From: Barbadora, Jeff <Jeff.Barbadora@crowncastle.com>
Sent: Wednesday, December 4, 2024 9:42 AM
To: CSC-DL Siting Council <Siting.Council@ct.gov>
Subject: EM-VER-001-240409 - 122 Jonathan Trumbull Highway, Andover - 842856

Good morning,

Construction completed on 11/8/24.

Please let me know if you have any questions.

Thanks,

Jeffrey Barbadora
Permitting Specialist
781-970-0053

Crown Castle
1800 W. Park Drive, Suite 250
Westborough, MA 01581

CENTEK engineering
Centered on Solutions℠

November 19, 2024

Mr. Rich McKinnon
Town of Andover Building Department
17 School Road
Andover, CT 06232

Re: Letter of Professional Opinion

Project: Coventry West CT – (Verizon)
122 Jonathan Trumbull Highway
Andover, CT 06232

Owner: Crown Castle

Engineer: B+T Group
1717 S. Boulder, Suite 300, Tulsa, OK 74119

Contractor: NEC Group
21 Marion Drive, Kingston, MA 02364

Centek Project No.: 24140.38

Building Permit No.: NA

Dear Mr. McKinnon,

We are providing this "Letter of Professional Opinion" with regard to the structural components at the above referenced project.

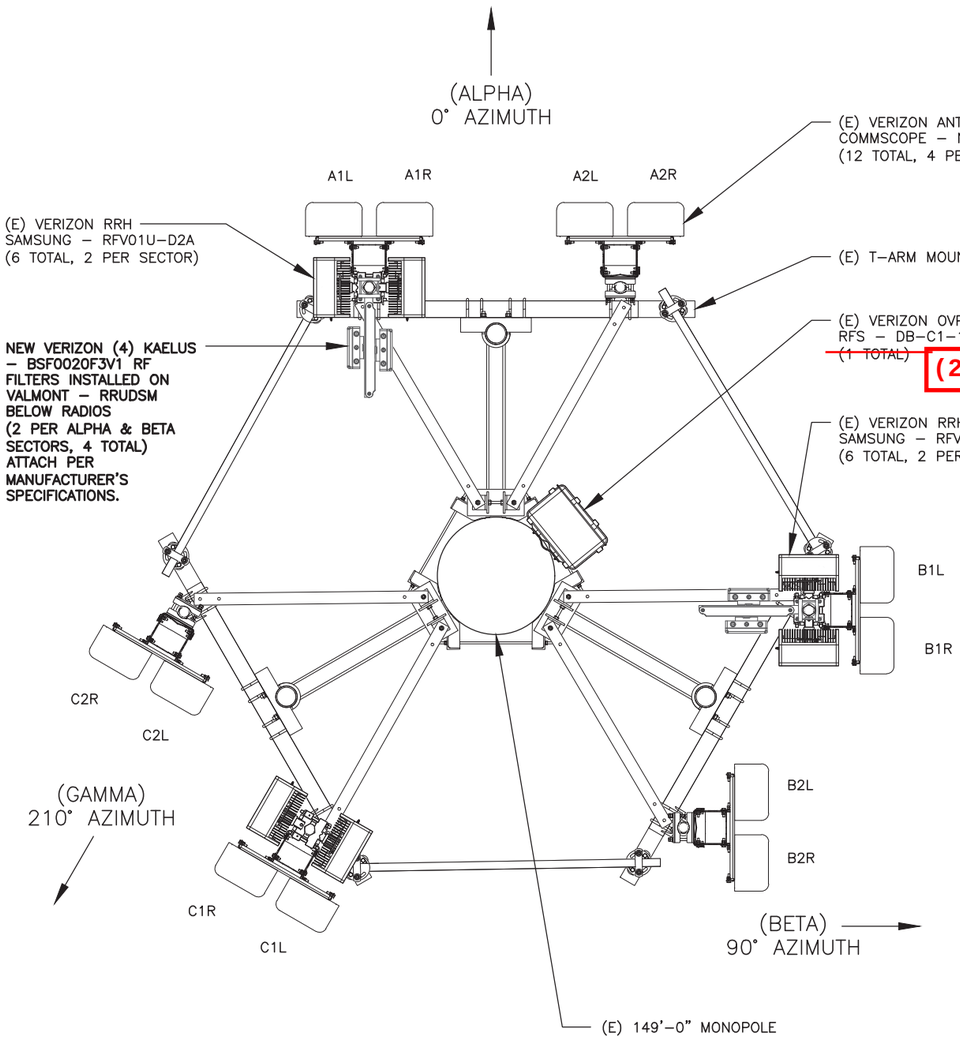
Please be advised that discrepancies have been identified between the tower-mounted equipment listed in the construction documents prepared by B+T Group dated 04/03/2024 Rev.2, Structural Analysis Report prepared by Tower Engineering Professionals dated 05/01/2024 and Mount Analysis Report prepared by Colliers Engineering & Design dated 10/17/2023. The inconsistencies in the mounted equipment are highlighted in red on the following attached pages: page 2 of the construction documents, page 3 of the Structural Analysis Report, and page 3 of the Mount Analysis Report.

