

BOROUGH OF AMBLER, MONTGOMERY COUNTY, PA

ORDINANCE NUMBER 1139

AN ORDINANCE OF THE BOROUGH OF AMBLER REPEALING THE EXISTING LANGUAGE IN CODIFIED ORDINANCE 27-412, "LIGHTING CRITERIA APPLICABLE TO ALL ZONING DISTRICTS" AND REPLACING IT WITH NEW LANGUAGE THAT ADDS NEW TECHNICAL DEFINITIONS, ILLUMINATION LIMITS, CUTOFF REQUIREMENTS FOR FLOODLIGHTS AND SPOTLIGHTS, LIMITS ON LIGHT SPILLAGE ONTO NEIGHBORING RESIDENCES, FIXTURE HEIGHT LIMITATIONS, FLAG ILLUMINATION, AND OTHER LIGHTING-RELATED REQUIREMENTS; CONTAINING SEVERANCE AND REPEALER CLAUSES; SETTING FORTH AN EFFECTIVE DATE

In order to keep the Borough lighting criteria current and responsive to citizen concerns and reflective of evolving trends in the area of lighting, Borough Council does hereby ORDAIN as follows:

1. The existing language at codified ordinance 27-412 is deleted in its entirety and replaced with the following language.

§27-412. Lighting Criteria Applicable to All Zoning Districts.

1. Purpose and Intent. The purpose of this Section is to regulate the placement, orientation, distribution patterns, and fixture types of exterior lighting. Furthermore it is the intent of this Section to:
 - A. Provide for and control lighting in outdoor public spaces where public health, safety, and welfare are potential concerns.
 - B. Protect drivers and pedestrians from the glare of non-vehicular light sources that shine into their eyes and thereby impair safe traverse.
 - C. Protect neighbors from nuisance glare and stray light from poorly aimed, placed, applied, maintained or shielded light sources.
 - D. Protect and retain the intended character of Ambler Borough.
 - E. Minimize or eliminate wasted and excessive outdoor lighting to promote energy efficiency and protect the environment.

2. Applicability.

- A. This Section applies to all uses where there is exterior lighting that creates a nuisance or hazard, including, but not limited to, residential, commercial, office, industrial, institutional, recreational, and institutional uses, and sign, architectural and landscape lighting.
- B. Temporary seasonal decorative lighting is exempt from all but the glare-control and lighting intensity requirements of this Section.
- C. Emergency lighting, as may be required by any public agency while engaged in the performance of its duties, is exempt from the requirements of this Section.
- D. Exterior lighting shall be required for safety and personal security for uses that operate during hours of darkness where there is a public assembly and traverse, including but not limited to the following uses: multifamily residential, commercial, office, industrial, public-recreational, and institutional.
- E. Borough Council may require that lighting be incorporated for other uses or locations, as it deems necessary.
- F. The glare-control requirements herein contained apply to lighting in all above-mentioned uses as well as, but not limited to, sign, architectural, landscape, and residential lighting.

3. Definitions. The following terms, when used in this Section, shall be defined as follows:

AUTOMATIC DAYLIGHT SHUTOFF — a photocell device that automatically prevents operation of a fixture during daylight hours.

Backlight Uplight Glare (B.U.G.) – An Illumination Engineering Society rating system of the light distribution of a luminaire.

DIRECT LIGHT — light emitted directly from the lamp, off of the reflector or reflector diffuser, or through the reflector or diffuser lens, of a luminaire.

ENERGY-STAR QUALIFIED LIGHTING — lighting which uses 1/3 the energy of traditional lighting, with bulbs lasting at least 10,000 hours. Energy-star qualified lighting is labeled as such by the federal government (U.S. EPA and Department of Energy).

EXTERIOR (OUTDOOR) LIGHTING — the nighttime illumination of an outside area or object by any man-made device located outdoors that produces light by any means.

FIXTURE — the assembly that houses the lamp or lamps and can include all or some of the following parts: a housing, a mounting bracket or pole socket, a lamp holder, a ballast, a reflector or mirror, and/or a refractor or lens.

FLOOD LIGHT — a bright, wide-angled light source.

FOOTCANDLE — a unit of light intensity stated in lumens per square foot and measurable with an illuminance meter, a.k.a. footcandle or light meter.

