Agenda Including Addeds
Civic Works Committee

The 11th Meeting of the Civic Works Committee

July 23, 2019, 4:00 PM

Council Chambers

Members

Councillors P. Squire (Chair), M. van Holst, S. Lewis, S. Lehman, E. Peloza, Mayor E. Holder

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The Committee will recess at approximately 6:30 PM for dinner, as required.

Transportation Advisory Committee

Report

The 6th Meeting of the Transportation Advisory Committee
June 25, 2019
Committee Room #4

Attendance

PRESENT: D. Foster (Chair), G. Bikas, D. Doroshenko, B. Gibson, T. Khan, P. Moore, M. Rice, M.D. Ross and J. Bunn (Committee Secretary)

ABSENT: A. Abiola, Z.M. Gorski, T. Kerr, S. Wraight and J. Zhu

ALSO PRESENT: M. Elmadhoon, Sgt. S. Harding, T. Macbeth, T. MacDaniel, M. Metcalfe, M. Schulthess and B. Westlake-Power

The meeting was called to order at 12:15 PM.

1. Call to Order

1.1 Orientation

That it BE NOTED that the Transportation Advisory Committee heard verbal presentations from B. Westlake-Power, Deputy City Clerk, and M. Schulthess, Deputy City Clerk, with respect to an Advisory Committee orientation.

1.2 Disclosures of Pecuniary Interest

That it BE NOTED that no pecuniary interests were disclosed.

1.3 Election of Chair and Vice Chair for the term ending November 30, 2019

That it BE NOTED that the Transportation Advisory Committee elected D. Foster and D. Doroshenko as Chair and Vice Chair, respectively, for the term ending November 30, 2019.

2. Scheduled Items

None.

3. Consent

3.1 5th Report of the Transportation Advisory Committee

That it BE NOTED that the 5th Report of the Transportation Advisory Committee, from its meeting held on May 28, 2019, was received.

3.2 Notice of Planning Application - Official Plan and Zoning By-law Amendments - 1680 Richmond Street

That it BE NOTED that the Notice of Planning Application, dated June 6, 2019, from M. Corby, Senior Planner, with respect to Official Plan and Zoning By-law Amendments related to the property located at 1680 Richmond Street, was received.

3.3 TAC 2019 Work Plan

That it BE NOTED that the Transportation Advisory Committee 2019 Work Plan, as at June 2019, was received.

3.4 TAC 2019 Work in Progress Document

That it BE NOTED that the Transportation Advisory Committee 2019 Work in Progress (WIP) document, as at June 4, 2019, was received.

4. Sub-Committees and Working Groups

4.1 (ADDED) Work Plan Working Group

That it BE NOTED that the Transportation Advisory Committee Work Plan Working Group, established during the last term of the Committee, will continue on with D. Foster as the lead.

5. Items for Discussion

None.

6. Adjournment

The meeting adjourned at 1:06 PM.

TO:	**CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON JULY 23, 2019**
FROM:	**KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER**
SUBJECT:	**SOUTHDALE ROAD WEST AND WICKERSON ROAD IMPROVEMENTS DETAILED DESIGN & TENDERING APPOINTMENT OF CONSULTING ENGINEER**

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental and Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the Southdale Road West and Wickerson Road Improvements Project:

(a) Dillon Consulting Limited **BE APPOINTED** Consulting Engineers for the detailed design and tendering for the Southdale Road West and Wickerson Road Improvements project at an upset amount of $853,614.60 (excluding HST) in accordance with Section 15.2 (g) of the Procurement of Goods and Services Policy;

(b) the financing for this project **BE APPROVED** as set out in the Sources of Financing Report attached hereto as Appendix A;

(c) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project;

(d) the approvals given herein **BE CONDITIONAL** upon the Corporation entering into a formal contract with the consultant for the work; and,

(e) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

- Civic Works Committee – June 19, 2012 – London 2030 Transportation Master Plan
- Strategic Priorities and Policy Committee – June 23, 2014 – Approval of 2014 Development Charges By-Law and DC Background Study
- Civic Works Committee – August 25, 2014 – Southdale Road and Boler Road Intersection Improvements Environmental Assessment Appointment of Consulting Engineer
- Civic Works Committee – July 18, 2016 – Environmental Assessment Appointment of Consulting Engineer
- Civic Works Committee – February 20, 2019 – Environmental Study Report

COUNCIL'S 2019-23 STRATEGIC PLAN

The following report supports the Strategic Plan through the strategic focus area of Building a Sustainable City by building new transportation infrastructure as London grows. The improvements to the Southdale Road West and Wickerson Road corridor will enhance safe and convenient mobility choices for transit, automobiles, pedestrians and cyclists.

BACKGROUND

Purpose

This report recommends the appointment of a consulting engineer to complete the detailed design and tendering for the Southdale Road West and Wickerson Road Improvements Project. The project limits are on Southdale Road West from Byron Hills Drive to Wickerson Road and northerly 650 m on Wickerson Road. See below for a map illustrating the project limits.

Southdale Road / Wickerson Road Improvement Limits

Context

Southdale Road West and Wickerson Road is a major transportation corridor designed to carry high volumes of traffic. Improvements to the subject section will accommodate the vehicle through traffic, residential and commercial traffic, and pedestrian traffic in a safe and efficient manner and improve mobility within the surrounding community.

Improvements to the profile and cross-section of Southdale Road West and Wickerson Road are required to meet design standards. Both roads will be improved to a two-lane standard, with the inclusion of active transportation and storm water management measures, and will require grading beyond the existing right of way (ROW). The project will allow for safer usage by emergency services, vehicular users, cyclists, and pedestrian's where service is currently limited by road geometrics.

DISCUSSION

Project Description

Due to the traffic volumes and developments in the area, the Southdale Road West corridor improvements were identified as a priority as part of the 2019 Development Charge Background Study. Construction is currently scheduled to begin in 2021, subject to property acquisition. Utility relocations and tree removals will be completed prior to capital construction.

Preferred Design

The recommended design includes significant vertical and horizontal profile revisions to Southdale Road West and Wickerson Road to meet current design standards. This will result in a flatter roadway with improved operations throughout the corridor. Improvements also include a new urban two-lane cross-section with standard lane widths, bike lanes, sidewalk, street lighting and a multi-use path to accommodate pedestrians and cyclists. Future consideration and accommodation will be given to connections of cycling infrastructure in the area.

Construction of a new 450 mm watermain on Wickerson Road and on Southdale Road West between Wickerson Road and Boler Road will be coordinated into the project. The project will also include installation of LID (low impact development) features to control storm water including oversized storm water storage pipes, rain garden infiltration and bio retention cell facilities. Oil grit separators will be used to pre-treat the flow to these infiltration measures.

Archaeological Assessment

During preliminary design, Dillon’s sub-consultant Fisher Archaeological Consulting (FAC), completed a Stage 1 Archaeology Assessment. The Stage 1 assessment identified areas for Stage 2 and 3 investigations. Dillon’s sub consultant for detail design, Timmins Martelle Heritage Consultants (TMHC) will complete the identified Stage 2 and 3 archaeology assessments as identified within the previously completed Stage 1 Archaeology Assessment Report.

During the completion of the previous environmental assessment and preliminary design, private property access limitations prevented the completion of all archaeological studies. However, based on work completed to date and knowledge of the area as well as past archaeological find sites, it is anticipated that there will be significant archaeology work required as part of this project.

The scope included in this Dillon Consulting assignment includes the required Stage 2 and 3 archaeology assessments, which will be completed once property access is available (anticipated in 2020). The extent of follow-up Stage 4 archeology work can only be determined once this Stage 2 and 3 work is complete.

Given the uncertainty of the extent of Stage 4 archaeology assessment required, a budget of $180,000 has been allocated for this work within the assignment. This budget would only be accessed following the Stage 2 and 3 assessments when the Stage 4 field program is finalized to meet the Ontario Heritage Act requirements of the Ministry of Tourism, Culture and Sport. The work will be carried out by a licensed professional consultant archaeologist to assess the property and document archaeological resources using a process that accords with the 2011 Standards and Guidelines for Consultant Archaeologists set by the ministry, and that the archaeological fieldwork and report recommendations are consistent with the conservation, protection and preservation of

the cultural heritage of Ontario. Detailed work plans and fee estimates for this work will be provided for City approval, prior to any expenditures from this budget amount.

Consultant Selection

Dillon Consulting successfully completed the EA for the Southdale Road West/Wickerson Road improvements. Dillon Consulting was selected to undertake the EA after a competitive consultant procurement process in accordance with the Procurement of Goods and Services Policy Section 15.2 (e) in which the assignment was publicly advertised and three (3) firms were invited to submit detailed proposals.

Due to the consultant's knowledge and experience on similar design projects combined with their positive performance on the project during the EA, Dillon Consulting was invited to submit a proposal to carry out the detailed design and tendering of this project. City staff have reviewed the fee submission in detail considering the hourly rates provided by each of the consultant's staff members. City staff have confirmed that hourly rates are consistent with those submitted through competitive processes. City staff also reviewed the time allocated to each project related task. The amount of time allocated to each project task is consistent with prior projects of a similar nature that have been awarded through a competitive process.

Appointment of Dillon as the consulting engineer for the design phase creates efficiencies providing financial advantage to the City by eliminating duplication that would be required if another firm were to be selected. The firm is familiar with City staff and procedures through recent work on other multi-disciplinary assignments.

Given their specific knowledge and understanding of the project, it is recommended in accordance with Section 15.2 (g) of the Procurement of Goods and Services Policy, that Dillon Consulting be awarded the consulting assignment for the detailed design and tendering of Southdale Road West / Wickerson Road improvements in the amount of $853,614.60 (excluding HST). The approval of this work will bring the value of the overall consulting assignment to $1,082,469.60. Subject to successful completion of the design phase of this project, Dillon Consulting may be considered for the construction administration stage.

CONCLUSION

Improvements to the Southdale Road West and Wickerson Road corridors are necessary to improve the roadway profile and cross-section to meet current design standards and adequately accommodate the increasing transportation demands on this corridor as a result of growth in the surrounding area.

It is recommended that Dillon Consulting be awarded the consulting assignment for the detailed design and tendering of the Southdale Road West and Wickerson Road Improvements in the amount of $853,614.60 (excluding HST). This amount includes contingency archaeology funds that will be expended only if necessary.

With construction scheduled to begin in 2021 subject to property acquisition and approvals, it is necessary to commence the design and approvals phase of this project. Award of this consultant assignment will progress this project within the approved project budget.

Acknowledgements

This report was prepared with assistance from Jiten Patel, C.E.T., Technologist II, and Ted Koza, P. Eng., of the Transportation Planning and Design Division.

SUBMITTED BY:	**REVIEWED & CONCURRED BY:**
GARFIELD DALES, P.ENG. **DIVISION MANAGER** **TRANSPORTATION PLANNING & DESIGN**	**DOUG MACRAE, P.ENG., MPA** **DIRECTOR** **ROADS AND TRANSPORTATION**
RECOMMENDED BY:	
KELLY SCHERR, P.ENG., MBA, FEC **MANAGING DIRECTOR** **ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER**	

Attach: Appendix A: Source of Financing

c: Brian Huston, Dillon Consulting Limited

APPENDIX "A"

#19105

Chair and Members
Civic Works Committee

July 23, 2019
(Appoint Consulting Engineer)

RE: Southdale Road West and Wickerson Road Improvements
Appointment of Consulting Engineer
(Subledger RD160014)
Capital Project TS1407-1 Southdale Road Upgrade Ph 1 Wickerson to Bramblewood
Capital Project TS1407-2 Southdale Road Upgrade Ph 2 Wickerson to Bramblewood
Dillon Consulting Limited - $853,614.60 (excluding H.S.T.)

FINANCE & CORPORATE SERVICES REPORT ON THE SOURCES OF FINANCING:

Finance & Corporate Services confirms that the cost of this project can be accommodated with the financing available in the Capital Works Budget, and that, subject to the adoption of the recommendations of the Managing Director, Environmental & Engineering Services and City Engineer, the detailed source of financing for this project is:

SUMMARY OF ESTIMATED EXPENDITURES		Approved Budget	Revised Budget	Committed to Date	This Submission		Balance for Future Work
TS1407-1 Southdale Road Upgrade Ph 1 Wickerson to Bramblewood							
Engineering		$490,000	$537,064	$102,745	$434,319		$0
Land Acquisition		300,000	300,000				300,000
Construction		1,760,000	1,760,000				1,760,000
Relocate Utilities		200,000	152,733				152,733
City Related Expenses			203	203			0
		2,750,000	2,750,000	102,948	434,319		2,212,733
TS1407-2 Southdale Road Upgrade Ph 2 Wickerson to Bramblewood							
Engineering		385,100	511,948	77,628	434,320		0
Land Acquisition		263,400	263,400				263,400
Construction		3,000,000	3,000,000	2,378			2,997,622
Relocate Utilities		294,000	167,152				167,152
City Related Expenses		100,000	100,000				100,000
		4,042,500	4,042,500	80,006	434,320		3,528,174
NET ESTIMATED EXPENDITURES		**$6,792,500**	**$6,792,500**	**$182,954**	**$868,639**	**1)**	**$5,740,907**
SOURCE OF FINANCING							
TS1407-1 Southdale Road Upgrade Ph 1 Wickerson to Bramblewood							
Drawdown from City Services - Roads Reserve Fund (Development Charges)	2)	$2,750,000	$2,750,000	$102,948	$434,319		$2,212,733
TS1407-2 Southdale Road Upgrade Ph 2 Wickerson to Bramblewood							
Debenture By-law No. W.-5607-237	3)	525,500	525,500	10,400	56,459		458,641
Drawdown from City Services - Roads Reserve Fund (Development Charges)	2)	3,517,000	3,517,000	69,606	377,861		3,069,533
		4,042,500	4,042,500	80,006	434,320		3,528,174
TOTAL FINANCING		**$6,792,500**	**$6,792,500**	**$182,954**	**$868,639**		**$5,740,907**

1) Financial Note:

	TS1407-1	TS1407-2	Total
Contract Price	$426,807	$426,808	$853,615
Add: HST @13%	55,485	55,485	110,970
Total Contract Price Including Taxes	482,292	482,293	964,585
Less: HST Rebate	47,973	47,973	95,946
Net Contract Price	$434,319	$434,320	$868,639

2) Development Charges have been utilized in accordance with the underlying legislation and the Development Charges Background Studies completed in 2014.

NOTE TO CITY CLERK

3) The City Clerk be authorized to increase Debenture By-law No. W.-5607-237 by $495,423 from $30,077 to $525,500.

lp

Jason Davies
Manager of Financial Planning & Policy

TO:	**CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON JULY 23, 2019**
FROM:	**KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER**
SUBJECT:	**SOUTHDALE ROAD WEST IMPROVEMENTS PHASE 1 DETAILED DESIGN & TENDERING APPOINTMENT OF CONSULTING ENGINEER**

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental and Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the appointment of a Consulting Engineer for the Southdale Road West Improvements Phase 1 Project from Pine Valley Boulevard to Bostwick Road:

(a) AECOM Canada Ltd. **BE APPOINTED** Consulting Engineers for the detailed design and tendering for the Southdale Road West Improvements Project between Pine Valley Boulevard and Bostwick Road, at an upset amount of $463,497 (excluding HST) in accordance with Section 15.2 (g) of the Procurement of Goods and Services Policy;

(b) the financing for this project **BE APPROVED** as set out in the Sources of Financing Report attached hereto as Appendix A;

(c) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project;

(d) the approvals given herein **BE CONDITIONAL** upon the Corporation entering into a formal contract with the consultant for the work; and,

(e) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

- Civic Works Committee – June 19, 2012 – London 2030 Transportation Master Plan
- Planning and Environmental Committee – October, 2012 – The Southwest Area Secondary Plan Report
- Strategic Priorities and Policy Committee – June 23, 2014 – Approval of 2014 Development Charges By-Law and DC Background Study
- Civic Works Committee – March 8, 2016 – Bostwick Road Environmental Assessment, Wharncliffe Road West to Pack Road, Appointment of Consulting Engineer
- Strategic Priorities & Policy Committee – June 9, 2016 – Growth Management Implementation Strategy (GMIS): 2017 Annual Review & Update – Appendix ‘F’: Detailed Commentary Regarding Developer Infrastructure Reports
- Civic Works Committee – January 10, 2017 – Environmental Assessment, Appointment of Consulting Engineer
- Civic Works Committee – April 2, 2019 – Environmental Study Report, Notice of Completion

COUNCIL'S 2019-23 STRATEGIC PLAN

The following report supports the Strategic Plan through the strategic focus area of Building a Sustainable City by building new transportation infrastructure as London grows. The improvements to the Southdale Road West corridor will enhance safe and convenient mobility choices for transit, automobiles, pedestrians and cyclists.

BACKGROUND

Purpose

This report seeks the approval of the Municipal Council to retain an engineering consultant to undertake the detailed design and tendering services for the Southdale Road West Improvements from Pine Valley Boulevard to Bostwick Road, including a portion of Bostwick Road from Southdale Road to north of Pack Road.

Context

Southdale Road West is one of the major east-west arterial roadways located in the south-west part of the City of London. Southdale Road West serves as a major transportation corridor designed to carry high volumes of traffic in a safe and efficient manner. Improvements to the subject sections will accommodate the high volumes of pedestrian and cyclist traffic, vehicle through traffic, and residential and commercial traffic in a safe and efficient manner and improve mobility within the surrounding community.

An Environmental Study Report (ESR), the result of a comprehensive Environmental Assessment (EA) for the Southdale Road West corridor was completed in April 2019. The ESR recommended widening Southdale Road West to four lanes. The preferred design recommendation also included localized turning lanes, intersection improvements and the addition of bike lanes and sidewalks.

In accordance with the City of London Complete Streets approach, the proposed design for Southdale Road West will bring a significant change to multi-modal movement and land use along the corridor, with improvements in safety, capacity, drainage and access management.

DISCUSSION

Project Description

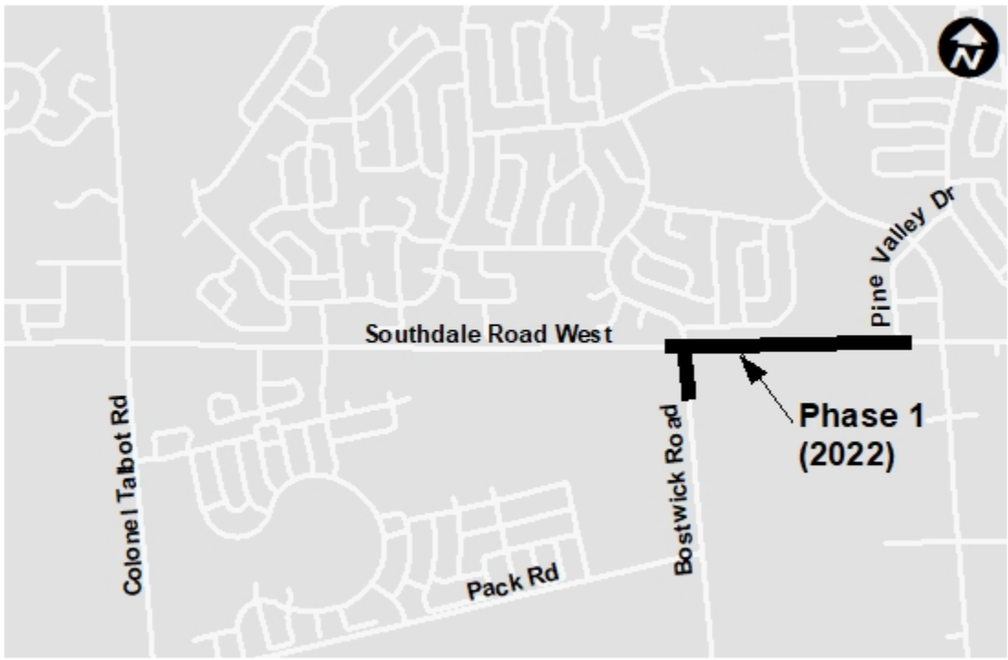
Due to the traffic volumes and developments in the area, the Southdale Road West corridor improvements were identified as a priority in the 2030 Smart Moves Transportation Master Plan (TMP) as part of the reprioritization of the Growth Management Implementation Strategy (GMIS) for transportation projects. The need for capacity improvements and construction phasing was also identified as part of the 2014 and 2019 Development Charge Background Studies.

The EA for Southdale Road West was completed in 2019. Six alternative planning solutions were developed and assessed. Of the six alternatives, Alternative 5 - Road Widening was selected as the preferred planning solution. Widening to the south to provide two lanes of traffic in each direction, including left turn lanes, sidewalks and bike paths on Southdale Road West, and widening around the existing centreline for Bostwick Road was carried forward as the preferred alternative. The Southdale Road

West and Bostwick Road intersection will remain as a signalized intersection but will be upgraded to accommodate the road widening. In the future, and when warranted, Bostwick Road will be widened to provide two lanes of traffic in each direction.

Due to the magnitude of the project, the EA recommended proceeding with two phases; Phase 1 from Pine Valley Boulevard to Bostwick Road and Phase 2 from Bostwick Road to Colonel Talbot Road. The 2019 Development Charges Transportation Background Study further divides Phase 2 into two separate projects; Phase 2a with the Colonel Talbot intersection (roundabout) project recommended for 2024 construction, and Phase 2b the remaining section of Southdale Road West from Colonel Talbot to Bostwick Road to be constructed in 2031.

Figure 1.0 – Southdale Road West Improvement Phases



Implementation timing for Phase 1 is anticipated in 2022 based on the 2019 Transportation Development Charges Background Study (DCBS) with early preparations and infrastructure works such as property acquisition, approvals and utility relocations being completed as early as 2021. The award of the design at this time aims to maintain this project schedule.

The primary deliverables from this detailed design assignment include field investigations, design, approvals, property acquisition support, and contract preparation. Particular focus areas for the assignment include:

- Detailed design for the subject corridor;
- Obtaining all necessary approvals from associated agencies;
- Detailed development of urban design elements such as lighting, etc.;
- Co-ordination with the utility companies and geotechnical sub-consultant;
- Consultation and coordination with the public, Bostwick Community Center, developers, businesses and stakeholders;
- Development of a stormwater management plan and report;
- Design of traffic signals and street light systems;
- Support for property acquisitions and consent-to-enter agreements;
- Preparation of construction staging, traffic staging, access management and building logistics plans; and,
- Preparation of the complete tender package, including advertisement, review of the submitted tenders for completeness, and contractor recommendations.

Consultant Procurement

AECOM Canada Ltd. successfully completed the EA for improvements to the Southdale Road West Corridor from Pine Valley Boulevard to Colonel Talbot Road. AECOM was selected to undertake the EA after a competitive consultant procurement process in accordance with the Procurement of Goods and Services Policy Section 15.2 (e) in which the assignment was publicly advertised and six firms were subsequently invited to submit detailed proposals.

Due to the consultant's knowledge and experience on similar design projects combined with their positive performance on the project during the EA, AECOM was invited to submit a proposal to carry out the detailed design and tendering of this project. City staff have reviewed the fee submission in detail considering the hourly rates provided by each of the consultant's staff members. City staff have confirmed that hourly rates are consistent with those submitted through competitive processes. City staff also reviewed the time allocated to each project related task. The amount of time allocated to each project task is consistent with prior projects of a similar nature that have been awarded through a competitive process.

Appointment of AECOM as the consulting engineer for the design phase creates efficiencies providing financial advantage to the City by eliminating duplication that would be required if another firm were to be selected. The firm is familiar with City staff and procedures through recent work on other multi-disciplinary assignments.

Given their specific knowledge and understanding of the project, it is recommended that in accordance with Section 15.2 (g) of the Procurement of Goods and Services Policy, AECOM be awarded the consulting assignment for the detailed design and tendering of Phase 1 Southdale Road West improvements from Pine Valley Boulevard to Bostwick Road, including a portion of Bostwick Road north of Pack Road in the amount of $463,497 (excluding HST). The approval of this work will bring the value of the overall consulting assignment to $772,502.40. Subject to successful completion of the design phase of this project, AECOM may be considered for the construction administration stage.

CONCLUSION

It is recommended that AECOM be awarded the consulting assignment for the detailed design and tendering of the Southdale Road West Improvements from Pine Valley Boulevard to Bostwick Road, including a portion of Bostwick Road from Southdale Road to north of Pack Road, in the amount of $463,497 (excluding HST). Award of this consultant assignment will progress this project within the approved project budget.

Acknowledgements

This report was prepared with assistance from Violetta Sypien C.E.T., Technologist II, and Ted Koza, P. Eng both of the Transportation Planning and Design Division.

SUBMITTED BY:	**REVIEWED & CONCURRED BY:**
GARFIELD DALES, P.ENG. **DIVISION MANAGER,** **TRANSPORTATION PLANNING & DESIGN**	**DOUG MACRAE, P.ENG., MPA** **DIRECTOR** **ROADS AND TRANSPORTATION**
RECOMMENDED BY:	
KELLY SCHERR, P.ENG., MBA, FEC **MANAGING DIRECTOR,** **ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER**	

Attach: Appendix A: Source of Financing

c: AECOM Canada Ltd.

APPENDIX "A"

#19106

Chair and Members
Civic Works Committee

July 23, 2019
(Appoint Consulting Engineer)

RE: Southdale Road West Improvements Phase 1
Appointment of Consulting Engineer
(Subledger RD190014)
Capital Project TS1407-1 Southdale Road Upgrade Ph 1 Wickerson to Bramblewood
Capital Project TS1629-1 Southdale Road West Widening Bostwick to Pine Valley
AECOM Canada Ltd. - $463,497.00 (excluding H.S.T.)

FINANCE & CORPORATE SERVICES REPORT ON THE SOURCES OF FINANCING:

Finance & Corporate Services confirms that the cost of this project can be accommodated with the financing available in the Capital Works Budget, and that, subject to the adoption of the recommendations of the Managing Director, Environmental & Engineering Services and City Engineer, the detailed source of financing for this project is:

SUMMARY OF ESTIMATED EXPENDITURES		Approved Budget	Revised Budget	Committed to Date	This Submission		Balance for Future Work
TS1407-1 Southdale Road Upgrade Ph 1 Wickerson to Bramblewood							
Engineering		$537,064	$788,240	$537,064	$251,176		$0
Land Acquisition		300,000	300,000				300,000
Construction		1,760,000	1,508,824				1,508,824
Relocate Utilities		152,733	152,733				152,733
City Related Expenses		203	203	203			0
		2,750,000	2,750,000	537,267	251,176		1,961,557
TS1629-1 Southdale Road West Widening Bostwick to Pine Valley							
Engineering		256,029	488,947	268,468	220,479		0
Land Acquisition		155,000	0				0
Construction		89,244	10,555	10,555			0
City Related Expenses		260	1,031	1,031			0
		500,533	500,533	280,054	220,479		0
NET ESTIMATED EXPENDITURES		**$3,250,533**	**$3,250,533**	**$817,321**	**$471,655**	**1)**	**$1,961,557**
SOURCE OF FINANCING							
TS1407-1 Southdale Road Upgrade Ph 1 Wickerson to Bramblewood							
Drawdown from City Services - Roads Reserve Fund (Development Charges)	2)	$2,750,000	$2,750,000	$537,267	$251,176		$1,961,557
TS1629-1 Southdale Road West Widening Bostwick to Pine Valley							
Debenture By-law No. W.-5618-64	3)	44,998	44,998	25,177	19,821		0
Drawdown from City Services - Roads Reserve Fund (Development Charges)	2)	455,535	455,535	254,877	200,658		0
		500,533	500,533	280,054	220,479		0
TOTAL FINANCING		**$3,250,533**	**$3,250,533**	**$817,321**	**$471,655**		**$1,961,557**

1) Financial Note:

	TS1407-1	TS1629-1	Total
Contract Price	$246,832	$216,665	$463,497
Add: HST @13%	32,088	28,167	60,255
Total Contract Price Including Taxes	278,920	244,832	523,752
Less: HST Rebate	27,744	24,353	52,097
Net Contract Price	$251,176	$220,479	$471,655

2) Development Charges have been utilized in accordance with the underlying legislation and the Development Charges Background Studies completed in 2014.

NOTE TO CITY CLERK

3) The City Clerk be authorized to increase Debenture By-law No. W.-5618-64 as amended by By-law No. W.-5618(a)-331 by $13,900 from $31,098 to $44,998.

lp

Jason Davies
Manager of Financial Planning & Policy

TO:	**CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON JULY 23, 2019**
FROM:	**KELLY SCHERR, P. Eng., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER**
SUBJECT:	**APPOINTMENT OF CONSULTING ENGINEER WONDERLAND ROAD SANITARY SEWER EXTENSION**

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental and Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the appointment of a consulting engineer for the Wonderland Road Sanitary Sewer Project:

a) AECOM Canada Ltd **BE APPOINTED** Consulting Engineers to complete the pre-design and detailed design for the Wonderland Road Sanitary Sewer Project in accordance with the estimate, on file, at an upset amount of $172,380.00 including 10% contingency, excluding HST, in accordance with Section 15.2(d) of the City of London's Procurement of Goods and Services Policy;

b) The financing for the project **BE APPROVED** in accordance with the "Sources of Financing Report" attached, hereto, as Appendix 'A';

c) The Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project;

d) The approvals given, herein, **BE CONDITIONAL** upon the Corporation entering into a formal contract; and,

e) The Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

2017-07-17 Southwest Area Trunk Sanitary Sewer Detailed Design Appointment of Consulting Engineer: Phase 3 – Wonderland Road South (Hamlyn Street to Wharncliffe Road South) & Wharncliffe Road South (Wonderland to Morgan Ave)

2015-02-03 Southwest Area Trunk Sanitary Sewer Detailed Design Appointment of Consulting Engineer: Phase 2 – Campbell Street (Hamlyn Street to Lambeth Optimist Park)

2014-05-12 Southwest Area Trunk Sanitary Sewer Detailed Design: Appointment of Consulting Engineer: Phase 1 – Wonderland Road South (Dingman Drive to Wharncliffe Road South) & Hamlyn Street (Wonderland Road South to Campbell Street)

2014-02-03 Notice of Completion of the Southwest Area Sanitary Servicing Master Plan: Municipal Class Environmental Assessment for the Southland Wastewater Treatment Plant and Proposed Sanitary Servicing of the Southwest Area (ES5260)

2019 – 2023 STRATEGIC PLAN

- This report and its recommendations support the Strategic Plan under Building a Sustainable City – Responsible Growth, by planning and designing new infrastructure consistent with the Growth Management Implementation Strategy (GMIS).

BACKGROUND

Purpose

The purpose of this report is to recommend the award of a qualified engineering consultant to complete the detailed design for the Wonderland Road Sanitary Sewer Extension Project. This project was approved by council in the 2019 Development Charges Study to be constructed in 2020. A project map is included as Appendix ‘C’.

Context

Awarding this consulting work will allow for the construction of a sanitary sewer along Wonderland Road South between Wharncliffe Road South and Bradley Avenue, and provide municipal servicing to the Wonderland Road Enterprise Corridor. This sewer is an essential component of the servicing required to facilitate up to 58 hectares of residential, commercial, and institutional development including the future Gateway Casino site.

