COHEN and WOLF P.C.
ATTORNEYS AT LAW

JULIE D. KOHLER

PLEASE REPLY TO: Bridgeport
WRITER'S DIRECT DIAL: (203) 337-4157
E-Mail Address: jkohler@cohenandwolf.com

June 13, 2014

Attorney Melanie Bachman
Acting Executive Director
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

Re: Notice of Exempt Modification
InSite Wireless Group, LLC/ MetroPCS co-location
Site ID CTHA536A
577 Bell Street, Glastonbury, Connecticut

Dear Attorney Bachman:

This office represents MetroPCS Wireless Inc. ("MetroPCS") and has been retained to file exempt modification filings with the Connecticut Siting Council on its behalf.

In this case, InSite Wireless Group, LLC owns the existing self-supported lattice tower and related facility located at 577 Bell Street, Glastonbury, Connecticut (Latitude: 41.7336 Longitude: -72.5496). MetroPCS intends to replace three antennas with six new antennas and related equipment at this existing telecommunications facility in Glastonbury ("Glastonbury Facility"). Please accept this letter as notification, pursuant to R.C.S.A. § 16-50j-73, of construction which 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 Manager, Richard J. Johnson, and the property owner, Cox Connecticut Telcom LLC.

The existing Glastonbury Facility consists of a 92 foot tall self-supported lattice tower.[1] MetroPCS plans to replace three antennas on single standoff arms with six antennas mounted on dual standoff arms at a centerline of 65 feet. (See the plans revised to May 1, 2014 attached hereto as Exhibit A). MetroPCS will also replace an equipment cabinet and battery backup unit on a new concrete pad, and install fiber cable. The existing Glastonbury Facility is structurally capable of supporting MetroPCS' proposed modifications, as indicated in the structural analysis dated May 29, 2014 and attached hereto as Exhibit B.

The planned modifications to the Glastonbury Facility fall squarely within those activities

[1] The Glastonbury Facility was first approved by the Council in Docket No. 16. Petition No. 990 was subsequently approved to increase the height of the facility to 104 feet. The Decision and Order in this docket (dated January 11, 1980) and Petition approval (dated June 23, 2011) contain no relevant requirements or limitations on the configuration of the Glastonbury Facility.

explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The proposed modification will not increase the height of the tower. MetroPCS' replacement antennas will be installed at a centerline of 65 feet, merely replacing existing antennas located at the same 65 foot elevation. The enclosed tower drawing confirms that the proposed modification will not increase the height of the tower.

2. The proposed modifications will not require an extension of the site boundaries. MetroPCS' equipment will be located entirely within the existing compound and equipment pad as shown on pages 2 and 3 of Exhibit A.

3. The proposed modification to the Glastonbury Facility will not increase the noise levels at the existing facility by six decibels or more.

4. The operation of the replacement antennas will not increase the total radio frequency (RF) power density, measured at the base of the tower, to a level at or above the applicable standard. According to a Radio Frequency Emissions Analysis Report prepared by EBI dated June 9, 2014, MetroPCS' operations would add 2.995% of the FCC Standard. Therefore, the calculated "worst case" power density for the planned combined operation at the site including all of the proposed antennas would be 78.595% of the FCC Standard as calculated for a mixed frequency site as evidenced by the engineering exhibit attached hereto as Exhibit C.

For the foregoing reasons, MetroPCS respectfully submits that the proposed replacement antennas and equipment at the Glastonbury Facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2). Upon acknowledgement by the Council of this proposed exempt modification, MetroPCS shall commence construction approximately sixty days from the date of the Council's notice of acknowledgement.

Sincerely,

Julie D. Kohler, Esq.

cc: Town of Glastonbury, Town Manager Richard J. Johnson
InSite Wireless Group, LLC
Cox Connecticut Telcom LLC
Northeast Site Solutions, Sheldon J. Freincle

EXHIBIT A

KEY PLAN

N.T.S.

CONFIGURATION

5A

SUBMITTALS	
LE REV A	05.01.14

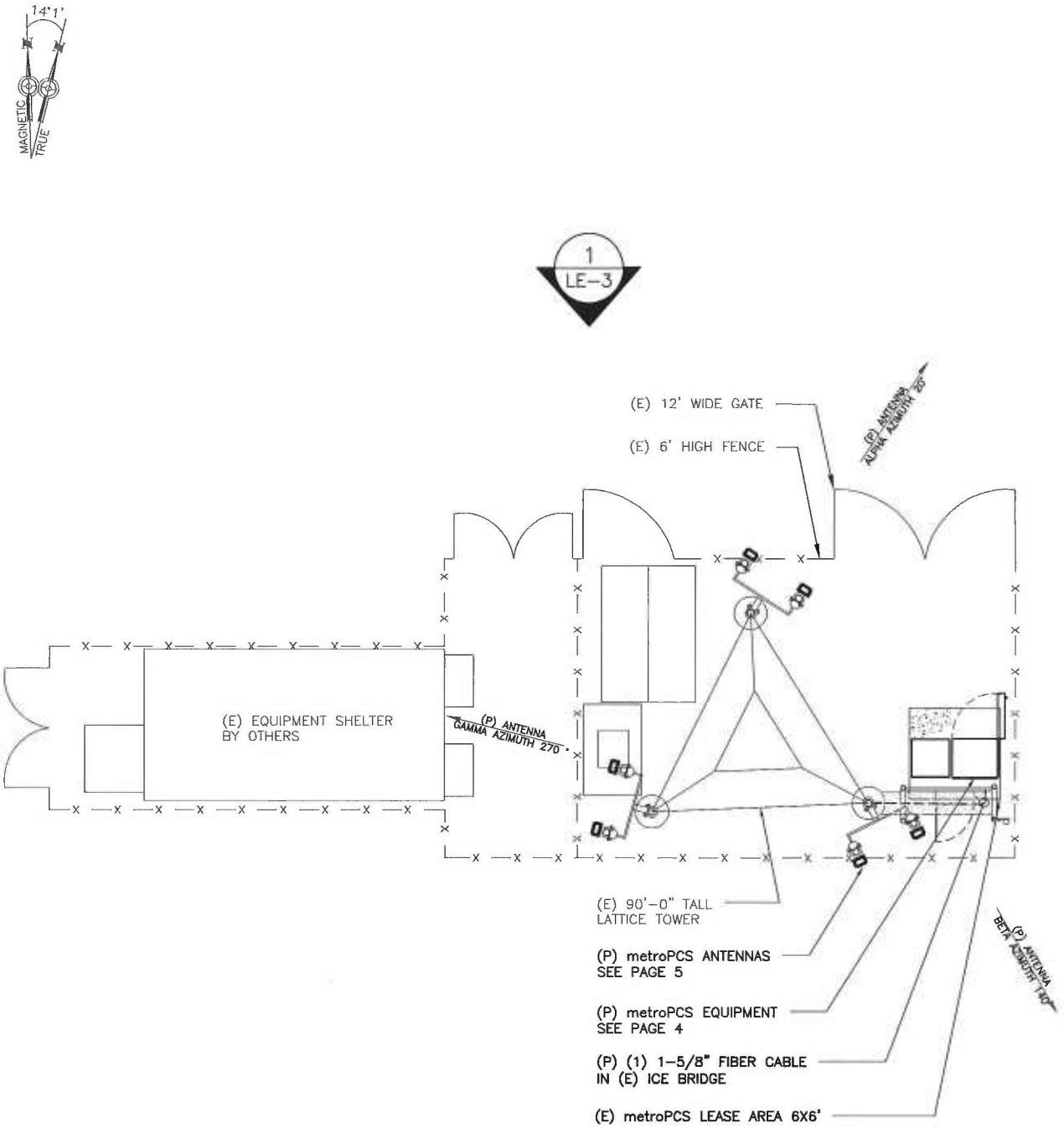
ATLANTIS GROUP
1340 Centre Street
Suite 212
Newton, MA 02459
Office: 617-965-0789
Fax: 617-213-5056

LEASE EXHIBIT

SITE NUMBER:
CTHA536A
SITE NAME:
INSITE GLASTONBURY LATTICE
SITE ADDRESS:
577 BELL STREET
GLASTONBURY, CT 06033

NORTHEAST SITE SOLUTIONS
54 MAIN STREET, UNIT 3
STURBRIDGE, MA 01566
(508) 434-5237
FOR
metroPCS.
metroPCS WIRELESS, INC.
35 GRIFFIN ROAD SOUTH
BLOOMFIELD, CT 06002

DRAWN BY: EB | CHECKED BY: SM



ALL EQUIPMENT LOCATIONS ARE APPROXIMATE AND ARE SUBJECT TO APPROVAL BY LESSEE/LICENSEE'S STRUCTURAL & RF ENGINEERS. LOCATIONS OF POWER & TELEPHONE FACILITIES ARE SUBJECT TO APPROVAL BY UTILITY COMPANIES.

SITE PLAN (1 / LE-2)
SCALE: N.T.S.

CONFIGURATION
5A

SUBMITTALS	
LE REV A	05.01.14

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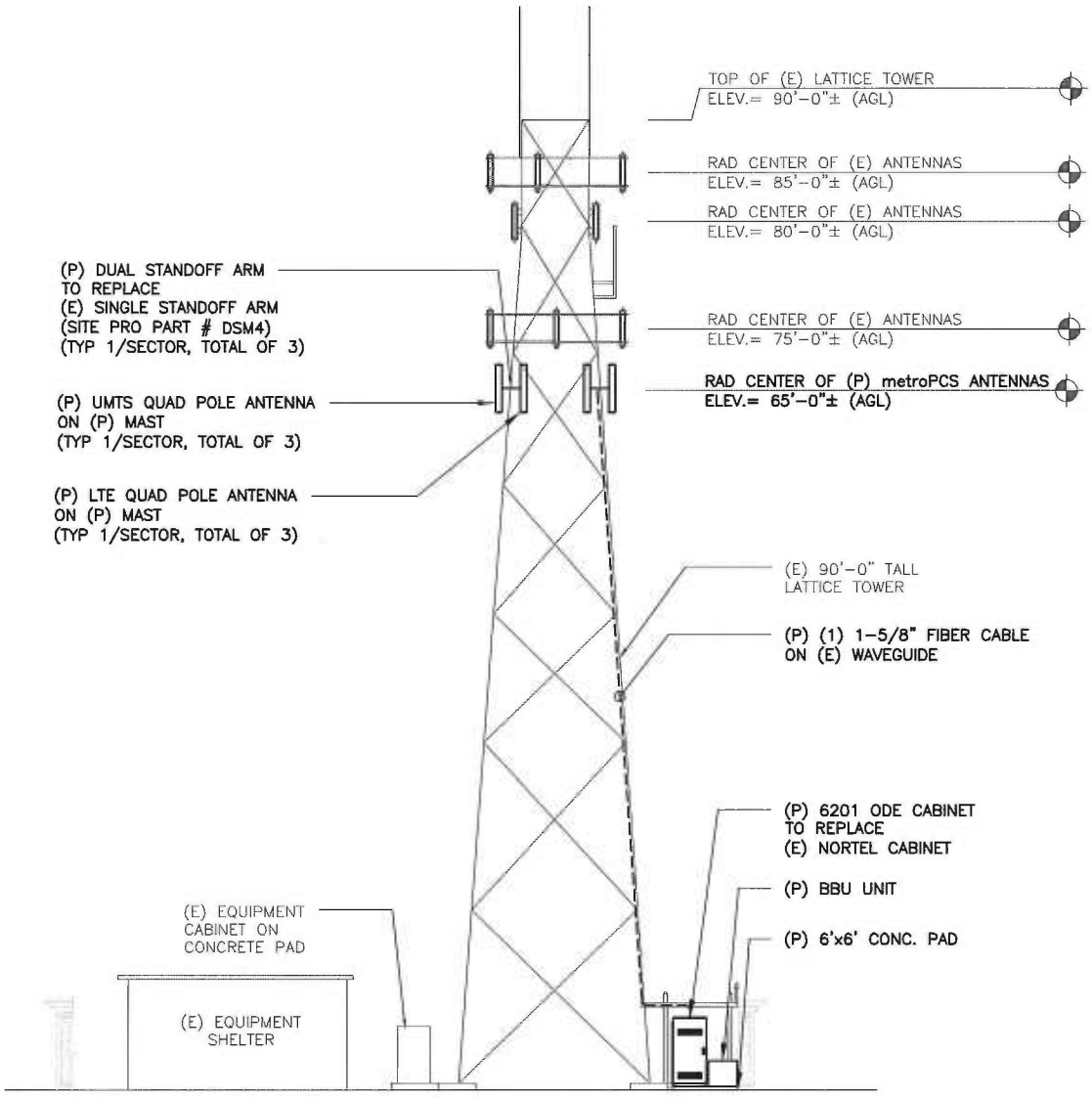

ELEVATION

N.T.S.

