

**Exhibit A**  
**Existing Lighting Ordinance**  
**Section 30-344**

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- **Sec. 30-344. - Outdoor lighting.**

(a) *Purpose.* To provide regulations for outdoor lighting that will:

- (1) Protect and promote the public health, safety, and welfare;
- (2) Promote safety and security in vehicular use areas;
- (3) Protect neighbors, the environment, and the night sky from adverse lighting impacts such as light pollution, light trespass, glare, excessive lighting, and offensive light sources; and
- (4) Promote energy and resource efficient lighting.

(b) *Applicability.* All outdoor lighting uses within the city including, but not limited to, multi-family residential, commercial, industrial, public and private recreational and institutional uses, architectural, and landscape lighting.

(c) *Exemptions.*

- (1) Properties with a single-family or two-family dwelling.
- (2) Lighting for public rights-of-way, public streets, and approved private streets.
- (3) Lighting necessary for emergency equipment and work conducted in the interests of law enforcement, fire rescue, storm debris clean-up or other similar public safety efforts.
- (4) Lighting for construction, renovation, or repair of roads and utilities.
- (5) Temporary general construction lighting, which shall be regulated in accordance with building construction standards and shall be valid during the active period of a building permit.
- (6) Holiday decorative lighting.
- (7) Sign lighting, which is regulated elsewhere in this Land Development Code.
- (8) Lighting required by federal or state laws or regulations.

(d) *General requirements.*

- (1) *Luminaire design and operation.*

- a. For the lighting of predominately horizontal surfaces such as, but not limited to, parking areas, recreational areas, and building entrances, luminaires shall be full-cutoff fixtures and shall be aimed downwards.
- b. For the lighting of predominately non-horizontal surfaces such as, but not limited to, facades, landscaping, fountains, displays, and statuary, luminaires shall be shielded and shall be installed and aimed so as to not project output past the object being illuminated, skyward, onto a public roadway, or onto adjacent uses.
- c. Lighting shall be designed, located, aimed, shielded, and maintained so as to minimize light pollution.
- d. Luminaires shall consist of lighting at least as energy and resource efficient as high performance LED lighting.
- e. Controls shall be provided that automatically extinguish all outdoor lighting when sufficient daylight is available using a control device or system such as a photoelectric switch, astronomic time switch or equivalent functions from a programmable lighting controller, building automaton system or lighting energy management system, all with battery or similar backup power. Automatic lighting controls are not required for the interior of parking structures.
- f. Vegetation and landscaping may be required to control glare and light trespass; however, vegetation screens shall be planted and maintained in a manner that does not obstruct security lighting. Where landscaping is used for light screening, it shall be in addition to the applicable landscaping requirements listed in article VIII of the Land Development Code. During development plan review, the technical review committee shall determine whether existing vegetation is adequate to meet the required screening needs or whether additional light screening vegetation is necessary to supplement the existing standards of article VIII.
- g. The use of search lights, lasers, lighting or lights that pulse, flash, rotate or simulate motion for advertising or promotions is prohibited. No exceptions or waivers shall be permitted.

(2) *Pole height.*

- a. Except as otherwise regulated by this section, the height of luminaires shall not exceed 30 feet.
- b. During approval of a development plan, building permit or special use permit, the appropriate reviewing board, city manager or designee may

permit by special exception pole heights up to 50 feet provided the following conditions are met:

1. The development for which the special exception is requested has a total floor area of 100,000 square feet or greater;
2. Any property adjacent to the property for which a special exception is requested has a zoning that allows a similar use; and
3. The special exception is requested for an area that is greater than 75 feet from any adjacent property that either contains a residential dwelling or that has a residential zoning district classification as established by section 30-41.

In granting the special exception, the city may impose any reasonable conditions, restrictions or limitations to preserve and promote the purpose and intent of this section.

