

Town Lighting Bylaws – Dark Sky Protection

Milton Warrant Committee
February 2025 Town Meeting

Preliminaries

Two requirements of the bylaw

- Fully Shielded

- A Fully Shielded light does not shine light up or sideways, only down



Fully Shielded

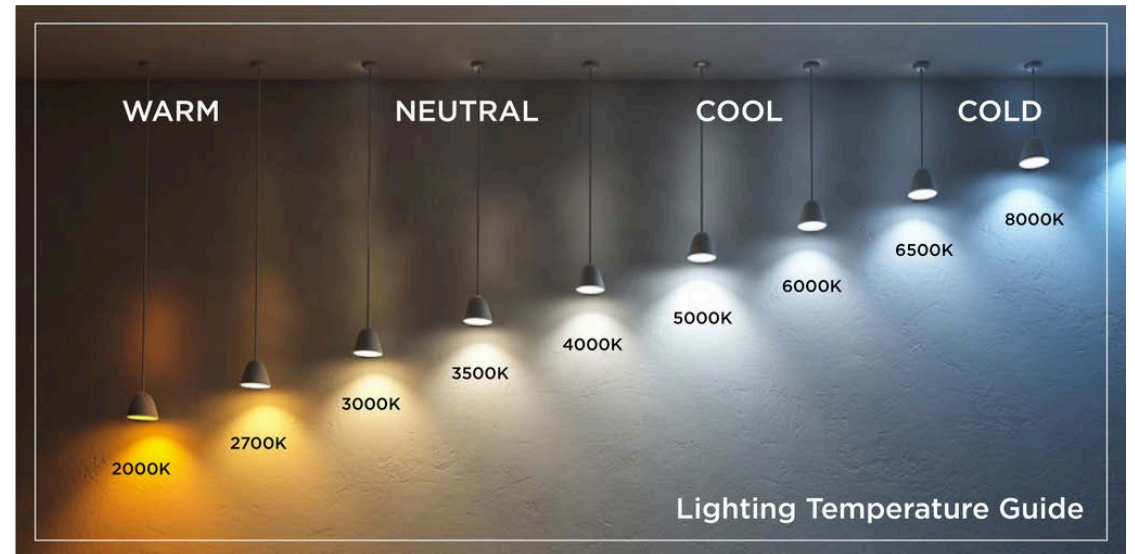


Not Fully Shielded

- This bylaw requires newly installed lights to be fully shielded
 - Current lights? Maybe....

- Light Color

- Outdoor lights must be 2,700 or less
- Warm / orange
 - Not cool / blue



Major Concerns

Issues that cannot be fixed with a minor amendment

Do house porchlights need to be swapped for Fully Shielded lights?

No (maybe)

Shielding: New lights need to be Fully Shielded

General Applicability:
Preexisting lights don't need to comply if they get an Outdoor Lighting Permit*

BUT

Yes (maybe)

Intention: Current lights “not otherwise affected by this bylaw” must be compliant within 2 years

AND

Preexisting Outdoor:
Preexisting lights need to be brought into compliance within 2 years

* More on Outdoor Lighting Permits below

Questions about current porchlights



“require that Preexisting Luminaires not otherwise affected by this bylaw be made compliant with this bylaw within two years”

Does this mean that porchlights need to be fully shielded in 2 years?
If not, what does this phrase mean?

Do current porchlights need to change their light color to be warm light under 2,700K?

Will getting an Outdoor Lighting Permit within two years allow them to keep their current light bulb?

