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

October 23, 2025

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

RE: Notice of Exempt Modification
277 Huckleberry Hill Rd. Avon, CT 06013
41.788133
-72.918254
T-Mobile #: CTHA510A

Dear Ms. Bachman:

T-Mobile currently maintains three (3) antennas at the 80-foot level of the existing 130-foot Monopole Tower at 277 Huckleberry Hill Rd. Avon, CT. The 130-foot tower is owned by SBA 2012 TC Assets, LLC. The property is owned by Town of Avon. T-Mobile now intends to replace three (3) antennas along with the equipment listed below. The new equipment will be installed at the 80-foot level of the tower.

Planned Modifications:

TOWER

Remove:
- (3) RFS APXVAR18_43-C-NA20 antennas
- (12) 7/8" coax cables

Install New:
- (3) Ericsson 840590966 antennas
- (3) Ericsson AIR 6419_B41 antennas
- (3) Ericsson 4460 B25+B66 RRUs
- (3) Ericsson 4449 B71+B85
- (3) 2" fiber cables

Existing Equipment to Remain:
- (1) ½" GPS coax cable

Reserved Entitlements:
- (5) 7/8" coax

GROUND

Remove:

- (1) Ericsson RBS 6201 ODE V1 equipment cabinet
- (6) Ericsson 4415 RRUs
- (3) Generic AWS/PCS Diplexers
- (3) Ericsson 4449 RRUs
- (1) T-Mobile Backup Battery cabinet

Install New:

- (1) T-Mobile Slackbox
- (1) Ericsson 6160 V2 AC equipment cabinet
- (1) Ericsson B160 battery cabinet

Existing Equipment to Remain:

- (1) diesel generator
- (1) GPS
- (1) Emerson Nextend Compact 2416 fiber cabinet
- (1) PPC

The facility was approved by the Connecticut Siting Council on January 24, 205 under Docket 297. 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 Avon's Town Manager, Brandon Robertson, and Town of Avon's Director of Planning and Community Development, Hiram Peck III. (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
Sr. Mgr. 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: Brandon Robertson, Town Manager / with attachments
The Town of Avon, 60 West Main St. Avon, CT 06001
Hiram Peck III, Director of Planning and Community Development / with attachments
The Town of Avon, 60 West Main St. Avon, CT 06001

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	Connecticut Siting Council January 24, 2005 Docket # 297
Exhibit 6	EME Report	Centerline 10/10/25
Exhibit 7	Structural Analysis	TES 9/5/25
Exhibit 8	Mount Analysis	TES 8/11/25
Exhibit 9	Construction Drawings	Chappell Engineering 9/17/25

Exhibit 1

SBA Network Services, LLC

To: CONNECTICUT SITING COUNCIL 129986

Check Number: 2191094
Date: 10/16/2025

Invoice Number	Invoice Date	Description	Gross Amount	Taxes Withheld	Net Amount
PRSF10152506	10/17/2025	535051_CTHA510A_CSC fee	$ 625.00	$ 0.00	$ 625.00
			$ 625.00	$ 0.00	$ 625.00

SBA Network Services, LLC
8051 Congress Avenue
Boca Raton, FL 33487-1307

(561) 981-7537

Wells Fargo Bank

061209756

2191094

129986

DATE: 10/16/2025

AMOUNT: $ 625.00

Void After 120 Days

Six Hundred Twenty Five Dollars And 00 Cents

Pay to the Order of:

CONNECTICUT SITING COUNCIL
ACCOUNTS RECEIVABLE
TEN FRANKLIN SQUARE

NEW BRITAIN, CT 06051

⑈2191094⑈ ⑆061209756⑆ 2079900424566⑈

Exhibit 2

After printing this label:
CONSIGNEE COPY - PLEASE PLACE IN FRONT OF POUCH
1. Fold the printed page along the horizontal line.
2. Place label in shipping pouch and affix it to your shipment.

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

SHIP DATE: 23OCT25
ACTWGT: 1.00 LB
CAD: 255382542/INET4535

BILL SENDER

TO **HIRAM PECK III**
DIRECTOR OF PLANNING
60 WEST MAIN ST

AVON CT 06001
(508) 614-0389
INV:
PO:

REF: 10-56-92009-6089
DEPT:

58HJ4/008C/59F2

FedEx Express

J25402509240 1UV

TRK# 0201 **8854 2933 7029**

MON - 27 OCT 5:00P
**** 2DAY ****

SP EHTA

06001

CT-US BDL

After printing this label:
CONSIGNEE COPY - PLEASE PLACE IN FRONT OF POUCH
1. Fold the printed page along the horizontal line.
2. Place label in shipping pouch and affix it to your shipment.

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.

Exhibit 3

Property at 00277 HUCKLEBERRY HILL RD | Prop ID 2810277 | Printed 14-Feb-2019 6:30 PM | Design and Layout (C) Right/Angles

BAAX

Administrative Information

Owner name: AVON TOWN OF
Second name:
Address: 60 WEST MAIN STREET
City/state: AVON CT Zip: 06001

Location Information

Map: 016 Clerk map:
Lot: 2810277 Neigh.: Zone: R40 Vol: 80 Page: 20

Assessments

Assmt category	Qty	Amount
Resident Excess	73.40	385,350
Resident Outbldg	3.00	28,460

Exemptions

Exempt	Cat	Amount

Last sale

Sale date: 19-Dec-1972
Sale price:
Sale valid:

Values

Mkt value :
Cost value: 591,157

Summary

Total assessments	413,810
Total exemptions	
Net assessment	413,810

Utilities

Water	None
Sewer	None
Gas	None

Sales ratios

Cost/sale :
Mkt/sale :
Assmt/sale:

Land Information

Type	Use	Acres/SqFt	Rate	Total	Infl Fact	Value	70% Value
RES	12	73.400	7,500	550,500		550,500	385,350
Residual		3,197,304					
		73.400 acres		Total land value		550,500	385,350

Outbuilding Information

Description	Wid	Len	Area	Rate	Year	Cnd	RCN	Depr	Value
C18 1 story frame	16	28	448	80.75	1957	C	36,176	50	18,090
RG1 Frame or Con Block Detach Garage	30	40	1,200	28.85		C	34,620	50	17,310
C84 Canopy	16	42	672	15.63	1992	C	10,503	50	5,250
			Value at 70%	28,455			Value at 100%		40,650

No sketch for this property

AVON LANDFILL

Exhibit 4

277 Huckleberry Hill

Search Results

Parcel Details

AVON TOWN OF

60 WEST MAIN STREET
AVON, 06001

Parcel ID: 2810277
Sale Price: $

Links
Parcel Details
Google Map
Bing Bird's Eye
Abutter Distance:
Adjacent
Adjacent
50 ft
100 ft
200 ft
300 ft
400 ft
500 ft
Find Abutters
Clear Abutters

Abutters
Add Parcel
Remove Parcel
Print Labels
Export List

Parcel Number 2810
Property Type PARC
BERRY HILL RD
Zone R40
Volume 80
Page 20
Owner AVON TOWN OF
Owner Address 60 WEST MAIN STREET
City AVON
State CT
ZIP 06001
GISPin 2810277
RecordCard http://www.avonassessor.com/prop

About
Layers
Identify

Email Map Link

lat:41.7917, long:-72.9075

Tighe&Bond

No sketch for this property

AVON LANDFILL

Copy and paste the following string into an email to link to the current map view:

Close

-->

lat:41.7917, long:-72.9075

Exhibit 5

Connecticut Siting Council

Decisions

DOCKET NO. 297 – Sprint Spectrum, L.P. application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility in Avon, Connecticut.	} } }	Connecticut Siting Council January 24, 2005

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 Public Need, as provided by General Statutes **§** 16-50k, be issued to Sprint Spectrum, L.P. for the construction, maintenance and operation of a wireless telecommunications facility at 277 Huckleberry Hill Road, Avon, 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 laminated wood monopole and shall be constructed no taller than 100 feet above ground level to provide telecommunications services to both public and private entities. The location of the tower and equipment compound shall be adjusted to avoid cutting down an existing 33" dbh tree.
2. 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 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, flush-mounted antennas, 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.

3.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.
4.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.
5.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.
6.The Certificate Holder shall provide reasonable space on the tower for no compensation for any municipal antennas, provided such antennas are compatible with the structural integrity of the tower.
7.If the facility does not initially provide wireless services within one year of completion of construction or 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.
8.Any antenna that becomes obsolete and ceases to function shall be removed within 60 days after such antennas become obsolete and cease to function.
9.Unless otherwise approved by the Council, this Decision and Order shall be void if the facility authorized herein is not operational within one year of the effective date of this Decision and Order or within one year after all appeals to this Decision and Order have been resolved. Any request for extensions of the period shall be filed with the Council not later than sixty days prior to expiration date of the Certificate and shall be served on all parties and intervenors, as listed in the service list. Any proposed modifications to this Decision and Order shall likewise be so served.
10.In accordance with Section 16-50j-77 of the Regulations of Connecticut State Agencies, the Certificate Holder shall provide the Council with notice in writing two weeks prior to the commencement of construction activities at the approved site. In addition, the Certificate Holder shall provide the Council with written notice of the completion of construction.

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 Hartford Courant, Valley News, and the Farmington Valley Post.

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 to this proceeding are:

Applicant	**Its Representative**
Sprint Spectrum, L.P. d/b/a Sprint PCS	Thomas J. Regan, Esq. Brown Rudnick Berlack Israels LLP CityPlace I, 38th Floor 185 Asylum Street Hartford, CT 06103-3402 (860) 509-6522 (860) 509-6501 – fax

Content Last Modified on 1/28/2005 4:44:58 PM

Exhibit 6

Radio Frequency Exposure Analysis Report

October 10, 2025

T-Mobile

Site Name: SBA Avon Monopole
Site ID: CTHA510A
Site Address: 277 Huckleberry Hill Rd, Avon, CT 06013

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

Signed 10 October 2025

Site Compliance Summary

T-Mobile Compliance Status:	Compliant
Cumulative Calculated Power Density (Ground Level):	137.75299 µW/cm^2
Cumulative General Population % MPE (Ground Level):	13.77610%

October 10, 2025

T-Mobile
Attn: Meg DeFeo
420 Northborough Rd Central
Marlborough, MA 02379

RF Exposure Analysis for Site: **SBA Avon Monopole**

Centerline was contracted to analyze the proposed T-Mobile facility at **277 Huckleberry Hill Rd, Avon, CT 06013** 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.

