

TOWN OF BLUFF AMENDED ORDINANCE #2022-18-10

An ordinance amending and enacting provisions regulating exterior lighting.

The Town of Bluff finds that:

- a. The preservation of the rural, small-town nature of Bluff is a value worth preserving;
- b. The proliferation of exterior lighting can result in negative impacts upon adjacent property owners and diminution of the quality of life;
- c. Excessive exterior lighting constitutes a waste of energy resources; and
- d. Nighttime conditions in and around Bluff enable viewing of dark night skies, supporting resident and visitor amenity and promoting area recreation and tourism opportunities.

Therefore, the Town enacts new Chapter 6.60 to its municipal code as follows.

Chapter 6.60 OUTDOOR LIGHTING

6.60.010 PURPOSE.

The purposes of this Chapter are to:

- A. Encourage outdoor lighting practices that will minimize light pollution, glare, light trespass and sky glow in order to preserve the natural dark of the night sky and to prevent lighting nuisances on properties.
- B. Promote energy conservation.
- C. Maintain nighttime safety and utility.

- D. Encourage the use of minimum safe lighting levels and adequately shielded light.
- E. Maintain the rural atmosphere and village character of the Town.

6.60.020 DEFINITIONS.

- A. For the purpose of this Chapter the words and terms used herein shall be defined as follows.
 - 1. ACCENT OR ARCHITECTURAL LIGHTING: Lighting of building surfaces, landscape features, statues and similar items for the purpose of decoration or ornamentation, or lighting that does not contribute to the safety of residents, guests, employees or customers on a property.
 - 2. BACKLIT: As it relates to signs, any sign that uses conventional luminaires to illuminate the surface containing the information or message intended to be consumed by the viewer from behind and does not allow indirect illumination to emanate from the sign. For example, signs that create a 'halo' effect against an opaque background around the sign copy are allowed.
 - 3. CORRELATED COLOR TEMPERATURE (CCT): A measure of the color properties of light emitted by lamps, being equal to the temperature, expressed in kelvins (K), of the Planckian radiator whose perceived color most closely resembles that of a given stimulus at the same brightness and under specified viewing conditions. CCT values are typically provided in lighting manufacturer data sheets.
 - 4. DEVELOPED ACRE: Property altered from its natural state by construction or development and consisting of structures and/or hardscape. The number of developed acres of a land parcel is the gross acreage of that parcel less any acres that are considered undeveloped.

5. DIRECT ILLUMINATION: Illumination resulting from light emitted directly from a lamp, light bulb, luminaire, or reflector. This does not include light reflected from other surfaces, such as the ground or building faces.
6. EXTERNALLY ILLUMINATED: As it relates to signs, any sign that uses conventional luminaires mounted at some distance above, below, or otherwise away from the surface containing the information or message intended to be consumed by the viewer. For the purposes of this Chapter, such signs are regulated as lighting and are thus subject to all of its provisions unless otherwise specifically exempted.
7. FLOODLIGHT: A luminaire designed to "flood" an area with light. A specific form of luminaire designed to direct its output in a specific direction. Such luminaires are often designated by the manufacturer and are commonly used in residential outdoor lighting.
8. FULLY SHIELDED LUMINAIRE: An outdoor luminaire designed so that the installed luminaire emits no light above the horizontal plane passing through the lowest light-emitting part of the luminaire. Fully shielded luminaires must be shielded in and of themselves. Surrounding structures, like canopies, are not to be considered when determining if the luminaire is fully shielded. Fully shielded luminaires must be appropriately mounted so that the shielding prevents light from escaping above the horizontal plane and all light is directed downward.
9. INITIAL LAMP LUMENS: The number of lumens of light emitted by a luminaire when the lamp is new, not accounting for any depreciation due to the age of the lamp or environmental conditions that may be detrimental to its performance.
10. INTERNALLY ILLUMINATED: As it relates to signs, any sign which has a light source entirely enclosed within the sign and not directly visible to the eye.

