

William Biddlecombe Joe Dike Sam Artino Monty Tapp Mark Claus Matt Grieves Joel Hagy
Councilmember Councilmember Councilmember Mayor Vice-Mayor Councilmember Councilmember

CITY COUNCIL — COUNCIL WORK SESSION

Tuesday, August 27, 2024 @ 6:00 PM
City Council Chambers
417 Main Street
Huron, Ohio 44839

LIVESTREAM MEETING INFORMATION

This Council work session will be conducted in person in Council Chambers at Huron City Hall and live-streamed of the City of Huron's YouTube channel. The public is free to observe and hear the discussions and deliberations of all members of City Council via the following link: https://www.youtube.com/channel/UCpRAV-AnmlA6lfukQzKakQg

- I. Call to Order
- II. Roll Call
- III. Old Business
- IV. New Business
 - IV.1 Council discussion on potential light trespass ordinance.
- V. Adjournment



TO: Mayor Tapp and City Council

FROM: Matthew Lasko

RE: Council discussion on potential light trespass ordinance.

DATE: August 27, 2024

Light Trespass Considerations.docx Plano Ord Sample.pdf Royalton MN ORD Sample.pdf Chardon Sample.pdf Lakewood Ord. OH SAMPLE.pdf

Light Trespass Considerations

- Planning has reported that, historically, City sends out courtesy letters to residents, and issues are normally resolved.
- Residents have common law nuisance rights that apply to light trespass.
- Query volume and frequency of complaints, and are they repeat offenders.
- Critical concerns include nature and extent of violations, how to measure/interpret violations, successful defense of City determinations, and enforcement.

Plano, Texas Ordinance 2021-11-06 - See Sample.

- Definitions include:
 - o "Candela" (luminous intensity in given a direction)
 - o "Diffusing luminaire" (luminaire that scatters light in all directions but less than 180 degrees)
 - o "Footcandle" (amount of illumination provided by one (1) lumen uniformly distributed on one (1) square foot surface)
 - o "Illumination" (density of luminous flux (lumens) incident on a surface; the quotient of luminous flux divided by the area of the surface, expressed as footcandles)
 - o "Luminance calculations" expressed as an algebraic formula
- Light is a nuisance if light is in excess of references on chart provided.
- Temporary exemptions granted based on type of outdoor lighting/fixture; duration of time requested; type of lamp; footcandle calculations; lamp wattage; location of fixtures; size of fixtures and shielding, etc..

Cleveland Heights, Ohio (Ord. 1165.07)

- No exterior lighting may glare into or upon the surrounding area of any residential premises. Light level must be no greater than 0.5 footcandles at a residential property line and 1 footcandle for any non-residential property line.
- Use of unshielded exterior lighting is prohibited.

Royalton, MN - Ord. 51 - See Sample. Note grandfathering.

Chardon, Ohio - Ord 1147.19. See Sample.

Lakewood, Ohio – 2 options

- Ord. 1306.311 See Sample.
- Ord. 541.04 (a)(6) (Criminal Mischief)
 - No person shall "[w]ith purpose to interfere with the use of or enjoyment of the property of another, maintain a light nuisance originating from a residential property by causing light to unreasonably shine, glare, reflect, or direct onto the property of another."
 Violation is a minor misdemeanor w/fine.
 - O No measuring of light, no footcandles, no "diffuse lighting" issues just a straightforward, "reasonable" interpretation of what is occurring re: light nuisance. Lakewood officials state their Police Department has cited successful based on this Ordinance. The mere threat of enforcement in correspondence to offender is also effective.

o Huron's Criminal Mischief Ordinance is also numbered 541.04 – it is possible to add a provision similar to Lakewood, but we would need to clean up penalty section a bit.

ORDINANCE NO. 2021-11-6

Sec. 6-469. Presumptions.

(a) Light is presumed to be unreasonable and declared a light nuisance

(1) The illumination or luminance is in excess of the limitations, or if t is improperly shielded, as provided in the tables below:

Table 1: Illumination Limits					
Zoning Catagony	Footcandles				
Zoning Category	Horizontal	Vertical			
Single-family and two-family residential districts	0.25	0.25			
Multiple-family residential districts	0.5	0.5			
Nonresidential districts, streets	3.0	3.0			
Light industrial districts	5.0	5.0			

- (A) The limit of illumination on neighboring property from one (1) establishment shall be based on the zoning category of the neighboring property.
- (B) Maximum computed or measured footcandles at the neighboring property line shall not exceed the limits found in this table.

