To: Richard C. Rossi, City Manager

From: Iram Farooq, Assistant City Manager for Community Development

Date: Sept. 14, 2016

Re: Outdoor Lighting Zoning Recommendations

As a follow-up to my memo of June 15, 2016 that described the recommendations of the Outdoor Lighting Task Force and transmitted the draft Lighting Ordinance, here are the companion changes that were proposed to the Cambridge Zoning Ordinance. These changes to Article 19 of the Zoning Ordinance are intended to complement the proposed Lighting Ordinance by strengthening the review of outdoor lighting in significant new development.

The Task Force recommendations included three components, the first two of which were included with the previous memo. Item 3 is the focus of this memo.

1. **Draft Outdoor Lighting Ordinance and map of proposed Lighting Zones:** The draft Ordinance represents a comprehensive effort to meet Task Force goals in a dense, varied, urban environment especially due to the proximity of some residential and commercial properties. With some exceptions, the proposed ordinance would regulate all outdoor lighting in the City of Cambridge.

2. **Draft Good Neighbor Brochure:** This represents a key step to the Task Force’s Education and Outreach recommendation

3. **Suggested Changes to Special Permit Application and Article 19:** To supplement the proposed ordinance and provide for more fine-grained review of lighting in large projects, changes are recommended to special permit application requirements and Article 19 (Project Review Special Permit) of the Zoning Ordinance. The purpose would be to:
   - Ensure that special permit project submittals include information about proposed outdoor lighting, including façade and landscape lighting.
   - Require new rooftop lighting for certain buildings to be reviewed by the Planning Board.
   - Strengthen reference to design guidelines and references to outdoor lighting to support the Planning Board’s review of outdoor lighting, including on facades and rooftops.

In the text below, changes to the zoning are highlighted in **bold underlined** text.
Ensure that special permit project submittals include information about proposed outdoor lighting, including façade and landscape lighting.

A. Add a new clause (f) to Paragraph (4) of Section 19.24, Application Procedures, as set forth below.

Explanation: These application materials are required for a project seeking a Project Review Special Permit from the Planning Board, which generally applies to projects of 50,000 square feet or more.

Zoning text (addition underlined):

(4) Urban Design Objectives Narrative. The application shall include a narrative description of how the proposal addresses each of the seven Urban Design Objectives set forth in Section 19.30. In addition the applicant shall comment specifically on the following: (a) the design and location of proposed mechanical equipment, including HVAC equipment, as well as a strategy for possible future expansion, if relevant, (b) location and operation of trash storage and removal systems, (c) location and operation of loading facilities, (d) measures taken to minimize the negative visual and noise impacts of such facilities on abutters, and (e) the provision in the building and site design to accommodate pedestrian, bicycle and transit access, and (f) measures taken to mitigate light pollution from outdoor lighting, including façade, landscape and rooftop lighting.

Strengthen reference to design guidelines and references to outdoor lighting to support the Planning Board’s review of outdoor lighting, including on facades and rooftops.

B. Add a new phrase “including façade, landscape and rooftop lighting” to Paragraph (9) of Section 19.33 of the Citywide Urban Design Objectives, as set forth below.

Explanation: Section 19.33 lists indicators that are considered in the review of a project, in order to assess the objective that “The building and site design should mitigate adverse environmental impacts of a development upon its neighbors.”

Zoning text (addition underlined):

(9) Outdoor lighting, including façade, landscape and rooftop lighting, is designed to provide minimum lighting and necessary to ensure adequate safety, night vision, and comfort, while minimizing light pollution.
Require new rooftop lighting for certain buildings to be reviewed by the Planning Board.

C. **Add a new Paragraph (5) to Section 19.58 of the Building and Site Plan Requirements, at set forth below.**

*Explanation:* The requirements of Section 19.58 (along with other subsections of 19.50) apply to most new developments of 25,000 square feet or more; however, they may be modified with special permit approval from the Planning Board.

*Zoning text (addition underlined):*

**19.58 Mechanical Equipment, Refuse Storage, and Loading Areas.** All mechanical equipment, refuse storage, or loading areas serving the building or its occupants that are (1) carried above the roof, (2) located at the exterior building wall or (3) located outside the building, shall meet the requirements listed below. Mechanical equipment includes, but is not limited to, ventilation equipment including exhaust fans and ducts, air conditioning equipment, elevator bulkheads, heat exchangers, transformers and any other equipment that, when in operation, potentially creates a noise detectable off the lot. The equipment and other facilities:

1. Shall not be located within any required setback. Where no setback is required, it shall not be located closer than 10 feet to any property line or it shall be entirely contained within the building. This Paragraph (1) shall not apply to electrical equipment whose location is mandated by a recognized public utility.

2. When on the ground, shall be permanently screened from view from adjacent public streets that are within 100 feet of the building, or from the view from abutting property in separate ownership at the property line. The screening shall consist of densely planted shrubs or trees equal or greater in height at the time of installation than the equipment or facilities to be screened, or a fence of equal or greater height that is comparable in quality to the materials used on the principal facades of the building, with no more than twenty-five (25) percent of the face of the fence open.

   When carried above the roof, shall be permanently screened from view, from the ground, from adjacent public streets and any abutting residentially used lot or lots in a residential zoning district. The screening shall be at least 50% opaque, uniformly distributed across the screening surface.
(3) Shall be designed to meet all city, state and federal noise regulations, as applicable, as certified by a professional acoustical engineer if the Department of Inspectional Services deems such certification necessary.

(4) That handle trash and other waste, shall be contained within the building or screened as required in this Section 19.58 until properly disposed of.

(5) **Shall only be lighted to the minimum extent necessary to meet applicable safety regulations.**

D. **Add a new Section 19.511 (as a subsection of 19.50) within the Building and Site Plan Requirements, at set forth below.**

*Explanation:* This would create a general prohibition on lighting above a roof applicable to most new developments of 25,000 square feet or more; however, this may be modified with special permit approval from the Planning Board.

*Zoning text (addition underlined):*

**19.511** No exterior lighting shall be allowed above the roof of a building.