



## VILLAGE OF CORRALES

### ORDINANCE NO. 18-004

**An Ordinance to Amend in Its Entirety Chapter 18, Article II, Section 42, Regarding Lighting of the Code of Ordinances of the Village of Corrales, and to Amend Article II, Section 29, Definitions; Regulating Lighting to Reduce or Eliminate Light Pollution; Requiring Conversion of Certain Existing Lighting to Comply with Amended Regulations; Providing for Enforcement**

**WHEREAS**, the Planning and Zoning Commission (the "Commission") of the Village of Corrales has undertaken a review of various provisions of the Code of Ordinances relating to zoning in the Village; and

**WHEREAS**, in connection with its review the Commission has recommended to the Village Council, the governing body of the Village ("Governing Body") that it consider amending in its entirety Section 18-42, regarding lighting requirements, by substituting new general standards, applicability, exemptions, submittals, and enforcement provisions for lighting and insert in appropriate alphabetical order related definitions of terms used in Section 18-29, definitions; and

**WHEREAS**, the amendments recommended by the Commission protect the visual aesthetic of the Village and provide for staff review and enforcement of regulations regarding lighting,

**NOW, THEREFORE, BE IT ORDAINED** by the Governing Body of the Village of Corrales, New Mexico, that Chapter 18 of the Code of Ordinances (the "Code"), is amended as follows:

**Section 18-29. Definitions** of the Code is amended to add, in appropriate alphabetical order, the following terms and definitions:

*Accent lighting* means any directional lighting that emphasizes a particular object or draws attention to a particular area.

*CIE* means the Commission Internationale de l'Eclairage, or International Commission on Illumination.

*Disabling glare* means lighting that impairs visibility and creates a potentially hazardous situation for pedestrians or motorists.

*Glare* means the brightness of a light source sufficient to cause eye discomfort or distraction for an average person not suffering from any visual impairment.

*Hood or Shield:* An opaque, non-reflective mechanism designed to constrain the radiation of a fixture in a way which does not allow light trespass to occur.

*Interior Lighting:* A luminaire whose installation is meant to provide lighting primarily for the interior of a building and whose majority of radiant output is confined to the interior space. Interior lighting shall not be allowed to create disabling glare or nuisance light trespass.

*Lamp or bulb* means that portion of the fixture that produces light by attaching to a socket within the fixture.

*Light pollution* means excessive or inappropriate artificial light. Light pollution causes an adverse effect on the night sky in a number of ways by decreasing the ability to see the natural night sky.

*Light trespass* means light emitted by a luminaire that shines beyond the property on which the luminaire is installed.

*Lumen* means a unit of light or illumination from a lamp or bulb, as defined by the International System of Units ("SI"). One lumen is the radiant flux emitted over a solid angle of one steradian by a point source having a brightness of one candela. This measures the total amount of visible light emitted from a source so that the unit reflects the varying sensitivity of the human eye to different wavelengths.

*Luminaire or fixture* means a complete lighting unit, including the lamps or bulbs, as well as the parts that connect to power, the housing that protects the bulbs and parts that distribute the light.

*Lux* is defined as the calculated value of Lumen per meter squared.

*Nuisance glare* means light that creates an annoyance or aggravation but does not create a potentially hazardous situation.

*Recreational use lighting* means lighting devices designed for the purpose of illuminating a playing field so as to allow sports and recreation in the evening hours.

*Shielding* means that no light rays emitted by a fixture above the horizontal plane running through the lowest point of the fixture where light is emitted.

*Spotlight or floodlight* means any lamp that incorporates a reflector or a refractor to concentrate light output into a directed beam in a particular direction.

*Unified Glare Rating (UGRs) small source extension* means the standardized calculation for determining glare of a small source in a given environment, based on source illumination as

compared to background illumination. UGR's shall be measured and calculated using the small source method in CIE 146-147 (2002).

Where  $L_b$  is the background illumination in candelas per square meter,  $L_b$  shall be taken to be:

Zones A-1, A-2, or H: 0.00438 candelas/meter-squared

Zones C, M, or O: 0.07 candelas/meter-squared

*UGRs Maximum Value* is the calculated glare value which exceeds the following limit: For all properties, the UGRs Maximum Value shall be 15.0 measured at the property boundary.

*Watt* means a unit of electric power flowing into a lamp or bulb, as defined by the International System of Units ("SI"). One watt is a rate of energy transfer of one joule per second.

