



February 19, 2020

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: 36 Mohawk Mountain, Cornwall, CT 06753
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 65-feet on an existing 65-foot self-support tower, owned by American Tower Corporation at 10 Presidential Way, Woburn, MA 01801. AT&T now intends to remove three (3) 4' Kathrein 7770 Panel Antennas, each currently installed in position [2], and swap these for four (4) 6' CCI DMP65R-BU6DA Panel Antennas to be installed in position [3], and two (2) 4' CCI DMP65R-BU4DA Panel Antennas to be installed in position [4], all sectors. In addition, AT&T intends to remove one (1) RRUS-11 B12 and add one (1) RRUS-4449 B2/B66A and (1) RRUS-4478 B14 in positions [3+4], all sectors, for a total of six (6) new RRUs. AT&T is also proposing to add (1) Raycap Squid, as well as one (1) fiber line and (2) DC Power Cables to their equipment configuration. All of the changes will take place on the existing 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 Gordon M. Ridgeway- First Selectman, Town of Cornwall, CT at 26 Pine Street, PO Box 97, Cornwall, CT 06753 and Paul Prindle – Building Official, Town of Cornwall, CT at PO Box 141, Cornwall Bridge, CT 06754. A copy of this letter is being sent to the property owner, American Tower Management Inc. at PO Box 723597, Atlanta, GA 31139 and to the tower company, American Tower Corporation at 10 Presidential Way, Woburn, MA 01801.

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

- **EM-CING-031-130116** – New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 36 Mohawk Mountain Road, Cornwall, Connecticut.
- **EM-AT&T-031-170428** – AT&T notice of intent to modify an existing telecommunications facility located at 36 Mohawk Mountain, Cornwall, Connecticut
- **EM-AT&T-031-200128** – AT&T Mobility, LLC notice of intent to modify an existing telecommunications facility located at 36 Mohawk Mountain, Cornwall, 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 65-foot level of the 65-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,

Kristina Cottone

CC w/enclosures:
Gordon M. Ridgeway- First Selectman, Town of Cornwall, CT
Paul Prindle – Building Official, Town of Cornwall, CT
American Tower Management Inc. – Property Owner
American Tower Corporation - Tower Company



02/24/2020

Memo: No Initial Zoning Decision Found

Upon consulting with the Building Inspector for the Town of Cornwall, it was determined that no initial zoning decision for this tower could be found. His phone number is 860 672-0711.

Kristina Cottone
Real Estate Specialist | Smartlink, LLC
85 Rangeway Road, Building 3, Suite 102
North Billerica, MA 01862

036 TOOMEY RD

Location 036 TOOMEY RD

Mblu F04/ 01/ / /

Acct# 98100011

Owner AMERICAN TOWER MGMT INC

PBN

Assessment \$53,800

Appraisal \$76,800

PID 10

Building Count 1

Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2019	\$76,800	\$0	\$76,800

Assessment			
Valuation Year	Improvements	Land	Total
2019	\$53,800	\$0	\$53,800

Owner of Record

Owner AMERICAN TOWER MGMT INC

Sale Price \$221,229

Co-Owner

Certificate

Address PO BOX 723597
ATLANTA, GA 31139

Book & Page 088/811

Sale Date 04/03/2000

Instrument QC

Ownership History

Ownership History					
Owner	Sale Price	Certificate	Book & Page	Instrument	Sale Date
AMERICAN TOWER MGMT INC	\$221,229		088/811	QC	04/03/2000

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/CornwallCTPhotos/default.jpg>)

Building Layout

Building Layout

(http://images.vgsi.com/photos/CornwallCTPhotos/Sketches/10_

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 2-1V
Description COMM LND 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 #
FGR1	GARAGE-AVE			946 S.F.	\$23,700	1
SHP2	WORK SHOP GOOD			936 S.F.	\$28,100	1
	TOWER EQUIPMENT			1	\$25,000	1

Valuation History

Appraisal			
Valuation Year	Improvements	Land	Total
2018	\$76,800	\$0	\$76,800
2016	\$76,800	\$0	\$76,800
2015	\$51,800	\$0	\$51,800

Assessment			
Valuation Year	Improvements	Land	Total
2018	\$53,800	\$0	\$53,800
2016	\$53,800	\$0	\$53,800
2015	\$36,300	\$0	\$36,300

(c) 2020 Vision Government Solutions, Inc. All rights reserved.



AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure : 65 ft Self Supported Tower
ATC Site Name : CORNWALL CT, CT
ATC Asset Number : 88009
Engineering Number : OAA752048_C3_03
Proposed Carrier : AT&T MOBILITY
Carrier Site Name : Cornwall
Carrier Site Number : CTL01025
Site Location : 36 Toomey Rd.
Cornwall, CT 06759-4232
41.821300,-73.296400
County : Litchfield
Date : February 19, 2020
Max Usage : 97%
Result : Pass

Prepared By:
Saja Alkhafaji
Structural Engineer

Saja Alkhafaji

Reviewed By:



COA: PEC.0001553



Table of Contents

Introduction	1
Supporting Documents	1
Analysis	1
Conclusion.....	1
Existing and Reserved Equipment.....	2
Equipment to be Removed.....	3
Proposed Equipment	3
Structure Usages	4
Foundations	4
Deflection, Twist, and Sway.....	4
Standard Conditions	5
Calculations	Attached



Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 65 ft self supported tower to reflect the change in loading by AT&T MOBILITY.

Supporting Documents

Tower Drawings	CSEI ATC Engineering #26472221, dated September 19, 2006
Foundation Drawing	TEP Project #74252-101870, dated November 22, 2016
Geotechnical Report	FDH Project #16PWAQ1600, dated November 30, 2016
Modifications	ATC Project #OAA687939_C6_07, dated November 6, 2017 [PENDING]

Analysis

The tower was analyzed using American Tower Corporation's tower analysis software. This program considers an elastic three-dimensional model and second-order effects per ANSI/TIA-222.

Basic Wind Speed:	90 mph (3-Second Gust, V_{asd}) / 115 mph (3-Second Gust, V_{ult})
Basic Wind Speed w/ Ice:	40 mph (3-Second Gust) w/ 3/4" radial ice concurrent
Code:	ANSI/TIA-222-G / 2015 IBC / 2018 Connecticut State Building Code
Structure Class:	II
Exposure Category:	B
Topographic Category:	3
Crest Height:	214 ft
Spectral Response:	$S_s = 0.18$, $S_1 = 0.06$
Site Class:	D - Stiff Soil

Conclusion

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

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



Existing and Reserved Equipment

Elev. ¹ (ft)	Qty	Antenna	Mount Type	Lines	Carrier
75.0	1	Generic 12' Dipole	Leg	-	OTHER
74.0	1	Generic 18' Omni	Leg	(1) 7/8" Coax	US DEPT OF HOMELAND SECURITY
72.0	1	Generic 6' Omni	Leg	-	OTHER
69.0	3	Alcatel-Lucent 800 MHz RRH	Side Arm	(4) 1 1/4" Hybriflex Cable	SPRINT NEXTEL
	3	Alcatel-Lucent RRH2x40 (700)			
	3	Alcatel-Lucent RRH2x50-08			
	3	Alcatel-Lucent TD-RRH8x20-25 w/ Solar Shield			
	3	Commscope DT465B-2XR			
	3	RFS APXVSP18-C-A20			
65.0	1	Andrew ABT-DFDM-ADB	Platform with Handrails	(1) 0.39" (10mm) Fiber Trunk (2) 0.78" (19.7mm) 8 AWG 6 (12) 1 1/4" Coax	AT&T MOBILITY
	6	Powerwave Allgon TT19-08BP111-001			
	3	Ericsson RRUS 32 (50.8 lbs)			
	1	Raycap DC6-48-60-18-8F			
	3	Powerwave Allgon 7770.00A			
63.0	1	Sinclair SV228-HF2SNM	Leg	(1) 7/8" Coax	US DEPT OF HOMELAND SECURITY
59.0	4	Generic 10' Dish w/ Radome	Leg	-	OTHER
57.0	3	RFS APXVAARR24_43-U-NA20	Sector Frame	(3) 1 5/8" (1.63"-41.3mm) Fiber	T-MOBILE
	3	RFS APX16DWV-16DWVS-E-A20			
	3	Ericsson RRUS 11 B2			
	3	Ericsson RRUS 11 B4			
	3	Ericsson Radio 4449 B12,B71			
48.0	3	Decibel 776QNB120EXM	Platform with Handrails	(3) 1/2" Coax (12) 7/8" Coax (2) 1 5/8" (1.63"-41.3mm) Fiber (6) 1 5/8" Coax	ALLTEL COMMUNICATIONS, LLC
46.0	6	Commscope JAHH-65B-R3B			
	6	Andrew DB846F65ZAXY			
	1	RFS DB-C1-12C-24AB-0Z			
	3	Alcatel-Lucent B66a RRH4x45 (AWS-3)			
	3	Alcatel-Lucent B25 RRH4x30-4R			
	3	Alcatel-Lucent B13 RRH4x30-4R			
	6	Antel LPA-80063/6CF			
3	Nokia B5 RRH4x40-850				



Equipment to be Removed

Elev. ¹ (ft)	Qty	Antenna	Mount Type	Lines	Carrier
65.0	1	Andrew SBNHH-1D65A (33.5 lbs)	-	-	AT&T MOBILITY
	2	CCI HPA-65R-BUU-H6			
	3	Powerwave Allgon 7770.00A			
	3	Ericsson RRUS 11 (Band 12)			

Proposed Equipment

Elev. ¹ (ft)	Qty	Antenna	Mount Type	Lines	Carrier
65.0	3	Ericsson RRUS 4478 B14	Platform with Handrails	(1) 0.39" (10mm) Fiber Trunk (2) 0.78" (19.7mm) 8 AWG 6	AT&T MOBILITY
	3	Ericsson RRUS 4449 B5, B12			
	4	CCI DMP65R-BU6DA			
	1	Raycap DC6-48-60-18			
	2	CCI DMP65R-BU4D			

¹ Contracted elevations are shown for appurtenances within contracted installation tolerances. Appurtenances outside of contract limits are shown at installed elevations.

Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Legs	55%	Pass
Diagonals	97%	Pass
Horizontals	36%	Pass
Anchor Bolts	0%	Pass

Foundations

Reaction Component	Analysis Reactions	% of Usage
Uplift (Kips)	84.5	31%
Axial (Kips)	107.7	3%
Shear (Kips)	58.3	16%

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

Deflection, Twist and Sway*

Antenna Elevation (ft)	Antenna	Carrier	Deflection (ft)	Twist (°)	Sway (Rotation) (°)
65.0	Ericsson RRUS 4478 B14	AT&T MOBILITY	0.266	1.549	0.598
	Ericsson RRUS 4449 B5, B12				
	Raycap DC6-48-60-18				
	CCI DMP65R-BU4D				
63.0	Sinclair SV228-HF2SNM	US DEPT OF HOMELAND			
59.0	Generic 10' Dish w/ Radome	Other	0.192	1.548	0.974

*Deflection, Twist and Sway was evaluated considering a design wind speed of 60 mph (3-Second Gust) per ANSI/TIA-222-G



Standard Conditions

All engineering services performed by A.T. Engineering Service, PLLC are prepared on the basis that the information used is current and correct. This information may consist of, but is not limited to the following:

- Information supplied by the client regarding antenna, mounts and feed line loading
- Information from drawings, design and analysis documents, and field notes in the possession of A.T. Engineering Service, PLLC

It is the responsibility of the client to ensure that the information provided to A.T. Engineering Service, PLLC and used in the performance of our engineering services is correct and complete.

All assets of American Tower Corporation, its affiliates and subsidiaries (collectively "American Tower") are inspected at regular intervals. Based upon these inspections and in the absence of information to the contrary, American Tower assumes that all structures were constructed in accordance with the drawings and specifications.

Unless explicitly agreed by both the client and A.T. Engineering Service, PLLC, all services will be performed in accordance with the current revision of ANSI/TIA-222.

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

© 2007 - 2020 by ATC IP LLC. All rights reserved.

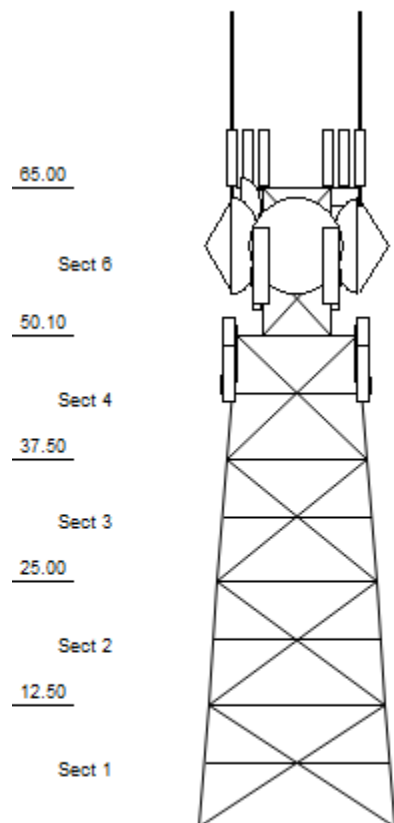
Loads: 90 mph no ice
 40 mph w/ 3/4" radial ice
 Site Class: D Ss: 0.18 S1: 0.06
 60 mph Serviceability

Job Information			
Client : AT&T MOBILITY			
Tower : 88009	Location : CORNWALL CT,	Base Width : 20.00 ft	
Code : ANSI/TIA-222-G		Top Width : 7.00 ft	
		Tower Ht : 65.00 ft	
		Shape : Square	

Sections Properties			
Section	Leg Members	Diagonal Members	Horizontal Members
1 - 2	SAE 33 ksi 6X6X0.625	SAU 36 ksi 4X3X0.25	DAL 36 ksi 3X2.5X0.25
3	SAE 33 ksi 6X6X0.5	SAU 36 ksi 3.5X3X0.25	DAL 36 ksi 3.5X3X0.3125
4	SAE 33 ksi 6X6X0.5	SAE 36 ksi 3.5x3.5x0.25	DAL 36 ksi 3.5X3X0.3125
5	SAE 33 ksi 6X6X0.5		
6	SAE 33 ksi 6X6X0.5	SAU 36 ksi 3X2X0.25	DAL 36 ksi 2.5X2X0.25

Discrete Appurtenance			
Elev (ft)	Type	Qty	Description
65.00	Panel	3	Commscope DT465B-2XR
65.00	Panel	3	RFS APXVSP18-C-A20
65.00	Straight Arm	6	Generic Flat Side Arm
65.00		3	Alcatel-Lucent TD-RRH8x20-25 w
65.00		3	Alcatel-Lucent 800 MHz RRH
65.00		3	Alcatel-Lucent RRH2x40 (700)
65.00		3	Alcatel-Lucent RRH2x50-08
65.00	Whip	1	Generic 6' Omni
65.00	Whip	1	Generic 18' Omni
65.00	Whip	1	Generic 12' Dipole
65.00	Other	1	Fire Warden Cabin
65.00	Panel	3	Powerwave Allgon 7770.00A
65.00		3	Ericsson RRUS 32 (50.8 lbs)
65.00		1	Raycap DC6-48-60-18-8F
65.00		6	Powerwave Allgon TT19-08BP111-
65.00		1	Andrew ABT-DFDM-ADB
65.00	Panel	2	CCI DMP65R-BU4D
65.00		1	Raycap DC6-48-60-18
65.00	Panel	4	CCI DMP65R-BU6DA
65.00		3	Ericsson RRUS 4449 B5, B12
65.00		3	Ericsson RRUS 4478 B14
63.00	Dish	1	Sinclair SV228-HF2SNM
62.00	Platform	1	Platform with Handrails
59.00	Dish	4	Generic 10' Dish w/ Radome
57.00	Panel	3	RFS APXVAARR24_43-U-NA20
57.00	Panel	3	RFS APX16DWV-16DWVS-E-A20
57.00		3	Ericsson RRUS 11 B2
57.00		3	Ericsson RRUS 11 B4
57.00		3	Ericsson Radio 4449 B12,B71
56.00	Mounting Frame	3	Site Pro TPF123XX
50.00	Platform	1	Platform w/ Handrails
48.00	Panel	3	Decibel 776QNB120EXM
46.00	Panel	6	Antel LPA-80063/6CF
46.00	Panel	6	Commscope JAHH-65B-R3B
46.00	Panel	6	Andrew DB846F65ZAXY
46.00		1	RFS DB-C1-12C-24AB-0Z
46.00		3	Alcatel-Lucent B66a RRH4x45 (A
46.00		3	Alcatel-Lucent B25 RRH4x30-4R
46.00		3	Alcatel-Lucent B13 RRH4x30-4R
46.00		3	Nokia B5 RRH4x40-850
37.50	Platform	1	Access Platform

Linear Appurtenance			
Elev (ft)	From	To	Qty Description
	0.00	74.00	1 7/8" Coax



© 2007 - 2020 by ATC IP LLC. All rights reserved.

Job Information		
Client : AT&T MOBILITY		
Tower : 88009	Location : CORNWALL CT,	Base Width : 20.00 ft
Code : ANSI/TIA-222-G		Top Width : 7.00 ft
		Tower Ht : 65.00 ft
		Shape : Square

0.00	69.00	4	1 1/4" Hybriflex Cab
0.00	67.00	1	Waveguide
0.00	67.00	1	Climbing Ladder
0.00	65.00	12	1 1/4" Coax
0.00	65.00	2	0.78" (19.7mm) 8 AWG
0.00	65.00	2	0.78" (19.7mm) 8 AWG
0.00	65.00	1	0.39" (10mm) Fiber T
0.00	65.00	1	0.39" (10mm) Fiber T
0.00	63.00	1	7/8" Coax
0.00	57.00	3	1 5/8" (1.63"-41.3mm
0.00	56.00	1	Waveguide
0.00	48.00	12	7/8" Coax
0.00	48.00	3	1/2" Coax
0.00	46.00	6	1 5/8" Coax
0.00	46.00	2	1 5/8" (1.63"-41.3mm

Global Base Foundation Design Loads			
Load Case	Moment (k-ft)	Vertical (kip)	Horizontal (kip)
DL + WL	2,672.67	52.87	58.27
DL + WL + IL	722.40	154.97	14.94

Individual Base Foundation Design Loads		
Vertical (kip)	Uplift (kip)	Horizontal (kip)
107.75	84.48	24.14

Site Number: 88009

Code: ANSI/TIA-222-G

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: CORNWALL CT, CT

Engineering Number: OAA752048_C3_03

2/19/2020 12:07:20 PM

Customer: AT&T MOBILITY

Analysis Parameters

Location:	Litchfield County, CT	Height (ft):	65
Code:	ANSI/TIA-222-G	Base Elevation (ft):	0.00
Shape:	Square	Bottom Face Width (ft):	20.00
Tower Manufacturer:	CSEI	Top Face Width (ft):	7.00
Tower Type:	Self Support	Anchor Bolt Detail Type	c
Kd:			
Ke:			

Ice & Wind Parameters

Structure Class:	II	Design Windspeed Without Ice:	90 mph
Exposure Category:	B	Design Windspeed With Ice:	40 mph
Topographic Category:	3	Operational Windspeed:	60 mph
Crest Height:	214 ft	Design Ice Thickness:	0.75 in

Seismic Parameters

Analysis Method:	Equivalent Modal Analysis & Equivalent Lateral Force Methods		
Site Class:	D - Stiff Soil		
Period Based on Rayleigh Method (sec):	0.61		
T_L (sec):	6	p:	1.3
S_s :	0.181	S_1 :	0.065
F_a :	1.600	F_v :	2.400
S_{ds} :	0.193	S_{d1} :	0.104
		C_s :	0.057
		C_s, Max :	0.057
		C_s, Min :	0.030

Load Cases

1.2D + 1.6W Normal	90 mph Normal with No Ice
1.2D + 1.6W 45 deg	90 mph 45 degree with No Ice
0.9D + 1.6W Normal	90 mph Normal with No Ice (Reduced DL)
0.9D + 1.6W 45 deg	90 mph 45 deg with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi Normal	40 mph Normal with 0.75 in Radial Ice
1.2D + 1.0Di + 1.0Wi 45 deg	40 mph 45 deg with 0.75 in Radial Ice
(1.2 + 0.2Sds) * DL + E Normal	Seismic Normal
(1.2 + 0.2Sds) * DL + E 45 deg	Seismic 45 deg
(0.9 - 0.2Sds) * DL + E Normal	Seismic (Reduced DL) Normal
(0.9 - 0.2Sds) * DL + E 45 deg	Seismic (Reduced DL) 45 deg
1.0D + 1.0W Service Normal	Serviceability - 60 mph Wind Normal
1.0D + 1.0W Service 45 deg	Serviceability - 60 mph Wind 45 deg

Site Number: 88009

Code:

ANSI/TIA-222-G

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: CORNWALL CT, CT

Engineering Number: OAA752048_C3_03

2/19/2020 12:07:20 PM

Customer: AT&T MOBILITY

Tower Loading

Discrete Appurtenance Properties 1.2D + 1.6W

Elevation (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K _a	Orient. Factor	Vert. Ecc.(ft)	M _u (lb-ft)	Q _z (psf)	F _a (WL) (lb)	P _a (DL) (lb)
65.00	Generic 12' Dipole	1	40	4.5	12.0	3.0	3.0	1.00	1.00	10.0	1505.3	24.54	151	48
65.00	Generic 18' Omni	1	55	5.4	18.0	3.0	3.0	1.00	1.00	9.0	1621.8	24.54	180	66
65.00	Generic 6' Omni	1	25	1.8	6.0	3.0	3.0	1.00	1.00	7.0	410.9	24.52	59	30
65.00	Alcatel-Lucent	3	53	1.7	1.3	13.0	9.8	0.80	0.50	4.0	272.0	24.50	68	190
65.00	Alcatel-Lucent	3	50	2.1	1.7	12.2	10.6	0.80	0.50	4.0	339.8	24.50	85	180
65.00	Alcatel-Lucent 800	3	53	2.1	1.6	13.0	10.8	0.80	0.50	4.0	341.3	24.50	85	191
65.00	Alcatel-Lucent TD-	3	70	4.0	2.2	18.6	6.7	0.80	0.50	4.0	647.0	24.50	162	252
65.00	Generic Flat Side	6	188	6.3	0.0	0.0	0.0	1.00	0.67	4.0	3375.0	24.50	844	1350
65.00	RFS APXVSP18-C-	3	57	8.0	6.0	11.8	7.0	0.80	0.69	4.0	1770.7	24.50	443	205
65.00	Commscope	3	58	9.1	6.0	13.8	8.2	0.80	0.69	4.0	2007.7	24.50	502	209
65.00	Andrew ABT-DFDM-	1	1	0.0	0.3	1.7	1.6	0.75	1.00	2.0	2.2	24.48	1	1
65.00	Powerwave Allgon	6	16	0.6	0.8	6.7	5.4	0.75	0.50	2.0	82.8	24.48	41	115
65.00	Raycap DC6-48-60-	1	20	1.3	2.0	9.7	9.7	0.75	1.00	2.0	62.9	24.48	31	24
65.00	Ericsson RRUS 4478	3	60	1.8	1.4	13.4	7.7	0.75	0.50	0.0	0.0	24.45	69	216
65.00	Ericsson RRUS 4449	3	71	2.0	1.5	13.2	9.4	0.75	0.50	0.0	0.0	24.45	74	256
65.00	Ericsson RRUS 32	3	51	2.7	2.2	12.1	6.7	0.75	0.50	2.0	201.6	24.48	101	183
65.00	Raycap DC6-48-60-	1	30	3.8	2.3	16.7	5.5	0.75	1.00	0.0	0.0	24.45	95	36
65.00	Powerwave Allgon	3	27	5.6	4.6	11.0	4.9	0.75	0.65	2.0	540.8	24.48	270	97
65.00	CCI DMP65R-BU4D	2	68	8.3	4.0	20.7	7.7	0.75	0.72	0.0	0.0	24.45	297	163
65.00	CCI DMP65R-BU6DA	4	79	12.7	5.9	20.7	7.7	0.75	0.63	0.0	0.0	24.45	799	381
65.00	Fire Warden Cabin	1	2000	150.0	0.0	0.0	0.0	1.00	1.00	0.0	0.0	24.45	4988	2400
63.00	Sinclair SV228-	1	93	15.8	6.0	116.0	62.0	1.00	1.00	0.0	0.0	24.42	526	112
62.00	Platform with	1	2000	27.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	24.41	903	2400
59.00	Generic 10' Dish w/	4	400	67.8	10.0	120.0	0.0	1.00	1.00	0.0	0.0	24.35	8982	1920
57.00	Ericsson Radio 4449	3	74	1.6	1.2	13.2	9.3	0.80	0.50	0.0	0.0	24.31	65	266
57.00	Ericsson RRUS 11 B4	3	51	2.8	1.6	17.0	7.2	0.80	0.50	-1.0	110.6	24.29	111	183
57.00	Ericsson RRUS 11 B2	3	51	2.8	1.6	17.0	7.2	0.80	0.50	-1.0	110.6	24.29	111	183
57.00	RFS APX16DWV-	3	41	6.6	4.7	13.3	3.1	0.80	0.60	-1.0	313.2	24.29	313	147
57.00	RFS	3	128	20.2	8.0	24.0	8.7	0.80	0.63	0.0	0.0	24.31	1012	460
56.00	Site Pro TPF123XX	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.0	24.29	803	1080
50.00	Platform w/	1	5000	70.0	0.0	0.0	0.0	1.00	1.00	0.0	0.0	24.11	2296	6000
48.00	Decibel	3	117	22.2	6.0	37.0	9.5	0.75	0.59	0.0	0.0	24.04	964	421
46.00	Nokia B5 RRH4x40-	3	49	1.3	1.1	12.2	6.9	0.75	0.50	1.0	48.5	24.00	49	175
46.00	Alcatel-Lucent B13	3	58	2.1	1.8	12.0	8.9	0.75	0.50	1.0	78.6	24.00	79	208
46.00	Alcatel-Lucent B25	3	51	2.1	1.8	12.0	7.2	0.75	0.50	1.0	78.6	24.00	79	184
46.00	Alcatel-Lucent B66a	3	67	2.7	2.2	12.0	6.8	0.75	0.50	1.0	97.7	24.00	98	241
46.00	RFS DB-C1-12C-	1	32	4.1	2.5	16.5	12.6	0.75	0.50	1.0	49.6	24.00	50	38
46.00	Andrew	6	21	7.0	6.0	10.0	8.5	0.75	0.75	0.0	0.0	23.96	773	151
46.00	Commscope JAHH-	6	61	9.1	6.0	13.8	8.2	0.75	0.69	1.0	923.7	24.00	924	436
46.00	Antel LPA-80063/6CF	6	27	9.6	5.9	15.0	13.1	0.75	0.76	0.0	0.0	23.96	1069	194
37.50	Access Platform	1	5000	45.0	0.0	0.0	0.0	1.00	1.00	0.0	0.0	23.50	1438	6000
Totals		115	22827	1217.3									29985	27392

Discrete Appurtenance Properties 0.9D + 1.6W

Elevation (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K _a	Orient. Factor	Vert. Ecc.(ft)	M _u (lb-ft)	Q _z (psf)	F _a (WL) (lb)	P _a (DL) (lb)
65.00	Generic 12' Dipole	1	40	4.5	12.0	3.0	3.0	1.00	1.00	10.0	1505.3	24.54	151	36
65.00	Generic 18' Omni	1	55	5.4	18.0	3.0	3.0	1.00	1.00	9.0	1621.8	24.54	180	50
65.00	Generic 6' Omni	1	25	1.8	6.0	3.0	3.0	1.00	1.00	7.0	410.9	24.52	59	23
65.00	Alcatel-Lucent	3	53	1.7	1.3	13.0	9.8	0.80	0.50	4.0	272.0	24.50	68	143
65.00	Alcatel-Lucent	3	50	2.1	1.7	12.2	10.6	0.80	0.50	4.0	339.8	24.50	85	135

Site Number: 88009

Code:

ANSI/TIA-222-G

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: CORNWALL CT, CT

Engineering Number: OAA752048_C3_03

2/19/2020 12:07:20 PM

Customer: AT&T MOBILITY

Tower Loading

65.00	Alcatel-Lucent 800	3	53	2.1	1.6	13.0	10.8	0.80	0.50	4.0	341.3	24.50	85	143
65.00	Alcatel-Lucent TD-	3	70	4.0	2.2	18.6	6.7	0.80	0.50	4.0	647.0	24.50	162	189
65.00	Generic Flat Side	6	188	6.3	0.0	0.0	0.0	1.00	0.67	4.0	3375.0	24.50	844	1013
65.00	RFS APXVSPP18-C-	3	57	8.0	6.0	11.8	7.0	0.80	0.69	4.0	1770.7	24.50	443	154
65.00	Commscope	3	58	9.1	6.0	13.8	8.2	0.80	0.69	4.0	2007.7	24.50	502	157
65.00	Andrew ABT-DFDM-	1	1	0.0	0.3	1.7	1.6	0.75	1.00	2.0	2.2	24.48	1	1
65.00	Powerwave Allgon	6	16	0.6	0.8	6.7	5.4	0.75	0.50	2.0	82.8	24.48	41	86
65.00	Raycap DC6-48-60-	1	20	1.3	2.0	9.7	9.7	0.75	1.00	2.0	62.9	24.48	31	18
65.00	Ericsson RRUS 4478	3	60	1.8	1.4	13.4	7.7	0.75	0.50	0.0	0.0	24.45	69	162
65.00	Ericsson RRUS 4449	3	71	2.0	1.5	13.2	9.4	0.75	0.50	0.0	0.0	24.45	74	192
65.00	Ericsson RRUS 32	3	51	2.7	2.2	12.1	6.7	0.75	0.50	2.0	201.6	24.48	101	137
65.00	Raycap DC6-48-60-	1	30	3.8	2.3	16.7	5.5	0.75	1.00	0.0	0.0	24.45	95	27
65.00	Powerwave Allgon	3	27	5.6	4.6	11.0	4.9	0.75	0.65	2.0	540.8	24.48	270	73
65.00	CCI DMP65R-BU4D	2	68	8.3	4.0	20.7	7.7	0.75	0.72	0.0	0.0	24.45	297	122
65.00	CCI DMP65R-BU6DA	4	79	12.7	5.9	20.7	7.7	0.75	0.63	0.0	0.0	24.45	799	286
65.00	Fire Warden Cabin	1	2000	150.0	0.0	0.0	0.0	1.00	1.00	0.0	0.0	24.45	4988	1800
63.00	Sinclair SV228-	1	93	15.8	6.0	116.0	62.0	1.00	1.00	0.0	0.0	24.42	526	84
62.00	Platform with	1	2000	27.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	24.41	903	1800
59.00	Generic 10' Dish w/	4	400	67.8	10.0	120.0	0.0	1.00	1.00	0.0	0.0	24.35	8982	1440
57.00	Ericsson Radio 4449	3	74	1.6	1.2	13.2	9.3	0.80	0.50	0.0	0.0	24.31	65	200
57.00	Ericsson RRUS 11 B4	3	51	2.8	1.6	17.0	7.2	0.80	0.50	-1.0	110.6	24.29	111	137
57.00	Ericsson RRUS 11 B2	3	51	2.8	1.6	17.0	7.2	0.80	0.50	-1.0	110.6	24.29	111	137
57.00	RFS APX16DWV-	3	41	6.6	4.7	13.3	3.1	0.80	0.60	-1.0	313.2	24.29	313	110
57.00	RFS	3	128	20.2	8.0	24.0	8.7	0.80	0.63	0.0	0.0	24.31	1012	345
56.00	Site Pro TPF123XX	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.0	24.29	803	810
50.00	Platform w/	1	5000	70.0	0.0	0.0	0.0	1.00	1.00	0.0	0.0	24.11	2296	4500
48.00	Decibel	3	117	22.2	6.0	37.0	9.5	0.75	0.59	0.0	0.0	24.04	964	316
46.00	Nokia B5 RRH4x40-	3	49	1.3	1.1	12.2	6.9	0.75	0.50	1.0	48.5	24.00	49	131
46.00	Alcatel-Lucent B13	3	58	2.1	1.8	12.0	8.9	0.75	0.50	1.0	78.6	24.00	79	156
46.00	Alcatel-Lucent B25	3	51	2.1	1.8	12.0	7.2	0.75	0.50	1.0	78.6	24.00	79	138
46.00	Alcatel-Lucent B66a	3	67	2.7	2.2	12.0	6.8	0.75	0.50	1.0	97.7	24.00	98	181
46.00	RFS DB-C1-12C-	1	32	4.1	2.5	16.5	12.6	0.75	0.50	1.0	49.6	24.00	50	29
46.00	Andrew	6	21	7.0	6.0	10.0	8.5	0.75	0.75	0.0	0.0	23.96	773	113
46.00	Commscope JAHH-	6	61	9.1	6.0	13.8	8.2	0.75	0.69	1.0	923.7	24.00	924	327
46.00	Antel LPA-80063/6CF	6	27	9.6	5.9	15.0	13.1	0.75	0.76	0.0	0.0	23.96	1069	146
37.50	Access Platform	1	5000	45.0	0.0	0.0	0.0	1.00	1.00	0.0	0.0	23.50	1438	4500
Totals		115	22827	1217.3									29985	20544

Discrete Appurtenance Properties 1.2D + 1.0Di + 1.0Wi

Elevation (ft)	Description	Qty	Ice Wt (lb)	Ice EPA (sf)	Length (ft)	Width (in)	Depth (in)	K _a	Orient. Factor	Vert. Ecc.(ft)	M _u (lb-ft)	Q _z (psf)	F _a (WL) (lb)	P _a (DL) (lb)
65.00	Generic 12' Dipole	1	184	12.3	12.0	3.0	3.0	1.00	1.00	10.0	504.8	4.85	50	192
65.00	Generic 18' Omni	1	202	12.3	18.0	3.0	3.0	1.00	1.00	9.0	456.4	4.85	51	213
65.00	Generic 6' Omni	1	75	3.1	6.0	3.0	3.0	1.00	1.00	7.0	89.9	4.84	13	80
65.00	Alcatel-Lucent	3	117	2.6	1.3	13.0	9.8	0.80	0.50	4.0	52.0	4.84	13	383
65.00	Alcatel-Lucent	3	129	3.2	1.7	12.2	10.6	0.80	0.50	4.0	63.1	4.84	16	418
65.00	Alcatel-Lucent 800	3	133	3.2	1.6	13.0	10.8	0.80	0.50	4.0	63.0	4.84	16	430
65.00	Alcatel-Lucent TD-	3	172	5.5	2.2	18.6	6.7	0.80	0.50	4.0	108.2	4.84	27	559
65.00	Generic Flat Side	6	332	9.7	0.0	0.0	0.0	1.00	0.67	4.0	639.6	4.84	160	2215
65.00	RFS APXVSPP18-C-	3	244	11.0	6.0	11.8	7.0	0.80	0.69	4.0	300.8	4.84	75	765
65.00	Commscope	3	276	12.1	6.0	13.8	8.2	0.80	0.69	4.0	329.5	4.84	82	864
65.00	Andrew ABT-DFDM-	1	4	0.2	0.3	1.7	1.6	0.75	1.00	2.0	1.4	4.83	1	4
65.00	Powerwave Allgon	6	38	1.1	0.8	6.7	5.4	0.75	0.50	2.0	20.5	4.83	10	246
65.00	Raycap DC6-48-60-	1	77	2.0	2.0	9.7	9.7	0.75	1.00	2.0	12.2	4.83	6	81
65.00	Ericsson RRUS 4478	3	120	2.8	1.4	13.4	7.7	0.75	0.50	0.0	0.0	4.83	13	395

Site Number: 88009

Code:

ANSI/TIA-222-G

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: CORNWALL CT, CT

Engineering Number: OAA752048_C3_03

2/19/2020 12:07:20 PM

Customer: AT&T MOBILITY

Tower Loading

65.00	Ericsson RRUS 4449	3	141	3.0	1.5	13.2	9.4	0.75	0.50	0.0	0.0	4.83	14	465
65.00	Ericsson RRUS 32	3	128	3.9	2.2	12.1	6.7	0.75	0.50	2.0	36.4	4.83	18	415
65.00	Raycap DC6-48-60-	1	122	5.2	2.3	16.7	5.5	0.75	1.00	0.0	0.0	4.83	16	128
65.00	Powerwave Allgon	3	150	7.9	4.6	11.0	4.9	0.75	0.65	2.0	94.5	4.83	47	467
65.00	CCI DMP65R-BU4D	2	263	10.5	4.0	20.7	7.7	0.75	0.72	0.0	0.0	4.83	46	554
65.00	CCI DMP65R-BU6DA	4	358	15.7	5.9	20.7	7.7	0.75	0.63	0.0	0.0	4.83	122	1496
65.00	Fire Warden Cabin	1	6521	771.6	0.0	0.0	0.0	1.00	1.00	0.0	0.0	4.83	3168	6921
63.00	Sinclair SV228-	1	610	64.1	6.0	116.0	62.0	1.00	1.00	0.0	0.0	4.82	263	629
62.00	Platform with	1	3401	53.6	0.0	0.0	0.0	1.00	1.00	0.0	0.0	4.82	220	3801
59.00	Generic 10' Dish w/	4	2506	72.1	10.0	120.0	0.0	1.00	1.00	0.0	0.0	4.81	1179	10343
57.00	Ericsson Radio 4449	3	135	2.6	1.2	13.2	9.3	0.80	0.50	0.0	0.0	4.80	12	448
57.00	Ericsson RRUS 11 B4	3	129	4.0	1.6	17.0	7.2	0.80	0.50	-1.0	19.5	4.80	19	417
57.00	Ericsson RRUS 11 B2	3	129	4.0	1.6	17.0	7.2	0.80	0.50	-1.0	19.5	4.80	19	417
57.00	RFS APX16DWV-	3	167	8.9	4.7	13.3	3.1	0.80	0.60	-1.0	52.4	4.80	52	526
57.00	RFS	3	552	24.3	8.0	24.0	8.7	0.80	0.63	0.0	0.0	4.80	150	1734
56.00	Site Pro TPF123XX	3	698	32.3	0.0	0.0	0.0	0.75	0.75	0.0	0.0	4.80	222	2273
50.00	Platform w/	1	18097	331.9	0.0	0.0	0.0	1.00	1.00	0.0	0.0	4.76	1344	19097
48.00	Decibel	3	621	24.3	6.0	37.0	9.5	0.75	0.59	0.0	0.0	4.75	130	1933
46.00	Nokia B5 RRH4x40-	3	93	2.1	1.1	12.2	6.9	0.75	0.50	1.0	9.7	4.74	10	308
46.00	Alcatel-Lucent B13	3	132	3.2	1.8	12.0	8.9	0.75	0.50	1.0	14.6	4.74	15	430
46.00	Alcatel-Lucent B25	3	116	3.2	1.8	12.0	7.2	0.75	0.50	1.0	14.6	4.74	15	380
46.00	Alcatel-Lucent B66a	3	143	3.9	2.2	12.0	6.8	0.75	0.50	1.0	17.7	4.74	18	470
46.00	RFS DB-C1-12C-	1	169	5.5	2.5	16.5	12.6	0.75	0.50	1.0	8.3	4.74	8	175
46.00	Andrew	6	236	8.4	6.0	10.0	8.5	0.75	0.75	0.0	0.0	4.73	114	1439
46.00	Commscope JAHH-	6	278	12.1	6.0	13.8	8.2	0.75	0.69	1.0	151.3	4.74	151	1740
46.00	Antel LPA-80063/6CF	6	339	11.1	5.9	15.0	13.1	0.75	0.76	0.0	0.0	4.73	152	2067
37.50	Access Platform	1	18296	211.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	4.64	833	19296
	Totals	115	80646	2602.9									8891	85211

