



CITY OF TROUTDALE

"Gateway to the Columbia River Gorge"

Memo

SUBJECT

Municipal Code Chapter 8.26 – Outdoor Lighting Standards

DATE

September 28, 2016

TO

Planning Commission

FROM

Chris Dampen,
Planning Director

ATTACHMENTS

A. Current Municipal
Code Language

B. Proposed Municipal
Code Language edits.

C. Proposed Areas in
City for Increasing
Height Restrictions

During the public comment period at the City Council meeting on September 13, 2016, the Port of Portland submitted a request that the City look into changing outdoor lighting standards, with specific reference to the height allowance of light fixtures on private property.

Currently, Code section 8.26.040 restricts light fixtures throughout the City to no more than 25 feet in height. More specific standards for non-residential developments abutting residential zoning districts further reduce the height to 15 feet. There are exemptions for recreational facilities (athletic fields). Although lighting standards are in the Municipal Code, there is a variance process from this requirement, and it involves a Planning Commission review and decision (Code section 8.26.070).

The specific request made by the Port is **increasing the height restriction** for industrial properties, which would include both Port-owned and other industrial properties in the surrounding area. The Port suggested that increasing the cap to 40 or 50 feet from the current 25 feet would satisfy most current or prospective industrial tenants. In particular, trucking and logistics-oriented businesses with large surface area parking, loading, staging, and storage areas would benefit from a higher fixture and more usable area due to fewer light fixtures required on site.

Staff is in general support of the Port's request, as it sees that amending the standards would:

- allow greater flexibility for lighting plans in new development
- remove multiple non-conformity situations on existing development
- reduce the number of instances when lighting plans would require variance approvals

Staff would recommend increasing the height restriction to 50 feet. Staff also recommends that light fixtures above 50 feet (similar to the ones at the FedEx Ground facility) should still require a variance.

Staff is also recommending an increase of height allowances for freeway-oriented General Commercial properties located to the north of the Union Pacific Railroad (UPRR) right-of-way. This particular area presently has several properties in non-conformance; specifically those properties with truck parking. Some of these properties have requested recently to repair, upgrade, or replace existing fixtures and are finding to their frustration that they need to comply with the 25 foot requirement or ask for a variance.

Staff would not recommend increasing height restrictions for other areas of the City, believing that the 25 foot threshold is a sufficient standard for smaller properties, and that the 15 foot threshold is respectful to residential properties adjacent to non-residential development.

Chapter 8.26 - OUTDOOR LIGHTING

Sections:

8.26.005 - Title.

This chapter shall be known as "The City of Troutdale Outdoor Lighting Ordinance."

(Ord. 712 § 1, Exh. A (part), 2001)

8.26.010 - Purpose and intent.

The purpose of this chapter is to affirm the right of citizens in Troutdale, Oregon, to illuminate residential, commercial and public areas with outdoor light fixtures appropriate to the need, and to confine lighting to the property from which it is generated to the greatest extent possible. Furthermore, the purpose of this chapter is to affirm the general need for well-lighted streets and that such illumination by nature cannot be confined to the property from which it is generated.

(Ord. 712 § 1, Exh. A (part), 2001)

8.26.015 - Definitions.

As used in this chapter, unless the context requires otherwise:

- A. "Community development department" means the community development department or designated representative(s) for the purposes of this chapter.
- B. "Directed shield" or "direct shielding" means shielding of a light fixture by design or external application that directs light downward and limits direct line-of-sight of a fixture's lamp to the property upon which the fixture is located.
- C. "Director" means the director of the community development department for the city or the director's authorized representative.
- D. "Exempt light fixtures" means outdoor artificial illuminating devices that are exempted by Section 8.26.085.
- E. "Flood light or spot light" means any light fixture or lamp that incorporates a reflector or a refractor to concentrate the light output into a directed beam in a particular direction.
- F. "Height of fixture" means the vertical distance from the ground directly below the centerline of the fixture to the lowest direct-light emitting part of the fixture.
- G. "High intensity discharge lamp sources" means high pressure sodium, mercury vapor, metal halide, low pressure sodium, and other similar lamps.
- H. "Horizontal plane" means the plane comprising the lowest portion of a shielded light fixture.
- I. "Installed" means installation of outdoor light fixtures following the effective date of this chapter. Projects with approved construction plans prior to the effective date of this chapter are excluded from compliance with the chapter in the initial installation only.
- J. "Luminous tube lighting" means gas-filled tubing which, when subjected to high voltage, becomes luminescent in a color characteristic of the particular gas used, e.g., neon, argon, etc.
- K. "Outdoor light fixtures" means outdoor artificial illuminating devices, outdoor fixtures, lamps and other similar devices, permanently installed or portable, used for flood lighting, general illumination or

advertisement. Such devices shall include, but are not limited to, search lights, spot lights and flood lights for:

