

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 1095 KENNEDY ROAD, WINDSOR, :  
CONNECTICUT : JUNE 30, 2015

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 “small cell” telecommunications facility on an existing commercial building at 1095 Kennedy Road in Windsor, Connecticut (the “Property”). The Property is owned by DDR Southeast Windsor, LLC. Cellco has designated this site as its “Windsor SC3 Facility”.

II. Factual Background

The Property is a 11.65-acre parcel in Windsor’s Planned Urban Development (PUD) zone district. The Property is currently used for commercial purposes. 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 throughout the State of Connecticut. Initially, the proposed Windsor SC3 Facility described above will provide wireless service in Cellco's 2100 MHz frequency range only. Coverage plots showing Cellco's 2100 MHz service in Windsor today and the coverage footprint for the proposed Windsor SC3 Facility are included in Attachment 2. The proposed Windsor SC3 Facility will provide service to existing 2100 MHz gaps in the area around the Property and provide capacity relief to Cellco's existing Windsor Locks 2 and Windsor cell sites.

### III. Proposed Windsor SC3 Facility

The proposed Windsor SC3 Facility would consist of a single canister-type antenna and a remote radio head ("RRH") attached to a small tower mast on the roof of the building. The tower and antenna will extend approximately five (5) feet above the roof of the building; 29 feet above grade. Equipment associated with the Windsor SC3 Facility will be located on an 8-foot by 8-foot concrete pad in an existing lawn area to the rear of the building. Power and telephone service to the Windsor SC3 Facility will extend from existing service at the Property. (See Cellco's Project Plans included in Attachment 3). Specifications for the small cell antenna (Commscope Model NH360QS-DG) and RRH (Model 2X60-AWS) are included in Attachment 4.

### 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 tower mast, a single canister antenna and RRH on the roof of the existing commercial shopping center building, will not involve a significant alteration in the physical and environmental characteristics of the Property. Ground disturbance associated with the facility is limited to an 8-foot by 8-foot equipment compound area in an existing lawn area. The equipment will be surrounded by a 6-foot tall security fence.

2. Visual Effects

The installation of a small tower mast supporting a single canister antenna and RRH on the roof of the existing commercial building at the Property would have minimal visual effects on the Property and the surrounding area. (See Limited Visual Assessment and Photo-Simulations (“Visual Report”) included in Attachment 5). As discussed in the attached Visual Report, the views of the tower mast structure are limited to select locations on the Property including service roads and parking areas. As such, Cellco has determined that the small cell facility components would not be highly visible and would not have a significant impact on aesthetics in the area.

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 6 is a General Power Density table, that demonstrates that the Windsor SC3 Facility will operate well within the FCC safety standard.

4. FAA Summary Report

Included in Attachment 7 is a Federal Airways & Airspace Summary Report verifying that the unipole tower attached to 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 Town, the Property Owner and Abutting Landowners

On June 30, 2015, a copy of this Petition was sent to Windsor's Town Manager Peter Souza, Town Planner Eric Barz and to DDR Southeast Windsor LLC, the owner of the Property. Included in Attachment 8 are copies of the letters sent to Mr. Souza, Mr. Barz, and the owner.

A copy of the Petition was also sent to each owner 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 9.

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 a small tower mast on the roof of the building and a small equipment cabinet in a grassed area to the rear of the building, will not have a substantial adverse environmental effect and does not require the issuance of a Certificate of Environmental Compatibility and Public Need pursuant to § 16-50k of the General Statutes.

Respectfully submitted,

CELLCO PARTNERSHIP d/b/a VERIZON  
WIRELESS

By  \_\_\_\_\_

Kenneth C. Baldwin, Esq.  
Robinson & Cole LLP  
280 Trumbull Street  
Hartford, CT 06103-3597  
(860) 275-8200  
Its Attorneys