CENTERLINE

Maximum Calculated Cumulative Power Density (Location: approximately 22' northwest 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	KATHREIN 840590966	700	13.15	80.00	2.00	40.00	1652.30	0.00000	466.67	0.00000
T-Mobile A 1	KATHREIN 840590966	600	12.45	80.00	4.00	40.00	2812.68	0.00000	400.00	0.00000
T-Mobile A 1	KATHREIN 840590966	1900	15.45	80.00	4.00	40.00	5612.03	0.00000	1000.00	0.00000
T-Mobile A 1	KATHREIN 840590966	1900	15.45	80.00	4.00	40.00	5612.03	0.00000	1000.00	0.00000
T-Mobile A 1	KATHREIN 840590966	2100	16.15	80.00	4.00	60.00	9890.34	0.00000	1000.00	0.00000
T-Mobile A 2	ERICSSON SON_AIR6419	2500	22.05	80.00	2.00	120.00	38477.89	0.43805	1000.00	0.04381
T-Mobile B 3	KATHREIN 840590966	700	13.15	80.00	2.00	40.00	1652.30	0.00026	466.67	0.00006
T-Mobile B 3	KATHREIN 840590966	600	12.45	80.00	4.00	40.00	2812.68	0.00048	400.00	0.00012
T-Mobile B 3	KATHREIN 840590966	1900	15.45	80.00	4.00	40.00	5612.03	0.00043	1000.00	0.00004
T-Mobile B 3	KATHREIN 840590966	1900	15.45	80.00	4.00	40.00	5612.03	0.00043	1000.00	0.00004
T-Mobile B 3	KATHREIN 840590966	2100	16.15	80.00	4.00	60.00	9890.34	0.00069	1000.00	0.00007
T-Mobile B 4	ERICSSON SON_AIR6419	2500	22.05	80.00	2.00	120.00	38477.89	69.90681	1000.00	6.99068
T-Mobile C 5	KATHREIN 840590966	700	13.15	80.00	2.00	40.00	1652.30	0.00031	466.67	0.00007
T-Mobile C 5	KATHREIN 840590966	600	12.45	80.00	4.00	40.00	2812.68	0.00068	400.00	0.00017
T-Mobile C 5	KATHREIN 840590966	1900	15.45	80.00	4.00	40.00	5612.03	0.00059	1000.00	0.00006
T-Mobile C 5	KATHREIN 840590966	1900	15.45	80.00	4.00	40.00	5612.03	0.00059	1000.00	0.00006
T-Mobile C 5	KATHREIN 840590966	2100	16.15	80.00	4.00	60.00	9890.34	0.00072	1000.00	0.00007
T-Mobile C 6	ERICSSON SON_AIR6419	2500	22.05	80.00	2.00	120.00	38477.89	67.37821	1000.00	6.73782
Unknown A 7	GENERIC OMNI 12FT	850	8.96	135.00	1.00	25.00	196.76	0.00001	566.67	0.00000
Unknown A 8	GENERIC OMNI 12FT	850	8.96	135.00	1.00	25.00	196.76	0.00001	566.67	0.00000
Unknown B 9	GENERIC PANEL 4FT	700	11.30	120.00	4.00	40.00	2158.34	0.00000	466.67	0.00000
Unknown B 10	GENERIC PANEL 4FT	850	11.52	120.00	4.00	40.00	567.62	0.00000	566.67	0.00000
Unknown B 11	GENERIC PANEL 6FT	1900	15.84	120.00	4.00	40.00	1534.83	0.00000	1000.00	0.00000
Unknown B 12	GENERIC PANEL 6FT	2100	16.39	120.00	4.00	40.00	1742.05	0.00000	1000.00	0.00000
Unknown C 13	GENERIC PANEL 4FT	700	11.30	120.00	4.00	40.00	539.59	0.00021	466.67	0.00005
Unknown C 13	GENERIC PANEL 4FT	850	11.52	120.00	4.00	40.00	567.62	0.00020	566.67	0.00004
Unknown C 14	GENERIC PANEL 6FT	1900	15.84	120.00	4.00	40.00	1534.83	0.00018	1000.00	0.00002
Unknown C 15	GENERIC PANEL 6FT	2100	16.39	120.00	4.00	40.00	1742.05	0.00013	1000.00	0.00001
Unknown D 16	GENERIC PANEL 4FT	700	11.30	120.00	4.00	40.00	539.59	0.00014	466.67	0.00003
Unknown D 16	GENERIC PANEL 4FT	850	11.52	120.00	4.00	40.00	567.62	0.00015	566.67	0.00003
Unknown D 17	GENERIC PANEL 6FT	1900	15.84	120.00	4.00	40.00	1534.83	0.00015	1000.00	0.00002
Unknown D 18	GENERIC PANEL 6FT	2100	16.39	120.00	4.00	40.00	1742.05	0.00021	1000.00	0.00002
Verizon A 19	GENERIC PANEL 2.5FT	3700	23.45	110.00	2.00	100.00	22130.95	0.00023	1000.00	0.00002
Verizon A 20	GENERIC PANEL 1FT	3600	8.50	110.00	4.00	5.00	35.40	0.00000	1000.00	0.00000
Verizon A 21	GENERIC PANEL 6FT	700	12.38	110.00	2.00	40.00	691.93	0.00000	466.67	0.00000
Verizon A 21	GENERIC PANEL 6FT	850	12.67	110.00	2.00	40.00	739.71	0.00000	566.67	0.00000
Verizon A 21	GENERIC PANEL 6FT	1900	15.89	110.00	4.00	40.00	1552.60	0.00000	1000.00	0.00000
Verizon A 22	GENERIC PANEL 6FT	700	12.38	110.00	2.00	40.00	691.93	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 A 22	GENERIC PANEL 6FT	850	12.67	110.00	2.00	40.00	739.71	0.00000	566.67	0.00000
Verizon A 22	GENERIC PANEL 6FT	2100	16.44	110.00	4.00	40.00	1762.22	0.00000	1000.00	0.00000
Verizon B 23	GENERIC PANEL 2.5FT	3700	23.45	110.00	2.00	100.00	22130.95	0.00736	1000.00	0.00074
Verizon B 24	GENERIC PANEL 1FT	3600	8.50	110.00	4.00	5.00	35.40	0.00005	1000.00	0.00001
Verizon B 25	GENERIC PANEL 6FT	700	12.38	110.00	2.00	40.00	691.93	0.00012	466.67	0.00003
Verizon B 25	GENERIC PANEL 6FT	850	12.67	110.00	2.00	40.00	739.71	0.00011	566.67	0.00002
Verizon B 25	GENERIC PANEL 6FT	1900	15.89	110.00	4.00	40.00	1552.60	0.00021	1000.00	0.00002
Verizon B 26	GENERIC PANEL 6FT	700	12.38	110.00	2.00	40.00	691.93	0.00012	466.67	0.00003
Verizon B 26	GENERIC PANEL 6FT	850	12.67	110.00	2.00	40.00	739.71	0.00011	566.67	0.00002
Verizon B 26	GENERIC PANEL 6FT	2100	16.44	110.00	4.00	40.00	1762.22	0.00015	1000.00	0.00002
Verizon C 27	GENERIC PANEL 2.5FT	3700	23.45	110.00	2.00	100.00	22130.95	0.00719	1000.00	0.00072
Verizon C 28	GENERIC PANEL 1FT	3600	8.50	110.00	4.00	5.00	35.40	0.00004	1000.00	0.00000
Verizon C 29	GENERIC PANEL 6FT	700	12.38	110.00	2.00	40.00	691.93	0.00011	466.67	0.00002
Verizon C 29	GENERIC PANEL 6FT	850	12.67	110.00	2.00	40.00	739.71	0.00009	566.67	0.00002
Verizon C 29	GENERIC PANEL 6FT	1900	15.89	110.00	4.00	40.00	1552.60	0.00018	1000.00	0.00002
Verizon C 30	GENERIC PANEL 6FT	700	12.38	110.00	2.00	40.00	691.93	0.00011	466.67	0.00002
Verizon C 30	GENERIC PANEL 6FT	850	12.67	110.00	2.00	40.00	739.71	0.00009	566.67	0.00002
Verizon C 30	GENERIC PANEL 6FT	2100	16.44	110.00	4.00	40.00	1762.22	0.00026	1000.00	0.00003
AT&T A 31	GENERIC PANEL 6FT	700	12.33	90.00	4.00	40.00	684.01	0.00000	466.67	0.00000
AT&T A 31	GENERIC PANEL 6FT	850	12.62	90.00	4.00	40.00	731.24	0.00000	566.67	0.00000
AT&T A 31	GENERIC PANEL 6FT	1900	15.84	90.00	4.00	40.00	1534.83	0.00000	1000.00	0.00000
AT&T A 31	GENERIC PANEL 6FT	2100	16.39	90.00	4.00	40.00	1742.05	0.00000	1000.00	0.00000
AT&T A 31	GENERIC PANEL 6FT	2300	16.22	90.00	4.00	25.00	1046.98	0.00000	1000.00	0.00000
AT&T B 32	GENERIC PANEL 6FT	700	12.33	90.00	4.00	40.00	684.01	0.00037	466.67	0.00008
AT&T B 32	GENERIC PANEL 6FT	850	12.62	90.00	4.00	40.00	731.24	0.00035	566.67	0.00006
AT&T B 32	GENERIC PANEL 6FT	1900	15.84	90.00	4.00	40.00	1534.83	0.00033	1000.00	0.00003
AT&T B 32	GENERIC PANEL 6FT	2100	16.39	90.00	4.00	40.00	1742.05	0.00023	1000.00	0.00002
AT&T B 32	GENERIC PANEL 6FT	2300	16.22	90.00	4.00	25.00	1046.98	0.00032	1000.00	0.00003
AT&T C 33	GENERIC PANEL 6FT	700	12.33	90.00	4.00	40.00	684.01	0.00032	466.67	0.00007
AT&T C 33	GENERIC PANEL 6FT	850	12.62	90.00	4.00	40.00	731.24	0.00028	566.67	0.00005
AT&T C 33	GENERIC PANEL 6FT	1900	15.84	90.00	4.00	40.00	1534.83	0.00027	1000.00	0.00003
AT&T C 33	GENERIC PANEL 6FT	2100	16.39	90.00	4.00	40.00	1742.05	0.00039	1000.00	0.00004
AT&T C 33	GENERIC PANEL 6FT	2300	16.22	90.00	4.00	25.00	1046.98	0.00007	1000.00	0.00001
Dish A 34	GENERIC PANEL 6FT	600	12.33	70.00	4.00	30.00	513.00	0.00000	400.00	0.00000
Dish A 34	GENERIC PANEL 6FT	700	12.33	70.00	4.00	30.00	513.00	0.00000	466.67	0.00000
Dish A 34	GENERIC PANEL 6FT	1900	15.84	70.00	4.00	40.00	1534.83	0.00000	1000.00	0.00000
Dish A 34	GENERIC PANEL 6FT	2100	16.39	70.00	4.00	40.00	1742.05	0.00000	1000.00	0.00000
Dish B 35	GENERIC PANEL 6FT	600	12.33	70.00	4.00	30.00	513.00	0.00048	400.00	0.00012
Dish B 35	GENERIC PANEL 6FT	700	12.33	70.00	4.00	30.00	513.00	0.00048	466.67	0.00010

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
Dish B 35	GENERIC PANEL 6FT	1900	15.84	70.00	4.00	40.00	1534.83	0.00056	1000.00	0.00006
Dish B 35	GENERIC PANEL 6FT	2100	16.39	70.00	4.00	40.00	1742.05	0.00040	1000.00	0.00004
Dish C 36	GENERIC PANEL 6FT	600	12.33	70.00	4.00	30.00	513.00	0.00042	400.00	0.00010
Dish C 36	GENERIC PANEL 6FT	700	12.33	70.00	4.00	30.00	513.00	0.00042	466.67	0.00009
Dish C 36	GENERIC PANEL 6FT	1900	15.84	70.00	4.00	40.00	1534.83	0.00046	1000.00	0.00005
Dish C 36	GENERIC PANEL 6FT	2100	16.39	70.00	4.00	40.00	1742.05	0.00067	1000.00	0.00007
							Cumulative Power Density:	**137.75299 µW/cm²**	**Cumulative % MPE:**	**13.77610%**

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.

Katrina Styx
RF EME Technical Writer II
Centerline

Exhibit 7

A CONGRUEX® COMPANY

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

Structural Analysis Report

Structure Information	*Tower Type*	*Existing 130 ft SABRE Monopole*
Customer Information	*Name*	SBA Communications Corp
	Site Number	CT46143-A
	Site Name	Burlington - Avon Landfill
Carrier Information	*Name*	*T-Mobile*
	Site ID / Name	*CTHA510A / SBA Avon Monopole*
	App #	*277758, V2*
Site Information	*Address:*	*277 Huckleberry Hill Road* *Avon, Connecticut 06013, Hartford County*
	Latitude:	*41.788055°*
	Longitude:	*-72.918166°*

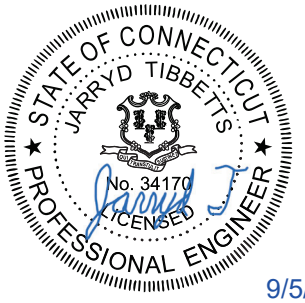
Analysis Result:

Max Structural Usage: **38.0% [Pass]**

Max Foundation Usage**: 32.4% [Pass]**

Additional Usage Caused by New Mount/Mount Modification: **+4.2%**

Report Prepared By: Yathish Medi



9/5/2025

Introduction

The purpose of this report is to summarize the analysis results on the 130 ft SABRE Monopole to support the proposed antennas and transmission lines in addition to those currently installed. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

Sources of Information

Document Type	Remarks
Tower Drawings	Design Report prepared by Sabre, Job #521586 Revision A dated 6/29/2023
Foundation Drawing	Design Report prepared by Sabre, Job #521586 Revision A dated 6/29/2023
Geotechnical Report	Delta Oaks Group, Project #23-19365-01 Revision 0 dated 6/28/2023
Modification Drawings	N/A
Mount Analysis	TES, Project # 161826, dated 08/11/2025.

Analysis Criteria

The comprehensive analysis was performed in accordance with the requirements and stipulations of the TIA-222-H. In accordance with this standard, the structure was analyzed using TESPoles, a proprietary analysis software. The program considers the structure as an elastic 3-D model with second-order effects and temperature effects incorporated in the analysis. The analysis was performed using multiple wind directions.

Codes and Standards	ANSI/TIA-222-H / 2021 IBC / 2022 Connecticut State Building Code	
Wind Parameters	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT}:	116.0 mph
	Ice Wind Speed (3-sec. Gust):	50 mph
	Design Ice Thickness:	1.50”
	Service Load Wind Speed:	60 mph + 0” Radial ice
	Exposure Category:	C
	Risk Category:	II
	Ground Elevation Factor (K_e):	0.983
Topographic Parameters	Method:	Method 1
	Feature Type:	Flat
	Crest Height (H):	0 ft
	Length of Feature (L):	0.0 ft
	Distance to crest (x):	0.0 ft
Seismic Parameters:	S_S	0.179 g
	S_1	0.054 g

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.

Existing Antennas, Mounts and Transmission Lines

The table below summarizes the antennas, mounts and transmission lines that were considered in the analysis as existing on the tower.

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
1	128.0	3	dbSpectra 14' Omni - Whip	(3) 3' Standoff Mounts	(3) 1 5/8" (1) 1/2"	Town of Avon
2		1	TTA - TMA			
3	110.0	3	Commscope NHHSS-65B-R2B - Panel	Platform w/ Handrails + Kicker Kit*	(2) 1 5/8" 6x12 Hybrid	Verizon
4		3	Commscope NHH-65B-R2B - Panel			
5		3	Samsung MT6413-77A - Panel			
6		3	Samsung RF4439d-25A - RRU			
7		3	Samsung RF4461d-13A - RRU			
8		3	Samsung RT4423-48A - RRU			
9		1	Raycap DB-B1-6C-12AB-0Z - Junction box			
10	90.0	3	Andrew SBNHH-1D65C - Panel	Flush Mount	(6) 1 5/8" (1) 3" Conduit housing {(2) 3/4" DC (1) 7/16" Fiber}	AT&T
11		3	Powerwave LGP21401 - TMA			
12		3	CCI TMABPD7823VG12A - TMA			
13		3	Andrew APTDC-BDFDM-DBW - OVP			
-	80.0	3	Ericsson 840590966 - Panel	(1) Platform w/ Support Rail SitePro (1) F4P-10W + (1) F4P-HRK10 + (16) P296	(2) 1.9" Hybrid (7) 7/8"	T-Mobile
-		3	Ericsson 4449 B71 + B85 - RRU			
-		3	Ericsson 4460 B25 + B66 - RRU			
18	70.0	3	JMA Wireless MX08FRO665-21 - Panel	Platform w/HRK [Commscope MC-PK8-DSH]	(1) 1.41" Hybrid	Dish Wireless
19		3	Fujitsu TA08025-B605 - RRU			
20		3	Fujitsu TA08025-B604 - RRU			
21		1	Raycap RDIDC-9181-PF-48 - OVP			

* Considering Verizon as a Platform w/ Handrails as per photos.

Proposed Carrier's Final Configuration of Antennas, Mounts and Transmission Lines

Information pertaining to the proposed carrier's final configuration of antennas and transmission lines was provided by SBA Communications Corp. The proposed antennas and lines are listed below.

Items	Elevation (ft)	Qty	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
14	80.0	3	Ericsson 840590966 - Panel	(1) Platform w/ Support Rail SitePro (1) F4P-10W + (1) F4P-HRK10 + (16) P296	(5) 7/8" (3) 1.9" Hybrid	T-Mobile
15		3	Ericsson AIR 6419 B41 - Panel			
16		3	Ericsson 4449 B71 + B85 - RRU			
17		3	Ericsson 4460 B25 + B66 - RRU			

See the attached coax layout for the line placement considered in the analysis.

Analysis Results

The results of the structural analysis, performed for the wind and ice loading and antenna equipment as defined above, are summarized as the following:

Tower Component	Utilization %	Pass / Fail
Pole Shaft	38.0%	Pass
Anchor Bolt	35.7%	Pass
Base Plate	37.9%	Pass
Serviceability	22.1%	Pass
Structure Rating – *(Controlling Utilization of all Components)*	**38.0%**	

Foundations

	Moment (Kip-Ft)	Shear (Kips)	Axial (Kips)
Analysis Reactions	1936.4	24.2	37.2

The foundation has been investigated using the supplied documents and soils report and was found adequate. Therefore, no modification to the foundation will be required.

