

# CAMBRIDGE LICENSE COMMISSION

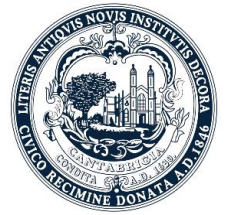
Nicole Murati Ferrer  
Chairperson

831 Massachusetts Avenue, First Floor, Cambridge, Massachusetts 02139

Stephen Lenkauskas  
City Electrician

## POLE AND CONDUIT COMMISSION

Terrence James Shea  
Superintendent of Streets



City of Cambridge

Elizabeth Y. Lint  
Executive Director

### **POLE AND CONDUIT COMMISSION MEETING**

**Monday, June 10, 2019, 5:00 p.m.**

**City Hall Annex, 344 Broadway**

**Second Floor Conference Room**

**Cambridge, Massachusetts**

*The Chair reasonably anticipates the following will be discussed and for which public testimony will be taken as of 5:00 p.m. Written testimony/comments to be considered may also be submitted by June 3, 2019, 8:00 p.m., via email to [license@cambridgema.gov](mailto:license@cambridgema.gov).*

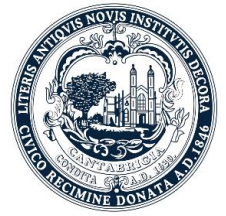
1. Draft Policy regarding Small Cell Wireless Attachments on public ways (attached).

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Elizabeth Lint, Executive Director

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**Executive Director**

### **POLICY REGARDING** **SMALL CELL WIRELESS INSTALLATIONS ON PUBLIC WAYS**

The City of Cambridge (“City”) Pole and Conduit Commission (“Commission”) hereby adopts this policy (“Policy”) regarding Applications (“Application”) relating to installations of small cell wireless communications equipment and related infrastructure upon City-owned poles or other City-owned property on (“Installations”).

#### **I. Application Process**

- A. Applicants (“Applicants”) shall submit Applications to the Commission accompanied by an Application fee of \$500 per Application, payable to the “City of Cambridge.” The \$500 fee will cover up to 5 Installations submitted with each Application. Each Application for more than 5 Installations is subject to a separate fee of \$100 per Installation after the first 5 Installations. Additionally, a \$270 fee (which shall be an “Annual Recurring Fee”) for each Installation shall be required to be submitted with said Application. If the Application relates to a request for installation of a new non-City owned pole or other structure on or within the public right of way, a one-time \$1,000.00 fee shall be required for each such new pole or other structure in addition to said Annual Recurring Fee. The amounts due under this section may be revised by the Commission from time to time, consistent with applicable law. In the event the City’s costs in reviewing any Application exceed the amounts prescribed in this section, Applicants shall be responsible for those costs.
- B. The Application process shall, in addition to the requirements described herein, follow the Siting Policy of the Commission (“Siting Policy”).
- C. Applications shall include certified mail receipts evidencing that notice has been made by certified mail, return receipt requested, to all other wireless providers (“Other Providers”), within the Applicant’s knowledge after reasonable inquiry, who may request use of the public right of way for wireless services in this location and/or within 500 feet of this location, indicating the Applicant’s intent to apply for utilization of a particular pole or other structure in the public way. Such receipts must demonstrate that notices were provided to all Other Providers within the Applicant’s knowledge after reasonable inquiry at the time of submission of the Application. In the event an Applicant cannot demonstrate it has provided notice by certified mail, return receipt requested, then proof of service of such notice by constable shall be required.
- D. Applications shall include certified mail receipts evidencing that notice has been made by certified mail, return receipt requested, to all owners of properties that share a common boundary with the area proposed, extending all the way to the owners of properties on either side of the area proposed in both directions for a distance of one

