



# Grand Chute

## Street Lighting Policy

Revision 5-2017



## **Intent:**

The intent of this policy is to outline the Town of Grand Chute's standards for the installation and retrofitting of street lighting along roadways and trails within the Town. The standards shall be applied to new and reconstructed subdivisions, roadway reconstructions, trails and standalone lighting upgrades as directed by the Town Board.

## **Scope:**

The Street Lighting Policy addresses six different area types: Rural Arterial/Collector, Urban Arterial/Collector, Commercial Business District, Rural Residential, Urban Residential and Multi-Use Trails. Each area has different lighting requirements due to the area usage. A street lighting map is included with this policy and defines the current locations of the six area types.

## **Street Lighting Standard Levels**

Ownership, operation and maintenance of the Town of Grand Chute street and trail lighting is a combination of We Energies, Private and Municipal.

- I. **Level 1** street lighting shall consist of light poles at all intersections, curves of at least 45° deflection angle and cul de sacs. Level 1 lighting utilizes wooden poles with a cobra head semi cut-off fixture.
- II. **Level 2** street lighting shall consist of aluminum or fiberglass poles with a shoebox or cobra head fixture at spacings from 225 to 300 feet. Closer spacing may be required due to the usage of the area. The typical height shall be a minimum of 30 feet.
- III. **Level 3** shall consist of a smooth fiberglass pole with an acorn style fixture at spacings of 200 to 300 feet. The typical height shall be 15 feet. With Town Board approval, the acorn fixture may be substituted with other fixture styles that are available from We Energies. Wooden poles and cobra head fixtures shall not be allowed in an area scheduled to receive Level 3 lighting without Town Board approval.
- IV. **Level T** shall consist of 12 to 15 foot decorative pole with a full cutoff fixture at spacings of 100 to 125 feet. This level may also consider bollard style lights for areas in close proximity to residential structures.

Illumination type (High Pressure Sodium, LED) shall be investigated on each project to provide the most cost effective option for the proposed lighting level. Initial lighting cost, ongoing maintenance, operation cost and longevity shall be considered for each installation.

## **Street Lighting Area Classifications**

- I. **Rural Arterial/Collector Lighting Classification**  
This area type shall receive Level 1 street lighting for general public safety purposes.
- II. **Urban Arterial/Collector Lighting Classification**  
This area type shall receive a minimum of Level 1 street lighting for general public safety purposes. The Town Board may require additional lighting or upgraded materials and equipment to enhance public safety or aesthetics. Upgraded materials and equipment may include aluminum or fiberglass poles with shoebox or cobra head fixtures. Urban Arterial/Collector streets shall be

upgraded to a minimum of Level 2 street lighting if sidewalks or bike paths have been incorporated into the street corridor.

III. **Commercial Business District Lighting Classification**

This area type shall receive a minimum of Level 2 street lighting for general pedestrian and vehicular safety purposes. This area will see an increased presence of pedestrian/bicycle traffic. Level 2 lighting utilizes aluminum or fiberglass poles with shoebox or cobra head fixture at spacings from 225 to 300 feet. Closer spacings may be required by the Town Board due to the usage of the area.

IV. **Rural Residential Lighting Classification**

A Rural Residential area is defined as a subdivision without curb and gutter and lots averaging in size greater than 43,500 square feet (1 acre). This area type shall receive Level 1 street lighting for general public safety purposes. This level shall consist of light poles at all intersections, curves of at least 45° deflection angle and cul de sacs. Level 1 lighting utilizes wooden poles with a cobra head semi cut-off fixture. Additional lighting may be required due to the presence of pedestrian or bicycle facilities.

V. **Urban Residential Lighting Classification**

An Urban Residential area is defined as a subdivision with or without curb and gutter and lots averaging less than 43,500 square feet (1 acre). This area shall receive Level 3 street lighting for general pedestrian and vehicular safety purposes. This area will see an increased presence of pedestrian/bicycle traffic and young children and may have parallel, multi-use trails or sidewalks included in the roadway typical section.