(3) *Illumination standards.*

- a. Lighting shall have illuminances, uniformities and glare control in accordance with the published standards of the Illuminating Engineering Society of North America (IESNA).
- b. Except as follows, light trespass onto adjacent property shall not exceed 1.0 footcandles measured line-of-sight from any point on the receiving property.
  1. *Residential property.* Light trespass onto any adjacent property that either contains a residential dwelling or that has a residential zoning district classification as established by section 30-41 shall not exceed 0.5 footcandles measured line-of-sight from any point on the receiving property.
  2. *Nature parks.* Light trespass onto any adjacent nature park shall not exceed 0.4 footcandles measured line-of-sight from any point on the receiving nature park.

(e) *Specific requirements.* In addition to the general requirements applicable to all outdoor lighting uses, this subsection outlines additional requirements for the following specific outdoor lighting uses or areas. If provisions in this subsection conflict with any of the general requirements, the provisions in this subsection shall prevail.

- (1) *Recreational lighting.* Lighting for outdoor recreational uses (including pole heights) may be designed in accordance with the published standards of the Illuminating Engineering Society of North America (IESNA).
- (2) *Nature parks.* Buildings shall not be externally illuminated on any vertical faces fronting a nature park.
- (3) *Building exteriors.* Lighting provided for the general security of areas such as, but not limited to, building entrances, stairways, ramps and main walkways shall not exceed an average horizontal illuminance of five footcandles at ground level, a uniformity ratio of 6:1, a maximum uniformity ratio of 10:1, and an average vertical illuminance of 0.2 footcandles measured five feet above the height of the luminaire.
- (4) *Parking lots.*
  - a. Lighting shall be uniform throughout the parking lot, with no dark patches or pockets, for safety and identification of features.
  - b. Luminaire locations shall not be in conflict with existing and proposed landscaping.
  - c. Except as provided in the next subsection, lighting shall maintain a minimum horizontal illuminance of 0.5 footcandles at ground level and shall not exceed an average horizontal illuminance of 2.5 footcandles, a uniformity ratio of 5:1, and a maximum uniformity ratio of 15:1.
  - d. Parking lots within 75 feet of any adjacent property that either contains a residential dwelling or that has a residential zoning district classification as established by section 30-41 shall meet the following requirements:
    1. Luminaires shall be full-cutoff fixtures from which no light is emitted at or above an angle of 80 degrees from the pole;
    2. The height of luminaires shall not exceed 15 feet; and
    3. Lighting shall maintain a minimum horizontal illuminance of 0.2 footcandles at ground level and shall not exceed an average horizontal illuminance of 1.0 footcandles, a uniformity ratio of 5:1, a maximum uniformity ratio of 10:1, and an average vertical illuminance of 0.1 footcandles measured five feet above the height of the luminaire.
  - e. Multiple-family residential developments shall have additional lighting at the entrance and exit points of parking lots sufficient to light the area for pedestrians entering and exiting the parking area. Lighting levels at

entrances and exits shall maintain a minimum horizontal illuminance of 1.0 footcandles at ground level.

- f. Lighting shall be provided in accordance with this section throughout the nighttime hours of operation and/or use by the public of a business or facility. However, lighting shall be automatically extinguished no later than one hour after the close of business or facility operation and/or use by the public. After-hours security lighting may be permitted when such lighting does not exceed 50 percent of the number of luminaires or the illumination level required or permitted during regular nighttime operation hours.

(5) *Parking structures.*

- a. *Applicability.* These standards for parking structures shall apply to any multilevel parking structure and any floor of a building, including but not limited to the first floor and/or basement level, used for parking or storage of vehicles. However, when either the top floor of a building used for parking or storage of vehicles or the top floor of a multilevel parking structure is uncovered and open to the sky, said floor shall be regulated in accordance with the standards for parking lots but shall have luminaires that do not exceed a height of 15 feet.
- b. Luminaires shall be full-cutoff, semi-cutoff and/or refractor high intensity discharge (HID) fixtures. The exact type, configuration and placement of luminaires shall be designed to prevent glare, cavern effect and to facilitate vertical illumination of the floor so that drivers are able to discern objects within the facility. Designs shall attain a cutoff angle of 24 degrees to 38 degrees on driver approach and 60 degrees to 75 degrees on driver retreat as shown in Figure 1.
- c. Lighting intensities for all floors, ramps, entrance/exit areas, and stairways shall be as listed in Table 1.