1 / LE-3

CONFIGURATION

5A

SUBMITTALS	
LE REV A	05.01.14

ATLANTIS GROUP
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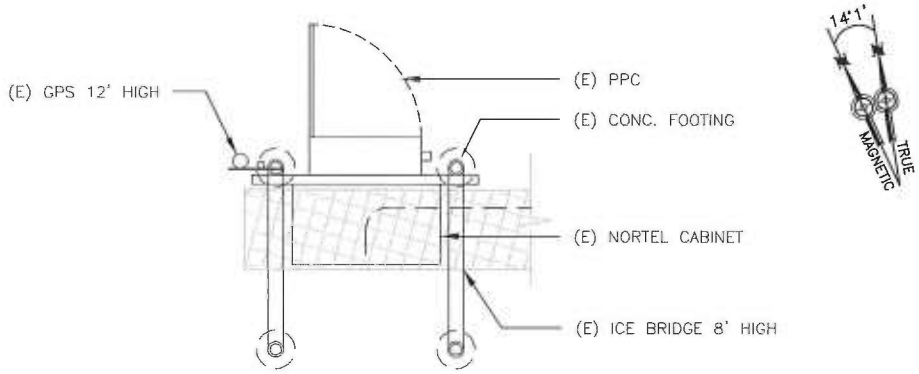
(508) 434-5237

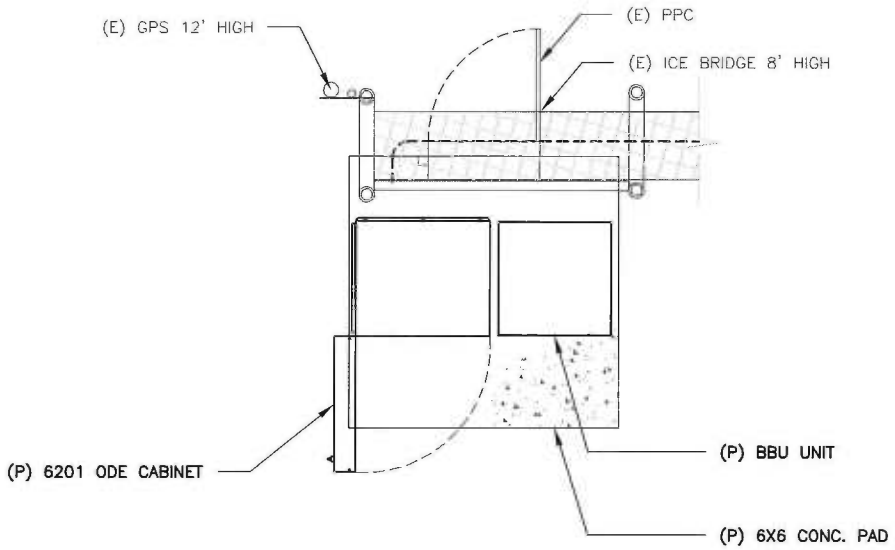
FOR metroPCS.

metroPCS WIRELESS, INC.
35 GRIFFIN ROAD SOUTH
BLOOMFIELD, CT 06002

DRAWN BY: EB | CHECKED BY: SM



EXISTING EQUIPMENT



PROPOSED EQUIPMENT

CONFIGURATION

5A

SUBMITTALS	
LE REV A	05.01.14

ATLANTIS GROUP
1340 Centre Street
Suite 212
Newton, MA 02459
Office: 617-965-0789
Fax: 617-213-5056

LEASE EXHIBIT

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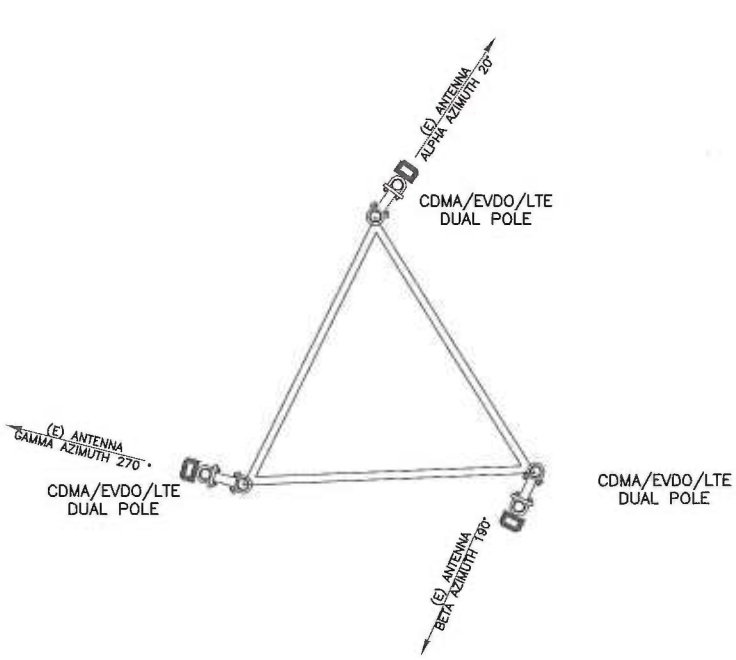
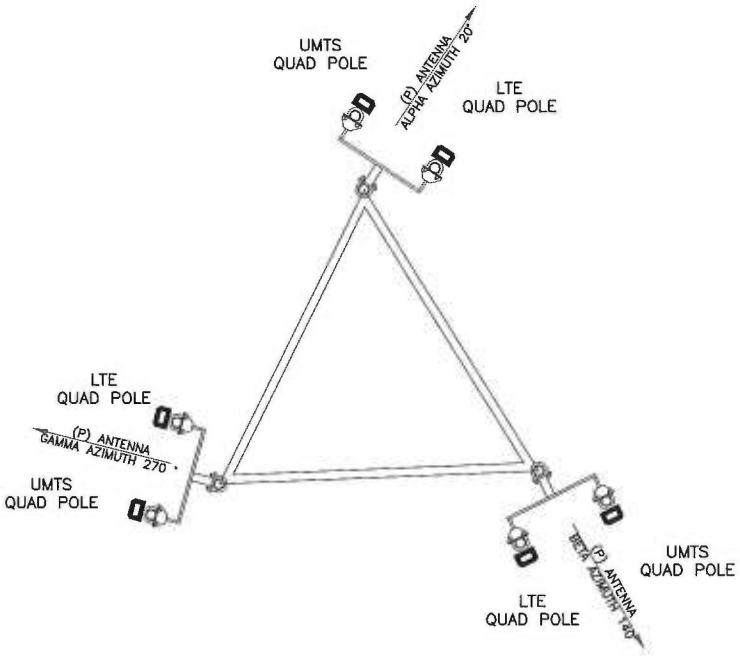


EXISTING ANTENNA CONFIGURATION



PROPOSED ANTENNA CONFIGURATION

CONFIGURATION

5A

SUBMITTALS	
LE REV A	05.01.14

ATLANTIS GROUP
1340 Centre Street
Suite 212
Newton, MA 02459
Office: 617-965-0789
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LEASE EXHIBIT

SITE NUMBER:
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metroPCS WIRELESS, INC.
35 GRIFFIN ROAD SOUTH
BLOOMFIELD, CT 06002

DRAWN BY: EB | CHECKED BY: SM |

EXHIBIT B

bennett&pless

Experience Structural Expertise

May 29, 2014

Ms. Tracy Lee
Insite Towers, LLC
1199 N. Fairfax St., Ste. 700
Alexandria, VA 22314

Re: Tower Structural Analysis- Metro PCS Antenna Installation

Site Number:	CT901	**Site Address:**	577 Bell Street Glastonbury, CT
Site Name:	Glastonbury		
Tower Owner:	N/A	**Lat/Long:**	41.7338/-72.5497
Tower Type:	92-ft Self-Support Tower	**B&P Job No:**	14060.001
Tower Status:	Passed (99% Capacity)	**Foundation Status:**	Passed

We have completed our structural analysis of the proposed equipment installation on the foregoing tower to determine its ability to support the new loads proposed by Metro PCS.

The following information was provided for our tower structural analysis:

- Tower: Member sizes and configuration were obtained from the previous structural analysis by the URS Corporation dated 9/7/2010.
- Foundation: Foundation details were obtained from the previous structural analysis listed above.
- Geotechnical: A geotechnical report was not available for this site.
- Antennas: Proposed antenna loading was obtained from the tenant application provided by Insite Towers, LLC dated 4/30/2014. Existing antenna loading was obtained from the structural analysis listed above.
- Other: General photographs of the tower

Table 1 summarizes the antenna, attachment, and transmission line loading proposed and Table 2 summarizes the design criteria used for our structural analysis. Attached is a copy of the structural calculations, which in addition to detailed results of the analysis also includes a tower profile with member sizes and configuration, and the existing/proposed equipment list with types and location.

Table 1 – Proposed Equipment Loading

Status	Antennas/Attachments					Transmission Lines[1]	
	Carrier	Rad Center	Qty	Manufacturer	Model	# of Feed lines	Feed line Size (in)
New Antenna	Metro PCS	65'	6	Ericsson	AIR 21	1	1 5/8"

[1]Note: See attachment for transmission line layout

Table 2 – Design Criteria Used for Structural Analysis

Criterion	Information Used
State Building Code	Connecticut (IBC 2003)
Tower Standard	EIA/TIA-222-F
County	Montgomery
Basic Wind Speed	80 mph, no ice
	69 mph, 1/2" ice
Steel Grade Assumed	50 ksi SR legs, 36 ksi all others, A325 bolts
Tower Analysis Software	tnxTower (version 6.1.3)

Based on the foregoing information, and provided all dead appurtenances and feed lines be removed from the tower, our structural analysis determined that **the existing tower is structurally capable of supporting the proposed equipment loads without modification.** The foundation modifications are assumed to have been completed, and if so the modified foundation is capable of supporting the current and proposed tower loading.

The following assumptions were made in conducting our structural analysis:

1. The existing tower has been maintained to manufacturer's specifications and is in good condition.
2. All member connections are assumed to have been designed to meet the load carrying capacity of the connected member.
3. Antenna mount loads have been estimated based on typical industry standards.
4. The new feed lines for the proposed Metro PCS antennas are assumed to be mounted across one tower face opposite of the existing feed lines.
5. The mounts for the proposed antennas have been analyzed and designed by others.
6. **Existing antennas (2 Omni and 1 dipole) and feed lines at 112' have been removed prior to the Metro PCS Installation.**
7. See additional assumptions contained in the report attached.

Bennett & Pless, Inc. makes no warranties, expressed or implied, in connection with this report, and disclaims any liability arising from material, fabrication and erection of this tower. Bennett & Pless, Inc. will not be responsible whatsoever for or on account of, consequential or incidental damages sustained by any person, firm, or organization as a result of any data or conclusions contained in this report. The maximum liability of Bennett & Pless, Inc. pursuant to this report will be limited to the total fee received for preparation of this report.

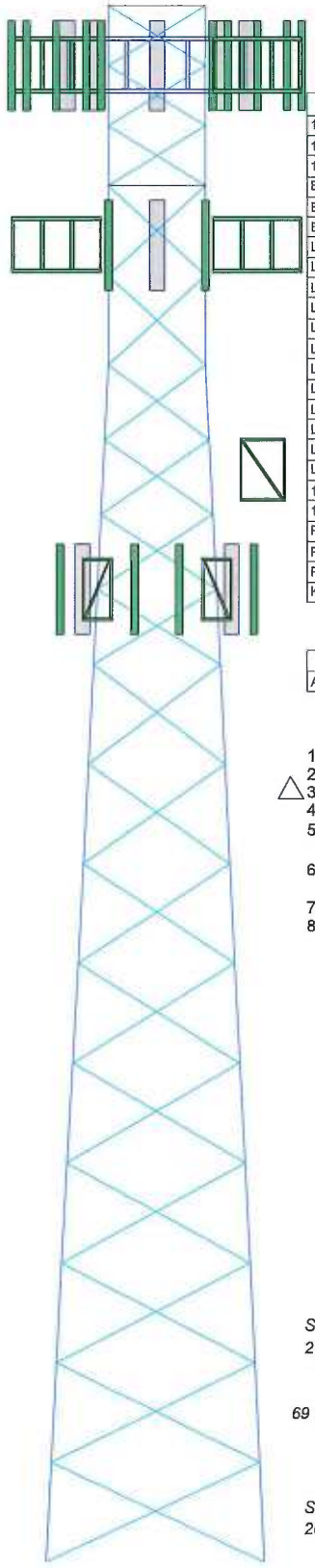
We appreciate the opportunity of providing our continuing professional services to you. If you have any questions or need further assistance on this please call us anytime.

Yours very truly,
Bennett & Pless, Inc.

Mike De Boer, P.E.
Director of Telecom

Section		T1	T2	T3	T4	T5	T6
Legs		P2x.154		P2.5x.203	Pipe 2.875 x .203 w/ 3/8 Plate	Pipe 2.875 x 0.276 w/ 3/8 Plate	Pipe 3 x 0.3 w/ 3/8 Plate
Leg Grade		A618-50					
Diagonals		L1 1/2x1 1/2x3/16		L1 1/2x1 1/2x1/4	L2x2x3/16	L2 1/2x2 1/2x3/16	
Diagonal Grade		A36					
Top Girts		L2x2x3/16		N.A.			
Face Width (ft)	14.65	6.52		6.56	8.56	10.56	12.6
# Panels @ (ft)		3 @ 4	2 @ 6	4 @ 5		9 @ 6.66667	
Weight (K)	3.2	0.3	0.3	0.5	0.5	0.7	0.8

104.0 ft
92.0 ft
80.0 ft
60.0 ft
40.0 ft
20.0 ft
0.0 ft



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
12' T-Frame Sector Mount (Verizon)	100	KMW AX-X-CD-1665-OOT (ATI)	88
12' T-Frame Sector Mount (Verizon)	100	KMW AX-X-CD-1665-OOT (ATI)	88
12' T-Frame Sector Mount (Verizon)	100	Andrew SBNH-1D6565C (ATI)	88
BXA-70063/8CF (Verizon)	100	Andrew SBNH-1D6565C (ATI)	88
BXA-70063/6CF (Verizon)	100	Andrew SBNH-1D6565C (ATI)	88
BXA-70063/6CF (Verizon)	100	(2) TMA (ATI)	88
LPA-80063/8CF (Verizon)	100	(2) TMA (ATI)	88
LPA-80063/6CF (Verizon)	100	(2) TMA (ATI)	88
LPA-80063/6CF (Verizon)	100	(2) RRU-11 (ATI)	88
LPA-80063/8CF (Verizon)	100	(2) RRU-11 (ATI)	88
LPA-80063/6CF (Verizon)	100	(2) RRU-11 (ATI)	88
LPA-80063/6CF (Verizon)	100	Demarcation Box DC6-4860-188F (ATI)	88
LPA-185063/16CF (Verizon)	100		
LPA-185063/12CH-2 (Verizon)	100	DB806-XT (Town of Glastonbury)	79
LPA-185063/12CH-2 (Verizon)	100	PR-950 (Town of Glastonbury)	73
LPA-185063/16CF (Verizon)	100	PIROD 6' Side Mount Standoff (Town of Glastonbury)	73
LPA-185063/12CH-2 (Verizon)	100		
LPA-185063/12CH-2 (Verizon)	100	3' Stand-Off (Metro PCS)	65
12' T-Frame Sector Mount (ATI)	88	3' Stand-Off (Metro PCS)	65
12' T-Frame Sector Mount (ATI)	88	(2) AIR 21 (Metro PCS)	65
Powerwave P65-17-XLH-RR (ATI)	88	(2) AIR 21 (Metro PCS)	65
Powerwave P65-17-XLH-RR (ATI)	88	(2) AIR 21 (Metro PCS)	65
Powerwave P65-17-XLH-RR (ATI)	88	3' Stand-Off (Metro PCS)	65
KMW AX-X-CD-1665-OOT (ATI)	88		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A618-50	50 ksi	70 ksi	A36	36 ksi	58 ksi

