



**CITY OF HAMILTON**

**PUBLIC WORKS DEPARTMENT**  
**Environment & Sustainable Infrastructure Division**

<b>TO:</b> Chair and Members Public Works Committee	<b>WARD(S) AFFECTED:</b> CITY WIDE
<b>COMMITTEE DATE:</b> September 19, 2011	
<b>SUBJECT/REPORT NO:</b> Authorization to Negotiate and Execute Traffic Signal Equipment Supply Contract – (PW09030a) (City Wide)	
<b>SUBMITTED BY:</b> Gerry Davis, CMA General Manager Public Works Department	<b>PREPARED BY:</b> Ron Gallo (905) 546-2424, Extension 6160
<b>SIGNATURE:</b>	

**RECOMMENDATION**

- (a) That the City secure supply of PEEK brand traffic signal units, control masters, associated hardware and software for a period ending April 14, 2014 with PEEK U.S. Traffic Corporation (Manufacturer) and/or Innovative Traffic Solutions Inc. (Supplier) as required and as applicable;
- (b) That the General Manager of Public Works or his/her Authorized Designate be authorized and directed to negotiate and execute all formal documents as per (a) above in a form acceptable to the City Solicitor.

**EXECUTIVE SUMMARY**

In 2009, a Committee report (PW09030) Appendix “A” to standardize on PEEK brand traffic signal control equipment and related hardware and software, for a period of five years, was approved. Currently, over 90% of the City Of Hamilton’s traffic signal system is controlled by PEEK brand traffic signal equipment and software. As a result, City staff’s expertise with these electronics has progressively increased. This local knowledge has resulted in improved efficiencies with programming, deployment and maintenance of the equipment. Continued use of PEEK brand equipment ensures compatibility with existing devices which increases reliability, minimizes downtime and helps to control costs.

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Innovative Traffic Solutions Inc. (ITS) is the sole Canadian Supplier of PEEK brand traffic signal equipment and is located in Hamilton (Stoney Creek). ITS has also been the most recent supplier to the City of Hamilton and, if approved, would continue to supply PEEK brand equipment as well as provide local customer support to staff. Contracting with the supplier is necessary in order for the City to meet its operational requirements and the standardization authorization previously provided by Council. A set pricing agreement to purchase the pre-approved traffic signal equipment would ensure a fixed cost over the life of the agreement. The length of the negotiated contract would terminate at the end of the five year period approved in the original April 15, 2009 report.

Therefore it is recommended that staff be authorized to negotiate and execute all formal documents required in order to secure the supply of PEEK brand traffic signal units, control masters, associated hardware and software until April 14, 2014 with PEEK U.S. Traffic Corporation (Manufacturer) and/or Innovative Traffic Solutions Inc. (Supplier) as required and as applicable, and that City signing authority be granted to the General Manager or his/her respective Authorized Designate.

**Alternatives for Consideration - See Page 5**

**FINANCIAL / STAFFING / LEGAL IMPLICATIONS**

**Financial:** The bulk of demand for traffic signal equipment purchase is derived from the annual controller replacement program. Other streams contributing to the demand for signal controllers includes emergency maintenance, road construction, new traffic signals and development related signals. The financial impact for traffic signal equipment, related to Traffic Engineering capital budgets, over the past five years has averaged approximately \$850,000 annually.

**Staffing:** Implementation of traffic signal equipment is a complex process which involves contributions from a number of staff members from, both, the Traffic Operations and the Traffic Engineering sections. The tasks range from management of purchase orders to inspections, signal timing design, programming, installation, maintenance. There are in excess of 10 staff involved in coordinating this program. Current staffing levels require regular adjustment of priorities in order to fulfil increasing demand for traffic signal installations.

**Legal:** It is important that a legally binding contract for the supply of traffic signal equipment is finalized in order to help mitigate liability and guarantee an arrangement is in place which will achieve cost and operating efficiencies. Approval of this report will ensure that proper authority is granted to staff to enter negotiations with the manufacturer and supplier for the supply of necessary traffic signal equipment. Approval is also necessary to comply with the standardization authorization previously provided by Council. To further protect the City's interests, a suitable contract ensuring accurate delivery of the equipment as well as the ability to control costs through a fixed pricing agreement will benefit the City. Legal Services will assist with the negotiation, drafting and execution of a formal contract.

**HISTORICAL BACKGROUND**

In April, 2009 Council approved a staff report (PW09030) authorizing standardization of PEEK brand traffic signal control equipment and associated hardware for a period of five years.