# **ATTACHMENT 1**

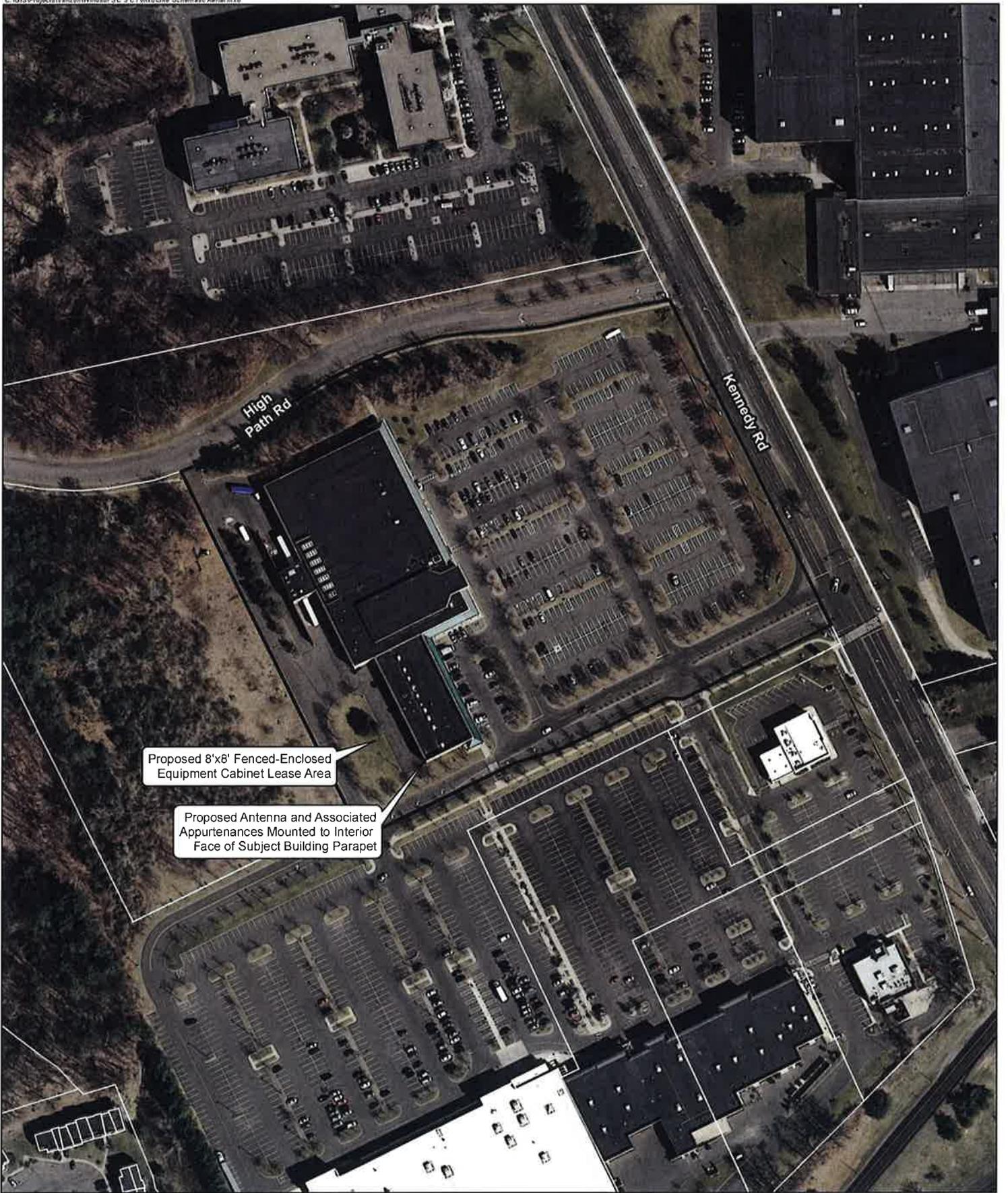


- Legend**
- ✳ Proposed Verizon Wireless Small Cell Facility
  - ✳ Surrounding Verizon Wireless Facilities
  - ▭ Municipal Boundary
  - 🌊 Waterbody

**Site Vicinity Map**  
 Proposed Small Cell Installation  
 Windsor SC 3 CT  
 1095 Kennedy Road  
 Windsor, Connecticut

Base Map Source: 2012 Aerial Photograph (CTECO)  
 Map Scale: 1 inch = 5,500 feet  
 Map Date: June 2015





**Legend**

-  Approximate Subject Property
-  Approximate Parcel Boundary (CTDEEP GIS Parcels Last Updated 2010)

**Site Schematic**

Proposed Small Cell Installation  
 Windsor SC 3 CT  
 1095 Kennedy Road  
 Windsor, Connecticut

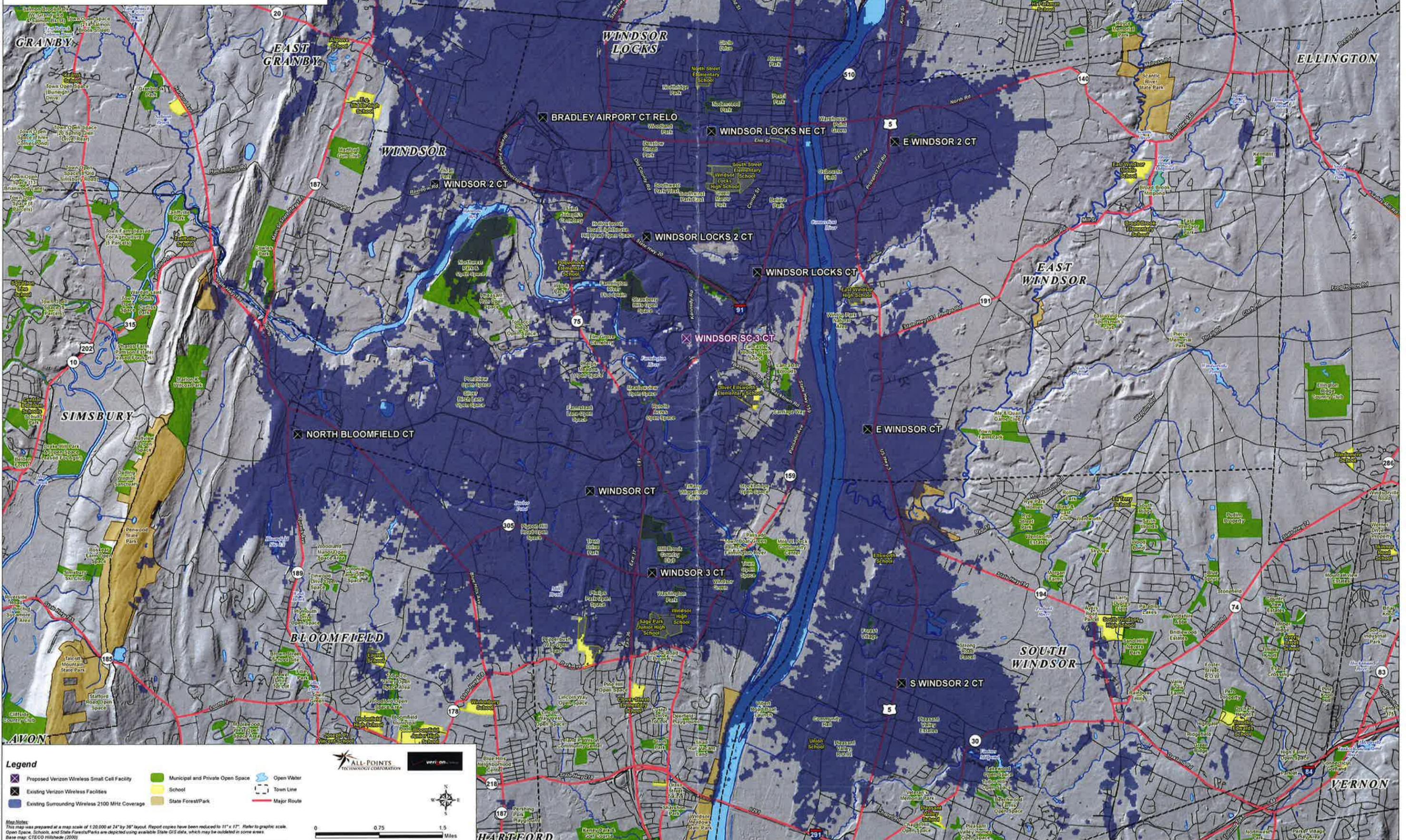
Map Notes:  
 Base Map Source: 2012 Aerial Photograph (CTECO)  
 Map Scale: 1 inch = 200 feet  
 Map Date: June 2015



# **ATTACHMENT 2**

**Existing Verizon Wireless 2100 MHz Coverage Windsor, Connecticut and Surrounding Area**  
 (\*Map Scale is 1:20,000)

Coverage is depicted at a signal threshold of 120 dB Operational Path Loss



**Legend**

- X Proposed Verizon Wireless Small Cell Facility
- X Existing Verizon Wireless Facilities
- Existing Surrounding Wireless 2100 Mhz Coverage
- Municipal and Private Open Space
- School
- State Forest/Park
- Open Water
- Town Line
- Major Route

