

Sponsor (Name or Committee):

Planning Board

Article Contact (Name, Title, Email, Phone):

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Article Title:

Zoning Bylaw Amendment - Wireless Communications Bylaw

Article (Warrant Language):

ARTICLE XX. To determine whether the Town will amend the Town's Zoning Bylaw to: (1) delete the Personal Wireless Communications Facilities Overlay District from Section 2.1 Conservancy and Overlay Districts and Section 2.2 Zoning Map; and (2) delete entirely Section 7.8 (Personal Wireless Communications Facility) of the Zoning Bylaw and replace it with a new Section 7.8 (Personal Wireless Communications Facility); or take any other action relative thereto:

7.8 PERSONAL WIRELESS COMMUNICATIONS FACILITY

7.8.1 Definitions : As used in this Section 7.8, the following terms shall have the following meanings:

7.8.1.1 Antenna: A device for transmitting and receiving electromagnetic waves, attached to a tower or other structure.

7.8.1.2 Available space: The space on a tower or other structure to which antennas of a personal wireless communications service provider are both structurally able and electromagnetically able to be attached.

7.8.1.3 Base station: A fixed-location sending and receiving site serving a coverage area within a wireless communications network.

7.8.1.4 Communications equipment shelter: A structure located at the base of a tower or other structure designed principally to enclose equipment used in connection with a personal wireless communications facility.

7.8.1.5 Facility site: A property, or any part thereof, which is owned or leased by one or more personal wireless communications service providers and upon which one or more personal wireless communications facility/ies and required landscaping are located.

7.8.1.6 Monopole: A single self-supporting vertical pole with no guy wire anchors, usually consisting of galvanized or other painted metal, or a wooden pole with below-grade foundations.

7.8.1.7 Personal wireless communications services: Commercial mobile services, unlicensed wireless services, and common carrier wireless exchange services. These services include but are not limited to cellular services, personal communications services (PCS), specialized mobile radio services and paging services.

7.8.1.8 Personal wireless communications facility/ ies: All equipment (including any repeaters, micro-cells, or other similar technology) with which a personal wireless communications service provider broadcasts and receives radio-frequency waves that carry personal wireless communications services and all locations of said equipment or any part thereof.

7.8.1.9 Personal wireless communications service provider: An entity licensed by the Federal Communications Commission (FCC) to provide personal wireless communications services.

7.8.1.10 Repeater: A small receiver or relay transmitter that has no significant visual impact on the surrounding area and is designed to provide personal wireless communications services to areas which cannot receive adequate coverage from a base station in a wireless communications network.

7.8.1.11 Structurally able: The determination that a tower or other structure can carry the load imposed by the new antennas under all reasonably predictable conditions as determined by professional structural engineering analysis.

7.8.1.12 Tower: A freestanding lattice structure or framework, or monopole, which is self-supporting, fixed to the ground and designed to support personal wireless communications transmissions, receiving or relaying antennas or other personal wireless communications equipment.

7.8.2 General Requirements for personal wireless communications facilities

7.8.2.1 Maximum height: The height of a facility and its supporting base structure shall not exceed one hundred fifty (150) feet.

7.8.2.2 Height from a structure: A facility placed on another structure shall not exceed the height of the structure upon which it is to be placed by more than twenty (20) feet.

7.8.2.3 Vegetated buffer: If the facility site is in a wooded area, a vegetated buffer strip of undisturbed trees shall be retained around the entire perimeter of the personal wireless communications facility site for at least the lesser of (a) the distance to the lot line or (b) fifty (50) feet. The landowner shall enter into a recordable easement, restriction, or similar instrument enforceable by the Town to ensure that the buffer strip is retained while the facility site is in place.

7.8.2.4 Security fencing and signage: The area around a facility's communications equipment shelters shall be completely fenced for security to a height of six feet and gated (unless the communications equipment shelter is otherwise secured). Use of razor or barbed wire is not permitted. A sign shall be posted adjacent to the entry gate listing the facility owner(s) and a 24-hour emergency telephone number, and any legally required radio-frequency warning sign shall be posted in an appropriate location. Commercial advertising on any antenna, tower, fencing, accessory building or communications equipment shelter is prohibited.

