Filed by:
Rick Woods Senior Manager, Site Development Services - SBA Communications
134 Flanders Rd., Suite 125, Westborough, MA 01581
508.251.0720 x 3800 - rwoods@sbasite.com

February 14, 2025

Melanie A. Bachman
Executive Director
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

RE: Notice of Exempt Modification
29 Bogus Hill Rd., New Fairfield, CT
Latitude: 41.511850
Longitude: -73.467213
T-Mobile Site #: CTFF750A

Dear Ms. Bachman:

T-Mobile currently maintains six (6) antennas currently installed at the 150-foot level of the existing 150-foot Monopole Tower at 29 Bogus Hill Rd., New Fairfield, CT. The tower is owned by SBA Towers IV, LLC. The property is owned by Bogus Ranger, LLC. T-Mobile now intends to replace three (3) antennas with three (3) antennas and other ancillary equipment listed below.

Planned Modifications:

TOWER

Remove
- (3) Filters (make/model # unknown)
- (3) Generic Diplexers
- (3) RFS APXV18-206516S-C-A20 antennas
- (3) Generic Twin Style 3B-PCS+AWS TMAs
- (3) 1 5/8" coax
- (1) 2" hybrid cable

Install New
- (3) Ericsson 4460 B25+B66 RRUs
- (3) RFS APXVLL19P_43-C-A20 antennas
- (2) 2" hybrid cables

Existing Equipment to Remain
- (3) Ericsson 4480 B71+B12/B85 RRUs
- (3) RFS APXVAALL24_43-U-NA20 antennas

Reserved Lease Entitlements
- (3) RFS APXV18-209014 antennas
- (3) Kathrein 782 11056 Bias Ts

GROUND

Remove

- (2) Ericsson RBS6201 ODE equipment cabinet
- (1) Battery backup cabinet

Install New

- (1) Ericsson B160 equipment cabinet
- (1) Ericsson 6160 V2 equipment cabinet
- (1) Slackbox

Existing Equipment to Remain

- (1) GPS
- (1) Emerson fiber cabinet
- (1) telco box
- (1) PPC
- (1) Diesel generator

This facility was approved by the Connecticut Siting Council, Docket No. 315, on September 28, 2006. Please see attached.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies §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 the Town of New Fairfield's First Selectman, Melissa Lindsey, and Zoning Enforcement Officer, Evan White, as well as to the property owner. (Separate notice is not being sent to tower owner, as it belongs to SBA.)

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.
2. The proposed modification 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 emissions at the facility to a level at or above the Federal Communications Commission safety standard.
5. The proposed modification will not cause a change or alteration in the physical or environmental characteristics of the site.
6. The existing structure and its foundation can support the proposed loading.

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

Sincerely,

Rick Woods
Senior Manager, Site Development Services
SBA COMMUNICATIONS CORPORATION
134 Flanders Rd., Suite 125
Westborough, MA 01581
508.251.0720 x3800 + T
508.366.2610 + F
508.614.0389 + C
rwoods@sbasite.com

Attachments

cc: Melissa Lindsey, First Selectman / with attachments
New Fairfield Town Hall *4 Brush Hill Rd., New Fairfield, CT 06812*
Evan White, Zoning Enforcement Officer/ with attachments
New Fairfield Town Hall *4 Brush Hill Rd., New Fairfield, CT 06812*
Bogus Ranger, LLC / with attachments
7 Mason's Island Road, Suite #1 Mystic, CT 06355

Exhibit List

Exhibit 1	Check Copy	X
Exhibit 2	Notification Receipts	X
Exhibit 3	Property Card	X
Exhibit 4	Property Map	X
Exhibit 5	Original Zoning Approval	CSC Docket No. 315 (9/28/06)
Exhibit 6	EME Report	2/4/25
Exhibit 7	Structural Analysis	TES 12/13/24
Exhibit 8	Mount Analysis	TES 12/3/24
Exhibit 9	Construction Drawings	X

Exhibit 1

Exhibit 2

ORIGIN ID:BBFA (508) 768-7960
JOHN MORRISON
SBA COMMUNICATIONS CORPORATION
134 FLANDERS
SUITE 125
WESTBOROUGH, MA 01581
UNITED STATES US

SHIP DATE: 14FEB25
ACTWGT: 1.00 LB
CAD: 25538254 2/INET4535

BILL SENDER

TO **MELISSA LINDSEY**
TOWN OF NEW FAIRFIELD FRST SELCTMAN
4 BRUSH HILL RD

NEW FAIRFIELD CT 06812

(508) 614-0389
INV:
PO:

REF: 10-56-92009-6089

DEPT:

580J4/26DE/C6C4

FedEx Express

J251024121701uv

WED - 19 FEB 5:00P
EXPRESS SAVER

TRK# 0201 **7720 9528 4030**

SP WODA

06812
CT-US SWF

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Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

ORIGIN ID:BBFA (508) 768-7960
JOHN MORRISON
SBA COMMUNICATIONS CORPORATION
134 FLANDERS
SUITE 125
WESTBOROUGH, MA 01581
UNITED STATES US

SHIP DATE: 14FEB25
ACTWGT: 1.00 LB
CAD: 25538254 2/INET4535

BILL SENDER

TO **BOGUS RANGER, LLC**
THE PCW MANAGEMENT CENTER, LLC
7 MASON'S ISLAND ROAD
SUITE #1
MYSTIC CT 06355
(860) 460-5344
INV:
PO:

REF: 10-56-92009-6089
DEPT:

580J4/26DE/C6C4

FedEx Express

J251024121701uv

WED - 19 FEB 5:00P
EXPRESS SAVER

TRK# 0201 **7720 9537 4671**

SP GONA

06355
CT-US BDL

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ORIGIN ID:BBFA (508) 768-7960
JOHN MORRISON
SBA COMMUNICATIONS CORPORATION
134 FLANDERS
SUITE 125
WESTBOROUGH, MA 01581
UNITED STATES US

SHIP DATE: 14FEB25
ACTWGT: 1.00 LB
CAD: 25538254 2/INET4535

BILL SENDER

TO **EVAN WHITE**
TOWN OF NEW FAIRFIELD ZONING DEPT
4 BRUSH HILL RD

NEW FAIRFIELD CT 06812
(508) 614-0389
INV:
PO:
REF: 10-56-92009-6089
DEPT:

580J4/26DE/C6C4

FedEx Express

J25102412701uv

WED - 19 FEB 5:00P
EXPRESS SAVER

TRK# 0201 **7720 9532 7356**

SP WODA

06812
CT-US SWF

After printing this label:
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Exhibit 3

29 BOGUS HILL RD

Location	29 BOGUS HILL RD	**Mblu**	6/ 4/ 84A/ /
Acct#	00071810	**Owner**	BOGUS RANGER LLC
Assessment	$718,200	**Appraisal**	$1,026,000
PID	100569	**Building Count**	1

Current Value

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2019	$810,000	$216,000	$1,026,000

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2019	$567,000	$151,200	$718,200

Owner of Record

Owner	BOGUS RANGER LLC	**Sale Price**	$9,000,000
Co-Owner		**Certificate**	
Address	7 MASONS ISLAND RD MYSTIC, CT 06355	**Book & Page**	562/39
		Sale Date	09/08/2021
		Instrument	00

Ownership History

Ownership History					
Owner	**Sale Price**	**Certificate**	**Book & Page**	**Instrument**	**Sale Date**
BOGUS RANGER LLC	$9,000,000		562/39	00	09/08/2021
GIRL SCOUTS OF CONNECTICUT INC	$0		0053/0587		01/01/1900

Building Information

Building 1 : Section 1

Year Built:	
Living Area:	0
Replacement Cost:	$0
Building Percent Good:	

Replacement Cost
Less Depreciation: $0

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:	
Full Bathrms:	
Half Baths:	
Num Xtra Fix	
Total Rooms:	
Bath Style	
Kitchen Style	
Fireplaces	
Bsmt Garage	
Fin Bsmt Area	
Fin Bsmt Qual	
Func Code	
Eco Code	
Num Park	
Fireplaces 1	
Fndtn Cndtn	
Basement	

Building Photo

(http://images.vgsi.com/photos/NewFairfieldCTPhotos//\00\00\61\79.jpg)

Building Layout

Building Layout
(http://images.vgsi.com/photos/NewFairfieldCTPhotos//Sketches/100569_8

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

Extra Features

Extra Features	Legend

No Data for Extra Features

Land

Land Use

Use Code	401
Description	Cell TWR
Zone	2
Neighborhood	
Alt Land Appr	No
Category	

Land Line Valuation

Size (Acres)	0.00
Depth	
Assessed Value	$151,200
Appraised Value	$216,000

Outbuildings

Outbuildings						Legend
Code	**Description**	**Sub Code**	**Sub Description**	**Size**	**Value**	**Bldg #**
CELL	Cell Tenant			3.00 UNITS	$810,000	1

Valuation History

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2018	$441,000	$216,000	$657,000
2017	$441,000	$216,000	$657,000
2016	$441,000	$216,000	$657,000

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2018	$308,700	$151,200	$459,900
2017	$308,700	$151,200	$459,900
2016	$308,700	$151,200	$459,900

Exhibit 4

29 BOGUS HILL ROAD

6/17/2022 8:51:29 AM

Scale: 1"=1000'

Scale is approximate

The information depicted on this map is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel-level analyses.

Exhibit 5

DOCKET NO. 315 – Optasite, Inc. and New Cingular Wireless PCS, LLC application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility at 29 Bogus Hill Road in New Fairfield, Connecticut.	}	Connecticut Siting Council

September 28, 2006

Decision and Order

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, operation, and maintenance of a telecommunications facility including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate either alone or cumulatively with other effects when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application and therefore directs that a Certificate of Environmental Compatibility and Pubic Need, as provided by General Statutes § 16-50k, be issued to Optasite, Inc. for the construction, maintenance and operation of a wireless telecommunications facility to be located at Site B at 29 Bogus Hill Road in New Fairfield, Connecticut. The Council denies certification of Site A located at 29 Bogus Hill Road in New Fairfield, Connecticut.

The facility shall be constructed, operated, and maintained substantially as specified in the Council's record in this matter, and subject to the following conditions:

1. The tower shall be designed as a monopole and shall be constructed no taller than 130 feet above ground level to provide telecommunications services to both public and private entities. The tower's design shall incorporate a yield point in order to reduce the size of the setback radius.

2. The location of the tower shall be adjusted within the lease parcel to maximize the distance from the tower to the nearest property to the north of the site.

3. No on-site construction work shall take place between December 31 and March 1 to avoid disturbing bald eagles that may be in the vicinity.

4. During construction, large cover objects such as logs and moveable rocks shall be moved out of the way of heavy machinery to minimize any potential harm to hognose snakes that might be in the area.

5. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. The D&M Plan shall be served on the Town of New Fairfield and all parties and intervenors, as listed in the service list, and submitted to and approved by the Council prior to the commencement of facility construction and shall include:

a) a final site plan(s) of site development to include specifications for the tower, tower foundation, antennas mountings, equipment building, access road, utility line, and landscaping; and

b) construction plans for site clearing, water drainage, and erosion and sedimentation control consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended.

6. The Certificate Holder shall, prior to the commencement of operation, provide the Council worst-case modeling of electromagnetic radio frequency power density of all proposed entities' antennas at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin No. 65, August 1997. The Certificate Holder shall ensure a recalculated report of electromagnetic radio frequency power density is submitted to the Council in the event other carriers locate at this facility or if circumstances in operation cause a change in power density above the levels calculated and provided pursuant to this Decision and Order.

7. Upon the establishment of any new state or federal radio frequency standards applicable to frequencies of this facility, the facility granted herein shall be brought into compliance with such standards.

8. The Certificate Holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.

9. The Certificate Holder shall provide reasonable space on the tower for no compensation for any Town of New Fairfield municipal antennas, provided such antennas can be accommodated and are compatible with the structural integrity of the tower.

10. If the facility authorized herein is not fully constructed and providing wireless services within eighteen months from the date of the mailing of the Council's Findings of Fact, Opinion, and Decision and Order (collectively called "Final Decision"), this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower 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 Final Decision shall not be counted in calculating this deadline.

11. If the facility ceases to provide wireless services for a period of one year, this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made.

12. The Certificate Holder shall remove any nonfunctioning antenna, and associated antenna mounting equipment, within 60 days of the date the antenna ceased to function.

13. Any request for extension of the time periods referred to in Conditions 10, 11, and 12 shall be filed with the Council not later than sixty days prior to the expiration date of this Certificate and shall be served on all parties and intervenors and the Town of Hartland, as listed in the service list. Any proposed modifications to this Decision and Order shall likewise be so served.

14. In accordance with Section 16-50j-77 of the Regulations of Connecticut State Agencies, the Certificate Holder shall provide the Council with written notice two weeks prior to the commencement of construction activities. In addition, the Certificate Holder shall provide the Council with written notice of the completion of site construction and the commencement of site operation.

Pursuant to General Statutes § 16-50p, we hereby direct that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below, and notice of issuance shall be published in the Danbury News-Times and in The Fairfield Citizen-News.

By this Decision and Order, the Council disposes of the legal rights, duties, and privileges of each party named or admitted to the proceeding in accordance with Section 16-50j-17 of the Regulations of Connecticut State Agencies.

The parties and intervenors in this proceeding are:

Status Granted	**Status Holder (name, address & phone number)**	**Representative (name, address & phone number)**
Applicant	Optasite, Inc. New Cingular Wireless PCS, LLC	Lucia Chiocchio, Esq. Cuddy and Feder, LLP 90 Maple Avenue White Plains, NY 10601 Ms. Jennifer Young Gaudet 345 Taylor Street Talcottville, CT 06066
Party *(approved on 5/17/06)*	Edward J. Hannafin Malcolm McCluskey	Thomas W. Beecher, Esq. Collins, Hannafin, Garamella, Jaber & Tuozzolo, P.C. 148 Deer Hill Avenue Danbury, CT 06810 (203) 744-2150 (203) 791-1126 - fax tbeecher@chgjtlaw.com
Intervenor *(approved on 7/12/06)*	Tax District of Bogus Hill	Allan Deutscher P.O. Box 8240 New Fairfield, CT 06812

Exhibit 6

Radio Frequency Exposure Analysis Report

February 4, 2025

T-Mobile

Site Name: NewFairfield
Site ID: CTFF750A
Site Address: 29 Bogus Hill Road, New Fairfield, CT 06812-2801

Michael Fischer, P.E.
Registered Professional Engineer (Electrical)
Connecticut License Number 33928
Expires January 31, 2026

Signed 04 February 2025

Site Compliance Summary

T-Mobile Compliance Status:	Compliant
Cumulative Calculated Power Density (Ground Level):	16.33314 µW/cm^2
Cumulative General Population % MPE (Ground Level):	1.63335%

February 4, 2025

T-Mobile
Attn: Adam Sullivan, Regulatory Compliance and Real Estate Consultant
15 Commerce Way, Suite B
Norton, MA 02379

RF Exposure Analysis for Site: **NewFairfield**

Centerline was contracted to analyze the proposed T-Mobile facility at **29 Bogus Hill Road, New Fairfield, CT 06812-2801** for the purpose of determining whether the predictive exposure from the proposed facility is within specified federal limits.

All information used in this report was analyzed as a percentage of the Maximum Permissible Exposure (% MPE) limits as detailed in 47 CFR § 1.1310 as well as Federal Communications Commission (FCC) OET Bulletin 65 Edition 97-01. The FCC MPE limits are typically expressed in units of milliwatts per square centimeter (mW/cm^2) or microwatts per square centimeter ($\mu W/cm^2$). The exposure limits vary depending upon the frequencies being utilized. The General Population/Uncontrolled MPE limit (in mW/cm^2) for frequencies between 300 and 1500 is defined as frequency (in MHz) divided by 1500 ($f_{MHz}/1500$). Frequencies between 1500 and 100,000 MHz have a General Population/Uncontrolled MPE limit of 1 mW/cm^2 (1000 $\mu W/cm^2$). The calculated power density at each sample point divided by the limit at each calculated frequency provides a result in % MPE. Summing the calculated % MPE from all contributors provides a cumulative % MPE at a particular sample point. Wireless carriers use different frequency bands with varying MPE limits; therefore, it is useful to report results in terms of % MPE as opposed to power density.

All results were compared to the FCC radio frequency exposure rules as detailed in 47 CFR § 1.1307(b) to determine compliance with the MPE limits for General Population/Uncontrolled environments as defined below.

General population/uncontrolled exposure limits apply to situations in which the general population may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general population would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/ controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits, as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means. Additional details can be found in FCC OET 65.

Calculation Methodology

Centerline has performed theoretical modeling of the site using a software tool, RoofMaster®, which incorporates calculation methodologies detailed in FCC OET 65. RoofMaster® uses a cylindrical model for conservative power density predictions within the near field of the antenna where the antenna pattern has not truly formed yet. Within this area power density values tend to decrease based upon an inverse distance function. At the point where it is appropriate for modeling to change from near-field calculations to far-field calculations, the power decreases inversely with the square of the distance. The modeling is based on worst-case assumptions in terms of transmitter power and duty cycle. No losses were included in the power calculations unless they were specifically provided for the project.

