

**SUBJECT:** Town Centre Boulevard Streetlight Replacement - Purchase Order Adjustment Request

**PREPARED BY:** Prathapan Kumar, Ext. 2989  
Gary Adamkowski, Ext. 2678

---

**RECOMMENDATION:**

- 1) THAT the report entitled "Town Centre Boulevard Streetlight Replacement – Purchase Order Adjustment Request" be received;
- 2) AND That Purchase Order PD 12282 issued to Fellmore Electric for contract 188-T-12 Town Centre Boulevard Streetlight Replacement be increased by \$237,076 from \$352,313 to \$589,389 inclusive of HST, to cover the additional works due to revised streetlight poles and luminaires design;
- 3) AND That Purchase Order PD 10097 issued to Lumentec Engineers Inc. for contract 036-Q-10 Town Centre Boulevard Illumination, Consulting, Design and Contract Administration Services be increased by \$16,180 from \$45,792 to \$61,972 inclusive of HST, to cover revisions to streetlight pole and luminaires design and additional contract administration services required;
- 4) AND That the funding shortfall of \$153,256 inclusive of HST, to complete the additional work be funded from the Life Cycle Replacement and Capital Reserve;
- 5) AND That Staff be authorized and directed to do all things necessary to give effect to this resolution.

**EXECUTIVE SUMMARY:**

Not Applicable

**PURPOSE:**

The purpose of this report is to seek Council's approval to increase the Purchase Order for Fellmore Electric for contract 188-T-12 Town Centre Boulevard Streetlight Replacement and to increase the Purchase Order for Lumentec Engineers Inc. for contract 036-Q-10 Town Centre Boulevard Illumination, Consulting, Design and Contract Administration Services due to revisions to streetlight poles and luminaires design.

**BACKGROUND:**

On August 12, 2012, Council awarded 188-T-12 and authorized staff to proceed with the replacement of Streetlighting along Town Centre Boulevard between Hwy 7 and Apple Creek Boulevard at a cost of \$387,544 (inclusive of HST) based on the cobra style LED luminaire. The underground installations have been completed including cabling and concrete pole foundations. Later Asset Management was asked to review the design and to propose alternatives to differentiate the Town Centre Boulevard lighting and signify the special nature of the Civic Centre and environs.

---

**OPTIONS/ DISCUSSION:**

The initial design implements a highly efficient architectural cobra-head style LED luminaire to replace the existing twin globe units which are obsolete, inefficient and prone to failure. Pole spacing was determined to optimize the performance based on the twinned pattern at an average spacing of 40-50 metres.

Asset Management subsequently looked at various options and recommended Philips Lumec Metroscape luminaire (see Attachment "A" for illustration) as it provides a more elegant solution to the initial design while attaining the efficiency and dark sky compliance objectives of the project incorporating LED light source as a demonstration of the technology. Twin fixtures on arms with a lantern "look" will be more elegant than the original design. This fixture was considered for Main Street Markham and rejected because the design while having a heritage "look" was considered too contemporary. Further, some concern was expressed about the open style of the fixture and how it might encourage bird nesting, however, the manufacturer assures this is not an issue and the staff has contacted other users who indicate they have had no problems.

Due to change of luminaire type, design must be revised to suit as follows:

- Pole height must be reduced to 6.1 m (original pole height 9.1m) to suit the twin Metroscape LED luminaire. The original poles are identical to the Markham Centre poles and could be used in other City projects. Staff has negotiated with the manufacturer and the Times Group developer so that the originally ordered poles could be used by the developer.
- Additional poles must be installed in between the existing poles to achieve the required lighting levels with a lower pole.
- Initially selected luminaires (20) have been fabricated so there will be a re-stocking charge to cancel the order.
- The underground cable must be replaced as installed cables will be damaged when pulling out while installing the additional poles.
- The Contractor will require compensation to de-mobilize and re-mobilize at a later date.
- Luminaires and mounting hardware will have to be ordered and the delivery time (8 -10 weeks) will push project completion into spring 2013.

**FINANCIAL CONSIDERATIONS AND TEMPLATE:**

Project 12308 'Streetlight Replacement – Town Centre Boulevard' was approved in the amount of \$635,000 as part of the 2012 Capital budget process. Subsequently, contract for the construction was awarded at \$387,544 leaving a balance of \$247,456 of which \$147,456 was returned to the Life Cycle Replacement and Capital Reserve. The project has a remaining budget of \$100,000 for potential additional work due to ground conditions.

With the purchase order increases of \$253,256, \$100,000 will be funded from the balance remaining in project 12308 and the shortfall of \$153,256 will be funded from the Life Cycle Replacement and Capital Reserve.

Details	\$'s
<b>Budget in Project 12308, 'Streetlight Replacement - Town Centre Boulevard'</b>	635,000
Cost of Award, 188-T-12	(387,544)
<b>Remaining funds after award</b>	<b>247,456</b>
Funds returned to original funding source as per 188-T-12	(147,456)
<b>Remaining Budget available</b>	<b>100,000</b>
PO 12282 Increase required for additional works due to streetlight poles and design	237,076
PO 10097 Increase required for additional contract administration services	16,180
<b>Budget Shortfall</b>	<b>153,256</b>

**HUMAN RESOURCES CONSIDERATIONS:**

Not applicable.

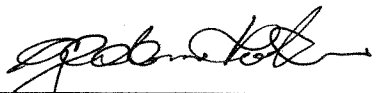
**ALIGNMENT WITH STRATEGIC CONSIDERATIONS:**

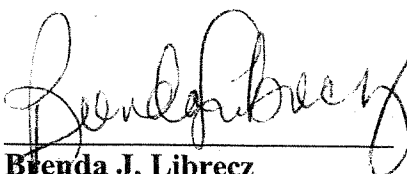
This project supports City's Building Markham's Future Together and Greenprint initiatives. LED luminaires reduces the annual energy and maintenance cost by approximately 50%.

**BUSINESS UNITS CONSULTED AND AFFECTED:**

The Finance Department has been consulted, provided input and reviewed this report.

**RECOMMENDED:****BY:**

  
**Gary R. Adamkowski**  
Director of Asset Management

  
**Brenda J. Librecz**  
Commissioner, Community  
& Fire Services

**ATTACHMENTS:**

Attachment "A" – Metroscape LED Luminaire

## Attachment "A" – Metroscape LED Luminaire

