

Agenda Including Addeds Civic Works Committee

5th Meeting of the Civic Works Committee

March 19, 2018, 12:00 PM

Council Chambers

Second Floor, London City Hall

Members

Councillors V. Ridley, T. Park, P. Hubert, P. Squire, H. Usher, Mayor M. Brown

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

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TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON MARCH 19, 2018
FROM:	KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT:	2018 ONTARIO MUNICIPAL COMMUTER CYCLING (OMCC) PROGRAM

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, the following actions be taken with respect to the 2018 Ontario Municipal Commuter Cycling (OMCC) Program:

- (a) the attached draft proposed by-law (Appendix A) **BE INTRODUCED** at the Municipal Council meeting to be held March 27, 2018 to:
 - i) authorize and approve the Ontario Municipal Commuter Cycling (OMCC) Program 2018 Application Declaration attached as Schedule A to the draft proposed by-law; and
 - ii) authorize the Mayor and the City Clerk to execute the Declaration authorized and approved in a) i) above;
- (b) the updated list of projects set out in Appendix B to this report **BE SUPPORTED** for application to the OMCC program; and
- (c) the Civic Administration **BE DIRECTED** to take all necessary steps to submit the City of London application for OMCC funding.

PREVIOUS REPORTS PERTINENT TO THIS MATTER
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- Civic Works Committee – June 8, 2016 - London ON Bikes Draft Cycling Master Plan
- Civic Works Committee – September 7, 2016 - London ON Bikes Cycling Master Plan
- Civic Works Committee – July 17, 2017 – 2017 Ontario Municipal Commuter Cycling (OMCC) Program
- Civic Works Committee – February 21, 2018 – Ontario Municipal Commuter Cycling (OMCC) Program Transfer Payment Agreement

2015-19 STRATEGIC PLAN

This report supports the objectives identified in the Strategic Plan by pursuing external funding to support the implementation of the London ON Bikes Cycling Master Plan. London ON Bikes contributes to Building a Sustainable City – Convenient and Connected Mobility Choices, by implementing and enhancing safe mobility choices for cyclists. These goals are consistent with the OMCC program.

BACKGROUND

Through the Province's Climate Change Action Plan, initiatives were identified to help municipalities reduce greenhouse gas (GHG) emissions. On May 29th 2017, the Government of Ontario introduced a four-year, cost-shared fund for municipalities to use for commuter cycling infrastructure programs. This is in addition to significant existing investments from previous Provincial and Federal Government funds. The City of London having completed the application process in 2017, was approved for \$3,303,752.26 in OMCC funding for fiscal year 2017/2018.

The purpose of this report is to obtain approval to execute the annual program participation declaration for Year 2 and to receive support for additions to the City of London projects list to be included in a program application.

Ontario Municipal Commuter Cycling (OMCC) Program

The OMCC is a multi-year program that supports cycling investments funded through cap and trade proceeds that meet short-term commuter cycling priorities that will help municipalities such as London to:

- i. Provide better cycling networks across the province by targeting routes where high-commuting volumes can be established; and,
- ii. Support the installation of cycling infrastructure that promotes safe cycling, such as grade separated routes as well as cycling signals.

Funding can cover costs associated with the design, implementation and construction work for new cycling projects. Projects must be identified in a cycling master plan. The City of London is well positioned for this program, having completed the London ON Bikes Cycling Master Plan. Eligible projects include new commuter cycling infrastructure as well as enhancements to existing cycling routes to better support commuting cyclists. OMCC funding can cover up to 80% of costs for eligible projects, which can include costs associated with design/engineering, project management and construction. The approved capital budget includes sufficient funds to match the provincial funding.

While the program extends for four years, the City is able to choose to participate in the OMCC in any or all of the program years. The City has the opportunity to submit a request to update the approved project list semi-annually in future funding years.

OMCC funding levels are a function of a municipality's population, census commuting cycling mode share and Ontario's cap and trade revenues. Funds not used in one funding year can be carried over to be used in subsequent funding years provided

projects are completed by December 30, 2020. OMCC funds and associated interest must be kept in a dedicated account and reported on annually.

Funding will be provided to participating municipalities after provision of a 2018 enabling bylaw and execution of a transfer payment agreement.

Project List Update

Appendix B provides the listing of City projects and associated preliminary estimated costs for the four-year Ontario Municipal Commuter Cycling Program. Projects in bold font are new additions to the list submitted with the 2017 application. The new projects are added to increase available opportunities given the larger than anticipated Year 1 funding and to maximize the City's potential future allocation. The proposed projects are consistent with the recommendations in London's recently completed London ON Bikes Cycling Master Plan.

The OMCC program will result in an increased rate of cycling infrastructure spending and construction, placing the City in an excellent position to meet or exceed the short-term infrastructure goals of the Cycling Master Plan.

CONCLUSION

The OMCC program goal is to increase cycling appeal for commuting and frequent trips. This program can help London expand its cycling network, support environmentally friendly and healthy transportation choices and obtain the mode share targets set out in the Smart Moves Transportation Master Plan. Continued participation in the OMCC program will accelerate the cycling projects identified in the London ON Bikes Cycling Master Plan.

The completion of the London ON Bikes Cycling Master Plan positioned London well for OMCC eligibility. The City of London was approved for an OMCC allocation of \$3,303,752.26 from the Province for fiscal year 2017/2018.

Municipalities must pass an enabling bylaw that commits municipal funding and identifies eligible projects on an annual basis to participate in the program. The approval requested in this report will enable London participation in Year 2 of the OMCC program.

Acknowledgements

This report was prepared with the input of staff in the Transportation Planning & Design, and Environmental Programs and Parks Planning Divisions.

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

Appendix A: Proposed By-law with 2018 Application Declaration
 Appendix B: Updated Proposed OMCC Application Project List

- c: Cycling Advisory Committee
 - Jay Stanford, Director, Environment, Fleet and Solid Waste
 - Andrew Macpherson, Manager, Environmental and Parks Planning
 - Janice Verhaegie, Financial Business Administrator

Appendix A

Bill No.
2018

By-law No.

A by-law to authorize and approve the Ontario Municipal Commuter Cycling (OMCC) Program 2018 Application Declaration and to authorize the Mayor and the City Clerk to execute the Declaration.

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

AND WHEREAS the Province of Ontario has introduced a program to promote commuter cycling in Ontario;

AND WHEREAS the Municipal Council wishes to seek funding through the Ontario Municipal Commuter Cycling (OMCC) Program, which requires the approval and execution of the 2018 Application Declaration;

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

1. The Ontario Municipal Commuter Cycling (OMCC) Program 2018 Application Declaration attached hereto as Schedule A is hereby authorized and approved;
2. The Mayor and the City Clerk are hereby authorized to execute the OMCC Program 2018 Application Declaration authorized and approved in section 1, above.
3. This by-law shall come into force and effect on the day it is passed.

PASSED in Open Council _____, 2018

Matt Brown
Mayor

Catharine Saunders
City Clerk

First Reading – March 27, 2018
Second Reading – March 27, 2018
Third Reading – March 27, 2018

Schedule A

**Ontario Municipal Commuter Cycling (OMCC) Program
2018 Application Declaration
Municipalities with a Population of 15,000 or Greater**

The Corporation of the City of London declares that it will participate in the Ontario Municipal Commuter Cycling Program (OMCC) for 2018 and requests funding to support the commuter cycling projects listed in this document.

The Corporation of the City of London declares that all the commuter cycling projects listed in this document and that use OMCC funding meet OMCC program requirements.

The Corporation of the City of London declares that it has a council approved cycling plan available at <http://www.london.ca/residents/Environment/EAs/Pages/London-on-Bikes.aspx> and that all projects submitted in this application for consideration for OMCC funding are supported by this plan.

Dated this ____ day of _____.

MATT BROWN
MAYOR

CATHARINE SAUNDERS
CLERK

**Appendix B
Proposed OMCC Application Projects**

Project Name	Project Description	Project Location	Potential Start Date	Estimated OMCC Eligible Costs
Adelaide Street South Bike Lanes	Extension of new buffered bike lanes.	From Southdale Road East to Osgoode Drive	01-June-18	\$225,000
Thames Valley Parkway, North Branch Gap	New Multiuse path with two bridges across the Thames River.	Richmond Street to Adelaide Street	10-Nov-18	\$6,500,000
Lambeth Centennial Park Bridge & Pathway Rehabilitation	Bridge rehabilitation	Centennial Park	30-May-18	\$775,000
Thames Valley Parkway Rehabilitation	Pavement rehabilitation on North Branch	2A Grosvenor Street to 1250 Richmond Street North	07-May-18	\$500,000
Adelaide Street North Boulevard Path Improvements	Renewal & upgrades of in boulevard facilities and intersection crossings.	South of Kipps Lane to Windermere Road	01-Jun-18	\$800,000
Cheapside Street Bike Lanes	Construction of new bike lanes	Richmond Street to Adelaide Street	01-Jun-19	\$2,000,000
Improvements to bicycle detection at traffic signals and permanent bike counters	Traffic signal upgrades and cyclist counters	Various signalized intersections within the City of London	01-Jun-18	\$400,000
Egerton Street Bike Lanes	Construction of new Bike Lanes	From Dundas Street to Pond Mills Road	01-Jun-18	\$3,000,000
Downtown West Bike Parking Facility	Addition of new commuter bicycle parking	West side of downtown London (near Covent Garden Market & Bud Gardens)	01-Sept-18	\$500,000
North Commuter Area Bike Parking	Addition of new commuter bicycle parking	One or two locations to serve cyclists combined with major transit stations	01-Sept-18	\$100,000
Cheapside Street Bike Lanes	Construction of new bike lanes	From Sandford Street to Clarke Road	01-Jun-18	\$900,000

Project Name	Project Description	Project Location	Potential Start Date	Estimated OMCC Eligible Costs
Oxford Street West Boulevard Path Improvements	Renewal & upgrades of in boulevard facilities and intersection crossings.	Hyde Park Road to Wonderland Road North	01-Jun-19	\$1,000,000
Sarnia Road Bike Lanes	Construction of new linear cycling facility	from Sleighholme to Coombs Avenue	01-Jun-19	\$750,000
Colborne Street Bike Lanes	Construction of new bike lane	Horton Street to Grey Street	01-Jun-19	\$400,000
Ridout Street Bike Lane	Bike lanes	Commissioners Road	01-Jun-19	\$700,000
Trafalgar Street Bike Lanes	Bike lanes	From Hale Street to Highbury Ave	01-Jun-19	\$350,000
Highbury Avenue North	Paved Shoulders	Blackwell Boulevard to Sunningdale Road	01-Jun-19	\$350,000
South Commuter Area Bike Parking	Addition of new commuter bicycle parking	One or two locations to serve cyclists combined with major transit stations	01-Sept-19	\$100,000
Downtown East Bike Parking Facility	Addition of new commuter bicycle parking	East side of downtown London (Wellington & King)	01-Sept-19	\$500,000
Colborne Street Bike Lanes	Bike lanes	Dufferin Ave to Oxford Street	01-Jun-20	\$800,000
Fanshawe Park Road Boulevard Path Improvements	Renewal and upgrades of in boulevard facilities and intersection crossings.	East of Wonderland Street North to Adelaide Street North	01-Jun-20	\$2,000,000
Hale Street Bike Lanes	Bike lanes	From Trafalgar Street to Dundas Street	01-Jun-20	\$900,000
Kilally Road	Paved Shoulders	Webster to Sanford Street	01-Jun-20	\$250,000
Adelaide Street North	Boulevard Cycling Facility	Kipps Lane to Huron Street	01-Jun-20	\$900,000
Sandford Street	Bike Lanes	Huron Street to Kilally Road	01-Jun-20	\$400,000
Wavell Street	Bike Lanes	Hale Street to Spruce Street	01-Jun-20	\$300,000

* bold font denotes a new entry added in 2018

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON MARCH 19, 2018
FROM:	KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER and GEORGE KOTSIFAS, P.ENG. MANAGING DIRECTOR, DEVELOPMENT & COMPLIANCE SERVICES AND CHIEF BUILDING OFFICIAL
SUBJECT:	PRIVATE AND PUBLIC WORKS IMPACTING THE TRANSPORTATION NETWORK

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer and Managing Director, Development & Compliance Services and Chief Building Official, the following actions **BE TAKEN** with respect to private and public works impacting the transportation network:

- a) The Civic Administration **BE DIRECTED** to develop options based on industry best practices for a revised Works Approval Permit process, including consideration related to a new fee model, enhanced monitoring/reporting, roadway inspections requirements and roadway occupancy restrictions;
- b) The utility companies, construction service providers and development industry **BE ENGAGED** to provide feedback on the potential changes to the Works Approval Permit process.

PREVIOUS REPORTS PERTINENT TO THIS MATTER
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None.

2015-19 STRATEGIC PLAN

This report supports the Strategic Plan through the strategic focus area of *Leading in Public Service* and *Building a Sustainable City* directly and indirectly as follows: Addressing the infrastructure gap, building robust infrastructure, enhancing safety for all road users in the city, and managing and improving our water, wastewater and stormwater infrastructure and services. The City is committed to delivering excellent customer service and providing great customer experiences to residents, business and visitors by communicating projects in advance and coordinating all work to help build and deliver efficient infrastructure and minimize delays and inconveniences to the public during construction.

BACKGROUND

At the December 4th, 2017 Civic Works Committee, the following resolution was approved:

That the Managing Director, Environmental and Engineering Services and City Engineer BE DIRECTED to:

- a) review, either through Lean Six Sigma or more generally, the process of issuing permits for approved works, including consultation with key stakeholders such as the Utilities Coordinating Committee, emergency services, the London Development Institute, business improvement associations and others who are likely to apply for permits for approved works on major roads; and
- 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
 - iv) any other improvements identified through the review. (2017-T04)

Purpose

This report identifies options to assist in addressing some of the broader concerns related to private and public works being carried out on municipal road allowances, including improved coordination, scheduling, and communication of works to the property owners and businesses most affected, as well as the traveling public.

Municipal Road Allowances

Municipal road allowances are the foundation of the City's public transportation network and serve as the primary corridors for municipal and utility infrastructure; two critical services which sometimes conflict with one-another. As the public road authority, it is the Corporation of the City of London's responsibility for the overall management of road allowances that have been assumed by the City.

For the most part, the City has the legal authority to regulate access to and work performed on road allowances, but there are limits. Utility companies also have a legal right of access to municipal road allowances through their authorizing Federal or Provincial legislation and the City cannot restrict utilities from accessing their infrastructure in the event of an emergency or priority repair situation.

The City can manage and co-ordinate planned construction and maintenance work so as to not unduly disrupt the public. The City, development community and the utilities operating in London have historically had an excellent working relationship and continuously work together to optimize the delivery of infrastructure.

Stakeholders

Road allowance “stakeholders” can generally be separated into two groups: the “owner stakeholders” as represented by the Corporation of The City of London and the utility companies that collectively own billions of dollars of infrastructure located within road allowances and the “user stakeholders” consisting of the general public which includes both the traveling public, as well as the abutting property owners and businesses who depend on the services supported by road allowances.

Another important group that has a direct impact on both owner and user stakeholders is the development industry. Although they do not own road allowances or the infrastructure beneath them, growth often results in the need for road improvements and the extension of services to support development and to fulfill the obligations of the subdivision and site plan development agreements with the City.

Permits

The City relies on various tools to plan, co-ordinate and control work on road allowances. Municipal Access Agreements are high level operating agreements between the City and utility companies that set out basic rights and responsibilities for both parties. Construction of new utility and City services, which includes capital infrastructure renewal and development-driven projects, is approved through the Municipal Consent Application (MCA) process reviewed by the Utilities Coordinating Committee (UCC). The UCC is comprised of representatives from all the related City Service areas and the utility companies operating in the City. The MCA approval process mostly focuses on resolving plant location conflicts and assists in the coordination of major construction projects.

The primary road allowance access control tool that the City relies on is the Works Approval Permit (more commonly referred to as Permit of Approved Works, or PAW), which is authorized by the City’s S-1 (Streets) bylaw. With the general exception of City operations groups (e.g. Sewer, Water & Roadside Operations), anyone planning to occupy and carry out work over, on or under a municipal road allowance is required to obtain a PAW from the City. The permit applies to the entity actually doing the work (typically contractors) and not to the owner of the infrastructure.

The process for obtaining a PAW involves the submission of an application with accompanying payment to the Building Division’s Public Property Compliance area. The application is reviewed by staff who are also responsible for ensuring the proposed works have been approved by the City, if required, and for determining if additional information is needed such as a traffic control plan. Staff also consult the Renew London database to ensure there are no conflicts with other major projects. Fees and any security deposits depend on the nature of the work being done.

Renew London

The “Renew London” application is a database that is used to record all major construction projects planned for the current year. Project information is publically accessible from the City’s website under the Renew London banner which provides information including the project name, planned schedule, some project details, and contact information.

Renew London was originally developed as a way of communicating to the public major construction projects managed by the City's Construction Administration Division, and has since been expanded to incorporate large utility-driven and development-driven projects as well as City Operations-driven projects. Renew London is becoming increasingly useful as a coordination, scheduling and communication tool, though the primary focus remains on major projects.

DISCUSSION

Communication

The Communications Department, which is responsible for the City's communications programs, has identified the following high-level steps designed to improve communications of works to the broader public:

1. Establish / formalize the minimum criteria as to when the public needs to be informed of impacts
2. Continue to identify ways to enhance Renew London through its design, functionality and content to be able to adapt to the changing needs of Londoners
3. Continue to put a focus on community relations (find opportunities to work with businesses, community members and groups affected by the project to engage and inform them proactively throughout the duration of the project)

Scheduling and Coordination

Scheduling and coordinating works on road allowances has always been a challenge due to the wide-range of activities by the many owner-stakeholders and developers coupled with the challenge of managing ever-changing work schedules.

Although most isolated short-term works can be managed reasonably well thereby minimizing disruption to the public, improvements can be made by restricting short-term occupation of arterial roads during peak traffic volumes (i.e. "rush hour"), and by making better use of Renew London to check for conflicts with other ongoing or planned works in the vicinity during the work period.

Risks of work conflicts escalate significantly when dealing with long term construction projects. When planning large City-driven infrastructure renewal projects, staff undertake considerable effort to ensure the contractor and utility companies work closely to minimize disruption to the public throughout the term of the project. Construction staging and the judicious use of traffic control plans are an essential component of every major project in the City. City staff also take great care ensuring projects affecting arterial roads are sufficiently separated to prevent traffic grid-lock in any particular area.

Notwithstanding these efforts, however, conflicts can arise from works unrelated to the project. Through their involvement with the Utilities Coordinating Committee, utility owners are generally well aware of major construction projects and either try to coordinate their work in conjunction with the larger project or refrain from initiating other work in the vicinity of the project altogether. When conflicts do occur, they're often caused by unanticipated delays in completing conflicting work, or by changes in

scheduling of works after a PAW has been issued.

Conflicts with development-driven work can arise for several reasons. Developers and their contractors are usually less aware of the status of other projects being planned in the vicinity of their developments. Development-related road improvements are reviewed along with the associated traffic control plans during the site plan approval process. The issue is that construction may not be undertaken for many months or even years after all development approvals are obtained. By the time the PAW is applied for the actual construction work, the approved traffic control plan may well be out of date. Also, even after the issuance of a PAW, private development work can be delayed for various reasons. All of these variables increase the risk of conflicts with other work.

The solution to all of these problems is to enforce stricter construction timelines and adopt a “just in time” PAW approval process which would include a full review of any associated traffic control plan, all of which would help to ensure the PAW approved works properly take into account the current situation on the ground. This “tightening up” of PAW issuances would require increased resources including stepped-up inspections and enforcement, and could result work approval permits being delayed if appropriate lead time is not accounted for.

A key component to success of improved scheduling and coordination of works is through the expanded use of Renew London which would be used to record and track a broader range of work activities. It would also serve as a major resource for staff when issuing PAWs, as well as for all stakeholders both internal and external to the Corporation.

Proposed improvements in scheduling and coordination of works on road allowances are summarized as follows:

- Make greater use of the Renew London database to record actual and planned works and to identify potential conflicts
- Expand PAW approvals to cover a wider range of works, particularly works having a traffic impact on arterial roads
- Restrict lane closures on arterial roads to non-peak traffic hours for all planned non-emergency short term work (also would apply to City Operations)
- Adopt a “just in time” PAW approval process including a full review of any traffic control plans and enforce stricter work timelines

Additional Options for Improvements

In addition to the suggestions to improve the communication, scheduling and coordination of works on road allowances, the following options also need to be considered which would allow the City to gain better control of work activities on road allowances and further minimize disruption to the public:

- adopt a new PAW fee model including a daily charge rate for the road occupancy component to encourage the completion of works on time
- expanded use of Traffic Control Plans including a pedestrian/cycling component
- review permitting policies to ensure compliance with AODA requirements
- increased inspections to ensure:
 - compliance with Traffic Control Plan (TCP) as approved

- compliance with AODA requirements
- work is complete within approved time period, and:
- restoration work conforms to City standards
- increased enforcement and fines for work being done without a valid PAW or where the PAW has expired
- make improvements to the PAW system to support e-permits and reporting by external owner-stakeholders
- review sufficiency of security deposits
- require site signage identifying the name of the contractor and/or owner with contact information in case of complaints

The implementation of all of these options would impact all owner-stakeholders to varying degrees while benefiting user-stakeholders. Private utilities, contractors, developers as well as City Operations staff and City contractors would all face additional direct and indirect costs to comply with a more stringent PAW program. The challenge will be to formulate a balanced approach that will achieve realistic goals of improved scheduling, co-ordination and communications of works while not being onerous on the owner-stakeholders and developers. It is clear, however, that any improvements can result in immeasurable benefits for the user-stakeholders in the form of reduced disruption to property owners and businesses and shorter transportation times and reduced energy costs for the traveling public.

Accordingly, staff recommend the development of a set of best practices including a revamped permitting system containing a tiered fee structure, increased inspections and stepped-up enforcement as well as for increased reporting and making more extensive use of Renew London. Such a review will include consultation with the Utilities Coordinating Committee whose members are collectively responsible for the large majority of works on road allowances, as well as developers and construction service providers.

Any additional resources needed would be identified and rationalized in conjunction with a recommended fee structure. A comprehensive report would be brought forward to the Civic Works Committee before the end of the year.

CONCLUSION

The Communications Department is exploring ways to improve the user-stakeholder experience as it relates to communicating works done on road allowances by owner-stakeholders and developers. Renew London is continuing to be developed as a central component of a comprehensive plan designed to improve the scheduling, co-ordination and communications of works on road allowances.

Subject to Council direction, staff will develop options for industry best practices for a revised Works Approval Permit process, including consideration related to a new fee model, enhanced monitoring and reporting, roadway inspections requirements and roadway occupancy restrictions, a process that will include consultation with utility companies, construction service providers and the development industry. The recommendations would be brought forward to a future meeting of the Civic Works Committee before the end of the 2018.

Acknowledgements

This report was prepared by Adam Salton (Zoning and Public Property Compliance) and Gary Irwin (Geomatics) with input from Ugo DeCandido (Construction Administration) and Megan Hutchison (Communications Department).

PREPARED BY:	PREPARED BY:
ADAM SALTON MANAGER ZONING AND PUBLIC PROPERTY COMPLIANCE	A GARY IRWIN, O.L.S., O.L.I.P. MANAGER OF GEOMATICS AND CITY SURVEYOR
CONCURRED BY:	RECOMMENDED BY:
EDWARD SOLDI, P.ENG. DIRECTOR, ROADS AND TRANSPORTATION	G. KOTSIFAS, P. ENG. MANAGING DIRECTOR, DEVELOPMENT & COMPLIANCE SERVICES AND CHIEF BUILDING OFFICIAL
RECOMMENDED BY:	
KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER	

March 7, 2018

cc: Ugo DeCandido
Megan Hutchison
Peter Kokkoros

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON MARCH 19, 2018
FROM:	KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER
SUBJECT:	NEW PUBLIC ELECTRIC VEHICLE (EV) CHARGING STATIONS

RECOMMENDATION

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

- a) The information on Natural Resources Canada's Curbside Electric Vehicle Charging Pilot Program and the support being provided by London Hydro and the City of London **BE RECEIVED** for information; and
- b) the attached proposed revisions to the Traffic & Parking By-law (PS-113) (Appendix A) **BE INTRODUCED** at the Municipal Council Meeting on March 27, 2018 to permit the issuance of parking tickets to a parked vehicle that blocks access to a municipally-controlled electric vehicle parking space, unless that vehicle is an electric vehicle plugged into an electric vehicle charging station.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

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

- Update on the Provincial Public Electric Vehicle (EV) Charging Application Process and Next Steps (November 1, 2016 meeting of the Civic Works Committee, Agenda Item #13)

STRATEGIC PLAN 2015-2019

Municipal Council has recognized the importance of climate change, transportation, innovation and other related environmental issues in its 2015-2019 - Strategic Plan for the City of London ([2015 – 2019 Strategic Plan](#)). Expanding the network of charging stations for electric vehicles supports three of the four Areas of Focus:

Building a Sustainable City

- Convenient and connected mobility choices
- Strong and healthy environment

Leading in Public Service

- Collaborative, engaged leadership
- Excellent service delivery

Growing our Economy

- Local, regional, and global innovation
- Strategic, collaborative partnerships

BACKGROUND

PURPOSE:

The purpose of this report is to provide the Civic Works Committee and Council with information on the Natural Resources Canada (NRCan) Curbside Electric Vehicle Charging

Pilot Program and the roles being played by London Hydro and the City of London to support this pilot program here in London. This includes revisions to the Traffic & Parking By-law (PS-113) to permit the issuance of parking tickets to vehicles that block access to electric vehicle (EV) charging stations at municipally-controlled parking locations.

CONTEXT:

The City of London led a pilot project in 2012 and 2013 to install Level 2, 240 volt EV charging stations at the City Hall Lower Level Parking Garage, Budweiser Gardens and Covent Garden Market. The Covent Garden Market location was discontinued and repurposed as a CarShare location, but the other two remain in operation. In 2017, the City Hall charging station has experienced over 75 percent utilization during weekday business hours, while remaining available to the public outside business hours. The current charger at the Budweiser Gardens location is not designed to collect and report on utilization rates.

EV charging is an important component of London's Community Energy Action Plan (CEAP), the recently approved Parking Strategy for Downtown London, part of the Future Cities Strategy project and all tied to Building a Sustainable City. CEAP has a transportation-specific goal to decrease the amount of petroleum-based fuel used per capita by 15 percent from 2012 levels by 2018. As of 2016, petroleum-based fuel used per capita has actually increased by over 10 percent since 2012. EVs are anticipated to be a small but important and growing part to help reverse this trend beyond 2018.

Both the provincial and federal governments have increased investment in EV charging infrastructure. The Ontario Ministry of Transportation through its Electric Vehicle Chargers Ontario Program (EVCO) have installed Level 2 and Level 3 public EV charging stations throughout Ontario, and has recently launched its new Workplace Electric Vehicle Charging Incentive Program in January 2018. Natural Resources Canada (NRCan) is working with FLO - AddÉnergie Technologies Inc. (FLO), a Quebec-based company with an extensive EV charging network in that province, on the implementation of charging stations across Canada, including the new FLO EV charging station at the Canadian Tire gas bar at White Oaks Mall.

There is also private sector investment in customer-focused public EV charging stations in London from both local and national businesses such as Goodlife Fitness, Mountain Equipment Co-op, TD-Canada Trust, Teppermans, and many automobile dealerships. To date, there are 27 publicly-available EV charging stations (38 charging ports in total) in London, including three DC fast-charging stations, as shown on Figure 1 in Appendix B. This is three times more than there were back in November 2016.

The EVCO program is planning to install publicly-available EV charging stations at the following locations some time in 2018, as shown on Figure 2 in Appendix B:

- St. Joseph's Health Care (three Level 2 charging ports)
- London Health Sciences Centre Victoria Hospital (ten Level 2 charging ports)
- Wellington Commons – 1115 Wellington Road South (two Level 2 charging ports)

DISCUSSION

An Overview of Electric Vehicle Chargers

Electric vehicle charging technology is classified in to the following three levels depending on their power output:

- "Level 1" - a 120 volt alternating current (AC) standard wall outlet, similar to the power used for an electric space heater or a hair dryer, capable of adding about 5 to 8 kilometres of range per hour;
- "Level 2" - a 208 – 240 volt AC outlet, similar to the heavy-duty power used for a clothes dryer, capable of adding about 15 to 35 kilometres of range per hour

depending upon the type of EV (higher for battery-only EVs); and

- “Level 3” – a 480 volt direct current (DC) fast-charging station is capable of adding about 100 kilometres of range in about 20 minutes depending upon the EV.

Every EV sold in North America is able to use the standard SAE J1772 Level 2 charging connector, and most of the existing publicly-available EV charging locations use this connector. However, it is important to note that some locations also provide connectors exclusively for use with Tesla vehicles and that these cannot be used by other EV makes and models.

The growth in publicly-accessible EV chargers is due in large part to the role played by private-sector EV charging network operators such as FLO and ChargePoint, as well as the MyEVRoad stations funded by the EVCO program. These network operators make use of smart phone apps providing both payment and real-time station availability for EV drivers.

The transition away from “free charging” towards “user-pay” public EV charging is required to help the long-term financial sustainability of expanding EV charging infrastructure.

NRCan Curbside EV Charging Pilot Program

NRCan is working with FLO on the implementation of Level 2 charging stations specially designed for street-side installation in five major Canadian cities, based on the expertise developed by the deployment of hundreds of charging stations in Montréal. FLO approached the City of London in late August to explore the City’s interest in participating in a pilot program. City staff engaged London Hydro to determine their interest in participating and leading this activity in London.

London Hydro obtained approval from their Board on December 12, 2017 to participate in this pilot project and install three curbside charging stations in different locations in downtown London. Each station would be equipped with two EV charging ports, as illustrated in Figure 3 in Appendix B. It is estimated that installation will take place in summer 2018.

Location Selection

London Hydro worked with City staff to select three locations, as illustrated in Figures 4 through 6 in Appendix B, that have both electricity supply infrastructure nearby as well as curbside parking locations that would not be impacted by the Bus Rapid Transit implementation:

- Dundas Street angled parking, north side, between Wellington and Waterloo
- Talbot Street curbside parking, east side, between King and York
- Pall Mall Street, south side, east of Richmond

These locations were reviewed with Downtown London.

Funding and Revenue

London Hydro is the lead on this \$70,000 pilot project, funded as follows:

Natural Resources Canada	\$30,000	43%
London Hydro	\$30,000	43%
City of London	\$10,000	14%
<i>Total</i>	<i>\$70,000</i>	

London Hydro will own these stations, but will be operated as part of the FLO Network and co-branded accordingly. The City of London’s contribution of \$10,000 comes from existing program funding for the ongoing implementation of the Community Energy Action Plan. City funding will be used to cover the costs for signage, parking spot painting, as well as contribute towards installation costs.

Use of the charging station will use time-based (\$1.50 per hour) cost recovery from users to cover both electricity consumption costs as well as overhead costs for operating the charging stations. This hourly rate is consistent with the rates charged by private-sector EV charging network operators. This revenue is not expected to provide complete cost recovery for incurred capital costs unless utilization is higher than anticipated.

Parking Enforcement at EV Charging Stations – Traffic & Parking By-law Revision

It is important that these EV charging stations be accessible to EV drivers who need to charge their vehicles, similar to drivers who require the use of and have permits to use Accessible Parking spots. This would require a revision to the Traffic & Parking By-law, so that any vehicle parked at an EV charger on municipal property that is not plugged in to the curbside charger can be issued a parking ticket. The City of Burlington, Ontario’s Parking By-law was used as model for the development of the proposed Traffic & Parking By-law revisions outlined in Appendix A.

The curbside charger units are equipped with indicator lights to make it easy for Parking Enforcement staff to identify those parking spots that have an EV plugged into the curbside charger.

ACKNOWLEDGEMENTS:

This report was prepared with assistance of Shane Maguire, Division Manager of Roadway Lighting & Traffic Control, Doug Bolton, Sr. Transportation Technologist, Ardian Spahiu, P.Eng., Transportation Design Engineer and Annette Drost, Manager of Municipal Law Enforcement Services.

PREPARED BY:	PREPARED AND RECOMMENDED BY:
JAMIE SKIMMING, P.ENG. MANAGER, AIR QUALITY	JAY STANFORD, M.A., M.P.A. DIRECTOR, ENVIRONMENT, FLEET & SOLID WASTE
PREPARED AND RECOMMENDED BY:	REVIEWED & CONCURRED BY:
EDWARD SOLDI, P.ENG. DIRECTOR, ROADS AND TRANSPORTATION	KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER

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Appendix A Proposed Revisions to the Traffic & Parking By-Law (PS-113)

Appendix B Maps of Current Charging Locations and Upcoming NRCan Curbside Charging Stations in London, Ontario

- c George Kotsifas, Managing Director, Managing Director, Development and Compliance Services and Chief Building Official
- Allan Van Damme, Director of Operations, London Hydro
- Vinay Sharma, CEO, London Hydro

APPENDIX A

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

Bill No.
2018

By-law No. PS-113-18____

A by-law to amend By-law No. 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. Section 1 of By-law No. PS-113 is amended by adding the following new definitions:

“Electric Vehicle” means a vehicle that is propelled by one or more electric motors, using electrical energy stored in one or more rechargeable batteries or another energy storage device and is capable of being plugged into an Electric Vehicle Charging Station and includes a plug-in electric car and a plug-in hybrid car;

“Electric Vehicle Charging Station” means any facility or equipment that is used to charge a battery or other energy storage device of an Electric Vehicle;

“Electric Vehicle Parking Space” means a parking space designated for the use of Electric Vehicles as indicated by a sign in the form set out in Schedule 29 to this By-law;

2. By-law No. PS-113 is amended by adding the following new Section 10.1:

“10.1 No Parking Electric Vehicle Parking Space

(a) No person shall park a vehicle or any part of a vehicle in an Electric Vehicle Parking Space where such vehicle is not an Electric Vehicle.

(b) No person shall park a vehicle or any part of a vehicle in an Electric Vehicle Parking Space where such vehicle is not connected to an Electric Vehicle Charging Station and charging.”

3. By-law No. PS-113 is amended by adding the following new Schedule 29 attached, entitled “Electric Vehicle Charging Signage”:

4. This by-law comes into force and effect on the day it is passed.

PASSED in Open Council on March 27, 2018.

Matt Brown
Mayor

Catharine Saunders
City Clerk

First Reading – March 27, 2018
Second Reading – March 27, 2018
Third Reading – March 27, 2018

Schedule 29 Electric Vehicle Charging Signage



APPENDIX B

Maps of Current Charging Locations and Upcoming NRCan Curbside Charging Stations in London, Ontario

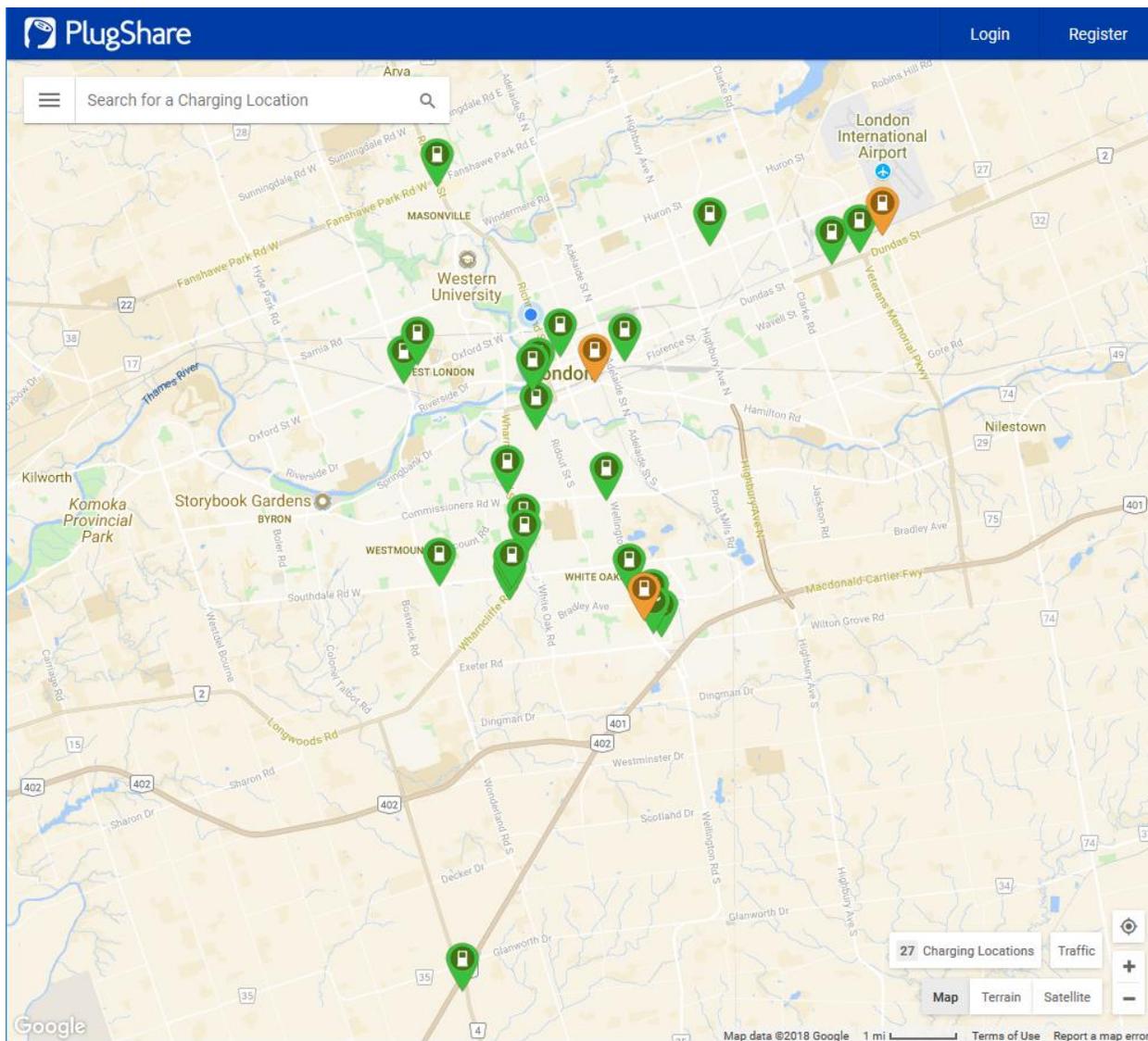
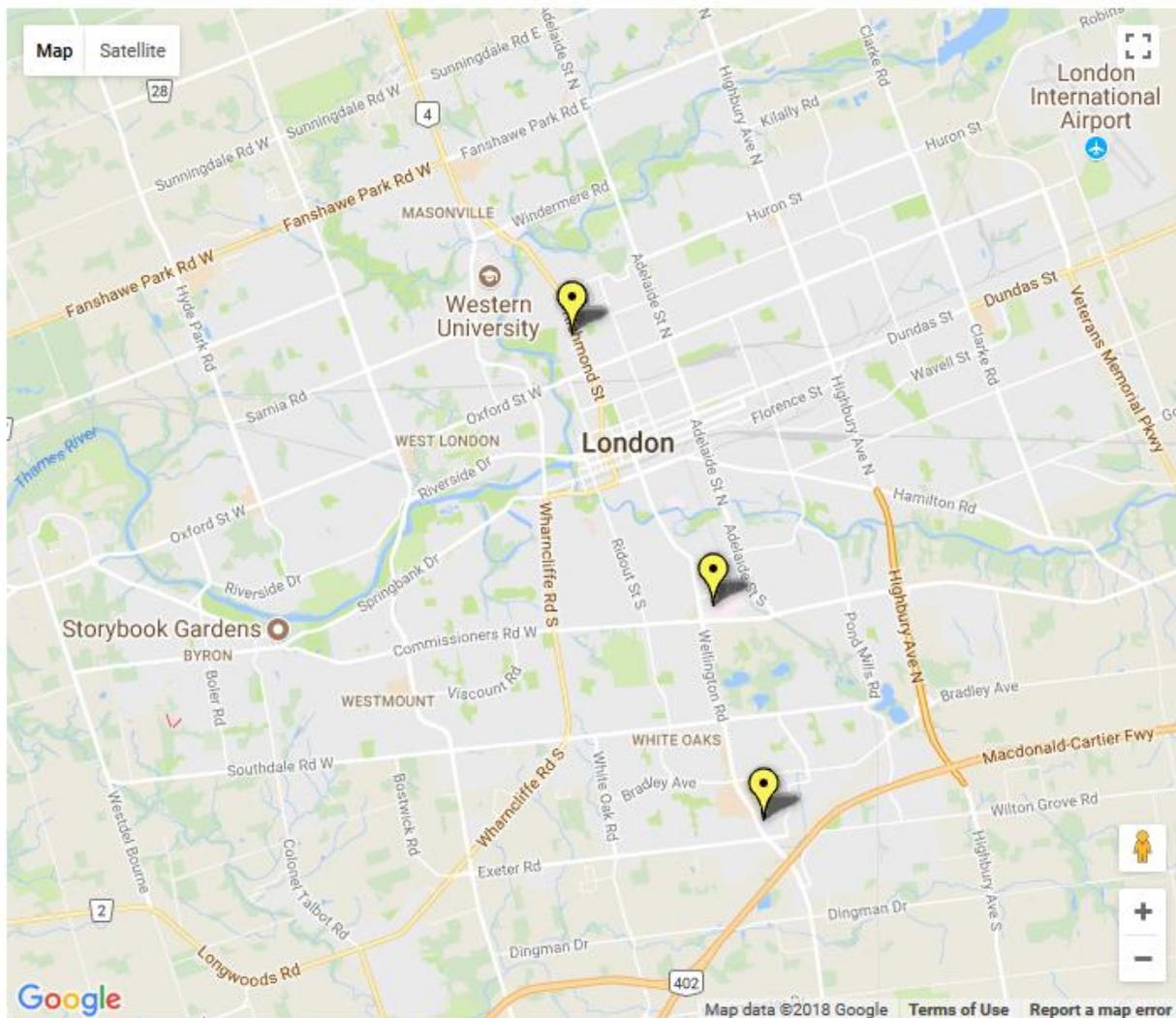


Figure 1 - Existing EV Charging Stations in London (Source: plugshare.com)



Legend:  In service  Coming Soon

Figure 2 - Future EVCO Public Charging Stations in London (Source: Ontario Ministry of Transportation website)



Figure 3 - FLO Charging Station at Canadian Tire on Wellington Road South

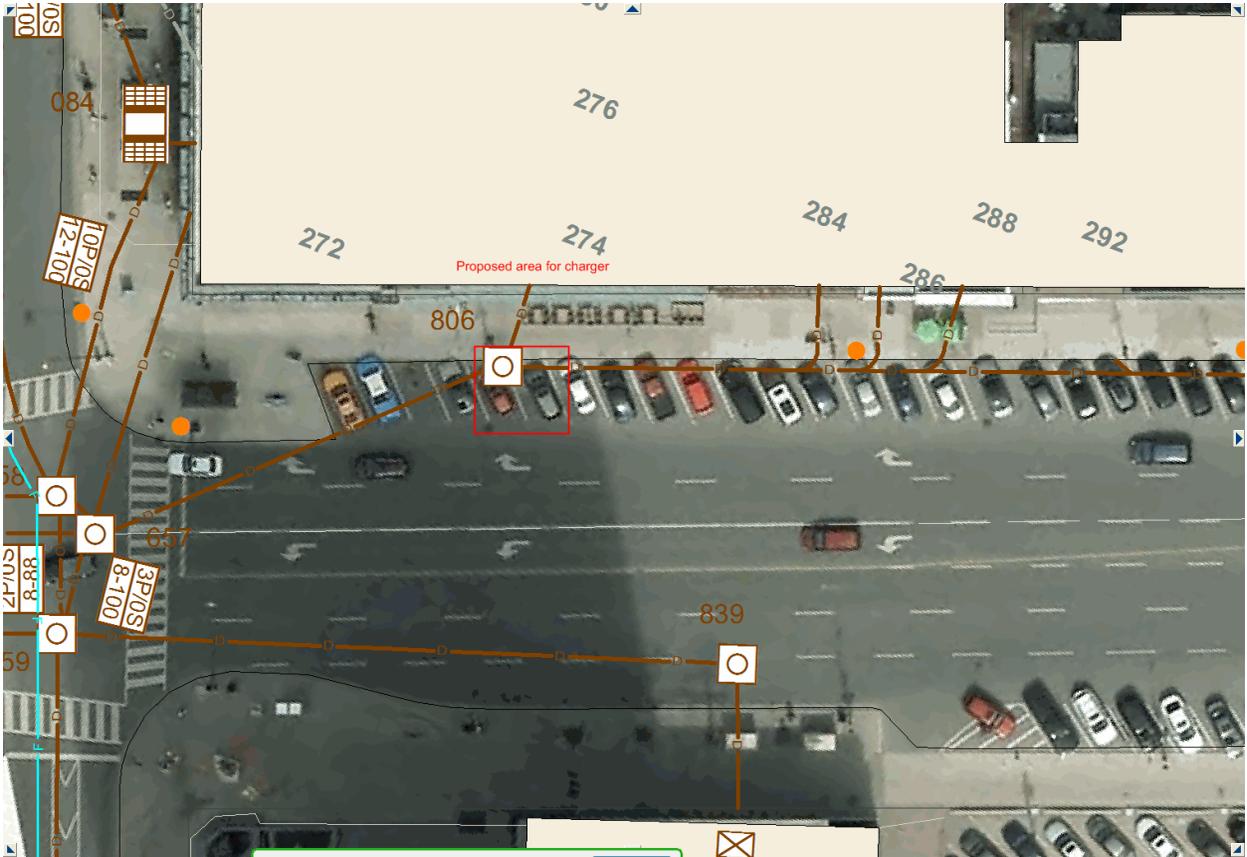


Figure 4 - Location for Dundas Street Curbside EV Charging Station

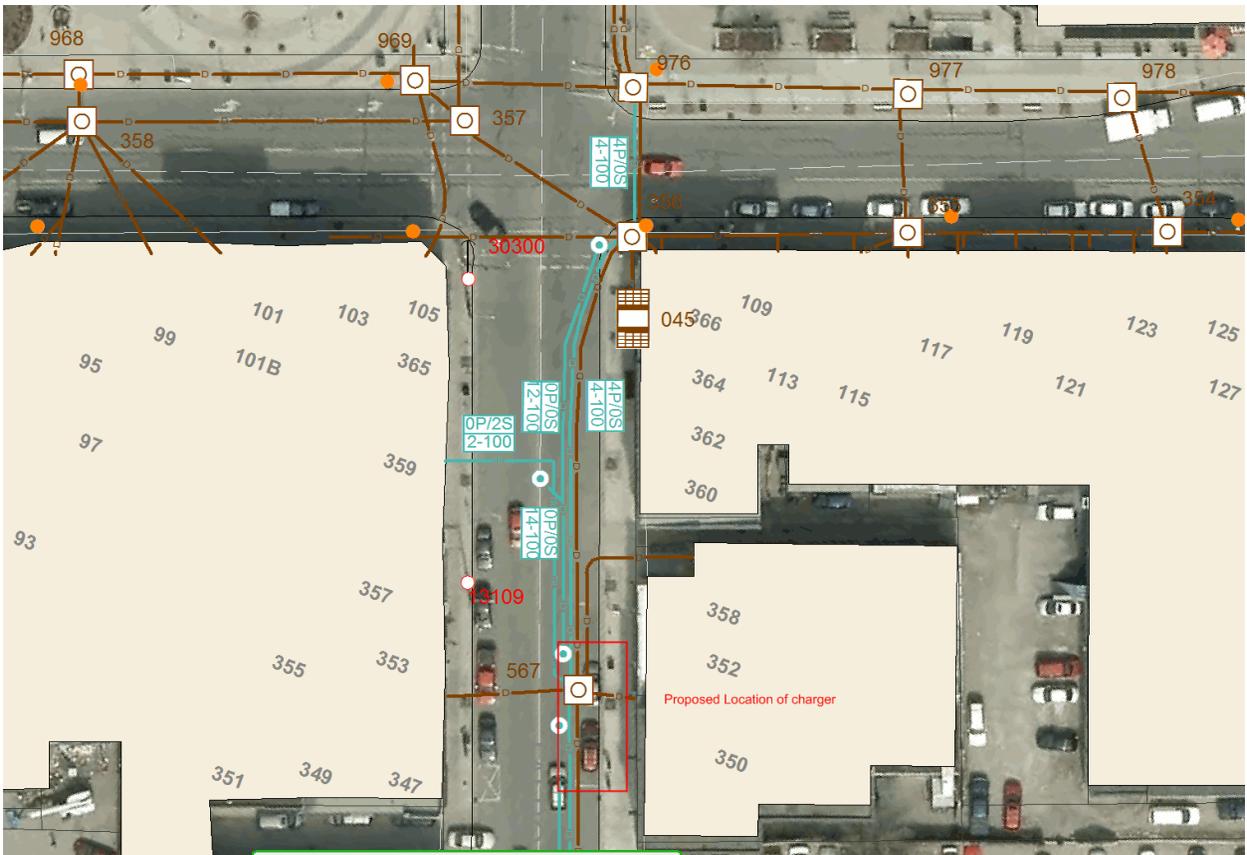


Figure 5 - Location for Talbot Street Curbside EV Charging Station

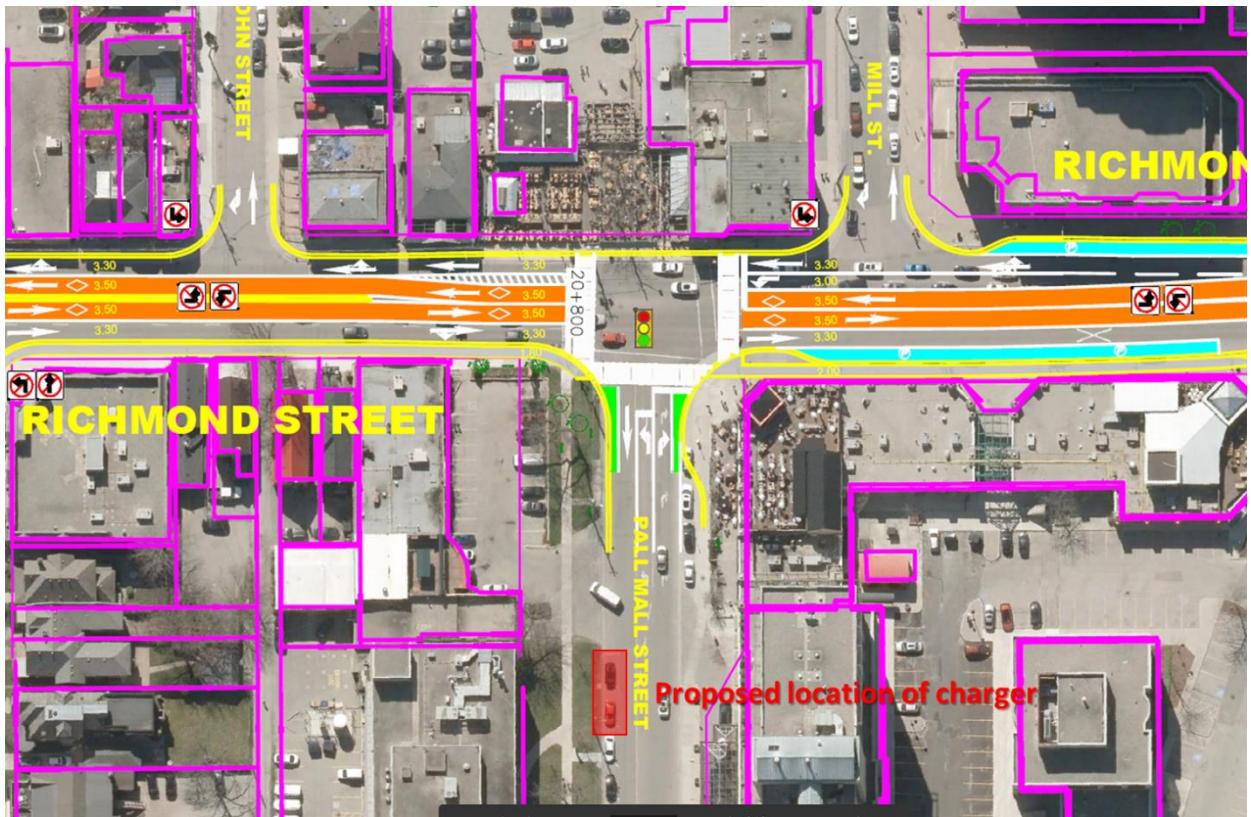


Figure 6 - Location for Pall Mall Street Curbside EV Charging Station

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON MARCH 19, 2018
FROM:	KELLY SCHERR, P. ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT:	CONTRACT AWARD: TENDER NO. 18-03 2018 INFRASTRUCTURE RENEWAL PROGRAM EGERTON STREET AND KING STREET PHASE 1 RECONSTRUCTION PROJECT

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 contracts for the 2018 Infrastructure Renewal Program Egerton Street and King Street Phase 1 reconstruction project:

- (a) the bid submitted by Blue-Con Construction at its tendered price of \$5,799,999.00, excluding HST, **BE ACCEPTED**; it being noted that the bid submitted by Blue-Con Construction was the lowest of five bids received and meets the City's specifications and requirements in all areas;
- (b) Archibald, Gray and McKay Engineering Ltd. (AGM), **BE AUTHORIZED** to carry out the resident inspection and contract administration for the said project in accordance with the estimate, on file, at an upset amount of \$480,656.00, excluding HST, in accordance with Section 15.2 (g) of the City of London's Procurement of Goods and Services Policy, noting that this firm completed the engineering design for this project;
- (c) the financing for this project **BE APPROVED** as set out in the Sources of Financing Report attached, hereto, as Appendix 'A';
- (d) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project;
- (e) 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 18-03); and
- (g) 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
--

Appointment of Consulting Engineers, Infrastructure Renewal Program 2015-2016, Civic Works Committee, May 26, 2014.

2015-2019 STRATEGIC PLAN

The 2015 – 2019 Strategic Plan under Building a Sustainable City identifies Robust Infrastructure, more specifically to this report; 1B – Manage and improve our water, wastewater and stormwater infrastructure and services.

BACKGROUND

Purpose

This report recommends award of a tender to a contractor, and continuation of consulting services, for the reconstruction of:

- Egerton Street from Dundas Street to 75 m north of Brydges Street; and,
- King Street from Egerton Street to Kellogg Lane.

A project location map is included for reference in Appendix 'B'.

Context

Egerton Street and King Street have each been identified as a high priority in the replacement programs due to the poor condition of the municipal infrastructure. Most of this infrastructure dates from the 1900's to the 1920's. The historical Egerton double trunk sewer has reached the end of its life expectancy. Surface drainage will be improved on King Street by replacing the existing storm sewer, that serves only half of the block, and extending the new storm sewer for the full length of the block. There are two watermains on this project, one of which is 1900's cast iron with potential lead services, and the other which is 1967 concrete pressure pipe.

DISCUSSION

The Egerton Street and King Street infrastructure renewal project includes the following improvements:

- installation of sanitary sewers and services;
- installation of storm sewers;
- installation of watermain and individual water services to property line where applicable;
- full road reconstruction including new asphalt, curb and gutter, and sidewalk; and,
- inclusion of underground works by Bell Canada who has infrastructure needs.

In addition, the following new features will be incorporated into this project:

- new sidewalk on the west side of Egerton Street; and,
- new on-road bicycle lanes on both sides of Egerton Street.

Infrastructure replacement needs have been coordinated within the Environmental and Engineering Services Department with support from Planning Services (Current Planning). The funding for this project comes from the approved 2018 wastewater and treatment, water and transportation Capital Works Budgets.

Public Consultation

A project update meeting was held on December 7, 2017, 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. Regular consultation has also occurred with the Western Fair to identify their needs. Consultation has also occurred between the project team and the Old East Village Business Improvement Area. Staff have been informed of a number of residents with special needs that will be accommodated throughout this construction contract. A 60m portion of Egerton Street from Dundas Street south will be paved immediately upon completion of the underground works to accommodate these businesses at the

intersection and south. Communication has been taking place with all the business owners and contact information has been collected in order that the communication can continue during the completion of this project.

Service Replacement

In conjunction with the construction of this Capital Works Project, the City is administering the Private Drain Connection (PDC) program, which allows property owners within the projects limits an opportunity to voluntarily replace their PDC's 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

Tenders for the 2018 Infrastructure Renewal Program Egerton Street and King Street Phase 1 reconstruction project were opened on January 30, 2018. Five (5) contractors submitted tender prices as listed below, excluding HST.

CONTRACTOR		TENDER PRICE SUBMITTED
1.	Blue-Con Construction	\$5,799,999.00
2.	Omega Contractors Incorporated	\$6,250,109.32
3.	L82 Construction Limited	\$6,267,767.40
4.	Bre-Ex Construction Incorporated	\$6,498,649.20
5.	J-AAR Excavating Limited	\$6,990,927.00

All tenders have been checked by the Environmental and Engineering Services Department and the City's consultant, AGM. No mathematical errors were found.

The tender estimate just prior to tender opening was \$5,990,280.00, excluding HST. All tenders include a contingency allowance of \$400,000.00.

Operating Budget Impacts

Additional annual sewer, water, and transportation operating costs, attributed to new infrastructure installation, are summarized in the following table.

Division	Rationale	Operational Cost Increase
Sewer Operations	Additional 100 meters of storm sewer	\$200
Water Operations	No additional increase in water services or total length of watermain	\$0
Transportation Operations	Road maintenance cost (As per Table 8 and 10 of the London ON Bikes report.)	\$9,180 – \$10,860
Total		\$9,380 - \$11,060

Consulting Services

AGM was awarded the detailed design of the project by Council on June 10, 2014. Due to the consultant's knowledge and positive performance on the project, the consultant was invited to submit a proposal to carry out the contract administration and resident supervision. Staff have reviewed the fee submission in detail considering the time allocated to each project task, along with hourly rates provided by each of the consultant's staff members. That review of assigned personnel, time per project task, and hourly rates is consistent with other infrastructure renewal program assignments of this scope and nature. The continued use of AGM on this project for construction administration is of financial advantage to the City because that firm has specific knowledge of the project and has undertaken work for which duplication would be required if another firm were to be selected.

In addition to the financial advantage, there are also accountability and risk reduction benefits. The City requires a professional engineer to seal all construction drawings. These "record drawings" are created based on field verification and ongoing involvement by the professional engineer. This requirement promotes consultant accountability for the design of these projects, and correspondingly, reduces the City's overall risk exposure. Consequently, the continued use of the consultant who created and sealed the design drawings is required in order to maintain this accountability process and to manage risk.

In accordance with Section 15.2 (g) of the City of London's Procurement of Goods and Services Policy, this firm has satisfactorily completed a substantial part of the project and is recommended for award of the balance of the project. The administration recommends that AGM be authorized to carry out the remainder of engineering services to complete this project for the provided fee estimate of \$480,656.00 excluding HST, noting the upset amount for total engineering services for the project is \$952,336.00, excluding HST, spread over 2014 – 2019.

CONCLUSIONS

Award of the 2018 Infrastructure Renewal Program, Egerton Street, and King Street Phase 1 reconstruction project to Blue-Con Construction will allow the project objectives to be met within the available budget and schedule.

The use of AGM for the remainder of engineering services for this project is in the best financial and technical interests of the City.

Acknowledgements

This report was prepared within the Wastewater and Drainage Engineering Division by John Bos, C.E.T., Technologist II, and reviewed by Kyle Chambers, P. Eng., Environmental Services Engineer.

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

Attach: Appendix 'A' – Sources of Financing
Appendix 'B' – Project Location Map

c.c.	Aaron Rozentals	John Freeman	Gary McDonald
	Edward Soldo	Ugo DeCandido	Bell Canada
	Blue-Con Construction	AGM	Alan Dunbar
	Jason Davies	Kyle Chambers	John Bos

APPENDIX 'A'

#18041

Chair and Members
Civic Works Committee

March 19, 2018
(Award Contract)

RE: 2018 Infrastructure Renewal Program - Egerton Street and King Street Phase 1 Reconstruction Project
(Subledger WS15C00A)
Capital Project ES241418 - Sewer Infrastructure Lifecycle Renewal
Capital Project ES246418 - Combined Sewer Separation
Capital Project EW3624 - Burbrook Watermain Upgrade Ph II
Capital Project EW376518 - Water Infrastructure Lifecycle Renewal
Capital Project TS144618 - Road Networks Improvements
Capital Project TS173918 - Cycling Facilities
Capital Project TS301418 - Road Network Improvements (Local & Rural)
Capital Project TS406718 - Traffic Signals - Mtce
Capital Project TS512318 - Street Light Maintenance
Blue-Con Construction - \$5,799,999.00 (excluding H.S.T.)
Archibald, Gray & McKay Engineering Ltd. (AGM) - \$480,656.00 (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
<u>ES241418-Sewer Infrastructure Lifecycle Renewal</u>					
Engineering	\$1,728,809	\$1,728,809	\$5,000	\$156,517	\$1,567,292
Construction	10,297,079	10,297,079		1,771,648	8,525,431
Construction (PDC Portion) 2)		10,000		10,000	0
Construction (Utilities) 2)		651,031		651,031	0
City Related Expenses	15,000	15,000			15,000
	<u>12,040,888</u>	<u>12,701,919</u>	<u>5,000</u>	<u>2,589,196</u>	<u>10,107,723</u>
<u>ES246418-Combined Sewer Separation</u>					
Engineering	600,000	600,000		48,912	551,088
Construction	2,800,000	2,800,000	384,140	385,763	2,030,097
Construction (PDC Portion)	18,800	18,800	18,800		0
	<u>3,418,800</u>	<u>3,418,800</u>	<u>402,940</u>	<u>434,675</u>	<u>2,581,185</u>
<u>EW3624-Burbrook Watermain Upgrade Ph II</u>					
Engineering	297,910	275,371	275,371		0
Construction	4,382,728	4,395,048	3,769,175	625,873	0
City Related Expenses	19,362	29,581	29,581		0
	<u>4,700,000</u>	<u>4,700,000</u>	<u>4,074,127</u>	<u>625,873</u>	<u>0</u>
<u>EW376518-Water Infrastructure Lifecycle Renewal</u>					
Engineering	1,250,000	1,250,000		171,191	1,078,809
Construction	7,222,019	7,222,019	934,784	1,123,760	5,163,475
	<u>8,472,019</u>	<u>8,472,019</u>	<u>934,784</u>	<u>1,294,951</u>	<u>6,242,284</u>
<u>TS144618-Road Networks Improvements</u>					
Engineering	1,000,000	1,000,000		39,129	960,871
Construction	11,661,996	11,661,996		563,499	11,098,497
	<u>12,661,996</u>	<u>12,661,996</u>	<u>0</u>	<u>602,628</u>	<u>12,059,368</u>
<u>TS173918-Cycling Facilities</u>					
Engineering	100,000	100,000			100,000
Construction	682,850	682,850		117,923	564,927
	<u>782,850</u>	<u>782,850</u>	<u>0</u>	<u>117,923</u>	<u>664,927</u>
<u>TS301418-Road Network Improvements</u>					
Engineering	100,000	100,000		12,227	87,773
Construction	9,294,985	9,294,985	1,639,492	482,457	7,173,036
	<u>9,394,985</u>	<u>9,394,985</u>	<u>1,639,492</u>	<u>494,684</u>	<u>7,260,809</u>
<u>TS406718-Traffic Signals - Mtce</u>					
Engineering		92,262	43,350	48,912	0
Construction	3,970,995	3,878,733		118,491	3,760,242
	<u>3,970,995</u>	<u>3,970,995</u>	<u>43,350</u>	<u>167,403</u>	<u>3,760,242</u>
<u>TS512318-Street Light Maintenance</u>					
Engineering	100,000	100,000	14,450	12,227	73,323
Construction	2,312,498	2,210,738	8,120	40,176	2,162,442
Traffic Lights		101,760	101,760		0
	<u>2,412,498</u>	<u>2,412,498</u>	<u>124,330</u>	<u>52,403</u>	<u>2,235,765</u>
NET ESTIMATED EXPENDITURES	<u>\$57,855,031</u>	<u>\$58,516,062</u>	<u>\$7,224,023</u>	<u>\$6,379,736</u> 1)	<u>\$44,912,303</u>

SUMMARY OF FINANCING:

<u>ES241418-Sewer Infrastructure Lifecycle Renewal</u>					
Capital Sewer Rates	\$7,093,000	\$7,093,000			\$7,093,000
Drawdown from Sewage Works Reserve Fund	447,888	447,888			447,888
Federal Gas Tax	4,500,000	4,500,000	5,000	1,928,165	2,566,835
Cash Recovery from Property Owners (PDC Portion) 2)		10,000		10,000	0
Other Contributions (Utilities) 2)		651,031		651,031	0
	<u>12,040,888</u>	<u>12,701,919</u>	<u>5,000</u>	<u>2,589,196</u>	<u>10,107,723</u>
<u>ES246418-Combined Sewer Separation</u>					
Capital Sewer Rates	1,168,000	1,168,000	384,140	434,675	349,185
Drawdown from Sewage Works Reserve Fund	2,232,000	2,232,000			2,232,000
Cash Recovery from Property Owners (PDC Portion)	18,800	18,800	18,800		0
	<u>3,418,800</u>	<u>3,418,800</u>	<u>402,940</u>	<u>434,675</u>	<u>2,581,185</u>
<u>EW3624-Burbrook Watermain Upgrade Ph II</u>					
Drawdown from Capital Water Reserve Fund	4,700,000	4,700,000	4,074,127	625,873	0

APPENDIX 'A'

#18041

Chair and Members
Civic Works Committee

March 19, 2018
(Award Contract)

RE: 2018 Infrastructure Renewal Program - Egerton Street and King Street Phase 1 Reconstruction Project
(Subledger WS15C00A)
Capital Project ES241418 - Sewer Infrastructure Lifecycle Renewal
Capital Project ES246418 - Combined Sewer Separation
Capital Project EW3624 - Burbrook Watermain Upgrade Ph II
Capital Project EW376518 - Water Infrastructure Lifecycle Renewal
Capital Project TS144618 - Road Networks Improvements
Capital Project TS173918 - Cycling Facilities
Capital Project TS301418 - Road Network Improvements (Local & Rural)
Capital Project TS406718 - Traffic Signals - Mtce
Capital Project TS512318 - Street Light Maintenance
Blue-Con Construction - \$5,799,999.00 (excluding H.S.T.)
Archibald, Gray & McKay Engineering Ltd. (AGM) - \$480,656.00 (excluding H.S.T.)

