



City of Yamhill
A small taste of Oregon

Planning Commission

Meeting Packet

April 15, 2024

6:30 pm

STAFF MEMORANDUM

TO: Yamhill Planning Commission
FROM: Walt Wendolowski, Contract City Planner
SUBJECT: Lighting Regulations
DATE: April 8, 2024

I. BACKGROUND

At the March 2024 meeting, the Commission discussed the issue of lighting regulations and directed staff to return with potential language for discussion.

II. CODE EXAMPLES

Attached to this memorandum are four documents for the Commission to review and consider. The following section review each attachment:

- A. Exhibit A (State Statute) – There are no state lighting requirements for private structures. However, ORS 455 includes provisions for establishing standards for new municipal buildings (post 2010). A municipal building must install shielded lighting. The rules permit alternatives if such lighting is not practicable. However, state law allows local jurisdictions to create lighting ordinances for their own purposes.
- B. Exhibit B (City of Port Orford) – This city’s building code contains lighting regulations. Enforcement therefore shifts from city administration to the building official. The regulations apply to all “construction, alteration, movement, enlargement, replacement, and installation of outdoor lighting” in the city and there is a time-limit for existing structures to comply. Specific requirements only apply to non-residential uses, public lighting, and streets/highways. There are no specific provisions for residential uses.
- C. Exhibit C (City of Sisters) – The Sisters regulations are similar to Port Orford’s in their detail but are part of their development code instead of building regulations. However, the regulations are inclusive as their goal is to preserve views of the night sky as they consider “dark skies” an economic resource (astrotourism). For this reason, the regulations apply to all uses, including all residential structures. Of particular interest is the curfew requirement for businesses with exemptions granted for 24-hour businesses and security lighting that must comply with specific Illuminating Engineering Society standards.
- D. Exhibit D (City of Dundee) – The Dundee regulations are more generalized, lacking some of the specific details found in the other examples. However, they do apply

to all land uses and the rules require lighting plans as part of any building permit or land use application. The regulations also grant flexibility in allowing alternate lighting materials. Finally, there are examples of the types of lights favored by the regulations.

III. DISCUSSION

- A. The above are a small sample of examples that are available for consideration but appear to represent the general approach to such regulations. If the City is considering such regulations, the Commission may wish to consider the following issues:
1. Purpose. Does the City simply wish to control commercial lighting or is there a larger purpose? For example, Sisters makes it clear the regulations' purpose is to preserve the night sky and sees it as an economic benefit. Yamhill will need to decide the ultimate purpose or focus of the regulations.
 2. Definitions. While not required, they are extremely helpful in understanding the regulations and staff recommends they be part of any set of regulations.
 3. Diagrams. In a similar vein, staff suggests diagrams be part of any regulations.
 4. Location of Regulations. The City has the option of establishing the rules as a building code regulation, a land use regulation, or a separate set of regulations in the Municipal Code. If the city considers the first option, it may need to reconsider its agreement with Yamhill County Building. As previously discussed, keeping the material out of Title 10 provides greater flexibility for the City.
 5. Inclusivity. Should the city limit regulations to commercial and public uses, or should they include residential development? This may be a function of the purpose of the regulations.
 6. Time Limit and Retrofitting. The examples require existing buildings and improvements to comply with the regulations by a certain date; e.g., Dundee is 10 years. Should the regulations require compliance with regulations by a certain date?
 7. Enforcement. Who is responsible for enforcing the regulations? Not sure if this is feasible if lighting regulations are part of the building program. Ultimately the city is responsible, and it is important to consider enforcement capabilities.
- B. Staff will proceed with the creation of draft regulations based on the Commission's discussion and guidance.

Exhibit A

ORS 455.573

Outdoor shielded lighting fixtures

- (1) Public buildings constructed on or after January 1, 2010, or on which outdoor lighting fixtures attached to the building are replaced on or after January 1, 2010, shall have installed to the greatest practicable extent shielded lighting fixtures for outdoor use.
- (2) Notwithstanding [ORS 455.020 \(Purpose\)](#) and [455.040 \(State building code preempts local ordinances and rules\)](#), a municipality may enact an ordinance or resolution that meets or exceeds the requirements established under subsection (1) of this section.
- (3) If a municipality determines that the use of shielded lighting is not practical for a public building because of the historical character of the building or for other reasons, the municipality may waive the requirements for the use of shielded lighting established under this section.
- (4) As used in this section, “shielded lighting” means a lighting fixture that has a covering or is designed to ensure that direct or indirect light rays emitted from the fixture are projected below a horizontal plane running through the lowest light-emitting point of the fixture. [2009 c.588 §6]

Exhibit B City of Port Orford, OR

Chapter 15.17 **OUTDOOR LIGHTING CODE**

§ 15.17.010 **Title.**

This chapter, together with the amendments codified in this chapter, shall be known and may be cited as the City of Port Orford Outdoor Lighting Code and will be referred to herein as "this code".