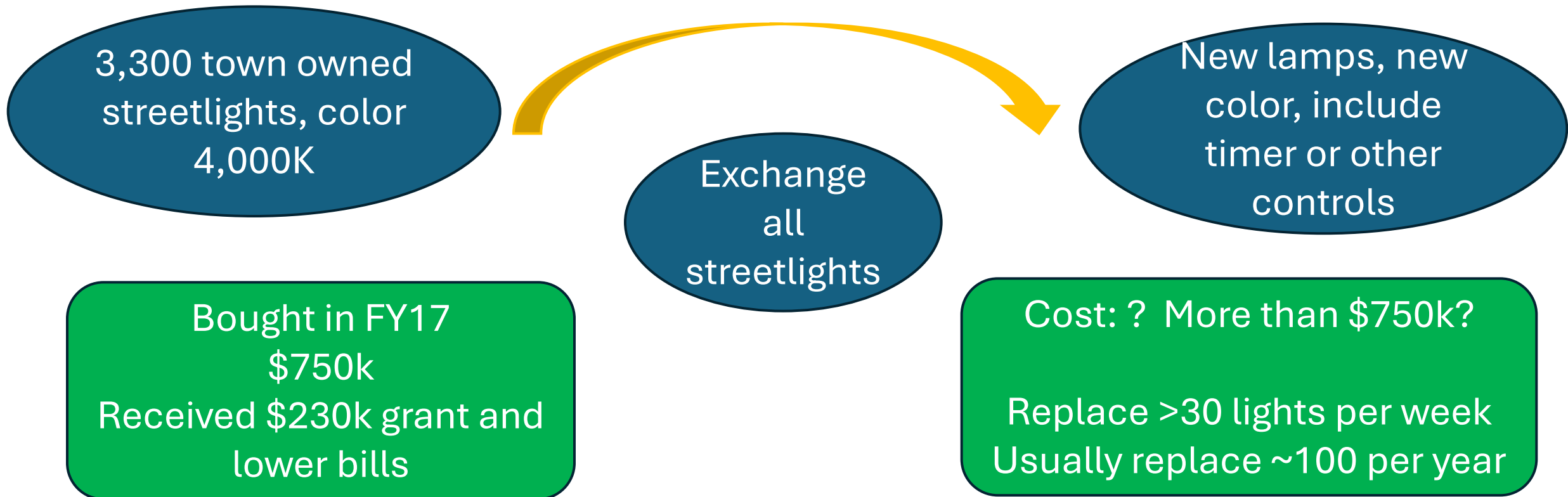
Many homes have 2-5 nonconforming lights.

Replacement at \$40 each = \$80-\$200

Average of \$100 per house x ~10,000 households = ~\$1M

Town Owned Streetlights

- **Public Lighting: Adoption** Existing Outdoor Lighting on public properties and rights of way must be modified to comply with this bylaw within two (2) years of the effective date of this bylaw.



Outdoor Lighting Permit

The bylaws refer often to an Outdoor Lighting Permit, but this permit is never described

- **General Applicability** paragraph says current lights that don't comply need to apply for an **Outdoor Lighting Permit**
- **Preexisting Outdoor Lighting Luminaires** says you need to upgrade your light with any modification that requires an **Outdoor Lighting Permit**
- **Other Restrictions** lists types of lights (searchlights, lasers, etc) forbidden unless you get an **Outdoor Lighting Permit**
- **Stop Work Orders** says if you violate this bylaw they can make you stop working on your project that has an **Outdoor Lighting Permit**

The Select Board is listed as the Outdoor Lighting Permit Granting Authority, but this is the only information we know about the Outdoor Lighting Permit.

- Who needs one? In what circumstance?
- What is a “modification requiring an Outdoor Lighting Permit”
- Are these for exceptions to these rules, or are they to record compliance with the rules?
- Are they needed for all construction projects?

Misdemeanor

- **Violations:** Any person violating any provision of this bylaw shall be guilty of a misdemeanor.

No other provision in the Milton bylaws declare a bylaw is a misdemeanor.



The town we based these laws on (New Marlborough) do not have this provision in their law.

This provision was proposed, but it was removed by their Town Meeting.

Other Concerns



There is no exception
for holiday lights

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for holiday lights

Almost all holiday lights are in violation as they are not Fully Shielded

Towns whose Dark Skies laws exempt Holiday lights include:

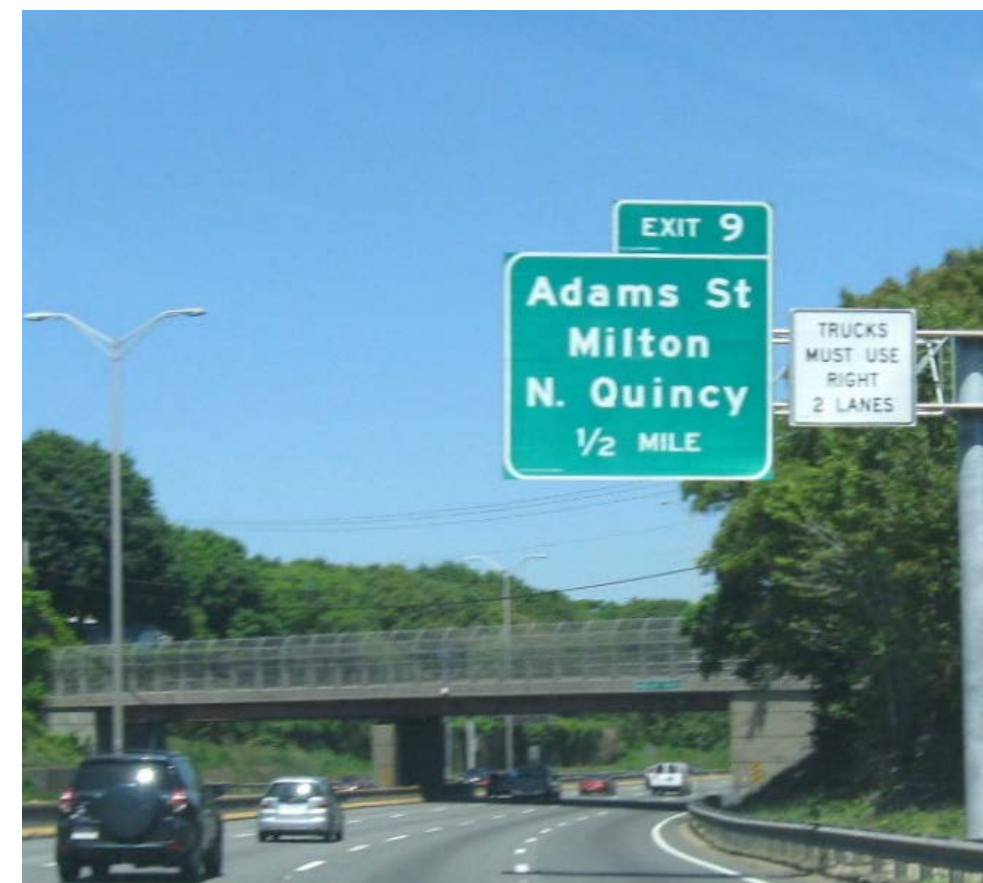


- Dalt on
- Arlin gton
- Camb ridge
- New ton
- Orle ans
- Well esley
- Har wich
- West field
- P- Town
- Harv ard

State owned lights

Streetlights on DCR roads (like Blue Hills Parkway and Unquity) and I-93 are not owned by Milton.

Will these lights be required to comply with this law?

