Robinson+Cole

KENNETH C. BALDWIN

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Also admitted in Massachusetts

September 18, 2018

Melanie A. Bachman, Esq.
Executive Director/Staff Attorney
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: **Notice of Exempt Modification – Facility Modification**
200 Executive Boulevard, Southington, Connecticut

Dear Ms. Bachman:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains a small cell telecommunications facility, consisting of a canister antenna and a remote radio head, attached to a tower mast on the roof of an existing office building at 200 Executive Boulevard in Southington, Connecticut (the "Property"). The Council approved the installation of this roof-top tower on April 2, 2015 (Petition No. 1141). Cellco now intends to modify this small cell facility by replacing the existing canister antenna and RRH with a new canister antenna of comparable size (Model V4SSPP-360S-F, 1900/2100 MHz), and a new RRH (Model No. Alcatel-Lucent B66A RRH 4x45), all attached to the same tower mast. Included in Attachment 1 are specifications for Cellco's new antenna and RRH.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Southington Town Manager, Mark Sciota; Robert Phillips, Southington's Director of Planning and Community Development; and Executive Two Hundred, LLC, the owner of the Property.

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The proposed modifications will not result in an increase in the height of the existing tower and antenna. In fact, Cellco's replacement canister antenna is approximately four (4) inches shorter than the existing antenna.

2. The proposed modifications will not involve any change to ground-mounted equipment and, therefore, will not require the extension of the site boundary.

3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.

4. The operation of the replacement antenna will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. A General Power Density table for Cellco's modified facility is included behind Attachment 2.

5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.

6. The tower mast and existing building can support Cellco's proposed modifications. (*See* Structural Certification Letter included in Attachment 3).

A copy of the parcel map and owner information for the Property is included in Attachment 4. A Certificate of Mailing verifying that this filing was sent to municipal officials and the owner of the Property is included in Attachment 5.

For the foregoing reasons, Cellco respectfully submits that the proposed modifications to the above-referenced telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,

Kenneth C. Baldwin

Enclosures
Copy to:
Mark Sciota, Southington Town Manager
Robert Phillips, Southington Director of Planning and Community Development
Executive Two Hundred, LLC
Tim Parks

ATTACHMENT 1

V4PP-360S-F

12-port small cell antenna, 8x 1695–2690 and 4x 5150-5925 MHz, 360° Horizontal Beamwidth, fixed tilt.

Electrical Specifications

Frequency Band, MHz	**1695–1920**	**1920–2180**	**2300–2690**	**5150–5925**
Gain, dBi	9.6	10.0	11.1	4.6
Beamwidth, Horizontal, degrees	360	360	360	360
Beamwidth, Vertical, degrees	21.6	18.7	15.0	25.1
Beam Tilt, degrees	7	7	7	0
USLS (First Lobe), dB	13	12	13	5
Isolation, dB	25	25	25	25
Isolation, Intersystem, dB	25	25	25	25
VSWR | Return Loss, dB	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	-150	
Input Power per Port at 50°C, maximum, watts	75	75	75	
Polarization	±45°	±45°	±45°	±45°
Impedance	50 ohm	50 ohm	50 ohm	50 ohm

Electrical Specifications, BASTA*

Frequency Band, MHz	**1695–1920**	**1920–2180**	**2300–2690**	**5150–5925**
Gain by all Beam Tilts, average, dBi	9.0	9.7	10.4	4.0
Gain by all Beam Tilts Tolerance, dB	±1.1	±0.6	±0.8	±0.8
Beamwidth, Vertical Tolerance, degrees	±2.1	±1.8	±1.4	±5
CPR at Boresight, dB	14	18	19	13

* 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.

