

**THE CORPORATION OF THE TOWNSHIP OF MUSKOKA LAKES
BY-LAW 2022-XXX**

Being a by-law to regulate outdoor illumination to ensure responsible lighting, light pollution mitigation and conservation of the dark sky environment.

WHEREAS Section 129 of the Municipal Act 2001, S.O 2001:

A local municipality may,

- a) prohibit and regulate with respect to noise, vibration, odour, dust and outdoor illumination, including indoor lighting that can be seen outdoors; and
- b) prohibit the matters described in clause (a) unless a permit is obtained from the municipality for those matters and may impose conditions for obtaining, continuing to hold and renewing the permit, including requiring the submission of plans.”

AND WHEREAS the Township of Muskoka Lakes Official Plan encourages, sensitive lighting which is oriented downward, is low wattage, energy efficient, and minimizes glare, to:

- a) prevent conflicts with abutting uses and preserve privacy;
- b) prevent impacts on wildlife and hazards to navigation; and
- c) preserve the night sky.

AND WHEREAS the Township of Muskoka Lakes recognizes its responsibility to protect and enhance the Torrance Barrens Dark Sky Reserve, which exists within the boundaries of the Township:

AND WHEREAS the Township of Muskoka Lakes values its dark sky on a broader scale throughout the municipality as it contributes to our tourist economy and traditional Muskoka character;

AND WHEREAS the Council of the Corporation of the Township of Muskoka Lakes deems it desirable to enact a by-law with respect to dark sky preservation and improvement by regulating lighting fixtures;

AND WHEREAS properly designed light fixtures do not emit undesirable or unsafe light rays into the dark sky and thus protect the dark sky environment and human health both on our streets and on the water;

AND WHEREAS the by-law will be referred to as the “Dark Sky By-law”;

NOW THEREFORE the Council of the Corporation of the Township of Muskoka Lakes enacts as follows:

1.0 DEFINITIONS

For the purposes of this by-law, the following definitions shall apply:

“Architectural Lighting” means lighting that is attached to the exterior of any building, structure, boathouse, dock or post

“Direct Light” means light emitted directly from the lamp or off of the reflector or luminaire;

“Director” means the Director of Developmental Services and Environmental Sustainability or designate as deemed appropriate based on the circumstance;

“Fixture” means the assembly that houses the lamp or lamps and can include all or some of the following parts: a housing, a mounting bracket or pole socket. Includes an Outdoor Light Fixture;

“Full-Cut-Off Fixture” means a luminaire or light fixture that; by design of the housing or lamp, does not allow any light dispersion or direct glare to shine above a horizontal plane from the base of the fixture where light is emitted and must be installed in a horizontal position as designed. These fixtures produce no glare or stray light due to the exposure of the bulb light source because the source is recessed or shielded;

“Glare” means light emitting from a luminaire, or reflection with an intensity great enough to reduce a viewer's ability to see, and in extreme cases causing momentary blindness;

“Grandfathered Luminaires” means luminaires not conforming to this by-law that were installed prior to the passing date of By-law 2014-029 (April 17th, 2014);

“Indirect Light” means direct light that has been reflected or has scattered off other surfaces;

“Install” means the wiring, connecting, plugging in, turning on, placing, mounting or attaching any light fixture or luminaire on a property;

“Interior Lighting” means any luminaire or part of a luminaire including the light bulb that is located inside of a building;

“Lamp” means the component of a luminaire that produces the actual light;

“Laser Source Light” means light amplification by stimulated emission of radiation which produces a high intensity narrow beam of light;

“Light Trespass” means the shining of light produced by a luminaire that shines beyond the boundaries of the property on which it is located;

“Light Pollution or Up Light” means the shining of light upwards into the sky above the horizontal plane of the light fixture caused by any of the following: light trespass, glare, direct light, reflected light, light from fixtures that are not ‘full cut-off’;

“Lumen” is the photometric unit of light output and the unit of measure used to quantify the amount of light produced by a lamp or emitted from a luminaire (as distinct from ‘watt,’ a measure of power consumption).

