



November 8, 2019

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

Re: Notice of Exempt Modification – Antenna and RRU Add
Property Address: 720 Quinebaug Road Thompson, CT 06277
Applicant: AT&T Mobility, LLC

Dear Ms. Bachman:

On behalf of AT&T, please accept this application as notification pursuant to R.C.S.A. §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. §16- 50j-72(b) (2).

AT&T currently maintains a wireless telecommunications facility consisting of nine (9) wireless telecommunication antennas at an antenna center line height of 125-feet on an existing 133-foot monopole, owned by the Quinebaug Volunteer Fire Department. AT&T now intends to remove two (2) Kathrein 800-10764 Panel Antennas, one (1) KMW AM-X_CD-17-65-00T-RET each currently installed in position [1], and swap these for three (3) CCI DMP65R-BU4DA Panel Antennas, each to be installed in position [1], all sectors. AT&T also intends to remove three (3) Powerwave 7770 Panel Antennas each currently installed in position [3] and swap them with three (3) CCI DMP65R-BU8DA in position [2], all sectors. In addition, AT&T plans to remove (3) RRUS-11, and install (3) RRUS- B14 4478, (3) RRUS- 4449 B5/B12, and (3) RRUS-8843 B2/B66A for a total of (9) RRUS. Lastly, AT&T proposes to install (1) DC6 Squid with (1) fiber and (2) DC Cables. All of the changes will take place on a new antenna mount.

Attached is a summary of the planned modifications including power density calculations reflecting the change in AT&T's operations at the site. Also included is documentation of the structural sufficiency of the tower to accommodate the revised antenna configuration.

Please accept this letter pursuant to Regulation of Connecticut State Agencies §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b) (2). In accordance with R.C.S.A., a copy of this letter is being sent to Terry Bellman – Building Official, Town of Thompson, CT at 815 Riverside Drive P.O. Box 899 CT 06255 and Ken Beausoleil – First Selectman, Town of Thompson, CT at 815 Riverside Drive P.O. Box 899, CT 06255. A copy of this letter is being sent to the property owner, Quinebaug Volunteer Fire Department at 720 Quinebaug Road., Quinebaug, CT 06262

The following is a list of subsequent decisions by the Connecticut Siting Council:

- [TS-CING-141-050801](#) - New Cingular Wireless PCS, LLC request for an order to approve tower sharing at an approved
- [EM-CING-141-121011](#) – New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 720 Quinebaug Road, **Thompson**, Connecticut.

The planned modifications to AT&T's facility fall squarely within those activities explicitly provided for in R.C.S.A. §16-50j-72(b) (2).

1. The proposed modifications will not result in an increase in the height of the existing tower. AT&T's replacement antennas will be installed at the 125-foot level of the 133-foot self-support tower.
2. The proposed modifications will not involve any changes to ground-mounted equipment and, therefore, will not require an extension of the site boundary.
3. The proposed modifications will not increase the noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
4. The operation of the modified facility will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. A cumulative worst-case RF



emissions calculation for AT&T's modified facility is provided in the RF Emissions Compliance Report, included in Tab 2.

5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
6. The tower and its foundation can support AT&T's proposed modifications. (See Structural Analysis Report included in Tab 3).

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

Sincerely,

Will Noel

CC w/enclosures:

Terry Bellman – Building Official, Town of Thompson

Ken Beausoleil – First Selectman, Town of Thompson CT

Quinebaug Volunteer Fire Department- Property Owner/Landlord

William Noel

From: dhall@thompsonct.org
Sent: Tuesday, November 19, 2019 12:51 PM
To: William Noel
Subject: 720 Quinebaug Rd.

From: dhall@thompsonct.org [mailto:dhall@thompsonct.org]
Sent: Tuesday, November 19, 2019 12:50 PM
To: 'william.noel@smarklinkllc.com'
Subject: 720 Quinebaug Rd.

Hi Will,

I did not receive the Connecticut Siting Council's decision with my packet that was submitted for the Building Permit for the cell town modifications proposed at the property located at 720 Quinebaug Rd. in Thompson, CT. If I can be of any further assistance, don't hesitate to contact me. Regards,

Donna

Donna Hall, Administrative Assistant

Town of Thompson

Building Official & Fire Marshal

815 Riverside Drive

N. Grosvenordale, CT. 06255

860-923-9002

860-923-9897 Fax

dhall@thompsonct.org

Monday-Thursday 7:00 AM-3:00 PM

Buildingoffice@thompsonct.org

-----Original Message-----

From: cmsmailer@civicplus.com [mailto:cmsmailer@civicplus.com]

Sent: Tuesday, November 19, 2019 11:44 AM

To: dhall@thompsonct.org; buildingofficial@thompsonct.org

Subject: Form submission from: Contact the Building Office

Submitted on Tuesday, November 19, 2019 - 11:44am

Your Name: Will Noel

Your Email Address: William.Noel@smartlinkllc.com

Subject: 720 Quinebaug Road Connecticut Siting Council Original Decision

Message:

Hi Donna,

Could you please send me the original decision from the Connecticut Siting Council for 720 Quinebaug Road? If you do not have it could you please state that in a return email?

Thank you,

Will Noel

720 QUINEBAUG RD

Location 720 QUINEBAUG RD

Mblu 3/ 81/ 1/ 2/

Acct# 005904

Owner QUINEBAUG VOLUNTEER
FIRE DEPT C/O

Assessment \$30,000

Appraisal \$42,800

PID 104480

Building Count 1

Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2015	\$42,800	\$0	\$42,800

Assessment			
Valuation Year	Improvements	Land	Total
2015	\$30,000	\$0	\$30,000

Owner of Record

Owner QUINEBAUG VOLUNTEER FIRE DEPT C/O
Co-Owner CELLCO PARTNERSHIP DBA VERIZON WIRELESS
Address VERIZON WIRELESS
P O BOX 2549
ADDISON, TX 75001

Sale Price \$0
Certificate
Book & Page 0368/0336
Sale Date 12/19/1997
Instrument

Ownership History

Ownership History					
Owner	Sale Price	Certificate	Book & Page	Instrument	Sale Date
QUINEBAUG VOLUNTEER FIRE DEPT C/O	\$0		0368/0336		12/19/1997

Building Information

Building 1 : Section 1

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

Building Attributes


Field	Description
Style	Outbuildings
Model	
Grade:	
Stories:	
Occupancy	
Exterior Wall 1	
Exterior Wall 2	
Roof Structure:	
Roof Cover	
Interior Wall 1	
Interior Wall 2	
Interior Flr 1	
Interior Flr 2	
Heat Fuel	
Heat Type:	
AC Type:	
Total Bedrooms:	
Total Bthrms:	
Total Half Baths:	
Total Xtra Fixtrs:	
Total Rooms:	
Bath Style:	
Kitchen Style:	

Building Photo



(<http://images.vgsi.com/photos/ThompsonCTPhotos//default.jpg>)

Building Layout

 Building Layout

(<http://images.vgsi.com/photos/ThompsonCTPhotos//Sketches/1>)

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

Extra Features

Extra Features	Legend
No Data for Extra Features	

Land

Land Use

Use Code 390A
Description DEVEL LAND MDL-00
Zone
Neighborhood
Alt Land Appr Category No

Land Line Valuation

Size (Acres) 0
Frontage
Depth
Assessed Value \$0
Appraised Value \$0

Outbuildings

--

Outbuildings**Legend**

Code	Description	Sub Code	Sub Description	Size	Value	Bldg #
CB1	PRECAST CONC CELL			360 S.F.	\$42,800	1

Valuation History

Appraisal			
Valuation Year	Improvements	Land	Total
2018	\$42,800	\$0	\$42,800
2017	\$42,800	\$0	\$42,800
2016	\$42,800	\$0	\$42,800

Assessment			
Valuation Year	Improvements	Land	Total
2018	\$30,000	\$0	\$30,000
2017	\$30,000	\$0	\$30,000
2016	\$30,000	\$0	\$30,000

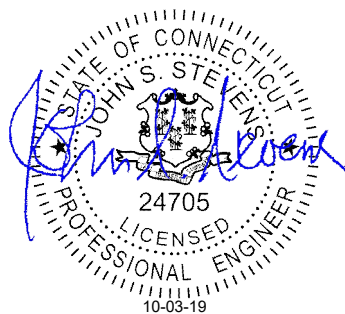
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Structural Analysis Report

October 3, 2019

Site Name	Thompson Quinebaug Road
Site Number	CTL01088
FA Number	10065743
PACE Number	MRCTB041526 / MRCTB041357 / MRCTB041375 MRCTB041762 / MRCTB041590
PTN Number	2051A0QA93 / 2051A0Q8S8 / 2051A0QAJ3 2051A0Q8VS / 2051A0Q7SN
Infinigy Job Number	1106-A0001-B
Client	Smartlink
Carrier	AT&T Mobility
Site Location	720 Quinebaug Road Thompson, CT 06277 42.0228419 N NAD83 71.9492181 W NAD83
Structure Type	130 ft. Monopole
Structural Usage Ratio	59.7%
Overall Result	Pass

Upon reviewing the results of this analysis, it is our opinion that the structure meets the specified TIA code requirements. The tower is therefore deemed adequate to support the existing and proposed loading as listed in this report.



Thomas Marr
Project Engineer I

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Introduction

Infinigy Engineering has been requested to perform a structural analysis on the existing 130 ft. Monopole. All supporting documents have been obtained from the client and are assumed to be accurate and applicable to this site. The tower was analyzed using tnxTower version 8.0.5 tower analysis software.

Supporting Documentation

RFDS	RFDS ID #3133991, dated August 6, 2019
Construction Drawings	Infinigy Engineering, PLLC, dated September 17, 2019
Site Photos	Provided by Infinigy, dated June 24, 2019
Structural Analysis Report	Hudson Design Group, LLC, dated October 8, 2012

Analysis Code Requirements

Wind Speed	120 mph (3-Second Gust)
Wind Speed w/ Ice	50 mph (3 Second Gust) w/ 1.00" Ice
TIA Revision	ANSI/TIA-222-H
Adopted IBC	2015 IBC / 2018 Connecticut State Building Code
Structure Class	II
Exposure Category	C
Topographic Category	1
Spectral Response	$S_s = 0.172 \text{ g}$, $S_1 = 0.064 \text{ g}$
Site Class	D - Stiff Soil
HMSL	371 ft.

Conclusion

Upon reviewing the results of this analysis, it is our opinion that the structure meets the specified TIA code requirements. The tower is therefore deemed adequate to support the existing and proposed loading as listed in this report.

If you have any questions, require additional information, or actual conditions differ from those as detailed in this report please contact me via the information below:

Thomas Marr
 Project Engineer I | **INFINIGY**
 1033 Watervliet Shaker Road, Albany, NY 12205
 (O) (518) 690-0790
 Structural@infinigy.com | www.infinigy.com

Existing and Reserved Loading

Mount Height (ft)	Qty.	Appurtenance	Mount Type	Coax & Lines	Carrier
130.0	1	4-Bay Dipole	Direct	--	--
	1	20' x 3" Whip			
	1	8.5' x 1.5" Whip			
	1	Lightning Rod 8' x 3/4"			
125.0	1	KATHREIN 800-10764	Platform	(12) 1-5/8" Coax (1) Fiber Cables (2) DC Cables	AT&T
	1	KATHREIN 800-10766			
	1	KMW AM-CD-17-65-00T-RET			
	6	POWERWAVE 7770			
	6	POWERWAVE LGP 21401			
	3	ERICSSON RRUS-11 B12			
	1	RAYCAP DC6-48-60-18-8F			
120.0	6	LPA – 80080 – 6CF	Platform	(12) 1-5/8" Coax	Verizon
	6	ANTEL 80090 – 6CF			

To Be Removed Loading

Mount Height (ft)	Qty.	Appurtenance	Mount Type	Coax & Lines	Carrier
125.0	1	KATHREIN 800-10764	--	--	AT&T
	1	KATHREIN 800-10766			
	1	KMW AM-CD-17-65-00T-RET			
	3	ERICSSON RRUS-11 B12			

Proposed Loading

Mount Height (ft)	Qty.	Appurtenance	Mount Type	Coax & Lines	Carrier
125.0	2	CCI DMP65R-BU4D	--	(1) Fiber Cables (2) DC Cables	AT&T
	4	CCI DMP65R-BU8D			
	3	ERICSSON RADIO 4449 B5/B12			
	3	ERICSSON RRUS 4478 B14			
	3	ERICSSON RADIO 8843 B2/B66A			
	1	RAYCAP DC6-48-60-18-8F			

Final Configuration

Mount Height (ft)	Qty.	Appurtenance	Mount Type	Coax & Lines	Carrier
130.0	1	4-Bay Dipole	Direct	--	--
	1	20' x 3" Whip			
	1	8.5' x 1.5" Whip			
	1	Lightning Rod 8' x 3/4"			
125.0	2	CCI DMP65R-BU4D	Platform	(12) 1-5/8" Coax (2) Fiber Cables (4) DC Cables	AT&T
	4	CCI DMP65R-BU8D			
	3	POWERWAVE 7770			
	6	POWERWAVE LGP 21401			
	3	ERICSSON RADIO 4449 B5/B12			
	3	ERICSSON RRUS 4478 B14			
	3	ERICSSON RADIO 8843 B2/B66A			
120.0	6	LPA – 80080 – 6CF	Platform	(12) 1-5/8" Coax	Verizon
	6	ANTEL 80090 – 6CF			

Structure Usages

Pole (L3)	59.7%	Pass
Plate Ratio	30.1%	Pass
Bolt Ratio	43.4%	Pass
RATING =	59.7%	Pass

Foundation Reactions

Reaction Data	Analysis Reactions
Moment (kip-ft)	1499.0
Axial (kip)	25.3
Shear (kip)	18.9

- Foundation was not analyzed at time of analysis due to lack of information.

Deflection, Twist, and Sway

Antenna Elevation (ft)	Deflection (in)	Twist (°)	Sway (°)
125.0	11.851	0.010	0.821

*Per ANSI/TIA-222-H Section 2.8.2 maximum serviceability structural deflection limit is 3% of structure height.

*Per ANSI/TIA-222-H Section 2.8.2 maximum serviceability structural twist and sway limit is 4 degrees.

*Per ANSI/TIA-222-H Section 2.8.3 deflection, Twist, and sway values were calculated using a basic 3-second gust wind speed of 60 mph.

*It is the responsibility of the client to ensure their proposed and/or existing equipment will meet ANSI/TIA-222-H Annex D or other appropriate microwave signal degradation limits based on the provided values above.

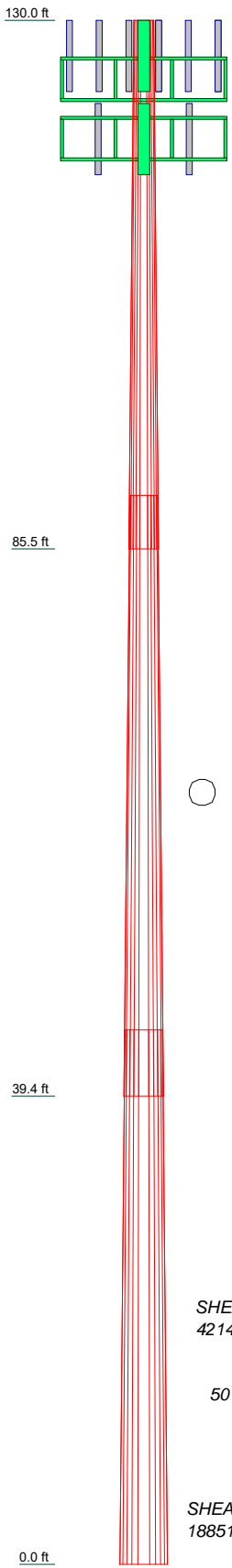
Assumptions and Limitations

Our structural calculations are completed assuming all information provided to Infinigy Engineering is accurate and applicable to this site. For the purposes of calculations, we assume an overall structure condition of “like new” and all members and connections to be free of corrosion and/or structural defects. The structure owner and/or contractor shall verify the structure’s condition prior to installation of any proposed equipment. If actual conditions differ from those described in this report Infinigy Engineering should be notified immediately to complete a revised evaluation.

Our evaluation is completed using standard TIA, AISC, ACI, and ASCE methods and procedures. Our structural results are proprietary and should not be used by others as their own. Infinigy Engineering is not responsible for decisions made by others that are or are not based on our supplied assumptions and conclusions.

This report is an evaluation of the tower structure only and does not reflect adequacy of any existing antenna mounts, mount connections, or cable mounting attachments. These elements are assumed to be adequate for the purposes of this analysis and are assumed to have been installed per their manufacturer requirements.

Section	1	2	3
Length (ft)	44.50	50.58	45.00
Number of Sides	12	12	12
Thickness (in)	0.1880	0.2810	0.3130
Socket Length (ft)	4.50	5.58	37.6116
Top Dia (in)	19.9400	28.3640	47.6000
Bot Dia (in)	29.7300	39.3900	65.27.0
Grade	A572-65	A572-65	A572-65
Weight (lb)	2259.3	5232.0	14018.3



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
4-Bay Dipole	130	RADIO 4449 B5/B12	125
20' x 3" Whip	130	RADIO 4449 B5/B12	125
8.5' x 1.5" Whip	130	RRUS 4478 B14	125
Lightning Rod 8' x 3/4"	130	RRUS 4478 B14	125
14' Low Profile Platform	125	RRUS 4478 B14	125
(2) DMP65R-BU4D	125	RADIO 8843 B2/B66A	125
(2) DMP65R-BU8D	125	RADIO 8843 B2/B66A	125
(2) DMP65R-BU8D	125	RADIO 8843 B2/B66A	125
7770.00	125	(2) (2) DC6-48-60-18-8F	125
7770.00	125	14' Low Profile Platform	120
7770.00	125	(2) (2) LPA - 80080 - 6CF	120
(2) (2) LGP21401	125	(2) (2) LPA - 80080 - 6CF	120
(2) (2) LGP21401	125	(2) (2) LPA - 80080 - 6CF	120
(2) (2) LGP21401	125	(2) (2) LPA - 80080 - 6CF	120
(2) (2) LGP21401	125	(2) (2) Antel 80090 - 6CF	120
RADIO 4449 B5/B12	125		

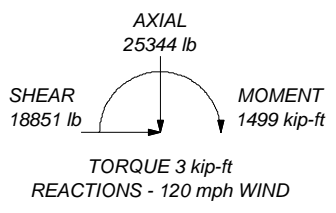
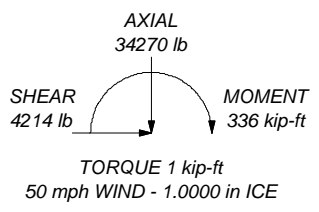
MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

TOWER DESIGN NOTES

1. Tower designed for Exposure C to the TIA-222-H Standard.
2. Tower designed for a 120 mph basic wind in accordance with the TIA-222-H Standard.
3. Tower is also designed for a 50 mph basic wind with 1.00 in ice. Ice is considered to increase in thickness with height.
4. Deflections are based upon a 60 mph wind.
5. Tower Risk Category II.
6. Topographic Category 1 with Crest Height of 0.00 ft
7. TOWER RATING: 59.7%

ALL REACTIONS ARE FACTORED



Infinigy Engineering PLLC 1033 Watervliet Shaker Rd. Albany, NY Phone: (518) 690-0790 FAX: (518) 690-0790	Job: CTL01088_10065743		
	Project: Structural Analysis		
	Client: Smartlink	Drawn by: BArcher	App'd:
	Code: TIA-222-H	Date: 10/03/19	Scale: NTS
	Path:		Dwg No. E-1

tnxTower Infinigy Engineering PLLC 1033 Watervliet Shaker Rd. Albany, NY Phone: (518) 690-0790 FAX: (518) 690-0790	Job CTL01088_10065743	Page 1 of 8
	Project Structural Analysis	Date 11:06:16 10/03/19
	Client Smartlink	Designed by BArcher

Tower Input Data

The tower is a monopole.

This tower is designed using the TIA-222-H standard.

The following design criteria apply:

- Tower base elevation above sea level: 371.00 ft.
- Basic wind speed of 120 mph.
- Risk Category II.
- Exposure Category C.
- Simplified Topographic Factor Procedure for wind speed-up calculations is used.
- Topographic Category: 1.
- Crest Height: 0.00 ft.
- Nominal ice thickness of 1.0000 in.
- Ice thickness is considered to increase with height.
- Ice density of 56 pcf.
- A wind speed of 50 mph is used in combination with ice.
- Temperature drop of 50 °F.
- Deflections calculated using a wind speed of 60 mph.
- A non-linear (P-delta) analysis was used.
- Pressures are calculated at each section.
- Stress ratio used in pole design is 1.
- Tower analysis based on target reliabilities in accordance with Annex S.
- Load Modification Factors used: $K_{es}(F_w) = 0.95$, $K_{es}(t_i) = 0.85$.
- Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

- | | | |
|--|---|---|
| <ul style="list-style-type: none"> Consider Moments - Legs Consider Moments - Horizontals Consider Moments - Diagonals Use Moment Magnification √ Use Code Stress Ratios √ Use Code Safety Factors - Guys Escalate Ice Always Use Max Kz Use Special Wind Profile Include Bolts In Member Capacity Leg Bolts Are At Top Of Section Secondary Horizontal Braces Leg Use Diamond Inner Bracing (4 Sided) SR Members Have Cut Ends SR Members Are Concentric | <ul style="list-style-type: none"> Distribute Leg Loads As Uniform Assume Legs Pinned √ Assume Rigid Index Plate √ Use Clear Spans For Wind Area Use Clear Spans For KL/r Retension Guys To Initial Tension √ Bypass Mast Stability Checks √ Use Azimuth Dish Coefficients √ Project Wind Area of Appurt. Autocalc Torque Arm Areas Add IBC .6D+W Combination √ Sort Capacity Reports By Component Triangulate Diamond Inner Bracing Treat Feed Line Bundles As Cylinder Ignore KL/ry For 60 Deg. Angle Legs | <ul style="list-style-type: none"> Use ASCE 10 X-Brace Ly Rules Calculate Redundant Bracing Forces Ignore Redundant Members in FEA SR Leg Bolts Resist Compression All Leg Panels Have Same Allowable Offset Girt At Foundation √ Consider Feed Line Torque Include Angle Block Shear Check Use TIA-222-H Bracing Resist. Exemption Use TIA-222-H Tension Splice Exemption <li style="text-align: center;">Poles √ Include Shear-Torsion Interaction Always Use Sub-Critical Flow Use Top Mounted Sockets Pole Without Linear Attachments Pole With Shroud Or No Appurtenances Outside and Inside Corner Radii Are Known |
|--|---|---|

Tapered Pole Section Geometry

tnxTower Infinigy Engineering PLLC 1033 Watervliet Shaker Rd. Albany, NY Phone: (518) 690-0790 FAX: (518) 690-0790	Job CTL01088_10065743	Page 2 of 8
	Project Structural Analysis	Date 11:06:16 10/03/19
	Client Smartlink	Designed by BArcher

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L1	130.00-85.50	44.50	4.50	12	19.9400	29.7300	0.1880	0.7500	A572-65 (65 ksi)
L2	85.50-39.42	50.58	5.58	12	28.3640	39.3900	0.2810	1.1250	A572-65 (65 ksi)
L3	39.42-0.00	45.00		12	37.6116	47.6000	0.3130	1.2520	A572-65 (65 ksi)

Tapered Pole Properties

Section	Tip Dia. in	Area in ²	I in ⁴	r in	C in	I/C in ³	J in ⁴	It/Q in ²	w in	w/t
L1	20.5772	11.9571	595.4330	7.0712	10.3289	57.6472	1206.5087	5.8849	4.8412	25.751
	30.7126	17.8835	1992.1377	10.5760	15.4001	129.3584	4036.6111	8.8017	7.4649	39.707
L2	30.2810	25.4101	2557.8710	10.0537	14.6926	174.0930	5182.9402	12.5061	6.8485	24.372
	40.6804	35.3866	6908.4127	14.0010	20.4040	338.5810	13998.3172	17.4162	9.8034	34.888
L3	40.1102	37.5918	6675.1967	13.3529	19.4828	342.6198	13525.7582	18.5015	9.2411	29.524
	49.1687	47.6587	13602.2717	16.9287	24.6568	551.6641	27561.8903	23.4562	11.9180	38.077

Tower Elevation ft	Gusset Area (per face) ft ²	Gusset Thickness in	Gusset Grade	Adjust. Factor A _f	Adjust. Factor A _r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
L1 130.00-85.50				1	1	1			
L2 85.50-39.42				1	1	1			
L3 39.42-0.00				1	1	1			

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	C _A A _A ft ² /ft	Weight plf
1 5/8	A	No	No	Inside Pole	125.00 - 7.00	12	No Ice	1.04
							1/2" Ice	1.04
							1" Ice	1.04
1 5/8	A	No	No	Inside Pole	120.00 - 7.00	12	No Ice	1.04
							1/2" Ice	1.04
							1" Ice	1.04
DC Cables	C	No	No	Inside Pole	125.00 - 7.00	4	No Ice	0.31
							1/2" Ice	0.31
							1" Ice	0.31
AT&T Fiber	C	No	No	Inside Pole	125.00 - 7.00	2	No Ice	0.10
							1/2" Ice	0.10
							1" Ice	0.10

tnxTower Infinigy Engineering PLLC 1033 Watervliet Shaker Rd. Albany, NY Phone: (518) 690-0790 FAX: (518) 690-0790	Job	CTL01088_10065743	Page	3 of 8
	Project	Structural Analysis	Date	11:06:16 10/03/19
	Client	Smartlink	Designed by	BArcher

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A_R ft ²	A_F ft ²	C_{AA} In Face ft ²	C_{AA} Out Face ft ²	Weight lb
L1	130.00-85.50	A	0.000	0.000	0.000	0.000	923.52
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	56.88
L2	85.50-39.42	A	0.000	0.000	0.000	0.000	1150.16
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	66.36
L3	39.42-0.00	A	0.000	0.000	0.000	0.000	809.20
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	46.68

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft ²	A_F ft ²	C_{AA} In Face ft ²	C_{AA} Out Face ft ²	Weight lb
L1	130.00-85.50	A	0.956	0.000	0.000	0.000	0.000	923.52
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	56.88
L2	85.50-39.42	A	0.905	0.000	0.000	0.000	0.000	1150.16
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	66.36
L3	39.42-0.00	A	0.807	0.000	0.000	0.000	0.000	809.20
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	46.68

Feed Line Center of Pressure

Section	Elevation ft	CP_x in	CP_z in	CP_x Ice in	CP_z Ice in
L1	130.00-85.50	0.0000	0.0000	0.0000	0.0000
L2	85.50-39.42	0.0000	0.0000	0.0000	0.0000
L3	39.42-0.00	0.0000	0.0000	0.0000	0.0000

Note: For pole sections, center of pressure calculations do not consider feed line shielding.

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice

Discrete Tower Loads

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Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	C _A A _A Front ft ²	C _A A _A Side ft ²	Weight lb	
4-Bay Dipole	A	From Face	3.50 0.00 10.00	0.000	130.00	No Ice 0.40 1/2" Ice 0.81 1" Ice 1.22	0.40 0.81 1.22	32.00 35.77 39.54	
20' x 3" Whip	B	From Face	3.50 0.00 10.00	0.000	130.00	No Ice 6.00 1/2" Ice 8.03 1" Ice 10.06	6.00 8.03 10.06	10.00 53.17 96.34	
8.5' x 1.5" Whip	C	From Face	3.50 0.00 5.00	0.000	130.00	No Ice 1.27 1/2" Ice 2.15 1" Ice 3.03	1.27 2.15 3.03	2.00 12.54 23.08	
Lightning Rod 8' x 3/4"	C	From Face	3.50 0.00 4.00	0.000	130.00	No Ice 0.60 1/2" Ice 1.41 1" Ice 2.22	0.60 1.41 2.22	14.00 20.19 26.38	
14' Low Profile Platform	A	None		0.000	125.00	No Ice 17.49 1/2" Ice 21.37 1" Ice 25.25	17.49 21.37 25.25	1349.00 1708.86 2131.10	
**									
(2) DMP65R-BU4D	A	From Face	3.50 0.00 2.00	0.000	125.00	No Ice 8.28 1/2" Ice 8.67 1" Ice 9.06	3.51 3.81 4.12	70.00 119.75 176.75	
(2) DMP65R-BU8D	B	From Face	3.50 0.00 2.00	0.000	125.00	No Ice 17.87 1/2" Ice 18.50 1" Ice 19.14	8.12 8.72 9.32	95.70 193.28 299.13	
(2) DMP65R-BU8D	B	From Face	3.50 0.00 2.00	0.000	125.00	No Ice 17.87 1/2" Ice 18.50 1" Ice 19.14	8.12 8.72 9.32	95.70 193.28 299.13	
7770.00	A	From Face	3.50 0.00 2.00	0.000	125.00	No Ice 5.51 1/2" Ice 5.87 1" Ice 6.23	2.93 3.27 3.63	35.00 67.63 105.06	
7770.00	B	From Face	3.50 0.00 2.00	0.000	125.00	No Ice 5.51 1/2" Ice 5.87 1" Ice 6.23	2.93 3.27 3.63	35.00 67.63 105.06	
7770.00	C	From Face	3.50 0.00 2.00	0.000	125.00	No Ice 5.51 1/2" Ice 5.87 1" Ice 6.23	2.93 3.27 3.63	35.00 67.63 105.06	
**									
(2) (2) LGP21401	A	From Face	3.50 0.00 2.00	0.000	125.00	No Ice 1.10 1/2" Ice 1.24 1" Ice 1.38	0.21 0.27 0.35	14.10 21.26 30.32	
(2) (2) LGP21401	B	From Face	3.50 0.00 2.00	0.000	125.00	No Ice 1.10 1/2" Ice 1.24 1" Ice 1.38	0.21 0.27 0.35	14.10 21.26 30.32	
(2) (2) LGP21401	C	From Face	3.50 0.00 2.00	0.000	125.00	No Ice 1.10 1/2" Ice 1.24 1" Ice 1.38	0.21 0.27 0.35	14.10 21.26 30.32	
RADIO 4449 B5/B12	A	From Face	1.00 0.00 2.00	0.000	125.00	No Ice 1.64 1/2" Ice 1.80 1" Ice 1.97	1.30 1.45 1.60	73.00 90.19 110.08	
RADIO 4449 B5/B12	B	From Face	1.00 0.00 2.00	0.000	125.00	No Ice 1.64 1/2" Ice 1.80 1" Ice 1.97	1.30 1.45 1.60	73.00 90.19 110.08	
RADIO 4449 B5/B12	C	From Face	1.00 0.00 2.00	0.000	125.00	No Ice 1.64 1/2" Ice 1.80 1" Ice 1.97	1.30 1.45 1.60	73.00 90.19 110.08	
RRUS 4478 B14	A	From Face	1.00 0.00 2.00	0.000	125.00	No Ice 1.84 1/2" Ice 2.01 1" Ice 2.19	1.06 1.20 1.34	59.90 75.78 94.29	

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Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert	Azimuth Adjustment	Placement	CAAA Front	CAAA Side	Weight	
			ft ft ft	°	ft	ft ²	ft ²	lb	
RRUS 4478 B14	B	From Face	1.00 0.00 2.00	0.000	125.00	No Ice 1/2" Ice 1" Ice	1.84 2.01 1.34	1.06 1.20 94.29	59.90 75.78 94.29
RRUS 4478 B14	C	From Face	1.00 0.00 2.00	0.000	125.00	No Ice 1/2" Ice 1" Ice	1.84 2.01 1.34	1.06 1.20 94.29	59.90 75.78 94.29
RADIO 8843 B2/B66A	A	From Face	1.00 0.00 2.00	0.000	125.00	No Ice 1/2" Ice 1" Ice	1.64 1.80 1.97	1.38 1.53 113.39	75.00 92.83 113.39
RADIO 8843 B2/B66A	B	From Face	1.00 0.00 2.00	0.000	125.00	No Ice 1/2" Ice 1" Ice	1.64 1.80 1.97	1.38 1.53 113.39	75.00 92.83 113.39
RADIO 8843 B2/B66A	C	From Face	1.00 0.00 2.00	0.000	125.00	No Ice 1/2" Ice 1" Ice	1.64 1.80 1.97	1.38 1.53 113.39	75.00 92.83 113.39
(2) (2) DC6-48-60-18-8F	A	From Face	1.00 0.00 2.00	0.000	125.00	No Ice 1/2" Ice 1" Ice	0.79 1.27 1.45	0.79 1.27 1.45	20.00 35.12 52.57

14' Low Profile Platform	A	None		0.000	120.00	No Ice 1/2" Ice 1" Ice	17.49 21.37 25.25	17.49 21.37 25.25	1349.00 1708.86 2131.10
**									
(2) (2) LPA - 80080 - 6CF	A	From Face	3.50 0.00 0.00	0.000	120.00	No Ice 1/2" Ice 1" Ice	4.32 4.76 5.20	9.10 9.65 10.20	23.00 71.26 119.52
(2) (2) LPA - 80080 - 6CF	B	From Face	3.50 0.00 0.00	0.000	120.00	No Ice 1/2" Ice 1" Ice	4.32 4.76 5.20	9.10 9.65 10.20	23.00 71.26 119.52
(2) (2) LPA - 80080 - 6CF	C	From Face	3.50 0.00 0.00	0.000	120.00	No Ice 1/2" Ice 1" Ice	4.32 4.76 5.20	9.10 9.65 10.20	23.00 71.26 119.52
(2) (2) Antel 80090 - 6CF	A	From Face	3.50 0.00 0.00	0.000	120.00	No Ice 1/2" Ice 1" Ice	4.32 4.76 5.20	6.56 7.02 7.48	20.00 58.72 97.44

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.0 Wind 0 deg - No Ice
3	0.9 Dead+1.0 Wind 0 deg - No Ice
4	1.2 Dead+1.0 Wind 30 deg - No Ice
5	0.9 Dead+1.0 Wind 30 deg - No Ice
6	1.2 Dead+1.0 Wind 60 deg - No Ice
7	0.9 Dead+1.0 Wind 60 deg - No Ice
8	1.2 Dead+1.0 Wind 90 deg - No Ice
9	0.9 Dead+1.0 Wind 90 deg - No Ice
10	1.2 Dead+1.0 Wind 120 deg - No Ice
11	0.9 Dead+1.0 Wind 120 deg - No Ice

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<i>Comb. No.</i>	<i>Description</i>
12	1.2 Dead+1.0 Wind 150 deg - No Ice
13	0.9 Dead+1.0 Wind 150 deg - No Ice
14	1.2 Dead+1.0 Wind 180 deg - No Ice
15	0.9 Dead+1.0 Wind 180 deg - No Ice
16	1.2 Dead+1.0 Wind 210 deg - No Ice
17	0.9 Dead+1.0 Wind 210 deg - No Ice
18	1.2 Dead+1.0 Wind 240 deg - No Ice
19	0.9 Dead+1.0 Wind 240 deg - No Ice
20	1.2 Dead+1.0 Wind 270 deg - No Ice
21	0.9 Dead+1.0 Wind 270 deg - No Ice
22	1.2 Dead+1.0 Wind 300 deg - No Ice
23	0.9 Dead+1.0 Wind 300 deg - No Ice
24	1.2 Dead+1.0 Wind 330 deg - No Ice
25	0.9 Dead+1.0 Wind 330 deg - No Ice
26	1.2 Dead+1.0 Ice+1.0 Temp
27	1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp
28	1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp
29	1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp
30	1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp
31	1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp
32	1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp
33	1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp
34	1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp
35	1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp
36	1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp
37	1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp
38	1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp
39	Dead+Wind 0 deg - Service
40	Dead+Wind 30 deg - Service
41	Dead+Wind 60 deg - Service
42	Dead+Wind 90 deg - Service
43	Dead+Wind 120 deg - Service
44	Dead+Wind 150 deg - Service
45	Dead+Wind 180 deg - Service
46	Dead+Wind 210 deg - Service
47	Dead+Wind 240 deg - Service
48	Dead+Wind 270 deg - Service
49	Dead+Wind 300 deg - Service
50	Dead+Wind 330 deg - Service

Maximum Tower Deflections - Service Wind

<i>Section No.</i>	<i>Elevation ft</i>	<i>Horz. Deflection in</i>	<i>Gov. Load Comb.</i>	<i>Tilt °</i>	<i>Twist °</i>
L1	130 - 85.5	12.718	41	0.843	0.011
L2	90 - 39.42	6.208	41	0.643	0.004
L3	45 - 0	1.575	41	0.318	0.001

Critical Deflections and Radius of Curvature - Service Wind

<i>Elevation ft</i>	<i>Appurtenance</i>	<i>Gov. Load Comb.</i>	<i>Deflection in</i>	<i>Tilt °</i>	<i>Twist °</i>	<i>Radius of Curvature ft</i>
130.00	4-Bay Dipole	41	12.718	0.843	0.011	59374

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Elevation	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
125.00	14' Low Profile Platform	41	11.851	0.821	0.010	59374
120.00	14' Low Profile Platform	41	10.990	0.798	0.009	29687

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	130 - 85.5	54.145	6	3.583	0.047
L2	90 - 39.42	26.460	6	2.740	0.016
L3	45 - 0	6.713	6	1.355	0.005

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
130.00	4-Bay Dipole	6	54.145	3.583	0.047	14120
125.00	14' Low Profile Platform	6	50.460	3.490	0.042	14120
120.00	14' Low Profile Platform	6	46.797	3.395	0.038	7060

Compression Checks

Pole Design Data

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u lb	φP _n lb	Ratio $\frac{P_u}{\phi P_n}$
L1	130 - 85.5 (1)	TP29.73x19.94x0.188	44.50	0.00	0.0	17.2842	-7883.58	956564.00	0.008
L2	85.5 - 39.42 (2)	TP39.39x28.364x0.281	50.58	0.00	0.0	34.2860	-15178.90	2005730.00	0.008
L3	39.42 - 0 (3)	TP47.6x37.6116x0.313	45.00	0.00	0.0	47.6587	-25333.00	2647560.00	0.010

Pole Bending Design Data

Section No.	Elevation ft	Size	M _{ux} kip-ft	φM _{ux} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{ux}}$	M _{uy} kip-ft	φM _{uy} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{uy}}$
L1	130 - 85.5 (1)	TP29.73x19.94x0.188	246.00	557.15	0.442	0.00	557.15	0.000
L2	85.5 - 39.42 (2)	TP39.39x28.364x0.281	757.47	1584.14	0.478	0.00	1584.14	0.000
L3	39.42 - 0 (3)	TP47.6x37.6116x0.313	1498.68	2553.86	0.587	0.00	2553.86	0.000

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Pole Shear Design Data

Section No.	Elevation ft	Size	Actual V_u lb	ϕV_n lb	Ratio $\frac{V_u}{\phi V_n}$	Actual T_u kip-ft	ϕT_n kip-ft	Ratio $\frac{T_u}{\phi T_n}$
L1	130 - 85.5 (1)	TP29.73x19.94x0.188	8856.28	303338.00	0.029	2.58	761.84	0.003
L2	85.5 - 39.42 (2)	TP39.39x28.364x0.281	13949.00	601719.00	0.023	2.58	2005.62	0.001
L3	39.42 - 0 (3)	TP47.6x37.6116x0.313	18865.50	836410.00	0.023	2.58	3479.05	0.001

Pole Interaction Design Data

Section No.	Elevation ft	Ratio P_u	Ratio M_{ux}	Ratio M_{uy}	Ratio V_u	Ratio T_u	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
		ϕP_n	ϕM_{ux}	ϕM_{uy}	ϕV_n	ϕT_n			
L1	130 - 85.5 (1)	0.008	0.442	0.000	0.029	0.003	0.451	1.000	4.8.2 ✓
L2	85.5 - 39.42 (2)	0.008	0.478	0.000	0.023	0.001	0.486	1.000	4.8.2 ✓
L3	39.42 - 0 (3)	0.010	0.587	0.000	0.023	0.001	0.597	1.000	4.8.2 ✓

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
L1	130 - 85.5	Pole	TP29.73x19.94x0.188	1	-7883.58	956564.00	45.1	Pass
L2	85.5 - 39.42	Pole	TP39.39x28.364x0.281	2	-15178.90	2005730.00	48.6	Pass
L3	39.42 - 0	Pole	TP47.6x37.6116x0.313	3	-25333.00	2647560.00	59.7	Pass
Summary								
Pole (L3)							59.7	Pass
RATING =							59.7	Pass

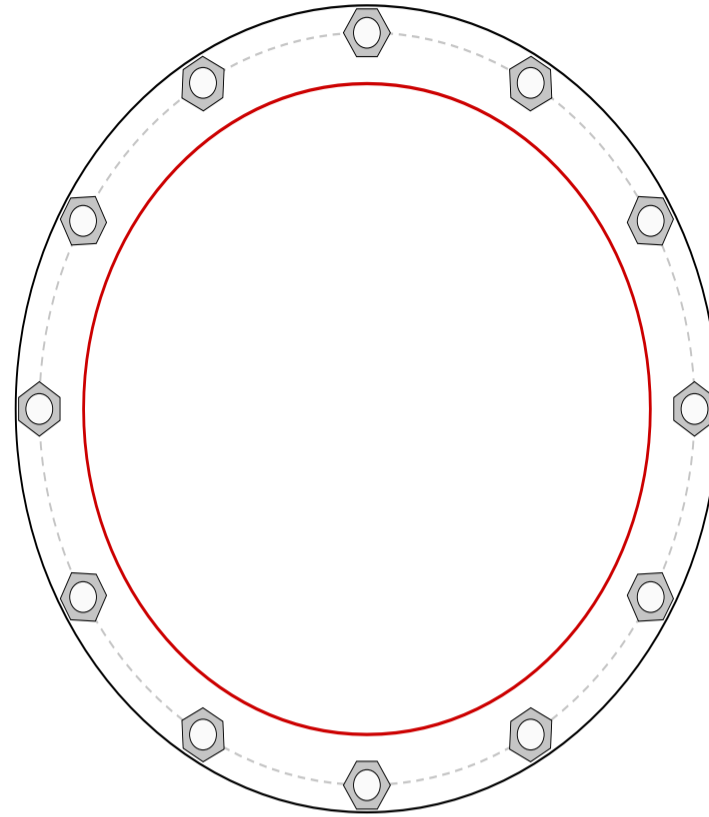
Monopole Base Plate Connection

Site Info	
Site Name	CTL01088

Analysis Considerations	
TIA-222 Revision	H
Grout Considered:	No
l_{ar} (in)	0

Applied Loads	
Moment (kip-ft)	1499.00
Axial Force (kips)	25.33
Shear Force (kips)	18.90

*TIA-222-H Section 15.5 Applied



Connection Properties		Analysis Results	
Anchor Rod Data		Anchor Rod Summary <i>(units of kips, kip-in)</i>	
(12) 2-1/4" ϕ bolts (A615-75 N; Fy=75 ksi, Fu=100 ksi) on 55.03" BC		$P_{u_c} = 110.97$	$\phi P_{n_c} = 243.75$ Stress Rating
Base Plate Data		$V_u = 1.57$	$\phi V_n = 73.13$ 43.4%
59" OD x 2.25" Plate (A572-60; Fy=60 ksi, Fu=75 ksi)		$M_u = n/a$	$\phi M_n = n/a$ Pass
Stiffener Data		Base Plate Summary	
N/A		Max Stress (ksi):	17.05 (Flexural)
Pole Data		Allowable Stress (ksi):	54
47.6" x 0.313" 12-sided pole (A572-65; Fy=65 ksi, Fu=80 ksi)		Stress Rating:	30.1% Pass

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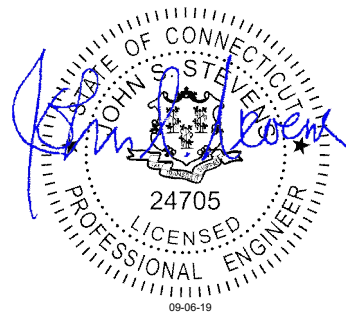
Mount Analysis Report

September 6, 2019

AT&T Mobility Site Name	Thompson Quinebaug Road
AT&T Mobility Site Number	CTL01088
AT&T FA Number	10065743
PACE Number	MRCTB041526, MRCTB041357, MRCTB041375, MRCTB041762, MRCTB041590
PTN Number	2051A0QA93, 2051A0Q8S8, 2051A0QAJ3, 2051A0Q8VS, 2051A0Q7SN
Infinigy Job Number	1106-A0001-B
Client	Smartlink
Carrier	AT&T Mobility
Site Location	720 Quinebaug Road Thompson, CT 6277 Windham County 42° 1' 22.2306" N NAD83 71° 56' 57.1848" W NAD83
Mount Centerline EL.	125.0 ft
Mount Type	Platform
Failing Mount Usage	118.0%
Passing Mount Usage	77.0%
Overall Result	Fail
Notes	Mount must be modified prior to installation of proposed appurtenances. See final page for cost estimate.

Upon reviewing the results of this analysis, it is our opinion that the structure does not meet the specified TIA code requirements. Completion of the modifications listed below is required to bring the mount into compliance.

- Reinforce mount standoffs.



Bryan P. Mawhinney
Project Engineer I

AZ CA CO FL GA MD NC NH NJ NY TX WA

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Calculations.....	Appended

Introduction

Infinigy Engineering has been requested to perform a mount analysis on the existing AT&T Mobility mounts. All supporting documents have been obtained from the client and are assumed to be accurate and applicable to this site. The mount was analyzed using RISA-3D Version 17.0.4 analysis software.

Supporting Documentation

RFDS	AT&T RFDS, Site No. CTL01188, dated May 20, 2019
Site Photos	Smartlink Provided, dated June 26, 2019

Analysis Code Requirements

Wind Speed	126 mph (3-Second Gust)
Wind Speed w/ Ice	50 mph (3 Second Gust) w/ 1.7" Ice
TIA Revision	ANSI/TIA-222-H
Adopted IBC	2015 IBC
Structure Class	II
Exposure Category	C
Topographic Category	1
Spectral Response	$S_s = 0.172 \text{ g}$, $S_1 = 0.064 \text{ g}$
Site Class	D - Stiff Soil

Conclusion

Upon reviewing the results of this analysis, it is our opinion that the structure does not meet the specified TIA code requirements. The design of mount modifications is outside of the current scope of work therefore they will be designed in a subsequent project.

If you have any questions, require additional information, or actual conditions differ from those as detailed in this report please contact me via the information below:

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Final Configuration Loading

Mount CL (ft)	Vert. O/S (ft)	Rad. HT (ft)	Horiz. O/S (ft)*	Qty	Appurtenance	Carrier
125.0	0.0	125.0	1.9/5.7	2	CCI ANTENNAS DMP65R-BU4D	AT&T
			1.9/5.7	4	CCI ANTENNAS DMP65R-BU8D	
			13.0	3	POWERWAVE 7770.00	
			1.9	3	ERICSSON TME-RADIO 4449	
			5.7	3	ERICSSON TME-RRUS 4478 B14	
			5.7	3	ERICSSON TME-RADIO 8843	
			13.0	6	POWERWAVE TME-LGP21401	
			-	2	RAYCAP TME-DC6-48-60-18-8F**	

*Horizontal Offset is defined as the distance from the left most edge of the mount face horizontal when viewed facing the tower

** Raycap assumed to be installed directly on tower

Structure Usages

Horizontals	97.5%	Pass
Standoffs	118.0%	Pass
Mount Pipes	104.4%	Pass
Passing Usage	77.0%	Pass
Result	118.0%	Fail

Mount Connection Usages

Reaction Data	Design Capacity*	Analysis Reactions	Results
Max Tension (lbs.)	40680.3	3490.0	8.6%
Max Shear (lbs.)	24850.5	3743.7	15.1%
Unity Check	--	--	3.0%

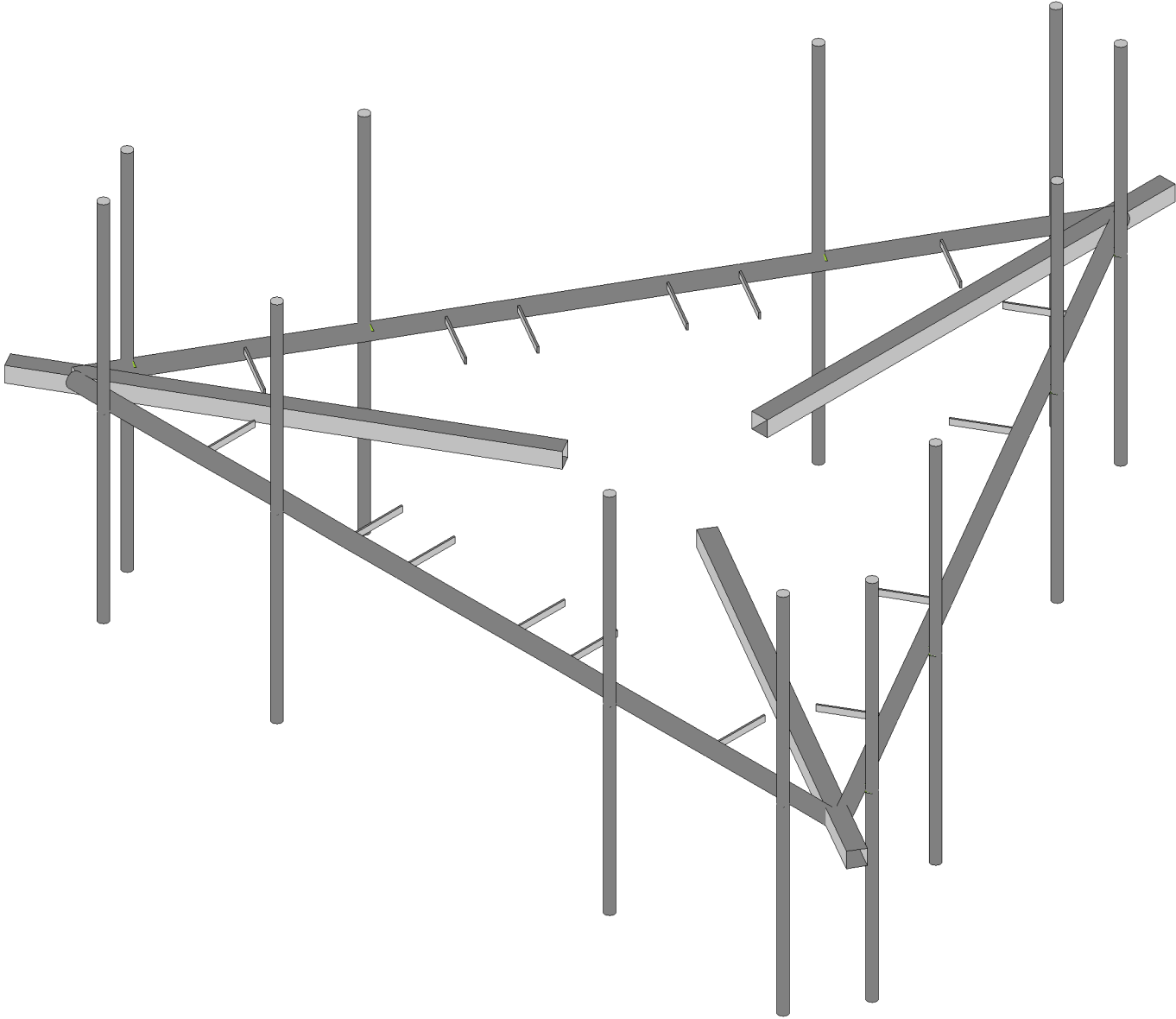
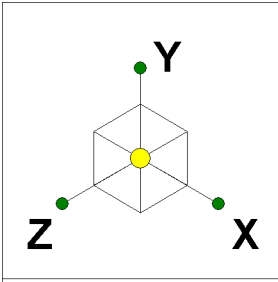
*Assumed (4) 0.625" A307 Bolts. Contractor to field verify prior to proposed installation.

