DUVAL & KLASNICK LLC
COUNSELORS AT LAW

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May 3, 2021

City Council
c/o Office of City Clerk
City of Marlborough
140 Main Street
Marlborough, Massachusetts 01752

Re: Application for Small Cell Wireless Installation
Applicant: Cellco Partnership d/b/a Verizon Wireless
Location: Utility Pole #19 located in the layout of the state highway of Boston Post Road W (Route 20), Marlborough, MA (Site Name: Marlborough SC31)

Dear Honorable City Council:

Cellco Partnership d/b/a Verizon Wireless respectfully requests the grant of the application for the installation of small cell equipment on an existing utility pole located within Marlborough, Massachusetts. The total number of small cell wireless facilities being requested on this application is one. I have also included the $500.00 application fee payable to City of Marlborough.

Representative: Daniel D. Klasnick
Duval & Klasnick LLC
P.O. Box 254
Boxford, MA 01921
(781) 873-0021
dklasnick@dkt-legal.com

POLE ATTACHMENT RIGHTS

Verizon Wireless has entered into a Pole Attachment License with National Grid the Owner of the utility pole to install the small cell equipment. National Grid 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.

PROJECT SUMMARY

Similar to a telephone or cable companies' utility pole equipment, the proposed small cell installation consists of a single antenna and small radios that will be mounted on the existing utility pole that carries electric and communications services. The single antenna will be top mounted on the existing wooden utility pole that already carry electric and communications services. The Verizon Wireless equipment will draw power by connecting to the existing electrical service on the pole. It will also connect to the fiber already on the pole to make a backhaul connection. More specifically, Verizon Wireless' small cell facilities consist of one (1) 14"Ø x 35.4" H canister antenna top mounted, remote radio heads, and associated wires, cables, fiber demarc, supporting equipment and electric meter to the existing utility pole. The install does not include any ground equipment.

See Exhibit 2, Site Drawings.
See Exhibit 3, Structural Report.

JUSTIFICATION OF NEED

The small cell facility operates as an integral part of the Verizon Wireless network and will improve the reliability of service for Marlborough residents and businesses. The proposed small cell facility will provide improved service to areas where this service is currently unavailable or unreliable because the 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 wireless service in areas of high wireless usage in Marlborough.

In order to further upgrade service, Verizon Wireless will need to install the proposed small cell equipment on the existing utility pole #19, which is located in the layout of the state highway way on Boston Post Road W (Route 20) in the City of Marlborough that will both address gaps in reliable coverage and enhance system performance.

See Exhibit 4, Affidavit of Radio Frequency Engineer.
See Exhibit 5, Radio Frequency Emissions Compliance.
See Exhibit 6, Site Selection Memorandum.

SATISFACTION OF ORDINANCE REVIEW STANDARDS

Small Cell technology provides for the continued deployment of Verizon Wireless' network in Marlborough and the greater Commonwealth. The size and unique design of Small Cell units allows Verizon Wireless to strategically install antennas in high demand locations while mitigating visual impact and increasing wireless performance in targeted areas of Marlborough. The purpose of the facilities is to provide adequate service capacity and coverage improvement to areas of Marlborough where Verizon Wireless does not currently provide acceptable service on its network.

In contrast to conventional single-location, multi-function macro wireless communication facilities such as telecommunication towers, small cell technology provides site-specific, multi-location network solutions, in small visually unobtrusive units. Verizon Wireless uses small cell antennas to combine transmission and processing in a single canister style unit allowing antenna placement and signal creation without the need for any onsite ground equipment. This type of facility is highly advantageous to address network coverage and capacity particularly during periods of peak use and improves overall system performance elsewhere in the network. Subsequently, municipalities can substantially improve wireless coverage and capacity by utilizing this state-of-the-art and discreet antenna technology.

See Exhibit 7, Photo Simulations.

Verizon Wireless submits that the installations are consistent with the City of Marlborough Ordinance for Small Cell Facilities within Public Rights-of-way. Due to the location of the equipment on the existing wood utility pole, the small cell installations will match the appearance of equipment that is typically installed on utility poles. The proposed antenna is within a canister enclosure with a maximum diameter of only 14" and will be mounted to the top of the utility pole with all cabling enclosed within a u-guard. There will be no ground equipment cabinets, batteries or generator installed at the locations. Any signage will be limited to identifying the location as a small cell facility with a contact phone number. There will be no lights, logos/decals or cooling fans associated with the installations.

In compliance with the City of Marlborough Ordinance, Verizon Wireless maintains liability insurance. The liability insurance shall be maintained throughout the period of construction, location and operation and use of the small cell equipment. Verizon Wireless will maintain the installation in good repair and according to FCC standards, and will remove the installation not in good repair or not in use within 60 days.

See Exhibit 8, Certificate of Liability Insurance.
See Exhibit 9, Affidavit of Verizon Wireless.

§473-29 Annual recertification and affidavit.

A. Annual recertification and affidavit. Each year on July 1, the small cell wireless equipment owner shall submit an affidavit which shall list, by location, all small cell wireless installations it owns within the City of Marlborough, and shall certify:

(1) Each such installation that remains in use;

(2) That such in-use installations remain covered by liability insurance naming the City as an additional insured; and

(3) Each such installation which is no longer in use.

Verizon Wireless will comply with this requirement.

B. Annual recertification fee. The equipment owner shall pay to the City of Marlborough an annual recertification fee of $250 per installation which remains in use.

Verizon Wireless will comply with this requirement.

C. Facility no longer in use. Any small cell wireless facility which is no longer in use shall be removed by the owner, at the owner's expense, within 60 days of the City Council's receipt of the annual recertification affidavit.

Verizon Wireless will comply with this requirement.

D. Nonremoval of facility no longer in use. Any small cell wireless installation which is not removed by the owner, at the owner's expense, within 60 days after being listed in the annual recertification affidavit as no longer in use shall be subject to a fine of $100 per day until such installation is removed by the owner.

Verizon Wireless will comply with this requirement.

E. Failure to timely submit recertification/remove facility no longer in use. Where such annual recertification has not been timely submitted, or equipment no longer in use has not been removed within the sixty-day period, no further applications for small cell wireless installations will be accepted by the City Clerk's office until such time as the annual recertification has been submitted and all fees and fines have been paid.

Verizon Wireless will comply with this requirement.

§473-30 Aesthetics and additional City requirements.

A. Poles.

(1) No small cell wireless equipment shall be installed on double poles.

The proposed small cell equipment will not be installed on a double pole.

(2) Within the public right-of-way, only pole-mounted antennas shall be permitted, and all telecommunications towers within the meaning of City Code § 650-25A are prohibited.

The proposal is to locate the small cell equipment on an existing utility pole.

(3) Absent City Council permission, no new poles are permitted within

the public right-of-way that are not replacing an existing pole. If an applicant proposes to replace a pole in order to accommodate the small cell wireless facility, the pole shall match the appearance of the original pole to the extent feasible, including size, height, color, materials and style, unless another design better accomplishes the objectives of this section as determined by the Council. Such replacement pole shall not exceed the height of the pole it is replacing by more than seven feet.

The proposal is to locate the small cell equipment on an existing utility pole.

(4) If a new pole is permitted by the City Council to be placed within the public right-of-way, the new pole shall be designed to resemble existing poles in the right-of-way, including size, height, color, materials and style, unless another design better accomplishes the objectives of this section as determined by the Council. Such new poles that are not replacement poles shall be located no closer than 90 feet to an existing pole.

The proposal is to locate the small cell equipment on an existing utility pole.

(5) Small cell wireless installation equipment (meters, boxes, etc.) shall be mounted on the pole a minimum of 11 feet above ground level.

The pole owner and servicing utility company requires that the electrical meter be set on the pole at the height of 8 feet specified in the plans. The installation of the electric meter is essential for the operation of the small cell equipment to address Verizon Wireless' network coverage and capacity requirements in the City Marlborough.

Article III, Section 473-27.B(1) of the Small Cell Wireless Facilities Within Public Right-of-Way ordinance, provides that "[t]his article is not intended, nor shall it be interpreted or applied, to: prohibit or effectively prohibit any personal wireless service provider's ability to provide personal wireless services." As certified in the attached Affidavit from Verizon Wireless' Radio Frequency Engineer, the proposed small cell installation is essential to the provision of reliable wireless service in the City of Marlborough.

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." Imposing a requirement that is not technically feasible effectively prohibits the provision of wireless services as it would materially inhibit Verizon Wireless from densifying its wireless network, introducing new services or otherwise improving service capabilities.

(6) No small cell wireless installation equipment shall be replaced or altered on a pole without a reapplication, hearing and approval from the City Council, unless the equipment is no longer functioning and it is being replaced with the same or substantially similar equipment.

Verizon Wireless will comply with this requirement.

(7) The maximum height of any antenna mounted to an existing pole shall not exceed 24 inches above the height of the then- existing pole, provided that in any event:

(a) No small cell wireless facility shall be located on a pole that is less than 26 feet in height; and

(b) No facility shall exceed 35 feet in height, including but not limited to the pole and any antenna that protrudes above the pole.

Verizon Wireless proposes to install one 14" ⌀ x 35.4" H canister antenna top mounted, remote radio heads, and associated wires, cables, fiber demarc, supporting equipment and electric meter to the existing 42.50' utility pole with an overall height of the antenna at 45.66'. It is technically impossible to install the proposed 35.4" H antenna on the top of the existing 42.50' utility pole and comply with the maximum height of 24 inches above the height of the pole and that no facility shall exceed 35 feet in height. The installation of the antenna on the utility pole is essential to address Verizon Wireless' network coverage and capacity requirements in the City Marlborough.

Article III, Section 473-27.B(1) of the Small Cell Wireless Facilities Within Public Right-of-Way ordinance, provides that "[t]his article is not intended, nor shall it be interpreted or applied, to: prohibit or effectively prohibit any personal wireless service provider's ability to provide personal wireless services." As certified in the attached Affidavit from Verizon Wireless' Radio Frequency Engineer, the proposed small cell installation is essential to the provision of reliable wireless service in the City of Marlborough.

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(8) Pole-mounted equipment shall not exceed six cubic feet in dimension.

Verizon Wireless installation will comply with this requirement.

(9) Not more than one small cell wireless facility shall be mounted per pole.

Verizon Wireless is proposing to install only one small cell wireless facility on the existing utility pole.

B. Location.

(1) Each component part of a facility shall be located so as not to cause any physical or visual obstruction to pedestrian or vehicular traffic inconvenience to the public's use of the right-of-way, or safety hazards to pedestrians and motorists.

Verizon Wireless' proposed small cell installation will comply with this requirement.

(2) A facility shall not be located within any portion of the public right-of-way interfering with access to fire hydrants, fire stations, fire escapes, water valves, underground vaults, valve housing structures, or any other vital public health and safety facility.

Verizon Wireless' proposed small cell installation will comply with this requirement.

(3) Each pole-mounted small cell wireless telecommunications facility must be separated by at least 1,500 feet.

Verizon Wireless' proposed small cell installation will comply with this requirement.

(4) All new wires needed to service the wireless telecommunications facility must be installed within the width of the existing pole so as to not exceed the diameter and height of the existing pole.

Verizon Wireless' proposed small cell installation will comply with this requirement. All cabling shall be located inside of u-guard attached to the side of the utility pole.

C. Americans with Disabilities Act compliance. All facilities shall be built and maintained in compliance with the Americans with Disabilities Act (ADA)/Architectural Access Board (AAB).

Verizon Wireless' proposed small cell installation will comply with this requirement.

D. Residential neighborhoods. If an applicant seeks to place a small cell wireless facility in a residentially zoned neighborhood, the applicant:

(1) Should seek to avoid attaching to poles that are within 25 feet of an existing driveway so that the property owner can plant trees that could shield the wireless equipment from view; and

(2) Should seek to avoid poles where the installation and/or ongoing maintenance will require significant tree trimming due to the wireless equipment.

Verizon Wireless' proposed small cell installation will be located on a utility pole in a commercial developed area within the layout of the state highway Boston Post Road West (Route 20).

E. Satisfactory material, construction and work. The small cell wireless facility shall be of such material and construction, and all installation and maintenance work shall be done in such manner, as to be satisfactory to the City Council and DPW Engineering. If the DPW Engineering shall determine that such material, construction and/or work is a) placing or tending to place at risk the public health, safety, and welfare, b) interfering or tending to interfere with pedestrian and/or vehicular traffic and/or c) causing or tending to cause damage to the public right-of-way or any property adjacent to the location of the pole in question, the DPW Engineering shall forthwith notify the City Council, which shall review that determination for possible further action as to the applicant.

The proposed small cell wireless equipment will be installed and maintained in compliance with all applicable laws, regulations and codes including the requirements of the City of Marlborough Ordinance. The installation of the small cell equipment will not adversely impact public health, safety, adjacent properties or neighborhoods as Verizon Wireless' installation will be consistent with equipment that is commonly attached utility poles and will not significantly change the appearance of the existing utility pole.

F. Indemnification. The applicant shall indemnify and hold harmless the City against all damages, injuries, costs, expenses, and any and all claims, demands and liabilities whatsoever of every name and nature, both in law and equity, allegedly caused by the acts or neglect of the applicant, its employees, agents and servants, in any manner arising out of the rights and privileges granted herein to the applicant for its small cell wireless facility. Such indemnification shall not be limited by the amount of the applicant's liability insurance naming the City as an additional insured.

Verizon Wireless' proposed small cell installation will comply with this requirement.

G. City streets and/or sidewalks. All cutting of and/or digging into City streets and/or sidewalks by or on behalf of an applicant in conjunction with its small cell wireless facility is prohibited, as is all underground installation associated with the small cell wireless facility; provided, however, that the grounding rod proposed to be installed as part of the small cell wireless facility is permitted as long as:

(1) The applicant installs the rod immediately adjacent to the pole so as to cause minimal disturbance to the surface of the street or sidewalk; and

(2) The applicant restores the street or sidewalk surface to its predisturbance condition to the satisfaction of the DPW Engineering.

Verizon Wireless' proposed small cell installation will comply with this requirement.

H. Repair of damage. The applicant shall repair, at its sole cost and expense, any damage, including, but not limited to, subsidence, cracking, erosion, collapse, weakening, or loss of lateral support to City streets, sidewalks, walks, curbs, gutters, trees, parkways, streetlights, traffic signals, improvements of any kind or nature, or utility lines and systems, underground utility line and systems, or sewer systems and sewer lines that result from any activities performed in connection with the installation or maintenance of a wireless telecommunications facility in the public right-of-way. The applicant shall restore such areas, structures and systems to the condition in which they existed prior to the installation or maintenance that necessitated the repairs. In the event the applicant fails to complete such repair within the number of days stated on a written notice from the City Engineering Division, the Division shall cause such repair to be completed at the applicant's sole cost and expense.

Verizon Wireless' proposed small cell installation will comply with this requirement.

I. Visual impact minimization. The small cell wireless facility shall be color coordinated so as to best minimize the visual impact of the facility.

