

**TOWN OF FAIRHAVEN**

**NARRATIVE IN SUPPORT OF  
APPLICATION  
FOR  
SPECIAL PERMIT REHEARING**

**APPLICANT:** Cellco Partnership d/b/a Verizon Wireless

**POLE LOCATION:** Utility Pole #43216 located in the town right of way  
on Fort Street, Fairhaven, MA (adjacent to 6 Fort Street)

This Narrative in Support of the Application for Special Permit Rehearing (with all rights reserved) for the installation of small cell equipment to an existing utility pole located in the town right of way is respectfully submitted by Cellco Partnership d/b/a Verizon Wireless (“Verizon Wireless”) to the Town of Fairhaven, Planning Board (the “Board”).

**I. POLE ATTACHMENT RIGHTS**

Verizon Wireless has entered into a Pole Attachment License with Eversource Energy d/b/a NSTAR Electric the Owner of the utility pole to install the small cell equipment. NSTAR has provided full and complete authorization to Verizon Wireless and its representatives to apply for all necessary zoning permits, petitions or any other necessary approvals for the proposed small cell equipment installation.

*See Exhibit 1, Letter of Authorization.*

**II. PROJECT SUMMARY**

The proposed small installation will include installing one (1) cylindrical antenna side mounted at a top height of 25.9’ above ground level, two (2) remote radio heads, and associated wires, cables, meter and junction boxes to an existing 33’ tall utility pole as shown on the attached Plans Titled FAIRHAVEN MA SC07 prepared by Advanced Engineering Group, P.C. with a last revision date of 08/09/2017.

Similar to a telephone or cable companies’ utility pole equipment, the proposed small cell installations consist of a single antenna and a small radio that will be side mounted on the existing utility pole that carries electric and communications services. The Verizon Wireless equipment will draw power by connecting to the existing electrical service on the pole. It will also tie into to the fiber already on the pole to make a backhaul connection to an equipment room located in a building. The install will not include any ground equipment.

*See Exhibit 2, Site Drawings.*

*See Exhibit 3, Utility Pole Photograph.*

### **III. JUSTIFICATION OF NEED**

Verizon Wireless is continuing to upgrade its nationwide network to the next generation of wireless technology. The fourth generation (“4G”) technology continues to revolutionize the wireless industry by allowing affordable voice and high-speed internet access to users wherever they go.

These small cell facilities will operate as an integral part of the Verizon Wireless network and will improve the reliability of service, including 4G service, for Fairhaven residents and others in their vicinity. The proposed small cell facilities will provide 4G LTE service to areas where this service is currently unavailable or unreliable because signal is dissipated by the distance from the nearest macro facility, obstructed by the intervening terrain, or diverted by high demand closer to the macro facility. Each of these “small cell” installations is designed to improve 4G service in areas of high wireless usage throughout Fairhaven. Although each individual site will cover a relatively small area, as a group they provide Verizon Wireless with the ability to address an extensive gap in reliable 4G LTE coverage.

In order to further upgrade service, Verizon Wireless will need to install the proposed small cell equipment on utility pole #43216, which is located in the town right of way on Fort Street in the Town of Fairhaven that will both address gaps in reliable coverage and enhance system performance.

*See Exhibit 4, FCC License to Operate.*

*See Exhibit 5, Affidavit of Radio Frequency Engineer.*

*See Exhibit 6, Supplement to RF Affidavit.*

*See Exhibit 7, Radio Frequency Compliance Study.*

*See Exhibit 8, Addendum to Radio Frequency Compliance Study.*

### **IV. SATISFACTION OF SPECIAL PERMIT REVIEW STANDARDS**

Small Cell technology provides for the continued deployment of Verizon's LTE network in Fairhaven and the greater Commonwealth. The small size and unique design of Small Cell units allows Verizon to strategically install antennas in high demand locations while mitigating visual impact and increasing wireless performance in targeted geographies such as Fort Phoenix State Park in Fairhaven.

In contrast to conventional single-location, multi-function, Wireless Communication Facilities (i.e. large telecommunication towers), Small Cell technology provides site-specific, multi-location network solutions in small, visually unobtrusive units. Wireless providers use Small Cell antennas to combine transmission and processing in a single canister style unit allowing antenna placement and signal creation without the need for fiber optic cable or centralized processing stations. This type of backhaul processing is highly advantageous in high demand municipalities where network capacity is an issue during periods of peak use. Subsequently, municipalities can substantially improve wireless coverage by utilizing this state-of-the-art and discreet antenna technology.

