T-Mobile Northeast, LLC NOTICE OF INTENT TO MODIFY AN EXISTING TELECOMMUNICATIONS FACILITY AT 9 MEYERS ROAD BETHANY, CONNECTICUT

Pursuant to the Public Utility Environmental Standards Act, Connecticut General Statutes § 16-50g et. Seq. ("PUESA"), and Sections 16-50j-72(b) and 16-50j-73 of the Regulations of Connecticut State Agencies ("R.C.S.A") adopted pursuant to the PUESA, by and through T-Mobile Northeast, LLC ("T-Mobile") and as successor in interest to Omnipoint Communications, Inc., hereby notifies the Connecticut Siting Council of its intent to modify an existing facility located at 9 Meyers Road, Bethany, CT.

T-Mobile Northeast LLC's Proposed Wireless Modifications

T-Mobile as successor in interest to Omnipoint Communications achieved an initial exempt modification approval from the Siting Council to install antennas and related ground equipment. The facility consists of a One-Hundred and fifty (150') foot high Monopole telecommunications tower (the "Tower") within a fenced compound. T-Mobile now intends to modify the facility as shown on the enclosed plans prepared by Infinigy Engineering group and annexed hereto as Exhibit 1. The modifications will consist of adding three (3) new antennas with bias-tees at the existing AGL of 220' along with two (2) equipment cabinets at the base of the tower within the existing compound. A structural analysis has been completed for the site. Please see report attached in exhibit 3.

T-mobile's Proposed Wireless Modifications Constitutes An "Exempt Modification"

The proposed modification to the 9 Meyers Road, Bethany, CT Facility constitutes an exempt modification of an existing facility provided for in R.C.S.A Section 16-50j-72(b)(2) and Council regulations promulgated pursuant thereto.

1) The proposed modifications will be to add three (3) antennas at the same AGL of 220'along with bias-tees. The modifications also include a pair of two (2) equipment cabinets which will be located within the existing designated equipment compound.
2) The proposed modifications will not require expansion of the site boundaries.
3) The proposed modifications will not increase noise levels at the facility by six decibels or more.
4) T-Mobile Northeast LLC's proposed facility will not increase the cumulative radio frequency electromagnetic radiation power density at the Tower site's boundary to or above the standard adopted by the Connecticut Department of Environmental Protection as set forth in Section 22a-162 of the Connecticut General Statutes and MPE limits established by the Federal Communications Commission. A cumulative General Power Density table for T-Mobile's proposed modified facility is included as Exhibit 2.

For all the foregoing reasons, T-Mobile Northeast LLC respectfully submits that the proposed modifications to the above-referenced telecommunications facility constitutes an exempt modification under R.C.S.A Section 16-50j-72(b)(2)

Respectfully submitted,

Amber Debole (781) 424-9253
On behalf of T-Mobile Northeast, LLC
c/o Tower Resource Management, Inc.
16 Chestnut Street, Suite 220
Foxboro, MA 02035

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: CTNH217A

CTNH217/ATC-Bethany
9 Meyers Road
Bethany, CT 06524

April 15, 2015

EBI Project Number: 6215002590

Site Compliance Summary	
Compliance Status:	COMPLIANT
Site total MPE% of FCC general public allowable limit:	37.39 %

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

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April 15, 2015

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

Emissions Analysis for Site: **CTNH217A – CTNH217/ATC-Bethany**

EBI Consulting was directed to analyze the proposed T-Mobile facility located at **9 Meyers Road, Bethany, 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 $\mu W/cm^2$ 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 ($\mu W/cm^2$). The general population exposure limit for the 700 MHz Band is 467 $\mu W/cm^2$, and the general population exposure limit for the PCS and AWS bands is 1000 $\mu W/cm^2$. 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 **9 Meyers Road, Bethany, 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, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was focused at the base of the tower. For this report the sample point is the top of 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 (PCS Band - 1900 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel

2) 2 UMTS channels (AWS Band – 2100 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.

3) 2 LTE channels (AWS Band – 2100 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 60 Watts per Channel.

4) 1 LTE channel (700 MHz Band) was considered for each sector of the proposed installation. This channel has a transmit power of 30 Watts.

5) 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.

6) For the following calculations the sample point was the top of a six foot person standing at the base of the tower. The maximum gain of the antenna per the antenna manufactures supplied specifications minus 10 dB was used in this direction. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.

7) The antennas used in this modeling are the **RFS APXV18-206517S-C-A20** for 1900 MHz (PCS) and 2100 MHz (AWS) channels and the **Commscope LNX-6515DS-VTM** for 700 MHz channels. This is based on feedback from the carrier with regards to anticipated antenna selection. The **RFS APXV18-206517S-C-A20** has a maximum gain of **16.7 dBd** at its main lobe. The **Commscope LNX-6515DS-VTM** has a maximum gain of **14.6 dBd** at its main lobe. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.

8) The antenna mounting height centerline of the proposed antennas is **222 feet** above ground level (AGL).

9) 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.

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T-Mobile Site Inventory and Power Data

Sector:	A	Sector:	B	Sector:	C
Antenna #:	1	Antenna #:	1	Antenna #:	1
Make / Model:	RFS APXV18-206517S-C-A20	Make / Model:	RFS APXV18-206517S-C-A20	Make / Model:	RFS APXV18-206517S-C-A20
Gain:	16.7 dBd	Gain:	16.7 dBd	Gain:	16.7 dBd
Height (AGL):	222	Height (AGL):	222	Height (AGL):	222
Frequency Bands	1900 MHz(PCS) / 2100 MHz (AWS)	Frequency Bands	1900 MHz(PCS) / 2100 MHz (AWS)	Frequency Bands	1900 MHz(PCS) / 2100 MHz (AWS)
Channel Count	6	Channel Count	6	# PCS Channels:	6
Total TX Power:	240	Total TX Power:	240	# AWS Channels:	240
ERP (W):	11,225.64	ERP (W):	11,225.64	ERP (W):	11,225.64
Antenna A1 MPE%	0.86	Antenna B1 MPE%	0.86	Antenna C1 MPE%	0.86
Antenna #:	2	Antenna #:	2	Antenna #:	2
Make / Model:	Commscope LNX-6515DS-VTM	Make / Model:	Commscope LNX-6515DS-VTM	Make / Model:	Commscope LNX-6515DS-VTM
Gain:	14.6 dBd	Gain:	14.6 dBd	Gain:	14.6 dBd
Height (AGL):	222	Height (AGL):	222	Height (AGL):	222
Frequency Bands	700 MHz	Frequency Bands	700 MHz	Frequency Bands	700 MHz
Channel Count	1	Channel Count	1	Channel Count	1
Total TX Power:	30	Total TX Power:	30	Total TX Power:	30
ERP (W):	865.21	ERP (W):	865.21	ERP (W):	865.21
Antenna A2 MPE%	0.14	Antenna B2 MPE%	0.14	Antenna C2 MPE%	0.14

Site Composite MPE%	
Carrier	**MPE%**
T-Mobile	**3.02**
AT&T	11.98 %
MetroPCS	6.81 %
Verizon Wireless	6.24 %
Sprint	2.16 %
Industrial Comm.	1.59 %
Nextel	1.60 %
Rescue 21	2.10 %
Dept Homeland Sec	1.89 %
Site Total MPE %:	**37.39 %**

T-Mobile Sector 1 Total:	1.01 %
T-Mobile Sector 2 Total:	1.01 %
T-Mobile Sector 3 Total:	1.01 %
Site Total:	37.39 %

Summary

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

The anticipated maximum composite contributions from the T-Mobile facility as well as the site composite emissions value with regards to compliance with FCC's allowable limits for general public exposure to RF Emissions are shown here:

T-Mobile Sector	Power Density Value (%)
Sector 1:	1.01 %
Sector 2:	1.01 %
Sector 3 :	1.01 %
T-Mobile Total:	3.02 %
Site Total:	37.39 %
Site Compliance Status:	**COMPLIANT**

The anticipated composite MPE value for this site assuming all carriers present is **37.39%** 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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21 B Street
Burlington, MA 01803

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TO NON-IONIZING EMISSIONS

T-Mobile Existing Facility

Site ID: CTNH217A

CTNH217/ATC-Bethany
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T-Mobile USA
Attn: Jason Overbey, RF Manager
35 Griffin Road South
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All calculations were done with respect to uncontrolled / general public threshold limits.

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T-Mobile Site Inventory and Power Data

Sector:	A	Sector:	B	Sector:	C
Antenna #:	1	Antenna #:	1	Antenna #:	1
Make / Model:	RFS APXV18-206517S-C-A20	Make / Model:	RFS APXV18-206517S-C-A20	Make / Model:	RFS APXV18-206517S-C-A20
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Height (AGL):	222	Height (AGL):	222	Height (AGL):	222
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Channel Count	6	Channel Count	6	# PCS Channels:	6
Total TX Power:	240	Total TX Power:	240	# AWS Channels:	240
ERP (W):	11,225.64	ERP (W):	11,225.64	ERP (W):	11,225.64
Antenna A1 MPE%	0.86	Antenna B1 MPE%	0.86	Antenna C1 MPE%	0.86
Antenna #:	2	Antenna #:	2	Antenna #:	2
Make / Model:	Commscope LNX-6515DS-VTM	Make / Model:	Commscope LNX-6515DS-VTM	Make / Model:	Commscope LNX-6515DS-VTM
Gain:	14.6 dBd	Gain:	14.6 dBd	Gain:	14.6 dBd
Height (AGL):	222	Height (AGL):	222	Height (AGL):	222
Frequency Bands	700 MHz	Frequency Bands	700 MHz	Frequency Bands	700 MHz
Channel Count	1	Channel Count	1	Channel Count	1
Total TX Power:	30	Total TX Power:	30	Total TX Power:	30
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Site Composite MPE%	
Carrier	**MPE%**
T-Mobile	**3.02**
AT&T	11.98 %
MetroPCS	6.81 %
Verizon Wireless	6.24 %
Sprint	2.16 %
Industrial Comm.	1.59 %
Nextel	1.60 %
Rescue 21	2.10 %
Dept Homeland Sec	1.89 %
Site Total MPE %:	**37.39 %**

T-Mobile Sector 1 Total:	1.01 %
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Summary

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

The anticipated maximum composite contributions from the T-Mobile facility as well as the site composite emissions value with regards to compliance with FCC's allowable limits for general public exposure to RF Emissions are shown here:

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Gain:	16.7 dBd	Gain:	16.7 dBd	Gain:	16.7 dBd
Height (AGL):	222	Height (AGL):	222	Height (AGL):	222
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Total TX Power:	240	Total TX Power:	240	# AWS Channels:	240
ERP (W):	11,225.64	ERP (W):	11,225.64	ERP (W):	11,225.64
Antenna A1 MPE%	0.86	Antenna B1 MPE%	0.86	Antenna C1 MPE%	0.86
Antenna #:	2	Antenna #:	2	Antenna #:	2
Make / Model:	Commscope LNX-6515DS-VTM	Make / Model:	Commscope LNX-6515DS-VTM	Make / Model	Commscope LNX-6515DS-VTM
Gain:	14.6 dBd	Gain:	14.6 dBd	Gain:	14.6 dBd
Height (AGL):	222	Height (AGL):	222	Height (AGL):	222
Frequency Bands	700 MHz	Frequency Bands	700 MHz	Frequency Bands	700 MHz
Channel Count	1	Channel Count	1	Channel Count	1
Total TX Power:	30	Total TX Power:	30	Total TX Power:	30
ERP (W):	865.21	ERP (W):	865.21	ERP (W):	865.21
Antenna A2 MPE%	0.14	Antenna B2 MPE%	0.14	Antenna C2 MPE%	0.14

Site Composite MPE%	
Carrier	**MPE%**
T-Mobile	**3.02**
AT&T	11.98 %
MetroPCS	6.81 %
Verizon Wireless	6.24 %
Sprint	2.16 %
Industrial Comm.	1.59 %
Nextel	1.60 %
Rescue 21	2.10 %
Dept Homeland Sec	1.89 %
Site Total MPE %:	**37.39 %**

T-Mobile Sector 1 Total:	1.01 %
T-Mobile Sector 2 Total:	1.01 %
T-Mobile Sector 3 Total:	1.01 %
Site Total:	37.39 %

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

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Summary

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

The anticipated maximum composite contributions from the T-Mobile facility as well as the site composite emissions value with regards to compliance with FCC's allowable limits for general public exposure to RF Emissions are shown here:

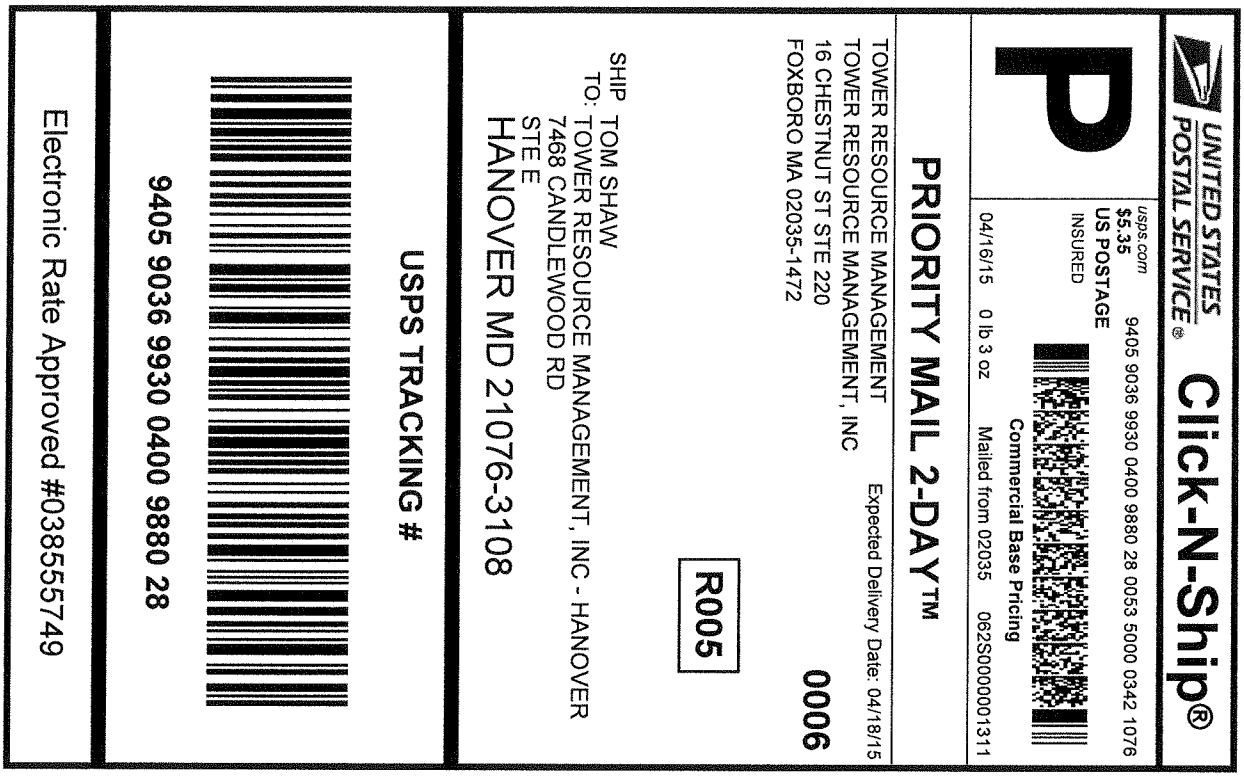
T-Mobile Sector	Power Density Value (%)
Sector 1:	1.01 %
Sector 2:	1.01 %
Sector 3 :	1.01 %
T-Mobile Total:	3.02 %
Site Total:	37.39 %
Site Compliance Status:	**COMPLIANT**

The anticipated composite MPE value for this site assuming all carriers present is **37.39%** 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

EBI Consulting
21 B Street
Burlington, MA 01803



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2. Place your label so it does not wrap around the edge of the package.
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4. To mail your package with PC Postage®, you may schedule a Package Pickup online, hand to your letter carrier, take to a Post Office™, or drop in a USPS collection box.
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Click-N-Ship® Label Record

USPS TRACKING # / Insurance Number:
9405 9036 9930 0400 9880 28

Trans. #:	332853093
Print Date:	04/16/2015
Ship Date:	04/16/2015
Expected Delivery Date:	04/18/2015
Insured Value:	$10.00

Priority Mail® Postage:	$5.35
Insurance Fee:	$0.00
Total:	$5.35

From: TOWER RESOURCE MANAGEMENT
TOWER RESOURCE MANAGEMENT, INC
16 CHESTNUT ST STE 220
FOXBORO MA 02035-1472

To: TOM SHAW
TOWER RESOURCE MANAGEMENT, INC - HANOVER
7468 CANDLEWOOD RD
STE E
HANOVER MD 21076-3108

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AMERICAN TOWER®
CORPORATION

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Structural Analysis Report

Structure	:	337.5 ft Self Supported Tower
ATC Site Name	:	Bethany CT, CT
ATC Site Number	:	88008
Engineering Number	:	61396221
Proposed Carrier	:	T-Mobile
Carrier Site Name	:	N/A
Carrier Site Number	:	CTNH217A
Site Location	:	93 Old Amity Road Bethany, CT 06524-3400 41.404758, -72.999983
County	:	New Haven
Date	:	March 31, 2015
Max Usage	:	100%
Result	:	Pass

STATE OF CONNECTICUT
THOMAS L. TAYLOR
28130
LICENSED
PROFESSIONAL ENGINEER
4-3-15

Prepared By:
Michael B. Davenport
Structural Engineer III

Michael Davenport

AMERICAN TOWER®
CORPORATION

Eng. Number 61396221
March 31, 2015

Table of Contents

AMERICAN TOWER®
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Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 337.5 ft self supported tower to reflect the change in loading by T-Mobile.

Supporting Documents

Tower Drawings	CSEI Analysis (ATC Engineering #73115244 dated November 18, 2002)
Foundation Drawing	ETS #120302.01, dated June 18, 2012
Geotechnical Report	Geotel Engineering Report #E12-221, dated June 5, 2012
Modifications	ATC Engineering #44269933, dated January 6, 2010 ATC Engineering #49564732, dated July 5, 2012

Analysis

The tower was analyzed using Power Line Systems, Inc. tower analysis software. This program considers an elastic three-dimensional model and second-order effects per ANSI/EIA-222.

Basic Wind Speed:	85 mph (Fastest Mile)
Basic Wind Speed w/ Ice:	74 mph (Fastest Mile)w/ 1/2" radial ice concurrent
Code:	ANSI/TIA/EIA-222-F / 2003 IBC , Sec. 1609.1.1, Exception (4) & Sec. 3108.4 w/ 2005 CT Supplement & 2009 CT Amendment

Conclusion

Based on the analysis results, the structure meets the requirements per the applicable codes listed above. The tower and foundation can support the equipment as described in this report.

If you have any questions or require additional information, please contact American Tower via email at Engineering@americantower.com. Please include the American Tower site name, site number, and engineering number in the subject line for any questions.

Existing and Reserved Equipment

Elevation[1] (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
338.0	344.0	1	Rohde & Schwarz ADD090	Platform w/ Handrails	(3) 7/8" Coax	US Treasury
320.0	320.0	-	-	Catwalk	-	-
319.0	326.0	1	Kathrein 750 10074	Stand-Off	(1) 1 5/8" Coax	Lightsquared LP
310.0	320.0	1	Sinclair SC281-L	Sector Frame	(2) 7/8" Coax	US Treasury
	315.0	1	Sinclair SC381-HL			
287.5	287.5	-	-	Rest Platform	-	-
275.0	285.0	1	Sinclair SC281-L	Sector Frame	(1) 7/8" Coax	US Treasury
250.0	250.0	12	Decibel DB844H90E-XY	Sector Frame	(12) 1 5/8" Coax	Sprint Nextel
240.0	240.0	3	Alcatel-Lucent 800MHz 2X50W RRH w/ Filter	Sector Frame	(4) 1 1/4" Hybriflex	
		3	Alcatel-Lucent 1900MHz 4X45 RRH			
		3	Alcatel-Lucent TD-RRH8x20-25 w/ Solar Shield			
		3	RFS RFS APXV9TM14-ALU-I20			
		3	RFS APXVSPP18-C-A20			
237.0	237.0	-	-	Working Platform	-	-
220.0	222.0	6	Remec S20057A1	Sector Frame	(12) 1 5/8" Coax (1) 3/8" Coax	T-Mobile
		3	RFS APX16PV-16PVL-E-00			
200.0	200.0	-	-	Rest Platform	-	-
194.0	204.0	1	Andrew DB616E-BC	Side Arm	(1) 1 1/4" Coax	US Treasury
180.0	180.0	6	RFS FD9R6004/1C-3L	Sector Frame	(12) 1 5/8" Coax	Verizon
		3	Rymsa MGD3-800TX			
		6	Andrew DB844H90E-XY			
		3	Powerwave P65-16-XL-2			
165.0	165.0	3	Powerwave LGP21901	Sector Frame	(12) 1 5/8" Coax (2) 0.78" 8 AWG 6 (1) 3" conduit (1) 0.39" Cable	AT&T Mobility
		3	Raycap DC2-48-60-0-9E			
		6	Powerwave LGP21401			
		1	Raycap FC12-PC6-10E			
		6	Ericsson RRUS 11 (Band 12)			
		6	Powerwave 7770.00			
		1	KMW AM-X-CD-16-65-00T-RET			
		2	Andrew SBNH-1D6565C			
150.0	150.0	-	-	Rest Platform	-	-
125.0	125.0	-	-	Working Platform	-	
100.0	100.0	3	RFS APXV18-206517S-C	Leg	(6) 1 5/8" Coax	Metro PCS
48.0	48.0	1	PCTEL GPS-TMG-HR-26N	Stand-Off	(1) 1/2" Coax	Sprint Nextel
20.0	20.0	1	Nortel NTGB01MA	Stand-Off	(1) 7/8" Coax	Metro PCS

Equipment to be Removed

Elevation[1] (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
220.0	222.0	3	RFS APX16PV-16PVL-E-00	Sector Frame	-	T-Mobile

Proposed Equipment

Elevation[1] (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
220.0	222.0	6	KMW Smart Bias-T	Sector Frame	-	T-Mobile
		3	Andrew LNX-6515DS-VTM			

[1]Mount elevation is defined as height above bottom of steel structure to the bottom of mount, RAD elevation is defined as center of antenna above ground level (AGL).

Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Legs	73%	Pass
Diagonals	88%	Pass
Horizontals	96%	Pass
Truss Diagonals	100%	Pass
Truss Horizontals	91%	Pass
Anchor Bolts	77%	Pass

Foundations

Reaction Component	Analysis Reactions	% of Usage
Uplift (Kips)	350.6	89%
Axial (Kips)	471.5	12%

The structure base reactions resulting from this analysis were found to be acceptable beyond a factor of safety of two based on geotechnical and foundation information, therefore no modification or reinforcement of the foundation will be required.

Standard Conditions

All engineering services are performed on the basis that the information used is current and correct. This information may consist of, but is not necessary limited, to:

-- Information supplied by the client regarding the structure itself, antenna, mounts and feed line loading on the structure and its components, or other relevant information.

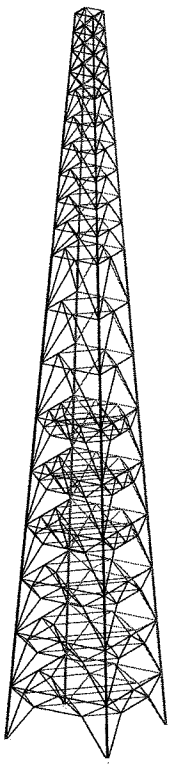
-- Information from drawings in the possession of American Tower Corporation, or generated by field inspections or measurements of the structure.

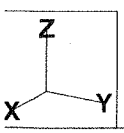
It is the responsibility of the client to ensure that the information provided to A.T. Engineering Service, PLLC and used in the performance of our engineering services is correct and complete. In the absence of information to the contrary, we assume that all structures were constructed in accordance with the drawings and specifications and that their capacity has not significantly changed from the "as new" condition.

Unless explicitly agreed by both the client and American Tower Corporation, all services will be performed in accordance with the current revision of ANSI/TIA -222. The design basic wind speed will be determined based on the minimum basic wind speed as prescribed in ANSI/TIA-222. Although every effort is taken to ensure that the loading considered is adequate to meet the requirements of all applicable regulatory entities, we can provide no assurance to meet any other local and state codes or requirements. If wind and ice loads or other relevant parameters are to be different from the minimum values recommended by the codes, the client shall specify the exact requirement.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. A.T. Engineering Service, PLLC is not responsible for the conclusions, opinions and recommendations made by others based on the information we supply.

American Tower Corp., Project: "88008-T-Mobile-03302015"
Tower Version 12.50, 1:14:37 PM Thursday, April 02, 2015
Undeformed geometry displayed





Project Name : 88008 - Bethany CT, CT
Project Notes: 337.5' AT&T Tag Self Supported Tower
Project File : S:\L2 - ATC\88008\61396221 - T-Mobile\88008-T-Mobile-03302015.tow
Date run : 12:49:02 PM Thursday, April 02, 2015
by : Tower Version 12.50
Licensed to : American Tower Corp.