Assumptions and Limitations

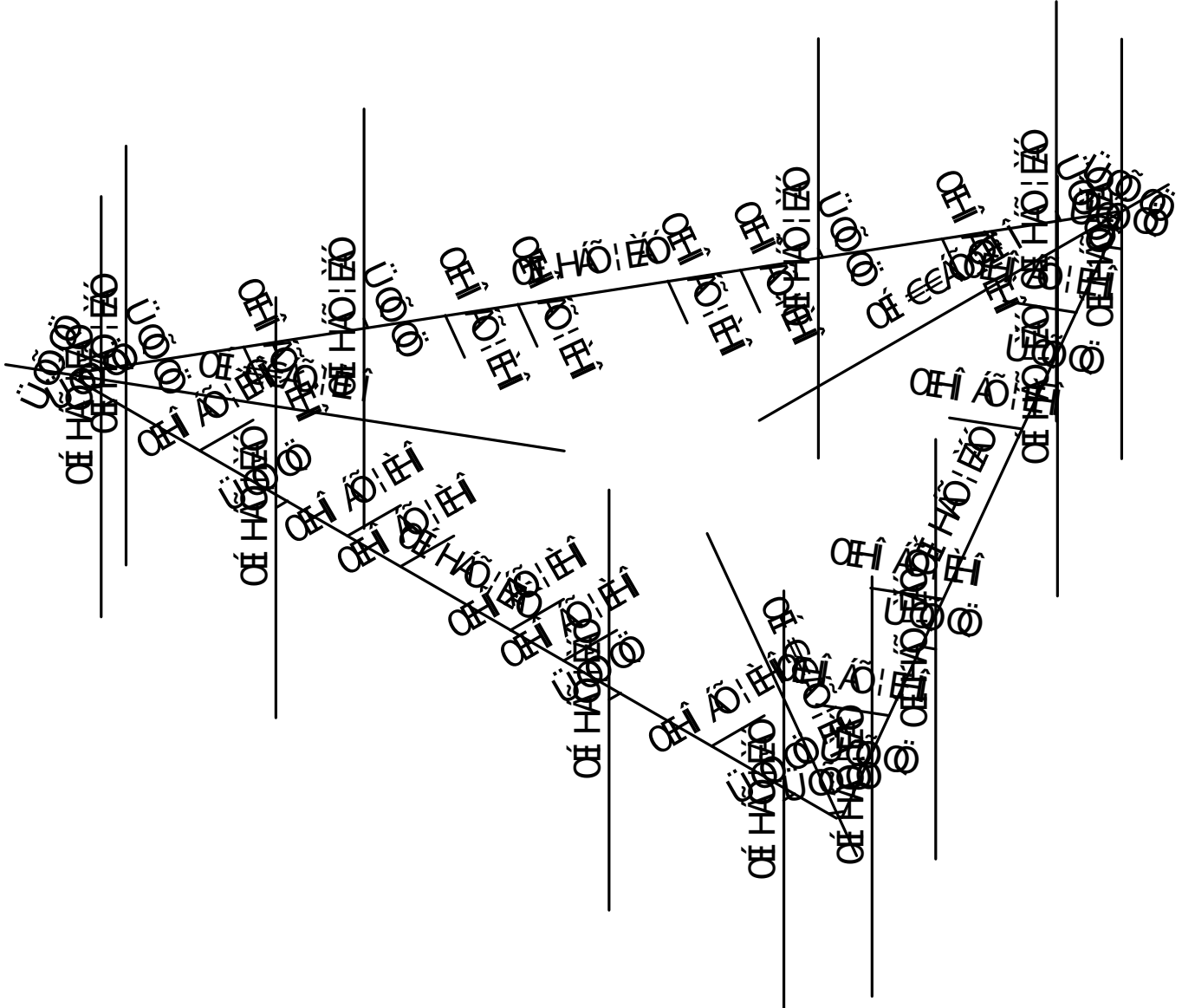
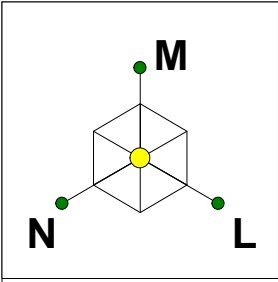
Our structural calculations are completed assuming all information provided to Infinigy Engineering is accurate and applicable to this site. For the purposes of calculations, we assume an overall structure condition of “like new” and all members and connections to be free of corrosion and/or structural defects. The structure owner and/or contractor shall verify the structure’s condition prior to installation of any proposed equipment. If actual conditions differ from those described in this report Infinigy Engineering should be notified immediately to complete a revised evaluation.

Our evaluation is completed using standard TIA, AISC, ACI, and ASCE methods and procedures. Our structural results are proprietary and should not be used by others as their own. Infinigy Engineering is not responsible for decisions made by others that are or are not based on our supplied assumptions and conclusions.

This report is an evaluation of the proposed carriers mount structure only and does not reflect adequacy of the existing tower, other mounts, or coax mounting attachments. These elements are assumed to be adequate for the purposes of this analysis and are assumed to have been installed per their manufacturer requirements.



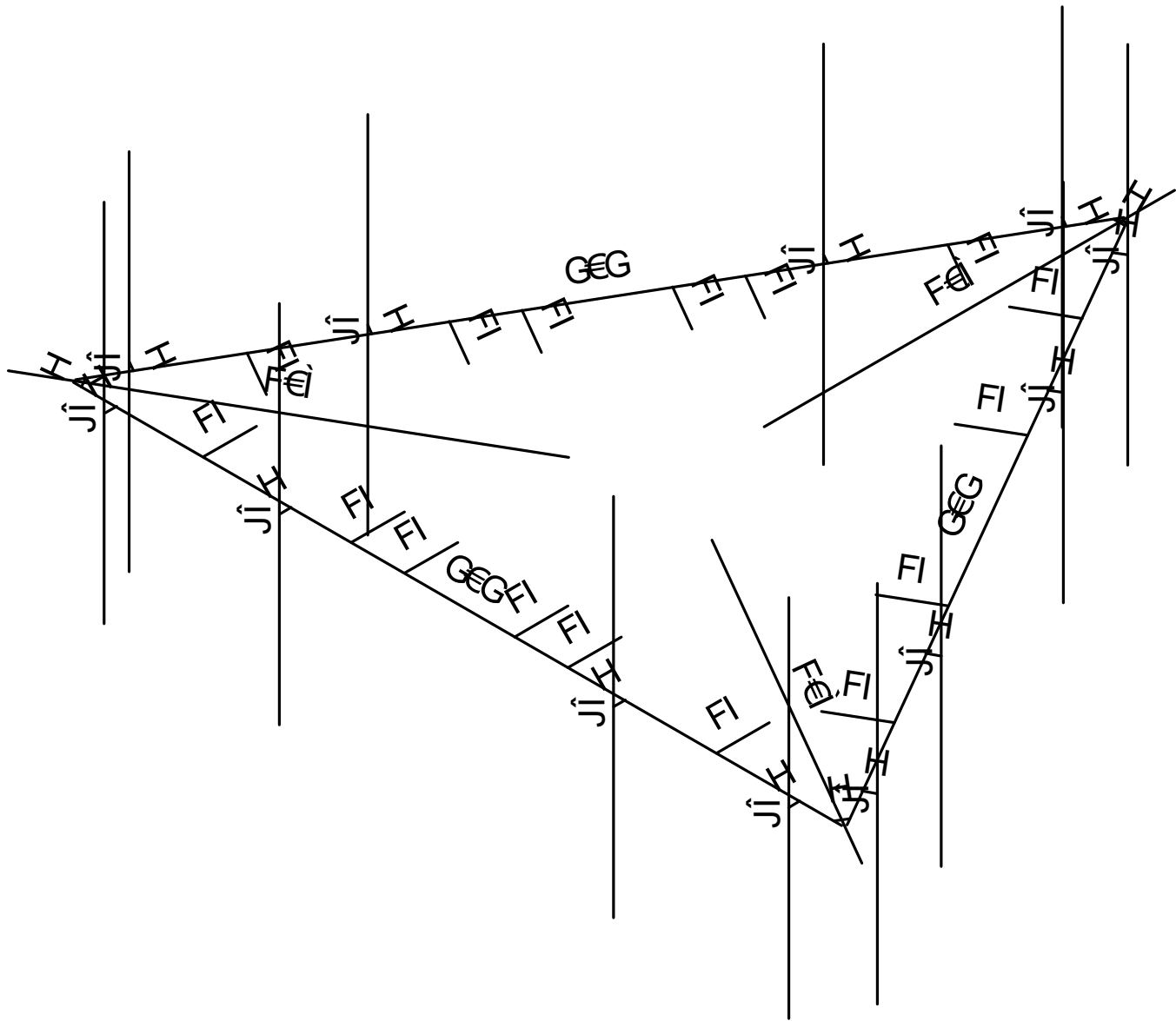
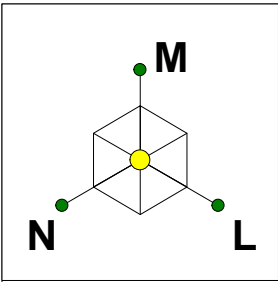
Infinigy Engineering, PLLC.	CTL01088	Rendered
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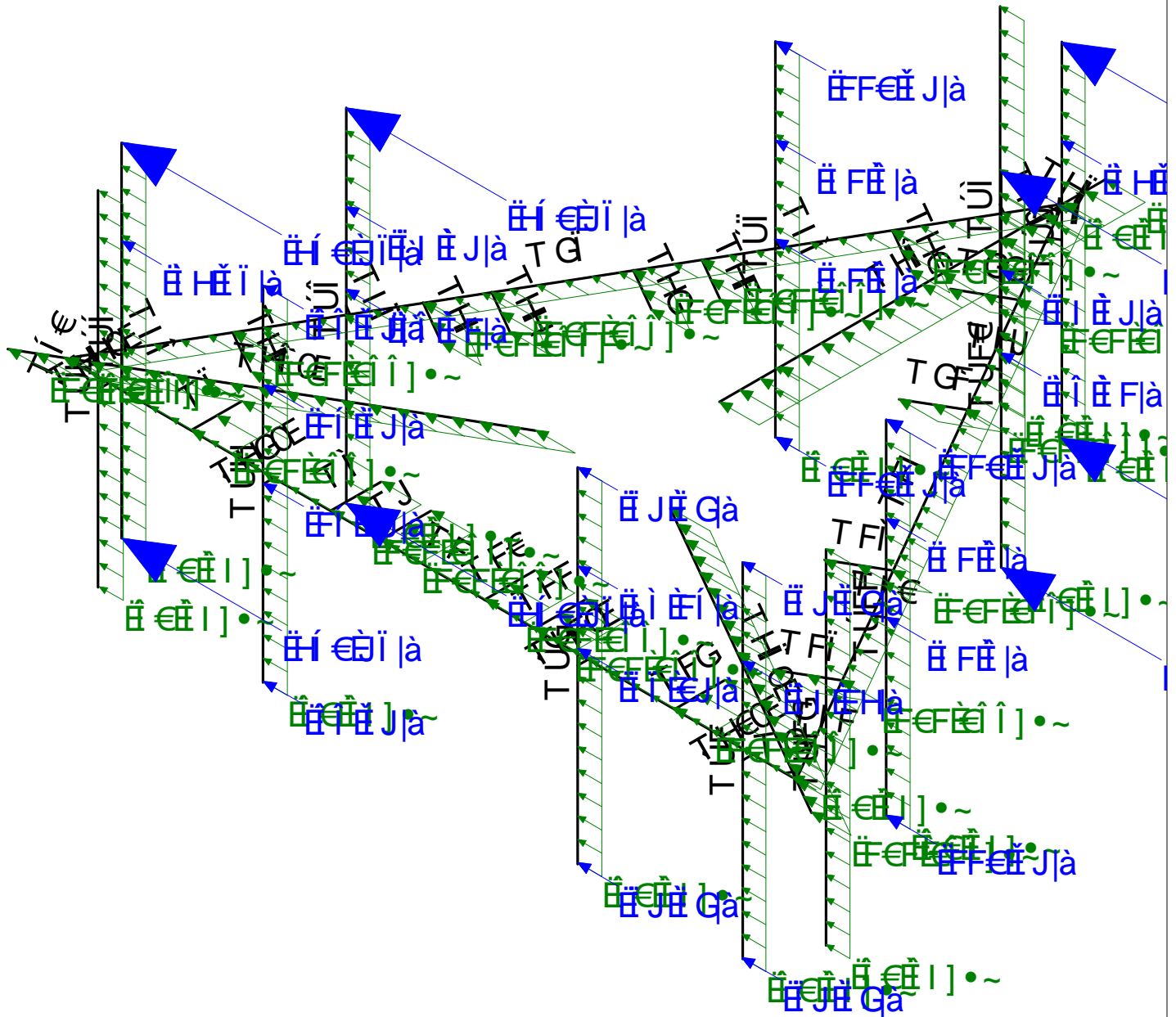
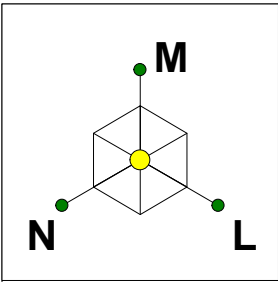


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Site Name: CTL01188
 Client: Smartlink
 Carrier: AT&T Mobility
 Engineer: BPM
 Date: 9/6/2019
 Job #: 1106-A0001-B

Code: LRFD
Bolt Diameter: 0.625
Bolt Grade: A307
Threads Excluded?: N
Axial (lbs): 3489.97
Shear (lbs): 3743.66

Bolt Info:

Yield Strength (F_{yb})	36.0 ksi
Ultimate Strength (F_{ub})	60.0 ksi
Threads/in (n)	11
Gross Area (A_{gb})	0.307 in ²
Net Area (A_{nb})	0.226 in ²

Bolt Capacity (5/8" A325 Bolt), Total of (4) per Connection				
	Ult Load / Bolt	Factored Load ($\phi=0.75$)	# of Bolts	Factor Joint Capacity
Axial (lb)	13560.1	10170.1	4	40680
Shear(lb)	8283.5	6212.6	4	24850

Interaction Check	
$T / \phi T_n$	8.6%
$V / \phi V_n$	15.1%
≤ 1.0	3.0%
	OK

Site Number: CTL01088
 Client: AT&T
 Carrier: Smartlink
 Job #: 1106-A0001-B
 Estimator: BPM
 Date: 9/6/2019

Mount upgrade pricing

Notes:
 - All Costs Incldue hardware.
 - This is an estimate, prices may vary and are dependant on many factors. An official quote will be provide at the time of construction.
 - All Costs are per mount unless noted.
 - Estimate does not include a crane, manlift, etc.
 -Estimate does not include delivery

Total Mod Cost Limit: \$ 20,000.00
 Total Day of Labor: 2 Days

Existing	
Structure Type:	Monopole
Mount type:	Platform
Mount Elevation:	125 ft.
Number of Sectors:	3
Mount Location:	Top of Tower

Replacement	
Mount Replacement Type:	Platform
Mount Manufacture:	Site_Pro_1
Mount Model:	RMQP-496-HK
Notes:	Monopole Platform for 12 Antennas Plus RRU's
Pipe Model:	P30120
Notes:	20. MOUNTING PIPE (QTY=1) Heavy 10 & WLL – 2.5" Sch 40 (2.875" OD x 0.203" wall thickness) x 10' long, ASTM A53 Grade B (minimum) plus connection hardware to attach to Heavy-10 mount
Number of Pipes:	12
Total Day of Labor:	3 Days

Mount Replacement Cost:
 Labor: \$ 12,000.00
 Material: \$ 7,835.49
 Total: \$ 19,835.49

Mount Mod Cost:
 Labor: \$ 8,000.00
 Material: \$ 2,036.79
 Total: \$ 10,036.79

Conclusion: Modify Mount

Post Mod Mount Analysis Report

September 16, 2019

Site Name	Thompson Quinebauf Road
Site Number	CTL01088
FA Number	10065743
PACE Number	MRCTB041526 / MRCTB041357 / MRCTB041375 MRCTB041762 / MRCTB041590
PTN Number	2051A0QA93 / 2051A0Q8S8 / 2051A0QAJ3 2051A0Q8VS / 2051A0Q7SN
Infinigy Job Number	1106-A0001-B
Client	Smartlink
Carrier	AT&T Mobility
Site Location	720 Quinebaug Road Thompson, CT 6277 Windham County 42.0228419 N NAD83 71.9492181 W NAD83
Mount Centerline EL.	125.0 ft
Mount Type	Platform
Structural Usage Ratio	76.2%
Overall Result	Pass
Note	See appended documents for mount modifications.

Upon reviewing the results of this analysis, it is our opinion that the post modification mount meets the specified TIA and ASCE code requirements. The mounts and connections for the proposed carrier are therefore deemed adequate to support the final loading configuration as listed in this report.



Thomas Marr
Project Engineer I

Contents

Introduction.....	3
Supporting Documentation.....	3
Analysis Code Requirements.....	3
Conclusion.....	3
Final Configuration Loading.....	4
Mount Usages.....	4
Mount Connection Usages.....	4
Assumptions and Limitations.....	5
Calculations.....	Appended

Introduction

Infinigy Engineering has been requested to perform a post modification mount analysis on the existing AT&T Mobility mounts. All supporting documents have been obtained from the client and are assumed to be accurate and applicable to this site. The mount was analyzed using RISA-3D Version 17.0.4 analysis software.

Supporting Documentation

RFDS	RFDS ID #3133991, dated August 6, 2019
Site Photos	Smartlink Provided, dated June 26, 2019

Analysis Code Requirements

Wind Speed	126 mph (3-Second Gust, V_{ult})
Wind Speed w/ Ice	50 mph (3 Second Gust) w/ 1.7" Ice
TIA Revision	ANSI/TIA-222-H
Adopted IBC	2015 IBC / 2018 Connecticut Building Code
Structure Class	II
Exposure Category	C
Topographic Category	1
Spectral Response	$S_s = 0.183$ g, $S_1 = 0.056$ g
Site Class	D - Stiff Soil
HMSL	371 ft.

Conclusion

Upon reviewing the results of this analysis, it is our opinion that the post modification mount meets the specified TIA and ASCE code requirements. The mount and connections for the provided carrier are therefore deemed adequate to support the existing and proposed loading as listed in this report.

If you have any questions, require additional information, or actual conditions differ from those as detailed in this report please contact me via the information below:

Thomas Marr
 Project Engineer I | **INFINIGY**
 1033 Watervliet Shaker Road, Albany, NY 12205
 (O) (518) 690-0790
 Structural@infinigy.com | www.infinigy.com

Final Configuration Loading

Mount CL (ft)	Vert. O/S (ft)	Rad. HT (ft)	Horiz. O/S (ft) ⁽¹⁾	Qty	Appurtenance ⁽²⁾⁽³⁾	Carrier
125.0	0.0	125.0	13.0, 16.9	2	CCI ANTENNAS DMP65R-BU4D	AT&T
			5.7	3	POWERWAVE 7770.00	
			16.9	3	ERICSSON RADIO 4449	
			13.0	3	ERICSSON RRUS 4478 B14	
			13.0	3	ERICSSON RADIO 8843	
			--	2	RAYCAP TME-DC6-48-60-18-8F	
			13.0, 16.9	4	CCI ANTENNAS DMP65R-BU8D	
			5.7	6	POWERWAVE LGP21401	

(1) Horizontal Offset is defined as the distance from the left most edge of the mount face horizontal when viewed facing the tower

(2) Radios are to be mounted behind antennas at respective locations see appended document for vertical locations

(3) Raycap assumed to be installed directly on tower

Mount Usages

Horizontals	76.2%	Pass
Standoffs	44.3%	Pass
Mount Pipes	53.1%	Pass
Kicker	34.6%	Pass
Bolts	61.9%	Pass
Max Usage	76.2%	Pass

Mount Connection Usages

Reaction Data	Design Capacity*	Analysis Reactions	Results
Max Tension (lbs.)	10170.0	6298.21	61.9%
Max Shear (lbs.)	6213.0	1950.64	31.4%
Unity Check	-	-	48.2%

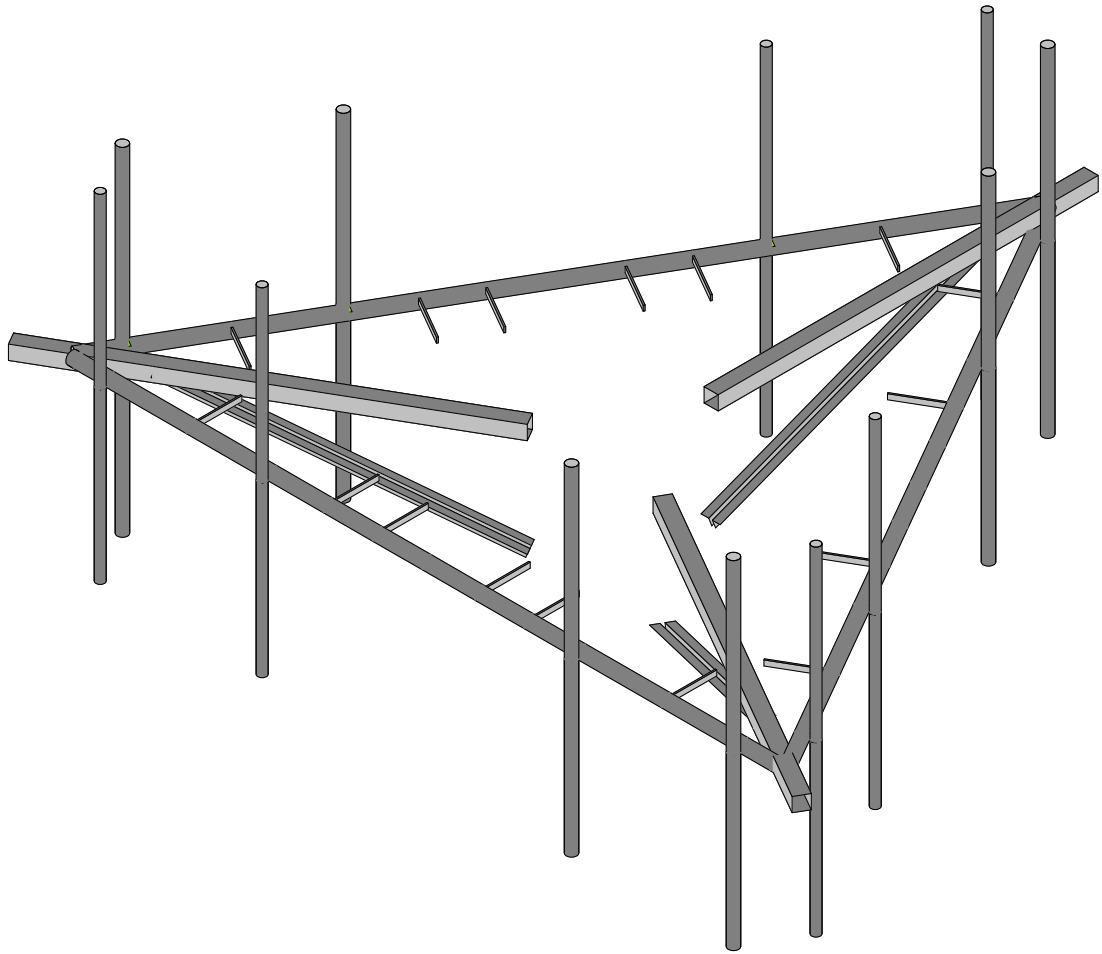
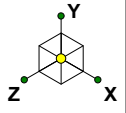
*Assumed (4) 0.625" A307 Bolts per connection. Contractor to field verify prior to proposed installation.

Assumptions and Limitations

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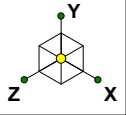
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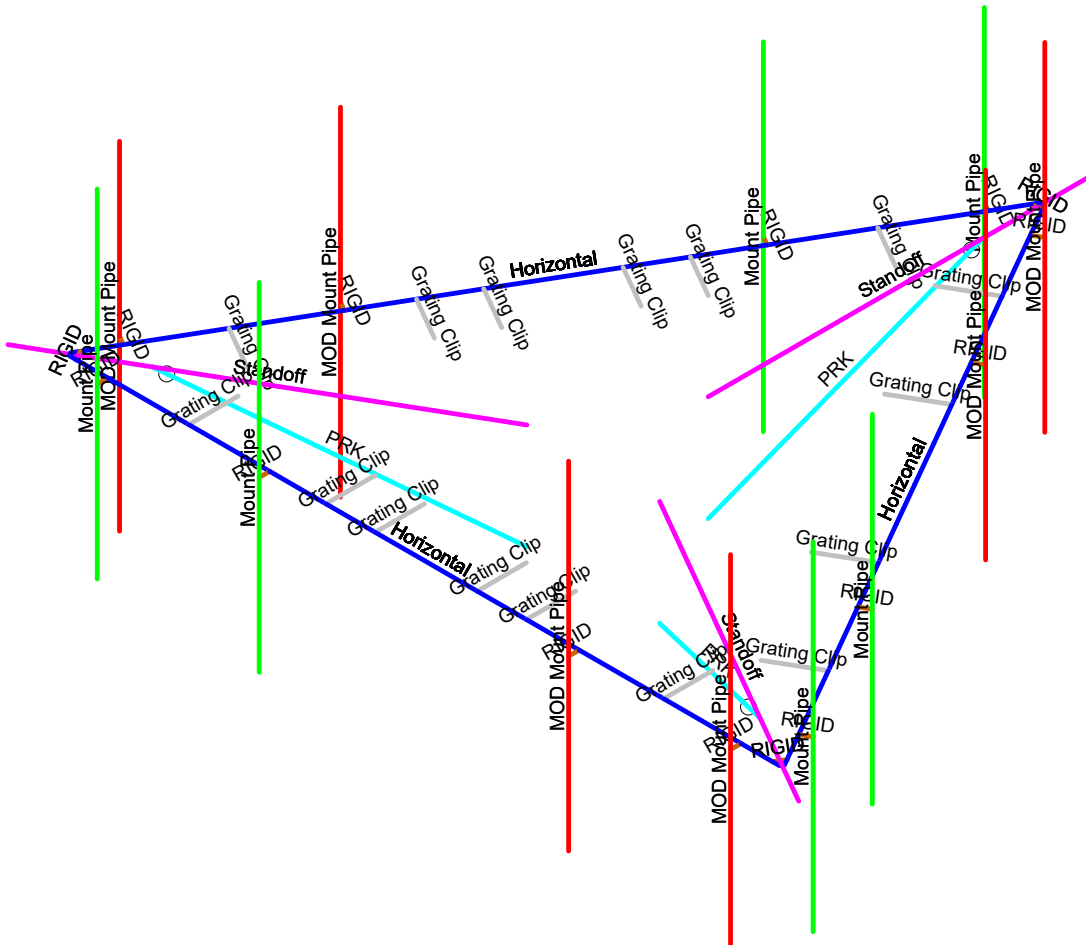
Final Configuration

Sept 13, 2019 at 8:58 AM

CTL01088_MOD_loaded.r3d



Section Sets	
Blue	Horizontal
Green	Mount Pipe
Red	MOD Mount Pipe
Grey	Grating Clip
Pink	Standoff
Cyan	PRK
Brown	RIGID



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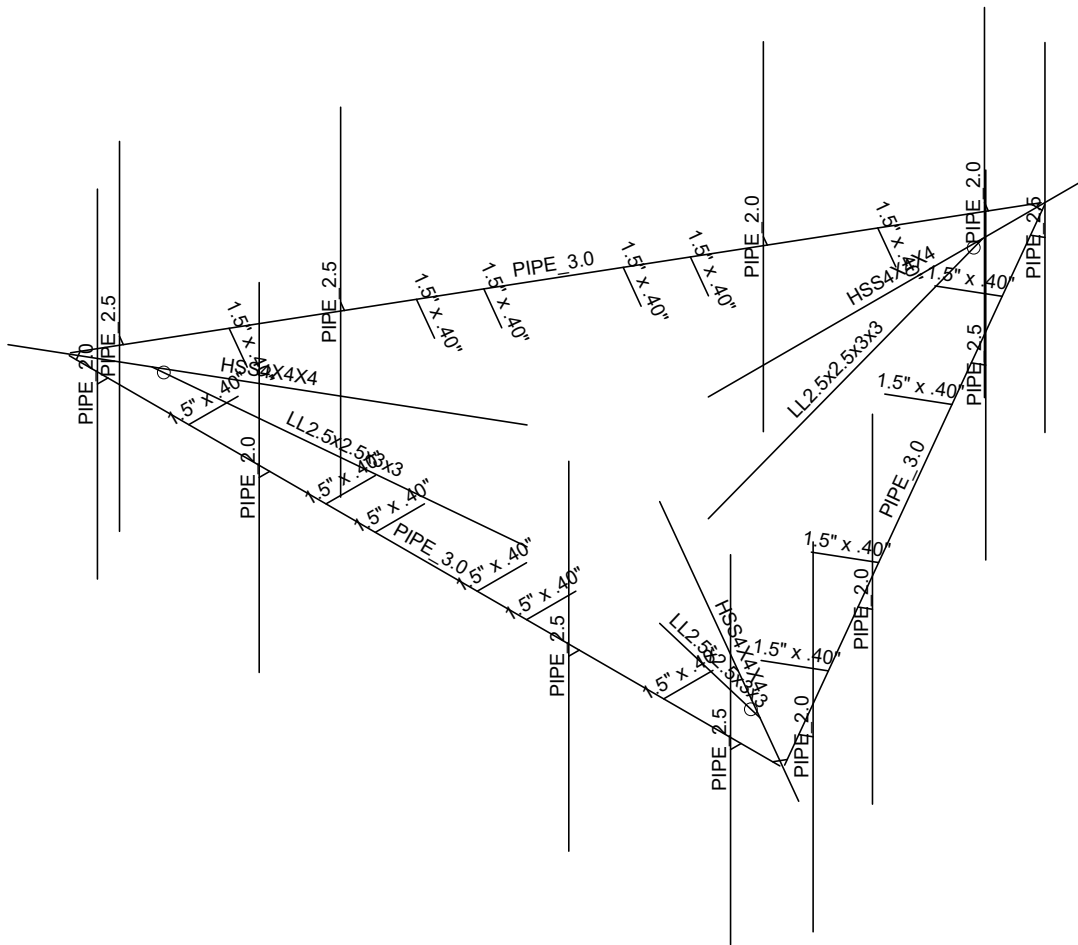
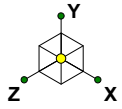
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Section Sets

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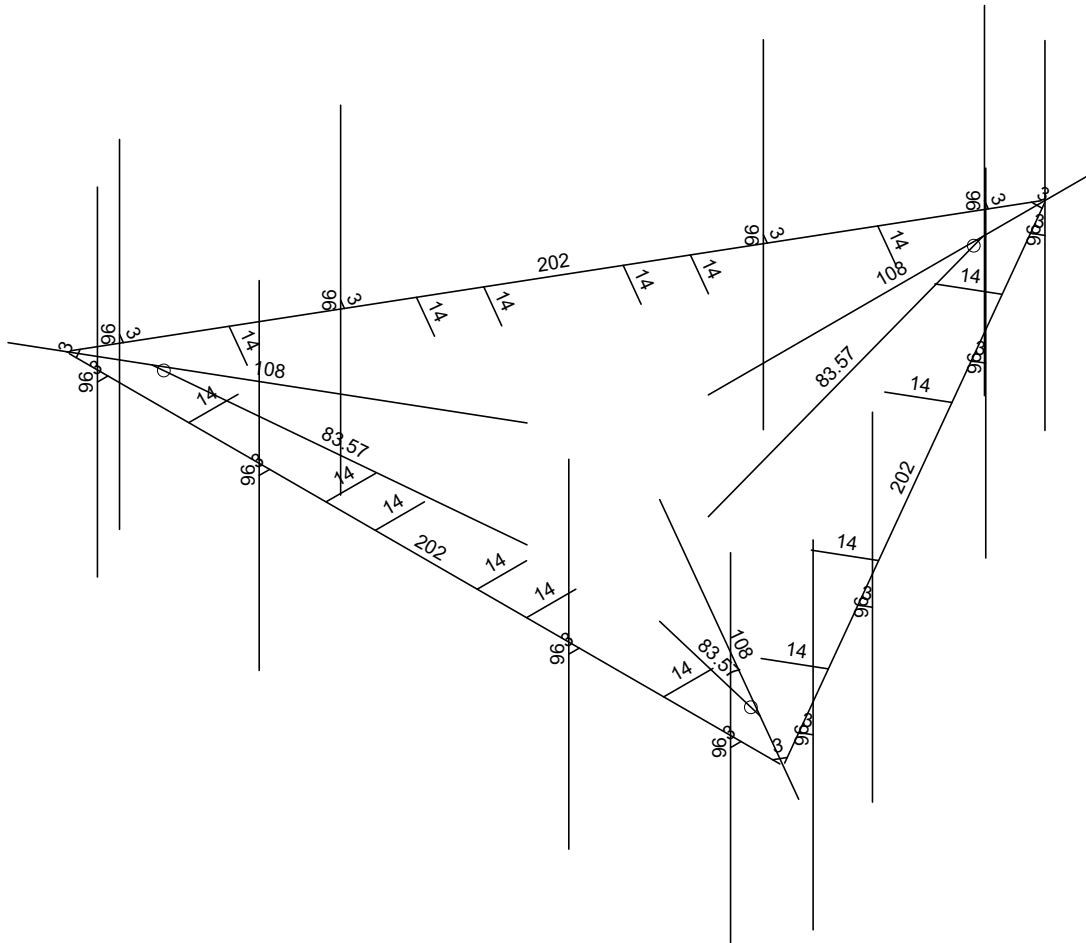
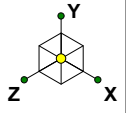
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Member Shape

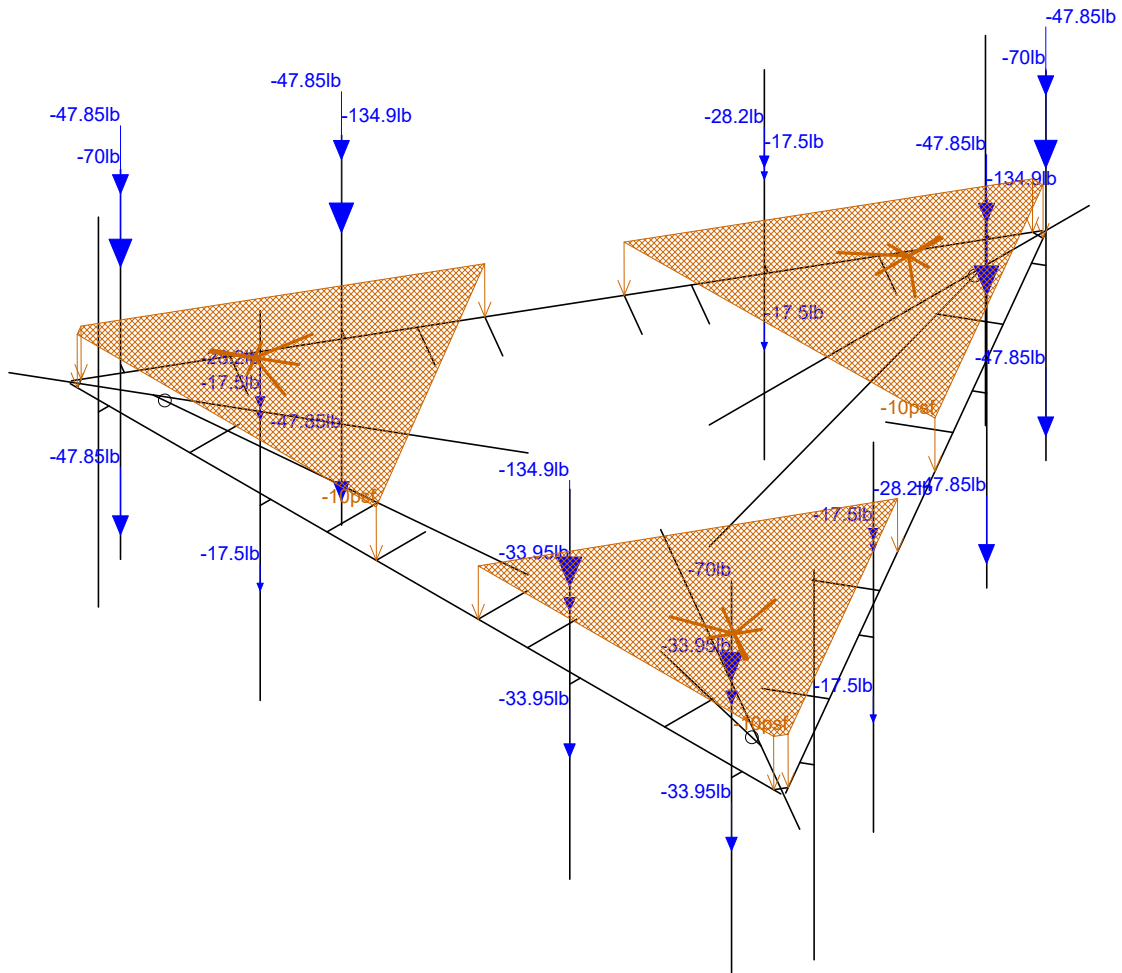
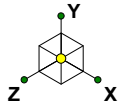
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Member Length (in) Displayed
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Infinigy Engineering, PLLC.	CTL01088	Member Length
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Loads: BLC 1, Self Weight
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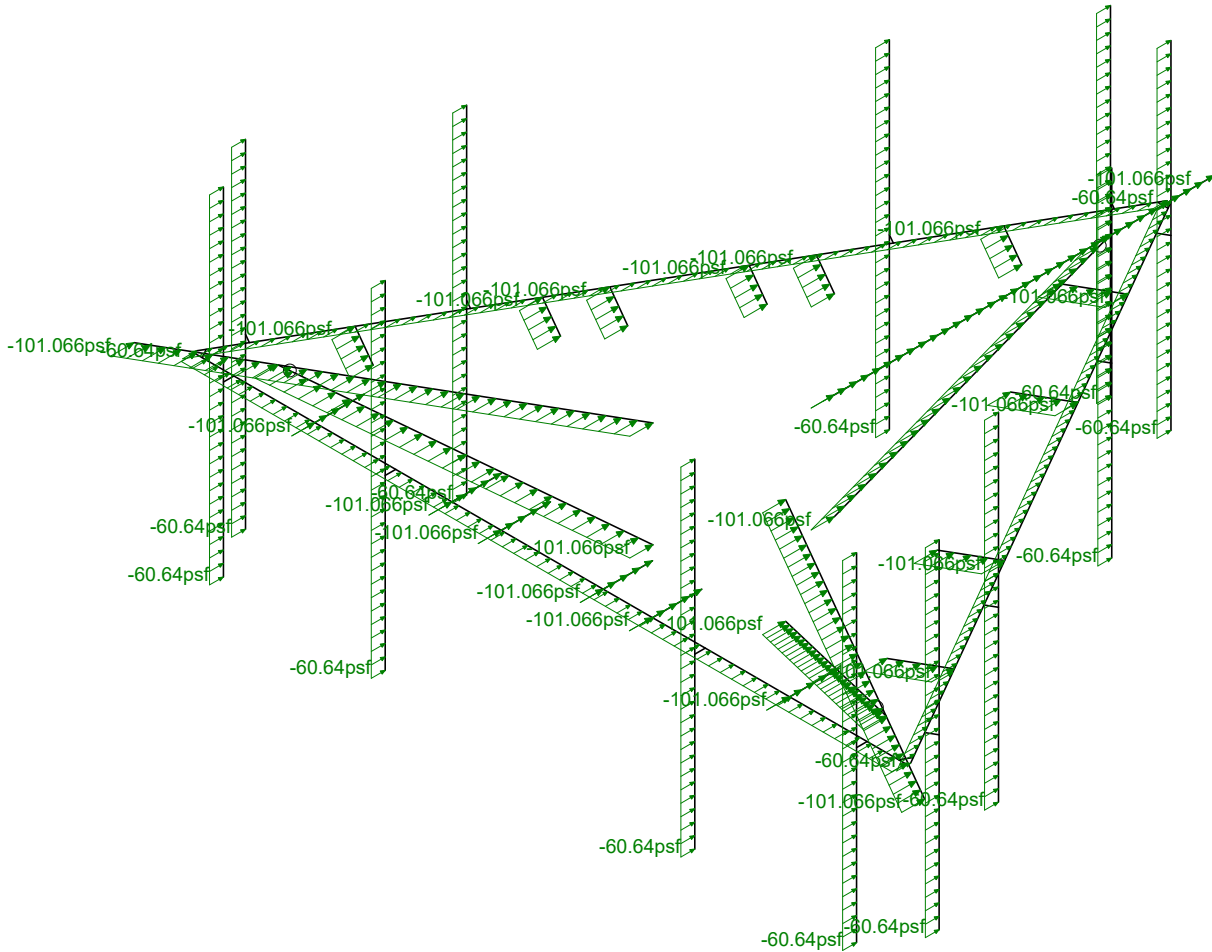
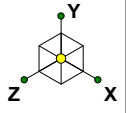
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Self Weight

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Loads: BLC 14, Distr. Wind Load Z
Envelope Only Solution

Infinigy Engineering, PLLC.

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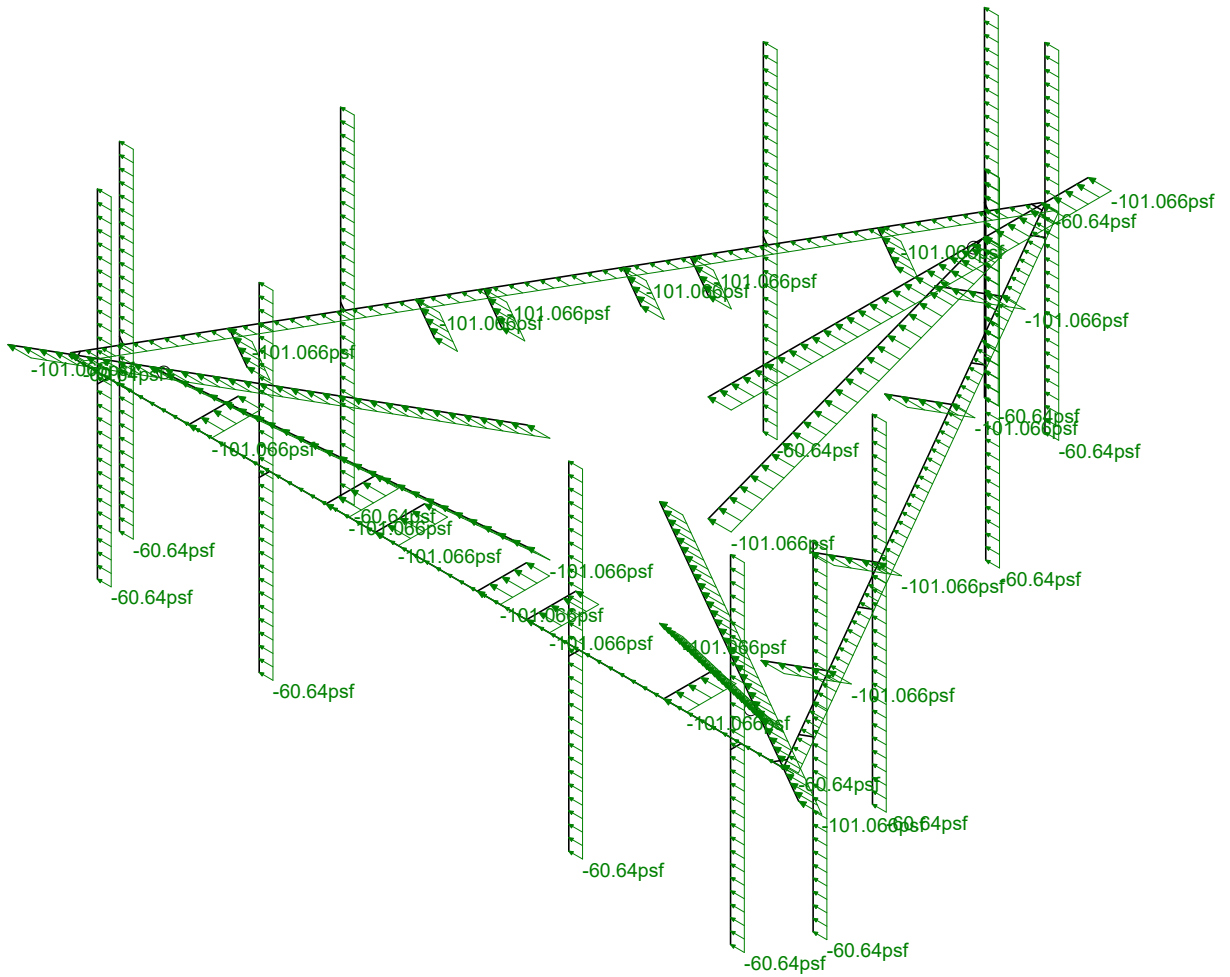
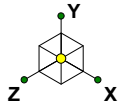
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Wind Load AZI 000

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Loads: BLC 15, Distr. Wind Load X
Envelope Only Solution

Infinigy Engineering, PLLC.

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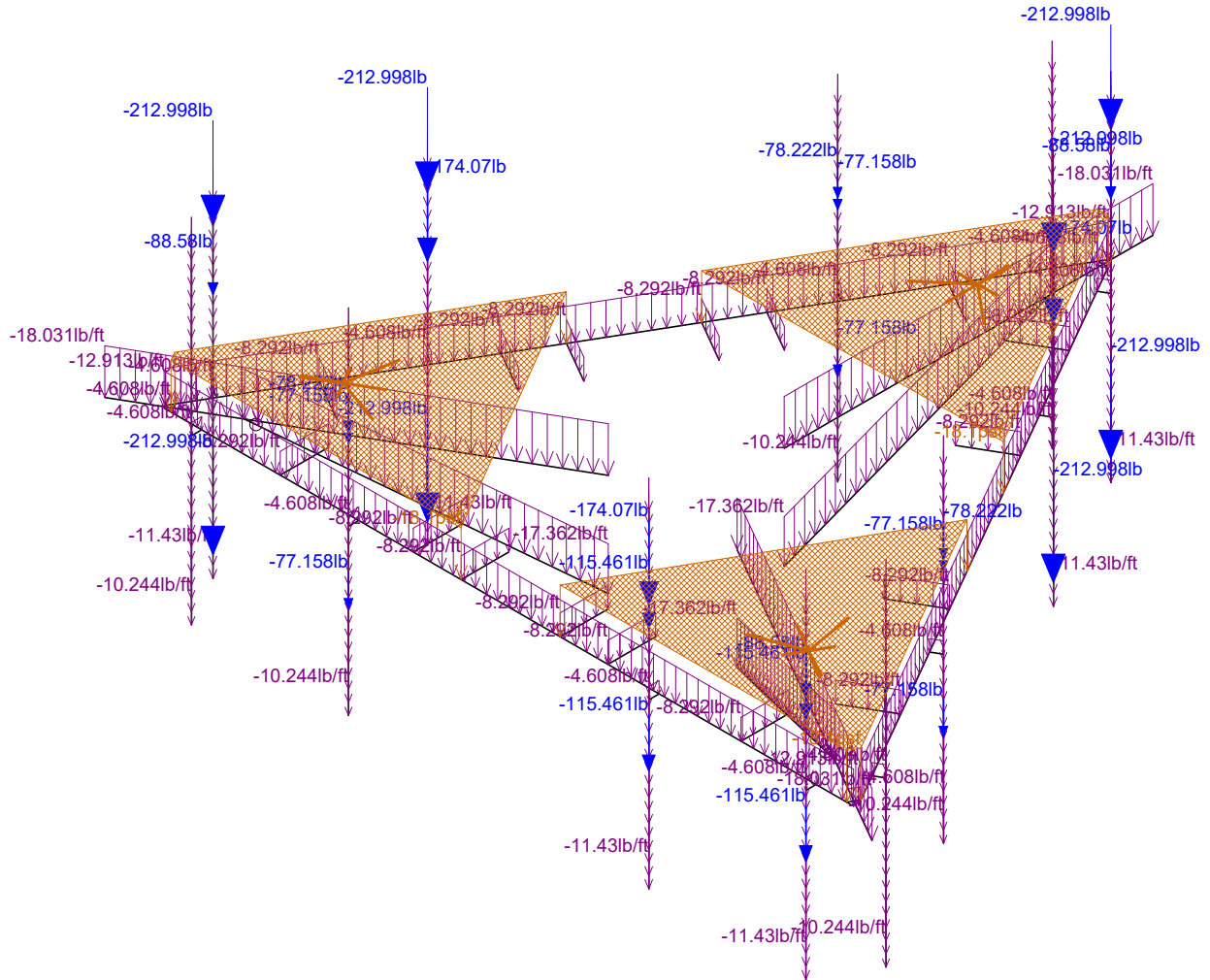
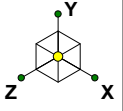
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Wind Load AZI 090

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CTL01088_MOD_loaded.r3d



Loads: BLC 16, Ice Weight
Envelope Only Solution

Infinigy Engineering, PLLC.