Table 2: Luminance Limits				
Zoning Category	Limit			
Single-family and two-family residential districts	0.02			
Multiple-family residential districts	0.05			
Nonresidential districts, streets	0.30			
Light industrial districts	0.50			

- (A) The permitted luminance on neighboring property from one (1) establishment shall be calculated based on the zoning of the neighboring property.
- (B) The luminance as calculated in Section 6-473 (b) shall not exceed the value based on zoning category.

Table 3: Shielding Requirements				
Lamp Type	Class I Lighting-Color Rendition Important	Class II Lighting-Color Rendition Not Important		
Low Pressure Sodium (LPS)	Fully Shielded	Fully Shielded		
High Pressure Sodium (HPS)	Fully Shielded	Fully Shielded		
Metal Halide	Fully Shielded	Fully Shielded		
Mercury Vapor	Prohibited	Prohibited		
Fluorescent	Partially or Fully Shielded	Fully Shielded		
Incandescent	Partially or	Prohibited		
(over 150 watts/fixture)	Fully Shielded			
Incandescent (under 150 watts/fixture)	Partially or Fully Shielded	Partially or Fully Shielded		
Any light source	Unshielded	Unshielded		
50 watts and under	Permitted	Permitted .		
Low intensity Neon, Krypton	Unshielded	Unshielded		
or Argon Discharge Tubes	Permitted	Permitted		

ORDINANCE NO. 51

OUTDOOR LIGHTING

I. Objective

Royalton is a rural city located in the beautiful Mississippi River Valley and saddles the scenic, gentle Platte River. The ideal location of Royalton provides a rich view of the sky. At night it is important that lighting enhances this beauty without taking away the ambiance of neighboring properties and natural environments. Lighting should offer a coalescent appearance for the Royalton's residential and commercial neighborhoods while still preserving the City's rural character and natural elements.

It is important that illumination is intelligently planned to complement this setting, both during the day, when luminaires are visible, and at night, when the quality of light creates a safe environment for pedestrians and vehicles. It is also important to consider the difference between the quality of light versus the quantity. Adding new luminaries adds more light to an existing environment. Therefore less light is required from each light source when integrating new lighting installations into existing environments. Appropriate lighting should always consider the brightness of surrounding conditions.

These guidelines are intended to promote high quality lighting, efficient use of energy and reduce negative aspects of lighting such as light pollution, skyglow and wasted energy. These guidelines are intended to provide assistance to property owners and occupants in bringing nonconforming lighting into conformance with efficient and cost effective lighting, which promotes safety and security.

The design policies and examples set forth in these Guidelines are not intended to discourage unique and inventive design solutions; they serve to assist the City's decision makers and staff, architects, lighting designers, and applicants with an understanding of concepts behind good lighting design and a means to achieve that goal by establishing parameters enabling reviewers to determine that the intent of the Ordinance and Guidelines has been met.

II. Definition of Terms

Area Light. Light that produces over 1800 lumens. Area lights include, but are not limited to, streetlights, parking lot lights and yard lights.

Artificial Light. Any illumination produced from a man-made light source.

Candela (cd). Unit of luminous intensity.

Direct light. Light emitted directly from a light source.

Directional Lighting Methods. Direction of light downward, rather than upward or outward, with the intention of directing light where it is needed; on the ground. Downward lighting also prevents unnecessary and unwanted spillover of light to adjacent areas and properties.

Eighty-five (85) Degree Full Cut Off Type Fixtures. Fixtures that do not allow light to escape above and 85-degree angle measured from a vertical line from the center of the lamp extended to the ground.

Exterior Lighting. Temporary or permanent lighting that is installed, located or used in such a manner to cause light rays to shine outside. Fixtures that are installed indoors that are intended to light something outside are considered exterior lighting for the intent of this Ordinance.

Existing lighting. Any and all lighting installed prior to the effective date of this Ordinance.

Fossil Fuel Lighting. Fossil fuel light produced directly or indirectly by the combustion of natural gas or other utility-type fossil fuels, for example: gas, propane and ceresin lighting.

Fixture. The assembly that holds a light source and may include an assembly housing, a mounting bracket or pole socket, a lamp holder, a ballast, a reflector or mirror, and a refractor or lens

Flood Light. Light that produces up to 1800 lumens and is designed to "flood" a well-defined area with light. Generally, floodlights produce from 1000 to 1800 lumens.

Flux (radiant flux). Unit is erg/sec or watts.

Footcandle. A unit of illumination produced on a surface, all points of which are one foot from a uniform point source of one candle.

Full Cut-Off Fixture. Fixtures, as installed, that are designed or shielded in such a manner that all light rays emitted by the fixture, either directly from the lamps or indirectly from the fixture, are projected below a horizontal plane running through the lowest point on the fixture where light is emitted.

Fully Shielded. Outdoor light fixtures with a solid barrier that emit no light rays above the horizontal plane and effectively obscure the visibility of the lamp.