### **Section 18-42 Lighting.**

- (a) *Intent.* The purpose of this section is the regulation of lighting to reduce or prevent light pollution to maximize the preservation of the agricultural and rural heritage of the Village. The intention of regulating lighting is to reduce or prevent glare, light trespass, conserve energy and promote safety and security, and to adopt the applicable requirements of the New Mexico "Night Sky Protection Act" *NMSA 1978, Section 74-12-1 et seq.* The illustrations contained in this section are intended to help the public understand acceptable and unacceptable lighting in the Village of Corrales.
- (b) *Applicability*
  - (1) All non-conforming fixtures installed prior to and operable on the effective date of this Ordinance shall be removed or converted to a conforming fixture when the existing non-conforming fixture is inoperable or un-repairable. The Village may require a non-conforming use to be corrected to the standards specified in this Ordinance if the Village determines that the non-conforming use is creating a nuisance glare or disabling glare as defined in Section 18-29.
  - (2) All existing lighting fixtures owned and maintained by any public utility company within the Village are required to be removed or comply with this Ordinance consistent with provision in the "Night Sky Protection Act", *NMSA 1978, Section 74-12-9* within 12 months from the enactment of this Ordinance.
  - (3) All new installations and modification to existing non-conforming fixtures shall comply with this Ordinance.

- (4) Compliance with this Ordinance shall be administered and enforced by the Village of Corrales Planning and Zoning Administrator or designated Village personnel.
- (5) In the event of a conflict with any other section of this Ordinance, the more stringent requirement shall apply.
- (6) Interior lighting shall not be allowed to create any disabling glare or nuisance light trespass.

(c) *Exemptions.* The following are exempt from the provisions of this Ordinance:

- (1) Traffic control signals and devices.
- (2) Street lights installed prior to the effective date of this Ordinance.
- (3) Temporary emergency lighting (i.e., fire, police, repair workers).
- (4) Moving vehicle lights.
- (5) Navigation lights (e.g., communications towers)
- (6) Seasonal decorations with light displays in place shall not produce nuisance glare beyond the property boundaries.
- (7) Special situations approved by the Village of Corrales for temporary or periodic events (i.e. fairs, fiestas, emergencies, or Village-sanctioned night-time construction.)
- (8) Flagpole illumination from below shall be allowed, consisting of a single spotlight fixture projecting in the perpendicular to the horizon, with intensity of no more than 500 lumens. Fixtures for top illumination for flags are not restricted to 500 lumens, but shall conform to all other requirements of this section including shielding, prohibition of light trespass, and glare.

(d) *Submittals*

- (1) Application for building permits shall be submitted to the Village Planning and Zoning Department. If the application includes installation of outdoor lighting fixtures, evidence of compliance with the requirements of this Section shall be provided. The applicant shall provide the following:

- a. Plans indicating the location, type, and height of luminaires including both building and ground-mounted fixtures;
- b. Description of luminaires, including lamps, poles or other supports, and shielding devices;
- c. Ganging of individual luminaries to achieve more than allowed lumens in a specific area is prohibited;
- d. Photometric data, showing downward angle of light emission;
- e. Additional information may be required by the Planning and Zoning Department in order to determine compliance with this Section.

(2) Requests for any lighting variance from the requirements of this Ordinance are to be submitted in writing to the Planning and Zoning Commission.

(e) *General Standards*

The following standards shall apply to all outdoor lighting which are not covered under subsection (c) *Exemptions* above:

- (1) General Standard: All light fixtures, including security lighting, shall be located, aimed and shielded so that the direct illumination from the fixture shall be confined to the property boundaries of the source. Shields shall be constructed of material which is primarily non-reflective, non-specular, and opaque in nature. A light fixture shall be determined to be non-compliant if the interior of the shield directly reflects light in a manner which causes nuisance glare which exceeds the UGR Maximum Rating Value, or light trespass. To be considered shielded, fixtures must be closed on top and mounted such so that fixture does not allow light trespass or nuisance glare. Examples of acceptable and unacceptable light shielding and hooding are shown on the following pages.
- (2) The hood or shield must restrict the fixture from creating nuisance glare or light trespass. The fixture shall not allow light to escape above the horizon. Fixtures which contain reflective interiors must be oriented such that glare from the radiant source is constrained to the property of origin.
- (3) Existing fixtures may be adapted to comply with this Section by adding a properly designed hood or shield, or by pointing any upward-mounted, shielded fixture downward toward the ground surface. All fixtures shall constrain all nuisance glare to the property of origin.
- (4) Any light falling onto adjacent property or streets that results in nuisance glare or disabling glare, or exceeds the UGRs Maximum Value, shall not be permitted. Light trespass beyond property boundaries or above the horizontal plane shall be considered non-compliant.

