STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

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 ROOF-TOP WIRELESS TELECOMMUNICATIONS FACILITY AT 330 MARKET STREET, HARTFORD, CONNECTICUT	:	PETITION NO. ____
	:	JUNE 29, 2016

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 new telecommunications tower on the roof of the building at 330 Market Street in Hartford, Connecticut (the "Property"). The Property is owned by Community Renewal Team, Inc. Cellco has designated this site as its "Hartford SC1 Facility".

II. Factual Background

The Property is a 0.6- acre parcel in Hartford's CX-1 Commercial-Industrial (MIX) zone district. The Property is surrounded by commercial and industrial uses as well as Interstate 91. *See* Attachment 1 – Site Vicinity and Site Schematic Maps (Aerial Photograph).

Cellco is licensed to provide wireless telecommunications services in the 850 MHz, 1900 MHz, 700 MHz and 2100 MHz frequency ranges in Hartford and throughout the State of Connecticut. Initially, the proposed Hartford SC1 Facility described above will provide wireless service in Cellco's 2100 MHz frequency range only.

III. Proposed Hartford SC1 Facility

The proposed Hartford SC1 Facility would consist of a small tower attached to the roof of the existing office building at the Property. The tower will support a single canister antenna (Model HBXX-6513DS) and a remote radio head ("RRH") (Model RRH2x90-AWS). The tower, canister antenna and RRH will be screened by a faux chimney enclosure that will extend to a height of approximately 39.8 feet above ground level; approximately 11 feet above the roof. Equipment associated with the Hartford SC1 Facility will be mounted on the north side of the building. Power and telephone service to the Hartford SC1 Facility will extend from existing service on the Property. (*See* Cellco's Project Plans included in Attachment 2). Specifications for the Hartford SC1 Facility antenna and RRH are included in Attachment 3.

IV. 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 roof-top tower supporting a single canister antenna and attaching a radio equipment cabinet to the northerly façade of the building, will not involve a significant alteration in the physical and environmental characteristics of the Property. No ground disturbance is required to complete this installation.

2. Visual Effects

The installation of a small tower, antenna and RRH, screened by a faux chimney structure, on the roof of the building would have minimal visual effects on the Property and the surrounding area. (*See* Limited Visual Assessment and Photo-Simulations ("Visual Assessment") included in Attachment 4). As concluded in the Visual Assessment, the visibility of the faux chimney concealment structure screening the roof-top tower and antenna is limited to nearby locations within approximately 550 feet of the Property, where portions of the building are visible today. The faux chimney concealment will maintain a finish consistent with the existing building material and color.

3. FCC Compliance

Radio frequency ("RF") emissions from the proposed installation will be well below the standards adopted by the Federal Communications Commission ("FCC"). Included in Attachment 5 is a worst-case General Power Density table, which demonstrates that Cellco's Hartford SC1 Facility will operate within the FCC safety standard (78.58% of the Standard).

4. FAA Summary Report

Included in Attachment 6 is a Federal Airways & Airspace Summary Report (the "FAA Report") verifying that the tower and concealment structure on the roof of the building at the Property would not constitute an obstruction or hazard to air navigation and that notification to

the FAA is not required.

B. Notice to the City, Property Owner and Abutting Landowners

On June 29, 2016, a copy of this Petition was sent to Hartford's Mayor Luke Bronin and to Community Renewal Team, Inc., the owner of the Property. Copies of the letters sent to the Mayor Bronin and the Property owner are included in Attachment 7. A copy of Cellco's Petition was also sent to the owners of land that abuts the Property. A sample abutter's letter, and the list of those abutting landowners who were sent notice of the filing of the Petition is included in Attachment 8.

V. 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 an approximately 11' tall screened tower supporting a single canister antenna and associated equipment on the roof of the building and the installation of a facade-mounted equipment cabinet 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.