TOWER DESIGN NOTES

1. Tower designed for a 80 mph basic wind in accordance with the TIA/EIA-222-F Standard.
2. Tower is also designed for a 69 mph basic wind with 0.50 in ice.
3. Deflections are based upon a 60 mph wind.
4. Weld together tower sections have flange connections.
5. Connections use galvanized A325 bolts, nuts and locking devices. Installation per TIA/EIA-222 and AISC Specifications.
6. Tower members are "hot dipped" galvanized in accordance with ASTM A123 and ASTM A153 Standards.
7. Welds are fabricated with ER-70S-6 electrodes.
8. TOWER RATING: 98.8%

MAX. CORNER REACTIONS AT BASE:
DOWN: 114 K
SHEAR: 12 K

UPLIFT: -101 K
SHEAR: 11 K

AXIAL
21 K
SHEAR 21 K *MOMENT 1363 kip-ft*

TORQUE 12 kip-ft
69 mph WIND - 0.5000 in ICE

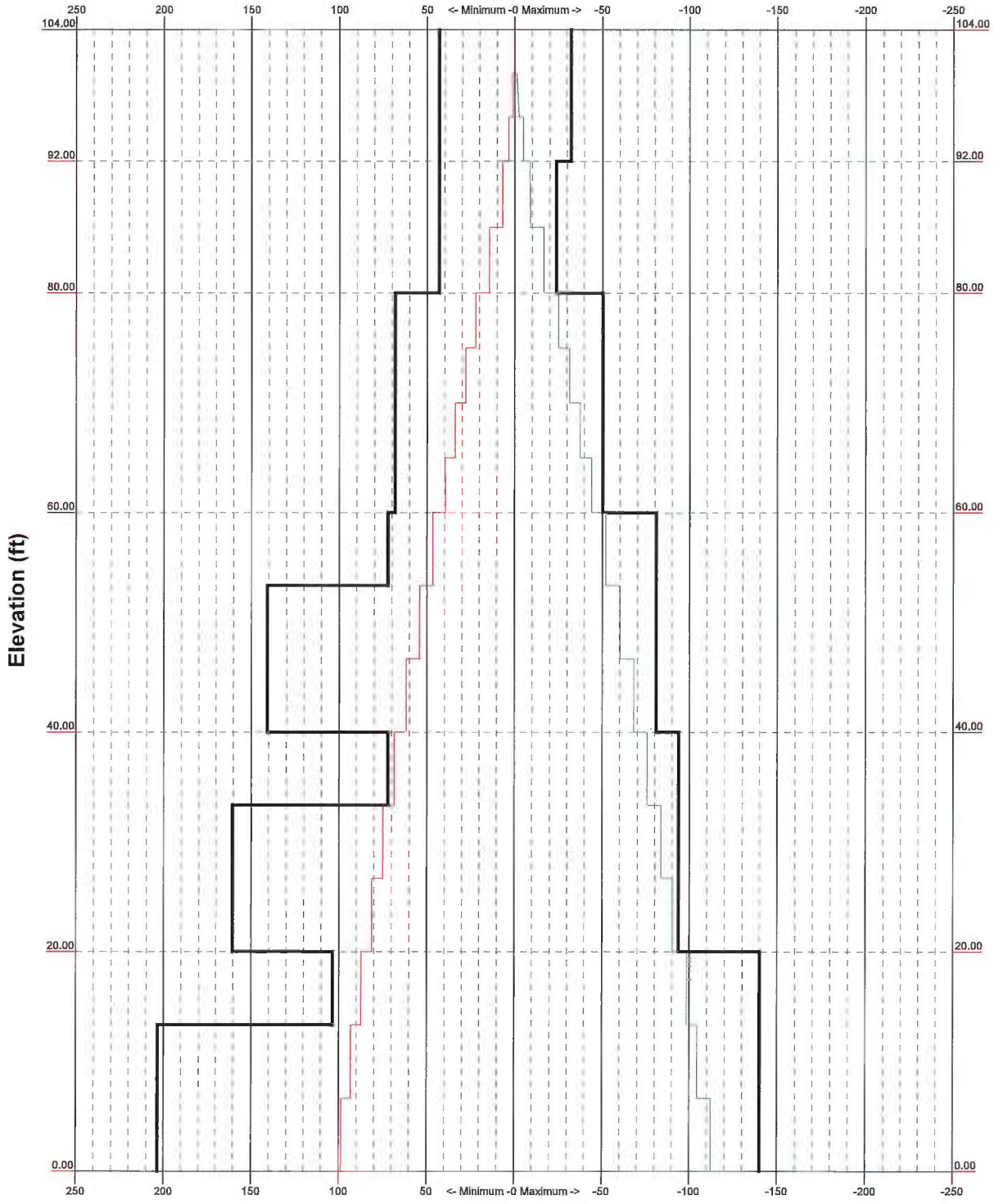
AXIAL
12 K
SHEAR 20 K *MOMENT 1365 kip-ft*

TORQUE 11 kip-ft
REACTIONS - 80 mph WIND

	Job: *CT901 Glastonbury*			
	Project: *SST Analysis*			
	Client: Insite Towers, LLC	Drawn by: LETS America, Inc.	App'd:	
Phone:	Code: TIA/EIA-222-F	Date: 06/03/14	Scale: NTS	
FAX:	Path: Y:\2014\14013.xxx - Insite Wireless\14013.002 - CT901 Glastonbury\Design\CT901 Glastonbury.eri		Dwg No. E-1	

TIA/EIA-222-F - 80 mph/69 mph 0.5000 in Ice

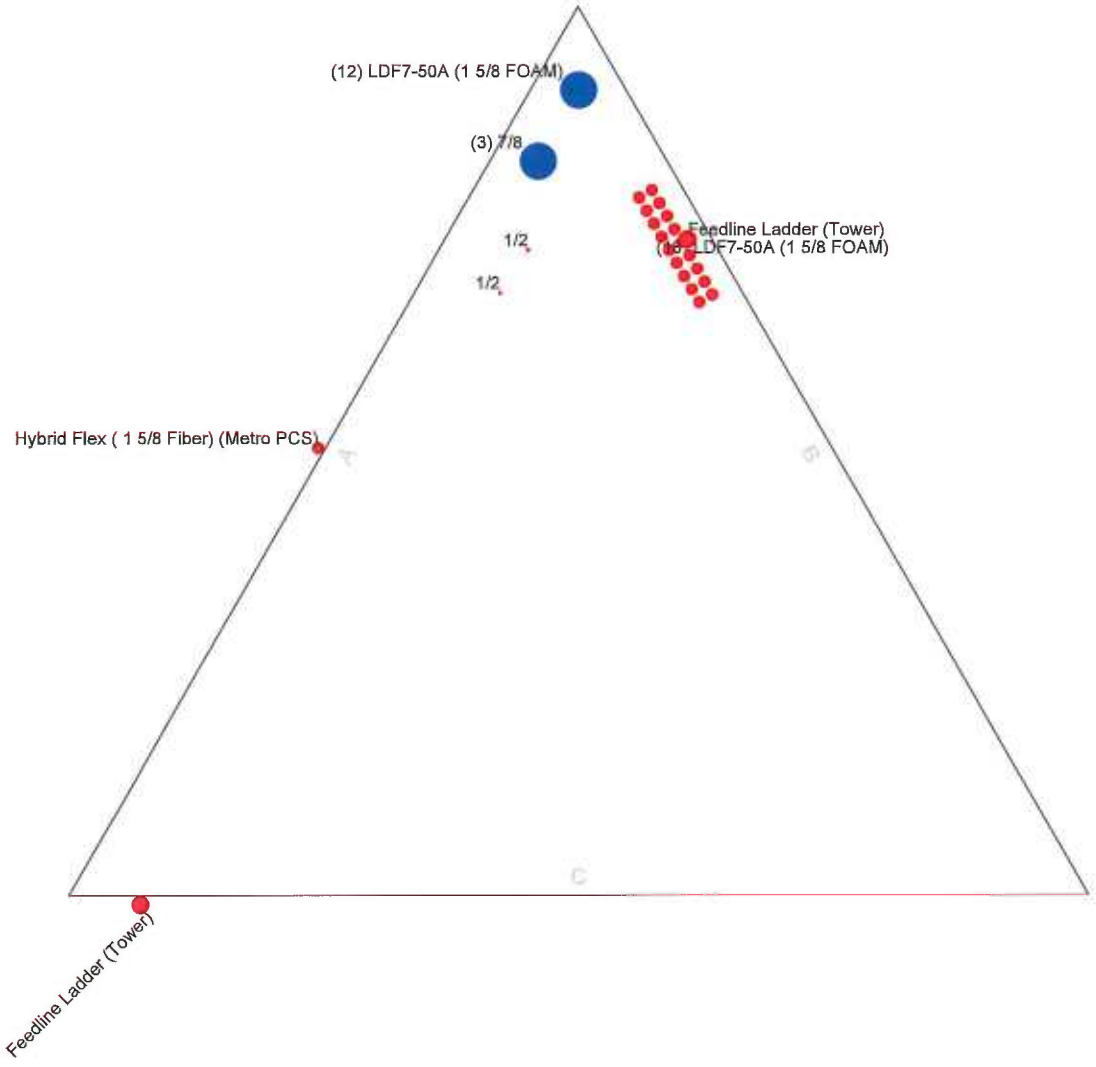
Leg Capacity ——— Leg Compression (K)



Phone: FAX:	Job: *CT901 Glastonbury*			
	Project: *SST Analysis*			
	Client: Insite Towers, LLC	Drawn by: LETS America, Inc.	App'd:	
	Code: TIA/EIA-222-F	Date: 06/03/14	Scale: NTS	
	Path: Y:\2014\14013.xxx - InSite Wireless\14013.002 - CT901 Glastonbury\Design\CT901 Glastonbury.eri		Dwg No. E-3	

Feed Line Plan

Round Flat App In Face App Out Face



Phone: FAX:	Job: **CT901 Glastonbury**			
	Project: **SST Analysis**			
	Client: Insite Towers, LLC	Drawn by: LETS America, Inc.	App'd:	
	Code: TIA/EIA-222-F	Date: 06/03/14	Scale: NTS	
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tnxTower	Job: CT901 Glastonbury	Page: 1 of 24
	Project: SST Analysis	Date: 12:06:49 06/03/14
Phone: FAX:	Client: Insite Towers, LLC	Designed by: LETS America, Inc.

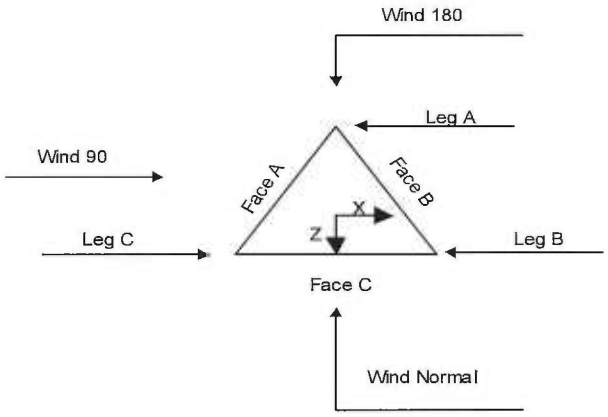
Tower Input Data

The main tower is a 3x free standing tower with an overall height of 104.00 ft above the ground line.
The base of the tower is set at an elevation of 0.00 ft above the ground line.
The face width of the tower is 6.52 ft at the top and 14.65 ft at the base.
This tower is designed using the TIA/EIA-222-F standard.
The following design criteria apply:

Basic wind speed of 80 mph.
Nominal ice thickness of 0.5000 in.
Ice density of 56 pcf.
A wind speed of 69 mph is used in combination with ice.
Temperature drop of 50 °F.
Deflections calculated using a wind speed of 60 mph.
Weld together tower sections have flange connections..
Connections use galvanized A325 bolts, nuts and locking devices. Installation per TIA/EIA-222 and AISC Specifications..
Tower members are "hot dipped" galvanized in accordance with ASTM A123 and ASTM A153 Standards..
Welds are fabricated with ER-70S-6 electrodes..
A non-linear (P-delta) analysis was used.
Pressures are calculated at each section.
Stress ratio used in tower member design is 1.333.
Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