7.8.2.5 Camouflaging: Communications equipment shelters and accessory buildings shall be designed to be architecturally similar to and compatible with others on the site and with the surrounding area to the extent feasible, and shall be used only for the housing of equipment related to the site. Additional supplemental

landscape screening may be required by the Board or Planning Board to lessen adverse visual impacts.

7.8.2.6 Lighting: Unless required by the Federal Aviation Administration or a hospital helicopter medical flight program or other applicable law, no exterior night lighting of towers or the facility is permitted except for manually operated emergency lights for use when operating personnel are on the facility site.

7.8.2.7. Radio frequency emissions: All facilities shall comply with the appropriate FCC Regulations regarding emissions of electromagnetic radiation.

7.8.3 Personal wireless communications facilities permitted as-of-right

7.8.3.1 Facilities on existing structures other than utility poles: A new facility, not including a new tower, may be located on an existing structure other than a utility pole within the Town right-of-way where:

- (a) there is sufficient available space for the facility on the existing tower or structure;
- (b) the new facility first obtains site plan approval from the Planning Board pursuant to Section 11.8; and
- (c) the facility meets the requirements of Section 7.8.2.

7.8.3.2 Facilities on utility poles: A facility may be located on an existing or proposed utility pole within a Town right-of-way provided:

- (a) there is sufficient available space for the facility on the utility pole;
- (b) the antenna is designed to appear like transformers or utility boxes that are located on other nearby utility poles;
- (c) the facility obtains a “grant of location” from the Select Board in accordance with the provisions of MGL c. 166, § 22 (or any related or successor provisions thereto); and
- (d) the facility meets the requirements of Section 7.8.2.

7.8.3.3 Facilities not requiring site plan review or special permit: The Building Commissioner may issue a building permit, without site plan review, for:

- (a) co-location of antennas on any structure on which there is an existing facility;
- (b) the replacement of an existing facility;
- (c) a decrease in height of a facility, or the structure on which it is located;
- (d) a one-time increase in the height of a facility by up to twenty (20) feet or by ten (10) percent, whichever is greater; or
- (e) any other modification or addition to a facility or personal wireless services equipment required to be permitted by right under federal law; provided, however, that the structure on which the facility is to be located is structurally able to support the additional facility and that the facility and the structure, as modified, meet the requirements of Section 7.8.2.

7.8.3.4 Conditions: The Planning Board may impose reasonable conditions on a facility permitted under Sections 7.8.3.1 and 7.8.3.2 pursuant to the provisions of Section 11.8.5.

7.8.4 Personal wireless communications facilities permitted by special permit

7.8.4.1 Special permit requirements: No new tower for personal wireless communications facilities shall be located in the town except upon issuance of a special permit. Such a tower may be located in any zoning district in the town, provided that:

- (a) The proposed facility meets the requirements of Section 7.8.2.
- (b) The proposed tower is set back a distance at least equal to its height from all lot lines of the site on which the tower is located, unless the tower has been designed to break away at a certain point above the ground, in which case the new tower may be set at least the breakaway distance from all lot lines.
- (c) In areas where there is no significant tree canopy, the tower, including the rest of the facility if it extends the height of the tower, does not exceed one hundred twenty (120) feet above finished grade of the ground elevation. Such finished grades shall not be distorted above the pre-existing natural grade as a way to achieve additional height. In areas where there is significant tree canopy, the maximum height of a tower shall not exceed twenty (20) feet above the average height of the natural pre-existing tree canopy within a one hundred fifty (150) foot radius of the tower.
- (d) The proposed tower is not located within three hundred (300) feet on a horizontal plane of:
 - i. any structure in a Historic District (except with the approval of the Historic District Commission) or listed, or eligible to be listed, on the state or federal Register of Historic Places (except with the approval of the Historical Commission); and
 - ii. the habitat of any Massachusetts listed rare or endangered wildlife or rare plant species.
- (e) No new tower that requires striping or lighting per Federal Aviation Administration requirements shall be located within one thousand (1000) feet of an existing school, day care center, residential dwelling, or historic resource.

7.8.4.2 Procedure for review by the Board: Any person who desires to construct or install a tower for installation of a personal wireless communications facility shall submit a written application for a special permit and site plan approval to the Board, with copies to the Planning Board. Applications shall be submitted in accordance with the requirements outlined in any Rules and Regulations for a Personal Wireless Communications Facility adopted by the Board.