The recommendation reads as follows: "That the PEEK brand of traffic signal equipment be approved as the Manufacturer's Standard for the City of Hamilton for a period of five years, relative to the purchase of traffic signal control units, control masters and associated hardware and software".

The previous supply contract expired at the end of 2009, however, sufficient units were purchased to support the 2010 traffic signal installation program. Staff subsequently, through consultation with Procurement, entered into negotiations with the manufacturer and supplier to define terms for supply of necessary equipment. During development of the agreement, additional advice was sought from Legal Services. Following same, this report was prepared.

In order to meet the immediate needs of the 2011 traffic signal controller program, and to minimize the risk to public from possible equipment failure, a bridge purchase order was established and approved as a stop gap measure, with assistance from Legal and Procurement. Approval of this purchase order, issued in March 2011, satisfies the immediate need to install traffic signal equipment, but does not address future needs beyond 2011.

This report will establish authority to negotiate and execute a formal contract with the supplier, Innovative Traffic Solutions Inc. (ITS), and the manufacturer, PEEK U.S. Traffic Corporation, as required and as applicable for the supply of PEEK brand of traffic signal control units.

Presently, over 90% of all traffic controllers in use in Hamilton are the PEEK brand. This has provided efficiencies with system compatibility, staff training and spare parts inventory. ITS is the only Canadian Supplier of PEEK equipment. The City of Hamilton has had a good working relationship with ITS for a number of years. Public Works currently has a short term agreement with ITS and there is good rapport between the corresponding parties. Upon granting of authorization, it is expected that a fixed pricing contract will be negotiated for the remainder of the five year period identified in the original April 15, 2009 report. Fixed pricing will be a benefit to the City as it accurately defines budget expenditures and eliminates the need to estimate future forecast spending.

It is, therefore, recommended that staff be authorized to negotiate and execute all formal documents required in order to secure supply of PEEK brand traffic signal units, control masters, associated hardware and software until April 14, 2014 with PEEK U.S. Traffic Corporation (manufacturer) and/or Innovative Traffic Solutions Inc. (supplier) as required and as applicable, and that City signing authority be granted to the General Manager or his/her respective Authorized Designate.

**POLICY IMPLICATIONS**

Purchasing Policy #13, Policy for Authority to Execute Contracts, section 4.13 states: “For all other Contracts that require Council approval, the City officials named in the Council resolution shall execute such Contracts on behalf of the City. Where City officials have not been named in the Council resolution, the Mayor and Clerk shall execute such Contract.”

In addition to realizing operating efficiencies, it is cost beneficial for the City to establish the purchase of traffic signal control equipment solely with the specified Manufacturer in an attempt to negotiate volume discounts directly with that Manufacturer and/or their local representative.

This report aligns with the Public Works Business Plan “Innovate Now” by promoting the development of a multi-year contract process this is defined, predictable and promotes effective use of capital.

**RELEVANT CONSULTATION**

Traffic Engineering staff have consulted with Legal Services, Procurement and Traffic Operations personnel.

Legal Services has provided advice and assistance with respect to the preparation of the bridge purchase order and this report and will assist with the preparation and negotiation of required documents and agreements as required.

Purchasing has provided documents for terms and conditions related to the purchasing of equipment through the bridge purchase order. They have also advised on ensuring that the purchasing process is adhered to during the course of establishing this project.

Traffic Operations staff have provided valuable information regarding development of equipment specifications. Traffic Operations has also been instrumental in supplying ordering and product management information which will contribute to a more comprehensive purchase agreement.

**ANALYSIS / RATIONALE FOR RECOMMENDATION**

Traffic signal control equipment in the City of Hamilton is almost exclusively made up of the PEEK brand of controllers. While the equipment manufacturer is located in the United States, Innovative Traffic Solutions Inc. (the Canadian supplier of PEEK brand equipment) is located in Hamilton (Stoney Creek). An approved Committee report in 2009 authorized the standardization of PEEK brand traffic signal equipment and associated hardware and software. It is, therefore, in the City’s best interest that negotiations to enter into a supply contract be initiated with the manufacturer and the local supplier.

