# STATE OF CONNECTICUT CONNECTICUT SITING COUNCIL

PETITION NO.

IN RE:

A PETITION OF CELLCO PARTNERSHIP :

D/B/A VERIZON WIRELESS FOR A :

DECLARATORY RULING ON THE NEED TO

OBTAIN A SITING COUNCIL CERTIFICATE

FOR THE INSTALLATION OF A SMALL CELL TELECOMMUNICATIONS FACILITY :

AT 3039 MAIN STREET, GLASTONBURY,

CONNECTICUT : AUGUST 8, 2017

# PETITION FOR A DECLARATORY RULING: INSTALLATION HAVING NO SUBSTANTIAL ADVERSE ENVIRONMENTAL EFFECT

.

#### I. Introduction

Pursuant to Sections 16-50j-38 and 16-50j-39 of the Regulations of Connecticut State

Agencies ("R.C.S.A."), Cellco Partnership d/b/a Verizon Wireless ("Cellco") hereby petitions the

Connecticut Siting Council (the "Council") for a declaratory ruling ("Petition") that no

Certificate of Environmental Compatibility and Public Need ("Certificate") is required under

Section 16-50k(a) of the Connecticut General Statutes ("C.G.S.") to install a "small cell"

telecommunications facility at 3039 Main Street in Glastonbury, Connecticut (the "Property").

The Property is owned by Bidwell Associates LLC and is used for commercial purposes. Cellco

refers to the proposed facility as its "East Hartford SC5 Facility".

# II. Factual Background

The Property is an approximately 2.38-acre parcel in Glastonbury's Planned Business and Development (PBD) zone district. *See* Attachment 1 – Site Vicinity and Site Schematic Maps (Aerial Photograph). Cellco is licensed to provide wireless telecommunications services in the

700 MHz, 850 MHz, 1900 MHz and 2100 MHz frequency ranges in Glastonbury and throughout the State of Connecticut. Initially, the proposed East Hartford SC5 Facility will provide wireless service in Cellco's 1900 MHz frequency range only.

## A. Proposed East Hartford SC5 Facility

The proposed East Hartford SC5 Facility would consist of a small tower mast attached to the easterly portion of the roof of the building. The tower will support a single canister antenna (Model NH-360QS-DG F0M) and a remote radio head ("RRH") (Model B12-RRH4x30).

Additional equipment will be attached to the southerly façade of the building within a 5-foot by 8-foot leased area. The tower mast and antenna will extend to a height of approximately 28.8 feet above ground level (AGL); approximately 4.4 feet above the roof. (See Cellco's Project Plans included in Attachment 2). Power and telephone service to the East Hartford SC5 Facility will extend from existing service at the Property. Specifications for the East Hartford SC5 Facility antenna and RRH are included in Attachment 3.

#### III. Discussion

# A. The Proposed Facility Modifications Will Not Have A Substantial Adverse Environmental Effect

The Public Utility Environmental Standards Act (the "Act"), C.G.S. § 16-50g et seq., provides for the orderly and environmentally compatible development of telecommunications towers in the state to avoid "a significant impact on the environment and ecology of the State of Connecticut." C.G.S. § 16-50g. To achieve these goals, the Act established the Council, and requires a Certificate of Environmental Compatibility and Public Need for the construction of cellular telecommunication towers "that may, as determined by the Council, have a substantial adverse environmental effect". C.G.S. § 16-50k(a).

# Physical Environmental Effects

Cellco respectfully submits that the installation of a small tower mast attached to the roof, supporting a canister antenna and RRH and the installation of associated electrical equipment on the façade of the building, will not involve a significant alteration in the physical and environmental characteristics of the Property. No tree removal or ground disturbance is needed to install the proposed facility components. There are no wetland areas on or near the Property.

Therefore, no wetland impacts are anticipated.

## 2. Visual Effects

The visibility of the proposed "small cell" facility would be limited to locations within the Property and nearby portions of the Putnam Bridge Center, the adjacent commercial property to the south. (See Visual Assessment & Photo-Simulations ("Visual Assessment") included in <a href="https://doi.org/10.2016/j.center.org/">Attachment 4</a>). Based on the results of a Visual Assessment, Cellco has determined that the proposed "small cell" facility will not have an adverse visual impact on the views of the building or the character of the existing community.

## FCC Compliance

Radio frequency ("RF") emissions from the proposed installation will be far below the standards adopted by the Federal Communications Commission ("FCC"). Included in <a href="Mattachment 5"><u>Attachment 5</u></a> is a worst-case MPE calculation for Cellco's "small cell" antenna at a centerline height of 27.6 feet AGL. This calculation indicates that the East Hartford SC5 Facility will operate well within (33.67% of the standard) the RF emission standards established by the FCC.

# 4. FAA Summary Report

Included in <u>Attachment 6</u> of this Petition is a Federal Airways & Airspace Summary Report verifying that the new tower mast and antenna described in this Petition would not

constitute an obstruction or hazard to air navigation and that notification to the FAA is not required.

# B. Notice to the Town, Property Owner and Abutting Landowners

On August 8, 2017, a copy of this Petition was sent to Glastonbury Town Manager Richard Johnson and Bidwell Associates LLC, the owner of the Property. Because the Property is located on the East Hartford-Glastonbury town line, a courtesy copy of this filing was also sent to East Hartford's Mayor Marcia Leclerc. Notice of Cellco's intent to file the Petition was also sent to the owners of land that abuts the Property. Included in <u>Attachment 7</u> is a copy of the letter sent to Mr. Johnson, Bidwell Associates LLC and Mayor Leclerc. Included in <u>Attachment 8</u> is a sample abutter's letter and the list of those abutting landowners who were sent notice of the filing of the Petition.

## IV. Conclusion

Based on the information provided above, Cellco respectfully requests that the Council issue a determination in the form of a declaratory ruling that the installation of a small tower mast used to support a "small cell" wireless antenna and related radio equipment will not have a substantial adverse environmental effect and does not require the issuance of a Certificate of Environmental Compatibility and Public Need pursuant to § 16-50k of the General Statutes.

# Respectfully submitted,

CELLCO PARTNERSHIP d/b/a VERIZON WIRELESS

By

Kenneth C. Baldwin, Esq.

Robinson & Cole LLP 280 Trumbull Street

Hartford, CT 06103-3597

(860) 275-8200

Its Attorneys

# **ATTACHMENT 1**



#### Legend

- Proposed Verizon Wireless Small Cell Facility
- Surrounding Verizon Wireless Facilities

Municipal Boundary



# Site Vicinity Map

3,500

Proposed Small Cell Installation East Hartford SC5 CT 3039 Main Street Glastonbury, Connecticut

verizon/





Proposed Antenna

Proposed +/-8'x8' Equipment Lease Area

······ Proposed Underground Utility (to be determined)

Approximate Subject Property

Approximate Parcel Boundary (CTDEEP GIS)

