TOWN OF STRATFORD - COUNCIL POLICY			Tab
Name:	Street Light Policy	Policy Number:	SS005-2024
Committee:	Safety Services	Approval Date:	October 9/24

1. Introduction

It is the responsibility of the Town of Stratford to install street lighting in the Town for the safety and security of residents. Street lighting is installed to enhance pedestrian safety, vehicular safety, and protection of property. This policy establishes the procedure for installing streetlights and the standard to which streetlights are to be installed.

This policy is divided into two main sections:

1. Street Lighting Standards for New Developments
2. Street Lighting Standards for Existing Streets

This policy applies only to public roads and does not apply to any private roads. Property owners are responsible for providing street lighting on private roads.

2. Authority and Reporting

The Safety Services Committee is hereby delegated authority for street lighting in accordance with this policy, subject to available budget resources. For street lighting mounted on Maritime Electric poles, the lights shall be rented from Maritime Electric and installed on their poles. For fixtures fed underground, the lighting will be supplied and installed by the developer and will be required to meet the requirements of this policy. Street lighting orders to Maritime Electric must be supported by the Safety Services Committee. The Safety Services Committee shall report new street light installations to Council at the regular monthly Council Meetings.

3. Street Lighting Standards for New Developments

3.1 Lighting Design Requirements

Street lighting for any new development must meet or exceed the minimum requirements of the Illuminating Engineering Society of North America (IESNA):

- ANSI/IES RP-8-22 Roadway Lighting Design Guideline Manual, current edition
- ANSI/IES DG-19-08 Design Guideline for Roundabout Lighting, current edition

Street lighting for new developments shall be installed on Maritime Electric utility poles (where the primary electrical distribution is overhead) or fixtures with poles and concrete bases (where the primary distribution is underground).

Where primary distribution is overhead, the Town of Stratford is responsible for arranging overhead lighting on Maritime Electric poles after the Town takes over the subdivision.

Where primary distribution is underground, it will be the responsibility of the developer to provide a detailed lighting design which meets the requirements of the town as follows:

- The street lighting design shall be completed using a photometric calculation software platform such as AGI32 or Visual Lighting.
- The calculations shall be completed using calculation points – with a grid set to 1.5m x 1.5m.
- A PDF of the lighting model showing all calculation points and associated lighting levels shall be submitted to the town. Summary tables shall be provided that clearly show that the lighting design meets or exceeds the requirements of ANSI/IES RP-8-22 and/or DG-19-08, latest edition.

3.2 Design For Overhead Electrical

When the primary electrical is overhead, the Town will arrange for the installation of street lighting mounted on Maritime Electric poles. In this situation, the developer is responsible for meeting the following requirements:

- Coordinate with Maritime Electric for appropriate spacing of poles to accommodate this policy and have the poles installed.
- Comply with Maritime Electric and communication utility standards for spacing between luminaires and high voltage and communication conductors.

3.3 Design For Underground Electrical

When the primary electrical is underground, the developer will need to provide a street lighting system that is fed from underground. In this situation, the developer is responsible for meeting the following requirements:

- The Town of Stratford must review and approve all proposed pole and lighting plans.
- The final lighting design approved by the Town of Stratford shall be stamped by the developer's Engineer of Record. The drawings shall meet the requirements of the Canadian Electrical Code (edition as adopted by the province at the time of the design).

3.4 Construction and Installation Requirements

The following outlines the installation requirements for streetlights:

- Streetlights mounted on Maritime Electric poles shall be arranged by the Town after poles are installed by developer and the street is taken over by the Province. The Town of Stratford shall rent these fixtures from Maritime Electric unless other arrangements are made in coordination with Maritime Electric.
- For underground fixture installation, the power supply will originate from a pad mount transformer or URD box. These fixtures may be metered per Maritime Electric standards. The electrical distribution shall be mounted on a wooden pole or in a power enclosure approved by the Town.
    - Light pole and fixture shall be mounted within the right of way, 3m from the edge of the asphalt. Final location approval is provided by the Department of Transportation and Infrastructure.
    - Light pole shall be installed on a concrete base. The concrete base shall extend 150mm from the finished grade. Bases and fixtures shall be installed parallel to the curb or roadway.
    - Light fixtures shall be controlled by using a contactor and photocell. The contactor and photocell shall be located at the main distribution.
- Once the Engineer of Record and the Town of Stratford representatives conduct an inspection of the installation and the deficiencies, if any, have been completed and stamped record drawings have been submitted, the Town of Stratford will accept the installation and take ownership of the lights.

4. Street Lighting Standards for Existing Streets

Street lighting shall be installed along existing streets in accordance with this policy upon receipt of a written request from a resident and recommendation from the Safety Services Committee – subject to available budget resources.

As described in the ANSI/IES RP-8-22 and/or DG-19-08 standards, there are numerous factors to be considered in terms of road geometrics in the lighting design, including number and width of lanes, location of sidewalks, driveway locations, crosswalk and intersection location, as well as medians, islands, etc. Other design criteria to consider are fixture type, pavement classification, light loss factor, fixture position and orientation and the impact of surrounding landscaping. The road and pedestrian classifications will identify the minimum requirements of lighting design in the ANSI/IES RP-8-22 and/or DG-19-08 standards. Classifications are described below for reference.

- Road classification
    - **Major Street –** Principal network for throughflow traffic.
    - **Collector Street** – A road servicing traffic between major and local streets.
    - **Local Street** – Used for direct access to residential, commercial, industrial or other abutting property.

- Pedestrian Activity classification:
    - **High Pedestrian** – More than 100 pedestrians during the highest nightly average one-hour volume period. Primarily downtown areas with dense urban development.
    - **Medium Pedestrian** – Between 11 and 99 pedestrians during the highest nightly average one-hour volume period.
    - **Low Pedestrian** – Less than 10 pedestrians during the highest nightly average one-hour volume period.

The installation of new lighting or replacement of existing fixtures on poles is to follow the spacing described in Table 4.1. as best fitted within existing pole configuration. Maritime Electric Stock codes have been provided as a reference for the fixture type and policy shall follow the current Maritime Electric equivalent stock.

Table 4.1 – Approximate Spacing

Street Classification	Pedestrian Classification	Average Luminance (cd/m^2)	Recommended Spacing			
			MECL Stock Code – L0070	MECL Stock Code – L0070	MECL Stock Code – L0071	MECL Stock Code – L0071
Major	**High**	1.2	N/A	N/A	20m	66ft
	Medium	0.9	N/A	N/A	25m	82ft
	Low	0.6	N/A	N/A	30m	98ft
Collector	**High**	0.8	N/A	N/A	25m	82ft
	Medium	0.6	N/A	49ft	35m	115ft
	Low	0.4	N/A	66ft	40m	131ft
Local	**High**	0.6	35m	115ft	35m	115ft
	Medium	0.5	35m	115ft	40m	131ft
	Low	0.3	35m	115ft	45m	148ft

L0070: RFS-35W16LED3K-G2-R2M-UNV-DMG-[API-212]-FAWS-RCD7-SP2-GY3

L0071: RFS-35W16LED3K-G2-R3M-UNV-DMG-[API-213]-FAWS-RCD7-SP2-GY3