

OUTDOOR LIGHTING ORDINANCE TASK FORCE MEETING OCTOBER 22, 2015 – 4:00-6:30 PM

Task Force Members in Attendance:

Carol Lynn Alpert
Chris Basler
Andrea Boyer
Peter Calkins
David Chilinski
Steve Lenkauskas
Ranjit Singanayagam
Charles Teague
Bob Woodbury

Consultants:

Jeffrey Berg
Paul Lutkevich

Members of Public in Attendance:

Kelly Beatty
Ed Brody
Glenn Heinmiller
Tom Stohlman
Kenneth Taylor
Marilyn Wellons

City Staff in Attendance:

Lisa Hemmerle
Tracey Joyce

Ninth meeting of Lighting Ordinance Task Force was held in the 2nd Floor Conference Room of the Department of Human Services, 51 Inman Street, Cambridge, Massachusetts.

MEETING NOTES:

Lisa Hemmerle welcomed everyone to the 9th meeting and pointed out the handouts to the Task Force Members (TFMs), including a copy of the meeting's agenda, a revised draft of the proposed outdoor lighting ordinance, copy of the redlined draft with comments from Task Force members from the previous meeting, copy of the LEED Light Pollution Reduction Credit v.4 requirements, copy of the proposed Outdoor Lighting Ordinance website landing page, and map of proposed Lighting Zones for Cambridge.

Lisa continued with the meeting and provided a recap of the changes to the draft ordinance since the September meeting. Changes included:

- addition of a definition for "Building Envelope";
- change in definition of "Correlated Color Temperature";
- change in definition of "Lighting Plan";
- addition of a definition for "Lighting Zone";
- change in definition of "Lux" to match Model Lighting Ordinance (MLO);
- addition of a definition for "Replacement lighting";
- change in definition of "Seasonal Lighting" to reflect back to Zoning Code 7.20;

- change in definition of “Temporary Lighting” to reduce amount of operation time to maximum 30 continuous days and then not operated for minimum of 30 continuous days before it can be reinstalled;
- addition of “Interim Modifications” as noted in w Section 15.22.050 under General Requirements.
- change in maximum Correlated Color Temperature to not exceed 3500 Kelvins;
- delete requirement for “automatic shut-offs” since the International Energy Code has shut-off requirements for commercial buildings;
- addition of a GFA trigger that requires property owners to follow the Performance Standard for any new construction of 25,000 SF or more; or substantial renovation of 25,000 SF or more of an existing building; and
- delete alternative Performance Standard that allows a maximum 8 lux at property line. This leaves the LEED Light Pollution Reduction Credit v4 as the sole Performance Standard.

Task Force Members (TFMs) had questions regarding the new provision requiring buildings of a certain size to follow the Performance Standard. Lisa explained that a building gross floor area of 25,000 SF or more was based on the existing requirement under the Green Building Ordinance, Article 22.0 of the Zoning Code.

Charlie pointed out that one of the original area requirements proposed at the previous meeting was 10,000 SF. He asked for examples of 10,000 SF buildings to help the TFMs visualize that size requirement. An approximate example given was 355 Fresh Pond Parkway (aka former Fresh Pond Seafood) which is 11,450 SF. Also, Charlie asked for clarification on what building space is used to calculate GFA.

Carol Lynn proposed that the GFA trigger for compulsory use of the Performance Standard be lowered to 10,000 SF. David and Charlie agreed. Peter believed that the GFA trigger should be 25,000 SF since buildings of that size already have to follow the Green Building Ordinance. If a lower GFA was adopted for compulsory use of the Performance Standard then Peter predicts that property owners would drag-out compliance as long as possible if not able to use the Prescriptive Standard. Bob did not have a strong preference either between 10,000 SF or 25,000 SF. A compromise was suggested among the TFMs that compulsory use of the Performance Standard be required at 25,000 SF under Lighting Zone 3 and 10,000 SF under Lighting Zone 2.

The discussion continued onto the next subject. Carol Lynn requested clarification on how the existing zoning ordinance would be applied. Lisa explained that the existing zoning does not conflict with the proposed municipal ordinance so property owners would be required to comply with both, if applicable.

Carol Lynn continued with questions about some of the exemptions. She wanted clarification on the definition of “public way”. It was explained that public way covers streets and sidewalks

and any fixtures or poles owned by the City or property owners with the approval of the City that are lighting the public way. It does not include poles owned and operated by utility companies or private property owners that light private property.

- An example of this included the building at 300 Massachusetts Avenue, owned by Forest City, which has wall fixtures that are lighting a public street. These fixtures would be exempt from the ordinance.
- Another example includes utility poles standing in the public way that are owned by NStar and have fixtures that are used to light private property. These fixtures would be required to comply with the ordinance.

We will ask the Law Department for a definition of “Public Way”. Additional concerns were raised about some of the other proposed exemptions, including:

- clarification on the inclusion of temporary lighting in the exemptions if the definition of “Temporary Lighting” already outlines a standard;
- additional information on what is covered under a temporary lighting permit for work areas at construction sites; and
- additional information on the hours that construction lighting is allowed during the day and evening and the length of time the permit is active until it must be reissued.