11. LIGHT POLLUTION: Any adverse effect of manmade light. Often used to denote "sky glow" from cities or towns, but also includes glare, light trespass, visual clutter and other adverse effects of lighting.
12. LIGHT POST: A post supporting an outdoor luminaire.
13. LIGHT SOURCE: The part of a luminaire that produces light, e.g., the lamp.
14. LIGHT TRESPASS: A condition in which light emitted from a luminaire on one property, not inclusive of light incidentally scattered or reflected from adjacent surfaces, is directed in such a manner that the lamp, or light source, itself is directly visible from any other property and creates conditions of nuisance.
15. LUMENS: Lumen means a unit of luminous flux equal to that yielded by a light source emitting one candela of luminous intensity uniformly over a solid angle of one steradian. Lumens refers to the amount of light emitted by a lamp (more lumens equate to brighter light).
16. LUMINAIRE: A complete lighting assembly, consisting of a lamp, housing, optic(s), and other structural elements, but not including any mounting pole or surface.
17. LUMINANCE: the amount of light that passes through, is emitted, or reflected, from a particular area, and that falls within a given solid angle. Luminance is a measure of light emitted by or from a surface. The SI unit of luminance is candela per square meter (cd/m^2), also known as a "nit."
18. MANUFACTURER'S CATALOG CUTS: A publication or other printed material of a lamp or lighting manufacturer offering visual and technical information about a luminaire or lamp. Also referred to as "data sheets" or "cut sheets".

19. OUTDOOR LUMINAIRE: An outdoor illuminating lamp or similar device used for lighting the exterior of structures, parking lots, pathways, service canopies, recreational areas, signs or other similar outdoor lighting uses.
20. RECREATIONAL LIGHTING: Lighting used to illuminate sports fields, ball courts, playgrounds or similar outdoor recreational facilities.
21. SPOTLIGHT: A luminaire designed to light a small area very brightly. See definition of Floodlight.
22. STRING LIGHTS: Light sources connected by free strung wires or inside tubing resulting in several Or many points of light that are unshielded light sources.
23. SUBSTANTIAL MODIFICATIONS: Means the remodeling of an existing building or structure entailing one or more of the following: i) five hundred (500) square feet or more of interior construction, ii) an alteration of the existing roof line of a building; or iii) any construction that alters the exterior footprint of the building.
24. TOWER: Any monopole, antenna or the like that exceeds eighteen feet (18') in height.
25. UNSHIELDED LUMINAIRE: A luminaire that allows light to be emitted above the horizontal plane either directly from the lamp or indirectly from the luminaire or reflector. Any luminaire not fully shielded.

6.60.030 SCOPE AND APPLICABILITY.

- A. Compliance. All exterior outdoor lighting installed after the effective date of this Chapter in all zones in the Town shall conform to the requirements established by this Chapter.

Light trespass from interior lighting that negatively impacts adjacent properties is also prohibited.

- B. Nonconforming Use Amortization and Deadline for Compliance. All existing outdoor lighting that does not meet the requirements of this Chapter and which is not otherwise exempt shall be considered a nonconforming use subject to a phase-out over time as specified in this subsection. The Town may also provide expertise to advise property owners as to the steps necessary to bring their exterior luminaires into compliance with this ordinance. All property owners shall comply with all provisions of this Chapter by December 31, 2023. This subsection supersedes and takes precedence over general non-conforming use provisions contained in Zoning Section 6.01.030.
- C. Modifications, Compliance Through Building Permit Process. All outdoor lighting shall be upgraded to comply with this Chapter in conjunction with the issuance of a building permit authorizing substantial modifications to an existing building or structure.
- D. Change Of Ownership. All property owners shall bring exterior lighting into compliance with this Chapter at or before the point of sale or conveyance to any new owner.
- E. Conflicts. Should this Chapter conflict with other ordinances of the Town, the more restrictive provision shall apply.

