

A group of people, mostly children, are gathered around a campfire at night. They are wearing winter clothing like hats and jackets. The campfire is in the foreground, and the people are looking up at a dark sky filled with stars. The background shows some trees and a building in the distance.

LAKES TO LAND REGIONAL INITIATIVE

Dark Sky Ordinance

ARTICLE _____

[MODEL ORDINANCE] EXTERIOR LIGHTING REGULATIONS

Section 1 - Purpose:

The purpose of this ordinance is to:

1. Permit reasonable uses of outdoor lighting for nighttime safety, utility, security, and enjoyment while preserving the ambiance of the night;
2. Curtail and reverse any degradation of the nighttime visual environment and the night sky;
3. Minimize glare and obtrusive light by limiting outdoor lighting that is misdirected, excessive, or unnecessary;
4. Conserve energy and resources to the greatest extent possible;
5. Help protect the natural environment from the damaging effects of night lighting.

Section 2 - Definitions:

1. Automatic Timing Device: a device which automatically turns on and off outdoor light fixtures or circuits. Photo-electric controls and motion detectors are not considered automatic timing devices for the purposes of this Article.
2. Light Pollution: artificial light which causes a detrimental effect on the environment, astronomical observation, enjoyment of the naturally illuminated night sky or causes undesirable glare or unnecessary and/or unwanted illumination of adjacent or even distant properties.
3. Outdoor Light Fixture: an illuminating device which is permanently installed outdoors, including, but not limited to, devices used to illuminate signs.
4. Cut-off Shielding: a technique or method of construction which causes light emitted from an outdoor light fixture to be projected only below and imaginary horizontal plan passing through the fixture below the light source.
5. Shielding: a permanently installed, non-translucent shade, cowl, hood, baffle or other construction which limits, restricts or directs light or the visibility of a light source to meet the standards of this Article.
6. Security Lighting: lighting fixtures and/or practices intended to discourage intrusion on the premises by unwanted persons.
7. Yard Lighting: lighting fixtures and/or practices intended for the convenience, enjoyment and safety of a property owner or tenant or guest.
8. Light Source: the bulb which creates the light.
9. Motion Detector: a device triggered by motion and used to energize incandescent lights.

Section 3 - Requirements:

1. Exterior lighting is required to use either **a** or **b** noted below:
 - a. All outdoor light fixtures shall have full cut-off shielding such that no light is emitted above an imaginary horizontal plane passing through the fixture below the light source regardless of type or wattage, EXCEPT for gas lighting, glass tubes filled with Neon, Argon or Krypton, and small decorative fixtures such as porch lights.
 - b. Baffles or shields shall be required as needed so that light sources are not visible beyond the property on which they are installed, so that direct light rays are not directed above a horizontal plane passing through the fixture, and also so that vehicular and pedestrian traffic are protected from unnecessary and dangerous glare and from the intense light of directly visible light sources.
2. Exterior lighting installed after the effective date of this ordinance shall have the Fixture Seal of Approval (FSA) for dark sky friendly light fixtures as certified by the International Dark Sky Association. FSA compliant fixture can be referenced at www.darksky.org/outdoorlighting-29.
3. Exterior light fixtures shall be energized only when necessary by means of automatic timing devices and through the use of motion detection devices on security lighting.
4. Parking lot outdoor light fixtures shall be turned off between 11:00 p.m. and sunrise.
5. Sodium light sources shall be used for street lighting, parking lot lighting, and for security lighting when such security lighting is not to be energized by motion detection devices. Where feasible, low-pressure sodium lighting is to be encouraged.
6. Floodlights shall be directed downward, shielded as necessary so that the light source is not visible from roads or adjacent property, and located and directed so that light is neither unnecessarily reflected onto adjacent property or into the night sky.
7. In addition to fixture design and shielding, architectural and landscape design features may be incorporated into an outdoor lighting plan to meet the requirements and comply with the intent of this Article.
8. Off-premises advertising signs, if permitted, shall not be illuminated externally or internally.
9. Advertising signs shall not be illuminated between one (1) hour after the close of business and one (1) hour before the opening of business on the following day except by special permission granted as a condition of site plan approval. All fixtures or circuits illuminating advertising signs shall be equipped with automatic timing device.
10. Quartz and mercury vapor lighting are prohibited because of the broad spectrum of visible light which these sources emit and because of the diffusive and reflective character of such light.
11. All parking lots shall be illuminated only when in use during regular business hours and thereafter only until the public and employees have left the premises. Approved security lighting will be permitted.

12. Entrance and traffic marker lights along access roads and drives, in parking lots and along pedestrian ways shall be sodium type and equipped with full cut-off shielding as well as shielding to keep the light source out of view of vehicular and pedestrian traffic.
13. Outdoor display areas including display or storage lots may be illuminated during the hours the business is open to the public or until 11:00 p.m. Metal halide light sources may be used provided such fixtures are equipped with full cut-off shielding and project only the minimum amount of light necessary for good visibility.
14. Lighting of building facades shall be from the top and directed downward with full cut-off shielding and additional shielding to keep the light source from the view of vehicular and pedestrian traffic and adjacent property.
15. Security lighting shall be directed away from and/or shielded from road traffic and adjacent properties.
16. Limit the type of LED light to a "warm-white" or filtered LEDS's (with a Correlated Color Temperature – CCT lower than 3,000K) to minimize blue emissions.

Section 4 - Approved Materials:

The provisions of this Article are not intended to prevent the use of any design, material or method of installation, even if not specifically prescribed by this Article, provided that such alternate has been approved by the Planning Commission and meets or exceeds the Illuminating Engineers Society (EIS) standards and has the Fixture Seal of Approval (FSA) from the International Dark Sky Association.

Section 5 - Exemptions:

The following uses and activities shall be exempt from these Exterior Lighting Regulations:

- a. Lighting in swimming pools and other water features governed by Article 680 of the National Electrical Code.
- b. Exit signs and other illumination required by building codes.
- c. Lighting for stairs and ramps, as required by the building code.
- d. Signs are regulated by the sign code, but all sign lighting is recommended to be fully shielded.
- e. Holiday and temporary lighting (less than thirty days use in any one year).
- f. Football, baseball, and softball field lighting; only with permit from the Township recognizing that steps have been taken to minimize glare and light trespass, and utilize sensible curfews.
- g. Low voltage landscape lighting, but such lighting should be shielded in such a way as to eliminate glare and light trespass.

Section 6 - Conflicts:

Where any provision of the statutes, codes or laws of the United States of America or the State of Michigan or the County of Benzie conflict with any of the provisions of this Article, the most restrictive shall apply unless otherwise required by law.

Section 7 - Violation and Enforcement:

- a. It shall be unlawful for any person to violate any of the provisions of this Article.
- b. Any person who shall violate any provision of this Article shall be subject to the penalties specified under Article _____ of this Ordinance.
- c. The Zoning Administrator or his agent is hereby empowered to enforce this Article.
- d. The Zoning Administrator or his agent shall notify each applicant for a Land Use Permit that compliance with the provisions and regulations of this Article is a condition of such Land User Permit.

Section 8 -Severability:

If any provision, clause, sentence, sub-sentence, paragraph, section or part of this Article be adjudged by any court of competent jurisdiction to be invalid, such judgment shall not affect, impair or invalidate the remainder thereof, but shall be confined in its operation to the provision, clause, sentence, sub-sentence, paragraph, section or part thereof directly involved in the controversy in which said judgment shall have been rendered.