Successfully performed nonlinear analysis

Member check option: TIA/EIA 222-F
Connection rupture check: Not Checked
Crossing diagonal check: Fixed
Included angle check: None
Climbing load check: None
Redundant members checked with: Actual Force
Loads from file: s:\l2 - atc\88008\61396221 - t-mobile\88008-t-mobile-03302015.eia

*** Analysis Results:

Maximum element usage is 99.98% for Angle "LD 35P" in load case "W -90"

Summary of Joint Support Reactions For All Load Cases:

Load Case	Joint Label	Long. Force (kips)	Tran. Force (kips)	Vert. Force (kips)	Shear Force (kips)	Tran. Moment (ft-k)	Long. Moment (ft-k)	Bending Moment (ft-k)	Vert. Moment (ft-k)	Found. Usage %
W 0	0P	-45.59	-24.56	-321.55	51.78	-0.46	-4.74	4.77	-2.57	0.00
W 0	0Z	-44.38	25.26	-317.63	51.06	0.22	-4.54	4.55	2.57	0.00
W 0	0XY	-34.36	-14.48	201.11	37.28	0.56	-5.16	5.19	2.33	0.00
W 0	0Y	-35.41	13.77	202.46	37.99	-0.38	-5.36	5.38	-2.32	0.00
W 180	0P	35.41	13.62	200.41	37.96	-0.38	5.40	5.42	2.32	0.00
W 180	0X	34.36	-14.32	199.14	37.22	0.56	5.20	5.23	-2.34	0.00
W 180	0XY	44.38	25.10	-315.66	50.98	0.23	4.58	4.59	-2.57	0.00
W 180	0Y	45.59	-24.40	-319.50	51.71	-0.46	4.78	4.81	2.57	0.00
W 45	0P	-51.88	-52.05	-471.51	73.49	3.65	-3.61	5.13	0.00	0.00
W 45	0X	-21.74	-10.92	-57.44	24.33	4.24	-3.54	5.52	3.84	0.00
W 45	0XY	-42.12	-42.00	350.04	59.48	4.37	-4.39	6.19	-0.00	0.00
W 45	0Y	-10.81	-21.57	-56.71	24.13	3.52	-4.20	5.48	-3.84	0.00
W -45	0P	-22.63	11.43	-60.60	25.35	-4.42	-3.68	5.75	-3.84	0.00
W -45	0X	-50.99	52.54	-468.35	73.22	-3.82	-3.46	5.16	-0.00	0.00
W -45	0XY	-10.09	21.08	-57.30	23.37	-3.40	-4.05	5.29	3.85	0.00
W -45	0Y	-42.83	41.50	350.63	59.64	-4.25	-4.53	6.21	0.02	0.00
W 90	0P	-24.47	-45.76	-321.86	51.89	4.78	0.49	4.80	2.57	0.00
W 90	0X	13.68	-35.52	202.04	38.07	5.40	0.37	5.41	2.32	0.00
W 90	0XY	-14.51	-34.24	200.80	37.19	5.14	-0.57	5.17	-2.34	0.00
W 90	0Y	25.29	-44.21	-316.60	50.93	4.52	-0.20	4.53	-2.57	0.00
W -90	0P	13.59	35.53	200.72	38.03	-5.42	0.37	5.44	-2.32	0.00
W -90	0X	-24.17	45.76	-320.54	51.84	-4.80	0.49	4.83	-2.57	0.00
W -90	0XY	25.19	44.21	-315.36	50.88	-4.55	-0.20	4.55	2.57	0.00
W -90	0Y	-14.41	34.24	199.57	37.15	-5.17	-0.57	5.20	2.34	0.00
W 0 Ice	0P	-40.34	-22.21	-302.83	46.05	-1.74	-2.69	3.21	-2.16	0.00
W 0 Ice	0X	-39.14	22.87	-298.48	45.33	1.50	-2.50	2.92	2.16	0.00
W 0 Ice	0XY	-28.94	-12.04	154.28	31.35	1.82	-5.73	6.01	2.00	0.00
W 0 Ice	0Y	-29.90	11.38	155.00	31.99	-1.66	-5.92	6.15	-1.98	0.00
W 180 Ice	0P	29.90	11.16	152.15	31.91	-1.66	5.98	6.20	1.99	0.00
W 180 Ice	0X	28.95	-11.83	151.54	31.27	1.82	5.78	6.06	-2.01	0.00
W 180 Ice	0XY	39.14	22.66	-295.74	45.22	1.51	2.55	2.97	-2.17	0.00
W 180 Ice	0Y	40.34	-21.99	-299.98	45.95	-1.74	2.75	3.25	2.17	0.00
W 45 Ice	0P	-47.02	-47.19	-442.44	66.61	1.87	-1.81	2.62	0.00	0.00
W 45 Ice	0X	-19.83	-9.02	-71.71	21.78	5.06	-1.78	5.36	1.37	0.00
W 45 Ice	0XY	-36.96	-36.87	292.85	52.20	5.17	-5.19	7.32	-0.00	0.00
W 45 Ice	0Y	-8.92	-19.66	-70.73	21.59	1.76	-5.02	5.32	-3.37	0.00
W -45 Ice	0P	-20.72	9.49	-75.33	22.79	-5.24	-1.91	5.57	-3.37	0.00
W -45 Ice	0X	-46.12	47.65	-438.83	66.32	-2.05	-1.69	2.66	-0.01	0.00
W -45 Ice	0XY	-8.29	19.19	-70.72	20.90	-1.66	-4.88	5.15	3.38	0.00
W -45 Ice	0Y	-37.59	36.39	292.85	52.32	-5.07	-5.32	7.35	0.02	0.00
W 90 Ice	0P	-22.11	-40.51	-303.12	46.16	2.73	1.77	3.25	2.16	0.00
W 90 Ice	0X	12.29	-30.00	154.31	32.05	5.95	1.66	6.18	1.98	0.00
W 90 Ice	0XY	-12.06	-28.85	153.99	31.27	5.71	-1.83	6.00	-2.00	0.00
W 90 Ice	0Y	22.89	-38.97	-297.22	45.19	2.48	-1.48	2.89	-2.16	0.00
W -90 Ice	0P	11.14	30.00	152.44	32.00	-5.99	1.66	6.21	-1.99	0.00
W -90 Ice	0X	-21.97	40.51	-301.25	46.09	-2.76	1.77	3.28	-2.17	0.00
W -90 Ice	0XY	22.75	38.97	-295.45	45.12	-2.52	-1.48	2.92	2.16	0.00
W -90 Ice	0Y	-11.92	28.85	152.23	31.21	-5.75	-1.83	6.03	2.01	0.00

Summary of Joint Support Reactions For All Load Cases in Direction of Leg:

Load Case	Support Origin Joint	Joint	Leg Member	Force In Leg Dir. (kips)	Residual Shear Perpendicular To Leg (kips)	Residual Shear Horizontal To Leg - Res. (kips)	Residual Shear Horizontal To Leg - Long. (kips)	Residual Shear Horizontal To Leg - Tran. (kips)	Total Long. Force (kips)	Total Tran. Force (kips)	Total Vert. Force (kips)
W 0	0P	1P	L 1P	324.700	25.436	25.503	25.166	4.131	-45.59	-24.56	-321.55
W 0	0X	1X	L 1X	320.766	24.660	24.729	24.201	-5.084	-44.38	25.26	-317.63
W 0	0XY	1XY	L 1XY	-203.394	21.598	21.648	21.581	1.701	-34.36	-14.48	201.11
W 0	0Y	1Y	L 1Y	-204.759	22.519	22.568	22.550	-0.912	-35.41	13.77	202.46
W 180	0P	1P	L 1P	-202.706	22.649	22.698	-22.681	-0.987	35.41	13.62	200.41
W 180	0X	1X	L 1X	-201.424	21.720	21.770	21.706	1.671	34.36	-14.32	199.14
W 180	0XY	1XY	L 1XY	318.794	24.775	24.844	-24.325	-5.054	44.38	25.10	-315.66
W 180	0Y	1Y	L 1Y	322.649	25.560	25.628	-25.297	4.107	45.59	-24.40	-319.50
W 45	0P	1P	L 1P	476.192	31.009	31.134	21.931	22.098	-51.88	-52.05	-471.51
W 45	0X	1X	L 1X	57.892	23.228	23.229	18.090	14.572	-21.74	-10.92	-57.44
W 45	0XY	1XY	L 1XY	-353.956	27.925	28.037	19.883	19.768	-42.12	-42.00	350.04
W 45	0Y	1Y	L 1Y	57.162	23.032	23.033	14.411	17.968	-10.81	-21.57	-56.71
W -45	0P	1P	L 1P	61.063	24.208	24.209	18.779	-15.278	-22.63	11.43	-60.60
W -45	0X	1X	L 1X	473.026	31.030	31.155	21.242	-22.790	-50.99	52.54	-468.35
W -45	0XY	1XY	L 1XY	57.762	22.196	22.198	13.734	-17.439	-10.09	21.08	-57.30
W -45	0Y	1Y	L 1Y	-354.562	28.035	28.147	20.558	-19.226	-42.83	41.50	350.63
W 90	0P	1P	L 1P	325.013	25.564	25.631	4.025	25.313	-24.47	-45.76	-321.86
W 90	0X	1X	L 1X	-204.340	22.659	22.708	-0.851	22.692	13.68	-35.52	202.04
W 90	0XY	1XY	L 1XY	-203.083	21.507	21.557	1.751	21.486	-14.51	-34.24	200.80
W 90	0Y	1Y	L 1Y	319.724	24.581	24.651	-5.181	24.100	25.29	-44.21	-316.60
W -90	0P	1P	L 1P	-203.018	22.743	22.792	-0.836	-22.777	13.59	35.53	200.72
W -90	0X	1X	L 1X	323.691	25.645	25.712	4.010	-25.397	-24.37	45.76	-320.54
W -90	0XY	1XY	L 1XY	318.483	24.653	24.722	-5.161	-24.178	25.19	44.21	-315.36
W -90	0Y	1Y	L 1Y	-201.843	21.583	21.633	1.731	-21.564	-14.41	34.24	199.57
W 0 Ice	0P	1P	L 1P	305.572	21.262	21.317	21.108	2.973	-40.34	-22.21	-302.83
W 0 Ice	0X	1X	L 1X	301.207	20.499	20.556	20.180	-3.913	-39.14	22.87	-298.48
W 0 Ice	0XY	1XY	L 1XY	-156.254	19.229	19.276	19.145	2.244	-28.94	-12.04	154.28
W 0 Ice	0Y	1Y	L 1Y	-156.987	20.067	20.113	20.055	-1.534	-29.90	11.38	155.00
W 180 Ice	0P	1P	L 1P	-154.139	20.244	20.291	-20.235	-1.497	29.90	11.16	152.15
W 180 Ice	0X	1X	L 1X	-153.513	19.397	19.445	-19.320	2.202	28.95	-11.83	151.54
W 180 Ice	0XY	1XY	L 1XY	298.464	20.661	20.718	-20.353	-3.872	39.14	22.66	-295.74
W 180 Ice	0Y	1Y	L 1Y	302.725	21.435	21.489	-21.288	2.936	40.34	-21.99	-299.98
W 45 Ice	0P	1P	L 1P	446.630	26.761	26.869	18.914	19.084	-47.02	-47.19	-442.44
W 45 Ice	0X	1X	L 1X	72.105	20.430	20.430	15.272	13.571	-19.83	-9.02	-71.71
W 45 Ice	0XY	1XY	L 1XY	-296.348	25.793	25.897	18.360	18.264	-36.96	-36.87	292.85
W 45 Ice	0Y	1Y	L 1Y	71.127	20.244	20.244	13.412	15.166	-8.92	-19.66	-70.73
W -45 Ice	0P	1P	L 1P	75.739	21.397	21.397	15.937	-14.277	-20.72	9.49	-75.33
W -45 Ice	0X	1X	L 1X	443.000	26.903	26.911	18.249	-19.778	-46.12	47.65	-438.83
W -45 Ice	0XY	1XY	L 1XY	71.128	19.476	19.477	12.778	-14.699	-8.29	19.19	-70.72
W -45 Ice	0Y	1Y	L 1Y	-296.354	25.918	26.022	18.993	-17.789	-37.59	36.39	292.85
W 90 Ice	0P	1P	L 1P	305.863	21.396	21.451	2.861	21.259	-22.11	-40.51	-303.12
W 90 Ice	0X	1X	L 1X	-156.300	20.204	20.251	-1.484	20.196	11.29	-30.00	154.31
W 90 Ice	0XY	1XY	L 1XY	-155.964	19.154	19.202	2.279	19.066	-12.06	-28.85	153.99
W 90 Ice	0Y	1Y	L 1Y	299.939	20.430	20.487	-4.011	20.091	22.89	-38.97	-297.22
W -90 Ice	0P	1P	L 1P	-154.430	20.320	20.367	-1.461	-20.314	11.14	30.00	152.44
W -90 Ice	0X	1X	L 1X	303.994	21.510	21.564	2.839	-21.377	-21.97	40.51	-301.25
W -90 Ice	0XY	1XY	L 1XY	298.173	20.534	20.591	-3.984	-20.202	22.75	38.97	-295.45
W -90 Ice	0Y	1Y	L 1Y	-154.200	19.263	19.310	2.251	-19.179	-11.92	28.85	152.23

Overturning Moment Summary For All Load Cases:

Load Case	Transverse Moment (ft-k)	Longitudinal Moment (ft-k)	Resultant Moment (ft-k)
W 0	66.650	27046.536	27046.619
W 180	66.711	-26838.003	26838.086
W 45	21289.903	21327.780	30135.264
W -45	-21156.878	21328.108	30041.665
W 90	27006.709	104.545	27008.911
W -90	-26875.879	104.595	26876.082
W 0 Ice	94.186	23618.352	23618.539
W 180 Ice	94.265	-23328.663	23328.854
W 45 Ice	19046.412	19097.079	26971.545
W -45 Ice	-18858.262	19097.173	26839.220
W 90 Ice	23567.730	144.877	23568.176
W -90 Ice	-23379.346	144.941	23379.795

EIA Sections Information:

Section Label	Top Z (ft)	Bottom Z (ft)	Joint Count	Member Count	Top Width (ft)	Bottom Width (ft)	Gross Area (ft^2)	Face Af Adjust Factor	Face Ar Adjust Factor	Dead Load Factor
328.9-337.5	337.500	328.917	8	20	9.00	10.09	81.93	1.1220	1.1220	1.346
320.3-328.9	328.917	320.334	8	16	10.09	11.18	91.28	1.1610	1.1610	1.393
310.2-320.3	320.334	310.167	8	16	11.18	12.47	120.24	1.1970	1.1970	1.436
300.0-310.2	310.167	300.000	12	24	12.47	13.76	133.37	1.1540	1.1540	1.385
287.5-300.0	300.000	287.500	16	24	13.76	15.35	181.97	1.2010	1.2010	1.442

275.0-287.5	287.500	275.000	16	24	15.35	16.94	201.82	1.2080	1.2080	1.449
262.5-275.0	275.000	262.500	16	24	16.94	18.53	221.67	1.2140	1.2140	1.457
250.0-262.5	262.500	250.000	16	24	18.53	20.12	241.52	1.2200	1.2200	1.464
237.5-250.0	250.000	237.500	16	24	20.12	21.70	261.37	1.2260	1.2260	1.471
225.0-237.5	237.500	225.000	16	24	21.70	23.29	281.22	1.2320	1.2320	1.478
200.0-225.0	225.000	200.000	16	24	23.29	26.47	621.99	1.2640	1.2640	1.516
175.0-200.0	200.000	175.000	16	24	26.47	29.64	701.39	1.2730	1.2730	1.528
150.0-175.0	175.000	150.000	20	32	29.64	32.82	780.79	1.2880	1.2880	1.545
125.0-150.0	150.000	125.000	36	76	32.82	36.00	860.19	1.2300	1.2300	1.476
100.0-125.0	125.000	100.000	36	76	36.00	39.17	939.58	1.2270	1.2270	1.473
75.00-100.0	100.000	75.000	32	68	39.17	42.35	1018.98	1.2320	1.2320	1.479
50.00-75.00	75.000	50.000	24	52	42.35	45.52	1098.38	1.3380	1.3380	1.606
25.00-50.00	50.000	25.000	24	52	45.52	48.70	1177.78	1.3250	1.3250	1.590
0.000-25.00	25.000	0.000	20	40	48.70	51.88	1257.18	1.3210	1.3210	1.585

*** Overall summary for all load cases - Usage = Maximum Stress / Allowable Stress
Printed capacities do not include EIA allowable stress increase for wind load cases.
Printed capacities do not include the strength factor entered for each load case.
The Group Summary reports on the member and load case that resulted in maximum usage
which may not necessarily be the same as that which produces maximum force.

Group Summary (Compression Portion):

Group Label	Group Desc.	Angle Type	Angle Size	Steel Strength (ksi)	Max Usage %	Usage Control	Max Use In Comp. %	Comp. Control Member	Comp. Force (kips)	Comp. Control Load Case	L/R Capacity (kips)	Comp. Connect. Shear Capacity (kips)	Comp. Connect. Bearing Capacity (kips)	RLX	RLY	RLZ	L/R	KL/R	Length Comp. Member (ft)	Curve No.	No. Of Bolts Comp.
Leg S1	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	73.43	Comp	73.43	L 1P	-409.089	W 45	417.820	0.000	0.000	0.281	0.281	0.281	54.29	54.29	25.101	1	0
Leg S2	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	71.29	Comp	71.29	L 2P	-366.061	W 45	385.120	0.000	0.000	0.281	0.281	0.281	54.29	54.29	25.101	1	0
Leg S3	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	68.41	Comp	68.41	L 3P	-321.977	W 45	352.980	0.000	0.000	0.281	0.281	0.281	54.29	54.29	25.101	1	0
Leg S4	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	67.56	Comp	67.56	L 4P	-270.716	W 45	300.553	0.000	0.000	0.281	0.281	0.281	54.29	54.29	25.101	1	0
Leg S5	L 8" x 8" x 1"	SAE	8X8X1	36.0	63.46	Comp	63.46	L 5P	-227.989	W 45	269.473	0.000	0.000	0.281	0.281	0.281	54.29	54.29	25.101	1	0
Leg S6	L 8" x 8" x 1"	SAE	8X8X1	36.0	51.47	Comp	51.47	L 6P	-184.918	W 45	269.473	0.000	0.000	0.281	0.281	0.281	54.29	54.29	25.101	1	0
Leg S7	L 8" x 8" x 0.875"	SAE	8X8X0.88	36.0	57.51	Comp	57.51	L 7P	-172.907	W 45	225.502	0.000	0.000	0.333	0.333	0.333	63.94	63.94	25.101	1	0
Leg S8	L 8" x 8" x 0.75"	SAE	8X8X0.75	36.0	52.75	Comp	52.75	L 8P	-137.466	W 45	195.450	0.000	0.000	0.333	0.333	0.333	63.54	63.54	25.101	1	0
Leg S9	L 8" x 8" x 0.75"	SAE	8X8X0.75	36.0	40.01	Comp	40.01	L 9P	-104.256	W 45	195.450	0.000	0.000	0.333	0.333	0.333	63.54	63.54	25.101	1	0
Leg S10	L 6" x 6" x 0.875"	SAE	6X6X0.88	36.0	40.10	Comp	40.10	L 10P	-88.448	W 45	165.443	0.000	0.000	0.500	0.500	0.500	64.36	64.36	12.550	1	0
Leg S11	L 6" x 6" x 0.75"	SAE	6X6X0.75	36.0	38.88	Comp	38.88	L 11P	-74.393	W 45	143.509	0.000	0.000	0.500	0.500	0.500	64.36	64.36	12.550	1	0
Leg S12	L 6" x 6" x 0.75"	SAE	6X6X0.75	36.0	32.69	Comp	32.69	L 12P	-62.543	W 45	143.509	0.000	0.000	0.500	0.500	0.500	64.36	64.36	12.550	1	0
Leg S13	L 6" x 6" x 0.5625"	SAE	6X6X0.56	36.0	34.79	Comp	34.79	L 13P	-50.875	W 45	109.680	0.000	0.000	0.500	0.500	0.500	63.82	63.82	12.550	1	0
Leg S14	L 6" x 6" x 0.5625"	SAE	6X6X0.56	36.0	27.03	Comp	27.03	L 14P	-39.535	W 45	109.680	0.000	0.000	0.500	0.500	0.500	63.82	63.82	12.550	1	0
Leg S15	L 6" x 6" x 0.4375"	SAE	6X6X0.44	36.0	24.44	Comp	24.44	L 15P	-28.212	W 45	86.579	0.000	0.000	0.500	0.500	0.500	63.28	63.28	12.550	1	0
Leg S16	L 5" x 5" x 0.4375"	SAE	5X5X0.44	36.0	23.29	Comp	23.29	L 16P	-22.356	W 45	71.999	0.000	0.000	0.500	0.500	0.500	62.12	62.12	10.208	1	0
Leg S17	L 5" x 5" x 0.4375"	SAE	5X5X0.44	36.0	14.85	Comp	14.85	L 17P	-14.251	W 45	71.999	0.000	0.000	0.500	0.500	0.500	62.12	62.12	10.208	1	0
Leg S18	L 5" x 5" x 0.3125"	SAE	5X5X0.31	36.0	10.22	Comp	10.22	L 18P	-7.483W	45 Ice	54.896	0.000	0.000	0.500	0.500	0.500	52.02	52.02	8.618	1	0
Leg S19	L 5" x 5" x 0.3125"	SAE	5X5X0.31	36.0	5.03	Comp	5.03	L 19P	-3.684W	45 Ice	54.896	0.000	0.000	0.500	0.500	0.500	52.02	52.02	8.618	1	0
Diag S1	B/B L3"x4"x0.375"	DAS	4X3X0.38	36.0	54.18	Comp	54.18	D 2X	-45.163	W -90	62.516	0.000	0.000	0.333	0.667	0.333	103.12	103.12	22.664	1	0
Diag S2	B/B L3"x4"x0.25"	DAS	4X3X0.25	36.0	76.02	Comp	76.02	D 4X	-44.866	W -90	44.268	0.000	0.000	0.333	0.667	0.333	99.05	99.05	22.190	1	0
Diag S3	B/B L3"x4"x0.25"	DAS	4X3X0.25	36.0	73.25	Comp	73.25	D 6X	-44.073	W -90	45.126	0.000	0.000	0.333	0.667	0.333	97.03	97.03	21.736	1	0
Diag S4	B/B L3"x3.5"x0.25"	DAS	3.5X3X0.25	36.0	88.26	Comp	88.26	D 8X	-47.271	W -90	40.170	0.000	0.000	0.333	0.667	0.333	101.13	101.13	20.858	1	0
Diag S5	B/B L3"x3.5"x0.25"	DAS	3.5X3X0.25	36.0	84.44	Comp	84.44	D 10X	-46.031	W -90	40.889	0.000	0.000	0.333	0.667	0.333	99.32	99.32	20.484	1	0
Diag S6	B/B L2.5"x3.5"x0.25"	DAS	3.5X2.5X0.25	36.0	88.37	Comp	88.37	D 12X	-44.636	W -90	37.881	0.000	0.000	0.300	0.600	0.300	98.61	98.61	20.132	1	0
Diag S7	B/B L3"x3"x0.375"	DAE	3X3X0.38	36.0	68.25	Comp	68.25	D 13X	-29.157	W -90	32.040	0.000	0.000	0.300	0.600	0.300	152.92	140.25	29.947	6	0
Diag S8	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	87.79	Comp	87.79	D 16Y	-25.192	W 180	21.522	0.000	0.000	0.300	0.600	0.300	144.53	135.09	29.107	6	0
Diag S9	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	79.07	Comp	79.07	D 18Y	-23.508	W 180	22.297	0.000	0.000	0.300	0.600	0.300	140.68	132.72	28.331	6	0
Diag S10	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	64.19	Comp	64.19	D 20Y	-13.120	W 180	15.329	0.000	0.000	0.500	1.000	0.500	172.47	152.27	17.103	6	0
Diag S11	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	51.22	Comp	51.22	D 22Y	-10.937	W 180	16.014	0.000	0.000	0.500	1.000	0.500	167.15	148.98	16.572	6	0
Diag S12	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	43.21	Comp	43.21	D 24Y	-9.630	W 180	16.714	0.000	0.000	0.500	1.000	0.500	161.99	145.82	16.064	6	0
Diag S13	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	63.95	Comp	63.95	D 26Y	-9.477	W 180	11.115	0.000	0.000	0.500	1.000	0.500	199.94	169.16	15.579	6	0
Diag S14	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	55.58	Comp	55.58	D 28Y	-8.601	W 180	11.607	0.000	0.000	0.500	1.000	0.500	194.06	165.54	15.120	6	0
Diag S15	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	50.41	Comp	50.41	D 29X	-8.132	W -90	12.098	0.000	0.000	0.500	1.000	0.500	188.54	162.15	14.690	6	0
Diag S16	L 3.5" x 3.5" x 0.25"	SAE	3.5X3.5X0.25	36.0	28.24	Comp	28.24	D 32X	-4.987	W -90	13.243	0.000	0.000	0.520	0.750	0.520	149.34	138.04	16.609	6	0
Diag S17	L 3.5" x 3.5" x 0.25"	SAE	3.5X3.5X0.25	36.0	21.85	Comp	21.85	D 34X	-4.002	W -90	13.736	0.000	0.000	0.520	0.750	0.520	140.35	135.55	15.609	5	0
Diag S18	L 3" x 3" x 0.25"	SAE	3X3X0.25	36.0	16.68	Comp	16.68	D 36P	-2.495	W 90	11.217	0.000	0.000	0.520	0.750	0.520	144.17	138.46	13.678	5	0
Diag S19	L 3" x 3" x 0.25"	SAE	3X3X0.25	36.0	12.53	Comp	12.53	D 38X	-2.068	W -90	12.380	0.000	0.000	0.520	0.750	0.520	135.43	131.90	12.848	5	0
Horiz 1	B/B L4"x3"x0.25"	DAL	4X3X0.25	36.0	77.19	Comp	77.19	H 1P	-30.637	W -90	37.543	0.000	0.000	0.500	0.500	0.500	114.14	114.14	24.350	1	0
Horiz 2	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	36.0	94.92	Comp	94.92	H 3P	-36.579	W -90	38.902	0.000	0.000	0.490	0.490	0.490	122.79	121.71	22.762	6	0
Horiz 3	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	75.46	Comp	75.46	H 5P	-34.378	W -90	34.170	0.000	0.000	0.460	0.460	0.460	123.68	122.26	21.174	6	0
Horiz 4	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	36.0	96.18	Comp	96.18	H 7P	-34.869	W -90	27.190	0.000	0.000	0.900	0.900	0.900	129.37	125.76	13.057	6	0
Horiz 5	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	36.0	90.23	Comp	90.23	H 9P	-31.858	W -90	26.482	0.000	0.000	1.000	1.000	1.000	132.09	127.44	11.998	6	0
Horiz 6	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	92.80	Comp	92.80	H 11P	-28.787	W -90	23.266	0.000	0.000	0.980	0.980	0.980	136.14	129.93	10.940	6	0
Horiz 7	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	71.54	Comp	71.54	H 14P	-14.282	W 180	14.974	0.000	0.000	1.000	1.000	1.000	188.21	161.95	14.822	6	0
Horiz 8	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	49.29	Comp	49.29	H 16P	-11.541	W 180	17.560	0.000	0.000	1.000	1.000	1.000	168.05	149.55	13.234	6	0
Horiz 9	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	51.13	Comp	51.13	H 18P	-9.709	W 180	14.243	0.000	0.000	1.000	1.000	1.000	181.73	157.96	11.646	6	0
Horiz 10	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	38.19	Comp	38.19	H 20P	-8.007	W 180	15.724	0.000	0.000	1.000	1.000	1.000	169.34	150.34	10.852	6	0
Horiz 11	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	27.25	Comp	27.25	H 22P	-6.340	W 180	17.447	0.000	0.000	1.000	1.000	1.000	156.95	142.72	10.058	6	0
Horiz 12	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	20.61	Comp	20.61	H 24P	-5.350	W 180	19.471	0.000	0.000	1.000	1.000	1.000	144.56	135.10	9.264	6	0
Horiz 13	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	18.84	Comp	18.84	H 26P	-5.492	W 180	21.868	0.000	0.000	1.000	1.000	1.000	132.17	127.48	8.470	6	0
Horiz 14	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	13.87	Comp	13.87	H 27P	-4.540	W -90	24.547	0.000	0.000	1.000	1.200	1.000	119.78	119.78	7.676	1	0
Horiz 15	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	9.58	Comp	9.58	H 29X	-3.654	W 90	28.609	0.000	0.000	1.000	1.070	1.000	107.39	107.39	6.882	1	0
Horiz 16	L 3" x 2.5" x 0.25"	SAU	3X2.5X0.25	36.0	4.92	Comp	4.92	H 31P	-0.722	W 180	10.999	0.000	0.000	0.500	0.520	0.500	141.73	133.36	12.472	6	0
Horiz 17	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	1.45	Tens	1.01	H 34P	-0.371	W -90	27.518	0.000	0.000	0.500	1.000	0.500	118.73	118.73	11.181	1	0
Horiz 18	L 3" x 2.5" x 0.25"	SAU	3X2.5X0.25	36.0	1.97	Tens	0.31	H 36X	-0.059	W 90	13.967	0.000	0.000	0.500	0.600	0.500	114.66	117.33	10.090	3	0
Horiz 19	C8x11.5	CHN	C8x11.5	36.0	1.29	Comp	1.29	H 38P	-0.375	W 180	21.711	0.000	0.000	1.000	1.000	1.000	172.80	152.47	9.000	6	0
LD 1	B/B L3"x2.5"x0.3125"	DAL	3X2.5X0.31	36.0	72.96	Comp	72.96	LD 1X	-21.976	W -45	30.141	0.000	0.000	0.904	0.904	0.904	162.84	146.35	14.066	6	0
LD 2	B/B L4"x3"x0.3125"	DAL	4X3X0.31	36.0	87.04	Comp	87.04	LD 3X	-49.816	W -90	42.927	0.000	0.000	0.904	0.904	0.904	120.15	120.09	14.066	6	0
LD 4	B/B L3"x2"x0.25"	DAL	3X2X0.25	36.0	90.72	Comp	90.72	LD 7X	-20.053	W -45	16.578	0.000	0.000	0.904	0.904	0.904	162.96	146.42	13.384	6	0
LD 5	B/B L4"x3"x0.25"	DAL	4X3X0.25	36.0	95.29	Comp	95.29	LD 9X	-48.118	W -90	37.971	0.000	0.000	0.904	0.904	0.904	113.43	113.43	13.384	1	0
LD 7	B/B L2.5"x2.5"x0.375"	DAE	2.5X2.5X0.38	36.0	71.63	Comp	71.63	LD 13X	-19.609	W -45	20.532	0.000	0.000	0.904	0.904	0.904	183.19	150.86	12.716	6	0
LD 8	B/B L3.5"x3"x0.25"	DAL	3.5X3X0.25	36.0	98.94	Comp	98.94	LD 15X	-45.920	W -90	34.810	0.000	0.000	0.904	0.904	0.904	124.27	122.63	12.716	6	0
LD 10	B/B L3"x3"x0.25"	DAE	3X3X0.25	36.0	59.94	Comp	59.94	LD 19X	-23.281	W -45	29.133	0.000	0.000	0.830	0.830	0.830	121.89	121.16	11.381	6	0
LD 11	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	87.27	Comp	87.27	LD 21X	-30.823	W -90	26.490	0.000	0.000	0.850	0.850	0.850	106.16	106.16	8.160	1	0
LD 12	B/B L3"x2"x0.25"	DAL	3X2X0.25	36.0	90.35	Comp	90.35	LD 23P	-33.547	W -90	27.850	0.000	0.000	0.860	0.860	0.860	111.24	111.24	9.604	1	0
LD 13	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	88.89	Comp	88.89	LD 25X	-22.124	W -45	18.669	0.000	0.000	0.830	0.830	0.830	137.12	130.53	10.793	6	0
LD 14	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	83.16	Comp	83.16	LD 27X	-29.927	W -90	26.990	0.000	0.000	0.850	0.850	0.850	104.26	104.26	8.014	1	0
LD 15	B/B L3"x3"x0.25"	DAE	3X3X0.25	36.0	66.63	Comp	66.63	LD 29P	-32.330	W -90	36.393	0.000	0.000	0.860	0.860	0.860	102.67	102.67	9.253	1	0
LD 16	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	82.76	Comp	82.76	LD 31X	-20.833	W -45	18.880	0.000	0.000	0.830	0.830	0.830	129.95	126.12	10.229	6	0
LD 17	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	80.04	Comp	80.04	LD 33X	-29.114	W -90	27.280	0.000	0.000	0.850	0.850	0.850	102.47	102.47	7.876	1	0
LD 18	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	99.98	Comp	99.98	LD 35P	-30.485	W -90	22.870	0.000	0.000	0.860	0.860	0.860	117.40	117.40	8.919	1	0
LH 1	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	56.77	Comp	56.77	LH 1P	-10.270	W 0	13.569	0.000	0.000	0.500	1.000	0.500	201.51	170.13	24.350	6	0
LH 2	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	38.38	Comp	38.38	LH 3P	-7.653	W 0	14.956	0.000	0.000	0.500	1.000	0.500	188.37	162.05	22.762	6	0
LH 3	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	36.03	Comp	36.03	LH 5P	-7.959	W 0	16.567	0.000	0.000	0.500	1.000	0.500	175.23	153.97	21.174	6	0
LH 4	B/B L3"x3"x0.375"	DAS	3X3X0.38	36.0	71.64	Comp	71.64	LH 7X	-26.412	W -45	27.651	0.000	0.000	0.940	0.880	0.940	170.35	150.96	19.647	6	0
LH 5	B/B L3.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	90.77	Comp	90.77	LH 9X	-24.195	W -45	19.992	0.000	0.000	0.940	1.880	0.940	152.78	140.16	9.820	6	0
LH 6	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	72.78	Comp	72.78	LH 11X	-21.792	W -45	22.456	0.000	0.000	0.940	1.880	0.940	139.91	132.25	8.993	6	0
DUM 1	Dummy Bracing Member	DUM	0.1X0.1X1	36.0	0.00		0.00	BR 13XY	-1.061	W 45	0.215	0.000	0.000	1.000	1.000	1.000	2.52	2.52	20.961	1	0