Service Load Condition (Rigidity)

Operational characteristics of the tower are found to be within the limits prescribed by TIA-222 for the installed antennas. The maximum twist/sway at the elevation of the proposed equipment is 0.494 degrees under the operational wind speed as specified in the Analysis Criteria.

Conclusions

Based on the analysis results, the existing structure and its foundation were found to be adequate to safely support the existing and proposed equipment and meet the minimum requirements per the TIA-222 Standard under the design basic wind speed as specified in the Analysis Criteria.

Standard Conditions

1. This analysis was performed based on the information supplied to **(TES) Tower Engineering Solutions, LLC.** Verification of the information provided was not included in the Scope of Work for **TES**. The accuracy of the analysis is dependent on the accuracy of the information provided.

2. The structural analysis was performance based upon the evidence available at the time of this report. All information provided by the client is considered to be accurate.

3. The analyses will be performed based on the codes as specified by the client or based on the best knowledge of the engineering staff of **TES**. In the absence of information to the contrary, all work will be performed in accordance with the latest relevant revision of ANSI/TIA-222. If wind speed and/or ice loads are different from the minimum values recommended by the ANSI/TIA-222 standard or other codes, **TES** should be notified in writing and the applicable minimum values provided by the client.

4. The configuration of the existing mounts, antennas, coax and other appurtenances were supplied by the customer for the current structural analysis. **TES** has not visited the tower site to verify the adequacy of the information provided. If there is any discrepancy found in the report regarding the existing conditions, **TES** should be notified immediately to evaluate the effect of the discrepancy on the analysis results.

5. The client will assume responsibility for rework associated with the differences in initially provided information, including tower and foundation information, existing and/or proposed equipment and transmission lines.

6. If a feasibility analysis was performed, final acceptance of changed conditions shall be based upon a comprehensive structural analysis.

Usage Diagram - Max Ratio 37.98% at 0.0ft

Structure:	CT46143-A-SBA	**Code:**	EIA/TIA-222-H	9/5/2025
Site Name:	Burlington - Avon Landfill	**Exposure:**	C	
Height:	130.00 (ft)	**Gh:**	1.1	
Base Elev:	0.000 (ft)			Page: 1

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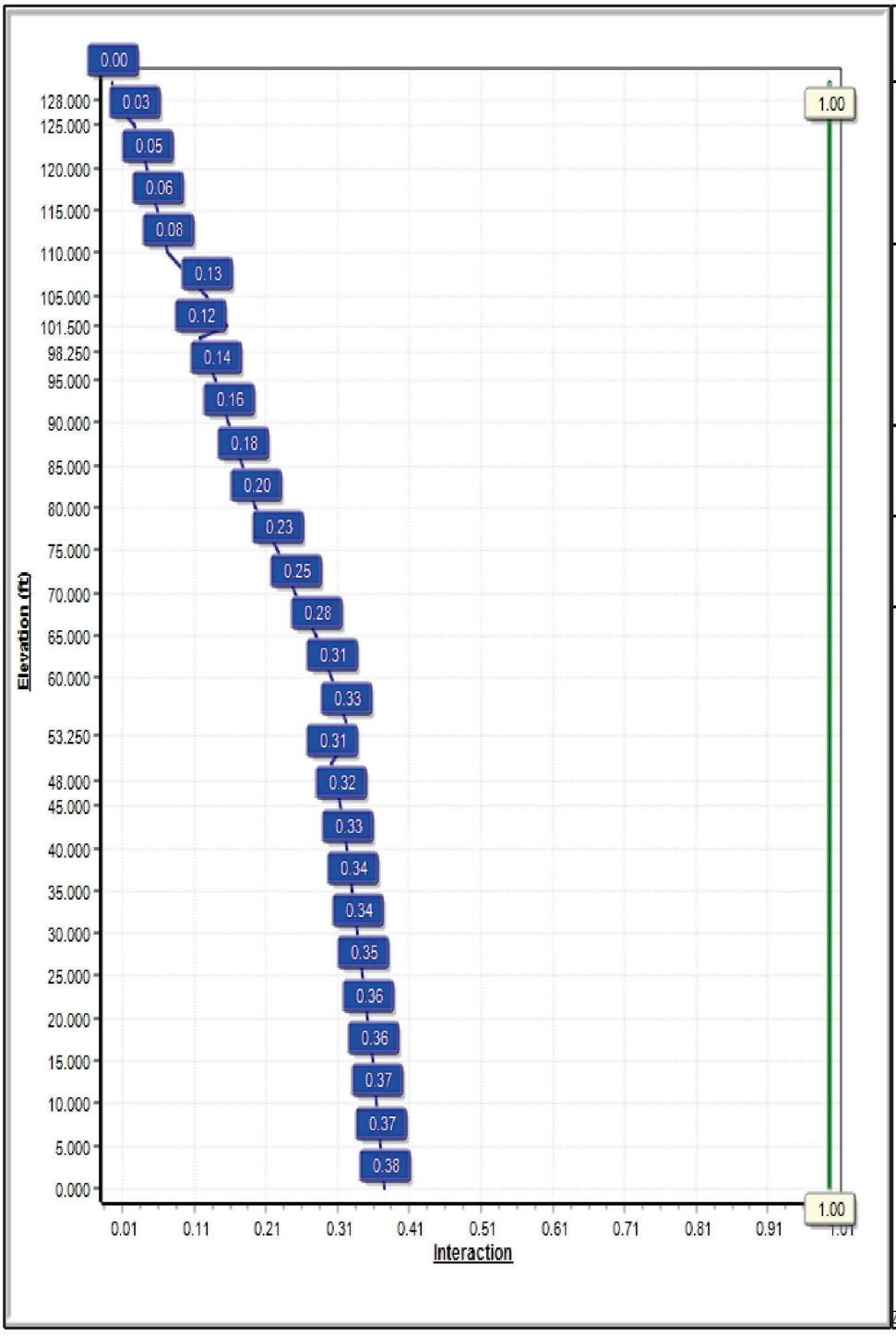
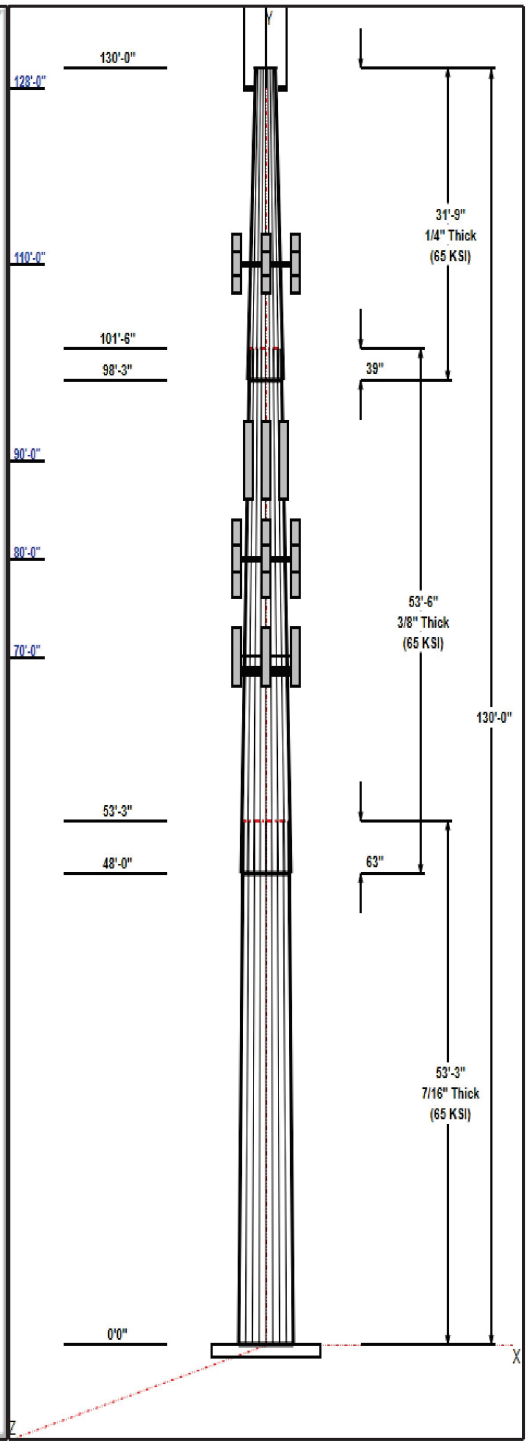
Dead Load Factor:	1.20	Wind Speed:	116.00	**Iterations:** 23
Wind Load Factor:	1.00	Ice Thickness:	1.50	

Load Case : 1.2D + 1.0W 116 mph Wind at 60°





Structure: CT46143-A-SBA

Type:	Tapered	**Base Shape:**	18 Sided	9/5/2025	
Site Name:	Burlington - Avon Landfill	**Taper:**	0.29531		
Height:	130.00 (ft)	**Wind Speed:**	116.00		
Base Elev:	0.00 (ft)	**Ice Thickness:**	1.50	Page: 2	

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Shaft Properties

Seq	Length (ft)	Top (in)	Bottom (in)	Thick (in)	Joint Type	Taper	Grade (ksi)
1	53.25	35.41	51.14	0.438		0.29531	65
2	53.50	21.92	37.72	0.375	Slip	0.29531	65
3	31.75	14.00	23.38	0.250	Slip	0.29531	65

Discrete Appurtenances

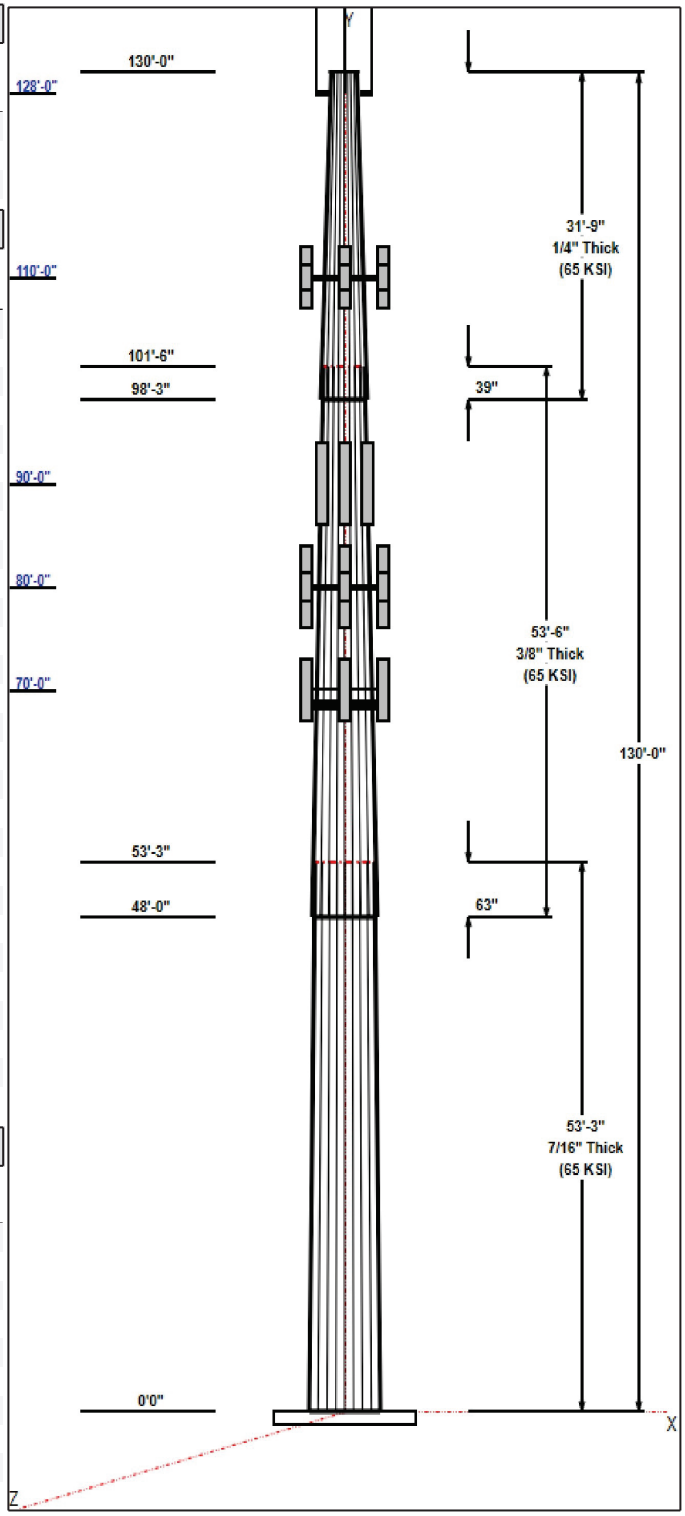
Attach Elev (ft)	Force Elev (ft)	Qty	Description	Carrier
128.00	135.00	3	dbSpectra 14' Omni	Town of Avon
128.00	128.00	3	3 ft Standoff	Town of Avon
128.00	128.00	1	TTA	Town of Avon
110.00	110.00	1	Raycap	Verizon
110.00	110.00	3	Samsung RF4439d-25A	Verizon
110.00	110.00	3	Samsung RF4461d-13A	Verizon
110.00	110.00	3	Samsung RT4423-48A	Verizon
110.00	110.00	3	Samsung MT6413-77A	Verizon
110.00	110.00	3	Commscope	Verizon
110.00	110.00	3	Commscope	Verizon
110.00	110.00	1	Platform w/ Hand Rail	Verizon
110.00	110.00	1	kicker kit	Verizon
90.00	90.00	3	Andrew SBNHH-1D65C	AT&T
90.00	90.00	3	Powerwave LGP21401	AT&T
90.00	90.00	3	Cci TMABPD7823VG12A	AT&T
90.00	90.00	3	Andrew	AT&T
90.00	90.00	1	Flush Mount	AT&T
80.00	80.00	3	AIR 6419 B41	T-Mobile
80.00	80.00	3	840590966	T-Mobile
80.00	80.00	1	F4P-10W	T-Mobile
80.00	80.00	1	F4P-HRK10	T-Mobile
80.00	80.00	3	4449 B71 + B85	T-Mobile
80.00	80.00	3	4460 B25 + B66	T-Mobile
70.00	70.00	3	JMA Wireless	Dish Wireless
70.00	70.00	3	Fujitsu TA08025-B605	Dish Wireless
70.00	70.00	3	Fujitsu TA08025-B604	Dish Wireless
70.00	70.00	1	Raycap	Dish Wireless
70.00	70.00	1	Commscope MC-PK8-DSH	Dish Wireless