5 GHz Port Power Table

5 GHz FCC Power Requirements				
U-NII Band	**U-NII 1**	**U-NII 2A**	**U-NII 2C**	**U-NII 3**
Frequency (MHz)	**5150 - 5250**	**5250 - 5350**	**5470 - 5725**	**5725 - 5850**
Max Input power per port to align with FCC Title 47 Part 15 (Watts)	**0.5**	**0.125**	**0.125**	**0.5**

General Specifications

Operating Frequency Band	1695 – 2690 MHz | 5150 – 5925 MHz
Antenna Type	Small Cell
Band	Multiband
Performance Note	Outdoor usage

Mechanical Specifications

RF Connector Quantity, total	12
RF Connector Quantity, high band	12
RF Connector Interface	4.3-10 Female
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Radiator Material	Low loss circuit board
Radome Material	ASA, UV stabilized
Reflector Material	Aluminum
RF Connector Location	Bottom
Wind Loading, frontal	140.0 N @ 150 km/h 31.5 lbf @ 150 km/h
Wind Speed, maximum	241 km/h | 150 mph

Dimensions

Length	620.0 mm | 24.4 in
Outer Diameter	305.0 mm | 12.0 in

V4PP-360S-F

Net Weight, without mounting kit 13.1 kg | 28.9 lb

Packed Dimensions

Length	888.0 mm | 35.0 in
Width	418.0 mm | 16.5 in
Depth	404.0 mm | 15.9 in
Shipping Weight	17.2 kg | 37.9 lb

Regulatory Compliance/Certifications

Agency	**Classification**
RoHS 2011/65/EU	Compliant by Exemption
China RoHS SJ/T 11364-2006	Above Maximum Concentration Value (MCV)
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

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.

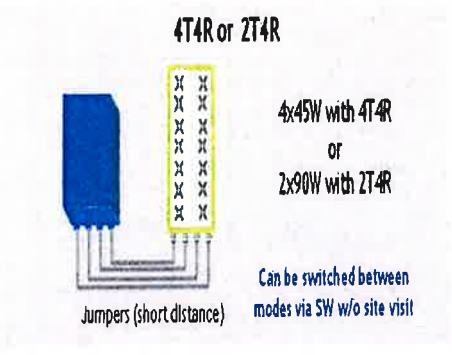
The Alcatel-Lucent B66a RRH4x45 product has four transmit RF paths, offering the possibility to **select, via software only, 2Tx or 4Tx MIMO configurations** with either 2x90W or 4x45W RF output power. It also supports 4-way Rx diversity at the 70 MHz instantaneous bandwidth.

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

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 - 4 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 (3GPP 36.104)	2 dB typical (<2.5 dB max) – 2 or 4 way Rx diversity -104.5 dBm maximum
Size (HxWxD) in mm (in.) Volume in Liters Weight in kg (lb.) (w/o mounting kit)	655x299x182 (25.8x11.8x7.2) (with solar shield) 640x290x160 (25.2x11.4x6.3) (without solar shield) 35.5 (with solar shield) 29.7 (without solar shield) 25.8kg (56.8lb) (with solar shield)
DC voltage range DC power consumption	Nominal: -48V, -40.5 to -57V at full performance, -38 to -57V with relaxation on power consumption 750W typical @100% RF load (in 2Tx or 4Tx mode); Add 58W for 2A*29V for AISG
Environmental conditions Wind load (@150Km/h or 93 mph)	-40°C (-40°F) /+55°C (+131°F) UL50E Type 4 Enclosure 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

ATTACHMENT 2

Site Name: Southington SC 2, 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)	(%)
5G 28GHz	28000	1						
VZW PCS	1970	1	1000	1000	78	0.0591	1.0	5.91%
VZW Cellular LTE	869	1						
VZW Cellular	869	3						
VZW AWS	2145	1	1000	1000	78	0.0591	1.0	5.91%
VZW 700	746	1						

Total Percentage of Maximum Permissible Exposure 11.82%

*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 3

ALL-POINTS
TECHNOLOGY CORPORATION

September 17, 2018

Verizon Wireless
20 Alexander Drive
Wallingford, CT 06492

Attn: Mr. James O'Donnell

Re: Antenna Mount Structural Certification Letter
Verizon Wireless Site I.D.: Southington SC2 CT
200 Executive Boulevard
Southington, CT 06489

Project/Location Code: 201815243773/308722
APT Filing No. CT141EB10600

Dear Mr. O'Donnell,

All-Points Technology Corp. (APT), a professional engineering corporation licensed in the State of Connecticut, has been retained by Verizon Wireless (VZW) to assess the structural adequacy of the existing VZW antenna mount assembly to support the proposed antenna and appurtenance modification on the above noted host building structure.