“Luminaire” means a complete lighting system, including a lamp or lamps and a fixture;

“Officer” means, Municipal Law Enforcement Officer or designate for the Township of Muskoka Lakes;

“Outdoor Luminaire” means outdoor artificial illuminating devices, installed or portable, used for flood lighting, general illumination or advertisement;

“Owner” includes, with respect to land or property, the registered owner, occupant, tenant, or the person for the time being managing or receiving the rent of the property whether on his own account or on an account of an agent or trustee of any other person, or any of the aforesaid;

“Person” includes an individual, an owner, corporation, partnership, company, firm, association, or party and includes the successors, assigns, heirs, executors, administrators, or other legal representatives of a person to whom the context can apply according to law and the singular shall include the plural;

“Reflected Light” means light redirected back into the sky off of surfaces that are being illuminated and does not include surfaces covered by non-man-made materials such as snow, ice, and water;;

“Strobe Light” or “Stroboscopic Lamp” is a device used to produce regular flashes of light;

“Township” means the Corporation of the Township of Muskoka Lakes.

“Watt” is a derived unit of power. The unit, “W” is defined as joule per second and can be used to express the rate of energy conversion to light with respect to time.

2.0 GENERAL

- 2.1 Every person installing an outdoor luminaire and/or interior lighting within the boundaries of the Township shall comply with the requirements of this by-law. If conflicts arise regarding control and maintenance of outdoor lighting, this by-law shall be the governing document.

- 2.2 Every person installing an outdoor luminaire shall be required to use completely shielded full-cut-off fixtures, as identified in Schedule "A" attached hereto and forming part of this by-law.

3.0 REGULATIONS

- 3.1 No person shall install or possess an outdoor luminaire that is not a full-cut-off fixture;
- 3.2 No person shall install or possess an outdoor luminaire that creates light pollution or up light;
- 3.3 No person shall install or possess an outdoor luminaire that creates light trespass;
- 3.4 No person shall install or possess a laser source light or any similar high intensity light outside;
- 3.5 No person shall install or possess a strobe light or stroboscopic lamp outside;
- 3.6 No person shall permit interior lighting to create light pollution, light trespass, up light, glare, or reflected light;
- 3.7 Every person shall turn off all exterior architectural lighting between 11:00pm and 6:00am. (see exemptions);
- 3.8 No person shall install or possess an outdoor luminaire that creates reflected light.

4.0 EXEMPTIONS

- 4.1 Every person who installs temporary lighting for seasonal lighting purposes (Halloween, Christmas etc.) shall be exempt from Sections 3.1, 3.2 and 3.3 and shall comply with the following conditions:
- (a) All lightbulbs shall be a maximum of either 10 watts or 70 lumens;
 - (b) All seasonal lighting shall be turned off from 11:00pm to 6:00am;
- 4.2 Every person who installs lighting used to warn people about the location of open water in the winter months (mainly used when bubbling boathouses and docks) shall be exempt from Sections 3.1, 3.2, 3.3 and 3.8 and shall comply with the following conditions:
- (a) The colour of the light shall be a solid blue only;;

- (b) The light shall not flash or be intermittent at any time;
 - (c) If using a fluorescent light, the maximum wattage shall be 13 watts;
 - (d) If using an incandescent light, the maximum wattage shall be 60 watts;
 - (e) If using a LED light, the maximum wattage shall be 10 watts.
- 4.3 Every person who uses a strobe light for construction projects or emergency purposes shall be exempt from Section 3.7.
- 4.4 Every person shall be temporarily exempt from this by-law for the purpose of temporary events or temporary advertising and shall comply with the following conditions:
- (a) Every person shall request a temporary exemption for the purpose of temporary events or temporary advertising by submitting a written request to the Director or designate and shall include the following information in the request:
 - i. Specific exemption requested (ex: strobe light or stroboscopic lamp);
 - ii. Type and use of exterior light involved;
 - iii. Date of the event;
 - iv. Duration of time for requested exemption;
 - v. Proposed location of exterior light; and
 - vi. Physical size of exterior light.
 - (b) Every person shall be required to obtain an approval by the Director or designate prior to the temporary event or temporary advertising.
 - (c) The exemption shall only be limited to a period of not more than 48 hours.
- 4.5 Every person that installed an outside luminaire prior to April 17th, 2014, and has satisfactory evidence to prove such, shall have the luminaire deemed as a grandfathered luminaire and shall be exempt from this by-law and shall comply with the following conditions:
- (a) Every person that needs to replace, modify, or move a grandfathered luminaire shall replace the grandfathered luminaire in compliance with all regulations of this By-law; and

(b) Every person responsible for a grandfathered luminaire that has been determined to direct light toward streets, parking lots or navigable waterways and cause glare to motorists, cyclists or boaters, and therefore deemed to be a public safety concern, shall bring it into compliance with the by-law immediately or by a compliance date set out in an order issued under Section 9.6.

