ORDINANCE NO. 4621

AN ORDINANCE OF THE CITY OF HASTINGS, NEBRASKA, TO CREATE SECTION 34-221 "DSO - DARK SKY OVERLAY DISTRICT;" TO REPEAL ANY ORDINANCE IN CONFLICT HEREWITH; AND TO PROVIDE WHEN THIS ORDINANCE SHALL BE IN FULL FORCE AND EFFECT.

BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF HASTINGS, NEBRASKA:

SECTION 1. That Hastings City Code Section 34-221 of the Official City Code be created to read as follows:

Section 34-221 DSO Dark Sky Overlay District

- (1) Intent: The intent of this district is to create an overlay district which establishes standards for outdoor lighting within an area, as described in Section 34-221 (8)(i) herein, surrounding the Sachtleben Observatory of Hastings College located at 4725 South Wabash Avenue, Hastings, Nebraska in order to maintain a dark sky in the area around said Observatory. These standards shall provide for nighttime safety, security and utility for present and future residents and property owners in this specified area while reducing light pollution and light trespass. The intent of this district is also to require appropriate lighting levels, full cut-off lighting and to minimize lighting glare, lighting pollution and lighting trespass within this specified area.
- (2) Permitted Principal Uses and Structures, Accessory Uses and Structures, Conditional Uses and Prohibited Uses: All principal uses and structures and accessory uses and structures allowable in the primary zoning district(s) upon which this district is overlain shall be allowable in this overlay district. All conditional uses which may be allowable in the primary zoning district(s) upon which this district is overlain may be authorized under this overlay district. Uses which are prohibited in the primary zoning districts upon which this district is overlain shall be prohibited in this overlay district.
- (3) Minimum Lot Size, Width, and Frontage: The minimum lot size, lot width and lot frontage within this overlay district shall be those minimum lot sizes, widths, and frontages set forth in the primary zoning district(s) upon which this district is overlain.
- (4) Minimum Yard Requirements: The minimum yard requirements in this overlay district shall be those minimum yard requirements set forth in the primary zoning district(s) upon which this district is overlain.
- (5) Maximum Height: The maximum height of structures within this zoning district shall be the maximum height set forth in the primary zoning district(s) upon which this district is overlain.

- (6) Maximum Lot Coverage: The maximum lot coverage within this zoning district shall be the maximum lot coverage set forth in the primary zoning district(s) upon which this district is overlain.
- (7) Off-Street Parking and Loading Areas: Off-street parking and loading areas shall be as governed in the primary zoning district(s) upon which this district is overlain.
- (8) Definitions: Notwithstanding the definitions contained in these Regulations, the following definitions shall apply with regard to lighting standards established in this overlay zoning district:
- (a) Cutoff: The point at which all light rays emitted by a lamp, light source or luminaire is completely eliminated (cutoff);
- (b) Cutoff Angle: The maximum angle formed by a line drawn in the direction of emitted light rays at the light source and a line perpendicular to the ground from the light source:
- (c) Full Cutoff-Type Luminaire: A luminaire constructed or shielded to direct all light at a cutoff angle of less than ninety (90) degrees, also referred to as horizon limited luminaire:
- (d) Foot Candle: A unit of illumination produced on a surface, all points of which are one (1) foot from a uniform point source of one (1) candle;
 - (e) Glare: Direct light emitted from a light source that causes eye discomfort.
- (f) Light Pollution: The shining of light produced by a luminaire above the height of the luminaire and into the sky;
- (g) Light Trespass: The shining of light produced by a luminaire beyond the boundaries of the property on which such luminaire is located;
- (h) Luminaire: A complete lighting unit consisting of a light source and all necessary mechanical, electrical and decorative parts;
- (i) Dark Sky Preserve: The land area surrounding the Hastings College Sachtleben Observatory, as indicated on the Official Zoning Map of City of Hastings as a primary dark sky preserve, which includes portions of the area described as being bounded by the centerline of Prairie Lake Road on the north, the centerline of Marian Road on the west, the centerline of Oregon Trail Road on the south and a line one-half (1/2) mile east of and parallel to the center line of Showboat Road on the east, which are in the zoning jurisdiction of the City of Hastings, Adams County, Nebraska where the city is exercising its powers and duties.
- (9) Dark Sky Preserve Light Control Standards and Regulations: Within the primary dark sky preserve upon which this overlay district is applied the following standards and regulations shall apply:
- (a) Illumination Level Standards: The recommended illumination levels contained in the Lighting Handbook of the Illuminating Engineering Society of North America, as may be amended from time to time, shall be used as a guide to providing adequate and safe illumination levels for any given type of use.
- (b) Prohibited Lighting: Flashing lights of any type, excluding such lights as are exempted from these regulations, as set forth in Section 34-309 (2)(b), are prohibited.