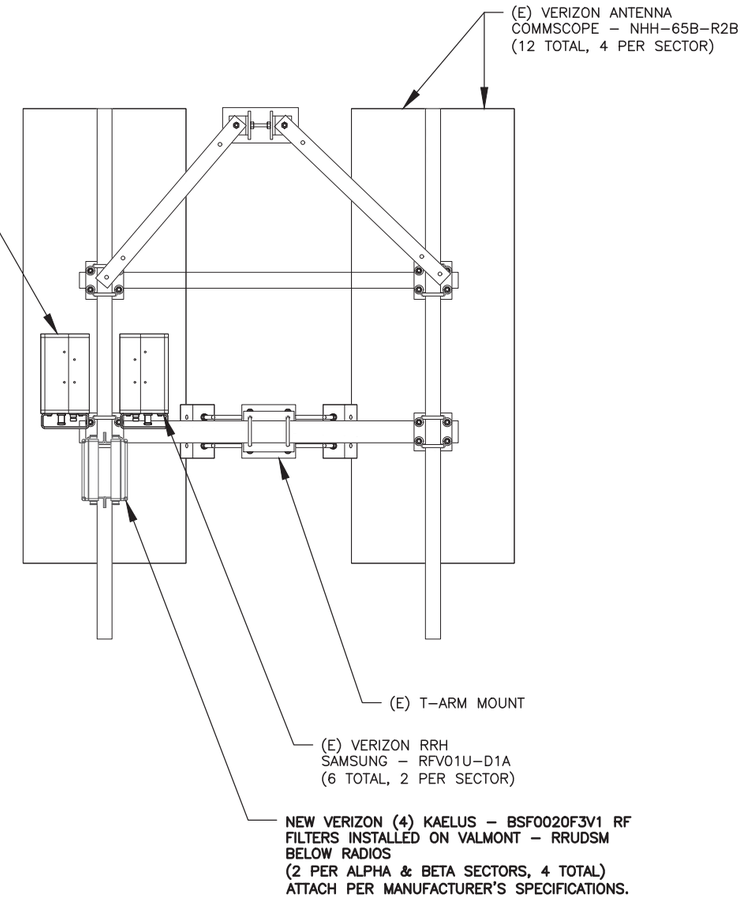
- ❑ Field observations of completed construction on 11/14/2024.

Sincerely,

STATE OF CONNECTICUT
CARLO F. CENTORE
No.16694
LICENSED
PROFESSIONAL ENGINEER

Carlo F. Centore, PE
Principal | Structural





1 PROPOSED RF FILTER PLAN
SCALE: 0' 1' 2' 4' 8'

N

2 PROPOSED RF FILTER ELEVATION - ALPHA & BETA SECTOR
SCALE: 0' 1' 2' 3' 4' 5'

verizon
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

B+T GRP
1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

COVENTRY WEST CT-A

122 JONATHAN TRUMBULL HIGHWAY
(ROUTE 6)
ANDOVER, CT 06232

EXISTING MONOPOLE

PROJECT NO:	135726.009.01
CHECKED BY:	TDG

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	8/28/23	TDG	ISSUED FOR REVIEW
1	3/5/24	YX	ISSUED FOR REVIEW
2	4/3/24	CP	ISSUED FOR REVIEW

MTS ENGINEERING P.L.L.C.
PEC.0001564
Expires 2/10/25

STATE OF CONNECTICUT
CHAD TITLE
No. 23924
LICENSED
PROFESSIONAL ENGINEER
4/3/24

SHEET NUMBER:	REVISION:
LE-2	2

1) INTRODUCTION

This is a 149-ft monopole tower designed by Engineered Endeavors, Inc. The tower has been modified multiple times in the past to accommodate additional loading.