The Canister will be light gray. Verizon Wireless submits and will demonstrate through the Application materials and the written and oral evidence at the public hearing in connection with the Application that the proposed small cell wireless equipment meets with all applicable requirements of the City of Marlborough Ordinance or a waiver of such requirement is appropriate. The installation of the small cell equipment will not adversely impact adjacent properties and neighborhoods as Verizon Wireless' installation will not significantly change the appearance of the existing utility pole.

J. Side of pole on which to mount equipment. The small cell wireless facility's equipment cabinet, circuit breaker box, and electric meter main shall be mounted on the side of the pole facing away from the roadway.

Verizon Wireless' proposed small cell installation will comply with this requirement.

K. Future road reconstruction repair. Any future road reconstruction or repair project by the City and/or the commonwealth requiring the relocation of the pole shall result in the applicant's moving its small cell wireless facility to another pole in a timely fashion after having been notified by the DPW Engineering about the road project; provided, however, that any such relocation shall require further City Council approval.

Verizon Wireless will comply with this Ordinance requirement.

L. Construction and/or installation schedule. Prior to the commencement of construction and/or installation of the small cell wireless facility, the applicant shall provide the DPW Engineering with a written construction and/or installation schedule satisfactory to DPW Engineering.

Verizon Wireless will comply with this Ordinance requirement.

M. Removal bond. Prior to the commencement of construction and/or installation of its small cell wireless facility, an applicant shall provide the City's Chief Procurement Officer (the City CPO) with a bond from a surety authorized to do business in Massachusetts and satisfactory to the City CPO in an amount equal to the cost of removal of the small cell wireless facility from the pole in question and for the repair and/or restoration of the public way, in the vicinity of the pole in question, to the condition the public way was in as of the date when the relevant application was submitted to the City Clerk's office, said amount to be determined by DPW Engineering. The amount of the bond shall be the total of the estimate by DPW Engineering plus an annual increase of 3% for the operating life of the small cell wireless facility. The applicant shall notify the City CPO and DPW Engineering of any cancellation of, or change in the terms or conditions in, the bond.

Verizon Wireless will comply with this Ordinance requirement.

WAIVERS

The Applicant has submitted detailed Plans and documentation in support of its application. The Plans and supporting documentation include information on all aspects of the proposed small cell equipment installation on the utility pole.

Due to the size and scope of the proposed installation of small cell equipment, Verizon Wireless believes that the Plans, Elevation, and other documents submitted meet the requirements of the City of Marlborough Ordinance to the extent applicable to this proposal. To the extent the Council 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 Council 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.

COMPLIANCE WITH TELECOMMUNICATIONS ACT OF 1996

Verizon Wireless further respectfully requests that the City of Marlborough 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 authority to regulate personal wireless service facilities, subject to five substantive and procedural limitations designed to prevent state and municipal government from prohibiting the provision of wireless service, 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).

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 90 days for new construction of Small Wireless Facilities.

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' voice and data services. The equipment proposed herein provides enhanced service to an area of concentrated demand in Marlborough 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 the foregoing reasons, Verizon Wireless respectfully requests (*with all rights reserved*) that the Council: Grant the request to install the small cell pole attachment equipment on the existing utility pole 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.

Verizon Wireless respectfully requests grant of the application in accordance with your regulations and guidelines. If you need any further information, please don't hesitate to contact me. Thank you.

Very truly yours,
DUVAL & KLASNICK LLC

By: Daniel D. Klasnick
Attorney at Law

PETITION FOR SMALL CELL POLE ATTACHMENT

To the City Council
Of **Marlborough**, Massachusetts

Cellco Partnership d/b/a Verizon Wireless hereby provides a petition to this Honorable City Council for the location of a small cell wireless antenna, and the necessary sustaining and protecting fixtures, on an existing utility pole in **Marlborough, Massachusetts,** as more particularly shown on the plans included herewith.

Pole Location

Existing Pole Location:	Boston Post Road West – Route 20 (Adjacent to 219-237 Boston Post Road West) Utility Pole Number: #19
Proposed Equipment:	Canister Antenna, Remote Radio Heads, Main Load Center, Diplexer and associated wires, cables, fiber demarc box, electric meter and associated equipment on an existing utility pole as shown on the attached Plans Titled MARLBORO_SC31_MA-391559 prepared by NB+C Engineering Services, LLC with a date of 01/07/21.
Purpose:	To address network coverage and capacity in the immediate area of the subject pole. Offload wireless traffic from macro sites and designed to increase throughput to customers in proximity to the pole.

Respectfully submitted,

PETITIONER:

Cellco Partnership d/b/a
Verizon Wireless

By _____
Daniel D. Klasnick, Esquire
Duval & Klasnick LLC
P.O. Box 254
Boxford, MA 01921
May 3, 2021

ORDER FOR GRANT OF LOCATION

UNDER MGL c. 166, §§ 22 and 25A

In the City Council of the City of Marlborough, Massachusetts
Notice having been given and public hearing held, as provided by law,

IT IS HEREBY ORDERED:

That Cellco Partnership d/b/a Verizon Wireless be and it is hereby granted a location for and permission to install a small cell wireless antenna, and the necessary sustaining and protecting fixtures on utility pole #19 and maintain such equipment to be placed thereon, together with such sustaining and protecting fixtures as said company may deem necessary, in the public way known as Boston Post Road West – Route 20 (near 219-237 Boston Post Road West), as requested in petition of said Company dated May 3, 2021.

All construction under this order shall be in accordance with the following conditions:

See Plans filed with this order.

There may be attached to said pole:

- Antenna;
- Remote Radio Head(s);
- Mounting Brackets;
- Main Load Center;
- Overhead Wire;
- Conduit;
- Cable;
- Diplexer;
- Converter;
- Disconnect;
- Electric Meter and
- such sustaining and protecting fixtures as it may find necessary.

I hereby certify that the foregoing order was adopted at a meeting of the City Council of the City of Marlborough, Massachusetts held on the___ day of _____, 2021.

Attest: _____
City Clerk

I hereby certify that the on _____, 2021, at ____ o'clock ___M., the City Council for Marlborough, Massachusetts held a public hearing on the petition of Cellco Partnership d/b/a Verizon Wireless for permission to install a small cell wireless antenna, and the necessary sustaining and protecting fixtures on utility pole#19 located in the public way of Boston Post Road West (Route 20) described in the order herewith recorded, and that we mailed written notice of the time and place of said hearing to each of the owners of real estate (as determined by the last preceding assessment for taxation) along the way or parts of ways upon which said Company is permitted to install a small cell wireless antenna, and the necessary sustaining and protecting fixtures on utility pole #19 under said order and that thereupon said order was duly adopted.

_____
City Clerk

CERTIFICATE

I hereby certify that the foregoing is a true copy of a location order, and certificate of hearing with notice adopted by the City Council of the City of Marlborough, Massachusetts, on the _____ day of _____, 2021 and recorded with the records of location orders of said City, Book _____, Page _____. This certified copy is made under the provisions of Chapter 166 of General Laws and any additions thereto or amendments thereof.

Attest:

_____
City Clerk

CITY OF MARLBOROUGH

TABLE OF EXHIBITS

Exhibit 1
Letter of Authorization

nationalgrid

To Whom It May Concern:

National Grid, as owner of certain utility poles in public rights-of-way in Marlboro, MA, is aware and authorizes Verizon Wireless to complete the process of permitting for the installation of necessary telecommunications equipment and corresponding aerial fiber optic cable on

National Grid-owned utility poles at the following locations:

Location	Street Address	Pole #
MARLBORO_SC31_MA	201 Boston Post Rd W	Pole No MECO 19

Accordingly, National Grid hereby submits its authorization for Verizon Wireless to install its antennae and appurtenant equipment and aerial fiber routes to National Grid poles at the above locations. Please be advised that the undersigned has entered into a master lease agreement authorizing Verizon Wireless to install, attach, maintain, repair, upgrade and use wireless communications equipment and appurtenances on certain utility poles. The installations on National Grid utility poles will be subject to the underlying terms and conditions of the aforementioned agreement by and between National Grid and Verizon Wireless, as the same may be in effect from time to time.

Sincerely,

Keith Amelin

Senior Data Analyst

Third Party Attachments

Exhibit 2
Site Drawings

MARLBORO_SC31_MA-391559

PRESIDING POWER COMPANY
nationalgrid

UTILITY POLE #19

237 BOSTON POST ROAD WEST
MARLBOROUGH, MA 01752

TRUE NORTH

SITE CONTROL POINT:
CENTER OF EXISTING U/P #19
N 42.338492° (42°-20'-18.571")
W 71.591242° (71°-35'-28.471")

1 / LE-1 LOCATION PLAN/AERIAL IMAGE
SCALE: 1" = 50'

ENGINEER

NB+C
TOTALLY COMMITTED.
NB+C ENGINEERING SERVICES, LLC.
100 APOLLO DRIVE, SUITE 303
CHELMSFORD, MA 01824
(978) 656-5300

APPLICANT

verizon
118 FLANDERS ROAD
WESTBORO, MA 01581
(508) 330-3330

SITE INFORMATION

MARLBORO_SC31_MA-391559
UTILITY POLE #19
237 BOSTON POST ROAD WEST
MARLBOROUGH, MA 01752

DESIGN RECORD

REVISIONS

REV	DATE	DESCRIPTION	BY
E	01/07/21	UPDATED TO LATEST STANDARDS	JMS
D	02/21/17	REVISED	PRC
C	09/20/16	REVISED	DRG
B	05/15/16	REVISED	ALM
A	01/05/16	PRELIMINARY	DRG

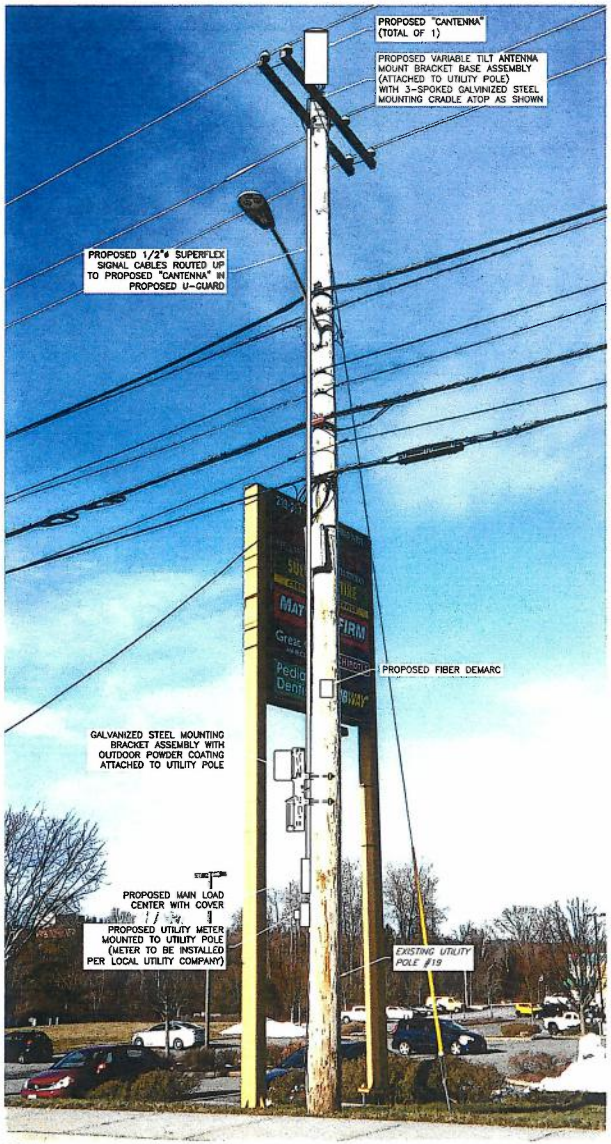
GENERAL NOTES

THIS DOCUMENT IS THE DESIGN PROPERTY AND COPYRIGHT OF NB+C ENGINEERING SERVICES, LLC. AND FOR THE EXCLUSIVE USE BY THE TITLE CLIENT. DUPLICATION OR USE WITHOUT THE EXPRESS WRITTEN CONSENT OF THE CREATOR IS STRICTLY PROHIBITED.

THESE DRAWINGS ARE FORMATTED TO BE FULL SIZE AT 11"x17"
ALL OTHER PRINTED SIZES ARE DEEMED "NOT TO SCALE"

SHEET NUMBER

LE-1



1 LE-2 UTILITY POLE PHOTO (EXISTING CONDITIONS/SCHEMATIC RENDERING)
SCALE: NTS

GENERAL NOTES:

1. THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE INTENDED TO PROVIDE GENERAL INFORMATION REGARDING THE LOCATION, SIZE AND ORIENTATION OF THE PROPOSED WIRELESS TELECOMMUNICATIONS EQUIPMENT INSTALLATION ON THE UTILITY POLE AND ARE NOT SPECIFICALLY INTENDED FOR CONSTRUCTION.
2. VERIZON WIRELESS SHALL PLACE WEATHER RESISTANT PHENOLIC PLACARDS ON UTILITY POLE AND ANCILLARY EQUIPMENT TO IDENTIFY EQUIPMENT OWNERSHIP & CONTACT INFORMATION TO BE UTILIZED IN CASE OF EMERGENCY.
3. AN ANALYSIS OF THE CAPACITY OF THE EXISTING UTILITY POLE TO SUPPORT THE PROPOSED LOADING HAS NOT BEEN COMPLETED BY NB+C ENGINEERING SERVICES, LLC AND THUS, THESE DRAWINGS ARE SUBJECT TO CHANGE PENDING THE OUTCOME OF A STRUCTURAL ANALYSIS (TO BE PERFORMED BY OTHERS).
4. VERIZON WIRELESS' GENERAL CONTRACTOR SHALL EXTEND EFFORTS TO ENSURE THAT ALL PROPOSED EQUIPMENT MEETS THE REQUIREMENTS OF THE EXISTING UTILITY COMPANY OR COMPANIES CURRENTLY OCCUPYING THE UTILITY POLE AND THE 2017 NATIONAL ELECTRICAL SAFETY CODE.

