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In Support of the Special Permit Findings of Fact

By Domenica Tatasciore, Agent for Crown Castle on behalf of Verizon Wireless

RE: Application for Special Permit for Modification of a Wireless Communications Facility
Property: 20 Ponderosa Road, Ashland, MA Map 13, Lot 35 (the "Property")
Applicant: Verizon Wireless by its representative Crown Castle, Agent Domenica Tatasciore
Property Owner: Town of Ashland, 101 Main Street, Ashland, MA

Dear Honorable Board Members:

I am the Agent for Crown Castle and represent Verizon Wireless in connection with an application for a Special Permit, *with all rights reserved*, for Verizon Wireless from the Town of Ashland Planning Board (the "Board"). In its application, Applicant seeks permission to modify an existing Wireless Communications Facility ("WCF") located at 20 Ponderosa Road, as more fully described herein (the "Project"). Pursuant to Section 6.4 of the Town of Ashland Zoning Bylaws, as more fully described herein (the "Bylaws"), the Project falls within the subject matter of, and is consistent with, the spirit, intent and purpose of the said Bylaws.

This application is submitted with full reservation of Applicant's rights including without limitation Section 6409(a) of the federal Middle Class Tax Relief and Job Creation Act of 2012 also referred to as the "Spectrum Act." The Spectrum Act was passed to "advance wireless broadband service" for both public safety and commercial purposes. The modification to the existing WCF satisfies the standards for the modification of an eligible facility under the Spectrum Act.

Applicant holds an interest in the Property by virtue of a Site Lease Agreement with the tower operator, CCTMO LLC. Applicant is the current holder and operator of a WCF at the Property pursuant to a Special Permit Decision, filed by the Ashland Zoning Board of Appeals on February 11, 2002 recorded with the Middlesex County District Registry of Deeds in Book 35239, Page 136 and Variance Decision on February 14, 2002 and recorded with the Middlesex County District Registry of Deeds in Book 35239, Page 139 through to Special Permit Modification Decision dated December 20, 2010 and recorded at the Middlesex County District Registry of Deeds in Book 56275, Page 52.

The Property is located in the Residential A (RA) zone. The Board is therefore vested with the authority to grant the permissions sought herein by Section 6.4 et seq. of the Bylaws and Section 6409(a) of the federal Middle Class Tax Relief and Job Creation Act of 2012 also referred to as the "Spectrum Act".

I. Background

The Applicant is licensed by the Federal Communications Commission to construct and operate a wireless telecommunications network in various markets throughout the country, including the Commonwealth of Massachusetts and in particular the Town of Ashland. The Applicant, in its design, has established the objective of providing seamless coverage to its customers throughout its coverage area. The radio transmitting and receiving facilities operate on a line of site basis, requiring a clear path from the facility to the user on the ground. This dynamic requires the antennas to be located above the tree line, and in a location where the signal is not obstructed or degraded by other buildings or by topographical features such as hills.

II. The Project

The Project will consist of removing three (3) existing antennas and one (1) collar mount with mount pipes and installing eight (8) antennas, three (3) antennas with integrated remote radio heads, eight (8) remote radio heads, one (1) over voltage protector, two (2) hybrid cables, one (1) platform mount with three (3) dual antenna mounts on an existing 150-foot Wireless Communications Facility Tower located at the property. The antennas and mount will be located at the 123-foot centerline of the tower. The specifications and locations of equipment associated with the Project and equipment already existing on the Property are more fully described on the plans included with this application.

The Project will comply with all applicable local, state and federal safety codes, including but not limited to all regulations promulgated by the Federal Communications Commission.

III. Legal Analysis

6.4.1 Purpose and Intent. This Section is designed to provide guidance for the installation of new towers, antennas and other communication structures for all types of Wireless Communications Facilities (WCF) within the Town of Ashland or for the replacement, expansion, upgrade or modification of said equipment. The By-Law will establish standards to protect the interests of the general public, provide for public safety, preserve character and property values, and minimize visual and environmental impacts throughout the town as well as adjacent towns and especially on Residential Districts. The Bylaw enables the review and approval of Wireless Communications Facilities by the Town's Planning Board, acting as the Special Permit Granting Authority, in keeping with the Town's existing bylaws and historic development patterns, including the size and spacing of structures and open spaces. This bylaw is intended to be used in conjunction with other regulations adopted by the Town, including historic district regulations, site plan review and other local bylaws designed to preserve the character of the town, preserve quality of life, and other local bylaws designed to preserve the character of the town, preserve quality of life, and encourage appropriate land use, environmental protection, and provision of adequate infrastructure development in Ashland.