In OET 65, a far field model is presented to calculate the spatial peak power density. The RoofMaster® implementation of this model incorporates antenna manufacturer's horizontal and vertical pattern data to determine the power density in all directions. This model yields the power density at a single point in space. In order to determine the spatial power density for comparison to the FCC limits, the average of several points calculated within the human profile (0-6') must be conducted. RoofMaster® calculates seven power density values between 0-6' above the specified study plane and performs a linear spatial average.

Data & Results

The following table details the antennas and operating parameters for the T-Mobile antenna system as well as any other antenna systems at the site. This is based on antenna information provided by the client and data compiled from other sources where necessary. The data below was input into Roofmaster® to perform the theoretical exposure calculations at ground level.

The theoretical calculations performed in Roofmaster® determine the cumulative exposure at all sample points at ground level (0-6' spatial average). The results from highest cumulative sample point at ground level surrounding the site are displayed in the table below. The contribution from directional antennas to the maximum cumulative totals varies greatly depending on location; therefore, the contribution from one antenna sector at the highest calculated exposure point may be greater or less than other sectors since sectorized directional antennas are pointed in different directions and there is not much overlapping exposure.

The contribution to the cumulative power density and % MPE for each antenna/frequency band is listed in the table(s) below. The cumulative power density and cumulative % MPE are displayed at the bottom of the table(s) below.

Maximum Calculated Cumulative Power Density
(Location: Ground Level approximately 670' North of site)

Antenna ID	Make / Model	Frequency Band (MHz)	Antenna Gain (dBd)	Antenna Centerline (ft)	Channel Count	TX Power/ Channel (watts)	ERP (watts)	Calculated Power Density (μW/cm²)	General Population MPE Limit (μW/cm²)	General Population % MPE
T-Mobile A 1	RFS APXVLL19P_43-C-A20	1900	16.24	150.00	4.00	40.00	6731.63	0.00004	1000.00	0.00000
T-Mobile A 1	RFS APXVLL19P_43-C-A20	1900	16.24	150.00	4.00	40.00	6731.63	0.00004	1000.00	0.00000
T-Mobile A 1	RFS APXVLL19P_43-C-A20	2100	17.33	150.00	4.00	60.00	12978.10	0.00006	1000.00	0.00001
T-Mobile A 2	RFS APXVAALL24 43-U-NA20	600	12.95	150.00	4.00	60.00	4733.81	0.00005	400.00	0.00001
T-Mobile A 2	RFS APXVAALL24 43-U-NA20	700	13.65	150.00	4.00	20.00	1853.92	0.00002	466.67	0.00000
T-Mobile B 3	RFS APXVLL19P_43-C-A20	1900	16.24	150.00	4.00	40.00	6731.63	0.00000	1000.00	0.00000
T-Mobile B 3	RFS APXVLL19P_43-C-A20	1900	16.24	150.00	4.00	40.00	6731.63	0.00000	1000.00	0.00000
T-Mobile B 3	RFS APXVLL19P_43-C-A20	2100	17.33	150.00	4.00	60.00	12978.10	0.00000	1000.00	0.00000
T-Mobile B 4	RFS APXVAALL24 43-U-NA20	600	12.95	150.00	4.00	60.00	4733.81	0.00000	400.00	0.00000
T-Mobile B 4	RFS APXVAALL24 43-U-NA20	700	13.65	150.00	4.00	20.00	1853.92	0.00000	466.67	0.00000
T-Mobile C 5	RFS APXVLL19P_43-C-A20	1900	16.24	150.00	4.00	40.00	6731.63	0.00000	1000.00	0.00000
T-Mobile C 5	RFS APXVLL19P_43-C-A20	1900	16.24	150.00	4.00	40.00	6731.63	0.00000	1000.00	0.00000
T-Mobile C 5	RFS APXVLL19P_43-C-A20	2100	17.33	150.00	4.00	60.00	12978.10	0.00000	1000.00	0.00000
T-Mobile C 6	RFS APXVAALL24 43-U-NA20	600	12.95	150.00	4.00	60.00	4733.81	0.00000	400.00	0.00000
T-Mobile C 6	RFS APXVAALL24 43-U-NA20	700	13.65	150.00	4.00	20.00	1853.92	0.00000	466.67	0.00000
AT&T A 7	Generic Panel	700	12.31	141.00	4.00	40.00	2723.45	0.00004	466.67	0.00001
AT&T A 7	Generic Panel	1900	15.05	141.00	4.00	40.00	5118.23	0.00004	1000.00	0.00000
AT&T A 7	Generic Panel	2100	15.53	141.00	4.00	40.00	5716.37	0.00005	1000.00	0.00001
AT&T A 8	Generic Panel	3400	17.05	142.00	1.00	54.55	2765.63	0.00804	1000.00	0.00080
AT&T A 8	Generic Panel	3700	16.95	142.00	1.00	81.33	4029.50	0.01142	1000.00	0.00114
AT&T A 9	Generic Panel	850	12.25	141.00	4.00	40.00	2686.09	0.00004	566.67	0.00001
AT&T A 9	Generic Panel	2300	15.17	141.00	4.00	40.00	5261.63	0.00004	1000.00	0.00000
AT&T B 10	Generic Panel	700	12.31	141.00	4.00	40.00	2723.45	0.00000	466.67	0.00000
AT&T B 10	Generic Panel	1900	15.05	141.00	4.00	40.00	5118.23	0.00000	1000.00	0.00000
AT&T B 10	Generic Panel	2100	15.53	141.00	4.00	40.00	5716.37	0.00000	1000.00	0.00000
AT&T B 11	Generic Panel	3400	17.05	142.00	1.00	54.55	2765.63	0.00002	1000.00	0.00000
AT&T B 11	Generic Panel	3700	16.95	142.00	1.00	81.33	4029.50	0.00003	1000.00	0.00000
AT&T B 12	Generic Panel	850	12.25	141.00	4.00	40.00	2686.09	0.00000	566.67	0.00000
AT&T B 12	Generic Panel	2300	15.17	141.00	4.00	40.00	5261.63	0.00000	1000.00	0.00000
AT&T C 13	Generic Panel	700	12.31	141.00	4.00	40.00	2723.45	0.00000	466.67	0.00000
AT&T C 13	Generic Panel	1900	15.05	141.00	4.00	40.00	5118.23	0.00000	1000.00	0.00000
AT&T C 13	Generic Panel	2100	15.53	141.00	4.00	40.00	5716.37	0.00000	1000.00	0.00000
AT&T C 14	Generic Panel	3400	17.05	142.00	1.00	54.55	2765.63	0.00002	1000.00	0.00000
AT&T C 14	Generic Panel	3700	16.95	142.00	1.00	81.33	4029.50	0.00004	1000.00	0.00000
AT&T C 15	Generic Panel	850	12.25	141.00	4.00	40.00	2686.09	0.00000	566.67	0.00000
AT&T C 15	Generic Panel	2300	15.17	141.00	4.00	40.00	5261.63	0.00000	1000.00	0.00000
Verizon A 16	Generic Panel	700	12.31	119.00	2.00	40.00	1361.73	0.00003	466.67	0.00001
Verizon A 16	Generic Panel	850	12.25	119.00	2.00	40.00	1343.04	0.00003	566.67	0.00001
Verizon A 16	Generic Panel	1900	15.05	119.00	4.00	40.00	5118.23	0.00006	1000.00	0.00001
Verizon A 17	Generic Panel	700	12.31	119.00	2.00	40.00	1361.73	0.00003	466.67	0.00001
Verizon A 17	Generic Panel	850	12.25	119.00	2.00	40.00	1343.04	0.00003	566.67	0.00001
Verizon A 17	Generic Panel	2100	15.53	119.00	4.00	40.00	5716.37	0.00007	1000.00	0.00001
Verizon A 18	Generic Panel	3500	13.07	119.00	4.00	5.00	405.54	0.00001	1000.00	0.00000
Verizon A 19	Generic Panel	3700	23.35	120.00	2.00	160.00	69206.99	15.73331	1000.00	1.57333
Verizon B 20	Generic Panel	700	12.31	119.00	2.00	40.00	1361.73	0.00000	466.67	0.00000
Verizon B 20	Generic Panel	850	12.25	119.00	2.00	40.00	1343.04	0.00000	566.67	0.00000
Verizon B 20	Generic Panel	1900	15.05	119.00	4.00	40.00	5118.23	0.00000	1000.00	0.00000
Verizon B 21	Generic Panel	700	12.31	119.00	2.00	40.00	1361.73	0.00000	466.67	0.00000
Verizon B 21	Generic Panel	850	12.25	119.00	2.00	40.00	1343.04	0.00000	566.67	0.00000
Verizon B 21	Generic Panel	2100	15.53	119.00	4.00	40.00	5716.37	0.00000	1000.00	0.00000
Verizon B 22	Generic Panel	3500	13.07	119.00	4.00	5.00	405.54	0.00000	1000.00	0.00000
Verizon B 23	Generic Panel	3700	23.35	120.00	2.00	160.00	69206.99	0.27978	1000.00	0.02798
Verizon C 24	Generic Panel	700	12.31	119.00	2.00	40.00	1361.73	0.00000	466.67	0.00000
Verizon C 24	Generic Panel	850	12.25	119.00	2.00	40.00	1343.04	0.00000	566.67	0.00000
Verizon C 24	Generic Panel	1900	15.05	119.00	4.00	40.00	5118.23	0.00000	1000.00	0.00000
Verizon C 25	Generic Panel	700	12.31	119.00	2.00	40.00	1361.73	0.00000	466.67	0.00000

Antenna ID	Make / Model	Frequency Band (MHz)	Antenna Gain (dBd)	Antenna Centerline (ft)	Channel Count	TX Power/ Channel (watts)	ERP (watts)	Calculated Power Density (µW/cm²)	General Population MPE Limit (µW/cm²)	General Population % MPE
Verizon C 25	Generic Panel	850	12.25	119.00	2.00	40.00	1343.04	0.00000	566.67	0.00000
Verizon C 25	Generic Panel	2100	15.53	119.00	4.00	40.00	5716.37	0.00000	1000.00	0.00000
Verizon C 26	Generic Panel	3500	13.07	119.00	4.00	5.00	405.54	0.00000	1000.00	0.00000
Verizon C 27	Generic Panel	3700	23.35	120.00	2.00	160.00	69206.99	0.29979	1000.00	0.02998
New Fairfield, Town Of A 28	Generic Omni	150	9.00	100.00	1.00	100.00	794.33	0.00001	200.00	0.00001
							Cumulative Power Density:	**16.33314 µW/cm²**	**Cumulative % MPE:**	**1.63335%**

Summary

The theoretical calculations performed for this analysis yielded cumulative power density totals in all areas at ground level that are within the allowable federal limits for public exposure to RF energy. Therefore, the site is **compliant** with FCC rules and regulations.

Samuel Cosgrove
RF EME Technical Writer III
Centerline

Exhibit 7

SBA Communications Corporation
8051 Congress Avenue
Boca Raton, FL 33487-1307

T + 561 995 7670
F + 561 995 7626

sbasite.com

Structural Analysis Report

Client: T-Mobile

Client Site ID / Name: CTFF750A / NewFairfield
Application #: 266144, v2

SBA Site ID / Name: CT13061-A / New Fairfield

150 ft Monopole

29 Bogus Hill Road
New Fairfield, Connecticut 06812-2801
Lat: 41.5118, Long: -73.4672

Project number: CT13061-TMO-121124

Analysis Results

Tower	86.4%	Pass
Foundation	97.0%	Pass

Change in tower stress due to mount modification / replacement	N/A

Prepared by:

Mojdeh Sadeghzadeh

December 13, 2024

STATE OF CONNECTICUT
JARRYD TIBBETTS
No. 34170
LICENSED
PROFESSIONAL ENGINEER

12/13/24

Table of Contents

Introduction

The purpose of this report is to summarize the analysis results on the 150 ft Monopole to support the proposed antennas and transmissions lines in addition to those currently installed.

Table 1 List of Documents Used

Item	Document
Tower design/drawings	Sabre, Job No.07-11088, Dated 11/07/2006.
Foundation drawings	Sabre, Job No.07-11088, Dated 11/07/2006.
Geotechnical report	JGI Eastern, Inc. Project No. 06645G, Dated 10/12/2006.
MA	TES, Project No. 153257, dated 12/03/2024.
Latest SA	SBAE, Project No. CT13061-VZW-082323R1, dated 09/15/2023.

Analysis Criteria

Table 2 Code Related Data

Jurisdiction (State/County/City)	Connecticut /Fairfield /New Fairfield
Governing Codes	ANSI/TIA/EIA 222-H, 2021 IBC, 2022 CSBC
Ultimate Wind Speed (3-Sec gust)	115.0 mph
Wind Speed with Ice (3-Sec gust)	50 mph
Service Wind Speed (3-Sec gust)	60 mph
Ice Thickness	1.0”
Risk Category	II
Exposure Category	C
Topographic Category	1
Crest Height	0 ft
Ground Elevation	613 ft.
Seismic Parameter S_s	0.211
Seismic Parameter S_1	0.056

This structural analysis is based upon the tower being classified as a risk category II; however, if a different classification is required subsequent to the date hereof, the tower classification will be changed to meet such requirement and a new structural analysis will be run.

Appurtenance Loading

Existing Loading:

Table 3 Existing Appurtenances

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
1	152.35	1	RFS BA1010 -Omni	(1) Standoff @150'	(2) 7/8"	T. Of New Fairfield
-	150.0	3	RFS APXV18-206517S-A20 - Panel	LP Platform w/ Handrails	(16) 1 5/8" (1) 1.9" Fiber	T-Mobile
-		3	RFS APXVAALL24_43-U-NA20 - Panel			
-		3	RFS APXV18-209014 - Panel			
-		3	Ericsson KRY 112 489/2 - TMA			
-		3	Ericsson 4480 B71 + B85 - RRU			
-		3	Kathrein 782 11056 - Bias Ts			
8	142.0	3	Ericsson 4426 B66 -RRU	LP Platform	(12) 1 5/8" (1) 1/2" Fiber (2) 3/4" DC (1) 3" Conduit [Housing (2) 3/4" DC & (1) 1/2" Fiber]	AT&T
9		3	Ericsson RRUS 32 -RRU			
10		3	Cci HPA-65R-BUU-H6 - Panel			
11		9	Powerwave LGP-21401 -TMA			
12		3	Powerwave TT19-08BP111-001 T-MA			
13		3	Ericsson RRUS 11 -RRU			
14		3	Ericsson RRUS 12 R-RU			
15	141.0	3	Ericsson RRUS-A2 -RRU Modules			
16		2	Raycap DC6-48-60-18-8F			
17		3	Powerwave 1001983 -Smart Bias Ts			
18		3	Powerwave 7770 - Panel			
19		3	Kathrein 80010798 - Panel			
20		6	Kaelus DBCT108F1V92-1 -Diplexer			
21	134.75	1	RFS BA40-01 -Omni	(1) Standoff @129'	(1) 7/8"	T. Of New Fairfield
22	120.0	3	Samsung MT6407-77A - Panel	Platform w/ Handrails & Kickers	(10) 1-5/8" (2) 1-5/8" Hybrid	Verizon
23		3	Samsung B2/B66A - RRU			
24		3	Samsung B5/B13 - RRU			
25		1	Raycap RC2DC-3315-PF-48 - OVP			
26		2	Kaelus KA-6030 -Filter			
27	119.5	6	Andrew SBNHH-1D65B - Panel			
28		6	Antel LPA-80080-4CF-EDIN-0 - Panel			

Proposed Loading:

Information pertaining to proposed antennas and transmission lines were based upon the Application #:266144, v2 from T-Mobile and is listed in Table 4.

Table 4 Proposed Appurtenances

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
2	150.0	3	RFS APXVLL19P_43-C-A20 -Panel	LP Platform w/ Handrails	(14) 1-5/8" (2) 1.9" Fiber	T-Mobile
3		3	RFS APXVAALL24_43-U-NA20 -Panel			
4		3	RFS APXV18-209014 -Panel			
5		3	Ericsson 4480 B71 + B85 -RRU			
6		3	Ericsson 4460 B25 + B66 -RRU			
7		3	Kathrein 782 11056 -Bias Ts			

Analysis Results

Tower

The results of the structural analysis are shown below in table 5. Additional information for the tower analysis is provided within the Appendix.

Table 5 Tower Analysis Summary

	Pole shafts	Anchor Bolts	Base Plate	Flange
Max. Usage:	86.4%	82.8%	59.6%	77.6%
Pass/Fail	Pass	Pass	Pass	Pass

Foundation

The results of the foundation analysis are shown below in table 6. Additional information for the foundation analysis is provided within the Appendix.

Table 6 Foundation Analysis Summary

Structural Component	Max Usage (%)	Analysis Result
Foundation	97.0	Pass

Conclusions

Based on the analysis results, the existing tower and foundation were found to be ***sufficient*** to safely support the equipment listed in this analysis. No modification to the tower and foundation is needed at this time.

Installation Requirements

This analysis was performed under the assumption that the carrier will place the proposed equipment and feed lines at the installation height listed in Table 4 and in accordance with the coax layout shown. TMAs and RRUs are to be installed on existing mounts behind tenant's antennas unless otherwise noted. No equipment is to be installed directly in the climbing path. All equipment is to be installed per mount manufacturer specifications. In case site conditions do not allow for the required installation parameters to be met the carrier must notify SBA Communications Corporation engineers for approval of an alternative placement.

