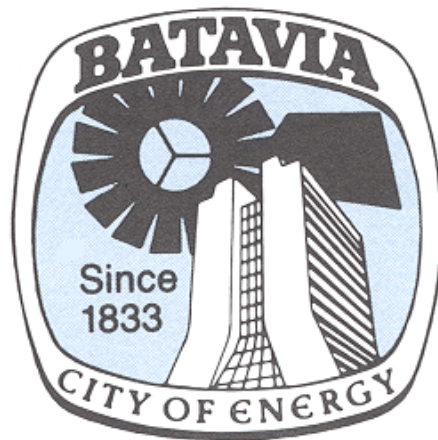


## SECTION 8

### STREET LIGHTING / ELECTRICAL DESIGN



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# SECTION 8 STREET LIGHTING

## 8.1 PERFORMANCE STANDARDS

The City of Batavia's Electric Dept. reviews all designs, installs and maintains all street lighting. Streetlights along all local, neighborhood connector and collector streets shall meet the performance standards as notated in the ANSI/IESNA RP-8-00 American National Standard Practice for Roadway Lighting.

Item	Collector Streets	Neighborhood Connector	Local Streets
Maximum FC	δ 5.0	δ 3.5	δ 3.5
Minimum FC	ε 0.3	N/A	N/A
Average FC	ε 1.1	ε 0.4	ε 0.4
Ave./Min. Ratio	δ 4.0	N/A	N/A
Max./Min. Ratio	N/A	N/A	N/A
Bulb	LED	LED	LED
Wattage	250	250	54
Lens	Flat		
IES Distribution Type	Medium Cutoff Type II or Type III		
Maintenance Factor	0.7		
Pole Location	3 to 5 feet From Back of Curb		
Pole	Aluminum - Cement		

Item	Collector Streets	Local Streets
Mounting Height (ft.)	32	23
Mast Arm (ft.)	10	0
Mast Arm Type	Truss or davit arm	Single member taper elliptical type or davit "bent fishing pole" arm

## 8.2 Approval

Catalog cuts for all components of street lights must be submitted for review and approved prior to installation. The components must meet the requirements set forth in Section 600 of the City of Batavia Standard Specifications. Submittals include, but are not limited to: Poles, mast arms, breakaway couplings, luminaries, photo-cells, conduit, cable, fuses, hand holes, junction boxes, ground rods, and controllers.

## 8.3 Location

Street Light poles shall be placed at the following locations:

- To be determined by the Illuminance Method Criteria from the lighting study.
- At each intersection, in the “stop sign” position, oriented at an angle of 90 degrees to the alignment of the street.
- Inside of all horizontal curves.
- On each cul-de-sac, at the point where the tangent meets the circular outside of the
- cul-de-sac (throat).
- At mid-block locations such that the spacing identified in the following sections is not exceeded.
- At additional locations where conditions warrant additional lighting per the City Engineer.

## 8.4 Cul-de-Sac and Local Street Design Standards

### 8.4.1 Mounting Height

The mounting height shall be 23 feet.

### 8.4.2 Single Aluminum Pole with Traditionaire Style Fixture

The fixture shall be a 54 Watt LED 120-277V Black.

### 8.4.3 Street Lighting Controller and Power Source

Street lighting controllers are not required for local streets and cul-de-sacs. Each streetlight shall be individually fed from the nearest power source as indicated by the City of Batavia Public Works Department. Each streetlight shall also be equipped with a photocell.

### 8.4.4 Spacing

For either staggered or single side layout, street light poles shall be located based on the recommended spacing from the Illuminance Method Criteria from the lighting study, and comply with the performance standards established in ANSI/IESNA RP-8-00 American National Standard Practice for Roadway Lighting.

#### Guideline

<i>Luminaire</i>	<i>GE M-C-II</i>	<i>GE M-C-III</i>
100 watt	100 feet	125 feet

## 8.5 Collector Street Design Standards

### 8.5.1 Mounting Height

The standard mounting height is 32 feet.

### 8.5.2 Mast Arm

The mast arm shall be 10 feet long.

### 8.5.3 Controller and Power Source

All streetlights on collector streets shall be run from a street lighting controller meeting the specifications noted in the City Standards. In general, the controller shall be located in the mid-point of all of the streetlights run by the controller. The power source shall be determined by the City of Batavia Department of Public Utilities/Electric. A photocell shall be placed on the nearest streetlight and connected back to the controller.

### 8.5.4 Spacing

Street light poles shall be located based on the following recommended spacing, and comply with the performance standards established in ANSI/IESNA RP-8-00 American National Standard Practice for Roadway Lighting.

#### Staggered Streetlight Layout Guideline

<i>Luminaire</i>	<i>GE M-C-II</i>	<i>GE M-C-III</i>
250 watt	1	170 feet

#### Single Side Streetlight Layout Guideline

<i>Luminaire</i>	<i>GE M-C-II</i>	<i>GE M-C-III</i>
250 watt	1	150 feet