6.60.040 APPLICATION AND REVIEW PROCEDURE.

- A. Lighting Plans Required. All sign permit applications, building permit applications, and Site Plan applications shall include a lighting plan that shows evidence that the proposed luminaires and light sources will comply with this Chapter and shall include the following:
 - 1. Plans or drawings indicating the proposed location of luminaires, height of luminaires on the premises, and type of illumination devices, lamps, supports, shielding

and reflectors used and installation and electrical details.

2. For commercial and industrial uses, photometric diagrams of proposed luminaires are also required. In the event photometric diagrams are not available, the applicant must provide sufficient information regarding the luminaire, number of lumens and shielding mechanisms for the planning commission to be able to determine compliance with the provisions of this ordinance.
3. A table showing the total amount of proposed exterior lightings, by luminaire type, wattage, lumens and lamp type.

B. Approval Procedure.

1. The lighting plan for all new development shall be submitted for approval concurrent with the associated application process.
2. A certificate of occupancy shall not be issued until such time as the property is subject to a post-installation lighting inspection by the building official.

C. Variances. The Planning and Zoning Commission, as part of its review as outlined in this section, may approve a variance for lighting that does not conform to these standards if the applicant demonstrates a substantial and compelling need is established. An applicant requesting such lighting is required to provide proof of requirements of property insurance or findings of competent research demonstrating the need for the requested lighting. The Planning and Zoning Commission may attach other conditions to the approval of such lighting that will make the lighting comply with the spirit of this Chapter.

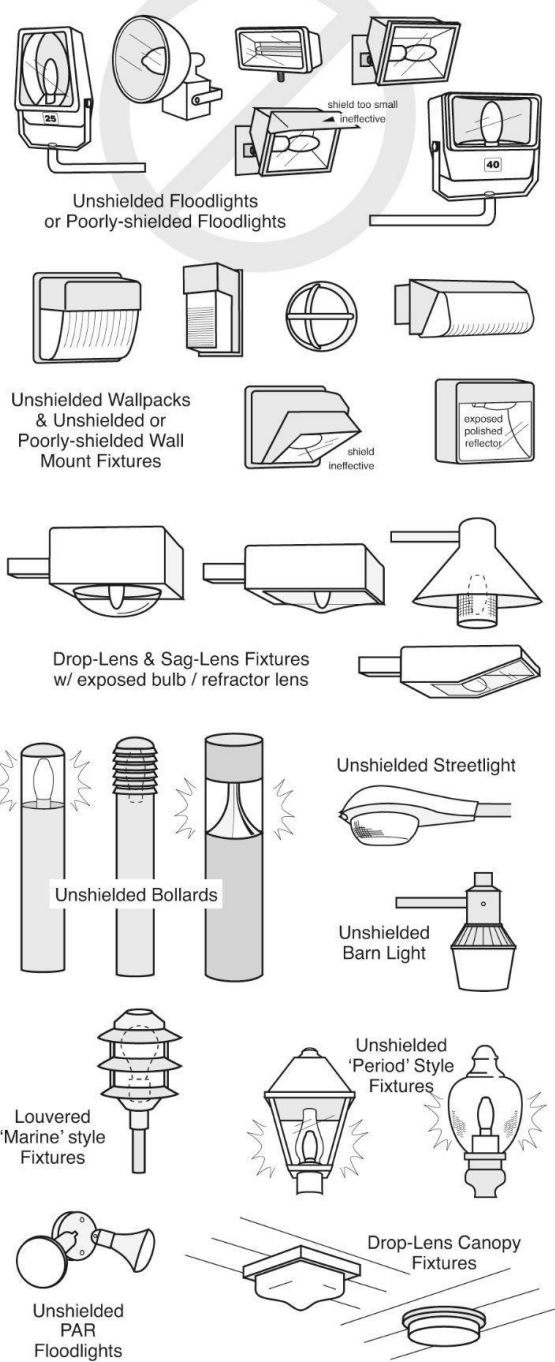
6.60.050 FULLY SHIELDED LUMINAIRE REQUIREMENTS.