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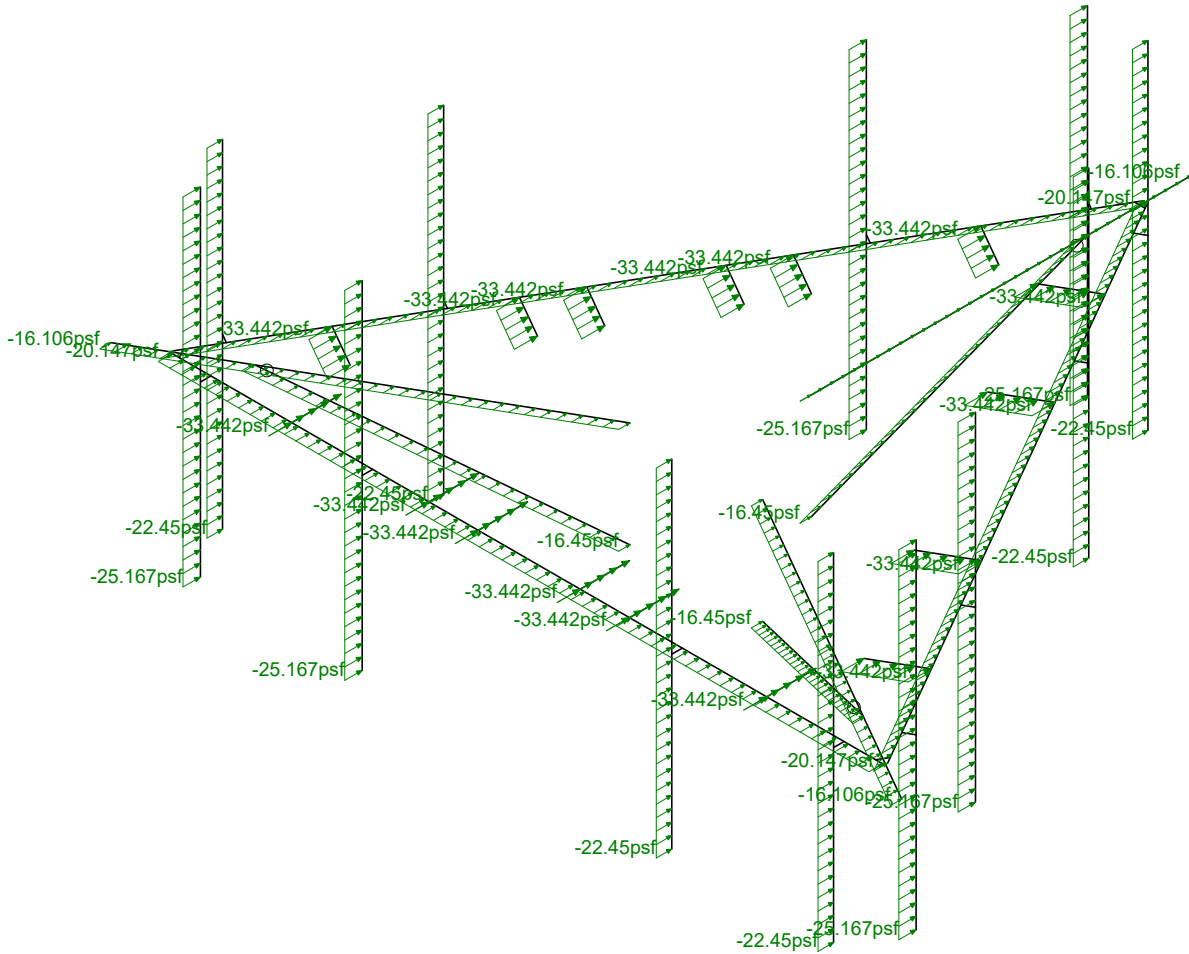
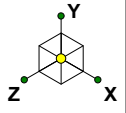
1106-A0001-B

CTL01088

Ice Weight

Sept 13, 2019 at 9:00 AM

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Loads: BLC 29, Distr. Ice Wind Load Z
Envelope Only Solution

Infinigy Engineering, PLLC.

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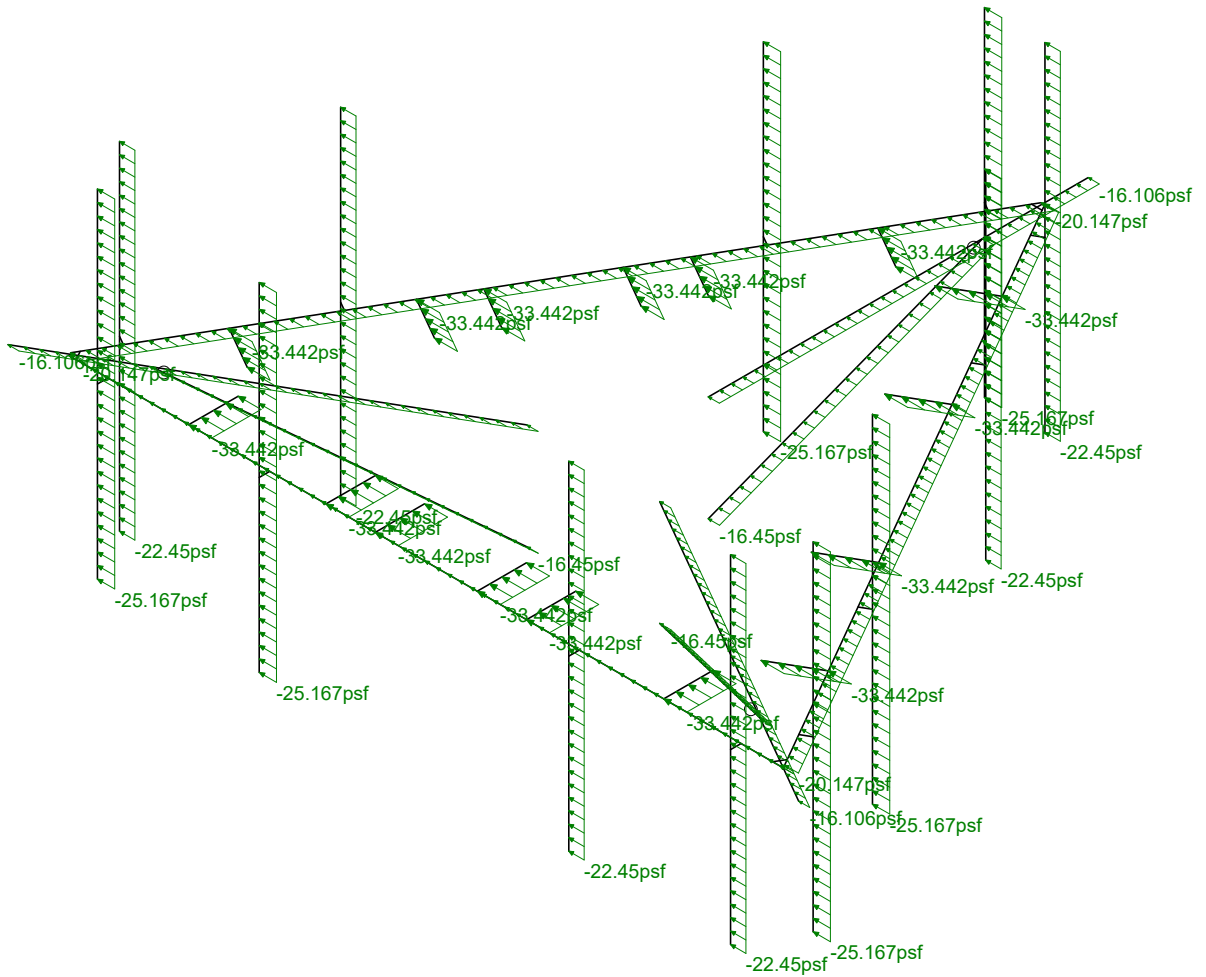
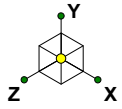
1106-A0001-B

CTL01088

Wind + Ice Load AZI 000

Sept 13, 2019 at 9:00 AM

CTL01088_MOD_loaded.r3d



Loads: BLC 30, Distr. Ice Wind Load X
Envelope Only Solution

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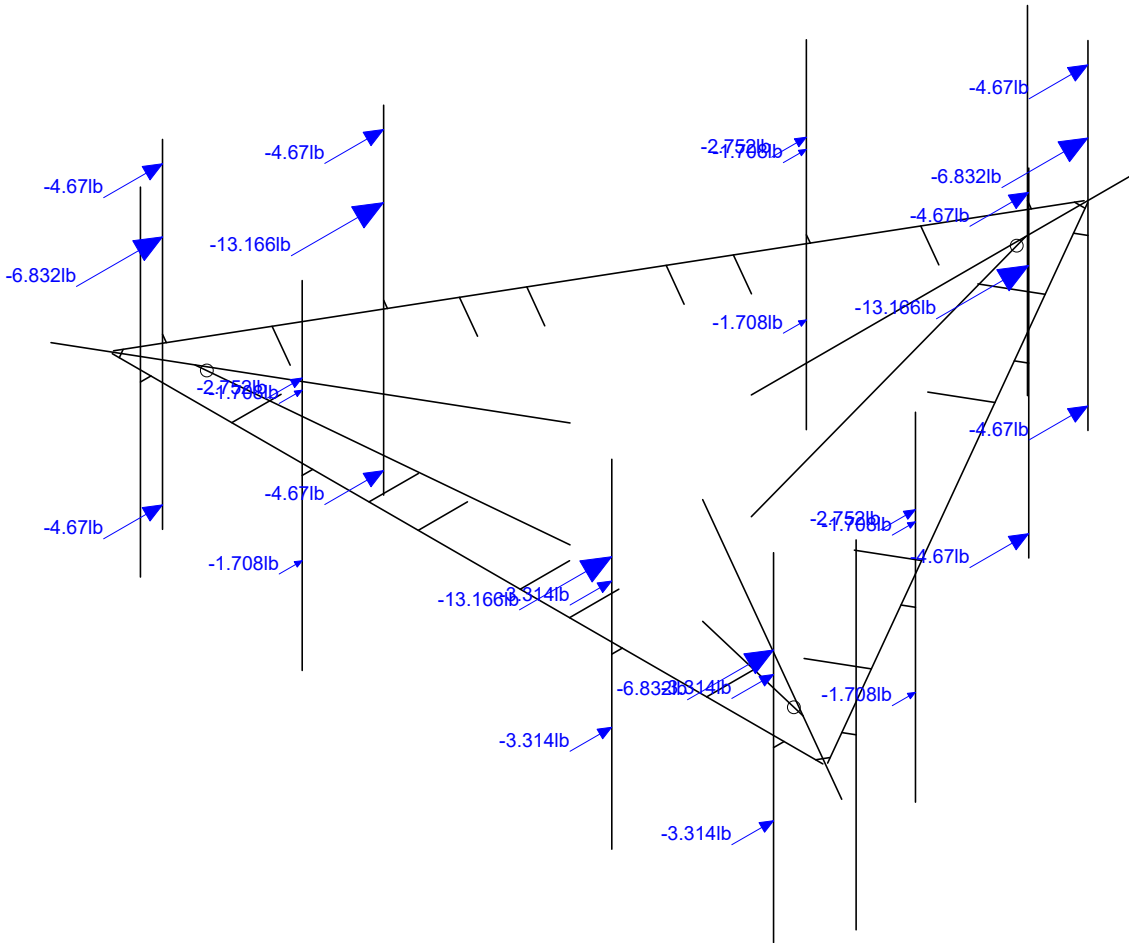
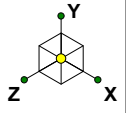
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CTL01088

Wind + Ice Load AZI 090

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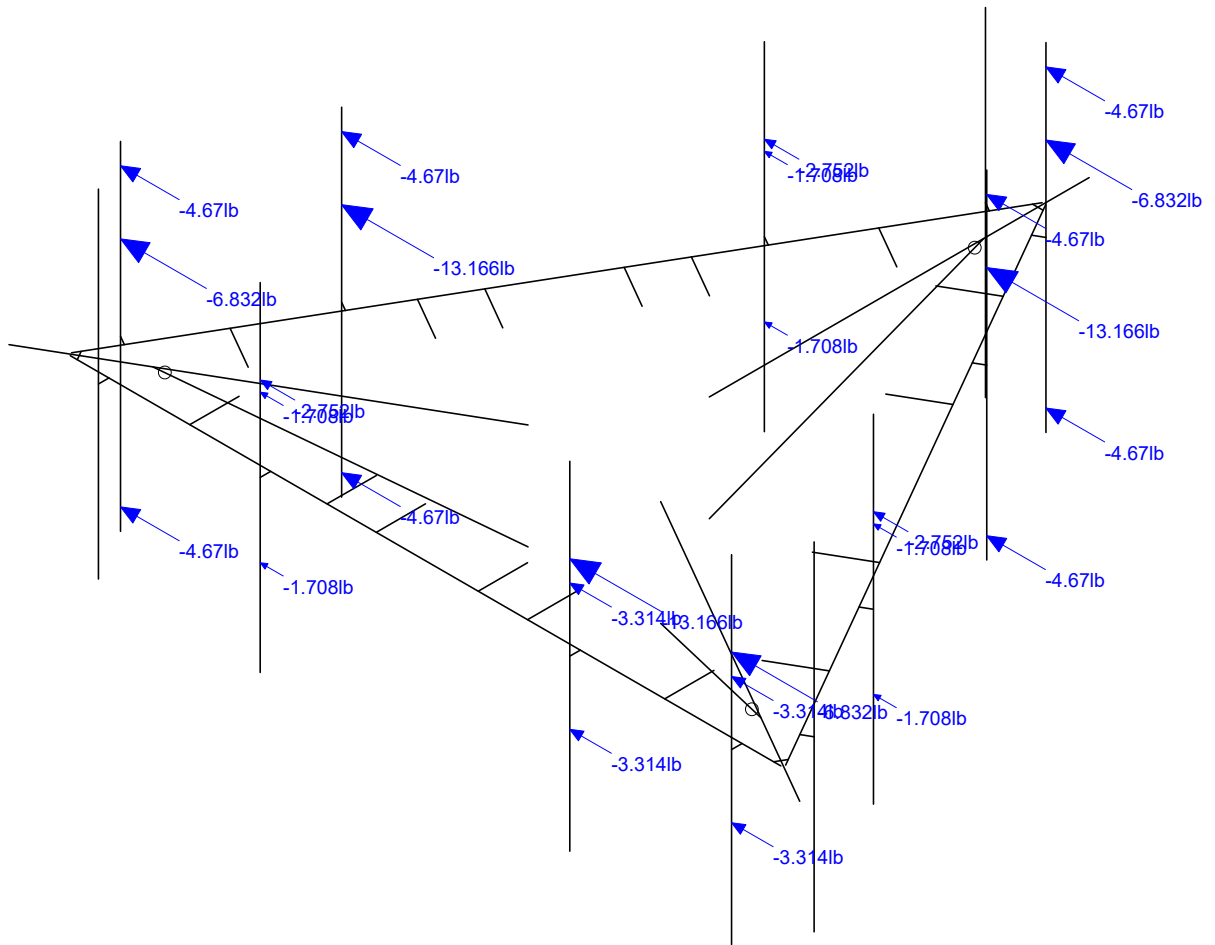
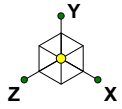


Loads: BLC 31, Seismic Load Z
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1106-A0001-B

CTL01088

Seismic Load AZI 000
Sept 13, 2019 at 9:00 AM
CTL01088_MOD_loaded.r3d



Loads: BLC 32, Seismic Load X
Envelope Only Solution

Infinigy Engineering, PLLC.

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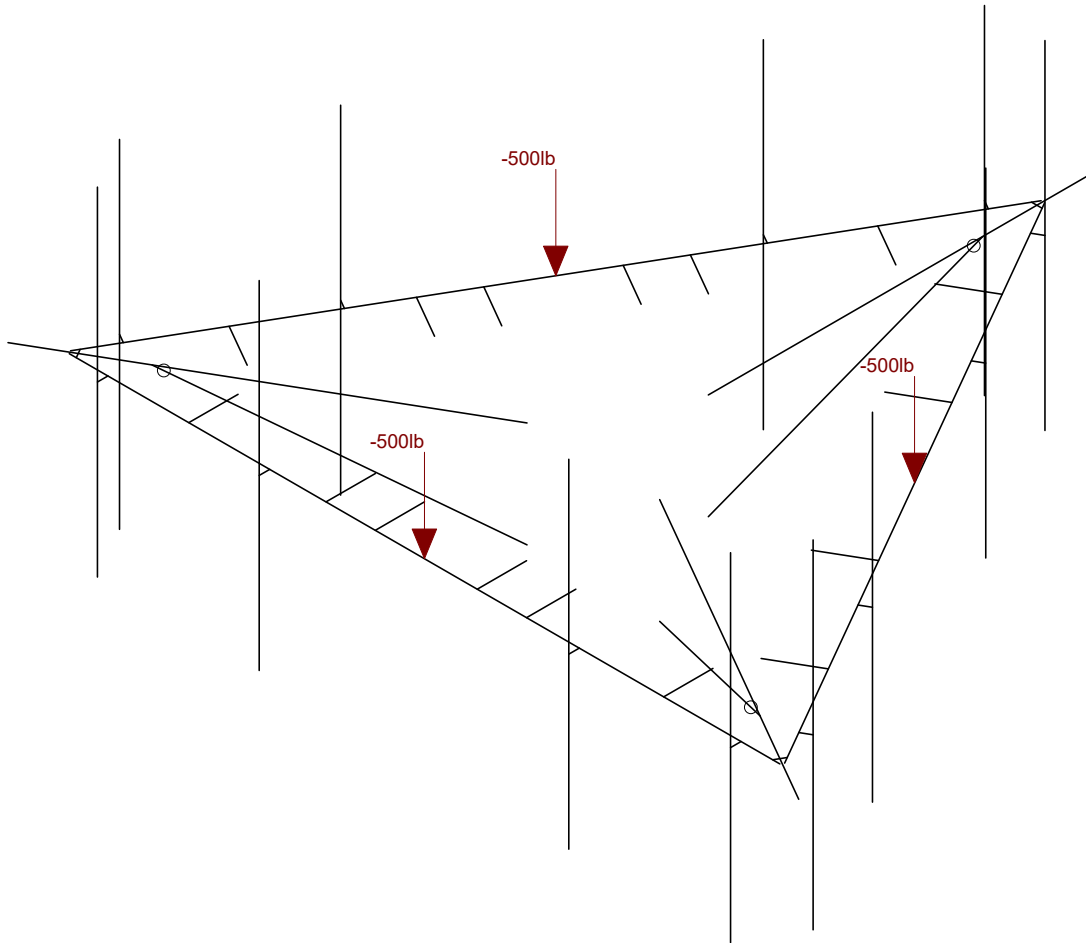
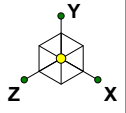
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Seismic Load AZI 090

Sept 13, 2019 at 9:01 AM

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Loads: BLC 33, Service Live Loads
Envelope Only Solution

Infinigy Engineering, PLLC.

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1106-A0001-B

CTL01088

Service Load

Sept 13, 2019 at 9:01 AM

CTL01088_MOD_loaded.r3d

Program Inputs



Project Information		
Client:	Smartlink	
Carrier:	AT&T Mobility	
Engineer:	TM	

Code Standards		
Building Code:	2015 IBC	
TIA Standard:	TIA-222-H	
ASCE Standard:	ASCE 7-10	

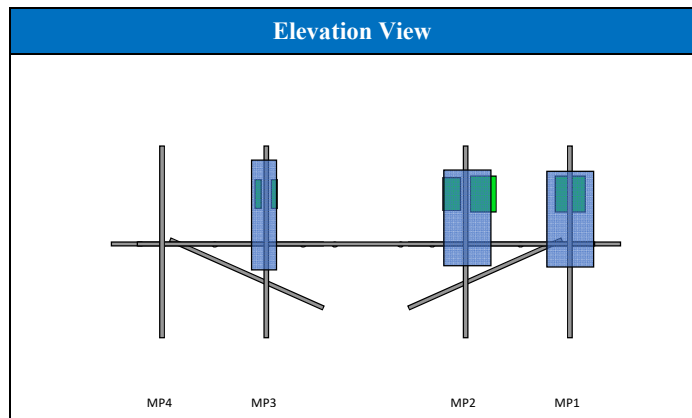
Mount Information		
Mount Type:	Platform	
Num Sectors:	3	
Centerline AGL:	125.0	ft
Roof Height AGL:	130.0	ft

Site Information		
Risk Category:	II	
Exposure Category:	C	
Topo Category:	1	
Site Class:	D - Stiff Soil	
Ground Elevation:	371	ft

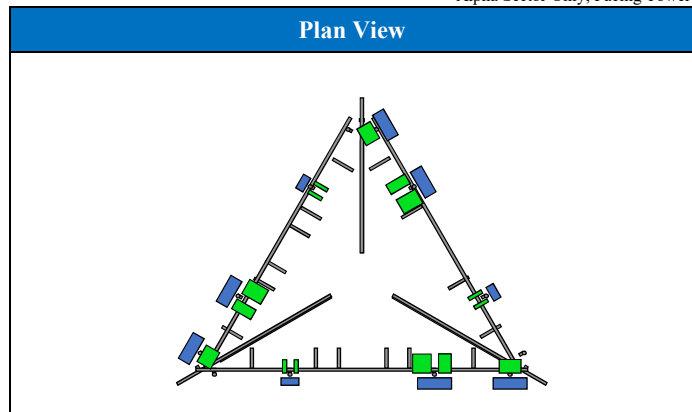
Wind and Ice Data		
Ultimate Wind:	126	mph
Basic Wind:	N/A	mph
Ice Wind:	50	mph
Ice Thickness:	1.7	in

Topographic Data		
Topo Feature:	N/A	
Crest Height:	N/A	ft
Slope Distance:	N/A	ft
Crest Distance:	N/A	ft

Seismic Data		
S _z :	0.18	g
S ₁ :	0.06	g
a _p :	1.0	
R _p :	2.50	
Ω _z :	1.0	
S _{DS} :	0.20	
S _{D1} :	0.09	
F _a :	1.60	
F _v :	2.40	



*Alpha Sector Only, Facing Tower



*Alpha Sector at Bottom

Appurtenance Information**											
Appurtenance Name	Elevation	Qty.	q _z (psf)	EPA _N (ft ²)	EPA _T (ft ²)	Wind F _z (lbs)	Wind F _x (lbs)	Weight (lbs)	Seismic F (lbs)	Member (α sector)	
CCI ANTENNAS DMP65R-BU4D	125.0	1	50.53	8.28	3.51	376.57	159.45	67.90	6.63	MP1	
CCI ANTENNAS DMP65R-BU4D	125.0	1	50.53	8.28	3.51	376.57	159.45	67.90	6.63	MP2	
POWERWAVE TECHNOLOGIES 7770.00	125.0	3	50.53	5.51	2.93	250.53	133.18	35.00	3.42	MP3	
ERICSSON TME-RADIO 4449	125.0	3	50.53	1.98	1.41	90.05	64.13	70.00	6.83	MP1	
ERICSSON TME-RRUS 4478 B14	125.0	3	50.53	1.84	1.06	83.80	48.15	59.90	5.85	MP2	
ERICSSON TME-RADIO 8843	125.0	3	50.53	1.98	1.70	90.05	77.09	75.00	7.32	MP2	
RAYCAP TME-DC6-48-60-18-8F	125.0	2	50.53	2.90	2.90	131.93	131.93	32.80	3.20	Leg/Flush	
CCI ANTENNAS DMP65R-BU8D	125.0	2	50.53	17.87	8.12	812.78	369.40	95.70	9.34	-	
CCI ANTENNAS DMP65R-BU8D	125.0	2	50.53	17.87	8.12	812.78	369.40	95.70	9.34	-	
POWERWAVE TECHNOLOGIES TME-LGP21401	125.0	3	50.53	1.10	0.35	50.21	15.79	14.10	1.38	MP3	
POWERWAVE TECHNOLOGIES TME-LGP21401	125.0	3	50.53	1.10	0.35	50.21	15.79	14.10	1.38	MP3	

**Dish calculations differ from those in display



Company : Infinigy Engineering, PLLC.
 Designer : TM
 Job Number : 1106-A0001-B
 Model Name : CTL01088

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Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N115	N117			Horizontal	Beam	None	A53 Gr. B	Typical
2	M2	N7	N14			Grating Clip	Beam	None	A36 Gr.36	Typical
3	M3	N8	N16			Grating Clip	Beam	None	A36 Gr.36	Typical
4	M4	N9	N18			Grating Clip	Beam	None	A36 Gr.36	Typical
5	M5	N10	N20			Grating Clip	Beam	None	A36 Gr.36	Typical
6	M6	N11	N22			Grating Clip	Beam	None	A36 Gr.36	Typical
7	M7	N12	N24			Grating Clip	Beam	None	A36 Gr.36	Typical
8	M8	N39	N41			Horizontal	Beam	None	A53 Gr. B	Typical
9	M9	N30	N34			Grating Clip	Beam	None	A36 Gr.36	Typical
10	M10	N31	N35			Grating Clip	Beam	None	A36 Gr.36	Typical
11	M11	N32	N36			Grating Clip	Beam	None	A36 Gr.36	Typical
12	M12	N33	N37			Grating Clip	Beam	None	A36 Gr.36	Typical
13	M13	N40	N42			RIGID	None	None	RIGID	Typical
14	M14	N66	N70			Horizontal	Beam	None	A53 Gr. B	Typical
15	M15	N52	N58			Grating Clip	Beam	None	A36 Gr.36	Typical
16	M16	N6	N69			RIGID	None	None	RIGID	Typical
17	M17	N53	N59			Grating Clip	Beam	None	A36 Gr.36	Typical
18	M18	N23	N73			RIGID	None	None	RIGID	Typical
19	M19	N54	N60			Grating Clip	Beam	None	A36 Gr.36	Typical
20	M20	N21	N71			RIGID	None	None	RIGID	Typical
21	M21	N55	N61			Grating Clip	Beam	None	A36 Gr.36	Typical
22	M22	N5	N67			RIGID	None	None	RIGID	Typical
23	M23	N56	N62			Grating Clip	Beam	None	A36 Gr.36	Typical
24	M24	N57	N63			Grating Clip	Beam	None	A36 Gr.36	Typical
25	M25	N65	N64			Standoff	Beam	None	A500 Gr....	Typical
26	M26	N100	N81			Standoff	Beam	None	A500 Gr....	Typical
27	M27	N68	N72			RIGID	None	None	RIGID	Typical
28	M28	N38	N87			Standoff	Beam	None	A500 Gr....	Typical
29	M29	N85	N29			RIGID	None	None	RIGID	Typical
30	M30	N94	N46			RIGID	None	None	RIGID	Typical
31	M31	N93	N45			RIGID	None	None	RIGID	Typical
32	M32	N83	N28			RIGID	None	None	RIGID	Typical
33	M33	N101	N51			RIGID	None	None	RIGID	Typical
34	M34	N111	N84			RIGID	None	None	RIGID	Typical
35	M35	N109	N82			RIGID	None	None	RIGID	Typical
36	M36	N99	N50			RIGID	None	None	RIGID	Typical
37	M37	N116	N118			RIGID	None	None	RIGID	Typical
38	M38	N107	N105			PRK	Beam	None	A36 Gr.36	Typical
39	M39	N112	N110			PRK	Beam	None	A36 Gr.36	Typical
40	M40	N114	N113			PRK	Beam	None	A36 Gr.36	Typical
41	MP1	N3	N4			MOD Mount ...	Beam	None	A53 Gr. B	Typical
42	MP2	N17	N19			MOD Mount ...	Beam	None	A53 Gr. B	Typical
43	MP3	N13	N15			Mount Pipe	Beam	None	A53 Gr. B	Typical
44	MP4	N1	N2			Mount Pipe	Beam	None	A53 Gr. B	Typical
45	MP5	N97	N98			MOD Mount ...	Beam	None	A53 Gr. B	Typical
46	MP6	N106	N108			MOD Mount ...	Beam	None	A53 Gr. B	Typical
47	MP7	N102	N104			Mount Pipe	Beam	None	A53 Gr. B	Typical
48	MP8	N95	N96			Mount Pipe	Beam	None	A53 Gr. B	Typical
49	MP9	N79	N80			MOD Mount ...	Beam	None	A53 Gr. B	Typical
50	MP10	N90	N91			MOD Mount ...	Beam	None	A53 Gr. B	Typical
51	MP11	N88	N89			Mount Pipe	Beam	None	A53 Gr. B	Typical
52	MP12	N75	N76			Mount Pipe	Beam	None	A53 Gr. B	Typical

Hot Rolled Steel Design Parameters

	Label	Shape	Length[in]	Lbyy[in]	Lbzz[in]	Lcomp top[...]	Lcomp bot[...]	L-torque[...]	Kyy	Kzz	Cb	Functi...
1	M1	Horizontal	202			Lbyy						Lateral
2	M2	Grating Clip	14			Lbyy						Lateral
3	M3	Grating Clip	14			Lbyy						Lateral
4	M4	Grating Clip	14			Lbyy						Lateral
5	M5	Grating Clip	14			Lbyy						Lateral
6	M6	Grating Clip	14			Lbyy						Lateral
7	M7	Grating Clip	14			Lbyy						Lateral
8	M8	Horizontal	202			Lbyy						Lateral
9	M9	Grating Clip	14			Lbyy						Lateral
10	M10	Grating Clip	14			Lbyy						Lateral
11	M11	Grating Clip	14			Lbyy						Lateral
12	M12	Grating Clip	14			Lbyy						Lateral
13	M14	Horizontal	202			Lbyy						Lateral
14	M15	Grating Clip	14			Lbyy						Lateral
15	M17	Grating Clip	14			Lbyy						Lateral
16	M19	Grating Clip	14			Lbyy						Lateral
17	M21	Grating Clip	14			Lbyy						Lateral
18	M23	Grating Clip	14			Lbyy						Lateral
19	M24	Grating Clip	14			Lbyy						Lateral
20	M25	Standoff	108			Lbyy						Lateral
21	M26	Standoff	108			Lbyy						Lateral
22	M28	Standoff	108			Lbyy						Lateral
23	M38	PRK	83.57			Lbyy						Lateral
24	M39	PRK	83.57			Lbyy						Lateral
25	M40	PRK	83.57			Lbyy						Lateral
26	MP1	MOD Mount Pipe	96	42	42	Lbyy			2.1	2.1		Lateral
27	MP2	MOD Mount Pipe	96			Lbyy						Lateral
28	MP3	Mount Pipe	96			Lbyy						Lateral
29	MP4	Mount Pipe	96	42	42	Lbyy			2.1	2.1		Lateral
30	MP5	MOD Mount Pipe	96	42	42	Lbyy			2.1	2.1		Lateral
31	MP6	MOD Mount Pipe	96			Lbyy						Lateral
32	MP7	Mount Pipe	96			Lbyy						Lateral
33	MP8	Mount Pipe	96	42	42	Lbyy			2.1	2.1		Lateral
34	MP9	MOD Mount Pipe	96	42	42	Lbyy			2.1	2.1		Lateral
35	MP10	MOD Mount Pipe	96			Lbyy						Lateral
36	MP11	Mount Pipe	96			Lbyy						Lateral
37	MP12	Mount Pipe	96	42	42	Lbyy			2.1	2.1		Lateral

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M1						Yes				None
2	M2						Yes				None
3	M3						Yes				None
4	M4						Yes				None
5	M5						Yes				None
6	M6						Yes				None
7	M7						Yes				None
8	M8						Yes				None
9	M9						Yes				None
10	M10						Yes				None
11	M11						Yes				None
12	M12						Yes				None
13	M13						Yes	** NA **			None
14	M14						Yes				None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
15	M15						Yes				None
16	M16						Yes	** NA **			None
17	M17						Yes				None
18	M18						Yes	** NA **			None
19	M19						Yes				None
20	M20						Yes	** NA **			None
21	M21						Yes				None
22	M22						Yes	** NA **			None
23	M23						Yes				None
24	M24						Yes				None
25	M25						Yes				None
26	M26						Yes				None
27	M27						Yes	** NA **			None
28	M28						Yes				None
29	M29						Yes	** NA **			None
30	M30						Yes	** NA **			None
31	M31						Yes	** NA **			None
32	M32						Yes	** NA **			None
33	M33						Yes	** NA **			None
34	M34						Yes	** NA **			None
35	M35						Yes	** NA **			None
36	M36						Yes	** NA **			None
37	M37						Yes	** NA **			None
38	M38		BenPIN				Yes	Default			None
39	M39		BenPIN				Yes	Default			None
40	M40		BenPIN				Yes	Default			None
41	MP1						Yes				None
42	MP2						Yes				None
43	MP3						Yes				None
44	MP4						Yes				None
45	MP5						Yes				None
46	MP6						Yes				None
47	MP7						Yes				None
48	MP8						Yes				None
49	MP9						Yes				None
50	MP10						Yes				None
51	MP11						Yes				None
52	MP12						Yes				None

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design R...	A [in ²]	I _{yy} [in ⁴]	I _{zz} [in ⁴]	J [in ⁴]
1	Horizontal	PIPE 3.0	Beam	None	A53 Gr. B	Typical	2.07	2.85	2.85	5.69
2	Mount Pipe	PIPE 2.0	Beam	None	A53 Gr. B	Typical	1.02	.627	.627	1.25
3	MOD Mount ...	PIPE 2.5	Beam	None	A53 Gr. B	Typical	1.61	1.45	1.45	2.89
4	Grating Clip	1.5" x .40"	Beam	None	A36 Gr.36	Typical	.6	.008	.113	.027
5	Standoff	HSS4X4X4	Beam	None	A500 Gr.46	Typical	3.37	7.8	7.8	12.8
6	PRK	LL2.5x2.5x3x3	Beam	None	A36 Gr.36	Typical	1.8	2.46	1.07	.023

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...	Surface(...
1	Self Weight	DL		-1			33		3
2	Wind Load AZI 0	WLZ					66		
3	Wind Load AZI 30	None					66		
4	Wind Load AZI 60	None					66		



Company : Infinigy Engineering, PLLC.
 Designer : TM
 Job Number : 1106-A0001-B
 Model Name : CTL01088

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Basic Load Cases (Continued)

BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me... Surface(...
5 Wind Load AZI 90	WLX					66	
6 Wind Load AZI 120	None					66	
7 Wind Load AZI 150	None					66	
8 Wind Load AZI 180	None					66	
9 Wind Load AZI 210	None					66	
10 Wind Load AZI 240	None					66	
11 Wind Load AZI 270	None					66	
12 Wind Load AZI 300	None					66	
13 Wind Load AZI 330	None					66	
14 Distr. Wind Load Z	WLZ						52
15 Distr. Wind Load X	WLX						52
16 Ice Weight	OL1					33	52 3
17 Ice Wind Load AZI 0	OL2					66	
18 Ice Wind Load AZI 30	None					66	
19 Ice Wind Load AZI 60	None					66	
20 Ice Wind Load AZI 90	OL3					66	
21 Ice Wind Load AZI 120	None					66	
22 Ice Wind Load AZI 150	None					66	
23 Ice Wind Load AZI 180	None					66	
24 Ice Wind Load AZI 210	None					66	
25 Ice Wind Load AZI 240	None					66	
26 Ice Wind Load AZI 270	None					66	
27 Ice Wind Load AZI 300	None					66	
28 Ice Wind Load AZI 330	None					66	
29 Distr. Ice Wind Load Z	OL2						52
30 Distr. Ice Wind Load X	OL3						52
31 Seismic Load Z	ELZ			-.098		33	
32 Seismic Load X	ELX	-.098				33	
33 Service Live Loads	LL				3		
34 Maintenance Load 1	LL				1		
35 Maintenance Load 2	LL				1		
36 Maintenance Load 3	LL				1		
37 Maintenance Load 4	LL				1		
38 Maintenance Load 5	LL				1		
39 Maintenance Load 6	LL				1		
40 Maintenance Load 7	LL				1		
41 Maintenance Load 8	LL				1		
42 Maintenance Load 9	LL				1		
43 Maintenance Load 10	LL				1		
44 Maintenance Load 11	LL				1		
45 Maintenance Load 12	LL				1		
46 BLC 1 Transient Area Loads	None						118
47 BLC 16 Transient Area Lo...	None						118

Load Combinations

Description	S...	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	
1 1.4DL	Yes	Y		1	1.4																	
2 1.2DL + 1WL AZI 0	Yes	Y		1	1.2	2	1	14	1	15												
3 1.2DL + 1WL AZI 30	Yes	Y		1	1.2	3	1	14	.866	15	.5											
4 1.2DL + 1WL AZI 60	Yes	Y		1	1.2	4	1	14	.5	15	.866											
5 1.2DL + 1WL AZI 90	Yes	Y		1	1.2	5	1	14		15	1											
6 1.2DL + 1WL AZI 120	Yes	Y		1	1.2	6	1	14	-.5	15	.866											
7 1.2DL + 1WL AZI 150	Yes	Y		1	1.2	7	1	14	-.866	15	.5											
8 1.2DL + 1WL AZI 180	Yes	Y		1	1.2	8	1	14	-1	15												
9 1.2DL + 1WL AZI 210	Yes	Y		1	1.2	9	1	14	-.866	15	-.5											

Load Combinations (Continued)

	Description	S...	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
10	1.2DL + 1WL AZI 240	Yes	Y		1	1.2	10	1	14	-.5	15	-.866												
11	1.2DL + 1WL AZI 270	Yes	Y		1	1.2	11	1	14		15	-.1												
12	1.2DL + 1WL AZI 300	Yes	Y		1	1.2	12	1	14	.5	15	-.866												
13	1.2DL + 1WL AZI 330	Yes	Y		1	1.2	13	1	14	.866	15	-.5												
14	0.9DL + 1WL AZI 0	Yes	Y		1	.9	2	1	14	1	15													
15	0.9DL + 1WL AZI 30	Yes	Y		1	.9	3	1	14	.866	15	.5												
16	0.9DL + 1WL AZI 60	Yes	Y		1	.9	4	1	14	.5	15	.866												
17	0.9DL + 1WL AZI 90	Yes	Y		1	.9	5	1	14		15	1												
18	0.9DL + 1WL AZI 120	Yes	Y		1	.9	6	1	14	-.5	15	.866												
19	0.9DL + 1WL AZI 150	Yes	Y		1	.9	7	1	14	-.866	15	.5												
20	0.9DL + 1WL AZI 180	Yes	Y		1	.9	8	1	14	-.1	15													
21	0.9DL + 1WL AZI 210	Yes	Y		1	.9	9	1	14	-.866	15	-.5												
22	0.9DL + 1WL AZI 240	Yes	Y		1	.9	10	1	14	-.5	15	-.866												
23	0.9DL + 1WL AZI 270	Yes	Y		1	.9	11	1	14		15	-.1												
24	0.9DL + 1WL AZI 300	Yes	Y		1	.9	12	1	14	.5	15	-.866												
25	0.9DL + 1WL AZI 330	Yes	Y		1	.9	13	1	14	.866	15	-.5												
26	1.2D + 1.0Di	Yes	Y		1	1.2	16	1																
27	1.2D + 1.0Di + 1.0Wi AZI 0	Yes	Y		1	1.2	16	1	17	1	29	1	30											
28	1.2D + 1.0Di + 1.0Wi AZI 30	Yes	Y		1	1.2	16	1	18	1	29	.866	30	.5										
29	1.2D + 1.0Di + 1.0Wi AZI 60	Yes	Y		1	1.2	16	1	19	1	29	.5	30	.866										
30	1.2D + 1.0Di + 1.0Wi AZI 90	Yes	Y		1	1.2	16	1	20	1	29		30	1										
31	1.2D + 1.0Di + 1.0Wi AZI 120	Yes	Y		1	1.2	16	1	21	1	29	-.5	30	.866										
32	1.2D + 1.0Di + 1.0Wi AZI 150	Yes	Y		1	1.2	16	1	22	1	29	-.866	30	.5										
33	1.2D + 1.0Di + 1.0Wi AZI 180	Yes	Y		1	1.2	16	1	23	1	29	-.1	30											
34	1.2D + 1.0Di + 1.0Wi AZI 210	Yes	Y		1	1.2	16	1	24	1	29	-.866	30	-.5										
35	1.2D + 1.0Di + 1.0Wi AZI 240	Yes	Y		1	1.2	16	1	25	1	29	-.5	30	-.866										
36	1.2D + 1.0Di + 1.0Wi AZI 270	Yes	Y		1	1.2	16	1	26	1	29		30	-.1										
37	1.2D + 1.0Di + 1.0Wi AZI 300	Yes	Y		1	1.2	16	1	27	1	29	.5	30	-.866										
38	1.2D + 1.0Di + 1.0Wi AZI 330	Yes	Y		1	1.2	16	1	28	1	29	.866	30	-.5										
39	(1.2 + 0.2Sds)DL + 1.0E A...	Yes	Y		1	1.2...	31	1	32															
40	(1.2 + 0.2Sds)DL + 1.0E A...	Yes	Y		1	1.2...	31	.866	32	.5														
41	(1.2 + 0.2Sds)DL + 1.0E A...	Yes	Y		1	1.2...	31	.5	32	.866														
42	(1.2 + 0.2Sds)DL + 1.0E A...	Yes	Y		1	1.2...	31		32	1														
43	(1.2 + 0.2Sds)DL + 1.0E A...	Yes	Y		1	1.2...	31	-.5	32	.866														
44	(1.2 + 0.2Sds)DL + 1.0E A...	Yes	Y		1	1.2...	31	-.866	32	.5														
45	(1.2 + 0.2Sds)DL + 1.0E A...	Yes	Y		1	1.2...	31	-.1	32															
46	(1.2 + 0.2Sds)DL + 1.0E A...	Yes	Y		1	1.2...	31	-.866	32	-.5														
47	(1.2 + 0.2Sds)DL + 1.0E A...	Yes	Y		1	1.2...	31	-.5	32	-.866														
48	(1.2 + 0.2Sds)DL + 1.0E A...	Yes	Y		1	1.2...	31		32	-.1														
49	(1.2 + 0.2Sds)DL + 1.0E A...	Yes	Y		1	1.2...	31	.5	32	-.866														
50	(1.2 + 0.2Sds)DL + 1.0E A...	Yes	Y		1	1.2...	31	.866	32	-.5														
51	(0.9 - 0.2Sds)DL + 1.0E AZ...	Yes	Y		1	.861	31	1	32															
52	(0.9 - 0.2Sds)DL + 1.0E AZ...	Yes	Y		1	.861	31	.866	32	.5														
53	(0.9 - 0.2Sds)DL + 1.0E AZ...	Yes	Y		1	.861	31	.5	32	.866														
54	(0.9 - 0.2Sds)DL + 1.0E AZ...	Yes	Y		1	.861	31		32	1														
55	(0.9 - 0.2Sds)DL + 1.0E AZ...	Yes	Y		1	.861	31	-.5	32	.866														
56	(0.9 - 0.2Sds)DL + 1.0E AZ...	Yes	Y		1	.861	31	-.866	32	.5														
57	(0.9 - 0.2Sds)DL + 1.0E AZ...	Yes	Y		1	.861	31	-.1	32															
58	(0.9 - 0.2Sds)DL + 1.0E AZ...	Yes	Y		1	.861	31	-.866	32	-.5														
59	(0.9 - 0.2Sds)DL + 1.0E AZ...	Yes	Y		1	.861	31	-.5	32	-.866														
60	(0.9 - 0.2Sds)DL + 1.0E AZ...	Yes	Y		1	.861	31		32	-.1														
61	(0.9 - 0.2Sds)DL + 1.0E AZ...	Yes	Y		1	.861	31	.5	32	-.866														
62	(0.9 - 0.2Sds)DL + 1.0E AZ...	Yes	Y		1	.861	31	.866	32	-.5														
63	1.0DL + 1.5LL + 1.0SWL (6...	Yes	Y		1	1	2	.227	14	.227	15		33	1.5										
64	1.0DL + 1.5LL + 1.0SWL (6...	Yes	Y		1	1	3	.227	14	.196	15	.113	33	1.5										
65	1.0DL + 1.5LL + 1.0SWL (6...	Yes	Y		1	1	4	.227	14	.113	15	.196	33	1.5										
66	1.0DL + 1.5LL + 1.0SWL (6...	Yes	Y		1	1	5	.227	14		15	.227	33	1.5										



Load Combinations (Continued)

	Description	S...	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	
124	1.2DL + 1.5LM-MP5 + 1S...	Yes	Y		1	1.2	38	1.5	2	.057	14	.057	15										
125	1.2DL + 1.5LM-MP5 + 1S...	Yes	Y		1	1.2	38	1.5	3	.057	14	.049	15	.028									
126	1.2DL + 1.5LM-MP5 + 1S...	Yes	Y		1	1.2	38	1.5	4	.057	14	.028	15	.049									
127	1.2DL + 1.5LM-MP5 + 1S...	Yes	Y		1	1.2	38	1.5	5	.057	14		15	.057									
128	1.2DL + 1.5LM-MP5 + 1S...	Yes	Y		1	1.2	38	1.5	6	.057	14	-.028	15	.049									
129	1.2DL + 1.5LM-MP5 + 1S...	Yes	Y		1	1.2	38	1.5	7	.057	14	-.049	15	.028									
130	1.2DL + 1.5LM-MP5 + 1S...	Yes	Y		1	1.2	38	1.5	8	.057	14	-.057	15										
131	1.2DL + 1.5LM-MP5 + 1S...	Yes	Y		1	1.2	38	1.5	9	.057	14	-.049	15	-.028									
132	1.2DL + 1.5LM-MP5 + 1S...	Yes	Y		1	1.2	38	1.5	10	.057	14	-.028	15	-.049									
133	1.2DL + 1.5LM-MP5 + 1S...	Yes	Y		1	1.2	38	1.5	11	.057	14		15	-.057									
134	1.2DL + 1.5LM-MP5 + 1S...	Yes	Y		1	1.2	38	1.5	12	.057	14	.028	15	-.049									
135	1.2DL + 1.5LM-MP5 + 1S...	Yes	Y		1	1.2	38	1.5	13	.057	14	.049	15	-.028									
136	1.2DL + 1.5LM-MP6 + 1S...	Yes	Y		1	1.2	39	1.5	2	.057	14	.057	15										
137	1.2DL + 1.5LM-MP6 + 1S...	Yes	Y		1	1.2	39	1.5	3	.057	14	.049	15	.028									
138	1.2DL + 1.5LM-MP6 + 1S...	Yes	Y		1	1.2	39	1.5	4	.057	14	.028	15	.049									
139	1.2DL + 1.5LM-MP6 + 1S...	Yes	Y		1	1.2	39	1.5	5	.057	14		15	.057									
140	1.2DL + 1.5LM-MP6 + 1S...	Yes	Y		1	1.2	39	1.5	6	.057	14	-.028	15	.049									
141	1.2DL + 1.5LM-MP6 + 1S...	Yes	Y		1	1.2	39	1.5	7	.057	14	-.049	15	.028									
142	1.2DL + 1.5LM-MP6 + 1S...	Yes	Y		1	1.2	39	1.5	8	.057	14	-.057	15										
143	1.2DL + 1.5LM-MP6 + 1S...	Yes	Y		1	1.2	39	1.5	9	.057	14	-.049	15	-.028									
144	1.2DL + 1.5LM-MP6 + 1S...	Yes	Y		1	1.2	39	1.5	10	.057	14	-.028	15	-.049									
145	1.2DL + 1.5LM-MP6 + 1S...	Yes	Y		1	1.2	39	1.5	11	.057	14		15	-.057									
146	1.2DL + 1.5LM-MP6 + 1S...	Yes	Y		1	1.2	39	1.5	12	.057	14	.028	15	-.049									
147	1.2DL + 1.5LM-MP6 + 1S...	Yes	Y		1	1.2	39	1.5	13	.057	14	.049	15	-.028									
148	1.2DL + 1.5LM-MP7 + 1S...	Yes	Y		1	1.2	40	1.5	2	.057	14	.057	15										
149	1.2DL + 1.5LM-MP7 + 1S...	Yes	Y		1	1.2	40	1.5	3	.057	14	.049	15	.028									
150	1.2DL + 1.5LM-MP7 + 1S...	Yes	Y		1	1.2	40	1.5	4	.057	14	.028	15	.049									
151	1.2DL + 1.5LM-MP7 + 1S...	Yes	Y		1	1.2	40	1.5	5	.057	14		15	.057									
152	1.2DL + 1.5LM-MP7 + 1S...	Yes	Y		1	1.2	40	1.5	6	.057	14	-.028	15	.049									
153	1.2DL + 1.5LM-MP7 + 1S...	Yes	Y		1	1.2	40	1.5	7	.057	14	-.049	15	.028									
154	1.2DL + 1.5LM-MP7 + 1S...	Yes	Y		1	1.2	40	1.5	8	.057	14	-.057	15										
155	1.2DL + 1.5LM-MP7 + 1S...	Yes	Y		1	1.2	40	1.5	9	.057	14	-.049	15	-.028									
156	1.2DL + 1.5LM-MP7 + 1S...	Yes	Y		1	1.2	40	1.5	10	.057	14	-.028	15	-.049									
157	1.2DL + 1.5LM-MP7 + 1S...	Yes	Y		1	1.2	40	1.5	11	.057	14		15	-.057									
158	1.2DL + 1.5LM-MP7 + 1S...	Yes	Y		1	1.2	40	1.5	12	.057	14	.028	15	-.049									
159	1.2DL + 1.5LM-MP7 + 1S...	Yes	Y		1	1.2	40	1.5	13	.057	14	.049	15	-.028									
160	1.2DL + 1.5LM-MP8 + 1S...	Yes	Y		1	1.2	41	1.5	2	.057	14	.057	15										
161	1.2DL + 1.5LM-MP8 + 1S...	Yes	Y		1	1.2	41	1.5	3	.057	14	.049	15	.028									
162	1.2DL + 1.5LM-MP8 + 1S...	Yes	Y		1	1.2	41	1.5	4	.057	14	.028	15	.049									
163	1.2DL + 1.5LM-MP8 + 1S...	Yes	Y		1	1.2	41	1.5	5	.057	14		15	.057									
164	1.2DL + 1.5LM-MP8 + 1S...	Yes	Y		1	1.2	41	1.5	6	.057	14	-.028	15	.049									
165	1.2DL + 1.5LM-MP8 + 1S...	Yes	Y		1	1.2	41	1.5	7	.057	14	-.049	15	.028									
166	1.2DL + 1.5LM-MP8 + 1S...	Yes	Y		1	1.2	41	1.5	8	.057	14	-.057	15										
167	1.2DL + 1.5LM-MP8 + 1S...	Yes	Y		1	1.2	41	1.5	9	.057	14	-.049	15	-.028									
168	1.2DL + 1.5LM-MP8 + 1S...	Yes	Y		1	1.2	41	1.5	10	.057	14	-.028	15	-.049									
169	1.2DL + 1.5LM-MP8 + 1S...	Yes	Y		1	1.2	41	1.5	11	.057	14		15	-.057									
170	1.2DL + 1.5LM-MP8 + 1S...	Yes	Y		1	1.2	41	1.5	12	.057	14	.028	15	-.049									
171	1.2DL + 1.5LM-MP8 + 1S...	Yes	Y		1	1.2	41	1.5	13	.057	14	.049	15	-.028									
172	1.2DL + 1.5LM-MP9 + 1S...	Yes	Y		1	1.2	42	1.5	2	.057	14	.057	15										
173	1.2DL + 1.5LM-MP9 + 1S...	Yes	Y		1	1.2	42	1.5	3	.057	14	.049	15	.028									
174	1.2DL + 1.5LM-MP9 + 1S...	Yes	Y		1	1.2	42	1.5	4	.057	14	.028	15	.049									
175	1.2DL + 1.5LM-MP9 + 1S...	Yes	Y		1	1.2	42	1.5	5	.057	14		15	.057									
176	1.2DL + 1.5LM-MP9 + 1S...	Yes	Y		1	1.2	42	1.5	6	.057	14	-.028	15	.049									
177	1.2DL + 1.5LM-MP9 + 1S...	Yes	Y		1	1.2	42	1.5	7	.057	14	-.049	15	.028									
178	1.2DL + 1.5LM-MP9 + 1S...	Yes	Y		1	1.2	42	1.5	8	.057	14	-.057	15										
179	1.2DL + 1.5LM-MP9 + 1S...	Yes	Y		1	1.2	42	1.5	9	.057	14	-.049	15	-.028									
180	1.2DL + 1.5LM-MP9 + 1S...	Yes	Y		1	1.2	42	1.5	10	.057	14	-.028	15	-.049									