	Approved Budget	Revised Budget	Committed to Date	This Submission	Balance for Future Work
SUMMARY OF FINANCING: (continued)					
EW376518-Water Infrastructure Lifecycle Renewal					
Capital Water Rates	6,502,100	6,502,100	934,784	1,294,951	4,272,365
Drawdown from Capital Water Reserve Fund	1,969,919	1,969,919			1,969,919
	8,472,019	8,472,019	934,784	1,294,951	6,242,284
TS144618-Road Networks Improvements					
Capital Levy	3,308,422	3,308,422		602,628	2,705,794
Debenture Quota	3) 847,844	847,844			847,844
Drawdown from Capital Infrastructure Gap R.F.	535,720	535,720			535,720
Federal Gas Tax	7,970,010	7,970,010			7,970,010
	12,661,996	12,661,996	0	602,628	12,059,368
TS173918-Cycling Facilities					
Capital Levy	391,425	391,425		58,961	332,464
Drawdown from City Services - Roads Reserve Fund (Development Charges)	4) 391,425	391,425		58,962	332,463
	782,850	782,850	0	117,923	664,927
TS301418-Road Network Improvements					
Capital Levy	8,993,195	8,993,195	1,639,492	494,684	6,859,019
Drawdown from Capital Infrastructure Gap R.F.	401,790	401,790			401,790
	9,394,985	9,394,985	1,639,492	494,684	7,260,809
TS406718-Traffic Signals - Mtce					
Capital Levy	3,837,065	3,837,065	43,350	167,403	3,626,312
Drawdown from Capital Infrastructure Gap R.F.	133,930	133,930			133,930
	3,970,995	3,970,995	43,350	167,403	3,760,242
TS512318-Street Light Maintenance					
Capital Levy	2,345,533	2,345,533	124,330	52,403	2,168,800
Drawdown from Capital Infrastructure Gap R.F.	66,965	66,965			66,965
	2,412,498	2,412,498	124,330	52,403	2,235,765
TOTAL FINANCING	\$57,855,031	\$58,516,062	\$7,224,023	\$6,379,736	\$44,912,303

1) Financial Note: (CONSTRUCTION)	Utilities				
	ES241418	ES241418	ES246418	EW3624	EW376518
Contract Price	\$1,750,834	\$651,031	\$379,091	\$615,048	\$1,104,324
Add: HST @13%	227,608	84,634	49,282	79,956	143,562
Total Contract Price Including Taxes	1,978,442	735,665	428,373	695,004	1,247,886
Less: HST Rebate	196,794	84,634	42,610	69,131	124,126
Net Contract Price	<u>\$1,781,648</u>	<u>\$651,031</u>	<u>\$385,763</u>	<u>\$625,873</u>	<u>\$1,123,760</u>

Financial Note (CONSTRUCTION continued)	TS144618	TS173918	TS301418	TS406718	TS512318
	Contract Price	\$553,753	\$115,883	\$474,112	\$116,442
Add: HST @13%	71,988	15,065	61,635	15,137	5,133
Total Contract Price Including Taxes	625,741	130,948	535,747	131,579	44,614
Less: HST Rebate	62,242	13,025	53,290	13,088	4,438
Net Contract Price	<u>\$563,499</u>	<u>\$117,923</u>	<u>\$482,457</u>	<u>\$118,491</u>	<u>\$40,176</u>

Financial Note (CONSTRUCTION continued)	CONSTRUCTION TOTAL				
	Contract Price				
Add: HST @13%					754,000
Total Contract Price Including Taxes					6,553,999
Less: HST Rebate					663,378
Net Contract Price					<u>\$5,890,621</u>

Financial Note: (ENGINEERING)	ES241418	ES246418	EW376518	TS144618	TS301418
	Contract Price	\$153,810	\$48,066	\$168,230	\$38,452
Add: HST @13%	19,995	6,249	21,870	4,999	1,562
Total Contract Price Including Taxes	173,805	54,315	190,100	43,451	13,578
Less: HST Rebate	17,288	5,403	18,909	4,322	1,351
Net Contract Price	<u>\$156,517</u>	<u>\$48,912</u>	<u>\$171,191</u>	<u>\$39,129</u>	<u>\$12,227</u>

Financial Note (ENGINEERING continued)	TS406718	TS512318	ENGINEERING TOTAL	
	Contract Price	\$48,066	\$12,016	
Add: HST @13%	6,249	1,562		62,486
Total Contract Price Including Taxes	54,315	13,578		543,142
Less: HST Rebate	5,403	1,351		54,027

APPENDIX 'A'

#18041

Chair and Members
Civic Works Committee

March 19, 2018
(Award Contract)

**RE: 2018 Infrastructure Renewal Program - Egerton Street and King Street Phase 1 Reconstruction Project
(Subledger WS15C00A)**

- Capital Project ES241418 - Sewer Infrastructure Lifecycle Renewal
- Capital Project ES246418 - Combined Sewer Separation
- Capital Project EW3624 - Burbrook Watermain Upgrade Ph II
- Capital Project EW376518 - Water Infrastructure Lifecycle Renewal
- Capital Project TS144618 - Road Networks Improvements
- Capital Project TS173918 - Cycling Facilities
- Capital Project TS301418 - Road Network Improvements (Local & Rural)
- Capital Project TS406718 - Traffic Signals - Mtce
- Capital Project TS512318 - Street Light Maintenance
- Blue-Con Construction - \$5,799,999.00 (excluding H.S.T.)
- Archibald, Gray & McKay Engineering Ltd. (AGM) - \$480,656.00 (excluding H.S.T.)

Net Contract Price	\$48,912	\$12,227	\$489,115
TOTAL CONSTRUCTION & ENGINEERING			\$6,379,736

2) The expenditures have increased to accommodate the PDC (Private Drain Connections) funding, Bell Canada and London Hydro contribution towards this project.

NOTE TO CITY CLERK:

3) Administration hereby certifies that the estimated amounts payable in respect of this project does not exceed the annual financial debt and obligation limit for the Municipality of Municipal Affairs in accordance with the provisions of Ontario Regulation 403/02 made under the Municipal Act, and accordingly the City Clerk is hereby requested to prepare and introduce the necessary authorizing by-laws.

An authorizing by-law should be drafted to secure debenture financing for project TS144618 - Road Networks Improvements for the net amount to be debentured of \$847,844.00.

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

5) Additional annual operating costs of \$200 for Sewer Operations and \$9,180 - \$10,860 for Transportation Operations, attributed to new infrastructure installation.

JG

Jason Davies
Manager of Financial Planning & Policy

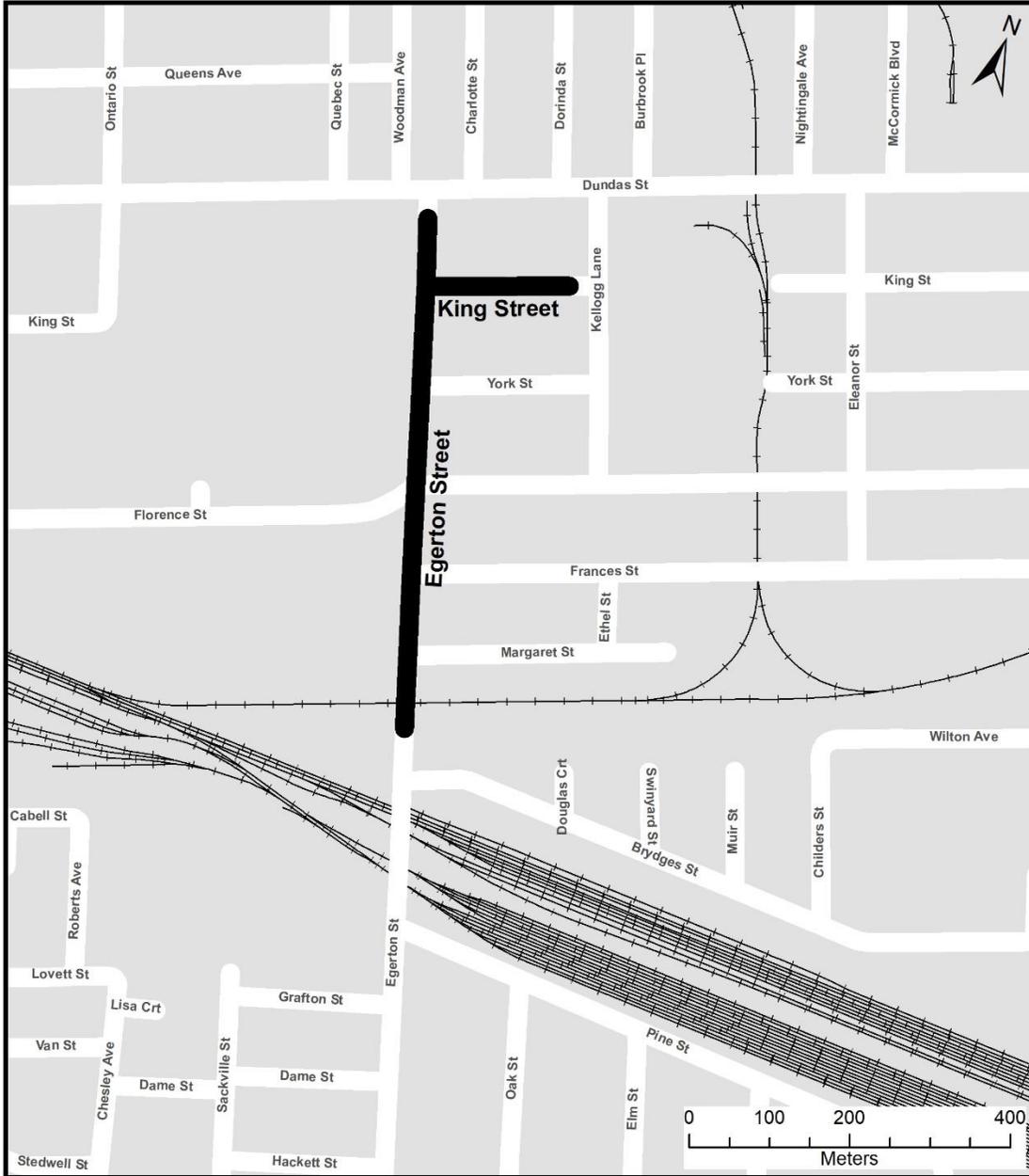
Appendix 'B'



2018 Infrastructure Renewal Program

Contract 10 - Location Map

Egerton Street from Dundas Street to 75 m north of Brydges Street
King Street from Egerton Street to Kellogg Lane



TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON MARCH 19, 2018
FROM:	KELLY SCHERR, P. ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER
SUBJECT:	CONTRACT AWARD: TENDER NO. 18-04 2018 INFRASTRUCTURE RENEWAL PROGRAM YORK STREET SEWER SEPARATION PHASE 1 PROJECT

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 contracts for the 2018 Infrastructure Renewal Program York Street Sewer Separation Phase 1 Project:

- (a) the bid submitted by Bre-Ex Construction Incorporated (Bre-Ex) at its tendered price of \$6,960,461.44, excluding HST, for the 2018 Infrastructure Renewal Program Contract 12, York Street Sewer Separation Phase 1 project, **BE ACCEPTED**; it being noted that the bid submitted by Bre-Ex Construction Incorporated was the lowest of six bids received and meets the City's specifications and requirements in all areas;
- (b) AECOM Canada Ltd. (AECOM), **BE AUTHORIZED** to carry out the resident inspection and contract administration for the said project in accordance with the estimate, on file, at an upset amount of \$420,970.00, excluding HST, in accordance with Section 15.2 (g) of the City of London's Procurement of Goods and Services Policy;
- (c) the financing for this project **BE APPROVED** as set out in the Sources of Financing Report attached, hereto, as Appendix A;
- (d) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project;
- (e) 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 18-04); and
- (g) 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
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- Civic Works Committee - November 29, 2016 - Agenda Item # 16 - RFP 16-44 Irregular Bid, Engineering Services for the Detailed Design of the First Phase of York Street Sewer Separation
- Civic Works Committee - November 29, 2016 - Agenda Item #17 - RFP 16-49 Irregular Bid, Engineering Services for the City Centre Servicing Strategy
- Civic Works Committee – September 26, 2017 – Agenda Item #14 – Domestic Action Plan (DAP): London – Proposal Update

- Civic Works Committee - November 21, 2017 - Agenda Item # 4 - Downtown Infrastructure Construction Project Coordination
- Civic Works Committee - November 21, 2017 - Agenda Item # 7 - Pollution Prevention and Control Plan Update

2015-2019 STRATEGIC PLAN

The 2015 – 2019 Strategic Plan identifies several initiatives that affect the downtown. Projects, such as downtown sewer separation, contribute to the Strategic Plan in the Growing Our Economy and Building a Sustainable City. These projects support the plan by facilitating urban regeneration through investment in London’s downtown as the heart of our City, through improvements to our water, wastewater and stormwater infrastructure and services.

BACKGROUND

Purpose

This report recommends award of a tender to a contractor and continuation of consulting services for the sewer separation and reconstruction of:

- York Street from Thames River to Talbot Street; and
- Talbot Street South from York Street to the CN Railway tracks.

A project location map is included for reference in Appendix ‘B’.

Context

York Street (Thames River to Colborne Street), King Street (Richmond Street to Colborne Street), Talbot Street (King Street to CN Railway tracks), Richmond Street (Dundas Street to York Street), Clarence Street (Dundas Street to York Street), and Wellington Street (Dundas Street to York Street) are served by combined sewers that are some of the first sewers built in the city, with construction dates going back as far as 1853. Combined sewers were designed to collect all flows, including sanitary sewage and storm runoff, in the same pipe and convey it to a treatment plant. They are remnants of early sewer infrastructure and were typically designed to overflow to nearby watercourses during high flows. Combined sewers are no longer permitted to be constructed in Ontario. All new sewers must be separate sanitary sewer and storm sewers. Construction of separate storm and sanitary sewers effectively reduces the volume of storm drainage diverted to the sanitary sewer system and reduces/prevents sewer system overflows to the Thames River. Separated systems also reduce the cost of treating flows since stormwater is not directed to treatment plants.

This project is the first phase to allow for the separation of some 20 blocks of combined sewers in the downtown core. With the many changes occurring downtown, including intensified growth, it is time to replace these combined sewers with a new separated system that will have the capacity to not only service existing and new growth, but also significantly reduce overflows to the Thames River.

DISCUSSION

Project Description

This Infrastructure Renewal project includes the first of nine phases of sewer separation in the downtown core, as highlighted in the City Centre Servicing Strategy. This project includes York Street from the Thames River to Talbot Street, as well as Talbot Street south from York Street to the CN Railway tracks, and will generally involve:

- Replacement of existing combined sewers with new sanitary and storm sewer, including private drain connections;
- New watermain and individual water services; and,
- Full road reconstruction back to its current configuration, including new asphalt, curb and gutter and sidewalks.

Infrastructure replacement needs have been coordinated within Environmental and Engineering Services for efficient use of funds during construction. The project budget has been included in the approved 2018 Wastewater and Treatment, Water and Transportation Capital Works Budgets.

This project was identified as a key short-term priority to mitigate the impacts of existing sewer system overflows project in the City's Pollution Prevention and Control Plan. This project will include the removal of an existing sewer system overflow located at the intersection of York Street and Ridout Street that currently discharges untreated combined sewage directly to the Thames River during wet weather events.

The City Centre Servicing Strategy has identified a total of nine phases of downtown sewer separation, as shown in the figure provided in Appendix 'C'. This project is the first phase of downtown sewer separation and will provide the storm sewer outlet for the subsequent phases.

Construction of the York Street Sewer Separation Phase 1 would be completed in late 2018. The JUNO Awards are scheduled to be held in London in March of 2019. Phase 2 of sewer separation, identified in the City Centre Servicing Strategy, would not commence until following the JUNO Awards in April of 2019.

A full road closure is planned for the first phase of the York Street sewer separation, and it is very likely that this pattern will hold for the other future downtown sewer separation phases, for the following points:

- In order to avoid unforeseen circumstances (poor soils, unforeseen underground infrastructure issues, Ministry of Labour orders, etc.) that might result in an unscheduled road closure thus causing confusion and driver frustration.
- To allow the contractor to work in a more efficient and unrestricted manner thus allowing the work to be undertaken in a more expeditious manner.
- To allow the contractor to work in a safer environment with less safety related distractions.
- To avoid the time and cost of building and removing temporary road surfaces.
- To avoid the need and cost of providing temporary traffic signals.

In order to minimize the impact on the general public, local businesses and residents it is generally proposed to undertake the York Street Sewer Separation Phase 1 project in stages as follows:

- Stage 1 – Thames River to just west of Ridout Street
- Stage 2 – Ridout Street intersection
- Stage 3 – Just east of Ridout Street to just west of Talbot Street
- Stage 4 – Talbot Street intersection and Talbot Street south of York Street

It should be noted that the breaking down of the construction into stages has the advantage of minimizing the inconvenience to the general public, local businesses and residents. Staging was coordinated with Dundas Place.

Public Consultation

A project update meeting was held on November 29, 2017, for all owners and residents within and immediately bordering the project area to address questions and concerns. Regular project consultation has also occurred with the local property owners and businesses, including Greyhound Canada. The proposed staging of construction was communicated to property owners and businesses to identify alternate business vehicle access and traffic impacts. Regular project consultation has also occurred with Downtown London.

The City is committed to providing access for all business and residents during construction. This includes access to Greyhound Canada bus terminal during Phase 1, as well as access to VIA Rail train station during Phase 2 in 2019.

Domestic Action Plan

One of the municipal actions identified in the City of London’s Domestic Action Plan (DAP) for Phosphorus Reduction is combined sewer replacement. The DAP states,

“The City of London will accelerate plans to separate combined sewers, including the design and construction of necessary stormwater outlets, with the target of separating 80 per cent (17 kilometres) of its combined sewer system by 2025.”

This target for combined sewer replacement is contingent on federal and provincial funding. The following table provides the length of combined sewer replacement achieved for this project in relation to the DAP targets.

2016 – 2025 Combined Sewer DAP Target (km)	Prior DAP Combined Sewer Removed/Separated (km)	This Project – Combined Sewer Removed/Separated (km)	Remaining Combined Sewer (km) to achieve target
17 km	4.4 km	0.3 km	12.3 km

The City has currently achieved approximately 20% removal of combined sewers. This project achieves the removal of approximately 300 m of combined sewer, as the City continues to work towards achieving its DAP targets.

Service Replacement

Sanitary, storm and water services will be replaced up to the property line as part of this project, at no cost to the property owner.

The City will replace the sanitary private drain connection (PDC) up to the property line as part of this project. A storm PDC will also be provided for selected properties up to the property line as part of this project. The property owners may elect to replace their private side sanitary or storm connection at their own cost. As part of this project, property owners are being advised to separate their roof and yard drainage from their sanitary plumbing, if they have not already done so, to comply with the City of London’s Drainage By-Law (WM-4), Part 4 Discharges into Public Sewage Works, section 4.1 Prohibited discharges – sanitary sewers states,

“No person shall permit storm water sewage from their property to be discharged into a sanitary sewer”.

The City would see great benefit from achieving a complete separation of flows from both the public and private sides. These benefits include a reduced amount of surface water sent to the wastewater treatment plant during low flow events, which ultimately reduces treatment costs. Dundas Street property owners were required to demonstrate that their building roof and property yard drainage were separated from their sanitary plumbing in advance of Dundas Place construction this year. York Street Phase 1 property owners have been informed of the need to separate their internal plumbing and will be given a timeframe of three years to comply with the City’s Drainage By-Law, following the completion of this project.

The water service connection will also be replaced to the property line and selected properties will have their metal water service replaced up to the water meter as part of this project.

Tender Summary

Tenders for the 2018 Infrastructure Renewal Program Contract 12, York Street Sewer Separation Project were opened on January 19, 2018. Six contractors submitted tender prices as listed below, excluding HST.

CONTRACTOR		TENDER PRICE SUBMITTED
1.	Bre-Ex Construction Incorporated	\$6,960,461.44
2.	Omega Contractors Incorporated	\$7,635,917.97
3.	CH Excavating (2013)	\$7,685,307.35
4.	L-82 Construction Limited	\$7,977,227.33
5.	Blue-Con Construction	\$8,069,069.69
6.	Amico Infrastructures (Oxford) Incorporated	\$8,636,675.05

All tenders have been checked by the Environmental and Engineering Services Department and AECOM. No mathematical errors were found. The results of the tendering process indicate a competitive process. The tender estimate just prior to tender opening was \$7,542,510.00, excluding HST. All tenders include a contingency allowance of \$650,000.00.

Consulting Services

AECOM was awarded the detailed design of the York Street Sewer Separation Phase 1 project by Council on December 6, 2016. Due to the consultant’s knowledge and positive performance on the detailed design, the consultant was invited to submit a proposal to carry out the contract administration and resident supervision for this project. Staff have reviewed the fee submission, including the time allocated to each project task, along with hourly rates provided by each of the consultant’s staff members. That review of assigned personnel, time per project task, and hourly rates was consistent with other Infrastructure Renewal Program assignments of similar scope.

The continued use of AECOM on this project for construction administration is of financial advantage to the City because 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 City’s construction administration requirement for the creation of record drawings following construction requires the reviewing professional engineer to seal the drawings based on field verification and ongoing involvement. This requirement promotes consultant accountability for the design. Consequently, the continued use of the consultant who created and sealed the design drawings is required in order maintain this accountability process and to manage risk.

In accordance with Section 15.2 (g) of the City of London’s Procurement of Goods and Services Policy, civic administration is recommending that AECOM be authorized to carry out the remainder of engineering services, as construction administrators, and complete this project for a fee estimate of \$420,970.00, excluding HST. These fees are associated with the construction contract administration and resident supervision services to ensure that the City receives the product specified and associated value. The approval of this work will bring the total engineering services for this project to \$716,259.50, excluding HST, between 2017 and 2018.

Operating Budget Impacts

Additional annual sewer, water and transportation operating costs attributed to new infrastructure installation are summarized in the following table.

DIVISION	RATIONALE	ANNUAL OPERATIONAL COST INCREASE
Sewer Operations	Additional 200 m of storm sewer and an oil/grit separator	\$1,750
Water Operations	Additional three fire hydrants, and four new valves	\$525
Transportation Operations	No change from existing road surface and lane configuration	\$0
Total		\$2,275

CONCLUSIONS

Civic Administration has reviewed the tender bids and recommends Bre-Ex Construction Incorporated be awarded the construction contact for York Street Sewer Separation Phase 1.

AECOM has demonstrated an understanding of the City’s requirements for this project, and it is recommended that this firm continue as the consulting engineer for the purpose of contract administration and resident supervision services, as it is in the best financial and technical interests of the City.

Acknowledgements

This report was prepared with assistance from Yan Clavet, C.E.T., Technologist II and Marcy McKillop, P. Eng., Environmental Services Engineer, in the Wastewater and Drainage Engineering Division.

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

March 12, 2018

MM/yc

Attach: Appendix 'A' – Sources of Financing
Appendix 'B' – Location Map
Appendix 'C' – Phases of Downtown Sewer Separation

c.c.	Scott Mathers	John Freeman	Gary McDonald
	Edward Soldo	Ugo DeCandido	Alan Dunbar
	Jason Davies	Bre-Ex Construction Inc.	AECOM
	Bell Canada	Rogers Communications	London Hydro
	Start Communications		

APPENDIX 'A'

#18043

Chair and Members
Civic Works Committee

March 19, 2018
(Award Contract)

RE: 2018 Infrastructure Renewal Program - York Street Sewer Separation Phase 1 Project
(Subledger WW160015)
Capital Project ES241418 - Sewer Infrastructure Lifecycle Renewal
Capital Project ES246418 - Combined Sewer Separation
Capital Project EW3710 - Downtown Watermain Replacement
Capital Project TS144618 - Road Networks Improvements
Capital Project TS512317 - Street Light Maintenance
Bre-Ex Construction Inc. - \$6,960,461.44 (excluding H.S.T.)
AECOM Canada Ltd. - \$420,970.00 (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
ES241418-Sewer Infrastructure Lifecycle Renewal					
Engineering	\$1,728,809	\$1,728,809	\$161,517		\$1,567,292
Engineering (Utilities) 2)		8,420		8,420	0
Construction	10,297,079	10,297,079	1,771,648	2,022,825	6,502,606
Construction (PDC Portion)	10,000	10,000	10,000		0
Construction (Utilities) 2)	651,031	1,023,538	651,031	372,507	0
City Related Expenses	15,000	15,000			15,000
	<u>12,701,919</u>	<u>13,082,846</u>	<u>2,594,196</u>	<u>2,403,752</u>	<u>8,084,898</u>
ES246418-Combined Sewer Separation					
Engineering	600,000	271,942	48,912	185,845	37,185
Construction	2,800,000	3,128,058	769,903	2,358,155	0
Construction (PDC Portion)	18,800	18,800	18,800		0
	<u>3,418,800</u>	<u>3,418,800</u>	<u>837,615</u>	<u>2,544,000</u>	<u>37,185</u>
EW3710-Downtown Watermain Replacement					
Engineering	567,876	506,947	335,065	165,453	6,429
Construction	4,286,954	4,347,883	2,741,954	1,605,929	0
City Related Expenses	8,170	8,170	8,170		0
	<u>4,863,000</u>	<u>4,863,000</u>	<u>3,085,189</u>	<u>1,771,382</u>	<u>6,429</u>
TS144618-Road Networks Improvements					
Engineering	1,000,000	1,000,000	39,129	68,513	892,358
Construction	11,661,996	11,661,996	563,499	667,363	10,431,134
	<u>12,661,996</u>	<u>12,661,996</u>	<u>602,628</u>	<u>735,876</u>	<u>11,323,492</u>
TS512317-Street Light Maintenance					
Engineering	300,000	300,000	244,680		55,320
Construction	1,000,000	1,000,000	507,680	49,630	442,690
Traffic Lights	796,750	796,750	553,036		243,714
	<u>2,096,750</u>	<u>2,096,750</u>	<u>1,305,396</u>	<u>49,630</u>	<u>741,724</u>
NET ESTIMATED EXPENDITURES	<u>\$35,742,465</u>	<u>\$36,123,392</u>	<u>\$8,425,024</u>	<u>\$7,504,640</u> 1)	<u>\$20,193,728</u>
SUMMARY OF FINANCING:					
ES241418-Sewer Infrastructure Lifecycle Renewal					
Capital Sewer Rates	\$7,093,000	\$7,093,000			\$7,093,000
Drawdown from Sewage Works Reserve Fund	447,888	447,888			447,888
Federal Gas Tax	4,500,000	4,500,000	1,933,165	2,022,825	544,010
Cash Recovery from Property Owners (PDC Portion)	10,000	10,000	10,000		0
Other Contributions (Utilities) 2)	651,031	1,031,958	651,031	380,927	0
	<u>12,701,919</u>	<u>13,082,846</u>	<u>2,594,196</u>	<u>2,403,752</u>	<u>8,084,898</u>
ES246418-Combined Sewer Separation					
Capital Sewer Rates	1,168,000	1,168,000	818,815	349,185	0
Drawdown from Sewage Works Reserve Fund	2,232,000	2,232,000		2,194,815	37,185
Cash Recovery from Property Owners (PDC Portion)	18,800	18,800	18,800		0
	<u>3,418,800</u>	<u>3,418,800</u>	<u>837,615</u>	<u>2,544,000</u>	<u>37,185</u>
EW3710-Downtown Watermain Replacement					
Drawdown from Capital Water Reserve Fund	3,210,000	3,210,000	1,432,189	1,771,382	6,429
Federal Gas Tax	1,653,000	1,653,000	1,653,000		0
	<u>4,863,000</u>	<u>4,863,000</u>	<u>3,085,189</u>	<u>1,771,382</u>	<u>6,429</u>
TS144618-Road Networks Improvements					
Capital Levy	3,308,422	3,308,422	602,628	735,876	1,969,918
Debenture Quota	847,844	847,844			847,844
Drawdown from Capital Infrastructure Gap R.F.	535,720	535,720			535,720
Federal Gas Tax	7,970,010	7,970,010			7,970,010
	<u>12,661,996</u>	<u>12,661,996</u>	<u>602,628</u>	<u>735,876</u>	<u>11,323,492</u>
TS512317-Street Light Maintenance					
Capital Levy	2,036,500	2,036,500	1,305,396	49,630	681,474
Drawdown from Capital Infrastructure Gap R.F.	60,250	60,250			60,250
	<u>2,096,750</u>	<u>2,096,750</u>	<u>1,305,396</u>	<u>49,630</u>	<u>741,724</u>
TOTAL FINANCING	<u>\$35,742,465</u>	<u>\$36,123,392</u>	<u>\$8,425,024</u>	<u>\$7,504,640</u>	<u>\$20,193,728</u>

APPENDIX 'A'

#18043

Chair and Members
Civic Works Committee

March 19, 2018
(Award Contract)

RE: 2018 Infrastructure Renewal Program - York Street Sewer Separation Phase 1 Project
(Subledger WW160015)
Capital Project ES241418 - Sewer Infrastructure Lifecycle Renewal
Capital Project ES246418 - Combined Sewer Separation
Capital Project EW3710 - Downtown Watermain Replacement
Capital Project TS144618 - Road Networks Improvements
Capital Project TS512317 - Street Light Maintenance
Bre-Ex Construction Inc. - \$6,960,461.44 (excluding H.S.T.)
AECOM Canada Ltd. - \$420,970.00 (excluding H.S.T.)

1) Financial Note: (CONSTRUCTION)	Utilities				
	ES241418	ES241418	ES246418	EW3710	TS144618
Contract Price	\$1,987,839	\$372,507	\$2,317,369	\$1,578,154	\$655,820
Add: HST @13%	258,419	48,426	301,258	205,160	85,257
Total Contract Price Including Taxes	2,246,258	420,933	2,618,627	1,783,314	741,077
Less: HST Rebate	223,433	48,426	260,472	177,385	73,714
Net Contract Price	<u>\$2,022,825</u>	<u>\$372,507</u>	<u>\$2,358,155</u>	<u>\$1,605,929</u>	<u>\$667,363</u>
Financial Note (CONSTRUCTION continued)					CONSTRUCTION
					TS512317
Contract Price					\$48,772
Add: HST @13%					6,340
Total Contract Price Including Taxes					55,112
Less: HST Rebate					5,482
Net Contract Price					<u>\$49,630</u>
					TOTAL
					\$6,960,461
					904,860
					7,865,321
					788,912
					<u>\$7,076,409</u>
Financial Note: (ENGINEERING)					ENGINEERING
					TOTAL
Contract Price	\$8,420	\$182,631	\$162,591	\$67,328	\$420,970
Add: HST @13%	1,095	23,742	21,137	8,753	54,727
Total Contract Price Including Taxes	9,515	206,373	183,728	76,081	475,697
Less: HST Rebate	1,095	20,528	18,275	7,568	47,466
Net Contract Price	<u>\$8,420</u>	<u>\$185,845</u>	<u>\$165,453</u>	<u>\$68,513</u>	<u>\$428,231</u>
TOTAL CONSTRUCTION & ENGINEERING					\$7,504,640

- 2) London Hydro, Start Communications , Bell Canada and Rogers Communications have confirmed the approval of their contribution towards this project. The expenditures have increased to accommodate their contributions.
- 3) Additional annual operating costs of \$1,750 for Sewer Operations and \$525 for Water Operations attributed to new infrastructure installation.

JG

Jason Davies
Manager of Financial Planning & Policy

Appendix 'B'

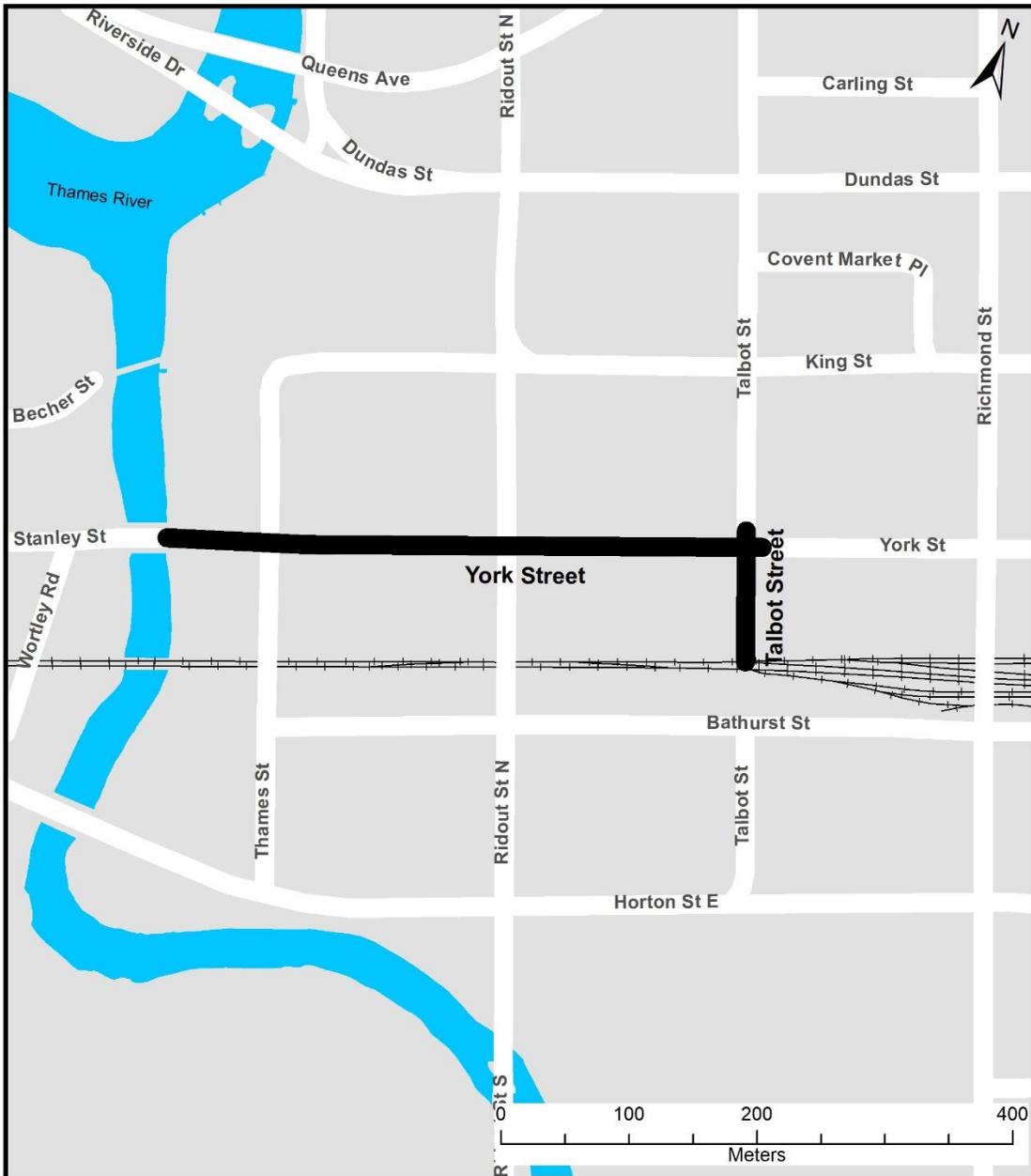


London
CANADA

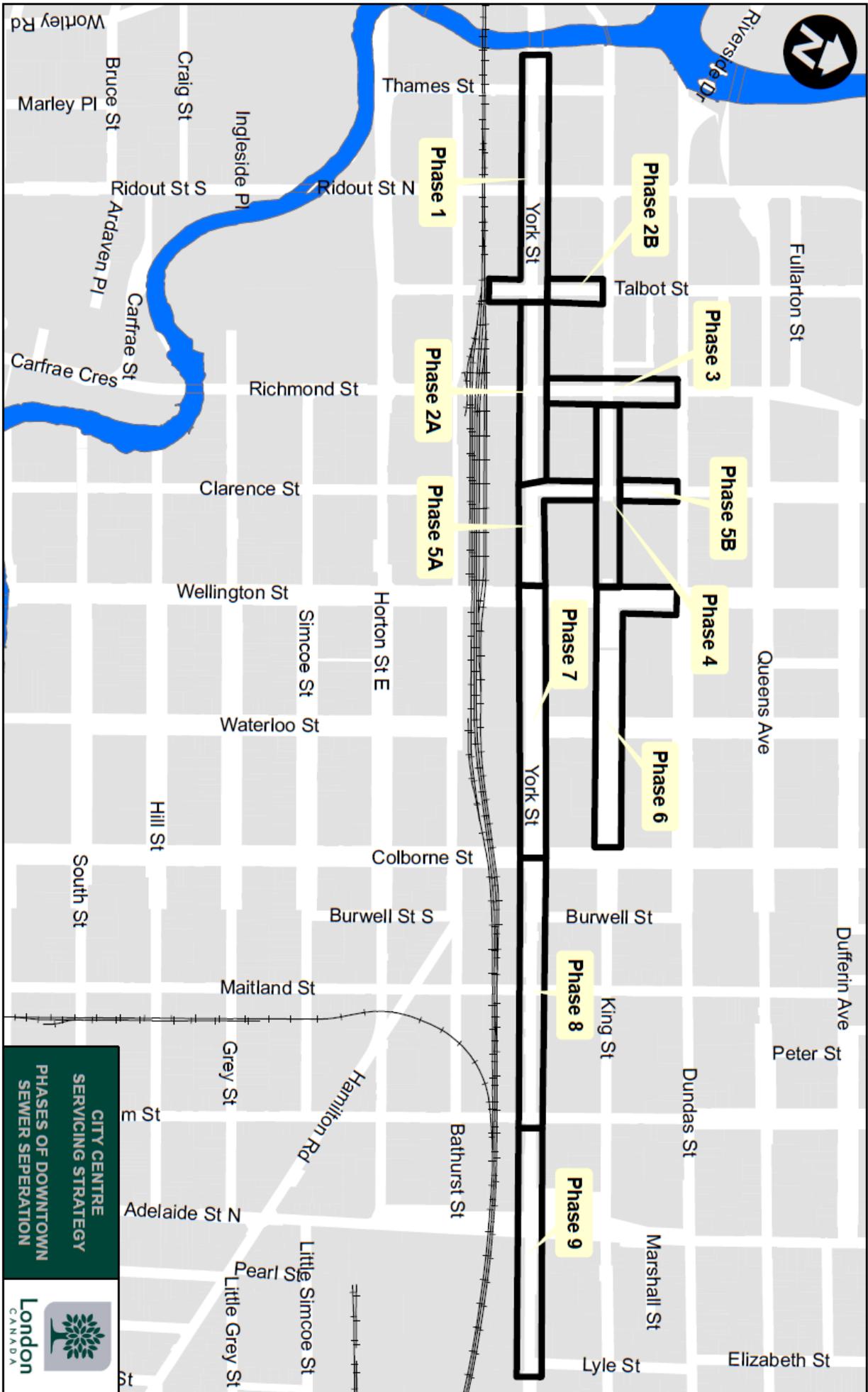
2018 Infrastructure Renewal Program

York Street Sewer Separation Phase 1

York Street from Thames River to Talbot Street
Talbot Street from York Street to CN Rail



Appendix 'C'



TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON MARCH 19, 2018
FROM:	KELLY SCHERR, P. Eng., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES & CITY ENGINEER
SUBJECT:	GREENWAY ODOUR CONTROL AND HVAC EQUIPMENT INSTALLATION IRREGULAR BID RESULT ES5019

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental and Engineering Services & City Engineer, this following actions **BE TAKEN** with respect to the Greenway Wastewater Treatment Plant (WWTP) Grit Building Odour Control Upgrades:

- (a) The bid submitted by J.M.R. Electrical Ltd. in the amount of \$491,100.00 (excluding HST) **BE APPROVED** in accordance with Section 19.4 (c) of the City of London’s 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; and
- (d) 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

CWC report of 2017-06-07, item 10, Clean Water and Wastewater Fund, Single Source Purchase of Odour Control, Air Handling and Heat Recovery Units for Wastewater Facilities

CWC report of 2016-10-04, item 8, Infrastructure Canada Phase 1-Project Requests- Clean Water and Wastewater Fund

2015-2019 STRATEGIC PLAN

This project supports the Wastewater Business Plan and the Strategic Plan with respect to building a sustainable city and robust infrastructure through investments in odour control technology.

BACKGROUND

Purpose

The purpose of this report is to recommend the award of an installation contract for pre-purchased odour control and air handling equipment at the Greenway plant to J.M.R. Electrical Ltd. This equipment will replace existing odour control equipment in the grit building.

Context

Grit is removed early in a wastewater treatment plant to help prevent costly wear on downstream equipment. The removed material is stored in an open bin within the building before disposal. Air handling units and odour control scrubbers ensure any odours associated with the grit removal process are contained and treated.

DISCUSSION

Odour control scrubber systems typically include both an air handling unit to supply fresh air to and remove odours from a building space and odour control unit to treat the exhausted air. The existing odour control system for the Greenway grit building is 14 years old and uses bleach to treat the odours. Bleach has proven to be very hard on the scrubbers at all City wastewater treatment plants and is being phased out in favour of ozone systems. Ozone systems are safer and have lower operation and maintenance costs. The new air handling unit also incorporates heat recovery providing energy (heat) savings of approximately 30%.

In the summer of 2017 the City awarded a pre-purchase contract for the integrated odour control system to Applied Energy Systems. This contract award is for the installation of the equipment which will be delivered in late March 2018.

Procurement Process

This project was previously tendered and closed on December 13, 2017 with J.M.R. Electrical Ltd. submitting the only bid. The J.M.R. Electrical Ltd. bid was not opened and the project was retendered with a January 18, 2018 closing date in hopes of receiving more bids. Again, J.M.R. Electrical Ltd. was the only bid received and after consultation with the Manager of Purchasing and Supply, their bid was opened.

The bid of \$491,100.00 (excluding HST) submitted was over the pre-tender estimate of \$441,733.50 (excluding HST). The additional costs may be related to the restricted area available for the installation of the equipment and the increased complexity. The general consensus among contractors doing similar work at other City facilities is there is an abundance of this type of work at this time thus retendering the work again will not ensure the submission of additional bids and increases the risk of damage to the equipment while it is stored onsite. There are sufficient funds in the Capital Budget for this work.

CONCLUSIONS

Civic Administration have reviewed the tender bid and recommends that J.M.R. Electrical Ltd. be awarded the contract, it being noted that only one bid was received and it is being reported as an irregular result in accordance with Section 19.4 (c) of the Procurement of Goods and Services Policy. Construction is tentatively scheduled to commence April 2018 with a target completion date of July 2018.

Acknowledgements

This report was prepared by Mark Elliott, C.E.T. of Wastewater Treatment Operations.

PREPARED BY:	REVIEWED & CONCURRED BY:
GEORDIE GAULD DIVISION MANAGER WASTEWATER & TREATMENT OPERATIONS	SCOTT MATHERS, MPA, P.ENG. DIRECTOR, WATER AND WASTEWATER
RECOMMENDED BY:	
KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER	

Attach: Appendix 'A' – Sources of Financing

Cc: John Freeman – City of London

Alan Dunbar – City of London

- Jason Davies – City of London
- Gary McDonald – City of London
- J.M.R. Electrical Ltd.

APPENDIX 'A'

#18042

Chair and Members
Civic Works Committee

March 19, 2018
(Award Contract)

**RE: Greenway Odour Control and HVAC Equipment Installation Irregular Bid Result
(Subledger FS17GW07)
Capital Project ES5019 - Treatment Plants Odour Control Upgrades
J.M.R. Electrical Ltd. - \$491,100.00 (excluding H.S.T.)**

FINANCE & CORPORATE SERVICES REPORT ON THE SOURCE 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 and City Engineer, the detailed source of financing for this project is:

<u>ESTIMATED EXPENDITURES</u>	<u>Approved Budget</u>	<u>Committed To Date</u>	<u>This Submission</u>	<u>Balance for Future Work</u>
Engineering	\$220,000	129,232		90,768
Construction	1,290,000	762,488	499,743	27,769
City Related Expenses	2,000			2,000
Replace Vehicle & Equipment	2,050,000	2,012,387		37,613
NET ESTIMATED EXPENDITURES	<u>\$3,562,000</u>	<u>\$2,904,107</u>	<u>\$499,743</u> 1)	<u>\$158,150</u>
<u>SOURCE OF FINANCING:</u>				
Drawdown from Sewage Works Reserve Fund	\$890,500	726,027	124,936	39,537
Clean Water and Wastewater Fund	2,671,500	2,178,080	374,807	118,613
TOTAL FINANCING	<u>\$3,562,000</u>	<u>\$2,904,107</u>	<u>\$499,743</u>	<u>\$158,150</u>

1) **Financial Note:**

Contract Price	\$491,100
Add: HST @13%	63,843
Total Contract Price Including Taxes	<u>554,943</u>
Less: HST Rebate	55,200
Net Contract Price	<u>\$499,743</u>

JG

Jason Davies
Manager of Financial Planning & Policy



Lake Huron

Primary Water Supply System

FAX

To: CAO/Clerk's Office
From: Regional Water Supply
Phone: (519) 930.3505
Fax: (519) 474.0451
Date: February 21, 2018

Page 1 of 11

Re: 2017 Annual Report

Please find the attached 2017 Annual Report for the Lake Huron Primary Water Supply System (LHPWSS). As required under Section 11 of O.Reg. 170/03, the LHPWSS is obligated to provide a copy of this report to all systems that are connected to and receive drinking water from this system.

This report has also been posted on the Regional Water Supply website at <https://huroneinwater.ca/> for public viewing. Copies will be made available upon request at the Regional Water Supply Office in London.

If you have any questions please feel free to contact our office.

Erin McLeod
Quality Assurance & Compliance Manager
Lake Huron Primary Water Supply System

City Clerk
 Subject: 2017 Annual Report
 No. 0513
 FEB 21 2018
 Ref. LE
 CC
 2018-EOB

This message is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, or the employee or agent responsible for delivering the message to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone and return the original to us by postal service at the address noted below. Thank you.



Ontario Drinking-Water Systems Regulation O. Reg. 170/03

Drinking-Water System Number:	210000791
Drinking-Water System Name:	Lake Huron Primary Water Supply System
Drinking-Water System Owner:	Lake Huron Primary Water Supply System Joint Board of Management
Drinking-Water System Operating Authority:	Ontario Clean Water Agency (OCWA)
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2017 through December 31, 2017

<p><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></p> <p>Does your Drinking-Water System serve more than 10,000 people? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Lake Huron and Elgin Area Water Supply Systems c/o Regional Water Supply Division 235 North Centre Road, Suite 200 London, ON N5X 4E7 https://huronelginwater.ca/</p> <p>Lake Huron Water Treatment Plant 71155 Bluewater Hwy. Grand Bend, ON</p> </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served: <input type="text" value="N/A"/></p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>Number of Interested Authorities you report to: <input type="text" value="N/A"/></p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes <input type="checkbox"/> No <input type="checkbox"/></p>
--	---



Ontario Drinking-Water Systems Regulation O. Reg. 170/03

List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:

Systems that receive their drinking water from the LHPWSS:

Drinking Water System Name	Drinking Water System Number
City of London	260004917
Municipality of Bluewater	260006542
Municipality of Lambton Shores (East Lambton Shores Water Distribution System)	260006568
Township of Lucan-Biddulph	260003071
Municipality of Middlesex Centre (Middlesex Centre Distribution System)	260004202
Municipality of North Middlesex	260006529
Municipality of Strathroy-Caradoc (Strathroy- Caradoc Distribution System)	260080106
Municipality of South Huron (South Huron Water Distribution System)	220001520

Systems that may receive their drinking water from the LHPWSS:

Drinking Water System Name	Drinking Water System Number
Municipality of Lambton Shores (West Lambton Shores Distribution System) *Normally supplied by the Lambton Area Water Supply System (LAWSS) but a connection to the LHPWSS exists	260006581

Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water?

Yes No

Indicate how you notified system users that your annual report is available, and is free of charge.

- Public access/notice via the web
 Public access/notice via Government Office
 Public access/notice via a newspaper
 Public access/notice via Public Request
 Public access/notice via a Public Library
 Public access/notice via other method News Release



Ontario Drinking-Water Systems Regulation O. Reg. 170/03

Describe your Drinking-Water System

The Lake Huron Water Treatment Plant (WTP) employs pre-chlorination, screening, powder activated carbon addition (seasonally on an as-required basis), coagulation, flocculation, sedimentation, dual-media filtration, post-chlorination, and pH adjustment using sodium hydroxide to treat raw water obtained from Lake Huron. The WTP intake crib and raw water intake pipe have an estimated gross capacity of 454.6 Megalitres/day (MLD). The WTP rated capacity is 340.0 MLD.

A Residuals Management Facility (RMF) providing equalization, clarification, sludge thickening and dechlorination is also housed in the main complex where thickened sludge is dewatered by centrifuges and sludge cake is sent to the landfill for final disposal. Clarified and dechlorinated liquid streams are sent back to Lake Huron through the plant drain via the Diversion Chamber.

The distribution system is comprised of the McGillivray Booster Pumping Station and Reservoir, the Exeter-Hensall Booster Pumping Station and Reservoir, the Arva Terminal Reservoir, the Komoka-Mt. Brydges Booster Pumping Station (PS#4) and the associated interconnecting transmission water mains, which includes the primary, Strathroy, Exeter-Hensall, and Komoka-Mt. Brydges transmission water mains.

The drinking water system is monitored at various locations throughout the system via a Supervisory Control and Data Acquisition (SCADA) system.

List all water treatment chemicals used over this reporting period

Filter Aid Polymer (on an as-required basis)
 Aluminum Sulphate
 Powder Activated Carbon
 Chlorine Gas
 Sodium Hydroxide
 Sodium Hypochlorite (Exeter Hensall Pumping Station)
 Dewatering Polymer (Residuals Management Facility)
 Sodium Bisulphite (Residuals Management Facility)

Were any significant expenses incurred to?

- Install required equipment
 Repair required equipment
 Replace required equipment

Please provide a brief description and a breakdown of monetary expenses incurred

Capital Projects:

- Electrical upgrade and primary transformers replacement
- Residuals Management Facility (RMF) HVAC upgrade
- Instrumentation replacements
- Travelling screen #2 replacement
- Low lift motors #3 and #4 replacement
- Installed chlorine tonner automatic actuators
- Filters #1 and #4 rebuilds



Ontario Drinking-Water Systems Regulation O. Reg. 170/03

- Distribution flow meter replacements
- Powder activated carbon (PAC) dust collector replacement
- SCADA hardware and software upgrade
- Concrete crack injection
- Drain piping replacement
- Distressed Pipe #32-48 replacement and Acoustic Fiber Optic (AFO) monitoring cable retrieval

Maintenance Projects:

- Low lift grit pump drain manifold and valves replacement
- Installed RMF sludge pump traps
- Gore Road pressure reducing valve (PRV) rebuild
- Reservoir hatch replacements (McGillivray and Arva Reservoir)
- Security camera replacement
- Replaced air relief valves at various chambers
- Air valve chamber restoration
- Installed new motors on powder activated carbon (PAC) pumps #1 and #3
- Replaced raw water sample pump
- Installed actuator on south centrifuge auger
- Installed new inlet pressure readouts at Monitoring Station #1 – Strathroy-Caradoc
- Backwash pump #1 rebuild
- Replaced chlorine injector quills at Exeter Hensall Pumping Station
- High pressure caustic soda pump rebuild and motor replacement
- PAC pump variable frequency drive (VFD) replacement
- Service water pump #2 rebuild
- Rebuilding of RMF sludge transfer pumps
- Modifications to generators to meet Technical Standards and Safety Authority (TSSA) requirements

Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
NA	NA	NA	NA	NA	NA



Ontario Drinking-Water Systems Regulation O. Reg. 170/03

Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period.

	Number of Samples	Range of E.Coli Results (CFU/100mL) (min #)-(max #)	Range of Total Coliform Results (CFU/100mL) (min #)-(max #)	Range of HPC Results (CFU/1mL) (min #)-(max #)
Raw Water	101	(0)-(<100)	(0)-(40,000)	(<10)-(>2,000)
Treated Water (WTP)	250	(0)-(0)	(0)-(0)	(<10)-(730)
Distribution (McGillivray PS)	52	(0)-(0)	(0)-(0)	(<10)-(20)
Distribution (North Exeter)	52	(0)-(0)	(0)-(0)	(<10)-(20)
Distribution (South Exeter)	52	(0)-(0)	(0)-(0)	(<10)-(10)
Distribution (Exeter-Hensall Reservoir)	52	(0)-(0)	(0)-(0)	(<10)-(110)
Distribution (Komoka-Mt. Brydges PS)	52	(0)-(0)	(0)-(0)	(<10)-(240)

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.

Parameter	Number of Grab Samples	Range of Results (min #)-(max #)
Treated Water Free Chlorine (mg/L)	Continuous Monitoring	(0.57) – (1.79)
	2116	(0.86) - (1.63)
Treated Water Turbidity (NTU)	Continuous Monitoring	(0.019) – (2.00)
	2117	(0.018) - (0.099)
Filter #1 - Filtered Water Turbidity (NTU)	Continuous Monitoring	(0.007) - (0.306)
Filter #2 - Filtered Water Turbidity (NTU)	Continuous Monitoring	(0.015) - (0.393)
Filter #3 - Filtered Water Turbidity (NTU)	Continuous Monitoring	(0.021) - (0.249)
Filter #4 - Filtered Water Turbidity (NTU)	Continuous Monitoring	(0.019) - (0.192)
Filter #5 - Filtered Water Turbidity (NTU)	Continuous Monitoring	(0.021) - (0.255)



Ontario Drinking-Water Systems Regulation O. Reg. 170/03

Filter #6 - Filtered Water Turbidity (NTU)	Continuous Monitoring	(0.019) - (0.186)
Filter #7 - Filtered Water Turbidity (NTU)	Continuous Monitoring	(0.021) - (0.437)
Filter #8 - Filtered Water Turbidity (NTU)	Continuous Monitoring	(0.017) - (0.165)
Filter #9 - Filtered Water Turbidity (NTU)	Continuous Monitoring	(0.020) - (0.249)
Filter #10- Filtered Water Turbidity (NTU)	Continuous Monitoring	(0.019) - (0.144)
Filter #11- Filtered Water Turbidity (NTU)	Continuous Monitoring	(0.012) - (0.608)
Filter #12- Filtered Water Turbidity (NTU)	Continuous Monitoring	(0.009) - (0.723)
Combined Filtered Water Turbidity (NTU)	2114	(0.018) - (0.100)

Summary of Inorganic parameters tested during this reporting period

(*All tests were conducted on treated water leaving the WTP unless otherwise noted)

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	January 12, 2017	0.00012	mg/L	NO
Arsenic	January 12, 2017	0.0002	mg/L	NO
Barium	January 12, 2017	0.0148	mg/L	NO
Boron	January 12, 2017	0.013	mg/L	NO
Cadmium	January 12, 2017	0.000005	mg/L	NO
Chromium	January 12, 2017	0.00065	mg/L	NO
Lead (Komoka Mt- Brydges Monitoring Station #2)	January 12, 2017 April 13, 2017 July 17, 2017 October 5, 2017	Not Detected 0.00005 Not Detected 0.00002	mg/L mg/L mg/L mg/L	NO
Mercury	January 12, 2017	Not Detected	mg/L	NO
Selenium	January 12, 2017	0.00011	mg/L	NO


Ontario Drinking-Water Systems Regulation O. Reg. 170/03

Sodium	January 12, 2017	11.4	mg/L	NO
Uranium	January 12, 2017	0.000024	mg/L	NO
Fluoride	NA	Not Tested	mg/L	--
Nitrite	January 12, 2017 April 13, 2017 July 17, 2017 October 5, 2017	Not Detected Not Detected Not Detected Not Detected	mg/L mg/L mg/L mg/L	NO
Nitrate	January 12, 2017 April 13, 2017 July 17, 2017 October 5, 2017	0.290 0.700 0.346 0.281	mg/L mg/L mg/L mg/L	NO

Summary of Organic parameters sampled during this reporting period or the most recent sample results

(*All tests were conducted on treated water leaving the WTP unless otherwise noted)

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	January 12, 2017	Not Detected	mg/L	NO
Atrazine + N-dealkylated metabolites	January 12, 2017	0.00003	mg/L	NO
Azinphos-methyl	January 12, 2017	Not Detected	mg/L	NO
Benzene	January 12, 2017	Not Detected	mg/L	NO
Benzo(a)pyrene	January 12, 2017	Not Detected	mg/L	NO
Bromoxynil	January 12, 2017	Not Detected	mg/L	NO
Carbaryl	January 12, 2017	Not Detected	mg/L	NO
Carbofuran	January 12, 2017	Not Detected	mg/L	NO
Carbon Tetrachloride	January 12, 2017	Not Detected	mg/L	NO
Chlorpyrifos	January 12, 2017	Not Detected	mg/L	NO
Diazinon	January 12, 2017	Not Detected	mg/L	NO
Dicamba	January 12, 2017	Not Detected	mg/L	NO
1,2-Dichlorobenzene	January 12, 2017	Not Detected	mg/L	NO
1,4-Dichlorobenzene	January 12, 2017	Not Detected	mg/L	NO
1,2-Dichloroethane	January 12, 2017	Not Detected	mg/L	NO


Ontario Drinking-Water Systems Regulation O. Reg. 170/03

1,1-Dichloroethylene (vinylidene chloride)	January 12, 2017	Not Detected	mg/L	NO
Dichloromethane	January 12, 2017	Not Detected	mg/L	NO
2,4-Dichlorophenol	January 12, 2017	Not Detected	mg/L	NO
2,4-Dichlorophenoxy acetic acid (2,4-D)	January 12, 2017	Not Detected	mg/L	NO
Diclofop-methyl	January 12, 2017	Not Detected	mg/L	NO
Dimethoate	January 12, 2017	Not Detected	mg/L	NO
Diquat	January 12, 2017	Not Detected	mg/L	NO
Diuron	January 12, 2017	Not Detected	mg/L	NO
Glyphosate	January 12, 2017	Not Detected	mg/L	NO
Haloacetic Acids (HAA's) (Arva Reservoir)	January 12, 2017 April 13, 2017 July 17, 2017 October 5, 2017	Not Detected Not Detected 0.0074 0.0070	mg/L mg/L mg/L mg/L	NO
Haloacetic Acids (HAA's) (Arva Reservoir) Annual Running Average	2017	0.0036	mg/L	NO
Haloacetic Acids (HAA's) (Exeter-Hensall Monitoring Station #3)	January 12, 2017 April 13, 2017 July 17, 2017 October 5, 2017	Not Detected 0.0131 0.0173 0.0237	mg/L mg/L mg/L mg/L	NO
Haloacetic Acids (HAA's) (Exeter-Hensall Monitoring Station #3) Annual Running Average	2017	0.0135	mg/L	NO
Haloacetic Acids (HAA's) (Komoka Mt-Brydges Monitoring Station #2)	January 12, 2017 April 13, 2017 July 17, 2017 October 5, 2017	Not Detected Not Detected 0.0084 0.0158	mg/L mg/L mg/L mg/L	NO


Ontario Drinking-Water Systems Regulation O. Reg. 170/03

Total Trihalomethanes (Exeter-Hensall Monitoring Station #3)	January 12, 2017 April 13, 2017 July 17, 2017 October 5, 2017	0.026 0.024 0.046 0.054	mg/L mg/L mg/L mg/L	NO
Total Trihalomethanes (Exeter-Hensall Monitoring Station #3) Running Annual Average	2017	0.0375	mg/L	NO
Total Trihalomethanes (Komoka Mt-Brydges Monitoring Station #2)	January 12, 2017 April 13, 2017 July 17, 2017 October 5, 2017	0.017 0.017 0.036 0.037	mg/L mg/L mg/L mg/L	NO
Total Trihalomethanes (Komoka Mt-Brydges Monitoring Station #2) Running Annual Average	2017	0.0268	mg/L	NO
Total Trihalomethanes (Strathroy-Caradoc Monitoring Station #2)	January 12, 2017 April 13, 2017 July 17, 2017 October 5, 2017	0.017 0.017 0.033 0.031	mg/L mg/L mg/L mg/L	NO
Total Trihalomethanes (Strathroy-Caradoc Monitoring Station #2) Running Annual Average	2017	0.0245	mg/L	NO
Terbufos	January 12, 2017	Not Detected	mg/L	NO
Tetrachloroethylene	January 12, 2017	Not Detected	mg/L	NO
2,3,4,6- Tetrachlorophenol	January 12, 2017	Not Detected	mg/L	NO
Triallate	January 12, 2017	Not Detected	mg/L	NO
Trichloroethylene	January 12, 2017	Not Detected	mg/L	NO
2,4,6-Trichlorophenol	January 12, 2017	Not Detected	mg/L	NO
Trifluralin	January 12, 2017	Not Detected	mg/L	NO
Vinyl Chloride	January 12, 2017	Not Detected	mg/L	NO

NOTE: During 2017, no Inorganic or Organic parameter(s) exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.


Ontario Drinking-Water Systems Regulation O. Reg. 170/03

Haloacetic Acids (HAA's) (Komoka Mt-Brydges Monitoring Station #2) Annual Running Average	2017	0.0061	mg/L	
Haloacetic Acids (HAA's) (Strathroy-Caradoc Monitoring Station #2)	January 12, 2017 April 13, 2017 July 17, 2017 October 5, 2017	Not Detected Not Detected 0.0089 0.0096	mg/L mg/L mg/L mg/L	NO
Haloacetic Acids (HAA's) (Strathroy-Caradoc Monitoring Station #2) Annual Running Average	2017	0.0046	mg/L	NO
Malathion	January 12, 2017	Not Detected	mg/L	NO
2-Methyl-4-chlorophenoxyacetic acid	January 12, 2017	Not Detected	mg/L	NO
Metolachlor	January 12, 2017	Not Detected	mg/L	NO
Metribuzin	January 12, 2017	Not Detected	mg/L	NO
Monochlorobenzene	January 12, 2017	Not Detected	mg/L	NO
Paraquat	January 12, 2017	Not Detected	mg/L	NO
Pentachlorophenol	January 12, 2017	Not Detected	mg/L	NO
Phorate	January 12, 2017	Not Detected	mg/L	NO
Picloram	January 12, 2017	Not Detected	mg/L	NO
Polychlorinated Biphenyls (PCB)	January 12, 2017	Not Detected	mg/L	NO
Prometryne	January 12, 2017	Not Detected	mg/L	NO
Simazine	January 12, 2017	Not Detected	mg/L	NO
Total Trihalomethanes (Arva Reservoir)	January 12, 2017 April 13, 2017 July 17, 2017 October 5, 2017	0.014 0.016 0.030 0.027	mg/L mg/L mg/L mg/L	NO
Total Trihalomethanes (THMs) (Arva Reservoir) Running Annual Average	2017	0.0218	mg/L	NO



Elgin Area
Primary Water Supply System

FAX

To: CAO/Clerk's Office
From: Regional Water Supply
Phone: (519) 930.3505
Fax: (519) 474.0451
Date: February 21, 2018

Page 1 of 10

Re: 2017 Annual Report

Please find the attached 2017 Annual Report for the Elgin Area Primary Water Supply System (EAPWSS). As required under Section 11 of O.Reg. 170/03, the EAPWSS is obligated to provide a copy of this report to all systems that are connected to and receive drinking water from this system.

This report has also been posted on the Regional Water Supply website at <https://huronelginwater.ca/> for public viewing. Copies will be made available upon request at the Regional Water Supply Office in London.

If you have any questions please feel free to contact our office.

Erin McLeod
Quality Assurance & Compliance Manager
Elgin Area Primary Water Supply System

[Faint handwritten notes and stamps, including "City Clerk" and "Subject 2017 Ann..."]

This message is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, or the employee or agent responsible for delivering the message to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone and return the original to us by postal service at the address noted below. Thank you.



Ontario Drinking-Water Systems Regulation O. Reg. 170/03

Drinking-Water System Number:	210000871
Drinking-Water System Name:	Elgin Area Primary Water Supply System
Drinking-Water System Owner:	Elgin Area Primary Water Supply System Joint Board of Management
Drinking-Water System Operating Authority:	Ontario Clean Water Agency (OCWA)
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2017 through December 31, 2017

Complete if your Category is Large Municipal Residential or Small Municipal Residential

Does your Drinking-Water System serve more than 10,000 people?
 Yes No

Is your annual report available to the public at no charge on a web site on the Internet?
 Yes No

Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.

Lake Huron and Elgin Area Water Supply Systems
 c/o Regional Water Supply Division
 235 North Centre Road, Suite 200
 London, ON N5X 4E7
<https://huronelginwater.ca/>

Elgin Area Water Treatment Plant
 43665 Dexter Line, Union, ON

Complete for all other Categories.

Number of Designated Facilities served:

Did you provide a copy of your annual report to all Designated Facilities you serve?
 Yes No

Number of Interested Authorities you report to:

Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility?
 Yes No



Ontario Drinking-Water Systems Regulation O. Reg. 170/03

List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:

Systems that receive their drinking water directly from the EAPWSS:

Drinking Water System Name	Drinking Water System Number
City of London Distribution System	260004917
St. Thomas Area Secondary Water Supply System	260078897
Aylmer Area Secondary Water Supply System	260004722
Port Burwell Secondary Water Supply System	260004735
Municipality of Central Elgin	260004761
St. Thomas Distribution System	260002187

Systems that receive their drinking water indirectly from the EAPWSS:

Drinking Water System Name	Drinking Water System Number
Aylmer Distribution System	260002136
Malahide Distribution System	260004774
Dutton/Dunwich Distribution System	220002967
Municipality of Bayham	260004748
Southwold Distribution System	210001362
Ontario Police College Distribution System	260002161
St. Thomas Psychiatric Hospital Distribution Supply	260005255

Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water?

Yes No

Indicate how you notified system users that your annual report is available, and is free of charge.

- Public access/notice via the web
- Public access/notice via Government Office
- Public access/notice via a newspaper
- Public access/notice via Public Request
- Public access/notice via a Public Library
- Public access/notice via other method News Release



Ontario Drinking-Water Systems Regulation O. Reg. 170/03

Describe your Drinking-Water System

The Elgin Area Primary Water Supply System employs pre-chlorination, screening, process pH adjustment (utilizing carbon dioxide), powder activated carbon addition (seasonally on an as-required basis), coagulation, flocculation, sedimentation, dual-media filtration, UV disinfection, post-chlorination, final pH adjustment (utilizing sodium hydroxide) and fluoridation to treat raw water obtained from Lake Erie. The WTP has a rated capacity of 91 ML/day (MLD). Water is pumped from the plant through two 750 mm and 900mm diameter water mains to various communities enroute to the Elgin-Middlesex terminal reservoirs located northeast of St. Thomas in the Municipality of Central Elgin. The drinking water system is monitored at various locations throughout the system via a Supervisory Control and Data Acquisition (SCADA) system.

A Residuals Management Facility (RMF) providing equalization, clarification, sludge thickening and dechlorination is also located on the main complex where thickened sludge is dewatered by centrifuges and sludge cake is sent to the landfill for final disposal. Clarified and dechlorinated liquid streams are sent back to Lake Erie through the plant drain.