Glare. Direct light emitted by a luminaire that causes reduced vision, discomfort, or momentary blindness to neighbors, pedestrians or motorists.

High intensity discharge lamp. High pressure sodium, mercury vapor, metal halide, low pressure sodium, and other similar lamps.

Horizontal Plane. Planes of the property and acknowledgment that there are different plane levels for each property based on vertical influence and placement.

Holiday Lighting. Festoon type lights, limited to small individual bulbs on a string where the spacing of bulbs is not closer than three inches and where the output per bulb is greater than 15 lumens.

IESNA. Illuminating Engineering Society of North America (IES or IESNA). The professional society of lighting engineers, including those from manufacturing companies, and other professionally involved in lighting. **Illumination.** The level of light measured at a surface Draft dated August 6, 2008

Indirect Light. Light reflected from light source or light refracted through a material that transmits light **Lamp.** The component of a luminarie that produces the light.

Laser Light. A device that emits light through a process of optical amplification based on the stimulated emission of photons producing an intense, directional light beam.

Light. The form of radiant energy acting on the retina of the eye to make sight possible, brightness, illumination, a lamp (as defined below).

Light diffuser. Any material that reduces the light intensity after it leaves the light source **Light emitting surface.** Any part of a fixture (lamp, diffuser) which emits light

Light pollution.

- Obstructed visibility of the sky due to a visible glow of light in the atmosphere caused by illumination from artificial light sources
- Glare
- Illumination that extends beyond the intended area of illumination or beyond property boundaries
- Light sources that are left on when they no longer serve a useful function

Light shield. Any attachment which interrupts and blocks the path of light emitted, transmitted through, or reflected from a light source

Light source. Any source of artificial light, such as incandescent, compact fluorescent, halogen or other vapor bulbs, neon or fluorescent tubes, or light emitting diodes (LED's).

Light stress. The effect of long term, artificial light on a biological species.

Light trespass. Light emitted by a luminaire that shines beyond the boundaries of the property on which the luminaire is located

Lighting. Any or all parts of a luminaire that function to produce light.

Lumen. A unit of measurement of light emitted from a light source

Luminaire. The complete lighting system, including the lamp and the fixture

Luminaire full cutoff. A luminaire that allows no direct light emissions above a horizontal plane through the luminaire's lowest light-emitting part

Luminance. The complete lighting unit, including the lamp, the fixture, and other parts.

Luminous Tube Lighting. Gas filled glass tubing which when subjected to high voltage becomes luminescent in a color characteristic of the gas used (neon, argon, etc.)

Non-Essential Lighting. Lighting that is not necessary for an intended purpose after the purpose has been served. Does not include any lighting used for safety and/or public circulation purposes. Examples: lighting for a business sign is considered essential during business hours; however, is considered non-essential once the business is closed. Or if the business is essentially open 24/7 hours then motion sensors and/or timers would be installed to create some non-essential lighting.

Outdoor light fixtures. Outdoor artificial illuminating devices, installed or portable, used for floodlighting, general illumination, or advertisement. Such devices shall include but are not limited to outdoor lighting for:

- Building and structures
- Recreational facilities
- Parking lots
- Landscape lighting
- Billboards and other signs
- Street lighting
- Walkway lighting

Outdoor Recreation Facility. An area designated for active recreation, whether publicly or privately owned, including but not limited to, baseball, and softball diamonds, soccer and football fields, equestrian arenas, golf courses, tennis courts and swimming pools.

Partially-Shielded. The bulb of the fixture is shielded by a translucent siding and the bulb is not visible at all. Light may be emitted at the horizontal level of the bulb.

Permanent outdoor luminaire. Any fixed luminaire or system of luminaries that is outdoors and this is intended to be used for seven (7) days or longer

Recessed. When a light is built into a structure or portion of a structure such that the light is fully cut off and no part of the light extends or protrudes beyond the underside of a structure or portion of a structure.

Roadway lighting. Permanent outdoor luminaries that are specifically intended to illuminate roadways for automotive vehicles

Shielded. When the light emitted from the fixture is projected below a horizontal plane running through the lowest point of the fixture where light is emitted. The bulb is not visible with a shielded light fixture, and no light is emitted from the sides of the fixture. This is also considered a full cut off fixture.

Security lighting. Permanent outdoor luminaries that are specifically intended to deter crime.

Skyglow: The brightening of the night-time sky that results from scattering and reflection of artificial light by moisture and dust particles in the atmosphere. Sky glow is caused by light directed or reflected upwards or sideways and reduces one's ability to view the night sky.

Standard methods. Methods that measure illumination from a light source of measurement established by a nationally recognized Board.

