

**COUNTY OF TIOGA  
COMMONWEALTH OF PENNSYLVANIA**

**ORDINANCE NO. 2024-1**

AN ORDINANCE OF THE BOARD OF COMMISSIONERS OF THE COUNTY OF TIOGA, PENNSYLVANIA, ESTABLISHING REGULATIONS, SPECIFICATIONS, AND RESTRICTIONS FOR THE USE AND/OR INSTALLATION OF OUTDOOR LIGHTING IN THE COUNTY.

WHEREAS, the Board of County Commissioners of Tioga County has determined that it is in the best interest of the County to establish standards and requirements for outdoor lighting within the County; and

NOW THEREFORE, be it ORDAINED and ENACTED by the Board of County Commissioners of the County of Tioga as follows:

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**SECTION 1 – TITLE**

An Ordinance of the Board of Commissioners of the County of Tioga, Pennsylvania, establishing regulations, specifications, and restrictions for the use and/or installation of outdoor lighting in the County.

## **SECTION 2 – SHORT TITLE**

This Ordinance shall be known as and may be cited as the “Outdoor Lighting Ordinance.”

## **SECTION 3 – PURPOSE/PREAMBLE – To require and set minimum standards for outdoor lighting to:**

- A. Provide for outdoor lighting that does not exceed the minimum levels specified and recommended practices for night-time safety, utility, security, productivity, enjoyment, and commerce established by IESNA (Illuminating Engineering Society of North America).
- B. Protect drivers and pedestrians from the glare of non-vehicular light sources.
- C. Promote energy efficient lighting design and operation.
- D. Curtail light pollution, reduce sky glow, improve the nighttime environment for astronomy and outdoor recreation, and prevent light trespass.

## **SECTION 4 – DEFINITIONS**

Words and phrases used in this Ordinance shall have the meanings set forth. All other words and phrases shall be given their common, ordinary meaning, unless the context clearly requires otherwise.

**BUG** – A luminaire classification system that classifies backlight (B), uplight (U) and glare (G).

**CANDELA** – The unit of luminous intensity in the International System of Units. It measures luminous power per unit solid angle emitted by a light source in a particular direction. The luminosity of an average candle is 1 candela, so 1 candela is the equivalent of the light of an average candle.

**CANOPY** – A covered, unconditioned structure with at least one side open for pedestrian and/or vehicular access. (An unconditioned structure is one that may be open to the elements and has no heat or air conditioning).

**EMERGENCY CONDITIONS/LIGHTING** – Generally, lighting that is only energized during an emergency power source; or the path of egress solely during a fire or other emergency situation; or, lighting for security purposes used solely during an alarm; lighting fed from a backup lighting for illuminating.

**FOOT-CANDLE** – The amount of illumination the inside surface of a 1-foot radius sphere would receive if there were a uniform point source of one candela in the exact center of the sphere. The foot-candle is equal to one lumen per square foot, and is measurable with an illuminance meter (light meter).

**FULL CUT-OFF** – Attribute of a luminaire from which no light is emitted at or above a horizontal plane drawn through the lowest light-emitting portion of the luminaire. A full cut-off luminaire, by definition, is fully shielded.

**FULLY SHIELDED** – A luminaire designed to have a solid barrier at the top of the fixture to prevent the light from going upwards and the fixture is angled so that the lamp is not visible below the barrier.

**GLARE** – Light entering the eye directly from luminaries or indirectly from reflective surfaces that causes visual discomfort or loss in visual performance and visibility.

**IES** – Illuminating Engineering Society. Established in 1906, the Illuminating Engineering Society is the recognized technical and educational authority on illumination.

**IESNA** – Illuminating Engineering Society of North America is a nonprofit organization that develops and publishes standards regarding lighting.

**LIGHT FIXTURE** – The complete lighting assembly (including the lamp, housing, reflectors, and the support assembly pole or mounting bracket).

**LIGHT TRESPASS** – Light emitted by a luminaire or installation, which is cast beyond the boundaries of the property of which the lighting installation is sited.

**LUMEN** – As used in the context of this Ordinance, the light-output rating of a light bulb.

**LUMINAIRE** – The complete lighting unit (fixture), consisting of a lamp, or lamps and ballast(s) when applicable, together with the parts designed to distribute the light (reflector lens, diffuser) to position and protect the lamps, and to connect the lamps to the power supply.

**PORCH** – A covered area with a roof, typically adjoining an entrance to a building.

**TEMPORARY LIGHTING** – Light that is not permanent and is used for a limited duration. It is intended for uses which by their nature are of limited duration, such as holiday decorations, civic events, or construction projects.