Assumptions and Limitations

Assumptions

This analysis was completed based on the following assumptions:

- Tower and foundation were built in accordance to manufacturer specifications.
- Tower and foundation has been properly maintained in accordance with the manufacturer's specifications
- All existing structural members were assumed to be in good condition with no physical damage or deterioration associated with corrosion
- Welds and bolts are assumed able to carry their intended original design loads.
- The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Table 3 and 4.
- This analysis may be affected if any assumptions are not valid or have been made in error. SBA should be notified to determine the effect on the structural integrity of the tower.

Limitations

The computer generated analysis performed by the tower software is limited to theoretical capacities of the towers structural members and does not account for any missing or damaged members or connections. The tower and foundation are assumed to have been properly designed, fabricated, installed and maintained, barring any conflicting findings from the most recent inspection.

SBA Communications Corporation has used its due diligence to verify the information provided to perform this analysis. It is unreasonable to perform a more detailed inspection of a tower and its components. This report is not a condition assessment of the tower or foundation.

Appendix

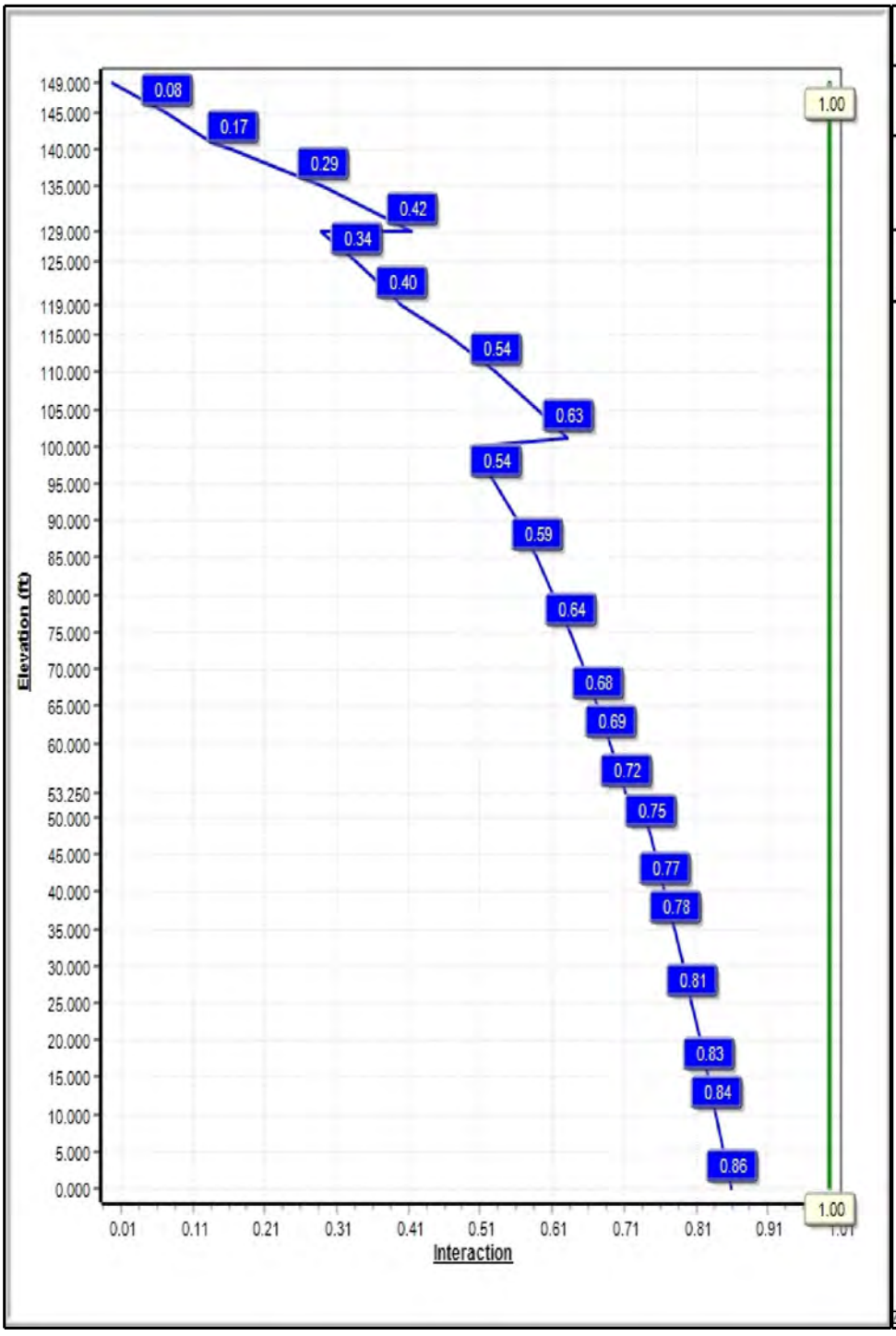
Usage Diagram - Max Ratio 86.41% at 0.0ft

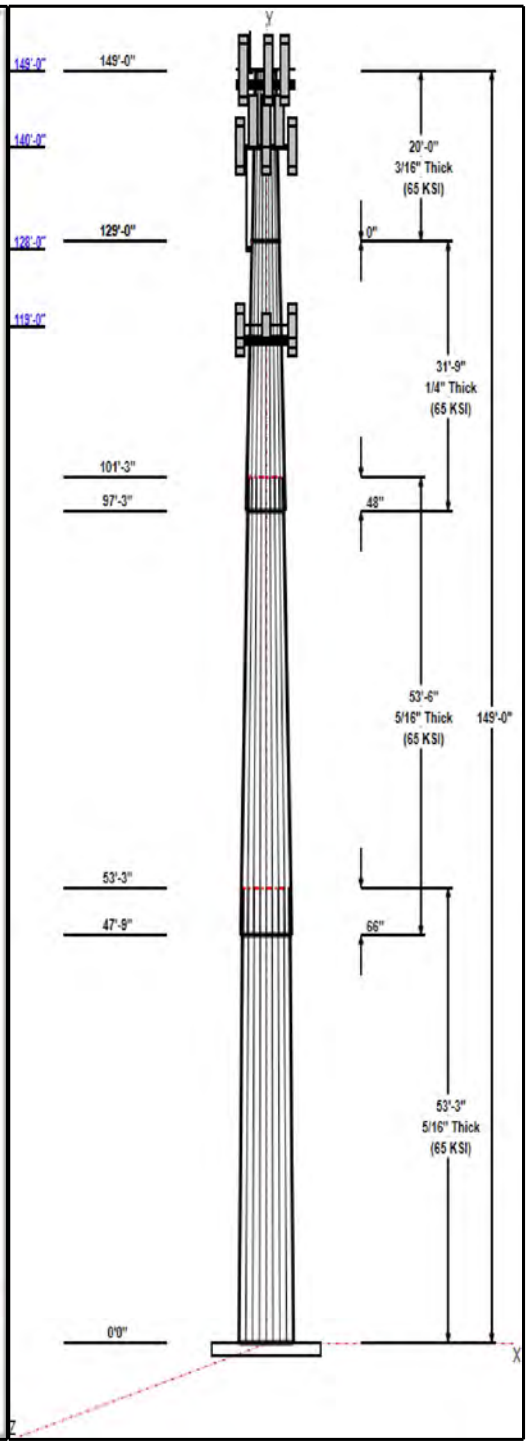
Structure:	CT13061-A	**Code:**	EIA/TIA-222-H	12/13/2024
Site Name:	New Fairfield	**Exposure:**	C	
Height:	149.00 (ft)	**Gh:**	1.1	
Base Elev:	1.000 (ft)			Page: 1

Dead Load Factor:	1.20
Wind Load Factor:	1.00

Load Case : 1.2D + 1.0W 115 mph Wind

Iterations: 25





Structure: CT13061-A

Type: Tapered
Site Name: New Fairfield
Height: 149.00 (ft)
Base Elev: 1.00 (ft)

Base Shape: 18 Sided
Taper: 0.25534

12/13/2024

Shaft Properties

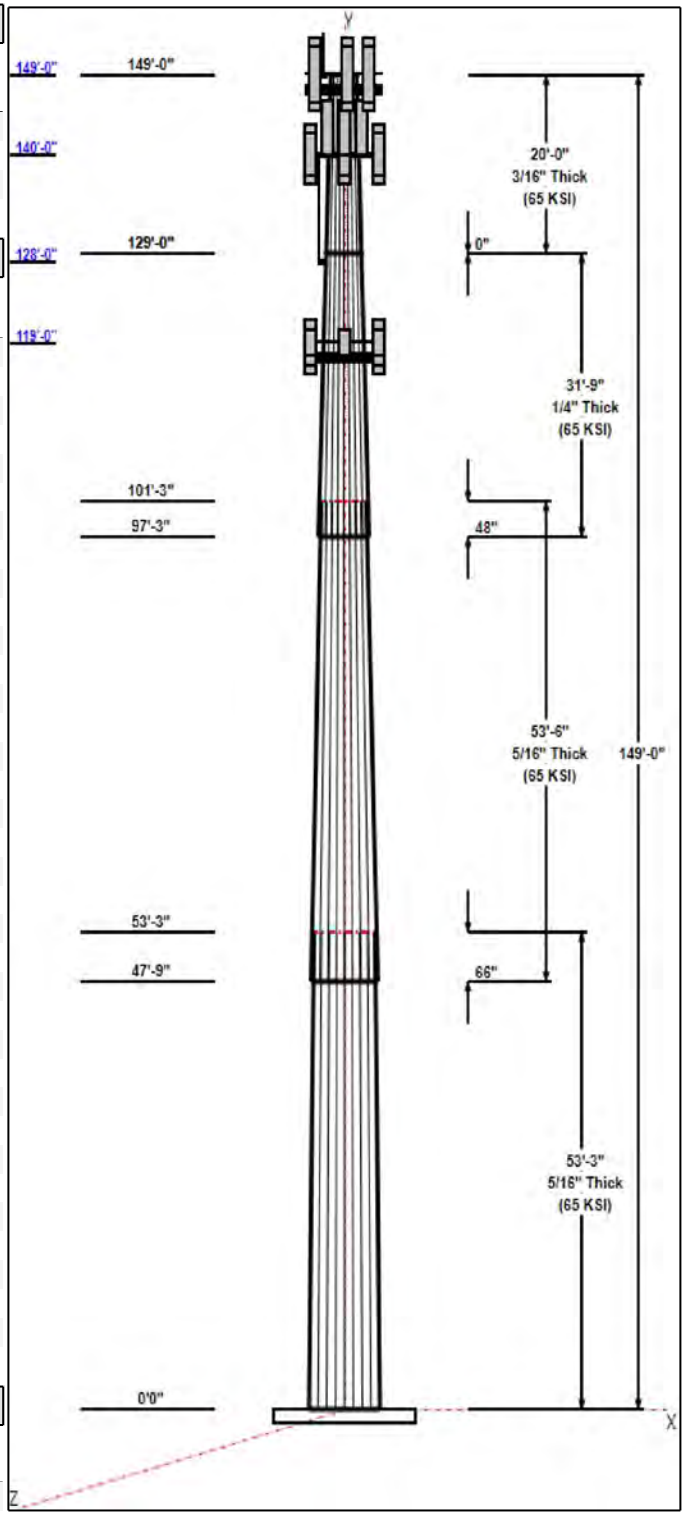
Seq	Length (ft)	Top (in)	Bottom (in)	Thick (in)	Joint Type	Taper	Grade (ksi)
1	53.25	42.32	55.92	0.313		0.25534	65
2	53.50	30.69	44.35	0.313	Slip	0.25534	65
3	31.75	24.11	32.21	0.250	Slip	0.25534	65
4	20.00	19.00	24.11	0.188	Butt	0.25534	65

Discrete Appurtenances

Attach Elev (ft)	Force Elev (ft)	Qty	Description	Carrier
149.00	152.50	1	Lightning Rod	---
149.00	151.35	1	RFS BA1010	T. Of New Fairfield
149.00	149.00	1	Platform w/ Hand Rail	T-Mobile
149.00	149.00	1	Standoff Mount	T. Of New Fairfield
149.00	149.00	3	RFS	T-Mobile
149.00	149.00	3	RFS	T-Mobile
149.00	149.00	3	RFS APXV18-209014	T-Mobile
149.00	149.00	3	Ericsson 4480 B71 + B85	T-Mobile
149.00	149.00	3	Kathrein 782 11056 Bias	T-Mobile
149.00	149.00	3	Ericsson 4460 B25 + B66	T-Mobile
149.00	149.00	9	Mount Pipes	T-Mobile
141.00	141.00	3	Ericsson 4426 B66	AT&T
141.00	141.00	3	Ericsson RRUS 32	AT&T
141.00	143.00	3	Cci HPA-65R-BUU-H6	AT&T
141.00	143.00	9	Powerwave LGP-21401	AT&T
141.00	143.00	3	Powerwave	AT&T
141.00	141.00	3	Ericsson RRUS 11	AT&T
141.00	143.00	3	Ericsson RRUS 12	AT&T
140.00	140.00	3	Ericsson RRUS-A2	AT&T
140.00	140.00	2	Raycap DC6-48-60-18-8F	AT&T
140.00	140.00	3	Powerwave 1001983 Bias	AT&T
140.00	140.00	1	Low Profile Platform	AT&T
140.00	140.00	3	Powerwave 7770	AT&T
140.00	140.00	3	Kathrein 80010798	AT&T
140.00	140.00	6	Kaelus DBCT108F1V92-1	AT&T
128.00	133.75	1	RFS BA40-01	T. Of New Fairfield
128.00	128.00	1	Standoff Mount	T. Of New Fairfield
119.00	118.50	6	Antel	Verizon
119.00	119.00	3	MT6407-77A	Verizon
119.00	119.00	15	(15) Mount Pipes	Verizon
119.00	119.00	3	Samsung B2/B66A	Verizon
119.00	119.00	3	Samsung B5/B13	Verizon
119.00	119.00	2	Kaelus KA-6030	Verizon
119.00	119.00	1	Raycap	Verizon
119.00	118.50	6	Andrew SBNHH-1D65B	Verizon
119.00	119.00	1	Platform w/ Handrails &	Verizon

Linear Appurtenances

Elev From (ft)	Elev To (ft)	Placement	Description	Carrier
3.00	149.00	Inside	1 5/8" Coax	T-Mobile
3.00	149.00	Inside	1.9" Fiber	T-Mobile
3.00	149.00	Inside	7/8" Coax	T. Of New Fairfield
3.00	149.00	Outside	Safety Cable	
3.00	149.00	Outside	Step bolts (ladder)	
3.00	141.00	Inside	1 5/8" Coax	AT&T



3.00	141.00	Inside	1/2" Fiber	AT&T
3.00	141.00	Inside	3" Conduit	AT&T
3.00	141.00	Inside	3/4" DC	AT&T
3.00	133.75	Inside	7/8" Coax	T. Of New Fairfield
3.00	119.00	Inside	1 5/8" Coax	Verizon
3.00	119.00	Inside	1 5/8" Hybrid	Verizon

Anchor Bolts

Qty	Specifications	Grade (ksi)	Arrangement
12	2.25" 18J	75.0	Cluster

Base Plate

Thickness (in)	Specifications (in)	Grade (ksi)	Geometry
2.7500	59.8	60.0	Clipped

Reactions

Load Case	Moment (FT-Kips)	Shear (Kips)	Axial (Kips)
1.2D + 1.0W 115 mph Wind	3193.1	28.8	41.1
0.9D + 1.0W 115 mph Wind	3152.3	28.8	30.8
1.2D + 1.0Di + 1.0Wi 50 mph Wind	901.1	8.2	56.1
1.2D + 1.0Ev + 1.0Eh	80.4	0.6	42.7
0.9D + 1.0Ev + 1.0Eh	79.6	0.6	32.4
1.0D + 1.0W 60 mph Wind	772.4	7.0	34.3

Structure: CT13061-A - Coax Line Placement

Type: Monopole
Site Name: New Fairfield
Height: 149.00 (ft)

