

April 9, 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
Hospital Avenue (aka Locust Avenue), Danbury, Connecticut**

Dear Ms. Bachman:

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) currently maintains a wireless telecommunications facility on the roof at Danbury Hospital, off Hospital Avenue in Danbury, Connecticut (the “Property”). The Council approved Cellco’s Danbury Hospital facility in 1987 (Docket No. 79) and maintains jurisdiction over any facility modifications. Cellco intends to modify the Danbury Hospital facility, removing nine (9) of its twelve (12) existing antennas and installing six (6) new antennas (three (3) model JAHH-65B-R3B, 700/2100 MHz antennas and three (3) model JAHH-65B-R3B, 850/1900 MHz antennas), all at the same height and location on the roof of the building. Cellco also intends to replace six (6) remote radio heads (“RRHs”) and install three (3) new RRHs. Included in Attachment 1 are specifications for Cellco’s replacement antennas and RRHs.

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 Mark D. Boughton, Mayor for the City of Danbury; Sharon Calitro, Danbury’s Director of Planning and Zoning; and Danbury Hospital.

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 structure. Cellco’s replacement antennas and RRHs will be installed in the same location and at the same height as the existing antennas and RRHs.

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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 antennas will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. A Calculated Radio Frequency Emissions Report for Cellco's modified facility is included behind Attachment 2.

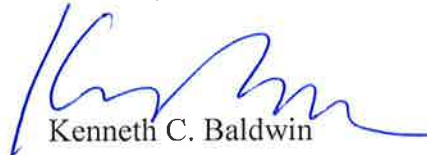
5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.

6. The hospital structure can support Cellco's proposed modifications. (See Structural Assessment 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 D. Boughton, Danbury Mayor
Sharon Calitro, Danbury's Director of Planning and Zoning
Danbury Hospital
Tim Parks

ATTACHMENT 1



JAHH-65B-R3B

8-port sector antenna, 2x 698–787, 2x 824–894 and 4x 1695–2360 MHz, 65° HPBW, 3x RET and low bands have diplexers. Internal SBT's on first LB(Port 1) and first HB (Port 5).

- Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable
- One RET for 700MHz, one RET for 850MHz, and one RET for both high bands to ensure same tilt level for 4x Rx or 4x MIMO
- Internal filter on low band and interleaved dipole technology providing for attractive, low wind load mechanical package
- Separate RS-485 RET input/output for low and high band

Electrical Specifications

Frequency Band, MHz	698–787	824–894	1695–1880	1850–1990	1920–2200	2300–2360
Gain, dBi	14.5	15.8	18.0	18.4	18.5	18.8
Beamwidth, Horizontal, degrees	67	65	63	63	65	68
Beamwidth, Vertical, degrees	12.4	10.5	5.7	5.2	4.9	4.4
Beam Tilt, degrees	2–14	2–14	0–10	0–10	0–10	0–10
USLS (First Lobe), dB	18	18	20	20	21	23
Front-to-Back Ratio at 180°, dB	32	34	31	35	36	38
Isolation, dB	25	25	25	25	25	25
Isolation, Intersystem, dB	30	30	30	30	30	30
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
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153
Input Power per Port, maximum, watts	350	350	350	350	350	300
Polarization	±45°	±45°	±45°	±45°	±45°	±45°
Impedance	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm

Electrical Specifications, BASTA*

Frequency Band, MHz	698–787	824–894	1695–1880	1850–1990	1920–2200	2300–2360
Gain by all Beam Tilts, average, dBi	14.3	14.9	17.6	18.1	18.2	18.5
Gain by all Beam Tilts Tolerance, dB	±0.3	±0.5	±0.6	±0.4	±0.5	±0.6
Gain by Beam Tilt, average, dBi	2° 14.3	2° 15.0	0° 17.2	0° 17.6	0° 17.7	0° 17.9
	8° 14.3	8° 14.9	5° 17.6	5° 18.2	5° 18.3	5° 18.7
	14° 14.3	14° 15.4	10° 17.6	10° 18.2	10° 18.3	10° 18.7
Beamwidth, Horizontal Tolerance, degrees	±1.2	±1.4	±4	±2.4	±2.9	±2.7
Beamwidth, Vertical Tolerance, degrees	±0.9	±0.5	±0.3	±0.2	±0.3	±0.1
USLS, beampeak to 20° above beampeak, dB	18	17	17	18	19	18
Front-to-Back Total Power at 180° ± 30°, dB	25	24	26	29	27	29
CPR at Boresight, dB	22	23	20	21	21	24
CPR at Sector, dB	11	12	11	11	11	8

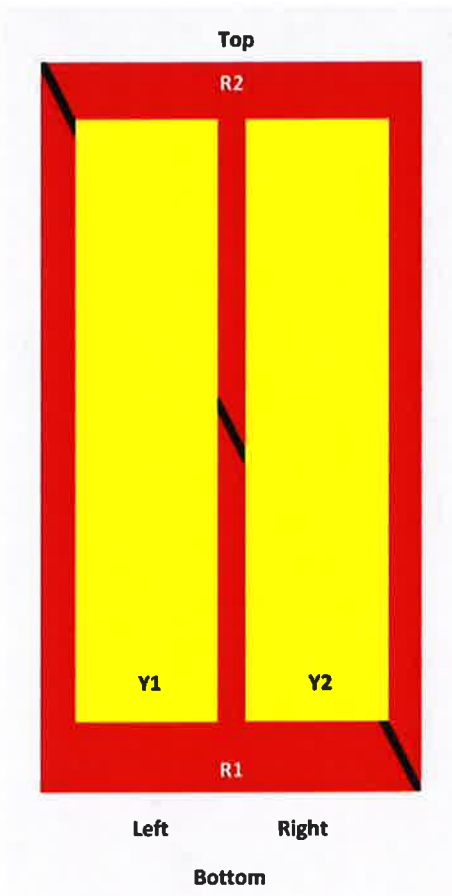
* CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, [download the whitepaper Time to Raise the Bar on BSAs.](#)

JAHH-65B-R3B

Array Layout

JAHH-65A-R3B JAHH-65B-R3B JAHH-65C-R3B

Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	698-798	1-2	1	ANXXXXXXXXXXXXX1
R2	824-894	3-4	2	ANXXXXXXXXXXXXX2
Y1	1695-2360	5-6	3	ANXXXXXXXXXXXXX3
Y2	1695-2360	7-8		



View from the front of the antenna

(Sizes of colored boxes are not true depictions of array sizes)

General Specifications

Operating Frequency Band	1695 – 2360 MHz 698 – 787 MHz 824 – 894 MHz
Antenna Type	Sector
Band	Multiband
Performance Note	Outdoor usage

Mechanical Specifications

RF Connector Quantity, total	8
RF Connector Quantity, low band	4
RF Connector Quantity, high band	4
RF Connector Interface	4.3-10 Female

JAHH-65BR3B

Color	Light gray
Grounding Type	RF connector body grounded to reflector and mounting bracket
Radiator Material	Aluminum Low loss circuit board
Radome Material	Fiberglass, UV resistant
Reflector Material	Aluminum
RF Connector Location	Bottom
Wind Loading, frontal	746.0 N @ 150 km/h 167.7 lbf @ 150 km/h
Wind Loading, lateral	243.0 N @ 150 km/h 54.6 lbf @ 150 km/h
Wind Loading, rear	776.0 N @ 150 km/h 174.5 lbf @ 150 km/h
Wind Speed, maximum	241 km/h 150 mph

Dimensions

Length	1828.0 mm 72.0 in
Width	350.0 mm 13.8 in
Depth	208.0 mm 8.2 in
Net Weight, without mounting kit	28.7 kg 63.3 lb

Remote Electrical Tilt (RET) Information

Input Voltage	10–30 Vdc
Internal Bias Tee	Port 1 Port 5
Internal RET	High band (1) Low band (2)
Power Consumption, idle state, maximum	2 W
Power Consumption, normal conditions, maximum	13 W
Protocol	3GPP/AISG 2.0 (Single RET)
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	2 female 2 male

Packed Dimensions

Length	1975.0 mm 77.8 in
Width	456.0 mm 18.0 in
Depth	357.0 mm 14.1 in
Shipping Weight	42.0 kg 92.6 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



JAHH-65B-R3B

Included Products

BSAMNT-1 — Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

ALCATEL-LUCENT B13 RRH4X30-4R

Alcatel-Lucent B13 Remote Radio Head 4x30-4R 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.

Supporting 2Tx/4Tx MIMO and 4-way Rx diversity, Alcatel-Lucent B13 RRH4x30-4R allows operators to have a compact radio solution to deploy LTE in the 700U band (700 MHz, 3GPP band 13), providing them with the means to achieve high capacity, high quality and high coverage with minimum site requirements.

The Alcatel-Lucent B13 RRH4x30-4R product has four transmit RF paths, offering the possibility to **select, via software only, 2Tx or 4Tx MIMO configurations** with either 2x60 W or 4x30 W RF output power. It supports also 4-way Rx diversity and up to 10MHz instantaneous bandwidth.

The Alcatel-Lucent B13 RRH4x30-4R is a near zero-footprint solution and operates noise free, simplifying negotiations with site property owners and minimizing environmental impacts.

Its compactness and slim design makes the Alcatel-Lucent B13 RRH4x30-4R 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.