1. buildings and structures;
 2. recreational areas;
 3. parking lot lighting;
 4. landscape lighting;
 5. externally lighted signs;
 6. street lighting;
 7. product display area lighting; and
 8. building overhangs and open canopies.
- L. "Shield" or "shielding" means an externally applied device such as a shroud or hood of metal, wood or painted glass that does not allow transmission of light.
- M. "Street light" means an outdoor light fixture located within the public right-of-way for the purpose of illuminating a public street.
- N. "Temporary outdoor lighting" means the illumination of a specific outside area or object by any manmade device located outdoors that produces light by any means for a period of less than seven days, with at least one hundred eighty days passing before being used again to illuminate the same outside area or object.
- O. "Unshielded" means light fixtures lacking any means to restrict the emitted light to below the horizontal plane.

(Ord. 712 § 1, Exh. A (part), 2001)

8.26.020 - Conformance with applicable codes.

All outdoor light fixtures shall be installed in conformance with the provisions of this chapter, the building code, the electrical code, and the sign code of the city. No provision of this chapter is intended to preempt applicable state codes.

(Ord. 712 § 1, Exh. A (part), 2001)

8.26.025 - Approved materials and methods of construction or installation/operation.

The provisions of this chapter are not intended to prevent the use of any design, material, or method of installation or operation not specifically prescribed by this chapter, provided any such alternative has been approved. The director may approve any such proposed alternative that provides an equivalent alternative design or operation of outdoor light fixtures that meet the purpose and intent of the regulations of this chapter.

(Ord. 712 § 1, Exh. A (part), 2001)

8.26.030 - Requirements for installation of outdoor lighting.

The installation of outdoor light fixtures shall be subject to the provisions of this ordinance, except as exempted herein. The only provisions applicable to street lights are those in Section 8.26.065.

(Ord. 712 § 1, Exh. A (part), 2001)

8.26.035 - Shielding.

All nonexempt outdoor light fixtures, other than street lights, shall have shielding as set forth in Table A.

(Ord. 712 § 1, Exh. A (part), 2001)

8.26.040 - Height restriction.

- A. No outdoor light fixture shall exceed twenty-five feet in height.
- B. For commercial, industrial, or institutional developments abutting residentially zoned property, the maximum height of an outdoor light fixture located within fifty feet of any property line abutting the residential zone shall be fifteen feet.
- C. Outdoor light fixtures used to illuminate athletic fields, stadiums, race tracks and similar outdoor recreational facilities shall be exempt from the provisions of this section.

(Ord. 712 § 1, Exh. A (part), 2001)

8.26.045 - Maximum light level.

For commercial, industrial, institutional or apartment residential developments abutting residentially zoned property, the light level emitted from outdoor light fixtures associated with the development shall not exceed one-half foot-candles measured at any point along a common property line between the development and the abutting residentially zoned property.

(Ord. 712 § 1, Exh. A (part), 2001)

8.26.050 - Submission of lighting plans and evidence of compliance for new development.

- A. All proposed development, other than a detached single-family dwelling, that includes outdoor light fixtures shall submit a lighting plan in compliance with this chapter as part of any required application for land use approval. The plan shall include, but is not limited to, the following, all or part of which may be in addition to the information required with the application for the land use approval:
 - 1. Plans showing the location on the premises of all outdoor light fixtures and the type of light fixtures, lamps, supports, reflectors and other devices that may be part of or related to any part of an outdoor light fixture.
 - 2. Descriptions of the light fixtures, lamps, supports, reflectors and other devices. The description may include, but is not limited to, catalog cuts by manufacturers and drawings.
 - 3. The wattage for each light fixture.
 - 4. A photometric report containing a numerical grid of light levels, measured in tenths of foot-candles, that the fixtures will produce on the ground. For developments subject to the maximum light levels of Section 8.26.045, the numerical grid shall include light level measurements at property lines abutting residentially zoned property.
 - 5. For light fixtures requiring direct shielding, photometric data, or similar data showing the angle of cut off or line of sight of the fixture's lamp in relation to the property's boundaries.
- B. Additional Submission. The above required plans, descriptions and data shall be sufficiently complete to enable the director to readily determine compliance with the requirements of this chapter. If the director is