7.8.4.3 Evaluation by qualified wireless engineer: If a new facility is needed to fill a significant gap in a personal wireless communications service provider's current or anticipated offerings of personal wireless communications services, the coverage gap shall be identified in the application. Upon submission of a complete application

for a special permit under Section 7.8.4, the Board may engage the services of a qualified wireless engineer to review the application. The Board shall provide said qualified wireless engineer with the completed application and existing documentation for analysis and review. The qualified wireless engineer shall gather additional documentation and conduct additional research as necessary to support the analysis and review. Access to the facility site to conduct any necessary site visits shall be provided to the qualified wireless engineer. The qualified wireless engineer shall submit to the Board a written recommendation and an opinion as to the conformance of the application with the requirements of Section 7.8.4.

7.8.4.4 Approval criteria: A special permit shall be issued under this section, and shall not be required to meet the approval criteria in Section 11.6, if the Board makes all the following findings:

- (a) The proposed facility and tower meet the applicable requirements listed in Section 7.8.4.1.
- (b) The proposed location of the facility will allow the personal wireless communications service provider to reduce or eliminate a significant gap in personal wireless communications services coverage or will provide backup or emergency coverage.
- (c) The proposed facility and tower minimize adverse impacts on historic resources, scenic views, and natural or human-made resources through the use of camouflage, stealth or other methods.
- (d) The applicant has agreed to rent or lease available space on the tower, under commercially reasonable terms and conditions, without discrimination to other personal wireless service providers.

7.8.4.5. Reasonable conditions: The Board may impose any additional conditions and safeguards as public safety, welfare and convenience may require, either as recommended by an independent consultant, by the Planning Board or other Town boards or committees, or upon its own initiative, provided that no such conditions effectively prohibit closing a significant gap in coverage for the provision of personal wireless communications services.

7.8.5 Form of decision: Any decision by the Planning Board, the Board, or the Building Commissioner under this Section shall be in conformance with the 1996 Telecommunications Act, in that it shall be in writing and, if a denial, supported by substantial evidence contained in a written record.

7.8.6 Fees and insurance: Personal wireless service facilities shall be continuously insured by the owner(s) against damage to persons or property. The facility owner(s) shall provide a Certificate of Insurance to the Building Commissioner on an annual basis. A schedule of fees for personal wireless service facilities permitting and renewal, inspection of structures, and any other fees may be established by the Board as part of the Rules and Regulations for Personal Wireless Communications Facilities.

7.8.7 Structural inspection: Prior to a final inspection and thereafter in accordance with this Section, a tower owner shall provide proof of an inspection by an independent licensed professional structural engineer of the tower's structural integrity and safety.

Guyed towers shall be inspected every three years. Monopoles and non-guyed lattice towers shall be inspected every five years. A report of the inspection results shall be prepared by the structural engineer and submitted to the Building Commissioner. Any modification of an existing facility that increases tower dimensions or antenna numbers or types shall require a new structural inspection pursuant to this Section.

7.8.8 Unsafe structure: Should the inspection of any tower reveal any structural defect(s) that, in the opinion of the independent structural engineer or the Building Commissioner, render the tower unsafe, the following actions shall be taken. Within ten (10) business days of written notification of unsafe structure, the owner(s) of the tower shall submit a plan to remediate the structural defect(s). This plan shall be initiated within ten (10) business days of the submission of the remediation plan and completed as soon as feasibly possible, provided that nothing herein shall be construed to limit the Town's or any other governmental bodies authority to take all necessary action to mitigate or address risks to public health and safety, or to prevent property damage as a result of an unsafe structure.

7.8.9 Removal requirements: Any personal wireless communications facility that ceases operating for a period of two (2) years may be ordered removed by the Board upon the request of the Building Commissioner. At the time of removal, the facility site shall be remediated such that all facility improvements that have ceased to operate are removed. If all facilities on a tower have ceased to operate, the tower (including the foundation to a depth of three feet below grade) may also be ordered removed and the facility site shall be revegetated at grade by the owner of the tower. Existing trees shall only be removed if necessary to complete the required removal of the facility.