6.4.2. District Regulations

1. New or modified WCFs in Ashland's zoning districts shall require a special permit from the SPGA. These include ground mounts, building (roof or side) mounts, and WCFs mounted on other existing structures. These also include replacement, expansion, upgrade, modification, or significant change in appearance of a WCF such as an extension in height or width; addition of cells, antennae, or panels; upgrade of technology; or a new replacement of a facility. The Applicant shall submit documentation of the legal right, physical need, and structural capacity to install and/ or use the

proposed facility mount at the time of application of the special permit.

2. In commercial and industrial zoning districts, WCFs are allowed in all areas, subject to the exceptions listed below.
3. In residential zoning districts, WCFs are not allowed in any areas unless the Applicant can show that the proposed location is necessary to close a significant gap in wireless service AND no feasible alternative, location, or technology exists, subject to the exceptions listed below.

The Applicant was previously granted Special Permits and Variance to install a new tower with antennas and ground equipment at the existing site. A subsequent Special Permit was granted in 2010 for the modification of the existing installation. The proposed equipment modifications are a continuation of this operation and are intrinsic to the Applicant's ability to provide necessary communications services. The Applicant further respectfully submits the proposed modifications satisfy the standards for an eligible facility request pursuant to 47 U.S.C. §1455 and 47 C.F.R. §1.6100.

4. Under no conditions will the SPGA allow a new or modified WCF located:
 - a. Within 300 feet of a residential building in Ashland's residential zoning districts;
 - b. Within 300 feet of a building in Ashland licensed by the Massachusetts Department of Elementary and Secondary Education to educate persons under the age of 18; and
 - c. On land for which there is a permanent conservation restriction as authorized under Sections 31-33 of Chapter 184 of the General Laws of Massachusetts OR there are active/ fixed recreational activities including but not limited to playgrounds, ball fields, and tennis courts.

The Wireless Telecommunications Facility is an existing and permitted use.

5. Notwithstanding any of these regulations, the Town encourages co-location on existing structures, including but not limited to existing WCFs, buildings, water towers, utility poles and towers, and related facilities, provided such installations preserve the character and integrity of those structures. Applicants are urged to consider use of existing telephone and electric utility structure.

The subject application conforms to the stated intent to utilize existing structures and WCFs by modifying an existing facility on an existing telecommunications tower.

6. WCFs on existing structures shall:
 - a. Not extend the height of the existing structure unless the structure meets all requirements of this Bylaw;

The proposed modifications will not extend above the height of the existing telecommunication tower.
 - b. not project above the existing structure by more than ten feet;

The proposed modifications will not extend above the height of the existing telecommunications tower.
 - c. be finished in a manner designed to be aesthetically consistent with the exterior finish of the structure;

The proposed equipment is compatible with the existing previously permitted equipment.

- d. be mounted so that it does not obscure any window or other exterior architectural feature; and

This provision is not applicable in the case of the existing telecommunications tower.

- e. not exceed fifty (50) square feet of front surface facing surrounding streets and adjacent properties, individually or in aggregate. In reviewing an application, the SPGA may increase this surface if it finds that a substantially better design will result from such increase. In making such a finding the SPGA shall consider both the visual and safety impacts of the proposed use.

The proposed modifications comply with this provision. The Applicant further respectfully submits the proposed modifications satisfy the standards for an eligible facility request pursuant to 47 U.S.C. §1455 and 47 C.F.R. §1.6100.