- hundred fifty feet, and to owners of property on the opposite side of the street of the area proposed, or, where the area proposed is adjacent to an intersection, notice must be given to all property owners in all directions of the public way for a distance of one hundred fifty feet as described in the previous sentence (hereinafter "Abutters"). All such required notices must be made at the time of the submission of the Application, and an Abutters list for each location referred to in an Application must also be submitted with the Application. In the event an Applicant cannot demonstrate notice by certified mail, return receipt requested, proof of service by constable shall be required.
- E. An Applicant shall provide an electronic copy of the Application at the time of the submission of the Application to each the following City departments: the Commission, the Community Development Department, the Historical Commission, and any other department that the Commission determines should receive a copy.
- F. Upon receipt, the Commission Chair shall make a determination as to completeness of the Application, including making a determination as to whether the Applicant has provided all the above required notices, and notify the Applicant, in writing, within 10 days, if the Application is incomplete. If the Applicant is notified that the Application is incomplete, the time periods set forth in this Policy shall be tolled until such time as a complete Application has been submitted. In the event an application remains incomplete thirty (30) days after its submission, such application shall be deemed withdrawn without prejudice, and will need to be resubmitted in full, including payment of fees accompanying a new application. Withdrawal for incompleteness shall not entitle Applicant to refund of any fees paid.
- G. Once the Commission Chair has determined that an Application is complete, the Commission Chair will schedule and convene a public hearing of the Commission to consider the Application, such that a determination may be made on any Application for any Installation(s) on an existing structure within sixty (60) days of initial receipt of the Application by the Commission, and on a new structure within ninety (90) days of receipt of the Application by the Commission. The Applicant shall notify all Abutters and Other Providers, as applicable, of the hearing date within one business day after such hearing date is scheduled, and failure to notify all Abutters Other Providers, as applicable, may result in denial of the Application.
- H. If there are any Other Providers who wish to utilize the same location or structure as described in the Application, then the Application(s) shall together be considered a common project ("Common Project"), and in the Common Project the first Applicant shall be the "Lead Provider" and shall coordinate the Applications, filings and responses of all Applications of Other Providers for the subject location involved in the Common Project, consistent with Section 7 of the Siting Policy.
- I. In the event that there are any material changes to an Application, or if the Application is amended, as determined by the Commission Chair in his or her sole discretion, any of these events shall constitute a new Application, for the purposes of the time standards set forth above in Section I(H).

- J. The Commission may grant, grant with conditions, or deny an Application. A denial may be based on criteria including but not limited to any of the following:
- i) inadequate capacity of the pole or mounting structure,
  - ii) safety concerns or reliability concerns,
  - iii) failure to meet applicable engineering standards,
  - iv) failure to meet the Commission's design standards,
  - iv) failure of the Applicant to comply with all applicable laws, rules, regulations or other requirements,
  - v) there are more convenient locations such that the location applied for is not needed as determined by the Commission,
  - vi) any other legally valid reason to deny such Application.
- K. Any approval granted to an Applicant shall be only for the specific Applicant and Application.

## **II. Content of Applications**

Applications shall include the following information, in digital form:

- A. Applicant's name, address, telephone number and email address.
- B. Names, addresses, telephone numbers, and email addresses of anyone acting on behalf of the Applicant with respect to the Application.
- C. A copy of the standard License Agreement issued by the City, executed by the Applicant. Execution by the City shall occur at the time of permit issuance, in the event of approval.
- D. Detailed drawings and descriptions of the equipment to be installed, whether mounted on poles or on the ground, or otherwise, including:
  - i. Type of equipment
  - ii. Specifications of equipment (including but not limited to dimensions and weight)
  - iii. Equipment mount type and material
  - iv. Power source or sources for equipment, including necessary wires, cables, and conduit
  - v. Expected life of equipment
  - vi. Coverage area of equipment, including:
    - 1. Amount of antennas
    - 2. Antenna model
    - 3. Antenna length
    - 4. Remote Radio Unit ("RRU")
    - 5. Antenna height
    - 6. Typical coverage area radius
  - vii. Call capacity of equipment, including:
    - 1. Total RRUs
    - 2. Max bandwidth per RRU