Discrete Appurtenance Properties 1.0D + 1.0W Service

Elevation (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K _a	Orient. Factor	Vert. Ecc.(ft)	M _u (lb-ft)	Q _z (psf)	F _a (WL) (lb)	P _a (DL) (lb)
65.00	Generic 12' Dipole	1	40	4.5	12.0	3.0	3.0	1.00	1.00	10.0	418.2	10.91	42	40
65.00	Generic 18' Omni	1	55	5.4	18.0	3.0	3.0	1.00	1.00	9.0	450.5	10.91	50	55
65.00	Generic 6' Omni	1	25	1.8	6.0	3.0	3.0	1.00	1.00	7.0	114.1	10.90	16	25
65.00	Alcatel-Lucent	3	53	1.7	1.3	13.0	9.8	0.80	0.50	4.0	75.6	10.89	19	159
65.00	Alcatel-Lucent	3	50	2.1	1.7	12.2	10.6	0.80	0.50	4.0	94.4	10.89	24	150
65.00	Alcatel-Lucent 800	3	53	2.1	1.6	13.0	10.8	0.80	0.50	4.0	94.8	10.89	24	159
65.00	Alcatel-Lucent TD-	3	70	4.0	2.2	18.6	6.7	0.80	0.50	4.0	179.7	10.89	45	210
65.00	Generic Flat Side	6	188	6.3	0.0	0.0	0.0	1.00	0.67	4.0	937.5	10.89	234	1125
65.00	RFS APXVSP18-C-	3	57	8.0	6.0	11.8	7.0	0.80	0.69	4.0	491.9	10.89	123	171
65.00	Commscope	3	58	9.1	6.0	13.8	8.2	0.80	0.69	4.0	557.7	10.89	139	174
65.00	Andrew ABT-DFDM-	1	1	0.0	0.3	1.7	1.6	0.75	1.00	2.0	0.6	10.88	0	1
65.00	Powerwave Allgon	6	16	0.6	0.8	6.7	5.4	0.75	0.50	2.0	23.0	10.88	12	96
65.00	Raycap DC6-48-60-	1	20	1.3	2.0	9.7	9.7	0.75	1.00	2.0	17.5	10.88	9	20
65.00	Ericsson RRUS 4478	3	60	1.8	1.4	13.4	7.7	0.75	0.50	0.0	0.0	10.87	19	180
65.00	Ericsson RRUS 4449	3	71	2.0	1.5	13.2	9.4	0.75	0.50	0.0	0.0	10.87	20	213
65.00	Ericsson RRUS 32	3	51	2.7	2.2	12.1	6.7	0.75	0.50	2.0	56.0	10.88	28	152
65.00	Raycap DC6-48-60-	1	30	3.8	2.3	16.7	5.5	0.75	1.00	0.0	0.0	10.87	26	30
65.00	Powerwave Allgon	3	27	5.6	4.6	11.0	4.9	0.75	0.65	2.0	150.2	10.88	75	81
65.00	CCI DMP65R-BU4D	2	68	8.3	4.0	20.7	7.7	0.75	0.72	0.0	0.0	10.87	83	136
65.00	CCI DMP65R-BU6DA	4	79	12.7	5.9	20.7	7.7	0.75	0.63	0.0	0.0	10.87	222	318
65.00	Fire Warden Cabin	1	2000	150.0	0.0	0.0	0.0	1.00	1.00	0.0	0.0	10.87	1386	2000
63.00	Sinclair SV228-	1	93	15.8	6.0	116.0	62.0	1.00	1.00	0.0	0.0	10.85	146	93
62.00	Platform with	1	2000	27.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	10.85	251	2000

Site Number: 88009

Code: ANSI/TIA-222-G

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: CORNWALL CT, CT

Engineering Number: OAA752048_C3_03

2/19/2020 12:07:20 PM

Customer: AT&T MOBILITY

Tower Loading

59.00	Generic 10' Dish w/	4	400	67.8	10.0	120.0	0.0	1.00	1.00	0.0	0.0	10.82	2495	1600
57.00	Ericsson Radio 4449	3	74	1.6	1.2	13.2	9.3	0.80	0.50	0.0	0.0	10.80	18	222
57.00	Ericsson RRUS 11 B4	3	51	2.8	1.6	17.0	7.2	0.80	0.50	-1.0	30.7	10.79	31	152
57.00	Ericsson RRUS 11 B2	3	51	2.8	1.6	17.0	7.2	0.80	0.50	-1.0	30.7	10.79	31	152
57.00	RFS APX16DWW-	3	41	6.6	4.7	13.3	3.1	0.80	0.60	-1.0	87.0	10.79	87	122
57.00	RFS	3	128	20.2	8.0	24.0	8.7	0.80	0.63	0.0	0.0	10.80	281	384
56.00	Site Pro TPF123XX	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.0	10.79	223	900
50.00	Platfrom w/	1	5000	70.0	0.0	0.0	0.0	1.00	1.00	0.0	0.0	10.72	638	5000
48.00	Decibel	3	117	22.2	6.0	37.0	9.5	0.75	0.59	0.0	0.0	10.69	268	351
46.00	Nokia B5 RRH4x40-	3	49	1.3	1.1	12.2	6.9	0.75	0.50	1.0	13.5	10.67	13	146
46.00	Alcatel-Lucent B13	3	58	2.1	1.8	12.0	8.9	0.75	0.50	1.0	21.8	10.67	22	173
46.00	Alcatel-Lucent B25	3	51	2.1	1.8	12.0	7.2	0.75	0.50	1.0	21.8	10.67	22	153
46.00	Alcatel-Lucent B66a	3	67	2.7	2.2	12.0	6.8	0.75	0.50	1.0	27.1	10.67	27	201
46.00	RFS DB-C1-12C-	1	32	4.1	2.5	16.5	12.6	0.75	0.50	1.0	13.8	10.67	14	32
46.00	Andrew	6	21	7.0	6.0	10.0	8.5	0.75	0.75	0.0	0.0	10.65	215	126
46.00	Commscope JAHH-	6	61	9.1	6.0	13.8	8.2	0.75	0.69	1.0	256.6	10.67	257	364
46.00	Antel LPA-80063/6CF	6	27	9.6	5.9	15.0	13.1	0.75	0.76	0.0	0.0	10.65	297	162
37.50	Access Platform	1	5000	45.0	0.0	0.0	0.0	1.00	1.00	0.0	0.0	10.44	399	5000
	Totals	115	22827	1217.3									8329	22827

Site Number: 88009

Code:

ANSI/TIA-222-G

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: CORNWALL CT, CT

Engineering Number: OAA752048_C3_03

2/19/2020 12:07:20 PM

Customer: AT&T MOBILITY

Tower Loading

Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Description	Qty	Width (in)	Weight (lb/ft)	Pct In Block	Spread On Faces	Bundling Arrangement	Cluster Dia (in)	Out Of Zone	Spacing (in)	Orientation Factor	Ka Override
0.00	74.00	7/8" Coax	1	1.09	0.33	100	1	Individual	0.00	N	1.00	1.00	0.00
0.00	69.00	1 1/4" Hybriflex	4	1.54	1.00	100	1	Individual	0.00	N	1.00	1.00	0.00
0.00	67.00	Climbing Ladder	1	2.00	6.90	100	1	Individual	0.00	N	1.00	1.00	0.00
0.00	67.00	Waveguide	1	2.00	6.00	100	1	Individual	0.00	N	1.00	1.00	0.00
0.00	65.00	0.39" (10mm) Fiber	1	0.39	0.06	100	1	Individual	0.00	N	1.00	1.00	0.01
0.00	65.00	0.39" (10mm) Fiber	1	0.39	0.06	100	1	Individual	0.00	N	1.00	1.00	0.01
0.00	65.00	0.78" (19.7mm) 8	2	0.78	0.59	100	1	Individual	0.00	N	1.00	1.00	0.01
0.00	65.00	0.78" (19.7mm) 8	2	0.78	0.59	100	1	Individual	0.00	N	1.00	1.00	0.01
0.00	65.00	1 1/4" Coax	12	1.55	0.63	50	1	Block	0.00	N	1.00	1.00	0.00
0.00	63.00	7/8" Coax	1	1.09	0.33	100	1	Individual	0.00	N	1.00	1.00	0.00
0.00	57.00	1 5/8" (1.63")-	3	1.63	1.61	100	3	Individual	0.00	N	1.00	1.00	0.00
0.00	56.00	Waveguide	1	2.00	6.00	100	3	Individual	0.00	N	1.00	1.00	0.00
0.00	48.00	1/2" Coax	3	0.63	0.15	100	1	Individual	0.00	N	1.00	1.00	0.00
0.00	48.00	7/8" Coax	12	1.09	0.33	50	1	Block	0.00	N	1.00	1.00	0.00
0.00	46.00	1 5/8" (1.63")-	2	1.63	1.61	100	1	Individual	0.00	N	1.00	1.00	0.00
0.00	46.00	1 5/8" Coax	6	1.98	0.82	50	1	Block	0.00	N	1.00	1.00	0.00

Site Number: 88009

Code: ANSI/TIA-222-G

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: CORNWALL CT, CT

Engineering Number: OAA752048_C3_03

2/19/2020 12:07:20 PM

Customer: AT&T MOBILITY

Equivalent Lateral Force Method

(Based on ASCE7-10 Chapters 11, 12 & 15)

Spectral Response Acceleration for Short Period (S_s):	0.18
Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.06
Long-Period Transition Period (T_L - Seconds):	6
Importance Factor (I_p):	1.00
Site Coefficient F_a :	1.60
Site Coefficient F_v :	2.40
Response Modification Coefficient (R):	3.00
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.19
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.10
Seismic Response Coefficient (C_s):	0.06
Upper Limit C_s :	0.06
Lower Limit C_s :	0.03
Period based on Rayleigh Method (sec):	0.61
Redundancy Factor (p):	1.30
Seismic Force Distribution Exponent (k):	1.05
Total Unfactored Dead Load:	44.06 k
Seismic Base Shear (E):	3.26 k

LoadCase (1.2 + 0.2Sds) * DL + E

Seismic

Section	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
6	57.55	2,946	211,431	0.094	305	3,648
5	50.05	339	21,024	0.009	30	420
4	43.75	4,070	218,813	0.097	316	5,041
3	31.25	4,637	174,835	0.077	252	5,744
2	18.75	4,499	98,983	0.044	143	5,573
1	6.25	4,742	32,752	0.015	47	5,873
Generic 12' Dipole	65.00	40	3,265	0.001	5	50
Generic 18' Omni	65.00	55	4,489	0.002	6	68
Generic 6' Omni	65.00	25	2,040	0.001	3	31
Alcatel-Lucent RRH2x50-08	65.00	159	12,952	0.006	19	197
Alcatel-Lucent RRH2x40 (700)	65.00	150	12,242	0.005	18	186
Alcatel-Lucent 800 MHz RRH	65.00	159	12,976	0.006	19	197
Alcatel-Lucent TD-RRH8x20-25 w/ Solar	65.00	210	17,139	0.008	25	260
Generic Flat Side Arm	65.00	1,125	91,815	0.041	133	1,393
RFS APXVSP18-C-A20	65.00	171	13,956	0.006	20	212
Commscope DT465B-2XR	65.00	174	14,201	0.006	20	216
Andrew ABT-DFDM-ADB	65.00	1	90	0.000	0	1
Powerwave Allgon TT19-08BP111-001	65.00	96	7,835	0.003	11	119
Raycap DC6-48-60-18-8F	65.00	20	1,632	0.001	2	25
Ericsson RRUS 4478 B14	65.00	180	14,666	0.006	21	223
Ericsson RRUS 4449 B5, B12	65.00	213	17,384	0.008	25	264
Ericsson RRUS 32 (50.8 lbs)	65.00	152	12,438	0.006	18	189
Raycap DC6-48-60-18	65.00	30	2,448	0.001	4	37
Powerwave Allgon 7770.00A	65.00	81	6,611	0.003	10	100
CCI DMP65R-BU4D	65.00	136	11,083	0.005	16	168

Site Number: 88009

Code: ANSI/TIA-222-G

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: CORNWALL CT, CT

Engineering Number: OAA752048_C3_03

2/19/2020 12:07:20 PM

Customer: AT&T MOBILITY

Equivalent Lateral Force Method

CCI DMP65R-BU6DA	65.00	318	25,920	0.011	37	393
Fire Warden Cabin	65.00	2,000	163,226	0.072	236	2,477
Sinclair SV228-HF2SNM	63.00	93	7,344	0.003	11	115
Platform with Handrails	62.00	2,000	155,292	0.069	224	2,477
Generic 10' Dish w/ Radome	59.00	1,600	117,903	0.052	170	1,982
Ericsson Radio 4449 B12,B71	57.00	222	15,775	0.007	23	275
Ericsson RRUS 11 B4	57.00	152	10,808	0.005	16	188
Ericsson RRUS 11 B2	57.00	152	10,808	0.005	16	188
RFS APX16DWV-16DWVS-E-A20	57.00	122	8,676	0.004	13	151
RFS APXVAARR24_43-U-NA20	57.00	384	27,265	0.012	39	475
Site Pro TPF123XX	56.00	900	62,769	0.028	91	1,115
Platform w/ Handrails	50.00	5,000	309,438	0.137	447	6,193
Decibel 776QNB120EXM	48.00	351	20,807	0.009	30	435
Nokia B5 RRH4x40-850	46.00	146	8,247	0.004	12	180
Alcatel-Lucent B13 RRH4x30-4R	46.00	173	9,828	0.004	14	215
Alcatel-Lucent B25 RRH4x30-4R	46.00	153	8,672	0.004	13	190
Alcatel-Lucent B66a RRH4x45 (AWS-3)	46.00	201	11,392	0.005	16	249
RFS DB-C1-12C-24AB-0Z	46.00	32	1,814	0.001	3	40
Andrew DB846F65ZAXY	46.00	126	7,141	0.003	10	156
Commscope JAHH-65B-R3B	46.00	364	20,608	0.009	30	450
Antel LPA-80063/6CF	46.00	162	9,182	0.004	13	201
Access Platform	37.50	5,000	228,467	0.101	330	6,193
		44,061	2,258,481	1.000	3,260	54,574

LoadCase (0.9 - 0.2Sds) * DL + E

Seismic (Reduced DL)

Section	Height Above Base (ft)	Weight (lb)	W _z (lb-ft)	C _{vx}	Horizontal Force (lb)	Vertical Force (lb)
6	57.55	2,946	211,431	0.094	305	2,537
5	50.05	339	21,024	0.009	30	292
4	43.75	4,070	218,813	0.097	316	3,506
3	31.25	4,637	174,835	0.077	252	3,995
2	18.75	4,499	98,983	0.044	143	3,876
1	6.25	4,742	32,752	0.015	47	4,085
Generic 12' Dipole	65.00	40	3,265	0.001	5	34
Generic 18' Omni	65.00	55	4,489	0.002	6	47
Generic 6' Omni	65.00	25	2,040	0.001	3	22
Alcatel-Lucent RRH2x50-08	65.00	159	12,952	0.006	19	137
Alcatel-Lucent RRH2x40 (700)	65.00	150	12,242	0.005	18	129
Alcatel-Lucent 800 MHz RRH	65.00	159	12,976	0.006	19	137
Alcatel-Lucent TD-RRH8x20-25 w/ Solar	65.00	210	17,139	0.008	25	181
Generic Flat Side Arm	65.00	1,125	91,815	0.041	133	969
RFS APXVSP18-C-A20	65.00	171	13,956	0.006	20	147
Commscope DT465B-2XR	65.00	174	14,201	0.006	20	150
Andrew ABT-DFDM-ADB	65.00	1	90	0.000	0	1
Powerwave Allgon TT19-08BP111-001	65.00	96	7,835	0.003	11	83
Raycap DC6-48-60-18-8F	65.00	20	1,632	0.001	2	17
Ericsson RRUS 4478 B14	65.00	180	14,666	0.006	21	155
Ericsson RRUS 4449 B5, B12	65.00	213	17,384	0.008	25	183
Ericsson RRUS 32 (50.8 lbs)	65.00	152	12,438	0.006	18	131
Raycap DC6-48-60-18	65.00	30	2,448	0.001	4	26
Powerwave Allgon 7770.00A	65.00	81	6,611	0.003	10	70
CCI DMP65R-BU4D	65.00	136	11,083	0.005	16	117
CCI DMP65R-BU6DA	65.00	318	25,920	0.011	37	274

Site Number: 88009

Code:

ANSI/TIA-222-G

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: CORNWALL CT, CT

Engineering Number: OAA752048_C3_03

2/19/2020 12:07:20 PM

Customer: AT&T MOBILITY

Equivalent Lateral Force Method

Fire Warden Cabin	65.00	2,000	163,226	0.072	236	1,723
Sinclair SV228-HF2SNM	63.00	93	7,344	0.003	11	80
Platform with Handrails	62.00	2,000	155,292	0.069	224	1,723
Generic 10' Dish w/ Radome	59.00	1,600	117,903	0.052	170	1,378
Ericsson Radio 4449 B12,B71	57.00	222	15,775	0.007	23	191
Ericsson RRUS 11 B4	57.00	152	10,808	0.005	16	131
Ericsson RRUS 11 B2	57.00	152	10,808	0.005	16	131
RFS APX16DWV-16DWVS-E-A20	57.00	122	8,676	0.004	13	105
RFS APXVAARR24_43-U-NA20	57.00	384	27,265	0.012	39	331
Site Pro TPF123XX	56.00	900	62,769	0.028	91	775
Platform w/ Handrails	50.00	5,000	309,438	0.137	447	4,307
Decibel 776QNB120EXM	48.00	351	20,807	0.009	30	302
Nokia B5 RRH4x40-850	46.00	146	8,247	0.004	12	125
Alcatel-Lucent B13 RRH4x30-4R	46.00	173	9,828	0.004	14	149
Alcatel-Lucent B25 RRH4x30-4R	46.00	153	8,672	0.004	13	132
Alcatel-Lucent B66a RRH4x45 (AWS-3)	46.00	201	11,392	0.005	16	173
RFS DB-C1-12C-24AB-0Z	46.00	32	1,814	0.001	3	28
Andrew DB846F65ZAXY	46.00	126	7,141	0.003	10	109
Commscope JAHH-65B-R3B	46.00	364	20,608	0.009	30	313
Antel LPA-80063/6CF	46.00	162	9,182	0.004	13	140
Access Platform	37.50	5,000	228,467	0.101	330	4,307
		44,061	2,258,481	1.000	3,260	37,953

Equivalent Modal Analysis Method

(Based on ASCE7-10 Chapters 11, 12 & 15 and ANSI/TIA-G, section 2.7)

Spectral Response Acceleration for Short Period (S_{s1}):	0.18
Spectral Response Acceleration at 1.0 Second Period (S_{s1}):	0.06
Importance Factor (I_p):	1.00
Site Coefficient F_a :	1.60
Site Coefficient F_v :	2.40
Response Modification Coefficient (R):	3.00
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.19
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.10
Period Based on Rayleigh Method (sec):	0.61
Redundancy Factor (ρ):	1.30

LoadCase (1.2 + 0.2Sds) * DL + E

Seismic

Section	Height		Seismic				Horizontal	Vertical
	Above Base (ft)	Weight (lb)	a	b	c	S_{az}	Force (lb)	Force (lb)
6	57.55	2,946	1.482	0.457	0.521	0.273	349	3,648
5	50.05	339	1.121	-0.058	0.200	0.160	23	420
4	43.75	4,070	0.856	-0.120	0.071	0.115	203	5,041
3	31.25	4,637	0.437	0.006	0.006	0.076	152	5,744
2	18.75	4,499	0.157	0.067	0.029	0.041	80	5,573
1	6.25	4,742	0.017	0.062	0.037	0.016	33	5,873
Generic 12' Dipole	65.00	40	1.890	1.980	1.140	0.482	8	50
Generic 18' Omni	65.00	55	1.890	1.980	1.140	0.482	11	68
Generic 6' Omni	65.00	25	1.890	1.980	1.140	0.482	5	31
Alcatel-Lucent RRH2x50-08	65.00	159	1.890	1.980	1.140	0.482	33	197
Alcatel-Lucent RRH2x40 (700)	65.00	150	1.890	1.980	1.140	0.482	31	186
Alcatel-Lucent 800 MHz RRH	65.00	159	1.890	1.980	1.140	0.482	33	197
Alcatel-Lucent TD-RRH8x20-25	65.00	210	1.890	1.980	1.140	0.482	44	260
Generic Flat Side Arm	65.00	1,125	1.890	1.980	1.140	0.482	235	1,393
RFS APXVSP18-C-A20	65.00	171	1.890	1.980	1.140	0.482	36	212
Commscope DT465B-2XR	65.00	174	1.890	1.980	1.140	0.482	36	216
Andrew ABT-DFDM-ADB	65.00	1	1.890	1.980	1.140	0.482	0	1
Powerwave Allgon TT19-	65.00	96	1.890	1.980	1.140	0.482	20	119
Raycap DC6-48-60-18-8F	65.00	20	1.890	1.980	1.140	0.482	4	25
Ericsson RRUS 4478 B14	65.00	180	1.890	1.980	1.140	0.482	38	223
Ericsson RRUS 4449 B5, B12	65.00	213	1.890	1.980	1.140	0.482	44	264
Ericsson RRUS 32 (50.8 lbs)	65.00	152	1.890	1.980	1.140	0.482	32	189
Raycap DC6-48-60-18	65.00	30	1.890	1.980	1.140	0.482	6	37
Powerwave Allgon 7770.00A	65.00	81	1.890	1.980	1.140	0.482	17	100
CCI DMP65R-BU4D	65.00	136	1.890	1.980	1.140	0.482	28	168
CCI DMP65R-BU6DA	65.00	318	1.890	1.980	1.140	0.482	66	393
Fire Warden Cabin	65.00	2,000	1.890	1.980	1.140	0.482	417	2,477
Sinclair SV228-HF2SNM	63.00	93	1.775	1.429	0.936	0.415	17	115
Platform with Handrails	62.00	2,000	1.720	1.198	0.845	0.385	334	2,477
Generic 10' Dish w/ Radome	59.00	1,600	1.557	0.652	0.613	0.306	212	1,982
Ericsson Radio 4449 B12,B71	57.00	222	1.453	0.393	0.489	0.262	25	275
Ericsson RRUS 11 B4	57.00	152	1.453	0.393	0.489	0.262	17	188
Ericsson RRUS 11 B2	57.00	152	1.453	0.393	0.489	0.262	17	188
RFS APX16DWV-16DWVS-E-A20	57.00	122	1.453	0.393	0.489	0.262	14	151
RFS APXVAARR24_43-U-NA20	57.00	384	1.453	0.393	0.489	0.262	44	475
Site Pro TPF123XX	56.00	900	1.403	0.289	0.435	0.243	95	1,115
Platform w/ Handrails	50.00	5,000	1.118	-0.059	0.198	0.159	345	6,193
Decibel 776QNB120EXM	48.00	351	1.031	-0.101	0.147	0.141	21	435
Nokia B5 RRH4x40-850	46.00	146	0.947	-0.119	0.106	0.127	8	180
Alcatel-Lucent B13 RRH4x30-4R	46.00	173	0.947	-0.119	0.106	0.127	10	215

Site Number: 88009

Code: ANSI/TIA-222-G

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: CORNWALL CT, CT

Engineering Number: OAA752048_C3_03

2/19/2020 12:07:20 PM

Customer: AT&T MOBILITY

Equivalent Modal Analysis Method

Alcatel-Lucent B25 RRH4x30-4R	46.00	153	0.947	-0.119	0.106	0.127	8	190
Alcatel-Lucent B66a RRH4x45	46.00	201	0.947	-0.119	0.106	0.127	11	249
RFS DB-C1-12C-24AB-0Z	46.00	32	0.947	-0.119	0.106	0.127	2	40
Andrew DB846F65ZAXY	46.00	126	0.947	-0.119	0.106	0.127	7	156
Commscope JAHH-65B-R3B	46.00	364	0.947	-0.119	0.106	0.127	20	450
Antel LPA-80063/6CF	46.00	162	0.947	-0.119	0.106	0.127	9	201
Access Platform	37.50	5,000	0.629	-0.063	0.018	0.093	200	6,193
		44,061	67.833	46.349	31.294	14.862	3,402	54,574

LoadCase (0.9 - 0.2Sds) * DL + E

Seismic (Reduced DL)

Section	Height Above Base (ft)	Weight (lb)	a	b	c	S _{az}	Horizontal Force (lb)	Vertical Force (lb)
6	57.55	2,946	1.482	0.457	0.521	0.273	349	2,537
5	50.05	339	1.121	-0.058	0.200	0.160	23	292
4	43.75	4,070	0.856	-0.120	0.071	0.115	203	3,506
3	31.25	4,637	0.437	0.006	0.006	0.076	152	3,995
2	18.75	4,499	0.157	0.067	0.029	0.041	80	3,876
1	6.25	4,742	0.017	0.062	0.037	0.016	33	4,085
Generic 12' Dipole	65.00	40	1.890	1.980	1.140	0.482	8	34
Generic 18' Omni	65.00	55	1.890	1.980	1.140	0.482	11	47
Generic 6' Omni	65.00	25	1.890	1.980	1.140	0.482	5	22
Alcatel-Lucent RRH2x50-08	65.00	159	1.890	1.980	1.140	0.482	33	137
Alcatel-Lucent RRH2x40 (700)	65.00	150	1.890	1.980	1.140	0.482	31	129
Alcatel-Lucent 800 MHz RRH	65.00	159	1.890	1.980	1.140	0.482	33	137
Alcatel-Lucent TD-RRH8x20-25	65.00	210	1.890	1.980	1.140	0.482	44	181
Generic Flat Side Arm	65.00	1,125	1.890	1.980	1.140	0.482	235	969
RFS APXVSP18-C-A20	65.00	171	1.890	1.980	1.140	0.482	36	147
Commscope DT465B-2XR	65.00	174	1.890	1.980	1.140	0.482	36	150
Andrew ABT-DFDM-ADB	65.00	1	1.890	1.980	1.140	0.482	0	1
Powerwave Allgon TT19-	65.00	96	1.890	1.980	1.140	0.482	20	83
Raycap DC6-48-60-18-8F	65.00	20	1.890	1.980	1.140	0.482	4	17
Ericsson RRUS 4478 B14	65.00	180	1.890	1.980	1.140	0.482	38	155
Ericsson RRUS 4449 B5, B12	65.00	213	1.890	1.980	1.140	0.482	44	183
Ericsson RRUS 32 (50.8 lbs)	65.00	152	1.890	1.980	1.140	0.482	32	131
Raycap DC6-48-60-18	65.00	30	1.890	1.980	1.140	0.482	6	26
Powerwave Allgon 7770.00A	65.00	81	1.890	1.980	1.140	0.482	17	70
CCI DMP65R-BU4D	65.00	136	1.890	1.980	1.140	0.482	28	117
CCI DMP65R-BU6DA	65.00	318	1.890	1.980	1.140	0.482	66	274
Fire Warden Cabin	65.00	2,000	1.890	1.980	1.140	0.482	417	1,723
Sinclair SV228-HF2SNM	63.00	93	1.775	1.429	0.936	0.415	17	80
Platform with Handrails	62.00	2,000	1.720	1.198	0.845	0.385	334	1,723
Generic 10' Dish w/ Radome	59.00	1,600	1.557	0.652	0.613	0.306	212	1,378
Ericsson Radio 4449 B12,B71	57.00	222	1.453	0.393	0.489	0.262	25	191
Ericsson RRUS 11 B4	57.00	152	1.453	0.393	0.489	0.262	17	131
Ericsson RRUS 11 B2	57.00	152	1.453	0.393	0.489	0.262	17	131
RFS APX16DWV-16DWVS-E-A20	57.00	122	1.453	0.393	0.489	0.262	14	105
RFS APXVAARR24_43-U-NA20	57.00	384	1.453	0.393	0.489	0.262	44	331
Site Pro TPF123XX	56.00	900	1.403	0.289	0.435	0.243	95	775
Platform w/ Handrails	50.00	5,000	1.118	-0.059	0.198	0.159	345	4,307
Decibel 776QNB120EXM	48.00	351	1.031	-0.101	0.147	0.141	21	302
Nokia B5 RRH4x40-850	46.00	146	0.947	-0.119	0.106	0.127	8	125
Alcatel-Lucent B13 RRH4x30-4R	46.00	173	0.947	-0.119	0.106	0.127	10	149
Alcatel-Lucent B25 RRH4x30-4R	46.00	153	0.947	-0.119	0.106	0.127	8	132
Alcatel-Lucent B66a RRH4x45	46.00	201	0.947	-0.119	0.106	0.127	11	173
RFS DB-C1-12C-24AB-0Z	46.00	32	0.947	-0.119	0.106	0.127	2	28
Andrew DB846F65ZAXY	46.00	126	0.947	-0.119	0.106	0.127	7	109
Commscope JAHH-65B-R3B	46.00	364	0.947	-0.119	0.106	0.127	20	313
Antel LPA-80063/6CF	46.00	162	0.947	-0.119	0.106	0.127	9	140
Access Platform	37.50	5,000	0.629	-0.063	0.018	0.093	200	4,307
		44,061	67.833	46.349	31.294	14.862	3,402	37,953

Site Number: 88009

Code: ANSI/TIA-222-G

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: CORNWALL CT, CT

Engineering Number: OAA752048_C3_03

2/19/2020 12:07:20 PM

Customer: AT&T MOBILITY

Force/Stress Summary

Section: 1		1		Bot Elev (ft): 0.00				Height (ft): 12.500							
		Pu (kip)	Load Case	Len (ft)	Bracing %			F'y (ksi)	Phic (kip)	Pn Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
Max Compression Member															
LEG	SAE - 6X6X0.625	-95.82	1.2D + 1.6W 45 deg	12.57	50	50	50	63.9	33.0	173.38	0	0	0.00	0.00	55 Member Z
HORIZ	DAL - 3X2.5X0.25	-4.10	0.9D + 1.6W Normal	18.12	50	100	13	199.8	36.0	14.89	0	0	0.00	0.00	27 Member Y
DIAG	SAU - 4X3X0.25	-11.64	1.2D + 1.6W Normal	22.81	47	47	47	179.2	36.0	11.89	0	0	0.00	0.00	97 Member Z
		Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit (kip)	Pn Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls		
Max Tension Member															
LEG	SAE - 6X6X0.625	75.04	0.9D + 1.6W 45 deg	33	45	211.17	0	0	0.00	0.00			35	Member	
HORIZ	DAL - 3X2.5X0.25	5.28	1.2D + 1.6W Normal	36	58	85.21	0	0	0.00	0.00	0.00		6	Member	
DIAG	SAU - 4X3X0.25	10.19	1.2D + 1.6W Normal	36	58	54.76	0	0	0.00	0.00	0.00		18	Member	
Max Splice Forces		Pu (kip)	Load Case	phiRnt (kip)		Use %	Num Bolts	Bolt Type							
Top Tension		67.37	0.9D + 1.6W 45 deg	0.00		0	0								
Top Compression		89.38	1.2D + 1.6W 45 deg	0.00		0									
Bot Tension		86.62	0.9D + 1.6W 45 deg	0.00		0									
Bot Compression		108.89	1.2D + 1.6W 45 deg	0.00		0									

Section: 2		1		Bot Elev (ft): 12.50				Height (ft): 12.500							
		Pu (kip)	Load Case	Len (ft)	Bracing %			F'y (ksi)	Phic (kip)	Pn Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
Max Compression Member															
LEG	SAE - 6X6X0.625	-77.71	1.2D + 1.6W 45 deg	12.57	50	50	50	63.9	33.0	173.38	0	0	0.00	0.00	44 Member Z
HORIZ	DAL - 3X2.5X0.25	-2.52	1.2D + 1.6W Normal	16.25	50	50	17	106.7	36.0	46.79	0	0	0.00	0.00	5 Member Y
DIAG	SAU - 4X3X0.25	-12.17	1.2D + 1.6W Normal	21.27	47	47	47	169.0	36.0	13.36	0	0	0.00	0.00	91 Member Z
		Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit (kip)	Pn Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls		
Max Tension Member															
LEG	SAE - 6X6X0.625	58.17	0.9D + 1.6W 45 deg	33	45	211.17	0	0	0.00	0.00			27	Member	
HORIZ	DAL - 3X2.5X0.25	3.49	1.2D + 1.6W Normal	36	58	85.21	0	0	0.00	0.00	0.00		4	Member	
DIAG	SAU - 4X3X0.25	10.96	0.9D + 1.6W Normal	36	58	54.76	0	0	0.00	0.00	0.00		20	Member	
Max Splice Forces		Pu (kip)	Load Case	phiRnt (kip)		Use %	Num Bolts	Bolt Type							
Top Tension		48.86	0.9D + 1.6W 45 deg	0.00		0	0								
Top Compression		69.76	1.2D + 1.6W 45 deg	0.00		0									
Bot Tension		67.37	0.9D + 1.6W 45 deg	0.00		0									
Bot Compression		0.00		0.00		0									

Site Number: 88009

Code: ANSI/TIA-222-G

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: CORNWALL CT, CT

Engineering Number: OAA752048_C3_03

2/19/2020 12:07:20 PM

Customer: AT&T MOBILITY

Force/Stress Summary

Section: 3		1		Bot Elev (ft): 25.00				Height (ft): 12.500							
		Pu (kip)	Load Case	Len (ft)	Bracing %			F'y (ksi)	Phic (kip)	Pn Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
Max Compression Member															
LEG	SAE - 6X6X0.5	-55.86	1.2D + 1.6W 45 deg	12.57	50	50	50	63.9	33.0	140.22	0	0	0.00	0.00	39 Member Z
HORIZ	DAL - 3.5X3X0.3125	-3.88	1.2D + 1.6W Normal	14.37	50	100	17	136.1	36.0	47.22	0	0	0.00	0.00	8 Member Y
DIAG	SAU - 3.5X3X0.25	-12.36	1.2D + 1.6W Normal	19.78	47	47	47	163.4	36.0	13.20	0	0	0.00	0.00	93 Member Z
Max Tension Member															
		Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit (kip)	Pn Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls		
LEG	SAE - 6X6X0.5	39.05	0.9D + 1.6W 45 deg	33	45	170.77	0	0	0.00	0.00			22	Member	Z
HORIZ	DAL - 3.5X3X0.3125	6.19	1.2D + 1.6W Normal	36	58	125.39	0	0	0.00	0.00	0.00		4	Member	
DIAG	SAU - 3.5X3X0.25	10.66	1.2D + 1.6W Normal	36	58	50.54	0	0	0.00	0.00	0.00		21	Member	
Max Splice Forces															
		Pu (kip)	Load Case			phiRnt (kip)	Use %	Num Bolts	Bolt Type						
Top Tension		29.03	0.9D + 1.6W 45 deg			0.00	0	0							
Top Compression		47.35	1.2D + 1.6W 45 deg			0.00	0								
Bot Tension		48.86	0.9D + 1.6W 45 deg			0.00	0								
Bot Compression		0.00				0.00	0								

Section: 4		1		Bot Elev (ft): 37.50				Height (ft): 12.500							
		Pu (kip)	Load Case	Len (ft)	Bracing %			F'y (ksi)	Phic (kip)	Pn Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
Max Compression Member															
LEG	SAE - 6X6X0.5	-33.54	1.2D + 1.6W 45 deg	12.57	50	50	50	63.9	33.0	140.22	0	0	0.00	0.00	23 Member Z
HORIZ	DAL - 3.5X3X0.3125	-7.82	1.2D + 1.6W 45 deg	12.50	100	100	17	136.4	36.0	47.01	0	0	0.00	0.00	16 Member X
DIAG	SAE - 3.5x3.5x0.25	-12.15	1.2D + 1.6W Normal	18.37	47	47	47	143.4	36.0	18.57	0	0	0.00	0.00	65 Member Z
Max Tension Member															
		Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit (kip)	Pn Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls		
LEG	SAE - 6X6X0.5	22.35	0.9D + 1.6W 45 deg	33	45	170.77	0	0	0.00	0.00			13	Member	Z
HORIZ	DAL - 3.5X3X0.3125	2.04	1.2D + 1.6W Normal	36	58	125.39	0	0	0.00	0.00	0.00		1	Member	
DIAG	SAE - 3.5x3.5x0.25	10.03	0.9D + 1.6W Normal	36	58	54.76	0	0	0.00	0.00	0.00		18	Member	
Max Splice Forces															
		Pu (kip)	Load Case			phiRnt (kip)	Use %	Num Bolts	Bolt Type						
Top Tension		10.00	0.9D + 1.6W 45 deg			0.00	0	0							
Top Compression		30.56	1.2D + 1.0Di + 1.0Wi			0.00	0								
Bot Tension		29.03	0.9D + 1.6W 45 deg			0.00	0								
Bot Compression		0.00				0.00	0								

Site Number: 88009

Code: ANSI/TIA-222-G

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: CORNWALL CT, CT

Engineering Number: OAA752048_C3_03

2/19/2020 12:07:20 PM

Customer: AT&T MOBILITY

Force/Stress Summary

Section: 5		1		Bot Elev (ft): 50.00				Height (ft): 0.100							
		Pu (kip)	Load Case	Len (ft)	Bracing %			F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
Max Compression Member															
LEG	SAE - 6X6X0.5	-5.94	1.2D + 1.0Di + 1.0Wi	0.39	50	50	50	2.0	33.0	170.74	0	0	0.00	0.00	3 Member Z
HORIZ		0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0
DIAG		0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	
Max Tension Member															
LEG	SAE - 6X6X0.5	23.44	1.2D + 1.6W 45 deg	33	45	170.77	0	0	0.00	0.00	0.00	0.00		13 Member	
HORIZ		0.00		0	0	0.00	0	0	0.00	0.00	0.00	0.00		0	
DIAG		0.00		0	0	0.00	0	0	0.00	0.00	0.00	0.00		0	
Max Splice Forces															
		Pu (kip)	Load Case			phiRnt (kip)	Use %	Num Bolts	Bolt Type						
Top Tension		23.43	0.9D + 1.6W 45 deg			0.00	0	0							
Top Compression		6.34	1.2D + 1.0Di + 1.0Wi			0.00	0								
Bot Tension		10.00	0.9D + 1.6W 45 deg			0.00	0								
Bot Compression		0.00				0.00	0								

Section: 6		1		Bot Elev (ft): 50.10				Height (ft): 14.900							
		Pu (kip)	Load Case	Len (ft)	Bracing %			F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
Max Compression Member															
LEG	SAE - 6X6X0.5	-31.72	1.2D + 1.6W 45 deg	7.45	100	100	100	75.8	33.0	129.46	0	0	0.00	0.00	24 Member Z
HORIZ	DAL - 2.5X2X0.25	-9.71	1.2D + 1.6W 45 deg	7.000	100	100	50	133.7	36.0	26.92	0	0	0.00	0.00	36 Member Y
DIAG	SAU - 3X2X0.25	-9.29	1.2D + 1.6W Normal	10.22	50	50	50	136.0	36.0	14.52	0	0	0.00	0.00	63 Member Z
Max Tension Member															
LEG	SAE - 6X6X0.5	4.30	1.2D + 1.6W Normal	33	45	170.77	0	0	0.00	0.00	0.00	0.00		2 Member	
HORIZ	DAL - 2.5X2X0.25	1.82	1.2D + 1.6W Normal	36	58	69.01	0	0	0.00	0.00	0.00	0.00		2 Member	
DIAG	SAU - 3X2X0.25	18.83	1.2D + 1.6W 45 deg	36	58	38.56	0	0	0.00	0.00	0.00	0.00		48 Member	
Max Splice Forces															
		Pu (kip)	Load Case			phiRnt (kip)	Use %	Num Bolts	Bolt Type						
Top Tension		0.00				0.00	0	0							
Top Compression		7.61	1.2D + 1.0Di + 1.0Wi			0.00	0								
Bot Tension		23.43	0.9D + 1.6W 45 deg			0.00	0								
Bot Compression		0.00				0.00	0								