**TABLE A
SHIELDING REQUIREMENTS**

Lamp Type	Wattage								
	25	30	35	40	50	60	75	100	110 or more
Low Pressure Sodium	Unshielded	Directed Shield							
High Pressure Sodium	Unshielded	Unshielded	Directed Shield						
Metal Halide	Unshielded	Unshielded	Directed Shield						
Fluorescent	Unshielded	Unshielded	Unshielded	Directed Shield					
Quartz Halogen	Unshielded	Unshielded	Unshielded	Unshielded	Unshielded	Directed Shield	Directed Shield	Directed Shield	Directed Shield
Tungsten Halogen	Unshielded	Unshielded	Unshielded	Unshielded	Unshielded	Directed Shield	Directed Shield	Directed Shield	Directed Shield
Mercury Vapor	Unshielded	Unshielded	Unshielded	Unshielded	Unshielded	Directed Shield	Directed Shield	Directed Shield	Directed Shield
Incandescent	Unshielded	Unshielded	Unshielded	Unshielded	Unshielded	Unshielded	Unshielded	Unshielded	Directed Shield

1. Wattage ratings for lamp types will be for either a single lamp source or multiple lamp sources when installed in a cluster.
2. Lamp types not listed in the table may be approved for use by the director provided installation of these lamps and operation of the light fixture meets the purpose and intent of the regulations of this chapter.
3. Glass tubes filled with argon, neon or krypton do not require shielding.

unable to determine compliance with the requirements of this chapter from the plans, descriptions and data initially submitted by an applicant as required by this section, the director may require the applicant to submit additional information as is necessary to make such a determination. Additional information may include certified reports of tests performed by a recognized testing laboratory.

- C. Any proposed detached single-family dwelling that includes a light fixture subject to the shielding requirements of Section 8 .26.035 shall submit a lighting plan as part of the electrical permit application.

(Ord. 712 § 1, Exh. A (part), 2001)

8.26.055 - Installing new light fixture within existing developments.

- A. No new outdoor light fixture shall be installed within an existing developed property without first obtaining an electrical permit. Except for detached single-family dwellings, a lighting plan for a new outdoor light fixture shall be submitted as part of the electrical permit application. The lighting plan shall consist of the information described in Section 8.26.050 of this chapter.
- B. No new outdoor light fixtures subject to the shielding requirements of Section 8.26.035 shall be installed in conjunction with an existing detached single-family dwelling without submitting a lighting plan as part of the electrical permit application.

(Ord. 712 § 1, Exh. A (part), 2001)

8.26.060 - Replacement or relocation of nonconforming light fixture.

All outdoor light fixtures lawfully installed prior to, and operable on, the effective date of this chapter may continue to be operated as nonconforming light fixtures. Any nonconforming light fixture that is replaced or relocated must meet the requirements of this chapter according to the following procedures:

- A. If the replacement or relocation of the light fixture requires an electrical permit, a lighting plan for the light fixture shall be submitted along with the electrical permit application.
- B. If the replacement or relocation of the light fixture does not require an electrical permit, application for a development permit from the director shall be made. A lighting plan for the light fixture shall be submitted as part of the development application.
- C. A lighting plan required under this section shall consist of the information described in Section 8.26.050 of this chapter.
- D. A lighting plan shall only be required of a detached single-family dwelling when the replacement or relocated outdoor light fixture is subject to the shielding requirements of Section 8.26.035.

(Ord. 712 § 1, Exh. A (part), 2001)

8.26.065 - Street lights.

- A. Street lights shall have a cutoff type light fixture so that the cutoff angle of light rays emitted by the lamp, light source or luminaire is ninety degrees or less. In determining the cutoff angle, street lights on hills should be adjusted to provide as uniform a lighting pattern as possible. The light fixture may be oriented so that its cutoff angle is measured perpendicular to the grade line of the street rather than level with the ground beneath the fixture. The cutoff angle is formed by a line drawn from the direction of light rays at the light source to the grade line of the street.
- B. Decorative style street lights shall be exempt from the provisions of this section.