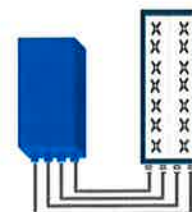


FEATURES

- Supporting LTE in 700 MHz band (700U, 3GPP band 13)
- LTE 2Tx or 4Tx MIMO (SW switchable)
- Output power: Up to 2x60W or 4x30W
- 10MHz 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 700U band
- MIMO scheme operation selection (2Tx or 4Tx) by software only
- Improves downlink spectral efficiency through MIMO4
- Increases LTE coverage thanks to 4Rx diversity capability and best in class Rx sensitivity
- Flexible mounting options: Pole or Wall



4x30W with 4T4R
or
2x60W with 2T4R

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

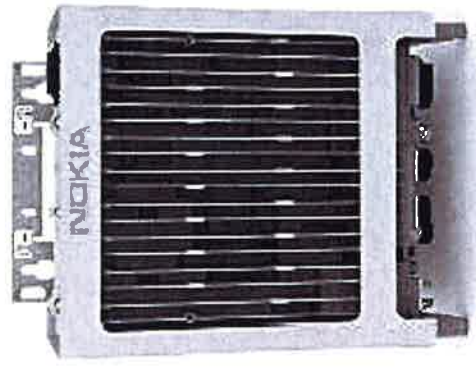
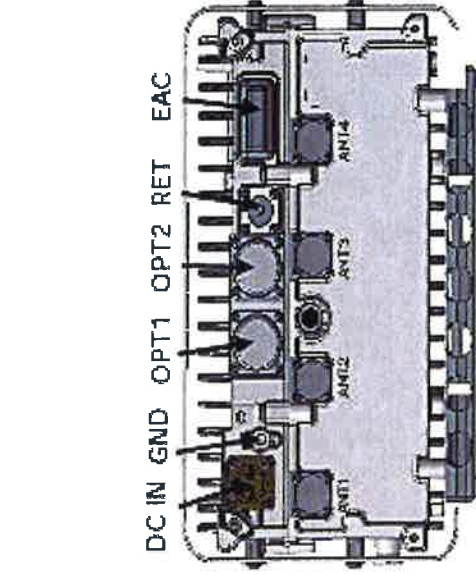
TECHNICAL SPECIFICATIONS

Features & performance	
Number of TX/RX paths	4 duplexed (either 4T4R or 2T4R by SW)
Frequency band	U700 (C) (3GPP bands 13): DL: 746 - 756 MHz / UL: 777 - 787 MHz
Instantaneous bandwidth - #carriers	10MHz – 1 LTE carrier (in 10MHz occupied bandwidth)
LTE carrier bandwidth	10 MHz
RF output power	2x60W or 4x30W (by SW)
Noise figure – RX Diversity scheme	2 dB typ. (<2.5 dB max) – 2 or 4 way Rx diversity
Size (HxWxD) in mm (in.)	550 x 305 x 230 (21.6" x 12.0" x 9") (with solar shield)
Volume in L	38 (with solar shield)
Weight in kg (lb) (w/o mounting HW)	26 (57.2) (with solar shield)
DC voltage range	-40.5 to -57V at full performance, -38 to -57V with relaxation on power consumption
DC power consumption	550W typical @100% RF load (in 2Tx or 4TX mode)
Environmental conditions	-40°C (-40°F) / +55°C (+131°F) IP65
Wind load (@150km/h or 93mph)	Frontal:<200N / Lateral :<150N
Antenna ports	4 ports 7/16 DIN female (50 ohms) VSWR < 1.5
CPRI ports	2 CPRI ports (HW ready for Rate7, 9.8 Gbps) SFP single mode dual fiber
AISG interfaces	1 AISG2.0 output (RS485) Integrated Smart Bias Tees (x2)
Misc. Interfaces	4 external alarms (1 connector) – 4 RF Tx & 4 RF Rx monitor ports - 1 DC connector (2 pins)
Installation conditions	Pole and wall mounting
Regulatory compliance	3GPP 36.141 / 3GPP 36.113 / GR-1089-CORE / GR-3108-CORE / UL 60950-1 / FCC Part 27

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AHCA AirScale RRH 4T4R B5 160W

Supported Frequency bands	3GPP band 5
Frequencies	DL 869-894 MHz, UL 824-849 MHz
Number of TX/RX paths/pipes	4TX/4RX
Instantaneous Bandwidth IBW	25 MHz (Full Band)
Occupied Bandwidth OBW	25 MHz (Full Band)
Output Power	4T4R @ 40W / 2T4R @ 60W
RF Sharing	LTE, WCDMA, LTE + NB-IoT supported
256 QAM Back Off	No backoff at 40W and 0.8dB at 60W.
Supply Voltage / Voltage Range	DC-48V / -36V to -60V
Typical Power Consumption	365W (50% ETSI Busy Hour Load at 4TX @ 40W)
	529W (100% RF Load at 4 TX @ 40W)
	574W (100% RF Load at 4 TX @ 40W with SBT and AISC ON)
Antenna Ports	4 Ports, 4.3-10+
Optical Ports	2x CPRI 9.8 gbps
ALD Control Interfaces	AISC3.0 from ANT1, 2, 3, 4 and RET (Power supply ANT1 and ANT3)
Other Interfaces	External Alarm MCR-26 Serial connector (4 inputs, 1 output) DC Circular Power Connector



Operational Temperature Range	-40°C to 55°C (with solar cover)
Dimensions (mm)	337 x 295 x 165 (radio only)
Height x width x depth	13.3" x 11.7" x 6.5" 428 x 324 x 208 (with bracket and enclosure) 16.9" x 12.8" x 8.2"
Volume (liters)	16.5
Weight (kg)	16/ 35.3 lb - w/o bracket
Ingress protection class	IP65
Installation options	Pole or Wall, Vertical or Horizontal Book Mount
Surge protection	Class II 5kA

NOKIA

B66a RRH4x45W

Datasheet

Radio Technology

FDD-LTE

Feature description:

- Remote Radio Head 4x45W or 2x90W Switchable via SW

Power Output

4 x 45 W or 2x90W (SW Switchable)
w/o fans

IBW

70MHz

OBW

60 MHz

RF Sharing

LTE

Mass/Volume

25.8kg/56.9 lb Weight
655H x 299W x 182D mm
25.8" x 11.8" x 7.2"
29.7L / 35.5L

Antenna Conf.

4Tx/4Rx

Temperature

-40 to 55 °C

IP class

IP65

Input Power

DC 48 V

Cooling

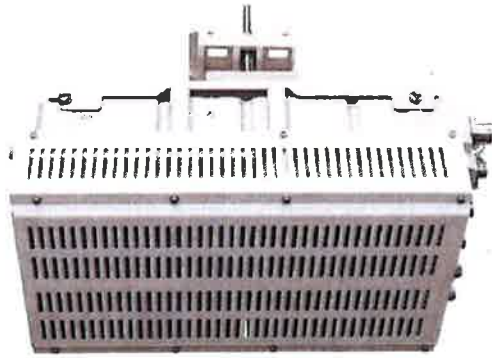
Natural Convection

Mounting

Wall, Pole mount

BBU connection

2 x 9.8Gbps SFP(Rate 7 HW ready)



B66a RRH 4x45 – Interfaces

Power:

- Max power: 816W (add 58W for AISG)
- Breaker size: 25A
- Max distance with 6ga power feed and 5.5V drop: 284 feet

RF Interfaces:

- 4.3/10 Connectors
- No monitoring ports(Spectrum analyzer SW takes place of monitoring ports)

AISG:

- Two Smart Bias-T
- One AISG port

B66 Details

- Max power for a single carrier is:
 - 2x60W for 10,15,20 MHz carrier
 - 2x40W for 5 MHz carrier
- Multi-Carrier Support with AWS-1 carriers: 15.1
- Multi-Carrier Support with AWS-3 carriers: 16.2

Carrier power: Multi-carrier

- Assuming 2 Tx power can be assigned per carrier subject to 40W max for 5Mhz, 60W for larger in 2T, cut that power in half for 4T
- Example:B4 (20Mhz) and AWS3 (10MHz)
 - Power can be varied between those two carriers, can go 60W for 20 MHz carrier, 30W for 10 MHz carrier to use the 90W in 2T.
 - It could be 45/45 for 20Mhz/10Mhz if desired.

ATTACHMENT 2



C Squared Systems, LLC
65 Dartmouth Drive
Auburn, NH 03032
(603) 644-2800
support@csquaredsystems.com

Calculated Radio Frequency Emissions Report

verizon^v

Danbury

24 Hospital Avenue, Danbury, CT 06810

February 5, 2018

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1. Introduction

The purpose of this report is to investigate compliance with applicable FCC regulations for the proposed modifications to the existing Verizon Wireless antenna arrays on the rooftop of the building located at 24 Hospital Avenue in Danbury, CT. The coordinates of the building are 41° 24' 18.03" N, 73° 26' 46.33" W.

Verizon is proposing the following modifications:

- 1) Remove three existing 751 MHz LTE antennas (one per sector);
- 2) Remove three existing 1900 MHz LTE antennas (one per sector);
- 3) Remove three existing 2100 MHz LTE antennas (one per sector);
- 4) Remove six remote radio heads (RRHs) for 751/2100 MHz LTE (two per sector);
- 5) Install six replacement quad-band 751/875/1900/2100 MHz LTE antennas (two per sector);
- 6) Install six replacement remote radio heads (RRHs) for 751/2100 MHz LTE (two per sector);
- 7) Add three additional remote radio heads (RRHs) for 875 MHz LTE;
- 8) Adjust the electrical and mechanical downtilts of the 751/2100 MHz LTE antennas;
- 9) Activate 875 MHz LTE.

2. FCC Guidelines for Evaluating RF Radiation Exposure Limits

In 1985, the FCC established rules to regulate radio frequency (RF) exposure from FCC licensed antenna facilities. In 1996, the FCC updated these rules, which were further amended in August 1997 by OET Bulletin 65 Edition 97-01. These new rules include Maximum Permissible Exposure (MPE) limits for transmitters operating between 300 kHz and 100 GHz. The FCC MPE limits are based upon those recommended by the National Council on Radiation Protection and Measurements (NCRP), developed by the Institute of Electrical and Electronics Engineers, Inc., (IEEE) and adopted by the American National Standards Institute (ANSI).

The FCC general population/uncontrolled limits set the maximum exposure to which most people may be subjected. General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

Public exposure to radio frequencies is regulated and enforced in units of milliwatts per square centimeter (mW/cm^2). The general population exposure limits for the various frequency ranges are defined in the attached "FCC Limits for Maximum Permissible Exposure (MPE)" in Attachment B of this report.