The following list outlines a number of other advantages to conducting purchases of PEEK brand traffic signal equipment from PEEK U.S. Traffic Corporation and Innovative Traffic Solutions Inc. (ITS):

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- ITS is the only Canadian supplier
- The City of Hamilton and ITS currently have a positive relationship
- Realize cost savings with a fixed pricing contract
- Expedited servicing of equipment and customer support
- Eliminates the need for annual tender, potentially reducing cost and reducing administrative workloads
- City of Hamilton staff have developed expertise with PEEK equipment realizing efficiencies
- Controller units are interchangeable within existing signal groups which controls costs and reduces downtime

PEEK brand equipment has been found to be reliable and is compatible with existing software.

**ALTERNATIVES FOR CONSIDERATION**

As per previous related report (PW09030), one alternative would be to revert to a competitive tender process; however, if PEEK was not the low bid, the City would be required to take on the new brand of equipment with all associated difficulties of introducing and integrating new and different hardware to the system. As well, the hardware compatibility issues associated with a different manufacturer, increased quantities of spare parts required, additional staff training needed and purchasing, inventory and repair management demands would all lead to increased costs beyond the initial purchase cost. Hence, this option is not recommended.

**CORPORATE STRATEGIC PLAN**

Focus Areas: 1. Skilled, Innovative and Respectful Organization, 2. Financial Sustainability, 3. Intergovernmental Relationships, 4. Growing Our Economy, 5. Social Development, 6. Environmental Stewardship, 7. Healthy Community

***Skilled, Innovative & Respectful Organization***

- ◆ A culture of excellence
- ◆ More innovation, greater teamwork, better client focus
- ◆ An enabling work environment - respectful culture, well-being and safety, effective communication
- ◆ Council and SMT are recognized for their leadership and integrity

***Financial Sustainability***

- ◆ Financially Sustainable City by 2020
- ◆ Effective and sustainable Growth Management

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- ◆ Delivery of municipal services and management capital assets/liabilities in a sustainable, innovative and cost effective manner

***Growing Our Economy***

- ◆ An improved customer service

***Social Development***

- ◆ Hamilton residents are optimally employed earning a living wage

**APPENDICES / SCHEDULES**

Appendix "A": Procurement and Standardization of Traffic Signal Control Units and Associated Hardware 2009 - 2013 (PW09030) - (City Wide)

**CITY OF HAMILTON**

**Appendix A  
PW09030a**

**PUBLIC WORKS DEPARTMENT  
Operations & Maintenance Division**

<b>Report to:</b> Chair and Members Public Works Committee	<b>Submitted by:</b> Gerry Davis, CMA Acting General Manager Public Works Department
<b>Date:</b> March 11, 2009	<b>Prepared by:</b> Hart Solomon Extension 4584

**SUBJECT: Procurement and Standardization of Traffic Signal Control Units and Associated Hardware 2009 - 2013 (PW09030) - (City Wide)**

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**RECOMMENDATION:**

- (a) That the PEEK brand of traffic signal equipment be approved as the Manufacturer's Standard for the City of Hamilton for a period of five years, relative to the purchase of traffic signal control units, control masters and associated hardware and software;
- (b) That staff be authorized to negotiate and execute "house accounts" for the supply of spare equipment, parts and repair and maintenance services with original equipment manufacturers and / or licensed distributors of the approved standardized product.



Gerry Davis, CMA  
Acting General Manager  
Public Works Department

**EXECUTIVE SUMMARY:**

For the current three year period, Council authorized staff (Report PW05076) to standardize on traffic signal control units and associated hardware, limiting the use to two brands with the bulk of the purchases to be directed to the lowest priced supplier. As such, the City has virtually standardized on the PEEK brand of equipment. The PEEK units have given satisfactory operation and are provided with good support from a supplier located in Stoney Creek.

At present sixty to seventy percent of all equipment in use in Hamilton is the PEEK brand. Since there are cost and efficiency advantages in terms of system compatibility,

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training and spare parts, it is recommended that the City of Hamilton standardize on the PEEK brand of traffic signal control units for the next five years.

**BACKGROUND:**

The information/recommendations contained within this report have City wide implications.

For the period 2005 through 2008, Council approved standardizing on two brands of traffic signal control units for use in the City of Hamilton (Report PW05076). The recommendation was based on creating a competitive bidding situation between the two brands which have had consistently been the lowest price and were presently in service in the City of Hamilton. The bulk of the award was biased toward the lowest price bidder meeting all specifications and the supply of traffic control signal units was awarded to Innovative Traffic Solutions Inc. of Stoney Creek, local supplier of the PEEK brand.

