

FACTSHEET

TITLE: TEXT AMENDMENT NO. 16003
(Amend Design Standards for Outdoor Lighting adding design standards for the installation of outdoor street lights).

BOARD/COMMITTEE: Planning Commission

APPLICANT: Jeff Hlavac, Lincoln Electric System

RECOMMENDATION: Approval (5-0: Lust Beecham, Harris, Sunderman, and Hove; Cornelius, Corr, Weber and Scheer absent).

STAFF RECOMMENDATION: Approval

OTHER DEPARTMENTS AFFECTED: N/A

SPONSOR: Planning Department

OPPONENTS: None present at hearing.

REASON FOR LEGISLATION:

Amending Chapter 3.100 of the City Design Standards for Outdoor Lighting to require all street lights to be Light Emitting Diode (LED).

DISCUSSION/FINDINGS OF FACT:

1. This text amendment and the associated Text Amendment No. 16005 (Bill #16-28), amending Section 26.27.005 of the Lincoln Municipal Code, were heard at the same time before the Planning Commission.
2. The staff recommendation of approval is based upon the "Analysis" as set forth on pp.2-3, concluding that requiring all street lights to be LED will benefit the City in lower energy costs and lower maintenance costs. LED street lights limit up lighting and light trespass. Staff presentation is found on p.4.
3. The applicant's testimony is found on pp.4-5.
4. There was no testimony in opposition.
5. On March 16, 2016, the Planning Commission agreed with the staff recommendation and voted 5-0 to recommend approval of this text amendment.
6. On March 16, 2016, the Planning Commission also voted 5-0 to recommend approval of the associated Text Amendment No. 16005 (Bill #16-28).

FACTSHEET PREPARED BY: Geri Rorabaugh, Administrative Officer

DATE: March 21, 2016

REVIEWED BY: David R. Cary, Planning Director

DATE: March 21, 2016



LINCOLN/LANCASTER COUNTY PLANNING STAFF REPORT

for MARCH 16, 2016 PLANNING COMMISSION MEETING

PROJECT #: Text No.16003

PROPOSAL: Amend Chapter 3.100 of the City Design Standards for Outdoor Lighting to require all street lights to be Light Emitting Diode (LED).

CONCLUSION: Requiring all street lights to be LED will benefit the City in lower energy costs and lower maintenance costs. LED street lights limit up lighting and light trespass.

<u>RECOMMENDATION:</u>	Approval
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GENERAL INFORMATION:

ASSOCIATED APPLICATIONS:

TX #16005

COMPREHENSIVE PLAN SPECIFICATIONS:

Promote the conservation and efficient use of energy in all areas. (P.11.2)

Through the Cleaner Greener Lincoln Program, the City currently funds municipal lighting upgrades. (P.11.3)

At the local level, energy conservation saves money and energy which benefits both homeowners and businesses. Through the Cleaner Greener Lincoln Program, the City is setting goals and developing measurable strategies to use energy more efficiently, which will in turn save the City and its residents money. (P.11.6)

ANALYSIS:

1. This application is to amend Chapter 3.100 of the City of Lincoln Design Standards pertaining to street lighting.
2. Lincoln Electric System is proposing a change to require all street lights be LED as opposed to High Pressure Sodium Vapor (HPSV).
3. A Street Light Coordination Committee was formed in August 2013. The Committee consists of representatives from LES, Public Works and Utilities, Parks and Recreation, Urban Development and Finance. The Committee recommended requiring all new street lights to be LED.
4. As of January 1, 2014 LES has been replacing failed HPSV luminaires on all Mast Arm Street Lighting with LED luminaires. Any new Mast Arm Street lights have also been LED. These lights are generally found on arterial streets and in commercial centers. Some areas of Lincoln that have LED street lights are West Haymarket and "P" Street in the downtown area.