Site Number: 88009

Code: ANSI/TIA-222-G

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: CORNWALL CT, CT

Engineering Number: OAA752048_C3_03

2/19/2020 12:07:20 PM

Customer: AT&T MOBILITY

Detailed Reactions

Load Case	Radius (ft)	Elevation (ft)	Azimuth (deg)	Node	FX (kip)	FY (kip)	FZ (kip)	(-) = Uplift (+) = Down
1.2D + 1.6W Normal	14.14	00.00	45	1	-8.30	78.36	-15.84	
	14.14	00.00	135	1a	5.34	-51.25	-12.85	
	14.14	00.00	225	1b	-6.23	-51.43	-12.09	
	14.14	00.00	315	1c	9.18	77.19	-14.92	
1.2D + 1.6W 45 deg	14.14	00.00	45	1	-16.45	107.75	-17.67	
	14.14	00.00	135	1a	-7.06	13.37	-4.06	
	14.14	00.00	225	1b	-14.75	-81.24	-13.61	
	14.14	00.00	315	1c	-2.93	13.00	-5.87	
0.9D + 1.6W Normal	14.14	00.00	45	1	-7.93	75.00	-15.45	
	14.14	00.00	135	1a	5.72	-54.66	-13.23	
	14.14	00.00	225	1b	-6.60	-54.70	-12.45	
	14.14	00.00	315	1c	8.81	74.02	-14.56	
0.9D + 1.6W 45 deg	14.14	00.00	45	1	-16.09	104.36	-17.28	
	14.14	00.00	135	1a	-6.68	9.90	-4.44	
	14.14	00.00	225	1b	-15.13	-84.48	-13.97	
	14.14	00.00	315	1c	-3.30	9.87	-5.51	
1.2D + 1.0Di + 1.0Wi Normal	14.14	00.00	45	1	-3.99	56.46	-6.12	
	14.14	00.00	135	1a	-0.57	23.54	-1.24	
	14.14	00.00	225	1b	0.33	21.41	-1.31	
	14.14	00.00	315	1c	4.23	53.56	-5.63	
1.2D + 1.0Di + 1.0Wi 45 deg	14.14	00.00	45	1	-6.06	64.33	-6.65	
	14.14	00.00	135	1a	-3.77	40.98	1.10	
	14.14	00.00	225	1b	-1.81	13.47	-1.77	
	14.14	00.00	315	1c	1.09	36.19	-3.24	
(1.2 + 0.2Sds) * DL + E Normal M1	14.14	00.00	45	1	-2.00	17.11	-2.35	
	14.14	00.00	135	1a	-1.06	8.71	0.73	
	14.14	00.00	225	1b	1.06	8.71	0.73	
	14.14	00.00	315	1c	2.00	17.11	-2.35	
(1.2 + 0.2Sds) * DL + E Normal M2	14.14	00.00	45	1	-2.06	17.62	-2.38	
	14.14	00.00	135	1a	-1.00	8.20	0.69	
	14.14	00.00	225	1b	1.00	8.20	0.69	
	14.14	00.00	315	1c	2.06	17.62	-2.38	
(1.2 + 0.2Sds) * DL + E 45 deg M1	14.14	00.00	45	1	-2.44	18.85	-2.45	
	14.14	00.00	135	1a	-1.77	12.91	1.30	
	14.14	00.00	225	1b	0.62	6.97	0.63	
	14.14	00.00	315	1c	1.29	12.91	-1.77	
(1.2 + 0.2Sds) * DL + E 45 deg M2	14.14	00.00	45	1	-2.50	19.57	-2.51	
	14.14	00.00	135	1a	-1.75	12.91	1.32	
	14.14	00.00	225	1b	0.56	6.25	0.56	
	14.14	00.00	315	1c	1.31	12.91	-1.76	
(0.9 - 0.2Sds) * DL + E Normal M1	14.14	00.00	45	1	-1.54	13.17	-1.88	
	14.14	00.00	135	1a	-0.59	4.78	0.26	
	14.14	00.00	225	1b	0.59	4.78	0.26	
	14.14	00.00	315	1c	1.54	13.17	-1.88	
(0.9 - 0.2Sds) * DL + E Normal M2	14.14	00.00	45	1	-1.59	13.68	-1.92	
	14.14	00.00	135	1a	-0.53	4.28	0.22	
	14.14	00.00	225	1b	0.53	4.28	0.22	
	14.14	00.00	315	1c	1.59	13.68	-1.92	

Site Number: 88009

Code:

ANSI/TIA-222-G

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: CORNWALL CT, CT

Engineering Number: OAA752048_C3_03

2/19/2020 12:07:20 PM

Customer: AT&T MOBILITY

(0.9 - 0.2Sds) * DL + E 45 deg M1	14.14	00.00	45	1	-1.97	14.91	-1.98
	14.14	00.00	135	1a	-1.30	8.98	0.83
	14.14	00.00	225	1b	0.16	3.04	0.16
	14.14	00.00	315	1c	0.83	8.98	-1.31
(0.9 - 0.2Sds) * DL + E 45 deg M2	14.14	00.00	45	1	-2.04	15.63	-2.04
	14.14	00.00	135	1a	-1.29	8.98	0.85
	14.14	00.00	225	1b	0.09	2.33	0.09
	14.14	00.00	315	1c	0.84	8.98	-1.29
1.0D + 1.0W Service Normal	14.14	00.00	45	1	-3.08	29.13	-5.28
	14.14	00.00	135	1a	0.61	-6.54	-2.74
	14.14	00.00	225	1b	-0.91	-6.92	-2.52
	14.14	00.00	315	1c	3.38	28.39	-4.93
1.0D + 1.0W Service 45 deg	14.14	00.00	45	1	-5.35	37.30	-5.79
	14.14	00.00	135	1a	-2.84	11.40	-0.31
	14.14	00.00	225	1b	-3.28	-15.19	-2.93
	14.14	00.00	315	1c	0.02	10.56	-2.41

Max Uplift:	84.48 (kip)	Moment Ice:	722.40 (kip-ft)	Moment:	2,672.67 (kip-ft)	1.2D + 1.6W 45 deg
Max Down:	107.75 (kip)	Total Down Ice:	154.97 (kip)	Total Down:	52.87 (kip)	
Max Shear:	24.14 (kip)	Total Shear Ice:	14.94 (kip)	Total Shear:	58.27 (kip)	

Deflections and Rotations

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
90 mph Normal with No Ice	37.50	0.035	1.6193	0.8992	1.7866
90 mph Normal with No Ice	50.00	0.053	2.2404	2.9951	3.7403
90 mph Normal with No Ice	57.55	0.442	2.4368	2.5734	3.5441
90 mph Normal with No Ice	65.00	0.708	2.4096	2.1003	3.1891
90 mph 45 degree with No Ice	37.50	0.037	1.8753	1.0802	2.1245
90 mph 45 degree with No Ice	50.00	0.055	2.6063	3.5151	4.3759
90 mph 45 degree with No Ice	57.55	0.488	2.7440	2.9984	4.0645
90 mph 45 degree with No Ice	65.00	0.747	2.7500	1.9795	3.2848
90 mph Normal with No Ice (Reduced DL)	37.50	0.035	1.5888	0.8384	1.7117
90 mph Normal with No Ice (Reduced DL)	50.00	0.053	2.1652	2.7689	3.5150
90 mph Normal with No Ice (Reduced DL)	57.55	0.436	2.3517	2.5192	3.4463
90 mph Normal with No Ice (Reduced DL)	65.00	0.701	2.3265	2.0825	3.1224
90 mph 45 deg with No Ice (Reduced DL)	37.50	0.037	1.8479	1.0194	2.0612
90 mph 45 deg with No Ice (Reduced DL)	50.00	0.055	2.5501	3.2863	4.1597
90 mph 45 deg with No Ice (Reduced DL)	57.55	0.482	2.6858	2.9176	3.9656
90 mph 45 deg with No Ice (Reduced DL)	65.00	0.739	2.6920	1.9520	3.2204
40 mph Normal with 0.75 in Radial Ice	37.50	0.010	1.0013	0.8583	1.3189
40 mph Normal with 0.75 in Radial Ice	50.00	0.015	1.4382	3.0966	3.4143
40 mph Normal with 0.75 in Radial Ice	57.55	0.175	1.4965	1.3145	1.9918
40 mph Normal with 0.75 in Radial Ice	65.00	0.248	1.4912	0.6792	1.5868
40 mph 45 deg with 0.75 in Radial Ice	37.50	0.011	1.1242	0.9258	1.4553
40 mph 45 deg with 0.75 in Radial Ice	50.00	0.016	1.5967	3.3119	3.6767
40 mph 45 deg with 0.75 in Radial Ice	57.55	0.211	1.6354	1.6680	2.3312
40 mph 45 deg with 0.75 in Radial Ice	65.00	0.301	1.6306	0.9475	1.7866
Seismic Normal M1	37.50	0.002	-0.0079	0.2532	0.2533
Seismic Normal M1	50.00	0.003	0.0020	0.9396	0.9396
Seismic Normal M1	57.55	0.018	0.0061	0.2680	0.2681
Seismic Normal M1	65.00	0.033	0.0056	0.1556	0.1556
Seismic Normal M2	37.50	0.003	-0.0089	0.2671	0.2672
Seismic Normal M2	50.00	0.004	0.0027	0.9894	0.9894
Seismic Normal M2	57.55	0.025	0.0082	0.3211	0.3212
Seismic Normal M2	65.00	0.047	0.0074	0.1986	0.1986
Seismic 45 deg M1	37.50	0.002	0.0077	0.2689	0.2690
Seismic 45 deg M1	50.00	0.003	0.0013	0.9903	0.9903
Seismic 45 deg M1	57.55	0.019	0.0035	0.3345	0.3345
Seismic 45 deg M1	65.00	0.035	0.0033	0.1809	0.1809
Seismic 45 deg M2	37.50	0.003	0.0086	0.2895	0.2896
Seismic 45 deg M2	50.00	0.004	0.0015	1.0637	1.0637
Seismic 45 deg M2	57.55	0.027	0.0042	0.4110	0.4110
Seismic 45 deg M2	65.00	0.050	0.0039	0.2258	0.2258
Seismic (Reduced DL) Normal M1	37.50	0.002	-0.0073	0.1848	0.1849
Seismic (Reduced DL) Normal M1	50.00	0.003	0.0007	0.6817	0.6817
Seismic (Reduced DL) Normal M1	57.55	0.018	0.0033	0.2206	0.2206
Seismic (Reduced DL) Normal M1	65.00	0.032	0.0030	0.1361	0.1362
Seismic (Reduced DL) Normal M2	37.50	0.003	0.0086	0.1985	0.1987
Seismic (Reduced DL) Normal M2	50.00	0.004	0.0007	0.7310	0.7310
Seismic (Reduced DL) Normal M2	57.55	0.025	0.0048	0.2753	0.2753
Seismic (Reduced DL) Normal M2	65.00	0.046	0.0042	0.1807	0.1807
Seismic (Reduced DL) 45 deg M1	37.50	0.002	0.0072	0.2003	0.2004
Seismic (Reduced DL) 45 deg M1	50.00	0.003	0.0002	0.7315	0.7315
Seismic (Reduced DL) 45 deg M1	57.55	0.019	0.0018	0.2817	0.2817
Seismic (Reduced DL) 45 deg M1	65.00	0.035	0.0017	0.1550	0.1550
Seismic (Reduced DL) 45 deg M2	37.50	0.003	0.0084	0.2207	0.2207
Seismic (Reduced DL) 45 deg M2	50.00	0.004	0.0002	0.8041	0.8041
Seismic (Reduced DL) 45 deg M2	57.55	0.026	0.0024	0.3573	0.3574

Site Number: 88009

Code:

ANSI/TIA-222-G

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: CORNWALL CT, CT

Engineering Number: OAA752048_C3_03

2/19/2020 12:07:20 PM

Customer: AT&T MOBILITY

Seismic (Reduced DL) 45 deg M2	65.00	0.049	0.0021	0.1994	0.1995
Serviceability - 60 mph Wind Normal	37.50	0.010	0.8941	0.3834	0.9468
Serviceability - 60 mph Wind Normal	50.00	0.015	1.2301	1.2776	1.7735
Serviceability - 60 mph Wind Normal	57.55	0.159	1.2773	0.8060	1.5103
Serviceability - 60 mph Wind Normal	65.00	0.229	1.2744	0.5975	1.3886
Serviceability - 60 mph Wind 45 deg	37.50	0.010	1.0923	0.4419	1.1584
Serviceability - 60 mph Wind 45 deg	50.00	0.015	1.5054	1.4443	2.0862
Serviceability - 60 mph Wind 45 deg	57.55	0.192	1.5484	0.9744	1.8294
Serviceability - 60 mph Wind 45 deg	65.00	0.266	1.5489	0.5958	1.6301

Maximum Reactions Summary

Anchor Group	Vertical (kip)				Horizontal (kip)		Moment (kip-ft)	
	DL+WL	DL+WL+IL	UpLift	Shear	DL+WL	DL+WL+IL	DL+WL	DL+WL+IL
Base	52.87	154.97	107.75	24.14	58.27	14.94	2672.67	722.40

Site Name: Cornwall, CT
Site Number: 88009
Tower Type: SST w/4 Legs
Design Loads (Factored) - Analysis per TIA-222-G Standards

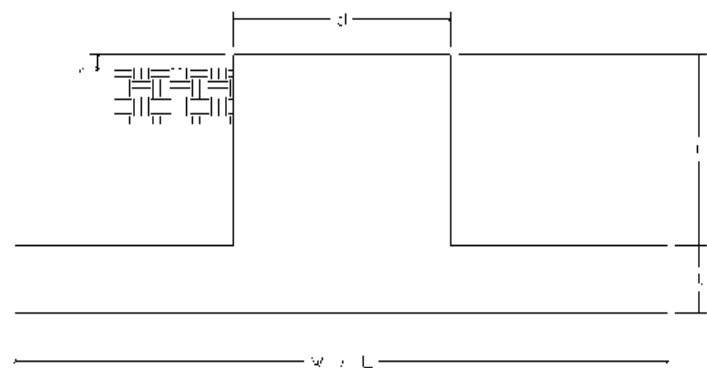
Monolithic Mat & Pier Foundation Analysis

Foundation Analysis Parameters		
Design / Analysis / Mapping:	Mapping	-
Compression/Leg:	107.8	k
Uplift/Leg:	84.5	k
Total Shear:	58.3	k
Moment:	2,672.7	k-ft
Tower + Appurtenance Weight:	52.9	k
Depth to Base of Foundation (l + t - h):	4.92	ft
Diameter of Pier (d):	4	ft
Length of Pier (l):	2.5	ft
Height of Pier above Ground (h):	0.5	ft
Width of Pad (W):	30	ft
Length of Pad (L):	30	ft
Thickness of Pad (t):	2.92	ft
Tower Leg Center to Center:	20	ft
Number of Tower Legs:	4	-
Tower Center from Mat Center:	0	ft
Depth Below Ground Surface to Water Table:	99	ft
Unit Weight of Concrete:	150	pcf
Unit Weight of Soil Above Water Table:	125	pcf
Unit Weight of Water:	62.4	pcf
Unit Weight of Soil Below Water Table:	62.6	pcf
Friction Angle of Uplift:	35	°
Coefficient of Shear Friction:	0.5	-
Ultimate Compressive Bearing Pressure:	40,000	psf
Ultimate Passive Pressure on Pad Face:	1,914	psf
$f_{\text{Soil and Concrete Weight}}$:	0.9	-
f_{Soil} :	0.75	-

Overturning Moment Usage		
Design OTM:	2988.5	k-ft
OTM Resistance:	9570.3	k-ft
Design OTM / OTM Resistance:	31%	Pass

Soil Bearing Pressure Usage		
Net Bearing Pressure:	849	psf
Factored Nominal Bearing Pressure:	30000	psf
Factored Nominal (Net) Bearing Pressure:	3%	Pass
Load Direction Controlling Design Bearing Pressure:	<i>Diagonal to Pad Edge</i>	

Sliding Factor of Safety		
Ultimate Friction Resistance:	334.8	k
Ultimate Passive Pressure Resistance:	150.9	k
Total Factored Sliding Resistance:	364.3	k
Sliding Design / Sliding Resistance:	16%	Pass



Post Mod Mount Analysis Report

December 2, 2019

Site Name	Cornwall
FA Number	10035044
Smartlink Site Number	CTL01025
PACE Number	MRCTB040565 / MRCTB040492 MRCTB040730 / MRCTB039876
PTN Number	2151A0PQGS / 2151A0PQTF 2151A0PQY4 / 2151A0P0GM
Infinigy Job Number	1106-A0001-B
Client	Smartlink
Carrier	AT&T Mobility
Site Location	36 Mohawk Mountain Cornwall, CT 06753 Litchfield County 41.8212981 N NAD83 73.2964431 W NAD83
Mount Centerline EL.	65.0 ft
Mount Type	Platform
Structural Usage Ratio	70.8%
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 Connections.....	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 referenced 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

Previous Mount Analysis	Infinigy Engineering Job #1106-A0001-B, dated September 17, 2019
RFDS	RFDS ID #3084438, dated May 23, 2019
Construction Drawings	Inifigy Engineering Job # 499-006, dated October 23, 2019
Structural Report	ATC Eng. Number OAA700092 C3 01, dated April 11, 2017
Site Photos	Smartlink Provided, dated May 13, 2016
Mapping Report	Smartlink Provided, dated May 13, 2016

Analysis Code Requirements

Wind Speed	115 mph (3-Second Gust)
Wind Speed w/ Ice	40 mph (3 Second Gust) w/ 1.275" Ice
TIA Revision	ANSI/TIA-222-H
Adopted IBC	2015 IBC
Structure Class	II
Exposure Category	B
Topographic Category	5
Spectral Response	$S_s = 0.181 \text{ g}$, $S_1 = 0.065 \text{ g}$
Site Class	D - Stiff Soil
HMSL	1680 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 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
 10035044_Cornwall

Final Configuration Loading

Mount CL (ft)	Vert. O/S (ft)	Rad. HT (ft)	Horiz. O/S (ft) ⁽¹⁾	Qty	Appurtenance ⁽²⁾	Carrier
65.0	0.0	65.0	13.0	3	POWERWAVE 7770.00	AT&T
			3.0, 10.0	4	CCI DMP65R-BU6DA	
			10.0	2	CCI DMP65R-BU4DA	
			3.0	3	POWERWAVE TT19-08B-P111-001	
			--	2	RAYCAP DC6-48-60-18-8F	
			10.0	3	ERICSSON 4478 B14	
			4.0	3	ERICSSON 4449 B5/B12	
			13.0	3	ERICSSON RRUS-32 B2	

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

(2) Raycap assumed to be installed directly on tower

Mount Usages

Horizontals	57.3%	Pass
Standoffs	64.5%	Pass
Mount Pipes	70.8%	Pass
Bracing	55.5%	Pass
Bolts	19.0%	Pass
Max Usage	70.8%	Pass

Mount Connection Usages

Reaction Data	Design Capacity*	Analysis Reactions	Results
Max Tension (lbs.)	15050.7	2854.4	19.0%
Max Shear (lbs.)	8946.2	993.5	11.1%
Unity Check	--	--	4.8%

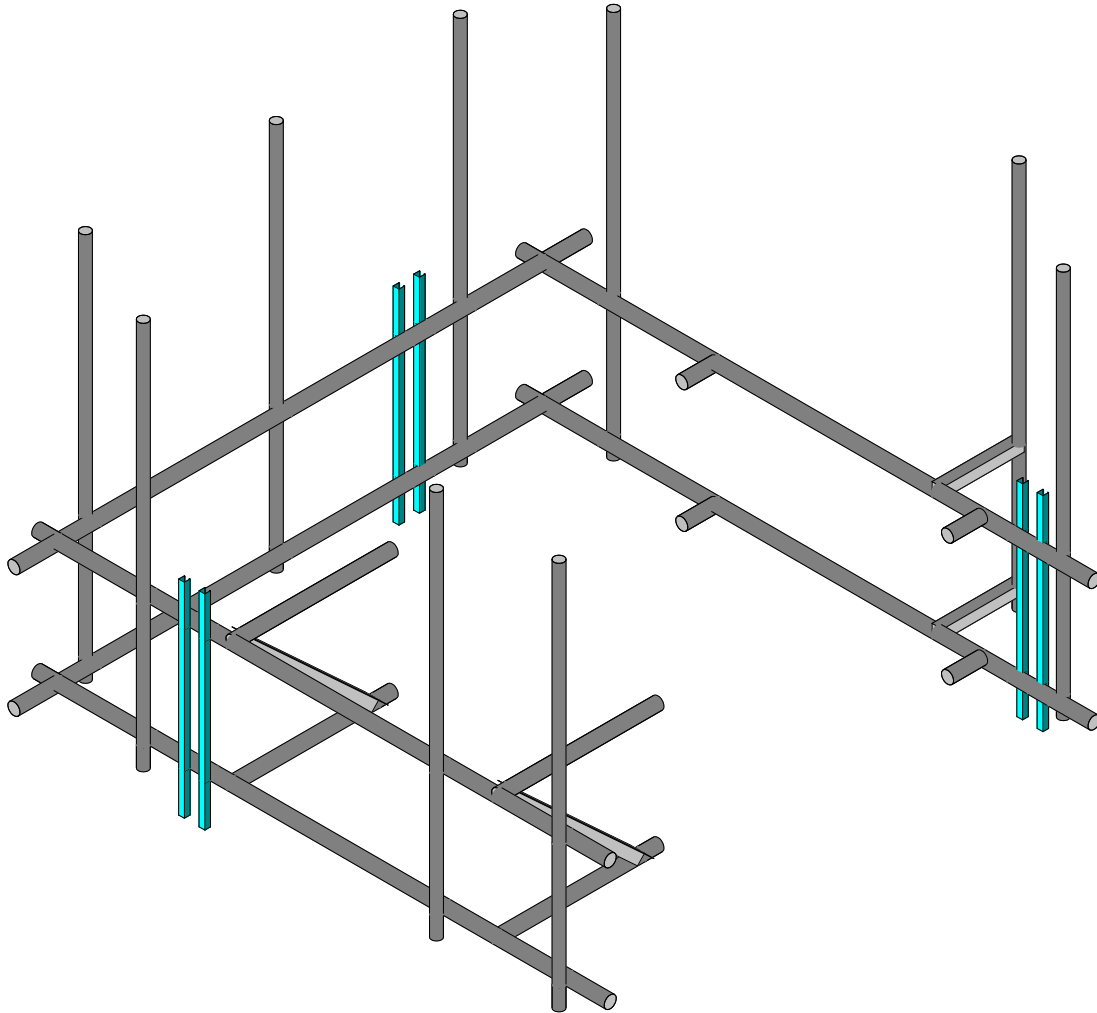
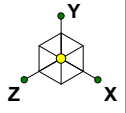
*Assumed (4) 0.75" A307 Bolts. Contractor to field verify prior to proposed installation.

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.



Envelope Only Solution

Infinigy Engineering PLLC

TM

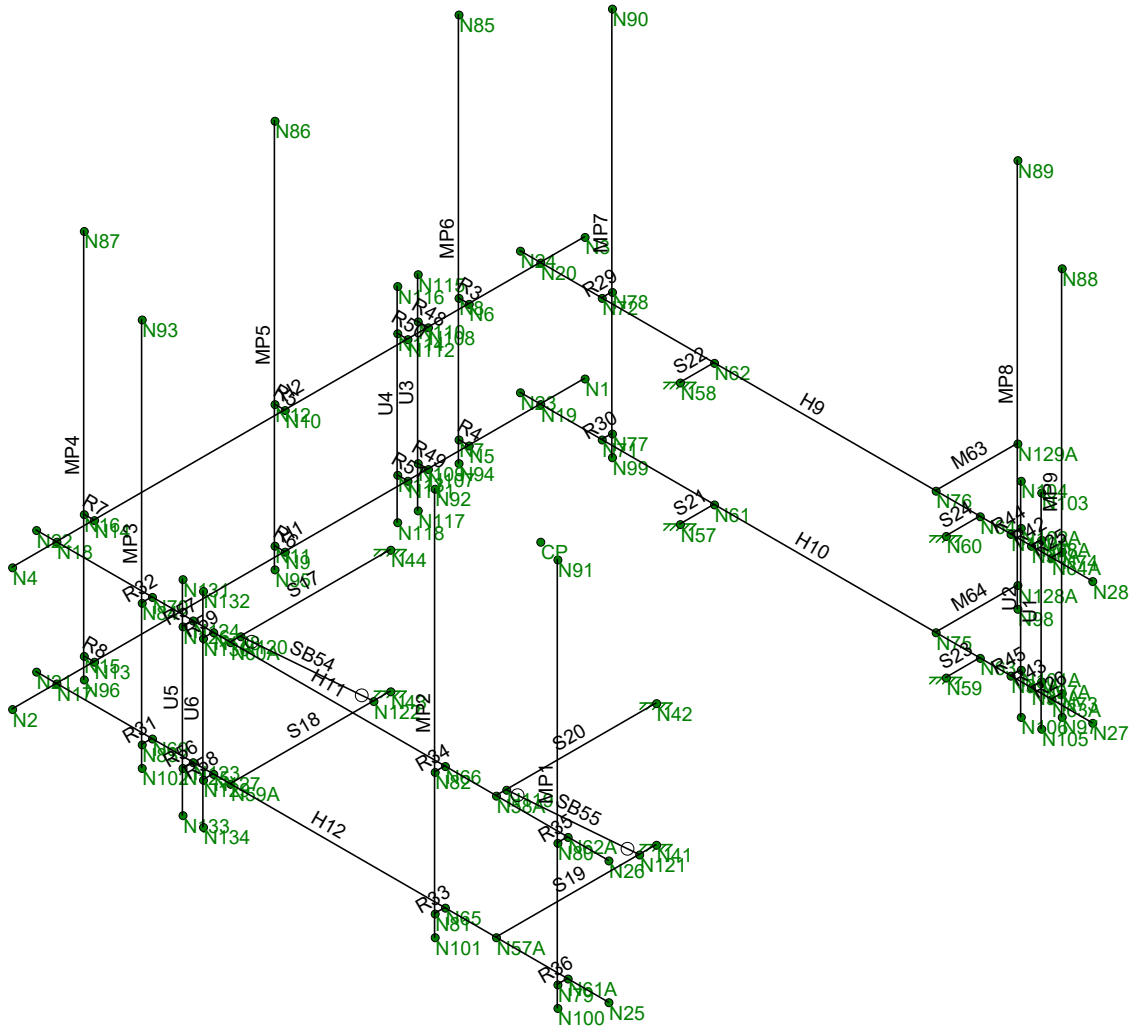
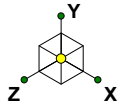
1106-A0001-B

Cornwall

Final Configuration

Nov 22, 2019 at 10:26 AM

10035044 Cornwall CT_MOD_load...



Envelope Only Solution

Infinigy Engineering PLLC

TM

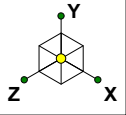
1106-A0001-B

Cornwall

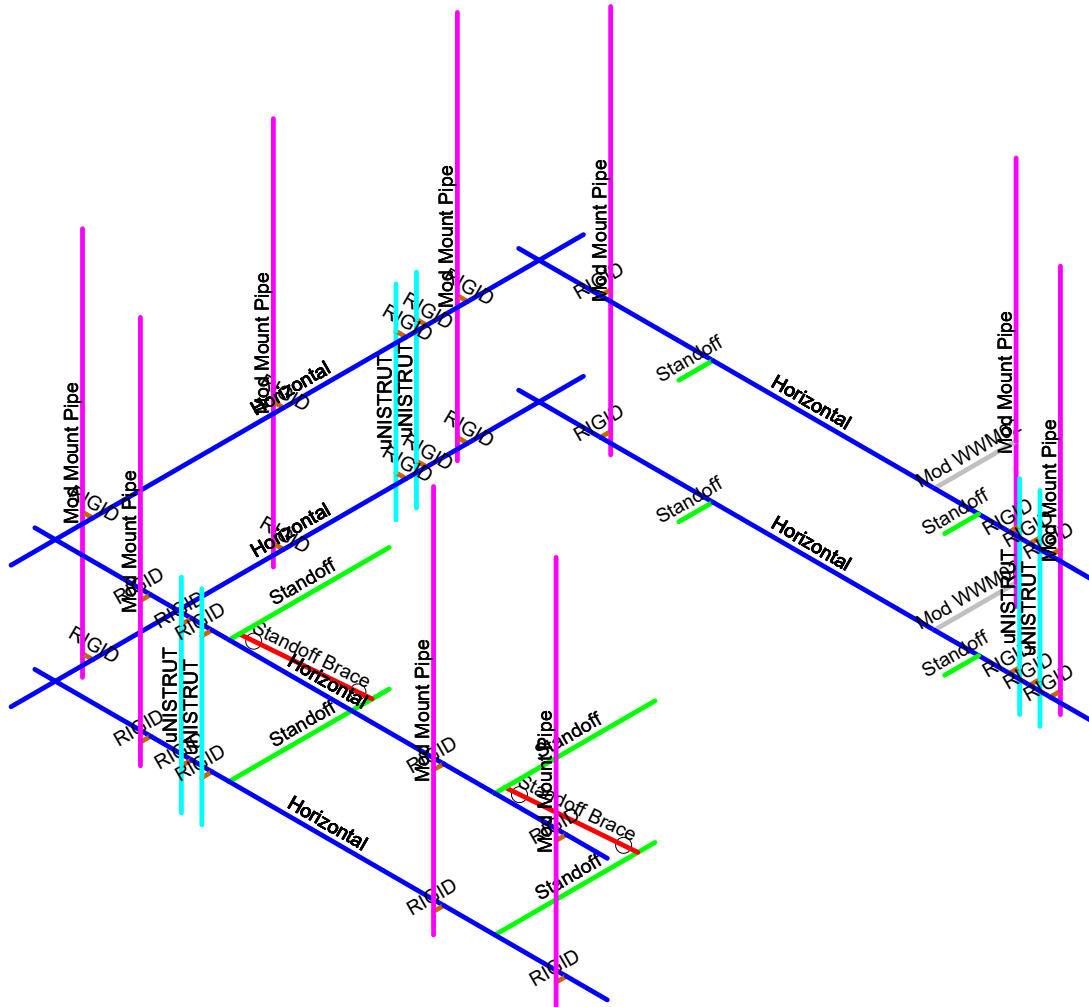
Wire Frame

Nov 22, 2019 at 10:26 AM

10035044 Cornwall CT_MOD_load...



Section Sets	
█	Horizontal
█	Standoff
█	Standoff Brace
█	Mod WWM02
█	Mod Mount Pipe
█	uNISTRUT
█	RIGID



Envelope Only Solution

Infinigy Engineering PLLC

TM

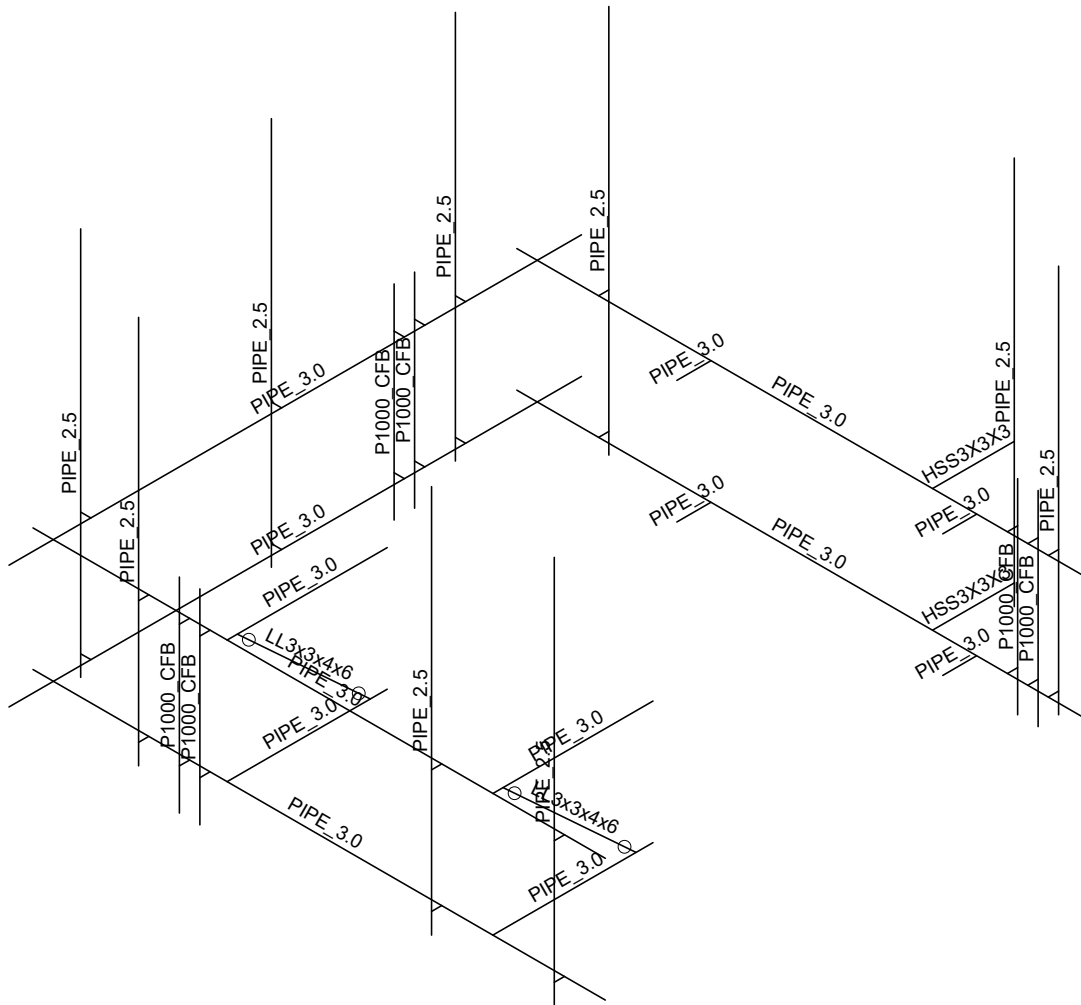
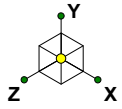
1106-A0001-B

Cornwall

Section Sets

Nov 22, 2019 at 10:27 AM

10035044 Cornwall CT_MOD_load...

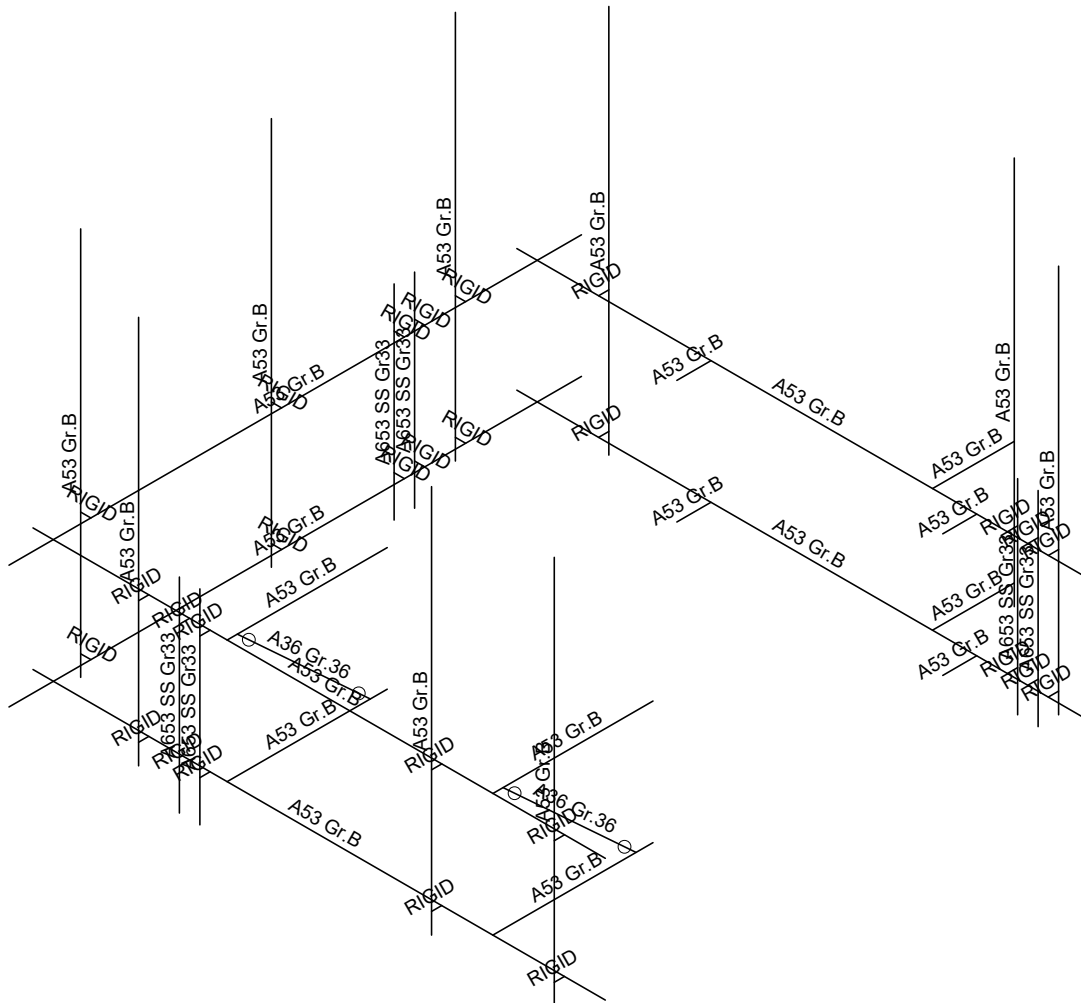
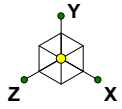


Envelope Only Solution

Infinigy Engineering PLLC
TM
1106-A0001-B

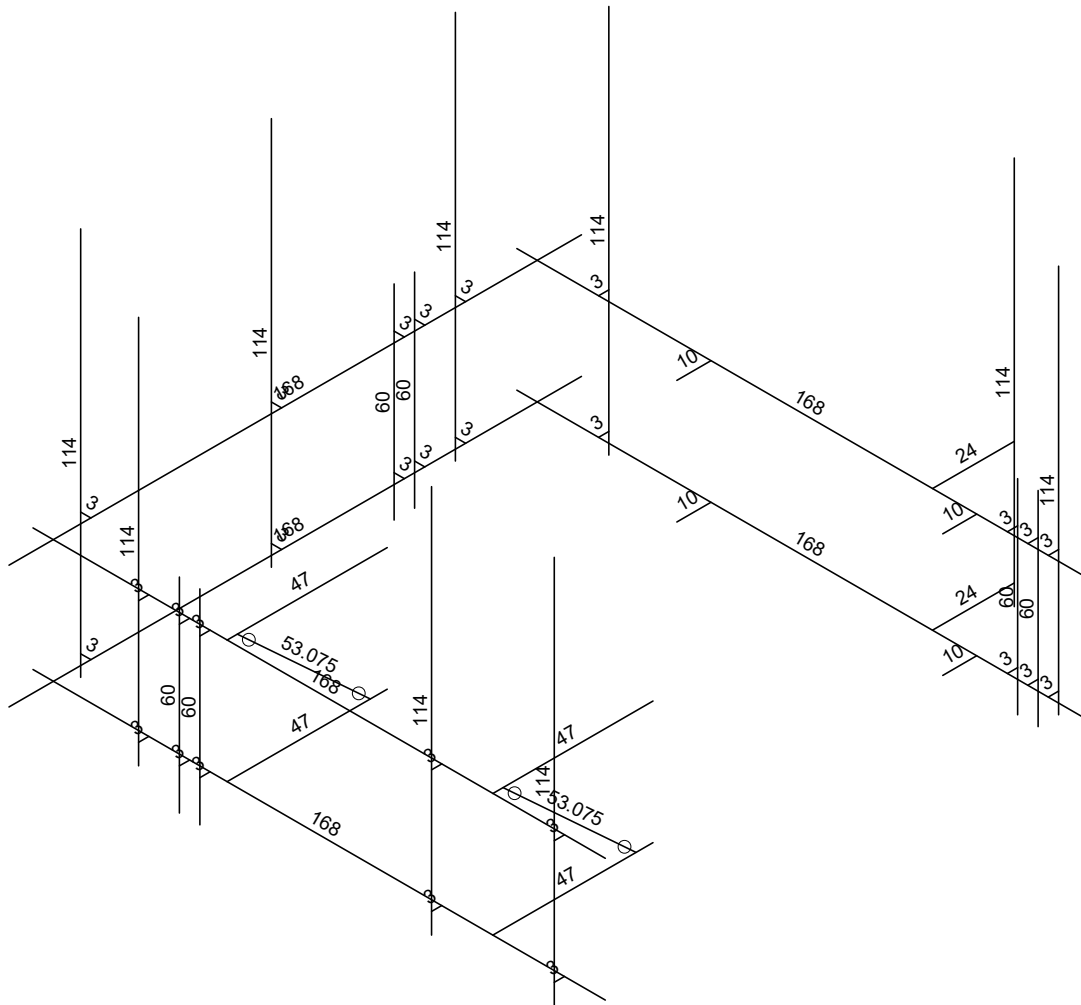
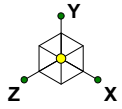
Cornwall

Member Shape
Nov 22, 2019 at 10:27 AM
10035044 Cornwall CT_MOD_load...