(c) Every person that has a grandfathered luminaire must bring it into compliance with all regulations of this by-law by no later than January 1, 2024.

4.6 All outdoor light fixtures producing light directly by the consumption of fossil fuels (such as gas lamps, kerosene lanterns, etc.) are exempt from this By-law.

4.7 All outdoor light that emits from a wood burning campfire or artificial outdoor fireplace are exempt from this By-law.

5.0 LIGHTING OF OUTDOOR SIGNS

5.1 No person shall install or possess an outdoor luminaire on an outdoor sign that is not in compliance with the current Township of Muskoka Lakes Sign By-law;

5.2 No person shall install or possess an outdoor luminaire on an outdoor sign that is not in compliance with the requirements of this By-law.

6.0 ENHANCED PRESERVATION AREA

6.1 Every person within the identified Enhanced Preservation Area - Torrance Barrens Dark Sky Preserve, as identified in Schedule "B" attached hereto and forming part of this by-law, shall comply with the following conditions:

(a) Every grandfathered luminaire shall comply with Section 4.6 and shall comply with the following conditions:

i. Every grandfathered luminaire shall be turned off at 11 pm from April 1st to September 30th ; and

ii. Every grandfathered luminaire shall be turned off at 9 pm from October 1st to March 31st .

7.0 SUBSTANTIAL NEW DEVELOPMENTS INVOLVING OUTDOOR LIGHTING

7.1 In support of substantial new developments (e.g. Commercial, Industrial, Institutional, Multiple Residential, etc.), as determined by the director, or designate, involving outdoor lighting fixtures, that applicant shall submit evidence that the proposed work will comply with this by-law. The submission shall

contain, but shall not necessarily be limited to, the following:

- (a) Plans indicating the location of lighting on the premises, and the type of illuminating devices, fixtures, lamps, supports, reflectors, and other devices;
- (b) Description of the illuminating devices, fixtures, lamps, supports, reflectors, and other devices and the description may include, but is not limited to, catalogue cuts by manufacturers and drawings (including sections where required);
- (c) Photometric data, such as that furnished by manufacturers, or similar documentation showing the angle of cut off or light emissions.

The above required plans, descriptions and data shall be sufficiently complete to enable Council and staff to readily determine compliance with the provisions of this by-law and shall be included in an implementing Site Plan Agreement.

8.0 ORDERS

- 8.1 If an officer is satisfied that a contravention of this by-law has occurred, the officer may issue an “Order to Remedy” and such Order shall contain:
 - (a) The municipal address of the land, this may also include the roll number associated with the land;
 - (b) Reasonable particulars of the contravention(s); and
 - (c) The period in which there must be compliance.
- 8.2 Any Order issued pursuant to Section 8.1 of this By-law may require a person or corporation who has contravened any section of this By-law to:
 - (a) Discontinue the contravening act;
 - (b) Fix, alter, remove or replace any luminaires, light fixtures or other illuminated objects to be compliant with the provisions of this By-law;
 - (c) Provide an officer written proof that the wattage or lumens comply with the provisions of this By-law;
 - (d) Provide a lighting plan which is completed by a professional in relation to lighting and to ensure that the plan complies with all provisions of this By-law.
- 8.3 Every person shall comply with an Order under Section 8.1.