Strobe or Stroboscopic Light. An electronic flash that produces rapid, brilliant bursts of light typically used for photography, special lighting effects, etc.

Uplighting. Lighting that is directed in such a manner as to shine light rays above the horizontal plane.

Unshielded. Unshielded means light fixtures lacking any means to restrict light emitted above the horizontal plane.

III. Purposes:

The general purpose of this Ordinance is to protect and promote the public health, safety and welfare, the quality of life, and the ability to view the night sky, by establishing regulations and a process of review for exterior lighting. This Ordinance establishes standards for exterior lighting in order to accomplish the following:

- 1. To save energy in an attempt to ensure Royalton's sustainability;
- 2. To protect against direct glare and excessive lighting;
- 3. To provide safe roadways for motorists, cyclists and pedestrians, trees, and animal life;
- 4. To protect and reclaim the ability to view the night sky, and thereby help preserve the quality of life and the tourist experience of this desirable visual resource;
- 5. To prevent light trespass in all areas of the City and neighboring areas;
- 6. To promote efficient and cost effective lighting;
- 7. To ensure that sufficient lighting can be provided where needed to promote safety and security;
- 8. To allow for flexibility in the style of lighting fixtures;
- 9. To provide lighting guidelines for efficient and moderate use;
- 10. To provide assistance to property owners and occupants in bringing nonconforming lighting into conformance with this Ordinance; and,
- 11. To work with other jurisdictions within Morrison County to meet the purposes of this Ordinance.

IV. Applicability

- 1. These Guidelines apply to all new land uses, developments, buildings, and structures that require a building permit or a site plan review. All outdoor lighting fixtures shall meet the requirements of this code.
- 2. All applications for Design Review, Conditional Use, Subdivision and/or Building Permits shall include lighting plans showing location, type, height, and lumen output of all proposed and existing fixtures. The applicant shall provide enough information to verify that lighting conforms to the provisions of this Ordinance. The Planning and Zoning Administrator, Commission and/or Building Official shall have the authority to request additional information in order to achieve the purposes of this Ordinance.
- 3. If a property or use with nonconforming lighting is abandoned, then all outdoor lighting shall be reviewed and brought into compliance with this Code before a new use is approved.
- 4. Any new lighting shall meet the requirements of this section with regards to shielding:
 - a. Any lamp installed must be shielded such that the light is projected below the horizontal plane created by the shield.
 - b. All light fixtures shall be installed and maintained in such a manner that the shielding does not permit light trespass beyond the property boundary.
 - c. Any fixed objects that reflect or defract light (such as windows, mirrors or other reflective objects) must not permit light trespass from light sources on the property.
- 5. The City of Royalton may require that any new lighting or existing lighting that comes before them meet the standards for footcandle output as established by the IESNA
- 6. All non-essential exterior commercial and residential lighting is encouraged to be off after business hours and/or when not in use. Lights on a timer are encouraged. Sensor activated lights are encouraged to replace existing lighting that is desired for security purposes.
- 7. All area lights, including street lights and parking area lighting, shall be full cut-off fixtures and are encouraged to be eighty-five (85) degree full cut-off type fixtures. Streetlights shall be high pressure sodium, low pressure sodium, led or metal halide, unless otherwise determined by the City Council that another type is more efficient. Street lights along residential streets shall be limited to a 70 watt high pressure sodium (hps) light. Street lights along nonresidential streets or at intersections shall be limited to 100 watts hps, except that lights at major intersections on state highways shall be limited to 200 watts hps. If the Council permits a light type other than high pressure sodium, then the equivalent output shall be the limit for the other light type. For example: a 100 watt high pressure sodium lamp has a roughly equivalent output as a 55 watt low pressure sodium lamp, or a 100 watt metal halide lamp.
- 8. All exterior lighting shall be full cut-off fixtures with the light source fully shielded, with the following exceptions:
 - a. Luminaires that have a maximum output of 260 lumens per fixture, regardless of number of bulbs, (equal to one 20 watt incandescent light), may be left unshielded provided the fixture has an opaque top to keep light from shining directly up.
 - b. Luminaires that have a maximum output of 1,000 lumens per fixture, regardless of number of bulbs, (equal to one 60 watt incandescent light) may be partially shielded, provided the bulb is not visible, and the fixture has an opaque top to keep light from shining directly up.
 - c. Flood lights with external shielding may be angled provided that no light escapes above a 25 degree angle measured from the vertical line from the center of the light extended to the ground, and only if the light does not cause glare or light to shine on adjacent property or public rights-of-way. Flood lights with directional shielding are encouraged. Photocells with timers that allow a floodlight to go on at dusk and off by 11:00 p.m. are encouraged.
 - d. Holiday lights as defined are exempt from the requirements of this Ordinance except that flashing holiday lights are prohibited on commercial properties. Flashing holiday lights on residential properties are discouraged. Holiday lights are encouraged to be turned off after bedtime and after close of businesses. A 60 day limit exists for holiday lights.
 - e. Sensor activated lighting may be unshielded provided it is located in such a manner as to prevent direct glare and lighting into properties of others or into a public right-of-way, and provided the light is set to only go on when activated and to go off within five minutes after activation has ceased, and the light shall not be triggered by activity off the property.