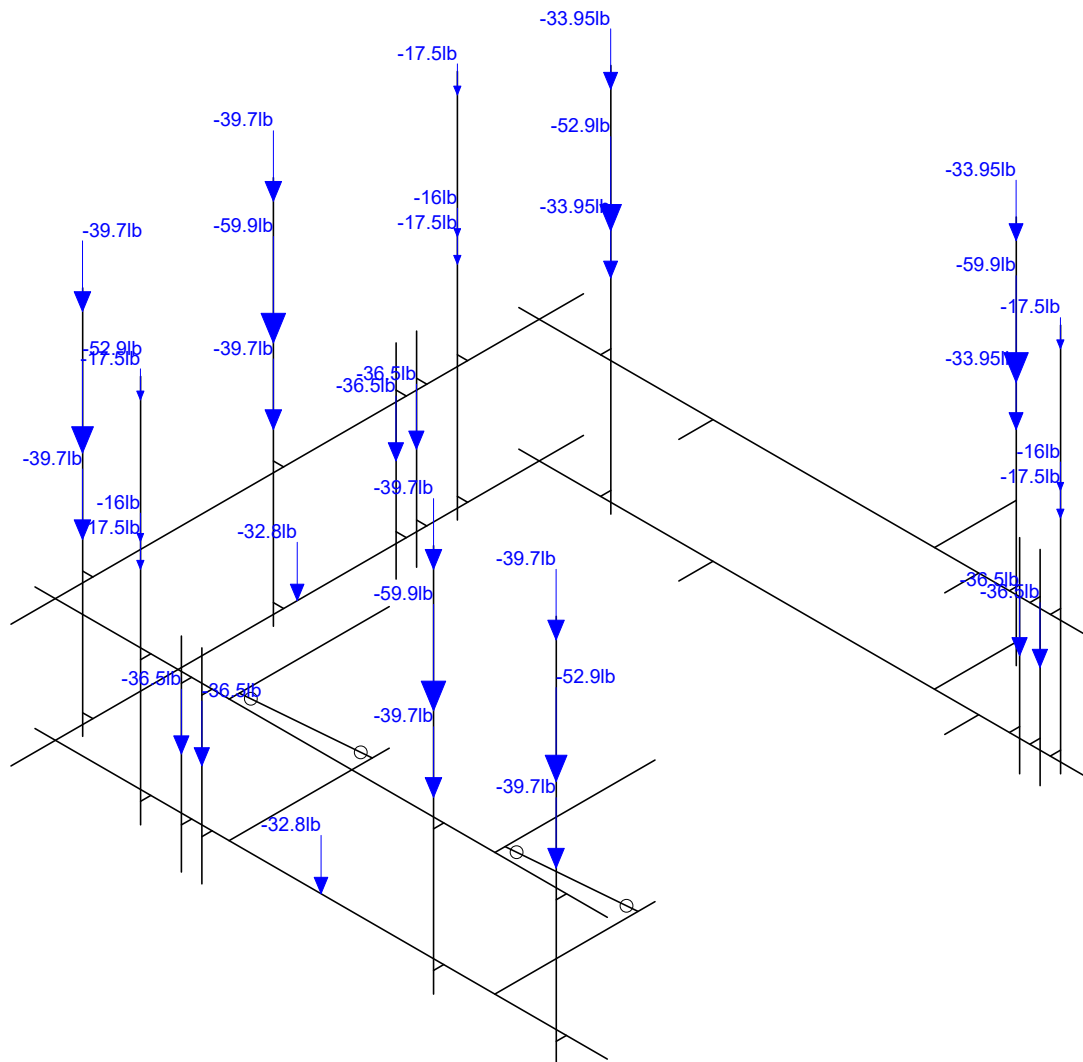
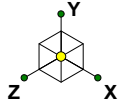
Envelope Only Solution

Infinigy Engineering PLLC	Cornwall	Material Sets
TM		Nov 22, 2019 at 10:27 AM
1106-A0001-B		10035044 Cornwall CT_MOD_load...



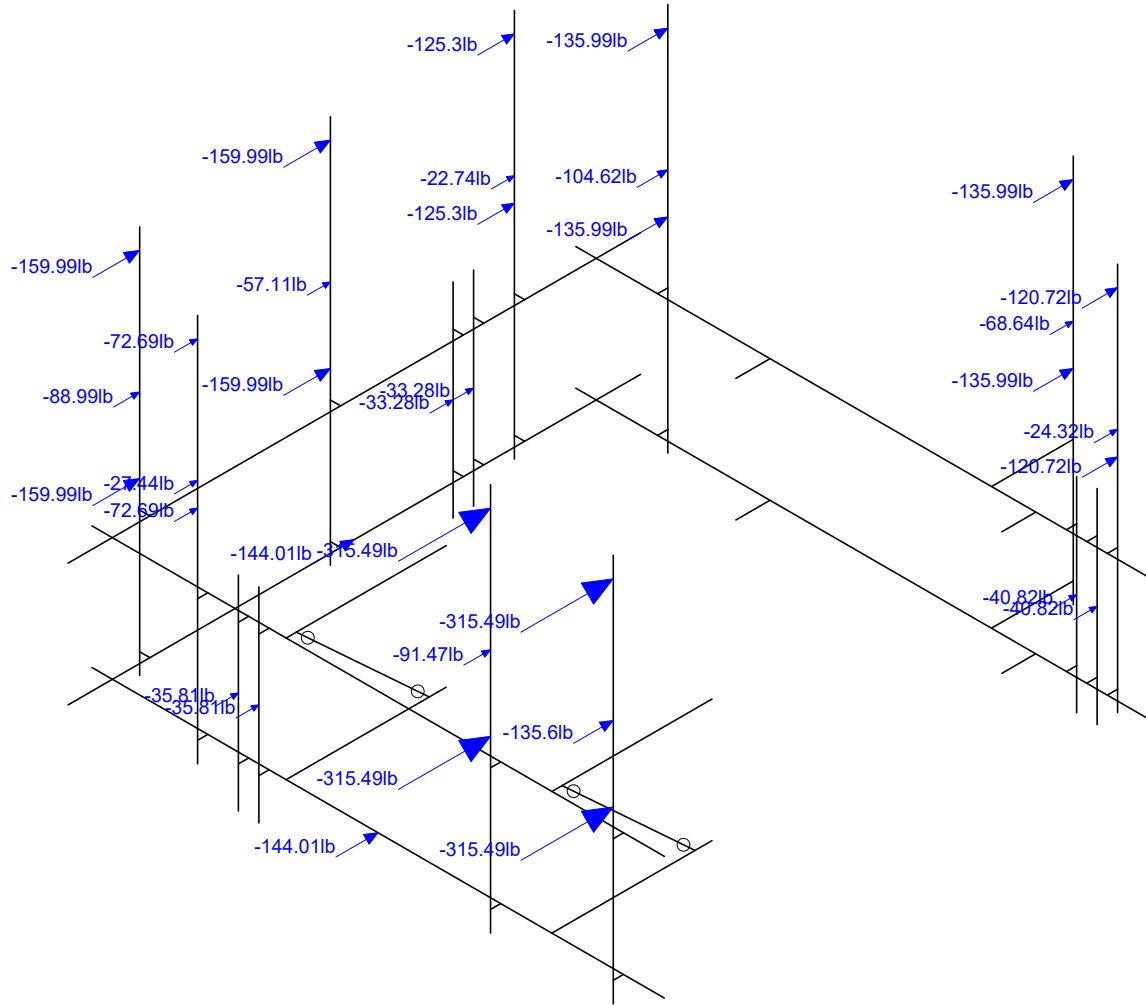
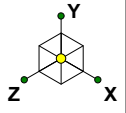
Member Length (in) Displayed
Envelope Only Solution

Infinigy Engineering PLLC	Cornwall	Member Length
TM		Nov 22, 2019 at 10:27 AM
1106-A0001-B		10035044 Cornwall CT_MOD_load...



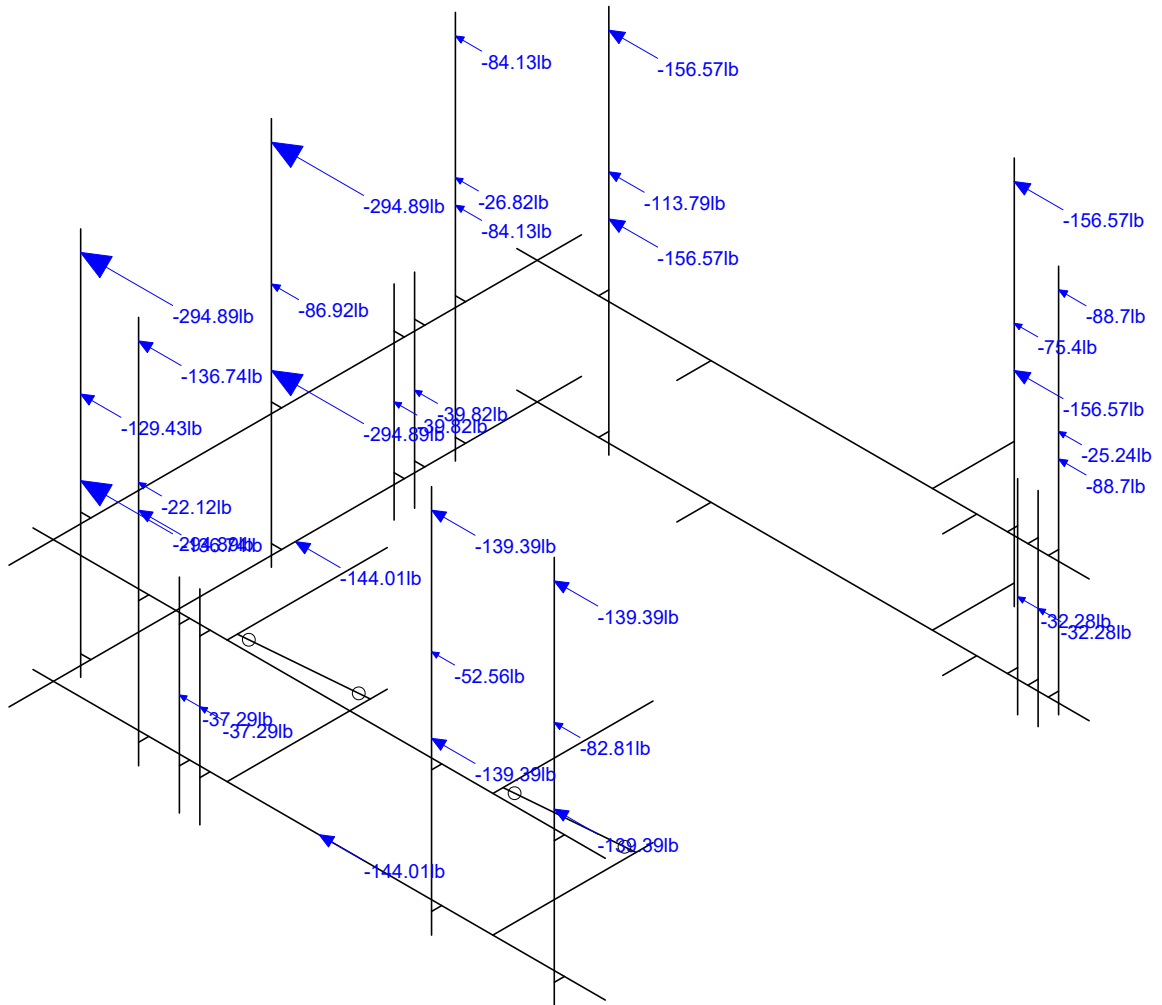
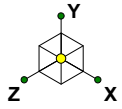
Loads: BLC 1, Self Weight
 Envelope Only Solution

Infinigy Engineering PLLC	Cornwall	Self Weight
TM		Nov 22, 2019 at 10:28 AM
1106-A0001-B		10035044 Cornwall CT_MOD_load...



Loads: BLC 2, Wind Load AZI 0
Envelope Only Solution

Infinigy Engineering PLLC	Cornwall	Wind Load AZI 000
TM		Nov 22, 2019 at 10:28 AM
1106-A0001-B		10035044 Cornwall CT_MOD_load...



Loads: BLC 5, Wind Load AZI 90
Envelope Only Solution

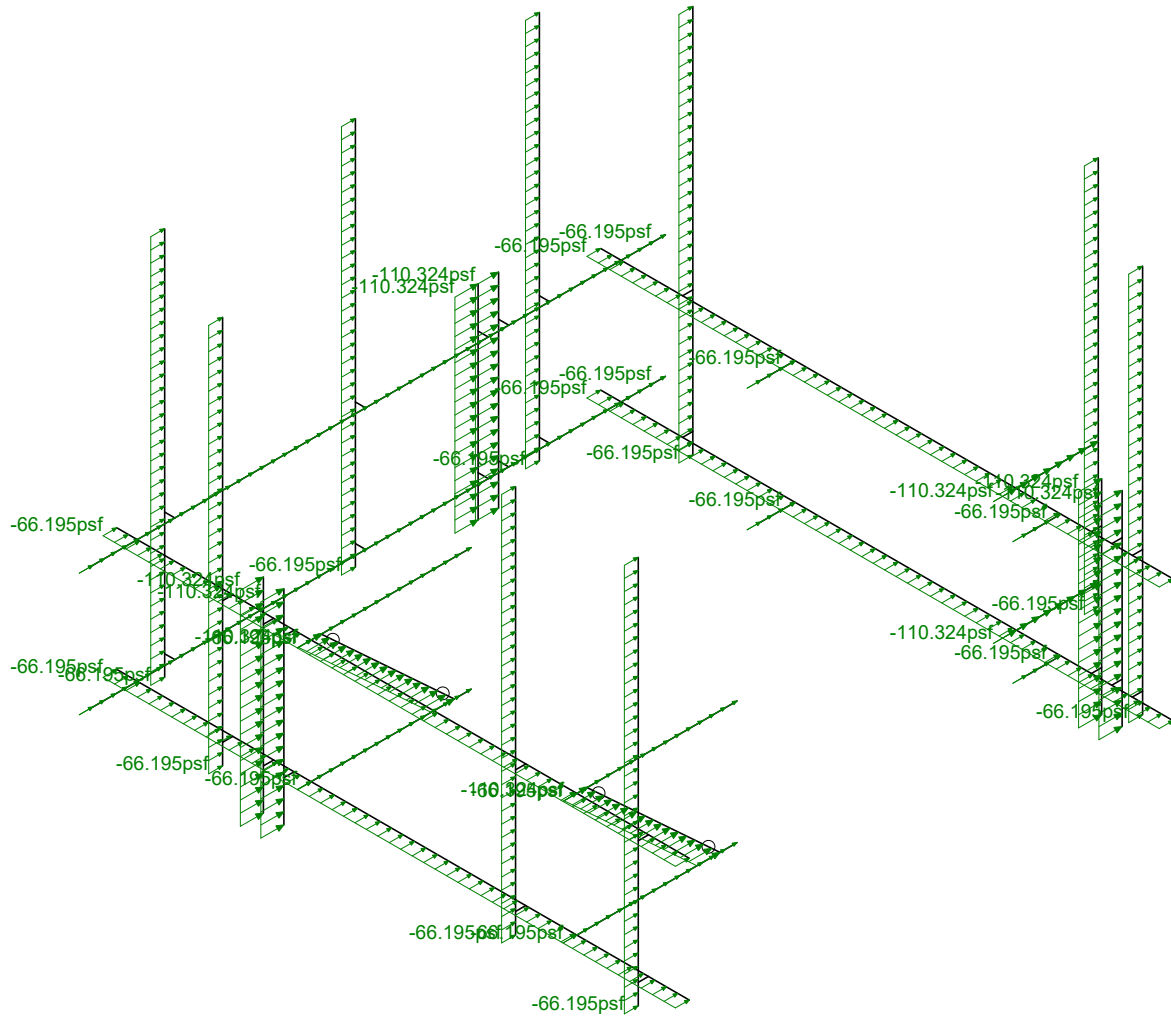
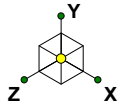
Infinigy Engineering PLLC
TM
1106-A0001-B

Cornwall

Wind Load AZI 090

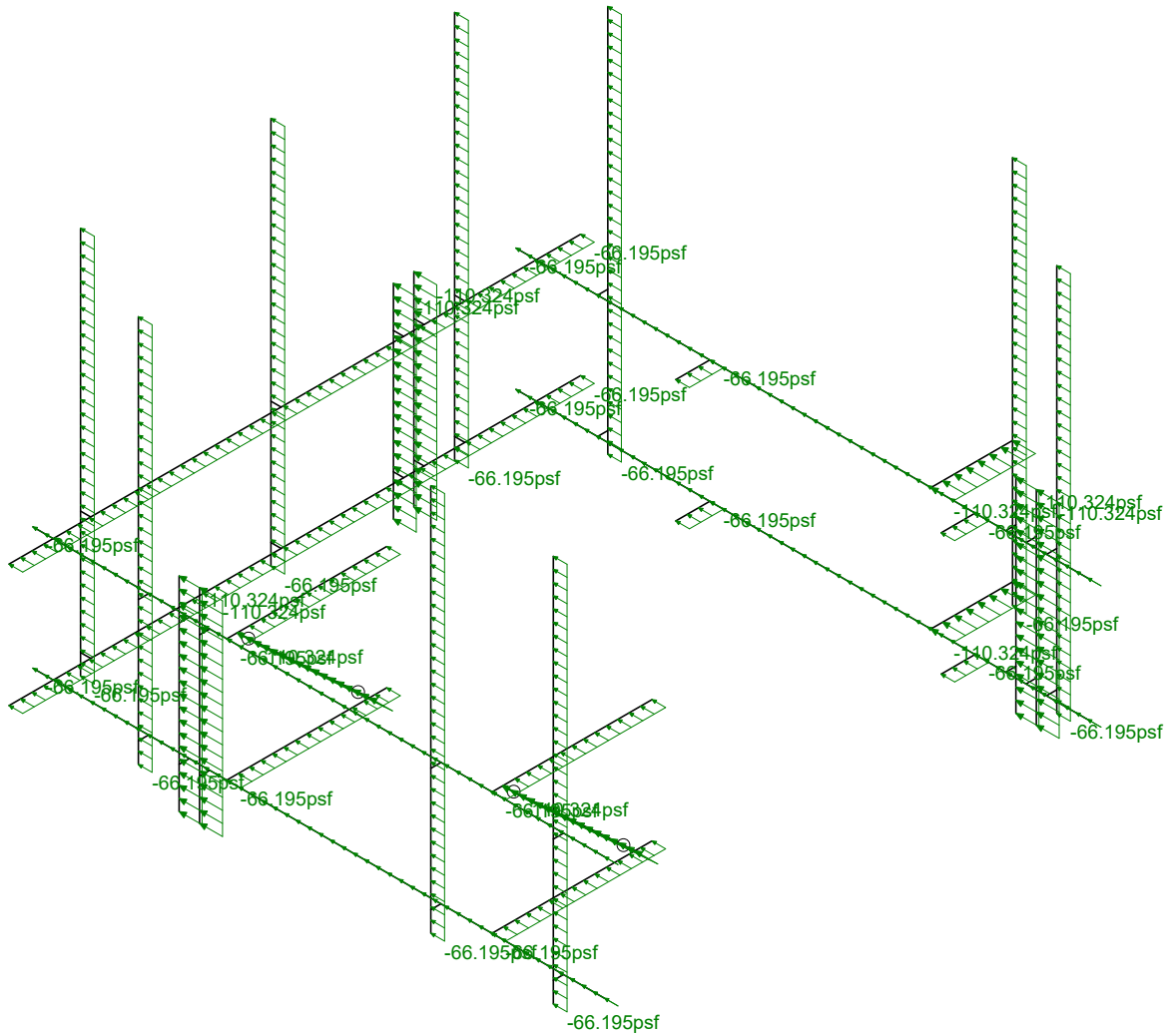
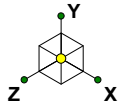
Nov 22, 2019 at 10:28 AM

10035044 Cornwall CT_MOD_load...



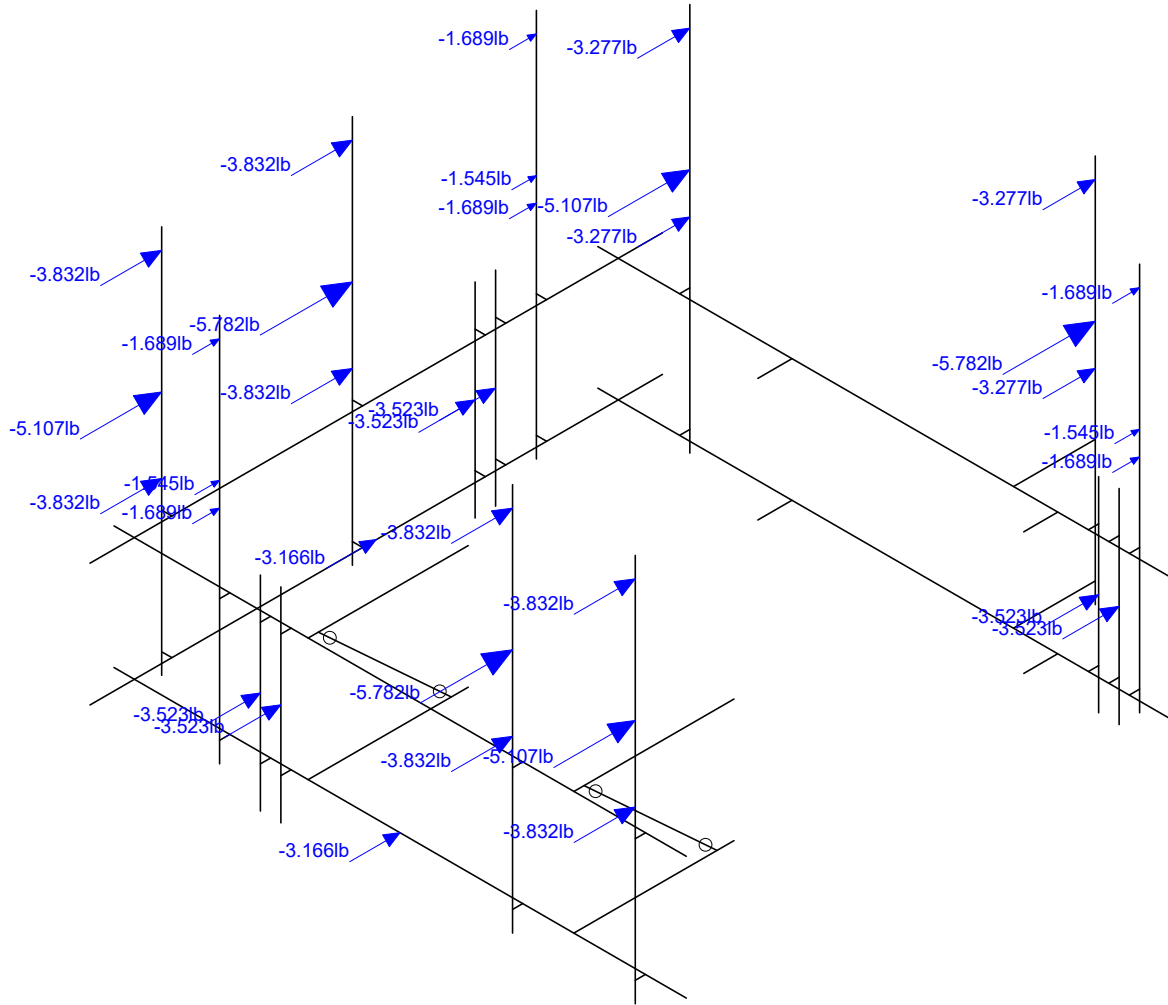
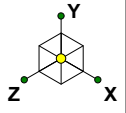
Loads: BLC 14, Distr. Wind Load Z
Envelope Only Solution

Infinigy Engineering PLLC	Cornwall	Distr Wind Load AZI 000
TM		Nov 22, 2019 at 10:29 AM
1106-A0001-B		10035044 Cornwall CT_MOD_load...



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

Infinigy Engineering PLLC	Cornwall	Distr Wind Load AZI 090
TM		Nov 22, 2019 at 10:29 AM
1106-A0001-B		10035044 Cornwall CT_MOD_load...



Loads: BLC 31, Seismic Load Z
Envelope Only Solution

Infinigy Engineering PLLC

TM

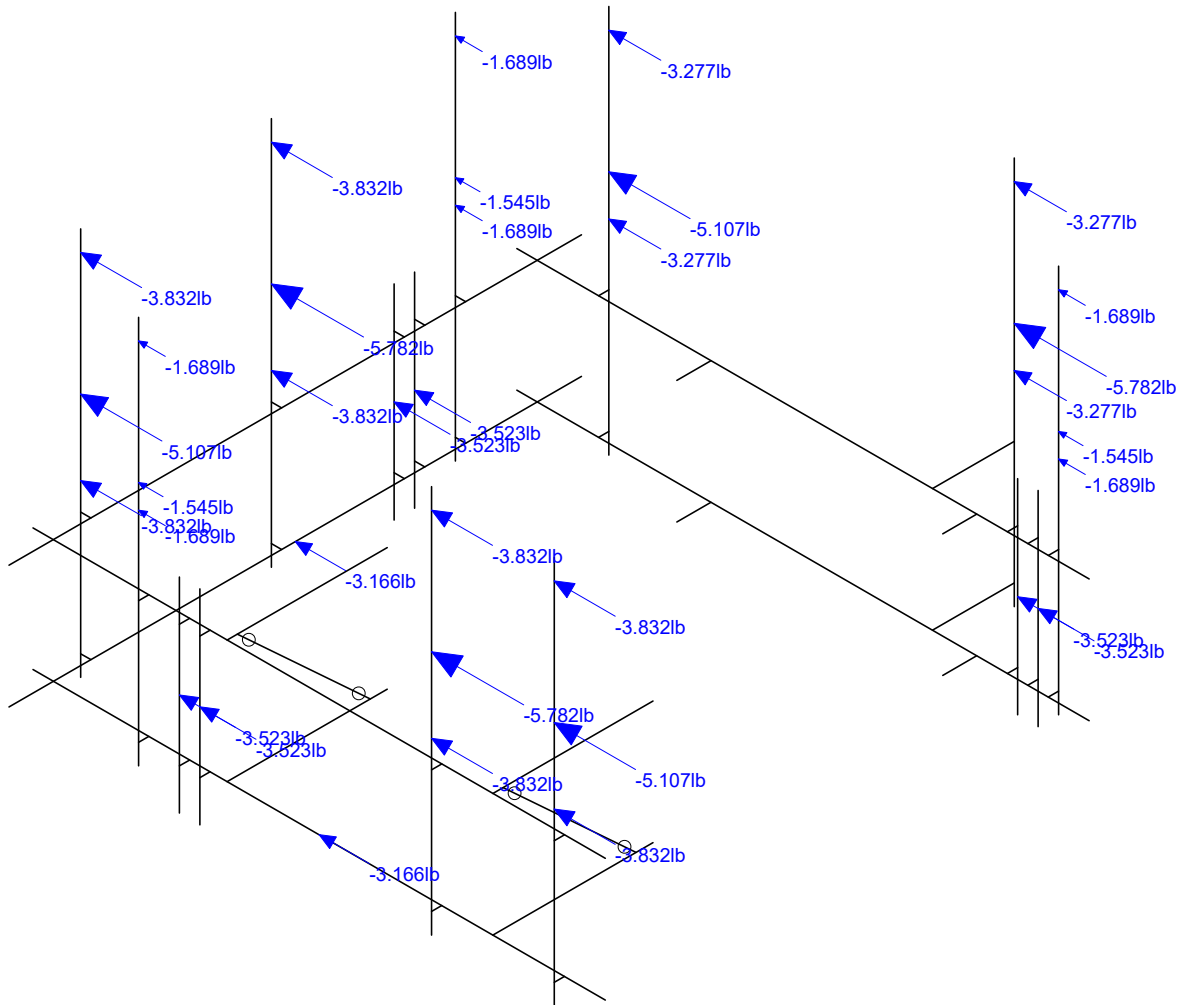
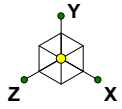
1106-A0001-B

Cornwall

Seismic Load AZI 000

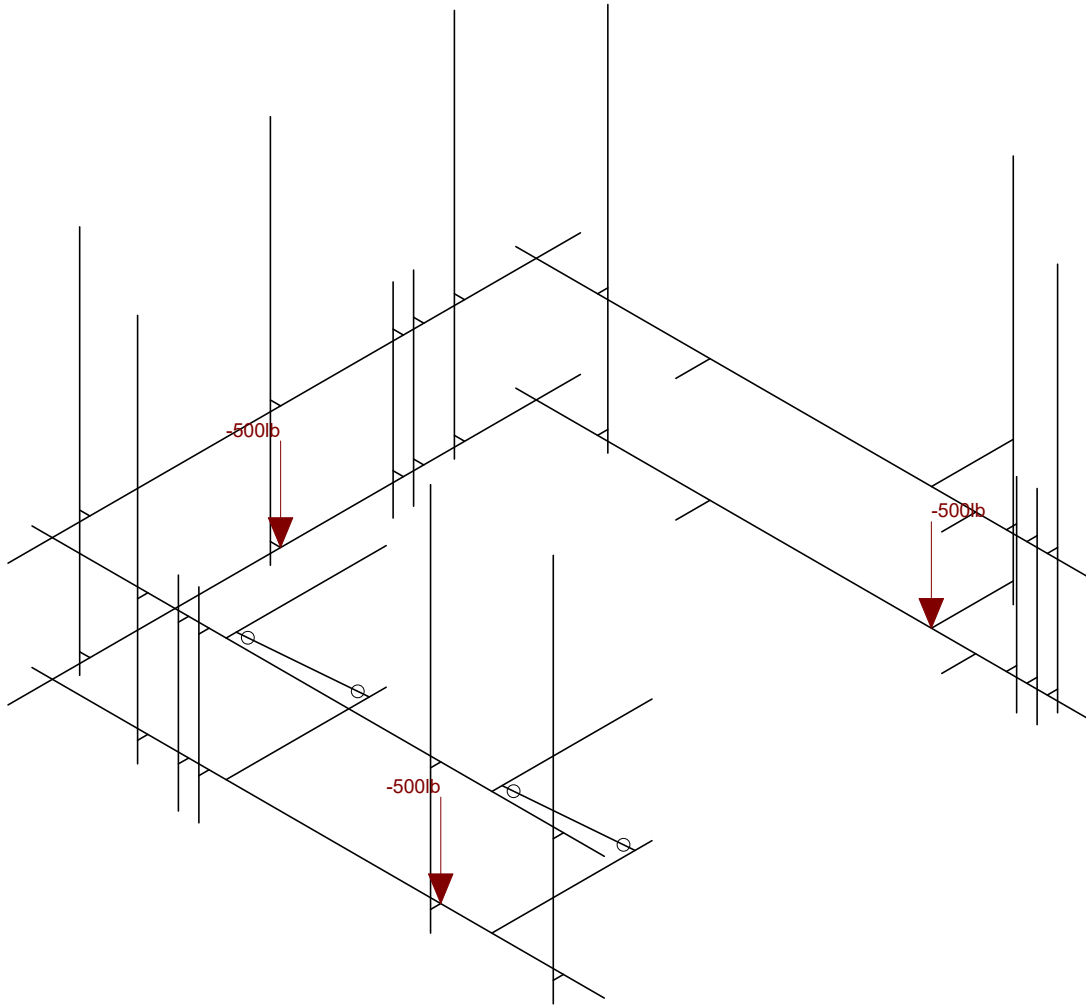
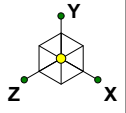
Nov 22, 2019 at 10:29 AM

10035044 Cornwall CT_MOD_load...



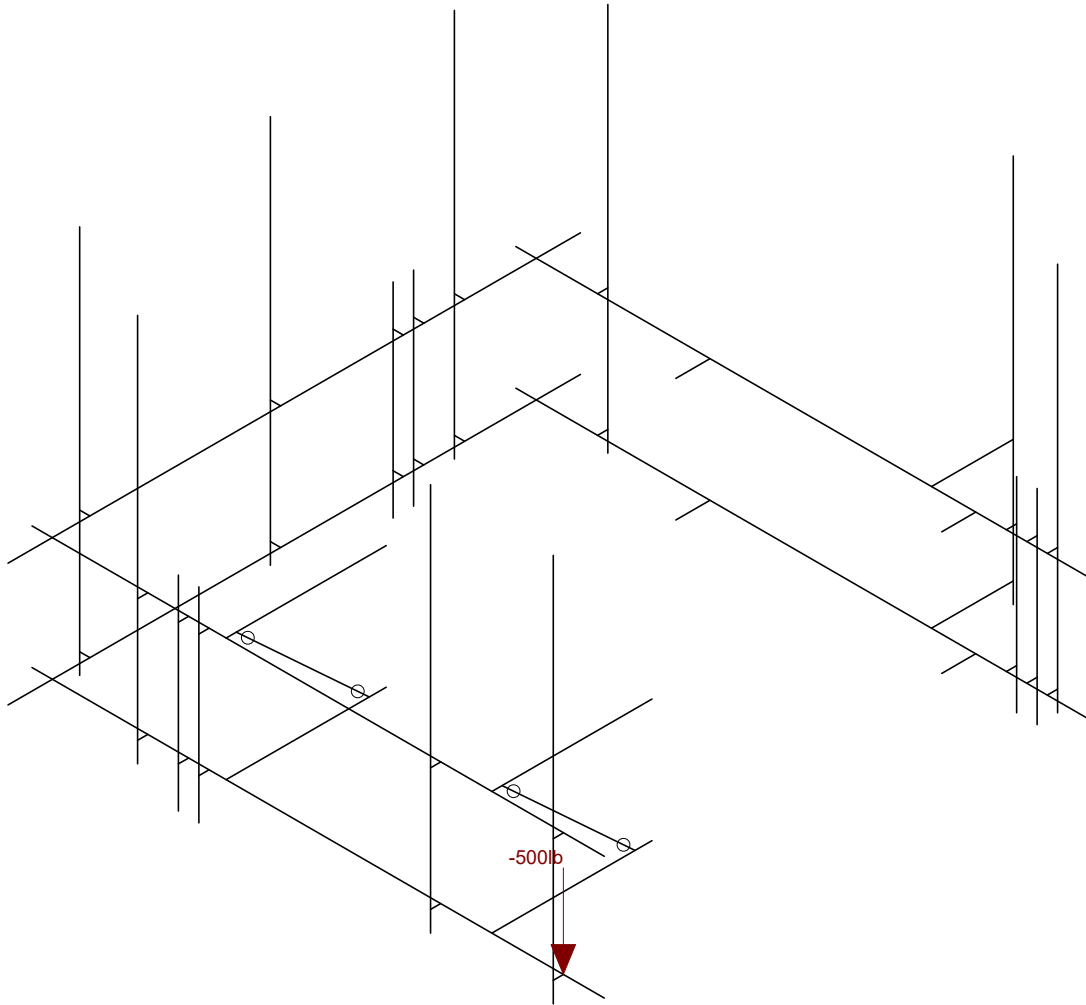
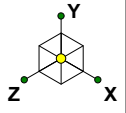
Loads: BLC 32, Seismic Load X
Envelope Only Solution

Infinigy Engineering PLLC	Cornwall	Seismic Load AZI 090
TM		Nov 22, 2019 at 10:29 AM
1106-A0001-B		10035044 Cornwall CT_MOD_load...



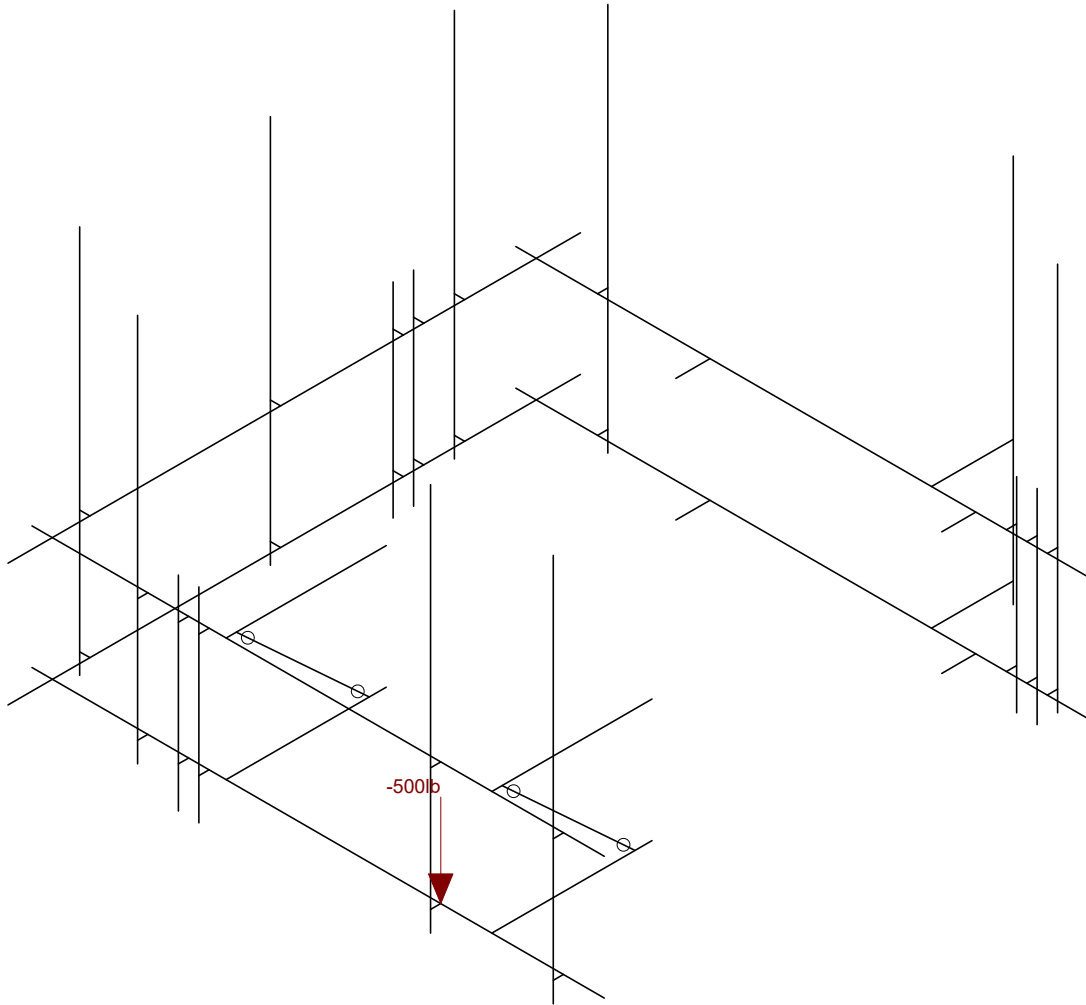
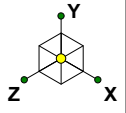
Loads: BLC 33, Service Live Loads
Envelope Only Solution

Infinigy Engineering PLLC	Cornwall	Service Load
TM		Nov 22, 2019 at 10:30 AM
1106-A0001-B		10035044 Cornwall CT_MOD_load...



Loads: BLC 34, Maintenance Load 1
Envelope Only Solution

Infinigy Engineering PLLC	Cornwall	Maintenance Load 1
TM		Nov 22, 2019 at 10:30 AM
1106-A0001-B		10035044 Cornwall CT_MOD_load...