- 8.4 Any Order issued under this section may be served personally and/or served by sending it by registered mail, and/or email to the last known address of;
- (a) The owner of the property at the address shown on the municipal tax rolls;
 - (b) The person identified as contravening this by-law;
 - (c) If sent via email, the Order shall be sent to the last known email address of the person(s) or corporation(s) in which the Order is addressed to.
- 8.5 Where service of an Order is made by registered mail, the Order shall be deemed to have been served on the fifth day after the Order is mailed.
- 8.6 Where service of an Order is made by email, the Order shall be deemed to have been served on the fifth day after the Order was emailed or upon a response from the recipient of the Order.
- 8.7 Where service cannot be made under Section 8.4, it is deemed sufficient if the Director, their designate or officer places a placard containing the terms of the Order in a conspicuous place on the affected lands and the placing of the placard shall be deemed to be sufficient service of the Order on the person to whom the Order is addressed to;
- 8.8 An Order under Section 8.1 may require work to be done even though the facts which constitute the contravention of this By-law were present before this By-law making them a contravention came into force.
- 8.9 If an Owner fails to do the work required by an Order issued pursuant to Section 8.1 inclusive of this By-law within the period specified, the Municipality, in addition to all other remedies it may have, may do the work and for this purpose may enter on the land with its employees and agents. The costs incurred by the Municipality in so doing shall be paid by the Owner of the land and may be recovered by the Municipality in the same manner as property taxes;
- 8.10 The costs in subsection 8.9 shall include interest calculated at a rate of 15 per cent, calculated for the period commencing on the day the Township incurs the costs and ending on the day the costs, including the interest, are paid in full.
- 8.11 For the purposes of subsection 8.9, the Township or any authorized agent on behalf of the Township may enter upon land at any reasonable time and complete the work set out in the order.

9.0 INSPECTION AND ENFORCEMENT

- 9.1 The Director, an officer or their designate may, at any reasonable time, enter and inspect any land to determine whether provisions of this By-law, a condition of a

permit issued under this By-law has been complied with, or to ensure that an Order issued under this By-law has been complied with;

9.2 For the purposes of conducting an inspection pursuant to Section 9.1 of this By-law, the Township may, in accordance with Section 436(2) of the Municipal Act, 2001;

- (a) Require the production of documents or things relevant to the inspection;
- (b) Inspect and remove documents or things relevant to the inspection for the purpose of making copies or extracts;
- (c) Require information from any person concerning a matter related to the inspection;
- (e) Alone or in conjunction with a person possessing special or expert knowledge, make examinations or take tests, samples or photographs necessary for the purpose of the inspection.

9.3 Upon completion of the work pursuant to the permit, the owner and/or permit holder shall contact the municipality for an inspection;

9.4 This By-law shall be administered and enforced by the Director, an officer or their designate.

10.0 OFFENCES AND PENALTIES

10.1 No person shall hinder or obstruct, or attempt to hinder or obstruct, any officer exercising a power or performing a duty under this by-law. Any person who is alleged to have contravened any of the provisions of this by-law shall identify themselves to the officer upon request, failure to do so shall be deemed to have obstructed or hindered the officer in the execution of his or her duties.

10.2 Every person who contravenes any provision of this By-law, and every director or officer of a corporation who knowingly concurs in the contravention of this By-law by the corporation is guilty of an offence and on conviction is liable to a fine as provided for in the Provincial Offences Act, R.S.O. 1990, c. P.33.

10.3 Each day on which a person contravenes any provisions of this bylaw shall be deemed to constitute a separate offence under this bylaw as provided for in section 429(2) of the *Municipal Act, S.O. 2001, c. 25*.

10.4 Every person who contravenes any section or provision of this by-law shall be guilty of an offence, as set out in Schedule "C".

10.5 Every person who contravenes the provisions of any section of this By-law, is guilty of an offence under the provisions of the Municipal Act, 2001, S.O. 2001, c.

25 as amended and is liable on conviction to a penalty where the minimum fine shall not exceed \$500 and a maximum fine shall not exceed \$50,000 exclusive of costs under the provisions of the Municipal Act, 2001, S.O. 2001, c. 25 as amended.