Load Combinations (Continued)

	Description	S...	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
181	1.2DL + 1.5LM-MP9 + 1S...	Yes	Y		1	1.2	42	1.5	11	.057	14		15	-.057												
182	1.2DL + 1.5LM-MP9 + 1S...	Yes	Y		1	1.2	42	1.5	12	.057	14	.028	15	-.049												
183	1.2DL + 1.5LM-MP9 + 1S...	Yes	Y		1	1.2	42	1.5	13	.057	14	.049	15	-.028												
184	1.2DL + 1.5LM-MP10 + 1S...	Yes	Y		1	1.2	43	1.5	2	.057	14	.057	15													
185	1.2DL + 1.5LM-MP10 + 1S...	Yes	Y		1	1.2	43	1.5	3	.057	14	.049	15	.028												
186	1.2DL + 1.5LM-MP10 + 1S...	Yes	Y		1	1.2	43	1.5	4	.057	14	.028	15	.049												
187	1.2DL + 1.5LM-MP10 + 1S...	Yes	Y		1	1.2	43	1.5	5	.057	14		15	.057												
188	1.2DL + 1.5LM-MP10 + 1S...	Yes	Y		1	1.2	43	1.5	6	.057	14	-.028	15	.049												
189	1.2DL + 1.5LM-MP10 + 1S...	Yes	Y		1	1.2	43	1.5	7	.057	14	-.049	15	.028												
190	1.2DL + 1.5LM-MP10 + 1S...	Yes	Y		1	1.2	43	1.5	8	.057	14	-.057	15													
191	1.2DL + 1.5LM-MP10 + 1S...	Yes	Y		1	1.2	43	1.5	9	.057	14	-.049	15	-.028												
192	1.2DL + 1.5LM-MP10 + 1S...	Yes	Y		1	1.2	43	1.5	10	.057	14	-.028	15	-.049												
193	1.2DL + 1.5LM-MP10 + 1S...	Yes	Y		1	1.2	43	1.5	11	.057	14		15	-.057												
194	1.2DL + 1.5LM-MP10 + 1S...	Yes	Y		1	1.2	43	1.5	12	.057	14	.028	15	-.049												
195	1.2DL + 1.5LM-MP10 + 1S...	Yes	Y		1	1.2	43	1.5	13	.057	14	.049	15	-.028												
196	1.2DL + 1.5LM-MP11 + 1S...	Yes	Y		1	1.2	44	1.5	2	.057	14	.057	15													
197	1.2DL + 1.5LM-MP11 + 1S...	Yes	Y		1	1.2	44	1.5	3	.057	14	.049	15	.028												
198	1.2DL + 1.5LM-MP11 + 1S...	Yes	Y		1	1.2	44	1.5	4	.057	14	.028	15	.049												
199	1.2DL + 1.5LM-MP11 + 1S...	Yes	Y		1	1.2	44	1.5	5	.057	14		15	.057												
200	1.2DL + 1.5LM-MP11 + 1S...	Yes	Y		1	1.2	44	1.5	6	.057	14	-.028	15	.049												
201	1.2DL + 1.5LM-MP11 + 1S...	Yes	Y		1	1.2	44	1.5	7	.057	14	-.049	15	.028												
202	1.2DL + 1.5LM-MP11 + 1S...	Yes	Y		1	1.2	44	1.5	8	.057	14	-.057	15													
203	1.2DL + 1.5LM-MP11 + 1S...	Yes	Y		1	1.2	44	1.5	9	.057	14	-.049	15	-.028												
204	1.2DL + 1.5LM-MP11 + 1S...	Yes	Y		1	1.2	44	1.5	10	.057	14	-.028	15	-.049												
205	1.2DL + 1.5LM-MP11 + 1S...	Yes	Y		1	1.2	44	1.5	11	.057	14		15	-.057												
206	1.2DL + 1.5LM-MP11 + 1S...	Yes	Y		1	1.2	44	1.5	12	.057	14	.028	15	-.049												
207	1.2DL + 1.5LM-MP11 + 1S...	Yes	Y		1	1.2	44	1.5	13	.057	14	.049	15	-.028												
208	1.2DL + 1.5LM-MP12 + 1S...	Yes	Y		1	1.2	45	1.5	2	.057	14	.057	15													
209	1.2DL + 1.5LM-MP12 + 1S...	Yes	Y		1	1.2	45	1.5	3	.057	14	.049	15	.028												
210	1.2DL + 1.5LM-MP12 + 1S...	Yes	Y		1	1.2	45	1.5	4	.057	14	.028	15	.049												
211	1.2DL + 1.5LM-MP12 + 1S...	Yes	Y		1	1.2	45	1.5	5	.057	14		15	.057												
212	1.2DL + 1.5LM-MP12 + 1S...	Yes	Y		1	1.2	45	1.5	6	.057	14	-.028	15	.049												
213	1.2DL + 1.5LM-MP12 + 1S...	Yes	Y		1	1.2	45	1.5	7	.057	14	-.049	15	.028												
214	1.2DL + 1.5LM-MP12 + 1S...	Yes	Y		1	1.2	45	1.5	8	.057	14	-.057	15													
215	1.2DL + 1.5LM-MP12 + 1S...	Yes	Y		1	1.2	45	1.5	9	.057	14	-.049	15	-.028												
216	1.2DL + 1.5LM-MP12 + 1S...	Yes	Y		1	1.2	45	1.5	10	.057	14	-.028	15	-.049												
217	1.2DL + 1.5LM-MP12 + 1S...	Yes	Y		1	1.2	45	1.5	11	.057	14		15	-.057												
218	1.2DL + 1.5LM-MP12 + 1S...	Yes	Y		1	1.2	45	1.5	12	.057	14	.028	15	-.049												

Joint Boundary Conditions

	Joint Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot.[k-ft/rad]	Y Rot.[k-ft/rad]	Z Rot.[k-ft/rad]
1	N64	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
2	N81	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
3	N87	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
4	N107	Reaction	Reaction	Reaction			
5	N112	Reaction	Reaction	Reaction			
6	N114	Reaction	Reaction	Reaction			

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
1	N64	max	1406.651	5	751.916	27	5919.539	27	1742.405	27	4805.022	23	769.515	193
2		min	-1407.266	11	193.31	25	-2651.016	20	434.482	20	-4801.4...	17	-477.527	151
3	N81	max	5058.942	31	725.35	31	1608.464	24	199.084	137	3727.69	15	-287.099	21
4		min	-2342.674	24	190.344	17	-3084.315	6	-880.816	107	-3710.6...	21	-1760.2...	29



Company : Infinigy Engineering, PLLC.
 Designer : TM
 Job Number : 1106-A0001-B
 Model Name : CTL01088

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Envelope Joint Reactions (Continued)

Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC	
5	N87	max	2420.65	16	738.446	35	1444.06	16	2.244	25	1716.327	19	1384.123	37
6		min	-4711.904	10	191.986	21	-2767.343	10	-1111.2...	93	-1736.1...	25	188.273	19
7	N107	max	63.392	17	3266.791	27	-1816.297	20	0	218	0	218	0	218
8		min	-63.373	23	697.465	20	-8279.894	27	0	1	0	1	0	1
9	N112	max	-1583.367	25	3236.456	31	4106.613	29	0	218	0	218	0	218
10		min	-7100.331	33	695.831	24	881.828	23	0	1	0	1	0	1
11	N114	max	6235.357	33	2853.61	35	3608.658	37	0	218	0	218	0	218
12		min	1476.296	15	652.294	16	821.767	18	0	1	0	1	0	1
13	Totals:	max	7613.445	5	11542.622	35	7113.832	14						
14		min	-7613.443	23	2818.546	52	-7113.837	20						

Member Point Loads (BLC 1 : Self Weight)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	Y	-33.95	30
2	MP1	Y	-33.95	66
3	MP2	Y	-33.95	30
4	MP2	Y	-33.95	66
5	MP3	Y	-17.5	27
6	MP3	Y	-17.5	69
7	MP1	Y	-70	72
8	MP2	Y	-59.9	72
9	MP2	Y	-75	72
10	MP3	Y	-14.1	72
11	MP3	Y	-14.1	72
12	MP7	Y	-17.5	27
13	MP7	Y	-17.5	69
14	MP5	Y	-70	72
15	MP6	Y	-59.9	72
16	MP6	Y	-75	72
17	MP5	Y	-47.85	6
18	MP5	Y	-47.85	90
19	MP6	Y	-47.85	6
20	MP6	Y	-47.85	90
21	MP7	Y	-14.1	72
22	MP7	Y	-14.1	72
23	MP11	Y	-17.5	27
24	MP11	Y	-17.5	69
25	MP9	Y	-70	72
26	MP10	Y	-59.9	72
27	MP10	Y	-75	72
28	MP9	Y	-47.85	6
29	MP9	Y	-47.85	90
30	MP10	Y	-47.85	6
31	MP10	Y	-47.85	90
32	MP11	Y	-14.1	72
33	MP11	Y	-14.1	72

Member Point Loads (BLC 2 : Wind Load AZI 0)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	0	30
2	MP1	Z	-188.29	30
3	MP1	X	0	66
4	MP1	Z	-188.29	66
5	MP2	X	0	30
6	MP2	Z	-188.29	30



Company : Infinigy Engineering, PLLC.
 Designer : TM
 Job Number : 1106-A0001-B
 Model Name : CTL01088

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Member Point Loads (BLC 2 : Wind Load AZI 0) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
7	MP2	X	0	66
8	MP2	Z	-188.29	66
9	MP3	X	0	27
10	MP3	Z	-125.26	27
11	MP3	X	0	69
12	MP3	Z	-125.26	69
13	MP1	X	0	72
14	MP1	Z	-90.05	72
15	MP2	X	0	72
16	MP2	Z	-83.8	72
17	MP2	X	0	72
18	MP2	Z	-90.05	72
19	MP3	X	0	72
20	MP3	Z	-50.21	72
21	MP3	X	0	72
22	MP3	Z	-50.21	72
23	MP7	X	0	27
24	MP7	Z	-81.26	27
25	MP7	X	0	69
26	MP7	Z	-81.26	69
27	MP5	X	0	72
28	MP5	Z	-70.61	72
29	MP6	X	0	72
30	MP6	Z	-57.06	72
31	MP6	X	0	72
32	MP6	Z	-80.33	72
33	MP5	X	0	6
34	MP5	Z	-240.12	6
35	MP5	X	0	90
36	MP5	Z	-240.12	90
37	MP6	X	0	6
38	MP6	Z	-240.12	6
39	MP6	X	0	90
40	MP6	Z	-240.12	90
41	MP7	X	0	72
42	MP7	Z	-24.39	72
43	MP7	X	0	72
44	MP7	Z	-24.39	72
45	MP11	X	0	27
46	MP11	Z	-81.26	27
47	MP11	X	0	69
48	MP11	Z	-81.26	69
49	MP9	X	0	72
50	MP9	Z	-70.61	72
51	MP10	X	0	72
52	MP10	Z	-57.06	72
53	MP10	X	0	72
54	MP10	Z	-80.33	72
55	MP9	X	0	6
56	MP9	Z	-240.12	6
57	MP9	X	0	90
58	MP9	Z	-240.12	90
59	MP10	X	0	6
60	MP10	Z	-240.12	6
61	MP10	X	0	90
62	MP10	Z	-240.12	90
63	MP11	X	0	72



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Member Point Loads (BLC 2 : Wind Load AZI 0) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
64	MP11	Z	-24.39	72
65	MP11	X	0	72
66	MP11	Z	-24.39	72

Member Point Loads (BLC 3 : Wind Load AZI 30)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	-80.57	30
2	MP1	Z	-139.56	30
3	MP1	X	-80.57	66
4	MP1	Z	-139.56	66
5	MP2	X	-80.57	30
6	MP2	Z	-139.56	30
7	MP2	X	-80.57	66
8	MP2	Z	-139.56	66
9	MP3	X	-55.3	27
10	MP3	Z	-95.78	27
11	MP3	X	-55.3	69
12	MP3	Z	-95.78	69
13	MP1	X	-41.78	72
14	MP1	Z	-72.37	72
15	MP2	X	-37.44	72
16	MP2	Z	-64.85	72
17	MP2	X	-43.4	72
18	MP2	Z	-75.18	72
19	MP3	X	-20.8	72
20	MP3	Z	-36.03	72
21	MP3	X	-20.8	72
22	MP3	Z	-36.03	72
23	MP7	X	-55.3	27
24	MP7	Z	-95.78	27
25	MP7	X	-55.3	69
26	MP7	Z	-95.78	69
27	MP5	X	-41.78	72
28	MP5	Z	-72.37	72
29	MP6	X	-37.44	72
30	MP6	Z	-64.85	72
31	MP6	X	-43.4	72
32	MP6	Z	-75.18	72
33	MP5	X	-175.48	6
34	MP5	Z	-303.95	6
35	MP5	X	-175.48	90
36	MP5	Z	-303.95	90
37	MP6	X	-175.48	6
38	MP6	Z	-303.95	6
39	MP6	X	-175.48	90
40	MP6	Z	-303.95	90
41	MP7	X	-20.8	72
42	MP7	Z	-36.03	72
43	MP7	X	-20.8	72
44	MP7	Z	-36.03	72
45	MP11	X	-33.29	27
46	MP11	Z	-57.67	27
47	MP11	X	-33.29	69
48	MP11	Z	-57.67	69
49	MP9	X	-32.06	72
50	MP9	Z	-55.54	72



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Member Point Loads (BLC 3 : Wind Load AZI 30) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
51	MP10	X	-24.08	72
52	MP10	Z	-41.7	72
53	MP10	X	-38.54	72
54	MP10	Z	-66.76	72
55	MP9	X	-92.35	6
56	MP9	Z	-159.95	6
57	MP9	X	-92.35	90
58	MP9	Z	-159.95	90
59	MP10	X	-92.35	6
60	MP10	Z	-159.95	6
61	MP10	X	-92.35	90
62	MP10	Z	-159.95	90
63	MP11	X	-7.89	72
64	MP11	Z	-13.67	72
65	MP11	X	-7.89	72
66	MP11	Z	-13.67	72

Member Point Loads (BLC 4 : Wind Load AZI 60)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-92.55	30
2	MP1	Z	-53.43	30
3	MP1	X	-92.55	66
4	MP1	Z	-53.43	66
5	MP2	X	-92.55	30
6	MP2	Z	-53.43	30
7	MP2	X	-92.55	66
8	MP2	Z	-53.43	66
9	MP3	X	-70.37	27
10	MP3	Z	-40.63	27
11	MP3	X	-70.37	69
12	MP3	Z	-40.63	69
13	MP1	X	-61.15	72
14	MP1	Z	-35.3	72
15	MP2	X	-49.42	72
16	MP2	Z	-28.53	72
17	MP2	X	-69.57	72
18	MP2	Z	-40.16	72
19	MP3	X	-21.12	72
20	MP3	Z	-12.2	72
21	MP3	X	-21.12	72
22	MP3	Z	-12.2	72
23	MP7	X	-108.48	27
24	MP7	Z	-62.63	27
25	MP7	X	-108.48	69
26	MP7	Z	-62.63	69
27	MP5	X	-77.99	72
28	MP5	Z	-45.03	72
29	MP6	X	-72.57	72
30	MP6	Z	-41.9	72
31	MP6	X	-77.99	72
32	MP6	Z	-45.03	72
33	MP5	X	-351.94	6
34	MP5	Z	-203.19	6
35	MP5	X	-351.94	90
36	MP5	Z	-203.19	90
37	MP6	X	-351.94	6



Member Point Loads (BLC 4 : Wind Load AZI 60) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
38	MP6	Z	-203.19	6
39	MP6	X	-351.94	90
40	MP6	Z	-203.19	90
41	MP7	X	-43.48	72
42	MP7	Z	-25.1	72
43	MP7	X	-43.48	72
44	MP7	Z	-25.1	72
45	MP11	X	-70.37	27
46	MP11	Z	-40.63	27
47	MP11	X	-70.37	69
48	MP11	Z	-40.63	69
49	MP9	X	-61.15	72
50	MP9	Z	-35.3	72
51	MP10	X	-49.42	72
52	MP10	Z	-28.53	72
53	MP10	X	-69.57	72
54	MP10	Z	-40.16	72
55	MP9	X	-207.95	6
56	MP9	Z	-120.06	6
57	MP9	X	-207.95	90
58	MP9	Z	-120.06	90
59	MP10	X	-207.95	6
60	MP10	Z	-120.06	6
61	MP10	X	-207.95	90
62	MP10	Z	-120.06	90
63	MP11	X	-21.12	72
64	MP11	Z	-12.2	72
65	MP11	X	-21.12	72
66	MP11	Z	-12.2	72

Member Point Loads (BLC 5 : Wind Load AZI 90)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	-79.72	30
2	MP1	Z	0	30
3	MP1	X	-79.72	66
4	MP1	Z	0	66
5	MP2	X	-79.72	30
6	MP2	Z	0	30
7	MP2	X	-79.72	66
8	MP2	Z	0	66
9	MP3	X	-66.59	27
10	MP3	Z	0	27
11	MP3	X	-66.59	69
12	MP3	Z	0	69
13	MP1	X	-64.13	72
14	MP1	Z	0	72
15	MP2	X	-48.15	72
16	MP2	Z	0	72
17	MP2	X	-77.09	72
18	MP2	Z	0	72
19	MP3	X	-15.79	72
20	MP3	Z	0	72
21	MP3	X	-15.79	72
22	MP3	Z	0	72
23	MP7	X	-110.59	27
24	MP7	Z	0	27



Member Point Loads (BLC 5 : Wind Load AZI 90) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
25	MP7	X	-110.59	69
26	MP7	Z	0	69
27	MP5	X	-83.57	72
28	MP5	Z	0	72
29	MP6	X	-74.89	72
30	MP6	Z	0	72
31	MP6	X	-86.81	72
32	MP6	Z	0	72
33	MP5	X	-350.97	6
34	MP5	Z	0	6
35	MP5	X	-350.97	90
36	MP5	Z	0	90
37	MP6	X	-350.97	6
38	MP6	Z	0	6
39	MP6	X	-350.97	90
40	MP6	Z	0	90
41	MP7	X	-41.6	72
42	MP7	Z	0	72
43	MP7	X	-41.6	72
44	MP7	Z	0	72
45	MP11	X	-110.59	27
46	MP11	Z	0	27
47	MP11	X	-110.59	69
48	MP11	Z	0	69
49	MP9	X	-83.57	72
50	MP9	Z	0	72
51	MP10	X	-74.89	72
52	MP10	Z	0	72
53	MP10	X	-86.81	72
54	MP10	Z	0	72
55	MP9	X	-350.97	6
56	MP9	Z	0	6
57	MP9	X	-350.97	90
58	MP9	Z	0	90
59	MP10	X	-350.97	6
60	MP10	Z	0	6
61	MP10	X	-350.97	90
62	MP10	Z	0	90
63	MP11	X	-41.6	72
64	MP11	Z	0	72
65	MP11	X	-41.6	72
66	MP11	Z	0	72

Member Point Loads (BLC 6 : Wind Load AZI 120)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	-92.55	30
2	MP1	Z	53.43	30
3	MP1	X	-92.55	66
4	MP1	Z	53.43	66
5	MP2	X	-92.55	30
6	MP2	Z	53.43	30
7	MP2	X	-92.55	66
8	MP2	Z	53.43	66
9	MP3	X	-70.37	27
10	MP3	Z	40.63	27
11	MP3	X	-70.37	69



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Member Point Loads (BLC 6 : Wind Load AZI 120) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
12	MP3	Z	40.63	69
13	MP1	X	-61.15	72
14	MP1	Z	35.3	72
15	MP2	X	-49.42	72
16	MP2	Z	28.53	72
17	MP2	X	-69.57	72
18	MP2	Z	40.16	72
19	MP3	X	-21.12	72
20	MP3	Z	12.2	72
21	MP3	X	-21.12	72
22	MP3	Z	12.2	72
23	MP7	X	-70.37	27
24	MP7	Z	40.63	27
25	MP7	X	-70.37	69
26	MP7	Z	40.63	69
27	MP5	X	-61.15	72
28	MP5	Z	35.3	72
29	MP6	X	-49.42	72
30	MP6	Z	28.53	72
31	MP6	X	-69.57	72
32	MP6	Z	40.16	72
33	MP5	X	-207.95	6
34	MP5	Z	120.06	6
35	MP5	X	-207.95	90
36	MP5	Z	120.06	90
37	MP6	X	-207.95	6
38	MP6	Z	120.06	6
39	MP6	X	-207.95	90
40	MP6	Z	120.06	90
41	MP7	X	-21.12	72
42	MP7	Z	12.2	72
43	MP7	X	-21.12	72
44	MP7	Z	12.2	72
45	MP11	X	-108.48	27
46	MP11	Z	62.63	27
47	MP11	X	-108.48	69
48	MP11	Z	62.63	69
49	MP9	X	-77.99	72
50	MP9	Z	45.03	72
51	MP10	X	-72.57	72
52	MP10	Z	41.9	72
53	MP10	X	-77.99	72
54	MP10	Z	45.03	72
55	MP9	X	-351.94	6
56	MP9	Z	203.19	6
57	MP9	X	-351.94	90
58	MP9	Z	203.19	90
59	MP10	X	-351.94	6
60	MP10	Z	203.19	6
61	MP10	X	-351.94	90
62	MP10	Z	203.19	90
63	MP11	X	-43.48	72
64	MP11	Z	25.1	72
65	MP11	X	-43.48	72
66	MP11	Z	25.1	72



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Member Point Loads (BLC 7 : Wind Load AZI 150)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	-80.57	30
2	MP1	Z	139.56	30
3	MP1	X	-80.57	66
4	MP1	Z	139.56	66
5	MP2	X	-80.57	30
6	MP2	Z	139.56	30
7	MP2	X	-80.57	66
8	MP2	Z	139.56	66
9	MP3	X	-55.3	27
10	MP3	Z	95.78	27
11	MP3	X	-55.3	69
12	MP3	Z	95.78	69
13	MP1	X	-41.78	72
14	MP1	Z	72.37	72
15	MP2	X	-37.44	72
16	MP2	Z	64.85	72
17	MP2	X	-43.4	72
18	MP2	Z	75.18	72
19	MP3	X	-20.8	72
20	MP3	Z	36.03	72
21	MP3	X	-20.8	72
22	MP3	Z	36.03	72
23	MP7	X	-33.29	27
24	MP7	Z	57.67	27
25	MP7	X	-33.29	69
26	MP7	Z	57.67	69
27	MP5	X	-32.06	72
28	MP5	Z	55.54	72
29	MP6	X	-24.08	72
30	MP6	Z	41.7	72
31	MP6	X	-38.54	72
32	MP6	Z	66.76	72
33	MP5	X	-92.35	6
34	MP5	Z	159.95	6
35	MP5	X	-92.35	90
36	MP5	Z	159.95	90
37	MP6	X	-92.35	6
38	MP6	Z	159.95	6
39	MP6	X	-92.35	90
40	MP6	Z	159.95	90
41	MP7	X	-7.89	72
42	MP7	Z	13.67	72
43	MP7	X	-7.89	72
44	MP7	Z	13.67	72
45	MP11	X	-55.3	27
46	MP11	Z	95.78	27
47	MP11	X	-55.3	69
48	MP11	Z	95.78	69
49	MP9	X	-41.78	72
50	MP9	Z	72.37	72
51	MP10	X	-37.44	72
52	MP10	Z	64.85	72
53	MP10	X	-43.4	72
54	MP10	Z	75.18	72
55	MP9	X	-175.48	6
56	MP9	Z	303.95	6
57	MP9	X	-175.48	90



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Member Point Loads (BLC 7 : Wind Load AZI 150) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
58	MP9	Z	303.95	90
59	MP10	X	-175.48	6
60	MP10	Z	303.95	6
61	MP10	X	-175.48	90
62	MP10	Z	303.95	90
63	MP11	X	-20.8	72
64	MP11	Z	36.03	72
65	MP11	X	-20.8	72
66	MP11	Z	36.03	72

Member Point Loads (BLC 8 : Wind Load AZI 180)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	0	30
2	MP1	Z	188.29	30
3	MP1	X	0	66
4	MP1	Z	188.29	66
5	MP2	X	0	30
6	MP2	Z	188.29	30
7	MP2	X	0	66
8	MP2	Z	188.29	66
9	MP3	X	0	27
10	MP3	Z	125.26	27
11	MP3	X	0	69
12	MP3	Z	125.26	69
13	MP1	X	0	72
14	MP1	Z	90.05	72
15	MP2	X	0	72
16	MP2	Z	83.8	72
17	MP2	X	0	72
18	MP2	Z	90.05	72
19	MP3	X	0	72
20	MP3	Z	50.21	72
21	MP3	X	0	72
22	MP3	Z	50.21	72
23	MP7	X	0	27
24	MP7	Z	81.26	27
25	MP7	X	0	69
26	MP7	Z	81.26	69
27	MP5	X	0	72
28	MP5	Z	70.61	72
29	MP6	X	0	72
30	MP6	Z	57.06	72
31	MP6	X	0	72
32	MP6	Z	80.33	72
33	MP5	X	0	6
34	MP5	Z	240.12	6
35	MP5	X	0	90
36	MP5	Z	240.12	90
37	MP6	X	0	6
38	MP6	Z	240.12	6
39	MP6	X	0	90
40	MP6	Z	240.12	90
41	MP7	X	0	72
42	MP7	Z	24.39	72
43	MP7	X	0	72
44	MP7	Z	24.39	72



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Member Point Loads (BLC 8 : Wind Load AZI 180) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
45	MP11	X	0	27
46	MP11	Z	81.26	27
47	MP11	X	0	69
48	MP11	Z	81.26	69
49	MP9	X	0	72
50	MP9	Z	70.61	72
51	MP10	X	0	72
52	MP10	Z	57.06	72
53	MP10	X	0	72
54	MP10	Z	80.33	72
55	MP9	X	0	6
56	MP9	Z	240.12	6
57	MP9	X	0	90
58	MP9	Z	240.12	90
59	MP10	X	0	6
60	MP10	Z	240.12	6
61	MP10	X	0	90
62	MP10	Z	240.12	90
63	MP11	X	0	72
64	MP11	Z	24.39	72
65	MP11	X	0	72
66	MP11	Z	24.39	72

Member Point Loads (BLC 9 : Wind Load AZI 210)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	80.57	30
2	MP1	Z	139.56	30
3	MP1	X	80.57	66
4	MP1	Z	139.56	66
5	MP2	X	80.57	30
6	MP2	Z	139.56	30
7	MP2	X	80.57	66
8	MP2	Z	139.56	66
9	MP3	X	55.3	27
10	MP3	Z	95.78	27
11	MP3	X	55.3	69
12	MP3	Z	95.78	69
13	MP1	X	41.78	72
14	MP1	Z	72.37	72
15	MP2	X	37.44	72
16	MP2	Z	64.85	72
17	MP2	X	43.4	72
18	MP2	Z	75.18	72
19	MP3	X	20.8	72
20	MP3	Z	36.03	72
21	MP3	X	20.8	72
22	MP3	Z	36.03	72
23	MP7	X	55.3	27
24	MP7	Z	95.78	27
25	MP7	X	55.3	69
26	MP7	Z	95.78	69
27	MP5	X	41.78	72
28	MP5	Z	72.37	72
29	MP6	X	37.44	72
30	MP6	Z	64.85	72
31	MP6	X	43.4	72



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Member Point Loads (BLC 9 : Wind Load AZI 210) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
32	MP6	Z	75.18	72
33	MP5	X	175.48	6
34	MP5	Z	303.95	6
35	MP5	X	175.48	90
36	MP5	Z	303.95	90
37	MP6	X	175.48	6
38	MP6	Z	303.95	6
39	MP6	X	175.48	90
40	MP6	Z	303.95	90
41	MP7	X	20.8	72
42	MP7	Z	36.03	72
43	MP7	X	20.8	72
44	MP7	Z	36.03	72
45	MP11	X	33.29	27
46	MP11	Z	57.67	27
47	MP11	X	33.29	69
48	MP11	Z	57.67	69
49	MP9	X	32.06	72
50	MP9	Z	55.54	72
51	MP10	X	24.08	72
52	MP10	Z	41.7	72
53	MP10	X	38.54	72
54	MP10	Z	66.76	72
55	MP9	X	92.35	6
56	MP9	Z	159.95	6
57	MP9	X	92.35	90
58	MP9	Z	159.95	90
59	MP10	X	92.35	6
60	MP10	Z	159.95	6
61	MP10	X	92.35	90
62	MP10	Z	159.95	90
63	MP11	X	7.89	72
64	MP11	Z	13.67	72
65	MP11	X	7.89	72
66	MP11	Z	13.67	72

Member Point Loads (BLC 10 : Wind Load AZI 240)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	92.55	30
2	MP1	Z	53.43	30
3	MP1	X	92.55	66
4	MP1	Z	53.43	66
5	MP2	X	92.55	30
6	MP2	Z	53.43	30
7	MP2	X	92.55	66
8	MP2	Z	53.43	66
9	MP3	X	70.37	27
10	MP3	Z	40.63	27
11	MP3	X	70.37	69
12	MP3	Z	40.63	69
13	MP1	X	61.15	72
14	MP1	Z	35.3	72
15	MP2	X	49.42	72
16	MP2	Z	28.53	72
17	MP2	X	69.57	72
18	MP2	Z	40.16	72



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Member Point Loads (BLC 10 : Wind Load AZI 240) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
19	MP3	X	21.12	72
20	MP3	Z	12.2	72
21	MP3	X	21.12	72
22	MP3	Z	12.2	72
23	MP7	X	108.48	27
24	MP7	Z	62.63	27
25	MP7	X	108.48	69
26	MP7	Z	62.63	69
27	MP5	X	77.99	72
28	MP5	Z	45.03	72
29	MP6	X	72.57	72
30	MP6	Z	41.9	72
31	MP6	X	77.99	72
32	MP6	Z	45.03	72
33	MP5	X	351.94	6
34	MP5	Z	203.19	6
35	MP5	X	351.94	90
36	MP5	Z	203.19	90
37	MP6	X	351.94	6
38	MP6	Z	203.19	6
39	MP6	X	351.94	90
40	MP6	Z	203.19	90
41	MP7	X	43.48	72
42	MP7	Z	25.1	72
43	MP7	X	43.48	72
44	MP7	Z	25.1	72
45	MP11	X	70.37	27
46	MP11	Z	40.63	27
47	MP11	X	70.37	69
48	MP11	Z	40.63	69
49	MP9	X	61.15	72
50	MP9	Z	35.3	72
51	MP10	X	49.42	72
52	MP10	Z	28.53	72
53	MP10	X	69.57	72
54	MP10	Z	40.16	72
55	MP9	X	207.95	6
56	MP9	Z	120.06	6
57	MP9	X	207.95	90
58	MP9	Z	120.06	90
59	MP10	X	207.95	6
60	MP10	Z	120.06	6
61	MP10	X	207.95	90
62	MP10	Z	120.06	90
63	MP11	X	21.12	72
64	MP11	Z	12.2	72
65	MP11	X	21.12	72
66	MP11	Z	12.2	72

Member Point Loads (BLC 11 : Wind Load AZI 270)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	79.72	30
2	MP1	Z	0	30
3	MP1	X	79.72	66
4	MP1	Z	0	66
5	MP2	X	79.72	30



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Member Point Loads (BLC 11 : Wind Load AZI 270) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
6	MP2	Z	0	30
7	MP2	X	79.72	66
8	MP2	Z	0	66
9	MP3	X	66.59	27
10	MP3	Z	0	27
11	MP3	X	66.59	69
12	MP3	Z	0	69
13	MP1	X	64.13	72
14	MP1	Z	0	72
15	MP2	X	48.15	72
16	MP2	Z	0	72
17	MP2	X	77.09	72
18	MP2	Z	0	72
19	MP3	X	15.79	72
20	MP3	Z	0	72
21	MP3	X	15.79	72
22	MP3	Z	0	72
23	MP7	X	110.59	27
24	MP7	Z	0	27
25	MP7	X	110.59	69
26	MP7	Z	0	69
27	MP5	X	83.57	72
28	MP5	Z	0	72
29	MP6	X	74.89	72
30	MP6	Z	0	72
31	MP6	X	86.81	72
32	MP6	Z	0	72
33	MP5	X	350.97	6
34	MP5	Z	0	6
35	MP5	X	350.97	90
36	MP5	Z	0	90
37	MP6	X	350.97	6
38	MP6	Z	0	6
39	MP6	X	350.97	90
40	MP6	Z	0	90
41	MP7	X	41.6	72
42	MP7	Z	0	72
43	MP7	X	41.6	72
44	MP7	Z	0	72
45	MP11	X	110.59	27
46	MP11	Z	0	27
47	MP11	X	110.59	69
48	MP11	Z	0	69
49	MP9	X	83.57	72
50	MP9	Z	0	72
51	MP10	X	74.89	72
52	MP10	Z	0	72
53	MP10	X	86.81	72
54	MP10	Z	0	72
55	MP9	X	350.97	6
56	MP9	Z	0	6
57	MP9	X	350.97	90
58	MP9	Z	0	90
59	MP10	X	350.97	6
60	MP10	Z	0	6
61	MP10	X	350.97	90
62	MP10	Z	0	90



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Member Point Loads (BLC 11 : Wind Load AZI 270) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
63	MP11	X	41.6	72
64	MP11	Z	0	72
65	MP11	X	41.6	72
66	MP11	Z	0	72

Member Point Loads (BLC 12 : Wind Load AZI 300)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	92.55	30
2	MP1	Z	-53.43	30
3	MP1	X	92.55	66
4	MP1	Z	-53.43	66
5	MP2	X	92.55	30
6	MP2	Z	-53.43	30
7	MP2	X	92.55	66
8	MP2	Z	-53.43	66
9	MP3	X	70.37	27
10	MP3	Z	-40.63	27
11	MP3	X	70.37	69
12	MP3	Z	-40.63	69
13	MP1	X	61.15	72
14	MP1	Z	-35.3	72
15	MP2	X	49.42	72
16	MP2	Z	-28.53	72
17	MP2	X	69.57	72
18	MP2	Z	-40.16	72
19	MP3	X	21.12	72
20	MP3	Z	-12.2	72
21	MP3	X	21.12	72
22	MP3	Z	-12.2	72
23	MP7	X	70.37	27
24	MP7	Z	-40.63	27
25	MP7	X	70.37	69
26	MP7	Z	-40.63	69
27	MP5	X	61.15	72
28	MP5	Z	-35.3	72
29	MP6	X	49.42	72
30	MP6	Z	-28.53	72
31	MP6	X	69.57	72
32	MP6	Z	-40.16	72
33	MP5	X	207.95	6
34	MP5	Z	-120.06	6
35	MP5	X	207.95	90
36	MP5	Z	-120.06	90
37	MP6	X	207.95	6
38	MP6	Z	-120.06	6
39	MP6	X	207.95	90
40	MP6	Z	-120.06	90
41	MP7	X	21.12	72
42	MP7	Z	-12.2	72
43	MP7	X	21.12	72
44	MP7	Z	-12.2	72
45	MP11	X	108.48	27
46	MP11	Z	-62.63	27
47	MP11	X	108.48	69
48	MP11	Z	-62.63	69
49	MP9	X	77.99	72



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Member Point Loads (BLC 12 : Wind Load AZI 300) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
50	MP9	Z	-45.03	72
51	MP10	X	72.57	72
52	MP10	Z	-41.9	72
53	MP10	X	77.99	72
54	MP10	Z	-45.03	72
55	MP9	X	351.94	6
56	MP9	Z	-203.19	6
57	MP9	X	351.94	90
58	MP9	Z	-203.19	90
59	MP10	X	351.94	6
60	MP10	Z	-203.19	6
61	MP10	X	351.94	90
62	MP10	Z	-203.19	90
63	MP11	X	43.48	72
64	MP11	Z	-25.1	72
65	MP11	X	43.48	72
66	MP11	Z	-25.1	72

Member Point Loads (BLC 13 : Wind Load AZI 330)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	80.57	30
2	MP1	Z	-139.56	30
3	MP1	X	80.57	66
4	MP1	Z	-139.56	66
5	MP2	X	80.57	30
6	MP2	Z	-139.56	30
7	MP2	X	80.57	66
8	MP2	Z	-139.56	66
9	MP3	X	55.3	27
10	MP3	Z	-95.78	27
11	MP3	X	55.3	69
12	MP3	Z	-95.78	69
13	MP1	X	41.78	72
14	MP1	Z	-72.37	72
15	MP2	X	37.44	72
16	MP2	Z	-64.85	72
17	MP2	X	43.4	72
18	MP2	Z	-75.18	72
19	MP3	X	20.8	72
20	MP3	Z	-36.03	72
21	MP3	X	20.8	72
22	MP3	Z	-36.03	72
23	MP7	X	33.29	27
24	MP7	Z	-57.67	27
25	MP7	X	33.29	69
26	MP7	Z	-57.67	69
27	MP5	X	32.06	72
28	MP5	Z	-55.54	72
29	MP6	X	24.08	72
30	MP6	Z	-41.7	72
31	MP6	X	38.54	72
32	MP6	Z	-66.76	72
33	MP5	X	92.35	6
34	MP5	Z	-159.95	6
35	MP5	X	92.35	90
36	MP5	Z	-159.95	90



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Member Point Loads (BLC 13 : Wind Load AZI 330) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
37	MP6	X	92.35	6
38	MP6	Z	-159.95	6
39	MP6	X	92.35	90
40	MP6	Z	-159.95	90
41	MP7	X	7.89	72
42	MP7	Z	-13.67	72
43	MP7	X	7.89	72
44	MP7	Z	-13.67	72
45	MP11	X	55.3	27
46	MP11	Z	-95.78	27
47	MP11	X	55.3	69
48	MP11	Z	-95.78	69
49	MP9	X	41.78	72
50	MP9	Z	-72.37	72
51	MP10	X	37.44	72
52	MP10	Z	-64.85	72
53	MP10	X	43.4	72
54	MP10	Z	-75.18	72
55	MP9	X	175.48	6
56	MP9	Z	-303.95	6
57	MP9	X	175.48	90
58	MP9	Z	-303.95	90
59	MP10	X	175.48	6
60	MP10	Z	-303.95	6
61	MP10	X	175.48	90
62	MP10	Z	-303.95	90
63	MP11	X	20.8	72
64	MP11	Z	-36.03	72
65	MP11	X	20.8	72
66	MP11	Z	-36.03	72

Member Point Loads (BLC 16 : Ice Weight)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	Y	-115.461	30
2	MP1	Y	-115.461	66
3	MP2	Y	-115.461	30
4	MP2	Y	-115.461	66
5	MP3	Y	-77.158	27
6	MP3	Y	-77.158	69
7	MP1	Y	-88.58	72
8	MP2	Y	-77.099	72
9	MP2	Y	-96.971	72
10	MP3	Y	-39.111	72
11	MP3	Y	-39.111	72
12	MP7	Y	-77.158	27
13	MP7	Y	-77.158	69
14	MP5	Y	-88.58	72
15	MP6	Y	-77.099	72
16	MP6	Y	-96.971	72
17	MP5	Y	-212.998	6
18	MP5	Y	-212.998	90
19	MP6	Y	-212.998	6
20	MP6	Y	-212.998	90
21	MP7	Y	-39.111	72
22	MP7	Y	-39.111	72
23	MP11	Y	-77.158	27



Member Point Loads (BLC 16 : Ice Weight) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
24	MP11	Y	-77.158	69
25	MP9	Y	-88.58	72
26	MP10	Y	-77.099	72
27	MP10	Y	-96.971	72
28	MP9	Y	-212.998	6
29	MP9	Y	-212.998	90
30	MP10	Y	-212.998	6
31	MP10	Y	-212.998	90
32	MP11	Y	-39.111	72
33	MP11	Y	-39.111	72

Member Point Loads (BLC 17 : Ice Wind Load AZI 0)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	0	30
2	MP1	Z	-15.86	30
3	MP1	X	0	66
4	MP1	Z	-15.86	66
5	MP2	X	0	30
6	MP2	Z	-15.86	30
7	MP2	X	0	66
8	MP2	Z	-15.86	66
9	MP3	X	0	27
10	MP3	Z	-12.13	27
11	MP3	X	0	69
12	MP3	Z	-12.13	69
13	MP1	X	0	72
14	MP1	Z	-9.3	72
15	MP2	X	0	72
16	MP2	Z	-8.76	72
17	MP2	X	0	72
18	MP2	Z	-9.3	72
19	MP3	X	0	72
20	MP3	Z	-6.64	72
21	MP3	X	0	72
22	MP3	Z	-6.64	72
23	MP7	X	0	27
24	MP7	Z	-10.5	27
25	MP7	X	0	69
26	MP7	Z	-10.5	69
27	MP5	X	0	72
28	MP5	Z	-8.33	72
29	MP6	X	0	72
30	MP6	Z	-7.4	72
31	MP6	X	0	72
32	MP6	Z	-8.76	72
33	MP5	X	0	6
34	MP5	Z	-23.41	6
35	MP5	X	0	90
36	MP5	Z	-23.41	90
37	MP6	X	0	6
38	MP6	Z	-23.41	6
39	MP6	X	0	90
40	MP6	Z	-23.41	90
41	MP7	X	0	72
42	MP7	Z	-4.79	72
43	MP7	X	0	72



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Member Point Loads (BLC 17 : Ice Wind Load AZI 0) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
44	MP7	Z	-4.79	72
45	MP11	X	0	27
46	MP11	Z	-10.5	27
47	MP11	X	0	69
48	MP11	Z	-10.5	69
49	MP9	X	0	72
50	MP9	Z	-8.33	72
51	MP10	X	0	72
52	MP10	Z	-7.4	72
53	MP10	X	0	72
54	MP10	Z	-8.76	72
55	MP9	X	0	6
56	MP9	Z	-23.41	6
57	MP9	X	0	90
58	MP9	Z	-23.41	90
59	MP10	X	0	6
60	MP10	Z	-23.41	6
61	MP10	X	0	90
62	MP10	Z	-23.41	90
63	MP11	X	0	72
64	MP11	Z	-4.79	72
65	MP11	X	0	72
66	MP11	Z	-4.79	72

Member Point Loads (BLC 18 : Ice Wind Load AZI 30)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	-7.14	30
2	MP1	Z	-12.36	30
3	MP1	X	-7.14	66
4	MP1	Z	-12.36	66
5	MP2	X	-7.14	30
6	MP2	Z	-12.36	30
7	MP2	X	-7.14	66
8	MP2	Z	-12.36	66
9	MP3	X	-5.79	27
10	MP3	Z	-10.03	27
11	MP3	X	-5.79	69
12	MP3	Z	-10.03	69
13	MP1	X	-4.49	72
14	MP1	Z	-7.77	72
15	MP2	X	-4.15	72
16	MP2	Z	-7.2	72
17	MP2	X	-4.56	72
18	MP2	Z	-7.9	72
19	MP3	X	-3.01	72
20	MP3	Z	-5.21	72
21	MP3	X	-3.01	72
22	MP3	Z	-5.21	72
23	MP7	X	-5.79	27
24	MP7	Z	-10.03	27
25	MP7	X	-5.79	69
26	MP7	Z	-10.03	69
27	MP5	X	-4.49	72
28	MP5	Z	-7.77	72
29	MP6	X	-4.15	72
30	MP6	Z	-7.2	72



Member Point Loads (BLC 18 : Ice Wind Load AZI 30) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
31	MP6	X	-4.56	72
32	MP6	Z	-7.9	72
33	MP5	X	-14.79	6
34	MP5	Z	-25.61	6
35	MP5	X	-14.79	90
36	MP5	Z	-25.61	90
37	MP6	X	-14.79	6
38	MP6	Z	-25.61	6
39	MP6	X	-14.79	90
40	MP6	Z	-25.61	90
41	MP7	X	-3.01	72
42	MP7	Z	-5.21	72
43	MP7	X	-3.01	72
44	MP7	Z	-5.21	72
45	MP11	X	-4.98	27
46	MP11	Z	-8.62	27
47	MP11	X	-4.98	69
48	MP11	Z	-8.62	69
49	MP9	X	-4	72
50	MP9	Z	-6.93	72
51	MP10	X	-3.47	72
52	MP10	Z	-6.02	72
53	MP10	X	-4.29	72
54	MP10	Z	-7.43	72
55	MP9	X	-10.17	6
56	MP9	Z	-17.61	6
57	MP9	X	-10.17	90
58	MP9	Z	-17.61	90
59	MP10	X	-10.17	6
60	MP10	Z	-17.61	6
61	MP10	X	-10.17	90
62	MP10	Z	-17.61	90
63	MP11	X	-2.08	72
64	MP11	Z	-3.61	72
65	MP11	X	-2.08	72
66	MP11	Z	-3.61	72

Member Point Loads (BLC 19 : Ice Wind Load AZI 60)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	-9.61	30
2	MP1	Z	-5.55	30
3	MP1	X	-9.61	66
4	MP1	Z	-5.55	66
5	MP2	X	-9.61	30
6	MP2	Z	-5.55	30
7	MP2	X	-9.61	66
8	MP2	Z	-5.55	66
9	MP3	X	-9.09	27
10	MP3	Z	-5.25	27
11	MP3	X	-9.09	69
12	MP3	Z	-5.25	69
13	MP1	X	-7.21	72
14	MP1	Z	-4.16	72
15	MP2	X	-6.41	72
16	MP2	Z	-3.7	72
17	MP2	X	-7.58	72



Member Point Loads (BLC 19 : Ice Wind Load AZI 60) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
18	MP2	Z	-4.38	72
19	MP3	X	-4.14	72
20	MP3	Z	-2.39	72
21	MP3	X	-4.14	72
22	MP3	Z	-2.39	72
23	MP7	X	-10.5	27
24	MP7	Z	-6.06	27
25	MP7	X	-10.5	69
26	MP7	Z	-6.06	69
27	MP5	X	-8.05	72
28	MP5	Z	-4.65	72
29	MP6	X	-7.59	72
30	MP6	Z	-4.38	72
31	MP6	X	-8.05	72
32	MP6	Z	-4.65	72
33	MP5	X	-28.28	6
34	MP5	Z	-16.33	6
35	MP5	X	-28.28	90
36	MP5	Z	-16.33	90
37	MP6	X	-28.28	6
38	MP6	Z	-16.33	6
39	MP6	X	-28.28	90
40	MP6	Z	-16.33	90
41	MP7	X	-5.75	72
42	MP7	Z	-3.32	72
43	MP7	X	-5.75	72
44	MP7	Z	-3.32	72
45	MP11	X	-9.09	27
46	MP11	Z	-5.25	27
47	MP11	X	-9.09	69
48	MP11	Z	-5.25	69
49	MP9	X	-7.21	72
50	MP9	Z	-4.16	72
51	MP10	X	-6.41	72
52	MP10	Z	-3.7	72
53	MP10	X	-7.58	72
54	MP10	Z	-4.38	72
55	MP9	X	-20.28	6
56	MP9	Z	-11.71	6
57	MP9	X	-20.28	90
58	MP9	Z	-11.71	90
59	MP10	X	-20.28	6
60	MP10	Z	-11.71	6
61	MP10	X	-20.28	90
62	MP10	Z	-11.71	90
63	MP11	X	-4.14	72
64	MP11	Z	-2.39	72
65	MP11	X	-4.14	72
66	MP11	Z	-2.39	72

Member Point Loads (BLC 20 : Ice Wind Load AZI 90)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	-9.51	30
2	MP1	Z	0	30
3	MP1	X	-9.51	66
4	MP1	Z	0	66



Member Point Loads (BLC 20 : Ice Wind Load AZI 90) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
5	MP2	X	-9.51	30
6	MP2	Z	0	30
7	MP2	X	-9.51	66
8	MP2	Z	0	66
9	MP3	X	-9.95	27
10	MP3	Z	0	27
11	MP3	X	-9.95	69
12	MP3	Z	0	69
13	MP1	X	-8.01	72
14	MP1	Z	0	72
15	MP2	X	-6.95	72
16	MP2	Z	0	72
17	MP2	X	-8.58	72
18	MP2	Z	0	72
19	MP3	X	-4.17	72
20	MP3	Z	0	72
21	MP3	X	-4.17	72
22	MP3	Z	0	72
23	MP7	X	-11.58	27
24	MP7	Z	0	27
25	MP7	X	-11.58	69
26	MP7	Z	0	69
27	MP5	X	-8.97	72
28	MP5	Z	0	72
29	MP6	X	-8.31	72
30	MP6	Z	0	72
31	MP6	X	-9.12	72
32	MP6	Z	0	72
33	MP5	X	-29.57	6
34	MP5	Z	0	6
35	MP5	X	-29.57	90
36	MP5	Z	0	90
37	MP6	X	-29.57	6
38	MP6	Z	0	6
39	MP6	X	-29.57	90
40	MP6	Z	0	90
41	MP7	X	-6.02	72
42	MP7	Z	0	72
43	MP7	X	-6.02	72
44	MP7	Z	0	72
45	MP11	X	-11.58	27
46	MP11	Z	0	27
47	MP11	X	-11.58	69
48	MP11	Z	0	69
49	MP9	X	-8.97	72
50	MP9	Z	0	72
51	MP10	X	-8.31	72
52	MP10	Z	0	72
53	MP10	X	-9.12	72
54	MP10	Z	0	72
55	MP9	X	-29.57	6
56	MP9	Z	0	6
57	MP9	X	-29.57	90
58	MP9	Z	0	90
59	MP10	X	-29.57	6
60	MP10	Z	0	6
61	MP10	X	-29.57	90



