MCKENNA



Memorandum: Exterior Lighting

TO: Grosse Pointe Woods City Council

FROM: Brigitte Smith Wolf, AICP

SUBJECT: Exterior Lighting Requirements to Consider

DATE: October 17, 2024

The addition to the Ordinance provided below is to better regulate exterior lighting. As it is now, the Zoning Ordinance (**Section 50-6.1**) does allow for the Building Department or Planning Commission to request a more detailed lighting plan and/or photometric study to assure adequate protection of surrounding properties; however, it does not provide any guidance on measurable indicator or thresholds for acceptable illumination levels. The proposed addition to the Ordinance below, offer these regulations.

The purpose of this section is to protect the health, safety, and welfare of the public by encouraging lighting practices and systems that will minimize glare and light trespass while recognizing the need for buildings and sites to be illuminated for safety, security, visibility, and enhancement. The proposed amendments provide standards for exterior lighting with measurable indicators to improve visibility and minimize nighttime lighting disturbances more consistently and proactively.

The proposed amendment on the following pages are supported by Planning Commission and the public hearing for the proposed amendment was held at the July 23, 2024, Planning Commission meeting.

DEFINITIONS:

Lumens – A measurement of light emitted by a source. It can be LED, fluorescent, halogen or incandescent. Also known as "brightness" or "light output." Reference point: A standard 100-watt incandescent light bulb produces about 1,500 – 1,700 lumens.

Footcandles – A unit of illumination: defined as one lumen per square foot.

CITY OF GROSSE POINTE WOODS WAYNE COUNTY, MICHIGAN

ORDINANCE	NO.			
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AN ORDINANCE TO AMEND THE CODE OF ORDINANCES OF THE CITY OF GROSSE POINTE WOODS, CHAPTER 50 – ZONING TO ADD SECTION 50-5.22 EXTERIOR LIGHTING TO CREATE MEASURABLE INDICATORS TO IMPROVE VISIBILITY AND MINIMIZE NIGHTTIME LIGHTING DISTURBANCES MORE CONSISTENTLY AND PROACTIVELY.

THE CITY OF GROSSE POINTE WOODS ORDAINS:

Section 1. The City of Grosse Pointe Woods Code of Ordinances, Chapter 50 - Zoning, Section 50-5.22 Exterior Lighting, is hereby amended to include regulations of exterior lighting as follows:

50.5.22 Exterior Lighting

The purpose of this section is to protect the health, safety, and welfare of the public by encouraging lighting practices and systems that will minimize glare and light trespass while recognizing the need for buildings and sites to be illuminated for safety, security, visibility, and enhancement. This section provides standards for exterior lighting with measurable indicators to improve visibility and minimize nighttime lighting disturbances more consistently and proactively.

A. Regulating Illumination Levels by Footcandles. Existing and proposed lights may not exceed the following maximum intensity levels (measured at a height of 5-feet above grade);

Location/Use	Maximum Level of Illumination (footcandles "fc")
Overall average for the site	5.0 fc
At any point within the site	10.0 fc
At rear property line	0.5 fc
At the public right of way / sidewalk along the front property line, for properties with building setback 5 feet or less	5.0 fc
At the public right of way / sidewalk along the front property line, for properties with buildings of a front setback greater than 5 feet	1.0 fc
Gas Station (under canopy only)	20.0 fc