DISCUSSION

Procurement Process

The engineering consultant selection procedure for this assignment utilized a competitive Request for Proposal (RFP) process that is in accordance with Section 15.2(d) of the Procurement of Goods and Services Policy. Four qualified engineering firms from the City’s pre-approved consultant list were invited to submit a formal proposal to undertake the detailed design work. An evaluation of each consultant proposal with a focus on their understanding of project goals, experience on directly related projects, project team members, capacity and qualifications, and overall project fee was undertaken by the Environmental and Engineering Services Department (EESD).

If the performance of the consultant continues to be of high quality and their fees are appropriate, a future recommendation will be made for a construction administration assignment in tandem with the award of the construction contract for the project in 2020.

Work Description and Development Servicing

The detailed design work to be undertaken will allow development of up to 58 hectares of vacant lands along the Wonderland Road South Enterprise Corridor to proceed in an orderly manner with full municipal servicing and allow existing developments to decommission their private servicing systems. The Wonderland Road Sanitary Sewer Project includes the installation of sanitary sewer from Wharncliffe Road South to Bradley Ave, storm sewer works, the addition of a turning lane at the future Gateway Casino, full asphalt replacement along the project limits, and restoration of areas disturbed by the construction activity. This appointment will allow the project to be constructed as per the approved timing set out in the current GMIS.

Consultant Selection

In accordance with Section 15.2(d) of the Procurement of Goods and Services Policy, Staff are recommending that AECOM be authorized to carry out the detailed design of the Wonderland Road South Sanitary Sewer.

In addition to being the successful proponent through the competitive bidding process, AECOM has significant knowledge of the project area through their previous experience completing design and construction administration services for recent sanitary servicing projects within the Southwest Area. AECOM has shown their competency and expertise with infrastructure projects of this nature and have provided strong performance in the past on City projects.

CONCLUSIONS

The appointment of AECOM to complete engineering services for the detailed design of the Wonderland Road Sanitary Sewer will meet the 2020 construction timing approved as part of the 2019.5 GMIS process. The project funding was approved through the 2019 Development Charges Study Update and funds have been allocated from the Transportation, Wastewater and Stormwater capital budgets to support the detailed design work.

Acknowledgements:

This report was prepared by Kevin Graham, Environmental Services Engineer.

SUBMITTED BY:	**REVIEWED & CONCURRED BY:**
TOM COPELAND, P. ENG. **DIVISION MANAGER** **WASTEWATER AND DRAINAGE ENGINEERING**	**SCOTT MATHERS, MPA, P. ENG.** **DIRECTOR** **WATER & WASTEWATER**
RECOMMENDED BY:	
KELLY SCHERR, P.ENG., MBA, FEC **MANAGING DIRECTOR** **ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER**	

Attach: Appendix ‘A’ – Source of Financing
Appendix ‘B’ – Location Map

Cc: John Freeman, Manager, Purchasing and Supply
Jeff Kelso, AECOM Canada Ltd.
Gary McDonald, Budget Analyst
Alan Dunbar, Manager III, Financial Planning and Policy
Jason Davies, Manager III, Financial Planning and Policy
Kevin Graham, Environmental Services Engineer, Wastewater and Drainage Engineering

APPENDIX 'A'

#19103

Chair and Members
Civic Works Committee

July 23, 2019
(Appoint Consulting Engineer)

RE: Wonderland Road Sanitary Sewer Extension
(Subledger WW190011)
Capital Project ES242818 - Erosion Remediation Open Watercourses Management and Reclamation
Capital Project ES5146 - Infill & Intensification Nodes Sanitary Sewer Servicing
Capital Project TS144619 - Road Networks Improvements (Main)
AECOM Canada Ltd. - $172,380.00 (excluding H.S.T.)

FINANCE & CORPORATE SERVICES REPORT ON THE SOURCES OF FINANCING:

Finance & Corporate Services confirms that the cost of this project can be accommodated within the financing available for it in the Capital Works Budget and that, subject to the adoption of the recommendations of the Managing Director, Environmental & Engineering Services & City Engineer, the detailed source of financing for this project is:

SUMMARY OF ESTIMATED EXPENDITURES	**Approved Budget**	**Revised Budget**	**Committed to Date**	**This Submission**	**Balance for Future Work**
ES242818-Erosion Remediation Open Watercourses Management & Reclamation					
Engineering	$266,059	$279,950	$266,059	$13,891	$0
Construction	426,997	413,106	643		412,463
	693,056	693,056	266,702	13,891	412,463
ES5146-Infill & Intensification Nodes Sanitary Sewer Servicing					
Engineering		153,696	24,728	128,968	0
Construction	614,805	461,109	460,078		1,031
	614,805	614,805	484,806	128,968	1,031
TS144619-Road Networks Improvements					
Engineering	995,329	995,329	549,811	32,555	412,963
Construction	12,923,971	12,923,971	12,923,971		0
	13,919,300	13,919,300	13,473,782	32,555	412,963
NET ESTIMATED EXPENDITURES	**$15,227,161**	**$15,227,161**	**$14,225,290**	**$175,414** 1)	**$826,457**
SUMMARY OF FINANCING:					
ES242818-Erosion Remediation Open Watercourses Management & Reclamation					
Capital Sewer Rates	$693,056	$693,056	$266,702	$13,891	$412,463
ES5146-Infill & Intensification Nodes Sanitary Sewer Servicing					
Drawdown from Sewage Works Reserve Fund	92,317	92,317	72,797	19,365	155
Drawdown from City Services - Sewers Reserve 2)	522,488	522,488	412,009	109,603	876
Fund (Development Charges)					0
	614,805	614,805	484,806	128,968	1,031
TS144619-Road Networks Improvements					
Capital Levy	3,269,714	3,269,714	3,269,714		0
Drawdown from Capital Infrastructure Gap R.F.	803,560	803,560	358,042	32,555	412,963
Federal Gas Tax	9,846,026	9,846,026	9,846,026		0
	13,919,300	13,919,300	13,473,782	32,555	412,963
TOTAL FINANCING	**$15,227,161**	**$15,227,161**	**$14,225,290**	**$175,414**	**$826,457**

1) **Financial Note:**

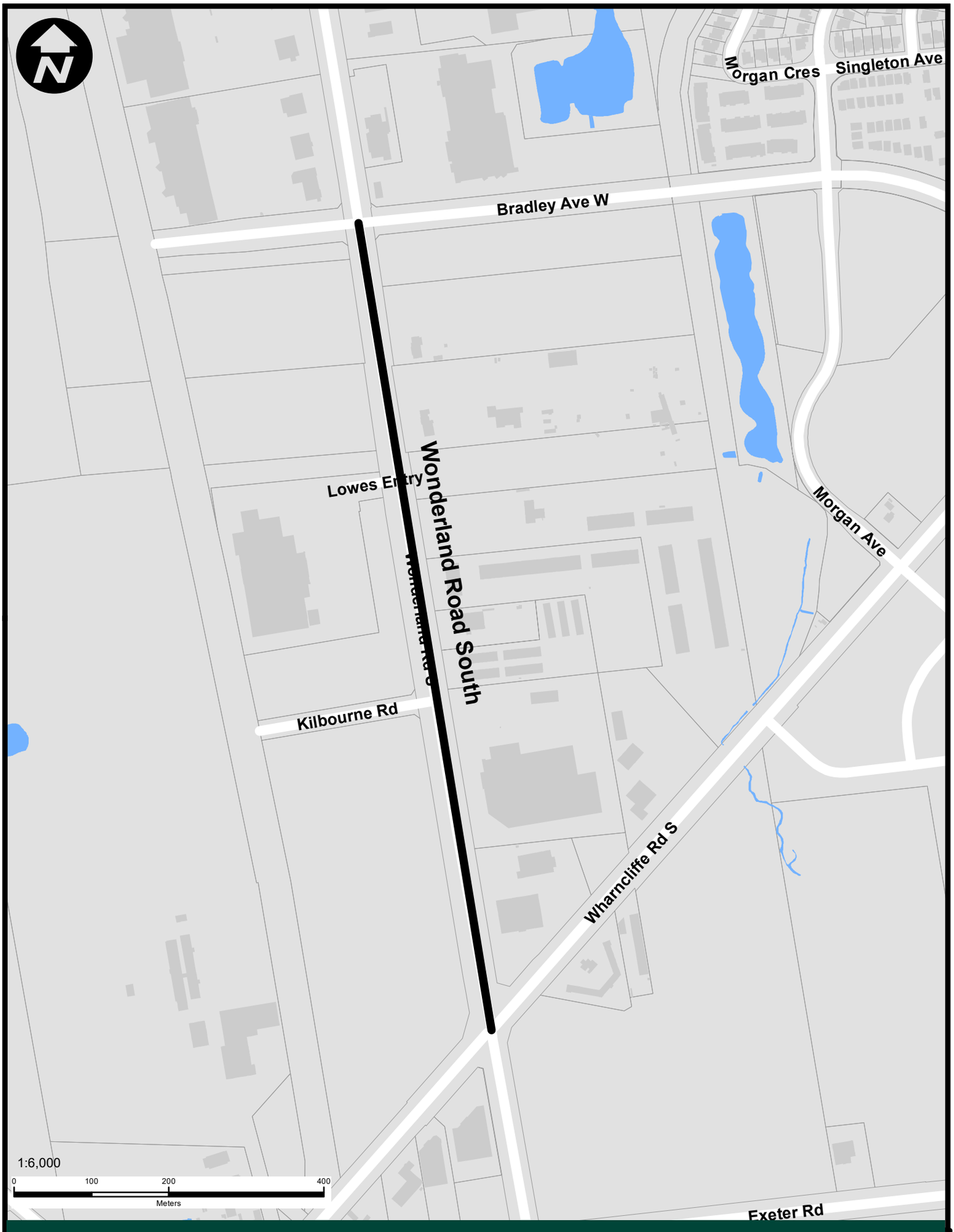
	ES242818	**ES5146**	**TS144619**	**Total**
Contract Price	$13,651	$126,737	$31,992	$172,380
Add: HST @13%	1,775	16,476	4,159	22,410
Total Contract Price Including Taxes	15,426	143,213	36,151	194,790
Less: HST Rebate	1,535	14,245	3,596	19,376
Net Contract Price	$13,891	$128,968	$32,555	$175,414

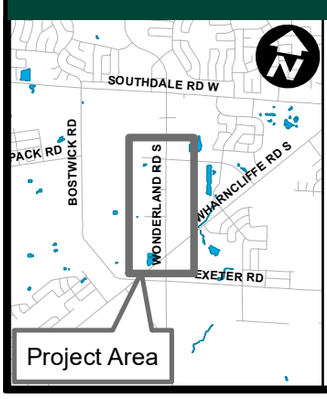
2) Development charges have been utilized in accordance with the underlying legislation and the Development Charges Background Studies completed in 2014.

JG

Jason Davies
Manager of Financial Planning & Policy

APPENDIX 'B'





Wonderland Sanitary Sewer Extension

Wonderland Road South from Bradley Ave West to Wharncliffe Road South

Project Area

Map Produced by the Wastewater & Drainage Engineering Division

June 10 2019 CM

London CANADA

300 Dufferin Avenue,
PO Box 5035
London, Ontario
N6A 4L9
www.London.ca

TO:	**CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON JULY 23, 2019**
FROM:	**KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR - ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER**
SUBJECT	**CURRENT AND PROPOSED ACTIONS FOR REDUCING AND MANAGING PLASTICS IN THE RESIDENTIAL SECTOR AND THE ROLE FOR THE HEFTY® ENERGYBAG® PILOT PROJECT**

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, with the support of the Director, Environment, Fleet and Solid Waste,

a) The following report containing the City of London's current approaches for reducing and managing plastics in the residential sector **BE RECEIVED** for information;

b) Civic Administration **BE DIRECTED** to develop a more comprehensive plan to reducing and managing plastics in the residential sector including i) addressing upcoming Federal and Provincial legislation, regulation, policies and scientific studies; ii) how senior government direction with producer responsibility will support local policies with respect to reduction, reuse, recycling and recovery of plastics; and iii) report back by early 2021 as part of the 60% Waste Diversion Action Plan implementation process;

c) The Hefty® EnergyBag® Pilot Project for flexible plastic packaging and hard-to-recycle plastics **BE APPROVED** for implementation in a phased approach starting October 1, 2019 using approved funds for 2019 and base program funds (Program 470300) for 2020 in the amount of $25,000 per year for two years noting that the Canadian Plastics Industry Association (CPIA) and the Dow Chemical Company are major financial contributors;

d) Civic Administration **BE AUTHORIZED** to expand the list of business and municipal project partners and funding sources (e.g., Continuous Improvement Fund, Federation of Canadian Municipalities Green Fund) interested in the Hefty® EnergyBag® Pilot Project for flexible plastic packaging and hard-to-recycle plastics including promoting these activities through the London Waste to Resources Innovation Centre and the Industrial Research Chair Agreement in Thermochemical Conversion of Biomass and Waste to Bioindustrial Resources with Western University;

e) the attached proposed by-law (Appendix B) **BE INTRODUCED** at the Municipal Council meeting to be held on July 30, 2019 to approve the Grant Recipient Agreement with CPIA attached as Schedule "A" to the by-law;

f) the Mayor and the City Clerk **BE AUTHORIZED** to execute the Agreement authorized and approved in e), above; and

g) Civic Administration **BE AUTHORIZED** to undertake all administrative acts that are necessary in connection with executing this Agreement.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

Relevant reports that can be found at www.london.ca under City Hall (Meetings) include:

- Update and Next Steps for the London Waste to Resources Innovation Centre (April 16, 2019 meeting of the Civic Work Committee - CWC, Item #2.4)

- Memorandum of Understanding with the Canadian Plastics Industry Association as Part of the London Waste to Resources Innovation Centre (February 21, 2018 meeting of the CWC, Item #10)

- Memorandum of Understanding with the University of Western Ontario (Institute of Chemicals and Fuels from Alternative Resources) as Part of the London Waste to Resources Innovation Centre (December 12, 2016 meeting of the CWC, Item #8)

COUNCIL'S 2019-2023 STRATEGIC PLAN

Municipal Council has recognized the importance of solid waste management and climate change in its 2019-2023 - Strategic Plan for the City of London as follows:

Building a Sustainable City
London has a strong and healthy environment
- Increase waste reduction, diversion and resource recovery
- Increase community knowledge and action to support the environment

Growing our Economy
Londoners experience exceptional and valued customer service
- Increase partnerships that promote collaboration, innovation and investment

Leading in Public Service
Londoners experience exceptional and valued customer service
- Increase community and resident satisfaction of their service experience with the City

BACKGROUND

PURPOSE

The purpose of this report is to:

- provide an update on the City's current approaches for reducing and managing plastics in the residential sector and the next steps for a more comprehensive approach, and

- provide Civic Works Committee and Council with the details to recommend the implementation of the Hefty® EnergyBag® Pilot Project for flexible plastic packaging and hard-to-recycle plastics in a phased approach starting October 1, 2019 including the execution of a funding agreement with the Canadian Plastics Industry Association (CPIA).

CONTEXT

Curbside and Multi-Residential Recycling Programs

The residents of London are currently involved in many different approaches to manage pre and post-consumer plastics in the residential sector. The requests to do more with plastics – reduce, reuse, recycle and/or recover - are quite common.

Municipal Council Approval of 60% Waste Diversion Action Plan

The 60% Waste Diversion Action Plan containing programs and initiatives to be phased in between 2019 and 2022 to achieve 60% waste diversion was approved subject to further financing considerations as part of the multi-year (2020-2023) budgeting process. The Action Plan includes an update on the progress of the long-term Resource Recovery Strategy that will be completed in 2020.

London Waste to Resources Innovation Centre

The London Waste to Resources Innovation Centre currently has activities in five main areas:

1. Research & Development
2. Training, Testing & Auditing
3. Resource & Waste Management Knowledge Exchange
4. Technology Demonstrations
5. Outreach & Engagement

Projects and activities to advance the management of plastic resources along with many other materials are underway in all the five areas. Western University, a partner in the London Waste to Resources Innovation Centre, has recently been awarded an Industrial Research Chair Agreement by the Natural Sciences and Engineering Research Council (NSERC) Collaborative Research. The focus is on projects related to the thermochemical conversion of biomass and waste to bioindustrial resources. CPIA is also part of the Industrial Research Chair program.

Addressing the Need for Action on Climate Change

On April 23, 2019, the following was approved by Municipal Council with respect to climate change:

> *Therefore, a climate emergency be declared by the City of London for the purposes of naming, framing, and deepening our commitment to protecting our economy, our eco systems, and our community from climate change.*

Understanding both the positive benefits and negative impacts of plastics to society and its role with climate change is important. The literature has conflicting information which is not uncommon. The goal of taking comprehensive action, working alongside industry, academia and the community will generate different actions, roles and responsibilities. A collaborative approach that is consistent with Provincial and Federal direction will ensure that current and future actions and investments are aligned as best as possible.

DISCUSSION

This section contains two parts with details provided in the appendices:

PART A Current Approaches for Reducing and Managing Plastics in the Residential Sector (Appendix A)

PART B: Flexible Plastic Packaging and Hard-to-Recycle Plastics Recovery Pilot Project (Part B)

PART A: Current Approaches for Reducing and Managing Plastics in the Residential Sector

Background

Over the last 5 years, London has been one of the most active communities in Canada looking at a wide variety of solutions (e.g., programs, approaches) to keep plastics out of the City's landfill and City parks, streams, rivers and roadsides. City staff carefully balance reduction/reuse, recyclability and recycling costs, what end markets are available (without end markets there is no recycling), newer approaches to resource recovery and also work on ideas and potential projects in partnership with industry and academia. In summary, through Council direction, City staff strive to balance environmental protection, affordability and community expectations. Further details on recent, current and upcoming actions with respect to plastics are contained in Appendix A.

Moving Forward – Next Steps

Advancements in policies, directions and approaches for overall resource recovery for plastics are changing. City staff propose to develop a more comprehensive plan for reducing and managing plastics in the residential sector including:

- addressing upcoming Federal and Provincial legislation, regulation, policies and scientific studies; and
- how senior government direction with extended producer responsibility (EPR) will support local policies with respect to reduction, reuse, recycling and recovery of plastics.

This work will be completed alongside related work as part of the London Waste to Resources Innovation Centre by early 2021 as part of the 60% Waste Diversion Action Plan implementation process.

PART B: Flexible Plastic Packaging and Hard-to-Recycle Plastics Recovery Pilot Project

The City of London has committed to reaching 60% waste diversion by the end of 2022. Over the last five years, the City has averaged about 45% waste diversion. The City of London operates, in conjunction with other partners, the London Waste to Resources Innovation Centre. Through the Innovation Centre, the City of London and partners work on solutions to turn more waste resources into valuable feedstocks for the economy.

The City was approached by Dow Chemical Company (Dow) and the Canadian Plastic Industry Association (CPIA) to implement the first Pilot Project in Canada using the Hefty® EnergyBag® program methodology (i.e., the costs of the program are paid for in the purchase price of the bags). The Pilot Project is going to focus on the collection and processing and marketing (i.e., recycling or recovery) of flexible plastic packaging and hard-to-recycle plastics. In the United States, most of the emphasis to date has been placed on energy recovery through pyrolysis and alternative fuels. The addition of a stronger focus on the recycling potential of this mix of plastics is a desirable solution for the pilot project due to the recent advancements in processing and markets in Canada and the northeast United States. London, Dow and CPIA have prioritized end markets for recycling the materials collected.

This Pilot Project fits many needs of London, the Innovation Centre, Dow, CPIA and potentially other funding partners. It also addresses many of the needs of municipalities as the materials to be recycled and recovered are waste products in other communities.

Background

<u>Challenges to Recycling Flexible Plastic Packaging</u>

Flexible plastic packaging is used for many consumer goods due to its ability to help prevent food waste, save money, and reduce environmental effects. Plus it helps keep

foods fresh and sanitary. Typically it is in the form of bags, pouches, liners, or overwraps, where the shape of the packaging can be readily changed or has unique application needs. Many types of flexible packaging currently cannot be mechanically recycled due to three main challenges:

1. Technical Challenges: In order to recycle plastics, each individual polymer needs to be separated from other polymers. Yet many flexible plastic packages are made from multiple materials, such as sealant layers, tie-layers, and various barrier layers, in order to enhance their performance for food freshness and extended shelf life. This however also makes these packages very difficult to recycle and consequently are sent to landfills.

2. Infrastructure Challenges: Currently flexible plastic packaging is not able to be sorted out at the vast majority of material recovery facilities (MRFs) in North America. Flexibles can cause operational issues for MRFs, as they can get entangled in the MRF disc screens, wrap around rotating shafts and interfere with proper equipment operation, which causes adverse downtime and expenses for MRF operators.

3. Consumer Challenges: In general, consumers want to do the right thing and recycle their discards, yet the complexities of plastic packaging and differences in recycling programs across communities leads to confusion as to what is allowed to be recycled.

There are also challenges with collection as these items tend to be very light. These items do represent an opportunity to be collected at drop-off depots or retail drop-off.

<u>What Other Plastics Can be Collected with Flexible Plastic Packaging in the Hefty® EnergyBag® program?</u>

The Hefty® EnergyBag® program methodology represents a unique opportunity to collect and potentially also recycle and/or recover many other plastic items that are considered “hard-to-recycle” such as:

- bags (e.g., food bags, produce bags, pet food bags) (NOTE: further discussion is required on bags as grocery bags and merchandise bags are returned to many retail outlets in London and this should be supported during the Pilot Project)
- foam cups, plates and bowls
- packing peanuts
- utensils and cutlery
- straws and stirrers
- toothpaste tubes

These items can be mixed with flexible plastic packaging and placed inside the same Hefty® EnergyBag®.

Communities with Hefty® EnergyBag® Programs in Place

The following communities have either full scale programs in place or opt-in program through either community replenishment or retail purchase of the Hefty® EnergyBag®:

- Citrus Heights, California, Pilot Project (2014)
- City of Omaha, Nebraska (2016)
- City of Bellevue, Nebraska (2018)
- City of Boise, Idaho (2018)
- Cobb County (near Atlanta), Georgia (Phase 1 2018)
- Lincoln, Nebraska (2019)
- Cobb County, Georgia (Phase 2 – 2019)

The City of London was selected by Dow and CPIA in 2018 to discuss the first Hefty® EnergyBag® program Pilot in Canada. Several planning, logistics and communication sessions have been held to layout the groundwork based on the United States projects. It is recognized that customization will be required for Canada; however the learnings

from the United States provide a good indication of how to prepare and launch in London. As a major funding partner, Dow stays very involved with pilot projects and ensures that the required expertise and experience is available from other programs for questions and advice.

How the Hefty® EnergyBag® Program Works and would be Applied in the City of London through a Pilot Project

The Hefty® EnergyBag® Pilot Project in London will address several of the challenges noted above by collecting currently non-recycled and hard to recycle plastic items – like juice pouches, chip bags, meat and cheese bags, cereal and cake box pouches, candy wrappers, and plastic dinnerware and utensils – at curbside or depots and diverting them from the City's landfill. The operation of the Hefty® EnergyBag® Program requires four main steps:

1. Participating households will be provided with a supply of Hefty® EnergyBag® orange bags (supplied in a roll of 20 bags per roll and are expected to last 6 to 12 months depending on usage). Residents place all their currently non-recycled plastic materials, once clean and dry, into the orange bags.

2. When the orange bags are full, they are tied closed and put out at the curb in the residents' Blue Box on the same day as regular recyclables, and then picked up by the City's contractor (Miller Waste Systems). Recycling Carts would be used for the multi-residential sector component. Container choices at the depot have not been determined at this time (e.g., recycling carts, large bins, etc.).

3. The collected Hefty® EnergyBag® are delivered to the City-owned MRF where they are pre-sorted out at the front end (pre-sort room) and baled (whole orange bag) for delivery to the end user.

4. The end user will convert the orange bags into new valuable resources such as target recyclables into existing markets (composite plastic products), energy, fuels, or potentially, feedstocks for making new plastics and new plastic products. Potential end markets for the London program are being evaluated.

Preliminary - Approximate Quantities Available and Potentially Recovered

Preliminary estimates (Table 1) suggest that the materials eligible to be collected in the Hefty® EnergyBag® would range between 16 and 20 kg per year (between 3% and 4% the waste stream, by weight), from single family households. Similarly between 12 and 16 kg per year (between 3% and 4% the waste stream, by weight), from multi-family households. On a volume basis, these same items may take up between 3 and 5 times more volume of the waste stream. Further work on estimated quantities available and potentially recoverable will take place this summer.

Table 1 – Preliminary Estimates (Average) of Materials Available for Recycling and Recovery

Material Category	Single Family Households (Blue Box)		Multi-residential Households (Blue Carts)	
	Average Estimated Quantity Per Hhld (kg/yr)	% of Waste Stream (by weight)	Average Estimated Quantity Per Hhld (kg/yr)	% of Waste Stream (by weight)
Flexible plastic packaging	9	1.8%	6	1.5%
Hard-to-recycle bags	5.8	1.1%	6.1	1.5%
Expanded polystyrene - foam	1.5	0.3%	1	0.2%
Other plastic – non-packaging	2	0.4%	1.3	0.3%
Totals	18	3.6%	14	3.4%

There is limited Ontario experience for potential capture rates by material. However, using a range between 40% and 60%, the following estimate occurs:

- Single Family household would capture between 7 and 11 kg per year
- Multi-residential households would capture between 5 and 8 kg per year

From a collection perspective and based on previous United States programs the Hefty® EnergyBag® weekly set-out rate often grows to approximately 55 to 65 per cent. If this is the case in London, this means that in a route of 1,000 households, approximately 550 to 650 households may place an orange bag out on collection day. The average weight of materials placed in an orange bag is 0.4 to 0.5 kilograms. This means that in a route of 1,000 households in the pilot project area, a truck would collect from 200 to 300 kilograms of materials. United States experience suggests that a 20,000 household pilot project will generate between 140 and 210 bales of material.

Project Governance and Outreach

The Pilot Project will have many involved including a (primary) Project Team; project stakeholders; project advisors and interested organizations. It is being designed to "learn on the go" and will include representatives from:

Project Team (tentative)

- City of London
- Dow
- Reynolds
- Canadian Plastics Industry Association (CPIA)
- Miller Waste Systems
- First Star Recycling
- Other potential funders such as Continuous Improvement Fund (CIF) representatives

Pilot Project Working Group (Technical Operations) (tentative)

- Project team members
- PAC Next
- EFS Plastics (Ontario recycler)
- Western University
- Regional Public Works Commissioners of Ontario (RPWCO)
- Association of Municipalities of Ontario (AMO)
- Others

Size, Timing and Duration of Pilot Project

The size of the Pilot Project will be 20,000 households across 3 different collection methodologies with suggested implementation dates as follows:

Step 1	October 1/19	7,000 households with curbside service (Phase 1)
Step 2	October 1/19	6,000 households with EnviroDepot (drop-off) access
Step 3	January 8/20	1,000 apartment units (8 to 10 buildings)
Step 4	February 1/20	6,000 households with curbside service (Phase 2)

The length of the Pilot Project will be between 1.5 – 2 years and will depend on how fast participants use the bags, and the time needed to track and report results. The location of the Pilot Project areas will be determined in August/September. The goal will be to balance as much coverage in London as possible while maintaining operational efficiencies.

Proposed Pilot Project Budget and Funding

The proposed budget ranges from $275,000 (basic pilot project) to $475,000 for a more comprehensive pilot project (Table 2).

- Basic Pilot Project – minimum pilot project to meet London needs and primary industry funder needs

- Extended Pilot Project – increased activities and partially subsidized Hefty® EnergyBag® to meet industry and other funder needs

- Comprehensive Pilot Project – substantially increased activities and partially subsidized Hefty® EnergyBag® to meet industry and other funder needs including a greater focus on monitoring, data and measurement

Table 2 – Pilot Project Expenditures - Estimates

	Basic Pilot Project	Extended Pilot Project	Comprehensive Pilot Project
Supply of Hefty® EnergyBag®	**$170,000**	$230,000	$230,000
Operations	**$20,000**	$30,000	$50,000
Monitoring and Measurement	**$35,000**	$45,000	$95,000
Communications and Engagement	**$25,000**	$35,000	$50,000
Contingency	**$25,000**	$35,000	$50,000
Total	**$275,000**	$375,000	$475,000

Funding

Subject to Council approval, funding for the Basic Pilot Project has been secured at $275,000 (Table 3; at time of writing this report). Discussions are underway with other funding partners. As noted above, additional funding strengthens the knowledge and experience gained during the Pilot Project.

Table 3 – Basic Pilot Project Funding

	Year 1	Year 2	Total	Percentage
City of London	$25,000	$25,000	$50,000	18%
Industry - Dow	$100,000	$35,000	$135,000	49%
Industry - CPIA	$75,000	TBD	$75,000	27%
Industry – Other (e.g., PAC Next)	$15,000	$0	$15,000	5%
Sub-total			$275,000	100%

Table 4 – Additional Funding Requests Being Examined

	Estimated Low	Estimated High
CPIA – Year 2	$25,000	$75,000
Stewardship Ontario (industry stewards/producers)	$25,000	$75,000
Continuous Improvement Fund (Blue Box Recycling)	$50,000	$150,000
FCM Green Municipal Fund	$50,000	$100,000
Other industry partners	$10,000	$20,000

In addition to the financial investment, there is a substantial amount of in-kind services and value to be provided by representatives from Dow, CPIA, Reynolds, First Star Recycling and others.

Moving Forward – Next Steps

The Grant Recipient Agreement with CPIA is attached in Appendix A. This will finalize the financial arrangement for the Pilot Project and permit the completion of remaining activities prior to launch.

ACKNOWLEDGEMENTS

This report was prepared with assistance of Anne Boyd, Manager, Waste Diversion and Legal Services.

PREPARED BY:	**PREPARED AND SUBMITTED BY:**
MICHAEL LOSEE, B.SC. **DIVISION MANAGER** **SOLID WASTE MANAGEMENT**	**JAY STANFORD, M.A., M.P.A.** **DIRECTOR, ENVIRONMENT, FLEET & SOLID WASTE**
RECOMMENDED BY:	
KELLY SCHERR, P.ENG., MBA, FEC **MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER**	

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Appendix A Current Approaches for Reducing and Managing Plastics in the Residential Sector

Appendix B A by-law to authorize and approve a Grant Recipient Agreement between the Canadian Plastics Industry Association, and The Corporation of the City of London and to authorize the Mayor and the City Clerk to execute the Agreement.

Schedule A Grant Recipient Agreement

c Canadian Plastics Industry Association, Attention Joe Hruska, Vice President, Sustainability, 5955 Airport Road, Suite 125, Mississauga, Ontario, Canada L4V 1R9

Appendix A

Current Approaches for Reducing and Managing Plastics in the Residential Sector

Over the last 5 years, London has been one of the most active communities in Canada looking at a wide variety of solutions (e.g., programs, approaches) to keep plastics out of the City's landfill and City parks, streams, rivers and roadsides. Details on recent, current and upcoming actions with respect to plastics are below.