Linear Appurtenances

Elev From (ft)	Elev To (ft)	Placement	Description	Carrier
0.00	128.00	Inside	1 5/8" Coax	Town of Avon
0.00	128.00	Inside	1/2" Coax	Town of Avon
0.00	110.00	Inside	1 5/8" 6x12 Hybrid	Verizon
0.00	90.00	Inside	1 5/8" Coax	AT&T
0.00	90.00	Inside	3" Coax	AT&T
0.00	90.00	Inside	3/4" DC	AT&T
0.00	90.00	Inside	7/16" Fiber	AT&T
0.00	80.00	Inside	1.9" Hybrid	T-Mobile
0.00	80.00	Inside	7/8" Coax	T-Mobile
0.00	70.00	Outside	1.41" Hybrid	Dish Wireless

Anchor Bolts

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



Base Plate

Thickness (in)	Specifications (in)	Grade (ksi)	Geometry
2.2500	63.8	50.0	Round

Reactions

Load Case	Moment (FT-Kips)	Shear (Kips)	Axial (Kips)
1.2D + 1.0W 116 mph Wind	1936.3	24.2	37.2
1.2D + 1.0W 116 mph Wind at 30°	1676.9	20.9	37.2
1.2D + 1.0W 116 mph Wind at 60°	968.2	12.1	37.2
1.2D + 1.0W 116 mph Wind at 90°	0.0	0.0	37.2
1.2D + 1.0W 116 mph Wind at 120°	968.2	12.1	37.2
1.2D + 1.0W 116 mph Wind at 150°	1676.9	20.9	37.2
1.2D + 1.0W 116 mph Wind at 180°	1936.3	24.2	37.2
1.2D + 1.0W 116 mph Wind at 210°	1676.9	20.9	37.2
1.2D + 1.0W 116 mph Wind at 240°	968.2	12.1	37.2
1.2D + 1.0W 116 mph Wind at 270°	0.0	0.0	37.2
1.2D + 1.0W 116 mph Wind at 300°	968.2	12.1	37.2
1.2D + 1.0W 116 mph Wind at 330°	1676.9	20.9	37.2
0.9D + 1.0W 116 mph Wind	1925.6	24.2	27.9
0.9D + 1.0W 116 mph Wind at 30°	1667.7	20.9	27.9
0.9D + 1.0W 116 mph Wind at 60°	962.9	12.1	27.9
0.9D + 1.0W 116 mph Wind at 90°	0.0	0.0	27.9
0.9D + 1.0W 116 mph Wind at 120°	962.9	12.1	27.9
0.9D + 1.0W 116 mph Wind at 150°	1667.7	20.9	27.9
0.9D + 1.0W 116 mph Wind at 180°	1925.6	24.2	27.9
0.9D + 1.0W 116 mph Wind at 210°	1667.7	20.9	27.9
0.9D + 1.0W 116 mph Wind at 240°	962.9	12.1	27.9
0.9D + 1.0W 116 mph Wind at 270°	0.0	0.0	27.9
0.9D + 1.0W 116 mph Wind at 300°	962.9	12.1	27.9
0.9D + 1.0W 116 mph Wind at 330°	1667.7	20.9	27.9
1.2D + 1.0Di + 1.0Wi 50 mph Wind	637.9	7.8	56.4
1.2D + 1.0Di + 1.0Wi 50 mph Wind at	552.5	6.7	56.4
1.2D + 1.0Di + 1.0Wi 50 mph Wind at	319.0	3.9	56.4
1.2D + 1.0Di + 1.0Wi 50 mph Wind at	0.0	0.0	56.4
1.2D + 1.0Di + 1.0Wi 50 mph Wind at	319.0	3.9	56.4
1.2D + 1.0Di + 1.0Wi 50 mph Wind at	552.5	6.7	56.4
1.2D + 1.0Di + 1.0Wi 50 mph Wind at	637.9	7.8	56.4
1.2D + 1.0Di + 1.0Wi 50 mph Wind at	552.5	6.7	56.4
1.2D + 1.0Di + 1.0Wi 50 mph Wind at	319.0	3.9	56.4
1.2D + 1.0Di + 1.0Wi 50 mph Wind at	0.0	0.0	56.4
1.2D + 1.0Di + 1.0Wi 50 mph Wind at	319.0	3.9	56.4
1.2D + 1.0Di + 1.0Wi 50 mph Wind at	552.5	6.7	56.4
1.0D + 1.0W 60 mph Wind	461.8	5.8	31.0
1.0D + 1.0W 60 mph Wind at 30°	400.0	5.0	31.0
1.0D + 1.0W 60 mph Wind at 60°	230.9	2.9	31.0
1.0D + 1.0W 60 mph Wind at 90°	0.0	0.0	31.0
1.0D + 1.0W 60 mph Wind at 120°	230.9	2.9	31.0
1.0D + 1.0W 60 mph Wind at 150°	400.0	5.0	31.0
1.0D + 1.0W 60 mph Wind at 180°	461.8	5.8	31.0
1.0D + 1.0W 60 mph Wind at 210°	400.0	5.0	31.0
1.0D + 1.0W 60 mph Wind at 240°	230.9	2.9	31.0
1.0D + 1.0W 60 mph Wind at 270°	0.0	0.0	31.0
1.0D + 1.0W 60 mph Wind at 300°	230.9	2.9	31.0
1.0D + 1.0W 60 mph Wind at 330°	400.0	5.0	31.0

1.2D + 1.0Ev + 1.0Eh	76.7	0.9	38.4
0.9D + 1.0Ev + 1.0Eh	76.4	0.9	29.1

Structure: CT46143-A-SBA - Coax Line Placement

Type: Monopole
Site Name: Burlington - Avon Landfill
Height: 130.00 (ft)

9/5/2025

Tower Engineering Solutions

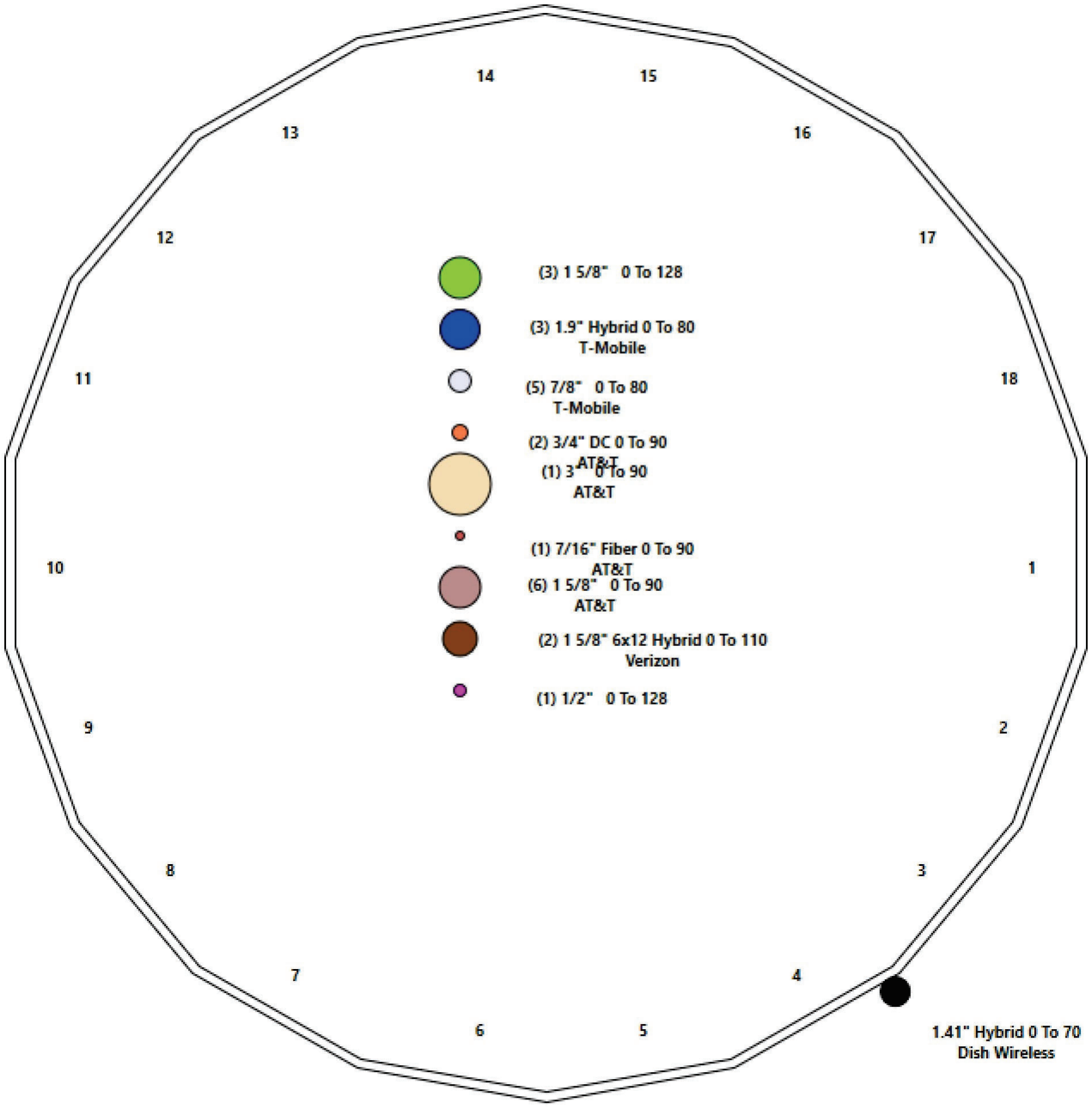


Exhibit 8

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: CT46143-A-SBA

Customer Site Name: Burlington - Avon Landfill

Carrier Name: T-Mobile (App: 277758-v2)

Carrier Site ID / Name: CTHA510A / SBA Avon Monopole

Site Location: 277 Huckleberry Hill Road

Avon, Connecticut

Hartford County

Latitude: 41.788055

Longitude: -72.918166

Analysis Result:

Max Structural Usage: 62.0% [Pass]

Report Prepared By: Siddartha Kokkula

NOTE: The proposed mount (1) Platform w/Support Rail [SitePro F4P-10W + F4P-HRK10] was supposed to be installed properly to the existing tower per the manufacturer's instructions. Tower Engineering Solutions, LLC is not liable for any fit-up issues during installation.

Tower Engineering Solutions
Phone (972) 483-0607, Fax (972) 975-9615
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Antenna Mount Analysis Report

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NOTE: The proposed mount (1) Platform w/Support Rail [SitePro F4P-10W + F4P-HRK10] was supposed to be installed properly to the existing tower per the manufacturer's instructions. Tower Engineering Solutions, LLC is not liable for any fit-up issues during installation.

Introduction

The purpose of this report is to summarize the analysis results on the (1) Platform w/Support Rail [SitePro F4P-10W + F4P-HRK10] at 80.00' 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 from SBA Application #: 277758, v2
Antenna Loading	SBA, Application #: 277758, v2 dated 08/11/2025
Modification Drawings	N/A

Analysis Criteria

Wind Speed Used in the Analysis: 120 mph (3-Sec. Gust) (Ultimate Wind Speed)
Wind Speed with Ice: 50 mph (3-Sec. Gust) with 1.5" radial ice concurrent
Service Load Wind Speed: 60 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: 0.983

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 [SitePro F4P-10W + F4P-HRK10] at 80.00' elevation

Final Antenna Configuration

3 Ericsson 840590966
3 Ericsson 4449 B71 + B85
3 Ericsson 4460 B25 + B66
3 Ericsson AIR 6419 B41

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 proposed mounts will be structurally adequate to support the proposed antenna configuration. The maximum structural usage is 62.0%, which occurs in the Support rail. 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.

NOTE: The proposed mount (1) Platform w/Support Rail [SitePro F4P-10W + F4P-HRK10] was supposed to be installed properly to the existing tower per the manufacturer's instructions. Tower Engineering Solutions, LLC is not liable for any fit-up issues during installation.

Attachments

1. Mount Drawings
2. Antenna Placement Diagram
3. 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.

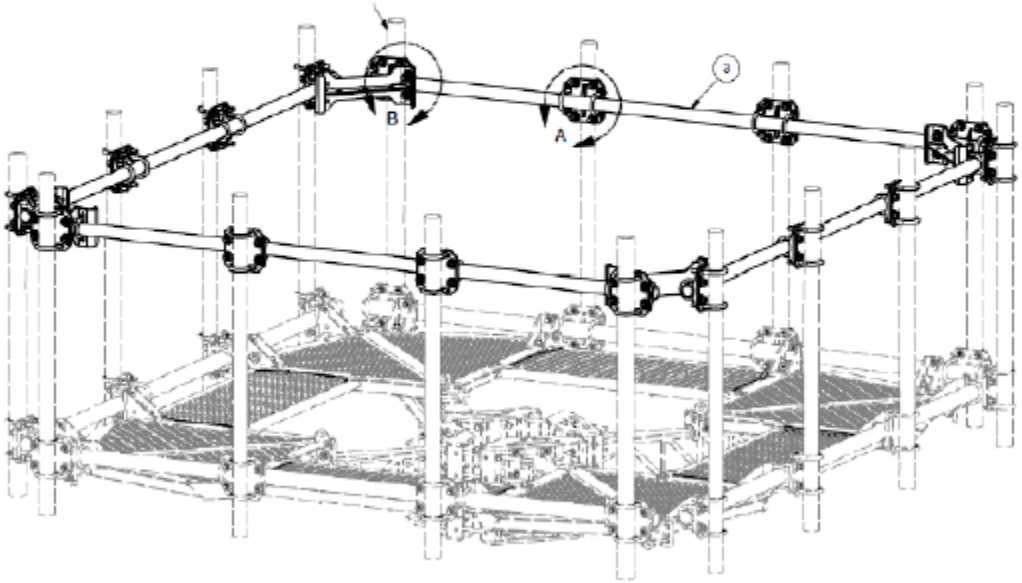
5. If the mount is modified, installation must adhere to the configuration communicated in the modification drawings.

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.