(Ord. 712 § 1, Exh. A (part), 2001)

8.26.070 - Variance.

A variance may be obtained from the provisions of this chapter. A variance shall be sought under this section in accordance with the procedures contained in Troutdale Development Code Chapter 6.200.

(Ord. 712 § 1, Exh. A (part), 2001)

8.26.075 - Prohibitions.

Recreational facilities. No outdoor recreational facility, public or private, shall be illuminated after eleven p.m., except to conclude a specific recreational or sporting event or any other similar activity conducted at or in the facility which was in progress under such illumination prior to eleven p.m., except that any outdoor recreational facility, public or private, which is illuminated with outdoor light fixtures conforming to this chapter may operate any time with such illumination.

(Ord. 712 § 1, Exh. A (part), 2001)

8.26.080 - Externally lighted outdoor signs.

All externally lighted signs shall comply with the standards in the Troutdale Development Code, Chapter 10, Signs, and the following provisions:

- A. Top mounted fixtures shall conform to the shielding requirements as set forth in Section 8.26.035.
- B. Bottom mounted fixtures shall be shielded either by application of an external device or manufactured in such a way that upward and side directed light is confined to an area within four inches of the outermost surface of the sign's top and sides (Figure 1). Shielding must be constructed in such a manner that no reflective surface of the lighting fixture will extend past the limit of the shielding in the vertical plane when viewed from directly above (Figure 2).

(Ord. 712 § 1, Exh. A (part), 2001)

8.26.085 - Exemptions.

The following shall be exempt from the provisions of this chapter:

- A. All outdoor light fixtures lawfully installed prior to and operable on the effective date of this ordinance may continue to be operated as a nonconforming light fixture, except that all replacement or relocation of outdoor light fixtures, as of the effective date of this chapter, shall be subject to the provisions of this chapter.
- B. Fossil fuel light. All outdoor light fixtures producing light directly by the combustion of natural gas or other fossil fuels.
- C. Airport operations lighting and aircraft navigational beacons as established by the Federal Aviation Administration. All other airport outdoor lighting must conform to the requirements of this chapter.
- D. Correctional institutions. Exterior lighting for county correctional institutions.
- E. Lights used for holiday decorations.
- F. Carnivals and fairs that require the use of temporary outdoor light fixtures except that permanent installations at dedicated sites must conform to the requirements of this chapter.
- G. Historical areas as designated by proper authority. Use of the minimum illumination necessary to maintain public safety in and around historical areas is encouraged.
- H. Motion detector lights that operate automatically for periods of less than ten minutes.
- I. U.S. flags displayed by top mounted lighting on a twenty-four-hour basis.
- J. Internally lighted signs.
- K. Television or movie film production lighting except that permanent installations at dedicated sites must conform to the requirements of this chapter.
- L. Temporary outdoor lighting.