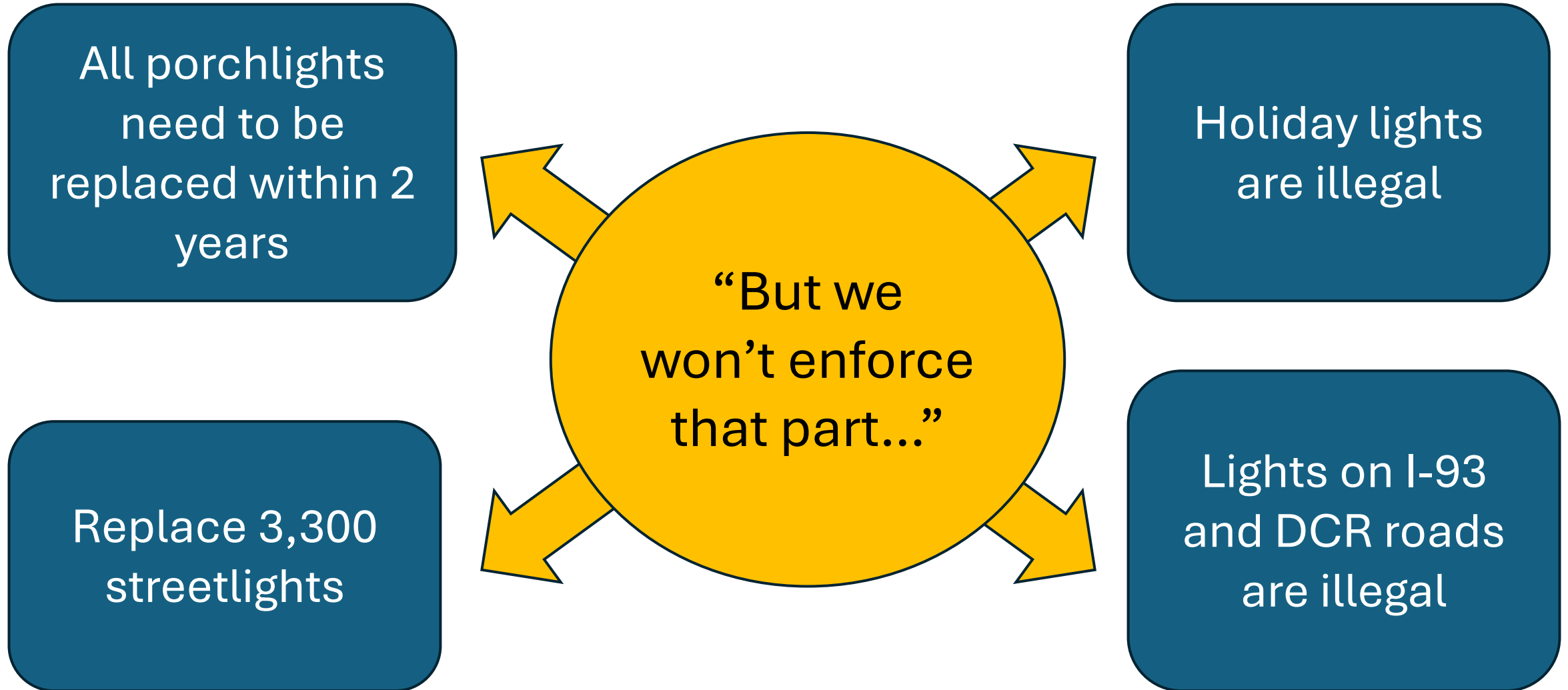


Will DCR and MassDOT be guilty of a misdemeanor?



Anticipated Responses

“We won’t enforce that part”



“Town Counsel reviewed this”

This just means
it's not illegal and
can be enacted
into law

“Not illegal” is the
bare minimum,
not the goal

Just because
wording is not
illegal does not
mean it's a good
law

It's not illegal to require
the town to replace
3,300 streetlights in 2
years - but it's not what
we want

Even More Concerns

These don't get pretty slides

Other Concerns – Intro and Definitions

- The Purpose section lists the first reason as “protect the rural character of the Town”
 - Milton is not rural. This appears to be leftover from the New Marlborough language
- Fully Shielded definition, second sentence:
 - “A Fully Shielded Luminaire, indicating the ninety (90) degree angle between the horizontal plane passing through the lowest light emitting part of the Luminaire and the nadir, defined as the local vertical pointing toward the center of the earth.”
 - **This sentence does not have a verb.** It also refers to a diagram not included
 - It appears to come from the New Marlborough bylaw which referred to a figure included in that bylaw
- “Public hazard or nuisance” is a defined term. It should be capitalized in the definition and every time it is used.

Other Concerns – Public Lighting and Color

- New Installations – there seems to be no consideration of the cost of streetlights vs other options
- Adaptive Controls and Curfew – Streetlights do not have an electric meter, they are billed assuming they are on all night every night. Will we be paying for electricity we don't use, or is there a way to be billed more accurately?
 - What is the mechanism for putting adaptive controls or timers on the streetlights?
- Internal Dark-Sky Association recommends light color up to 3000K, why are we stricter than this?
 - Massachusetts dark sky laws often use 2700K or 3000K, so we are not out of the norm