5. In 2015 LES began replacing failed post top luminaires with LED. Post top luminaires, also referred to as ornamental street lights, are generally used on local streets in residential areas. The current City Design Standards requires local residential streets to have post top luminaires.
6. The benefits of having LED street lights are lower energy costs, lower maintenance costs and better color rendering. The disadvantages are higher up front costs for developers and higher replacement costs to the City. On average the cost of an LED Post Top Luminaire is about \$185.00 more than a HPSV luminaire. Payback in energy and maintenance savings on the added cost varies by luminaire type, but is typically 10 to 15 years. Expected LED luminaire life span is 25 to 30 years compared to 4-5 years for HPSV luminaire.
7. The requirement for LED street lights would only apply to subdivisions approved after the adoption of the text change. To encourage LED street lights on those developments already approved, the City is proposing to pay 100 percent of the cost differential, between the cost of the approved HPSV fixture and the cost of a comparable LED fixture on post top luminaire.
8. On January 21, 2016 the proposed text was sent to 126 recipients that include developers, architects, engineers, LIBA, realtors and home builders that are listed on the Planning Departments contact list. The Planning Department did not receive any comments in opposition to the proposed text.

Prepared by:

Tom Cajka
Planner

DATE: February 26, 2016

APPLICANT/CONTACT: Jeff Hlavac
Lincoln Electric System
2620 Fairfield St.
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402-467-7647

TEXT AMENDMENT NO. 16003

TEXT AMENDMENT NO. 16003

AMENDING THE CITY OF LINCOLN DESIGN STANDARDS FOR OUTDOOR LIGHTING BY ADDING CHAPTER 3.100

PUBLIC HEARING BEFORE PLANNING COMMISSION:

March 16, 2016

and

TEXT AMENDMENT NO. 16005

AMENDING SECTION 26.27.005 OF THE LINCOLN MUNICIPAL CODE

PUBLIC HEARING BEFORE PLANNING COMMISSION:

March 16, 2016

Members present: Beecham, Harris, Hove, Lust, Sunderman; Corr, Cornelius, Scheer, and Weber absent.

Staff recommendation: Approval.

There were no ex parte communications disclosed.

Staff presentation: **Tom Cajka of the Planning Department** introduced Eric Steffen from Lincoln Electric System (LES) who is on hand to answer questions. Text Amendment 16003 is to add Section 3.100 to the Design Standards requiring that all street lights in new subdivisions be LED. Currently, they are high-pressure sodium. The City and LES have been working together on a variety of issues since 2013 and are now ready to move forward with this portion. LEDs are more energy efficient, last longer, and have lower maintenance costs, though up front, they cost more, averaging \$185 per pole. Text Amendment 16005 to the Subdivision Ordinance allows the City to subsidize increased costs associated with the required improvements for previously approved final plats. Since final plats already approved fall under the current standards, they would not be required to put in the LED. To encourage them, the City is willing to subsidize the difference in cost between the previous light fixtures and the LED. Again, this is only for previously approved final plats.

Eric Steffen, Lincoln Electric System, stated the biggest benefit for LED lighting is the maintenance savings over the life of the fixture. They are tested to last at least 25-30 years without maintenance. The high pressure sodium fixtures have a bulb that will go out in 4-5 years, so that cost is reduced substantially. There is less light trespass with LEDs since the diodes can be aimed exactly where they need to be on the roadway. Environmentally, they use less electricity so will save on the carbon footprint.

Hove asked if the LED lights use a completely different fixture, and if they therefore cannot be converted. Steffen said correct, the old would have to be completely replaced. Hove asked for confirmation that there is no plan in place to replace the old, and that this will only apply to new fixtures. Steffen confirmed this only applies to a new fixture. Hove went on, for clarification, to say that in some way, this effectively transfers some cost to the developer who pays the additional price for the light, but then the City gets the benefit. That is why the subsidy is there to help. From here

on out, it will be the developer's responsibility. Cajka said with new subdivisions, it is the case that the developer is responsible for paying for light installation, then LES takes over. Steffen agreed that the City takes over ownership, and LES maintains the fixtures.

Sunderman asked if there has been any feedback from the development community. Cajka said they were notified of the change and no feedback was received.

Hove asked if LES is the applicant. Cajka said yes.

There was no public testimony on this item.