VI. **Off-Road Multi-Use Trail Classification**

The Off-Road Multi-Use Trail area is defined as a paved trail in an area not lighted by street lights define under subsections I. through V. of this section. This area shall receive Level T lighting for pedestrian and bicycle safety purposes as directed by the Town Board.

## **Materials and Equipment**

Poles, fixtures and lighting design are generally provided by We Energies but may be provided by a private contractor on a project by project basis. The performance standards for the Town of Grand Chute do not meet the Illuminating Engineers Society (IES) guidelines. The performance standard for Town lighting are listed in the table below.

Criteria/Area	Rural Art./Coll. $\alpha$	Urban Art./Coll. $\alpha$	Comm. Business District	Rural Residential > 1 acre $\alpha$	Rural/Urban Residential < 1 acre	Pedestrian & Bicycle Ways
Min. Foot Candles (amount of light)	Min. 100W Sodium Vapor or equivalent LED color temperature shall be 4000k or 3000k in areas where LED's are mixed with other types of luminaires.	Min. 100W Sodium Vapor or equivalent LED color temperature shall be 4000k or 3000k in areas where LED's are mixed with other types of luminaires.	0.5 fc	Min. 100W Sodium Vapor or equivalent LED color temperature shall be 4000k or 3000k in areas where LED's are mixed with other types of luminaires.	0.1 fc	0.1 fc
Veiling Luminance (glare)	0.4 to 1 max	0.4 to 1 max	0.4 to 1 max	0.4 to 1 max	0.4 to 1 max	0.4 to 1 max

$\alpha$  Lights located only at intersections, curves and cul de sacs, average 0.1 fc.

If additional lighting is desired and it is reasonable for the area and environment, then it will be recommended by Town Staff for consideration for approval by the Town Board. Environmental concerns and energy use are the factors that will be considered to limit the amount of lighting in excess of the Town standards. If lighting over the standard is installed, the full cost (installation, operation & maintenance) of the “extra” lighting may be charged to the adjacent properties. The installation charge is a one-time cost that may be paid over the term of the assessment. The operation and maintenance charges for non-residential areas are annual charges added to the property tax bills.

## Process for the Installation of Street Lighting

**Capital Improvement Street Reconstruction Projects.** New lighting systems will be installed with street reconstruction projects in Commercial Business Districts and Residential areas. The cost of the new lighting facilities will be assessed using the current Special Assessment Policy. There is no option to “opt-out” of the prescribed lighting level.

All new streets dedicated by plats recorded after January 1, 1994 shall have street lighting included with the initial construction to the level described above for the area’s lighting classification or as directed by the Town Board. Street lighting shall be installed before the roadway is accepted as a Town road and prior to the issuance of an occupancy permit to any building with its primary access onto the new roadway. New streets, as described above, do not have an option to “opt-out” of the prescribed lighting level.

**Stand Alone Street Lighting Project – Town Initiated.** Areas that are not likely to have the streets reconstructed in the near future (within 5 years) and have a safety issue due to a lack of street lighting may be included as a project in the Town’s Capital Improvement Plan (CIP). The projects shall propose

facilities as required for the lighting level described above for the area's lighting classification or as directed by the Town Board. A CIP street lighting project may follow the current Special Assessment Policy and no petition is required.

**Stand Alone Street Lighting Projects – Property Owner Initiated.** Areas that are not likely to have the streets reconstructed in the near future (within 5 years) are able to have street lighting installed by “opt-in” petition and paying an assessment for the cost of the installation. Opting-in to a street lighting project will follow a two-phase petition effort. A Phase I petition will be used to document general support and shall equal or exceed 35% of properties fronting the proposed area within a six month time period. If successful, the Phase II petition is conducted via a formal petition mailing sent out by the Town of Grand Chute. In order to move forward with a street lighting project, greater than 50% of the affected property owners have to agree to support and fund the project using the current Policy for Special Assessments. Other funds may be used to buy down the assessments such as grant dollars or neighborhood funds. The minimum project size to install street lighting is a business node in a Commercial Business District or on an arterial or collector roadway and two blocks in a residential area.