Consider Moments - Legs	Distribute Leg Loads As Uniform	Treat Feedline Bundles As Cylinder
Consider Moments - Horizontals	Assume Legs Pinned	Use ASCE 10 X-Brace Ly Rules
Consider Moments - Diagonals	√ Assume Rigid Index Plate	√ Calculate Redundant Bracing Forces
Use Moment Magnification	√ Use Clear Spans For Wind Area	Ignore Redundant Members in FEA
√ Use Code Stress Ratios	√ Use Clear Spans For KL/r	SR Leg Bolts Resist Compression
√ Use Code Safety Factors - Guys	Retension Guys To Initial Tension	√ All Leg Panels Have Same Allowable
Escalate Ice	Bypass Mast Stability Checks	Offset Girt At Foundation
Always Use Max Kz	√ Use Azimuth Dish Coefficients	√ Consider Feedline Torque
Use Special Wind Profile	√ Project Wind Area of Appurt.	Include Angle Block Shear Check
√ Include Bolts In Member Capacity	Autocalc Torque Arm Areas	Poles
√ Leg Bolts Are At Top Of Section	SR Members Have Cut Ends	Include Shear-Torsion Interaction
Secondary Horizontal Braces Leg	√ Sort Capacity Reports By Component	Always Use Sub-Critical Flow
Use Diamond Inner Bracing (4 Sided)	Triangulate Diamond Inner Bracing	Use Top Mounted Sockets
Add IBC .6D+W Combination	Use TIA-222-G Tension Splice Capacity Exemption	



Triangular Tower

Tower Section Geometry

Tower Section	Tower Elevation	Assembly Database	Description	Section Width	Number of Sections	Section Length
	ft			ft		ft
T1	104.00-92.00			6.52	1	12.00
T2	92.00-80.00			6.52	1	12.00
T3	80.00-60.00			6.56	1	20.00
T4	60.00-40.00			8.56	1	20.00
T5	40.00-20.00			10.56	1	20.00
T6	20.00-0.00			12.60	1	20.00

Tower Section Geometry *(cont'd)*

Tower Section	Tower Elevation	Diagonal Spacing	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset	Bottom Girt Offset
	ft	ft				in	in
T1	104.00-92.00	4.00	X Brace	No	No	0.0000	0.0000
T2	92.00-80.00	6.00	X Brace	No	No	0.0000	0.0000
T3	80.00-60.00	5.00	X Brace	No	No	0.0000	0.0000
T4	60.00-40.00	6.67	X Brace	No	No	0.0000	0.0000
T5	40.00-20.00	6.67	X Brace	No	No	0.0000	0.0000
T6	20.00-0.00	6.67	X Brace	No	No	0.0000	0.0000

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
T1 104.00-92.00	Pipe	P2x.154	A618-50 (50 ksi)	Single Angle	L1 1/2x1 1/2x3/16	A36 (36 ksi)
T2 92.00-80.00	Pipe	P2x.154	A618-50 (50 ksi)	Single Angle	L1 1/2x1 1/2x1/4	A36 (36 ksi)
T3 80.00-60.00	Pipe	P2.5x.203	A618-50 (50 ksi)	Single Angle	L1 1/2x1 1/2x1/4	A36 (36 ksi)
T4 60.00-40.00	Arbitrary Shape	Pipe 2.875 x .203 w/ 3/8 Plate	A618-50 (50 ksi)	Single Angle	L2x2x3/16	A36 (36 ksi)
T5 40.00-20.00	Arbitrary Shape	Pipe 2.875 x 0.276 w/ 3/8 Plate	A618-50 (50 ksi)	Single Angle	L2 1/2x2 1/2x3/16	A36 (36 ksi)
T6 20.00-0.00	Arbitrary Shape	Pipe 3 x 0.3 w/ 3/8 Plate	A618-50 (50 ksi)	Single Angle	L2 1/2x2 1/2x3/16	A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
T1 104.00-92.00	Single Angle	L2x2x3/16	A36 (36 ksi)	Solid Round		A36 (36 ksi)
T2 92.00-80.00	Single Angle	L2x2x3/16	A36 (36 ksi)	Solid Round		A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in
T1 104.00-92.00	0.00	0.2500	A36 (36 ksi)	1.02	1	1	36.0000	36.0000
T2 92.00-80.00	0.00	0.2500	A36 (36 ksi)	1.02	1	1	36.0000	36.0000
T3 80.00-60.00	0.00	0.2500	A36 (36 ksi)	1.02	1	1	36.0000	36.0000
T4 60.00-40.00	0.00	0.2500	A36 (36 ksi)	1.02	1	1	36.0000	36.0000
T5 40.00-20.00	0.00	0.2500	A36 (36 ksi)	1.02	1	1	36.0000	36.0000
T6 20.00-0.00	0.00	0.2500	A36 (36 ksi)	1.02	1	1	36.0000	36.0000

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	K Factors[1] Legs	X Brace Diags X	X Brace Diags Y	K Single Diags X	K Single Diags Y	Girts X	Girts Y	Horiz. X	Horiz. Y	Sec. Horiz. X	Sec. Horiz. Y	Inner Brace X	Inner Brace Y
T1	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1
104.00-92.00				1	1	1	1	1	1	1	1	1	1	1	1
T2	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1
92.00-80.00				1	1	1	1	1	1	1	1	1	1	1	1
T3	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1
80.00-60.00				1	1	1	1	1	1	1	1	1	1	1	1
T4	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1
60.00-40.00				1	1	1	1	1	1	1	1	1	1	1	1
T5	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1
40.00-20.00				1	1	1	1	1	1	1	1	1	1	1	1
T6 20.00-0.00	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1	1	1	1	1	1

[1]*Note: K factors are applied to member segment lengths. K-braces without inner supporting members will have the K factor in the out-of-plane direction applied to the overall length.*

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Net Width Deduct in	Leg U	Diagonal Net Width Deduct in	Diagonal U	Top Girt Net Width Deduct in	Top Girt U	Bottom Girt Net Width Deduct in	Bottom Girt U	Mid Girt Net Width Deduct in	Mid Girt U	Long Horizontal Net Width Deduct in	Long Horizontal U	Short Horizontal Net Width Deduct in	Short Horizontal U
T1	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
104.00-92.00														
T2 92.00-80.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T3 80.00-60.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T4 60.00-40.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T5 40.00-20.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T6 20.00-0.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Connection Type	Leg Bolt Size in	Leg No.	Diagonal Bolt Size in	Diagonal No.	Top Girt Bolt Size in	Top Girt No.	Bottom Girt Bolt Size in	Bottom Girt No.	Mid Girt Bolt Size in	Mid Girt No.	Long Horizontal Bolt Size in	Long Horizontal No.	Short Horizontal Bolt Size in	Short Horizontal No.
T1	Flange	0.6250	4	0.5000	1	0.5000	1	0.6250	0	0.6250	0	0.6250	0	0.6250	0
104.00-92.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T2 92.00-80.00	Flange	0.6250	4	0.5000	1	0.5000	1	0.6250	0	0.6250	0	0.6250	0	0.6250	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T3 80.00-60.00	Flange	0.6250	4	0.5000	1	0.0000	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T4 60.00-40.00	Flange	0.6250	4	0.5000	1	0.0000	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T5 40.00-20.00	Flange	0.6250	4	0.5000	1	0.0000	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	

Tower Elevation ft	Leg Connection Type	Leg Bolt Size in	Leg No.	Diagonal Bolt Size in	Diagonal No.	Top Girt Bolt Size in	Top Girt No.	Bottom Girt Bolt Size in	Bottom Girt No.	Mid Girt Bolt Size in	Mid Girt No.	Long Horizontal Bolt Size in	Long Horizontal No.	Short Horizontal Bolt Size in	Short Horizontal No.
T6 20.00-0.00	Flange	0.7500 A325N	4	0.5000 A325N	1	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Face or Leg	Allow Shield	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
1/2	A	Yes	Ar (CfAe)	73.00 - 6.00	-12.5000	0.27	1	1	0.5000	0.5800		0.25
1/2	A	Yes	Ar (CfAe)	73.00 - 6.00	-12.0000	0.22	1	1	0.5000	0.5800		0.25
Feedline Ladder (Tower)	C	Yes	Ar (CfAe)	65.00 - 6.00	0.0000	0.43	1	1	0.5000	3.0000		8.40
LDF7-50A (1 5/8 FOAM)	B	Yes	Ar (CfAe)	100.00 - 6.00	-6.0000	-0.25	18	9	0.5000	1.9800		0.82
Feedline Ladder (Tower)	B	Yes	Ar (CfAe)	100.00 - 6.00	-2.0000	-0.25	1	1	0.5000	3.0000		8.40
Hybrid Flex (1 5/8 Fiber) (Metro PCS)	A	Yes	Ar (CfAe)	65.00 - 6.00	0.0000	0	1	1	1.9800	1.9800		0.82

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#		C_AA_A ft^2/ft	Weight plf
7/8	A	No	CaAa (In Face)	102.00 - 6.00	-4.0000	0.35	3	No Ice	0.00	0.54
								1/2" Ice	0.00	0.00
LDF7-50A (1 5/8 FOAM)	A	No	CaAa (In Face)	92.00 - 6.00	-4.0000	0.43	12	No Ice	0.16	0.82
								1/2" Ice	0.26	2.05

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
T1	104.00-92.00	A	0.000	0.000	0.000	0.000	0.02
		B	13.880	0.000	0.000	0.000	0.19
		C	0.000	0.000	0.000	0.000	0.00
T2	92.00-80.00	A	0.000	0.000	23.401	0.000	0.14
		B	20.820	0.000	0.000	0.000	0.28
		C	0.000	0.000	0.000	0.000	0.00
T3	80.00-60.00	A	2.082	0.000	39.001	0.000	0.24
		B	34.700	0.000	0.000	0.000	0.46
		C	1.250	0.000	0.000	0.000	0.04
T4	60.00-40.00	A	5.233	0.000	39.001	0.000	0.26

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
		B	34.700	0.000	0.000	0.000	0.46
		C	5.000	0.000	0.000	0.000	0.17
T5	40.00-20.00	A	5.233	0.000	39.001	0.000	0.26
		B	34.700	0.000	0.000	0.000	0.46
		C	5.000	0.000	0.000	0.000	0.17
T6	20.00-0.00	A	3.663	0.000	27.301	0.000	0.18
		B	24.290	0.000	0.000	0.000	0.32
		C	3.500	0.000	0.000	0.000	0.12

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
T1	104.00-92.00	A	0.500	0.000	0.000	0.000	0.000	0.00
		B		4.653	13.227	0.000	0.000	0.41
		C		0.000	0.000	0.000	0.000	0.00
T2	92.00-80.00	A	0.500	0.000	0.000	37.800	0.000	0.29
		B		6.980	19.840	0.000	0.000	0.62
		C		0.000	0.000	0.000	0.000	0.00
T3	80.00-60.00	A	0.500	4.665	0.000	63.000	0.000	0.53
		B		11.633	33.067	0.000	0.000	1.03
		C		1.667	0.000	0.000	0.000	0.05
T4	60.00-40.00	A	0.500	10.233	0.000	63.000	0.000	0.57
		B		11.633	33.067	0.000	0.000	1.03
		C		6.667	0.000	0.000	0.000	0.21
T5	40.00-20.00	A	0.500	10.233	0.000	63.000	0.000	0.57
		B		11.633	33.067	0.000	0.000	1.03
		C		6.667	0.000	0.000	0.000	0.21
T6	20.00-0.00	A	0.500	7.163	0.000	44.100	0.000	0.40
		B		8.143	23.147	0.000	0.000	0.72
		C		4.667	0.000	0.000	0.000	0.15

Feed Line Shielding

Section	Elevation ft	Face	A_R ft^2	A_R Ice ft^2	A_F ft^2	A_F Ice ft^2
T1	104.00-92.00	A	0.000	0.000	0.000	0.000
		B	0.000	0.998	1.211	1.559
		C	0.000	0.000	0.000	0.000
T2	92.00-80.00	A	0.000	0.000	0.000	0.000
		B	0.000	1.197	1.466	1.889
		C	0.000	0.000	0.000	0.000
T3	80.00-60.00	A	0.000	0.187	0.125	0.280
		B	0.000	1.790	2.085	2.686
		C	0.000	0.067	0.075	0.100
T4	60.00-40.00	A	0.000	0.312	0.319	0.625
		B	0.000	1.364	2.118	2.728
		C	0.000	0.203	0.305	0.407
T5	40.00-20.00	A	0.000	0.295	0.378	0.739
		B	0.000	1.290	2.504	3.226
		C	0.000	0.192	0.361	0.481
T6	20.00-0.00	A	0.000	0.199	0.255	0.499

Section	Elevation	Face	A_R	A_R Ice	A_F	A_F Ice
	ft		ft^2	ft^2	ft^2	ft^2
		B	0.000	0.871	1.691	2.178
		C	0.000	0.130	0.244	0.325

Feed Line Center of Pressure

Section	Elevation	CP_X	CP_Z	CP_X Ice	CP_Z Ice
	ft	in	in	in	in
T1	104.00-92.00	1.3649	-6.8550	0.9992	-4.9724
T2	92.00-80.00	0.8057	-9.7336	0.6054	-8.9705
T3	80.00-60.00	0.6306	-11.0652	0.4123	-10.3434
T4	60.00-40.00	-0.1603	-14.8036	-0.3875	-13.9615
T5	40.00-20.00	-0.1822	-16.9491	-0.5032	-16.2286
T6	20.00-0.00	-0.1862	-17.4274	-0.5556	-16.8470

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
12' T-Frame Sector Mount (Verizon)	A	From Leg	4.00 0.00 0.00	0.0000	100.00	No Ice 1/2" Ice	11.00 11.30	11.00 11.30	0.47 0.60
12' T-Frame Sector Mount (Verizon)	B	From Leg	4.00 0.00 0.00	0.0000	100.00	No Ice 1/2" Ice	11.00 11.30	11.00 11.30	0.47 0.60
12' T-Frame Sector Mount (Verizon)	C	From Leg	4.00 0.00 0.00	0.0000	100.00	No Ice 1/2" Ice	11.00 11.30	11.00 11.30	0.47 0.60
BXA-70063/8CF (Verizon)	A	From Leg	4.00 0.00 0.00	0.0000	100.00	No Ice 1/2" Ice	7.40 8.00	3.00 3.50	0.02 0.08
BXA-70063/6CF (Verizon)	B	From Leg	4.00 0.00 0.00	0.0000	100.00	No Ice 1/2" Ice	5.50 6.50	2.20 3.20	0.04 0.09
BXA-70063/6CF (Verizon)	C	From Leg	4.00 0.00 0.00	0.0000	100.00	No Ice 1/2" Ice	5.50 6.50	2.20 3.20	0.04 0.09
LPA-80063/8CF (Verizon)	A	From Leg	4.00 -6.00 0.00	0.0000	100.00	No Ice 1/2" Ice	10.00 10.75	8.70 9.50	0.04 0.14
LPA-80063/6CF (Verizon)	B	From Leg	4.00 -6.00 0.00	0.0000	100.00	No Ice 1/2" Ice	7.40 8.00	6.50 7.00	0.03 0.04
LPA-80063/6CF (Verizon)	C	From Leg	4.00 -6.00 0.00	0.0000	100.00	No Ice 1/2" Ice	7.40 8.00	6.50 7.00	0.03 0.04
LPA-80063/8CF	A	From Leg	4.00	0.0000	100.00	No Ice	10.00	8.70	0.04

