

June 12, 2020

Via Electronic Mail

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
2450 Mount Vernon Road, Southington, Connecticut**

Dear Attorney Bachman:

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) currently maintains a small cell wireless facility at Lake Compounce Theme Park at 2450 Mount Vernon Road in Southington, Connecticut (the “Property”). The facility consists of a single cannister antenna and a remote radio head (“RRH”) attached to a building-mounted mast. The antenna extends to a height of 40.9 feet above ground level. The mast, antenna and RRH are concealed within a faux chimney. The building and underlying property are owned by Festival Fun Parks LLC. Cellco’s existing wireless facility was approved by the Siting Council (“Council”) in 2015 (Petition No. 1174). A copy of the Council’s Petition No. 1174 decision is included in [Attachment 1](#).

Cellco now intends to modify its facility by replacing its existing antenna with a newer model cannister antenna, removing the existing RRH and installing two (2) new RRHs attached to the mast below the antenna. A set of project plans showing the proposed facility modifications and the specifications for Cellco’s new cannister antenna and RRHs are included in [Attachment 2](#).

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

20838882-v1

Melanie A. Bachman, Esq.

June 12, 2020

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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 wireless structure. Cellco's replacement antenna will be installed at the 40.9-foot level on the mast and inside the faux chimney.

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 installation of the new antenna and RRHs will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. A General Power Density table for the modified facility is included in Attachment 3.

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

6. The antenna mast, building and antenna mounts can support Cellco's proposed facility modifications. (*See* Mount Analysis Report included in Attachment 4).

A copy of the parcel map and Property owner information is included in Attachment 5. A Certificate of Mailing verifying that this filing was sent to municipal officials and the owner of the Property is included in Attachment 6.

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).

Robinson+Cole

Melanie A. Bachman, Esq.
June 12, 2020
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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

Enclosures

Copy to:

Mark Sciota, Southington Town Manager
Robert Phillips, Southington Director of Planning and Community Development
Festival Fun Parks LLC
Tim Parks

ATTACHMENT 1



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

www.ct.gov/csc

CERTIFIED MAIL RETURN RECEIPT REQUESTED

September 8, 2015

Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597

RE: **PETITION NO. 1174** - Cellco Partnership d/b/a Verizon Wireless petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed installation of a small cell telecommunications facility on the roof of an existing commercial building located at Lake Compounce Amusement Park, off Mount Vernon Road, Southington, Connecticut.

Dear Attorney Baldwin:

At a public meeting held on September 3, 2015, the Connecticut Siting Council (Council) considered and ruled that the above-referenced proposal would not have a substantial adverse environmental effect, and pursuant to Connecticut General Statutes § 16-50k, would not require a Certificate of Environmental Compatibility and Public Need with the following conditions:

- Unless otherwise approved by the Council, if the facility authorized herein is not fully constructed within three years from the date of the mailing of the Council's decision, this decision shall be void, and the facility owner/operator shall dismantle the facility and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made. The time between the filing and resolution of any appeals of the Council's decision shall not be counted in calculating this deadline. Authority to monitor and modify this schedule, as necessary, is delegated to the Executive Director. The facility owner/operator shall provide written notice to the Executive Director of any schedule changes as soon as is practicable;
- Any request for extension of the time period to fully construct the facility shall be filed with the Council not later than 60 days prior to the expiration date of this decision and shall be served on all parties and intervenors, if applicable, and the Town of Southington;
- Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
- Any nonfunctioning antenna and associated antenna mounting equipment on this facility owned and operated by the Petitioner shall be removed within 60 days of the date the antenna ceased to function;

- If the facility ceases to provide wireless services for a period of one year the Petitioner shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council within 90 days from the one year period of cessation of service. The Petitioner may submit a written request to the Council for an extension of the 90 day period not later than 60 days prior to the expiration of the 90 day period; and
- This Declaratory Ruling may be transferred or partially transferred, provided both the facility owner/operator/transferor and the transferee are current with payments to the Council for their respective annual assessments and invoices under Conn. Gen. Stat. §16-50v. The Council shall be notified of such sale and/or transfer and of any change in contact information for the individual or representative responsible for management and operations of the facility within 30 days of the sale and/or transfer. Both the facility owner/operator/transferor and the transferee shall provide the Council with a written agreement as to the entity responsible for any quarterly assessment charges under Conn. Gen. Stat. §16-50v(b)(2) that may be associated with this facility.

This decision is under the exclusive jurisdiction of the Council and is not applicable to any other modification or construction. All work is to be implemented as specified in the petition dated July 17, 2015.

Enclosed for your information is a copy of the staff report on this project.

Very truly yours,

Handwritten signature of Robert Stein in blue ink, with the initials "MAB" written to the right of the signature.

Robert Stein
Chairman

RS/CH/lm

Enclosure: Staff Report dated September 3, 2015

c: The Honorable Michael Riccio, Chairman, Town of Southington
Garry Brumback, Town Manager, Town of Southington
Robert Phillips, Director of Planning and Community Development, Town of Southington
Festival Fun Parks LLC



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

www.ct.gov/csc

Petition No. 1174

Cellco Partnership d/b/a Verizon Wireless

Lake Compounce Amusement Park, Mount Vernon Road, Southington

Staff Report

September 3, 2015

On July 17, 2015, the Connecticut Siting Council (Council) received a petition from Cellco Partnership d/b/a Verizon Wireless (Cellco) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed installation of a small cell telecommunications facility attached to an existing commercial building in Lake Compounce Amusement Park in Southington, owned by the Festival Fun Parks. The facility will provide capacity relief in the 2100 MHz frequency range to Lake Compounce Amusement Park.

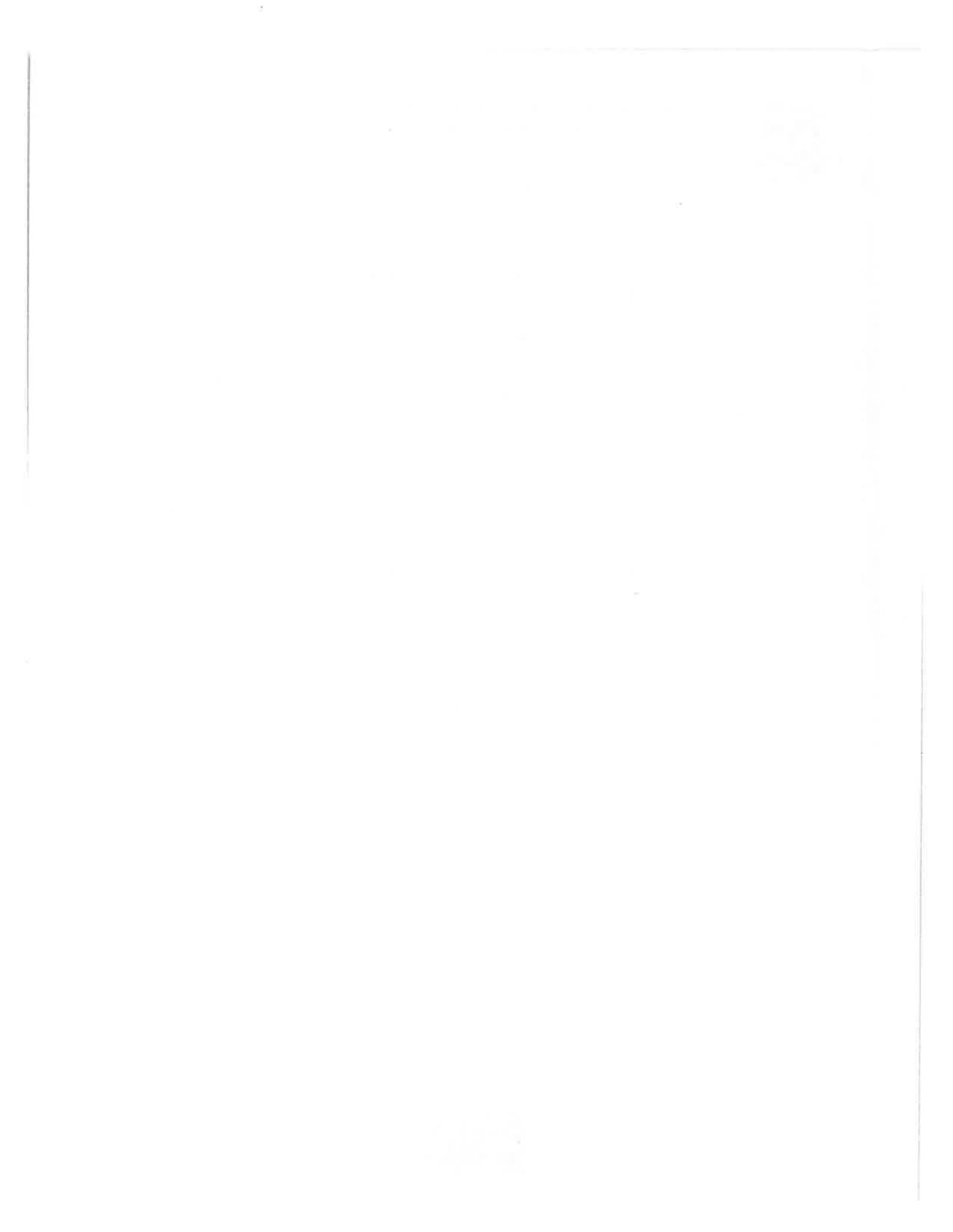
Specifically, Cellco would install a single canister-type antenna and remote radio head to the top of a small tower, attached to an existing building inside the park. The tower, antenna and remote radio head will be concealed inside a faux chimney structure designed to match the building. The mast and antenna would extend approximately ten feet above the peak of the roof of the building, to an overall height of approximately 42.9 feet above ground level. Equipment associated with the facility will be located inside a ground floor equipment room inside the building. Power and telephone service to the facility will likewise extend from existing service inside the building. The 150 acre parcel is within a single family residential zone. The property is surrounded by commercial, industrial and some residential uses.

