# § 92-57. Lighting. [Amended 7-14-1994 by Ord. No. 94-10; 6-8-2006 by Ord. No. 06-15<sup>1</sup>]

- A. The purpose and intent of this lighting section is to preserve the rural, agricultural and historic nature of East Amwell, preserve East Amwell's investment in farmland preservation, protect the sky from light pollution and unnecessary sky glow, promote environmentally sound and responsible use of resources, protect drivers and pedestrians from glare, protect the natural environment from the damaging effects of night lighting from man-made sources, discourage the waste of electricity and improve or maintain nighttime public safety, utility, and security.
- B. Applicability of this lighting section.
  - (1) All uses of outdoor lighting are covered by this section.
  - (2) Temporary ornamental seasonal unshielded low-wattage lighting shall be permitted.
  - (3) Emergency lighting as may be required by any public agency engaged in the performance of their duties is permitted.
- C. This subsection contains general standards which apply to all outdoor lighting.
  - (1) All outdoor light fixtures shall be installed and maintained to comply with the following requirements:
    - (a) Only shielded or fully shielded light fixtures shall be used. Opaque fixtures which are not fully shielded, shielded or partly shielded are permitted only when the total illumination source within the opaque fixture shall not exceed 900 lumens (approximate output of sixty-watt incandescent lamp).
    - (b) Light fixtures emitting more than 900 lumens shall not be aligned, focused or designed to illuminate above the horizontal plane passing through the lowest part of the light fixture and shield.
    - (c) Two light fixtures to illuminate a single United States or New Jersey State flag at the same location is permitted. Each such fixture shall not exceed 1,000 lumens and shall use only a narrow cone of light, the beam angle of which shall be based on a circle having a radius equal to the width of the flag, except that flags having a width of 12 feet or more shall not be illuminated by a beam with a radius greater than two-thirds of the width of the flag. Light fixtures which illuminate the United States or New Jersey State flags shall operate by a timer which will turn the lights off no later than 11:00 p.m.

<sup>1.</sup> Editor's Note: The purpose of this ordinance was stated as: "Revisions to the existing Lighting Ordinance have been made because the previously existing Lighting Ordinance (§ 92-57 of the Code) is not readily understandable to those who are not lighting experts. The objective of this ordinance is to revise the language to provide objectively defined standards and improved flexibility to residents who seek lighting for safety and aesthetic purposes."

(d) Other architectural, landscape, ornamental, accent, and decorative lighting, and other direct light emissions shall not be visible above the roofline and shall operate by a timer which will turn the lights off no later than 11:00 p.m.

- (e) All floodlight-type fixtures shall be fully shielded, aimed no higher than 45 degrees from straight down and, once properly installed, shall be permanently affixed in the proper position.
- (f) Lighting fixtures are not permitted within the side yard or the rear yard building setbacks.

## (2) Poles and standards:

- (a) Maximum mounting height of an outdoor lighting fixture shall be 25 feet or the height of the building roofline, whichever is less, measured from the ground level to the lowest part of the fixture. In walkways and bikeways the maximum mounting height shall be 15 feet measured from the ground level to the lowest part of the fixture.
- (b) All poles or standards shall be anodized, coated or made of a material which shall minimize glare from the light source. (Wooden poles are an acceptable choice; polished metal is not acceptable.)
- (c) All pole-mounted fixtures for ground and horizontal lighting shall be aligned to point straight down.

#### (3) Light trespass.

- (a) All outdoor lighting shall be designed and installed in a manner which shall result in the direct or diffused source of illumination not being visible at any point on the property boundary at a height of three feet above the ground surface or anything greater. This can be accomplished through shielding, placement, type and style of fixtures and other devices which are technically feasible.
- (b) Lighting shall not project off the property. At the property line, or at a distance of 150 feet from a structure, whichever is less, illumination from light fixtures shall not exceed 0.1 footcandles in a vertical plane, measured at three feet above the ground surface.
- (c) Outdoor light fixtures shall be designed, installed and maintained so that there will be no objectionable direct light emissions.
- (4) Prohibited illumination includes: exterior light globes (except those which are in compliance with opaque fixtures under Subsection C(1)(a); unshielded sources; upward pointed light sources except as permitted under Subsection C(1)(c) for illumination of a single United States or New Jersey State flag; tower lighting except as required by the FAA; off-site lighting of outdoor advertisements or signs; advertisements or signs not about the business at that

location; laser source lights; searchlights; arc lights; animated lights; rotating, moving, pulsed, and flashing lights.