Higher exposure limits are permitted under the occupational/controlled exposure category, but only for persons who are exposed as a consequence of their employment and who have been made fully aware of the potential for exposure, and they must be able to exercise control over their exposure. General population/uncontrolled limits are five times more stringent than the levels that are acceptable for occupational, or radio frequency trained individuals. Attachment B contains excerpts from OET Bulletin 65 and defines the Maximum Exposure Limit.

Finally, it should be noted that the MPE limits adopted by the FCC for both general population/uncontrolled exposure and for occupational/controlled exposure incorporate a substantial margin of safety and have been established to be well below levels generally accepted as having the potential to cause adverse health effects.

3. RF Exposure Prediction Methods

The emission field calculation results displayed in the following figures were generated using the following formula as outlined in FCC bulletin OET 65:

$$\text{Power Density} = \left(\frac{1.6^2 \times EIRP}{4\pi \times R^2} \right) \times \text{OffBeamLoss}$$

Where:

EIRP = Effective Isotropic Radiated Power

R = Radial Distance = $\sqrt{(H^2 + V^2)}$

H = Horizontal Distance from antenna in meters

V = Vertical Distance from radiation center of antenna in meters

Ground reflection factor of 1.6

Off Beam Loss is determined by the selected antenna patterns

These calculations assume that the antennas are operating at 100 percent capacity, that all antenna channels are transmitting simultaneously, and that the radio transmitters are operating at full power. As a result, the predicted signal levels reported below are much higher than the actual signal levels will be from the final site configuration.

4. Calculation Results

The table below outlines the power density information for the site. Due to the directional nature of the proposed Verizon antennas, the majority of the RF power is focused out towards the horizon. As a result, there will be less RF power directed below the antennas relative to the horizon, and consequently lower power density levels around the base of the building. Please refer to Attachment C for the vertical patterns of the proposed Verizon antennas.

Carrier	Antenna Height (Feet)	Operating Frequency (MHz)	Number of Trans.	ERP Per Transmitter (Watts)	Power Density (mw/cm ²)	Limit	%MPE
Verizon	156	1900	1	4669	0.0747	1.0000	4.38%
Verizon	156	869	9	373	0.0537	0.5793	
Verizon	156	751	1	1919	0.0307	0.5007	
Verizon	156	2100	1	4669	0.0747	1.0000	
AT&T	132/134	850/1900	N/A	N/A	N/A	N/A	
Dish	132	22000	N/A	N/A	N/A	N/A	
WDBY	157	105.5	N/A	N/A	N/A	N/A	
Nextel	144/156/124	850	N/A	N/A	N/A	N/A	
Whip	154	155.28	N/A	N/A	N/A	N/A	
Whip	158	152.007	N/A	N/A	N/A	N/A	
Whip	156	453	N/A	N/A	N/A	N/A	
Whip	158	155.34	N/A	N/A	N/A	N/A	
Whip	158	964.925	N/A	N/A	N/A	N/A	
Whip	158	453.55	N/A	N/A	N/A	N/A	
Whip	158	464	N/A	N/A	N/A	N/A	
Whip	158	463	N/A	N/A	N/A	N/A	
Whip	158	931	N/A	N/A	N/A	N/A	
Whip	158	464	N/A	N/A	N/A	N/A	
Whip	158	468	N/A	N/A	N/A	N/A	
Whip	158	464	N/A	N/A	N/A	N/A	
Whip	149	155.34	N/A	N/A	N/A	N/A	
Whip	158	464	N/A	N/A	N/A	N/A	
Whip	158	464	N/A	N/A	N/A	N/A	
Whip	149	155.34	N/A	N/A	N/A	N/A	
Dish	170	900	N/A	N/A	N/A	N/A	
Whip	158	464	N/A	N/A	N/A	N/A	
Whip	158	464	N/A	N/A	N/A	N/A	
Whip	158	464	N/A	N/A	N/A	N/A	
Dish	Receive Only						
Cisco	130	2400	N/A	N/A	N/A	N/A	
Clearwire	153	2496	2	153	0.0051	1.0000	
Clearwire	148	2100	1	211	0.0038	1.0000	
Sprint	155	865	1	350	0.0057	0.5767	0.10%
Sprint	155	865	1	875	0.0142	0.5767	0.25%
Sprint	155	1900	11	622	0.1109	1.0000	1.11%
Sprint	155	1900	1	3112	0.0504	1.0000	0.50%
Sprint	155	2500	1	3112	0.0504	1.0000	0.50%
T-Mobile	127	2100	2	2334	0.1147	1.0000	1.15%
T-Mobile	127	1900	2	2334	0.1147	1.0000	1.15%
T-Mobile	127	2100	2	1167	0.0574	1.0000	0.57%
T-Mobile	127	1950	2	1167	0.0574	1.0000	0.57%
T-Mobile	127	1950	2	1167	0.0574	1.0000	0.57%
T-Mobile	127	700	1	865	0.0213	0.4667	0.46%
Verizon	156	751	1	2085	0.0333	0.5007	0.67%
Verizon	156	875	1	3751	0.0600	0.5833	1.03%
Verizon	156	875	3	564	0.0271	0.5833	0.46%
Verizon	156	1900	1	5119	0.0819	1.0000	0.82%
Verizon	156	2100	1	7857	0.1256	1.0000	1.26%
Total:							15.55%

Table 1: Carrier Information^{1 2}

¹ The existing CSC filing for Verizon should be removed and replaced with the updated Verizon values provided in Table 1. The power density information for carriers other than Verizon was taken directly from the CSC database dated June 1, 2017. Please note that %MPE values listed are rounded to two decimal points. The total %MPE listed is a summation of each unrounded contribution. Therefore, summing each rounded value may not reflect the total value listed in the table.

² Antenna heights listed for Verizon are in reference to the Verizon Wireless RFDS, dated June 13, 2017.

5. Conclusion

The above analysis verifies that emissions from the proposed site configuration will be below the maximum power density levels as outlined by the FCC in the OET Bulletin 65 Ed. 97-01. The highest, cumulative expected percent of Maximum Permissible Exposure at ground level is **15.55% of the FCC Uncontrolled/General Population limit.**

6. Statement of Certification

I certify to the best of my knowledge that the statements in this report are true and accurate. The calculations follow guidelines set forth in ANSI/IEEE Std. C95.3, ANSI/IEE Std. C95.1 and FCC OET Bulletin 65 Edition 97-01.



Daniel L. Goulet
C Squared Systems, LLC

February 5, 2018

Date

Attachment A: References

OET Bulletin 65 - Edition 97-01 - August 1997 Federal Communications Commission Office of Engineering & Technology

IEEE C95.1-2005, IEEE Standard Safety Levels With Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz IEEE-SA Standards Board

IEEE Std C95.3-2002 (R2008), IEEE Recommended Practice for Measurements and Computations of Radio Frequency Electromagnetic Fields With Respect to Human Exposure to Such Fields, 100 kHz-300 GHz IEEE-SA Standards Board

Attachment B: FCC Limits for Maximum Permissible Exposure (MPE)

(A) Limits for Occupational/Controlled Exposure³

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f ²)*	6
30-300	61.4	0.163	1.0	6
300-1500	-	-	f/300	6
1500-100,000	-	-	5	6

(B) Limits for General Population/Uncontrolled Exposure⁴

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f ²)*	30
30-300	27.5	0.073	0.2	30
300-1500	-	-	f/1500	30
1500-100,000	-	-	1.0	30

f = frequency in MHz * Plane-wave equivalent power density

Table 2: FCC Limits for Maximum Permissible Exposure (MPE)

³ Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

⁴ General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

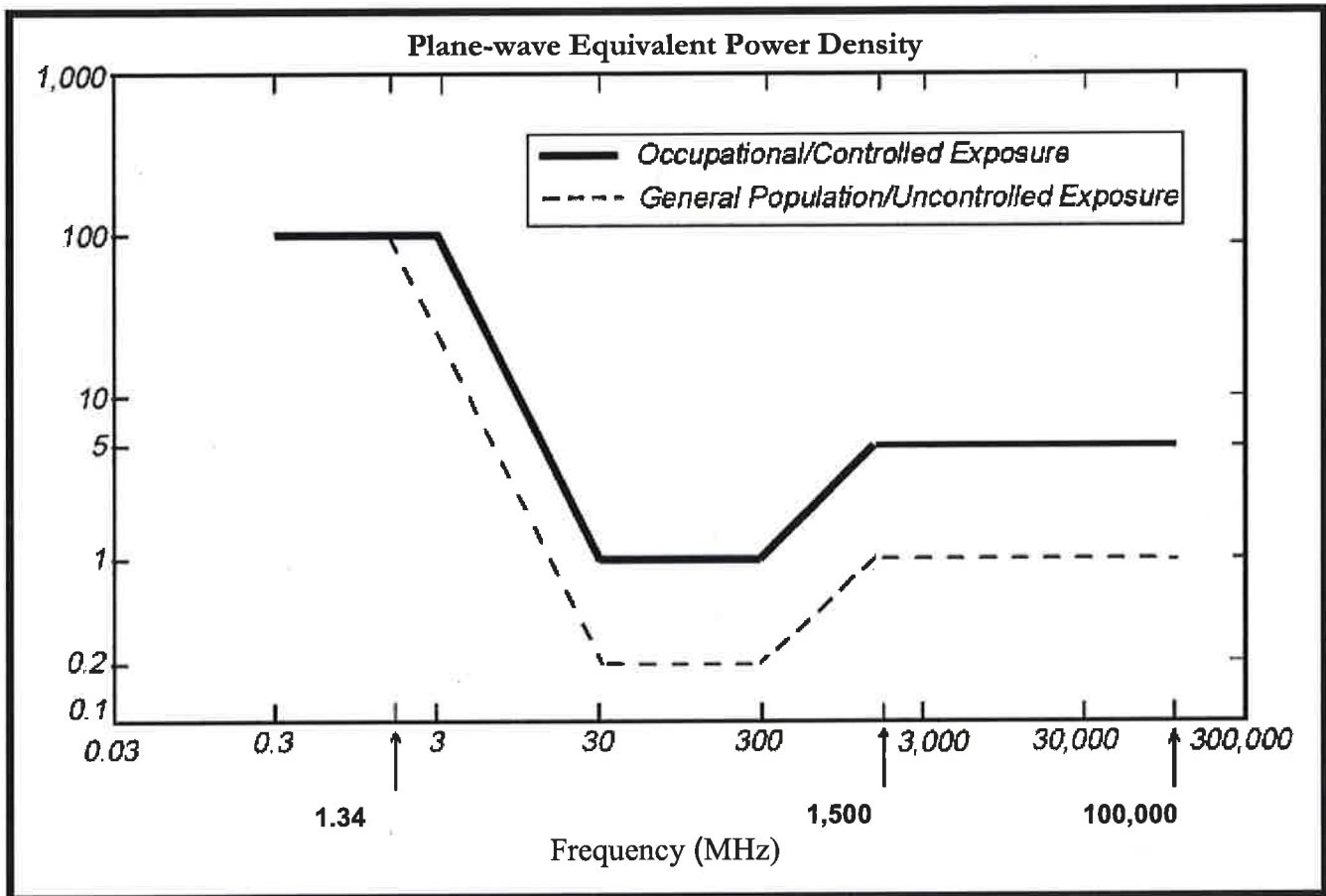
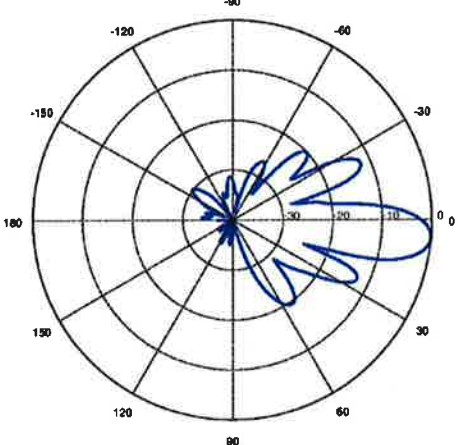
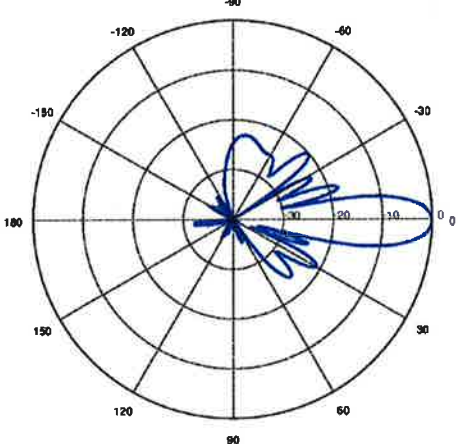
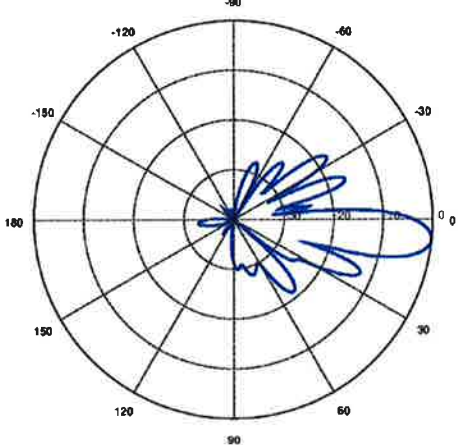


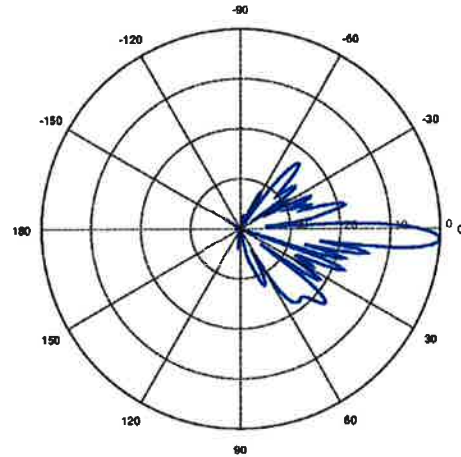
Figure 1: Graph of FCC Limits for Maximum Permissible Exposure (MPE)

Attachment C: Verizon Wireless' Antenna Model Data Sheets and Electrical Patterns

<p>751 MHz LTE</p> <p>Manufacturer: Commscope Model #: JAHH-65B-R3B_6 Frequency Band: 698-787 MHz Gain: 14.5 dBi Vertical Beamwidth: 12.4° Horizontal Beamwidth: 67° Polarization: ±45° Size L x W x D: 72.0" x 13.8" x 8.2"</p>	
<p>875 MHz CDMA/EVDO</p> <p>Manufacturer: Amphenol Model #: BXA-80063/6BF_0 Frequency Band: 806-900 MHz Gain: 16.6 dBi Vertical Beamwidth: 11° Horizontal Beamwidth: 63° Polarization: ±45° Size L x W x D: 68.6" x 11.2" x 5.3"</p>	
<p>875 MHz LTE</p> <p>Manufacturer: Commscope Model #: JAHH-65B-R3B_6 Frequency Band: 824-894 MHz Gain: 15.8 dBi Vertical Beamwidth: 10.5° Horizontal Beamwidth: 65° Polarization: ±45° Size L x W x D: 72.0" x 13.8" x 8.2"</p>	

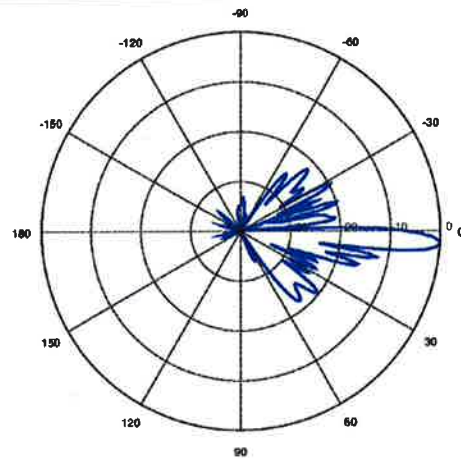
1900 MHz LTE

Manufacturer: Commscope
 Model #: JAHH-65B-R3B_3
 Frequency Band: 1850-1990 MHz
 Gain: 18.4 dBi
 Vertical Beamwidth: 5.2°
 Horizontal Beamwidth: 63°
 Polarization: ±45°
 Size L x W x D: 72.0" x 13.8" x 8.2"



2100 MHz LTE

Manufacturer: Commscope
 Model #: JAHH-65B-R3B_4
 Frequency Band: 1920-2200 MHz
 Gain: 18.5 dBi
 Vertical Beamwidth: 4.9°
 Horizontal Beamwidth: 65°
 Polarization: ±45°
 Size L x W x D: 72.0" x 13.8" x 8.2"



ATTACHMENT 3

April 4, 2018

Mr. Tom Nolan
Verizon Wireless
99 East River Drive
Hartford, CT 06108

Re: Site Name: Danbury CT
Site Address: 24 Hospital Ave.
Danbury, CT 06810
Hartford County
Dewberry No.: 50095228

Dear Mr. Nolan,

This assessment completed by Dewberry Engineers Inc. (Dewberry) considers the structural integrity of the proposed telecommunications upgrade at the above mentioned site. The telecommunications upgrade consists of removal and replacement of nine (9) existing panel antennas with six (6) JAHH-65B-R3B panel antennas (two (2) per sector) measuring 72.0"Hx13.8"Wx8.2"D, weighing 63.3lbs, and the removal and replacement of six (6) RRH units with three (3) new 700 RRH units (one (1) per sector) measuring 20.9"Hx11.8"Wx7.5"D, weighing 55.6lbs and three (3) new AWS RRH units (one (1) per sector) measuring 25.8"Hx11.8"Wx7.2"D, weighing 56.8lbs. Additionally, three (3) new 850 RRH units (one (1) per sector) are to be installed, measuring 13.3"Hx11.9"Wx6.5"D, weighing 35.3lbs. Proposed antennas are to be mounted to proposed brackets on existing antenna pipe mast in each sector. Proposed radio heads are to be mounted to proposed L4x4x1/4 angle attached to existing antenna frames. The telecommunications upgrade is proposed by Verizon Wireless.

The assessment is based on the following information:

1. Photographs, field notes, visual inspection of existing antenna installation and other relevant information acquired on a site visit conducted by Dewberry Engineers on July 31, 2017.
2. RFDS for proposed antenna configuration dated June 13, 2017.

The proposed installation produces an increase in weight and wind loading on the existing structure from the currently existing installation. However, we have determined that **the existing and proposed framing and existing building structure is adequate** for the proposed Verizon Wireless telecommunication upgrade. No mount analysis was performed at the time this letter was written. All telecommunications equipment and associated accessories are to be installed in accordance with the configuration from the latest Construction Drawings by Dewberry Engineers.

This assessment was based on the following limitations and assumptions:

1. No equipment or associated accessories shall deviate from the Construction Drawings without prior written approval of the Engineer.
2. Dewberry is not responsible for any modifications completed prior to and hereafter where Dewberry is not the Engineer of Record.
3. All components supporting the Verizon Wireless equipment are assumed to be designed to all applicable codes and designed for loads equal to or larger than the current proposed loads.
4. Mapping of existing antenna framing was unavailable to Dewberry during structural assessment. **Contractor shall field verify size of existing antenna pipe mast is at minimum 3.5" O.D.**, and notify Dewberry immediately if existing conditions are different than stated.

If you have any questions, please do not hesitate to call me at 973.739.9400.

Sincerely,

Dewberry Engineers, Inc.