2) ANALYSIS CRITERIA

TIA-222 Revision:	TIA-222-H
Risk Category:	II
Wind Speed:	119 mph
Exposure Category:	C
Topographic Factor:	1.0
Ice Thickness:	1.50 in
Wind Speed with Ice:	50 mph
Service Wind Speed:	60 mph

Table 1 - Proposed Equipment Configuration

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
130.0	130.0	6	Commscope	NHH-65B-R2B w/ Mount Pipe	2	1-5/8
		6	Commscope	NHH-65B-R2B		
		6	Samsung Telecom.	RFV01U-D2A		
		6	Samsung Telecom.	RFV01U-D1A		
		4	Kaelus	BSF0020F3V1		
		~~1~~ 2	RFS Celwave	DB-C1-12C-24AB-0Z Confirm Model		
		1	Tower Mounts	T-Arm Mount [TA 702-3_KCKR]		

Table 2 - Other Considered Equipment

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
149.0	149.0	3	CCI Antennas	HPA65R-BU6A	1 2 6	3/8 7/8 1-1/4
		3	CCI Antennas	DMP65R-BU6D		
		3	Ericsson	RRUS 4449 B5/B12		
		3	Ericsson	RRUS 8843 B2/B66A		
		1	Raycap	DC6-48-60-18-8F		
		1	Sabre	C10855721C 12' Platform Mount		
140.0	140.0	3	Ericsson	AIR 6419 B41_TMO_CCIV2 w/ Mount Pipe	3	1-5/8
		3	RFS Celwave	APXVAARR24_43-U-NA20 w/ Mount Pipe		
		3	Ericsson	RADIO 4449 B71 B85A_T-MOBILE		
		3	Ericsson	RADIO 4460 B2/B25 B66_TMO		
		1	Site Pro 1	RMQP-496 Platform Mount		
		1	Site Pro 1	HRK12 Handrail Kit		

Final Loading Configuration:

The following equipment has been considered for the analysis of the mounts:

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
128.00	129.00	12	Commscope	NHH-65B-R2B	Retained
		~~3~~ 6	Samsung	RFV01U-D1A	
		6 ~~3~~	Samsung	RFV01U-D2A	
		2	Raycap	RRFDC-3315-PF-48	Confirm Model
		4	KAelus	KA-6030	Added

The recent mount mapping reported existing OVP units. It is acceptable to install up to any three (3) of the OVP model numbers listed below as required at any location other than the mount face without affecting the structural capacity of the mount. If OVP units are installed on the mount face, a mount re-analysis may be required unless replacing an existing OVP.

Model Number	Ports	AKA
DB-B1-6C-12AB-0Z	6	OVP-6
RVZDC-6627-PF-48	12	OVP-12

Standard Conditions:

1. All engineering services are performed on the basis that the information provided to Colliers Engineering & Design and used in this analysis is current and correct. The existing equipment loading has been applied at locations determined from the supplied documentation. Any deviation from the loading locations specified in this report shall be communicated to Colliers Engineering & Design to verify deviation will not adversely impact the analysis.

2. Mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer's specifications.

   Obvious safety and structural issues/deficiencies noticed at the time of the mount mapping and reported in the Mount Mapping Report are assumed to be corrected and documented as part of the PMI process and are not considered in the mount analysis.

   The mount analysis and the mount mapping are not a condition assessment of the mount. Proper maintenance and condition assessments are still required post analysis.

3. For mount analyses completed from other data sources (including new replacement mounts) and not specifically mapped in accordance with the NSTD-446 Standard, the mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer's specifications.

4. All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected member unless otherwise specified in this report.

5. The mount was checked up to, and including, the bolts that fasten it to the mount collar/attachment and threaded rod connections in collar members if applicable. Local deformation and interaction between the mount collar/attachment and the supporting tower structure are outside the scope of this analysis.

6. All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. Colliers Engineering & Design is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.