SitePro F4P-10W w/ HRK10

Structure: CT46143-A-SBA - Burlington - Avon Landfill

Sector: A

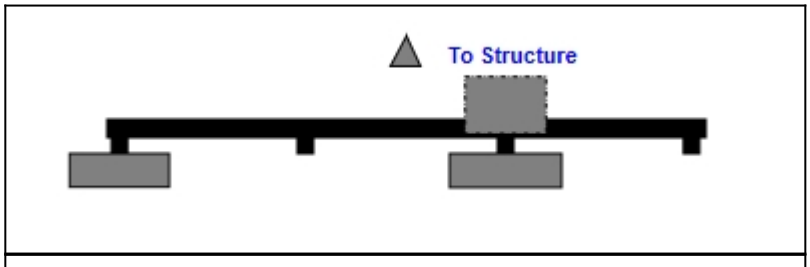
Structure Type: Monopole

Mount Elev: 80.00

8/11/2025

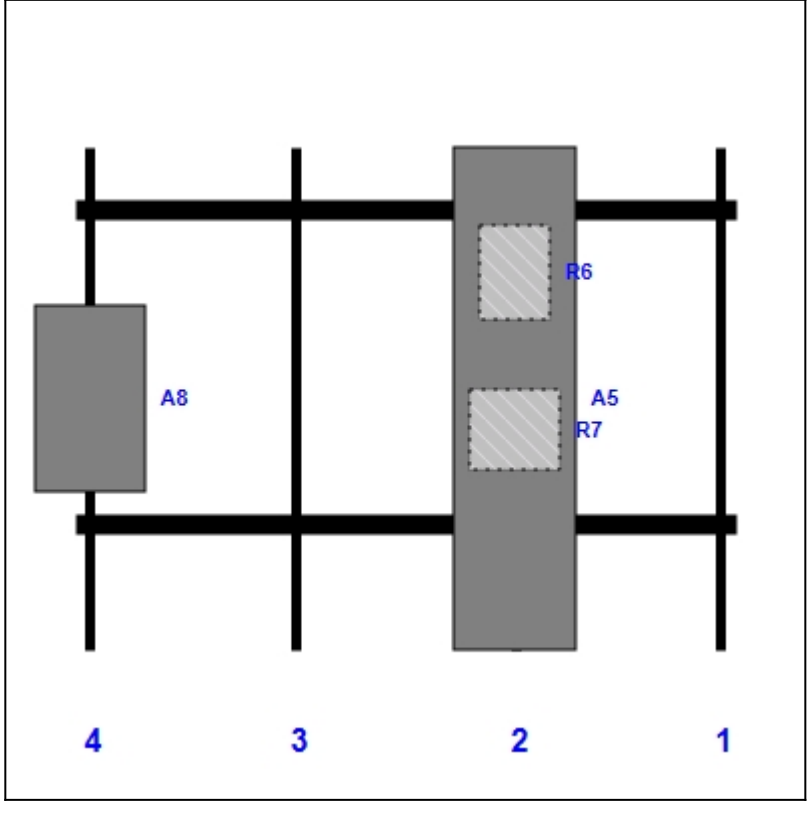
Tower Engineering Solutions

Plan View



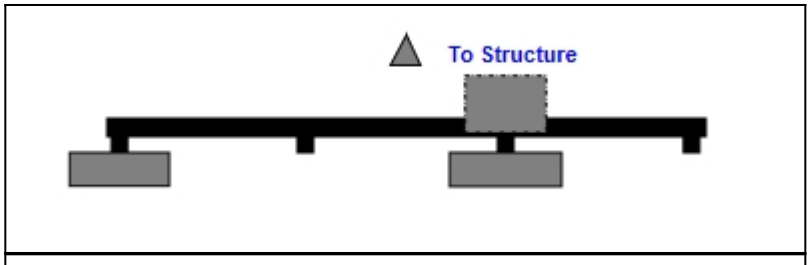
Front View

Looking Toward Structure



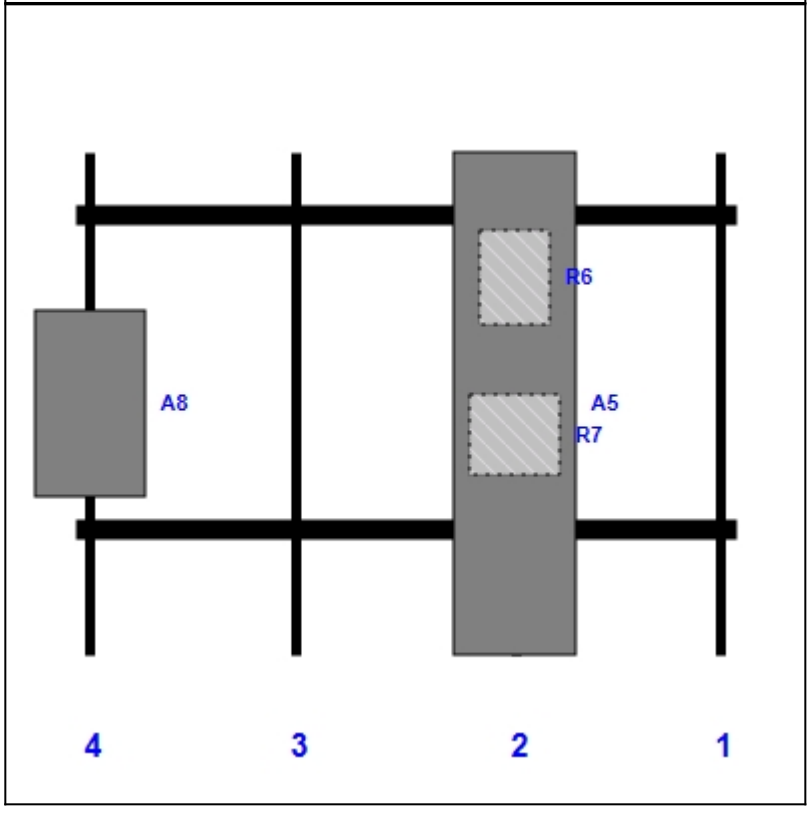
Ref #	Model	Height (in)	Width (in)	H Dist Left	Pipe #	Pipe Pos V	Pos	From Top	H Offset	Status	Validation
A5	840590966	95.90	23.50	84.00	2	a	Front	48.00			
R6	4449 B71 + B85	17.90	13.10	84.00	2	a	Behind	24.00			
R7	4460 B25 + B66	15.10	17.00	84.00	2	a	Behind	54.00			
A8	AIR 6419 B41	35.20	20.90	3.00	4	a	Front	48.00			

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
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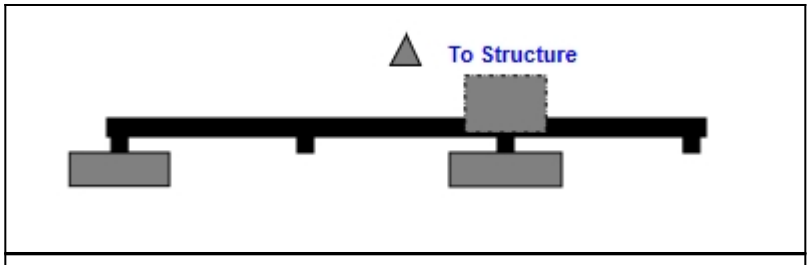
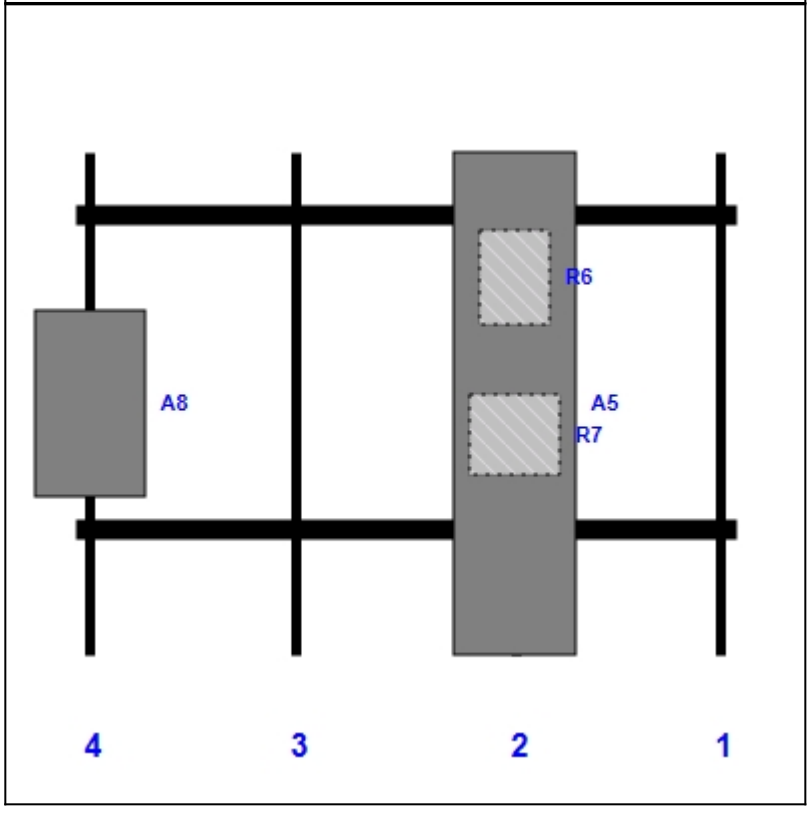
A8	AIR 6419 B41	35.20	20.90	3.00	4	a	Front	48.00			

Plan View



Front View

Looking Toward Structure



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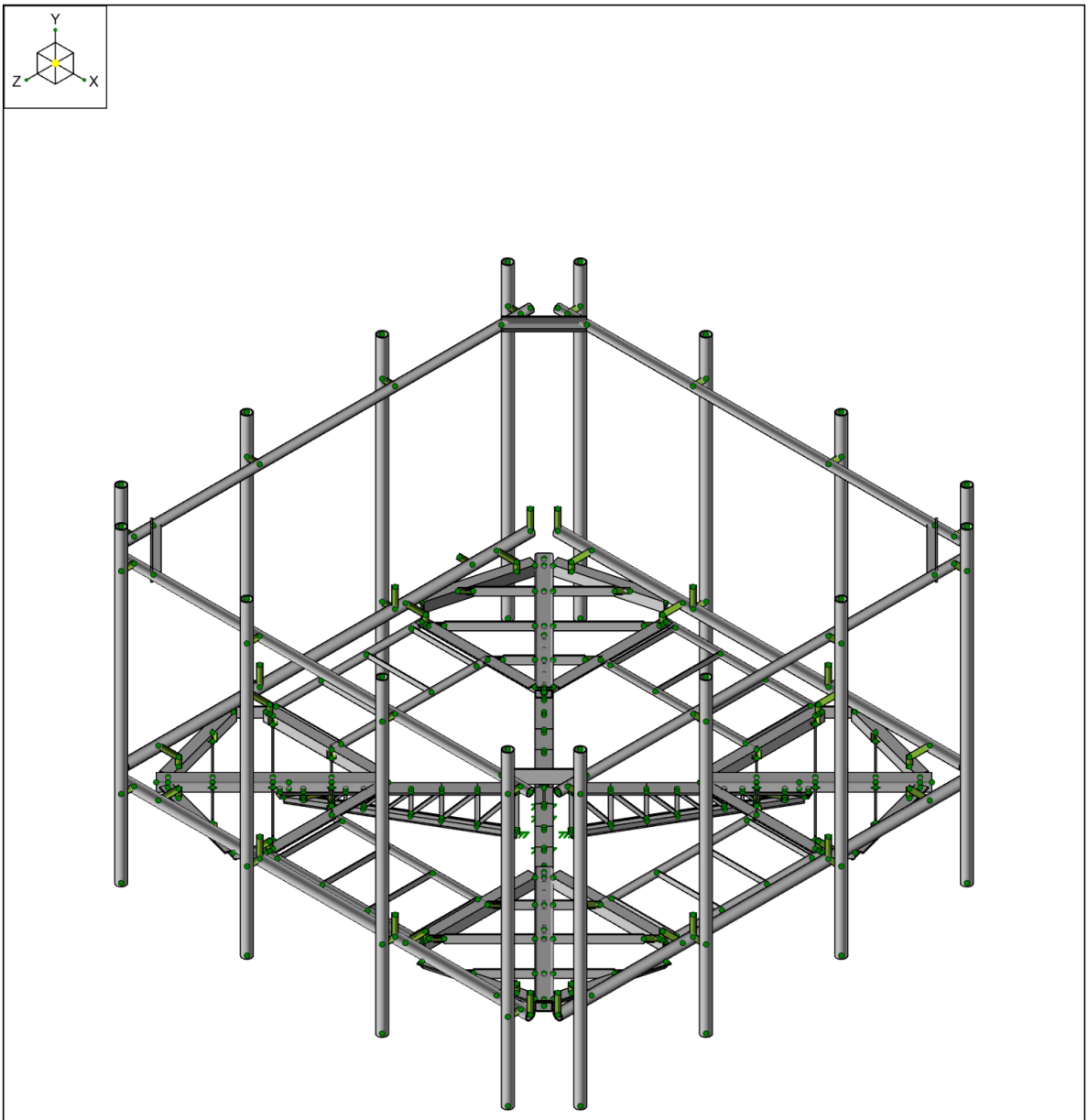
R7	4460 B25 + B66	15.10	17.00	84.00	2	a	Behind	54.00			
A8	AIR 6419 B41	35.20	20.90	3.00	4	a	Front	48.00			