- 10.6 Every director or officer of a corporation who contravenes any provisions of the By-law is guilty of an offence under the provisions of the Municipal Act, 2001, S.O. 2001, c. 25 as amended and is liable on conviction to a penalty where the minimum fine shall not exceed \$500 and a maximum fine shall not exceed \$100,000 exclusive of costs under the provisions of the Municipal Act, 2001, S.O. 2001, c. 25 as amended.
- 10.7 If there is a contravention of any provision within this By-law, and the contravention has not been complied with or corrected, the contravention of the provisions shall be designated as a continuous offence for each day or part of a day that the contravention remains uncorrected;
- 10.8 For the purposes of this By-law, if there is an offence respecting two or more acts or omissions, each of which separately constitutes an offence and is a contravention of the same provision of this By-law, then the offence is deemed a multiple offence.
- 10.9 For the purpose of continuous offences, every person who contravenes any provision of this By-law, and every director or officer of a corporation who knowingly concurs in the contravention of this By-law by the corporation, is guilty of an offence and is liable on conviction to a penalty not exceeding \$10,000 per day or part thereof, exclusive of costs, under the provisions of the Municipal Act, 2001, S.O. 2001, c. 25 as amended.
- 10.10 For the purpose of multiple offences, every person who contravenes any provision of this By-law, and every director or officer of a corporation who knowingly concurs in the contravention of this By-law by the corporation, is guilty of an offence and is liable on conviction to a penalty not exceeding \$10,000 per offence, exclusive of costs under the provisions of the Municipal Act, 2001, S.O. 2001, c. 25 as amended.
- 10.11 Notwithstanding Section 10.9 and 10.10, and in accordance with the provisions of the Municipal Act, 2001, S.O. 2001, c. 25 as amended, the total of all fines for the continuous offences or multiple offences is not limited to \$100,000.

11.0 SEVERABILITY

- 11.1 Should any part, section, subsection or portion of this By-law be repealed or declared by a court of competent jurisdiction to be illegal, the same shall not affect the validity of this By-law as a whole or in part thereof, except for that which was declared to be invalid.

12.0 ADMINISTRATION

12.1 Schedules “A” to “C” shall form part of this By-law;

12.2 The short title of this By-law shall be the “Dark Sky By-law”

13.0 REPEAL AND EFFECTIVE DATE

13.1 By-law 2014-029 is hereby repealed.

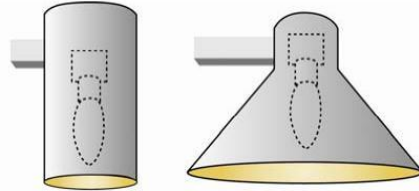
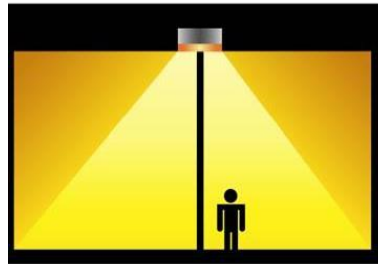
13.2 This By-law shall come into force and effect on the date of passage.

READ A FIRST, SECOND, AND THIRD TIME and finally passed this

Mayor

Clerk

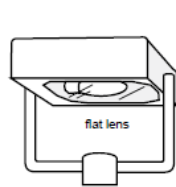
Schedule "A" Full-Cut-Off Fixtures



Fully Shielded Fixtures

ACCEPTABLE

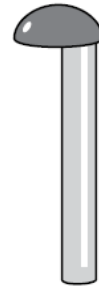
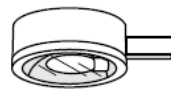
Fixtures that shield the light source to minimize glare and light trespass and to facilitate better vision at night



flat lens



Full Cutoff Fixtures



Fully Shielded
Walkway
Bollards



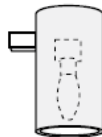
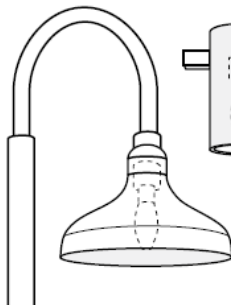
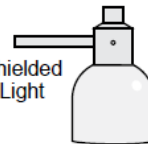
Fully Shielded
Wallpack & Wall
Mount Fixtures



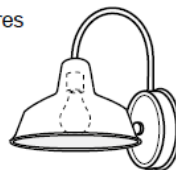
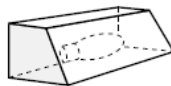
Full Cutoff Streetlight