Since the equipment has performed satisfactorily, and there are distinct operational advantages to standardization, it is therefore recommended that, subject to negotiating a satisfactory price based on the current, known pricing, that the City standardize on PEEK traffic control units and associated hardware and software for the next 5 years.

**ANALYSIS/RATIONALE:**

Traffic signal control units are not interchangeable. While some specifications are standard within the industry, others, particularly the communications between units, are proprietary and are unique to individual manufacturers. The City of Hamilton has a significant investment in the PEEK hardware and has found it to be reliable and satisfactory to our needs.

The current structure of the Traffic Signal System has control units in groups of ten to 24 for communications purposes. All units within a communications groups must be of a common brand. Standardizing on one manufacturer allows interchangeability without having to replace an entire control system. Adding units to an existing system or replacing units which have reached their life expectancy is much easier with all units in a group of the same manufacturer specification.

Secondary benefits include the reduced training levels, increased familiarity of staff with operations, as well as reduced levels of spare components which must be maintained in stock.

**ALTERNATIVES FOR CONSIDERATION:**

One alternative would be to revert to a competitive tender process; however, if PEEK was not the low bid, the City would be required to take on the new brand of equipment with all the associated difficulties of introducing and integrating new and different hardware to the system. As well, the hardware compatibility issues associated with a different manufacturer, increased quantities of spare parts required, additional staff training needed and purchasing, inventory and repair management demands would all lead to increased costs beyond the initial purchase cost.



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**FINANCIAL/STAFFING/LEGAL IMPLICATIONS:**

The 2009 demand for new traffic signal equipment purchase plus spare components is estimated at \$800,000. Subsequent years would be approximately similar, with variations for changes in capital and current programs such as emergency maintenance, construction, new traffic signals, capital controller replacement, etc. The actual purchase orders will be placed annually based on the approved funding for the various programs.

**POLICIES AFFECTING PROPOSAL:**

The City of Hamilton's Purchasing Policy Section 4.14 - Policy for Standardization states that when more than one application exists for any equipment, product, or service a standard will be established.

If such a standard will result in a single source purchase, the Manager of Purchasing and Council shall approve that standard. The recommendations contained within this report are keeping with the spirit of that provision.

It is cost beneficial for the City to base the purchase of traffic signal control equipment on the specified manufacturer in an attempt to negotiate volume discounts directly with that manufacturer and/or their local representative. This will guarantee the City receives maximum discount on the equipment acquired.

This initiative is consistent with two of the vision drivers in Innovate Now, the Public Works Strategic Plan, those which encourage Smart Processes That Match Our Needs and Sound Financial Management for the Long Haul. This initiative is also consistent with the focus area of Fiscal Sustainability from the City of Hamilton Strategic Plan.

**RELEVANT CONSULTATION:**

Purchasing staff have advised the preferred method to undertake these revise purchasing process. Legal has been consulted with regard to this format.

Staff responsible for traffic signal installation and maintenance in other municipalities regularly discuss traffic signal equipment procurement strategy. Municipalities such as Niagara and Durham have elected to acquire traffic signal system equipment from a single supplier. Other municipalities have been following the tendering process.

**CITY STRATEGIC COMMITMENT:**

By evaluating the "Triple Bottom Line", (community, environment, economic implications) we can make choices that create value across all three bottom lines, moving us closer to our vision for a sustainable community, and Provincial interests.

**Community Well-Being is enhanced.**       Yes     No

Public services and programs are delivered in an equitable manner, coordinated, efficient, effective and easily accessible to all citizens.

The public are involved in the definition and development of local solutions.

Partnerships are promoted.

This approach will optimize the functioning of the City's traffic control system, encouraging smooth, safe traffic flow.

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**Environmental Well-Being is enhanced.**       Yes    No

Human health and safety are protected.

Consumption of all natural resources is reduced.

Air quality and water quality and quantity are protected.

Climate-related risks are managed; Greenhouse Gas emissions are reduced.

Ecological function and the natural heritage system are protected.

Fewer maintenance calls means less material and vehicle use.

**Economic Well-Being is enhanced.**       Yes    No

A skilled, innovative and diverse workforce is attracted and retained.

Hamilton's high-quality environmental amenities are maintained and enhanced.

This approach should minimize maintenance costs.

**Does the option you are recommending create value across all three bottom lines?**

Yes    No

**Do the options you are recommending make Hamilton a City of choice for high performance public servants?**

Yes    No