Municipal Boundary



#### **Site Schematic**

Proposed Small Cell Installation East Hartford SC5 CT 3039 Main Street Glastonbury, Connecticut

verizon/



# **ATTACHMENT 2**

SITE NAME: EAST HARTFORD SC5 CT

**LOCATION ID: 399009** 

SITE ADDRESS: 3039 MAIN STREET

**GLASTONBURY, CT 06033** 

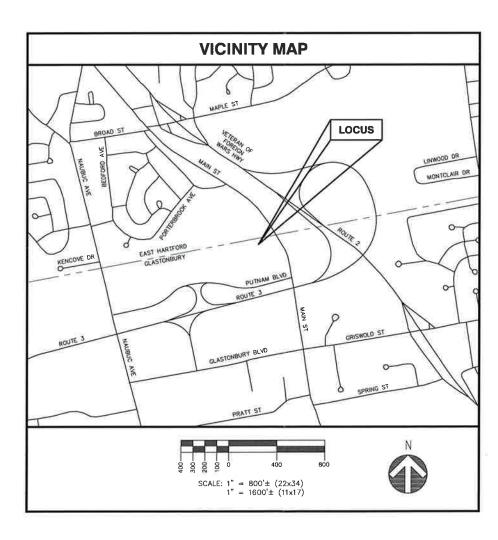
PROPOSED SMALL CELL CO-LO ROOFTOP ANTENNA

### **GENERAL NOTES**

- CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ENGINEER & OWNER REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME
- ALL UNDERGROUND UTILITY INFORMATION WAS DETERMINED FROM SURFACE INVESTIGATIONS AND EXISTING PLANS OF RECORD. THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES IN THE FIELD PRIOR TO ANY SITE WORK. CALL DIG-SAFE (888) 344-7233 72-HOURS PRIOR TO ANY EXCAVATION.
- NEW CONSTRUCTION WILL CONFORM TO ALL APPLICABLE CODES AND ORDINANCES: BUILDING CODE: 2016 CONNECTICUT STATE BUILDING CODE (2012 IBC) AND AMENDMENTS

ELECTRICAL CODE: 2014 NFPA 70, NEC WITH AMENDMENTS

- 4. PLANS FOR PERMITTING USE ONLY. NOT FOR CONSTRUCTION.
- THE TYPE, DIMENSIONS, MOUNTING HARDWARE, AND POSITIONS OF ALL PROJECT OWNER'S EQUIPMENT ARE SHOWN IN ILLUSTRATIVE FASHION. ACTUAL HARDWARE DETAILS AND FINAL LOCATIONS MAY DIFFER SLIGHTLY FROM WHAT IS SHOWN.
- 6. THE PROJECT OWNER'S FACILITY IS AN UNMANNED PRIVATE AND SECURED EQUIPMENT INSTALLATION. IT IS ONLY ACCESSED BY TRAINED TECHNICIANS FOR PERIODIC ROUTINE MAINTENANCE AND THEREFORE DOES NOT REQUIRE ANY WATER OR SANITARY SEWER SERVICE. THE FACILITY IS NOT GOVERNED BY REGULATIONS REQUIRING PUBLIC ACCESS PER ADA REQUIREMENTS.
- 7. THE DESIGN OF THE ANTENNA MOUNTING HARDWARE WILL MEET THE ANSI/EIA/TIA-222-G STANDARDS FOR STRUCTURAL STEEL ANTENNA SUPPORTING STRUCTURES AND STATE BUILDING CODE REQUIREMENTS. DETAILED CONSTRUCTION DRAWINGS AND STRUCTURAL CALCULATIONS WILL BE PREPARED BY A REGISTERED PROFESSIONAL ENGINEER AND SUBMITTED WITH A BUILDING PERMIT APPLICATION FOR REVIEW AND APPROVAL BY THE LOCAL BUILDING CODE ENFORCEMENT OFFICIAL.
- 8. ONCE THE FACILITY BECOMES FULLY OPERATIONAL, NORMAL AND ROUTINE MAINTENANCE BY CARRIER'S TECHNICIANS WILL BE PERFORMED. THE ESTIMATED VEHICULAR TRAFFIC GENERATED BY THESE VISITS IS PREDICTED TO BE LESS THAN THE TYPICAL TRAFFIC GENERATED BY A SINGLE-FAMILY DWELLING.
- PROTERRA DESIGN GROUP, LLC HAS NOT PERFORMED A BOUNDARY
  RE-TRACEMENT OR ON THE GROUND PROPERTY SURVEY. THE DIMENSIONS
  DEPICTED ARE BASED UPON COMPILED SOURCES AND MAY CHANGE BASED
  UPON THE RESULTS OF AN ON-THE-GROUND SURVEY OR AS MORE
  ACCURATE SURVEY DATA MAY ALLOW.



#### **PROJECT INFORMATION** 3039 MAIN STREET SITE ADDRESS: GLASTONBURY, CT 06033 COUNTY: HARTFORD 41° 43' 37.09"± N (41.726969) (FROM 2C SURVEY) LATITUDE: LONGITUDE: 72° 37' 02.97"± W (-72.617492) (FROM 2C SURVEY) GROUND ELEVATION: 34.0'± (FROM 2C SURVEY) NAD83 & NAVD88 DATUMS: BIDWELL ASSOCIATES LLC 3180 HEBRON AVENUE GLASTONBURY, CT 06033 PROPERTY OWNER: VERIZON SITE NAME: EAST HARTFORD SC5 CT CELLCO PARTNERSHIP APPLICANT: d/b/a VERIZON WIRELESS 99 EAST RIVER DRIVE EAST HARTFORD, CT 06108 SITE ENGINEER: PROTERRA DESIGN GROUP, LLC 4 BAY ROAD BUILDING A; SUITE 200 HADLEY, MA 01035 (413) 320-4918 **DRAWING INDEX**