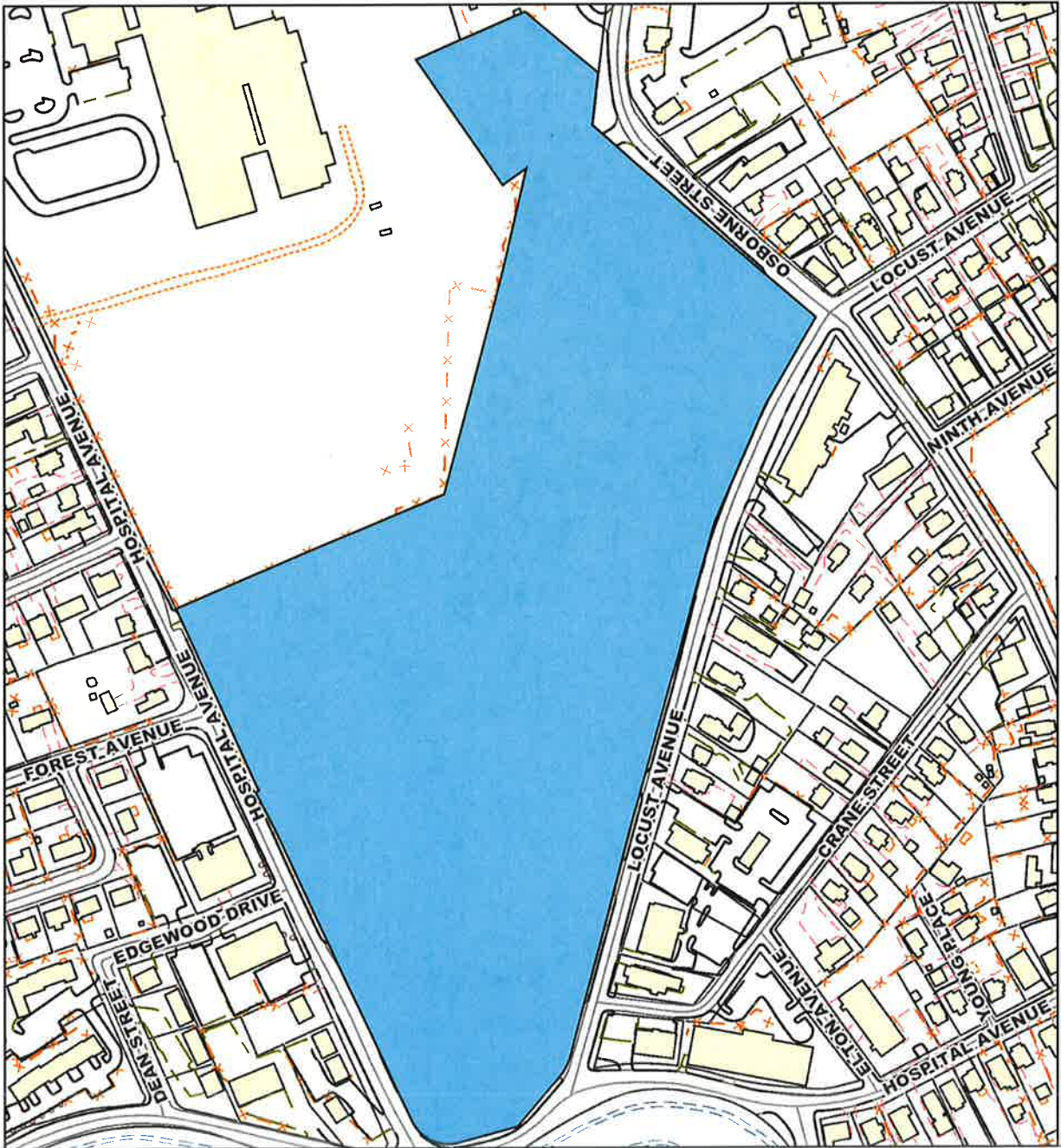
If you have any questions, please do not hesitate to call me at 973.739.9400.



Professional Engineer License No. 0023222

ATTACHMENT 4

- Channel
- Stream
- Parcel
- Unpaved
- Driveway (Paved)
- Driveway (Unpaved)
- Light Pole
- Building
- Excavation
- House Trailer
- Pump
- Deck
- Bridge
- Row (Paved)
- Row (Unpaved)
- Fence
- Stone Wall
- Parking (Paved)
- Parking (Unpaved)
- Sidewalk
- Other
- Parcel
- Private Right of Way
- Public Right of Way
- Rail Right of Way
- Traffic Island
- Water



Not a legal survey.

LOCUST AV

Location LOCUST AV

Mblu I12 / / 1 / /

Acct#

Owner DANBURY HOSPITAL

Assessment \$249,467,100

Appraisal \$356,381,900

PID 24190

Building Count 16

Assessing Distri...

Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2017	\$300,531,000	\$55,850,900	\$356,381,900

Assessment			
Valuation Year	Improvements	Land	Total
2017	\$210,371,500	\$39,095,600	\$249,467,100

Owner of Record

Owner DANBURY HOSPITAL
Co-Owner
Address 24 HOSPITAL AVE
DANBURY, CT 06810

Sale Price \$0
Book & Page 0679/0464
Sale Date 05/26/1983

Ownership History

Ownership History			
Owner	Sale Price	Book & Page	Sale Date
DANBURY HOSPITAL	\$0	0679/0464	05/26/1983

Building Information

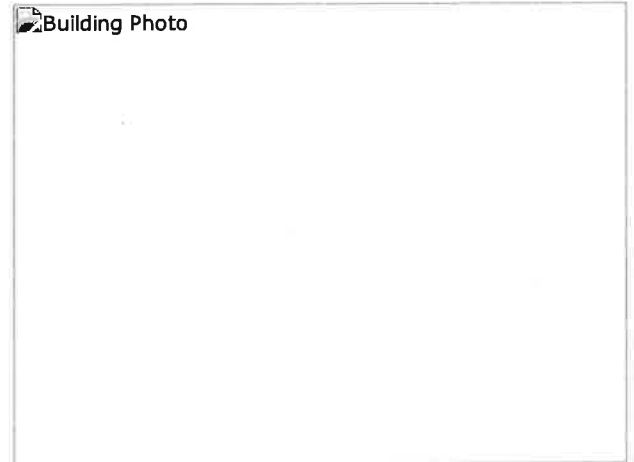
Building 1 : Section 1

Year Built: 1970
Living Area: 295,646
Replacement Cost: \$69,493,425
Building Percent 76
Good:
Replacement Cost
Less Depreciation: \$52,815,000

Building Attributes

Field	Description
STYLE	Hospital
MODEL	Commercial
Grade	Excellent
Stories:	6
Occupancy	1
Exterior Wall 1	Brick/Masonry
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	Tar & Gravel
Interior Wall 1	Drywall/Sheet
Interior Wall 2	
Interior Floor 1	Vinyl/Asphalt
Interior Floor 2	
Heating Fuel	Gas
Heating Type	Forced Air-Duc
AC Type	Central
Bldg Use	Commercial MDL-94
Total Rooms	
Total Bedrms	00
Total Baths	0
1st Floor Use:	200
Heat/AC	HEAT/AC SPLIT
Frame Type	MASONRY
Baths/Plumbing	AVERAGE
Ceiling/Wall	CEIL & WALLS
Rooms/Prtns	AVERAGE
Wall Height	10
% Comn Wall	0

Building Photo



(<http://images.vgsi.com/photos/DanburyCTPhotos//\00\02\88/>:/

Building Layout

FUS[25408]
 FUS[25408]
 FUS[25408]
 FUS[25408]
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 FUS[25408]
 FUS[25408]
 FUS[25408]
 FUS[25408]
 FUS[25408]
 FUS[25408]
 BAS[25408]

BAS COGEN[598]

FUS/BAS COGEN[2116]

Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
FUS	Finished Upper Story	281,604	267,524
BAS	First Floor	28,122	28,122
		309,726	295,646

Building 1 : Section 1

Year Built: 1970
Living Area: 0
Replacement Cost: \$69,493,425
Building Percent Good: 76
Replacement Cost Less Depreciation: \$52,815,000

Building Attributes	
Field	Description
Style	Outbuildings
Model	
Grade:	

Stories:	
Occupancy	
Exterior Wall 1	
Exterior Wall 2	
Roof Structure:	
Roof Cover	
Interior Wall 1	
Interior Wall 2	
Interior Flr 1	
Interior Flr 2	
Heat Fuel	
Heat Type:	
AC Type:	
Total Bedrooms:	
Total Bthrms:	
Total Half Baths:	
Total Xtra Fixtrs:	
Total Rooms:	
Bath Style:	
Kitchen Style:	
Fireplaces	
Whirlpool	
Addn'l Kitchen	
Bsm Gar	
Fin Bsm Area	
Fin Bsm Qual	
Nhbd	
MH Park	

Building Photo



(<http://images.vgsi.com/photos/DanburyCTPhotos//default.jpg>)

Building Layout



Building Sub-Areas (sq ft)	Legend
No Data for Building Sub-Areas	

Building 2 : Section 1

Year Built: 1968
Living Area: 15,232
Replacement Cost: \$3,857,248
Building Percent 71
Good:
Replacement Cost
Less Depreciation: \$2,738,600

Building Attributes : Bldg 2 of 16	
Field	Description
STYLE	Hospital
MODEL	Commercial
Grade	Excellent

Stories:	3
Occupancy	1
Exterior Wall 1	Brick/Masonry
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	Tar & Gravel
Interior Wall 1	Drywall/Sheet
Interior Wall 2	
Interior Floor 1	Vinyl/Asphalt
Interior Floor 2	
Heating Fuel	Gas
Heating Type	Forced Air-Duc
AC Type	Central
Bldg Use	Commercial MDL-94
Total Rooms	
Total Bedrms	00
Total Baths	0
1st Floor Use:	200
Heat/AC	HEAT/AC SPLIT
Frame Type	MASONRY
Baths/Plumbing	AVERAGE
Ceiling/Wall	CEIL & WALLS
Rooms/Prtns	AVERAGE
Wall Height	10
% Conn Wall	0