- D. This subsection contains standards which apply only to residential and agricultural lighting.
  - (1) Barn lights and dusk-to-dawn lights are permitted only when fully shielded and properly aligned.
  - (2) Externally illuminated building identification, signs and advertisements are prohibited for residential lighting.
  - (3) Externally illuminated building identification, signs and advertisements about an approved farm business at that location are permitted and shall be designed so that they turn off no later than 1/2 hour after closing and no later than 11:00 p.m. Externally illuminated signs shall be lit with lighting fixtures mounted to the top of the sign. When top-mounted fixtures are shown to be not feasible for good cause, additional directional control devices and/or visors shall be required to eliminate any spill light. Total illumination for building identification, signs and advertisements shall not exceed 10,000 lumens.
- E. This subsection contains standards which apply only to commercial and public lighting.
  - (1) Lighting where required by the Building Code of the State of New Jersey shall comply with the Ninth Edition of the Illumination Engineering Society of North America (IESNA) Lighting Handbook using minimum illumination levels, as permitted, which are suitable for a rural environment.
  - (2) Sports and recreational lighting shall comply with all sections of Subsection C; however, an exception to Subsection C(2) is made with respect to maximum mounting height requirements which shall be set in accordance with the guidelines as established in the Ninth Edition of the IESNA Lighting Handbook, as described under "Sports and Recreational Area Lighting," which is suitable for a rural environment.
  - (3) Fully shielded outdoor lighting for security purposes which complies with the provisions of this section is permitted during operating hours. During nonoperating hours, all outdoor lighting for security purposes shall be activated only by a device such as a motion sensor, infrared sensor, or security alarm system; alternatively, outdoor lighting for security purposes shall be turned off during nonoperating hours. Light sources which cannot be rapidly turned on and off are prohibited for use for security purposes.
  - (4) Externally illuminated building identification, signs and advertisements about the business at that location, or parking lots shall be designed so that they turn off no later than 1/2 hour after closing. Externally illuminated signs shall be lit with lighting fixtures mounted to the top of the sign. When top-mounted fixtures are shown to be not feasible for good cause, additional directional control devices and/or visors shall be required to eliminate any spill light.

Total illumination for building identification, signs and advertisements shall not exceed 10,000 lumens.

(5) Dusk-to-dawn lights are prohibited for commercial, sports and recreational facilities. (Note that outdoor lighting for security purposes as described above can be used instead as necessary.)

## F. Plans required. Plans shall include the following:

- (1) Description of outdoor light fixtures, including specifications such as type, wattage, and lumens of lamps, reflectors, optics, angle of cutoff, support and poles. The manufacturer's catalog cuts for each fixture shall be included on the plans.
- (2) Location and description of every outdoor light fixture and the hours of operation.
- (3) Location and description of motion detectors for security lighting and the light fixtures controlled by the unit.
- (4) Maintained horizontal illuminance shown as footcandles (after depreciation), including the following:
  - (a) Maximum.
  - (b) Minimum.
  - (c) Average during operating and nonoperating hours.
  - (d) Maximum to minimum ratio.
  - (e) Average to minimum ratio.
- (5) Computer-generated photometric grid showing average footcandles every 10 feet or less.
- (6) Foundation details of lightpoles.
- (7) Height of mounting of light fixture.

## G. Compliance monitoring.

- (1) Safety hazards. If the Township Engineer or Township Zoning Officer determines a lighting installation creates a safety hazard, the person(s) responsible for the lighting shall be notified and required to take remedial action.
- (2) Nuisance glare and inadequate illumination levels. When the Township Engineer or Township Zoning Officer determines an installation produces unacceptable levels of nuisance glare, skyward light, excessive or insufficient illumination levels or otherwise varies from this section, the Township may cause notification of the person(s) responsible for the lighting and require

appropriate remedial action.

- (3) Night-time lighting inspection. A night-time lighting inspection shall be conducted by the Township Engineer or Building Inspector to confirm that the new lighting is in conformance with the section and Board approvals prior to a certificate of occupancy being issued. A note stating the above shall be added to all lighting plans or plans containing lighting information and/or design.
- H. Preexisting lighting installed before the adoption of the current lighting regulations is exempt only where such preexisting lighting was in compliance with the prior lighting regulations or was installed before the prior lighting regulations.