Group Summary (Tension Portion):

Group Label	Group Desc.	Angle Type	Angle Size	Steel Strength (ksi)	Max Usage %	Usage Control	Max Use In Tens. %	Tension Control Member	Tension Force (kips)	Tension Control Load Case	Net Section Capacity (kips)	Tension Connect. Shear Capacity (kips)	Tension Connect. Bearing Capacity (kips)	Tension Connect. Rupture Capacity (kips)	Length Tens. Member (ft)	No. Of Bolts Tens.	No. Of Holes	Hole Diameter (in)
Leg S1	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	73.43	Comp	62.25	L 1Y	299.939	W -45	361.367	0.000	0.000	0.000	25.101	0	0.000	0
Leg S2	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	71.29	Comp	56.16	L 2Y	270.604	W -45	361.367	0.000	0.000	0.000	25.101	0	0.000	0
Leg S3	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	68.41	Comp	49.37	L 3Y	237.888	W -45	361.367	0.000	0.000	0.000	25.101	0	0.000	0
Leg S4	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	67.56	Comp	41.47	L 4Y	199.813	W 45	361.367	0.000	0.000	0.000	25.101	0	0.000	0
Leg S5	L 8" x 8" x 1"	SAE	8X8X1	36.0	63.46	Comp	38.97	L 5Y	168.328	W 45	323.999	0.000	0.000	0.000	25.101	0	0.000	0
Leg S6	L 8" x 8" x 1"	SAE	8X8X1	36.0	51.47	Comp	31.92	L 6Y	137.895	W 45	323.999	0.000	0.000	0.000	25.101	0	0.000	0
Leg S7	L 8" x 8" x 0.875"	SAE	8X8X0.88	36.0	57.51	Comp	34.74	L 7Y	132.360	W 45	285.768	0.000	0.000	0.000	25.101	0	0.000	0
Leg S8	L 8" x 8" x 0.75"	SAE	8X8X0.75	36.0	52.75	Comp	32.72	L 8Y	104.515	W 45	247.104	0.000	0.000	0.000	25.101	0	0.000	0
Leg S9	L 8" x 8" x 0.75"	SAE	8X8X0.75	36.0	40.01	Comp	23.41	L 9Y	77.123	W 45	247.104	0.000	0.000	0.000	25.101	0	0.000	0
Leg S10	L 6" x 6" x 0.875"	SAE	6X6X0.88	36.0	40.10	Comp	23.19	L 10Y	64.994	W 45	210.168	0.000	0.000	0.000	12.550	0	0.000	0
Leg S11	L 6" x 6" x 0.75"	SAE	6X6X0.75	36.0	38.88	Comp	22.47	L 11Y	54.623	W 45	182.304	0.000	0.000	0.000	12.550	0	0.000	0
Leg S12	L 6" x 6" x 0.75"	SAE	6X6X0.75	36.0	32.69	Comp	18.49	L 12Y	44.932	W -45	182.304	0.000	0.000	0.000	12.550	0	0.000	0
Leg S13	L 6" x 6" x 0.5625"	SAE	6X6X0.56	36.0	34.79	Comp	19.00	L 13Y	35.187	W -45	138.888	0.000	0.000	0.000	12.550	0	0.000	0
Leg S14	L 6" x 6" x 0.5625"	SAE	6X6X0.56	36.0	27.03	Comp	13.96	L 14Y	25.843	W -45	138.888	0.000	0.000	0.000	12.550	0	0.000	0
Leg S15	L 6" x 6" x 0.4375"	SAE	6X6X0.44	36.0	24.44	Comp	11.52	L 15Y	16.785	W -45	109.296	0.000	0.000	0.000	12.550	0	0.000	0
Leg S16	L 5" x 5" x 0.4375"	SAE	5X5X0.44	36.0	23.29	Comp	10.71	L 16Y	12.888	W -45	90.288	0.000	0.000	0.000	10.208	0	0.000	0
Leg S17	L 5" x 5" x 0.4375"	SAE	5X5X0.44	36.0	14.85	Comp	5.47	L 17Y	6.579	W -45	90.288	0.000	0.000	0.000	10.208	0	0.000	0
Leg S18	L 5" x 5" x 0.3125"	SAE	5X5X0.31	36.0	10.22	Comp	3.20	L 18Y	2.788	W -45	65.448	0.000	0.000	0.000	8.618	0	0.000	0
Leg S19	L 5" x 5" x 0.3125"	SAE	5X5X0.31	36.0	5.03	Comp	0.00	L 19Y	0.000		65.448	0.000	0.000	0.000	8.618	0	0.000	0
Diag S1	B/B L3"x4"x0.375"	DAS	4X3X0.38	36.0	54.18	Comp	27.08	D 2P	38.764	W -90	107.352	0.000	0.000	0.000	22.664	0	0.000	0
Diag S2	B/B L3"x4"x0.25"	DAS	4X3X0.25	36.0	76.02	Comp	40.01	D 4P	38.944	W -90	73.008	0.000	0.000	0.000	22.190	0	0.000	0
Diag S3	B/B L3"x4"x0.25"	DAS	4X3X0.25	36.0	73.25	Comp	39.95	D 6P	38.892	W -90	73.008	0.000	0.000	0.000	21.736	0	0.000	0
Diag S4	B/B L3"x3.5"x0.25"	DAS	3.5X3X0.25	36.0	88.26	Comp	45.60	D 8P	41.108	W -90	67.608	0.000	0.000	0.000	20.858	0	0.000	0
Diag S5	B/B L3"x3.5"x0.25"	DAS	3.5X3X0.25	36.0	84.44	Comp	44.92	D 10P	40.492	W -90	67.608	0.000	0.000	0.000	20.484	0	0.000	0
Diag S6	B/B L2.5"x3.5"x0.25"	DAS	3.5X2.5X0.25	36.0	88.37	Comp	46.75	D 12P	42.776	W -90	62.208	0.000	0.000	0.000	20.132	0	0.000	0
Diag S7	B/B L3"x3"x0.375"	DAE	3X3X0.38	36.0	68.25	Comp	22.40	D 13P	27.219	W -90	91.152	0.000	0.000	0.000	29.947	0	0.000	0
Diag S

Horiz 7	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	71.54	Comp	19.22	H 14P	14.558	W 0	56.808	0.000	0.000	0.000	14.822	0	0.000	0
Horiz 8	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	49.29	Comp	15.41	H 16P	11.672	W 0	56.808	0.000	0.000	0.000	13.234	0	0.000	0
Horiz 9	B/B L2.5"x2.5"x0.25"	DAH	2.5X2.5X0.25	36.0	51.13	Comp	14.74	H 18Y	10.105	W 180	51.408	0.000	0.000	0.000	11.646	0	0.000	0
Horiz 10	B/B L2.5"x2.5"x0.25"	DAH	2.5X2.5X0.25	36.0	38.19	Comp	12.07	H 20Y	8.271	W 180	51.408	0.000	0.000	0.000	10.852	0	0.000	0
Horiz 11	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	27.25	Comp	9.68	H 22Y	6.635	W 180	51.408	0.000	0.000	0.000	10.058	0	0.000	0
Horiz 12	B/B L2.5"x2.5"x0.25"	DAH	2.5X2.5X0.25	36.0	20.61	Comp	8.17	H 24Y	5.602	W 180	51.408	0.000	0.000	0.000	9.264	0	0.000	0
Horiz 13	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	18.84	Comp	8.18	H 26P	5.606	W 0	51.408	0.000	0.000	0.000	8.470	0	0.000	0
Horiz 14	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	13.87	Comp	6.75	H 27P	4.624	W 90	51.408	0.000	0.000	0.000	7.676	0	0.000	0
Horiz 15	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	9.58	Comp	6.11	H 29X	4.185	W -90	51.408	0.000	0.000	0.000	6.882	0	0.000	0
Horiz 16	L 3" x 2.5" x 0.25"	SAU	3X2.5X0.25	36.0	4.92	Comp	4.71	H 32P	1.778W	90 Ice	28.296	0.000	0.000	0.000	12.472	0	0.000	0
Horiz 17	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	1.45	Tens	1.45	H 33P	1.102	W 0 Ice	56.808	0.000	0.000	0.000	11.181	0	0.000	0
Horiz 18	L 3" x 2.5" x 0.25"	SAU	3X2.5X0.25	36.0	1.97	Tens	1.97	H 35P	0.743	W 0 Ice	28.296	0.000	0.000	0.000	10.090	0	0.000	0
Horiz 19	C8x11.5	CHN	C8x11.5	36.0	1.29	Comp	0.51	H 38P	0.498	W 0	73.008	0.000	0.000	0.000	9.000	0	0.000	0
LD 1	B/B L3"x2.5"x0.3125"	DAL	3X2.5X0.31	36.0	72.96	Comp	23.69	LD 2Y	22.108W	-45 Ic	69.984	0.000	0.000	0.000	14.066	0	0.000	0
LD 2	B/B L4"x3"x0.3125"	DAL	4X3X0.31	36.0	87.04	Comp	37.43	LD 3P	45.062	W -90	90.288	0.000	0.000	0.000	14.066	0	0.000	0
LD 4	B/B L3"x2"x0.25"	DAL	3X2X0.25	36.0	90.72	Comp	26.99	LD 8Y	18.503	W -45	51.408	0.000	0.000	0.000	13.384	0	0.000	0
LD 5	B/B L4"x3"x0.25"	DAL	4X3X0.25	36.0	95.29	Comp	45.27	LD 9P	44.062	W -90	73.008	0.000	0.000	0.000	13.384	0	0.000	0
LD 7	B/B L2.5"x2.5"x0.375"	DAE	2.5X2.5X0.38	36.0	71.63	Comp	18.17	LD 14Y	18.162	W -45	74.952	0.000	0.000	0.000	12.716	0	0.000	0
LD 8	B/B L3.5"x3"x0.25"	DAL	3.5X3X0.25	36.0	98.94	Comp	47.45	LD 15P	42.772	W -90	67.608	0.000	0.000	0.000	12.716	0	0.000	0
LD 10	B/B L3"x3"x0.25"	DAE	3X3X0.25	36.0	59.94	Comp	25.98	LD 20Y	21.551	W -45	62.208	0.000	0.000	0.000	11.381	0	0.000	0
LD 11	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	87.27	Comp	44.24	LD 21P	27.137	W -90	46.008	0.000	0.000	0.000	8.160	0	0.000	0
LD 12	B/B L3"x2"x0.25"	DAL	3X2X0.25	36.0	90.35	Comp	50.32	LD 23X	34.489	W -90	51.408	0.000	0.000	0.000	9.604	0	0.000	0
LD 13	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	88.89	Comp	32.65	LD 26Y	20.028	W -45	46.008	0.000	0.000	0.000	10.793	0	0.000	0
LD 14	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	83.16	Comp	43.78	LD 27P	26.854	W -90	46.008	0.000	0.000	0.000	8.014	0	0.000	0
LD 15	B/B L3"x3"x0.25"	DAE	3X3X0.25	36.0	66.63	Comp	39.85	LD 29X	33.053	W -90	62.208	0.000	0.000	0.000	9.253	0	0.000	0
LD 16	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	82.76	Comp	31.24	LD 32Y	19.166	W -45	46.008	0.000	0.000	0.000	10.229	0	0.000	0
LD 17	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	80.04	Comp	41.51	LD 33P	25.465	W -90	46.008	0.000	0.000	0.000	7.876	0	0.000	0
LD 18	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	99.98	Comp	50.78	LD 35X	31.148	W -90	46.008	0.000	0.000	0.000	8.919	0	0.000	0
LH 1	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	56.77	Comp	16.68	LH 1Y	12.637	W 0 Ice	56.808	0.000	0.000	0.000	24.350	0	0.000	0
LH 2	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	38.38	Comp	0.26	LH 3Y	6.256	W 0	56.808	0.000	0.000	0.000	22.762	0	0.000	0
LH 3	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	36.03	Comp	8.61	LH 5Y	6.523	W 0	56.808	0.000	0.000	0.000	21.174	0	0.000	0
LH 4	B/B L3"x3"x0.375"	DAE	3X3X0.38	36.0	71.64	Comp	19.54	LH 8Y	23.746	W -45	91.152	0.000	0.000	0.000	10.647	0	0.000	0
LH 5	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	90.77	Comp	20.24	LH 10Y	21.387	W -45	56.808	0.000	0.000	0.000	9.820	0	0.000	0
LH 6	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	72.78	Comp	25.87	LH 12Y	19.591	W -45	56.808	0.000	0.000	0.000	8.993	0	0.000	0
DUM 1	Dummy Bracing Member	DUM	0.1X0.1X1	36.0	0.00		0.00	BR 13X	0.871	W -45	0.216	0.000	0.000	0.000	20.961	0	0.000	0

*** Maximum Stress Summary for Each Load Case

Summary of Maximum Usages by Load Case:

Load Case	Maximum Usage %	Element Label	Element Type
W 0	98.83	LD 36Y	Angle
W 180	99.64	LD 36P	Angle
W 45	88.63	H 8XY	Angle
W -45	92.99	H 8Y	Angle
W 90	99.19	LD 35X	Angle
W -90	99.98	LD 35P	Angle
W 0 Ice	86.24	LD 36Y	Angle
W 180 Ice	87.36	LD 36P	Angle
W 45 Ice	81.16	LD 7P	Angle
W -45 Ice	83.90	LD 7X	Angle
W 90 Ice	86.65	LD 15P	Angle
W -90 Ice	87.60	LD 35P	Angle

*** Weight of structure (lbs):

Weight of Angles*Section BLF:	179316.8
Total:	179316.8

*** End of Report

Site # 164058
Name Salisbury #1, CT

Engineer RD
Date 03/16/05

Whiteboard No but it's dark Up 71 mph

Partial Of Whole

Tower Height 327 ft
Pct of Tower 0%

Overall Weight 41.227817 k
Pct of Rated 51.53%

Ground Level Vertical Line Diagram %03/2004

Item Label	Symmetry Axis	Y Coord (ft)	Y Coord (ft)	Z Coord (ft)	X Dist. Feet	Y Dist. Feet	Z Dist. Feet	X Dist. Feet	Y Dist. Feet	Z Dist. Feet	Group Sub-Group For Sheet	X Feet	Prop Pct	Height (ft)	Type	Quan.	X Size (ft)	Y Size (ft)	X Sub-Group
0	YY-Symmetry	95.9375	95.9375	0 Feet	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed		3	7.62	25	L	1	0	51.875	9
1	YY-Symmetry	24.34375766	24.34375766	25 Free	Free	Free	Free	Free	Free	Free		3	7.62	25	L	2	25	49.83007437	9
2	XX-Symmetry	22.71625407	22.71625407	50 Free	Free	Free	Free	Free	Free	Free		3	7.62	25	L	3	50	45.52534615	9
3	YY-Symmetry	21.52341151	21.52341151	75 Free	Free	Free	Free	Free	Free	Free			7.62	25	Z	4	75	43.34732222	9
4	XX-Symmetry	20.3581.4151	20.3581.4151	100 Free	Free	Free	Free	Free	Free	Free			7.62	25	Z	5	100	29.2727742	9
5	YY-Symmetry	17.9578.5515	17.9578.5515	125 Free	Free	Free	Free	Free	Free	Free			7.62	25	Z	6	125	35.99737077	9
6	XX-Symmetry	16.6457.7717	16.6457.7717	150 Free	Free	Free	Free	Free	Free	Free			7.62	25	Z	7	150	32.8078.444	9
7	YY-Symmetry	15.4217.9926	15.4217.9926	175 Free	Free	Free	Free	Free	Free	Free				25	A	8	175	29.6638.1842	9
8	XX-Symmetry	1.2.1387963	1.2.1387963	200 Free	Free	Free	Free	Free	Free	Free				25	A	9	200	21.4075.9225	9
9	YY-Symmetry	11.9.4.2.2.3.3	11.9.4.2.2.3.3	225 Free	Free	Free	Free	Free	Free	Free				33.5	A	10	225	29.2916.8697	9
10	YY-Symmetry	10.4.1.2.5.1.8.5	10.4.1.2.5.1.8.5	237.5 Free	Free	Free	Free	Free	Free	Free				12.5	A	11	237.5	25.9.4.7.9.7.3.7	9
11	YY-Symmetry	10.4.1.2.4.2.9.7	10.4.1.2.4.2.9.7	250 Free	Free	Free	Free	Free	Free	Free				12.5	A	12	250	26.1.1.5.4.6.7.4	9
12	YY-Symmetry	9.2.4.3.8.8.4.6	9.2.4.3.8.8.4.6	262.5 Free	Free	Free	Free	Free	Free	Free				12.5	A	13	262.5	12.5.7.7.7.7.2.5	9
13	XX-Symmetry	8.4.4.5.7.2.4.2.7	8.4.4.5.7.2.4.2.7	275 Free	Free	Free	Free	Free	Free	Free				12.5	A	14	275	16.5.7.7.7.1.4.6.5	9
14	XX-Symmetry	7.4.7.5.7.2.7.5.4	7.4.7.5.7.2.7.5.4	287.5 Free	Free	Free	Free	Free	Free	Free				12.5	A	15	287.5	15.5.2.1.5.1.6.9.5	9
15	YY-Symmetry	6.4.9.5.7.5.4.6.4.4	6.4.9.5.7.5.4.6.4.4	300 Free	Free	Free	Free	Free	Free	Free				25.347	L	16	300	17.3.5.8.3.8.3.8.2	9
16	XX-Symmetry	6.2.9.6.1.5.1.6.7	6.2.9.6.1.5.1.6.7	311.347 Free	Free	Free	Free	Free	Free	Free	1			10.347	L	17	310.957	10.4.1.2.3.8.3.3	9
17	XX-Symmetry	5.5.9.1.3.5.8.3.8.9	5.5.9.1.3.5.8.3.8.9	324.304 Free	Free	Free	Free	Free	Free	Free				8.043	L	18	320.304	12.1.8.5.2.7.7.8	9
18	XX-Symmetry	5.4.9.1.1.7.8.4.4	5.4.9.1.1.7.8.4.4	328.307 Free	Free	Free	Free	Free	Free	Free				8.043	L	19	329.217	10.7.9.8.5.3.9.5	9
19	XX-Symmetry	4.3	4.3	327.5 Free	Free	Free	Free	Free	Free	Free						20	327.5		9

Wind Pressure
Notes:
1) Steel up mains, w/ A
2) Guys up mains, w/ M
3) Typical A Inner
4) Typical B Inner

Rotation 0 29

A1	YY-Symmetry	24.2.4.9.5.7.9.4	0	25 Free	Free	Free	Free	Free	Free	Free	
A2	XX-Symmetry	0	24.3.4.5.1.7.6	25 Free	Free	Free	Free	Free	Free	Free	
A3	YY-Symmetry	22.7.6.2.5.4.8.7	0	50 Free	Free	Free	Free	Free	Free	Free	
A4	XX-Symmetry	0	47.3.4.2.5.4.9.2.8	50 Free	Free	Free	Free	Free	Free	Free	
A5	YY-Symmetry	21.5.7.8.6.1.2.1.1	0	75 Free	Free	Free	Free	Free	Free	Free	
A6	XX-Symmetry	0	21.4.7.3.6.1.5.1.1	75 Free	Free	Free	Free	Free	Free	Free	
A7	XX-Symmetry	19.4.5.4.9.4.9.1.5	6.2.3.9.4.5.9.8.2	100 Free	Free	Free	Free	Free	Free	Free	
A8	YY-Symmetry	6.3.2.9.5.4.8.3.5	19.5.9.5.4.6.8.5	100 Free	Free	Free	Free	Free	Free	Free	
A9	XX-Symmetry	17.9.7.9.7.4.8.1.9	5.9.9.2.3.8.9.5	125 Free	Free	Free	Free	Free	Free	Free	
A10	YY-Symmetry	5.7.9.5.1.3.8.7.9.5	17.9.9.7.4.6.1.9	125 Free	Free	Free	Free	Free	Free	Free	
A11	YY-Symmetry	18.4.9.7.7.1.2.2	5.4.4.9.2.3.4.3.7	150 Free	Free	Free	Free	Free	Free	Free	
A12	XX-Symmetry	3.4.6.9.9.2.3.4.2	16.4.9.8.7.9.7.2.7	150 Free	Free	Free	Free	Free	Free	Free	
A13	YY-Symmetry	14.8.3.1.7.5.3.6	0	175 Free	Free	Free	Free	Free	Free	Free	
A14	XX-Symmetry	0	14.8.2.7.7.9.2.6	175 Free	Free	Free	Free	Free	Free	Free	
A15	YY-Symmetry	12.2.8.9.7.9.2	0	200 Free	Free	Free	Free	Free	Free	Free	
A16	XX-Symmetry	0	13.3.3.3.7.9.4.3	200 Free	Free	Free	Free	Free	Free	Free	
A17	YY-Symmetry	11.5.4.8.3.3.3.7	0	225 Free	Free	Free	Free	Free	Free	Free	
A18	XX-Symmetry	0	11.4.9.4.3.3.2.2	225 Free	Free	Free	Free	Free	Free	Free	
A19	YY-Symmetry	10.4.9.1.8.1.3.5	0	237.5 Free	Free	Free	Free	Free	Free	Free	
A20	XX-Symmetry	0	10.4.5.1.8.1.3.5	237.5 Free	Free	Free	Free	Free	Free	Free	
A21	XX-Symmetry	10.4.9.1.8.7.3.7	0	250 Free	Free	Free	Free	Free	Free	Free	
A22	XX-Symmetry	0	10.4.5.7.9.7.3.7	250 Free	Free	Free	Free	Free	Free	Free	
A23	YY-Symmetry	9.2.6.3.9.9.8.8.6	0	262.5 Free	Free	Free	Free	Free	Free	Free	
A24	XX-Symmetry	0	9.2.5.9.9.8.9.8.6	262.5 Free	Free	Free	Free	Free	Free	Free	
A25	YY-Symmetry	8.4.6.9.7.4.5.6.7	0	275 Free	Free	Free	Free	Free	Free	Free	
A26	XX-Symmetry	0	8.4.4.9.7.4.5.6.7	275 Free	Free	Free	Free	Free	Free	Free	
A27	YY-Symmetry	7.4.7.5.7.2.5.7.6	0	287.5 Free	Free	Free	Free	Free	Free	Free	
A28	XX-Symmetry	0	7.4.7.2.7.2.5.7.6	287.5 Free	Free	Free	Free	Free	Free	Free	
A29	YY-Symmetry	6.4.8.1.3.6.4.4.4	0	300 Free	Free	Free	Free	Free	Free	Free	
A30	XX-Symmetry	0	6.4.3.1.6.4.4.4.4	300 Free	Free	Free	Free	Free	Free	Free	

H2	YY-Symmetry	24.2.5.6.8.7.2.2.2	13.1.7.4.7.6.4.5.2	13.93 Free	Free	Free	Free	Free	Free	Free	
H2	YY-Symmetry	13.1.3.7.4.6.5.5	24.2.5.6.8.7.2.2.2	13.93 Free	Free	Free	Free	Free	Free	Free	
H3	XX-Symmetry	47.2.0.1.1.9.2.1.8	11.3.8.7.6.7.6.4	42.92 Free	Free	Free	Free	Free	Free	Free	
H4	YY-Symmetry	11.3.6.3.9.7.6.4	47.2.0.1.1.9.2.1.8	42.92 Free	Free	Free	Free	Free	Free	Free	
H7	XX-Symmetry	71.6.2.2.1.4.6.5	10.3.9.8.8.9.3.4.4	42.92 Free	Free	Free	Free	Free	Free	Free	
H10	XX-Symmetry	10.5.8.9.9.0.5.6	71.6.2.2.1.4.6.5	42.92 Free	Free	Free	Free	Free	Free	Free	
H13	YY-Symmetry	7.6.0.0.3.8.2.5.8	18.6.6.5.7.4.6.7.4	37.92 Free	Free	Free	Free	Free	Free	Free	
H14	YY-Symmetry	10.4.9.7.4.6.7.4	20.8.3.9.7.8.2.5.5	32.92 Free	Free	Free	Free	Free	Free	Free	
H15	YY-Symmetry	20.8.2.1.9.7.5.5	0	32.92 Free	Free	Free	Free	Free	Free	Free	
H16	YY-Symmetry	0	19.8.3.1.9.3.5.5.8	32.92 Free	Free	Free	Free	Free	Free	Free	
H17	YY-Symmetry	16.4.4.6.2.9.2.3.7	6.8.3.3.7.9.4.5	112.46 Free	Free	Free	Free	Free	Free	Free	
H18	YY-Symmetry	6.8.3.7.3.7.9.4.5	16.4.4.6.2.9.2.3.7	113.92 Free	Free	Free	Free	Free	Free	Free	
H19	YY-Symmetry	16.4.4.6.2.9.2.3.7	0	112.92 Free	Free	Free	Free	Free	Free	Free	
H20	YY-Symmetry	0	16.4.4.6.2.9.2.3.7	112.92 Free	Free	Free	Free	Free	Free	Free	
H21	XX-Symmetry	16.8.9.8.3.7.4.1	8.9.9.7.3.8.3.8	142.92 Free	Free	Free	Free	Free	Free	Free	
H22	XX-Symmetry	8.9.9.2.1.8.3.1.9	16.8.5.6.3.7.4.1	142.92 Free	Free	Free	Free	Free	Free	Free	
H23	YY-Symmetry	16.8.9.2.3.7.4.1	0	142.92 Free	Free	Free	Free	Free	Free	Free	
H24	XX-Symmetry	0	16.8.2.5.3.7.4.1	142.92 Free	Free	Free	Free	Free	Free	Free	

Legs

Site No.:	88008
Engineer:	BD
Date:	03/30/2015
Carrier:	T-Mobile

When inputting thickness values, include all decimal places.

Tower Section #	Section Elevations *(ft)*	Type of Shape [1]	Diameter or Length *(in)*	Thickness [2] *(in)*	F_Y *(ksi)*
1	0.000-25.00	L	8	1.125	36
2	25.00-50.00	L	8	1.125	36
3	50.00-75.00	L	8	1.125	36
4	75.00-100.0	L	8	1.125	36
5	100.0-125.0	L	8	1	36
6	125.0-150.0	L	8	1	36
7	150.0-175.0	L	8	0.875	36
8	175.0-200.0	L	8	0.75	36
9	200.0-225.0	L	8	0.75	36
10	225.0-237.5	L	6	0.875	36
11	237.5-250.0	L	6	0.75	36
12	250.0-262.5	L	6	0.75	36
13	262.5-275.0	L	6	0.5625	36
14	275.0-287.5	L	6	0.5625	36
15	287.5-300.0	L	6	0.4375	36
16	300.0-310.2	L	5	0.4375	36
17	310.2-320.3	L	5	0.4375	36
18	320.3-328.9	L	5	0.3125	36
19	328.9-337.5	L	5	0.3125	36

Notes:

[1] Type of Leg Shape: **R** = Round or **P** = Bent Plate or **S** = Schifflerized Angle. **L** = Even Leg

[2] For Solid Round Leg Shapes Thickness Equals Zero.

[3] Adjust for Bent Plate Leg Shapes.

Diagonals

Site No.:	88008
Engineer:	BD
Date:	03/30/2015
Carrier:	T-Mobile

When inputting thickness values, include all decimal places.

Tower Section #	Section Elevations *(ft)*	Type of Shape [1]	Diameter [2] *(in)*	Web Length [3] *(in)*	Flange Length [3] *(in)*	Thickness *(in)*	F_y *(ksi)*	Is Diag. Tension Only? *(Y/N)*
1	0.000-25.00	2L		3	4	0.375	36	
2	25.00-50.00	2L		3	4	0.25	36	
3	50.00-75.00	2L		3	4	0.25	36	
4	75.00-100.0	2L		3	3.5	0.25	36	
5	100.0-125.0	2L		3	3.5	0.25	36	
6	125.0-150.0	2L		2.5	3.5	0.25	36	
7	150.0-175.0	2L		3	3	0.375	36	
8	175.0-200.0	2L		2.5	3	0.25	36	
9	200.0-225.0	2L		2.5	3	0.25	36	
10	225.0-237.5	2L		2.5	2.5	0.25	36	
11	237.5-250.0	2L		2.5	2.5	0.25	36	
12	250.0-262.5	2L		2.5	2.5	0.25	36	
13	262.5-275.0	2L		2.5	2	0.25	36	
14	275.0-287.5	2L		2.5	2	0.25	36	
15	287.5-300.0	2L		2.5	2	0.25	36	
16	300.0-310.2	L		3.5	3.5	0.25	36	Y
17	310.2-320.3	L		3.5	3.5	0.25	36	Y
18	320.3-328.9	L		3	3	0.25	36	Y
19	328.9-337.5	L		3	3	0.25	36	Y

Notes:

[1] Type of Diagonal Shape: **R** = Round, **L** = Single-Angle or **2L** = Double-Angle.