3. Multiple In and Multiple Out per RRU
  4. Backhaul rate per RRU
  - viii. Hardening, including:
    1. If there is battery backup
    2. If there is generator backup
    3. If there are multiple fiber paths to switch
  - ix. Rendering and elevation of equipment
  - x. Photosimulations, from four different angles, showing the pole and streetscape before the installation, as well as after installation.
- E. Detailed map in a digital format acceptable to the Commission with locations of the poles or other City-owned property on which equipment is to be located, including specific pole identification number, if applicable, and the areas it will service.
- F. Detailed map in a digital format acceptable to the Commission showing the Applicant's existing and proposed Installation(s) within 500 feet of the Application site and amount of cellular coverage in the area, including the amount of cellular coverage in such area, and any gaps in cellular coverage.
- G. Certification by a registered professional engineer that the pole or City-owned property will safely support the proposed equipment.
- H. Affidavit from a Radio Frequency Engineer outlining the network/network service requirements in the City and how the Installation(s) address that need in the City. Such affidavit shall characterize the current level of coverage and how the desired Installation(s) will change the current level of coverage, through or with coverage maps, including current and proposed coverage, including a breakdown of "excellent" "good" and "poor" reception area.
- I. Insurance certificates with the following minimum coverages: General liability insurance in an amount not less than \$1,000,000 per occurrence and \$2,000,000 in the aggregate, worker's compensation insurance not less than the amount of \$100,000 per accident and \$500,000 per illness or the statutorily required amount, whichever is greater, and umbrella insurance in an amount not less than \$5,000,000. The City must be an additionally named insured, and such policies shall indicate that the insurance company shall provide thirty (30) business days' prior written notice to the City of lapse or cancellation. All insurance carriers shall carry an A.M. Best rating of "A-" or better. Such insurance shall provide for the waiver by the insurance carrier of any subrogation rights against City, its agents, servants and employees.
- J. Description as to why the desired location is superior to other similar locations, from a community perspective, including, but not limited to:
- i. Aspects showing that the Installation will not incommode the public way;
  - ii. Visual aspects; and
  - iii. Proximity to residential buildings.
- K. An affidavit from the Applicant which certifies that it will maintain the Installation(s) in good repair and according to Federal Communications

- Commission standards and will remove any Installation not in such good repair, or not in use, within 60 days of being no longer in good repair or no longer in use.
- L. Description of efforts to co-locate the Installation(s) on existing structures, poles, or towers which currently exist or are under construction pursuant to the Siting Policy. A good faith effort to co-locate is required and written evidence of such efforts must be submitted with the Application, all pursuant to the Siting Policy.
  - M. Installation(s) shall comply with the Installation and Design Requirements of Section V. of this Policy.

### **III. Annual Re-Certification and Affidavit**

- A. Each year on January 1 the Applicant shall submit an affidavit to the Commission which shall list, by location, all Installation(s) it owns within the City by location, and shall certify the following: (1) each Installation that remains “in use;” (2) that such Installations remain covered by insurance; and/or (3) each such Installations are no longer in use.
- B. The Applicant shall pay an annual re-certification and public way fee of \$270 per Installation to the Commission.
- C. Any Installation which is no longer in use shall be considered in default and removed or turned over to the City after all small cell Installation equipment has been removed at the discretion of the City, as provided in the License Agreement to be entered into with the City.
- D. Where such annual re-certification has not been timely submitted, or an Installation no longer in use has not been removed or turned over to the City after all small cell Installation equipment has been removed at the discretion of the City, as provided in the License Agreement to be entered into with the City, no further applications for Installations will be accepted by the Commission from that Applicant until such time as the annual re-certification has been submitted and all fees and fines paid.

### **IV. Prohibitions**

- A. No Installations will be permitted to be installed on double poles;
- B. No Installations will be permitted to be installed on poles which result in non-compliance with any applicable federal, state and/or local laws, rules and regulations;
- C. No Installations shall remain upon the City right of way or on City property which has not been certified as “in use” in the annual re-certification affidavit; and
- D. No Installations will be permitted to be installed on any traffic signal pole or other related infrastructure or equipment.
- E. An Applicant may submit an Application inconsistent with the foregoing prohibitions, but only if accompanied by evidence sufficient to demonstrate that the otherwise-prohibited Installation must be considered by the City in order to

avoid a prohibition or effective prohibition on the provision of service, as defined by applicable federal law.

**V. Design and Location Requirements for Installations**

The purpose of the Design and Location Requirements for Installations is to preserve the character of Cambridge's neighborhoods and commercial corridors.