Policies and Directions

- The City is working closely with the Provincial Government and upcoming policies and regulations that will make industry 100% financially responsible for end-of-life management of the products and packages they make. This is called extended producer responsibility. Moving industry to 100% financial responsibility is essential. Recycling plastics ranges in complexity depending on the type and makeup of plastics. Complexity can add costs. When industry is responsible for the costs, they will make better packaging choices and ensure the cost of managing the package is included in the overall price. This will also be beneficial for London taxpayers as recycling program costs will be substantially reduced.

- The Federal Government has just announced an aggressive program to address plastic challenges. These important policies are best done at higher levels of government as it is more cost effective and a consistent approach is passed on to all residents, businesses and municipalities. The Federal Government highlighted the importance of making decisions based on science and evidence. London staff is following this very closely and will be making a contribution to the process through our London Waste to Resources Innovation Centre and Municipal Council.

- City staff are following the progress of research, direction and solutions at the Provincial and Federal government levels for microplastics (including microbeads) including local academic research at Western University. City staff will be examining effluent criteria (discharges from wastewater treatment plants) and potential modifications to plants as it is proposed and the potential role of low impact development (LID) and stormwater management ponds to reduce microplastics.

- Municipal Council signed a Memorandum of Understanding with the Canadian Plastics Industry Association in 2018 (the only municipality in Canada to do so) to work directly with them and Western University to help find a variety of solutions for plastics. Working directly with industry helps to influence them and make sure they understand consumer wants and needs. This also helps City staff to understand the challenges facing an important industry in Canada.

- Municipal Council approved the establishment of the London Waste to Resources Innovation Centre that includes goals such as:

    - creating a focal point (location or locations) for the ongoing examination of innovative solutions for waste reduction, resource recovery, energy recovery and/or waste conversion into value-added materials, chemicals, heat and power; and

    - establishing partnerships and collaborations between government, academia and businesses to synergistically build on existing strengths to create opportunities to prevent waste, to create products of value from waste, and to solve existing waste management challenges.

Reduction

- In 2019 as part of the London Clean & Green campaign, the partnership launched the idea of "refusables", encouraging residents to "say no" to items that are not needed, such as bottled water (use a refillable bottle); plastic bags (use reusable

bags), etc. This has strengthened the longstanding initiatives dealing with reduction and reuse.

- The London Clean & Green partnership program has grown over the years and now has a stronger focus on litter prevention in addition to the business and community-wide clean-up days.

Reuse

- City staff encourage the reuse of a wide variety of plastic products such as large pails, reusing plastic bags as garbage liners or for pet waste, reusing plastic food containers, resealable bags, enclosures, sending useable items to the reuse sector (e.g., Goodwill).

Recycling

- London recycles a wide range of plastic items in the recycling program commonly described as “plastic containers” (bottles and jugs) and “rigid plastic” (packaging around toys commonly referred to as blister pack) as follows:

  #1: PET (Polyethylene terephthalate) (beverage bottles, cups, other packaging, etc.)
  #2: HDPE (High density polyethylene) (bottles, cups, milk jugs, etc.)
  #3: PVC (Polyvinyl chloride) (some bottles, etc.)
  #5: PP (Polypropylene) (food containers, etc.)
  #6: PS (Polystyrene) (some food containers, etc.)
  #7: other – products stamped with a #7 are often made out of multiple plastic types or out of other types of plastic that can’t easily be recycled.

  The City does not collect #4: LDPE (Low density polyethylene such as bags) although the ones that do arrive at the Material Recovery Facility (MRF - recycling centre) are sent to local end markets for recycling. The City also does not collect expanded polystyrene such as foam packaging, plates, cups, etc.

  The plastic items that are collected are sent to two recyclers in Ontario to make new bottles and other plastic products. These facilities are located within 90 minutes of London.

- Plastic bag recycling occurs at a number of retail locations in London. Recently a few have stopped accepting plastic bags and City staff are learning more about this situation. For those that still do accept the bags, it is an ideal solution that does not cost London taxpayers any money.

- City staff have been examining processing systems that can mechanically handle a wider variety of plastic products such as advanced MRF technologies and mixed waste processing systems.

Recovery

- For flexible plastic packaging and hard-to-recycle plastics, City staff have been working with the plastics industry and Western University to identify solutions to break down the plastics back to their original chemistry (called chemical recycling) so new plastic products can be created; to recover the energy potential from plastics as a synthetic fuel source through innovative technologies such as pyrolysis and gasification.

Appendix B

Bill No.
2019

By-law No. A.-

A by-law to authorize and approve a Grant Recipient Agreement between the Canadian Plastics Industry Association, and The Corporation of the City of London and to authorize the Mayor and the City Clerk to execute the Agreement.

WHEREAS section 5(3) of the *Municipal Act, 2001,* S.O. 2001, c. 25, as amended, provides that a municipal power shall be exercised by by-law;

AND WHEREAS section 9 of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended, provides that a municipality has the capacity, rights, powers and privileges of a natural person for the purpose of exercising its authority under this or any other Act;

AND WHEREAS it is deemed appropriate for The Corporation of the City of London (the "City") to enter into a Grant Recipient Agreement with the Canadian Plastics Industry Association ("CPIA") to be a part of the Hefty® EnergyBag® Pilot Project to collect hard-to-recycle plastics – like juice pouches, candy wrappers and plastic dinnerware – at residential curbside, multi-residential buildings and residential drop-off depots and divert them from landfill and/or becoming litter by converting them into viable new resources; and the City and other Funders are prepared to support CPIA, and in return will receive operational experience and knowledge to be shared with others including those involved with the London Waste to Resources Innovation Centre program;

AND WHEREAS it is deemed appropriate to authorize the Mayor and the City Clerk to execute the Agreement on behalf of the City;

NOW THEREFORE the Municipal Council of The Corporation of the City of London enacts as follows:

1. The Agreement between The Corporation of the City of London and the Canadian Plastics Industry Association, attached as Schedule A to this by-law, is hereby authorized and approved.

2. The Mayor and the City Clerk are hereby authorized to execute the Agreement authorized and approved under section 1 of this by-law.

3. This by-law shall come into force and effect on the day it is passed.

PASSED in Open Council July 30, 2019

Ed Holder
Mayor

Catharine Saunders
City Clerk

First Reading – July 30, 2019
Second Reading – July 30, 2019
Third Reading – July 30, 2019

Schedule A

Grant Recipient Agreement

The Canadian Plastics Industry Association (CPIA), in collaboration with The Dow Chemical Company (Dow), has agreed to make a grant contribution to **The Corporation of the City of London, Ontario** (hereafter the "City") through the Hefty® EnergyBag® Grant Program. The grant contribution is subject to the following terms and conditions (hereafter the "Contribution Agreement").

Project Overview: The Hefty® EnergyBag® program collects hard-to-recycle plastics – like juice pouches, candy wrappers and plastic dinnerware – at residential curbside, multi-residential buildings and residential drop-off depots and diverts them from landfill by converting them into viable new resources.

CPIA's role is to promote and administer the grant program. As such, CPIA will provide City with a grant exclusively for the establishment of a large-scale, pilot project with a goal of implementing a new full-scale, permanent Hefty® EnergyBag® program in London, Ontario.

1. **Program Name:** Hefty® EnergyBag® Grant Program

2. **Primary Partner Name:** Canadian Plastics Industry Association

3. **Grant Partner Representative:** Joe Hruska, Vice President, Sustainability

4. **Grant Recipient(s): The City of London, Ontario**

5. **Grant Amount ($): A)** Grant funding for City from Dow is **Cdn $64,695**. Dow will also provide matching funding, up to an additional Cdn $50,000, to those communities who commit their own funding by time of initial purchase of the Hefty® EnergyBag® orange bags. The City agrees to commit Cdn $50,000, of which Dow will match Cdn $50,000. B) CPIA will also provide funding in the amount of $75,000 in 2019, and a yet-to-be determined amount in 2020.

6. **Grant Conditions and Funding Distribution:** The grant offer is conditional on the following criteria being met, namely; 1) the initial order of Hefty® EnergyBag® orange bags is a minimum of 20,000 households. This level of participation must be reached within 6 months of program launch date, and 2) City agrees to actively and frequently promote the Hefty® EnergyBag® program on their website, through social media and using other forms of community outreach, beginning no later than one to two months prior to program launch.

   Once the above conditions have been met, the grant will be distributed to the City prior to program launch once A) CPIA receives signed copy of this Grant Recipient Contribution Agreement from City, and B) CPIA receives signed Letter of Collaboration (LOC) from City (signed by all key local partners (City, Material Recovery Facility operator, Hauler, and Sponsors, if applicable) acknowledging their support and commitment to implement and operate a successful Hefty® EnergyBag® pilot project), and C) Dow and CPIA have formally announced the City as the grant recipient.

The grant money provided by CPIA is to be used solely for the purchase of the initial Hefty® EnergyBag® orange bags as part of the approved Hefty® EnergyBag® curbside collection program, related correspondence, and this Contribution Agreement. The funds may not be expended for any other purpose without CPIA's prior written approval. Grant funds may not be re-granted or transferred to any other entity without CPIA's permission, except as payment for goods or services to carry out the purposes of the grant. CPIA reserves the right to discontinue, modify or withhold any payments to be made under this grant award or to halt any further contributions of unpaid Grant funds , if it, in the CPIA's sole discretion, determines such action is

necessary: (1) because the City has not fully complied with the terms and conditions of this Contribution Agreement, including timely implementation and successful management of program; (2) to protect the purpose and objectives of the grant or any other charitable activities of CPIA; or (3) to comply with any law or regulation applicable to the City, CPIA, Dow or this grant.

Upon request, the City will supply CPIA with any and all records of contributions or City activity related to the grant funding.

In order to maintain program consistency and integrity, the City is required to submit any and all external communications, marketing and publicity that refers to the Hefty® EnergyBag® program or Hefty® EnergyBag® Grant program to CPIA, Dow, and Reynolds Consumer Products for review and approval before release. The City is required to adhere to the Hefty® EnergyBag® trademarks, logos and other distinctive brand features in accordance with the Hefty® EnergyBag® Brand Guidelines provided by Reynolds Consumer Products.

In addition, the City agrees they will neither undertake nor cause, nor permit to be undertaken, any activity which is illegal under any laws, decrees, rules, regulations, treaties, or international directives in effect in Canada (including, without limitation, the Corruption of Foreign Public Officials Act and other applicable anti-corruption laws, Bill 198 (Canadian SOX), immigration and export laws, and applicable campaign finance and disclosure laws), or other applicable jurisdictions. The City agrees that, with funds from CPIA or from any other source, they will not, directly or indirectly, improperly give, offer, or promise, or authorize or tolerate to be given, offered, or promised, anything of value to any official, entity, or individual with the intent to (i) influence any act or decision of such official, entity, or individual, or (ii) induce such official, entity, or individual to use their influence to affect or influence any act or decision, in order to assist the City in any way. The City agrees to notify CPIA immediately of any extortive solicitation, demand, or other request for anything of value, by or on behalf of any official, entity, or individual, relating to the City work on behalf of its stakeholders and contributors.

Grant funding may not be used to intervene in any election, support or oppose any political party or candidate for public office, engage in a substantial amount of lobbying, or for fundraising, litigation, or terrorist activities.

7. Implementation Plan and Timeline:

Activity	Timing	Implementation / Responsibility
1) Identify Program Collaborators	**Within 1 month after receipt of signed agreement**	The City is responsible to identify acceptable community stakeholders (ex: materials recovery facilities, haulers, sponsor(s),) best suited for program success in approved community. The City will also assist identifying end market user facilities.
2) Program Implementation	**< 6 months after receipt of signed agreement**	The City is responsible to work with local partners to implement the Hefty® EnergyBag® program in designated community and distribute approved communications announcing the program (with approval from Dow and Reynolds Consumer Products as noted above). Dow, CPIA and City will jointly work together to ensure that all collected materials are sent to various recycling and/or energy recovery end markets and that no materials will be sent to landfill with the exception of items that might be collected but are considered contaminants (e.g., metal cans, glass container, etc.). Table continued

Activity	Timing	Implementation / Responsibility
3) Program Data Collection	**After program launch**	The City is responsible to collect and report data measurements including bags collected (# & lbs./kgs.) every month, as well as Hefty® EnergyBag® material composition data every 6 months, for the first 2 years, determining the quality of materials collected by package and plastic types. The composition audits will allow City to focus household communications as to what should & should not be put in the orange bags.
4) Program Institutionalized	**Every month after program launch**	City is responsible for ongoing tracking of key metrics and monthly reports to CPIA & Dow for the first 2 years, as detailed below.

8. Monitoring, Evaluation and Learning:

- A baseline measurement of recycling rates and MRF contamination will be taken at the on-set of the project. The City will work with the local MRF to acquire this information.

- Measurement throughout the programs will also be conducted by the City with assistance from local MRF. This includes monthly measuring of the number and weight of Hefty® EnergyBag® orange bags collected (# & lbs/kgs.). Additional measurements are included in the table below.

- The City will submit quarterly reports to CPIA & Dow detailing progress of key objectives and timelines, and a narrative summarizing expenditures of the grant funds, if requested. The City will promptly provide any additional information, reports and documents reasonably requested by CPIA and/or Dow during the first two years from program launch.

Key Objectives/Metrics	Outcome indicator
1. Successful implementation of Hefty® EnergyBag® program	- Curbside Hefty® EnergyBag® program available to full community, or in phases of a minimum 20,000 households per phase. - Target by end of initial 2 years is ~30% of households are participating in Hefty® EnergyBag® program
2. Increase the amount of plastic waste diverted from landfills	- # and pounds of Hefty® EnergyBag® orange bags collected - Total amount of plastics collected - % change in waste diverted from landfills based on collected Hefty® EnergyBag® orange bags - % of contaminants in orange bags by packaging and plastic types as determined via composition audits
3. Reduce contamination in MRF recycling streams	- % change in non-recycled plastics removed from recycling stream

On behalf of the City, I hereby understand and agree to the foregoing grant contribution terms and conditions, and hereby certify my authority to execute this Contribution Agreement on the City's behalf.

_____	_____
Ed Holder	Joe Hruska
Title: Mayor The Corporation of the City of London	Title: Vice President Sustainability The Canadian Plastics Industry Association
Date:	Date:
_____	_____
Catharine Saunders Title: City Clerk	Carol Hochu Title: President & CEO
The Corporation of the City of London	The Canadian Plastics Industry Association
Date:	Date:

TO:	**CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON JULY 23, 2019**
FROM:	**KELLY SCHERR, P. ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER**
SUBJECT:	**AWARD OF TENDER 19-47 CONTRACT 15: OAKRIDGE ACRES PHASE III, PINETREE, DOLWAY AND HICKORY IRREGULAR RESULT**

RECOMMENDATION

That on the recommendation of the Managing Director, Environmental and Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the award of tender for Contract 15: Oakridge Acres Phase III; Pinetree, Dolway and Hickory:

(a) the irregular bid submitted by CH Excavating (2013) at its tendered price of $1,974,431.32, excluding HST, **BE ACCEPTED** in accordance with the Procurement of Goods and Services Policy Section 8.10 Irregular Result Clause b and Section 13.2 Clause b;

(b) the financing for this project **BE APPROVED** as set out in the Sources of Financing Report attached, hereto, as Appendix 'A';

(c) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project;

(d) the approval given, herein, **BE CONDITIONAL** upon the Corporation entering into a formal contract, or issuing a purchase order for the material to be supplied and the work to be done, relating to this project (Tender 19-47); and,

(e) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

2019-2023 STRATEGIC PLAN

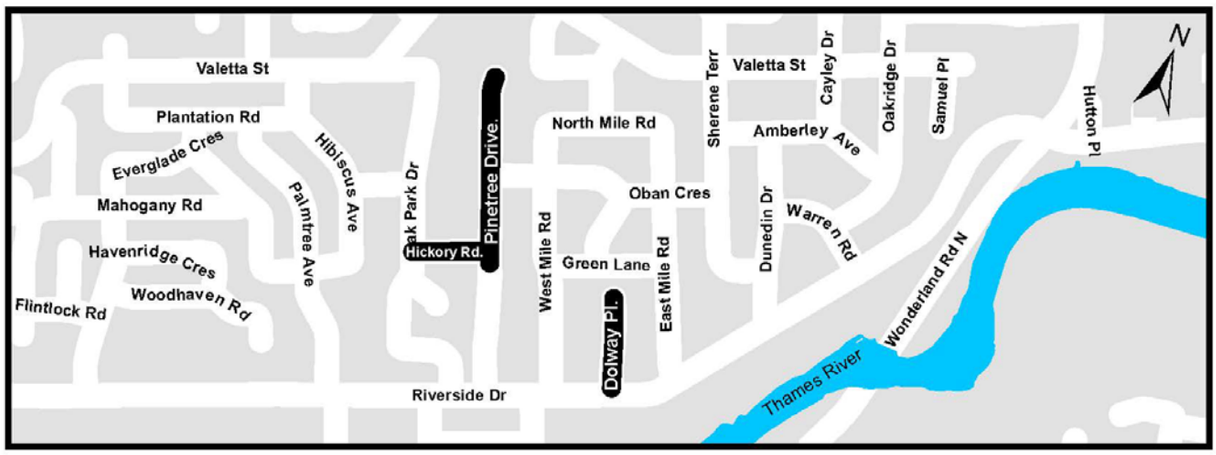
Council's Strategic Plan under Building a Sustainable City identifies that London's infrastructure should be built, maintained and operated to meet the long-term needs of our community.

BACKGROUND

Purpose

This report recommends award of a construction tender to a contractor for the reconstruction of Pinetree Drive, Hickory Road and Dolway Place in 2019. This report is required because the contract award is an irregular result as a result of receiving one tender submission.

A project location map is included reference below.



DISCUSSION

This project has been identified as a high priority in the infrastructure renewal program due to the poor condition of the municipal infrastructure on these streets.

The Oakridge Acres Phase III Infrastructure Renewal Project includes the following improvements:

- Replacement of watermain and water services to property line
- Replacement of storm sewer on Hickory Road
- Replacement of sanitary sewers and private drain connections (PDCs) where requested
- Replacement of storm sewers and PDCs where requested
- Replacement of curb and gutter, sidewalk, and roadway
- Adding a new sidewalk on the south side of Hickory Road

Infrastructure renewal needs have been coordinated within the Environmental and Engineering Services Department. The funding for this project comes from the approved 2019 Wastewater and Treatment, Water and Transportation Capital Works Budgets.

Public Consultation

A project update meeting was held on March 19, 2019 for all owners and residents within and immediately bordering the project area to address questions and concerns. This meeting was well attended with no significant concerns noted.

Service Replacement

In conjunction with the construction of this Capital Works Project, the City is administering the Private Drain Connection (PDC) Subsidy Program, which allows property owners within the projects limits an opportunity to voluntarily replace their PDCs at a reduced cost. As part of this project, the water service connections will be replaced to the property line at the City's cost and the property owner may elect to replace their private side connection at their own cost. Homeowners may also be eligible to participate in the Lead Service Extension Replacement Loan Program.

Tender Summary

The City issued a tender through Bids and Tenders for the reconstruction of Pinetree Drive, Hickory Road and Dolway Place, referred to as Contract 15; Oakridge Acres Phase III. The tender closed on Thursday June 6th, 2019.

One (1) bid was received from CH Excavating (2013). The tender submission was opened June 7, 2019 after administrative approval was received to open a single bid in accordance with the Purchasing Policy. The submitted tender value was $1,974,431.32, excluding HST. The submission was reviewed by staff from Purchasing and Supply and Construction Administration to ensure compliance to the tender requirements. The bid met the City's specifications and requirements in all areas.

The tender estimate just prior to tender opening was $1,950,000 excluding HST. The results are very close to the estimate for this work and comparable to other recent competitive tenders.

It is recommended that the contract be awarded to CH Excavating (2013) as an irregular result in accordance with Section 8.10 Clause b and Section 13.2 Clause b of the Procurement of Goods and Services Policy. The bid submitted by CH Excavating is within the budget.

CONCLUSION

It is recommended that the single bid submitted by CH Excavating (2013), in the amount of $1,974,431.32, excluding HST, be accepted, noting it is an irregular result in accordance with the Procurement of Goods and Services Policy. Award of the 2019 Infrastructure Renewal Program Contract 15: Oakridge Acres Phase III, Pinetree, Dolway and Hickory project to CH Excavating (2013) will allow the project objectives to be met within the available budget and schedule.

Additional annual Road Operating costs of $250 are identified for the new sidewalk along Hickory Road. Additional annual Sewer Operating costs of $200 are identified for additional maintenance holes and catchbasins. There are no additional operating costs associated with Water Operations.

Acknowledgements

This report was prepared within the Construction Administration Division by Paul Choma, P. Eng., Environmental Services Engineer with the assistance of John Freeman, Manager – Purchasing and Supply.

PREPARED BY:	**REVIEWED & CONCURRED BY:**
UGO DECANDIDO, P. ENG. **DIVISION MANAGER,** **CONSTRUCTION ADMINISTRATION**	**SCOTT MATHERS, P. ENG., MPA** **DIRECTOR,** **WATER AND WASTEWATER**
REVIEWED & CONCURRED BY:	**RECOMMENDED BY:**
DOUG MACRAE, P. ENG., MPA **DIRECTOR,** **ROADS AND TRANSPORTATION**	**KELLY SCHERR, P.ENG., MBA, FEC** **MANAGING DIRECTOR,** **ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER**

Attach: Appendix ‘A’ – Sources of Financing

c.c. Purchasing and Supply Division
CH Excavating

APPENDIX 'A'

#19101

Chair and Members
Civic Works Committee

July 23, 2019
(Award Contract)

RE: Contract 15: Oakridge Acres Phase lll; Pinetree, Dolway and Hickory Irregular Result Tender 19-47 (Subledger WS19C015)
Capital Project ES241419 - Sewer Infrastructure Lifecycle Renewal
Capital Project EW376519 - Water Infrastructure Lifecycle Renewal
Capital Project TS301419 - Road Network Improvements
CH Excavating (2013) - $1,974,431.32 (excluding H.S.T.)

FINANCE & CORPORATE SERVICES REPORT ON THE SOURCES OF FINANCING:

Finance & Corporate Services confirms that the cost of this project can be accommodated within the financing available for it in the Capital Works Budget and that, subject to the adoption of the recommendations of the Managing Director, Environmental & Engineering Services & City Engineer, the detailed source of financing for this project is:

SUMMARY OF ESTIMATED EXPENDITURES		**Approved Budget**	**Revised Budget**	**Committed to Date**	**This Submission**		**Balance for Future Work**
ES241419-Sewer Infra. Lifecycle Renewal							
Engineering		$2,500,000	$2,500,000	$1,342,660			$1,157,340
Construction		10,858,000	10,858,000	9,156,992	125,986		1,575,022
Construction (PDC Portion)	2)	191,600	227,600	191,600	36,000		0
Construction (London Hydro)		7,500	7,500	7,500			0
Construction (Bell)		841,680	841,680	841,680			0
City Related Expenses		20,000	20,000	77			19,923
		14,418,780	14,454,780	11,540,509	161,986		2,752,285
EW376519-Water Infra. Lifecycle Renewal							
Engineering		1,500,000	1,500,000	1,097,387			402,613
Construction		8,000,000	7,999,464	3,421,921	1,610,823		2,966,720
City Related Expenses			536	536			0
		9,500,000	9,500,000	4,519,844	1,610,823		3,369,333
TS301419-Road Network Improvements							
Engineering		100,000	100,000				100,000
Construction		9,675,435	9,675,435	8,003,712	236,372		1,435,351
		9,775,435	9,775,435	8,003,712	236,372		1,535,351
NET ESTIMATED EXPENDITURES		**$33,694,215**	**$33,730,215**	**$24,064,065**	**$2,009,181**	**1)**	**$7,656,969**
SUMMARY OF FINANCING:							
ES241419-Sewer Infra. Lifecycle Renewal							
Capital Sewer Rates		$8,978,000	$8,978,000	$8,978,000			$0
Federal Gas Tax		4,400,000	4,400,000	1,521,729	125,986		2,752,285
Other Contributions (Bell, London Hydro)		849,180	849,180	849,180			0
Cash Recovery from Property Owners (PDC Portion)	2)	191,600	227,600	191,600	36,000		0
		14,418,780	14,454,780	11,540,509	161,986		2,752,285
EW376519-Water Infra. Lifecycle Renewal							
Capital Water Rates		7,692,100	7,692,100	4,519,844	1,610,823		1,561,433
Drawdown from Capital Water Reserve Fund		1,246,900	1,246,900				1,246,900
Federal Gas Tax		561,000	561,000				561,000
		9,500,000	9,500,000	4,519,844	1,610,823		3,369,333
TS301419-Road Network Improvements							
Capital Levy		9,172,765	9,172,765	8,003,712	236,372		932,681
Drawdown from Capital Infrastructure Gap R.F.		602,670	602,670				602,670
		9,775,435	9,775,435	8,003,712	236,372		1,535,351
TOTAL FINANCING		**$33,694,215**	**$33,730,215**	**$24,064,065**	**$2,009,181**		**$7,656,969**

1) **Financial Note:**

	ES241419	**EW376519**	**TS301419**	**Total**
Contract Price	$159,184	$1,582,963	$232,284	$1,974,431
Add: HST @13%	20,694	205,785	30,197	256,676
Total Contract Price Including Taxes	179,878	1,788,748	262,481	2,231,107
Less: HST Rebate	17,892	177,925	26,109	221,926
Net Contract Price	$161,986	$1,610,823	$236,372	$2,009,181

2) The expenditures have increased to accommodate the PDC (Private Drain Connections) funding.

3) Additional annual Road Operating costs of $250.00 are identified for the new sidewalk along Hickory Road. Additional annual Sewer Operating costs of $200.00 are identified for additional maintenance holes and catchbasins. There are no additional operating costs associated with Water Operations.

JG

Jason Davies
Manager of Financial Planning & Policy

TO:	**CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON JULY 23, 2019**
FROM:	**KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR – ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER**
SUBJECT:	**IRREGULAR RESULT REQUEST FOR TENDER (RFT) 19-83 REMOVAL AND MANAGEMENT OF MUNICIPAL (HOUSEHOLD) HAZARDOUS AND SPECIAL WASTE**

RECOMMENDATION

That, on the recommendation of the Managing Director - Environmental & Engineering Services & City Engineer:

a) RFT 19-83 **BE ACCEPTED** to provide service for removal and management of municipal (household) hazardous and special waste from the depot located at the W12A Landfill Site for an estimated annual cost of $122,830 excluding HST from Envirosystems Incorporated, 239 Lottridge Street, Hamilton, Ontario, L8L 6W1, in accordance with the 'Procurement of Goods and Services Policy' Section 8.10 Irregular Result, Clause b and Section 13.2 Clause b;

b) Civic Administration **BE AUTHORIZED** to undertake all administrative acts that are necessary in connection with this purchase; and,

c) Approval hereby given **BE CONDITIONAL** upon the Corporation entering into a formal contract or having a purchase order, or contract record relating to the subject matter of this approval.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

None

STRATEGIC PLAN 2019-2023

Municipal Council has recognized the importance of solid waste management in its 2019-2023 - Strategic Plan for the City of London as follows:

Building a Sustainable City
London has a strong and healthy environment
- Increase waste reduction, diversion and resource recovery

Leading in Public Service
Londoners experience exceptional and valued customer service
- Increase community and resident satisfaction of their service experience with the City

BACKGROUND

PURPOSE

The purpose of this report is to seek approval from Committee and Council to award RFT 19-83 Removal and Management of Municipal Hazardous and Special Waste to Envirosystems Incorporated, in accordance with the 'Procurement of Goods and Services Policy' Section 8.10 Irregular Result, Clause b and Section 13.2 Clause b.

The purchasing process for RFT 19-83 is considered an irregular result as only one bid was received.

CONTEXT

The Household Special Waste (HSW) Depot is located at the W12A Landfill site (3502 Manning Drive). Residents can drop off waste products that might be flammable, corrosive, toxic or explosive at the HSW Depot, where they can be safely recycled, reused or disposed.

Historical (1987 to 2018) resident use and the amount of household special waste that has been managed at the HSW Depot is identified in Figure 1. The composition of the materials managed in 2018 respectively is illustrated in Figure 2.

