

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

IN RE:

A PETITION OF CELLCO PARTNERSHIP : PETITION NO. ____
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 THE MASONICARE HEALTH CENTER, :
22 MASONIC AVENUE, WALLINGFORD, :
CONNECTICUT : MAY 10, 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 on the Masonicare Health Center building located at 22 Masonic Avenue in Wallingford, Connecticut (the “Property”). The Property is owned by Masonic Health Center. Cellco refers to the proposed facility as its “Wallingford SC5 Facility”.

II. Factual Background

The Property is a 32.8-acre parcel in Wallingford’s RU-40 Rural 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 Wallingford and throughout the State of Connecticut. Initially, the proposed Wallingford SC5 Facility will provide wireless service in Cellco's 2100 MHz frequency range only.

A. Proposed Wallingford SC5 Facility

The proposed Wallingford SC5 Facility would consist of a small tower mast attached to the building. The tower mast will support a single canister antenna (Model HBXX-6513DS 2100 MHz). A remote radio head ("RRH") (Model 66A-RRH4x45) and associated electrical equipment boxes would be attached to the westerly building façade. The tower mast and antenna will extend to a height of approximately 60'-3" above ground level (AGL), approximately 3'-3" above the roof. (See Cellco's Project Plans included in Attachment 2). Power and telephone service to the Wallingford SC5 Facility will extend from existing service at the Property. Specifications for the Wallingford 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).

1. Physical Environmental Effects

Cellco respectfully submits that the installation of a small tower mast attached to the building and supporting a single canister antenna and associated radio and electrical equipment attached to 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 of any kind is necessary to install the proposed Wallingford SC5 Facility. There are no wetlands on the Property and, therefore, no wetland impacts associated with the installation.

2. Visual Effects

The visibility of the proposed “small cell” facility would be limited to locations on the Property, within approximately 450 feet to the north and east of the building. (See Visual Assessment & Photo-Simulations (“Visual Assessment”) included in Attachment 4). All other views of the Wallingford SC5 Facility would be obstructed by existing structures and mature vegetation at the Property. 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 character of the surrounding community.

3. 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 Attachment 5 is a worst-case MPE calculation for Cellco’s “small cell” antenna at a centerline height of 60’-3” AGL. This calculation indicates that the Wallingford SC5 Facility will operate well within (22.59% of the standard) the RF emission standards established by the FCC.

4. FAA Summary Report

Included in Attachment 6 of this Petition is a Federal Airways & Airspace Summary

Report verifying that the new tower and antenna described above would constitute an obstruction or hazard to air navigation and that notification to the FAA is not required.

B. Notice to First Selectman, Property Owner and Abutting Landowners

On May 10, 2017, a copy of this Petition was sent to Wallingford's Mayor, William W. Dickinson, Jr. and Masonic Health Center, the owner of the Property. Notice of Cellco's intent to file the Petition was also sent to the owners of land that abuts the Property. Included in Attachment 7 is a copy of the letter sent to Mayor Dickinson and Masonic Health Center. Included in Attachment 8 is a sample abutter's letter and the list of those abutting landowners who were sent notice of the filing of the Petition.

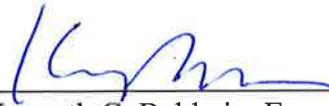
IV. Conclusion

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 façade-mounted 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 Facility
- ☒ Surrounding Verizon Wireless Facilities
- ☒ Municipal Boundary
- ~~~~ Watercourse (CTDEEP)
- ~~~~ Waterbody (CTDEEP)

Base Map Source: CT 2016 Aerial Imagery (CTECO)
 Map Scale: 1 inch = 3,500 feet
 Map Date: May 2017

3,500 1,750 0 3,500
 Feet

Site Vicinity Map

Proposed Wireless Small Cell Facility
 Wallingford SC5 CT
 22 Masonic Avenue
 Wallingford, Connecticut

verizon[®]

ALL-POINTS
 TECHNOLOGY CORPORATION



Legend

- Proposed 8'x8' Lease Area
- Approximate Subject Property
- Approximate Parcel Boundary (CTDEEP GIS)

Site Schematic

Proposed Wireless Small Cell Facility
Wallingford SC5 CT
22 Masonic Avenue
Wallingford, Connecticut

verizon



ATTACHMENT 2

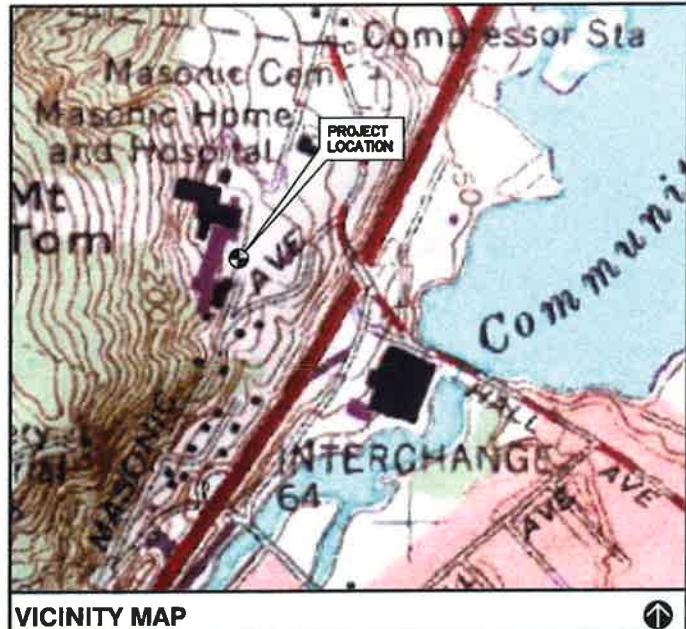
CELLCO PARTNERSHIP

d.b.a. **verizon** 

WIRELESS COMMUNICATIONS FACILITY

WALLINGFORD SC5 CT

22 MASONIC AVE
WALLINGFORD, CT 06492



VICINITY MAP

DIRECTIONS TO SITE:

1. HEAD SOUTHWEST ON E RIVER DR TOWARD PITKIN ST
2. CONTINUE ONTO E RIVER DRIVE EXTENSION
3. TURN RIGHT TO MERGE ONTO CT-15 S/US-5 S TOWARD NEW HAVEN/INTERSTATE 91 S
4. MERGE ONTO CT-15 S/US-5 S
5. TAKE EXIT 86 TO MERGE ONTO I-91 S TOWARD NEW HAVEN/NEW YORK CITY
6. TAKE EXIT 17 TO MERGE ONTO CT-15 S/WILBUR CROSS PKWY
7. USE THE MIDDLE LANE TO TURN SLIGHTLY RIGHT ONTO MASONIC AVE (SIGNS FOR DMR REGION 5 CTR)
8. TURN LEFT DESTINATION WILL BE ON THE LEFT

CONSULTANT TEAM

PROJECT ENGINEER

HUDSON DESIGN GROUP, LLC
1600 OSGOOD STREET
BUILDING 20 NORTH, SUITE 3090
NORTH ANDOVER, MA 01845
TEL: 1-(978)-557-5553
FAX: 1-(978)-336-5586

MEP ENGINEER

HUDSON DESIGN GROUP, LLC
1600 OSGOOD STREET
BUILDING 20 NORTH, SUITE 3090
NORTH ANDOVER, MA 01845
TEL: 1-(978)-557-5553
FAX: 1-(978)-336-5586

PROJECT SUMMARY

SITE NAME: WALLINGFORD SC5 CT

SITE ADDRESS: 22 MASONIC AVENUE
WALLINGFORD CT 06492

APPLICANT: CELLCO PARTNERSHIP
d/b/a VERIZON
99 EAST RIVER DRIVE
EAST HARTFORD, CT 06108

SITE ACQUISITION CONTACT: HOLLIS REDDING
STRUCTURE CONSULTING GROUP
(860)966-0989

LEGAL/REGULATORY COUNSEL: KENNETH C. BALDWIN ESQ.
ROBINSON + COLE LLP
(860)275-8345

LATITUDE: N41° 27' 48.63"
LONGITUDE: W72° 50' 11.12"
GROUND ELEVATION: 135' ± AMSL

SHEET INDEX

| SHT. NO. | DESCRIPTION |
|----------|----------------------------|
| T-1 | TITLE SHEET |
| C-1 | ABUTTERS PLAN |
| A-1 | SITE PLAN & EQUIPMENT PLAN |
| A-2 | ELEVATION |

PREPARED FOR: CELLCO PARTNERSHIP D.B.A.

verizon 



1600 OSGOOD STREET
BUILDING 20 NORTH, SUITE 3090
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

CHECKED BY: DJR

APPROVED BY: DPH

SUBMITTALS

| REV. | DATE | DESCRIPTION | BY |
|------|----------|----------------------|----|
| 1 | 05/09/17 | REVISED PER COMMENTS | GC |
| 0 | 03/23/17 | ISSUED FOR REVIEW | EB |