[2] Applies to Pipes and Solid Round Shapes only. For Solid Round Shapes Thickness Equals Zero.

[3] Applies to Single-Angle and Double-Angle Shapes only.

[4] Applies to Double-Angle Shapes only.

[5] Applies to Single-Angle Shapes only.

Horizontals

Site No.:	88008
Engineer:	BD
Date:	03/30/2015
Carrier:	T-Mobile

When inputting thickness values, include all decimal places.

Tower Section #	Section Elevations *(ft)*	Type of Shape [1]	Diameter [2] *(in)*	Web Length [3] *(in)*	Flange Length [3] *(in)*	Thickness *(in)*	F_y *(ksi)*	
1	0.000-25.00	2L		4	3	0.25	36	
2	25.00-50.00	2L		3.5	2.5	0.25	36	
3	50.00-75.00	2L		3	2.5	0.25	36	
4	75.00-100.0	2L		3.5	2.5	0.25	36	
5	100.0-125.0	2L		3.5	2.5	0.25	36	
6	125.0-150.0	2L		3	2.5	0.25	36	
7	150.0-175.0	2L		3	2.5	0.25	36	
8	175.0-200.0	2L		3	2.5	0.25	36	
9	200.0-225.0	2L		2.5	2.5	0.25	36	
10	225.0-237.5	2L		2.5	2.5	0.25	36	
11	237.5-250.0	2L		2.5	2.5	0.25	36	
12	250.0-262.5	2L		2.5	2.5	0.25	36	
13	262.5-275.0	2L		2.5	2.5	0.25	36	
14	275.0-287.5	2L		2.5	2.5	0.25	36	
15	287.5-300.0	2L		2.5	2.5	0.25	36	
16	300.0-310.2	L		3	2.5	0.25	36	
17	310.2-320.3	2L		3	2.5	0.25	36	
18	320.3-328.9	L		3	2.5	0.25	36	
19	328.9-337.5	C		8	11.5		36	

Notes:

[1] Type of Horizontal Shape: **R** = Round, **L** = Single-Angle, **2L** = Double-Angle, **C** = Channel, **W** = W Shape

[2] Applies to Pipes and Solid Round Shapes only. For Solid Round Shapes Thickness Equals Zero.

[3] Applies to Single-Angle and Double-Angle Shapes only.

[4] Applies to Double-Angle Shapes only.

[5] Applies to Single-Angle Shapes only.

Built-up Diagonals

Site No.:	88008
Engineer:	BD
Date:	03/30/2015
Carrier:	T-Mobile

When inputting thickness values, include all decimal places.
Input diags. from left to center & from base section upward.

Tower Built-up Diag. #	Section Elevations *(ft)*	Type of Shape [1]	Diameter [2] *(in)*	Web Length [3] *(in)*	Flange Length [3] *(in)*	Thickness *(in)*	F_y *(ksi)*
1	0.000-25.00	2L		3	2.5	0.3125	36
2	0.000-25.00	2L		4	3	0.3125	36
3	25.00-50.00	2L		3	2	0.25	36
4	25.00-50.00	2L		4	3	0.25	36
5	50.00-75.00	2L		2.5	2.5	0.375	36
6	50.00-75.00	2L		3.5	3	0.25	36
7	75.00-100.0	2L		3	3	0.25	36
8	75.00-100.0	2L		2.5	2	0.25	36
9	75.00-100.0	2L		3	2	0.25	36
10	100.0-125.0	2L		2.5	2	0.25	36
11	100.0-125.0	2L		2.5	2	0.25	36
12	100.0-125.0	2L		3	3	0.25	36
13	125.0-150.0	2L		2.5	2	0.25	36
14	125.0-150.0	2L		2.5	2	0.25	36
15	125.0-150.0	2L		2.5	2	0.25	36

Notes:

[1] Type of Diagonal Shape: **R** = Round, **L** = Single-Angle or **2L** = Double-Angle.

[2] Applies to Pipes and Solid Round Shapes only. For Solid Round Shapes Thickness Equals Zero.

[3] Applies to Single-Angle and Double-Angle Shapes only.

[4] Applies to Double-Angle Shapes only.

[5] Applies to Single-Angle Shapes only.

Built-up Horizontals

Site No.:	88008
Engineer:	BD
Date:	03/30/2015
Carrier:	T-Mobile

When inputting thickness values, include all decimal places.

Tower Section #	Section Elevations (ft)	Type of Shape [1]	Diameter [2] (in)	Web Length [3] (in)	Flange Length [3] (in)	Thickness (in)	F_y (ksi)	Is Horiz. Tension Only? (Y/N)
1	0.000-25.00	2L		2.5	3	0.25	36	
2	25.00-50.00	2L		2.5	3	0.25	36	
3	50.00-75.00	2L		2.5	3	0.25	36	
4	75.00-100.0	2L		3	3	0.375	36	
5	100.0-125.0	2L		2.5	3	0.25	36	
6	125.0-150.0	2L		2.5	3	0.25	36	

Notes:

[1] Type of Horizontal Shape: **R** = Round, **L** = Single-Angle or **2L** = Double-Angle.

[2] Applies to Pipes and Solid Round Shapes only. For Solid Round Shapes Thickness Equals Zero.

[3] Applies to Single-Angle and Double-Angle Shapes only.

[4] Applies to Double-Angle Shapes only.

[5] Applies to Single-Angle Shapes only.

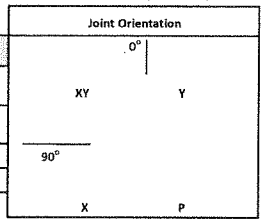
Coax and Dishes (p. 1 of 2)

Orig by MED, Improved by ABL. Last update 6/25/13 MED

Site No.:	88008
Engineer:	BD
Date:	03/30/15
Carrier:	T-Mobile

Dish Types	
S	Standard
R	Standard w/ Radome
H	High Performance
G	Grid

Joint Orientation



Dish Elevation (ft)	Dish Dia. (ft)	Dish Angle (deg)	Dish Type	Joint Orientation

Equipment Label	Attach Label	Equipment Property Set	EIA Antenna Orientation Angle

Description	From (ft)	To (ft)	Quantity	Shape	Width or Diameter (in)	Perimeter (in)	Unit Weight (lb/ft)	Part of Face Solidity Ratio (Yes/No)	Include in Wind Load (Yes/No)
Coax Cage	12.5	32.5	2	Round	12	37.7	25	No	No
Aband 1	0	337.5	1	Round	1.09	3.4	0.33	Yes	Yes
USCG 1	0	337.5	2	Round	1.09	3.4	0.33	Yes	No
USCG 2	0	310	2	Round	1.09	3.4	0.33	Yes	No
USCG 3	0	275	1	Round	1.09	3.4	0.33	Yes	No
Sprint Nextel 1	0	250	9	Round	1.98	6.2	0.82	Yes	Yes
Sprint Nextel 2	0	240	4	Round	1.55	4.9	0.33	No	No
T-Mobile	0	220	1	Round	11.88	30.0	9.84	Yes	No
Coax Cage2	12.5	32.5	2	Round	12	37.7	25	Yes	No
US Treasury 1	0	194	1	Round	1.55	4.9	0.33	Yes	No
Verizon 1	0	180	1	Round	11.88	30.0	9.84	Yes	Yes
Lightsquared LP	0	319	1	Round	1.98	6.2	0.82	Yes	Yes
AT&T Mobility 1	0	165	1	Round	11.88	30.0	9.84	Yes	No
Metro PCS	0	100	6	Round	1.98	6.2	0.82	Yes	No
Sprint Nextel 3	0	48	1	Round	0.63	2.0	0.04	Yes	No
AT&T Mobility 2	0	165	1	Round	3.5	11.0	6	Yes	No
AT&T Mobility 3	0	165	1	Round	0.39	1.2	0.04	Yes	No
AT&T Mobility 4	0	165	1	Round	0.78	4.0	0.08	Yes	No
Metro PCS 3	0	20	1	Round	1.09	3.4	0.33	Yes	No
T-Mobile3	0	220	1	Round	0.44	1.4	0.04	Yes	No
Waveguide1	0	100	1	Flat	1.5	6.0	0.33	Yes	No
Waveguide2	0	180	1	Flat	1.5	6.0	0.33	Yes	Yes
Waveguide3	0	165	1	Flat	1.5	6.0	0.33	Yes	No

Coax and Dishes (p. 2 of 2)

Tia Code: TIA-222-F

α 7 $k_{z\,max}$ 2.58

z_g 33 $k_{z\,min}$ 1

e t

Description	From (ft)	To (ft)	Quantity	Face # (1-4, A-D)	Coax Width (in)	Considered Coax Shape (Block / Flat / Ind)	% Exposed	Spacing (in)	Shape (Round/Flat)	Block Width (# coax)	Block Depth (# coax)	Perimeter (in)	Unit Weight (lb/ft)	In Face Zone (Yes/No)	Include in Wind Load (Yes/No)
Coax Cage	12.5	32.5	2	1	12	Ind	100		Round	2	1	37.7	25	No	No
Aband 1	0	337.5	1	4	1.09	Ind	100		Round	1	1	3.4	0.33	Yes	Yes
USCG 1	0	337.5	2	2	1.09	Ind	100		Round	2	1	3.4	0.33	Yes	No
USCG 2	0	310	2	2	1.09	Ind	100		Round	2	1	3.4	0.33	Yes	No
USCG 3	0	275	1	2	1.09	Ind	100		Round	1	1	3.4	0.33	Yes	No
Sprint Nextel 1	0	250	9	4	1.98	Ind	100		Round	9	1	6.2	0.82	Yes	Yes
Sprint Nextel 2	0	240	4	B	1.55	Ind	100		Round	4	1	4.9	0.33	No	No
T-Mobile	0	220	12	1	1.98	Ind	50		Round	6	2	30.0	9.84	Yes	No
Coax Cage2	12.5	32.5	2	3	12.00	Ind	100		Round	2	1	37.7	25	Yes	No
US Treasury 1	0	194	1	2	1.55	Ind	100		Round	1	1	4.9	0.33	Yes	No
Verizon 1	0	180	12	4	1.98	Ind	50		Round	6	2	30.0	9.84	Yes	Yes
Lightsquared LP	0	319	1	4	1.98	Ind	100		Round	1	1	6.2	0.82	Yes	Yes
AT&T Mobility 1	0	165	12	2	1.98	Ind	50		Round	6	2	30.0	9.84	Yes	No
Metro PCS	0	100	6	1	1.98	Ind	100		Round	6	1	6.2	0.82	Yes	No
Sprint Nextel 3	0	48	1	2	0.63	Ind	100		Round	1	1	2.0	0.04	Yes	No
							100							No	No
AT&T Mobility 2	0	165	1	2	3.50	Ind	0		Round	1	1	11.0	6	Yes	No
AT&T Mobility 3	0	165	1	2	0.39	Ind	0		Round	1	1	1.2	0.04	Yes	No
AT&T Mobility 4	0	165	2	2	0.78	Ind	0		Round	1	2	4.0	0.08	Yes	No
Metro PCS 3	0	20	1	1	1.09	Ind	100		Round	1	1	3.4	0.33	Yes	No
														No	No
T-Mobile3	0	220	1	1	0.44	Ind	100		Round	1	1	1.4	0.04	Yes	No
Waveguide1	0	100	1	1	1.50	Flat	100		Flat	1	1	6.0	0.33	Yes	No
Waveguide2	0	180	1	4	1.50	Flat	100		Flat	1	1	6.0	0.33	Yes	Yes
Waveguide3	0	165	1	2	1.50	Flat	100		Flat	1	1	6.0	0.33	Yes	No
							100							No	No
							100							No	No
							100							No	No
							100							No	No
							100							No	No
							100							No	No
							100							No	No
							100							No	No
							100							No	No
							100							No	No
							100							No	No
							100							No	No
							100							No	No
							100							No	No

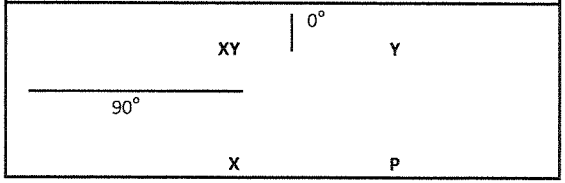
Coax & Dishes

Dish Types	
S	Standard
R	Standard w/ Radome
H	High Performance
G	Grid

Dish Elevation (ft)	Dish Dia. (ft)	Dish Angle (deg)	Dish Type	Joint Orientation

Equipment Label	Attach Label	Equipment Property Set	EIA Antenna Orientation Angle *(deg)*

Joint Orientation



Site #:	88008
Name:	T-Mobile

Engineer:	BD
Date:	03/30/15

Section Label	Section Color	Joint Defining Bottom Section	Dead Load Adj. Factor					Adj. Factor Flat	Adj. Factor Round	Area Multiplier	Weight Multiplier
0.000-25.00		0P	1.585195713					1.320996427	1.320996427	1	1.2
25.00-50.00		1P	1.590007719					1.325006432	1.325006432	1	1.2
50.00-75.00		2P	1.605588167					1.337990139	1.337990139	1	1.2
75.00-100.0		3P	1.472051441					1.226709534	1.226709534	1	1.2
100.0-125.0		4P	1.46985131					1.224876092	1.224876092	1	1.2
125.0-150.0		5P	1.47553471					1.229612258	1.229612258	1	1.2
150.0-175.0		6P	1.529754954					1.274795795	1.274795795	1	1.2
175.0-200.0		7P	1.527887654					1.273239712	1.273239712	1	1.2
200.0-225.0		8P	1.516391419					1.263659516	1.263659516	1	1.2
225.0-237.5		9P	1.478249179					1.231874316	1.231874316	1	1.2
237.5-250.0		10P	1.471209196					1.226007664	1.226007664	1	1.2
250.0-262.5		11P	1.464012143					1.220010119	1.220010119	1	1.2
262.5-275.0		12P	1.456672479					1.213893733	1.213893733	1	1.2
275.0-287.5		13P	1.449208368					1.20767364	1.20767364	1	1.2
287.5-300.0		14P	1.441641869					1.201368224	1.201368224	1	1.2
300.0-310.2		15P	1.384856588					1.154047156	1.154047156	1	1.2
310.2-320.3		16P	1.436421012					1.19701751	1.19701751	1	1.2
320.3-328.9		17P	1.393105127					1.160920939	1.160920939	1	1.2
328.9-337.5		18P	1.346209977					1.121841647	1.121841647	1	1.2

Site #:	88008
Name:	T-Mobile

Engineer:	BD
Date:	03/30/15

Group Label	Group Description	Angle Type	Angle Size	Material Type	Element Type	Group Type	Optimize Group
Leg S1	L 8" x 8" x 1.125"	SAE	8X8X1.13	A 36	Beam	Leg	None
Leg S2	L 8" x 8" x 1.125"	SAE	8X8X1.13	A 36	Beam	Leg	None
Leg S3	L 8" x 8" x 1.125"	SAE	8X8X1.13	A 36	Beam	Leg	None
Leg S4	L 8" x 8" x 1.125"	SAE	8X8X1.13	A 36	Beam	Leg	None
Leg S5	L 8" x 8" x 1"	SAE	8X8X1	A 36	Beam	Leg	None
Leg S6	L 8" x 8" x 1"	SAE	8X8X1	A 36	Beam	Leg	None
Leg S7	L 8" x 8" x 0.875"	SAE	8X8X0.88	A 36	Beam	Leg	None
Leg S8	L 8" x 8" x 0.75"	SAE	8X8X0.75	A 36	Beam	Leg	None
Leg S9	L 8" x 8" x 0.75"	SAE	8X8X0.75	A 36	Beam	Leg	None
Leg S10	L 6" x 6" x 0.875"	SAE	6X6X0.88	A 36	Beam	Leg	None
Leg S11	L 6" x 6" x 0.75"	SAE	6X6X0.75	A 36	Beam	Leg	None
Leg S12	L 6" x 6" x 0.75"	SAE	6X6X0.75	A 36	Beam	Leg	None
Leg S13	L 6" x 6" x 0.5625"	SAE	6X6X0.56	A 36	Beam	Leg	None
Leg S14	L 6" x 6" x 0.5625"	SAE	6X6X0.56	A 36	Beam	Leg	None
Leg S15	L 6" x 6" x 0.4375"	SAE	6X6X0.44	A 36	Beam	Leg	None
Leg S16	L 5" x 5" x 0.4375"	SAE	5X5X0.44	A 36	Beam	Leg	None
Leg S17	L 5" x 5" x 0.4375"	SAE	5X5X0.44	A 36	Beam	Leg	None
Leg S18	L 5" x 5" x 0.3125"	SAE	5X5X0.31	A 36	Beam	Leg	None
Leg S19	L 5" x 5" x 0.3125"	SAE	5X5X0.31	A 36	Beam	Leg	None
Diag S1	B/B L3"x4"x0.375"	DAS	4X3X0.38	A 36	Beam	Other	None
Diag S2	B/B L3"x4"x0.25"	DAS	4X3X0.25	A 36	Beam	Other	None
Diag S3	B/B L3"x4"x0.25"	DAS	4X3X0.25	A 36	Beam	Other	None
Diag S4	B/B L3"x3.5"x0.25"	DAS	3.5X3X0.25	A 36	Beam	Other	None
Diag S5	B/B L3"x3.5"x0.25"	DAS	3.5X3X0.25	A 36	Beam	Other	None
Diag S6	B/B L2.5"x3.5"x0.25"	DAS	3.5X2.5X0.25	A 36	Beam	Other	None
Diag S7	B/B L3"x3"x0.375"	DAE	3X3X0.38	A 36	Beam	Other	None
Diag S8	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	A 36	Beam	Other	None
Diag S9	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	A 36	Beam	Other	None
Diag S10	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Diag S11	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Diag S12	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Diag S13	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	A 36	Beam	Other	None
Diag S14	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	A 36	Beam	Other	None
Diag S15	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	A 36	Beam	Other	None
Diag S16	L 3.5" x 3.5" x 0.25"	SAE	3.5X3.5X0.25	A 36	T-Only	Other	None
Diag S17	L 3.5" x 3.5" x 0.25"	SAE	3.5X3.5X0.25	A 36	T-Only	Other	None
Diag S18	L 3" x 3" x 0.25"	SAE	3X3X0.25	A 36	T-Only	Other	None
Diag S19	L 3" x 3" x 0.25"	SAE	3X3X0.25	A 36	T-Only	Other	None
Horiz 1	B/B L4"x3"x0.25"	DAL	4X3X0.25	A 36	Beam	Other	None
Horiz 2	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	A 36	Beam	Other	None
Horiz 3	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	A 36	Beam	Other	None
Horiz 4	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	A 36	Beam	Other	None
Horiz 5	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	A 36	Beam	Other	None
Horiz 6	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	A 36	Beam	Other	None
Horiz 7	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	A 36	Beam	Other	None
Horiz 8	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	A 36	Beam	Other	None
Horiz 9	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Horiz 10	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Horiz 11	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Horiz 12	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Horiz 13	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Horiz 14	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Horiz 15	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Horiz 16	L 3" x 2.5" x 0.25"	SAU	3X2.5X0.25	A 36	Beam	Other	None
Horiz 17	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	A 36	Beam	Other	None
Horiz 18	L 3" x 2.5" x 0.25"	SAU	3X2.5X0.25	A 36	Beam	Other	None
Horiz 19	C8x11.5	CHN	C8x11.5	A 36	Beam	Other	None
LD 1	B/B L3"x2.5"x0.3125"	DAL	3X2.5X0.31	A 36	Beam	Other	None
LD 2	B/B L4"x3"x0.3125"	DAL	4X3X0.31	A 36	Beam	Other	None
LD 4	B/B L3"x2"x0.25"	DAL	3X2X0.25	A 36	Beam	Other	None
LD 5	B/B L4"x3"x0.25"	DAL	4X3X0.25	A 36	Beam	Other	None
LD 7	B/B L2.5"x2.5"x0.375"	DAE	2.5X2.5X0.38	A 36	Beam	Other	None
LD 8	B/B L3.5"x3"x0.25"	DAL	3.5X3X0.25	A 36	Beam	Other	None
LD 10	B/B L3"x3"x0.25"	DAE	3X3X0.25	A 36	Beam	Other	None

Group Label	Group Description	Angle Type	Angle Size	Material Type	Element Type	Group Type	Optimize Group
LD 11	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	A 36	Beam	Other	None
LD 12	B/B L3"x2"x0.25"	DAL	3X2X0.25	A 36	Beam	Other	None
LD 13	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	A 36	Beam	Other	None
LD 14	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	A 36	Beam	Other	None
LD 15	B/B L3"x3"x0.25"	DAE	3X3X0.25	A 36	Beam	Other	None
LD 16	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	A 36	Beam	Other	None
LD 17	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	A 36	Beam	Other	None
LD 18	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	A 36	Beam	Other	None
LH 1	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	A 36	Beam	Other	None
LH 2	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	A 36	Beam	Other	None
LH 3	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	A 36	Beam	Other	None
LH 4	B/B L3"x3"x0.375"	DAE	3X3X0.38	A 36	Beam	Other	None
LH 5	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	A 36	Beam	Other	None
LH 6	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	A 36	Beam	Other	None
DUM 1	Dummy Bracing Member	DUM	0.1X0.1X1	A 36	Beam	Fictitious	None

Group Label	Group Description	Angle Type	Angle Size	Material Type	Element Type	Group Type	Optimize Group

Site #:	88008
Name:	T-Mobile

Engineer:	BD
Date:	03/30/15

Member Label	Group Label	Section Label	Symmetry Code	Origin Joint	End Joint	Ecc. Code	Rest. Code	Ratio RLX	Ratio RLY	Ratio RLZ
L 1	Leg S1		XY-Symmetry	0P	1P	1	4	0.2812	0.2812	0.2812
L 2	Leg S2		XY-Symmetry	1P	2P	1	4	0.2812	0.2812	0.2812
L 3	Leg S3		XY-Symmetry	2P	3P	1	4	0.2812	0.2812	0.2812
L 4	Leg S4		XY-Symmetry	3P	4P	1	4	0.2812	0.2812	0.2812
L 5	Leg S5		XY-Symmetry	4P	5P	1	4	0.2812	0.2812	0.2812
L 6	Leg S6		XY-Symmetry	5P	6P	1	4	0.2812	0.2812	0.2812
L 7	Leg S7		XY-Symmetry	6P	7P	1	4	0.333333333	0.333333333	0.333333333
L 8	Leg S8		XY-Symmetry	7P	8P	1	4	0.333333333	0.333333333	0.333333333
L 9	Leg S9		XY-Symmetry	8P	9P	1	4	0.333333333	0.333333333	0.333333333
L 10	Leg S10		XY-Symmetry	9P	10P	1	4	0.5	0.5	0.5
L 11	Leg S11		XY-Symmetry	10P	11P	1	4	0.5	0.5	0.5
L 12	Leg S12		XY-Symmetry	11P	12P	1	4	0.5	0.5	0.5
L 13	Leg S13		XY-Symmetry	12P	13P	1	4	0.5	0.5	0.5
L 14	Leg S14		XY-Symmetry	13P	14P	1	4	0.5	0.5	0.5
L 15	Leg S15		XY-Symmetry	14P	15P	1	4	0.5	0.5	0.5
L 16	Leg S16		XY-Symmetry	15P	16P	1	4	0.5	0.5	0.5
L 17	Leg S17		XY-Symmetry	16P	17P	1	4	0.5	0.5	0.5
L 18	Leg S18		XY-Symmetry	17P	18P	1	4	0.5	0.5	0.5
L 19	Leg S19		XY-Symmetry	18P	19P	1	4	0.5	0.5	0.5
D 1	Diag S1		XY-Symmetry	0P	H2P	1	6	0.333333333	0.666666667	0.333333333
D 2	Diag S1		XY-Symmetry	0P	H1P	1	6	0.333333333	0.666666667	0.333333333
D 3	Diag S2		XY-Symmetry	1P	H6P	1	6	0.333333333	0.666666667	0.333333333
D 4	Diag S2		XY-Symmetry	1P	H5P	1	6	0.333333333	0.666666667	0.333333333
D 5	Diag S3		XY-Symmetry	2P	H10P	1	6	0.333333333	0.666666667	0.333333333
D 6	Diag S3		XY-Symmetry	2P	H9P	1	6	0.333333333	0.666666667	0.333333333
D 7	Diag S4		XY-Symmetry	3P	H14P	1	6	0.333333333	0.666666667	0.333333333
D 8	Diag S4		XY-Symmetry	3P	H13P	1	6	0.333333333	0.666666667	0.333333333
D 9	Diag S5		XY-Symmetry	4P	H18P	1	6	0.333333333	0.666666667	0.333333333
D 10	Diag S5		XY-Symmetry	4P	H17P	1	6	0.333333333	0.666666667	0.333333333
D 11	Diag S6		XY-Symmetry	5P	H22P	1	6	0.3	0.6	0.3
D 12	Diag S6		XY-Symmetry	5P	H21P	1	6	0.3	0.6	0.3
D 13	Diag S7		XY-Symmetry	6P	A13P	1	6	0.3	0.6	0.3
D 14	Diag S7		XY-Symmetry	6P	A14P	1	6	0.3	0.6	0.3
D 15	Diag S8		XY-Symmetry	7P	A15P	1	6	0.3	0.6	0.3
D 16	Diag S8		XY-Symmetry	7P	A16P	1	6	0.3	0.6	0.3
D 17	Diag S9		XY-Symmetry	8P	A17P	1	6	0.3	0.6	0.3
D 18	Diag S9		XY-Symmetry	8P	A18P	1	6	0.3	0.6	0.3
D 19	Diag S10		XY-Symmetry	9P	A19P	1	6	0.5	1	0.5
D 20	Diag S10		XY-Symmetry	9P	A20P	1	6	0.5	1	0.5
D 21	Diag S11		XY-Symmetry	10P	A21P	1	6	0.5	1	0.5
D 22	Diag S11		XY-Symmetry	10P	A22P	1	6	0.5	1	0.5

Member Label	Group Label	Section Label	Symmetry Code	Origin Joint	End Joint	Ecc. Code	Rest. Code	Ratio RLX	Ratio RLY	Ratio RLZ
D 23	Diag S12		XY-Symmetry	11P	A23P	1	6	0.5	1	0.5
D 24	Diag S12		XY-Symmetry	11P	A24P	1	6	0.5	1	0.5
D 25	Diag S13		XY-Symmetry	12P	A25P	1	6	0.5	1	0.5
D 26	Diag S13		XY-Symmetry	12P	A26P	1	6	0.5	1	0.5
D 27	Diag S14		XY-Symmetry	13P	A27P	1	6	0.5	1	0.5
D 28	Diag S14		XY-Symmetry	13P	A28P	1	6	0.5	1	0.5
D 29	Diag S15		XY-Symmetry	14P	A29P	1	6	0.5	1	0.5
D 30	Diag S15		XY-Symmetry	14P	A30P	1	6	0.5	1	0.5
D 31	Diag S16		XY-Symmetry	15P	16Y	2	6	0.52	0.75	0.52
D 32	Diag S16		XY-Symmetry	15P	16X	2	6	0.52	0.75	0.52
D 33	Diag S17		XY-Symmetry	16P	17Y	2	5	0.52	0.75	0.52
D 34	Diag S17		XY-Symmetry	16P	17X	2	5	0.52	0.75	0.52
D 35	Diag S18		XY-Symmetry	17P	18Y	2	5	0.52	0.75	0.52
D 36	Diag S18		XY-Symmetry	17P	18X	2	5	0.52	0.75	0.52
D 37	Diag S19		XY-Symmetry	18P	19Y	2	5	0.52	0.75	0.52
D 38	Diag S19		XY-Symmetry	18P	19X	2	5	0.52	0.75	0.52
H 1	Horiz 1		XY-Symmetry	1P	A1P	1	6	0.5	0.5	0.5
H 2	Horiz 1		XY-Symmetry	1P	A2P	1	6	0.5	0.5	0.5
H 3	Horiz 2		XY-Symmetry	2P	A3P	1	6	0.49	0.49	0.49
H 4	Horiz 2		XY-Symmetry	2P	A4P	1	6	0.49	0.49	0.49
H 5	Horiz 3		XY-Symmetry	3P	A5P	1	6	0.46	0.46	0.46
H 6	Horiz 3		XY-Symmetry	3P	A6P	1	6	0.46	0.46	0.46
H 7	Horiz 4		XY-Symmetry	4P	A7P	1	6	0.9	0.9	0.9
H 8	Horiz 4		XY-Symmetry	4P	A8P	1	6	0.9	0.9	0.09