TEXT AMENDMENT NO. 16003

ACTION BY PLANNING COMMISSION:

March 16, 2016

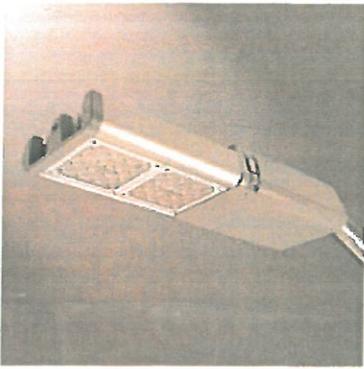
Lust moved approval, seconded by Beecham.

Lust stated this is a good public policy that will save City costs in the long-term. Without objection from the development community, it is a good plan and should move forward.

Hove said he echoes those thoughts. Although there is some cost transfer, it is good for the City and it will save money.

Motion for approval carried 5-0: Beecham, Harris, Lust, Sunderman, and Hove voting 'yes'; Cornelius, Corr, Scheer, and Weber absent. This is a recommendation to the City Council.

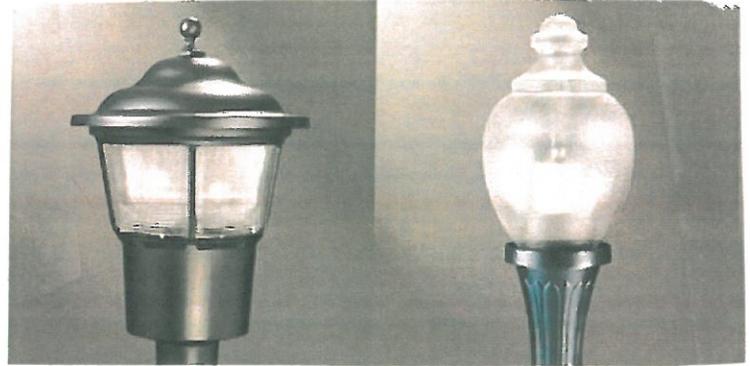
LED Mast Arm:



POST TOP LUMINAIRE



HPSV Mast Arm:



Here is a picture of Old Cheney after the road widening project was completed. It's easy to see the yellowing/orangish light in the neighborhoods and the white light on Old Cheney. This is a pretty dramatic image of HPSV vs. LED. It also demonstrates the extreme cutoff capability of the LED luminaires. The area behind the sidewalk is virtually black with nearly zero light pollution.



Chapter 3.100

DESIGN STANDARDS FOR OUTDOOR LIGHTING

The Building and Safety Department is assigned responsibility for administration of these design standards.

Section 1. GENERAL PROVISIONS

All outdoor luminaires ~~installed after the date Resolution (Misc. No. 08009) is adopted~~ shall be installed in conformance with the provisions of this chapter and the applicable provisions of the City of Lincoln regulating the installation of such fixtures.

No illumination source shall exceed initial output of 4050 lumens unless it is within a cutoff or full cutoff luminaire, except for luminous tube lighting such as neon, cold cathode and fiber optic cable, or as specified for Class II or Class III lighting, or as otherwise provided in this chapter.

All fixtures greater than 4050 lumens, except as specifically provided for in this chapter, shall be cutoff or full cutoff and mounted level in the horizontal and vertical axis with the central part of the beam directed vertically downward.

The installation of any mercury vapor luminaires for use as outdoor lighting is prohibited.

Section 2. MATERIALS AND METHODS OF INSTALLATION

The City of Lincoln encourages the use of quality materials, methods and designs. It is not the intent of this chapter to prevent the use of any design, material or method of installation not specifically forbidden; provided, any such alternate has been approved. The Building and Safety Department may approve any such proposed alternate if manufacturers' documentation provides satisfactory evidence that the proposed alternate is equivalent to the applicable requirements of this chapter.

Section 3. DEFINITIONS

The following terms and definitions shall apply in the enforcement and interpretation of this chapter:

Class I lighting (General) shall mean all outdoor lighting used to illuminate outdoor areas other than areas described for Classes II through IV.

Class II lighting (Accent/Decorative) shall mean all outdoor lighting used for accent or decorative effects. Examples of Class II lighting include, but are not limited to, the illumination of landscape features, flags, pennants or banners, fountains, statues, art work, and building walls.

Class III lighting (Street Lighting) shall mean all outdoor lighting used to illuminate public streets or highways and private roads subject to public access easement.