§ 15.17.020 **Purpose.**

The purposes of these lighting standards are: conserving energy to the greatest extent possible; promoting traffic and pedestrian safety; minimizing glare, light trespass, obtrusive lighting, light pollution, and sky glow; and preserving the dark sky of the natural nighttime environment.

It is the intent of this code to control the obtrusive aspects of excessive and careless outdoor lighting while preserving, protecting, and enhancing the lawful nighttime use and enjoyment of any and all property; to preserve the quality of life for residents of the City and enhance the tourist experience for visitors; and to provide assistance to property owners and occupants in bringing nonconforming lighting into compliance with this code

§ 15.17.030 **Definitions.**

In the case where a definition of a term is found to be in conflict with a definition or term in any other City ordinance or regulation, the more restrictive definition shall apply.

"Bulb" means the component of the fixture that produces light.

"Canopy" means a covered structure open to the elements, with at least one side open for pedestrian and/or vehicular access.

"City" means the City of Port Orford, Curry County, Oregon, USA.

"Development project" for the purposes of Chapter **15.17** means any residential, commercial, industrial, or mixed use land use plan which is submitted to the Jurisdiction for approval or for permit.

"Direct illumination" means illumination resulting from light emitted directly from a lamp or fixture, not light diffused through translucent materials or reflected from other surfaces such as the ground or building faces.

"Eave" means an area of a roof which overhangs the walls.

"Excessive lighting" means lighting that exceeds the amount that is needed to perform a visual task at night or required for public safety.

"Fixture" means the complete lighting assembly that houses the lamp or lamps together with everything required to control and distribute the light output. The terms "fixture" and "luminaire" may be used interchangeably in this code.

"Foot candle" means the imperial unit of measurement used to quantify the amount of light falling on a surface. One foot-candle is the illuminance produced by a candle on a surface one foot square from a distance of one foot. See also "lux."

"Flood or spotlight" means any light fixture or lamp that incorporates a reflector, a refractor, or a prismatic lens to concentrate the light output into a directed beam in a particular direction.

"Full cutoff" means zero radiation of light above the horizontal plane or a lighting fixture designed, constructed, or installed, so that the lighting elements (i.e., lamps or bulbs) are not exposed to normal view by motorists or pedestrians, or from adjacent or nearby properties.

"Fully shielded" means a fixture that allows no emission of light above the horizontal plane. For the purpose of this chapter, full cutoff fixtures are considered fully shielded.

"Glare" means stray unshielded light in the field of view that is brighter than the level to which the eyes are adapted, and may result in: (a) nuisance or annoyance such as light shining into a window; (b) discomfort causing squinting of the eyes; (c) disabling vision by reducing the ability of the eyes to see into shadows; (d) reduced visual acuity.

"Installed" means set up or put in place.

"Kelvin" (K) means the color temperature scale used to describe the visual characteristics of various light sources. It is measured in degrees on a Kelvin scale (K) and typically ranges from 2,000K (warm) to 5,000K (cool).

"Lamp" See "bulb."

"Light pollution" means any deleterious effect of artificial light, including, but not limited to, glare, light trespass, sky glow, excessive or unnecessary lighting, or any artificial light that might be disruptive to the natural environment.

"Light trespass" means light falling from one property onto an adjacent or nearby property, or onto the public right-of-way.

"Lumen" means the international unit of measurement used to quantify the amount of light produced by a lamp or emitted from a fixture. For the purposes of this code, measurements in lumens shall refer to "initial lamp lumens" as rated by the manufacturer when the lamp is new, as listed on the packaging.

"Luminaire" see "fixture."

"Lux" means the international unit used to measure the amount of light striking a surface. If this unit is used, please divide by 10.76 to convert to foot candles.

"Motion sensor" means a device that detects physical movement within the sensors local environment and activates a light that is extinguished by a timer.

"Mounting height" means the vertical distance from the existing grade or average elevation of the finished grade of the surface being illuminated to the lowest light emitting point of the fixture.

"Nonessential lighting" means lighting which is unnecessary for pedestrian passage or other visual tasks and therefore is not generally useful (i.e., decorative, architectural, and landscape lighting). This includes lighting intended for a specific task or purpose when that task or purpose is not being actively performed, such as parking lot illumination.

"Opaque" means any material that prevents light from passing through (i.e., impenetrable to light).

"Outdoor lighting" means temporary or permanent lighting equipment installed outside the building envelope, whether attached to poles, building structures, the earth, or any other location. For the purpose and intent of this code, fixtures that are installed indoors and are intended to light something outdoors are considered outdoor lighting.

"Replacement" means the installation of a new lighting fixture or luminaire in place of a pre-existing fixture. Replacement does not mean the changing of light bulbs or lamps with same or lower output. All replacements must comply or continue to comply with this chapter.

"Seasonal lighting" means temporary lighting installed and operated in connection with holidays, traditions, or local festivals.

"Shield or shielding" means an opaque material or device that is attached to a lighting fixture to prevent light from being emitted in certain directions.