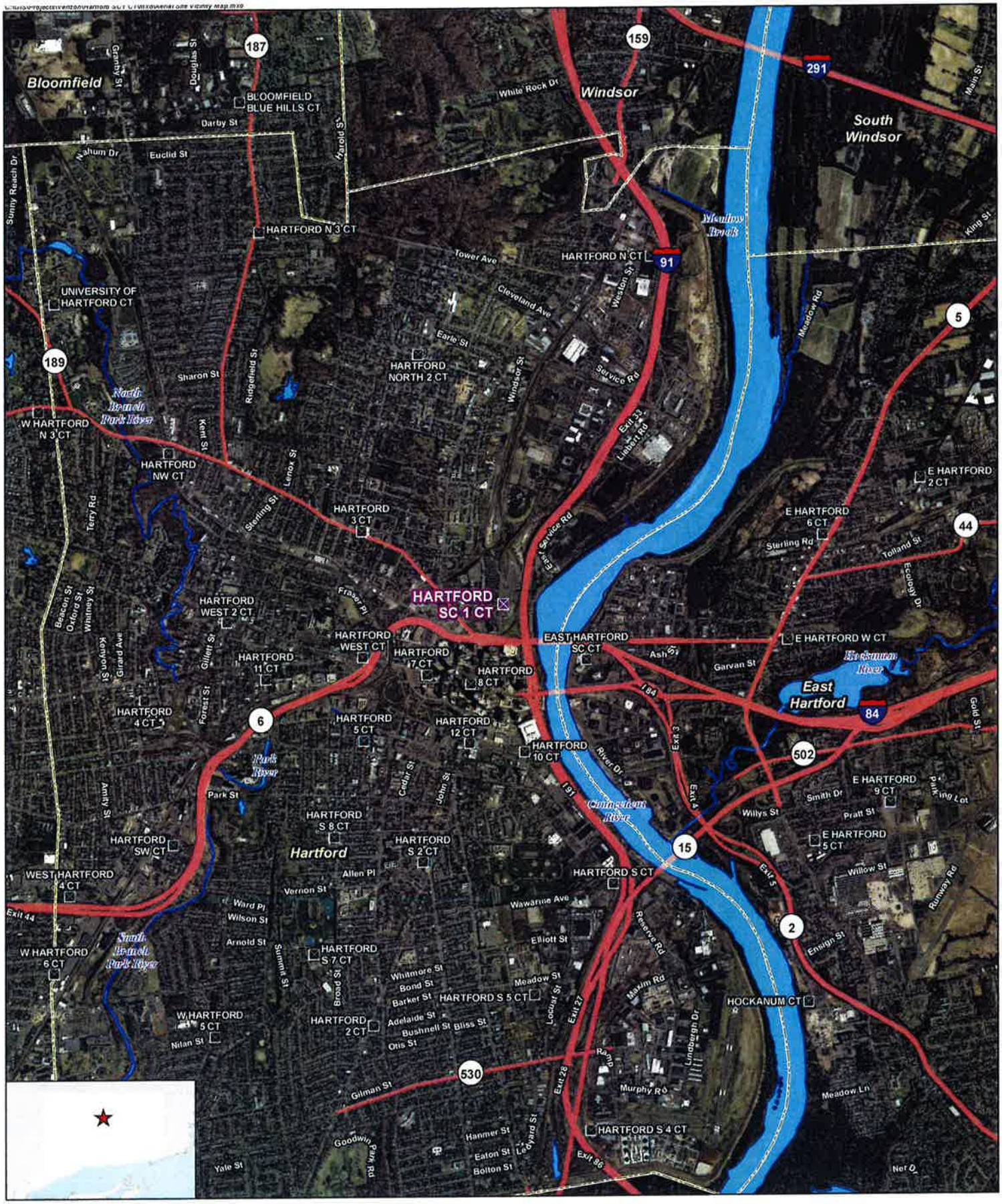
Respectfully submitted,

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
- Waterbody

N
W E
S

3,500 1,750 0 3,500 Feet

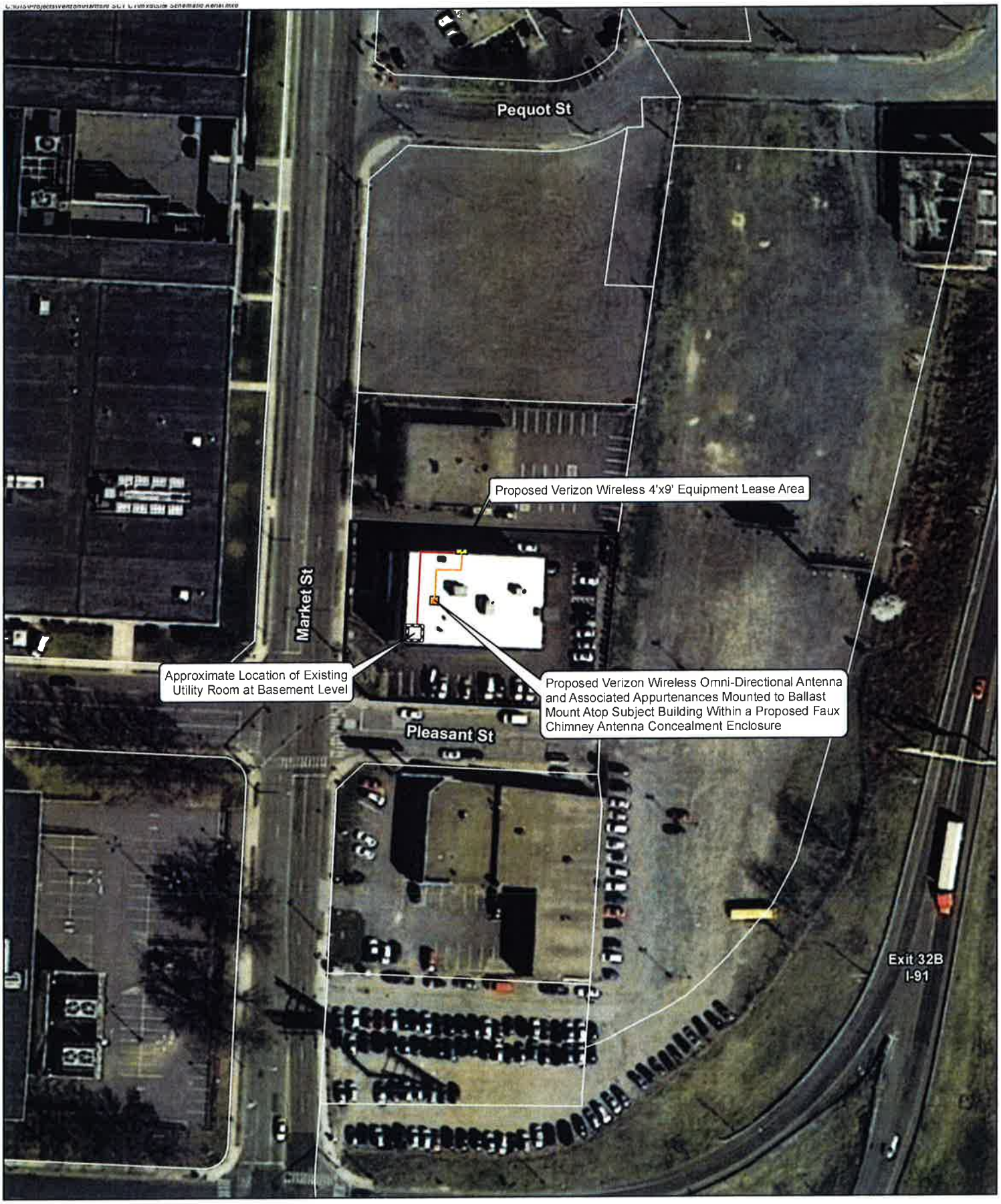
Base Map Source: 2012 Aerial Photograph (CTECO)
Map Scale: 1 inch = 3,500 feet
Map Date: May 2016

Site Vicinity Map

Proposed Small Cell Installation
Hartford SC1
330 Market Street
Hartford, Connecticut

verizon

ALL-POINTS TECHNOLOGY CORPORATION



Legend

- Proposed Verizon Wireless Omni-Directional Antenna
- Proposed Verizon Wireless 4'x9' Equipment Lease Area
- Existing Utility Room
- Proposed Verizon Wireless Antenna Cable
- Proposed Verizon Wireless Utility Conduit
- Approximate Subject Property Boundary
- Approximate Parcel Boundary (CTDEEP GIS)

N
W E
S

100 50 0 100 Feet

Map Notes:
Base Map Source: 2012 Aerial Photograph (CTECO)
Map Scale: 1 inch = 100 feet
Map Date: May 2016

Site Schematic

Proposed Small Cell Installation
Hartford SC1
330 Market Street
Hartford, Connecticut

verizon

ALL-POINTS TECHNOLOGY CORPORATION

ATTACHMENT 2

verizon

WIRELESS COMMUNICATIONS FACILITY

HARTFORD SC1
330 MARKET STREET
HARTFORD, CT 06120

SITE DIRECTIONS

FROM: 99 EAST RIVER DRIVE, EAST HARTFORD, CONNECTICUT **TO:** 330 MARKET STREET, HARTFORD, CT 06120

1. Head northeast on E River Dr toward Darlin St.	0.3 mi
2. Turn left to stay on E River Dr.	0.8 mi
3. Take the 1st left onto Connecticut Blvd/US-44 W.	0.2 mi
4. Merge onto I-84 W/US-6 W/US-44 via the ramp on to left toward Hartford	0.4 mi
5. Take the US-44 W exit, EXIT 50, toward I-91 S/Main St.	0.2 mi
6. Turn right onto Market St.	0.2 mi
7. 330 MARKET ST is on the right	0.0 mi

GENERAL NOTES

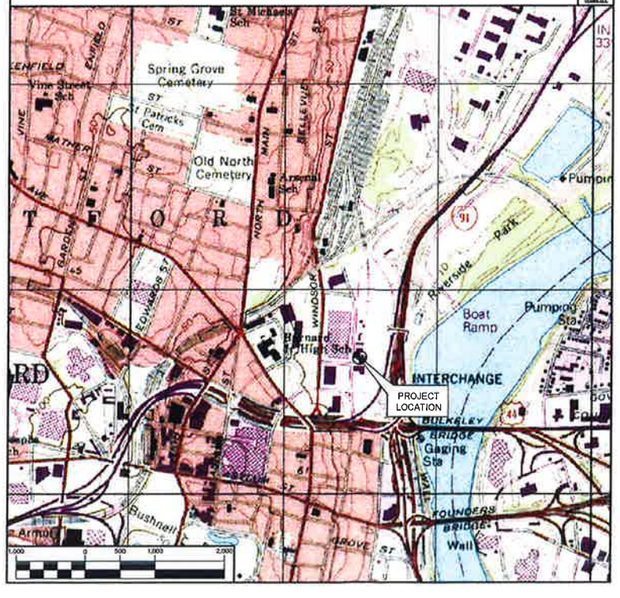
1. PROPOSED ANTENNA LOCATIONS AND HEIGHTS PROVIDED BY CELLCO PARTNERSHIP.