Building Photo



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Building Layout

FUS[4200]
FUS[5358]
BAS[6152]

Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
FUS	Finished Upper Story	9,558	9,080
BAS	First Floor	6,152	6,152
		15,710	15,232

Building 3 : Section 1

Year Built: 1970
Living Area: 1,400
Replacement Cost: \$87,851
Building Percent Good: 76
Replacement Cost Less Depreciation: \$66,800

Building Attributes : Bldg 3 of 16	
Field	Description
STYLE	Warehouse
MODEL	Ind/Comm
Grade	Excellent

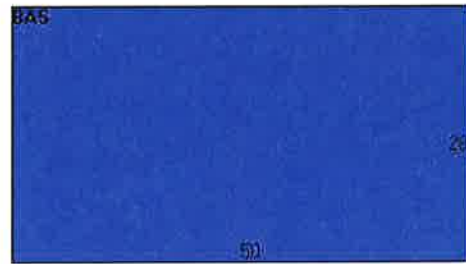
Stories:	1
Occupancy	1
Exterior Wall 1	Concr/Cinder
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	Tar & Gravel
Interior Wall 1	Minim/Masonry
Interior Wall 2	
Interior Floor 1	Concr-Finished
Interior Floor 2	
Heating Fuel	Coal or Wood
Heating Type	None
AC Type	None
Bldg Use	Commercial MDL-96
Total Rooms	
Total Bedrms	00
Total Baths	0
1st Floor Use:	200I
Heat/AC	NONE
Frame Type	MASONRY
Baths/Plumbing	AVERAGE
Ceiling/Wall	CEIL & MIN WL
Rooms/Prtns	AVERAGE
Wall Height	14
% Comn Wall	0

Building Photo



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Building Layout



Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
BAS	First Floor	1,400	1,400
		1,400	1,400

Building 4 : Section 1

Year Built: 1989
Living Area: 3,000
Replacement Cost: \$749,706
Building Percent Good: 81
Replacement Cost Less Depreciation: \$607,300

Building Attributes : Bldg 4 of 16	
Field	Description
STYLE	Hospital
MODEL	Commercial
Grade	Average+
Stories:	1

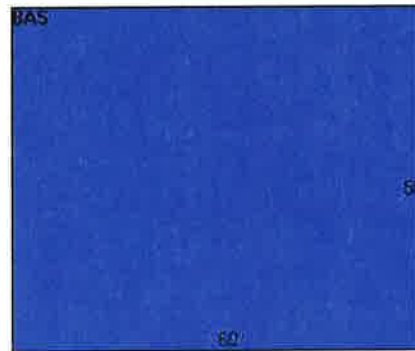
Occupancy	1
Exterior Wall 1	Brick/Masonry
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	Tar & Gravel
Interior Wall 1	Drywall/Sheet
Interior Wall 2	
Interior Floor 1	Carpet
Interior Floor 2	
Heating Fuel	Gas
Heating Type	Forced Air-Duc
AC Type	Central
Bldg Use	Commercial MDL-94
Total Rooms	
Total Bedrms	00
Total Baths	0
1st Floor Use:	200
Heat/AC	HEAT/AC PKGS
Frame Type	STEEL
Baths/Plumbing	AVERAGE
Ceiling/Wall	CEIL & WALLS
Rooms/Prtns	AVERAGE
Wall Height	12
% Corn Wall	0

Building Photo



(<http://images.vgsi.com/photos/DanburyCTPhotos//default.jpg>)

Building Layout



Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
BAS	First Floor	3,000	3,000
		3,000	3,000

Building 5 : Section 1

Year Built: 1989
Living Area: 9,610
Replacement Cost: \$2,853,081
Building Percent Good: 81
Replacement Cost Less Depreciation: \$2,311,000

Building Attributes : Bldg 5 of 16	
Field	Description
STYLE	Hospital
MODEL	Commercial
Grade	Excellent+
Stories:	2

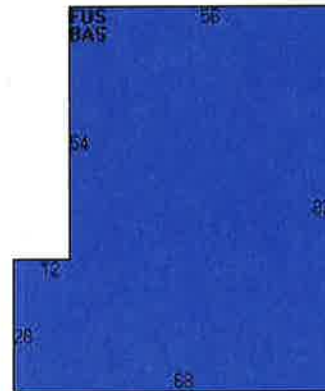
Occupancy	1
Exterior Wall 1	Brick/Masonry
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	Tar & Gravel
Interior Wall 1	Drywall/Sheet
Interior Wall 2	
Interior Floor 1	Carpet
Interior Floor 2	Ceram Clay Til
Heating Fuel	Gas
Heating Type	Forced Air-Duc
AC Type	Central
Bldg Use	Commercial MDL-94
Total Rooms	
Total Bedrms	00
Total Baths	0
1st Floor Use:	200
Heat/AC	HEAT/AC SPLIT
Frame Type	STEEL
Baths/Plumbing	AVERAGE
Ceiling/Wall	SUS-CEIL & WL
Rooms/Prtns	AVERAGE
Wall Height	10
% Comn Wall	0

Building Photo



(<http://images.vgsi.com/photos/DanburyCTPhotos//default.jpg>)

Building Layout



Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
BAS	First Floor	4,928	4,928
FUS	Finished Upper Story	4,928	4,682
		9,856	9,610

Building 6 : Section 1

Year Built: 1983
Living Area: 167,220
Replacement Cost: \$39,177,338
Building Percent Good: 80
Replacement Cost Less Depreciation: \$31,341,900

Building Attributes : Bldg 6 of 16	
Field	Description
STYLE	Hospital
MODEL	Commercial
Grade	Excellent

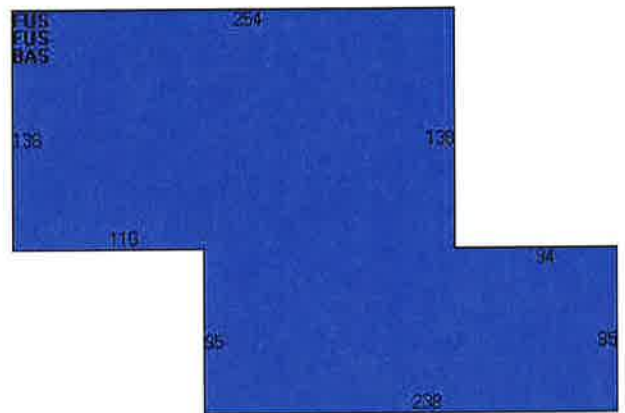
Stories:	3
Occupancy	1
Exterior Wall 1	Brick/Masonry
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	Tar & Gravel
Interior Wall 1	Drywall/Sheet
Interior Wall 2	
Interior Floor 1	Vinyl/Asphalt
Interior Floor 2	Carpet
Heating Fuel	Gas
Heating Type	Forced Air-Duc
AC Type	None
Bldg Use	Commercial MDL-94
Total Rooms	
Total Bedrms	00
Total Baths	0
1st Floor Use:	200
Heat/AC	NONE
Frame Type	STEEL
Baths/Plumbing	AVERAGE
Ceiling/Wall	SUS-CEIL & WL
Rooms/Prtns	AVERAGE
Wall Height	12
% Comn Wall	

Building Photo



(<http://images.vgsi.com/photos/DanburyCTPhotos//default.jpg>)

Building Layout



Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
FUS	Finished Upper Story	115,324	109,558
BAS	First Floor	57,662	57,662
		172,986	167,220

Building 7 : Section 1

Year Built: 1983
Living Area: 165,411
Replacement Cost: \$5,847,683
Building Percent Good: 88
Replacement Cost Less Depreciation: \$5,146,000

Building Attributes : Bldg 7 of 16	
Field	Description
STYLE	Parking Garage
MODEL	Ind/Comm
Grade	Good+

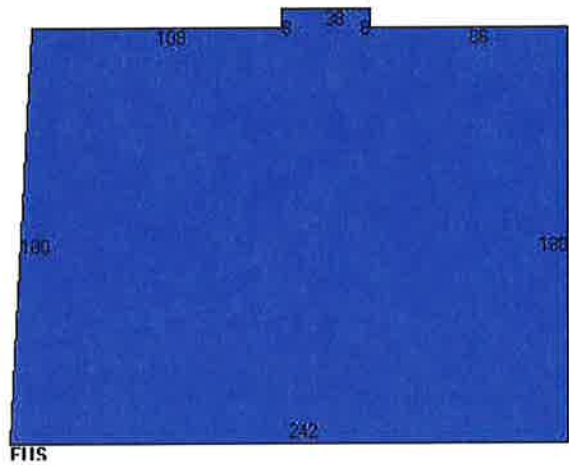
Stories:	2
Occupancy	1
Exterior Wall 1	Reinforc Concr
Exterior Wall 2	
Roof Structure	Reinforc Concr
Roof Cover	Concrete Tile
Interior Wall 1	Minim/Masonry
Interior Wall 2	
Interior Floor 1	Concr-Finished
Interior Floor 2	
Heating Fuel	Coal or Wood
Heating Type	None
AC Type	None
Bldg Use	Commercial MDL-96
Total Rooms	
Total Bedrms	00
Total Baths	0
1st Floor Use:	200I
Heat/AC	NONE
Frame Type	STEEL
Baths/Plumbing	NONE
Ceiling/Wall	CEILING ONLY
Rooms/Prtns	LIGHT
Wall Height	10
% Comn Wall	0

Building Photo



(<http://images.vgsi.com/photos/DanburyCTPhotos//\00\02\23/>;

Building Layout



Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
FUS	Finished Upper Story	128,892	122,447
BAS	First Floor	42,964	42,964
BSM	Basement	42,964	0
		214,820	165,411