Londoners can also drop off many HSW items at different retail locations in London such as:

- paint
- oil
- pharmaceuticals
- batteries (car, dry cell and rechargeable)
- fluorescent bulbs and tubes

Figure 1

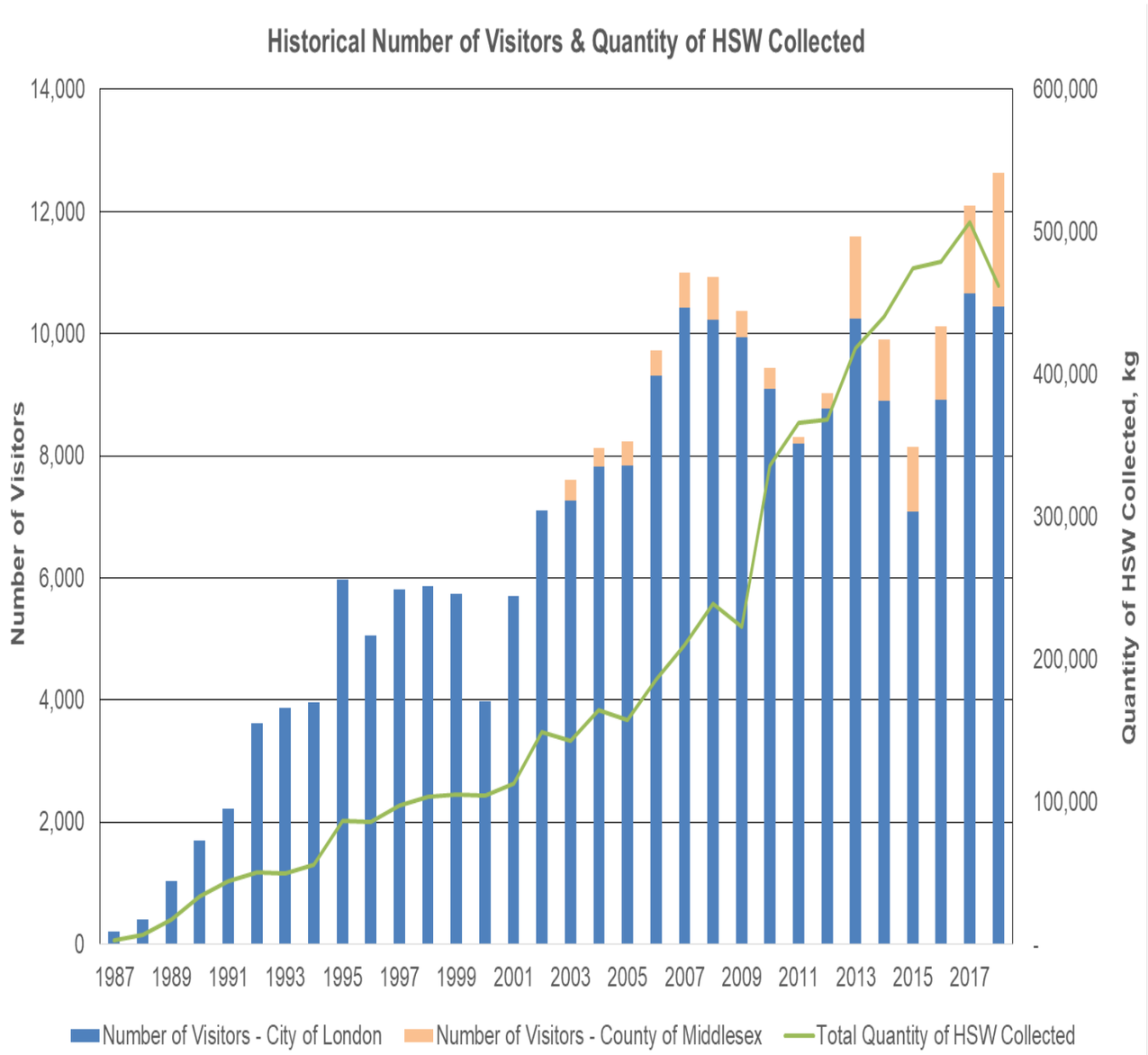
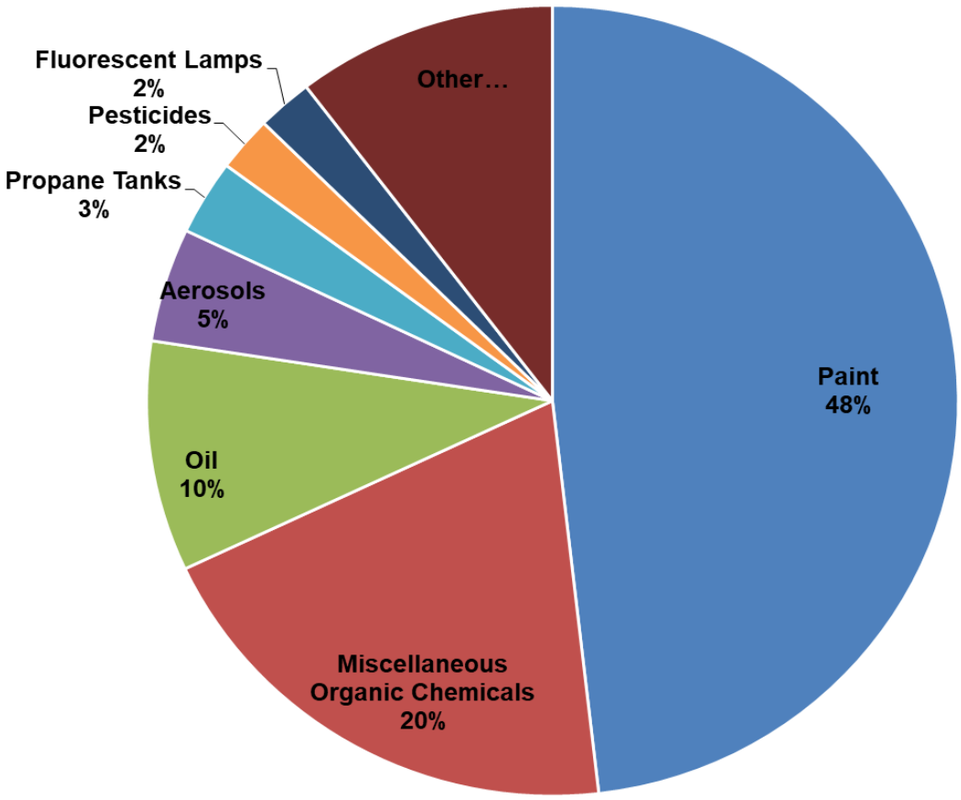


Figure 2

Breakdown of Materials
HSW Depot 2018



Note: “Other” includes items that are each less than 2% by weight of materials managed and includes: Batteries (car, dry cell and rechargeable), Inorganic acids/bases, fuel, antifreeze, oxidizers, empty automotive containers, fire extinguishers and pharmaceuticals

The HSW Depot is operated by City staff. Services for removal and management of the wastes received at the HSW Depot are contracted out. Envirosystems Incorporated is the incumbent service provider and has been providing this service under the existing contract since June 1st, 2015.

DISCUSSION

Purchasing Process

Solid Waste Management initiated the RFT process for this service with Purchasing and Supply in May 2019. RFT 19-83 was issued on Bids & Tenders™ May 29, 2019 and closed on June 12, 2019.

Tender Results

Purchasing received one (1) bid submission on this tender:

Service Provider	Estimated Annual Price(1) (excluding HST)
Envirosystems Incorporated	$122,830

(1) Actual costs depend on amount of material accepted at the HSW each year.

The Procurement of Goods and Services Policy (Section 19.4) specifies that RFTs that have irregular results require approval from Committee and Council.

Service Provider Performance

Envirosystems Incorporated is the incumbent service provider and has been providing this service to the City of London since June 1, 2015. To date Envirosystems has performed all aspects of the contract and there have been no service or performance related issues.

Financial Impact

The actual annual expenditures under the existing contract for this service have averaged $115,000 for the last four years. The estimated annual expenditure of $122,830 is an increase of approximately 7% over the four year historical average. A portion of the cost (approximately 10% to 15%) to remove and manage the waste materials accepted at the HSW Depot is currently paid for by industry (Stewards).

The province intends to transition the management of household special waste to full producer responsibility at the end of 2020. It is expected that under full producer responsibility, the funding received to manage materials dropped off at the HSW Depot will increase significantly.

Funding, under the existing model (i.e., prior to industry taking over) for this expenditure will be identified in the 2020-2023 multi-year budget. The potential additional funding to be received once the program is transitioned to full industry responsibility will be addressed as part of the monitoring process for the 2020-2023 multi-year budget.

CONCLUSION

Solid Waste Management in conjunction with Purchasing and Supply recommend that the bid from Envirosystems Incorporated be accepted for RFT19-83 Removal and Management of Municipal Hazardous and Special Waste for the estimated annual price of $122,830 excluding HST. The new contract starts on August 1, 2019 and ends on July 31, 2020. There are two (2) six month contract extension options at the sole discretion of the city.

Acknowledgements
This report has been reviewed and supported by Purchasing & Supply.

PREPARED BY:	**PREPARED & SUBMITTED BY:**
MICHAEL LOSEE, B.SC., DIVISION MANAGER, SOLID WASTE MANAGEMENT	**JAY STANFORD, M.A., M.P.A. DIRECTOR, ENVIRONMENT, FLEET & SOLID WASTE**
RECOMMENDED BY:	
KELLY SCHERR, P. ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER	

c: John Freeman, Manager of Purchasing & Supply
Ian Harris, Procurement Specialist, Purchasing & Supply

TO:	**CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON JULY 23, 2019**
FROM:	**KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR - ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER**
SUBJECT:	**SINGLE SOURCE PROCUREMENT – REPLACEMENT OF SAND/SALT SPREADERS**

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental and Engineering Services & City Engineer, the following actions **BE TAKEN**:

a) Civic Administration **BE AUTHORIZED** to enter into a single source agreement for the procurement of Sand/Salt Spreaders as per Section 14.4(d) of the Procurement of Goods and Services Policy;

b) The submission from S&B Services Ltd., 36312 Talbot Line, Shedden, Ontario, **BE ACCEPTED**; for the supply and delivery of three (3) Slide In Sand/Salt Spreaders with at a total purchase price of is $242,700 excluding HST ($80,900 per unit excluding HST);

c) Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this purchase;

d) Approval hereby given **BE CONDITIONAL** upon the Corporation entering into a formal contract or having a purchase order, or contract record relating to the subject matter of this approval; and

e) That the funding for this purchase **BE APPROVED** as set out in the Source of Financing Report attached hereto as Appendix “A”.

COUNCIL’S 2019-2023 STRATEGIC PLAN

Municipal Council has recognized in its 2019-2023 - Strategic Plan for the City of London the importance of:

Building a Sustainable City
London has a strong and healthy environment:
- Protect and enhance waterways, wetlands, and natural areas

Londoners can move around the city safely and easily in a manner that meets their needs
- Improving safety for all modes of transportation

Leading in Public Service
Londoners experience exceptional and valued customer service:
- Increase responsiveness to our customers
- Increase efficiency and effectiveness of service delivery
- Increase the use of technology to improve service delivery

BACKGROUND

Purpose

The Corporation has three (3) Sand/Salt Spreaders that have reached their optimum service life. The purpose of this report is to provide background and analysis to support the single source recommendation being put forward for replacement of these assets.

Context

Roads and Transportation Program

The Road and Transportation program includes approximately forty (40) tandem dump trucks that are used year round in a variety of applications. In the summer months these units are utilized as dump trucks for various road maintenance and construction projects. In the winter months all the units are outfitted with snow plows and nine (9) of these units are additionally outfitted with sand/salt spreaders (Figure 1).

Figure 1 – Example of the Giletta UH Sand/Salt rear discharge spreader with liquid anti-icing system

These nine (9) units are assigned to the ‘Sander Shift’ and are dedicated to sand/salt and anti-icing activities 24 hours a day, seven days a week during the winter season (November to April).

In 2017, prior to issuing a tender for the replacement of six (6) Epoke Sand/Salt Spreaders, several trial units from different vendors were tested in operation. Fleet Services then issued Tender T17-42 for six (6) Sand/Salt Spreaders and the successful vendor was S&B Services Ltd for the Bucher Giletta UH 4000 Slide-In Rear Discharge Sand/Salt Spreaders with on board liquid anti icing and computerized application control systems. The S&B Services bid was the low compliant bidder, met all our terms, conditions and specifications and had performed well during the trials. Since being put into service these six (6) units have continued to perform well.

The remaining three (3) Epoke spreader units have reached the end of their optimum service life (10 years) and require replacement. The recommendation is that these three (3) units also be replaced with the Bucher Giletta Spreaders based on their price, performance and the efficiencies of brand standardization.

DISCUSSION

Purchasing Process

This report seeks approval to proceed with a single source non-competitive procurement under the Procurement of Goods and Services Policy section 14.4 d):

> "*There is a need for compatibility with goods and/or services previously acquired or the required goods and/or services will be additional to similar goods and/or services being supplied under an existing contract*";

Vendor Quote - Three (3) Sand/Salt Spreaders with Anti-Icing Systems

Dealer	Model	Price for Three
S&B Services Ltd.	2019 Giletta UH 4000	$242,700 (excluding HST

Justification for Single Source Recommendation

1. The City currently owns six (6) Giletta UH4000 model Sand/Salt Spreaders purchased in 2017. Since that time the units have performed well with positive operator and technician feedback.

2. The slide in and out system allows the assets to be separated for cleaning, maintenance and alternative utilization during the winter months.

3. The price offered by the vendor to replace the three remaining is under budget.

4. The City's plow trucks are configured to accept the Giletta UH4000 model sand/salt spreader, which allows Fleet Maintenance and Transportation Operations the ability to keep as many Sand/Salt Spreaders in operation as possible.

5. The rear spreader configuration with computerized control system maximizes the effectiveness of sand/salt applications and minimizes the loss of product and impact to the environment.

6. Standardizing the sand/salt spreader fleet provides efficiencies in operations through familiarity, experience/knowledge, training, parts (inventory/supply), process standardization and performance.

Financial Impact:

The replacement of three (3) end of life sand/salt spreaders was identified and budgeted for in Capital Replacement Project ME201801. The total capital replacement budget for three new units was $272,400 excluding HST.

The total purchase price for these replacement assets is $242,700 excluding HST. Therefore the total project is $29,700 (approximately 11%) under budget.

Ongoing operating costs for maintenance, inspection/service, and capital replacement are funded through the internal rental rate process and charged to the program. The amounts are calculated based on historical maintenance and repair cost experience averaged over three years of operation for similar units in the equipment class.

Source of financing is attached as Appendix "A".

CONCLUSION

Based on the discussion and analysis above, Fleet Services in conjunction with Purchasing and Supply recommend a single source procurement of rear discharge sand/salt spreaders to S&B Services Ltd., 36312 Talbot Line, Shedden, Ontario.

The Giletta Sand/Salt Spreaders have performed well in both pre-tender trials and since being put in service since 2017. The product provides enhance spreader, pre-wetting and application rate technology that increases effectiveness of the salt and reduces unnecessary impacts to the environment.

The pricing offered from the Vendor remains competitive and if approved will be $29,700 under forecasted budget for the three replacements.

In addition, Operations Staff and Fleet Services have gained familiarity and experience with the Giletta Sand/Salt Spreader and that will provide value and efficiencies with respect to training, parts inventory/supply and process standardization and performance.

Acknowledgements

This report was prepared with input from Steve Mollon, Manager of Fleet Planning.

SUBMITTED BY:	**REVIEWED & CONCURRED BY**
MIKE BUSHBY, BA **DIVISION MANAGER,** **FLEET & OPERATIONAL SERVICES**	**JAY STANFORD, MA, MPA** **DIRECTOR, ENVIRONMENT, FLEET & SOLID WASTE**
RECOMMENDED BY:	
KELLY SCHERR, P. ENG., MBA, FEC **MANAGING DIRECTOR,** **ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER**	

Appendix A Source of Financing

C: John Freeman, Manager of Purchasing & Supply
Steve Mollon, Manager of Fleet Planning

APPENDIX 'A'

#19107

Chair and Members
Civic Works Committee

July 23, 2019
(Award Contract)

RE: Single Source Procurement - Replacement of Sand/Salt Spreaders
(Work Orders 2470798-2470800)
Capital Project ME201801 - Vehicle & Equipment Repl - TCA
S&B Services Ltd. - $242,700.00 (excluding H.S.T.)

FINANCE & CORPORATE SERVICES REPORT ON THE SOURCES OF FINANCING:

Finance & Corporate Services confirms that the total cost of this project can be accommodated within the financing available for it in the Capital Works Budget and that, subject to the adoption of the recommendations of the Managing Director, Environmental & Engineering Services & City Engineer, the detailed source of financing for this project is:

SUMMARY OF ESTIMATED EXPENDITURES	Approved Budget	Committed To Date	This Submission		Balance for Future Work
Vehicle & Equipment	$6,469,253	$2,504,513	$246,972		$3,717,768
NET ESTIMATED EXPENDITURES	**$6,469,253**	**$2,504,513**	**$246,972**	1)	**$3,717,768**
SUMMARY OF FINANCING:					
Capital Levy	$250,000	$250,000			$0
Drawdown from Vehicles & Equipment Replacement R.F.	6,165,891	2,201,151	246,972		3,717,768
Drawdown from Self Insurance R.F.	42,500	42,500			0
Funded From Operations	10,862	10,862			0
TOTAL FINANCING	**$6,469,253**	**$2,504,513**	**$246,972**		**$3,717,768**

1) **Financial Note:**

Contract Price	$242,700
Add: HST @13%	31,551
Total Contract Price Including Taxes	274,251
Less: HST Rebate	27,279
Net Contract Price	$246,972

lp

Jason Davies
Manager of Financial Planning & Policy

TO:	**CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON July 23, 2019**
FROM:	**KELLY SCHERR, P. ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER**
SUBJECT:	**AMENDMENTS TO THE TRAFFIC AND PARKING BY-LAW**

RECOMMENDATION

That on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, the following actions be taken with respect to the Traffic and Parking By-law (PS-113):

a) The proposed by-law, attached as Appendix 'A' **BE INTRODUCED** at the Municipal Council meeting to be held on July 30, 2019 for the purpose of amending the Traffic and Parking By-law (PS-113);

b) The proposed by-law, attached as Appendix 'B' **BE INTRODUCED** at the Municipal Council meeting to be held on July 30, 2019 for the purpose of amending the Traffic and Parking By-law (PS-113) in order to implement 'No Stopping Anytime' zones in the vicinity of the London International Airport for Airshow London 2019 from September 13th, 2019 to September 15th, 2019; and

c) The proposed by-law, attached as Appendix 'C' **BE INTRODUCED** at the Municipal Council meeting to be held on July 30, 2019 for the purpose of amending the Traffic and Parking By-law (PS-113) in order to remove the 'No Stopping Anytime' zones previously approved for Airshow London 2019 from September 13th, 2019 to September 15th, 2019.

2019-23 STRATEGIC PLAN

The following report supports the Strategic Plan through the strategic focus area of **Building a Sustainable City** by improving safety, traffic operations and residential parking needs in London's neighbourhoods.

BACKGROUND

The Traffic and Parking By-law (PS-113) requires amendments to address traffic safety, operations and parking concerns. The following amendments are proposed:

1. **Loading Zones**

   The following new loading zones are recommended to help mitigate the changes on Dundas Street and King Street:

   - Remove existing 'no parking within 20 m of an intersection' zone on the east side of Talbot Street, north of King Street and replace with a loading zone;

- Convert existing parking on the east side of Talbot Street, north of Dundas Street to a loading zone; noting the displaced parking will be provided on the west side of Talbot Street; and

- Remove existing ‘no stopping’ zone on the west side of Talbot Street, south of Queens Avenue and replace it with a loading zone.

The above results in the creation of three (3) loading zones without impacting the number of parking stalls. For clarity purposes existing parking regulations that remain unchanged are not shown in the following figures.

Figure 1: Talbot Street at King Street

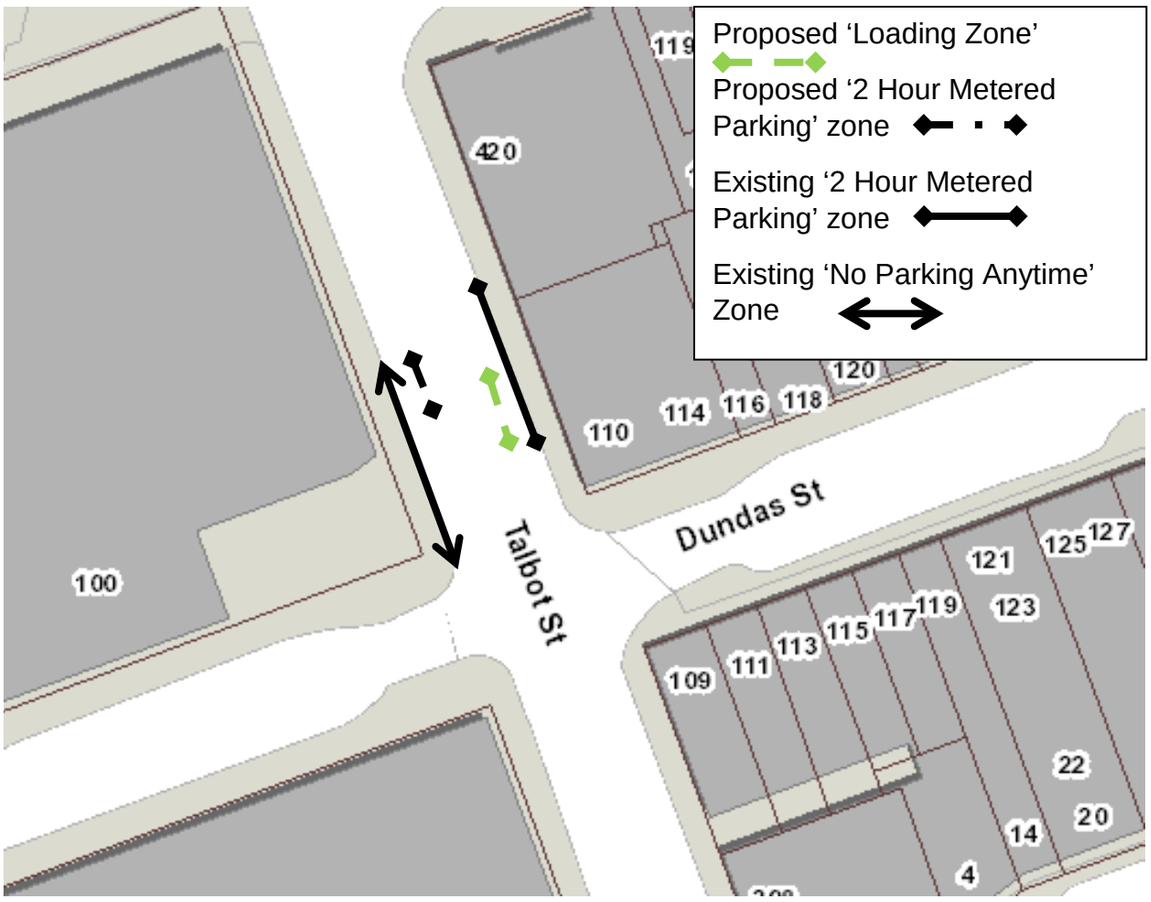


Figure 2: Talbot Street North of Dundas Street

Figure 3: Talbot Street south of Queens Avenue

Amendments are required to Schedule 5 (Loading Zones) for the above changes.

2. Airshow London 2019

Staff received a request from the Airshow London 2019 organizers and the Parking Office to implement 'No Stopping Anytime' zones on key streets near the London International Airport during the show. These changes have been implemented for the Airshow London for the last several years. The changes are to be in place from September 13th, 2019 to September 15th, 2019. The 'No Stopping Anytime' signs will be removed after September 15th, 2019. The following are the recommended temporary 'No Stopping Anytime' zones:

- Both sides of Creamery Road north from Dundas Street to the north limit of Creamery Road;
- Both sides of Dakota Place from the south limit of Dakota Place to Huron Street;
- Both sides of Dundas Street from Crumlin Sideroad to the east City limit;
- Both sides of Evelyn Drive from Rebecca Road to the east City limit;
- Both sides of Kostis Avenue from Dundas Street to north limit of Kostis Avenue;
- Both sides of Rebecca Road from Robin's Hill Road to Evelyn Drive; and
- Both sides of Robin's Hill Road from Crumlin Sideroad to Rebecca Road.

It should be noted that the timing of Airshow London may vary from year to year; therefore, the above changes are required on a yearly basis when the date of the event is finalized.

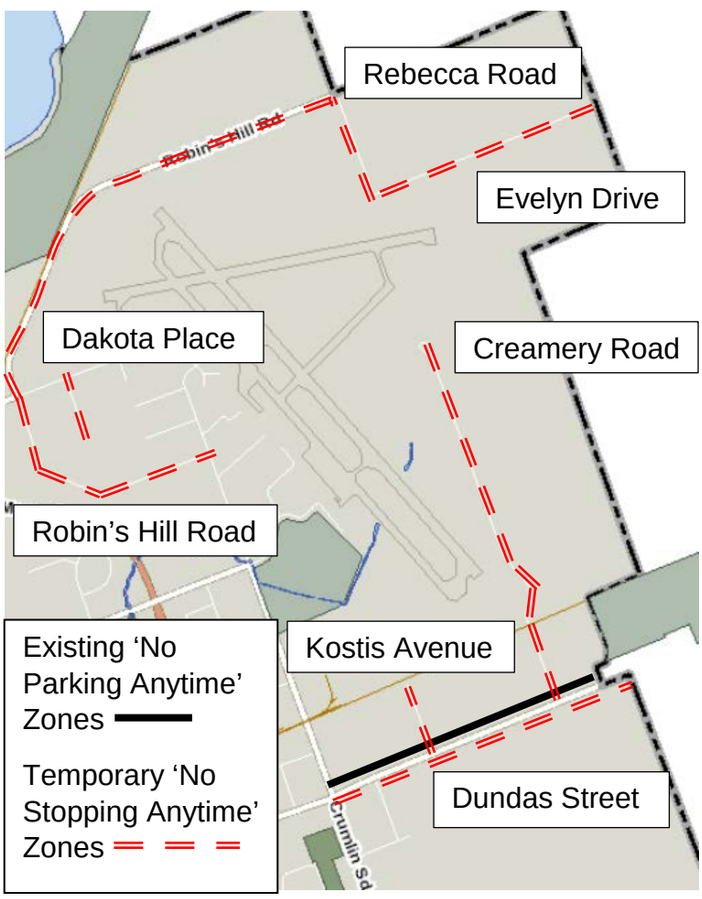


Figure 4: Temporary 'No Stopping Anytime' zones for Airshow London 2019

Amendments are required to Schedule 1 (No Stopping) for the above changes.

ACKNOWLEDGEMENT:

This report was prepared with the assistance of Doug Bolton of the Roadway Lighting and Traffic Control Division.

PREPARED BY:	REVIEWED AND CONCURRED BY:
SHANE MAGUIRE, P. ENG. **DIVISION MANAGER,** **ROADWAY LIGHTING AND TRAFFIC CONTROL**	**DOUG MACRAE, P.ENG., MPA** **DIRECTOR, ROADS AND TRANSPORTATION**

RECOMMENDED BY:
KELLY SCHERR, P.ENG., MBA, FEC **MANAGING DIRECTOR,** **ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER**

Y:\Shared\Administration\COMMITTEE REPORTS\Civic Works\2019\DRAFT\07-23\CWC - AIR SHOW TRAFFIC & LZ PARKING BY-LAW AMENDMENTS CWC July 23 2019 Council July 30 2019 Ver. 5.docx

July 9, 2019/db

Attach: Appendix ‘A’: Proposed Traffic and Parking By-Law Amendments
Appendix ‘B’: Proposed Traffic and Parking By-Law Amendments related to London Airshow 2019
Appendix ‘C’: Proposed Traffic and Parking By-Law Amendments related to London Airshow 2019

cc. City Solicitor’s Office
Parking Office

APPENDIX 'A'

BY-LAW TO AMEND THE TRAFFIC & PARKING BY-LAW (PS-113)

Bill No.

By-law No. PS-113

A by-law to amend By-law PS-113 entitled, "A by-law to regulate traffic and the parking of motor vehicles in the City of London."

WHEREAS subsection 10(2) paragraph 7. Of the *Municipal Act, 2001*, S.O. 2001, c.25, as amended, provides that a municipality may pass by-laws to provide any service or thing that the municipality considers necessary or desirable to the public;

AND WHEREAS subsection 5(3) of the *Municipal Act*, 2001, as amended, provides that a municipal power shall be exercised by by-law;

NOW THEREFORE the Municipal Council of The Corporation of the City of London enacts as follows:

1. **Loading Zones**

   Schedule 5 (Loading Zones) of the PS-113 By-law is hereby amended by **adding** the following rows:

Talbot Street	East	From a point 14 m north of Dundas Street to a point 21 m north of Dundas Street
Talbot Street	East	From a point 6 m north of King Street to a point 20 m north of King Street
Talbot Street	West	From a point 18 m south of Queens Avenue to a point 7 m south of Queens Avenue

This by-law comes into force and effect on July 30, 2019.

PASSED in Open Council on July 30, 2019

Ed Holder, Mayor

Catharine Saunders, City Clerk

First Reading – July 30, 2019
Second Reading – July 30, 2019
Third Reading – July 30, 2019

APPENDIX 'B'

BY-LAW TO AMEND THE TRAFFIC AND PARKING BY-LAW (PS-113)

To add No Stopping Zones with respect to Airshow London 2019

Bill No.

By-law No. PS-113

A by-law to amend By-law PS-113 entitled, "A by-law to regulate traffic and the parking of motor vehicles in the City of London."

WHEREAS subsection 10(2) paragraph 7. Of the *Municipal Act, 2001*, S.O. 2001, c.25, as amended, provides that a municipality may pass by-laws to provide any service or thing that the municipality considers necessary or desirable to the public;

AND WHEREAS subsection 5(3) of the *Municipal Act*, 2001, as amended, provides that a municipal power shall be exercised by by-law;

NOW THEREFORE the Municipal Council of The Corporation of the City of London enacts as follows:

No Stopping

Schedule 1 (No Stopping) of the PS-113 By-law is hereby amended by **adding** the following rows:

Creamery Road	Both	Dundas Street	North limit of Creamery Road	Anytime
Dakota Place	Both	South limit of Dakota Place	Huron Street	Anytime
Dundas Street	Both	Crumlin Sideroad	East City limit	Anytime
Evelyn Drive	Both	Rebecca Road	East City limit	Anytime
Kostis Avenue	Both	Dundas Street	North limit of Kostis Avenue	Anytime
Rebecca Road	Both	Robin's Hill Road	Evelyn Drive	Anytime
Robin's Hill Road	Both	Crumlin Sideroad	Rebecca Road	Anytime

This by-law comes into force and effect on September 13, 2019.

PASSED in Open Council on July 30, 2019

Ed Holder, Mayor

Catharine Saunders, City Clerk

First Reading – July 30, 2019
Second Reading – July 30, 2019
Third Reading – July 30, 2019

APPENDIX 'C'

BY-LAW TO AMEND THE TRAFFIC & PARKING BY-LAW (PS 113)

To remove No Stopping Zones with respect to Airshow London 2019

Bill No.

By-law No. PS-113

A by-law to amend By-law PS-113 entitled, "A by-law to regulate traffic and the parking of motor vehicles in the City of London."

WHEREAS subsection 10(2) paragraph 7. Of the *Municipal Act, 2001*, S.O. 2001, c.25, as amended, provides that a municipality may pass by-laws to provide any service or thing that the municipality considers necessary or desirable to the public;

AND WHEREAS subsection 5(3) of the *Municipal Act*, 2001, as amended, provides that a municipal power shall be exercised by by-law;

NOW THEREFORE the Municipal Council of The Corporation of the City of London enacts as follows:

1. **No Stopping**

   Schedule 1 (No Stopping) of the PS-113 By-law is hereby amended by **deleting** the following rows:

Creamery Road	Both	Dundas Street	North limit of Creamery Road	Anytime
Dakota Place	Both	South limit of Dakota Place	Huron Street	Anytime
Dundas Street	Both	Crumlin Sideroad	East City limit	Anytime
Evelyn Drive	Both	Rebecca Road	East City limit	Anytime
Kostis Avenue	Both	Dundas Street	North limit of Kostis Avenue	Anytime
Rebecca Road	Both	Robin's Hill Road	Evelyn Drive	Anytime
Robin's Hill Road	Both	Crumlin Sideroad	Rebecca Road	Anytime

This by-law comes into force and effect on September 16, 2019.

PASSED in Open Council on July 30, 2019.

Ed Holder, Mayor

Catharine Saunders, City Clerk

First Reading – July 30, 2019
Second Reading – July 30, 2019
Third Reading – July 30, 2019

TO:	**CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON JULY 23, 2019**
FROM:	**KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER**
SUBJECT:	**SEWER PRIVATE DRAIN CONNECTION POLICY REVIEW RESULTS: PROPOSED DRAINAGE BY-LAW (WM-4) AND WASTEWATER & STORMWATER BY-LAW (WM-28) AMENDMENTS**

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental and Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the Drainage By-law (WM-4) and the Wastewater & Stormwater By-law (WM-28):

(a) the proposed by-law amendment attached hereto as Appendix 'B' **BE INTRODUCED** at the Municipal Council Meeting on July 23, 2019 to amend the existing Drainage By-law (WM-4);

(b) the proposed by-law amendment attached hereto as Appendix 'C' **BE INTRODUCED** at the Municipal Council Meeting on July 23, 2019 to amend the existing Wastewater & Stormwater By-law (WM-28); and,

(c) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this proposed by-law amendment.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

Sewer Private Drain Connection Policy Review, Civic Works Committee, September 25, 2018.

2019-2023 STRATEGIC PLAN

The following report supports the 2019 – 2023 Strategic Plan through the strategic focus area of Building a Sustainable City including:

- London's infrastructure is built, maintained, and operated to meet the long-term needs of our community; and
- London has a strong and healthy environment.

BACKGROUND

Purpose

The purpose of this report is to recommend amendments to the Drainage By-law (WM-4) and Wastewater & Stormwater By-law (WM-28) related to Private Drain Connection (PDC) policies and charges.