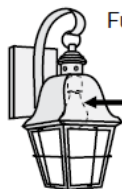
Fully Shielded
Barn Light



Fully Shielded Fixtures



Fully Shielded
'Period' Style
Fixtures
bulb shielded
in opaque top

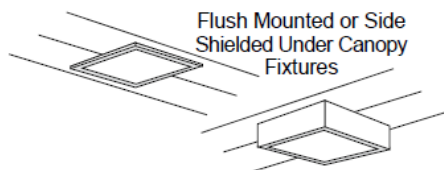


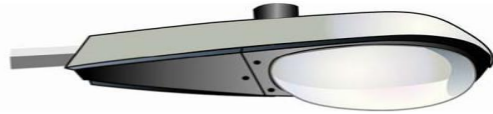
Fully Shielded
Decorative
Fixtures
bulb shielded
in opaque top



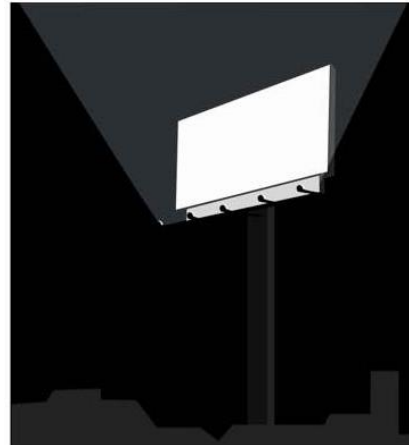
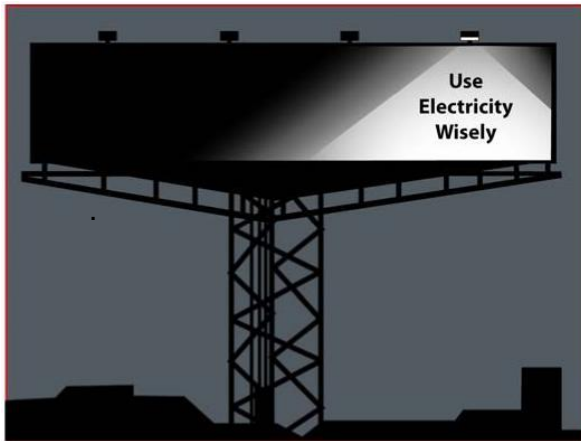
Shielded / Properly-aimed
PAR Floodlights

Flush Mounted or Side
Shielded Under Canopy
Fixtures





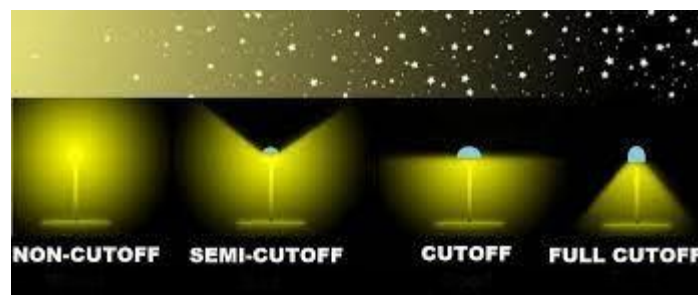
Flat lens cobra head fixture (permitted) vs. Drop lens cobra head fixture (prohibited)



Billboard illuminated from the top (permitted) vs. Billboard illuminated from the bottom (prohibited)