7. WCFs in new locations shall:

- a. be allowed only if the Applicant has definitively demonstrated that there are no feasible existing structures upon which to locate;
- b. be camouflaged to the greatest extent possible, including but not limited to the use of compatible building materials and colors, screening, and landscaping; and
- c. include a “fall zone” equal to 150% of the height of the facility/ mount, including any antennae or other appurtenances. Within this fall zone there shall be no habitable structure and the Applicant shall demonstrate control of the land (via lease or ownership) to prohibit future habitable construction. In reviewing an application the SPGA may reduce the required fall zone by as much as 50% of the required distance if it finds that a substantially better design will result from such reduction. In making such a finding the SPGA shall consider both the visual and safety impacts of the proposed use.

Paragraphs 7 (a, b, c) do not apply as the modifications will not be located on a new structure.

8. All WCFs shall:

- a. be no higher than ten feet above the average height AGL of buildings, tree canopy, or other structures within 300 feet OR, if on an existing structure, ten feet above the height of the existing structure, whichever is higher;
- b. be no higher than ten feet above the height limit of the zoning district within which the WCF is located, unless the WCF is completely camouflaged such as within a flagpole, steeple, chimney, or similar structure; and
- c. meet the setback requirements of the underlying zoning district.

The Applicant believes that since the proposed equipment will not extend above the height of the existing telecommunications tower structure, it will be in compliance with height requirements. Similarly, the proposed modifications do not alter the existing ground footprint of the WCF and this will not impact existing setbacks. The Applicant further respectfully submits the proposed modifications satisfy the standards for an eligible facility request pursuant to 47 U.S.C. §1455 and 47 C.F.R. §1.6100.

6.4.3 Special Permit Regulations. All Wireless Communications Facilities shall comply with the Requirements and Performance Standards set forth in this section.

1. The following types of wireless communications facilities are exempt from the Special Permit requirement of this bylaw and may be constructed, erected, installed, placed and/or used within the Town subject to the issuance of a building permit by the Building Commissioner:
 - a. Amateur radio towers used in accordance with the terms of any amateur radio service license issued by the Federal Communications Commission, provided that:
 - i. the tower is not used or licensed for any commercial purpose;
 - ii. the tower must have a cost or replacement value of less than \$10,000.00;
 - iii. if the tower is a free-standing device, such device shall be installed in the rear yard only, outside the setback; and
 - iv. the tower must be removed if the use is discontinued for one (1) year.
 - b. Towers used for the purposes set forth in M.G.L. C. 40, Section 3.
 - c. Satellite dishes less than 1 meter in diameter

The Applicant agrees that the exemptions provided by Section 6.4.3, Paragraph 1 above do not apply to its proposed equipment modification. Section 6409(a) of P.L. 112-96, as codified at 47 U.S. Code §1455, however, requires permitting authorities to approve most applications administratively for the collocation and modification of wireless equipment in an effort to streamline “the process for siting of a wireless facility by preempting the ability of State and local authorities to delay collocation of, removal of, and replacement of wireless transmission equipment.”

2. The SPGA shall not grant a Special Permit for lattice towers and similar facilities requiring three (3) or more legs and/or guy wires for support. Only monopoles, with associated antenna and/or panels, are allowed.

The Applicant submits that this provision does not apply as the subject structure is an existing telecommunication tower, which was previously permitted as a WCF.

3. Any new free standing towers shall be designed to structurally accommodate the maximum number of foreseeable users (within a ten (10) year period) as technically practicable. The intent of this requirement is to reduce the number of facilities which will be required to be located within the community.

This provision does not apply as the proposed modifications do not involve a new telecommunications tower structure.

4. Design Standards

- a. Site Design Standards

- i. All wireless communications facilities shall minimize, to the extent feasible, adverse visual effects on the environment, the community and surrounding communities. The SPGA may impose reasonable conditions to ensure this result, including painting, screening and lighting standards.

The Applicant agrees to reasonable conditions under this section while noting

that the modifications are to an existing facility which will not exceed the height of the telecommunications tower structure and will not result in adverse visual effects to the community. The Applicant further respectfully submits the proposed modifications satisfy the standards for an eligible facility request pursuant to 47 U.S.C. §1455 and 47 C.F.R. §1.6100.

- ii. Access shall be provided to a tower site by a roadway which respects the natural terrain, does not appear as a scar on the landscape and is approved by the SPGA, the SPGA and the Fire Chief to assure emergency access at all times. Consideration shall be given to design which minimizes erosion, construction on unstable soils and steep slopes.