"Sky glow" means the brightening of the nighttime sky by diffuse, scattered light from artificial light sources reducing the ability to view features of the night sky.

"Street lighting" means permanent outdoor lighting that is owned and maintained by a municipality or other public agency or private enterprise and is specifically intended to illuminate streets and highways for automotive vehicles and may also incidentally light sidewalks and adjacent private property.

"Temporary lighting" means lighting which is intended for uses which by their nature are of limited duration, such as civic events or construction projects, and will not be used for more than one 30-day period within a calendar year, with one 30-day extension.

"Unshielded" means lighting fixtures capable of emitting light in any direction.

"Uplighted" means a lighting fixture usually installed on the ground or permanently mounted to an architectural element, tree, or other structure that has the light from the fixture directed in a contained pattern above the horizontal plane to illuminate an adjacent or nearby building element, shrub, tree, or other landscaping.

§ 15.17.040 **Authority.**

The City of Port Orford and such designees as shall be appointed by City Council shall have the authority to require new lighting and existing lighting meet the provisions of this code.

§ 15.17.050 **Applicability.**

A. General. The provisions of this code apply to the construction, alteration, movement, enlargement, replacement, and installation of outdoor lighting throughout the City of Port Orford.

B. Application of Code. The standards and requirements of this code are applied in all zones of the City of Port Orford as follows:

1. All existing lighting that fails to comply with this code at the time of its enactment shall mitigate the non-conformance through shielding or capping of the offending light within 180 days of the effective date of this chapter.

2. If mitigation cannot bring the offending lights into complete compliance with this chapter, the lights must be capped, moved, relocated, or replaced resulting in compliance within five years of the effective date of this chapter.

3. Any construction or development which requires permitting of any kind, must be in compliance with this chapter at the time the application for the permit is filed. The City of Port Orford will not sign, nor administer, any permitting process without proof of compliance.

C. Other Laws. Where any provision of Federal, State, County, or City statutes, codes or laws conflicts with any provision of this code, the most restrictive shall govern. Where there is a conflict between the general requirements and a specific requirement, the specific requirement shall apply unless otherwise regulated by law.

§ 15.17.060 **General requirements.**

A. The maximum lumens of any lamp shall not exceed 1,700 lumens.

B. The color temperature of all lamps shall not exceed 2,700K.

C. Lighting fixtures shall be fully shielded or full cutoff fixtures.

D. Direct or indirect illumination shall not exceed 0.2 foot candles upon abutting lots in residential use as measured at the property line.

§ 15.17.070 **Nonresidential lighting requirements.**

A. Canopy and Eave Lighting. Lighting levels under eaves and canopies shall be adequate to facilitate the activities taking place in such locations.

1. Lighting fixtures mounted on canopies and/or eaves shall be designed, constructed, or installed so the lens cover is recessed from the bottom surface (ceiling) of the canopy or shielded by the fixture or the edge of the canopy/eave. Light shall be constrained to no more than 85° from vertical.

2. Lights shall not be mounted on the top or sides (fascias) of the canopy/eave and the sides (fascias) of the canopy/eave shall not be illuminated.

B. Exterior Display and Sales Areas. Lighting levels on exterior display and/or sales areas shall be adequate to facilitate the activities taking place in these locations. The site plan shall designate areas to be considered display/sales areas and areas to be used as parking. These designations must be approved by the City.

1. Each area designated as an exterior display and/or sales area shall be considered separately.

2. Lighting fixtures shall be full cut-off fixtures.

3. Fixtures shall be mounted no more than 20 feet above grade.

4. Fixtures shall not create glare on adjacent streets, highways, or properties, and shall not create light trespass on nearby and abutting properties.

5. Exterior display/sales areas shall be illuminated only when the establishment is open for business unless motion sensing devices are installed.

C. Parking Areas. Parking area lighting shall provide the minimum lighting necessary to ensure adequate vision in parking areas, and to not cause glare or direct illumination onto adjacent properties or streets.

1. All lighting fixtures serving parking areas shall be full cut-off fixtures.

D. Security Lighting

1. All security lighting fixtures shall be fully shielded, comply with lighting standards, and be directed only onto the designated area, and not illuminate other areas.

2. Sensor activated security lights shall be automatically turned off within five minutes after being activated if no additional motion, light, or infrared radiation is detected.

3. Residential security lights shall not be installed or attached to public utility or streetlight poles.

E. Lighted Signs. All lighted signs must comply with general requirements of this chapter. Noncompliant signs must be turned off between 8pm and 6am.

§ 15.17.080**Public lighting standards.**

The following additional standards shall apply to all public and semi-public uses:

A. All lighting fixtures shall be full cut-off fixtures.

B. Where illumination is provided, lighting of parks or open space shall have a maximum mounting height of 20 feet, minimum illumination level of 0.3 foot-candles, maximum illumination level of 1.3 foot-candles, and color temperature not to exceed 2,700K.

1. The decision authority, in consultation with the Parks and Recreation Commission and the Public Works Director, shall determine whether off-street walking and bike trails built in accordance with the Parks and Recreation Master Plan, are required to be illuminated in accordance with the standards above.