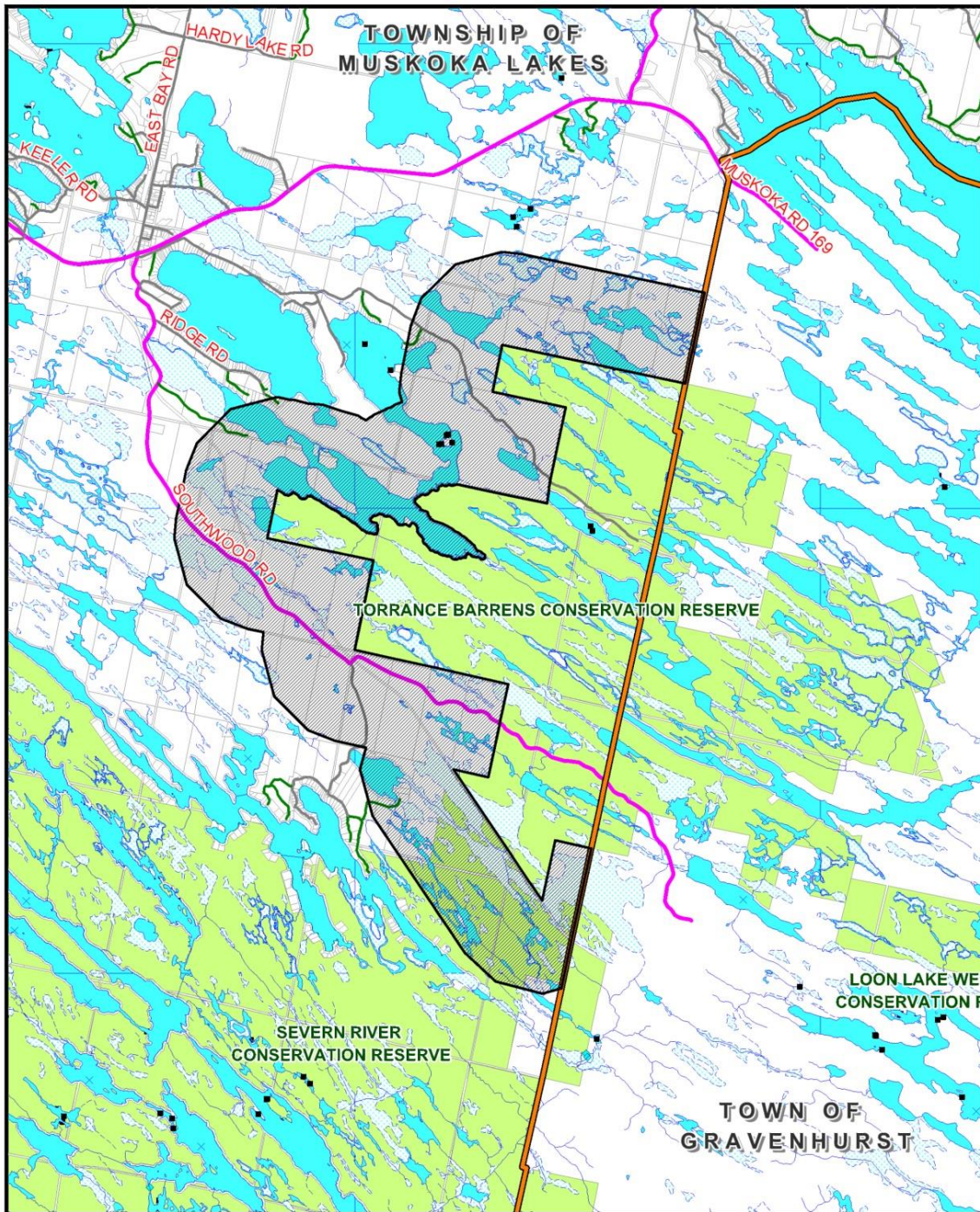


Full-cut-off fixture (permitted) vs. Outdoor luminaire that creates light trespass (prohibited)



Full-Cut-Off fixture is the only permitted light fixture

Schedule "B"
Enhanced Preservation Area - Torrance Barrens Dark Sky Preserve



THE CORPORATION OF THE TOWNSHIP OF MUSKOKA LAKES

PART I Provincial Offences Act

By-law 2022-**: Dark Sky By-law**

Schedule "C": Set Fines

ITEM	COLUMN 1 Short Form Wording	COLUMN 2 Provision creating or defining offence	COLUMN 3 Set Fine
1	Install/possess an outdoor luminaire- not a full-cut-off fixture	3.1	\$300.00
2	Install/possess an outdoor luminaire that creates light pollution/up light	3.2	\$300.00
3	Install/possess an outdoor luminaire that creates light trespass	3.3	\$300.00
5	Install/possess a laser source light or any similar high intensity light outside	3.4	\$300.00
7	Install/possess a strobe light or stroboscopic lamp outside	3.5	\$300.00
8	Permit interior lighting to cause light pollution, light trespass, up light or glare	3.6	\$300.00
9	Fail to turn off exterior architectural lighting	3.7	\$300.00
10	Install/possess an outdoor luminaire that creates light reflection	3.8	\$300.00
11	Install/possess outdoor luminaire on outdoor sign not in compliance with sign by-law	5.1	\$300.00
12	Fail to comply with an order	8.3	\$500.00
13	Hinder or obstruct an officer	10.1	\$500.00

NOTE: The penalty provision for the offence indicated above is section 10 of By-law 2022-**, a certified copy of which has been filed.**