DESCRIPTION

TITLE SHEET

**DETAILS** 

ABUTTERS MAP

ROOF PLAN & ELEVATION

SHEET

T-1

A-1

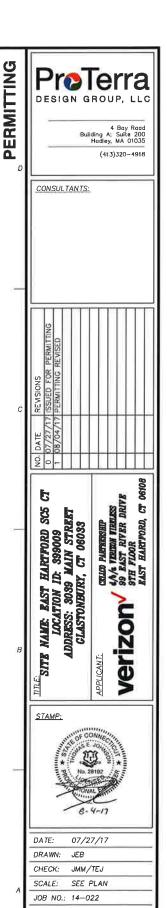
D-1

REVISION

1

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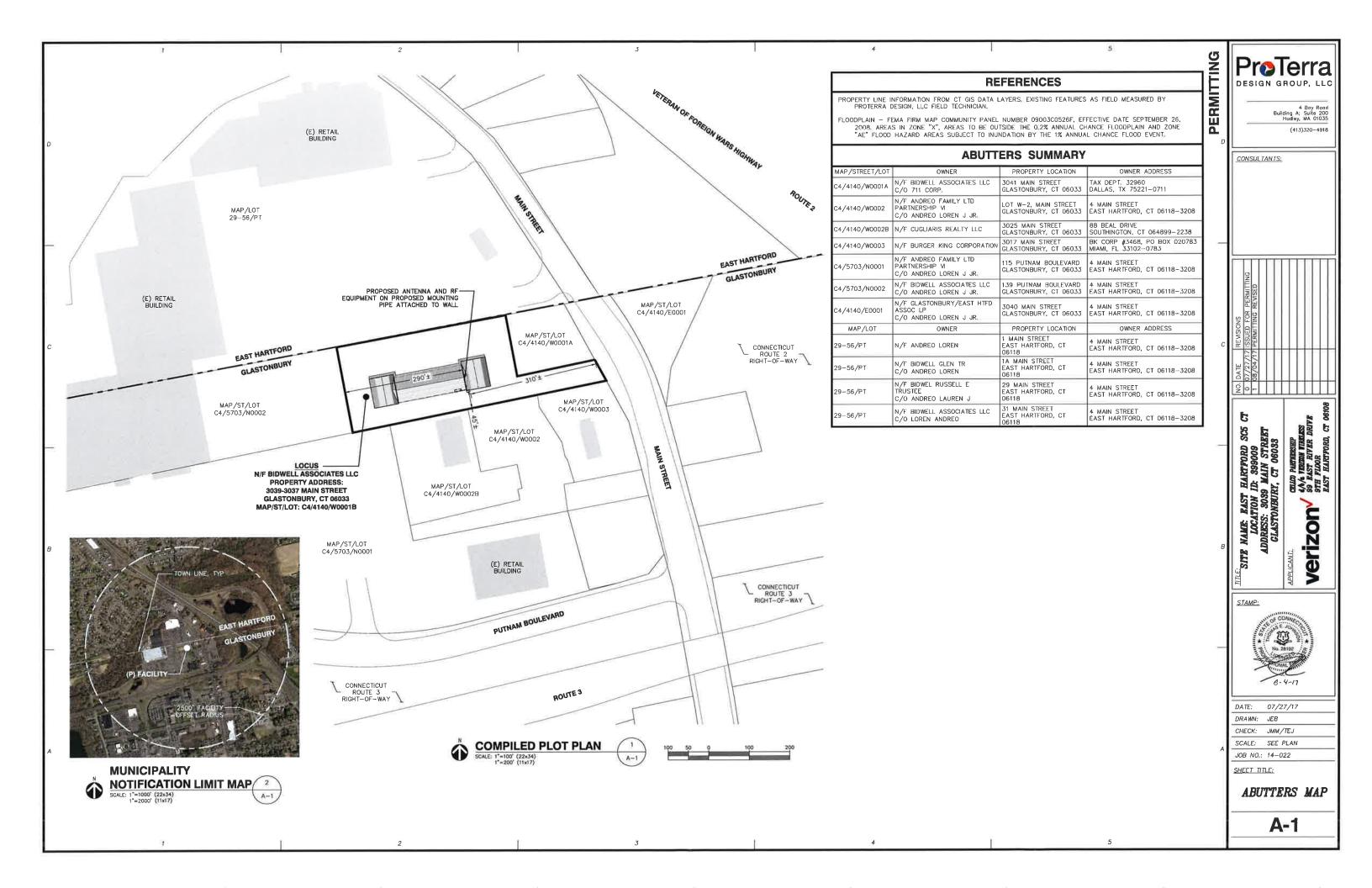
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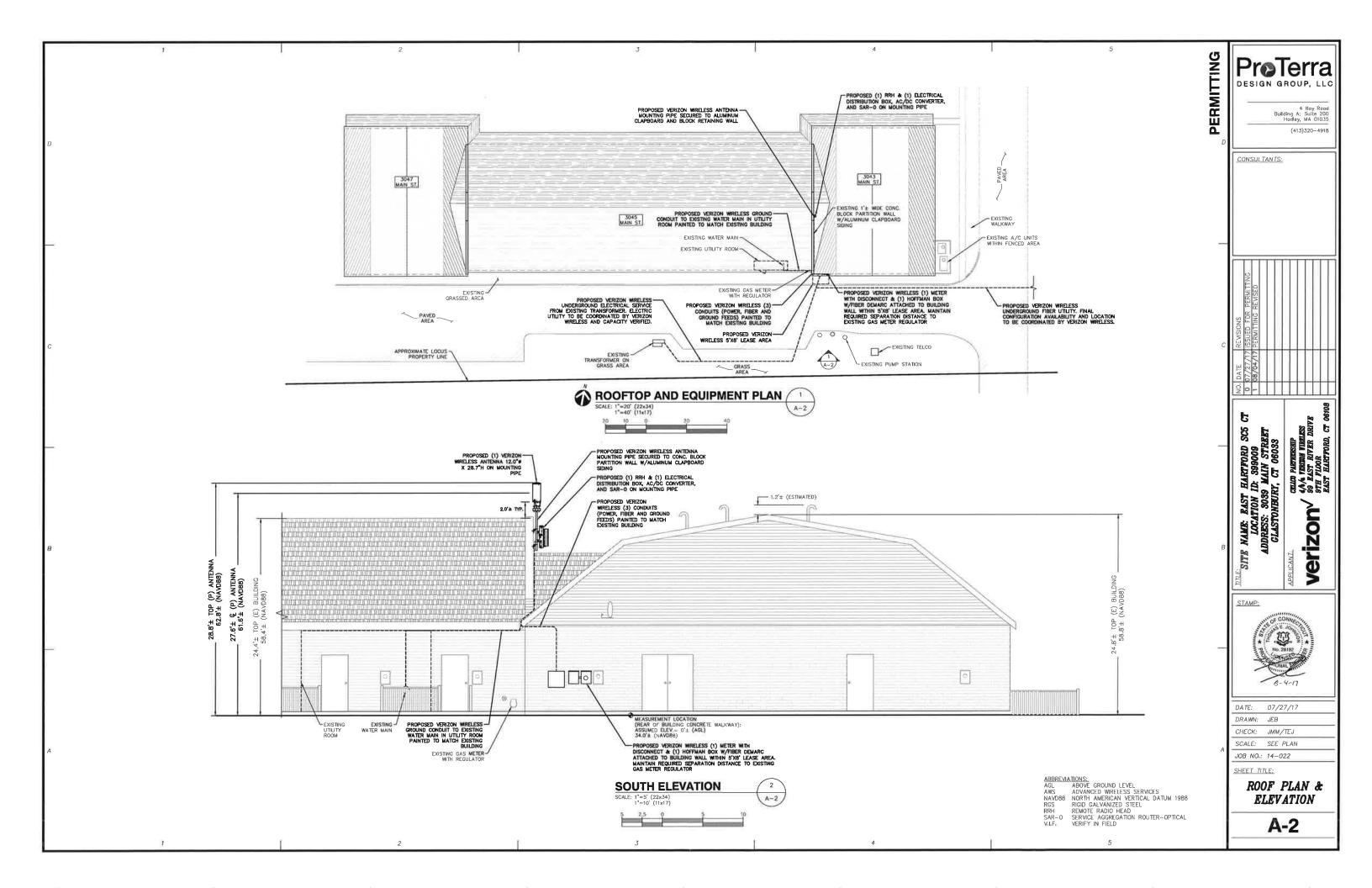