- A. Required. Unless specifically exempted by this Chapter, all outdoor lighting shall use fully shielded luminaires. Lighting must be placed at a location, angle, or height to prevent direct illumination outside the property boundaries where the luminaires are located.
- B. Characteristics. In order to qualify as a "fully shielded" luminaire, a luminaire must have the top and sides made of completely opaque material such that light only escapes through the bottom of the luminaire. Luminaires with translucent or transparent sides, or sides with perforations or slits, do not qualify as fully shielded. Any glass or diffuser on the bottom of the luminaire must be flush with the luminaire (no drop lenses). Merely placing a luminaire under an eave, canopy, patio cover or other similar structure does not qualify as fully shielded.
1. Samples of acceptable and unacceptable luminaires (courtesy of International Dark Sky Association <https://www.darksky.org>)

Examples of Acceptable & Unacceptable Lighting Fixtures

Unacceptable/Not Compliant

Fixtures that produce glare and light trespass



Acceptable/Compliant

Fixtures that shield the light source to minimize glare and light trespass and to facilitate better vision at night



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C. Exemptions To Fully Shielded Luminaire Requirements.

1. Luminaires having a total light output less than one thousand (1000) initial lamp lumens are exempt from the full shielding requirement provided one of the following criteria are met:
 - a. The luminaire has a top that is completely opaque such that no light is directed upward, OR
 - b. The luminaire has sides that completely cover the light source and are made of opaque or semi-opaque material. Luminaires with opaque sides may have incidental decorative perforations that emit small amounts of light. Semi-opaque material, such as dark tinted glass or translucent plastic, may be used if the light source is not discernible behind the material. Completely transparent materials, such as clear glass, are not allowed.
2. Pathway lights less than eighteen inches (18") in height are exempted from the full shielding luminaire requirement if the total light output from each pathway light is less than three hundred (300) initial lamp lumens and the luminaires have opaque caps that direct light downward.

6.60.060 CONDITIONS AND STANDARDS GENERALLY.

A. Establishment of Lighting Zones.

1. The Lighting Zones (LZs) shall be as follows:
 - a. LZ0: No ambient lighting. Areas where the natural environment will be seriously and adversely affected by lighting. Impacts include disturbing the biological cycles of flora and fauna and/or detracting from human enjoyment and appreciation of the natural environment. Human activity is subordinate in importance to nature. The vision of human residents and users is adapted to the darkness, and they expect to see little or no lighting.

b. LZ1: Low ambient lighting. Areas where lighting might adversely affect flora and fauna or disturb the character of the area. The vision of human residents and users is adapted to low light levels. Lighting may be used for safety and convenience but it is not necessarily uniform or continuous. After curfew, most lighting should be extinguished or reduced as activity levels decline.

2. A parcel located in more than one of the described zones shall be subject to the requirements of the most restrictive zone.

B. Maximum Color Temperature Of All Lighting Luminaires. The correlated color temperature of any outdoor luminaire shall not exceed two thousand seven hundred kelvins (2700K).

C. Maximum Lighting Allowed. The total amount of outdoor lighting installed on a parcel shall not exceed the lumen values specified in Table 1. "Total lumen allowance" refers to all installed outdoor lighting, whether fully shielded or unshielded, in aggregate. "Unshielded lumen allowance" refers specifically to unshielded luminaires only. Parcels smaller than one (1) acre shall be permitted a maximum number of lumens proportional to the developed acreage.

Table 1. Lighting allowances per zone.

Lighting Zone	Land Use Zones	Total lumen allowance per developed acre	Unshielded lumen allowance per developed acre
LZ0	A-1	0	0
LZ1	A-2	5,000	0
	A-3	10,000	1,000
	C-1	25,000	1,000
	C-2	35,000	2,000
	C-3	45,000	5,000
	F-I	25,000	1,000
	R	5,000	1,000