Context

A sanitary PDC is a pipe that conveys sewage from a home or business to the City's sewer system. At the October 2, 2018 meeting of Municipal Council it was resolved:

That, on the recommendation of the Managing Director, Environmental and Engineering Services and City Engineer, a review of the current private drain connection policies BE ENDORSED, noting that the review process will include consultation with external stakeholders prior to a recommendation being advanced to Council. (2018-E01) (2.11/13/CWC)

A comprehensive review of PDC renewal and installation policies has been undertaken with input from key stakeholders including the plumbing community, development community, London Home Builders Association (LHBA), Consulting Engineers of Ontario, London Chapter, and Urban League. The following report outlines the recommended amendments to the Drainage By-law (WM-4) and Wastewater & Stormwater By-law (WM-28) based on this review.

DISCUSSION

What is a Private Drain Connection (PDC)?

Wastewater from a home travels from the toilet, sinks, and other fixtures through a building's internal plumbing to an external pipe connected to the municipal sanitary sewer system. The portion of this external pipe between the building face and the property line is called the building sewer, which is regulated by the Ontario Building Code. The portion of the external pipe between the property line and the municipal sewer is called the Private Drain Connection or PDC. A property will generally have one sanitary PDC and, depending upon the year of home construction, may also have a storm PDC. The storm PDC would provide an outlet for sump pump discharge or a private side catchbasin. A diagram is provided in Appendix 'A' to help illustrate building sewer and PDC locations and definitions. In London, the property owner is responsible for the maintenance and ultimately the cost to replace their building's PDC.

Proposed By-Law Changes

The following discussion deals with a number of PDC policies which are recommended to be changed including PDC Renewal in Construction Projects, properties eligible for 'one-off' City PDC renewal, and PDC warranty. Each section describes the current practice, proposed change, and rationale for change.

PDC Renewal During Infrastructure Renewal Projects

Currently:
During any municipal led construction project where there is excavation below the road base, property owners are contacted and given the opportunity to sign up for a PDC renewal for a flat rate fee. Most PDCs were constructed at the same time as the home and those replaced as part of the City's lifecycle replacement problem are between 60 - 100 years old. Depending on the extent of construction and property type, there are different flat rate fees outlined in the by-law that range from $2,000 to $5,000. If a property owner chooses to sign-up for a PDC renewal, the PDC is renewed between the mainline sewer and property line. If the property owner does not sign up, the 60-100 year old PDC is reconnected to the new sewer mainline. The choice to replace the PDC is completely the property owner's decision. The City subsidized replacement cost is to make the replacement choice more attractive for the property owner.

Proposed Change:
It is recommended that the program requiring an owner to fund a portion of the PDC replacement costs during a construction project be eliminated. It is also recommended that during sewer renewal projects that every active PDC be replaced at no charge to the homeowner from the sewer mainline to a point approximately two meters beyond

the curb (or sidewalk) at no charge to the property owner.

Rationale:
The current practice of soliciting PDC renewal agreements from every property owner within every sewer reconstruction project has proven to be cumbersome to administer and has had low participation rates. The proposed City funded program reduces the administrative requirement of the current program and provides a consistent approach for all property types which makes it less confusing for the property owners.

In addition, the new program provides a significant benefit to the City by reducing the risk of PDC failure underneath the new asphalt roadway. Under the current program, PDCs from the homes that do not participate in the replacement program are reburied under the new roadway. The PDCs are the same vintage as the mainline sewers being replaced (60-100 years) and are at a high risk of failing under the new roadway. Should these pipes actually collapse the newly constructed road would need to be re-excavated to make the repair or replacement. The recommended by-law changes would ensure that the all PDCs under the new road surface and sidewalks would be replaced as part of the overall infrastructure renewal project thereby potentially avoiding future pavement cuts and eventual pavement degradation of the newly constructed roadway pavement.

The financial impact of this change is estimated to be in the order of $150,000 - $250,000 per year; however, the change will have a corresponding overall increase in the life of the asphalt roadway. The impacts of this change is planned to be absorbed within the program funding envelope to be confirmed as part of the ongoing multi-year budget development.

Low Density Residential PDC Renewals Outside Infrastructure Renewal Projects

Currently:
When a single family, semi-detached, and duplex dwelling's PDC fails, property owners are eligible to have City Sewer Operations renew their PDC. This work is currently offered for a subsidized flat rate fee of $5,000. All other low density residential property types, including triplex and properties up to six self-contained (six-plex) units must hire their own contractor to undertake PDC renewal.

Proposed:
It is proposed that the $5,000 flat rate fee be extended to apply to all low-density residential properties, which will include properties with up to six self-contained units.

Rationale:
Extending the eligible properties is considered to be a more logical approach which does not discriminate between low density residential properties (for example between a duplex and a triplex). The demand for triplex to six-plex property PDC replacements is relatively small (two or less per year) so it is anticipated that extending the subsidy to these additional properties can be accommodated within the existing program's budget.

PDC Warranty

Currently:
The City currently offers a 20 year warranty when a PDC is replaced.

Proposed:
It is recommended that the current 20 year warranty be eliminated in lieu of offering a two year warranty that is standard in the construction industry.

Rationale:
Upon review of municipal comparators, no other municipality is offering a warranty

similar to the 20 year warranty offered by the City. It is therefore recommended that this warranty period be replaced with the standard two year warranty typically offered by the construction industry.

Clean Out Installation Requirements

As part of this review, the practice of requiring clean out (access to PDC for maintenance, inspection) installations was reviewed. Currently, all new residential construction requires the installation of a cleanout at property line. After review, it was determined that clean out installation shall no longer be required. Changes will be made to the City Design Standards and City Standard Contract Documents to reflect this change.

Stakeholder Consultation

During the PDC Policy review, City staff sought the feedback from multiple stakeholder groups including the plumbing community, development community, London Home Builders Association (LHBA), Urban League, and Consulting Engineers of Ontario, London Chapter to gain input and hear suggestions regarding changes to the City's current PDC Policies. The comments provided by the various stakeholders were in support of the suggested bylaw changes.

CONCLUSIONS

A number of amendments to the Drainage By-law (WM-4) and Wastewater & Stormwater By-law (WM-28) are proposed with respect to changes to the Private Drain Connection (PDC) policies and charges. These amendments are expected to be easier to understand, administer, implement, both for City staff and for property owners.

Acknowledgements

This report was prepared within the Wastewater and Drainage Engineering Division by Kyle Chambers, P. Eng., Environmental Service Engineer with assistance from Rick Pedlow, C.E.T, Division Manager, Sewer Operations Division.

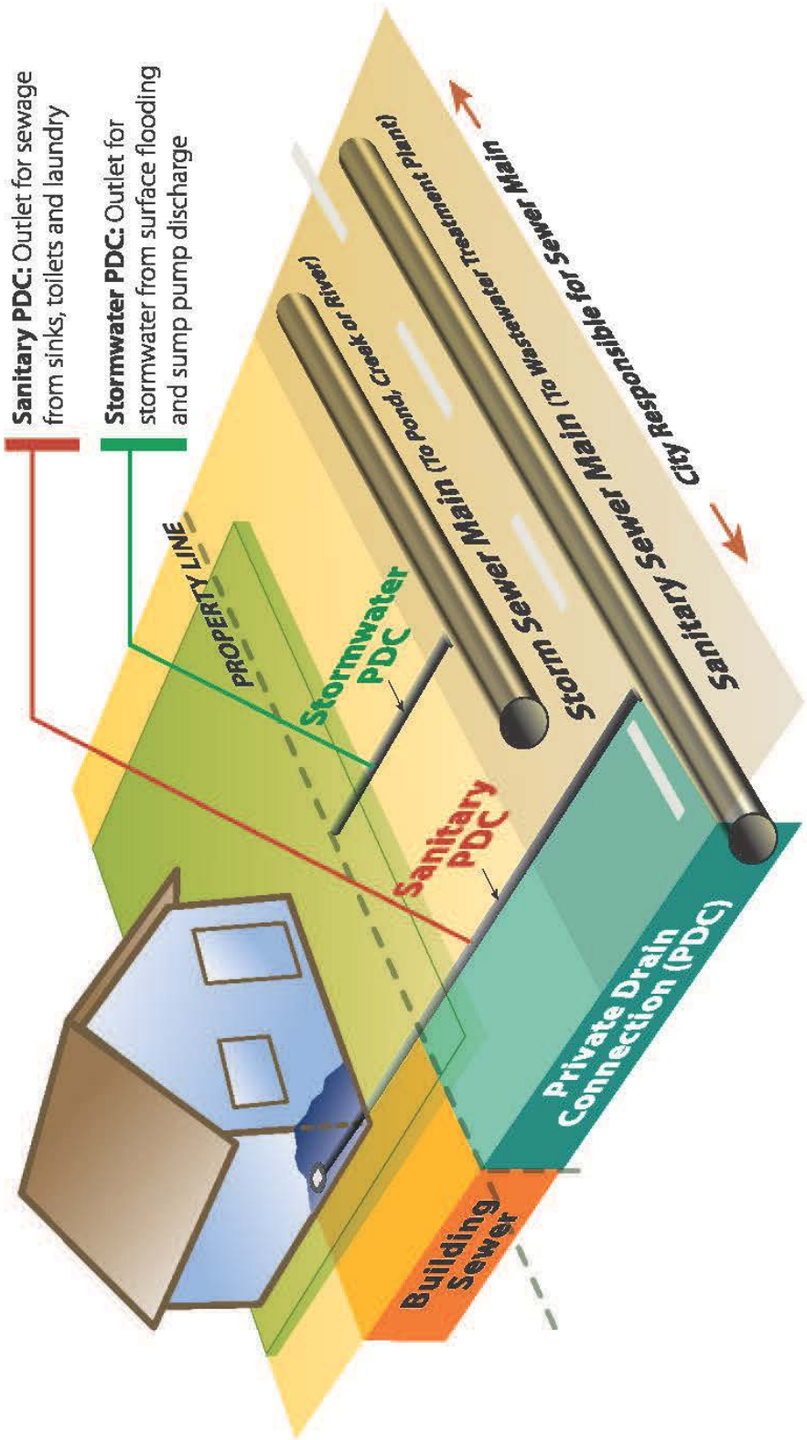
SUBMITTED BY:	REVIEWED & CONCURRED BY:
TOM COPELAND, P. ENG. **DIVISION MANAGER** **WASTEWATER AND DRAINAGE ENGINEERING**	**SCOTT MATHERS, P. ENG., MPA** **DIRECTOR** **WATER AND WASTEWATER**
RECOMMENDED BY:	
KELLY SCHERR, P.ENG., MBA, FEC **MANAGING DIRECTOR** **ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER**	

July 15, 2019
KJC/kjc

Attach: Appendix ‘A’ - Diagram of Building Sewer and PDC Details
Appendix ‘B’ - Drainage By-law WM-4 Amendment
Appendix ‘C’ - Wastewater & Stormwater By-law WM-28 Amendment

c.c. Rick Pedlow

Appendix ‘A’
Diagram of Building Sewer and Private Drain Connection (PDC) Details



Bill No.

By-law No.

A By-law to amend By-law WM-4, being a by-law to Regulate Connections to the Public Sewage Works.

WHEREAS on September 20th, 1993 Municipal Council of The Corporation of the City of London enacted By-law WM-4, being a by-law being a by-law to Regulate Connections to the Public Sewage Works;

AND WHEREAS it is deemed expedient to amend the By-law;

NOW THEREFORE the Municipal Council of The Corporation of the City of London enacts as follows:

1. Section 1.1 of the said By-law is hereby amended by adding the following definition:

   "**Low–density Residential**" meansany building that is duplex, triplex, four-plex, five-plea or six-plex and is metered by a bulk meter.

2. Section 3.1 of the By-law is hereby repealed and replaced by the following

   3.1 Owner responsibilities

   Any work upon a Private drain connection be done at the request and expense of the owner, including but not limited to:

   (i) plunging and rodding;
   (ii) the installation of new drains not installed in conjunction with main sewer installation;
   (iii) installation of a PDC liner by cured-in-place pipe (CIPP) method; or
   (iv) repair and replacement of existing PDC by open cut method.

3. Section 7.2.1 of the By-law is hereby deleted and replaced by the following:

   7.2.1 Services provided by the City Engineer – repair, replacement, installation – Single detached and Low-density Residential buildings

   The fees and charges as set out in the applicable fees and charges by-law are imposed on owners of Single detached and Low-density Residential buildings for services or activities provided by the city Engineer.

4. Section 7.2.2 of the By-law is hereby deleted.

5. Section 7.7 of the By-law is hereby deleted and replaced by the following:

   7.7 Work undertaken by the City limited

   The City Engineer shall not undertake:

   (i) the repair or replacement of a Private drain connection serving a property that is not a Single detached or Low-density Residential building; or
   (ii) the installation of new Private drain connections for any property.

   The responsibility and costs for such works shall be borne by the property owner in accordance with the applicable fees and charges by-law.

6. Section 7.8 of the By-law is hereby deleted.

2. This by-law shall come into force and effect on the day it is passed.

PASSED in Open Council , 2019

Ed Holder
Mayor

Catharine Saunders
City Clerk

First reading -
Second reading –
Third reading –

Bill No.

By-law No.

A By-law to amend By-law WM-28, being a by-law for regulation of wastewater and stormwater drainage systems in the City of London

WHEREAS on December 3, 2013 Municipal Council of The Corporation of the City of London enacted By-law WM-26, being a by-law for regulation of wastewater and stormwater drainage systems in the City of London;

AND WHEREAS it is deemed expedient to amend the said By-law;

NOW THEREFORE the Municipal Council of The Corporation of the City of London enacts as follows:

1. Section 4.2 of Schedule “A” to the By-law is hereby deleted and replaced by the following:

Repair or replace existing pdc– no construction (iv) the repair or replacement of an existing private drain connection.	$5000

2. This by-law shall come into force and effect on the day it is passed.

PASSED in Open Council , 2019

Ed Holder
Mayor

Catharine Saunders
City Clerk

First reading -
Second reading –
Third reading –

Bill No.

By-law No.

A By-law to amend By-law WM-28, being a by-law for regulation of wastewater and stormwater drainage systems in the City of London

WHEREAS on December 3, 2013 Municipal Council of The Corporation of the City of London enacted By-law WM-26, being a by-law for regulation of wastewater and stormwater drainage systems in the City of London;

AND WHEREAS it is deemed expedient to amend the said By-law;

NOW THEREFORE the Municipal Council of The Corporation of the City of London enacts as follows:

1. Section 4.2 of Schedule “A” to the By-law is hereby deleted and replaced by the following:

4.2 Private Drain Connection (PDC) Charges

Services provided by the Engineer – single detached residential, low density residential dwellings	Each PDC ($)
Repair or replace existing pdc– no construction the repair or replacement of an existing private drain connection.	$5000

2. This by-law shall come into force and effect on the day it is passed.

PASSED in Open Council , 2019

Ed Holder
Mayor

Catharine Saunders
City Clerk

First reading -
Second reading –
Third reading –

July 11, 2019

To the City of London,

Please accept this petition as a formal request for the city to remedy a parking situation that has caused a safety concern for the residents of Pall Mall St. As you are aware, there is often a cargo van parked in the lower section of driveway at 549 Pall Mall Street, which completely blocks the view of oncoming traffic for vehicles trying to enter or exit their adjacent driveways.

The city bylaw currently allows parking on these boulevards. We ask that you amend this bylaw to exclude commercial vehicles, as they are too large to be safely parked in these spaces. Cargo vans and other large, commercial vehicles nearly eliminate visibility into and out of the driveways near 549 Pall Mall St., and are therefore a significant safety concern.

We ask that you take action to amend this bylaw and no longer allow commercial vehicles of this size to be parked between the sidewalk and the street in a residential neighbourhood.

Thank you in advance for your consideration.

July 12 2019

Att: Chairs + Members of the Civic Works Committe.

Re: request for Compassionate Compensation for private drain connection at 55 1/2 Ada St.

I replaced my sewer line years ago. For the last 3 yrs, I have had sewer backup into my basement. I have had it cleared out on a regular basis last time was in June 2019. Then on July 5 2019 it backed up again. The company that cleared it said it was tree roots out on the City line. The tree is on City Property at 57 Ada St. How can I be responible for the repairs of the City drain when I have done everything to try and keep it clear.

The City workers on July 8 said it was plugged with tree roots near the road. They had difficaulty with it.

For 43 years I've lived here and would like to continue into my Elderly years. I am 65 and receive my CPP + OAS of 1526.00 monthly my Mortgage taxes and bills add up to 1360. It will be a finacial hardship if 117 mthy for 5 moth for 10 years is added to my taxes. It will leave me $109.00 for food and transportation I cannot live like that!

Please consider my request for not having to pay it. I have done everything I could do to keep the lines clear.

Thankyou for hearing my request.

Karen Ramsay

TO:	**CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON JULY 23, 2019**
FROM:	**KELLY SCHERR, P. ENG, MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER**
SUBJECT:	**VICTORIA BRIDGE REPLACEMENT DETAILED DESIGN & TENDERING APPOINTMENT OF CONSULTING ENGINEER**

RECOMMENDATION

That on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer the following actions **BE TAKEN** with respect to the appointment of a Consulting Engineer for the Victoria Bridge Replacement Project:

(a) AECOM Canada Ltd. **BE APPOINTED** Consulting Engineers for the detailed design and tendering for the Victoria Bridge Replacement Project at an upset amount of $772,894 (excluding HST) in accordance with Section 15.2 (g) of the Procurement of Goods and Services Policy;

(b) the financing for this project **BE APPROVED** as set out in the Sources of Financing Report attached hereto as Appendix A;

(c) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project;

(d) the approvals given herein **BE CONDITIONAL** upon the Corporation entering into a formal contract with the consultant for the work; and,

(e) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents including agreements, if required, to give effect to these recommendations.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

- Strategic Priorities and Policy Committee – January 28, 2016 – Downtown Infrastructure Planning and Coordination
- Civic Works Committee – November 1, 2016 – Environmental Assessment Appointment of Consulting Engineer
- Strategic Priorities and Policy Committee – November 21, 2017 – Downtown Infrastructure Construction Project Coordination
- Civic Works Committee – June 19, 2018 – Victoria Bridge Environmental Study Report

COUNCIL'S 2019-2023 STRATEGIC PLAN

The following report supports the Strategic Plan through the strategic focus area of Building a Sustainable City by building new transportation infrastructure to meet the long term needs of our community.

BACKGROUND

Purpose

This report recommends the appointment of a consulting engineer to complete the detailed design and tendering for the Victoria Bridge Replacement Project.

Context

The Victoria Bridge (6-BR-19) located on Ridout Street South spans the South Branch of the Thames River, just south of Horton Street. There have been three previous bridges in this location dating back to 1848. The current bridge was constructed in 1926 on the abutments and central pier from the previous bridge which was constructed in 1875. The south abutment was replaced in the 1950's when the original abutment was damaged by flood waters. The current structure is a steel modified warren pony truss structure.

The bridge supports two lanes of traffic, with two cantilevered sidewalks outside of the truss. A watermain, sanitary sewer and Bell Canada cables are suspended beneath the structure. At 93 years of age with substructure elements at 144 years of age, this structure is nearing the end of its service life. It has had emergency repairs due to full perforations of the steel truss, deck perforations, and expansion joint failures within the last five years. The Schedule C Class Municipal Environmental Assessment for this project was completed in July 2018 and recommended the full replacement of this structure.

This consultant assignment will allow the detailed design for the replacement of the Victoria Bridge to be completed and be 'shovel ready' in the fall of 2020. Currently, the upcoming budget anticipates the construction in 2022.

DISCUSSION

The Victoria Bridge serves as a connecting link for pedestrian, cyclist and vehicle traffic while concurrently providing a support mechanism for City services and Bell Canada cables on Ridout Street South over the South Branch of the Thames River.

The preferred alternative in the environmental assessment was to replace the existing two span steel truss bridge with a new single span steel through arch structure founded on a concrete cap and pile system. The new bridge will be wide enough to allow for two through lanes, a 1.5m bicycle lane and a 2.5m wide concrete sidewalk on the east (northbound side) and a 4.0m wide raised multi-use path on the west (southbound side). The steel truss replacement structure will provide the sympathetic design elements that recognize the cultural heritage value of this river crossing.

The removal and replacement of this structure will require that Ridout Street South be closed from Horton Street to the Thames Park entrance for approximately one year. Vehicle traffic will be detoured around the area. A temporary modular bridge is proposed to provide the necessary support to maintain the existing services currently supported under the existing structure. The bridge design will be designed to maintain connectivity over the river for pedestrians and cyclists.

The road profile will be raised by approximately 1.5 m within the limits of the project so that the new bridge will permit the river to convey the 100 year storm event river flow. This profile change necessitates reconfiguration, upgrades and revised tie-ins to the Thames Valley Parkway and the entrances to the London Hydro lands & Thames

Park, along with adjustments to various City services and utilities.

The project will also include the removal of the existing central pier from the river with due regard and protection for all the flora, fauna, terrestrial, avian and aquatic life and features, and the historic presence of coal tar.

The current bridge capital budget is balancing a number of priorities and has this project programmed for construction in 2022 and 2023. Project implementation is subject to available funding and the coordination of this work with other large infrastructure projects planned on parallel corridors. The Wharncliffe/CN Underpass reconstruction and rapid transit reconstruction of Wellington Road (including the widening of Clark's Bridge over the South Branch of the Thames River) are also scheduled in the near term.

City Staff are recommending the advancement of the detailed design for this project at this time to provide implementation timing flexibility to facilitate coordination with the other area large scale projects and to create an opportunity to accelerate in conjunction with potential external funding programs. Deferral of the construction is also possible but not desired due to the bridge condition and the likelihood of additional maintenance and repair costs.

Consultant Procurement

AECOM Canada Ltd. was selected to complete the environmental assessment in the fall of 2016 after a two stage competitive process in accordance with Section 15.2 (e) of the Procurement of Goods and Services Policy in which the assignment was publicly advertised and firms were subsequently invited to submit detailed proposals.

Due to the consultant's knowledge and experience on similar design projects combined with their positive performance on the project during the environmental assessment, AECOM was invited to submit a proposal to carry out the detailed design and tendering of this project. City staff have reviewed the fee submission in detail considering the hourly rates provided by each of the consultant's staff members. City staff have confirmed that hourly rates are consistent with those submitted through competitive processes. City staff also reviewed the time allocated to each project related task. The amount of time allocated to each project task is consistent with prior projects of a similar nature that have been awarded through a competitive process.

In accordance with Section 15.2 (g) of the Procurement of Goods and Services Policy, Civic Administration is recommending that AECOM Canada Ltd. be authorized to carry out engineering services related to detailed design and tendering for the Victoria Bridge Replacement Project for a fee estimate of $772,894 (excluding HST).

AECOM Canada Ltd. has a long history of successful structural projects within the City of London and surrounding area. AECOM's local office has a strong structural staff component fully capable of completing this assignment.

The continued use of AECOM Canada Ltd. on this project for these additional services is of financial advantage to the City due to the fact that the firm has specific knowledge of the project and has undertaken work for which duplication would be required if another firm were to be selected. The approval of this work will bring the value of the overall consulting assignment to $1,162,294. Funds for this assignment are available in the capital budget. Subject to successful completion of the design phase of this project, AECOM may be considered for the construction administration stage.

CONCLUSION

It is recommended that AECOM Canada Ltd. be appointed to undertake the detailed design and tendering for the replacement of the Victoria Bridge in the amount of $772,894 (excluding HST). AECOM Canada Ltd. has demonstrated an understanding of the City requirements for this project. AECOM has acquired a detailed knowledge of this project and issues by completing the environmental assessment

There are no anticipated additional annual operating costs to the Environmental and Engineering Services Department associated with this assignment.

Acknowledgements

This report was prepared with the assistance of Jane Fullick, C.E.T., Senior Technologist and Karl Grabowski, P. Eng., Transportation Design Engineer of the Transportation Planning & Design Division.

PREPARED BY:	**REVIEWED & CONCURRED BY:**
GARFIELD DALES, P. ENG. **DIVISION MANAGER** **TRANSPORTATION PLANNING & DESIGN**	**DOUG MACRAE, P. ENG., MPA** **DIRECTOR** **ROADS AND TRANSPORTATION**
RECOMMENDED BY:	
KELLY SCHERR, P. ENG., MBA, FEC **MANAGING DIRECTOR,** **ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER**	

Attach: Appendix A: Source of Financing

c: G. McDonald/J. Pucchio, AECOM Canada Ltd.

APPENDIX "A"

#19097

Chair and Members
Civic Works Committee

July 23, 2019
(Appoint Consulting Engineer)

RE: Victoria Bridge Replacement Detailed Design & Tendering
Appointment of Consulting Engineer
(Subledger BR160001)
Capital Project TS176319 - Bridges Major Upgrades
Capital Project ES241419 - Sewer Infrastructure Lifecycle Renewal
Capital Project TS406718 - Traffic Signals - Mtce
Capital Project TS512318 - Streetlight Maintenance
AECOM Canada Ltd. - $772,894.00 (Excluding H.S.T.)

FINANCE & CORPORATE SERVICES REPORT ON THE SOURCES OF FINANCING:

Finance & Corporate Services confirms that the cost of this project can be accommodated with the financing available in the Capital Works Budget, and that, subject to the adoption of the recommendations of the Managing Director, Environmental & Engineering Services and City Engineer, the detailed source of financing for this project is:

SUMMARY OF ESTIMATED EXPENDITURES	**Approved Budget**	**Revised Budget**	**Committed to Date**	**This Submission**	**Balance for Future Work**
TS176319 - Bridges Major Upgrades					
Engineering	$500,000	$935,283	$208,852	$726,431	$0
Construction	4,571,811	4,136,528	930,912		3,205,616
City Related Expenses	20,000	20,000			20,000
	5,091,811	5,091,811	1,139,764	726,431	3,225,616
ES241419 - Sewer Infrastructure Lifecycle Renewal					
Engineering	2,500,000	2,500,000	1,305,994	36,666	1,157,340
Construction	10,858,000	10,858,000	9,106,627		1,751,373
Construction (PDC Portion)	191,600	191,600	191,600		0
Construction (London Hydro)	7,500	7,500	7,500		0
Construction (Bell)	841,680	841,680	841,680		0
City Related Expenses	20,000	20,000	77		19,923
	14,418,780	14,418,780	11,453,478	36,666	2,928,636
TS406718 - Traffic Signals - Mtce					
Engineering	920,640	920,640	880,926	17,541	22,173
Construction	3,465,304	3,465,304	2,432,276		1,033,028
Traffic Signals	2,248,591	2,248,591	1,380,735		867,856
City Related Expenses	4,106	4,106	4,106		0
	6,638,641	6,638,641	4,698,043	17,541	1,923,057
TS512318 -Streetlight Maintenance					
Engineering	$293,795	$299,653	$293,795	$5,858	$0
Construction	1,955,283	1,949,425	1,511,744		437,681
Relocate Utilities	1,351,364	1,351,364	460,781		890,583
	3,600,442	3,600,442	2,266,320	5,858	1,328,264
NET ESTIMATED EXPENDITURES	**$29,749,674**	**$29,749,674**	**$19,557,605**	**$786,496** 1)	**$9,405,573**
SOURCE OF FINANCING					
TS176319 - Bridges Major Upgrades					
Capital Levy	$1,890,921	$1,890,921	$1,139,764	$726,431	$24,726
Drawdown from Capital Infrastructure Gap R.F.	1,200,890	1,200,890			1,200,890
Federal Gas Tax	2,000,000	2,000,000			2,000,000
	5,091,811	5,091,811	1,139,764	726,431	3,225,616
ES241419 - Sewer Infrastructure Lifecycle Renewal					
Capital Sewer Rates	8,978,000	8,978,000	8,978,000		0
Federal Gas Tax	4,400,000	4,400,000	1,434,698	36,666	2,928,636
Other Contributions (Bell, London Hydro)	849,180	849,180	849,180		0
Cash Recovery from Property Owners (PDC Portion)	191,600	191,600	191,600		0
	14,418,780	14,418,780	11,453,478	36,666	2,928,636
TS406718 - Traffic Signals - Mtce					
Capital Levy	6,424,711	6,424,711	4,698,043	17,541	1,709,127
Drawdown from Capital Infrastructure Gap R.F.	213,930	213,930			213,930
	6,638,641	6,638,641	4,698,043	17,541	1,923,057
TS512318 -Streetlight Maintenance					
Capital Levy	3,533,477	3,533,477	2,266,320	5,858	1,261,299
Drawdown from Capital Infrastructure Gap R.F.	66,965	66,965			66,965
	3,600,442	3,600,442	2,266,320	5,858	1,328,264
TOTAL FINANCING	**$29,749,674**	**$29,749,674**	**$19,557,605**	**$786,496**	**$9,405,573**

1) Financial Note:	**TS176319**	**ES241419**	**TS406718**	**TS512318**	**Total**
Contract Price	$713,867	$36,032	$17,238	$5,757	$772,894
Add: HST @13%	92,803	4,684	2,241	748	100,476
Total Contract Price Including Taxes	806,670	40,716	19,479	6,505	873,370
Less: HST Rebate	80,239	4,050	1,938	647	86,874
Net Contract Price	$726,431	$36,666	$17,541	$5,858	$786,496

lp

Jason Davies
Manager of Financial Planning & Policy

Cost Effective Options for the Victoria Bridge Design

Dear Chair and CWC colleagues,

In the upcoming multi-year budget, we will consider replacing the Victoria bridge near Ridout and Horton with a *Through-Arch-Bridge*. The cost of this design is 2.3 million dollars more than a standard concrete girder design so substantial savings are available if we look to a more cost-effective alternative.

The enhanced design was chosen because a greater visual appeal was requested by the 17 and 18 people that attended the two PICs. I believe we can honour their wishes, preserve heritage, and save more than a million dollars by simply using a standard design and incorporating two of the existing trusses.

The need for housing in our community is placing large capital demands upon us so we should look for savings on capital projects where possible. For this reason, I ask that the following motion be endorsed as a means of giving us new options at budget time.

That staff determine the cost of incorporating two of the Victoria bridge's existing trusses into a concrete girder design as a means of finding savings, preserving heritage, and enhancing the visual appeal of a new structure.

Sincerely,

Michael van Holst

TO:	**CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON JUNE 19, 2018**
FROM:	**KELLY SCHERR, P. ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER**
SUBJECT:	**VICTORIA BRIDGE ENVIRONMENTAL STUDY REPORT**

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the Victoria Bridge Environmental Assessment:

(a) Victoria Bridge Municipal Class Environmental Study Report **BE ACCEPTED**;

(b) A Notice of Completion for the project **BE FILED** with the Municipal Clerk;

(c) The Environmental Study Report **BE PLACED** on public record for a 30 day review period; and,

(d) The Victoria Bridge Replacement **BE CONSIDERED** in future multi-year capital budget developments.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

- Strategic Priorities and Policy Committee – January 28, 2016 – Downtown Infrastructure Planning and Coordination
- Civic Works Committee – November 1, 2016 – Environmental Assessment Appointment of Consulting Engineer
- Strategic Priorities and Policy Committee – November 21, 2017 – Downtown Infrastructure Construction Project Coordination

2015-19 STRATEGIC PLAN

The following report supports the Strategic Plan through the strategic focus area of *Building a Sustainable City* by implementing and enhancing safe and convenient mobility choices for transit, automobile users, pedestrians, and cyclists and creating beautiful places and spaces. The completed Environmental Assessment has identified a solution to the aging Victoria Bridge, recommending a full replacement structure which will address connectivity issues for all users while providing a distinctive unique design for the replacement structure that will enhance the Thames River Corridor.