PROJECT SCOPE

1. THE PROPOSED CELLCO PARTNERSHIP ANTENNA INSTALLATION TO CONSIST OF A TOTAL OF (1) OMNI-DIRECTIONAL ANTENNA, APPURTENANCES AND ASSOCIATED CABLES MOUNTED WITHIN A PROPOSED FAUX CHIMNEY ANTENNA CONCEALMENT ENCLOSURE.
2. POWER & TELCO UTILITIES SHALL BE ROUTED FROM EXISTING DEMARCS WITHIN OR ADJACENT TO THE SUBJECT BUILDING. FINAL UTILITY DEMARC LOCATIONS AND ROUTING TO BE DETERMINED DURING CONSTRUCTION DOCUMENT PHASE OF THE PROJECT, AND WILL BE COORDINATED WITH BUILDING OWNER AND LOCAL UTILITY COMPANY REQUIREMENTS.
3. THE PROPOSED WIRELESS FACILITY INSTALLATION WILL BE DESIGNED IN ACCORDANCE WITH THE 2003 INTERNATIONAL BUILDING CODE AS MODIFIED BY THE 2009 CONNECTICUT SUPPLEMENT.

VICINITY MAP

SCALE: 1" = 1000'



PROJECT SUMMARY

SITE NAME:	HARTFORD SC1
SITE ADDRESS:	330 MARKET STREET HARTFORD, CT 06120
PROPERTY OWNER:	COMMUNITY RENEWAL TEAM INC 330 MARKET STREET HARTFORD, CT 06120-2418
LESSEE/TENANT:	CELLCO PARTNERSHIP d.b.a. VERIZON WIRELESS 99 EAST RIVER DRIVE EAST HARTFORD, CT 06108
VERIZON SITE ACQUISITION CONTACT:	STEVE SCHADLER CELLCO PARTNERSHIP (508) 887-0357
LEGAL/REGULATORY COUNSEL:	KENNETH C. BALDWIN, ESQ. ROBINSON & COLE LLP (860) 275-8345
TOWER COORDINATES:	LATITUDE: 41°-46'-20.477"N LONGITUDE: 72°-40'-14.319"W GROUND ELEVATION: ±25.26' AMSL COORDINATES & GROUND ELEVATION ARE REFERENCED FROM FAA 2-C PREPARED FOR VERIZON WIRELESS BY CENTEK ENGINEERING DATED JANUARY 11, 2016

SHEET INDEX

SHT. NO.	DESCRIPTION	REV. NO.
T-1	TITLE SHEET	1
C-1	ABUTTERS MAP	1
C-2	SITE PLAN, ELEVATION AND ANTENNA CONFIG.	1

PROFESSIONAL ENGINEER SEAL

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
1	05/07/16	KAMJR	DMD	ISSUED FOR CSC
0	02/03/16	KAMJR	DMD	ISSUED FOR CSC - CLIENT REVIEW

verizon

CENTEK engineering
Centered on Solutions
(203) 488-0580
(203) 488-8587 Fax
63-2 North Branford Road
Branford, CT 06405
www.CentekEng.com

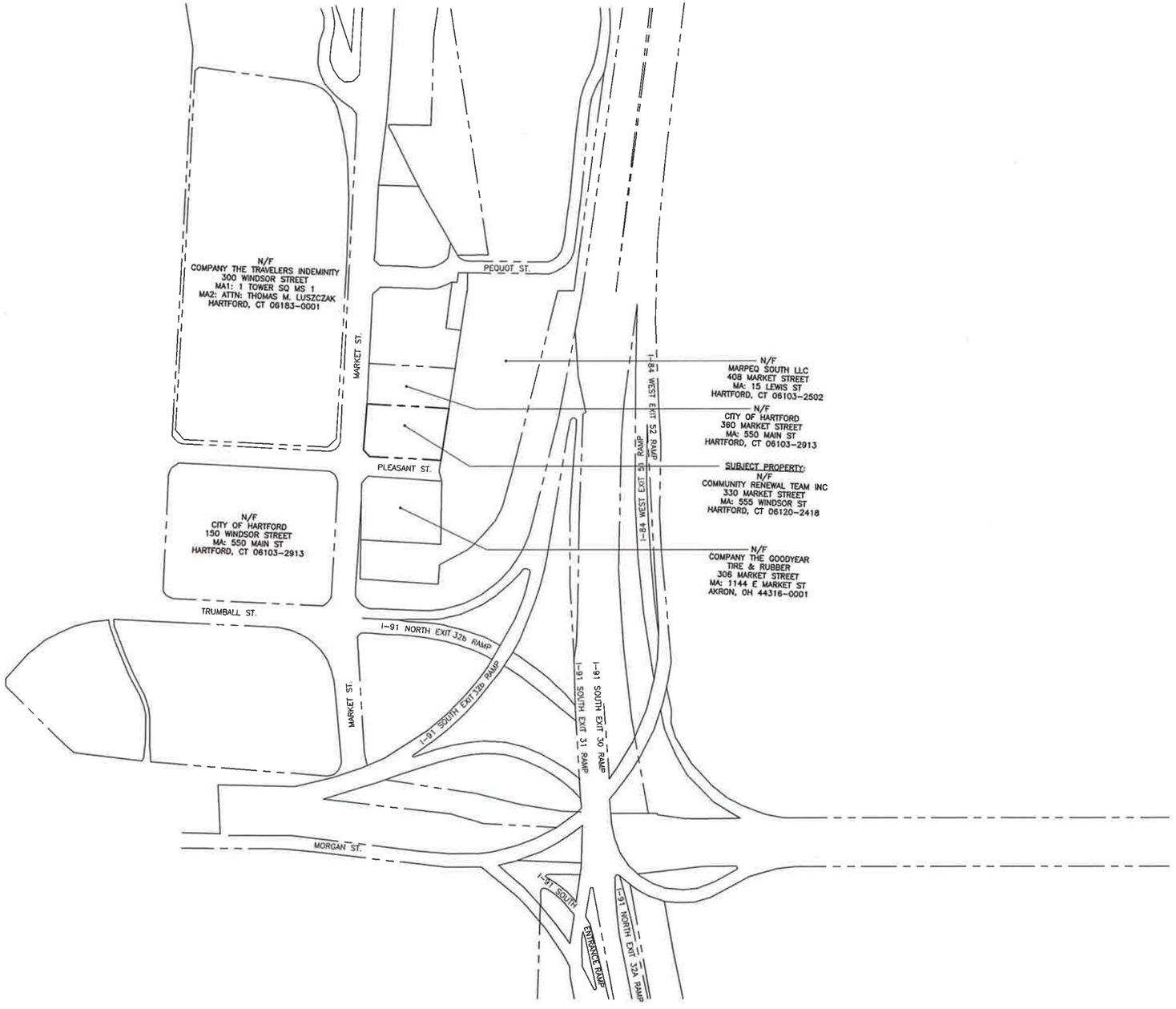
Cellco Partnership d/b/a Verizon Wireless
WIRELESS COMMUNICATIONS FACILITY
HARTFORD SC1
330 MARKET STREET
HARTFORD, CT 06120