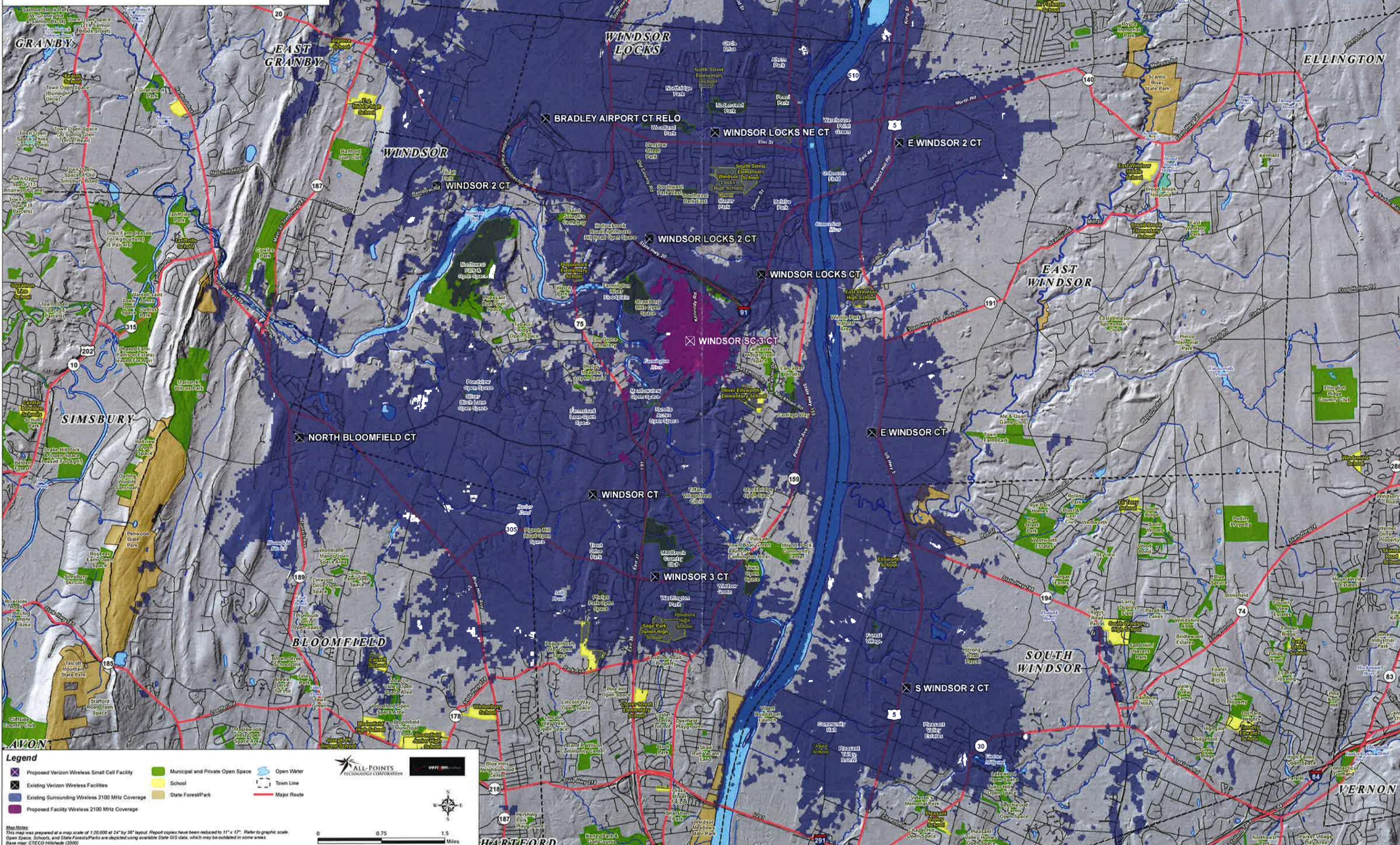
**Map Notes:**  
 This map was prepared at a map scale of 1:20,000 at 24" by 36" layout. Report copies have been reduced to 11" x 17". Refer to graphic scale.  
 Open Space, Schools, and State Forests/Parks are depicted using available State GIS data, which may be outdated in some areas.  
 Base map: CTECO Hillshade (2000)

**Scale:** 0 0.75 1.5 Miles

**Logos:** ALL-POINTS TECHNOLOGY CORPORATION, verizon

**Proposed Verizon Wireless 2100 MHz Coverage  
Windsor, Connecticut and Surrounding Area  
(\*Map Scale is 1:20,000)**

Coverage is depicted at a signal threshold of 120 dB Operational Path Loss



**Legend**

- 
- 
- 
- 
- 
- 
- 
- 
- 
- 

**Map Notes:**  
This map was prepared at a map scale of 1:20,000 at 24" by 36" layout. Report copies have been reduced to 11" x 17". Refer to graphic scale.  
Open Space, Schools, and State Forests/Parks are depicted using available State GIS data, which may be outdated in some areas.  
Base map: CTECO Hiltzade (2000)