12/13/2024

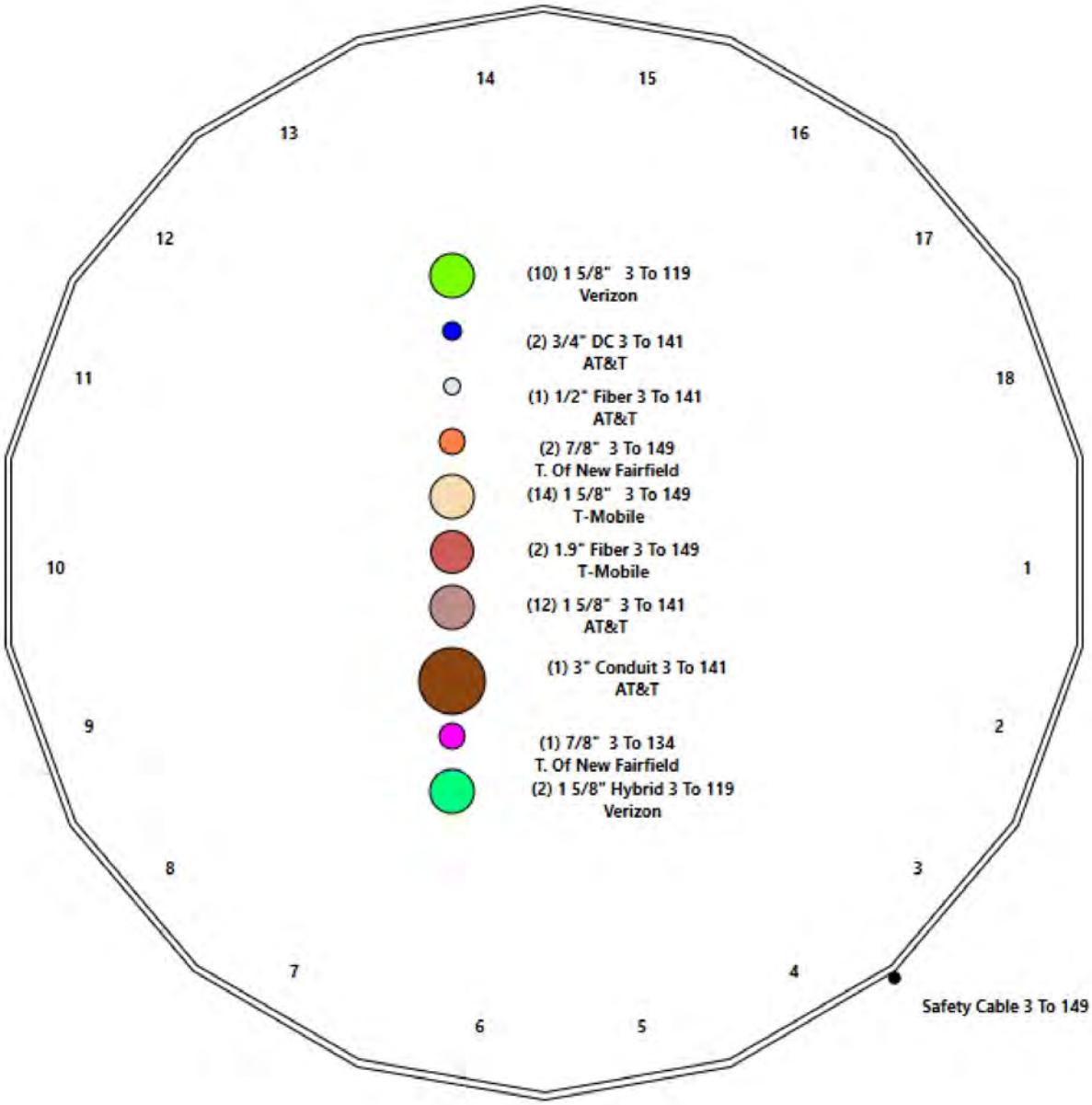


Exhibit 8

Tower Engineering Solutions
Phone (972) 483-0607, Fax (972) 975-9615
1320 Greenway Drive, Suite 600, Irving, Texas 75038

Antenna Mount Analysis Report

Existing Monopole Tower
Customer Name: SBA Communications Corp
Customer Site Number: CT13061-A-SBA
Customer Site Name: New Fairfield
Carrier Name: T-Mobile (App#: 266144-2)
Carrier Site ID / Name: CTFF750A / NewFairfield
Site Location: 29 Bogus Hill Road
New Fairfield, Connecticut
Fairfield County
Latitude: 41.511833
Longitude: -73.450528

Analysis Result:

Max Structural Usage: 98.0% [Pass]

Report Prepared By: Sandesh Khawas Bhujel

NOTE: The MA assumes that (1) 2" Std 8' pipe per sector will be added to position 2 for all sectors. The analysis results are void if the proposed equipment is not installed in accordance with this report.

Tower Engineering Solutions
Phone (972) 483-0607, Fax (972) 975-9615
1320 Greenway Drive, Suite 600, Irving, Texas 75038

Antenna Mount Analysis Report

Existing Monopole Tower

Customer Name: SBA Communications Corp

Customer Site Number: CT13061-A-SBA

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Site Location: 29 Bogus Hill Road

New Fairfield, Connecticut

Fairfield County

Latitude: 41.511833

Longitude: -73.450528

Analysis Result:

Max Structural Usage: 98.0% [Pass]

Report Prepared By: Sandesh Khawas Bhujel

NOTE: The MA assumes that (1) 2" Std 8' pipe per sector will be added to position 2 for all sectors. The analysis results are void if the proposed equipment is not installed in accordance with this report.

Introduction

The purpose of this report is to summarize the analysis results on the (1) Platform w/ support rail at 150.00' elevation to support the proposed antenna configuration. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

Sources of Information

Mount Drawings	Mount Mapping by SGS Towers; dated 5/13/2022
Antenna Loading	SBA; Application #: 266144, v2, dated 11/25/2024
Modification Drawings	N/A

Analysis Criteria

Wind Speed Used in the Analysis: 115 mph (3-Sec. Gust) (Ultimate Wind Speed)
Wind Speed with Ice: 50 mph (3-Sec. Gust) with 1" radial ice concurrent
Service Load Wind Speed: 30 mph +0" Radial ice
Standard/Codes: ANSI/TIA/EIA 222-H / IBC 2021
Exposure Category: C
Risk Category: II
Topographic Category: 1
Crest Height (Ft): 0
Ground Elevation Factor: 0.979

The site is a Risk Category II structure per IBC Table 1604.5. This site does not support emergency communication equipment for first responders such as fire departments, police, hospitals, ambulance services or any of the facilities listed for Risk Categories III and IV. The scope of work detailed in this structural analysis does not include items that are a part of emergency service as the 911 or essential facility service of an emergency response system.

Mount Information

(1) Platform w/ support rail at 150.00' elevation

Final Antenna Configuration

3	RFS APXVLL19P_43-C-A20
3	RFS APXVAALL24_43-U-NA20
3	RFS APXV18-209014
3	Ericsson 4460 B25 + B66
3	Ericsson 4480 B71 + B85
3	Kathrein 782 11056

In addition to the proposed equipment loading, a 500 lb serviceability load was also considered in this analysis in accordance with TIA requirements.

Analysis Results

Our calculations have determined that under design wind load the existing mounts will be structurally adequate to support the proposed antenna configuration. The maximum structural usage is 98.0%, which occurs in the collar check. The proposed equipment must be installed as stipulated in the Final Antenna Configuration section of this report. The analysis results are void if the proposed equipment is not installed in accordance with this report.

Attachments

1. Mount Photos
2. Antenna Placement Diagram
3. Mount Mapping Information
4. Analysis Calculations

Standard Conditions

1. The loading configuration as analyzed in this report is as provided from the customer. Any deviation from this design shall be communicated to TES to verify deviation will not adversely impact the analysis.

2. The analysis is based on the presumption that the antenna mount members and components along with any existing reinforcement items have been correctly and properly designed, manufactured, installed and maintained.

3. All the existing structural members were assumed to be in good condition with no physical damage or deterioration associated with corrosion. The mount analysis is not a condition assessment of the mount.

4. The mount analysis was performed in accordance with the loading provided, and if applicable the modification required to support the additional loading.

5. If the mount is modified, installation must adhere to the configuration communicated in the modification drawings.

6. The modification drawings are not intended to convey means or methods. These are the responsibility of the installing contractor.

7. Rigging plan review is available if the contractor requires for a construction class IV or other if required. Review fee would apply.

8. The mount modification package was created based upon information provided for the mount loading. The underlying tower is assumed to provide support and sufficient rigidity to support the mount loads as a tower analysis was not part of the mount analysis.

9. TES is not responsible for modifications to climbing facilities unless communicated to TES in writing.

Structure: CT13061-A-SBA - New Fairfield

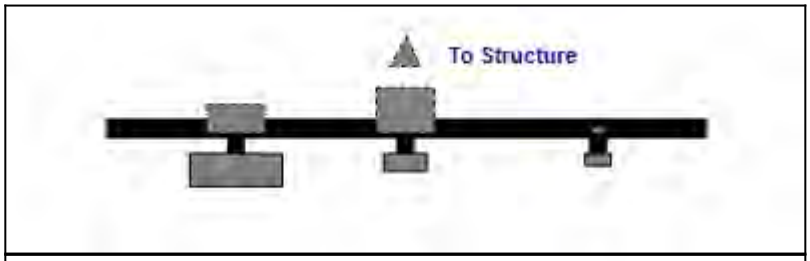
Sector: A

Structure Type: Monopole

Mount Elev: 150.00

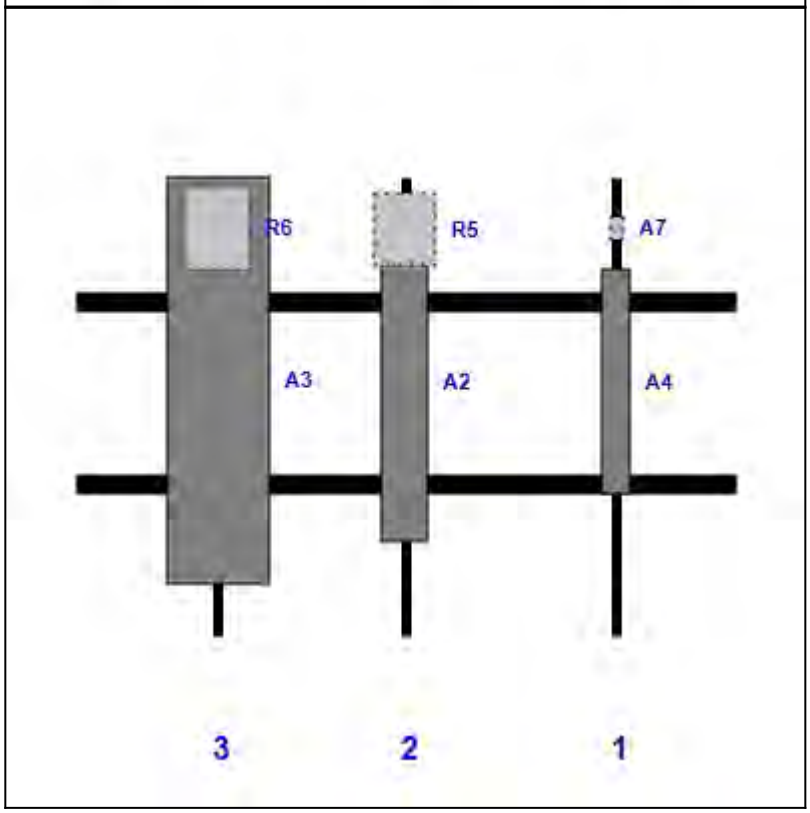
12/3/2024

Plan View



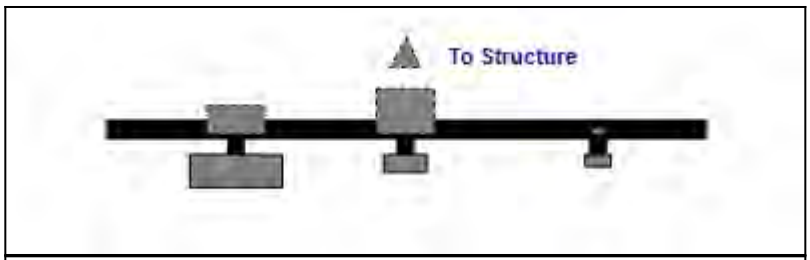
Front View

Looking Toward Structure



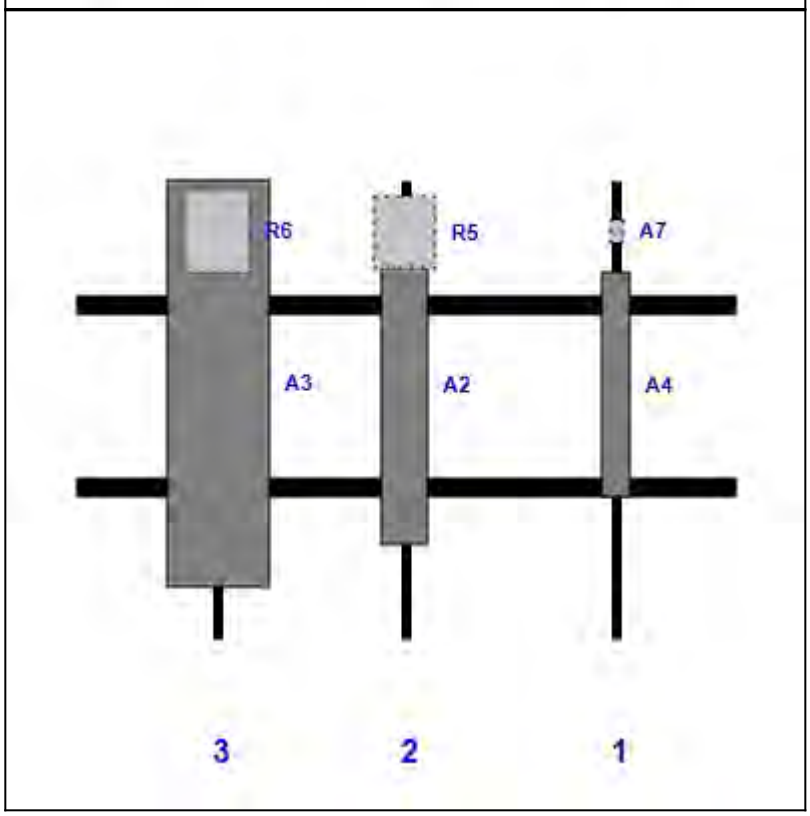
Ref #	Model	Height (in)	Width (in)	H Dist Left	Pipe #	Pipe Pos V	Pos	From Top	H Offset	Status	Validation
A4	APXV18-209014	53.00	6.65	128.00	1	a	Front	48.00		Leased	
A7	782 11056	5.50	3.20	128.00	1	a	Behind	12.00		Retained	
A2	APXVLL19P_43-C-A20	75.80	11.30	78.00	2	a	Front	48.00		Added	
R5	4460 B25 + B66	17.00	15.10	78.00	2	a	Behind	12.00		Added	
A3	APXVAALL24_43-U-NA20	95.90	24.00	34.00	3	a	Front	48.00		Retained	
R6	4480 B71 + B85	19.20	15.10	34.00	3	a	Behind	12.00		Retained	

Plan View



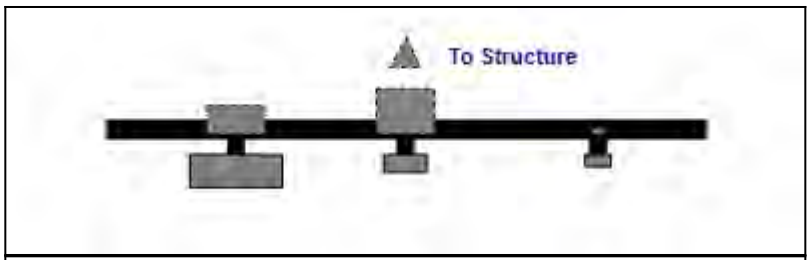
Front View

Looking Toward Structure



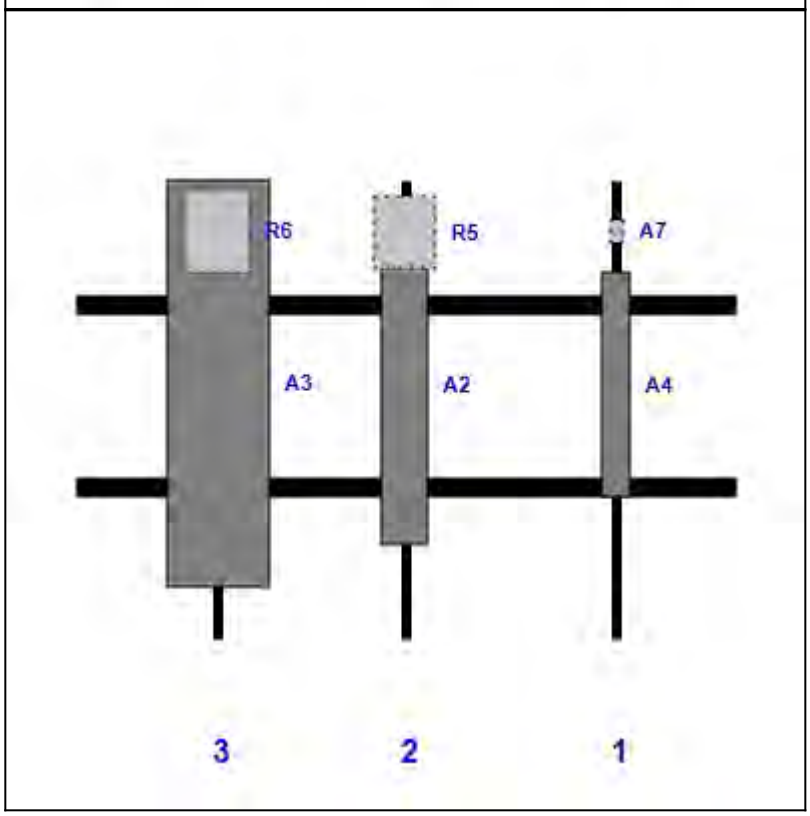
Ref #	Model	Height (in)	Width (in)	H Dist Left	Pipe #	Pipe Pos V	Pos	From Top	H Offset	Status	Validation
A4	APXV18-209014	53.00	6.65	128.00	1	a	Front	48.00		Leased	
A7	782 11056	5.50	3.20	128.00	1	a	Behind	12.00		Retained	
A2	APXVLL19P_43-C-A20	75.80	11.30	78.00	2	a	Front	48.00		Added	
R5	4460 B25 + B66	17.00	15.10	78.00	2	a	Behind	12.00		Added	
A3	APXVAALL24_43-U-NA20	95.90	24.00	34.00	3	a	Front	48.00		Retained	
R6	4480 B71 + B85	19.20	15.10	34.00	3	a	Behind	12.00		Retained	