- f. Vehicular lights and all temporary emergency lighting needed by the Fire and Police Departments, or other emergency services shall be exempt from the requirements of this Ordinance.
- 9. Light Trespass: It is the intent of this Ordinance to eliminate and prevent light trespass through the proper installation of lighting fixtures. All existing and/or new exterior lighting shall not cause light trespass and shall be such as to protect adjacent properties from glare and excessive lighting.
- 10. Parking area lights are encouraged to be greater in number, lower in height and lower in light level, as opposed to fewer in number, higher in height and higher in light level. Parking lot lighting shall not exceed IESNA recommended footcandle levels.
- 11. Luminaire Mounting Height: Free standing luminaires shall be no higher than 25 feet above the stand/pole base, except that luminaires used for playing fields shall be exempt from the height restriction provided all other provisions of this Ordinance are met and the light is used only while the field is in use, and except that street lights used on major roads may exceed this standard if necessary as determined by the City Council, as advised by a lighting engineer. Building mounted luminaires shall be attached only to walls, and the top of the fixture shall not exceed the height of the parapet or roof, whichever is greater.
- 12. Uplighting: Uplighting is prohibited in all zoning districts, except in cases where the fixture is shielded by a roof overhang or similar structural shield from the sky and a licensed architect or engineer has stamped a prepared lighting plan that ensures that the light fixture(s) will not cause light to extend beyond the structural shield, and except as specifically permitted in this Ordinance.
- 13. Flag Poles: Upward flagpole lighting is permitted for governmental flags only, and provided that the maximum lumen output is 1300 lumens. Flags are encouraged to be taken down at sunset to avoid the need for lighting.
- 14. Service Stations: The average footcandle lighting level for new and existing service stations is required to be no greater than 30 footcandles, as set by the IESNA for urban service stations.
- 15. Canopy Lights: All lighting shall be recessed sufficiently so as to ensure that no light source is visible from or causes glare on public rights-of-way or adjacent property.
- 16. Landscape Lighting: Lighting of vegetation is discouraged and shall be in conformance with this Ordinance. Uplighting is prohibited.
- 17. Towers: All radio, communication, and navigation towers that require lights shall have dual lighting capabilities. For daytime, the white strobe light may be used, and for nighttime, only red lights shall be used.
- 18. Temporary Lighting: Temporary lighting that conforms to the requirements of this Ordinance shall be allowed. Nonconforming temporary exterior lighting may be permitted by the Planning and Zoning Commission and approved by the City Council only after considering 1) the public and/or private benefits which will result from the temporary lighting; 2) any annoyance or safety problems that may result from the use of the temporary lighting; and, 3) the duration of the temporary nonconforming lighting. The applicant shall submit a detailed description of the proposed temporary nonconforming lighting to the Planning and Zoning Commission via filing through the City Clerk. Upon te recommendation of the Planning and Zoning Commission the City of Royalton shall provide written notice of said request to owners of property immediately adjacent to the subject property and the City Council will call for a public hearing. Said notice shall inform adjacent property owners they may comment on the request at the scheduled public hearing.
- 19. Neon Lights: Neon lights are only permitted pursuant to the Sign Ordinance, Section TBD.
- **V. General Requirements**. All non-exempt light fixtures requiring a County permit for their installation shall be subject to the following general requirements:
 - 1. All outdoor light fixtures installed after the effective date of this article and thereafter maintained upon private property, public property, or within the public right-of-way shall be fully shielded.
 - 2. All replaced or repaired lighting fixtures requiring a permit shall be subject to the requirements of this ordinance.
 - 3. Light trespass and glare shall be reduced to the maximum extent feasible through directional lighting methods with additional methods of motion sensors and timers installed if needed to comply.

- 4. Externally illuminated signs, advertising displays and building identification shall use top mounted light fixtures which shine downward and are fully shielded with motion sensors or timers if needed.
- 5. Outdoor light fixtures used for outdoor recreational facilities shall be fully shielded except when such shielding would cause an impairment to the visibility required in the intended recreational activity. In such cases, partially shielded fixtures and downward lighting methods shall be utilized to limit light pollution, glare, and light trespass to a reasonable level as determined by the Planning and Zoning Commission.
- 6. Illumination from recreational facility light fixtures shall be shielded to minimize glare extending towards roadways where impairment of motorist vision might cause a hazard.

