



**SUBJECT: Single Source Supply and Installation of LED Street Lighting**

**TO: Mayor and Members of Council**

**FROM: Transportation Services**

Report Number: TS-03-17

Wards Affected: All

File Numbers: 765-02

Date to Committee: May 30, 2017

Date to Council: June 12, 2017

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**Recommendation:**

Approve the single source procurement for the supply and installation of LED street lighting replacement program to Burlington Hydro Inc. Burlington Electricity Services Incorporated (BESI); and

Direct the Director of Transportation to enter into an agreement with Burlington Hydro for the supply, installation and project management of the LED Streetlight Replacement project to commence in 2017 subject to the satisfaction of the City Solicitor and Director of Finance on finalized agreement terms; and

Authorize the Manager of Procurement Services to issue a Purchase Order and or sign related agreements subject to the approval of the City Solicitor as outlined in Transportation report TS-03-17.

**Purpose:**

The purpose of this report is to obtain Council approval for the single source purchase award commitment for the supply and installation of LED streetlights to Burlington Hydro and the subsidiary Burlington Electricity Services Inc. (BESI).

**Relationship to Strategic Plan:**

A Healthy and Greener City

- Environmental and Energy Leadership

The City will significantly reduce energy consumption and maintenance costs associated with the existing street light system while aligning to Burlington's corporate energy management plan.

#### An Engaging City

- Good Governance

To accelerate the program to commence in 2017, the City will be taking advantage of currently available financial incentives and significant energy savings sooner.

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### **Background and Discussion:**

The 2017 Capital Forecast (year 2018) includes a project to convert the city's high pressure sodium (HPS) streetlight fixtures to light emitting diode (LED) technology. Converting to LED streetlights has become increasingly common amongst municipalities as a reliable and energy saving alternative.

In the assessment of options related to the execution of the LED Streetlight Replacement program, staff identified a potential opportunity to partner with Burlington Hydro which can result in significant benefits to the City.

The LED Streetlight Replacement program will result in a significant reduction in energy consumption. As the City's energy services and power distribution company, Burlington Hydro is committed to meeting industry-related energy conservation targets, of which the City's LED Streetlight Replacement program represents a significant portion. Implementing the Streetlight LED conversion program utilizing BESl services would result in the shortest conversion timeframe, would optimize energy savings and provide service efficiencies.

Achieving energy conservation targets by the end of 2017 is critical for Burlington Hydro to achieve their Mid-Term (2015-2017) target under the Conservation First Framework. If they can achieve their mid-term target, Burlington Hydro would be eligible for a substantial financial performance incentive from the Independent Electricity System Operator (IESO). If achieved, the financial benefits would flow through to the shareholder, the City.

It is important to note that these energy reduction incentives Burlington Hydro are eligible for are separate from the energy reduction incentives the City has already applied for and eligible for through the IESO as a result of LED replacement project.

In addition to the potential financial incentives available, a partnership of Burlington Hydro and their affiliate company, Burlington Electricity Services Incorporated (BESl)

provides opportunities to leverage Burlington Hydro's industry knowledge, project management resources and skilled field crews to complete the work in an efficient manner.

Staff have researched the processes used by neighbouring municipalities to determine successful implementation models. The results of this research revealed that Halton Hills, Oakville and Mississauga each took an approach to their LED replacement programs involving a partnership with their electrical utility or affiliate companies. These partnerships were instrumental in successfully delivering the LED replacement programs as well as accelerating the LED installation program to realize energy savings sooner.

### **Strategy/process**

Contingent upon the approval of a single source award to Burlington Hydro for the supply and installation of LED streetlights, the project would commence in 2017 with a goal to complete approximately 50% of the streetlights by the end of 2017. This would achieve the 2017 energy reduction incentives Burlington Hydro is eligible for. The remainder of the LED street lights will be completed by the end of 2018.

Under the City's Procurement By-law 19-2014 single source procurement for goods and/or services in an amount equal to or greater than \$100,000.00 is authorized subject to Council approval. Justification for single sourcing the contract to Burlington Hydro meets the criteria for single sourcing provided for in Schedule D to the Procurement By-law, and more specifically 1(b)(vi) – "It is advantageous to the City to acquire the Goods and/or Services directly from another Public Body or public service body". The benefits, financial and otherwise, as outlined in this report support single sourcing to Burlington Hydro.

Recognizing that Capital funding for the LED replacement project is not currently approved and will be part of the 2018 Capital Budget submission, Burlington Hydro will incur all related expenses in 2017 until such time as project funds within the 2018 Capital Budget is approved and funds can be remitted to Burlington Hydro. Burlington Hydro has agreed to bear the risk of this front-end funding and costs incurred in proceeding with the program in 2017.

It is important to note that approval of this approach means approval of the LED Streetlight Replacement program such that Burlington Hydro can begin work in 2017. In addition, the 2018 Capital Budget will include the funding related to the LED Streetlight Replacement project which is key to a successful partnership with Burlington Hydro on this project. In the event that funding is not approved in the 2018 Capital Budget, the agreement with Burlington Hydro would be in jeopardy.

## **Options considered**

Staff have considered various alternatives to delivering this project, including 'turn-key' options provided by companies within the industry. It is felt that a partnership with Burlington Hydro is most beneficial to the City based on the current relationship between the City and Burlington Hydro and the potential additional financial incentives.

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## **Financial Matters:**

By proceeding with the project in this recommended manner the City would not incur any additional costs. However approval of the 2018 Capital Budget related to this project is key to its success.

## **Total Financial Impact**

The city would not incur any financial payments in 2017. Funding would commence upon approval of the 2018 Capital Budget.

Based on preliminary assumptions including the estimated cost of conversion, debt financing and energy rate changes, the estimated annual energy and maintenance savings to be achieved at full conversion is about \$900,000. This results in a projected net present value discounted payback of 9 years.

## **Source of Funding**

Capital Budget 10 year forecast

## **Connections:**

The LED street lighting conversion forms a significant part of the City's corporate energy management plan, which aims to reduce energy consumption by at least 20%, reduce green house gas emissions and incorporate the implementation of advanced technology.

Estimated energy reduction is well documented for LED street lighting and the City will aim to reach up to 70% in reduced energy consumption.

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**Public Engagement Matters:**

Public will be engaged throughout the conversion process, informing, communicating and explaining the reasoning for, the benefits of and timing of LED street lighting replacement.

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Respectfully submitted,

Paul Byrne

Project Leader

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**Report Approval:**

All reports are reviewed and/or approved by Department Director, Director of Finance and Director of Legal. Final approval is by the City Manager.