Class IV lighting (Outdoor Recreational Facilities) shall mean all outdoor lighting used to illuminate outdoor recreational facilities.

Class V lighting (Salt Creek Tiger Beetle Environs) shall mean all outdoor lighting used to illuminate the area within the Salt Creek Tiger Beetle environs (this is a holding class for anticipated Federal Standards).

Cutoff and Full-Cutoff shall mean outdoor light fixtures shielded or constructed by the manufacturer so as to comply with the Illuminating Engineering Society of North America (IESNA) definition for cutoff and full cut-off outdoor lighting fixtures as found in the IESNA Lighting Handbook, 9th edition.

Display Area shall mean the area used for the outdoor display of merchandise for sale including aisles between the display.

Field Angle shall mean the angle of the cone of light from reflector lamps or flood luminaires encompassing the central part of the beam out to the angle where the intensity is 10 percent of maximum.

Foot-candle (abbreviated fc) shall mean a unit of measure of illumination (number of lumens per area) or how much light is on a surface. A foot-candle is defined as one lumen per square foot.

Glare shall mean the amount of direct or indirect artificial light (measured with the meter vertical at 5 feet above ground level and rotated in a horizontal plane so it is facing the brightest source) in excess of the vertical foot candle limits allowed by Section 9 of this chapter.

IESNA shall mean Illuminating Engineering Society of North America.

Illuminance shall mean the amount of light falling onto a unit area of a horizontal surface (luminous flux per unit area) measured in lumens per square foot (foot-candles) at 3 feet above ground level.

Light trespass shall mean the amount of direct or indirect artificial light (measured with the meter horizontal and facing upwards at 3 feet above ground) in excess of the horizontal foot candle limits allowed by Section 9 of this chapter.

Lumen shall mean a unit of light emitted from a source. Where used in this chapter, lumen shall mean the “initial” manufacturer published amount emitted from the ~~lamp or lamps constituting the light source.~~ (Example: a LED lamp equivalent to a 100 watt incandescent lamp has approximately 1700 lumens of light output.) ~~(Note 4050 lamp lumens is generally equivalent to one 50-watt high-pressure sodium or one 200-watt incandescent lamp.)~~

Luminaire shall mean a complete manufactured and UL listed lighting unit consisting of a ~~lamp or lamps~~light source, together with the parts designed to distribute the light, to position and protect the ~~light source~~lamps and to connect the ~~light source~~lamps to the power supply. (Roadway luminaires are exempt from UL listing.)

Mounting height shall mean the distance from finished grade to the bottom most portion of any light emitting source, (e.g. ~~lamp,~~ LED, surface of lens).

Nit is a unit of luminance equal to one candela per square meter.

Outdoor recreational facilities shall mean public, or private facilities designed and equipped for the outdoor conduct of sports, leisure time activities, and other customary and usual recreational activities. Outdoor recreational facilities include, but are not limited to, fields or stadiums for softball, baseball, football, soccer, golf courses, driving ranges and other “field sports,” and courts for tennis, basketball, volleyball, handball and other “court sports.”

Parking area shall mean an area, other than a street, designed or used primarily for parking of vehicles. This includes both “required” and “surplus” parking areas for residential, commercial and industrial uses, and inventory storage areas for automobile dealerships, but not display areas.

Person shall mean any natural person, firm partnership, association, corporation, company, or organization of any kind.

Private shall mean an area, street or facility that is not available for use by the general public.

Public shall mean an area, street or facility, whether publicly or privately owned, that is available for general public use, either free or for remuneration.

Residential shall mean an area or development in which the land use is zoned or used for single family, two-family or multi-family dwelling units. It shall include public streets and private roads within such areas.

Section 4. CLASS I LIGHTING (GENERAL)

4.1 Requirements

- A. Exterior lighting for outdoor vehicle display area shall not exceed an average maintained illuminance of 20 foot-candles.

If any portion of the outdoor auto display area is within 500 feet of residential zoning, the average maintained illuminance shall not exceed 20 foot-candles and the luminaires shall be full cutoff for the entire outdoor vehicle display area.

- B. Outdoor areas under lighted canopies, such as gas pump islands and ATM bays, shall not exceed an average maintained illuminance of 20 foot-candles.