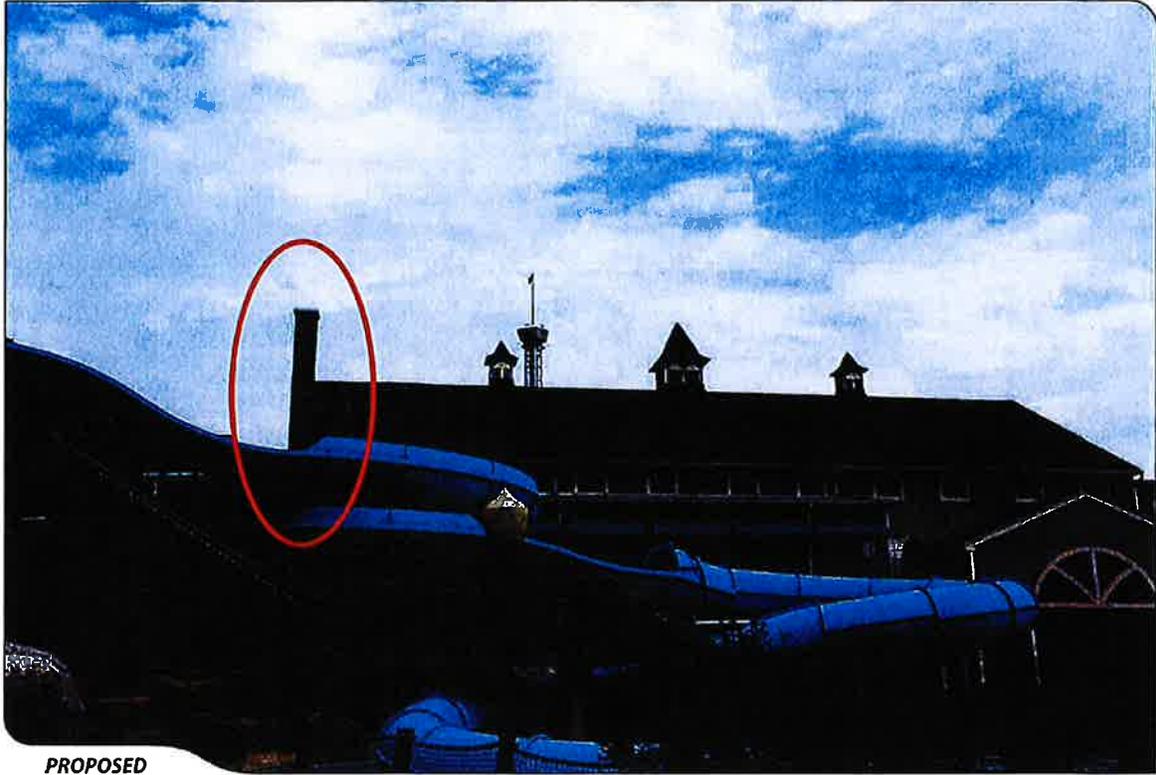
The visual impact of the project is expected to be negligible as the small cell facility would be concealed by a faux chimney. Visibility of the small cell installation would be limited to the immediate vicinity. See the photo-simulation on the next page. No ground disturbance of any kind will occur and no trees or vegetation of any kind will need to be removed to install the proposed small cell facility.

The maximum worst-case power density would be 18.49 percent of the applicable limit. No notice to the Federal Aviation Administration is required.

Notice was provided to Southington's Town Manager Garry Brumback, Bristol's Mayor Kenneth B. Cockayne, Festival Fun Parks LLC, the owner of the property, and abutting property owners. No comments have been received to date.

Cellco contends that this proposed project would not have a substantial adverse environmental effect.





PROPOSED

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
3	HOST PROPERTY (35mm Focal Length)	NORTH	+/- 137 FEET



ATTACHMENT 2

PERMITTING DOCUMENTS

NO.	DATE	REVISION
1	05/20/20	ISSUED FOR REVIEW / JIM
2		
3		
4		
5		

DESIGN PROFESSIONALS OF RECORD

PROJECT: MICHAEL S. THORBER P.E.
COMPANY: MICHAEL S. THORBER & ASSOCIATES, P.C.
ADDRESS: 50 VANWALL STREET EXT.
WHITEHORN, CT 06898

OWNER: FESTIVAL JUNI PAROIS, LLC
ADDRESS: P.O. BOX 5418
BOULDER, WY 82501-0518

LAKE COMPOUNCE SCI CT

SITE: 2400 MOUNT VERNON ROAD
ADDRESS: DORSETTOWN, CT 01702
APT FILING NUMBER: CT141811215

DATE: 04/02/20
DRAWN BY: DKA
CHECKED BY: JIM
VZW PROJECT CODE: 212222288
VZW LOCATION CODE: 48033
VZW FUSE ID: 1252543

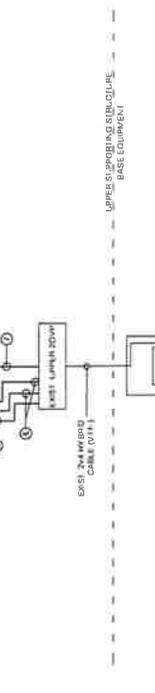
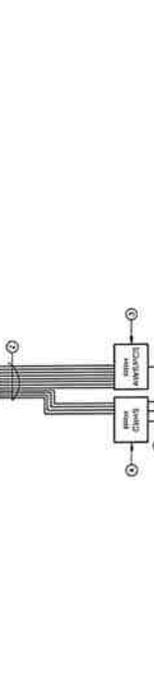
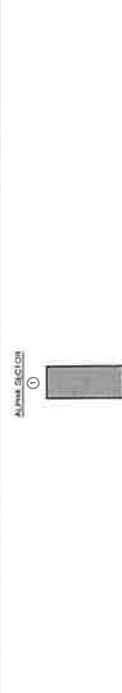
SHEET TITLE:
**FRP DETAILS,
EQUIPMENT
DETAILS & RF BILL
OF MATERIALS**

SHEET NUMBER:
C-2

BILL OF MATERIALS

QTY	DESCRIPTION	LENGTH	COMMENTS
1	12" FIBER OPTIC ANTENNA		
12	1/2" 10' CORE LAYERS	81' 1"	1 HOUR 1 HOUR 10' SMALL CELL ANTENNA
1	1/2" ANGLE IRON		SAME AS 2. BEARING ABOVE 2.0000' INDICATED TO EAST. PER 1.0451
1	1/2" ANGLE IRON		SAME AS 2. BEARING ABOVE 2.0000' INDICATED TO EAST. PER 1.0451
1	1/2" ANGLE IRON		SAME AS 2. BEARING ABOVE 2.0000' INDICATED TO EAST. PER 1.0451
1	1/2" ANGLE IRON		SAME AS 2. BEARING ABOVE 2.0000' INDICATED TO EAST. PER 1.0451
2	1/2" ANGLE IRON		SAME AS 2. BEARING ABOVE 2.0000' INDICATED TO EAST. PER 1.0451
2	1/2" ANGLE IRON		SAME AS 2. BEARING ABOVE 2.0000' INDICATED TO EAST. PER 1.0451

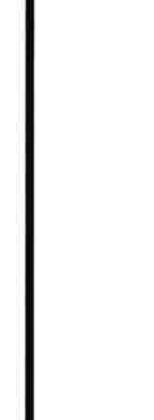
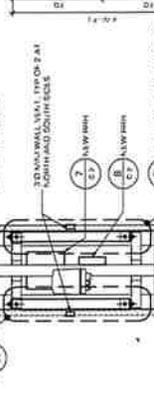
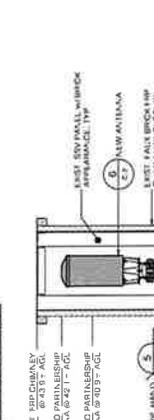
NOTES:
1. INFORMATION SHOWN HEREON IS FOR USE BY VERIZON EQUIPMENT OPERATIONS.
2. INFORMATION IS BASED ON RECORD DRAWING 212222288.
3. REFER TO EQUIPMENT DESCRIPTIONS FOR DIMENSIONS ONLY. (WHERE APPLICABLE).



EQUIPMENT DATA

RECORD	ANTENNA MAKE/MODEL	QTY	ALPHA	HEIGHT FT. (IN.)	WIDTH FT. (IN.)	DEPTH FT. (IN.)	WEIGHT LBS. (KG.)
1	12" FIBER OPTIC ANTENNA	1	8"	24.4	12.0	29.3"	29.3"
1	1/2" ANGLE IRON	1	1/2"	14.8	14.8	10.0	97.5
1	1/2" ANGLE IRON	1	1/2"	20.5	10.15	8.2	14.0
1	1/2" ANGLE IRON	1	1/2"	13.0	8.6	4.2	18.6

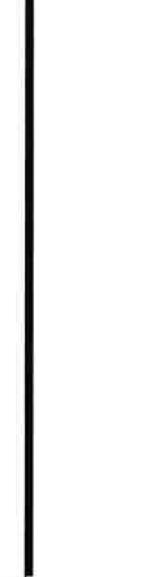
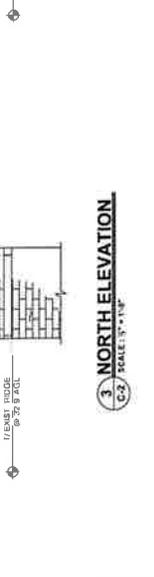
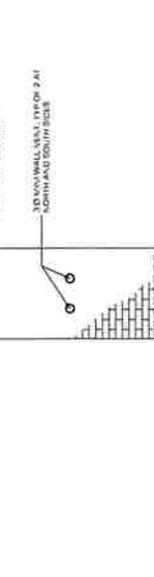
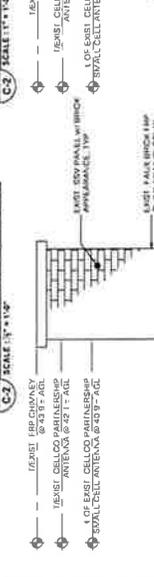
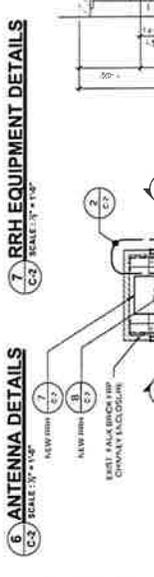
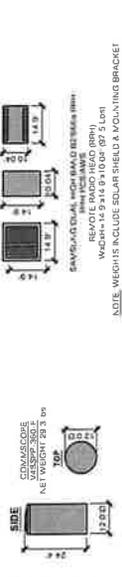
NOTE: EQUIPMENT WEIGHTS ARE BASED ON RECORD DRAWING 212222288.
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3. EQUIPMENT WEIGHTS ARE BASED ON RECORD DRAWING 212222288.