Building 8 : Section 1

Year Built: 1995
Living Area: 2,120
Replacement Cost: \$790,227
Building Percent Good: 88
Replacement Cost Less Depreciation: \$695,400

Building Attributes : Bldg 8 of 16	
Field	Description
STYLE	Hospital
MODEL	Commercial

Grade	Excellent
Stories:	1
Occupancy	1
Exterior Wall 1	Brick/Masonry
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	Tar & Gravel
Interior Wall 1	Drywall/Sheet
Interior Wall 2	
Interior Floor 1	Carpet
Interior Floor 2	
Heating Fuel	Gas
Heating Type	Forced Air-Duc
AC Type	Central
Bldg Use	Commercial MDL-94
Total Rooms	
Total Bedrms	00
Total Baths	0
1st Floor Use:	200
Heat/AC	HEAT/AC PKGS
Frame Type	STEEL
Baths/Plumbing	AVERAGE
Ceiling/Wall	SUS-CEIL & WL
Rooms/Prtns	AVERAGE
Wall Height	10
% Comn Wall	0

Building Photo



(<http://images.vgsi.com/photos/DanburyCTPhotos//default.jpg>)

Building Layout



Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
BAS	First Floor	2,120	2,120
		2,120	2,120

Building 9 : Section 1

Year Built: 1993
Living Area: 2,766
Replacement Cost: \$992,618
Building Percent Good: 88
Replacement Cost Less Depreciation: \$873,500

Building Attributes : Bldg 9 of 16	
Field	Description
STYLE	Hospital
MODEL	Commercial
Grade	Excellent
Stories:	1

Occupancy	1
Exterior Wall 1	Brick/Masonry
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	Tar & Gravel
Interior Wall 1	Drywall/Sheet
Interior Wall 2	
Interior Floor 1	Carpet
Interior Floor 2	Vinyl/Asphalt
Heating Fuel	Gas
Heating Type	Forced Air-Duc
AC Type	Central
Bldg Use	Commercial MDL-94
Total Rooms	
Total Bedrms	00
Total Baths	0
1st Floor Use:	200
Heat/AC	HEAT/AC PKGS
Frame Type	STEEL
Baths/Plumbing	AVERAGE
Ceiling/Wall	SUS-CEIL & WL
Rooms/Prtns	AVERAGE
Wall Height	18
% Comn Wall	0

Building Photo



(<http://images.vgsi.com/photos/DanburyCTPhotos//default.jpg>)

Building Layout



Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
BAS	First Floor	2,766	2,766
		2,766	2,766

Building 10 : Section 1

Year Built: 1976
Living Area: 6,400
Replacement Cost: \$232,640
Building Percent Good: 80
Replacement Cost Less Depreciation: \$186,100

Building Attributes : Bldg 10 of 16	
Field	Description
STYLE	Warehouse
MODEL	Ind/Comm
Grade	Average
Stories:	1

Occupancy	1
Exterior Wall 1	Concr/Cinder
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	Tar & Gravel
Interior Wall 1	Minim/Masonry
Interior Wall 2	
Interior Floor 1	Concr-Finished
Interior Floor 2	
Heating Fuel	Gas
Heating Type	Forced Air-Duc
AC Type	None
Bldg Use	Commercial MDL-96
Total Rooms	
Total Bedrms	00
Total Baths	0
1st Floor Use:	200I
Heat/AC	NONE
Frame Type	MASONRY
Baths/Plumbing	AVERAGE
Ceiling/Wall	CEIL & MIN WL
Rooms/Prtns	AVERAGE
Wall Height	12
% Comn Wall	0

Building Photo



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Building Layout



Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
BAS	First Floor	6,400	6,400
		6,400	6,400

Building 12 : Section 1

Year Built: 1991
Living Area: 381,271
Replacement Cost: \$14,294,917
Building Percent Good: 88
Replacement Cost Less Depreciation: \$12,579,500

Building Attributes : Bldg 12 of 16	
Field	Description
STYLE	Parking Garage
MODEL	Ind/Comm
Grade	Excellent
Stories:	5

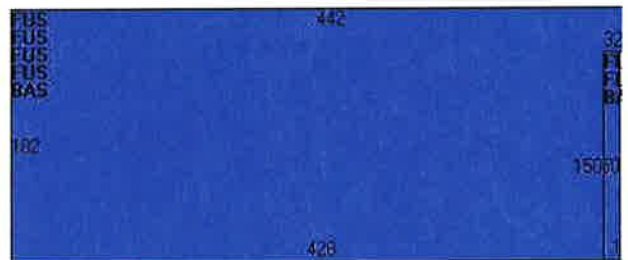
Occupancy	707
Exterior Wall 1	Pre-cast Concr
Exterior Wall 2	
Roof Structure	Reinforc Concr
Roof Cover	Concrete Tile
Interior Wall 1	Minim/Masonry
Interior Wall 2	
Interior Floor 1	Concr Abv Grad
Interior Floor 2	
Heating Fuel	
Heating Type	
AC Type	None
Bldg Use	Commercial MDL-94
Total Rooms	
Total Bedrms	
Total Baths	
1st Floor Use:	
Heat/AC	NONE
Frame Type	REINF. CONCR
Baths/Plumbing	NONE
Ceiling/Wall	NONE
Rooms/Prtns	AVERAGE
Wall Height	19
% Corn Wall	

Building Photo



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Building Layout



Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
FUS	Finished Upper Story	316,976	301,127
BAS	First Floor	80,144	80,144
		397,120	381,271

Building 13 : Section 1

Year Built: 2007
Living Area: 155,010
Replacement Cost: \$8,552,188
Building Percent Good: 96
Replacement Cost Less Depreciation: \$8,210,100

Building Attributes : Bldg 13 of 16	
Field	Description
STYLE	Parking Garage
MODEL	Commercial
Grade	Excellent++

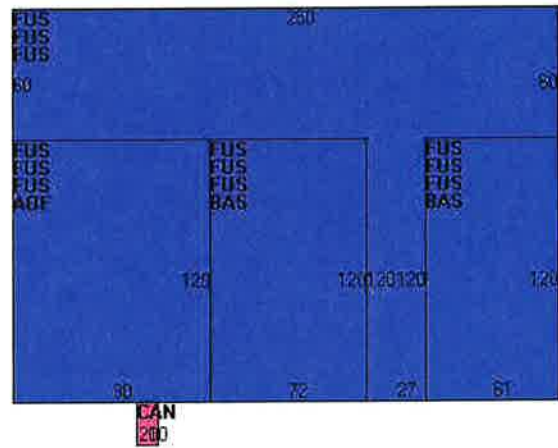
Stories:	3
Occupancy	2
Exterior Wall 1	Concr/Cinder
Exterior Wall 2	Brick/Masonry
Roof Structure	Reinforc Concr
Roof Cover	Concrete Tile
Interior Wall 1	Drywall/Sheet
Interior Wall 2	
Interior Floor 1	Ceram Clay Til
Interior Floor 2	Carpet
Heating Fuel	Gas
Heating Type	Forced Air-Duc
AC Type	Central
Bldg Use	Commercial MDL-94
Total Rooms	
Total Bedrms	
Total Baths	
1st Floor Use:	
Heat/AC	HEAT/AC PKGS
Frame Type	REINF. CONCR
Baths/Plumbing	ABOVE AVERAGE
Ceiling/Wall	CEIL & WALLS
Rooms/Prtns	ABOVE AVERAGE
Wall Height	9
% Comn Wall	

Building Photo



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Building Layout



Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
FUS	Finished Upper Story	135,000	128,250
BAS	First Floor	15,960	15,960
AOF	Office, (Average)	10,800	10,800
CAN	Canopy	200	0
		161,960	155,010

Building 14 : Section 1

Year Built:	2007
Living Area:	35,136
Replacement Cost:	\$1,239,770
Building Percent Good:	96
Replacement Cost Less Depreciation:	\$1,190,200

Building Attributes : Bldg 14 of 16	
Field	Description
STYLE	Parking Garage

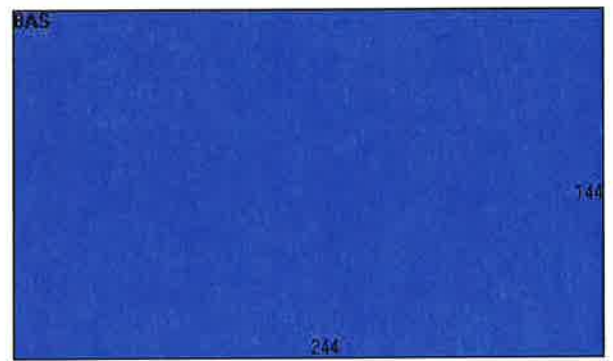
MODEL	Commercial
Grade	Good+
Stories:	6
Occupancy	707
Exterior Wall 1	Reinforc Concr
Exterior Wall 2	
Roof Structure	Reinforc Concr
Roof Cover	Concrete Tile
Interior Wall 1	Minim/Masonry
Interior Wall 2	
Interior Floor 1	Concr Abv Grad
Interior Floor 2	
Heating Fuel	Coal or Wood
Heating Type	None
AC Type	None
Bldg Use	Commercial MDL-94
Total Rooms	
Total Bedrms	
Total Baths	
1st Floor Use:	
Heat/AC	NONE
Frame Type	REINF. CONCR
Baths/Plumbing	NONE
Ceiling/Wall	NONE
Rooms/Prtns	AVERAGE
Wall Height	15
% Comn Wall	

Building Photo



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Building Layout



Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
BAS	First Floor	35,136	35,136
		35,136	35,136

Building 15 : Section 1

Year Built: 2007
Living Area: 58,869
Replacement Cost: \$10,500,769
Building Percent Good: 95
Replacement Cost Less Depreciation: \$9,975,700

Building Attributes : Bldg 15 of 16	
Field	Description
STYLE	Profess. Bldg
MODEL	Commercial
Grade	Excellent+++
Stories:	3