D. Allowable Applications. Outdoor lighting shall only be allowed in the following applications.

1. To illuminate the entrances to buildings (including garage entrances).
2. To illuminate pathways and walkways.
3. To illuminate parking areas and parking area access lanes.
4. To illuminate outdoor gathering areas, such as patios, pool and hot tub areas, outdoor dining areas and recreation areas.
5. To illuminate signage, subject to the requirements of Section 6.60.060, subsection F.
6. For architectural lighting, provided all of the following conditions are met:
 - a. The property where the architectural lighting is placed is on a property designated as commercial by the Town.
 - b. The architectural lighting is compatible with the purposes of this ordinance as determined by the planning and zoning commission.
 - c. The architectural lighting is directed such that all light falls on the front of the building, and not on the adjacent ground or into the night sky.
7. To illuminate outdoor water features, provided all of the following conditions are met:
 - a. The lighting is angled below the horizontal plane.
 - b. The lighting is fully submerged.

c. Each light source has a total light output of one thousand (1000) lumens.

E. General Curfew. In all non-residential zones, all exterior lighting shall be extinguished either by 11 P.M.; or within one (1) hour of the close of normal business hours; or at the conclusion of usual operations, whichever occurs later. Businesses whose normal operating hours are twenty-four (24) hours per day are exempt from this provision.

6.60.070 SPECIALIZED OUTDOOR LIGHTING.

A. Gas Station Canopies. Gas station canopies may be illuminated, provided that all luminaires are mounted on the undersurface of the canopy, are fully shielded and do not yield conditions of light trespass. Except for directed beam lighting, merely placing the luminaires on the underside of the canopy does not qualify as fully shielding the luminaires.

B. Publicly Owned Lighting. Lighting on public property and in public rights of way will be installed as recommended by the Town engineer or Town Council upon determination that a public safety hazard exists in the area to be lit, and that the hazard can only be effectively mitigated through the use of outdoor lighting and not through some other passive means, such as reflectorized roadway paint or markers. All such lighting shall utilize lamp types that are energy efficient, and shall make use of adaptive controls and/or curfews in order to minimize sky glow and other negative impacts of artificial lighting.

C. Parking Lots.

1. Spot or flood lighting of parking lots from a building or other structure is prohibited.

2. The overall height of any light post used to illuminate parking lots in commercial zones shall not exceed fourteen feet (14') All post mounted parking lot

luminaires shall be set back from property lines a distance of not less than ten feet (10').

3. The overall height of any light post used to illuminate parking lots in residential zones shall not exceed six feet (6').
4. All parking lot lighting shall use fully shielded luminaires.

D. Recreational Lighting.

1. The Planning and Zoning Commission shall review all requests for new recreational luminaires for fields or courts. The Planning and Zoning Commission may approve such requests only after finding:
 - a. Off-site impacts of the recreational lighting will be limited to the greatest practical extent possible by minimizing glare, spill light and uplight by the use of louvers, hoods or shielding;
 - b. The recreational lighting does not exceed illumination levels for Class IV sports lighting set by the Illuminating Engineering Society Of North America (<https://www.ies.org/product/sports-and-recreational-area-lighting/>);
 - c. The recreational lighting will only illuminate the field or court area and shall be shielded to prevent illumination falling outside of those areas;
 - d. The light source for the recreational light will not be visible from adjacent properties;
 - e. The intensity of lighting is adjustable based on the task, such as active play versus field maintenance;
 - f. Lighting will be extinguished by 10 p.m. or one hour after the end of play, whichever is later; and

g. Recreational lighting equipment will be furnished with timers to prevent lighting being left on accidentally overnight by automatically extinguishing it.

2. Pole mounted recreational lighting shall be limited to eighteen feet (18') in height. Pole mounted recreational lighting must be set back an appropriate distance from neighboring properties as determined in consultation with the Planning and Zoning Commission.
3. The lighting for non-field and non-court areas shall conform to all provisions of this Chapter.
4. Temporary event lighting (such as string lights) may be allowed in occupied dining and temporary entertainment areas and must not exceed the maximum lumens per acre per zone. Temporary event lighting shall not be used as landscape lighting. This subsection does not apply to seasonal holiday lighting.