DATE: 04/29/16
SCALE: AS NOTED
JOB NO. 15195.000

TITLE SHEET

T-1

Sheet No. 1 of 3



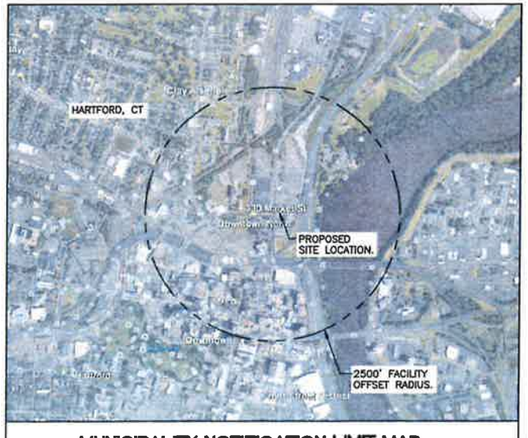
1 / C-1 ABUTTERS MAP
SCALE: 1" = 145'

APPROXIMATE NORTH

GRAPHIC SCALE
145 0 72.5 145 290 580
(IN FEET)
1 inch = 146 ft.

MAP REFERENCE NOTE:

PROPERTY LINES AND PROPERTY OWNERSHIP INFORMATION SHOWN HEREIN ARE REFERENCED FROM THE TOWN OF HARTFORD ON-LINE ASSESSORS MAPPING AND ASSESSORS DATABASE.



MUNICIPALITY NOTIFICATION LIMIT MAP

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
1	06/07/16	KAMJR	DMD	ISSUED FOR CSC
0	05/03/16	KAMJR	DMD	ISSUED FOR CSC - CLIENT REVIEW

PROFESSIONAL ENGINEER SEAL

verizon

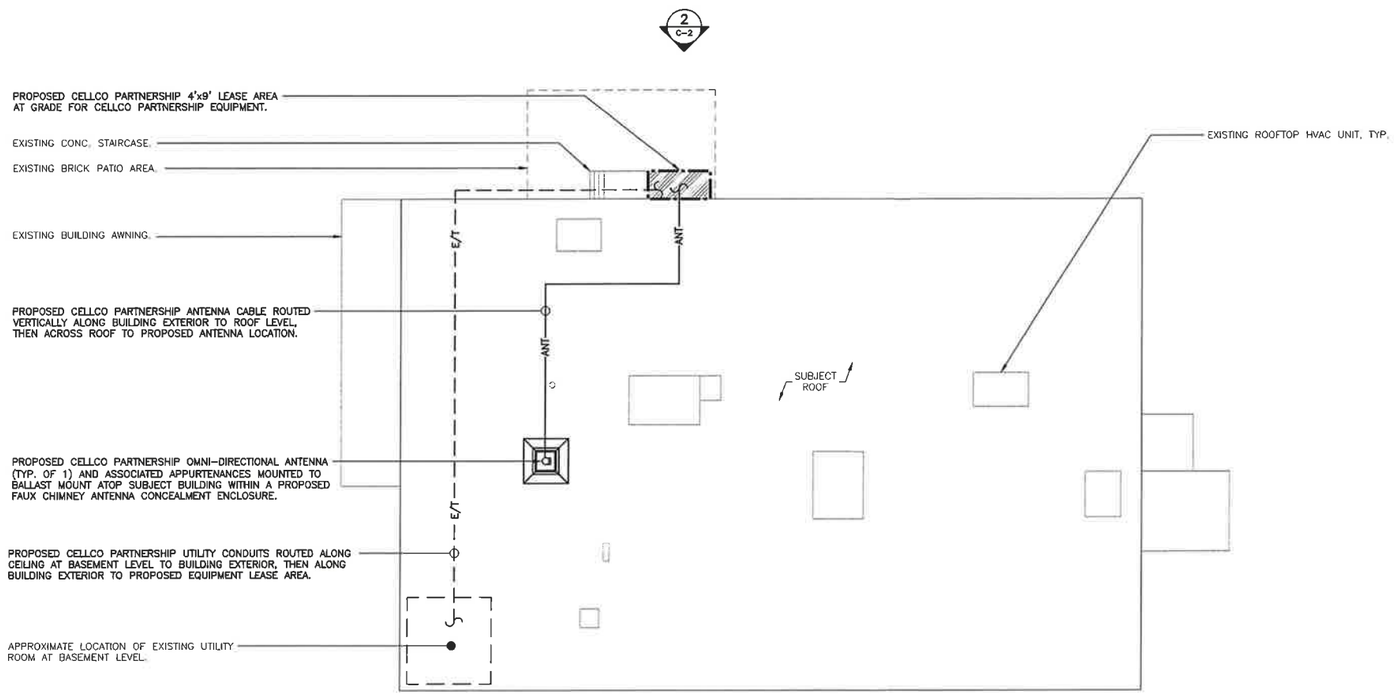
CENTEK engineering
Centered on Solutions
(203) 488-0580
(203) 488-8587 Fax
63-2 North Branford Road
Branford, CT 06405
www.CentekEng.com

Cellco Partnership d/b/a Verizon Wireless
WIRELESS COMMUNICATIONS FACILITY
HARTFORD SC1
330 MARKET STREET
HARTFORD, CT 06120

DATE: 04/29/16
SCALE: AS NOTED
JOB NO. 15195.000

ABUTTERS MAP

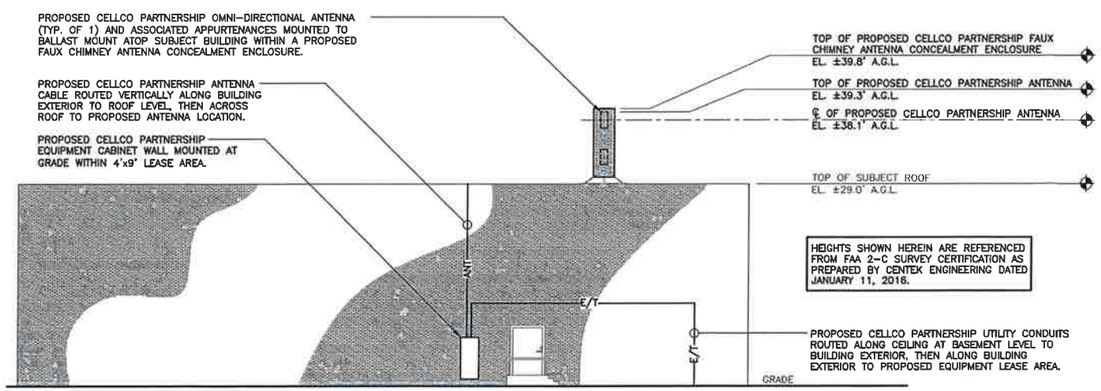
C-1
Sheet No. 2 of 3



1 C-2 **SITE PLAN**
SCALE: 1" = 10'

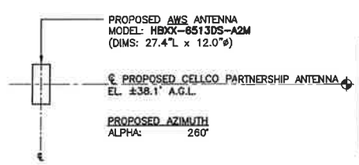
APPROXIMATE NORTH

GRAPHIC SCALE
(IN FEET)
1 inch = 10 ft.