List all water treatment chemicals used over this reporting period

Carbon Dioxide
 Aluminum Sulphate
 Cationic Polymer
 Powder Activated Carbon
 Chlorine Gas
 Hydrofluosillicic Acid
 Sodium Hydroxide
 Dewatering Polymer (Residuals Management Facility)
 Sodium Bisulphite (Residuals Management Facility)

Were any significant expenses incurred to?

- Install required equipment
 Repair required equipment
 Replace required equipment

Please provide a brief description and a breakdown of monetary expenses incurred:

Capital Projects:

- Instrumentation replacements, turbidity analyzers
- Concrete crack injection
- Drain pipe replacements
- Installation of HVAC duct insulation in filter gallery
- Sluice gate shaft replacements
- Replaced backwash isolation valves
- Replaced discharge valves on low lift pumps #1 and #4
- Interior renovations and LED lighting upgrades
- Flow meter replacements



Ontario Drinking-Water Systems Regulation O. Reg. 170/03

- Replaced 30" butterfly valve and 4" bypass valves at terminal reservoir inlet
- Implementation of online CT Calculator
- Clearwell and reservoir drainage improvements project
- Septic system replacement
- Low Lift 5 kV electrical upgrade project
- Removal of old communication antenna and wiring
- Installed storage and racking for spare pipe segments
- SCADA hardware and software upgrades
- Residuals Management Facility (RMF) scraper system repairs

Maintenance Projects:

- Cell 1 level sensor replacement at terminal reservoir
- Replaced the section of service water pipe in the low lift building
- Replaced the low lift service water pressure reducing valve (PRV)
- Rebuilt the high lift 5 kV breaker
- Annual major preventive maintenance for UV units
- Annual major preventive maintenance for generators
- Annual major preventive maintenance for chlorinators
- Replaced low lift pH meter
- Installed new heating coil in the dehumidifier unit
- Replaced air relief valves on low lift pumps #1 & #4
- Installed new motor on north flash mixer
- Rebuild flash mixer
- Replaced valve actuator at Fruitridge surge facility
- Replaced flex couplings on chlorine solution lines and control valves
- Replaced low lift pumps #1 & #2 packing with mechanical seals
- Installed Uninterruptible Power Supply (UPS) unit for station 6 fluoride analyzer
- Installed actuator on valve in chamber #P039A
- Painted plant transformer
- Installed fall restraint anchor points on plant roofs
- Replaced administrative building hot water tank
- Electric heater units replaced in the reservoir valve house and low lift chlorine building

Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre

Incident Report Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
NA	NA	NA	NA	NA	NA



Ontario Drinking-Water Systems Regulation O. Reg. 170/03

Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period.

	Number of Samples	Range of E.Coli Results (counts/100 mL) (min #)-(max #)	Range of Total Coliform Results (counts/100 mL) (min #)-(max #)	Range of HPC Results (counts/1 mL) (min #)-(max #)
Raw Water	104	(0)-(100)	(0)-(32,000)	(<10)-(>2,000)
Treated Water (WTP)	253	(0)-(0)	(0)-(0)	(0)-(30)
Distribution (EMPS Valve House & Fruitridge Surge Facility)	154	(0)-(0)	(0)-(0)	(<10)-(140)

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.

Parameter	Number of Grab Samples	Range of Results (min #)-(max #)
Treated Water Free Chlorine (mg/L)	Continuous Monitoring	(0.53)-(2.23)
	1769	(0.90)-(1.60)
Treated Water Turbidity (NTU)	Continuous Monitoring	(0.01)-(2.00)
	1768	(0.018)-(0.127)
Treated Water Fluoride (mg/L)	Continuous Monitoring	(0.14)-(2.00)
	616	(0.07)-(0.80)
Filter #1 - Filtered Water Turbidity (NTU)	Continuous Monitoring	(0.012)-(0.206)
Filter #2 - Filtered Water Turbidity (NTU)	Continuous Monitoring	(0.010)-(0.552)
Filter #3 - Filtered Water Turbidity (NTU)	Continuous Monitoring	(0.010)-(0.338)
Filter #4 - Filtered Water Turbidity (NTU)	Continuous Monitoring	(0.012)-(0.374)
Combined Filtered Water Turbidity (NTU)	1769	(0.018)-(0.110)



Ontario Drinking-Water Systems Regulation O. Reg. 170/03

Summary of Inorganic parameters tested during this reporting period
 (*All tests were conducted on treated water leaving the WTP unless otherwise noted)

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	Jan.10, 2017	0.00012	mg/L	NO
	Aug. 9, 2017	0.00016	mg/L	
Arsenic	Jan.10, 2017	0.0003	mg/L	NO
	Aug. 9, 2017	0.0004	mg/L	
Barium	Jan.10, 2017	0.022	mg/L	NO
	Aug. 9, 2017	0.021	mg/L	
Boron	Jan.10, 2017	0.020	mg/L	NO
	Aug. 9, 2017	0.018	mg/L	
Cadmium	Jan.10, 2017	0.000009	mg/L	NO
	Aug. 9, 2017	0.000010	mg/L	
Chromium	Jan.10, 2017	0.00055	mg/L	NO
	Aug. 9, 2017	0.00070	mg/L	
Lead (EMPS Valve House)	Jan. 10, 2017	Not Detected	mg/L	NO
	Jul. 4, 2017	0.00000002	mg/L	
Mercury	Jan.10, 2017	Not Detected	mg/L	NO
	Aug. 9, 2017	Not Detected	mg/L	
Selenium	Jan.10, 2017	0.00019	mg/L	NO
	Aug. 9, 2017	0.00017	mg/L	
Uranium	Jan.10, 2017	0.000047	mg/L	NO
	Aug. 9, 2017	0.000090	mg/L	
Sodium	Jan.10, 2017	16.9	mg/L	NO
Nitrite	Jan. 10, 2017	Not Detected	mg/L	NO
	Apr. 11, 2017	0.006	mg/L	
	Jul. 4, 2017	Not Detected	mg/L	
	Oct. 17, 2017	Not Detected	mg/L	
Nitrate	Jan. 10, 2017	0.155	mg/L	NO
	Apr. 11, 2017	0.505	mg/L	
	Jul. 4, 2017	0.134	mg/L	
	Oct. 17, 2017	0.181	mg/L	



Ontario Drinking-Water Systems Regulation O. Reg. 170/03

Summary of Organic parameters sampled during this reporting period
 (*All tests were conducted on treated water leaving the WTP unless otherwise noted)

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	Jan.10, 2017	Not Detected	mg/L	NO
	Aug.9, 2017	Not Detected	mg/L	
Atrazine + N-dealkylated metabolites	Jan.10, 2017	0.00005	mg/L	NO
	Aug.9, 2017	0.00006	mg/L	
Azinphos-methyl	Jan.10, 2017	Not Detected	mg/L	NO
	Aug.9, 2017	Not Detected	mg/L	
Benzene	Jan.10, 2017	Not Detected	mg/L	NO
	Aug.9, 2017	Not Detected	mg/L	
Benzo(a)pyrene	Jan.10, 2017	Not Detected	mg/L	NO
	Aug.9, 2017	Not Detected	mg/L	
Bromoxynil	Jan.10, 2017	Not Detected	mg/L	NO
	Aug.9, 2017	Not Detected	mg/L	
Carbaryl	Jan.10, 2017	Not Detected	mg/L	NO
	Aug.9, 2017	Not Detected	mg/L	
Carbofuran	Jan.10, 2017	Not Detected	mg/L	NO
	Aug.9, 2017	Not Detected	mg/L	
Carbon Tetrachloride	Jan.10, 2017	Not Detected	mg/L	NO
	Aug.9, 2017	Not Detected	mg/L	
Chlorpyrifos	Jan.10, 2017	Not Detected	mg/L	NO
	Aug.9, 2017	Not Detected	mg/L	
Diazinon	Jan.10, 2017	Not Detected	mg/L	NO
	Aug.9, 2017	Not Detected	mg/L	
Dicamba	Jan.10, 2017	Not Detected	mg/L	NO
	Aug.9, 2017	Not Detected	mg/L	
1,2-Dichlorobenzene	Jan.10, 2017	Not Detected	mg/L	NO
	Aug.9, 2017	Not Detected	mg/L	
1,4-Dichlorobenzene	Jan.10, 2017	Not Detected	mg/L	NO
	Aug.9, 2017	Not Detected	mg/L	
1,2-Dichloroethane	Jan.10, 2017	Not Detected	mg/L	NO
	Aug.9, 2017	Not Detected	mg/L	
1,1-Dichloroethylene (vinylidene chloride)	Jan.10, 2017	Not Detected	mg/L	NO
	Aug.9, 2017	Not Detected	mg/L	
Dichloromethane	Jan.10, 2017	Not Detected	mg/L	NO
	Aug.9, 2017	Not Detected	mg/L	



Ontario Drinking-Water Systems Regulation O. Reg. 170/03

2-4 Dichlorophenol	Jan.10, 2017 Aug.9, 2017	Not Detected Not Detected	mg/L mg/L	NO
2,4-Dichlorophenoxy acetic acid (2,4-D)	Jan.10, 2017 Aug.9, 2017	Not Detected Not Detected	mg/L mg/L	NO
Diclofop-methyl	Jan.10, 2017 Aug.9, 2017	Not Detected Not Detected	mg/L mg/L	NO
Dimethoate	Jan.10, 2017 Aug.9, 2017	Not Detected Not Detected	mg/L mg/L	NO
Diquat	Jan.10, 2017 Aug.9, 2017	Not Detected Not Detected	mg/L mg/L	NO
Diuron	Jan.10, 2017 Aug.9, 2017	Not Detected Not Detected	mg/L mg/L	NO
Glyphosate	Jan.10, 2017 Aug.9, 2017	Not Detected Not Detected	mg/L mg/L	NO
Haloacetic Acids (HAA's) (EMPS Valve House)	Jan.10, 2017 Apr.11, 2017 Jul.4, 2017 Oct.17, 2017	Not Detected Not Detected Not Detected Not Detected	mg/L mg/L mg/L mg/L	NO
Haloacetic Acids (HAA's) (EMPS Valve House) Annual Running Average	2017	Not Detected	mg/L	NO
Malathion	Jan.10, 2017 Aug.9, 2017	Not Detected Not Detected	mg/L mg/L	NO
2-Methyl-4-chlorophenoxyacetic acid	Jan.10, 2017 Aug.9, 2017	Not Detected Not Detected	mg/L mg/L	NO
Metolachlor	Jan.10, 2017 Aug.9, 2017	Not Detected 0.00001	mg/L mg/L	NO
Metribuzin	Jan.10, 2017 Aug.9, 2017	Not Detected Not Detected	mg/L mg/L	NO
Monochlorobenzene	Jan.10, 2017 Aug.9, 2017	Not Detected Not Detected	mg/L mg/L	NO
Paraquat	Jan.10, 2017 Aug.9, 2017	Not Detected Not Detected	mg/L mg/L	NO
Pentachlorophenol	Jan.10, 2017 Aug.9, 2017	Not Detected Not Detected	mg/L mg/L	NO
Phorate	Jan.10, 2017 Aug.9, 2017	Not Detected Not Detected	mg/L mg/L	NO



Ontario Drinking-Water Systems Regulation O. Reg. 170/03

Picloram	Jan.10, 2017 Aug.9, 2017	Not Detected Not Detected	mg/L mg/L	NO
Polychlorinated Biphenyls (PCB)	Jan.10, 2017 Aug.9, 2017	Not Detected Not Detected	mg/L mg/L	NO
Prometryne	Jan.10, 2017 Aug.9, 2017	Not Detected Not Detected	mg/L mg/L	NO
Simazine	Jan.10, 2017 Aug.9, 2017	Not Detected Not Detected	mg/L mg/L	NO
Total Trihalomethanes (THMs) (EMPS Valve House)	Jan.10, 2017 Apr.11, 2017 Jul.4, 2017 Oct.17, 2017	0.0086 0.012 0.016 0.019	mg/L mg/L mg/L mg/L	NO
Total Trihalomethanes (THMs) (EMPS Valve House) Running Annual Average	2017	0.0139	mg/L	NO
Terbufos	Jan.10, 2017 Aug.9, 2017	Not Detected Not Detected	mg/L mg/L	NO
Tetrachloroethylene	Jan.10, 2017 Aug.9, 2017	Not Detected Not Detected	mg/L mg/L	NO
2,3,4,6-Tetrachlorophenol	Jan.10, 2017 Aug.9, 2017	Not Detected Not Detected	mg/L mg/L	NO
Triallate	Jan.10, 2017 Aug.9, 2017	Not Detected Not Detected	mg/L mg/L	NO
Trichloroethylene	Jan.10, 2017 Aug.9, 2017	Not Detected Not Detected	mg/L mg/L	NO
2,4,6-Trichlorophenol	Jan.10, 2017 Aug.9, 2017	Not Detected Not Detected	mg/L mg/L	NO
Trifluralin	Jan.10, 2017 Aug.9, 2017	Not Detected Not Detected	mg/L mg/L	NO
Vinyl Chloride	Jan.10, 2017 Aug.9, 2017	Not Detected Not Detected	mg/L mg/L	NO

NOTE: During 2017, no Inorganic or Organic parameter(s) exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.

Rapid Transit Implementation Working Group

Report

3rd Meeting of the Rapid Transit Implementation Working Group
March 8, 2018
Council Chambers

Attendance PRESENT: S. Rooth (Chair), Councillors J. Helmer, P. Hubert, P. Squire, and M. van Holst; D. Sheppard and E. Southern, and B. Westlake-Power (Acting Secretary).

ABSENT: Mayor M. Brown; Councillors T. Park and H. Usher.

ALSO PRESENT: Councillor S. Turner, H. Beecroft, K. Burns, C. James, K. Paleczny, A. Rammeloo, J. Ramsay, C. Saunders, K. Scherr, S. Spring and E. Soldo.

1. Call to Order

1.1 Disclosures of Pecuniary Interest

That it BE NOTED that no pecuniary interests were disclosed.

2. Scheduled Items

2.1 Public Open House Materials and Design Renderings - Preferred Design Options for the Bus Rapid Transit Corridors

That it BE NOTED that the Rapid Transit Implementation Working Group received a presentation from J. Ramsay, Project Director Rapid Transit, as included in the March 8, 2018 Agenda.

3. Consent

3.1 2nd Report of the Rapid Transit Implementation Working Group

That it BE NOTED that the 2nd Report of the Rapid Transit Implementation Working Group, from its meeting held on February 8, 2018, was received.

4. Items for Discussion

None.

5. Deferred Matters/Additional Business

None.

6. Adjournment

The meeting adjourned at 6:20 PM.

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON MARCH 19, 2018
FROM:	KELLY SCHERR, P. ENG, MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT:	HIGHWAY 401 / HIGHWAY 4 INTERCHANGE IMPROVEMENTS & HIGHWAY 4 AND GLANWORTH DRIVE UNDERPASS REPLACEMENTS ENVIRONMENTAL ASSESSMENT

RECOMMENDATION

That on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, the technically preferred alternative **BE ENDORSED** for the Highway 401 / Highway 4 Interchange Improvements and Highway 4 and Glanworth Drive Underpass Replacements Environmental Assessment.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

- Environment and Transportation Committee – January 12, 2004 – Highway 401 Improvements: Planning Study Completion
- Civic Works Committee – February 4, 2013 - Agreement with Ministry of Transportation

2015-19 STRATEGIC PLAN

The following report supports the Strategic Plan through the strategic focus area of Building a Sustainable City by improving access for Londoners and supporting growth in the area of Highway 401. The projects will also implement and enhance safe and convenient mobility choices for automobile users, pedestrians and cyclists for the short and longer term.

BACKGROUND

Purpose

This report provides information on the Highway 401 / Highway 4 Interchange Improvements including the Glanworth Drive Underpass Replacement being managed by the Ministry of Transportation (MTO) in London. MTO is undertaking an Environmental Assessment (EA) for the project. Two Public Information Centres (PICs) were held in 2013. A third PIC was held on February 1, 2018.

The report also provides a general update on the status of the other Highway 401 interchanges with improvements planned and implemented within the City of London.

DISCUSSION

The Ministry of Transportation is undertaking an EA for improvements at the interchange at Highway 401 and Highway 4 (Colonel Talbot Road) including the Glanworth Drive Underpass Bridge. This same interchange was studied in 2004 and some improvements were carried out at that time. The EA was revisited in 2012 leading to two PICs in 2013. In addition, several separate meetings were held with interested agencies, stakeholder groups and community associations. As a result, over 500 comments and submissions were received.

Since 2013, MTO worked with their consultant, Dillon Consulting Limited, to review data, comments and modify alternatives with the goal of providing a revised preferred alternative to better satisfy the safety and community needs. On February 1st, 2018, the MTO hosted an additional PIC reviewing background material and presenting all of the alternatives considered along with a Technically Preferred Alternative.

Attached as Appendix A is the display material presented at the February 1 PIC including Alternative 6 as the Technically Preferred Alternative. This alternative includes:

1. Colonel Talbot Road Bridge Realigned east of the existing bridge;
2. Littlewood Drive realignment;
3. E-N/S Ramp Realigned;
4. Burtwistle Lane Realigned;
5. Tempo Road Realigned; and,
6. New intersection at Glanworth Drive and Old Glanworth Drive.

Additional information is available on the project website at www.hwy401londonbridges.ca.

The PIC was well attended by residents and stakeholders to learn about the project and see the Technically Preferred Alternative.

City Transportation staff have reviewed the recommendation and are satisfied that the proposed new road network configuration meets the City's long-term needs considering the public input to MTO that was shared during the EA process. The new interchange design will improve interchange operations and will address an existing non-standard interaction of Glanworth Drive with the westbound off-ramp.

London Interchange Program

In 2013, The City and MTO entered into an Agreement for Highway 401 Interchange Improvement Projects in London. The interchanges include four Highway 401 locations across the City of London:

- Wonderland Road;
- Veterans Memorial Parkway;
- Highbury Avenue; and,
- Highwaywy 4 / Colonel Talbot Road.

The Wonderland Road Interchange was completed in 2016, and the project is now in the warranty period with the contractor. This new interchange has changed traffic flow in the area as it provides a direct connection between Wonderland Road and Highway 401 and provides an improved connection to the Southwest Area lands.

Construction was initiated on the Veterans Memorial Parkway Interchange in the fall of 2016 with the majority of the structure and roadwork completed in 2017. Final construction will be

completed by the summer of 2018. This new interchange is open to traffic and provides a new extension of Veterans Memorial Parkway to the south with an intersection at Wilton Grove Road. This connection to Wilton Grove Road will improve access to lands on the south side of Highway 401 including local industrial areas westerly along the roadway.

The Highbury Avenue Interchange Improvements project is still in the preliminary design phase. This interchange project will be coordinated with other Highway 401 improvements including a localized widening of Highway 401 and an expansion of the Pond Mills Road underpass. MTO is anticipated to begin the process to retain a design-build team later in 2018 and construction could start in 2019.

The Colonel Talbot Road Interchange is still in the Environmental Assessment stage as previously noted in this report. The earlier public consultation encountered concerns from some of the stakeholders which resulted in further evaluation and design before the recent PIC. The Technically Preferred Alternative provided at the February 1st PIC includes an overpass for Glanworth Drive to continue to travel over Highway 401. This roadway has been a very important route for the agricultural community and other residents in south London.

Interchange Agreement Financial Status

At the time of the creation of the interchange agreement, the cost of the four projects was estimated at a combined total of \$115 M. The value was subject to variation because of the preliminary nature of the projects at the time. The Highway 4/Colonel Talbot Interchange presented the largest uncertainty due to the uncertainty of the Glanworth Drive alignment and underpass structure. The technically preferred alternative presented in PIC 3 is similar to the configuration assumed at the time of the cost sharing estimates. Therefore, the February 1st PIC recommendation is not expected to significantly affect the previous cost estimates.

The primary cost sharing formula comprised a \$25 M contribution from the City toward the total cost of \$115 M. The City's contribution is to be adjusted proportionately to reflect an increase or decrease in the total cost provided such that the increase or decrease does not exceed a maximum of \$2 M.

While construction is far from complete on the four interchanges, the construction values provided for the first two projects at Wonderland Road and Veterans Memorial Parkway are trending below the previously estimated costs. The next two interchanges will be constructed in the coming years. Staff will continue to monitor and provide updates as the various projects proceed. If the current trend of less than estimated costs continue, the total City contribution could potentially be reduced to less than \$25 M.

CONCLUSION

The Province of Ontario and City of London are making investments to the provincial freeway system in London. These improvements will help improve the function of the freeway and enhance London's competitiveness.

Four interchanges are being created or improved within the City. The new Wonderland Road Interchange is complete. The construction of the Veterans Memorial Parkway Interchange is mostly complete with only final construction to be completed in 2018. Mobility benefits have been achieved with new transportation routes now open on both projects.

MTO and the City continue to work on the next two interchanges with construction anticipated in the coming years. City staff will continue to be part of the projects to ensure the City's interests are incorporated in the final projects.

The third PIC for the Highway 401 / Highway 4 Interchange Improvements EA illustrated additional analysis and design and provides an additional formal opportunity for stakeholders interested in the project to provide comment. The project team is reviewing and responding to comments and will subsequently finalize the preliminary design and prepare the Transportation Environmental Study Report (TESR) that summarizes the EA. Upon completion of the EA, the TESR will be placed on the public record for a 30-day review period.

Acknowledgements

This report was prepared with the assistance of Karl Grabowski, P.Eng., Transportation Design Engineer of the Transportation Planning & Design Division.

<p>PREPARED BY:</p>	<p>REVIEWED & CONCURRED BY:</p>
<p>DOUG MACRAE, P. ENG. DIVISION MANAGER TRANSPORTATION PLANNING & DESIGN</p>	<p>EDWARD SOLDI, P.ENG. DIRECTOR, ROADS AND TRANSPORTATION</p>
<p>RECOMMENDED BY:</p> <p>KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER</p>	

Attach: Public Information Centre #3 Displays

- c: Jeff Matthews, P.Eng., Dillon Consulting Limited
- Frank Hochstenbach, P.Eng., Ministry of Transportation

APPENDIX A – Public Information Centre #3 Displays



Accessibility

Under the *Integrated Accessibility Standards Regulation* (2011), the Ministry of Transportation, Ontario (MTO) is committed to excellence in serving all customers, including people with disabilities, and to ensuring the Class Environmental Assessment process is accessible to all participants. This Public Information Centre incorporates the following accessibility features:

- Accessible venue location for people with disabilities. The venue includes wheelchair ramps, elevators , reserved seating , accessible washrooms and parking.
- For people requiring assistance, project team members will:
 - Verbally explain presentation board content
 - Assist with written submission of comment forms
- Reading aids are available, including magnifying glasses
- Presentation boards and materials printed in large, legible font
- We welcome people with disabilities and their service animals.

Welcome



- ✔ **PROVIDE** an update on work completed to date
- ✔ **SUMMARIZE** the input received to date
- ✔ **DISPLAY** alternatives considered
- ✔ **PRESENT** the comparative evaluation of alternatives and technically preferred alternative
- ✔ **OUTLINE** the next steps in the study.

Study Purpose

As presented at PICs in 2013, the purpose of this study is to...

Study Purpose

The purpose of this study is to:

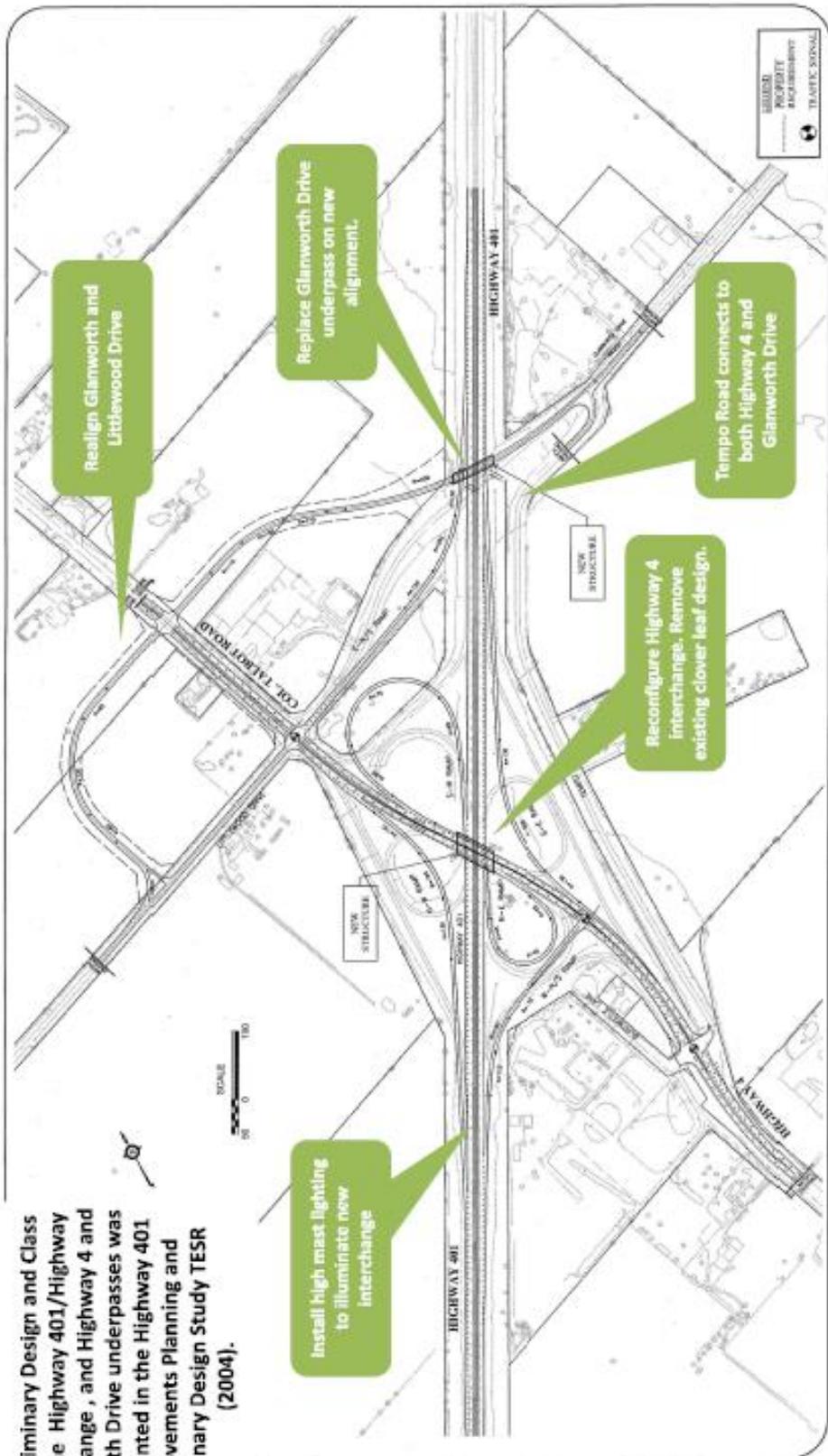
- Review and update the approved plan for the Highway 401/Colonel Talbot Road interchange and Glanworth Drive Underpass Bridge based on changes since the approval of the 2004 Transportation Environmental Study Report (TESR), including:
 - Changes in local road network and traffic patterns (new Wonderland Road interchange)
 - MTO access management best practices
 - Green Lane Landfill expansion and closure of Ford Talbotville plant
 - Interim improvements made in 2003, including:
 - realignment of the Highway 401 westbound ramp to tie into Littlewood Drive
 - traffic signals and illumination at the Highway 401/Colonel Talbot Road westbound ramp/Glanworth Drive/Littlewood Drive intersection
 - Continued deterioration of Colonel Talbot and Glanworth Drive Bridges (reaching the end of their service life)
- Consider alternatives to improve the function and operation of Colonel Talbot Road
- Update existing conditions in the Study Area since 2004
- Document any changes to the approved plan in an Addendum to the 2004 TESR



2004 Approved Plan Overview



The Preliminary Design and Class EA for the Highway 401/Highway 4 Interchange, and Highway 4 and Glamworth Drive underpasses was documented in the Highway 401 Improvements Planning and Preliminary Design Study TESR (2004).



HIGHWAY 401 IMPROVEMENTS
PLANNING STUDY
Highway 4 Easterly to Highbury Avenue
G.W.P. 476-89-00

Highway 4/Col. Talbot Road Interchange
Recommended Plan (2021)

FIGURE
9

Consultation To Date



- Two Public Information Centres (June and November 2013)
- Separate meetings with interested agencies, stakeholder groups and community associations including:
 - Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA)
 - City of London
 - Township of Southwold
 - Municipality of Central Elgin
 - County of Elgin
 - Local business owners/operators
 - Lambeth Community Association
 - London Agricultural Advisory Committee
 - Potentially impacted landowners.
- Over 500 comments and submissions have been received to date for the project.

Thank You, your input is appreciated and valued!

What We've Heard to Date



- Glanworth Drive functions as a regional artery for agricultural operations; direct east/west travel should be a priority movement accommodated by any improvement, supporting local agricultural operations
- Speed differential between traffic and farm equipment on Highway 4 is not desirable
- Cul-de-sacs on Tempo Road are not desirable
- Highway 4 interchange should be designed to facilitate both north/south and east/west movement of agricultural equipment (traffic signals, shoulder design, turning lanes)
- Local road realignments should not restrict opportunities for expansion of existing local businesses
- Interchange ramp reconfigurations should minimize potential increases in noise for adjacent businesses and residents.

Project Update

Since the last Public Information Centre (November 2013) the project team has completed:

- Additional field studies
- Additional traffic counts, and analysis
- Traffic simulation modelling
- Additional consultation with interested stakeholders, community groups, and agencies
- Development of two additional alternatives and updated the comparative evaluation
- Identified a technically preferred alternative.



Alternative 1 – Interchange Improvements with Glanworth Drive and Littlewood Drive Realigned



This alternative was previously presented at PIC #2

Alternative 2 – Interchange Improvements with Permanent Closure of Glanworth Drive Bridge



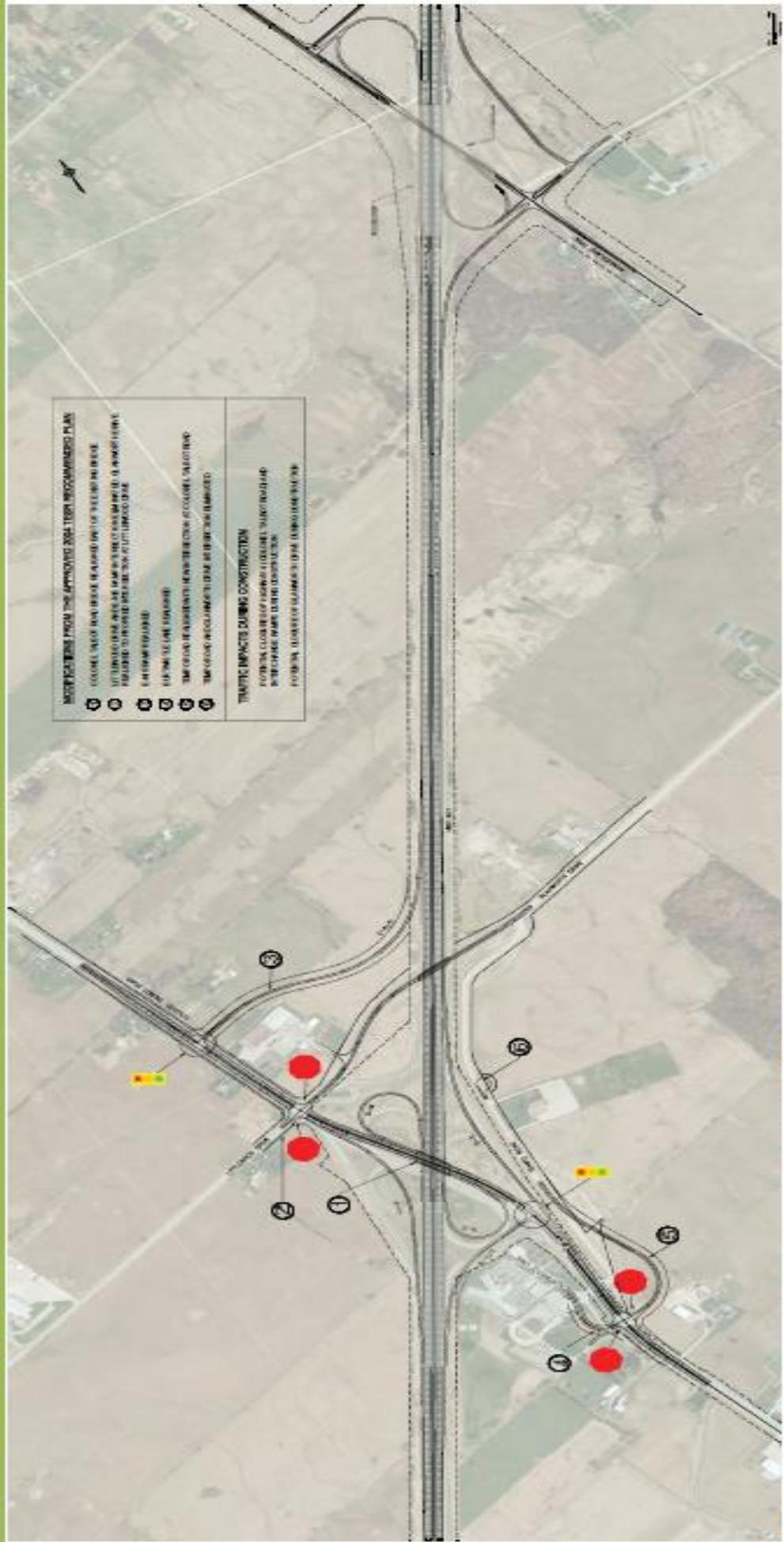
This alternative was previously presented at PIC #2

**Alternative 3 – Interchange Improvements with Permanent Closure of
Glanworth Drive Bridge and Littlewood Drive Realigned**



This alternative was previously presented at PIC #2

Alternative 4 – Interchange Improvements with Glanworth Drive Bridge



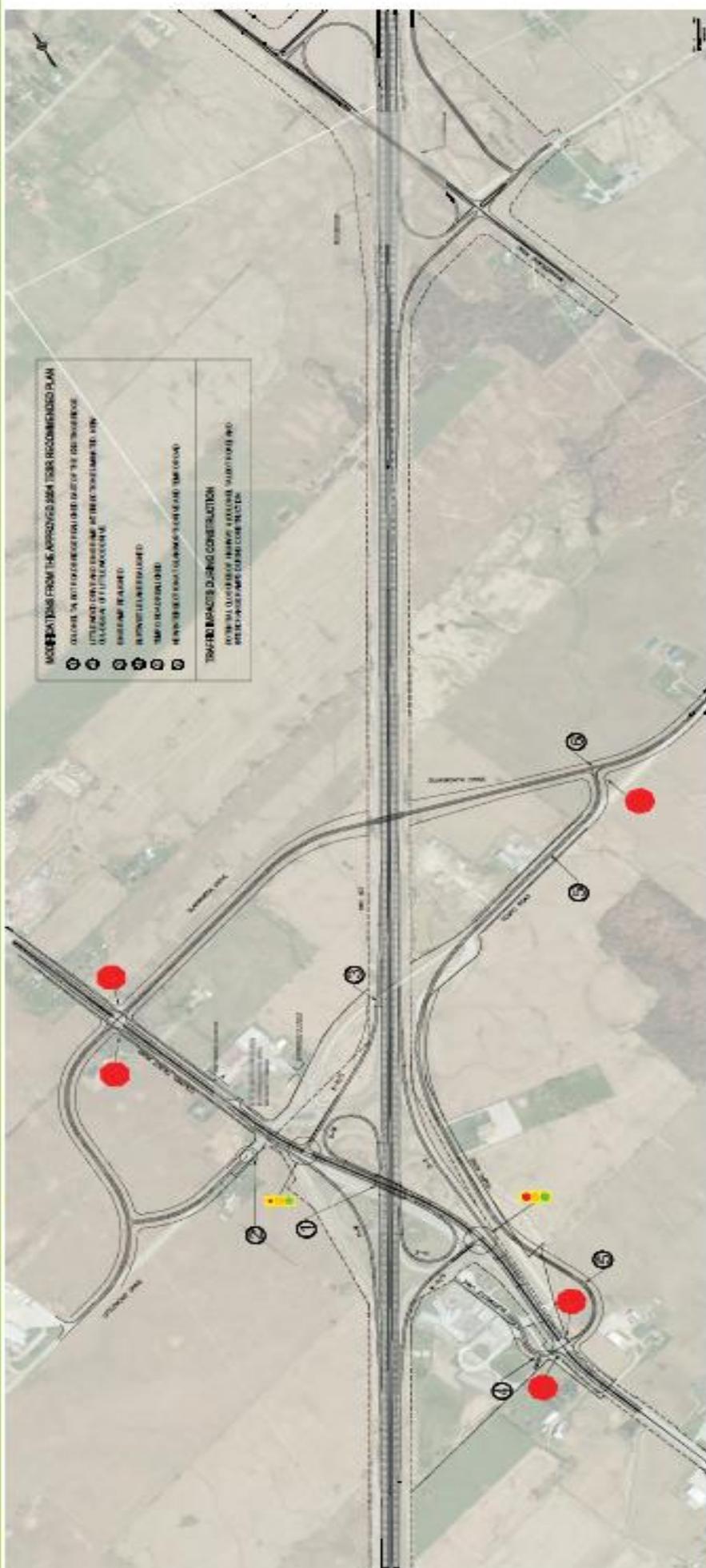
This alternative was previously presented at PIC #2

Alternative 5 – Glanworth Drive/Littlewood Drive Aligned & More Northerly Realignment of Westbound Exit (E-N/S Ramp)



NEW Alternative

Alternative 6 – More Northerly Glanworth Drive/Littlewood Drive Realignment



NEW Alternative

Alternative Evaluation Criteria



Based on background information collected and feedback received from public consultation to date on the project, an updated comparative evaluation has been completed which includes the addition of two new alternatives. The following criteria were used to assess the alternatives and identify the technically preferred:

	Criteria Considered	What Was Measured
Evaluation Factors	<ul style="list-style-type: none"> Municipal Road Connectivity 	<ul style="list-style-type: none"> Ability for the alternative to maintain the existing municipal road network (municipal roads are all non-provincial highways including Glanworth Drive, Littlewood Drive, Tempo Road, Burtwistle Lane, etc.)
	<ul style="list-style-type: none"> Engineering Standards, Practices and Policies 	<ul style="list-style-type: none"> Ability to adhere to highway design standards
	<ul style="list-style-type: none"> Movement of Farm Machinery 	<ul style="list-style-type: none"> Ability for farm machinery to move across the provincial road network in a safe and reliable manner
	<ul style="list-style-type: none"> New Infrastructure Requirements 	<ul style="list-style-type: none"> Ability to minimize the amount of new infrastructure created and ability to re-use existing infrastructure (e.g. built up embankments, berms, etc.)
	<ul style="list-style-type: none"> Impacts to utilities 	<ul style="list-style-type: none"> Ability to minimize required utility relocations
	<ul style="list-style-type: none"> Operation and Maintenance Costs 	<ul style="list-style-type: none"> Lowest overall operation and maintenance costs (short-term and long-term)
Transportation & Engineering	Criteria Considered	What Was Measured
	<ul style="list-style-type: none"> Impacts to Fish and Fish Habitat 	<ul style="list-style-type: none"> Ability to minimize impacts to existing fish and fish habitat
	<ul style="list-style-type: none"> Impacts to Terrestrial Resources 	<ul style="list-style-type: none"> Ability to minimize impacts to wildlife or wildlife habitat and terrestrial species at risk
Natural Environment		

Alternative Evaluation: Transportation & Engineering Factor Area



Below is a summary of the Comparative Evaluation completed for the Transportation & Engineering Factor Area. Note that for ease of public review the justification statements provided are intended to provide high level rationale on reasons one alternative was preferred over another. Not all considerations for each alternative are shown on this table. To discuss a specific justifications for an alternative or criteria measure please talk to a project team member.

Criteria	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6
Municipal Road Connectivity	<p>✓ Glanworthy/Littlewood connection maintained</p> <p>✗ Reduces driver visibility and does not fully comply with Access Management Guidelines</p>	<p>✗ Severs direct connection of Glanworthy/Littlewood</p> <p>✗ Interchange ramps in close proximity to municipal road and does not fully comply with Access Management Guidelines</p>	<p>✗ Severs direct connection of Glanworthy/Littlewood</p> <p>✗ Does not fully comply with Access Management Guidelines</p>	<p>✓ Glanworthy/Littlewood connection maintained</p> <p>✗ Interchange ramps in close proximity to municipal road and does not fully comply with Access Management Guidelines</p>	<p>✓ Glanworthy/Littlewood connection maintained</p> <p>✗ Reduces driver visibility and creates weaving potential on Highway 401 due to proximity of Wonderland Road. Does not fully comply with Access Management Guidelines</p>	<p>✓ Glanworthy/Littlewood connection maintained</p> <p>✓ Best meets access management guidelines. Driver visibility reduced due to proximity of Glanworthy Drive bridge but less impact compared to other alternatives</p>
Engineering Standards, Practices, and Policies						
Movement of Farm Machinery	<p>✓ Movement maintained. Stop controlled intersection at Highway 4 creates potential delays</p>	<p>✗ Elimination of Glanworthy Drive impacts ability of farm machinery to move east/west across Highway 401</p>	<p>✗ Elimination of Glanworthy Drive impacts ability of farm machinery to move east/west across Highway 401</p>	<p>✗ Movement maintained. Stop controlled intersection at Highway 4 creates longer delays compared to Alternatives 1 or 5</p>	<p>✗ Movement maintained. Stop controlled intersection at Highway 4 creates longer delays compared to Alternatives 1 or 6</p>	<p>✓ Movement maintained. Stop controlled intersection at Highway 4 creates potential delays</p>
New Infrastructure Requirements	<p>✗ Requires most new infrastructure</p>	<p>✓ Requires least new infrastructure</p>	<p>✗ Requires moderate amount of new infrastructure</p>	<p>✗ Requires moderate amount of new infrastructure</p>	<p>✗ Requires moderate amount of new infrastructure</p>	<p>✗ Requires most new infrastructure</p>
Impacts to Utilities	<p>✗ Most impacts to existing utility infrastructure</p>	<p>✓ Least impacts to existing utility infrastructure</p>	<p>✗ Moderate impacts to existing utility infrastructure</p>	<p>✓ Least impacts to existing utility infrastructure</p>	<p>✓ Least impacts to existing utility infrastructure</p>	<p>✗ Moderate impacts to existing utility infrastructure</p>
Operation and Maintenance Costs	<p>✗ High maintenance costs (two bridges)</p>	<p>✓ Lower maintenance costs (one bridge)</p>	<p>✓ Lower maintenance costs (one bridge)</p>	<p>✗ High maintenance costs (two bridges)</p>	<p>✗ High maintenance costs (two bridges)</p>	<p>✗ High maintenance costs (two bridges)</p>
Transportation & Engineering Factor Area Summary	Alternative 2 or 6 are preferred. However, Alternative 5 is more preferred due to its ability to better address engineering standards and local community concerns surrounding movement of farm machinery.					

Alternative Evaluation: Natural Environment Factor Area



Below is a summary of the Comparative Evaluation completed for the Natural Environment Factor Area. Note that the justification statements provided are intended to provide high level rationale on reasons one alternative was preferred over another. Not all considerations for each alternative are shown on this table. To discuss a specific justifications for an alternative or criteria measure please talk to a project team member.

Criteria	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6
Impacts to Fish and Fish Habitat	✘ New culvert at westbound exit ramp creates minor footprint impacts	✔ Removal of culverts at Glanworth Drive improves fish habitat compared to existing conditions	✔ Removal of culverts at Glanworth Drive Improves Fish habitat compared to existing conditions	✘ New culvert at westbound exit ramp creates minor footprint impacts	✘ New culvert at westbound exit ramp creates minor footprint impacts	✘ New culvert at westbound exit ramp creates minor footprint impacts
Impacts to Terrestrial Resources	✔ Minimal impacts to terrestrial resources	✔ Minimal impacts to terrestrial resources	✔ Minimal impacts to terrestrial resources	✔ Minimal impacts to terrestrial resources	✘ Requires removal of pond with Candidate Turtle Overwintering Habitat	✘ Requires removal of pond with Candidate Turtle Overwintering Habitat
Natural Environment Factor Area Summary	Alternative 2 or 3 are preferred because they have the least potential to negatively impact the natural environment. It is noted that in all alternatives, the relative differences of impacts to the Natural Environment are not significant compared to other factor areas in the comparative evaluation.					

Alternative Evaluation: Cultural Environment Factor Area



Below is a summary of the Comparative Evaluation completed for the Cultural Environment Factor Area. Note that the justification statements provided are intended to provide high level rationale on reasons one alternative was preferred over another. Not all considerations for each alternative are shown on this table. To discuss a specific justifications for an alternative or criteria measure please talk to a project team member.

Criteria	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6
Archaeological Potential	Requires minimal amount of land with archaeological potential ✓	Requires minimal amount of land with archaeological potential ✓	Requires minimal amount of land with archaeological potential ✓	Requires minimal amount of land with archaeological potential ✓	Requires minimal amount of land with archaeological potential ✓	Requires the most land with archaeological potential ✗
Cultural Heritage Potential	Minimal impacts to cultural heritage resources ✓	Removes Glanworth Drive bridge impacting overall landscape ✗	Removes Glanworth Drive bridge impacting overall landscape ✗	Minimal impacts to cultural heritage resources ✓	Minimal impacts to cultural heritage resources ✓	Minimal impacts to cultural heritage resources ✓
Cultural Environment Factor Area Summary	Alternatives 1, 4 or 5 are preferred because they have the least potential to impact lands with potential cultural or archaeological resources. It is noted that in all alternatives, the impacts to the Cultural Environment are negligible compared to other factor areas in the comparative evaluation.					

Comparative Evaluation Summary



Transportation & Engineering Factor Area Summary	Alternative 6 is preferred because it best meets MTO Practices, Policies and guidelines while best maintaining local road networks and providing a reliable and efficient route for the movement of farm machinery.
Natural Environment Factor Area Summary	Alternative 2 or 3 are preferred because they have the least potential to negatively impact the natural environment. It is noted that in all alternatives, the impacts to the Natural Environment are negligible compared to other factor areas in the comparative evaluation.
Socio-Economic Environment Factor Area Summary	Alternative 2 is preferred because it has the fewest impacts to existing and future land uses, best conforms to land use planning policies and has the fewest short-term impacts to the local community.
Cultural Environment Factor Area Summary	Alternatives 1, 4 or 5 are preferred because they have the least potential to impact cultural or archaeological resources. It is noted that in all alternatives, the impacts to the Cultural Environment are negligible compared to other factor areas in the comparative evaluation.

Based on the comparative evaluation of alternatives, using a reasoned argument method, Alternative 6 has been selected as the Technically Preferred Alternative.

Alternative 6 is technically preferred over Alternative 2 because it:

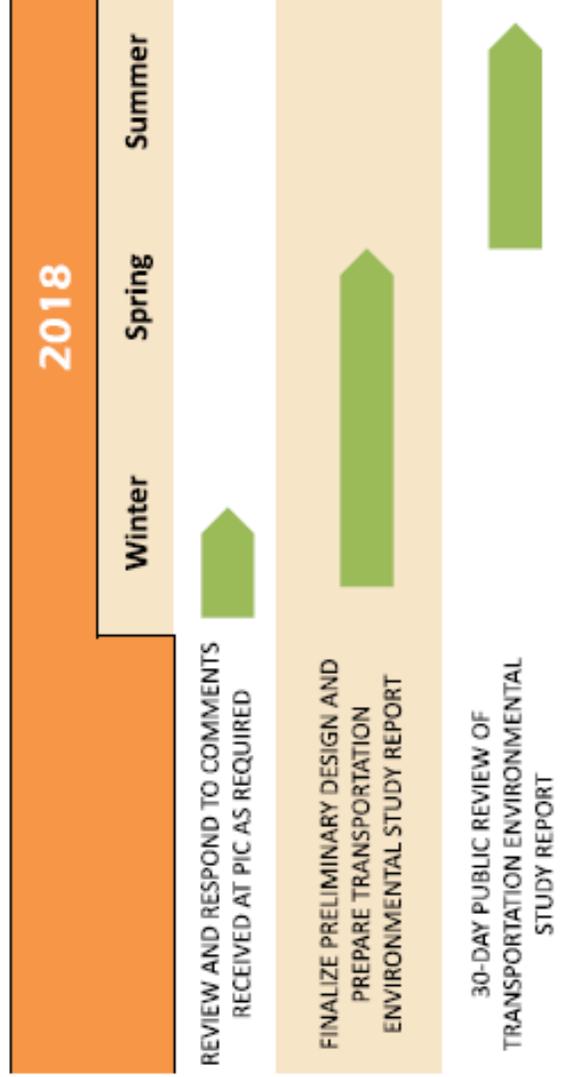
- Adheres to engineering standards, policies and practices
- best maintains the local road network
- offers potential benefits for future development opportunities
- provides an efficient route for the movement of farm machinery
- addresses concerns of local stakeholders, as heard through public consultation activities

Technically Preferred Alternative



Alternative 6

Next Steps



THANK YOU FOR ATTENDING

More information about the project can be found online at www.hwy401londonbridges.ca

Your input is important to the outcome of this project.

Please complete a comment form and return it by

February 15, 2018

Information on this project is being collected in accordance with the Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record.

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON MARCH 19, 2018
FROM:	KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT:	2018 RENEW LONDON INFRASTRUCTURE CONSTRUCTION PROGRAM AND 2017 RENEW LONDON POST CONSTRUCTION OVERVIEW REPORT

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, the following information report concerning the 2018 Renew London Infrastructure Construction Program and the 2017 Renew London Infrastructure Post Construction overview **BE RECEIVED** for information.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

Civic Works Committee – January 10, 2017. II, 7. [2017 Renew London Infrastructure Construction Program](#)

2015-19 STRATEGIC PLAN

The following report supports the Strategic Plan through the strategic focus areas of *Building a Sustainable City* and *Leading in Public Service* directly and indirectly as follows: Addressing the infrastructure gap, building robust infrastructure, enhancing safety for all road users in the city, and managing and improving our water, wastewater and stormwater infrastructure and services. Renew London is committed to delivering excellent customer service and providing great customer experiences to residents, business and visitors by communicating projects in advance and coordinating all work to help build and deliver efficient infrastructure and minimize delays and inconveniences to the public during construction

BACKGROUND

Purpose

The purpose of this report is to provide Committee and Council with an overview of the planned City major construction projects for 2018 and to provide an overview and evaluation of the 2017 Renew London program, outlining lessons learned and identifying potential risks for the upcoming construction season.

2018 RENEW LONDON

Context

The Environmental and Engineering Services (“EES”) Department undertakes approximately 200 capital works projects and programs on a yearly basis. Our goal is to provide safe, dependable, affordable and environmentally responsible services that help London’s communities thrive and the city prosper.

The delivery of a sustainable infrastructure program through the provision of road, sewer, water, sidewalk, traffic signal and streetlight assets is managed through the 2018 Renew London - Infrastructure Construction Program. The program addresses existing lifecycle needs, system improvements, and growth related priorities. The City of London is responsible to provide onsite inspection where required and maintain oversight of City construction projects to ensure the projects are built in accordance with plans, specifications and City standards, completed on time, within set budget limits and following proper safety procedures.

The City is responsible for a transportation system that promotes the movement of goods and services while providing for transportation mobility choices for residents. An efficient transportation system promotes business, creates employment, provides social opportunities and saves lives. A key consideration in the delivery of the Infrastructure Construction Program is the efficiency of infrastructure delivery and minimization of delays and inconveniences to the public during construction.

DISCUSSION

A number of large construction projects are currently scheduled for implementation in 2018. Table 1 provides a listing of projects which may have an impact on traffic flows around the City. Extensive review and coordination has been carried out at project and program levels to reduce potential impacts.

In addition to Table 1, there are a number of other medium scale reconstruction/resurfacing projects to rehabilitate infrastructure throughout the City which will have local impacts and may require minor traffic detours. There will be 73 lane km of road reconstructed, 15 km of sanitary and storm sewers, and 9 km of watermain rebuilt. In addition, 9 km of watermain and 8 km of sewers will be lined trenchless. These trenchless programs allow for significant capital avoidance and minimized social impact by avoiding open cut construction.

The total of the 2018 capital infrastructure program is approximately \$187 million. The program includes approximately \$65 million of road improvements, \$86 million of sewer improvements and \$36 million of water improvements. A complete map of 2018 projects can be viewed on the City’s website; [2018 Renew London Map](#).

The City is making great strides in addressing its sewer, water and roads infrastructure renewal backlog, with a forecasted growth in capital construction in the next 10 years, raising the prospect of higher construction-related impacts on pedestrians, cyclists, transit and motorists.

Table 1 – Top 10 City Projects

	Street/Project	Scope	Schedule	Traffic Impact
1	Western Road / Wharncliffe Road Widening	Road Widening - post 2017/18 Rail diversion work	April 2018 – March 2019	Reduced lanes/ staged road closures
2	Dundas Place	Utilities, sewer, water, road, Transformation Project	April 2018 – Nov 2019	Road closure/ intersection impacts
3	Main Street	Sewer, water, road, signals	April – Nov 2018	Reduced lanes/ staged road closures
4	York Street	Sewer Separation, water, road	April – Nov 2018	Staged road closures/ intersection impacts
5	Wonderland Road /Wharncliffe Road Bostwick Road Pump Station	Sewer, water, road, signals, Sanitary Pump Station	April – Nov 2018	Staged road closures
6	Egerton Street	Sewer, water, road	April – Oct 2018	Reduced lanes/ staged road closures
7	Wonderland Road / HWY 402	2 Lane upgrade	April – Oct 2018	Reduced lanes
8	Colonel Talbot Road Pump Station and Forcemain	Sanitary Forcemain & Pump Station	April – Oct 2018	Full closure of Col. Talbot and North Street 2 months. Reduced lanes.
9	Hamilton Road / Sackville Street	Sewer, water, road	April – Oct 2018	Road closed/ reduced lanes
10	Talbot Street	Sewer, water, road	April – Oct 2018	Reduced lanes / staged road closures

Mitigation

Traffic congestion is a concern for the City, businesses and users of the roadway. Congestion and disruption caused by public and private construction is disruptive to all road users. City staff manage programs to mitigate the impacts as much as possible and all City projects are reviewed from a traffic and construction detour impact perspective. Some locations will require road closures to complete the planned construction for the safety of the contractor and the public. Each closure will include a detour to safely redirect traffic around the disturbed areas and permit the work to be completed in a timely manner. The planned detours are as short a route as possible while keeping traffic on a similar class of roadway and not directing traffic through local streets.

Notwithstanding the detour routes, residents should expect increased traffic volumes on some local roads near construction areas as drivers look for shortest routes around the closures. In some cases, temporary neighborhood traffic calming measures will be implemented to mitigate this behavior. Traffic signal adjustments are sometimes made in the network surrounding construction projects to facilitate deflected traffic and help reduce delays.

The City strives to minimize the disruption to the public during construction and maintain access to the maximum extent possible. Breaking down of the construction into stages is often considered and has the advantage of minimizing the inconvenience to the general public, local businesses and residents however it also creates challenges from a constructability and increased capital cost perspective. A balance needs to be established that satisfies both objectives.

Moving pedestrians safely and efficiently through and around construction sites remains a priority for all projects. Pedestrian accessibility is also required of private applicants through their Permit for Approved Works (“PAW”). Hard walking surfaces will be maintained as much as possible noting that sidewalks will sometimes be closed where no other option is feasible.

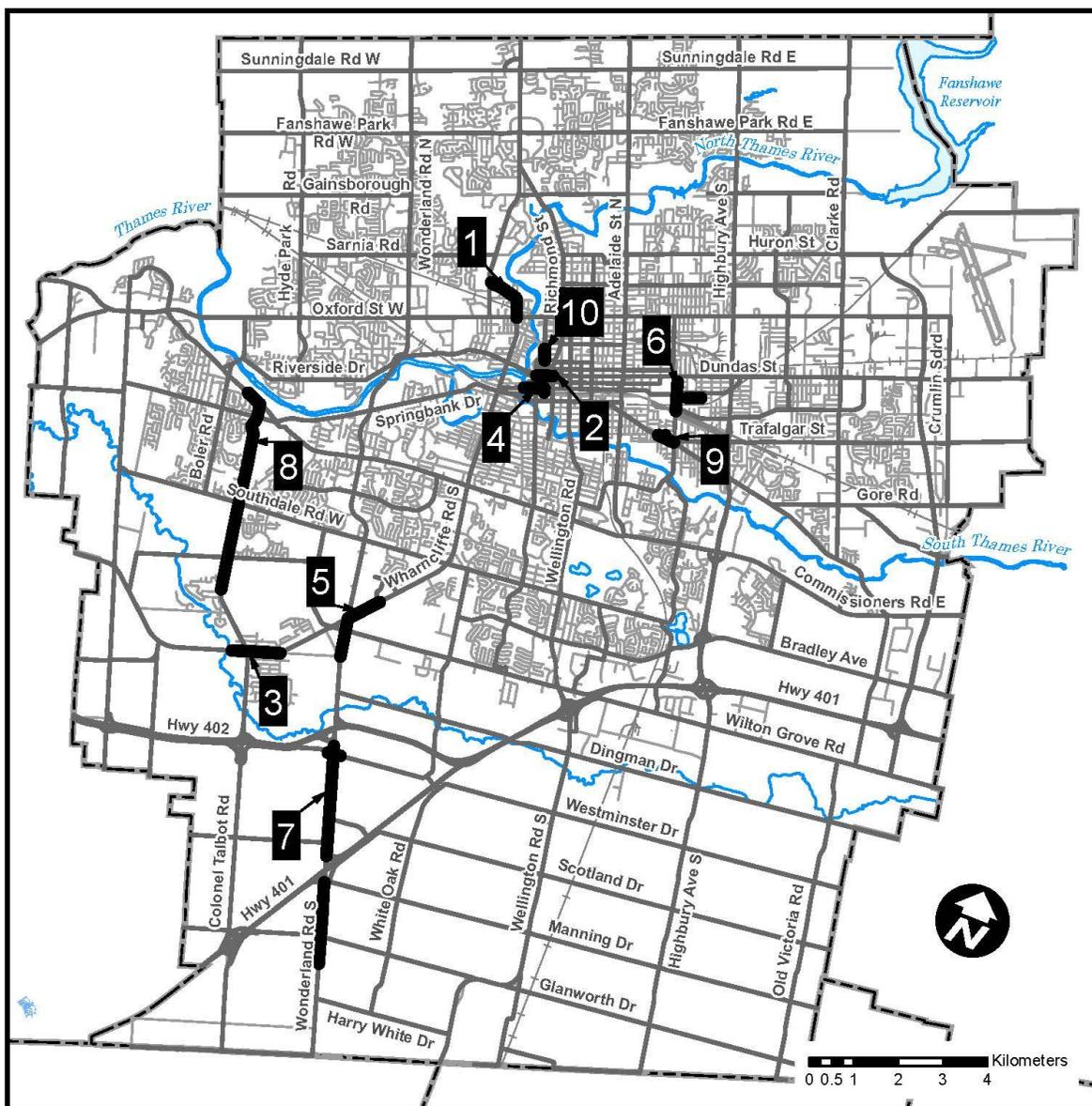


Figure 1- 2018 Major Infrastructure Projects

Routine maintenance undertaken by the City on roadways is scheduled in a manner to minimize impacts on traffic.

In addition to City led projects, coordination is undertaken with known development projects that may impact traffic flows along City streets. It should be noted that the exact timing of these projects is dependant on the development industry.

2018 COMMUNICATION PLAN

External Communication

Good construction communication is key to a successful project and this is an area of continuous improvement. Every effort is made to ensure Londoners are aware of construction zones and traffic detours resulting from road work using on- and off-site signage. Construction is an opportunity to bring us together and make connections. For City-led construction projects, property owner letters are sent out in advance of construction and daily updates are provided through the City's website, www.london.ca/roadwork with information about road closures, and ongoing/ upcoming projects on city streets.

Working with the City's communication team, large scale closures and impacts are communicated to Londoners by an integrated social media strategy using Facebook and Twitter. The social impact is being mitigated through coordination and communication. The specific communication strategies include:

- 2018 construction program media release;
- Operations meetings with Western University, LTC, Police, Fire, EMS, school boards and school bus providers and Canada Post;
- Public meetings for all major reconstruction projects;
- 3 letters to directly impacted residents for medium and large projects, 1 letter for short term work,
- Special meetings for business areas and community associations;
- Social media (Facebook and Twitter);
- Renew London website (project updates)
- Project websites for major reconstruction projects
- Renew London Road Report (generates daily email to media, emergency services and stakeholders if requested); and,
- Advanced warning signs.

Before construction begins, discussions take place with many groups early in the project(s) to identify issues, to share information and modify construction plans as possible to make any disruptions as painless as possible.

Residents are encouraged to minimize their travel time impact by:

- Using Renew London to plan their commutes, using alternative routes;
- Utilize transit (<http://www.ltconline.ca>), car pool, ride your bike or walk; for assistance in finding a carpool, please visit <https://www.regionalrideshare.ca/en/my/> (Regional Rideshare (formerly London Carpools) is a free service that matches potential carpoolers. It is available to all Londoners and anyone who regularly commutes to and from London from surrounding communities.
- Adjusting their travel times to avoid peak periods.

Once construction begins, road construction teams are juggling many activities. Road closures are constantly changing on a daily and weekly basis and that makes it quite hard to predict exactly what the impacts will be. The construction team works with homeowners, businesses to maintain access to home, business and to indicate when sidewalks are closed. The City also post “Businesses are Open” signs within and around our projects. The construction team will be available and strive to give the public the best information possible for when work will be complete. However, unexpected events may change the duration of a project and teams will ensure the public is aware and communicated too. Project contacts are provided before projects start and residents, business owners, public are encouraged to connect with them for any questions or concerns during the project.

Updates to Road Impact Report Website – RENEW London

In March 2018, Renew London will introduce enhancements for the users and editors. Improvements include better access on website to RENEW London map, improved colour coding and filtering abilities on map, and website appeal and ease-of-use. Additionally, improvements to the internal data entry system will ensure more accurate and complete information in being uploaded to the public website.

Core Downtown Communications Plan - Dundas Place

The 2018 Dundas Place project aims to further grow the vibrancy in the downtown that Londoners have become accustomed to and the project team is developing a communications plan to manage the construction disruption. The Dundas Place project team is working with Downtown London to develop a multi-faceted plan to support the downtown during construction. The plan includes new ways of distributing timely and helpful information with stakeholders, rolling out programs to support businesses and their customers. The plan is focusing on improving the overall user experience to maximize time spent on Dundas Street and downtown. It will aim to create positive experiences that businesses, residents, workers and visitors can all be a part of during construction and beyond. Development of this plan is being informed by face-to-face meetings with many of the property and business owners in the corridor to understand opportunities and concerns with the project.

The project team is also developing core messaging and visuals that will convey the unique essence of the Dundas Place community this project will build upon. An ongoing effort will be made to highlight positive experiences and interactions that differentiate Dundas Place from other destinations. It will also be critical to communicate effectively when there are impacts that arise within the core resulting from weather, other construction, development and special events.

FOR MORE INFORMATION, VISIT MYDUNDAS.CA

MYDUNDAS.CA  [@MY_DUNDAS/#MYDUNDAS](https://twitter.com/MY_DUNDAS/#MYDUNDAS)  [MYDUNDAS](https://www.facebook.com/MYDUNDAS) 

The construction monitoring includes a higher allowance for stakeholder/business coordination and full-time inspection. In an effort to maintain accessibility and enhance stakeholder relations with downtown businesses, City staff will be onsite daily with

senior support to listen to concerns, ensure communications are timely and clear, and be the link to the contractor and the municipality. Public communications will continue through a website portal, the media, and on social media via direct e-mail as construction progresses.

The 2018 Dundas Place, York Street and Talbot Street reconstruction projects are interconnected as it relates to stages of work and detour routes around downtown and will need to be constantly monitored and updated. In addition, of particular significance, the construction schedule and progress of work on Dundas Place will require concentrated oversight and need to be closely monitored in preparation for the hosting of the Junos in March 2019. As such, a member of the construction administration team will be included in the Junos committee and will be responsible to provide updates and coordinate the construction issues with the team.

Transit Stop Changes Downtown

As per the direction of Municipal Council, City staff and the London Transit Commission (LIC) have been working towards the permanent rerouting of buses from Dundas Street onto parallel streets within the downtown core. The changes to transit routing in the downtown is a component of the Dundas Place project that will eliminate the need to detour buses during street closures for events that are expected to become more frequent. Dundas Place construction is anticipated to begin in late March/early April. Re-routed buses will be primarily travelling in a counter-clockwise loop, travelling east on King Street, north on Wellington Street, west on Queens Avenue and south on Ridout Street.

In order to provide the necessary on-street space to accommodate the bus re-routing, changes to on-street parking and loading areas are being completed. Notices were recently provided to all Property owners and/or occupants about these changes at the affected locations on King street, Wellington street, Queens Avenue and Ridout Street.

2017 RENEW LONDON OVERVIEW REPORT

The City of London's 2017 road construction season came to an end in December, with all City's projects successfully complete or on track to finish in 2018.

The 2017 construction season was very busy overall and the City was able to deliver on our commitment of building better roads for London residents and visitors. The completion of these significant projects are a large part of the City's ongoing commitment to provide safe, dependable, affordable and environmentally responsible services that help London's



Figure 2 - Wharncliffe Road Rail Diversion

communities thrive and the City prosper. The roads belong to all Londoners, and the City makes it a priority to provide residents with infrastructure that will serve them for years to come.

Projects completed in 2017 included local infrastructure renewal in mature neighborhoods such as Old North, Old South and Old East, which had extensive work done underground and on roads, sidewalks, curbs, gutters and traffic lights. Major Infrastructure projects included Dundas Street East and Sarnia Road Improvements, phase two resurfacing on Veterans Memorial Parkway, Colborne Cycle tracks and Western / Wharnccliffe Western Rail Diversion.

Work on most projects generally began back in May 2017, and even with a stretch of cold and snow in early November, the projects were all finished within their contractual completion dates, except seven, all of which has base asphalt completed by December. The end result are complete streets that have water main and sewer infrastructure that is built for the future, and improved pavements and sidewalks. With the completion of the construction season, traffic flow has improved and the transportation system is able to more efficiently handle the movement of goods and people. All roadways were fully opened to traffic by mid December 2017. This spring, crews will return to most projects for touch up work, landscaping, surface asphalt where necessary and final site cleanup.