VI. Prohibited Lights:

- 1. All illuminated advertising signs on and off premises shall be off between 11.00PM and sunrise, except on-premises signs that may be illuminated while the business is open to the public. If the business is a 24 hours/day, 7 days/week used facility, such as a self storage, then the lights should have motion sensors and/or timers after 11:00PM.
- 2. All outside illumination that is not fully shielded of any building and/or surrounding landscape, public or private, for aesthetic and decorative purposes is prohibited between 9:00PM and sunrise. This includes all uplighting which is under overhangs.
- 3. No outdoor recreational facility with lights that are not fully shielded shall be illuminated between 9:00PM and sunrise except to complete a specific organized recreational event, in progress and under illumination in conformance with this ordinance at 9:00Pm. Shielded lights are not subject to a time restriction.
- 4. All outdoor stroboscopic (strobe lights) and outdoor laser lights including laser light shows and aerial laser lights are prohibited. Any indoor use of stroboscopic light(s) or indoor laser light(s) that constitutes light trespassing or light stress to adjacent properties, buildings, right of ways, public streets, paths, alleys, sidewalks, and parks are prohibited. Exemptions: these lights or similar lights as needed and used by law enforcement, fire and rescue squads in order to ensure public safety.

VII. Exemptions: The following are exempt from the provisions of this ordinance:

- 1. Lighting for public roadways for traffic control such as signals and other devices installed prior to this ordinance are exempt from the shielding requirements of this ordinance.
- 2. All outdoor lighting fixtures existing and legally installed prior to the effective date of this ordinance are exempt from the shielding requirements of this ordinance. Existing lighting fixtures shall be subject to the requirements of Section -4.2 requiring lights that are not fully shielded to be turned off at 9:00 PM. Shielded lights are not subject to a turn-off time.
- 3. Lighting in historic districts may be exempted from these regulations.
- 4. Seasonal decorations using typical unshielded low wattage lamps shall be permitted no longer than 60 days.
- 5. Individuals may file for a temporary exception with the City Building Department. This request must contain the following information:
 - a. Duration of requested exemption
 - b. Address and location of light sources at points of use
 - c. Purpose of proposed light use, and reason for request for exemption
 - d. Previous temporary exemptions allowed on premises
- 6. Fossil fuel light.
- 7. Temporary emergency lighting such as fire, police, public works.
- 8. Moving vehicle lights.
- 9. Navigation lights such as radio/television towers.
- 10. Temporary lighting for agricultural activities of a limited duration, not including unshielded arena lights.
- 11. Security lights of any wattage that are controlled by a motion-sensor switch and which do not remain on longer than 10 to 12 minutes after activation.
- 12. Projects with approved construction plans prior to the effective date of this ordinance are excluded from compliance with the ordinance in the initial installation only.
- 13. Solar walkway lights.

THIS ORDINANCE SHALL SUPERSEDE AND REPEAL ALL PRIOR AND CONSISTENT ORDINANCES. THIS ORDINANCE SHALL BE EFFECTIVE UPON PASSAGE AND PUBLICATION REQUIRED BY LAW.

DATED: September 2, 2014

Carol Madsen

CLERK

Andrea Lauer

MAYOR

1147.19 LIGHTING REGULATIONS.

CHARDON, OHIO SAMPLE

The purpose of this Section is to control the installation of exterior lighting fixtures to prevent light pollution in the forms of light trespass and glare and to preserve, protect and enhance the character of the City and the lawful nighttime use and enjoyment of property located within the City. Appropriate site lighting, including lights for signs and buildings, shall be arranged to provide safety, utility and security; and control light trespass and glare on adjacent properties and public roadways.

- (a) General Requirements.
 - (1) Lighting shall be controlled to prevent direct lighting into the sky or on neighboring properties. Examples of methods to accomplish the use of fully shielded cut-off fixtures, directing light fixtures downward rather than upward, or shielding the light to reduce light emission from the fixture so it cannot be seen at a reasonable distance.
 - (2) Only fully shielded cut-off style light fixtures shall be permitted for security or to illuminate walkways, roadways, equipment yards or parking lots.



Full cut-off lighting directs light down and to the sides as needed.