The proposed VZW antenna and appurtenance modification consists of the replacement of one (1) existing small cell antenna with one (1) proposed small cell antenna and one (1) existing Remote Radio Head (RRH) with one (1) proposed Remote Radio Head (RRH). Reference is made to the Design Exhibit Drawings prepared by this office, marked Rev 0, dated 08/20/18.

The structural review has been prepared in accordance with the following design standards:

ANSI/TIA-222-G-2009 - Structural Standards for Steel Antenna Towers and Antenna Supporting Structures

ASCE/SEI 7-10 – Minimum Design Loads for Buildings and Other Structures

AISC - American Institute of Steel Construction Manual of Steel Construction, 14th Ed.

IBC 2012 - as amended by the 2016 Connecticut State Building Code.

Antenna, appurtenance and mount assembly loads were evaluated utilizing the ANSI TIA-222-G standard.

- Load Case 1: 97 mph (3-second gust,), 0in ice (Nominal Survival Wind)
- Load Case 2: 50 mph (3-second gust) with 1.00in ice thickness
- Load Case 3: 60 mph (3-second gust) (Service Load)
- Structure Class II
- Exposure Category C
- Topographic Category 1.

Note:
1. Based upon IBC 2012/2016 Connecticut State Building Code maximum ultimate wind speed for site location of 125 mph (3-sec gust), equivalent to a nominal design speed of 97 mph (3-sec gust) per Appendix N and exception #5, Section 1609.1.1.

The existing and proposed VZW antenna/appurtenance and mount assembly loading consists of the following equipment (proposed equipment shown in **bold** text):

Antenna and Appurtenance Make/Model	Quantity	Status	Mount Type	Elevation
Commscope V4PP-360S-F small cell antenna	1	P	One (1) Antenna Pipe Mounting Assembly	78 ft± AGL
Samsung B2/B66a RRH BR049 Remote Radio Head (RRH)	1	P		
½" Jumper Cables	8	P	Banded to Exist. Pipe Mast Noted Above	n/a

Notes:
1. ETR = Existing to Remain/to be Relocated; P = Proposed.
2. Antennas and appurtenances shall be centered on mount assembly at the above specified elevation with no vertical eccentricity.

The findings of this review are based upon a comparative review of the proposed equipment loading, a Structural Evaluation Letter prepared by CENTEK Engineering, Inc., dated February 13, 2015, and Construction Drawings prepared by CENTEK Engineering, Inc., dated March 12, 2015.

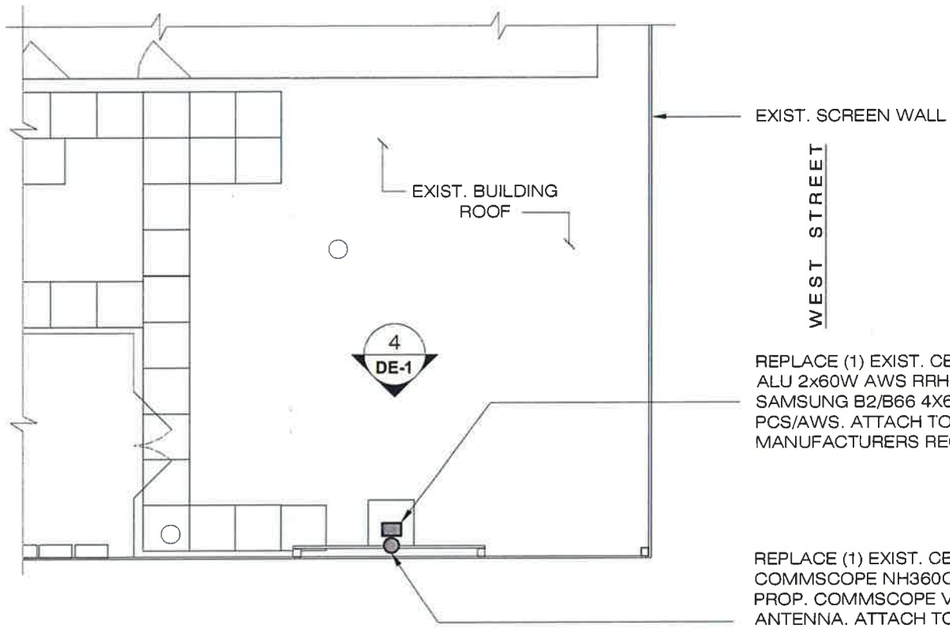
In conclusion, we find that the existing VZW antenna mounting assembly is structurally adequate to support the proposed antenna/appurtenance modification. Further, our analysis of the impacted components has determined that the proposed VZW installation will not adversely affect the structural integrity of the existing host structure.