2 C-2 **NORTH ELEVATION**
SCALE: 1" = 10'

GRAPHIC SCALE
(IN FEET)
1 inch = 10 ft.



RRH BOX MOUNTING NOTE:

- RRH (MODEL: **ALU RRH2x90-AWS**
  (DIMS: 26.6"L x 12"W x 6.8"D) (TYP. OF 1)

RRH (TYP. OF 1) MOUNTED ON THE ANTENNA MAST MOUNTED BEYOND PORTION OF EXISTING BUILDING.

3 C-2 **TYP. ANTENNA MOUNTING CONFIGURATION**
NOT TO SCALE

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
1	06/07/16	KWMJR	DMD	ISSUED FOR CSC
0	05/03/16	KWMJR	DMD	ISSUED FOR CSC - CLIENT REVIEW

PROFESSIONAL ENGINEER SEAL

verizon

CENTEK engineering
Centered on Solutions
(203) 488-0580
(203) 488-8587 Fax
63-2 North Branford Road
Branford, CT 06405
www.CentekEng.com

Cellco Partnership d/b/a Verizon Wireless
WIRELESS COMMUNICATIONS FACILITY
HARTFORD SC1
330 MARKET STREET
HARTFORD, CT 06120

DATE: 04/29/16
SCALE: AS NOTED
JOB NO. 15195.000

SITE PLAN, ELEVATION & ANTENNA CONFIG.

C-2
Sheet No. 3 of 3

ATTACHMENT 3

Product Specifications

COMMSCOPE®

HBXX-6513DS-VTM

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

POWERED BY ANDREW

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
Gain by Beam Tilt, average, dBi	0 ° | 14.6	0 ° | 14.7	0 ° | 15.0
	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
WIRELESS PRODUCT DATASHEET
B4 RRH2X60-4R FOR AWS BAND APPLICATIONS

The Alcatel-Lucent B4 RRH2x60-4R is a high power, small form factor Remote Radio Head operating in the AWS frequency band (3GPP Band 4) for LTE technology. It is designed with an eco-efficient approach, providing operators with the means to achieve high quality and high capacity coverage with minimum site requirements and efficient operation.

A distributed Node B expands the deployment options by using two components, a Base Band Unit (BBU) containing the digital assets and a separate RRH containing the radio-frequency (RF) elements. This modular design optimizes available space and allows the main components of a Node B to be installed separately, within the same site or several kilometers apart.

The Alcatel-Lucent B4 RRH2x60-4R is linked to the BBU by an optical-fiber connection carrying downlink and uplink digital radio signals along with operations, administration and maintenance (OA&M) information.

SUPERIOR RF PERFORMANCE

The Alcatel-Lucent B4 RRH2x60-4R integrates all the latest technologies. This allows operators to offer best-in-class characteristics.

It delivers an outstanding 120 watts of total RF power thanks to its two transmit RF paths of 60 W each.

It is ideally suited to support multiple-input multiple-output (MIMO) 2x2 operation.

It includes four RF receivers to natively support 4-way uplink reception diversity. This improves the radio uplink coverage and this can be used to extend the cell radius commensurate with 2x2MIMO 2x60 W for the downlink.

It supports multiple discontinuous LTE carriers within an instantaneous bandwidth of 45 MHz corresponding to the entire AWS B4 spectrum.

The latest generation power amplifiers (PA) used in this product achieve high efficiency (>40%), resulting in improved power consumption figures.

OPTIMIZED TCO

The Alcatel-Lucent B4 RRH2x60-4R is designed to make available all the benefits of a distributed Node B, with excellent RF characteristics, with low capital expenditures (CAPEX) and low operating expenditures (OPEX).

The Alcatel-Lucent B4 RRH2x60-4R is a very cost-effective solution to deploy LTE MIMO.

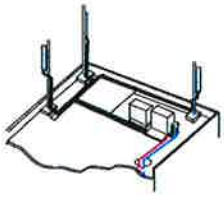
EASY INSTALLATION

The B4 RRH2x60-4R includes a reversible mounting bracket which allows for ease of installation behind an antenna, or on a rooftop knee wall while providing easy access to the mid body RF connectors.

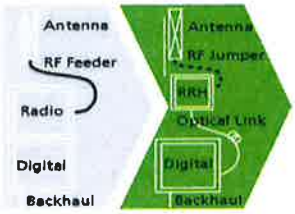
The limited space available in some sites may prevent the installation of traditional single-cabinet BTS equipment. However, many of these sites can host an Alcatel-Lucent B4 RRH2x60-4R installation, providing more flexible site selection and improved network quality along with greatly reduced installation time and costs.

The Alcatel-Lucent B4 RRH2x60-4R is a zero-footprint solution and is convection cooled without fans for silent operation, simplifying negotiations with site property owners and minimizing environmental impacts.

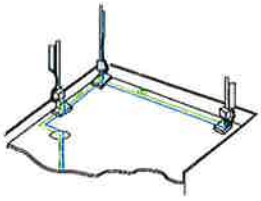
Installation can easily be done by a single person as the Alcatel–Lucent B4 RRH2x60-4R is compact and weighs about 25 kg, eliminating the need for a crane to hoist the BTS cabinet to the rooftop. A site can be in operation in less than one day.



Macro



RRH for space-constrained cell sites



Distributed

FEATURES

- B4 RRH2x60-4R integrates two power amplifiers of 60W rating (at each antenna connector)
- Support multiple carriers over the entire 3GPP band 4
- B4 RRH2x60-4R is optimized for LTE operation
- B4 RRH2x60-4R is a very compact and lightweight product
- Advanced power management techniques are embedded to provide power savings, such as PA bias control

BENEFITS

- MIMO LTE operation with only one single unit per sector
- Improved uplink coverage with built-in 4-way receive diversity capability
- RRH can be mounted close to the antenna, eliminating nearly all losses in RF cables and thus reducing power consumption by 50% compared to conventional solutions
- Distributed configurations provide easily deployable and cost-effective solutions, near zero footprint and silent solutions, with minimum impact on the neighborhood, which ease the deployment
- RETA and TMA support without additional hardware thanks to the AISG v2.0 port and the integrated Bias-Tees. Bias-Tees support AISG DC supply and signaling.

TECHNICAL SPECIFICATIONS

Specifications listed are hardware capabilities. Some capabilities depend on support in a specific software release or future release.