PERMITTING DOCUMENTS		
NO.	DATE	REVISION
1		ISSUED FOR REVIEW - JIM
2		
3		
4		
5		
6		

DESIGN PROFESSIONALS OF RECORD
 PROF. MICHAEL S. TRODDEN P.E.
 COMP. ALL-POINTS TECHNOLOGY
 ADD: 577 VAN HALL STREET EXT.
 SUITE 200
 WASHINGTON, CT 06095

OWNER: FESTIVAL FIVE FARMS, LLC
 ADDRESS: P.O. BOX 54185
 DALLAS, TX 75244-1185

LAME COMPOUNCE SCI CT
 SITE: 450 NORTH WASHINGTON ROAD
 ADDRESS: SOUTHINGTON, CT 06488
 APT FILING NUMBER: CT141811272
 DATE: 8/20/2014
 DRAWN BY: GSA
 CHECKED BY: JIM
 VDW PROJECT CODE: 2013032801
 VDW LOCATION CODE: 44881
 VDW FILE ID: 1335543

SHEET TITLE:
 NOTES & SPECIFICATIONS

SHEET NUMBER:
 N-1

LEGAL USE:
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DATE: 8/20/2014
 DRAWN BY: GSA
 CHECKED BY: JIM
 VDW PROJECT CODE: 2013032801
 VDW LOCATION CODE: 44881
 VDW FILE ID: 1335543

1. GENERAL NOTES:
 A. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE INTERNATIONAL BUILDING CODE (IBC) AND THE INTERNATIONAL PLUMBING CODE (IPC).
 B. ALL MATERIALS SHALL BE APPROVED BY THE ARCHITECT AND THE LOCAL BUILDING DEPARTMENT.
 C. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.
 D. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS.
 E. ALL WORK SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE LOCAL BUILDING DEPARTMENT.
 F. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES.
 G. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE SPECIFICATIONS AND NOTES.

2. MATERIALS:
 A. ALL MATERIALS SHALL BE APPROVED BY THE ARCHITECT AND THE LOCAL BUILDING DEPARTMENT.
 B. ALL MATERIALS SHALL BE SUBMITTED FOR APPROVAL AT LEAST 14 DAYS PRIOR TO INSTALLATION.
 C. ALL MATERIALS SHALL BE STORED PROPERLY ON-SITE TO PREVENT DAMAGE.

3. INSTALLATION:
 A. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
 B. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE INTERNATIONAL BUILDING CODE (IBC) AND THE INTERNATIONAL PLUMBING CODE (IPC).
 C. ALL WORK SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE LOCAL BUILDING DEPARTMENT.

4. TESTING AND INSPECTION:
 A. ALL WORK SHALL BE SUBJECT TO TESTING AND INSPECTION BY THE LOCAL BUILDING DEPARTMENT.
 B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING ALL TESTING AND INSPECTIONS.
 C. ALL TESTING AND INSPECTIONS SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.

5. WARRANTY:
 A. ALL WORK SHALL BE WARRANTED FOR A PERIOD OF TWO (2) YEARS FROM THE DATE OF COMPLETION.
 B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING RECORDS OF ALL WORK.

6. OTHER NOTES:
 A. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE SPECIFICATIONS AND NOTES.
 B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS.
 C. ALL WORK SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE LOCAL BUILDING DEPARTMENT.

V4SSPP-360S-F



16-port small cell antenna, 8x 1695–2690, 4x 3300–3800 and 4x 5150–5925 MHz, 360° Horizontal Beamwidth, fixed tilt.

General Specifications

Antenna Type	Small Cell
Band	Multiband
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
Radome Material	ASA, UV stabilized
Radiator Material	Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	16
RF Connector Quantity, total	16

Dimensions

Length	620 mm 24.409 in
Outer Diameter	305 mm 12.008 in

5 GHz Port Power Table

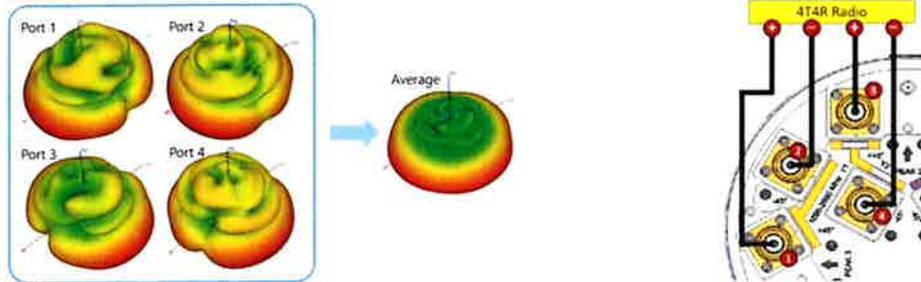
V4SSPP-360S-F

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

Port Configuration

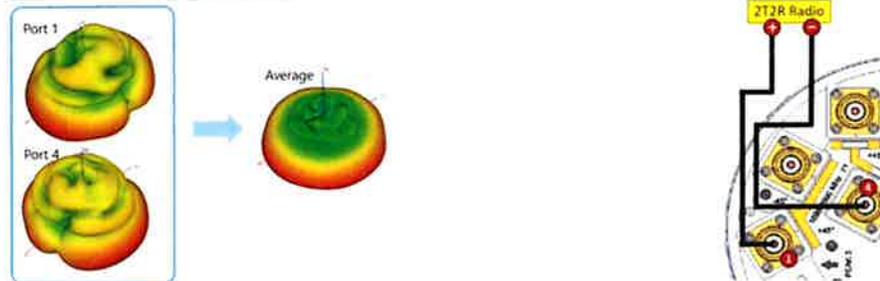
V4SSPP-360S-F

4X Port Configuration:



- When using a 4T4R radio, use ports 1 – 4 of the pattern diversity antenna

2X Port Configuration:



- When using a 2T2R radio, use ports 1 & 4 of the pattern diversity antenna
- Using ports 2 & 3 yields the same result
- This ensures that both orientations and both polarizations are used
- When using this antenna in 2T2R, then this antenna does not have full polarization diversity

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz 3300 – 3800 MHz 5150 – 5925 MHz
Polarization	±45°
Total Input Power, maximum	300 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	1695–1920	1920–2180	2300–2690	3300–3800	5150–5925
Gain, dBi	7.2	7.3	8.4	5.4	4
Beamwidth, Horizontal, degrees	360	360	360	360	360
Beamwidth, Vertical, degrees	21.5	18.7	15.1	37.7	25.5

V4SSPP-360S-F

Beam Tilt, degrees	7	7	7	2	2
USLS (First Lobe), dB	14	12	12	15	5
Isolation, Cross Polarization, dB	25	25	25	25	25
Isolation, Inter-band, dB	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
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-150		
Input Power per Port, maximum, watts	125	125	125	50	80
Input Power per Port at 50° C, maximum, watts	75	75	75	35	20

Electrical Specifications, BASTA

Frequency Band, MHz	1695–1920	1920–2180	2300–2690	3300–3800	5150–5925
Gain by all Beam Tilts, average, dBi	6.7	7	8	4.9	3.4
Gain by all Beam Tilts Tolerance, dB	±0.8	±0.3	±0.9	±0.6	±0.7
Beamwidth, Vertical Tolerance, degrees	±2.3	±1.7	±1.4	±5.4	±4.3
USLS, beampeak to 20° above beampeak, dB	10	15	14		5
CPR at Boresight, dB	12	16	17	15	13

Mechanical Specifications

Wind Loading at Velocity, frontal	103.0 N @ 150 km/h 24.7 lbf @ 150 km/h
Wind Loading at Velocity, maximum	103.0 N @ 150 km/h 23.2 lbf @ 150 km/h
Wind Speed, maximum	241 km/h 149.75 mph

Packaging and Weights

Width, packed	418 mm 16.457 in
Depth, packed	404 mm 15.906 in
Length, packed	888 mm 34.961 in
Net Weight, without mounting kit	13.3 kg 29.321 lb
Weight, gross	17.8 kg 39.242 lb

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

V4SSPP-360S-F



* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

SAMSUNG

Dual-Band Radio Unit AWS/PCS (B66/B2) RFV01U-D1A

Samsung's RFV01U-D1A is a compact remote Radio Unit (RU) designed for deployments that require flexibility in installation and rapid onlining, without compromising on coverage, capacity or operational expenses.



The RFV01U-D1A RU targets dual-band support across Band 66 (AWS) and Band 2 (PCS), making it an ideal product for broad coverage footprints across multiple common mid-range frequencies.

The RU handles all Radio Frequency (RF) processing in a single, compact unit, and is designed to interface via CPRI with Samsung's CDU baseband offerings, in both distributed- and central-RAN configurations.

In addition to its minimal footprint and ease of installation, the RU is also designed to reduce cost of ownership through its integrated spectrum analyzer, which allows for remote RF monitoring, greatly reducing the need for on-site maintenance visits.