ANTENNA AND MOUNT NOTE:

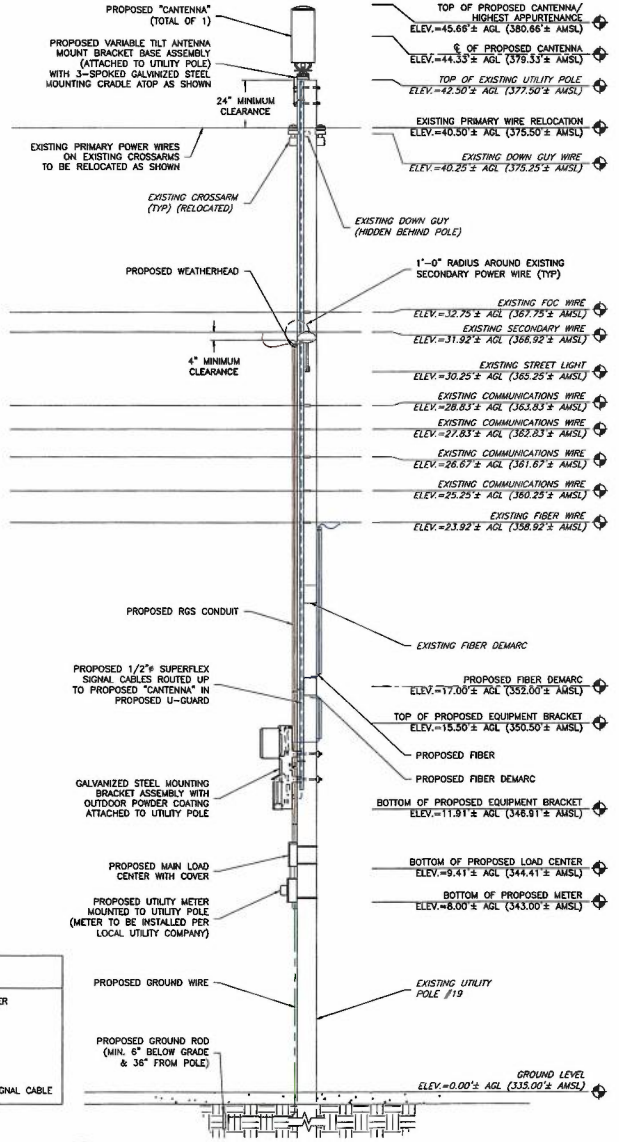
CONTRACTOR SHALL POSITION/ROTATE PROPOSED ANTENNA MOUNT/BRACKET IN SUCH A WAY SO AS TO NOT INTERFERE WITH EXISTING STREET LIGHT, PRIMARY POWER CROSSARM(S) (IF PRESENT), BRACKETS, BRACES, SECONDARY POWER SUPPORTS OR ANY OTHER MISCELLANEOUS APPURTENANCES AND RELATED SUPPORT BRACKETS ENCOUNTERED LOCATED ON THE EXISTING UTILITY POLE.

EQUIPMENT AND MOUNT NOTE:

CONTRACTOR SHALL POSITION/ROTATE PROPOSED EQUIPMENT AND ASSOCIATED MOUNTS/BRACKETS IN SUCH A WAY SO AS TO NOT INTERFERE WITH EXISTING WIRES/PANELS ETC. OR ANY OTHER MISCELLANEOUS APPURTENANCES AND RELATED SUPPORT BRACKETS ENCOUNTERED LOCATED ON THE FACE OF THE EXISTING UTILITY POLE.

NOTE:

UTILITY POLE, EXISTING APPURTENANCES AND DETAILS OF PROPOSED INSTALLATION SHOWN SCHEMATICALLY.



LEGEND

- = FIBER BUNDLE/JUMPER
- = AC POWER
- = DC POWER
- = GROUND
- = 1/2"ø SUPERFLEX SIGNAL CABLE

2 LE-2 UTILITY POLE ELEVATION (PROPOSED CONDITIONS)
SCALE: 1" = 5'

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APPLICANT

verizon
118 FLANDERS ROAD
WESTBORO, MA 01581
(508) 330-3330

SITE INFORMATION

MARLBORO_SC31_MA-391559
UTILITY POLE #19
237 BOSTON POST ROAD WEST
MARLBOROUGH, MA 01752

DESIGN RECORD

REVISIONS

REV	DATE	DESCRIPTION	BY
E	01/07/21	UPDATED TO LATEST STANDARDS	JMS
D	02/21/17	REVISED	PRC
C	08/26/16	REVISED	DRG
B	06/15/16	REVISED	ALM
A	01/05/16	PRELIMINARY	ORG

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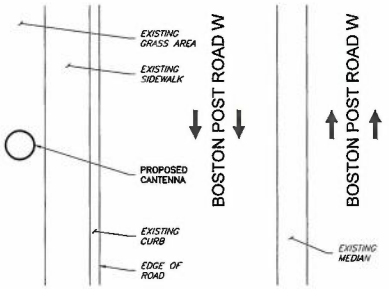
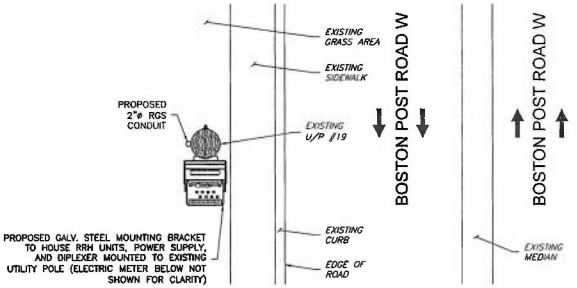
SHEET NUMBER

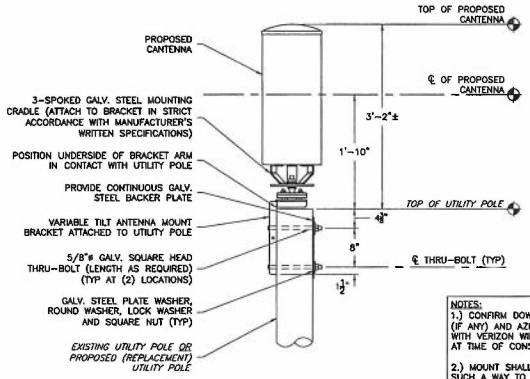
LE-2



1 / LE-3 ANTENNA ORIENTATION PLAN
SCALE: NTS



2 / LE-3 ANCILLARY EQUIPMENT ORIENTATION PLAN
SCALE: NTS



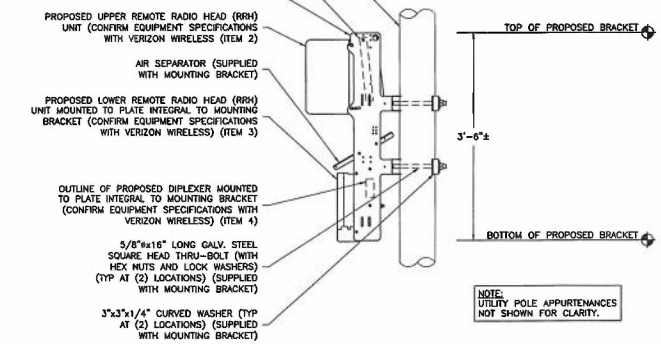
NOTES:
1.) CONFIRM DOWNTILT REQUIREMENTS (IF ANY) AND AZIMUTH SPECIFICATIONS WITH VERIZON WIRELESS RF ENGINEER AT TIME OF CONSTRUCTION.

2.) MOUNT SHALL BE INSTALLED IN SUCH A WAY TO ENSURE PLUMB INSTALLATION OF CANTENNA.

3.) UTILITY POLE APPURTENANCES NOT SHOWN FOR CLARITY.

3 / LE-3 CANTENNA MOUNT DETAIL
SCALE: NTS

ITEM ID (SEE DETAIL)	DESCRIPTION	WEIGHT (LBS)
1	MOUNTING BRACKET	32.2±
2	UPPER RRH UNIT	102.5±
3	LOWER RRH UNIT	21.4±
4	DIPLEXER	7.6±
5	POWER SUPPLY	25.6±
		TOTAL = 189.3± (SAY 190 LBS)



NOTE:
UTILITY POLE APPURTENANCES NOT SHOWN FOR CLARITY.

4 / LE-3 ANCILLARY EQUIPMENT MOUNTING BRACKET DETAIL
SCALE: NTS

ENGINEER

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SITE INFORMATION

MARLBORO_SC31_MA-391559
UTILITY POLE #19
237 BOSTON POST ROAD WEST
MARLBOROUGH, MA 01752

DESIGN RECORD

REVISIONS

REV	DATE	DESCRIPTION	BY
E	01/07/21	UPDATED TO LATEST STANDARDS	JMS
D	02/21/17	REVISED	PRC
C	09/29/16	REVISED	DRC
B	09/15/16	REVISED	ALM
A	01/05/16	PRELIMINARY	DRC

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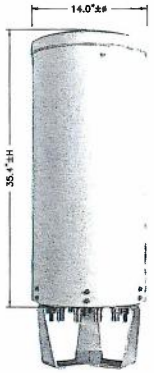
SHEET NUMBER

LE-3



SMALL CELL CANTENNA	
DIMENSIONS:	14.0"±ø x 35.4"±H
WEIGHT:	35.0± LBS
QUANTITY:	TOTAL OF 1

1 LE-4 TYPICAL CANTENNA SPECIFICATIONS
SCALE: NTS

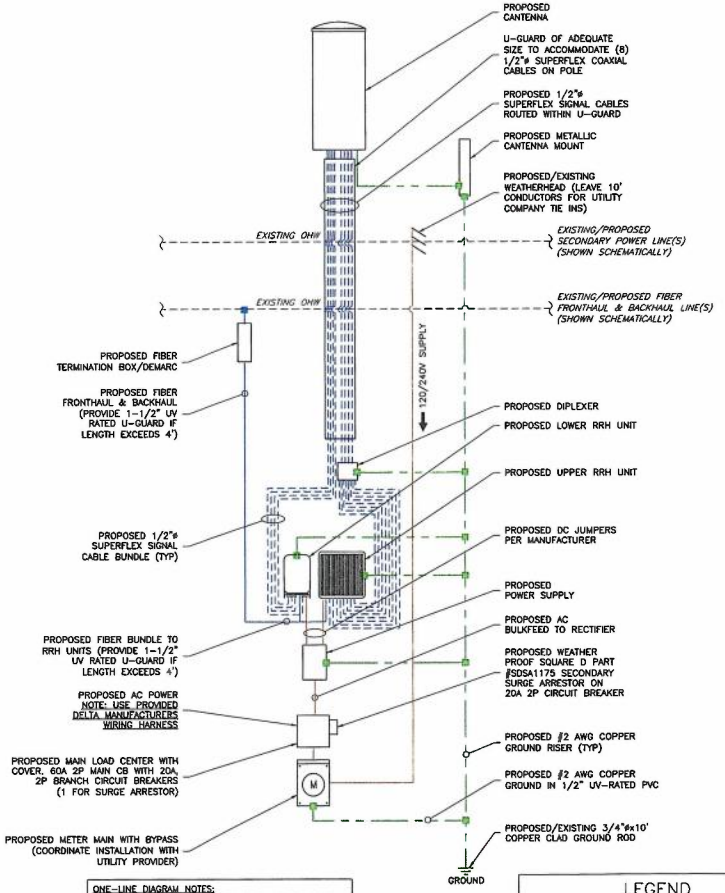
REMOTE RADIO HEAD	
DIMENSIONS:	17.3"±H x 17.3"±W x 11.5"±D
WEIGHT:	102.5± LBS
QUANTITY:	TOTAL OF 1

REMOTE RADIO HEAD	
DIMENSIONS:	13.9"±H x 9.8"±W x 4.8"±D
WEIGHT:	21.4± LBS
QUANTITY:	TOTAL OF 1

2 LE-4 TYPICAL REMOTE RADIO HEAD (RRH) UNIT DIMENSIONS
SCALE: NTS

DIPLEXER	
DIMENSIONS:	4.8"±H x 7.9"±W x 3.3"±D
WEIGHT:	7.6 LBS
QUANTITY:	TOTAL OF 1

3 LE-4 TYPICAL DIPLEXER DIMENSIONS
SCALE: NTS



ONE-LINE DIAGRAM NOTES:
1.) PROVIDE WEATHER TIGHT SEAL CONNECTORS ON ALL CONNECTIONS EACH SIDE OF ENCLOSURE HOUSING

2.) COORDINATE ANY FURTHER MISCELLANEOUS WIRING AND CONDUIT REQUIREMENTS WITH VERIZON WIRELESS AND ELECTRIC COMPANY

LEGEND
- FIBER BUNDLE/JUMPER
- = AC POWER
- = DC POWER
- = GROUND
- = 1/2"ø SUPERFLEX SIGNAL CABLE

4 LE-4 FIBER/ELECTRICAL ONE-LINE DIAGRAM
SCALE: NTS

ENGINEER

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SITE INFORMATION

MARLBORO_SC31_MA-391559
UTILITY POLE #19
237 BOSTON POST ROAD WEST
MARLBOROUGH, MA 01752

DESIGN RECORD

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C	08/26/16	REVISED	DRG
B	06/15/16	REVISED	ALM
A	01/05/16	PRELIMINARY	DRG

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SHEET NUMBER

LE-4

Table 6H-3. Meaning of Letter Codes on Typical Application Diagrams

Road Type	Distance Between Signs**		
	A	B	C
Urban (low speed)	100 feet	100 feet	100 feet
Urban (high speed)	350 feet	350 feet	350 feet
Rural	500 feet	500 feet	500 feet
Expressway / Freeway	1,000 feet	1,500 feet	2,640 feet

* Speed category to be determined by the highway agency

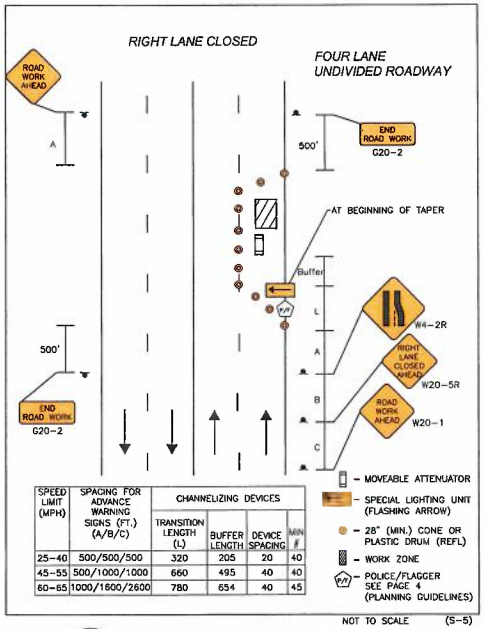
** The column headings A, B, and C are the dimensions shown in Figures 6H-1 through 6H-46. The A dimension is the distance from the transition or point of restriction to the first sign. The B dimension is the distance between the first and second signs. The C dimension is the distance between the second and third signs. (The "first sign" is the sign in a three-sign series that is closest to the TTC zone. The "third sign" is the sign that is farthest upstream from the TTC zone.)