SITE NAME:
WALLINGFORD
SC5 CT

SITE ADDRESS:
22 MASONIC AVENUE
WALLINGFORD CT 06492

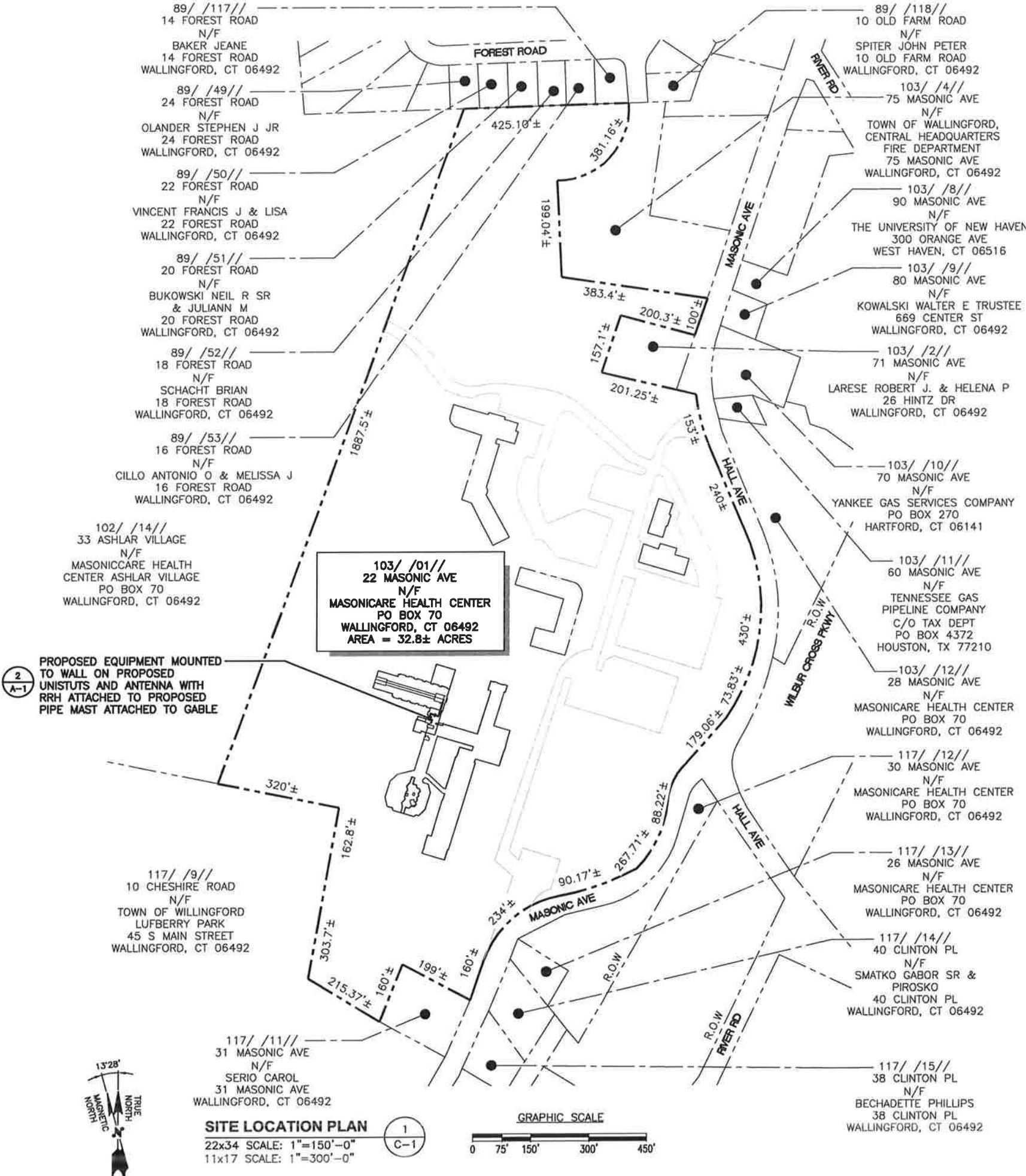
SHEET TITLE:
TITLE SHEET

SHEET NUMBER:
T-1

verizon



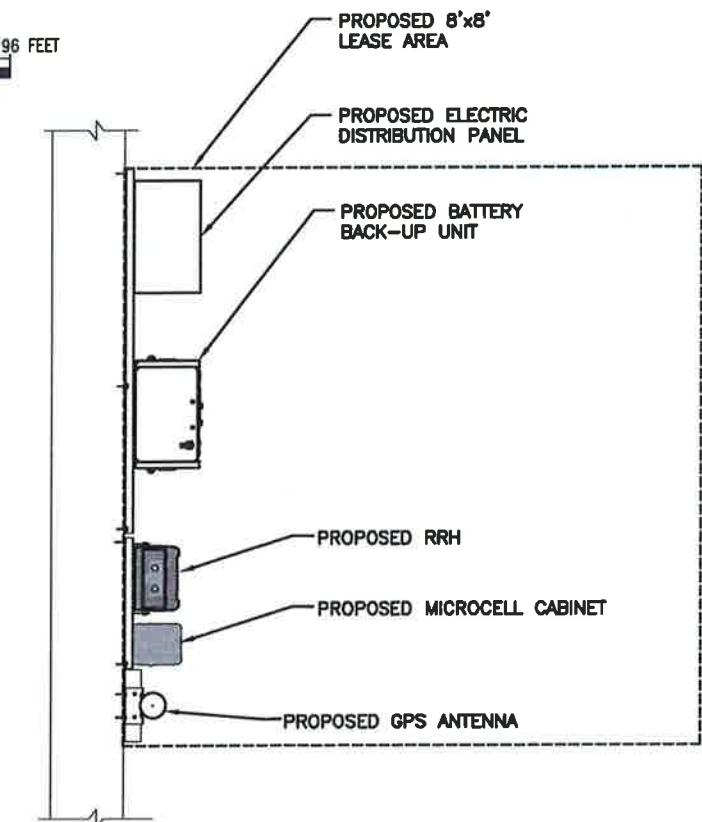
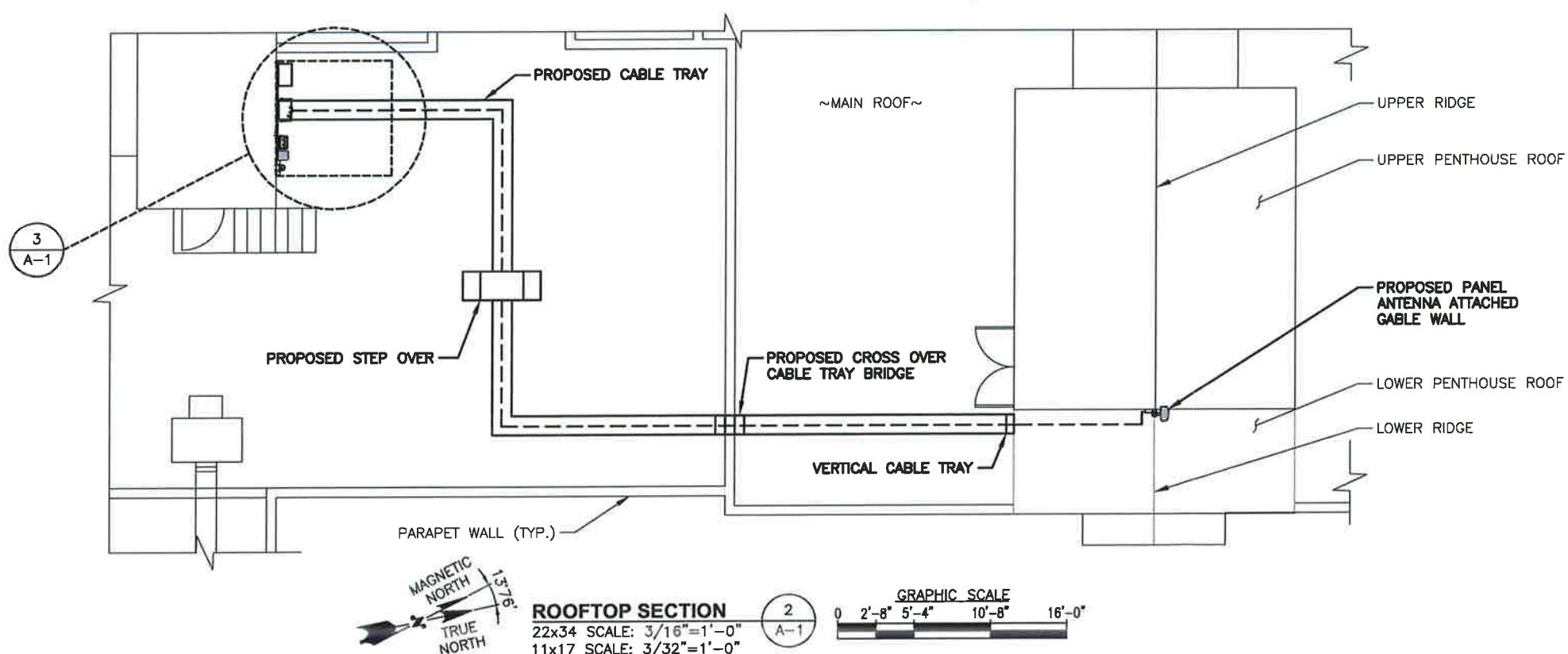
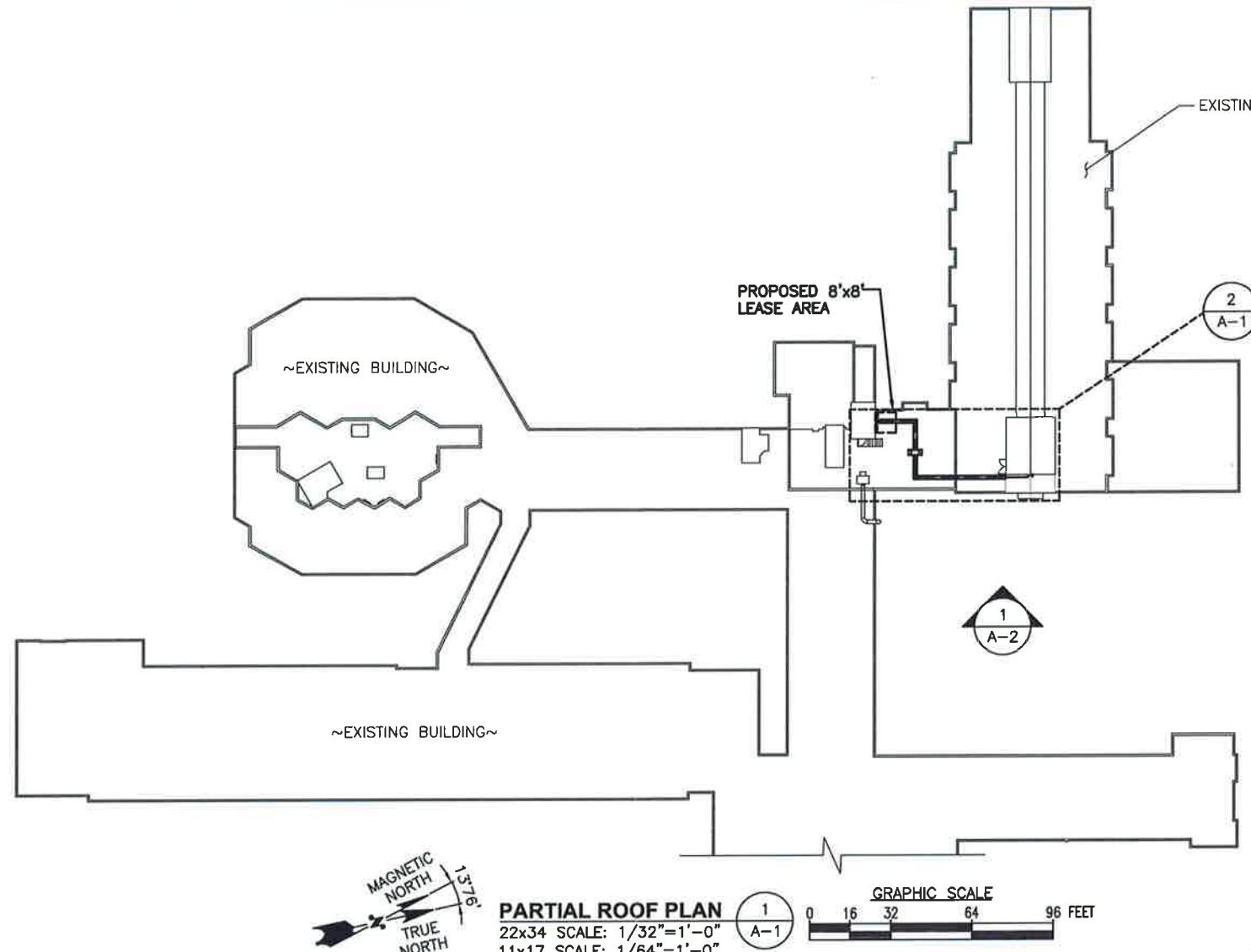
1600 OSGOOD STREET
BUILDING 20 NORTH, SUITE 3090
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5886