If any portion of the canopy area is within 500 feet of a residential zoning district, the average maintained illuminance shall not exceed 20 foot-candles and the luminaires shall be full cutoff or mounted so that the bottom of the lens is recessed or flush with the bottom surface of the canopy for the entire canopy area.

- C. Class I lighting in residential zoning districts shall not exceed an average maintained illuminance of 4 foot-candles. All other Class I lighting, including but not limited to lighting of entrance ways, dining areas, display of merchandise other than vehicles and outdoor work areas shall not exceed an average maintained illuminance of 6 foot-candles.

- D. All Class I lighting levels shall be reduced to an average maintained illuminance level of 4 foot-candles after business hours.

- E. Illuminance level shall not exceed 4 foot-candles average maintained on parking surface for off-street parking.

Section 5. CLASS II LIGHTING (ACCENT/DECORATIVE)

5.1 Requirements

- A. Luminaires used to illuminate buildings, flags, artwork or other landscape features may have lamps exceeding an output of 4050 lumens and be non-cutoff in design and aimed upward, but the field of angle of the lamp may not extend beyond the surface to be illuminated, or the luminaire must have shielding to provide the same limiting effect.

- B. All Class II lighting must be selected, installed and aimed so that the amount of light trespass and glare beyond the area intended to be lighted is minimized or eliminated.

Section 6. CLASS III LIGHTING (STREET LIGHTING)

6.1 General Requirements

- A. LES shall prepare or approve all designs for all lighted streets. LES will install and/or operate and maintain City of Lincoln street lighting for all lighted streets. LES shall establish, encourage, promote and employ energy conservation measures in the design, operation and maintenance of these street lighting systems.
- B. Only ~~high pressure sodium (HPS)~~ light emitting diode (LED) sources or an equivalent or higher efficiency source shall be used.
- C. Street lighting may exceed trespass and glare standards.
- D. All luminaires for street lighting shall be mounted level in the horizontal and vertical axis.

6.2 Design Requirements

Street lighting design shall be done in accordance with the IESNA "AMERICAN NATIONAL STANDARD PRACTICE FOR ROADWAY LIGHTING", ~~latest~~^{9th} edition, except as specifically provided in this section.

6.3 Standard Street Lighting

LES may install/replace and maintain, "standard lighting" in any area where the City Council has not provided for "ornamental street lighting." Informal petitions signed by affected property owners or requests by the Mayor, City Council, Police Department or Public Works Department will precipitate investigation by LES Street Light Engineering to design and order the installation of justifiable lighting.

The standard street light shall normally consist of a wood pole and bracket with a ~~pendant~~ LES approved roadway luminaire. Wiring will be underground in areas with an underground source and overhead in areas with an overhead source. Whenever directed by the Public Works Department, wiring shall be installed underground.

For local residential streets, ~~lamps shall be 70 watt high pressure sodium sources or equivalent efficiency sources.~~ Poles shall generally be ~~twenty feet high mounting height and~~ placed at street intersections and mid-block with normal interval spacing of 240 feet.

For all other streets, the street lights intensity will be designed to 70% illuminance or higher and 100% of uniformity of IESNA recommended practices, ~~depending on the uniformity.~~

6.4 Ornamental Street Lighting

Ornamental Lighting shall be constructed in areas designated by the City Council as “Ornamental Lighting Districts” or authorized by mayoral “Executive Order” ~~areas~~ and shall be of a design specified to provide illumination in accordance with these standards. Such systems are to be served by underground wiring and design/construction will consist of a metal, concrete or fiberglass Standard (pole).

For local residential streets the standard street ~~lamp/luminaire will be post top with a 70-watt high pressure sodium vapor type~~ a LES approved light emitting diode (LED) post top luminaire, or an LES approved ~~lamp/luminaire~~ source of equal or greater efficiency, mounted generally 20 feet above grade. The units shall be located at all intersections and at approximate mid-block normal interval spacings of 240 feet.

For all other streets, the street lights intensity will be designed to 70% illuminance or higher and 100% of uniformity of IESNA recommended practices, ~~depending on uniformity~~. The City Council authorizes the City Engineer or subdivision developer (in the case of “Executive Order” areas) to advertise for equipment and installation-construction bids for ornamental lighting. LES is responsible for inspecting and monitoring work done by contractors and maintaining the lighting after its installation.