Table 6H-4. Formulas for Determining Taper Length

Speed (S)	Taper Length (L) in feet
40 mph or less	$L = WS^2 / 60$
45 mph or more	$L = WS$

Where:
L = taper length in feet
W = width of offset in feet
S = posted speed limit, or off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

STATIONARY OPERATIONS



SPEED LIMIT (MPH)	SPACING FOR ADVANCE WARNING SIGNS (FT.) (A/B/C)	CHANNELIZING DEVICES			
		TRANSITION LENGTH (L)	BUFFER LENGTH	DEVICE SPACING	MIN. #
25–40	500/500/500	320	205	20	40
45–55	500/1000/1000	660	495	40	40
60–65	1000/1600/2600	780	654	40	45

NOT TO SCALE (S-5)

1 / LE-5 WORK ZONE SAFETY TRAFFIC PLAN NTS

Table 6H-2. Meaning of Symbols on Typical Application Diagrams

Symbols	Description
	Arrow board
	Arrow board support or trailer (shown facing down)
	Changeable message sign or support trailer
	Channelizing device
	Crash cushion
	Direction of temporary traffic detour
	Direction of traffic
	Flagger
	High-level warning device (Flag tree)
	Longitudinal channelizing device
	Luminaire
	Pavement markings that should be removed for a long-term project
	Shadow vehicle
	Sign (shown facing left)
	Surveyor
	Temporary barrier
	Temporary barrier with warning light
	Traffic or pedestrian signal
	Truck-mounted attenuator
	Type 3 barricade
	Warning light
	Work space
	Work vehicle

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SITE INFORMATION
MARLBORO_SC31_MA-391559
UTILITY POLE #19
237 BOSTON POST ROAD WEST
MARLBOROUGH, MA 01752

DESIGN RECORD

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D	02/21/17	REVISED	PRC
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SHEET NUMBER
LE-5

Exhibit 3
Structural Report

TOTALLY COMMITTED.

NB+C Engineering Services

Existing Wood Pole Antenna Installation

Prepared for Verizon Wireless

SITE INFORMATION

Address	237 Boston Post Road West
	Marlborough, MA 01752
	Middlesex County
	Latitude: 42.338489°
	Longitude: -71.591241°
Verizon Site Name	MARLBORO_SC031
NB+C Project Number	100381
Date	January 8, 2021

1.0 INTRODUCTION

Th pole is an existing wood pole located in Marlborough, MA. As per your request **NB+C ES** performed a structural analysis and design for the existing wood pole to verify that the structure can support the new loads and are in compliance with the applicable codes and standards. Information we have received and used for this analysis includes:

- Lease Exhibits prepared by **NB+C ES** personnel dated January 8, 2021
- Site photos taken by **NB+C ES** personnel dated January 7, 2021

2.0 APPURTENANCES LOADING

As per the information provided to us, Verizon is proposing antennas and feed lines as shown in Table 1 of this report.

Center Line Elevation (ft)	Antenna Model	Carrier	Feed Lines (in)
44'-0"	(1) Small Cell Cantenna	Verizon	(1) ½" Superflex Cable (1) RGS Conduit (1) Ground Wire
	(1) Mounting Bracket		
17'-0"	(1) Fiber Demarc		
13'-9"	(1) Steel Mounting Bracket with (2) RRHs		
10'-0"	(1) Main Load Center		
8'-4"	(1) Utility Meter		

3.0 ASSUMPTIONS

This report is based on the theoretical capacity of the existing structural elements and is not an assessment of the overall suitability of the existing structure or its components for any particular use other than specified here in this report:

- This report makes no warranties, expressed and/or implied, and disclaims any liability arising from material, fabrication and erection of the existing Structure and any other existing or proposed components or appurtenances.
- All proposed and existing antennas, mounts, coaxial cables and appurtenances are assumed to be properly installed and configured according to manufacturer requirements.
- All existing structural elements are assumed to be in place and in good condition and were previously designed and constructed in accordance with applicable codes and standards.

APPENDIX A

NESC 250B CALCULATIONS

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 88.8°

	Shear Load* (lbs)	Applied Load (%)	Bending Moment (ft-lb)	Applied Moment (%)	Pole Capacity (%)	Bending Stress (+/- psi)	Vertical Load (lbs)	Vertical Stress (psi)	Total Stress (psi)	Pole Capacity (%)
Powers	526	19.7	19,422	27.1	20.8	1,220	74	1	1,220	20.3
Comms	724	27.1	19,489	27.2	20.9	1,224	107	1	1,225	20.4
GuyBraces	1	0.0	38	0.1	0.0	2	8	0	2	0.0
GenericEquipments	421	15.8	10,645	14.9	11.4	668	701	6	674	11.2
Pole	805	30.2	16,080	22.4	17.2	1,010	1,398	12	1,021	17.0
Crossarms	9	0.3	352	0.5	0.4	22	100	1	23	0.4
Streetlights	156	5.8	4,575	6.4	4.9	287	45	0	288	4.8
SpanAdditions	3	0.1	73	0.1	0.1	5	13	0	5	0.1
Insulators	25	0.9	1,011	1.4	1.1	64	65	1	64	1.1
Pole Load	2,669	100.0	71,685	100.0	76.9	4,502	2,512	21	4,522	75.4
Pole Reserve Capacity			21,570		23.1	1,498			1,478	24.6

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 88.8°

	Shear Load* (lbs)	Applied Load (%)	Bending Moment (ft-lb)	Applied Moment (%)	Pole Capacity (%)	Bending Stress (+/- psi)	Vertical Load (lbs)	Vertical Stress (psi)	Total Stress (psi)	Pole Capacity (%)
<Undefined>	1,864	69.8	55,605	77.6	59.6	3,492	1,114	9	3,501	58.3
Pole	805	30.2	16,080	22.4	17.2	1,010	1,398	12	1,021	17.0
Totals:	2,669	100.0	71,685	100.0	76.9	4,502	2,512	21	4,522	75.4

Detailed Load Components:

Power		Owner	Height (ft)	Horiz. Offset (in)	Cable Diameter (in)	Sag at Max Temp (ft)	Cable Weight (lbs/ft)	Lead/Span Length (ft)	Span Angle (deg)	Wire Length (ft)	Tension (lbs)	Tension Moment* (ft-lb)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Primary	ACSR 1/0 AWG 6/1 RAVEN		40.35	46.35	0.3980	2.36	0.145	105.0	0.0	105.1	111	95	29	1,593	1,717
Primary	ACSR 1/0 AWG 6/1 RAVEN		40.35	46.35	0.3980	2.36	0.145	105.0	180.0	105.1	111	-95	29	1,593	1,526
Primary	ACSR 1/0 AWG 6/1 RAVEN		40.35	40.40	0.3980	2.36	0.145	105.0	0.0	105.1	111	95	-25	1,593	1,663
Primary	ACSR 1/0 AWG 6/1 RAVEN		40.35	40.40	0.3980	2.36	0.145	105.0	180.0	105.1	111	-95	-25	1,593	1,472
Primary	ACSR 1/0 AWG 6/1 RAVEN		40.35	22.72	0.3980	2.36	0.145	105.0	0.0	105.1	111	95	14	1,593	1,702
Primary	ACSR 1/0 AWG 6/1 RAVEN		40.35	22.72	0.3980	2.36	0.145	105.0	180.0	105.1	111	-95	14	1,593	1,511

Normal	10'x3.5" x 4.5" SP - 4 Pin	39.50	5.66	0.0	0.0	50.00	4.50	3.50	96.00	0	344	344
									Totals:	0	344	344

Streetlight		Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (lbs)	Unit Height (in)	Unit Depth (in)	Unit Diameter (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Flood Light	Streetlight - 3 ft. Arm		30.25	4.44	270.0	270.0	45.00	36.00	20.00	3.00	96.00	-251	4,716	4,465
											Totals:	-251	4,716	4,465

SpanAddition		Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (lbs)	Unit Height (in)	Unit Depth (in)	Unit Diameter (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Maintenance Loop	Span Addition		25.69	120.00	360.0	360.0	7.00	3.00	3.00	3.00	3.00	0	35	35
Maintenance Loop	Span Addition		25.84	96.00	360.0	360.0	7.00	3.00	3.00	3.00	3.00	0	36	36
											Totals:	0	72	72

Insulator		Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (lbs)	Unit Diameter (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Pin	15 kV Pin Insulator 6" Dia x 8"		39.69	46.00	83.0	0.0	10.00	6.00	8.00	38	328	366
Pin	15 kV Pin Insulator 6" Dia x 8"		39.69	-40.00	278.0	0.0	10.00	6.00	8.00	-33	328	295
Pin	15 kV Pin Insulator 6" Dia x 8"		39.69	22.00	75.6	0.0	10.00	6.00	8.00	18	328	346
Bolt	Single Bolt		32.75	0.00	270.0	270.0	5.00	3.00	0.00	-3	0	-3
Bolt	Single Bolt		31.92	0.00	270.0	270.0	5.00	3.00	0.00	-3	0	-3
Bolt	Single Bolt		28.83	0.00	270.0	270.0	5.00	3.00	0.00	-3	0	-3
Bolt	Single Bolt		27.83	0.00	270.0	270.0	5.00	3.00	0.00	-3	0	-3
Bolt	Single Bolt		26.67	0.00	270.0	270.0	5.00	3.00	0.00	-3	0	-3
Bolt	Single Bolt		25.25	0.00	270.0	270.0	5.00	3.00	0.00	-3	0	-3
Bolt	Single Bolt		23.92	0.00	270.0	270.0	5.00	3.00	0.00	-3	0	-3
									Totals:	3	983	986

Guy Wire and Brace		Owner	Attach Height (ft)	End Height (ft)	Lead/Span Length (ft)	Wire Diameter (in)	Percent Solid (%)	Lead Angle (deg)	Incline Angle (deg)	Wire Weight (lbs/ft)	Rest Length (ft)	Stretch Length (in)
EHS 3/8	Down		36.83	0.00	8.00	0.375	75.00	90.0	77.5	0.273	42.26	0.00

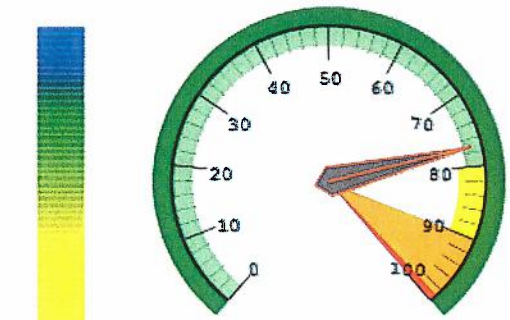
Guy Wire and Brace (Loads and Reactions)		Elastic Modulus (psi)	Rated Tensile Strength (lbs)	Guy Strength Factor	Allowable Tension (lbs)	Initial Tension (lbs)	Loaded Tension*[2] (lbs)	Maximum Tension[2] (lbs)	Applied Tension[3] (lbs)	Vertical Load (lbs)	Shear Load In Guy Dir (lbs)	Shear Load At Report Angle (lbs)	Moment at GL[3] (ft-lb)
EHS 3/8	Down	2.30e+7	15,400	0.90	13,860	700	5,677	5,677	0	0	0	0	37
									Totals:	0	0	0	37