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
(Verizon)			6.00			1/2" Ice	10.75	9.50	0.14
			0.00						
LPA-80063/6CF	B	From Leg	4.00	0.0000	100.00	No Ice	7.40	6.50	0.03
(Verizon)			6.00			1/2" Ice	8.00	7.00	0.04
			0.00						
LPA-80063/6CF	C	From Leg	4.00	0.0000	100.00	No Ice	7.40	6.50	0.03
(Verizon)			6.00			1/2" Ice	8.00	7.00	0.04
			0.00						
LPA-185063/16CF	A	From Leg	4.00	0.0000	100.00	No Ice	2.59	4.53	0.02
(Verizon)			-4.00			1/2" Ice	3.20	5.10	0.03
			0.00						
LPA-185063/12CH-2	B	From Leg	4.00	0.0000	100.00	No Ice	4.97	4.51	0.01
(Verizon)			-4.00			1/2" Ice	5.42	4.95	0.05
			0.00						
LPA-185063/12CH-2	C	From Leg	4.00	0.0000	100.00	No Ice	4.97	4.51	0.01
(Verizon)			-4.00			1/2" Ice	5.42	4.95	0.05
			0.00						
LPA-185063/16CF	A	From Leg	4.00	0.0000	100.00	No Ice	2.59	4.53	0.02
(Verizon)			4.00			1/2" Ice	3.20	5.10	0.03
			0.00						
LPA-185063/12CH-2	B	From Leg	4.00	0.0000	100.00	No Ice	4.97	4.51	0.01
(Verizon)			4.00			1/2" Ice	5.42	4.95	0.05
			0.00						
LPA-185063/12CH-2	C	From Leg	4.00	0.0000	100.00	No Ice	4.97	4.51	0.01
(Verizon)			4.00			1/2" Ice	5.42	4.95	0.05
			0.00						
12' T-Frame Sector Mount	B	From Leg	4.00	0.0000	88.00	No Ice	11.00	11.00	0.47
(AT&T)			0.00			1/2" Ice	11.30	11.30	0.60
			0.00						
12' T-Frame Sector Mount	C	From Leg	4.00	0.0000	88.00	No Ice	11.00	11.00	0.47
(AT&T)			0.00			1/2" Ice	11.30	11.30	0.60
			0.00						
DB806-XT	B	From Leg	4.00	0.0000	79.00	No Ice	1.14	1.14	0.02
(Town of Glastonbury)			0.00			1/2" Ice	1.68	1.68	0.03
			0.00						
PR-950	B	From Leg	4.00	0.0000	73.00	No Ice	6.35	6.35	0.04
(Town of Glastonbury)			0.00			1/2" Ice	11.43	11.43	0.05
			0.00						
PiROD 6' Side Mount	B	From Leg	4.00	0.0000	73.00	No Ice	4.97	4.97	0.07
Standoff			0.00			1/2" Ice	6.12	6.12	0.13
(Town of Glastonbury)			0.00						
(2) AIR 21	A	From Leg	0.00	0.0000	65.00	No Ice	6.53	5.72	0.12
(Metro PCS)			0.00			1/2" Ice	6.98	6.42	0.18
			0.00						
(2) AIR 21	B	From Leg	0.00	0.0000	65.00	No Ice	6.53	5.72	0.12
(Metro PCS)			0.00			1/2" Ice	6.98	6.42	0.18
			0.00						
(2) AIR 21	C	From Leg	0.00	0.0000	65.00	No Ice	6.53	5.72	0.12
(Metro PCS)			0.00			1/2" Ice	6.98	6.42	0.18
			0.00						
3' Stand-Off	A	From Leg	0.00	0.0000	65.00	No Ice	4.00	8.00	0.05
(Metro PCS)			0.00			1/2" Ice	4.25	8.50	0.07
			0.00						
3' Stand-Off	B	From Leg	0.00	0.0000	65.00	No Ice	4.00	8.00	0.05
(Metro PCS)			0.00			1/2" Ice	4.25	8.50	0.07
			0.00						
3' Stand-Off	C	From Leg	0.00	0.0000	65.00	No Ice	4.00	8.00	0.05

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
(Metro PCS)			0.00			1/2" Ice	4.25	8.50	0.07
			0.00						
Powerwave P65-17-XLH-RR	A	From Leg	0.00	0.0000	88.00	No Ice	11.70	8.94	0.09
(AT&T)			0.00			1/2" Ice	12.42	10.45	0.12
			0.00						
Powerwave P65-17-XLH-RR	B	From Leg	0.00	0.0000	88.00	No Ice	11.70	8.94	0.09
(AT&T)			0.00			1/2" Ice	12.42	10.45	0.12
			0.00						
Powerwave P65-17-XLH-RR	C	From Leg	0.00	0.0000	88.00	No Ice	11.70	8.94	0.09
(AT&T)			0.00			1/2" Ice	12.42	10.45	0.12
			0.00						
KMW AX-X-CD-1665-OOT	A	From Leg	0.00	0.0000	88.00	No Ice	8.50	6.30	0.07
(AT&T)			0.00			1/2" Ice	9.15	7.48	0.09
			0.00						
KMW AX-X-CD-1665-OOT	B	From Leg	0.00	0.0000	88.00	No Ice	8.50	6.30	0.07
(AT&T)			0.00			1/2" Ice	9.15	7.48	0.09
			0.00						
KMW AX-X-CD-1665-OOT	C	From Leg	0.00	0.0000	88.00	No Ice	8.50	6.30	0.07
(AT&T)			0.00			1/2" Ice	9.15	7.48	0.09
			0.00						
Andrew SBNH-1D6565C	A	From Leg	0.00	0.0000	88.00	No Ice	11.64	9.84	0.09
(AT&T)			0.00			1/2" Ice	12.37	11.37	0.18
			0.00						
Andrew SBNH-1D6565C	B	From Leg	0.00	0.0000	88.00	No Ice	11.64	9.84	0.09
(AT&T)			0.00			1/2" Ice	12.37	11.37	0.18
			0.00						
Andrew SBNH-1D6565C	C	From Leg	0.00	0.0000	88.00	No Ice	11.64	9.84	0.09
(AT&T)			0.00			1/2" Ice	12.37	11.37	0.18
			0.00						
(2) TMA	A	From Leg	0.00	0.0000	88.00	No Ice	1.69	0.85	0.02
(AT&T)			0.00			1/2" Ice	1.87	0.98	0.03
			0.00						
(2) TMA	B	From Leg	0.00	0.0000	88.00	No Ice	1.69	0.85	0.02
(AT&T)			0.00			1/2" Ice	1.87	0.98	0.03
			0.00						
(2) TMA	C	From Leg	0.00	0.0000	88.00	No Ice	1.69	0.85	0.02
(AT&T)			0.00			1/2" Ice	1.87	0.98	0.03
			0.00						
(2) RRU-11	A	From Leg	0.00	0.0000	88.00	No Ice	4.42	1.19	0.06
(AT&T)			0.00			1/2" Ice	4.71	1.35	0.08
			0.00						
(2) RRU-11	B	From Leg	0.00	0.0000	88.00	No Ice	4.42	1.19	0.06
(AT&T)			0.00			1/2" Ice	4.71	1.35	0.08
			0.00						
(2) RRU-11	C	From Leg	0.00	0.0000	88.00	No Ice	4.42	1.19	0.06
(AT&T)			0.00			1/2" Ice	4.71	1.35	0.08
			0.00						
Demarcation Box	C	From Leg	0.00	0.0000	88.00	No Ice	4.45	0.89	0.02
DC6-4860-188F			0.00			1/2" Ice	4.76	1.04	0.05
(AT&T)			0.00						

Tower Pressures - No Ice

$G_H = 1.159$

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
T1	98.00	1.365	22	80.615	A	6.749	4.750	4.750	41.31	0.000	0.000
104.00-92.00					B	5.538	18.630		19.65	0.000	0.000
					C	6.749	4.750		41.31	0.000	0.000
T2 92.00-80.00	86.00	1.315	22	80.855	A	5.464	4.750	4.750	46.50	23.401	0.000
					B	3.998	25.570		16.06	0.000	0.000
					C	5.464	4.750		46.50	0.000	0.000
T3 80.00-60.00	70.00	1.24	20	155.998	A	8.840	11.681	9.599	46.78	39.001	0.000
					B	6.880	44.299		18.76	0.000	0.000
					C	8.890	10.849		48.63	0.000	0.000
T4 60.00-40.00	50.00	1.126	18	197.250	A	11.243	5.233	0.000	0.00	39.001	0.000
					B	9.445	34.700		0.00	0.000	0.000
					C	11.258	5.000		0.00	0.000	0.000
T5 40.00-20.00	30.00	1	16	237.659	A	16.265	5.233	0.000	0.00	39.001	0.000
					B	14.138	34.700		0.00	0.000	0.000
					C	16.282	5.000		0.00	0.000	0.000
T6 20.00-0.00	10.00	1	16	279.593	A	18.643	3.663	0.000	0.00	27.301	0.000
					B	17.207	24.290		0.00	0.000	0.000
					C	18.654	3.500		0.00	0.000	0.000

Tower Pressure - With Ice

$G_H = 1.159$

Section Elevation ft	z ft	K_Z	q_z psf	t_Z in	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
T1 104.00-92.00	98.00	1.365	17	0.5000	81.615	A	6.749	10.985	6.750	38.06	0.000	0.000
						B	18.416	14.640		20.42	0.000	0.000
						C	6.749	10.985		38.06	0.000	0.000
T2 92.00-80.00	86.00	1.315	16	0.5000	81.855	A	5.464	10.146	6.750	43.24	37.800	0.000
						B	23.415	15.928		17.16	0.000	0.000
						C	5.464	10.146		43.24	0.000	0.000
T3 80.00-60.00	70.00	1.24	15	0.5000	157.666	A	8.684	23.276	12.938	40.48	63.000	0.000
						B	39.346	28.640		19.03	0.000	0.000
						C	8.865	20.397		44.22	0.000	0.000
T4 60.00-40.00	50.00	1.126	14	0.5000	198.919	A	10.938	15.589	0.000	0.00	63.000	0.000
						B	41.901	15.937		0.00	0.000	0.000
						C	11.156	12.131		0.00	0.000	0.000
T5 40.00-20.00	30.00	1	12	0.5000	239.328	A	15.904	16.464	0.000	0.00	63.000	0.000
						B	46.483	16.869		0.00	0.000	0.000
						C	16.161	13.001		0.00	0.000	0.000
T6 20.00-0.00	10.00	1	12	0.5000	281.262	A	18.399	14.375	0.000	0.00	44.100	0.000
						B	39.866	14.683		0.00	0.000	0.000
						C	18.573	11.948		0.00	0.000	0.000

Tower Pressure - Service

$G_H = 1.159$

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
T1	98.00	1.365	13	80.615	A	6.749	4.750	4.750	41.31	0.000	0.000
104.00-92.00					B	5.538	18.630		19.65	0.000	0.000
					C	6.749	4.750		41.31	0.000	0.000
T2 92.00-80.00	86.00	1.315	12	80.855	A	5.464	4.750	4.750	46.50	23.401	0.000
					B	3.998	25.570		16.06	0.000	0.000
					C	5.464	4.750		46.50	0.000	0.000
T3 80.00-60.00	70.00	1.24	11	155.998	A	8.840	11.681	9.599	46.78	39.001	0.000
					B	6.880	44.299		18.76	0.000	0.000
					C	8.890	10.849		48.63	0.000	0.000
T4 60.00-40.00	50.00	1.126	10	197.250	A	11.243	5.233	0.000	0.00	39.001	0.000
					B	9.445	34.700		0.00	0.000	0.000
					C	11.258	5.000		0.00	0.000	0.000
T5 40.00-20.00	30.00	1	9	237.659	A	16.265	5.233	0.000	0.00	39.001	0.000
					B	14.138	34.700		0.00	0.000	0.000
					C	16.282	5.000		0.00	0.000	0.000
T6 20.00-0.00	10.00	1	9	279.593	A	18.643	3.663	0.000	0.00	27.301	0.000
					B	17.207	24.290		0.00	0.000	0.000
					C	18.654	3.500		0.00	0.000	0.000

Tower Forces - No Ice - Wind Normal To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.20	0.29	A	0.143	2.799	0.58	1	1	9.506	1.01	84.39	B
104.00-92.00			B	0.3	2.297	0.616	1	1	17.011			
			C	0.143	2.799	0.58	1	1	9.506			
T2	0.42	0.30	A	0.126	2.861	0.578	1	1	8.210	1.67	139.00	B
92.00-80.00			B	0.366	2.136	0.638	1	1	20.317			
			C	0.126	2.861	0.578	1	1	8.210			
T3	0.75	0.51	A	0.132	2.841	0.579	1	1	15.601	2.73	136.41	B
80.00-60.00			B	0.328	2.224	0.625	1	1	34.562			
			C	0.127	2.86	0.578	1	1	15.162			
T4	0.89	0.51	A	0.084	3.031	0.574	1	1	14.245	2.46	122.80	B
60.00-40.00			B	0.224	2.518	0.596	1	1	30.110			
			C	0.082	3.036	0.573	1	1	14.125			
T5	0.89	0.74	A	0.09	3.003	0.574	1	1	19.270	2.44	121.90	B
40.00-20.00			B	0.205	2.578	0.592	1	1	34.665			
			C	0.09	3.006	0.574	1	1	19.152			
T6 20.00-0.00	0.62	0.84	A	0.08	3.047	0.573	1	1	20.743	2.17	108.55	B
			B	0.148	2.777	0.581	1	1	31.325			
			C	0.079	3.049	0.573	1	1	20.660			
Sum Weight:	3.76	3.19						OTM	651.31 kip-ft	12.47		