## **SECTION 5 – GENERAL REQUIREMENTS**

### **A. Conformance with all applicable codes**

All outdoor light shall be installed in conformance with the provisions of this Ordinance, applicable Electrical and Energy Codes, and applicable sections of the Building Code.

### **B. Applicability**

All uses within the County where there is interior or exterior lighting that creates a nuisance or hazard as viewed from the outside, including, but not limited to, residential, commercial, industrial, public and private recreational/sports and institutional uses, signage, billboard, architectural and landscape lighting.

### **C. Exemptions Generally**

The following lighting applications are exempt from the requirements of this Ordinance providing there is no glare or light trespass and that the lighting meets dark sky standards.

- Lighting within public right-of-way or easement for the principal purpose of illuminating streets or roads. No exemption shall apply to any lighting within the public right of way or easement when the purpose of the luminaire is to illuminate areas outside the public right of way or easement.
- Lighting for American flags, Pennsylvania state flags, public monuments and statues.
- Individual porch lights of a dwelling, under car ports, lighting under canopies, lighting for tunnels, parking garages, garage entrances, and similar conditions.
- Specific lighting as required by State and Federal Standards.

#### **D. Exemptions for Temporary Lighting**

- Lighting for theatrical, television, performance areas and construction sites including but not limited to drilling rigs, et cetera.
- Lighting that is only used under emergency conditions. Emergency lighting, as may be required by any public or private agency while engaged in the performance of their duties, or for illumination of the path of egress during an emergency or alarm.

### **SECTION 6 – STANDARDS – As defined in the IES (Illuminating Engineering Society) Lighting Handbook and listed below:**

#### **A. Outdoor Lighting**

Outdoor Lighting installed in conjunction with Land Development applications shall be designed in such a manner not to seriously and adversely affect the natural environment, and to preserve Dark Skies and the peace and enjoyment of neighboring residents.

- a. Lighting shall follow the five principles for Responsible Outdoor Lighting:
  - All light shall have a clear purpose.
  - Light shall be directed only where needed and oriented downward.
  - Light shall be no brighter than necessary.
  - Light shall only be used when it is useful.
  - Use warmer color lights where possible.
- b. In general, outside of an area with a higher density of business or commercial activity, a low ambient lighting shall cover only the area needed and only operate when activity requires it.
- c. Where lighting is needed for security or convenience, illumination shall be limited to the area needed. Lighting shall be extinguished or reduced when activity levels decline or end.
- d. Illumination levels and glare control shall conform with IES (Illuminating Engineering Society) standards as recorded in the IES Lighting Handbook in effect at the time of the date of adoption of this Ordinance. Such standards may be updated after recommendation of Planning Board and action by County Commissioners.

## **B. Outdoor Lighting – Horizontal Surfaces**

- a. For the purpose of this Ordinance, Horizontal Surfaces may include but are not limited to, parking areas, driveways, fuel dispensing facilities or other related businesses with needed outdoor lighting, active and passive recreation areas, building entrances, sidewalks, loading docks, bike path and related trails.
- b. Luminaires shall be aimed straight down, have no up-light, and shall meet IESNA (Illuminating Engineering Society of North America) full cut-off/ fully shielded criteria. Luminaires shall have a BUG rating of U=0.
- c. Lighting with an aggregate rated lamp output of less than 500 lumens (similar to 40-watt bulb or 10-watt compact fluorescent) are exempt from these standards.

## **C. Outdoor Lighting – Non-Horizontal Surfaces**

- a. For the purpose of this Ordinance, Non-Horizontal Surfaces may include but are not limited to, facades, walls or poles, signs, landscaping, fountains and displays.
- b. Luminaires shall be adequately shielded, designed, and installed to illuminate the object or the immediate area desired and not project into the windows of neighboring residences, adjacent areas, skyward, or onto public areas or roadways.
- c. Attention shall be paid to only having the lighting operational as needed, or motion activated, or on a dimmer, to avoid lighting at times not needed such as late evening.
- d. Lighting with an aggregate rated lamp output of less than 500 lumens (similar to 40-watt bulb or 10-watt compact fluorescent) are exempt from these standards.

