Township of Central Manitoulin Outdoor Lighting Control and Dark Sky By-law BY-LAW #2003-16

WHEREAS, unnecessary and improperly designed light fixtures cause glare, light pollution and wasted resources; and,

WHEREAS, glare and light pollution can result in: hazardous circulation conditions for all modes of transportation; the diminishing ability to view the night sky; light trespass; and, unattractive townscapes; and

WHEREAS, the citizens of the *Township of Central Manitoulin* value the natural environment, including the beauty and high quality of the night sky; and,

WHEREAS, the *Township of Central Manitoulin* desires to protect the health, safety and welfare of the general public (residents, tourists and motorists), and to protect the integrity of our dark night sky that adds to the quality of life, economic well being and community identity of the Municipality; and,

WHEREAS, these regulations for exterior lighting will not sacrifice the safety of our citizens or visitors, or the security of property, but instead will result in safer, efficient and more cost-effective lighting.

NOW THEREFORE, BE IT RESOLVED, "that the *Township of Central Manitoulin* hereby enacts this by-law in support of the National Dark Sky Sanctuary designation".

CARRIED.

Section 1. Short Title

This by-law together with future amendments may be cited as the "Outdoor Lighting Control and Dark Sky By-law".

Section 2. Purpose

- 2.1 The general purpose of this by-law is to protect and promote public health, safety and welfare, quality of life, and the ability to view the night sky, by establishing regulations and a process of review for exterior lighting. These lighting standards for exterior lighting are intended to accomplish the following:
 - 2.1.1 To protect against direct glare and excessive lighting (light pollution);
 - 2.1.2 To protect and reclaim the ability to view the night sky, and thereby help preserve the quality of life and this area as a National Dark Sky Sanctuary;
 - 2.1.3 To prevent light trespass in all areas of the Municipality;
 - 2.1.4 To promote efficient and cost effective lighting;
 - 2.1.5 To ensure that sufficient lighting can be provided where needed to promote safety, visibility and security for the properties, businesses and rights of way within the Municipality;
 - 2.1.6 To provide assistance to property owners and occupants in bringing new, and existing non-conforming lighting into conformance with this by-law; and,
 - 2.1.7 To work with other jurisdictions throughout Manitoulin Island to meet the purposes of this by-law.

Section 3. Definitions

- 3.1 As used in the *Outdoor Lighting Control and Dark Sky By-law*:
- 3.2 Fully Shielded means that fixtures are shielded in such a manner that light rays emitted by the fixture, either directly from the bulb or indirectly from the lens or fixture, are completely restricted to regions below an angle 15 degrees beneath the horizontal plane running through the lowest point on the fixture.
- 3.3 Partially Shielded means that fixtures are shielded or constructed so that no more that ten percent of the light rays emitted by the fixture either directly from the bulb or indirectly form the fixture, project above the horizontal plane running through the lowest point on the fixture.
- 3.4 Glare means light emitting from a luminaire with an intensity great enough to reduce visibility, and in extreme cases, may cause momentary blindness.
- 3.5 Bulb means the source of electric light.
- 3.6 Fixture means the assembly that holds the lamp in a lighting system. It includes the elements designed to give light output control, such as a reflector (mirror) or refractor (lens), the ballast, housing and the attachment parts.
- 3.7 Existing lighting means any and all lighting installed prior to the effective date of this by-law.
- 3.8 Full cut-off fixtures means fixtures that do not allow light to escape above an eight-five (85) degree angle measured from a vertical line from the centre of the bulb extended to the ground (see Appendix A, also see 3.2 fully shielded).
- 3.9 Exterior Lighting means temporary or permanent lighting that is installed, located or used in such a manner to cause light rays to shine outside or in areas not enclosed by a structure. Fixtures that are installed indoors that are intended to light something outside are considered exterior lighting for the intent of this by-law.
- 3.10 Light means the form of radiant energy acting on the retina of the eye to make sight possible; brightness; illumination; a lamp or fixture as defined above.
- 3.11 Light Trespass means light falling where it is not wanted or needed generally caused by a light on a property that shines onto the property of others.
- 3.12 Light Pollution means any adverse effects of manmade light including, but not limited to, light trespass, uplighting, the uncomfortable distraction to the eye, or any manmade light that diminishes the ability to view the night sky; often used to denote urban sky glow.
- 3.13 Uplighting means lighting that is directed in such a manner as to shine light rays above the horizontal plane.

