



Legislation Text

File #: 2017-21, **Version:** 2

MOTION TO ADOPT PROPOSED ORDINANCE NO. 2017-21 ON SECOND AND FINAL READING.

PROPOSED ORDINANCE NO. 2017-21 IS AN ORDINANCE OF THE CITY OF PEMBROKE PINES, FLORIDA AMENDING TITLE XI, ENTITLED "BUSINESS REGULATIONS," CHAPTER 116, ENTITLED "LIGHTING STANDARDS" OF THE CITY OF PEMBROKE PINES CODE OF ORDINANCES; AMENDING SECTION 116.01 ENTITLED "PURPOSE AND INTENT" TO PROVIDE FOR GUIDING PRINCIPLES; AMENDING SECTION 116.02 ENTITLED "DEFINITIONS" TO PROVIDE FOR ADDITIONAL DEFINITIONS; AMENDING SECTION 116.03 ENTITLED "GENERAL STANDARDS" TO PROVIDE FOR ADDITIONAL STANDARDS; AMENDING SECTION 116.04 TO PROVIDE FOR ADDITIONAL STANDARDS; AMENDING SECTION 116.06 ENTITLED "LIGHTING OF RESIDENTIAL COMMON AREAS" TO PROVIDE FOR ADDITIONAL STANDARDS; CREATING SECTION 116.07, TO BE ENTITLED "PRESERVES, NATURAL AREAS AND ENVIRONMENTAL SENSITIVE LANDS"; PROVIDING FOR DEFINITIONS; PROVIDING FOR CODIFICATION; PROVIDING FOR CONFLICTS; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

SUMMARY EXPLANATION AND BACKGROUND:

1. The City Commission adopted the City's first lighting ordinance in April of 2005 (Ordinance 1513 - Section 116 Code of Ordinances). The Ordinance provided basic guidelines for lighting use in residential and non-residential areas which focused on creating guidelines based on general dark sky principles. The City was one of the first western Broward County communities to create lighting guidelines.
2. Technology has changed since 2005 and the use of LED lighting is becoming more widespread due to the LED bulb's long life and energy efficiency. LED lighting also creates new challenges as the certain intensities of LED lighting can adversely impact the general public.
3. City staff worked with the Environmental Advisory Board (EAB) since June 2017 to provide the recommendations listed within the proposed ordinance. The EAB relied on the following resources prior to making recommendations on this matter:
 - A presentation on lighting from EAB member Diana Umpierre (International Dark Sky Association President)
 - Detailed discussions on lighting issues regarding LED concerns.
 - Staff and EAB members (2 members) attendance at a Broward County Lighting Workshop on October 11, 2017.
 - Selected review of articles on lighting topics.

4. The major component of this Code amendment is a restriction on Correlated Color Temperature (CCT). CCT defines the color appearance of a white LED and is defined in degrees Kelvin (k). For these purposes, a warm (amber) light is around **2700K**, moving to neutral white at around **4000K**, and to cool white (blue light), at **5000K** or more. Higher CCT levels are often linked to higher amounts of glare and discomfort.

5. The EAB at its November 7, 2017 meeting approved in concept the changes of the Code as recommended by staff. The following general lighting changes are proposed as a result of the proposal:

- Addition of Guiding Principles to ensure lighting design and equipment are used in a safe, financially conscious, and ecological manner.
- Revision to section 116.02 Definitions to include new technology and lighting principles.
- Under section 116.03 General Standards the following revision and or additions are proposed:
 - Architectural and Landscape Lighting
 - Lighting placement shall ensure only the intended objects are illuminated, as well the maximum growth of a trees canopy will be taken in to consideration.
 - Lighting shall be directed downward when applicable.
 - Construction Lighting
 - Construction lighting shall be full cut-off or directionally shielded to confine light to the site.
 - Nonconforming Lighting
 - Lighting shall be brought up to the standards set forth in chapter 116 under the following circumstances:
 - If 50% or more of any lighting component is being upgraded, changed, or replaced.
 - If less than 50% of any lighting component is being upgraded, changed, or replaced, and an equivalent replacement is no longer obtainable due to obsolescence, or lack of supply.
 - Prohibited Lighting
 - Additions have been made to limit the negative impact lighting can have on our health and the environment. Additions include: Mercury vapor lamps, sag lenses, convex lenses, and drop lenses.
 - Exceptions to General Lighting Requirements
 - Items have been added include but not limited to lighting regulated by Federal or State statutes, seasonal lighting, and municipal signage.
- Non-Residential Standards
 - Correlated color temperature (CCT) shall measure no more than 4,000°K in B-3, C-1, M-1, M-2, M-3, M-4, M-5 zoning districts. By comparison, City Center parking lot lighting have a CCT measure of 4,000°K.
 - All other zoning districts correlated color temperature shall measure no more than 3,000°K.
 - Using dimmers, light illumination levels shall be reduced by a minimum of 25% no later than one hour after the close of operations.
- Lighting of Residential Common Areas
 - A maximum correlated color temperature of 3,000°K will be permitted in residential

zoning districts.

- Section 116.07 Natural Areas, Preserves & Environmentally Sensitive Areas was added to minimize any negative effect lighting may have on natural habitats and wildlife in the area.
 - Correlated color temperature in these areas shall measure no more than 3,000°K, however amber color lighting is encouraged where feasible.

6. The Planning and Zoning Board at its December 14, 2017 meeting reviewed the proposed lighting amendments and voted to transmit this Ordinance with a favorable recommendation to the City Commission.

7. Recommend adoption of proposed ordinance 2017-21 on second and final reading.

FINANCIAL IMPACT DETAIL:

- a) **Initial Cost:** None.
- b) **Amount budgeted for this item in Account No:** Not Applicable.
- c) **Source of funding for difference, if not fully budgeted:** Not Applicable.
- d) **5 year projection of the operational cost of the project:** Not Applicable.
- e) **Detail of additional staff requirements:** Not Applicable.