The Civic Administration uses a continuous improvement process in its capital works programs to minimize negative effects on the public and community during construction. While the investment in the renewal of the City's infrastructure helps address the City's significant infrastructure gap, provides longer term benefits and enhances the quality of life for residents, the construction activities have impacts in the short term. A coordinated approach that uses targeted, flexible phasing and extended work hours allows the City to improve services and complete the work in an efficient manner. The goal is to minimize the impact to residents, businesses and essential services while the work is being completed.

Overview of 2017 Projects

A number of large construction projects were identified to the Municipal Council in January 2017 and scheduled for implementation in 2017. A previous report provided an overview of major projects that were projected to have an impact on traffic flows across the City, noting that extensive coordination was carried out at project and program levels to reduce these impacts. In addition to those projects, there were a number of other medium scale reconstruction / resurfacing projects to rehabilitate infrastructure throughout the City which had local impacts and required minor traffic detours.



Figure 3 - Blackfriars Bridge

In 2017, the City reconstructed 85 lane km of road, 25 km of sanitary and storm sewer, and 13 km of watermains. The City also relined approximately 10 km of watermain and 13 km of sewer using trenchless technologies. These trenchless programs have allowed for significant capital avoidance and minimized social impact by avoiding open cut construction, which avoids the cost and social impact of open excavations.

In 2017, three development projects (Southdale Southwest Community Center; Talbot High Rise; Fanshawe College Carling Street, formerly Kingsmills) had significant impacts to surrounding streets and were coordinated with nearby City projects to help mitigate traffic impacts to commuters and communities. The Byron Area experienced major traffic and commuter disruption as a result of five major development projects (Wickerson, Commissioners, Westdel Borne, Oxford) occurring simultaneously in the area compounded by an adjacent City project on Byron Baseline Road. Process improvements are being developed through a separate report related to the PAW process to better coordinate utility and development Projects (affecting right of way) and City road projects.

Customer Service

As part of the Municipal Council approved Service London Implementation Plan, 2017 was the second year of Customer Relationship Management (CRM) implementation as it relates to construction projects. The software captures all customer interactions and complaints and filters them back to Project Managers assigned to City construction projects. Construction Administration received over 530 CRM inquiries in 2017. Program features will be enhanced in upcoming years which will make the interaction with our customers even better over time.

Budget and Schedule

The City managed \$146 million in infrastructure construction project work in 2017. To-date about 80% of the contract value has been paid on those projects with only one project, Byron Baseline, that has exceed budget due to unforeseen underground circumstances. All other projects are nearing completion and are all within the approved contract value.

Construction contracts for the City of London are usually tendered based on a specified number of “working days” allowed to reach substantial completion. Rain days, Saturdays, Sundays and holidays do not count towards the working day count. Additional work and unforeseen conditions may increase the number of working days allowed within a contract. Liquidated damages (cost for lateness charges) are assessed against the contractor once the number of allowed working days has been exceeded.

In 2017, the Dundas Street East and Byron Baseline projects encountered scheduling challenges associated with their underground work. These projects will be completed later than originally anticipated, however these changes to the schedule were due to unforeseen challenges that could not have been anticipated by the contractor, consultant, or the City. In both of these cases the City does not currently have a contractual basis to charge the contractor liquidated damages.

While most projects have work to be completed in 2018, all but seven projects are currently within their contractually allotted number of working days. The City is currently

working with their consultants and the contractors to reconcile the extents of these damages.

Lessons Learned From 2017 Construction Season

Public and Private Infrastructure Roadway Coordination

As always, our goal is to reduce traffic disruption on City-led construction projects on our roads by taking effective and responsible action to coordinate City projects in advance as much as possible. There are many other individual construction activities by third parties within the road that impacts traffic flow. These private initiatives include works such as utility cuts for service repairs or new installations, street events and parades, and lanes/road closures to support development projects.

Advance planning of infrastructure work in the municipal right-of-way for 21 different public and private organizations is the mandate of the Utility Coordinating Committee (UCC). Coordination is complicated by hundreds of emergency and routine operational repairs undertaken by City Transportation, Water, Sewer and Forestry Operation teams annually. Coordination of all these works is a challenge.

Advanced cumulative planning allows the City to better respond to proposed and unplanned work and helps visualize the effects of all projects relative to others and promotes better definition of specifications around scheduling of our contracts. The Corporate goal is to ensure that construction is planned and sequenced in a manner that will minimize impacts on traffic and disruption to the public.

Through routine coordination meetings with all applicable City departments we can continue to minimize the disruption to the public from all works on the City right of way.

Construction Impact to Trees

The protection of trees always plays a crucial role in any City construction project. Specialized construction methods, such as trenchless technologies, are employed wherever reasonable in order to minimize the disturbance to trees. The City requires that all contractors follow a rigorous tree protection plan to ensure damage to trees is minimized during construction. While City staff and their consultants diligently monitor the contractor's use of tree protection strategies, damage can still occur. Contractors who damage trees are financially penalized through the City contract. This past fall during a City presentation to the London District Heavy Construction Association, all attendees were reminded of the importance of tree protection and the fines associated with damaging trees. Ongoing education is essential and the City will take every opportunity to remind the construction industry of the importance of tree protection and best practices surrounding tree protection.

The City's Construction Administration group continues to work with the Trees and Forests Advisory Committee providing updates on the City's tree protection policies and procedures.

Tree Protection Strategy – Construction Impact Mitigation



Figure 4 - City of London EESD Tree Protection Strategy

Road Closures And Pedestrian Access

The City strives to minimize the disruption to the public during construction and maintain access to the maximum extent possible. There are however times when road closures are necessary for the safety of the contractor and the public. Road closures allow the contractor to expedite their work, shortening the duration of their work. Road closures will continue to be evaluated moving forward in order to ensure the safety of the public and minimize the duration of social impacts due to construction.

Moving pedestrians safely and efficiently through and around construction sites remains a priority and the City is taking more steps to address this for future City projects and third party work on City Streets. In some cases, sidewalks need to be closed for safety and other construction related reasons. Safeguarding corridors near schools and heavy pedestrian sites to ensure access is important along with keeping these locations clean and free of dangerous material.

In some cases, the City will be requesting contractors to prepare construction site pedestrian control plans which will ensure the provision of a safe and accessible path of travel for all pedestrians through and/or around the construction site. The plan intent is to ensure that pedestrians with disabilities, as well as those with increased mobility needs (parents with strollers and/or young children, elderly pedestrians using canes, walkers, or wheelchairs, etc.), will be accommodated either through or around the construction site.

Public Perception

The City does receive complaints about absent work zones and lack of construction activity. While it may appear at times that little work is being completed, coordination is required by the contractor to ensure all work is completed in the correct sequence given the complexity of the work, number of subcontractors and other external utility providers. The required work must be completed in the proper sequence and must be finished prior to lane shifts, starting another phase or moving on to the next critical path operation.

Testing of soils, water, asphalt, concrete, compaction, etc. can also lead to durations of minimal activities on site giving a perception that no work is being done. In fact this testing is some of the most critical work on a project, ensuring public safety and value for money.

Customer Satisfaction Surveys

Each year, the City sends out a survey to a selection of construction projects to collect feedback from the residents and businesses about how they were impacted. The feedback in 2017 was generally positive with survey respondents expressing appreciation for the communication before the project starts and the professionalism and customer service of all the staff, consultants, and contractors involved in the projects.

The most typical comments on how the City can improve are to decrease the duration of the projects and improve communication during construction related to unexpected localized impacts. In 2017 the overall response rate for these surveys was 24.2%.

By comparison, the 2016 average rating of 4.09 decreased to 3.86 out of 5 in 2017. The City typically sends out survey's on the more challenging and contentious projects in order to receive more useful feedback for improvement. Overall the rating is good and the City will continue to strive for improvement. Figure 5 shows the trends in these survey results since 2004.



Figure 5 - Customer Satisfaction Survey

Risks For The 2018 Construction Season

There are several risks for the upcoming construction season that may impact project budgets and schedule. The noted risks are as follows;

Downtown 2018 Coordination: London is experiencing a renewed vitality in its downtown as the city grows. Many public infrastructure projects are proposed that will contribute to London's downtown regeneration. The coordination of the construction of these large-scale infrastructure projects is a continual process. The magnitude and timing pressures of the projects bring significant challenges and risks and will create significant disruptions which need to be proactively managed. For this reason, the temporary position of Downtown Projects & Business Relations Manager has been created to co-ordinate timely and effective responses to specifically address both anticipated and unanticipated disruptions from the downtown construction. This effort is particularly necessary in 2018, with the simultaneous closure of York Street and Dundas Street. Project coordination and mitigation measures will be implemented to the extent possible to reduce the impacts to London road users, residents and visitors to the downtown. Another risk is in underestimating how long it takes to deliver these major projects.



Figure 6 - Businesses Open During Construction

Regional workload: Due to a number of government funding initiatives across the province (Public Transit Infrastructure Fund (PTIF) and the Clean Water and Wastewater Fund (CWWF)), both London and the rest of Ontario is experiencing an increase in the amount of work for 2017 and 2018. Based on our experience from the 2017 construction season this additional work will put a strain on contractor resources in the London area and also cause an increase in the cost of work. It will become difficult to predict budget impacts, contractor availability and project schedules as the tender period and construction season unfolds. Contractor resources will become strained.

Sub-contractor availability: During the 2017 construction season there was significant issues with sub-contractor availability due to the volume of work. Typically a majority of sub-contractor work occurs in the fall months, causing a strain on their resources. During this time there is more work than there are resources to complete it, and this causes a challenge for the project team to provide accurate schedule updates. While it is the general contractors responsibility to coordinate these sub-trades, the timeliness of their work affects the overall success of the project.

Business impacts: During this increase in construction volume of work on London roads, it is especially important to reduce potential impacts of construction on businesses, pedestrians and commuters. The loss of parking spaces, diverted traffic, unexpected power outages and noise and dust typically accompany the large scale projects. The City will continue to protect businesses by communicating in advance and working with the business owners to mitigate construction impacts based on their operations. Signage that lets the public know businesses are still open in construction zones is a simple and effective way to lessen the disruption. Phasing construction, so it's not all happening at the same time, and identifying issues and developing plans to make any disruptions as painless as possible, can also minimize disruption to business.

Safety: Contractor and worker safety is a significant and serious concern for the City. The 2017 construction season saw a number of incidents around the city where drivers endangered workers on site. One of the main concerns is drivers not obeying temporary traffic signals and flagpersons, and speeding through construction zones. Public education and enforcement is critical in improving driver habits, and City staff are committed to working with our contractors to report dangerous drivers and educate the public wherever possible.

CONCLUSION

The City has \$6.8 B of water/wastewater infrastructure and \$2.1 B of transportation infrastructure, the timely replacement and upgrade of those assets is critical to ensuring long term sustainability of those services. The 2018 Infrastructure Construction Program has been planned to address asset needs for the lifecycle renewal while at the same time ensuring that the growth requirements of the community are met in a timely manner during the construction season.

While the 2018 projects have been scheduled in a manner to minimize social impacts on traffic, commuting around the city will be impacted and as such, residents are encouraged to plan ahead and exercise patience in construction zones.

Overall, 2017 was a successful construction season with the reconstruction of 85 km of road, 25 km of sanitary and storm sewer, and 13 km of watermains. The City managed portfolio of Council approved projects totalled about \$146 M which is about 80% spent. The remaining 2017 contract work is expected to be completed in 2018 and within approved contract values.



Figure 7 - Dundas Street

Since the completion of the 2017 construction season, levels of service and safety have been improved for pedestrians, cyclists, transit users and automobile users. Traffic flow has moved more efficiently and roads are better able to handle the large volume of vehicles using the City's transportation network.

There are several risks associated with the 2018 construction season that may impact project budgets and schedule. Due to a number of continuing government funding initiatives, there may not be adequate contractor and sub-contractor resources to deliver the infrastructure program which will also cause an increase in the cost of work.

Lessons learned from 2017 projects and anticipated risks associated with the 2018 construction season have been communicated to Project Managers to support design and future project planning.

Figure 8 – Pedestrian Pathway Connection in Kiwanis Park

Lessons learned, strategies that may be adapted and procedures that can be improved have been identified and will be applied to 2018 construction projects where possible. Opportunities for the collection and utilization of lessons learned have been in all phases of a project life cycle. The early integration of construction knowledge into all phases of a project can be improved by effective use of lessons learned as well.



ACKNOWLEDGEMENTS:

This report was prepared by Ugo DeCandido, P.Eng. and Brian Nourse, P.Eng., of the Construction Administration Division, with input from Jim Yanchula, MCIP RPP, Manager, Downtown Projects & Business Relations, and Megan Hutchison (Communications Department) and reviewed by staff in Water Engineering, Wastewater and Drainage Engineering, Stormwater Management, Wastewater Treatment Operations, Roadway Lighting and Traffic Control, and Transportation Planning and Design service areas.

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

March 7, 2018
/ud

cc: Transportation Advisory Committee c/o Betty Mercier

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON MARCH 19, 2018
FROM:	KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT:	ONE RIVER ENVIRONMENTAL ASSESSMENT UPDATE TECHNICAL MEMORANDUM: STAGE TWO WORK PLAN

RECOMMENDATION

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

- a) the attached One River Environmental Assessment Technical Memorandum: Stage 2 Approach **BE RECEIVED**;
- b) the value of design and contract administration fees for Jacobs (formerly) CH2M **BE INCREASED** by \$403,283.00 (including \$150,000 of provisional work items) to a total contract value of \$1,039,806, including contingency, excluding HST, to cover additional efforts required to complete the Schedule B environmental assessment requirements for the decommissioning of the Springbank Dam and Forks of the Thames inaugural project, as per Procurement of Goods and Services Policy Clause 20.3e;
- c) The Civic Administration **BE AUTHORIZED** to undertake all administrative acts that are necessary in connection with this project; and
- d) the financing for this project **BE APPROVED** as set out in the Sources of Financing Report attached, hereto, as Appendix "A";

PREVIOUS REPORTS PERTINENT TO THIS MATTER
--

Planning and Environment Committee – December 14, 2015 – Back to the River Design Competition

Strategic Priorities and Policy Committee – January 28, 2016 – Downtown Infrastructure Planning and Coordination

Civic Works Committee – February 2, 2016 – West London Dyke Master Repair Plan Municipal Class Environmental Assessment Study

Civic Works Committee – February 2, 2016 – Springbank Dam

Civic Works Committee – March 8, 2016 - One River - Master Plan Environmental Assessment

Municipal Council - March 22, 2016 - One River- Master Plan Environmental Assessment: Background Information

Civic Works Committee – November 1, 2016 – One River Master Plan Environmental Assessment: Terms of Reference

Civic Works Committee – February 21, 2017 – One River Master Plan Environmental Assessment – Appointment of Consultant

Civic Works Committee – August 29, 2017 – One River Environmental Assessment Update: Technical Memorandum Stage One Work Plan and Community Consultation Plan

Civic Works Committee – September 26, 2017 – One River Environmental Assessment Update: Agency Advisory Committee Report

Civic Works Committee – January 9, 2018 - One River Environmental Assessment

Update: Phase II Stage I Report

2015-19 STRATEGIC PLAN

The 2015 – 2019 Strategic Plan identifies these objectives under Building a Sustainable City: 1B – Managing our infrastructure; 3E -- Strong and Healthy environment through protection of the natural environment; 4E – Beautiful places and spaces through investing in making London’s riverfront beautiful and accessible for all Londoners. Under Growing our Economy: 2A – promote Urban regeneration through investing in London’s downtown as the heart of our city.

BACKGROUND

Purpose

To update members of Council on the One River Environmental Assessment (EA) process, specifically the Technical Memorandum: Stage 2 Approach.

Context

After a series of reports in 2016, Municipal Council directed that due to the broader social, economic and natural environmental issues associated with the Springbank Dam, Thames River Valley Corridor, and Back to the River projects, these projects would be studied together through a master plan Environmental Assessment.

In February 2017, CH2M (now Jacobs) was appointed the Consultant for the One River EA. The Notice of Commencement was published in The Londoner on July 20 and July 27 of 2017. Public consultation for Phase I and Phase II Stage I took place from July through December 2017. Council endorsed the recommendation of the Stage I report to decommission Springbank Dam in January 2018.

DISCUSSION

Technical Memorandum: Stage Two Approach

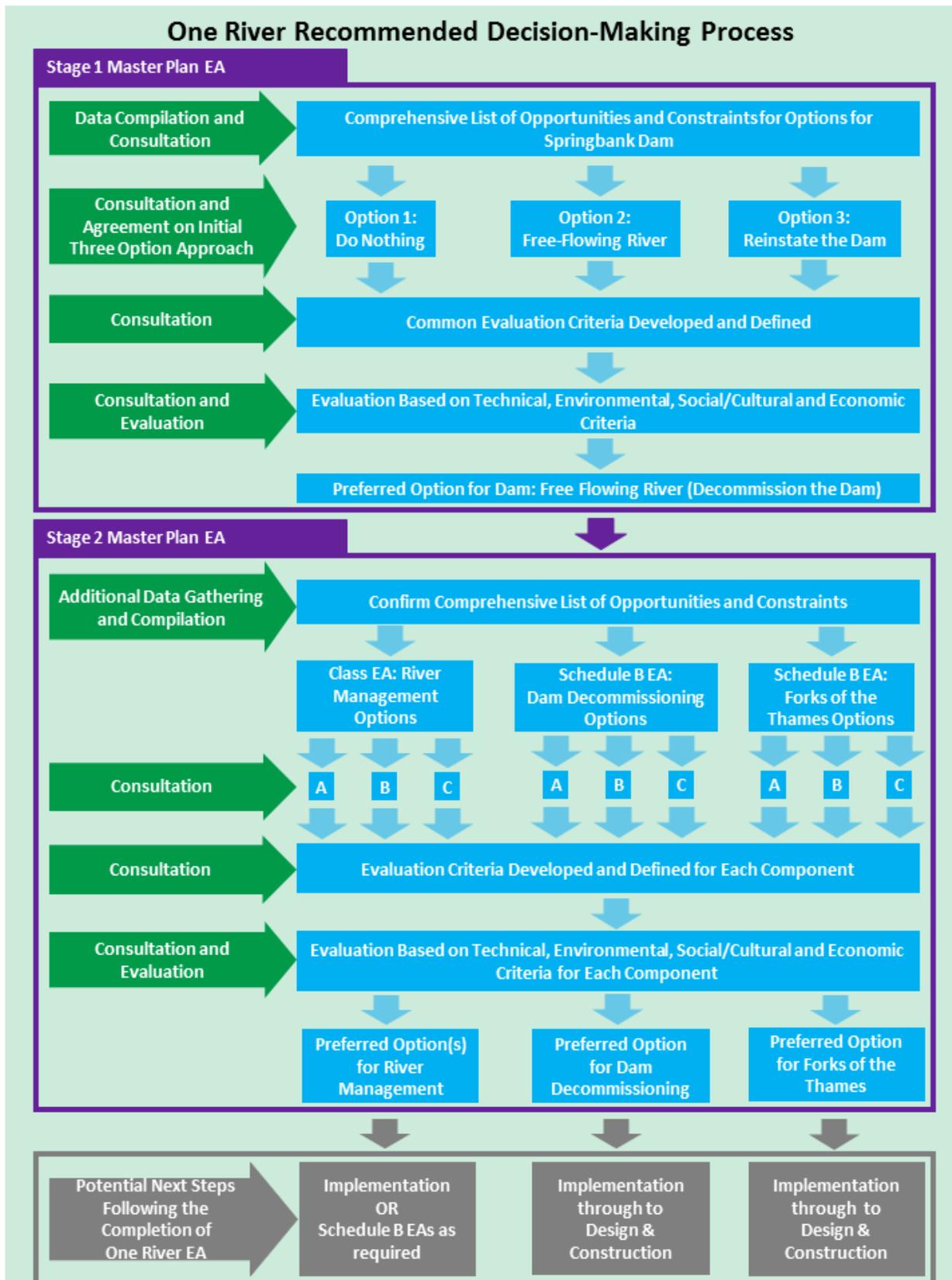
The One River Environmental Assessment: Stage 2 Approach (Appendix ‘A’) presents the approach for completing the three components of Stage 2: development of Master Plan Class EA concepts for river improvements, completion of Schedule B environmental assessment requirements for the decommissioning of Springbank Dam, and completion of Schedule B environmental assessment requirements for the selected design components at the Forks of the Thames. Figure 1, below, illustrates the new recommended process for the One River EA.

When the One River Master Plan was presented as the preferred approach, integrating multiple river-based projects, it was to ensure the issues affecting each project would be fully considered in the evaluation of alternatives for the other projects and take financial advantage of the overlapping study requirements. Any recommendation for Springbank Dam would have a direct influence on the Back to the River design work.

At this point, it is appropriate for the work streams to continue into their respective EA processes. There is now an endorsed preferred option for Springbank Dam. With that decision made, the Back to the River design at the Forks of the Thames and planning for other improvements can proceed. By completing the EA requirements as part of the One River project, the City continues to achieve the cost efficiencies of having one consultant working on the three project streams, sharing environmental study work, and

remaining closely coordinated. It also ensures that if the EA process is delayed for one of the streams, the others can continue on to completion without also being delayed.

Figure 1: One River Recommended Decision-Making Process (Figure 3.1 from Technical Memorandum)



Master Plan Class EA – River Management Strategy

Stage 1 selected the preferred option for Springbank Dam, which was the determining factor in identifying and evaluating additional river management strategies. Stage 2 will be a more detailed evaluation of the requirements for specific works. This will include concepts for overall improvements that will form part of a long-term management strategy for the river.

Schedule B Environmental Assessment – Springbank Dam Decommissioning

In addition to the work completed in Stage 1, there are specific tasks to fulfil the Schedule B environmental assessment requirements for the evaluation of the dam decommissioning options. The existing conditions documented in Stage 1 will be carried forward and augmented with the collection of more detailed information required to meet the Environmental Impact Study (EIS) requirements for the Schedule B project.

Schedule B Environmental Assessment – Forks of the Thames Design Elements

Numerous design components of the award winning design trigger the regulatory requirements for an EA. Development of the preferred option for the design elements at the Forks of the Thames will thus be carried out as a Schedule B component of the One River EA. The project team will work with the Ribbon of the Thames design team, comprised of Civitas and Stantec, on how the design elements of Back to the River can be integrated into the EA evaluation.

Public Consultation and First Nations Engagement

Consultation is a pivotal part of the Master Plan and Class EA processes. One River employed a robust public, stakeholder, and First Nations engagement strategy during Stage 1 and will continue in Stage 2. These activities will be initiated to provide input into alternatives for the three areas of focus. The project team will continue to utilize public engagement methods such as online surveys, meetings with key stakeholders, Public Information Centres, First Nation and Métis engagement, Internal Steering Committee meetings, and Agency Advisory Committee meetings.

Cost

Jacobs (previously CH2M) was awarded the contract as the prime consultant for the One River Master Plan EA following a two-stage Request for Expression of Interest/Request for Qualification and Request for Proposal process. They have provided excellent services through the completion of Stage 1. Additionally, some work initially scheduled for Stage 2, was moved forward in the project schedule to ensure we had sufficient environmental data to make informed decisions in Stage 1.

Due to Council concerns with the originally recommend approach for the One River EA, a report dated March 22, 2018, was submitted to Council with a “Revised One River EA Master Plan EA Approach”. This approach stopped short of completing the final Schedule B environmental assessment requirements for the decommissioning of Springbank Dam or the design elements at the Forks of the Thames. Now that a decision has been made on the Springbank Dam, it is recommended to proceed with the Schedule B activities in order to finalize the Springbank Dam project and to complete the required EA on the Back to the River inaugural project. The additional effort required to complete the two Schedule B environmental assessments is \$403,283, resulting in a total assignment to Jacobs of \$1,039,806. Of the new consultant appointment amount, a value of \$150,000 for provisional items is included. These provisional items include further environmental and alternative analysis work that may be required based on the results of the preliminary environmental work and the public, First Nations, and stakeholder engagement process. The need for this provisional work will be assessed as the project progresses.

The initial One River EA CH2M (Jacobs) consultant assignment of \$636,523 was fully funded from the PD1215 “Back to the River” project account. It should be noted that a significant portion of this work was related to the environmental assessment related to the Springbank Dam. The attached source of financing recommends that Phase 2 of the One River EA be fully funded from ES3068 Springbank Dam to offset the cost of the previous Springbank Dam work funded through the Back to the River project account. Following this consultant award of \$403,283 to Jacobs (formerly CH2M) a balance of

\$3,521,674 will remain in the ES3068 project to address future work related to the Springbank Dam. The revised budget for ES3068 includes receipt of the final legal settlement from 2015.

Next Steps

The three streams of work will proceed concurrently. The project team will be obtaining the additional detail on the existing environmental conditions for the two Schedule B projects and integration with the Back to the River design. The existing hydraulic model of the Thames River will also be refined to the level necessary to assess river management alternatives. Once a short list of alternatives has been developed for the projects, consultation and engagement activities will be initiated to further develop the alternatives.

Schedule

It is anticipated that a short list of alternatives will be developed in Q2 of 2018, followed by Public Information Centres in Q3 2018. The draft Master Plan is anticipated to be completed late Q3 2018, and be followed by a second set of Public Information Centres, prior to completion of the report and 30-day public review period in Q4 2018.

CONCLUSION

At this time, it is advantageous to approach the One River Master Plan EA with a three-pronged approach, separating the Class EA requirements for the decommissioning of Springbank Dam and design elements at the Forks of the Thames. It is recommended that Jacobs continues this work as an extension of their One River Master Plan assignment.

This report was prepared by Ashley Rammeloo, P.Eng., Manager III, Engineering.

PREPARED BY:	REVIEWED AND CONCURRED BY:
ASHLEY RAMMELOO, P.ENG. MANAGER III, ENGINEERING	SCOTT MATHERS, MPA, P. ENG. DIRECTOR, WATER AND WASTEWATER
RECOMMENDED BY:	
KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER	

Attach: Appendix 'A' – Source of Finance
Appendix 'B' – Technical Memorandum: Stage Two Approach

cc. J. Fleming, S. Stafford, D. Hsia. G. MacDonald, J. Freeman, A. Dunbar, J. Davies
Tom Mahood (Jacobs CH2M)

APPENDIX 'A'

#18049

Chair and Members
Civic Works Committee

March 19, 2018
(Consulting Fee Increase)

**RE: One River Environmental Assessment Update
(Subledger WW170002)
Capital Project ES3068-Springbank Dam Replacement and Erosion Control
Jacobs (formerly CH2M) - \$1,039,806 (excluding H.S.T.)**

FINANCE & CORPORATE SERVICES REPORT ON THE SOURCE 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 and Engineering Services and City Engineer, the detailed source of financing for this project is:

<u>ESTIMATED EXPENDITURES</u>	<u>Approved Budget</u>	<u>Revised Budget</u>	<u>Committed To Date</u>	<u>This Submission</u>	<u>Balance for Future Work</u>
Engineering	\$808,203	\$1,217,792	\$807,411	\$410,381	\$0
Construction	5,991,176	9,360,338	5,838,664		3,521,674
City Related Expenses	65,700	67,228	67,228		0
NET ESTIMATED EXPENDITURES	<u>\$6,865,079</u>	<u>\$10,645,358</u>	<u>\$6,713,303</u>	<u>\$410,381</u> 1)	<u>\$3,521,674</u>
<u>SOURCE OF FINANCING:</u>					
Debenture By-law No. W.-1936-317	\$1,200,000	\$1,200,000	\$1,043,256	\$156,744	\$0
Drawdown from Sewage Works Reserve Fund	2,866,079	2,866,079	2,866,079		0
Other Contributions 2)	2,799,000	6,579,279	2,803,968	253,637	3,521,674
TOTAL FINANCING	<u>\$6,865,079</u>	<u>\$10,645,358</u>	<u>\$6,713,303</u>	<u>\$410,381</u>	<u>\$3,521,674</u>

Financial Note:

- | | | |
|----|--|-------------------------|
| 1) | Contract Price | \$1,039,806 |
| | Less: Amount Previously approved by Council March 3, 2017 (Project PD1215-Back to the River) | <u>636,523</u> |
| | | 403,283 |
| | Add: HST @13% | <u>52,427</u> |
| | Total Contract Price Including Taxes | 455,710 |
| | Less: HST Rebate | <u>45,329</u> |
| | Net Contract Price | <u>\$410,381</u> |
- 2) The budget is being revised to include the legal settlement of \$3,775,000. This money is required for future costs related to the Springbank Dam.

ms

Jason Davies
Manager of Financial Planning & Policy

Appendix 'B'

One River Master Plan Environmental Assessment: Stage 2 Approach

PREPARED FOR: Ashley Rammeloo, City of London
 COPY TO: One River EA Steering Committee
 PREPARED BY: Tom Mahood, Jacobs
 DATE: February 26, 2018
 PROJECT NUMBER: 692537
 REVISION NO.: 0

1.0 Purpose

The purpose of this Technical Memorandum (TM) is to present the approach for completing the One River Master Plan Environmental Assessment (EA) in 2018. In particular, the approach for completing the EA components for Stage 2 of the EA which focus on the Master Plan requirements for the Thames River Management Strategy, the Schedule “B” EA requirements for the Forks of the Thames which focuses on the “Back to the River” elements, and the Schedule “B” EA requirements which will examine the options for the decommissioning of Springbank Dam.

2.0 Background

2.1 Purpose of the One River Master Plan

The overall purpose of the One River Master Plan EA is to develop a comprehensive plan, through engagement with First Nations and Métis, and in consultation with the public, and agency stakeholders, for implementing various projects within the One River study area that are being considered within of the overall Master Plan. These projects represent both infrastructure needs and the community’s recreational and ecological vision for the Thames River in the City.

The One River Master Plan EA is being carried out in two Stages. Stage 1 of the Master Plan EA was completed in January 2018 with the selection of the preferred option for the Springbank Dam. The preferred option was to restore a free-flowing river by decommissioning the dam. Stage 2 of the One River Master Plan EA will include:

- Development of Master Plan Class EA concepts for river improvements that will form part of a long-term Thames River Management Strategy.
- Completion of Schedule “B” EA requirements for the selection of the preferred option for decommissioning the dam.
- Completion of Schedule “B” EA requirements for the selection of the preferred option for the “Forks of the Thames” with a focus on the “Back to the River” design elements.

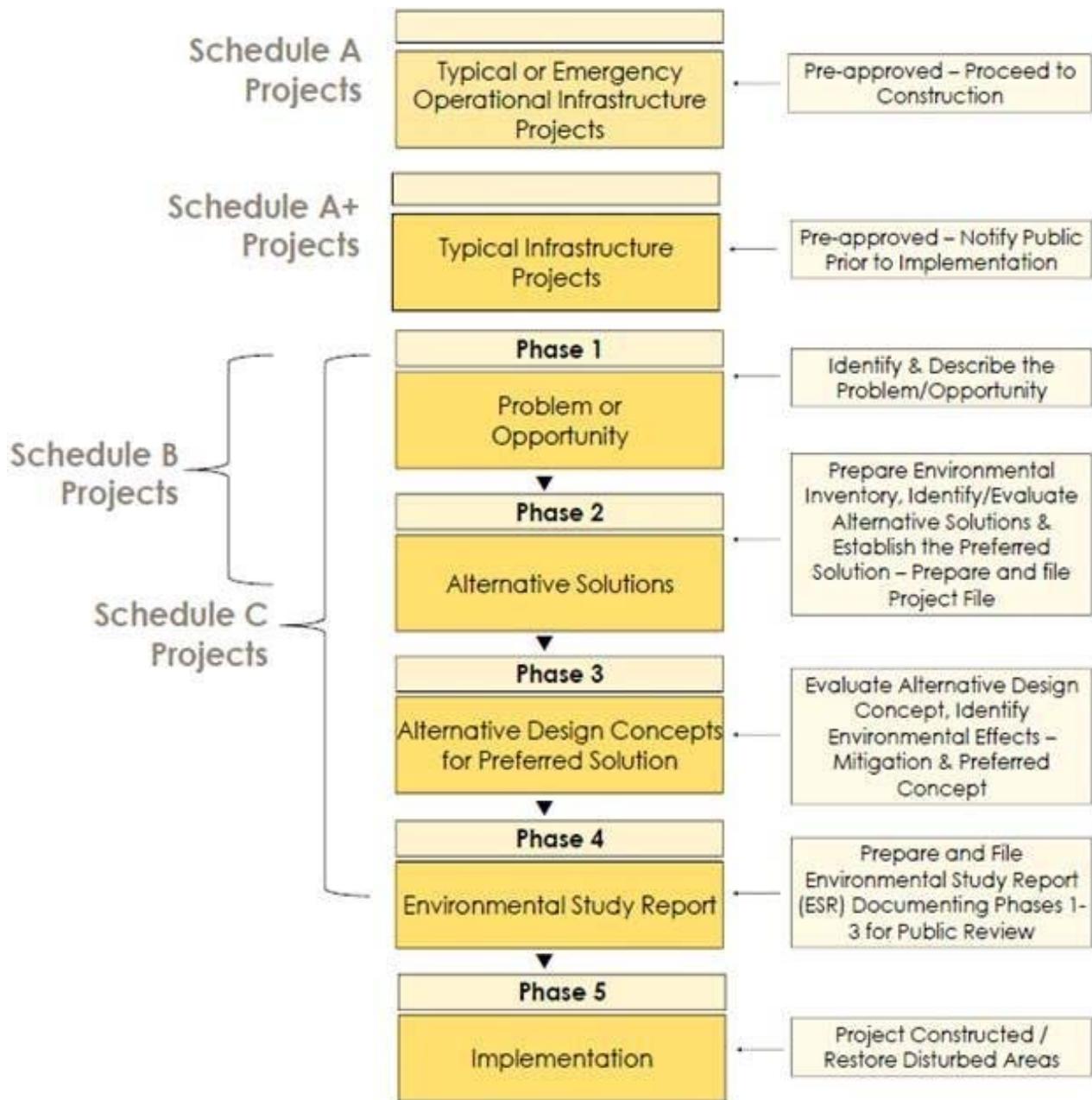
As part of the EA process, the results of the One River EA field investigations, public participation, stakeholder discussions, First Nations engagement and findings from other studies, plans, and projects will be taken into consideration in order to select preferred options for Stage 2 on the basis of their net social/cultural, environmental, technical, and economic impacts. Key amongst these other studies, plans, and projects to be incorporated into the evaluation process are The London Plan which has identified the vision for the Thames Valley Corridor, and the Thames Valley Corridor Plan (TVCP) which includes recommendations that relate to the improvement of the riverfront’s environment and accessibility.

2.2 Municipal Class Environmental Assessment

The Ontario Environmental Assessment Act allows municipalities to meet the requirements of the Act either through “Individual” EAs or approved categories of “Class” EAs. Projects implemented to protect and enhance the Thames River will meet the EA Act requirements by following the requirements outlined in the MEA’s Municipal Class EA document (as amended in 2007 and 2011, and 2015). The MEA process is illustrated in Figure 2.1, and identifies project Schedules (i.e. A, A+, B and C) based on their potential impacts.

The Municipal Class EA is not only applicable for Master Plans that involve considering infrastructure systems or groups of related projects, but also for individual projects that require Schedule “B” project level investigation as is the case with One River.

Figure 2.1: Municipal Class Environmental Assessment



3.0 One River Master Plan EA Process

3.1 Overview of EA Process

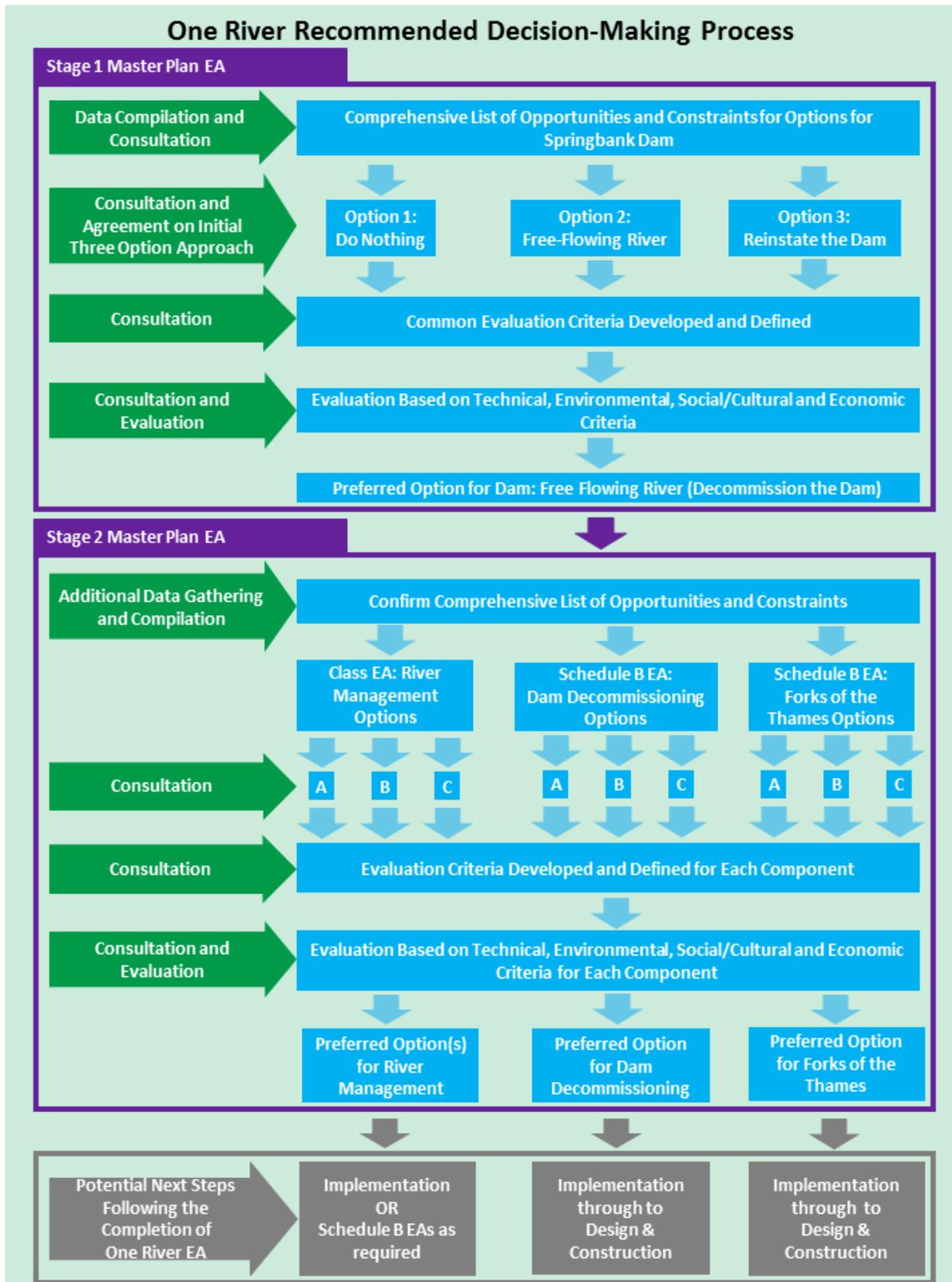
Phase 1 of the Master Plan EA process includes the collection and review of background information and the confirmation of the problem opportunity /problem definition, Phase 2 of the Master Plan EA process includes the development and assessment of alternatives and the selection of the preferred strategy through a comprehensive evaluation process. The development and assessment of alternatives and the selection of the preferred strategy for the various components of the One River EA are being carried out in the following two stages:

- Stage 1 (**completed**): The selection of the option for Springbank Dam is the determining factor in the identification and evaluation of the additional river management strategies in Stage 2. These Stage 2 strategies include concepts for overall river improvements that will form part of a long-term Thames River Management Strategy, the plan for decommissioning the dam and the plan for developing the “Forks of the Thames”. It was therefore necessary to determine the preferred option for the dam first so that the dam option selected can inform the decision-making process on the river management strategies.
- Stage 2: Now that the option for the Springbank Dam has been selected, alternative strategies for river management, which consist of different types of projects related to infrastructure and

river improvements, will be developed and assessed. These include the Master Plan Class EA river improvements as well as the identified Schedule “B” level projects. A preferred and integrated strategy for each of these three components of the project will be selected based on environmental, social/cultural, technical and cost criteria.

Figure 3.1 illustrates the two Stages of the One River Master Plan EA approach. At key milestones, project details will be provided to Council for their guidance or approval. Details of the process are described in more detail in the following sections.

Figure 3.1: One River Recommended Decision-Making Process



3.2 Establishing Environment Conditions

To assess the Stage 2 alternatives, the existing conditions in the study area must be identified and the impacts of alternatives on existing conditions must be determined analysis but there are additional site specific efforts required to fulfill the Schedule “B” requirements for the evaluation of the dam decommissioning options and the “Forks of the Thames” options.

In order to assess Springbank Dam decommissioning options, “Forks of the Thames” options and River Management strategies, the impacts on the natural, social and cultural environment as well as the technical implications and costs of the options and strategies must be evaluated. The findings of the

existing conditions effort conducted out in Stage 1 will be carried forward to Stage 2 but the level of information being collected becomes more detailed as the Phase 2 evaluation proceeds for the river management options and for the Schedule “B” components of the effort. To assess the River Management strategies and the Schedule “B” components, more detailed inventories and evaluations including river hydraulics, will be undertaken to better understand the impacts on the social, cultural, and natural environment in the area of Springbank Dam and the Forks of the Thames River. Detailed site-specific field investigations will be undertaken on individual projects as identified in the detailed Stage 2 Work Plan.

It should be noted that the level of detail for the environmental program will be sufficient to meet the City’s Environmental Impact Study (EIS) and Subject Lands Status Report (SLSR) requirements for Schedule “B” projects.

3.3 Consultation and Engagement

Consultation and engagement is an integral part of the Master Plan process and various methods will be used to solicit input from various stakeholders, the public and First Nations and Métis. These are described below.

3.3.1 Stakeholder Consultation

Stakeholder meetings were held in Stage 2 to solicit input on various river uses and options for continued recreational opportunities to continue on the Thames River. Additional input from these stakeholders will be gathered through correspondence and meetings were required.

3.3.2 Public Consultation

Public consultation in Stage 2 will include Public Information Centres (PICs) and the continuation of the City’s online communications platform that was very successful in soliciting input and communicating to the public in Stage 1. This will provide more opportunities to receive continued feedback from members of the public through the use of short, electronic surveys.

3.3.3 First Nation and Métis Engagement

First Nations and Métis input is key to Master Plan success. As part of the scope of work for Stage 1 of the EA, the goal was to have early and continuous input from the First Nations on the problem definition, alternatives, evaluation criteria and the overall preferred strategy. During Stage 1, all First Nations in the Study Area were contacted to provide them with project information and solicit feedback. Stage 1 also included a First Nations PIC. The City recognizes the importance of continuing engagement throughout the process, and being proactive in seeking their input. A second and third First Nations PIC is planned for Stage 2.

3.3.4 Steering Committee Meetings

The Internal Steering Committee is comprised of City staff and is responsible for the business issues associated with the project and for providing guidance and support to the sponsor, project manager and project team. The Steering Committee consists of staff who are representative of the business area(s) and have a direct, vested interest in realizing the project’s deliverables and objectives. Steering Committee meetings will be continued in Stage 2.

3.3.5 Agency Advisory Committee Meetings

An Agency Advisory Committee was formed in Stage 1 to provide guidance on regulatory processes and issues that may arise as the project progresses. These agencies include the MNRF, MOECC, UTRCA, LTRCA and DFO. The intent of the Agency meetings in Stage 1 was to determine the issues and challenges around permitting and approvals for the dam alternatives. In Stage 2, continued consultation with agencies for infrastructure and river management options will continue.

3.4 Integration of Existing River Management Planning

3.4.1 “Forks of the Thames”, Back to the River Design Integration

The Back to the River “Ribbon of the Thames” award-winning design incorporates a number of elements that support a River vision that has been called bold and exciting. It focuses on bringing people back to the River to enjoy a significant cultural and heritage resource and engage in activities that reflect the River’s beauty and cultural significance. Development of the preferred option for the “Forks of the Thames” will be carried out in Stage 2 as a Schedule “B” component of the One River EA. Coordination will be done with the Ribbon of the Thames Civitas/Stantec team on how the design elements of Back to the River can be integrated into the EA evaluation.

3.4.2 TVCP Integration

The City has developed a corridor based plan for the Thames River that looks at the multifunctional role of the river corridor. Recommendations from that plan will be considered and integrated into the EA process.

3.4.3 Official Plan Integration

As required by the Planning Act, all municipal works shall comply with the City’s Official Plan (OP). Proposed projects under this EA will be reviewed against all OP policies.

4.0 Schedule for Stage 2

The approximate schedule for major deliverables and consultation activities that are part of Stage 2 are illustrated in Table 4.1.

Table 4.1: Stage 2 Schedule

Task/Deliverable	February	March	April	May	June	July	August	September	October
Final Work Plan Approval									
Short List of Alternatives									
First Nations PIC #1									
Public PIC #1									
Modelling Report									
Natural Environment Study Reports									
Draft Implementation Plan									
Draft Master Plan									
First Nations PIC #2									
Public PIC #2									
Second Draft Master Plan									
30 Day Review Period									
Final Master Plan									

5.0 Next Steps

The Stage 2 assessment of River Management strategies will be a more detailed evaluation of various requirements for the specific works identified in this memorandum. Development of more detailed environmental conditions will begin for the Schedule “B” project areas and integration of the “Back to the River” design for the “Forks of the Thames” project area will begin through discussions with the Civitas/Stantec design team. The existing Thames River model will be refined to provide the hydraulic details necessary to assess the project works.

Consultation and engagement activities will be initiated to provide input into Stage 2 alternatives development. In Stage 2, these alternatives for river management will be evaluated and criteria for this evaluation process will also be established as drafted in Table 5.1. The criteria will be based on consultation with the City, and in consideration of community, First Nation, Métis, and agency inputs during the Class EA and Schedule “B” consultation process, to best reflect the priorities of all stakeholders and First Nations. River management strategies and Schedule “B” projects for the “Forks of the Thames” and decommissioning the dam will be scored and ranked to establish the preferred Strategy that best addresses the problem/opportunity statement and **“will preserve for future generations this valuable resource and allow people of all abilities to enjoy and access this designated Canadian Heritage River”**.

Table 5.1: Draft Evaluation Criteria for Assessing River Options

Category & Criterion	Description
Natural Environmental	
Water Quality	The potential of the option to maintain or improve water quality to Provincial Water Quality Objectives (PWQOs) or better.
Geomorphology	The potential of the option to result in a stable streambank condition with respect to slope stability and erosion (upstream and downstream).
Sedimentation	The potential for the option to optimize sediment transport to a stable sediment load condition.
Species at Risk	The potential of the option to protect sensitive species and species at risk (both aquatic and terrestrial).
Terrestrial Habitat	The potential for the option to maintain or enhance terrestrial habitat by protecting sensitive areas.
Aquatic Habitat	The potential for the option to maintain or enhance aquatic habitat that supports benthic and fish communities.
Groundwater	The ability of the option to protect groundwater resources from a quality and quantity perspective.
Social/Cultural Environment	
Cultural Heritage	The potential of the option to protect cultural/heritage resources.

Public Health & Safety	The potential of the option to minimize risk or liability to community health and safety resulting from flooding.
Recreation Opportunity	The potential of the option to provide or enhance recreational activities.
Downtown Integration	The potential of the option to impact the integration of the River with the downtown area.
River Destinations	The potential for the option to permit city-wide destinations that include both built (mixed-use developments) and natural places.
Urban Waterfronts	The potential for the solution to permit an “urban” waterfront in certain locations.
Aesthetics	The ability of the option to maintain or enhance the visual character of the study area.
Stakeholder Acceptance	The potential of the option to be accepted by stakeholders including landowners, First Nations, Métis, and the public based on comments and feedback received through public consultation during the study.
The London Plan Integration	The ability of option to incorporate recommendations from The London Plan.
TVCP Integration	The ability of option to incorporate recommendations from the TVCP.
Technical and Economic	
Flood Control	The ability of the alternative to allow for the required flooding control.
Erosion Control	The ability of the alternative to mitigate streambank erosion upstream and downstream of Springbank Dam.
Constructability, Implementation, and Work Scope	The ability of the option to be constructed and implemented on a technical, regulatory, and practical basis; within a reasonable scope of work. In particular, the ability of the option to meet required approvals from the City of London and regulating agencies (UTRCA, MNRF, MOECC, DFO).
Operations & Maintenance	The ability of the option to be operated and maintained within regular operating parameters at the City. (Operational and Maintenance requirements of the options will be described).
Compatibility with existing and planned infrastructure projects	The ability of the option to be compatible with existing and planned projects.
Relative Capital Cost	Estimated capital cost relative to other options.

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON MARCH 19, 2018
FROM:	KELLY SCHERR, P. ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL & 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 attached proposed by-law (Appendix A) **BE INTRODUCED** at the Municipal Council meeting to be held on March 27, 2018 for the purpose of amending the Traffic and Parking By-law (PS-113).

PREVIOUS REPORTS PERTINENT TO THIS MATTER
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Additional information with respect to the bus stop changes can be found in the following reports:

- Civic Works Committee – October 4, 2016 – [Infrastructure Canada Phase One Investments Public Transit Infrastructure Fund](#);
- Civic Works Committee – December 12, 2016 – [Dundas Place Environmental Assessment Study Report](#);
- Civic Works Committee – April 24, 2017 – [London Transit Commission Buses Off Dundas Street Update](#);
- Strategic Priorities and Policy Committee – May 3, 2017 – [Rapid Transit Alternative Corridor Review](#);
- Strategic Priorities and Policy Committee – May 15, 2017 – [Rapid Transit Corridors](#);
- Strategic Priorities and Policy Committee – July 24, 2017 – [Shift Rapid Transit Master Plan and Business Case](#); and
- Civic Works Committee – September 26, 2017 – [Transit Rerouting Off Dundas Street in Downtown Report](#).

2015-19 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 (Appendix A) to address traffic safety, operations and parking concerns. The following amendments are proposed:

1. Transit Rerouting Off Dundas Street

On September 26, 2017, the Civic Works Committee approved the rerouting of transit from Dundas Street to King Street and Queens Street. Changes to the existing London Transit Stops, Parking Zones, Loading Zones, No Parking Zones and No Stopping Zones as outlined below are required to accommodate this change. Letters have been sent to all property owners along the impacted streets advising them of these changes. Letters were also hand delivered to help ensure tenants are also aware of the changes.

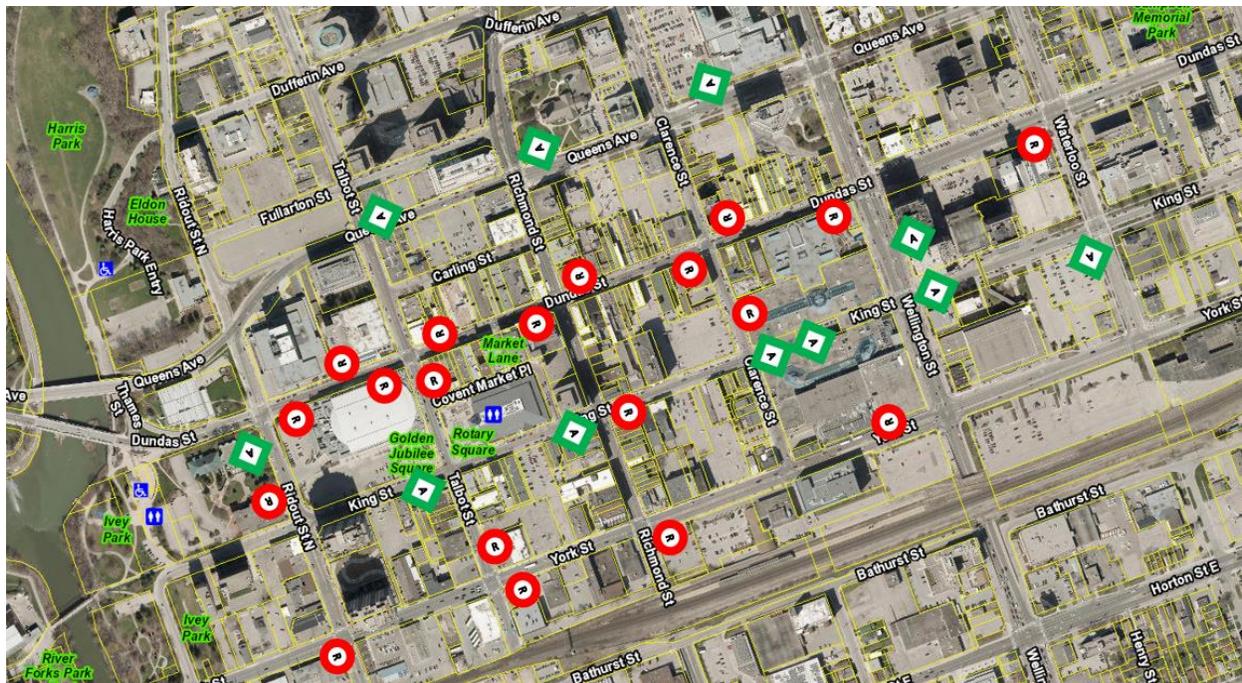


Figure 1: Proposed and Removed Bus Stops

It should be noted that the following maps do not show all of the various parking regulations in order to provide clarity.

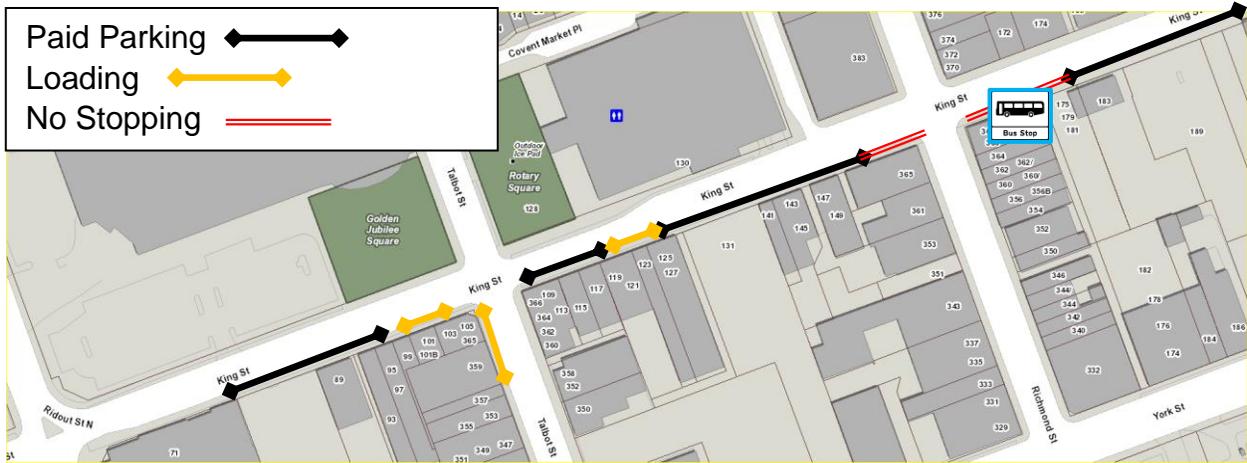


Figure 2: Existing King Street, Ridout Street N to Clarence Street

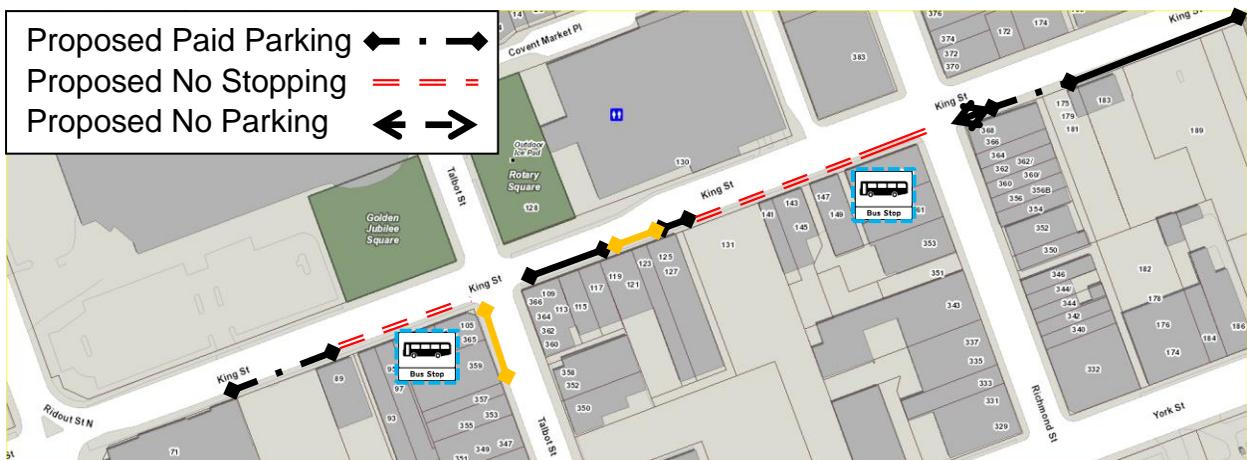


Figure 3: Proposed King Street, Ridout Street N to Clarence Street

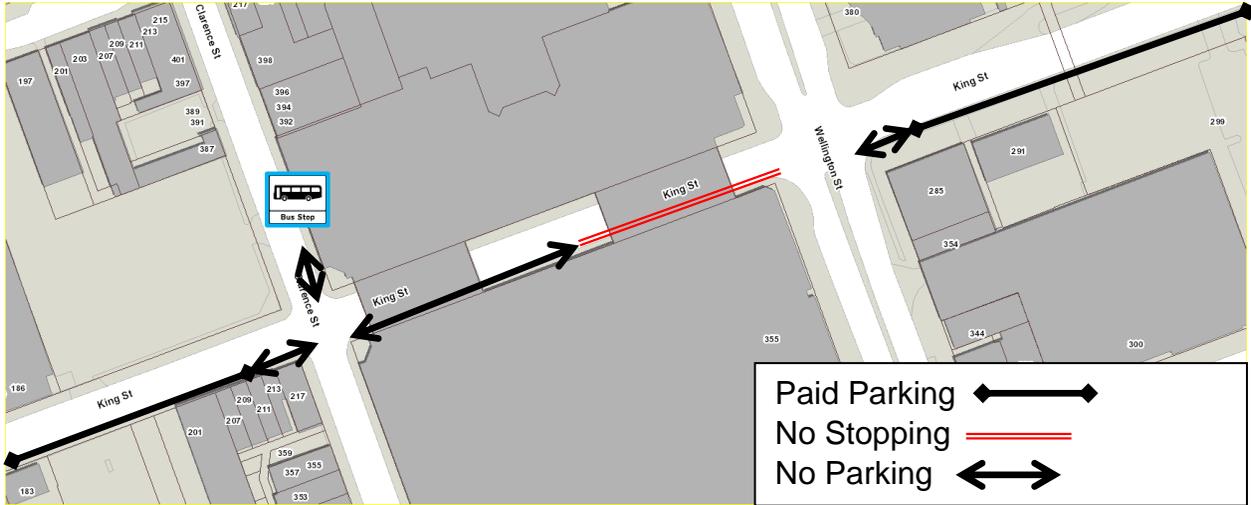


Figure 4: Existing King Street, Clarence Street to Wellington Street

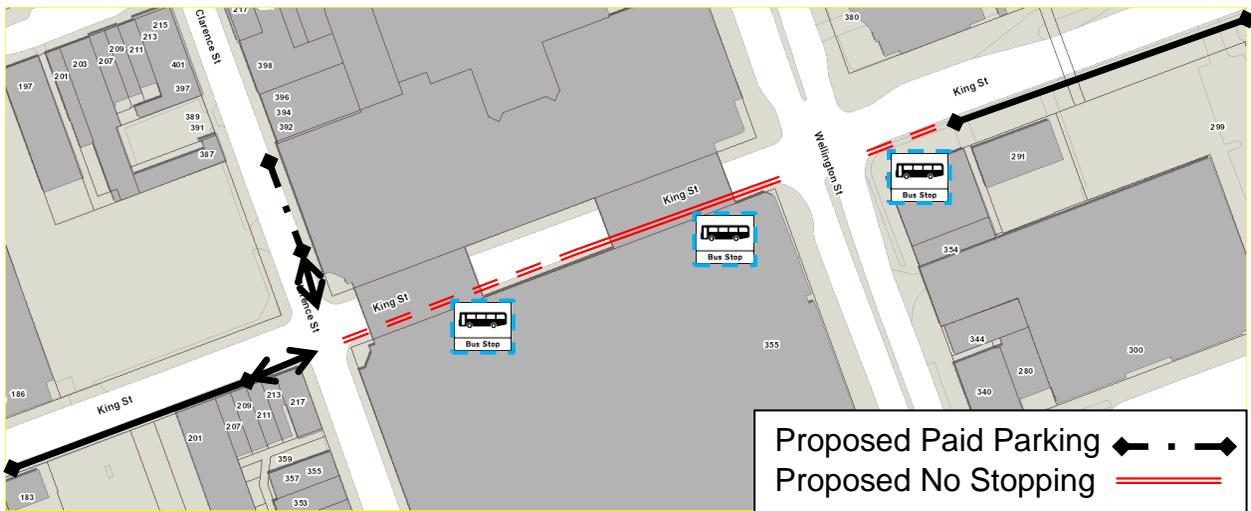


Figure 5: Proposed King Street, Clarence Street to Wellington Street

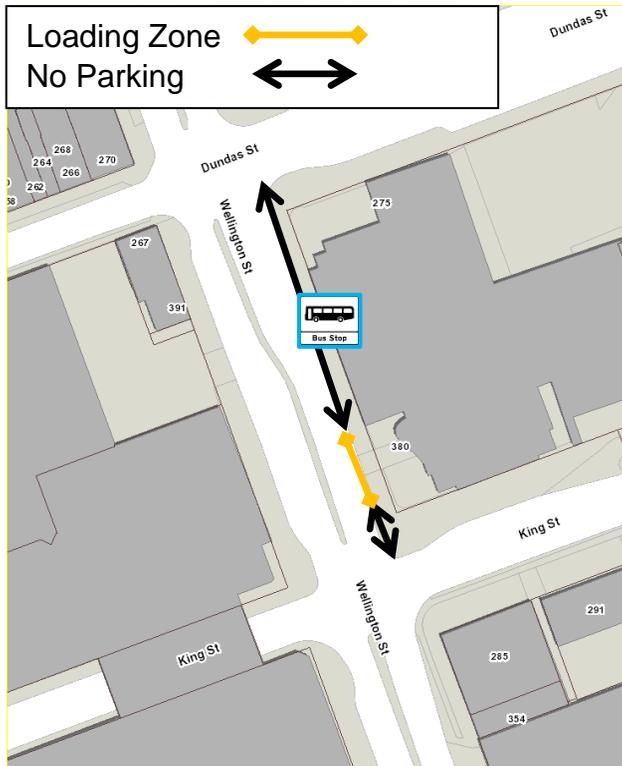


Figure 6: Existing Wellington Street, King Street to Dundas Street

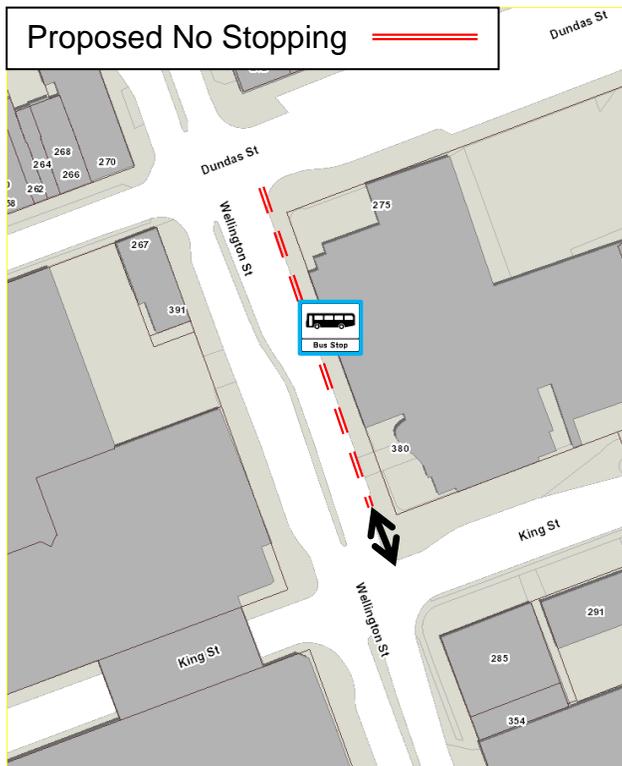


Figure 7: Proposed Wellington Street, King Street to Dundas Street

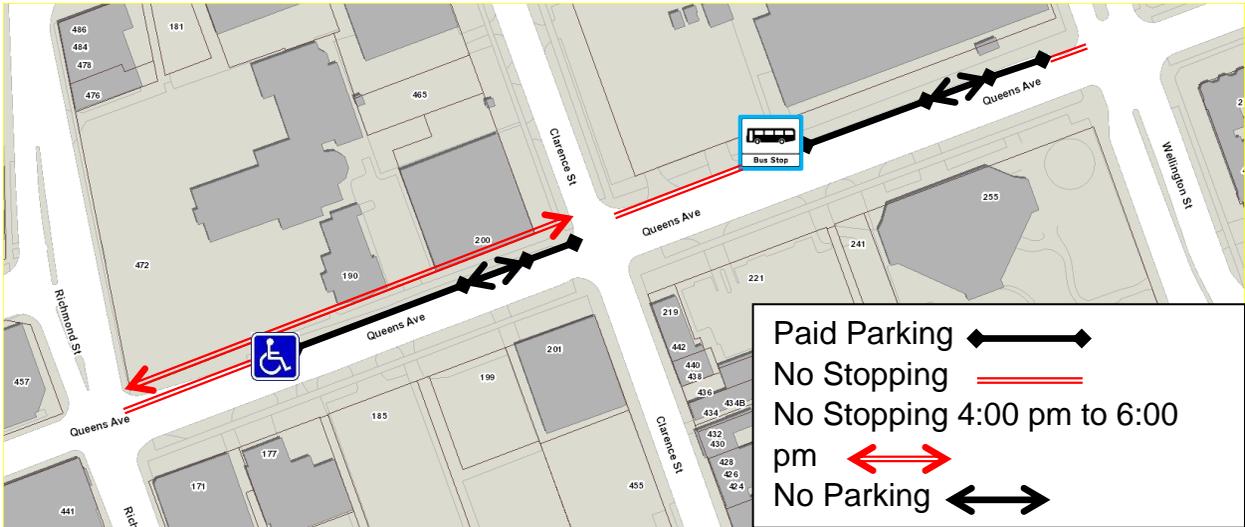


Figure 8: Existing Queens Avenue, Clarence Street to Wellington Street



Figure 9: Proposed Queens Avenue, Clarence Street to Wellington Street



Figure 10: Existing Queens Avenue, Ridout Street N to Richmond Street



Figure 11: Proposed Queens Avenue, Ridout Street N to Richmond Street

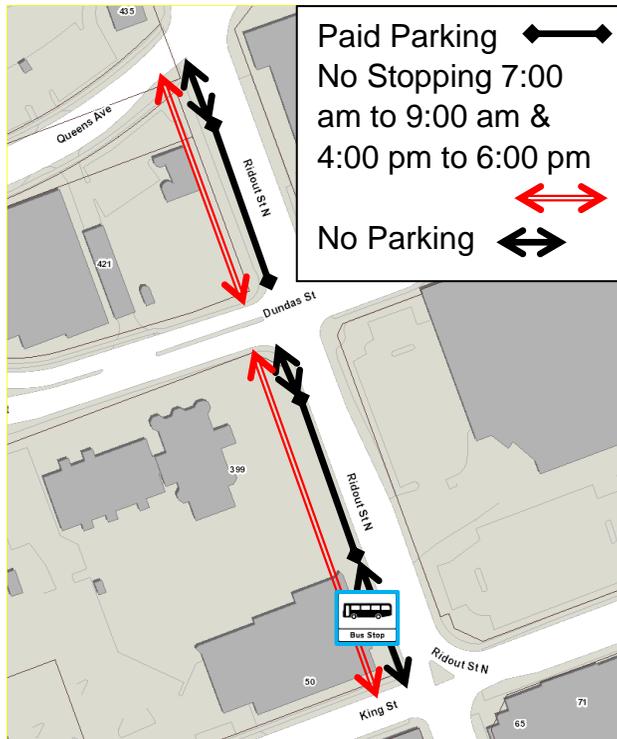


Figure 12: Existing Ridout Street N, King Street to Queens Avenue

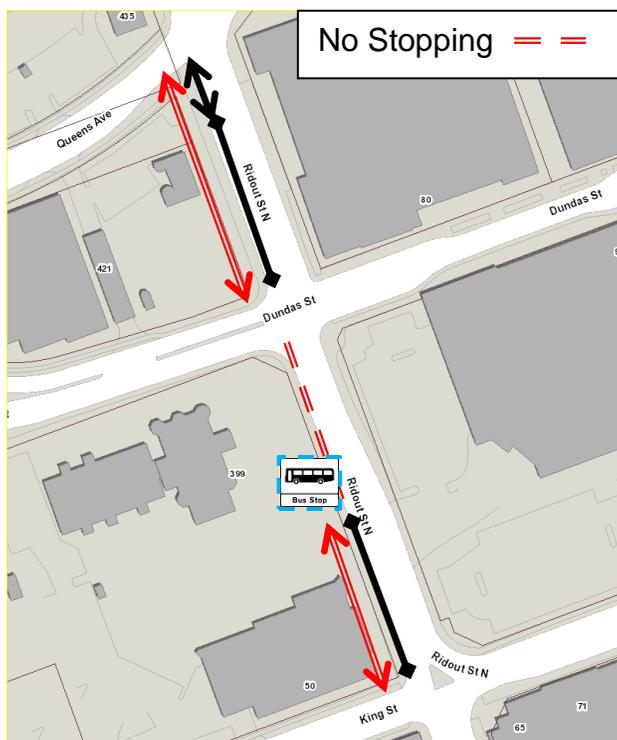


Figure 13: Proposed Ridout Street N, King Street to Queens Avenue

An amendment is required to Schedule 1 (No Stopping), Schedule 2 (No Parking), Schedule 3 (Bus Stops), Schedule 5 (Loading Zones), and Schedule 27 (Designated Parking Spaces – Disabled Person) for the above changes.