Plan View



Front View

Looking Toward Structure



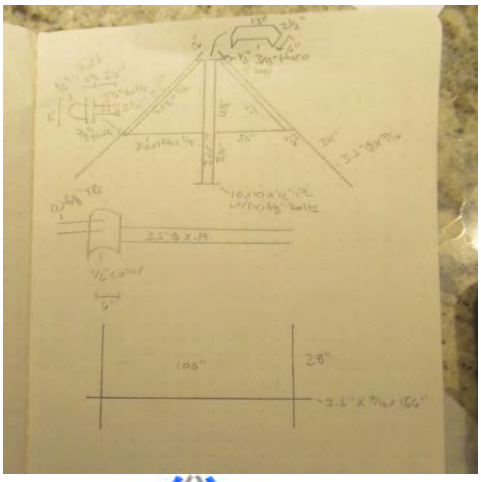
Ref #	Model	Height (in)	Width (in)	H Dist Left	Pipe #	Pipe Pos V	Pos	From Top	H Offset	Status	Validation
A4	APXV18-209014	53.00	6.65	128.00	1	a	Front	48.00		Leased	
A7	782 11056	5.50	3.20	128.00	1	a	Behind	12.00		Retained	
A2	APXVLL19P_43-C-A20	75.80	11.30	78.00	2	a	Front	48.00		Added	
R5	4460 B25 + B66	17.00	15.10	78.00	2	a	Behind	12.00		Added	
A3	APXVAALL24_43-U-NA20	95.90	24.00	34.00	3	a	Front	48.00		Retained	
R6	4480 B71 + B85	19.20	15.10	34.00	3	a	Behind	12.00		Retained	

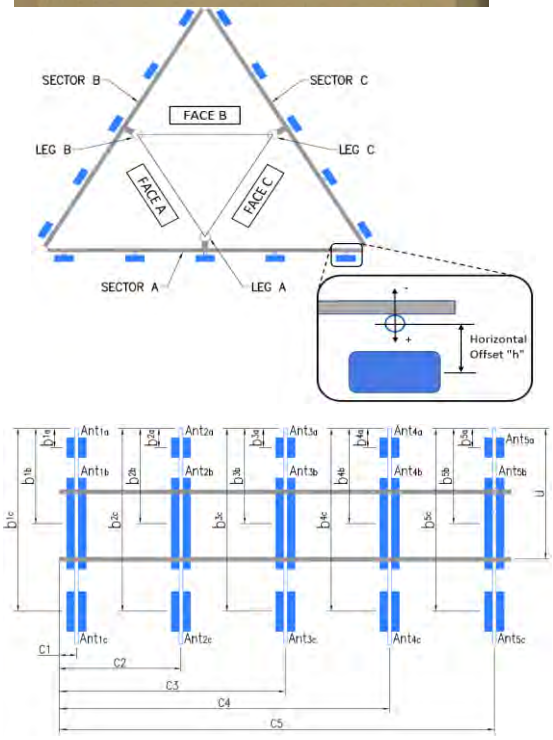
V4.1 Updated on 12-17-2021

Antenna Mount Mapping Form (PATENT PENDING)

FCC # 1265077

Tower Owner:	SBA	**Mapping Date:**	5/13/2022
Site Name:	New Fairfield	**Tower Type:**	Monopole
Site Number or ID:	CT13061	**Tower Height (Ft.):**	150
Mapping Contractor:	SGS Towers	**Mount Elevation (Ft.):**	147





Antenna Layout (Looking Out From Tower)

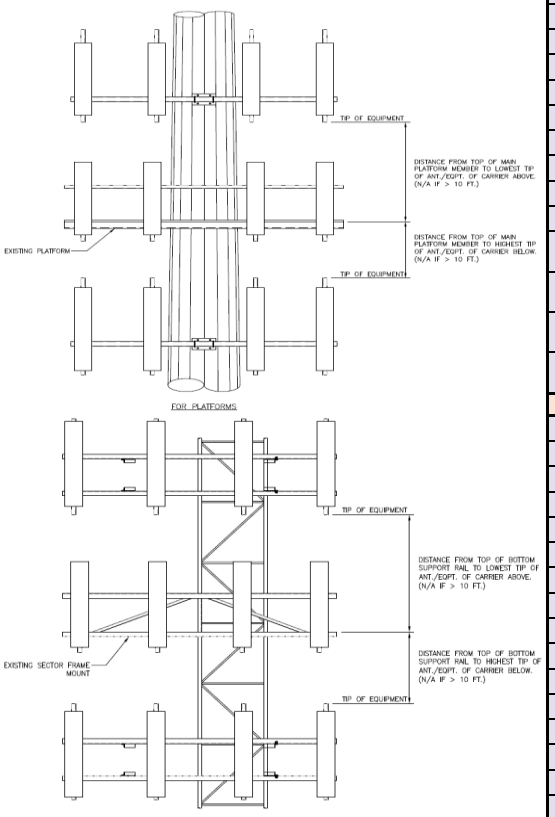
Mount Pipe Configuration and Geometries [Unit = Inches]

Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."
A1	2.4x1/8x72	54.50	28.00	C1	2.4x1/8x72	54.50	28.00
A2	2.9x3/16x108	72.00	134.00	C2	2.4x1/8x72	72.00	134.00
A3				C3			
A4				C4			
A5				C5			
A6				C6			
B1	2.4x1/8x72	54.50	28.00	D1			
B2	2.4x1/8x72	72.00	134.00	D2			
B3				D3			
B4				D4			
B5				D5			
B6				D6			
Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) :							
Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) :							8
Please enter additional infomation or comments below.							
Tower Face Width at Mount Elev. (ft.):		Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):					19.85

	Enter antenna model. If not labeled, enter "Unknown".						Mounting Locations [Units are inches and degrees]			Photos of antennas
Ants. Items	Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Vertical Distances"b_{1a}, b_{2a}, b_{3a}, b_{1b}...." (Inches)	Horiz. Offset "h" (Use "-" if Ant. is behind)	Antenna Azimuth (Degrees)	Photo Numbers
Sector A										
Ant_{1a}				(12) 1 7/8" FH						
Ant_{1b}	UNKN ANT	7.00	3.25	73.00		150	28.00	9.00	0.00	179-181
Ant_{1c}	(2) UNKN TME	8.50	2.25	9.75			36.00	4.00		183-185
Ant_{2a}										
Ant_{2b}	LNX-6515DS-A1M	11.90	7.10	96.40		150	36.00	9.00	0.00	212
Ant_{2c}										
Ant_{3a}										
Ant_{3b}										
Ant_{3c}										
Ant_{4a}										
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector	
Sector A:	0.00	Deg	Leg A:		Deg
Sector B:	120.00	Deg	Leg B:		Deg
Sector C:	240.00	Deg	Leg C:		Deg
Sector D:		Deg	Leg D:		Deg

Climbing Facility Information			
Location:	180.00	Deg	Sector B
Climbing Facility	Corrosion Type:		Good condition.
	Access:		Climbing path was unobstructed.
	Condition:		Good condition.



Sector B										
Ant_{1a}										
Ant_{1b}	UNKN ANT	7.00	3.25	73.00		150	28.00	9.00	120.00	221
Ant_{1c}	(2) TMA-DB1921-DD-A	8.50	2.25	9.75			36.00	4.00		229
Ant_{2a}										
Ant_{2b}	LNX-6515DS-A1M	11.90	7.10	96.40		150	36.00	9.00	120.00	231
Ant_{2c}										
Ant_{3a}										
Ant_{3b}										
Ant_{3c}										
Ant_{4a}										
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										
Sector C										
Ant_{1a}										
Ant_{1b}	UNKN ANT	7.00	3.25	73.00		150	28.00	9.00	240.00	236
Ant_{1c}	(2) UNKN TME	8.50	2.25	9.75			36.00	4.00		240
Ant_{2a}										
Ant_{2b}	LNX-6515DS-A1M	11.90	7.10	96.40		150	36.00	9.00	240.00	250
Ant_{2c}										
Ant_{3a}										
Ant_{3b}										
Ant_{3c}										
Ant_{4a}										
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										
Sector D										
Ant_{1a}										
Ant_{1b}										
Ant_{1c}										
Ant_{2a}										
Ant_{2b}										
Ant_{2c}										
Ant_{3a}										
Ant_{3b}										
Ant_{3c}										
Ant_{4a}										
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

Observed Safety and Structural Issues During the Mount Mapping		
Issue #	Description of Issue	Photo #
1		
2		
3		
4		
5		
6		
7		
8		

Mapping Notes
1. Please report any visible structural or safety issues observed on the antenna mounts (Damaged members, loose connections, tilting mounts, safety climb issues, etc.)
2. If the thickness of the existing pipes or tubing can't be obtained from a general tool (such as Caliper), please use an ultrasonic measurement tool (thickness gauge) to measure the thickness.
3. Please create all required detail sketches of the mounts and insert them into the "Sketches" tab.
4. Please measure and enter the bolt sizes and types under the Members Box in the spreadsheet of the mount type.
5. Take and label the photos of the tower, mounts, connections, antennas and all measurements. Minimum 50 photos are required.
6. Please measure and report the size and length of all existing antenna mounting pipes.
7. Please measure and report the antenna information for all sectors.
8. Don't delete or rearrange any sheet or contents of any sheet from this mapping form.

Standard Conditions
1. Obvious safety and structural issues/deficiencies noticed at the time of the mount mapping are to be reported in this mapping. However, this mount mapping is not a condition assessment of the mount.

Exhibit 9

T-Mobile®

NEWFAIRFIELD

29 BOGUS HILL ROAD
NEW FAIRFIELD, CT 06812-2801
NEW FAIRFIELD COUNTY

SITE NO.: CTFF750A

SITE TYPE: 150'± MONOPOLE

PROJECT: EQUIPMENT UPGRADE

RF DESIGN GUIDELINE: 67E998E 6160 (NO GSM)

APPROVALS

PROJECT MANAGER:	DATE:	ZONING/SITE ACQ.:	DATE:
CONSTRUCTION:	DATE:	OPERATIONS:	DATE:
RF ENGINEERING:	DATE:	TOWER OWNER:	DATE:

T-MOBILE TECHNICIAN SITE SAFETY NOTES

LOCATION	SPECIAL RESTRICTIONS
SECTOR A:	ACCESS BY CERTIFIED CLIMBER
SECTOR B:	ACCESS BY CERTIFIED CLIMBER
SECTOR C:	ACCESS BY CERTIFIED CLIMBER
SECTOR D:	ACCESS BY CERTIFIED CLIMBER
GPS/LMU:	UNRESTRICTED
RADIO CABINETS:	UNRESTRICTED
PPC DISCONNECT:	UNRESTRICTED
MAIN CIRCUIT D/C:	UNRESTRICTED
NIU/T DEMARC:	UNRESTRICTED
OTHER/SPECIAL:	NONE

GENERAL NOTES

1. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES.
2. THE ARCHITECT/ENGINEER HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR BIDDING THE JOB IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.
3. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE OMNIPOINT REPRESENTATIVE OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.
4. THE SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR AND ALL OTHER MATERIALS AND LABOR DEEMED NECESSARY TO COMPLETE THE WORK/PROJECT AS DESCRIBED HEREIN.
5. THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO THE SUBMISSION OF BIDS OR PERFORMING WORK TO FAMILIARIZE HIMSELF WITH THE FIELD CONDITIONS AND TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
6. THE CONTRACTOR SHALL OBTAIN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS.
7. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S/VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
8. THE CONTRACTOR SHALL PROVIDE A FULL SET OF CONSTRUCTION DOCUMENTS AT THE SITE UPDATED WITH THE LATEST REVISIONS AND ADDENDUMS OR CLARIFICATIONS AVAILABLE FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.
9. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
10. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY CONSTRUCTION CONTROL SURVEYS, ESTABLISHING AND MAINTAINING ALL LINES AND GRADES REQUIRED TO CONSTRUCT ALL IMPROVEMENTS AS SHOWN HEREIN.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY OR LOCAL GOVERNMENT AUTHORITY.
12. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
13. THE CONTRACTOR SHALL KEEP THE GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
14. THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJECT.
15. THE CONTRACTOR SHALL NOTIFY THE PROJECT OWNER'S REPRESENTATIVE WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE WORK THAT IS IN CONFLICT UNTIL CONFLICT IS RESOLVED BY THE LESSEE/LICENSEE REPRESENTATIVE.
16. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC. ON THE JOB.
17. ALL UNDERGROUND UTILITY INFORMATION WAS DETERMINED FROM SURFACE INVESTIGATIONS AND EXISTING PLANS OF RECORD. THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES IN THE FIELD PRIOR TO ANY SITE WORK.

AT LEAST 72 HOURS PRIOR TO DIGGING, THE CONTRACTOR IS REQUIRED TO CALL DIG SAFE AT 811

VICINITY MAP

SCALE: 1" = 1000'

DIRECTIONS

FROM NORTON TAKE I-495 NORTH TOWARD MANSFIELD/MARLBORO. TAKE EXIT 58 TOI MERGE ONTO I-90 WEST. TAKE EXIT 78 FOR I-84 TOWARD HARTFORD CT. TAKE EXIT 6 FOR CT 37 NORTH. TURN RIGHT ONTO SAW MILL ROAD. TURN RIGHT ONTO CT-39 NORTH. TURN RIGHT ONTO BOGUS HILL ROAD. SITE IS LOCATED ON THE LEFT HAND SIDE.

SHEET INDEX

SHEET NO.	DESCRIPTION	REV. NO.
T-1	TITLE SHEET	2
GN-1	GENERAL NOTES	2
A-1	COMPOUND & EQUIPMENT PLANS	2
A-2	TOWER ELEVATION & ANTENNA PLANS	2
A-3	SITE DETAILS	2
RF-1	RF DATA	2
E-1	ELECTRIC & GROUNDING DETAILS	2

DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE PROJECT OWNER'S REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

SCOPE OF WORK

REMOVE:
- (3) ANTENNAS
- (3) TMAS
- (3) DIPLEXERS
- (3) FILTERS
- (3) COAX CABLES
- (1) HYBRID CABLE
- (2) 6201 ODE EQUIPMENT CABINETS
- (1) NORTEL S12000 EQUIPMENT CABINET
- (1) BATTERY BACKUP CABINET

INSTALL:
- (3) ANTENNAS
- (3) RADIOS
- (2) HYBRID CABLES
- (1) SLACKBOX FOR FIBER MANAGEMENT
- (1) 6160 V2 AC EQUIPMENT CABINET
- (1) B160 BATTERY CABINET
- RAN EQUIPMENT (REFER TO SHEET RF-1)
- (1) CIRCUIT BREAKER

SITE NOTES

1. THIS IS AN UNMANNED AND RESTRICTED ACCESS TELECOMMUNICATION FACILITY, AND IS NOT FOR HUMAN HABITATION. IT WILL BE USED FOR THE TRANSMISSION OF RADIO SIGNAL FOR THE PURPOSE OF PROVIDING PUBLIC CELLULAR SERVICE.
   - ADA COMPLIANCE NOT REQUIRED.
   - POTABLE WATER OR SANITARY SERVICE IS NOT REQUIRED.
   - NO OUTDOOR STORAGE OR ANY SOLID WASTE RECEPTACLES REQUIRED.
2. CONTRACTOR SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS, AND CONDITIONS ON JOB SITE. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK. FAILURE TO NOTIFY THE ARCHITECT/ENGINEER PLACE THE RESPONSIBILITY ON THE CONTRACTOR TO CORRECT THE DISCREPANCIES AT THE CONTRACTOR'S EXPENSE.
3. NEW CONSTRUCTION WILL CONFORM TO ALL APPLICABLE CODES AND ORDINANCES.
   - BUILDING CODE: 2022 CONNECTICUT STATE BUILDING CODE
   - ELECTRICAL CODE: 2020 NATIONAL ELECTRICAL CODE
   - STRUCTURAL CODE: TIA/EIA-222-H STRUCTURAL STANDARDS FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS.