The findings of this certification letter are based upon a review of the physical characteristics of the mount assembly as documented by local field mapping conducted by APT. This letter assumes that the mounting assembly structural components and connections are in good condition and have been properly maintained since erection. The contractor shall inspect the condition of the existing mount assemblies in its entirety prior to the installation of the equipment modification.

If there are any further questions regarding this project or if we may of further assistance, please do not hesitate to call.

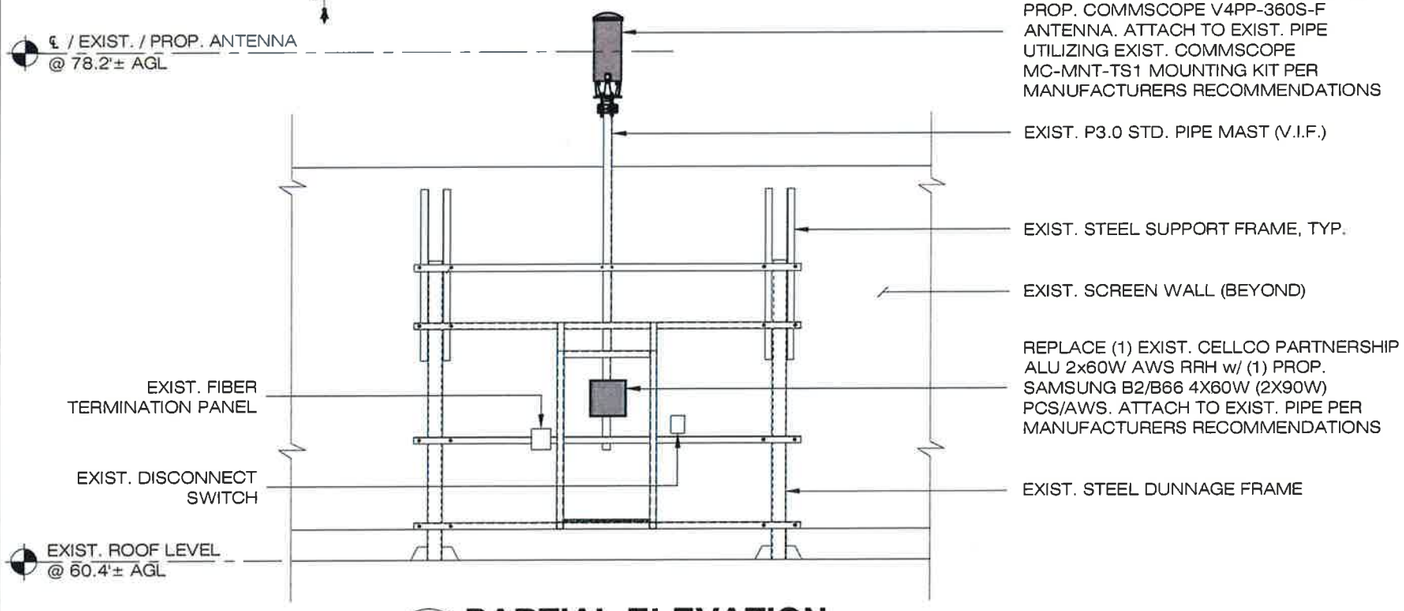
Sincerely,
All-Points Technology Corp. P.C.