APPROXIMATE
BUILDING COORDINATES: LAT: N41° 27' 48.63" LONG: W72° 50' 11.12"

NOTES:
REFER TO STRUCTURAL ANALYSIS REPORT
PREPARED BY HUDSON DESIGN GROUP LLC.
DATED MAY 8, 2017 PRIOR TO INSTALLING
VERIZON IMPROVEMENTS ON THE TOWER.



EQUIPMENT DETAIL 3
SCALE: N.T.S A-1

PREPARED FOR: CELLCO PARTNERSHIP D.B.A.

verizon



Hudson
Design Group LLC

1600 OSGOOD STREET
BUILDING 20 NORTH, SUITE 3090
N. ANDOVER, MA 01845

CHECKED BY: DJR

APPROVED BY: DPH

SUBMITTALS

| REV. | DATE | DESCRIPTION | BY |
|------|----------|----------------------|----|
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| | | | |
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| | | | |
| 1 | 05/09/17 | REVISED PER COMMENTS | GC |
| 0 | 03/23/17 | ISSUED FOR REVIEW | EB |

SITE NAME:
WALLINGFORD
SC5 CT

SITE ADDRESS:
22 MASONIC AVENUE
WALLINGFORD CT 06492

SHEET TITLE
**PARTIAL
ROOF PLAN**

SHEET NUMBER

A-1

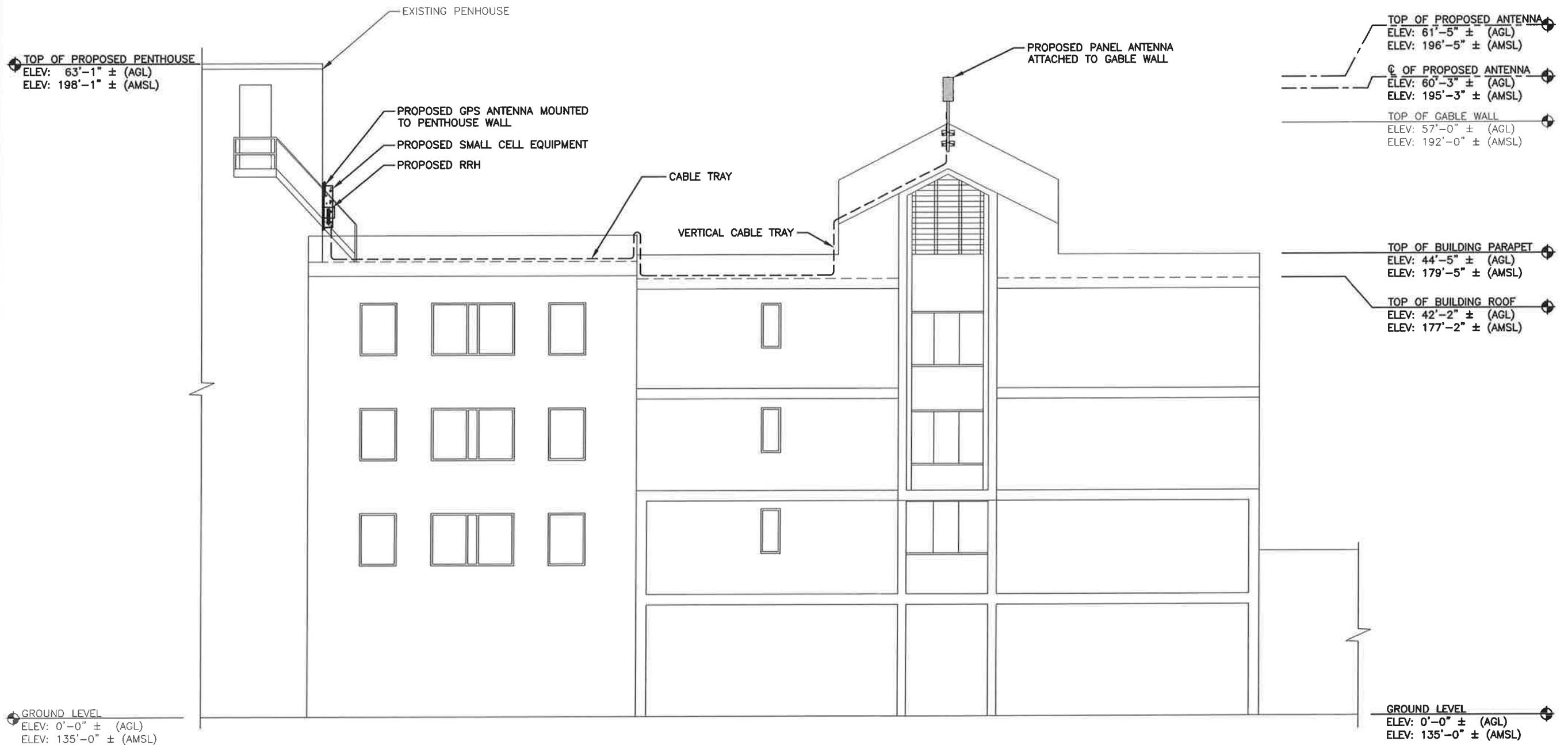
verizon[®]

NOTES:

REFER TO STRUCTURAL ANALYSIS REPORT
PREPARED BY HUDSON DESIGN GROUP LLC.
DATED MAY 8, 2017 PRIOR TO INSTALLING
VERIZON IMPROVEMENTS ON THE TOWER.