2. No Stopping

Dawn Drive

Staff received a request from Princess Anne French Immersion Public School to review the on-street parking regulations with regards to safety concerns for Dawn Drive from Whitehall Drive to Moffatt Avenue due to vehicles parking and/or stopping on the east side of Dawn Drive opposite the School Bus Loading zone during the morning school drop-off time. Currently the east side of Dawn Drive from Whitehall Drive to Moffatt Avenue is 'No Stopping 2:00 p.m. to 3:00 p.m., Monday to Friday September 1st to June 30th'. It is recommended to add 'No Stopping 8:00 a.m. to 9:00 a.m. Monday to Friday September 1st to June 30th' to address the concerns.

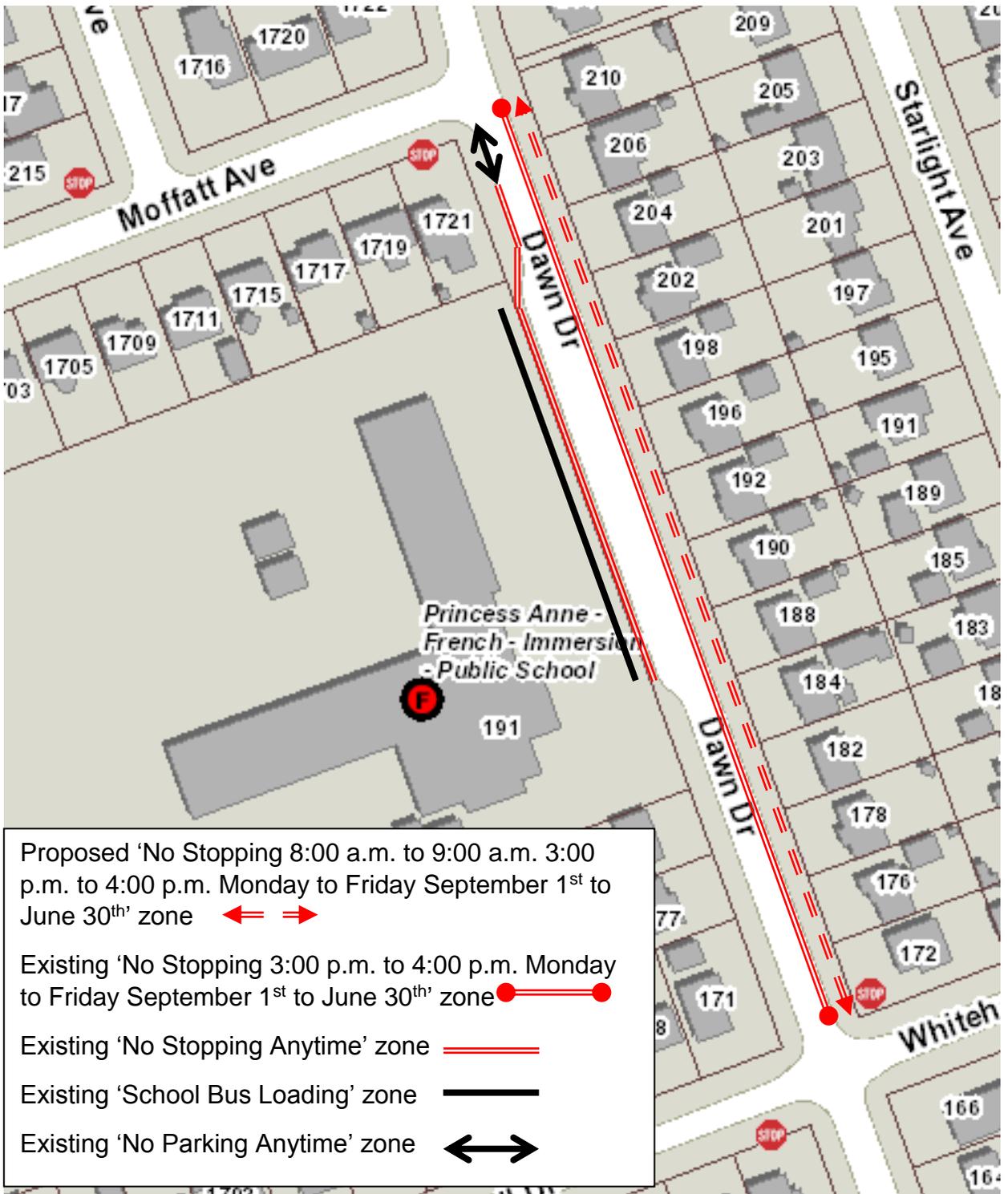


Figure 14: Dawn Drive

An amendment is required to Schedule 1 (No Stopping) for the above change.

3. **No Parking**

Year-round Overnight Parking Restriction

Included in Schedule 2 (No Parking) are streets with year-round 'No Parking, 3:00 a.m. to 5:00 am' restrictions. When these streets opted out of the relaxation of the Overnight Parking Restrictions it was intended that the restriction be applied all-year long. In order to improve clarity the line "Monday to Sunday" should be added to each the streets. It should be noted that the on-street signage will not change.

Charles Street

A review of Schedule 2 Prohibited Parking on a Specified Street revealed an error stating the No Parking zone on the south and east side of Charles Street from Mount Pleasant Avenue to Wharncliffe Road N from 12:00 a.m. to 3:00 a.m. Monday to Saturday, when it should be 12:00 a.m. to 3:00 a.m. Monday to Sunday. It is recommended to correct the error in the by-law schedule to ensure accuracy of parking enforcement.

Devonshire Avenue

At the request of local residents, a mail-back survey was sent to the property owners on Devonshire Avenue where the majority of the respondents supported extending the existing 'No Parking Anytime' zone on the north side of Devonshire Avenue from Wharncliffe Road S to Edward Street.

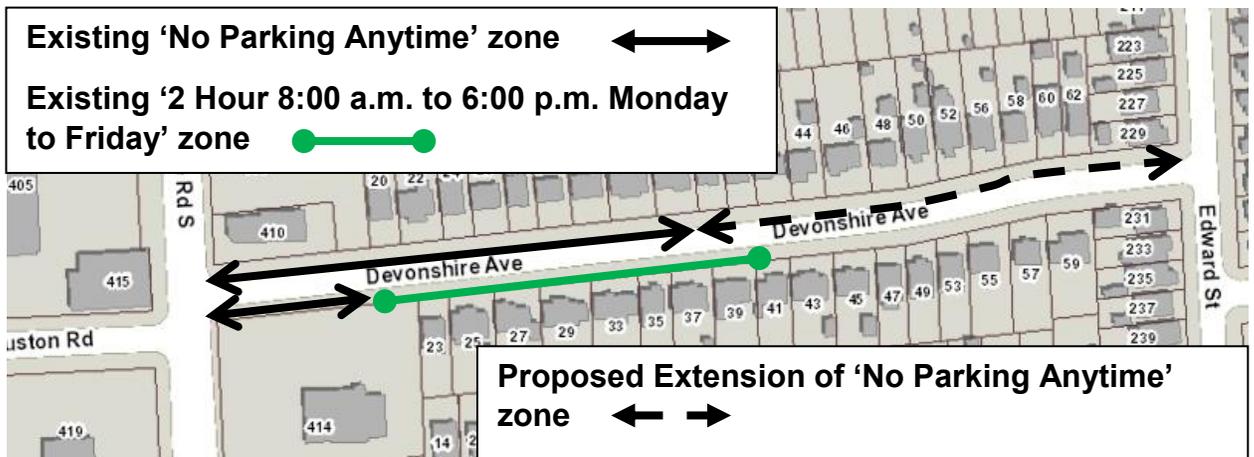


Figure15: Devonshire Avenue

Fairview Avenue

Staff received a request from London Transit to review the on-street parking near a transit stop on Fairview Avenue. Vehicles that park too close to the transit stop make it difficult to load passengers from the sidewalk connector pad and make it difficult for the transit bus to egress the transit stop. It is recommended to implement the 'No Parking Anytime' zones to address these concerns.

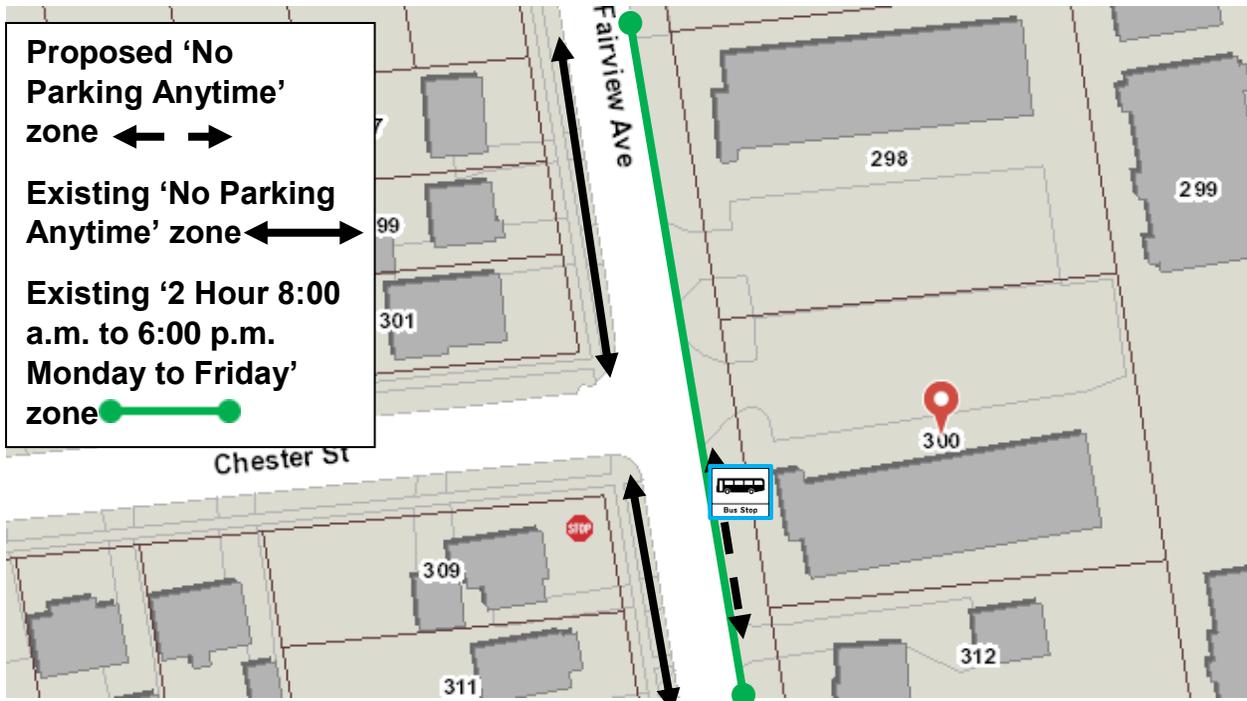


Figure 16: Fairview Avenue

Wickerson Road

Construction vehicles related to nearby development, continue to park on Wickerson Road south of Tibet Butler Boulevard in an area without shoulders. It is recommended that the 'No Parking Anytime' zone on Wickerson Road be extended southerly to Southdale Road W.

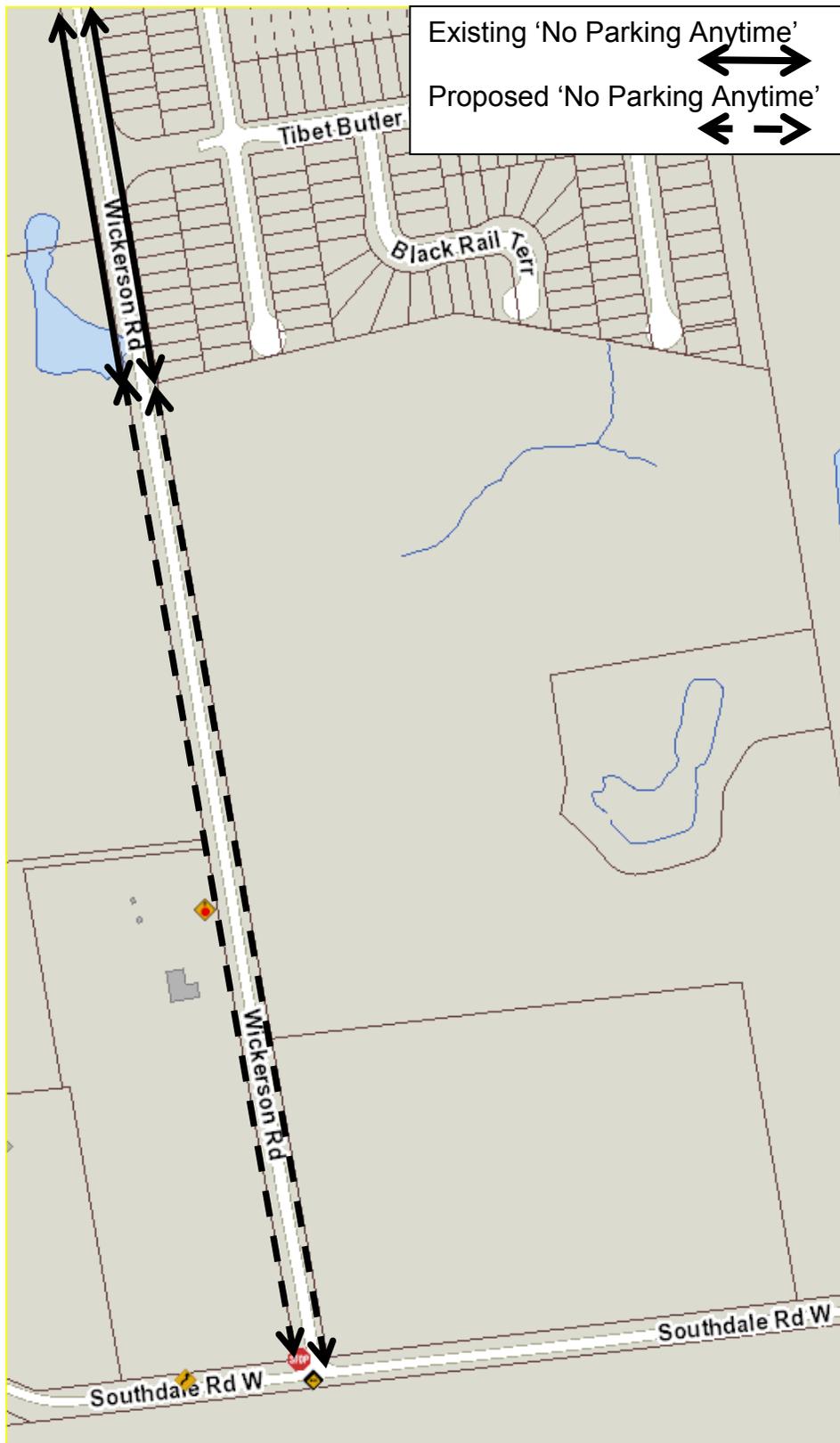


Figure 17: Wickerson Road

An amendment is required to Schedule 2 (No Parking) for the above changes.

4. Regulatory Signs

Due to changes to the Riverbend Subdivision road layout, it is recommended that stop signs be installed on Logans Way at Riverbend Road, Logans Trail at Riverbend Road and Logans Run at Shore Road. Additionally, a traffic study was conducted at the intersection of Riverbend Road at Shore Road, which concluded that the intersection satisfied the warrant for an All-way stop.



Figure 18: Logans Run at Shore Road and Riverbend Road at Shore Road

An amendment is required to Schedule 10 (Entering Highway (Stop Signs on Specified Streets)) and 11 (Entering Highway (Yield Signs on Specified Streets)) for the above changes.

5. School Zone Speed Limits

It is recommended that the speed limit be reduced to 40 km/h at the following locations as per the School Zone Speed Limit Policy approved by Council:

Covenant Christian School

Howard Avenue Sunray Avenue to David Street

Sunray Avenue Colonel Talbot Road to Howard Avenue

It should be noted that Colonel Talbot Road is classified as an arterial road; therefore, the School Zone Speed Limit does not apply.

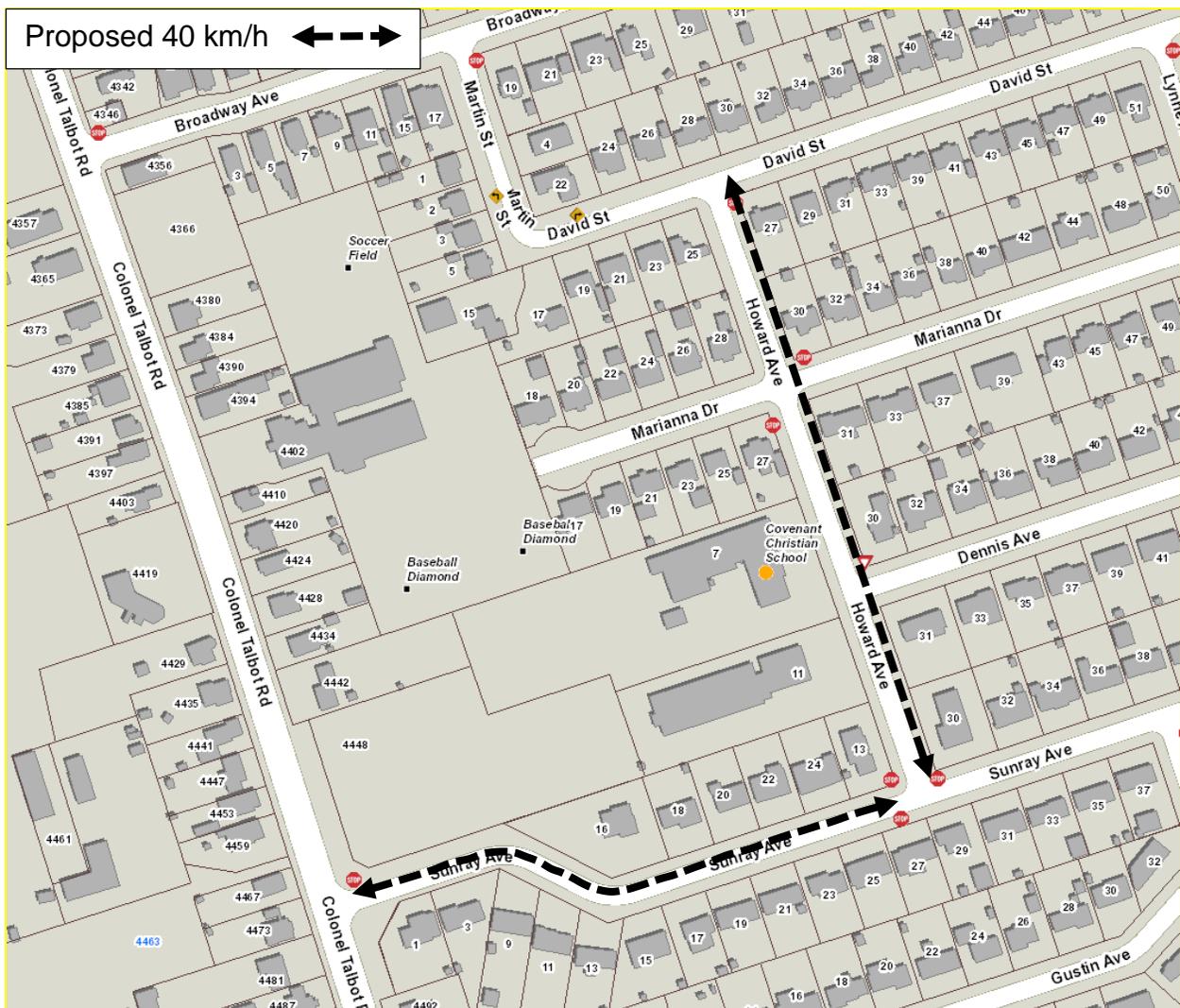


Figure 19: Covenant Christian School

Holy Cross Catholic Elementary School

Elm Street

Hamilton Road to Trafalgar Street

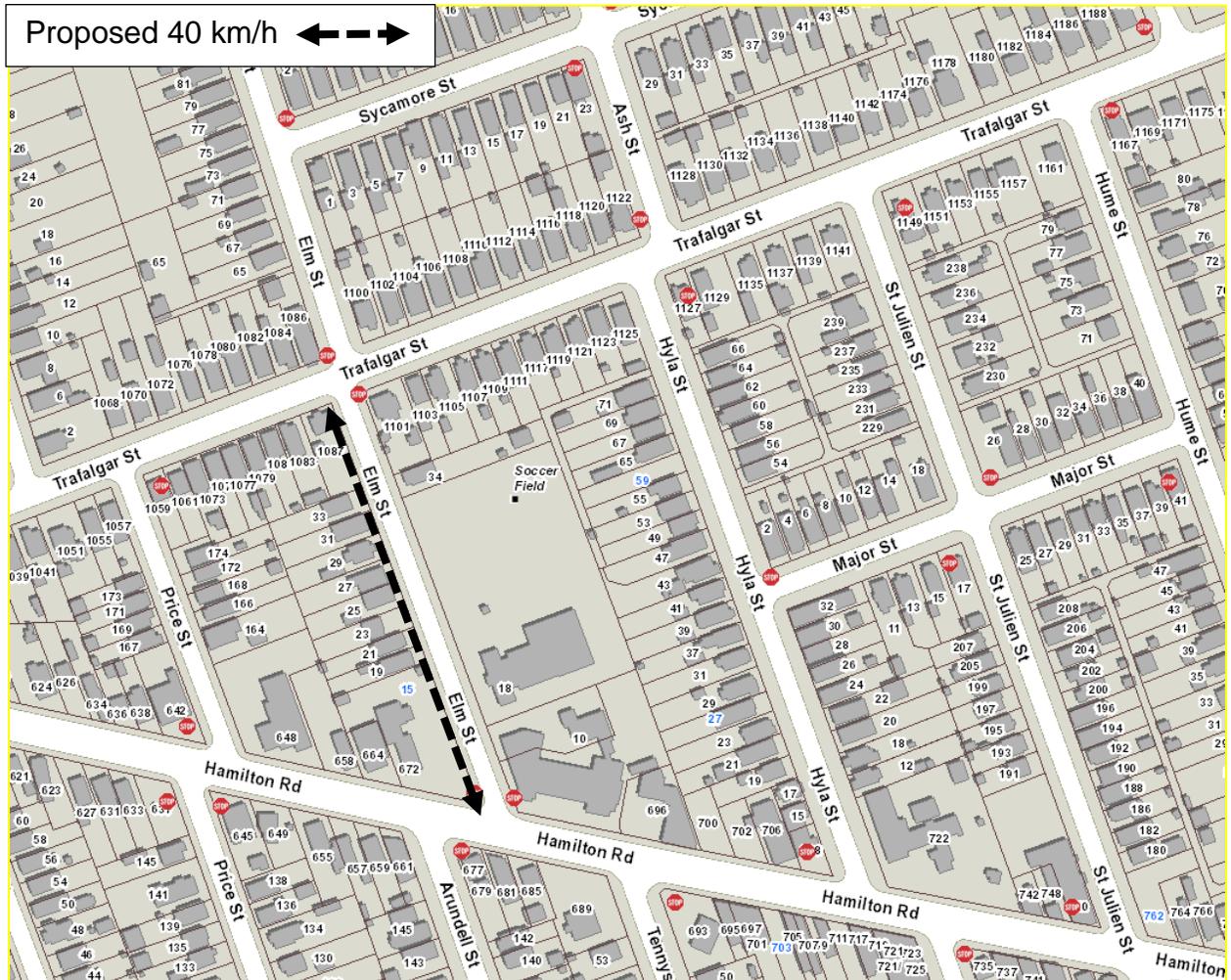


Figure 20: Holy Cross Catholic Elementary School

London Waldorf School

Beaufort Street

Wharncliffe Road N to east limit of Beaufort Street



Figure 21: London Waldorf School

St. Martin Catholic School

Duchess Avenue Cathcart Street to Wortley Road

Elmwood Avenue E Cathcart Street to Wortley Road

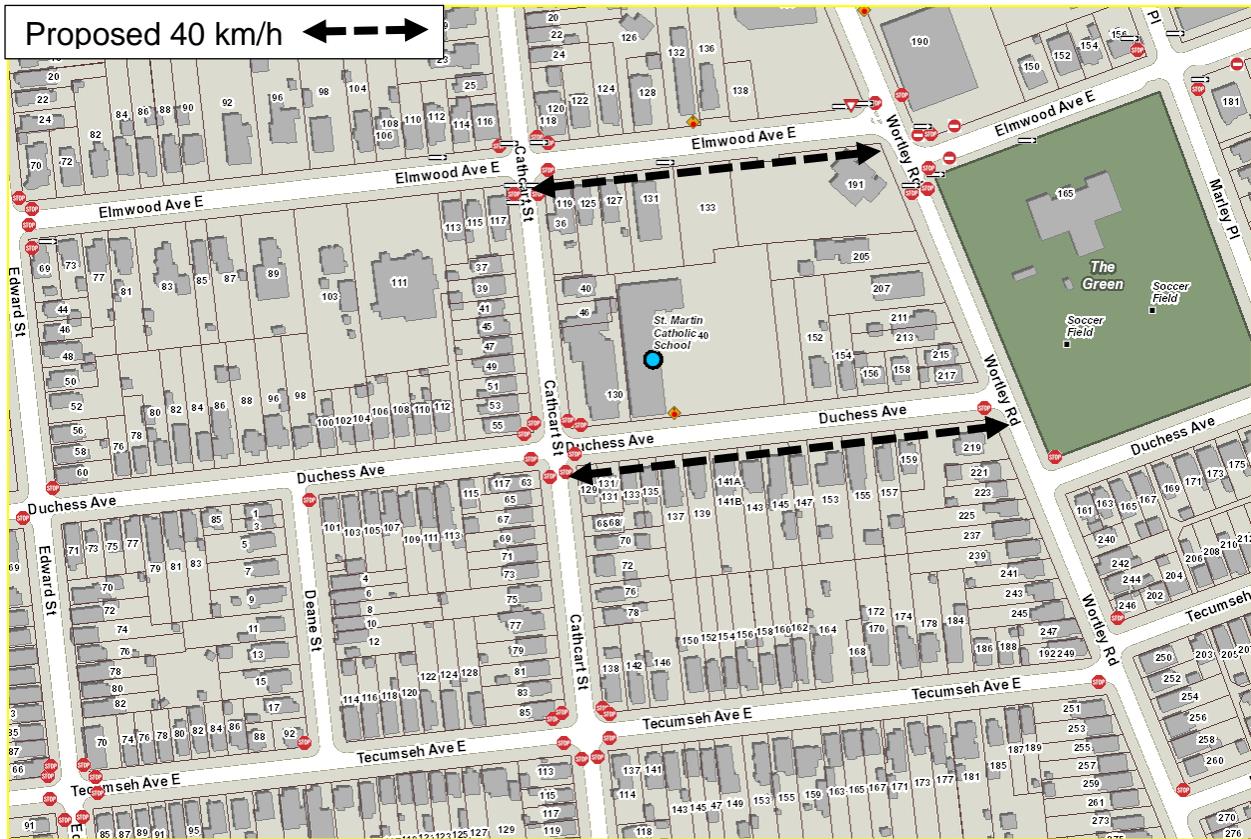


Figure 22: St. Martin Catholic School

St. Michael Catholic School

Maitland Street

Grosvenor Street to Cheapside Street

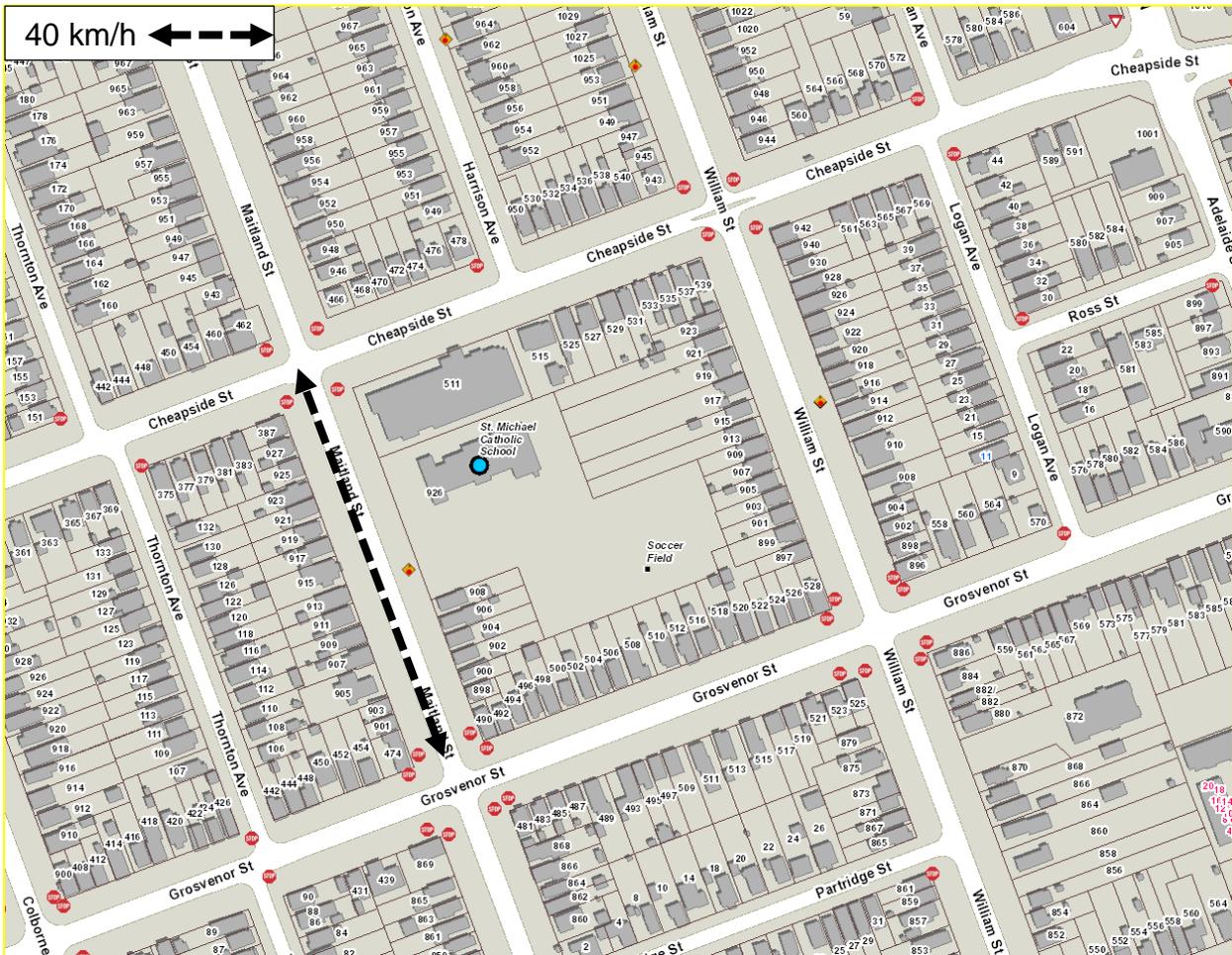


Figure 23: St. Michael Catholic School

Victoria Public School

Askin Street Wharncliffe Road S to a point 35m east of Cynthia Street

Byron Avenue E Wharncliffe Road S to Birch Street

It should be noted that Wharncliffe Road S is classified as an arterial road; therefore, the School Zone Speed Limit does not apply.

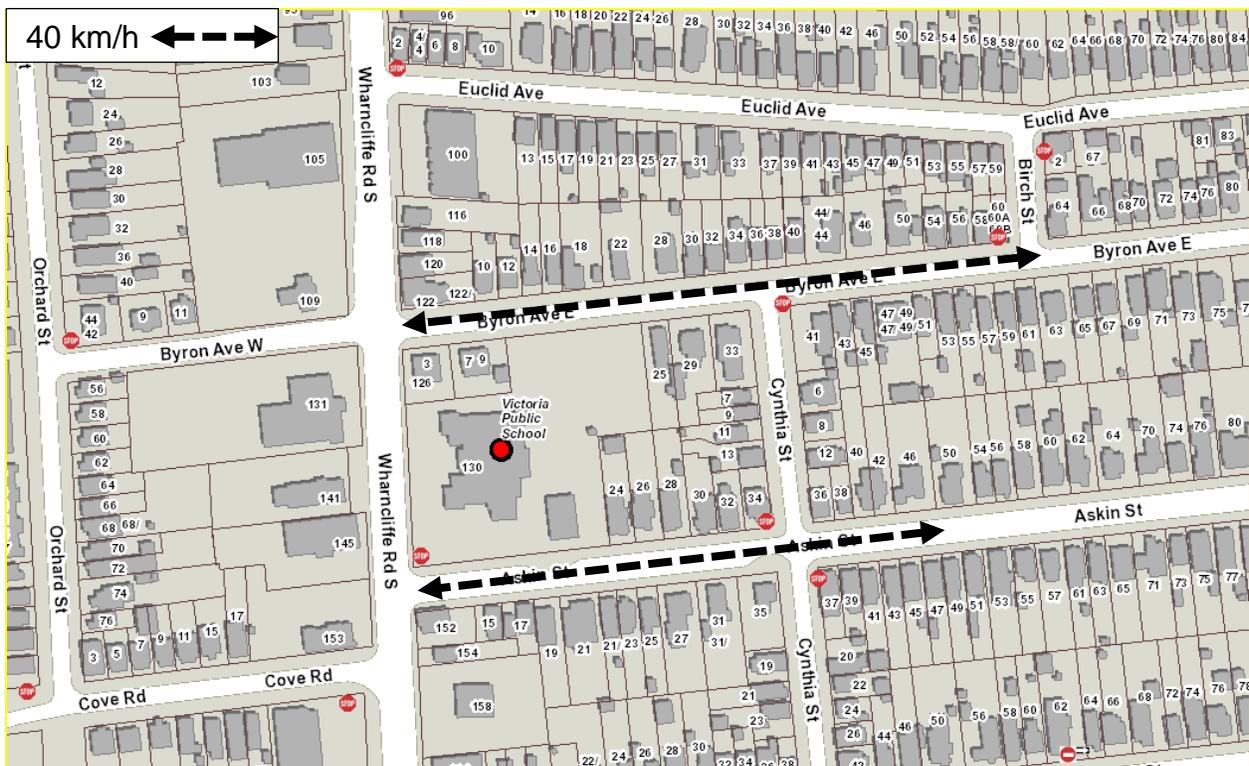


Figure 24: Victoria Public School

An amendment is required to Schedule 17.1 (Lower Speed limits) for the above changes.

This report was prepared by Andrea Hamilton, Doug Bolton and Shane Maguire of the Roadway Lighting & Traffic Control Division.

PREPARED BY:	REVIEWED & CONCURRED BY:
SHANE MAGUIRE, P. ENG. DIVISION MANAGER, ROADWAY LIGHTING & TRAFFIC CONTROL	EDWARD SOLDI, P.ENG. DIRECTOR, ROADS AND TRANSPORTATION
RECOMMENDED BY:	
KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER	

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March 1, 2018/sm

Attach: Appendix A: Proposed Traffic & Parking By-Law Amendments

cc. City Solicitor's Office
Parking Office

APPENDIX A

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

Bill No.
2018

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 By-law PS-113 is hereby amended by **deleting** the following rows:

Dawn Drive	East	Moffat Avenue	Whitehall Drive	2:00 pm to 3:00 pm Monday to Friday September 1st to June 30th
King Street	South	A point 92 m east of Clarence Street	Wellington Street	Anytime
King Street	South	Richmond Street	A point 42 m east of Richmond Street	Anytime
Queens Avenue	North	Clarence Street	A point 55 m east of Clarence Street	Anytime
Queens Avenue	North	A point 11 m west of Richmond Street	A point 49 m east of Said street	Anytime

Ridout Street N	West	Queens Avenue	King Street	7:30 am to 9:00 am & 4:00 pm to 6:00 pm
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Schedule 1 (No Stopping) of the By-law PS-113 is hereby amended by **adding** the following rows:

Dawn Drive	East	A point 254 m south of Seeley Drive	Whitehall Drive	8:00 a.m. to 9:00 a.m. and 2:00 p.m. to 3:00 p.m. Monday to Friday September 1st to June 30th
King Street	South	Clarence Street	A point 48 m east of Wellington Street	Anytime
King Street	South	A point 76 m west of Richmond Street	Richmond Street	Anytime
King Street	South	A point 53m west of Talbot Street	Talbot Street	Anytime
Queens Avenue	North	Clarence Street	A point 115 m east of Clarence Street	Anytime
Queens Avenue	North	A point 11 m west of Richmond Street	A point 68 m east of Richmond Street	Anytime
Queens Avenue	North	A point 68 m east of Richmond Street	A point 94 m east of Richmond Street	Monday to Saturday
Queens Avenue	North	Talbot Street	A point 84 m east of Talbot Street	Anytime
Ridout Street N	West	A point 55 m south of Dundas Street	Dundas Street	Anytime

Ridout Street N	West	Queens Avenue	A point 69 m north of King Street	7:00 am to 9:30 am & 3:30 pm to 6:30 pm
Wellington Street	East	King Street	Dundas Street	Anytime

2. No Parking

Schedule 2 (No Parking) of the By-law PS-113 is hereby amended by **deleting** the following rows:

Algoma Place	Both	Algoma Avenue	North limit of Algoma Place	3:00 am to 5:00 am
Ambleside Drive	Both	Grangeover Avenue	Western Road	3:00 am to 5:00 am
Audrey Avenue	Both	Broughdale Avenue	Huron Street	3:00 am to 5:00 am
Barons Crescent	Both	Highland Heights	East end of street	3:00 am to 5:00 am
Beckworth Avenue	Both	Toukay Crescent	Sorrel Road	3:00 am to 5:00 am
Bernard Avenue	Both	Richmond Street	East end of Street	3:00 am to 5:00 am
Brough Street	Both	Huron Street	University Crescent	3:00 am to 5:00 am
Broughdale Avenue	Both	West end of street	Brough Street	3:00 am to 5:00 am
Canterbury Road	Both	Windermere Road	Richmond Street	3:00 am to 5:00 am
Charles Street	South & East	Mount Pleasant Avenue	Wharnccliffe Road N	12:00 am to 3:00 am Monday to Saturday
Clarence Street	East	A point 42 m north of King Street	King Street	Anytime
Clearview Avenue	Both	Thames Valley Avenue	Sunningdale Avenue	3:00 am to 5:00 am
College Street	North	West driveway to St. Joseph LTC Facility	A point 18 m east of said driveway	3:00 am to 5:00 am

Dale Street	Both	First Street	Hansuld Street	3:00 am to 5:00 am
Devonshire Avenue	North	Wharnccliffe Road S	185 m easterly	Anytime
Epworth Avenue	Both	Richmond Street	Waterloo Street	3:00 am to 5:00 am
Farmsborough Crescent	Both	Langdon Road	Fleming Drive	3:00 am to 5:00 am
Fleming Drive	Both	Fanshawe College Blvd	East end of street	3:00 am to 5:00 am
Fleming Drive	Both	Fleming Drive (west intersection)	Fleming Drive (east intersection)	3:00 am to 5:00 am
Fox Avenue	Both	Tamblyn Drive	Trott Drive	3:00 am to 5:00 am
Gibbons Place	East	Victoria Street	South end of street	3:00 am to 5:00 am
Godfrey Drive	Both	Highbury Avenue N	East end of Street	5:00 am
Godfrey Drive	Both	Godfrey Drive (west intersection)	Godfrey Drive (east intersection)	3:00 am to 5:00 am
Goldwick Crescent	Both	Portland Street (north intersection)	Farnsborough Crescent	3:00 am to 5:00 am
Hansuld Street	Both	First Street	Dale Street	3:00 am to 5:00 am
Hartlet Street	Both	First Street	Second Street	3:00 am to 5:00 am
Hawkesbury Avenue	Both	Toukay Crescent	Perth Avenue	3:00 am to 5:00 am
Howland Avenue	Both	West end of street	First Street	3:00 am to 5:00 am
Huron Street	Both	The Parkway	Fraser Avenue	3:00 am to 5:00 am
Irving Place	Both	Mark Street	Michael Street	3:00 am to 5:00 am

King Street	South	A point 40 m east of Clarence Street	A point 70 m east of said street	Anytime
King Street	South	A point 55 m west of Clarence Street	A point 100 m east of said street	Anytime
Lancaster Street	Both	Beckworth Avenue	Goldwick Crescent	3:00 am to 5:00 am
Langton Road	Both	Beckworth Avenue	Sorrell Road	3:00 am to 5:00 am
Madeira Drive	Both	Langton Road	Beckworth Avenue	3:00 am to 5:00 am
Mardell Place	Both	West end of street	First Street	3:00 am to 5:00 am
Mardell Place	Both	First Street	Second Street	3:00 am to 5:00 am
Mayfair Drive	Both	Richmond Street	Meadowdown Drive	3:00 am to 5:00 am
McStay Road	Both	Hillside Drive	Shavian Blvd	3:00 am to 5:00 am
Nairn Avenue	Both	Sorrell Road	Kaladar Drive	3:00 am to 5:00 am
Parkdale Avenue	Both	Parkdale Avenue	Richmond Street	3:00 am to 5:00 am
Parkdale Crescent	Both	Parkdale Avenue	Richmond Street	3:00 am to 5:00 am
Patricia Street	Both	Huron Street	University Crescent	3:00 am to 5:00 am
Portland Street	Both	Beckworth Avenue	Goldwick Crescent	3:00 am to 5:00 am
Prosperity Court	Both	Fleming Drive	East end of street	3:00 am to 5:00 am
Queens Avenue	North	Clarence Street	55 m easterly	Anytime

Queens Avenue	North	A point 110 m east of Clarence Street	A point 132 m easterly from the said Street	Anytime
Queens Avenue	North	Talbot Street	40 m easterly	Anytime
Raymond Avenue	Both	Richmond Street	Bernard Avenue	3:00 am to 5:00 am
Ridout Street N	West	King Street	A point 47 m north of the said street	Anytime
Roehampton Avenue	Both	Oxford Street E (west intersection)	Oxford Street E (east intersection)	3:00 am to 5:00 am
Rushland Avenue	Both	West end of street	First Street	3:00 am to 5:00 am
St. Bees Close	Both	Ambleside Drive	End of street	3:00 am to 5:00 am
St. Bees Court	Both	St. Bees Close	East end of street	3:00 am to 5:00 am
St. Bees Place	Both	St. Bees Close	East end of street	3:00 am to 5:00 am
St. George Street	Both	Huron Street	Regent St	3:00 am to 5:00 am
St. James Street	Both	Talbot Street	Richmond Street	3:00 am to 5:00 am
Second Street	Both	Dale Street	C.P.R. Right-of-Way	3:00 am to 5:00 am
Sorrel Road	Both	Huron Street	Cheapside Street	3:00 am to 5:00 am
Steele Street	Both	West end of street	Waterloo Street	3:00 am to 5:00 am
Sunset Street	Both	Huron Street	North end of the street	3:00 am to 5:00 am
Susan Avenue	Both	Mark Street (south intersection)	Mark Street (north intersection)	3:00 am to 5:00 am
Talbot Street	Both	Oxford Street E	Street James Street	3:00 am to 5:00 am

Tamblyn Drive	Both	Coombs Avenue	Fox Avenue	3:00 am to 5:00 am
Thurman Circle	Both	Farnsborough Crescent	Thurman Circle	3:00 am to 5:00 am
Tower Lane	Both	West end of street	Richmond Street	3:00 am to 5:00 am
University Crescent	Both	West end of street	Patricia Street	3:00 am to 5:00 am
Walmer Grove	Both	Walmer Gardens	East end of street	3:00 am to 5:00 am
Waterloo Street	Both	Epworth Avenue	Victoria Street	3:00 am to 5:00 am
Wellington Street	Both	Huron Street	Victoria Street	3:00 am to 5:00 am
Westchester Drive	Both	Canterbury Road	Richmond Street	3:00 am to 5:00 am
Westview Drive	Both	The Parkway	Huron St	3:00 am to 5:00 am
Wellington Street	East	A point 25 m north of King Street	River Thames	Anytime
Wickerson Road	East	A point 101 m north of Tibet Butler Boulevard	A point 150 m south of Tibet Butler Boulevard	Anytime
Wickerson Road	West	Byron Baseline Road	A point 150 m south of Tibet Butler Boulevard	Anytime

Schedule 2 (No Parking) of the By-law PS-113 is hereby amended by **adding** the following rows:

Algoma Place	Both	Algoma Avenue	North limit of Algoma Place	3:00 a.m. to 5:00 a.m. Monday to Sunday
Ambleside Drive	Both	Grangeover Avenue	Western Road	3:00 a.m. to 5:00 a.m. Monday to Sunday

Audrey Avenue	Both	Broughdale Avenue	Huron Street	3:00 a.m. to 5:00 a.m. Monday to Sunday
Barons Crescent	Both	Highland Heights	East limit of Highland Heights	3:00 a.m. to 5:00 a.m. Monday to Sunday
Beckworth Avenue	Both	Toukay Crescent	Sorrel Road	3:00 a.m. to 5:00 a.m. Monday to Sunday
Bernard Avenue	Both	Richmond Street	East limit of Bernard Avenue	3:00 a.m. to 5:00 a.m. Monday to Sunday
Brough Street	Both	Huron Street	University Crescent	3:00 a.m. to 5:00 a.m. Monday to Sunday
Broughdale Avenue	Both	West limit of Broughdale Avenue	Brough Street	3:00 a.m. to 5:00 a.m. Monday to Sunday
Canterbury Road	Both	Windermere Road	Richmond Street	3:00 a.m. to 5:00 a.m. Monday to Sunday
Charles Street	South & East	Mount Pleasant Avenue	Wharnccliffe Road N	12:00 a.m. to 3:00 a.m. Monday to Sunday
Clearview Avenue	Both	Thames Valley Avenue	Sunninghill Avenue	3:00 a.m. to 5:00 a.m. Monday to Sunday
College Street	North	West driveway to St. Joseph LTC Facility	A point 18 m east of College Street	3:00 a.m. to 5:00 a.m. Monday to Sunday

Dale Street	Both	First Street	Hansuld Street	3:00 a.m. to 5:00 a.m. Monday to Sunday
Devonshire Avenue	North	Wharnccliffe Road S	Edward Street	Anytime
Epworth Avenue	Both	Richmond Street	Waterloo Street	3:00 a.m. to 5:00 a.m. Monday to Sunday
Fairview Avenue	East	A point 130m south of Whetter Avenue	A point 105m south of Whetter Avenue	Anytime
Farnsborough Crescent	Both	Langdon Road	Fleming Drive	3:00 a.m. to 5:00 a.m. Monday to Sunday
Fleming Drive	Both	Fanshawe College Boulevard	East limit of Fleming Drive	3:00 a.m. to 5:00 a.m. Monday to Sunday
Fleming Drive	Both	Fleming Drive (west intersection)	Fleming Drive (east intersection)	3:00 a.m. to 5:00 a.m. Monday to Sunday
Fox Avenue	Both	Tamblyn Drive	Trott Drive	3:00 a.m. to 5:00 a.m. Monday to Sunday
Gibbons Place	East	Victoria Street	South limit of Gibbons Place	3:00 a.m. to 5:00 a.m. Monday to Sunday
Godfrey Drive	Both	Highbury Avenue N	East limit of Godfrey Drive	3:00 a.m. to 5:00 a.m. Monday to Sunday
Godfrey Drive	Both	Godfrey Drive (west intersection)	Godfrey Drive (east intersection)	3:00 a.m. to 5:00 a.m. Monday to Sunday

Goldwick Crescent	Both	Portland Street (north intersection)	Farnsborough Crescent	3:00 a.m. to 5:00 a.m. Monday to Sunday
Hansuld Street	Both	First Street	Dale Street	3:00 a.m. to 5:00 a.m. Monday to Sunday
Hartlet Street	Both	First Street	Second Street	3:00 a.m. to 5:00 a.m. Monday to Sunday
Hawkesbury Avenue	Both	Toukay Crescent	Perth Avenue	3:00 a.m. to 5:00 a.m. Monday to Sunday
Howland Avenue	Both	West limit of Howland Avenue	First Street	3:00 a.m. to 5:00 a.m. Monday to Sunday
Huron Street	Both	The Parkway	Fraser Avenue	3:00 a.m. to 5:00 a.m. Monday to Sunday
Irving Place	Both	Mark Street	Michael Street	3:00 a.m. to 5:00 a.m. Monday to Sunday
King Street	South	A point 55 m west of Clarence Street	Clarence Street	Anytime
King Street	South	A point 86m west of Richmond Street	A point 78m west of Richmond Street	Anytime Police Vehicle Only
King Street	South	A point 88m west of Wellington Street	Wellington Street	Anytime

Lancaster Street	Both	Beckworth Avenue	Goldwick Crescent	3:00 a.m. to 5:00 a.m. Monday to Sunday
Langton Road	Both	Beckworth Avenue	Sorrell Road	3:00 a.m. to 5:00 a.m. Monday to Sunday
Madeira Drive	Both	Langton Road	Beckworth Avenue	3:00 a.m. to 5:00 a.m. Monday to Sunday
Mardell Place	Both	West limit of Mardell Place	First Street	3:00 a.m. to 5:00 a.m. Monday to Sunday
Mardell Street	Both	First Street	Second Street	3:00 a.m. to 5:00 a.m. Monday to Sunday
Mayfair Drive	Both	Richmond Street	Meadowdown Drive	3:00 a.m. to 5:00 a.m. Monday to Sunday
McStay Road	Both	Hillside Drive	Shavian Boulevards	3:00 a.m. to 5:00 a.m. Monday to Sunday
Mornington Avenue	South	A point 132 m west of Curry Street	A point 112 m west of Curry Street	Anytime
Nairn Avenue	Both	Sorrell Road	Kaladar Drive	3:00 a.m. to 5:00 a.m. Monday to Sunday
Parkdale Avenue	Both	West limit of Parkdale Avenue	Richmond Street	3:00 a.m. to 5:00 a.m. Monday to Sunday
Parkdale Crescent	Both	Parkdale Avenue	Richmond Street	3:00 a.m. to 5:00 a.m. Monday to Sunday

Patricia Street	Both	Huron Street	University Crescent	3:00 a.m. to 5:00 a.m. Monday to Sunday
Portland Street	Both	Beckworth Avenue	Goldwick Crescent	3:00 a.m. to 5:00 a.m. Monday to Sunday
Prosperity Court	Both	Fleming Drive	East limit of Prosperity Court	3:00 a.m. to 5:00 a.m. Monday to Sunday
Queens Avenue	North	A point 65 m west of Wellington Street	A point 43 m west of Wellington Street	Anytime
Raymond Avenue	Both	Richmond Street	Bernard Avenue	3:00 a.m. to 5:00 a.m. Monday to Sunday
Roehampton Avenue	Both	Oxford Street E (west intersection)	Oxford Street E (east intersection)	3:00 a.m. to 5:00 a.m. Monday to Sunday
Rushland Avenue	Both	West limit of Rushland Avenue	First Street	3:00 a.m. to 5:00 a.m. Monday to Sunday
St. Bees Close	Both	Ambleside Drive	West limit of St. Bees Close	3:00 a.m. to 5:00 a.m. Monday to Sunday
St. Bees Court	Both	St. Bees Close	East limit of St. Bees Court	3:00 a.m. to 5:00 a.m. Monday to Sunday
St. Bees Place	Both	St. Bees Close	East limit of St. Bees Place	3:00 a.m. to 5:00 a.m. Monday to Sunday

St. George Street	Both	Huron Street	Regent Street	3:00 a.m. to 5:00 a.m. Monday to Sunday
St. James Street	Both	Talbot Street	Richmond Street	3:00 a.m. to 5:00 a.m. Monday to Sunday
Second Street	Both	Dale Street	C.P.R. Right-of-Way	3:00 a.m. to 5:00 a.m. Monday to Sunday
Sorrel Road	Both	Huron Street	Cheapside Street	3:00 a.m. to 5:00 a.m. Monday to Sunday
Steele Street	Both	West limit of Steele Street	Waterloo Street	3:00 a.m. to 5:00 a.m. Monday to Sunday
Sunset Street	Both	Huron Street	North limit of Sunset Street	3:00 a.m. to 5:00 a.m. Monday to Sunday
Susan Avenue	Both	Mark Street (south intersection)	Mark Street (north intersection)	3:00 a.m. to 5:00 a.m. Monday to Sunday
Talbot Street	Both	Oxford Street E	St. James Street	3:00 a.m. to 5:00 a.m. Monday to Sunday
Tamblyn Drive	Both	Coombs Avenue	Fox Avenue	3:00 a.m. to 5:00 a.m. Monday to Sunday
Thurman Circle	Both	Farnsborough Crescent	Thurman Circle	3:00 a.m. to 5:00 a.m. Monday to Sunday

Tower Lane	Both	West limit of Tower Lane	Richmond Street	3:00 a.m. to 5:00 a.m. Monday to Sunday
University Crescent	Both	West limit of University Crescent	Patricia Street	3:00 a.m. to 5:00 a.m. Monday to Sunday
Walmer Grove	Both	Walmer Gardens	East limit of Walmer Grove	3:00 a.m. to 5:00 a.m. Monday to Sunday
Waterloo Street	Both	Epworth Avenue	Victoria Street	3:00 a.m. to 5:00 a.m. Monday to Sunday
Wellington Street	Both	Huron Street	Victoria Street	3:00 a.m. to 5:00 a.m. Monday to Sunday
Westchester Drive	Both	Canterbury Road	Richmond Street	3:00 a.m. to 5:00 a.m. Monday to Sunday
Westview Drive	Both	The Parkway	Huron Street	3:00 a.m. to 5:00 a.m. Monday to Sunday
Wellington Street	East	Thames River (south branch)	King Street	Anytime
Wickerson Road	East	A point 101 m north of Tibet Butler Boulevard	Southdale Road W	Anytime
Wickerson Road	West	Byron Baseline Road	Southdale Road W	Anytime

3. Bus Stops

Schedule 3 (Bus Stops) of the By-law PS-113 is hereby amended by **deleting** the following rows:

King Street	South	Clarence Street	40 m easterly
Queens Avenue	North	A point 55 m east of Clarence	A point 84 m easterly from the said street
Wellington Street	East	A point 47 m south Dundas Street	A point 73 m south of the said street

Schedule 3 (Bus Stops) of the By-law PS-113 is hereby amended by **adding** the following rows:

King Street	South	Clarence Street	A point 48 m east of Wellington Street
King Street	South	A point 76 m west of Richmond Street	Richmond Street
King Street	South	A point 53m west of Talbot Street	Talbot Street
Queens Avenue	North	Clarence Street	A point 115 m east of Clarence Street
Queens Avenue	North	A point 11 m west of Richmond Street	A point 68 m east of Richmond Street
Queens Avenue	North	A point 68 m east of Richmond Street	A point 94 m east of Richmond Street
Queens Avenue	North	Talbot Street	A point 84 m east of Talbot Street
Ridout Street N	West	A point 55 m south of Dundas Street	Dundas Street
Wellington Street	East	King Street	Dundas Street

4. Loading Zones

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

King Street	South	From a point 27 m west of Talbot Street to a point 13 m westerly from the said street	8:00 a.m. to 6:00 p.m.
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Wellington Street	East	From a point 73 m south of Dundas Street to a point 25 m north of King Street
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5. Stop Sign Locations

Schedule 10 (Stop Signs) of the PS-113 By-law is hereby amended by **adding** the following rows:

Northbound & Southbound	Logans Run	Shore Road
Westbound	Logans Trail	Riverbend Road
Westbound	Logans Way	Riverbend Road
Northbound & Southbound	Riverbend Road	Shore Road
Eastbound & Westbound	Shore Road	Riverbend Road

6. Yield Sign Locations

Schedule 11 (Yield Signs) of the PS-113 By-law is hereby amended by **deleting** the following rows:

Southbound	Logans Run	Shore Road
Westbound	Logans Trail	Riverbend Road
Westbound	Logans Way	Riverbend Road

7. Lower Speed Limits

Schedule 17.1 (Lower Speed Limits) of the PS-113 By-law is hereby amended by **adding** the following rows:

Askin Street	Wharnccliffe Road S	A point 35 m east of Cynthia Street	40 km/h
Beaufort Street	Wharnccliffe Road N	East limit of Beaufort Street	40 km/h
Byron Avenue E	Wharnccliffe Road S	Birch Street	40 km/h
Duchess Avenue	Cathcart Street	Wortley Road	40 km/h
Elm Street	Hamilton Road	Trafalgar Street	40 km/h
Elmwood Avenue E	Cathcart Street	Wortley Road	40 km/h

Howard Avenue	Sunray Avenue	David Street	40 km/h
Maitland Street	Grosvenor Street	Cheapside Street	40 km/h
Sunray Avenue	Colonel Talbot Road	Howard Avenue	40 km/h

8. 2 Hour Metered Zone

Schedule 20 (2 Hour Metered Zones) of the said By-law PS-111 is hereby amended by **adding** the following rows:

Clarence Street	East	A point 14 m north of King Street	A point 42 m north of King Street	8:00 a.m. to 6:00 p.m.
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9. Designated Parking Spaces - Disabled Persons

Schedule 27 (Designated Parking Spaces - Disabled Persons) of the PS-113 By-law is hereby amended by **deleting** the following row:

Queens Avenue	North	From a point 49 m east of Richmond Street to a point 55 m east of said street	2 Hours
Queens Avenue	North	From 41 m east of Talbot Street to 48 m east of Talbot Street	2 Hours 8:00 a.m. to 4:00 p.m. Monday to Friday 8:00 a.m. to 6:00 p.m. (Saturday)
Queens Avenue	North	From 41 m east of Talbot Street to 48 m east of Talbot Street	2 Hours

Schedule 27 (Designated Parking Spaces - Disabled Persons) of the PS-113 By-law is hereby amended by **adding** the following row:

Queens Avenue	North	A point 50 m west of Clarence Street to a point 42 m east of Clarence Street	2 Hours
Queens Avenue	North	From 85 m east of Talbot Street to 92 m east of Talbot Street	2 Hours 8:00 a.m. to 4:00 p.m. Monday to Friday 8:00 a.m. to 6:00 p.m. (Saturday)

This by-law comes into force and effect on the day it is passed.

PASSED in Open Council on March 27, 2018

Matt Brown

Mayor

Catharine Saunders

City Clerk

First Reading – March 27, 2018

Second Reading – March 27, 2018

Third Reading – March 27, 2018

Hello

I was told that the removal of north side parking on Devonshire Ave would be on the CWC agenda for March 19th

I would like to speak to the following at that meeting:

- Speed and volume of traffic is already a problem on the street - the Beer Store and Source for Sports are at the end of the street.
- Currently cars have to slow down to navigate between parked cars on both sides of the street.
- When parking is removed on the north side it will make it easier for cars to drive fast
- It will increase the volume of traffic because it will be easier to drive down the road quickly

I plan to talk to my neighbors to gauge their concern with speed and volume of traffic prior to the meeting. I will share those results with the CWC as well.

I am okay to go on the public agenda and website.

--

Lauren Starr, M.A.
42 Devonshire Ave
London N6C 2H4

Hello Ms. Ridley and Ms. Martin,

I was given your names by Councillor Stephen Turner regarding a potential new parking bylaw on Devonshire Ave. Stephen informed us that this bylaw could be passed at the Civic Works Committee meeting on March 19 and I was hoping to bring to your attention and possibly the rest of the committee the concerns we have about this potential bylaw.

In summary, the city wants to extend the no parking zone on the north side of Devonshire Ave from Wharncliffe Road all the way to Edward Street. Currently parking is allowed on both sides of the street for the majority of Devonshire Ave. We were given the opportunity to vote regarding this change, however we were never given an initial reason as to why this parking change was proposed. Furthermore, the response rate of the vote was 54% and the "majority" did vote in favour of the change, however this majority was 57% of the votes, which doesn't seem to be a clear majority. The main reason for my continual concern is safety on the street. Devonshire Ave is one of the busier roads in the Old South neighbourhood as it is a throughway from Wharncliffe Road to Wortley area. Additionally it is flanked on the Wharncliffe end by The Beer Store and Source for Sports making it significantly busier. The proposed change of traffic only being able to park on the south side of the street would increase the speed of the vehicles, making it more dangerous for residents on this street.

Please see below for any further information and concerns that we had initially brought to Mr. Turner. I look forward to hearing from you and continue this discussion. If you have any questions at any time please feel free to contact me at [REDACTED] or via email.

Yours in Health,

Dr. Eric Jackson B. HK., D.C

London Chiropractic and Massage

423 Colborne St.

London, ON N6B 2T2

<http://londonchiropractic.ca/>

2ND REPORT OF THE
TRANSPORTATION ADVISORY COMMITTEE

Meeting held on February 27, 2018, commencing at 12:15 PM, in Committee Room #4, Second Floor, London City Hall.

PRESENT: A. Farahi (Chair), G. Bikas, D. Doroshenko, T. Khan, J. Madden, H. Moussa, L. Norman, J. Scarterfield and A. Stratton and J. Bunn (Secretary).

ABSENT: S. Brooks and G. Debbert.

ALSO PRESENT: M. Elmadhoon, D. Hall, Sgt. S. Harding, J. Kostyniuk, T. Macbeth and L. Tulk.

I. CALL TO ORDER

1. Disclosures of Pecuniary Interest

That it BE NOTED that no pecuniary interests were disclosed.

II. SCHEDULED ITEMS

None.

III. CONSENT ITEMS

2. 1st Report of the Transportation Advisory Committee

That it BE NOTED that the 1st Report of the Transportation Advisory Committee, from its meeting held on January 23, 2018, was received.

3. Municipal Council Resolution Appointments to the Transportation Advisory Committee

That it BE NOTED that the Municipal Council resolution from its meeting held on February 13, 2018, with respect to the appointments of Tariq Khan and Storm Morgan, was received

4. Notice of Application - City of London - Lands South of Exeter Road, north of Dingman Drive, east of White Oak Road, and west of Marr Drain

That it BE NOTED that the Notice of Application dated February 13, 2018, from T. Macbeth, Planner II, with respect to an application by the City of London related to the lands south of Exeter Road, north of Dingman Drive, east of White Oak Road and west of Marr Drain, was received.

5. Highway 401 and Highway 4 Interchange Improvements and Highway 4 Glanworrrh Drive Underpass Replacements - Public Information Centre 3, Display Material Package

That it BE NOTED that the communication dated February 13, 2018, from J. Matthews, Dillon Consulting Limited, with respect to the Highway 401 and Highway 4 (Colonel Talbot Road) Interchange Improvements and Highway 4 and Glanworrrh Drive Underpass Replacements, Public Information Centre 3 display material package, was received.

IV. SUB-COMMITTEES & WORKING GROUPS

None.

V. ITEMS FOR DISCUSSION

6. Work Plans

That the following actions be taken with respect to the Transportation Advisory Committee (TAC) Work Plans:

- a) the revised, attached 2018 Work Plan for the TAC BE FORWARDED to the Municipal Council for consideration; and,
- b) the revised, attached 2017 TAC Work Plan Summary BE FORWARDED to the Municipal Council for their information.

VI. DEFERRED MATTERS/ADDITIONAL BUSINESS

7. (ADDED) City of London Planning Services Community Information Meeting - White Oak-Dingman Secondary Plan Process

That it BE NOTED that the City of London Planning Services Community Information Meeting notice from T. Macbeth, Planner II, with respect to the White Oak-Dingman Secondary Plan, was received.