C. Rustic trails built in accordance with the Parks and Recreation Master Plan shall not be illuminated.

D. The following shall apply to lighting of pedestrian walkways in nonresidential zones and multifamily developments:

1. If pedestrian walkways are adjacent to illuminated parking areas, public rights-of-way or common open space this standard shall be met without the need for additional lighting if the ambient lighting meets the illumination levels specified in Section 15.17.080.B, above.

2. Pedestrian walkways between parking areas and buildings or adjacent to dwellings and off street multi-purpose pathways shall use bollard lights with a minimum illumination level of 0.3 footcandles, a maximum illumination level of 1.2 foot-candles, and a maximum color temperature of 2,700K.

3. The decision authority, in consultation with the Parks and Recreation Commission and the Public Works Director, may require off-street walk and bike trails built within or adjacent to a multifamily development in accordance with the Parks and Recreation Master Plan to be illuminated in accordance with the standards of Section 15.17.080.B, above.

4. Rustic trails built within or adjacent to a multifamily development in accordance with the Parks and Recreation Master Plan shall not be illuminated.

§ 15.17.090**Street and highway lighting standards.**

A. All lighting fixtures shall be level mounted and 85° full cutoff type fixtures.

B. Maximum color temperature shall not exceed 2,700K.

C. Luminaires shall be mounted at a height of 30 feet or less.

D. All street and highway lights shall meet the following standards for average horizontal illuminance:

Zones	Average Horizontal Illuminance in Footcandles
Residential Zones	0.2-1.2 fc
Hwy 101, including intersections and crosswalks	0.9-1.2 fc

§ 15.17.100 **Prohibitions.**

Any light source that does not meet the standards and requirements of this chapter is prohibited. In addition to nonconforming lighting, the following lighting is specifically prohibited:

A. Laser Light Source. The use of laser source light or any similar high intensity light for outdoor advertising or entertainment is prohibited.

B. Searchlights and Strobe Lights. The use of searchlights or strobe lights for purposes other than public safety or emergencies is prohibited.

C. Blinking and Flashing Lights. Any lighting that is flashing, blinking, rotating, chasing, or rapidly changing in color or intensity is prohibited, except for traffic control fixtures, those used for public safety or emergencies, and seasonal holiday lights.

D. Externally Affixed Neon Lighting. Externally affixed neon lighting is prohibited except as a trim element that surrounds windows, doors, or building edges when located on building façades that face street frontages. Such lighting must not be located more than 15 feet from finished grade and must not be used to define a building roof-line or to attract business; and such lighting must not include flashing, intermittent or rotating lights. Notwithstanding the provisions of this subsection, all neon lighting associated with signs must meet the requirements of the City of Port Orford Sign Code.

E. Bottom Mounted Sign Lighting. Sign lighting attached to the sign structure is prohibited.

F. High Intensity Lamps and Fixtures. The use, installation, sale, offer for sale, lease, or purchase of any high intensity lamp for use as outdoor lighting is prohibited.

G. Lighting within the public right-of-way or easement when the purpose of the fixture is to illuminate areas outside the public right-of-way or easement

§ 15.17.110 **Exemptions.**

The following are not regulated by this chapter:

A. Lighting for public monuments and statuary. No exemption shall apply to light directed upward.

B. Temporary lighting for theatrical, television, performance areas, and construction sites.

C. Holiday lighting during the months of November, December, and January provided such lighting does not create glare on adjacent streets or adjacent or nearby properties.

D. Lighting that is only used under emergency conditions.

E. Low voltage landscape lighting not exceeding 200 lumens per fixture and aimed so that glare is not visible from adjacent properties.

F. Lighting specified or identified in a temporary use permit.

G. Lighting required by Federal or State laws or regulations.

§ 15.17.120 **Acceptance.**

The applicant shall, by signing the permit application, agree to comply with the provisions of this chapter, a copy of which shall be provided with the application packet.

§ 15.17.130 **Enforcement, abatement, and penalties.**

Lighting disputes should be settled between the parties whenever possible. Education and voluntary compliance are encouraged, however, whenever such disputes cannot be resolved between parties, a citizen may lodge a complaint at City Hall. Any peace officer, as defined by ORS 161.015, the Director of the Public Works Department, or any other individual who may be designated by City Council shall enforce this chapter.

A. Unlawful Acts. It shall be unlawful to erect, construct, alter, extend, repair, move, install, or use any outdoor lighting in violation of this chapter, or in violation of a detail statement or a plan approved hereunder, or in violation of a permit issued under the provisions of this chapter.

B. Notification and Order. The City Council, the Director of the Public Works Department, or any other individual who may be designated by City Council shall verify the facts of the complaint, and if the complaint is deemed legitimate, issue a notice of violation and order for abatement. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation. The property owner or authorized agent of the owner shall comply with the requirements of the notice of violation within the time period given, not to exceed 30 days.