Other Concerns - Enforcement

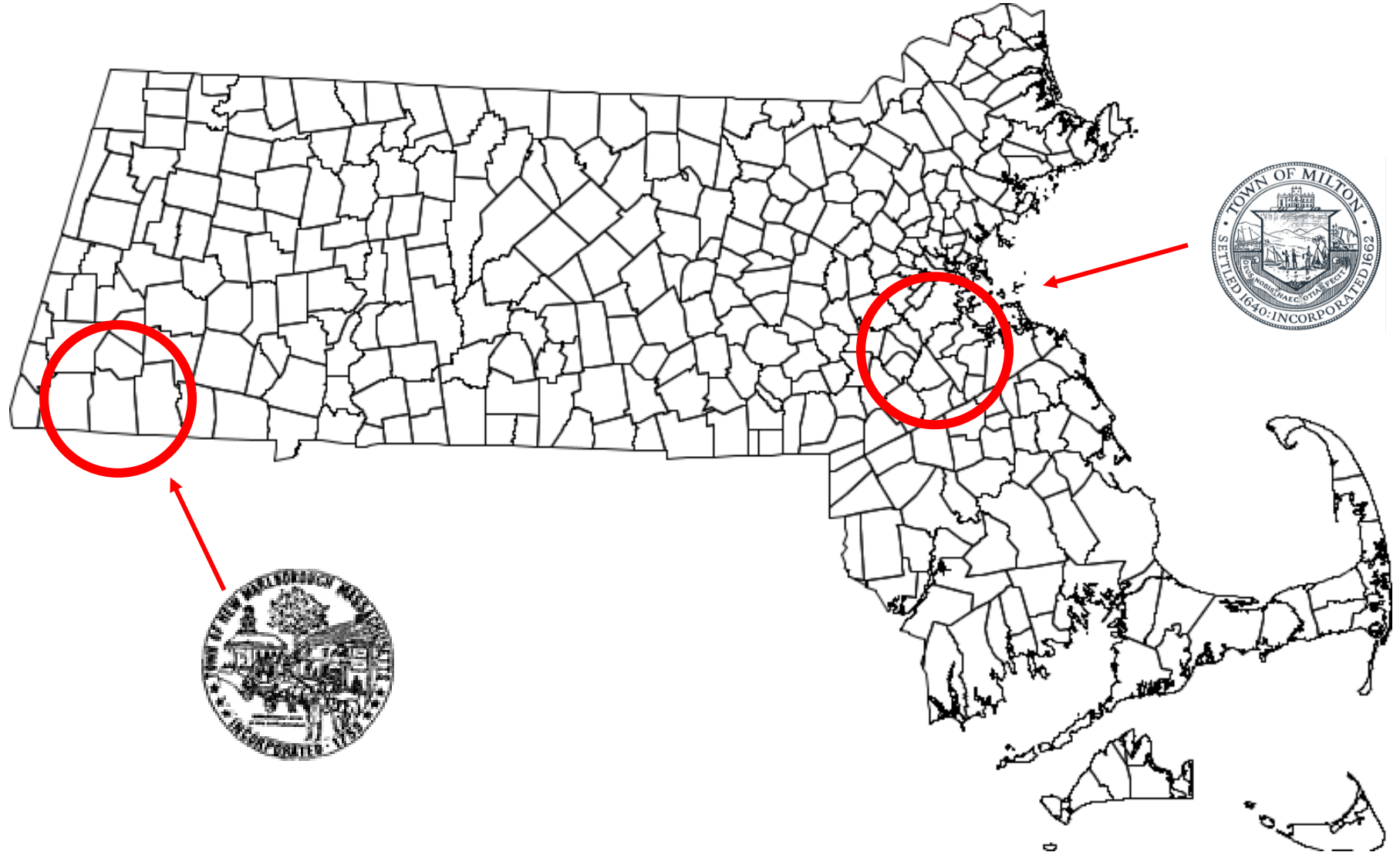
- **Violations:** Each day during which the illegal and use of such non-conforming Outdoor Lighting continues shall constitute a separate **offense**
- **Penalties:** Any person or entity who violates this By-Law shall receive a warning for the first **violation** and shall be liable to the Town of Milton in the amount of \$50 for the second **violation** and in the amount of \$100 for each subsequent **violation**... . Each separate instance of noncompliance following the issuance of any warning or citation pursuant to this section shall constitute a separate **violation**
 - Is an offense the same as a violation?
 - If so, does one happen each day, or is it “each separate instance of noncompliance”?
 - Note: the New Marlborough bylaw does not have this language inconsistency

Other Concerns - Enforcement

- Are the fines in the Penalties section criminal or civil? It appears to be up to the select board per the wording “Fines shall be recovered by indictment or on complaint before the District Court or by noncriminal disposition in accordance with MGL c. 40 S. 21D”
- To use 21D we must state the Enforcing Person (See [Appendix B here](#): “for the purpose of the non-criminal procedure, the enforcing individual(s) must be specified”)
 - Is the Enforcing Person here the Select Board? Will they be the ones writing a ticket? Or the town police?
 - The only other use of 21D in Milton’s bylaws appears to be the Stormwater section. That section names the Enforcing Person as “the agent of the Stormwater Authority”
- The purpose of 21D is to allow a person to dispose of a complaint by paying a fine. How does this work on a first offence when there is no fine?
- The Light Trespass bylaw detailed the process for enforcement by the Select Board including a 14 day notice and a hearing. Why is such a process not included with this bylaw?