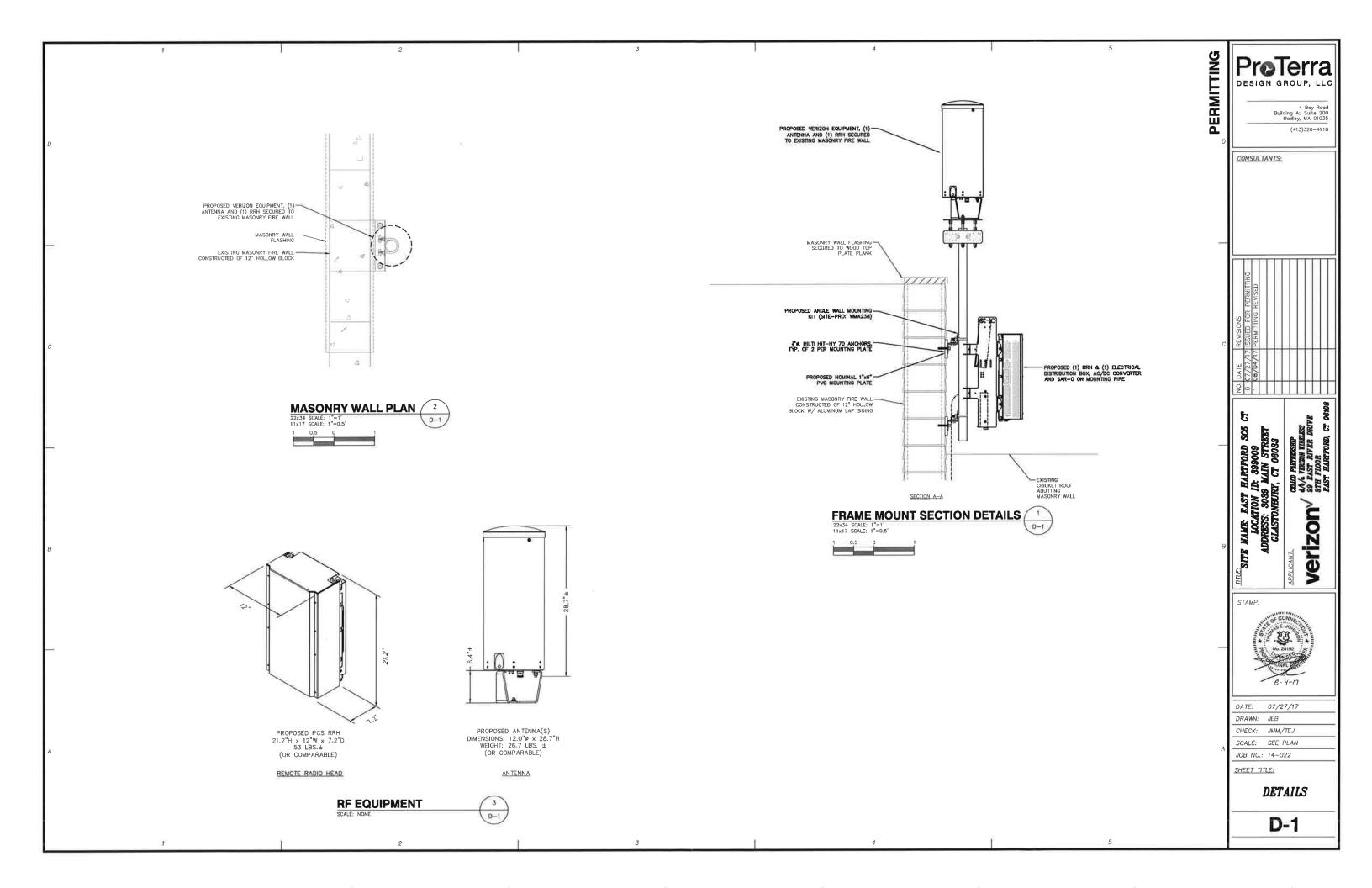
SHEET TITLE:

TITLE SHEET

T-1







# **ATTACHMENT 3**

# Product Specifications









## NH360QS-DG-F0M

Andrew® Dualband Quasi Omni Metro Cell Antenna, 698-896 and 1710-2170 MHz with fixed tilt in the low band and manual tilt in the high band. Contains internal diplexer and active GPS L1 band antenna

# **Electrical Specifications**

| Frequency Band, MHz                  | 698-806    | 806-896    | 1710-1880  | 1850-1990  | 1920-2170  |
|--------------------------------------|------------|------------|------------|------------|------------|
| Gain, dBi                            | 4.2        | 5.0        | 8.0        | 8.1        | 8.0        |
| Beamwidth, Horizontal, degrees       | 360        | 360        | 360        | 360        | 360        |
| Beamwidth, Vertical, degrees         | 35.4       | 35.6       | 15.1       | 14.0       | 13.3       |
| Beam Tilt, degrees                   | 0          | 0          | 0-16       | 0-16       | 0-16       |
| USLS, dB                             | 13         | 13         | 10         | 13         | 10         |
| Isolation, dB                        | 25         | 25         | 25         | 25         | 25         |
| VSWR   Return Loss, dB               | 1.5   14.0 | 1.5   14.0 | 1.5   14.0 | 1.5   14.0 | 1.5   14.0 |
| PIM, 3rd Order, 2 x 20 W, dBc        | -153       | -153       | -153       | -153       | -153       |
| Input Power per Port, maximum, watts | 125        | 125        | 125        | 125        | 125        |
| Polarization                         | ±45°       | ±45°       | ±45°       | ±45°       | ±45°       |
| Impedance                            | 50 ohm     |

# **Electrical Specifications, BASTA\***

| Frequency Band, MHz Gain by all Beam Tilts, average, dBi Gain by all Beam Tilts Tolerance, dB | <b>698-806</b><br>4.2<br>±1 | <b>806-896</b><br>4.8<br>±0.7 | <b>1710-1880</b> 7.6 ±0.6 | 1850-1990<br>7.8<br>±0.7 | 1920-2170<br>7.9<br>±0.8 |
|---|-----------------------------|-------------------------------|---------------------------|--------------------------|--------------------------|
|   |                             |                               | 0 °   7.9                 | 0 °   8.0                | 0 °   8.3                |
| Gain by Beam Tilt, average, dBi   |                             |                               | 8° 7.7                    | 8° 7.9                   | 8 °   8.0                |
| ,   |                             |                               | 16 °   7.2                | 16 °   7.3               | 16 °   7.5               |
| Beamwidth, Vertical Tolerance, degrees<br>USLS, dB  | ±4.2<br>14                  | ±5.8<br>13                    | ±1.3<br>14                | ±1<br>14                 | ±1.2<br>12               |

<sup>\*</sup> CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, download the whitepaper Time to Raise the Bar on BSAs.

## **General Specifications**

Antenna Brand Andrew®
Antenna Type Metro Cell
Band Multiband
Brand DualPol®

Operating Frequency Band 1710 - 2170 MHz | 698 - 896 MHz

Internal GPS frequency band 1575.42 MHz

Internal GPS VSWR 1.9

Performance Note Outdoor usage

# **Mechanical Specifications**

# Product Specifications



ANDREW

**POWERED BY** 

#### NH360QS-DG-F0M

Color Light gray

GPS Connector Interface 4.1-9.5 DIN Female

GPS Connector Quantity 1

Lightning Protection dc Ground

Radiator Material Aluminum | Low loss circuit board

Radome Material ASA
Reflector Material Aluminum

RF Connector Interface 7-16 DIN Female

RF Connector Location Bottom

RF Connector Quantity, total 2

Wind Loading, maximum 167.0 N @ 150 km/h

37.5 lbf @ 150 km/h

Wind Speed, maximum 241.0 km/h | 149.8 mph

#### **Dimensions**

 Length
 728.0 mm | 28.7 in

 Outer Diameter
 305.0 mm | 12.0 in

 Net Weight
 12.1 kg | 26.7 lb

# **Regulatory Compliance/Certifications**

#### Agency

RoHS 2011/65/EU

China RoHS SJ/T 11364-2006

ISO 9001:2008

#### Classification

Compliant by Exemption

Above Maximum Concentration Value (MCV)

Designed, manufactured and/or distributed under this quality management system





#### \* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

# **ALCATEL-LUCENT B25 RRH4X30**

Alcatel-Lucent Band 25 Remote Radio Head 4x30W is the new addition of Remote Radio Head to the extended product line of Alcatel-Lucent's distributed Base Station solutions, aimed at facilitating smooth RF site acquisition and related civil engineering.