## **Gathering Petition Support**

**Phase I.** This petition will be initiated by and consist of neighborhood or business association gathering general support. The neighborhood/block club/business association will work with Town staff to determine project boundaries and select the hardware style. Town staff will provide an estimated Street Lighting Assessment Rate. A dated Phase I petition form for the designated area is provided by the Town to the community to begin the petition process. When the general support equals or exceeds 35% of the property owners within six months from when the form was provided, the information can be submitted to the Town of Grand Chute Public Works Department. Public Works will review and validate the signatures and addresses according to the current tax records.

**Phase II.** Based on a successful Phase I petition, a formal petition mailing will be prepared by the Town of Grand Chute. The Phase II petition mailing ensures that all property owners are given the appropriate street lighting information, and the owners can make their decision whether to support the project based on this information. The mailing will be sent to the listed property owners on record with Outagamie County. The mailing will define the proposed project limits, estimated project cost, estimated assessment rate, information on the remainder of the process, and a form to complete and return to the Town. The returnable form will provide the property address, a space to check “yes” or “no” on the support of the project, and a space for the owner/tax payer's signature.

The Town will tabulate the results of the returned Phase II forms to determine the support level for the project. If the support is greater than 50% of the forms that were mailed, the proposed street lighting project will be forwarded to begin the Grand Chute Town Board approval process. The petition is an advisory tool used to gauge the support for the street lighting project.

**Town Board Approval Process.** When the street lighting project has received the 50% approval from the property owners, the next steps would be to present the project to the Town Board in the form of a preliminary resolution, set a public hearing and receive direction to prepare assessments. The assessment procedure and public hearing process for street lighting is the same as other improvement projects as set out in Chapter 57 of the Town's Code of Ordinances. Design will begin after the preliminary resolution

to special assess the project costs is approved by the Town Board and construction would begin after the final resolution is approved by the Town Board.

## **Funding Street Lighting**

The funding for street lighting projects varies based on the process used to install the lighting. The installation of street lighting is either associated with a 1) street reconstruction project, 2) a stand-alone street lighting project that was initiated by the citizens, neighborhood and/or business association or the Town, or 3) as part of the construction of a new street or subdivision.

**Street lighting with Street Reconstruction Projects.** Level 2 or 3 street lighting will be installed as part of a street reconstruction project. The capital costs for these installations will be paid according to the Special Assessment Policy by assessable properties adjacent to the project.

**Street Lighting Stand Alone Projects.** Street lighting can be installed in advance of a street reconstruction project or to augment the existing lighting facilities. These projects will occur when safety concerns necessitate the addition of lighting or when 50% of the property owners adjacent to the proposed street lighting have “opted-in” through a petition process. The capital cost of these projects may be funded through the General Fund or may be special assessed in accordance with the current Special Assessment Policy.

**Street Lighting as Part of New Street Construction or a Subdivision Development.** Street lighting as defined in this policy shall be included in all new residential and commercial street construction. All costs for the installation of required street lighting shall be paid by the developer. No “opt-out” provision is available for new street construction or subdivision developments.

Neighborhoods, grants or other funds can be used to fund the installation of street lighting. Such funds can be used to “buy down” the assessments. If funding other than assessments are greater than the total street lighting project cost, an assessment would not be necessary.

The assessment rate will differ from project to project due to installation costs of standard systems in different area types and will be set on an individual project basis. The cost of a lighting project includes preliminary engineering, administration, design, installation, inspection and final closeout.

**Operation and Maintenance Costs.** Street lighting that has been installed in the public right-of-way and to the Town’s standards (lighting levels and equipment) may be owned and maintained by We Energies, by private owners or by the Town. The operation and maintenance costs for all residential street lighting and Level 1 street lighting on rural town roads in agricultural use areas shall be included in the Town’s General Fund budget (RSF, RTF, 3-plex, 4-plex and 5-plex). The operation and maintenance costs for all nonresidential lighting will be charged equally to all nonresidential properties in the specified service area as a special charge on their property tax bills. Lighting charges may vary from service area to service area due to the number of lights installed and the type of fixture. The operation and maintenance costs for street lighting above the Town’s standards will be assessed to the adjacent properties in the form of an additional special charge on the property tax bills.