Loads: BLC 35, Maintenance Load 2
Envelope Only Solution

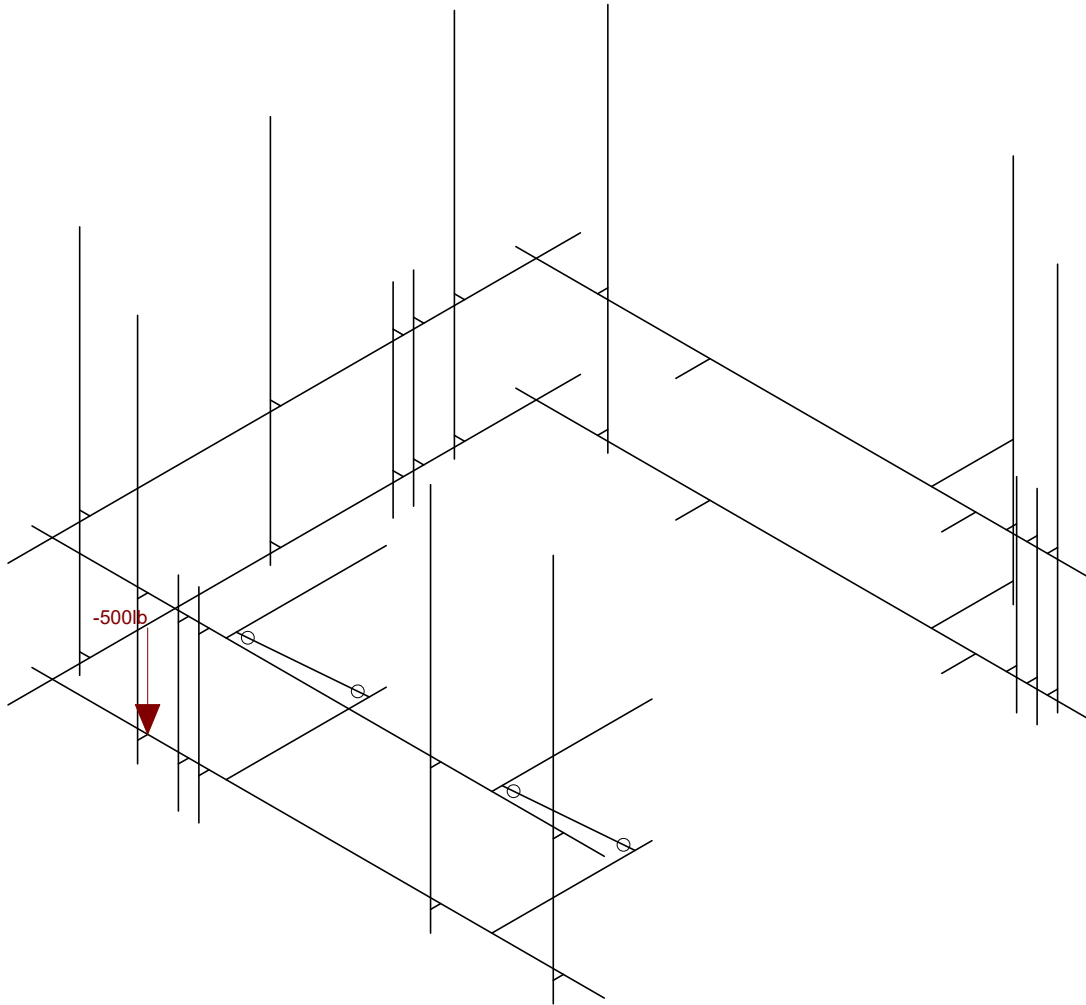
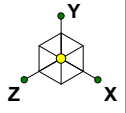
Infinigy Engineering PLLC
TM
1106-A0001-B

Cornwall

Maintenance Load 2

Nov 22, 2019 at 10:30 AM

10035044 Cornwall CT_MOD_load...



Loads: BLC 36, Maintenance Load 3
Envelope Only Solution

Infinigy Engineering PLLC
TM
1106-A0001-B

Cornwall

Maintenance Load 3

Nov 22, 2019 at 10:30 AM

10035044 Cornwall CT_MOD_load...

Program Inputs

PROJECT INFORMATION		
Client:	Smartlink	
Carrier:	AT&T Mobility	
Engineer:	Thomas Marr	

SITE INFORMATION		
Risk Category:	II	
Exposure Category:	B	
Topo Category:	5	
Site Class:	D - Stiff Soil	
Ground Elevation:	1680	ft *Rev H

MOUNT INFORMATION		
Mount Type:	Platform	
Num Sectors:	3	
Centerline AGL:	65.0	ft
Tower Height AGL:	70.0	ft

TOPOGRAPHIC DATA		
Topo Feature:	Hill	
Crest Height:	1680.0	ft
Slope Distance:	2260.0	ft
Crest Distance:	0.0	ft

FACTORS		
Directionality Fact. (K_d):	0.95	
Ground Ele. Factor (K_e):	0.94	*Rev H Only
Rooftop Speed-Up (K_s):	1.00	*Rev H Only
Topographic Factor (K_{zt}):	2.09	
Gust Effect Factor (G_h):	1.0	

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

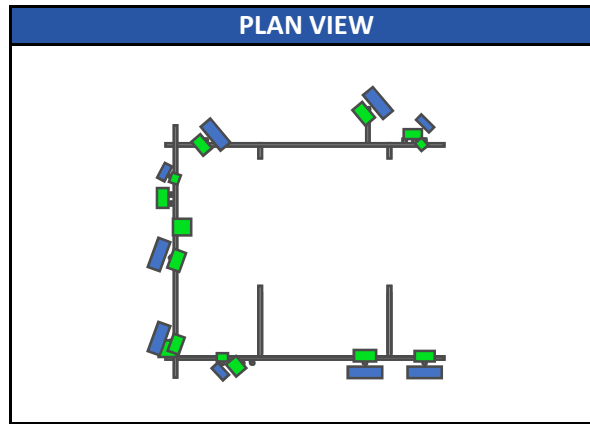
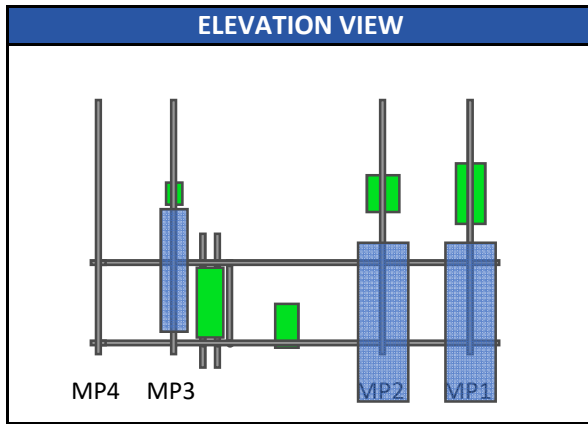
WIND AND ICE DATA		
Ultimate Wind (V_{ult}):	115	mph
Design Wind (V):	N/A	mph
Ice Wind (V_{ice}):	40	mph
Base Ice Thickness (t_i):	1.275	in
Flat Pressure:	110.32	psf
Round Pressure:	66.19	psf
Ice Wind Pressure:	8.01	psf

SEISMIC DATA		
Short-Period Accel. (S_s):	0.18	g
1-Second Accel. (S_1):	0.07	g
Short-Period Design (S_{DS}):	0.19	
1-Second Design (S_{D1}):	0.10	
Short-Period Coeff. (F_a):	1.60	
1-Second Coeff. (F_v):	2.40	
Amplification Factor (a_p):	1.00	
Response Mod. (R_p):	2.50	
Overstrength (Ω_o):	1.00	



Infinigy Wind Load Calculator V2.1.3

Program Inputs



INFINIGY
 FROM ZERO TO INFINIGY
 the solutions are endless
 Infinigy Wind Load Calculator V2.1.3

APPURTENANCE INFORMATION												
Appurtenance Name	Elevation	Qty.	K _a	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)	
POWERWAVE 7770	65.0	3	0.90	55.16	5.51	2.93	145.38	273.47	35.00	3.38	MP3	
CCI DMP65R-BU6DA	65.0	2	0.90	55.16	12.71	5.62	630.97	278.77	79.40	7.66	MP1	
CCI DMP65R-BU6DA	65.0	2	0.90	55.16	12.71	5.62	630.97	278.77	79.40	7.66	MP2	
CCI DMP65R-BU4DA	65.0	1	0.90	55.16	8.28	3.51	411.07	174.06	67.90	6.55	Leg/Flush	
CCI DMP65R-BU4DA	65.0	1	0.90	55.16	8.28	3.51	411.07	174.06	67.90	6.55	Leg/Flush	
RAYCAP DC6-48-60-18-8F	65.0	2	0.90	55.16	2.90	2.90	144.01	144.01	32.80	3.17	H12	
POWERWAVE TT19-08B-P111-001	65.0	3	0.90	55.16	0.55	0.45	27.44	22.12	16.00	1.54	MP3	
ERICSSON 4478 B14	65.0	3	0.90	55.16	1.84	1.06	91.47	52.56	59.90	5.78	MP2	
ERICSSON 4449 B5/B12	65.0	3	0.90	55.16	1.64	1.30	81.64	64.55	73.00	7.05	U1	
ERICSSON RRUS-32 B2	65.0	3	0.90	55.16	2.73	1.67	135.60	82.81	52.90	5.11	MP1	

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Rules
1	H1	N1	N2			Horizontal	Beam	Pipe	A53 Gr.B	Typical
2	H2	N3	N4			Horizontal	Beam	Pipe	A53 Gr.B	Typical
3	R3	N8	N6			RIGID	None	None	RIGID	Typical
4	R4	N7	N5			RIGID	None	None	RIGID	Typical
5	R5	N12	N10			RIGID	None	None	RIGID	Typical
6	R6	N11	N9			RIGID	None	None	RIGID	Typical
7	R7	N16	N14			RIGID	None	None	RIGID	Typical
8	R8	N15	N13			RIGID	None	None	RIGID	Typical
9	H9	N24	N28			Horizontal	Beam	Pipe	A53 Gr.B	Typical
10	H10	N23	N27			Horizontal	Beam	Pipe	A53 Gr.B	Typical
11	H11	N22	N26			Horizontal	Beam	Pipe	A53 Gr.B	Typical
12	H12	N21	N25			Horizontal	Beam	Pipe	A53 Gr.B	Typical
13	S17	N60A	N44			Standoff	Beam	Pipe	A53 Gr.B	Typical
14	S18	N59A	N43			Standoff	Beam	Pipe	A53 Gr.B	Typical
15	S19	N57A	N41			Standoff	Beam	Pipe	A53 Gr.B	Typical
16	S20	N58A	N42			Standoff	Beam	Pipe	A53 Gr.B	Typical
17	S21	N61	N57			Standoff	Beam	Pipe	A53 Gr.B	Typical
18	S22	N62	N58			Standoff	Beam	Pipe	A53 Gr.B	Typical
19	S23	N63	N59			Standoff	Beam	Pipe	A53 Gr.B	Typical
20	S24	N64	N60			Standoff	Beam	Pipe	A53 Gr.B	Typical
21	R25	N64A	N74			RIGID	None	None	RIGID	Typical
22	R26	N63A	N73			RIGID	None	None	RIGID	Typical
23	R29	N72	N78			RIGID	None	None	RIGID	Typical
24	R30	N71	N77			RIGID	None	None	RIGID	Typical
25	R31	N83	N69			RIGID	None	None	RIGID	Typical
26	R32	N84	N70			RIGID	None	None	RIGID	Typical
27	R33	N81	N65			RIGID	None	None	RIGID	Typical
28	R34	N82	N66			RIGID	None	None	RIGID	Typical
29	R35	N80	N62A			RIGID	None	None	RIGID	Typical
30	R36	N79	N61A			RIGID	None	None	RIGID	Typical
31	MP9	N97	N88			Mod Mount Pipe	None	None	A53 Gr.B	Typical
32	MP8	N98	N89			Mod Mount Pipe	None	None	A53 Gr.B	Typical
33	MP7	N99	N90			Mod Mount Pipe	None	None	A53 Gr.B	Typical
34	MP6	N94	N85			Mod Mount Pipe	None	None	A53 Gr.B	Typical
35	MP5	N95	N86			Mod Mount Pipe	None	None	A53 Gr.B	Typical
36	MP4	N96	N87			Mod Mount Pipe	None	None	A53 Gr.B	Typical
37	MP3	N102	N93			Mod Mount Pipe	None	None	A53 Gr.B	Typical
38	MP2	N101	N92			Mod Mount Pipe	None	None	A53 Gr.B	Typical
39	MP1	N100	N91			Mod Mount Pipe	None	None	A53 Gr.B	Typical
40	R42	N96A	N98A			RIGID	None	None	RIGID	Typical
41	R43	N95A	N97A			RIGID	None	None	RIGID	Typical
42	R44	N100A	N102A			RIGID	None	None	RIGID	Typical
43	R45	N99A	N101A			RIGID	None	None	RIGID	Typical
44	U1	N103	N105			uNISTRUT	None	None	A653 SS Gr...	Typical
45	U2	N104	N106			uNISTRUT	None	None	A653 SS Gr...	Typical
46	R48	N110	N108			RIGID	None	None	RIGID	Typical
47	R49	N109	N107			RIGID	None	None	RIGID	Typical
48	R50	N114	N112			RIGID	None	None	RIGID	Typical
49	R51	N113	N111			RIGID	None	None	RIGID	Typical
50	U3	N115	N117			uNISTRUT	None	None	A653 SS Gr...	Typical
51	U4	N116	N118			uNISTRUT	None	None	A653 SS Gr...	Typical
52	SB54	N120	N122			Standoff Brace	Beam	Double Angle ...	A36 Gr.36	Typical
53	SB55	N119	N121			Standoff Brace	Beam	Double Angle ...	A36 Gr.36	Typical
54	R56	N125	N123			RIGID	None	None	RIGID	Typical
55	R57	N126	N124			RIGID	None	None	RIGID	Typical
56	R58	N129	N127			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Rules
57	R59	N130	N128			RIGID	None	None	RIGID	Typical
58	U5	N131	N133			uNISTRUT	None	None	A653 SS Gr...	Typical
59	U6	N132	N134			uNISTRUT	None	None	A653 SS Gr...	Typical
60	M63	N76	N129A			Mod WWM02	None	None	A53 Gr.B	Typical
61	M64	N75	N128A			Mod WWM02	None	None	A53 Gr.B	Typical

Material Takeoff

	Material	Size	Pieces	Length[in]	Weight[LB]
1	General				
2	RIGID		28	84	0
3	Total General		28	84	0
4					
5	Hot Rolled Steel				
6	A36 Gr.36	LL3x3x4x6	2	106.2	86.69
7	A53 Gr.B	HSS3X3X3	2	48	25.725
8	A53 Gr.B	PIPE 2.5	9	1026	468.41
9	A53 Gr.B	PIPE 3.0	14	1236	725.507
10	Total HR Steel		27	2416.2	1306.331
11					
12	Cold Formed Steel				
13	A653 SS Gr33	P1000 CFB	6	360	58.551
14	Total CF Steel		6	360	58.551

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distribut...	Area(Me...Surface(...
1	Self Weight	DL		-1			35		
2	Wind Load AZI 0	WLZ					70		
3	Wind Load AZI 30	None					70		
4	Wind Load AZI 60	None					70		
5	Wind Load AZI 90	WLX					70		
6	Wind Load AZI 120	None					70		
7	Wind Load AZI 150	None					70		
8	Wind Load AZI 180	None					70		
9	Wind Load AZI 210	None					70		
10	Wind Load AZI 240	None					70		
11	Wind Load AZI 270	None					70		
12	Wind Load AZI 300	None					70		
13	Wind Load AZI 330	None					70		
14	Distr. Wind Load Z	WLZ						61	
15	Distr. Wind Load X	WLX						61	
16	Ice Weight	OL1					35	61	
17	Ice Wind Load AZI 0	OL2					70		
18	Ice Wind Load AZI 30	None					70		
19	Ice Wind Load AZI 60	None					70		
20	Ice Wind Load AZI 90	OL3					70		
21	Ice Wind Load AZI 120	None					70		
22	Ice Wind Load AZI 150	None					70		
23	Ice Wind Load AZI 180	None					70		
24	Ice Wind Load AZI 210	None					70		
25	Ice Wind Load AZI 240	None					70		
26	Ice Wind Load AZI 270	None					70		
27	Ice Wind Load AZI 300	None					70		
28	Ice Wind Load AZI 330	None					70		
29	Distr. Ice Wind Load Z	OL2						61	

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distrib...	Area(Me...	Surface(...
30	Distr. Ice Wind Load X	OL3						61		
31	Seismic Load Z	ELZ			-.097		35			
32	Seismic Load X	ELX	-.097				35			
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				

Load Combinations

	Description	So...P...	S...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...
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 ...	Yes	Y	1	1.2	3	1	14	.866	15	.5				
4	1.2DL + 1WL AZI ...	Yes	Y	1	1.2	4	1	14	.5	15	.866				
5	1.2DL + 1WL AZI ...	Yes	Y	1	1.2	5	1	14		15	1				
6	1.2DL + 1WL AZI ...	Yes	Y	1	1.2	6	1	14	-.5	15	.866				
7	1.2DL + 1WL AZI ...	Yes	Y	1	1.2	7	1	14	-.866	15	.5				
8	1.2DL + 1WL AZI ...	Yes	Y	1	1.2	8	1	14	-1	15					
9	1.2DL + 1WL AZI ...	Yes	Y	1	1.2	9	1	14	-.866	15	-.5				
10	1.2DL + 1WL AZI ...	Yes	Y	1	1.2	10	1	14	-.5	15	-.866				
11	1.2DL + 1WL AZI ...	Yes	Y	1	1.2	11	1	14		15	-1				
12	1.2DL + 1WL AZI ...	Yes	Y	1	1.2	12	1	14	.5	15	-.866				
13	1.2DL + 1WL AZI ...	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 ...	Yes	Y	1	.9	3	1	14	.866	15	.5				
16	0.9DL + 1WL AZI ...	Yes	Y	1	.9	4	1	14	.5	15	.866				
17	0.9DL + 1WL AZI ...	Yes	Y	1	.9	5	1	14		15	1				
18	0.9DL + 1WL AZI ...	Yes	Y	1	.9	6	1	14	-.5	15	.866				
19	0.9DL + 1WL AZI ...	Yes	Y	1	.9	7	1	14	-.866	15	.5				
20	0.9DL + 1WL AZI ...	Yes	Y	1	.9	8	1	14	-1	15					
21	0.9DL + 1WL AZI ...	Yes	Y	1	.9	9	1	14	-.866	15	-.5				
22	0.9DL + 1WL AZI ...	Yes	Y	1	.9	10	1	14	-.5	15	-.866				
23	0.9DL + 1WL AZI ...	Yes	Y	1	.9	11	1	14		15	-1				
24	0.9DL + 1WL AZI ...	Yes	Y	1	.9	12	1	14	.5	15	-.866				
25	0.9DL + 1WL AZI ...	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 + 1.0...	Yes	Y	1	1.2	16	1	17	1	29	1	30			
28	1.2D + 1.0Di + 1.0...	Yes	Y	1	1.2	16	1	18	1	29	.866	30	.5		
29	1.2D + 1.0Di + 1.0...	Yes	Y	1	1.2	16	1	19	1	29	.5	30	.866		
30	1.2D + 1.0Di + 1.0...	Yes	Y	1	1.2	16	1	20	1	29		30	1		
31	1.2D + 1.0Di + 1.0...	Yes	Y	1	1.2	16	1	21	1	29	-.5	30	.866		
32	1.2D + 1.0Di + 1.0...	Yes	Y	1	1.2	16	1	22	1	29	-.866	30	.5		
33	1.2D + 1.0Di + 1.0...	Yes	Y	1	1.2	16	1	23	1	29	-1	30			
34	1.2D + 1.0Di + 1.0...	Yes	Y	1	1.2	16	1	24	1	29	-.866	30	-.5		
35	1.2D + 1.0Di + 1.0...	Yes	Y	1	1.2	16	1	25	1	29	-.5	30	-.866		
36	1.2D + 1.0Di + 1.0...	Yes	Y	1	1.2	16	1	26	1	29		30	-1		
37	1.2D + 1.0Di + 1.0...	Yes	Y	1	1.2	16	1	27	1	29	.5	30	-.866		
38	1.2D + 1.0Di + 1.0...	Yes	Y	1	1.2	16	1	28	1	29	.866	30	-.5		
39	(1.2 + 0.2Sds)DL ...	Yes	Y	1	1.239	31	1	32							

Load Combinations (Continued)

	Description	So...	P...	S...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...
40	(1.2 + 0.2Sds)DL ...	Yes	Y		1	1.239	31	.866	32	.5			
41	(1.2 + 0.2Sds)DL ...	Yes	Y		1	1.239	31	.5	32	.866			
42	(1.2 + 0.2Sds)DL ...	Yes	Y		1	1.239	31		32	1			
43	(1.2 + 0.2Sds)DL ...	Yes	Y		1	1.239	31	-.5	32	.866			
44	(1.2 + 0.2Sds)DL ...	Yes	Y		1	1.239	31	-.866	32	.5			
45	(1.2 + 0.2Sds)DL ...	Yes	Y		1	1.239	31	-1	32				
46	(1.2 + 0.2Sds)DL ...	Yes	Y		1	1.239	31	-.866	32	-.5			
47	(1.2 + 0.2Sds)DL ...	Yes	Y		1	1.239	31	-.5	32	-.866			
48	(1.2 + 0.2Sds)DL ...	Yes	Y		1	1.239	31		32	-1			
49	(1.2 + 0.2Sds)DL ...	Yes	Y		1	1.239	31	.5	32	-.866			
50	(1.2 + 0.2Sds)DL ...	Yes	Y		1	1.239	31	.866	32	-.5			
51	(0.9 - 0.2Sds)DL ...	Yes	Y		1	.861	31	1	32				
52	(0.9 - 0.2Sds)DL ...	Yes	Y		1	.861	31	.866	32	.5			
53	(0.9 - 0.2Sds)DL ...	Yes	Y		1	.861	31	.5	32	.866			
54	(0.9 - 0.2Sds)DL ...	Yes	Y		1	.861	31		32	1			
55	(0.9 - 0.2Sds)DL ...	Yes	Y		1	.861	31	-.5	32	.866			
56	(0.9 - 0.2Sds)DL ...	Yes	Y		1	.861	31	-.866	32	.5			
57	(0.9 - 0.2Sds)DL ...	Yes	Y		1	.861	31	-1	32				
58	(0.9 - 0.2Sds)DL ...	Yes	Y		1	.861	31	-.866	32	-.5			
59	(0.9 - 0.2Sds)DL ...	Yes	Y		1	.861	31	-.5	32	-.866			
60	(0.9 - 0.2Sds)DL ...	Yes	Y		1	.861	31		32	-1			
61	(0.9 - 0.2Sds)DL ...	Yes	Y		1	.861	31	.5	32	-.866			
62	(0.9 - 0.2Sds)DL ...	Yes	Y		1	.861	31	.866	32	-.5			
63	1.0DL + 1.5LL + 1...	Yes	Y		1	1	2	.272	14	.272	15		33 1.5
64	1.0DL + 1.5LL + 1...	Yes	Y		1	1	3	.272	14	.236	15	.136	33 1.5
65	1.0DL + 1.5LL + 1...	Yes	Y		1	1	4	.272	14	.136	15	.236	33 1.5
66	1.0DL + 1.5LL + 1...	Yes	Y		1	1	5	.272	14		15	.272	33 1.5
67	1.0DL + 1.5LL + 1...	Yes	Y		1	1	6	.272	14	-.136	15	.236	33 1.5
68	1.0DL + 1.5LL + 1...	Yes	Y		1	1	7	.272	14	-.236	15	.136	33 1.5
69	1.0DL + 1.5LL + 1...	Yes	Y		1	1	8	.272	14	-.272	15		33 1.5
70	1.0DL + 1.5LL + 1...	Yes	Y		1	1	9	.272	14	-.236	15	-.136	33 1.5
71	1.0DL + 1.5LL + 1...	Yes	Y		1	1	10	.272	14	-.136	15	-.236	33 1.5
72	1.0DL + 1.5LL + 1...	Yes	Y		1	1	11	.272	14		15	-.272	33 1.5
73	1.0DL + 1.5LL + 1...	Yes	Y		1	1	12	.272	14	.136	15	-.236	33 1.5
74	1.0DL + 1.5LL + 1...	Yes	Y		1	1	13	.272	14	.236	15	-.136	33 1.5
75	1.2DL + 1.5LL	Yes	Y		1	1.2	33	1.5					
76	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	34	1.5	2	.068	14	.068	15
77	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	34	1.5	3	.068	14	.059	15 .034
78	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	34	1.5	4	.068	14	.034	15 .059
79	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	34	1.5	5	.068	14		15 .068
80	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	34	1.5	6	.068	14	-.034	15 .059
81	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	34	1.5	7	.068	14	-.059	15 .034
82	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	34	1.5	8	.068	14	-.068	15
83	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	34	1.5	9	.068	14	-.059	15 -.034
84	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	34	1.5	10	.068	14	-.034	15 -.059
85	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	34	1.5	11	.068	14		15 -.068
86	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	34	1.5	12	.068	14	.034	15 -.059
87	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	34	1.5	13	.068	14	.059	15 -.034
88	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	35	1.5	2	.068	14	.068	15
89	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	35	1.5	3	.068	14	.059	15 .034
90	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	35	1.5	4	.068	14	.034	15 .059
91	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	35	1.5	5	.068	14		15 .068
92	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	35	1.5	6	.068	14	-.034	15 .059
93	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	35	1.5	7	.068	14	-.059	15 .034
94	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	35	1.5	8	.068	14	-.068	15
95	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	35	1.5	9	.068	14	-.059	15 -.034
96	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	35	1.5	10	.068	14	-.034	15 -.059

Load Combinations (Continued)

	Description	So...	P...	S...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...
97	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	35	1.5	11	.068	14		15	-.068
98	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	35	1.5	12	.068	14	.034	15	-.059
99	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	35	1.5	13	.068	14	.059	15	-.034
100	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	36	1.5	2	.068	14	.068	15	
101	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	36	1.5	3	.068	14	.059	15	.034
102	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	36	1.5	4	.068	14	.034	15	.059
103	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	36	1.5	5	.068	14		15	.068
104	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	36	1.5	6	.068	14	-.034	15	.059
105	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	36	1.5	7	.068	14	-.059	15	.034
106	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	36	1.5	8	.068	14	-.068	15	
107	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	36	1.5	9	.068	14	-.059	15	-.034
108	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	36	1.5	10	.068	14	-.034	15	-.059
109	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	36	1.5	11	.068	14		15	-.068
110	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	36	1.5	12	.068	14	.034	15	-.059
111	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	36	1.5	13	.068	14	.059	15	-.034
112	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	37	1.5	2	.068	14	.068	15	
113	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	37	1.5	3	.068	14	.059	15	.034
114	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	37	1.5	4	.068	14	.034	15	.059
115	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	37	1.5	5	.068	14		15	.068
116	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	37	1.5	6	.068	14	-.034	15	.059
117	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	37	1.5	7	.068	14	-.059	15	.034
118	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	37	1.5	8	.068	14	-.068	15	
119	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	37	1.5	9	.068	14	-.059	15	-.034
120	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	37	1.5	10	.068	14	-.034	15	-.059
121	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	37	1.5	11	.068	14		15	-.068
122	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	37	1.5	12	.068	14	.034	15	-.059
123	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	37	1.5	13	.068	14	.059	15	-.034
124	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	38	1.5	2	.068	14	.068	15	
125	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	38	1.5	3	.068	14	.059	15	.034
126	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	38	1.5	4	.068	14	.034	15	.059
127	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	38	1.5	5	.068	14		15	.068
128	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	38	1.5	6	.068	14	-.034	15	.059
129	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	38	1.5	7	.068	14	-.059	15	.034
130	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	38	1.5	8	.068	14	-.068	15	
131	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	38	1.5	9	.068	14	-.059	15	-.034
132	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	38	1.5	10	.068	14	-.034	15	-.059
133	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	38	1.5	11	.068	14		15	-.068
134	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	38	1.5	12	.068	14	.034	15	-.059
135	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	38	1.5	13	.068	14	.059	15	-.034
136	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	39	1.5	2	.068	14	.068	15	
137	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	39	1.5	3	.068	14	.059	15	.034
138	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	39	1.5	4	.068	14	.034	15	.059
139	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	39	1.5	5	.068	14		15	.068
140	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	39	1.5	6	.068	14	-.034	15	.059
141	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	39	1.5	7	.068	14	-.059	15	.034
142	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	39	1.5	8	.068	14	-.068	15	
143	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	39	1.5	9	.068	14	-.059	15	-.034
144	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	39	1.5	10	.068	14	-.034	15	-.059
145	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	39	1.5	11	.068	14		15	-.068
146	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	39	1.5	12	.068	14	.034	15	-.059
147	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	39	1.5	13	.068	14	.059	15	-.034
148	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	40	1.5	2	.068	14	.068	15	
149	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	40	1.5	3	.068	14	.059	15	.034
150	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	40	1.5	4	.068	14	.034	15	.059
151	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	40	1.5	5	.068	14		15	.068
152	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	40	1.5	6	.068	14	-.034	15	.059
153	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	40	1.5	7	.068	14	-.059	15	.034

Load Combinations (Continued)

	Description	So...	P...	S...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...
154	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	40	1.5	8	.068	14	-.068	15	
155	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	40	1.5	9	.068	14	-.059	15	-.034
156	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	40	1.5	10	.068	14	-.034	15	-.059
157	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	40	1.5	11	.068	14		15	-.068
158	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	40	1.5	12	.068	14	.034	15	-.059
159	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	40	1.5	13	.068	14	.059	15	-.034
160	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	41	1.5	2	.068	14	.068	15	
161	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	41	1.5	3	.068	14	.059	15	.034
162	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	41	1.5	4	.068	14	.034	15	.059
163	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	41	1.5	5	.068	14		15	.068
164	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	41	1.5	6	.068	14	-.034	15	.059
165	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	41	1.5	7	.068	14	-.059	15	.034
166	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	41	1.5	8	.068	14	-.068	15	
167	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	41	1.5	9	.068	14	-.059	15	-.034
168	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	41	1.5	10	.068	14	-.034	15	-.059
169	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	41	1.5	11	.068	14		15	-.068
170	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	41	1.5	12	.068	14	.034	15	-.059
171	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	41	1.5	13	.068	14	.059	15	-.034
172	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	42	1.5	2	.068	14	.068	15	
173	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	42	1.5	3	.068	14	.059	15	.034
174	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	42	1.5	4	.068	14	.034	15	.059
175	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	42	1.5	5	.068	14		15	.068
176	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	42	1.5	6	.068	14	-.034	15	.059
177	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	42	1.5	7	.068	14	-.059	15	.034
178	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	42	1.5	8	.068	14	-.068	15	
179	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	42	1.5	9	.068	14	-.059	15	-.034
180	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	42	1.5	10	.068	14	-.034	15	-.059
181	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	42	1.5	11	.068	14		15	-.068
182	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	42	1.5	12	.068	14	.034	15	-.059

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	N60	max	2445.544	6	732.268	8	1684.839	2	689.95	27	1539.739	24	326.833	12
2		min	-2010.854	24	-299.939	14	-1446.273	20	20.137	21	-1771.1...	6	-243.072	18
3	N59	max	1290.353	21	950.031	74	331.177	20	729.56	13	902.868	3	287.609	181
4		min	-1731.758	3	-294.283	19	-569.146	2	-292.908	19	-668.439	21	-226.294	66
5	N57	max	556.739	25	1346.617	28	692.418	3	887.054	27	833.186	3	175.865	22
6		min	-959.322	7	-194.949	21	-636.132	21	-296.429	20	-503.659	21	-1159.6...	28
7	N58	max	3249.631	4	1312.032	27	1642.131	25	920.058	13	1537.376	24	2.744	21
8		min	-2859.418	22	169.486	21	-1718.883	7	-384.541	19	-1865.8...	6	-1136.4...	28
9	N44	max	1611.677	5	237.3	14	1724.813	14	350.788	8	3640.499	5	66.04	24
10		min	-1439.081	23	-334.222	8	-4111.521	33	-267.032	14	-3271.7...	23	-403.912	31
11	N43	max	478.865	17	3813.432	32	3925.953	30	267.886	25	1147.26	16	86.045	24
12		min	-656.787	11	-441.964	25	-536.615	23	-1821.8...	32	-1508.2...	10	-269.26	31
13	N41	max	607.309	16	1484.598	10	2199.091	9	501.068	15	1333.999	16	344.992	23
14		min	-749.609	10	-678.61	16	-1322.991	15	-883.141	9	-1683.3...	10	-386.077	5
15	N42	max	1624.647	4	611.312	14	2665.271	14	739.074	8	3653.071	4	279.304	23
16		min	-1473.705	22	-637.304	8	-3544.531	8	-708.69	14	-3280.7...	22	-329.63	5
17	Totals:	max	7170.351	17	8636.478	36	7428.379	2						
18		min	-7170.356	11	2234.668	54	-7428.378	20						

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	MP1	PIPE 2.5	.708	42.75	8	.156	41....	8	24231...	50715	3596.253596.25...	H1-1b
2	MP4	PIPE 2.5	.698	42.75	4	.208	41....	5	24231...	50715	3596.253596.25...	H1-1b
3	MP2	PIPE 2.5	.678	42.75	8	.071	41....	8	24231...	50715	3596.253596.25...	H1-1b
4	MP5	PIPE 2.5	.670	42.75	4	.053	42....	4	24231...	50715	3596.253596.25...	H1-1b
5	S17	PIPE 3.0	.645	47	5	.243	2.9...	31	60064...	65205	5748.755748.75...	H1-1b
6	S20	PIPE 3.0	.644	47	4	.144	47	5	60064...	65205	5748.755748.75...	H1-1b
7	H2	PIPE 3.0	.573	154	10	.435	154	10	22812...	65205	5748.755748.75...	H3-6
8	MP7	PIPE 2.5	.561	42.75	6	.101	41....	31	24231...	50715	3596.253596.25...	H1-1b
9	MP8	PIPE 2.5	.532	42.75	12	.125	41....	12	24231...	50715	3596.253596.25...	H1-1b
10	H11	PIPE 3.0	.511	7	10	.295	136...	8	22812...	65205	5748.755748.75...	H1-1b
11	H9	PIPE 3.0	.452	56	2	.195	22....	13	22812...	65205	5748.755748.75...	H1-1b
12	H10	PIPE 3.0	.388	56	3	.133	22....	31	22812...	65205	5748.755748.75...	H1-1b
13	MP3	PIPE 2.5	.373	42.75	5	.083	41....	8	24231...	50715	3596.253596.25...	H1-1b
14	MP9	PIPE 2.5	.373	42.75	3	.072	41....	3	24231...	50715	3596.253596.25...	H1-1b
15	MP6	PIPE 2.5	.372	42.75	7	.235	41....	5	24231...	50715	3596.253596.25...	H1-1b
16	S18	PIPE 3.0	.365	47	33	.248	47	31	60064...	65205	5748.755748.75...	H1-1b
17	S22	PIPE 3.0	.351	0	9	.307	10	28	64963...	65205	5748.755748.75...	H1-1b
18	S19	PIPE 3.0	.345	47	10	.148	47	11	60064...	65205	5748.755748.75...	H1-1b
19	H12	PIPE 3.0	.334	52.5	5	.117	120...	8	22812...	65205	5748.755748.75...	H1-1b
20	S24	PIPE 3.0	.313	10	6	.172	10	6	64963...	65205	5748.755748.75...	H1-1b
21	M63	HSS3X3X3	.300	0	12	.245	0 z	6	58201...	59535	5171.255171.25...	H1-1b
22	S21	PIPE 3.0	.273	10	28	.301	10	28	64963...	65205	5748.755748.75...	H3-6
23	H1	PIPE 3.0	.218	145.25	4	.183	154	31	22812...	65205	5748.755748.75...	H1-1b
24	S23	PIPE 3.0	.191	10	3	.101	0	4	64963...	65205	5748.755748.75...	H1-1b
25	M64	HSS3X3X3	.145	24	13	.045	0 y	13	58201...	59535	5171.255171.25...	H1-1b
26	SB54	LL3x3x4x6	.071	53.075	32	.011	0 y	9	73361...	93312	8512 4910.....	H1-1...
27	SB55	LL3x3x4x6	.030	26.538	10	.006	0 z	5	73361...	93312	8512 4910.....	H1-1b

Envelope AISI S100-16: LRFD Cold Formed Steel Code Checks

Member	Shape	Code Check	Loc[in]	LC	Shear ...	Loc[...Dir	LC	phi*Pn...	phi*Tn...	phi*M...	phi*M...	phi*...phi*...	Cb	Eqn
1	U6	P1000_CFB	.555	12.5	9	.113	47.5 y	10	6937...	17034...	428.602705.971	205...411...	1.588	H1.1-1
2	U4	P1000_CFB	.527	12.5	4	.042	12.5 y	5	6937...	17034...	348.998705.791	205...411...	1.45	H1.2-1
3	U3	P1000_CFB	.516	12.5	4	.055	12.5 y	5	6937...	17034...	348.998705.791	205...411...	1.816	H1.1-2
4	U5	P1000_CFB	.508	12.5	9	.098	47.5 y	10	6937...	17034...	348.998705.791	205...411...	1.632	H1.1-2
5	U1	P1000_CFB	.246	12.5	2	.036	12.5 y	11	6937...	17034...	409.311705.791	205...411...	1.686	H1.1-2
6	U2	P1000_CFB	.246	12.5	2	.031	12.5 y	11	6937...	17034...	409.311705.791	205...411...	1.675	H1.2-1

Hot Rolled Steel Section Sets

Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]	
1	Horizontal	PIPE 3.0	Beam	Pipe	A53 Gr.B	Typical	2.07	2.85	2.85	5.69
2	Standoff	PIPE 3.0	Beam	Pipe	A53 Gr.B	Typical	2.07	2.85	2.85	5.69
3	Standoff Brace	LL3x3x4x6	Beam	Double Angle (...)	A36 Gr.36	Typical	2.88	6.65	2.46	.063
4	Mod WWM02	HSS3X3X3	None	None	A53 Gr.B	Typical	1.89	2.46	2.46	4.03
5	Mod Mount Pipe	PIPE 2.5	None	None	A53 Gr.B	Typical	1.61	1.45	1.45	2.89

Cold Formed Steel Section Sets

Label	Shape	Type	Design List	Material	Design R...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]	
1	uNISTRUT	P1000_CFB	None	None	A653 SS Gr...	Typical	.574	.165	.232	.003

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat..	Analysis ...	Inactive	Seismic...
1	H1						Yes				None
2	H2						Yes				None
3	R3						Yes	** NA **			None
4	R4						Yes	** NA **			None
5	R5						Yes	** NA **			None
6	R6						Yes	** NA **			None
7	R7						Yes	** NA **			None
8	R8						Yes	** NA **			None
9	H9						Yes				None
10	H10						Yes				None
11	H11						Yes				None
12	H12						Yes				None
13	S17						Yes				None
14	S18						Yes				None
15	S19						Yes				None
16	S20						Yes				None
17	S21						Yes				None
18	S22						Yes				None
19	S23						Yes				None
20	S24						Yes				None
21	R25						Yes	** NA **			None
22	R26						Yes	** NA **			None
23	R29						Yes	** NA **			None
24	R30						Yes	** NA **			None
25	R31						Yes	** NA **			None
26	R32						Yes	** NA **			None
27	R33						Yes	** NA **			None
28	R34						Yes	** NA **			None
29	R35						Yes	** NA **			None
30	R36						Yes	** NA **			None
31	MP9						Yes	** NA **			None
32	MP8						Yes	** NA **			None
33	MP7						Yes	** NA **			None
34	MP6						Yes	** NA **			None
35	MP5						Yes	** NA **			None
36	MP4						Yes	** NA **			None
37	MP3						Yes	** NA **			None
38	MP2						Yes	** NA **			None
39	MP1						Yes	** NA **			None
40	R42						Yes	** NA **			None
41	R43						Yes	** NA **			None
42	R44						Yes	** NA **			None
43	R45						Yes	** NA **			None
44	U1						Yes	** NA **			None
45	U2						Yes	** NA **			None
46	R48						Yes	** NA **			None
47	R49						Yes	** NA **			None
48	R50						Yes	** NA **			None
49	R51						Yes	** NA **			None
50	U3						Yes	** NA **			None
51	U4						Yes	** NA **			None
52	SB54	BenPIN	BenPIN				Yes				None
53	SB55	BenPIN	BenPIN				Yes				None
54	R56						Yes	** NA **			None
55	R57						Yes	** NA **			None
56	R58						Yes	** NA **			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..
57	R59						Yes	** NA **			None
58	U5						Yes	** NA **			None
59	U6						Yes	** NA **			None
60	M63						Yes	** NA **			None
61	M64						Yes	** NA **			None

Hot Rolled Steel Design Parameters

	Label	Shape	Length[...]	Lbyy[in]	Lbzz[in]	Lcomp top[...]	Lcomp bot[...]	L-torque[...]	Kyy	Kzz	Cb	Functi...
1	H1	Horizontal	168			Lbyy						Lateral
2	H2	Horizontal	168			Lbyy						Lateral
3	H9	Horizontal	168			Lbyy						Lateral
4	H10	Horizontal	168			Lbyy						Lateral
5	H11	Horizontal	168			Lbyy						Lateral
6	H12	Horizontal	168			Lbyy						Lateral
7	S17	Standoff	47			Lbyy						Lateral
8	S18	Standoff	47			Lbyy						Lateral
9	S19	Standoff	47			Lbyy						Lateral
10	S20	Standoff	47			Lbyy						Lateral
11	S21	Standoff	10			Lbyy						Lateral
12	S22	Standoff	10			Lbyy						Lateral
13	S23	Standoff	10			Lbyy						Lateral
14	S24	Standoff	10			Lbyy						Lateral
15	MP9	Mod Mount Pipe	114									Lateral
16	MP8	Mod Mount Pipe	114									Lateral
17	MP7	Mod Mount Pipe	114									Lateral
18	MP6	Mod Mount Pipe	114									Lateral
19	MP5	Mod Mount Pipe	114									Lateral
20	MP4	Mod Mount Pipe	114									Lateral
21	MP3	Mod Mount Pipe	114									Lateral
22	MP2	Mod Mount Pipe	114									Lateral
23	MP1	Mod Mount Pipe	114									Lateral
24	SB54	Standoff Brace	53.075			Lbyy						Lateral
25	SB55	Standoff Brace	53.075			Lbyy						Lateral
26	M63	Mod WWM02	24									Lateral
27	M64	Mod WWM02	24									Lateral

Cold Formed Steel Design Parameters

	Label	Shape	Length...	Lbyy[in]	Lbzz[in]	Lcomp to...	Lcomp bo..	L-torque[in]	Kyy	Kzz	Cb	R	a[in]	Funct...
1	U1	uNISTRUT	60			Lbyy								Lateral
2	U2	uNISTRUT	60			Lbyy								Lateral
3	U3	uNISTRUT	60			Lbyy								Lateral
4	U4	uNISTRUT	60			Lbyy								Lateral
5	U5	uNISTRUT	60			Lbyy								Lateral
6	U6	uNISTRUT	60			Lbyy								Lateral