C. Penalty. Any violation of this chapter, or any portion of this chapter not abated within the specified time period, shall be considered a Class C violation.

Exhibit C City of Sisters

2.15.2400 Dark Skies Standards

A. Purpose. The purpose of the Dark Skies Standards is to utilize responsible lighting practices to:

1. Protect the valuable resource of dark night skies.
2. Preserve opportunities for viewing stars, planets, and other astronomical features.
3. Promote human health and limit negative impacts from light at night.
4. Provide safely and responsibly lit areas for citizens and visitors.
5. Protect ecological wellness and support wildlife needs for darkness.
6. Reduce energy consumption, emissions, and costs.
7. Increase opportunities for tourism, such as astrotourism.

B. Guiding Principles. The Dark Skies Standards are based on the following guiding principles and are not intended to be mandatory approval criteria:

1. Useful. Light should only be used if needed. All light should have a clear purpose, with consideration about how light will impact neighbors, wildlife, and their habitats.
2. Targeted. Light fixtures should be directed so light falls only where it is needed. Shielding and careful aiming of the light beam to target its direction downward should be employed to prevent spill beyond where lighting is needed.
3. Low Level. Lights should be no brighter than necessary, using the lowest light level possible. Attention should be given to reflective surfaces that will amplify lights and direct light into the sky or neighboring properties.
4. Controlled. Lighting should only occur when it is needed. Controls such as timers or motion detectors should be employed to ensure that light is available when it is needed, dimmed when possible and turned off when not needed.
5. Color. Warmer color lights should be used where possible.

C. Definitions.

1. ANSI: American National Standards Institute.
2. Correlated Color Temperature (CCT): A specification of the color appearance of the light emitted by a lamp, relating its color to the color of light from a reference source when heated to a particular temperature, measured in kelvins (K).
3. Dark Skies Standards: The provisions of this Section SDC [2.15.2400](#).
4. Downcast: Lighting that is installed such that its light is directed only down toward the ground and in which the fixture shield is parallel with the level ground (see Figure 1).
5. Effective Date: February 10, 2024.
6. Foot-candle: A measurement of light intensity. One foot-candle is defined as enough light to saturate a surface having an area of one square foot with one lumen of light.

7. Fully shielded: A light fixture that allows no direct emission of light above a horizontal plane passing through the lowest light-emitting part of the light fixture (see Figure 1).

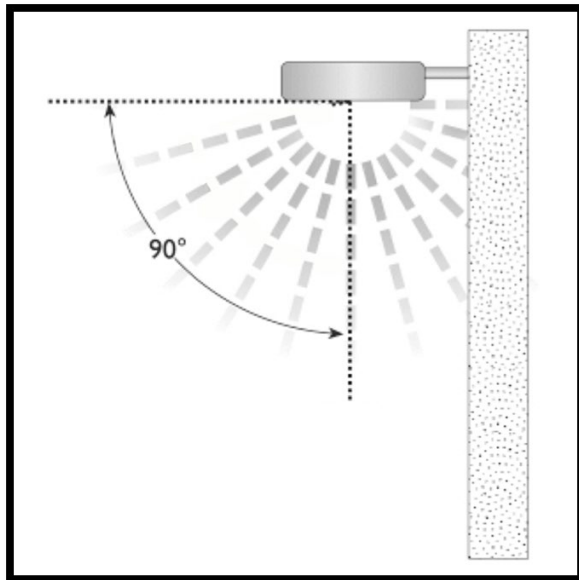


Figure 1.

8. Glare: The sensation produced by luminances within the visual field that are sufficiently greater than the luminance to which the eyes are adapted to cause annoyance, discomfort, or loss in visual performance or visibility.

9. IES: Illuminating Engineering Society.

10. Illuminance: Describes the amount of light falling onto or illuminating a given surface.

11. Kelvin: A measurement unit (abbreviated “K”) used to describe the correlated color temperature of a light source. This is the specification that gives a description of the “warmth” or “coolness” of a light source.

12. Lamp: The specific component of a light fixture that emits light.

13. Laser Source: Any lamp employing light amplification by stimulated emission of radiation to produce highly monochromatic and coherent light.

14. Light Trespass: A condition in which light emitted directly by a light fixture shines beyond the property lines of the property where the fixture is installed. This means that a person standing on any other property sees the light-emitting source directly. Light trespass does not include indirect reflection or scattering of light from mounting hardware or any other surfaces.

15. Light Fixture: A device that includes the lamp, the ballast or driver, internal wiring, reflectors, lens and any additional components required to deliver light. It does not include the pole or other mounting surface.

16. Low Lumen: Describes a light fixture whose total light output does not exceed 300 lumens.

17. Lumen: The International System of Units (SI) measure of luminous flux equal to the amount of light emitted per second into a unit solid angle of one steradian from a uniform source of one candela.