- B. *Shielding*. All exterior lighting, excluding accent lighting in residential districts, must be fully cut off and shielded so the surface of the source of the light is not visible, and is directed downward and shielded away from adjacent properties, with consideration to protecting residential uses.
- C. *Non-Essential Lighting*. Non-essential lighting must be turned off after business hours, except for the minimum necessary security lighting. The use of a motion detector or other automatic timing system of security lighting is encouraged.
- D. Consistent Fixtures. The type and design of lighting must be consistent throughout a site.
- E. *Impact*. Lighting must be arranged so as to not adversely affect driver visibility on rights-of-way.
- F. *Decorative Lighting*. Buildings within the C and C-F districts must feature decorative lighting on all façades which face the public right-of-way. Wall pack type lighting is prohibited.
- G. Gas Station Lighting. Lighting under gas station canopies is limited to fully recessed lighting fixtures.
- H. *Sign Lighting*. Illuminated signs must comply with the footcandle measurements of the overall site and cannot cause the site to exceed the maximum allowable footcandles at any point within the site or from the public right-of-way.
- I. Exempt Lighting. The following are exempt from the requirements of this Article:
 - a. Required exit signs and safety lights for stairs and ramps.
 - b. Temporary holiday lights (provided that such lighting is installed no more than 60-days prior to, and 30 days following, the holiday such decorations represent).
 - c. Lights required by the Federal Aviation Administration, or other federal or state agency.
 - d. Interior lights.
 - e. Temporary lights necessary for construction or emergencies.
- J. *Prohibited Lighting*. The following lights are prohibited:
 - a. Rope lights (including neon, except when used in outlined tubing signs) around and within window and door openings.
 - b. Aerial lasers and/or "searchlight" style lights.
 - c. Flashing, moving, or intermittent lights (including lighting that changes colors).
 - d. Other intense lights, defined as having a light source exceeding 3,000 lumens per fixture.

K. Special Exception Lighting.

a. Lighting systems not complying with the requirements of this Article, but consistent with its intent, may be considered by the Planning Commission, subject to special land

- use approval. This includes instances of: a) Sport fields and stadiums. b) Public monuments, public buildings, government facilities, and religious institutions. c) Any other lighting application determined to be appropriate by the Planning Commission. 2)
- b. The Planning Commission must find that the proposed lighting will not create unwarranted glare, sky glow, or light trespass. The applicant must demonstrate that every reasonable effort has been made to mitigate obtrusive light and artificial sky glow, supported by a signed statement from a registered engineer or by a lighting certified professional describing the mitigation measures.
- L. *Lighting Nuisance Violations*: Any luminaries erected, constructed, enlarged, altered, replaced, moved, improved, or converted contrary to the provisions of this section shall be unlawful and declared a light nuisance as determined by the Building Official, and is subject to abatement in accordance with Illuminating Engineering Society of North America (IESNA) recommendations in the manner provided by law.
- M. *Non-Conformities*: Any nonconformities existing at the time of the enactment of this section may continue or be maintained subject to the following provisions, provided that they do not cause a nuisance.
 - a. If a nonconforming luminaire is destroyed, it shall be repaired, reconstructed or replaced, in conformity with all the provisions of this ordinance, and the remnants of the former luminaire shall be removed from the property. For purposes of this section, a nonconforming luminaire is "destroyed" if damaged to an extent that the cost of repairing the luminaire to its former condition or replacing it with an equivalent luminaire equals or exceeds 50 percent of the replacement value of the luminaire so damaged, including labor.
 - b. Subject to the other provisions of this section, nonconforming luminaries may be repaired so long as the cost of such work does not exceed 50 percent of the cost of such luminaire within any 12-month period.
 - c. At the time that a non-conforming luminaire is replaced, moved, upgraded, or otherwise changed, the luminaire must be brought into compliance with the requirements of this ordinance. Routine maintenance, including changing the <u>lamp</u>, ballast, starter, photo control, lens and other required components, is permitted for all existing fixtures.
- **Section 2. Repealer Clause.** Any ordinances or parts of ordinances in conflict herewith are hereby repealed only to the extent necessary to give this Ordinance full force and effect.
- <u>Section 3.</u> <u>Validity and Severability.</u> Should any portion of this Ordinance be found invalid for any reason, such a holding shall not be construed as affecting the validity of the remaining portions of the Ordinance.
- **Section 4.** Effective Date. This Ordinance shall be effective twenty (20) days from and after its adoption by the City of Grosse Pointe Woods City Council.

NAYS	
Attested:	Arthur W. Bryant, Mayor
Paul Antolin, City Clerk	
CERTIFIC	CATION OF CLERK
I, Paul Antolin, City Clerk of the Ci	ity of Crosso Dointo Woods Warna County
Michigan, do hereby certify that Ordinance I Grosse Pointe Woods, assembled in regular was posted in the following places: Notice of said posting was published in	No was adopted by the City Council of
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