1600 OSGOOD STREET
BUILDING 20 NORTH, SUITE 3090 TEL: (978) 557-5553
N. ANDOVER, MA 01845 FAX: (978) 336-5586



EAST ELEVATION

22x34 SCALE: 3/16"=1'-0"
11x17 SCALE: 3/32"=1'-0"

1
A-2

GRAPHIC SCALE
0 2'-8" 5'-4" 10'-8" 16'-0"

SHEET NUMBER
A-2

CHECKED BY: DJR

APPROVED BY: DPH

SUBMITTALS

| REV. | DATE | DESCRIPTION | BY |
|------|------|-------------|----|
| | | | |
| | | | |

1 05/09/17 REVISED PER COMMENTS GC
0 03/23/17 ISSUED FOR REVIEW EB

SITE NAME:
WALLINGFORD
SC5 CT

SITE ADDRESS:
22 MASONIC AVENUE
WALLINGFORD CT 06492

SHEET TITLE
ELEVATION

SHEET NUMBER

ATTACHMENT 3

Product Specifications

COMMSCOPE®

HBXX-6513DS-VM

Andrew® Quad Port Antenna, 1710–2170 MHz, 65° horizontal beamwidth, RET compatible

POWERED BY



Electrical Specifications

| Frequency Band, MHz | 1710–1880 | 1850–1990 | 1920–2170 |
|---|------------|------------|------------|
| Gain, dBi | 14.5 | 14.6 | 14.9 |
| Beamwidth, Horizontal, degrees | 67 | 66 | 64 |
| Beamwidth, Vertical, degrees | 14.8 | 14.0 | 13.4 |
| Beam Tilt, degrees | 0–12 | 0–12 | 0–12 |
| USLS, dB | 15 | 15 | 15 |
| Front-to-Back Ratio at 180°, dB | 30 | 30 | 30 |
| Front-to-Back Total Power at 180° ± 30°, dB | 26 | 27 | 27 |
| CPR at Boresight, dB | 22 | 22 | 22 |
| CPR at Sector, dB | 7 | 8 | 8 |
| Isolation, dB | 30 | 30 | 30 |
| VSWR Return Loss, dB | 1.4 15.6 | 1.4 15.6 | 1.4 15.6 |
| PIM, 3rd Order, 2 x 20 W, dBc | -150 | -150 | -150 |
| Input Power per Port, maximum, watts | 350 | 350 | 350 |
| Polarization | ±45° | ±45° | ±45° |

Electrical Specifications, BASTA*

| Frequency Band, MHz | 1710–1880 | 1850–1990 | 1920–2170 |
|--|-------------|-------------|-------------|
| Gain by all Beam Tilts, average, dBi | 14.2 | 14.3 | 14.6 |
| Gain by all Beam Tilts Tolerance, dB | ±0.8 | ±0.7 | ±0.7 |
| | 0 ° 14.6 | 0 ° 14.7 | 0 ° 15.0 |
| Gain by Beam Tilt, average, dBi | 6 ° 14.4 | 6 ° 14.5 | 6 ° 14.7 |
| | 12 ° 13.5 | 12 ° 13.7 | 12 ° 13.8 |
| Beamwidth, Horizontal Tolerance, degrees | ±3.7 | ±3.3 | ±3.5 |
| Beamwidth, Vertical Tolerance, degrees | ±1.4 | ±0.9 | ±1.1 |
| USLS, dB | 15 | 15 | 16 |
| CPR at Boresight, dB | 22 | 22 | 22 |
| CPR at Sector, dB | 7 | 8 | 8 |

* 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.](#)

Mechanical Specifications

| | |
|---|---|
| Color Radome Material | Light gray PVC, UV resistant |
| Connector Interface Location Quantity | 7-16 DIN Female Bottom 4 |
| Wind Loading, maximum | 223.0 N @ 150 km/h 50.1 lbf @ 150 km/h |
| Wind Speed, maximum | 241.0 km/h 149.8 mph |
| Antenna Dimensions, L x W x D | 695.0 mm x 305.0 mm x 166.0 mm 27.4 in x 12.0 in x 6.5 in |
| Net Weight | 7.9 kg 17.4 lb |
| Model with factory installed AISG 2.0 RET | HBXX-6513DS-A2M |

ALCATEL-LUCENT B66A RRH4X45

The Alcatel-Lucent B66a Remote Radio Head 4x45 is the newest 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. Its operational range covers beyond that of B4 (AWS) and B10 (AWS+).

Supporting 2Tx/4Tx MIMO and 2-way/4-way Rx diversity, the Alcatel-Lucent B66a RRH4x45 allows operators to have a compact radio solution to deploy LTE in the 2100 band (3GPP band 4, 10, and 66), providing them with the means to achieve high capacity, high quality, high reliability, large instantaneous bandwidth, and high coverage with minimum site requirements.

The Alcatel-Lucent B66a RRH4x45 product has four transmit RF paths, offering the possibility to **select, via software only, 2Tx or 4Tx MIMO configurations** with either 2x90W or 4x45W RF output power. It also supports 4-way Rx diversity at the 70 MHz instantaneous bandwidth.



The Alcatel-Lucent B66a RRH4x45 is a compact (near zero-footprint) solution and operates noise free, simplifying negotiations with site property owners and minimizing environmental impacts.

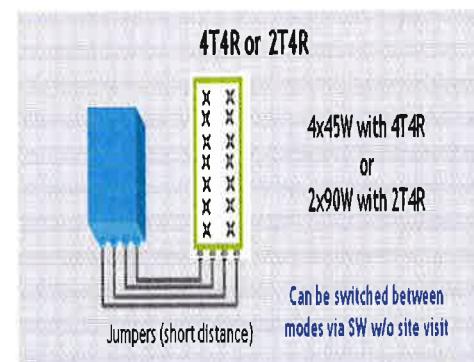
Its compactness and slim design makes the Alcatel-Lucent B66a RRH4x45 easy to install close to the antenna: operators can therefore locate this Remote Radio Head where RF design conditions are deemed ideal, minimizing trade-offs between available sites and RF optimum sites, together with reducing the RF feeder needs and installation costs.

FEATURES

- Supporting LTE in 2110 - 2180 MHz band/DL, 1710-1780MHz/UL (3GPP band 4, 10, and 66a)
- LTE 2Tx or 4Tx MIMO (SW selectable)
- Configuration: 2T2R/2T4R/4T4R
- Output power: Up to 2x90W or 4x45W (SW configurable)
- 70MHz LTE carrier with 4Rx Diversity
- Convection-cooled (fan-less)
- Supports AISG 2.0 ALD devices (RET, TMA) through RS485 or RF ports

BENEFITS

- Compact to reduce additional footprint when adding LTE in AWS 1-3 band
- Selection of MIMO configuration (2Tx or 4Tx) by software only
- Improves downlink spectral efficiency through 4Tx MIMO
- Increases LTE coverage thanks to 4Rx diversity capability and best in class Rx sensitivity
- Flexible mounting options: Pole or Wall