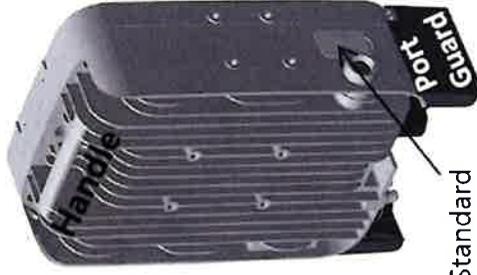
Features and Benefits

- Dual-band support for broad frequency coverage
- Minimal footprint reduces site costs
- Rapid, easy installation
- Flexibly deployable in any location
- Remote RF monitoring capability
- Convection cooled, silent operation
- Built-in Broadcast Auxiliary Services (BAS) filter ensures compliant AWS operation without impacting footprint

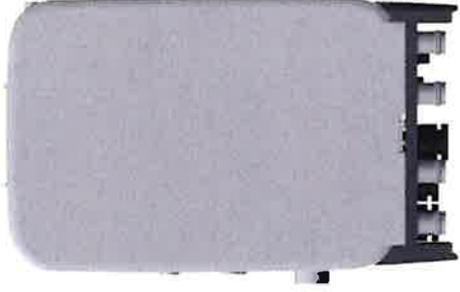
Key Technical Specifications

Duplex Type: FDD
Operating Frequencies:
B66: DL(2,110-2,180MHz)/UL(1,710-1,780MHz)
B2: DL(1,930-1,990MHz)/UL(1,850-1,910MHz)
Instantaneous Bandwidth:
70MHz(B66) + 60MHz(B2)
RF Chain: 4T4R/2T4R/2T2R
Output Power: Total 320W
DU-RU Interface: CPRI (10Gbps)
Dimensions: 380 x 380 x 255mm (36.8L)
Weight: 38.3kg
Input Power: -48V DC
Operating Temp.: -40 - 55°(w/o solar load)
Cooling: Natural convection

[CBRS RRH] Spec.



Standard Label



Current Size: 216 x 307 x 105.5 mm (6.99L)
(8.5 x 12.1 x 4.1 inch., excluding Port Guard)

Design is subject to minor change

Item	Specification
Band	Band 48 (3.5 GHz)
Frequency	3550~3700 MHz
IBW	150 MHz
OBW	80 MHz
# of Carriers	5/10/15/20 MHz x 4 carriers
RF Chain	4TX / 4RX
RF Output Power & EIRP	4 path x 5 W (Total: 20 W = 43 dBm) (EIRP: 47 dBm / 10 MHz)
RX Sensitivity	Typical : -101.5 dBm @ 1 Rx (3GPP 36.104, Wide Area)
Modulation	256-QAM support (1024-QAM with 1~2dB power back-off) -48 VDC (-38 to -57 VDC, 1 SKU), with clip-on AC-DC converter (Option)
Input Power	
Power Consumption	About 160 Watt @ 100% RF load, typical conditions
Volume	Under 7L (w/o Antenna), Under 9.6L (with antenna)
Weight	Under 8.0 kg (18.64 lb) (w/o Antenna), Under 10.5 Kg (with ant.)
Operating Temperature	-40°C (-40°F) ~ 55°C (131°F) (W/o solar load)
Cooling	Natural convection
Unwanted Emission	3GPP 36.104 Category A [B48] : FCC 47 CFR 96.41 e)
Optic Interface	20km, 2 ports (9.8Gbps x 2), SFP, single mode, duplex or Bi-Di
CPRI Cascade	Not supported
# of Antenna Port	4
External Alarm (UDA)	4
RET	AISG 2.2
TMA & built-in Bias-T I//F and PIM cancellation	Not supported
Mounting Options	Pole, wall, tower, back to back, side by side (for external ant), 3 RRH with Clip-on Antenna on the pole
Antenna Type	Integrated (Clip-on) antenna (Option), External antenna (Option)
NB-IoT	Not Supported (HW Resource reserved for 1 Guard Band NB-IoT per LTE carrier)
Spectrum Analyzer	TX/RX Support
External Alarm (UDA)	4
5G NR	Support with S/W upgrade
X-RAN	Support with S/W upgrade

ATTACHMENT 3

General Power Density

Site Name: Lake Compounce SC 1, CT
 Cumulative Power Density

Operator	Operating Frequency (MHz)	Number of Trans.	ERP Per Trans. (watts)	Total ERP (watts)	Distance to Target (feet)	Calculated Power Density (mW/cm ²)	Maximum Permissible Exposure* (mW/cm ²)	Fraction of MPE (%)
VZW CBRS	3600	1	50	50	40.9	0.0107	1.0	1.07%
VZW PCS	1970	1	855	855	40.9	0.1838	1.0	18.38%
VZW Cellular LTE	869							
VZW Cellular	869							
VZW AWS	2145	1	795	795	40.9	0.1709	1.0	17.09%
VZW 700	746							
Total Percentage of Maximum Permissible Exposure								36.55%

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Section 1.13101 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992

MHz = Megahertz
 mW/cm² = milliwatts per square centimeter
 ERP = Effective Radiated Power

Absolute worst case maximum values used, including the following assumptions:

1. closest accessible point is distance from antenna to base of pole;
2. continuous transmission from all available channels at full power for indefinite time period; and,
3. all RF energy is assumed to be directed solely to the base of the pole.

ATTACHMENT 4



June 11, 2020 (Rev 1)

Verizon Wireless
20 Alexander Drive
Wallingford, CT 06492

Attn: Mr. Andrew Leone

Re: Antenna Mount Structural Analysis – Wireless Communications Modification
Verizon Wireless Site I.D.: Lake Compounce SC1 CT
2540 Mount Vernon Road
Southington, CT 06489

Project/Location Code: 20202082699/468932
VZW FUZE I.D.: 15263043
APT Filing No. CT141EB11270

Dear Mr. Leone,

All-Points Technology Corp. (APT), a professional engineering corporation licensed in the State of Connecticut, has been retained by Verizon Wireless (VZW) to assess the structural adequacy of the existing VZW faux chimney antenna enclosure to support the proposed antenna and appurtenance modification at the location referenced above.

Details of the proposed antenna and appurtenance modification are included within the table on the following page. Reference is made to the Construction Drawings C-1 thru N-1 prepared by this office, marked Rev 0, dated 04/06/2020.

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

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

IBC 2015 - as amended by the 2018 Connecticut State Building Code.

ANSI/AWC NDS 2015 – National Design Specification (NDS) for Wood Construction with 2015 NDS Supplement

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

The faux chimney enclosure loads were evaluated utilizing the ASCE 7-10 – Chapter 26 Wind Loads: General Requirements & Appendix N of the 2018 Connecticut State Building Code:

- o Ultimate Design Windspeed: 125 mph (3-sec gust)
- o Structure Class II
- o Exposure Category B
- o Topographic Category 1

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

Antenna and Appurtenance Make/Model	Quantity	Status	Mount Type	Elevation
Commscope V4SSPP-360S-F Small Cell Antenna	1	P	One (1) existing Steel Pipe Mount located within FRP Enclosure. Existing FRP Enclosure modified to accommodate proposed vents.	40.9 ft± AGL
Samsung B2/B66 PCS/AWS RRH Remote Radio Head (RRH)	1	P		
Samsung RT4401-48A CBRS RRH Remote Radio Head (RRH)	1	P		
Raycap RxxDC-1064-PF-48 (2 OVP)	1	ETR		
2x4 Hybrid Cable	1	ETR	n/a	n/a

Notes:

1. ETR = Existing to Remain; P = Proposed.

The findings of this review are based upon comparative review of the proposed equipment loading, Construction Drawings prepared by CENTEK dated October 15, 2015, Fabrication Drawings prepared by Stealth dated January 20, 2016 and a Final Report of Special Inspections prepared by CENTEK dated June 6, 2016. Under the proposed loading as referenced above, the maximum usage of the modified VZW antenna FRP enclosure is 76% (pipe mount connection to host building).

In conclusion, we find that the existing VZW antenna enclosure and host building are structurally adequate to support the proposed antenna/appurtenance upgrade.

This letter assumes that the mounting assembly structural components and connections are in good condition and have been properly maintained since erection. The contractor shall inspect the condition of the existing mount assembly in its entirety prior to the installation of the proposed antenna and appurtenance modification.

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

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



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



Appendix A

Design Criteria

ATC Hazards by Location

Search Information

Coordinates: 41.63916625303818, -72.92380873096619
Elevation: 208 ft
Timestamp: 2020-03-25T14:33:02.981Z
Hazard Type: Wind



ASCE 7-16

MRI 10-Year 75 mph
 MRI 25-Year 83 mph
 MRI 50-Year 89 mph
 MRI 100-Year 96 mph
 Risk Category I 107 mph
 Risk Category II 117 mph
 Risk Category III 126 mph
 Risk Category IV **▲ 130 mph**

You are in a wind-borne debris region if you are also within 1 mile of the coastal mean high water line.

ASCE 7-10

MRI 10-Year 76 mph
 MRI 25-Year 86 mph
 MRI 50-Year 92 mph
 MRI 100-Year 98 mph
 Risk Category I 110 mph
 Risk Category II 121 mph
 Risk Category III-IV **▲ 130 mph**

If the structure under consideration is a healthcare facility and you are also within 1 mile of the coastal mean high water line, you are in a wind-borne debris region. If other occupancy, use the Risk Category II basic wind speed contours to determine if you are in a wind-borne debris region.

ASCE 7-05

ASCE 7-05 Wind Speed 99 mph

The results indicated here DO NOT reflect any state or local amendments to the values or any delineation lines made during the building code adoption process. Users should confirm any output obtained from this tool with the local Authority Having Jurisdiction before proceeding with design.

Disclaimer

Hazard loads are interpolated from data provided in ASCE 7 and rounded up to the nearest whole integer. Per ASCE 7, islands and coastal areas outside the last contour should use the last wind speed contour of the coastal area – in some cases, this website will extrapolate past the last wind speed contour and therefore, provide a wind speed that is slightly higher. NOTE: For queries near wind-borne debris region boundaries, the resulting determination is sensitive to rounding which may affect whether or not it is considered to be within a wind-borne debris region.

Mountainous terrain, gorges, ocean promontories, and special wind regions shall be examined for unusual wind conditions.