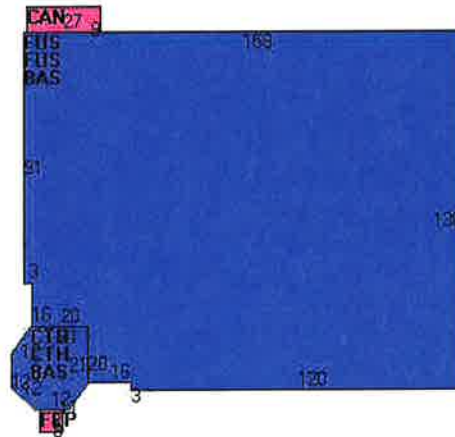
Occupancy	1
Exterior Wall 1	Stucco/Masonry
Exterior Wall 2	Brick Veneer
Roof Structure	Flat
Roof Cover	Tar & Gravel
Interior Wall 1	Drywall/Sheet
Interior Wall 2	
Interior Floor 1	Ceram Clay Til
Interior Floor 2	Carpet
Heating Fuel	Gas
Heating Type	Forced Air-Duc
AC Type	Central
Bldg Use	Commercial MDL-94
Total Rooms	
Total Bedrms	
Total Baths	
1st Floor Use:	
Heat/AC	HEAT/AC PKGS
Frame Type	FIREPRF STEEL
Baths/Plumbing	ABOVE AVERAGE
Ceiling/Wall	SUS-CEIL & WL
Rooms/Prtns	ABOVE AVERAGE
Wall Height	9
% Comn Wall	

Building Photo



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Building Layout



Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
FUS	Finished Upper Story	40,090	38,086
BAS	First Floor	20,783	20,783
CAN	Canopy	243	0
CTH	Cathedral Ceiling	1,476	0
FEP	Fin. Enclosed Porch	64	0
		62,656	58,869

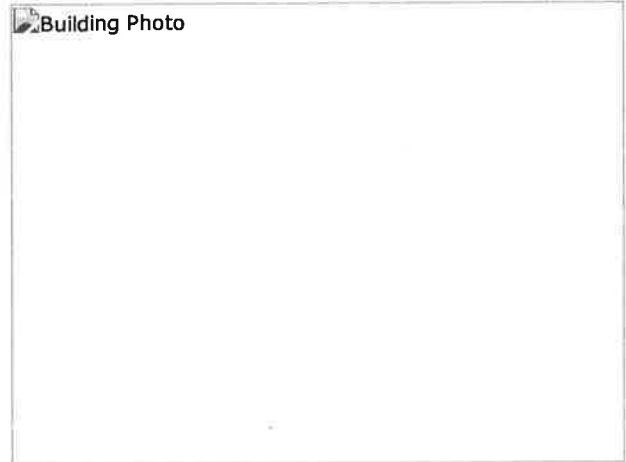
Building 16 : Section 1

Year Built: 2012
Living Area: 300,000
Replacement Cost: \$96,426,000
Building Percent Good: 140
Replacement Cost Less Depreciation: \$134,996,400

Building Attributes : Bldg 16 of 16	
Field	Description

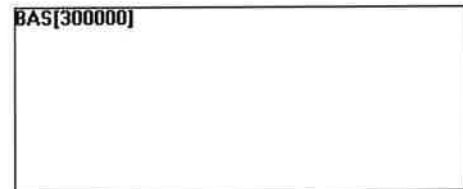
STYLE	Hospital
MODEL	Commercial
Grade	Excellent+++
Stories:	6
Occupancy	1
Exterior Wall 1	Brick/Masonry
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	Tar & Gravel
Interior Wall 1	Drywall/Sheet
Interior Wall 2	
Interior Floor 1	Carpet
Interior Floor 2	Vinyl/Asphalt
Heating Fuel	Gas
Heating Type	Forced Air-Duc
AC Type	Central
Bldg Use	Hospital
Total Rooms	
Total Bedrms	
Total Baths	
1st Floor Use:	
Heat/AC	HEAT/AC PKGS
Frame Type	STEEL
Baths/Plumbing	AVERAGE
Ceiling/Wall	SUS-CEIL & WL
Rooms/Prtns	AVERAGE
Wall Height	10
% Comn Wall	

Building Photo



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Building Layout



Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
BAS	First Floor	300,000	300,000
		300,000	300,000

Extra Features

Extra Features				Legend
Code	Description	Size	Value	Bldg #
ELV1	Elevator	5 STOPS	\$178,000	7
SPR1	Sprinklers-Wet	172986 S.F.	\$218,000	6
SPR1	Sprinklers-Wet	18147 S.F.	\$23,700	2
SPR1	Sprinklers-Wet	2120 S.F.	\$2,900	8
SPR1	Sprinklers-Wet	268385 S.F.	\$402,600	16
SPR1	Sprinklers-Wet	2766 S.F.	\$3,900	9
SPR1	Sprinklers-Wet	3000 S.F.	\$3,900	4
SPR1	Sprinklers-Wet	38890 S.F.	\$52,500	13

SPR1	Sprinklers-Wet	9856 S.F.	\$12,700	5
A/C	Air Condition	14820 UNITS	\$33,300	13
ELV1	Elevator	4 STOPS	\$139,200	2
ELV1	Elevator	5 STOPS	\$178,000	7
ELV1	Elevator	5 STOPS	\$198,000	12
SPR1	Sprinklers-Wet	304896 S.F.	\$343,000	1
SPR1	Sprinklers-Wet	62413 S.F.	\$88,900	15
ELV1	Elevator	3 STOPS	\$114,000	15
ELV1	Elevator	4 STOPS	\$152,000	13
ELV1	Elevator	5 STOPS	\$198,000	12
ELV1	Elevator	7 STOPS	\$235,200	6
ELV1	Elevator	3 STOPS	\$114,000	15
ELV1	Elevator	7 STOPS	\$235,200	6
ELV1	Elevator	3 STOPS	\$114,000	15
ELV1	Elevator	7 STOPS	\$235,200	6
ELV1	Elevator	6 STOPS	\$201,600	6
ELV1	Elevator	5 STOPS	\$168,000	6
ELV2	Freight Elevator	3 STOPS	\$75,600	6

Land

Land Use

Use Code 951
Description Hospital
Zone RH3
Neighborhood 7500
Alt Land Appr No
Category

Land Line Valuation

Size (Acres) 23.46
Frontage 0
Depth 0
Assessed Value \$39,095,600
Appraised Value \$55,850,900

Outbuildings

Outbuildings						Legend
Code	Description	Sub Code	Sub Description	Size	Value	Bldg #
	EXPANSION			1	\$1,720,000	14
LT2	Light 2			8 UNITS	\$5,600	12
PAV1	Paving-Asphalt			243936 S.F.	\$292,700	1
PAV1	Paving-Asphalt			56580 S.F.	\$56,600	15
CNP2	Canopy-Gd			1686 S.F.	\$29,500	6
CNP2	Canopy-Gd			2607 S.F.	\$45,600	5
CEL	Cell Tower			1 UNITS	\$0	1
LT1	Light 1			9 UNITS	\$1,600	2
LT2	Light 2			4 UNITS	\$1,400	7
	RENOVATE LAB		10-1-05 LIST	1	\$500,000	1

LT2	Light 2			2 UNITS	\$700	13
LT2	Light 2			9 UNITS	\$3,200	2
	FM BOOSTER FACILITY		10-1-06 LIST	1	\$235,300	1
	FM BOOSTER/REN		10-1-06 LIST	1	\$435,000	1
LT3	Lights 3			4 UNITS	\$2,000	13
	RENOVATION TO 10 BED UNIT		10-1-06 LIST	1	\$200,000	1
LT1	Light 1			18 UNITS	\$3,200	15
	4TH FLR CONV/RED LOT		10-1-06 LIST	1	\$2,000,300	1
	4TH FLR CONVERT STGE RM TO OR		10-1-06 LIST	1	\$250,000	1
LT2	Light 2			2 UNITS	\$700	15
	FIELD PRICE		RED LOT PARKING EXPANSION	1	\$1,750,000	1
	1800 SQ FT M			1	\$900,000	1
	ALTERATIONS		10-1-10 LIST	1	\$3,200,000	1
	OFFICES		10-1-10 LIST	1	\$400,000	1
	RENOVATE 1ST FLOOR SOUTH		10-1-10 LIST	1	\$750,000	1
	BLDG. EXPANSION		BLDG. EXANSION	1	\$2,000,000	1
	TOWER ADD		TOWER ADDITION	1	\$18,000,000	1

Valuation History

Appraisal			
Valuation Year	Improvements	Land	Total
2015	\$300,531,000	\$55,850,900	\$356,381,900
2014	\$300,531,000	\$55,911,000	\$356,442,000
2013	\$181,313,800	\$55,911,000	\$237,224,800

Assessment			
Valuation Year	Improvements	Land	Total
2015	\$210,371,500	\$39,095,600	\$249,467,100
2014	\$210,371,500	\$39,137,700	\$249,509,200
2013	\$126,919,400	\$39,137,700	\$166,057,100

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ATTACHMENT 5



Certificate of Mailing — Firm

Name and Address of Sender
Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103

TOTAL NO. of Pieces Listed by Sender

3

TOTAL NO. of Pieces Received at Post Office™

3

Postmaster, per (name of receiving employee)

[Handwritten Signature]

Affix Stamp Here
 Postmark with Date of Receipt.



USPS® Tracking Number
 Firm-specific Identifier

Address
 (Name, Street, City, State, and ZIP Code™)

1.

Mark D Boughton, Mayor
 City of Danbury
 155 Deer Hill Avenue
 Danbury, CT 06810

2.

Sharon Caliro, AICP, Director Planning & Zoning
 City of Danbury
 155 Deer Hill Avenue
 Danbury, CT 06810

3.

Danbury Hospital Inc.
 24 Hospital Avenue
 Danbury, CT 06810

4.

5.

6.

Postage	Fee	Special Handling	Parcel Airift