TFMs raised concerns about the Administrative Exemption process and how it relates to the Complaint Process. Charlie proposed that the Administrative Exemption process follow a similar notification process required when an applicant files for a Variance from the Board of Zoning Appeals. Abutters within a designated distance from the property should be notified when an Administrative Exemption is requested and placards should be placed on the property requesting comment from the public.

David questioned whether there should be an adjudicated process so the individual that filed a lighting complaint can be informed of the status and outcome before any Administrative Exemption is granted..

An additional concern raised by TFMs is that changes in slope and grade between properties and the impact of lighting are not addressed. Light sources on buildings located at a higher grade than neighboring properties might meet the ordinance requirements but have a more dramatic impact due to the site condition. Other TFMs were concerned about this leading to over regulation in the ordinance.

Due to limited time, Lisa requested that TFMs submit their additional comments and concerns by e-mail. Topics that didn't get resolved include:

- concerns that fixture limits are not included in the Prescriptive Standard;
- concerns that lumen levels are too high in the Prescriptive Standard;
- concern that 5 years is too long for the transition phase;

- include a lux limit at the property line for the Prescriptive Standard that can be measured by inspectors as a “backstop” in addition to the proposed fixture shielding requirements, mounting heights, and fixture lumen limit; and
- if a specific percentage of fixtures are replaced then all of the fixtures need to be brought into compliance.

Lisa also requested that the Task Force present specific recommendations on the additional limits to be placed on the Prescriptive Standard to be considered since there is no technological lighting standard that quantifies an appropriate number of fixtures within dense residential or commercial areas.

Before moving to public comment, Lisa scheduled the next meeting of the Task Force for Wednesday, November 4th from 4:00-6:00 PM in the 4th Floor Conference Room of the City Hall Annex at 344 Broadway.

Lisa opened the meeting to Public Comment by the audience members.

PUBLIC COMMENT

Comments and concerns raised by members of the public attending include:

- 1) Kelly Beatty, lighting professional.
 - The Prescriptive Standard and Performance Standard need to have a lumen limit at the property line that includes a vertical and horizontal lux limit.
- 2) Ken Taylor, resident and lighting professional.
 - The prescriptive standards do not have a vertical illuminance limit, a maximum lumens limit, or a limitation on the number of fixtures. This renders the prescriptive standards weak and ineffective. Having compliance with the prescriptive standards as an alternative to LEEDs for larger existing buildings does not make sense unless the prescriptive standards are tightened up.
 - There are an estimated 300-500 buildings/projects/monuments in the City that could be candidates for special lighting exemptions (Boston started with 800). Of these no more than 20% fall within historic or conservation districts, no more than 5% are listed on the National Register of Historical Places. This leaves an estimated 75% (200-400 roughly) that would have to meet with prescriptive standards, rendering it difficult or impossible to do special lighting. Provision in the ordinance needs to be made for such locations.
 - Would like more information on the differences between allowed lighting practices in Lighting Zone 2 from Lighting Zone 3.

- 3) Glen Heinmiller, resident and lighting professional.
 - If the Prescriptive Standard includes a lumen limit at the property line then most property owners will not be able to bring their lighting into compliance; especially those with buildings close to the property line or near a sidewalk with lights from beyond the property line. This will force property owners to ignore the ordinance.
 - The next version of the International Energy Code will provide tougher standards that can be adopted under the Prescriptive Standard rather than creating conflicting standard.
 - The existing lumen limits on fixtures under the Prescriptive Standard dramatically limit the lighting levels and will limit the amount of light pollution and light trespass.
 - Full-cutoff shielding is obsolete and no longer included in new fixtures.

- 4) Resident to remain anonymous.
 - Appreciates the thought and dedication by the Task Force members on this subject.
 - Wants to see the ordinance follow a common-sense direction that strongly promotes good neighbor practices.
 - Look at the spectrum of properties and different site conditions that impact lighting.
 - Look at the cost of bad lighting on the neighbors rather than the cost to the property owner with noncompliant fixtures. Additional expenses for window shades and other mitigation efforts on the side of the abutter have a real cost, which can be high.

- 5) Ed Brody, resident.
 - He proposes that the Prescriptive Standard include a lux limit at the building of the abutter as a backstop rather than at the property line. This will address the primary concern of light entering neighboring windows rather than at the property edge.

- 6) Marilyn Wellons, resident.
 - The Task Force should put the responsibility of providing appropriate lighting on the developer rather than the neighbor. The cost to neighbors to mitigate inappropriate lighting is too expensive.
 - This is a Public Health issue that needs to be recognized by the Task Force and City.
 - Changes in grade and slope between properties is a big issue that isn't considered under the current draft.
 - Would like to see indoor lighting spilling out of windows included in the ordinance.
 - The legal definition of "Nuisance" should be included in the ordinance and applied to the Standards.
 - Concerned that the review and enforcement of the ordinance will not be given enough resources.

Lisa thanked everyone for their time and the meeting was adjourned.