PROJECT SUMMARY

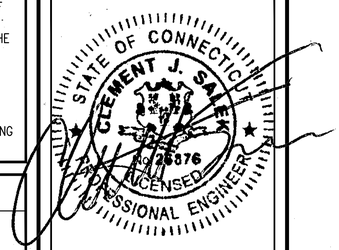
SITE NUMBER:	CTFF750A
SITE NAME:	NEWFAIRFIELD
SBA SITE NUMBER:	CT13061-A
SBA SITE NAME:	NEW FAIRFIELD
SBA COLLO APP NUMBER:	TBD
SITE ADDRESS:	29 BOGUS HILL ROAD NEW FAIRFIELD, CT 06812-2801
PROPERTY OWNER:	GIRL SCOUT COUNCIL OF SOUTHWESTERN CONNECTICUT, INC. 340 WASHINGTON STREET HARTFORD, CT 06106
TOWER OWNER:	SBA TOWERS IV, LLC 8501 CONGRESS AVENUE BOCA RATON, FL 33487 PHONE: 561-226-9523
COUNTY:	NEW FAIRFIELD
ZONING DISTRICT:	R-44 (RESIDENTIAL)
STRUCTURE TYPE:	MONOPOLE
STRUCTURE HEIGHT:	150'±
STRUCTURE HEIGHT W/APPURT.:	157'±
GROUND ELEVATION:	615'±
TOTAL AMSL:	772'±
APPLICANT:	T-MOBILE NORTHEAST LLC 15 COMMERCE WAY, SUITE B NORTON, MA 02766
ARCHITECT:	CHAPPELL ENGINEERING ASSOCIATES, LLC 201 BOSTON POST ROAD WEST, SUITE 101 MARLBOROUGH, MA 01752
STRUCTURAL ENGINEER:	CHAPPELL ENGINEERING ASSOCIATES, LLC 201 BOSTON POST ROAD WEST, SUITE 101 MARLBOROUGH, MA 01752
SITE CONTROL POINT:	LATITUDE: 41.5119' N41°30'42.66" LONGITUDE: -73.4672' W73°28'01.97"

SPECIAL ZONING NOTE:
BASED ON INFORMATION PROVIDED BY T-MOBILE REGULATORY COMPLIANCE PROFESSIONALS AND LEGAL COUNSEL, THIS TELECOMMUNICATIONS EQUIPMENT DEPLOYMENT IS CONSIDERED AN ELIGIBLE FACILITY UNDER THE MIDDLE CLASS TAX RELIEF AND JOB CREATION ACT OF 2012, 47 USC 1455(A), SECTION 6409(A), AND IS SUBJECT TO AN ELIGIBLE FACILITY REQUEST, EXPEDITED REVIEW, AND LIMITED/PARTIAL ZONING PRE-EMPTION FOR LOCAL DISCRETIONARY PERMITS (VARIANCE, SPECIAL PERMIT, SITE PLAN REVIEW, OR ADMINISTRATIVE REVIEW).

T-Mobile
15 COMMERCE WAY, SUITE B
NORTON, MA 02766
(508) 286-2700

SBA
SBA COMMUNICATIONS CORP.
134 FLANDERS ROAD, SUITE 125
WESTBOROUGH, MA 01581
(508) 251-0720

CHAPPELL ENGINEERING ASSOCIATES, LLC
Civil ·Structural ·Land Surveying
R.K. EXECUTIVE CENTRE
201 BOSTON POST ROAD WEST, SUITE 101
MARLBOROUGH, MA 01752
(508) 481-7400
www.chappellengineering.com



CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
2	12/16/24	CONSTRUCTION REVISED	CMC
1	11/20/24	ISSUED FOR CONSTRUCTION	CMC
0	11/04/24	ISSUED FOR REVIEW	JRV

SITE NUMBER:
CTFF750A

SITE ADDRESS:
29 BOGUS HILL ROAD
NEW FAIRFIELD, CT 06812-2801

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

1815.579

GENERAL NOTES:

1. FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY:
   CONTRACTOR – T–MOBILE
   SUBCONTRACTOR – GENERAL CONTRACTOR (CONSTRUCTION)
   OWNER – T–MOBILE
   OEM – ORIGINAL EQUIPMENT MANUFACTURER

2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.

3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.

4. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL, STATE AND FEDERAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.

5. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.

6. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.

7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.

8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR.

9. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER, T1 CABLES AND GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY. SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR AND/OR LANDLORD PRIOR TO CONSTRUCTION.

10. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.

11. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY.

12. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION AND RETURN DISTURBED AREAS TO ORIGINAL CONDITIONS.

13. THE SUBCONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE SUBCONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.

14. SUBCONTRACTOR SHALL NOTIFY CHAPPELL ENGINEERING ASSOCIATES, LLC 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING TRENCHES, SEALING ROOF AND WALL PENETRATIONS AND POST DOWNS, FINISHING NEW WALLS OR FINAL ELECTRICAL CONNECTIONS FOR ENGINEERING REVIEW.

15. CONSTRUCTION SHALL COMPLY WITH ALL T–MOBILE STANDARDS AND SPECIFICATIONS.

16. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.

17. THE EXISTING CELL SITES ARE IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.

18. IF THE EXISTING CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.

SITE WORK GENERAL NOTES:

1. THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.

2. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY ENGINEERS. EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION.

3. ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.

4. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.

5. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.

6. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.

7. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.

8. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF ENGINEERING, OWNER AND/OR LOCAL UTILITIES.

9. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE AND STABILIZED TO PREVENT EROSION AS SPECIFIED IN THE PROJECT SPECIFICATIONS.

10. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.

11. THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE T–MOBILE SPECIFICATION FOR SITE SIGNAGE.

CONCRETE AND REINFORCING STEEL NOTES:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST–IN–PLACE CONCRETE.

2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. A HIGHER STRENGTH (4000PSI) MAY BE USED. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 381 CODE REQUIREMENTS

3. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.

4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:
   CONCRETE CAST AGAINST EARTH.....3 IN.
   CONCRETE EXPOSED TO EARTH OR WEATHER:
   #6 AND LARGER .....2 IN.
   #5 AND SMALLER & WWF .....1½ IN.
   CONCRETE NOT EXPOSED TO EARTH OR WEATHER
   OR NOT CAST AGAINST THE GROUND:
   SLAB AND WALL .....¾ IN.
   BEAMS AND COLUMNS .....1½ IN.

5. A CHAMFER ¾" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

6. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHORS SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO THE MANUFACTURERS RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS. ALL EXPANSION/WEDGE ANCHORS SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED. EXPANSION BOLTS SHALL BE PROVIDED BY SIMPSON OR APPROVED EQUAL.

7. CONCRETE CYLINDER TIES ARE NOT REQUIRED FOR SLAB ON GRADE WHEN CONCRETE IS LESS THAN 50 CUBIC YARDS (IBC1905.6.2.3) IN THAT EVENT THE FOLLOWING RECORDS SHALL BE PROVIDED BY THE CONCRETE SUPPLIER;
   (A) RESULTS OF CONCRETE CYLINDER TEST PERFORMED AT THE SUPPLIERS PLANT.
   (B) CERTIFICATION OF MINIMUM COMPRESSIVE STRENGTH FOR THE CONCRETE GRADE SUPPLIED.
FOR GREATER THAN 50 CUBIC YARDS THE GC SHALL PERFORM THE CONCRETE CYLINDER TEST.

8. AS AN ALTERNATIVE TO ITEM 7. TEST CYLINDERS SHALL BE TAKEN INITIALLY AND THEREAFTER FOR EVERY 50 YARDS OF CONCRETE FROM EACH DIFFERENT BATCH PLANT.

9. EQUIPMENT SHALL NOT BE PLACED ON NEW PADS FOR SEVEN DAYS AFTER PAD IS POURED, UNLESS IT IS VERIFIED BY CYLINDER TESTS THAT COMPRESSIVE STRENGTH HAS BEEN ATTAINED.

STRUCTURAL STEEL NOTES:

1. ALL STEEL WORK SHALL BE PAINTED OR GALVANIZED IN ACCORDANCE WITH THE DRAWINGS AND T–MOBILE SPECIFICATIONS UNLESS OTHERWISE NOTED. STRUCTURAL STEEL SHALL BE ASTM–A–36 UNLESS OTHERWISE NOTED ON THE SITE SPECIFIC DRAWINGS. STEEL DESIGN, INSTALLATION AND BOLTING SHALL BE IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) "MANUAL OF STEEL CONSTRUCTION".

2. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND AWS D1.1. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION", 9TH EDITION. PAINTED SURFACES SHALL BE TOUCHED UP.

3. BOLTED CONNECTIONS SHALL USE BEARING TYPE ASTM A325 BOLTS (¾"ø) AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE. ALL BOLTS SHALL BE GALVANIZED OR STAINLESS STEEL.

4. NON–STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE ⅝" DIA. ASTM A 307 BOLTS (GALV) UNLESS NOTED OTHERWISE.

5. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ENGINEER REVIEW & APPROVAL ON PROJECTS REQUIRING STRUCTURAL STEEL

6. ALL STRUCTURAL STEEL WORK SHALL BE DONE IN ACCORDANCE WITH AISC SPECIFICATIONS.

SOIL COMPACTION NOTES FOR SLAB ON GRADE:

1. EXCAVATE AS REQUIRED TO REMOVE VEGETATION AND TOPSOIL TO EXPOSE NATURAL SUBGRADE AND PLACE CRUSHED STONE AS REQUIRED.

2. COMPACTION CERTIFICATION: AN INSPECTION AND WRITTEN CERTIFICATION BY A QUALIFIED GEOTECHNICAL TECHNICIAN OR ENGINEER IS ACCEPTABLE.

3. AS AN ALTERNATE TO INSPECTION AND WRITTEN CERTIFICATION, THE "UNDISTURBED SOIL" BASE SHALL BE COMPACTED WITH "COMPACTION EQUIPMENT", LISTED BELOW, TO AT LEAST 90% MODIFIED PROCTOR MAXIMUM DENSITY PER ASTM D 1557 METHOD C.

4. COMPACTED SUBBASE SHALL BE UNIFORM AND LEVELED. PROVIDE 6" MINIMUM CRUSHED STONE OR GRAVEL COMPACTED IN 3" LIFTS ABOVE COMPACTED SOIL. GRAVEL SHALL BE NATURAL OR CRUSHED WITH 100% PASSING #1 SIEVE.

5. AS AN ALTERNATE TO ITEMS 2 AND 3, THE SUBGRADE SOILS WITH 5 PASSES OR A MEDIUM SIZED VIBRATORY PLATE COMPACTOR (SUCH AS BOMAG BPR 30/38) OR HAND–OPERATED SINGLE DRUM VIBRATORY ROLLER (SUCH AS BOMAG BW 55E). AND SOFT AREAS THAT ARE ENCOUNTERED SHOULD BE REMOVED AND REPLACED WITH A WELL–GRADED GRANULAR FILL AND COMPACTED AS STATED ABOVE.

COMPACTION EQUIPMENT:

1. HAND OPERATED DOUBLE DRUN, VIBRATORY ROLLER, VIBRATORY PLATE COMPACTOR OR JUMPING JACK COMPACTOR.

CONSTRUCTION NOTES:

1. FIELD VERIFICATION:
SUBCONTRACTOR SHALL FIELD VERIFY SCOPE OF WORK, T–MOBILE ANTENNA PLATFORM LOCATION AND UTILITY TRENCHWORK.

2. COORDINATION OF WORK:
SUBCONTRACTOR SHALL COORDINATE RF WORK AND PROCEDURES WITH CONTRACTOR.

3. CABLE LADDER RACK:
SUBCONTRACTOR SHALL FURNISH AND INSTALL CABLE LADDER RACK, CABLE TRAY AND/OR ICE BRIDGE, AND CONDUIT AS REQUIRED TO SUPPORT CABLES TO THE NEW BTS LOCATION.

ELECTRICAL INSTALLATION NOTES:

1. WIRING, RACEWAY, AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC AND TELCORDIA.

2. SUBCONTRACTOR SHALL MODIFY OR INSTALL CABLE TRAY SYSTEM AS REQUIRED TO SUPPORT RF AND TRANSPORT CABLING TO THE NEW BTS EQUIPMENT. SUBCONTRACTOR SHALL SUBMIT MODIFICATIONS TO CONTRACTOR FOR APPROVAL.

3. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC AND TELCORDIA.

4. CABLES SHALL NOT BE ROUTED THROUGH LADDER–STYLE CABLE TRAY RUNGS.

5. EACH END OF EVERY POWER, GROUNDING, AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR–CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA, AND MATCH INSTALLATION REQUIREMENTS.

6. POWER PHASE CONDUCTORS (I.E., HOTS) SHALL BE LABELED WITH COLOR–CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, ½ INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). PHASE CONDUCTOR COLOR CODES SHALL CONFORM WITH THE NEC AND OSHA.

7. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E., PANELBOARD AND CIRCUIT ID'S).

8. PANELBOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.

9. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.

10. POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#34 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN–2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.

11. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN–2 GREEN INSULATION, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.

12. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED OUTDOORS, OR BELOW GRADE, SHALL BE SINGLE CONDUCTOR #2 AWG SOLID TINNED COPPER CABLE, UNLESS OTHERWISE SPECIFIED.

13. POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI–CONDUCTOR, TYPE TC CABLE (#34 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN–2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.

14. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP–STYLE, COMPRESSION WIRE LUGS AND WIRENUTS BY HARGER (OR EQUAL). LUGS AND WIRENUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75°C (90°C IF AVAILABLE).

15. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.

16. NEW RACEWAY OR CABLE TRAY WILL MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.

17. ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.

18. ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.

19. GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.

20. RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND; DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.

21. LIQUID–TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID–TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.

22. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION–TYPE AND APPROVED FOR THE LOCATION USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.

23. CABINETS, BOXES AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.

24. CABINETS, BOXES AND WIREWAYS TO MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.

25. WIREWAYS SHALL BE EPOXY–COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARD; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.

26. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR EPOXY–COATED SHEET STEEL, SHALL MEET OR EXCEED UL 50, AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.

27. METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY–COATED, OR NON–CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.

28. NONMETALLIC RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.

29. THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.

30. THE SUBCONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROPERTY.

31. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.

32. CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.

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CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
2	12/16/24	CONSTRUCTION REVISED	CMC
1	11/20/24	ISSUED FOR CONSTRUCTION	CMC
0	11/04/24	ISSUED FOR REVIEW	JRV

SITE NUMBER:
CTFF750A

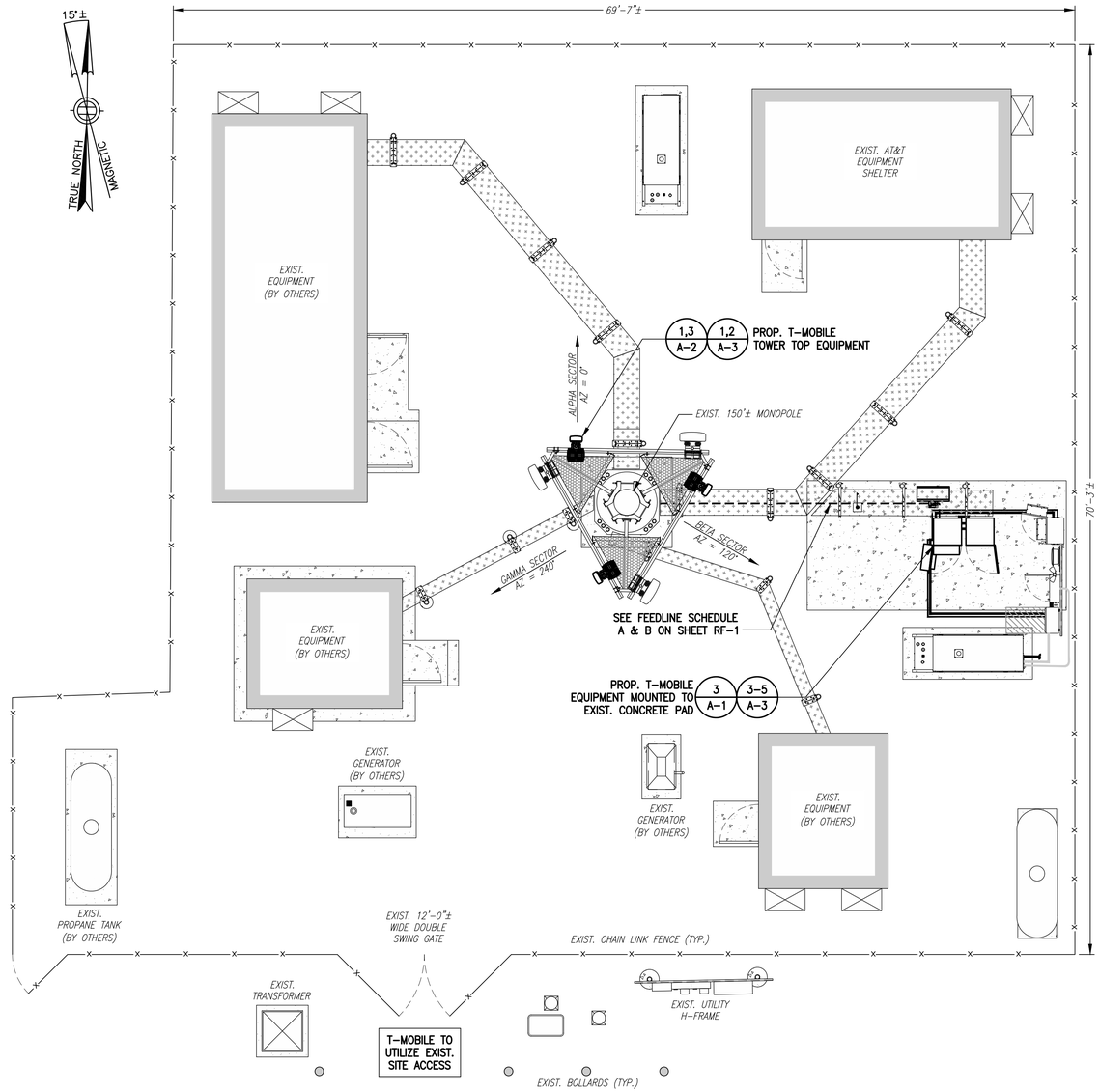
SITE ADDRESS:
29 BOGUS HILL ROAD
NEW FAIRFIELD, CT 06812-2801