The existing WCF complies with this requirement. Access will be unaffected by the proposed modifications.

- iii. There shall be a minimum of one (1) parking space for each WCF to be used in connection with the maintenance of the site, and not to be used for the permanent storage of vehicles or other equipment.

See comment below.

- iv. Traffic associated with the tower and accessory facilities and structures shall not adversely affect abutting ways.

The Applicant will comply with this provision and notes that the subject WCF is unmanned and will remain unmanned subsequent to the proposed equipment modifications. The WCF will not generate traffic in and of itself except for periodic site visits by a technician for routine maintenance. This status will remain unchanged from the existing facility.

- b. Visibility/Camouflage. All WCFs shall be sited in such a manner that the view of the facility from adjacent abutters, residential neighbors and other areas of the Town or Adjacent Towns shall be as limited as possible. All monopoles and dishes shall be painted or otherwise colored so as to blend in with the landscape or the structure on which they are located. A different color scheme shall be used to blend the structure with the landscape below and above the tree or building line.

Satellite dishes and/or antennae shall be situated on or attached to a structure in such a manner that they are screened, preferably not being visible from abutting streets. Free-standing dishes or antennae shall be located on the landscape in such a manner so as to minimize visibility from abutting streets and residences and to limit the need to remove existing vegetation. All equipment shall be colored, molded and/or installed to blend into the structure and/or the landscape.

Wireless Communications Facilities shall be camouflaged as follows:

- i. Camouflage by Existing Buildings or Structures. When a Wireless Communications Facility extends above the roof height of a building on which it is mounted, every effort shall be made to conceal the facility within or behind existing architectural features to limit its visibility from public ways. Facilities mounted on a roof shall be stepped back from the front facade in order to limit their impact on the building's silhouette. Wireless Communications Facilities which are side mounted shall blend with the existing building's architecture and shall be painted or shielded with material which is consistent with the design features and materials of the building.

This provision is inapplicable in that the proposed equipment modification will

not extend above the height of the telecommunications tower structure and will not be mounted on a roof. The Applicant further respectfully submits the proposed modifications satisfy the standards for an eligible facility request pursuant to 47 U.S.C. §1455 and 47 C.F.R. §1.6100.

- ii. Camouflage by Vegetation. If Wireless Communications Facilities are not camouflaged from public viewing areas by existing buildings or structures, they shall be surrounded by buffers of dense tree growth and understory vegetation in all directions to create an effective year-round visual buffer. Ground-mounted Wireless Communications Facilities shall provide a vegetated buffer of sufficient height and depth to effectively screen the facility. Trees and vegetation may be existing on the subject property or installed as part of the proposed facility or a combination of both. Existing on-site vegetation shall be preserved to the maximum extent practicable. The SPGA shall determine the types of trees and plant materials and depth of the needed buffer based on site conditions.

This provision is inapplicable in that the proposed equipment modification will not affect any changes to the existing fenced ground equipment area.

- iii. Color. Wireless Communications Facilities which are side-mounted on buildings shall be painted or constructed of materials to match the color of the building material directly behind them. To the extent that any Wireless Communications Facilities extend above the height of the vegetation immediately surrounding it, they shall be painted in a light grey or light blue hue which blends with sky and clouds. The portion of a building-mounted WCF extending above the building shall be painted to blend with sky and clouds.

This provision is inapplicable in that the proposed equipment modification is mounted on an existing telecommunications tower and not a building.

- c. Equipment Shelters. Where feasible, the equipment to relay the wireless transmission or to transfer the wireless transmissions to the phone system shall be located inside an existing structure. Otherwise, such equipment shall be located in a new structure in a location where the visual impact to the community and surrounding communities will be minimized. The SPGA may impose conditions on the siting and screening of such structure.

Equipment shelters for Wireless Communications Facilities shall be designed consistent with one of the following design standards:

- i. Equipment shelters shall be located in underground vaults;
- ii. Equipment shelters shall be designed to be consistent with the architectural context, styles and materials, of the surrounding neighborhood as determined by the SPGA.
- iii. Equipment shelters shall be camouflaged behind an effective year-round landscape buffer, equal to the height of the proposed building, and/or wooden fence. The SPGA shall determine the style of fencing and/or landscape buffer that is compatible with the neighborhood.