BACKGROUND

Purpose

This report provides Committee and Council with an overview of the Municipal Class Schedule C Environmental Assessment (EA) for Victoria Bridge and seeks approval to finalize the study. The EA process was thorough and responsive to the feedback received. The completed Environmental Study Report (ESR) documents the preferred course of action for the Victoria Bridge. The ESR recommendation considers the deteriorated condition of the structure combined with opportunities for better transportation mobility provided by a replacement structure.

Background

Victoria Bridge (6-BR-19) is located on Ridout Street South and spans the south branch of the Thames River, just south of Horton Street as shown on Figure 1. The current two-span, seven panel modified Warren steel pony truss bridge was constructed in 1926 and is the fourth bridge at this location. The structure is 78 m long, with cantilevered sidewalks and railings on the outside of the trusses bring the overall width of the structure to 14.8 m.

Figure 1: Site Photo

Historic records indicate the pre-existing 1875 bridge abutments and pier were retained during the 1926 construction and concrete extensions were constructed on the west side to accommodate the new wider structure. Remaining portions of the stone masonry substructure from the previous bridge (built in 1875) were concrete encased. A 1956 rehabilitation of the structure saw the south abutment and wingwalls fully replaced with reinforced concrete founded on H-piles. The original centre pier and north abutment remain as originally constructed in 1875 and subsequently widened.

Victoria Bridge is experiencing extensive deterioration resulting in ongoing and escalating maintenance repairs including emergency repairs to address deck delaminations, a major full perforation of the truss in one location near the road surface, removal of loose concrete from the underside of the bridge, expansion joint replacement

and emergency repairs to concrete encase the severely corroded deck stringers at the abutments. Other recommended work required in the near term includes additional structural steel repairs, recoating of the steel, full deck replacement, replacement of the bearings and expansion joints, and foundation strengthening. As a result, a major lifecycle renewal investment to either replace or rehabilitate the structure is warranted. Due to the age of the structure, a Schedule 'C' Municipal Class EA and preliminary design must be completed to determine the planning and design solution for the structure. The EA process undertakes technical study combined with the input from a variety of stakeholders to determine the best course of action for renewal.

Context

Ridout Street South is a neighbourhood connector street (formerly primary collector) which accommodates an average of 12,000 vehicles per day connecting Old South London to the downtown across the south branch of the Thames River. Ridout Street is also a major north south corridor in the City's Cycling Master Plan. Bicycle lanes exist to the south of the structure, but the truss on the existing bridge has prevented the extension of the bicycle lanes across the river.

The Thames Valley Pathway (TVP) passes under the north end of the bridge adjacent to the river. The existing path crossing is of substandard width with compromised sightlines. Plans to upgrade this pathway system are currently on hold pending the resolution of this EA. Thames Park is located to the southwest of the bridge.

The area northwest of the bridge is historically known for coal tar deposits with containment and monitoring facilities in the area. The area north-east of the bridge where London Hydro is located has long been used for industrial purposes. London Hydro has an access driveway on the north east side of the bridge that must be maintained for emergency ingress and egress.

There are various utilities suspended beneath this structure including watermain, sanitary sewer, Bell Canada and Union Gas. Also there are storm outlets to the river in the near vicinity of the bridge, and a sanitary forcemain that carries flows from the Thames Park facility southwest of the bridge to a sanitary sewer on Ridout Street South - approximately 20 m south of the bridge's south expansion joint.

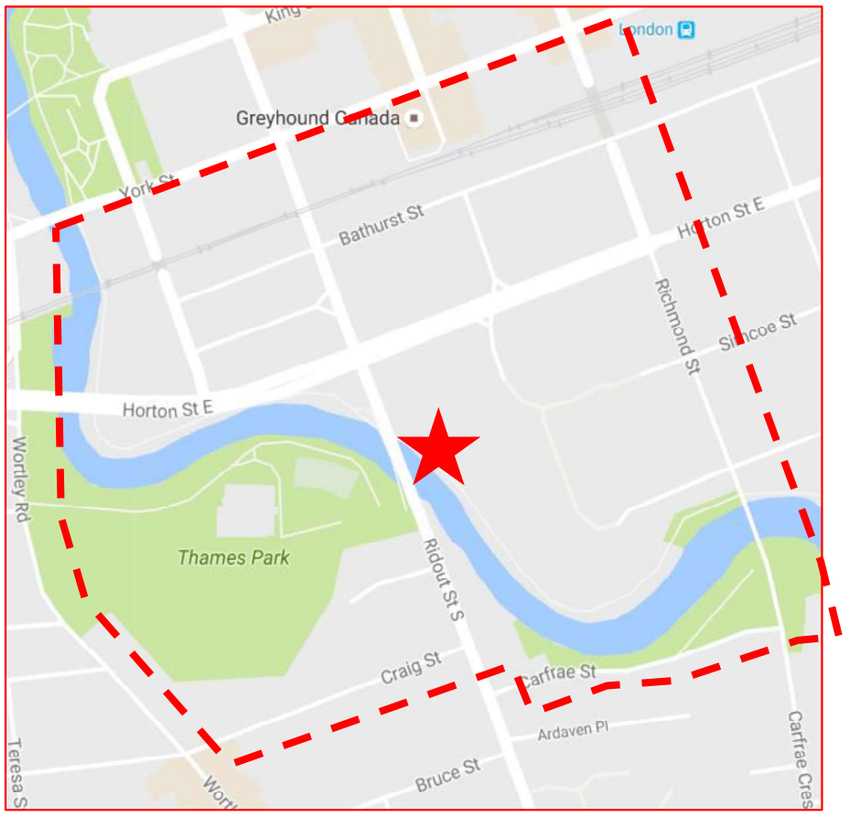
While Victoria Bridge demonstrates cultural heritage, it is not designated under the Ontario Heritage Act. The *City of London Inventory of Heritage Resources* includes the following properties within or adjacent to the study area:

- Wortley Village – Old South Heritage Conservation District South of the bridge, Ridout Street serves as the eastern boundary to the Wortley Village/Old South Heritage Conservation District (HDC).
- 37 Ridout Street S - designated under Part IV and Part V of the *Ontario Heritage Act.*

DISCUSSION

The Victoria Bridge Class EA Study was carried out in accordance with Schedule 'C' of the Municipal Class Environmental Assessment (Class EA) document (October 2000, amended 2007, 2011, and 2015). The Class EA process is approved under the Ontario Environmental Assessment Act and outlines the process whereby municipalities can comply with the requirements of the Ontario Environmental Assessment Act.

This Class EA study provided a comprehensive, environmentally sound planning process with public participation and facilitated dialogue. This Environmental Study Report (ESR) documents the decision making process carried out during the Victoria Bridge Class EA study. See below for a map illustrating the study limits.



Victoria Bridge EA Study Limits Map

Evaluation

The Problem / Opportunity Statement developed for the EA is as follows:

> Constructed in 1926, Victoria Bridge is located on Ridout Street over the South Branch of the Thames River in the City of London. Ridout Street is an important link to downtown and a designated north-south bicycle route. However, Victoria Bridge does not have sufficient width to accommodate dedicated bicycle lanes which is a safety concern. Recent bridge inspections also identified ongoing issues of deterioration which may reduce the structural capacity of the bridge. Given the age of the bridge, existing conditions, functional deck width, structural capacity, potential heritage value and other considerations, the Class EA study shall identify a solution to address structural deficiencies and accommodate all users through bridge rehabilitation or replacement.

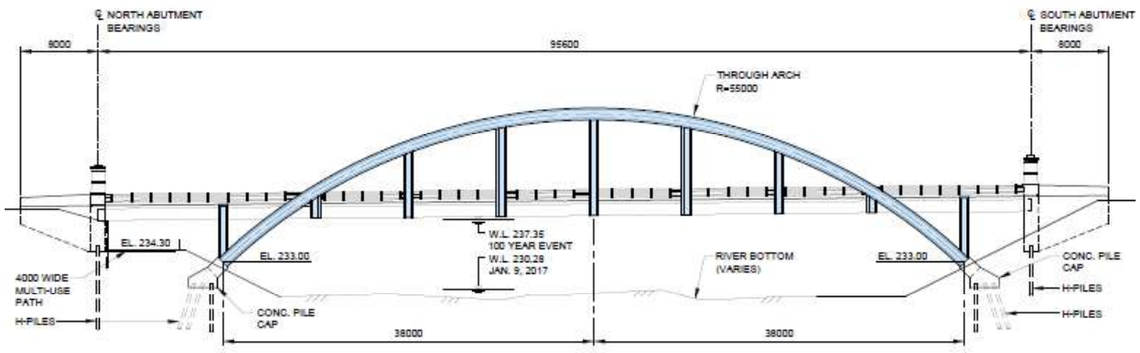
In accordance with the process, the EA evaluated the following alternatives:

- Do Nothing (not a viable alternative)
- Major Rehabilitation of the existing bridge with improved accommodation of pedestrians and cyclists
- Keep the bridge, re-purpose for active transportation and build a new bridge downstream (west side)
- Remove the existing bridge and build new bridge on existing alignment
- Remove the existing bridge and build new bridge on new alignment downstream (west side)

The evaluation of the alternatives was based on the criteria of Social/Cultural Environment, Socio-Economic Environment, Natural Environment, Technical Environment and Economic Environment. Within the Social/Cultural Environment category, the Ontario Heritage Bridge Guidelines (Interim 2008) hierarchy of heritage conservation actions to be considered during rehabilitation were considered within the Heritage Impact Statement.

Preferred Alternative

The preferred alternative recommended through the EA is to completely remove the existing structure and replace it with a new Through Arch bridge on the existing alignment. The preferred alternative will address the lifecycle renewal needs of the aging structure and will provide improved functionality with space to accommodate improved cycling and walking facilities. The attractive design is sympathetic to the design qualities of the original bridge and its setting. A bridge replacement can also provide improved climate change protection by raising the clearance of the bridge above the river and removing the centre pier which blocks debris and impedes river flows.

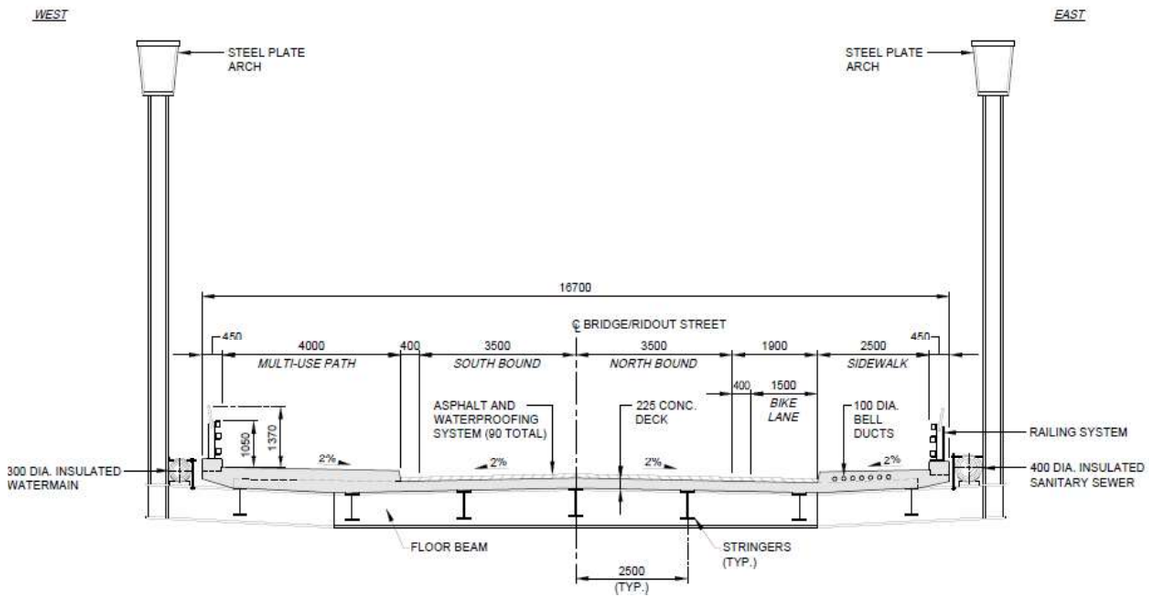


WEST ELEVATION

Proposed Through Arch Bridge Design

The new bridge will be wide enough to have two through vehicle lanes and much better active transportation facilities. A 2.5 m wide sidewalk and a dedicated northbound on-street buffered cycle lane will be on the east side of the bridge. A 4.0 m multi-use pathway is proposed on the west side of the bridge. The 4.0 m multi-use pathway will provide southbound connectivity for cyclists across the bridge as well as allow northbound cyclists from the Thames Park to cross the river and access the TVP on the north side of the river without having to enter the Ridout Street traffic. The multi-use path will extend to Horton Street and connect to the TVP as illustrated in Figure ES.7 in Appendix A.

The bridge replacement also enables significant improvement to the existing TVP crossing beneath the north end of the bridge. A new wider crossing with improved clearance will be created.



Proposed Bridge Cross-Section

Consultation

The EA process included a public consultation process with input from relevant agencies, affected landowners, First Nations communities and members of the public. A Notice of Study Commencement was mailed out to the relevant agencies and study area property owners/residents on January 19th, 2017 and an advertisement was placed in 'The Londoner' on January 19th, 2017 and January 26th, 2017. Direct correspondence and some meetings were held with the First Nation communities, Department of Fisheries and Oceans (DFO), Ministry of the Environment and Climate Change (MOECC), Ministry of Natural Resources and Forestry (MNRF), Ministry of Tourism, Culture and Sport (MTCS), Upper Thames River Conservation Authority (UTRCA), and London Hydro.

In accordance with the Schedule 'C' EA process, Public Information Centre (PIC) No. 1 was held on April 26, 2017 at St. James Westminster Anglican Church located at 115 Askin Street. Mail out notifications were sent to the residents on April 10th, 2017, and published in The Londoner on April 13th 2017 and April 20th, 2017. This PIC presented the preferred design solution for the Victoria Bridge project including identifying approach works for input and comment. 17 people attended the PIC, and/or submitted comments throughout the process. Comments were generally favourable in nature, with concerns being expressed about traffic management/detours during construction.

Taking the input received at PIC No. 1 into account, and factoring in the evaluation criteria (Cultural Heritage Significance, Transportation Environment, Socio-Economic Environment, Aesthetics, Technical Consideration, Natural Environment and Costs Implications) the preferred design alternative was established. A second PIC was held on November 15, 2017, again at St. James Westminster Anglican Church, to present the preferred design alternative to the public. Similar to PIC No. 1, mail outs to the residents were issued on November 1st 2017 with publications in The Londoner on November 2nd 2017 and November 9th, 2017. Attendance was similar to PIC No. 1 with approximately 18 attendees. The feedback was supportive of the preferred design alternative but indicated a desire for a unique design with more character. The project team considered this input in the further development of the recommendation of the through arch truss design.

Presentation of the DRAFT Heritage Impact Statement was made to the London Advisory Committee on Heritage (LACH) on April 12th, 2017. While LACH would prefer to retain the existing structure, a new bridge design constructed on the existing alignment could provide an opportunity for sympathetic design, and LACH supported the HIA as presented.

A presentation to the Cycling Advisory Committee (CAC) for active transportation impacts was made on January 17th, 2018 and presented the proposed changes to the TVP and cycle lanes on Ridout Street South and Victoria Bridge. The feedback provided from the CAC was used to develop the cycling facility arrangement including the improved connection to the TVP.

A presentation to the Transportation Advisory Committee (TAC) was made on January 23rd, 2018 with the details focused on the changes to the bridge and impacts to Ridout Street and Horton Street. The information provided was received with no issues raised by the committee.

In accordance with the City of London Official Plan, an Environmental Impact Study (EIS) was prepared and presented to the Environmental and Ecological Planning Advisory Committee for review/comments on March 15th, 2018. The information provided was received with no issues raised by the committee.

Multiple discussions have been held with London Hydro (LH) to address the impacts to their entrance off of Ridout Street South. With a road profile raise of approximately 1.0 m this entrance will need to be modified to allow safe ingress and egress of LH and emergency vehicles. A design solution has been agreed upon which satisfies the needs of all parties.

UTRCA has been consulted as a major stakeholder through the entire EA process. Their concerns to date have been addressed, and they will continue to be an involved partner in future stages of this project.

Following the PICs and stakeholder review and responses, the preferred design and ESR were finalized. A copy of the executive summary for the ESR is contained in Appendix A.

Implementation

Approach Works

The new bridge will result in a profile raise for Ridout Street South of about one metre to account for improved level of safety associated with the design flows in the Thames River. The new profile will match back into existing at Horton Street on the north end and just prior to the stone and mortar retaining wall associated with the heritage designated property located at 37 Ridout Street South on the south end. This grade raise will result in modifications to the entrances of London Hydro on the north side of the river and the Thames Park on the south side of the river.

This work will require the temporary closure of the Thames Park and London Hydro entrances for a period of time. At Thames Park, the entrance will need to be regraded and repaved to accommodate the grade changes. This work will be timed to occur during the off-season to minimize disturbance of access to the facility. Revised ramping and retaining walls will be required at the London Hydro entrance in order to maintain this access while transitioning down to the existing building and parking levels. Emergency access will be maintained at all times at the London Hydro access, but

general ingress and egress may be impacted for the duration of the construction project. The main access point into the Hydro property from Talbot Street will be open at all times.

Lighting levels on and near the bridge will be reviewed and adjusted as necessary.

There are no requirements for permanent property acquisition related to the preferred alternative.

Construction Impacts

Full Road Closure during Construction

As the existing bridge is being removed and replaced, the motor vehicle connectivity on Ridout Street across the South Branch of the Thames River cannot be maintained during construction. A road closure for a duration in the order of a year is necessary. The official signed detour routes for motor vehicles will be Wharncliffe Road and Wellington Road in the north-south direction, with Horton Street and Commissioners Road in the east-west direction.

Temporary Bridge

The existing bridge supports a sanitary sewer and Bell Canada cables. Provision of a temporary bridge to support these utilities during construction can also provide a temporary crossing for pedestrians and cyclists. The temporary structure will be installed on the west side of the existing structure with temporary connections and way finding signage installed as necessary. Rental of a temporary crossing and associated installation costs is estimated to be in the order of $450,000.

Construction laydown areas will be required. These will be identified during detailed design. On the south side of the river, part of the Thames Park and potentially one of the tennis courts will be impacted for the construction season. On the north side, the laydown area is expected to be on the northwest corner.

Thames Valley Parkway

The TVP runs underneath the existing bridge along the north side of the river from Horton Street easterly. The project will create a much improved path crossing. The TVP between Horton and Richmond Streets would need to be closed for the duration of the construction work. Detours for the TVP would be established through the local road network with way finding signage installed as necessary.

Thames Park

The entrance to will need to be closed to accommodate the road works required on the south side. This closure will be timed to occur after the peak season for Thames Park (i.e. after October 1st), so that usage of the park can be maintained as normal through the spring/summer season.

The work may impact the use of one of the tennis courts for the duration of the construction, as the area may be required for the temporary bridge and/or contractor laydown area.

London Hydro

The Ridout Street South entrance to the London Hydro Lands on the north side of the river will be impacted during the construction. It may be closed for the full construction season, though language in the contract will be included to allow for emergency access, etc. as needed if a flood event or similar situation should occur.

Temporary Detour Routes

Concerns have been raised about cut-through traffic in Old South during the construction period. With the grid pattern of local streets in Old South but no direct connection between Wortley Road and Richmond Street, encouraging through traffic to use the signed detours on higher order roads as shown on Figure ES.8 in Appendix A will be difficult. Temporary traffic calming measures to discourage traffic and control speeds on local streets in the area (Carfrae Street, Craig Street and others) will be investigated during the detailed design phase and installed prior to the start of construction.

Environmental Impact and Mitigation Measures

The work involved in removing the existing structure and installing the new structure will result in minor in-water works, and temporary disturbance to wildlife and wildlife habitat, disturbance of fish and mussel species and their habitat.

Mitigation measures will be developed and implemented to minimize the effects of construction. These could include:

- A plan to relocate fish and mussels encountered within the construction footprint;
- Species at Risk habitat to be compensated and/or enhanced;
- An invasive species control program; and,
- A detailed restoration plan utilizing native plantings and seed mixes.

Discussions and any necessary permits/approvals from the Upper Thames River Conservation Authority, MNRF, and DFO will be obtained during detailed design phase. Monitoring of the construction will be ongoing to measure effectiveness of the mitigation strategies.

The area northwest of the site is known historically for its coal tar contamination. The proposed alternative will have minimal impact on the area. Additional geoenvironmental testing will be completed during detailed design to identify with mitigation measures identified for the contract. Measures could include dewatering treatment from excavations and appropriate containment and disposal of any contaminated materials. Additional effort and review are required during detailed design and construction to ensure the existing containment and collection system along the north edge of the river is not compromised.

Financial Impacts

A preliminary construction cost for the Victoria Bridge Replacement is $14.14 M. The cost estimate includes removal of the existing steel truss structure, abutments and central pier (located in the river), construction of the new replacement bridge, roadway modifications north and south of the new bridge, modifications to the London Hydro entrance on the east side of Ridout Street, temporary relocation/support of existing sanitary sewer and Bell Canada plant currently suspended from the existing bridge, provision of a temporary bridge crossing to support these utilities during construction, and provide connectivity for pedestrians and cyclists, landscaping, traffic control,

staging, and includes allowance for detailed design and contract administration through the construction phase.

The preliminary estimate for the project is summarized below. This value will be considered in future capital budget development. The Development Charges Background Study development will also consider funding the additional bridge width to provide cycling network connectivity.

Item	Estimated Cost (2018 $)
Civil Works	1,405,400
Utility Work	728,000
Environmental Work	350,000
Temporary Work	1,150,000
Bridge Work	6,873,600
Miscellaneous	203,000
Preliminary Estimating Contingency (10%)	1,071,000
Construction Contingency (10%)	1,071,000
Engineering (12%)	1,286,000
TOTAL	**14,140,000**

Utility cost sharing has been taken into account within the estimates. The watermain and sewer costs represent life cycle renewal investments that will be funded out of sewer and water rate accounts. Accounting for these sources identifies a $13.5 M transportation budget need for the Victoria Bridge Replacement Project.

As reported to Civic Works Committee on May 28th, 2018 in the Smart Moves Transportation Master Plan Accomplishments report, the near-term demands on the Major Bridge Upgrades capital account exceed the asset management needs of the City's inventory of aging structures.

Construction Timing

The existing bridge is showing increasing areas of structural deterioration and implementation of this bridge replacement is needed in the near-term. However implementation is dictated by funding and coordination with other area projects including the Wharncliffe Road / CN Grade Separation the Wharncliffe Rd/Horton/CN Rail Overpass, the rehabilitation of Wharncliffe Road Bridge over Thames River and Shift Rapid Transit needs on the Kensington Bridge and the Queen's Bridge. The project is not expected to proceed to construction until fall of 2021/winter of 2022. Annual inspections will need to occur with additional funds spent on maintenance/emergency repair issues as they arise.

CONCLUSION

The Victoria Bridge is reaching the end of its service life. The superstructure is showing advanced deterioration including full perforations of the truss members and the 1875 capped stone masonry abutment and pier present concern. The provincial Environmental Assessment Act requires the completion of an EA for projects of this scope. The solution identified in this EA will help fulfill the Strategic Plan Area of Focus

of Building a Sustainable City by providing convenient and connected mobility choices for all Londoners.

A Municipal Class Environmental Assessment (EA) was undertaken. The ESR is ready for final public review. The ESR was prepared with input from external agencies, utilities, emergency service providers, and other stakeholders, as well as First Nations and property owners in proximity to the study.

The EA recommendation provides for the replacement of the existing deteriorated structure with a new structure that provides an improved cycling and walking experience, climate change adaption and an attractive design that is sympathetic to the heritage value of the existing truss bridge. Specifically, the preferred plan includes the following aspects:

- The removal of the existing structure including all abutments and central pier;
- The construction of a new through arch bridge with lower life-cycle costs;
- Active transportation improvements including wider sidewalks and cycling facilities;
- Upgrades to road approach and lighting; and,
- Upgrades to the TVP.

Pending Council approval, a Notice of Completion will be filed, and the ESR will be placed on public record for a 30-day review period. Stakeholders and the public are encouraged to provide input and comments regarding the study during this time period. Should the public and stakeholders feel that the EA process has not been adequately addressed, they may provide written notification within the 30-day review period to the Minister of the Environment requesting a Part II Order. If no requests for a Part II Order are received, the project will be in an immediate position to move forward to implementation in accordance with the recommendations of the study.

Construction is possible in the three to five-year horizon subject to on coordination with other project schedules as they are further developed. This timing is subject to capital budget affordability recognizing that there is a major bridge upgrade infrastructure gap based on current identified asset management needs.

Acknowledgements

This report was prepared with the assistance of Jane Fullick, C.E.T. Senior Technologist and Karl Grabowski, P. Eng., Transportation Design Engineer of the Transportation Planning & Design Division.

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Attachment: Appendix A – Environmental Study Report Executive Summary

cc. J. Pucchio, AECOM Canada Inc.

APPENDIX A

Executive Summary

1. Introduction

The City of London (the City) has completed a Municipal Class Environmental Assessment (Class EA) study for Victoria Bridge on Ridout Street South. The Class EA has determined that the bridge should be replaced and the new structure should include dedicated bicycle lanes for increased rider safety. The study area (**Figure ES.1**) is located in the City's core in close proximity to the downtown area.

The Class EA study was completed in accordance with the Ontario *Environmental Assessment Act* (EAA), and followed the Municipal Engineers Association (MEA) process for Schedule 'C' projects (as amended in 2007, 2011 and 2015).

Figure ES.1: Study Area

2. Background

Victoria Bridge crosses the South Branch of the Thames River in the City of London and is a two-span, riveted-steel pony truss bridge constructed in 1926 (**Photo ES.1**). Portions of the stone masonry substructure still exist from the previous bridge constructed in 1875. The bridge carries two lanes of traffic on Ridout Street South and pedestrians on cantilevered sidewalks located on each side of the bridge outside of the trusses. There are no separated dedicated bicycle lanes on the bridge structure. The superstructure has an overall span of approximately 77.9 m and an overall width of 14.76 m. A view of the bridge (facing north) is provided below.

Ridout Street South is an important link to downtown and Old South/Wortley Village. It carries approximately 12,000 vehicles daily and is served by public transit. Sharrows on the approaches to the bridge and the bridge itself identify shared lanes for bicycle and vehicle use. Intersections are signalized at Ridout Street South/Horton Street and Ridout Street South/Grand Avenue.

The Cultural Heritage Evaluation Report identified Victoria Bridge as having cultural heritage value or interest under Ontario Regulation 9/06. However, the bridge does not currently appear in any municipal, provincial, and federal heritage registers or inventories.

3. Problem/Opportunity Statement

The Class EA Problem/Opportunity Statement provides the basis for the need and justification for this project and is presented below:

> *Constructed in 1926, Victoria Bridge is located on Ridout Street South over the South Branch of the Thames River in the City of London. Ridout Street South is an important*

link to downtown and a designated north-south bicycle route. However, Victoria Bridge does not have sufficient width to accommodate dedicated bicycle lanes which is a safety concern. Recent bridge inspections also identified ongoing issues of deterioration which may reduce the structural capacity of the bridge. Given the age of the bridge, existing conditions, functional deck width, structural capacity, potential heritage value and other considerations, the Class EA study should identify a solution to address structural deficiencies and accommodate all users through bridge rehabilitation or replacement.

4. Alternative Planning Concepts

The evaluation of planning alternatives was completed in two steps. The initial step considered conservation strategies as identified in the Ontario Heritage Bridge Guidelines. Four alternatives were considered that could implement the conservation strategies were carried forward (**Figure ES.2**).

The second step was to evaluate the alternatives based on the environmental factors that included socio-economic, cultural heritage, natural heritage, technical, transportation and cost. Alternative A (Rehabilitation) and Alternative C (Replacement) were ranked highest among the four alternatives carried forward. Additional criteria was added to the evaluation (pedestrian and bicycle functionality, Thames Valley Pathway (TVP), structural considerations, aesthetics) and costs were further refined. As a result, **Alternative C (remove existing bridge and build a new bridge on existing alignment)** was selected as the preferred planning solution for the following reasons:

Function

- Replacement satisfies all geometric and safety design standards for vehicles, pedestrians, and cyclists.
- Removal of centre pier will improve river flow and reduce debris build up.
- There is potential to improve Thames Valley Parkway alignment for active transportation.

Structure

- The replacement bridge will be designed to current material and code standards.
- The new structure will have a service life of approximately 100 years.

Aesthetics

- Special design elements (such as decorative lighting, railing systems and end post) can be incorporated into the new bridge.

Cost

- New construction has a higher initial cost, but lower life cycle and lower maintenance costs than rehabilitation.