**Scale:** 0 0.75 1.5 Miles

**ALL-POINTS TECHNOLOGY CORPORATION**

# **ATTACHMENT 3**

# Cellco Partnership

d.b.a. **verizon** wireless

## WIRELESS COMMUNICATIONS FACILITY

WINDSOR SC 3  
1095 KENNEDY ROAD  
WINDSOR, CT 06095

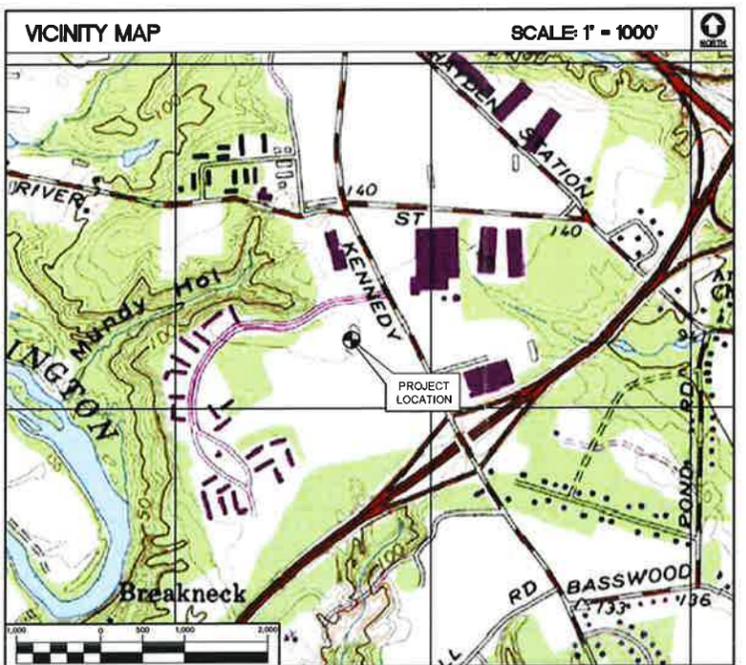
PROJECT SUMMARY	
SITE NAME:	WINDSOR SC 3
SITE ADDRESS:	1095 KENNEDY ROAD WINDSOR, CT 06095
LESSEE/TENANT:	CELLCO PARTNERSHIP d.b.a. VERIZON WIRELESS 99 EAST RIVER DRIVE EAST HARTFORD, CT 06108
VERIZON SITE ACQUISITION CONTACT:	ALEKSEY TYURIN CELLCO PARTNERSHIP (860) 803-8213
LEGAL/REGULATORY COUNSEL:	KENNETH C. BALDWIN, ESQ. ROBINSON & COLE LLP (860) 257-8345
SITE COORDINATES:	LATITUDE: 41°-53'-33.70" N LONGITUDE: 72°-39'-08.73" W PROVIDED BY LESSEE  GROUND ELEVATION: ±160' AMSL REF. "TERRAIN NAVIGATOR" (TOPO SOFTWARE)

SHEET INDEX		
SHT. NO.	DESCRIPTION	REV. NO.
T-1	TITLE SHEET	0
C-1	ABUTTERS MAP	0
C-2	ROOF PLAN, ELEVATION AND ANTENNA CONFIG.	0

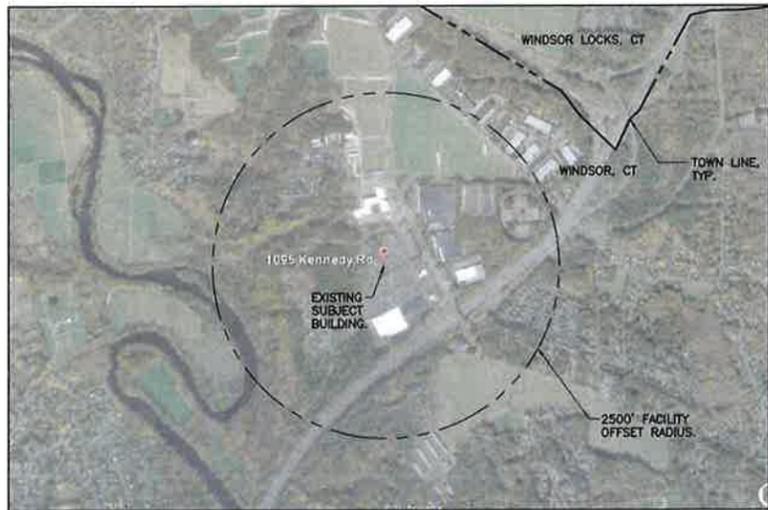
SITE DIRECTIONS		
FROM:	TO:	
99 EAST RIVER DRIVE EAST HARTFORD, CONNECTICUT	1095 KENNEDY ROAD WINDSOR, CT 06095	
1. Get on I-84 from E River Dr and Connecticut Blvd	0.6 mi	
2. Head east on E River Dr toward Darlin St	0.3 mi	
3. Turn left to stay on E River Dr	354 ft	
4. Turn left at the 1st cross street onto Connecticut Blvd	0.2 mi	
5. Turn left onto the Route 84 W ramp to Hartford/Route 91	482 ft	
6. Follow I-91 N to Kennedy Rd in Windsor.		
7. Take exit 39-41 from I-91 N	9.3 mi	
8. Merge onto I-84	0.3 mi	
9. Take exit 51 to merge onto I-91 N toward Springfield	1.3 mi	
10. Keep right at the fork to stay on I-91 N	7.5 mi	
11. Take exit 39-41 for Kennedy Rd toward Center St	0.2 mi	
12. Drive to Kennedy Rd	0.7 mi	
13. Turn left onto Kennedy Rd	0.5 mi	
14. Make a U-turn at River St Destination will be on the right	0.2 mi	

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

PROJECT SCOPE
1. THE PROPOSED SCOPE OF WORK GENERALLY INCLUDES THE INSTALLATION OF A PROPOSED CELLCO PARTNERSHIP EQUIPMENT CABINET AT GRADE. LEASE AREA TO HAVE 6' TALL WHITE VINYL FENCE WITH LOCKABLE SWING GATE AND BOLLARDS.
2. A TOTAL OF ONE (1) ANTENNA IS PROPOSED TO BE MOUNTED TO INTERIOR FACE OF SUBJECT BUILDING PARAPET, WITH AN ANTENNA CENTERLINE ELEVATION OF 28' A.G.L.
3. ELECTRIC AND TELCO UTILITIES SHALL BE ROUTED FROM EXISTING UTILITY ROOM UNDERGROUND TO PROPOSED EQUIPMENT CABINET AT GRADE.
4. THE PROPOSED WIRELESS FACILITY INSTALLATION WILL BE DESIGNED IN ACCORDANCE WITH THE 2003 INTERNATIONAL BUILDING CODE AS MODIFIED BY THE 2009 CONNECTICUT SUPPLEMENT.



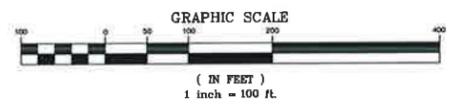
PROFESSIONAL ENGINEER SEAL	ISSUED FOR CSC-CLIENT REVIEW	DMD	DATE	DESCRIPTION
	0	06/03/15	DRA	DRAWN BY CHC'D BY
	1	06/29/15	DRA	
 (203) 488-0580 (203) 488-8387 Fax 43-2 North Branford Road Branford, CT 06405 www.CentekEng.com				
Cellco Partnership d/b/a Verizon Wireless WIRELESS COMMUNICATIONS FACILITY <b>WINDSOR SC 3</b> 1095 KENNEDY ROAD WINDSOR, CT 06095				
DATE:	06/01/15			
SCALE:	AS NOTED			
JOB NO.:	14346.000			
TITLE SHEET				
<b>T-1</b>				
Sheet No. 1 of 3				