FULL CUTOFF — attribute of a lighting fixture from which no light is emitted at or above a horizontal plane drawn through the highest light-emitting portion of the luminaire and no more than 10% of the lamp's intensity is emitted at or above an angle 10° below that horizontal plane, at all lateral angles around the fixture. A full cutoff luminaire, by definition, is also fully shielded. Full cutoff fixtures all have a B.U.G. uplight rating of zero (0).

FULLY SHIELDED — attribute of a lighting fixture provided with internal and/or external shields and louvers to ensure that no light is emitted at or above a horizontal plane drawn through the lowest light-emitting portion of the luminaire.

GLARE — the sensation produced by lighting that causes an annoyance, discomfort, or loss in visual performance and visibility to the eye.

HEIGHT OF LUMINAIRE — the height of a luminaire shall be the vertical distance from the ground directly below the center line of the luminaire to the lowest direct-light-emitting part of the luminaire.

ILLUMINANCE — quantity of light on an area, measured in footcandles (1 footcandle = 1 lumen per square foot).

INDIRECT LIGHT — direct light that has been reflected or has scattered off of other surfaces.

LAMP — the component of a luminaire that produces the actual light.

LIGHT TRESPASS — the shining of light produced by a luminaire beyond the boundaries of the property on which it is located.

LUMEN — a unit of luminous flux. One footcandle is one lumen per square foot. For the purposes of this Section, the lumen output values shall be the initial lumen output ratings of a lamp.

LUMINAIRE — a complete lighting system, including a lamp or lamps and a fixture.

MOUNTING HEIGHT — the height of a lighting fixture, measured from mean grade to the highest point of the fixture emitting light.

SECURITY LIGHTING — lighting intended to enhance the security of the premises. Security lighting is permitted to remain on between the hours of 11:00 p.m. and 6:00 a.m. even if on-site activities do not occur during that period.

SPOTLIGHT — any light fixture or lamp that incorporates a reflector or a refractor to concentrate light output into a directed beam in a particular direction.

STREETLIGHT — a lighting fixture, mounted on a pole, which provides light along a street. It shall consist of a pole, head, arm, lamp, photocell, mounting bracket and fixture.

TEMPORARY OUTDOOR LIGHTING — the specific illumination of an outside area or object by any man-made device located outdoors that produces light by any means for a period of less than seven days, with at least 180 days passing before being used again.

UNIFORMITY RATIO — the variation of illuminance over an area. For the purposes of this Section, the "uniformity ratio" will be calculated by comparing the average illuminance to the minimum illuminance.

4. Criteria

A. Illumination Levels.

(1) Lighting, where required by this Section, shall have intensities and uniformity ratios that comply with the table below.

Area or Land Use	Illuminance (footcandles)	Uniformity Ratio
Commercial and Nonresidential Roads	1.1 avg	6 avg/min
Local and Residential Roads	0.5 avg	6 avg/min
Sidewalk	0.5 avg	5 avg/min
Parking Lots and Drive Aisles	0.2 min	20 max/min
ATM/Transaction Areas	2 min	4 avg/min
Gas Station Canopy - No Ambient Lighting	4 avg	4 avg/min
Gas Station Canopy - High Ambient Lighting	15 max	2 max/min
Car Dealer and Outdoor Sales - Front Row	15 max	5 max/min
Car Dealer and Outdoor Sales - Other sale areas	10 max	5 max/min
Building Entrances	2 avg	5 avg/min
General Walkways and Bikeways	0.5 avg	5 avg/min
Stairs and Ramps	2 avg	5 avg/min

(2) Future amendments to said recommended practices shall become a part of this Section without further action of the Borough.

B. Lighting Fixture Design.

(1) Fixtures shall be of a type and design appropriate to the lighting application, and aesthetically acceptable to Borough Council based on the recommendation of the Planning Commission and Borough Engineer.

(2) For lighting predominantly horizontal surfaces such as, but not limited to, parking areas, roadways, vehicular and pedestrian passage areas, merchandising and storage areas, automotive-fuel dispensing facilities, automotive sales areas, loading docks, culs-de-sac, active and passive recreational areas, building entrances, sidewalks, bicycle and

pedestrian paths, and site entrances, fixtures shall be aimed straight down and shall be full cutoff and fully shielded.