TECHNICAL SPECIFICATIONS

| Features & Performance | |
|---|--|
| Number of TX/RX paths | 4 duplexed (either 4T4R or 2T4R selectable by SW) |
| Frequency band | AWS 1-3, B4/B66a DL: 2110-2180 MHz / UL: 1710-1780 MHz |
| Instantaneous bandwidth - #carriers | 70 MHz – 4 LTE MIMO carriers (in 70 MHz occupied bandwidth) |
| LTE carrier bandwidth | 5, 10, 15, 20 MHz |
| RF output power | 2x90W or 4x45W (selectable by SW) |
| Noise figure – RX Diversity scheme Receiver Sensitivity (FRC A1-3) | 2 dB typical (<2.5 dB max) – 2 or 4 way Rx diversity -104.5 dBm maximum |
| Sizes (HxWxD) in mm (in.) | 655x299x182 (25.8x11.8x7.2) (with solar shield) 640x290x160 (25.2x11.4x6.3) (without solar shield) |
| Volume in Liters | 35.5 (with solar shield) 29.7 (without solar shield) |
| Weight in kg (lb) (w/o mounting HW) | 25.8kg (56.8lb) (with solar shield) |
| DC voltage range | Nominal: -48V, -40.5 to -57V at full performance, -38 to -57V with relaxation on power consumption |
| DC power consumption | 750W typical @100% RF load (In 2Tx or 4Tx mode); Add 58W for 2A*29V for AISG |
| Environmental conditions | -40°C (-40°F) / +55°C (+131°F) UL50E Type 4 Enclosure |
| Wind load (@150km/h or 93mph) | 250N (56lb) Frontal/150N (34lb) Lateral |
| Antenna ports | 4 ports 4.3-10 female (50 ohms) VSWR < 1.5 |
| CPRI ports | 2 CPRI ports (HW ready for Rate 7, 9.8 Gbps) SFP: SMDF (HW supports also SMSF and MMDF) |
| AISG interfaces | 1 AISG 2.0 output (RS485) Integrated Smart Bias Tees (x2) |
| Misc. Interfaces | 4 external alarms (1 connector) 1 DC connector (2 pins) |
| Installation conditions | Pole and wall mounting |
| Regulatory compliance | 3GPP 36.141 / 3GPP 36.113 / GR-487 / GR-1089-CORE / GR-3108-CORE / UL 60950-1 / FCC Part 27 / FCC Part 15 / GR-3178-CORE |

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ATTACHMENT 4

Visual Assessment & Photo-Simulations



WALLINGFORD SC5 CT
22 MASONIC AVENUE
WALLINGFORD, CT 06492

Prepared in May 2017 by:
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 at 22 Masonic Avenue in Wallingford, Connecticut (the "Host Property").

Project Setting

The Host Property is located on the west side of Masonic Avenue and south of Axis Road. Connecticut Route 15 is located approximately 0.13 mile to the east. The surrounding land use is a mix of commercial and residential development with undeveloped land located to the west, northwest and south. The Host Property is currently developed with multiple commercial structures with the subject building housing the Masonic Health Center. See *Figure 1 – Proposed Facility Location*

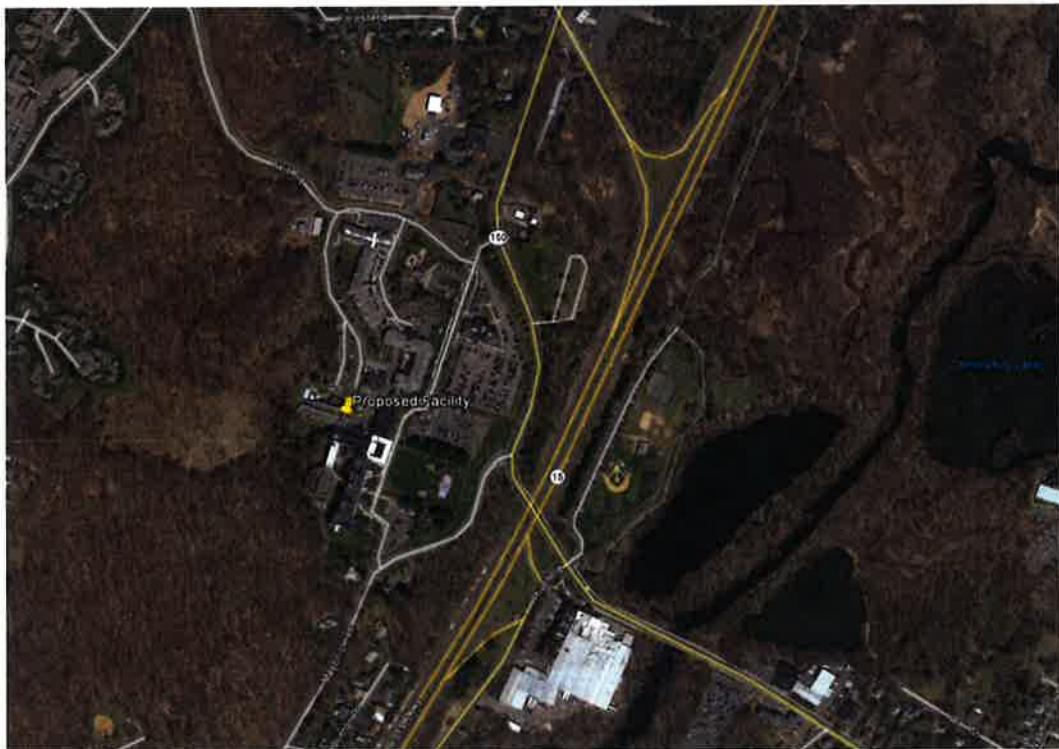
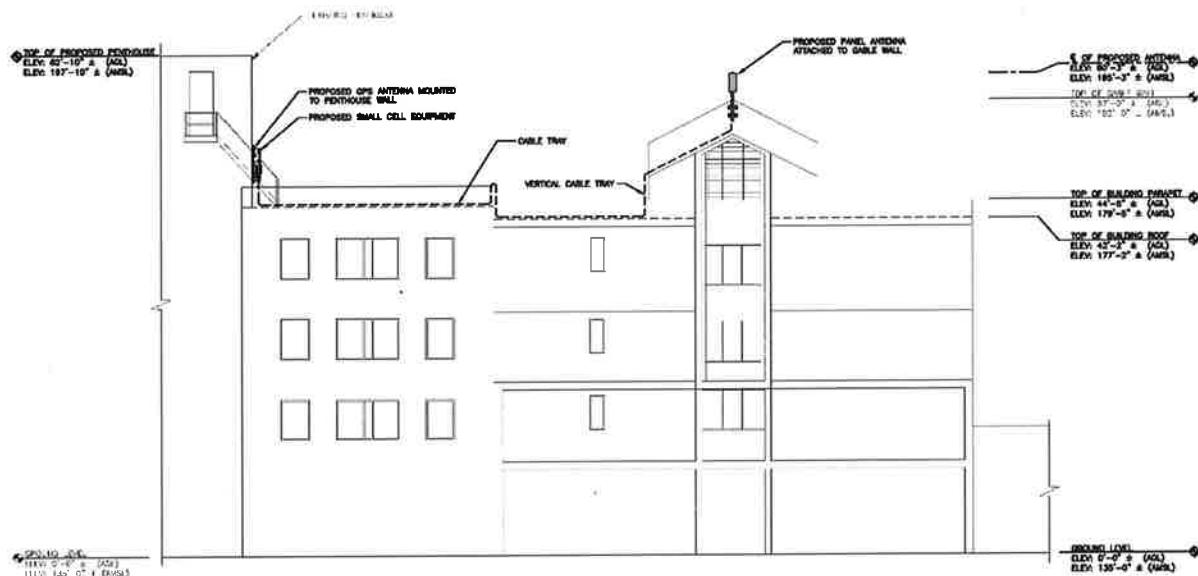


Figure 1 – Proposed Facility Location

The proposed Facility would include one (1) panel antenna with remote radio head ("RRH") attached to a pipe mast mounted to the northeast gable end of the existing building and one (1) GPS Antenna with associated equipment for both the small cell and GPS antennas mounted to the northern wall of the existing building's penthouse. The centerline height of the proposed small cell antenna is ± 60.25 feet above ground level ("AGL"). The top of the antenna would rise to a height comparable to the existing penthouse, approximately 63 feet AGL. Utility connections will be contained within a cable tray running across the existing roof below the parapet wall. The proposed Facility components locations are illustrated in *Figure 2 – Proposed Facility Components Location and Elevations*.



**Figure 2 – Proposed Facility Components Locations and Elevations
Looking East**

Methodology

On April 4, 2017, APT personnel conducted 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, with the lens set to 50 mm to present a consistent field of view.

Three-dimensional computer models were developed for the building and proposed small cell 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. A photolog map and copies of the existing conditions and photo-simulations are attached.

Photograph Locations

Three (3) of the 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. The photo locations are depicted on the photo-log map provided as an attachment to this report.

| View | Location | Orientation | Distance to Site |
|------|---------------|-------------|------------------|
| 1 | Host Property | West | ±0.10 Mile |
| 2 | Host Property | West | ± 75 Feet |
| 3 | Host Property | South | ±256 Feet |
| 4 | Host Property | South | ±428 Feet |

Conclusions

The visibility of the proposed Facility would be limited to locations on the Host Property within ±450 feet of the building to the north and east. Views beyond these areas would be obstructed by existing structures and vegetation. Combined with the location and size of the proposed small cell antenna, sight lines to the proposed Facility would be significantly limited. All associated power generation equipment and GPS antenna, located on the northern wall of the building penthouse, would be obscured from view.

Based on the results of this assessment, it is our opinion that the proposed installation of the Verizon Wireless communications 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.