(APPENDIX N) MUNICIPALITY - SPECIFIC STRUCTURAL DESIGN PARAMETERS												
Municipality	Ground Snow Load	Wind Design Parameters										
		MCE Spectral Accelerations (%g)		Ultimate Design Wind Speeds, V_{ult} (mph)			Nominal Design Wind Speeds, V_{asd} (mph)			Wind-Borne Debris Regions¹		Hurricane-Prone Regions
		S_s	S_1	Risk Cat. I	Risk Cat. II	Risk Cat III-IV	Risk Cat. I	Risk Cat. II	Risk Cat. III-IV	Risk Cat. II & III except Occup I-2	Risk Cat III Occup I-2 & Risk Cat. IV	
New Haven	30	0.186	0.062	115	125	135	89	97	105		Type C	Yes
Newington	30	0.182	0.064	115	125	135	89	97	105			
New London	30	0.161	0.058	125	135	145	97	105	112	Type B	Type A	Yes
New Milford	35	0.198	0.066	105	115	125	81	89	97			
Newtown	30	0.208	0.066	110	120	130	85	93	101			Yes
Norfolk	40	0.175	0.065	105	115	125	81	89	97			
North Branford	30	0.179	0.061	120	130	140	93	101	108			Yes
North Canaan	40	0.173	0.065	105	115	120	81	89	93			
North Haven	30	0.184	0.062	115	125	135	89	97	105			Yes
North Stonington	30	0.163	0.059	125	135	145	97	105	112		Type A	Yes
Norwalk	30	0.232	0.067	110	120	130	85	93	101			Yes
Norwich	30	0.168	0.060	125	135	145	97	105	112		Type A	Yes
Old Lyme	30	0.164	0.059	125	135	145	97	105	112	Type B	Type A	Yes
Old Saybrook	30	0.164	0.059	125	135	145	97	105	112	Type B	Type A	Yes
Orange	30	0.192	0.063	115	125	135	89	97	105			Yes
Oxford	30	0.196	0.064	110	125	130	85	97	101			Yes
Plainfield	35	0.170	0.061	125	135	145	97	105	112		Type A	Yes
Plainville	35	0.184	0.064	115	125	135	89	97	105			Yes
Plymouth	35	0.186	0.064	110	120	130	85	93	101			Yes
Pomfret	40	0.172	0.063	120	130	140	93	101	108			Yes
Portland	30	0.180	0.063	115	130	135	89	101	105			Yes
Preston	30	0.167	0.060	125	135	145	97	105	112		Type A	Yes
Prospect	30	0.188	0.064	115	125	135	89	97	105			Yes
Putnam	40	0.172	0.063	120	130	140	93	101	108			Yes
Redding	30	0.220	0.067	110	120	130	85	93	101			Yes
Ridgefield	30	0.230	0.068	110	120	125	85	93	97			Yes
Rocky Hill	30	0.181	0.063	115	125	135	89	97	105			Yes
Roxbury	35	0.197	0.065	110	120	125	85	93	97			Yes
Salem	30	0.170	0.060	120	135	140	93	105	108		Type A	Yes
Salisbury	40	0.173	0.065	105	115	120	81	89	93			
Scotland	30	0.172	0.061	120	130	140	93	101	108			Yes
Seymour	30	0.194	0.064	115	125	135	89	97	105			Yes
Sharon	40	0.179	0.065	105	115	120	81	89	93			
Shelton	30	0.199	0.064	115	125	135	89	97	105			Yes
Sherman	35	0.202	0.066	105	115	120	81	89	93			
Simsbury	35	0.179	0.064	110	120	130	85	93	101			Yes
Somers	35	0.174	0.064	115	125	135	89	97	105			Yes
Southbury	35	0.198	0.065	110	120	130	85	93	101			Yes
Southington	30	0.185	0.064	115	125	135	89	97	105			Yes
South Windsor	30	0.178	0.064	115	125	135	89	97	105			Yes

Appendix B

Antenna Mount Analysis



APT
MT
LAKE COMPOUNCE SC1

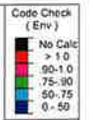
MOUNT
NODE & MEMBER LABELS

Mar 25, 2020 at 10:40 AM
mount.r3d



Loads: LC 2, DL + 0.6WLX

APT	MOUNT	Mar 25, 2020 at 10:45 AM
MT		mount.r3d
LAKE COMPOUNCE SC1		LC2 - DL + 0.6*WLX (WORST CASE)



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

APT
MT
LAKE COMPOUNCE SC1

MOUNT
BENDING STRESSES

Mar 25, 2020 at 10:47 AM
mount.r3d



Company : APT
 Designer : MT
 Job Number : LAKE COMPOUNCE SC1
 Model Name : MOUNT

Mar 25, 2020
 10:50 AM
 Checked By: _____

(Global) Model Settings

Display Sections for Member Calcs	5
Max Internal Sections for Member Calcs	97
Include Shear Deformation?	Yes
Increase Nailing Capacity for Wind?	Yes
Include Warping?	Yes
Trans Load Btwn Intersecting Wood Wall?	Yes
Area Load Mesh (in^2)	144
Merge Tolerance (in)	.12
P-Delta Analysis Tolerance	0.50%
Include P-Delta for Walls?	Yes
Automatically Iterate Stiffness for Walls?	Yes
Max Iterations for Wall Stiffness	3
Gravity Acceleration (in/sec^2)	386.4
Wall Mesh Size (in)	24
Eigensolution Convergence Tol. (1.E-)	4
Vertical Axis	Y
Global Member Orientation Plane	XZ
Static Solver	Sparse Accelerated
Dynamic Solver	Accelerated Solver

Hot Rolled Steel Code	AISC 14th(360-10): ASD
Adjust Stiffness?	Yes(Iterative)
RISAConnection Code	AISC 14th(360-10): ASD
Cold Formed Steel Code	AISI S100-12: ASD
Wood Code	AWC NDS-15: ASD
Wood Temperature	< 100F
Concrete Code	ACI 318-14
Masonry Code	ACI 530-13: ASD
Aluminum Code	AA ADM1-15: ASD - Building
	AISC 14th(360-10): ASD

Number of Shear Regions	4
Region Spacing Increment (in)	4
Biaxial Column Method	Exact Integration
Parme Beta Factor (PCA)	.65
Concrete Stress Block	Rectangular
Use Cracked Sections?	Yes
Use Cracked Sections Slab?	Yes
Bad Framing Warnings?	No
Unused Force Warnings?	Yes
Min 1 Bar Diam. Spacing?	No
Concrete Rebar Set	REBAR_SET_ASTMA615
Min % Steel for Column	1
Max % Steel for Column	8



Company : APT
 Designer : MT
 Job Number : LAKE COMPOUNCE SC1
 Model Name : MOUNT

Mar 25, 2020
 10:50 AM
 Checked By: _____

(Global) Model Settings, Continued

Seismic Code	ASCE 7-10
Seismic Base Elevation (in)	Not Entered
Add Base Weight?	Yes
Ct X	.02
Ct Z	.02
T X (sec)	Not Entered
T Z (sec)	Not Entered
R X	3
R Z	3
Ct Exp. X	.75
Ct Exp. Z	.75
SD1	1
SDS	1
S1	1
TL (sec)	5
Risk Cat	I or II
Drift Cat	Other
Om Z	1
Om X	1
Cd Z	4
Cd X	4
Rho Z	1
Rho X	1

Member Primary Data

Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	5	4		4.0" STD	Column	Pipe	A500 Gr.B...	Typical

Member Advanced Data

Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M1					Yes	** NA **			None

Hot Rolled Steel Design Parameters

Label	Shape	Length[in]	Lbyy[in]	Lbzz[in]	Lcomp top[in]	Lcomp bot[in]	L-torq...	Kyy	Kzz	Cb	Function
1	M1	4.0" STD	144								Lateral

Load Combinations

Description	S...	PDelta	S...	BLC Fa...	BLC Fa...	BLC Fa...	BLC Fa...	B...	Fa...								
1	DL	Yes	Y	DL	1												
2	DL + 0.6WLX	Yes	Y	DL	1	WLX	.6										
3	DL + 0.6WLZ	Yes	Y	DL	1	WLZ	.6										
4	DL + SL	Yes	Y	DL	1	SL	1										
5	DL + 0.75SL + .45WLX	Yes	Y	DL	1	SL	.75	WLX	.45								
6	DL + 0.75SL + .45WLZ	Yes	Y	DL	1	SL	.75	WLZ	.45								

Envelope Joint Reactions

Joint	X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
1	2	max	0	1	1477.83	4	0	1	0	1	0	1
2		min	-1535.57	2	1109.83	1	-1535.57	3	0	1	0	1
3	3	max	962.57	2	44.41	1	962.57	3	0	1	0	1



Company : APT
 Designer : MT
 Job Number : LAKE COMPOUNCE SC1
 Model Name : MOUNT

Mar 25, 2020
 10:50 AM
 Checked By: _____

Envelope Joint Reactions (Continued)

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
4		min	0	1	44.41	1	0	1	0	1	0	1	0	1
5	Totals:	max	0	1	1522.25	4	0	1						
6		min	-573	2	1154.25	1	-573	3						

Envelope AISC 14th(360-10): ASD Steel Code Checks

Member	Shape	Code	Che...	Loc[in]	LC	Shear	Check	Loc[...]	Dir	LC	Pnc/om	Pnt/om	Mnyy/om	Mnzz/om	Cb	Eqn
1	M1	PIPE	4.0X	.272	91.5	2	.031	91.5		2	58405.27	104119...	11589.82	11589.82	1.62	H1-1b