- (c) Outdoor Signs: Lighting for outdoor on-premise (business) signs and outdoor off-premise (billboard) signs shall be designed to function as full cutoff luminaires. Lighting for such signs which projects light into the sky shall be prohibited. Additionally, outdoor signs shall comply all with provisions set forth in Section 34-309. In the case of any discrepancy between these provisions, the more restrictive code shall apply.
- (d) Non-Agricultural and Non-Residential Uses: All luminaires located on any premises used for commercial, industrial or public or semi-public (institutional) uses shall:
 - (i) Be designed so that the light source (bulb or lamp) is completely shielded from the direct view of an adult observer standing at grade on the lot line of abutting property or any location on residentially zoned property,
 - (ii) Have a full-cutoff lighting reflectors installed;
 - (iii) Be designed and positioned so that the maximum illumination at the property lines of the property on which such lighting is located shall not exceed one-half (1/2) foot-candle; and
 - (iv) The use of exterior lighting for non-residential uses shall observe the same hours of operation as the use itself, provided that any lighting for security purposes shall meet all other requirements of Items (i) through (iii) immediately above, and further provided that for any non-residential use in which lighting is used to provide operational, maintenance safety and security throughout the periods of darkness or twenty-four hours per day, all such outdoor lighting shall comply with all other requirements of provisions (i) through (iii) of this subsection.
 - (e) Agricultural and Residential Uses: With the exceptions set forth in subsection (12) of this Section, all luminaires located on any premises used for agricultural or residential purposes shall:
 - (i) Have a full-cutoff lighting reflectors installed;
 - (ii) Be designed and positioned so that the maximum illumination at the property lines of the property on which such lighting is located shall not exceed one-half (1/2) foot-candle.
- (11) Method of Lighting Measurement: Illumination levels shall be measured in foot-candles with a meter sensor in a horizontal position at an approximate height of three (3) feet above grade. Maximum illumination readings are to be taken directly beneath the luminaire. Readings should normally be taken after a cumulative initial lamp burn-in period of at least two hundred (200) hours.
- (12) Exceptions and Exemptions: The following lighting issues shall be exempt from the standards and regulations of this overlay district:
- (a) Decorative seasonal lighting with a power rating equal to or less than seventy-five (75) watts for incandescent bulbs or the equivalent of such power ratings for alternative lighting instruments;
 - (b) Seasonal use of miniature light strings, which may be flashing;
 - (c) Low voltage and solar powered landscape lighting:
- (d) Temporary emergency lighting used by law enforcement officials, fire fighters or other emergency services;

- (e) Vehicle and farm equipment luminaires;
- (f) Hazard warning luminaires which are required for use by governmental regulatory agencies;
- (g) Motion sensor lighting where the lamp is not on for a continuous period exceeding five (5) minutes;
- (h) Ball diamonds, play fields, tennis courts, race tracks and other similar uses, provided the typical hours of operation do not extend past midnight and provided that the lighting shall for such uses be shielded to prohibit light from projecting into the sky and to minimize light and glare from spilling over onto adjacent properties.
- (13) Non-Conforming Luminaires: Except as herein provided, exterior lighting luminaires in existence as of the effective date of this Section shall be exempt from the standards and regulations of this Section and shall be considered legally non-conforming. Such fixtures may be repaired and maintained, provided however, that if any such non-conforming luminaire is moved or damaged by any means to the extent that its total replacement is necessary, the luminaire, or replacement shall comply with the standards and regulations of this Section.
- **SECTION 2.** That any ordinance passed and approved prior to the passage of this ordinance, and in conflict with its provision, is hereby repealed.
- **SECTION 3.** This ordinance shall take effect and be in full force from and after its passage, approval and publication in pamphlet form.

PASSED AND APPROVED by the Mayor and City Council of the City of Hastings, Nebraska, this 10th day of February, 2020.

ATTEST:	Mayor
City Clerk	
(SEAL) APPROVED AS TO FORM	
City Attorney	