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	N65	L	Y	-500
2	N9	L	Y	-500
3	N75	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	N61A	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	N65	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	N69	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	N13	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	N9	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	N5	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	N71	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	N75	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	N63A	L	Y	-500

Member Point Loads (BLC 1 : Self Weight)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP3	Y	-17.5	65
2	MP3	Y	-17.5	108
3	MP1	Y	-39.7	50
4	MP1	Y	-39.7	108
5	MP2	Y	-39.7	50
6	MP2	Y	-39.7	108
7	H12	Y	-32.8	84
8	MP3	Y	-16	72
9	MP2	Y	-59.9	72
10	U1	Y	-36.5	30
11	U2	Y	-36.5	30
12	MP1	Y	-52.9	72
13	MP6	Y	-17.5	65
14	MP6	Y	-17.5	108
15	MP4	Y	-39.7	50

Member Point Loads (BLC 1 : Self Weight) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
16	MP4	Y	-39.7	108
17	MP5	Y	-39.7	50
18	MP5	Y	-39.7	108
19	H1	Y	-32.8	84
20	MP6	Y	-16	72
21	MP5	Y	-59.9	72
22	U3	Y	-36.5	30
23	U4	Y	-36.5	30
24	MP4	Y	-52.9	72
25	MP9	Y	-17.5	65
26	MP9	Y	-17.5	108
27	MP7	Y	-33.95	60
28	MP7	Y	-33.95	108
29	MP8	Y	-33.95	60
30	MP8	Y	-33.95	108
31	MP9	Y	-16	72
32	MP8	Y	-59.9	72
33	U5	Y	-36.5	30
34	U6	Y	-36.5	30
35	MP7	Y	-52.9	72

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

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP3	X	0	65
2	MP3	Z	-72.69	65
3	MP3	X	0	108
4	MP3	Z	-72.69	108
5	MP1	X	0	50
6	MP1	Z	-315.49	50
7	MP1	X	0	108
8	MP1	Z	-315.49	108
9	MP2	X	0	50
10	MP2	Z	-315.49	50
11	MP2	X	0	108
12	MP2	Z	-315.49	108
13	H12	X	0	84
14	H12	Z	-144.01	84
15	MP3	X	0	72
16	MP3	Z	-27.44	72
17	MP2	X	0	72
18	MP2	Z	-91.47	72
19	U1	X	0	30
20	U1	Z	-40.82	30
21	U2	X	0	30
22	U2	Z	-40.82	30
23	MP1	X	0	72
24	MP1	Z	-135.6	72
25	MP6	X	0	65
26	MP6	Z	-125.3	65
27	MP6	X	0	108
28	MP6	Z	-125.3	108
29	MP4	X	0	50
30	MP4	Z	-159.99	50
31	MP4	X	0	108
32	MP4	Z	-159.99	108
33	MP5	X	0	50

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

	Member Label	Direction	Magnitude[lb.,lb-ft]	Location[in, %]
34	MP5	Z	-159.99	50
35	MP5	X	0	108
36	MP5	Z	-159.99	108
37	H1	X	0	84
38	H1	Z	-144.01	84
39	MP6	X	0	72
40	MP6	Z	-22.74	72
41	MP5	X	0	72
42	MP5	Z	-57.11	72
43	U3	X	0	30
44	U3	Z	-33.28	30
45	U4	X	0	30
46	U4	Z	-33.28	30
47	MP4	X	0	72
48	MP4	Z	-88.99	72
49	MP9	X	0	65
50	MP9	Z	-120.72	65
51	MP9	X	0	108
52	MP9	Z	-120.72	108
53	MP7	X	0	60
54	MP7	Z	-135.99	60
55	MP7	X	0	108
56	MP7	Z	-135.99	108
57	MP8	X	0	60
58	MP8	Z	-135.99	60
59	MP8	X	0	108
60	MP8	Z	-135.99	108
61	MP9	X	0	72
62	MP9	Z	-24.32	72
63	MP8	X	0	72
64	MP8	Z	-68.64	72
65	U5	X	0	30
66	U5	Z	-35.81	30
67	U6	X	0	30
68	U6	Z	-35.81	30
69	MP7	X	0	72
70	MP7	Z	-104.62	72

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

	Member Label	Direction	Magnitude[lb.,lb-ft]	Location[in, %]
1	MP3	X	-44.35	65
2	MP3	Z	-76.82	65
3	MP3	X	-44.35	108
4	MP3	Z	-76.82	108
5	MP1	X	-135.73	50
6	MP1	Z	-235.09	50
7	MP1	X	-135.73	108
8	MP1	Z	-235.09	108
9	MP2	X	-135.73	50
10	MP2	Z	-235.09	50
11	MP2	X	-135.73	108
12	MP2	Z	-235.09	108
13	H12	X	-72.01	84
14	H12	Z	-124.72	84
15	MP3	X	-13.06	72
16	MP3	Z	-22.61	72

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

	Member Label	Direction	Magnitude[lb.-ft]	Location[in.-%]
17	MP2	X	-40.87	72
18	MP2	Z	-70.79	72
19	U1	X	-19.34	30
20	U1	Z	-33.5	30
21	U2	X	-19.34	30
22	U2	Z	-33.5	30
23	MP1	X	-61.2	72
24	MP1	Z	-106	72
25	MP6	X	-46.88	65
26	MP6	Z	-81.2	65
27	MP6	X	-46.88	108
28	MP6	Z	-81.2	108
29	MP4	X	-121.36	50
30	MP4	Z	-210.21	50
31	MP4	X	-121.36	108
32	MP4	Z	-210.21	108
33	MP5	X	-121.36	50
34	MP5	Z	-210.21	50
35	MP5	X	-121.36	108
36	MP5	Z	-210.21	108
37	H1	X	-72.01	84
38	H1	Z	-124.72	84
39	MP6	X	-12.62	72
40	MP6	Z	-21.86	72
41	MP5	X	-37.7	72
42	MP5	Z	-65.29	72
43	U3	X	-18.64	30
44	U3	Z	-32.29	30
45	U4	X	-18.64	30
46	U4	Z	-32.29	30
47	MP4	X	-56.9	72
48	MP4	Z	-98.55	72
49	MP9	X	-68.37	65
50	MP9	Z	-118.42	65
51	MP9	X	-68.37	108
52	MP9	Z	-118.42	108
53	MP7	X	-45.3	60
54	MP7	Z	-78.46	60
55	MP7	X	-45.3	108
56	MP7	Z	-78.46	108
57	MP8	X	-45.3	60
58	MP8	Z	-78.46	60
59	MP8	X	-45.3	108
60	MP8	Z	-78.46	108
61	MP9	X	-11.14	72
62	MP9	Z	-19.29	72
63	MP8	X	-26.87	72
64	MP8	Z	-46.54	72
65	U5	X	-16.27	30
66	U5	Z	-28.18	30
67	U6	X	-16.27	30
68	U6	Z	-28.18	30
69	MP7	X	-42.2	72
70	MP7	Z	-73.1	72

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

	Member Label	Direction	Magnitude[lb.-ft]	Location[in.-%]
--	--------------	-----------	-------------------	-----------------

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

	Member Label	Direction	Magnitude[lb.-ft]	Location[in.-%]
1	MP3	X	-104.55	65
2	MP3	Z	-60.36	65
3	MP3	X	-104.55	108
4	MP3	Z	-60.36	108
5	MP1	X	-158.84	50
6	MP1	Z	-91.71	50
7	MP1	X	-158.84	108
8	MP1	Z	-91.71	108
9	MP2	X	-158.84	50
10	MP2	Z	-91.71	50
11	MP2	X	-158.84	108
12	MP2	Z	-91.71	108
13	H12	X	-124.72	84
14	H12	Z	-72.01	84
15	MP3	X	-20.31	72
16	MP3	Z	-11.72	72
17	MP2	X	-53.94	72
18	MP2	Z	-31.15	72
19	U1	X	-29.8	30
20	U1	Z	-17.21	30
21	U2	X	-29.8	30
22	U2	Z	-17.21	30
23	MP1	X	-83.15	72
24	MP1	Z	-48.01	72
25	MP6	X	-63.37	65
26	MP6	Z	-36.59	65
27	MP6	X	-63.37	108
28	MP6	Z	-36.59	108
29	MP4	X	-268.62	50
30	MP4	Z	-155.09	50
31	MP4	X	-268.62	108
32	MP4	Z	-155.09	108
33	MP5	X	-268.62	50
34	MP5	Z	-155.09	50
35	MP5	X	-268.62	108
36	MP5	Z	-155.09	108
37	H1	X	-124.72	84
38	H1	Z	-72.01	84
39	MP6	X	-23.63	72
40	MP6	Z	-13.64	72
41	MP5	X	-78.2	72
42	MP5	Z	-45.15	72
43	U3	X	-35.13	30
44	U3	Z	-20.28	30
45	U4	X	-35.13	30
46	U4	Z	-20.28	30
47	MP4	X	-116.05	72
48	MP4	Z	-67	72
49	MP9	X	-104.55	65
50	MP9	Z	-60.36	65
51	MP9	X	-104.55	108
52	MP9	Z	-60.36	108
53	MP7	X	-87.37	60
54	MP7	Z	-50.45	60
55	MP7	X	-87.37	108
56	MP7	Z	-50.45	108
57	MP8	X	-87.37	60

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

	Member Label	Direction	Magnitude[lb.,lb-ft]	Location[in, %]
58	MP8	Z	-50.45	60
59	MP8	X	-87.37	108
60	MP8	Z	-50.45	108
61	MP9	X	-19.69	72
62	MP9	Z	-11.37	72
63	MP8	X	-49.46	72
64	MP8	Z	-28.56	72
65	U5	X	-28.82	30
66	U5	Z	-16.64	30
67	U6	X	-28.82	30
68	U6	Z	-16.64	30
69	MP7	X	-77.07	72
70	MP7	Z	-44.49	72

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

	Member Label	Direction	Magnitude[lb.,lb-ft]	Location[in, %]
1	MP3	X	-136.74	65
2	MP3	Z	0	65
3	MP3	X	-136.74	108
4	MP3	Z	0	108
5	MP1	X	-139.39	50
6	MP1	Z	0	50
7	MP1	X	-139.39	108
8	MP1	Z	0	108
9	MP2	X	-139.39	50
10	MP2	Z	0	50
11	MP2	X	-139.39	108
12	MP2	Z	0	108
13	H12	X	-144.01	84
14	H12	Z	0	84
15	MP3	X	-22.12	72
16	MP3	Z	0	72
17	MP2	X	-52.56	72
18	MP2	Z	0	72
19	U1	X	-32.28	30
20	U1	Z	0	30
21	U2	X	-32.28	30
22	U2	Z	0	30
23	MP1	X	-82.81	72
24	MP1	Z	0	72
25	MP6	X	-84.13	65
26	MP6	Z	0	65
27	MP6	X	-84.13	108
28	MP6	Z	0	108
29	MP4	X	-294.89	50
30	MP4	Z	0	50
31	MP4	X	-294.89	108
32	MP4	Z	0	108
33	MP5	X	-294.89	50
34	MP5	Z	0	50
35	MP5	X	-294.89	108
36	MP5	Z	0	108
37	H1	X	-144.01	84
38	H1	Z	0	84
39	MP6	X	-26.82	72
40	MP6	Z	0	72

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

	Member Label	Direction	Magnitude[lb.,lb-ft]	Location[in, %]
41	MP5	X	-86.92	72
42	MP5	Z	0	72
43	U3	X	-39.82	30
44	U3	Z	0	30
45	U4	X	-39.82	30
46	U4	Z	0	30
47	MP4	X	-129.43	72
48	MP4	Z	0	72
49	MP9	X	-88.7	65
50	MP9	Z	0	65
51	MP9	X	-88.7	108
52	MP9	Z	0	108
53	MP7	X	-156.57	60
54	MP7	Z	0	60
55	MP7	X	-156.57	108
56	MP7	Z	0	108
57	MP8	X	-156.57	60
58	MP8	Z	0	60
59	MP8	X	-156.57	108
60	MP8	Z	0	108
61	MP9	X	-25.24	72
62	MP9	Z	0	72
63	MP8	X	-75.4	72
64	MP8	Z	0	72
65	U5	X	-37.29	30
66	U5	Z	0	30
67	U6	X	-37.29	30
68	U6	Z	0	30
69	MP7	X	-113.79	72
70	MP7	Z	0	72

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

	Member Label	Direction	Magnitude[lb.,lb-ft]	Location[in, %]
1	MP3	X	-104.55	65
2	MP3	Z	60.36	65
3	MP3	X	-104.55	108
4	MP3	Z	60.36	108
5	MP1	X	-158.84	50
6	MP1	Z	91.71	50
7	MP1	X	-158.84	108
8	MP1	Z	91.71	108
9	MP2	X	-158.84	50
10	MP2	Z	91.71	50
11	MP2	X	-158.84	108
12	MP2	Z	91.71	108
13	H12	X	-124.72	84
14	H12	Z	72.01	84
15	MP3	X	-20.31	72
16	MP3	Z	11.72	72
17	MP2	X	-53.94	72
18	MP2	Z	31.15	72
19	U1	X	-29.8	30
20	U1	Z	17.21	30
21	U2	X	-29.8	30
22	U2	Z	17.21	30
23	MP1	X	-83.15	72

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

	Member Label	Direction	Magnitude[lb.-ft]	Location[in, %]
24	MP1	Z	48.01	72
25	MP6	X	-100.17	65
26	MP6	Z	57.83	65
27	MP6	X	-100.17	108
28	MP6	Z	57.83	108
29	MP4	X	-183.72	50
30	MP4	Z	106.07	50
31	MP4	X	-183.72	108
32	MP4	Z	106.07	108
33	MP5	X	-183.72	50
34	MP5	Z	106.07	50
35	MP5	X	-183.72	108
36	MP5	Z	106.07	108
37	H1	X	-124.72	84
38	H1	Z	72.01	84
39	MP6	X	-21.06	72
40	MP6	Z	12.16	72
41	MP5	X	-59.44	72
42	MP5	Z	34.32	72
43	U3	X	-31.01	30
44	U3	Z	17.9	30
45	U4	X	-31.01	30
46	U4	Z	17.9	30
47	MP4	X	-90.61	72
48	MP4	Z	52.31	72
49	MP9	X	-62.95	65
50	MP9	Z	36.34	65
51	MP9	X	-62.95	108
52	MP9	Z	36.34	108
53	MP7	X	-174.9	60
54	MP7	Z	100.98	60
55	MP7	X	-174.9	108
56	MP7	Z	100.98	108
57	MP8	X	-174.9	60
58	MP8	Z	100.98	60
59	MP8	X	-174.9	108
60	MP8	Z	100.98	108
61	MP9	X	-23.63	72
62	MP9	Z	13.64	72
63	MP8	X	-78.2	72
64	MP8	Z	45.15	72
65	U5	X	-35.13	30
66	U5	Z	20.28	30
67	U6	X	-35.13	30
68	U6	Z	20.28	30
69	MP7	X	-116.05	72
70	MP7	Z	67	72

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

	Member Label	Direction	Magnitude[lb.-ft]	Location[in, %]
1	MP3	X	-44.35	65
2	MP3	Z	76.82	65
3	MP3	X	-44.35	108
4	MP3	Z	76.82	108
5	MP1	X	-135.73	50
6	MP1	Z	235.09	50

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

	Member Label	Direction	Magnitude[lb.,lb.-ft]	Location[in, %]
7	MP1	X	-135.73	108
8	MP1	Z	235.09	108
9	MP2	X	-135.73	50
10	MP2	Z	235.09	50
11	MP2	X	-135.73	108
12	MP2	Z	235.09	108
13	H12	X	-72.01	84
14	H12	Z	124.72	84
15	MP3	X	-13.06	72
16	MP3	Z	22.61	72
17	MP2	X	-40.87	72
18	MP2	Z	70.79	72
19	U1	X	-19.34	30
20	U1	Z	33.5	30
21	U2	X	-19.34	30
22	U2	Z	33.5	30
23	MP1	X	-61.2	72
24	MP1	Z	106	72
25	MP6	X	-68.13	65
26	MP6	Z	118	65
27	MP6	X	-68.13	108
28	MP6	Z	118	108
29	MP4	X	-72.35	50
30	MP4	Z	125.31	50
31	MP4	X	-72.35	108
32	MP4	Z	125.31	108
33	MP5	X	-72.35	50
34	MP5	Z	125.31	50
35	MP5	X	-72.35	108
36	MP5	Z	125.31	108
37	H1	X	-72.01	84
38	H1	Z	124.72	84
39	MP6	X	-11.14	72
40	MP6	Z	19.29	72
41	MP5	X	-26.87	72
42	MP5	Z	46.54	72
43	U3	X	-16.27	30
44	U3	Z	28.18	30
45	U4	X	-16.27	30
46	U4	Z	28.18	30
47	MP4	X	-42.2	72
48	MP4	Z	73.1	72
49	MP9	X	-44.35	65
50	MP9	Z	76.82	65
51	MP9	X	-44.35	108
52	MP9	Z	76.82	108
53	MP7	X	-95.84	60
54	MP7	Z	165.99	60
55	MP7	X	-95.84	108
56	MP7	Z	165.99	108
57	MP8	X	-95.84	60
58	MP8	Z	165.99	60
59	MP8	X	-95.84	108
60	MP8	Z	165.99	108
61	MP9	X	-13.41	72
62	MP9	Z	23.23	72
63	MP8	X	-43.46	72

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
64	MP8	Z	75.28	72
65	U5	X	-19.91	30
66	U5	Z	34.48	30
67	U6	X	-19.91	30
68	U6	Z	34.48	30
69	MP7	X	-64.71	72
70	MP7	Z	112.09	72

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP3	X	0	65
2	MP3	Z	72.69	65
3	MP3	X	0	108
4	MP3	Z	72.69	108
5	MP1	X	0	50
6	MP1	Z	315.49	50
7	MP1	X	0	108
8	MP1	Z	315.49	108
9	MP2	X	0	50
10	MP2	Z	315.49	50
11	MP2	X	0	108
12	MP2	Z	315.49	108
13	H12	X	0	84
14	H12	Z	144.01	84
15	MP3	X	0	72
16	MP3	Z	27.44	72
17	MP2	X	0	72
18	MP2	Z	91.47	72
19	U1	X	0	30
20	U1	Z	40.82	30
21	U2	X	0	30
22	U2	Z	40.82	30
23	MP1	X	0	72
24	MP1	Z	135.6	72
25	MP6	X	0	65
26	MP6	Z	125.3	65
27	MP6	X	0	108
28	MP6	Z	125.3	108
29	MP4	X	0	50
30	MP4	Z	159.99	50
31	MP4	X	0	108
32	MP4	Z	159.99	108
33	MP5	X	0	50
34	MP5	Z	159.99	50
35	MP5	X	0	108
36	MP5	Z	159.99	108
37	H1	X	0	84
38	H1	Z	144.01	84
39	MP6	X	0	72
40	MP6	Z	22.74	72
41	MP5	X	0	72
42	MP5	Z	57.11	72
43	U3	X	0	30
44	U3	Z	33.28	30
45	U4	X	0	30
46	U4	Z	33.28	30

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

	Member Label	Direction	Magnitude[lb.-ft]	Location[in.-%]
47	MP4	X	0	72
48	MP4	Z	88.99	72
49	MP9	X	0	65
50	MP9	Z	120.72	65
51	MP9	X	0	108
52	MP9	Z	120.72	108
53	MP7	X	0	60
54	MP7	Z	135.99	60
55	MP7	X	0	108
56	MP7	Z	135.99	108
57	MP8	X	0	60
58	MP8	Z	135.99	60
59	MP8	X	0	108
60	MP8	Z	135.99	108
61	MP9	X	0	72
62	MP9	Z	24.32	72
63	MP8	X	0	72
64	MP8	Z	68.64	72
65	U5	X	0	30
66	U5	Z	35.81	30
67	U6	X	0	30
68	U6	Z	35.81	30
69	MP7	X	0	72
70	MP7	Z	104.62	72

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

	Member Label	Direction	Magnitude[lb.-ft]	Location[in.-%]
1	MP3	X	44.35	65
2	MP3	Z	76.82	65
3	MP3	X	44.35	108
4	MP3	Z	76.82	108
5	MP1	X	135.73	50
6	MP1	Z	235.09	50
7	MP1	X	135.73	108
8	MP1	Z	235.09	108
9	MP2	X	135.73	50
10	MP2	Z	235.09	50
11	MP2	X	135.73	108
12	MP2	Z	235.09	108
13	H12	X	72.01	84
14	H12	Z	124.72	84
15	MP3	X	13.06	72
16	MP3	Z	22.61	72
17	MP2	X	40.87	72
18	MP2	Z	70.79	72
19	U1	X	19.34	30
20	U1	Z	33.5	30
21	U2	X	19.34	30
22	U2	Z	33.5	30
23	MP1	X	61.2	72
24	MP1	Z	106	72
25	MP6	X	46.88	65
26	MP6	Z	81.2	65
27	MP6	X	46.88	108
28	MP6	Z	81.2	108
29	MP4	X	121.36	50

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

	Member Label	Direction	Magnitude[lb.,lb-ft]	Location[in, %]
30	MP4	Z	210.21	50
31	MP4	X	121.36	108
32	MP4	Z	210.21	108
33	MP5	X	121.36	50
34	MP5	Z	210.21	50
35	MP5	X	121.36	108
36	MP5	Z	210.21	108
37	H1	X	72.01	84
38	H1	Z	124.72	84
39	MP6	X	12.62	72
40	MP6	Z	21.86	72
41	MP5	X	37.7	72
42	MP5	Z	65.29	72
43	U3	X	18.64	30
44	U3	Z	32.29	30
45	U4	X	18.64	30
46	U4	Z	32.29	30
47	MP4	X	56.9	72
48	MP4	Z	98.55	72
49	MP9	X	68.37	65
50	MP9	Z	118.42	65
51	MP9	X	68.37	108
52	MP9	Z	118.42	108
53	MP7	X	45.3	60
54	MP7	Z	78.46	60
55	MP7	X	45.3	108
56	MP7	Z	78.46	108
57	MP8	X	45.3	60
58	MP8	Z	78.46	60
59	MP8	X	45.3	108
60	MP8	Z	78.46	108
61	MP9	X	11.14	72
62	MP9	Z	19.29	72
63	MP8	X	26.87	72
64	MP8	Z	46.54	72
65	U5	X	16.27	30
66	U5	Z	28.18	30
67	U6	X	16.27	30
68	U6	Z	28.18	30
69	MP7	X	42.2	72
70	MP7	Z	73.1	72

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

	Member Label	Direction	Magnitude[lb.,lb-ft]	Location[in, %]
1	MP3	X	104.55	65
2	MP3	Z	60.36	65
3	MP3	X	104.55	108
4	MP3	Z	60.36	108
5	MP1	X	158.84	50
6	MP1	Z	91.71	50
7	MP1	X	158.84	108
8	MP1	Z	91.71	108
9	MP2	X	158.84	50
10	MP2	Z	91.71	50
11	MP2	X	158.84	108
12	MP2	Z	91.71	108

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

	Member Label	Direction	Magnitude[lb.-ft]	Location[in.-%]
13	H12	X	124.72	84
14	H12	Z	72.01	84
15	MP3	X	20.31	72
16	MP3	Z	11.72	72
17	MP2	X	53.94	72
18	MP2	Z	31.15	72
19	U1	X	29.8	30
20	U1	Z	17.21	30
21	U2	X	29.8	30
22	U2	Z	17.21	30
23	MP1	X	83.15	72
24	MP1	Z	48.01	72
25	MP6	X	63.37	65
26	MP6	Z	36.59	65
27	MP6	X	63.37	108
28	MP6	Z	36.59	108
29	MP4	X	268.62	50
30	MP4	Z	155.09	50
31	MP4	X	268.62	108
32	MP4	Z	155.09	108
33	MP5	X	268.62	50
34	MP5	Z	155.09	50
35	MP5	X	268.62	108
36	MP5	Z	155.09	108
37	H1	X	124.72	84
38	H1	Z	72.01	84
39	MP6	X	23.63	72
40	MP6	Z	13.64	72
41	MP5	X	78.2	72
42	MP5	Z	45.15	72
43	U3	X	35.13	30
44	U3	Z	20.28	30
45	U4	X	35.13	30
46	U4	Z	20.28	30
47	MP4	X	116.05	72
48	MP4	Z	67	72
49	MP9	X	104.55	65
50	MP9	Z	60.36	65
51	MP9	X	104.55	108
52	MP9	Z	60.36	108
53	MP7	X	87.37	60
54	MP7	Z	50.45	60
55	MP7	X	87.37	108
56	MP7	Z	50.45	108
57	MP8	X	87.37	60
58	MP8	Z	50.45	60
59	MP8	X	87.37	108
60	MP8	Z	50.45	108
61	MP9	X	19.69	72
62	MP9	Z	11.37	72
63	MP8	X	49.46	72
64	MP8	Z	28.56	72
65	U5	X	28.82	30
66	U5	Z	16.64	30
67	U6	X	28.82	30
68	U6	Z	16.64	30
69	MP7	X	77.07	72

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

	Member Label	Direction	Magnitude[lb.-ft]	Location[in.-%]
70	MP7	Z	44.49	72

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

	Member Label	Direction	Magnitude[lb.-ft]	Location[in.-%]
1	MP3	X	136.74	65
2	MP3	Z	0	65
3	MP3	X	136.74	108
4	MP3	Z	0	108
5	MP1	X	139.39	50
6	MP1	Z	0	50
7	MP1	X	139.39	108
8	MP1	Z	0	108
9	MP2	X	139.39	50
10	MP2	Z	0	50
11	MP2	X	139.39	108
12	MP2	Z	0	108
13	H12	X	144.01	84
14	H12	Z	0	84
15	MP3	X	22.12	72
16	MP3	Z	0	72
17	MP2	X	52.56	72
18	MP2	Z	0	72
19	U1	X	32.28	30
20	U1	Z	0	30
21	U2	X	32.28	30
22	U2	Z	0	30
23	MP1	X	82.81	72
24	MP1	Z	0	72
25	MP6	X	84.13	65
26	MP6	Z	0	65
27	MP6	X	84.13	108
28	MP6	Z	0	108
29	MP4	X	294.89	50
30	MP4	Z	0	50
31	MP4	X	294.89	108
32	MP4	Z	0	108
33	MP5	X	294.89	50
34	MP5	Z	0	50
35	MP5	X	294.89	108
36	MP5	Z	0	108
37	H1	X	144.01	84
38	H1	Z	0	84
39	MP6	X	26.82	72
40	MP6	Z	0	72
41	MP5	X	86.92	72
42	MP5	Z	0	72
43	U3	X	39.82	30
44	U3	Z	0	30
45	U4	X	39.82	30
46	U4	Z	0	30
47	MP4	X	129.43	72
48	MP4	Z	0	72
49	MP9	X	88.7	65
50	MP9	Z	0	65
51	MP9	X	88.7	108
52	MP9	Z	0	108

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

	Member Label	Direction	Magnitude[lb.-ft]	Location[in, %]
53	MP7	X	156.57	60
54	MP7	Z	0	60
55	MP7	X	156.57	108
56	MP7	Z	0	108
57	MP8	X	156.57	60
58	MP8	Z	0	60
59	MP8	X	156.57	108
60	MP8	Z	0	108
61	MP9	X	25.24	72
62	MP9	Z	0	72
63	MP8	X	75.4	72
64	MP8	Z	0	72
65	U5	X	37.29	30
66	U5	Z	0	30
67	U6	X	37.29	30
68	U6	Z	0	30
69	MP7	X	113.79	72
70	MP7	Z	0	72

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

	Member Label	Direction	Magnitude[lb.-ft]	Location[in, %]
1	MP3	X	104.55	65
2	MP3	Z	-60.36	65
3	MP3	X	104.55	108
4	MP3	Z	-60.36	108
5	MP1	X	158.84	50
6	MP1	Z	-91.71	50
7	MP1	X	158.84	108
8	MP1	Z	-91.71	108
9	MP2	X	158.84	50
10	MP2	Z	-91.71	50
11	MP2	X	158.84	108
12	MP2	Z	-91.71	108
13	H12	X	124.72	84
14	H12	Z	-72.01	84
15	MP3	X	20.31	72
16	MP3	Z	-11.72	72
17	MP2	X	53.94	72
18	MP2	Z	-31.15	72
19	U1	X	29.8	30
20	U1	Z	-17.21	30
21	U2	X	29.8	30
22	U2	Z	-17.21	30
23	MP1	X	83.15	72
24	MP1	Z	-48.01	72
25	MP6	X	100.17	65
26	MP6	Z	-57.83	65
27	MP6	X	100.17	108
28	MP6	Z	-57.83	108
29	MP4	X	183.72	50
30	MP4	Z	-106.07	50
31	MP4	X	183.72	108
32	MP4	Z	-106.07	108
33	MP5	X	183.72	50
34	MP5	Z	-106.07	50
35	MP5	X	183.72	108

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

	Member Label	Direction	Magnitude[lb.-ft]	Location[in.-%]
36	MP5	Z	-106.07	108
37	H1	X	124.72	84
38	H1	Z	-72.01	84
39	MP6	X	21.06	72
40	MP6	Z	-12.16	72
41	MP5	X	59.44	72
42	MP5	Z	-34.32	72
43	U3	X	31.01	30
44	U3	Z	-17.9	30
45	U4	X	31.01	30
46	U4	Z	-17.9	30
47	MP4	X	90.61	72
48	MP4	Z	-52.31	72
49	MP9	X	62.95	65
50	MP9	Z	-36.34	65
51	MP9	X	62.95	108
52	MP9	Z	-36.34	108
53	MP7	X	174.9	60
54	MP7	Z	-100.98	60
55	MP7	X	174.9	108
56	MP7	Z	-100.98	108
57	MP8	X	174.9	60
58	MP8	Z	-100.98	60
59	MP8	X	174.9	108
60	MP8	Z	-100.98	108
61	MP9	X	23.63	72
62	MP9	Z	-13.64	72
63	MP8	X	78.2	72
64	MP8	Z	-45.15	72
65	U5	X	35.13	30
66	U5	Z	-20.28	30
67	U6	X	35.13	30
68	U6	Z	-20.28	30
69	MP7	X	116.05	72
70	MP7	Z	-67	72

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

	Member Label	Direction	Magnitude[lb.-ft]	Location[in.-%]
1	MP3	X	44.35	65
2	MP3	Z	-76.82	65
3	MP3	X	44.35	108
4	MP3	Z	-76.82	108
5	MP1	X	135.73	50
6	MP1	Z	-235.09	50
7	MP1	X	135.73	108
8	MP1	Z	-235.09	108
9	MP2	X	135.73	50
10	MP2	Z	-235.09	50
11	MP2	X	135.73	108
12	MP2	Z	-235.09	108
13	H12	X	72.01	84
14	H12	Z	-124.72	84
15	MP3	X	13.06	72
16	MP3	Z	-22.61	72
17	MP2	X	40.87	72
18	MP2	Z	-70.79	72

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

	Member Label	Direction	Magnitude[lb.,lb.-ft]	Location[in, %]
19	U1	X	19.34	30
20	U1	Z	-33.5	30
21	U2	X	19.34	30
22	U2	Z	-33.5	30
23	MP1	X	61.2	72
24	MP1	Z	-106	72
25	MP6	X	68.13	65
26	MP6	Z	-118	65
27	MP6	X	68.13	108
28	MP6	Z	-118	108
29	MP4	X	72.35	50
30	MP4	Z	-125.31	50
31	MP4	X	72.35	108
32	MP4	Z	-125.31	108
33	MP5	X	72.35	50
34	MP5	Z	-125.31	50
35	MP5	X	72.35	108
36	MP5	Z	-125.31	108
37	H1	X	72.01	84
38	H1	Z	-124.72	84
39	MP6	X	11.14	72
40	MP6	Z	-19.29	72
41	MP5	X	26.87	72
42	MP5	Z	-46.54	72
43	U3	X	16.27	30
44	U3	Z	-28.18	30
45	U4	X	16.27	30
46	U4	Z	-28.18	30
47	MP4	X	42.2	72
48	MP4	Z	-73.1	72
49	MP9	X	44.35	65
50	MP9	Z	-76.82	65
51	MP9	X	44.35	108
52	MP9	Z	-76.82	108
53	MP7	X	95.84	60
54	MP7	Z	-165.99	60
55	MP7	X	95.84	108
56	MP7	Z	-165.99	108
57	MP8	X	95.84	60
58	MP8	Z	-165.99	60
59	MP8	X	95.84	108
60	MP8	Z	-165.99	108
61	MP9	X	13.41	72
62	MP9	Z	-23.23	72
63	MP8	X	43.46	72
64	MP8	Z	-75.28	72
65	U5	X	19.91	30
66	U5	Z	-34.48	30
67	U6	X	19.91	30
68	U6	Z	-34.48	30
69	MP7	X	64.71	72
70	MP7	Z	-112.09	72

Member Point Loads (BLC 16 : Ice Weight)

	Member Label	Direction	Magnitude[lb.,lb.-ft]	Location[in, %]
1	MP3	Y	-68.521	65

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

	Member Label	Direction	Magnitude[lb.-ft]	Location[in.-%]
2	MP3	Y	-68.521	108
3	MP1	Y	-145.585	50
4	MP1	Y	-145.585	108
5	MP2	Y	-145.585	50
6	MP2	Y	-145.585	108
7	H12	Y	-115.406	84
8	MP3	Y	-28.148	72
9	MP2	Y	-68.232	72
10	U1	Y	-36.579	30
11	U2	Y	-36.579	30
12	MP1	Y	-89.017	72
13	MP6	Y	-68.521	65
14	MP6	Y	-68.521	108
15	MP4	Y	-145.585	50
16	MP4	Y	-145.585	108
17	MP5	Y	-145.585	50
18	MP5	Y	-145.585	108
19	H1	Y	-115.406	84
20	MP6	Y	-28.148	72
21	MP5	Y	-68.232	72
22	U3	Y	-36.579	30
23	U4	Y	-36.579	30
24	MP4	Y	-89.017	72
25	MP9	Y	-68.521	65
26	MP9	Y	-68.521	108
27	MP7	Y	-103.218	60
28	MP7	Y	-103.218	108
29	MP8	Y	-103.218	60
30	MP8	Y	-103.218	108
31	MP9	Y	-28.148	72
32	MP8	Y	-68.232	72
33	U5	Y	-36.579	30
34	U6	Y	-36.579	30
35	MP7	Y	-89.017	72

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

	Member Label	Direction	Magnitude[lb.-ft]	Location[in.-%]
1	MP3	X	0	65
2	MP3	Z	-8.3	65
3	MP3	X	0	108
4	MP3	Z	-8.3	108
5	MP1	X	0	50
6	MP1	Z	-19.37	50
7	MP1	X	0	108
8	MP1	Z	-19.37	108
9	MP2	X	0	50
10	MP2	Z	-19.37	50
11	MP2	X	0	108
12	MP2	Z	-19.37	108
13	H12	X	0	84
14	H12	Z	-11.66	84
15	MP3	X	0	72
16	MP3	Z	-3.76	72
17	MP2	X	0	72
18	MP2	Z	-7.27	72
19	U1	X	0	30

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

	Member Label	Direction	Magnitude[lb.,lb-ft]	Location[in.,%]
20	U1	Z	-3.33	30
21	U2	X	0	30
22	U2	Z	-3.33	30
23	MP1	X	0	72
24	MP1	Z	-10.68	72
25	MP6	X	0	65
26	MP6	Z	-10.04	65
27	MP6	X	0	108
28	MP6	Z	-10.04	108
29	MP4	X	0	50
30	MP4	Z	-13.39	50
31	MP4	X	0	108
32	MP4	Z	-13.39	108
33	MP5	X	0	50
34	MP5	Z	-13.39	50
35	MP5	X	0	108
36	MP5	Z	-13.39	108
37	H1	X	0	84
38	H1	Z	-11.66	84
39	MP6	X	0	72
40	MP6	Z	-3.53	72
41	MP5	X	0	72
42	MP5	Z	-6.04	72
43	U3	X	0	30
44	U3	Z	-3.07	30
45	U4	X	0	30
46	U4	Z	-3.07	30
47	MP4	X	0	72
48	MP4	Z	-9.07	72
49	MP9	X	0	65
50	MP9	Z	-9.89	65
51	MP9	X	0	108
52	MP9	Z	-9.89	108
53	MP7	X	0	60
54	MP7	Z	-10.15	60
55	MP7	X	0	108
56	MP7	Z	-10.15	108
57	MP8	X	0	60
58	MP8	Z	-10.15	60
59	MP8	X	0	108
60	MP8	Z	-10.15	108
61	MP9	X	0	72
62	MP9	Z	-3.61	72
63	MP8	X	0	72
64	MP8	Z	-6.45	72
65	U5	X	0	30
66	U5	Z	-3.16	30
67	U6	X	0	30
68	U6	Z	-3.16	30
69	MP7	X	0	72
70	MP7	Z	-9.61	72

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

	Member Label	Direction	Magnitude[lb.,lb-ft]	Location[in.,%]
1	MP3	X	-4.41	65
2	MP3	Z	-7.64	65

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

	Member Label	Direction	Magnitude[lb.,lb.-ft]	Location[in, %]
3	MP3	X	-4.41	108
4	MP3	Z	-7.64	108
5	MP1	X	-8.84	50
6	MP1	Z	-15.31	50
7	MP1	X	-8.84	108
8	MP1	Z	-15.31	108
9	MP2	X	-8.84	50
10	MP2	Z	-15.31	50
11	MP2	X	-8.84	108
12	MP2	Z	-15.31	108
13	H12	X	-5.83	84
14	H12	Z	-10.1	84
15	MP3	X	-1.85	72
16	MP3	Z	-3.2	72
17	MP2	X	-3.46	72
18	MP2	Z	-5.99	72
19	U1	X	-1.63	30
20	U1	Z	-2.82	30
21	U2	X	-1.63	30
22	U2	Z	-2.82	30
23	MP1	X	-5.11	72
24	MP1	Z	-8.85	72
25	MP6	X	-4.5	65
26	MP6	Z	-7.79	65
27	MP6	X	-4.5	108
28	MP6	Z	-7.79	108
29	MP4	X	-8.29	50
30	MP4	Z	-14.35	50
31	MP4	X	-8.29	108
32	MP4	Z	-14.35	108
33	MP5	X	-8.29	50
34	MP5	Z	-14.35	50
35	MP5	X	-8.29	108
36	MP5	Z	-14.35	108
37	H1	X	-5.83	84
38	H1	Z	-10.1	84
39	MP6	X	-1.83	72
40	MP6	Z	-3.16	72
41	MP5	X	-3.35	72
42	MP5	Z	-5.8	72
43	U3	X	-1.6	30
44	U3	Z	-2.78	30
45	U4	X	-1.6	30
46	U4	Z	-2.78	30
47	MP4	X	-4.96	72
48	MP4	Z	-8.6	72
49	MP9	X	-5.21	65
50	MP9	Z	-9.02	65
51	MP9	X	-5.21	108
52	MP9	Z	-9.02	108
53	MP7	X	-4.14	60
54	MP7	Z	-7.17	60
55	MP7	X	-4.14	108
56	MP7	Z	-7.17	108
57	MP8	X	-4.14	60
58	MP8	Z	-7.17	60
59	MP8	X	-4.14	108

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

	Member Label	Direction	Magnitude[lb.,lb.-ft]	Location[in.,%]
60	MP8	Z	-7.17	108
61	MP9	X	-1.75	72
62	MP9	Z	-3.04	72
63	MP8	X	-2.96	72
64	MP8	Z	-5.13	72
65	U5	X	-1.52	30
66	U5	Z	-2.64	30
67	U6	X	-1.52	30
68	U6	Z	-2.64	30
69	MP7	X	-4.45	72
70	MP7	Z	-7.72	72