MUNICIPALITY NOTIFICATION LIMIT MAP



1 ABUTTERS MAP  
C-1 SCALE: 1" = 100'



REV.	DATE	DRAWN BY	CHECK'D BY	DESCRIPTION
1	08/29/15	DRA	DMD	ISSUED FOR CSC-CLIENT REVIEW
0	06/03/15	DRA	DMD	ISSUED FOR CSC-CLIENT REVIEW

PROFESSIONAL ENGINEER SEAL

Cellco Partnership  
d.b.a. Verizon Wireless

**CENITEK** engineering  
Centek on Solutions  
(203) 498-0380  
(203) 498-8887 Fax  
43-2 North Branford Road  
Branford, CT 06405  
www.CentekEng.com

Cellco Partnership d/b/a Verizon Wireless  
WIRELESS COMMUNICATIONS FACILITY  
**WINDSOR SC 3**  
1095 KENNEDY ROAD  
WINDSOR, CT 06095

DATE: 08/01/15  
SCALE: AS NOTED  
JOB NO. 14348.000

ABUTTERS MAP

**C-1**  
Sheet No. 2 of 3



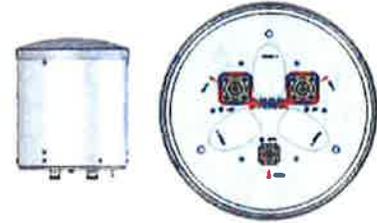
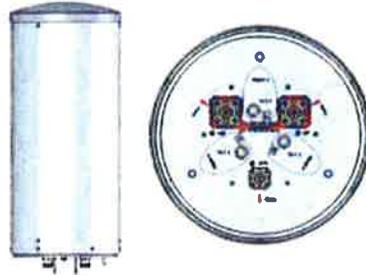
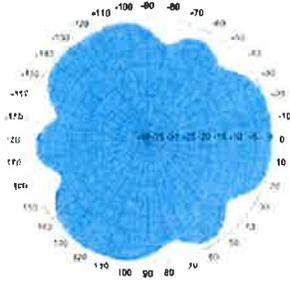
# **ATTACHMENT 4**

Metro Cell Antennas with Internal Diplexer and GPS Antenna

Dualband Quasi-Omni (360°), Metro Cell Antenna

NH360QS-DG-F0M

NH360QT-DG-F0



ELECTRICAL SPECIFICATIONS

Operating Frequency Range	698 - 896 and 1710 - 2170 MHz					698 - 896 and 1710 - 2170 MHz				
	698 - 806	806 - 896	1710 - 1880	1850 - 1990	1920 - 2170	698 - 806	806 - 896	1710 - 1880	1850 - 1990	1920 - 2170
Frequency Bands, MHz										
Polarization	±45°	±45°	±45°	±45°	±45°	±45°	±45°	±45°	±45°	±45°
Gain, dBi	4.3	5.3	8.0	8.1	8.5	1.3	2.3	4.0	4.2	4.5
Beamwidth, Horizontal, degrees	360	360	360	360	360	360	360	360	360	360
Beamwidth, Vertical, degrees	30.0	24.0	16.0	15.0	14.0	60.0	55.0	32.5	30.0	28.5
USLS, dB	12	12	14	13	13	-	-	14	12	11
Beam Tilt, degrees	0	0	0-16	0-16	0-16	0	0	0	0	0
Isolation, dB	25	25	25	25	25	25	25	25	25	25
VSWR (Return Loss, dB)	1.5 (14.0)	1.5 (14.0)	1.5 (14.0)	1.5 (14.0)	1.5 (14.0)	1.5 (14.0)	1.5 (14.0)	1.5 (14.0)	1.5 (14.0)	1.5 (14.0)
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-150	-150	-150	-150
Input Power per Port, maximum, watts	250	250	250	250	250	250	250	250	250	250

MECHANICAL SPECIFICATIONS

Connector Interface	7 - 16 DIN Female	7 - 16 DIN Female
Connector Quantity, Location	2, Bottom	2, Bottom
GPS Connector Interface	4, 1/9.5 DIN female	4, 1/9.5 DIN Female
GPS Connector Quantity, Location	1, Bottom	1, Bottom
Length, mm (inch)	730 (28.7)	360 (14.2)
Outer Diameter, mm (inch)	305 (12.0)	305 (12.0)
Wind Speed, maximum, km/h (mph)	241.4 (150)	241.4 (150)
Net Weight, kg (lb)	20.0 (44.1)	12.0 (26.5)

AVAILABILITY

Expected Ready Date for Manufacturing	March 2014	June 2014
---------------------------------------	------------	-----------

# ALCATEL-LUCENT WIRELESS PRODUCT DATASHEET RRH2x60-AWS FOR BAND 4 APPLICATIONS

The Alcatel-Lucent RRH2x60-AWS 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 RRH2x60-AWS 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.

The Alcatel-Lucent RRH2x60-AWS integrates all the latest technologies. This allows 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.

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

The RRH2x60-AWS 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.

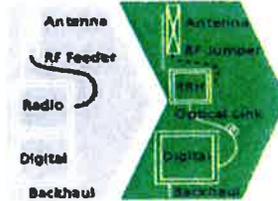
The limited space available in some sites may prevent the installation of traditional single-cabinet BTS equipment. However, many of these sites can host an Alcatel-Lucent RRH2x60-AWS installation, providing more flexible site selection and improved network quality along with greatly reduced installation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

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

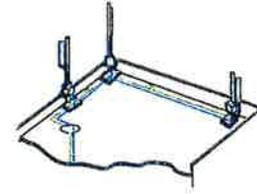
Installation can easily be done by a single person as the Alcatel-Lucent RRH2x60-AWS is compact and weighs about 20 kg, eliminating the need for a crane to hoist the BTS cabinet to the rooftop. A site can be in operation in less than one day.



Macro



RRH for space-constrained cell sites



Distributed

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

- 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.

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

#### Dimensions and weights

- HxWxD : 510x285x186mm (27 l with solar shield)
- Weight : 20 kg (44 lbs)

#### Electrical Data

- Power Supply : -48V DC (-40.5 to -57V)
- Power Consumption (ETSI average traffic load reference) : 250W @2x60W

#### 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 optical ports for daisy chaining and up to six RRHs per fiber
- Type of optical fiber: Single-Mode (SM) and Multi-Mode (MM) SFPs
- Optical fiber length: up to 500m using MM fiber, up to 20km using SM fiber
- TMA/RETA : AISG 2.0 (RS485 connector and internal Bias-Tee)
- Six 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, CE Mark – European Directive : 2002/95/EC (ROHS); 2002/96/EC (WEEE); 1999/5/EC (R&TTE)
- Health : EN 50385

www.alcatel-lucent.com Alcatel, Lucent, Alcatel-Lucent and the Alcatel-Lucent logo are trademarks of Alcatel-Lucent. All other trademarks are the property of their respective owners. The information presented is subject to change without notice. Alcatel-Lucent assumes no responsibility for inaccuracies contained herein.