**Supporting 2Tx/4Tx MIMO and 4-way Rx diversity**, Alcatel-Lucent B25 RRH4x30 allows operators to have a compact radio solution to deploy LTE in the PCS band (1.9 GHz, 3GPP band 25), providing them with the means to achieve high capacity, high quality and high coverage with minimum site requirements.

The Alcatel-Lucent B25 RRH4x30 product has four transmit RF paths, offering the possibility to **select, via software only, 2Tx or 4Tx MIMO configurations** with either 2x60 W or 4x30 W RF output power. It supports also 4-way Rx diversity, LTE carriers from 3 MHz up to 20 MHz and up to 65 MHz instantaneous bandwidth.

The Alcatel-Lucent B25 RRH4x30 is a near zero-footprint solution and operates noise free, simplifying negotiations with site property owners and minimizing environmental impacts.

Its compactness and slim design makes the Alcatel-Lucent B25 RRH4x30 easy to install close to the antenna: operators can therefore locate this Remote Radio Head where RF design conditions are deemed ideal, minimizing trade-offs between available sites and RF optimum sites, together with reducing the RF feeder needs and installation costs.

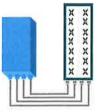


#### FEATURES

- Supporting LTE in 1.9 GHz band (PCS, 3GPP band 2 & 25)
- LTE 2Tx or 4Tx MIMO (SW switchable)
- Output power: Up to 2x60W or 4x30W
- Ready for 3, 5, 10, 15 or 20MHz LTE carrier operation with 4Rx Diversity
- Ready to support up to 4 carriers anywhere in 65MHz instantaneous bandwidth
- Convection-cooled (fan-less)
- Supports AISG 2.0 devices (RET, TMA) through RS485 or RF ports

#### BENEFITS

- · Compact to reduce additional footprint when adding LTE in PCS band
- MIMO scheme operation selection (2Tx or 4Tx) by software only
- · Full flexibility for multiple carriers operation over entire PCS spectrum
- Improves downlink spectral efficiency and cell edge throughput through MIMO4
- Increases LTE coverage thanks to 4-way Rx diversity capability and best in class Rx sensitivity
- Flexible mounting options (Pole or Wall)



4x30W with 4T4R or 2x60W with 2T4R

Can be switched between modes via SW w/o site visit



#### TECHNICAL SPECIFICATIONS

|  | Features & performance   |
|--|--|
| Number of TX/RX paths  | 4 duplexed (either 4T4R or 2T4R by SW)   |
| Frequency band   | 3GPP bands 2 & 25 (PCS-G) DL: 1930 - 1995 MHz UL: 1850 - 1915 MHz  |
| Instantaneous bandwidth - #carriers  | 65MHz – Up to 4 LTE carriers (in 40MHz occupied bandwidth)   |
| LTE carrier bandwidth  | 3, 5, 10, 15 or 20 MHz   |
| RF output power  | 2x60W or 4x30W (by SW)   |
| Noise figure (3GPP band 2)  RX Diversity scheme  | 2.0 dB typ. (<2.5 dB max) 2 or 4 way Rx diversity  |
| Sizes (HxWxD)(w/ solar shield) in mm (in.) Volume (w/ solar shield) in L Weight (w/ solar shield) in kg (lb) | 538 x 304 x 182 (21.2" x 12.0" x 7.2")<br>30<br>24 (53)  |
| DC voltage range DC power consumption  | -40.5 to -57V at full performance, -38 to -57V with relaxation on power consumption 580W typical @100% RF load |
| Environmental conditions  Wind load (@150km/h or 93mph)  | -40°C (-40°F) /+55°C (+131°F) IP65 Frontal:<200N / Lateral :<150N  |
| Antenna ports  | 4 ports 7/16 DIN female (50 ohms)  VSWR < 1.5 (> 14dB)   |
| CPRI ports   | 2 CPRI ports (HW ready for Rate7 / 9.8 Gbps)   |
| AISG interfaces  | 1 AISG2.0 output (RS485), +24V/2A DC power Integrated Smart Bias Tees (x2)                                     |
| Misc, Interfaces   | 1 external alarms connector (4 alarms) 4 RF Tx & 4 RF Rx monitor ports 1 DC connector (2 pins)                 |
| Installation conditions  | Pole and wall mounting   |
| Regulatory compliance  | 3GPP 36.141 / 3GPP 36.113 / GR-1089-CORE / GR-3108-CORE / UL 60950-1 / FCC Part 27                             |

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# **ATTACHMENT 4**

# Visual Assessment & Photo-Simulations

EAST HARTFORD SC5 3039 MAIN STREET PUTNAM BRIDGE CENTER GLASTONBURY, CT 06033 All-Points Technology Corporation, P.C. 3 Saddlebrook Drive Killingworth, CT 06419

Prepared for Verizon Wireless



# **VISUAL ASSESSMENT & PHOTO-SIMULATIONS**

At the request of Cellco partnership LLC d/b/a Verizon Wireless, All-Points Technology Corporation, P.C. ("APT") completed this visual assessment and prepared computer-generated photo-simulations depicting the proposed installation of a small cell wireless telecommunications facility ("Facility") at 3039 Main Street in Glastonbury, Connecticut (the "Host Property").

## **Project Setting**

The Host Property, part of the Putnam Bridge Center, is located on the western side of Main Street, north of Putnam Boulevard and Connecticut Route 3 and west of Connecticut Route 2. The municipal boundary of East Hartford lies immediately north of the Host Property. The surrounding land use is a mix of medium density commercial development to the south with residential communities more prevalent to north and east. See Figure 1 – Site Location Map.

The proposed Facility would include one (1) panel antenna and one (1) remote radio head ("RRH") pipe mounted to the existing concrete block partition wall on the east side of the building. The height of the proposed Facility would be ±28.8 feet above ground level ("AGL"), extending approximately 4.4 feet above the building's highest roof line. Utilities would be routed underground from existing underground utilities located within the Putnam Bridge Center to a proposed wall mounted Hoffman Box located on the southeastern portion of the building. Utilities housed within conduit would then traverse the building's southern exterior to allow for connection to the proposed Facility. The proposed conduit would be painted to match the existing buildings façade. The Facility components and their locations are illustrated in *Figure 2 – Proposed Equipment Location and Elevation Plan*.

# Methodology

On July 12, 2017, APT personnel conducted a field reconnaissance and photo-documented existing conditions. At each photo location, the geographic coordinates of the camera's position were logged using global positioning system ("GPS") technology. Photographs were taken with a Canon EOS 6D digital camera body and Canon EF 24 to 105 millimeter ("mm") zoom lens using a focal length of 50 mm for consistency.

Three-dimensional computer models were developed for the building and proposed Facility components from AutoCAD information. Photographic simulations were then generated to portray scaled renderings of the proposed installation. Using field data, site plan information and image editing software, the proposed Facility was scaled to the correct location and height, relative to the existing structure and surrounding area.