## **SECTION 7 – PLAN SUBMISSION**

A lighting plan shall be submitted for Planning Commission review and approval for all Land Development applications. The information submitted shall contain the following:

- A. A plan of the site shall have all structures, parking spaces, traffic areas (both pedestrian and vehicular), building entrances, existing and proposed vegetation, and any adjacent uses that may be adversely impacted by the lighting. The plan shall contain a layout of all proposed fixtures by orientation, aiming direction, mounting height, type, and location. The submission shall also include existing lighting, including architectural, building entrances, landscaping, flags, signage, etc.
- B. A 10'x10' illuminance grid (point by point) plot of maintained horizontal footcandles overlaid on the site plan, plotted out to 0.0 footcandles, which demonstrates compliance with light trespass, illuminances and uniformity requirements set forth in this ordinance. When the scale of the plan, as judged by the Planning Commission, makes a 10'x10' grid plot illegible a larger grid may be permitted.
- C. Light loss factors, IES (Illuminating Engineering Society) candela test, initial lamp lumen ratings, and specific lamp manufacturer's lamp ordering nomenclature, used in calculating the plotted illumination levels.



- D. Description of the proposed equipment, including luminaire catalog cuts, photometrics, glare reduction devices, lamps, on/off control devices, mounting heights, pole foundation details, pole protection means and mounting methods.
- E. Landscaping plans shall contain luminaire locations, demonstrate the site lighting and landscaping have been coordinated to minimize conflict between vegetation and intended light distribution, both initially and at vegetation maturity.
- F. When requested by the Planning Commission, the application shall submit a visual impact plan that demonstrates appropriate steps have been taken to mitigate the potential consequences of offsite and onsite glare. This plan may require the inclusion of initial vertical footcandle values at neighboring offsite venues, such as bedroom windows of adjacent residences.
- G. When changes are required by either the Planning Commission or the County engineer the developer will have 60 days to update and resubmit the plan for review and approval.

## **SECTION 8 – ENFORCEMENT**

Any person, partnership, or corporation who or which has violated the provisions of this Ordinance shall, upon being found liable therefore in a civil enforcement initially brought before a district justice by the Commission, pay a judgment of not more than \$500 plus all court costs, including reasonable attorney fees incurred by the Commission as a result thereof. No judgment shall commence or be imposed, levied or payable until the date of the determination of a violation by the district justice. If the defendant neither pays nor timely appeals the judgment, the Commission may enforce the judgment pursuant to the applicable rules of civil procedure. Each day that a violation continues shall constitute a separate violation, unless the district justice, determining that there has been a violation, further determines that there was a good faith basis for the person, partnership or corporation violating the Ordinance to have believed that there was no such violation, in which event there shall be deemed to have been only one such violation until the fifth day following the date of the determination of a violation by the district justice and thereafter each day that a violation continues shall constitute a separate violation.

## **SECTION 9 – SEVERABILITY**

If any sentence, clause, section, or part of this Ordinance is for any reason found to be unconstitutional, illegal, or invalid, such unconstitutionality, illegality, or invalidity shall not affect or impair any of the remaining provisions, sentences, clauses, sections, or parts of this Ordinance. It is hereby declared as the intent of the Board of County Commissioners of Tioga County that this Ordinance would have been adopted had such unconstitutional, illegal, or invalid sentence, clause, section, or part thereof had not been included herein.

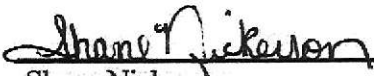
**SECTION 10 – EFFECTIVE DATE**

The Tioga County Outdoor Lighting Ordinance shall become effective 10/8/24. This Ordinance shall apply to all Lighting Plans submitted on or after the effective date.

DULY ADOPTED AND ENACTED, by the Board of Commissioners of the County of Tioga, this 8<sup>th</sup> day of October, 2024, in lawful session duly assembled.


**Tioga County Board of Commissioners:**

  
\_\_\_\_\_  
Sam VanLoon

  
\_\_\_\_\_  
Shane Nickerson

  
\_\_\_\_\_  
Marc Rice

Attest: \_\_\_\_\_  
Christopher Gabriel, Solicitor

Witnessed:   
\_\_\_\_\_  
Janice Chamberlain, Chief Clerk

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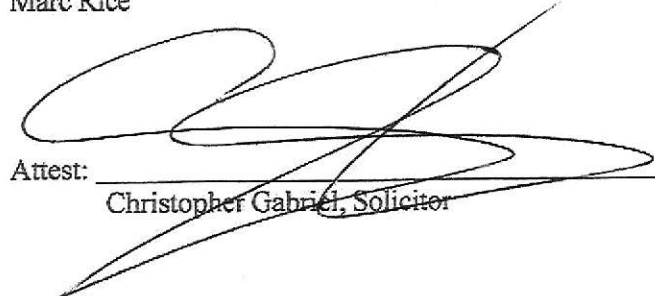
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