6.5 Supplemental Streetscape Lighting

Supplemental streetscape lighting shall be for decorative purposes only and are not intended to light the street. No supplemental streetscape light shall exceed 4050 lumens unless it is within a cutoff luminaire.

6.6 Existing Street Lighting (replacement)

LES will replace existing street lighting if it has been determined that maintenance of the existing system is no longer economically feasible. LES will replace the system with standard components equivalent to those currently being installed. Requests for special lighting equipment requires specific action by property owners/developers and approval by the LES Engineering staff.

If an existing wood pole (bracket style) area desires ornamental lighting, the property owners in that area shall pay the difference between such “standard street lighting” and “ornamental residential street lighting.”

6.7 Arterial Street Lighting

“Permanent” arterial lighting consists of metal, concrete or fiberglass poles specifically designed to support bracket mounted roadway luminaires ~~pendant street lights~~, generally served with underground wiring. The roadway illuminance ~~street lights intensity~~ will be designed to 70% or higher and 100% of uniformity of IESNA recommended practices ~~depending on uniformity~~.

“Temporary” arterial lighting may consist of wood utility poles supporting bracket mounted fixtures served overhead. Such systems will be converted to permanent at such time as roadway improvement factors, capital improvement funds and system age priorities permit.

6.8 Street Light Maintenance

LES will responsibly maintain street lighting in a manner recognizing public safety and convenience needs of such systems.

The principal objective is to keep as many lights as possible functioning properly and responding promptly to “light-out” call-ins.

Lighting which becomes unreliable and maintenance prone will be replaced as expeditiously as possible, within budget limitations.

Section 7. CLASS IV LIGHTING (OUTDOOR RECREATIONAL FACILITIES)

7.1 Requirements

- A. Except, as noted in this section hereinafter, recreational facilities shall be lighted in accordance with the IESNA RP-6 standards for “SPORTS AND RECREATIONAL AREA LIGHTING,” latest edition, including standards for illuminance and uniformity ratio.
- B. Glare Control
 - 1. The luminaires shall meet, when installed and aimed, IES “Cutoff” type luminaire designation as defined in the IESNA Lighting Handbook, 9th edition.
 - 2. Sports flood luminaires shall have a maximum aiming angle up from nadir (the point 90 degrees down from horizontal) of seventy-two (72 degrees) above nadir or two times the mounting heights out from the pole the fixture is mounted on, whichever is less.
- C. Time of Operation
 - 1. Outdoor recreational and sports facilities, except golf driving ranges, may remain lighted past 12:00 midnight to complete recreational and sports activities that are in progress and under illumination at 12:00 midnight and still be in conformance with this chapter, i.e., activities in progress may complete after 12:00 midnight, but they cannot start under illumination after 12:00 midnight, However, in no case shall the illumination stay on past 12:30 a.m.-

Lighting for golf driving ranges shall be off between 11:00 p.m. and sunrise.

Section 8. CLASS V LIGHTING (SALT CREEK TIGER BEETLE ENVIRONS)

These requirements will be developed by the United States Fish and Wildlife Service and amended into this code when available.

Section 9. LIGHT TRESPASS AND GLARE

- A. All lighting except, Class III (street lighting) or as otherwise exempted elsewhere in this chapter, shall meet the requirements for luminaire, shielding, placement and aiming to minimize light trespass and glare such that:
 - 1. No more than 2.0 foot-candles is measured on a vertical plane located at the property line of the adjacent property.
 - 2. Light trespass from a non-residential use abutting, or across the alley from, a residential district shall not exceed 0.5 foot-candles at the residential property line measured on a horizontal plane.
- B. Exterior building surfaces shall not exceed an average surface brightness of 750 nits.
- C. Signs are regulated for surface brightness by Chapter 27.69 of the LMC. Sign illumination shall be included in the measurement of light trespass.