8. (ADDED) Street Lights at Southdale Road and Millbank Drive

That Civic Administration BE REQUESTED to review the street lighting in the Southdale Road and Millbank Drive area, specifically Millbank Drive to Shaftsbury Avenue, and report back to the Transportation Advisory Committee with findings; it being noted that the Transportation Advisory Committee received the attached presentation from H. Moussa, with respect to this matter.

9. (ADDED) Pedestrian Charter for London

That it BE NOTED that a Pedestrian Charter Working Group was established, with Amanda Stratton as the lead, and the goal being to report back to the Transportation Advisory Committee at a future meeting related to this matter.

VII. ADJOURNMENT

The meeting adjourned at 1:10 PM.

NEXT MEETING DATE: March 27, 2018

**TRANSPORTATION ADVISORY COMMITTEE
2018 WORK PLAN
(as at February 2018)**

	Project/Initiative	Background	Lead/ Responsible	Proposed Timeline	Proposed Budget	Link to Strategic Plan	Status
	Rapid Transit	The TAC is in an excellent position to determine, in concert with the city and other key organizations, how community stakeholders can best support progress on the city's Rapid Transit Strategy, including funding requests to government, as well as inform Londoners on its progress.	Gordon Debbert Amir Farahi (now a member of the Rapid Transit Working Group)	ongoing		<u>Building a Sustainable City</u> 1. A	Have requested that rapid transit items at Council, CWC, and RTIWG be copied to TAC; standing item on agenda.
	Dundas Place	TAC will provide input on Dundas Place design and implementation plans as the project progresses.	Sarah Brooks	ongoing		<u>Beautiful Places and Spaces</u> 5. B	Will review detailed drawings when available.
	Traffic Signals & Intersections	The committee will review the standards and practices surrounding the design and operation of traffic signals and intersections. The committee will better understand current practices, how citizens can provide input or report issues on particular intersections, and what new opportunities may exist to integrate emerging technologies into our infrastructure and practices.	Amir Farahi	ongoing		<u>Strengthening Our Community</u> 5. G, H, and I	Requesting a presentation by staff at earliest convenience.
	Pedestrian Charter	In 2016, the committee received a citizen presentation suggesting that it look into the possibility of implementing a Pedestrian Charter in London.	Amanda Stratton Jayne Scarterfield	ongoing		<u>Building a Sustainable City</u> 2. A <u>Strengthening Our Community</u> 5. I.	

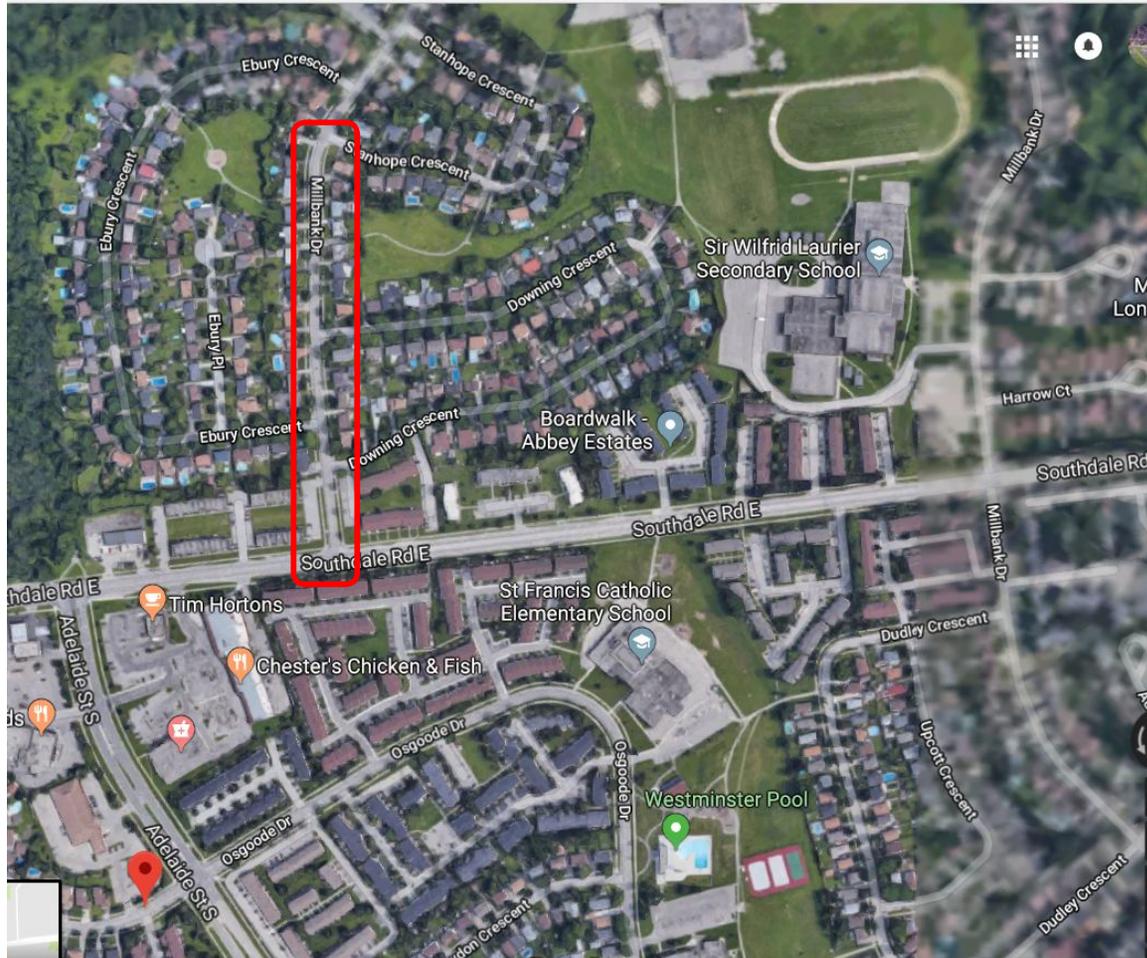
	Project/Initiative	Background	Lead/ Responsible	Proposed Timeline	Proposed Budget	Link to Strategic Plan	Status
	Emerging Technologies Automated Vehicle (AV) preparedness	Exploring opportunities to utilize existing and emerging technologies to optimize transportation performance and create efficiencies in our transportation system as well as to encourage active transportation. Identify technologies to explore over the course of the term.	Amir Farahi Hani Moussa	ongoing		<u>Growing Our Economy</u> 3. A. <u>Building a Sustainable City</u> 1., 3., 5. <u>Strengthening our Community</u> 1.	
	Transportation Advisory Committee Terms of Reference	Review the terms for reference for the committee and make recommendations to the City Clerk regarding membership and mandate items	Amanda Stratton Dan Doroshenko	ongoing			

**TRANSPORTATION ADVISORY COMMITTEE
2017 WORK PLAN
(as at December 2017)**

	Project/Initiative	Background	Lead/ Responsible	Proposed Timeline	Proposed Budget	Link to Strategic Plan	Status
	Transportation Master Plan (TMP) and Transportation Demand Management (TDM)	liaise with appropriate staff to arrive at action items that support the TMP and TDM. One topic of particular interest is land use policies related to TDM.	Jon Kostyniuk	ongoing		<u>Strengthening Our Community</u> 5. C, H, and I <u>Building a Sustainable City</u> 1. A 5. B	Will present suggested action items to TAC.
	Create a program of education to ensure that TAC committee members are well-informed on the matters that fall within its mandate.	Recognizing that an advisory committee is made up of stakeholders bringing expertise and perspectives from various backgrounds, it would be helpful to ensure that all members are “up to speed” on practices and procedures by allowing 10-15 minutes per meeting to explore relevant topics. As TAC meetings are open to the public, these sessions would also create an opportunity for other citizens and stakeholders to become better educated about transportation policies and procedures.	Amanda Stratton	ongoing		<u>Strengthening Our Community</u> 2. B	
	Rapid Transit	The TAC is in an excellent position to determine, in concert with the city and other key organizations, how community stakeholders can best support progress on the city’s Rapid Transit Strategy, including funding requests to government, as well as inform Londoners on its progress.	Gordon Debbert Amir Farahi	ongoing		<u>Building a Sustainable City</u> 1. A	Have requested that rapid transit items at Council, CWC, and RTIWG be copied to TAC; standing item on agenda.
	Dundas Place	TAC will provide input on Dundas Place design and implementation plans as the project progresses.	Sarah Brooks	ongoing		<u>Beautiful Places and Spaces</u> 5. B	Will review detailed drawings when available.

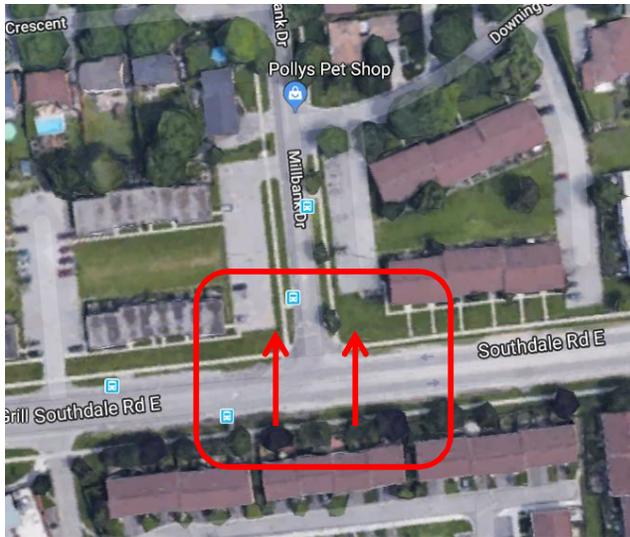
	Project/Initiative	Background	Lead/ Responsible	Proposed Timeline	Proposed Budget	Link to Strategic Plan	Status
	Traffic Signals & Intersections	The committee will review the standards and practices surrounding the design and operation of traffic signals and intersections. The committee will better understand current practices, how citizens can provide input or report issues on particular intersections, and what new opportunities may exist to integrate emerging technologies into our infrastructure and practices.	Henk Ketelaars / Jon Kostinyuk	ongoing		<u>Strengthening Our Community</u> 5. G, H, and I	Requesting a presentation by staff at earliest convenience.
	Pedestrian Charter	In 2016, the committee received a citizen presentation suggesting that it look into the possibility of implementing a Pedestrian Charter in London.	Amanda Stratton	ongoing		<u>Building a Sustainable City</u> 2. A <u>Strengthening Our Community</u> 5. I.	Will report back with information and proposed motion in Fall 2017
	Emerging Technologies Automated Vehicle (AV) preparedness	Exploring opportunities to utilize existing and emerging technologies to optimize transportation performance and create efficiencies in our transportation system as well as to encourage active transportation. Identify technologies to explore over the course of the term.	Julian Pecchia / Amir Farahi	ongoing		<u>Growing Our Economy</u> 3. A. <u>Building a Sustainable City</u> 1., 3., 5. <u>Strengthening our Community</u> 1.	Will report to TAC in May/June 2017.

Lighting – Area of Concern



Southdale
Road &
Millbank
Drive

Southdale Road & Millbank Drive



- Visibility at this intersection in the late evening and at night
- Very difficult to see pedestrians crossing at night
- No street lights are installed on this side of Millbank Drive up to Shaftesbury Ave.

Waste Management Working Group

Report

2nd Meeting of the Waste Management Working Group
March 8, 2018
Committee Room #3

Attendance PRESENT: Councillor M. van Holst (Chair); Mayor M. Brown;
Councillors M. Cassidy, J. Helmer and S. Turner and J. Bunn
(Secretary).

ABSENT: Councillor H.L. Usher.

ALSO PRESENT: W. Abbott, M. Losee, K. Scherr and J.
Stanford.

1. Call to Order

1.1 Disclosures of Pecuniary Interest

That it BE NOTED that no pecuniary interests were disclosed.

2. Scheduled Items

2.1 Decision Report #6: Preliminary Proposed Draft Terms of Reference

That, on the recommendation of the Director, Environment, Fleet and Solid Waste, the following actions be taken with respect to the report entitled "Preliminary Proposed Draft Terms of Reference - Environmental Assessment of the Proposed W12A Landfill Expansion, City of London":

- a) the release of the report entitled "Preliminary Proposed Draft Terms of Reference - Environmental Assessment of the Proposed W12A Landfill Expansion, City of London" for review and comment by the Government Review Team and the general public BE SUPPORTED; it being noted that minor changes/revisions to the report may be made prior to the release to accommodate preliminary comments from the Ministry of the Environment and Climate Change scheduled to be received by March 14, 2018; it being further noted that the above-noted report was provided under separate cover and a copy is on file in the City Clerk's Office; and,
- b) the staff report dated February 15, 2018, with respect to this matter, BE RECEIVED.

3. Consent

3.1 1st Report of the Waste Management Working Group

That it BE NOTED that the 1st Report of the Waste Management Working Group, from its meeting held on January 18, 2018, was received.

3.2 Progress Report #5: Community Engagement Program Update January 11, 2018 to February 28, 2018

That it BE NOTED that the staff report dated March 8, 2018, from the Director, Environment, Fleet and Solid Waste, with respect to an update on the Community Engagement Program (Progress Report #5), from January 11, 2018 to February 28, 2018, was received.

3.3 Background Report #3: Development of 60% Waste Diversion Action Plan

That it BE NOTED that the staff report dated March 8, 2018, from the Director, Environment, Fleet and Solid Waste, with respect to the Development of 60% Waste Diversion Action Plan (Background Report #3), was received.

4. Items for Discussion

None.

5. Deferred Matters/Additional Business

5.1 (ADDED) Waste Management Community Liaison Committee Meeting #5

That it BE NOTED that a summary from the Waste Management Community Liaison Committee Meeting #5, from its meeting held on February 26, 2018, was received.

6. Adjournment

The meeting adjourned at 4:28 PM.

**3RD REPORT OF THE
CYCLING ADVISORY COMMITTEE**

Meeting held on February 21, 2018, commencing at 4:05 PM, in Committee Room #4, Second Floor, London City Hall.

PRESENT: D. Mitchell (Chair), D. Doroshenko, R. Henderson, J. Jordan, W. Pol, A. Stratton and M. Zunti and H. Lysynski (Acting Secretary).

ABSENT: D. Szoller.

ALSO PRESENT: Sergeant S. Harding, B. McCall and J. Ramsay.

I. CALL TO ORDER

1. Disclosures of Pecuniary Interest

That it BE NOTED that no pecuniary interests were disclosed.

II. SCHEDULED ITEMS

2. Bikes on Dundas

That the Division Manager, Transportation, Planning and Design, BE ASKED to report back at the next Cycling Advisory Committee meeting with respect to an update on the east-west cycle track environmental assessment; it being noted that the Cycling Advisory Committee heard a verbal presentation from S. Climans, London Cycle Link, with respect to the "Bikes on Dundas" campaign.

III. CONSENT ITEMS

3. 2nd Report of the Cycling Advisory Committee

That it BE NOTED that the 2nd Report of the Cycling Advisory Committee from its meeting held on January 17, 2018, was received.

4. Construction Notice - 2017 Kilally Road Reconstruction - Phase 1

That it BE NOTED that the Construction Notice relating to 2017 Kilally Road Construction, Phase 1, was received.

5. West London Dyke Erosion Control Municipal Class Environmental Assessment - Notice of Public Information Centre

That it BE NOTED that the Cycling Advisory Committee reviewed and received the West London Dyke Erosion Control Municipal Class Environmental Assessment, Notice of Public Information Centre, from C. Gorrie, Project Manager and S. Bergman, Planner, Stantec Consulting Ltd, and heard verbal presentations from D. Doroshenko and J. Jordan, with respect to this matter.

IV. SUB-COMMITTEES & WORKING GROUPS

None.

V. ITEMS FOR DISCUSSION

6. CycleON Action Plan 2.0 Proposal

That M. Ridley, Senior Technologist, BE REQUESTED to advise what The Corporation of the City of London has undertaken with respect to the Ontario Municipal Commuter Cycling Program and the Safe Cycling Education Fund; it being noted that the CAC reviewed and received a communication dated February 5, 2018, with respect to the CycleON Action Plan 2.0 proposal.

7. Cycling along Bus Rapid Transit Routes

That it BE NOTED that the verbal presentation and the communication from J. Jordan with respect to cycling along Bus Rapid Transit routes, were received.

8. Work Plan

That consideration of the 2018 Work Plan BE POSTPONED to the next meeting.

VI. DEFERRED MATTERS/ADDITIONAL BUSINESS

9. Bike Fest

That the Director, Environment, Fleet and Solid Waste, BE REQUESTED to provide information for the next Cycling Advisory Committee meeting with respect to what City funding is available and what the City is already undertaking related to the 2018 Bike Fest; it being noted that the Cycling Advisory Committee held a general discussion with respect to this matter.

VII. ADJOURNMENT

The meeting adjourned at 6:38 PM.

NEXT MEETING DATE: March 21, 2018

DEFERRED MATTERS

**CIVIC WORKS COMMITTEE
(as of February 20, 2018)**

Item No.	File No.	Subject	Request Date	Requested/ Expected Reply Date	Person Responsible	Status
1.	28	<u>Southern Ontario Water Consortium - London Wastewater Facility Update, Operating Agreement and Next Steps</u> – Civic Administration to report back with a review of the mandate and business plan of the International Water Centre of Excellence.	Oct 6/14	2nd Quarter 2018	K. Scherr S. Mathers	IN PROGRESS Lead by London Economic Development Corporation with input from Community & Economic Innovation, Environmental and Engineering Services, Western, Southern Ontario Water Consortium and industry.
2.	44	<u>Potential Savings in Consulting Costs</u> Civic Administration to review and report back on areas that the City of London could realize consulting cost decreases for capital projects through the addition of new staff, rather than contracting out those consulting services, so that the City of London would realize net savings.	June 2/15	2nd Quarter 2018	K. Scherr	IN PROGRESS
3.	75.	<u>Options for Increased Recycling in the Downtown Core</u> 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	2nd Quarter 2018	K. Scherr J. Stanford	
4.	76.	<u>Rapid Transit Corridor Traffic Flow</u> 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 2018	K. Scherr E. Soldo	

5.	78.	<p><u>Garbage and Recycling Collection and Next Steps</u> 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:</p> <ul style="list-style-type: none"> a) the Civic Administration BE DIRECTED to report back to Civic Works Committee when additional details are known with respect to the Waste Free Ontario Act including the potential impacts on London residents, businesses and the City's waste management system; and, b) the Civic Administration BE DIRECTED to report back to Civic Works Committee by December 2017 with: <ul style="list-style-type: none"> 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	2nd Quarter 2018	K. Scherr J. Stanford	
6.	79.	<p><u>Update and Next Steps - Resource Recovery Strategy and Residual Waste Disposal Strategy as Part of the Environmental Assessment Process</u> That, on the recommendation of the Managing Director, Environmental and Engineering Services and City Engineer, with the support of the Waste Management Working Group, the following actions be taken with respect to the development of London's Long-Term Solid Waste Resource Recovery Strategy and Residual Waste Disposal Strategy as part of the Environmental Assessment (EA) process (Phase One - Prepare Terms of Reference and Phase Two – Undertake EA):</p> <ul style="list-style-type: none"> e) the Civic Administration BE DIRECTED to report back to the Civic Works Committee with an Interim Update Report and the Final Draft Terms of Reference, which would incorporate a public participation meeting to conclude Phase One activities. 	Oct 24/17	2nd Quarter 2018	K. Scherr J. Stanford	

7.	80.	<p><u>Wastewater Management</u> That the Civic Administration BE DIRECTED to report back to the Civic Works Committee by June 30, 2017 with respect to the following:</p> <p>a) a report summarizing the Pollution Prevention Control Plan (PPCP) Phase 1 Report, and providing the status of the PPCP Phase 2 Report, with the latter to include details on work to date, findings and next steps for measuring overflows and bypasses; and,</p> <p>b) a report providing historical and current data on the amount of untreated sewage being discharged from pollution control plants and other wastewater infrastructure to the Thames and other waterways, the reason for the aforementioned discharges, a summary of system improvements in the last 10 to 20 years, a summary of system improvements included in the current Capital Budget, as well as any other related information that may be educational for both the Municipal Council and the public.</p>	Feb 7/17	2nd Quarter 2018	K. Scherr S. Mathers	
8.	89.	<p><u>6th Report of the Transportation Advisory Committee</u> That the following actions be taken with respect to the 6th Report of the Transportation Advisory Committee, from its meeting held on May 23, 2017:</p> <p>a) the Transportation Advisory Committee (TAC) Terms of Reference BE REFERRED to the Civic Administration to review and report back to the Civic Works Committee with respect to a review of the overlapping of Advisory Committee mandates of the Cycling Advisory Committee and the Transportation Advisory Committee.</p>	June 7/17	4th Quarter 2018	K. Scherr E. Soldo City Clerk	
9.	91.	<p><u>Warranted Sidewalk Program</u> That the following actions be taken with respect to the Warranted Sidewalk Program:</p> <p>a) the Managing Director, Environmental and Engineering Services and City Engineer BE REQUESTED to develop an improved community engagement strategy with respect to Warranted Sidewalk Program; and,</p> <p>b) the Managing Director, Environmental and Engineering Services and City Engineer, BE REQUESTED to report back to the Civic Works Committee with respect to the potential future provision of additional sidewalk installation options on the east side of Regal Drive in the Hillcrest Public School area; it being noted that currently planned work would not be impeded by the potential additional work; it being further noted that the Civic Works Committee received a delegation and communication dated September 22, 2017 from L. and F. Conley and the attached presentation from the Division Manager, Transportation Planning and Design, with respect to this matter.</p>	Sept 26/17	2nd Quarter 2018	K. Scherr E. Soldo	

10.	92.	<p><u>Municipal Greenhouse Gas (GHG) Challenge Fund Proposed Applications</u> That, on the recommendation of the Managing Director, Environmental and Engineering Services and City Engineer with the and the Managing Director, Corporate Services and City Treasurer, Chief Financial Officer, the following actions be taken with respect to the Municipal Greenhouse Gas (GHG) Challenge Fund proposed applications: c) the Managing Director, Environmental and Engineering Services and City Engineer BE DIRECTED to report back to the Civic Works Committee on the outcome of the Municipal GHG Challenge Fund applications including, where applicable, final business cases or other financial or environmental benefit details prior to final approval of projects.</p>	Oct 24/17		K. Scherr J. Stanford	
11.	93.	<p><u>Public Notification Policy for Construction Projects</u> 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.</p>	Nov 21/17	2nd Quarter 2018	E. Soldo	

12.	94.	<p><u>Report on Private Works Impacting the Transportation Network</u></p> <p>b) report back to the Civic Works Committee, by the end of March 2018, on:</p> <ul style="list-style-type: none"> 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 iv) any other improvements identified through the review resources required to implement these improvements; and 	Dec 4/17	March 31/18	K. Scherr	
13.	96.	<p><u>Hydro One Grant for Tree Planting</u></p> <p>That the following actions be taken with respect to the Hydro One grant for tree planting</p> <ul style="list-style-type: none"> a) the Managing Director, Environmental and Engineering Services and City Engineer BE DIRECTED to investigate and report back on possible options to address the noise impacts being experienced by homes abutting Highbury Avenue resulting from the recent removal of trees by Hydro One, including the costs for implementing such options; it being noted that the Civic Administration would, as part of the investigation, review the City's policy on local improvements, as it related to noise attenuation barriers, as well as past projects; 	Nov. 28/17	3rd Quarter 2018	K. Scherr E. Soldo	

14.	97.	<p><u>Comments on the Amended Blue Box Program Plan (prepared by Stewardship Ontario)</u></p> <p>a) Civic Administration BE DIRECTED to prepare both short term actions and a comprehensive plan, steps and recommendations for London as a transitioned municipality providing services to Stewardship Ontario as part of the transition phase (full producer responsibility) to a completely industry-led (individual producer responsibility) recycling program in Ontario;</p>				
15.	98.	<p><u>Private Drain Connection (PDC) Projects</u></p> <p>That the Director of Water and Wastewater BE REQUESTED to review the Wastewater and Stormwater By-law WM-28 as it relates to fees and charges for Private Drain Connections (PDC) work undertaken as part of a City of London construction projects and report back with respect to a potential blended fee for mixed use properties that is reflective of a balanced charge between the current residential and commercial fees; it being noted that a communication dated January 16, 2018, from Councillor T. Park was received related to this matter.</p>	Feb. 6, 2018		S. Mathers	
16.	99.	<p><u>Pedestrian Sidewalk – Pack Road and Colonel Talbot Road</u></p> <p>That the communication from J. Burns related to a request for a pedestrian crosswalk at the intersection of Pack Road and Colonel Talbot Road BE REFERRED to the Division Manager, Transportation Planning and Design for review and consultation with Mr. Burns as well as a report back to the appropriate standing committee related to this matter.</p>	Feb. 6, 2018	2nd Quarter 2018	D. MacRae S. Maguire	

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON MARCH 19, 2018
FROM:	KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT:	ONTARIO MUNICIPAL GREENHOUSE GAS (GHG) CHALLENGE FUND TRANSFER PAYMENT AGREEMENT FOR PHASE 1 - FUEL SWITCHING PROJECT - DIESEL TO COMPRESSED NATURAL GAS (CNG) TRANSITION

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, the following actions be taken with respect to the Province of Ontario's Municipal GHG Challenge Fund:

- a) the attached proposed by-law (Appendix A) **BE INTRODUCED** at the Municipal Council meeting to be held March 27, 2018 to:
 - i) authorize and approve the Transfer Payment Agreement, attached as Schedule 1 to the by-law, to be entered into between The Corporation of the City of London and Her Majesty the Queen in Right of Ontario, as represented by the Minister of Environment and Climate Change for the Province of Ontario, for funding of a fuel switching project to transition from diesel to compressed natural gas for London under the Ontario Municipal GHG Challenge Fund;
 - ii) authorize the Mayor and the City Clerk to execute the Agreement authorized and approved in i), above; and
 - iii) delegate authority to the Managing Director of Environmental & Engineering Services and City Engineer and Managing Director, Corporate Services & City Treasurer, or their designate, to execute any reports required as a condition of the Agreement authorized and approved in i), above;
- b) the Civic Administration **BE AUTHORIZED** to increase the 2016-2019 Multi-Year Capital Budget by \$1,382,625 to reflect the approved Ontario Municipal GHG Challenge Fund contribution of \$691,312 and equal City of London contribution of \$691,313 as set out in the Source of Financing attached (Appendix B); and
- c) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this program.

PREVIOUS REPORTS PERTINENT TO THIS MATTER
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The relevant reports that can be found at www.london.ca under City Hall (Meetings) are:

- Report to the October 24th 2017 Civic Works Committee (CWC) Meeting, Municipal Greenhouse Gas (GHG) Challenge Fund Applications (Agenda Item #15)
- Report to the August 29th 2017 Civic Works Committee (CWC) Meeting, Community Energy Action Plan – Update and Status (Agenda Item #11)

2015-19 STRATEGIC PLAN

Municipal Council has recognized the importance of climate change mitigation, related environmental issues and the need for a more sustainable city in its 2015-2019 - Strategic Plan for the City of London ([2015 – 2019 Strategic Plan](#)). Specifically, the Community Energy Action Plan (CEAP) and the Corporate Energy Conservation and Demand Management (CDM) Plan address all four Areas of Focus, at one level or another, as follows:

Strengthening Our Community

- Healthy, safe, and accessible city

Building a Sustainable City

- Convenient and connected mobility choices
- Strong and healthy environment

Growing our Economy

- Local, regional, and global innovation
- Strategic, collaborative partnerships

Leading in Public Service

- Collaborative, engaged leadership
- Excellent service delivery

DISCUSSION

PURPOSE

The purpose of this report is to obtain the approvals required for the execution of the Transfer Payment Agreement document with the Province of Ontario to receive funding under the Ontario Municipal GHG Challenge Fund ('GHG Challenge Fund'). The report also requests approval to increase the capital budget to reflect the additional funding to be received through the Ontario Municipal GHG Challenge Fund.

CONTEXT

The Corporation of the City of London's use of diesel represents about 12 percent of total corporate energy use (in terms of gigajoules of energy) and 7 percent of corporate energy cost, but diesel's environmental impact is significantly higher representing 31 percent of the Corporation's energy-related GHG emissions. Fleet greening is part of the Corporate Energy CDM Plan with a separate Green Fleet Strategy to be submitted later in 2018.

Encouraging other London-based fleet operators to use compressed natural gas (CNG) as part of their fleet greening programs is also an action outlined within London's 2014-2018 CEAP. The City of London partnered with Union Gas in November 2014 to co-host a CNG workshop for London-area fleet operators. The need for CNG refuelling was identified during that workshop. Since that time, Union Gas and other gas suppliers and dispensing vendors have been working on plans for a commercial CNG refuelling station in London.

At the January 17, 2017 meeting of Council, it was resolved that:

- c) That 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)*

During 2017, it was identified that a number of potential municipal funding programs may be launched based on revenues obtained from the Provincial Cap and Trade Program that would be advantageous to this Business Case.

The Municipal GHG Challenge Fund, announced in August 2017, is one of the programs funded by revenue from Ontario's Cap & Trade program in support of

Ontario's Climate Change Action Plan. This fund is administered by the Ontario Ministry of Environment and Climate Change (MOECC). It complements other programs funded by Cap & Trade revenue, such as the Green Ontario (GreenON) Fund programs for residents and businesses, the Ontario Municipal Commuter Cycling Program, and the Green Commercial Vehicle Program. In particular, the Green Commercial Vehicle Program will help offset the costs associated with procuring CNG trucks in the future.

Using CNG as a fuel significantly reduces the emissions of hazardous air pollutants such as diesel soot as well as greenhouse gas emissions. CNG engines are also significantly quieter than diesel engines which is an important and positive feature for early morning collection vehicles in residential neighbourhoods and multi-residential buildings.

In terms of economic benefits, although vehicles that run on CNG have higher up-front capital costs, the operating (fuel) costs from using CNG are significantly lower than diesel, particularly for vehicles with high annual travel distances (more than 15,000 kilometres). As a result, there is a net lifecycle cost-saving benefit associated with switching from diesel to CNG for some vehicles.

The preliminary analysis has identified financial and environmental benefits of switching to CNG for waste collection vehicles. However, in order to facilitate the transition to CNG it is imperative to have a CNG fuelling strategy and a CNG compliant maintenance/repair facility to enable this transition.

The GHG Challenge Fund represented an ideal opportunity to assist the City of London, businesses in the community and fleet travelling along the 401/402 corridor with their fuel switching needs.

CNG Compliant Maintenance/Repair Facility Upgrade Plan for City of London

The Exeter Road Operations Centre (EROC) that currently serves as the operational base for the waste collection fleet and facilitates the inspection, repairs and service on the trucks, would need be retrofitted to accommodate the safety and code requirements for performing maintenance on CNG vehicles. Building and system requirements are a prerequisite in order for the City to move to CNG vehicles.

Fleet and Facilities Divisions commissioned a consulting engineer review of the shop space at EROC in October 2017. The report identified the Mechanical Code Compliance measures required and the feasibility of transitioning to a fully complaint CNG repair facility.

The enhancements and changes to the facility were identified and include estimated costs for the proposed upgrades. The major upgrade components are HVAC systems, air exchange equipment, gas detection systems along with various electrical, structural and architectural items to support those systems. The facility improvements will be procured and managed through the Facility Services.

Refuelling Infrastructure Plan – City of London and Businesses

After a preliminary review of various options and alternatives including investing in City-owned and managed on-site slow fill CNG infrastructure, the most viable and effective alternative for CNG refuelling, at this time, is to piggyback with a current public-private partnership opportunity being led by Union Gas. The project currently being proposed involves the City buying into the Union Gas led venture for a CNG fast-fill station at the Flying "J" Truck Centre at Highbury Avenue and Highway 401.

The City commitment in the proposed plan would be to provide funding support for the current start-up of the fast-fill (about the same length of time as diesel) CNG refuelling infrastructure project and also provide funding for add functionality and future growth infrastructure in support of the City's longer term 'anchor tenant' (i.e., large fuel purchaser) requirements as City fleet phases over to CNG waste collection vehicles over the next seven years. As added value to this plan and investment, the City would enjoy priority usage rights during our primary refuelling times and a significantly reduced price below standard market pricing for the CNG fuel.

This CNG facility would be available for use by other early CNG adopters that either currently have or would like to move into the CNG commercial vehicles space outside of typical waste collection fuelling hours.

Public sector investment in CNG refuelling infrastructure that is commercially available to other customers and businesses in addition to the City's waste collection vehicles provides a fundamental building block for financial and environmental change in the transportation sector. Having CNG refuelling readily available in London's south end industrial/manufacturing/warehouse district will open the options for companies to invest in CNG vehicles. This provides an excellent opportunity for London-based companies that rely heavily on transportation.

A proposed CNG refuelling location at the Flying "J" Truck Centre would also provide a strategically beneficial location for existing and new CNG freight vehicles that use the Toronto-Detroit 401 freight corridor. The ability to make this extra CNG fuelling capacity available to private sector vehicles will also help accelerate the overall value and economic payback for the City as a whole for the investment in this fuelling infrastructure.

The project will also have local economic benefits as facilities and equipment are retrofitted and replaced to support CNG vehicles thus creating demand for CNG-related products and services. This will result in investment in this field which translates into more jobs and enhanced investment and growth in the sector.

The transition of the City waste collection fleet to CNG also prepares and aligns our operation and vehicle assets to move to even greater environmentally sustainable fuel/energy sources like renewable natural gas (RNG).

Province of Ontario Commitment – GHG Challenge Fund

The estimated total capital cost that was submitted to the GHG Challenge Fund for the diesel to CNG fuel switching project was \$1,382,625 including detailed design, construction and contract administration costs. The GHG Challenge Fund has confirmed that it will cover 50 percent of these costs, or \$691,312.50.

FINANCIAL AND RISK CONSIDERATIONS

The overall project has been designed in two phases with estimated costs and timelines included on the table below. The costs below do not include the Harmonized Sales Tax (HST) which will be included within the Transfer Payment Agreement.

Project Activities	Estimated Cost to be Split 50/50	Timeline ^(a)
Phase 1 – Complete Final Business Case and Fuel Purchase Agreement		
1. Finalize Business Case for fuel switching (diesel to CNG) for waste collection fleet. Re-confirm that the proposed City-Union Gas CNG refuelling partnership is the best option compared to alternatives (partner with private sector CNG developer, build City-owned CNG station)	In-kind City staff time and technical assistance where required	April – June 2018
2. Submission of Business Case and proposed CNG fuel purchasing agreement to Municipal Council for approval		July 2018 (continued)

Project Activities	Estimated Cost to be Split 50/50	Timeline^(a)
Phase 2A – Facility Upgrades to Service and Repair CNG Vehicles		
3. Final design, tendering, construction and implementation requirements to install combustible gas detection systems, upgrade ventilation and air distribution systems and the associated electrical, structural and architectural items required for the project at EROC through Facilities.	\$681,125	August 2018 – June 2019
Phase 2B – Refuelling Infrastructure Partnership		
4. Final design, equipment purchase, construction and implementation of CNG refueling equipment	\$701,500	August 2018 – June 2019
Total Estimated Budget	\$1,382,625	
<i>Province</i>	\$691,312.50	
<i>City of London</i>	\$691,312.50	

(a) An alternate timeline has also been prepared if circumstances change and the Business Case and related matters require additional time. This would push the end point for the project until September/October 2019.

Risk Mitigation

The completion of the Business Case will include two parts. Part one will be the details on the financial, technical and environmental aspects of switching from diesel to CNG for waste collection vehicles and the potential for other high kilometre vehicles (e.g., pickup trucks, service trucks, dump trucks).

Part two will include a final review of the proposed cost-sharing partnership with Union Gas for their proposed CNG refuelling station at the Flying J Truck Stop. This partnership would result in CNG fuel price for City fleet vehicles that will be lower than the price charged to other CNG vehicles. The costs and savings associated with this approach would be compared to alternative options, such as a direct partnership with a private sector CNG developer to develop a CNG station at a different location, and the installation of a slow-fill CNG refuelling station at the Exeter Road Operations Centre.

The Business Case and the associated CNG fuel purchasing agreement between the City and Union Gas (i.e., or Clean Energy, Union Gas's CNG developer partner) requires Council approval.

Termination and Default Clauses

Section A15 of the Transfer Payment Agreement (Event of Default, Corrective Action, and Termination for Default) does allow for the City of London to withdraw from the agreement in the event that Municipal Council does not approve the business case or the recommendation from the RFP.

Section A14 of the Transfer Payment Agreement (Termination Where No Appropriation) has similar language in the event that the Province does not receive the necessary appropriation from the Ontario Legislature.

Source of Financing

The attached Source of Financing report 'Appendix B' outlines the source of financing for the Phase 1 – Fuel Switching Project – Diesel to Compressed Natural Gas (CNG) Transition. The City's portion, \$691,312.50, although not included in the approved Capital Plan, can be accommodated with a drawdown from the Efficiency, Effectiveness & Economic Reserve in combination with an equal contribution from the Ontario Municipal Greenhouse (GHG) Challenge Fund.

ACKNOWLEDGEMENTS

This report was prepared with assistance from Jamie Skimming, Manager, Air Quality; Jason Davies, Manager III, Financial Planning & Policy; and Laurie Green, Financial Business Administrator.

PREPARED BY:	PREPARED & SUBMITTED BY:
MIKE BUSHBY, DIVISION MANAGER FLEET & OPERATIONAL SERVICES	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 AND CITY ENGINEER	

Attach: Appendix A – By-law. A.-
Appendix A Schedule 1 – Transfer Payment Agreement
Appendix B – Source of Financing Report

c: Anna Lisa Barbon, Managing Director Corporate Services and City Treasurer
Laurie Green, Financial Business Administrator

APPENDIX A

Bill No.
2018

By-law No. A.-

A by-law to authorize and approve a Transfer Payment Agreement under the Ontario Municipal GHG Challenge Fund Program, between Her Majesty the Queen in Right of Ontario, as represented by the Minister of Environment and Climate Change for the Province of Ontario and The Corporation of the City of London; to authorize the Mayor and the City Clerk to execute the Agreement; and to delegate authority to the Managing Director of Environmental & Engineering Services and City Engineer, or their written designate, and the Managing Director, Corporate Services and City Treasurer, Chief Financial Officer, or their written designate, to execute any financial reports and all other documents required under the Agreement.

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 section 8 of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended provides that the powers of a municipality shall be interpreted broadly so as to confer broad authority on the municipality to enable it to govern its affairs as it considers appropriate and to enhance its ability to respond to municipal issues;

AND WHEREAS subsection 10(1) of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended provides that a municipality may provide any service or thing that the municipality considers necessary or desirable for the public;

AND WHEREAS the Province of Ontario (the "Province") and The Corporation of the City of London (the "City") recognize that investment in compressed natural gas fuel switching projects is a key component in Ontario's Climate Change Action Plan;

AND WHEREAS the City has applied to the Province for funding under the Ontario Municipal GHG Challenge Fund Program for a list of projects;

AND WHEREAS subsection 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;

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

1. The Transfer Payment Agreement to be entered into between Her Majesty the Queen in Right of Ontario, as represented by the Minister of the Environment and Climate Change for the Province of Ontario and The Corporation of the City of London, for the provision of funding from the Ontario Municipal GHG Challenge Fund Program, attached hereto as Schedule "1", 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, above.
3. The Managing Director of Environmental & Engineering Services and City Engineer, or their written designate, and the Managing Director, Corporate Services and City Treasurer, Chief Financial Officer, or their written designate, are delegated authority to verify and attest to the accuracy of claimed costs and all other documents required by the Province and is the Authorized Representative with signing authority on behalf of the City.
4. The City commits to reviewing its existing Community-wide GHG Emissions Inventory, Community-wide GHG Reduction Targets, and Community-wide GHG Emissions

Reduction Plan to ensure they meet each of the definitions in Schedule B of the Transfer Payment Agreement within two years of signing the Agreement.

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

PASSED in Open Council on March 27, 2018.

Matt Brown
Mayor

Catharine Saunders
City Clerk

First Reading – March 27, 2018
Second Reading - March 27, 2018
Third Reading - March 27, 2018

Schedule 1
Transfer Payment Agreement

ONTARIO TRANSFER PAYMENT AGREEMENT

Municipal GHG Challenge Fund – Phase 1 - Fuel Switching Project - Diesel to CNG Transition

THE AGREEMENT is effective as of March 29, 2018.

B E T W E E N:

Her Majesty the Queen in right of Ontario as represented by the Minister of the Environment and Climate Change

(the “**Province**”)

- and -

The Corporation of the City of London

(the “**Recipient**”)

CONSIDERATION

In consideration of the mutual covenants and agreements contained in this Agreement and for other good and valuable consideration, the receipt and sufficiency of which are expressly acknowledged, the Province and the Recipient agree as follows:

1.0 ENTIRE AGREEMENT

1.1 This Agreement, including:

- Schedule “A” - General Terms and Conditions
- Schedule “B” - Project Specific Information and Additional Provisions
- Schedule “C” - Project Description
- Schedule “D” - Budget
- Schedule “E” - Payment Plan
- Schedule “F” - Reporting, and

any amending agreement entered into as provided for below, constitutes the entire agreement between the Parties with respect to the subject matter contained in the Agreement and supersedes all prior oral or written representations and agreements.

2.0 COUNTERPARTS AND TRANSMISSION

- 2.1 The Agreement may be executed in any number of counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument.
- 2.2 The Agreement may be validly executed and delivered by means of transmission of signed facsimile or by email transmission of an electronically scanned original signature (such as in PDF file format).

3.0 AMENDING THE AGREEMENT

- 3.1 The Agreement may only be amended by a written agreement duly executed by the Parties.

4.0 ACKNOWLEDGEMENT

- 4.1 The Recipient acknowledges that:
- (a) by receiving Funds it may become subject to legislation applicable to organizations that receive funding from the Government of Ontario, including the *Broader Public Sector Accountability Act, 2010* (Ontario), the *Public Sector Salary Disclosure Act, 1996* (Ontario), and the *Auditor General Act* (Ontario);
 - (b) Her Majesty the Queen in right of Ontario has issued expenses, perquisites, and procurement directives and guidelines pursuant to the *Broader Public Sector Accountability Act, 2010* (Ontario);
 - (c) the Funds are:
 - (i) to assist the Recipient to carry out the Project and not to provide goods or services to the Province;
 - (ii) funding for the purposes of the *Public Sector Salary Disclosure Act, 1996* (Ontario);
 - (d) the Province is not responsible for carrying out the Project.

- SIGNATURE PAGE FOLLOWS -

The Parties have executed the Agreement on the dates set out below.

**HER MAJESTY THE QUEEN IN RIGHT OF ONTARIO
as represented by the Minister of the Environment and
Climate Change**

Date

Name: Alex Wood
Title: Assistant Deputy Minister

The Corporation of the City of London

Date

Name: Matt Brown
Title: Mayor

I have authority to bind the Recipient.

Date

Name: Catharine Saunders
Title: City Clerk

I have authority to bind the Recipient.

**SCHEDULE “A”
GENERAL TERMS AND CONDITIONS**

A1.0 INTERPRETATION AND DEFINITIONS

A1.1 Interpretation. For the purposes of interpretation:

- (a) words in the singular include the plural and vice-versa;
- (b) words in one gender include all genders;
- (c) the headings do not form part of the Agreement; they are for reference only and will not affect the interpretation of the Agreement;
- (d) any reference to dollars or currency will be in Canadian dollars and currency; and
- (e) “include”, “includes” and “including” denote that the subsequent list is not exhaustive.

A1.2 Definitions. In the Agreement, the following terms will have the following meanings:

“Additional Provisions” means the terms and conditions referred to in section A9.1 and as specified in Schedule “B”.

“Agreement” means this agreement entered into between the Province and the Recipient and includes all of the schedules listed in section 1.1 and any amending agreement entered into pursuant to section 3.1.

“Budget” means the budget attached to the Agreement as Schedule “D”.

“Business Day” means any working day, Monday to Friday inclusive, excluding statutory and other holidays, namely: New Year’s Day; Family Day; Good Friday; Easter Monday; Victoria Day; Canada Day; Civic Holiday; Labour Day; Thanksgiving Day; Remembrance Day; Christmas Day; Boxing Day and any other day on which the Province has elected to be closed for business.

“Effective Date” means the date set out at the top of the Agreement.

“Event of Default” has the meaning ascribed to it in section A15.1.

“Expiry Date” means the date on which the Agreement will expire and is the date set out in Schedule “B”.

“Funding Year” means:

- (a) in the case of the first Funding Year, the period commencing on the

Effective Date and ending on the following March 31; and

- (b) in the case of Funding Years subsequent to the first Funding Year, the period commencing on April 1 following the end of the previous Funding Year and ending on the following March 31.

“Funds” means the money the Province provides to the Recipient pursuant to the Agreement.

“Indemnified Parties” means Her Majesty the Queen in right of Ontario, Her ministers, agents, appointees, and employees.

“Maximum Funds” means the maximum amount the Province will provide the Recipient under the Agreement as set out in Schedule “B”.

“Notice” means any communication given or required to be given pursuant to the Agreement.

“Notice Period” means the period of time within which the Recipient is required to remedy an Event of Default, and includes any such period or periods of time by which the Province extends that time in accordance with section A15.4.

“Parties” means the Province and the Recipient.

“Party” means either the Province or the Recipient.

“Project” means the undertaking described in Schedule “C”.

“Reports” means the reports described in Schedule “F”.

A2.0 REPRESENTATIONS, WARRANTIES, AND COVENANTS

A2.1 General. The Recipient represents, warrants, and covenants that:

- (a) it is, and will continue to be, a validly existing legal entity with full power to fulfill its obligations under the Agreement;
- (b) it has, and will continue to have, the experience and expertise necessary to carry out the Project;
- (c) it is in compliance with, and will continue to comply with, all federal and provincial laws and regulations, all municipal by-laws, and any other orders, rules, and by-laws related to any aspect of the Project, the Funds, or both; and
- (d) unless otherwise provided for in the Agreement, any information the Recipient provided to the Province in support of its request for funds (including information relating to any eligibility requirements) was true and

complete at the time the Recipient provided it and will continue to be true and complete.

A2.2 Execution of Agreement. The Recipient represents and warrants that it has:

- (a) the full power and authority to enter into the Agreement; and
- (b) taken all necessary actions to authorize the execution of the Agreement.

A2.3 Governance. The Recipient represents, warrants, and covenants that it has, will maintain, in writing, and will follow:

- (a) a code of conduct and ethical responsibilities for all persons at all levels of the Recipient's organization;
- (b) procedures to enable the ongoing effective functioning of the Recipient;
- (c) decision-making mechanisms for the Recipient;
- (d) procedures to enable the Recipient to manage Funds prudently and effectively;
- (e) procedures to enable the Recipient to complete the Project successfully;
- (f) procedures to enable the Recipient, in a timely manner, to identify risks to the completion of the Project, and strategies to address the identified risks;
- (g) procedures to enable the preparation and submission of all Reports required pursuant to Article A7.0; and
- (h) procedures to enable the Recipient to deal with such other matters as the Recipient considers necessary to ensure that the Recipient carries out its obligations under the Agreement.

A2.4 Supporting Documentation. Upon the request of the Province, the Recipient will provide the Province with proof of the matters referred to in this Article A2.0.

A3.0 TERM OF THE AGREEMENT

A3.1 Term. The term of the Agreement will commence on the Effective Date and will expire on the Expiry Date unless terminated earlier pursuant to Article A13.0, Article A14.0, or Article A15.0.

A4.0 FUNDS AND CARRYING OUT THE PROJECT

A4.1 Funds Provided. The Province will:

- (a) provide the Recipient up to the Maximum Funds for the purpose of carrying out the Project;
- (b) provide the Funds to the Recipient in accordance with the Payment Plan attached to the Agreement as Schedule “E”; and
- (c) deposit the Funds into an account designated by the Recipient provided that the account:
 - (i) resides at a Canadian financial institution; and
 - (ii) is in the name of the Recipient.

A4.2 Limitation on Payment of Funds. Despite section A4.1:

- (a) the Province is not obligated to provide any Funds to the Recipient until the Recipient provides the insurance certificate or other proof as the Province may request pursuant to section A12.2;
- (b) the Province is not obligated to provide instalments of Funds until it is satisfied with the progress of the Project;
- (c) the Province may adjust the amount of Funds it provides to the Recipient in any Funding Year based upon the Province’s assessment of the information the Recipient provides to the Province pursuant to section A7.1; and
- (d) if, pursuant to the *Financial Administration Act* (Ontario), the Province does not receive the necessary appropriation from the Ontario Legislature for payment under the Agreement, the Province is not obligated to make any such payment, and, as a consequence, the Province may:
 - (i) reduce the amount of Funds and, in consultation with the Recipient, change the Project; or
 - (ii) terminate the Agreement pursuant to section A14.1.

A4.3 Use of Funds and Carry Out the Project. The Recipient will do all of the following:

- (a) carry out the Project;
- (b) use the Funds only for the purpose of carrying out the Project;
- (c) spend the Funds only in accordance with the Budget;
- (d) not use the Funds to cover any cost that has been or will be funded or reimbursed by one or more of any third party, any ministry, agency, or organization of the Government of Ontario.

A4.4 No Changes. The Recipient will not make any changes to the Project or the Budget without the prior written consent of the Province.

A4.5 Interest Bearing Account. If the Province provides Funds before the Recipient's immediate need for the Funds, the Recipient will place the Funds in an interest bearing account in the name of the Recipient at a Canadian financial institution.

A4.6 Interest. If the Recipient earns any interest on the Funds, the Province may:

- (a) deduct an amount equal to the interest from any further instalments of Funds; or
- (b) demand from the Recipient the repayment of an amount equal to the interest.

A4.7 Maximum Funds. The Recipient acknowledges that the Funds available to it pursuant to the Agreement will not exceed the Maximum Funds.

A4.8 Rebates, Credits, and Refunds. The Recipient acknowledges that the amount of Funds available to it pursuant to the Agreement is based on the actual costs to the Recipient to carry out the Project, less any costs (including taxes) for which the Recipient has received, will receive, or is eligible to receive, a rebate, credit, or refund.

A5.0 RECIPIENT'S ACQUISITION OF GOODS OR SERVICES, AND DISPOSAL OF ASSETS

A5.1 Acquisition. If the Recipient acquires goods, services, or both with the Funds, it will:

- (a) do so through a process that promotes the best value for money; and
- (b) comply with the *Broader Public Sector Accountability Act, 2010* (Ontario), including any procurement directive issued thereunder, to the extent applicable.

A5.2 Disposal. The Recipient will not, without the Province's prior written consent, sell, lease, or otherwise dispose of any asset purchased or created with the Funds or for which Funds were provided, the cost of which exceeded the amount as set out in Schedule "B" at the time of purchase.

A6.0 CONFLICT OF INTEREST

A6.1 No Conflict of Interest. The Recipient will carry out the Project and use the Funds without an actual, potential, or perceived conflict of interest.

A6.2 Conflict of Interest Includes. For the purposes of this Article, a conflict of interest includes any circumstances where:

- (a) the Recipient; or
- (b) any person who has the capacity to influence the Recipient's decisions,

has outside commitments, relationships, or financial interests that could, or could be seen to, interfere with the Recipient's objective, unbiased, and impartial judgment relating to the Project, the use of the Funds, or both.

A6.3 Disclosure to Province. The Recipient will:

- (a) disclose to the Province, without delay, any situation that a reasonable person would interpret as an actual, potential, or perceived conflict of interest; and
- (b) comply with any terms and conditions that the Province may prescribe as a result of the disclosure.

A7.0 REPORTING, ACCOUNTING, AND REVIEW

A7.1 Preparation and Submission. The Recipient will:

- (a) submit to the Province at the address referred to in section A19.1, all Reports in accordance with the timelines and content requirements set out in Schedule "F", or in a form as specified by the Province from time to time;
- (b) submit to the Province at the address referred to in section A19.1, any other reports as may be requested by the Province in accordance with the timelines and content requirements specified by the Province;
- (c) ensure that all Reports and other reports are completed to the satisfaction of the Province; and
- (d) ensure that all Reports and other reports are signed on behalf of the Recipient by an authorized signing officer.

A7.2 Record Maintenance. The Recipient will keep and maintain:

- (a) all financial records (including invoices) relating to the Funds or otherwise to the Project in a manner consistent with generally accepted accounting principles; and
- (b) all non-financial documents and records relating to the Funds or otherwise to the Project.

A7.3 Inspection. The Province, any authorized representative, or any independent auditor identified by the Province may, at the Province's expense, upon twenty-four hours' Notice to the Recipient and during normal business hours, enter upon the Recipient's premises to review the progress of the Project and the Recipient's allocation and expenditure of the Funds and, for these purposes, the Province, any authorized representative, or any independent auditor identified by the Province may take one or more of the following actions:

- (a) inspect and copy the records and documents referred to in section A7.2;
- (b) remove any copies made pursuant to section A7.3(a) from the Recipient's premises; and
- (c) conduct an audit or investigation of the Recipient in respect of the expenditure of the Funds, the Project, or both.

A7.4 Disclosure. To assist in respect of the rights set out in section A7.3, the Recipient will disclose any information requested by the Province, any authorized representatives, or any independent auditor identified by the Province, and will do so in the form requested by the Province, any authorized representative, or any independent auditor identified by the Province, as the case may be.

A7.5 No Control of Records. No provision of the Agreement will be construed so as to give the Province any control whatsoever over the Recipient's records.

A7.6 Auditor General. For greater certainty, the Province's rights under this Article are in addition to any rights provided to the Auditor General pursuant to section 9.1 of the *Auditor General Act* (Ontario).

A8.0 COMMUNICATIONS REQUIREMENTS

A8.1 Acknowledge Support. Unless otherwise directed by the Province, the Recipient will:

- (a) acknowledge the support of the Province for the Project; and
- (b) ensure that the acknowledgement referred to in section A8.1(a) is in a form and manner as directed by the Province.

A8.2 Publication. The Recipient will indicate, in any of its Project-related publications, whether written, oral, or visual, that the views expressed in the publication are the views of the Recipient and do not necessarily reflect those of the Province.

A9.0 FURTHER CONDITIONS

A9.1 Additional Provisions. The Recipient will comply with any Additional Provisions. In the event of a conflict or inconsistency between any of the

requirements of the Additional Provisions and any requirements of this Schedule “A”, the Additional Provisions will prevail.

A10.0 FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY

A10.1 FIPPA. The Recipient acknowledges that the Province is bound by the *Freedom of Information and Protection of Privacy Act* (Ontario) and that any information provided to the Province in connection with the Project or otherwise in connection with the Agreement may be subject to disclosure in accordance with that Act.

A11.0 INDEMNITY

A11.1 Indemnification. The Recipient hereby agrees to indemnify and hold harmless the Indemnified Parties from and against any and all liability, loss, costs, damages, and expenses (including legal, expert and consultant fees), causes of action, actions, claims, demands, lawsuits, or other proceedings, by whomever made, sustained, incurred, brought, or prosecuted, in any way arising out of or in connection with the Project or otherwise in connection with the Agreement, unless solely caused by the negligence or wilful misconduct of the Indemnified Parties.

A11.2 Recipient’s Participation. The Recipient will, at its expense, to the extent requested by the Province, participate in or conduct the defence of any proceeding against any Indemnified Parties and any negotiations for their settlement.

A11.3 Province’s Election. The Province may elect to participate in or conduct the defence of any proceeding by providing Notice to the Recipient of such election without prejudice to any other rights or remedies of the Province under the Agreement, at law, or in equity. Each Party participating in the defence will do so by actively participating with the other’s counsel.

A11.4 Settlement Authority. The Recipient will not enter into a settlement of any proceeding against any Indemnified Parties unless the Recipient has obtained the prior written approval of the Province. If the Recipient is requested by the Province to participate in or conduct the defence of any proceeding, the Province will co-operate with and assist the Recipient to the fullest extent possible in the proceeding and any related settlement negotiations.

A11.5 Recipient’s Co-operation. If the Province conducts the defence of any proceedings, the Recipient will co-operate with and assist the Province to the fullest extent possible in the proceedings and any related settlement negotiations

A12.0 INSURANCE

A12.1 Recipient’s Insurance. The Recipient represents, warrants, and covenants that it has, and will maintain, at its own cost and expense, with insurers having a secure A.M. Best rating of B+ or greater, or the equivalent, all the necessary and

appropriate insurance that a prudent person carrying out a project similar to the Project would maintain, including commercial general liability insurance on an occurrence basis for third party bodily injury, personal injury, and property damage, to an inclusive limit of not less than the amount set out in Schedule "B" per occurrence. The policy will include the following:

- (a) the Indemnified Parties as additional insureds with respect to liability arising in the course of performance of the Recipient's obligations under, or otherwise in connection with, the Agreement;
- (b) a cross-liability clause;
- (c) contractual liability coverage; and
- (d) a 30 day written notice of cancellation.

A12.2 Proof of Insurance. The Recipient will:

- (a) provide to the Province, either:
 - (i) certificates of insurance that confirm the insurance coverage as provided for in section A12.1; or
 - (ii) other proof that confirms the insurance coverage as provided for in section A12.1; and
- (b) upon the request of the Province, provide to the Province a copy of any insurance policy.

A13.0 TERMINATION ON NOTICE

A13.1 Termination on Notice. The Province may terminate the Agreement at any time without liability, penalty, or costs upon giving at least 30 days' Notice to the Recipient.

A13.2 Consequences of Termination on Notice by the Province. If the Province terminates the Agreement pursuant to section A13.1, the Province may take one or more of the following actions:

- (a) cancel all further instalments of Funds;
- (b) demand the repayment of any Funds remaining in the possession or under the control of the Recipient; and
- (c) determine the reasonable costs for the Recipient to wind down the Project, and do either or both of the following:
 - (i) permit the Recipient to offset such costs against the amount the Recipient owes pursuant to section A13.2(b); and

- (ii) subject to section A4.8, provide Funds to the Recipient to cover such costs.

A14.0 TERMINATION WHERE NO APPROPRIATION

A14.1 Termination Where No Appropriation. If, as provided for in section A4.2(d), the Province does not receive the necessary appropriation from the Ontario Legislature for any payment the Province is to make pursuant to the Agreement, the Province may terminate the Agreement immediately without liability, penalty, or costs by giving Notice to the Recipient.

A14.2 Consequences of Termination Where No Appropriation. If the Province terminates the Agreement pursuant to section A14.1, the Province may take one or more of the following actions:

- (a) cancel all further instalments of Funds;
- (b) demand the repayment of any Funds remaining in the possession or under the control of the Recipient; and
- (c) determine the reasonable costs for the Recipient to wind down the Project and permit the Recipient to offset such costs against the amount owing pursuant to section A14.2(b).

A14.3 No Additional Funds. For greater clarity, if the costs determined pursuant to section A14.2(c) exceed the Funds remaining in the possession or under the control of the Recipient, the Province will not provide additional Funds to the Recipient.

A15.0 EVENT OF DEFAULT, CORRECTIVE ACTION, AND TERMINATION FOR DEFAULT

A15.1 Events of Default. Each of the following events will constitute an Event of Default:

- (a) in the opinion of the Province, the Recipient breaches any representation, warranty, covenant, or other material term of the Agreement, including failing to do any of the following in accordance with the terms and conditions of the Agreement:
 - (i) carry out the Project;
 - (ii) use or spend Funds; or
 - (iii) provide, in accordance with section A7.1, Reports or such other reports as may have been requested pursuant to section A7.1(b);
- (b) the Recipient's operations, or its organizational structure, changes such that it no longer meets one or more of the eligibility requirements of the program under

which the Province provides the Funds;

- (c) the Recipient makes an assignment, proposal, compromise, or arrangement for the benefit of creditors, or a creditor makes an application for an order adjudging the Recipient bankrupt, or applies for the appointment of a receiver; or
- (d) the Recipient ceases to operate.

A15.2 Consequences of Events of Default and Corrective Action. If an Event of Default occurs, the Province may, at any time, take one or more of the following actions:

- (a) initiate any action the Province considers necessary in order to facilitate the successful continuation or completion of the Project;
- (b) provide the Recipient with an opportunity to remedy the Event of Default;
- (c) suspend the payment of Funds for such period as the Province determines appropriate;
- (d) reduce the amount of the Funds;
- (e) cancel all further instalments of Funds;
- (f) demand the repayment of any Funds remaining in the possession or under the control of the Recipient;
- (g) demand the repayment of an amount equal to any Funds the Recipient used, but did not use in accordance with the Agreement;
- (h) demand the repayment of an amount equal to any Funds the Province provided to the Recipient; and
- (i) terminate the Agreement at any time, including immediately, without liability, penalty or costs to the Province upon giving Notice to the Recipient.

A15.3 Opportunity to Remedy. If, in accordance with section A15.2(b), the Province provides the Recipient with an opportunity to remedy the Event of Default, the Province will provide Notice to the Recipient of:

- (a) the particulars of the Event of Default; and
- (b) the Notice Period.

A15.4 Recipient not Remediating. If the Province has provided the Recipient with an opportunity to remedy the Event of Default pursuant to section A15.2(b), and:

- (a) the Recipient does not remedy the Event of Default within the Notice

Period;

- (b) it becomes apparent to the Province that the Recipient cannot completely remedy the Event of Default within the Notice Period; or
- (c) the Recipient is not proceeding to remedy the Event of Default in a way that is satisfactory to the Province,

the Province may extend the Notice Period, or initiate any one or more of the actions provided for in sections A15.2(a), (c), (d), (e), (f), (g), (h), and (i).

A15.5 When Termination Effective. Termination under this Article will take effect as set out in the Notice.

A16.0 FUNDS AT THE END OF A FUNDING YEAR

A16.1 Funds at the End of a Funding Year. Without limiting any rights of the Province under Article A15.0, if the Recipient has not spent all of the Funds allocated for the Funding Year as provided for in the Budget, the Province may take one or both of the following actions:

- (a) demand the return of the unspent Funds; and
- (b) adjust the amount of any further instalments of Funds accordingly.

A17.0 FUNDS UPON EXPIRY

A17.1 Funds Upon Expiry. The Recipient will, upon expiry of the Agreement, return to the Province any Funds remaining in its possession or under its control.

A18.0 REPAYMENT

A18.1 Repayment of Overpayment. If at any time the Province provides Funds in excess of the amount to which the Recipient is entitled under the Agreement, the Province may:

- (a) deduct an amount equal to the excess Funds from any further instalments of Funds; or
- (b) demand that the Recipient pay an amount equal to the excess Funds to the Province.

A18.2 Debt Due. If, pursuant to the Agreement:

- (a) the Province demands the payment of any Funds or an amount equal to any Funds from the Recipient; or

- (b) the Recipient owes any Funds or an amount equal to any Funds to the Province, whether or not their return or repayment has been demanded by the Province,

such Funds or other amount will be deemed to be a debt due and owing to the Province by the Recipient, and the Recipient will pay or return the amount to the Province immediately, unless the Province directs otherwise.

A18.3 Interest Rate. The Province may charge the Recipient interest on any money owing by the Recipient at the then current interest rate charged by the Province of Ontario on accounts receivable.

A18.4 Payment of Money to Province. The Recipient will pay any money owing to the Province by cheque payable to the “Ontario Minister of Finance” and delivered to the Province at the address referred to in section A19.1.

A18.5 Fails to Repay. Without limiting the application of section 43 of the *Financial Administration Act* (Ontario), if the Recipient fails to repay any amount owing under the Agreement, Her Majesty the Queen in right of Ontario may deduct any unpaid amount from any money payable to the Recipient by Her Majesty the Queen in right of Ontario.

A19.0 NOTICE

A19.1 Notice in Writing and Addressed. Notice will be in writing and will be delivered by email, postage-prepaid mail, personal delivery, or fax, and will be addressed to the Province and the Recipient respectively as set out in Schedule “B”, or as either Party later designates to the other by Notice.

A19.2 Notice Given. Notice will be deemed to have been given:

- (a) in the case of postage-prepaid mail, five Business Days after the Notice is mailed; or
- (b) in the case of email, personal delivery, or fax, one Business Day after the Notice is delivered.

A19.3 Postal Disruption. Despite section A19.2(a), in the event of a postal disruption:

- (a) Notice by postage-prepaid mail will not be deemed to be received; and
- (b) the Party giving Notice will provide Notice by email, personal delivery, or fax.

A20.0 CONSENT BY PROVINCE AND COMPLIANCE BY RECIPIENT

A20.1 Consent. When the Province provides its consent pursuant to the Agreement, it may impose any terms and conditions on such consent and the Recipient will comply with such terms and conditions.

A21.0 SEVERABILITY OF PROVISIONS

A21.1 Invalidity or Unenforceability of Any Provision. The invalidity or unenforceability of any provision of the Agreement will not affect the validity or enforceability of any other provision of the Agreement. Any invalid or unenforceable provision will be deemed to be severed.

A22.0 WAIVER

A22.1 Waivers in Writing. If a Party fails to comply with any term of the Agreement, that Party may only rely on a waiver of the other Party if the other Party has provided a written waiver in accordance with the Notice provisions in Article A19.0. Any waiver must refer to a specific failure to comply and will not have the effect of waiving any subsequent failures to comply.

A23.0 INDEPENDENT PARTIES

A23.1 Parties Independent. The Recipient is not an agent, joint venturer, partner, or employee of the Province, and the Recipient will not represent itself in any way that might be taken by a reasonable person to suggest that it is, or take any actions that could establish or imply such a relationship.

A24.0 ASSIGNMENT OF AGREEMENT OR FUNDS

A24.1 No Assignment. The Recipient will not, without the prior written consent of the Province, assign any of its rights or obligations under the Agreement.

A24.2 Agreement Binding. All rights and obligations contained in the Agreement will extend to and be binding on the Parties' respective heirs, executors, administrators, successors, and permitted assigns.

A25.0 GOVERNING LAW

A25.1 Governing Law. The Agreement and the rights, obligations, and relations of the Parties will be governed by and construed in accordance with the laws of the Province of Ontario and the applicable federal laws of Canada. Any actions or proceedings arising in connection with the Agreement will be conducted in the courts of Ontario, which will have exclusive jurisdiction over such proceedings.

A26.0 FURTHER ASSURANCES

A26.1 Agreement into Effect. The Recipient will provide such further assurances as the Province may request from time to time with respect to any matter to which the Agreement pertains, and will otherwise do or cause to be done all acts or things necessary to implement and carry into effect the terms and conditions of the Agreement to their full extent.

A27.0 JOINT AND SEVERAL LIABILITY

A27.1 Joint and Several Liability. Where the Recipient is comprised of more than one entity, all such entities will be jointly and severally liable to the Province for the fulfillment of the obligations of the Recipient under the Agreement.

A28.0 RIGHTS AND REMEDIES CUMULATIVE

A28.1 Rights and Remedies Cumulative. The rights and remedies of the Province under the Agreement are cumulative and are in addition to, and not in substitution for, any of its rights and remedies provided by law or in equity.