7.8.10 Exemptions: The following wireless communications facilities are exempt from the application of Section 7.8: police, fire, ambulance and other emergency dispatch; amateur (ham) radio; citizens band radio; any existing commercial radio tower; and radio dispatch for local businesses and small cell wireless services located entirely in the Town right-of-way to the extent otherwise regulated by the Select Board; provided, however, that no personal wireless communications facility shall be considered exempt from this Section 7.8 because it is proposed to share a tower or other structure with such exempt uses.

7.8.11 Relief from requirements: The Planning Board, through site plan review pursuant to Section 7.8.3, or the Board, through Special Permit and Site Plan Review pursuant to Section 7.8.4, may grant a waiver from any requirement contained in Section 7.8 where the Planning Board or Board (as applicable) finds that:

- (a) the extent of the granted relief is necessary to allow the facility to provide a viable means of reducing or eliminating a significant gap in coverage for the provision of personal wireless communications services; or
- (b) the desired relief may be granted without substantial detriment to the neighborhood.

Article Explanation:

At the 2025 Annual Town Meeting, the Select Board and the Planning Board committed to updating the Zoning Bylaw for Personal Wireless Communications Facilities (the "Current Bylaw") in order to address changes in federal law and reduce barriers to entry

by wireless communications carriers to the Town given the need for increased cell service. Given the complexities of the Current Bylaw and the needed changes, the Current Bylaw is being replaced in its entirety.

I. Shifting the Zoning Paradigm

The Current Bylaw was written during a time of immense proliferation of wireless infrastructure around the country and corresponding concern about the effects of that infrastructure on the natural and built environment. Accordingly, the Current Bylaw was designed to limit the number of personal wireless communications facilities (“Facilities”) in the Town. It focused largely on minimizing their impacts, rather than encouraging service. When wireless phones first came out, coverage along major roadways was the concern. No one would have thought that smartphones and the need for adequate cell coverage would be part of everyday life for most people and in all places, not just cars.

The Current Bylaw accomplished these purposes in part by imposing permissible, but somewhat stringent, requirements on applicants seeking to install Facilities in the Town. Most notably, the Current Bylaw included provisions that require an applicant to eliminate the possibility that it could provide adequate cellular coverage utilizing other Facilities outside the Town. If they could not, the Current Bylaw requires applicants to seek locations in “overlay districts” in the Town as the first option, subject to a handful of additional provisions that further limit where Facilities could be located. The result is a significant limitation on the number of available sites that an applicant could use to fill coverage gaps.

Provisions implementing this paradigm include the following provisions of the Current Bylaw:

- 7.8.4.2(e): New towers may not exceed the minimum height necessary to provide adequate coverage for the Facilities proposed for use on the tower.
- 7.8.4.2(f): If primary coverage from the proposed facility (greater than 50%) is outside the Town, the permit may be denied unless the applicant can show it is unable to locate within the Town if the Town is the community primarily receiving service from the proposed facility.
- 7.8.4.2(j): No new tower for a facility may be located within one thousand feet of childcare facilities and schools, single-family detached dwellings, structures in a Historic District, vernal pools, and habitats of any endangered wildlife of plant species. Note that many of these areas are already protected under the jurisdiction of other bodies (e.g., the Natural Resources Commission or the Historic Districts Commission).
- 7.8.4.2(k): New Facilities in or on an existing, suitable, non-residential structure or tower for which an occupancy permit was issued as of January 1, 2000 must be located at least: 500 feet from habitable structures and 300 feet from any structure in a Historic District.
- 7.8.4.2(m): Facilities must be located so as to provide adequate coverage and adequate capacity with the fewest number of base stations, towers and antenna arrays that are technically feasible.

Further, an applicant seeking relief from any of these requirements is currently required to demonstrate its need for such relief and provide the Board with “a written statement describing why the requested relief is in the best interest of the Town”, rather than in the interest of service to its customers or potential customers.

These types of requirements, as explained below, may be unenforceable in particular circumstances and preempted by federal law, which expressly permits wireless carriers to override local zoning to close coverage gaps. An applicant today could ignore these requirements and argue their lack of enforceability to the Town. However, the presence of these provisions is not helpful to the Town’s goals of promoting additional coverage. Applicants reviewing the Current Bylaw may be discouraged from pursuing the citing of Facilities in Town due to the apparent resistance to them, or the effort involved in citing them.