Copyright © 2012 Alcatel-Lucent. All rights reserved. M2012XXXXXX (March)

# **ATTACHMENT 5**

# Limited Visual Assessments and Photo-Simulations

WINDSOR SC 3  
1095 KENNEDY ROAD  
WINDSOR, CT 06095



*Prepared in June 2015 by:*  
All-Points Technology Corporation, P.C.  
3 Saddlebrook Drive  
Killingworth, CT 06141

Prepared for Verizon Wireless



# LIMITED VISUAL ASSESSMENT & PHOTO-SIMULATIONS

At the request of Cellco partnership LLC d/b/a Verizon Wireless, All-Points Technology Corporation, P.C. ("APT") completed a limited visual assessment and prepared computer-generated photo-simulations depicting the proposed installation of a small cell wireless telecommunications Facility at 1095 Kennedy Road in Windsor, Connecticut (the "Property").

## Project Setting

The Property is located west of Kennedy Road and south of High Path Road in a commercially developed area of Windsor. The Property is currently improved with a two-story brick retail building. The proposed Facility would include the installation of a single canister omni-directional antenna pipe-mounted to the inside face of an existing parapet wall on the south side of the roof. The top of the antenna would extend to a height of approximately 29 feet above ground level. A remote radio head ("RRH") would be affixed at the base of the pipe-mast, behind the parapet wall. Antenna cabling would be similarly mounted to the roof behind the parapet. Supporting equipment would be located within an 8-foot by 8-foot fence-enclosure at ground level on a landscaped island west of the building, near an existing electrical transformer. Electrical and telco service cables originating within the first floor of the building would extend underground to the exterior; antenna cable connections would also be routed to this area underground from the building façade.

## Methodology

On June 18, 2015, APT personnel conducted a field reconnaissance to photo-document existing conditions. Four (4) nearby locations were selected to depict representative existing and proposed 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.

*"The lens that most closely approximates the view of the unaided human eye is known as the normal focal-length lens. For the 35 mm camera format, which gives a 24x36 mm image, the normal focal length is about 50 mm."<sup>1</sup>*

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. For presentation purposes in this report, all of the photographs were produced in an approximate 7-inch by 10.5-inch format<sup>2</sup>. A photolog map and copies of the existing conditions and photo-simulations are attached.

---

<sup>1</sup> Warren, Bruce. *Photography*, West Publishing Company, Eagan, MN, c. 1993, (page 70).

<sup>2</sup> When viewing in this format size, we believe it is important to provide the largest representational image while maintaining an accurate relation of sizes between objects within the frame of the photograph and depicting the subject in a way similar to

## **Conclusions**

The visibility of the proposed installation would be limited to select locations on the Property, primarily south and west of the building. These areas consist of a service road and a parking lot. Views of the proposed installation would not extend to either Kennedy Road or High Path Road. Based on the results of this assessment, it is APT's opinion that the proposed installation of Verizon Wireless equipment at the Property would not be highly visible nor have a significant impact on aesthetics in the area.

## **Limitations**

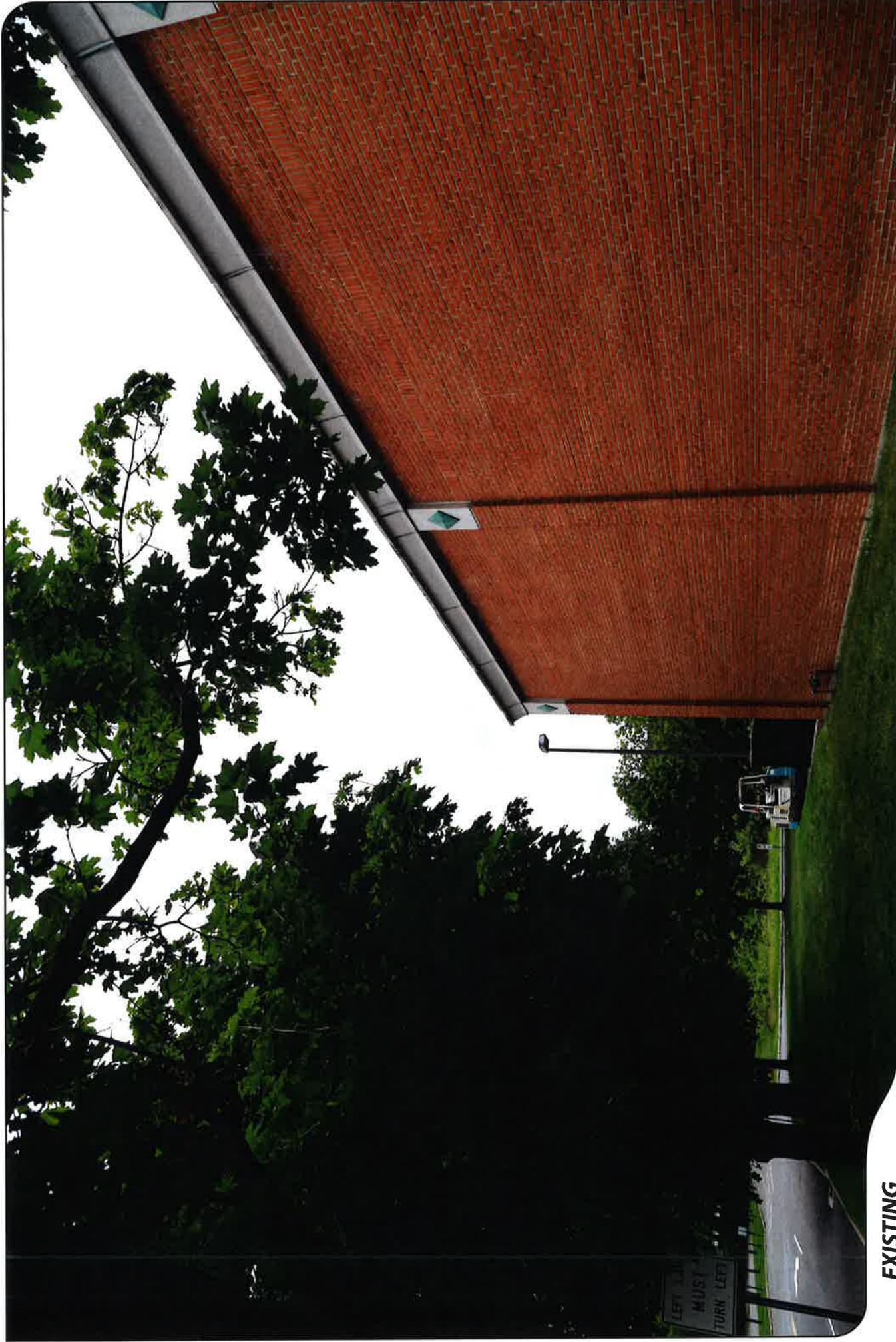
This analysis does not claim to depict the only areas, or all locations, where visibility may occur; it is intended to provide a representation of those areas where the Facility is likely to be seen. The photo-simulations provide a representation of the Facility under similar settings as those encountered during the field reconnaissance. 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. Weather conditions on the day of the reconnaissance included mostly sunny skies and the photo-simulations presented in this report provide an accurate portrayal of the Facility during comparable conditions.