A29.0 FAILURE TO COMPLY WITH OTHER AGREEMENTS

A29.1 Other Agreements. If the Recipient:

- (a) has failed to comply with any term, condition, or obligation under any other agreement with Her Majesty the Queen in right of Ontario or one of Her agencies (a “**Failure**”);
- (b) has been provided with notice of such Failure in accordance with the requirements of such other agreement;
- (c) has, if applicable, failed to rectify such Failure in accordance with the requirements of such other agreement; and
- (d) such Failure is continuing,

the Province may suspend the payment of Funds for such period as the Province determines appropriate.

A30.0 SURVIVAL

A30.1 Survival. The following Articles and sections, and all applicable cross-referenced sections and schedules, will continue in full force and effect for a period of seven years from the date of expiry or termination of the Agreement: Article 1.0, Article 3.0, Article A1.0 and any other applicable definitions, sections

A4.2(d), A4.6, section A5.2, section A7.1 (to the extent that the Recipient has not provided the Reports or other reports as may have been requested to the satisfaction of the Province), sections A7.2, A7.3, A7.4, A7.5, A7.6, Article A8.0, Article A11.0, sections A13.2, sections A14.2, A14.3, sections A15.1, A15.2(d), (e), (f), (g) and (h), Article A17.0, Article A18.0, Article A19.0, Article A21.0, section A24.2, Article A25.0, Article A27.0, Article A28.0, Article A29.0 and Article A30.0.

- END OF GENERAL TERMS AND CONDITIONS -

SCHEDULE “B”
PROJECT SPECIFIC INFORMATION AND ADDITIONAL PROVISIONS

Maximum Funds	\$703,479.60
Expiry Date	90 days after the final report due date in Schedule “F”
Amount for the purposes of section A5.2 (Disposal) of Schedule “A”	\$1,000.00
Insurance	\$ 2,000,000.00
Contact information for the purposes of Notice to the Province	Name: Ministry of the Environment and Climate Change Attention: Municipal Challenge Fund Coordinator Email: ChallengeFund@ontario.ca
Contact information for the purposes of Notice to the Recipient	Name: City of London Address: 300 Dufferin Avenue, London, ON, N6A 4L9 Attention: Ms. Kelly Scherr, Managing Director, Environmental & Engineering Services & City Engineer Email: kscherr@london.ca Telephone: (519) 661-2489 x2391
Contact information for the senior financial person in the Recipient organization (e.g., CFO, CAO) – to respond as required to requests from the Province related to the Agreement	Name: Anna Lisa Barbon Position: Managing Director, Corporate Services and City Treasurer, Chief Financial Office Email: abarbon@london.ca Telephone: (519) 661-2489 x4705

Recipient's Canada Revenue Agency Business Number – for compliance with the <i>Financial Administration Act</i> (Ontario)	1194 20883
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Additional Provisions:

B.1 The following definitions are added to section A1.2 in alphabetical order:

“**Act**” has the meaning set out in section C.1 of Schedule “C”.

“**CCAP**” has the meaning set out in section C.1 of Schedule “C”.

“**CNG**” has the meaning set out in section C.1 of Schedule “C”.

“**Community-wide GHG Emissions Inventory**” means a summary of all GHG emissions produced within a community which, at a minimum, includes emissions from buildings, transportation and solid waste within municipal boundaries.

“**Community-wide GHG Emissions Reduction Plan**” means a municipal council-approved document that outlines the Recipient’s strategy for meeting its Community-wide GHG Reduction Targets, including a comprehensive assessment of various GHG emissions reduction strategies and the identification of costs and impacts of specific GHG emissions reduction measures that could be undertaken for specific facilities, operations, areas, or sectors and an implementation strategy that includes resource requirements, a monitoring and evaluation plan, and timelines.

“**Community-wide GHG Reduction Target**” means a goal for reducing GHG emissions from all sources included in the Recipient’s Community-wide GHG Emissions Inventory to a specific level compared to a baseline year.

“**GHG**” means greenhouse gas that traps heat in the atmosphere, and includes carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride, and nitrogen trifluoride.

“**Greenhouse Gas Reduction Account**” has the meaning set out in section 71 of the *Climate Change Mitigation and Low-carbon Economy Act, 2016*.

“**Payment Plan**” means the payment plan attached to the Agreement as Schedule “E”.

“**RNG**” has the meaning set out in section C.1 of Schedule “C”.

B.2 The following is added to section A2.1:

- (e) it has, and will continue to have for the term of the Agreement, adequate financial resources to cover normal operating expenses and be a going concern.

B.3 Article A2.0 is amended by adding the following new section:

A2.5 Greenhouse Gas Reduction Account. The Recipient acknowledges that:

- (a) the Funds come from amounts credited to the Greenhouse Gas Reduction Account and as such can only be used, directly or indirectly, for initiatives reasonably likely to reduce, or support the reduction of, GHG, and
- (b) it is receiving Funds for the Project on the basis that the Project is reasonably likely to reduce or support the reduction of GHG,
- (c) components of the Project may be funded from source(s) other than (a) above,

and on the basis of the above acknowledgments, the Recipient agrees and covenants that it shall not register, and shall ensure that no person registers, any component of the Project receiving Funds from amounts credited to the Greenhouse Gas Reduction Account as an offset initiative under the *Climate Change Mitigation and Low-carbon Economy Act, 2016*, or use GHG reductions resulting from any component of the Project receiving Funds from amounts credited to the Greenhouse Gas Reduction Account as the basis for offsetting or displacing GHG emissions. In addition and on the basis of the above acknowledgments, the Recipient agrees and covenants that it shall not register, and shall ensure that no person registers, any component of the Project receiving amounts from source(s) other than (a) above as an offset initiative under the *Climate Change Mitigation and Low-carbon Economy Act, 2016*, or use GHG reductions under any component of the Project receiving amounts from source(s) other than (a) above as the basis for offsetting or displacing GHG emissions, except with the Province’s prior written consent.

B.4 Section A4.4 is deleted in its entirety and replaced with the following:

A4.4 No Changes. The Recipient will not make any changes to the Project, the timelines or the Budget without the prior written consent of the Province.

B.5 Article A4.0 is amended by adding the following new sections:

A4.9 Province’s Role Limited to Providing Funds. For greater clarity, the Province’s role under the Agreement is limited to providing Funds to the

Recipient for the purposes of the Project and to receiving Reports, unless explicitly stated otherwise.

A4.10 Project Over Budget. The Recipient acknowledges that should Project expenses exceed the amount of the Funds allocated in the Budget, the Province is not responsible for any additional funding and the Recipient undertakes to incur all further costs necessary to complete the Project.

A4.11 Moving Funds. Despite section A4.4, the Recipient may move Funds equaling up to ten percent (10%) of the allocation in one line within a Budget category in Schedule "D" to another line within the same Budget category, except for expenses listed under the Budget category "Other" (if any) in Schedule "D" which may not be moved without approval from the Province. In moving Funds under this section A4.11, the Recipient may not reduce any Budget line by more than ten percent (10%) of its original allocation or increase any Budget line by more than twenty percent (20%) of its original allocation.

A4.12 Intellectual Property. The Province is not the owner of any intellectual property generated as a result of the Agreement.

A4.13 Cash Flow Management. Despite subsection A4.1(b), in order to more accurately reflect the Recipient's anticipated cash flow needs, the Province may divide any instalment of the Funds set out in the Payment Plan into two or more smaller instalments based upon the Reports submitted by the Recipient pursuant to section A7.1. If the instalment amount is so divided by the Province, the Recipient may request payment of another instalment by confirming to the Province in a further report pursuant to section A7.1(b) that said instalment will be required in one month's time.

A4.14 Additional Funding. The Recipient acknowledges that it shall not be eligible to apply for or to receive additional funding from any other Greenhouse Gas Reduction Account-funded programs to fund any components of the Project.

B.6 Article 7 is amended by adding the following new section:

A7.7 Confirmation of GHG Emission Reduction Potential. After receiving a Report from the Recipient, the Province will verify the GHG emission reduction potential of the Project as set out in the Report. To conduct such verification, the Province may use any of the following provided to it by the Recipient: (i) energy data, (ii) activity levels, (iii) GHG emission factors, and (iv) any underlying assumptions.

B.7 Section A8.1(a) is deleted and replaced with the following:

A8.1 **Acknowledge Support.** Unless otherwise approved by the Province, the Recipient will:

- (a) acknowledge the support of the Province for the Project using the statement “This project has received funding support from the Government of Ontario. Such support does not indicate endorsement by the Government of Ontario of the contents of this material”;

B.8 Article A8.0 is further amended by adding the following new sections:

A8.3 **Open Data.** Subject to applicable laws, the Recipient gives its consent to the Province for the public release of any information provided under this Agreement including but not limited to the following information, whether in hard copy or in electronic form, on the internet or otherwise: Recipient name, Recipient contact information, Recipient address or general location, amount of Maximum Funds and/or Funds, Project description, Project objectives/goals, Project location, Project results reported by the Recipient including, without limitation, the GHG emission reduction potential of the Project, Budget and any analysis, audit or evaluation reports relating to the Project or to the Agreement performed by either Party. However, the Province and the Recipient agree that such permission does not apply to the following: NIL.

A8.4 **Announcements.** The Recipient shall not publicly announce receiving the Funds or anything to do with the Agreement, including requesting the presence of the Minister of the Environment and Climate Change at one or more Project events, until permitted by the Province.

A8.5 **Use of Ontario logo.** The Recipient may only use the Ontario logo by requesting and obtaining written approval from the Province. The placement of the logo on the Recipient’s materials will clearly identify the Government of Ontario as a funder, funding supporter or sponsor, and not as a partner or similar.

B.9 **Conjunctions.** Where, pursuant to section A9.1, any sections have been modified to add or delete an item from a list, the “and” or “or” conjunction used before the last item on the list shall be deemed to have been moved to the penultimate item on the modified list.

B.10 Article A10.0 is amended by adding the following new section:

A10.2 **MFIPPA.** The Province acknowledges that the Recipient is bound by the *Municipal Freedom of Information and Protection of Privacy Act* and that any information provided to the Recipient in connection with the Project or otherwise in connection with the Agreement may be subject to disclosure in accordance with that Act.

- B.11 The following event is added to section A15.1:
- (e) the Recipient fails to respond to any inquiry of the Province pertaining to the *Public Sector Salary Disclosure Act, 1996* (Ontario).
- B.12 The following consequence is added to section A15.2:
- (j) demand the repayment of an amount equal to, at the discretion of the Province, either the interest earned on the amount demanded under subsections (f), (g) or (h), or the interest imputed to be earned on such amount based on the then current interest rate charged by the Province of Ontario on accounts receivable, calculated from the date of the Event of Default;
- B.13 The following is added to section A18.1:
- (c) deduct from any further instalments of Funds an amount equal to, at the discretion of the Province, either the interest earned on the amount deducted under subsection (a) or the interest imputed to be earned on said amount based on the then current interest rate charged by the Province of Ontario on accounts receivable, calculated from the date of overpayment;
 - (d) demand that the Recipient pay an amount to the Province equal to, at the discretion of the Province, either the interest earned on the amount deducted under subsection (b) or the interest imputed to be earned on said amount based on the then current interest rate charged by the Province of Ontario on accounts receivable, calculated from the date of overpayment;
 - (e) deduct the amounts referred to in both subsection (a) and (c) from any further instalments of Funds; or
 - (f) demand that the Recipient pay an amount equal to the amounts referred to in both subsection (b) and (d).

B.14 A19.0 NOTICE

A19.1 Notice in Writing and Addressed. Notice will be in writing and will be delivered by email addressed to the Province and the Recipient respectively as set out in Schedule “B”, or as either Party later designates to the other by Notice.

A19.2 Notice Given. Notice will be deemed to have been given one Business Day after the Notice is delivered.

A19.3 Notice Not Given. For clarity, Notice may not be given or received by telephone, postage-prepaid mail, personal delivery, or fax despite the

inclusion of a telephone number, fax number or address (if any) in the table in Schedule "B".

B.15 The following sections are added to section A30.1, Survival, in chronological order: section A2.1(c), section A2.5, sections A4.1(a) and (b), section A4.11, section A4.13, section A7.7, section A8.3, section A8.5, sections A15.2(i) and (j), Article A31.0 and Article A34.0. Notwithstanding the foregoing, section A2.5 and all applicable cross-referenced sections and schedules, including without limitation the definitions in section B.1, will continue in full force and effect until the later of:

- (a) a period of thirty years from the date of expiry or termination of the Agreement; or
- (b) the period of time over which any direct or indirect GHG reduction occurs as a result of any Project component in section C.3.

B.16 The following new provisions are added following Article A30.0 Survival

A31.0 INDIGENOUS CONSULTATION

A31.1 Notification. The Recipient agrees to immediately notify the Province if any Indigenous group makes any inquiries about the Project.

A32.0 ACCESSIBILITY

A32.1 Meetings and Events. In using the Funds for meetings, events or similar, the Recipient will consider the accessibility needs of attendees with disabilities, both in terms of physical access to the event/meeting space, as well as access to the event/meeting contents and proceedings. The Recipient will use best efforts to accommodate these needs.

A32.2 Meetings and Events Examples. For assistance with the Recipient's obligations under section A32.1, examples of areas where accessibility should be considered include: refreshment and dietary arrangements; communications (e.g. alternate formats – large print, screen readers, Braille, audio format; assistive technologies); and venue selection.

A32.3 Venues. In using the Funds for venues, the Recipient will consider the accessibility needs of attendees with disabilities when selecting a venue, both in terms of exterior and interior access. The Recipient will use best efforts to accommodate these needs.

A32.4 Venue Examples. For assistance with the Recipient's obligations under section A32.3, examples of areas where accessibility should be considered include: parking, sidewalks/paths of travel, accessible transit, entrances and lobbies, elevators, accessible washrooms, hallways and corridors, and meeting and conference rooms.

A33.0 ENVIRONMENTAL INITIATIVES

A33.1 Meetings. In using the Funds for meetings, the Recipient will use best efforts to hold virtual meetings instead of requiring attendees to travel to meetings in person.

A33.2 Printing. In using the Funds for printing, the Recipient will use best efforts to:

- (a) minimize the need to print documents by scanning and e-mailing documents that might otherwise be printed;
- (b) print or copy double-sided and in black and white when printing or copying is necessary; and
- (c) purchase paper from environmentally responsible sources.

A33.3 Environmentally Responsible Sources. For assistance with the Recipient's obligations under section A33.2(c), environmentally responsible sources provide virgin bulk paper certified by third party verified forest certification systems such as Forest Stewardship Council (FSC), Canadian Standards Association (CSA) or Sustainable Forest Initiative (SFI).

A34.0 PERSONAL INFORMATION and PARTICIPATION BY MINORS

A34.1 Permissions. The Recipient represents, warrants and covenants that it has or will receive permission to disclose the personal information of all individuals whose personal information is disclosed in the Agreement or during the Project, Reports or other reports, and, in the case of minors, the legal guardian or parent has provided such permission on behalf of the minor.

A34.2 Consent of Legal Guardian. The Recipient acknowledges that it is the responsibility of the Recipient to obtain express written consent from the legal guardian of any minors who are involved in any way with the Project.

- END OF ADDITIONAL PROVISIONS -

SCHEDULE “C”

PROJECT DESCRIPTION

C.1 BACKGROUND

The Government of Ontario has taken significant steps to fight climate change and limit GHG emissions. With the passage of the *Climate Change Mitigation and Low-carbon Economy Act, 2016* (the “**Act**”) and release of its 5-year Climate Change Action Plan (“**CCAP**”), the Ontario government has shown a clear and continued commitment to leadership on climate change.

The Act establishes the Government of Ontario’s 2020, 2030, and 2050 GHG reduction targets in law. CCAP creates a foundation on which the Ontario government will develop and build the policies and programs needed to help the province meet the targets set in the Act. The Municipal GHG Challenge Fund is one of the specific actions identified in CCAP to support municipal action on climate change mitigation.

Ontario’s municipal governments own more of Ontario’s infrastructure than any other level of government, and local decisions about buildings, land-use and transportation have significant impacts on how people consume energy and emit GHGs. This is why community-based emission reduction projects are essential to achieving long-term and cost-effective emission reductions in the Province of Ontario.

The Municipal GHG Challenge Fund is aimed at supporting community-led action on climate change. It is a competitive, application-based program that will support GHG emissions reduction projects proposed by municipalities who have or will develop a Community-wide GHG Emissions Inventory, Community-wide GHG Reduction Targets, and a Community-wide GHG Emissions Reduction Plan.

The Project is a GHG reduction project that was proposed by the Recipient and selected for funding through the Municipal GHG Challenge Fund.

The Project was identified as an action item in the Recipient’s 2014-2018 Community Energy Action Plan. Within the Vehicles and the Transportation System section of this plan, the Recipient committed to the following actions:

- Lead by example for vehicle fleet management practices through the Green Fleet strategy.
- Work with Union Gas to promote the use of compressed natural gas (“**CNG**”) and renewable natural gas (“**RNG**”) (purified biogas) as a substitute for diesel fuel for heavy-duty vehicles in London

Transportation represents one of the largest challenges Ontario faces in achieving its emissions reductions targets. More than one-third of Ontario’s GHG emissions is caused by the transportation sector, with cars and trucks responsible for more than 70 per cent of the total.

The Recipient's direct use of diesel represents about 12 percent of total corporate energy use and 7 percent of corporate energy cost, but diesel's environmental impact is significantly higher, being 31 percent of the Recipient's energy-related GHG emissions.

Waste collection trucks are one of the largest users of diesel fuel in the Recipient's fleet. Curbside collection of garbage, recycling and yard waste is provided to approximately 120,000 single-family homes. Bulk collection of garbage and recycling is provided to approximately 50,000 multi-residential units.

The use of CNG as a vehicle fuel would reduce GHG emissions and air pollutants such as nitrogen oxides and diesel soot. Using CNG as a fuel also has lower operating costs. Using CNG also opens up opportunities for the Recipient to use RNG that it is hoping to produce from its W12A landfill to offset its own GHG emissions. Having waste collection trucks powered by the by-products of the waste disposed by Londoners also has great potential for public awareness of environmental challenges and opportunities.

However, there are two significant barriers to the use of CNG as fuel - the upfront premium cost for CNG vehicles and the cost for CNG infrastructure such as refueling and building improvements needed for CNG vehicle maintenance. The Province of Ontario is planning to address the first barrier through its proposed Green Commercial Vehicle Program. This Project deals with the second barrier.

Creating a commercially available refuelling site at a strategically placed location along the Recipient's municipal waste collection travel routes, close to other industrial and commercial fleets and along Highway 401/402 Toronto-Detroit-Sarnia freight corridor will fundamentally enable three separate sectors to transition to the CNG space.

The City will work with Union Gas and other stakeholders to incorporate CNG fuelling infrastructure that would serve the Recipient's waste collection trucks during weekday collection, but would then be made available to other private commercial CNG vehicles as well.

C.2 PROJECT OBJECTIVE

The objectives of this Project are to reduce GHG emissions from the transportation sector by implementing CNG refueling infrastructure and building improvements needed for CNG vehicle maintenance for the Recipient's fleet vehicles, while providing co-benefits such as job creation and developing CNG refuelling services for both London area CNG vehicle operators as well as CNG freight trucks using the Highway 401/402 highway corridor.

C.3 SCOPE OF PROJECT

The Recipient will plan, design, and implement:

- CNG refueling infrastructure working with Union Gas at a location close to the 401/402 highway corridor and

- building improvements at the Exeter Road Operations Centre in London, Ontario needed for CNG vehicle maintenance.
- their replacement strategy of replacing 5 diesel powered waste collection vehicles in their fleet with CNG powered waste collection vehicles by the end of 2019, replacing an additional 12 diesel powered waste collection vehicles in their fleet with CNG powered waste collection vehicles by the end of 2020, replacing an additional 6 diesel powered waste collection vehicles in their fleet with CNG powered waste collection vehicles by the end of 2022 and replacing an additional 14 diesel powered waste collection vehicles in their fleet with CNG powered waste collection vehicles by 2025.

The Recipient will then quantify the resulting GHG emissions reductions for 12 months after implementation of the CNG refueling and CNG vehicle maintenance infrastructure.

The Project will mainly be conducted by Kelly Scherr, Managing Director, Environmental & Engineering Services & City Engineer, Mike Bushby, Division Manager of Fleet and Operational Services Jay Stanford, Director, Environment, Fleet & Solid Waste, and James Skimming, Manager, Air Quality.

The activities and phases of this Project are as follows:

- C.3.1. GHG emissions inventory, targets and plan
- C.3.2. Phase 1 - Finalize business case and fuel purchase agreement, for approval by City of London Municipal Council
- C.3.3. Phase 2A - Facility Upgrades to Service and Repair CNG Vehicles
- C.3.4. Phase 2B - Refuelling Infrastructure Agreement
- C.3.5. Replacement Strategy for CNG vehicles
- C.3.6. GHG quantification

Specifically:

C.3.1. GHG emissions inventory, targets and plan

C.3.1.1. The Recipient will review its existing GHG inventory, targets and plan to ensure they meet or exceed the definitions of Community-wide GHG Emissions Inventory, Community-wide GHG Reduction Targets, and Community-wide GHG Emissions Reduction Plan in section B.1. If the existing GHG inventory, targets and plan do not meet or exceed the definitions in section B.1, the Recipient will either:

- (a) revise or update their GHG inventory, targets, and plan to ensure they meet the definitions of Community-wide GHG Emissions Inventory, Community-wide GHG Reduction Targets, and Community-wide GHG Emissions Reduction Plan in section B.1; or
- (b) create a Community-wide GHG Emissions Inventory, Community-wide GHG Reduction Targets, and Community-wide GHG Emissions Reduction Plan to meet the definitions of each in section B.1.

C.3.2. Phase 1 – Finalize business case and fuel purchase agreement, for approval by City of London Municipal Council

C.3.2.1. The Recipient will develop a business case for Municipal Council to reconfirm the financial benefits of the proposed cost-sharing with Union Energy Solutions (an unregulated affiliated company of Union Gas) for their proposed CNG refuelling station at the Flying J Truck Stop on Highbury Avenue south of Highway 401, in comparison to alternative options, such as:

- a direct relationship with a private sector CNG developer to develop a CNG station at a different location, or
- the installation of a slow-fill CNG refuelling station at the Exeter Road Operations Centre.

C.3.2.2. The Recipient will submit the business case, along with the proposed CNG fuel purchasing agreement to be developed between the City and Union Energy Solutions to Municipal Council for their review and approval to proceed.

C.3.3. Phase 2A - Facility Upgrades to Service and Repair CNG Vehicles

C.3.3.1. In accordance with

- the Recipient's Procurement of Goods and Services Policy, and
- the *Broader Public Sector Accountability Act, 2010* and relevant directives including but not limited to the Broader Public Sector Procurement Directive and the Broader Public Sector Perquisites Directive

the Recipient will undertake the following tasks:

Task 1 – Prepare tender documents and award assignment(s) which includes:

- a) Finalize equipment, mechanical and structural requirements
- b) Prepare tender documents, including equipment, mechanical and structural specifications
- c) Prepare tender documents – procurement requirements
- d) Undertake competitive procurement process
- e) Review tender submissions for compliance, recommend award and contract administration

Task 2 – The contractor(s) selected at the conclusion of the tender process will undertake the following:

- a) Upgrade heating/ventilation and air distribution
- b) Install combustible gas detection system
- c) Complete architectural items (painting, room finishes)
- d) Commission heating/ventilation and air distribution and combustible gas detection system

This work is required to maintain CNG vehicles at the Exeter Road Operations Centre.

C.3.3.2. Based on the Mechanical Code Compliance and Feasibility Study undertaken by NA Engineering Associate Inc. (October 11, 2017), the Recipient will obtain two makeup air units and ductwork, new exhaust fans/upgrade ductwork, combustible gas detection system, structural items (joist reinforcement), architectural items (painting, room finishes) electrical work (compressor power feeds, high low voltage wiring, PCC panel connections), civil work (concrete surfaces, bollards, granular area, gates and signage) and commission work (leak test, station acceptance test, demonstration and testing) to meet the Recipient's needs in the most economical and efficient manner, through appropriate municipal procurement processes that conform with principles of value for money, vendor access, transparency, fairness, responsible management, geographic neutrality and reciprocal non-discrimination.

C.3.3.3. The Recipient will specify the responsibilities of individuals and organizations in terms of the mechanical, electrical, civil and commissioning work, at each stage of the procurement process. This work will be identified in section C.3.3 Task 1 undertaken by the Recipient (City of London Facilities Division) with technical assistance from a consultant.

C.3.3.4. The Recipient will establish a clear terms of reference for the service and purchase of goods assignments including: objectives, background, scope, constraints, staff responsibilities, tangible deliverables/results, timing, progress reporting, approval requirements, and where applicable, knowledge transfer requirements.

C.3.3.5. The Recipient will ensure consistency in the management of procurement-related processes and decisions.

C.3.4. Phase 2B - Refuelling Infrastructure Agreement

C.3.4.1. In accordance with

- the Recipient's Procurement of Goods and Services Policy, and
- the *Broader Public Sector Accountability Act, 2010* and relevant directives including but not limited to the Broader Public Sector Procurement Directive and the Broader Public Sector Perquisites Directive

The Recipient will establish a CNG fuel purchasing agreement between the City and Union Energy Solutions (an unregulated affiliated company of Union Gas)) that takes into account the Recipient's fleet operational needs and the Recipient's financial contribution relative to the entire capital and operating cost for the CNG refuelling infrastructure.

In the fuel purchasing agreement, the Recipient will document how Union Energy Solutions will make use of and maintain the CNG compressor equipment and the mechanical work (piping, pressure testing, permits and inspection fee), electrical work (compressor power feeds, high low voltage wiring, PCC panel connections), civil work (concrete surfaces, bollards, granular area, gates and signage) and commission work

(leak test, station acceptance test, demonstration and testing) to create a dedicated filling area for the Recipient's waste collection vehicles.

C.3.4.2. The Recipient will obtain the required goods and services necessary to meet the Recipient's needs in the most economical and efficient manner, through appropriate municipal procurement processes that conform with principles of value for money, vendor access, transparency, fairness, responsible management, geographic neutrality and reciprocal non-discrimination.

C.3.4.3. The Recipient will specify the responsibilities of individuals and organizations at each stage of the procurement process.

C.3.4.4. The Recipient will establish a clear terms of reference for the service and purchase of goods assignments including: objectives, background, scope, constraints, staff responsibilities, tangible deliverables/results, timing, progress reporting, approval requirements, and where applicable, knowledge transfer requirements.

C.3.4.5. The Recipient will ensure consistency in the management of procurement-related processes and decisions.

C.3.5. Replacement Strategy for CNG vehicles

C.3.5.1. The Recipient will execute their replacement strategy by replacing 5 diesel powered waste collection vehicles with CNG powered waste collection vehicles by the end of 2019, replacing an additional 12 diesel powered waste collection vehicles with CNG powered waste collection vehicles by the end of 2020, replacing an additional 6 diesel powered waste collection vehicles with CNG powered waste collection vehicles by the end of 2022 and replacing an additional 14 diesel powered waste collection vehicles with CNG powered waste collection vehicles by 2025.

C.3.5.2. The Recipient will measure and monitor methane leaks (non-combusted methane) from CNG powered waste collection vehicles in their fleet on a monthly basis.

C.3.6. GHG quantification

The Recipient will quantify the GHG emissions reductions resulting from the Recipient's CNG vehicles using the CNG refuelling infrastructure for the first 12 months of operation. The Recipient will also confirm or update the GHG emissions reduction potential over the life of the Project.

GHG emission reduction estimates will be based on the measured quantities of CNG and RNG (if applicable and the RNG emission reductions have not been accounted for by another party) and will make use of best practices for GHG estimation outlined in the most recent version of the guidance document titled "Ontario Public Service Guidance Document for Quantifying Projected and Actual Greenhouse Gas Emission Reductions", Version 1, June 30, 2017.

C.4 TIMELINES

The following are the timelines for the Project:

Project Initiative (Work)	Start-Finish Date
C.3.1 GHG emissions inventory, targets and plan	Sept 5, 2018
C.3.2 Phase 1 - Business case development, for approval by City of London Municipal Council	April 1, 2018 – July 31, 2018
C.3.3 Phase 2A - Facility Upgrades to Service and Repair CNG Vehicles	August 1, 2018 – June 30, 2019
C.3.4 Phase 2B - Refuelling Infrastructure Relationship	August 1, 2018 – June 30, 2019
C.3.5. Replacement Strategy for CNG vehicles	June 30, 2019 to Dec. 31, 2025
C.3.6 GHG quantification	July 1, 2020 – December 31, 2025

C.5 PROJECT PARTICIPANTS

The Project will be undertaken by the following Project team members:

Organization	Participant Name and Title	Role and responsibility of the participant/ organization in the Project
Recipient	Kelly Scherr, Managing Director, Environmental & Engineering Services & City Engineer	Senior management oversight
Recipient	Mike Bushby, Division Manager of Fleet and Operational Services	Overall project management Development of the business case Review and negotiate CNG fuel purchasing agreement between the City and Union Energy Solutions

Organization	Participant Name and Title	Role and responsibility of the participant/ organization in the Project
Recipient	Jay Stanford, Director, Environment, Fleet & Solid Waste	Senior management direction Development of the business case Review and negotiate CNG fuel purchasing agreement between the City and Union Energy Solutions
Recipient	James Skimming, Manager, Air Quality	Development of the business case GHG emissions inventory, targets and plan
Recipient	Tim Wellhauser, Division Manager, Facilities	Project management for facility upgrades to the Exeter Road Operations Centre to allow service and repair of CNG vehicles
Union Energy Solutions	Sarah Van Der Paelt	Make use of and maintain the CNG compressor equipment and the mechanical work (piping, pressure testing, permits and inspection fee), electrical work (compressor power feeds, high low voltage wiring, PCC panel connections), civil work (concrete surfaces, bollards, granular area, gates and signage) and commission work (leak test, station acceptance test, demonstration and testing) to create a dedicated filling area for the Recipient's waste collection vehicles.
Technical firm hired by Union Energy Solutions	To be determined	The selected contractor(s) will upgrade heating/ventilation and air distribution; install combustible gas detection system; complete architectural items (painting, room finishes); and commission heating/ventilation and air distribution and combustible gas detection system

Organization	Participant Name and Title	Role and responsibility of the participant/ organization in the Project
NA Engineering	Jim Culliton	Will finalize equipment, mechanical and structural requirements; prepare tender documents, including equipment, mechanical and structural specifications; review tender submissions for compliance, recommend awarding of the contract and contract administration

Should there be any changes to the above-noted Project team members, the Recipient will advise the Province forthwith. Changes include additions, replacements and vacancies.

C.6 PERFORMANCE MEASURES AND TARGETS

In carrying out the Project, the Recipient will use the following measures and aim to meet the following targets to assess its success in meeting the Project objective:

Performance Measures	Performance Targets
GHG emissions reduction potential	Lifetime GHG reduction: 3,773 tonnes CO2e
Job creation	Creation of up to two local full-time equivalent jobs to operate and maintain the CNG
GHG emissions reductions resulting from the Diesel to CNG waste vehicle transition for the first 12 months of operation	20 tonnes CO2e
Economic benefits to the community	\$35,000 per year savings in City fleet fuel costs from using CNG in first 12 months
Number of users in the first 12 months of operation	3,000 CNG filling sessions for the whole station
Number of Diesel powered waste collection vehicles in the fleet replaced by CNG powered waste collection vehicles	5 by the end of 2019 an additional 12 by the end of 2020 an additional 6 by the end of 2022 and an additional 14 by the end of 2025

- END OF PROJECT DESCRIPTION AND TIMELINES -

SCHEDULE "D"

BUDGET

Project Expenditures	Budgeted Cost	Amount from the Funds	Cash confirmed from other sources	Value of confirmed in-kind staff support	Sources of other funding or in-kind support	When will expenditures be made
CITY OF LONDON STAFF						
C.3.1 GHG emissions inventory, targets and plan				\$300.00 (\$75/hour x 4 hours)	City of London	May 2018
C.3.2 Phase 1 - Business case development, for approval by City of London Municipal Council				\$3,750.00 (\$75/hour x 50 hours)	City of London	April – July 2018
C.3.3 Phase 2A - Facility Upgrades to Service and Repair CNG Vehicles				\$6,000.00 (\$75/hour x 80 hours)	City of London	August 2018 – June 2019
C.3.4 Phase 2B - Refuelling Infrastructure Agreement				\$3,000.00 (\$75/hour x 40 hours)	City of London	August 2018 – June 2019
C.3.5. Replacement Strategy for CNG vehicles				\$300.00 (\$75/hour x 4 hours)	City of London	April – July 2018
C.3.6 GHG quantification				\$300.00 (\$75/hour x 4 hours)	City of London	July – August 2020
CONSULTANTS						
C.3.3* Phase 2A Facility Upgrades – Task 1 – Tender document(s) and award assignment(s) a) Finalize equipment, mechanical and structural requirements to be done by NA engineering	\$3,052.80 (Hourly rates range between \$100 and \$175)	\$1,526.40	\$1,526.40			August 2018 – October 2018
C.3.3* Phase 2A – Task 1 b) Prepare tender documents equipment, mechanical and structural specifications to be done by NA Engineering	\$14,246.40 (Hourly rates range between \$100 and \$175)	\$7,123.20	\$7,123.20			August 2018 – October 2018
C.3.3* Phase 2A – Task 1 c) Prepare tender documents – procurement requirements				Included under City of London Staff		August 2018 – October 2018

Project Expenditures	Budgeted Cost	Amount from the Funds	Cash confirmed from other sources	Value of confirmed in-kind staff support	Sources of other funding or in-kind support	When will expenditures be made
C.3.3 Phase 2A* – Task 1 d) Undertake competitive procurement process				Included under City of London Staff		August 2018 – October 2018
C.3.3 Phase 2A* – Task 1 e) Review tender submissions for compliance, recommend award and contract administration to be done by NA Engineering	\$23,404.80 (Hourly rates range between \$100 and \$175)	\$11,702.40	\$11,702.40			August 2018 – October 2018
C.3.4** Phase 2B - Refuelling Infrastructure Agreement – Design (technical firm to be determined by Union Energy Solutions)	\$58,512.00	\$29,256.00	\$29,256.00			August 2018 – June 2019
GOODS						
C.3.3* Phase 2A - Facility Upgrades – Task 2a) Upgrade Heating/Ventilation and Air - Distribution - Joist Reinforcement 4 joists at MUA(Makeup Air) units	\$44,520.00	\$22,260.00	\$22,260.00			August 2018 – June 2019
C.3.3* Phase 2A - Facility Upgrades– Task 2a) Upgrade Heating/Ventilation and Air – Two new MUA(Makeup Air) units/Ductwork	\$242,188.80	\$121,094.40	\$121,094.40			August 2018 – June 2019
C.3.3* Phase 2A - Facility Upgrades– Task 2a) Upgrade Heating/Ventilation and Air – New Exhaust Fans/Upgrade ductwork	\$180,624.00	\$90,312.00	\$90,312.00			August 2018 – June 2019
C.3.3* Phase 2A - Facility Upgrades – Task 2b) Install Combustible Gas Detection System	\$79,500.00	\$39,750.00	\$39,750.00			August 2018 – June 2019
C.3.4** Phase 2B - Refuelling Infrastructure Agreement - Mechanical (piping, pressure testing)	\$58,512.00	\$29,256.00	\$29,256.00			August 2018 – June 2019

Project Expenditures	Budgeted Cost	Amount from the Funds	Cash confirmed from other sources	Value of confirmed in-kind staff support	Sources of other funding or in-kind support	When will expenditures be made
C.3.4** Phase 2B - Refuelling Infrastructure Agreement - Electrical (compressor power feeds, high and low voltage wiring, PCC panel connections)	\$40,958.40	\$20,479.20	\$20,479.20			August 2018 – June 2019
C.3.4** Phase 2B - Refuelling Infrastructure Agreement - Civil (concrete surfaces, bollards, granular areas, gates, signage)	\$76,065.60	\$38,032.80	\$38,032.80			August 2018 – June 2019
C.3.4** Phase 2B - Refuelling Infrastructure Agreement - Equipment (compressor, storage, dispenser)	\$438,840.00	\$219,420.00	\$219,420.00			August 2018 – June 2019
SERVICES						
C.3.3* Phase 2A - Facility Upgrades - Task 2a) Upgrade Heating/Ventilation and Air – Electrical	\$31,800.00	\$15,900.00	\$15,900.00			August 2018 – June 2019
C.3.3* Phase 2A - Facility Upgrades – Task 2a) Upgrade Heating/Ventilation and Air – OWSJ Analysis	\$10,176.00	\$5,088.00	\$5,088.00			August 2018 – June 2019
C.3.3* Phase 2A - Facility Upgrades – Task 2c) Complete Architectural Items – Painting, Room Finishes	\$63,600.00	\$31,800.00	\$31,800.00			August 2018 – June 2019
C.3.3* Phase 2A - Facility Upgrades – Task 2d) Commission heating/ventilation and air distribution and combustible gas detection system	Included above	Included above	Included above			August 2018 – June 2019

Project Expenditures	Budgeted Cost	Amount from the Funds	Cash confirmed from other sources	Value of confirmed in-kind staff support	Sources of other funding or in-kind support	When will expenditures be made
C.3.4** Phase 2B - Refuelling Infrastructure Agreement - Commissioning (leak testing, station acceptance test, demonstration and training)	\$17,553.60	\$8,776.80	\$8,776.80			August 2018 – June 2019
C.3.4** Phase 2B - Refuelling Infrastructure Agreement - Freight/shipping	\$23,404.80	\$11,702.40	\$11,702.40			August 2018 – June 2019
EQUIPMENT/CAPITAL ITEM RENTAL						
OTHER						
TOTAL ELIGIBLE COSTS	\$1,406,959.00	\$703,479.60	\$703,479.60			
INELIGIBLE COSTS						
C.3.3 Phase 2A - Facility Upgrades to Service and Repair CNG Vehicles – Mechanical Code Compliance and Feasibility Study, NA Engineering, October 11, 2017			\$12,000.00 (City of London)			Completed
C.3.4 Phase 2B - Refuelling Infrastructure Agreement – Technical work completed under the direction of Union Gas				\$5,000.00	Union Gas	Completed
TOTAL COSTS	\$1,406,959.00	\$703,479.60	\$715,479.60	\$5,000.00		

* C.3.3 Phase 2A - Facility Upgrades to Service and Repair CNG Vehicles Goods and Services - Budget estimates have been prepared by NA Engineering Associates Inc. as part of the Compressed Natural Gas Vehicle Repair Are Study – Exeter Road Operations Centre – Mechanical Code Compliance and Feasibility, October 11, 2017. Each line item includes a 25% contingency based on the consultant report.

** C.3.4 Phase 2B - Refuelling Infrastructure Agreement
Goods and Services - Budget estimates have been provided by Union Energy Solutions (October 2017). Each line item includes a 15% contingency.

D.1 BUDGET NOTES

- (a) **Ineligible costs** – For clarity, in addition to any other costs identified or described as ineligible in the Agreement, the following is a non-exhaustive list of costs for which the Province will not provide any Funds:
- (i) **Purchase or lease of real property** – including but not limited to lease payments, purchase price, taxes, legal fees and disbursements, consultant fees and disbursements;
 - (ii) **Legal fees and disbursements and consultant fees and disbursements associated with environmental assessments** - including but not limited to assessments undertaken pursuant to the *Environmental Assessment Act*, R.S.O. 1990, c. E.18, or Ontario Regulation 153/04 made under the *Environmental Protection Act*, R.S.O. 1990, c. E.19;
 - (iii) **Operations costs** – back-up systems, spare parts inventory in support of a qualifying system, and operating costs including fuel, electricity, maintenance and insurance costs;
 - (iv) **Overhead costs** – office space, supplies, general overhead costs incurred in the ordinary course of business;
 - (v) **Fundraising** – any costs related to developing a business case, funding proposal or other activity with a similar aim;
 - (vi) **Lobbying** – any costs related to activities undertaken with the actual or perceived intention of lobbying;
 - (vii) **Non-Project costs** – any costs not directly related to the Project or capital costs related to ongoing or other business activities that are not a specific requirement of the project;
 - (viii) **Pre-Project costs** – any costs which were incurred prior to November 17, 2017;
 - (ix) **Refundable expenses** – costs deemed ineligible in accordance with section A4.8 of Schedule “A”; and
 - (x) Any costs which are an inappropriate use of public funds in the sole opinion of the Province.

- (b) **Consultants** – Consultant costs may include reasonable disbursements in addition to fees. However, the Funds may not be used for costs that would otherwise be ineligible or beyond the limits set by this Agreement (e.g. mileage limits) if they were directly incurred by the Recipient. In addition, the Funds may not be used for: None.
- (c) **Equipment/Capital Item Rental** – The Province *may* approve the purchase instead of the rental of equipment or capital items that fulfill the following criteria: (i) the equipment or capital item is being used on multiple occasions throughout the Project; (ii) total rental costs are greater than the one-time purchase cost; (iii) the equipment or capital item is not of a type found in a normal office environment; and (iv) without the Project, it is unlikely that the Recipient would purchase the equipment or capital item. If intending to purchase the equipment or capital item using the Funds, the Recipient must request approval from the Province prior to acquisition of the equipment or capital item.
- (d) **Services** – Costs for services may include reasonable disbursements in addition to fees. However, the Funds may not be used for the following disbursements: none.
- (e) **Phase 2A - Facility Upgrades to Service and Repair CNG Vehicles** (under “Consultants”) – The Recipient has already selected NA Engineering as the consultant for the consulting work for Phase 2A Facility Upgrades to Service and Repair CNG Vehicles. The Recipient confirms that it has provided the Province with a description of the procurement process and a justification for the selection of the preferred consultant which evidences good value for money.

D.2 ADDITIONAL FUNDING

The Recipient has requested, but not received confirmation of, additional funding or in-kind support for the Project from the following:

POTENTIAL FUNDER (CASH OR IN-KIND)	PROJECT EXPENDITURES TO BE COVERED	AMOUNT
NIL	NIL	NIL
TOTAL		

- END OF BUDGET -

SCHEDULE "E"

PAYMENT PLAN

Criteria	Amount
Following Province execution of Agreement evidencing approval of Recipient Project proposal	\$1,000.00
Following Province approval of first interim progress report and financial progress report as set out in Schedule "F"	\$30,000.00
Following Province approval of second interim progress report and financial progress report as set out in Schedule "F"	\$410,000.00
Following Province approval of third interim progress report and financial progress report as set out in Schedule "F"	\$250,000.00
Following Province approval of final report as set out in Schedule "F"	\$12,479.60
TOTAL	\$703,479.60

- END OF PAYMENT PLAN -

**SCHEDULE “F”
REPORTING**

Name of Report	Due Date
1. Additional Funding Report(s)	An on-going obligation of the Recipient following the Recipient’s receipt of notification that it will be receiving additional funding for the Project
2. Procurement Report(s)	Immediately following selection of preferred proponent if applicable
3. Interim Progress Report(s)	September 15, 2018 March 15, 2019 September 15, 2019 March 15, 2021 March 15, 2023
4. Financial Progress Report(s)	September 15, 2018 March 15, 2019 September 15, 2019
5. Final Report	March 15, 2026
6. Reports as specified from time to time	On a date or dates specified by the Province.

Report Due Date

Except as noted below, if the due date of any Report falls on a non-Business Day, the due date is deemed to be the next Business Day.

For any Report due on March 31 in a year when March 31 is not on a Business Day, the due date of such report is deemed to be the Business Day immediately prior to March 31.

Reporting Templates

When reporting to the Province, the Recipient will use the templates provided by the Province (if any).

Supporting Documentation

For clarity, the Province may request supporting documentation from the Recipient as

part of the Reports submitted as described in this schedule.

Report Details

1. The Additional Funding Reports will set out:

- (i) an accounting of any other funding received or to be received by the Recipient, including the identification of the funding organization, the amount and the specific aspect of the Project that the additional funding is supporting;
- (ii) confirmation that there is no overlap of funding from the Province and from the other funding entities.

2. The Procurement Reports will set out:

- (i) a description of the procurement process followed by the Recipient to acquire goods or services required to perform the Project;
- (ii) a justification for the selection of the preferred proponent or good which evidences value for money, including, if applicable, confirmation from the supplier that they are the sole supplier of the goods.

3. The Interim Progress Reports will set out:

- (i) actions undertaken to the date of the report, with reference to specific paragraphs of section C.3 (Scope of Project), and how they relate to the objective(s)/desired outcomes of the Project identified in section C.2;
- (ii) any Project milestones achieved within the reporting period and show how Project objectives / expectations have been met;
- (iii) an update to the estimated GHG emissions reduction potential, any variance from the performance target identified in section C.6, and the reasons for such variance;
- (iv) for any staff position covered in whole or in part by the some or all of the Funds, confirmation of the time spent by the staff person on the Project;
- (v) set out any variances from the timelines, the reasons for such variances and the strategy used to correct the variances and achieve the Project objectives;
- (vi) a statement confirming the Recipient is in compliance with the terms and conditions of the Agreement except as disclosed in the interim progress report, signed by the Chief Operating Officer, the Board chair or equivalent.

4. The Financial Progress Reports will set out:

- (i) an interim accounting of all Project expenditures to date signed by the Chief Financial Officer, the Board chair or equivalent, if applicable, confirming actual Project expenditures and providing an explanation for any variances from the Budget;
- (ii) an accounting of any other funding received by the Recipient, the identification of the funding organization, the amount and the specific aspect of the Project that the additional funding is supporting as well as a statement confirming that there is no overlap of funding from the Province and from any other organization;
- (iii) a high-level monthly spending forecast (e.g. total per month) covering the time period between the date of the financial progress report and (a) the date two months beyond the next financial progress report, or (b) the date of the final report if no further financial progress reports; and
- (iii) whether or not the Project as described in the Agreement can be completed.

5. The Final Report will:

- (i) describe actions undertaken in carrying out the Project, with reference to specific paragraphs of section C.3 (Scope of Project) and how they relate to the objectives/desired outcomes of the Project identified in section C.2;
- (ii) discuss Project objectives / expectations, confirming that Project objectives / expectations were met, setting out lessons learned;
- (iii) confirm or update the GHG emission reduction potential, setting out any variance from the performance target identified in section C.6 and the reasons for such variance, and provide the actual GHG emission reductions achieved to date;
- (iv) for any staff position covered in whole or in part by the some or all of the Funds, confirmation of the time spent by the staff person on the Project;
- (v) include a final accounting of all Project expenditures signed by the Chief Financial Officer, and the Board chair or equivalent if applicable, confirming actual Project expenditures and providing an explanation for any variances from the Budget;
- (iv) include an accounting of any unspent Funds and an explanation as to why there are remaining Funds;
- (vii) include a final accounting of the other funding received by the Recipient, the identification of the funding organization, the amount and the specific aspect of the Project that the additional funding supported as well as a statement

confirming that there has been no overlap of funding from the Province and from any other organization; and

- (viii) include a statement signed by the Chief Operating Officer, the Board chair or equivalent confirming Recipient compliance with the terms and conditions of the Agreement, except as disclosed in the final report.

6. Other Reports:

- (i) the Province will specify the timing and content of any other Reports as may be necessary.

– END OF REPORTING –

APPENDIX 'B'

#18047

Chair and Members
Civic Works Committee

March 19, 2018
(Establish Budget)

**RE: Ontario Municipal Greenhouse Gas (GHG) Challenge
Fund Transfer Payment Agreement
Capital Project ME1208 - Phase 1 - Fuel Switching Project - Diesel to
Compressed Natural Gas (CNG) Transition**

FINANCE & CORPORATE SERVICES REPORT ON THE SOURCES OF FINANCING:

Finance & Corporate Services confirms that the cost of this project, although not included in the Capital Plan, can be accommodated with a drawdown from the Economic Development Reserve Fund and a contribution from the Ontario Municipal Greenhouse (GHG) Challenge Fund, 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:

<u>ESTIMATED EXPENDITURES</u>	<u>Approved Budget</u>	<u>Additional Funding</u>	<u>Revised Budget</u>
Engineering	\$0	\$280,000	\$280,000
Construction	0	1,102,625	1,102,625
NET ESTIMATED EXPENDITURES	<u>\$0</u>	<u>\$1,382,625</u> 1)	<u>\$1,382,625</u>
<u>SOURCE OF FINANCING:</u>			
Drawdown from the Economic Development Reserve Fund	1)	\$691,313	\$691,313
Ontario Municipal Greenhouse Gas Challenge Fund	2)	691,312	691,312
TOTAL FINANCING	<u>\$0</u>	<u>\$1,382,625</u>	<u>\$1,382,625</u>

- 1) The funding is available as a drawdown from the Economic Development Reserve Fund. The uncommitted balance will be approximately \$14.4 million after the approval of this project.
- 2) The City of London was approved an Ontario Municipal GHG Challenge Fund contribution of \$691,312 for the Compressed Natural Gas Vehicle Fuelling and Maintenance Infrastructure project.

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Anna Lisa Barbon
Managing Director, Corporate Services and
City Treasurer, Chief Financial Officer

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON MARCH 19, 2018
FROM:	KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT:	ONTARIO MUNICIPAL GREENHOUSE GAS (GHG) CHALLENGE FUND TRANSFER PAYMENT AGREEMENT FOR THE BIKE SHARE SYSTEM

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, the following actions be taken with respect to the Province of Ontario's Municipal GHG Challenge Fund:

- a) the attached proposed by-law (Appendix A) **BE INTRODUCED** at the Municipal Council meeting to be held March 27, 2018 to:
 - i) authorize and approve the Transfer Payment Agreement, attached as Schedule 1 to the by-law, to be entered into between The Corporation of the City of London and Her Majesty the Queen in Right of Ontario, as represented by the Minister of Environment and Climate Change for the Province of Ontario, for funding of a bike share system for London under the Ontario Municipal GHG Challenge Fund;
 - ii) authorize the Mayor and the City Clerk to execute the Agreement authorized and approved in i), above; and
 - iii) delegate authority to the Managing Director of Environmental & Engineering Services and City Engineer and Managing Director, Corporate Services & City Treasurer, or their designate, to execute any reports required as a condition of the Agreement authorized and approved in i), above;
- b) the Civic Administration **BE AUTHORIZED** to increase the 2016-2019 Multi-Year Capital Budget by \$822,500 to reflect the approved Ontario Municipal GHG Challenge Fund contribution as set out in the Source of Financing attached (Appendix B);
- c) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this program.

PREVIOUS REPORTS PERTINENT TO THIS MATTER
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The relevant reports that can be found at www.london.ca under City Hall (Meetings) are:

- Report to the October 24th 2017 Civic Works Committee (CWC) Meeting, Municipal Greenhouse Gas (GHG) Challenge Fund Applications (Agenda Item #15)
- Report to the August 29th 2017 Civic Works Committee (CWC) Meeting, Community Energy Action Plan – Update and Status (Agenda Item #11)

2015-19 STRATEGIC PLAN

Municipal Council has recognized the importance of climate change mitigation, related environmental issues and the need for a more sustainable city in its 2015-2019 - Strategic Plan for the City of London ([2015 – 2019 Strategic Plan](#)). Specifically, the Community Energy Action Plan (CEAP), addresses all four Areas of Focus, at one level or another, as follows:

Strengthening Our Community

- Healthy, safe, and accessible city

Building a Sustainable City

- Convenient and connected mobility choices
- Strong and healthy environment

Growing our Economy

- Local, regional, and global innovation
- Strategic, collaborative partnerships

Leading in Public Service

- Collaborative, engaged leadership
- Excellent service delivery

DISCUSSION

PURPOSE

The purpose of this report is to obtain the approvals required for the execution of the Transfer Payment Agreement document with the Province of Ontario to receive funding under the Ontario Municipal GHG Challenge Fund ('GHG Challenge Fund'). The report also requests approval to increase the capital budget to reflect the additional funding to be received through the Ontario Municipal GHG Challenge Fund.

CONTEXT

Bike share systems have been discussed in London for a number of years with increased interest starting in 2014/2015. A bike share system is specifically referenced in the 2016 Cycling Master Plan as an action item:

Action #4 Exploring a Bike Share System. To identify a system of "for rent" / "on-call" bicycles located at key destinations to provide residents and visitors with an opportunity to ride a bike to work, for fun or for fitness.

During the 2016-2019 Multi-Year Budget deliberations, Council approved a ten year capital project to assist with the implementation of Active Transportation (TS6020) as part of the implementation of the Cycling Master Plan. This capital project is financed by funds received through the Federal Gas Tax program at a rate of \$300,000 per year with the exception of 2016 (\$150,000). Funds from this project, in addition to grant funding received, will be transferred to a new capital project TS6025 – Bike Share Program to enhance tracking and reporting.

The London Plan, approved in 2017, also includes two policies that speak directly to introducing bike share into downtown:

96_ Our Downtown will be an exceptional neighbourhood unto itself - with housing, services, and amenities targeted to serve a wide spectrum of lifestyles such as families, seniors, and young adults. The shared economy will thrive in our core, including such features as shared office and work space, as well as shared car and bicycle fleets. Our Downtown will be the most highly connected location in the entire city, being the hub for rapid transit, rail, high speed rail, and the multi-use pathway along the Thames River. Downtown will offer the city's premier pedestrian experience.

803_10. Shared car and bicycle parking facilities and carshare/bikeshare programs will be encouraged within the Downtown.

The Ontario Municipal GHG Challenge Fund, announced in August 2017, is one of the programs funded by revenue from Ontario's Cap & Trade program in support of Ontario's Climate Change Action Plan. This fund is administered by the Ontario Ministry of Environment and Climate Change (MOECC). It complements other programs funded by Cap & Trade revenue, such as the Green Ontario (GreenON) Fund programs for residents and businesses, the Ontario Municipal Commuter Cycling Program, and the Green Commercial Vehicle Program.

The estimated total capital cost that was submitted to the GHG Challenge Fund for a bike share system was \$1,645,000 including detailed design, construction and contract administration costs. The GHG Challenge Fund has confirmed that it will cover 50 percent of these costs, or \$822,500.

This funding will go towards establishing an anticipated first phase of a bike share system that would start off serving neighbourhoods in or near downtown, St. Joseph's Hospital and Western University. Phase one of the bike share will consist of approximately 300 bikes, serving approximately 40,000 residents, 35,000 employees, two hospitals, Western University and Fanshawe College (downtown campus) faculty, staff and students. An additional target audience includes visitors to London.

Procuring Technical Consulting Assistance

City staff will be procuring the services of a technical consultant given that there is a rapid shift in technology occurring now with bike share systems worldwide. In Canada, there is evidence of this when comparing the first generation of bike share systems in Montréal and Toronto, for example, with second generation systems piloted in Kingston (and expanding into other cities). First generation systems have fixed bike share stations where bikes are docked (picked up and returned), payment is made, and information such as maps is provided. Second generation bike share systems are station-less systems where bikes have built-in mobile payment technology and built-in locks so they can be parked anywhere within the service area.

The consultant will assist City staff with the following project activities:

- Business case development;
- Development of a Request for Proposal (RFP) for the design, build, operate and maintenance of the bike share system; and
- Preliminary operations period and acceptance testing to confirm the bike share system meets specified performance criteria.

FINANCIAL AND RISK CONSIDERATIONS

The overall project has been designed in four phases including seven activities with estimated costs and timelines identified on the table below. The costs below do not include the Harmonized Sales Tax (HST) which will be included within the Transfer Payment Agreement.

Project Activities	Estimated Cost to be Split 50/50	Timeline
Phase 1 – Prepare and Approve Final Business Case		
1. Finalize options and design, including community engagement and final Business Case development	\$22,500	April 2018 – December 2018
2. Submission of Business Case to Municipal Council for approval		January 2019

Project Activities	Estimated Cost to be Split 50/50	Timeline
Phase 2 - Request for Proposal (RFP) for Bike Share System		
3. Development and release of a RFP for the design, build, operate and maintenance of the bike share system	\$6,250	February 2019 – July 2019
4. Submission of RFP recommendations to Municipal Council for approval		August 2019
Phase 3 - Final Design, Product Purchase, Construction and Implementation		
5. Final design, product purchase, construction and implementation requirements for bike share system including pre-launch promotional activities and events	\$1,595,750	September 2019 – February 2020
Phase 4 – Program Launch		
6. Preliminary operations period and acceptance testing to confirm the bike share system meets specified performance criteria	\$20,500	January 2020 – March 2020
7. Program launch		Earth Day 2020
Total Estimated Budget	\$1,645,000	
<i>Province</i>	<i>\$822,500</i>	
<i>City of London</i>	<i>\$822,500</i>	

Risk Mitigation

Bike share systems in communities the size of London are not common. Kitchener-Waterloo (340,000) has a system, but it is currently evolving into something new. Bike share systems are more common in communities with larger populations such as cities of Hamilton (500,000), Toronto (2.8 million), Ottawa (950,000), and Montreal (1.8 million); however there are bike share systems in places with lower populations like Kingston (130,000) and Kitchener-Waterloo (340,000).

Updated information will be obtained from these and other comparable locations as part of Phase 1 activities.

The preparation of the Business Case will include annual operating costs and revenues for the system. The Business Cases requires Council approval.

Phase 2 will include an RFP for a system operator including all financial elements of the system. The outcome of the RFP process requires Council approval.

Termination and Default Clauses

Section A15 of the Transfer Payment Agreement (Event of Default, Corrective Action, and Termination for Default) does allow for the City of London to withdraw from the agreement in the event that Municipal Council does not approve the business case or the recommendation from the RFP.

Section A14 of the Transfer Payment Agreement (Termination Where No Appropriation) has similar language in the event that the Province does not receive the necessary appropriation from the Ontario Legislature.

Source of Financing

The attached Source of Financing report 'Appendix B' outlines the source of financing for the bike share system. The City's portion, \$822,500, will be funded using \$750,000 currently in the Active Transportation (TS6020) project, which as previously noted will be transferred to a new capital project to better facilitate expenditure tracking and project reporting, and \$72,500 of Federal Gas Tax funding allocated for future eligible Active Transportation projects currently held in the Federal Gas Tax Reserve Fund.

ACKNOWLEDGEMENTS

This report was prepared with assistance from Allison Miller, Transportation Demand Management (TDM) Coordinator; Jason Davies, Manager III, Financial Planning & Policy; and Laurie Green, Financial Business Administrator

PREPARED BY:	PREPARED & SUBMITTED BY:
JAMIE SKIMMING, P.ENG MANAGER, AIR QUALITY	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 AND CITY ENGINEER	

Attach: Appendix A – By-law No. A -
Appendix A Schedule 1 – Transfer Payment Agreement
Appendix B – Source of Financing Report

c: Anna Lisa Barbon, Managing Director, Corporate Services and City Treasurer
Edward Soldo, P.Eng., Director, Roads & Transportation
John Millson, Senior Financial Business Administrator

APPENDIX A

Bill No.
2018

By-law No. A.-

A by-law to authorize and approve a Transfer Payment Agreement under the Ontario Municipal GHG Challenge Fund Program, between Her Majesty the Queen in Right of Ontario, as represented by the Minister of Environment and Climate Change for the Province of Ontario and The Corporation of the City of London; to authorize the Mayor and the City Clerk to execute the Agreement; and to delegate authority to the Managing Director of Environmental & Engineering Services and City Engineer, or their written designate, and the Managing Director, Corporate Services and City Treasurer, Chief Financial Officer, or their written designate, to execute any financial reports and all other documents required under the Agreement.

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 section 8 of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended provides that the powers of a municipality shall be interpreted broadly so as to confer broad authority on the municipality to enable it to govern its affairs as it considers appropriate and to enhance its ability to respond to municipal issues;

AND WHEREAS subsection 10(1) of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended provides that a municipality may provide any service or thing that the municipality considers necessary or desirable for the public;

AND WHEREAS the Province of Ontario (the "Province") and The Corporation of the City of London (the "City") recognize that investment in bike share systems is a key component in Ontario's Climate Change Action Plan;

AND WHEREAS the City has applied to the Province for funding under the Ontario Municipal GHG Challenge Fund Program for a list of projects;

AND WHEREAS subsection 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;

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

1. The Transfer Payment Agreement to be entered into between Her Majesty the Queen in Right of Ontario, as represented by the Minister of the Environment and Climate Change for the Province of Ontario and The Corporation of the City of London, for the provision of funding from the Ontario Municipal GHG Challenge Fund Program, attached hereto as Schedule "1", 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, above.
3. The Managing Director of Environmental & Engineering Services and City Engineer, or their written designate, and the Managing Director, Corporate Services and City Treasurer, Chief Financial Officer, or their written designate, are delegated authority to verify and attest to the accuracy of claimed costs and all other documents required by the Province and is the Authorized Representative with signing authority on behalf of the City.

4. The City commits to reviewing its existing Community-wide GHG Emissions Inventory, Community-wide GHG Reduction Targets, and Community-wide GHG Emissions Reduction Plan to ensure they meet each of the definitions in Schedule B of the Transfer Payment Agreement within two years of signing the Agreement.

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

PASSED in Open Council on March 27, 2018.

Matt Brown
Mayor

Catharine Saunders
City Clerk

First Reading – March 27, 2018
Second Reading - March 27, 2018
Third Reading - March 27, 2018

Schedule 1
Transfer Payment Agreement

ONTARIO TRANSFER PAYMENT AGREEMENT
Municipal GHG Challenge Fund – Bike Share System

THE AGREEMENT is effective as of March 29, 2018.

B E T W E E N:

**Her Majesty the Queen in right of Ontario as represented by
the Minister of the Environment and Climate Change**

(the “**Province**”)

- and -

The Corporation of the City of London

(the “**Recipient**”)

CONSIDERATION

In consideration of the mutual covenants and agreements contained in this Agreement and for other good and valuable consideration, the receipt and sufficiency of which are expressly acknowledged, the Province and the Recipient agree as follows:

1.0 ENTIRE AGREEMENT

1.1 This Agreement, including:

- Schedule “A” - General Terms and Conditions
- Schedule “B” - Project Specific Information and Additional Provisions
- Schedule “C” - Project Description
- Schedule “D” - Budget
- Schedule “E” - Payment Plan
- Schedule “F” - Reporting, and

any amending agreement entered into as provided for below, constitutes the entire agreement between the Parties with respect to the subject matter contained in the Agreement and supersedes all prior oral or written representations and agreements.

2.0 COUNTERPARTS AND TRANSMISSION

- 2.1 The Agreement may be executed in any number of counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument.
- 2.2 The Agreement may be validly executed and delivered by means of transmission of signed facsimile or by email transmission of an electronically scanned original signature (such as in PDF file format).

3.0 AMENDING THE AGREEMENT

- 3.1 The Agreement may only be amended by a written agreement duly executed by the Parties.

4.0 ACKNOWLEDGEMENT

- 4.1 The Recipient acknowledges that:
- (a) by receiving Funds it may become subject to legislation applicable to organizations that receive funding from the Government of Ontario, including the *Broader Public Sector Accountability Act, 2010* (Ontario), the *Public Sector Salary Disclosure Act, 1996* (Ontario), and the *Auditor General Act* (Ontario);
 - (b) Her Majesty the Queen in right of Ontario has issued expenses, perquisites, and procurement directives and guidelines pursuant to the *Broader Public Sector Accountability Act, 2010* (Ontario);
 - (c) the Funds are:
 - (i) to assist the Recipient to carry out the Project and not to provide goods or services to the Province;
 - (ii) funding for the purposes of the *Public Sector Salary Disclosure Act, 1996* (Ontario);
 - (d) the Province is not responsible for carrying out the Project.

- SIGNATURE PAGE FOLLOWS -

The Parties have executed the Agreement on the dates set out below.

**HER MAJESTY THE QUEEN IN RIGHT OF ONTARIO
as represented by the Minister of the Environment and
Climate Change**

Date

Name: Alex Wood
Title: Assistant Deputy Minister

The Corporation of the City of London

Date

Name: Matt Brown
Title: Mayor

I have authority to bind the Recipient.

Date

Name: Catharine Saunders
Title: City Clerk

I have authority to bind the Recipient.

**SCHEDULE “A”
GENERAL TERMS AND CONDITIONS**

A1.0 INTERPRETATION AND DEFINITIONS

A1.1 Interpretation. For the purposes of interpretation:

- (a) words in the singular include the plural and vice-versa;
- (b) words in one gender include all genders;
- (c) the headings do not form part of the Agreement; they are for reference only and will not affect the interpretation of the Agreement;
- (d) any reference to dollars or currency will be in Canadian dollars and currency; and
- (e) “include”, “includes” and “including” denote that the subsequent list is not exhaustive.

A1.2 Definitions. In the Agreement, the following terms will have the following meanings:

“Additional Provisions” means the terms and conditions referred to in section A9.1 and as specified in Schedule “B”.

“Agreement” means this agreement entered into between the Province and the Recipient and includes all of the schedules listed in section 1.1 and any amending agreement entered into pursuant to section 3.1.

“Budget” means the budget attached to the Agreement as Schedule “D”.

“Business Day” means any working day, Monday to Friday inclusive, excluding statutory and other holidays, namely: New Year’s Day; Family Day; Good Friday; Easter Monday; Victoria Day; Canada Day; Civic Holiday; Labour Day; Thanksgiving Day; Remembrance Day; Christmas Day; Boxing Day and any other day on which the Province has elected to be closed for business.

“Effective Date” means the date set out at the top of the Agreement.

“Event of Default” has the meaning ascribed to it in section A15.1.

“Expiry Date” means the date on which the Agreement will expire and is the date set out in Schedule “B”.

“Funding Year” means:

- (a) in the case of the first Funding Year, the period commencing on the

Effective Date and ending on the following March 31; and

- (b) in the case of Funding Years subsequent to the first Funding Year, the period commencing on April 1 following the end of the previous Funding Year and ending on the following March 31.

“Funds” means the money the Province provides to the Recipient pursuant to the Agreement.

“Indemnified Parties” means Her Majesty the Queen in right of Ontario, Her ministers, agents, appointees, and employees.

“Maximum Funds” means the maximum amount the Province will provide the Recipient under the Agreement as set out in Schedule “B”.

“Notice” means any communication given or required to be given pursuant to the Agreement.

“Notice Period” means the period of time within which the Recipient is required to remedy an Event of Default, and includes any such period or periods of time by which the Province extends that time in accordance with section A15.4.

“Parties” means the Province and the Recipient.

“Party” means either the Province or the Recipient.

“Project” means the undertaking described in Schedule “C”.

“Reports” means the reports described in Schedule “F”.

A2.0 REPRESENTATIONS, WARRANTIES, AND COVENANTS

A2.1 General. The Recipient represents, warrants, and covenants that:

- (a) it is, and will continue to be, a validly existing legal entity with full power to fulfill its obligations under the Agreement;
- (b) it has, and will continue to have, the experience and expertise necessary to carry out the Project;
- (c) it is in compliance with, and will continue to comply with, all federal and provincial laws and regulations, all municipal by-laws, and any other orders, rules, and by-laws related to any aspect of the Project, the Funds, or both; and
- (d) unless otherwise provided for in the Agreement, any information the Recipient provided to the Province in support of its request for funds (including information relating to any eligibility requirements) was true and

complete at the time the Recipient provided it and will continue to be true and complete.