E. Amphitheater Lighting. Outdoor amphitheaters may use illumination to light the performance area of the amphitheater and for the safety of the public. The following standards apply to all amphitheater lighting:

1. Lighting used to illuminate the performance area must be either directed spotlighting or fully shielded lighting. If directed spotlighting, the light source must be located and designed such that it does not yield conditions of light trespass.
2. Lighting used to illuminate the performance area may only be turned on during performances or rehearsals.
3. Lighting used to illuminate the seating areas, pathways and other areas of the amphitheater must meet all standards of this Chapter.

F. Signs. Signs may be unlighted, externally illuminated, or internally illuminated, or backlit. All sign lighting must be designed, directed and shielded in such a manner that it does not yield conditions of light trespass. Lighting for signs must be directed such that only the sign face is illuminated.

1. Standards For Externally Illuminated Signs.

a. Lighting for externally illuminated signs must be aimed and shielded so that light is directed only onto the sign face and does not trespass onto adjacent streets, roads or properties or into the night sky.

b. Lighting for externally illuminated signs must be mounted at the top of the sign (or within 2 feet of the top of a building mounted sign), except for freestanding monument style signs which may be illuminated by ground mounted lighting.

2. Standards For Internally Illuminated Signs - Lighting Is Visible On Both Sides Of Sign.

a. Only sign copy areas and business logos may be illuminated on an internally illuminated sign.

b. Internally illuminated signs shall use semi-opaque materials for sign copy such that the light emanating from the sign is diffused. Transparent or clear materials are not allowed for sign copy. Non-copy portions of the sign (e.g., background and graphics) shall be made of completely opaque material.

c. No luminous element of any such sign shall exceed a luminance of 100 nits.

3. Standards For Backlit Signs - Only One Side Of Sign Is Lit.

- a. Backlit signs shall be designed such that the light source is not directly visible.
 - b. Backlit signs shall use low wattage light sources.
4. Curfew. Lighting of all illuminated signs shall be completely extinguished no later than one hour after the end of usual business hours and shall not commence again until one hour before sunrise of the following day.
 5. Illuminated Window Signage: Illuminated window signs positioned to be primarily visible outside the business structure are allowed only if there are no more than two (2) signs per business space and each sign measures less than three and one-half (3 ½) square feet in area. Such signs must not be illuminated when the business is closed.

6.60.080 HILLSIDES, RIDGELINES, AND SPECIAL CASES.

In certain cases (such as, but not limited to, properties on or near ridgelines, bluffs, rock formations, or hillsides), additional shielding may be required to mitigate glare or light trespass. The need for additional shielding will be considered as part of the review process performed by the Planning and Zoning Commission prior to development approval.

- A. All monopole, antenna, tower, or support facility lighting not required by the Federal Aviation Administration (FAA) or the Federal Communications Commission (FCC) is prohibited.
- B. When lighting is required by the FAA or the FCC, such lighting shall not exceed the minimum requirements of those agencies. Collision markers should have a dual mode for day and night to minimize impact to the night sky and migrating birds.
- C. All other lighting used on the property not regulated by the FAA or FCC shall conform to this ordinance.

6.60.090 EXEMPTIONS.

The following shall be exempt from the requirements of this Chapter

- A. Any form of lighting whose use is mandated or otherwise governed by any legal jurisdiction higher than that of the Town.
- B. Holiday lighting from October 25 to January 30 as long as it does not create a hazard or nuisance to surrounding businesses or residences. Lumens from holiday lighting shall not exceed property lighting allowance.
- C. Fossil fuel lighting.
- D. Traffic control signals and devices.
- E. Lighting employed during repairs of roads, utilities and similar infrastructure, including unshielded lighting, provided that such lighting is deployed, positioned and aimed such that the resulting glare is not directed toward any roadway or highway.
- F. Temporary emergency lighting in use by law enforcement or government agencies, or at their direction.
- G. The lighting of federal or state flags, provided that all of the following conditions are met:
 - 1. The light is a narrow beam aimed and shielded to illuminate only the flag(s).
 - 2. Flagpoles with a height greater than 20 feet above ground level shall be illuminated only from above. This may be achieved by utilizing a luminaire attached to the top of the flagpole or a luminaire mounted above the top of the flagpole on a structure within fifteen (15) feet of the flagpole that complies with all sections of this Chapter. The total light output from any luminaire mounted on top of or above a flag pole shall not exceed 800 lumens.