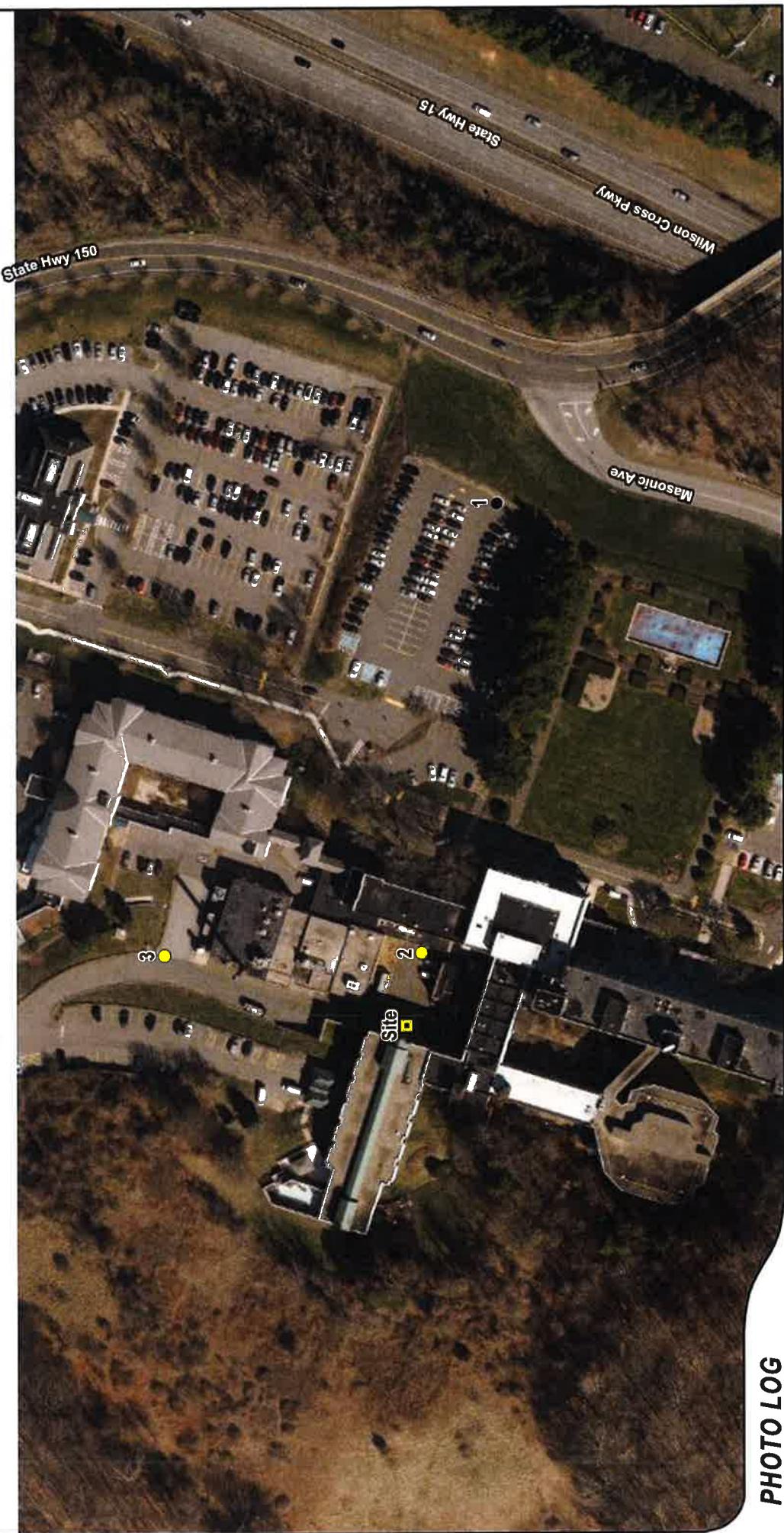
ATTACHMENTS



PHOTO LOG

Legend

| | |
|---|-------------|
| ■ | Site |
| ● | Visible |
| ● | Not Visible |





| EXISTING | LOCATION | ORIENTATION | DISTANCE TO SITE |
|----------|---------------|-------------|------------------|
| PHOTO 1 | HOST PROPERTY | WEST | +/- 0.10 MILE |

| | | |
|------------------|---------------|----------|
| PHOTO | 2 | EXISTING |
| LOCATION | HOST PROPERTY | |
| ORIENTATION | WEST | |
| DISTANCE TO SITE | +/- 75 FEET | |

888.966.13PM





PROPOSED

PHOTO
2

LOCATION
HOST PROPERTY

ORIENTATION
WEST

DISTANCE TO SITE
+/- 75 FEET

888.966.4444

ALL-POINTS
TECHNOLOGY CORPORATION

verizon

DISTANCE TO SITE
+/- 256 FEET

ORIENTATION
SOUTH

LOCATION
HOST PROPERTY

EXISTING

PHOTO
3





PROPOSED

PHOTO
3

HOST PROPERTY

ORIENTATION
SOUTH

DISTANCE TO SITE
+/- 256 FEET



EXISTING

PHOTO

LOCATION

HOST PROPERTY

ORIENTATION

SOUTH

DISTANCE TO SITE

+/- 428 FEET



verizon



PROPOSED

PHOTO

LOCATION

HOST PROPERTY

ORIENTATION

DISTANCE TO SITE

ALL-POINTS
TECHNOLOGY CORPORATION

verizon

ATTACHMENT 5

Site Name: Wallingford SC 5 CT
Cumulative Power Density

| Operator | Operating Frequency (MHz) | Number of Trans. | ERP Per Trans. (watts) | Total ERP (watts) | Distance to Target (feet) | Calculated Power Density (mW/cm^2) | Maximum Permissible Exposure* (mW/cm^2) | Fraction of MPE (%) |
|--------------|---------------------------|------------------|------------------------|-------------------|---------------------------|------------------------------------|---|---------------------|
| VZW PCS | 1970 | 0 | 1637 | 0 | 60 | 0.0000 | 1.0 | 0.00% |
| VZW Cellular | 869 | 0 | 492 | 0 | 60 | 0.0000 | 0.5793333333 | 0.00% |
| VZW AWS | 2145 | 1 | 2261 | 2261 | 60 | 0.2259 | 1.0 | 22.59% |
| VZW 700 | 746 | 0 | 1074 | 0 | 60 | 0.0000 | 0.4973333333 | 0.00% |

Total Percentage of Maximum Permissible Exposure

*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

The location and analysis were based upon an existing structure. However, no existing aeronautical study number was identified. If the 'existing' structure penetrates an obstruction surface defined by CFR 77.17, 77.19, 77.21 or 77.23 (see below) it is strongly recommended the FAA be notified of the 'existing' structure to determine obstruction marking or lighting

requirements. It is not uncommon for the FAA to issue a Determination of No Hazard (DNH) for an existing structure and modify the airspace to accommodate the structure, should that be required. If the FAA issues a DNH enter the aeronautical study number (ASN) in the space provided on the Airspace Analysis Window Form and re-run Airspace.

The below analysis reflects the aeronautical conditions that exist as of the date stamped on this analysis.

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: MMK: MERIDEN MARKHAM MUNI

Type: A RD: 15365.91 RE: 98.6

FAR 77.17(a)(1): DNE
FAR 77.17(a)(2): Does Not Apply.
VFR Horizontal Surface: DNE
VFR Conical Surface: DNE
VFR Approach Slope: DNE
VFR Transitional Slope: DNE

The structure is within VFR - Traffic Pattern Airspace Climb/Descent Area.

Structures exceeding the greater of 350' AAE, 77.17(a)(2), or VFR horizontal and conical surfaces will receive a hazard determination from the FAA.

Maximum AMSL of Climb/Descent Area is 453 feet.

VFR TRAFFIC PATTERN AIRSPACE FOR: HVN: TWEED-NEW HAVEN

Type: A RD: 71195.63 RE: 12.3

FAR 77.17(a)(1): DNE
FAR 77.17(a)(2): DNE - Greater Than 5.99 NM.