Michael S. Trodden, P.E.
Sr. Structural Engineer



3 DE-1 PARTIAL ROOF PLAN

SCALE: 1" = 20'-0"



4 DE-1 PARTIAL ELEVATION

SCALE: 3/16" = 1'-0"

NOTES:

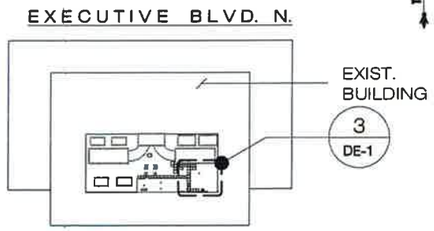
1. DESIGN EXHIBIT DRAWINGS ARE DIAGRAMMATIC IN NATURE AND CONVEY GENERAL INFORMATION PERTAINING TO THE SIZE AND LOCATION OF THE PROPOSED WIRELESS EQUIPMENT UPGRADE.
2. BASE MAPPING FROM FIELD MEASUREMENTS TAKEN BY ALL-POINTS TECH. CORP., P.C. ON 07/30/18.
3. REFER TO MOUNT CERTIFICATION LETTER PREPARED BY ALL-POINTS TECHNOLOGY CORP. DATED 08-20-18 AVAILABLE UNDER SEPARATE COVER

APPROX. EXIST. PROPERTY LINE

PARTIAL ROOF PLAN 3 DE-1

1 DE-1 LOCATION PLAN

SCALE: 1" = 250'-0"



2 DE-1 KEY PLAN

SCALE: N.T.S.

REVISIONS:
-REV0: 08/20/18: FOR REVIEW: JRM
-REV1:
-REV2:
-REV3:
-REV4:
-REV5:

ALL-POINTS TECHNOLOGY CORPORATION
3 SADDLEBROOK DRIVE
KILLINGWORTH, CT 06419
WWW.ALLPOINTSTECH.COM
PHONE: (860)-663-1697
FAX: (860)-663-0935