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

	Member Label	Direction	Magnitude[lb.,lb.-ft]	Location[in.,%]
1	MP3	X	-8.56	65
2	MP3	Z	-4.94	65
3	MP3	X	-8.56	108
4	MP3	Z	-4.94	108
5	MP1	X	-12.38	50
6	MP1	Z	-7.15	50
7	MP1	X	-12.38	108
8	MP1	Z	-7.15	108
9	MP2	X	-12.38	50
10	MP2	Z	-7.15	50
11	MP2	X	-12.38	108
12	MP2	Z	-7.15	108
13	H12	X	-10.1	84
14	H12	Z	-5.83	84
15	MP3	X	-3.09	72
16	MP3	Z	-1.78	72
17	MP2	X	-5.39	72
18	MP2	Z	-3.11	72
19	U1	X	-2.69	30
20	U1	Z	-1.56	30
21	U2	X	-2.69	30
22	U2	Z	-1.56	30
23	MP1	X	-8.06	72
24	MP1	Z	-4.66	72
25	MP6	X	-7.2	65
26	MP6	Z	-4.16	65
27	MP6	X	-7.2	108
28	MP6	Z	-4.16	108
29	MP4	X	-16.6	50
30	MP4	Z	-9.58	50
31	MP4	X	-16.6	108
32	MP4	Z	-9.58	108
33	MP5	X	-16.6	50
34	MP5	Z	-9.58	50
35	MP5	X	-16.6	108
36	MP5	Z	-9.58	108
37	H1	X	-10.1	84
38	H1	Z	-5.83	84
39	MP6	X	-3.25	72
40	MP6	Z	-1.88	72
41	MP5	X	-6.26	72
42	MP5	Z	-3.61	72

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

	Member Label	Direction	Magnitude[lb.,lb-ft]	Location[in, %]
43	U3	X	-2.88	30
44	U3	Z	-1.66	30
45	U4	X	-2.88	30
46	U4	Z	-1.66	30
47	MP4	X	-9.2	72
48	MP4	Z	-5.31	72
49	MP9	X	-8.56	65
50	MP9	Z	-4.94	65
51	MP9	X	-8.56	108
52	MP9	Z	-4.94	108
53	MP7	X	-7.54	60
54	MP7	Z	-4.35	60
55	MP7	X	-7.54	108
56	MP7	Z	-4.35	108
57	MP8	X	-7.54	60
58	MP8	Z	-4.35	60
59	MP8	X	-7.54	108
60	MP8	Z	-4.35	108
61	MP9	X	-3.06	72
62	MP9	Z	-1.77	72
63	MP8	X	-5.23	72
64	MP8	Z	-3.02	72
65	U5	X	-2.66	30
66	U5	Z	-1.54	30
67	U6	X	-2.66	30
68	U6	Z	-1.54	30
69	MP7	X	-7.85	72
70	MP7	Z	-4.53	72

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

	Member Label	Direction	Magnitude[lb.,lb-ft]	Location[in, %]
1	MP3	X	-10.42	65
2	MP3	Z	0	65
3	MP3	X	-10.42	108
4	MP3	Z	0	108
5	MP1	X	-12.6	50
6	MP1	Z	0	50
7	MP1	X	-12.6	108
8	MP1	Z	0	108
9	MP2	X	-12.6	50
10	MP2	Z	0	50
11	MP2	X	-12.6	108
12	MP2	Z	0	108
13	H12	X	-11.66	84
14	H12	Z	0	84
15	MP3	X	-3.5	72
16	MP3	Z	0	72
17	MP2	X	-5.88	72
18	MP2	Z	0	72
19	U1	X	-3.04	30
20	U1	Z	0	30
21	U2	X	-3.04	30
22	U2	Z	0	30
23	MP1	X	-8.85	72
24	MP1	Z	0	72
25	MP6	X	-8.68	65

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

	Member Label	Direction	Magnitude[lb.-ft]	Location[in.-%]
26	MP6	Z	0	65
27	MP6	X	-8.68	108
28	MP6	Z	0	108
29	MP4	X	-18.58	50
30	MP4	Z	0	50
31	MP4	X	-18.58	108
32	MP4	Z	0	108
33	MP5	X	-18.58	50
34	MP5	Z	0	50
35	MP5	X	-18.58	108
36	MP5	Z	0	108
37	H1	X	-11.66	84
38	H1	Z	0	84
39	MP6	X	-3.73	72
40	MP6	Z	0	72
41	MP5	X	-7.1	72
42	MP5	Z	0	72
43	U3	X	-3.3	30
44	U3	Z	0	30
45	U4	X	-3.3	30
46	U4	Z	0	30
47	MP4	X	-10.47	72
48	MP4	Z	0	72
49	MP9	X	-8.83	65
50	MP9	Z	0	65
51	MP9	X	-8.83	108
52	MP9	Z	0	108
53	MP7	X	-11	60
54	MP7	Z	0	60
55	MP7	X	-11	108
56	MP7	Z	0	108
57	MP8	X	-11	60
58	MP8	Z	0	60
59	MP8	X	-11	108
60	MP8	Z	0	108
61	MP9	X	-3.65	72
62	MP9	Z	0	72
63	MP8	X	-6.69	72
64	MP8	Z	0	72
65	U5	X	-3.21	30
66	U5	Z	0	30
67	U6	X	-3.21	30
68	U6	Z	0	30
69	MP7	X	-9.93	72
70	MP7	Z	0	72

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

	Member Label	Direction	Magnitude[lb.-ft]	Location[in.-%]
1	MP3	X	-8.56	65
2	MP3	Z	4.94	65
3	MP3	X	-8.56	108
4	MP3	Z	4.94	108
5	MP1	X	-12.38	50
6	MP1	Z	7.15	50
7	MP1	X	-12.38	108
8	MP1	Z	7.15	108

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

	Member Label	Direction	Magnitude[lb.,lb-ft]	Location[in, %]
9	MP2	X	-12.38	50
10	MP2	Z	7.15	50
11	MP2	X	-12.38	108
12	MP2	Z	7.15	108
13	H12	X	-10.1	84
14	H12	Z	5.83	84
15	MP3	X	-3.09	72
16	MP3	Z	1.78	72
17	MP2	X	-5.39	72
18	MP2	Z	3.11	72
19	U1	X	-2.69	30
20	U1	Z	1.56	30
21	U2	X	-2.69	30
22	U2	Z	1.56	30
23	MP1	X	-8.06	72
24	MP1	Z	4.66	72
25	MP6	X	-8.42	65
26	MP6	Z	4.86	65
27	MP6	X	-8.42	108
28	MP6	Z	4.86	108
29	MP4	X	-13.34	50
30	MP4	Z	7.7	50
31	MP4	X	-13.34	108
32	MP4	Z	7.7	108
33	MP5	X	-13.34	50
34	MP5	Z	7.7	50
35	MP5	X	-13.34	108
36	MP5	Z	7.7	108
37	H1	X	-10.1	84
38	H1	Z	5.83	84
39	MP6	X	-3.12	72
40	MP6	Z	1.8	72
41	MP5	X	-5.59	72
42	MP5	Z	3.23	72
43	U3	X	-2.74	30
44	U3	Z	1.58	30
45	U4	X	-2.74	30
46	U4	Z	1.58	30
47	MP4	X	-8.32	72
48	MP4	Z	4.8	72
49	MP9	X	-7.19	65
50	MP9	Z	4.15	65
51	MP9	X	-7.19	108
52	MP9	Z	4.15	108
53	MP7	X	-11.15	60
54	MP7	Z	6.44	60
55	MP7	X	-11.15	108
56	MP7	Z	6.44	108
57	MP8	X	-11.15	60
58	MP8	Z	6.44	60
59	MP8	X	-11.15	108
60	MP8	Z	6.44	108
61	MP9	X	-3.25	72
62	MP9	Z	1.88	72
63	MP8	X	-6.26	72
64	MP8	Z	3.61	72
65	U5	X	-2.88	30

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

	Member Label	Direction	Magnitude[lb.-ft]	Location[in.-%]
66	U5	Z	1.66	30
67	U6	X	-2.88	30
68	U6	Z	1.66	30
69	MP7	X	-9.2	72
70	MP7	Z	5.31	72

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

	Member Label	Direction	Magnitude[lb.-ft]	Location[in.-%]
1	MP3	X	-4.41	65
2	MP3	Z	7.64	65
3	MP3	X	-4.41	108
4	MP3	Z	7.64	108
5	MP1	X	-8.84	50
6	MP1	Z	15.31	50
7	MP1	X	-8.84	108
8	MP1	Z	15.31	108
9	MP2	X	-8.84	50
10	MP2	Z	15.31	50
11	MP2	X	-8.84	108
12	MP2	Z	15.31	108
13	H12	X	-5.83	84
14	H12	Z	10.1	84
15	MP3	X	-1.85	72
16	MP3	Z	3.2	72
17	MP2	X	-3.46	72
18	MP2	Z	5.99	72
19	U1	X	-1.63	30
20	U1	Z	2.82	30
21	U2	X	-1.63	30
22	U2	Z	2.82	30
23	MP1	X	-5.11	72
24	MP1	Z	8.85	72
25	MP6	X	-5.2	65
26	MP6	Z	9.01	65
27	MP6	X	-5.2	108
28	MP6	Z	9.01	108
29	MP4	X	-6.4	50
30	MP4	Z	11.09	50
31	MP4	X	-6.4	108
32	MP4	Z	11.09	108
33	MP5	X	-6.4	50
34	MP5	Z	11.09	50
35	MP5	X	-6.4	108
36	MP5	Z	11.09	108
37	H1	X	-5.83	84
38	H1	Z	10.1	84
39	MP6	X	-1.75	72
40	MP6	Z	3.04	72
41	MP5	X	-2.96	72
42	MP5	Z	5.13	72
43	U3	X	-1.52	30
44	U3	Z	2.64	30
45	U4	X	-1.52	30
46	U4	Z	2.64	30
47	MP4	X	-4.45	72
48	MP4	Z	7.72	72

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
49	MP9	X	-4.41	65
50	MP9	Z	7.64	65
51	MP9	X	-4.41	108
52	MP9	Z	7.64	108
53	MP7	X	-6.22	60
54	MP7	Z	10.78	60
55	MP7	X	-6.22	108
56	MP7	Z	10.78	108
57	MP8	X	-6.22	60
58	MP8	Z	10.78	60
59	MP8	X	-6.22	108
60	MP8	Z	10.78	108
61	MP9	X	-1.86	72
62	MP9	Z	3.23	72
63	MP8	X	-3.55	72
64	MP8	Z	6.15	72
65	U5	X	-1.65	30
66	U5	Z	2.86	30
67	U6	X	-1.65	30
68	U6	Z	2.86	30
69	MP7	X	-5.23	72
70	MP7	Z	9.06	72

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP3	X	0	65
2	MP3	Z	8.3	65
3	MP3	X	0	108
4	MP3	Z	8.3	108
5	MP1	X	0	50
6	MP1	Z	19.37	50
7	MP1	X	0	108
8	MP1	Z	19.37	108
9	MP2	X	0	50
10	MP2	Z	19.37	50
11	MP2	X	0	108
12	MP2	Z	19.37	108
13	H12	X	0	84
14	H12	Z	11.66	84
15	MP3	X	0	72
16	MP3	Z	3.76	72
17	MP2	X	0	72
18	MP2	Z	7.27	72
19	U1	X	0	30
20	U1	Z	3.33	30
21	U2	X	0	30
22	U2	Z	3.33	30
23	MP1	X	0	72
24	MP1	Z	10.68	72
25	MP6	X	0	65
26	MP6	Z	10.04	65
27	MP6	X	0	108
28	MP6	Z	10.04	108
29	MP4	X	0	50
30	MP4	Z	13.39	50
31	MP4	X	0	108

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

	Member Label	Direction	Magnitude[lb.-ft]	Location[in.-%]
32	MP4	Z	13.39	108
33	MP5	X	0	50
34	MP5	Z	13.39	50
35	MP5	X	0	108
36	MP5	Z	13.39	108
37	H1	X	0	84
38	H1	Z	11.66	84
39	MP6	X	0	72
40	MP6	Z	3.53	72
41	MP5	X	0	72
42	MP5	Z	6.04	72
43	U3	X	0	30
44	U3	Z	3.07	30
45	U4	X	0	30
46	U4	Z	3.07	30
47	MP4	X	0	72
48	MP4	Z	9.07	72
49	MP9	X	0	65
50	MP9	Z	9.89	65
51	MP9	X	0	108
52	MP9	Z	9.89	108
53	MP7	X	0	60
54	MP7	Z	10.15	60
55	MP7	X	0	108
56	MP7	Z	10.15	108
57	MP8	X	0	60
58	MP8	Z	10.15	60
59	MP8	X	0	108
60	MP8	Z	10.15	108
61	MP9	X	0	72
62	MP9	Z	3.61	72
63	MP8	X	0	72
64	MP8	Z	6.45	72
65	U5	X	0	30
66	U5	Z	3.16	30
67	U6	X	0	30
68	U6	Z	3.16	30
69	MP7	X	0	72
70	MP7	Z	9.61	72

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

	Member Label	Direction	Magnitude[lb.-ft]	Location[in.-%]
1	MP3	X	4.41	65
2	MP3	Z	7.64	65
3	MP3	X	4.41	108
4	MP3	Z	7.64	108
5	MP1	X	8.84	50
6	MP1	Z	15.31	50
7	MP1	X	8.84	108
8	MP1	Z	15.31	108
9	MP2	X	8.84	50
10	MP2	Z	15.31	50
11	MP2	X	8.84	108
12	MP2	Z	15.31	108
13	H12	X	5.83	84
14	H12	Z	10.1	84

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

	Member Label	Direction	Magnitude[lb.,lb.-ft]	Location[in, %]
15	MP3	X	1.85	72
16	MP3	Z	3.2	72
17	MP2	X	3.46	72
18	MP2	Z	5.99	72
19	U1	X	1.63	30
20	U1	Z	2.82	30
21	U2	X	1.63	30
22	U2	Z	2.82	30
23	MP1	X	5.11	72
24	MP1	Z	8.85	72
25	MP6	X	4.5	65
26	MP6	Z	7.79	65
27	MP6	X	4.5	108
28	MP6	Z	7.79	108
29	MP4	X	8.29	50
30	MP4	Z	14.35	50
31	MP4	X	8.29	108
32	MP4	Z	14.35	108
33	MP5	X	8.29	50
34	MP5	Z	14.35	50
35	MP5	X	8.29	108
36	MP5	Z	14.35	108
37	H1	X	5.83	84
38	H1	Z	10.1	84
39	MP6	X	1.83	72
40	MP6	Z	3.16	72
41	MP5	X	3.35	72
42	MP5	Z	5.8	72
43	U3	X	1.6	30
44	U3	Z	2.78	30
45	U4	X	1.6	30
46	U4	Z	2.78	30
47	MP4	X	4.96	72
48	MP4	Z	8.6	72
49	MP9	X	5.21	65
50	MP9	Z	9.02	65
51	MP9	X	5.21	108
52	MP9	Z	9.02	108
53	MP7	X	4.14	60
54	MP7	Z	7.17	60
55	MP7	X	4.14	108
56	MP7	Z	7.17	108
57	MP8	X	4.14	60
58	MP8	Z	7.17	60
59	MP8	X	4.14	108
60	MP8	Z	7.17	108
61	MP9	X	1.75	72
62	MP9	Z	3.04	72
63	MP8	X	2.96	72
64	MP8	Z	5.13	72
65	U5	X	1.52	30
66	U5	Z	2.64	30
67	U6	X	1.52	30
68	U6	Z	2.64	30
69	MP7	X	4.45	72
70	MP7	Z	7.72	72

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

	Member Label	Direction	Magnitude[lb.,lb.-ft]	Location[in, %]
1	MP3	X	8.56	65
2	MP3	Z	4.94	65
3	MP3	X	8.56	108
4	MP3	Z	4.94	108
5	MP1	X	12.38	50
6	MP1	Z	7.15	50
7	MP1	X	12.38	108
8	MP1	Z	7.15	108
9	MP2	X	12.38	50
10	MP2	Z	7.15	50
11	MP2	X	12.38	108
12	MP2	Z	7.15	108
13	H12	X	10.1	84
14	H12	Z	5.83	84
15	MP3	X	3.09	72
16	MP3	Z	1.78	72
17	MP2	X	5.39	72
18	MP2	Z	3.11	72
19	U1	X	2.69	30
20	U1	Z	1.56	30
21	U2	X	2.69	30
22	U2	Z	1.56	30
23	MP1	X	8.06	72
24	MP1	Z	4.66	72
25	MP6	X	7.2	65
26	MP6	Z	4.16	65
27	MP6	X	7.2	108
28	MP6	Z	4.16	108
29	MP4	X	16.6	50
30	MP4	Z	9.58	50
31	MP4	X	16.6	108
32	MP4	Z	9.58	108
33	MP5	X	16.6	50
34	MP5	Z	9.58	50
35	MP5	X	16.6	108
36	MP5	Z	9.58	108
37	H1	X	10.1	84
38	H1	Z	5.83	84
39	MP6	X	3.25	72
40	MP6	Z	1.88	72
41	MP5	X	6.26	72
42	MP5	Z	3.61	72
43	U3	X	2.88	30
44	U3	Z	1.66	30
45	U4	X	2.88	30
46	U4	Z	1.66	30
47	MP4	X	9.2	72
48	MP4	Z	5.31	72
49	MP9	X	8.56	65
50	MP9	Z	4.94	65
51	MP9	X	8.56	108
52	MP9	Z	4.94	108
53	MP7	X	7.54	60
54	MP7	Z	4.35	60
55	MP7	X	7.54	108
56	MP7	Z	4.35	108
57	MP8	X	7.54	60

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

	Member Label	Direction	Magnitude[lb.,lb-ft]	Location[in, %]
58	MP8	Z	4.35	60
59	MP8	X	7.54	108
60	MP8	Z	4.35	108
61	MP9	X	3.06	72
62	MP9	Z	1.77	72
63	MP8	X	5.23	72
64	MP8	Z	3.02	72
65	U5	X	2.66	30
66	U5	Z	1.54	30
67	U6	X	2.66	30
68	U6	Z	1.54	30
69	MP7	X	7.85	72
70	MP7	Z	4.53	72

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

	Member Label	Direction	Magnitude[lb.,lb-ft]	Location[in, %]
1	MP3	X	10.42	65
2	MP3	Z	0	65
3	MP3	X	10.42	108
4	MP3	Z	0	108
5	MP1	X	12.6	50
6	MP1	Z	0	50
7	MP1	X	12.6	108
8	MP1	Z	0	108
9	MP2	X	12.6	50
10	MP2	Z	0	50
11	MP2	X	12.6	108
12	MP2	Z	0	108
13	H12	X	11.66	84
14	H12	Z	0	84
15	MP3	X	3.5	72
16	MP3	Z	0	72
17	MP2	X	5.88	72
18	MP2	Z	0	72
19	U1	X	3.04	30
20	U1	Z	0	30
21	U2	X	3.04	30
22	U2	Z	0	30
23	MP1	X	8.85	72
24	MP1	Z	0	72
25	MP6	X	8.68	65
26	MP6	Z	0	65
27	MP6	X	8.68	108
28	MP6	Z	0	108
29	MP4	X	18.58	50
30	MP4	Z	0	50
31	MP4	X	18.58	108
32	MP4	Z	0	108
33	MP5	X	18.58	50
34	MP5	Z	0	50
35	MP5	X	18.58	108
36	MP5	Z	0	108
37	H1	X	11.66	84
38	H1	Z	0	84
39	MP6	X	3.73	72
40	MP6	Z	0	72

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

	Member Label	Direction	Magnitude[lb.,lb-ft]	Location[in, %]
41	MP5	X	7.1	72
42	MP5	Z	0	72
43	U3	X	3.3	30
44	U3	Z	0	30
45	U4	X	3.3	30
46	U4	Z	0	30
47	MP4	X	10.47	72
48	MP4	Z	0	72
49	MP9	X	8.83	65
50	MP9	Z	0	65
51	MP9	X	8.83	108
52	MP9	Z	0	108
53	MP7	X	11	60
54	MP7	Z	0	60
55	MP7	X	11	108
56	MP7	Z	0	108
57	MP8	X	11	60
58	MP8	Z	0	60
59	MP8	X	11	108
60	MP8	Z	0	108
61	MP9	X	3.65	72
62	MP9	Z	0	72
63	MP8	X	6.69	72
64	MP8	Z	0	72
65	U5	X	3.21	30
66	U5	Z	0	30
67	U6	X	3.21	30
68	U6	Z	0	30
69	MP7	X	9.93	72
70	MP7	Z	0	72

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

	Member Label	Direction	Magnitude[lb.,lb-ft]	Location[in, %]
1	MP3	X	8.56	65
2	MP3	Z	-4.94	65
3	MP3	X	8.56	108
4	MP3	Z	-4.94	108
5	MP1	X	12.38	50
6	MP1	Z	-7.15	50
7	MP1	X	12.38	108
8	MP1	Z	-7.15	108
9	MP2	X	12.38	50
10	MP2	Z	-7.15	50
11	MP2	X	12.38	108
12	MP2	Z	-7.15	108
13	H12	X	10.1	84
14	H12	Z	-5.83	84
15	MP3	X	3.09	72
16	MP3	Z	-1.78	72
17	MP2	X	5.39	72
18	MP2	Z	-3.11	72
19	U1	X	2.69	30
20	U1	Z	-1.56	30
21	U2	X	2.69	30
22	U2	Z	-1.56	30
23	MP1	X	8.06	72

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

	Member Label	Direction	Magnitude[lb.,lb-ft]	Location[in, %]
24	MP1	Z	-4.66	72
25	MP6	X	8.42	65
26	MP6	Z	-4.86	65
27	MP6	X	8.42	108
28	MP6	Z	-4.86	108
29	MP4	X	13.34	50
30	MP4	Z	-7.7	50
31	MP4	X	13.34	108
32	MP4	Z	-7.7	108
33	MP5	X	13.34	50
34	MP5	Z	-7.7	50
35	MP5	X	13.34	108
36	MP5	Z	-7.7	108
37	H1	X	10.1	84
38	H1	Z	-5.83	84
39	MP6	X	3.12	72
40	MP6	Z	-1.8	72
41	MP5	X	5.59	72
42	MP5	Z	-3.23	72
43	U3	X	2.74	30
44	U3	Z	-1.58	30
45	U4	X	2.74	30
46	U4	Z	-1.58	30
47	MP4	X	8.32	72
48	MP4	Z	-4.8	72
49	MP9	X	7.19	65
50	MP9	Z	-4.15	65
51	MP9	X	7.19	108
52	MP9	Z	-4.15	108
53	MP7	X	11.15	60
54	MP7	Z	-6.44	60
55	MP7	X	11.15	108
56	MP7	Z	-6.44	108
57	MP8	X	11.15	60
58	MP8	Z	-6.44	60
59	MP8	X	11.15	108
60	MP8	Z	-6.44	108
61	MP9	X	3.25	72
62	MP9	Z	-1.88	72
63	MP8	X	6.26	72
64	MP8	Z	-3.61	72
65	U5	X	2.88	30
66	U5	Z	-1.66	30
67	U6	X	2.88	30
68	U6	Z	-1.66	30
69	MP7	X	9.2	72
70	MP7	Z	-5.31	72

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

	Member Label	Direction	Magnitude[lb.,lb-ft]	Location[in, %]
1	MP3	X	4.41	65
2	MP3	Z	-7.64	65
3	MP3	X	4.41	108
4	MP3	Z	-7.64	108
5	MP1	X	8.84	50
6	MP1	Z	-15.31	50

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

	Member Label	Direction	Magnitude[lb.-ft]	Location[in.-%]
7	MP1	X	8.84	108
8	MP1	Z	-15.31	108
9	MP2	X	8.84	50
10	MP2	Z	-15.31	50
11	MP2	X	8.84	108
12	MP2	Z	-15.31	108
13	H12	X	5.83	84
14	H12	Z	-10.1	84
15	MP3	X	1.85	72
16	MP3	Z	-3.2	72
17	MP2	X	3.46	72
18	MP2	Z	-5.99	72
19	U1	X	1.63	30
20	U1	Z	-2.82	30
21	U2	X	1.63	30
22	U2	Z	-2.82	30
23	MP1	X	5.11	72
24	MP1	Z	-8.85	72
25	MP6	X	5.2	65
26	MP6	Z	-9.01	65
27	MP6	X	5.2	108
28	MP6	Z	-9.01	108
29	MP4	X	6.4	50
30	MP4	Z	-11.09	50
31	MP4	X	6.4	108
32	MP4	Z	-11.09	108
33	MP5	X	6.4	50
34	MP5	Z	-11.09	50
35	MP5	X	6.4	108
36	MP5	Z	-11.09	108
37	H1	X	5.83	84
38	H1	Z	-10.1	84
39	MP6	X	1.75	72
40	MP6	Z	-3.04	72
41	MP5	X	2.96	72
42	MP5	Z	-5.13	72
43	U3	X	1.52	30
44	U3	Z	-2.64	30
45	U4	X	1.52	30
46	U4	Z	-2.64	30
47	MP4	X	4.45	72
48	MP4	Z	-7.72	72
49	MP9	X	4.41	65
50	MP9	Z	-7.64	65
51	MP9	X	4.41	108
52	MP9	Z	-7.64	108
53	MP7	X	6.22	60
54	MP7	Z	-10.78	60
55	MP7	X	6.22	108
56	MP7	Z	-10.78	108
57	MP8	X	6.22	60
58	MP8	Z	-10.78	60
59	MP8	X	6.22	108
60	MP8	Z	-10.78	108
61	MP9	X	1.86	72
62	MP9	Z	-3.23	72
63	MP8	X	3.55	72

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

	Member Label	Direction	Magnitude[lb.,lb-ft]	Location[in, %]
64	MP8	Z	-6.15	72
65	U5	X	1.65	30
66	U5	Z	-2.86	30
67	U6	X	1.65	30
68	U6	Z	-2.86	30
69	MP7	X	5.23	72
70	MP7	Z	-9.06	72

Member Point Loads (BLC 31 : Seismic Load Z)

	Member Label	Direction	Magnitude[lb.,lb-ft]	Location[in, %]
1	MP3	Z	-1.689	65
2	MP3	Z	-1.689	108
3	MP1	Z	-3.832	50
4	MP1	Z	-3.832	108
5	MP2	Z	-3.832	50
6	MP2	Z	-3.832	108
7	H12	Z	-3.166	84
8	MP3	Z	-1.545	72
9	MP2	Z	-5.782	72
10	U1	Z	-3.523	30
11	U2	Z	-3.523	30
12	MP1	Z	-5.107	72
13	MP6	Z	-1.689	65
14	MP6	Z	-1.689	108
15	MP4	Z	-3.832	50
16	MP4	Z	-3.832	108
17	MP5	Z	-3.832	50
18	MP5	Z	-3.832	108
19	H1	Z	-3.166	84
20	MP6	Z	-1.545	72
21	MP5	Z	-5.782	72
22	U3	Z	-3.523	30
23	U4	Z	-3.523	30
24	MP4	Z	-5.107	72
25	MP9	Z	-1.689	65
26	MP9	Z	-1.689	108
27	MP7	Z	-3.277	60
28	MP7	Z	-3.277	108
29	MP8	Z	-3.277	60
30	MP8	Z	-3.277	108
31	MP9	Z	-1.545	72
32	MP8	Z	-5.782	72
33	U5	Z	-3.523	30
34	U6	Z	-3.523	30
35	MP7	Z	-5.107	72

Member Point Loads (BLC 32 : Seismic Load X)

	Member Label	Direction	Magnitude[lb.,lb-ft]	Location[in, %]
1	MP3	X	-1.689	65
2	MP3	X	-1.689	108
3	MP1	X	-3.832	50
4	MP1	X	-3.832	108
5	MP2	X	-3.832	50
6	MP2	X	-3.832	108
7	H12	X	-3.166	84
8	MP3	X	-1.545	72

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

	Member Label	Direction	Magnitude[lb.,lb.-ft]	Location[in.-%]
9	MP2	X	-5.782	72
10	U1	X	-3.523	30
11	U2	X	-3.523	30
12	MP1	X	-5.107	72
13	MP6	X	-1.689	65
14	MP6	X	-1.689	108
15	MP4	X	-3.832	50
16	MP4	X	-3.832	108
17	MP5	X	-3.832	50
18	MP5	X	-3.832	108
19	H1	X	-3.166	84
20	MP6	X	-1.545	72
21	MP5	X	-5.782	72
22	U3	X	-3.523	30
23	U4	X	-3.523	30
24	MP4	X	-5.107	72
25	MP9	X	-1.689	65
26	MP9	X	-1.689	108
27	MP7	X	-3.277	60
28	MP7	X	-3.277	108
29	MP8	X	-3.277	60
30	MP8	X	-3.277	108
31	MP9	X	-1.545	72
32	MP8	X	-5.782	72
33	U5	X	-3.523	30
34	U6	X	-3.523	30
35	MP7	X	-5.107	72

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

	Member Label	Direction	Start Magnitude[lb./ft.F,psf]	End Magnitude[lb./ft.F,psf]	Start Location[in...]	End Location[in...]
1	H1	SZ	-66.195	-66.195	0	%100
2	H2	SZ	-66.195	-66.195	0	%100
3	R3	SZ	0	0	0	%100
4	R4	SZ	0	0	0	%100
5	R5	SZ	0	0	0	%100
6	R6	SZ	0	0	0	%100
7	R7	SZ	0	0	0	%100
8	R8	SZ	0	0	0	%100
9	H9	SZ	-66.195	-66.195	0	%100
10	H10	SZ	-66.195	-66.195	0	%100
11	H11	SZ	-66.195	-66.195	0	%100
12	H12	SZ	-66.195	-66.195	0	%100
13	S17	SZ	-66.195	-66.195	0	%100
14	S18	SZ	-66.195	-66.195	0	%100
15	S19	SZ	-66.195	-66.195	0	%100
16	S20	SZ	-66.195	-66.195	0	%100
17	S21	SZ	-66.195	-66.195	0	%100
18	S22	SZ	-66.195	-66.195	0	%100
19	S23	SZ	-66.195	-66.195	0	%100
20	S24	SZ	-66.195	-66.195	0	%100
21	R25	SZ	0	0	0	%100
22	R26	SZ	0	0	0	%100
23	R29	SZ	0	0	0	%100
24	R30	SZ	0	0	0	%100
25	R31	SZ	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft,F,psf]	Start Location[in,ft]	End Location[in,ft]
26	R32	SZ	0	0	0	%100
27	R33	SZ	0	0	0	%100
28	R34	SZ	0	0	0	%100
29	R35	SZ	0	0	0	%100
30	R36	SZ	0	0	0	%100
31	MP9	SZ	-66.195	-66.195	0	%100
32	MP8	SZ	-66.195	-66.195	0	%100
33	MP7	SZ	-66.195	-66.195	0	%100
34	MP6	SZ	-66.195	-66.195	0	%100
35	MP5	SZ	-66.195	-66.195	0	%100
36	MP4	SZ	-66.195	-66.195	0	%100
37	MP3	SZ	-66.195	-66.195	0	%100
38	MP2	SZ	-66.195	-66.195	0	%100
39	MP1	SZ	-66.195	-66.195	0	%100
40	R42	SZ	0	0	0	%100
41	R43	SZ	0	0	0	%100
42	R44	SZ	0	0	0	%100
43	R45	SZ	0	0	0	%100
44	U1	SZ	-110.324	-110.324	0	%100
45	U2	SZ	-110.324	-110.324	0	%100
46	R48	SZ	0	0	0	%100
47	R49	SZ	0	0	0	%100
48	R50	SZ	0	0	0	%100
49	R51	SZ	0	0	0	%100
50	U3	SZ	-110.324	-110.324	0	%100
51	U4	SZ	-110.324	-110.324	0	%100
52	SB54	SZ	-110.324	-110.324	0	%100
53	SB55	SZ	-110.324	-110.324	0	%100
54	R56	SZ	0	0	0	%100
55	R57	SZ	0	0	0	%100
56	R58	SZ	0	0	0	%100
57	R59	SZ	0	0	0	%100
58	U5	SZ	-110.324	-110.324	0	%100
59	U6	SZ	-110.324	-110.324	0	%100
60	M63	SZ	-110.324	-110.324	0	%100
61	M64	SZ	-110.324	-110.324	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft,F,psf]	Start Location[in,ft]	End Location[in,ft]
1	H1	SX	-66.195	-66.195	0	%100
2	H2	SX	-66.195	-66.195	0	%100
3	R3	SX	0	0	0	%100
4	R4	SX	0	0	0	%100
5	R5	SX	0	0	0	%100
6	R6	SX	0	0	0	%100
7	R7	SX	0	0	0	%100
8	R8	SX	0	0	0	%100
9	H9	SX	-66.195	-66.195	0	%100
10	H10	SX	-66.195	-66.195	0	%100
11	H11	SX	-66.195	-66.195	0	%100
12	H12	SX	-66.195	-66.195	0	%100
13	S17	SX	-66.195	-66.195	0	%100
14	S18	SX	-66.195	-66.195	0	%100
15	S19	SX	-66.195	-66.195	0	%100
16	S20	SX	-66.195	-66.195	0	%100
17	S21	SX	-66.195	-66.195	0	%100

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

	Member Label	Direction	Start Magnitude[...]	End Magnitude[lb/ft.F,psf]	Start Location[in...]	End Location[in...]
18	S22	SX	-66.195	-66.195	0	%100
19	S23	SX	-66.195	-66.195	0	%100
20	S24	SX	-66.195	-66.195	0	%100
21	R25	SX	0	0	0	%100
22	R26	SX	0	0	0	%100
23	R29	SX	0	0	0	%100
24	R30	SX	0	0	0	%100
25	R31	SX	0	0	0	%100
26	R32	SX	0	0	0	%100
27	R33	SX	0	0	0	%100
28	R34	SX	0	0	0	%100
29	R35	SX	0	0	0	%100
30	R36	SX	0	0	0	%100
31	MP9	SX	-66.195	-66.195	0	%100
32	MP8	SX	-66.195	-66.195	0	%100
33	MP7	SX	-66.195	-66.195	0	%100
34	MP6	SX	-66.195	-66.195	0	%100
35	MP5	SX	-66.195	-66.195	0	%100
36	MP4	SX	-66.195	-66.195	0	%100
37	MP3	SX	-66.195	-66.195	0	%100
38	MP2	SX	-66.195	-66.195	0	%100
39	MP1	SX	-66.195	-66.195	0	%100
40	R42	SX	0	0	0	%100
41	R43	SX	0	0	0	%100
42	R44	SX	0	0	0	%100
43	R45	SX	0	0	0	%100
44	U1	SX	-110.324	-110.324	0	%100
45	U2	SX	-110.324	-110.324	0	%100
46	R48	SX	0	0	0	%100
47	R49	SX	0	0	0	%100
48	R50	SX	0	0	0	%100
49	R51	SX	0	0	0	%100
50	U3	SX	-110.324	-110.324	0	%100
51	U4	SX	-110.324	-110.324	0	%100
52	SB54	SX	-110.324	-110.324	0	%100
53	SB55	SX	-110.324	-110.324	0	%100
54	R56	SX	0	0	0	%100
55	R57	SX	0	0	0	%100
56	R58	SX	0	0	0	%100
57	R59	SX	0	0	0	%100
58	U5	SX	-110.324	-110.324	0	%100
59	U6	SX	-110.324	-110.324	0	%100
60	M63	SX	-110.324	-110.324	0	%100
61	M64	SX	-110.324	-110.324	0	%100

Member Distributed Loads (BLC 16 : Ice Weight)

	Member Label	Direction	Start Magnitude[...]	End Magnitude[lb/ft.F,psf]	Start Location[in...]	End Location[in...]
1	H1	Y	-11.352	-11.352	0	%100
2	H2	Y	-11.352	-11.352	0	%100
3	R3	Y	-3.805	-3.805	0	%100
4	R4	Y	-3.805	-3.805	0	%100
5	R5	Y	-3.805	-3.805	0	%100
6	R6	Y	-3.805	-3.805	0	%100
7	R7	Y	-3.805	-3.805	0	%100
8	R8	Y	-3.805	-3.805	0	%100
9	H9	Y	-11.352	-11.352	0	%100

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

	Member Label	Direction	Start Magnitude[l...	End Magnitude[lb/ft.F,psf]	Start Location[in...	End Location[in....
10	H10	Y	-11.352	-11.352	0	%100
11	H11	Y	-11.352	-11.352	0	%100
12	H12	Y	-11.352	-11.352	0	%100
13	S17	Y	-11.352	-11.352	0	%100
14	S18	Y	-11.352	-11.352	0	%100
15	S19	Y	-11.352	-11.352	0	%100
16	S20	Y	-11.352	-11.352	0	%100
17	S21	Y	-11.352	-11.352	0	%100
18	S22	Y	-11.352	-11.352	0	%100
19	S23	Y	-11.352	-11.352	0	%100
20	S24	Y	-11.352	-11.352	0	%100
21	R25	Y	-3.805	-3.805	0	%100
22	R26	Y	-3.805	-3.805	0	%100
23	R29	Y	-3.805	-3.805	0	%100
24	R30	Y	-3.805	-3.805	0	%100
25	R31	Y	-3.805	-3.805	0	%100
26	R32	Y	-3.805	-3.805	0	%100
27	R33	Y	-3.805	-3.805	0	%100
28	R34	Y	-3.805	-3.805	0	%100
29	R35	Y	-3.805	-3.805	0	%100
30	R36	Y	-3.805	-3.805	0	%100
31	MP9	Y	-10.004	-10.004	0	%100
32	MP8	Y	-10.004	-10.004	0	%100
33	MP7	Y	-10.004	-10.004	0	%100
34	MP6	Y	-10.004	-10.004	0	%100
35	MP5	Y	-10.004	-10.004	0	%100
36	MP4	Y	-10.004	-10.004	0	%100
37	MP3	Y	-10.004	-10.004	0	%100
38	MP2	Y	-10.004	-10.004	0	%100
39	MP1	Y	-10.004	-10.004	0	%100
40	R42	Y	-3.805	-3.805	0	%100
41	R43	Y	-3.805	-3.805	0	%100
42	R44	Y	-3.805	-3.805	0	%100
43	R45	Y	-3.805	-3.805	0	%100
44	U1	Y	-8.76	-8.76	0	%100
45	U2	Y	-8.76	-8.76	0	%100
46	R48	Y	-3.805	-3.805	0	%100
47	R49	Y	-3.805	-3.805	0	%100
48	R50	Y	-3.805	-3.805	0	%100
49	R51	Y	-3.805	-3.805	0	%100
50	U3	Y	-8.76	-8.76	0	%100
51	U4	Y	-8.76	-8.76	0	%100
52	SB54	Y	-18.359	-18.359	0	%100
53	SB55	Y	-18.359	-18.359	0	%100
54	R56	Y	-3.805	-3.805	0	%100
55	R57	Y	-3.805	-3.805	0	%100
56	R58	Y	-3.805	-3.805	0	%100
57	R59	Y	-3.805	-3.805	0	%100
58	U5	Y	-8.76	-8.76	0	%100
59	U6	Y	-8.76	-8.76	0	%100
60	M63	Y	-12.953	-12.953	0	%100
61	M64	Y	-12.953	-12.953	0	%100

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

	Member Label	Direction	Start Magnitude[l...	End Magnitude[lb/ft.F,psf]	Start Location[in...	End Location[in....
1	H1	SZ	-16.085	-16.085	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft]	End Magnitude[lb/ft.F.psf]	Start Location[in]	End Location[in]
2	H2	SZ	-16.085	-16.085	0	%100
3	R3	SZ	0	0	0	%100
4	R4	SZ	0	0	0	%100
5	R5	SZ	0	0	0	%100
6	R6	SZ	0	0	0	%100
7	R7	SZ	0	0	0	%100
8	R8	SZ	0	0	0	%100
9	H9	SZ	-16.085	-16.085	0	%100
10	H10	SZ	-16.085	-16.085	0	%100
11	H11	SZ	-16.085	-16.085	0	%100
12	H12	SZ	-16.085	-16.085	0	%100
13	S17	SZ	-16.085	-16.085	0	%100
14	S18	SZ	-16.085	-16.085	0	%100
15	S19	SZ	-16.085	-16.085	0	%100
16	S20	SZ	-16.085	-16.085	0	%100
17	S21	SZ	-16.085	-16.085	0	%100
18	S22	SZ	-16.085	-16.085	0	%100
19	S23	SZ	-16.085	-16.085	0	%100
20	S24	SZ	-16.085	-16.085	0	%100
21	R25	SZ	0	0	0	%100
22	R26	SZ	0	0	0	%100
23	R29	SZ	0	0	0	%100
24	R30	SZ	0	0	0	%100
25	R31	SZ	0	0	0	%100
26	R32	SZ	0	0	0	%100
27	R33	SZ	0	0	0	%100
28	R34	SZ	0	0	0	%100
29	R35	SZ	0	0	0	%100
30	R36	SZ	0	0	0	%100
31	MP9	SZ	-17.84	-17.84	0	%100
32	MP8	SZ	-17.84	-17.84	0	%100
33	MP7	SZ	-17.84	-17.84	0	%100
34	MP6	SZ	-17.84	-17.84	0	%100
35	MP5	SZ	-17.84	-17.84	0	%100
36	MP4	SZ	-17.84	-17.84	0	%100
37	MP3	SZ	-17.84	-17.84	0	%100
38	MP2	SZ	-17.84	-17.84	0	%100
39	MP1	SZ	-17.84	-17.84	0	%100
40	R42	SZ	0	0	0	%100
41	R43	SZ	0	0	0	%100
42	R44	SZ	0	0	0	%100
43	R45	SZ	0	0	0	%100
44	U1	SZ	-20.309	-20.309	0	%100
45	U2	SZ	-20.309	-20.309	0	%100
46	R48	SZ	0	0	0	%100
47	R49	SZ	0	0	0	%100
48	R50	SZ	0	0	0	%100
49	R51	SZ	0	0	0	%100
50	U3	SZ	-20.309	-20.309	0	%100
51	U4	SZ	-20.309	-20.309	0	%100
52	SB54	SZ	-12.196	-12.196	0	%100
53	SB55	SZ	-12.196	-12.196	0	%100
54	R56	SZ	0	0	0	%100
55	R57	SZ	0	0	0	%100
56	R58	SZ	0	0	0	%100
57	R59	SZ	0	0	0	%100
58	U5	SZ	-20.309	-20.309	0	%100

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

	Member Label	Direction	Start Magnitude[...]	End Magnitude[lb/ft.F,psf]	Start Location[in...]	End Location[in...]
59	U6	SZ	-20.309	-20.309	0	%100
60	M63	SZ	-14.671	-14.671	0	%100
61	M64	SZ	-14.671	-14.671	0	%100

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

	Member Label	Direction	Start Magnitude[...]	End Magnitude[lb/ft.F,psf]	Start Location[in...]	End Location[in...]
1	H1	SX	-16.085	-16.085	0	%100
2	H2	SX	-16.085	-16.085	0	%100
3	R3	SX	0	0	0	%100
4	R4	SX	0	0	0	%100
5	R5	SX	0	0	0	%100
6	R6	SX	0	0	0	%100
7	R7	SX	0	0	0	%100
8	R8	SX	0	0	0	%100
9	H9	SX	-16.085	-16.085	0	%100
10	H10	SX	-16.085	-16.085	0	%100
11	H11	SX	-16.085	-16.085	0	%100
12	H12	SX	-16.085	-16.085	0	%100
13	S17	SX	-16.085	-16.085	0	%100
14	S18	SX	-16.085	-16.085	0	%100
15	S19	SX	-16.085	-16.085	0	%100
16	S20	SX	-16.085	-16.085	0	%100
17	S21	SX	-16.085	-16.085	0	%100
18	S22	SX	-16.085	-16.085	0	%100
19	S23	SX	-16.085	-16.085	0	%100
20	S24	SX	-16.085	-16.085	0	%100
21	R25	SX	0	0	0	%100
22	R26	SX	0	0	0	%100
23	R29	SX	0	0	0	%100
24	R30	SX	0	0	0	%100
25	R31	SX	0	0	0	%100
26	R32	SX	0	0	0	%100
27	R33	SX	0	0	0	%100
28	R34	SX	0	0	0	%100
29	R35	SX	0	0	0	%100
30	R36	SX	0	0	0	%100
31	MP9	SX	-17.84	-17.84	0	%100
32	MP8	SX	-17.84	-17.84	0	%100
33	MP7	SX	-17.84	-17.84	0	%100
34	MP6	SX	-17.84	-17.84	0	%100
35	MP5	SX	-17.84	-17.84	0	%100
36	MP4	SX	-17.84	-17.84	0	%100
37	MP3	SX	-17.84	-17.84	0	%100
38	MP2	SX	-17.84	-17.84	0	%100
39	MP1	SX	-17.84	-17.84	0	%100
40	R42	SX	0	0	0	%100
41	R43	SX	0	0	0	%100
42	R44	SX	0	0	0	%100
43	R45	SX	0	0	0	%100
44	U1	SX	-20.309	-20.309	0	%100
45	U2	SX	-20.309	-20.309	0	%100
46	R48	SX	0	0	0	%100
47	R49	SX	0	0	0	%100
48	R50	SX	0	0	0	%100
49	R51	SX	0	0	0	%100
50	U3	SX	-20.309	-20.309	0	%100

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

	Member Label	Direction	Start Magnitude[l...	End Magnitude[lb/ft,F,psf]	Start Location[in...	End Location[in....
51	U4	SX	-20.309	-20.309	0	%100
52	SB54	SX	-12.196	-12.196	0	%100
53	SB55	SX	-12.196	-12.196	0	%100
54	R56	SX	0	0	0	%100
55	R57	SX	0	0	0	%100
56	R58	SX	0	0	0	%100
57	R59	SX	0	0	0	%100
58	U5	SX	-20.309	-20.309	0	%100
59	U6	SX	-20.309	-20.309	0	%100
60	M63	SX	-14.671	-14.671	0	%100
61	M64	SX	-14.671	-14.671	0	%100

Member Area Loads

Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
No Data to Print ...						

