

ARTICLE 31

EXTERIOR LIGHTING

SECTION 31.01. Purpose

The purpose of this Article is to preserve the safe and appropriate nighttime use and enjoyment of all properties in the Township through the establishment and enforcement of reasonable and consistent exterior lighting standards. Exterior lighting shall be designed, installed, and maintained to control glare and light trespass; conserve energy and resources; and prevent the degradation of the nighttime visual environment.

The standards of this Article are intended to protect the general welfare by allowing sufficient (but not excessive) lighting for parking areas, walkways, driveways, building entrances, loading areas, and common areas; to minimize the adverse effects of inappropriate lighting; and to provide for the safety and security of people and property in the Township, particularly at points of ingress and egress.

SECTION 31.02. Scope

The standards of this Article shall apply to all exterior lighting sources, and to all light sources visible from any road right-of-way or adjacent lot.

SECTION 31.03. General Provisions

The following general standards shall apply to all light sources regulated by this Article:

A. Fully-Shielded

Exterior lighting shall be fully shielded using concealed source fixtures directed downward and away from adjacent lots and road rights-of-way. All exterior light fixtures shall utilize full cutoff housings, louvers, glare shields, optics, reflectors or other measures to prevent off-site glare and minimize light pollution (see illustration).

B. Glare and Light Trespass

Exterior lighting shall be designed, constructed, and maintained in a manner that minimizes off-site glare, light trespass on neighboring lots, and traffic hazards for motorists.

C. Lamp Wattage

Lamp wattages and types shall be consistent with the fixture's style and function, as follows:

1. Fixtures in parking lots and high traffic areas shall use low or high-pressure sodium, metal halide or similar lamp types with maximum lamp wattage of 250 watts per fixture up to 20 feet in height above grade. A maximum of 400 watts per fixture shall be permitted for fixtures exceeding 20 feet in height above grade.
2. Decorative exterior light fixtures shall be limited to lamps with a maximum wattage of 100 watts per fixture.

D. Intensity

The maximum intensity of light within any site shall not exceed the following standards:

LIGHT INTENSITY	MAXIMUM (footcandles)
At any point within the site	10.0
Average for the overall site	5.0
At any lot boundary or road right-of-way line	1.0

1. **Outdoor dealership sales area lighting.** The Planning Commission may permit a maximum lighting intensity of 20.0 footcandles for any point within a dealership outdoor sales area, provided that all site lighting is otherwise in compliance with this Ordinance.
2. **Pump island canopy lighting.** The Planning Commission may permit a maximum lighting intensity of 20.0 footcandles for any point under a gas station’s pump island canopy; provided that all light fixtures under the canopy shall be fully recessed into the canopy structure and all site lighting is otherwise in compliance with this Ordinance (see illustration).

E. Measurements

Measurements of exterior lighting height and intensity shall be made in accordance with the following:

1. Light intensity levels shall be measured on the horizontal plane at grade level within the site.
2. Light intensity levels shall be measured on the vertical plane of the lot or road right-of-way boundaries at a height of five (5) feet above grade.
3. Fixture height shall be measured from grade level to the highest point of the light source (see illustration).

F. Submittal Requirements

The following exterior lighting information may be required by the Planning Commission or Planning Director with any site plan, site condominium plan, subdivision plat or zoning permit application where exterior lighting is proposed to be altered or installed:

1. The location, type, and height of all existing and proposed light fixtures.
2. A photometric grid measuring the overall light intensity within the site in footcandles.
3. Manufacturer’s specifications and details for each type of light fixture, including the total lumen output, type of lamp, and method of shielding.