II. Recommended Changes to Maintain Compliance with Federal Law

The following are current provisions that should be eliminated because they would likely be unenforceable if challenged:

- 1) Section 7.8.4.2(l), which ranks various locations for a personal wireless communications system in order of preference;
- 2) Section 7.8.4.1(e), which requires an applicant to document its decision not to place its facility in a designated overlay district.

Under 47 U.S.C. § 332(c)(7)(B)(i)(II), municipalities cannot adopt policies that prohibit or have the effect of prohibiting the provision of personal wireless services. An applicant could argue that these two Sections prevent providers from filling a significant gap in their coverage, thereby effectively prohibiting the provision of wireless services in that geographic area. Although these provisions do not fully prohibit the placement of a facility, the stated preference for certain locations leaves that point unclear. Removing these provisions would more effectively bring the bylaw into compliance with federal law, as well as signaling to applicants that they are welcomed to provide additional coverage in the Town.

Additionally, the Current Bylaw’s provisions require a special permit for certain minor changes to an existing facility, such as co-locating an antenna on an existing tower, changing out equipment, and minimally changing the height of a tower. It is likely that such provisions requiring a discretionary special permit would be unenforceable. In 2012, Congress passed the “Spectrum Act” to further the development of a nationwide wireless network and further reduced local control over facility siting. Under Section 6409 of the 2012 Spectrum Act, “a state or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station,” including requests to “collocat[e] new transmission equipment.” Moreover, these provisions do not further the Town’s goals of promoting solutions to gaps in cellular coverage.

III. Additional Changes to Promote Additional Coverage

- (1) Differentiate between applications to add antennas versus applications for new towers, which would allow desirable actions by right

As discussed above, certain actions are not only required to be permitted as-of-right under federal law but should also be as-of-right under the paradigm of encouraging wireless providers to close the Town's coverage gap by reasonable means. Accordingly, the proposed Bylaw allows wireless providers that wish to co-locate a new antenna on an existing tower, swap out old equipment, etc. to do so via a non-discretionary building permit.

(2) Allow Facilities subject to site plan review rather than a special permit

The Current Bylaw requires a special permit for all Facilities in the Town, whether they are on standalone towers or on existing buildings. It also requires applicants to take extensive steps to demonstrate why a facility cannot be located within the overlay district as a prerequisite to being located anywhere else. This process has the advantage of providing for robust public review of these Facilities, but the significant amount of information needed to apply for and obtain a special permit can create a burden for wireless carriers looking to increase service in the Town. There is also a suggestion that the current special permit criteria are too stringent in some cases, and vague in others, which further discourages applications.

Rather than continuing to require applicants to obtain a special permit, the proposed Bylaw uses site plan review as the primary manner to site Facilities. This would be preferable for a few reasons. As described above, there are certain categories of uses the Town may want to encourage: for example, co-locating antennas on existing Facilities or placing them out of sight in steeples, cupolas and other existing structures. Requiring applicants to comply with location/siting requirements for these uses is redundant and unnecessary, since implementing these uses requires no new structures to be built.

(3) Utilizing conditions in site plan review, rather than waivers from requirements, to address site conditions

Where there is nevertheless a special concern about a particular location, however, those site-specific concerns can be addressed through reasonable conditions on site plan review in a more appropriately tailored way. This would also have the advantage of significantly simplifying the bylaw by removing many, if not all, of the design and other siting criteria in the Current Bylaw and leaving a few basic ones that are likely to matter for all Facilities such as a reasonable height limitations, camouflaging and screening requirements, and safety "fall" zones for towers (see § 7.8.4.2(a) of the Current Bylaw).

It would also remove the need for limitations on Facilities in particularly sensitive areas such as historic districts or near wetland areas. Placement of Facilities in those areas would still trigger review by other bodies and the conditions of their decisions can be incorporated into the site plan review as enforceable conditions of zoning as well, with more sensitivity to particular locations and circumstances.

(4) Limiting the use of special permits for Facilities of a certain size or in certain locations

The proposed Bylaw will still require a special permit for new towers or for Facilities in particularly sensitive locations, while utilizing site plan review for all other Facilities. This will preserve the public hearing for applicants proposing a new tower, providing the

transparency desired for larger projects and putting a greater burden on applicants to justify such Facilities.

Motion (if known at time of submission):

[Insert proposed motion language, if available.]