O-Calc® Pro Capacity Summary Info

Pole Identification: MARLBORO SC31

Report Created: 1/8/2021

File: MARLBORO_SC31_MA_Structural Analysis.pplx



77.2% of Allowed MCU

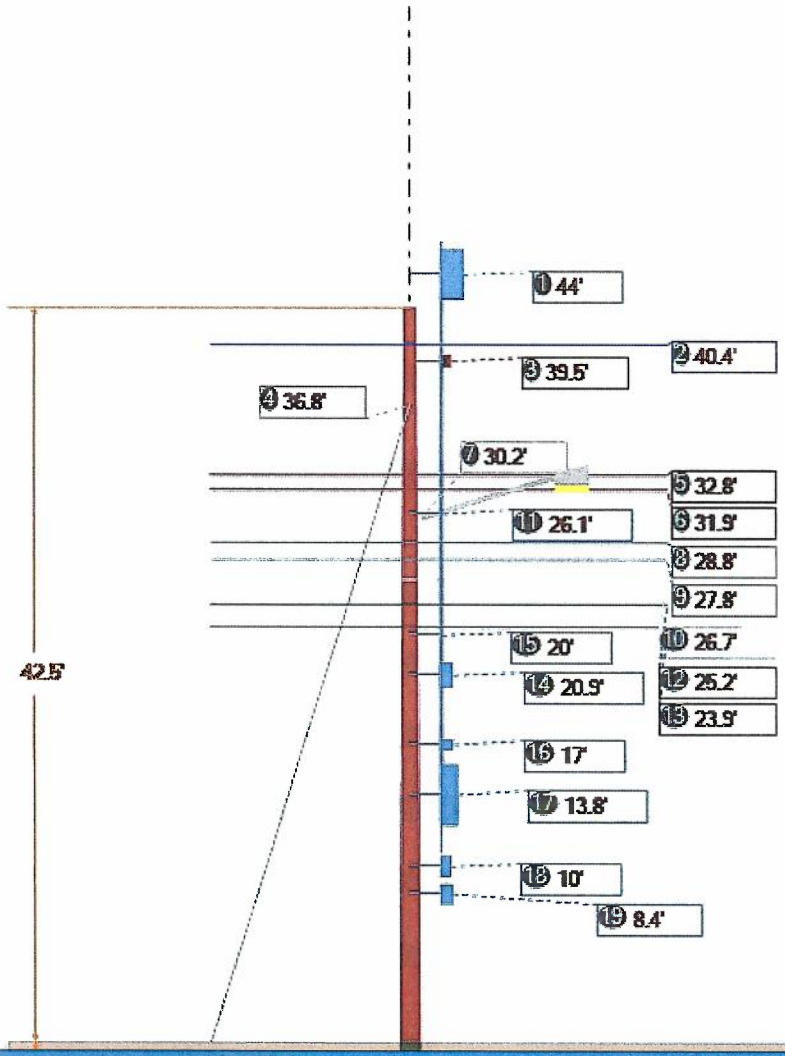
Guys are adequate

O-Calc® Pro Schematic View

Pole Identification: MARLBORO SC31

Report Created: 1/8/2021

File: MARLBORO_SC31_MA_Structural Analysis.pplx



1 - 44' (528")
Small Cell Cantenna

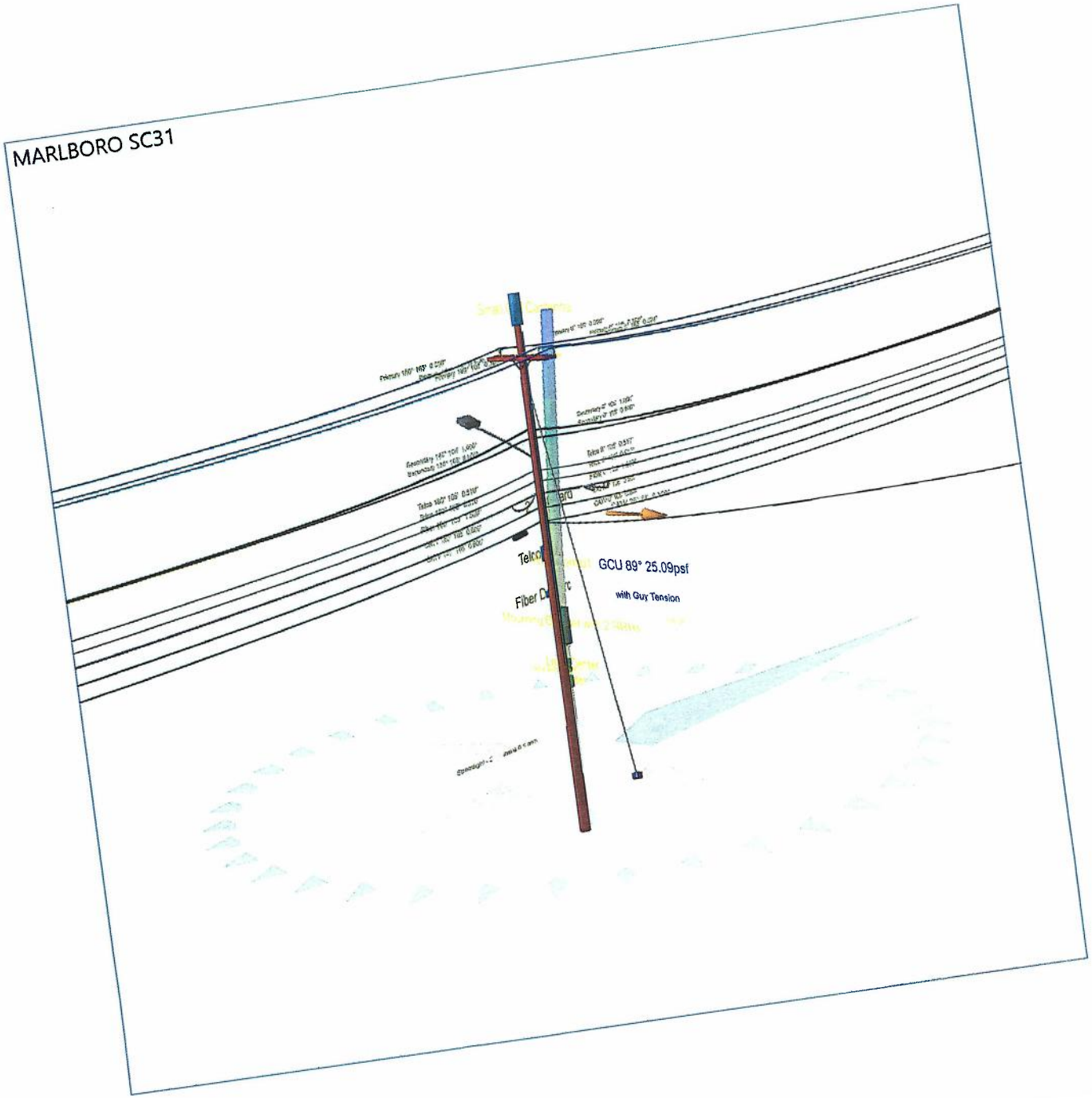
2 - 40.4' (484.2")
Primary 0° 105' 0.398" (ACSR 1/0 AWG 6/1 RAVEN)
Primary 180° 105' 0.398" (ACSR 1/0 AWG 6/1 RAVEN)
Primary 0° 105' 0.398" (ACSR 1/0 AWG 6/1 RAVEN)
Primary 180° 105' 0.398" (ACSR 1/0 AWG 6/1 RAVEN)
Primary 0° 105' 0.398" (ACSR 1/0 AWG 6/1 RAVEN)
Primary 180° 105' 0.398" (ACSR 1/0 AWG 6/1 RAVEN)

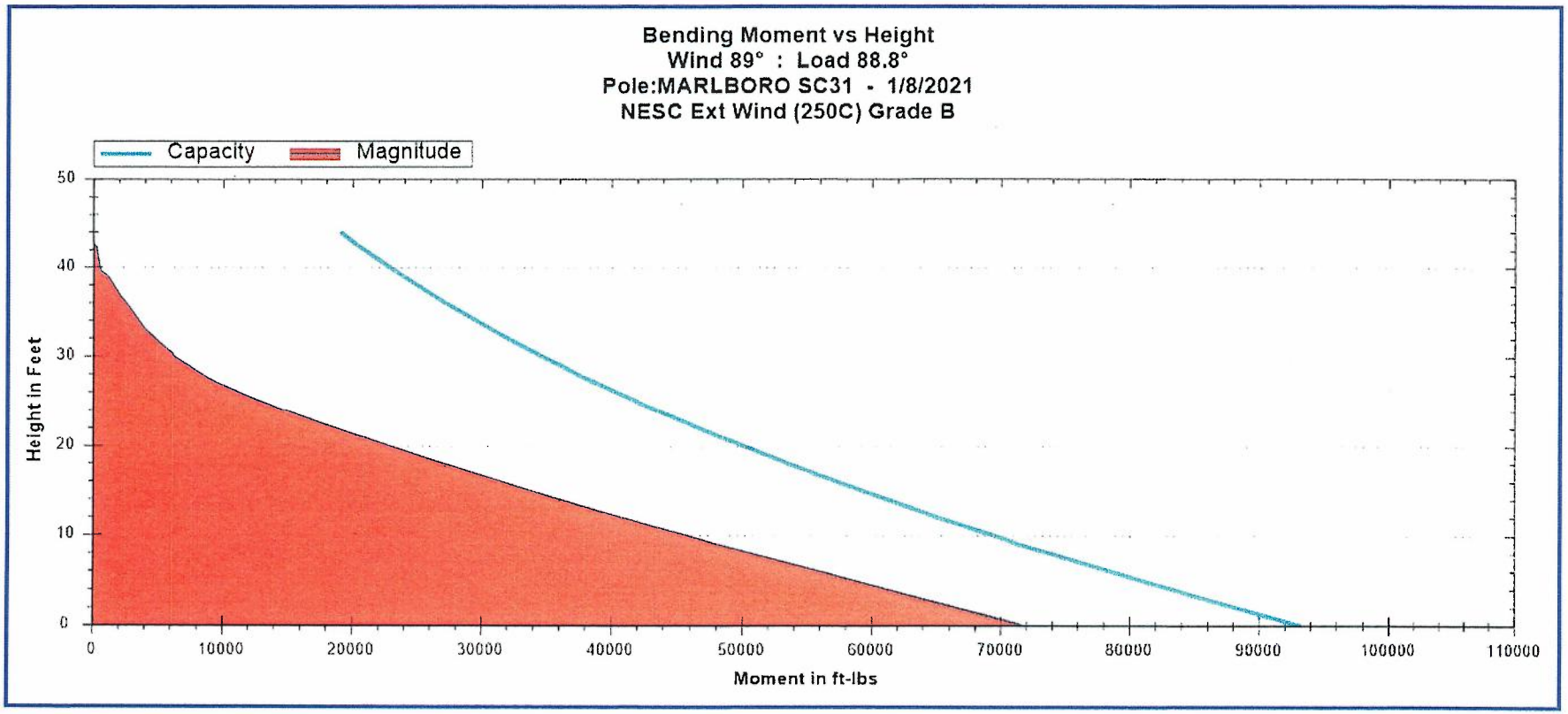
3 - 39.5' (474")
Normal 8ft 3.5in x 4.5in

4 - 36.8' (442")
EHS 3/8 Down Guy 36.8 ft hgt, 77.7° angle

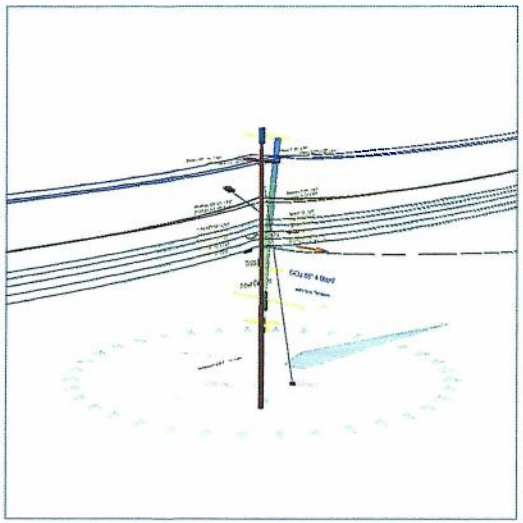
5 - 32.8' (393")
Secondary 0° 105' 1.000" (Generic Span)
Secondary 180° 105' 1.000" (Generic Span)

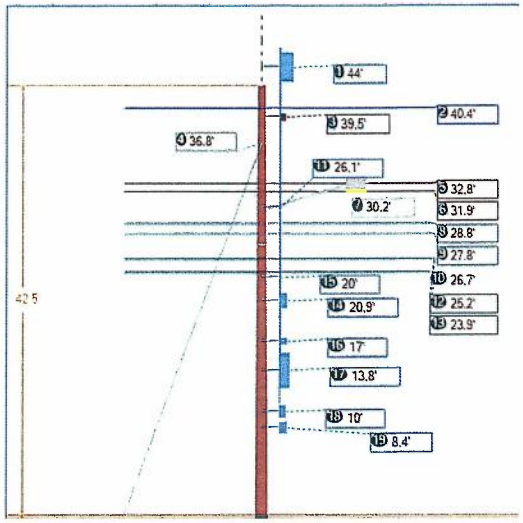
MARLBORO SC31




Bending Moment vs Height
Wind 89° : Load 88.8°
Pole:MARLBORO SC31 - 1/8/2021
NESC Ext Wind (250C) Grade B
Capacity
Magnitude
Height in Feet
0
10
20
30
40
50
0
10000
20000
30000
40000
50000
60000
70000
80000
90000
100000
110000
Moment in ft-lbs

Pole Num:	**MARLBORO SC31**	Pole Length / Class:	**48.75 / 3**	Code:	**NESC**	Structure Type:	**Guyed Tangent**
Aux Data 1	**Unset**	Species:	**SOUTHERN PINE**	NESC Rule:	**Rule 250B**	Status	**Guy Wires Adequate**
Aux Data 2	**Unset**	Setting Depth (ft):	**6.25**	Construction Grade:	**B**	Pole Strength Factor:	**0.65**
Aux Data 3	**Unset**	G/L Circumference (in):	**38.91**	Loading District:	**Heavy**	Transverse Wind LF:	**2.50**
Aux Data 4	**Unset**	G/L Fiber Stress (psi):	**8,000**	Ice Thickness (in):	**0.50**	Wire Tension LF:	**1.65**
Aux Data 5	**Unset**	Allowable Stress (psi):	**5,200**	Wind Speed (mph):	**39.53**	Vertical LF:	**1.50**
Aux Data 6	**Unset**	Fiber Stress Ht. Reduc:	**No**	Wind Pressure (psf):	**4.00**		
Latitude:		**0.000000 Deg**	Longitude:		**0.000000 Deg**	Elevation:	**0 Feet**





Pole Capacity Utilization (%)		Height (ft)	Wind Angle (deg)
Maximum	**78.9**	0.0	87.9
Groundline	**78.9**	0.0	87.9
Vertical	**2.5**	24.7	270.0

Pole Moments (ft-lb)		Load Angle (deg)	Wind Angle (deg)
Max Cap Util	**63,153**	82.2	87.9
Groundline	**63,153**	82.2	87.9
GL Allowable	**80,821**		

Guy System Component Summary				Load From Worst Wind Angle on Pole		Individual Maximum Load	
Description	**Lead Length (ft)**	**Lead Angle (deg)**	**Height (ft)**	**Nominal Capacity (%)**	**Wind Angle (deg)**	**Max Load Capacity (%)**	**Wind Angle (deg)**
Single Helix Anchor	8.0	90.0		**0.0**	87.9	**72.8**	270.0
EHS 3/8 (Down)			36.8	**0.0**	87.9	**57.8**	270.0
			System Capacity Summary:	**Adequate**		**Adequate**	

Secondary	Generic Span	32.75	6.80	1.0000	3.15	0.182	105.0	0.0	105.3	543	3,985	-49	2,837	6,773
Secondary	Generic Span	32.75	6.80	1.0000	3.15	0.182	105.0	180.0	105.3	543	-3,985	-49	2,837	-1,197
Secondary	Generic Span	31.92	6.85	0.5000	2.56	0.091	105.0	0.0	105.1	467	3,337	-32	2,074	5,379
Secondary	Generic Span	31.92	6.85	0.5000	2.56	0.091	105.0	180.0	105.1	467	-3,337	-32	2,074	-1,295
										Totals:	**0**	**115**	**24,490**	**24,606**

Comm		**Owner**	**Height (ft)**	**Horiz. Offset (in)**	**Cable Diameter (in)**	**Sag at Max Temp (ft)**	**Cable Weight (lbs/ft)**	**Lead/Span Length (ft)**	**Span Angle (deg)**	**Wire Length (ft)**	**Tension (lbs)**	**Tension Moment* (ft-lb)**	**Offset Moment* (ft-lb)**	**Wind Moment* (ft-lb)**	**Moment at GL* (ft-lb)**
Telco	SS 26 GA 25 PR (0.51)		28.83	7.02	0.5100	2.55	0.260	105.0	0.0	105.1	618	3,988	-41	1,886	5,833
Telco	SS 26 GA 25 PR (0.51)		28.83	7.02	0.5100	2.55	0.260	105.0	180.0	105.1	618	-3,988	-41	1,886	-2,142
Telco	SS 26 GA 25 PR (0.51)		27.83	7.08	0.5100	2.55	0.260	105.0	0.0	105.1	618	3,849	-41	1,820	5,629
Telco	SS 26 GA 25 PR (0.51)		27.83	7.08	0.5100	2.55	0.260	105.0	180.0	105.1	618	-3,849	-41	1,820	-2,070
Fiber	Generic Span		26.67	7.15	1.5000	2.57	0.274	105.0	0.0	105.1	1,254	7,490	-71	2,888	10,307
Fiber	Generic Span		26.67	7.15	1.5000	2.57	0.274	105.0	180.0	105.1	1,254	-7,490	-71	2,993	-4,567
CATV	Generic Span		25.25	7.23	0.5000	2.56	0.091	105.0	0.0	105.1	467	2,640	-34	1,641	4,247
CATV	Generic Span		25.25	7.23	0.5000	2.56	0.091	105.0	180.0	105.1	467	-2,640	-34	1,641	-1,033
CATV	Generic Span		23.92	7.31	0.5000	2.56	0.091	105.0	0.0	105.1	467	2,501	-34	1,554	4,021
CATV	Generic Span		23.92	7.31	0.5000	2.13	0.091	74.0	20.0	74.2	205	3,766	-31	907	4,643
CATV	Generic Span		23.92	7.31	0.5000	2.56	0.091	105.0	180.0	105.1	467	-2,501	-34	1,752	-783
											Totals:	**3,766**	**-469**	**20,787**	**24,084**