- (5) Any lighting fixtures shall be designed, installed, located and maintained such that glare onto other properties or streets shall be eliminated and all direct illumination kept within the boundaries of the property of origin.
- (6) Accent or landscape lighting shall be directed onto foliage or objects and not skyward or onto adjacent properties. Direct light emissions shall not be visible above the roofline or beyond the building edge.
- (7) Spotlighting on landscaping and foliage shall be limited to 500 lumens output. The lamp shall be shielded and not create disabling or nuisance glare or exceed the UGRs Maximum Value.
- (8) Rotating, flashing, moving or stationary beacons of light used for advertising purposes or public events are prohibited.
- (9) Exterior light fixtures shall be limited to fifteen (15) feet in height from grade.
- (10) Where exterior lighting is used for security purposes or to illuminate walkways, entrances, driveways, equipment yards and parking lots, outdoor shielded lights shall be used.
- (11) This section shall be enforced on the basis of a formal complaint in writing with the Planning and Zoning Department.
- (12) UGRs measurements of a fixture shall be recorded from a point of observation which is at the boundary of the property of origin of the light source.

(f) *Enforcement and Penalties for Violation*

(1) It shall be unlawful to install or operate a light fixture in violation of this Ordinance. Any person violating any provisions of this Ordinance shall be guilty of a misdemeanor. Each and every day during which the illegal use continues after notification shall be considered a separate offense. Continued installation of non-compliant fixtures after notification shall be determined to be an additional offense per fixture.

(2) This Section shall be enforced when the Planning and Zoning Administrator or Village-designated personnel determines a violation has occurred or when any citizen makes a complaint in writing to the Village and investigation by the Village determines that there is a violation of this Ordinance. The Planning and Zoning Administrator or Village-designated code enforcement officer will contact the owner, tenant, agent, or person in charge of the premises where the violation has occurred and notify them of

the violation in writing.

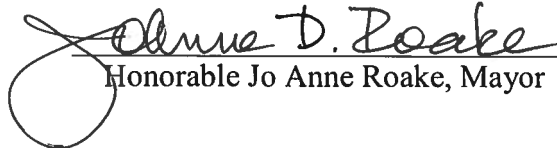
**SEVERABILITY CLAUSE:** Should any section, paragraph, clause or provision of this Ordinance be held to be invalid or unenforceable for any reason, the invalidity or unenforceability of such section, paragraph, clause or provision shall not affect any of the remaining provisions of this Ordinance. The Governing Body of the Village of Corrales hereby declares that it would have passed this Ordinance and each section, subsection, sentence, clause, word or phrase thereof irrespective of any one or more sections, subsections, sentence, clauses, words or phrases being declared unconstitutional or otherwise invalid.

**COMPILING CLAUSE:** This Ordinance shall be incorporated in and compiled as a part of the Code of Ordinances of the Village of Corrales.

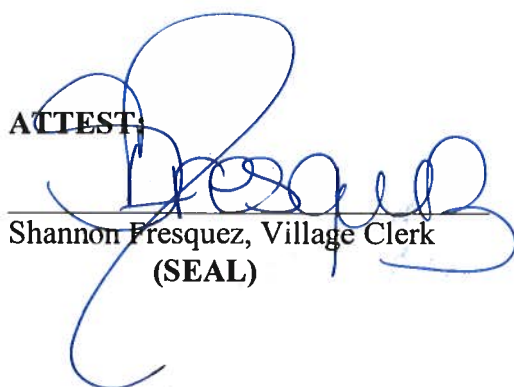
**EFFECTIVE DATE AND PUBLICATION:** This Ordinance shall become effective and be in full force and effect from and after its passage, publication and posting, according to law.

**PASSED, APPROVED, ADOPTED AND SIGNED** at a duly called regular Meeting of the governing body of the Village of Corrales on this 8th day of August 2018 in the Village of Corrales, New Mexico.

**VILLAGE OF CORRALES**

  
Honorable Jo Anne Roake, Mayor

**ATTEST:**

  
Shannon Fresquez, Village Clerk  
(SEAL)