SHEET TITLE
GENERAL NOTES

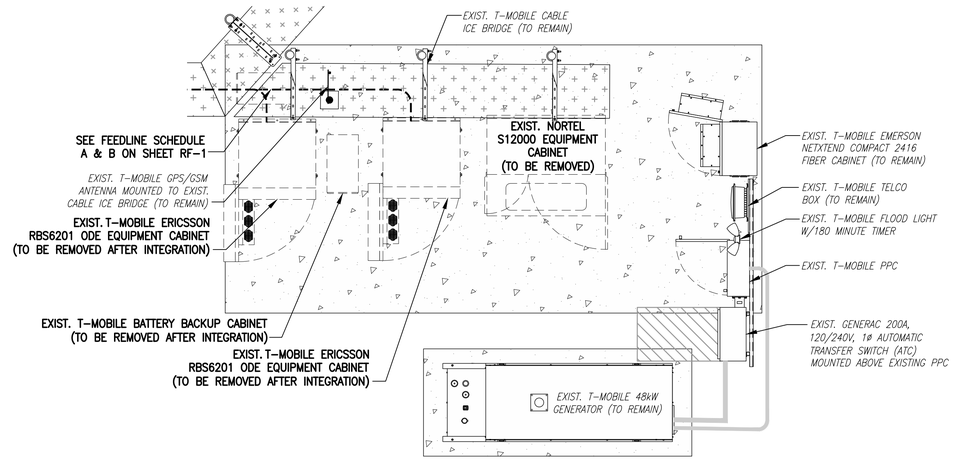
SHEET NUMBER
GN-1

1815.579

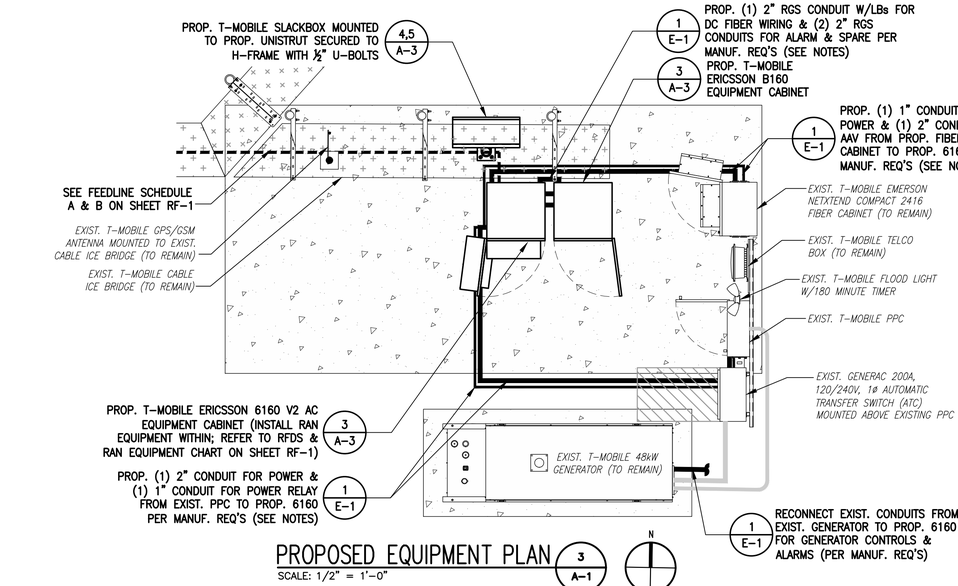
SPECIAL PRE-CONSTRUCTION WORK NOTE (SBA-PROVIDED TOWER STRUCTURAL ANALYSIS SPECIAL EQUIPMENT INSTALLATION REQUIREMENTS):
GENERAL CONTRACTOR SHALL FURNISH AND INSTALL ALL SPECIAL OR SUPPLEMENTAL ADDITIONAL TOWER-MOUNTED EQUIPMENT PER RECOMMENDATIONS FROM SBA-PROVIDED TOWER STRUCTURAL ANALYSIS FOR ANY SPECIAL SHIELDING OF TOWER TOP EQUIPMENT AND FOR ANY SPECIAL FEEDLINE BUNDLING OR RELOCATION.



COMPOUND PLAN 1 A-1
SCALE: 3/16" = 1'-0"
0 5'-4" 10'-8" 16'-0"



EXISTING EQUIPMENT PLAN 2 A-1
SCALE: 3/8" = 1'-0"
0 2'-8" 5'-4" 8'-0"



PROPOSED EQUIPMENT PLAN 3 A-1
SCALE: 1/2" = 1'-0"
0 2'-8" 5'-4" 8'-0"

CONDUIT NOTES:

1. ALL EXISTING CONDUITS FROM EXISTING RBS6201 ODE & BATTERY CAB SHALL BE REMOVED.
2. ALL NEW CONDUITS SHALL BE ROUTED UNDERGROUND TO AVOID TRIP HAZARD, WHERE APPLICABLE.
3. ALL UNDERGROUND CONDUITS SHALL BE PVC. ALL ABOVEGROUND CONDUITS SHALL BE RGS.

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CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
2	12/16/24	CONSTRUCTION REVISED	CMC
1	11/20/24	ISSUED FOR CONSTRUCTION	CMC
0	11/04/24	ISSUED FOR REVIEW	JRV

SITE NUMBER:
CTFF750A

SITE ADDRESS:
29 BOGUS HILL ROAD
NEW FAIRFIELD, CT 06812-2801

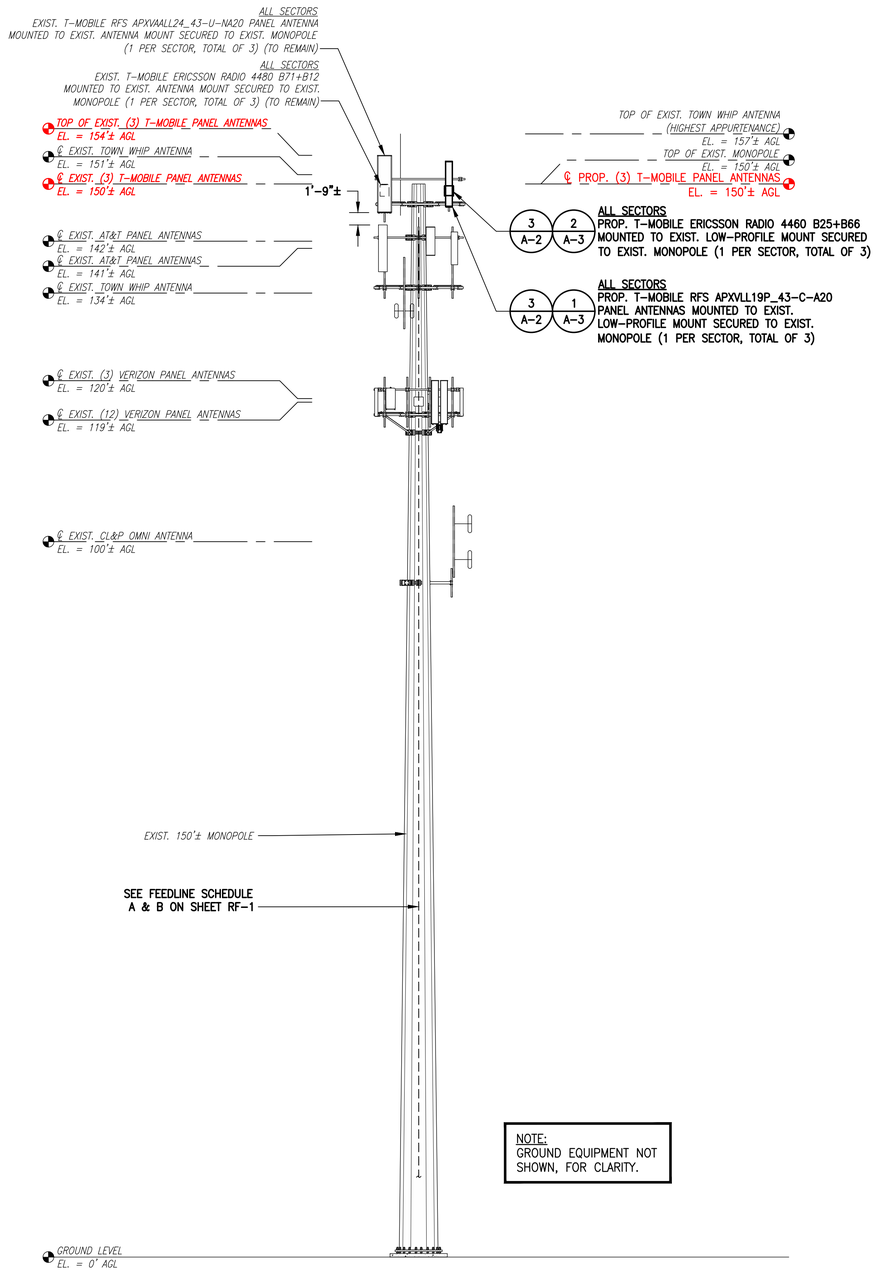
SHEET TITLE
COMPOUND & EQUIPMENT PLANS

SHEET NUMBER
A-1

1815.579

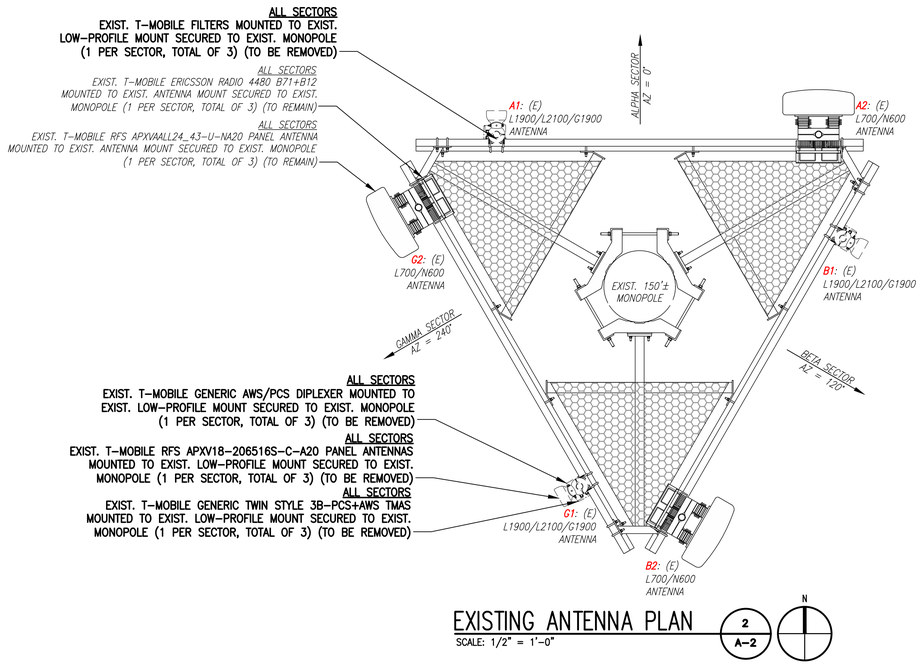
SPECIAL PRE-CONSTRUCTION WORK NOTE (SBA-PROVIDED TOWER STRUCTURAL ANALYSIS SPECIAL EQUIPMENT INSTALLATION REQUIREMENTS):
GENERAL CONTRACTOR SHALL FURNISH AND INSTALL ALL SPECIAL OR SUPPLEMENTAL ADDITIONAL TOWER-MOUNTED EQUIPMENT PER RECOMMENDATIONS FROM SBA-PROVIDED TOWER STRUCTURAL ANALYSIS FOR ANY SPECIAL SHIELDING OF TOWER TOP EQUIPMENT AND FOR ANY SPECIAL FEEDLINE BUNDLING OR RELOCATION.

RAD CENTER NOTE:
T-MOBILE ANTENNA AND MOUNT RAD CENTER SHOWN IN ELEVATION ARE ACCORDING TO STRUCTURAL ANALYSIS DONE BY OTHERS AND MAY DIFFER FROM RAD CENTER ON RFDS PROVIDED BY T-MOBILE.

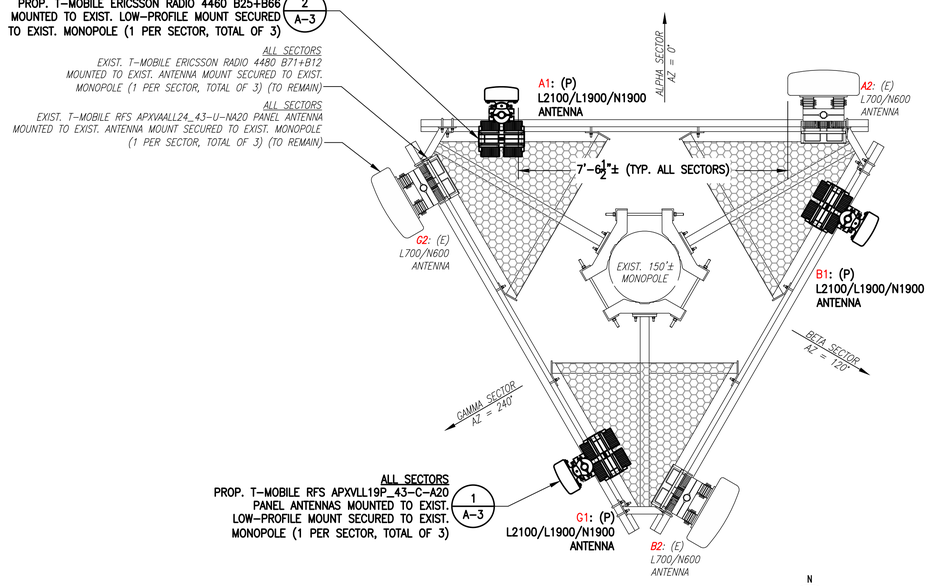


TOWER ELEVATION 1 A-2
SCALE: 1" = 10'-0"
0 10'-0" 20'-0" 30'-0"

NOTE:
GROUND EQUIPMENT NOT SHOWN, FOR CLARITY.



EXISTING ANTENNA PLAN 2 A-2
SCALE: 1/2" = 1'-0"



PROPOSED ANTENNA PLAN 3 A-2
SCALE: 1/2" = 1'-0"

NOTE:
VERIFY PROPOSED AZIMUTHS WITH RF ENGINEER PRIOR TO INSTALLATION.

ANTENNA STATUS LEGEND:

EMPTY – EMPTY PIPE

EXIST. – EXISTING
PROP. – INSTALL
(F) – FUTURE

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LICENSED
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APPROVED BY: JMT

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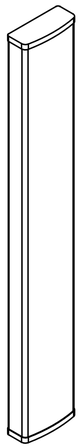
SITE ADDRESS:
29 BOGUS HILL ROAD
NEW FAIRFIELD, CT 06812-2801

SHEET TITLE
TOWER ELEVATION & ANTENNA PLANS

SHEET NUMBER
A-2

1815.579



RFS APXVLL19P_43-C-A20 ANTENNA

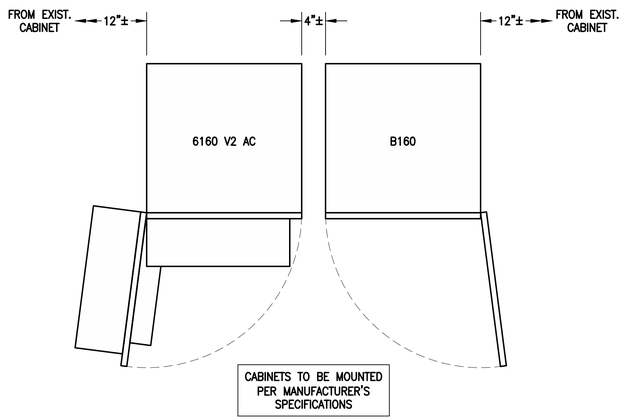
DIMENSIONS: 75.8"H x 11.3"W x 4.6"D
WEIGHT: 49.3 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3
SECTORS: ALPHA, BETA, GAMMA

ANTENNA DETAILS — 1 / A-3
SCALE: N.T.S.

ERICSSON RADIO 4460 B25+B66

DIMENSIONS: 17.0"H x 15.1"W x 11.9"D
WEIGHT: 104.0 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3
SECTORS: ALPHA, BETA, GAMMA

RADIO DETAIL — 2 / A-3
SCALE: N.T.S.



ERICSSON 6160 V2 AC EQUIPMENT CABINET

DIMENSIONS: 63.25"H x 26.0"W x 34.0"D
QUANTITY: TOTAL OF 1

ERICSSON B160 BATTERY CABINET

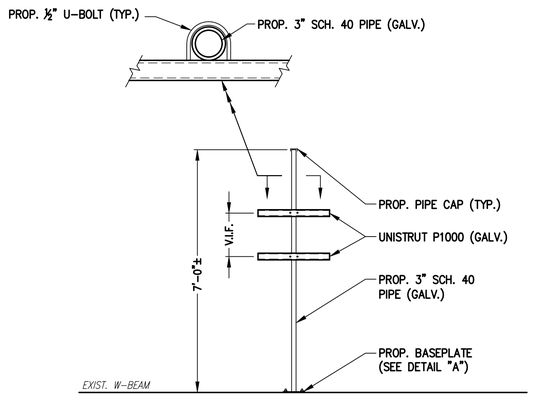
DIMENSIONS: 63.25"H x 26.0"W x 26.0"D
QUANTITY: TOTAL OF 1

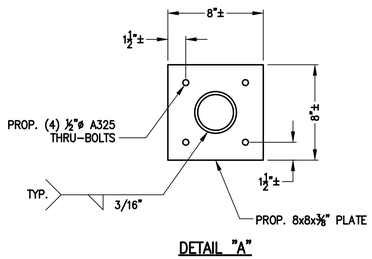
EQUIPMENT DETAIL — 3 / A-3
SCALE: N.T.S.