GenericEquipment		**Owner**	**Height (ft)**	**Horiz. Offset (in)**	**Offset Angle (deg)**	**Rotate Angle (deg)**	**Unit Weight (lbs)**	**Unit Height (in)**	**Unit Depth (in)**	**Unit Diameter (in)**	**Unit Length (in)**	**Offset Moment* (ft-lb)**	**Wind Moment* (ft-lb)**	**Moment at GL* (ft-lb)**
Cylinder	Small Cell Cantenna		44.00	0.65	0.0	0.0	32.00	35.40	--	14.00	--	0	1,507	1,507
Cylinder	2" U-Guard		26.13	5.68	90.0	0.0	200.00	380.00	--	2.00	--	141	1,372	1,513
Box	Telco Box		20.92	6.48	270.0	0.0	17.00	18.00	3.00	--	8.00	-14	332	318
Cylinder	1" RGS Conduit		20.00	5.54	0.0	0.0	150.00	300.00	--	1.00	--	14	415	429
Box	Fiber Demarc		17.00	8.21	270.0	0.0	12.00	8.00	2.00	--	8.00	-12	120	108
Box	Mounting Bracket with 2 RRHs		13.75	10.40	0.0	0.0	190.00	42.00	10.00	--	10.58	34	639	672
Box	Load Center		10.00	8.05	0.0	0.0	50.00	14.88	4.87	--	6.63	7	80	87
Box	Meter		8.41	7.90	0.0	0.0	50.00	14.00	4.38	--	8.00	7	57	64
											Totals:	**176**	**4,522**	**4,698**

Crossarm	**Owner**	**Height (ft)**	**Horiz. Offset (in)**	**Offset Angle (deg)**	**Rotate Angle (deg)**	**Unit Weight (lbs)**	**Unit Height (in)**	**Unit Depth (in)**	**Unit Length (in)**	**Offset Moment* (ft-lb)**	**Wind Moment* (ft-lb)**	**Moment at GL* (ft-lb)**

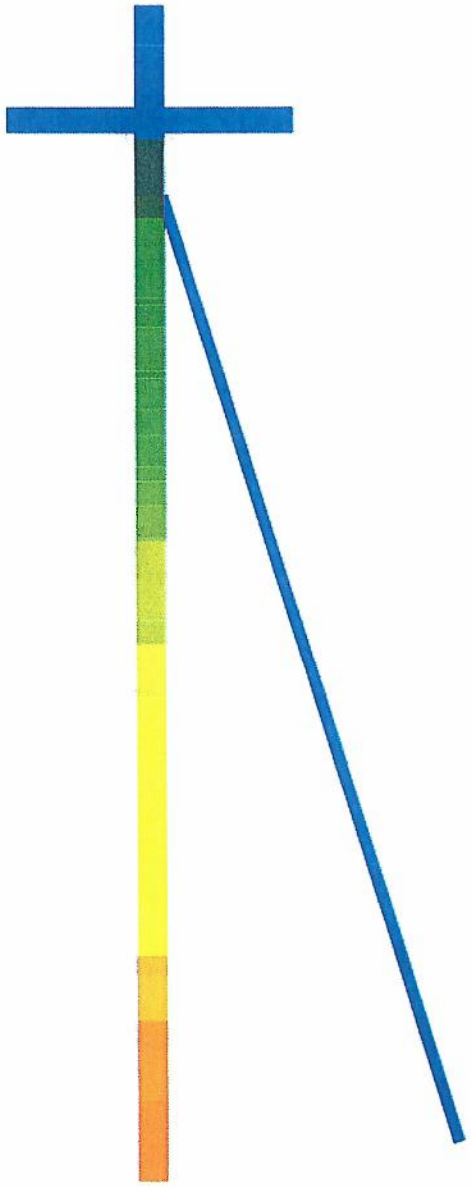
Anchor/Rod Load Summary	Owner	Rod Length AGL (in)	Lead Length (ft)	Lead Angle (deg)	Strength of Assembly (lbs)	Anchor/Rod Strength Factor	Allowable Load (lbs)	Max Load[2] (lbs)	Load at Pole MCU[3] (lbs)	Max Required Capacity[2] (%)
Single Helix Anchor		18.00	8.00	90.0	11,000	1.00	11,000	8,006	0	72.8

Pole Buckling

Buckling Constant	Buckling Column Height* (ft)	Buckling Section Height (% Buckling Col. Hgt.)	Buckling Section Diameter (in)	Minimum Buckling Diameter at GL (in)	Diameter at Tip (in)	Diameter at GL (in)	Modulus of Elasticity (psi)	Pole Density (pcf)	Ice Density (pcf)	Pole Tip Height (ft)	Buckling Load Capacity at Height (lbs)	Buckling Load Applied at Height (lbs)	Buckling Load Factor of Safety
0.71	24.67	33.46	11.43	11.36	7.47	12.39	1.60e+6	60.00	57.00	42.50	196,214	**1967.98**	**40.00**

O-Calc® Pro Heat Map View

Report Created: 1/8/2021



6 - 31.9' (383")
Secondary 0° 105' 0.500" (Generic Span)
Secondary 180° 105' 0.500" (Generic Span)

7 - 30.2' (363")
Streetlight - 3 ft. Arm 8.0 ft arm

8 - 28.8' (346")
Telco 0° 105' 0.510" (SS 26 GA 25 PR (0.51))
Telco 180° 105' 0.510" (SS 26 GA 25 PR (0.51))

9 - 27.8' (334")
Telco 0° 105' 0.510" (SS 26 GA 25 PR (0.51))
Telco 180° 105' 0.510" (SS 26 GA 25 PR (0.51))

10 - 26.7' (320")
Fiber 0° 105' 1.500" (Generic Span)
Fiber 180° 105' 1.500" (Generic Span)

11 - 26.1' (313.6")
2" U-Guard

12 - 25.2' (303")
CATV 0° 105' 0.500" (Generic Span)
CATV 180° 105' 0.500" (Generic Span)

13 - 23.9' (287")
CATV 0° 105' 0.500" (Generic Span)
CATV 20° 74' 0.500" (Generic Span)
CATV 180° 105' 0.500" (Generic Span)

14 - 20.9' (251")
Telco Box

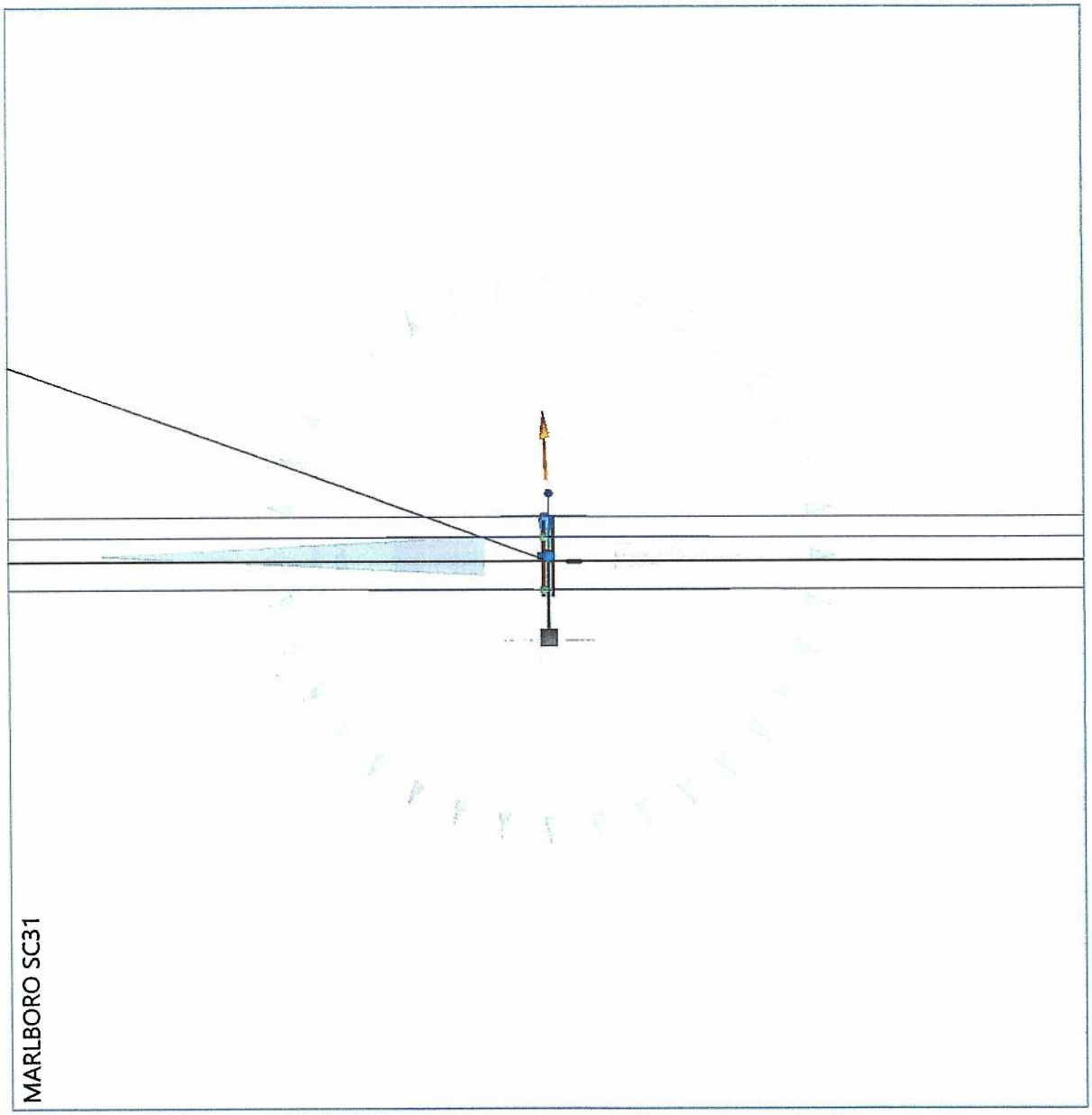
15 - 20' (240")
1" Conduit

16 - 17' (204")
Fiber Demarc

17 - 13.8' (165")
Mounting Bracket with 2 RRHs

18 - 10' (120")
Load Center

19 - 8.4' (100.9")
Meter


MARLBORO SC31

Hazards by Location

Search Information

Address: 52 Norfolk St, Cambridge, MA 02139, USA

Coordinates: 42.338489, -71.591241

Elevation: 335 ft

Timestamp: 2021-01-07T17:17:44.635Z

Hazard Type: Wind

ASCE 7-16

MRI 10-Year	74 mph
MRI 25-Year	83 mph
MRI 50-Year	90 mph
MRI 100-Year	97 mph
Risk Category I	108 mph
Risk Category II	118 mph
Risk Category III	126 mph
Risk Category IV	⚠ 131 mph

You are in a wind-borne debris region if you are also within 1 mile of the coastal mean high water line.

ASCE 7-10

MRI 10-Year	77 mph
MRI 25-Year	87 mph
MRI 50-Year	94 mph
MRI 100-Year	101 mph
Risk Category I	114 mph
Risk Category II	124 mph
Risk Category III-IV	⚠ 135 mph

If the structure under consideration is a healthcare facility and you are also within 1 mile of the coastal mean high water line, you are in a wind-borne debris region. If other occupancy, use the Risk Category II basic wind speed contours to determine if you are in a wind-borne debris region.

ASCE 7-05

ASCE 7-05 Wind Speed	99 mph

The results indicated here DO NOT reflect any state or local amendments to the values or any delineation lines made during the building code adoption process. Users should confirm any output obtained from this tool with the local Authority Having Jurisdiction before proceeding with design.

Disclaimer

Hazard loads are interpolated from data provided in ASCE 7 and rounded up to the nearest whole integer. Per ASCE 7, islands and coastal areas outside the last contour should use the last wind speed contour of the coastal area – in some cases, this website will extrapolate past the last wind speed contour and therefore, provide a wind speed that is slightly higher. NOTE: For queries near wind-borne debris region boundaries, the resulting determination is sensitive to rounding which may affect whether or not it is considered to be within a wind-borne debris region.

Mountainous terrain, gorges, ocean promontories, and special wind regions shall be examined for unusual wind conditions.

Exhibit 4

Affidavit of Radio Frequency Engineer

verizon

AFFIDAVIT OF RADIO FREQUENCY ENGINEER

The undersigned, in support of the application to install a small wireless communications facility (SWF) consisting of one antenna array and associated radio equipment on one (1) utility pole located within the City of Marlborough, Massachusetts, states the following:

1. My name is Mark Noonan. I have a Bachelor of Engineering, Electrical Engineering Technology degree from SUNY Institute of Technology at Utica Rome College. I have been employed as a Radio Frequency (RF) Design Engineer for three (3) years, the last three (3) years with Verizon Wireless. I am responsible for network design in the area of Massachusetts that includes the City of Marlborough, MA.

2. Verizon Wireless is a federally licensed provider of wireless communications services with a national footprint.

3. The proposed small wireless facility is within an area where Verizon Wireless has identified a need to install additional facilities in order to provide reliable wireless service for customers and emergency responders and access to new technologies. The search area for the proposed facility was determined with reference to Verizon's existing network serving the Marlborough area and by identifying those areas in need of improved service. Furthermore, it was determined that the area served by the facility would interact well with those of existing and proposed facilities in the surrounding areas.

   The following table provides details of each proposed site:

Name	Address	Pole Number
Marlborough_SC31_MA	237 Boston Post Road	Pole No. MECO 19

4. Small cell deployments are intended to complement, not replace, macro network sites, and are typically target areas of heavy network usage (a.k.a "hotspots"). In doing so, small cells serve to offload the demand on the existing sites serving these hotspots. This not only improves service to the targeted area, but also improves overall system performance elsewhere in the network. In addition, small cells allow for Verizon's deployment of new technologies that will further enhance the network experience and reliability, including faster download time and lower latency.

5. Pursuant to its Federal Communications Commission (FCC) licenses, Verizon Wireless is required to ensure that all radio equipment operating at the proposed communications facilities and the resulting radio frequency exposure levels are compliant with FCC requirements as well as federal and state health and safety standards.

6. Providing wireless communications services is a benefit to the residents of the City of Marlborough, as well as to mobile customers traveling through the area. The proposed facility reflects the locations and designs required to meet Verizon Wireless' network objectives with

respect to capacity and coverage enhancement and deployment of new technologies, including 5G. Without the proposed facilities, Verizon Wireless will be unable to provide reliable wireless communication services in these areas of Marlborough; therefore, Verizon Wireless respectfully requests that the City of Marlborough act favorably upon the proposed facility.

Signed and sworn under the pains and penalties of perjury this 4th day of January 2021.

Mark Noonan

Mark Noonan
RF Design Engineer
Verizon Wireless
118 Flanders Road, 3rd Floor
Westborough, MA 01851

Exhibit 5
Radio Frequency Emissions Compliance

January 11, 2021

verizon

Marlborough City Council
Marlborough City Hall
140 Main Street
Marlborough, MA 01752

RE: Verizon Wireless Small Cell SC31

Dear City Council;

Verizon is installing additional wireless telecommunications facilities in order to meet the growing demand for Verizon Wireless service by residents, businesses, visitors, and emergency responders.

To ensure general public safety, it is important that you contact Verizon Wireless personnel at least 24 hours in advance should general maintenance need to be performed in areas of potential concern as marked on the next page of this document. This is required to comply with FCC guidelines and ensure the environment is safe for general maintenance workers who may require RF Safety & Awareness training. With notification, Verizon Wireless is able to evaluate appropriate actions needed relating to the antennas and proximity of the work location.