Dimensions and weights

- HxWxD : 930x270x146 mm (with solar shield)
- Weight : 25 kg (55 lbs) (with solar shield)

Electrical Data

- Power Supply : -48V DC (-38 to -57V)
- Power Consumption: 346W typ. @2x30W (100%RF), 560W typ. @2x60W (100%RF)

RF Characteristics

- Frequency band: 1710-1755, UL / 2110-2155 MHz, DL (3GPP band 4)
- Output power: 2x60W at antenna connectors
- Technology supported: LTE
- Instantaneous bandwidth: 45 MHz
- Rx diversity: 2-way and 4-way uplink reception
- Typical sensitivity without Rx diversity: -105 dBm for LTE

Connectivity

- Two CPRI (3-6) optical ports for daisychaining and up to six RRHs per fiber
- Type of optical fiber: Single-Mode (SM) and Multi-Mode (MM) SFPs
- Optical fiber length: up to 300m using MM fiber, up to 15km using SM fiber
- TMA/RETA : AISG 2.0 (RS485 connector and internal Bias-Tee)
- Four external alarms
- Surge protection for all external ports (DC and RF)

Environmental specifications

- Operating temperature: -40°C to 55°C including solar load
- Operating relative humidity: 8% to 100%
- Environmental Conditions : ETS 300 019-1-4 class 4.1E
- Ingress Protection : IEC 60529 IP65
- Acoustic Noise : Noiseless (natural convection cooling)

Safety and Regulatory Data

- EMC : 3GPP 25113, EN 301 489-1, EN 301 489-23, GR 1089, GR 3108, OET-65
- Safety : IEC60950-1, EN 60825-1, UL, ANSI/NFPA 70, CAN/CSA-C22.2
- Regulatory : FCC Part 15 Class B
- Health : EN 50385

Alcatel·Lucent

ATTACHMENT 4

Visual Assessment & Photo-Simulations

HARTFORD SC1
330 MARKET STREET
HARTFORD, CT

Prepared in May 2016 by:
All-Points Technology Corporation, P.C.
3 Saddlebrook Drive
Killingworth, CT 06141

Prepared for Verizon Wireless

ALL-POINTS
TECHNOLOGY CORPORATION

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 330 Market Street in Hartford, Connecticut (the "Property").

Project Setting

The Property is located on the east side of Market Street, at the intersection of Pleasant Street, in a commercial area just north of downtown Hartford. The Property is currently developed with a two-story masonry commercial office building.

The proposed Facility would include the installation of an omni-directional antenna and associated appurtenances concealed within an RF-transparent enclosure designed to resemble a chimney on the building rooftop. The faux chimney would be constructed match the architecture and brick construction of the building. The faux chimney would extend approximately 11 feet above the rooftop and approximately 39 feet above grade. Associated equipment would be affixed to the building's rear (north side) exterior wall.

Methodology

On May 23, 2016, APT personnel conducted field reconnaissance and photo-documented existing conditions. Seven (7) nearby locations were selected to depict existing and proposed conditions with the new installation. 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.

The seven (7) locations simulated were chosen in the field because they presented generally unobstructed view lines towards at least a portion of the building and represent the approximate limits of visibility associated with the proposed installation. They are however static in nature and do not necessarily fairly characterize the prevailing views from all locations within a given area. The simulations provide a representation of the proposed Facility under similar settings as those encountered during the field reconnaissance. Views of the Facility can change substantially throughout the seasons as well as the time of day, and are dependent on weather and other atmospheric conditions including but not necessarily limited to haze, fog, and clouds; the location, angle and intensity of the sun; light conditions, and the specific viewer location.

Conclusions

The visibility of the proposed installation would be limited primarily to nearby locations within approximately 550 feet or less of the Property, in locations where at least portions of the building can be seen today. The facility's concealment within the faux chimney on the roof roofs results in no antenna or supporting equipment being visible from exterior locations. The design of the RF-transparent enclosure will be consistent with the style and colors of the building façade such that the proposed installation would appear to be original design elements.

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

ATTACHMENTS

PHOTO LOG

Legend

Site ● Photo Location

200 100 0 200 Feet

1 inch = 200 feet

ALL-POINTS verizon

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
1	**MARKET STREET**	**SOUTHEAST**	**+/- 222 FEET**

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
1	**MARKET STREET**	**SOUTHEAST**	**+/- 222 FEET**

ALL-POINTS TECHNOLOGY CORPORATION

verizon

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
2	**PLEASANT STREET**	**NORTHEAST**	**+/- 242 FEET**

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
2	**PLEASANT STREET**	**NORTHEAST**	**+/- 242 FEET**

ALL-POINTS TECHNOLOGY CORPORATION

verizon

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
3	**MARKET STREET**	**NORTHEAST**	**+/- 241 FEET**

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
3	**MARKET STREET**	**NORTHEAST**	**+/- 241 FEET**

ALL-POINTS TECHNOLOGY CORPORATION

verizon

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
4	**TRUMBULL STREET**	**NORTHEAST**	**+/- 558 FEET**

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
4	**TRUMBULL STREET**	**NORTHEAST**	**+/- 558 FEET**