SLACKBOX – HOFFMAN A36R3012HCR NEMA 3R ENCLOSURE

DIMENSIONS: 36.0"H x 30.0"W x 12.0"D
QUANTITY: TOTAL OF 1

SSC DETAILS — 4 / A-3
SCALE: N.T.S.





DETAIL "A"

H-FRAME DETAIL — 5 / A-3
SCALE: N.T.S.

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SHEET TITLE
SITE DETAILS

SHEET NUMBER
A-3

1815.579

FINAL ANTENNA CONFIGURATION

SECTOR	ANTENNA	RAD CENTER	AZIMUTH (TRUE NORTH)	MECHANICAL DOWNTILT	ELECTRICAL DOWNTILT	BAND	SBTS/TMAS/MULTIPLEXERS/RADIOS	CABLES
ALPHA	A1 RFS APXVLL19P_43-C-A20	150'± AGL	0°	–	–	L2100/L1900/N1900	ERICSSON RADIO 4460 B25+B66	(P) (2) 2" (6x24) HCS FIBER CABLES (70m±)
	A2 *RFS APXVAALL24_43-U-NA20*	*150'± AGL*	*0°*	–	–	*L700/N600*	*ERICSSON RADIO 4480 B71+B85*	
BETA	B1 RFS APXVLL19P_43-C-A20	150'± AGL	120°	–	–	L2100/L1900/N1900	ERICSSON RADIO 4460 B25+B66	
	B2 *RFS APXVAALL24_43-U-NA20*	*150'± AGL*	*120°*	–	–	*L700/N600*	*ERICSSON RADIO 4480 B71+B85*	
GAMMA	G1 RFS APXVLL19P_43-C-A20	150'± AGL	240°	–	–	L2100/L1900/N1900	ERICSSON RADIO 4460 B25+B66	
	G2 *RFS APXVAALL24_43-U-NA20*	*150'± AGL*	*240°*	–	–	*L700/N600*	*ERICSSON RADIO 4480 B71+B85*	

CABLE NOTE: (E) (3) 1-5/8" COAXIAL CABLES & (1) 2" (6x24) HCS FIBER CABLE TO BE REMOVED. SEE FEEDLINE SCHEDULE A & B BELOW.

NOTE: RFDS REV5 – 10/25/24

RAD CENTER NOTE:
T-MOBILE ANTENNA RAD CENTER SHOWN IN ABOVE SCHEDULE IS ACCORDING TO RFDS PROVIDED BY T-MOBILE AND MIGHT DIFFER FROM ACTUAL ANTENNA RAD CENTER ON STRUCTURAL ANALYSIS.

FEEDLINE SCHEDULE

SCHEDULE	FEEDLINES	LOCATION
A	*EXISTING TO REMAIN:* *(1) ½" COAXIAL CABLE FOR GPS ANTENNA* *EXISTING TO BE REMOVED:* *(3) 1-5/8" COAXIAL CABLES* *(1) 2" (6x24) HCS FIBER CABLE*	ROUTED PER STRUCTURAL ANALYSIS
B	PROPOSED: (2) 2" (6x24) HCS FIBER CABLES (70m±)	

NOTE:
EXISTING T-MOBILE EQUIPMENT FEEDLINE INVENTORY BASED ON OBSERVED FIELD CONDITIONS. RFDS AND FEEDLINE LEASING ENTITLEMENTS MAY DIFFER.

RAN EQUIPMENT

CABINET	EXISTING	PROPOSED
EXIST. ERICSSON RBS6201 ODE EQUIPMENT CABINET (TO BE REMOVED)	*(1) BB 6630* *(1) DUG20* *(6) RUS01 B2* *(6) RUS01 B4*	N/A
EXIST. ERICSSON RBS6201 ODE EQUIPMENT CABINET (TO BE REMOVED)	*(1) RP 6651* *(1) PSU 4813 vR4A*	N/A
PROP. ERICSSON 6160 V2 AC EQUIPMENT CABINET	*N/A*	*(1) BB 6630 (RELOCATED)* *(1) RP 6651 (RELOCATED)* CSR IXRe V2 (GEN2)

NOTE:
RAN EQUIPMENT IS BASED ON RFDS REV5 DATED 10/25/24.

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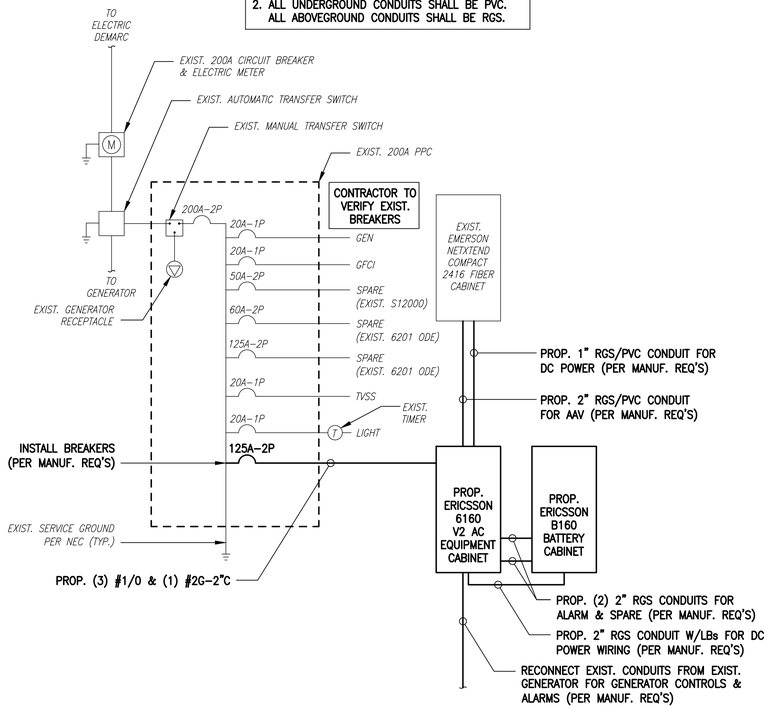
SHEET TITLE
RF DATA

SHEET NUMBER
RF-1

1815.579

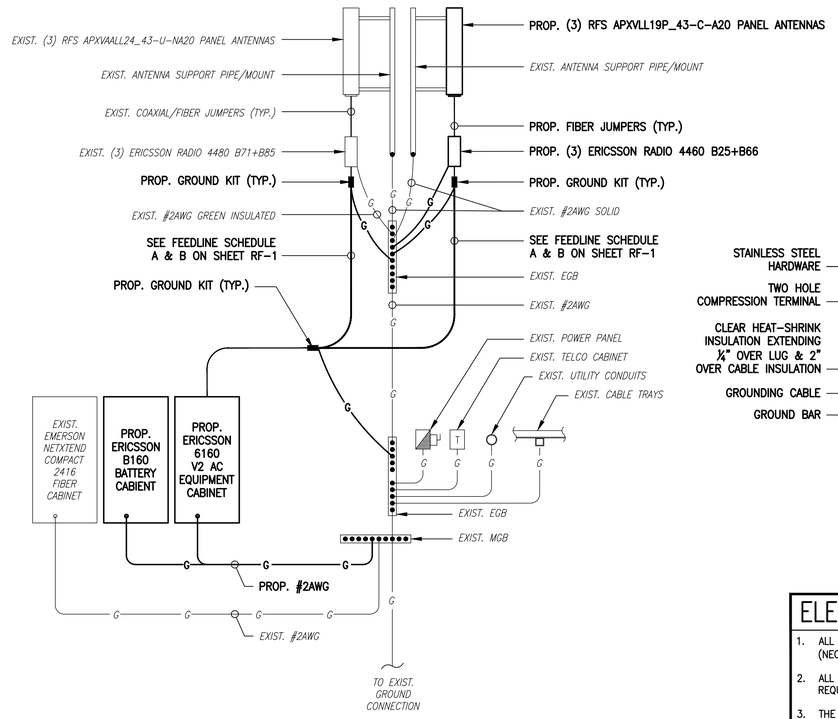
CONDUIT NOTES:

1. ALL CONDUITS SHALL BE ROUTED UNDERGROUND TO AVOID TRIP HAZARD, WHERE APPLICABLE.
2. ALL UNDERGROUND CONDUITS SHALL BE PVC. ALL ABOVEGROUND CONDUITS SHALL BE RGS.



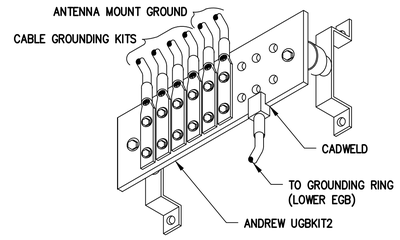
ONE–LINE DIAGRAM

SCALE: NOT TO SCALE — 1 / E–1



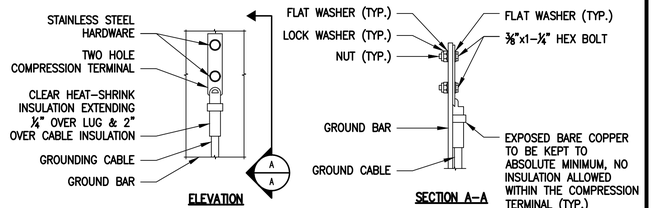
GROUNDING RISER DIAGRAM

SCALE: NOT TO SCALE — 2 / E–1



GROUND BAR (EGB)

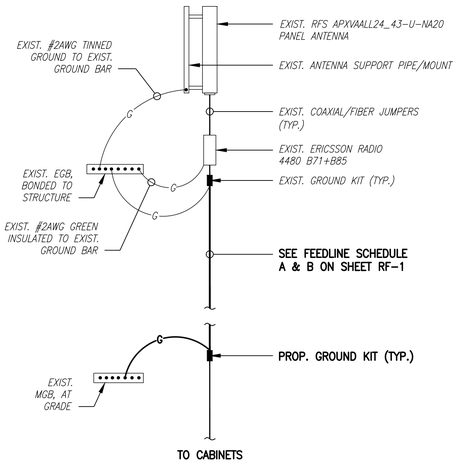
SCALE: NOT TO SCALE — 4 / E–1



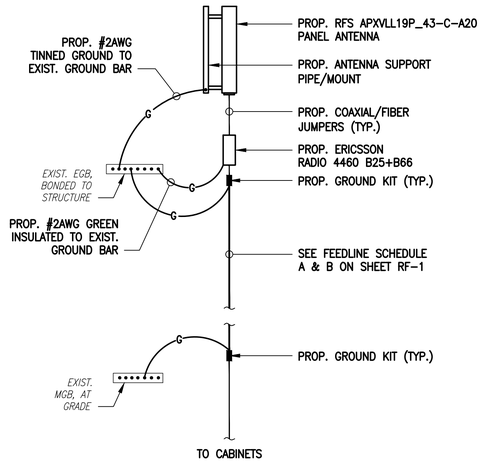
NOTES:
1. "DOUBLING UP" OR "STACKING" OF CONNECTIONS IS NOT PERMITTED.
2. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.
3. CADWELD DOWNLEADS FROM UPPER EGB, LOWER EGB, & MGB.

TYPICAL GROUND BAR CONNECTIONS DETAIL

SCALE: NOT TO SCALE — 5 / E–1



L700/N600 ANTENNA



L2100/L1900/N1900 ANTENNA

COAX CABLE CONNECTION AND GROUNDING DETAIL

SCALE: NOT TO SCALE — 3 / E–1

ELECTRICAL & GROUNDING NOTES

1. ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC) AS WELL AS APPLICABLE STATE AND LOCAL CODES.
2. ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED AND PROCURED PER SPECIFICATION REQUIREMENTS.
3. THE ELECTRICAL WORK INCLUDES ALL LABOR AND MATERIAL DESCRIBED BY DRAWINGS AND SPECIFICATION INCLUDING INCIDENTAL WORK TO PROVIDE COMPLETE OPERATING AND APPROVED ELECTRICAL SYSTEM.
4. GENERAL CONTRACTOR SHALL PAY FEES FOR PERMITS, AND IS RESPONSIBLE FOR OBTAINING SAID PERMITS AND COORDINATION OF INSPECTIONS.
5. ELECTRICAL AND TELCO WIRING OUTSIDE A BUILDING AND EXPOSED TO WEATHER SHALL BE IN WATER TIGHT GALVANIZED RIGID STEEL CONDUITS OR SCHEDULE 80 PVC (AS PERMITTED BY CODE) AND WHERE REQUIRED IN LIQUID TIGHT FLEXIBLE METAL OR NONMETALLIC CONDUITS.
6. BURIED CONDUIT SHALL BE SCHEDULE 40 PVC.
7. ELECTRICAL WIRING SHALL BE COPPER WITH TYPE XHHW, THWN, OR THHN INSULATION.
8. RUN ELECTRICAL CONDUIT OR CABLE BETWEEN ELECTRICAL UTILITY DEMARCATION POINT AND PROJECT OWNER CELL SITE PPC AS INDICATED ON THIS DRAWING. PROVIDE FULL LENGTH PULL ROPE. COORDINATE INSTALLATION WITH UTILITY COMPANY.
9. RUN TELCO CONDUIT OR CABLE BETWEEN TELEPHONE UTILITY DEMARCATION POINT AND PROJECT OWNER CELL SITE TELCO CABINET AND BTS CABINET AS INDICATED ON THIS DRAWING PROVIDE FULL LENGTH PULL ROPE IN INSTALLED TELCO CONDUIT. PROVIDE GREENLEE CONDUIT MEASURING TAPE AT EACH END.
10. WHERE CONDUIT BETWEEN BTS AND PROJECT OWNER CELL SITE PPC AND BETWEEN BTS AND PROJECT OWNER CELL SITE TELCO SERVICE CABINET ARE UNDERGROUND USE PVC, SCHEDULE 40 CONDUIT. ABOVE THE GROUND PORTION OF THESE CONDUITS SHALL BE PVC CONDUIT.
11. ALL EQUIPMENT LOCATED OUTSIDE SHALL HAVE NEMA 3R ENCLOSURE.
12. PPC SUPPLIED BY PROJECT OWNER.
13. GROUNDING SHALL COMPLY WITH NEC ART. 250. ADDITIONALLY, GROUNDING, BONDING AND LIGHTNING PROTECTION SHALL BE DONE IN ACCORDANCE WITH "T–MOBILE BTS SITE GROUNDING STANDARDS".
14. GROUND COAXIAL CABLE SHIELDS MINIMUM AT BOTH ENDS USING MANUFACTURERS COAX CABLE GROUNDING KITS SUPPLIED BY PROJECT OWNER.
15. USE #6 COPPER STRANDED WIRE WITH GREEN COLOR INSULATION FOR ABOVE GRADE GROUNDING (UNLESS OTHERWISE SPECIFIED) AND #2 SOLID TINNED BARE COPPER WIRE FOR BELOW GRADE GROUNDING AS INDICATED ON THE DRAWING.
16. ALL GROUND CONNECTIONS TO BE BURNDY HYGROUND COMPRESSION TYPE CONNECTORS OR CADWELD EXOTHERMIC WELD. DO NOT ALLOW BARE COPPER WIRE TO BE IN CONTACT WITH GALVANIZED STEEL.
17. ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE, EXCEPT AS OTHERWISE INDICATED. GROUNDING LEADS SHOULD NEVER BE BENT AT RIGHT ANGLE. ALWAYS MAKE AT LEAST 12" RADIUS BENDS. #6 WIRE CAN BE BENT AT 6" RADIUS WHEN NECESSARY. BOND ANY METAL OBJECTS WITHIN 6 FEET OF PROJECT OWNER EQUIPMENT OR CABINET TO MASTER GROUND BAR OR GROUNDING RING.
18. CONNECTIONS TO GROUND BARS SHALL BE MADE WITH TWO HOLE COMPRESSION TYPE COPPER LUGS. APPLY OXIDE INHIBITING COMPOUND TO ALL LOCATIONS.
19. APPLY OXIDE INHIBITING COMPOUND TO ALL COMPRESSION TYPE GROUND CONNECTIONS.
20. CONTRACTOR SHALL PROVIDE AND INSTALL OMNI DIRECTIONAL ELECTRONIC MARKER SYSTEM (EMS) BALLS OVER EACH GROUND ROD AND BONDING POINT BETWEEN EXIST. TOWER/MONOPOLE GROUNDING RING AND EQUIPMENT GROUNDING RING.
21. CONTRACTOR SHALL TEST COMPLETED GROUND SYSTEM AND RECORD RESULTS FOR PROJECT CLOSE–OUT DOCUMENTATION. 5 OHMNS MINIMUM RESISTANCE REQUIRED.
22. CONTRACTOR SHALL CONDUCT ANTENNA, COAX, AND LNA RETURN–LOSS AND DISTANCE–TO–FAULT MEASUREMENTS (SWEEP TESTS) AND RECORD RESULTS FOR PROJECT CLOSE OUT.

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