**A. Intent of the Design and Location Requirements for Installations:**

- i. Minimizing visual as well as physical clutter to the maximum extent possible.
- ii. Maintaining public open spaces and parks clear of visual clutter of communication and signage elements.
- iii. Discouraging placement of Installations on decorative pedestrian municipal street lights.
- iv. Standardizing components of Installations, e.g., size, scale, color, location to be consistent with character of existing public infrastructure in the public right of way.
- v. Avoiding siting of Installations in front of designated historic structures, landmarks, parks or impacting view corridor to major natural, cultural, or historic resources.
- vi. Reducing visual clutter as much as possible by collocating Installations onto existing infrastructure.
- vii. Maintaining the consistency of character of the neighborhoods in Cambridge.

**B. Siting Requirements. All Installation(s) shall comply with the following requirements:**

- i. No Installations should be located closer than 150 feet radially from another Installation.
- ii. In commercial districts and major city squares such as Harvard Square, Central Square, Inman Square, Porter Square and Kendall Square, Installation should not be located directly adjacent to a preexisting City pole with a previously approved Installation.
- iii. To the maximum extent possible, Installations shall be placed on existing non-decorative light poles such as the 'Cobra' and the '1907 Teardrop'. With respect to Cobra Head poles, preference shall be given to antennae, equipment, wiring and cabling built within the pole itself, which allow for multiple carriers in one pole, similar in design to the "Smart Fusion Pole."

- iv. All equipment associated with an Installation shall be consistent with ADA regulations.
- v. No Installation shall be located less than 6 feet from an existing building wall.
- vi. No equipment associated with the Installation, including backup power supply or base equipment cabinet shall be installed in the pedestrian walking area or amenity zone of the sidewalk, where site furniture including seating or bike racks are located.
- vii. Installations shall not obstruct ADA access and circulation including maintaining clear landing at the top of crosswalk curb ramps and minimum distance between the base of the new Installation and any other obstruction such as building walls or other elements and shall not incommode the public way.
- viii. Where possible, Installations shall be in a straight line with existing utility poles, street lights and street trees in the right of way.
- ix. No Installation shall be placed less than 6 feet away from the edge of a driveway of a residential or commercial property; and shall be placed at least 15 feet from the edge of the curb of public right of way where possible.
- x. Installations shall not be placed in front or within 6 feet of a residence's window, door openings, porches or balconies.
- xi. No Installation shall be placed where, in the determination of the City, it might limit the City's ability to plant future street trees.
- xii. No Installation shall be placed where, in the determination of the City, it might limit the City's ability to install any city infrastructure, transportation elements or facilities including bike lanes, bike racks or other street furniture and the like.
- xiii. Where the City has a planned a redevelopment or change to a street, sidewalk, square, or other area of the City, Applicants shall remove their Installation at their own cost and may apply to re-install their Installation in a different location upon the City's redevelopment or change to such area.
- xiv. In residential zoning districts, Installations shall not be placed within the primary street frontage wall plane as measured perpendicular to that wall plane.
- xv. For properties under the jurisdiction of the Cambridge Historical Commission, Applicants for Installations shall apply for a certificate from the Cambridge Historical Commission.
- xvi. Applicants of proposed Installations must consider other optional siting locations to avoid placing Installations in-front of storefront windows, primary entrances, exits, in front of primary walkways or area in such a manner that would hinder service to the building or delivery.



- xvii. In residential zoning districts, new poles for Installations must be located at the lot line between properties.
- xviii. New Installations shall not be placed where they obstruct the sight line of any intersecting street or public alley. A minimum of fifteen feet (15') shall be maintained between the new Installation and the outside edge of the street curb or public alley.
- xix. The design and location of Installations shall be consistent with the current Manual on Uniform Traffic Control Devices (MUTCD) and adopted Cambridge standards for intersections' sight lines triangles.
- xx. Siting for utilization of existing City-owned poles or other City-owned property for Installations will be given priority.