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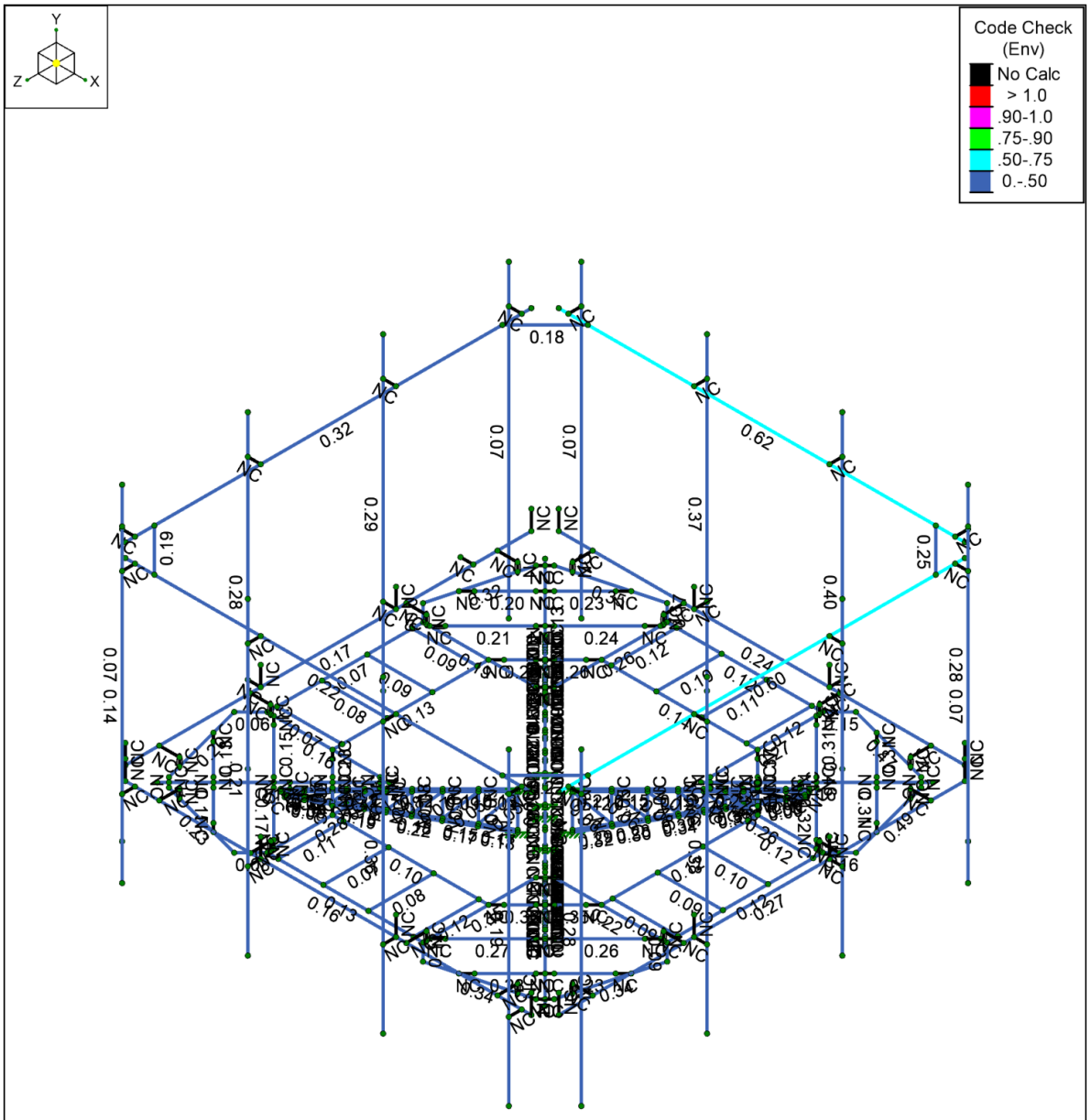
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Z
X
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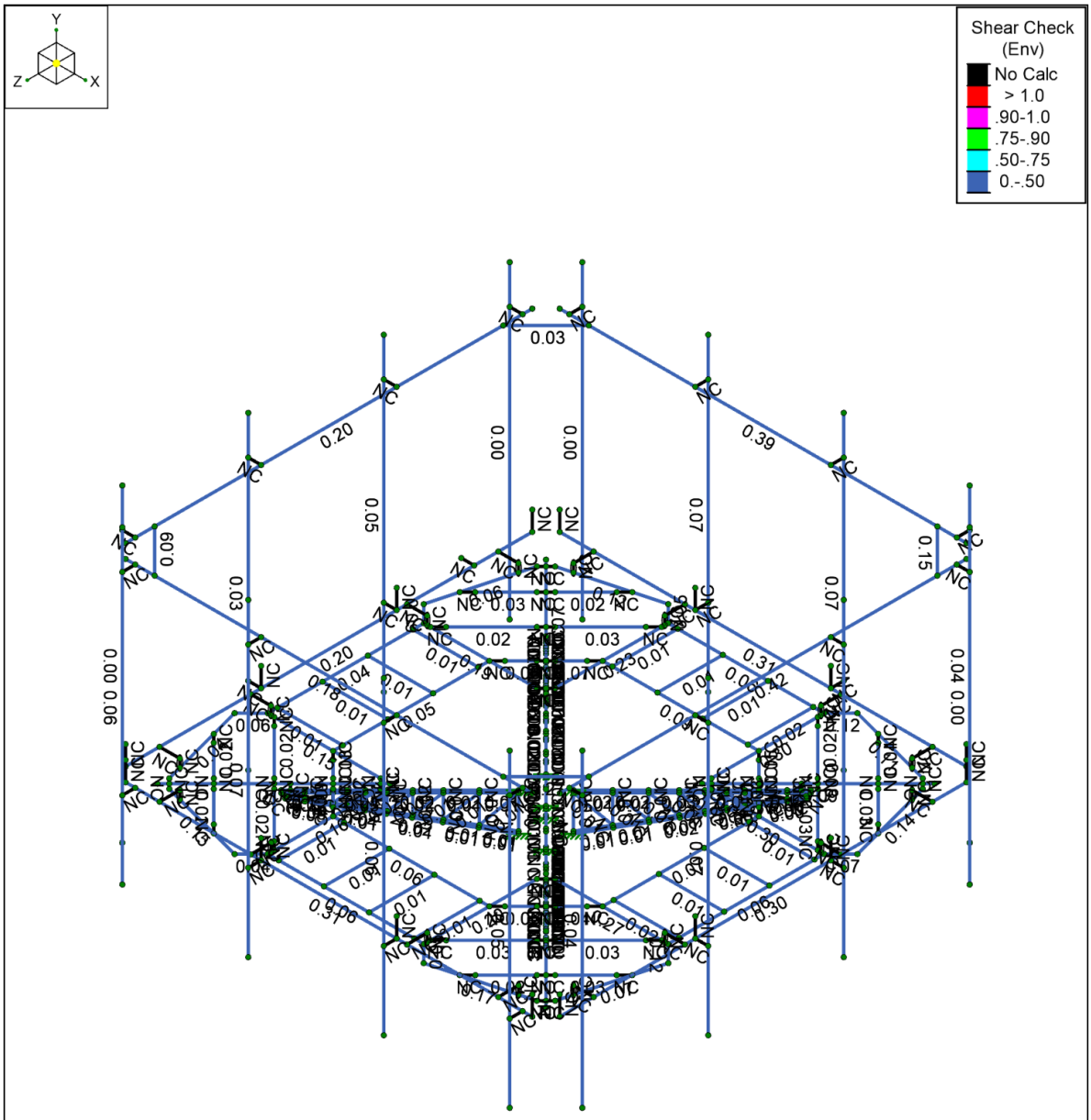
No Calc
> 1.0
.90-1.0
.75-.90
.50-.75
0.-.50
Member Code Checks Displayed (Enveloped)
TES
Tower Engineering Solutio…
JET
TES Project No. 161826
CT46143-A-SBA_MT_LO_Loads Only_H
SK-2
Aug 11, 2025 at 09:48 AM
CT46143-A-SBA_161826_H…



Member Shear Checks Displayed (Enveloped)

TES A CONGRUEX COMPANY	Tower Engineering Solutio…	CT46143-A-SBA_MT_LO_Loads Only_H	SK-3
	JET		Aug 11, 2025 at 09:48 AM
	TES Project No. 161826		CT46143-A-SBA_161826_H…

Exhibit 9

T··Mobile·®

SBA AVON MONOPOLE

277 HUCKLEBERRY HILL ROAD
AVON, CT 06013
HARTFORD COUNTY

SITE NO.: CTHA510A

SITE TYPE: 130'± MONOPOLE

PROJECT: ANCHOR UPGRADE
RF DESIGN GUIDELINE: 67D5D998E 6160

APPROVALS

APPROVED By Craig Koppang at 11:55 am, Sep 23, 2025	ANAGER:	DATE:	
APPROVED By Bill Blake at 9:12 am, Sep 19, 2025	ION:	DATE:	E:
APPROVED By SRandha5 at 4:55 pm, Sep 19, 2025	ING:	DATE:	
ZONING/SITE ACQ.:		DATE:	
OPERATIONS:		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

TURN LEFT ONTO S WASHINGTON ST. TURN RIGHT ONTO MA-123 E. TURN LEFT TO MERGE ONTO I-495 NORTH TOWARD MANSFIELD/MARLBORO. MERGE ONTO I-495 NORTH. TAKE EXIT 58 TO MERGE ONTO I-90 WEST. TAKE EXIT 78 TOWARD I-84. KEEP LEFT TO STAY ON I-84. KEEP RIGHT TO STAY ON I-84. TAKE EXIT 39 TOWARD FRAMINGTON. CONTINUE ONTO STATE HWY 508. STATE HIGHWAY 508 TURNS SLIGHTLY RIGHT AND BECOMES CT-4 WEST. TURN RIGHT ONTO CT-177 NORTH. SLIGHT LEFT ONTO CT-4 WEST. TURN RIGHT ONTO HUCKLEBERRY HILL ROAD. SITE WILL BE ON THE LEFT.

SHEET INDEX

SHEET NO.	DESCRIPTION	REV. NO.
T-1	TITLE SHEET	4
GN-1	GENERAL NOTES	4
A-1	COMPOUND & EQUIPMENT PLANS	4
A-2	TOWER ELEVATION & ANTENNA PLANS	4
A-3	SITE DETAILS	4
RF-1	RF DATA	4
E-1	ELECTRIC & GROUNDING DETAILS	4

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) ANTENNA MOUNTS
- (12) COAXIAL CABLES
- (6) RADIOS
- (3) DIPLEXERS
- (1) 6201 EQUIPMENT CABINET
- (1) BACKUP BATTERY CABINET

RELOCATE:
- (3) RADIOS

INSTALL:
- (6) ANTENNAS
- (6) RADIOS
- (1) QUAD PLATFORM W/HANDRAIL
- (3) 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

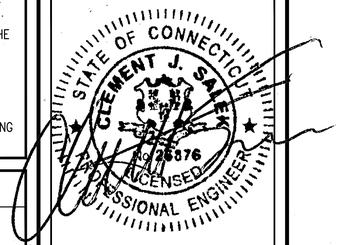
SITE NUMBER:	CTHA510A
SITE NAME:	SBA AVON MONOPOLE
SBA SITE NUMBER:	CT46143-A
SBA SITE NAME:	BURLINGTON-AVON LANDFILL
SBA COLLO APP NUMBER:	TBD
SITE ADDRESS:	277 HUCKLEBERRY HILL ROAD AVON, CT 06001
PROPERTY OWNER:	TOWN OF AVON 60 WEST MAIN STREET AVON, CT 06013
TOWER OWNER:	SBA 2012 TC ASSETS, LLC 8501 CONGRESS AVENUE BOCA RATON, FL 33487 PHONE: 561-226-9523
COUNTY:	HARTFORD
ZONING DISTRICT:	R-40 (RESIDENTIAL)
STRUCTURE TYPE:	MONOPOLE
STRUCTURE HEIGHT:	130'±
STRUCTURE HEIGHT W/APPURT.:	146'±
GROUND ELEVATION:	529'±
TOTAL AMSL:	675'±
APPLICANT:	T-MOBILE NORTHEAST LLC 15 COMMERCE WAY, SUITE B NORTON, MA 02766
ARCHITECT:	CHAPPELL ENGINEERING ASSOCIATES, LLC 201 BOSTON POST ROAD WEST, SUITE 205 MARLBOROUGH, MA 01752
STRUCTURAL ENGINEER:	CHAPPELL ENGINEERING ASSOCIATES, LLC 201 BOSTON POST ROAD WEST, SUITE 205 MARLBOROUGH, MA 01752
SITE CONTROL POINT:	LATITUDE: N.41.788133° N41°47'17.277" LONGITUDE W.72.918254° W72°55'05.713"

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 205
MARLBOROUGH, MA 01752
(508) 481-7400
www.chappellengineering.com



CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
4	09/17/25	CONSTRUCTION REVISED	TRB
3	07/28/25	CONSTRUCTION REVISED	TRB
2	05/22/25	CONSTRUCTION REVISED	TRB
1	05/05/25	ISSUED FOR CONSTRUCTION	TRB
0	03/17/25	ISSUED FOR REVIEW	TRB

SITE NUMBER:
CTHA510A

SITE ADDRESS:
277 HUCKLEBERRY HILL ROAD
AVON, CT 06013

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

1815.638

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.

