TO:	**CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON OCTOBER 22, 2019**
FROM:	**KELLY SCHERR, P. ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER**
SUBJECT:	**CONTRACT AWARD: RFP 19-27 ADVANCED TRAFFIC MANAGEMENT SYSTEM AND TRAFFIC SIGNAL CONTROLLERS**

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 procurement of an Advanced Traffic Management System and new traffic signal controllers:

(a) Parsons Corporation, **BE APPOINTED** the Contractor to complete the project, in the amount of $4,425,695.91 (excluding HST) in accordance with Section 12.2(b) of the Procurement of Goods and Services Policy;

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

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

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

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

PREVIOUS REPORTS PERTINENT TO THIS MATTER

For additional information, please refer to the following committee reports:

- Civic Works Committee – October 24, 2017, II, 9. Intelligent Transportation System – Appointment of Consulting Engineer;
- Civic Works Committee – April 17, 2018, II, 10. Transportation Intelligent Mobility Management System – Waze Connected Citizens Program Agreement; and
- Civic Works Committee – May 28, 2018, II, 12. Connected and Autonomous Vehicles Technology Strategy.

COUNCIL'S 2019-2023 STRATEGIC PLAN

The following report supports the Strategic Plan through the strategic focus area of **Building a Sustainable City**. By continuing to improve the traffic signal system for the benefit of all road users and implementing infrastructure improvements and programs this will have the effect of managing congestion and travel times and improving safety for all modes of transportation, including transit.

BACKGROUND

Purpose

This report seeks the approval of Municipal Council to retain the contractor to provide a commercial-off-the-shelf (COTS) solution for the supply and installation of an Advanced Traffic Management System (ATMS) and associated new traffic signal controllers.

Context

Each traffic signal has a microcomputer to control the operation of the signal (i.e. the traffic signal controller) and the microcomputers are managed by a traffic signal system that was installed in 2003. The current traffic signal control system (TSCS), has been kept up-to-date since its installation; however, the existing system no longer meets the needs of the City to be more responsive to changing traffic patterns.

The ATMS and traffic signal controller component will support related initiatives as part of the overall Transportation Intelligent Mobility Management System (TIMMS) project to modernize and future-proof the City's traffic signal system and other municipal strategic priorities including:

- Rapid transit implementation and transit signal priority (TSP);
- Active and responsive transportation management during peak travel periods through the upcoming Transportation Management Centre (TMC);
- Real-time traveller information through enhanced sensors and mobile apps, such as the City's recent agreement with Waze; and
- Preparation for the emergence of connected and automated vehicles (CAVs).