**VI. Pole Design and Overall Height**

- A. If Installation are proposed to be mounted on any of the City's existing single Acorn or single Saturn poles, the existing pole shall be replaced with a double luminaire fixture of the same design.
- B. If the Applicant proposes to replace an existing decorative pole with a new Installation, the Applicant shall replicate the existing pole design and overall dimensions.
- C. Any installations at the site of an existing pole shall not extend the overall height of the pole to more than 30 feet high or by more than 10% of the existing pole height, whichever is less except for "whip antennas" which shall be no higher than 30 inches high by 2 inches in diameter and shall have a pole extension no more than 45 inches high by 4.5 inches in diameter for antenna mount.
- D. In residential zoning districts, top mounted antennae on Installations shall not increase the height of the existing pole by more than 5 feet.
- E. No Installation shall be higher than 30 feet or more than 10% higher than other adjacent poles, whichever is less.

**VII. Equipment Cabinet, Equipment Shroud, Antenna and Antenna Shroud**

- A. Where technically feasible, equipment cabinets for Installations shall be located underground. All such below ground equipment may not be located in the street but may be located under the sidewalk.
- B. Any above ground or pole mounted equipment cabinet shall be no more than 36 inches high, no more than 18 inches wide and no more than 12 inches deep. Any above ground or pole mounted equipment cabinet shall be installed with the 18

inches side parallel to the sidewalk. Hardware, anchors and straps to the pole shall match the pole color and finish.

- C. Equipment cabinets shall be pole mounted at least 10 feet high on Installations which are less than 25 feet high, or at least 12 feet high on Installations which are greater than 25 feet high.
- D. Pole mounted equipment cabinets shall not be mounted on the street side of the Installation.
- E. Antennae of Installations shall be no more than 60 inches high by 16 inches in diameter.
- F. Antennae's conduits, brackets and hardware shall be hidden from view. All associated wiring and cable shall be installed within the Installation.
- G. Antennae mounted on Installation which are greater than 25 feet high shall include a tapered transition piece between the antenna and the pole top for a seamless extension of the existing pole. The tapered transition piece shall be no more than 16 inches in diameter and 24 inches high.
- H. Antenna enclosures on Installations that are more than 25 feet high shall be no wider than 150 percent of the diameter of the pole or support structure and shall not be more than 16 inches in diameter or whichever is less.
- I. Antenna mounted on top of Installations that are less than 25 feet high shall be no higher than 30 inches high by 2 inches in diameter and shall have a pole extension of no more than 45 inches high by 4.5 inches in diameter for the antenna mount.

**VIII. Color, Finish, Signage, Logos and Decals**

- A. All Installations shall match the existing and adjacent street light poles' colors.
- B. No exposed wires or conduit shall be permitted on any Installation except on existing wooden poles; and Installations are installed on existing wooden poles, they must conform to the utilities' 'Construction Requirements for Distributed Antenna Systems (DAS) on Electric Distribution Poles'.
- C. No Signage/Decals or Logos of the Applicant, other than FCC required signage, shall be placed on any Installation.
  - i. Signage: Unless required otherwise by state, federal or local laws, rules or regulations, signage shall not exceed 4 inches by 6 inches and must be attached or anchored with material to match the pole color and finish of

the Installation. Applicant shall only post its or the manufacturer's name, location, pertinent and emergency contact information in an area on the cabinet that is visible to the public and shall do so only as permitted or required by state, federal or local laws, rules or regulations. Where no equipment cabinet exists on an Installation, the signage shall be located at the base of the Installation.

- ii. Applicants shall remove or paint over manufacturer decals without compromising the surface, color or finish of the Installation's base material. The color and finish of the Installation shall match or be as approved by Cambridge Historical Commission staff. No advertisement for the Applicant or manufacturer of the Installation shall be allowed except displaying information as permitted or required by federal, state or local laws, rules or regulation.
- iii. Required equipment warning stickers: applicants shall use only the smallest and lowest visibility warning stickers allowed by federal, state, local laws, rules or regulations.
- iv. Equipment cooling fans: In residential zoning districts, if equipment cooling fans are required, the Applicant shall use equipment cooling fans with the lowest noise level and shall not exceed the levels allowed in the City's noise ordinance.