ALL-POINTS TECHNOLOGY CORPORATION

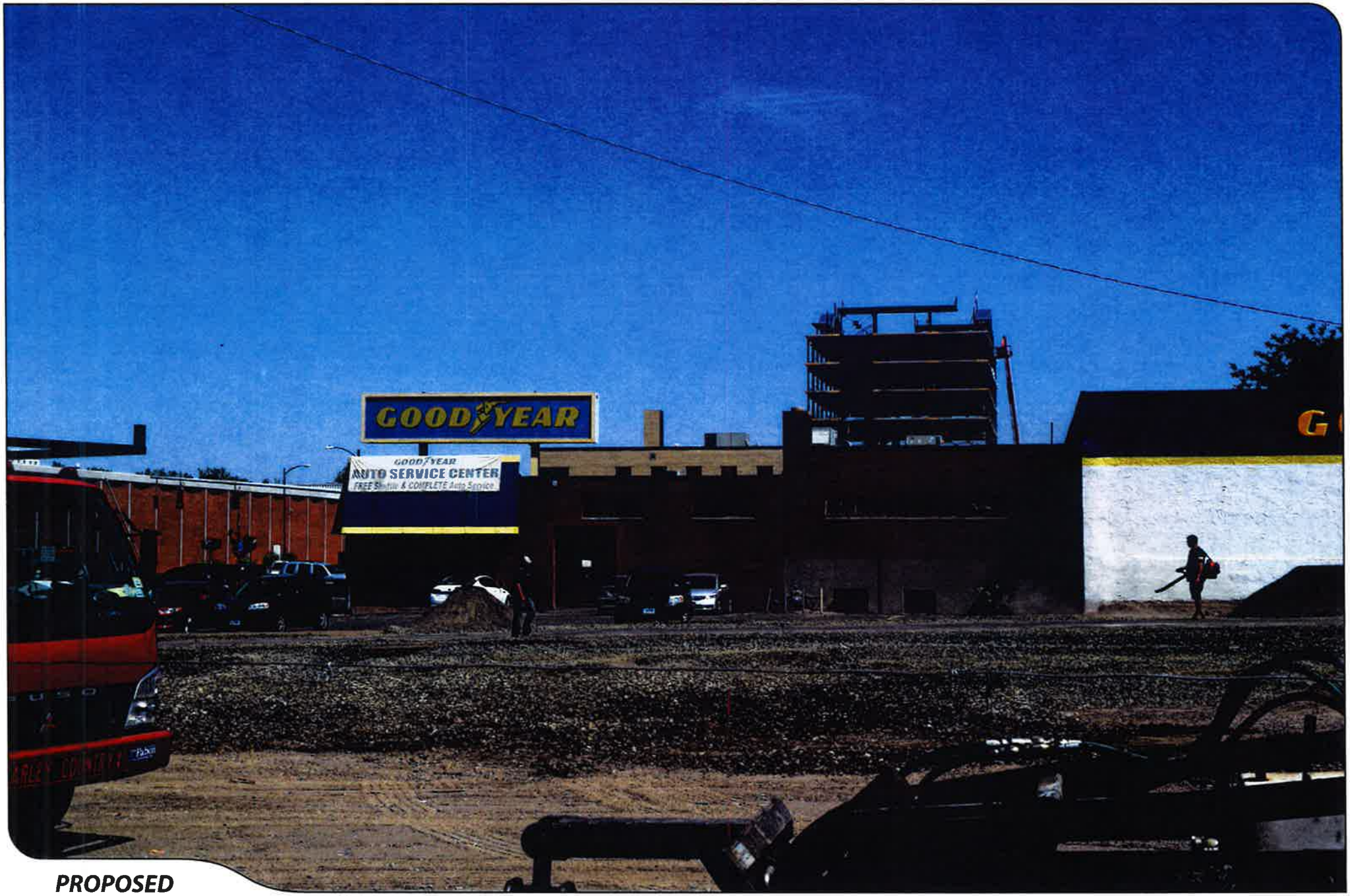
verizon

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
5	**ADJACENT TO HOST PROPERTY**	**NORTH**	**+/- 429 FEET**

ALL-POINTS TECHNOLOGY CORPORATION

verizon



PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
5	**ADJACENT TO HOST PROPERTY**	**NORTH**	**+/- 429 FEET**

ALL-POINTS TECHNOLOGY CORPORATION

verizon

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
6	**ADJACENT TO HOST PROPERTY**	**WEST**	**+/- 374 FEET**

ALL-POINTS TECHNOLOGY CORPORATION

verizon

PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
6	**ADJACENT TO HOST PROPERTY**	**WEST**	**+/- 374 FEET**

ALL-POINTS TECHNOLOGY CORPORATION

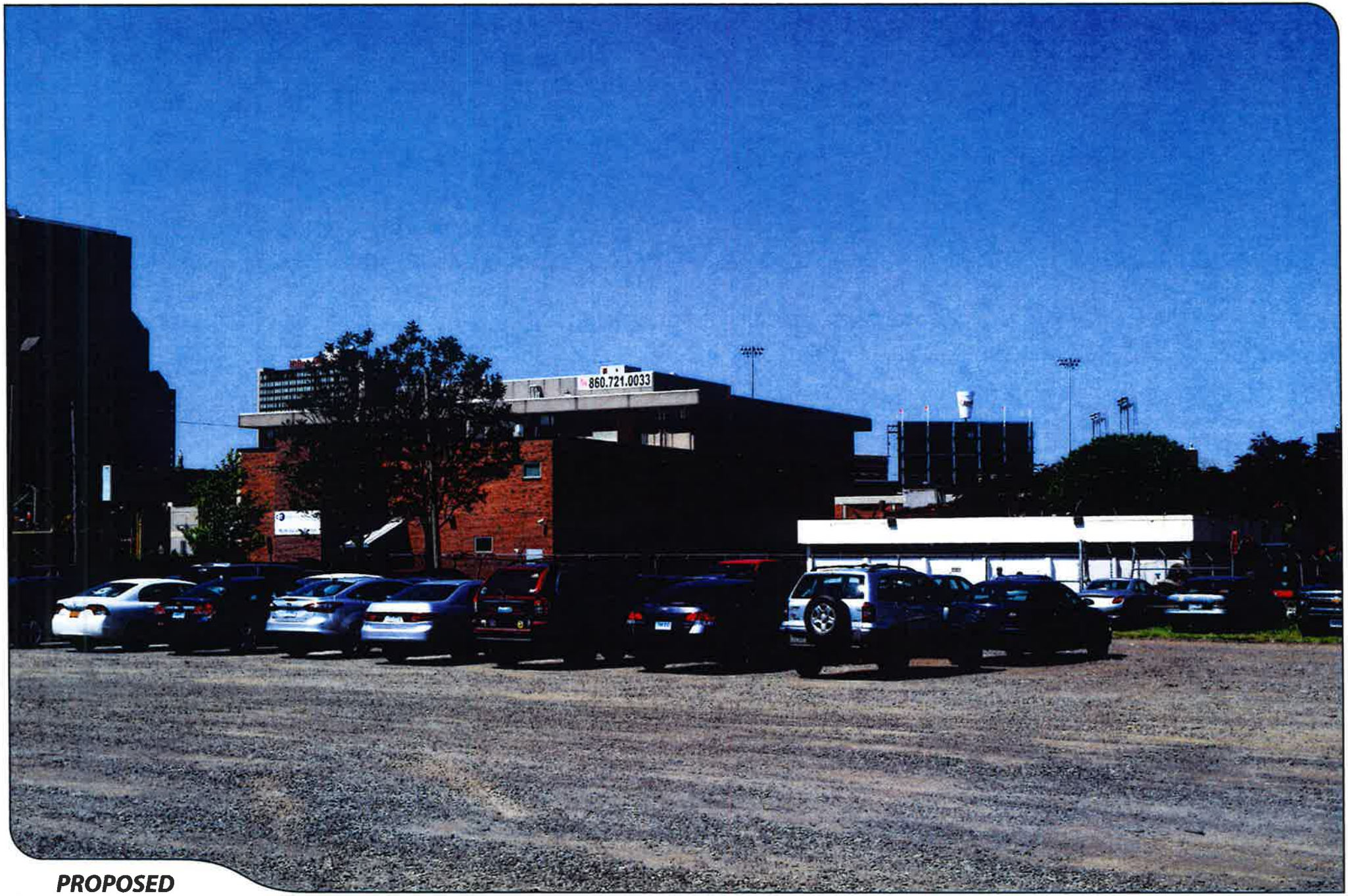
verizon

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
7	**ADJACENT TO HOST PROPERTY**	**SOUTHWEST**	**+/- 411 FEET**

ALL-POINTS TECHNOLOGY CORPORATION

verizon



PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
7	**ADJACENT TO HOST PROPERTY**	**SOUTHWEST**	**+/- 411 FEET**

ALL-POINTS TECHNOLOGY CORPORATION

verizon

ATTACHMENT 5

Site Name: Hartford SC 1, CT
Cumulative Power Density

Operator	Operating Frequency	Number of Trans.	ERP Per Trans.	Total ERP	Distance to Target	Calculated Power Density	Maximum Permissable Exposure*	Fraction of MPE
	(MHz)		(watts)	(watts)	(feet)	(mW/cm^2)	(mW/cm^2)	(%)
VZW PCS	1970	1	180	3172	38.1	0.7858	1.0	78.58%
VZW Cellular	869							
VZW AWS	2145							
VZW 700	746							
Total Percentage of Maximum Permissible Exposure								78.58%

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 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.