## **ATTACHMENTS**



# PHOTO LOG

- Legend
- Site
  - Points



**EXISTING**

PHOTO

1

LOCATION

**HOST PROPERTY**

ORIENTATION

**WEST**

DISTANCE TO SITE

**+/- 62 FEET**





**PROPOSED**

PHOTO

1

LOCATION

HOST PROPERTY

ORIENTATION

WEST

DISTANCE TO SITE

+/- 62 FEET



**EXISTING**

PHOTO

2

LOCATION

**HOST PROPERTY**

ORIENTATION

**NORTHEAST**

DISTANCE TO SITE

**+/- 103 FEET**



**ALL-POINTS**  
TECHNOLOGY CORPORATION





**PROPOSED**

PHOTO

2

LOCATION

**HOST PROPERTY**

ORIENTATION

**NORTHEAST**

DISTANCE TO SITE

**+/- 103 FEET**



**ALL-POINTS  
TECHNOLOGY CORPORATION**





**EXISTING**

PHOTO

3

LOCATION

**HOST PROPERTY**

ORIENTATION

**SOUTHEAST**

DISTANCE TO SITE

**+/- 144 FEET**



**PROPOSED**

PHOTO

3

LOCATION

**HOST PROPERTY**

ORIENTATION

**SOUTHEAST**

DISTANCE TO SITE

**+/- 144 FEET**





**EXISTING**

PHOTO

4

LOCATION

**HOST PROPERTY**

ORIENTATION

**NORTH**

DISTANCE TO SITE

**+/- 56 FEET**



**PROPOSED**

PHOTO

4

LOCATION

**HOST PROPERTY**

ORIENTATION

**NORTH**

DISTANCE TO SITE

**+/- 56 FEET**

# **ATTACHMENT 6**

General Power Density

Site Name: Windsor SC 3, 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 <sup>2</sup> )	Maximum Permissible Exposure* (mW/cm <sup>2</sup> )	Fraction of MPE (%)
VZW AWS	2145	1	600	600	28	0.2752	1.0	27.52%

**Total Percentage of Maximum Permissible Exposure**

27.52%

\*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<sup>2</sup> = milliwatts per square centimeter  
 ERP = Effective Radiated Power

Absolute worst case maximum values used.

# **ATTACHMENT 7**

\*\*\*\*\*

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

\*

\*\*\*\*\*

Airspace User: Mark Brauer

File: WINDSOR\_SC\_3\_CT

Location: Hartford, CT

Latitude: 41°-53'-33.69" Longitude:  
72°-39'-9.18"

SITE ELEVATION AMSL.....160 ft.  
STRUCTURE HEIGHT.....30 ft.  
OVERALL HEIGHT AMSL.....190 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 BDL
- FAR 77.9: NNR FAR 77.9 IFR Straight-In Notice Criteria for 7B6
- 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: BDL: BRADLEY INTL

Type: A RD: 14689.23 RE: 168.3

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

VFR TRAFFIC PATTERN AIRSPACE FOR: 7B6: SKYLARK AIRPARK

Type: A RD: 23079.37 RE: 112

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

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 1600 ft AMSL

PRIVATE LANDING FACILITIES

ARP FAA	FACIL	BEARING	RANGE	DELTA
ELEVATION IFR	IDENT TYP NAME	To FACIL	IN NM	
+153	CT85 AIR ROBERTS FARM	96.05	1.69	
	No Impact to Private Landing Facility. DNE 200 ft AGL within 3 NM of Airport.			
+138	CT14 AIR BANCROFT	133.71	2.26	
	No Impact to Private Landing Facility. DNE 200 ft AGL within 3 NM of Airport.			
	CT05 HEL KAMAN AEROSPACE CORP	228.89	2.81	+26
	No Impact to Private Landing Facility Structure is beyond notice limit by 12074 feet.			
	CT35 HEL HAMILTON STANDARD	319.26	3.22	+17
	No Impact to Private Landing Facility Structure is beyond notice limit by 14565 feet.			

CT23	HEL DELLA	36.4	3.53	+75
No Impact to Private Landing Facility				
Structure is beyond notice limit by 16449 feet.				
CT50	HEL MARKS	321.4	3.84	+40
No Impact to Private Landing Facility				
Structure is beyond notice limit by 18332 feet.				
CT00	HEL ELECTRO-METHODS INC	147.54	4.32	+86
No Impact to Private Landing Facility				
Structure is beyond notice limit by 21249 feet.				
CT62	HEL TWIN MANUFACTURING COMPANY	158.91	5.33	+130
No Impact to Private Landing Facility				
Structure is beyond notice limit by 27386 feet.				