- (3) Flashing, rotating, moving, and digital lights are prohibited.
- (4) An outdoor light fixture shall not exceed a maximum height of 30 feet measured from the finish grade established not closer than 15 feet from the pole.
- (5) The illumination level at the property line of a parcel adjacent to a residence shall not exceed one-foot candle power.
- (6) In addition to the requirements set forth in this Section, outdoor light fixtures shall be installed in conformity with all other applicable provisions of the codified ordinances of the City of Chardon, Ohio.
- (7) An outdoor light fixtures used to illuminate a sign or recreational facility or for decorative effects, such as building, landscape, or recreational field illumination, shall be equipped with an automatic timing device and shielded and focused to reduce light shining into the sky or upon neighboring properties.
- (8) An outdoor light fixture installed and maintained upon private property within all zoning districts shall be turned off between 11:00 pm and sunrise, except when used for security purposes or to illuminate walkways and roadways.
- (9) An illuminated sign for commercial purposes shall be turned off between 11:00 pm and sunrise, except that signs may be illuminated while the business facility is open to the public.
- (10) Illuminated signs shall also comply with Chapter 1129 (Sign Regulations). (Ord. 2635. Passed 1-13-11.)

LAKEWOOD OHIO SAMPLE

disintegrating or whose exterior surface has weathered with dirt and grime or has been impaired through peeling or flaking of the paint or other protective coating shall be cleaned, repaired, repainted or resurfaced.

- (1) All exterior surfaces shall be replaced or repaired in good condition preparatory to repainting or staining.
- (2) All bare exterior surfaces that are flaking or crumbling shall be replaced or sealed in a good workman-like manner.
- (3) All new or repaired bare surfaces shall be painted or stained to match and conform to the existing colors of the structure, but not to include fences or patio decks constructed at the rear of the structure.
- (4) All exterior surfaces weathered with dirt and grime or which are peeling or flaking shall be painted or stained with approved, protective coating or surface. (Ord. 68-97. Passed 4-20-1998.)

1306.31 EXTERIOR PROPERTY AREAS.

No owner or operator of any premises shall maintain or permit to be maintained at or on the exterior property areas of such premises any condition which deteriorates, blights or debases the appearance of the neighborhood; or creates a fire, safety or health hazard; or which is a public nuisance; or which adversely alters the appearance and general character of the neighborhood and shall keep such premises free of any debris, object, material or condition which may create a health, accident or fire hazard or which is a public nuisance. Furniture used on open porches, decks and patios shall be of the type and style designed and intended for exterior use. Lawns, landscaping, trees and driveway shall also be maintained so as not to constitute a blighting or deteriorating effect in the neighborhood. All parking surfaces, both existing and new, and all parts thereof, shall be maintained in a safe and sanitary condition. (Ord. 68-97. Passed 4-20-1998.)

1306.311 OUTDOOR LIGHTING.

- (a) Definitions. As used herein:
- (1) "Area light" means lighting fixture intended to illuminate a significant parking or pedestrian area, such as a parking lot or walkway.
- (2) "Cutoff" means a lighting fixture from which no more than 2.5 percent of its lamp's intensity is emitted at or above horizontal plane drawn through the bottom of the fixture and no more than 10 percent of its lamp's intensity is emitted between 80 degrees and that horizontal plane.
- (3) "Footcandle" means a unit of incident light stated in lumens per square foot and measurable with an illuminance meter, a.k.a. footcandle or light meter.
- (4) "Full cutoff" means a lighting fixture from which none of its lamp's intensity is emitted at or above a horizontal plane drawn through the bottom of the fixture and no more than 10 percent of the lamp's intensity is emitted between 80 degrees and that horizontal plane.
- (5) "Fully shielded" means a lighting fixture, from which, in the installed position, none of its light output, either directly from the lamp or a diffusing element, or indirectly by reflection or refraction from any part of the fixture (excepting only incidental reflections from supporting brackets or arms), is projected above a horizontal plane through the fixture's lowest light-emitting part, as determined by photometric test or certified by the manufacturer. Any structural part of the fixture providing this shielding shall be permanently affixed.
- (6) "Glare" means the sensation produced by lighting that causes an annoyance, discomfort or loss in visual performance and visibility to the eye.
 - (7) "Illuminance" means the quantity of incident light measured in footcandles.
- (8) "Light trespass" means light emitted by a lighting installation, which extends beyond the boundaries of the property on which the installation is sited.
 - (9) "Lumen" means the light-output rating of a lamp (light bulb), as used in the context of this section.
 - (10) "Luminaire" means a complete lighting unit
- (11) "Shielded" means the description of a luminaire from which no direct glare is visible at normal viewing angles, by virtue of its being properly aimed, oriented, and located and properly fitted with such devices as shields, barn doors, baffles, louvers, skirts or visors.
- (12) "Commercial property" means property used for commercial purposes as defined in C1, C2, C3, C4, I, Planned Development, Mixed Use Overlay Districts, and multi-family properties of four or more units.
 - (b) Lighting Fixture Design and Control. The following regulations are required on commercial property:
 - (1) Luminaires shall be of a type and design appropriate to the lighting application.
- (2) For the lighting of predominantly horizontal surfaces such as, but not limited to parking areas, and pedestrian passage areas, merchandising and storage areas automotive-fuel dispensing facilities, automotive sales areas, loading docks, active and passive recreational areas, building entrances, and site entrances, luminaires shall be aimed straight down, have no uplight and shall meet IESNA full-cutoff/fully shielded criteria.