Column: **M1**

Shape: **PIPE_4.0X**

Material: **A500 Gr.B RND**

Length: **144 in**

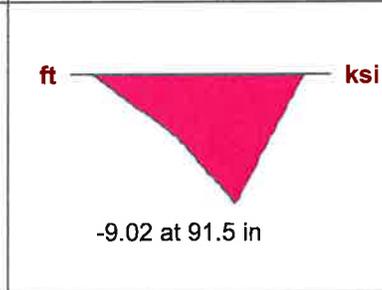
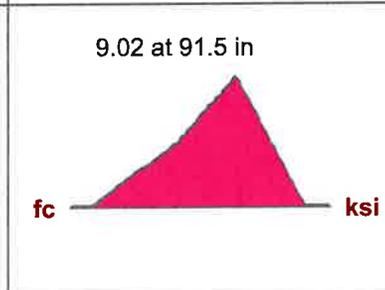
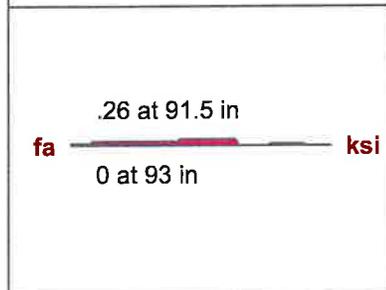
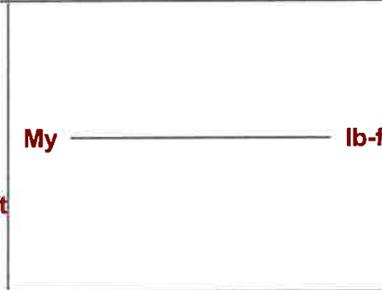
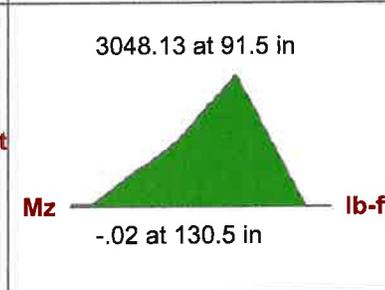
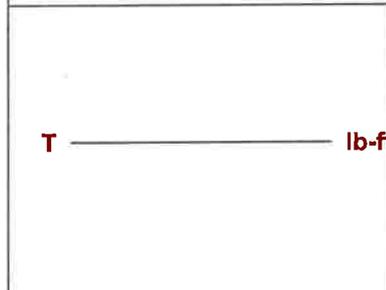
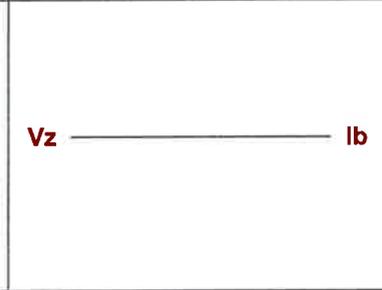
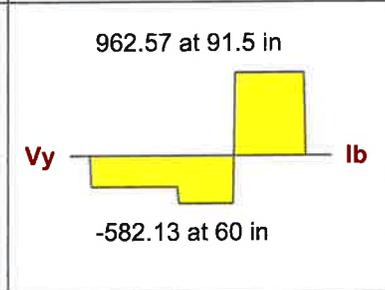
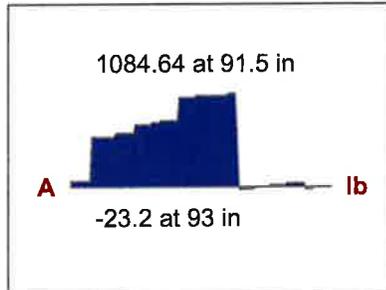
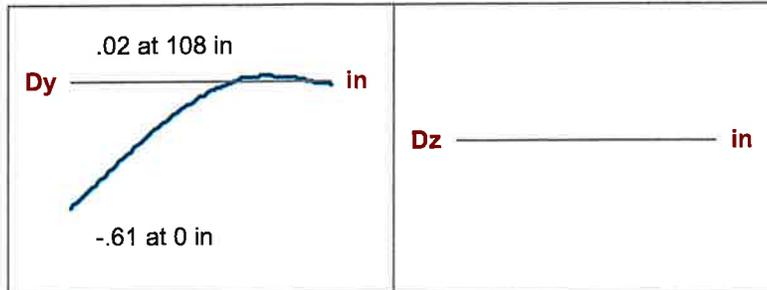
I Joint: **5**

J Joint: **4**

LC 2: **DL + 0.6WLX**

Code Check: **0.272 (bending)**

Report Based On 97 Sections



AISC 14th(360-10): ASD Code Check

Direct Analysis Method

Max Bending Check **0.272**
 Location **91.5 in**
 Equation **H1-1b**

Max Shear Check **0.031 (s)**
 Location **91.5 in**
 Max Defl Ratio **L/240**

Bending		Compact	Compression		Non-Slender
Fy	42 ksi	Lb	144 in	Z-Z	144 in
Pnc/om	58405.27 lb	KL/r	97.02		97.02
Pnt/om	104119.76 lb	L Comp Flange	144 in		
Mny/om	11589.82 lb-ft	L-torque	144 in		
Mnz/om	11589.82 lb-ft	Tau_b	1		
Vny/om	31235.93 lb				
Vnz/om	31235.93 lb				
Tn/om	10897.43 lb-ft				
Cb	1.62				



(Per NDS 2012)

Project ID: CT141EB11270
Site Name: Lake Compounce SC1 CT
Date: 4/6/2020
Sheet: of

WOOD CONNECTION CHECK

Proposed Loading: (Per RISA Output)

T_max = 1536 lbs
V_max = 577 lbs

Assumptions:

Assume Wood Species is Douglas Fir-Larch No. 2, G = 0.49

Anchorage:

Asume 1/2" DIA Lag Bolts
Dia = 0.50
Total # of Bolts = 2.00

Existing Conditions do not match detail on CDs. Assume (2) 1/2" dia. Thru Bolts

Allowable Withdrawal Capacity:

W = 3750 lbs/in (Per Steel Strength)
W_allow = 3750 lbs/screw
W_actual = 767.8 lbs/screw 20.5% OK

Allowable Shear Capacity:

Z = 455 lbs Table 11B
C_D = 1.6 Table 2.3.2
C_M^2 = 1.0 Table 10.3.3
C_t = 1.0 Table 10.3.4
C_g = 1.0 Table 10.3.6
C_delta = 1.0 Section 10.3.6
C_eg = 1.0 Section 11.5.2
C_di = 1.0 Section 11.5.3
C_tn = 1.0 Section 11.5.4
Z_allow = 728.0 lbs/screw
Z_actual = 288.6 lbs/screw 39.6% OK

Combined Loading: (NDS 2012, Section 11.4.1)

Theta = 90.00 degrees
Theta = 1.57 radians
Z_theta = 3750.0 lbs/screw
Z_theta_actual = 820.2 lbs/screw 21.9% OK



(Per NDS 2012)

Project ID: CT141EB11270
 Site Name: Lake Compounce SC1 CT
 Date: 4/6/2020
 Sheet: of

WOOD CONNECTION CHECK

Proposed Loading: (Per RISA Output)

$T_{max} = 0$ lbs
 $V_{max} = 1640$ lbs

Assumptions:

Assume Wood Species is Douglas Fir-Larch No. 2, $G = 0.49$

Anchorage:

Assume (12) 10d Common Nails
 Dia = 0.148
 Total # of Nails = 12.0

Existing Conditions do not match detail on CDs. Assume (3) Nails into end of each 2x blocking at studs.

Allowable Withdrawal Capacity:

$W = 34$ lbs/in Table 11.2C
 $C_D = 1.6$ Table 2.3.2
 $C_M^2 = 1.0$ Table 10.3.3
 $C_t = 1.0$ Table 10.3.4
 $C_{eg} = 1.0$ Section 11.5.2
 $C_{tn} = 1.0$ Section 11.5.4
 Penetration = 1.5 in
 $W_{allow} = 81.6$ lbs/nail
 $W_{actual} = 0.0$ lbs/nail 0.0% OK

Allowable Shear Capacity:

$Z = 112.0$ lbs Table 11P
 $C_D = 1.6$ Table 2.3.2
 $C_M^2 = 1.0$ Table 10.3.3
 $C_t = 1.0$ Table 10.3.4
 $C_g = 1.0$ Table 10.3.6
 $C_{\Delta} = 1.0$ Section 10.3.6
 $C_{eg} = 1.0$ Section 11.5.2
 $C_{di} = 1.0$ Section 11.5.3
 $C_{tn} = 1.0$ Section 11.5.4
 $Z_{allow} = 179.2$ lbs/nail
 $Z_{actual} = 136.7$ lbs/nail 76.3% OK

Combined Loading: (NDS 2012, Section 11.4.1)

$\Theta = 0.00$ degrees
 $\Theta = 0.00$ radians
 $Z_{\Theta} = 179.2$ lbs/screw
 $Z_{\Theta actual} = 136.7$ lbs/screw 76.3% OK



Project ID: CT141EB11270
 Site Name: Lake Compounce SC1 CT
 Date: 4/6/2020
 Sheet: of

(Based on IBC 2015/ASCE 7-10)

>> Provide a total of six (6) 3"Ø holes for proposed venting. Two (2) faces to have two (2) vents holes each. Refer to Fabrication Drawings prepared by Stealth dated December 5, 2015 for dimensions, material specifications, etc for the existing enclosure.