- (a) Except as may be specified elsewhere in this ordinance, luminaires shall have an IES Backlight Uplight Glare (B.U.G.) uplight rating of zero (0).
 - (b) Except for those containing directional lamps, fixtures with an aggregate rated lamp output not exceeding 500 lumens, (e.g., the rated output of a standard non-directional 40-watt incandescent, 10-watt LED, or 10-watt compact fluorescent lamp) are exempt from the requirements of this sub-section.
- (3) For the lighting of predominantly non-horizontal surfaces such as, but not limited to, facades, landscaping, signs, fountains, displays and statuary, fixtures shall be fully shielded and shall be installed and aimed so as to not project their output into the windows of neighboring residences, adjacent uses, past the object being illuminated, skyward or onto a public roadway. Fixtures, except those containing directional lamps, with an aggregate rated lamp output not exceeding 500 lumens (e.g., the rated output of a standard non-directional 40-watt incandescent, 10-watt LED, or 10-watt compact fluorescent lamp) are exempt from the requirements of this paragraph.
- (4) Fixtures shall be equipped with or be capable of being back-fitted with light-directing devices such as shields, visors or hoods when necessary to redirect offending light distribution.
- (5) Streetlights in residential developments, when provided by a developer, shall conform with the specifications for luminaire, pole, connection, etc., as specified by §27-412.5. The developer shall also warrant all parts and associated labor for a period of 18 months.
- (6) Fixture height.
- (a) Any fixtures primarily designed to light pedestrian areas, such as sidewalks and pathways, shall be mounted at a maximum height of 15 feet above finished grade.
 - (b) All other fixtures shall be mounted at a maximum height of 20 feet above finished grade.

- (7) Illuminance Under Outdoor Canopies. All fixtures utilized beneath canopies shall be flush-mounted fixtures, recessed into the canopy itself. All lighting shall be accomplished utilizing flat-lens full cutoff style fixtures, aimed straight down. Canopies themselves shall not be illuminated. Outdoor canopies include, but are not limited to, fueling stations associated with convenience stores and service stations, financial establishments where a drive-through kiosk is proposed, and exterior canopies above store fronts in shopping centers.

C. Control of Nuisance and Disabling Glare

- (1) All outdoor lighting, whether or not required by this Section, on private, residential, commercial, industrial, municipal, recreational, or institutional property, shall be aimed, located, designed, fitted, shielded, and maintained so as not to present a hazard to drivers or pedestrians by impairing their ability to safely traverse and so as not to present a nuisance glare concern to neighboring properties.
- (2) New floodlights and spotlights shall be prohibited unless they meet full cutoff criteria. Existing directional fixtures such as floodlights and spotlights shall be aimed that they do not project their output into the windows of neighboring residences, adjacent uses, directly skyward or onto a roadway. Floodlights installed above grade on residential properties shall not be aimed out more than 45° from straight down. When a floodlight creates glare as viewed from an adjacent residential property or use, the floodlight shall be required to be re-aimed and/or fitted with a shielding device to block the direct view of the glare from that property.
- (3) Unless otherwise permitted by Borough Council, e.g., for safety or security, lighting shall be controlled by automatic switching devices, such as time clocks or combination motion detectors and photocells, to permit extinguishing offending sources between 11:00 p.m. and dawn to mitigate nuisance glare.
- (4) Where all-night safety or security lighting is to be provided, the lighting intensity levels shall not exceed 25% of the levels normally permitted by this Section for the use. All fixtures designated as non-

security fixtures shall be extinguished between the hours of 11:00 p.m. and 6:00 a.m., unless on-site activities persist during those hours.

(5) Vegetation screens shall not be employed to serve as the primary means for controlling glare. Rather, glare control shall be achieved primarily through the use of such means as cutoff fixtures, shields and baffles, and appropriate application of fixture mounting height, wattage, aiming angle and fixture placement.

(6) Projection onto adjacent uses.

- a. Intensity of illumination projected onto a neighboring residential property line shall not exceed 0.1 footcandles, measured at line-of-sight and from any point on the receiving residential property. This footcandle value shall not be use as a criterion for assessing glare control onto a neighboring property.
- b. Intensity of illumination projected onto a neighboring non-residential property line shall not exceed 0.5 footcandles, measured at line-of-sight and from any point on the receiving residential property. This footcandle value shall not be use as a criterion for assessing glare control onto a neighboring property.