AIR NAVIGATION ELECTRONIC FACILITIES

GRND	FAC	ST	DIST	DELTA	LOCATION				
ANGLE	APCH	TYPE	AT	FREQ	VECTOR	(ft)	ELEVA	ST	LOCATION
BEAR	IDNT								
-.14	BDL	RADAR	ON		334.03	18591	-46	CT	BRADLEY INTL
	No Impact. EMI Notice is not required for this structure.								
	The studied location is within 5 NM of a Radar facility.								
	The calculated Radar Line-Of-Sight (LOS) distance is: 36 NM.								
	This location and height is within the Radar Line-Of-Sight.								
IN	MYQ	LOCALIZER	I	111.1	316.82	18605	+20	CT	RWY 24 BRADLEY
	.06	238							
.09	BDL	VORTAC	D	109.0	330.91	20147	+30	CT	BRADLEY
-.41	BDL	ATCT	ON	A/G	333.11	21624	-155	CT	BRADLEY INTL
IN	IKX	LOCALIZER	I	108.5	327.89	22293	+22	CT	RWY 33 BRADLEY
	.06	328							
IN	BDL	LOCALIZER	I	111.1	350.51	23010	+41	CT	RWY 06 BRADLEY
	.10	58							
-.39	HFD	VOR/DME	R	114.9	162.66	96065	-659	CT	HARTFORD
-.04	BAF	VORTAC	R	113.0	350.03	99630	-77	MA	BARNES
-.03	CEF	VORTAC	R	114.0	17.11	116258	-51	MA	WESTOVER
-.49	CTR	VOR/DME	I	115.1	331.08	166109	-1410	MA	CHESTER
-.01	MAD	VOR/DME	R	110.4	182.93	211203	-30	CT	MADISON
-.49	QHA	RADAR ARSR	Y	1320.	338.15	228681	-1963	MA	West Cummington

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: WKND @ 4913 meters.

Airspace® Summary Version 15.5.391

AIRSPACE® and TERPS® are registered ® trademarks of Federal Airways & Airspace®  
Copyright © 1989 - 2015

06-04-2015  
09:24:30

# **ATTACHMENT 8**

June 30, 2015

*Via Certificate of Mailing*

Peter Souza, Town Manager  
Town of Windsor  
Town Hall  
275 Broad Street  
Windsor, CT 06095

Re: **Installation of a Small Cell Telecommunications Facility at 1095 Kennedy Road,  
Windsor, Connecticut**

Dear Mr. Souza:

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 “small cell” telecommunications facility on a commercial parcel at 1095 Kennedy Road in Windsor (the “Property”).

The proposed “small cell” would consist of a single canister-type antenna and remote radio head attached to a small tower mast on the easterly portion of the roof of the building. Equipment associated with the small cell facility will be located on an 8-foot by 8-foot concrete pad in an existing lawn area to the rear of the building.

A copy of Cellco’s Petition is attached for your review. Landowners whose property abuts the Property were also sent a copy of the Petition.

# Robinson+Cole

Peter Souza  
June 30, 2015  
Page 2

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Ken Baldwin', written in a cursive style.

Kenneth C. Baldwin

KCB/kmd  
Attachment

June 30, 2015

*Via Certificate of Mailing*

Eric Barz, Town Planner  
Town of Windsor  
Town Hall  
275 Broad Street  
Windsor, CT 06095

Re: **Installation of a Small Cell Telecommunications Facility at 1095 Kennedy Road,  
Windsor, Connecticut**

Dear Mr. Barz:

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 “small cell” telecommunications facility on a commercial parcel at 1095 Kennedy Road in Windsor (the “Property”).

The proposed “small cell” would consist of a single canister-type antenna and remote radio head attached to a small tower mast on the easterly portion of the roof of the building. Equipment associated with the small cell facility will be located on an 8-foot by 8-foot concrete pad in an existing lawn area to the rear of the building.

A copy of Cellco’s Petition is attached for your review. Landowners whose property abuts the Property were also sent a copy of the Petition.

# Robinson+Cole

Eric Barz  
June 30, 2015  
Page 2

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

Sincerely,



Kenneth C. Baldwin

KCB/kmd  
Attachment

June 30, 2015

*Via Certificate of Mailing*

DDR Southeast Windsor, LLC  
c/o DDR Corp.  
3300 Enterprise Parkway  
Beachwood, OH 44122

Re: **Installation of a Small Cell Telecommunications Facility at 1095 Kennedy Road,  
Windsor, 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 “small cell” telecommunications facility on a commercial parcel at 1095 Kennedy Road in Windsor (the “Property”).

The proposed “small cell” would consist of a single canister-type antenna and remote radio head attached to a small tower mast on the easterly portion of the roof of the building. Equipment associated with the small cell facility will be located on an 8-foot by 8-foot concrete pad in an existing lawn area to the rear of the building.

A copy of Cellco’s Petition is attached for your review. Landowners whose property abuts the Property were also sent a copy of the Petition.

# Robinson+Cole

DDR Southeast Windsor, LLC  
June 30, 2015  
Page 2

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Ken Baldwin', written in a cursive style.

Kenneth C. Baldwin

KCB/kmd  
Attachment

# **ATTACHMENT 9**

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 30, 2015

*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 “Small Cell” Telecommunications Facility at 1095 Kennedy Road, Windsor, 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 “small cell” telecommunications facility on a commercial parcel at 1095 Kennedy Road in Windsor (the “Property”).

The proposed “small cell” would consist of a single canister-type antenna and remote radio head attached to a small tower mast on the easterly portion of the roof of the building. Equipment associated with the small cell facility will be located on an 8-foot by 8-foot concrete pad in an existing lawn area to the rear of the building. A copy of the full Petition is attached for your review.

This notice is being sent to you because you are listed 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.

June 30, 2015  
Page 2

Sincerely,

A handwritten signature in black ink, appearing to read "Kenneth C. Baldwin". The signature is fluid and cursive, with a long horizontal stroke at the end.

Kenneth C. Baldwin

Attachment  
Copy to:  
Tim Parks

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

**ABUTTERS LIST  
MAP 50/BLOCK 466/LOT 1095**

**1095 KENNEDY ROAD  
WINDSOR, CONNECTICUT**

	<u>Map/Block/Lot</u>	<u>Property Address</u>	<u>Owner and Mailing Address</u>
1.	50/467/35	1100 Kennedy Road	Iron Mountain Record Iron Mountain Information Management LLC c/o Ad Valorem Tax Inc. 1931 Rohlwing Road, Suite A Rolling Meadows, IL 60008-1360
2.	50/466/1075	1075 Kennedy Road	Target Corporation c/o Property Tax Dept. – T2213 P.O. Box 9456 Minneapolis, MN 55440-9456
3.	50/466/1085	1085 Kennedy Road	Windsor Investors Corporation c/o Chase Enterrprises 222 Asylum Street – 29 <sup>th</sup> Floor Hartford, CT 06103
4.	50/466/1000	1000T High Path Road	Windsor Investors Corporation c/o Chase Enterrprises 222 Asylum Street – 29 <sup>th</sup> Floor Hartford, CT 06103