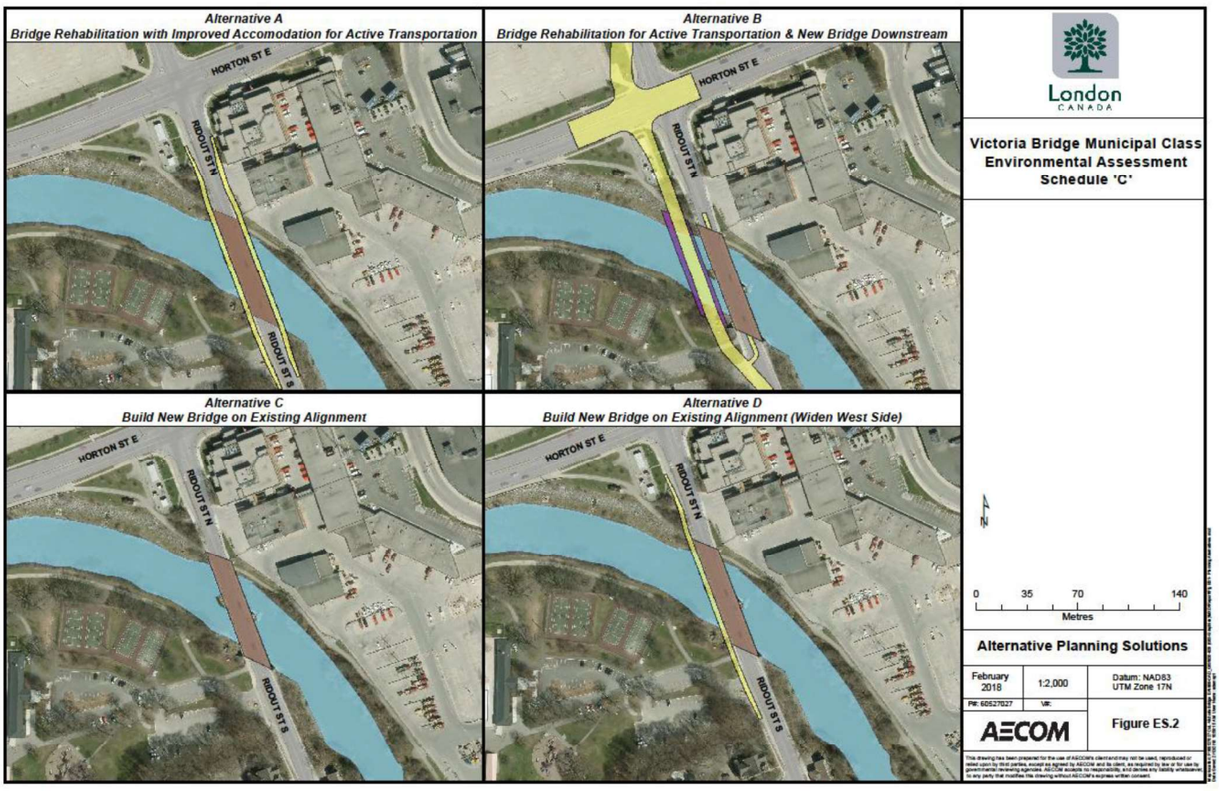


Figure ES.2 Alternative Planning Scenarios

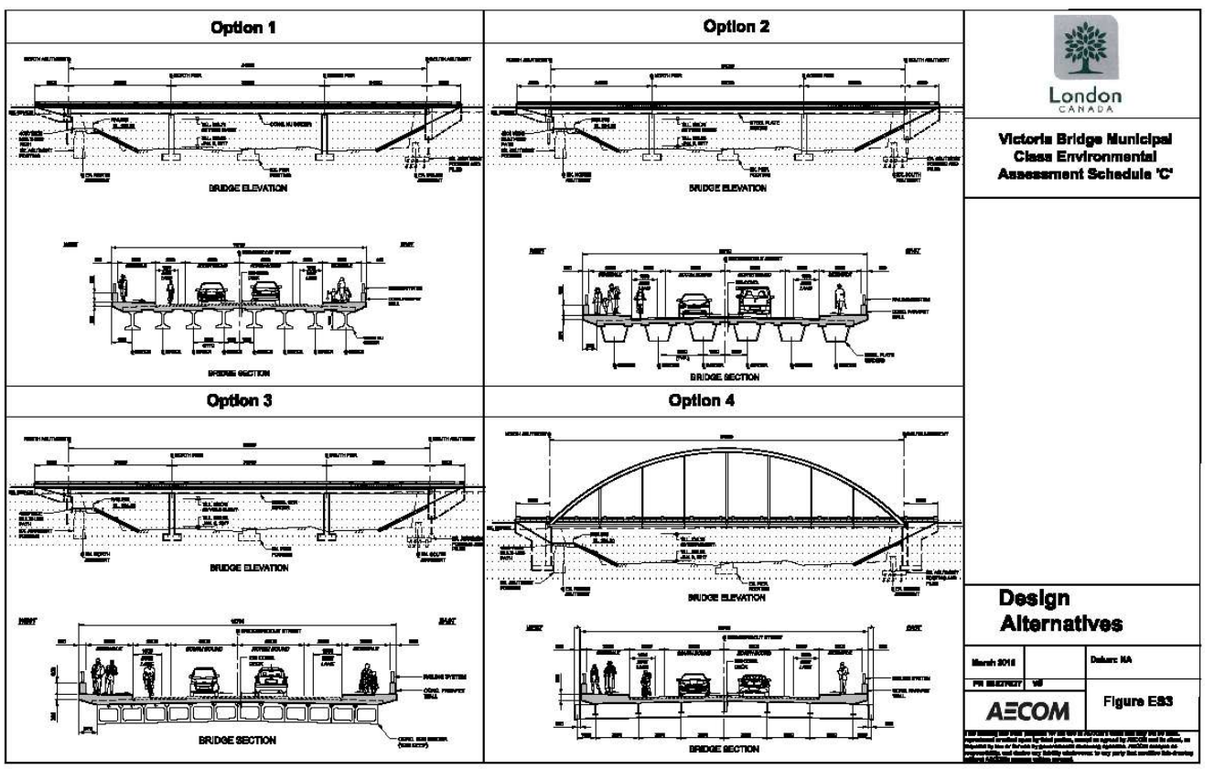


Figure ES.3 Design Alternatives

5. Alternative Design Concepts

Four bridge design concept alternatives were considered to implement the Preferred Planning Solution for replacing the bridge on the existing alignment (**Figure ES.3**). These included Alternative 1: Concrete Girder; Alternative 2: Steel Box Girder; Alternative 3: Concrete Box

Girder; and Alternative 4: Tied Arch. Evaluation of these alternatives was undertaken with the use of a decision matrix and concluded **Alternative 1: Concrete Girder** design to be the recommended alternative. This alternative demonstrated the lowest capital and maintenance costs, high durability, low impact on the natural environment, and the design is conducive to the addition of aesthetic enhancements.

6. Feedback on the Recommended Design Alternative

Comments received from the public at PIC #2 indicated a preference for a bridge design that demonstrated more character and design elements than the concrete girder option, such as the tied arch design. As such, an additional alternative was developed consisting of a Through Arch bridge (Alternative 5) to reflect the comments received (**Figure ES.4**). All alternatives were then re-evaluated to determine a revised Recommended Design Alternative.

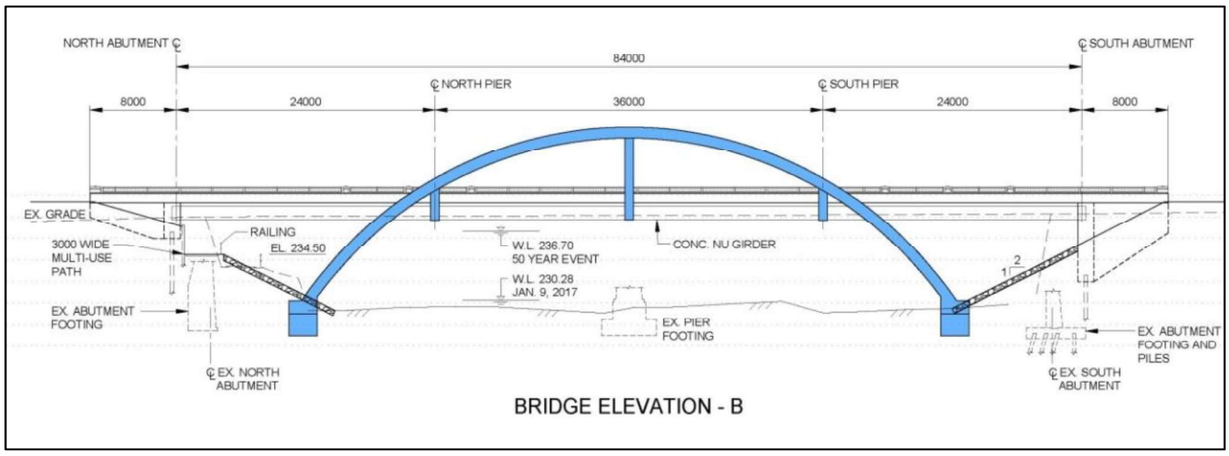


Figure ES.4: Alternative 5 (Through Arch)

Evaluation of the alternatives resulted in **Alternative 5: Through Arch** being selected as the Preferred Design Concept. Details of this alternative are described below.

7. Project Details

The proposed bridge consists of a single span steel Through Arch structure with a 76 m arch span and 94 m overall length of the deck structure. A Through Arch is positioned on each side of the deck, with each end founded on a concrete cap and pile system. Located on the river banks, the tops of the concrete caps will extend above the normal water level of the river. Vertical steel members extend from the arch to support transverse steel floor beams. Longitudinal steel stringers are connected to the floor beams and support the 0.225 m thick reinforced concrete deck slab.

The proposed bridge will have the same roadway and bridge centreline profile as the existing. However, the vertical profile will be significantly raised (between the south side of the Horton Street intersection to just south of the Thames Park entrance) to provide clearance for the 100 year flood level. Reconstruction of the London Hydro and Thames Park entrances is also required to accommodate the change in vertical grades. This will include regrading each entrance and construction of concrete retaining walls for adequate transition to the surrounding grades.

Zero skew is proposed between both sides of the arch structure to reduce the high complexity and cost of fabricating a skewed framing system. However, a skew of 19.7 degrees is proposed for the ends of the bridge to reduce conflicts with buried obstructions and reduce the overall deck area. The skew angle may be modified during Detailed Design to optimize the structural

arrangement. The concrete abutments at each end of the bridge are supported on piled foundations.

The concrete deck width of 16.7 m provides sufficient space for two 3.5 m through lanes (one northbound and one southbound) and a 1.5 m bicycle lane on the east (northbound side). There is a 4.0 m wide raised multi-use path on the west side of the deck for pedestrians and bicyclists. On the east side, there is a 2.5 m raised concrete sidewalk. The Through Arch will be located outside of the deck.

A railing height of 1.05 m (for pedestrians) and 1.37 m (for combined pedestrian / cyclist usage) is required for the east and west sides of the bridge respectively. However, a railing height of 1.37 m will be used on both sides of the bridge for aesthetic symmetry. The railing system will conform to a crash tested system, but modified for use with pedestrians and bicycles. A concrete end wall will be placed at each corner for transitioning to the guide rail system.

A temporary modular bridge is proposed across the Thames River on the west side of Ridout Street South for pedestrians and cyclists, as well as support of temporary services for the duration of the construction project (including sanitary sewer and Bell). The temporary bridge will connect the TVP on the north bank to the multi-use pathway (in Thames Park) on the south side. The elevation of the temporary bridge at each end will be at, or slightly above the existing pathway elevations on both sides, with ramps leading to the bridges.

Figures ES.5- ES.6 illustrates the preferred bridge arrangement and cross-section.

Thames Valley Parkway

The existing TVP passes below the north span of bridge, immediately adjacent to the north abutment. The path varies in width, providing a clear width of at least 1.8 m. The following upgrades are proposed:

- Pathway below bridge will be increased to 4 m wide with a 3 m vertical clearance.
- The ramp from the TVP to Ridout Street South will be removed due to the increased vertical profile of the road and associated substandard slope of the path.
- Approximately 6 m east of the bridge, the pathway will transition to the existing path.
- The widened path will extend approximately 65 m to the west of the bridge and transition to the existing pathway. A new northeast ramp will be provided at this location to connect to the new pathway.
- The existing sidewalk situated adjacent to Horton Street will be upgraded to a multi-use path with a 4 m width, extending to Ridout Street South to approximately 100 m west of the bridge where it will join the existing TVP (situated adjacent to Horton Street). This provides connectivity from eastbound cyclists to Ridout Street South.
- A new northeast ramp situated 65 m west of the bridge will be provided to connect to the new multi-use path along Horton Street, effectively connecting westbound bicyclists to Ridout Street South.

See **Figure ES.7: Proposed TVP Connection**.

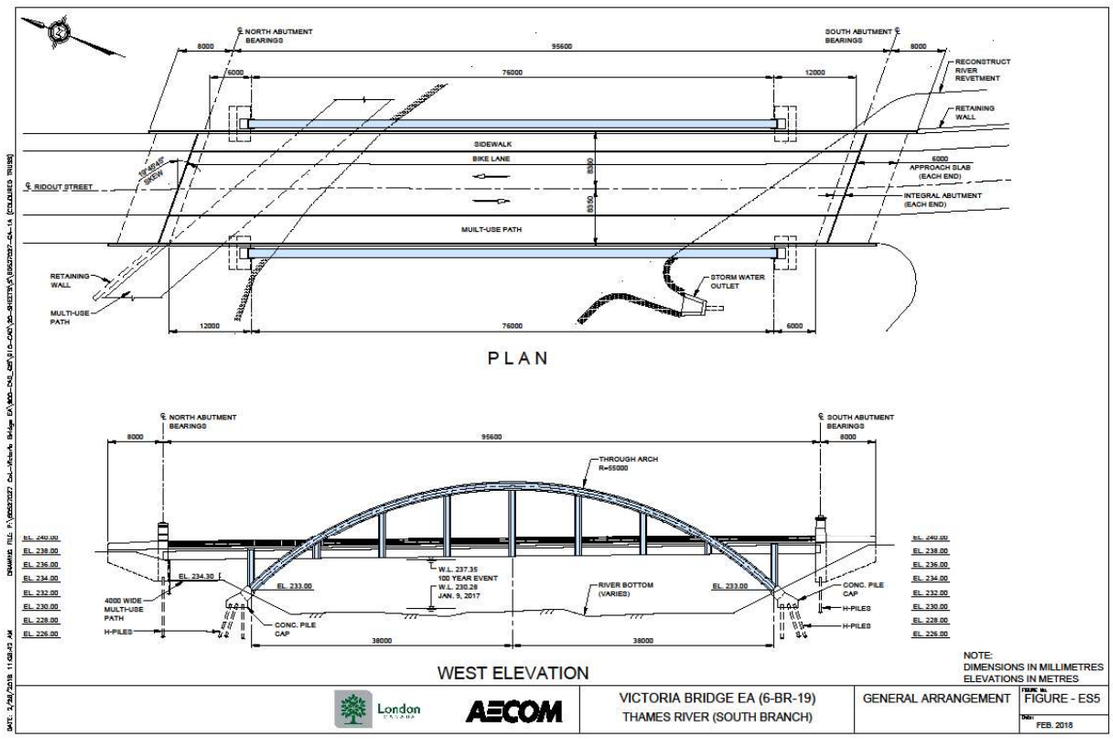


Figure ES.5: Proposed Bridge Arrangement

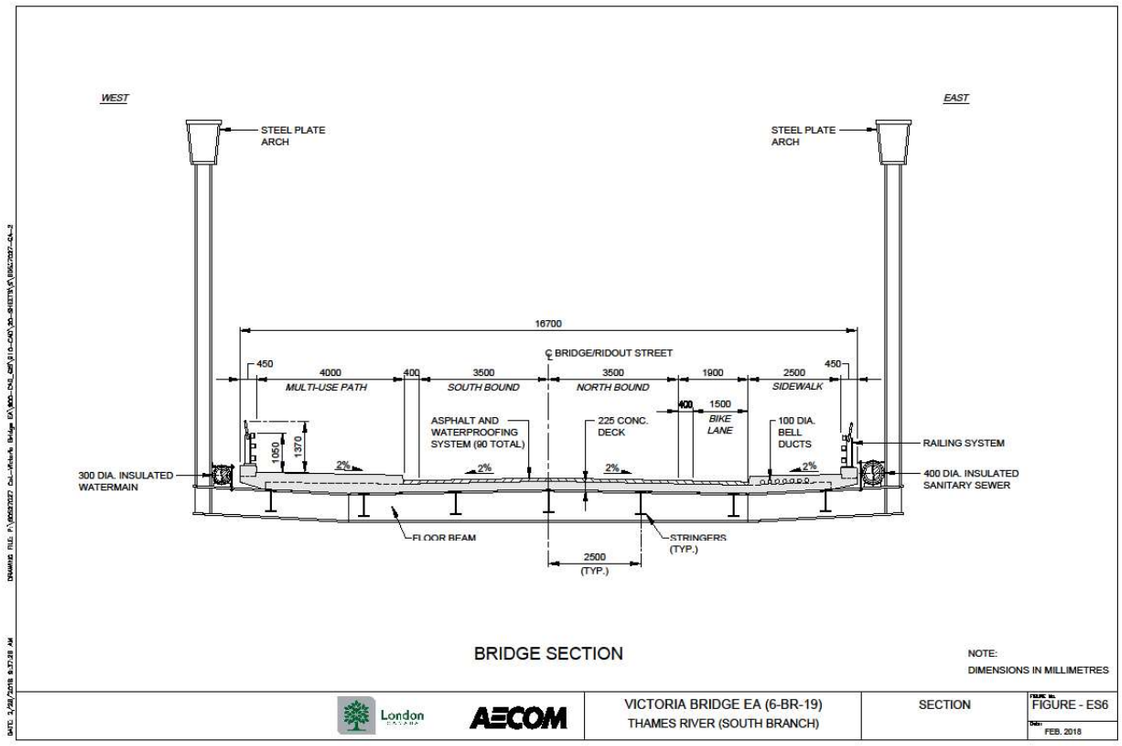


Figure ES.6: Proposed Bridge Cross-Section

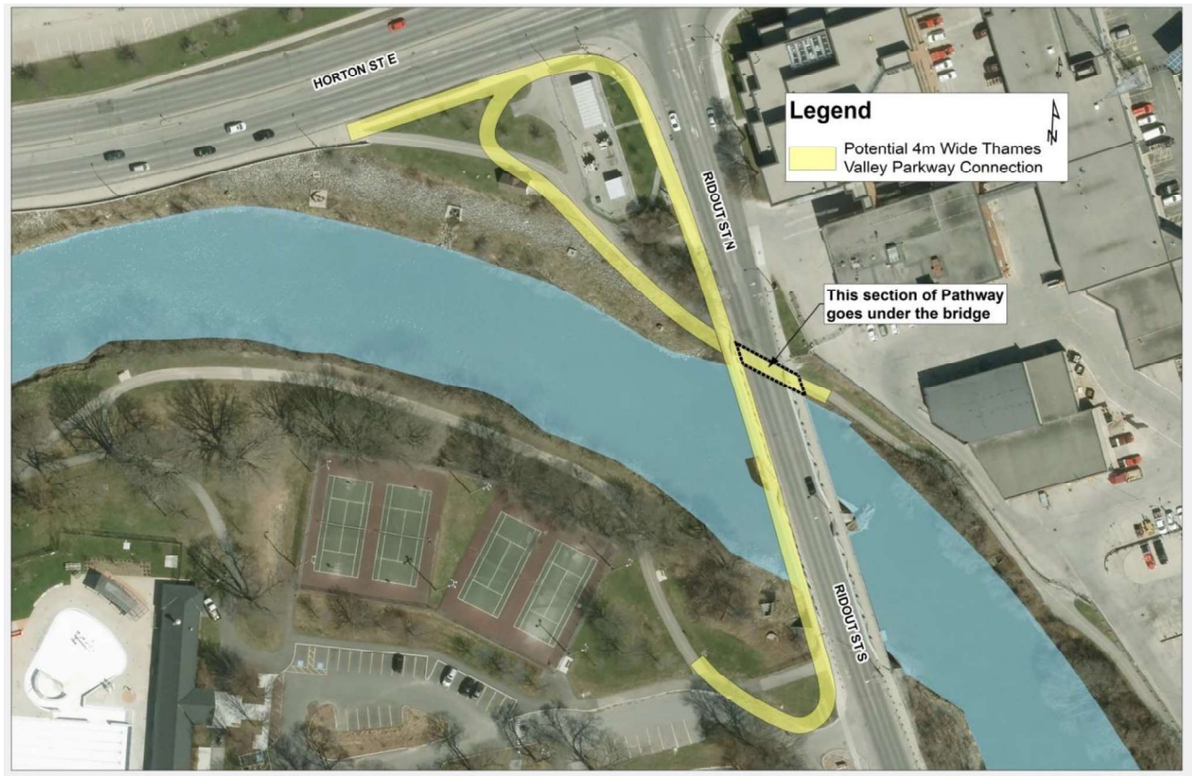


Figure ES.7: Proposed TVP Connection Upgrades

Traffic Management - Vehicular Traffic Detour

- Because of the scale of work required to replace the bridge and limited space, a full road closure will be required on Ridout Street South between Horton Street and the Thames Park entrance. Road closure is expected for a period of up to one year, with the actual road closure defined during Detailed Design.
- Traffic is required to be rerouted to roads capable of carrying the increased volume of traffic. Vehicular traffic will be directed to Wharncliffe Road to the west and Wellington Road to the east for one full construction season. See **Figure ES.8**.
- Temporary traffic calming measures will be incorporated during construction on local streets to reduce traffic cut through.

Traffic Management - Active Transportation Detour

- The impact of construction on active transportation will vary throughout the duration of construction.
- Temporary closure of TVP below the bridge on the north bank of the Thames River (from Richmond Street to Horton Street) is required for the duration of construction.
- A temporary modular bridge will provide access for pedestrians and cyclists across the river during construction.
- Way-finding signage will be incorporated at various locations to direct pathway users to the temporary bridge crossing.

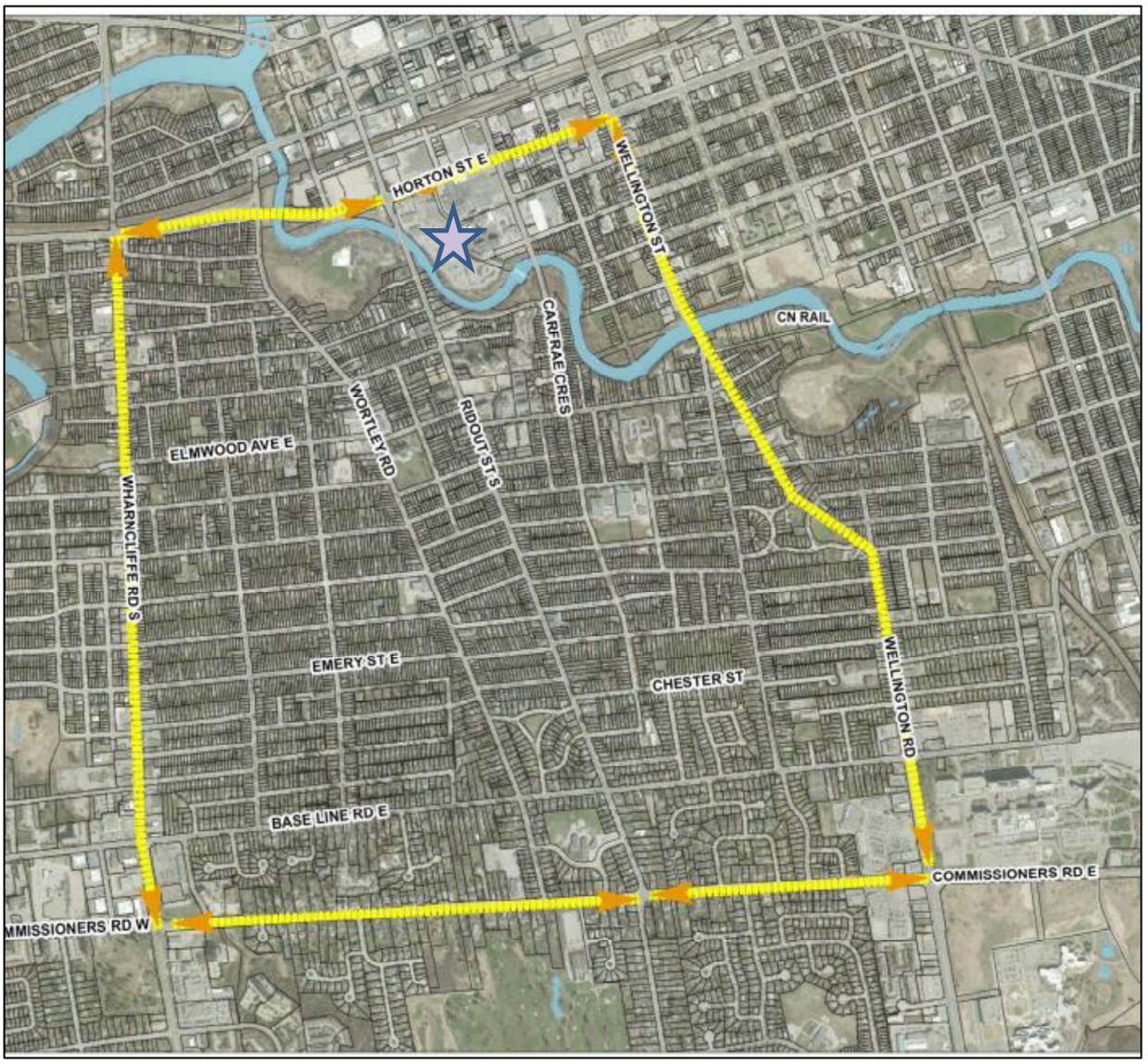


Figure ES.8: Proposed Detour Plan

Environmental Considerations

Testing of groundwater samples indicated that MOECC standards were exceeded for benzene and petroleum hydrocarbons. Excavation dewatering will be required during construction and measures required to treat the water prior to discharge. Measures will be considered during Detailed Design to prevent mobilization of the potential coal tar plume or potentially impacted groundwater into the excavation. Excavation of soil materials at the north side of the bridge will also be disposed of at a licensed facility. No impacts to the coal tar/groundwater collection system at the northwest quadrant of the bridge are anticipated.

Potential habitat for 13 Species at Risk was identified within the study area. Further consultation during Detailed Design is required to determine specific field investigations and permitting. A detailed Species at Risk and Wildlife Handling Protocol will be developed prior to construction.

The Thames River is classified as a warmwater regime. Accordingly, no in-water work is permitted between March 15 and June 26 of the same year. Removal of the bridge structure and vegetation can occur between the months of September to April, which is outside of the typical breeding bird period (April 1 to August 31) within Southern Ontario to avoid contravening the Migratory Birds Act.

Remaining Approvals

- During Detailed Design and prior to the start of construction, all necessary approvals and permits will be obtained. Permitting and approvals may be required from UTRCA, MOECC, MNRF, London Hydro, Bell, and the City of London.

Implementation Schedule

The proposed schedule for Detailed Design and construction of the new bridge is to be determined and will be based on available funding as well as coordination of other City of London infrastructure projects. A preliminary schedule is as follows:

- Detailed Design: 2019 to 2020.
- Tendering and contract award: Fall 2021.
- Construction: 2022.

It is anticipated that some Bell work may be completed in advance of this schedule with some work initiated in Fall 2021.

Estimated Capital Costs

The project cost estimate is $14.14M. The project estimate includes:

- Roadwork.
- Sidewalk and multi-use path.
- Street lighting.
- Utility relocations (as required).
- Temporary work (including modular bridge, site access/staging and relocation of sanitary sewer and Bell infrastructure).
- Allowance for construction adjustments and contingency.

Table 7.1: Estimated Capital Costs

Item	Cost Estimate
Part A - Road Work	$1,405,000
Part B – Utility Work	$ 728,000
Part C – Environmental Work	$ 350,000
Part D – Temporary Work	$1,150,000
Part E – Bridge Work	$6,873,000
Part F – Miscellaneous	$ 203,000
Sub total	**$10,710,000**
Preliminary Estimating Contingency (10%)	$1,071,000
Construction Contingency (10%)	$1,071,000
Engineering (12%)	$1,286,000
Total Estimated Budget Cost	**$14,140,000**

8. Potential Impacts and Recommended Mitigation Measures

Impacts related to construction of the recommended design concept will largely be limited to the duration and location of construction in addition to the loss of a heritage bridge. Based on the recommended preferred solution and proposed construction techniques, construction is expected to have temporary environmental impacts.

As the project moves into the design and construction phases, the construction team will ensure the following:

Natural Environment:

- All regulatory requirements to protect the environment are followed.

- A tree protection and replanting plan is prepared.
- SAR protocols and permitting will be followed.
- Construction occurs outside of the breeding bird window.
- Necessary erosion control measures are implemented.
- Treat effluent water from dewatered excavation, as required.
- Remove and dispose of contaminated fill material from excavations to a designated landfill.

Social Environment:

- A traffic management plan is prepared to minimize disruption during construction.
- Access to existing properties will be maintained during and after construction.
- Infrastructure will be implemented to support healthy lifestyle activities (walking, cycling).

Cultural Heritage and Archaeology:

- Although the Cultural Heritage Evaluation Report indicated the Victoria Bridge has cultural significance, it is not formally recognized/designated under the Ontario Heritage Act or the City of London. Replacement of the bridge will have a significant cultural heritage impact. However, there is an opportunity to provide sympathetic design to convey some historic attributes of the original bridge or era, while connecting with the historic context of the adjacent Heritage Conservation District.
- The feasibility of salvaging and reusing various historic elements of the existing bridge will be further investigated during Detailed Design.
- Documentation and photography of the existing bridge will be undertaken during removals, with methodology to be reviewed during Detailed Design.
- The opportunity for cultural heritage interpretive signage of Victoria Bridge on the TVP will be further explored during Detailed Design.
- Little or no impact is anticipated to existing archaeological resources. However, a Stage 2 archaeological assessment will be undertaken as part of Detailed Design, if necessary. An invitation will be extended to Chippewa of the Thames First Nation to act as observers if a Stage 2 assessment is conducted.

9. Consultation

As part of the Municipal Class EA planning process, several steps were undertaken to inform stakeholders, study area residents, businesses, review agencies and Indigenous communities about the project, and to solicit comments at key stages of the study process. Consultation methods included:

- Publication of newspaper notices for all project milestones, including Notices of Study Commencement, Public Information Centres (PICs), and Study Completion.
- Placement of notices and other materials on the City's website.
- Direct mailing of project milestone notices to stakeholders, study area residents, businesses, review agencies and Indigenous communities.
- Two PICs to engage and obtain input from the public, review agencies, and stakeholders.
- Individual meetings with review agencies and stakeholders as required or as opportunities arose.
- Consultation with Indigenous communities as per the Ministry of Tourism, Culture and Sport and the City of London consultation protocol.

10.Summary

This Municipal Class EA has fulfilled the requirements for a Schedule 'C' project under the MEA Municipal Class EA document. The Municipal Class EA planning process requires an initial

review and analysis for a project of this type, and this review and analysis has not identified any significant impacts that cannot be addressed by incorporating the recommended mitigation measures during construction.

Consultation requirements of the Municipal Class EA have been fulfilled through two PICs, agency consultation, Indigenous consultation, and the submission of the Environmental Study Report for a 30-day review period.

TO:	**CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON JULY 23, 2019**
FROM:	**KELLY SCHERR, P.ENG, MBA, FEC MANAGING DIRECTOR OF ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER**
SUBJECT:	**WINTER MAINTENANCE PROGRAM SUPPORT**

RECOMMENDATION

That on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, the Winter Maintenance Program Support Options described herein **BE CONSIDERED** as part of the 2020-2023 Multi Year Budgeting process.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

- Environment and Transportation Committee – April 14, 2003 – Minimum Maintenance Standards for Municipal Highways
- Environment and Transportation Committee – June 7, 2004 – Walkway Winter Policy Review
- Environment and Transportation Committee – January 21, 2005 – Service Level - Winter Sidewalk Maintenance
- Environment and Transportation Committee – March 23, 2009 – Winter Maintenance Budget Monitoring
- Environment and Transportation Committee – November 16, 2009 – Service Level – Winter Sidewalk Maintenance
- Civic Works Committee – January 6, 2014 – Snow Packed Roads and Snow Dumping from Private Property
- Civic Works Committee – October 7, 2014 – Provincial Minimum Maintenance Standards 2013 Update
- Civic Works Committee – February 3, 2015 - CWC Roadway Winter Maintenance Program
- Civic Works Committee – November 3, 2015 - CWC Winter Maintenance Program Enhancements
- Civic Works Committee – August 13, 2018 - CWC Provincial Maintenance Standards for Municipal Highways – Amendments 2018

2019-23 STRATEGIC PLAN

The following report supports the Strategic Plan through the strategic focus area of Leading in Public Service by considering improvements to resident satisfaction with winter road and sidewalk maintenance.

