

GROVELAND TOWNSHIP, OAKLAND COUNTY, MICHIGAN

Zoning Ordinance Amendment
EXTERIOR LIGHTING

Add to Article V, GENERAL PROVISIONS, Division 6, EXTERIOR LIGHTING, the following amendment:

Sec. 54-861 Standards

The intent of this section is to encourage site lighting that will be attractive to the eye while at the same time adequately illuminating a site for safety and convenience. It is further the intent of this section to discourage excessively bright and harsh site illumination that creates undesirable halo effects on the property, projects a glare visible from adjacent streets and properties, diminishes the visual environment of nearby land uses, and presents a potential hazard to vehicle and pedestrian traffic on abutting streets and sidewalks.

All exterior site lighting designed and intended to light private property shall comply with the following applicable requirements.

(1) *Exterior lighting in all zoning districts.* Exterior site lighting shall comply with the following applicable standards.

(a) *Exterior light fixtures.* Exterior light fixtures shall be subject to the following requirements:

1. Freestanding fixtures and their vertical support structures (i.e. light poles) shall be constructed of metal, concrete, wood laminates or composite materials and shall be of an architectural nature.
2. Fixtures for a nonresidential use in or adjacent to a residential zoning district, or adjacent to a residential use, shall not exceed 25 feet in height.
3. Fixtures for a nonresidential use in a nonresidential zoning district not adjacent to a residential zoning district or residential use may extend to a maximum height of 25 feet or the maximum allowable building height for that zoning district, whichever is greater.
4. Fixture height shall be measured from the surface (ground or pavement) at the base of the structure, including any supporting pedestal, to the base of the fixture. At the discretion of the Planning Commission, decorative elements such as caps or goosenecks that extend above the fixture may not be included in the height of the fixture.
5. Fixtures and their support structures, including protective bollards, shall meet the minimum building setback requirements of the zoning district.
6. All light fixtures shall be full-cutoff as described by the International Illuminating Engineering Society of North America (IES-NA) .

7. Fixture lamps contained within a permitted canopy structure – including the canopy for a fueling station - shall not extend beyond the ceiling surface of the canopy, and shall be either recessed within or flush with the ceiling surface of the canopy. No fixture lens shall extend more than 1 inch beyond the ceiling surface of the canopy.

8. No flashing light shall be permitted.

(b) *Wall-mounted exterior light fixtures.* Wall mounted exterior light fixtures - including those intended to illuminate service areas - shall be subject to the following requirements:

1. Wall-mounted exterior light fixtures shall be full-cutoff as defined by IES-NA; unshielded “wallpacks” shall not be permitted.
2. The light emitted by wall-mounted exterior light fixtures is subject to the illumination requirements of this Ordinance with respect to intensity and uniformity and shall be accounted for in the required photometric plan.
3. No wall-mounted exterior light fixture shall extend beyond the parapet or eave line of a roof.
4. Wall-mounted exterior light fixtures shall comply with the minimum building setback requirements of the zoning district.
5. No flashing light shall be permitted.
6. Where deemed appropriate, the requirements of this Ordinance may be waived at the discretion of the Planning Commission for wall-mounted exterior light fixtures for the purposes of decorative lighting, accent lighting, and/or uplighting.

(c) *Photometric Plan.* A photometric plan prepared by a lighting professional shall be required for all developments that require site plan approval. The photometric plan shall illustrate the levels of illumination at ground level, accounting for all light sources that impact the subject site. The photometric plan shall demonstrate the following:

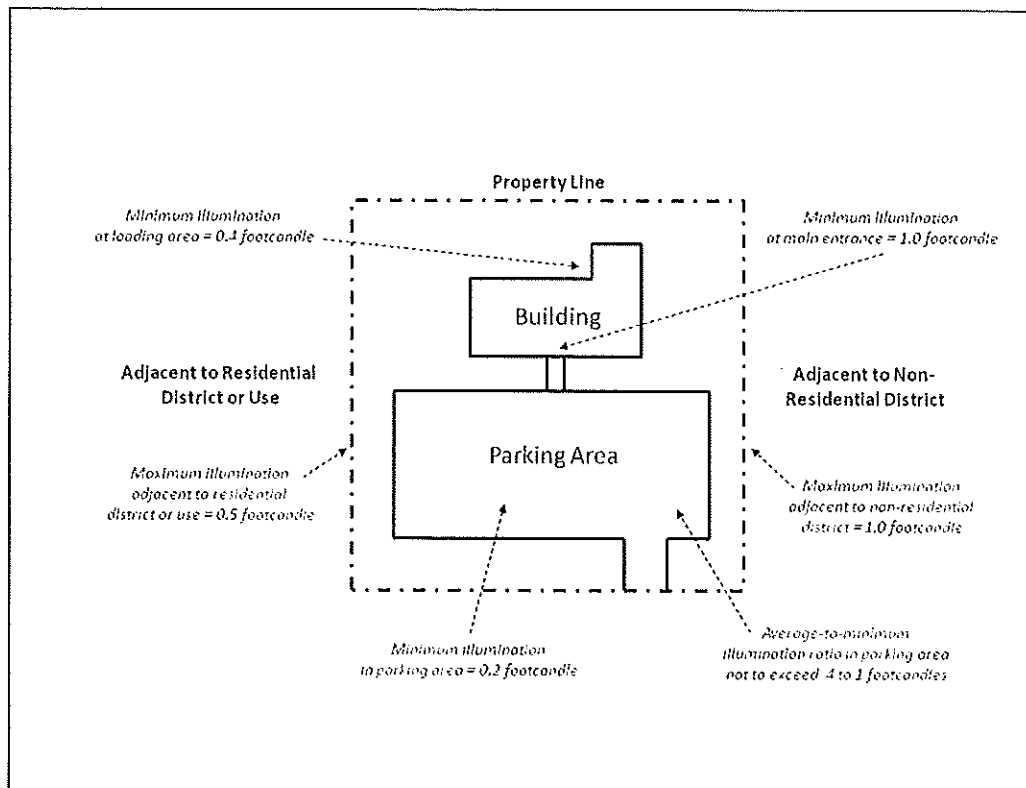
1. In order to achieve uniform illumination levels, the ratio of the average light level of the surface being lit to the lowest light level of the surface being lit, measured in footcandles, shall not exceed 4:1.
2. The following illumination levels shall act as minimum standards for all exterior lighting, while maximum illumination levels shall be governed by the 4:1 ratio of average-to-minimum light level:

Minimum Illumination Levels

Use	Minimum Illumination (footcandles)
Parking Areas	0.2
Loading/Unloading Areas	0.4
Designated walkways	0.2
Building Entrances – Frequent Use	1.0
Building Entrances – Infrequent Use	0.2

3. Where a site abuts a residential zoning district or residential use, maximum illumination at the property line shall not exceed 0.5 footcandle.

4. Where a site abuts a non-residential zoning district, maximum illumination at the property line shall not exceed 1.0 footcandle.



- (d) *Exterior fixture lamps.* All exterior fixture lamps shall meet the following requirements:
1. All exterior fixture lamps shall be oriented so that their light is cast directly downward and only onto the property they are intended to light..
 2. Exterior fixture lamps shall be of a true color rendering type such as metal halide. High and low pressure sodium lamps shall only be permitted at the discretion of the Planning Commission.
 3. Exterior fixture lamps shall be designed and oriented to minimize glare.
- (e) *Wiring requirements.* All electrical service to any exterior light source shall be placed under ground and within the interior of any canopy structure and shall meet all applicable electric codes and ordinances.
- (f) *Architectural exterior lighting.* Designed to enhance the architectural appearance of a building or to highlight an architectural feature of a building shall consist of:
1. A low wattage luminary designed to cast only a soft light on the subject, and
 2. A luminary that when directly visible from a fixture, shall not be an irritant to pedestrians, or vehicle traffic on adjacent streets, or to residents in any adjacent residential zoning district.
- (g) *Exterior site lighting in multiple-family residential districts.* Shall be subject to the following requirements:

1. Exterior lighting may consist of a low wattage incandescent, LED, or compact fluorescent luminary contained in a decorative light fixture attached to the wall next to the door of each exterior entry to a dwelling unit.
2. Exterior lighting may also consist of a low wattage incandescent, LED, or compact fluorescent luminary contained in a decorative light fixture attached to the top of a low profile yard type of light pole. All wiring to pole fixtures shall be underground and shall comply with all applicable electric codes and ordinances.
3. Carports in a multiple dwelling complex may be lighted so long as all such lighting is limited to the under side of the carport roof. The fixtures shall be placed no closer to the front of the underside roof structure than half the distance from the rear roof line to the front roof line.
4. Luminary shall be limited to not more than the illumination equivalent of a 100 watt incandescent lamp and shall be housed in fixtures.