VFR Horizontal Surface: DNE
 VFR Conical Surface: DNE
 VFR Approach Slope: DNE
 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 500 ft AMSL

PRIVATE LANDING FACILITIES

| | FACIL | BEARING | RANGE | DELTA |
|---------------|--|----------|-------|-------|
| ARP FAA | IDENT TYP NAME | TO FACIL | IN NM | |
| ELEVATION IFR | | | | |
| ----- | ----- | ----- | ----- | ----- |
| 152 | OCT1 HEL BRISTOL-MYERS SQUIBB COMPANY | 70.29 | 3.86 | - |
| | No Impact to Private Landing Facility Structure 0 ft below heliport. | | | |
| 135 | CT21 HEL C N FLAGG | 48.01 | 4.01 | - |
| | No Impact to Private Landing Facility Structure 2 ft below heliport. | | | |
| +53 | CT95 HEL MERIDEN-WALLINGFORD HOSPITAL | 16.23 | 4.39 | |
| | No Impact to Private Landing Facility Structure is beyond notice limit by 21674 feet. | | | |
| 82 | CT39 AIR MAPLEWOOD FARM | 86.83 | 5.8 | - |
| | No Impact to VFR Transitional Surface. Below surface height of 480 ft above ARP. | | | |

AIR NAVIGATION ELECTRONIC FACILITIES

| GRND | FAC | ST | DIST | DELTA | | | | | | |
|-------|-------------|-------|--------|--------|-------|--------|-------|---------|-------|----------|
| ANGLE | APCH | IDNT | TYPE | AT | FREQ | VECTOR | (ft) | ELEVA | ST | LOCATION |
| | BEAR | | | | | | | | | |
| ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| .13 | MMK CO | Y | 134.92 | 5.6 | 18348 | +42 | CT | MERIDEN | | |
| -.02 | MAD VOR/DME | R | 110.4 | 143.94 | 67295 | -22 | CT | MADISON | | |

Alert! Existing Structures Do Not Require Notice based upon IFR. The FAA should take into account and adjusts aircraft minimums and procedures for existing structures. New Construction or Alteration would require notice unless exempted under Title 14 CFR Part 77.9(e) or FCC/FAA Co-Location Policy. Predict within Final Segment of MMK: VOR RWY 36

| | | | | | | | | |
|------|------|------------|----|--------|--------|--------|------|-----------------|
| .15 | HVN | VOR/DME | R | 109.8 | 190.3 | 74345 | +192 | CT NEW HAVEN |
| -.26 | JWE | NDB | I | 36 | 248.67 | 81154 | -373 | CT CLERA |
| -.36 | HFD | VOR/DME | R | 114.9 | 50.58 | 102359 | -651 | CT HARTFORD |
| .08 | BDR | VOR/DME | R | 108.8 | 215.57 | 135612 | +189 | CT BRIDGEPORT |
| -.01 | BDL | RADAR | ON | | 13.61 | 178312 | -38 | CT BRADLEY INTL |
| .01 | BDL | VORTAC | D | 109.0 | 13.03 | 178795 | +38 | CT BRADLEY |
| .03 | CCC | VOR/DME | R | 117.2 | 176.95 | 194640 | +113 | NY CALVERTON |
| -.04 | QVH | RADAR ARSR | Y | 1326.9 | 169.11 | 216850 | -153 | NY RIVERHEAD |
| 0.00 | KOKX | RADAR WXL | Y | | 181.96 | 217828 | +3 | NY NEW YORK |

CFR Title 47, §1.30000-§1.30004

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

Movement Method Proof as specified in §73.151(c) is not required.

Please review 'AM Station Report' for details.

Nearest AM Station: WMMW @ 10510 meters.

Airspace® Summary Version 17.3.436

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04-06-2017
10:24:13

ATTACHMENT 7

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

May 10, 2017

Via Certificate of Mailing

William W. Dickinson, Jr., Mayor
Town of Wallingford
45 South Main Street
Wallingford, CT 06492

Re: **Proposed Installation of a Wireless Telecommunications Facility at Masonic Health Center, 22 Masonic Avenue, Wallingford, Connecticut**

Dear Mayor Dickinson:

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 the Masonic Health Center, 22 Masonic Avenue in Wallingford (the “Property”). The facility will consist of a tower mast attached to the building and supporting a single canister antenna. The top of the antenna would extend to a height of approximately 60'-3" above grade, approximately 3'-3" above the top of the roof of the building. Equipment associated with the antenna will be attached to the westerly 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.

16472806-v1

Robinson + Cole

William W. Dickinson, Jr., Mayor
May 10, 2017
Page 2

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

Sincerely,



Kenneth C. Baldwin

Attachment

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

May 10, 2017

Via Certificate of Mailing

Masonic Health Center
22 Masonic Avenue
Wallingford, CT 06492

Re: **Proposed Installation of a Wireless Telecommunications Facility at Masonic Health Center, 22 Masonic Avenue, Wallingford, 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 the Masonic Health Center, 22 Masonic Avenue in Wallingford (the “Property”). The facility will consist of a tower mast attached to the building and supporting a single canister antenna. The top of the antenna would extend to a height of approximately 60’-3” above grade, approximately 3’-3” above the top of the roof of the building. Equipment associated with the antenna will be attached to the westerly 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.

16472845-v1

Robinson Cole

Masonic Health Center
May 10, 2017
Page 2

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

Sincerely,



Kenneth C. Baldwin

Attachment

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

May 10, 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 the Masonic Health Center, Wallingford, 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 the Masonic Health Center, 22 Masonic Avenue in Wallingford (the “Property”). The facility will consist of a tower mast attached to the building and supporting a single canister antenna. The top of the antenna would extend to a height of approximately 60'-3" above grade, approximately 3'-3" above the top of the roof of the building. Equipment associated with the antenna will be attached to the westerly façade of the building. A copy of Cellco’s project plans and a select photosimulation 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.

May 10, 2017

Page 2

Sincerely,

A handwritten signature in black ink, appearing to read "Kenneth C. Baldwin".

Kenneth C. Baldwin

Attachment

verizon

d.b.a.

WIRELESS COMMUNICATIONS FACILITY

WALLINGFORD SC5 CT

22 MASONIC AVE WALLINGFORD, CT 06492

CONSULTANT TEAM

PROJECT ENGINEER

HUDSON DESIGN GROUP, LLC
 1600 OSGOOD STREET, SUITE 3090
 BUILDING 20 NORTH, SUITE 3090
 NORTH ANDOVER, MA 01845
 TEL: 1-(978)-557-5533
 FAX: 1-(978)-336-5586

MEP ENGINEER

HUDSON DESIGN GROUP, LLC
 1600 OSGOOD STREET, SUITE 3090
 BUILDING 20 NORTH, SUITE 3090
 NORTH ANDOVER, MA 01845
 TEL: 1-(978)-557-5533
 FAX: 1-(978)-336-5586

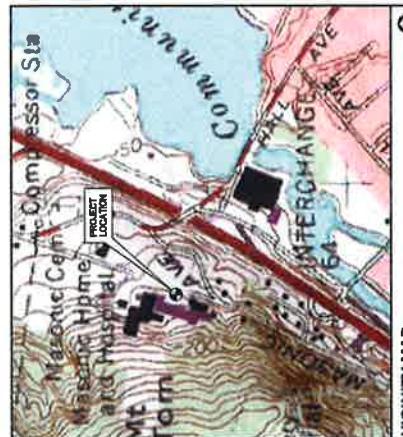
PROJECT SUMMARY

| SHT. NO. | DESCRIPTION |
|------------|-----------------------------|
| T-1 | TITLE SHEET |
| C-1 | ABUTTERS PLAN |
| A-1 | SITE PLAN & EQUIPMENT PLAN |
| A-2 | ELEVATION |
| SUBMITTALS | |
| REV. | DATE |
| | DESCRIPTION |
| | BY |
| 1 | 15/2/17 ISSUED FOR COMMENTS |
| 2 | 15/2/17 ISSUED FOR REVIEW |

SCOPE OF WORK INFO.

VERIZON WIRELESS IS PROPOSING TO INSTALL THE FOLLOWING:

- (1) NEW SMALL CELL ANTENNA MOUNTED TO PIPE MOUNT ON ROOF OF EXISTING BUILDING.
- (1) NEW RHR
- ITEMS LISTED ABOVE TO BE MOUNTED TO EXISTING BUILDING ON ROOF.
- NEW EQUIPMENT DISTRIBUTION PANEL, BATTERY BACKUP UNIT, MICROCELL CABINET AND GPS ANTENNA
- ITEMS LISTED ABOVE TO BE INSTALLED ON FAÇADE OF PEATHOUSE WALL WITHIN PROPOSED 8'-0" x 8'-0" LEASE AREA
- FINAL POWER AND TELCO ROUTING TO BE FINALIZED DURING CONSTRUCTION PHASE.