BACKGROUND

Purpose

The purpose of this report is to provide Council with a response to the following communication to the January 8, 2019 Civic Works Committee meeting:

That Civic Administration BE DIRECTED to investigate and report back, before the next multi-year budget process, on the operational and budget impacts of the following items to snow clearing:

a) lowering the snow clearing of residential streets from 10 cm to 8 cm and 7 cm options;
b) the capital cost for new equipment and options for faster response times during heavy or consecutive snowfall events;
c) lowering the threshold of sidewalk snow clearing from 8 cm to 5 cm;
d) ensuring that school walking routes are cleared of snow as a priority; and,
e) Reviewing of current plowing routes, and available technologies to implement smarter, more flexible and more responsive snow clearing.

This report provides considerations related to each of the items followed by the cost for the identified program support options.

Context

The City of London maintains roadways in accordance with the Provincial Minimum Maintenance Standards for Municipal Highways (MMS), Regulation 239/02. This Provincial regulation under the Municipal Act specifies minimum maintenance standards for roads, bridges, luminaires, road shoulders, signs, and as of May 13, 2018, includes the maintenance related to bike lanes and sidewalks. Winter standards include thresholds to deploy resources and time to complete the work after the snowfall ends.

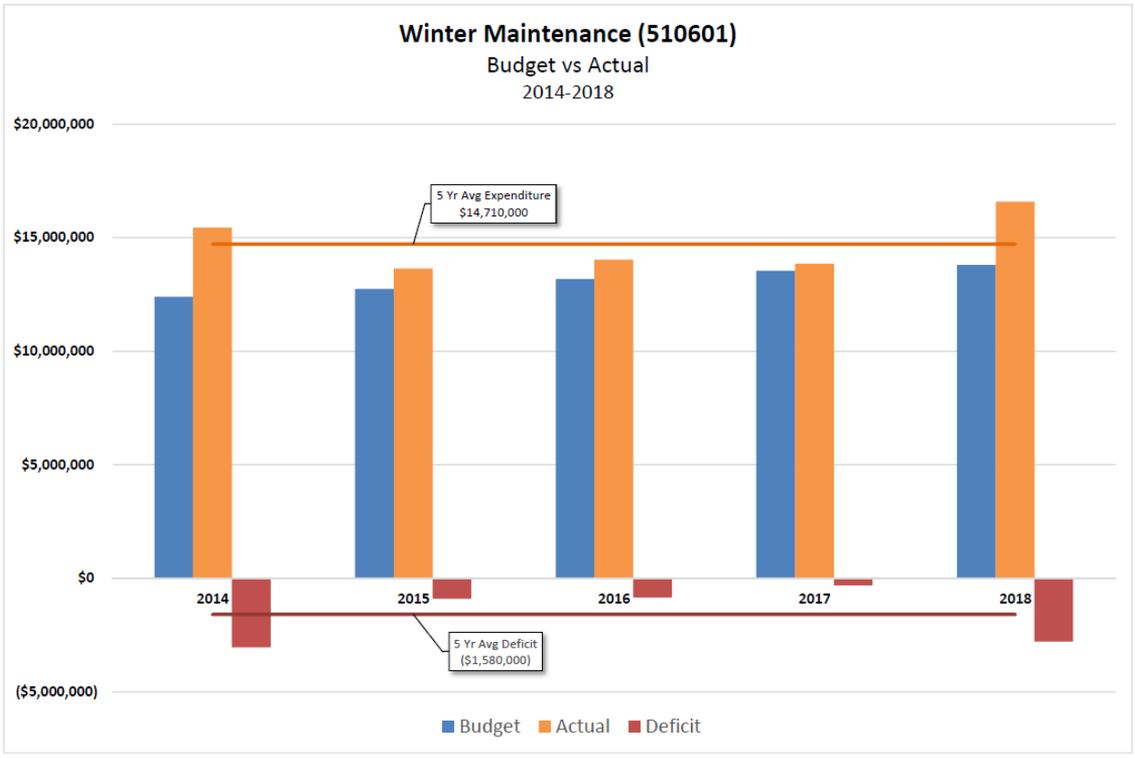
The timing of winter weather events influences the impact on the sidewalk, bike lane or road user. If the snowfall ends by the late evening, City forces have time to clear most routes before the beginning of the school or work day. Early morning snow events are more impactful.

It is also important to recognize that conditions across the city can be variable. For example, during the January 10, 2019 snow event, snow accumulation in the east end of the city was 5.3 cm, while the west end reported 16.9 cm of snow.

The City executes winter maintenance via a combination of in-house resources and staff and outsourced contractors. The City has a 24/7 response team equipped with 70 pieces of road plowing equipment, 27 road salt/sanders and 41 sidewalk plows. The response team maintains 3,655 kms of roadway, 1,500 kms of sidewalk and 720 cul-de-sacs. Over 2,000 bus stops are also maintained on behalf of the LTC on a cost-recovery basis. In an average winter season, crews are deployed approximately 70 to 90 days on major roads and bus routes and 10 to 14 times on residential routes.

Winter Maintenance Budget

The 2019 budget for the Winter Maintenance Program is $14,579,311. The winter maintenance budget has been experiencing pressures over the last five years as shown in the graph below. This issue is under review in the current Multi-Year Budget creation.



The cost to maintain the City's roadways during the winter depends on the frequency, severity and timing of weather events. The type and duration of winter storms impacts operations and maintenance costs. London benchmarks cost with other municipalities that follow the Provincial Minimum Maintenance Standards for Municipal Highways (MMS), Regulation 239/02. The operating costs in London are average in comparison.

The following analysis and program support options consider average multiyear expenditures and deployments for snowfall frequency.

DISCUSSION

Winter maintenance is a function of the frequency and severity of snowfall events which vary from year to year. Deploying plows at lower snow accumulations would require more frequent deployments plus additional passes through the road or sidewalk network when accumulations reach the threshold a second time during a large and sustained winter snowfall event. The number of snowfall events at various snowfall depths over the past ten years is illustrated below in Table 1.

Table 1

Yearly Summary of Snowfall Events @ London Airport							
	>=0 cm	>=2.5 cm	>=5 cm	>=7 cm	>=8 cm	>=10 cm	>=15 cm
2007	89	32	10	7	5	4	2
2008	96	41	26	15	14	11	7
2009	66	16	9	3	2	1	0
2010	62	18	12	9	8	7	5
2011	74	31	14	9	8	7	2
2012	56	18	8	4	2	2	1
2013	93	31	12	8	7	5	2
2014	75	29	13	8	7	4	2
2015	58	20	10	6	5	3	1
2016	65	30	17	14	11	7	1
Average	73	27	13	8	7	5	2

The following are considerations related to the items in the Council resolution that inform the subsequent winter maintenance support options.

Item A: Lowering the snow clearing of residential streets from 10 cm to 8 cm and 7 cm options

The current practice prescribed by the MMS is to deploy plows on residential streets once snow accumulation reaches 10 cm. This snow clearing is to occur within 24 hours after the snowfall ends.

Based on Table 1 there would be an annual average of 2 and 3 more deployments required for the 8 and 7 cm thresholds respectively plus additional secondary deployments for large sustained events.

Item B: the capital cost for new equipment and options for faster response times during heavy or consecutive snowfall events

Winter road maintenance is executed with a combination of in-house owned equipment and outsourced services.

A key consideration in this balance is the sustained need for the equipment year round. For example, owned road plow units are also used assisting summer road building projects. The development of program support options considered current year-round operations needs and identified a negligible need for additional owned equipment for road maintenance.

The option costs presented later in the report represent operating dollars based on a combination of outsourcing and additional usage of existing equipment.

Item C: Lowering the threshold of sidewalk snow clearing from 8 cm to 5 cm

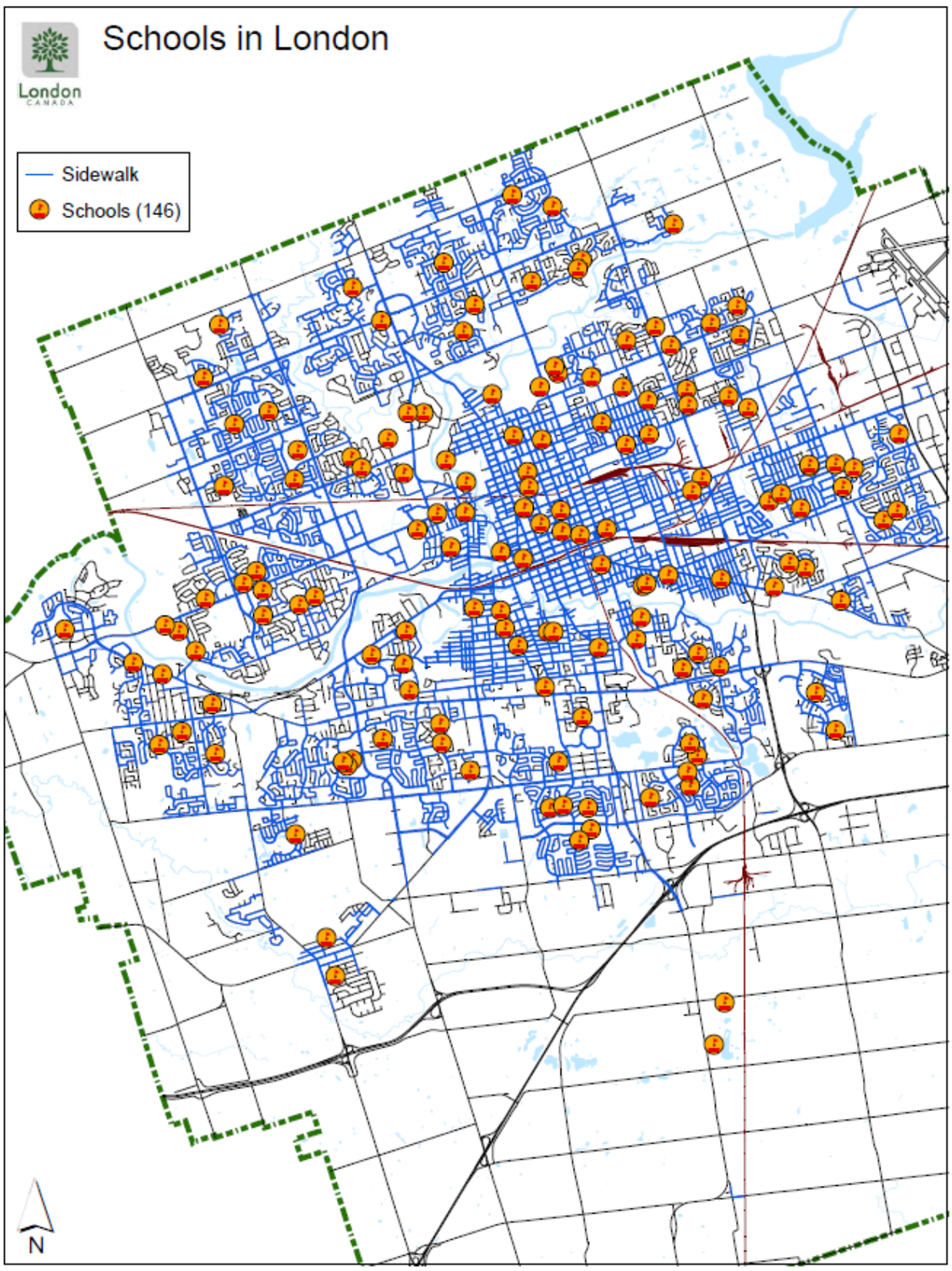
Currently the MMS threshold is 8 cm of snow accumulation before equipment is deployed and it allows 48 hours after the snowfall ends to clear the sidewalk. Based on Table 1, a 5 cm threshold would require an average of 6 additional deployments for a total of 13 annually. Lowering the threshold for sidewalk clearing to 5 cm could also require multiple passes through the beat system during a single sustained winter storm event if 10, 15 or 20 cm of accumulation occurs.

Winter road maintenance is executed with a combination of in-house owned equipment and outsourced services. A key consideration in this balance is the sustained need for the equipment year round. For example, owned sidewalk units are used for roadside mowing. The development of program support options considered current year-round operations needs and identified a negligible need for additional owned equipment for sidewalk snow clearing.

Item D: Ensuring that school walking routes are cleared of snow as a priority

Staff reviewed sidewalks within school busing thresholds, which are 1.6 km from elementary schools and 3.2 km from secondary schools. Mapping these radii around schools revealed overlapping circles covering most of the city indicating that the vast majority of the City's sidewalk network are within the school board expected walking areas of schools. Mapping smaller radii around schools did not identify logical walking routes. Therefore, an individual school approach is required in conjunction with plowing operations.

Current sidewalk snow clearing operations prioritizes major roads and bus routes which tend to have higher volumes of pedestrians. This aligns with road plowing operations that clear the windrows at the major road intersections that have been created by the earlier road plowing. While some schools are on major roads and benefit from the prioritization of these streets, there are many schools on lower priority streets that do not. An approach to provide priority plowing to schools would be to assess individual school areas and add logical local street routes to schools to the main route plow beats. The identification of routing would consider school property, main access points and school bus operations. Ongoing discussions with the school boards have resulted in the plowing of some joint park/school pathways which could also influence the identification of priority routes.

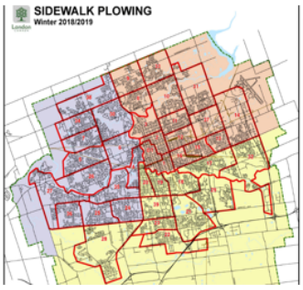


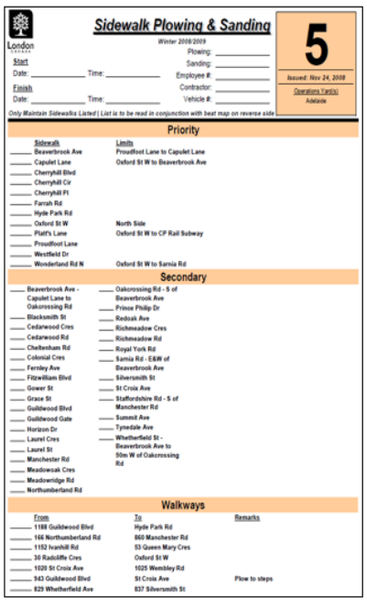
Item E: Reviewing of current plowing routes, and available technologies to implement smarter, more flexible and more responsive snow clearing.

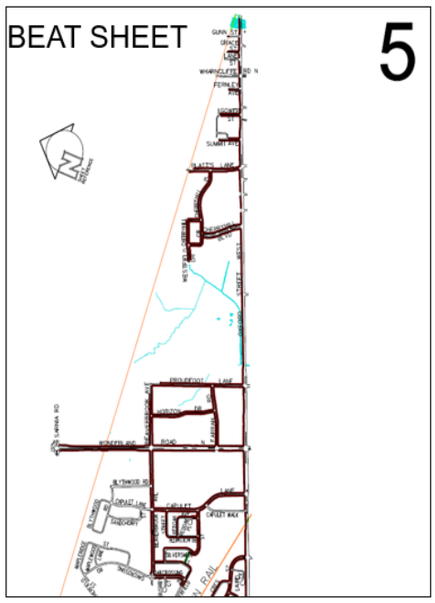
Operations staff monitors new technologies to improve winter operations as they become available. London has kept pace with many available technologies, they include:

- Road Weather Information System (RWIS) that provides a road air temperature forecast and pavement temperatures. London has five locations and these supplement the Environment Canada weather station at the airport to help provide a local forecast three times per day.
- Electronic spreader controllers which provide measured amounts of sand, salt or winter liquids through the spreader fleet. These units and the contracted units are calibrated to ensure the prescribed dosage of winter materials is applied to the road.
- Anti-icing brine is used to help break the bond of snow and ice to the road. The recent replacement of road flushers included an upgrade to allow anti-icing of more than 700 lane-km in advance of a storm.
- Pre-wetting technology that enhances the rock salt capabilities and placement.
- Social media has improved communication with users. Winter maintenance social media statistics reveal the following.
    - Snow Removal Updates on Twitter alone resulted in 275,084 impressions (number of times our post appears in feed) and 4,539 engagements (retweets, likes, replies) from Nov 1, 2018 to March 31, 2019. This demonstrates the widespread organic (unpaid) reach winter maintenance-related social posts receive.
    - Six videos posted on Twitter, Facebook and Instagram (combined) resulted in 82,373 impressions, 28,321 views and 6,036 engagements (likes, shares, comments). These numbers demonstrate the power of use of video when possible.
    - The City of London received more than 250 inquiries about snow removal / winter maintenance on social media from Nov 1, 2018 to March 31, 2019. The City's winter maintenance web page received 5,146 page views from Nov 1, 2018 to March 31, 2019.
    - Corporate Communications has reported a noticeable improvement in tone and complimentary visitor replies / comments on winter maintenance-related content.
- Roads and sidewalks are cleared using a sequence of deployments that rely on equipment assigned to specific routes, geographical areas known as 'beats'. Priorities follow the prescribed MMS standards starting with main roads, LTC bus routes and then residential streets. Some areas have limited snow storage due to bike lanes or reduced boulevard width and those areas need additional service. This process is reviewed and modified as new subdivisions are assumed or road classes change.

  A beat sheet example is illustrated below:







- "Track my Plow" applications provide residents the ability to monitor recent plow progress. The implementation of these are being monitored and considered for the future. However, this service requires additional staff to monitor and review data that are not currently available.

Winter Maintenance of LTC Bus Stops

The winter maintenance of bus stops is the responsibility of the LTC. LTC contracts the City to maintain bus stops based on a Council approved standard. The cleaning of LTC bus stops is currently done after all roads and sidewalks are completed. The current standard to clear bus stops is 48 hours after the sidewalks have been cleared; therefore, up to 96 hours after the snowfall ends. The City uses contracted sidewalk plows to clear bus stops. The timing is cost effective because it occurs after equipment has completed sidewalk clearing. The costs for this service are currently billed back to the LTC and are approximately $165,000 per year. The charge includes equipment operating time only and does not include supervision or contractor standby. The City would require additional equipment on standby to plow the bus stops as soon as the road plows are finished on the main roadways and bus routes. Equipment numbers would be based on service level requirements.

Bus stop clearing is coordinated with sidewalk plowing and road plowing to address windrows. Therefore, more frequent sidewalk plowing would require additional bus stop clearing. The additional bus stop clearing associated with the lower threshold of 5 cm would increase the expenditure for LTC by approximately $140,000 and $23,000 if threshold for roads is changed to 7 cm.

PROGRAM SUPPORT OPTIONS

Winter Maintenance Support Options

Options to ensure standards are met and to provide a better customer experience when using the transportation network during winter events are listed below. The associated additional annual operating budget estimates are based on the additional deployments estimated by historical weather data and current operating costs. The identified costs are entirely operating because the development of program support options envisions a combination of outsourcing and additional usage of existing equipment.

Option	Description	Estimated Additional Annual Operating Budget
1	**Lowering the threshold of road plow deployments from 10 cm to 8 cm of snow on residential streets** Two additional deployments per year based on Table 1 weather data.	$500,000
2	**Lowering the threshold of road plow deployments from 10 cm to 7 cm of snow on residential streets** Three additional deployments based on Table 1 weather data. The LTC will see increased costs due to additional bus stop clearing to match the more frequent road threshold and address windrows. This cost is estimated at $23,000.	$760,000
3	**Lowering the threshold of sidewalk snow clearing from 8 cm to 5 cm** Six additional deployments based on Table 1. This option does not include prioritization of school areas in Option 4. The LTC will see increased costs due to additional bus stop clearing to match the more frequent sidewalk threshold and address windrows. This cost is estimated at $140,000.	$600,000
4	**Prioritize school area sidewalks (more timely 8 cm response)** This option will provide earlier sidewalk clearing to all school main entrances including those on local streets. School route plowing would be done at the same time as main roads and transit routes. The cost assumes additional sidewalk plowing equipment for one access route to the schools main entrance without significantly affecting main route sidewalk plowing completion time. There would be no change to sidewalk clearing leading to rear or side entrances.	$280,000
5	**Prioritize school area sidewalks (more timely 5 cm response)** Same comments as Option 4, but with six additional deployments based on Table 1.	$520,000

Due to contractual commitments with service providers, the optimal time to make changes to the contracted fleet is when the current contracts expire which are as follows:

- Road plow contract expires in April 2020
- Sidewalk plow contract expires in April 2021

These timings should be considered if any of the support options are implemented.

SUMMARY

The program support options described herein are identified for budget consideration to improve mobility for all users of roads and sidewalks within the City road allowance. Civic Administration does not recommending repealing the MMS because it is the provincial standard and provides a legal defense under the Municipal Act. The options are meant to compliment the service that is already provided to meet the Provincial Standards.

PREPARED BY:	**REVIEWED BY:**
JOHN PARSONS, C.E.T. **DIVISION MANAGER, ROAD OPERATIONS AND FORESTRY**	**DOUG MACRAE, P.ENG., MPA** **DIRECTOR** **ROADS AND TRANSPORTATION**
RECOMMENDED BY:	
KELLY SCHERR, P.ENG, MBA, FEC **MANAGING DIRECTOR** **ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER**	

DEFERRED MATTERS

CIVIC WORKS COMMITTEE
(as of July 15, 2019)

Item No.	File No.	Subject	Request Date	Requested/ Expected Reply Date	Person Responsible	Status
1.	75.	**Options for Increased Recycling in the Downtown Core** That, on the recommendation of the Director, Environment, Fleet and Solid Waste, the following actions be taken with respect to the options for increased recycling in the Downtown core: b) the Civic Administration BE DIRECTED to report back to the Civic Works Committee in May 2017 with respect to: i) the outcome of the discussions with Downtown London, the London Downtown Business Association and the Old East Village Business Improvement Area; ii) potential funding opportunities as part of upcoming provincial legislation and regulations, service fees, direct business contributions, that could be used to lower recycling program costs in the Downtown core; iii) the future role of municipal governments with respect to recycling services in Downtown and Business Areas; and, iv) the recommended approach for increasing recycling in the Downtown area.	Dec 12/16	3rd Quarter 2019	K. Scherr J. Stanford	
2.	76.	**Rapid Transit Corridor Traffic Flow** That the Civic Administration BE DIRECTED to report back on the feasibility of implementing specific pick-up and drop-off times for services, such as deliveries and curbside pick-up of recycling and waste collection to local businesses in the downtown area and in particular, along the proposed rapid transit corridors.	Dec 12/16	2nd Quarter 2019	K. Scherr J. Ramsay	

3.	78.	**Garbage and Recycling Collection and Next Steps** That, on the recommendation of the Managing Director, Environmental and Engineering Services and City Engineer, with the support of the Director, Environment, Fleet and Solid Waste, the following actions be taken with respect to the garbage and recycling collection and next steps: b) the Civic Administration BE DIRECTED to report back to Civic Works Committee by December 2017 with: ~~i) a Business Case including a detailed feasibility study of options and potential next steps to change the City's fleet of garbage packers from diesel to compressed natural gas (CNG); and,~~ ii) an Options Report for the introduction of a semi or fully automated garbage collection system including considerations for customers and operational impacts.	Jan 10/17	3rd Quarter 2019	K. Scherr J. Stanford	2nd Quarter 2019
4.	93.	**Public Notification Policy for Construction Projects** That the Civic Administration BE DIRECTED to amend the "Public Notification Policy for Construction Projects" to provide for a notification process that would ensure that property owners would be given at least one week's written notice of the City of London's intent to undertake maintenance activities on the City boulevard adjacent to their property; it being noted that a communication from Councillor V. Ridley was received with respect to this matter.	Nov 21/17	3rd Quarter 2019	U. DeCandido	

5.	94.	**Report on Private Works Impacting the Transportation Network** b) report back to the Civic Works Committee, by the end of March 2018, on: i) ways to improve communication with affected business, organizations and residents about the timing, duration and impacts of permits for approved works, including unexpected developments; ii) ways to improve the scheduling and coordination of private and public projects affecting roadways and sidewalks that carry significant pedestrian, cyclist, transit and auto traffic; iii) resources required to implement these improvements; and any other improvements identified through the review iv) resources required to implement these improvements; and	Dec 4/17	3rd Quarter 2018	G. Kotsifas	George to provide new date
6.	105	**Environmental Assessment** That the Managing Director, Environmental and Engineering Services & City Engineer BE REQUESTED to report on the outstanding items that are not addressed during the Environmental Assessment response be followed up through the detailed design phase in its report to the Civic Works Committee.	July 25, 2018	2nd Quarter 2019	S. Mathers P. Yeoman	

July 17, 2019

Dear Colleagues,

Recently we approved the staff recommendation for the annual new sidewalks program.

During this debate some concerns were raised with regard to gaps in sidewalk infrastructure that occur in “walk to school routes”.

Resources from the City of London, the Middlesex London Health Unit, London Police Services and the school communities are used annually to develop and promote Safe and Active Routes to School for area families to encourage exercise and discourage students being driven to school and decrease the complications arising with traffic and parking when driving to school becomes the preferred option.

Given these realities, it makes sense to take appropriate steps to align new sidewalk need evaluations with school zones and routes to neighbourhood schools.

Therefore in consultation with our City Engineer and the Manager for Roads and Transportation, we have developed the following motion for consideration by the Civic Works Committee:

That staff be directed to review the current assessment process for new sidewalks and add an additional assessment criteria for filling gaps in school zones, community safety zones, and identified Safe and Active Routes to School be added to the evaluation process.

Sincerely,

Councillor Shawn Lewis

Councillor Josh Morgan

Cycling Advisory Committee

Report

The 7th Meeting of the Cycling Advisory Committee
July 17, 2019
Committee Room #4

Attendance

PRESENT: C. Linton (Chair), K. Brawn, B. Cowie, C. DeGroot, R. Henderson, J. Jordan, C. Pollett, E. Raftis, J. Roberts and O. Toth; P. Shack (Secretary)

ABSENT: B. Hill

ALSO PRESENT: A. Giesen, P. Kavcic, T. MacDaniel and D. MacRae

The meeting was called to order at 4:00 PM.

1. Call to Order

1.1 Orientation

That it BE NOTED that the Cycling Advisory Committee heard a verbal presentation from M. Schulthess, Deputy City Clerk, with respect to an orientation.

1.2 Disclosures of Pecuniary Interest

None.

1.3 Election of Chair and Vice-Chair for the term ending November 30, 2019

That it BE NOTED that the Cycling Advisory Committee elected C. Linton and R. Henderson as Chair and Vice Chair, respectively, for the term ending November 30, 2019.

2. Scheduled Items

2.1 Dundas Street-Old East Village Infrastructure Renewal Project

That it BE NOTED that the attached presentation from T. Hitchon, Technologist II-Transportation, with respect to the Dundas Street-Old East Village Infrastructure Renewal Project, was received.

3. Consent

3.1 6th Report of the Cycling Advisory Committee

That it BE NOTED that the 6th Report of the Cycling Advisory Committee, from its meeting held on May 15, 2019, was received.

3.2 Public Meeting Notice - Official Plan and Zoning By-law Amendments - 124 St. James Street

That it BE NOTED that the Public Meeting Notice, dated July 2, 2019, from B. Debbert, Senior Planner, with respect to the Official Plan and Zoning By-law Amendments for 124 St. James Street.

3.3 Public Meeting Notice - Official Plan and Zoning By-law Amendments - 1631-1649 Richmond Street

That it BE NOTED that the Public Meeting Notice, dated July 3, 2019, from C. Lowery, Planner II, with respect to the Official Plan and Zoning By-law Amendments for 1631-1649 Richmond Street, was received.

3.4 Public Meeting Notice - Official Plan and Zoning By-law Amendments - 3334 and 3354 Wonderland Road South

That it BE NOTED that the Public Meeting Notice, dated July 3, 2019, from M. Campbell, Manager, Development Planning (Current Planning), with respect to the Official Plan and Zoning By-law Amendments for 3334 and 3354 Wonderland Road South, was received.

4. Sub-Committees and Working Groups

None.

5. Items for Discussion

None.

6. Adjournment

The meeting adjourned at 5:40 PM.

300 Dufferin Avenue
P.O. Box 5035
London, ON

N6A 4L9

MEMO

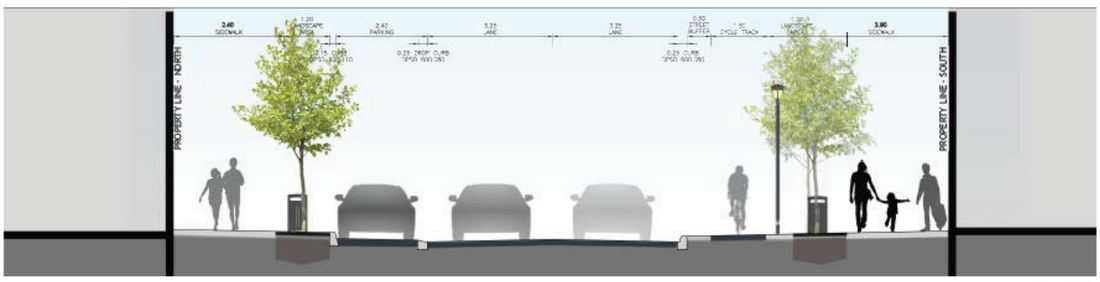
To:	Cycling Advisory Committee
From:	Trevor Hitchon, CET Technologist II Transportation Planning & Design
c:	Doug MacRae, Garfield Dales, Peter Kavcic
Date:	July 10, 2019
Re:	**Dundas Street Infrastructure Renewal Project from Adelaide Street North to Ontario Street**

The purpose of this memo is to provide a general overview of the proposed streetscape and cycle track design on Dundas Street, between Adelaide Street North and Ontario Street, with the first phase of construction planned for 2020.

This project is informed by the Council Approved East – West Bikeway Evaluation, which identified a single eastbound dedicated cycle lane on this section of Dundas Street.

Key design elements can be seen below:

Figure 1: Typical Section



- 1.50m wide raised cycle track, separated from vehicular traffic by a 0.25m wide curb and 0.60m wide buffer;
- Buffer increased at bus stops and loading zones to 0.75m;

- Further design investigations will decide whether or not the cycle track will be vertically separated from the sidewalk;

Figure 2: Dundas Street @ Elizabeth Street and Lyle Street

- Crossride through the intersection, aligned with offset cycle track at bus stop;
- Left turn queue box for cyclists turning on to Elizabeth Street;
- Narrow lane widths on Lyle Street which reduces cyclists and pedestrian crossing times;
- “No Rights On Red” scenario on Lyle Street

Figure 3: Dundas Street at Hewitt Street and English Street

- Crossride through the intersection;
- On-street bike lanes proposed on English Street through a separate infrastructure renewal program;

- In this concept, cyclists would turn left to English Street by dismounting and using the PXO. The location of the PXO is under review, and as such, the method for cyclists turning left;

Figure 4: Dundas Street at Ontario Street

- Typical raised cycle track separation transitions to on-street separated bike lane with barrier curbs and bollards installed (similar to Colborne Street);
- Left turn queue box on Ontario Street for turning left;
- Intersection to be redesigned in conjunction with future BRT projects.

A complete roll plan and other details will be shown to the Cycling Advisory Committee on July 17th, 2019 and are available online at http://www.london.ca/OldEastVillageIRP.

We appreciate any and all feedback related to this Memo and the roll plan that will be shown.