SHEET NUMBER: DE-1

SOUTHINGTON SC2 CT
200 EXECUTIVE BLVD
SOUTHINGTON, CT 06489

VZW FUZE ID: 15243773 VZW VZW
PROJECT CODE: 20181839752 LC: 467491 CM: JO

APT FILING NUMBER: CT141EB10600

LOCATION PLAN, PARTIAL ROOF PLAN & ELEVATION

DRAWN BY: DRA
CHECKED BY: JRM
DATE OF DV: 07/30/18
DATE: 08/20/18

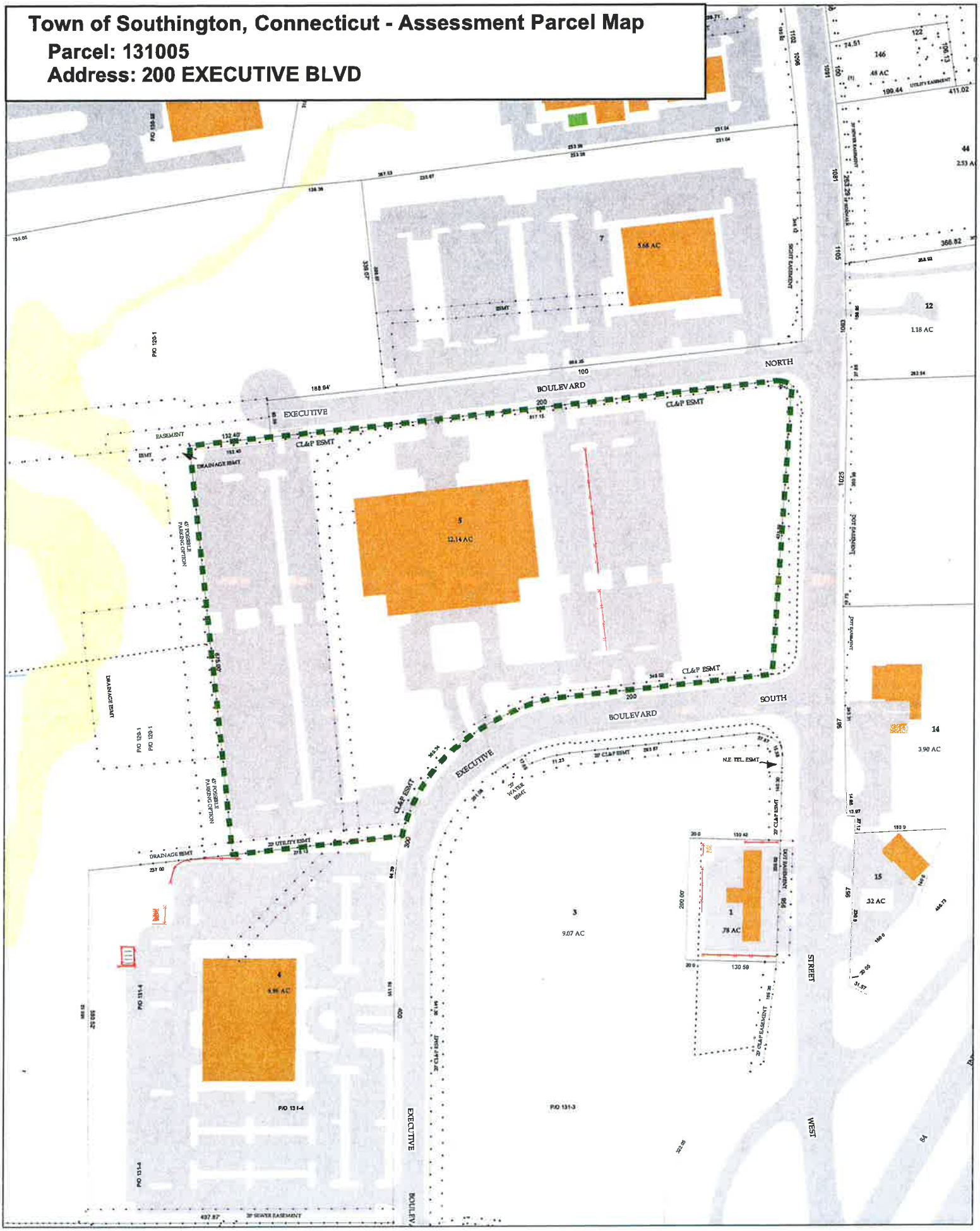
Cellco Partnership d/b/a verizon

ATTACHMENT 4

Town of Southington, Connecticut - Assessment Parcel Map

Parcel: 131005

Address: 200 EXECUTIVE BLVD



Approximate Scale:

40 0 40 80 120 160 Feet

Disclaimer: This map is for informational purposes only.
All information is subject to verification by any user.
The Town of Southington and its mapping contractors
assume no legal responsibility for the information contained herein.

Map Produced August 2018

200 EXECUTIVE BLVD

Location	200 EXECUTIVE BLVD	**Mblu**	131/ / 005/ /
Acct#	7190	**Owner**	EXECUTIVE TWO HUNDRED LLC
Assessment	$7,690,710	**Appraisal**	$10,986,730
PID	13406	**Building Count**	1

Current Value

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2016	$8,822,040	$2,164,690	$10,986,730

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2016	$6,175,430	$1,515,280	$7,690,710

Owner of Record

Owner	EXECUTIVE TWO HUNDRED LLC
Co-Owner	% JOSEPH MORUZZI
Address	PO BOX 185598 HAMDEN, CT 06518

Sale Price	$2,550,000
Certificate	
Book & Page	1315/ 360
Sale Date	05/19/2014
Instrument	14

Ownership History

Ownership History					
Owner	**Sale Price**	**Certificate**	**Book & Page**	**Instrument**	**Sale Date**
EXECUTIVE TWO HUNDRED LLC	$2,550,000		1315/ 360	14	05/19/2014
200 SOUTHINGTON EXECUTIVE PARK	$0		1277/ 73	18	03/21/2013
LEXINGTON SOUTHINGTON L P	$0		1011/ 893	29	05/23/2005
LXP I L.P. THE HARTFORD CORP REAL EST HO	$100		702/ 263	00	06/08/1998