VICINITY MAP

DIRECTIONS TO SITE:

1. HEAD SOUTHWEST ON E. RIVER DR TOWARD PITKIN ST
2. CONTINUE ONTO E. RIVER DRIVE EXTENSION
3. TURN RIGHT TO MERGE ONTO CT-15 S/US-5 S TOWARD NEW HAVEN/INTERSTATE 91 S
4. MERGE ONTO CT-15 S/US-5 S
5. TAKE EXIT B6 TO MERGE ONTO I-91 S TOWARD NEW HAVEN/NEW YORK CITY
6. TAKE EXIT 17 TO MERGE ONTO CT-15 S/WILBUR CROSS PKWY
7. USE THE MIDDLE LANE TO TURN SLIGHTLY RIGHT ONTO MASONIC AVE. (SIGNS FOR DNR REGION 5 CTR)
8. TURN LEFT DESTINATION WILL BE ON THE LEFT

SITE ADDRESS:
22 MASONIC AVENUE
WALLINGFORD CT 06492

SHEET TITLE:
TITLE SHEET

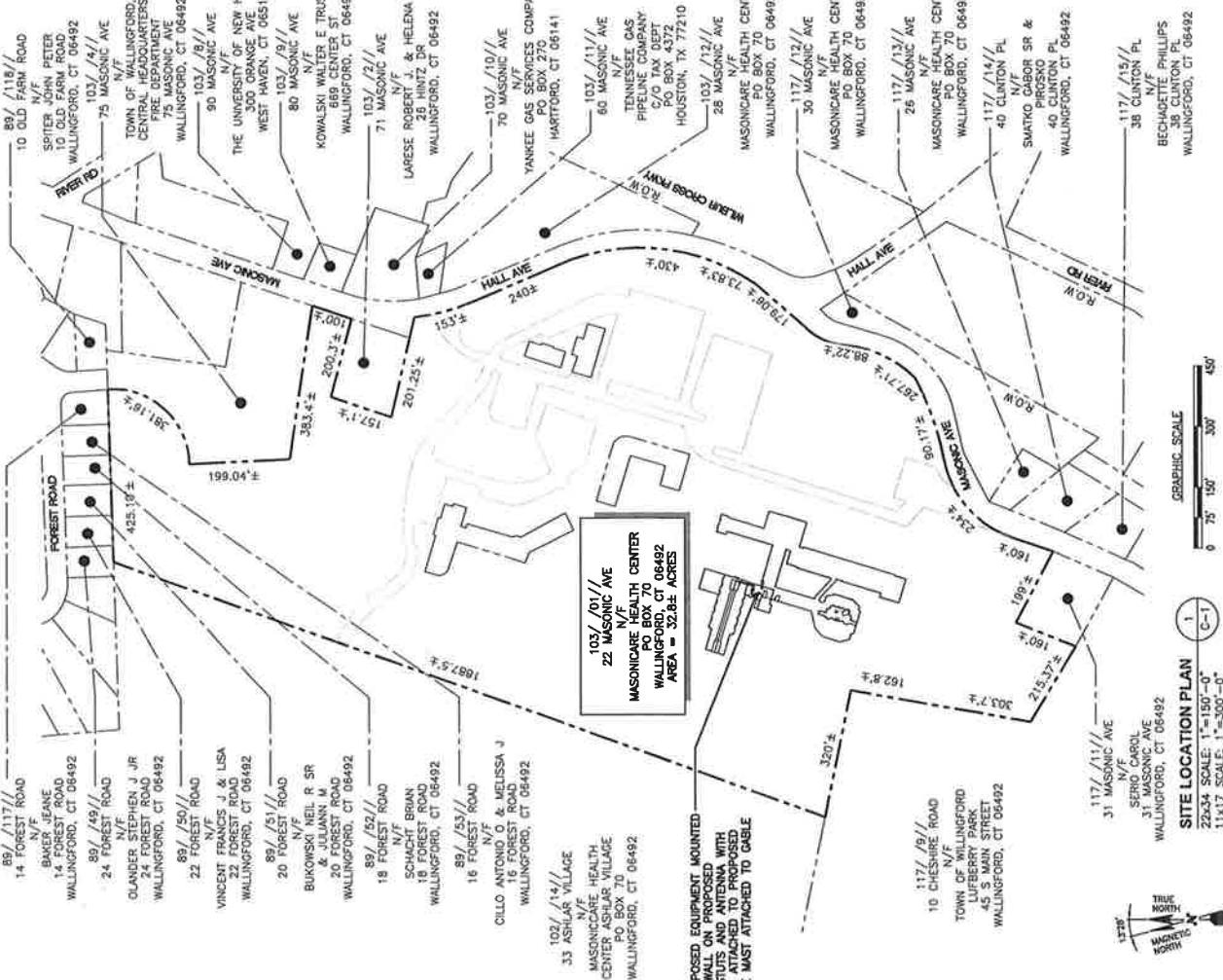
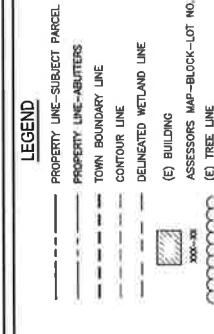
SHEET NUMBER:
T-1

SOURCE:

 TOWN OF WALLINGFORD, CT. ASSESSORS MAP,
MAP NUMBERS: 89/ OF 233
102 OF 233
103 OF 233
117 OF 233

SITE SPECIFIC NOTES:

1. VERIFY AZIMUTHS W/ RF ENGINEER.
2. PROPERTY LINE INFORMATION IS COMPILED FROM ASSESSORS PLAN AND RECORD DOCUMENTS AND IS NOT TO BE CONSTRUED AS HAVING BEEN OBTAINED AS THE RESULT OF A FIELD BOUNDARY SURVEY, AND IS SUBJECT TO CHANGE AS AN ACCURATE FIELD SURVEY MAY DECODE. A FULL BOUNDARY SURVEY WAS NOT PERFORMED.



verizon

ALL-POINTS
TECHNOLOGY CORPORATION

EXISTING

PHOTO

LOCATION

HOST PROPERTY

DISTANCE TO SITE

WEST

388-966-LWPM



2



PROPOSED

PHOTO

HOST PROPERTY

LOCATION

ORIENTATION

DISTANCE TO SITE

WEST

+/- 75 FEET





EXISTING

PHOTO

LOCATION

HOST PROPERTY

ORIENTATION

SOUTH

DISTANCE TO SITE

+/- 256 FEET



verizon



PROPOSED

PHOTO

3

HOST PROPERTY
LOCATION

SOUTH

DISTANCE TO SITE
+/- 256 FEET



verizon

| | | | | | |
|----------|-------|----------|---------------|-------------|------------------|
| EXISTING | PHOTO | LOCATION | HOST PROPERTY | ORIENTATION | DISTANCE TO SITE |
| | | | | SOUTH | +/- 428 FEET |





PROPOSED

PHOTO

LOCATION

HOST PROPERTY

ORIENTATION

+/- 428 FEET

DISTANCE TO SITE

4

**ALL-POINTS
TECHNOLOGY CORPORATION**

verizon

CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS

ABUTTERS LIST

**22 MASONIC AVENUE
WALLINGFORD, CONNECTICUT**

| | <u>Property Address</u> | <u>Owner and Mailing Address</u> |
|----|-------------------------|---|
| 1. | 24 Forest Road | Stephen J. Olander, Jr. 24 Forest Road Wallingford, CT 06492 |
| 2. | 22 Forest Road | Lisa and Francis J. Vincent 22 Forest Road Wallingford, CT 06492 |
| 3. | 20 Forest Road | Juliann M. and Neil R. Bukowski, Sr. 20 Forest Road Wallingford, CT 06492 |
| 4. | 18 Forest Road | Brian Schacht 18 Forest Road Wallingford, CT 06492 |
| 5. | 16 Forest Road | Antonio and Melissa Cillo 16 Forest Road Wallingford, CT 06492 |
| 6. | 33 Ashlar Village | Masonicare Health Center Ashlar Village P.O. Box 70 Wallingford, CT 06492 |
| 7. | 10 Cheshire Road | Town of Wallingford Lufberry Park 45 South Main Street Wallingford, CT 06492 |
| 8. | 31 Masonic Avenue | Carol Serio 31 Masonic Avenue Wallingford, CT 06492 |
| 9. | 38 Clinton Place | Bernadette Phillips 38 Clinton Place Wallingford, CT 06492 |

| | <u>Property Address</u> | <u>Owner and Mailing Address</u> |
|-----|----------------------------|---|
| 10. | 40 Clinton Place | Pirosko and Gabor Smatko, Jr. 40 Clinton Place Wallingford, CT 06492 |
| 11. | 26 Masonic Avenue | Masonicare Health Center P.O. Box 70 Wallingford, CT 06492 |
| 12. | 30 Masonic and Hall Avenue | Masonicare Health Center P.O. Box 70 Wallingford, CT 06492 |
| 13. | 28 Masonic Avenue | Masonicare Health Center P.O. Box 70 Wallingford, CT 06492 |
| 14. | 60 Masonic Avenue | Tennessee Gas Pipeline Company c/o Tax Dept. P.O. Box 4372 Houston, TX 77210 |
| 15. | 70 Masonic Avenue | Yankee Gas Services Company P.O. Box 270 Hartford, CT 06141 |
| 16. | 71 Masonic Avenue | Robert J. and Helena P. Larese 26 Hintz Drive Wallingford, CT 06492 |
| 17. | 80 Masonic Avenue | Walter E. Kowalsk, Trustee 669 Center Street Wallingford, CT 06492 |
| 18. | 90 Masonic Avenue | The University of New Haven 300 Orange Avenue West Haven, CT 06516 |
| 19. | 75 Masonic Avenue | Town of Wallingford Central Headquarters Fire Department Wallingford, CT 06492 |
| 20. | 10 Old Farm Road | John Peter Spiter 10 Old Farm Road Wallingford, CT 06492 |

| | <u>Property Address</u> | <u>Owner and Mailing Address</u> |
|-----|-------------------------|--|
| 21. | 14 Forest Road | Jeane Baker 14 Forest Road Wallingford, CT 06492 |