ATTACHMENT 6

```
**************************************************
*          Federal Airways & Airspace            *
*        Summary Report: New Construction        *
*              Antenna Structure                 *
**************************************************

Airspace User: Mark Brauer

File: HARTFORD_SC_1_CT

Location:  Hartford, CT

Latitude:  41°-46'-20.4"          Longitude: 72°-40'-13.97"

SITE ELEVATION AMSL.....40 ft.
STRUCTURE HEIGHT.........40 ft.
OVERALL HEIGHT AMSL.....80 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)
  FAR 77.9:    NNR FAR 77.9 IFR Straight-In Notice Criteria for HFD
  FAR 77.9:    NNR FAR 77.9 IFR Straight-In Notice Criteria for 4B9
  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
Type: A   RD: 12238.73   RE: 18.3
  FAR 77.17(a)(1):        DNE
  FAR 77.17(a)(2):        DNE - Height No Greater Than 200 feet AGL.
  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 368 feet.

VFR TRAFFIC PATTERN AIRSPACE FOR: 4B9: SIMSBURY
Type: A   RD: 59118.91   RE: 162.2
  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

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): DNE - No Airway Found

PRIVATE LANDING FACILITIES

FACIL IDENT	TYP	NAME	BEARING To FACIL	RANGE IN NM	DELTA ARP ELEVATION	FAA IFR
CT06	HEL	DELTA ONE	24.31	1.09	+59	
No Impact to Private Landing Facility Structure is beyond notice limit by 1623 feet.						
0CT9	HEL	HARTFORD HOSPITAL	198.65	1.13	-131	
No Impact to Private Landing Facility Structure 0 ft below heliport.						
0CT5	HEL	ST FRANCIS HOSPITAL	275.69	1.28	-104	
No Impact to Private Landing Facility Structure 1 ft below heliport.						
CT88	HEL	RENTSCHLER	121.03	2.21	+32	
No Impact to Private Landing Facility Structure is beyond notice limit by 8428 feet.						
CT62	HEL	TWIN MANUFACTURING COMPANY	50.58	3.53	+20	
No Impact to Private Landing Facility Structure is beyond notice limit by 16449 feet.						
CT00	HEL	ELECTRO-METHODS INC	41.17	4.75	-24	
No Impact to Private Landing Facility Structure 0 ft below heliport.						
CT38	HEL	CORPORATE CENTER	134.14	5.18	-24	
No Impact to Private Landing Facility Structure 9 ft below heliport.						
CT05	HEL	KAMAN AEROSPACE CORP	346.32	5.53	-84	
No Impact to Private Landing Facility Structure 0 ft below heliport.						

AIR NAVIGATION ELECTRONIC FACILITIES

FAC IDNT	TYPE	ST AT	FREQ	VECTOR	DIST (ft)	DELTA ELEVA	ST	LOCATION	GRND APCH ANGLE	BEAR
HFD	ATCT	Y	A/G	159.13	14581	+5	CT	HARTFORD-BRAINARD		.02
Notice Not Required for Stations operating with an ERP no greater than 3500 watts and frequencies are within the FAA/FCC co-location policy frequency bands. If ERP of 3500 watts is exceeded notice to the FAA is required.										
HFD	LOCALIZER	I	109.7	160.12	15348	+69	CT	RWY 02 HARTFORD-B		.26

2

HFD	VOR/DME	R	114.9	144.93	58462	-769	CT HARTFORD	-.75
BDL	RADAR	ON		356.93	60658	-156	CT BRADLEY INTL	-.15

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.

BDL	VORTAC	D	109.0	355.44	61657	-80	CT BRADLEY	-.07
BAF	VORTAC	R	113.0	355.02	142518	-187	MA BARNES	-.08
CEF	VORTAC	R	114.0	14.16	159829	-161	MA WESTOVER	-.06
MAD	VOR/DME	R	110.4	182.02	167172	-140	CT MADISON	-.05
HVN	VOR/DME	R	109.8	197.48	194915	+74	CT NEW HAVEN	.02
ORW	VOR/DME	I	110.0	113.44	199575	-230	CT NORWICH	-.07
CTR	VOR/DME	I	115.1	338.26	203727	-1520	MA CHESTER	-.43

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: WDRC @ 4978 meters.

Airspace® Summary Version 16.3.410

04-28-2016
10:26:07

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

June 29, 2016

Via Certificate of Mailing

Luke Bronin, Mayor
City of Hartford
550 Main Street, Room 200
Hartford, CT 06103

Re: **Proposed Installation of a Roof-Top Wireless Telecommunications Facility at 330 Market Street, Hartford, Connecticut**

Dear Mayor Bronin:

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 telecommunications facility on the roof of the building at 330 Market Street in Hartford (the "Property"). The facility will consist of a roof-top tower supporting one (1) canister antenna and one (1) remote radio head (RRH). The tower, antenna and RRH will be screened by a faux chimney enclosure that will extend to a height of approximately 39.8 feet above ground level. Equipment associated with the facility will be attached to the northerly façade of the building.

A copy of the Petition is attached for your review. Landowners whose property abuts the Property were also sent notice of this filing along with a copy of the Petition.

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

Sincerely,

Kenneth C. Baldwin

Attachment

14824469-v1

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

June 29, 2016

Via Certificate of Mailing

Community Renewal Team, Inc.
555 Windsor Street
Hartford, CT 06120

Re: **Proposed Installation of a Roof-Top Wireless Telecommunications Facility at 330 Market Street, Hartford, 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 telecommunications facility on the roof of the building at 330 Market Street in Hartford (the "Property"). The facility will consist of a roof-top tower supporting one (1) canister antenna and one (1) remote radio head (RRH). The tower, antenna and RRH will be screened by a faux chimney enclosure that will extend to a height of approximately 39.8 feet above ground level. Equipment associated with the facility will be attached to the northerly façade of the building.

A copy of the Petition is attached for your review. Landowners whose property abuts the Property were also sent notice of this filing along with a copy of the Petition.

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

Sincerely,

Kenneth C. Baldwin

Attachment

14824485-v1

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

June 29, 2016

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 Roof-Top Wireless Telecommunications Facility at 330 Market Street, Hartford, 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 telecommunications facility on the roof of the building at 330 Market Street in Hartford (the "Property"). The facility will consist of a roof-top tower supporting one (1) canister antenna and one (1) remote radio head (RRH). The tower, antenna and RRH will be screened by a faux chimney enclosure that will extend to a height of approximately 39.8 feet above ground level. Equipment associated with the facility will be attached to the northerly façade of the building. A copy of Cellco's 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.

Sincerely,

Kenneth C. Baldwin

Attachment

CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS

ABUTTING PROPERTY OWNERS
330 MARKET STREET
HARTFORD, CONNECTICUT

	Property Address	Owner's and Mailing Address
1.	300 Windsor Street	The Travelers Indemnity Company Attn: Thomas M. Luszczak 1 Tower Square, MS1 Hartford, CT 06183
2.	360 Market Street	City of Hartford 550 Main Street Hartford, CT 06103
3.	306 Market Street	The Goodyear Tire & Rubber Company 1144 East Market Street Akron, OH 44316
4.	150 Windsor Street	City of Hartford 550 Main Street Hartford, CT 06103
5.	408 Market Street	Marpeq South LLC 15 Lewis Street Hartford, CT 06103