Thank you for your inquiry. Verizon has a process to deactivate power on small cells (regardless of whether the small cell is 4G or 5G) while work is being done on the pole (including joint use poles). The information needed to have a small cell powered down for work to occur on the pole (including contact numbers and pole identifiers) is provided at a safe distance from the small cell on the pole itself. Please contact Verizon Wireless personnel at least 24 hours in advance if you need to perform maintenance at that site. If you have any additional questions, our point of contact in that area is Luis Teves.

You also expressed concerns about the health effects of RF emissions from Verizon's network equipment. The Federal Communications Commission (FCC) has developed safety rules for human exposure to RF emissions in consultation with numerous other federal agencies, including the Environmental Protection Agency, the Food and Drug Administration, and the Occupational Safety and Health Administration. These rules can be found at 47 C.F.R § 1.1310. No matter which generation of technology we use, all Verizon equipment must comply with these safety requirements.

The FCC supported and adopted the standards after examining the RF research that scientists in the US and around the world conducted for decades. The research continues to this day, and agencies continue to monitor it. Based on that research, federal agencies have concluded that equipment that has been deployed in a manner that complies with the safety standards poses no known health risks. You can

obtain further information about the safety of RF emissions from cell towers on the FCC's website, which you can access via this link: http://www.fcc.gov/oet/rfsafety/rf-faqs.html.

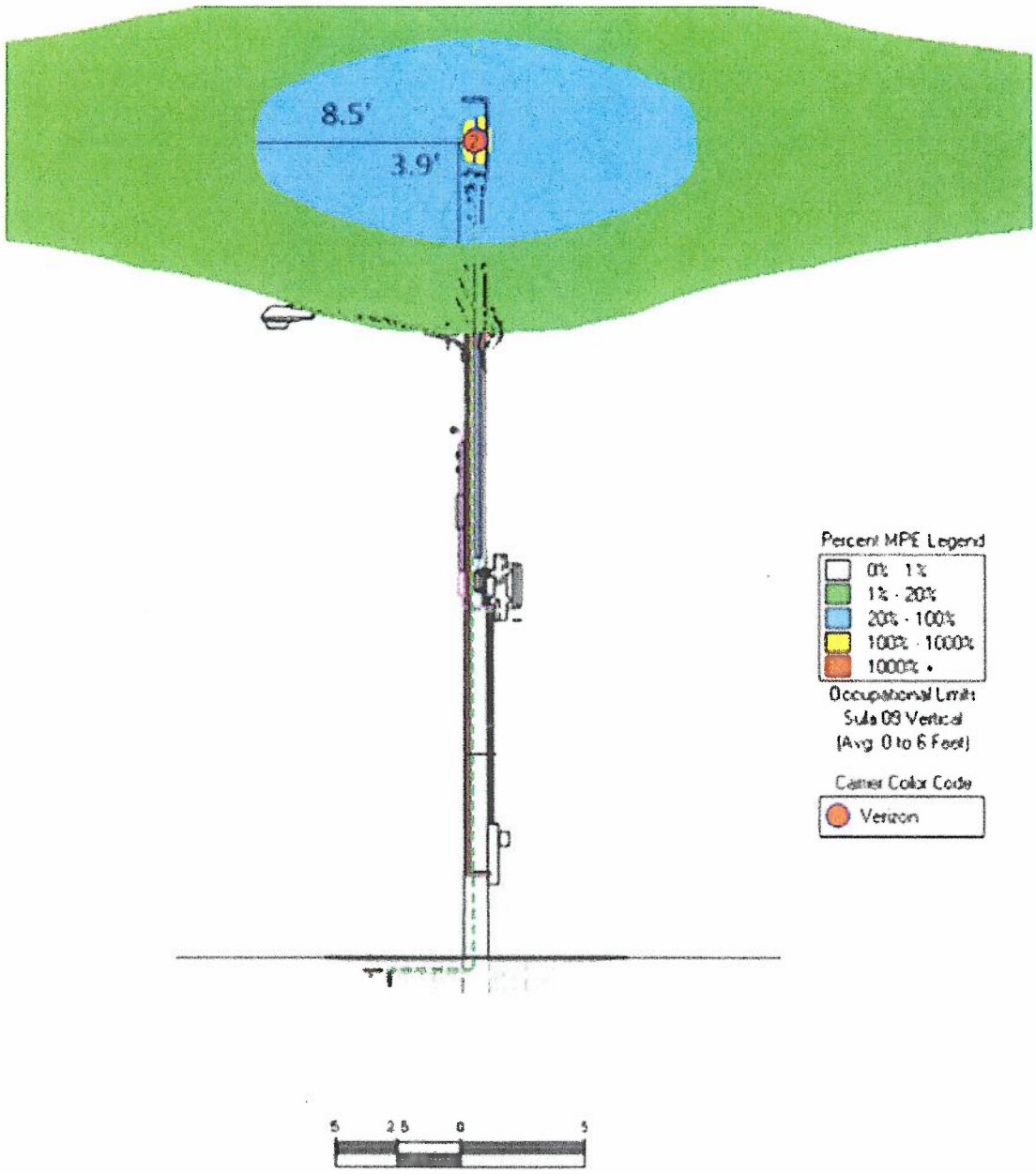
Thank you for reaching out to us regarding your concerns. We appreciate the chance to explain our activities regarding the wireless facility at issue. Questions related to compliance with federal regulations should be directed to VZWRFCompliance@verizonwireless.com. Please contact your local Verizon Wireless resource below if you have any additional questions.

Contact Name	Contact Email	Contact Phone
Luis Teves	Luis.Teves@VerizonWireles.com	508-479-3197

Sincerely,
Mark Noonan
Engineer
RF Design
Verizon Wireless

Verizon Wireless (VZW) Radiofrequency (RF) Emissions Map

The following site layout represents a current snapshot in time of the predicted Verizon Wireless RF emissions from transmitting antennas on this facility. Contact Verizon Wireless should maintenance need to be performed in any non-green areas.

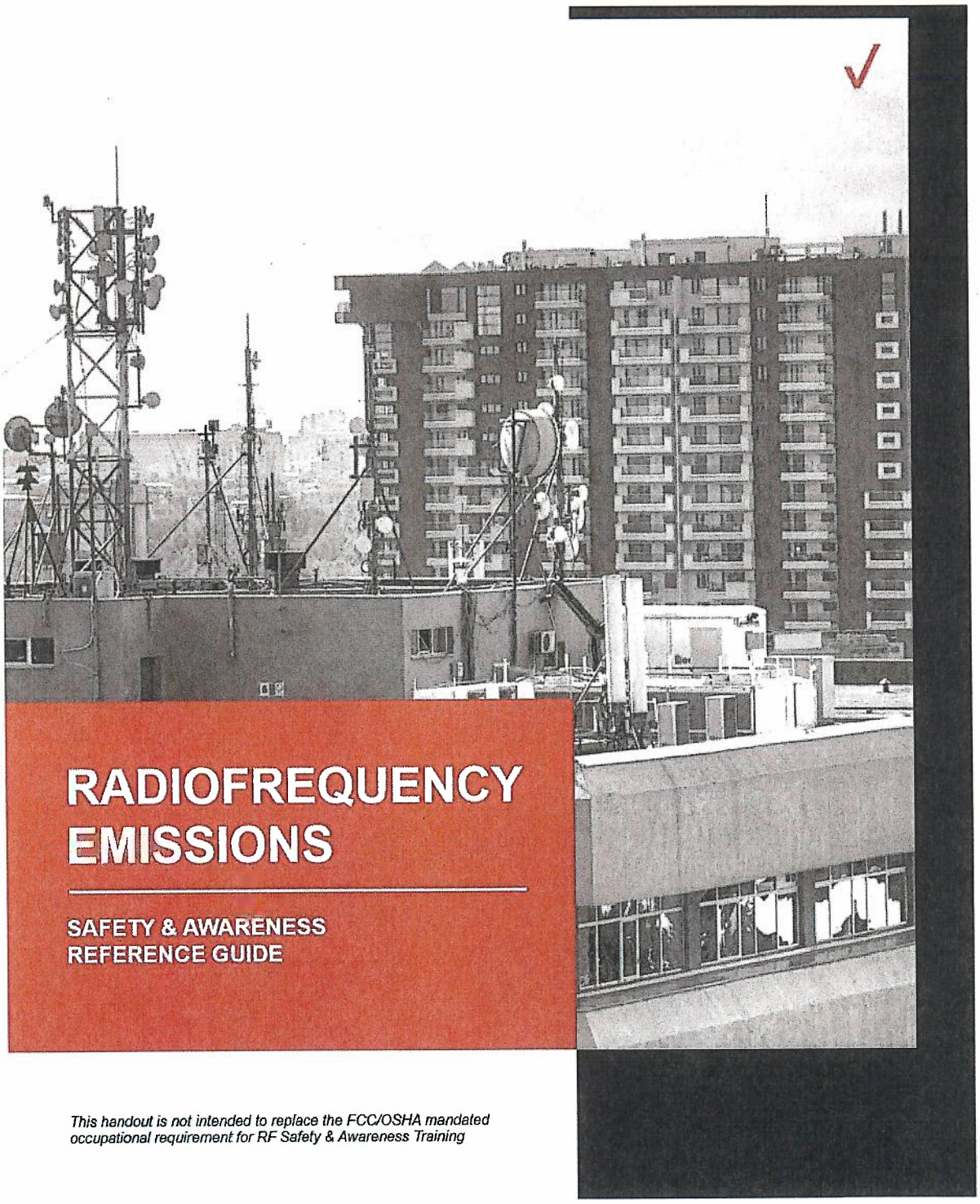


Color % Occupational MPE Instructions

0 to 20 Safe In Relation to VZW. Contact Other Carriers Before Entering This Area 20 to 100

Greater Than 100 Contact VZW Before Accessing This Area

Greater Than 1000



RADIOFREQUENCY EMISSIONS

SAFETY & AWARENESS REFERENCE GUIDE

This handout is not intended to replace the FCC/OSHA mandated occupational requirement for RF Safety & Awareness Training

FEDERAL COMPLIANCE REQUIREMENTS

The Federal Communications Commission (FCC) has established safety guidelines relating to RF exposure from cell sites. The FCC developed those standards, known as Maximum Permissible Exposure (MPE) limits, in consultation with numerous other federal agencies, including the Environmental Protection Agency, the Food and Drug Administration, and the Occupational Safety and Health Administration.

The standards were developed by expert scientists and engineers after extensive reviews of the scientific literature related to RF biological effects. The FCC explains that its standards incorporate prudent margins of safety.

CLASSIFICATIONS FOR EXPOSURE LIMITS

OCCUPATIONAL

Persons are "exposed as a consequence of their employment" and are "fully aware of the potential for exposure and can exercise control over their exposure".

GENERAL POPULATION

Any persons that "may not be made fully aware of the potential for exposure or cannot exercise control over their exposure".

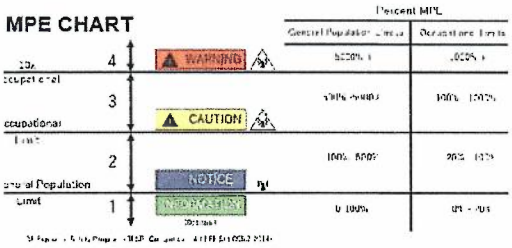
Those in this category do not require RF Safety & Awareness Training.

ENSURING COMPLIANCE WITH FCC GUIDELINES

Areas or portions of any transmitter site may be susceptible to high power densities that could cause personnel exposures in excess of the FCC guidelines. Wireless Licensees are required by law to implement the following:

- Restrict access
- Post notification signage on every access point to increase awareness of the potential for exposure BEFORE one enters an area with antennas.
- Place additional notification signage and visual in dicators in an area with antennas (beyond an access point) where RF exposure levels may start to exceed the FCC's limits.

MPE CHART



EXPOSURE MANAGEMENT

- Assume that all antennas are active
- Obey all posted signs
- Do not stop in front of any antenna
- Recognize the type of antenna and approach at the safest angle
- Contact wireless operator to coordinate access if required
- Signage will indicate where potential RF conditions exist
- Understand pathways of safe egress
- If needed and possible wear personal protection equipment
- When using a personal monitor, remember the time averaging limits and monitor alarm thresholds if working in front of antennas
- If experiencing symptoms of heat exhaustion or nausea, remove yourself from the worksite and seek medical attention
- Power density decreases with distance so maintain distance between you and the antennas. The greater the distance you are from an antenna the bigger the reduction of RF exposure you will receive

PROPERTY OWNER RESPONSIBILITIES (M.E.N.U.)

RF exposure safety and the protection of every licensee's infrastructure are very important. Property owners and licensees have a shared responsibility in maintaining a safe and secure RF environment. Property owners can help in this significant endeavor by:

- **M**aintaining all necessary wireless licensee contact information.
- **E**nforcing restricted access (help maintain a Controlled Environment). Ensuring all building/maintenance personnel are trained in RF Safety, aware that the potential for exposure exists, and follow all appropriate entry and safety procedures.
- **N**otifying all licensees when any non-carrier requests access to any area with antennas at least 24 hours in advance.
- **U**nderstanding that compliance with the FCC and OSHA can be achieved with RF Exposure levels above the applicable limit if the proper signage, physical/indicative barrier, and access restrictions are implemented. Commitment to compliance and willingness to cooperate are essential.

NOTIFICATION SIGNS

A blue Notice sign is posted when levels (beyond posted signage) may exceed General Population MPE limits.

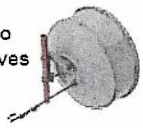
A yellow Caution sign is posted when levels (beyond posted signage) may exceed Occupational MPE limits.

A orange Warning sign is posted when levels (beyond posted signage) exceed 10 times the Occupational MPE limits.

TYPES OF ANTENNAS

MICROWAVE ANTENNA

- Highly directional antenna model used for point to point communications
- Approach from the rear and sides. Do not stand or walk in front of microwaves as they transmit at a high frequency.



PANEL ANTENNA

- Range from 1 to 8 feet in length
- Sled mounted or to a support structure on site (Rooftop)
- Approach these antennas from the rear.

OMNI ANTENNA

- Omni antennas have the appearance of a rod-shaped pole and radiate in a 360° pattern around the pole.
- At the antenna level, there is no approach angle that is safer than another. Typically, emissions directly below the antenna are less than in front of the antenna.