- (3) For the lighting of predominantly non-horizontal tasks or surfaces such as, but not limited to, facades, landscaping, fountains, displays and statuary, when their use is specifically permitted, luminaires shall be 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.
- (4) Area light shall not be permitted where visible, during hours of darkness, from a residential use, unless fitted with a reflector or other shielding device to block direct viewing of the light source from the adjacent use.
- (5) All lighting shall be aimed, located, designed, fitted and maintained so as not to present a hazard and so as not to create a light trespass by projecting or reflecting objectionable light onto a neighboring use or property.
- (6) Directional luminaires such as floodlights and spotlights shall be so shielded, installed and aimed that they do not project their output onto the properties of neighboring residences, adjacent uses, past the object being illuminated, or skyward. Floodlights installed above grade shall not be aimed out more than 45 degrees from straight down. When a floodlight creates glare as viewed from an adjacent residential property, the floodlight shall be required to be re-aimed and/or fitted with a shielding device to block the view of the glare source from that property.
 - (7) All exterior property areas shall maintain all exterior lighting so that it complies with the following:
 - A. All luminaire fixtures should be installed at a height appropriate for the use.
 - B. All luminaire fixtures should be placed in the area of use or as near to the area of use as is reasonably possible.
 - C. All luminaire fixtures should be angled such that it reasonably reduces horizontal glare.
- D. The luminaire should be aimed at the subject property of the horizontal plane and all reasonable efforts made to reduce glare and light trespass from the neighboring properties.
- E. Full cutoff, fully shielded and internal baffling is required on all luminaire fixtures to reduce or eliminate glare and light trespass to the extent reasonably possible.
- (8) 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.
- (9) The level of illumination projected onto a residential use from an adjacent property shall not create a light trespass or glare as determined by reasonable person.
- (c) <u>Plan Submission</u>. For all commercial properties where site lighting is proposed or otherwise required by the City, lighting plans shall be submitted to the Commissioner for review and approval with any preliminary development plan application or with any conditional use application. The Commissioner may also require that lighting plans be submitted for Building Permit applications or referred to Architectural Review Board for review. Lighting plans shall include:
- (1) A site plan, complete with all structures, parking spaces, building entrances, traffic areas (both vehicular and pedestrian), vegetation that might interfere with lighting, and adjacent uses that might be adversely impacted by the lighting, containing a layout of all proposed fixtures by location, mounting height and type. The submission shall include, in addition to area lighting, exterior architectural, building entrance, landscape lighting, etc.
- (2) A point-by-point illuminance-grid plot on 10-foot-by-10-foot centers (or as necessary for suitable legibility) of footcandles overlaid on the site plan, plotted out to 0.0 maintained footcandles, which demonstrate compliance with the light trespass, illuminance and uniformity requirements as set forth in this Section or as otherwise required by the City.
- (3) Description of the proposed equipment, including fixture catalog cuts, photometrics, glare reduction devices, lamps, on/off control devices, mounting heights, pole wind-loading conformance, foundation pole details and mounting methods.
- (4) Landscaping plans shall contain lighting fixture locations and shall demonstrate that the site lighting and landscaping have been coordinated to minimize conflict between vegetation and intended light distribution, both initially and at vegetation maturity.
- (5) Post-approval alterations to lighting plans or intended substitutions for specified lighting equipment on the approved plan shall be submitted to the Commissioner for review and approval prior to installation. Requests for substitutions shall be accompanied by catalog cuts of the proposed equipment that demonstrate the proposed substitution is equal to or exceeds the optical performance and maintainability of the specified luminaires; and accompanied by a lighting plan, including a point-by-point plot, which demonstrates that proposed substitutions will result in a lighting design that equals or exceeds the performance of the lighting on the approved plan.

(Ord. 2-18. Passed 4-1-2019.)

1306.32 MAINTENANCE RESPONSIBILITIES.

(a) Owner. Whenever any habitable or occupiable structure or part thereof, or any accessory building or structure or part thereof, is in such state of disrepair, or whenever the light or ventilation, or any other condition in or about such buildings or structures or part thereof, or in or about the lot on which they are situated, is, in the opinion of the Building Commissioner, in a condition or in its effect dangerous to life or health, the Building Commissioner may order or cause repairs to be made, or may order or cause the light or ventilation to be improved, or take such other action as he may deem necessary to remove such danger to life or health.