(7) Illuminating flags and flagpoles.

- a. Only the United States and the state flag shall be permitted to be illuminated from dusk till dawn. All other flags shall not be illuminated past 11:00 p.m.
- b. The light source shall have a beam spread no greater than necessary to illuminate the flag and shall be adequately shielded.
- c. Maximum illumination for flags shall be the sum of the lumens for all light aimed at the flag. For a flagpole of ten feet or less, the maximum illumination shall be 1,400 lumens. For every additional ten feet or portion thereof, an additional 1,400 shall be permitted.
- d. Other regulations from this ordinance shall not apply to flag illumination.

D. Installation.

(1) All electrical feed wiring and conduit shall be run below finished grade, as required by code.

(2) Lighting standards in parking areas shall be placed a minimum of five feet outside of curb, or mounted on a thirty-inch-high pedestal.

Fixtures located in central areas of parking facilities shall be mounted on a thirty-inch-high concrete pedestal.

E. Maintenance. Lighting fixtures and ancillary equipment shall be maintained so as to comply with this Section.

F. Energy-Efficient Lighting. The Borough encourages energy conservation, cost savings, and environmental preservation through use of the following external lighting tools.

(1) Energy Star qualified lamps.

(2) Automatic daylight shutoff switches to extinguish or dim lighting when there is ample natural (solar) lighting.

(3) Motion activated lighting which shuts off automatically.

5. Fixture Placement in Residential Developments.

A. Streetlighting fixtures in residential developments shall be placed at the following locations:

(1) At the intersection of public roads with entrance roads to the proposed development.

(2) Intersections involving proposed public or nonpublic primary distributor streets within the proposed development.

(3) At the apex of the curve of any primary distributor street, public or nonpublic, within the proposed development, having less than a three-hundred-foot minimum centerline radius.

(4) Cul-de-sac bulb radii.

(5) Terminal ends of center median islands having concrete-structure curbing, trees and/or other fixed objects not having breakaway design for speeds of 25 miles per hour or greater.

6. Post-Installation Inspection. The Borough reserves the right to conduct a post-installation nighttime inspection to verify compliance with the requirements of this Section, and if appropriate, to require remedial action at no expense to the Borough.

7. Compliance Monitoring.

A. Safety Hazards.

(1) If the Borough judges that a lighting installation creates a safety or personal-security hazard, the person(s) responsible for the lighting shall be notified and required to take remedial action.

(2) If appropriate corrective action has not been effected within 30 days of notification, the Borough may levy a fine for as long as the hazard continues to exist.

B. Nuisance Glare and Inadequate Illumination Levels.

(1) When the Borough judges that an installation produces unacceptable levels of nuisance glare, skyward light, excessive or insufficient illumination levels or otherwise varies from this Section, the Borough may cause notification of the person(s) responsible for the lighting and require appropriate remedial action.

(2) If the infraction so warrants, the Borough may act to have the problem corrected as in §27-412.7A(2) above.

C. Nonconforming Lighting. Any lighting fixture or lighting installation existing on the effective date of this Section that does not conform with the requirements of this Section shall be considered as a lawful nonconformance. A nonconforming lighting fixture or lighting installation shall be made to conform with the requirements of this Section when:

(1) The nonconformance is deemed to create a safety hazard.

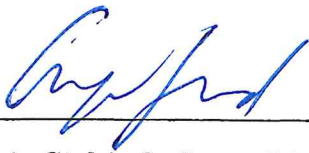
(2) It is replaced by another fixture or fixtures or abandoned or relocated.

(3) There is a change in use.

2. This ordinance is effective on the earliest effective date set forth in the Pennsylvania Borough Code as it relates to ordinance adoption and effective dates.

3. Should a court of competent jurisdiction invalidate any portion of this ordinance, then to the extent possible such invalid portion shall be severed from the remainder, which shall continue in full force and effect.
4. Any existing ordinance that is inconsistent with the foregoing is, to the extent of such inconsistency, repealed.

SO ORDAINED this ___ day of _____, 2024.



Glynnis Siskind, Council President

Attest:  _____

Mary Aversa, Borough Secretary

APPROVED: _____

Jeanne Sorg, Mayor