18. **Luminance:** The amount of light that passes through, is emitted, or reflected, from a particular area, and that falls within a given solid angle.
19. **Net acre:** The portion of any property that is developed, consisting of structures and/or hardscape. The net acreage of a property is the gross acreage of that parcel less any acres that are considered undeveloped.
20. **Searchlight:** A light fixture generating a very intense beam of light consisting of parallel rays that can be oriented in any particular direction often used to draw the attention of the public to a place or event.
21. **String Lights:** Electric lights on a wire, string, or cable used as decoration or for outdoor lighting.
22. **Warm Color:** A white light source with a correlated color temperature less than or equal to 3,000 Kelvins.
23. **Uplighting:** Any lighting that is directed in such a manner as to shine light above the horizontal plane.

D. **Applicability.** Except as otherwise exempted by the SDC, the Dark Skies Standards are generally applicable to all new lighting installed on or after the Effective Date and therefore apply even if proposed lighting does not require the filing of an application or the issuance of a permit of approval (or even if no development occurs, see, e.g., subsection (E)(4) of this section). The Dark Skies Standards are in addition to applicable provisions of the Building Code and Electrical Code, and other provisions of the SDC including, without limitation, Chapter [3.4](#) SDC (Signs).

E. **Requirements.** All non-exempt outdoor lighting fixtures shall meet the following requirements:

1. **Downcast.** Lighting shall be downcast. Uplighting is prohibited.
2. **Fully Shielded.** Unless subject to an exception, all light fixtures shall be fully shielded and otherwise designed and installed to prevent light trespass and glare.
3. **Maximum Brightness.** To prevent over-lighting, lighting shall not exceed the following maximum lamp brightness:
 - a. **Single Family Residential.** No individual light fixture may exceed 850 lumens and the entire property may not exceed 4,000 lumens in total or 6,000 lumens in total if the property contains an accessory dwelling.
 - b. **Duplex and Triplex.** No individual lighting fixture may exceed 850 lumens and the entire property shall not exceed 6,000 lumens in total for a duplex or 8,000 lumens for a triplex.
 - c. **Multi-Family Residential.** No individual light fixture may exceed 850 lumens and the entire property may not exceed 20,000 lumens per net acre.
 - d. **Mixed Use and Non-Residential.** No individual light fixture may exceed 1,500 lumens and the entire property may not exceed 25,000 lumens for the initial net acre plus 2,000 lumens for each additional net acre.
 - e. **Publicly Owned Lighting.** Public street lighting shall adhere to the standards contained in the current edition of IES Recommended Practice 8 (“Design of Roadway Facility Lighting”).
4. **Parking Lot Lighting.** Parking lot lighting shall be downcast, fully shielded and meet the maximum brightness in accordance with recommended minimum value of

the IES Standard RP-20-1 “Lighting for Parking Facilities” and shall not exceed a threshold of allowable light trespass of 0.1 foot-candle at the property line.

5. Curfew. In all non-residential zones, all exterior lighting shall be extinguished either by 11 P.M.; or within one (1) hour of the close of normal business hours; or at the conclusion of usual operations, whichever occurs later. The use of such lighting may resume one (1) hour before sunrise (or opening of business for the property, whichever is earlier) of the following day. Businesses whose normal operating hours are twenty-four (24) hours per day are exempt from this provision. Security lighting in accordance with the current edition of IES Guide 1 (“Guide for Security Lighting for People, Property and Critical Infrastructure”) is permitted during curfew.

6. Color. The Correlated Color Temperature (CCT) shall not exceed 3,000 Kelvins.

7. Publicly Owned Lighting. Publicly owned lighting (including streetlights located in the public right-of-way) shall be fully shielded, comply with the color limits in subsection (E)(6) of this section and meet the brightness limits in subsection (E)(3)(e) of this section. They are encouraged, but not required, to comply with the light trespass requirement. Notwithstanding the foregoing, all outdoor light fixtures on property (other than public right-of-way) or buildings that are owned and operated by the City of Sisters must be fully shielded unless exempt under subsection (H) of this section and adaptive controls and curfews must be employed.

F. Signage. Notwithstanding anything in Chapter [3.4](#) SDC to the contrary, lighting of signage must meet the following requirements:

1. Except for businesses whose normal operating hours are twenty-four (24) hours per day, sign illumination must be extinguished completely one (1) hour after sunset (or at close of business for the property, whichever is later), and remain off until one (1) hour before sunrise (or opening of business for the property, whichever is earlier);
2. The illuminated surface area of an individual sign cannot exceed 200 square feet; and
3. Lighting must be downcast and fully shielded.

G. Prohibitions.

1. Laser Source Light. The use of laser source light or any similar high intensity light is prohibited if it projects beyond the property lines of the property on which it is located.
2. Searchlights. The operation of searchlights for purposes other than public safety or emergencies is prohibited.
3. Upward-pointing light fixtures. All light fixtures must be downcast including illumination of signs, landscaping, flags (except the U.S. and state flag, if flown on the same flagpole), and other items.

H. Exemptions. Notwithstanding anything herein to the contrary, the following forms of lighting are exempt from the Dark Skies Standards.