Figure 1. Transverse Lighting Coverage  
Transverse Coverage and Cutoff based on Eight-Foot Mounting Height

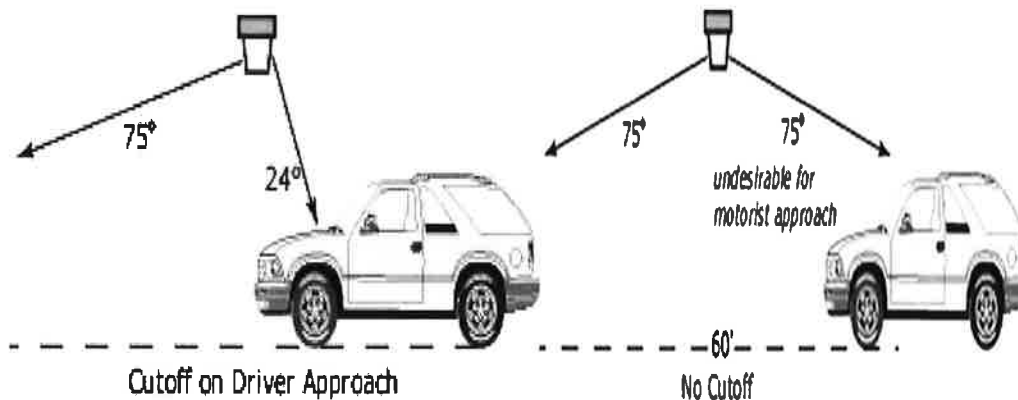


Table 1

	Minimum Horizontal Illuminance (footcandles)	Maximum Uniformity Ratio	Minimum Vertical Illuminance* (footcandles)
Basic per floor	1	10:1	.5
Ramps day	2	10:1	1
Ramps night	1	10:1	.5
Entrance areas day	50	—	25
Entrance areas night	1	10:1	.5
Stairways	2	—	1

\*Measured facing the drive aisle at five feet above the parking surface at the point of the lowest horizontal illuminance.

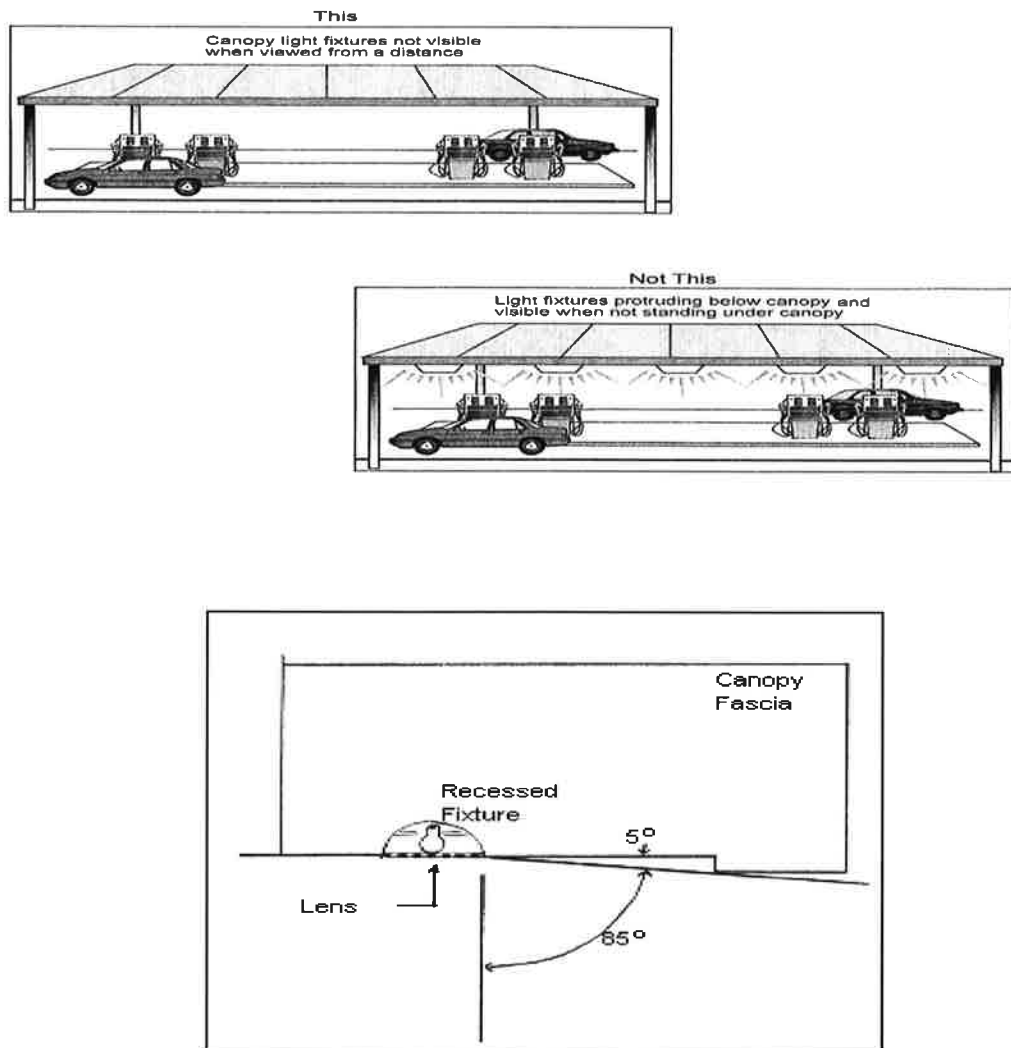
#### (6) Canopy lighting.