Building Information

Building 1 : Section 1

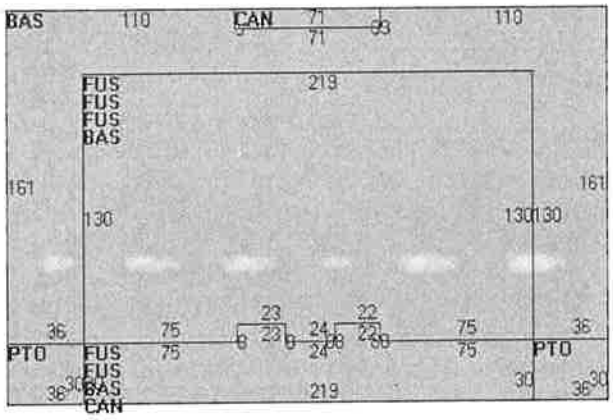
Year Built:	1984
Living Area:	150,972
Building Percent Good:	45

Building Attributes	
Field	**Description**
STYLE	Office Bldg
MODEL	Comm/Ind
Grade	A
Stories:	4
Occupancy	
Exterior Wall 1	Pre-cast Concr
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	Tar & Gravel
Interior Wall 1	Average
Interior Wall 2	
Interior Floor 1	Average
Interior Floor 2	
Heating Fuel	Typical
Heating Type	Forced Hot Air
AC Type	Central
Bldg Use	General Office
Total Bedrooms	
Total Baths	
Wet Sprinkler	0
Dry Sprinkler	0
1st Floor Use:	
Heat/AC	Heat/AC Pkgs
Frame Type	Fire Resistant
Baths/Plumbing	Average
Ceiling/Wall	Typical
Rooms/Prtns	Average
Wall Height	18

Building Photo

(http://images.vgsi.com/photos2/SouthingtonCTPhotos//\00\05

Building Layout



(http://images.vgsi.com/photos2/SouthingtonCTPhotos//Sketch

Building Sub-Areas (sq ft)			Legend
Code	**Description**	**Gross Area**	**Living Area**
FUS	Finished Upper Story	98,190	98,190
BAS	First Floor	52,782	52,782
CAN	Canopy	7,569	0
PTO	Patio	2,160	0
		160,701	150,972

Extra Features

Extra Features			Legend
Code	**Description**	**Size**	**Bldg #**
SPR1	Sprinklers-Wet	150972 S.F.	1

Land

Land Use

Land Line Valuation

Use Code	340	**Size (Acres)**	12.14
Description	General Office	**Depth**	
Zone	I-1		
Alt Land Appr	No		
Category			

Outbuildings

Outbuildings					Legend
Code	**Description**	**Sub Code**	**Sub Description**	**Size**	**Bldg #**
PAV1	Paving	AS	Asphalt	200000 S.F.	1

Valuation History

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2017	$8,822,040	$2,164,690	$10,986,730
2016	$8,822,040	$2,164,690	$10,986,730
2015	$8,822,040	$2,164,690	$10,986,730
2014	$3,378,860	$2,121,140	$5,500,000
2013	$13,510,780	$2,121,140	$15,631,920

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2017	$6,175,430	$1,515,280	$7,690,710
2016	$6,175,430	$1,515,280	$7,690,710
2015	$6,175,430	$1,515,280	$7,690,710
2014	$2,365,200	$1,484,800	$3,850,000
2013	$9,457,550	$1,484,800	$10,942,350

ATTACHMENT 5

UNITED STATES POSTAL SERVICE®

Certificate of Mailing — Firm

Name and Address of Sender	TOTAL NO. of Pieces Listed by Sender	TOTAL NO. of Pieces Received at Post Office™	Affix Stamp Here *Postmark with Date of Receipt.*
Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103	3	3	neopost 09/18/2018 US POSTAGE $002.38 ZIP 06103 041L1220838
	Postmaster, per *(name of receiving employee)* V.P		

USPS® Tracking Number / Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.	Mark Sciota, Town Manager Town of Southington 75 Main Street Southington, CT 06489				
2.	Robert Phillips, Director of Planning and Community Development Town of Southington 75 Main Street Southington, CT 06489				
3.	Executive Two Hundred, LLC c/o Joseph Moruzzi P.O. Box 185598 Hamden, CT 06518				
4.					
5.					
6.					

OLD STATE HOUSE STATION 06106 SEP 18 2018 USPS