Milton Bylaw vs New Marlborough bylaw

The Select Board stated there should be no problems because this is based on New Marlborough's law which was approved by the AG, but our law differs from the NM law in many of the issues above



Current lighting needing an Outdoor Lighting Permit

Milton

All Outdoor Lighting Luminaires installed after the effective date of this bylaw shall be in conformance with the requirements established by this bylaw and any other applicable bylaws, codes or regulations of the Town,

The same

New Marlborough

All Outdoor Lighting Luminaires installed after the effective date of this bylaw, in all zoning districts in the Town, shall be in conformance with the requirements established by this bylaw and any other applicable bylaws, codes or regulations of the Town

except that owners of lawfully preexisting Outdoor Lighting Luminaires shall be deemed in compliance with this bylaw provided that they obtain an Outdoor Lighting Permit authorizing such preexisting Outdoor Lighting Luminaire within two years of the date that this bylaw becomes effective

No similar provision

Rules applying to pre-existing lights

Milton

- All commercial and residential Outdoor Lighting Luminaires that were lawfully installed prior to the effective date of this bylaw, but that do not comply with the requirements of this bylaw, are declared to be lawfully preexisting and are referred to herein as “Preexisting Luminaires.” All Preexisting Luminaires may continue to be used and maintained after the adoption of this bylaw and any related codes or regulations, but shall be brought into compliance with its requirements upon the first to occur of any of the following:
 - i. A change of use of a property, or any other modification requiring an Outdoor Lighting Permit; or
 - ii. A determination by the Select Board, following a hearing held no less than 14 days after providing notice to the owner of the Preexisting Luminaire, that such Preexisting Luminaire constitutes a public hazard or a nuisance;
 - iii. The replacement of any Preexisting Luminaire with new lighting equipment, not inclusive of Lamps or similar consumable parts; or
 - iv. The two-year anniversary of the effective date of this bylaw.
- Conformity shall occur prior to issuance of a certificate of occupancy, final inspection, or final plat recordation, when applicable. For other permits, the applicant shall have a maximum of sixty (60) days from the date of permit issuance to bring the lighting into conformance.

New Marlborough

- All commercial and residential Outdoor Lighting Luminaires that were lawfully installed prior to the effective date of this bylaw, but that do not comply with the requirements of this bylaw are declared to be legal non-conforming Luminaires. All legal non-conforming Luminaires may continue to be used and maintained after the adoption of this bylaw and any related codes or regulations, but shall be brought into compliance with its requirements upon the first to occur of any of the following:
 - i. 22.3.4.1 A change of use of a property, or any other modification requiring a special permit.
 - ii. 22.3.4.2 A determination by the Select Board that the legal non-conforming Luminaire constitutes a public hazard or a nuisance.
 - iii. 22.3.4.3 The replacement of any legal non-conforming Luminaire with new lighting equipment, not inclusive of Lamps or similar consumable parts; or
 - iv. 22.3.4.4 Conformity shall occur prior to issuance of a certificate of occupancy, final inspection, or final plat recordation, when applicable. For other permits, the applicant shall have a maximum of sixty (60) days from the date of permit issuance to bring the lighting into conformance.

No similar provision



Rules applying to pre-existing lights

Milton

INTENTION

- The intention of this bylaw is **to encourage compliance immediately and then require** that Preexisting Luminaires not otherwise affected by this bylaw be made compliant with this bylaw within two (2) years after the effective date of this bylaw.

New Marlborough

INTENTION

- The intention of this bylaw is to **encourage, but not require**, that legal non-conforming Luminaires not otherwise affected by this bylaw be made compliant with this bylaw within five (5) years after the effective date of this bylaw

We changed

“encourage, but not require”

to

“encourage and then require”