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 205
MARLBOROUGH, MA 01752
(508) 481–7400
www.chappellengineering.com

STATE OF CONNECTICUT
CLEMENT J. SAJEK
No. 26876
LICENSED
PROFESSIONAL ENGINEER

CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
4	09/17/25	CONSTRUCTION REVISED	TRB
3	07/28/25	CONSTRUCTION REVISED	TRB
2	05/22/25	CONSTRUCTION REVISED	TRB
1	05/05/25	ISSUED FOR CONSTRUCTION	TRB
0	03/17/25	ISSUED FOR REVIEW	TRB

SITE NUMBER:
CTHA510A

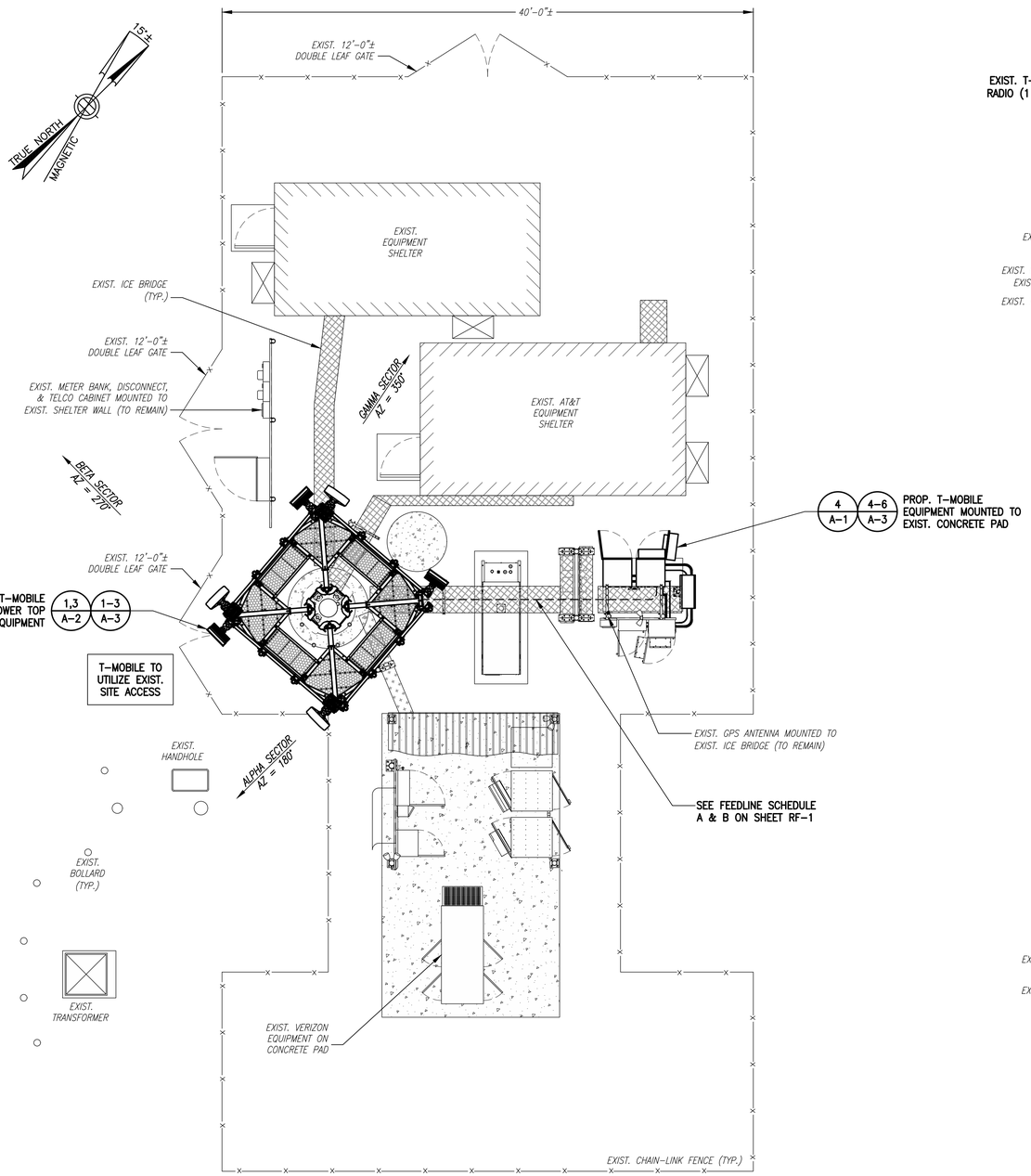
SITE ADDRESS:
277 HUCKLEBERRY HILL ROAD
AVON, CT 06013

SHEET TITLE
GENERAL NOTES

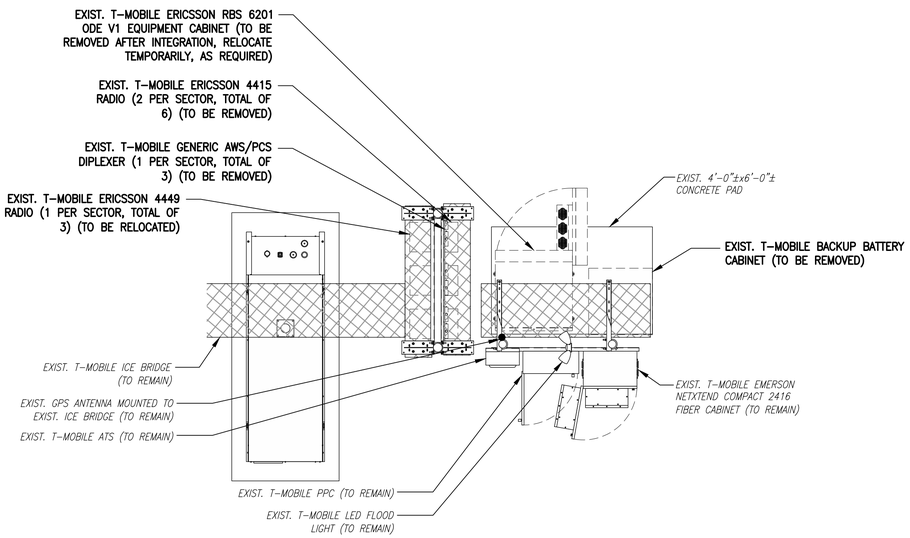
SHEET NUMBER
GN-1

1815.638

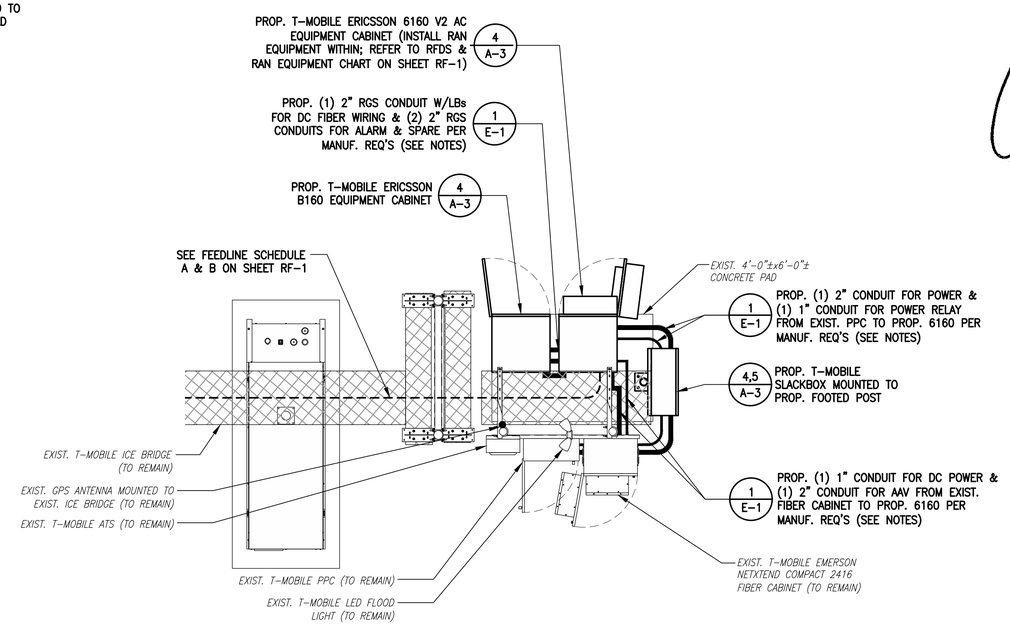
SPECIAL PRE-CONSTRUCTION WORK NOTE (SBA-PROVIDED TOWER STRUCTURAL ANALYSIS SPECIAL EQUIPMENT INSTALLATION REQUIREMENTS):
GENERAL CONTRACTOR SHALL FURNISH AND INSTALL ALL SPECIAL OR SUPPLEMENTAL ADDITIONAL TOWER-MOUNTED EQUIPMENT PER RECOMMENDATIONS FROM SBA-PROVIDED TOWER STRUCTURAL ANALYSIS FOR ANY 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 2'-8" 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: 3/8" = 1'-0"
0 2'-8" 5'-4" 8'-0"

CONDUIT NOTES:

1. ALL EXISTING CONDUITS FROM EXISTING ERICSSON RBS 6201 CABINET 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.

T-Mobile
15 COMMERCE WAY, SUITE B
NORTON, MA 02766
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SHEET TITLE
COMPOUND & EQUIPMENT PLANS

SHEET NUMBER
A-1

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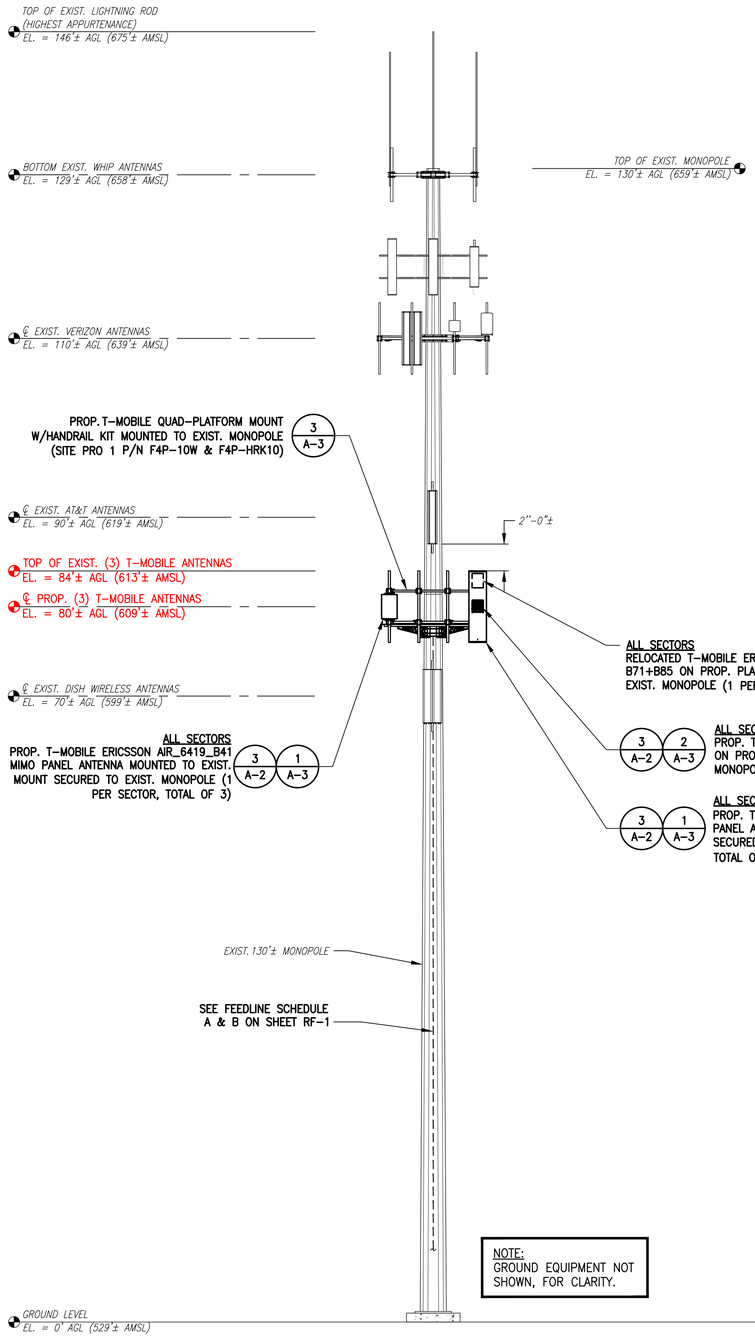
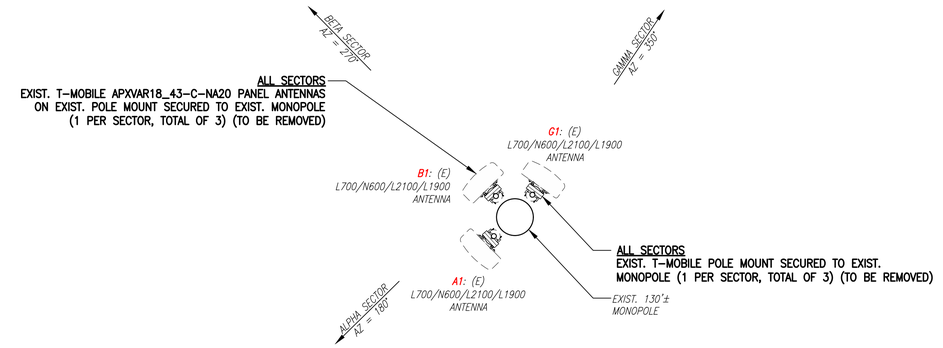
RAD CENTER NOTE:
T-MOBILE ANTENNA AND MOUNT RAD CENTER SHOWN IN ELEVATION ARE ACCORDING TO STRUCTURAL ANALYSIS DONE BY OTHERS AND MAY DIFFER FROM RAD CENTER ON RFDS PROVIDED BY T-MOBILE.



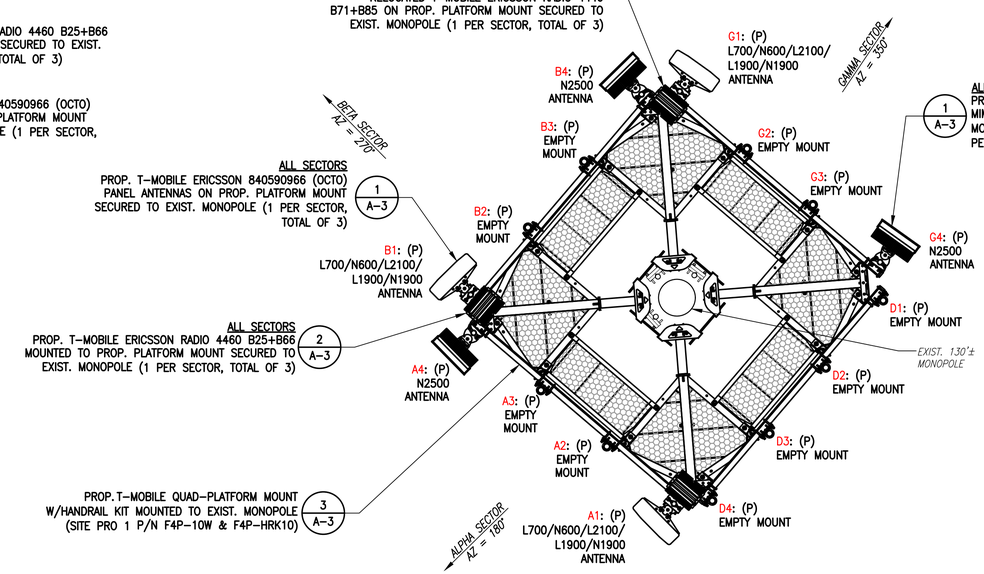
NOTE:
GROUND EQUIPMENT NOT SHOWN, FOR CLARITY.