A2.2 Execution of Agreement. The Recipient represents and warrants that it has:

- (a) the full power and authority to enter into the Agreement; and
- (b) taken all necessary actions to authorize the execution of the Agreement.

A2.3 Governance. The Recipient represents, warrants, and covenants that it has, will maintain, in writing, and will follow:

- (a) a code of conduct and ethical responsibilities for all persons at all levels of the Recipient's organization;
- (b) procedures to enable the ongoing effective functioning of the Recipient;
- (c) decision-making mechanisms for the Recipient;
- (d) procedures to enable the Recipient to manage Funds prudently and effectively;
- (e) procedures to enable the Recipient to complete the Project successfully;
- (f) procedures to enable the Recipient, in a timely manner, to identify risks to the completion of the Project, and strategies to address the identified risks;
- (g) procedures to enable the preparation and submission of all Reports required pursuant to Article A7.0; and
- (h) procedures to enable the Recipient to deal with such other matters as the Recipient considers necessary to ensure that the Recipient carries out its obligations under the Agreement.

A2.4 Supporting Documentation. Upon the request of the Province, the Recipient will provide the Province with proof of the matters referred to in this Article A2.0.

A3.0 TERM OF THE AGREEMENT

A3.1 Term. The term of the Agreement will commence on the Effective Date and will expire on the Expiry Date unless terminated earlier pursuant to Article A13.0, Article A14.0, or Article A15.0.

A4.0 FUNDS AND CARRYING OUT THE PROJECT

A4.1 Funds Provided. The Province will:

- (a) provide the Recipient up to the Maximum Funds for the purpose of carrying out the Project;
- (b) provide the Funds to the Recipient in accordance with the Payment Plan attached to the Agreement as Schedule “E”; and
- (c) deposit the Funds into an account designated by the Recipient provided that the account:
 - (i) resides at a Canadian financial institution; and
 - (ii) is in the name of the Recipient.

A4.2 Limitation on Payment of Funds. Despite section A4.1:

- (a) the Province is not obligated to provide any Funds to the Recipient until the Recipient provides the insurance certificate or other proof as the Province may request pursuant to section A12.2;
- (b) the Province is not obligated to provide instalments of Funds until it is satisfied with the progress of the Project;
- (c) the Province may adjust the amount of Funds it provides to the Recipient in any Funding Year based upon the Province’s assessment of the information the Recipient provides to the Province pursuant to section A7.1; and
- (d) if, pursuant to the *Financial Administration Act* (Ontario), the Province does not receive the necessary appropriation from the Ontario Legislature for payment under the Agreement, the Province is not obligated to make any such payment, and, as a consequence, the Province may:
 - (i) reduce the amount of Funds and, in consultation with the Recipient, change the Project; or
 - (ii) terminate the Agreement pursuant to section A14.1.

A4.3 Use of Funds and Carry Out the Project. The Recipient will do all of the following:

- (a) carry out the Project;
- (b) use the Funds only for the purpose of carrying out the Project;
- (c) spend the Funds only in accordance with the Budget;
- (d) not use the Funds to cover any cost that has been or will be funded or reimbursed by one or more of any third party, any ministry, agency, or organization of the Government of Ontario.

A4.4 No Changes. The Recipient will not make any changes to the Project or the Budget without the prior written consent of the Province.

A4.5 Interest Bearing Account. If the Province provides Funds before the Recipient's immediate need for the Funds, the Recipient will place the Funds in an interest bearing account in the name of the Recipient at a Canadian financial institution.

A4.6 Interest. If the Recipient earns any interest on the Funds, the Province may:

- (a) deduct an amount equal to the interest from any further instalments of Funds; or
- (b) demand from the Recipient the repayment of an amount equal to the interest.

A4.7 Maximum Funds. The Recipient acknowledges that the Funds available to it pursuant to the Agreement will not exceed the Maximum Funds.

A4.8 Rebates, Credits, and Refunds. The Recipient acknowledges that the amount of Funds available to it pursuant to the Agreement is based on the actual costs to the Recipient to carry out the Project, less any costs (including taxes) for which the Recipient has received, will receive, or is eligible to receive, a rebate, credit, or refund.

A5.0 RECIPIENT'S ACQUISITION OF GOODS OR SERVICES, AND DISPOSAL OF ASSETS

A5.1 Acquisition. If the Recipient acquires goods, services, or both with the Funds, it will:

- (a) do so through a process that promotes the best value for money; and
- (b) comply with the *Broader Public Sector Accountability Act, 2010* (Ontario), including any procurement directive issued thereunder, to the extent applicable.

A5.2 Disposal. The Recipient will not, without the Province's prior written consent, sell, lease, or otherwise dispose of any asset purchased or created with the Funds or for which Funds were provided, the cost of which exceeded the amount as set out in Schedule "B" at the time of purchase.

A6.0 CONFLICT OF INTEREST

A6.1 No Conflict of Interest. The Recipient will carry out the Project and use the Funds without an actual, potential, or perceived conflict of interest.

A6.2 Conflict of Interest Includes. For the purposes of this Article, a conflict of interest includes any circumstances where:

- (a) the Recipient; or
- (b) any person who has the capacity to influence the Recipient's decisions,

has outside commitments, relationships, or financial interests that could, or could be seen to, interfere with the Recipient's objective, unbiased, and impartial judgment relating to the Project, the use of the Funds, or both.

A6.3 Disclosure to Province. The Recipient will:

- (a) disclose to the Province, without delay, any situation that a reasonable person would interpret as an actual, potential, or perceived conflict of interest; and
- (b) comply with any terms and conditions that the Province may prescribe as a result of the disclosure.

A7.0 REPORTING, ACCOUNTING, AND REVIEW

A7.1 Preparation and Submission. The Recipient will:

- (a) submit to the Province at the address referred to in section A19.1, all Reports in accordance with the timelines and content requirements set out in Schedule "F", or in a form as specified by the Province from time to time;
- (b) submit to the Province at the address referred to in section A19.1, any other reports as may be requested by the Province in accordance with the timelines and content requirements specified by the Province;
- (c) ensure that all Reports and other reports are completed to the satisfaction of the Province; and
- (d) ensure that all Reports and other reports are signed on behalf of the Recipient by an authorized signing officer.

A7.2 Record Maintenance. The Recipient will keep and maintain:

- (a) all financial records (including invoices) relating to the Funds or otherwise to the Project in a manner consistent with generally accepted accounting principles; and
- (b) all non-financial documents and records relating to the Funds or otherwise to the Project.

A7.3 Inspection. The Province, any authorized representative, or any independent auditor identified by the Province may, at the Province's expense, upon twenty-four hours' Notice to the Recipient and during normal business hours, enter upon the Recipient's premises to review the progress of the Project and the Recipient's allocation and expenditure of the Funds and, for these purposes, the Province, any authorized representative, or any independent auditor identified by the Province may take one or more of the following actions:

- (a) inspect and copy the records and documents referred to in section A7.2;
- (b) remove any copies made pursuant to section A7.3(a) from the Recipient's premises; and
- (c) conduct an audit or investigation of the Recipient in respect of the expenditure of the Funds, the Project, or both.

A7.4 Disclosure. To assist in respect of the rights set out in section A7.3, the Recipient will disclose any information requested by the Province, any authorized representatives, or any independent auditor identified by the Province, and will do so in the form requested by the Province, any authorized representative, or any independent auditor identified by the Province, as the case may be.

A7.5 No Control of Records. No provision of the Agreement will be construed so as to give the Province any control whatsoever over the Recipient's records.

A7.6 Auditor General. For greater certainty, the Province's rights under this Article are in addition to any rights provided to the Auditor General pursuant to section 9.1 of the *Auditor General Act* (Ontario).

A8.0 COMMUNICATIONS REQUIREMENTS

A8.1 Acknowledge Support. Unless otherwise directed by the Province, the Recipient will:

- (a) acknowledge the support of the Province for the Project; and
- (b) ensure that the acknowledgement referred to in section A8.1(a) is in a form and manner as directed by the Province.

A8.2 Publication. The Recipient will indicate, in any of its Project-related publications, whether written, oral, or visual, that the views expressed in the publication are the views of the Recipient and do not necessarily reflect those of the Province.

A9.0 FURTHER CONDITIONS

A9.1 Additional Provisions. The Recipient will comply with any Additional Provisions. In the event of a conflict or inconsistency between any of the

requirements of the Additional Provisions and any requirements of this Schedule “A”, the Additional Provisions will prevail.

A10.0 FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY

A10.1 FIPPA. The Recipient acknowledges that the Province is bound by the *Freedom of Information and Protection of Privacy Act* (Ontario) and that any information provided to the Province in connection with the Project or otherwise in connection with the Agreement may be subject to disclosure in accordance with that Act.

A11.0 INDEMNITY

A11.1 Indemnification. The Recipient hereby agrees to indemnify and hold harmless the Indemnified Parties from and against any and all liability, loss, costs, damages, and expenses (including legal, expert and consultant fees), causes of action, actions, claims, demands, lawsuits, or other proceedings, by whomever made, sustained, incurred, brought, or prosecuted, in any way arising out of or in connection with the Project or otherwise in connection with the Agreement, unless solely caused by the negligence or wilful misconduct of the Indemnified Parties.

A11.2 Recipient’s Participation. The Recipient will, at its expense, to the extent requested by the Province, participate in or conduct the defence of any proceeding against any Indemnified Parties and any negotiations for their settlement.

A11.3 Province’s Election. The Province may elect to participate in or conduct the defence of any proceeding by providing Notice to the Recipient of such election without prejudice to any other rights or remedies of the Province under the Agreement, at law, or in equity. Each Party participating in the defence will do so by actively participating with the other’s counsel.

A11.4 Settlement Authority. The Recipient will not enter into a settlement of any proceeding against any Indemnified Parties unless the Recipient has obtained the prior written approval of the Province. If the Recipient is requested by the Province to participate in or conduct the defence of any proceeding, the Province will co-operate with and assist the Recipient to the fullest extent possible in the proceeding and any related settlement negotiations.

A11.5 Recipient’s Co-operation. If the Province conducts the defence of any proceedings, the Recipient will co-operate with and assist the Province to the fullest extent possible in the proceedings and any related settlement negotiations

A12.0 INSURANCE

A12.1 Recipient’s Insurance. The Recipient represents, warrants, and covenants that it has, and will maintain, at its own cost and expense, with insurers having a secure A.M. Best rating of B+ or greater, or the equivalent, all the necessary and

appropriate insurance that a prudent person carrying out a project similar to the Project would maintain, including commercial general liability insurance on an occurrence basis for third party bodily injury, personal injury, and property damage, to an inclusive limit of not less than the amount set out in Schedule "B" per occurrence. The policy will include the following:

- (a) the Indemnified Parties as additional insureds with respect to liability arising in the course of performance of the Recipient's obligations under, or otherwise in connection with, the Agreement;
- (b) a cross-liability clause;
- (c) contractual liability coverage; and
- (d) a 30 day written notice of cancellation.

A12.2 Proof of Insurance. The Recipient will:

- (a) provide to the Province, either:
 - (i) certificates of insurance that confirm the insurance coverage as provided for in section A12.1; or
 - (ii) other proof that confirms the insurance coverage as provided for in section A12.1; and
- (b) upon the request of the Province, provide to the Province a copy of any insurance policy.

A13.0 TERMINATION ON NOTICE

A13.1 Termination on Notice. The Province may terminate the Agreement at any time without liability, penalty, or costs upon giving at least 30 days' Notice to the Recipient.

A13.2 Consequences of Termination on Notice by the Province. If the Province terminates the Agreement pursuant to section A13.1, the Province may take one or more of the following actions:

- (a) cancel all further instalments of Funds;
- (b) demand the repayment of any Funds remaining in the possession or under the control of the Recipient; and
- (c) determine the reasonable costs for the Recipient to wind down the Project, and do either or both of the following:
 - (i) permit the Recipient to offset such costs against the amount the Recipient owes pursuant to section A13.2(b); and

- (ii) subject to section A4.8, provide Funds to the Recipient to cover such costs.

A14.0 TERMINATION WHERE NO APPROPRIATION

A14.1 Termination Where No Appropriation. If, as provided for in section A4.2(d), the Province does not receive the necessary appropriation from the Ontario Legislature for any payment the Province is to make pursuant to the Agreement, the Province may terminate the Agreement immediately without liability, penalty, or costs by giving Notice to the Recipient.

A14.2 Consequences of Termination Where No Appropriation. If the Province terminates the Agreement pursuant to section A14.1, the Province may take one or more of the following actions:

- (a) cancel all further instalments of Funds;
- (b) demand the repayment of any Funds remaining in the possession or under the control of the Recipient; and
- (c) determine the reasonable costs for the Recipient to wind down the Project and permit the Recipient to offset such costs against the amount owing pursuant to section A14.2(b).

A14.3 No Additional Funds. For greater clarity, if the costs determined pursuant to section A14.2(c) exceed the Funds remaining in the possession or under the control of the Recipient, the Province will not provide additional Funds to the Recipient.

A15.0 EVENT OF DEFAULT, CORRECTIVE ACTION, AND TERMINATION FOR DEFAULT

A15.1 Events of Default. Each of the following events will constitute an Event of Default:

- (a) in the opinion of the Province, the Recipient breaches any representation, warranty, covenant, or other material term of the Agreement, including failing to do any of the following in accordance with the terms and conditions of the Agreement:
 - (i) carry out the Project;
 - (ii) use or spend Funds; or
 - (iii) provide, in accordance with section A7.1, Reports or such other reports as may have been requested pursuant to section A7.1(b);
- (b) the Recipient's operations, or its organizational structure, changes such that it no longer meets one or more of the eligibility requirements of the program under

which the Province provides the Funds;

- (c) the Recipient makes an assignment, proposal, compromise, or arrangement for the benefit of creditors, or a creditor makes an application for an order adjudging the Recipient bankrupt, or applies for the appointment of a receiver; or
- (d) the Recipient ceases to operate.

A15.2 Consequences of Events of Default and Corrective Action. If an Event of Default occurs, the Province may, at any time, take one or more of the following actions:

- (a) initiate any action the Province considers necessary in order to facilitate the successful continuation or completion of the Project;
- (b) provide the Recipient with an opportunity to remedy the Event of Default;
- (c) suspend the payment of Funds for such period as the Province determines appropriate;
- (d) reduce the amount of the Funds;
- (e) cancel all further instalments of Funds;
- (f) demand the repayment of any Funds remaining in the possession or under the control of the Recipient;
- (g) demand the repayment of an amount equal to any Funds the Recipient used, but did not use in accordance with the Agreement;
- (h) demand the repayment of an amount equal to any Funds the Province provided to the Recipient; and
- (i) terminate the Agreement at any time, including immediately, without liability, penalty or costs to the Province upon giving Notice to the Recipient.

A15.3 Opportunity to Remedy. If, in accordance with section A15.2(b), the Province provides the Recipient with an opportunity to remedy the Event of Default, the Province will provide Notice to the Recipient of:

- (a) the particulars of the Event of Default; and
- (b) the Notice Period.

A15.4 Recipient not Remediating. If the Province has provided the Recipient with an opportunity to remedy the Event of Default pursuant to section A15.2(b), and:

- (a) the Recipient does not remedy the Event of Default within the Notice

Period;

- (b) it becomes apparent to the Province that the Recipient cannot completely remedy the Event of Default within the Notice Period; or
- (c) the Recipient is not proceeding to remedy the Event of Default in a way that is satisfactory to the Province,

the Province may extend the Notice Period, or initiate any one or more of the actions provided for in sections A15.2(a), (c), (d), (e), (f), (g), (h), and (i).

A15.5 When Termination Effective. Termination under this Article will take effect as set out in the Notice.

A16.0 FUNDS AT THE END OF A FUNDING YEAR

A16.1 Funds at the End of a Funding Year. Without limiting any rights of the Province under Article A15.0, if the Recipient has not spent all of the Funds allocated for the Funding Year as provided for in the Budget, the Province may take one or both of the following actions:

- (a) demand the return of the unspent Funds; and
- (b) adjust the amount of any further instalments of Funds accordingly.

A17.0 FUNDS UPON EXPIRY

A17.1 Funds Upon Expiry. The Recipient will, upon expiry of the Agreement, return to the Province any Funds remaining in its possession or under its control.

A18.0 REPAYMENT

A18.1 Repayment of Overpayment. If at any time the Province provides Funds in excess of the amount to which the Recipient is entitled under the Agreement, the Province may:

- (a) deduct an amount equal to the excess Funds from any further instalments of Funds; or
- (b) demand that the Recipient pay an amount equal to the excess Funds to the Province.

A18.2 Debt Due. If, pursuant to the Agreement:

- (a) the Province demands the payment of any Funds or an amount equal to any Funds from the Recipient; or

- (b) the Recipient owes any Funds or an amount equal to any Funds to the Province, whether or not their return or repayment has been demanded by the Province,

such Funds or other amount will be deemed to be a debt due and owing to the Province by the Recipient, and the Recipient will pay or return the amount to the Province immediately, unless the Province directs otherwise.

A18.3 Interest Rate. The Province may charge the Recipient interest on any money owing by the Recipient at the then current interest rate charged by the Province of Ontario on accounts receivable.

A18.4 Payment of Money to Province. The Recipient will pay any money owing to the Province by cheque payable to the “Ontario Minister of Finance” and delivered to the Province at the address referred to in section A19.1.

A18.5 Fails to Repay. Without limiting the application of section 43 of the *Financial Administration Act* (Ontario), if the Recipient fails to repay any amount owing under the Agreement, Her Majesty the Queen in right of Ontario may deduct any unpaid amount from any money payable to the Recipient by Her Majesty the Queen in right of Ontario.

A19.0 NOTICE

A19.1 Notice in Writing and Addressed. Notice will be in writing and will be delivered by email, postage-prepaid mail, personal delivery, or fax, and will be addressed to the Province and the Recipient respectively as set out in Schedule “B”, or as either Party later designates to the other by Notice.

A19.2 Notice Given. Notice will be deemed to have been given:

- (a) in the case of postage-prepaid mail, five Business Days after the Notice is mailed; or
- (b) in the case of email, personal delivery, or fax, one Business Day after the Notice is delivered.

A19.3 Postal Disruption. Despite section A19.2(a), in the event of a postal disruption:

- (a) Notice by postage-prepaid mail will not be deemed to be received; and
- (b) the Party giving Notice will provide Notice by email, personal delivery, or fax.

A20.0 CONSENT BY PROVINCE AND COMPLIANCE BY RECIPIENT

A20.1 Consent. When the Province provides its consent pursuant to the Agreement, it may impose any terms and conditions on such consent and the Recipient will comply with such terms and conditions.

A21.0 SEVERABILITY OF PROVISIONS

A21.1 Invalidity or Unenforceability of Any Provision. The invalidity or unenforceability of any provision of the Agreement will not affect the validity or enforceability of any other provision of the Agreement. Any invalid or unenforceable provision will be deemed to be severed.

A22.0 WAIVER

A22.1 Waivers in Writing. If a Party fails to comply with any term of the Agreement, that Party may only rely on a waiver of the other Party if the other Party has provided a written waiver in accordance with the Notice provisions in Article A19.0. Any waiver must refer to a specific failure to comply and will not have the effect of waiving any subsequent failures to comply.

A23.0 INDEPENDENT PARTIES

A23.1 Parties Independent. The Recipient is not an agent, joint venturer, partner, or employee of the Province, and the Recipient will not represent itself in any way that might be taken by a reasonable person to suggest that it is, or take any actions that could establish or imply such a relationship.

A24.0 ASSIGNMENT OF AGREEMENT OR FUNDS

A24.1 No Assignment. The Recipient will not, without the prior written consent of the Province, assign any of its rights or obligations under the Agreement.

A24.2 Agreement Binding. All rights and obligations contained in the Agreement will extend to and be binding on the Parties' respective heirs, executors, administrators, successors, and permitted assigns.

A25.0 GOVERNING LAW

A25.1 Governing Law. The Agreement and the rights, obligations, and relations of the Parties will be governed by and construed in accordance with the laws of the Province of Ontario and the applicable federal laws of Canada. Any actions or proceedings arising in connection with the Agreement will be conducted in the courts of Ontario, which will have exclusive jurisdiction over such proceedings.

A26.0 FURTHER ASSURANCES

A26.1 Agreement into Effect. The Recipient will provide such further assurances as the Province may request from time to time with respect to any matter to which the Agreement pertains, and will otherwise do or cause to be done all acts or things necessary to implement and carry into effect the terms and conditions of the Agreement to their full extent.

A27.0 JOINT AND SEVERAL LIABILITY

A27.1 Joint and Several Liability. Where the Recipient is comprised of more than one entity, all such entities will be jointly and severally liable to the Province for the fulfillment of the obligations of the Recipient under the Agreement.

A28.0 RIGHTS AND REMEDIES CUMULATIVE

A28.1 Rights and Remedies Cumulative. The rights and remedies of the Province under the Agreement are cumulative and are in addition to, and not in substitution for, any of its rights and remedies provided by law or in equity.

A29.0 FAILURE TO COMPLY WITH OTHER AGREEMENTS

A29.1 Other Agreements. If the Recipient:

- (a) has failed to comply with any term, condition, or obligation under any other agreement with Her Majesty the Queen in right of Ontario or one of Her agencies (a “**Failure**”);
- (b) has been provided with notice of such Failure in accordance with the requirements of such other agreement;
- (c) has, if applicable, failed to rectify such Failure in accordance with the requirements of such other agreement; and
- (d) such Failure is continuing,

the Province may suspend the payment of Funds for such period as the Province determines appropriate.

A30.0 SURVIVAL

A30.1 Survival. The following Articles and sections, and all applicable cross-referenced sections and schedules, will continue in full force and effect for a period of seven years from the date of expiry or termination of the Agreement: Article 1.0, Article 3.0, Article A1.0 and any other applicable definitions, sections

A4.2(d), A4.6, section A5.2, section A7.1 (to the extent that the Recipient has not provided the Reports or other reports as may have been requested to the satisfaction of the Province), sections A7.2, A7.3, A7.4, A7.5, A7.6, Article A8.0, Article A11.0, sections A13.2, sections A14.2, A14.3, sections A15.1, A15.2(d), (e), (f), (g) and (h), Article A17.0, Article A18.0, Article A19.0, Article A21.0, section A24.2, Article A25.0, Article A27.0, Article A28.0, Article A29.0 and Article A30.0.

- END OF GENERAL TERMS AND CONDITIONS -

**SCHEDULE “B”
PROJECT SPECIFIC INFORMATION AND ADDITIONAL PROVISIONS**

Maximum Funds	\$836,976.00
Expiry Date	90 days after the final report due date in Schedule “F”
Amount for the purposes of section A5.2 (Disposal) of Schedule “A”	\$1,000.00
Insurance	\$ 2,000,000.00
Contact information for the purposes of Notice to the Province	Name: Ministry of the Environment and Climate Change Attention: Municipal Challenge Fund Coordinator Email: ChallengeFund@ontario.ca
Contact information for the purposes of Notice to the Recipient	Name: Kelly Scherr Address: 300 Dufferin Avenue, London, ON, N6A 4L9 Attention: Ms.Kelly Scherr, Managing Director, Environmental & Engineering Services & City Engineer Email: kscherr@london.ca Telephone: (519) 661-2489 x2391
Contact information for the senior financial person in the Recipient organization (e.g., CFO, CAO) – to respond as required to requests from the Province related to the Agreement	Name: Anna Lisa Barbon Position: Managing Director, Corporate Services and City Treasurer, Chief Financial Office Fax: Email: abarbon@london.ca Telephone: (519) 661-2489 x4705

Recipient's Canada Revenue Agency Business Number – for compliance with the <i>Financial Administration Act</i> (Ontario)	1194 20883
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Additional Provisions:

B.1 The following definitions are added to section A1.2 in alphabetical order:

“**Act**” has the meaning set out in Section C.1 of Schedule “C”.

“**CCAP**” has the meaning set out in Section C.1 of Schedule “C”.

“**Community-wide GHG Emissions Inventory**” means a summary of all GHG emissions produced within a community which, at a minimum, includes emissions from buildings, transportation and solid waste within municipal boundaries.

“**Community-wide GHG Emissions Reduction Plan**” means a municipal council-approved document that outlines the Recipient’s strategy for meeting its Community-wide GHG Reduction Targets, including a comprehensive assessment of various GHG emissions reduction strategies and the identification of costs and impacts of specific GHG emissions reduction measures that could be undertaken for specific facilities, operations, areas, or sectors and an implementation strategy that includes resource requirements, a monitoring and evaluation plan, and timelines.

“**Community-wide GHG Reduction Target**” means a goal for reducing GHG emissions from all sources included in the Recipient’s Community-wide GHG Emissions Inventory to a specific level compared to a baseline year.

“**GHG**” means greenhouse gas that traps heat in the atmosphere, and includes carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride, and nitrogen trifluoride.

“**Greenhouse Gas Reduction Account**” has the meaning set out in section 71 of the *Climate Change Mitigation and Low-carbon Economy Act, 2016*.

“**Payment Plan**” means the payment plan attached to the Agreement as Schedule “E”.

B.2 The following is added to section A2.1:

- (e) it has, and will continue to have for the term of the Agreement, adequate financial resources to cover normal operating expenses and be a going concern.

B.3 Article A2.0 is amended by adding the following new section:

A2.5 Greenhouse Gas Reduction Account. The Recipient acknowledges that:

- (a) the Funds come from amounts credited to the Greenhouse Gas Reduction Account and as such can only be used, directly or indirectly, for initiatives reasonably likely to reduce, or support the reduction of, GHG, and
- (b) it is receiving Funds for the Project on the basis that the Project is reasonably likely to reduce or support the reduction of GHG,
- (c) components of the Project may be funded from source(s) other than (a) above,

and on the basis of the above acknowledgments, the Recipient agrees and covenants that it shall not register, and shall ensure that no person registers, any component of the Project receiving Funds from amounts credited to the Greenhouse Gas Reduction Account as an offset initiative under the *Climate Change Mitigation and Low-carbon Economy Act, 2016*, or use GHG reductions resulting from any component of the Project receiving Funds from amounts credited to the Greenhouse Gas Reduction Account as the basis for offsetting or displacing GHG emissions. In addition and on the basis of the above acknowledgments, the Recipient agrees and covenants that it shall not register, and shall ensure that no person registers, any component of the Project receiving amounts from source(s) other than (a) above as an offset initiative under the *Climate Change Mitigation and Low-carbon Economy Act, 2016*, or use GHG reductions under any component of the Project receiving amounts from source(s) other than (a) above as the basis for offsetting or displacing GHG emissions, except with the Province's prior written consent.

B.4 Section A4.4 is deleted in its entirety and replaced with the following:

A4.4 No Changes. The Recipient will not make any changes to the Project, the timelines or the Budget without the prior written consent of the Province.

B.5 Article A4.0 is amended by adding the following new sections:

A4.9 Province's Role Limited to Providing Funds. For greater clarity, the Province's role under the Agreement is limited to providing Funds to the

Recipient for the purposes of the Project and to receiving Reports, unless explicitly stated otherwise.

A4.10 **Project Over Budget.** The Recipient acknowledges that should Project expenses exceed the amount of the Funds allocated in the Budget, the Province is not responsible for any additional funding and the Recipient undertakes to incur all further costs necessary to complete the Project.

A4.11 **Moving Funds.** Despite section A4.4, the Recipient may move Funds equaling up to ten percent (10%) of the allocation in one line within a Budget category in Schedule “D” to another line within the same Budget category, except for expenses listed under the Budget category “Other” (if any) in Schedule “D” which may not be moved without approval from the Province. In moving Funds under this section A4.11, the Recipient may not reduce any Budget line by more than ten percent (10%) of its original allocation or increase any Budget line by more than twenty percent (20%) of its original allocation.

A4.12 **Intellectual Property.** The Province is not the owner of any intellectual property generated as a result of the Agreement.

A4.13 **Cash Flow Management.** Despite subsection A4.1(b), in order to more accurately reflect the Recipient’s anticipated cash flow needs, the Province may divide any instalment of the Funds set out in the Payment Plan into two or more smaller instalments based upon the Reports submitted by the Recipient pursuant to section A7.1. If the instalment amount is so divided by the Province, the Recipient may request payment of another instalment by confirming to the Province in a further report pursuant to section A7.1(b) that said instalment will be required in one month’s time.

A4.14 **Additional Funding.** The Recipient acknowledges that it shall not be eligible to apply for or to receive additional funding from any other Greenhouse Gas Reduction Account-funded programs to fund any components of the Project.

B.6 Article 7 is amended by adding the following new section:

A7.7 **Confirmation of GHG Emission Reduction Potential.** After receiving a Report from the Recipient, the Province will verify the GHG emission reduction potential of the Project as set out in the Report. To conduct such verification, the Province may use any of the following provided to it by the Recipient: (i) energy data, (ii) activity levels, (iii) GHG emission factors, and (iv) any underlying assumptions.

- B.7 Section A8.1(a) is deleted and replaced with the following:
- A8.1 **Acknowledge Support.** Unless otherwise approved by the Province, the Recipient will:
- (a) acknowledge the support of the Province for the Project using the statement “This project has received funding support from the Government of Ontario. Such support does not indicate endorsement by the Government of Ontario of the contents of this material”;
- B.8 Article A8.0 is further amended by adding the following new sections:
- A8.3 **Open Data.** Subject to applicable laws, the Recipient gives its consent to the Province for the public release of any information provided under this Agreement including but not limited to the following information, whether in hard copy or in electronic form, on the internet or otherwise: Recipient name, Recipient contact information, Recipient address or general location, amount of Maximum Funds and/or Funds, Project description, Project objectives/goals, Project location, Project results reported by the Recipient including, without limitation, the GHG emission reduction potential of the Project, Budget and any analysis, audit or evaluation reports relating to the Project or to the Agreement performed by either Party. However, the Province and the Recipient agree that such permission does not apply to the following: NIL.
- A8.4 **Announcements.** The Recipient shall not publicly announce receiving the Funds or anything to do with the Agreement, including requesting the presence of the Minister of the Environment and Climate Change at one or more Project events, until permitted by the Province.
- A8.5 **Use of Ontario logo.** The Recipient may only use the Ontario logo by requesting and obtaining written approval from the Province. The placement of the logo on the Recipient’s materials will clearly identify the Government of Ontario as a funder, funding supporter or sponsor, and not as a partner or similar.
- B.9 **Conjunctions.** Where, pursuant to section A9.1, any sections have been modified to add or delete an item from a list, the “and” or “or” conjunction used before the last item on the list shall be deemed to have been moved to the penultimate item on the modified list.
- B.10 Article A10.0 is amended by adding the following new section:
- A10.2 **MFIPPA.** The Province acknowledges that the Recipient is bound by the *Municipal Freedom of Information and Protection of Privacy Act* and that any information provided to the Recipient in connection with the Project or otherwise in connection with the Agreement may be subject to disclosure in accordance with that Act.

B.11 The following event is added to section A15.1:

- (e) the Recipient fails to respond to any inquiry of the Province pertaining to the *Public Sector Salary Disclosure Act, 1996* (Ontario).

B.12 The following consequence is added to section A15.2:

- (j) demand the repayment of an amount equal to, at the discretion of the Province, either the interest earned on the amount demanded under subsection (f), (g) or (h), or the interest imputed to be earned on such amount based on the then current interest rate charged by the Province of Ontario on accounts receivable, calculated from the date of the Event of Default;

B.13 The following is added to section A18.1:

- (c) deduct from any further instalments of Funds an amount equal to, at the discretion of the Province, either the interest earned on the amount deducted under subsection (a) or the interest imputed to be earned on said amount based on the then current interest rate charged by the Province of Ontario on accounts receivable, calculated from the date of overpayment;
- (d) demand that the Recipient pay an amount to the Province equal to, at the discretion of the Province, either the interest earned on the amount deducted under subsection (b) or the interest imputed to be earned on said amount based on the then current interest rate charged by the Province of Ontario on accounts receivable, calculated from the date of overpayment;
- (e) deduct the amounts referred to in both subsection (a) and (c) from any further instalments of Funds; or
- (f) demand that the Recipient pay an amount equal to the amounts referred to in both subsection (b) and (d).

B.14 Article A19.0 is deleted in its entirety and replaced with the following:

A19.0 NOTICE

A19.1 Notice in Writing and Addressed. Notice will be in writing and will be delivered by email addressed to the Province and the Recipient respectively as set out in Schedule "B", or as either Party later designates to the other by Notice.

A19.2 Notice Given. Notice will be deemed to have been give one Business Day after the Notice is delivered.

A19.3 **Notice Not Given.** For clarity, Notice may not be given or received by telephone, postage-prepaid mail, personal delivery, or fax despite the inclusion of a telephone number, fax number or address (if any) in the table in Schedule “B”.

B.15 The following sections are added to section A30.1, Survival, in chronological order: section A2.1(c), section A2.5, sections A4.1(a) and (b), section A4.11, section A4.13, section A7.7, section A8.3, section A8.5, sections A15.2(i) and (j), Article A31.0 and Article A34.0. Notwithstanding the foregoing, section A2.5 and all applicable cross-referenced sections and schedules, including without limitation the definitions in section B.1, will continue in full force and effect until the later of:

- (a) a period of thirty years from the date of expiry or termination of the Agreement; or
- (b) the period of time over which any direct or indirect GHG reduction occurs as a result of any Project component in section C.3.

B.16 The following new provisions are added following Article A30.0 Survival

A31.0 INDIGENOUS CONSULTATION

A31.1 **Notification.** The Recipient agrees to immediately notify the Province if any Indigenous group makes any inquiries about the Project.

A32.0 ACCESSIBILITY

A32.1 Meetings and Events. In using the Funds for meetings, events or similar, the Recipient will consider the accessibility needs of attendees with disabilities, both in terms of physical access to the event/meeting space, as well as access to the event/meeting contents and proceedings. The Recipient will use best efforts to accommodate these needs.

A32.2 Meetings and Events Examples. For assistance with the Recipient’s obligations under section A32.1, examples of areas where accessibility should be considered include: refreshment and dietary arrangements; communications (e.g. alternate formats – large print, screen readers, Braille, audio format; assistive technologies); and venue selection.

A32.3 Venues. In using the Funds for venues, the Recipient will consider the accessibility needs of attendees with disabilities when selecting a venue, both in terms of exterior and interior access. The Recipient will use best efforts to accommodate these needs.

A32.4 Venue Examples. For assistance with the Recipient’s obligations under section A32.3, examples of areas where accessibility should be

considered include: parking, sidewalks/paths of travel, accessible transit, entrances and lobbies, elevators, accessible washrooms, hallways and corridors, and meeting and conference rooms.

A33.0 ENVIRONMENTAL INITIATIVES

A33.1 Meetings. In using the Funds for meetings, the Recipient will use best efforts to hold virtual meetings instead of requiring attendees to travel to meetings in person.

A33.2 Printing. In using the Funds for printing, the Recipient will use best efforts to:

- (a) minimize the need to print documents by scanning and e-mailing documents that might otherwise be printed;
- (b) print or copy double-sided and in black and white when printing or copying is necessary; and
- (c) purchase paper from environmentally responsible sources.

A33.3 Environmentally Responsible Sources. For assistance with the Recipient's obligations under section A33.2(c), environmentally responsible sources provide virgin bulk paper certified by third party verified forest certification systems such as Forest Stewardship Council (FSC), Canadian Standards Association (CSA) or Sustainable Forest Initiative (SFI).

A34.0 PERSONAL INFORMATION and PARTICIPATION BY MINORS

A34.1 Permissions. The Recipient represents, warrants and covenants that it has or will receive permission to disclose the personal information of all individuals whose personal information is disclosed in the Agreement or during the Project, Reports or other reports, and, in the case of minors, the legal guardian or parent has provided such permission on behalf of the minor.

A34.2 Consent of Legal Guardian. The Recipient acknowledges that it is the responsibility of the Recipient to obtain express written consent from the legal guardian of any minors who are involved in any way with the Project.

- END OF ADDITIONAL PROVISIONS -

SCHEDULE “C”

PROJECT DESCRIPTION

C.1 BACKGROUND

The Government of Ontario has taken significant steps to fight climate change and limit GHG emissions. With the passage of the *Climate Change Mitigation and Low-carbon Economy Act, 2016* (the “**Act**”) and release of its 5-year Climate Change Action Plan (“**CCAP**”), the Ontario government has shown a clear and continued commitment to leadership on climate change.

The Act establishes the Government of Ontario’s 2020, 2030, and 2050 GHG reduction targets in law. CCAP creates a foundation on which the Ontario government will develop and build the policies and programs needed to help the province meet the targets set in the Act. The Municipal GHG Challenge Fund is one of the specific actions identified in CCAP to support municipal action on climate change mitigation.

Ontario’s municipal governments own more of Ontario’s infrastructure than any other level of government, and local decisions about buildings, land-use and transportation have significant impacts on how people consume energy and emit GHGs. This is why community-based emission reduction projects are essential to achieving long-term and cost-effective emission reductions in the Province of Ontario.

The Municipal GHG Challenge Fund is aimed at supporting community-led action on climate change. It is a competitive, application-based program that will support GHG emissions reduction projects proposed by municipalities who have or will develop a Community-wide GHG Emissions Inventory, Community-wide GHG Reduction Targets, and a Community-wide GHG Emissions Reduction Plan.

The Project is a GHG reduction project that was proposed by the Recipient and selected for funding through the Municipal GHG Challenge Fund.

The Project was identified as an action item in the Recipient’s 2016 Cycling Master Plan – known as London ON Bikes - a guide and a blueprint for future planning, design, development and programming related to cycling. In addition, the Project also aligns with several of the Recipient’s plans related to lowering transportation-related emissions such as the Recipient’s Community Energy Action Plan, Smart Moves 2030 Transportation Plan, Official Plan (The London Plan), and Our Move Forward - London's Downtown Plan.

Recent plans of the Recipient highlight the need for providing accessible, lower-cost, technology-driven transportation options for Londoners. Bike share ties into three of the Recipient’s 2015-2019 Strategic Plan areas of focus: Strengthening our Community, Building a Sustainable City, and Growing our Economy.

Cycling is an important part of the Recipient’s existing and future multimodal transportation and recreation system and part of the “bigger strategic picture” for the

City of London. As a tool, London ON Bikes contains the information needed to support future decision making in the municipality.

Building and promoting cycling as an option to get to work, school or for fitness and recreation can benefit communities in many ways. London ON Bikes' business case demonstrates that the value of investments in cycling can help to articulate the importance of future commitments to improvements by the Recipient and support from the community.

Transportation represents one of the largest challenges Ontario faces in achieving its emissions reductions targets. More than one-third of Ontario's GHG emissions is caused by the transportation sector, with cars and trucks responsible for more than 70 per cent of the total.

The Bike Share System for the City of London will provide residents and visitors with an opportunity to ride a bike to work, for fun or for fitness and provide GHG emissions-free transportation that will become a core part of the City of London's transportation system.

C.2 PROJECT OBJECTIVE

The objectives of this Project are to reduce GHG emissions from the transportation sector by implementing a bike share system for the City of London and increase community-led planning on climate change mitigation, while providing co-benefits such as job creation.

C.3 SCOPE OF PROJECT

The Recipient will plan, design, implement, promote and launch a bike share system in London, Ontario. The Recipient will then quantify the resulting GHG emissions reductions for 12 months after implementation of the bike share system. The Project will mainly be conducted by Kelly Scherr, Managing Director, Environmental & Engineering Services & City Engineer, Allison Miller, Transportation Demand Management Coordinator, Jay Stanford, Director, Environment, Fleet & Solid Waste, and James Skimming, Manager, Air Quality.

Specifically:

C.3.1. GHG emissions inventory, targets and plan

C.3.1.1. The Recipient will review its existing GHG inventory, targets and plan to ensure they meet or exceed the definitions of Community-wide GHG Emissions Inventory, Community-wide GHG Reduction Targets, and Community-wide GHG Emissions Reduction Plan in section B.1. If the existing GHG inventory, targets and plan do not meet or exceed the definitions in section B.1, the Recipient will either:

- (a) revise or update their GHG inventory, targets, and plan to ensure they meet the definitions of Community-wide GHG Emissions Inventory, Community-wide GHG Reduction Targets, and Community-wide GHG Emissions Reduction

Plan in section B.1; or

- (b) create a Community-wide GHG Emissions Inventory, Community-wide GHG Reduction Targets, and Community-wide GHG Emissions Reduction Plan to meet the definitions of each in section B.1.

C.3.2. Consulting services procurement

C.3.2.1. In accordance with

- the Recipient's Procurement of Goods and Services Policy, and
- the *Broader Public Sector Accountability Act, 2010* and relevant directives including but not limited to the Broader Public Sector Procurement Directive and the Broader Public Sector Perquisites Directive

the Recipient will conduct an open, transparent, and competitive procurement process to identify potential supply sources to assist the Recipient with the implementation of the Project, specifically:

- Phase 1 - Business case development, for approval by City of London Municipal Council;
- Phase 2 - Development and release of a Request for Proposal for the design, build, operate and maintenance of the bike share system; and
- Phase 4 - Program launch and preliminary operations period and acceptance testing to confirm the bike share system meets specified performance criteria.

C.3.2.2. The Recipient's competitive procurement processes will obtain the required services necessary to meet the Recipient's needs in the most economical and efficient manner, through appropriate municipal procurement processes that conform with principles of value for money, vendor access, transparency, fairness, responsible management, geographic neutrality and reciprocal non-discrimination.

C.3.2.3. The Recipient will specify the responsibilities of individuals and organizations at each stage of the procurement process.

C.3.2.4. The Recipient will establish a clear terms of reference for the service assignments including: objectives, background, scope, constraints, staff responsibilities, tangible deliverables/results, timing, progress reporting, approval requirements, and where applicable, knowledge transfer requirements.

C.3.2.5. The Recipient will ensure consistency in the management of procurement-related processes and decisions.

C.3.2.6. The Recipient will ensure that each successful vendor at the conclusion of the procurement process to be undertaken by the Recipient executes specific tasks established in the agreement and stays within the budget.

C.3.3. Phase 1 - Business case development, for approval by City of London Municipal Council

C.3.3.1. The Recipient will develop a business case for Municipal Council to:

- Review existing bike share systems, based on site visits conducted of three bike share systems to see how the bike share system and infrastructure works along with an assessment of their latest operating costs and revenue
- Consolidate analysis of comparator bike share systems
- Identify and map current cycling infrastructure in place within London, Ontario
- Determine cycling infrastructure needed for the implementation of a bike share system in London, Ontario
- Determine recommended service areas for the bike share system that consists of a minimum of 300 bicycles
- Determine criteria for siting bike share service locations
- Determine anticipated warehousing and maintenance space needs
- Determine recommendations for bike share service locations that consists of a minimum of 38 bike share service locations
- Determine anticipated range of fees for bike share system access
- Determine recommended membership level targets
- Provide details on estimated costs and benefits
- Provide a high-level summary implementation plan
- Establish criteria for bike share service provider selection

C.3.3.2. The Recipient will submit the business case to Municipal Council for their review and approval to proceed with a Request for Proposals to design, build, operate, and maintain a bike share system.

C.3.4. Phase 2 - Development and release of a Request for Proposal to design, build, operate and maintain the bike share system

C.3.4.1. In accordance with

- the Recipient's Procurement of Goods and Services Policy, and
- the *Broader Public Sector Accountability Act, 2010* and relevant directives including but not limited to the Broader Public Sector Procurement Directive and the Broader Public Sector Prerequisites Directive

the Recipient will conduct an open, transparent, and competitive Request for Proposals to identify potential supply sources to design, build, operate, and maintain a bike share system that includes, but is not limited to, the following:

- Minimum of 300 bicycles
- Minimum of 38 bike share service locations serving the designated service area outlined within the Request for Proposals
- Bicycle maintenance
- Bicycle redistribution equipment
- Station maintenance (if required)
- Website for the bike share system promotion and user registration
- Secure and smart payment system for both registered users and one-time users
- Bike share program branding

- Promotional plan for Phase 3: Pre-launch promotional activities and events and Phase 4: program launch

C.3.4.2. The Recipient's competitive procurement processes will obtain the required goods and services necessary to meet the Recipient's needs in the most economical and efficient manner, through appropriate municipal procurement processes that conform with principles of value for money, vendor access, transparency, fairness, responsible management, geographic neutrality and reciprocal non-discrimination.

C.3.4.3. The Recipient will specify the responsibilities of individuals and organizations at each stage of the procurement process.

C.3.4.4. The Recipient will establish a clear terms of reference for the service and purchase of goods assignments including: objectives, background, scope, constraints, staff responsibilities, tangible deliverables/results, timing, progress reporting, approval requirements, and where applicable, knowledge transfer requirements.

C.3.4.5. The Recipient will ensure consistency in the management of procurement-related processes and decisions.

C.3.5. Phase 3: Construction and development of the bike share system by successful proponent, including pre-launch promotional activities and events

C.3.5.1. The Recipient will ensure that the successful proponent at the conclusion of the procurement process to be undertaken by the Recipient executes the tasks established in the agreement and stays within the budget.

C.3.5.2. The Recipient will carry out pre-launch promotion activities as per the promotion plan outlined in the agreement as per section C.3.5.1., including but not limited to:

- materials such as display banners for public events,
- posters for information boards at community centres and workplaces within the service area,
- hand-out materials for public events,
- social media advertising, and
- print media advertising

C.3.6. Phase 4: Preliminary operations period and acceptance testing to confirm the bike share system meets specified performance criteria, and Program Launch

C.3.6.1. The Recipient will ensure that the bike share program is launched by April 22, 2020.

C.3.6.2. Prior to the official launch date, the Recipient will ensure that the bike share system has been fully operational for at least 3 (three) months.

C.3.6.3. The Recipient will promote the launch of the bike share system as per the

promotion plan outlined within the agreement described in section C.3.5.1.

C.3.7. GHG quantification

The Recipient will quantify the GHG emissions reductions resulting from the bike share system for the first 12 months of operation. The Recipient will also confirm or update the GHG emissions reduction potential over the life of the Project.

GHG emission reduction estimates will be based on the number of bike share trips per year, the average distance travelled per trip, the assumed mode share for vehicle use replaced by using bike share, the current fleet-average fuel economy for vehicles, and assumed future fuel economy improvements for vehicles.

C.4 TIMELINES

The following are the timelines for the Project:

Project Initiative (Work)	Start-Finish Date
C.3.1 GHG emissions inventory, targets and plan	already completed
C.3.2 Consulting services procurement	April 1, 2018 – June 30, 2018
C.3.3 Phase 1 - Business case development, for approval by City of London Municipal Council	July 1, 2018 – January 30, 2019
C.3.4 Phase 2 - Development and release of a Request for Proposal for the design, build, operate and maintenance of the bike share system	February 1, 2019 – August 31, 2019
C.3.5 Phase 3: Construction and development of the bike share system by successful proponent, including pre-launch promotional activities and events	September 1, 2019 – February 29, 2020
C.3.6 Phase 4: Preliminary operations period and acceptance testing to confirm the bike share system meets specified performance criteria, and Program Launch	January 1, 2020 - April 22, 2020
C.3.7 GHG quantification	May 1, 2020 – June 30, 2021

C.5 PROJECT PARTICIPANTS

The Project will be undertaken by the following Project team members:

Organization	Participant Name and Title	Role and responsibility of the participant/ organization in the Project
Recipient	Kelly Scherr, Managing Director, Environmental & Engineering Services & City Engineer	Senior management oversight
Recipient	Allison Miller, Transportation Demand Management Coordinator	Day-to-day project management activities Development of RFP for consultant and bike share system operator Development of the business case Selection of consultant and bike share system operator oversee activities of the selected bike share system operator
Recipient	Jay Stanford, Director, Environment, Fleet & Solid Waste	Senior management direction Development of RFP for consultant and bike share system operator Development of the business case Selection of consultant and bike share system operator Oversee activities of the selected bike share system operator
Recipient	James Skimming, Manager, Air Quality	Overall project management Development of RFP for consultant and bike share system operator Development of the business case Selection of consultant and bike share system operator Oversee activities of the selected bike share system operator GHG emissions inventory, targets and plan

Organization	Participant Name and Title	Role and responsibility of the participant/ organization in the Project
Recipient	Consultant	Assist with development of the business case Assist in development of RFP for bike share system operator Assist with selection of bike share system operator
Recipient	Bike share system operator	Design, build, operate, and maintain the bike share system

Should there be any changes to the above-noted Project team members, the Recipient will advise the Province forthwith. Changes include additions, replacements and vacancies.

C.6 PERFORMANCE MEASURES AND TARGETS

In carrying out the Project, the Recipient will use the following measures and aim to meet the following targets to assess its success in meeting the Project objective:

Performance Measures	Performance Targets
GHG emissions reduction potential of the Bike Share System	Gross GHG reduction: 2,675 tonnes CO2e
Job creation	Creation of at least three local full-time equivalent jobs to operate and maintain the bike share program
GHG emissions reductions resulting from the bike share system for the first 12 months of operation	35 tonnes CO2e
Economic benefits to the community	200,000 bike trips
Number of users in the first 12 months of operation	6,000 users

- END OF PROJECT DESCRIPTION AND TIMELINES -

SCHEDULE "D"

BUDGET

Project Expenditures	Budgeted Cost	Amount from the Funds	Cash confirmed from other sources	Value of confirmed in-kind support	Sources of other funding or in-kind support	When will expenditures be made
STAFF						
C.3.1 GHG emissions inventory, targets and plan				\$250.00	City of London	May 2018
C.3.2 Consulting services procurement				\$1,000.00	City of London	April - June 2018
C.3.3 Phase 1 - Business case development, for approval by City of London Municipal Council				\$4,500.00	City of London	July 2018 – January 2019
C.3.4 Phase 2 - Development and release of a Request for Proposal for the design, build, operate and maintenance of the bike share system				\$4,250.00	City of London	February August 2019
C.3.5 Phase 3: Construction and development of the bike share system by successful proponent, including pre-launch promotional activities and events				\$1,000.00	City of London	September 2019 – February 2020
C.3.6 Phase 4: Preliminary operations period and acceptance testing to confirm the bike share system meets specified performance criteria, and Program Launch				\$1,000.00	City of London	January - April 2020
C.3.7 GHG quantification				\$250.00	City of London	May– June 2021
GOODS						
C.3.5 Phase 3: Construction and development of the bike share system by successful proponent	\$1,564,814	\$782,407.20	\$782,407.20		City of London	February 2019 – February 2020

Project Expenditures	Budgeted Cost	Amount from the Funds	Cash confirmed from other sources	Value of confirmed in-kind support	Sources of other funding or in-kind support	When will expenditures be made
SERVICES						
C.3.5 Phase 3: Pre-launch promotional activities and events, including membership drive and traditional and social media promotion of launch event to the general public	\$48,844.80	\$24,422.40	\$24,422.40		City of London	January – April 2020
C.3.6 Phase 4: Preliminary operations period and acceptance testing to confirm the bike share system meets specified performance criteria, and Program Launch	\$18,316.80	\$9,158.40	\$9,158.40		City of London	April 2020
CONSULTANTS						
C.3.3 Phase 1 - Business case development, for approval by City of London Municipal Council	\$22,896.00	\$11,448.00	\$11,448.00		City of London	July 2018 – January 2019
C.3.4 Phase 2 - Development and release of a Request for Proposal for the design, build, operate and maintenance of the bike share system	\$6,360.00	\$3,180.00	\$3,180.00		City of London	February 2019 – February 2020
C.3.6 Phase 4: Preliminary operations period and acceptance testing to confirm the bike share system meets specified performance criteria, and Program Launch	\$2,544.00	\$1,272.00	\$1,272.00		City of London	April 2020
OTHER						
C.3.5 Phase 3: Pre-launch promotional activities and events, including outreach through employers and neighbourhood organizations	\$10,176.00	\$5,088.00	\$5,088.00		City of London	January – April 2020

Project Expenditures	Budgeted Cost	Amount from the Funds	Cash confirmed from other sources	Value of confirmed in-kind support	Sources of other funding or in-kind support	When will expenditures be made
TOTAL ELIGIBLE COSTS	\$1,673,952.00	\$836,976.00	\$836,976.00	\$12,250.00		
OTHER – INELIGIBLE COSTS SUPPORTING BIKE SHARE						
C.3.5 Phase 3: installation of additional bike parking within bike share system service area	\$51,897.60		\$51,897.60		City of London	January – April 2020
TOTAL COSTS	\$1,725,849.60	\$836,976.00	\$888,873.60	\$12,250.00		

D.1 BUDGET NOTES

- (a) **Ineligible costs** – For clarity, in addition to any other costs identified or described as ineligible in the Agreement, the following is a non-exhaustive list of costs for which the Province will not provide any Funds:
- (i) **Purchase or lease of real property** – including but not limited to lease payments, purchase price, taxes, legal fees and disbursements, consultant fees and disbursements;
 - (ii) **Legal fees and disbursements and consultant fees and disbursements associated with environmental assessments** - including but not limited to assessments undertaken pursuant to the *Environmental Assessment Act*, R.S.O. 1990, c. E.18, or Ontario Regulation 153/04 made under the *Environmental Protection Act*, R.S.O. 1990, c. E.19;
 - (iii) **Operations costs** – back-up systems, spare parts inventory in support of a qualifying system, and operating costs including fuel, electricity, maintenance and insurance costs;
 - (iv) **Overhead costs** – office space, supplies, general overhead costs incurred in the ordinary course of business;
 - (v) **Fundraising** – any costs related to developing a business case, funding proposal or other activity with a similar aim;
 - (vi) **Lobbying** – any costs related to activities undertaken with the actual or perceived intention of lobbying;
 - (vii) **Non-Project costs** – any costs not directly related to the Project or capital costs related to ongoing or other business activities that are not a specific requirement of the project;

- (viii) **Pre-Project costs** – any costs which were incurred prior to November 17, 2017;
 - (ix) **Refundable expenses** – costs deemed ineligible in accordance with section A4.8 of Schedule “A”; and
 - (x) Any costs which are an inappropriate use of public funds in the sole opinion of the Province.
- (b) **Administration Expenses** (under “Other”) – Administration expenses are comprised of disbursements such as postage/courier charges, photocopying charges, office supplies, and financial institution service fees incurred in carrying out the Project. The Funds may not be used for avoidable financial institution service fees (e.g. NSF charges). For clarity, administration expenses do not include items such as salary and wages, rent, travel, accommodation and meal expenses, computers, legal fees, audit fees, engineering fees, and other professional fees. Notwithstanding anything contained herein, the portion of administration expenses covered by the Funds shall not include: None.
- (c) **Support Services** (under “Other”) – Support services refer to the time spent by staff in human resources, finance, information technology, and communications departments providing administrative support that can be attributed to the Project. Project managers and key Project participants are not included in support services. Notwithstanding anything contained herein, the portion of support services covered by the Funds shall not include: None.
- (d) **Consultants** – Consultant costs may include reasonable disbursements in addition to fees. However, the Funds may not be used for costs that would otherwise be ineligible or beyond the limits set by this Agreement (e.g. mileage limits) if they were directly incurred by the Recipient. In addition, the Funds may not be used for: None.
- (e) **Equipment/Capital Item Rental** – The Province *may* approve the purchase instead of the rental of equipment or capital items that fulfill the following criteria: (i) the equipment or capital item is being used on multiple occasions throughout the Project; (ii) total rental costs are greater than the one-time purchase cost; (iii) the equipment or capital item is not of a type found in a normal office environment; and (iv) without the Project, it is unlikely that the Recipient would purchase the equipment or capital item. If intending to purchase the equipment or capital item using the Funds, the Recipient must request approval from the Province prior to acquisition of the equipment or capital item.
- (f) **Transportation** (under “Travel and Hospitality”) – Transportation refers to the provision of transportation for meetings or events to the Recipient’s staff or contractors or meeting/event attendees if specified in the Budget. The amount from the Funds used for transportation will be calculated according to the rates in

the [Ontario Government's Travel, Meal and Hospitality Expenses Directive](#) that is current as of the date that the expense is incurred. Transportation will be by the most practical and economical method; tickets (e.g. train, airplane) purchased must be for economy/coach class and when renting a vehicle, the Funds may only be used for a compact model or its equivalent unless approval for a different model is obtained from the Province prior to rental. **The Funds under this Budget line may not be used for:**

- **transportation for meeting/event attendees when the distance to the meeting or event venue is less than: 100 km.**

(g) **Accommodation** (under "Travel and Hospitality") – Accommodation refers to the provision of accommodation for meetings or events to the Recipient's staff or contractors or other meeting/event attendees if specified in the Budget. Accommodation will be in a standard room; the Funds may not be used for hotel suites, executive floors or concierge levels. **The Funds under this Budget line may not be used for:**

- **accommodation for the Recipient's staff or contractors when the distance to the meeting or event venue is less than fill in km;**
- **accommodation for meeting/event attendees when the distance to the meeting or event venue is less than: 100 km; or**
- **penalties incurred for non-cancellation of guaranteed hotel reservations.**

(h) **Food and Beverage – Staff or Contractors** (under "Travel and Hospitality") – The Recipient may use the Funds for the provision of food or beverages to the Recipient's staff or contractors when travelling for Project-related work. The Funds may only be used for meals during such travel periods, subject to the limitations below. The amount from the Funds used for food or beverage will be calculated according to the rates in the [Ontario Government's Travel, Meal and Hospitality Expenses Directive](#) that is current as of the date that the expense is incurred. **The Recipient may only use the Funds for food and beverage if it is collecting and retaining itemized receipts that verify the expenditure.** In addition, **the Funds under this Budget line may not be used for:**

- **non-meal food and beverages;**
- **alcohol;**
- **meals when the travel period is less than 5 hours, calculated from the time the Recipient's staff or contractor leaves their normal place of business (or reasonable alternative origin) to the time the Recipient's staff or contractor returns to the normal place of business (or reasonable alternative destination); or**
- **meals during travel when travel is a part of the Recipient's staff's or contractor's regular job duties.**

(i) **Food and Beverage - Hospitality** (under "Travel and Hospitality") – The Recipient may use the Funds for the provision of food or beverages during Project meetings/events held with the public. If the Funds are being used to pay for meals during public Project meetings or events, the amount from the Funds used for these meals will be calculated according to the rates in the [Ontario Government's](#)

[Travel, Meal and Hospitality Expenses Directive](#) that is current as of the date that the expense is incurred. If the Funds are being used to pay for non-meal food and beverages (e.g. coffee, water, snacks) during public Project meetings or events the amount from the Funds used for these non-meal expenses can be up to the following maximums: \$5/day per person for a half-day public Project meeting/event or \$10/day per person for a full day public Project meeting/event. **The Recipient may only use the Funds for food and beverage if it is collecting and retaining itemized receipts that verify the expenditure.** In addition, the Funds under this Budget line may not be used for:

- alcohol;
- meals (breakfast, lunch and dinner) or non-meal food and beverages outside of public Project meetings/events; or
- food and beverages already covered under the “Food and Beverage – Travel” budget line.

(j) **Overhead** (under “Other”) – The amount from the Funds used for overhead shall only be for expenses related to the Project. Fixed costs incurred by the Recipient regardless of the Project (e.g. mortgage, rent, insurance for the Recipient’s regular operations) are not eligible for coverage by the Funds. Overhead expenses in the Budget include:

(k) **Services** – Costs for services may include reasonable disbursements in addition to fees. However, the Funds may not be used for the following disbursements:
none

D.2 ADDITIONAL FUNDING

The Recipient has requested, but not received confirmation of, additional funding or in-kind support for the Project from the following:

POTENTIAL FUNDER (CASH OR IN-KIND)	PROJECT EXPENDITURES TO BE COVERED	AMOUNT
NIL	NIL	NIL
	TOTAL	

- END OF BUDGET -

SCHEDULE "E"

PAYMENT PLAN

Criteria	Amount
Following Province execution of Agreement evidencing approval of Recipient Project proposal	\$1,000.00
Following Province approval of first interim progress report and financial progress report as set out in Schedule "F"	\$5,724.00
Following Province approval of second interim progress report and financial progress report as set out in Schedule "F"	\$7,314.00
Following Province approval of third interim progress report and financial progress report as set out in Schedule "F"	\$1,590.00
Following Province approval of fourth interim progress report and financial progress report as set out in Schedule "F"	\$782,407.20
Following Province approval of final report as set out in Schedule "F"	\$38,940.80
TOTAL	\$836,976.00

- END OF PAYMENT PLAN -

**SCHEDULE “F”
REPORTING**

Name of Report	Due Date
1. Additional Funding Report(s)	An on-going obligation of the Recipient following the Recipient’s receipt of notification that it will be receiving additional funding for the Project
2. Procurement Report(s)	Immediately following selection of preferred proponent if applicable
3. Interim Progress Report(s)	September 15, 2018 March 15, 2019 September 15, 2019 March 15, 2020
4. Financial Progress Report(s)	September 15, 2018 March 15, 2019 September 15, 2019 March 15, 2020
5. Final Report	June 30, 2021
6. Reports as specified from time to time	On a date or dates specified by the Province.

Report Due Date

Except as noted below, if the due date of any Report falls on a non-Business Day, the due date is deemed to be the next Business Day.

For any Report due on March 31 in a year when March 31 is not on a Business Day, the due date of such report is deemed to be the Business Day immediately prior to March 31.

Reporting Templates

When reporting to the Province, the Recipient will use the templates provided by the Province (if any).

Supporting Documentation

For clarity, the Province may request supporting documentation from the Recipient as

part of the Reports submitted as described in this schedule.

Report Details

1. The Additional Funding Reports will set out:

- (i) an accounting of any other funding received or to be received by the Recipient, including the identification of the funding organization, the amount and the specific aspect of the Project that the additional funding is supporting;
- (ii) confirmation that there is no overlap of funding from the Province and from the other funding entities.

2. The Procurement Reports will set out:

- (i) a description of the procurement process followed by the Recipient to acquire goods or services required to perform the Project;
- (ii) a justification for the selection of the preferred proponent or good which evidences value for money, including, if applicable, confirmation from the supplier that they are the sole supplier of the goods.

3. The Interim Progress Reports will set out:

- (i) actions undertaken to the date of the report, with reference to specific paragraphs of section C.3 (Scope of Project), and how they relate to the objective(s)/desired outcomes of the Project identified in section C.2;
- (ii) any Project milestones achieved within the reporting period and show how Project objectives / expectations have been met;
- (iii) an update to the estimated GHG emissions reduction potential, any variance from the performance target identified in section C.6, and the reasons for such variance;
- (iv) for any staff position covered in whole or in part by the some or all of the Funds, confirmation of the time spent by the staff person on the Project;
- (v) set out any variances from the timelines, the reasons for such variances and the strategy used to correct the variances and achieve the Project objectives;
- (vi) a statement confirming the Recipient is in compliance with the terms and conditions of the Agreement except as disclosed in the interim progress report, signed by the Chief Operating Officer, the Board chair or equivalent.

4. The Financial Progress Reports will set out:

- (i) an interim accounting of all Project expenditures to date signed by the Chief Financial Officer, the Board chair or equivalent, if applicable, confirming actual Project expenditures and providing an explanation for any variances from the Budget;
- (ii) an accounting of any other funding received by the Recipient, the identification of the funding organization, the amount and the specific aspect of the Project that the additional funding is supporting as well as a statement confirming that there is no overlap of funding from the Province and from any other organization;
- (iii) a high-level monthly spending forecast (e.g. total per month) covering the time period between the date of the financial progress report and (a) the date two months beyond the next financial progress report, or (b) the date of the final report if no further financial progress reports; and
- (iii) whether or not the Project as described in the Agreement can be completed.

5. The Final Report will:

- (i) describe actions undertaken in carrying out the Project, with reference to specific paragraphs of section C.3 (Scope of Project) and how they relate to the objectives/desired outcomes of the Project identified in section C.2;
- (ii) discuss Project objectives / expectations, confirming that Project objectives / expectations were met, setting out lessons learned;
- (iii) confirm or update the GHG emission reduction potential, setting out any variance from the performance target identified in section C.6 and the reasons for such variance, and provide the actual GHG emission reductions achieved to date;
- (iv) for any staff position covered in whole or in part by the some or all of the Funds, confirmation of the time spent by the staff person on the Project;
- (v) include a final accounting of all Project expenditures signed by the Chief Financial Officer, and the Board chair or equivalent if applicable, confirming actual Project expenditures and providing an explanation for any variances from the Budget;
- (iv) include an accounting of any unspent Funds and an explanation as to why there are remaining Funds;
- (vii) include a final accounting of the other funding received by the Recipient, the identification of the funding organization, the amount and the specific aspect of the Project that the additional funding supported as well as a statement

confirming that there has been no overlap of funding from the Province and from any other organization; and

- (viii) include a statement signed by the Chief Operating Officer, the Board chair or equivalent confirming Recipient compliance with the terms and conditions of the Agreement, except as disclosed in the final report.

6. Other Reports:

- (i) the Province will specify the timing and content of any other Reports as may be necessary.

– END OF REPORTING –

APPENDIX 'B'

#18046

Chair and Members
Civic Works Committee

March 19, 2018
(Establish Budget)

**RE: Ontario Municipal Greenhouse Gas (GHG) Challenge
Fund Transfer Payment Agreement
Capital Project TS6025 - Bike Share Program**

FINANCE & CORPORATE SERVICES REPORT ON THE SOURCES OF FINANCING:

Finance & Corporate Services confirms that the cost of this project can be accommodated with a contribution from the Ontario Municipal Greenhouse (GHG) Challenge Fund, 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:

<u>ESTIMATED EXPENDITURES</u>	<u>Approved Budget</u>	<u>Additional Funding</u>	<u>Revised Budget</u>
Engineering	\$100,000		\$100,000
Construction	722,500	822,500	1,545,000
NET ESTIMATED EXPENDITURES	<u>\$822,500</u>	<u>\$822,500</u> 1)	<u>\$1,645,000</u>
 <u>SOURCE OF FINANCING:</u>			
Drawdown from Federal Gas Tax Reserve Fund	\$750,000		\$750,000
Additional drawdown from Federal Gas Tax Reserve Fund 1)	72,500		72,500
Ontario Municipal Greenhouse Gas Challenge Fund 2)		822,500	822,500
TOTAL FINANCING	<u>\$822,500</u>	<u>\$822,500</u>	<u>\$1,645,000</u>

- 1) The funding is available as a drawdown from Federal Gas Tax Reserve Fund; noting that this drawdown is from funding allocated for future eligible Active Transportation projects.
- 2) The City of London was approved an Ontario Municipal GHG Challenge Fund contribution of \$822,500 for the Bike Share Program project.

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Jason Davies
Manager of Financial Planning & Policy