The Applicant believes that sub section (c) above is inapplicable as Verizon Wireless does not utilize an equipment shelter at the site but locates its ground equipment using cabinets on an existing concrete equipment pad. Verizon Wireless proposes to continue utilizing replacement equipment cabinets located inside the existing fenced area.

d. Lighting and Signage:

- i. Wireless Communications Facilities shall be lighted only if required by the Federal Aviation Administration (FAA). Lighting of equipment structures and any other facilities on site shall be shielded from abutting properties. There shall be total cutoff of all light at the property lines of the parcel to be developed, and foot-candle measurements at the property line shall be 0.0 initial foot-candles when measured at grade.

This provision is not applicable as the WCF is not lighted.

- ii. There shall be no signs, except for announcement signs, danger signs, "No Trespassing" signs and a required sign giving the telephone number where the owner may be reached on a twenty-four-hour (24-hr.) basis. All signs shall conform with the Town of Ashland Sign Bylaws.

The Applicant will comply with this provision subject to any lawful requirements by federal and state authority.

e. Historic Buildings and Districts:

- i. Any Wireless Communications Facilities located on or within an historic structure shall not alter the character-defining features, distinctive construction methods, or original historic materials of the building.
- ii. Any alteration made to an historic structure to accommodate a Wireless Communications Facility shall be fully reversible.
- iii. Wireless Communications Facilities within an historic district shall be concealed within or behind existing architectural features or shall be located so that they are not visible from public roads and viewing areas within the district.

The provisions of this subsection regarding Historic Districts and Buildings do not apply.

f. Scenic Landscapes and Vistas:

- i. Wireless Communications Facilities shall not be located within open areas that are visible from public roads, recreational areas or residential development. As required in the Camouflage section above, all ground-mounted Wireless Communications Facilities which are not camouflaged by existing buildings or structures shall be surrounded by a buffer of dense tree growth.
- ii. Any Wireless Communications Facility that is located within 300 feet of a scenic vista, scenic landscape, or scenic road as designated by the town shall not exceed the height of vegetation at the proposed location. If the facility is located farther than 300 feet from those elements, the height regulations described elsewhere in this bylaw will apply.

The Applicant respectfully submits that the subject telecommunication tower facility is not located within a scenic landscape or vista and thus the provision of subsection (f) does not apply.

- g. Service Utilities. All utilities, which will service the proposed personal wireless service facility, shall be located below ground from the facility's property line.

The WCF is an existing facility and no new utilities are proposed for the subject site.

h. Environmental Standards:

- i. Wireless Communications Facilities shall not be located in wetlands. Locating of wireless facilities in wetland buffer areas shall be avoided whenever possible and disturbance to wetland buffer areas shall be minimized and subject to approval of the Conservation Commission.

The subject facility is not located within a wetland area.

- ii. No hazardous waste shall be discharged on the site of any Wireless Communications Facility. If any hazardous materials are to be used on site, there shall be provisions for full containment of such materials. An enclosed containment area shall be provided with a sealed floor, designed to contain at least 110% of the volume of the hazardous materials stored or used on the site.
- iii. Stormwater run-off shall be contained on-site. Any WCF or related groundwork shall comply with Chapter 282 sec 9.4 (Site Plan Review) and Chapter 247 Stormwater Management of the Codes of the Town of Ashland.
- iv. Ground-mounted equipment for Wireless Communications Facilities shall not generate noise in excess of 50 db at the property line.
- v. Roof-mounted or side-mounted equipment for Wireless Communications Facilities shall not generate noise in excess of 50 db at ground level at the base of the building closest to the antenna.

The Applicant respectfully notes that the WCF both as currently existing and subsequent to the installation of the proposed equipment modifications does not and will not produce any hazardous waste or other physical byproducts. Similarly, the existing WCF and post- modification WCF will not produce noise.

i. Safety Standards:

- i. Radiofrequency Radiation (RFR) Standards. All equipment proposed for a Wireless Communications Facility shall be authorized per the FCC Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation (FCC Guidelines), as well as the Massachusetts Department of Public Health standards with respect to emissions from wireless facilities.