Verizon Wireless proposes the installation of one (1) small cell unit on an existing utility pole #43216 located on Fort Street. This installation consists of a 12.0" Ø x 38.7" cylindrical antenna side mounted on the existing utility pole and resembles a common electric transformer. This antenna complies with all applicable FCC radio frequency emission standards and regulations, and requires minimal maintenance. Subsequently, this antenna will not impact utilities, schools, traffic or other municipal resources in the Town of Fairhaven.

Due to rapidly increasing wireless demands and the immediate availability of this technology, Verizon Wireless is endeavoring to rapidly deploy Small Cell units throughout Massachusetts in 2019. To this end, Verizon secured an agreement with Eversource expediting the licensing and approval of these installations on utility poles throughout the state.

This Facility complies the Town of Fairhaven Zoning Bylaws. The Town of Fairhaven Zoning Bylaws provide guidelines for Telecommunication Facilities under §198.29.1, providing that "[w]ireless communications antennas (including panels) may be mounted on or attached to existing structures (including, without limitations water towers and church steeples) by special permit provided that they conform to applicable design requirements as set forth in §198.29.1(B)." *Id.* at 21.

As described herein, Verizon Wireless' proposed Small Cell unit is a canister style antenna slated for installation on an existing utility pole in Fairhaven's RA zone. To ensure compliance with the Fairhaven Zoning Bylaw, Verizon Wireless had received a determination from the then Planning & Economic Director, William Roth on August 3, 2016. In his email, Mr. Roth confirmed that Small Cell antennas on a utility pole are permitted upon issuance of a special permit. Subsequently, Verizon Wireless lists (*italicized*) and addresses relevant sections of Fairhaven Zoning Bylaws §198.29.1 below:

*§ 198.29.1A(1). The purpose of this section is to regulate wireless communications services so that these services may be provided with minimal harm to the public health, safety and general welfare. Specifically, the Wireless Communications Services Zoning has been created to protect the general public from potential hazards associated with the structure of wireless communications facilities and minimize the visual impacts of wireless communications facilities on residential districts within Fairhaven. This section does not apply to satellite dishes and antennas for residential use.*

**By minimizing impacts associated with traditional telecommunication tower installations, this small cell antenna installation fulfills the Town of Fairhaven's above stated goals by allowing Verizon Wireless to provide service using a visually unobtrusive design that blends with the existing utility infrastructure. To further lessen the visual impact, the canister antenna can be painted to match the color of the existing utility pole.**

*§ 198.29.1A(2). Applicants for a special permit to construct wireless communications service facilities are encouraged to explore alternative types of systems other than systems on newly constructed towers. Wireless communications antennas (including panels) may be*

*mounted on or attached to existing structures (including, without limitations water towers and church steeples) by special permit provided that they conform to applicable design requirements as set forth in § 198-29.1(B).*

**The proposal to install an antenna and supporting equipment on a utility pole fulfills the Town of Fairhaven's above stated preference to explore alternative types of systems other than newly constructed towers. The installation will consist of one (1) small cell unit on an existing utility pole #43216 located on Fort Street. This installation consists of a 12.0"  $\varnothing$  x 38.7" cylindrical antenna side mounted on the existing utility pole and resembles a common electric transformer. This antenna complies with all applicable FCC radio frequency emission standards and regulations, and requires minimal maintenance.**

*§ 198.29.1.B.(1). Design Standards for allowed uses. All requirements of the underlying zoning district shall remain in full force and effect, except as may be specifically superseded herein*

*(1) Antennas may locate on any existing guyed tower, lattice tower, monopole, electric utility transmission tower, fire tower, church steeple, clock tower or water tower provided that the facility complies with the following:*

*(a) Facade-Mount Antennas must not extend above the top of the building wall or parapet; not detract, based upon a written finding from the Massachusetts Historical Commission, from the historic significance of a structure on, or eligible for listing on, the National or Massachusetts Registers of Historic Places; and be painted so as to blend in with the existing structure as much as possible.*