1. Non-conforming lighting subject to subsection (I) of this section.
2. Airport operations lighting and aircraft navigational beacons required by the Federal or State Law are exempt from these provisions. All other airport outdoor lighting must conform with this ordinance.

3. String Lights, subject to the following standards:
 - a. String lights may be installed in either residential or non-residential zones.
 - b. String lights shall not be used to solely illuminate or decorate landscaping features.
 - c. All installations of string lighting shall employ lamps that do not flash or flicker and whose individual output does not exceed fifty (50) lumens.
 - d. String lights shall consist only of white light sources with a CCT not to exceed three thousand (3,000) Kelvin.
 - e. String lights are exempt from the downcast and full shielding requirements of subsection (E) of this section; it should be noted, however, the installation and operation of string lights in accordance with these provisions may still result in civil nuisance claims.
 - f. In non-residential zones, string lights may be installed in outdoor dining and entertainment areas only and shall not be used to delineate or outline the edges of a building or for any other purpose. String lighting must be completely extinguished by the end of normal business hours. Permanent string lighting installations shall be subject to inclusion in the total lumen allowance calculation.
 - g. In residential zones, string lighting may be used to delineate or outline the edges of patios, porches, decks and similar structures. String lighting must be completely extinguished by 11 P.M.
 - h. The aforementioned limitations do not apply to holiday lighting.
4. Decorative Lighting.
 - a. Holiday lighting shall be allowed for no more than the period between November 1 and February 15.
 - b. Decorative low lumen lights are permitted only in residential districts.
 - c. Low lumen landscape lighting is permitted, but such lighting shall be shielded in such a way as to prevent glare and light trespass. Light fixtures shall be mounted no more than three (3) feet above grade and used solely for landscape delineation rather than area lighting.
5. Special events that require the use of temporary outdoor light fixtures are exempt if the exemption does not exceed five (5) days for a particular property in any calendar year; however, permanent installations special event venues must conform to the Dark Skies Standards.
6. Lighting for U.S. flags properly displayed (consistent with the U.S. Flag Code).
7. Temporary construction lighting necessary for an allowed use.
8. Lighting under the jurisdiction of the Oregon Department of Transportation.
9. Athletic field lighting meeting the following conditions:
 - a. Current Illuminating Engineering Society (IES) lighting guidelines are followed according to the appropriate class of play.
 - b. Field lighting is provided exclusively for illumination of the surface of play and viewing stands and not for any other applications.
 - c. Illuminance levels must be adjustable based on the task (e.g., active play vs. field maintenance).
 - d. Off-site impacts of the lighting will be limited to the greatest practical extent possible.

- e. Lights must be extinguished by 10:00 pm local time or one hour after the end of play, whichever is later.
- f. Timers must be installed to prevent lights being left on accidentally overnight.

I. Non-Conforming Lighting. Outdoor light fixtures lawfully installed and operable prior to the Effective Date are exempt from all such requirements, except as follows:

- 1. All publicly owned lighting must be brought into conformance within five (5) years after the Effective Date.
- 2. All privately owned lighting must be brought into conformance within five (5) years after the Effective Date.
- 3. Notwithstanding anything herein to the contrary, any replacement or modification to nonconforming outdoor lighting must comply with the Dark Skies Standards.
- 4. Notwithstanding anything herein to the contrary, all non-conforming outdoor lighting must be brought into compliance as a condition of land use approval involving a Conditional Use or a Site Plan Review.

J. Lighting Plan Required. All applications for Site Plan Review and/or building permits must include lighting plans showing location, type, height, color temperature, lumen output and amount of all proposed and existing light fixtures, along with light fixture cut sheets from the manufacturer. The applicant must provide enough information to demonstrate compliance with the Dark Skies Standards. The Community Development Director may request any additional information necessary or appropriate to evaluate compliance with the Dark Skies Standards.

Exhibit D City of Dundee

17.303.010 Purpose.

The purposes of the exterior lighting standards are to:

- A. Provide adequate light for safety and security;
- B. Promote efficient and cost effective lighting and to conserve energy;
- C. Minimize light pollution, glare, and nuisance light sources;
- D. Encourage quality lighting design, especially light fixture shielding;
- E. Provide an environmentally sensitive nighttime environment that protects and reclaims the ability to view the night sky.

17.303.020 Permitted lighting and design standards.

A. Scope. These standards shall apply to all exterior lighting in all zones, with the exception of:

- 1. Lighting installed in any zone prior to March 1, 2011.
- 2. Lighting required by federal or state law that cannot meet the standards of this chapter, or used by public safety personnel.
- 3. Fossil Fuel Light. Fossil fuel light produced directly or indirectly by the combustion of a natural gas or other utility-type fossil fuels is exempt from the provisions of these standards. All fossil fuel lighting shall include an opaque top.

B. Light Trespass. The luminance of any light shall not create a private nuisance.

C. Fully Shielded Lighting. Luminaires with light output greater than 1,000 lumens shall be fully shielded or recessed. With the exception of uplighting, the shielding shall be angled; provided, that no light is directed above a 25-degree angle measured from the vertical line from the center of the light extended to the ground.