#### Legend

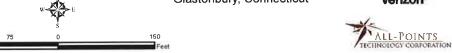
Approximate Subject Property
Approximate Parcel Boundary (CTDEEP GIS)

Municipal Boundary

# Figure 1 – Site Location Map

Proposed Small Cell Installation East Hartford SC5 CT 3039 Main Street Glastonbury, Connecticut

verizon



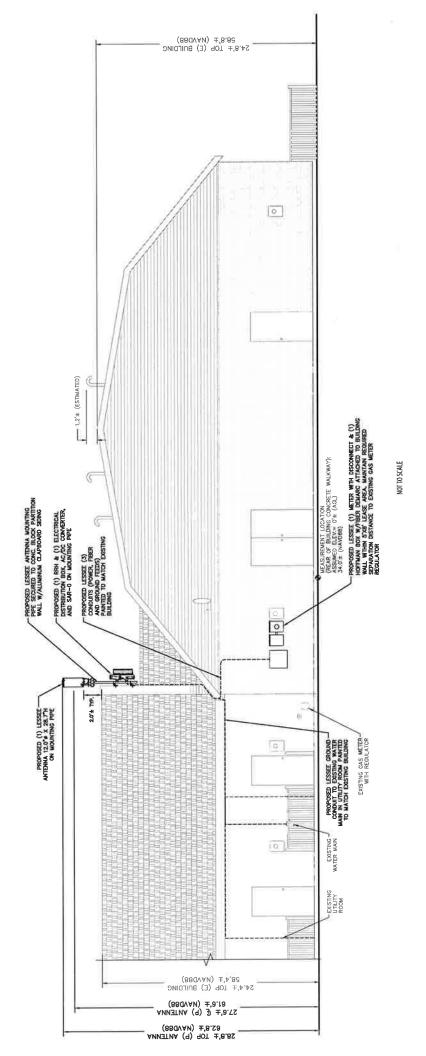


FIGURE 2: PROPOSED EQUIPMENT LOCATION AND ELEVATION PLAN

Details extracted from technical drawings provided by Pro Terra Design Group, LLC dated 7-27-17.

## **Photograph Locations**

Four (4) photo-locations were simulated and present generally unobstructed view lines towards at least a portion of the proposed installation(s). The table below summarizes characteristics of the photographs and simulations presented in the attachment to this report including a description of each location, view orientation, and the distance from where the photo was taken relative to the proposed Facility. A photo-log map depicting the photo locations and corresponding photo-simulations are provided in the attachment to this report.

|   | Location          | Orientation | to Site   |
|---|-------------------|-------------|-----------|
| 1 | Host Property     | Southeast   | ±288 Feet |
| 2 | Host Property     | Northeast   | ±222 Feet |
| 3 | Adjacent Property | Northwest   | ±197 Feet |
| 4 | Host Property*    | Northwest   | ±90 Feet  |

#### Conclusions

The visibility of the proposed Facility would be limited to locations primarily within the Host Property and nearby portions of the Putnam Bridge Center. The location and design of the proposed Facility would allow for it to blend in with existing equipment and appurtenances already occupying portions of the building and would be barely discernible as a telecommunications site.

Based on the results of this assessment, it is our opinion that the proposed installation of the Verizon Wireless Facility will not have an adverse visual impact on existing views of this building or the character of the community.

#### Limitations

The photo-simulations provide a representation of the Facility under similar settings as those encountered during the reconnaissance. They are however static in nature and do not necessarily fairly characterize the prevailing views from all locations within a given area. Views of the Facility can change throughout the seasons and the time of day, and are dependent on weather and other atmospheric conditions (e.g., haze, fog, clouds); the location, angle and intensity of the sun; and the specific viewer location.

# **Attachments**

Putnam Blvd

**@** 

回

Site

Legend

Site













ALL-POINTS
TECHNOLOGY CORPORATION

DISTANCE TO SITE +/- 288 FEET ORIENTATION SOUTHEAST **HOST PROPERTY** LOCATION

**PROPOSED** 

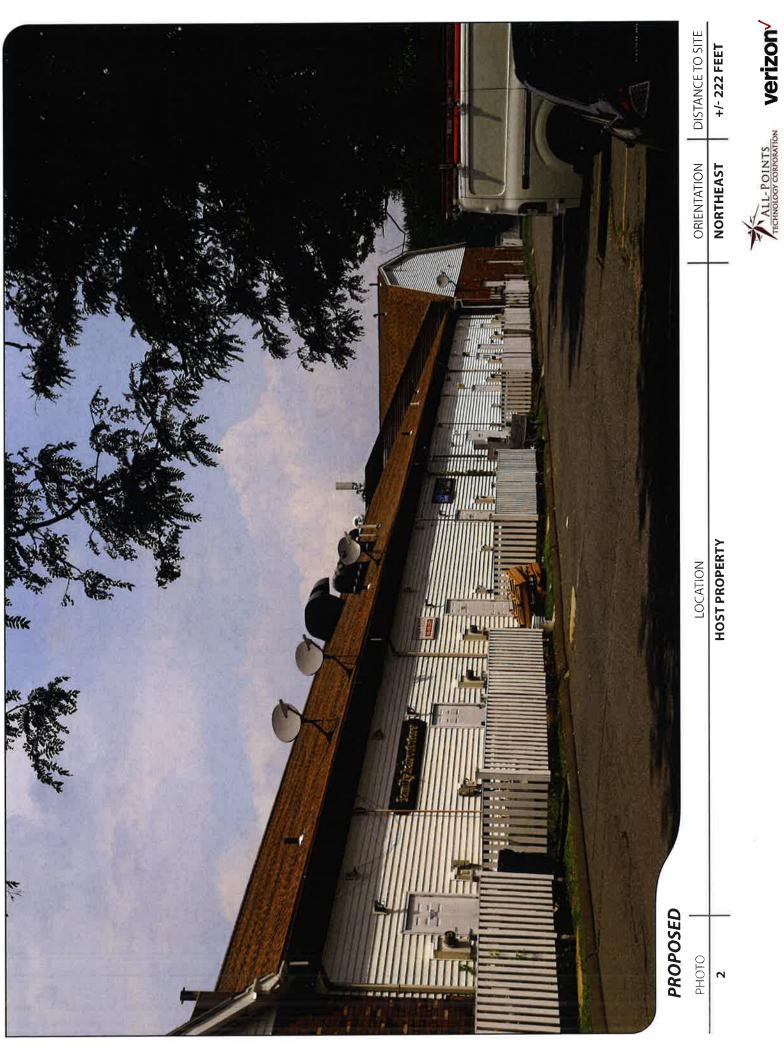
PHOTO

















HOST PROPERTY



















# **ATTACHMENT 5**

Site Name: East Hartford SC 5, CT Cumulative Power Density

| Operator     | Operating Frequency | Number<br>of Trans. | ERP Per<br>Trans. | Total   | Distance to<br>Target |           | Calculated Maximum Power Permissable Density Exposure* | Fraction<br>of MPE |
|--------------|---------------------|---------------------|-------------------|---------|-----------------------|-----------|--|--------------------|
|              | (MHz)               |                     | (watts)           | (watts) | (feet)                | (mW/cm^2) | (mW/cm^2) (mW/cm^2)                                    | (%)                |
| VZW PCS      | 1970                | 1                   | 208               | 708     | 27.5                  | 0.3367    | 1.0  | 33.67%             |
| VZW Cellular | 698                 |                     |                   |         |                       |           |  |                    |
| VZW AWS      | 2145                |                     |                   |         |                       |           |  |                    |
| VZW 700      | 746                 |                     |                   |         |                       |           |  |                    |

Total Percentage of Maximum Permissible Exposure

33.67%

\*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Section 1.13101 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992

MHz = Megahertz

mW/cm^2 = milliwatts per square centimeter

ERP = Effective Radiated Power

Absolute worst case maximum values used, including the following assumptions:

- 1. closest accessible point is distance from antenna to base of pole;
- 2. continuous transmission from all available channels at full power for indefinite time period; and,
  - 3. all RF energy is assumed to be directed solely to the base of the pole.

