

SECTION I STREET LIGHTING

I.1 STANDARDS AND GUIDELINES

- I.1.1** The street lighting design shall be in accordance with the “Guide for the Design of Roadway Lighting” published by the Transportation Association of Canada (TAC) as well as applicable standards published by the Illuminating Engineering Society of North America (IES).
- I.1.2** Street lighting for existing subdivisions, access roads and playgrounds shall conform to
- I.1.3** All roadway lighting systems shall be installed in strict compliance with the Canadian Electrical Code.
- I.1.4** The Developer shall be responsible for all arrangements with the local wires owner for necessary approvals and power connections.

I.2 ENGINEERING DRAWINGS & APPROVAL

- I.2.1** The Developer is responsible for the preparation and submission of design drawings prepared by a qualified professional engineer showing the layout, pole spacing, types and heights and luminaire wattages. The street lighting plan shall include all surface features and utilities. The layout, products and materials are subject to approval by the County.

I.3 DESIGN AND OPERATIONS

- I.3.1** The Developer shall be responsible to work with ATCO Electric Alberta or the current supplier for the design, supply and installation of the street lighting system. The light standards chosen shall be readily available from ATCO Electric’s regular inventory. The responsibility for energizing the street lighting system shall be with the County. The operating cost of the Street lighting system shall be the responsibility of the Developer until the Subdivision Area is seventy-five (75%) percent occupied. The Developer will pay these costs upon receipt of an invoice from the County. Upon the energizing of the streetlights the Developer shall, provide County of Vermilion River with an irrevocable letter of credit as security for the ongoing maintenance and costs of energizing of the streetlights based on current rates. County of Vermilion River shall release the letter of credit upon the expiration of 60 months from the date of energizing or if the Subdivision Area is seventy-five (75%) percent occupied, whichever occurs first.

I.4 SAFETY

The lighting design shall ensure the proper illumination of conflict areas such as intersections and crosswalks. The design shall be prepared with public safety in mind.

I.5 ENERGY USAGE

The street lighting design should be optimized to allow for the least possible energy consumption while still maintaining acceptable safety standards. County of Vermilion River encourages the use of the highest efficiency lamps available at the time of installation.

I.6 POLE LOCATIONS

I.6.1 In some cases, the road and lot configuration will dictate the pole layout. Wherever possible, poles should be located at the projection of lot lines. Pole locations shall not conflict with other utilities or approaches. The face of the posts shall be 1 meter clear of the face curb or road shoulder. Spacing shall be selected by the Developer's Engineer and the Municipal Engineer based on the optimum spacing/height/light distribution combination but shall not exceed the minimum standards published by the TAC.

I.6.2 Pole setbacks shall be as outlined in the TAC guidelines. Where roadways are designated for widening within five years of pole installation, the pole setback shall allow for side widening.

I.7 TYPE OF POLE

I.7.1 Pole type, material and base to be approved by the County prior to purchase. A sample may be required for inspection.

I.7.2 Breakaway poles shall not be required for design speeds of less than 80 km/hr. Yielding poles are recommended for all roadways with a design speed less than 80 km/hr and a pole setback of less than 4 m from edge of pavement.

I.7.3 Steel poles shall be galvanized and powder coated. Aluminium poles to be powder coated. Composite poles are to be pulltrusion manufacture method.

I.7.4 Pole types shall be consistent with adjacent developments. All poles within a new development shall be of the same type and height in order to obtain continuity.

I.7.5 All poles shall be resistant to all climatic and environmental conditions encountered within County of Vermilion River.

I.8 AESTHETICS

I.8.1 The developer shall ensure that the street lighting design is compatible with the type of development and proposed buildings.

I.8.2 The use of decorative poles shall be subject to approval by the County. Proposed decorative poles and luminaires should share common optical systems and components as other decorative items found in existing developments within the County.

I.9 FOUNDATIONS

I.9.1 Foundations shall be designed based on the specific soil conditions on site. The foundations shall be designed to withstand all loading, wind loading in particular.

I.10 LUMINAIRES

I.10.1 Luminaires must be approved by the County prior to purchase. A sample may be required for inspection.

I.10.2 All luminaires to be complete with IP66 Certified Sealsafe optical chamber.

I.10.2.2 All luminaire optical systems to have a seal value R rating of greater than 600.

I.10.2.3 All luminaires to be tool free type.

I.10.2.4 All luminaires to be complete with a ¼ turn shutter system for lamp replacement.

I.11 COSTS

I.11.1 Any capital contribution that the utility company may charge for the installation of underground street lighting shall be paid for the Developer.

I.11.2 The County will pay monthly rental charges to the utility company providing street lighting, for the operation of street lights installed on streets, rights-of-way and parks after acceptance by the County.

I.11.3 The County will accept street lights only after completion and acceptance of street, sidewalk and boulevard improvements.

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