SECTION 31.04. Standards by Type of Fixture

The following additional standards shall apply to specific types of exterior light fixtures, in addition to the provisions of Article 31 (General Provisions):

A. Freestanding Pole Lighting

Maximum overall height. The maximum height of pole-mounted fixtures shall be directly proportional to the fixture’s proximity to the boundary of a residential district or lot occupied by an existing residential use, as follows:

Fixture Location	Maximum Height
Less than 50 feet from a residential district or use	15 feet
50 feet to 300 feet from a residential district or use	20 feet
More than 300 feet from a residential district or use	25 feet

B. Architectural Lighting

Architectural lighting shall be subject to the following:

1. **Facade illumination.** Exterior illumination of building facades shall be limited to fully shielded fixtures directed towards the facade. All light from such fixtures shall be concentrated on the wall surface.
2. **Accent lighting.** Unshielded luminous tube (neon) or fluorescent lighting shall be prohibited as an architectural detail on the exterior of any structure; including but not limited to rooflines, cornices, eaves, windows, and door openings. The Planning Commission may approve internally illuminated architectural bands or similar shielded lighting accents as part of a site plan, upon determining that such

lighting accents would enhance the aesthetics of the site, and would not cause off-site glare or light pollution.

C. Window Lighting

All interior light fixtures visible through a window from a public right-of-way or adjacent property shall be shielded to prevent glare at the property line or within a public right-of-way. Unshielded luminous tube (neon) and fluorescent light fixtures shall be prohibited where the light source would be visible through the window from a public right-of-way or adjacent property.

D. Illuminated Signs

Sign illumination shall conform to the provisions of Article 30.

SECTION 31.05. Prohibited Lighting

The following types of exterior light sources and activities shall be prohibited:

- A. Mercury vapor lighting.** The installation of mercury vapor fixtures shall be prohibited.
- B. Animated lighting.** Lighting shall not be of a flashing, moving, animated or intermittent type, including electronic reader boards and other animated sign lighting, except that electronic reader boards may be permitted on Township owned property to advertise Township events or information.
- C. Laser Source Light.** The use of laser source light or any similar high intensity light for outdoor advertising or entertainment, when projected above the horizontal, is prohibited.
- D. Searchlights.** The operation of searchlights for advertising purposes is prohibited.

SECTION 31.06. Exempt Lighting

The following types of exterior lighting shall be exempt from the requirements of this Article, except that the Building Director may impose reasonable restrictions on the use of such lighting where necessary to protect the health, safety, and welfare of the public:

- A.** Holiday decorations displayed for temporary periods not to exceed 60 calendar days within any 6 month period.
- B.** Lighting for a permitted temporary circus, fair, carnival, or civic use, or as otherwise permitted in this Ordinance.
- C.** Shielded pedestrian walkway lighting, and single family residential lighting that does not cause off-site glare or contribute to light pollution.

- D. Circumstances where federal or state laws, rules or regulations take precedence over the provisions of this Article, or where fire, police, emergency, or repair personnel need light for temporary or emergency situations.
- E. Fossil fuel light produced directly or indirectly from the combustion of natural gas or other utility-type fossil fuels (e.g., gas lamps).

SECTION 31.07. Alternatives and Substitutions

Specific lighting design alternatives or fixture substitutions may be permitted in accordance with the purpose of this Article and the following:

A. Decorative Light Fixtures.

The Planning Commission may approve the use of decorative light fixtures as an alternative to fully shielded fixtures, where such fixtures would enhance the aesthetics of the site without causing off-site glare or light pollution.

B. Alternative Lighting Designs.

The Planning Commission may approve an alternative lighting design, provided that the Commission finds that the design would be in accordance with the purpose of this Article.

C. Fixture Alteration or Replacement.

Light fixtures regulated by this Article shall not be altered or replaced after approval has been granted, except where the Building Director has verified that the alteration or replacement would comply with the provisions of this Article.

SECTION 31.08. Exceptions

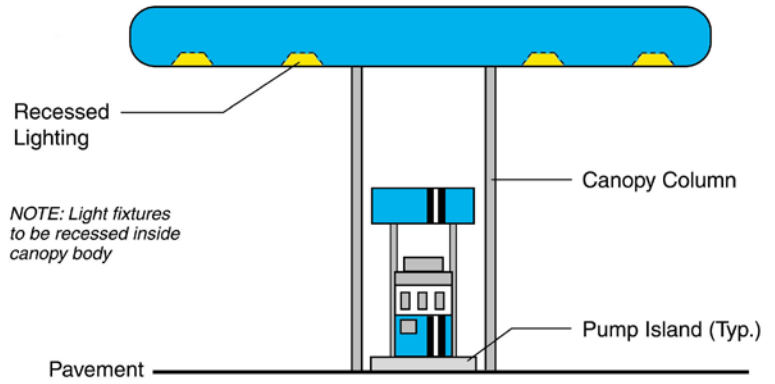
It is recognized by the Township that certain uses or circumstances may have special exterior lighting requirements not otherwise addressed by this Article. The Zoning Board of Appeals (ZBA) may waive or modify specific provisions of this Article for a particular use or circumstance, upon determining that all of the following conditions have been satisfied:

- A. A public hearing shall be held for all lighting exception requests in accordance with the procedures set forth in Article 34 (Public Hearing Procedures).
- B. The waiver or modification is necessary because of safety or design factors unique to the use, circumstance, or site.
- C. The minimum possible light intensity proposed is adequate for the intended purpose. Consideration shall be given to maximizing safety and energy conservation; and to minimizing light pollution, off-site glare, and light trespass onto neighboring properties or road rights-of-way.

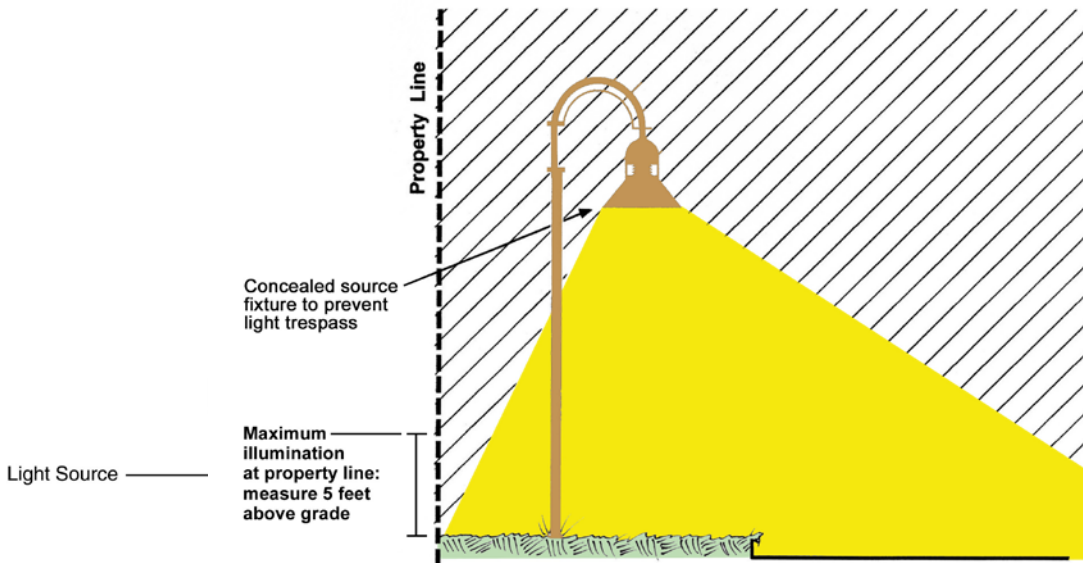
- D.** For lighting related to roads or other vehicle access areas, a determination must be made that the purpose of the lighting cannot be achieved by installation of reflectorized markers, lines, informational signs, or other passive means.
- E.** Additional conditions or limitations may be imposed by the ZBA to protect the public health, safety or welfare, or to fulfill the spirit and purpose of this Article.

m:\ctc\zoning ordinance\current ordinance\article 31 - exterior lighting.doc

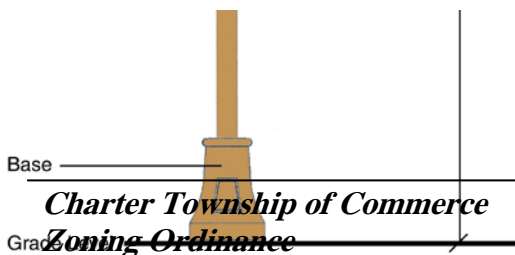
ILLUSTRATIONS



Pump Island Canopy Lighting



Lighting Fixture Orientation and Shielding



Light Fixture Height