Member Point Loads (BLC 20 : Ice Wind Load AZI 90) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
62	MP10	Z	0	90
63	MP11	X	-6.02	72
64	MP11	Z	0	72
65	MP11	X	-6.02	72
66	MP11	Z	0	72

Member Point Loads (BLC 21 : Ice Wind Load AZI 120)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	-9.61	30
2	MP1	Z	5.55	30
3	MP1	X	-9.61	66
4	MP1	Z	5.55	66
5	MP2	X	-9.61	30
6	MP2	Z	5.55	30
7	MP2	X	-9.61	66
8	MP2	Z	5.55	66
9	MP3	X	-9.09	27
10	MP3	Z	5.25	27
11	MP3	X	-9.09	69
12	MP3	Z	5.25	69
13	MP1	X	-7.21	72
14	MP1	Z	4.16	72
15	MP2	X	-6.41	72
16	MP2	Z	3.7	72
17	MP2	X	-7.58	72
18	MP2	Z	4.38	72
19	MP3	X	-4.14	72
20	MP3	Z	2.39	72
21	MP3	X	-4.14	72
22	MP3	Z	2.39	72
23	MP7	X	-9.09	27
24	MP7	Z	5.25	27
25	MP7	X	-9.09	69
26	MP7	Z	5.25	69
27	MP5	X	-7.21	72
28	MP5	Z	4.16	72
29	MP6	X	-6.41	72
30	MP6	Z	3.7	72
31	MP6	X	-7.58	72
32	MP6	Z	4.38	72
33	MP5	X	-20.28	6
34	MP5	Z	11.71	6
35	MP5	X	-20.28	90
36	MP5	Z	11.71	90
37	MP6	X	-20.28	6
38	MP6	Z	11.71	6
39	MP6	X	-20.28	90
40	MP6	Z	11.71	90
41	MP7	X	-4.14	72
42	MP7	Z	2.39	72
43	MP7	X	-4.14	72
44	MP7	Z	2.39	72
45	MP11	X	-10.5	27
46	MP11	Z	6.06	27
47	MP11	X	-10.5	69
48	MP11	Z	6.06	69



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Member Point Loads (BLC 21 : Ice Wind Load AZI 120) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
49	MP9	X	-8.05	72
50	MP9	Z	4.65	72
51	MP10	X	-7.59	72
52	MP10	Z	4.38	72
53	MP10	X	-8.05	72
54	MP10	Z	4.65	72
55	MP9	X	-28.28	6
56	MP9	Z	16.33	6
57	MP9	X	-28.28	90
58	MP9	Z	16.33	90
59	MP10	X	-28.28	6
60	MP10	Z	16.33	6
61	MP10	X	-28.28	90
62	MP10	Z	16.33	90
63	MP11	X	-5.75	72
64	MP11	Z	3.32	72
65	MP11	X	-5.75	72
66	MP11	Z	3.32	72

Member Point Loads (BLC 22 : Ice Wind Load AZI 150)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	-7.14	30
2	MP1	Z	12.36	30
3	MP1	X	-7.14	66
4	MP1	Z	12.36	66
5	MP2	X	-7.14	30
6	MP2	Z	12.36	30
7	MP2	X	-7.14	66
8	MP2	Z	12.36	66
9	MP3	X	-5.79	27
10	MP3	Z	10.03	27
11	MP3	X	-5.79	69
12	MP3	Z	10.03	69
13	MP1	X	-4.49	72
14	MP1	Z	7.77	72
15	MP2	X	-4.15	72
16	MP2	Z	7.2	72
17	MP2	X	-4.56	72
18	MP2	Z	7.9	72
19	MP3	X	-3.01	72
20	MP3	Z	5.21	72
21	MP3	X	-3.01	72
22	MP3	Z	5.21	72
23	MP7	X	-4.98	27
24	MP7	Z	8.62	27
25	MP7	X	-4.98	69
26	MP7	Z	8.62	69
27	MP5	X	-4	72
28	MP5	Z	6.93	72
29	MP6	X	-3.47	72
30	MP6	Z	6.02	72
31	MP6	X	-4.29	72
32	MP6	Z	7.43	72
33	MP5	X	-10.17	6
34	MP5	Z	17.61	6
35	MP5	X	-10.17	90



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Member Point Loads (BLC 22 : Ice Wind Load AZI 150) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
36	MP5	Z	17.61	90
37	MP6	X	-10.17	6
38	MP6	Z	17.61	6
39	MP6	X	-10.17	90
40	MP6	Z	17.61	90
41	MP7	X	-2.08	72
42	MP7	Z	3.61	72
43	MP7	X	-2.08	72
44	MP7	Z	3.61	72
45	MP11	X	-5.79	27
46	MP11	Z	10.03	27
47	MP11	X	-5.79	69
48	MP11	Z	10.03	69
49	MP9	X	-4.49	72
50	MP9	Z	7.77	72
51	MP10	X	-4.15	72
52	MP10	Z	7.2	72
53	MP10	X	-4.56	72
54	MP10	Z	7.9	72
55	MP9	X	-14.79	6
56	MP9	Z	25.61	6
57	MP9	X	-14.79	90
58	MP9	Z	25.61	90
59	MP10	X	-14.79	6
60	MP10	Z	25.61	6
61	MP10	X	-14.79	90
62	MP10	Z	25.61	90
63	MP11	X	-3.01	72
64	MP11	Z	5.21	72
65	MP11	X	-3.01	72
66	MP11	Z	5.21	72

Member Point Loads (BLC 23 : Ice Wind Load AZI 180)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	0	30
2	MP1	Z	15.86	30
3	MP1	X	0	66
4	MP1	Z	15.86	66
5	MP2	X	0	30
6	MP2	Z	15.86	30
7	MP2	X	0	66
8	MP2	Z	15.86	66
9	MP3	X	0	27
10	MP3	Z	12.13	27
11	MP3	X	0	69
12	MP3	Z	12.13	69
13	MP1	X	0	72
14	MP1	Z	9.3	72
15	MP2	X	0	72
16	MP2	Z	8.76	72
17	MP2	X	0	72
18	MP2	Z	9.3	72
19	MP3	X	0	72
20	MP3	Z	6.64	72
21	MP3	X	0	72
22	MP3	Z	6.64	72



Member Point Loads (BLC 23 : Ice Wind Load AZI 180) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
23	MP7	X	0	27
24	MP7	Z	10.5	27
25	MP7	X	0	69
26	MP7	Z	10.5	69
27	MP5	X	0	72
28	MP5	Z	8.33	72
29	MP6	X	0	72
30	MP6	Z	7.4	72
31	MP6	X	0	72
32	MP6	Z	8.76	72
33	MP5	X	0	6
34	MP5	Z	23.41	6
35	MP5	X	0	90
36	MP5	Z	23.41	90
37	MP6	X	0	6
38	MP6	Z	23.41	6
39	MP6	X	0	90
40	MP6	Z	23.41	90
41	MP7	X	0	72
42	MP7	Z	4.79	72
43	MP7	X	0	72
44	MP7	Z	4.79	72
45	MP11	X	0	27
46	MP11	Z	10.5	27
47	MP11	X	0	69
48	MP11	Z	10.5	69
49	MP9	X	0	72
50	MP9	Z	8.33	72
51	MP10	X	0	72
52	MP10	Z	7.4	72
53	MP10	X	0	72
54	MP10	Z	8.76	72
55	MP9	X	0	6
56	MP9	Z	23.41	6
57	MP9	X	0	90
58	MP9	Z	23.41	90
59	MP10	X	0	6
60	MP10	Z	23.41	6
61	MP10	X	0	90
62	MP10	Z	23.41	90
63	MP11	X	0	72
64	MP11	Z	4.79	72
65	MP11	X	0	72
66	MP11	Z	4.79	72

Member Point Loads (BLC 24 : Ice Wind Load AZI 210)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	7.14	30
2	MP1	Z	12.36	30
3	MP1	X	7.14	66
4	MP1	Z	12.36	66
5	MP2	X	7.14	30
6	MP2	Z	12.36	30
7	MP2	X	7.14	66
8	MP2	Z	12.36	66
9	MP3	X	5.79	27



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Member Point Loads (BLC 24 : Ice Wind Load AZI 210) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
10	MP3	Z	10.03	27
11	MP3	X	5.79	69
12	MP3	Z	10.03	69
13	MP1	X	4.49	72
14	MP1	Z	7.77	72
15	MP2	X	4.15	72
16	MP2	Z	7.2	72
17	MP2	X	4.56	72
18	MP2	Z	7.9	72
19	MP3	X	3.01	72
20	MP3	Z	5.21	72
21	MP3	X	3.01	72
22	MP3	Z	5.21	72
23	MP7	X	5.79	27
24	MP7	Z	10.03	27
25	MP7	X	5.79	69
26	MP7	Z	10.03	69
27	MP5	X	4.49	72
28	MP5	Z	7.77	72
29	MP6	X	4.15	72
30	MP6	Z	7.2	72
31	MP6	X	4.56	72
32	MP6	Z	7.9	72
33	MP5	X	14.79	6
34	MP5	Z	25.61	6
35	MP5	X	14.79	90
36	MP5	Z	25.61	90
37	MP6	X	14.79	6
38	MP6	Z	25.61	6
39	MP6	X	14.79	90
40	MP6	Z	25.61	90
41	MP7	X	3.01	72
42	MP7	Z	5.21	72
43	MP7	X	3.01	72
44	MP7	Z	5.21	72
45	MP11	X	4.98	27
46	MP11	Z	8.62	27
47	MP11	X	4.98	69
48	MP11	Z	8.62	69
49	MP9	X	4	72
50	MP9	Z	6.93	72
51	MP10	X	3.47	72
52	MP10	Z	6.02	72
53	MP10	X	4.29	72
54	MP10	Z	7.43	72
55	MP9	X	10.17	6
56	MP9	Z	17.61	6
57	MP9	X	10.17	90
58	MP9	Z	17.61	90
59	MP10	X	10.17	6
60	MP10	Z	17.61	6
61	MP10	X	10.17	90
62	MP10	Z	17.61	90
63	MP11	X	2.08	72
64	MP11	Z	3.61	72
65	MP11	X	2.08	72
66	MP11	Z	3.61	72



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Member Point Loads (BLC 25 : Ice Wind Load AZI 240)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	9.61	30
2	MP1	Z	5.55	30
3	MP1	X	9.61	66
4	MP1	Z	5.55	66
5	MP2	X	9.61	30
6	MP2	Z	5.55	30
7	MP2	X	9.61	66
8	MP2	Z	5.55	66
9	MP3	X	9.09	27
10	MP3	Z	5.25	27
11	MP3	X	9.09	69
12	MP3	Z	5.25	69
13	MP1	X	7.21	72
14	MP1	Z	4.16	72
15	MP2	X	6.41	72
16	MP2	Z	3.7	72
17	MP2	X	7.58	72
18	MP2	Z	4.38	72
19	MP3	X	4.14	72
20	MP3	Z	2.39	72
21	MP3	X	4.14	72
22	MP3	Z	2.39	72
23	MP7	X	10.5	27
24	MP7	Z	6.06	27
25	MP7	X	10.5	69
26	MP7	Z	6.06	69
27	MP5	X	8.05	72
28	MP5	Z	4.65	72
29	MP6	X	7.59	72
30	MP6	Z	4.38	72
31	MP6	X	8.05	72
32	MP6	Z	4.65	72
33	MP5	X	28.28	6
34	MP5	Z	16.33	6
35	MP5	X	28.28	90
36	MP5	Z	16.33	90
37	MP6	X	28.28	6
38	MP6	Z	16.33	6
39	MP6	X	28.28	90
40	MP6	Z	16.33	90
41	MP7	X	5.75	72
42	MP7	Z	3.32	72
43	MP7	X	5.75	72
44	MP7	Z	3.32	72
45	MP11	X	9.09	27
46	MP11	Z	5.25	27
47	MP11	X	9.09	69
48	MP11	Z	5.25	69
49	MP9	X	7.21	72
50	MP9	Z	4.16	72
51	MP10	X	6.41	72
52	MP10	Z	3.7	72
53	MP10	X	7.58	72
54	MP10	Z	4.38	72
55	MP9	X	20.28	6
56	MP9	Z	11.71	6
57	MP9	X	20.28	90



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Member Point Loads (BLC 25 : Ice Wind Load AZI 240) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
58	MP9	Z	11.71	90
59	MP10	X	20.28	6
60	MP10	Z	11.71	6
61	MP10	X	20.28	90
62	MP10	Z	11.71	90
63	MP11	X	4.14	72
64	MP11	Z	2.39	72
65	MP11	X	4.14	72
66	MP11	Z	2.39	72

Member Point Loads (BLC 26 : Ice Wind Load AZI 270)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	9.51	30
2	MP1	Z	0	30
3	MP1	X	9.51	66
4	MP1	Z	0	66
5	MP2	X	9.51	30
6	MP2	Z	0	30
7	MP2	X	9.51	66
8	MP2	Z	0	66
9	MP3	X	9.95	27
10	MP3	Z	0	27
11	MP3	X	9.95	69
12	MP3	Z	0	69
13	MP1	X	8.01	72
14	MP1	Z	0	72
15	MP2	X	6.95	72
16	MP2	Z	0	72
17	MP2	X	8.58	72
18	MP2	Z	0	72
19	MP3	X	4.17	72
20	MP3	Z	0	72
21	MP3	X	4.17	72
22	MP3	Z	0	72
23	MP7	X	11.58	27
24	MP7	Z	0	27
25	MP7	X	11.58	69
26	MP7	Z	0	69
27	MP5	X	8.97	72
28	MP5	Z	0	72
29	MP6	X	8.31	72
30	MP6	Z	0	72
31	MP6	X	9.12	72
32	MP6	Z	0	72
33	MP5	X	29.57	6
34	MP5	Z	0	6
35	MP5	X	29.57	90
36	MP5	Z	0	90
37	MP6	X	29.57	6
38	MP6	Z	0	6
39	MP6	X	29.57	90
40	MP6	Z	0	90
41	MP7	X	6.02	72
42	MP7	Z	0	72
43	MP7	X	6.02	72
44	MP7	Z	0	72



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Member Point Loads (BLC 26 : Ice Wind Load AZI 270) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
45	MP11	X	11.58	27
46	MP11	Z	0	27
47	MP11	X	11.58	69
48	MP11	Z	0	69
49	MP9	X	8.97	72
50	MP9	Z	0	72
51	MP10	X	8.31	72
52	MP10	Z	0	72
53	MP10	X	9.12	72
54	MP10	Z	0	72
55	MP9	X	29.57	6
56	MP9	Z	0	6
57	MP9	X	29.57	90
58	MP9	Z	0	90
59	MP10	X	29.57	6
60	MP10	Z	0	6
61	MP10	X	29.57	90
62	MP10	Z	0	90
63	MP11	X	6.02	72
64	MP11	Z	0	72
65	MP11	X	6.02	72
66	MP11	Z	0	72

Member Point Loads (BLC 27 : Ice Wind Load AZI 300)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	9.61	30
2	MP1	Z	-5.55	30
3	MP1	X	9.61	66
4	MP1	Z	-5.55	66
5	MP2	X	9.61	30
6	MP2	Z	-5.55	30
7	MP2	X	9.61	66
8	MP2	Z	-5.55	66
9	MP3	X	9.09	27
10	MP3	Z	-5.25	27
11	MP3	X	9.09	69
12	MP3	Z	-5.25	69
13	MP1	X	7.21	72
14	MP1	Z	-4.16	72
15	MP2	X	6.41	72
16	MP2	Z	-3.7	72
17	MP2	X	7.58	72
18	MP2	Z	-4.38	72
19	MP3	X	4.14	72
20	MP3	Z	-2.39	72
21	MP3	X	4.14	72
22	MP3	Z	-2.39	72
23	MP7	X	9.09	27
24	MP7	Z	-5.25	27
25	MP7	X	9.09	69
26	MP7	Z	-5.25	69
27	MP5	X	7.21	72
28	MP5	Z	-4.16	72
29	MP6	X	6.41	72
30	MP6	Z	-3.7	72
31	MP6	X	7.58	72



Member Point Loads (BLC 27 : Ice Wind Load AZI 300) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
32	MP6	Z	-4.38	72
33	MP5	X	20.28	6
34	MP5	Z	-11.71	6
35	MP5	X	20.28	90
36	MP5	Z	-11.71	90
37	MP6	X	20.28	6
38	MP6	Z	-11.71	6
39	MP6	X	20.28	90
40	MP6	Z	-11.71	90
41	MP7	X	4.14	72
42	MP7	Z	-2.39	72
43	MP7	X	4.14	72
44	MP7	Z	-2.39	72
45	MP11	X	10.5	27
46	MP11	Z	-6.06	27
47	MP11	X	10.5	69
48	MP11	Z	-6.06	69
49	MP9	X	8.05	72
50	MP9	Z	-4.65	72
51	MP10	X	7.59	72
52	MP10	Z	-4.38	72
53	MP10	X	8.05	72
54	MP10	Z	-4.65	72
55	MP9	X	28.28	6
56	MP9	Z	-16.33	6
57	MP9	X	28.28	90
58	MP9	Z	-16.33	90
59	MP10	X	28.28	6
60	MP10	Z	-16.33	6
61	MP10	X	28.28	90
62	MP10	Z	-16.33	90
63	MP11	X	5.75	72
64	MP11	Z	-3.32	72
65	MP11	X	5.75	72
66	MP11	Z	-3.32	72

Member Point Loads (BLC 28 : Ice Wind Load AZI 330)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	7.14	30
2	MP1	Z	-12.36	30
3	MP1	X	7.14	66
4	MP1	Z	-12.36	66
5	MP2	X	7.14	30
6	MP2	Z	-12.36	30
7	MP2	X	7.14	66
8	MP2	Z	-12.36	66
9	MP3	X	5.79	27
10	MP3	Z	-10.03	27
11	MP3	X	5.79	69
12	MP3	Z	-10.03	69
13	MP1	X	4.49	72
14	MP1	Z	-7.77	72
15	MP2	X	4.15	72
16	MP2	Z	-7.2	72
17	MP2	X	4.56	72
18	MP2	Z	-7.9	72



Member Point Loads (BLC 28 : Ice Wind Load AZI 330) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
19	MP3	X	3.01	72
20	MP3	Z	-5.21	72
21	MP3	X	3.01	72
22	MP3	Z	-5.21	72
23	MP7	X	4.98	27
24	MP7	Z	-8.62	27
25	MP7	X	4.98	69
26	MP7	Z	-8.62	69
27	MP5	X	4	72
28	MP5	Z	-6.93	72
29	MP6	X	3.47	72
30	MP6	Z	-6.02	72
31	MP6	X	4.29	72
32	MP6	Z	-7.43	72
33	MP5	X	10.17	6
34	MP5	Z	-17.61	6
35	MP5	X	10.17	90
36	MP5	Z	-17.61	90
37	MP6	X	10.17	6
38	MP6	Z	-17.61	6
39	MP6	X	10.17	90
40	MP6	Z	-17.61	90
41	MP7	X	2.08	72
42	MP7	Z	-3.61	72
43	MP7	X	2.08	72
44	MP7	Z	-3.61	72
45	MP11	X	5.79	27
46	MP11	Z	-10.03	27
47	MP11	X	5.79	69
48	MP11	Z	-10.03	69
49	MP9	X	4.49	72
50	MP9	Z	-7.77	72
51	MP10	X	4.15	72
52	MP10	Z	-7.2	72
53	MP10	X	4.56	72
54	MP10	Z	-7.9	72
55	MP9	X	14.79	6
56	MP9	Z	-25.61	6
57	MP9	X	14.79	90
58	MP9	Z	-25.61	90
59	MP10	X	14.79	6
60	MP10	Z	-25.61	6
61	MP10	X	14.79	90
62	MP10	Z	-25.61	90
63	MP11	X	3.01	72
64	MP11	Z	-5.21	72
65	MP11	X	3.01	72
66	MP11	Z	-5.21	72

Member Point Loads (BLC 31 : Seismic Load Z)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	Z	-3.314	30
2	MP1	Z	-3.314	66
3	MP2	Z	-3.314	30
4	MP2	Z	-3.314	66
5	MP3	Z	-1.708	27



Member Point Loads (BLC 31 : Seismic Load Z) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
6	MP3	Z	-1.708	69
7	MP1	Z	-6.832	72
8	MP2	Z	-5.846	72
9	MP2	Z	-7.32	72
10	MP3	Z	-1.376	72
11	MP3	Z	-1.376	72
12	MP7	Z	-1.708	27
13	MP7	Z	-1.708	69
14	MP5	Z	-6.832	72
15	MP6	Z	-5.846	72
16	MP6	Z	-7.32	72
17	MP5	Z	-4.67	6
18	MP5	Z	-4.67	90
19	MP6	Z	-4.67	6
20	MP6	Z	-4.67	90
21	MP7	Z	-1.376	72
22	MP7	Z	-1.376	72
23	MP11	Z	-1.708	27
24	MP11	Z	-1.708	69
25	MP9	Z	-6.832	72
26	MP10	Z	-5.846	72
27	MP10	Z	-7.32	72
28	MP9	Z	-4.67	6
29	MP9	Z	-4.67	90
30	MP10	Z	-4.67	6
31	MP10	Z	-4.67	90
32	MP11	Z	-1.376	72
33	MP11	Z	-1.376	72

Member Point Loads (BLC 32 : Seismic Load X)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-3.314	30
2	MP1	X	-3.314	66
3	MP2	X	-3.314	30
4	MP2	X	-3.314	66
5	MP3	X	-1.708	27
6	MP3	X	-1.708	69
7	MP1	X	-6.832	72
8	MP2	X	-5.846	72
9	MP2	X	-7.32	72
10	MP3	X	-1.376	72
11	MP3	X	-1.376	72
12	MP7	X	-1.708	27
13	MP7	X	-1.708	69
14	MP5	X	-6.832	72
15	MP6	X	-5.846	72
16	MP6	X	-7.32	72
17	MP5	X	-4.67	6
18	MP5	X	-4.67	90
19	MP6	X	-4.67	6
20	MP6	X	-4.67	90
21	MP7	X	-1.376	72
22	MP7	X	-1.376	72
23	MP11	X	-1.708	27
24	MP11	X	-1.708	69
25	MP9	X	-6.832	72



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Member Point Loads (BLC 32 : Seismic Load X) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
26	MP10	X	-5.846	72
27	MP10	X	-7.32	72
28	MP9	X	-4.67	6
29	MP9	X	-4.67	90
30	MP10	X	-4.67	6
31	MP10	X	-4.67	90
32	MP11	X	-1.376	72
33	MP11	X	-1.376	72

Joint Loads and Enforced Displacements (BLC 33 : Service Live Loads)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^...
1	N120	L	Y	-500
2	N103	L	Y	-500
3	N121	L	Y	-500

Joint Loads and Enforced Displacements (BLC 34 : Maintenance Load 1)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^...
1	N69	L	Y	-500

Joint Loads and Enforced Displacements (BLC 35 : Maintenance Load 2)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^...
1	N73	L	Y	-500

Joint Loads and Enforced Displacements (BLC 36 : Maintenance Load 3)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^...
1	N71	L	Y	-500

Joint Loads and Enforced Displacements (BLC 37 : Maintenance Load 4)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^...
1	N67	L	Y	-500

Joint Loads and Enforced Displacements (BLC 38 : Maintenance Load 5)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^...
1	N51	L	Y	-500

Joint Loads and Enforced Displacements (BLC 39 : Maintenance Load 6)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^...
1	N84	L	Y	-500

Joint Loads and Enforced Displacements (BLC 40 : Maintenance Load 7)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^...
1	N82	L	Y	-500

Joint Loads and Enforced Displacements (BLC 41 : Maintenance Load 8)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^...
1	N50	L	Y	-500

Joint Loads and Enforced Displacements (BLC 42 : Maintenance Load 9)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^...
1	N29	L	Y	-500



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Joint Loads and Enforced Displacements (BLC 43 : Maintenance Load 10)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^...
1	N46	L	Y	-500

Joint Loads and Enforced Displacements (BLC 44 : Maintenance Load 11)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^...
1	N45	L	Y	-500

Joint Loads and Enforced Displacements (BLC 45 : Maintenance Load 12)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^...
1	N28	L	Y	-500

Member Distributed Loads (BLC 14 : Distr. Wind Load Z)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in, %]	End Location[in, %]
1	M1	SZ	-60.64	-60.64	0	%100
2	M2	SZ	-101.066	-101.066	0	%100
3	M3	SZ	-101.066	-101.066	0	%100
4	M4	SZ	-101.066	-101.066	0	%100
5	M5	SZ	-101.066	-101.066	0	%100
6	M6	SZ	-101.066	-101.066	0	%100
7	M7	SZ	-101.066	-101.066	0	%100
8	M8	SZ	-60.64	-60.64	0	%100
9	M9	SZ	-101.066	-101.066	0	%100
10	M10	SZ	-101.066	-101.066	0	%100
11	M11	SZ	-101.066	-101.066	0	%100
12	M12	SZ	-101.066	-101.066	0	%100
13	M13	SZ	0	0	0	%100
14	M14	SZ	-60.64	-60.64	0	%100
15	M15	SZ	-101.066	-101.066	0	%100
16	M16	SZ	0	0	0	%100
17	M17	SZ	-101.066	-101.066	0	%100
18	M18	SZ	0	0	0	%100
19	M19	SZ	-101.066	-101.066	0	%100
20	M20	SZ	0	0	0	%100
21	M21	SZ	-101.066	-101.066	0	%100
22	M22	SZ	0	0	0	%100
23	M23	SZ	-101.066	-101.066	0	%100
24	M24	SZ	-101.066	-101.066	0	%100
25	M25	SZ	-101.066	-101.066	0	%100
26	M26	SZ	-101.066	-101.066	0	%100
27	M27	SZ	0	0	0	%100
28	M28	SZ	-101.066	-101.066	0	%100
29	M29	SZ	0	0	0	%100
30	M30	SZ	0	0	0	%100
31	M31	SZ	0	0	0	%100
32	M32	SZ	0	0	0	%100
33	M33	SZ	0	0	0	%100
34	M34	SZ	0	0	0	%100
35	M35	SZ	0	0	0	%100
36	M36	SZ	0	0	0	%100
37	M37	SZ	0	0	0	%100
38	M38	SZ	-101.066	-101.066	0	%100
39	M39	SZ	-101.066	-101.066	0	%100
40	M40	SZ	-101.066	-101.066	0	%100
41	MP1	SZ	-60.64	-60.64	0	%100
42	MP2	SZ	-60.64	-60.64	0	%100



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Member Distributed Loads (BLC 14 : Distr. Wind Load Z) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft....]	Start Location[in, %]	End Location[in, %]
43	MP3	SZ	-60.64	-60.64	0 %100
44	MP4	SZ	-60.64	-60.64	0 %100
45	MP5	SZ	-60.64	-60.64	0 %100
46	MP6	SZ	-60.64	-60.64	0 %100
47	MP7	SZ	-60.64	-60.64	0 %100
48	MP8	SZ	-60.64	-60.64	0 %100
49	MP9	SZ	-60.64	-60.64	0 %100
50	MP10	SZ	-60.64	-60.64	0 %100
51	MP11	SZ	-60.64	-60.64	0 %100
52	MP12	SZ	-60.64	-60.64	0 %100

Member Distributed Loads (BLC 15 : Distr. Wind Load X)

Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft....]	Start Location[in, %]	End Location[in, %]
1	M1	SX	-60.64	-60.64	0 %100
2	M2	SX	-101.066	-101.066	0 %100
3	M3	SX	-101.066	-101.066	0 %100
4	M4	SX	-101.066	-101.066	0 %100
5	M5	SX	-101.066	-101.066	0 %100
6	M6	SX	-101.066	-101.066	0 %100
7	M7	SX	-101.066	-101.066	0 %100
8	M8	SX	-60.64	-60.64	0 %100
9	M9	SX	-101.066	-101.066	0 %100
10	M10	SX	-101.066	-101.066	0 %100
11	M11	SX	-101.066	-101.066	0 %100
12	M12	SX	-101.066	-101.066	0 %100
13	M13	SX	0	0	0 %100
14	M14	SX	-60.64	-60.64	0 %100
15	M15	SX	-101.066	-101.066	0 %100
16	M16	SX	0	0	0 %100
17	M17	SX	-101.066	-101.066	0 %100
18	M18	SX	0	0	0 %100
19	M19	SX	-101.066	-101.066	0 %100
20	M20	SX	0	0	0 %100
21	M21	SX	-101.066	-101.066	0 %100
22	M22	SX	0	0	0 %100
23	M23	SX	-101.066	-101.066	0 %100
24	M24	SX	-101.066	-101.066	0 %100
25	M25	SX	-101.066	-101.066	0 %100
26	M26	SX	-101.066	-101.066	0 %100
27	M27	SX	0	0	0 %100
28	M28	SX	-101.066	-101.066	0 %100
29	M29	SX	0	0	0 %100
30	M30	SX	0	0	0 %100
31	M31	SX	0	0	0 %100
32	M32	SX	0	0	0 %100
33	M33	SX	0	0	0 %100
34	M34	SX	0	0	0 %100
35	M35	SX	0	0	0 %100
36	M36	SX	0	0	0 %100
37	M37	SX	0	0	0 %100
38	M38	SX	-101.066	-101.066	0 %100
39	M39	SX	-101.066	-101.066	0 %100
40	M40	SX	-101.066	-101.066	0 %100
41	MP1	SX	-60.64	-60.64	0 %100
42	MP2	SX	-60.64	-60.64	0 %100
43	MP3	SX	-60.64	-60.64	0 %100



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Member Distributed Loads (BLC 15 : Distr. Wind Load X) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
44	MP4	SX	-60.64	-60.64	0	%100
45	MP5	SX	-60.64	-60.64	0	%100
46	MP6	SX	-60.64	-60.64	0	%100
47	MP7	SX	-60.64	-60.64	0	%100
48	MP8	SX	-60.64	-60.64	0	%100
49	MP9	SX	-60.64	-60.64	0	%100
50	MP10	SX	-60.64	-60.64	0	%100
51	MP11	SX	-60.64	-60.64	0	%100
52	MP12	SX	-60.64	-60.64	0	%100

Member Distributed Loads (BLC 16 : Ice Weight)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
1	M1	Y	-12.913	-12.913	0	%100
2	M2	Y	-8.292	-8.292	0	%100
3	M3	Y	-8.292	-8.292	0	%100
4	M4	Y	-8.292	-8.292	0	%100
5	M5	Y	-8.292	-8.292	0	%100
6	M6	Y	-8.292	-8.292	0	%100
7	M7	Y	-8.292	-8.292	0	%100
8	M8	Y	-12.913	-12.913	0	%100
9	M9	Y	-8.292	-8.292	0	%100
10	M10	Y	-8.292	-8.292	0	%100
11	M11	Y	-8.292	-8.292	0	%100
12	M12	Y	-8.292	-8.292	0	%100
13	M13	Y	-4.608	-4.608	0	%100
14	M14	Y	-12.913	-12.913	0	%100
15	M15	Y	-8.292	-8.292	0	%100
16	M16	Y	-4.608	-4.608	0	%100
17	M17	Y	-8.292	-8.292	0	%100
18	M18	Y	-4.608	-4.608	0	%100
19	M19	Y	-8.292	-8.292	0	%100
20	M20	Y	-4.608	-4.608	0	%100
21	M21	Y	-8.292	-8.292	0	%100
22	M22	Y	-4.608	-4.608	0	%100
23	M23	Y	-8.292	-8.292	0	%100
24	M24	Y	-8.292	-8.292	0	%100
25	M25	Y	-18.031	-18.031	0	%100
26	M26	Y	-18.031	-18.031	0	%100
27	M27	Y	-4.608	-4.608	0	%100
28	M28	Y	-18.031	-18.031	0	%100
29	M29	Y	-4.608	-4.608	0	%100
30	M30	Y	-4.608	-4.608	0	%100
31	M31	Y	-4.608	-4.608	0	%100
32	M32	Y	-4.608	-4.608	0	%100
33	M33	Y	-4.608	-4.608	0	%100
34	M34	Y	-4.608	-4.608	0	%100
35	M35	Y	-4.608	-4.608	0	%100
36	M36	Y	-4.608	-4.608	0	%100
37	M37	Y	-4.608	-4.608	0	%100
38	M38	Y	-17.362	-17.362	0	%100
39	M39	Y	-17.362	-17.362	0	%100
40	M40	Y	-17.362	-17.362	0	%100
41	MP1	Y	-11.43	-11.43	0	%100
42	MP2	Y	-11.43	-11.43	0	%100
43	MP3	Y	-10.244	-10.244	0	%100
44	MP4	Y	-10.244	-10.244	0	%100



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Member Distributed Loads (BLC 16 : Ice Weight) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in, %]	End Location[in, %]
45	MP5	Y	-11.43	-11.43	0	%100
46	MP6	Y	-11.43	-11.43	0	%100
47	MP7	Y	-10.244	-10.244	0	%100
48	MP8	Y	-10.244	-10.244	0	%100
49	MP9	Y	-11.43	-11.43	0	%100
50	MP10	Y	-11.43	-11.43	0	%100
51	MP11	Y	-10.244	-10.244	0	%100
52	MP12	Y	-10.244	-10.244	0	%100

Member Distributed Loads (BLC 29 : Distr. Ice Wind Load Z)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in, %]	End Location[in, %]
1	M1	SZ	-20.147	-20.147	0	%100
2	M2	SZ	-33.442	-33.442	0	%100
3	M3	SZ	-33.442	-33.442	0	%100
4	M4	SZ	-33.442	-33.442	0	%100
5	M5	SZ	-33.442	-33.442	0	%100
6	M6	SZ	-33.442	-33.442	0	%100
7	M7	SZ	-33.442	-33.442	0	%100
8	M8	SZ	-20.147	-20.147	0	%100
9	M9	SZ	-33.442	-33.442	0	%100
10	M10	SZ	-33.442	-33.442	0	%100
11	M11	SZ	-33.442	-33.442	0	%100
12	M12	SZ	-33.442	-33.442	0	%100
13	M13	SZ	0	0	0	%100
14	M14	SZ	-20.147	-20.147	0	%100
15	M15	SZ	-33.442	-33.442	0	%100
16	M16	SZ	0	0	0	%100
17	M17	SZ	-33.442	-33.442	0	%100
18	M18	SZ	0	0	0	%100
19	M19	SZ	-33.442	-33.442	0	%100
20	M20	SZ	0	0	0	%100
21	M21	SZ	-33.442	-33.442	0	%100
22	M22	SZ	0	0	0	%100
23	M23	SZ	-33.442	-33.442	0	%100
24	M24	SZ	-33.442	-33.442	0	%100
25	M25	SZ	-16.106	-16.106	0	%100
26	M26	SZ	-16.106	-16.106	0	%100
27	M27	SZ	0	0	0	%100
28	M28	SZ	-16.106	-16.106	0	%100
29	M29	SZ	0	0	0	%100
30	M30	SZ	0	0	0	%100
31	M31	SZ	0	0	0	%100
32	M32	SZ	0	0	0	%100
33	M33	SZ	0	0	0	%100
34	M34	SZ	0	0	0	%100
35	M35	SZ	0	0	0	%100
36	M36	SZ	0	0	0	%100
37	M37	SZ	0	0	0	%100
38	M38	SZ	-16.45	-16.45	0	%100
39	M39	SZ	-16.45	-16.45	0	%100
40	M40	SZ	-16.45	-16.45	0	%100
41	MP1	SZ	-22.45	-22.45	0	%100
42	MP2	SZ	-22.45	-22.45	0	%100
43	MP3	SZ	-25.167	-25.167	0	%100
44	MP4	SZ	-25.167	-25.167	0	%100
45	MP5	SZ	-22.45	-22.45	0	%100



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Member Distributed Loads (BLC 29 : Distr. Ice Wind Load Z) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft....]	Start Location[in, %]	End Location[in, %]
46	MP6	SZ	-22.45	-22.45	0	%100
47	MP7	SZ	-25.167	-25.167	0	%100
48	MP8	SZ	-25.167	-25.167	0	%100
49	MP9	SZ	-22.45	-22.45	0	%100
50	MP10	SZ	-22.45	-22.45	0	%100
51	MP11	SZ	-25.167	-25.167	0	%100
52	MP12	SZ	-25.167	-25.167	0	%100

Member Distributed Loads (BLC 30 : Distr. Ice Wind Load X)

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft....]	Start Location[in, %]	End Location[in, %]
1	M1	SX	-20.147	-20.147	0	%100
2	M2	SX	-33.442	-33.442	0	%100
3	M3	SX	-33.442	-33.442	0	%100
4	M4	SX	-33.442	-33.442	0	%100
5	M5	SX	-33.442	-33.442	0	%100
6	M6	SX	-33.442	-33.442	0	%100
7	M7	SX	-33.442	-33.442	0	%100
8	M8	SX	-20.147	-20.147	0	%100
9	M9	SX	-33.442	-33.442	0	%100
10	M10	SX	-33.442	-33.442	0	%100
11	M11	SX	-33.442	-33.442	0	%100
12	M12	SX	-33.442	-33.442	0	%100
13	M13	SX	0	0	0	%100
14	M14	SX	-20.147	-20.147	0	%100
15	M15	SX	-33.442	-33.442	0	%100
16	M16	SX	0	0	0	%100
17	M17	SX	-33.442	-33.442	0	%100
18	M18	SX	0	0	0	%100
19	M19	SX	-33.442	-33.442	0	%100
20	M20	SX	0	0	0	%100
21	M21	SX	-33.442	-33.442	0	%100
22	M22	SX	0	0	0	%100
23	M23	SX	-33.442	-33.442	0	%100
24	M24	SX	-33.442	-33.442	0	%100
25	M25	SX	-16.106	-16.106	0	%100
26	M26	SX	-16.106	-16.106	0	%100
27	M27	SX	0	0	0	%100
28	M28	SX	-16.106	-16.106	0	%100
29	M29	SX	0	0	0	%100
30	M30	SX	0	0	0	%100
31	M31	SX	0	0	0	%100
32	M32	SX	0	0	0	%100
33	M33	SX	0	0	0	%100
34	M34	SX	0	0	0	%100
35	M35	SX	0	0	0	%100
36	M36	SX	0	0	0	%100
37	M37	SX	0	0	0	%100
38	M38	SX	-16.45	-16.45	0	%100
39	M39	SX	-16.45	-16.45	0	%100
40	M40	SX	-16.45	-16.45	0	%100
41	MP1	SX	-22.45	-22.45	0	%100
42	MP2	SX	-22.45	-22.45	0	%100
43	MP3	SX	-25.167	-25.167	0	%100
44	MP4	SX	-25.167	-25.167	0	%100
45	MP5	SX	-22.45	-22.45	0	%100
46	MP6	SX	-22.45	-22.45	0	%100



Company : Infinigy Engineering, PLLC.
 Designer : TM
 Job Number : 1106-A0001-B
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Member Distributed Loads (BLC 30 : Distr. Ice Wind Load X) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft....]	Start Location[in,%]	End Location[in,%]
47	MP7	SX	-25.167	-25.167	0	%100
48	MP8	SX	-25.167	-25.167	0	%100
49	MP9	SX	-22.45	-22.45	0	%100
50	MP10	SX	-22.45	-22.45	0	%100
51	MP11	SX	-25.167	-25.167	0	%100
52	MP12	SX	-25.167	-25.167	0	%100

Member Distributed Loads (BLC 46 : BLC 1 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft....]	Start Location[in,%]	End Location[in,%]
1	M8	Y	-.298	-3.809	101	121.2
2	M8	Y	-3.809	-7.995	121.2	141.4
3	M8	Y	-7.995	-7.667	141.4	161.6
4	M8	Y	-7.667	-3.633	161.6	181.8
5	M8	Y	-3.633	-.298	181.8	202
6	M11	Y	2.252	2.252	0	2.8
7	M11	Y	2.252	-4.307	2.8	5.6
8	M11	Y	-4.307	-12.821	5.6	8.4
9	M11	Y	-12.821	-37.299	8.4	11.2
10	M11	Y	-37.299	-82.348	11.2	14
11	M12	Y	.665	.665	0	2.8
12	M12	Y	.665	-7.392	2.8	5.6
13	M12	Y	-7.392	-13.278	5.6	8.4
14	M12	Y	-13.278	-17.754	8.4	11.2
15	M12	Y	-17.754	-31.05	11.2	14
16	M14	Y	-.831	-3.688	0	20.2
17	M14	Y	-3.688	-6.836	20.2	40.4
18	M14	Y	-6.836	-7.168	40.4	60.6
19	M14	Y	-7.168	-3.698	60.6	80.8
20	M14	Y	-3.698	-.277	80.8	101
21	M15	Y	.618	.618	0	2.8
22	M15	Y	.618	-5.17	2.8	5.6
23	M15	Y	-5.17	-11.426	5.6	8.4
24	M15	Y	-11.426	-18.073	8.4	11.2
25	M15	Y	-18.073	-30.435	11.2	14
26	M17	Y	2.285	2.285	0	2.8
27	M17	Y	2.285	-3.955	2.8	5.6
28	M17	Y	-3.955	-11.811	5.6	8.4
29	M17	Y	-11.811	-36.276	8.4	11.2
30	M17	Y	-36.276	-81.972	11.2	14
31	M19	Y	-1.519	-1.519	1.18	13.18
32	M25	Y	-.632	-4.936	0	19.44
33	M25	Y	-4.936	-8.246	19.44	38.88
34	M25	Y	-8.246	-15.822	38.88	58.32
35	M25	Y	-15.822	-18.068	58.32	77.76
36	M25	Y	-18.068	-6.288	77.76	97.2
37	M27	Y	-.7	-.7	.633	2.367
38	M29	Y	-2.005	-2.005	0	3
39	M35	Y	-13.712	-13.712	0	3
40	M1	Y	-.833	-3.687	0	20.2
41	M1	Y	-3.687	-6.852	20.2	40.4
42	M1	Y	-6.852	-7.185	40.4	60.6
43	M1	Y	-7.185	-3.7	60.6	80.8
44	M1	Y	-3.7	-.277	80.8	101
45	M2	Y	.62	.62	0	2.8
46	M2	Y	.62	-5.156	2.8	5.6
47	M2	Y	-5.156	-11.417	5.6	8.4



Company : Infinigy Engineering, PLLC.
 Designer : TM
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Member Distributed Loads (BLC 46 : BLC 1 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft....]	Start Location[in, %]	End Location[in, %]
48	M2	-11.417	-18.104	8.4	11.2
49	M2	-18.104	-30.509	11.2	14
50	M3	2.276	2.276	0	2.8
51	M3	2.276	-3.963	2.8	5.6
52	M3	-3.963	-11.828	5.6	8.4
53	M3	-11.828	-36.211	8.4	11.2
54	M3	-36.211	-81.726	11.2	14
55	M4	-1.52	-1.52	1.18	13.18
56	M14	-.298	-3.317	101	121.2
57	M14	-3.317	-7.669	121.2	141.4
58	M14	-7.669	-7.83	141.4	161.6
59	M14	-7.83	-3.631	161.6	181.8
60	M14	-3.631	-.298	181.8	202
61	M20	-13.745	-13.745	0	3
62	M21	-1.551	-1.551	1.15	13.15
63	M23	2.452	2.452	0	2.8
64	M23	2.452	-4.065	2.8	5.6
65	M23	-4.065	-12.482	5.6	8.4
66	M23	-12.482	-38.903	8.4	11.2
67	M23	-38.903	-87.945	11.2	14
68	M24	.348	.348	0	2.8
69	M24	.348	-7.767	2.8	5.6
70	M24	-7.767	-13.772	5.6	8.4
71	M24	-13.772	-15.142	8.4	11.2
72	M24	-15.142	-22.106	11.2	14
73	M26	-.813	-5.117	0	19.44
74	M26	-5.117	-8.502	19.44	38.88
75	M26	-8.502	-17.935	38.88	58.32
76	M26	-17.935	-18.182	58.32	77.76
77	M26	-18.182	-.813	77.76	97.2
78	M33	-2.005	-2.005	0	3
79	M37	-.7	-.7	.633	2.367
80	M1	-.298	-3.348	101	121.2
81	M1	-3.348	-7.534	121.2	141.4
82	M1	-7.534	-7.667	141.4	161.6
83	M1	-7.667	-3.633	161.6	181.8
84	M1	-3.633	-.298	181.8	202
85	M5	-1.552	-1.552	1.15	13.15
86	M6	2.252	2.252	0	2.8
87	M6	2.252	-4.307	2.8	5.6
88	M6	-4.307	-12.821	5.6	8.4
89	M6	-12.821	-37.299	8.4	11.2
90	M6	-37.299	-82.348	11.2	14
91	M7	.665	.665	0	2.8
92	M7	.665	-7.392	2.8	5.6
93	M7	-7.392	-13.278	5.6	8.4
94	M7	-13.278	-17.754	8.4	11.2
95	M7	-17.754	-31.05	11.2	14
96	M8	-.831	-3.688	0	20.2
97	M8	-3.688	-6.836	20.2	40.4
98	M8	-6.836	-7.168	40.4	60.6
99	M8	-7.168	-3.698	60.6	80.8
100	M8	-3.698	-.277	80.8	101
101	M9	.618	.618	0	2.8
102	M9	.618	-5.17	2.8	5.6
103	M9	-5.17	-11.426	5.6	8.4
104	M9	-11.426	-18.073	8.4	11.2



Company : Infinigy Engineering, PLLC.
 Designer : TM
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Member Distributed Loads (BLC 46 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
105	M9	Y	-18.073	-30.435	11.2	14
106	M10	Y	2.285	2.285	0	2.8
107	M10	Y	2.285	-7.211	2.8	5.6
108	M10	Y	-7.211	-15.067	5.6	8.4
109	M10	Y	-15.067	-36.276	8.4	11.2
110	M10	Y	-36.276	-81.972	11.2	14
111	M13	Y	-.7	-.7	.633	2.367
112	M16	Y	-2.005	-2.005	0	3
113	M28	Y	-.632	-4.936	0	19.44
114	M28	Y	-4.936	-8.246	19.44	38.88
115	M28	Y	-8.246	-15.822	38.88	58.32
116	M28	Y	-15.822	-18.068	58.32	77.76
117	M28	Y	-18.068	-6.288	77.76	97.2
118	M31	Y	-13.712	-13.712	0	3

Member Distributed Loads (BLC 47 : BLC 16 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
1	M8	Y	-.54	-6.894	101	121.2
2	M8	Y	-6.894	-14.471	121.2	141.4
3	M8	Y	-14.471	-13.877	141.4	161.6
4	M8	Y	-13.877	-6.575	161.6	181.8
5	M8	Y	-6.575	-.54	181.8	202
6	M11	Y	4.077	4.077	0	2.8
7	M11	Y	4.077	-7.796	2.8	5.6
8	M11	Y	-7.796	-23.205	5.6	8.4
9	M11	Y	-23.205	-67.511	8.4	11.2
10	M11	Y	-67.511	-149.05	11.2	14
11	M12	Y	1.203	1.203	0	2.8
12	M12	Y	1.203	-13.38	2.8	5.6
13	M12	Y	-13.38	-24.032	5.6	8.4
14	M12	Y	-24.032	-32.135	8.4	11.2
15	M12	Y	-32.135	-56.2	11.2	14
16	M14	Y	-1.505	-6.676	0	20.2
17	M14	Y	-6.676	-12.374	20.2	40.4
18	M14	Y	-12.374	-12.973	40.4	60.6
19	M14	Y	-12.973	-6.694	60.6	80.8
20	M14	Y	-6.694	-.501	80.8	101
21	M15	Y	1.119	1.119	0	2.8
22	M15	Y	1.119	-9.358	2.8	5.6
23	M15	Y	-9.358	-20.68	5.6	8.4
24	M15	Y	-20.68	-32.712	8.4	11.2
25	M15	Y	-32.712	-55.087	11.2	14
26	M17	Y	4.136	4.136	0	2.8
27	M17	Y	4.136	-7.158	2.8	5.6
28	M17	Y	-7.158	-21.378	5.6	8.4
29	M17	Y	-21.378	-65.66	8.4	11.2
30	M17	Y	-65.66	-148.37	11.2	14
31	M19	Y	-2.75	-2.75	1.18	13.18
32	M25	Y	-1.145	-8.934	0	19.44
33	M25	Y	-8.934	-14.924	19.44	38.88
34	M25	Y	-14.924	-28.637	38.88	58.32
35	M25	Y	-28.637	-32.703	58.32	77.76
36	M25	Y	-32.703	-11.381	77.76	97.2
37	M27	Y	-1.266	-1.266	.633	2.367
38	M29	Y	-3.63	-3.63	0	3
39	M35	Y	-24.819	-24.819	0	3



Company : Infinigy Engineering, PLLC.
 Designer : TM
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Member Distributed Loads (BLC 47 : BLC 16 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft....]	Start Location[in,%]	End Location[in,%]
40	M1	-1.507	-6.673	0	20.2
41	M1	-6.673	-12.402	20.2	40.4
42	M1	-12.402	-13.004	40.4	60.6
43	M1	-13.004	-6.696	60.6	80.8
44	M1	-6.696	-.501	80.8	101
45	M2	1.123	1.123	0	2.8
46	M2	1.123	-9.332	2.8	5.6
47	M2	-9.332	-20.665	5.6	8.4
48	M2	-20.665	-32.769	8.4	11.2
49	M2	-32.769	-55.221	11.2	14
50	M3	4.119	4.119	0	2.8
51	M3	4.119	-7.173	2.8	5.6
52	M3	-7.173	-21.409	5.6	8.4
53	M3	-21.409	-65.542	8.4	11.2
54	M3	-65.542	-147.924	11.2	14
55	M4	-2.751	-2.751	1.18	13.18
56	M14	-.54	-6.004	101	121.2
57	M14	-6.004	-13.881	121.2	141.4
58	M14	-13.881	-14.173	141.4	161.6
59	M14	-14.173	-6.573	161.6	181.8
60	M14	-6.573	-.54	181.8	202
61	M20	-24.878	-24.878	0	3
62	M21	-2.807	-2.807	1.15	13.15
63	M23	4.438	4.438	0	2.8
64	M23	4.438	-7.357	2.8	5.6
65	M23	-7.357	-22.592	5.6	8.4
66	M23	-22.592	-70.415	8.4	11.2
67	M23	-70.415	-159.18	11.2	14
68	M24	.63	.63	0	2.8
69	M24	.63	-14.059	2.8	5.6
70	M24	-14.059	-24.927	5.6	8.4
71	M24	-24.927	-27.407	8.4	11.2
72	M24	-27.407	-40.012	11.2	14
73	M26	-1.472	-9.261	0	19.44
74	M26	-9.261	-15.389	19.44	38.88
75	M26	-15.389	-32.463	38.88	58.32
76	M26	-32.463	-32.909	58.32	77.76
77	M26	-32.909	-1.472	77.76	97.2
78	M33	-3.63	-3.63	0	3
79	M37	-1.266	-1.266	.633	2.367
80	M1	-.54	-6.06	101	121.2
81	M1	-6.06	-13.636	121.2	141.4
82	M1	-13.636	-13.877	141.4	161.6
83	M1	-13.877	-6.575	161.6	181.8
84	M1	-6.575	-.54	181.8	202
85	M5	-2.809	-2.809	1.15	13.15
86	M6	4.077	4.077	0	2.8
87	M6	4.077	-7.796	2.8	5.6
88	M6	-7.796	-23.205	5.6	8.4
89	M6	-23.205	-67.511	8.4	11.2
90	M6	-67.511	-149.05	11.2	14
91	M7	1.203	1.203	0	2.8
92	M7	1.203	-13.38	2.8	5.6
93	M7	-13.38	-24.032	5.6	8.4
94	M7	-24.032	-32.135	8.4	11.2
95	M7	-32.135	-56.2	11.2	14
96	M8	-1.505	-6.676	0	20.2