Section 10. SUBMISSION OF PLANS AND EVIDENCE OF COMPLIANCE

- A. The application for a building permit involving outdoor lamps (except Class III lighting) that exceed 4050 lumens shall include evidence that the proposed work will comply with this chapter. Single-family and two-family dwellings are exempt from the requirements of this section. The submission shall contain, but not be limited to, four complete sets of the following:
 - 1. The location of the site where the outdoor luminaires or outdoor light fixtures will be installed;
 - 2. Plans showing the location, type and the mounting heights of all fixtures, both existing and proposed, on the premises, including point-by-point lighting level (initial and maintained) printouts with calculation areas delineated and average values and initial horizontal and vertical values at 20 foot intervals across all property lines.

3. A description of the outdoor light fixtures including, but not limited to, manufacturer's catalog cuts, ITL photometric report with candela distribution, drawings, and shielding information.
 4. Justification for light loss factors (LLF) utilized by the calculations for the light levels submitted.
- B. The above required plans and descriptions shall be sufficiently complete to enable the City to readily determine whether compliance with the requirements of these design standards will be met. At a minimum, the plans shall show point-by-point horizontal foot-candle levels (initial and maintained) for all areas of the project subject to these Design Standards for Outdoor Lighting. The plans shall also include horizontal and vertical foot-candle levels at twenty foot intervals at all property lines. These horizontal and vertical levels shall be taken at the heights required by this code. If such plans and descriptions cannot enable the City to make a determination of compliance with the requirements of these design standards by reason of the nature or configuration of the devices, fixtures or lamps proposed, the applicant shall submit further evidence of compliance enabling such determination.
- C. Submittal and drawings shall be signed by a professional engineer licensed in Nebraska, a lighting designer certified by the National Council on Qualifications for the Lighting Profession (NCQLP) or by the licensed electrical contractor that is performing the work. This engineer, lighting designer or contractor shall certify that the submitted design meets these design standards. Submittal must contain the name of the company that prepared the drawings and the name, title and telephone number of the person that performed the design work.
- D. All projects resubmitted for approval shall include a written description of all changes and comments keyed and attached to the plan check comments.
- E. Plans and calculations are not required when an electrical contractor submits an application for an electrical permit; however, the contractor or associated engineer or lighting designer shall certify that the intended work meets these design standards.

Section 11. INSTALLATION

The owner or contractor of record (except Class III lighting) shall install the approved outdoor luminaires or outdoor light fixtures in conformance to the listing, manufacturer's installation specifications, and all applicable local and state electrical codes. An electrical permit and inspection by the City of Lincoln Department of Building and Safety is required.

Section 12. PERMANENT EXEMPTIONS

- A. Nonconformance. All outdoor luminaire existing and legally installed prior to the adoption of Resolution (~~Misc. No. 08009~~TX No. 16003) are exempt from the requirements of this chapter, except that when existing luminaires are reconstructed or replaced, such reconstruction or replacement shall be in compliance with this chapter, unless it is part of a larger set of the same fixtures, being replaced with the same type of fixture, and no other fixture in that set has been replaced in the past 3 months.
- B. Fossil Fuel Light. All outdoor light fixtures producing light directly by combustion of fossil fuels (such as kerosene lanterns and gas lamps) are exempt from the requirements of this chapter.
- C. Holiday Decorations. Lights used for holiday decorations are exempt from the requirements of this chapter.
- D. Other Uses. Airport lighting which is required for the safe and efficient movement of aircraft during flight, take off, landing, taxiing, loading, unloading, and servicing areas is exempt from the provisions of this chapter. All other outdoor lighting at airport facilities shall comply with the provisions of this chapter. These standards also shall not apply to correctional facilities, heliports, hospital emergency entrances, outdoor workers governed by OSHA standards, or other uses for which lighting standards are preempted by federal or state regulations.
- E. This chapter shall not apply to portable temporary lighting used by law enforcement, utilities or emergency services personnel.

Section 13. TEMPORARY EXEMPTIONS

- A. General. Temporary exemptions are required to be approved for any situation that is not allowed by this chapter where temporary lighting is required including, but not limited to, search lights, construction, parades, special civic or public events, special business events, grand openings of businesses, etc: The exemption shall be permitted on the premises for no more than two occasions and for no more than a combined total of ten days in any calendar year.

(New Chapter 3.100 adopted by Resolution No. A-850+223, 9-15-08)