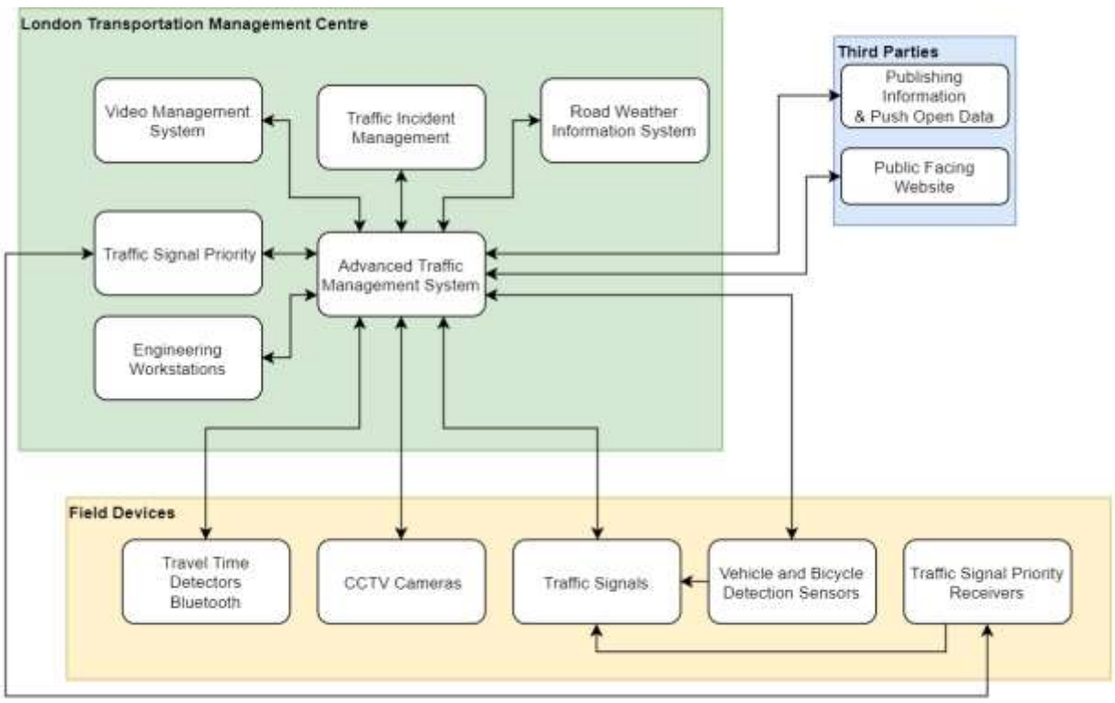
DISCUSSION

Background

The City currently has 403 traffic signals with two to four new traffic signals added each year. As part of TIMMS, various projects are underway in parallel to the Request for Proposals (RFP) for an ATMS and traffic signal controllers. Other features of TIMMS include a data communications upgrade to support the higher volume of data being transmitted from the intersection, the development of the TMC, integration of enhanced TSP, a pilot adaptive signals corridor (i.e. self-adjusting traffic signals), and other traffic operations enhancements.

Scope of Work

The ATMS will provide the necessary tools to assist the City's transportation management group by providing a system that will allow the City to effectively and efficiently manage the flow of traffic within the City of London. The management of the traffic signal system includes the typical Time of Day timing plans while allowing the City to proactively change timing plans based on real-time events, scheduling timing plans in anticipation of events or emergencies, and the ability to automatically rollback to previous timing plans.



System Procurement

On June 27, 2019 a Request for Proposals (RFP19-27) was issued to call for proposals for the procurement of an ATMS and traffic signal controllers. Three (3) proponents submitted proposals for evaluation.

These proposals were evaluated by a team with representation from Roads and Transportation and Information Technology Services with the assistance of the Purchasing and Supply Division. On August 29, 2019, the proponents were invited to the City for an all-day session to further present their ATMS solution and answer technical questions from Municipal Staff to aid in the evaluation process.

The review and evaluation was scored based on criteria including the company profile, proponent experience, project understanding and approach, interview and product demonstration, and the cost proposal.

Based on the evaluation criteria and selection process identified in the Request for Proposals, the evaluation committee unanimously concluded that the proposal from Parsons Corporation provides the best value to the City. Parsons Corporation's past proven experience on similar projects of this nature combined with a project proposal that demonstrated a thorough understanding of the goals and objectives demonstrated their suitability for the undertaking.

Parsons proposed ATMS, known as iNET, has been implemented in several other Canadian municipalities including:

- The City of Mississauga (2015);
- Halifax Regional Municipality (2014);
- The Regional Municipality of Peel (2016); and
- The City of Vancouver (2013).

The iNET ATMS will interface with traffic controllers on the street so that the status of signals and associated field equipment can be monitored remotely in real-time. The iNET ATMS provided has the ability and flexibility to include other modules, features, or integration of other systems to assist the City with effectively managing traffic and transportation needs now and in the future, including transit signal priority , traffic video monitoring systems and adaptive traffic control systems (i.e. self-adjusting).

CONCLUSION

Based on the technical evaluation of the proposals, it is recommended that Parsons Corporation be awarded the contract for the supply and installation of an ATMS and the installation of 404 traffic signal controllers in the amount of $4,425,695.91 (excluding HST) in accordance with Section 12.2(b) of the Procurements of Goods and Services Policy.

PREPARED BY:	**REVIEWED AND CONCURRED BY:**
SHANE MAGUIRE, P. ENG. **DIVISION MANAGER,** **ROADWAY LIGHTING AND TRAFFIC CONTROL**	**DOUG MACRAE, P.ENG., MPA** **DIRECTOR, ROADS AND TRANSPORTATION**
CONCURRED BY:	**RECOMMENDED BY:**
MAT DALEY **DIRECTOR, INFORMATION TECHNOLOGY SERVICES**	**KELLY SCHERR, P.ENG., MBA, FEC** **MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER**

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October 11, 2019/jdk

Attach: Appendix A: Sources of Financing Report

cc: Purchasing and Supply Division
Transportation Advisory Committee