Member Distributed Loads (BLC 47 : BLC 16 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft....]	Start Location[in,%]	End Location[in,%]	
97	M8	Y	-6.676	-12.374	20.2	40.4
98	M8	Y	-12.374	-12.973	40.4	60.6
99	M8	Y	-12.973	-6.694	60.6	80.8
100	M8	Y	-6.694	-.501	80.8	101
101	M9	Y	1.119	1.119	0	2.8
102	M9	Y	1.119	-9.358	2.8	5.6
103	M9	Y	-9.358	-20.68	5.6	8.4
104	M9	Y	-20.68	-32.712	8.4	11.2
105	M9	Y	-32.712	-55.087	11.2	14
106	M10	Y	4.136	4.136	0	2.8
107	M10	Y	4.136	-13.051	2.8	5.6
108	M10	Y	-13.051	-27.272	5.6	8.4
109	M10	Y	-27.272	-65.66	8.4	11.2
110	M10	Y	-65.66	-148.37	11.2	14
111	M13	Y	-1.266	-1.266	.633	2.367
112	M16	Y	-3.63	-3.63	0	3
113	M28	Y	-1.145	-8.934	0	19.44
114	M28	Y	-8.934	-14.924	19.44	38.88
115	M28	Y	-14.924	-28.637	38.88	58.32
116	M28	Y	-28.637	-32.703	58.32	77.76
117	M28	Y	-32.703	-11.381	77.76	97.2
118	M31	Y	-24.819	-24.819	0	3

Member Area Loads (BLC 1 : Self Weight)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	N92	N54	N68	N72	Y	Two Way	-10
2	N9	N55	N118	N116	Y	Two Way	-10
3	N40	N42	N10	N78	Y	Two Way	-10

Member Area Loads (BLC 16 : Ice Weight)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	N92	N54	N68	N72	Y	Two Way	-18.1
2	N9	N55	N118	N116	Y	Two Way	-18.1
3	N40	N42	N10	N78	Y	Two Way	-18.1

Envelope AISC 15th(360-16): LRFD Steel Code Checks

Member	Shape	Code Ch...	Loc[in]	LC	Shear C...	Loc.....	LC	phi*Pn...	phi*Pn...	phi*M...	phi*M.....	Eqn			
1	M8	PIPE 3.0	.762	199.896	12	.218	199...	12	15779...	65205	5748.75	5748.75	2	H1-1b	
2	M14	PIPE 3.0	.739	199.896	4	.215	199...	4	15779...	65205	5748.75	5748.75	...	H1-1b	
3	M1	PIPE 3.0	.622	199.896	27	.174	199...	8	15779...	65205	5748.75	5748.75	...	H1-1b	
4	MP6	PIPE 2.5	.531	48	10	.042	48	10	30038...	50715	3596.25	3596.25	...	H1-1b	
5	MP10	PIPE 2.5	.531	48	6	.042	48	6	30038...	50715	3596.25	3596.25	...	H1-1b	
6	MP5	PIPE 2.5	.482	48	4	.037	48	4	32594...	50715	3596.25	3596.25	1	H1-1b	
7	MP9	PIPE 2.5	.482	48	12	.037	48	12	32594...	50715	3596.25	3596.25	...	H1-1b	
8	M25	HSS4X4X4	.443	14.625	6	.125	29....	y	36	99404...	139518	16180.5	16180.5	...	H1-1b
9	M26	HSS4X4X4	.428	14.625	28	.132	29....	y	28	99404...	139518	16180.5	16180.5	...	H1-1b
10	M28	HSS4X4X4	.398	14.625	38	.096	29....	y	93	99404...	139518	16180.5	16180.5	...	H1-1b
11	M39	LL2.5x2.5x3x3	.346	41.785	29	.006	0	z	21	31419...	58320	3954....	2113....	...	H1-1a
12	M38	LL2.5x2.5x3x3	.337	41.785	37	.005	83....	y	27	31419...	58320	3954....	2511....	...	H1-1a
13	M40	LL2.5x2.5x3x3	.312	41.785	37	.006	0	z	25	31419...	58320	3954....	2113....	...	H1-1a
14	MP3	PIPE 2.0	.279	48	2	.028	48	2	14916...	32130	1871....	1871....	...	H1-1b	
15	MP7	PIPE 2.0	.279	48	10	.028	48	10	14916...	32130	1871....	1871....	...	H1-1b	
16	MP11	PIPE 2.0	.279	48	6	.028	48	6	14916...	32130	1871....	1871....	...	H1-1b	



Company : Infinigy Engineering, PLLC.
 Designer : TM
 Job Number : 1106-A0001-B
 Model Name : CTL01088

Sept 13, 2019
 8:57 AM
 Checked By: _____

Envelope AISC 15th(360-16): LRFD Steel Code Checks (Continued)

Member	Shape	Code Ch...	Loc[in]	LC	Shear C...	Loc.....	LC	phi*Pn...	phi*Pn...	phi*M...	phi*M.....	Eqn
17	MP2	PIPE 2.5	.212	48	2	.028	48	2	30038...	50715	3596.25	3596.25... H1-1b
18	MP1	PIPE 2.5	.164	48	2	.022	48	2	32594...	50715	3596.25	3596.25... H1-1b
19	M23	1.5" x .40"	.135	0	38	.010	0 y	28	8966...	19440	162	607.5... H1-1b
20	M6	1.5" x .40"	.134	0	36	.010	0 y	38	8966...	19440	162	607.5... H1-1b
21	M10	1.5" x .40"	.132	0	28	.010	0 y	38	8966...	19440	162	607.5... H1-1b
22	M3	1.5" x .40"	.131	0	36	.010	0 y	38	8966...	19440	162	607.5... H1-1b
23	M11	1.5" x .40"	.130	0	28	.010	0 y	38	8966...	19440	162	607.5... H1-1b
24	M17	1.5" x .40"	.127	0	38	.010	0 y	28	8966...	19440	162	607.5... H1-1b
25	M7	1.5" x .40"	.083	0	36	.006	0 y	38	8966...	19440	162	607.5... H1-1b
26	M2	1.5" x .40"	.080	0	36	.006	0 y	38	8966...	19440	162	607.5... H1-1b
27	M12	1.5" x .40"	.079	0	28	.006	0 y	28	8966...	19440	162	607.5... H1-1b
28	M15	1.5" x .40"	.076	0	38	.006	0 y	28	8966...	19440	162	607.5... H1-1b
29	M9	1.5" x .40"	.076	0	28	.006	0 y	38	8966...	19440	162	607.5... H1-1b
30	M24	1.5" x .40"	.071	0	38	.006	0 y	37	8966...	19440	162	607.5... H1-1b
31	M5	1.5" x .40"	.058	0	11	.002	0 y	38	8966...	19440	162	607.5... H1-1b
32	M4	1.5" x .40"	.058	0	11	.002	0 y	38	8966...	19440	162	607.5... H1-1b
33	MP4	PIPE 2.0	.052	48	2	.005	48	2	16811...	32130	1871....	1871.... H1-1b
34	MP8	PIPE 2.0	.052	48	10	.005	48	10	16811...	32130	1871....	1871.... H1-1b
35	MP12	PIPE 2.0	.052	48	6	.005	48	6	16811...	32130	1871....	1871.... 1 H1-1b
36	M21	1.5" x .40"	.046	0	13	.002	0 y	28	8966...	19440	162	607.5... H1-1b
37	M19	1.5" x .40"	.046	0	13	.002	0 y	28	8966...	19440	162	607.5... H1-1b

Site Name:	CTL01088
Client:	Smartlink
Carrier:	AT&T Mobility
Engineer:	TM
Date:	9/16/2019
Job #:	1106-A0001-B
	125.0' RAD

Code:	LRFD
Bolt Diameter	0.625
Bolt Grade:	A307
Threads Excluded?:	N
Axial (lbs):	6298.21
Shear (lbs):	1950.64

Bolt Info:	
Yield Strength (F_{yb})	36.0 ksi
Ultimate Strength (F_{ub})	60.0 ksi
Threads/in (n)	11
Gross Area (A_{gb})	0.307 in ²
Net Area (A_{nb})	0.226 in ²

Bolt Capacity (5/8" A307 Bolt), Total of (4) per Connection				
	Ult Load / Bolt	Factored Load ($\phi=0.75$)	# of Bolts	Factor Joint Capacity
Axial (lb)	13560.1	10170.1	1	10170
Shear(lb)	8283.5	6212.6	1	6213

Interaction Check	
$T / \phi T_n$	61.9%
$V / \phi V_n$	31.4%
≤ 1.0	48.2%
	OK

GENERAL NOTES:

1. THESE DOCUMENTS WERE DESIGNED IN ACCORDANCE WITH THE LATEST VERSION OF APPLICABLE LOCAL/STATE/COUNTY/CITY BUILDING CODES, AS WELL AS ANSI/TIA-222 STANDARD, AWWA-D100 STANDARD, NDS, NEC, MSJC, AND/OR THE LATEST VERSION OF THE INTERNATIONAL BUILDING CODE, UNLESS NOTED OTHERWISE IN THE CORRESPONDING STRUCTURAL REPORT.
2. ALL CONSTRUCTION METHODS SHOULD FOLLOW STANDARDS OF GOOD CONSTRUCTION PRACTICE.
3. ALL WORK INDICATED ON THESE DRAWINGS SHALL BE PERFORMED BY QUALIFIED CONTRACTORS EXPERIENCED IN SIMILAR CONSTRUCTION.
4. ALL NEW WORK SHALL ACCOMMODATE EXISTING CONDITIONS. IF OBSTRUCTIONS ARE FOUND, CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD PRIOR TO CONTINUING WORK.
5. ANY CHANGES OR ADDITIONS MUST CONFORM TO THE REQUIREMENTS OF THESE NOTES AND SPECIFICATIONS, AND SHOULD BE SIMILAR TO THOSE SHOWN. ALL CHANGES OR ADDITIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO FABRICATION AND/OR CONSTRUCTION.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND EXECUTION OF ALL MISCELLANEOUS SHORING, BRACING, TEMPORARY SUPPORTS, ETC. NECESSARY TO PROVIDE A COMPLETE AND STABLE STRUCTURE DURING CONSTRUCTION. TIA-1019-A-2011 IS AN APPROPRIATE REFERENCE FOR THOSE DESIGNS MEETING TIA STANDARDS. THE ENGINEER OF RECORD MAY PROVIDE FORMAL RIGGING PLANS AT THE REQUEST AND EXPENSE OF THE CONTRACTOR.

7. INSTALLATION SHALL NOT INTERFERE NOR DENY ADEQUATE ACCESS TO OR FROM ANY EXISTING OR PROPOSED OPERATIONAL AND SAFETY EQUIPMENT.
8. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO ANY FABRICATION. CONTACT INFINIGY ENGINEERING IF ANY DISCREPANCIES EXIST.

STEEL CONSTRUCTION NOTES:

1. STRUCTURAL STEEL SHALL CONFORM TO THE AISC MANUAL OF STEEL CONSTRUCTION 14TH EDITION, FOR THE DESIGN AND FABRICATION OF STEEL COMPONENTS.
2. ALL FIELD CUT SURFACES, FIELD DRILLED HOLES, AND GROUND SURFACES WHERE EXISTING PAINT OR GALVANIZATION REMOVAL WAS REQUIRED SHALL BE REPAIRED WITH (2) BRUSHED COATS OF ZRC GALVALITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS' RECOMMENDATIONS.
3. ALL FIELD DRILLED HOLES TO BE USED FOR FIELD BOLTING INSTALLATION SHALL BE STANDARD HOLES, AS DEFINED BY AISC, UNLESS NOTED OTHERWISE.
4. ALL EXTERIOR STEEL WORK SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A123.
5. ALL STEEL MEMBERS AND CONNECTIONS SHALL MEET THE FOLLOWING GRADES:
 - ANGLES, CHANNELS, PLATES AND BARS TO BE A36. Fy=36 KSI, U.N.O.
 - W SHAPES TO BE A992. Fy=50 KSI, U.N.O.
 - RECTANGULAR HSS TO BE A500, GRADE B. Fy=46 KSI, U.N.O.
 - ROUND HSS TO BE A500, GRADE B. Fy=42 KSI, U.N.O.
 - STEEL PIPE TO BE A53, GRADE B. Fy=35 KSI, U.N.O.
 - BOLTS TO BE A325-X. Fu=120 KSI, U.N.O.
 - U-BOLTS AND LAG SCREWS TO BE A307 GR A. Fu=60 KSI, U.N.O.
6. ALL WELDING SHALL BE DONE USING E70XX ELECTRODES, U.N.O.
7. ALL WELDING SHALL CONFORM TO AISC AND AWS D1.1 LATEST EDITION.
8. ALL HILTI ANCHORS TO BE CARBON STEEL, U.N.O.
 - MECHANICAL ANCHORS: KWIK BOLT-TZ, U.N.O.
 - CMU BLOCK ANCHORS: ADHESIVE - HY120, U.N.O.
 - CONCRETE ANCHORS: ADHESIVE - HY150, U.N.O.
 - CONCRETE REBAR: ADHESIVE - RES500, U.N.O.
9. ALL STUDS TO BE NELSON CAPACITOR DISCHARGE 1/4"-20 LOW CARBON STEEL COPPER-FLASH AT 55 KSI ULT/50 KSI YIELD, U.N.O.
10. BOLTS SHALL BE TIGHTENED TO A "SNUG TIGHT" CONDITION AS DEFINED BY AISC.
11. MINIMUM EDGE DISTANCES SHALL CONFORM TO AISC TABLE J3.4.
12. REMOVAL/REPLACEMENT OF STRUCTURAL MEMBERS SHALL BE DONE ONE MEMBER AT A TIME. CONTRACTOR IS RESPONSIBLE FOR ENSURING THE STRUCTURAL INTEGRITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION.

CONCRETE CONSTRUCTION NOTES:

1. CONCRETE TO BE 4000 PSI @ 28 DAYS. REINFORCING BAR TO CONFORM TO ASTM A615 GRADE 60 SPECIFICATIONS. CONCRETE INSTALLATION TO CONFORM TO ACI-318 BUILDING REQUIREMENTS FOR REINFORCED CONCRETE. ALL CONCRETE TO BE PLACED AGAINST UNDISTURBED EARTH FREE OF WATER AND ALL FOREIGN OBJECTS AND MATERIALS. A MINIMUM OF THREE INCHES OF CONCRETE SHALL COVER ALL REINFORCEMENT. WELDING OF REBAR IS NOT PERMITTED.
2. EXISTING CONCRETE SURFACES THAT ARE TO BE IN CONTACT WITH NEW PROPOSED CONCRETE SHOULD BE WIRE BRUSHED CLEAN AND TREATED WITH APPROPRIATE MECHANICAL SCRATCH COAT AND REPAIR MATERIALS OR APPROPRIATE CHEMICAL METHODS SUCH AS THE APPLICATION OF A BONDING AGENT, EX. SAKRETE OR EQUIVALENT, TO ENSURE A QUALITY BOND BETWEEN EXISTING AND PROPOSED CONCRETE SURFACES.

FIBER REINFORCED POLYMER (FRP) NOTES:

1. FRP PLATES, SHAPES, BOLTS AND NUTS (STUD/NUT ASSEMBLIES) SHALL CONFORM TO ASTM D638, 695, 790. PLATES AND SHAPES TO BE FY = 5.35 KSI LW (SAFETY FACTOR OF 8), .945 KSI CW (SAFETY FACTOR OF 8) MIN.
2. IF FIELD FABRICATION IS REQUIRED, ALL CUT EDGES AND DRILLED HOLES TO BE SEALED USING VINYL ESTER SEALING KIT SUPPLIED BY THE MANUFACTURER.
3. ALL FASTENERS TO BE 1/2" DIA FRP THREADED ROD WITH FIBER REINFORCED THERMOPLASTIC NUT, SPACED AT 12 INCHES ON CENTER MAXIMUM, U.N.O., FOR PANELS AND AS DESIGNED FOR STRUCTURAL MEMBERS.
4. THE COLOR AND SURFACE PATTERN OF EXPOSED FRP PANELS SHALL MATCH THE EXTERIOR OF THE EXISTING BUILDING, U.N.O.
5. STUD/NUT ASSEMBLIES SHOULD BE LUBRICATED FOR INSTALLATION
6. ENSURE BEARING SURFACES OF THE NUTS ARE PARALLEL TO THE SURFACES BEING FASTENED.
7. TORQUE BOLTS ACCORDING TO THE FOLLOWING TABLE:

INSTALLATION TORQUE TABLE		
SIZE	ULTIMATE TORQUE STRENGTH	RECOMMENDED MAXIMUM INSTALLATION TORQUE
3/8-16 UNC	8 FT-LBS	4 FT-LBS
1/2-13 UNC	18 FT-LBS	8 FT-LBS
5/8-11 UNC	35 FT-LBS	16 FT-LBS
3/4-10 UNC	50 FT-LBS	24 FT-LBS
1-8 UNC	110 FT-LBS	50 FT-LBS

8. WHEN TIGHTENING FRP STUD/NUT ASSEMBLIES, WRENCHES MUST MAKE FULL CONTACT WITH ALL NUT EDGES. A STANDARD SIX POINT SOCKET IS RECOMMENDED.
9. STUD/NUT ASSEMBLIES SHOULD BE BONDED BY APPLYING BONDING AGENT TO ENTIRE NUT AND EXPOSED STUD.
10. ALL FRP MATERIALS TO BE PROVIDED BY FIBERGRATE COMPOSITE STRUCTURES, DALLAS TX, OR APPROVED EQUAL.
11. ALL FRP SHAPES TO BE DYNAFORM PULTRUDED STRUCTURAL SHAPES.
12. ALL FRP PLATES TO BE FIBERPLATE MOLDED FRP PLATE.
13. ALL FRP PANELS TO BE FIBERPLATE CLADDING PANEL.
14. EACH FRP PANEL TO BE IDENTIFIED WITH LARR#25536 AND FIBERGRATE COMPOSITE STRUCTURAL LABEL.
15. FRP MATERIAL TO BE CLASSIFIED AS CC1 OR BETTER, AND HAVE MAXIMUM FLAME SPREAD OF 50.
16. ALL DESIGN AND CONSTRUCTION TO BE COMPLETED IN ACCORDANCE WITH LOS ANGELES RESEARCH REPORT RR25536, DATED FEBRUARY 1, 2016.
17. SPECIAL INSPECTIONS MUST BE PROVIDED FOR ALL FRP INSTALLMENTS. SEE SPECIAL INSPECTION SECTION, THIS SHEET.

RATIO OF EDGE DISTANCE TO FRP FASTENER DIAMETER		
	RANGE	RECOMMENDED
EDGE DISTANCE - CL* BOLT TO END	2.0-4.0	3.0
EDGE DISTANCE - CL* BOLT TO SIDE	1.5-3.5	2.5
BOLT PITCH - CL* TO CL*	4.0-5.0	5.0

WOOD CONSTRUCTION NOTES:

1. ALL EXISTING WOOD SHAPES ARE ASSUMED TO BE DOUGLAS FIR-LARCH WITH A REFERENCE DESIGN BENDING VALUE OF 1000 PSI MIN.
2. ALL PROPOSED WOOD SHAPES ARE TO BE DOUGLAS FIR-LARCH WITH A REFERENCE DESIGN BENDING VALUE OF 1000 PSI MIN. U.N.O.
3. ALL EXISTING AND PROPOSED GLUED LAMINATED TIMBERS ARE TO BE 24F-1.8C DOUGLAS FIR BALANCED WITH A REFERENCE DESIGN BENDING VALUE OF 2400 PSI MIN. U.N.O.

MASONRY CONSTRUCTION NOTES:

1. ALL BRICK TO BE 1500 PSI MIN. REINFORCING BAR (IF APPLICABLE) TO CONFORM TO ASTM A615 GRADE 60 SPECIFICATIONS. ALL MORTAR TO BE 2000 PSI MIN.
 - FOR INTERIOR/ABOVE GRADE APPLICATIONS TYPE N MORTAR HAVING MINIMUM MODULUS OF RUPTURE OF 100 PSI SHALL BE USED. FOR EXTERIOR/BELOW GRADE APPLICATIONS TYPE M OR S MORTAR HAVING A MINIMUM MODULUS OF RUPTURE OF 133 PSI.
 - BRICK AND MORTAR INSTALLATION TO CONFORM TO MSJC BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES.
2. ALL CMU TO BE 1500 PSI MIN. REINFORCING BAR (IF APPLICABLE) TO CONFORM TO ASTM A615 GRADE 60 SPECIFICATIONS. ALL MORTAR TO BE 2000 PSI MIN.
 - FOR INTERIOR/ABOVE GRADE APPLICATIONS, TYPE N MORTAR HAVING MINIMUM MODULUS OF RUPTURE OF 64 PSI SHALL BE USED FOR UNGROUTED BLOCKS, AND 158 PSI FOR FULLY GROUTED BLOCKS.
 - FOR EXTERIOR/BELOW GRADE APPLICATIONS TYPE M OR S MORTAR HAVING A MINIMUM MODULUS OF RUPTURE OF 84 PSI SHALL BE USED FOR UNGROUTED BLOCKS, AND 163 PSI FOR FULLY GROUTED BLOCKS.
 - BRICK AND MORTAR INSTALLATION TO CONFORM TO MSJC BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES.

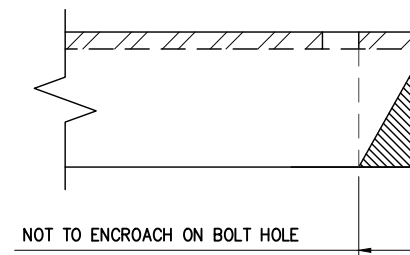
TOWER PLUMB & TENSION NOTES:

1. PLUMB AND TENSION TOWER UPON COMPLETION OF STRUCTURAL MODIFICATIONS DETAILED IN THESE DRAWINGS.
2. RETENSIONING OF EXISTING GUY WIRES SHALL BE PERFORMED AT A TIME WHEN THE WIND VELOCITY IS LESS THAN 10 MPH AT GROUND LEVEL AND WITH NO ICE ON THE STRUCTURE AND GUY WIRES.
3. PLUMB THE TOWER WHILE RETENSIONING THE EXISTING GUY WIRES. THE HORIZONTAL DISTANCE BETWEEN THE VERTICAL CENTERLINES AT ANY TWO ELEVATIONS SHALL NOT EXCEED 0.25% OF THE VERTICAL DISTANCE BETWEEN TWO ELEVATIONS FOR LATTICED STRUCTURES.
4. THE TWIST BETWEEN ANY TWO ELEVATIONS THROUGHOUT THE HEIGHT OF A LATTICE STRUCTURE SHALL NOT EXCEED 0.5 DEGREES IN 10 FEET. THE MAXIMUM TWIST OVER THE LATTICE STRUCTURE HEIGHT SHALL NOT EXCEED 5 DEGREES.

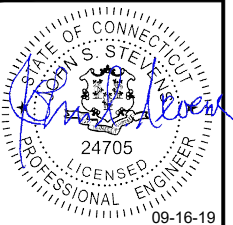
SPECIAL INSPECTIONS NOTES:

1. A QUALIFIED INDEPENDENT TESTING LABORATORY, EMPLOYED BY THE OWNER AND APPROVED BY THE JURISDICTION, SHALL PERFORM INSPECTION AND TESTING IN ACCORDANCE WITH THE THE GOVERNING BUILDING CODE, APPLICABLE SECTION(S) AS REQUIRED BY PROJECT SPECIFICATIONS FOR THE FOLLOWING CONSTRUCTION WORK:
 - a. STRUCTURAL WELDING (CONTINUOUS INSPECTION OF FIELD WELDS ONLY).
 - b. HIGH STRENGTH BOLTS (PERIODIC INSPECTION OF A325 AND/OR A490 BOLTS) TO BE TIGHTENED PER "TURN-OF-THE-NUT" METHOD.
 - c. MECHANICAL AND EPOXYED ANCHORAGES.
 - d. FIBER REINFORCED POLYMER.
 - THE SPECIAL INSPECTOR MUST VERIFY THAT THE FRP MATERIAL SPECIFIED ON THE APPROVED DESIGN DOCUMENTS IS BEING INSTALLED.
 - THE SPECIAL INSPECTOR MUST VERIFY THAT ALL CUT EDGES AND DRILLED HOLES ARE PROPERLY SEALED USING A VINYL ESTER SEALING KIT SUPPLIED BY THE MANUFACTURER.
 - THE SPECIAL INSPECTOR MUST VERIFY THAT THE STRUCTURE IS BUILT IN ACCORDANCE WITH THE APPROVED DESIGN DOCUMENTS.
2. THE INSPECTION AGENCY SHALL SUBMIT INSPECTION AND TEST REPORTS TO THE BUILDING DEPARTMENT, THE ENGINEER OF RECORD, AND THE OWNER UNLESS THE FABRICATOR IS APPROVED BY THE BUILDING OFFICIAL TO PERFORM WORK WITHOUT THE SPECIAL INSPECTIONS.

MAXIMUM ALLOWABLE ANGLE CLIP



INFINIGY & ENGINEERING, PLLC
 26445 RANCHO PARKWAY
 SOUTH LAKE FOREST, CA 92690
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No.	ISSUED FOR REVIEW	TM	09/12/19

Drawn: LAM Date: 09/12/19
 Designed: TM Date: 09/12/19
 Checked: TM Date: 09/12/19

Project Number: 1106-A0001-B

Project Title: CTL01088
 FA# 10065743
 720 QUINEBAUG ROAD
 THOMPSON, CT 6277



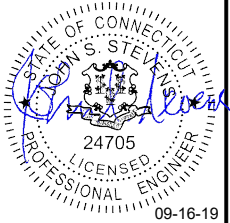
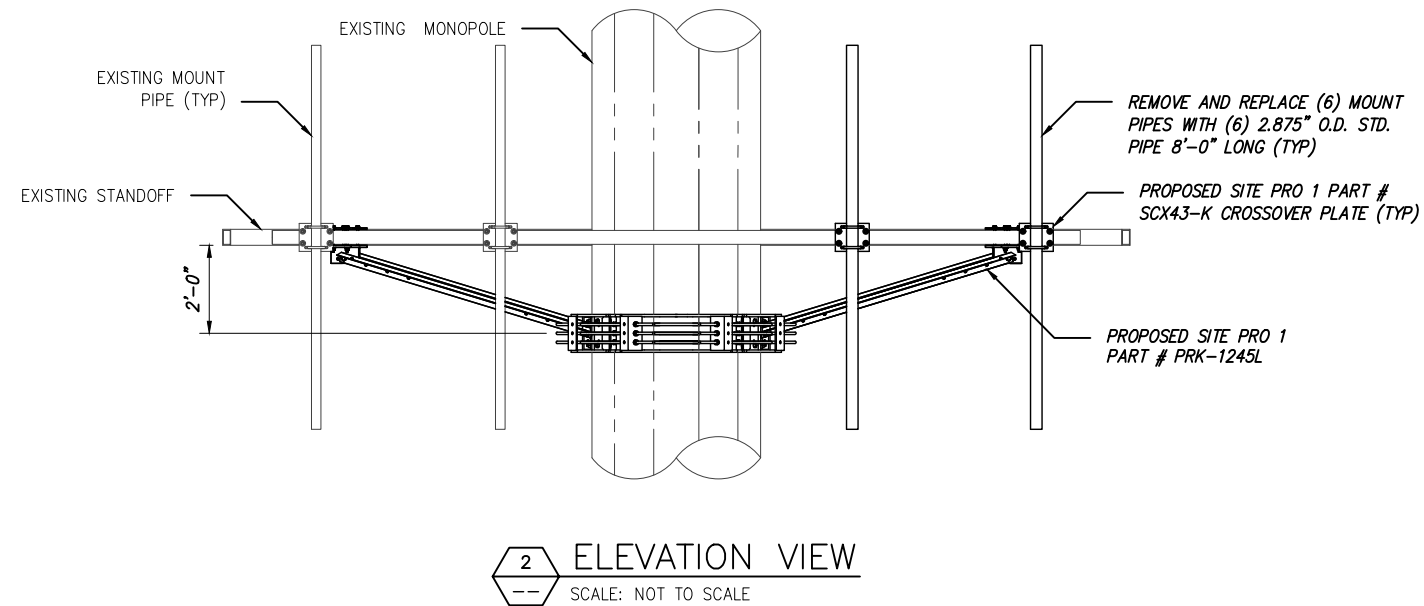
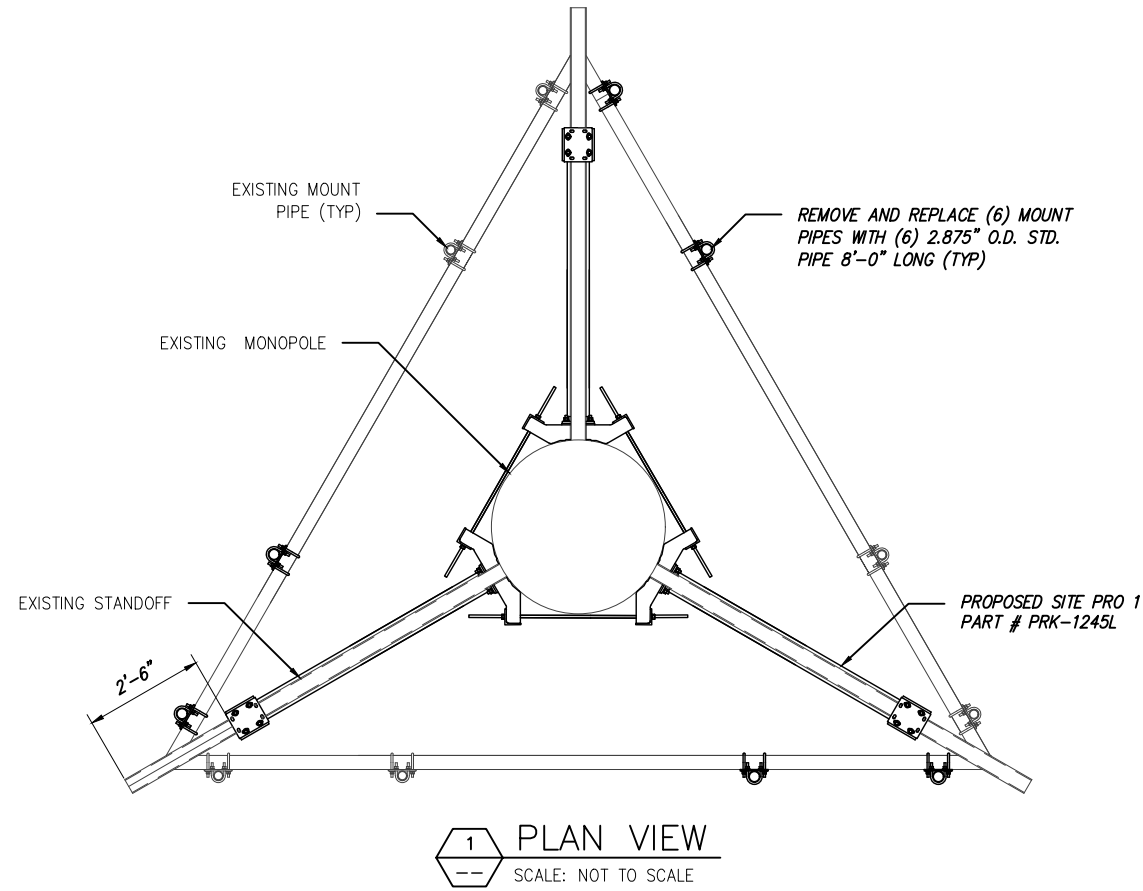
Drawing Scale: AS NOTED
 Date: 09/12/19

Drawing Title: **GENERAL NOTES**

Drawing Number: **S-1**

NOTES:

1. VARIOUS EXISTING CONDITIONS AND PROPOSED MODIFICATIONS ARE NOT SHOWN FOR CLARITY.
2. ALL SITE PRO 1 PARTS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.



UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF APPLICABLE STATE AND/OR LOCAL LAWS.

No.	Submitted / Revision	App'd	Date
0			09/12/19

Drawn: LAM Date: 09/12/19
 Designed: TM Date: 09/12/19
 Checked: TM Date: 09/12/19

Project Number:
 1106-A0001-B
 Project Title:
 CTL01088
 FA# 10065743
 720 QUINEBAUG ROAD
 THOMPSON, CT 6277



Drawing Scale:
 AS NOTED
 Date:
 09/12/19

Drawing Title:
**MODIFICATION
 DETAIL**

Drawing Number:
S-2



Non-Ionizing Radiation Report

Compiled For: Smartlink on behalf of AT&T

Site Name: Thompson Quinebaug Road

Site FA: 10065743

Site ID: CTL01088

720 Quinebaug Road, Thompson, CT 06277

Latitude: 42.0228419 Longitude: -71.94921

Structure Type: Monopole

Report Date: October 7, 2019

Status: AT&T will be compliant with FCC rules on RF Exposure with the signage recommendation in section 4 of this report.

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1. Executive Summary:

Smartlink on behalf of AT&T has contracted Infinigy Solutions, LLC to determine whether the site Thompson Quinebaug Road located at 720 Quinebaug Road in Windham, CT Will Be Compliant with all Federal Communications Commission (FCC) rules and regulations for radio frequency (RF) exposure as indicated in **47CFR§1.1310**.

The report incorporates a theoretical RF field analysis in accordance with the FCC Rules and Regulations for all individuals classified as “Occupational or Controlled” and “General Public or Uncontrolled” (see Appendix A and B).

This document and the conclusions herein are based on information provided by Smartlink on behalf of AT&T.

As a result of the analysis, **AT&T Will Be Compliant with FCC rules with the installation of signage recommended in section 4.**

Engineering assumptions were made regarding the collation operator(s). The assumptions were made based upon typical deployment configurations and practices of the operator(s).

All Carriers, All Bands Cumulative Exposure %		
Uncontrolled / General Population	Exposure values at the site (mW/cm ²)	0.0185
	% Exposure	2.71%
Controlled / Occupational	Exposure values at the site (mW/cm ²)	0.0185
	% Exposure	0.57%

2. Site Summary:

Site Information	
Site Name: Thompson Quinebaug Road	
Site Address: 720 Quinebaug Road, Windham, CT 06277	
Site Type: Monopole	
Compliance Status	Will Be Compliant
Mitigation Required	No
Signage Required	Yes
Barriers Required	No
Access Locked	No
Area Controlled or Uncontrolled	Uncontrolled

3. Site Compliance

This report also incorporates overview of the site information:

- Antenna Inventory Table
- Calculation Tables showing exposure for each carrier transmit frequency
- Total exposure for all carriers existing and proposed at ground level considering the centerline of all antennas and horizontal distance from the tower.
- Maximum Effective Radiated Power Assumed as Worst Case for Calculations used in this study
- Calculations based on flat ground around base of the structure

4. Site Compliance Recommendations

Infinigy recommends the following upon the installation of antennas at the site:

Base of tower

Caution 2 sign.

Note: The above signage recommendation is moot if there is an existing caution 2 sign at the base of the tower.

5. Antenna Inventory Table

Ant ID	Sector	Operator	Antenna manufacturer	Antenna Model	Operating Frequency	Rad Ctr (Ft)	Total ERP Power (Watts)
1a	Alpha	AT&T	CCI	DMP65R-BU4DA-700	700	147	1475
1b	Alpha	AT&T	CCI	DMP65R-BU4DA-850	850	147	745
1c	Alpha	AT&T	CCI	DMP65R-BU4DA-1900	2100	147	1000
2a	Alpha	AT&T	CCI	DMP65R-BU8D-700	700	147	2951
2b	Alpha	AT&T	CCI	DMP65R-BU8D-1900	1900	147	3664
3	Alpha	AT&T	Powerwave	7770-850	850	147	3664
4a	Beta	AT&T	CCI	DMP65R-BU4DA-700	700	147	1475
4b	Beta	AT&T	CCI	DMP65R-BU4DA-850	850	147	1117
4c	Beta	AT&T	CCI	DMP65R-BU4DA-1900	2100	147	1000
5a	Beta	AT&T	CCI	DMP65R-BU8D-700	700	147	2951
5b	Beta	AT&T	CCI	DMP65R-BU8D-1900	1900	147	3664
6	Beta	AT&T	Powerwave	7770-850	850	147	3664
7a	Gamma	AT&T	CCI	DMP65R-BU4DA-700	700	147	1475
7b	Gamma	AT&T	CCI	DMP65R-BU4DA-850	850	147	1117
7c	Gamma	AT&T	CCI	DMP65R-BU4DA-1900	2100	147	1000
8a	Gamma	AT&T	CCI	DMP65R-BU8D-700	700	147	2951
8b	Gamma	AT&T	CCI	DMP65R-BU8D-1900	1900	147	3664
9	Gamma	AT&T	Powerwave	7770-850	850	147	3664
10	Alpha	Verizon Wireless	Commscope	NNH-65C-R2B-700	700	119	1583
11	Alpha	Verizon Wireless	Commscope	NNH-65C-R2B-2100	2100	119	2216
12	Alpha	Verizon Wireless	Commscope	NNH-65C-R2B-1900	1900	119	1987
13	Alpha	Verizon Wireless	Commscope	NNH-65C-R2B-850	850	119	1587

Ant ID	Sector	Operator	Antenna manufacturer	Antenna Model	Operating Frequency	Rad Ctr (Ft)	Total ERP Power (Watts)
14	Beta	Verizon Wireless	Commscope	NNH-65C-R2B-700	700	119	1583
15	Beta	Verizon Wireless	Commscope	NNH-65C-R2B-2100	2100	119	2216
16	Beta	Verizon Wireless	Commscope	NNH-65C-R2B-1900	1900	119	1987
17	Beta	Verizon Wireless	Commscope	NNH-65C-R2B-850	850	119	1587
18	Gamma	Verizon Wireless	Commscope	NNH-65C-R2B-700	700	119	1583
19	Gamma	Verizon Wireless	Commscope	NNH-65C-R2B-2100	2100	119	2216
20	Gamma	Verizon Wireless	Commscope	NNH-65C-R2B-1900	1900	119	1987

6. RF Guidelines

To ensure safety of company workers, the following points need to be taken into consideration and implemented at wireless sites in accordance with the Carriers policies:

- a) **Worksite:** Any employee at the site should avoid working directly in front of the antenna or in areas predicted to exceed general population exposure limits by 100%. Workers should insist that the transmitters be switched off during the work period.
- b) **RF Safety Training and Awareness:** All employees working in areas exceeding the general population limits should have a basic awareness of RF safety measures. Videos, classroom lectures and online courses are all appropriate training methods on these topics.
- c) **Site Access:** Restricting access to transmitting antenna locations is one of the most important elements of RF safety. This can be done with:
 - Locked doors/gates/ladder access
 - Alarmed doors
 - Restrictive barriers
- d) **Three-foot Buffer:** There is an inverse relationship between the strength of the field and the distance from the antenna. The RF field diminishes with distance from the antenna. Workers should maintain a three-foot distance from the antennas.
- e) **Antennas:** Workers should always assume that the antenna is transmitting and should never stop right in front of the antenna. If someone must pass by an antenna, he/she should move quickly, thus reducing RF exposure.

Attachment 1: AT&T Exposure Analysis

AT&T 700 MHz LTE		
Uncontrolled / General Population	FCC's exposure limits (mW/cm ²)	0.5
	Exposure values at the site (mW/cm ²)	0.0033
	% Exposure	0.67%
Controlled / Occupational	FCC's Exposure limits(mW/cm ²)	2.3
	Exposure values at the site (mW/cm ²)	0.0033
	% Exposure	0.14%

AT&T 850 MHz UMTS		
Uncontrolled / General Population	FCC's exposure limits (mW/cm ²)	0.6
	Exposure values at the site (mW/cm ²)	0.0033
	% Exposure	0.55%
Controlled / Occupational	FCC's Exposure limits(mW/cm ²)	2.8
	Exposure values at the site (mW/cm ²)	0.0033
	% Exposure	0.12%

AT&T 850 MHz LTE		
Uncontrolled / General Population	FCC's exposure limits (mW/cm ²)	0.6
	Exposure values at the site (mW/cm ²)	0.0002
	% Exposure	0.03%
Controlled / Occupational	FCC's Exposure limits(mW/cm ²)	2.8
	Exposure values at the site (mW/cm ²)	0.0002
	% Exposure	0.01%

AT&T 1900 MHz LTE		
Uncontrolled / General Population	FCC's exposure limits (mW/cm ²)	1.0
	Exposure values at the site (mW/cm ²)	0.0028
	% Exposure	0.28%
Controlled / Occupational	FCC's Exposure limits(mW/cm ²)	5.0
	Exposure values at the site (mW/cm ²)	0.0028
	% Exposure	0.06%

AT&T 2100 MHz LTE		
Uncontrolled / General Population	FCC's exposure limits (mW/cm ²)	1.0
	Exposure values at the site (mW/cm ²)	0.0008
	% Exposure	0.08%
Controlled / Occupational	FCC's Exposure limits(mW/cm ²)	5.0
	Exposure values at the site (mW/cm ²)	0.0008
	% Exposure	0.02%

Attachment 2: Verizon Wireless Exposure Analysis

Verizon Wireless 700 MHz LTE		
Uncontrolled / General Population	FCC's exposure limits (mW/cm ²)	0.5
	Exposure values at the site (mW/cm ²)	0.0017
	% Exposure	0.35%
Controlled / Occupational	FCC's Exposure limits(mW/cm ²)	2.3
	Exposure values at the site (mW/cm ²)	0.0017
	% Exposure	0.08%

Verizon Wireless 850 MHz LTE		
Uncontrolled / General Population	FCC's exposure limits (mW/cm ²)	0.6
	Exposure values at the site (mW/cm ²)	0.0018
	% Exposure	0.29%
Controlled / Occupational	FCC's Exposure limits(mW/cm ²)	2.8
	Exposure values at the site (mW/cm ²)	0.0018
	% Exposure	0.06%

Verizon Wireless 1900 MHz LTE		
Uncontrolled / General Population	FCC's exposure limits (mW/cm ²)	1.0
	Exposure values at the site (mW/cm ²)	0.0022
	% Exposure	0.22%
Controlled / Occupational	FCC's Exposure limits(mW/cm ²)	5.0
	Exposure values at the site (mW/cm ²)	0.0022
	% Exposure	0.04%

Verizon Wireless 2100 MHz LTE		
Uncontrolled / General Population	FCC's exposure limits (mW/cm ²)	1.0
	Exposure values at the site (mW/cm ²)	0.0024
	% Exposure	0.24%
Controlled / Occupational	FCC's Exposure limits(mW/cm ²)	5.0
	Exposure values at the site (mW/cm ²)	0.0024
	% Exposure	0.05%

Attachment 3: Combined Exposure Analysis for each Carrier

AT&T All Bands		
Uncontrolled / General Population	Exposure values at the site (mW/cm ²)	0.0104
	% Exposure	1.60%
Controlled / Occupational	Exposure values at the site (mW/cm ²)	0.0104
	% Exposure	0.34%

Verizon Wireless All Bands		
Uncontrolled / General Population	Exposure values at the site (mW/cm ²)	0.0081
	% Exposure	1.11%
Controlled / Occupational	Exposure values at the site (mW/cm ²)	0.0081
	% Exposure	0.23%

7. Appendix A: FCC Guidelines

FCC Policies

The Federal Communications Commission (FCC) in 1996 implemented regulations and policies for analysis of RF propagation to evaluate RF emissions. All the analysis and results of this report are compared with FCC's (Federal Communications Commission) rules to determine whether a site is compliant for Occupational/Controlled or General Public/Uncontrolled exposure. All the analysis of RF propagation is done in terms of a percentage. The limits primarily indicate the power density and are generally expressed in terms of milliwatts per centimeter square, mW/cm².

FCC guidelines incorporate two separate tiers of exposure limits that are dependent on the scenario/ situation in which that exposure takes place or the status of the individuals who are subjected to that exposure. The decision as to which tier is applied to a scenario is based on the following definitions:

Occupational / Controlled

These limits apply in situations when someone is exposed to RF energy through his/her occupation, is fully aware of the harmful effects of the RF exposure and has an ability to exercise control over this exposure. Occupational / controlled exposure limits also apply when 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. limits for Occupational/Controlled exposure can be found on Table 1(A).

General Population / Uncontrolled

These limits apply to situations in which the general public may be exposed or in which persons who are exposed because of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure to RF. Therefore, members of the general public would always be considered under this category, for example, in the case of a telecommunications tower that exposes people in a nearby residential area. Exposure limits for General Population/Uncontrolled can be found on Table 1(B).

Table 1. LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

(A) Limits for Occupational/Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f)*	6
30-300	61.4	0.163	1.0	6
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6

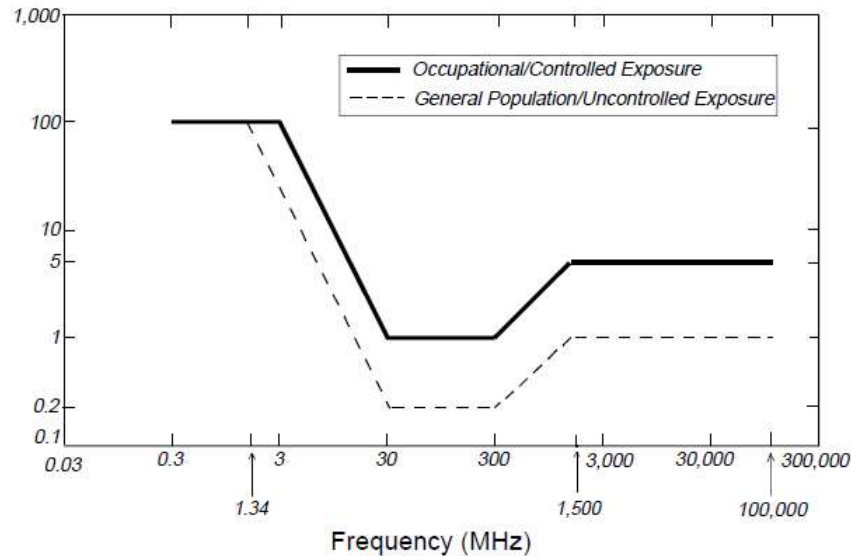
(B) Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/1500	30
1500-100,000	--	--	1.0	30

f = frequency in MHz

*Plane-wave equivalent power density

Figure 1. FCC Limits for Maximum Permissible Exposure (MPE)
Plane-wave Equivalent Power Density



OSHA Statement:

The objective of the OSHA Act is to ensure the safety and health of the working men and women by enforcing certain standards. The act also assists and encourages the states in their efforts to ensure safe and healthy working conditions through means of research, information, education and training in the field of occupational safety and health and for other purposes.

According to OSHA Act section 5, important duties to be considered are:

(a) Each employer

- 1) Shall furnish to each of his employees' employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious harm to his employees
- 2) Shall comply with occupational safety and health standards promulgated under this act.

(b) Each employee shall comply with occupational safety and health standards and all rules, regulations, and orders issued pursuant to this Act which are applicable to his own actions and conduct.

8. Appendix B: Preparer Certification

I, Tim Harris, preparer of this report, certify that I am fully trained and aware of the rules and regulations of both the Federal Communications Commission and the Occupational Safety and Health Administration regarding Human Exposure to Radio Frequency Radiation. In addition, I have been trained in 1) RF safety and 2) RF modeling using RoofView modeling software.

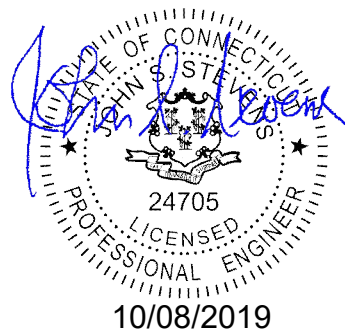
I certify that the information contained in this report is true and correct to the best of my knowledge.