- a. Luminaires mounted on or under canopies shall be full-cutoff fixtures, or recessed so that the lens cover is flush with the bottom surface (ceiling) of the canopy as demonstrated in Figure 2. Lighting may also be shielded by fixtures or the edge of the canopy so that light is restrained to 85 degrees or less from vertical as shown in Figure 2.
- b. Lighting within six feet of the canopy shall maintain a minimum horizontal illuminance of 2.0 footcandles at ground level and shall not exceed an average horizontal illuminance of ten footcandles, a uniformity ratio of 5:1, and a maximum uniformity ratio of 6:1.

- c. Indirect lighting where light is aimed upward at the underside of the canopy and reflected back down from the underside of the canopy may be used when luminaires are shielded so that all direct illumination is focused exclusively on the underside of the canopy and when the average vertical illuminance does not exceed 0.5 footcandles at five feet above the canopy level.
- d. Luminaires shall not be mounted on the top or sides (fascias) of the canopy when not part of a permitted sign. The sides (fascias) of the canopy shall not be illuminated in a manner other than that prescribed under the section of the Land Development Code regulating signs.
- e. Lighting shall be provided in accordance with this section throughout the nighttime hours of operation and/or use by the public of a business or facility. However, lighting shall be automatically extinguished no later than one hour after the close of business or facility operation and/or use by the public. After-hours security lighting may be permitted when such lighting does not exceed 50 percent of the number of luminaires or the illumination level required or permitted during regular nighttime operation hours.



Figure 2. Canopy Lighting



(f)

*Lighting plan submission.* Lighting plans demonstrating compliance with the requirements of this section shall be submitted to the technical review committee for review and approval for development plan review, a building permit, and special use permit applications. Lighting plans shall be certified by a registered architect, engineer, or lighting professional holding a current lighting certification (LC) from the National Council on Qualifications for the Lighting Profession (NCQLP) as providing illumination in accordance with the applicable standards of this section and shall include the following information:

- (1) A brief written narrative, with accompanying plan or sketch, which demonstrates the objectives of the lighting.
- (2) A statement of the proposed hours when the luminaires will be on and when they will be extinguished.
- (3) A layout of all existing and proposed luminaires by type, location, mounting height, aiming direction, orientation, lamp, and photometry.
- (4) Description of the proposed equipment, including luminaire catalog cuts, glare reduction devices, lamps, lamp color temperature, on/off control devices, mounting heights, mounting methods, pole foundation details, and pole protection means.
- (5) Manufacturer specification sheets, cut-sheets or other manufacturer-provided information for all existing and proposed luminaires, including designation as full-cutoff fixtures if applicable and/or required.
- (6) Photometric data and drawings to illustrate how light sources are shielded to prevent spillover lighting and how the aiming of lights will prevent light trespass and glare to drivers, pedestrians, adjacent properties, and the night sky.
- (7) An illustration showing lighting levels (illuminance in footcandles), uniformity ratios, lamp wattages, shades, deflectors, beam directions, and luminous areas for each source of light.
- (8) A photometric grid showing footcandle readings every ten feet within the property or site, and 25 feet beyond the property lines, plotted out to 0.0 footcandles. The map or grid shall be drawn to a scale acceptable to the city manager or designee, but in no instance to a scale smaller than one inch equals 100 feet. Iso-footcandle contour line style plans are also acceptable.
- (9) Landscaping information demonstrating that the site lighting and existing and proposed landscaping have been coordinated to minimize conflict between vegetation and intended light distribution, both initially and at vegetation maturity.
- (10) A description of adjacent properties that may be adversely impacted by the lighting. The lighting plan may require the inclusion of illuminance values on specific adjacent properties (e.g. adjacent properties with residential dwellings).
- (11) For parking structures, the lighting plan shall include the following additional information:
  - a. Minimum horizontal and vertical lighting intensities for each floor, floor ramps, entrance areas and stairways. Data may be requested for certain daylight periods.

- b. Uniformity ratios and maximum uniformity ratios for each floor, floor ramps, entrance areas and stairways. Data may be requested for certain daylight periods.
  - c. The cutoff angles on driver approach and retreat.
  - d. Any cavern effects from light shielding.
- (g) *Waivers.* During approval of a development plan, building permit or special use permit, the appropriate reviewing board, city manager or designee may permit a waiver for one or more of the requirements of this section. An applicant requesting a waiver shall submit a lighting plan as described in this section and the appropriate reviewing board, city manager or designee may have the request and lighting plan reviewed, at the applicant's expense, by a registered architect, engineer, or lighting professional holding a current lighting certification (LC) from the National Council on Qualifications for the Lighting Profession (NCQLP). The appropriate reviewing board, city manager or designee may permit a waiver only when an applicant demonstrates that:
- (1) The requested waiver is consistent with and promotes the purpose and intent of this section;
  - (2) The applicant otherwise meets the requirements of this section;
  - (3) A unique situation or hardship exists as a result of conditions peculiar to the property and not due to the actions of the applicant; and
  - (4) The requested waiver is necessary to ensure compatibility and consistency with the surrounding properties.

In granting a waiver, the appropriate reviewing board, city manager or designee may impose any reasonable conditions, restrictions or limitations to preserve and promote the purpose and intent of this section.

- (h) *Nonconforming luminaires and lighting.* Any luminaire or lighting installation lawfully existing on December 20, 2012, that does not conform with the requirements of this section shall be deemed legally nonconforming.
- (1) A nonconforming luminaire or lighting installation shall be made to conform with the requirements of this section when:
    - a. Minor corrective action, such as re-aiming or shielding, can achieve conformity with the applicable requirements of this section;
    - b. Fifty percent or more of the existing luminaires on a property are replaced;

- c. The number of existing luminaires on a property is increased by 50 percent or more; or
  - d. The city manager or designee deems the nonconforming luminaire or lighting installation a safety hazard.
- (2) A development that becomes nonconforming with this section due to a change in operational hours from daytime only to include nighttime operation shall be required to comply with these regulations within 90 days of the effective date of the change.

*(Ord. No. 120023, § 7, 12-20-12)*

**Editor's note—**

Prior to the reenactment of § 30-344 by Ord. No. 120023, Ord. No. 040238, § 1, adopted Sept. 27, 2004, repealed said section in its entirety. The former § 30-344 pertained to storage of flammable liquids and derived from Ord. No. 3777, § 1, adopted June 10, 1992.