The Applicant complies and will continue to comply in all respects to RF emissions standards as established by the FCC both in general and specifically as under the terms of its license. The Applicant has been advised that the Massachusetts Department of Public Health no longer issues RF compliance letters but defers to established FCC standards.

- ii. All ground-mounted WCFs shall be surrounded by a security barrier. The security barrier shall be a minimum of eight (8) feet in height All fencing, walls and gates shall be compatible with the context of the existing neighborhood and community as determined by the SPGA and the Building Inspector.

The existing telecommunications tower itself is protected by an existing fence. The Applicant will comply with reasonable security provisions applicable to its own installation.

IV. Compliance with Telecommunications Act of 1996

Because the Applicant is applying for zoning approval for the installation of equipment that provides wireless services, the application is subject to §704 of the federal Telecommunications Act of 1996 (“TCA”), codified at 47 U.S.C. §332(c)(7)(B). By way of background, the TCA is a federal law enacted in 1996 whose purpose is “[t]o promote competition and reduce regulation in order to secure lower prices and higher quality services for American telecommunications consumers and encourage the rapid deployment of new telecommunications technologies.” To further this purpose, the TCA established national standards that apply to zoning applications for wireless facilities. These standards preempt inconsistent state and local laws, so they must be considered by zoning boards in making decisions on applications for wireless facilities.

On February 22, 2012, President Obama signed into law H.R. 3630, known as the “Middle Class Tax Relief and Job Creation Act of 2012,” which then became Public Law 112-96 (“P.L. 112-96”). Section 6409(a) of P.L. 112-96 adds new language to the existing body of laws, regulations, and decisions pertaining to wireless facility zoning.

In an effort to advance Congress’ goal of facilitating the rapid deployment of qualified modifications, the Federal Communications Commission adopted rules in 2014 that clarified many of the terms of Section 6409(a). The Commission stated that the purpose of implementing the rules “will serve the public interest by providing guidance to all stakeholders on their rights and responsibilities under the provision, reducing the delays in the review process for wireless infrastructure modifications, and facilitating the rapid deployment of wireless infrastructure, thereby promoting the advanced wireless broadband services.”

47 U.S. Code §1455(a) and 47 C.F.R. §1.6100(b) builds on the existing legal framework for wireless facilities by requiring permitting authorities to approve an eligible facilities request in an effort to streamline “the process for siting of a wireless facility by preempting the ability of State and local authorities to delay collocation of, removal of, and replacement of wireless transmission equipment.” “Collocation” is defined as “the mounting or installation of transmission equipment on an eligible support structure for the purpose of transmitting and/or receiving radio frequency signals for communications purposes.” The term “eligible support structure” means any structure that is a “tower” or “base station.” The term “eligible facilities request” includes any request for modification of an existing wireless tower or base station that involves— (i) collocation of new transmission equipment; (ii) removal of transmission equipment; or (iii) replacement of transmission equipment.

The tower is “eligible support structure” in that it currently exists and “supports and houses” wireless communication equipment that has been reviewed and approved under the Town’s zoning bylaws. The proposed replacement of the T-Mobile equipment for the purpose of transmitting and receiving radio frequency signals for communication purposes constitutes a “replacement of transmission equipment” and the proposed addition of equipment is the “collocation of new transmission equipment.”

Federal authorities clearly provide that an eligible facilities request must be approved if the installation does not result in a substantial change. The proposed modifications to the existing Verizon Wireless facility is an “eligible facilities request.”



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V. Conclusion

Applicant respectfully requests the Board to determine that the Applicant has satisfied the requirements for the granting of the requested special permit and to further determine that the proposed Project will not have an adverse effect on the surrounding neighborhood or the Town of Ashland. This conclusion is supported by the particular unique topographical characteristics of the Property and the proposed Project's design and equipment location as detailed above and within the supporting documentation submitted herewith.

The Property is an appropriate location for the installation and operation of the proposed Project and represents the least intrusive and most practical means by which the Applicant can enhance service coverage and capacity by deploying new and replacement. For the foregoing reasons, the Applicant respectfully requests that the honorable Board members grant the requested special permit and/or such other relief as the Board deems necessary to allow the Applicant to install and complete the proposed Project on the Property.