Member Label	Group Label	Section Label	Symmetry Code	Origin Joint	End Joint	Ecc. Code	Rest. Code	Ratio RLX	Ratio RLY	Ratio RLZ
H 9	Horiz 5		XY-Symmetry	5P	A9P	1	6	1	1	1
H 10	Horiz 5		XY-Symmetry	5P	A10P	1	6	1	1	1
H 11	Horiz 6		XY-Symmetry	6P	A11P	1	6	0.98	0.98	0.98
H 12	Horiz 6		XY-Symmetry	6P	A12P	1	6	0.98	0.98	0.98
H 13	Horiz 7		XY-Symmetry	7P	A13P	1	6	1	1	1
H 14	Horiz 7		XY-Symmetry	7P	A14P	1	6	1	1	1
H 15	Horiz 8		XY-Symmetry	8P	A15P	1	6	1	1	1
H 16	Horiz 8		XY-Symmetry	8P	A16P	1	6	1	1	1
H 17	Horiz 9		XY-Symmetry	9P	A17P	1	6	1	1	1
H 18	Horiz 9		XY-Symmetry	9P	A18P	1	6	1	1	1
H 19	Horiz 10		XY-Symmetry	10P	A19P	1	6	1	1	1
H 20	Horiz 10		XY-Symmetry	10P	A20P	1	6	1	1	1
H 21	Horiz 11		XY-Symmetry	11P	A21P	1	6	1	1	1
H 22	Horiz 11		XY-Symmetry	11P	A22P	1	6	1	1	1
H 23	Horiz 12		XY-Symmetry	12P	A23P	1	6	1	1	1
H 24	Horiz 12		XY-Symmetry	12P	A24P	1	6	1	1	1
H 25	Horiz 13		XY-Symmetry	13P	A25P	1	6	1	1	1
H 26	Horiz 13		XY-Symmetry	13P	A26P	1	6	1	1	1
H 27	Horiz 14		XY-Symmetry	14P	A27P	1	6	1	1.2	1
H 28	Horiz 14		XY-Symmetry	14P	A28P	1	6	1	1.2	1
H 29	Horiz 15		XY-Symmetry	15P	A29P	1	6	1	1.07	1
H 30	Horiz 15		XY-Symmetry	15P	A30P	1	6	1	1.07	1
H 31	Horiz 16		Y-Symmetry	16P	16X	3	6	0.5	0.52	0.5
H 32	Horiz 16		X-Symmetry	16P	16Y	3	6	0.5	0.52	0.5
H 33	Horiz 17		Y-Symmetry	17P	17X	1	6	0.5	1	0.5
H 34	Horiz 17		X-Symmetry	17P	17Y	1	6	0.5	1	0.5
H 35	Horiz 18		Y-Symmetry	18P	18X	3	6	0.5	0.6	0.5
H 36	Horiz 18		X-Symmetry	18P	18Y	3	6	0.5	0.6	0.5
H 37	Horiz 19		Y-Symmetry	19P	19X	3	6	1	1	1
H 38	Horiz 19		X-Symmetry	19P	19Y	3	6	1	1	1

Member Label	Group Label	Section Label	Symmetry Code	Origin Joint	End Joint	Ecc. Code	Rest. Code	Ratio RLX	Ratio RLY	Ratio RLZ
H 45	Horiz 4		Y-Symmetry	A7P	A7X	1	6	1	1	1
H 46	Horiz 4		X-Symmetry	A8P	A8Y	1	6	1	1	1
H 47	Horiz 5		Y-Symmetry	A9P	A9X	1	6	1	1	1
H 48	Horiz 5		X-Symmetry	A10P	A10Y	1	6	1	1	1
H 49	Horiz 6		Y-Symmetry	A11P	A11X	1	6	1	1	1
H 50	Horiz 6		X-Symmetry	A12P	A12Y	1	6	1	1	1
LH 1	LH 1		Y-Symmetry	H1P	H1X	1	6	0.5	1	0.5
LH 2	LH 1		X-Symmetry	H2P	H2Y	1	6	0.5	1	0.5
LH 3	LH 2		Y-Symmetry	H5P	H5X	1	6	0.5	1	0.5
LH 4	LH 2		X-Symmetry	H6P	H6Y	1	6	0.5	1	0.5
LH 5	LH 3		Y-Symmetry	H9P	H9X	1	6	0.5	1	0.5
LH 6	LH 3		X-Symmetry	H10P	H10Y	1	6	0.5	1	0.5
LH 7	LH 4		XY-Symmetry	H13P	H15P	1	6	0.94	1.88	0.94
LH 8	LH 4		XY-Symmetry	H14P	H16P	1	6	0.94	1.88	0.94
LH 9	LH 5		XY-Symmetry	H17P	H19P	1	6	0.94	1.88	0.94
LH 10	LH 5		XY-Symmetry	H18P	H20P	1	6	0.94	1.88	0.94
LH 11	LH 6		XY-Symmetry	H21P	H23P	1	6	0.94	1.88	0.94
LH 12	LH 6		XY-Symmetry	H22P	H24P	1	6	0.94	1.88	0.94

Member Label	Group Label	Section Label	Symmetry Code	Origin Joint	End Joint	Ecc. Code	Rest. Code	Ratio RLX	Ratio RLY	Ratio RLZ
LD 1	LD 1		XY-Symmetry	H1P	1P	1	6	0.904	0.904	0.904
LD 2	LD 1		XY-Symmetry	H2P	1P	1	6	0.904	0.904	0.904
LD 3	LD 2		XY-Symmetry	H1P	A1P	1	6	0.904	0.904	0.904
LD 4	LD 2		XY-Symmetry	H2P	A2P	1	6	0.904	0.904	0.904
LD 7	LD 4		XY-Symmetry	H5P	2P	1	6	0.904	0.904	0.904
LD 8	LD 4		XY-Symmetry	H6P	2P	1	6	0.904	0.904	0.904
LD 9	LD 5		XY-Symmetry	H5P	A3P	1	6	0.904	0.904	0.904
LD 10	LD 5		XY-Symmetry	H6P	A4P	1	6	0.904	0.904	0.904
LD 13	LD 7		XY-Symmetry	H9P	3P	1	6	0.904	0.904	0.904
LD 14	LD 7		XY-Symmetry	H10P	3P	1	6	0.904	0.904	0.904
LD 15	LD 8		XY-Symmetry	H9P	A5P	1	6	0.904	0.904	0.904
LD 16	LD 8		XY-Symmetry	H10P	A6P	1	6	0.904	0.904	0.904
LD 19	LD 10		XY-Symmetry	H13P	4P	1	6	0.83	0.83	0.83
LD 20	LD 10		XY-Symmetry	H14P	4P	1	6	0.83	0.83	0.83
LD 21	LD 11		XY-Symmetry	H13P	A7P	1	6	0.85	0.85	0.85
LD 22	LD 11		XY-Symmetry	H14P	A8P	1	6	0.85	0.85	0.85
LD 23	LD 12		XY-Symmetry	A7P	H15P	1	6	0.86	0.86	0.86
LD 24	LD 12		XY-Symmetry	A8P	H16P	1	6	0.86	0.86	0.86
LD 25	LD 13		XY-Symmetry	H17P	5P	1	6	0.83	0.83	0.83
LD 26	LD 13		XY-Symmetry	H18P	5P	1	6	0.83	0.83	0.83
LD 27	LD 14		XY-Symmetry	H17P	A9P	1	6	0.85	0.85	0.85
LD 28	LD 14		XY-Symmetry	H18P	A10P	1	6	0.85	0.85	0.85
LD 29	LD 15		XY-Symmetry	A9P	H19P	1	6	0.86	0.86	0.86
LD 30	LD 15		XY-Symmetry	A10P	H20P	1	6	0.86	0.86	0.86
LD 31	LD 16		XY-Symmetry	H21P	6P	1	6	0.83	0.83	0.83
LD 32	LD 16		XY-Symmetry	H22P	6P	1	6	0.83	0.83	0.83
LD 33	LD 17		XY-Symmetry	H21P	A11P	1	6	0.85	0.85	0.85
LD 34	LD 17		XY-Symmetry	H22P	A12P	1	6	0.85	0.85	0.85
LD 35	LD 18		XY-Symmetry	A11P	H23P	1	6	0.86	0.86	0.86
LD 36	LD 18		XY-Symmetry	A12P	H24P	1	6	0.86	0.86	0.86

Member Label	Group Label	Section Label	Symmetry Code	Origin Joint	End Joint	Ecc. Code	Rest. Code	Ratio RLX	Ratio RLY	Ratio RLZ
BR 1	DUM 1	XY-Symmetry	A1P	A2P	1	4	1	1	1
BR 3	DUM 1	XY-Symmetry	A3P	A4P	1	4	1	1	1
BR 5	DUM 1	XY-Symmetry	A5P	A6P	1	4	1	1	1
BR 7	DUM 1	XY-Symmetry	A7P	A8P	1	4	1	1	1
BR 8	DUM 1	XY-Symmetry	A7P	A8XY	1	4	1	1	1
BR 9	DUM 1	XY-Symmetry	A9P	A10P	1	4	1	1	1
BR 10	DUM 1	XY-Symmetry	A9P	A10XY	1	4	1	1	1
BR 11	DUM 1	XY-Symmetry	A11P	A12P	1	4	1	1	1
BR 12	DUM 1	XY-Symmetry	A11P	A12XY	1	4	1	1	1
BR 13	DUM 1	XY-Symmetry	A13P	A14P	1	4	1	1	1
BR 15	DUM 1	XY-Symmetry	A15P	A16P	1	4	1	1	1
BR 17	DUM 1	XY-Symmetry	A17P	A18P	1	4	1	1	1
BR 19	DUM 1	XY-Symmetry	A19P	A20P	1	4	1	1	1
BR 21	DUM 1	XY-Symmetry	A21P	A22P	1	4	1	1	1
BR 23	DUM 1	XY-Symmetry	A23P	A24P	1	4	1	1	1
BR 25	DUM 1	XY-Symmetry	A25P	A26P	1	4	1	1	1
BR 27	DUM 1	XY-Symmetry	A27P	A28P	1	4	1	1	1
BR 29	DUM 1	XY-Symmetry	A29P	A30P	1	4	1	1	1

Member Label	Group Label	Section Label	Symmetry Code	Origin Joint	End Joint	Ecc. Code	Rest. Code	Ratio RLX	Ratio RLY	Ratio RLZ
BR 61	DUM 1		XY-Symmetry	H1P	H2P	1	4	1	1	1
BR 62	DUM 1		XY-Symmetry	H1P	H2XY	1	4	1	1	1
BR 64	DUM 1		XY-Symmetry	H5P	H6P	1	4	1	1	1
BR 65	DUM 1		XY-Symmetry	H5P	H6XY	1	4	1	1	1
BR 67	DUM 1		XY-Symmetry	H9P	H10P	1	4	1	1	1
BR 68	DUM 1		XY-Symmetry	H9P	H10XY	1	4	1	1	1
BR 70	DUM 1		XY-Symmetry	H13P	H14P	1	4	1	1	1
BR 71	DUM 1		XY-Symmetry	H13P	H14XY	1	4	1	1	1
BR 72	DUM 1		XY-Symmetry	H15P	H16P	1	4	1	1	1
BR 73	DUM 1		XY-Symmetry	H17P	H18P	1	4	1	1	1
BR 74	DUM 1		XY-Symmetry	H17P	H18XY	1	4	1	1	1
BR 75	DUM 1		XY-Symmetry	H19P	H20P	1	4	1	1	1
BR 76	DUM 1		XY-Symmetry	H21P	H22P	1	4	1	1	1
BR 77	DUM 1		XY-Symmetry	H21P	H22XY	1	4	1	1	1
BR 78	DUM 1		XY-Symmetry	H23P	H24P	1	4	1	1	1

Member Label	Group Label	Section Label	Symmetry Code	Origin Joint	End Joint	Ecc. Code	Rest. Code	Ratio RLX	Ratio RLY	Ratio RLZ

Point Loads

Tower Height:	337.5	ft
Gh:	1.08	
Wind Speed:	85.00	mph
Wind Speed (Ice):	73.60	mph
Radial Ice Diameter:	0.5	in

Site No.:	88008
Engineer:	BD
Date:	03/30/2015
Carrier:	T-Mobile

KS-15676 Horn Antennas: ~128 ft²

No.	Carrier	Elevation (ft)	Quantity	Number of Azimuths	Model	Height (in)	Width (in)	Depth (in)	Weight (lbs/ea)	Flat/Round (F/R)	Reduction Factor	C_AA_C (ft²/ea)	Weight (k/ea)	H/W	C_A	q_z (psf)	q_z (ice) (psf)
1	US Treasury	338	1	1	Rohde & Schwarz ADD090	78.7	31.5	31.5	88.2	F	1.000			2.50	1.40	35.96	26.96
			1	4	Platform						1.000	70.00	6.00	-	-		
2	US Treasury	310	1	1	Sinclair SC381-HL	160	4.5	4.5	47	R	1.000			35.56	1.20	35.08	26.30
			1	1	Sector Frame						0.900	15.00	0.30	-	-		
3	US Treasury	310	1	1	Sinclair SC281-L	251	5	5	79	R	1.000			50.20	1.20	35.08	26.30
														-	-		
4	US Treasury	275	1	1	Sinclair SC281-L	251	5	5	79	R	1.000			50.20	1.20	33.90	25.41
			1	1	Sector Frame						0.900	15.00	0.30	-	-		
5	Sprint Nextel	250	12	3	Decibel DB844H90E-XY	48	8	6.5	14	F	0.730			6.00	1.40	32.99	24.73
			3	3	Pipes						0.667	8.00	0.20	-	-		
6	Sprint Nextel	240	3	3	Alcatel-Lucent 1900 MHz 4X45 RRH	25.1	11.1	10.7	60	F	0.500			2.26	1.40	32.60	24.45
			3	3	Sector Frames						0.667	15.00	0.30	-	-		
7	T-Mobile	222	3	3	RFS APX16PV-16PVL-E-00	53	12.9	3.1	39.6	F	0.590			4.11	1.40	31.89	23.91
			3	3	Sector Frames + (6) TTA's						0.667	19.54	0.40	-	-		
8	Verizon	180	6	3	Andrew DB844H90E-XY	48	8.5	6	10	F	0.730			5.65	1.40	30.03	22.52
			3	3	Sector Frames + (6) RFS Diplexers						0.667	14.74	0.31	-	-		
9	Verizon	180	3	3	Powerwave P65-16-XL-2	72	12	5	33	F	0.640			6.00	1.40	30.03	22.52
			3	3	Rymsa MGD3-800T0 + GPS						0.690	3.65	0.02	-	-		
10	AT&T Mobility	165	6	3	Allgon 7770.00	55	11	5	35	F	0.640			5.00	1.40	29.29	21.96
			3	3	Sector Frames + (6) TTA's						0.667	16.80	0.35	-	-		
11	Metro PCS	100	3	3	RFS APXV18-206517S-C	72	6.8	3.2	26.4	F	0.680			10.59	1.52	25.39	19.04
											0.001	0.00	0.00	-	-		
12	Sprint Nextel	48												0.00	0.00	20.59	15.43
			1	1	PCTEL GPS-TMG-HR-26N						1.000	0.09	0.01	-	-		
13	Metro PCS	20	1	1	Nortel NTGB01MA	4	4	4	1	R	1.000			1.00	0.80	18.50	13.87
														-	-		
14	US Treasury	194	1	1	Andrew DB616E-BC	231	3.5	3.5	51	R	1.000			66.00	1.20	30.68	23.00
			1	1	Side Arm						1.000	5.20	0.15	-	-		
15	Sprint Nextel	240	3	3	RFS APXVSPP18-C-A20	72	11.8	7	57	F	0.680			6.10	1.40	32.60	24.45
	Sprint Nextel		3	3	Alcatel-Lucent 800 MHz 2X50W RRH						0.500	2.40	0.06	-	-		
16	-	320												0.00	0.00	35.40	26.54
			1	4	Catwalk						1.000	55.00	4.00	-	-		
17	-	237												0.00	0.00	32.49	24.36
			1	4	Working Platform						1.000	25.00	2.50	-	-		
18	-	150												0.00	0.00	28.51	21.37
			1	1	Rest Platform						1.000	20.00	1.00	-	-		
19	-	125												0.00	0.00	27.06	20.29
			1	2	Working Platform						1.000	25.00	2.00	-	-		
20	AT&T Mobility	165	3	3	Raycap DC2-48-60-0-9E	10.2	10.2	6.2	16	F	0.333			1.00	1.40	29.29	21.96
			3	3	Powerwave LGP21901						0.333	0.23	0.01	-	-		
21	AT&T Mobility	165	1	1	Raycap FC12-PC6-10E	15.5	16.3	6.6	25	F	0.333			0.95	1.40	29.29	21.96
			6	3	Ericsson RRUS 11 (Band 12)						0.500	2.99	0.05	-	-		
22	AT&T Mobility	165	2	2	Andrew SBNH-1D6565C	96.4	11.9	7.1	60.8	F	0.700			8.10	1.44	29.29	21.96
			1	1	KMW AM-X-CD-65-00T-RET						0.660	8.26	0.05	-	-		
23	-	200												0.00	0.00	30.95	23.20
			1	1	Rest Platform						1.000	12.00	0.50	-	-		
24	-	287.5												0.00	0.00	34.33	25.74
			1	1	Rest Platform						1.000	12.00	0.50	-	-		
25	Sprint Nextel	240	3	3	RFS APXV9TM14-ALU-I20	56.3	12.6	6.3	55.1	F	0.650			4.47	1.40	32.60	24.45
			3	3	Alcatel-Lucent TD-RRH8x20-25 w/ SS						0.500	4.72	0.07	-	-		
26	Lightsquared LP	319	1	1	Kathrein Scala 750 10074	104.3	2	2	17.6	R	1.000			52.15	1.20	35.37	26.52
					Side Arm						1.000	5.20	0.15	-	-		
27	T-Mobile	222	3	3	Andrew LNX-6515DS-VTM	96.3	11.9	7.1	51.3	F	0.700			8.09	1.44	31.89	23.91
			6	3	KMW Smart Bias-T						0.670	0.08	0.01	-	-		
28																	
29																	
30																	

No.	Elevation (ft)	C_AA_C (ft^2)	C_AA_C (Ice) (ft^2)	Force (k)	Force (Ice) (k)	Weight (k)	Weight (Ice) (k)	Σ Force (k)	Σ Force (Ice) (k)	Σ Weight (k)	Σ Weight (Ice) (k)
1	338	24.10	25.18	0.936	0.733	0.088	0.286	3.66	3.49	6.09	8.09
		70.00	94.50	2.719	2.752	6.000	7.800				
2	310	6.00	7.38	0.227	0.210	0.047	0.100	0.74	0.73	0.35	0.49
		13.50	18.23	0.512	0.518	0.300	0.390				
3	310	10.46	12.60	0.396	0.358	0.079	0.170	0.40	0.36	0.08	0.17
		0.00	0.00	0.000	0.000	0.000	0.000				
4	275	10.46	12.60	0.383	0.346	0.079	0.170	0.88	0.85	0.38	0.56
		13.50	18.23	0.494	0.500	0.300	0.390				
5	250	32.70	37.56	1.166	1.004	0.168	0.484	1.74	1.58	0.77	1.26
		16.01	21.61	0.571	0.577	0.600	0.780				
6	240	4.06	4.61	0.143	0.122	0.180	0.249	1.20	1.19	1.08	1.42
		30.02	40.52	1.057	1.070	0.900	1.170				
7	222	11.77	12.92	0.405	0.334	0.119	0.212	1.75	1.70	1.32	1.77
		39.10	52.78	1.347	1.363	1.200	1.560				
8	180	17.37	19.82	0.564	0.482	0.060	0.218	1.52	1.45	0.98	1.41
		29.49	39.82	0.957	0.969	0.919	1.194				
9	180	16.13	17.71	0.523	0.431	0.099	0.233	0.77	0.68	0.16	0.31
		7.56	10.20	0.245	0.248	0.059	0.077				
10	165	22.59	25.09	0.715	0.595	0.210	0.406	1.78	1.67	1.26	1.77
		33.62	45.38	1.064	1.077	1.050	1.365				
11	100	10.54	12.26	0.289	0.252	0.079	0.159	0.29	0.25	0.08	0.16
		0.00	0.00	0.000	0.000	0.000	0.000				
12	48	0.00	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.01	0.01
		0.09	0.12	0.002	0.002	0.005	0.007				
13	20	0.09	0.14	0.002	0.002	0.001	0.003	0.00	0.00	0.00	0.00
		0.00	0.00	0.000	0.000	0.000	0.000				
14	194	6.74	8.70	0.223	0.216	0.051	0.112	0.40	0.39	0.20	0.31
		5.20	7.02	0.172	0.174	0.150	0.195				
15	240	16.85	18.53	0.594	0.489	0.171	0.320	0.72	0.62	0.36	0.57
		3.60	4.86	0.127	0.128	0.192	0.250				
16	320	0.00	0.00	0.000	0.000	0.000	0.000	2.10	2.13	4.00	5.20
		55.00	74.25	2.103	2.129	4.000	5.200				
17	237	0.00	0.00	0.000	0.000	0.000	0.000	0.88	0.89	2.50	3.25
		25.00	33.75	0.878	0.888	2.500	3.250				
18	150	0.00	0.00	0.000	0.000	0.000	0.000	0.62	0.62	1.00	1.30
		20.00	27.00	0.616	0.623	1.000	1.300				
19	125	0.00	0.00	0.000	0.000	0.000	0.000	0.73	0.74	2.00	2.60
		25.00	33.75	0.731	0.740	2.000	2.600				
20	165	1.01	1.22	0.032	0.029	0.048	0.073	0.04	0.04	0.06	0.09
		0.23	0.31	0.007	0.007	0.017	0.021				
21	165	0.82	0.92	0.026	0.022	0.025	0.041	0.31	0.31	0.33	0.43
		8.97	12.11	0.284	0.287	0.300	0.390				
22	165	16.02	17.55	0.507	0.416	0.122	0.253	0.68	0.59	0.17	0.32
		5.45	7.36	0.173	0.175	0.049	0.063				
23	200	0.00	0.00	0.000	0.000	0.000	0.000	0.40	0.41	0.50	0.65
		12.00	16.20	0.401	0.406	0.500	0.650				
24	287.5	0.00	0.00	0.000	0.000	0.000	0.000	0.45	0.45	0.50	0.65
		12.00	16.20	0.445	0.451	0.500	0.650				
25	240	13.45	14.77	0.474	0.390	0.165	0.284	0.72	0.64	0.38	0.56
		7.08	9.56	0.249	0.252	0.210	0.273				
26	319	1.74	2.63	0.066	0.075	0.018	0.035	0.07	0.08	0.02	0.03
		0.00	0.00	0.000	0.000	0.000	0.000				
27	222	24.01	26.29	0.827	0.679	0.154	0.351	0.84	0.69	0.23	0.45
		0.32	0.43	0.011	0.011	0.078	0.101				
28											
29											
30											

Site:	88008
Carrier:	T-Mobile

Engineer:	BD
Date:	03/30/15

Load Case Description	Dead Load Factor	Wind Load Factor	Ice Load Factor	Strength Factor	Allowable Stress Inc. Factor	Basic Wind Speed	Wind Dir.	Ice Thick.	Ice Density	Temp.	Point Loads
W 0	1.1	1	1	1	1.333333333	85	0	0	56	50	
W 180	1.1	1	1	1	1.333333333	85	180	0	56	50	
W 45	1.1	1	1	1	1.333333333	85	45	0	56	50	
W -45	1.1	1	1	1	1.333333333	85	-45	0	56	50	
W 90	1.1	1	1	1	1.333333333	85	90	0	56	50	
W -90	1.1	1	1	1	1.333333333	85	-90	0	56	50	
W 0 Ice	1.1	1	1	1	1.333333333	73.6	0	0.5	56	10	
W 180 Ice	1.1	1	1	1	1.333333333	73.6	180	0.5	56	10	
W 45 Ice	1.1	1	1	1	1.333333333	73.6	45	0.5	56	10	
W -45 Ice	1.1	1	1	1	1.333333333	73.6	-45	0.5	56	10	
W 90 Ice	1.1	1	1	1	1.333333333	73.6	90	0.5	56	10	
W -90 Ice	1.1	1	1	1	1.333333333	73.6	-90	0.5	56	10	

Angle:	-90

No Ice

Joint Label	Force X-Dir (lbs)	Force Y-Dir (lbs)	Force Vertical (lbs)	Moment X-Axis (ft-lbs)	Moment Y-Axis (ft-lbs)	Moment Z-Axis (ft-lbs)
19P	0.00	-1616.12	1588.2			
19X	0.00	-679.83	1500			
19Y	0.00	-679.83	1500			
19XY	0.00	-679.83	1500			
16P	0.00	-739.03	347			
16X	0.00	0.00	0			
16Y	0.00	0.00	0			
16XY	0.00	0.00	0			
16P	0.00	-396.36	79			
16X	0.00	0.00	0			
16Y	0.00	0.00	0			
16XY	0.00	0.00	0			
13P	0.00	-877.45	379			
13X	0.00	0.00	0			
13Y	0.00	0.00	0			
13XY	0.00	0.00	0			
11P	0.00	-578.70	256			
11X	0.00	-578.70	256			
11Y	0.00	-578.70	256			
11XY	0.00	0.00	0			
10P	0.00	-400.15	360			
10X	0.00	-400.15	360			
10Y	0.00	-400.15	360			
10XY	0.00	0.00	0			
9P	0.00	-584.11	439.6			
9X	0.00	-584.11	439.6			
9Y	0.00	-584.11	439.6			
9XY	0.00	0.00	0			
7P	0.00	-506.92	326.2			
7X	0.00	-506.92	326.2			
7Y	0.00	-506.92	326.2			
7XY	0.00	0.00	0			
7P	0.00	-256.15	52.8			
7X	0.00	-256.15	52.8			
7Y	0.00	-256.15	52.8			
7XY	0.00	0.00	0			
7P	0.00	-592.95	420			
7X	0.00	-592.95	420			
7Y	0.00	-592.95	420			
7XY	0.00	0.00	0			
4P	0.00	-96.37	26.4			
4X	0.00	-96.37	26.4			
4Y	0.00	-96.37	26.4			
4XY	0.00	0.00	0			
2P	0.00	-2.00	5			
2X	0.00	0.00	0			
2Y	0.00	0.00	0			
2XY	0.00	0.00	0			
1P	0.00	-1.78	1			
1X	0.00	0.00	0			
1Y	0.00	0.00	0			
1XY	0.00	0.00	0			
8P	0.00	-395.72	201			
8X	0.00	0.00	0			
8Y	0.00	0.00	0			
8XY	0.00	0.00	0			
10P	0.00	-240.13	121			
10X	0.00	-240.13	121			
10Y	0.00	-240.13	121			
10XY	0.00	0.00	0			
17P	0.00	-525.86	1000			
17X	0.00	-525.86	1000			
17Y	0.00	-525.86	1000			
17XY	0.00	-525.86	1000			
10P	0.00	-219.38	625			
10X	0.00	-219.38	625			
10Y	0.00	-219.38	625			
10XY	0.00	-219.38	625			
6P	0.00	-616.00	1000			
6X	0.00	0.00	0			
6Y	0.00	0.00	0			
6XY	0.00	0.00	0			
5P	0.00	-365.46	1000			
5X	0.00	-365.46	1000			
5Y	0.00	0.00	0			
5XY	0.00	0.00	0			
7P	0.00	-13.08	21.5			
7X	0.00	-13.08	21.5			
7Y	0.00	-13.08	21.5			
7XY	0.00	0.00	0			
7P	0.00	-120.52	125			
7X	0.00	-94.63	100			
7Y	0.00	-94.63	100			
7XY	0.00	0.00	0			
7P	0.00	-426.12	109.3			
7X	0.00	-253.57	60.8			
7Y	0.00	0.00	0			
7XY	0.00	0.00	0			
8P	0.00	-401.26	500			
8X	0.00	0.00	0			
8Y	0.00	0.00	0			
8XY	0.00	0.00	0			
14P	0.00	-445.10	500			
14X	0.00	0.00	0			
14Y	0.00	0.00	0			
14XY	0.00	0.00	0			
10P	0.00	-241.05	125.1			
10X	0.00	-241.05	125.1			
10Y	0.00	-241.05	125.1			
10XY	0.00	0.00	0			
17P	0.00	-66.42	17.6			
17X	0.00	0.00	0			
17Y	0.00	0.00	0			
17XY	0.00	0.00	0			
9P	0.00	-279.36	77.3			
9X	0.00	-279.36	77.3			
9Y	0.00	-279.36	77.3			
9XY	0.00	0.00	0			