QUASI-OMNI ANTENNA

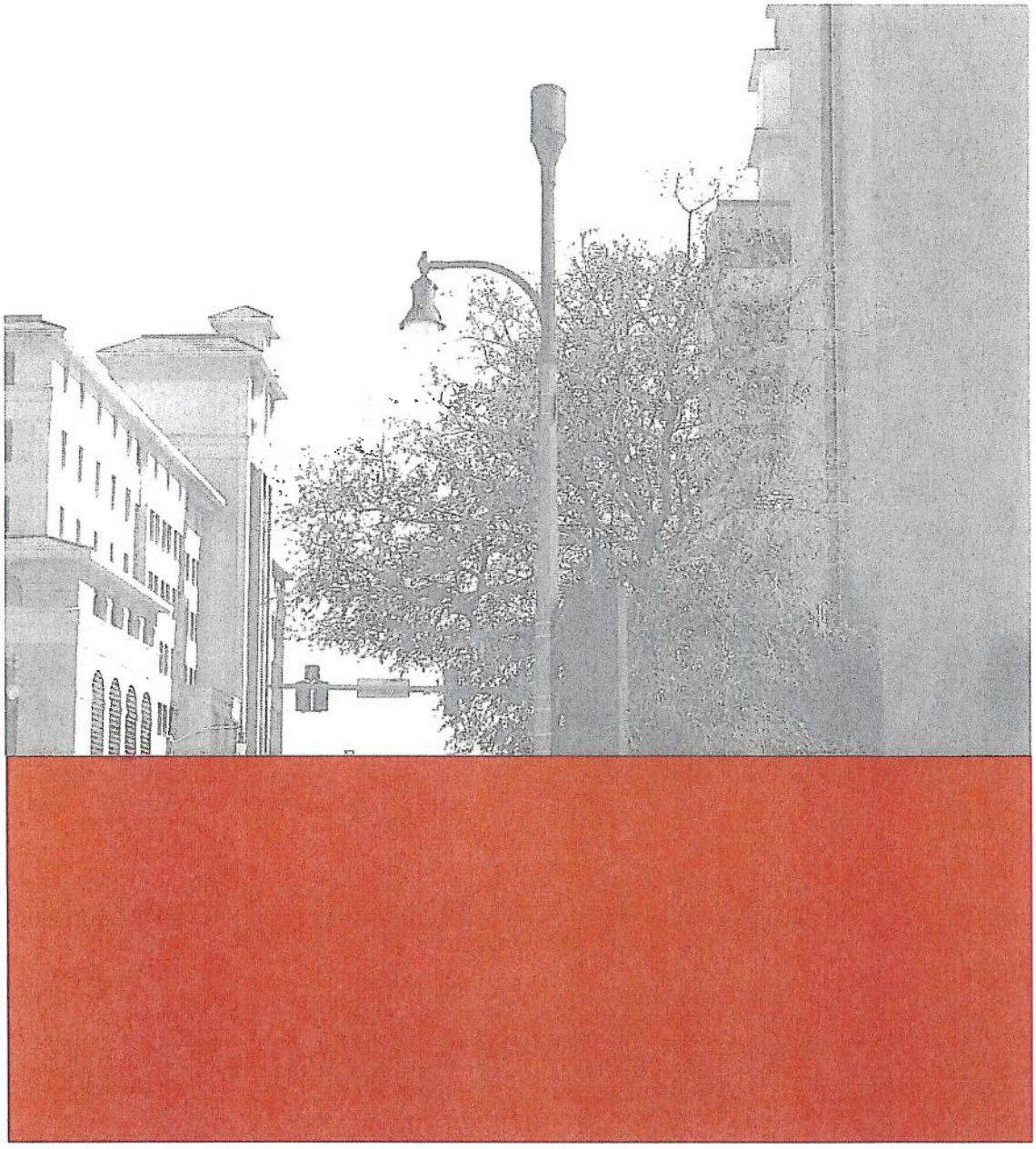
- Quasi-Omni antennas have the appearance of a cylinder and contain emitters that radiate in a 360°pattern around the pole.
- At the antenna level, there is no approach angle that is safer than another. Typically, emissions directly below the antenna are less than in front of the antenna.

YAGI ANTENNA

- Directional antenna model
- Approach from sides and rear.

RF SAFETY TRAINING CONTACTS

WATERFORD CONSULTANTS	www.waterfordconsultants.com
EBI	www.ebiconsulting.com
SITESAFE	www.sitesafe.com
DTECH COMMUNICATIONS.....	www.dtech.com



CONTACT US

Email: VZWRFCompliance@vzw.com
Subject: "ATTN:RF Compliance"

For Emergency Maintenance:
1-800-264-6620

verizon

Exhibit 6
Site Selection Memorandum

Small Cell Siting Memo – Utility Pole # 19

Verizon Wireless Site Name: Marlboro_SC31_MA

Address: 237 Boston Post Road West Marlborough, MA.

The location required for the Verizon Wireless 4G Small Cell NODE was limited to the use of a utility pole in a very specific area along Route 20. The wood utility poles located along Boston Post Road have transformers and other heavy equipment on them. National Grid prohibits the carriers from locating on poles with excessive equipment and transformers, therefore they are unsuitable for collocation.

The pole selected and licensed by Verizon Wireless was tagged as MECO 19. The antenna will be mounted to the pole top which is 42 feet 6 inches. All the poles along the roadway in this area are approximately similar in height at 43 Feet.

A review of alternatives offer no options and there also is no adverse impact. This is a busy commercial area and the location of the antenna on this pole will serve businesses, commuters and local shoppers in the area.

Exhibit 7
Photo Simulations

Site Name: Marlborough MA
SC31 391559
Wireless Communication Facility
42.338489, -71.591241
Marlborough, MA 01752

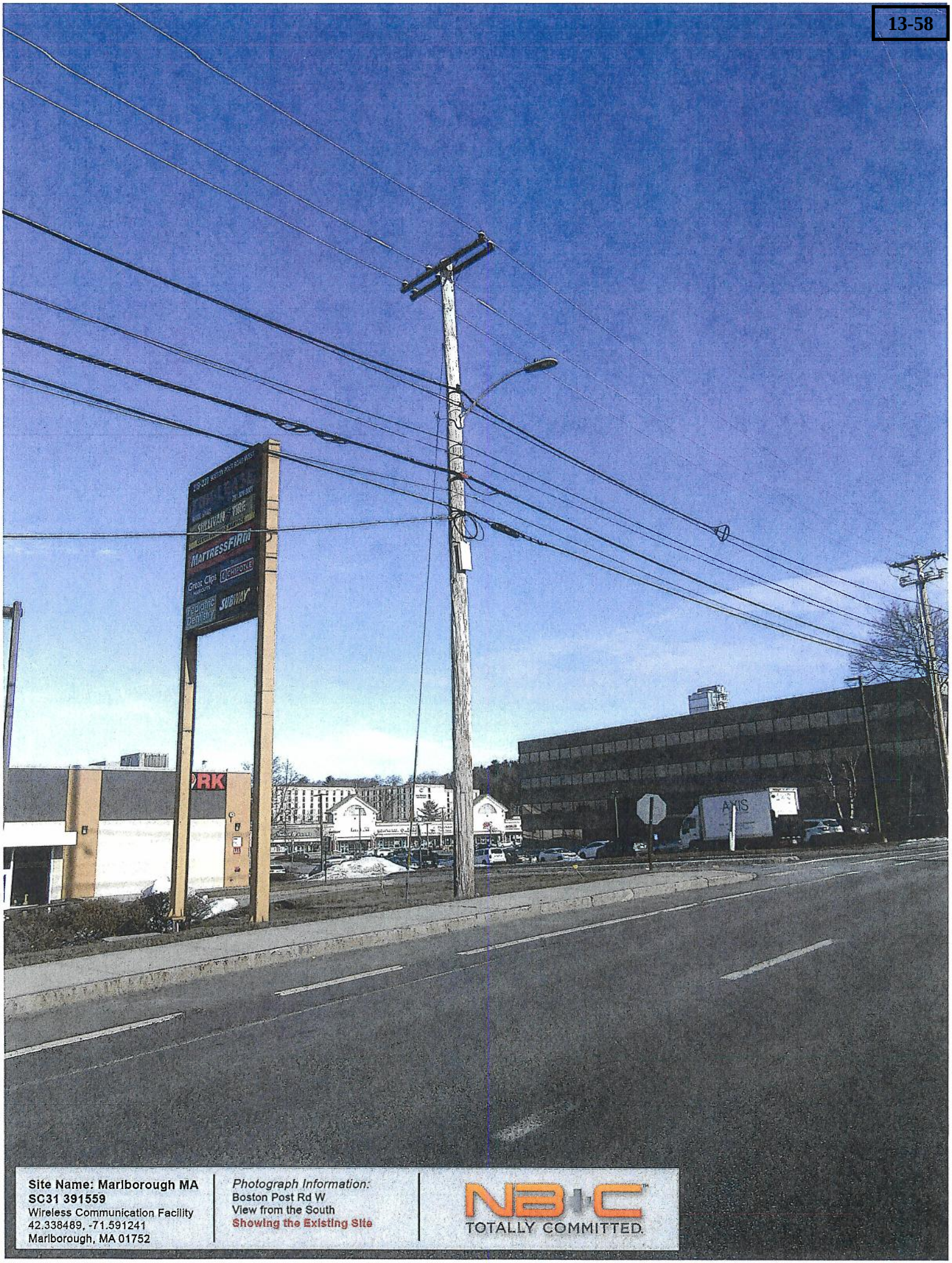
Photograph Information:
Boston Post Rd W
View from the East
Showing the Existing Site

NB+C™
TOTALLY COMMITTED.

Site Name: Marlborough MA
SC31 391559
Wireless Communication Facility
42.338489, -71.591241
Marlborough, MA 01752

Photograph Information:
Boston Post Rd W
View from the East
Showing the Proposed Site

NB+C
TOTALLY COMMITTED.



Site Name: Marlborough MA
SC31 391559
Wireless Communication Facility
42.338489, -71.591241
Marlborough, MA 01752

Photograph Information:
Boston Post Rd W
View from the South
Showing the Existing Site

NB+C
TOTALLY COMMITTED.

Site Name: Marlborough MA
SC31 391559
Wireless Communication Facility
42.338489, -71.591241
Marlborough, MA 01752

Photograph Information:
Boston Post Rd W
View from the South
Showing the Proposed Site

NB+C
TOTALLY COMMITTED.

Exhibit 8
Certificate of Liability Insurance

ACORD®

CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY) 11/23/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

Holder Identifier :

PRODUCER	CONTACT NAME:	
Aon Risk Services Northeast, Inc. New York NY Office One Liberty Plaza 165 Broadway, Suite 3201 New York NY 10006 USA	PHONE (A/C. No. Ext): (866) 283-7122	FAX (A/C. No.): (800) 363-0105
	E-MAIL ADDRESS:	

INSURED	INSURER(S) AFFORDING COVERAGE	NAIC #
Cellco Partnership dba Verizon Wireless 1095 Avenue of the Americas New York NY 10036 USA	INSURER A: National Union Fire Ins Co of Pittsburgh	19445
	INSURER B: AIU Insurance Company	19399
	INSURER C: American Home Assurance Co.	19380
	INSURER D: New Hampshire Insurance Company	23841
	INSURER E:	
	INSURER F:	

COVERAGES **CERTIFICATE NUMBER:** 570085019113 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS,

Limits shown are as requested

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY			GL1728890	06/30/2020	06/30/2021	EACH OCCURRENCE	$1,000,000
	CLAIMS-MADE X OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$2,000,000
	X XCU Coverage is Included						MED EXP (Any one person)	$10,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						PERSONAL & ADV INJURY	$1,000,000
	X POLICY PRO-JECT LOC						GENERAL AGGREGATE	$2,000,000
	OTHER:						PRODUCTS - COMP/OP AGG	$2,000,000
A	AUTOMOBILE LIABILITY			CA 4594298 AOS	06/30/2020	06/30/2021	COMBINED SINGLE LIMIT (Ea accident)	$1,000,000
A	X ANY AUTO			CA 4594299 MA	06/30/2020	06/30/2021	BODILY INJURY (Per person)	
A	OWNED AUTOS ONLY / SCHEDULED AUTOS						BODILY INJURY (Per accident)	
A	HIRED AUTOS ONLY / NON-OWNED AUTOS ONLY			CA 4594300 VA	06/30/2020	06/30/2021	PROPERTY DAMAGE (Per accident)	
A				See Next Page	06/30/2020	06/30/2021		
	UMBRELLA LIAB OCCUR						EACH OCCURRENCE	
	EXCESS LIAB CLAIMS-MADE						AGGREGATE	
	DED RETENTION							
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY			WC045886576 AOS	06/30/2020	06/30/2021	X PER STATUTE OTH-ER	
C	ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER (Mandatory in NH) Y/N: N	N/A		WC045886575 CA	06/30/2020	06/30/2021	E.L. EACH ACCIDENT	$1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE-EA EMPLOYEE	$1,000,000
							E.L. DISEASE-POLICY LIMIT	$1,000,000

Certificate No : 570085019113

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

RE: Verizon Wireless Small Cell locations in Marlborough, MA. City of Marlborough, MA is included as Additional Insured with respect to the General Liability.

CERTIFICATE HOLDER

City of Marlborough, MA
140 Main Street
Marlborough MA 01752 USA

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Aon Risk Services Northeast, Inc.

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AGENCY CUSTOMER ID: 570000027366
LOC #:

ADDITIONAL REMARKS SCHEDULE

AGENCY	NAMED INSURED
Aon Risk Services Northeast, Inc.	Cellco Partnership dba Verizon Wireless
POLICY NUMBER: See Certificate Numbe 570085019113	
CARRIER: See Certificate Numbe 570085019113 / NAIC CODE	EFFECTIVE DATE:

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,
FORM NUMBER: ACORD 25 **FORM TITLE:** Certificate of Liability Insurance

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER	
INSURER	
INSURER	
INSURER	

ADDITIONAL POLICIES If a policy below does not include limit information, refer to the corresponding policy on the ACORD certificate form for policy limits.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YYYY)	POLICY EXPIRATION DATE (MM/DD/YYYY)	LIMITS	
	AUTOMOBILE LIABILITY							
A				CA 4594301 NH - Primary	06/30/2020	06/30/2021		
A				CA 4594302 NH - Excess	06/30/2020	06/30/2021		
	WORKERS COMPENSATION							
B		N/A		WC045886579 NY	06/30/2020	06/30/2021		
B		N/A		WC045886577 FL	06/30/2020	06/30/2021		
D		N/A		WC045886578 MA,ND,OH,WI,WY	06/30/2020	06/30/2021		
B		N/A		WC045886574 NJ,TX,VA	06/30/2020	06/30/2021		

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Exhibit 9
Affidavit of Verizon Wireless

AFFIDAVIT OF VERIZON WIRELESS

The undersigned, in support of the application to install a wireless telecommunications facility consisting of multiple antennas and associated radio equipment on the existing wooden utility poles located in the City of Marlborough, Massachusetts, states the following:

1. My name is Sean Conway. I am the Small Cell Project Manager for Verizon Wireless in Massachusetts.
2. Verizon Wireless is a federally licensed provider of wireless communications services with a national footprint.
3. Verizon Wireless certifies that it will maintain the installations in good repair and in accordance to FCC standards.
4. Verizon Wireless certifies that it will remove the above identified installation not in such good repair, or not in use, within 60 days of being no longer in use.

Signed and sworn under the pains and penalties of perjury on November 24, 2020.

Sean Conway

Sean Conway
Engineer IV Specialist Real Estate / Regulatory
Verizon Wireless
118 Flanders Road, 3rd Floor
Westborough, MA 01581