TOWER ELEVATION 2 A-2
SCALE: 1/8" = 1'-0"
0 8'-0" 16'-0" 24'-0"



80'-0" (AGL)

EXISTING ANTENNA PLAN 2 A-2
SCALE: 3/8" = 1'-0"



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

80'-0" (AGL)

PROPOSED ANTENNA PLAN 3 A-2
SCALE: 3/8" = 1'-0"

ANTENNA STATUS LEGEND:

EMPTY – EMPTY PIPE

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

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SITE NUMBER:
CTHA510A

SITE ADDRESS:
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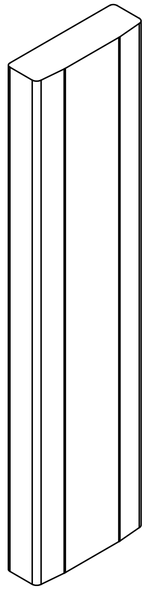
SHEET TITLE
TOWER ELEVATION & ANTENNA PLANS

SHEET NUMBER
A-2

1815.638

ERICSSON M-MIMO AIR6419 B41 ANTENNA

DIMENSIONS: 36.3"H x 20.9"W x 9.0"D
WEIGHT: 83.3 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3
SECTORS: ALPHA, BETA, GAMMA



ERICSSON 840590966 ANTENNA

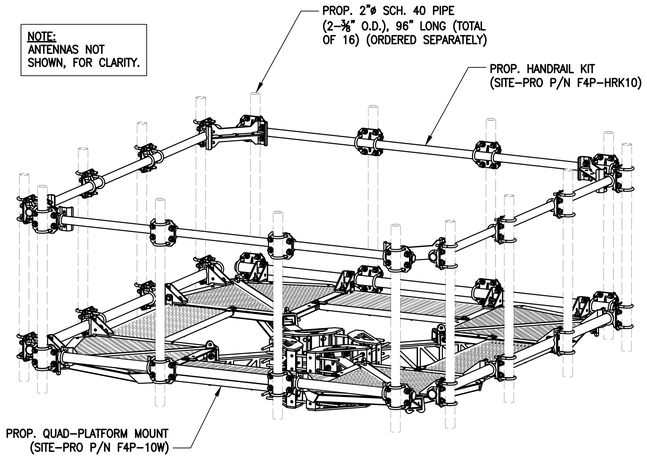
DIMENSIONS: 95.9"H x 23.5"W x 7.1"D
WEIGHT: 101.4 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3

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

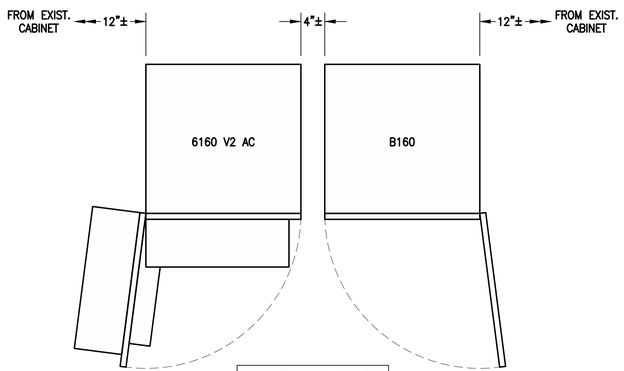
RADIO DETAIL (2 / A-3)
SCALE: N.T.S.



SITE-PRO 1 FORTRESS QUAD PLATFORM MOUNT W/HANDRAIL KIT

PART NUMBERS: F4P-10W & F4P-HRK10
QUANTITY: TOTAL OF 1 EACH

ANTENNA MOUNT DETAIL (3 / 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

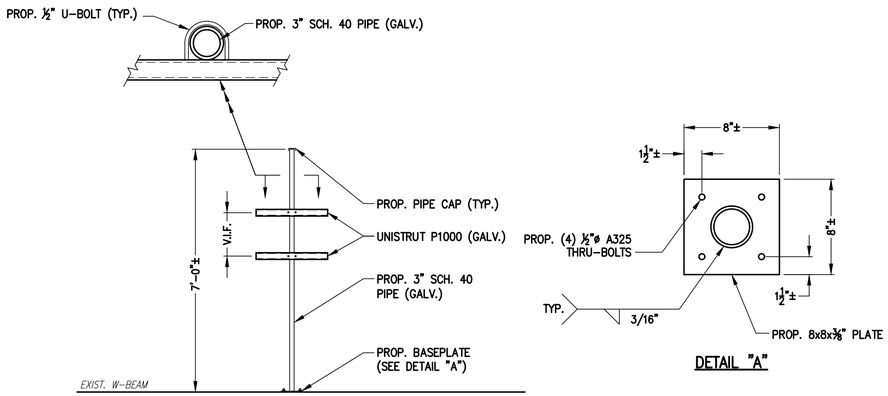
DIMENSIONS: 63.25"H x 26.0"W x 26.0"D
QUANTITY: TOTAL OF 1

EQUIPMENT DETAIL (4 / 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 (5 / A-3)
SCALE: N.T.S.



DETAIL "A"

H-FRAME DETAIL (6 / A-3)
SCALE: N.T.S.

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SITE DETAILS

SHEET NUMBER
A-3

1815.638

FINAL ANTENNA CONFIGURATION

SECTOR	ANTENNA	RAD CENTER	AZIMUTH (TRUE NORTH)	MECHANICAL DOWNTILT	ELECTRICAL DOWNTILT	BAND	SBTS/TMAS/MULTIPLEXERS/RADIOS	CABLES
ALPHA	A1 ERICSSON 840590966	80'± AGL	180°	0°	0°	N600/L700	*ERICSSON RADIO 4449 B71+B85*	(3) 2" (6x24) HCS FIBER CABLES (50m±)
						L2100/L1900/N1900	ERICSSON RADIO 4460 B25+B66	
	A2 *EMPTY PIPE*	–	–	–	–	–	–	
	A3 *EMPTY PIPE*	–	–	–	–	–	–	
	A4 ERICSSON AIR_6419_B41	80'± AGL	180°	–	–	N2500	–	
BETA	B1 ERICSSON 840590966	80'± AGL	270°	0°	0°	N600/L700	*ERICSSON RADIO 4449 B71+B85*	
						L2100/L1900/N1900	ERICSSON RADIO 4460 B25+B66	
	B2 *EMPTY PIPE*	–	–	–	–	–	–	
	B3 *EMPTY PIPE*	–	–	–	–	–	–	
	B4 ERICSSON AIR_6419_B41	80'± AGL	270°	–	–	N2500	–	
GAMMA	G1 ERICSSON 840590966	80'± AGL	350°	0°	0°	N600/L700	*ERICSSON RADIO 4449 B71+B85*	
						L2100/L1900/N1900	ERICSSON RADIO 4460 B25+B66	
	G2 *EMPTY PIPE*	–	–	–	–	–	–	
	G3 *EMPTY PIPE*	–	–	–	–	–	–	
	G4 ERICSSON AIR_6419_B41	80'± AGL	350°	–	–	N2500	–	
	D1							
	D2 *EMPTY PIPE*	–	–	–	–	–	–	
	D3 *EMPTY PIPE*	–	–	–	–	–	–	
	D4 *EMPTY PIPE*	–	–	–	–	–	–	

CABLE NOTE: (E) (12) 7/8" COAXIAL CABLES TO BE REMOVED. SEE FEEDLINE SCHEDULE A & B BELOW.

NOTE: RFDS REV11 – 07/03/25

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*	ROUTED PER STRUCTURAL ANALYSIS
	EXISTING TO BE REMOVED: *(12) 7/8" COAXIAL CABLES*	
B	PROPOSED: (3) 2" (6x24) HCS FIBER CABLES (50m±)	

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)	*(2) BB 6630 (TO BE RELOCATED)* *(1) DUW30* *(1) CSR 7705 SAR–M*	N/A
PROP. ERICSSON 6160 V2 AC EQUIPMENT CABINET	*N/A*	*(2) BB 6630 (RELOCATED)* (1) RP 6651 (1) CSR IXRE V2 (GEN2)

NOTE:
RAN EQUIPMENT IS BASED ON RFDS REV11 DATED 07/03/25.

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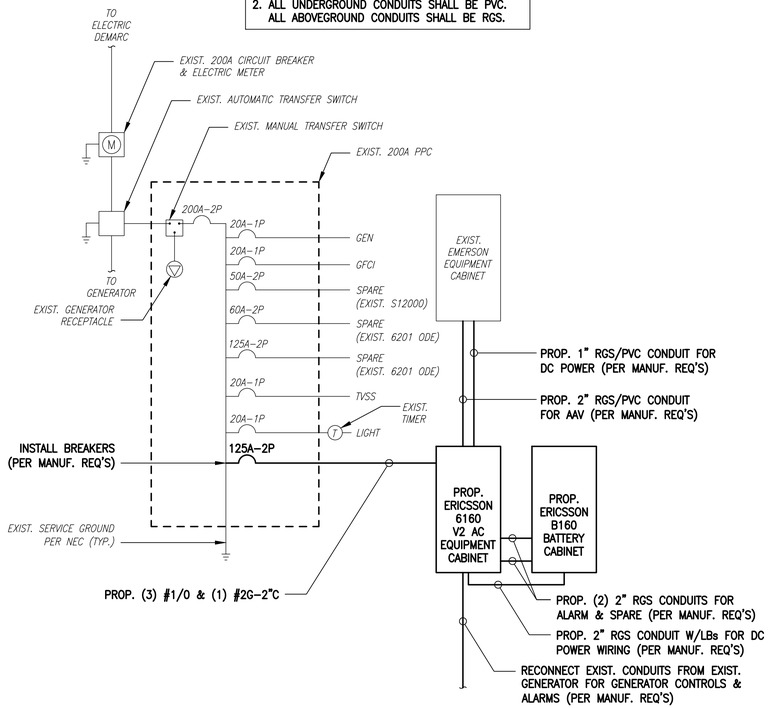
SHEET TITLE
RF DATA

SHEET NUMBER
RF-1

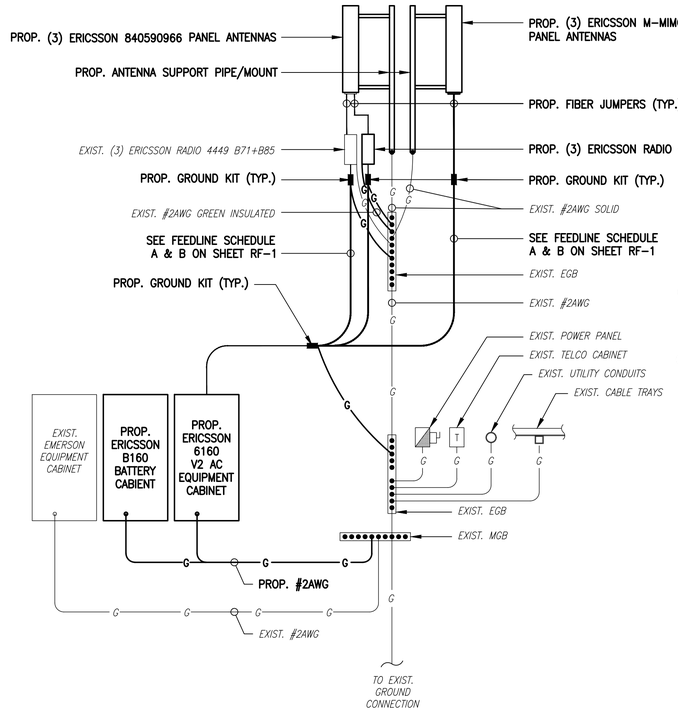
1815.638

CONDUIT NOTES:

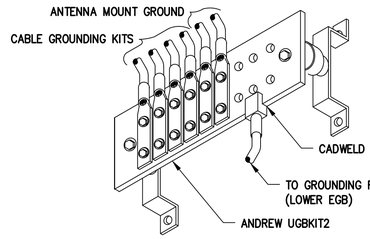
1. ALL CONDUITS SHALL BE ROUTED UNDERGROUND TO AVOID TRIP HAZARD, WHERE APPLICABLE.
2. ALL UNDERGROUND CONDUITS SHALL BE PVC. ALL ABOVEGROUND CONDUITS SHALL BE RGS.



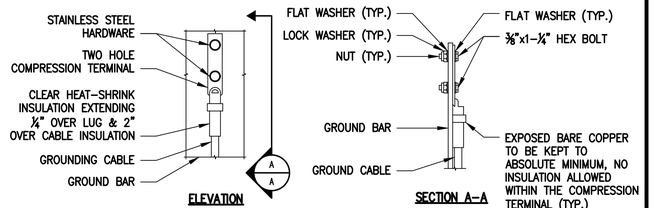
ONE-LINE DIAGRAM
SCALE: NOT TO SCALE — 1 / E-1



GROUNDING RISER DIAGRAM
SCALE: NOT TO SCALE — 2 / E-1

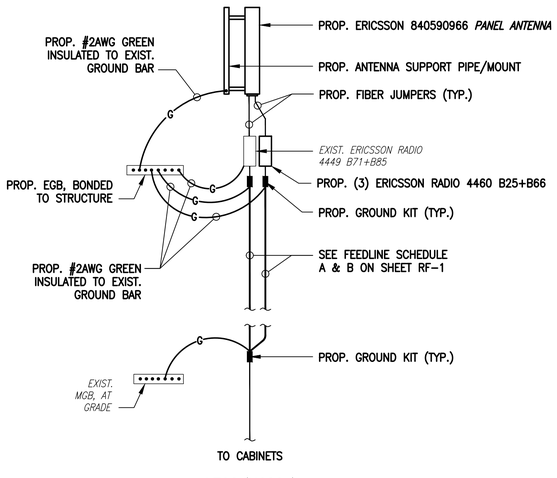


GROUND BAR (EGB)
SCALE: NOT TO SCALE — 4 / E-1

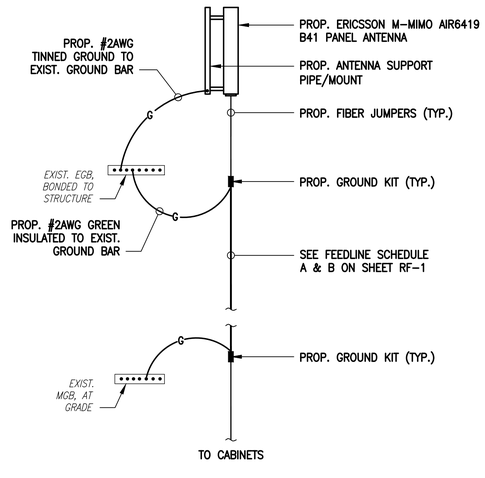


NOTES:
1. "DOUBLING UP" OR "STACKING" OF CONNECTIONS IS NOT PERMITTED.
2. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.
3. CADWELD DOWNLEADS FROM UPPER EGB, LOWER EGB, & MGB.

TYPICAL GROUND BAR CONNECTIONS DETAIL
SCALE: NOT TO SCALE — 5 / E-1



L700/N600/ L2100/L1900/N1900 ANTENNA



N2500 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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