*(b) Roof mounted antennas must not extend more than 15 feet above the highest point of the building; not detract, based upon a written finding from the Massachusetts Historical Commission, from the historic significance of a structure on or eligible for listing on the National Register of Historic Places; and be painted so as to blend in with the existing structure as much as possible.*

*(c) Wireless communication facilities placed on existing buildings, and any equipment associated with the facility, shall be camouflaged or screened and designed to be harmonious and architecturally compatible with the building.*

**The Applicant is proposing to install small cell equipment on an existing utility pole and not a building. The location of an antenna side mounted that will not extend above the height of the existing utility pole will not detract from any structure of historic significance. To further lessen the visual impact, the canister antenna can be painted to match the color of the existing utility pole.**

*§ 198.29.1.B.(2). Application Completeness.*

**The Applicant has submitted detailed Plans in support of its application for Special Permit prepared by Advanced Engineering Group, P.C. The Plans include information on all aspects of the proposed small cell equipment installation on the existing utility pole.**

**Verizon Wireless has further provided a detailed Affidavit of Radio Frequency Engineer, a Supplement to RF Affidavit, Radio Frequency Compliance Study with Addendum and a copy of its FCC Licenses.**

**Due to the size and scope of the proposed installation of small cell equipment, Applicant believes that the Plans, Elevation, and other documents submitted meet the requirements of the Town of Fairhaven, Zoning Bylaw to the extent applicable to this proposal. To the extent the Board believes that the provided Plans and exhibits do not comply with the requirements, the Applicant believes that the additional detail will not tend to provide substantive assistance to the Board and therefore the Applicant requests a waiver from any such requirements or, in the alternative, a determination of non-applicability for all standards and requirements that do not apply to the installation of small cell equipment on the existing utility pole.**

*§ 198.29.1.C. Design standards for special permits. A special permit shall be granted by the Planning Board in accordance with MGL c 40A, § 9. All of the requirements of Subsection B above apply except, by special permit the SPGA may:*

*(1) Allow towers nearer to the property line than the height of the tower, but no tower shall be nearer to a property line than a distance equal to ½ the height of the tower and no tower may be closer to the nearest lot line of a residentially zoned lot or a lot in residential use (other than the lot on which the tower is proposed than a distance determined by the following formula: (height of the tower in feet)/40 feet*

**The Applicant is not proposing to install a tower. The small cell equipment will be installed on an existing utility pole. Please see enclosed plans.**

*(2) Determine that a location is favorable to the clustering of facilities and may allow more than one facility on a lot in that location.*

**In accordance with its licensing with the pole owner, the Applicant is proposing to install small cell equipment on an existing utility pole in a right of way. The Applicant's interest is limited to the authority to install its small cell equipment on the utility pole pursuant to its licensing with the pole owner. To the extent other wireless service providers can locate small cell equipment on the utility pole would depend upon the ability to obtain a license from the pole owner. Please see enclosed plans.**

*(3) Require the maintenance of all improvements to the site including structures, fencing, plantings, and required signs; plumb and tension tests shall be available on site to enforcement authorities; that a facility must be removed within 90 days following failure to obtain suitable test specifications, loss of FCC license, or removal of communications devices coupled with disconnection of utilities and that the applicant shall be responsible for the costs to remove any tower.*

**The Applicant shall ensure the proper maintenance of its small cell equipment to ensure that it is operable and in good condition and further shall comply with the standards for equipment removal and disconnection of utilities.**

*§ 198.29.1.D. Criteria for review and approval.*

*(1) Review of applications; approvals or denials.*

*(a) The SPGA shall review all special permit applications for wireless communication facilities, roof mounted antennas or facade mounted antennas and shall issue a special permit if it finds:*

*[1] That the location of the tower or device is suitable and that the size, height, and design is the minimum necessary for that purpose;*

**Verizon Wireless proposes the installation of one (1) small cell unit on utility pole #43216 located on Fort Street. This installation consists of a 12.0"  $\varnothing$  x 38.7" cylindrical antenna mounted, remote radio heads, electric meter and cabling on an existing utility pole.**