# **ATTACHMENT 6**

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Federal Airways & Airspace Summary Report: New Construction Non-Antenna Structure \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Airspace User: Mark Brauer File: EAST HARTFORD SC 5 CT Location: Hartford, CT Latitude: 41°-43'-37.14" Longitude: 72°-33'-3.00" SITE ELEVATION AMSL.....55 ft. STRUCTURE HEIGHT.....28 ft. OVERALL HEIGHT AMSL....83 ft. SURVEY HEIGHT AMSL.....83 ft. NOTICE CRITERIA FAR 77.9(a): NNR (DNE 200 ft AGL) FAR 77.9(b): NNR (DNE Notice Slope) FAR 77.9(c): NNR (Not a Traverse Way) NNR FAR 77.9 IFR Straight-In Notice Criteria for HFD FAR 77.9: NNR FAR 77.9 IFR Straight-In Notice Criteria for 9B8 FAR 77.9: FAR 77.9(d): NNR (Off Airport Construction) NR = Notice Required NNR = Notice Not Required PNR = Possible Notice Required (depends upon actual IFR procedure) For new construction review Air Navigation Facilities at bottom of this report. Notice to the FAA is not required at the analyzed location and height for slope, height or Straight-In procedures. Please review the 'Air Navigation' section for notice requirements for offset IFR procedures and EMI.

#### OBSTRUCTION STANDARDS

FAR 77.17(a)(1): DNE 499 ft AGL

FAR 77.17(a)(2): DNE - Airport Surface

FAR 77.19(a): DNE - Horizontal Surface

FAR 77.19(b): DNE - Conical Surface

FAR 77.19(c): DNE - Primary Surface

FAR 77.19(d): DNE - Approach Surface

#### FAR 77.19(e): DNE - Transitional Surface

VFR TRAFFIC PATTERN AIRSPACE FOR: HFD: HARTFORD-BRAINARD RD: 26948.17 RE: 12 Type: A FAR 77.17(a)(1): DNE

DNE - Height No Greater Than 200 feet AGL. VFR Horizontal Surface: DNE VFR Conical Surface: DNE VFR Approach Slope: DNE VFR Transitional Slope: DNE VFR TRAFFIC PATTERN AIRSPACE FOR: 9B8: SALMON RIVER AIRFIELD Type: A RD: 57336.59 RE: 535.6 DNE FAR 77.17(a)(1): FAR 77.17(a)(2): Does Not Apply. VFR Horizontal Surface: DNE VFR Conical Surface: DNE VFR Approach Slope: VFR Transitional Slope: DNE TERPS DEPARTURE PROCEDURE (FAA Order 8260.3, Volume 4) FAR 77.17(a)(3) Departure Surface Criteria (40:1) DNE Departure Surface MINIMUM OBSTACLE CLEARANCE ALTITUDE (MOCA) FAR 77.17(a)(4) MOCA Altitude Enroute Criteria The Maximum Height Permitted is 1885 ft AMSL PRIVATE LANDING FACILITIES BEARING RANGE DELTA FACIL ARP FAA To FACIL IN NM IDENT TYP NAME ELEVATION IFR \_\_\_\_\_ \_\_\_\_\_ 1.88 -21 241.92 CT38 HEL CORPORATE CENTER No Impact to Private Landing Facility Structure 0 ft below heliport. 294.44 3.82 +35 CT88 HEL RENTSCHLER No Impact to Private Landing Facility Structure is beyond notice limit by 18211 feet. 190.99 5.04 5CT3 HEL SOUTH GLASTONBURY -467 No Impact to Private Landing Facility Structure 0 ft below heliport.

186.3 5.11

-637
No Impact to Private Landing Facility
Structure 7 ft below heliport.

CT02 HEL CLARK HILL

CT62 HEL TWIN MANUFACTURING COMPANY 331.97 5.62 +23
No Impact to Private Landing Facility
Structure is beyond notice limit by 29148 feet.

OCT9 HEL HARTFORD HOSPITAL

286.05 5.97

-128

-.1

No Impact to Private Landing Facility Structure 6 ft below heliport.

|      | AIR | NAVIGATION | ELECTRONI | C FA  | CILITIES |        |             |    |      |
|------|-----|------------|-----------|-------|----------|--------|-------------|----|------|
|      | FP  | √C         | ST        |       |          | DIST   | DELTA       |    |      |
| GRND | APO | CH         |           |       |          |        |             |    |      |
|      |     |            |           | 70.00 | TTTCTCT  | (£ L \ | TOT TOY 7.7 | СШ | TOGI |

IDNT TYPE AT FREQ VECTOR (ft) ELEVA ST LOCATION
ANGLE BEAR

HFD LOCALIZER I 109.7 274.39 27536 +72 CT RWY 02

HARTFORD-B .15 2

HFD ATCT Y A/G 276.06 27631 +8 CT

HARTFORD-BRAINARD .02

HFD VOR/DME R 114.9 178.29 31314 -766 CT HARTFORD

-1.4

BDL RADAR ON 335.09 85035 -153 CT BRADLEY INTL

No Impact. This structure does not require Notice based upon EMI. The studied location is within 20 NM of a Radar facility. The calculated Radar Line-Of-Sight (LOS) distance is: 30 NM. This location and height is within the Radar Line-Of-Sight.

| 0.5   | BDL | VORTAC  | D | 109.0 | 334.35 | 86549  | -77  | СТ | BRADLEY   |
|-------|-----|---------|---|-------|--------|--------|------|----|-----------|
| 05    | MAD | VOR/DME | R | 110.4 | 194.37 | 155438 | -137 | CT | MADISON   |
| 05    | ORW | VOR/DME | I | 110.0 | 112.59 | 163063 | -227 | CT | NORWICH   |
| 08    | BAF | VORTAC  | R | 113.0 | 344.21 | 164762 | -184 | MA | BARNES    |
| 06    | CEF | VORTAC  | R | 114.0 | 2.22   | 171598 | -158 | MA | WESTOVER  |
| = .05 | HVN | VOR/DME | R | 109.8 | 208.3  | 192504 | +77  | CT | NEW HAVEN |
| .02   | GON | VOR/DME | R | 110.8 | 136.78 | 198852 | +74  | CT | GROTON    |
| .02   | PUT | VOR/DME | R | 117.4 | 66.39  | 209812 | -569 | CT | PUTNAM    |
| 16    |     |         |   |       |        |        |      |    |           |

CFR Title 47, §1.30000-§1.30004

AM STUDY NOT REQUIRED: Structure is not near a FCC licensed AM

Movement Method Proof as specified in §73.151(c) is not required. Please review 'AM Station Report' for details.

Nearest AM Station: WNEZ @ 5480 meters.

Airspace® Summary Version 17.5.450

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06-06-2017 14:16:03

# **ATTACHMENT 7**

### Robinson+Cole

KENNETH C. BALDWIN

280 Trumbull Street Hartford, CT 06103-3597 Main (860) 275-8200 Fax (860) 275-8299 kbaldwin@rc.com Direct (860) 275-8345

Also admitted in Massachusetts

August 8, 2017

#### Via Certificate of Mailing

Richard J. Johnson, Town Manager Town of Glastonbury 2155 Main Street Glastonbury, CT 06033

Re: Proposed Installation of a Wireless Telecommunications Facility at 3039 Main Street, Glastonbury, Connecticut

Dear Mr. Johnson:

This firm represents Cellco Partnership d/b/a Verizon Wireless ("Cellco"). Today, Cellco filed a Petition for Declaratory Ruling ("Petition") with the Connecticut Siting Council ("Council") seeking approval to install a new small cell wireless telecommunications facility at 3039 Main Street in Glastonbury (the "Property"). The facility will consist of a small tower mast attached to the building and supporting a canister antenna and a remote radio head. The top of the antenna would extend to a height of approximately 28.8 feet above grade, approximately 4.4 feet above the roof of the building. Equipment associated with the antenna would be attached to the southerly façade of the building.