Tower Forces - No Ice - Wind 60 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.20	0.29	A	0.143	2.799	0.58	0.8	1	8.156	0.95	78.89	B
104.00-92.00			B	0.3	2.297	0.616	0.8	1	15.904			
			C	0.143	2.799	0.58	0.8	1	8.156			
T2	0.42	0.30	A	0.126	2.861	0.578	0.8	1	7.118	1.63	135.45	B
92.00-80.00			B	0.366	2.136	0.638	0.8	1	19.517			
			C	0.126	2.861	0.578	0.8	1	7.118			
T3	0.75	0.51	A	0.132	2.841	0.579	0.8	1	13.833	2.66	132.81	B
80.00-60.00			B	0.328	2.224	0.625	0.8	1	33.186			
			C	0.127	2.86	0.578	0.8	1	13.384			
T4	0.89	0.51	A	0.084	3.031	0.574	0.8	1	11.996	2.35	117.71	B
60.00-40.00			B	0.224	2.518	0.596	0.8	1	28.221			
			C	0.082	3.036	0.573	0.8	1	11.873			
T5	0.89	0.74	A	0.09	3.003	0.574	0.8	1	16.017	2.30	114.97	B
40.00-20.00			B	0.205	2.578	0.592	0.8	1	31.837			
			C	0.09	3.006	0.574	0.8	1	15.896			
T6 20.00-0.00	0.62	0.84	A	0.08	3.047	0.573	0.8	1	17.014	1.99	99.47	B
			B	0.148	2.777	0.581	0.8	1	27.884			
			C	0.079	3.049	0.573	0.8	1	16.929			
Sum Weight:	3.76	3.19						OTM	625.08 kip-ft	11.87		

Tower Forces - No Ice - Wind 90 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.20	0.29	A	0.143	2.799	0.58	0.85	1	8.493	0.96	80.27	B
104.00-92.00			B	0.3	2.297	0.616	0.85	1	16.181			
			C	0.143	2.799	0.58	0.85	1	8.493			
T2	0.42	0.30	A	0.126	2.861	0.578	0.85	1	7.391	1.64	136.34	B
92.00-80.00			B	0.366	2.136	0.638	0.85	1	19.717			
			C	0.126	2.861	0.578	0.85	1	7.391			
T3	0.75	0.51	A	0.132	2.841	0.579	0.85	1	14.275	2.67	133.71	B
80.00-60.00			B	0.328	2.224	0.625	0.85	1	33.530			
			C	0.127	2.86	0.578	0.85	1	13.829			
T4	0.89	0.51	A	0.084	3.031	0.574	0.85	1	12.558	2.38	118.98	B
60.00-40.00			B	0.224	2.518	0.596	0.85	1	28.693			
			C	0.082	3.036	0.573	0.85	1	12.436			
T5	0.89	0.74	A	0.09	3.003	0.574	0.85	1	16.830	2.33	116.70	B
40.00-20.00			B	0.205	2.578	0.592	0.85	1	32.544			
			C	0.09	3.006	0.574	0.85	1	16.710			
T6 20.00-0.00	0.62	0.84	A	0.08	3.047	0.573	0.85	1	17.946	2.03	101.74	B
			B	0.148	2.777	0.581	0.85	1	28.744			
			C	0.079	3.049	0.573	0.85	1	17.862			
Sum Weight:	3.76	3.19						OTM	631.63 kip-ft	12.02		

Tower Forces - With Ice - Wind Normal To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.41	0.61	A	0.217	2.539	0.594	1	1	13.275	1.12	93.13	B
104.00-92.00			B	0.405	2.054	0.654	1	1	27.986			
			C	0.217	2.539	0.594	1	1	13.275			
T2	0.91	0.56	A	0.191	2.627	0.589	1	1	11.435	1.95	162.34	B
92.00-80.00			B	0.481	1.926	0.688	1	1	34.371			
			C	0.191	2.627	0.589	1	1	11.435			
T3	1.61	0.97	A	0.203	2.587	0.591	1	1	22.439	3.18	159.02	B
80.00-60.00			B	0.431	2.006	0.665	1	1	58.387			
			C	0.186	2.645	0.588	1	1	20.849			
T4	1.81	0.92	A	0.133	2.834	0.579	1	1	19.965	2.93	146.71	B
60.00-40.00			B	0.291	2.321	0.613	1	1	51.672			
			C	0.117	2.896	0.577	1	1	18.155			
T5	1.81	1.30	A	0.135	2.827	0.579	1	1	25.442	2.83	141.56	B
40.00-20.00			B	0.265	2.394	0.606	1	1	56.702			
			C	0.122	2.878	0.578	1	1	23.670			
T6 20.00-0.00	1.27	1.47	A	0.117	2.899	0.577	1	1	26.692	2.44	121.82	B
			B	0.194	2.616	0.589	1	1	48.517			
			C	0.109	2.93	0.576	1	1	25.455			
Sum Weight:	7.83	5.83						OTM	755.69 kip-ft	14.45		

Tower Forces - With Ice - Wind 60 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.41	0.61	A	0.217	2.539	0.594	0.8	1	11.925	0.97	80.88	B
104.00-92.00			B	0.405	2.054	0.654	0.8	1	24.303			
			C	0.217	2.539	0.594	0.8	1	11.925			
T2	0.91	0.56	A	0.191	2.627	0.589	0.8	1	10.343	1.78	148.26	B
92.00-80.00			B	0.481	1.926	0.688	0.8	1	29.688			
			C	0.191	2.627	0.589	0.8	1	10.343			
T3	1.61	0.97	A	0.203	2.587	0.591	0.8	1	20.702	2.90	145.08	B
80.00-60.00			B	0.431	2.006	0.665	0.8	1	50.518			
			C	0.186	2.645	0.588	0.8	1	19.076			
T4	1.81	0.92	A	0.133	2.834	0.579	0.8	1	17.778	2.62	131.11	B
60.00-40.00			B	0.291	2.321	0.613	0.8	1	43.292			
			C	0.117	2.896	0.577	0.8	1	15.924			
T5	1.81	1.30	A	0.135	2.827	0.579	0.8	1	22.262	2.51	125.71	B
40.00-20.00			B	0.265	2.394	0.606	0.8	1	47.405			
			C	0.122	2.878	0.578	0.8	1	20.438			
T6 20.00-0.00	1.27	1.47	A	0.117	2.899	0.577	0.8	1	23.012	2.14	106.96	B
			B	0.194	2.616	0.589	0.8	1	40.544			
			C	0.109	2.93	0.576	0.8	1	21.740			
Sum Weight:	7.83	5.83						OTM	679.16 kip-ft	12.93		

Tower Forces - With Ice - Wind 90 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.41	0.61	A	0.217	2.539	0.594	0.85	1	12.263	1.01	83.94	B
104.00-92.00			B	0.405	2.054	0.654	0.85	1	25.224			
			C	0.217	2.539	0.594	0.85	1	12.263			
T2	0.91	0.56	A	0.191	2.627	0.589	0.85	1	10.616	1.82	151.78	B
92.00-80.00			B	0.481	1.926	0.688	0.85	1	30.859			
			C	0.191	2.627	0.589	0.85	1	10.616			
T3	1.61	0.97	A	0.203	2.587	0.591	0.85	1	21.137	2.97	148.57	B
80.00-60.00			B	0.431	2.006	0.665	0.85	1	52.485			
			C	0.186	2.645	0.588	0.85	1	19.520			
T4	1.81	0.92	A	0.133	2.834	0.579	0.85	1	18.325	2.70	135.01	B
60.00-40.00			B	0.291	2.321	0.613	0.85	1	45.387			
			C	0.117	2.896	0.577	0.85	1	16.482			
T5	1.81	1.30	A	0.135	2.827	0.579	0.85	1	23.057	2.59	129.67	B
40.00-20.00			B	0.265	2.394	0.606	0.85	1	49.729			
			C	0.122	2.878	0.578	0.85	1	21.246			
T6 20.00-0.00	1.27	1.47	A	0.117	2.899	0.577	0.85	1	23.932	2.21	110.68	B
			B	0.194	2.616	0.589	0.85	1	42.537			
			C	0.109	2.93	0.576	0.85	1	22.669			
Sum Weight:	7.83	5.83						OTM	698.29 kip-ft	13.31		

Tower Forces - Service - Wind Normal To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.20	0.29	A	0.143	2.799	0.58	1	1	9.506	0.57	47.47	B
104.00-92.00			B	0.3	2.297	0.616	1	1	17.011			
			C	0.143	2.799	0.58	1	1	9.506			
T2	0.42	0.30	A	0.126	2.861	0.578	1	1	8.210	0.94	78.19	B
92.00-80.00			B	0.366	2.136	0.638	1	1	20.317			
			C	0.126	2.861	0.578	1	1	8.210			
T3	0.75	0.51	A	0.132	2.841	0.579	1	1	15.601	1.53	76.73	B
80.00-60.00			B	0.328	2.224	0.625	1	1	34.562			
			C	0.127	2.86	0.578	1	1	15.162			
T4	0.89	0.51	A	0.084	3.031	0.574	1	1	14.245	1.38	69.07	B
60.00-40.00			B	0.224	2.518	0.596	1	1	30.110			
			C	0.082	3.036	0.573	1	1	14.125			
T5	0.89	0.74	A	0.09	3.003	0.574	1	1	19.270	1.37	68.57	B
40.00-20.00			B	0.205	2.578	0.592	1	1	34.665			
			C	0.09	3.006	0.574	1	1	19.152			
T6 20.00-0.00	0.62	0.84	A	0.08	3.047	0.573	1	1	20.743	1.22	61.06	B
			B	0.148	2.777	0.581	1	1	31.325			
			C	0.079	3.049	0.573	1	1	20.660			
Sum Weight:	3.76	3.19						OTM	366.36 kip-ft	7.02		

Tower Forces - Service - Wind 60 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.20	0.29	A	0.143	2.799	0.58	0.8	1	8.156	0.53	44.38	B
104.00-92.00			B	0.3	2.297	0.616	0.8	1	15.904			
			C	0.143	2.799	0.58	0.8	1	8.156			
T2	0.42	0.30	A	0.126	2.861	0.578	0.8	1	7.118	0.91	76.19	B
92.00-80.00			B	0.366	2.136	0.638	0.8	1	19.517			
			C	0.126	2.861	0.578	0.8	1	7.118			
T3	0.75	0.51	A	0.132	2.841	0.579	0.8	1	13.833	1.49	74.70	B
80.00-60.00			B	0.328	2.224	0.625	0.8	1	33.186			
			C	0.127	2.86	0.578	0.8	1	13.384			
T4	0.89	0.51	A	0.084	3.031	0.574	0.8	1	11.996	1.32	66.21	B
60.00-40.00			B	0.224	2.518	0.596	0.8	1	28.221			
			C	0.082	3.036	0.573	0.8	1	11.873			
T5	0.89	0.74	A	0.09	3.003	0.574	0.8	1	16.017	1.29	64.67	B
40.00-20.00			B	0.205	2.578	0.592	0.8	1	31.837			
			C	0.09	3.006	0.574	0.8	1	15.896			
T6 20.00-0.00	0.62	0.84	A	0.08	3.047	0.573	0.8	1	17.014	1.12	55.95	B
			B	0.148	2.777	0.581	0.8	1	27.884			
			C	0.079	3.049	0.573	0.8	1	16.929			
Sum Weight:	3.76	3.19						OTM	351.61 kip-ft	6.68		

Tower Forces - Service - Wind 90 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.20	0.29	A	0.143	2.799	0.58	0.85	1	8.493	0.54	45.15	B
104.00-92.00			B	0.3	2.297	0.616	0.85	1	16.181			
			C	0.143	2.799	0.58	0.85	1	8.493			
T2	0.42	0.30	A	0.126	2.861	0.578	0.85	1	7.391	0.92	76.69	B
92.00-80.00			B	0.366	2.136	0.638	0.85	1	19.717			
			C	0.126	2.861	0.578	0.85	1	7.391			
T3	0.75	0.51	A	0.132	2.841	0.579	0.85	1	14.275	1.50	75.21	B
80.00-60.00			B	0.328	2.224	0.625	0.85	1	33.530			
			C	0.127	2.86	0.578	0.85	1	13.829			
T4	0.89	0.51	A	0.084	3.031	0.574	0.85	1	12.558	1.34	66.93	B
60.00-40.00			B	0.224	2.518	0.596	0.85	1	28.693			
			C	0.082	3.036	0.573	0.85	1	12.436			
T5	0.89	0.74	A	0.09	3.003	0.574	0.85	1	16.830	1.31	65.65	B
40.00-20.00			B	0.205	2.578	0.592	0.85	1	32.544			
			C	0.09	3.006	0.574	0.85	1	16.710			
T6 20.00-0.00	0.62	0.84	A	0.08	3.047	0.573	0.85	1	17.946	1.14	57.23	B
			B	0.148	2.777	0.581	0.85	1	28.744			
			C	0.079	3.049	0.573	0.85	1	17.862			
Sum Weight:	3.76	3.19						OTM	355.29 kip-ft	6.76		

