



Neighbourhood Renewal Street Light Installation Frequently Asked Questions

What is the purpose of street lighting? Why do we need it?

Main purposes for roadway lighting:

- Provide an adequate visual environment for road users to safely use the road system during hours of darkness.
- Reduce the blinding glare impacts of approaching headlights thus improving visibility.
- Reveal objects and markings on the roadway beyond the range of vehicle head lamps.

Research indicates street lighting offers a cost-effective means of increasing public safety.

How do the street lights turn on and off?

The street light circuits are turned on and off automatically by a photocell that senses ambient light levels. The photocell is set to turn on at dusk and off at dawn.

Are new street light poles galvanized?

Yes. All new street light poles, including decorative colored poles, are hot dipped galvanized to CSA G-164 standard. The life expectancy for galvanized street light poles is projected at 75 years.

What guidelines are the street lights designed to?

All new or rehabilitated street lighting systems are designed to the City of Edmonton's Road and Walkway Lighting Design Standards manual, which is based on technical guidelines and industry best practices (such as Transportation Association of Canada) and applicable policies.

How are street light pole locations selected?

For full system street lighting system rebuilds, the new poles and fixtures replace the existing street lights that generally were not previously installed to any national design guideline or standard at the time of installation. Pole locations may be altered from their original location to ensure that design light levels are met, there is little or no impact on trees, legal and safe clearance from utilities are maintained, adequate clearance from accesses such as alley entrances and driveways are met and the least amount of impact on the residents is achieved. However, in some cases it is necessary to have the pole in front of a property. It is only after adhering to all of these considerations that the only feasible location for a pole may be in front of a residence.

What is the priority sequence for choosing pole locations?

During the design and construction stages, the priority sequence of the street light installation is to 1) light the roadway to provide a safe and functional roadway system, 2) ensure legal and safe clearances from existing utilities, trees and tree canopies, 3) minimize capital costs and ongoing maintenance costs, and 4) minimize environmental impact.

Are the street light poles installed on my property?

No. Every street light pole in a neighborhood reconstruction is installed entirely on city road right of way. Street light pole locations are initially designed to be at projected property lines between houses, and still meet recommended light levels. All pole locations are field checked prior to installation by the City of Edmonton Street Lighting Section, the electrical services contractor and Forestry. The field inspections are to determine if there are utilities, trees, landscaping obstructions or accesses in the field that may be in conflict with the initial design. It is at this point that street light poles may need to be moved away from the projected property lines between houses. For the same design and construction reasons above, poles may also be moved to the opposite side of the road.



Is the City using LED fixtures?

Yes. Over the past 5 years, the City of Edmonton Street Light section has researched LED products and conducted LED pilot projects to determine if they are a viable option for roadway lighting. Beginning in 2011, LED luminaires will be used on neighbourhood roadways. The expected benefits of using LED fixtures in neighbourhoods include:

- **Power Consumption Savings** - Net power consumption savings for entire neighborhood renewals can be 40 – 60% depending on the application. This may take in to account road classification, road width and spacing.
- **Long lasting fixtures** - LED fixtures are expected to last 15 - 20 years. That is approximately 4 times longer than HPS fixtures. This reduces maintenance costs. In addition, the City of Edmonton insists that all LED manufacturers provide a 10 year warranty.
- **Dark Skies Friendly** - All LED fixtures are flat lens, full cut-off with 0% uplight.
- **Reduces CO2 emissions** - LED fixtures reduce green house gas emissions.
- **Minimizes Light Trespass** – LED’s are more directional than HPS, therefore light is better designed to light the roadway, (not private property) and further minimize light trespass onto private property.

Is decorative street light an option for older neighbourhoods?

The City of Edmonton offers decorative street light options for neighbourhoods that are to be reconstructed via a neighbourhood decorative street light local improvement. As opposed to the current standard galvanized street lights, decorative street lights have features which include colors (black, blue or green), pole styles (octagonal or fluted), and pole arm types (Newport, Scroll or Heritage). The decorative pole options have been standardized to better manage the street light costs associated with inventory control, maintenance and replacement. There is no difference between the power consumption of the standard street light pole or the decorative street light pole offered. To initiate the local improvement for

neighbourhood decorative street lights, an expression of interest must be initiated that requires approval by 51 % of the property owners. If the Decorative Street Light Local Improvement is successfully passed by City Council, property owners will pay 100 per cent of the total amount above what the standard galvanized street lights cost. The Decorative Street Light Local Improvement rate (or cost) can vary depending on the decorative options selected and the number of lots within the neighbourhood who will be sharing the expense.



For More Information, please contact:

For Local Improvements Inquiries:

Virgilio Mendoza
Neighbourhood Renewal, Roadways Construction
Roads Design & Construction Branch
780-944-7672
Virgilio.mendoza@edmonton.ca

For Street Light Inquiries:

Gary Ursulak
Signals, Street Lights, and Infrastructure
Transportation Operations Branch
780-496-1908
Gary.Ursulak@edmonton.ca