With Ice

Joint Label	Force X-Dir (lbs)	Force Y-Dir (lbs)	Force Vertical (lbs)
19P	0.00	-1421.57	2235.659954
19X	0.00	-688.10	1950
19Y	0.00	-688.10	1950
19XY	0.00	-688.10	1950
16P	0.00	-727.54	489.8321759
16X	0.00	0.00	0
16Y	0.00	0.00	0
16XY	0.00	0.00	0
16P	0.00	-358.03	169.6435185
16X	0.00	0.00	0
16Y	0.00	0.00	0
16XY	0.00	0.00	0
13P	0.00	-846.42	559.6435185
13X	0.00	0.00	0
13Y	0.00	0.00	0
13XY	0.00	0.00	0
11P	0.00	-527.02	421.1944444
11X	0.00	-527.02	421.1944444
11Y	0.00	-527.02	421.1944444
11XY	0.00	0.00	0
10P	0.00	-397.28	473.1340278
10X	0.00	-397.28	473.1340278
10Y	0.00	-397.28	473.1340278
10XY	0.00	0.00	0
9P	0.00	-565.68	590.6459722
9X	0.00	-565.68	590.6459722
9Y	0.00	-565.68	590.6459722
9XY	0.00	0.00	0
7P	0.00	-483.63	470.5924074
7X	0.00	-483.63	470.5924074
7Y	0.00	-483.63	470.5924074
7XY	0.00	0.00	0
7P	0.00	-226.36	103.2677778
7X	0.00	-226.36	103.2677778
7Y	0.00	-226.36	103.2677778
7XY	0.00	0.00	0
7P	0.00	-557.42	590.2685185
7X	0.00	-557.42	590.2685185
7Y	0.00	-557.42	590.2685185
7XY	0.00	0.00	0
4P	0.00	-84.03	53.12833333
4X	0.00	-84.03	53.12833333
4Y	0.00	-84.03	53.12833333
4XY	0.00	0.00	0
2P	0.00	-2.03	6.5
2X	0.00	0.00	0
2Y	0.00	0.00	0
2XY	0.00	0.00	0
1P	0.00	-2.08	2.976851852
1X	0.00	0.00	0
1Y	0.00	0.00	0
1XY	0.00	0.00	0
8P	0.00	-390.70	306.5451389
8X	0.00	0.00	0
8Y	0.00	0.00	0
8XY	0.00	0.00	0
10P	0.00	-205.94	189.7185185
10X	0.00	-205.94	189.7185185
10Y	0.00	-205.94	189.7185185
10XY	0.00	0.00	0
17P	0.00	-532.26	1300
17X	0.00	-532.26	1300
17Y	0.00	-532.26	1300
17XY	0.00	-532.26	1300
10P	0.00	-222.05	812.5
10X	0.00	-222.05	812.5
10Y	0.00	-222.05	812.5
10XY	0.00	-222.05	812.5
6P	0.00	-623.50	1300
6X	0.00	0.00	0
6Y	0.00	0.00	0
6XY	0.00	0.00	0
5P	0.00	-369.91	1300
5X	0.00	-369.91	1300
5Y	0.00	0.00	0
5XY	0.00	0.00	0
7P	0.00	-12.09	31.515
7X	0.00	-12.09	31.515
7Y	0.00	-12.09	31.515
7XY	0.00	0.00	0
7P	0.00	-117.72	171.26625
7X	0.00	-95.79	130
7Y	0.00	-95.79	130
7XY	0.00	0.00	0
7P	0.00	-382.88	189.7177315
7X	0.00	-208.23	126.6677315
7Y	0.00	0.00	0
7XY	0.00	0.00	0
8P	0.00	-406.15	650
8X	0.00	0.00	0
8Y	0.00	0.00	0
8XY	0.00	0.00	0
14P	0.00	-450.52	650
14X	0.00	0.00	0
14Y	0.00	0.00	0
14XY	0.00	0.00	0
10P	0.00	-214.21	185.6256944
10X	0.00	-214.21	185.6256944
10Y	0.00	-214.21	185.6256944
10XY	0.00	0.00	0
17P	0.00	-75.42	34.79212963
17X	0.00	0.00	0
17Y	0.00	0.00	0
17XY	0.00	0.00	0
9P	0.00	-230.12	150.9029167
9X	0.00	-230.12	150.9029167
9Y	0.00	-230.12	150.9029167
9XY	0.00	0.00	0

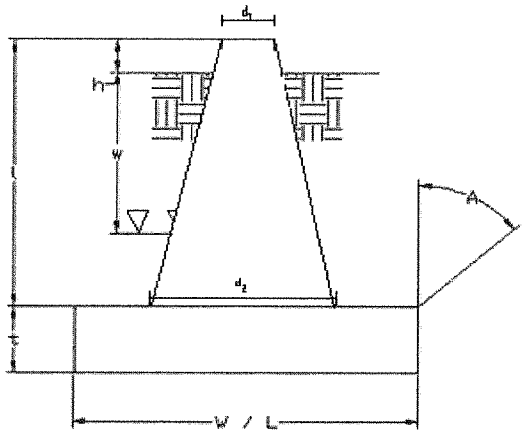
Foundation

Site No.:	88008
Engineer:	BD
Date:	03/30/15
Carrier:	T-Mobile

Design Loads (Unfactored)

Compression/Leg:	471.50	k
Uplift/Leg:	350.60	k

Face Width @ Top of Pier (d_1):	4.00	ft
Face Width @ Bottom of Pier (d_2):	7.50	ft
Total Length of Pier (l):	7.25	ft
Height of Pedestal Above Ground (h):	0.50	ft
Width of Pad (W):	21.50	ft
Length of Pad (L):	21.50	ft
Thickness of Pad (t):	2.50	ft
Water Table Depth (w):	20	ft
Unit Weight of Concrete:	150.0	pcf
Unit Weight of Soil (Above Water Table):	131.0	pcf
Unit Weight of Soil (Below Water Table):	55.0	pcf
Friction Angle of Uplift (A):	15	°
Allowable Compressive Bearing Pressure:	8700	psf



Volume Pier (Total):	247.10	ft³
Volume Pad (Total):	1155.63	ft³
Volume Soil (Total):	3429.66	ft³
Volume Pier (Buoyant):	0.00	ft³
Volume Pad (Buoyant):	0.00	ft³
Volume Soil (Buoyant):	0.00	ft³
Weight Pier:	37.07	k
Weight Pad:	173.34	k
Skin Friction:	129.00	k
Weight Soil:	449.29	k

Uplift Check

TIA Case 1: $\frac{\text{Wt. Soil} + \text{Wt. Concrete}}{2.0}$

TIA Case 2: $\frac{\text{Wt. Soil}}{2.0} + \frac{\text{Wt. Concrete}}{2.0}$

	Allowable Uplift (k)	Ratio	Result
TIA Case 1:	394.35	0.89	**OK**
TIA Case 2:	394.35	0.89	**OK**

Axial Check

Allowable Axial: Allowable Bearing Pressure * W * L

	Allowable Axial (k)	Ratio	Result
	4021.58	0.12	**OK**

Anchor Bolt Check

Bolt Description	Allowable Uplift (k)	Ratio	Result
(6) 2 1/4" A36	456.61	0.77	**OK**

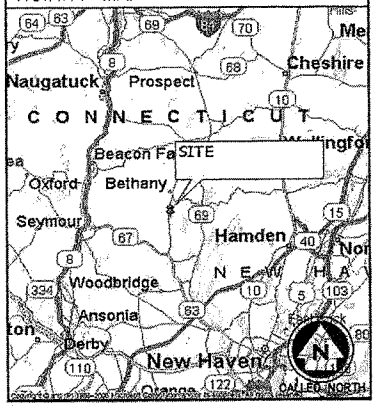
T-MOBILE NORTHEAST LLC

CTNH217A
CTNH217/ATC-BETHANY

9 MEYERS ROAD
BETHANY, CT 06524

(704E CONFIGURATION)

VICINITY MAP



DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

CALL:
"CALL BEFORE YOU DIG"
WWW.CBYD.COM
CALL 811, OR 1-800-922-4455
CALL THREE WORKING DAYS PRIOR TO DIGGING
SAFETY PRECAUTIONS SHALL BE IMPLEMENTED, IF CONSTRUCTION IS TO BE INITIATED, IN ACCORDANCE WITH CURRENT OSHA STANDARDS.

COLOR CODE FOR UTILITY LOCATIONS

ELECTRIC	– RED	SEWER	– GREEN
GAS/OIL	– YELLOW	SURVEY	– PINK
TEL/CATV	– ORANGE	PROPOSED EXCAVATION	– WHITE
WATER	– BLUE	RECLAIMED WATER	– PURPLE

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 CONSTRUCT 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 T–MOBILE REPRESENTATIVE OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO THE SUBMISSION OF THE CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK. IN THE EVENT OF DISCREPANCIES, THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXPENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.
4. THE SCOPE OF WORK SHALL INCLUDE FURNISHING OF 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 ADDENDUM 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 CONTRACT.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY PERMITS AND INSPECTIONS WHICH ARE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY, OR LOCAL GOVERNMENT AUTHORITY.
11. 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.
12. 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 PROPERTY. PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
13. THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS, AS WELL AS THE LATEST EDITIONS OF ANY PERTINENT STATE SAFETY REGULATIONS.
14. THE CONTRACTOR SHALL NOTIFY THE T–MOBILE 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 T–MOBILE REPRESENTATIVE.
15. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC., ON THE JOB.
16. THE CONTRACTOR SHALL RETURN ALL DISTURBED AREAS TO THEIR ORIGINAL CONDITION AT THE COMPLETION OF WORK.

PROJECT SUMMARY

SITE NUMBER:	CTNH217A	APPLICANT:	T–MOBILE NORTHEAST LLC 400 STREET RD BENSALEM, PA 19020
SITE NAME:	CTNH217/ATC–BETHANY		
SITE ADDRESS:	9 MEYERS ROAD BETHANY, CT 06524		
PROPERTY OWNER:	TBD	PROJECT MANAGER:	AMERICAN TOWER CORPORATION 319 QUARRY ROAD SPRING CITY, PA 19475
PARCEL:	TBD	CONTACT:	BRUCE HOFFMASTER 484–942–6339
CURRENT ZONING:	TBD		
JURISDICTION:	TBD	ARCHITECT/ENGINEER:	INFINIGY ENGINEERING 1033 WATERVLIET SHAKER ROAD ALBANY, NY 12205
ATC SITE NUMBER:	88008		
LAT./LONG.:	N 41.40475677° / W –72.999805°		
CONSTRUCTION TYPE:	–	CONTACT:	ALEX WELLER 518–690–0790
USE GROUP:	–		

PROJECT DESCRIPTION

☐ EXISTING MONOPOLE	☒ EXISTING CABINET(S)	☒ OUTDOOR
☒ EXISTING LATTICE TOWER	☐ EXISTING RBS 2106	☐ INDOOR
☐ EXISTING TRANSMISSION TOWER	☒ PROPOSED BBU	☒ EXISTING CONCRETE PAD
☐ EXISTING WATER TANK	☒ (2) PROPOSED RBS 6201	☐ EXISTING STEEL PLATFORM
☐ EXISTING BUILDING	☐ SITE SUPPORT KIT	☒ EXISTING PPC
☐ EXISTING FLAGPOLE	☐ SITE SUPPORT CABINET	☐ PANELBOARD
☐ EXISTING FORT WORTH	☒ GPS	

T–MOBILE NORTHEAST LLC PROPOSES THE MODIFICATION OF AN UNMANNED WIRELESS BROADBAND FACILITY. ADDITION OF PROPOSED LTE 700 PANEL ANTENNAS, GROUND MOUNTED RRU'S AND COAX. REUSE, GPS ANTENNA AND EXISTING EQUIPMENT CABINETS.

SHEET INDEX

T-Mobile
T-MOBILE NORTHEAST LLC
400 STREET ROAD
BENSALEM, PA 19020

INFINIGY Design, Build & Deploy
1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793

SUBMITTALS

DATE	DESCRIPTION	REVISION
4/13/18	FOR PERMIT	0

DSTC.	DATE	APP'D	REVISIONS
RFE			
RF MAP			
ZONING			
GPS			
CD/ADDM.			
SITE ACQ.			

PROJECT NO: 317-000
DRAWN BY: JLM
CHECKED BY: ASW

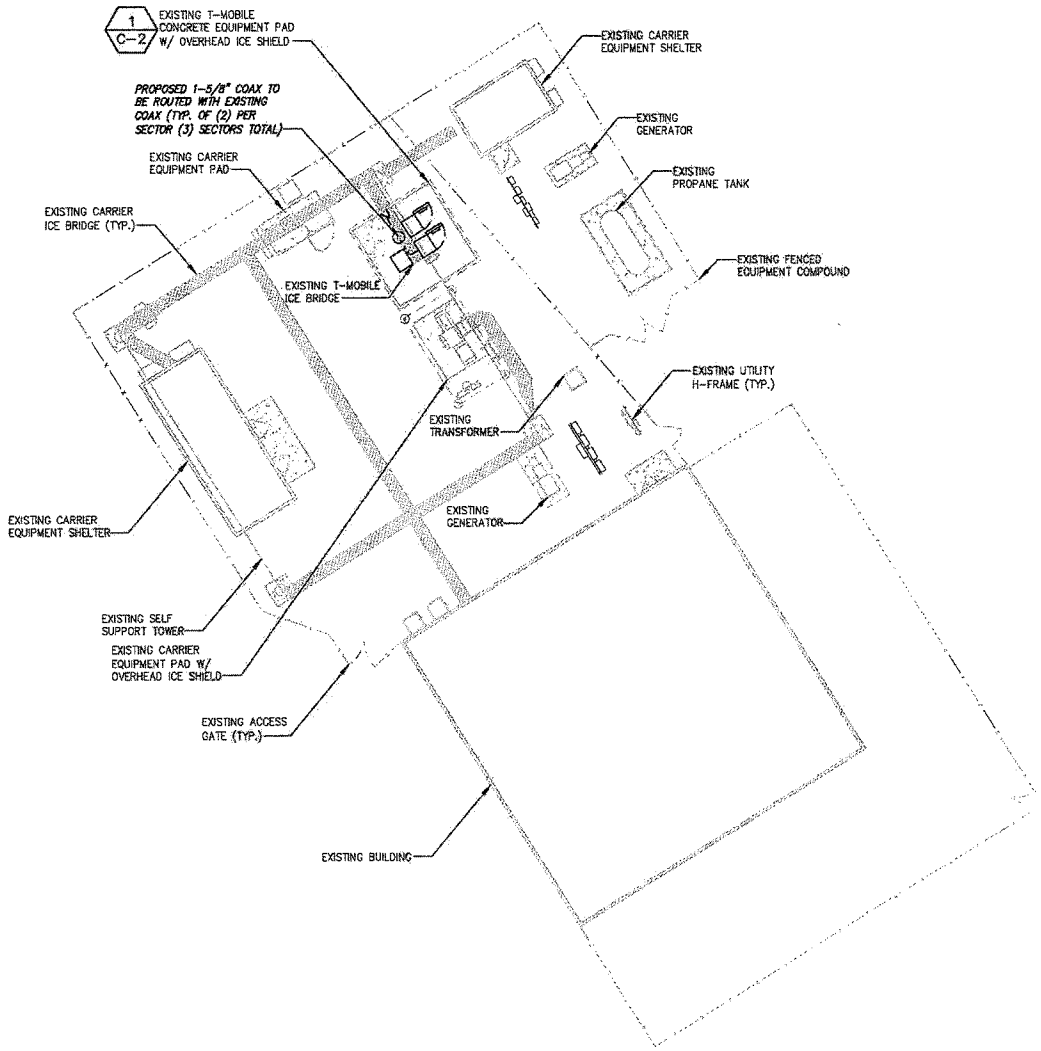
STATE OF CONNECTICUT
JOHN S. STEVENS
No. 24705
LICENSED PROFESSIONAL ENGINEER
PROFESSIONAL SEAL

NOTE: IF DRAWINGS ARE 22"x34", USE GRAPHICAL SCALE AND/OR 1/2 TIMES OF THE NOTED SCALE.

SITE NUMBER:
CTNH217A
SITE NAME:
CTNH217/ATC-BETHANY
9 MEYERS ROAD
BETHANY, CT 06524

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1



CALLED NORTH

1 C-2 COMPOUND PLAN
SCALE: AS NOTED

GENERAL SITE NOTES:

1. A COMPLETE BOUNDARY SURVEY OF THE HOST PARCEL HAS NOT BEEN PERFORMED BY INFINIGY. BOUNDARY INFORMATION IF SHOWN WAS OBTAINED FROM INFORMATION PROVIDED BY OTHERS. PROPERTY IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.
2. BASEMAPPING INFORMATION BASED ON PROVIDED INFORMATION.
3. CONTRACTOR TO FIELD VERIFY DIMENSIONS AS NECESSARY BEFORE CONSTRUCTION.
4. THE PROPOSED DEVELOPMENT DOES NOT INCLUDE SIGNS OF ADVERTISING.
5. THE PROPOSED DEVELOPMENT IS UNMANNED AND THEREFORE DOES NOT REQUIRE A MEANS OF WATER SUPPLY OR SEWAGE DISPOSAL.
6. NO LANDSCAPING WORK IS PROPOSED IN CONJUNCTION WITH THIS DEVELOPMENT OTHER THAN THAT WHICH IS SHOWN.
7. THE PROPOSED DEVELOPMENT DOES NOT INCLUDE OUTDOOR STORAGE OR ANY SOLID WASTE RECEPTACLES.
8. UTILITIES SHOWN ON PLAN ARE TAKEN FROM OWNERS RECORDS AND FIELD LOCATION OF VISIBLE SURFACE FEATURES. THE EXISTENCE, EXTENT AND EXACT HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES HAS NOT BEEN VERIFIED. ANY CONTRACTOR PERFORMING WORK ON THIS SITE MUST CONTACT MISS UTILITY AT LEAST 48 HOURS PRIOR TO COMMENCING WORK.
9. ALL OBSOLETE OR UNUSED FACILITIES SHALL BE REMOVED WITHIN 12 MONTHS OF CESSATION OF OPERATIONS.

SITE LEGEND

	SITE PROPERTY LINE
	STREET OR ROAD
— x — x —	CHAIN LINK FENCE
—o—o—o—	OPAQUE WOODEN FENCE
	TREES/SHRUBS
	TREE LINE
⊠	UTILITY POLE
(E)	EXISTING
(N)	NEW
(P)	PROPOSED
(F)	FUTURE

GRAPHIC SCALE

20' 10' 0 10' 20'

SCALE (11x17): 1" = 20'-0"
SCALE (22x34): 1" = 10'-0"

T-Mobile
T-MOBILE NORTHEAST LLC
500 STREET ROAD
SOUTHBURY, PA 18929

INFINIGY
Design. Build. Deploy.
1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793

SUBMITTALS

DATE	DESCRIPTION	REVISION
4/13/18	FOR PERMIT	0

DEPT.	DATE	APP'D	REVISIONS
RF			
RF MAN.			
ZONING			
OPS			
CONSTR.			
SITE AC.			

PROJECT NO: 317-000
DRAWN BY: JLM
CHECKED BY: ASW

STATE OF CONNECTICUT
JOHN S. STEVENS
No. 24705
LICENSED PROFESSIONAL ENGINEER

PROFESSIONAL SEAL

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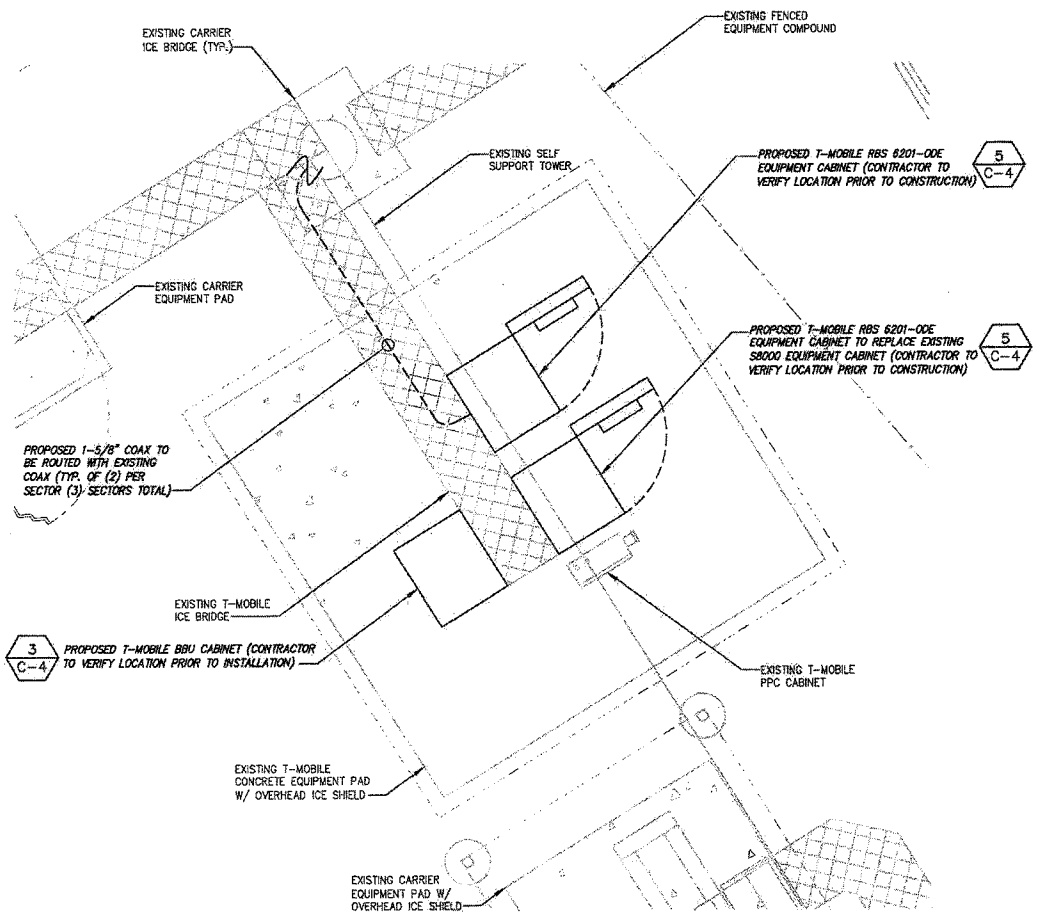
SITE NUMBER:
CTNH217A

SITE NAME:
CTNH217/ATC-BETHANY

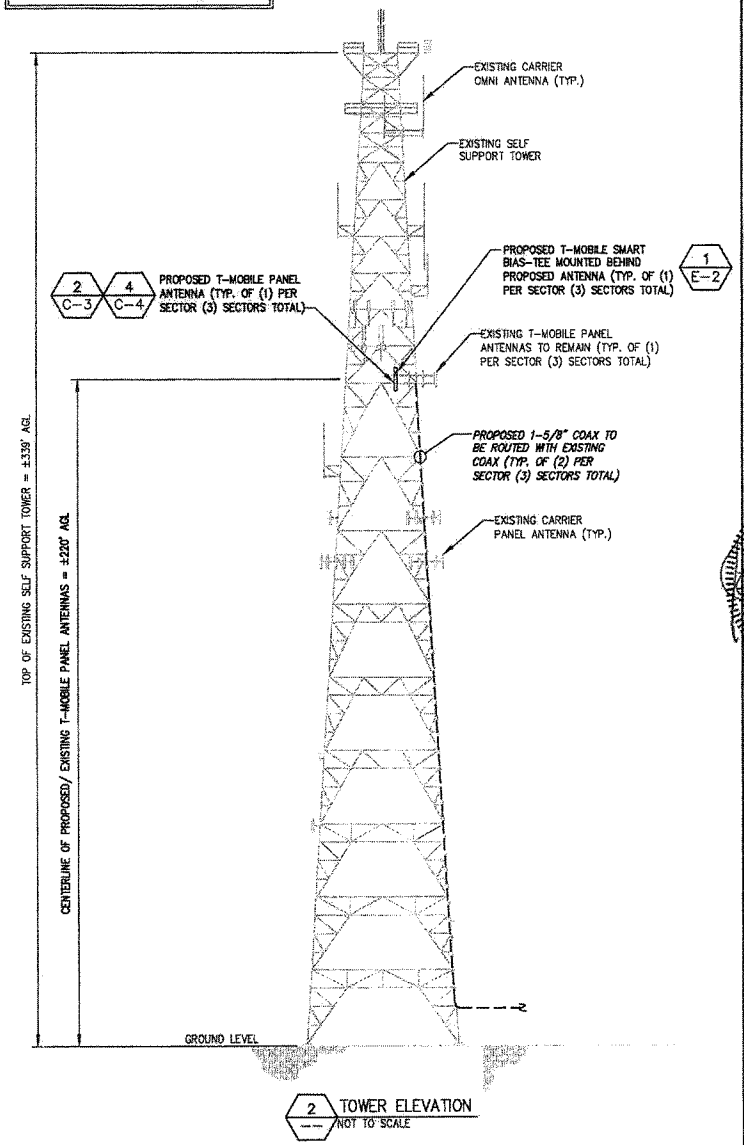
9 MEYERS ROAD
BETHANY, CT 06524

SHEET TITLE
SITE PLAN

SHEET NUMBER
C-1



NOTE:
INFINIGY ENGINEERING HAS NOT EVALUATED THE TOWER OR LOADING FOR THIS SITE, AND ASSUMES NO RESPONSIBILITY FOR ITS STRUCTURAL INTEGRITY REGARDING ITS EXISTING OR PROPOSED LOADING. FINAL INSTALLATION TO COMPLY WITH RESULTS OF PASSING STRUCTURAL ANALYSIS.



T-Mobile
T-MOBILE NORTHEAST LLC
100 STATE ROAD
SEWALL'S FALLS, NH 03301

INFINIGY
Design Build Deliver
1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793

SUBMITTALS

DATE	DESCRIPTION	REVISION
4/13/15	FOR PERMIT	0

DEPT.	DATE	APP'D	REVISIONS
RF			
RF MGR.			
ZONING			
OPS			
CONSTR.			
SITE ACQ.			

PROJECT NO: 317-000
DRAWN BY: JLM
CHECKED BY: ASW

STATE OF CONNECTICUT
JOHN S. STEVENS
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PROFESSIONAL ENGINEER

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SITE NUMBER:
CTNH217A

SITE NAME:
CTNH217/ATC-BETHANY

9 MEYERS ROAD
BETHANY, CT 06524

SHEET TITLE
COMPOUND PLAN & ELEVATION

SHEET NUMBER
C-2

SHEET 3 OF 8 SHEETS

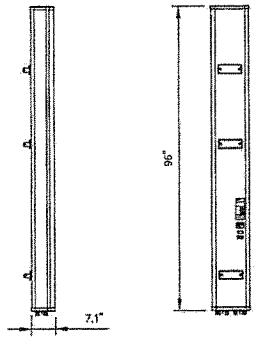
RF SYSTEM SCHEDULE (704E CONFIGURATION)

SECTOR	TECHNOLOGY	ANTENNA PORT	BAND	ANTENNA MODEL #	VENDOR	QTY (REMOVED)	QTY (NEW)	AZIMUTH	M-TILT	E-TILT	ANTENNA CENTERLINE	TMA MODEL #	VENDOR	RRU MODEL #	VENDOR	CABLE LENGTH	CABLE DIAMETER	CABLE TYPE	CABLE MODEL #	VENDOR	CABLE TAGGING	COLOR CODING	JUMPER TYPE	JUMPER TAGGING	COLOR CODING
A	GSM/LTE AWS	OPTICAL #1	B2P	APXV18-206517S-C-A20	RFS	0	0	30°	0°	2°	220'-0"	(2) S20057A1	REMEC	--	--	(2) EXISTING	1⅝"	COAX	EXISTING	N/A	---	--	COAX	---	--
	LTE 700	TBD	B12P	LNX-6515DS-VTM	COMMSCOPE	0	1	30°	0°	2°	220'-0"	--	--	--	--	(2)±285'	1⅝"	COAX	TBD	N/A	LTE 700 COAX	--	COAX	LTE 700 COAX	--
B	GSM/LTE AWS	OPTICAL #1	B2P	APXV18-206517S-C-A20	RFS	0	0	150°	0°	2°	220'-0"	(2) S20057A1	REMEC	--	--	(2) EXISTING	1⅝"	COAX	EXISTING	N/A	---	--	COAX	---	--
	LTE 700	TBD	B12P	LNX-6515DS-VTM	COMMSCOPE	0	1	150°	0°	2°	220'-0"	--	--	--	--	(2)±285'	1⅝"	COAX	TBD	N/A	LTE 700 COAX	--	COAX	LTE 700 COAX	--
C	GSM/LTE AWS	OPTICAL #1	B2P	APXV18-206517S-C-A20	RFS	0	0	270°	0°	2°	220'-0"	(2) S20057A1	REMEC	--	--	(2) EXISTING	1⅝"	COAX	EXISTING	N/A	---	--	COAX	---	--
	LTE 700	TBD	B12P	LNX-6515DS-VTM	COMMSCOPE	0	1	270°	0°	2°	220'-0"	--	--	--	--	(2)±285'	1⅝"	COAX	TBD	N/A	LTE 700 COAX	--	COAX	LTE 700 COAX	--

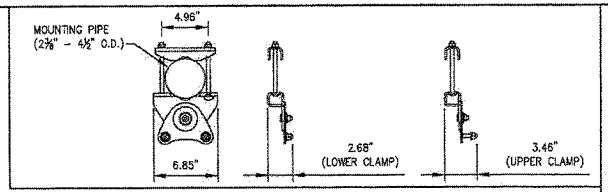
KEY

EXISTING	R - RED - GSM
PROPOSED	G - GREEN - UMTS 1900
FIBER CONNECTION	B - BLUE - UMTS AWS
	Y - YELLOW - LTE
	O - ORANGE - FIBER CABLE

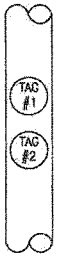
1 RF SYSTEM SCHEDULE
NOT TO SCALE



2 ANTENNA DETAIL
NOT TO SCALE



COMMSCOPE MODEL NO.:	LNX-6515DS-VTM
RADOME MATERIAL:	FIBERGLASS, UV RESISTANT
RADOME COLOR:	LIGHT GRAY
DIMENSIONS, HxWxD:	96"x11.9"x7.1" (2438 x 301 x 181 mm)
WEIGHT, W/ PRE-MOUNTED BRACKETS:	43.7 LBS (19.8 kg)
CONNECTOR:	7-16 DIN FEMALE



METALLIC TAG NOTES:

1. TWO METALLIC TAGS SHALL BE ATTACHED AT EACH END OF EVERY CABLE LONGER THAN (3) THREE FEET.
2. CABLES LESS THAN (3) THREE FEET WILL HAVE TWO METALLIC TAGS ATTACHED AT THE CENTER OF THE CABLE.
3. TAGS WILL BE FASTENED WITH STAINLESS STEEL ZIP TIES APPROPRIATE FOR CABLE DIAMETER.
4. STANDARDIZED METALLIC TAG KITS WILL BE ASSEMBLED WITH TAGS ALREADY ENGRAVED TO ACCOMODATE ALL CONFIGURATIONS.