A full copy of the Petition is attached for your review. In accordance with Council requirements, abutting landowners were also sent notice of this filing and a copy of the Petition.

16857856-v1

## Robinson Cole

Richard J. Johnson, Town Manager August 8, 2017 Page 2

Please contact me if you have any questions regarding this proposal.

Sincerely,

Kenneth C. Baldwin

### Robinson+Cole

KENNETH C. BALDWIN

280 Trumbull Street Hartford, CT 06103-3597 Main (860) 275-8200 Fax (860) 275-8299 kbaldwin@rc.com Direct (860) 275-8345

Also admitted in Massachusetts

August 8, 2017

#### Via Certificate of Mailing

Bidwell Associates c/o Bidwell Industries 3180 Hebron Avenue Glastonbury, CT 06033

Re: Proposed Installation of a Wireless Telecommunications Facility at 3039 Main Street, Glastonbury, Connecticut

Dear Sir or Madam:

This firm represents Cellco Partnership d/b/a Verizon Wireless ("Cellco"). Today, Cellco filed a Petition for Declaratory Ruling ("Petition") with the Connecticut Siting Council ("Council") seeking approval to install a new small cell wireless telecommunications facility at 3039 Main Street in Glastonbury (the "Property"). The facility will consist of a small tower mast attached to the building and supporting a canister antenna and a remote radio head. The top of the antenna would extend to a height of approximately 28.8 feet above grade, approximately 4.4 feet above the roof of the building. Equipment associated with the antenna would be attached to the southerly façade of the building.

A full copy of the Petition is attached for your review. In accordance with Council requirements, abutting landowners were also sent notice of this filing and a copy of the Petition.

16857861-v1

## Robinson Cole

Bidwell Associates August 8, 2017 Page 2

Please contact me if you have any questions regarding this proposal.

Sincerely,

Kenneth C. Baldwin

### Robinson + Cole

KENNETH C. BALDWIN

280 Trumbull Street Hartford, CT 06103-3597 Main (860) 275-8200 Fax (860) 275-8299 kbaldwin@rc.com Direct (860) 275-8345

Also admitted in Massachusetts

August 8, 2017

#### Via Certificate of Mailing

Marcia Leclerc, Mayor Town of East Hartford 740 Main Street East Hartford, CT 06108

Re: Proposed Installation of a Wireless Telecommunications Facility at 3039 Main Street, Glastonbury, Connecticut

#### Dear Mayor Leclerc:

This firm represents Cellco Partnership d/b/a Verizon Wireless ("Cellco"). Today, Cellco filed a Petition for Declaratory Ruling ("Petition") with the Connecticut Siting Council ("Council") seeking approval to install a new small cell wireless telecommunications facility at 3039 Main Street in Glastonbury (the "Property"). The facility will consist of a small tower mast attached to the building and supporting a canister antenna and a remote radio head. The top of the antenna would extend to a height of approximately 28.8 feet above grade, approximately 4.4 feet above the roof of the building. Equipment associated with the antenna would be attached to the southerly façade of the building.

A full copy of the Petition is attached for your review. In accordance with Council requirements, abutting landowners were also sent notice of this filing and a copy of the Petition.

16857870-v1

## Robinson Cole

Marcia Leclerc, Mayor August 8, 2017 Page 2

Please contact me if you have any questions regarding this proposal.

Sincerely,

Kenneth C. Baldwin

# **ATTACHMENT 8**

KENNETH C. BALDWIN

280 Trumbull Street Hartford, CT 06103-3597 Main (860) 275-8200 Fax (860) 275-8299 kbaldwin@rc.com Direct (860) 275-8345

Also admitted in Massachusetts

August 8, 2017

#### Via Certificate of Mailing

«Name\_and\_Address»

Re: Notice of Intent to File a Petition for Declaratory Ruling with the Connecticut Siting Council for the Installation of a Wireless Telecommunications Facility at 3039 Main Street, Glastonbury, Connecticut

Dear «Salutation»:

This firm represents Cellco Partnership d/b/a Verizon Wireless ("Cellco"). Today, Cellco filed a Petition for Declaratory Ruling ("Petition") with the Connecticut Siting Council ("Council") seeking approval to install a new small cell wireless telecommunications facility at 3039 Main Street in Glastonbury (the "Property"). The facility will consist of a small tower mast attached to the building and supporting a canister antenna and a remote radio head. The top of the antenna would extend to a height of approximately 28.8 feet above grade, approximately 4.4 feet above the roof of the building. Equipment associated with the antenna would be attached to the southerly façade of the building. A full copy of the Petition is attached for your review.

This notice is being sent to you because you are listed on the Town Assessor's records as an owner of land that abuts the Property. If you have any questions regarding the Petition, the Council's process for reviewing the Petition or the details of the filing itself, please feel free to contact me at the number listed above. You may also contact the Council directly at 860-827-2935.

August 8, 2017 Page 2

Sincerely,

Kenneth C. Baldwin

#### CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS

#### ABUTTERS LIST

### 3039 MAIN STREET GLASTONBURY, CONNECTICUT

#### **GLASTONBURY**

|    | Property Address     | Owner and Mailing Address   |
|----|----------------------|---|
| 1. | 139 Putnam Boulevard | Bidwell Associates LLC<br>c/o Loren J. Andreo, Jr.<br>4 Main Street<br>East Hartford, CT 06118            |
| 2. | 3041 Main Street     | Bidwell Associates LLC<br>c/o 711 Corp.<br>Tax Dept. 32960<br>Dallas, TX 75221-0711                       |
| 3. | 3025 Main Street     | Cugliaris Realty LLC<br>88 Beal Street<br>Southington, CT 06489   |
| 4. | Main Street          | Andreo Family Ltd. Partnership VI<br>c/o Loren J. Andreo, Jr.<br>4 Main Street<br>East Hartford, CT 06118 |
| 5. | 3017 Main Street     | Burger King Corporation<br>BK Corp. #3468<br>P.O. Box 020783<br>Miami, FL 33102-0783                      |
| 6. | 3040 Main Street     | Glastonbury/East Hartford Associates LP c/o Loren J. Andreo, Jr. 4 Main Street East Hartford, CT 06118    |
| 7. | 115 Putnam Boulevard | Andrewo Family<br>c/o Loren J. Andreo, Jr.<br>4 Main Street<br>East Hartford, CT 06118                    |

#### EAST HARTFORD

|    | Property Address | Owner and Mailing Address  |
|----|------------------|--|
| 1. | 1 Main Street    | Loren Andreo<br>4 Main Street<br>East Hartford, CT 06118                                   |
| 2, | 1A Main Street   | Glen Bidwell Trust<br>c/o Loren Andreo<br>4 Main Street<br>East Hartford, CT 06118         |
| 3, | 29 Main Street   | Russell E. Bidwell Trustee<br>c/o Loren Andreo<br>4 Main Street<br>East Hartford, CT 06118 |
| 4. | 31 Main Street   | Bidwell Associates<br>c/o Loren Andreo<br>4 Main Street<br>East Hartford, CT 06118         |