FIGURE 1

TYPICAL EXTERNALLY ILLUMINATED OUTDOOR SIGN CONFIGURATION

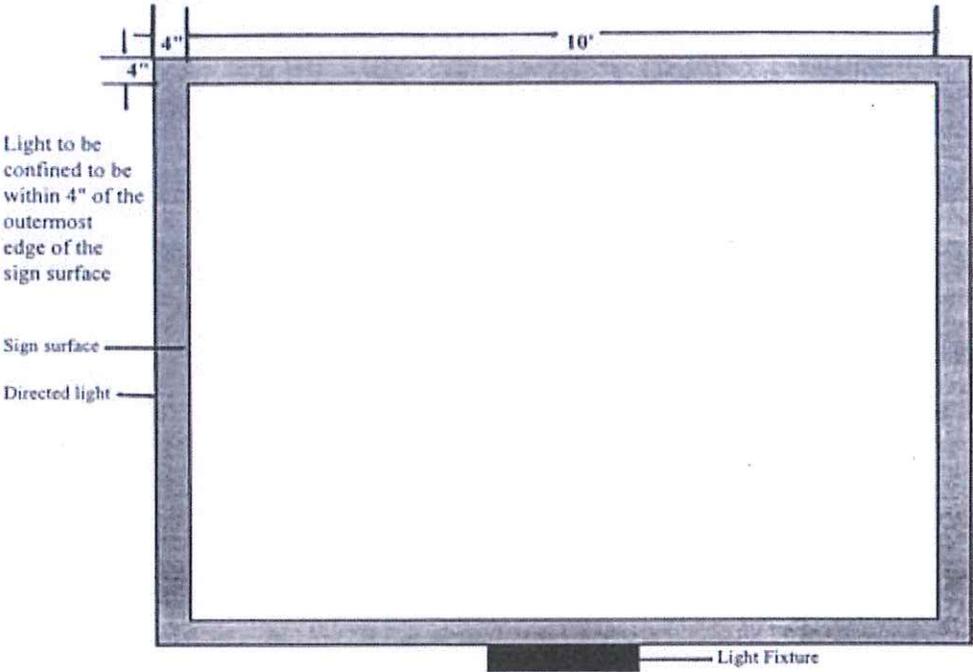
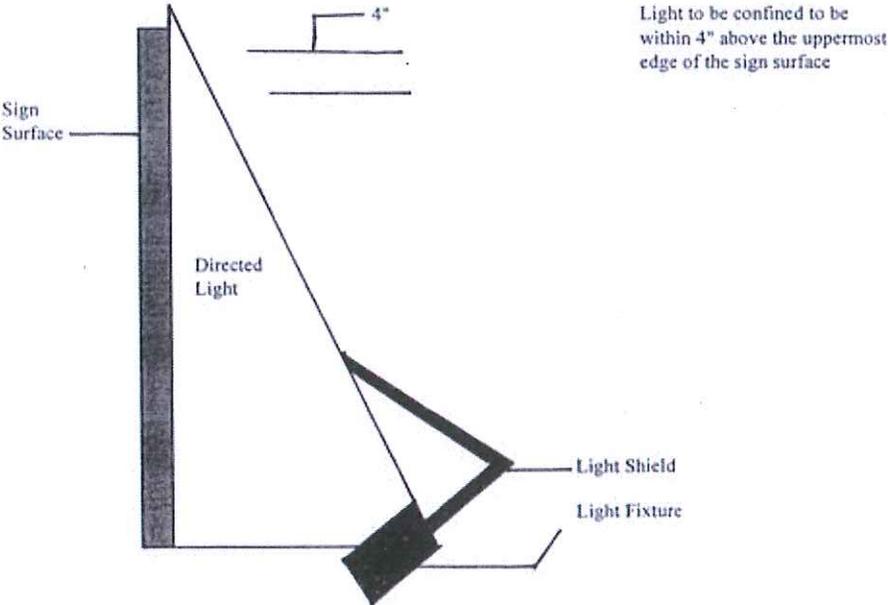


FIGURE 2

TYPICALLY EXTERNALLY ILLUMINATED OUTDOOR SIGN CONFIGURATION



- M. Construction lighting necessary for an allowed use except that permanent installations at dedicated sites must conform to the requirements of this chapter.
- N. Warning lights required by the Federal Aviation Administration atop telecommunication towers, water towers, smokestacks or similar vertical projections which are exempt from height limitations of the Troutdale Development Code.
- O. Traffic lights.

(Ord. 712 § 1, Exh. A (part), 2001)

8.26.090 - Violations constitute public nuisance.