D. Partially Shielded Lighting. Luminaires with light output between 450 and 1,000 lumens shall be partially shielded or recessed.

E. Unshielded Lighting. The following types of luminaires may be left unshielded under certain conditions:

- 1. Decorative Lighting. Luminaires shall be limited to small individual bulbs on a string where spacing of bulbs is not closer than three inches and where output per bulb is no greater than 50 lumens.
- 2. Holiday Period Lighting. During the holiday period blinking, flashing, moving, revolving, flickering, changing intensity or color, and chase lights are permitted. The light output per luminaire shall not exceed 50 lumens, and shall be spaced a minimum of three inches apart.

3. Motion Activated Lighting. Luminaires may be left unshielded if all of the following conditions are met:
 - a. The light output does not exceed 1,800 lumens; and
 - b. The light will go on only when motion activated; and
 - c. The light goes off within 10 minutes of motion cessation; and
 - d. The light is not activated by any movement or activity located on adjacent property except by express permission of the adjacent property owner(s).
4. Luminaires, except sign lighting, with light output less than 450 lumens.

F. Uplighting. Uplighting may illuminate landscaping, structures, flags, and signs under the following conditions:

1. Landscaping Uplighting. The light output for landscaping uplight shall not exceed 900 lumens, and shall be directed solely onto the landscaping. The lighting shall be shielded. The full beam width shall not exceed 40 degrees.
2. Structure Uplighting. The light output for structure uplight shall not exceed 900 lumens. The uplighting shall be directed solely onto the structure. The lighting shall be shielded. The full beam width shall not exceed 40 degrees.
3. Flag Uplighting. The light output for flag uplight shall not exceed 3,500 lumens. All uplighting shall be shielded. A spotlight shall be used for flag uplighting. The full beam width shall not exceed the width of the flag.
4. Sign Uplighting. The light output for sign uplight shall not exceed 900 lumens. The uplighting shall be directed solely onto the sign. The lighting shall be shielded. The full beam width shall not exceed the width of the sign.

G. Minimum Requirements. To improve public safety, the illuminance levels for parking lots, sidewalks, and other walkways shall meet the minimum recommended illuminance levels and shall not exceed the maximum recommended illuminance levels listed in the most current IESNA recommended practices. (See references: IESNA RP-33-99, Lighting for Exterior Environments; IESNA RP-20-98, Lighting for Parking Facilities; IESNA DG 5-94, Recommended Lighting for Walkways and Class I Bikeways. See PGE Dark Sky Friendly Fixture Recommendations.)

H. Height Limit. Any freestanding luminaire shall not exceed 25 feet in height, with the exception of street lights. Any luminaire attached to a building shall not exceed the height limit of that zone. There shall be no height limit for holiday period lighting or decorative lighting.

I. Equivalent Materials. The provisions of this section are not intended to prevent the use of any design, material or method of installation not specifically prohibited by this chapter, provided any such alternate has been approved by the city administrator or his/her designee. The city administrator or his/her designee may approve any such alternate if the proposed design, materials or methods provide an equivalent or superior method of satisfying the standards in this section.

17.303.030 Prohibited lighting.

The following types of lighting are prohibited in all zones:

- A. Lighting that may be confused with or construed as a traffic control device.
- B. Search lights, laser source lights or any similar high intensity light.
- C. Blinking, flashing, moving, revolving, flickering, changing intensity or color, and chase lights that are not part of a holiday period lighting display.
- D. Low pressure sodium lamps.
- E. Mercury vapor luminaire or lamps.
- F. Drop (sag) lens luminaire.

17.303.040 Approval procedures.

A. Lighting Plan Required. Any building permit, Type I, Type II, or Type III application where lighting is proposed shall include lighting plans in order to verify that new and existing lighting conforms to the provisions of these standards. The lighting plan shall include:

1. A site plan showing the location of all building and building heights, parking, and pedestrian areas on the lot or parcel;
2. The location and height above grade of all proposed and existing light fixtures on the subject property;
3. The type, initial lumen rating, and shielding of each lamp source;
4. A photometric plan showing the footcandle level at the property line, and a copy of the manufacturer's catalog information sheet. A photometric plan is not required for a building permit application for single- and two-family dwellings;
5. Control descriptions including type of controls (timer, motion sensor, time clock, etc.), the light fixtures to be controlled by each type, and control schedule when required.

B. Any lighting that is not part of a building permit, Type I, Type II, or Type III application shall meet the requirements of this chapter. However, no lighting plan is required to be submitted to the city for approval.

17.303.050 Variance procedures.

All variance requests regarding the standards of this chapter shall follow the procedures contained in Chapter [17.406](#) DMC.

17.303.060 Nonconforming lighting.

Exterior lighting installed prior to March 1, 2011, does not need to conform to the standards of this chapter until such time as the light fixture is replaced or March 1, 2021, whichever occurs first.