Timothy A. Harris

10/7/2019

Signature

Date



SHEET INDEX

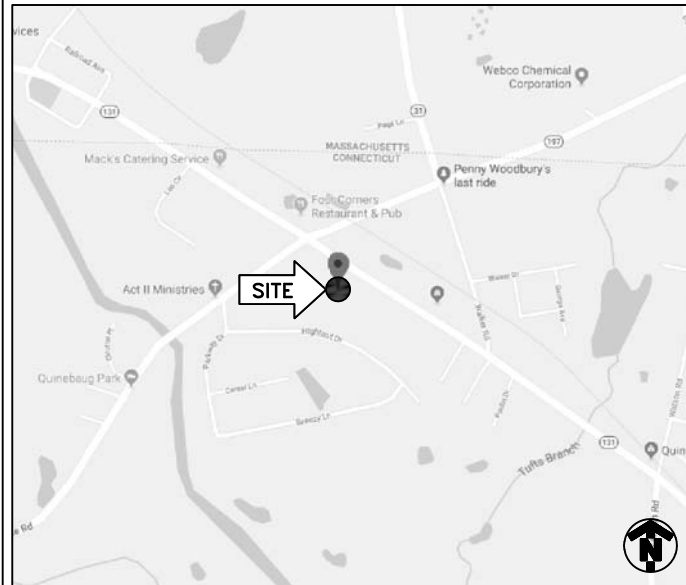
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C1	GENERAL NOTES
C2	OVERALL SITE PLAN
C2A	ENLARGED SITE PLAN
C3	ELEVATION VIEW
C4	ANTENNA ORIENTATION PLAN
C5	EQUIPMENT DETAILS
C6	PLUMBING DIAGRAM
C7	GROUNDING DETAILS
S1-S2	MODIFICATION DETAILS

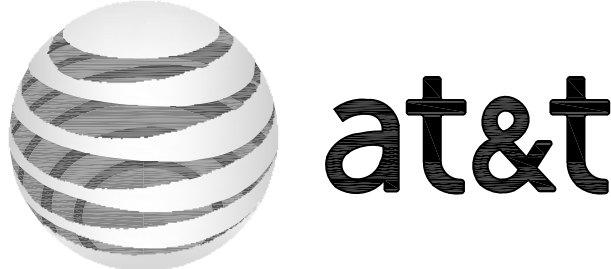
DRIVING DIRECTIONS

FROM 550 COCHITUATE RD.:

GET ON I-90 WEST/MASSACHUSETTS TURNPIKE. HEAD NORTH EAST TOWARD LEGGATT MCCALL CONN. TURN LEFT ONTO LEGGATT MCCALL CONN. CONTINUE ONTO BURR STREET. TURN LEFT ONTO COCHITUATE ROAD. USE THE RIGHT LANE TO TAKE THE RAMP TO I-90 EAST/MASSPIKE WEST/SPRINGFIELD/BOSTON. KEEP LEFT AT THE FORK, FOLLOW SIGNS FOR I-90 WEST/MASSACHUSETTS TURNPIKE/WORCESTER/SPRINGFIELD AND MERGE ONTO I-90 WEST/MASSACHUSETTS TURNPIKE. FOLLOW I-90 WEST/MASSACHUSETTS TURNPIKE AND I-395 SOUTH TO MA-16 WEST/EAST MAIN STREET IN WEBSTER. TAKE EXIT 2 FROM I-395 SOUTH. MERGE ONTO I-90 WEST/MASSACHUSETTS TURNPIKE. TAKE EXIT 10 TOWARD MA-12 NORTH/AUBURN/WORCESTER. KEEP RIGHT AT THE FORK, FOLLOW SIGNS FOR I-395 SOUTH/US-20 EAST/NORWICH CT AND MERGE ONTO I-395 SOUTH. TAKE EXIT 2 FOR MA-16 TOWARD WEBSTER/DOUGLAS. FOLLOW EAST MAIN STREET TO QUINEBAUG ROAD IN THOMPSON. TURN RIGHT ONTO MA-16 WEST/EAST MAIN STREET (SIGNS FOR WEBSTER). CONTINUE ONTO CT-197 WEST/OLD TURNPIKE ROAD. TURN LEFT ONTO QUINEBAUG ROAD.

LOCATION MAP





PROJECT
LTE 2C/3C/4C/5C/RETROFIT

SITE NAME
THOMPSON QUINEBAUG ROAD

CELL SITE ID
CTL01088



FA SITE NUMBER
10065743

PACE ID
**MRCTB041526/MRCTB041357/MRCTB041375
MRCTB041762/MRCTB041590**

SITE ADDRESS
**720 QUINEBAUG ROAD
THOMPSON, CT 06277**

STRUCTURE TYPE
MONOPOLE

PROJECT TEAM

 <p>PROJECT MANAGER</p>	 <p>1033 Watervliet Shaker Rd Albany, NY 12205 Office # (518) 690-0790 Fax # (518) 690-0793</p> <p>ENGINEER</p>
---	--

- SCOPE OF WORK (PER LTE RFDS, DATED 08/06/2019 V3.00):**
- HANDICAP ACCESS REQUIREMENTS ARE NOT REQUIRED.
 - FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION.
 - FACILITY HAS NO PLUMBING OR REFRIGERANTS.
 - THIS FACILITY SHALL MEET OR EXCEED ALL FAA AND FCC REGULATORY REQUIREMENTS.
 - ALL NEW MATERIAL SHALL BE FURNISHED AND INSTALLED BY CONTRACTOR UNLESS NOTED OTHERWISE. EQUIPMENT, ANTENNAS/RRU AND CABLES FURNISHED BY OWNER AND INSTALLED BY CONTRACTOR.
- | | |
|---|--|
| <p>TOWER</p> <ul style="list-style-type: none"> • REMOVE (6) PANEL ANTENNAS • INSTALL (6) PANEL ANTENNAS • REMOVE (3) RRUS-11 B12 • INSTALL (3) B14 4478 • INSTALL (3) 4449 B5/B12 • INSTALL (3) 8843 B2/B66A • INSTALL (1) DC6 SQUID WITH (1) FIBER AND (2) DC CABLES <p>GROUND</p> <ul style="list-style-type: none"> • SWAP BB WITH (2) 6630 • ADD IDLe CABLE | <p>811</p> <p>TO OBTAIN LOCATION OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN CONNECTICUT, CONTACT CALL BEFORE YOU DIG TOLL FREE: 1-800-922-4455 OR www.cbyd.com</p> <p>CONNECTICUT STATUTE REQUIRES MIN OF 2 WORKING DAYS NOTICE BEFORE YOU EXCAVATE</p> |
|---|--|

PROJECT SUMMARY

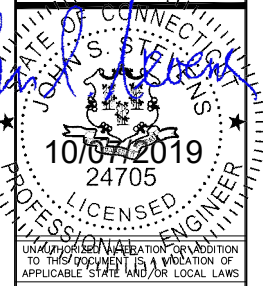
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CELL SITE ID:	CTL01088	
FA SITE #:	10065743	
SITE ADDRESS:	720 QUINEBAUG ROAD THOMPSON, CT 06277	
COUNTY:	WINDHAM	
SITE COORDINATES:		
LATITUDE:	42.0228419° N	(NAD 83)
LONGITUDE:	71.9492181° W	(NAD 83)
RAD CENTER	±125'	(AGL)
LANDLORD:	STEVEN T. BODREAU – CHIEF QUINEBUAG VOL. F.D. 860-935-5255	
APPLICANT:	AT&T MOBILITY 550 COCHITUATE RD. FRAMINGHAM, MA 01701	
CLIENT REPRESENTATIVE:	SMARTLINK, LLC 85 RANGEWAY RD., BUILDING 3, SUITE 102 NORTH BILLERICA, MA 01862	
CONTACT:	EDWARD WEISSMAN (917)528-1857	
ENGINEER:	INFINIGY 1033 WATERVLIET SHAKER ROAD ALBANY, NY 12205	
CONTACT:	ALEX WELLER (518) 690-0790	
BUILDING CODE:	2018 CT STATE BUILDING CODE 2015 INTERNATIONAL BUILDING CODE ANSI/TIA-222 G 2015 INTERNATIONAL PLUMBING CODE 2015 INTERNATIONAL MECHANICAL CODE 2015 INTERNATIONAL ENERGY CONSERVATION CODE 2017 NFPA 70	
ELECTRICAL CODE:	NATIONAL ELECTRICAL CODE (LATEST EDITION)	

811

Know what's below.
Call before you dig.

INFINIGY

INFINIGY ENGINEERING, PLLC
1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793



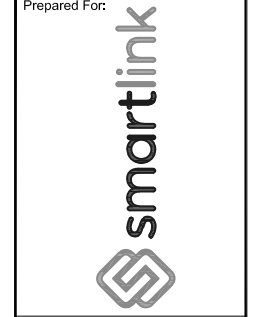
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Drawn:	BMM	Date:	09/17/19
Designed:	ASW	Date:	09/17/19
Checked:	ASW	Date:	09/17/19
Project Number:			
499-006			

Prepared For:

**THOMPSON
QUINEBAUG ROAD**

**CTL01088
FA# 10065743**

720 QUINEBAUG ROAD
THOMPSON, CT 06277



Drawing Scale:
AS NOTED

CD

Date:
10/7/19

Drawing Title

TITLE PAGE

Drawing Number

T1

GENERAL NOTES

PART 1 – GENERAL REQUIREMENTS

- 1.1 THE WORK SHALL COMPLY WITH APPLICABLE NATIONAL CODES AND STANDARDS, LATEST EDITION, AND PORTIONS THEREOF, INCLUDED BUT NOT LIMITED TO THE FOLLOWING:
 - A. GR-63-CORE NEBS REQUIREMENTS: PHYSICAL PROTECTION
 - B. GR-78-CORE GENERIC REQUIREMENTS FOR THE PHYSICAL DESIGN AND MANUFACTURE OF TELECOMMUNICATIONS EQUIPMENT.
 - C. NATIONAL FIRE PROTECTION ASSOCIATION CODES AND STANDARDS (NFPA) INCLUDING NFPA 70 (NATIONAL ELECTRICAL CODE – "NEC").
 - D. AND NFPA 101 (LIFE SAFETY CODE).
 - E. AMERICAN SOCIETY FOR TESTING OF MATERIALS (ASTM).
 - F. INSTITUTE OF ELECTRONIC AND ELECTRICAL ENGINEERS (IEEE).
- 1.2 DEFINITIONS:
 - A. WORK: THE SUM OF TASKS AND RESPONSIBILITIES IDENTIFIED IN THE CONTRACT DOCUMENTS.
 - B. COMPANY: AT&T CORPORATION
 - C. ENGINEER: SYNONYMOUS WITH ARCHITECT & ENGINEER AND "A&E". THE DESIGN PROFESSIONAL HAVING PROFESSIONAL RESPONSIBILITY FOR DESIGN OF THE PROJECT.
 - D. CONTRACTOR: CONSTRUCTION CONTRACTOR; CONSTRUCTION VENDOR; INDIVIDUAL OR ENTITY WHO AFTER EXECUTION OF A CONTRACT IS BOUND TO ACCOMPLISH THE WORK.
 - E. THIRD PARTY VENDOR OR AGENCY: A VENDOR OR AGENCY ENGAGED SEPARATELY BY THE COMPANY, A&E, OR CONTRACTOR TO PROVIDE MATERIALS OR TO ACCOMPLISH SPECIFIC TASKS RELATED TO BUT NOT INCLUDED IN THE WORK.
- 1.3 POINT OF CONTACT: COMMUNICATION BETWEEN THE COMPANY AND THE CONTRACTOR SHALL FLOW THROUGH THE SINGLE COMPANY SITE DEVELOPMENT SPECIALIST OR OTHER PROJECT COORDINATOR APPOINTED TO MANAGE THE PROJECT FOR THE COMPANY.
- 1.4 ON-SITE SUPERVISION: THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL EMPLOY A COMPETENT SUPERINTENDENT WHO SHALL BE IN ATTENDANCE AT THE SITE AT ALL TIMES DURING PERFORMANCE OF THE WORK.
- 1.5 DRAWINGS, SPECIFICATIONS AND DETAILS REQUIRED AT JOBSITE: THE CONSTRUCTION CONTRACTOR SHALL MAINTAIN A FULL SET OF THE CONSTRUCTION DRAWINGS, STANDARD CONSTRUCTION DETAILS FOR WIRELESS SITES, AND THE STANDARD CONSTRUCTION SPECIFICATIONS FOR WIRELESS SITES AT THE JOBSITE FROM MOBILIZATION THROUGH CONSTRUCTION COMPLETION.
 - A. THE JOBSITE DRAWINGS, SPECIFICATIONS AND DETAILS SHALL BE CLEARLY MARKED DAILY IN PENCIL WITH ANY CHANGES IN CONSTRUCTION OVER WHAT IS DEPICTED IN THE DOCUMENTS. AT CONSTRUCTION COMPLETION, THIS JOBSITE MARKUP SET SHALL BE DELIVERED TO THE COMPANY OR COMPANY'S DESIGNATED REPRESENTATIVE TO BE FORWARDED TO THE COMPANY'S A&E VENDOR FOR PRODUCTION OF "AS-BUILT" DRAWINGS.
- 1.6 USE OF JOB SITE: THE CONTRACTOR SHALL CONFINE ALL CONSTRUCTION AND RELATED OPERATIONS INCLUDING STAGING AND STORAGE OF MATERIALS AND EQUIPMENT, PARKING, TEMPORARY FACILITIES, AND WASTE STORAGE TO THE LEASE PARCEL UNLESS OTHERWISE PERMITTED BY THE CONTRACT DOCUMENTS.
- 1.7 NOTICE TO PROCEED:
 - A. NO WORK SHALL COMMENCE PRIOR TO COMPANY'S WRITTEN NOTICE TO PROCEED.
 - B. UPON RECEIVING NOTICE TO PROCEED, CONTRACTOR SHALL FULLY PERFORM ALL WORK NECESSARY TO PROVIDE AT&T WITH AN OPERATIONAL WIRELESS FACILITY.

PART 2 – EXECUTION

- 2.1 TEMPORARY UTILITIES AND FACILITIES: THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY UTILITIES AND FACILITIES NECESSARY EXCEPT AS OTHERWISE INDICATED IN THE CONSTRUCTION DOCUMENTS. TEMPORARY UTILITIES AND FACILITIES INCLUDE, POTABLE WATER, HEAT, HVAC, ELECTRICITY, SANITARY FACILITIES, WASTE DISPOSAL FACILITIES, AND TELEPHONE/COMMUNICATION SERVICES. PROVIDE TEMPORARY UTILITIES AND FACILITIES IN ACCORDANCE WITH OSHA AND THE AUTHORITY HAVING JURISDICTION. CONTRACTOR MAY UTILIZE THE COMPANY ELECTRICAL SERVICE IN THE COMPLETION OF THE WORK WHEN IT BECOMES AVAILABLE. USE OF THE LESSORS OR SITE OWNER'S UTILITIES OR FACILITIES IS EXPRESSLY FORBIDDEN EXCEPT AS OTHERWISE ALLOWED IN THE CONTRACT DOCUMENTS.
- 2.2 ACCESS TO WORK: THE CONTRACTOR SHALL PROVIDE ACCESS TO THE JOB SITE FOR AUTHORIZED COMPANY PERSONNEL AND AUTHORIZED REPRESENTATIVES OF THE ARCHITECT/ENGINEER DURING ALL PHASES OF THE WORK.
- 2.3 TESTING: REQUIREMENTS FOR TESTING BY THIS CONTRACTOR SHALL BE AS INDICATED HERewith, ON THE CONSTRUCTION DRAWINGS, AND IN THE INDIVIDUAL SECTIONS OF THESE SPECIFICATIONS. SHOULD COMPANY CHOOSE TO ENGAGE ANY THIRD-PARTY TO CONDUCT ADDITIONAL TESTING, THE CONTRACTOR SHALL COOPERATE WITH AND PROVIDE A WORK AREA FOR COMPANY'S TEST AGENCY.

- 2.4 COMPANY FURNISHED MATERIAL AND EQUIPMENT: ALL HANDLING, STORAGE AND INSTALLATION OF COMPANY FURNISHED MATERIAL AND EQUIPMENT SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AND WITH THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.
 - A. CONTRACTOR SHALL PROCURE ALL OTHER REQUIRED WORK RELATED MATERIALS NOT PROVIDED BY AT&T TO SUCCESSFULLY CONSTRUCT A WIRELESS FACILITY.
- 2.5 DIMENSIONS: VERIFY DIMENSIONS INDICATED ON DRAWINGS WITH FIELD DIMENSIONS BEFORE FABRICATION OR ORDERING OF MATERIALS. DO NOT SCALE DRAWINGS.
- 2.6 EXISTING CONDITIONS: NOTIFY THE COMPANY REPRESENTATIVE OF EXISTING CONDITIONS DIFFERING FROM THOSE INDICATED ON THE DRAWINGS. DO NOT REMOVE OR ALTER STRUCTURAL COMPONENTS WITHOUT PRIOR WRITTEN APPROVAL FROM THE ARCHITECT AND ENGINEER.

PART 3 – RECEIPT OF MATERIAL & EQUIPMENT

- 3.1 RECEIPT OF MATERIAL AND EQUIPMENT: CONTRACTOR IS RESPONSIBLE FOR AT&T PROVIDED MATERIAL AND EQUIPMENT AND UPON RECEIPT SHALL:
 - A. ACCEPT DELIVERIES AS SHIPPED AND TAKE RECEIPT.
 - B. VERIFY COMPLETENESS AND CONDITION OF ALL DELIVERIES.
 - C. TAKE RESPONSIBILITY FOR EQUIPMENT AND PROVIDE INSURANCE PROTECTION AS REQUIRED IN AGREEMENT.
 - D. RECORD ANY DEFECTS OR DAMAGES AND WITHIN TWENTY-FOUR HOURS AFTER RECEIPT, REPORT TO AT&T OR ITS DESIGNATED PROJECT REPRESENTATIVE OF SUCH.
 - E. PROVIDE SECURE AND NECESSARY WEATHER PROTECTED WAREHOUSING.
 - F. COORDINATE SAFE AND SECURE TRANSPORTATION OF MATERIAL AND EQUIPMENT, DELIVERING AND OFF-LOADING FROM CONTRACTOR'S WAREHOUSE TO SITE.

PART 4 – GENERAL REQUIREMENTS FOR CONSTRUCTION

- 4.1 CONTRACTOR SHALL KEEP THE SITE FREE FROM ACCUMULATING WASTE MATERIAL, DEBRIS, AND TRASH. AT THE COMPLETION OF THE WORK, CONTRACTOR SHALL REMOVE FROM THE SITE ALL REMAINING RUBBISH, IMPLEMENTS, TEMPORARY FACILITIES, AND SURPLUS MATERIALS.
- 4.2 EQUIPMENT ROOMS SHALL AT ALL TIMES BE MAINTAINED "BROOM CLEAN" AND CLEAR OF DEBRIS.
- 4.3 CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS TO DISCOVER AND LOCATE ANY HAZARDOUS CONDITION.
 - A. IN THE EVENT CONTRACTOR ENCOUNTERS ANY HAZARDOUS CONDITION WHICH HAS NOT BEEN ABATED OR OTHERWISE MITIGATED, CONTRACTOR AND ALL OTHER PERSONS SHALL IMMEDIATELY STOP WORK IN THE AFFECTED AREA AND NOTIFY COMPANY IN WRITING. THE WORK IN THE AFFECTED AREA SHALL NOT BE RESUMED EXCEPT BY WRITTEN NOTIFICATION BY COMPANY.
 - B. CONTRACTOR AGREES TO USE CARE WHILE ON THE SITE AND SHALL NOT TAKE ANY ACTION THAT WILL OR MAY RESULT IN OR CAUSE THE HAZARDOUS CONDITION TO BE FURTHER RELEASED IN THE ENVIRONMENT, OR TO FURTHER EXPOSE INDIVIDUALS TO THE HAZARD.
- 4.4 CONTRACTOR'S ACTIVITIES SHALL BE RESTRICTED TO THE PROJECT LIMITS. SHOULD AREAS OUTSIDE THE PROJECT LIMITS BE AFFECTED BY CONTRACTOR'S ACTIVITIES, CONTRACTOR SHALL IMMEDIATELY RETURN THEM TO ORIGINAL CONDITION.
- 4.5 CONDUCT TESTING AS REQUIRED HEREIN.

PART 5 – TESTS AND INSPECTIONS

- 5.1 TESTS AND INSPECTIONS:
 - A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION TESTS, INSPECTIONS AND PROJECT DOCUMENTATION.
 - B. CONTRACTOR SHALL COORDINATE TEST AND INSPECTION SCHEDULES WITH COMPANY'S REPRESENTATIVE WHO MUST BE ON SITE TO WITNESS SUCH TESTS AND INSPECTIONS.
 - C. WHEN THE USE OF A THIRD PARTY INDEPENDENT TESTING AGENCY IS REQUIRED, THE AGENCY THAT IS SELECTED MUST PERFORM SUCH WORK ON A REGULAR BASIS IN THE STATE WHERE THE PROJECT IS LOCATED AND HAVE A THOROUGH UNDERSTANDING OF LOCAL AVAILABLE MATERIALS, INCLUDING THE SOIL, ROCK, AND GROUNDWATER CONDITIONS.
 - D. THE THIRD PARTY TESTING AGENCY IS TO BE FAMILIAR WITH THE APPLICABLE REQUIREMENTS FOR THE TESTS TO BE DONE, EQUIPMENT TO BE USED, AND ASSOCIATED HEALTH AND SAFETY ISSUES.
 - E. SITE RESISTANCE TO EARTH TESTING PER EXHIBIT: CELL SITE GROUNDING SYSTEM DESIGN.

- F. ANTENNA AND COAX SWEEP TESTS PER EXHIBIT: ANTENNA TRANSMISSION LINE ACCEPTANCE STANDARDS.
- G. ALL OTHER TESTS REQUIRED BY COMPANY OR JURISDICTION.

PART 6 – TRENCHING AND BACKFILLING

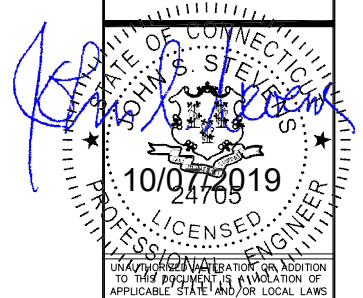
- 6.1 TRENCHING AND BACKFILLING: THE CONTRACTOR SHALL PERFORM ALL EXCAVATION OF EVERY DESCRIPTION AND OF WHATEVER SUBSTANCES ENCOUNTERED, TO THE DEPTHS INDICATED ON THE CONSTRUCTION DRAWINGS OR AS OTHERWISE SPECIFIED.
 - A. PROTECTION OF EXISTING UTILITIES: THE CONTRACTOR SHALL CHECK WITH THE LOCAL UTILITIES AND THE RESPECTIVE UTILITY LOCATOR COMPANIES PRIOR TO STARTING EXCAVATION OPERATIONS IN EACH RESPECTIVE AREA TO ASCERTAIN THE LOCATIONS OF KNOWN UTILITY LINES. THE LOCATIONS, NUMBER AND TYPES OF EXISTING UTILITY LINES DETAILED ON THE CONSTRUCTION DRAWINGS ARE APPROXIMATE AND DO NOT REPRESENT EXACT INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ALL LINES DAMAGED DURING EXCAVATION AND ALL ASSOCIATED OPERATIONS. ALL UTILITY LINES UNCOVERED DURING THE EXCAVATION OPERATIONS, SHALL BE PROTECTED FROM DAMAGE DURING EXCAVATION AND ASSOCIATED OPERATIONS. ALL REPAIRS SHALL BE APPROVED BY THE UTILITY COMPANY.
 - B. HAND DIGGING: UNLESS APPROVED IN WRITING OTHERWISE, ALL DIGGING WITHIN AN EXISTING CELL SITE COMPOUND IS TO BE DONE BY HAND.
 - C. DURING EXCAVATION, MATERIAL SUITABLE FOR BACKFILLING SHALL BE STOCKPILED IN AN ORDERLY MANNER A SUFFICIENT DISTANCE FROM THE BANKS OF THE TRENCH TO AVOID OVERLOADING AND TO PREVENT SLIDES OR CAVE-INS. ALL EXCAVATED MATERIALS NOT REQUIRED OR SUITABLE FOR BACKFILL SHALL BE REMOVED AND DISPOSED OF AT THE CONTRACTOR'S EXPENSE.
 - D. GRADING SHALL BE DONE AS MAY BE NECESSARY TO PREVENT SURFACE WATER FROM FLOWING INTO TRENCHES OR OTHER EXCAVATIONS, AND ANY WATER ACCUMULATING THEREIN SHALL BE REMOVED BY PUMPING OR BY OTHER APPROVED METHOD.
 - E. SHEETING AND SHORING SHALL BE DONE AS NECESSARY FOR THE PROTECTION OF THE WORK AND FOR THE SAFETY OF PERSONNEL. UNLESS OTHERWISE INDICATED, EXCAVATION SHALL BE BY OPEN CUT, EXCEPT THAT SHORT SECTIONS OF A TRENCH MAY BE TUNNELED IF, THE CONDUIT CAN BE SAFELY AND PROPERLY INSTALLED AND BACKFILL CAN BE PROPERLY TAMPED IN SUCH TUNNEL SECTIONS. EARTH EXCAVATION SHALL COMPRISE ALL MATERIALS AND SHALL INCLUDE CLAY, SILT, SAND, MUCK, GRAVEL, HARDPAN, LOOSE SHALE, AND LOOSE STONE.
 - F. TRENCHES SHALL BE OF NECESSARY WIDTH FOR THE PROPER LAYING OF THE CONDUIT OR CABLE, AND THE BANKS SHALL BE AS NEARLY VERTICAL AS PRACTICABLE. THE BOTTOM OF THE TRENCHES SHALL BE ACCURATELY GRADED TO PROVIDE UNIFORM BEARING AND SUPPORT FOR EACH SECTION OF THE CONDUIT OR CABLE ON UNDISTURBED SOIL AT EVERY POINT ALONG ITS ENTIRE LENGTH. EXCEPT WHERE ROCK IS ENCOUNTERED, CARE SHALL BE TAKEN NOT TO EXCAVATE BELOW THE DEPTHS INDICATED. WHERE ROCK EXCAVATIONS ARE NECESSARY, THE ROCK SHALL BE EXCAVATED TO A MINIMUM OVER DEPTH OF 6 INCHES BELOW THE TRENCH DEPTHS INDICATED ON THE CONSTRUCTION DRAWINGS OR SPECIFIED. OVER DEPTHS IN THE ROCK EXCAVATION AND UNAUTHORIZED OVER DEPTHS SHALL BE THOROUGHLY BACK FILLED AND TAMPED TO THE APPROPRIATE GRADE. WHENEVER WET OR OTHERWISE UNSTABLE SOIL THAT IS INCAPABLE OF PROPERLY SUPPORTING THE CONDUIT OR CABLE IS ENCOUNTERED IN THE BOTTOM OF THE TRENCH, SUCH SOLID SHALL BE REMOVED TO A MINIMUM OVER DEPTH OF 6 INCHES AND THE TRENCH BACKFILLED TO THE PROPER GRADE WITH EARTH OF OTHER SUITABLE MATERIAL, AS HEREINAFTER SPECIFIED.
 - G. BACKFILLING OF TRENCHES. TRENCHES SHALL NOT BE BACKFILLED UNTIL ALL SPECIFIED TESTS HAVE BEEN PERFORMED AND ACCEPTED. WHERE COMPACTED BACKFILL IS NOT INDICATED THE TRENCHES SHALL BE CAREFULLY BACKFILLED WITH SELECT MATERIAL SUCH AS EXCAVATED SOILS THAT ARE FREE OF ROOTS, SOD, RUBBISH OR STONES, DEPOSITED IN 6 INCH LAYERS AND THOROUGHLY AND CAREFULLY RAMMED UNTIL THE CONDUIT OR CABLE HAS A COVER OF NOT LESS THAN 1 FOOT. THE REMAINDER OF THE BACKFILL MATERIAL SHALL BE GRANULAR IN NATURE AND SHALL NOT CONTAIN ROOTS, SOD, RUBBING, OR STONES OF 2-1/2 INCH MAXIMUM DIMENSION. BACKFILL SHALL BE CAREFULLY PLACED IN THE TRENCH AND IN 1 FOOT LAYERS AND EACH LAYER TAMPED. SETTLING THE BACKFILL WITH WATER WILL BE PERMITTED. THE SURFACE SHALL BE GRADED TO A REASONABLE UNIFORMITY AND THE MOUNDING OVER THE TRENCHES LEFT IN A UNIFORM AND NEAT CONDITION.

SYMBOL	DESCRIPTION
	CIRCUIT BREAKER
	NON-FUSIBLE DISCONNECT SWITCH
	FUSIBLE DISCONNECT SWITCH
	SURFACE MOUNTED PANEL BOARD
	TRANSFORMER
	KILOWATT HOUR METER
	JUNCTION BOX
	PULL BOX TO NEC/TELCO STANDARDS
-----	UNDERGROUND UTILITIES
	EXOTHERMIC WELD CONNECTION
	MECHANICAL CONNECTION
	GROUND ROD
	GROUND ROD WITH INSPECTION SLEEVE
	GROUND BAR
	120AC DUPLEX RECEPTACLE
	GROUND CONDUCTOR
	DC POWER AND FIBER OPTIC TRUNK CABLES
	DC POWER CABLES
	REPRESENTS DETAIL NUMBER
	REF. DRAWING NUMBER

ABBREVIATIONS

CIGBE	COAX ISOLATED GROUND BAR EXTERNAL
MIGB	MASTER ISOLATED GROUND BAR
SST	SELF SUPPORTING TOWER
GPS	GLOBAL POSITIONING SYSTEM
TYP.	TYPICAL
DWG	DRAWING
BCW	BARE COPPER WIRE
BFG	BELOW FINISH GRADE
PVC	POLYVINYL CHLORIDE
CAB	CABINET
C	CONDUIT
SS	STAINLESS STEEL
G	GROUND
AWG	AMERICAN WIRE GAUGE
RGS	RIGID GALVANIZED STEEL
AHJ	AUTHORITY HAVING JURISDICTION
TTLNA	TOWER TOP LOW NOISE AMPLIFIER
UNO	UNLESS NOTED OTHERWISE
EMT	ELECTRICAL METALLIC TUBING
AGL	ABOVE GROUND LEVEL

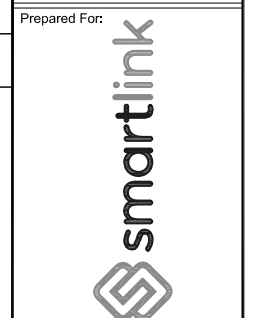
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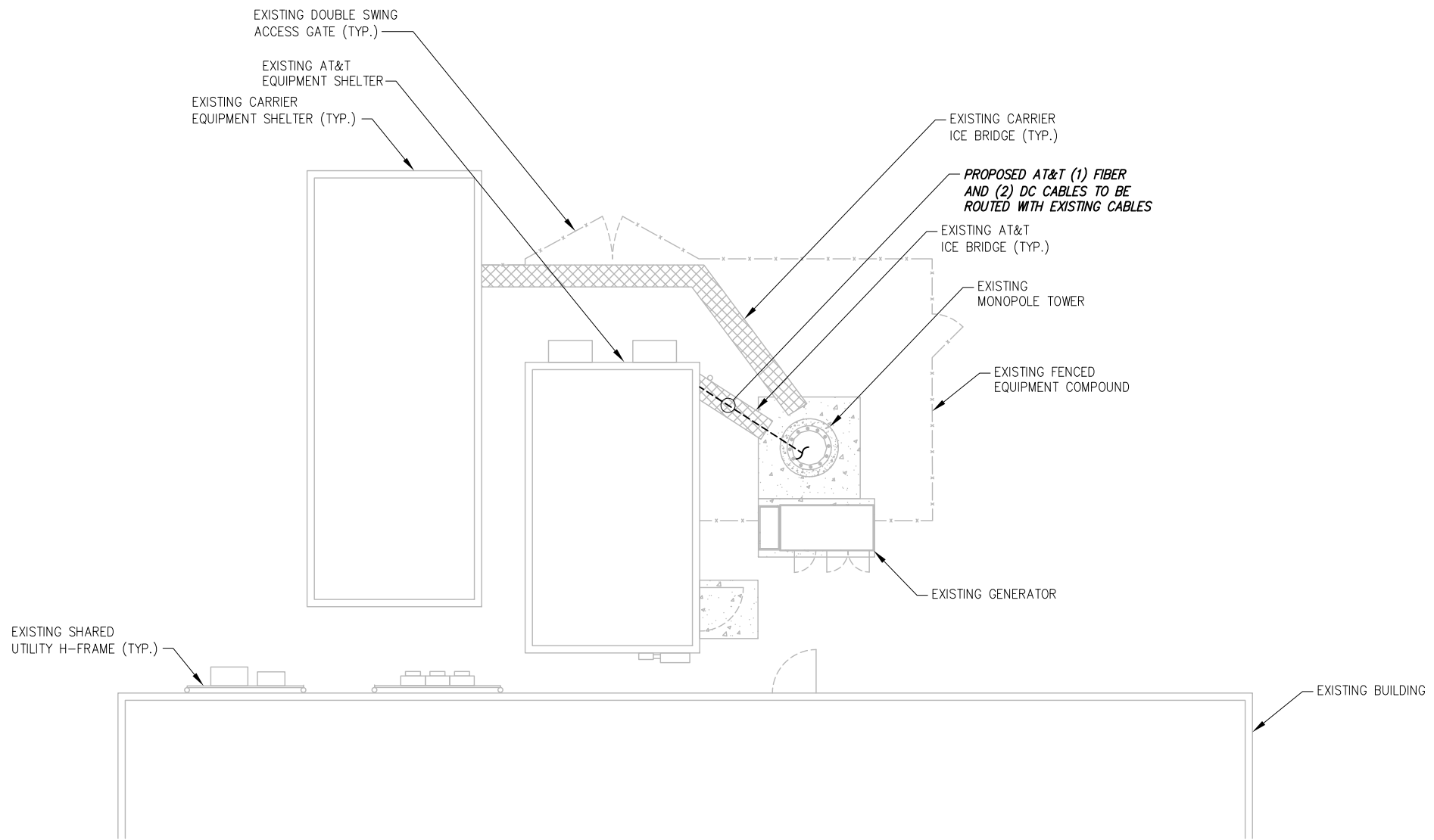
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FA# 10065743
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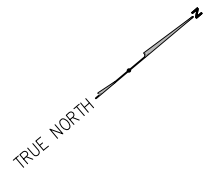
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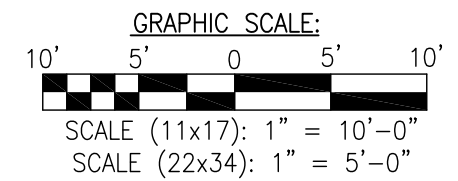
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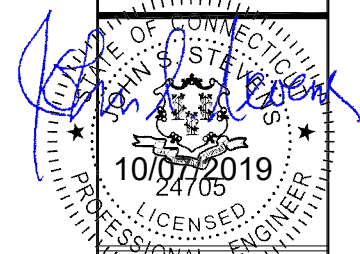
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1 SITE PLAN
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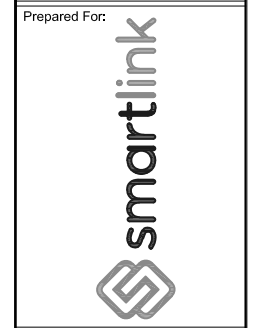
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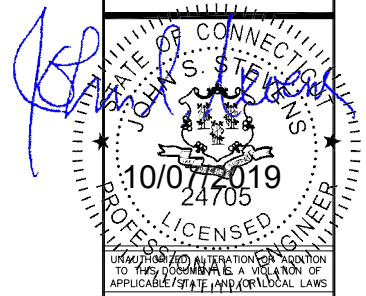


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Drawing Title
**OVERALL
SITE PLAN**

Drawing Number
C2

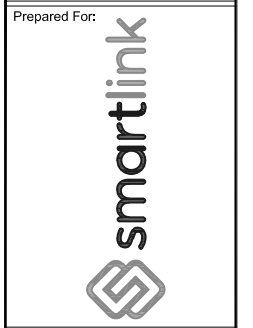


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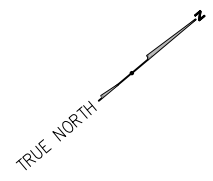
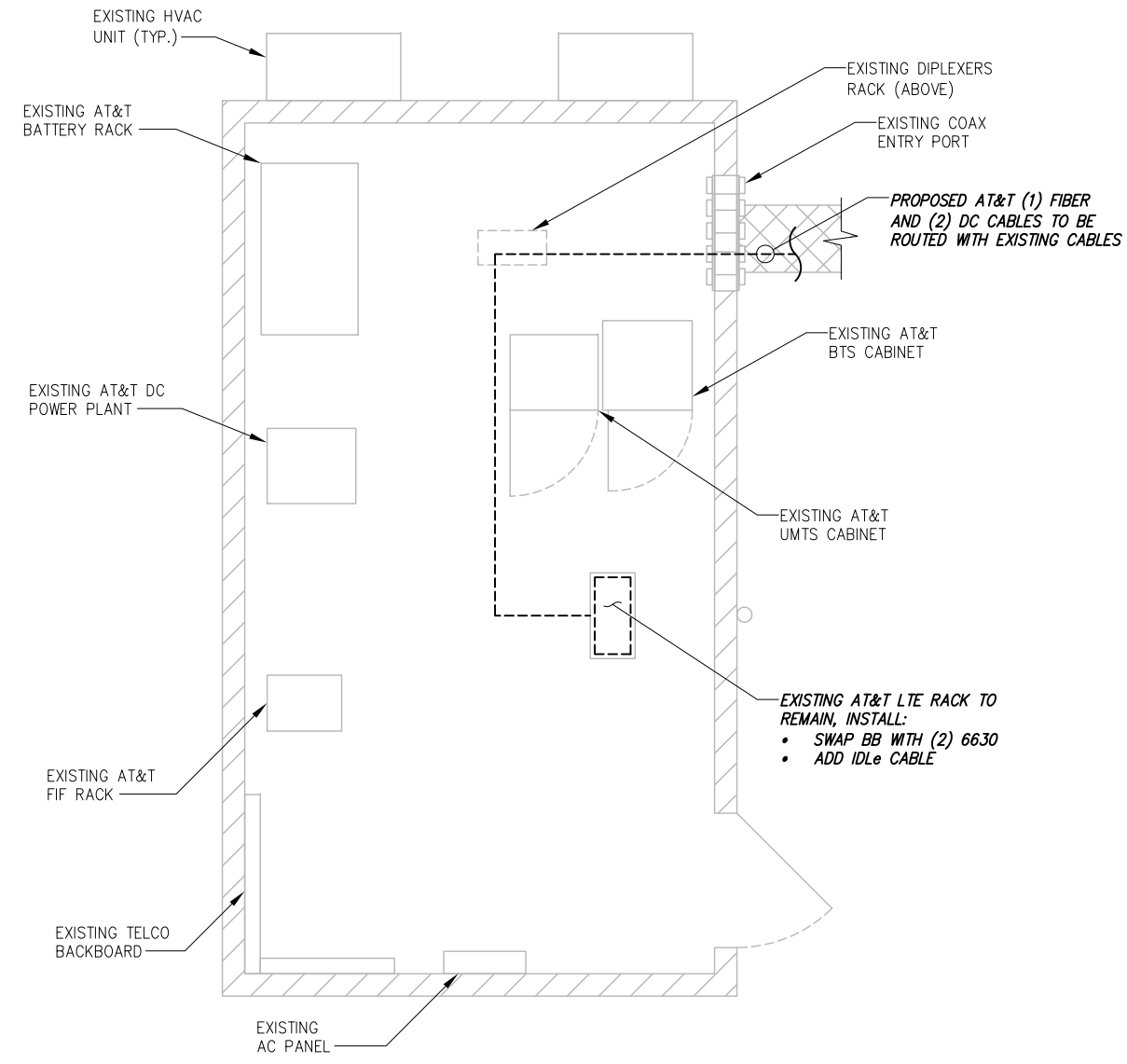
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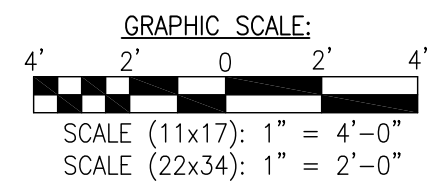
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ENLARGED SITE PLAN

Drawing Number:
C2A



2 ENLARGED EQUIPMENT PLAN
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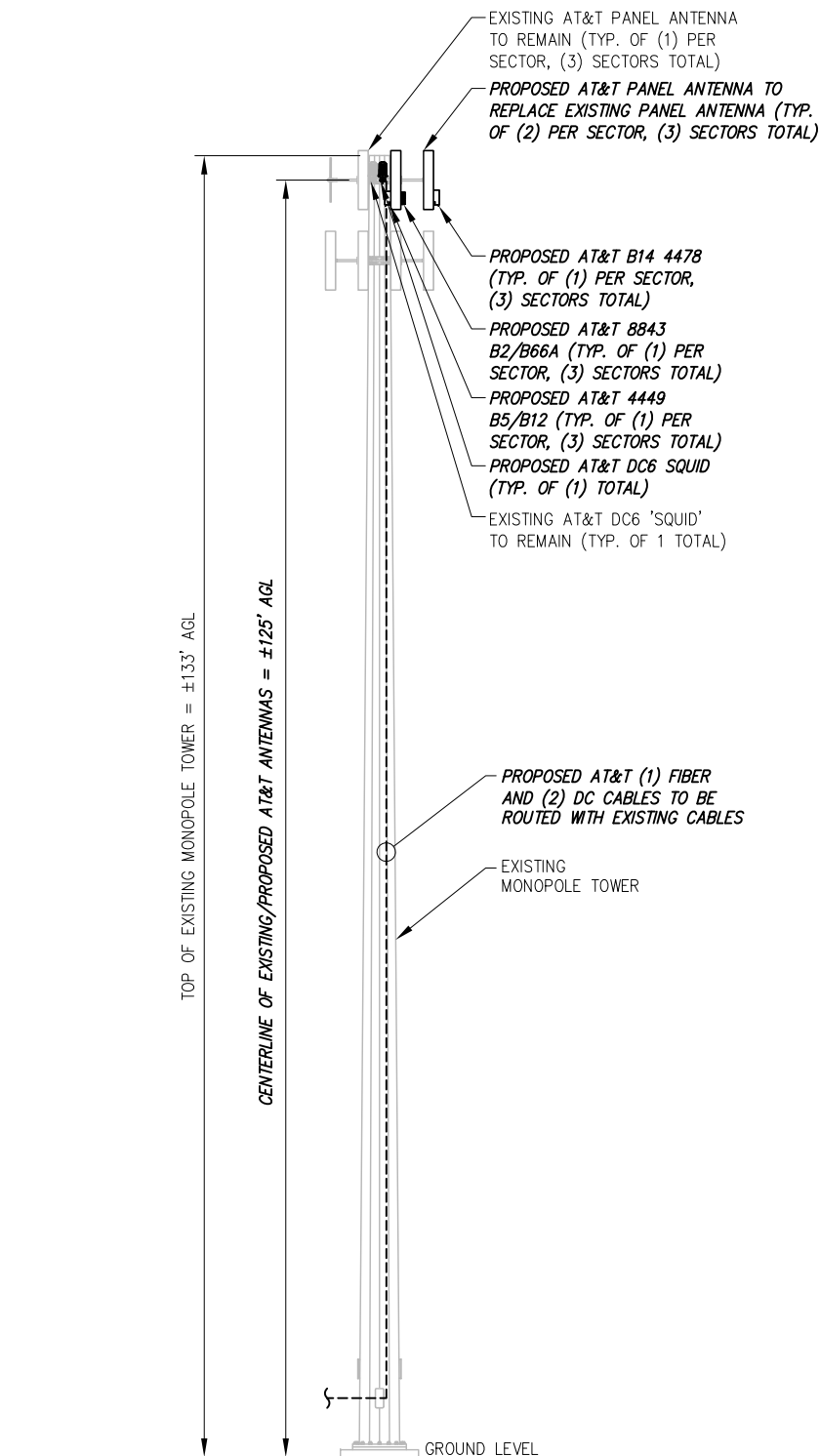
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NOTE:

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- FOR ADDITIONAL STRUCTURAL INFORMATION PERTAINING TO THE ANTENNA MOUNT, SEE 'POST MOD MOUNT ANALYSIS REPORT' COMPLETED BY INFINIGY, DATED 09/16/19. SEE SHEETS S1-S2 FOR ADDITIONAL MODIFICATION DETAILS.

NOTE:

- 3' MINIMUM SEPARATION BETWEEN ALL LTE ANTENNAS
- 6' MINIMUM SEPARATION BETWEEN 700 BC/700 DE ANTENNAS



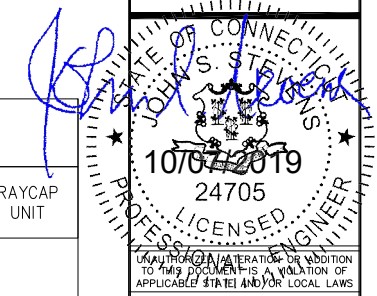
1 ELEVATION VIEW
NOT TO SCALE

FINAL ANTENNA CONFIGURATION & CABLE SCHEDULE BASED ON LTE RFDS DATED 08/06/19, V 3.00

SECTOR	ANTENNA POSITION	ANTENNA STATUS & TECHNOLOGY	ANTENNA MANF/MODEL	TMA/DIPLEXER	RRUS	AZIMUTH	ANTENNA Q. HEIGHT	CABLE FEEDER		RAYCAP UNIT
								TYPE	LENGTH	
ALPHA	A-1	(P) LTE 700/850/AWS /5G 850	CCI DMP65R-BU4DA	--	(1) (P) 4449 B5/B12	10°	±125'	(1) (E) FIBER CABLE (2) (E) DC CABLES	--	(1) (E) DC6 'SQUID' (1) (P) DC6 'SQUID'
	A-2	(P) LTE 700/1900	CCI DMP65R-BU4DA	--	(1) (P) B14 4478 (1) (P) 8843 B2/B66A	10°	±125'	SEE A-1 FOR CABLE INFORMATION	--	
	A-3	(E) UMTS 850	POWERWAVE 7770	(2) (E) LGP21401	--	30°	±125'	(2) (E) 1-5/8" COAX CABLES	±180'	
	A-4	--	--	--	--	--	--	(2) (E) 1-5/8" COAX CABLES	±180'	
BETA	B-1	(P) LTE 700/850/AWS /5G 850	CCI DMP65R-BU8DA	--	(1) (P) 4449 B5/B12	130°	±125'	(1) (P) FIBER CABLE (2) (P) DC CABLES	--	
	B-2	(P) LTE 700/1900	CCI DMP65R-BU8DA	--	(1) (P) B14 4478 (1) (P) 8843 B2/B66A	130°	±125'	SEE A-1 FOR CABLE INFORMATION	--	
	B-3	(E) UMTS 850	POWERWAVE 7770	(2) (E) LGP21401	--	150°	±125'	(2) (E) 1-5/8" COAX CABLES	±180'	
	B-4	--	--	--	--	--	--	(2) (E) 1-5/8" COAX CABLES	±180'	
GAMMA	G-1	(P) LTE 700/850/AWS /5G 850	CCI DMP65R-BU8DA	--	(1) (P) 4449 B5/B12	240°	±125'	SEE A-1 FOR CABLE INFORMATION	--	
	G-2	(P) LTE 700/1900	CCI DMP65R-BU8DA	--	(1) (P) B14 4478 (1) (P) 8843 B2/B66A	240°	±125'	SEE A-1 FOR CABLE INFORMATION	--	
	G-3	(E) UMTS 850	POWERWAVE 7770	(2) (E) LGP21401	--	270°	±125'	(2) (E) 1-5/8" COAX CABLES	±180'	
	G-4	--	--	--	--	--	--	(2) (E) 1-5/8" COAX CABLES	±180'	

2 AT&T ANTENNA SCHEDULE
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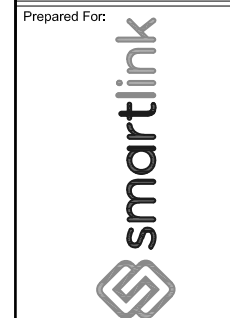
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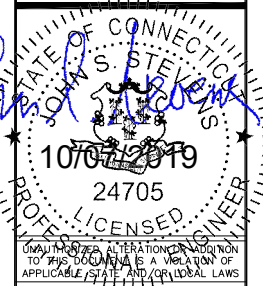
NOTE:

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NOTE:

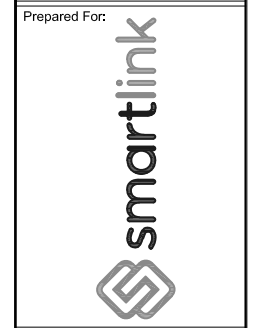
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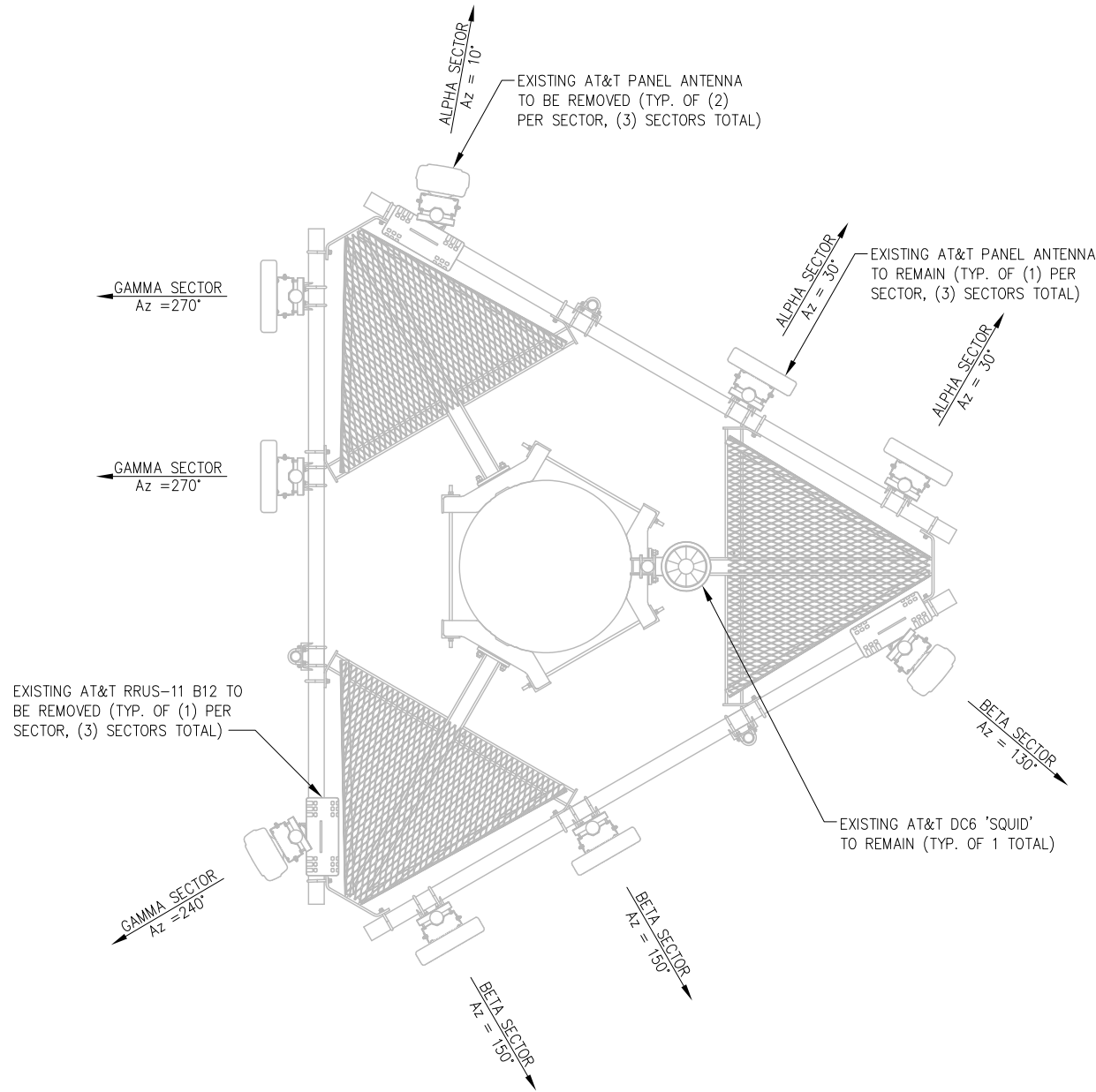
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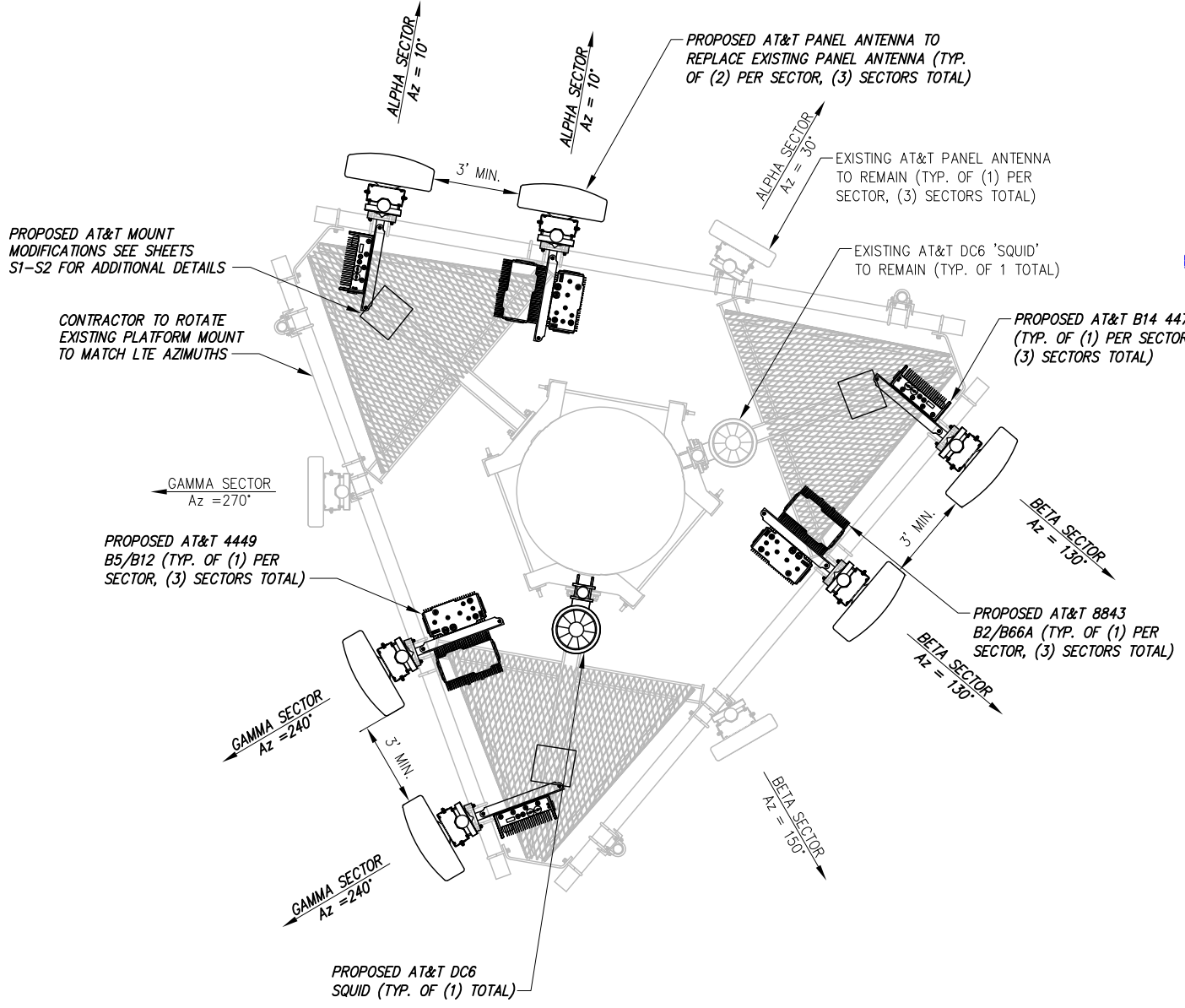
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Drawing Title:
ANTENNA ORIENTATION PLAN

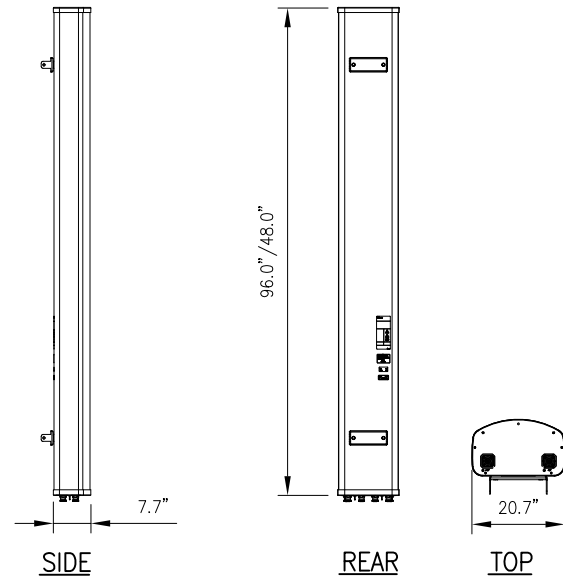
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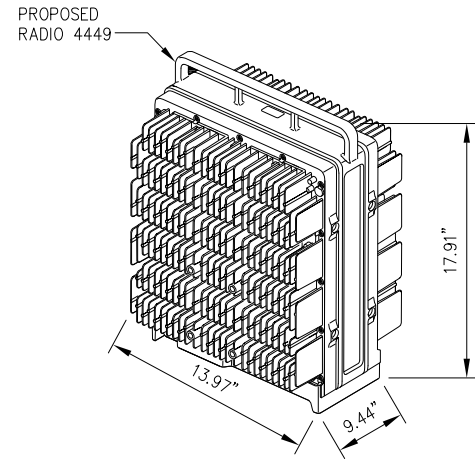


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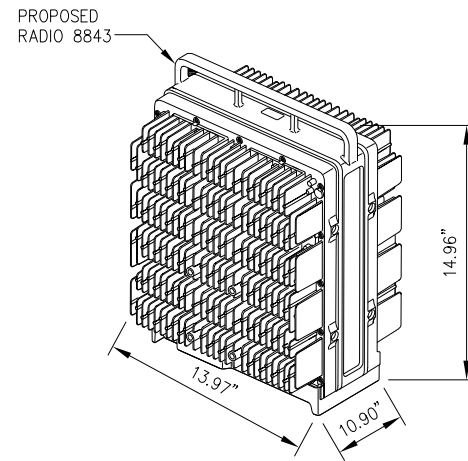
CCI MODEL NO.:	DMP65R-BU8DA/DMP65R-DU4DA
RADOME MATERIAL:	FIBERGLASS
RADOME COLOR:	LIGHT GRAY
DIMENSIONS, HxWxD:	96.0"x20.7"x7.7"/48.0"x20.7"x7.7"
WEIGHT, W/	95.7 LBS/67.9 LBS
PRE-MOUNTED BRACKETS:	7-16 DIN FEMALE
CONNECTOR:	

1 ANTENNA DETAIL
NOT TO SCALE



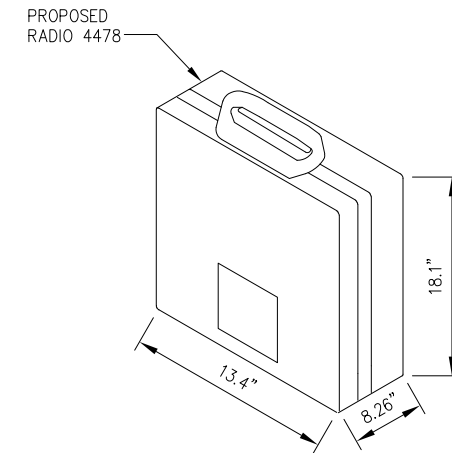
RADIO 4449 SPECIFICATIONS
• HxWxD, (INCHES) : 17.91"x13.97"x9.44"
• WEIGHT (LBS) : 70.54
• COLOR : GRAY

2 ERICSSON RADIO 4449 DETAIL
NOT TO SCALE



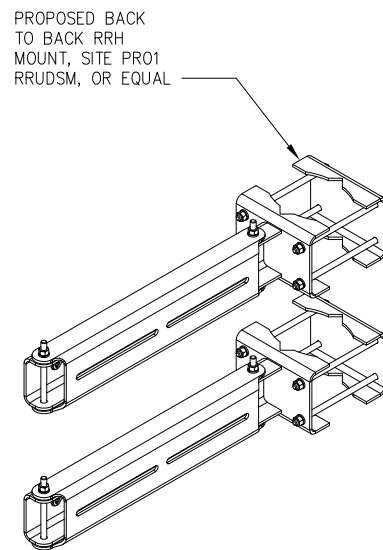
RADIO 8843 SPECIFICATIONS
• HxWxD, (INCHES) : 14.96"x13.97"x10.90"
• WEIGHT (LBS) : 71.87
• COLOR : GRAY

3 ERICSSON RADIO 8843 DETAIL
NOT TO SCALE

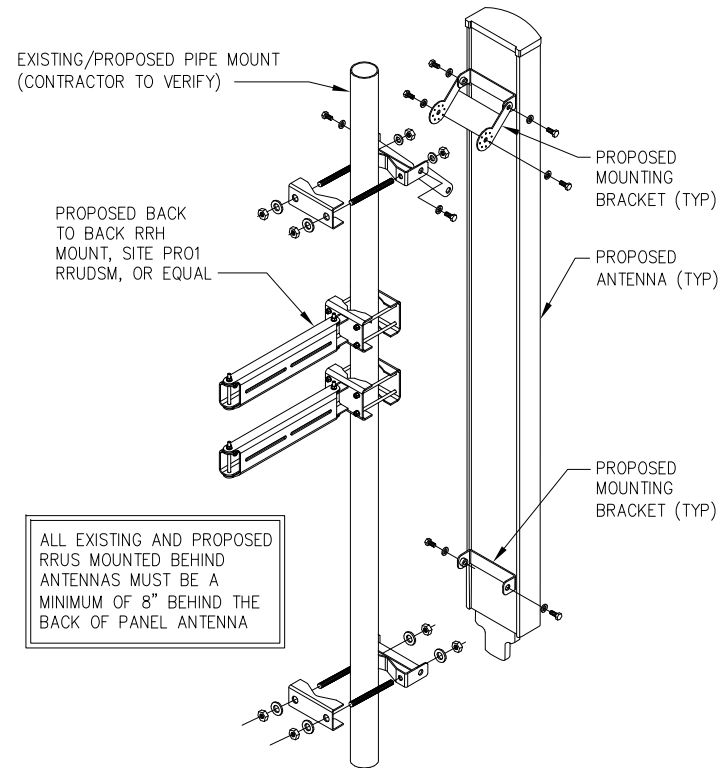


RADIO 4478-B14 SPECIFICATIONS
• HxWxD, (INCHES) : 18.1"x13.4"x8.26"
• WEIGHT (LBS) : 59.5
• COLOR : GRAY
• MOUNTING BRACKET: SXK1250244/1

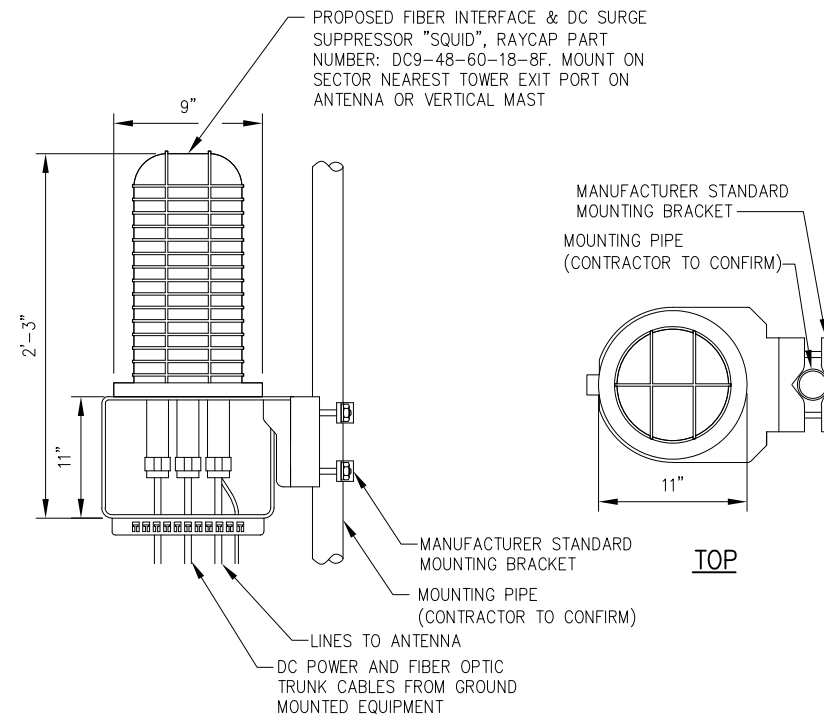
4 ERICSSON RADIO 4478-B14 DETAIL
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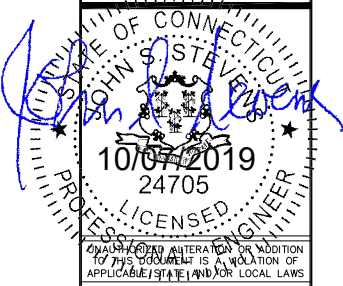
5 BACK TO BACK PIPE MOUNT DETAIL
NOT TO SCALE



6 ANTENNA MOUNTING DETAIL
NOT TO SCALE



7 SQUID DETAIL
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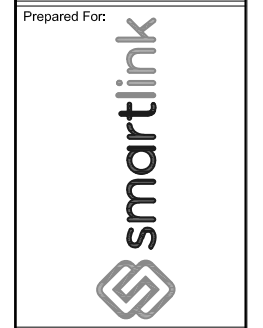


INFINIGY
INFINIGY ENGINEERING, PLLC
1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793



1	ISSUED FOR PERMIT	ASW	10/7/19
0	ISSUED FOR REVIEW	BMM	09/17/19
No.	Submittal / Revision	App'd	Date
Drawn:	BMM	Date:	09/17/19
Designed:	ASW	Date:	09/17/19
Checked:	ASW	Date:	09/17/19
Project Number:			
499-006			

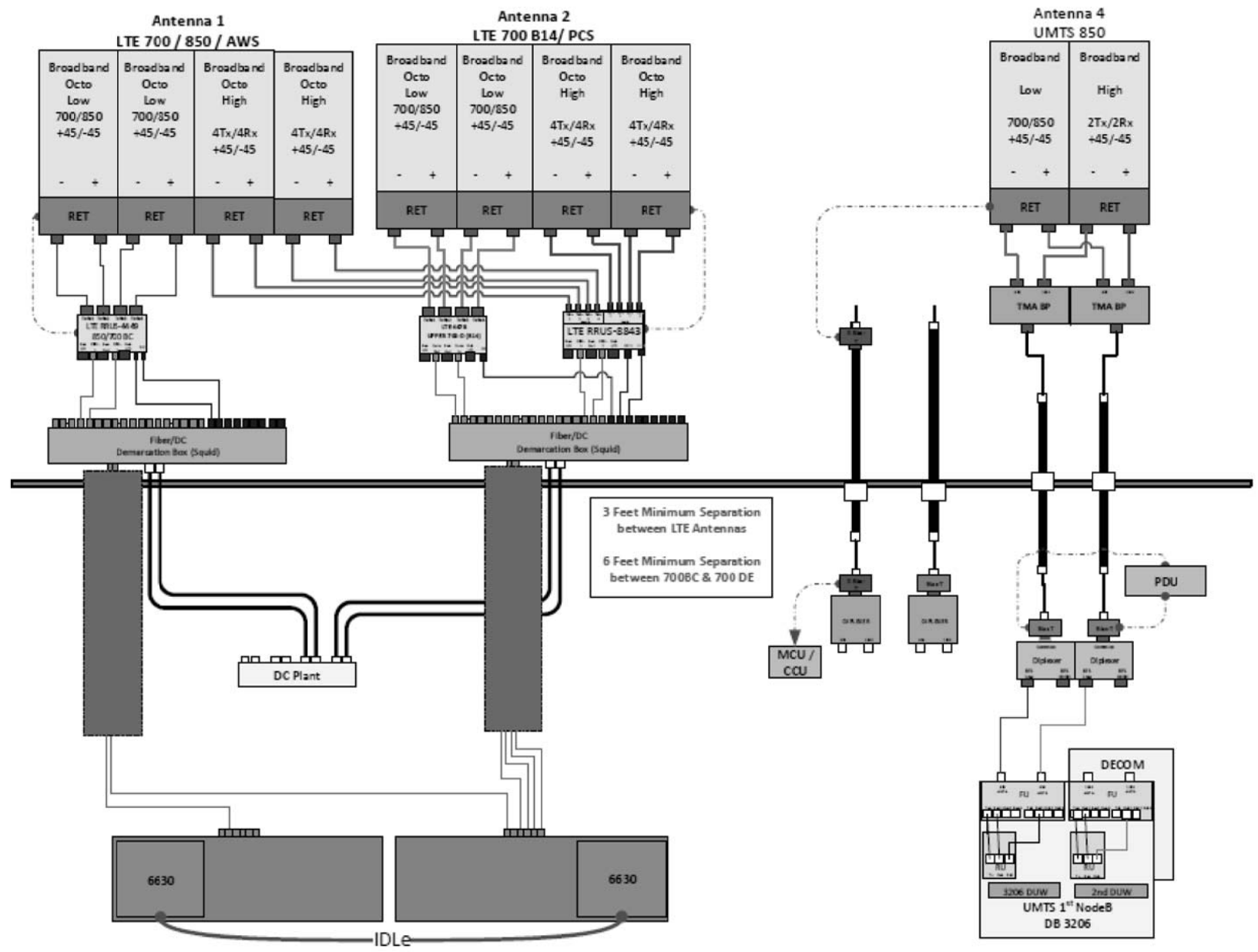
Project Title:
**THOMPSON
QUINEBAUG ROAD
CTL01088
FA# 10065743
720 QUINEBAUG ROAD
THOMPSON, CT 06277**



Drawing Scale:
AS NOTED
Date:
10/7/19

Drawing Title:
**EQUIPMENT
DETAILS**

Drawing Number:
C5

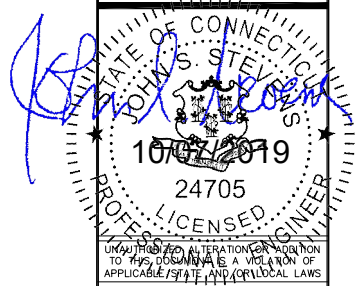


ALPHA/BETA/GAMMA

1 PLUMBING DIAGRAM (FINAL CONFIGURATION)
 -- NOT TO SCALE

*BASED ON LTE RFDS, DATED 08/06/2019, V3.00

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 1033 Waterlily Shaker Rd
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499-006			

Project Title:
 THOMPSON
 QUINEBAUG ROAD
 CTL01088
 FA# 10065743
 720 QUINEBAUG ROAD
 THOMPSON, CT 06277

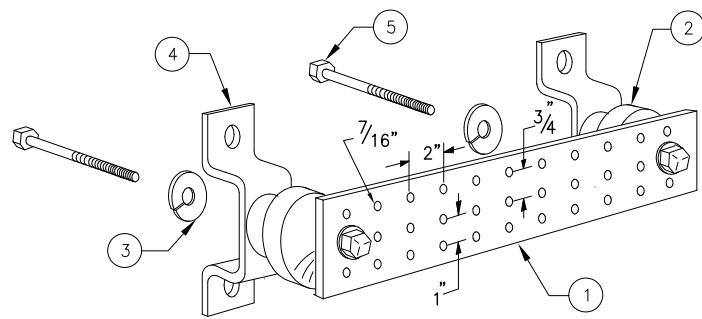


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 Date:
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CD

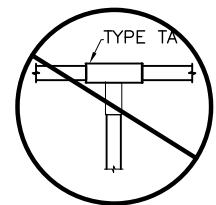
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**PLUMBING
 DIAGRAM**

Drawing Number
C6

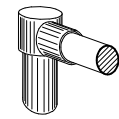


LEGEND

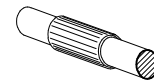
- 1 - SOLID TINNED COPPER GROUND BAR, 1/4"x 4"x 20" MIN., NEWTON INSTRUMENT CO. HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION
- 2 - INSULATORS, NEWTON INSTRUMENT CAT. NO. 3061-4
- 3 - 5/8" LOCKWASHERS, NEWTON INSTRUMENT CO. CAT. NO. 3015-8
- 4 - WALL MOUNTING BRACKET, NEWTON INSTRUMENT CO. CAT NO. A-6056
- 5 - 5/8-11 X 1" H.H.C.S. BOLTS, NEWTON INSTRUMENT CO. CAT NO. 3012-1
- 6 - GROUND BAR SHALL BE SIZED TO ACCOMODATE ALL GROUNDING CONNECTIONS REQUIRED PLUS PROVIDE 50% SPARE CAPACITY
- 7 - GROUND BARS SHALL NEITHER BE FIELD FABRICATED NOR NEW HOLES DRILLED
- 8 - GROUND LUGS SHALL MATCH THE HOLE SPACING ON THE BAR
- 9 - HARDWARE DIAMETER SHALL BE MINIMUM 3/8"



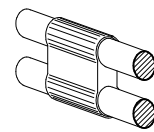
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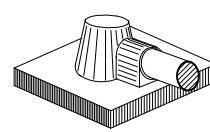
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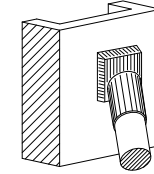
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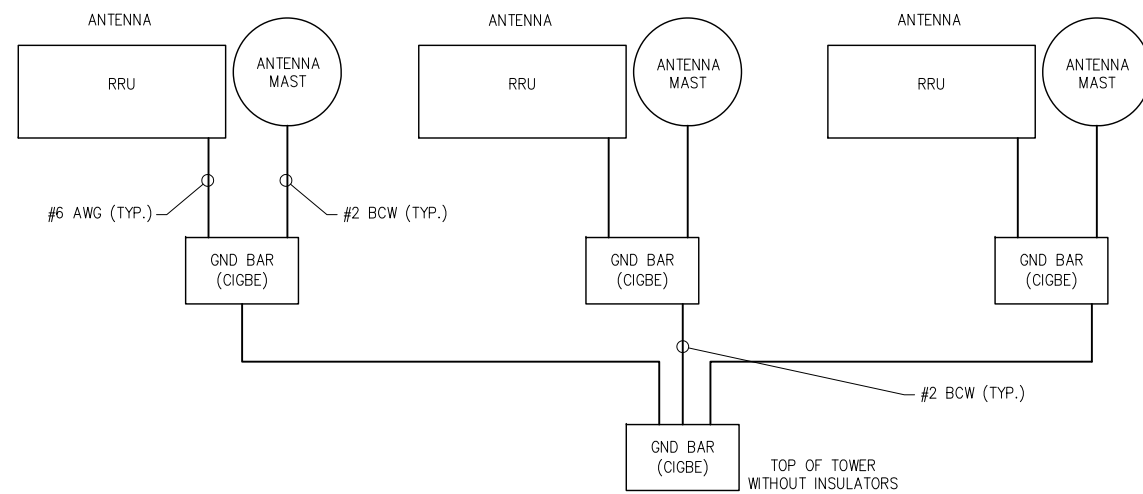
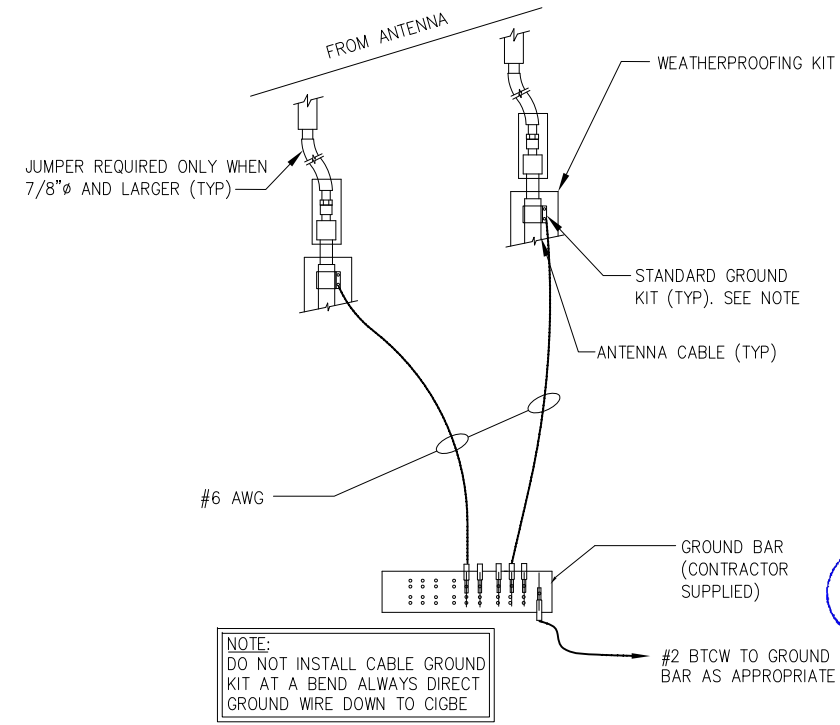
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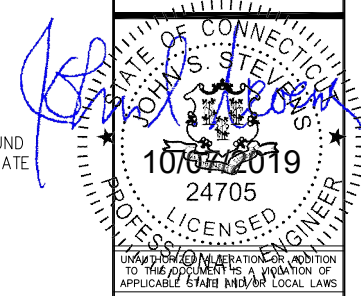
TYPE KA



TYPE VS

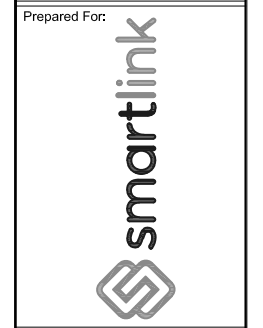


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 CTL01088
 FA# 10065743
 720 QUINEBAUG ROAD
 THOMPSON, CT 06277



Drawing Scale:
 AS NOTED
 Date:
 10/7/19

CD

Drawing Title
**GROUNDING
 DETAILS**

Drawing Number
C7

GENERAL NOTES:

1. THESE DOCUMENTS WERE DESIGNED IN ACCORDANCE WITH THE LATEST VERSION OF APPLICABLE LOCAL/STATE/COUNTY/CITY BUILDING CODES, AS WELL AS ANSI/TIA-222 STANDARD, AWWA-D100 STANDARD, NDS, NEC, MSJC, AND/OR THE LATEST VERSION OF THE INTERNATIONAL BUILDING CODE, UNLESS NOTED OTHERWISE IN THE CORRESPONDING STRUCTURAL REPORT.
2. ALL CONSTRUCTION METHODS SHOULD FOLLOW STANDARDS OF GOOD CONSTRUCTION PRACTICE.
3. ALL WORK INDICATED ON THESE DRAWINGS SHALL BE PERFORMED BY QUALIFIED CONTRACTORS EXPERIENCED IN SIMILAR CONSTRUCTION.
4. ALL NEW WORK SHALL ACCOMMODATE EXISTING CONDITIONS. IF OBSTRUCTIONS ARE FOUND, CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD PRIOR TO CONTINUING WORK.
5. ANY CHANGES OR ADDITIONS MUST CONFORM TO THE REQUIREMENTS OF THESE NOTES AND SPECIFICATIONS, AND SHOULD BE SIMILAR TO THOSE SHOWN. ALL CHANGES OR ADDITIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO FABRICATION AND/OR CONSTRUCTION.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND EXECUTION OF ALL MISCELLANEOUS SHORING, BRACING, TEMPORARY SUPPORTS, ETC. NECESSARY TO PROVIDE A COMPLETE AND STABLE STRUCTURE DURING CONSTRUCTION. TIA-1019-A-2011 IS AN APPROPRIATE REFERENCE FOR THOSE DESIGNS MEETING TIA STANDARDS. THE ENGINEER OF RECORD MAY PROVIDE FORMAL RIGGING PLANS AT THE REQUEST AND EXPENSE OF THE CONTRACTOR.

7. INSTALLATION SHALL NOT INTERFERE NOR DENY ADEQUATE ACCESS TO OR FROM ANY EXISTING OR PROPOSED OPERATIONAL AND SAFETY EQUIPMENT.
8. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO ANY FABRICATION. CONTACT INFINIGY ENGINEERING IF ANY DISCREPANCIES EXIST.

STEEL CONSTRUCTION NOTES:

1. STRUCTURAL STEEL SHALL CONFORM TO THE AISC MANUAL OF STEEL CONSTRUCTION 14TH EDITION, FOR THE DESIGN AND FABRICATION OF STEEL COMPONENTS.
2. ALL FIELD CUT SURFACES, FIELD DRILLED HOLES, AND GROUND SURFACES WHERE EXISTING PAINT OR GALVANIZATION REMOVAL WAS REQUIRED SHALL BE REPAIRED WITH (2) BRUSHED COATS OF ZRC GALVALITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS' RECOMMENDATIONS.
3. ALL FIELD DRILLED HOLES TO BE USED FOR FIELD BOLTING INSTALLATION SHALL BE STANDARD HOLES, AS DEFINED BY AISC, UNLESS NOTED OTHERWISE.
4. ALL EXTERIOR STEEL WORK SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A123.
5. ALL STEEL MEMBERS AND CONNECTIONS SHALL MEET THE FOLLOWING GRADES:
 - ANGLES, CHANNELS, PLATES AND BARS TO BE A36. Fy=36 KSI, U.N.O.
 - W SHAPES TO BE A992. Fy=50 KSI, U.N.O.
 - RECTANGULAR HSS TO BE A500, GRADE B. Fy=46 KSI, U.N.O.
 - ROUND HSS TO BE A500, GRADE B. Fy=42 KSI, U.N.O.
 - STEEL PIPE TO BE A53, GRADE B. Fy=35 KSI, U.N.O.
 - BOLTS TO BE A325-X. Fu=120 KSI, U.N.O.
 - U-BOLTS AND LAG SCREWS TO BE A307 GR A. Fu=60 KSI, U.N.O.
6. ALL WELDING SHALL BE DONE USING E70XX ELECTRODES, U.N.O.
7. ALL WELDING SHALL CONFORM TO AISC AND AWS D1.1 LATEST EDITION.
8. ALL HILTI ANCHORS TO BE CARBON STEEL, U.N.O.
 - MECHANICAL ANCHORS: KWIK BOLT-TZ, U.N.O.
 - CMU BLOCK ANCHORS: ADHESIVE - HY120, U.N.O.
 - CONCRETE ANCHORS: ADHESIVE - HY150, U.N.O.
 - CONCRETE REBAR: ADHESIVE - RES500, U.N.O.
9. ALL STUDS TO BE NELSON CAPACITOR DISCHARGE 1/4"-20 LOW CARBON STEEL COPPER-FLASH AT 55 KSI ULT/50 KSI YIELD, U.N.O.
10. BOLTS SHALL BE TIGHTENED TO A "SNUG TIGHT" CONDITION AS DEFINED BY AISC.
11. MINIMUM EDGE DISTANCES SHALL CONFORM TO AISC TABLE J3.4.
12. REMOVAL/REPLACEMENT OF STRUCTURAL MEMBERS SHALL BE DONE ONE MEMBER AT A TIME. CONTRACTOR IS RESPONSIBLE FOR ENSURING THE STRUCTURAL INTEGRITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION.

CONCRETE CONSTRUCTION NOTES:

1. CONCRETE TO BE 4000 PSI @ 28 DAYS. REINFORCING BAR TO CONFORM TO ASTM A615 GRADE 60 SPECIFICATIONS. CONCRETE INSTALLATION TO CONFORM TO ACI-318 BUILDING REQUIREMENTS FOR REINFORCED CONCRETE. ALL CONCRETE TO BE PLACED AGAINST UNDISTURBED EARTH FREE OF WATER AND ALL FOREIGN OBJECTS AND MATERIALS. A MINIMUM OF THREE INCHES OF CONCRETE SHALL COVER ALL REINFORCEMENT. WELDING OF REBAR IS NOT PERMITTED.
2. EXISTING CONCRETE SURFACES THAT ARE TO BE IN CONTACT WITH NEW PROPOSED CONCRETE SHOULD BE WIRE BRUSHED CLEAN AND TREATED WITH APPROPRIATE MECHANICAL SCRATCH COAT AND REPAIR MATERIALS OR APPROPRIATE CHEMICAL METHODS SUCH AS THE APPLICATION OF A BONDING AGENT, EX. SAKRETE OR EQUIVALENT, TO ENSURE A QUALITY BOND BETWEEN EXISTING AND PROPOSED CONCRETE SURFACES.

FIBER REINFORCED POLYMER (FRP) NOTES:

1. FRP PLATES, SHAPES, BOLTS AND NUTS (STUD/NUT ASSEMBLIES) SHALL CONFORM TO ASTM D638, 695, 790. PLATES AND SHAPES TO BE FY = 5.35 KSI LW (SAFETY FACTOR OF 8), .945 KSI CW (SAFETY FACTOR OF 8) MIN.
2. IF FIELD FABRICATION IS REQUIRED, ALL CUT EDGES AND DRILLED HOLES TO BE SEALED USING VINYL ESTER SEALING KIT SUPPLIED BY THE MANUFACTURER.
3. ALL FASTENERS TO BE 1/2" DIA FRP THREADED ROD WITH FIBER REINFORCED THERMOPLASTIC NUT, SPACED AT 12 INCHES ON CENTER MAXIMUM, U.N.O., FOR PANELS AND AS DESIGNED FOR STRUCTURAL MEMBERS.
4. THE COLOR AND SURFACE PATTERN OF EXPOSED FRP PANELS SHALL MATCH THE EXTERIOR OF THE EXISTING BUILDING, U.N.O.
5. STUD/NUT ASSEMBLIES SHOULD BE LUBRICATED FOR INSTALLATION
6. ENSURE BEARING SURFACES OF THE NUTS ARE PARALLEL TO THE SURFACES BEING FASTENED.
7. TORQUE BOLTS ACCORDING TO THE FOLLOWING TABLE:

INSTALLATION TORQUE TABLE		
SIZE	ULTIMATE TORQUE STRENGTH	RECOMMENDED MAXIMUM INSTALLATION TORQUE
3/8-16 UNC	8 FT-LBS	4 FT-LBS
1/2-13 UNC	18 FT-LBS	8 FT-LBS
5/8-11 UNC	35 FT-LBS	16 FT-LBS
3/4-10 UNC	50 FT-LBS	24 FT-LBS
1-8 UNC	110 FT-LBS	50 FT-LBS

8. WHEN TIGHTENING FRP STUD/NUT ASSEMBLIES, WRENCHES MUST MAKE FULL CONTACT WITH ALL NUT EDGES. A STANDARD SIX POINT SOCKET IS RECOMMENDED.
9. STUD/NUT ASSEMBLIES SHOULD BE BONDED BY APPLYING BONDING AGENT TO ENTIRE NUT AND EXPOSED STUD.
10. ALL FRP MATERIALS TO BE PROVIDED BY FIBERGRATE COMPOSITE STRUCTURES, DALLAS TX, OR APPROVED EQUAL.
11. ALL FRP SHAPES TO BE DYNAFORM PULTRUDED STRUCTURAL SHAPES.
12. ALL FRP PLATES TO BE FIBERPLATE MOLDED FRP PLATE.
13. ALL FRP PANELS TO BE FIBERPLATE CLADDING PANEL.
14. EACH FRP PANEL TO BE IDENTIFIED WITH LARR#25536 AND FIBERGRATE COMPOSITE STRUCTURAL LABEL.
15. FRP MATERIAL TO BE CLASSIFIED AS CC1 OR BETTER, AND HAVE MAXIMUM FLAME SPREAD OF 50.
16. ALL DESIGN AND CONSTRUCTION TO BE COMPLETED IN ACCORDANCE WITH LOS ANGELES RESEARCH REPORT RR25536, DATED FEBRUARY 1, 2016.
17. SPECIAL INSPECTIONS MUST BE PROVIDED FOR ALL FRP INSTALLMENTS. SEE SPECIAL INSPECTION SECTION, THIS SHEET.

RATIO OF EDGE DISTANCE TO FRP FASTENER DIAMETER		
	RANGE	RECOMMENDED
EDGE DISTANCE - CL* BOLT TO END	2.0-4.0	3.0
EDGE DISTANCE - CL* BOLT TO SIDE	1.5-3.5	2.5
BOLT PITCH - CL* TO CL*	4.0-5.0	5.0

WOOD CONSTRUCTION NOTES:

1. ALL EXISTING WOOD SHAPES ARE ASSUMED TO BE DOUGLAS FIR-LARCH WITH A REFERENCE DESIGN BENDING VALUE OF 1000 PSI MIN.
2. ALL PROPOSED WOOD SHAPES ARE TO BE DOUGLAS FIR-LARCH WITH A REFERENCE DESIGN BENDING VALUE OF 1000 PSI MIN. U.N.O.
3. ALL EXISTING AND PROPOSED GLUED LAMINATED TIMBERS ARE TO BE 24F-1.8C DOUGLAS FIR BALANCED WITH A REFERENCE DESIGN BENDING VALUE OF 2400 PSI MIN. U.N.O.

MASONRY CONSTRUCTION NOTES:

1. ALL BRICK TO BE 1500 PSI MIN. REINFORCING BAR (IF APPLICABLE) TO CONFORM TO ASTM A615 GRADE 60 SPECIFICATIONS. ALL MORTAR TO BE 2000 PSI MIN.
 - FOR INTERIOR/ABOVE GRADE APPLICATIONS TYPE N MORTAR HAVING MINIMUM MODULUS OF RUPTURE OF 100 PSI SHALL BE USED. FOR EXTERIOR/BELOW GRADE APPLICATIONS TYPE M OR S MORTAR HAVING A MINIMUM MODULUS OF RUPTURE OF 133 PSI.
 - BRICK AND MORTAR INSTALLATION TO CONFORM TO MSJC BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES.
2. ALL CMU TO BE 1500 PSI MIN. REINFORCING BAR (IF APPLICABLE) TO CONFORM TO ASTM A615 GRADE 60 SPECIFICATIONS. ALL MORTAR TO BE 2000 PSI MIN.
 - FOR INTERIOR/ABOVE GRADE APPLICATIONS, TYPE N MORTAR HAVING MINIMUM MODULUS OF RUPTURE OF 64 PSI SHALL BE USED FOR UNGROUTED BLOCKS, AND 158 PSI FOR FULLY GROUTED BLOCKS.
 - FOR EXTERIOR/BELOW GRADE APPLICATIONS TYPE M OR S MORTAR HAVING A MINIMUM MODULUS OF RUPTURE OF 84 PSI SHALL BE USED FOR UNGROUTED BLOCKS, AND 163 PSI FOR FULLY GROUTED BLOCKS.
 - BRICK AND MORTAR INSTALLATION TO CONFORM TO MSJC BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES.

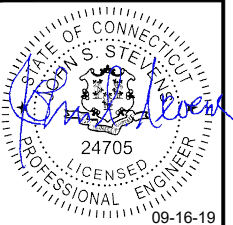
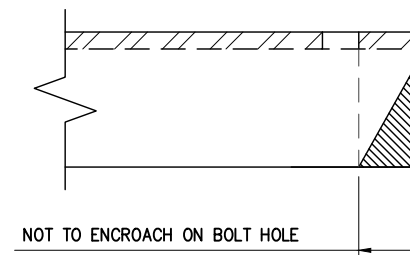
TOWER PLUMB & TENSION NOTES:

1. PLUMB AND TENSION TOWER UPON COMPLETION OF STRUCTURAL MODIFICATIONS DETAILED IN THESE DRAWINGS.
2. RETENSIONING OF EXISTING GUY WIRES SHALL BE PERFORMED AT A TIME WHEN THE WIND VELOCITY IS LESS THAN 10 MPH AT GROUND LEVEL AND WITH NO ICE ON THE STRUCTURE AND GUY WIRES.
3. PLUMB THE TOWER WHILE RETENSIONING THE EXISTING GUY WIRES. THE HORIZONTAL DISTANCE BETWEEN THE VERTICAL CENTERLINES AT ANY TWO ELEVATIONS SHALL NOT EXCEED 0.25% OF THE VERTICAL DISTANCE BETWEEN TWO ELEVATIONS FOR LATTICED STRUCTURES.
4. THE TWIST BETWEEN ANY TWO ELEVATIONS THROUGHOUT THE HEIGHT OF A LATTICE STRUCTURE SHALL NOT EXCEED 0.5 DEGREES IN 10 FEET. THE MAXIMUM TWIST OVER THE LATTICE STRUCTURE HEIGHT SHALL NOT EXCEED 5 DEGREES.

SPECIAL INSPECTIONS NOTES:

1. A QUALIFIED INDEPENDENT TESTING LABORATORY, EMPLOYED BY THE OWNER AND APPROVED BY THE JURISDICTION, SHALL PERFORM INSPECTION AND TESTING IN ACCORDANCE WITH THE THE GOVERNING BUILDING CODE, APPLICABLE SECTION(S) AS REQUIRED BY PROJECT SPECIFICATIONS FOR THE FOLLOWING CONSTRUCTION WORK:
 - a. STRUCTURAL WELDING (CONTINUOUS INSPECTION OF FIELD WELDS ONLY).
 - b. HIGH STRENGTH BOLTS (PERIODIC INSPECTION OF A325 AND/OR A490 BOLTS) TO BE TIGHTENED PER "TURN-OF-THE-NUT" METHOD.
 - c. MECHANICAL AND EPOXYED ANCHORAGES.
 - d. FIBER REINFORCED POLYMER.
 - THE SPECIAL INSPECTOR MUST VERIFY THAT THE FRP MATERIAL SPECIFIED ON THE APPROVED DESIGN DOCUMENTS IS BEING INSTALLED.
 - THE SPECIAL INSPECTOR MUST VERIFY THAT ALL CUT EDGES AND DRILLED HOLES ARE PROPERLY SEALED USING A VINYL ESTER SEALING KIT SUPPLIED BY THE MANUFACTURER.
 - THE SPECIAL INSPECTOR MUST VERIFY THAT THE STRUCTURE IS BUILT IN ACCORDANCE WITH THE APPROVED DESIGN DOCUMENTS.
2. THE INSPECTION AGENCY SHALL SUBMIT INSPECTION AND TEST REPORTS TO THE BUILDING DEPARTMENT, THE ENGINEER OF RECORD, AND THE OWNER UNLESS THE FABRICATOR IS APPROVED BY THE BUILDING OFFICIAL TO PERFORM WORK WITHOUT THE SPECIAL INSPECTIONS.

MAXIMUM ALLOWABLE ANGLE CLIP



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No.	ISSUED FOR REVIEW	TM	09/12/19

No.	Submitted / Revision	App'd	Date

Drawn: LAM Date: 09/12/19
 Designed: TM Date: 09/12/19
 Checked: TM Date: 09/12/19

Project Number: 1106-A0001-B

Project Title: CTL01088
 FA# 10065743
 720 QUINEBAUG ROAD
 THOMPSON, CT 6277



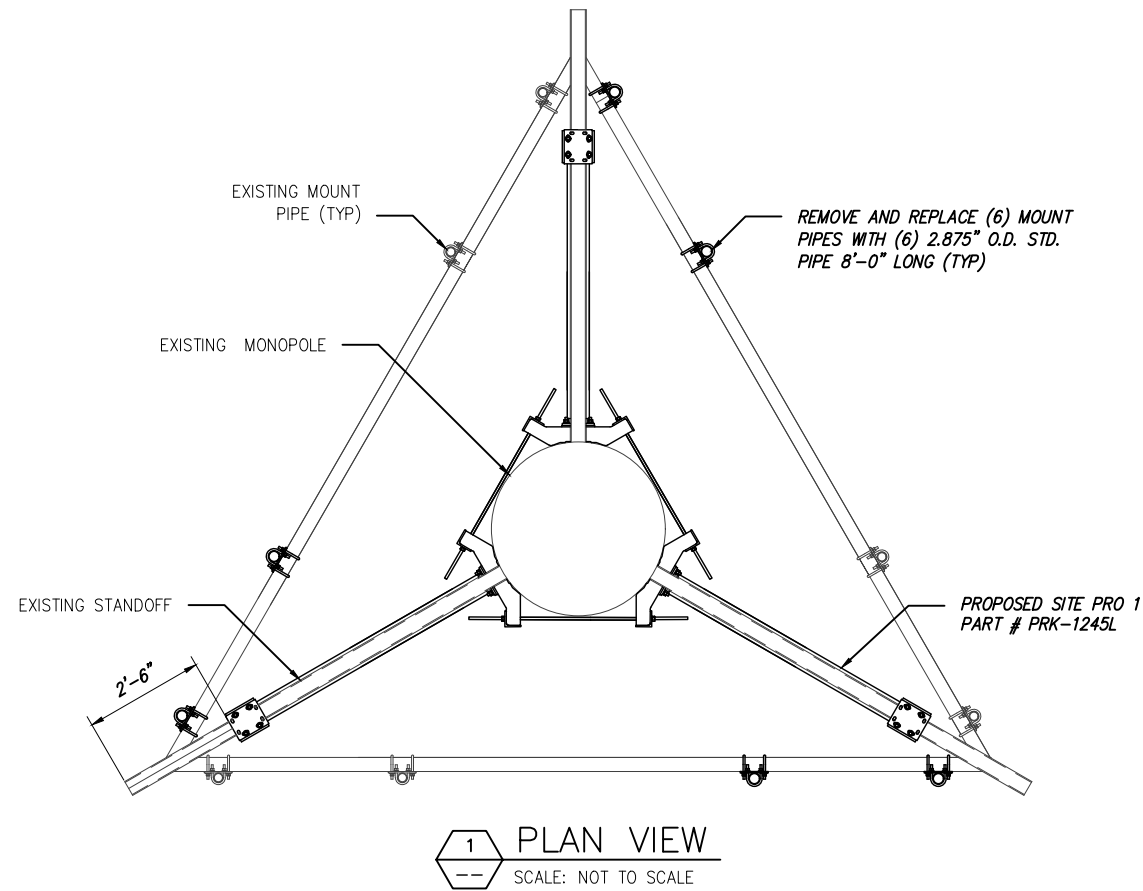
Drawing Scale: AS NOTED
 Date: 09/12/19

Drawing Title: **GENERAL NOTES**

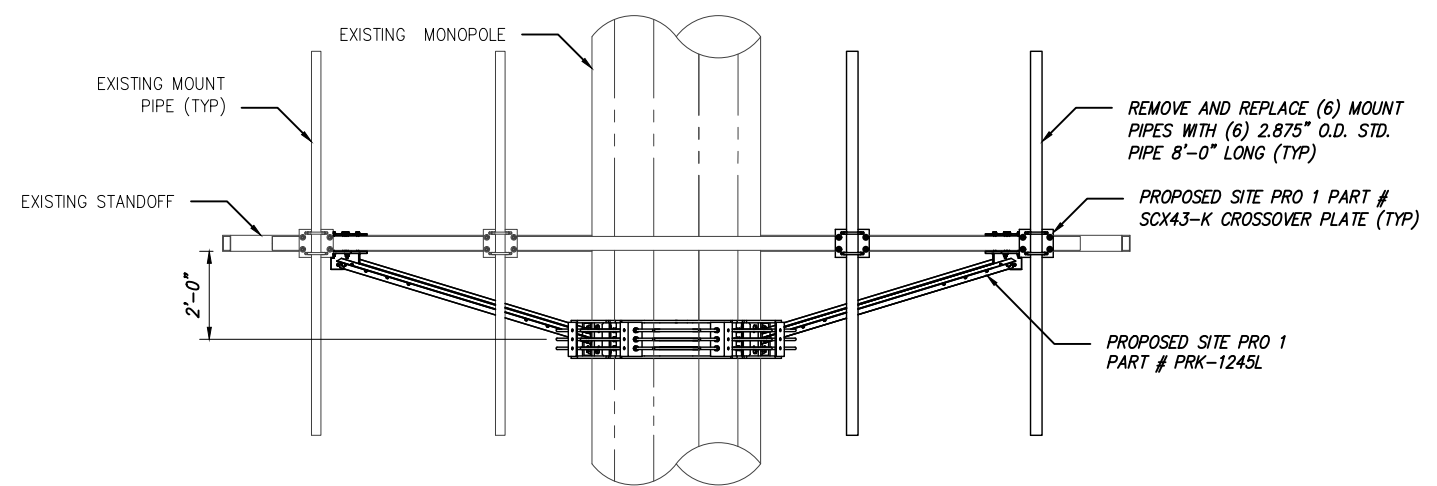
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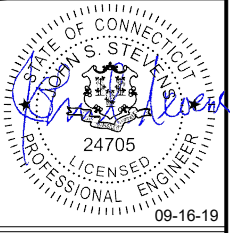
1. VARIOUS EXISTING CONDITIONS AND PROPOSED MODIFICATIONS ARE NOT SHOWN FOR CLARITY.
2. ALL SITE PRO 1 PARTS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.



1 PLAN VIEW
SCALE: NOT TO SCALE



2 ELEVATION VIEW
SCALE: NOT TO SCALE



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1106-A0001-B

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CTL01088
FA# 10065743
720 QUINEBAUG ROAD
THOMPSON, CT 6277



Drawing Scale:
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Date:
09/12/19

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Drawing Title:
**MODIFICATION
DETAIL**

Drawing Number:
S-2



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November 15, 2019, 8:41 am

Arrived at Post Office
QUINEBAUG, CT 06262

November 15, 2019, 12:34 am

Departed USPS Regional Facility

SPRINGFIELD MA NETWORK DISTRIBUTION CENTER

November 14, 2019, 11:55 pm

Arrived at USPS Regional Facility

SPRINGFIELD MA NETWORK DISTRIBUTION CENTER

November 14, 2019, 5:00 pm

Departed Post Office

NORTH GROSVENORDALE, CT 06255

November 14, 2019, 3:22 pm

USPS in possession of item

NORTH GROSVENORDALE, CT 06255

Product Information



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FAQs

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Delivered

November 14, 2019 at 3:27 pm
Delivered, PO Box
NORTH GROSVENORDALE, CT 06255

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Tracking History



November 14, 2019, 3:27 pm

Delivered, PO Box
NORTH GROSVENORDALE, CT 06255

Your item has been delivered and is available at a PO Box at 3:27 pm on November 14, 2019 in NORTH GROSVENORDALE, CT 06255.

November 14, 2019, 3:27 pm

Arrived at Post Office
NORTH GROSVENORDALE, CT 06255

November 14, 2019, 3:21 pm
USPS in possession of item
NORTH GROSVENORDALE, CT 06255

Product Information



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FAQs

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