**This facility will operate as an integral part of the Verizon Wireless network and will improve the reliability of 4G service for Fairhaven residents and others in their vicinity. The proposed small cell facility will provide 4G LTE service to an area where this service is currently unavailable or unreliable because signal is dissipated by the distance from the nearest macro facility, obstructed by the intervening terrain, or diverted by high demand closer to the macro facility. The "small cell" installation is designed to improve 4G service along a busy roadway through Fairhaven.**

**The Federal Communications Commission in its Declaration Ruling and Third Report and Order clarified that under Section 253(a) or 332(c)(7)(B)(i)(II), "an effective prohibition [of service] occurs where a state or local legal requirement materially inhibits a provider's ability to engage in any of a variety of activities related to its provision of a covered service." By this ruling, the FCC makes it clear that a state or local legal requirement effectively prohibits the provision of wireless services if it inhibits or limits a provider "not only when filling a coverage gap but also when densifying a wireless network, introducing new services or otherwise improving service capabilities." "Thus, an effective prohibition includes materially inhibiting additional services or improving existing services." The FCC also makes clear that an effective prohibition includes inhibiting a provider from deploying the "performance characteristics" of its choosing.**

*[2] That any façade- or roof-mounted antenna or panel located on a structure that is listed on or eligible for listing on the National or Massachusetts Registers of Historic Places shall not materially alter the character-defining features, distinctive construction methods or original historic materials of the building. Any alteration made to a structure that is listed on or eligible for listing on the National or Massachusetts Registers of Historic Places to accommodate a facade or roof mounted antenna shall be fully reversible;*

**The Applicant is proposing to install small cell equipment on an existing utility pole in a right of way and therefore will not be located on a structure that is listed on or eligible for listing on the National or Massachusetts Registers of Historic Places. Please see enclosed plans.**

*[3] That the applicant for a special permit has demonstrated a good faith effort to co-locate with other carriers or to façade- or roof-mount the wireless communication facility including in such good faith effort a survey of all existing structures that may be feasible sites for mounting or collocation; and contact with all other licensed carriers for operating in the contiguous communities and the SPGA finds no technically or economically equal collocation is available; and*

**The Applicant has undertaken an extensive search of utility poles in the area. After an exhaustive search of available locations in the area, the Applicant is proposing to install small cell equipment on an existing utility and not a tower.**

*See Exhibit 5, Affidavit of Radio Frequency Engineer.*

*See Exhibit 6, Supplement to RF Affidavit.*

*[4] That the proposed tower or device is in compliance with federal and state requirements regarding aviation safety.*

**The proposed small cell equipment will be installed in compliance with federal and state requirements regarding aviation safety. The location of an antenna that will not extend above the height of the existing utility pole will not impact aviation safety.**

*§ 198.29.1.D.(5) The board may require the proponent to provide or pay for engineering services to evaluate proposals submitted; determining flexibility of geographic location, loading capacities of structures and architectural review of camouflage techniques.*

**Because the application is limited to a proposal to install small cell equipment on an existing utility pole, the Applicant believes that the use of a consultant to review the proposal will not tend to provide substantive assistance to the Board and therefore the Applicant requests a waiver from any such requirement. If the Board determines that consultant review is necessary, the Applicant agrees, with all rights reserved, to escrow a mutually agreeable amount to cover the reasonable cost of review.**

## **V. WAIVERS**

The Applicant has submitted detailed Plans in support of its application for Special Permit prepared by Advanced Engineering Group, P.C. The Plans include information on all aspects of the proposed small cell equipment installation on the existing utility pole.

Due to the size and scope of the proposed installation of small cell equipment, Applicant believes that the Plans, Elevation, and other documents submitted meet the requirements of the Town of Fairhaven, Zoning Bylaw to the extent applicable to this proposal. To the extent the

Board believes that the provided Plans and exhibits do not comply with the requirements, the Applicant believes that the additional detail will not tend to provide substantive assistance to the Board and therefore the Applicant requests a waiver from any such requirements or, in the alternative, a determination of non-applicability for all standards and requirements that do not apply to the installation of small cell equipment on the utility pole.