Force Totals

Load Case	Vertical Forces K	Sum of Forces X K	Sum of Forces Z K	Sum of Overturning Moments, M_x kip-ft	Sum of Overturning Moments, M_z kip-ft	Sum of Torques kip-ft
Leg Weight	0.00					
Bracing Weight	3.19					
Total Member Self-Weight	3.19			-6.24	-0.04	
Total Weight	11.91			-6.24	-0.04	
Wind 0 deg - No Ice		0.04	-20.44	-1362.15	-3.45	2.30
Wind 90 deg - No Ice		20.11	-0.04	-9.65	-1347.78	-11.19
Wind 180 deg - No Ice		-0.04	19.84	1323.44	3.37	-2.29
Member Ice	2.64					
Total Weight Ice	20.98			-19.90	-1.70	
Wind 0 deg - Ice		0.03	-21.06	-1358.61	-4.37	2.34
Wind 90 deg - Ice		20.01	-0.03	-22.57	-1292.04	-11.85
Wind 180 deg - Ice		-0.03	19.54	1242.27	0.97	-2.35
Total Weight	11.91			-6.24	-0.04	
Wind 0 deg - Service		0.02	-11.50	-758.64	-2.77	1.29
Wind 90 deg - Service		11.31	-0.02	2.15	-758.95	-6.29
Wind 180 deg - Service		-0.02	11.16	752.01	1.07	-1.29

Load Combinations

Comb. No.	Description
1	Dead Only
2	Dead+Wind 0 deg - No Ice
3	Dead+Wind 90 deg - No Ice
4	Dead+Wind 180 deg - No Ice
5	Dead+Ice+Temp
6	Dead+Wind 0 deg+Ice+Temp
7	Dead+Wind 90 deg+Ice+Temp
8	Dead+Wind 180 deg+Ice+Temp
9	Dead+Wind 0 deg - Service
10	Dead+Wind 90 deg - Service
11	Dead+Wind 180 deg - Service

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T1	104 - 92	Leg	Max Tension	4	3.21	-0.00	0.12
			Max. Compression	6	-5.08	-0.01	0.41
			Max. Mx	3	-4.23	-0.51	0.04
			Max. My	2	-4.88	-0.01	0.49
			Max. Vy	3	-1.17	0.01	0.00
			Max. Vx	2	1.08	0.00	0.04
		Diagonal	Max Tension	4	1.36	0.00	0.00
			Max. Compression	2	-1.36	0.00	0.00
			Max. Mx	7	0.89	0.01	0.00
			Max. My	4	-1.12	0.00	0.00
			Max. Vy	7	-0.01	0.01	0.00
			Max. Vx	4	0.00	0.00	0.00
		Top Girt	Max Tension	4	0.43	0.00	0.00
			Max. Compression	2	-0.43	0.00	0.00
			Max. Mx	5	-0.01	-0.02	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. My	7	-0.01	0.00	0.00
			Max. Vy	5	0.01	0.00	0.00
			Max. Vx	7	-0.00	0.00	0.00
T2	92 - 80	Leg	Max Tension	4	14.21	-0.60	-0.01
			Max. Compression	2	-16.75	-0.17	-0.00
			Max. Mx	2	-8.93	-0.97	0.01
			Max. My	4	-5.68	0.28	-0.86
			Max. Vy	4	0.79	-0.60	-0.01
			Max. Vx	3	-0.70	0.00	0.54
		Diagonal	Max Tension	3	4.04	0.00	0.00
			Max. Compression	3	-4.18	0.00	0.00
			Max. Mx	6	2.88	0.02	0.00
			Max. My	4	-1.89	0.00	0.00
			Max. Vy	6	-0.01	0.02	0.00
			Max. Vx	4	0.00	0.00	0.00
		Top Girt	Max Tension	2	0.21	0.00	0.00
			Max. Compression	8	-0.26	0.00	0.00
			Max. Mx	5	-0.05	-0.02	0.00
			Max. My	7	-0.06	0.00	0.00
			Max. Vy	5	0.01	0.00	0.00
			Max. Vx	7	-0.00	0.00	0.00
T3	80 - 60	Leg	Max Tension	4	39.60	-0.08	-0.01
			Max. Compression	2	-44.38	0.05	-0.00
			Max. Mx	8	17.64	-0.18	0.07
			Max. My	8	-16.35	0.05	-0.18
			Max. Vy	4	-0.47	-0.08	-0.01
			Max. Vx	3	0.44	0.00	0.02
		Diagonal	Max Tension	3	3.51	0.00	0.00
			Max. Compression	3	-3.55	0.00	0.00
			Max. Mx	8	2.79	0.02	0.00
			Max. My	8	-3.10	0.01	0.00
			Max. Vy	8	0.01	0.02	0.00
			Max. Vx	8	-0.00	0.00	0.00
T4	60 - 40	Leg	Max Tension	4	61.44	-0.06	-0.00
			Max. Compression	2	-68.22	0.12	-0.00
			Max. Mx	8	53.31	-0.22	0.00
			Max. My	3	-2.63	-0.01	0.16
			Max. Vy	8	0.04	-0.22	0.00
			Max. Vx	3	0.05	-0.01	0.16
		Diagonal	Max Tension	3	3.76	0.00	0.00
			Max. Compression	6	-3.81	0.00	0.00
			Max. Mx	8	3.02	0.03	0.00
			Max. My	8	-3.45	0.01	0.00
			Max. Vy	8	0.02	0.03	0.00
			Max. Vx	8	-0.00	0.00	0.00
T5	40 - 20	Leg	Max Tension	4	80.85	-0.10	-0.00
			Max. Compression	6	-90.38	0.41	0.00
			Max. Mx	6	-90.38	0.41	0.00
			Max. My	3	-4.03	-0.01	0.17
			Max. Vy	8	-0.09	-0.31	-0.00
			Max. Vx	3	-0.04	-0.01	0.17
		Diagonal	Max Tension	6	3.80	0.00	0.00
			Max. Compression	6	-4.10	0.00	0.00
			Max. Mx	6	3.06	0.06	-0.00
			Max. My	7	-2.63	0.04	0.01
			Max. Vy	8	0.03	0.06	0.00
			Max. Vx	7	-0.00	0.00	0.00
T6	20 - 0	Leg	Max Tension	4	97.97	-0.11	-0.00
			Max. Compression	6	-111.85	0.00	0.00
			Max. Mx	8	84.00	-0.71	-0.00
			Max. My	3	-4.61	-0.02	0.30

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Vy	8	-0.18	-0.71	-0.00
			Max. Vx	3	-0.07	-0.02	0.30
		Diagonal	Max Tension	8	4.43	0.00	0.00
			Max. Compression	6	-4.36	0.00	0.00
			Max. Mx	8	2.58	0.07	0.00
			Max. My	7	-3.15	0.06	0.01
			Max. Vy	8	0.03	0.07	0.00
			Max. Vx	7	-0.00	0.00	0.00

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Leg C	Max. Vert	4	56.48	4.67	-4.16
	Max. H_x	4	56.48	4.67	-4.16
	Max. H_z	7	-82.40	-9.63	5.16
	Min. Vert	3	-88.62	-8.81	4.68
	Min. H_x	7	-82.40	-9.63	5.16
	Min. H_z	4	56.48	4.67	-4.16
Leg B	Max. Vert	3	95.80	-9.27	-4.94
	Max. H_x	6	-46.43	5.19	4.78
	Max. H_z	6	-46.43	5.19	4.78
	Min. Vert	2	-49.60	4.19	4.15
	Min. H_x	3	95.80	-9.27	-4.94
	Min. H_z	3	95.80	-9.27	-4.94
Leg A	Max. Vert	6	114.44	0.09	11.64
	Max. H_x	6	114.44	0.09	11.64
	Max. H_z	2	111.58	0.09	12.28
	Min. Vert	4	-100.58	-0.09	-11.38
	Min. H_x	7	8.78	-2.06	-0.68
	Min. H_z	8	-91.26	-0.09	-12.17

Tower Mast Reaction Summary

Load Combination	Vertical K	$Shear_x$ K	$Shear_z$ K	Overturning Moment, M_x kip-ft	Overturning Moment, M_z kip-ft	Torque kip-ft
Dead Only	11.91	0.00	-0.00	-6.24	-0.04	-0.00
Dead+Wind 0 deg - No Ice	11.91	0.04	-20.44	-1365.27	-3.47	2.30
Dead+Wind 90 deg - No Ice	11.91	20.11	-0.04	-9.68	-1350.89	-11.19
Dead+Wind 180 deg - No Ice	11.91	-0.04	19.84	1326.50	3.36	-2.29
Dead+Ice+Temp	20.98	-0.00	0.00	-19.94	-1.70	0.00
Dead+Wind 0 deg+Ice+Temp	20.98	0.03	-21.06	-1363.25	-4.41	2.36
Dead+Wind 90 deg+Ice+Temp	20.98	20.01	-0.03	-22.65	-1296.52	-11.91
Dead+Wind 180 deg+Ice+Temp	20.98	-0.03	19.54	1246.59	0.96	-2.36
Dead+Wind 0 deg - Service	11.91	0.02	-11.50	-770.70	-1.97	1.29
Dead+Wind 90 deg - Service	11.91	11.31	-0.02	-8.17	-759.90	-6.30
Dead+Wind 180 deg - Service	11.91	-0.02	11.16	743.43	1.87	-1.29

Solution Summary

Load Comb.	Sum of Applied Forces PX K	PY K	PZ K	Sum of Reactions PX K	PY K	PZ K	% Error
1	0.00	-11.91	0.00	-0.00	11.91	0.00	0.000%
2	0.04	-11.91	-20.44	-0.04	11.91	20.44	0.001%
3	20.11	-11.91	-0.04	-20.11	11.91	0.04	0.001%
4	-0.04	-11.91	19.84	0.04	11.91	-19.84	0.002%
5	0.00	-20.98	0.00	0.00	20.98	-0.00	0.000%
6	0.03	-20.98	-21.06	-0.03	20.98	21.06	0.002%
7	20.01	-20.98	-0.03	-20.01	20.98	0.03	0.002%
8	-0.03	-20.98	19.54	0.03	20.98	-19.54	0.002%
9	0.02	-11.91	-11.50	-0.02	11.91	11.50	0.001%
10	11.31	-11.91	-0.02	-11.31	11.91	0.02	0.001%
11	-0.02	-11.91	11.16	0.02	11.91	-11.16	0.001%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	6	0.00000001	0.00000001
2	Yes	8	0.00000001	0.00007088
3	Yes	8	0.00000001	0.00008004
4	Yes	8	0.00000001	0.00008792
5	Yes	6	0.00000001	0.00010110
6	Yes	8	0.00000001	0.00012054
7	Yes	8	0.00000001	0.00012995
8	Yes	8	0.00000001	0.00013695
9	Yes	8	0.00000001	0.00007425
10	Yes	8	0.00000001	0.00007960
11	Yes	8	0.00000001	0.00008422

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	104 - 92	3.849	10	0.3204	0.0278
T2	92 - 80	3.037	9	0.3146	0.0245
T3	80 - 60	2.265	9	0.2759	0.0228
T4	60 - 40	1.248	9	0.1808	0.0196
T5	40 - 20	0.566	9	0.1177	0.0137
T6	20 - 0	0.160	9	0.0533	0.0073

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
100.00	12' T-Frame Sector Mount	10	3.577	0.3206	0.0266	321983
88.00	12' T-Frame Sector Mount	9	2.772	0.3055	0.0238	29808
79.00	DB806-XT	9	2.205	0.2715	0.0227	12064
73.00	PR-950	9	1.867	0.2425	0.0219	12334
65.00	(2) AIR 21	9	1.468	0.2028	0.0206	13250

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	104 - 92	6.835	3	0.5686	0.0515
T2	92 - 80	5.395	2	0.5585	0.0469
T3	80 - 60	4.019	2	0.4898	0.0437
T4	60 - 40	2.213	2	0.3207	0.0372
T5	40 - 20	1.004	2	0.2085	0.0260
T6	20 - 0	0.288	6	0.0944	0.0138

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
100.00	12' T-Frame Sector Mount	3	6.353	0.5691	0.0498	177613
88.00	12' T-Frame Sector Mount	2	4.922	0.5422	0.0457	16811
79.00	DB806-XT	2	3.913	0.4818	0.0434	6866
73.00	PR-950	2	3.312	0.4304	0.0418	6960
65.00	(2) AIR 21	2	2.604	0.3600	0.0392	7476

Bolt Design Data

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load K	Ratio Load / Allowable	Allowable Ratio	Criteria
T1	104	Leg	A325N	0.6250	4	0.05	13.50	0.004 ✔	1.333	Bolt Tension
		Diagonal	A325N	0.5000	1	1.36	4.08	0.333 ✔	1.333	Member Bearing
		Top Girt	A325N	0.5000	1	0.43	4.12	0.105 ✔	1.333	Bolt Shear
T2	92	Leg	A325N	0.6250	4	1.68	13.49	0.124 ✔	1.333	Bolt Tension
		Diagonal	A325N	0.5000	1	4.18	4.12	1.014 ✔	1.333	Bolt Shear
		Top Girt	A325N	0.5000	1	0.26	4.12	0.063 ✔	1.333	Bolt Shear
T3	80	Leg	A325N	0.6250	4	5.52	13.50	0.409 ✔	1.333	Bolt Tension
		Diagonal	A325N	0.5000	1	3.55	4.12	0.860 ✔	1.333	Bolt Shear
T4	60	Leg	A325N	0.6250	4	11.65	13.50	0.863 ✔	1.333	Bolt Tension

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load K	Ratio Load / Allowable	Allowable Ratio	Criteria
		Diagonal	A325N	0.5000	1	3.81	4.12	0.924 ✔	1.333	Bolt Shear
T5	40	Leg	A325N	0.6250	4	17.05	13.50	1.263 ✔	1.333	Bolt Tension
		Diagonal	A325N	0.5000	1	4.10	4.12	0.994 ✔	1.333	Bolt Shear
T6	20	Leg	A325N	0.7500	4	21.69	19.44	1.116 ✔	1.333	Bolt Tension
		Diagonal	A325N	0.5000	1	4.43	4.08	1.085 ✔	1.333	Member Bearing