WIND LOADING

> Wind Loads: General Requirements- Chapter 26

Location = Southington, CT

Risk Category =	II		(ASCE 7-10, Table 1.5-1)
V_{ult} =	125	mph	(2018 CSBC, Appendix N)
z =	38	ft, +/-	(Mid Height of Faux Chimney)
Exposure =	B		(ASCE 7-10, Sect. 26.7.3)
α =	7		(ASCE 7-10, Table 26.9-1)
z_g =	1200		(ASCE 7-10, Table 26.9-1)
k_z =	0.750		(ASCE 7-10, Table 27.3-1)
k_{zt} =	1.00		(ASCE 7-10, Sect. 26.8)
(Components & Cladding) k_d =	0.85		(ASCE 7-10, Table 26.6-1)
q_z =	25.48	psf	

> Wind Loads- Components & Cladding- Chapter 30

Opening Size =	3.0	in diameter	
Opening Area =	7.07	in ²	
Total Opening Area (Per Face) =	14.14	in ²	0.098 ft ²
Total Wall Face Area =	29.01	ft ²	
% Opening =	0.34%		
Classification =	Enclosed		
GC_{pi} =	-0.18		(ASCE 7-10, Table 26.11-1)
Effective Area of New Wall Support =	6.0	ft ²	
GC_p =	-1.40		(ASCE 7-10, Table 30.4-1)
F =	-40.3	psf	

>> Design of Wall Support- (Per Bedford Reinforced Plastic Design Guide, 2012)

Tributary Width =	18.0	in	(0.50 x 36" Chimney Width)
New Angle Length =	48.0	in	
Tributary Area =	864.0	in ²	
Applied Shear =	72.5	lbs / End	(ASD, Apply 0.6 to WL)
Applied Moment =	869.7	lbs-in	(ASD, Apply 0.6 to WL)
Allowable Stress, F_b =	10000	psi	
$S_{req'd}$ =	0.0869734	in ³	Use FRP L4x4x3/8
Ultimate Bolt Shear (1/2") =	6800	lbs	(Double Shear)
Allowable Single Shear =	1360	lbs	(2.5 Safety Factor)

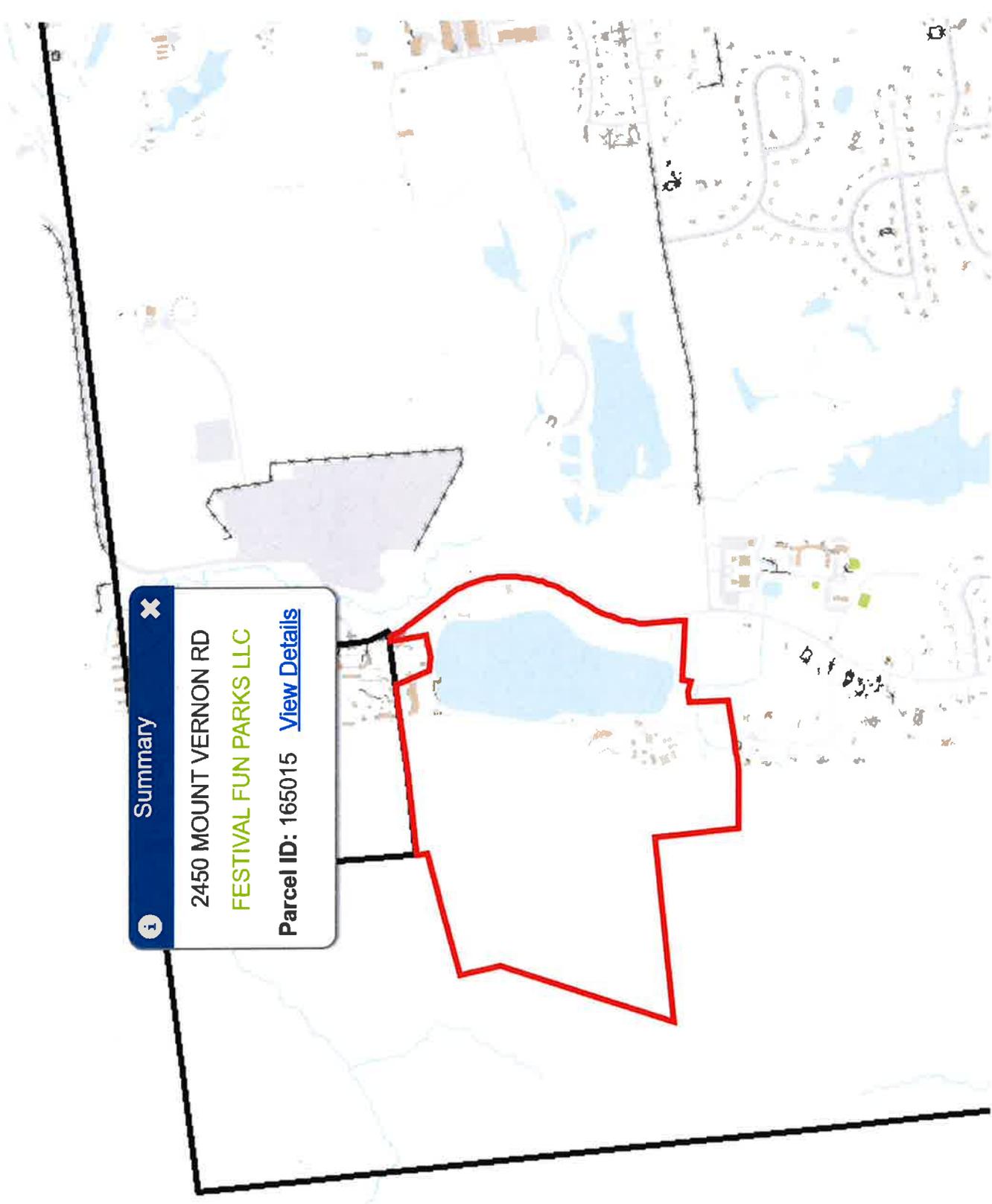
Use Min. (1) 1/2" Ø FRP Threaded Rod @ Each End

ATTACHMENT 5

Summary ✕

2450 MOUNT VERNON RD
FESTIVAL FUN PARKS LLC

Parcel ID: 165015 [View Details](#)





SOUTHINGTON, CT

2450 MOUNT VERNON RD

Location

2450 MOUNT VERNON RD

Mblu

165 / / 015 / /

Acct#

2389

Owner

FESTIVAL FUN PARKS LLC

Assessment

\$2,948,300

Appraisal

\$5,313,630

PID

15816

Building Count

3

Current Value

Appraisal

Valuation Year	Improvements	Land	Total
2016	\$3,211,090	\$2,102,540	\$5,313,630

Assessment

Valuation Year	Improvements	Land	Total
2016	\$2,247,790	\$700,510	\$2,948,300

Owner of Record

Owner FESTIVAL FUN PARKS LLC

Co-Owner

Address PO BOX 543185
DALLAS, TX 75354-3185

Sale Price \$100

Certificate

Book & Page 1213/0705

Sale Date 04/07/2011

Instrument 29

Ownership History

Ownership History					
Owner	Sale Price	Certificate	Book & Page	Instrument	Sale Date
FESTIVAL FUN PARKS LLC	\$100		1213/0705	29	04/07/2011
KENNYWOOD ENTERTAINMENT INC	\$100		1165/1215	29	07/23/2009
LAKE COMPOUNCE THEME PARK INC	\$100		1165/1213	29	07/23/2009
LAKE COMPOUNCE LIMITED PARTNERSHIP	\$1,250,000		0660/0992	25	12/31/1996

Building Information

Building 1 : Section 1

Year Built: 1958

Living Area: 22,998

Building Percent Good: 65

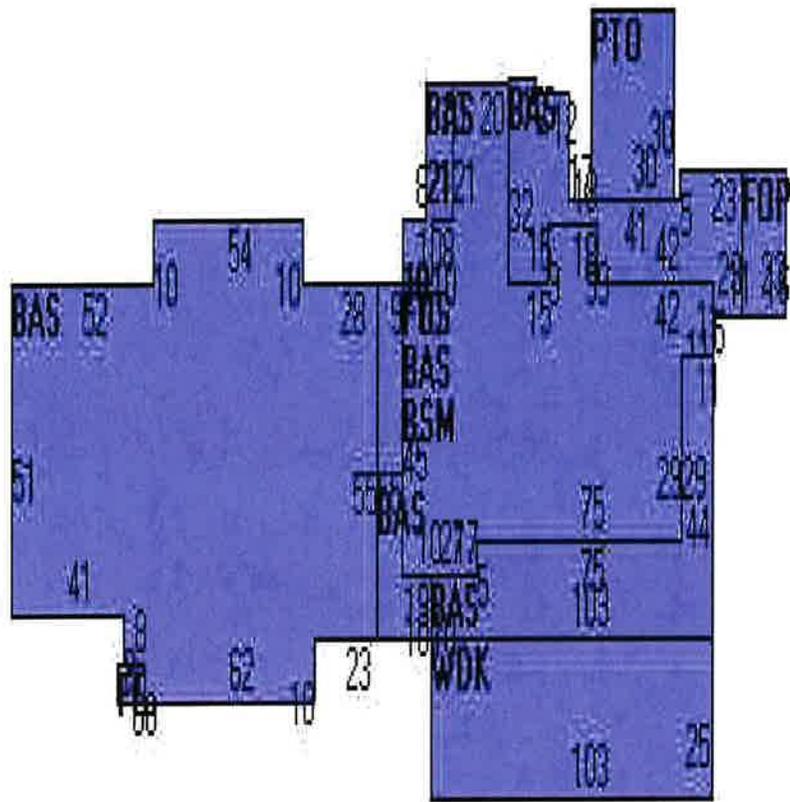
Building Attributes

Field	Description
STYLE	Restaurant
MODEL	Comm/Ind
Grade	C
Stories:	1
Occupancy	
Exterior Wall 1	Clapboard
Exterior Wall 2	
Roof Structure	Gable
Roof Cover	Asphalt Shingl
Interior Wall 1	Average
Interior Wall 2	
Interior Floor 1	Average
Interior Floor 2	
Heating Fuel	Typical
Heating Type	Forced Hot Air
AC Type	Central
Struct Class	
Bldg Use	Eating And Drinking
Total Bedrooms	
Total Baths	
UsrflD 217	0
Wet Sprinkler	0
Dry Sprinkler	0
1st Floor Use:	
Heat/AC	Heat/AC Pkgs
Frame Type	Wood Frame

Baths/Plumbing	Average
Ceiling/Wall	Typical
Rooms/Prtns	Average
Wall Height	12.00
Usrflld 214	0.00

Building Photo





Building Layout

Building Sub-Areas (sq ft) Legend

Code	Description	Gross Area	Living Area
------	-------------	------------	-------------

BAS	First Floor	17,800	17,800
FUS	Finished Upper Story	5,198	5,198
BSM	Basement	5,198	0
FOP	Open Porch	428	0
PTO	Patio	900	0
WDK	Deck	2,575	0
		32,099	22,998

Building 2 : Section 1

Year Built:

2013

Living Area:

2,184

Building Percent Good:

99

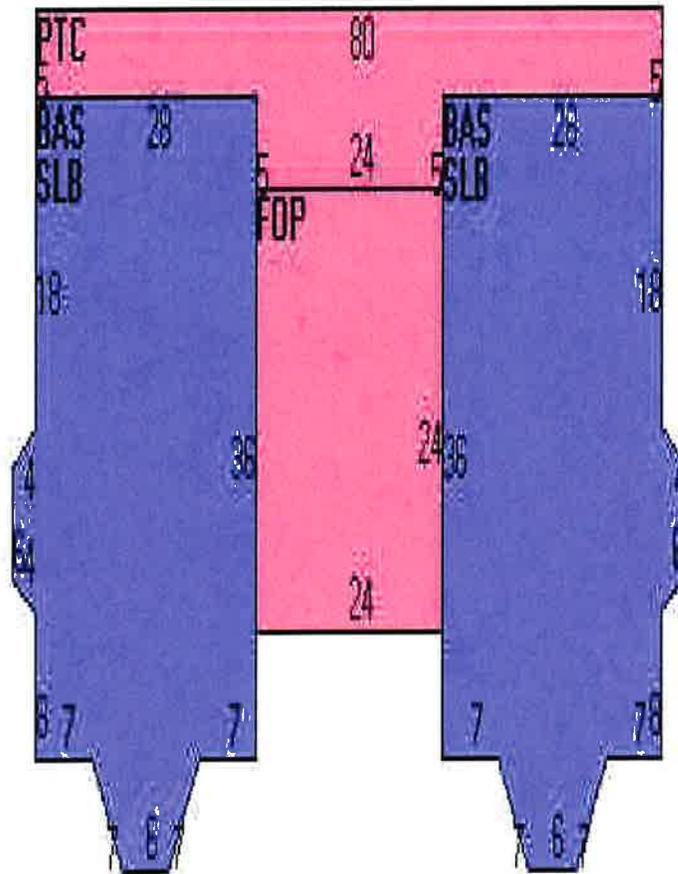
Building Attributes : Bldg 2 of 3

Field	Description
STYLE	Club House
MODEL	Comm/Ind
Grade	AA-
Stories:	1
Occupancy	1.00
Exterior Wall 1	Hardy Plank
Exterior Wall 2	
Roof Structure	Gable
Roof Cover	Asphalt Shingl
Interior Wall 1	Drywall
Interior Wall 2	
Interior Floor 1	Ceramic Tile
Interior Floor 2	
Heating Fuel	Propane
Heating Type	Forced Hot Air

AC Type	Central
Struct Class	
Bldg Use	Other Outdoor Facilities
Total Bedrooms	
Total Baths	
Usrflid 217	
Wet Sprinkler	0
Dry Sprinkler	0
1st Floor Use:	
Heat/AC	Heat/AC Pkgs
Frame Type	Wood Frame
Baths/Plumbing	Above Average
Ceiling/Wall	Ceil & Walls
Rooms/Prtns	Above Aveage
Wall Height	12.00
Usrflid 214	



Building Photo



Building Layout

Building Sub-Areas (sq ft) Legend

Code	Description	Gross Area	Living Area
------	-------------	------------	-------------

BAS	First Floor	2,184	2,184
FOP	Open Porch	576	0
PTC	Patio - Concrete	520	0
SLB	Slab	2,184	0
		5,464	2,184

Building 3 : Section 1

Year Built:

2013

Living Area:

3,384

Building Percent Good:

99

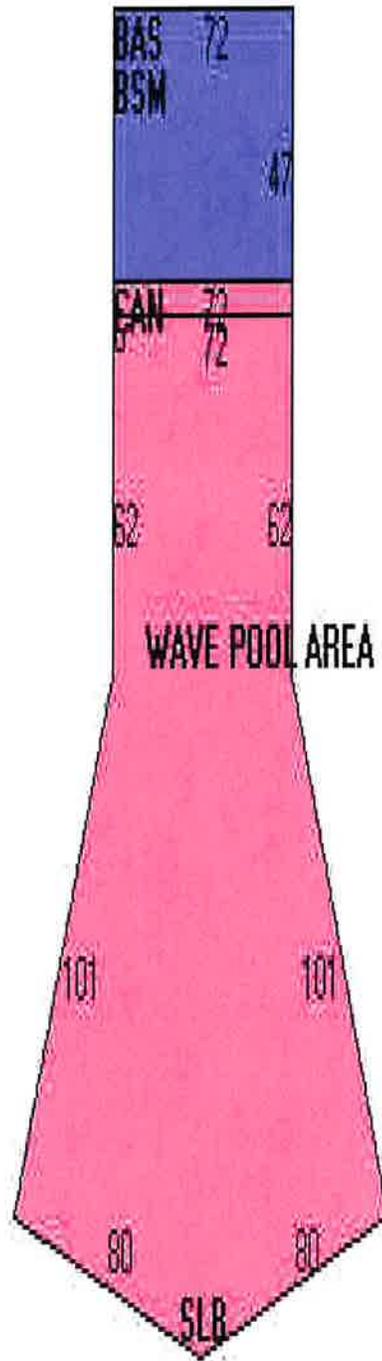
Building Attributes : Bldg 3 of 3

Field	Description
STYLE	Equipment Bldg
MODEL	Ind/Comm
Grade	A+
Stories:	1
Occupancy	1.00
Exterior Wall 1	Stone/Masonry
Exterior Wall 2	Wood on Sheath
Roof Structure	Flat
Roof Cover	Rolled Roofing
Interior Wall 1	Drywall
Interior Wall 2	
Interior Floor 1	Finished Conc
Interior Floor 2	
Heating Fuel	Propane
Heating Type	Forced Hot Air
AC Type	None
Struct Class	

Bldg Use	Other Outdoor Facilities
Total Bedrooms	
Total Baths	
Usrflid 217	
Wet Sprinkler	0
Dry Sprinkler	0
1st Floor Use:	
Heat/AC	Heat Only
Frame Type	Wood Frame
Baths/Plumbing	Above Average
Ceiling/Wall	Ceil & Walls
Rooms/Prtns	Average
Wall Height	10.00
Usrflid 214	



Building Photo



Building Layout

Building Sub-Areas (sq ft) Legend

Code	Description	Gross Area	Living Area
------	-------------	------------	-------------

BAS	First Floor	3,384	3,384
BSM	Basement	3,384	0
CAN	Canopy	432	0
SLB	Slab	16,704	0
		23,904	3,384

Extra Features

Extra Features Legend

No Data for Extra Features

Land

Land Use

Use Code 326

Description Eating And Drinking

Zone R-80

Alt Land Appr No

Category

Land Line Valuation

Size (Acres) 149.84

Depth

Outbuildings

Outbuildings Legend

Code	Description	Sub Code	Sub Description	Size	Bldg #
CNP	Canopy			800.00 S.F.	1
SPL2	Inground Pool - Custom	HT	Heated	16704.00 S.F.	3
FOP	Porch			1779.00 S.F.	1
SHD1	Shed	FR	Frame	264.00 S.F.	3
FN1	Fence - Chain			2500.00 L.F.	1
PAV1	Paving	AS	Asphalt	900.00 S.F.	1

PAV1	Paving	AS	Asphalt	3600.00 S.F.	1
FEP	Enclosed Porch			2880.00 S.F.	1
FEP	Enclosed Porch			1884.00 S.F.	1
FEP	Enclosed Porch			1176.00 S.F.	1
FEP	Enclosed Porch			1184.00 S.F.	1
FEP	Enclosed Porch			1269.00 S.F.	1
FEP	Enclosed Porch			3600.00 S.F.	1
FEP	Enclosed Porch			1120.00 S.F.	1

Valuation History

Appraisal

Valuation Year	Improvements	Land	Total
2018	\$3,211,090	\$2,102,540	\$5,313,630
2017	\$3,211,090	\$2,102,540	\$5,313,630
2016	\$3,211,090	\$2,102,540	\$5,313,630
2015	\$3,211,090	\$2,102,540	\$5,313,630
2014	\$3,205,810	\$2,102,540	\$5,308,350

Assessment

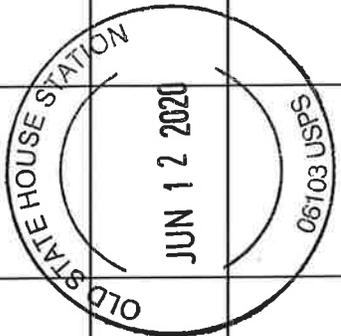
Valuation Year	Improvements	Land	Total
2018	\$2,247,790	\$700,510	\$2,948,300
2017	\$2,247,790	\$700,510	\$2,948,300
2016	\$2,247,790	\$700,510	\$2,948,300
2015	\$2,247,790	\$700,510	\$2,948,300
2014	\$2,244,080	\$700,510	\$2,944,590

closecloseclose

ATTACHMENT 6



Certificate of Mailing — Firm

Name and Address of Sender		TOTAL NO. of Pieces Listed by Sender	TOTAL NO. of Pieces Received at Post Office™	Affix Stamp Here Postmark with Date of Receipt.			
Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103		TOTAL NO. of Pieces Listed by Sender Postmaster, per (name of receiving employee) 	 06/12/2020 US POSTAGE \$003.20  ZIP 06103 041L12203937	Postage	Fee	Special Handling	Parcel Airift
USPS® Tracking Number Firm-specific Identifier		Address (Name, Street, City, State, and ZIP Code™)					
1.	Mark Sciota, Town Manager Town of Southington 75 Main Street Southington, CT 06489						
2.	Robert Phillips, Director of Planning and Community Development Town of Southington Municipal Center 196 North Main Street Southington, CT 06489						
3.	Festival Fun Parks LLC 4590 MacArthur Boulevard, Suite 400 Newport Beach, CA 92660 Attn: Executive Director Information and Technology						
4.	Festival Fun Parks LLC 822 Lake Avenue Bristol, CT 06010						
5.							
6.							