Section 4. Application

- 4.1 All outdoor lighting fixtures shall be fully shielded and be of the full cut-off type of fixture. A fixture installed as part of a structure may be considered fully shielded if the structure rather than the fixture itself provides the required restriction of light rays.
- 4.2 Lighting fixtures shall be shielded and/or directed in such a manner that they illuminate only the area intended and do not spill over into neighboring areas so as to interfere with the peaceful enjoyment of residential or public properties.
- 4.3 The use of Metal Halide, Mercury Vapour and Quartz outdoor lighting is prohibited within the boundaries of the Municipality after dark.

- 4.4 All architectural or decorative lighting shall be turned off between 2300 hours and sunrise (see exemptions).
- 4.5 No lighting shall be installed higher than 9.2 metres above grade, except lighting for recreational playing fields provided that all other provisions of this by-law are met; and, except street lights used on major roads may exceed this restriction if deemed necessary by Municipal Council, as advised by a lighting engineer.
- 4.6 No outdoor recreation facility shall be illuminated after 2300 hours, except to conclude any recreational or sporting event, or other activity in progress prior to 2300 hours.
- 4.7 Outdoor advertising signs; lighting fixtures used to illuminate an outdoor advertising sign shall be;
 - 4.7.1 Mounted on top of the sign and be in compliance with other sections of this by-law or;
 - 4.7.2 Signs may be illuminated from within provided they are constructed with an opaque background and translucent text and symbols, or with a coloured background (not white, off white, light gray, cream or yellow) and generally lighter text and symbols.

Section 5. Exemptions

- 5.1 All luminaries lawfully in place prior to the adoption of this by-law shall be grandfathered and exempted from the provisions of this by-law. However, any luminaire that replaces a grandfathered luminaire, or any grandfathered luminaire that is moved or modified must meet the standards of this by-law.
- 5.2 Sensor activated lighting may be left unshielded provided it is located in such a manner as to prevent direct glare and lighting the properties of others or into a public right of way, and provided the light is set to only go on when activated and to go off within five minutes after activation has ceased, and the light shall not be triggered by activity off the property.
- 5.3 Vehicular lights and all temporary emergency lighting needed by the Fire and Police departments, or other emergency services shall be exempt from the requirements of this by-law.
- 5.4 Nothing in this by-law shall apply to navigational lighting systems at lighthouses and airports, nor to airport lighting systems marking runways or taxiways. All radio, communications and navigation towers that require lights shall have dual lighting capabilities. For daytime, white strobe lights may be used, and for nighttime, only red lights shall be used.
- 5.5 Outdoor lighting fixtures on residential properties with incandescent lamps equal to or less than 100 (one hundred) watts are exempt from the requirements of this by-law. However, owners are encouraged to use fixtures with opaque tops to prevent light from going directly up.
- 5.6 Decorative outdoor lighting fixtures typically with bulbs less than 25 watts, such as holiday lighting installed seasonally are exempt from the requirements of this by-law.
- 5.7 Outdoor lighting utilizing only fossil fuels, including torches, luminaries, lanterns and open flame devices are exempt from the requirements of this by-law.

Section 6. Penalties

- 6.1 If after investigation, the Municipality finds that any provision of this by-law is being violated, the administrator shall give notice by hand delivery or registered mail, return receipt requested, of such violation to the owner and/or occupant of the premises, demanding that the violation be abated within thirty (30) days of receipt of notice of violation. The municipal staff, planning personnel or chief building official shall be available to assist in working with the violator to correct said violation. If the violation is not abated within the thirty-day period, the administrator may institute actions and proceedings to restrain or abate any violations of this by-law and to collect the penalties for such violations.
- 6.2 **PENALTY-** A violation of this by-law, or any provision thereof, shall be punishable by a civil penalty of one hundred dollars (\$100), and each day of violation after the expiration of the thirty-day period provided in Subsection 6.1 above, shall constitute a separate offense for the purpose of calculating the civil penalty.

Section 7. Notification

7.1 The Municipality shall notify any person of the existence of this by-law prior to issuance of a building permit for any new construction or renovation project, which includes exterior lighting. The Municipality shall also provide a copy of Appendix A of this by-law, along with a copy of the Good Neighbor Outdoor Lighting leaflet to all persons receiving a building permit.