Compression Checks

Leg Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio P / P_a
T1	104 - 92	P2x.154	12.00	4.00	61.0 K=1.00	22.549	1.0745	-5.08	24.23	0.210 ✔
T2	92 - 80	P2x.154	12.00	6.00	91.5 K=1.00	16.619	1.0745	-16.75	17.86	0.938 ✔
T3	80 - 60	P2.5x.203	20.03	5.01	63.4 K=1.00	22.122	1.7040	-44.38	37.70	1.177 ✔
T4	60 - 40	Pipe 2.875 x .203 w/ 3/8 Plate	20.03	6.68	88.5 K=1.00	17.258	3.5180	-68.22	60.71	1.124 ✔
T5	40 - 20	Pipe 2.875 x 0.276 w/ 3/8 Plate	20.03	6.68	87.0 K=1.00	17.572	4.0080	-90.38	70.43	1.283 ✔
T6	20 - 0	Pipe 3 x 0.3 w/ 3/8 Plate	20.03	6.68	71.4 K=1.00	20.671	5.0840	-111.85	105.09	1.064 ✔

Diagonal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio P / P_a
T1	104 - 92	L1 1/2x1 1/2x3/16	7.65	3.60	147.4 K=1.00	6.869	0.5273	-1.36	3.62	0.374 ✔
T2	92 - 80	L1 1/2x1 1/2x1/4	8.88	4.21	173.0 K=1.00	4.990	0.6875	-4.18	3.43	1.218 ✔
T3	80 - 60	L1 1/2x1 1/2x1/4	9.70	4.75	195.3 K=1.00	3.917	0.6875	-3.55	2.69	1.317 ✔
T4	60 - 40	L2x2x3/16	12.21	6.04	183.9 K=1.00	4.416	0.7150	-3.63	3.16	1.150 ✔
T5	40 - 20	L2 1/2x2 1/2x3/16	13.96	6.91	167.6 K=1.00	5.316	0.9020	-4.10	4.80	0.855 ✔
T6	20 - 0	L2 1/2x2 1/2x3/16	15.17	7.49	181.6	4.526	0.9020	-4.36	4.08	1.069

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
					K=1.00					✔

Top Girt Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T1	104 - 92	L2x2x3/16	6.52	6.11	186.2 K=1.00	4.307	0.7150	-0.43	3.08	0.141 ✔
T2	92 - 80	L2x2x3/16	6.52	6.11	186.2 K=1.00	4.307	0.7150	-0.26	3.08	0.084 ✔

Tension Checks

Leg Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T1	104 - 92	P2x.154	12.00	4.00	61.0	30.000	1.0745	3.21	32.24	0.100 ✔
T2	92 - 80	P2x.154	12.00	6.00	91.5	30.000	1.0745	14.21	32.24	0.441 ✔
T3	80 - 60	P2.5x.203	20.03	5.01	63.4	30.000	1.7040	39.33	51.12	0.769 ✔
T4	60 - 40	Pipe 2.875 x .203 w/ 3/8 Plate	20.03	6.68	88.5	30.000	3.5180	61.44	105.54	0.582 ✔
T5	40 - 20	Pipe 2.875 x 0.276 w/ 3/8 Plate	20.03	6.68	87.0	30.000	4.0080	80.85	120.24	0.672 ✔
T6	20 - 0	Pipe 3 x 0.3 w/ 3/8 Plate	20.03	6.68	71.4	30.000	5.0840	97.97	152.52	0.642 ✔

Diagonal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T1	104 - 92	L1 1/2x1 1/2x3/16	7.65	3.60	97.4	29.000	0.3076	1.36	8.92	0.152 ✔
T2	92 - 80	L1 1/2x1 1/2x1/4	8.88	4.21	115.3	29.000	0.3984	4.04	11.55	0.350 ✔
T3	80 - 60	L1 1/2x1 1/2x1/4	9.70	4.75	129.8	29.000	0.3984	3.51	11.55	0.304

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T4	60 - 40	L2x2x3/16	11.12	5.50	109.0	29.000	0.4484	3.76	13.00	0.289
T5	40 - 20	L2 1/2x2 1/2x3/16	13.36	6.62	103.7	29.000	0.5886	3.80	17.07	0.223
T6	20 - 0	L2 1/2x2 1/2x3/16	15.79	7.80	121.9	29.000	0.5886	4.43	17.07	0.259

Top Girt Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T1	104 - 92	L2x2x3/16	6.52	6.11	123.0	29.000	0.4484	0.43	13.00	0.033
T2	92 - 80	L2x2x3/16	6.52	6.11	123.0	29.000	0.4484	0.21	13.00	0.016

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	$SF*P_{allow}$ K	% Capacity	Pass Fail
T1	104 - 92	Leg	P2x.154	3	-5.08	32.30	15.7	Pass
T2	92 - 80	Leg	P2x.154	27	-16.75	23.80	70.4	Pass
T3	80 - 60	Leg	P2.5x.203	45	-44.38	50.25	88.3	Pass
T4	60 - 40	Leg	Pipe 2.875 x .203 w/ 3/8 Plate	72	-68.22	80.93	84.3	Pass
T5	40 - 20	Leg	Pipe 2.875 x 0.276 w/ 3/8 Plate	93	-90.38	93.88	96.3	Pass
T6	20 - 0	Leg	Pipe 3 x 0.3 w/ 3/8 Plate	114	-111.85	140.09	79.8 83.7 (b)	Pass
T1	104 - 92	Diagonal	L1 1/2x1 1/2x3/16	16	-1.36	4.83	28.1	Pass
T2	92 - 80	Diagonal	L1 1/2x1 1/2x1/4	32	-4.18	4.57	91.4	Pass
T3	80 - 60	Diagonal	L1 1/2x1 1/2x1/4	47	-3.55	3.59	98.8	Pass
T4	60 - 40	Diagonal	L2x2x3/16	74	-3.63	4.21	86.3	Pass
T5	40 - 20	Diagonal	L2 1/2x2 1/2x3/16	97	-4.10	6.39	64.1 74.6 (b)	Pass
T6	20 - 0	Diagonal	L2 1/2x2 1/2x3/16	124	-4.36	5.44	80.2 81.4 (b)	Pass
T1	104 - 92	Top Girt	L2x2x3/16	4	-0.43	4.10	10.6	Pass
T2	92 - 80	Top Girt	L2x2x3/16	28	-0.26	4.10	6.3	Pass

Summary	ELC:	Existing+Proposed
Leg (T5)	96.3	Pass
Diagonal (T3)	98.8	Pass
Top Girt (T1)	10.6	Pass
Bolt Checks	94.8	Pass
Rating =	98.8	Pass

EXHIBIT C

EBI Consulting
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RADIO FREQUENCY EMISSIONS ANALYSIS REPORT
EVALUATION OF HUMAN EXPOSURE POTENTIAL TO NON-IONIZING EMISSIONS

T-Mobile Existing Facility

Site ID: CTHA536A

Insite Glastonbury Lattice

577 Bell Street
Glastonbury, CT 06033

June 9, 2014

EBI Project Number: 62143318

21 B Street · Burlington, MA 01803 · Tel: (781) 273.2500 · Fax: (781) 273.3311

EBI Consulting
environmental | engineering | due diligence

June 9, 2014

T-Mobile USA
Attn: Jason Overbey, RF Manager
35 Griffin Road South
Bloomfield, CT 06002

Re: Emissions Values for Site: **CTHA536A - Insite Glastonbury Lattice**

EBI Consulting was directed to analyze the proposed T-Mobile facility located at 577 Bell Street, Glastonbury, CT, for the purpose of determining whether the emissions from the Proposed T-Mobile Antenna Installation located on this property are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter (μW/cm2). The number of μW/cm2 calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) – (b)(3), to determine compliance with the Maximum Permissible Exposure (MPE) limits for General Population/Uncontrolled environments as defined below.

General population/uncontrolled exposure limits apply to situations in which the general public 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 public 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.

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter (μW/cm2). The general population exposure limit for the cellular band is 567 μW/cm2, and the general population exposure limit for the PCS and AWS bands is 1000 μW/cm2. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

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 (see below), 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.

CALCULATIONS

Calculations were done for the proposed T-Mobile Wireless antenna facility located at 577 Bell Street, Glastonbury, CT, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since T-Mobile is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, the actual antenna pattern gain value in the direction of the sample area was used. For this report the sample point is a 6 foot person standing at the base of the tower

For all calculations, all equipment was calculated using the following assumptions:

1) 2 GSM channels (1935.000 MHz—to 1945.000 MHz) were considered for each sector of the proposed installation.
2) 2 UMTS channels (2110.000 MHz to 2120.000 MHz / 2140.000 MHz to 2145.000 MHz) were considered for each sector of the proposed installation.
3) 2 LTE channels (2110.000 MHz to 2120.000 MHz / 2140.000 MHz to 2145.000 MHz) were considered for each sector of the proposed installation.
4) All radios at the proposed installation were considered to be running at full power and were uncombined in their RF transmissions paths per carrier prescribed configuration. Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.
5) For the following calculations the sample point was the top of a six foot person standing at the base of the tower. The actual gain in this direction was used per the manufactures supplied specifications.
6) The antenna used in this modeling is the Ericsson AIR21 for LTE, UMTS and GSM. This is based on feedback from the carrier with regards to anticipated antenna selection. This antenna has a 15.6 dBd gain value at its main lobe. Actual antenna gain values were used for all calculations as per the manufacturers specifications.

7) The antenna mounting height centerline of the proposed antennas is **65 feet** above ground level (AGL).
8) Emissions values for additional carriers were taken from the Connecticut Siting Council active database. Values in this database are provided by the individual carriers themselves.

All calculations were done with respect to uncontrolled / general public threshold limits.

Site ID	CTHA536A - Insite Glastonbury Lattice
Site Addresss	577 Bell Street, Glastonbury, CT 06033
Site Type	Self Support Tower

Sector 1

Antenna Number	Antenna Make	Antenna Model	Status	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain in direction of sample point (dBd)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss	ERP	Power Density Value	Power Density Percentage
1a	Ericsson	AIR21 B4A/B2P	Active	AWS - 2100 MHz	LTE	60	2	120	-3.95	65	59	None	0	0	48.326044	4.99095	0.49909%
1b	Ericsson	AIR21 B4A/B2P	Not Used	-	-			0	-3.95	65	59	None	0	0	0	0	0.00000%
2a	Ericsson	AIR21 B2A / B4P	Active	PCS - 1950 MHz	GSM / UMTS	30	2	60	-3.95	65	59	1-5/8"	0	0	24.163022	2.495475	0.24955%
2B	Ericsson	AIR21 B2A / B4P	Passive	AWS - 2100 MHz	UMTS	30	2	60	-3.95	65	59	1-5/8"	0	0	24.163022	2.495475	0.24955%
														Sector total Power Density Value:		0.998%	

Sector 2

Antenna Number	Antenna Make	Antenna Model	Status	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain in direction of sample point (dBd)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss	ERP	Power Density Value	Power Density Percentage
1a	Ericsson	AIR21 B4A/B2P	Active	AWS - 2100 MHz	LTE	60	2	120	-3.95	65	59	None	0	0	48.326044	4.99095	0.49909%
1b	Ericsson	AIR21 B4A/B2P	Not Used	-	-			0	-3.95	65	59	None	0	0	0	0	0.00000%
2a	Ericsson	AIR21 B2A / B4P	Active	PCS - 1950 MHz	GSM / UMTS	30	2	60	-3.95	65	59	1-5/8"	0	0	24.163022	2.495475	0.24955%
2b	Ericsson	AIR21 B2A / B4P	Passive	AWS - 2100 MHz	UMTS	30	2	60	-3.95	65	59	1-5/8"	0	0	24.163022	2.495475	0.24955%
														Sector total Power Density Value:		0.998%	

Sector 3

Antenna Number	Antenna Make	Antenna Model	Status	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain in direction of sample point (dBd)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss	ERP	Power Density Value	Power Density Percentage
1a	Ericsson	AIR21 B4A/B2P	Active	AWS - 2100 MHz	LTE	60	2	120	-3.95	65	59	None	0	0	48.326044	4.99095	0.49909%
1b	Ericsson	AIR21 B4A/B2P	Not Used	-	-			0	-3.95	65	59	None	0	0	0	0	0.00000%
2a	Ericsson	AIR21 B2A / B4P	Active	PCS - 1950 MHz	GSM / UMTS	30	2	60	-3.95	65	59	1-5/8"	0	0	24.163022	2.495475	0.24955%
2b	Ericsson	AIR21 B2A / B4P	Passive	AWS - 2100 MHz	UMTS	30	2	60	-3.95	65	59	1-5/8"	0	0	24.163022	2.495475	0.24955%
														Sector total Power Density Value:		0.998%	

Site Composite MPE %	
Carrier	MPE %
T-Mobile	2.995%
Town	0.170%
Clearwire	6.150%
MetroPCS	16.110%
AT&T	5.550%
COX	15.960%
Verizon Wireless	31.660%
Total Site MPE %	**78.595%**

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Summary

All calculations performed for this analysis yielded results that were well within the allowable limits for general public exposure to RF Emissions.

The anticipated Maximum Composite contributions from the T-Mobile facility are **2.995% (0.998% from each sector)** of the allowable FCC established general public limit considering all three sectors simultaneously sampled at the ground level.

The anticipated composite MPE value for this site assuming all carriers present is **78.595%** of the allowable FCC established general public limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

FCC guidelines state that if a site is found to be out of compliance (over allowable thresholds), that carriers over a 5% contribution to the composite value will require measures to bring the site into compliance. For this facility, the composite values calculated were well within the allowable 100% threshold standard per the federal government.

Scott Heffernan
RF Engineering Director

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