3 METALLIC TAG DETAIL
NOT TO SCALE

T-Mobile
T-MOBILE NORTHEAST LLC
410 STREET ROAD
SOUTHAMPTON, PA 18966

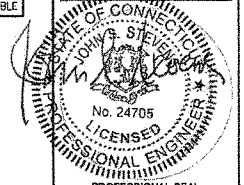
INFINIGY Design, Build, Deliver.
1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793

SUBMITTALS

DATE	DESCRIPTION	REVISION
4/13/15	FOR PERMIT	0

DEPT.	DATE	APP'D	REVISIONS
RFE			
RF MGR.			
ZONING			
OPS			
CONSTR.			
SITE AQ.			

PROJECT NO: 317-000
DRAWN BY: JLM
CHECKED BY: ASW



PROFESSIONAL SEAL

NOTE: IF DRAWINGS ARE 22"x34", USE GRAPHICAL SCALE AND/OR 1/2 TIMES OF THE NOTED SCALE.

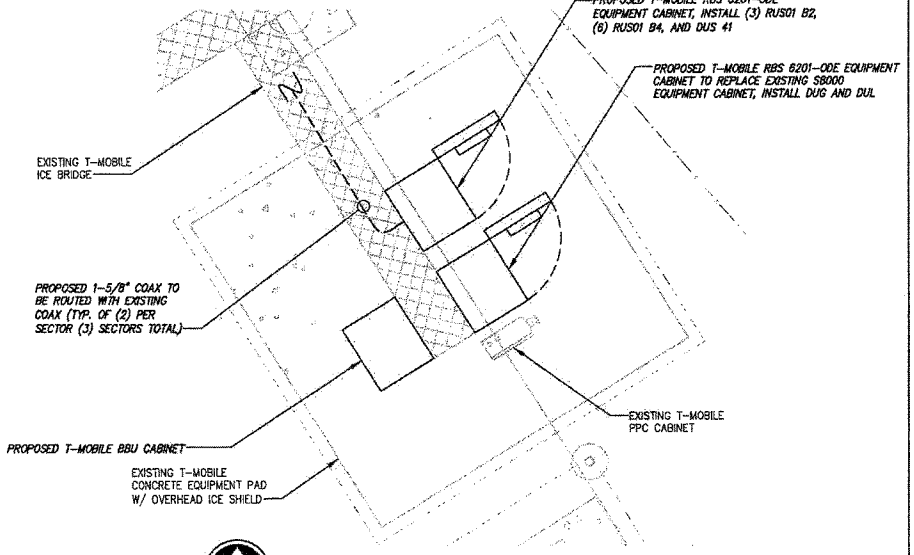
SITE NUMBER:
CTNH217A

SITE NAME:
CTNH217/ATC-BETHANY

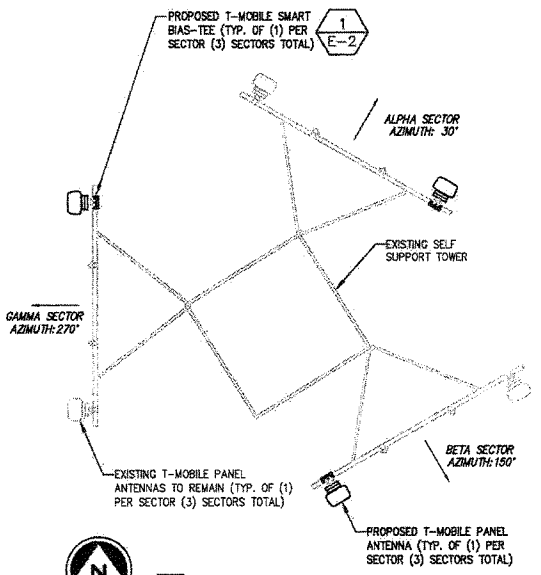
9 MEYERS ROAD
BETHANY, CT 06524

SHEET TITLE
ANTENNA DETAIL & RF SCHEDULE

SHEET NUMBER
C-3



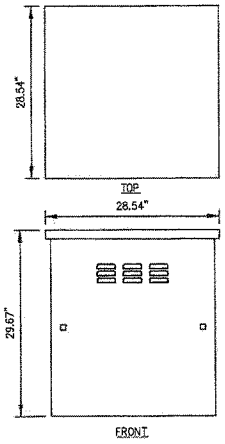
1 EQUIPMENT PAD LAYOUT PLAN
NOT TO SCALE



2 ANTENNA ORIENTATION PLAN
NOT TO SCALE

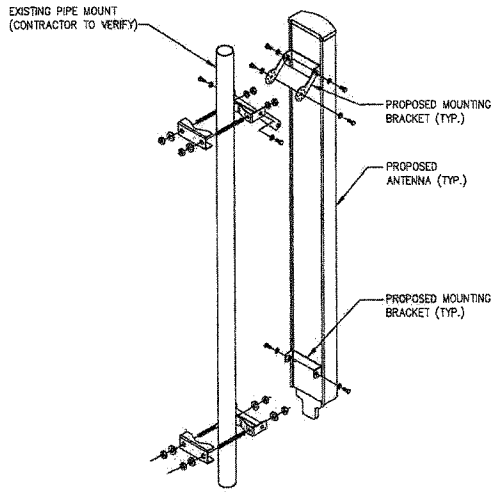
STRUCTURAL NOTES:

1. SPECIFICATIONS / CODES:
   - -CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH LATEST EDITION OF THE ACI CODE.
   - -STEEL WORK SHALL BE PERFORMED IN ACCORDANCE WITH AISC STEEL CONSTRUCTION MANUAL, 9TH EDITION.
   - -WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AMERICAN WELDING SOCIETY (AWS) D1.1-92 "STRUCTURAL WELDING" CODE-STEEL.
   - -REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI), "MANUAL OF STANDARD PRACTICE."
2. MATERIALS:
   - -CONCRETE: fc' = 3000psi. (MIN. U.N.O.)
   - -REINFORCING STEEL: ASTM A615, GRADE 60.
   - -WIRE MESH: ASTM A185.
   - -STRUCTURAL STEEL: ASTM A36.
   - -ELECTRODES FOR WELDING: E 70xx.
   - -GALVANIZING: ASTM A153 (BOLTS) OR ASTM A123 (SHAPES, PLATES).
   - -EXPANSION BOLTS: HILTI KWIK BOLT II, STAINLESS STEEL, 3/4"ø x 4 3/4" EMBEDMENT OR AN APPROVED EQUAL.



DUAL VOLTAGE BATTERY BASE MODULE CABINET
MANUFACTURER: MSF DATA SERVICES
MODEL#: DV88M-2ALM

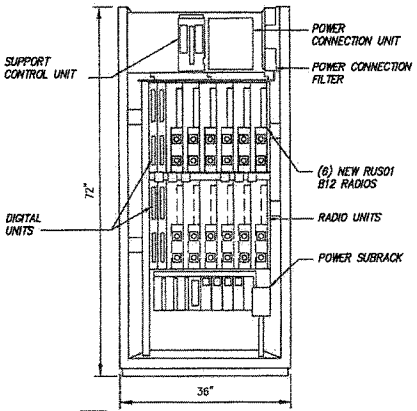
3 BBU CABINET DETAIL
NOT TO SCALE



4 MOUNTING DETAIL
NOT TO SCALE

ERICSSON - RBS 6201-ODE

CABINET COLOR:	LIGHT GRAY
DIMENSIONS (HxWxD IN):	72x36x36 IN
V1 WEIGHT (FULLY EQUIPPED):	715 LBS 340 LBS (ENCLOSURE + SUPPORT) 374 LBS (RBS 6201)
V2 WEIGHT (FULLY EQUIPPED):	1100 LBS 470 LBS (ENCLOSURE + CLIMATE SYSTEM + LOAD CENTER) 630 LBS (RBS + TRANSMISSION + SUPPORT EQUIPMENT)



5 EQUIPMENT CABINET DETAIL
NOT TO SCALE

T-Mobile
T-MOBILE NORTHEAST LLC
35E STEVENS ROAD
BERWYN, PA 19020

INFINIGY
Design, Build, Deploy.
1033 Watervliet-Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793

SUBMITTALS

DATE	DESCRIPTION	REVISION
6/13/15	FOR PERMIT	0

DEPT.	DATE	APP'D	REVISIONS
RFE			
RF ENGR.			
ZONING			
OPS			
CONSTR.			
SITE ACQ.			

PROJECT NO:	317-000
DRAWN BY:	JLM
CHECKED BY:	ASW

STATE OF CONNECTICUT
JOHN S. STEVENS
No. 24705
LICENSED PROFESSIONAL ENGINEER
PROFESSIONAL SEAL

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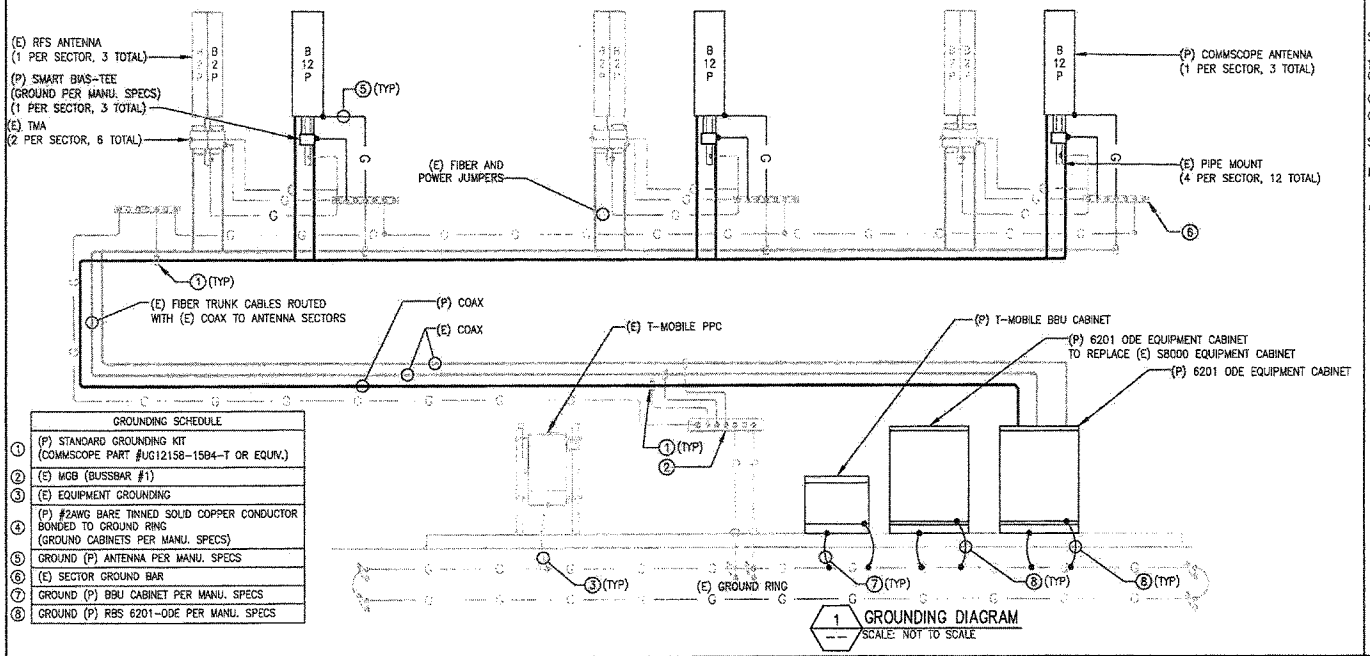
SITE NUMBER:
CTNH217A

SITE NAME:
CTNH217/ATC-BETHANY

9 MEYERS ROAD
BETHANY, CT 06524

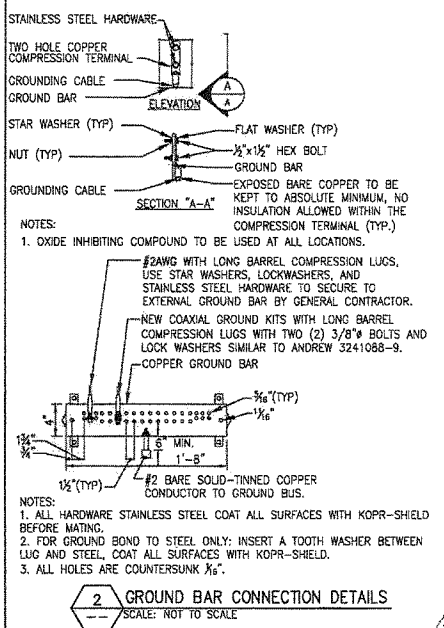
SHEET TITLE
EQUIPMENT SPECIFICATIONS

SHEET NUMBER
C-4



GROUNDING SCHEDULE	
①	(P) STANDARD GROUNDING KIT (COMMSCOPE PART #UG12158-1584-T OR EQUV.)
②	(E) MGB (BUSSBAR #1)
③	(E) EQUIPMENT GROUNDING
④	(P) #2AWG BARE TINNED SOLID COPPER CONDUCTOR BONDED TO GROUND RING (GROUND CABINETS PER MANU. SPECS)
⑤	GROUND (P) ANTENNA PER MANU. SPECS
⑥	(E) SECTOR GROUND BAR
⑦	GROUND (P) BBU CABINET PER MANU. SPECS
⑧	GROUND (P) RBS 6201-ODE PER MANU. SPECS

1 GROUNDING DIAGRAM
SCALE: NOT TO SCALE

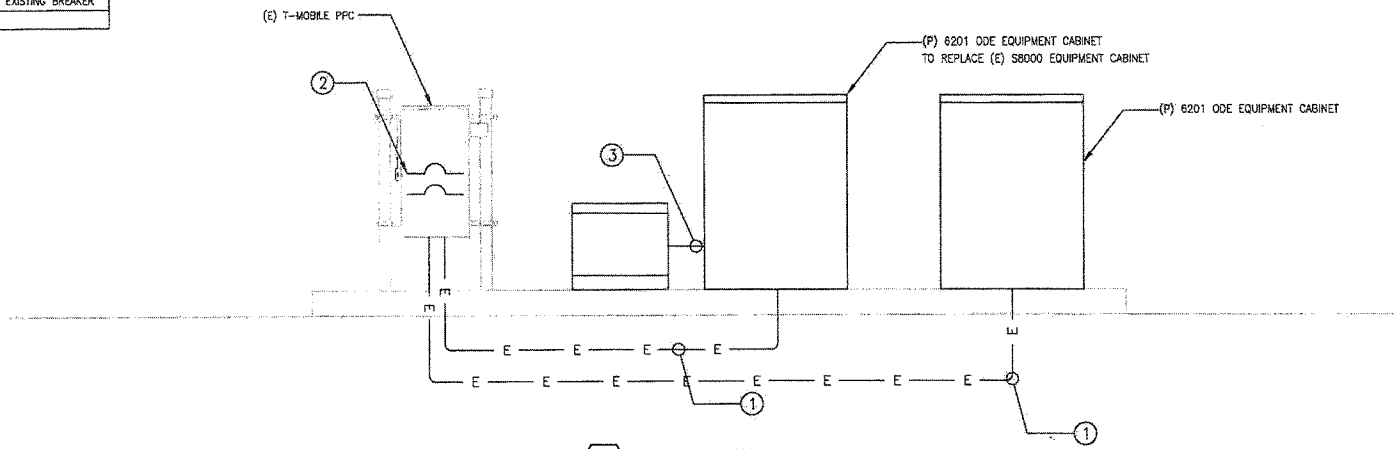


NOTES:
1. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.

NOTES:
1. ALL HARDWARE STAINLESS STEEL COAT ALL SURFACES WITH KOPR-SHIELD BEFORE MATING.
2. FOR GROUND BOND TO STEEL ONLY: INSERT A TOOTH WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH KOPR-SHIELD.
3. ALL HOLES ARE COUNTERSUNK ⅛".

2 GROUND BAR CONNECTION DETAILS
SCALE: NOT TO SCALE

CONDUIT SCHEDULE	
①	(P) UPGRADE WIRE FOR 100A BREAKER
②	(P) 100A BREAKER TO REPLACE EXISTING BREAKER
③	(P) CONDUIT



3 POWER DIAGRAM
SCALE: NOT TO SCALE

T-Mobile
T-MOBILE NORTHEAST LLC
35 STREET ROAD
BENSALEM, PA 19020

INFINIGY
Division of Dutco Tennant
1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793

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DEPT.	DATE	APP'D	REVISIONS
RFE			
RF MGR.			
ZONING			
OPS			
CONSTR.			
SITE AC.			

PROJECT NO:	317-000
DRAWN BY:	JLM
CHECKED BY:	ASW

STATE OF CONNECTICUT
JOHN S. STEVENS
No. 24705
LICENSED
PROFESSIONAL ENGINEER

PROFESSIONAL SEAL

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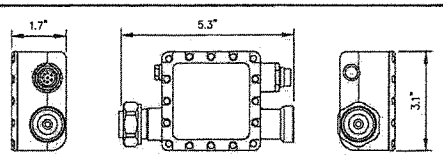
SITE NUMBER:
CTNH217A

SITE NAME:
CTNH217/ATC-BETHANY

8 MEYERS ROAD
BETHANY, CT 06524

SHEET TITLE
GROUNDING & POWER DIAGRAMS

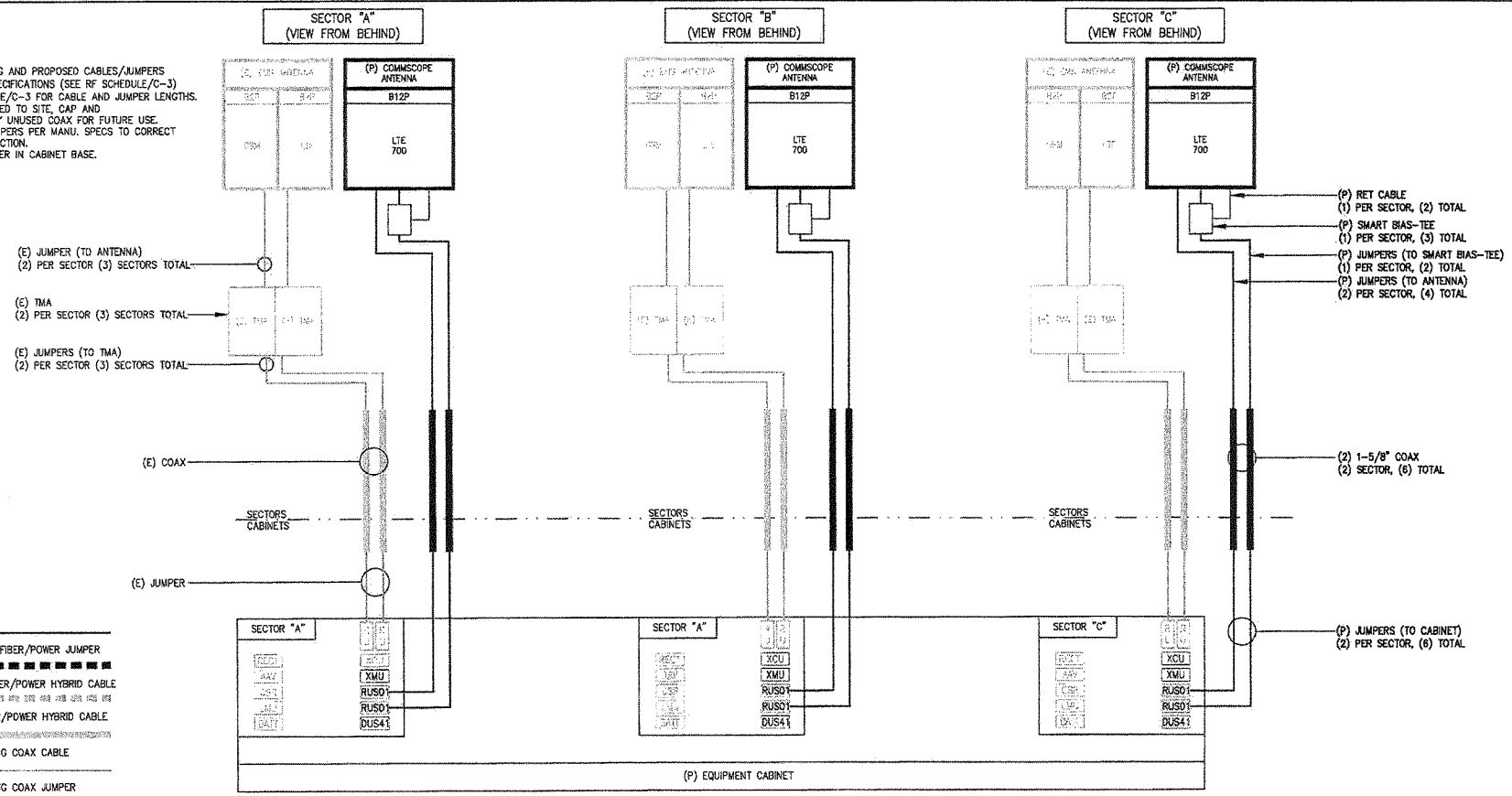
SHEET NUMBER
E-1



KATHREIN SCALA SMART BIAS TEE
WEIGHT: 3.3 LBS

1 SMART BIAS-TEE DETAIL
NOT TO SCALE

NOTES:
1. TAG ALL EXISTING AND PROPOSED CABLES/JUMPERS PER T-MOBILE SPECIFICATIONS (SEE RF SCHEDULE/C-3)
2. SEE RF SCHEDULE/C-3 FOR CABLE AND JUMPER LENGTHS.
3. IF NEW GPS ADDED TO SITE, CAP AND WEATHERPROOF ANY UNUSED COAX FOR FUTURE USE.
4. TRIM POWER JUMPERS PER MANU. SPECS TO CORRECT LENGTH FOR CONNECTION.
5. COIL EXCESS FIBER IN CABINET BASE.



PROPOSED FIBER/POWER JUMPER
PROPOSED FIBER/POWER HYBRID CABLE
EXISTING FIBER/POWER HYBRID CABLE
EXISTING COAX CABLE
EXISTING COAX JUMPER

2 704E CONFIGURATION COAX/FIBER PLUMBING DIAGRAM
NOT TO SCALE

T-Mobile
T-MOBILE NORTHEAST LLC
100 STREET POND
SEWALL'S, PA 18030

INFINIGY
Design Build Deliver
1023 Waterville Stocker Rd
Ashley, NY 18706
Office # (518) 690-0790
Fax # (518) 696-0793

SUBMITTALS		
DATE	DESCRIPTION	REVISION
4/13/15	FOR PERMIT	0

DEPT.	DATE	APP'D	REVISIONS
RFC			
RF ENG.			
ZONING			
OPS			
CONSTR.			
SITE AC.			

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DRAWN BY:	JLM
CHECKED BY:	ASW

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NOTE: IF DRAWINGS ARE 22"x34", USE GRAPHICAL SCALE AND/OR 1/2 TIMES OF THE NOTED SCALE.

SITE NUMBER:
CTNH217A

SITE NAME:
CTNH217/ATC-BETHANY

9 MEYERS ROAD
BETHANY, CT 06524

SHEET TITLE
COAX/FIBER PLUMBING DIAGRAM

SHEET NUMBER
E-2

ELECTRICAL NOTES:

WORK INCLUDED

1. INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, PLANT SERVICES AND ADMINISTRATIVE TASKS REQUIRED TO COMPLETE AND MAKE OPERABLE THE ELECTRICAL WORK SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
   A. PREPARE AND SUBMIT SHOP DRAWINGS, DIAGRAMS AND ILLUSTRATIONS.
   B. PROCURE ALL NECESSARY PERMITS AND APPROVALS AND PAY ALL REQUIRED FEES AND CHARGES IN CONNECTION WITH THE WORK OF THIS CONTRACT.
   C. SUBMIT AS-BUILT DRAWINGS, OPERATING AND MAINTENANCE INSTRUCTIONS AND MANUALS.
   D. EXECUTE ALL CUTTING, DRILLING, ROUGH AND FINISH PATCHING OF EXISTING OR NEWLY INSTALLED CONSTRUCTION REQUIRED FOR THE WORK OF THIS CONTRACT. FOR SLAB PENETRATIONS THROUGH POST TENSION SLABS, X-RAY EXACT AREA OF PENETRATION PRIOR TO PERFORMING WORK. COORDINATE ALL X-RAY WORK WITH BUILDING ENGINEER.
   E. PROVIDE HANGERS, SUPPORTS, FOUNDATIONS, STRUCTURAL FRAMING SUPPORTS, AND BASES FOR CONDUIT AND EQUIPMENT PROVIDED OR INSTALLED UNDER THE WORK OF HIS CONTRACT. PROVIDE COUNTER FLASHING, SLEEVES AND SEALS FOR FLOOR AND WALL PENETRATIONS.
   F. MAINTAIN ALL EXISTING ELECTRICAL SERVICES IN THE BUILDING AREAS NOT AFFECTED BY THE ALTERATION DURING THE PROGRESS OF THE WORK INCLUDING PROVIDING ALL TEMPORARY JUMPERS, CONDUITS, CAPS, PROTECTIVE DEVICES, CONNECTIONS AND EQUIPMENT REQUIRED. PROVIDE TEMPORARY LIGHT AND POWER FOR CONSTRUCTION PURPOSES.
2. IT IS THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS TO CALL FOR AN INSTALLATION THAT IS COMPLETE IN EVERY RESPECT. IT IS NOT THE INTENT TO GIVE EVERY DETAIL ON THE DRAWINGS AND IN THE SPECIFICATIONS. IF AN ITEM OF WORK IS INDICATED IN THE DRAWINGS, IT IS CONSIDERED SUFFICIENT FOR INCLUSION IN THE CONTRACT. FURNISH AND INSTALL ALL MATERIAL AND EQUIPMENT USUALLY FURNISHED OR NEEDED TO MAKE A COMPLETE INSTALLATION WHETHER OR NOT SPECIFICALLY MENTIONED IN THE CONTRACT DOCUMENTS.

GENERAL REQUIREMENTS

1. PROVIDE ALL WORK IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND LOCAL AND STATE ELECTRICAL CODES.
2. THE ELECTRICAL PLANS ARE DIAGRAMMATIC ONLY. REFER TO THE ARCHITECTURAL PLANS FOR THE EXACT DIMENSIONS OF THE BUILDING.
3. LOAD CALCULATIONS ARE BASED ON EXISTING BUILDING INFORMATION/DRAWINGS PROVIDED TO ENGINEERING. CONTRACTOR IS TO VERIFY ALL EXISTING RATINGS AND LOADS PRIOR TO PURCHASING OF SPECIFIED EQUIPMENT FOR COMPLIANCE TO NEC. CONTRACTOR TO NOTIFY ENGINEER OF ANY DISCREPANCIES AND REQUEST FURTHER DIRECTION BY ENGINEER.
4. EXISTING BUILDING EQUIPMENT IS NOTED ON THE DRAWINGS. NEW OR RELOCATED EQUIPMENT IS SHOWN WITH SOLID LINES. FUTURE EQUIPMENT (NOT IN THIS CONTRACT) IS DEPICTED WITH SHADED LINES. REQUEST CLARIFICATION OF DRAWINGS OR OF SPECIFICATIONS PRIOR TO PRICING OR INSTALLATION.
5. GENERAL
   A. AFTER CAREFULLY STUDYING THE DRAWINGS AND SPECIFICATIONS, AND BEFORE SUBMITTING THE PROPOSAL, MAKE A MANDATORY SITE VISIT TO ASCERTAIN CONDITIONS OF THE SITE, AND THE NATURE AND EXACT QUANTITY OF WORK TO BE PERFORMED. NO EXTRA COMPENSATION WILL BE ALLOWED FOR FAILURE TO NOTIFY THE OWNER, IN WRITING, OF ANY DISCREPANCIES THAT MAY HAVE BEEN NOTED BETWEEN THE EXISTING CONDITIONS AND THE DRAWINGS AND SPECIFICATIONS.
   B. VERIFY ALL MEASUREMENTS AT THE SITE AND BE RESPONSIBLE FOR CORRECTNESS OF SAME.
6. QUALITY, WORKMANSHIP, MATERIALS AND SAFETY
   A. PROVIDE NEW MATERIALS AND EQUIPMENT OF A DOMESTIC MANUFACTURER BY THOSE REGULARLY ENGAGED IN THE PRODUCTION AND MANUFACTURE OF SPECIFIED MATERIALS AND EQUIPMENT. WHERE UL, OR OTHER AGENCY, HAS ESTABLISHED STANDARDS FOR MATERIALS, PROVIDE MATERIALS WHICH ARE LISTED AND LABELED ACCORDINGLY. THE COMMERCIALLY STANDARD ITEMS OF EQUIPMENT AND THE SPECIFIC NAMES MENTIONED HEREIN ARE INTENDED FOR THE PROPER FUNCTIONING OF THE WORK.
   B. WORK SHALL BE PERFORMED BY WORKMEN SKILLED IN THE TRADE REQUIRED FOR THE WORK. INSTALL MATERIALS AND EQUIPMENT TO PRESENT A NEAT APPEARANCE WHEN COMPLETED AND IN ACCORDANCE WITH THE APPROVED RECOMMENDATIONS OF THE MANUFACTURER AND IN ACCORDANCE WITH CONTRACT DOCUMENTS.
   C. PROVIDE LABOR, MATERIALS, APPARATUS AND APPLIANCES ESSENTIAL TO THE FUNCTIONING OF THE SYSTEMS DESCRIBED OR INDICATED HEREIN, OR WHICH MAY BE REASONABLY IMPLIED AS ESSENTIAL WHENEVER MENTIONED IN THE CONTRACT DOCUMENT OR NOT.
   D. MAKE WRITTEN REQUESTS FOR SUPPLEMENTARY INSTRUCTIONS TO ARCHITECT/ENGINEER IN CASE OF DOUBT AS TO WORK INTENDED OR IN EVENT OF NEED FOR EXPLANATION THEREOF.
   E. PERFORMANCE AND MATERIAL REQUIREMENTS SCHEDULED OR SPECIFIED ARE MINIMUM STANDARD ACCEPTABLE. THE RIGHT TO JUDGE THE QUALITY OF EQUIPMENT THAT DEVIATES FROM THE CONTRACT DOCUMENT REMAINS SOLELY WITH ARCHITECT/ENGINEER. CONTRACT DOCUMENT OR NOT.