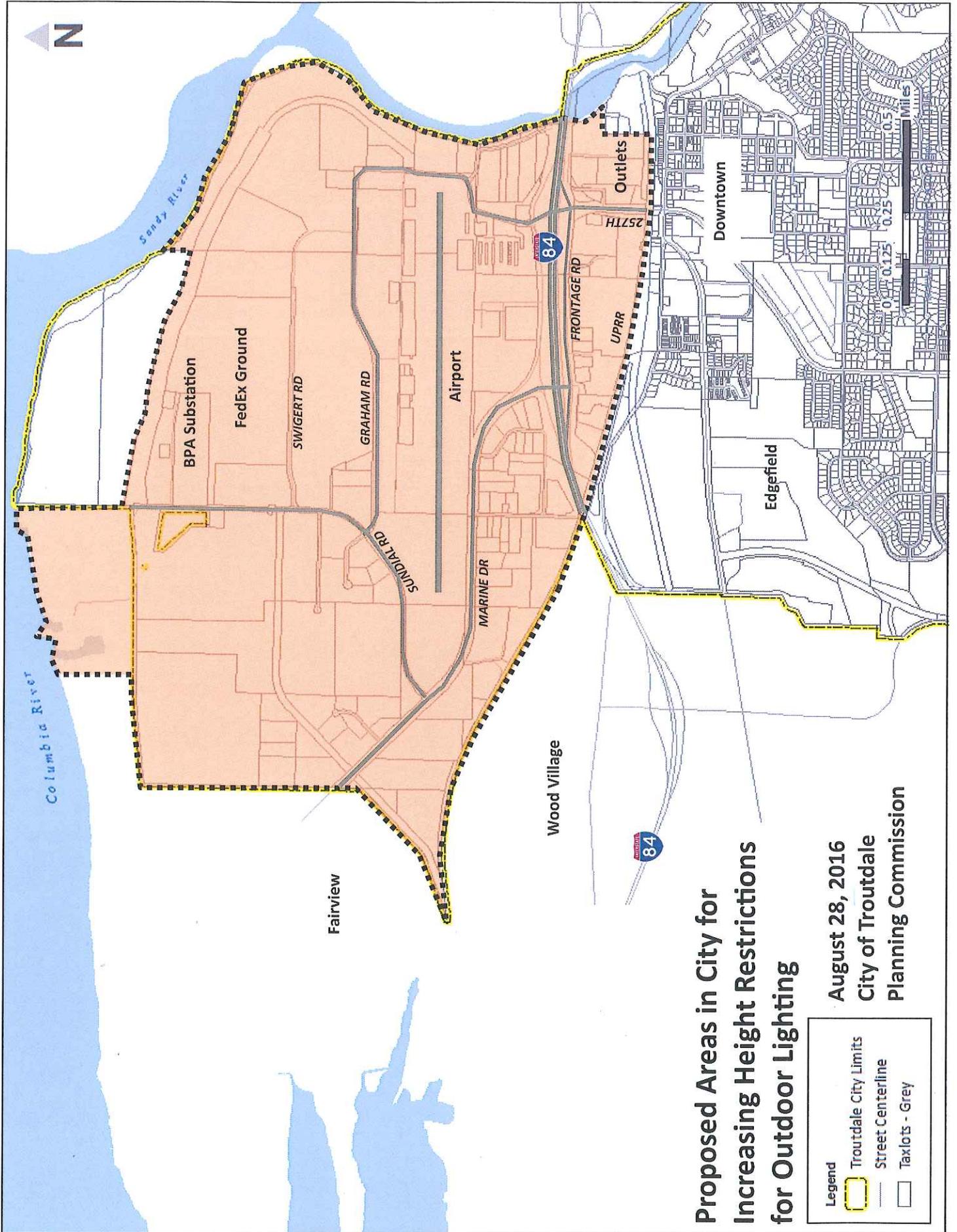
Any outdoor light fixture erected, constructed, enlarged, altered, repaired, moved, improved, or converted, contrary to, or in violation of, any provisions of this chapter shall constitute a nuisance. Failure to comply with provisions of this chapter may result in nuisance abatement proceedings under Chapter 8.28 of this code.

(Ord. 712 § 1, Exh. A (part), 2001)

Proposed Language for Code Amendment

8.26.040 - Height restriction.

- A. ~~No outdoor light fixture shall exceed twenty-five feet in height.~~ The maximum height of an outdoor light fixture for developments located in industrially zoned properties and General Commercial zoned properties north of the Union Pacific Railroad right-of-way shall be fifty (50) feet.
- B. The maximum height of an outdoor light fixture for developments in all other areas within the City shall be twenty-five (25) feet.
- ~~B-C.~~ For commercial, industrial, or institutional developments abutting residentially zoned property, the maximum height of an outdoor light fixture located within fifty feet of any property line abutting the residential zone shall be fifteen (15) feet.
- ~~C-D.~~ Outdoor light fixtures used to illuminate athletic fields, stadiums, race tracks and similar outdoor recreational facilities shall be exempt from the provisions of this section.



**Proposed Areas in City for
Increasing Height Restrictions
for Outdoor Lighting**

August 28, 2016
City of Troutdale
Planning Commission

Legend

- Troutdale City Limits
- Street Centerline
- Taxlots - Grey