## VI. COMPLIANCE WITH TELECOMMUNICATIONS ACT OF 1996

Verizon Wireless further respectfully requests that the Town of Fairhaven grant this application under the Federal Telecommunications Act of 1996 (hereinafter the "TCA"). Pub. L. No. 104-104, 110 Stat. 56 (1996). In 1996, Congress enacted the TCA to facilitate the rapid deployment of telecommunications infrastructure in the United States. 47 U.S.C. § 332; *City of Arlington, Texas v. Federal Communications Commission*, 133 S.Ct. 1863, 1866-67 (2013). The TCA preserves state and municipal zoning authority to regulate personal wireless service facilities, subject to five substantive and procedural limitations designed to prevent state and municipal government from delaying the application process and/or discriminating against specific wireless service providers. 47 U.S.C. § 332(C)(i)-(v); *T-Mobile South, LLC v. City of Roswell, Ga.*, 135 S.Ct. 808, 814 (2015); *City of Arlington*, 133 S.Ct. at 1866-67; *Rancho Palos Verdes v. Abrams*, 544 U.S. 113, 115 (2005); *Omnipoint Holdings, Inc. v. City of Cranston*, 586 F.3d 38, 45 (1st Cir. 2009).

Specifically, the TCA reflects Congress's intent to expand wireless services and increase competition among providers by preempting state and municipal regulations inconsistent with infrastructure development. *Rancho Palos Verdes*, 544 U.S. at 115; *Omnipoint Holdings*, 586 F.3d at 47; *Sprint Spectrum L.P. v. Town of Swansea*, 574 F.Supp. 2d 227, 235 (D. Mass. 2008). Although the TCA does not preempt all local zoning laws, it expressly preempts rules and laws attempting to regulate the "placement, construction, and modification of personal wireless service facilities that effectively prohibit the provision of personal wireless services." *City of Roswell, Ga.*, 135 S.Ct. at 814 (citing *Rancho Palos Verdes*, 544 U.S. at 115; 47 U.S.C. § 332(c)(7)(B)(i)(II)); *Green Mountain Realty Corp. v. Leonard*, 750 F.3d 30, 38 (1st Cir. 2014); *Town of Swansea*, 574 F.Supp. at 235; *Nextel Communications of the Mid-Atlantic, Inc. v. Town of Provincetown*, 2003 WL 21497159, \*8 (D. Mass. 2003). "Accordingly, the TCA significantly limits the ability of state and local authority to apply zoning regulations to wireless telecommunications." *Telecorp Realty, LLC v. Town of Edgartown*, 81 F.Supp.2d 257, 259 (D. Mass. 2000); *Town of Swansea*, 574 F.Supp. at 235; 47 U.S.C. § 332(c)(7)(B)(i)(II).

The Federal Communications Commission in its Declaration Ruling and Third Report and Order clarified that under Section 253(a) or 332(c)(7)(B)(i)(II), "an effective prohibition [of service] occurs where a state or local legal requirement materially inhibits a provider's ability to engage in any of a variety of activities related to its provision of a covered service." By this ruling, the FCC makes it clear that a state or local legal requirement effectively prohibits the provision of wireless services if it inhibits or limits a provider "not only when filling a coverage gap but also when densifying a wireless network, introducing new services or otherwise improving service capabilities." The FCC also makes clear that an effective prohibition includes inhibiting a provider from deploying the "performance characteristics" of its choosing.



The Federal Communications Commission in the final text of the Declaratory Ruling and Third Report and Order also promulgated rules imposing new “shot clocks” for Small Wireless Facility application review. The Commission establishes the following application review timeframes for Small Wireless Facilities: (1) 60 days for collocations of Small Wireless Facilities on existing structures and (2) a shot clock of days 90 days for new construction of Small Wireless Facilities.

## **VII. CONCLUSION**

Accordingly, while Small Cell installations do not obviate the need for traditional wireless communication facilities, they are overwhelmingly the least intrusive means available to address network requirements in areas of dense demand for Verizon Wireless’ LTE voice and data services. The equipment proposed herein provides enhanced service to areas of concentrated demand in Fairhaven while avoiding the possible aesthetic impact of larger wireless service facilities. Furthermore, the Telecommunications Act of 1996 supports the granting of the application in light of its goal to promote the rapid expansion of new technologies. For these reasons, Verizon Wireless respectfully requests that the Board grant its application.

For the foregoing reasons, Verizon respectfully requests (with all rights reserved) that the Board: Grant a special permit to install the small cell pole attachment equipment in accordance with this application and Grant any other relief or waivers necessary to allow the installation and operation of this small cell pole attachment equipment.