GUARANTEE

1. GUARANTEE MATERIALS, PARTS AND LABOR FOR WORK FOR ONE YEAR FROM THE DATE OF ISSUANCE OF OCCUPANCY PERMIT. DURING THAT PERIOD, MAKE GOOD FAULTS OR IMPERFECTIONS THAT MAY ARISE DUE TO DEFECTS OR OMISSIONS IN MATERIALS OR WORKMANSHIP WITH NO ADDITIONAL COMPENSATION AND AS DIRECTED BY ARCHITECT.

CLEANING

1. REMOVE ALL CONSTRUCTION DEBRIS RESULTING FROM THE WORK.
2. CLEAN EQUIPMENT AND SYSTEMS FOLLOWING THE COMPLETION OF THE PROJECT TO THE SATISFACTION OF THE ENGINEER.

COORDINATION AND SUPERVISION

1. CAREFULLY LAY OUT ALL WORK IN ADVANCE TO AVOID UNNECESSARY CUTTING, CHANNELING, CHASING OR DRILLING OF FLOORS, WALLS, PARTITIONS, CEILINGS OR OTHER SURFACES. WHERE SUCH WORK IS NECESSARY, HOWEVER, PATCH AND REPAIR THE WORK IN AN APPROVED MANNER BY SKILLED MECHANICS AT NO ADDITIONAL COST TO THE OWNER. RENDER FULL COOPERATION TO OTHER TRADES WHERE WORK WILL BE INSTALLED IN CLOSE PROXIMITY TO WORK OF OTHER TRADES. ASSIST IN WORKING OUT SPACE CONDITIONS. IF WORK IS INSTALLED BEFORE COORDINATION WITH OTHER TRADES, OR CAUSES INTERFERENCE, MAKE CHANGES NECESSARY TO CORRECT CONDITIONS WITHOUT EXTRA CHARGE.

SUBMITTALS

1. AS-BUILT DRAWINGS:
   A. UPON COMPLETION OF THE WORK, FURNISH TO THE OWNER "AS-BUILT" DRAWINGS.
2. SERVICE MANUALS:
   A. UPON COMPLETION OF THE WORK, FULLY INSTRUCT T-MOBILE AS TO THE OPERATION AND MAINTENANCE OF ALL MATERIAL, EQUIPMENT AND SYSTEMS.
   B. PROVIDE 3 COMPLETE BOUND SETS OF INSTRUCTIONS FOR OPERATING AND MAINTAINING ALL SYSTEMS AND EQUIPMENT.

CUTTING AND PATCHING

1. PROVIDE ALL CUTTING, DRILLING, ROUGH AND FINISH PATCHING REQUIRED TO COMPLETE THE WORK.
2. OBTAIN OWNER APPROVAL PRIOR TO CUTTING THROUGH FLOORS OR WALLS FOR PIPING OR CONDUIT.

TESTS, INSPECTION AND APPROVAL

1. BEFORE ENERGIZING ANY ELECTRICAL INSTALLATION, INSPECT EACH UNIT IN DETAIL. TIGHTEN ALL BOLTS AND CONNECTIONS (TORQUE-TIGHTEN WHERE REQUIRED) AND DETERMINE THAT ALL COMPONENTS ARE ALIGNED, AND THE EQUIPMENT IS IN SAFE, OPERATIONAL CONDITION.
2. PROVIDE THE COMPLETE ELECTRICAL SYSTEM FREE OF GROUND FAULTS AND SHORT CIRCUITS SUCH THAT THE SYSTEM WILL OPERATE SATISFACTORILY UNDER FULL LOAD CONDITIONS, WITHOUT EXCESSIVE HEATING AT ANY POINT IN THE SYSTEM.

SPECIAL REQUIREMENTS

1. DO NOT LEAVE ANY WORK INCOMPLETE NOR ANY HAZARDOUS SITUATIONS CREATED WHICH WILL AFFECT THE LIFE OR SAFETY OF THE PUBLIC AND/OR BUILDING OCCUPANTS. DO NOT INTERFERE WITH OR CUTOFF ANY OF THE EXISTING SERVICES WITHOUT THE OWNER'S WRITTEN PERMISSION.
2. WHEN NECESSARY TO TEMPORARILY DISCONNECT ANY EXISTING BUILDING UTILITIES AND SERVICE SYSTEMS, INCLUDING FEEDER OR BRANCH CIRCUITRY SUPPLYING EXISTING FACILITIES, CONFER WITH THE OWNER AND ARRANGE THE PERIOD OF INTERRUPTION FOR A TIME MUTUALLY AGREED UPON. SHUTDOWN NOTE: SCHEDULE AND NOTIFY OWNER 48 HOURS PRIOR TO SHUTDOWN. ALL SHUTDOWN WORK TO BE SCHEDULED AT A TIME CONVENIENT TO OWNER.

GROUNDING

1. ROUTE ALL GROUNDING CONDUCTORS AS SHOWN ON CONDUIT/GROUNDING RISER.
2. ROUTE 500 KCMIL CU. THHN CONDUCTOR FROM THE MGB LOCATION TO BUILDING STEEL. VERIFY BUILDING STEEL IS EFFECTIVELY GROUNDED PER NEC TO THE MAIN SERVICE GROUNDING ELECTRODE CONDUCTOR (GEC).
3. MAKE ALL GROUND CONNECTIONS FROM MGB TO ELECTRICAL EQUIPMENT WITH 2 HOLE, CRIMP TYPE, BURNDY COMPRESSION TERMINATIONS, SIZED AS REQUIRED.
4. USE 1 HOLE, CRIMP TYPE, BURNDY COMPRESSIONS TERMINATIONS, SIZED AS REQUIRED, AT EQUIPMENT GROUND CONNECTIONS.
5. HIRE AN INDEPENDENT LAB TO PERFORM THE SPECIFIED OHMS TESTING. PROVIDE 4 SETS OF THE CERTIFIED DOCUMENTS TO THE OWNER FOR VERIFICATION PRIOR TO THE PROJECT COMPLETION.

RACEWAYS

1. ALL WIRING TO BE INSTALLED IN CONDUIT SYSTEMS IN ACCORDANCE WITH THE FOLLOWING:
   A. EXTERIOR FEEDERS AND CONTROL, WHERE UNDERGROUND, TO BE IN SCH 40 PVC.
   B. EXTERIOR, ABOVE GROUND POWER CONDUITS TO BE GALVANIZED RIGID STEEL (RGS).
   C. ALL TELECOMMUNICATION CONDUITS, INTERIOR/EXTERIOR, TO BE EMT.
   D. INSTALL PULL ROPES IN ALL NEW EMPTY CONDUITS INSTALLED ON THIS PROJECT.
   E. ALL TELCOM CONDUITS AND PULL BOXES INSTALLED ON THIS PROJECT TO BE LABELED "T-MOBILE". OWNER WILL PROVIDE LABELS FOR CONTRACTOR TO INSTALL.
   F. INTERIOR FEEDERS TO BE INSTALLED IN E.M.T. WITH STEEL COMPRESSION FITTINGS.
   G. MINIMUM SIZE CONDUIT TO BE ¾" TRADE SIZE UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
   H. FINAL CONNECTIONS TO MOTORS AND VIBRATING EQUIPMENT TO BE INSTALLED IN LIQUID-TIGHT FLEXIBLE METAL CONDUIT.
   I. CONDUIT TO BE RUN CONCEALED IN CEILINGS, FINISHED AREAS OR DRYWALL PARTITIONS, UNLESS OTHERWISE NOTED.
   J. THE ROUTING OF CONDUITS INDICATED ON THE DRAWINGS IS DIAGRAMMATIC. BEFORE INSTALLING ANY WORK, EXAMINE THE WORKING LAYOUTS AND SHOP DRAWINGS OF THE OTHER TRADES TO DETERMINE THE EXACT LOCATIONS AND CLEARANCES.
   K. ALL EXTERIOR MOUNTING HARDWARE TO BE GALVANIZED STEEL. COORDINATE WITH BUILDING ENGINEER PRIOR TO ATTACHING TO BUILDING STRUCTURE.

RACEWAYS CONT'D

   L. PENETRATIONS OF WALLS, FLOORS AND ROOFS, FOR THE PASSAGE OF ELECTRICAL RACEWAYS, TO BE PROPERLY SEALED AFTER INSTALLATION OF RACEWAYS SO AS TO MAINTAIN THE STRUCTURAL OR WATERPROOF INTEGRITY OF THE WALL, FLOOR OR ROOF SYSTEM TO BE PENETRATED. SEAL ALL CONDUIT PENETRATIONS THROUGH FIRE OR SMOKE RATED WALLS, CEILINGS OR SMOKE TIGHT CORRIDOR PARTITIONS TO MAINTAIN PROPER RATING OF WALL OR CEILING.
   M. PROVIDE ALL CONDUIT ENDS WITH INSULATED METALLIC GROUNDING BUSHINGS.
   N. CONDUIT TO BE SUPPORTED AT MAXIMUM DISTANCE OF 8'-0", OR AS REQUIRED BY NEC, IN HORIZONTAL AND VERTICAL DIRECTIONS.
   O. PROVIDE STAINLESS STEEL BLANK COVER PLATES FOR ALL JUNCTION BOXES AND/OR OUTLET BOXES NOT USED IN EXPOSED AREAS. PROVIDE ALL OTHER UNUSED BOXES WITH STANDARD STEEL COVER PLATES.
   P. WHERE APPLICABLE, PROVIDE ROOFTOP CONDUIT SUPPORT SYSTEM, CONFORMING TO ROOFTOP WARRANTY REQUIREMENTS, PER BUILDING.

WIRES AND CABLES

1. CONTRACTOR TO COORDINATE WITH EQUIPMENT SUPPLIER AND VENDOR FOR EXACT EQUIPMENT OVER-CURRENT PROTECTION VOLTAGE, WIRE SIZE AND PLUG CONFIGURATION, IF APPLICABLE, PRIOR TO BID.
2. ALL EQUIPMENT/DEVICES TO BE PROVIDED WITH INSULATED GROUND CONDUCTOR.
3. ALL WIRE AND CABLE TO BE 600VOLT, COPPER, WITH THWN/THHN INSULATION, EXCEPT AS NOTED.
4. WIRE FOR POWER AND LIGHTING WILL NOT BE LESS THAN NO. 12AWG. ALL WIRE NO. 8 AND LARGER TO BE STRANDED.
5. CONTROL WIRING IS NOT TO BE LESS THAN NO. 14AWG, FLEXIBLE IN SINGLE CONDUCTORS OR MULTI-CONDUCTOR CABLES. CONTROL WIRING WILL CONSIST OF MULTI-CONDUCTOR CABLES WHEREVER POSSIBLE. CABLES TO BE PROVIDED WITH AN OVERALL FLAME-RETARDANT, EXTRUDED JACKET AND RATED FOR PLENUM USE. ALL CONTROL WIRE TO BE 600VOLT RATED.
6. WIRE PREVIOUSLY PULLED INTO CONDUIT IS CONSIDERED USED AND IS NOT TO BE RE-PULLED.
7. HOME RUNS AND BRANCH CIRCUIT WIRING FOR 20A, 120V CIRCUITS:

LENGTH (FT.)	HOME RUN WIRE SIZE
0 TO 50	NO. 12
51 TO 100	NO. 10
101 TO 150	NO. 8

8. VOLTAGE DROP IS NOT TO EXCEED 3%.
9. MAKE ALL CONNECTIONS WITH UL APPROVED, SOLDERLESS, PRESSURE TYPE INSULATED CONNECTORS: SCOTCHLOK OR AND APPROVED EQUAL.

WIRING DEVICES

1. ALL RECEPTACLES INSTALLED IN THIS PROJECT TO BE GROUNDING TYPE, WITH GROUNDING PIN SLOT CONNECTED TO DEVICE GROUND SCREW FOR GROUND WIRE CONNECTION.

DISCONNECT SWITCHES

1. DISCONNECT SWITCHES TO BE VOLTAGE-RATED TO SUIT THE CHARACTERISTICS OF THE SYSTEM FROM WHICH THEY ARE SUPPLIED.
2. PROVIDE HEAVY-DUTY, METAL-ENCLOSED, EXTERNALLY-OPERATED DISCONNECT SWITCHES, FUSED OR UNFUSED, OF SUCH TYPE AND SIZE AS REQUIRED TO PROPERLY PROTECT OR DISCONNECT THE LOAD FOR WHICH THEY ARE INTENDED.
3. PROVIDE NEMA 1 DISCONNECT SWITCHES FOR INTERIOR INSTALLATION, NEMA 3R FOR EXTERIOR INSTALLATION.
4. DISCONNECT SWITCHES TO BE MANUFACTURED BY:
   A. GENERAL ELECTRIC COMPANY
   B. SQUARE-D
5. PROVIDE RK-1 TYPE FUSES, UNLESS NOTED OTHERWISE.

INSTALLATION

1. INSTALL DISCONNECT SWITCHES WHERE INDICATED ON DRAWINGS.
2. INSTALL FUSES IN FUSIBLE DISCONNECT SWITCHES. FUSES MUST MATCH IN TYPE AND RATING.
3. FUSES TO BE MOUNTED SO THAT THE LABELS SHOWING THEIR RATINGS CAN BE READ WITHOUT REQUIRING FUSE REMOVAL.
4. FURNISH AND DEPOSIT SPARE FUSES AT THE JOB SITE AS FOLLOWS:
   A. THREE SPARES FOR EACH TYPE AND SIZE, IN EXCESS OF 60A, USED FOR INITIAL FUSING.
   B. TEN PERCENT SPARES FOR EACH TYPE AND SIZE, UP TO AND INCLUDING 60A, USED FOR INITIAL FUSING, IN CASE WILL LESS THAN THREE FUSES OF ONE PARTICULAR TYPE AND SIZE BE FURNISHED.

GENERAL NOTES:

INTENT

1. THESE SPECIFICATIONS AND CONSTRUCTION DRAWINGS ACCOMPANYING THEM DESCRIBE THE WORK TO BE DONE AND THE MATERIALS TO BE FURNISHED FOR CONSTRUCTION.
2. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO BE FULLY EXPLANATORY AND SUPPLEMENTARY. HOWEVER, SHOULD ANYTHING BE SHOWN, INDICATED, OR SPECIFIED ON ONE AND NOT THE OTHER, IT SHALL BE DONE THE SAME AS IF SHOWN, INDICATED OR SPECIFIED IN BOTH.
3. THE INTENTION OF THE DOCUMENTS IS TO INCLUDE ALL LABOR AND MATERIALS REASONABLY NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK AS STIPULATED IN THE CONTRACT.
4. THE PURPOSE OF THE SPECIFICATIONS IS TO INTERPRET THE INTENT OF THE DRAWINGS AND TO DESIGNATE THE METHOD OF THE PROCEDURE, TYPE AND QUALITY OF MATERIALS REQUIRED TO COMPLETE THE WORK.
5. MINOR DEVIATIONS FROM THE DESIGN LAYOUT ARE ANTICIPATED AND SHALL BE CONSIDERED AS PART OF THE WORK. NO CHANGES THAT ALTER THE CHARACTER OF THE WORK WILL BE MADE OR PERMITTED BY THE OWNER WITHOUT ISSUING A CHANGE ORDER.

CONFLICTS

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATIONS OF ALL MEASUREMENTS AT THE SITE BEFORE ORDERING ANY MATERIALS OR DOING ANY WORK. NO EXTRA CHARGE OR COMPENSATION SHALL BE ALLOWED DUE TO DIFFERENCE BETWEEN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE CONSTRUCTION DRAWINGS. ANY SUCH DISCREPANCY IN DIMENSION WHICH MAY BE FOUND SHALL BE SUBMITTED TO THE OWNER FOR CONSIDERATION BEFORE THE CONTRACTOR PROCEEDS WITH THE WORK IN THE AFFECTED AREAS.
2. THE BIDDER, IF AWARDED THE CONTRACT, WILL NOT BE ALLOWED ANY EXTRA COMPENSATION BY REASON OF ANY MATTER OR THING CONCERNING SUCH BIDDER MIGHT HAVE FULLY INFORMED THEMSELVES PRIOR TO THE BIDDING.
3. NO PLEA OF IGNORANCE OF CONDITIONS THAT EXIST, OR OF DIFFICULTIES OR CONDITIONS THAT MAY BE ENCOUNTERED, OR OF ANY OTHER RELEVANT MATTER CONCERNING THE WORK TO BE PERFORMED IN THE EXECUTION OF THE WORK WILL BE ACCEPTED AS AN EXCUSE FOR ANY FAILURE OR OMISSION ON THE PART OF THE CONTRACTOR TO FULFILL EVERY DETAIL OF ALL THE REQUIREMENTS OF THE CONTRACT DOCUMENTS GOVERNING THE WORK.

CONTRACTS AND WARRANTIES

1. CONTRACTOR IS RESPONSIBLE FOR APPLICATION AND PAYMENT OF CONTRACTOR LICENSES AND BONDS.
2. SEE MASTER CONTRACTION SERVICES AGREEMENT FOR ADDITIONAL DETAILS.

STORAGE

1. ALL MATERIALS MUST BE STORED IN A LEVEL AND DRY FASHION AND IN A MANNER THAT DOES NOT NECESSARILY OBSTRUCT THE FLOW OF OTHER WORK. ANY STORAGE METHOD MUST MEET ALL RECOMMENDATIONS OF THE ASSOCIATED MANUFACTURER.

CLEANUP

1. THE CONTRACTORS SHALL, AT ALL TIMES, KEEP THE SITE FREE FROM ACCUMULATION OF WASTE MATERIALS OR RUBBISH CAUSED BY THEIR EMPLOYEES AT WORK AND AT THE COMPLETION OF THE WORK. THEY SHALL REMOVE ALL RUBBISH FROM AND ABOUT THE BUILDING AREA, INCLUDING ALL THEIR TOOLS, SCAFFOLDING AND SURPLUS MATERIALS AND SHALL LEAVE THEIR WORK CLEAN AND READY TO USE.
2. EXTERIOR
   A. VISUALLY INSPECT EXTERIOR SURFACES AND REMOVE ALL TRACES OF SOIL, WASTE MATERIALS, SMUDGES AND OTHER FOREIGN MATTER.
   B. REMOVE ALL TRACES OF SPLASHED MATERIALS FROM ADJACENT SURFACES.
   C. IF NECESSARY, TO ACHIEVE A UNIFORM DEGREE OF CLEANLINESS, HOSE DOWN THE EXTERIOR OF THE STRUCTURE.
3. INTERIOR
   A. VISUALLY INSPECT INTERIOR SURFACE AND REMOVE ALL TRACES OF SOIL, WASTE MATERIALS, SMUDGES AND OTHER FOREIGN MATTER FROM WALLS, FLOOR, AND CEILING.
   B. REMOVE ALL TRACES OF SPLASHED MATERIALS FROM ADJACENT SURFACES.
   C. REMOVE PAINT DROPPINGS, SPOTS, STAINS, AND DIRT FROM FINISHED SURFACES.

CHANGE ORDER PROCEDURE:

1. REFER TO SECTION 17 OF SIGNED MCSA: SEE PROFESSIONAL SERVICE AGREEMENT FOR MCSA.

RELATED DOCUMENTS AND COORDINATION

1. GENERAL CARPENTRY, ELECTRICAL AND ANTENNA DRAWINGS ARE INTERRELATED. IN PERFORMANCE OF THE WORK, THE CONTRACTOR MUST REFER TO ALL DRAWINGS. ALL COORDINATION TO BE THE RESPONSIBILITY OF THE CONTRACTOR.

SHOP DRAWINGS

1. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AS REQUIRED AND LISTED IN THESE SPECIFICATIONS TO THE OWNER FOR APPROVAL.
2. ALL SHOP DRAWINGS SHALL BE REVIEWED, CHECKED AND CORRECTED BY CONTRACTOR PRIOR TO SUBMITTAL TO THE OWNER.

PRODUCTS AND SUBSTITUTIONS

1. SUBMIT 3 COPIES OF EACH REQUEST FOR SUBSTITUTION. IN EACH REQUEST, IDENTIFY THE PRODUCT OR FABRICATION OR INSTALLATION METHOD TO BE REPLACED BY THE SUBSTITUTION. INCLUDE RELATED SPECIFICATION SECTION AND DRAWING NUMBERS AND COMPLETE DOCUMENTATION SHOWING COMPLIANCE WITH THE REQUIREMENTS FOR SUBSTITUTIONS.
2. SUBMIT ALL NECESSARY PRODUCT DATA AND CUT SHEETS WHICH PROPERLY INDICATE AND DESCRIBE THE ITEMS, PRODUCTS AND MATERIALS BEING INSTALLED. THE CONTRACTOR SHALL, IF DEEMED NECESSARY BY THE OWNER, SUBMIT ACTUAL SAMPLES TO THE OWNER FOR APPROVAL IN LIEU OF CUT SHEETS.

QUALITY ASSURANCE

1. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. THESE SHALL INCLUDE, BUT NOT BE LIMITED TO THE APPLICABLE CODES SET FORTH BY THE LOCAL GOVERNING BODY. SEE "CODE COMPLIANCE" T-1.

ADMINISTRATION

1. BEFORE THE COMMENCEMENT OF ANY WORK, THE CONTRACTOR WILL ASSIGN A PROJECT MANAGER WHO WILL ACT AS A SINGLE POINT OF CONTACT FOR ALL PERSONNEL INVOLVED IN THIS PROJECT. THIS PROJECT MANAGER WILL DEVELOP A MASTER SCHEDULE FOR THE PROJECT WHICH WILL BE SUBMITTED TO THE OWNER PRIOR TO THE COMMENCEMENT OF ANY WORK.
2. SUBMIT A BAR TYPE PROGRESS CHART, NOT MORE THAN 3 DAYS AFTER THE DATE ESTABLISHED FOR COMMENCEMENT OF THE WORK ON THE SCHEDULE, INDICATING A TIME BAR FOR EACH MAJOR CATEGORY OR UNIT OF WORK TO BE PERFORMED AT THE SITE, PROPERLY SEQUENCED AND COORDINATED WITH OTHER ELEMENTS OF WORK AND SHOWING COMPLETION OF THE WORK SUFFICIENTLY IN ADVANCE OF THE DATE ESTABLISHED FOR SUBSTANTIAL COMPLETION OF THE WORK.
3. PRIOR TO COMMENCING CONSTRUCTION, THE OWNER SHALL SCHEDULE AN ON-SITE MEETING WITH ALL MAJOR PARTIES. THIS WOULD INCLUDE, BUT NOT LIMITED TO, THE OWNER, PROJECT MANAGER, CONTRACTOR, LAND OWNER REPRESENTATIVE, LOCAL TELEPHONE COMPANY, TOWER ERECTION FOREMAN (IF SUBCONTRACTED).
4. CONTRACTOR SHALL BE EQUIPPED WITH SOME MEANS OF CONSTANT COMMUNICATIONS, SUCH AS A MOBILE PHONE OR A BEEPER. THIS EQUIPMENT WILL NOT BE SUPPLIED BY THE OWNER, NOR WILL WIRELESS SERVICE BE ARRANGED.
5. DURING CONSTRUCTION, CONTRACTOR MUST ENSURE THAT EMPLOYEES AND SUBCONTRACTORS WEAR HARD HATS AT ALL TIMES. CONTRACTOR WILL COMPLY WITH ALL WPCS SAFETY REQUIREMENTS IN THEIR AGREEMENT.
6. PROVIDE WRITTEN DAILY UPDATES ON SITE PROGRESS TO THE OWNER.
7. COMPLETE INVENTORY OF CONSTRUCTION MATERIALS AND EQUIPMENT IS REQUIRED PRIOR TO START OF CONSTRUCTION.
8. NOTIFY THE OWNER/PROJECT MANAGER IN WRITING NO LESS THAN 48 HOURS IN ADVANCE OF CONCRETE POURS, TOWER ERECTIONS, AND EQUIPMENT CABINET PLACEMENTS.

INSURANCE AND BONDS

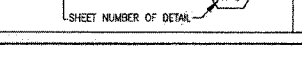
1. CONTRACTOR, AT THEIR OWN EXPENSE, SHALL CARRY AND MAINTAIN, FOR THE DURATION OF THE PROJECT, ALL INSURANCE, AS REQUIRED AND LISTED, AND SHALL NOT COMMENCE WITH THEIR WORK UNTIL THEY HAVE PRESENTED AN ORIGINAL CERTIFICATE OF INSURANCE STATING ALL COVERAGES TO THE OWNER. REFER TO THE MASTER AGREEMENT FOR REQUIRED INSURANCE LIMITS.
2. THE OWNER SHALL BE NAMED AS AN ADDITIONAL INSURED ON ALL POLICIES.
3. CONTRACTOR MUST PROVIDE PROOF OF INSURANCE.

ARCHITECTURAL SYMBOLS

ROOM ###

(X) →

DETAIL REFERENCE KEY



ABBREVIATIONS

ADJ	ADJUSTABLE
AGL	ABOVE GROUND LINE
&	AND
APPROX	APPROXIMATE
@	AT
BTS	BASE TRANSMISSION STATION
CAB	CABINET
CLG	CEILING
CONC	CONCRETE
CONT	CONTINUOUS
DIA OR ø	DIAMETER
DWG	DRAWING
EA	EACH
ELEC	ELECTRICAL
ELEV	ELEVATION
EQ	EQUAL
EQUIP	EQUIPMENT
EGB	EQUIPMENT GROUND BAR
(E)	EXISTING
EXT	EXTERIOR
FF	FINISHED FLOOR
GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GRND	GROUND
LG	LONG
MAX	MAXIMUM
MECH	MECHANICAL
MW	MICROWAVE DISH
MFR	MANUFACTURER
MGB	MASTER GROUND BAR
MIN	MINIMUM
MTL	METAL
(N)	NEW
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	ON CENTER
OPP	OPPOSITE
(P)	PROPOSED
PCS	PERSONAL COMMUNICATION SYSTEM
PPC	POWER PROTECTION CABINET
SF	SQUARE FOOT
SHT	SHEET
SIM	SIMILAR
SS	STAINLESS STEEL
STL	STEEL
TOC	TOP OF CONCRETE
TOM	TOP OF MASONRY
TYP	TYPICAL
VIF	VERIFY IN FIELD
UON	UNLESS OTHERWISE NOTED
WWF	WELDED WIRE FABRIC
W/	WITH

T-Mobile

T-MOBILE NORTHEAST LLC
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SUBMITTALS

DATE	DESCRIPTION	REVISION
4/13/15	FOR PERMIT	0

DSGN.	DATE	APP'D	REVISIONS
RFE			
RF ENGR.			
ZONING			
OPS			
CONSTR.			
SITE ACQ.			

PROJECT NO: 317-000
DRAWN BY: JLM
CHECKED BY: ASW

STATE OF CONNECTICUT
JOHN S. STEVENS
No. 24705
LICENSED
PROFESSIONAL ENGINEER
PROFESSIONAL SEAL

NOTE: IF DRAWINGS ARE 22"X34", USE GRAPHICAL SCALE AND/OR 1/2 TIMES OF THE NOTED SCALE.

SITE NUMBER:
CTNH217A

SITE NAME:
CTNH217/ATC-BETHANY

9 MEYERS ROAD
BETHANY, CT 06524

SHEET TITLE

GENERAL AND ELECTRICAL NOTES

SHEET NUMBER

N-1

SHEET 8 OF 8 SHEETS