3. Flag poles with a height equal to or less than twenty (20) feet above ground level may be illuminated from below. If ground-level illumination is used, flagpoles may be illuminated with up to two (2) spot type luminaires, utilizing shields or diffusers to reduce glare, whose maximum combined lumen output is 75 lumens per linear foot of pole height, measured from the level of the luminaire above grade to the top of the flagpole. Luminaires are to be mounted so that their lenses are perpendicular to the flag pole and the light output points directly toward the flag(s).
- H. Temporary lighting required to save life, limb or property from imminent peril, provided that use persists only during the hours of the peril.
- I. Luminaires controlled by motion-sensing switches, provided all the following conditions are met:
1. The lighting is activated by motion sensors and extinguishes within five (5) minutes after each instance in which the switch is triggered.
 2. The trigger sensitivity threshold is adjusted to avoid inappropriately triggering on small objects.
 3. Luminaires do not create conditions of light trespass while activated.

6.60.100 PROHIBITED LIGHTING.

The following are prohibited:

- A. Uplighting to illuminate buildings, structures, natural features, or vegetation, except as allowed by other provisions in this Chapter.
- B. Signs that blink, flash, have moving (or apparently moving) text or images, or which have electronically modifiable text

or images -- including video, electronically variable messaging, mechanically or electronically activated lighting, or the like, not including holiday lighting between October 25 and January 30.

- C. Floodlights or spotlights affixed to buildings for the purpose of lighting parking lots or sales display lot areas.
- D. Searchlights, laser source lights, laser images or projections, or any similar high intensity light.
- E. Any light that dynamically varies its output by intermittently fading, flashing, blinking, or rotating. This type of lighting includes strobe lighting.
- F. Except when used in window signage pursuant to subsection 6.60.070.F4 of this Chapter, neon or luminous tube lighting, either when outdoor mounted on signs or architectural elements, or indoor mounted if visible beyond the property boundaries.

6.60.110 VIOLATIONS.

A. The following constitute violations of this ordinance:

- 1. The installation, maintenance, or operation of any luminaire not in compliance with the provisions of this Chapter.
- 2. The alteration of outdoor luminaires after a certificate of occupancy has been issued when such alteration does not conform to the provisions of this Chapter.
- 3. Light trespass.

B. The Town may enforce this Chapter in a civil action against any property owner by seeking injunctive relief, damages, or both as may fit the circumstances. The Town need only show proof of a violation of this Chapter in order to obtain an injunction, which shall be issued without bond. In any such

judicial action to enforce this Chapter the Court shall award reasonable attorney fees and court costs to the prevailing party in addition to any other form or type of relief.

- C. In addition to all other remedies, the Town may withhold Land Use Clearances or the issuance of building permits to any property owner seeking to develop a parcel that is not in compliance with this Chapter until such time as all violations are abated.
- D. An adversely affected property owner may bring an action to enforce this Chapter to the same extent as the Town.
- E. In any enforcement action where it is shown that the conduct of the property owner is willful, wanton, or deliberately undertaken to: 1) annoy or harass others, or i) defy Town ordinances, the court may award civil damages to the plaintiff of up to three hundred (\$300) per violation. Each day that a discrete violation is maintained may be treated as a separate violation.

THIS AMENDED ORDINANCE was approved by the affirmative vote of a majority of the Town Council of the Town of Bluff this 18th day of October, 2022. This ordinance shall take effect immediately upon passage.

By: 
Mayor Ann K. Leppanen

October 18, 2022
Date

Attest

By: 
Linda Sosa, Town of Bluff Recorder

10/18/2022
Date

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