Additional Calculations



Steel Bolt Calculator V2.0.0

PROJECT DATA	
Site Name:	Cornwall
Site Number:	COL01025
Job Code:	1106-A0001-B

BOLT INFORMATION		
Code:	LRFD	
Bolt Diameter	3/4	in
Bolt Grade:	A307	
Threads Excluded?:	N	
Yield Strength (F_{yb})	36.0	ksi
Ultimate Strength (F_{ub})	60.0	ksi
Threads/in (n)	10	
Gross Area (A_{gb})	0.442 in ²	in ²
Net Area (A_{nb})	0.334 in ²	in ²
Applied Axial:	2854.40	lbs
Applied Shear	993.55	lbs

BOLT CAPCITIES				
	Ult Load / Bolt	Factored Load ($\phi=0.75$)	# of Bolts	Factor Joint Capacity
Axial (lb)	20067.6	15050.7	1	15050.7
Shear(lb)	11928.2	8946.2	1	8946.2

INTERACTION CHECK	
$T / \phi T_n$	19.0%
$V / \phi V_n$	11.1%
≤ 1.0	4.8%
Result	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 GALVILITE 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 - RE500, 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.

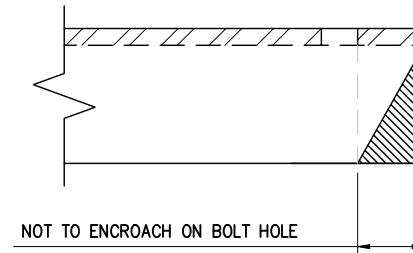
TOWER PLUMB & TENSION NOTES:

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.

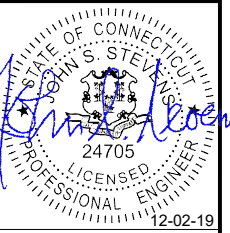
SPECIAL INSPECTIONS NOTES:

1. A QUALIFIED INDEPENDENT TESTING LABORATORY, EMPLOYED BY THE OWNER AND APPROVED BY THE JURISDICTION, SHALL PERFORM INSPECTION AND TESTING IN ACCORDANCE WITH THE 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 EPOXIED 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
 INFINIGY ENGINEERING, PLLC
 1033 Watervliet Shaker Rd
 Albany, NY 12205
 Office # (518) 899-0790
 Fax # (518) 690-0793



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

No.	ISSUED FOR REVIEW	TM	11/21/19
	Submittal / Revision	App'd	Date

Drawn: LAM Date: 11/21/19
 Designed: TM Date: 11/21/19
 Checked: BA Date: 11/21/19
 Project Number: 499-006

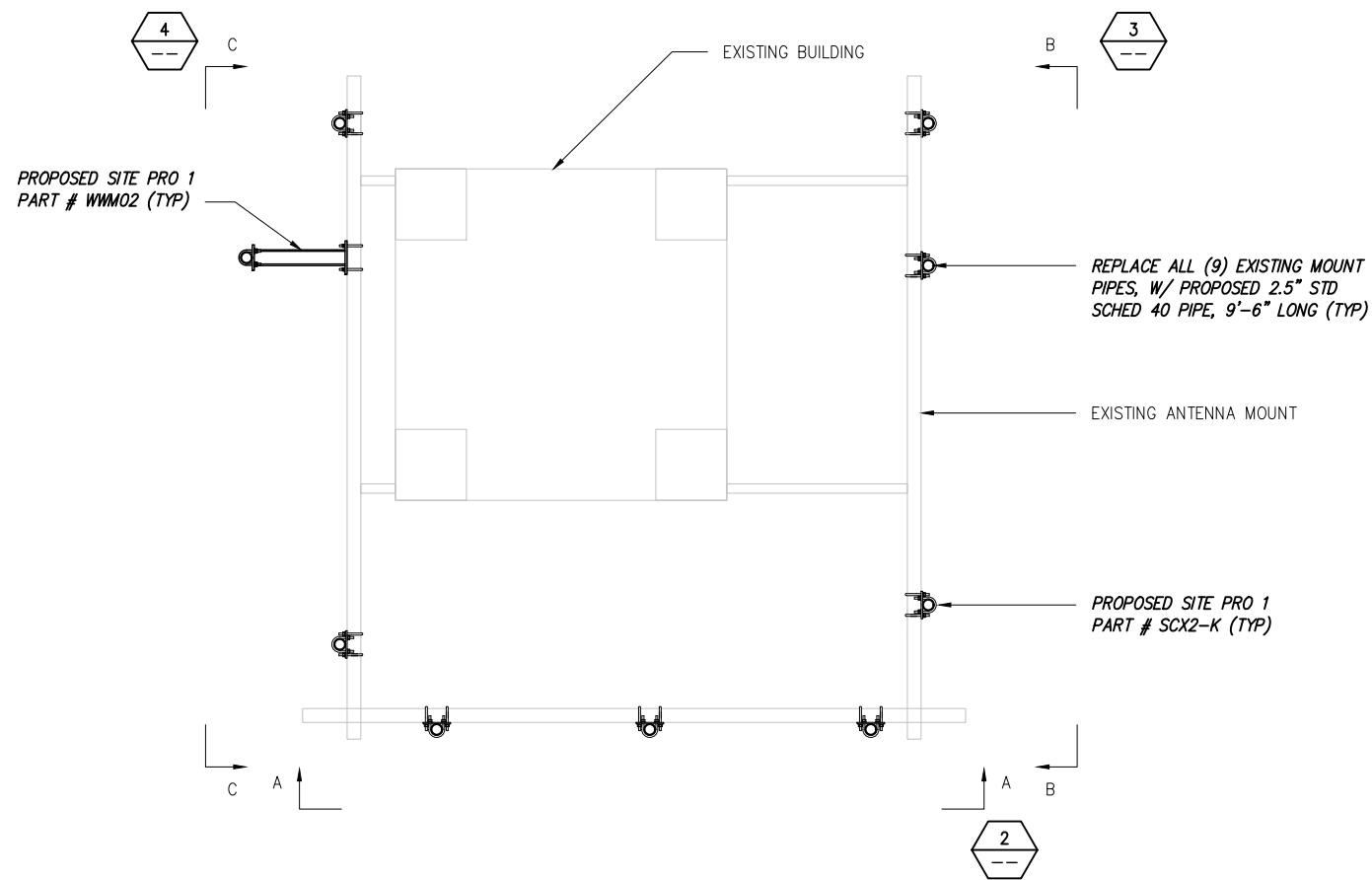
Project Title:
CORNWALL
CTL01025
FA# 10035044
 36 MOHAWK MOUNTAIN
 CORNWALL, CT 06753



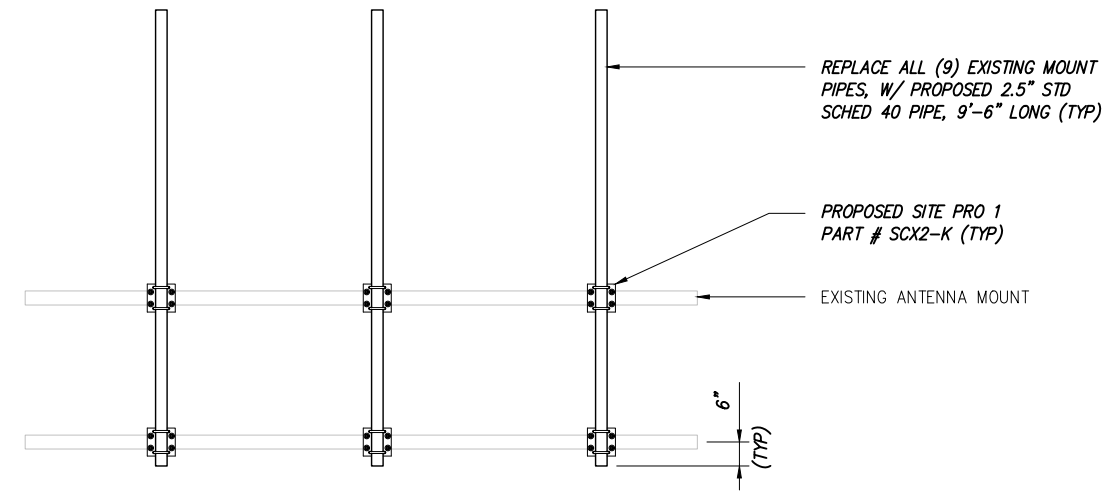
Drawing Scale:
 AS NOTED
SD
 Date:
 11/21/19

Drawing Title
GENERAL NOTES

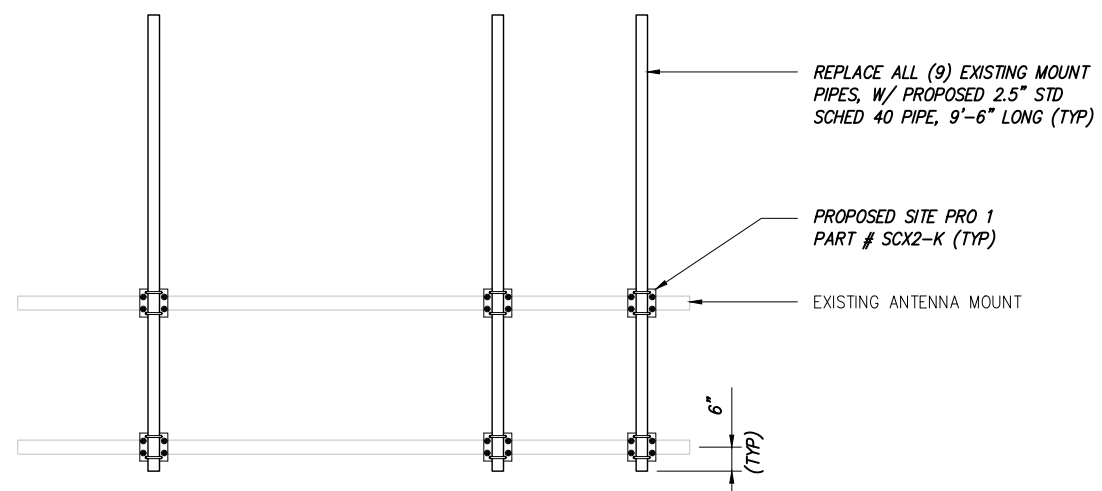
Drawing Number
S1



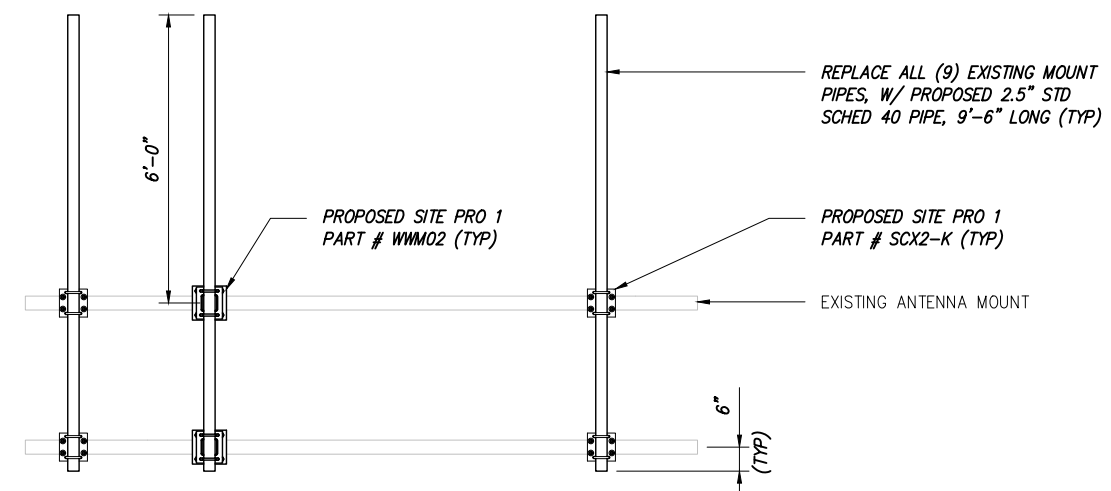
1 PLAN VIEW
SCALE: NOT TO SCALE



2 SECTION A-A
SCALE: NOT TO SCALE



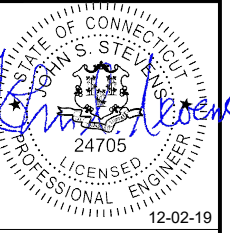
3 SECTION B-B
SCALE: NOT TO SCALE



4 SECTION C-C
SCALE: NOT TO SCALE

NOTE:
 1. VARIOUS EXISTING CONDITIONS AND PROPOSED MODIFICATIONS NOT SHOWN FOR CLARITY.
 2. ALL SITE PRO 1 PARTS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS, EXCEPT OTHERWISE NOTED.
 3. PROPOSED SITE PRO 1 PART # WMM02 MODIFICATION IS FOR GAMMA SECTOR ONLY

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



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

No.	ISSUED FOR REVIEW	TM	11/21/19
	Submittal / Revision	App'd	Date

Drawn: LAM Date: 11/21/19
 Designed: TM Date: 11/21/19
 Checked: BA Date: 11/21/19

Project Number:
499-006

Project Title:
 CORNWALL
 CTL01025
 FA# 10035044
 36 MOHAWK MOUNTAIN
 CORNWALL, CT 06753

Prepared For:

Drawing Scale:
AS NOTED **SD**
 Date:
11/21/19

Drawing Title:
MOUNT MODIFICATIONS

Drawing Number:
S2



Non-Ionizing Radiation Report

Compiled For: Smartlink on behalf of AT&T

Site Name: Cornwall

Site FA: 10035044

Site ID: CTL01025

36 Mohawk Mountain, Cornwall, CT 6753

Latitude: 41.8212981 Longitude: -73.2964431

Structure Type: Self Support

Report Date: September 30, 2019



Status: AT&T will be compliant with FCC rules on RF Exposure with the recommended signage.

Table of Contents

1. Executive Summary:	3
2. Site Summary:.....	4
3. Site Compliance.....	4
4. Site Compliance Recommendations.....	5
5. Antenna Inventory Table	6
6. RF Guidelines	9
Attachment 1: AT&T Exposure Analysis	10
Attachment 2: T-Mobile Exposure Analysis.....	12
Attachment 3: Alltel (Verizon Wireless) Exposure Analysis	13
Attachment 4: Sprint Exposure Analysis	15
Attachment 5: Homeland Security Exposure Analysis.....	17
Attachment 6: Unknown Exposure Analysis.....	18
Attachment 7: Combined Exposure Analysis for each Carrier.....	19
7. Appendix A: FCC Guidelines	21
FCC Policies.....	21
Occupational / Controlled	21
General Population / Uncontrolled	21
8. Appendix B: Preparer Certification	24

1. Executive Summary:

Smartlink on behalf of AT&T has contracted Infinigy Solutions, LLC to determine whether the site Cornwall located at 36 Mohawk Mountain in Cornwall, 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 recommended signage in section 4 of this report.**

All Carriers, All Bands Cumulative Exposure %		
Uncontrolled / General Population	Exposure values at the site (mW/cm ²)	0.1215
	% Exposure	14.77%
Controlled / Occupational	Exposure values at the site (mW/cm ²)	0.1214
	% Exposure	2.79%

The exposure calculations were derived based on data provided by Smartlink on behalf of AT&T and engineering assumptions for all other operators. The exposure calculations do not pose a threat to anyone on the ground of the site.

2. Site Summary:

Site Information	
Site Name: Cornwall	
Site Address: 36 Mohawk Mountain, Cornwall, CT 6753	
Site Type: Self Support	
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. The recommendation is moot if there is already signage installed at the site.

5. Antenna Inventory Table

Ant ID	Sector	Operator	Antenna manufacturer	Antenna Model	Operating Frequency	Rad Ctr (Ft)	Total ERP Power (Watts)
1	Alpha	AT&T	Powerwave	7770	850	65	334
2	Alpha	AT&T	CCI	DMP65R-BU6DA	700	65	2951
3a	Alpha	AT&T	CCI	DMP65R-BU6DA	700	65	1476
3b	Alpha	AT&T	CCI	DMP65R-BU6DA	1900	65	4842
3c	Alpha	AT&T	CCI	DMP65R-BU6DA	850	65	1000
4	Beta	AT&T	Powerwave	7770	850	65	334
5	Beta	AT&T	CCI	DMP65R-BU6DA	700	65	2951
6a	Beta	AT&T	CCI	DMP65R-BU6DA	700	65	1476
6b	Beta	AT&T	CCI	DMP65R-BU6DA	1900	65	4842
6c	Beta	AT&T	CCI	DMP65R-BU6DA	850	65	1000
7	Gamma	AT&T	Powerwave	7770	850	65	334
8	Gamma	AT&T	CCI	DMP65R-BU6DA	700	65	2951
9a	Gamma	AT&T	CCI	DMP65R-BU6DA	700	65	1476
9b	Gamma	AT&T	CCI	DMP65R-BU6DA	1900	65	4842
9c	Gamma	AT&T	CCI	DMP65R-BU6DA	850	65	1000
10		Unknown	Generic	Dipole	150	75	100
11		Homeland Security	Generic	Omni-150 MHz	150	74	100
12		Unknown	Generic	Omni-150 MHz	150	72	100
13	Alpha	Sprint	RFS	APXVAARR18_N43-U-NA20	1900	69	2664
14a	Alpha	Sprint	Commscope	DT465B-2XR-V2	850	69	2037
14b	Alpha	Sprint	Commscope	DT465B-2XR-V2	2500	69	2405
15	Beta	Sprint	RFS	APXVAARR18_N43-U-NA20	1900	69	2664

Ant ID	Sector	Operator	Antenna manufacturer	Antenna Model	Operating Frequency	Rad Ctr (Ft)	Total ERP Power (Watts)
16a	Beta	Sprint	Commscope	DT465B-2XR-V2	850	69	2037
16b	Beta	Sprint	Commscope	DT465B-2XR-V2	2500	69	2405
17	Gamma	Sprint	RFS	APXVAARR18_N43-U-NA20	1900	69	2664
18a	Gamma	Sprint	Commscope	DT465B-2XR-V2	850	69	2037
18b	Gamma	Sprint	Commscope	DT465B-2XR-V2	2500	69	2405
19		Homeland Security	Sinclair	SV228-HF2SNM	150	63	100
20		Unknown	Generic	10' Dish-11000	11000	59	1
21	Alpha	T-Mobile	RFS	APX16DW-16DWS	1900	57	5447
22	Alpha	T-Mobile	RFS	APXVARR24_43-C-NA20	2100	57	5355
23	Beta	T-Mobile	RFS	APX16DW-16DWS	1900	57	5447
24	Beta	T-Mobile	RFS	APXVARR24_43-C-NA20	2100	57	5355
25	Gamma	T-Mobile	RFS	APX16DW-16DWS	1900	57	5447
26	Gamma	T-Mobile	RFS	APXVARR24_43-C-NA20	2100	57	5355
27	Alpha	Alltel (Verizon Wireless)	Commscope	DB846F65ZAXY	850	46	3488
28a	Alpha	Alltel (Verizon Wireless)	Commscope	JAHH-65C-3B-1900	1900	46	5704
28b	Alpha	Alltel (Verizon Wireless)	Commscope	JAHH-65C-3B-700	700	46	3074
28c	Alpha	Alltel (Verizon Wireless)	Commscope	JAHH-65C-3B-2100	2100	46	5738
29	Alpha	Alltel (Verizon Wireless)	Antel	LPA-80063/6CF	850	46	5527
30	Beta	Alltel (Verizon Wireless)	Commscope	DB846F65ZAXY	850	46	3488

Ant ID	Sector	Operator	Antenna manufacturer	Antenna Model	Operating Frequency	Rad Ctr (Ft)	Total ERP Power (Watts)
31a	Beta	Alltel (Verizon Wireless)	Commscope	JAHH-65C-3B-1900	1900	46	5704
31b	Beta	Alltel (Verizon Wireless)	Commscope	JAHH-65C-3B-700	700	46	3074
31c	Beta	Alltel (Verizon Wireless)	Commscope	JAHH-65C-3B-2100	2100	46	5738
32	Beta	Alltel (Verizon Wireless)	Antel	LPA-80063/6CF	850	46	5527
33	Gamma	Alltel (Verizon Wireless)	Commscope	DB846F65ZAXY	850	46	3488
34a	Gamma	Alltel (Verizon Wireless)	Commscope	JAHH-65C-3B-1900	1900	46	5704
34b	Gamma	Alltel (Verizon Wireless)	Commscope	JAHH-65C-3B-700	700	46	3074
34c	Gamma	Alltel (Verizon Wireless)	Commscope	JAHH-65C-3B-2100	2100	46	5738
35	Gamma	Alltel (Verizon Wireless)	Antel	LPA-80063/6CF	850	46	5527

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)	0.0125
	% Exposure	2.50%
Controlled / Occupational	FCC's Exposure limits(mW/cm ²)	2.3
	Exposure values at the site (mW/cm ²)	0.0125
	% Exposure	0.54%

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)	0.0009
	% Exposure	0.16%
Controlled / Occupational	FCC's Exposure limits(mW/cm ²)	2.8
	Exposure values at the site (mW/cm ²)	0.0009
	% Exposure	0.03%

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)	0.0028
	% Exposure	0.47%
Controlled / Occupational	FCC's Exposure limits(mW/cm ²)	2.8
	Exposure values at the site (mW/cm ²)	0.0028
	% Exposure	0.10%

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)	0.0137
	% Exposure	1.37%
Controlled / Occupational	FCC's Exposure limits(mW/cm ²)	5.0
	Exposure values at the site (mW/cm ²)	0.0137
	% Exposure	0.27%

Attachment 2: T-Mobile Exposure Analysis

T-Mobile 1900 MHz LTE		
Uncontrolled / General Population	FCC's exposure limits (mW/cm ²)	1.0
	Exposure values at the site (mW/cm ²)	0.0180
	% Exposure	1.80%
Controlled / Occupational	FCC's Exposure limits(mW/cm ²)	5.0
	Exposure values at the site (mW/cm ²)	0.0180
	% Exposure	0.36%

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)	0.0177
	% Exposure	1.77%
Controlled / Occupational	FCC's Exposure limits(mW/cm ²)	5.0
	Exposure values at the site (mW/cm ²)	0.0177
	% Exposure	0.35%

Attachment 3: Alltel (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)	0.0126
	% Exposure	2.53%
Controlled / Occupational	FCC's Exposure limits(mW/cm ²)	2.3
	Exposure values at the site (mW/cm ²)	0.0126
	% Exposure	0.55%

Verizon Wireless 850 MHz CDMA		
Uncontrolled / General Population	FCC's exposure limits (mW/cm ²)	0.6
	Exposure values at the site (mW/cm ²)	0.0048
	% Exposure	0.80%
Controlled / Occupational	FCC's Exposure limits(mW/cm ²)	2.8
	Exposure values at the site (mW/cm ²)	0.0048
	% Exposure	0.17%

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)	0.0323
	% Exposure	5.38%
Controlled / Occupational	FCC's Exposure limits(mW/cm ²)	2.8
	Exposure values at the site (mW/cm ²)	0.0323
	% Exposure	1.15%

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)	0.0235
	% Exposure	2.35%
Controlled / Occupational	FCC's Exposure limits(mW/cm ²)	5.0
	Exposure values at the site (mW/cm ²)	0.0235
	% Exposure	0.47%

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)	0.0236
	% Exposure	2.36%
Controlled / Occupational	FCC's Exposure limits(mW/cm ²)	5.0
	Exposure values at the site (mW/cm ²)	0.0236
	% Exposure	0.47%

Attachment 4: Sprint Exposure Analysis

Sprint 850 MHz LTE		
Uncontrolled / General Population	FCC's exposure limits (mW/cm ²)	0.6
	Exposure values at the site (mW/cm ²)	0.0053
	% Exposure	0.89%
Controlled / Occupational	FCC's Exposure limits(mW/cm ²)	5.0
	Exposure values at the site (mW/cm ²)	0.0053
	% Exposure	0.1062%

Sprint 1900 MHz LTE		
Uncontrolled / General Population	FCC's exposure limits (mW/cm ²)	1.0
	Exposure values at the site (mW/cm ²)	0.0069
	% Exposure	0.69%
Controlled / Occupational	FCC's Exposure limits(mW/cm ²)	5.0
	Exposure values at the site (mW/cm ²)	0.0069
	% Exposure	0.1389%

Sprint 2500 MHz LTE		
Uncontrolled / General Population	FCC's exposure limits (mW/cm ²)	1.0
	Exposure values at the site (mW/cm ²)	0.0063
	% Exposure	0.63%
Controlled / Occupational	FCC's Exposure limits(mW/cm ²)	5.0
	Exposure values at the site (mW/cm ²)	0.0063
	% Exposure	0.1254%

Attachment 5: Homeland Security Exposure Analysis

Homeland Security 100 MHz VHF		
Uncontrolled / General Population	FCC's exposure limits (mW/cm ²)	0.2
	Exposure values at the site (mW/cm ²)	0.0002
	% Exposure	0.09%
Controlled / Occupational	FCC's Exposure limits(mW/cm ²)	1.0
	Exposure values at the site (mW/cm ²)	0.0002
	% Exposure	0.02%

Attachment 6: Unknown Exposure Analysis

Unknown 100 MHz VHF		
Uncontrolled / General Population	FCC's exposure limits (mW/cm ²)	0.0002
	Exposure values at the site (mW/cm ²)	0.0000
	% Exposure	0.08%
Controlled / Occupational	FCC's Exposure limits(mW/cm ²)	0.0002
	Exposure values at the site (mW/cm ²)	0.0000
	% Exposure	0.02%

Unknown 11 GHz VHF		
Uncontrolled / General Population	FCC's exposure limits (mW/cm ²)	1.0
	Exposure values at the site (mW/cm ²)	0.000001
	% Exposure	0.00%
Controlled / Occupational	FCC's Exposure limits(mW/cm ²)	5.0
	Exposure values at the site (mW/cm ²)	0.000001
	% Exposure	0.0000%

Attachment 7: Combined Exposure Analysis for each Carrier

AT&T All Bands		
Uncontrolled / General Population	Exposure values at the site (mW/cm ²)	0.0299
	% Exposure	4.49%
Controlled / Occupational	Exposure values at the site (mW/cm ²)	0.0299
	% Exposure	0.95%

T-Mobile All Bands		
Uncontrolled / General Population	Exposure values at the site (mW/cm ²)	0.0357
	% Exposure	3.57%
Controlled / Occupational	Exposure values at the site (mW/cm ²)	0.0357
	% Exposure	0.71%

Verizon Wireless All Bands		
Uncontrolled / General Population	Exposure values at the site (mW/cm ²)	0.0185
	% Exposure	2.21%
Controlled / Occupational	Exposure values at the site (mW/cm ²)	0.0185
	% Exposure	0.37%

Sprint All Bands		
Uncontrolled / General Population	Exposure values at the site (mW/cm ²)	0.0185
	% Exposure	2.21%
Controlled / Occupational	Exposure values at the site (mW/cm ²)	0.0185
	% Exposure	0.37%

Homeland Security All Bands		
Uncontrolled / General Population	Exposure values at the site (mW/cm ²)	0.0002
	% Exposure	0.09%
Controlled / Occupational	Exposure values at the site (mW/cm ²)	0.0002
	% Exposure	0.02%

Unknown All Bands		
Uncontrolled / General Population	Exposure values at the site (mW/cm ²)	0.0002
	% Exposure	0.08%
Controlled / Occupational	Exposure values at the site (mW/cm ²)	0.0002
	% Exposure	0.02%

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 ²)*	6
30-300	61.4	0.163	1.0	6
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6

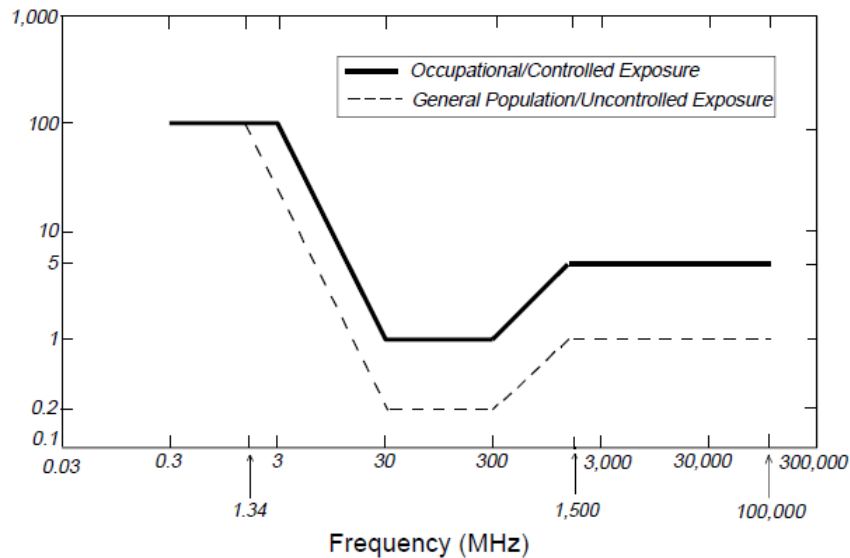
(B) Limits for General Population/Uncontrolled Exposure

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 ²)*	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.

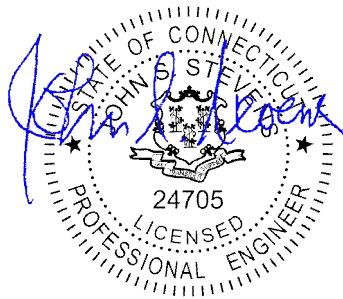
I certify that the information contained in this report is true and correct to the best of my knowledge.

Timothy A. Harris

9/30/2019

Signature

Date



10/03/2019

Kristina Cottone

From: auto-reply@usps.com
Sent: Friday, February 28, 2020 1:28 PM
To: Kristina Cottone
Subject: USPS® Item Delivered, PO Box 9505510019660056366250



Hello **Kristina Cottone**,

Your item has been delivered and is available at a PO Box at 9:14 am on February 27, 2020 in CORNWALL, CT 06753.

Tracking Number: [9505510019660056366250](#)

Delivered, PO Box



Tracking & Delivery Options

My Account

Visit [USPS Tracking](#)® to check the most up-to-date status of your package. Sign up for [Informed Delivery](#)® to digitally preview the address side of your incoming letter-sized mail and manage your packages scheduled to arrive soon! To update how frequently you receive emails from USPS, log in to your [USPS.com](#) account.

Want regular updates on your package? [Set up text alerts.](#)

INFORMED DELIVERY®

Sign up to view your mail
online or via email.



Kristina Cottone

From: auto-reply@usps.com
Sent: Friday, February 28, 2020 1:31 PM
To: Kristina Cottone
Subject: USPS® Item Delivered, PO Box 9505510019660056366267



Hello **Kristina Cottone**,

Your item has been delivered and is available at a PO Box at 8:24 am on February 27, 2020 in CORNWALL BRIDGE, CT 06754.

Tracking Number: [9505510019660056366267](#)

Delivered, PO Box



Tracking & Delivery Options

My Account

Visit [USPS Tracking](#)® to check the most up-to-date status of your package. Sign up for [Informed Delivery](#)® to digitally preview the address side of your incoming letter-sized mail and manage your packages scheduled to arrive soon! To update how frequently you receive emails from USPS, log in to your [USPS.com](#) account.

Want regular updates on your package? [Set up text alerts.](#)

INFORMED DELIVERY®

Sign up to view your mail
online or via email.



Kristina Cottone

From: auto-reply@usps.com
Sent: Friday, February 28, 2020 1:33 PM
To: Kristina Cottone
Subject: USPS® Item Delivered, PO Box 9505510019660056366274



Hello **Kristina Cottone**,

Your item has been delivered and is available at a PO Box at 2:50 pm on February 27, 2020 in ATLANTA, GA 31139.

Tracking Number: [9505510019660056366274](#)

Delivered, PO Box



Tracking & Delivery Options

My Account

Visit [USPS Tracking](#)® to check the most up-to-date status of your package. Sign up for [Informed Delivery](#)® to digitally preview the address side of your incoming letter-sized mail and manage your packages scheduled to arrive soon! To update how frequently you receive emails from USPS, log in to your [USPS.com](#) account.

Want regular updates on your package? [Set up text alerts.](#)

INFORMED DELIVERY®

Sign up to view your mail
online or via email.



Kristina Cottone

From: TrackingUpdates@fedex.com
Sent: Wednesday, February 26, 2020 11:04 AM
To: Kristina Cottone
Subject: FedEx Shipment 777843931410 Delivered

Your package has been delivered

Tracking # [777843931410](#)

Ship date:
Tue, 2/25/2020

Kristina Cottone
Smartlink LLC
NORTH BILLERICA, MA 01862
US



Delivered


Delivery date:
Wed, 2/26/2020 11:02 am

Ryan Tierney
AMERICAN TOWER
CORPORATION
10 PRESIDENTIAL WAY
WOBURN, MA 01801105399
US

Shipment Facts

Our records indicate that the following package has been delivered.

Tracking number:	777843931410
Status:	Delivered: 02/26/2020 11:02 AM Signed for By: DDONNA
Reference:	CTL01025- Cornwall
Signed for by:	DDONNA
Delivery location:	Woburn, MA
Service type:	FedEx Ground
Packaging type:	Package
Number of pieces:	1
Weight:	1.00 lb.
Standard transit:	2/26/2020

 Please do not respond to this message. This email was sent from an unattended mailbox. This report was generated at approximately 10:03 AM CST on 02/26/2020.

All weights are estimated.

To track the latest status of your shipment, click on the tracking number above.

SHEET INDEX

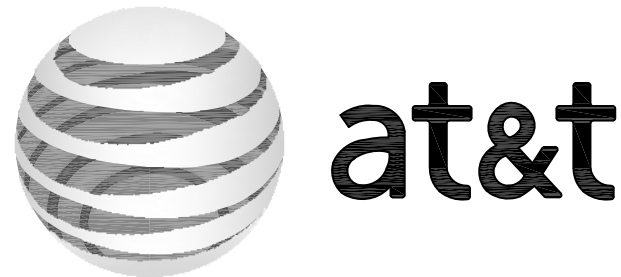
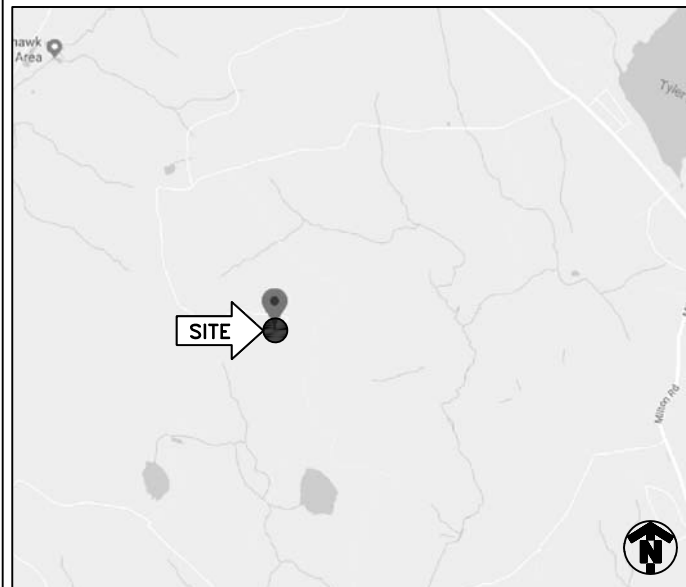
NO.	DESCRIPTION
T1	TITLE SHEET
C1	GENERAL NOTES
C2	OVERALL SITE PLAN
C2A	ENLARGED SITE PLAN
C3	ELEVATION VIEW
C4	ANTENNA ORIENTATION PLAN
C5	EQUIPMENT DETAILS
C6	PLUMBING DIAGRAM
C7	GROUNDING DETAILS
S1-S2	MODIFICATION DETAILS

DRIVING DIRECTIONS

FROM 550 COCHITUATE RD.:

GET ON I-90 WEST/MASSACHUSETTS TURNPIKE. HEAD NORTHEAST 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-84 TO STATE HWY 508 IN FARMINGTON. TAKE EXIT 39 FROM I-84. MERGE ONTO I-90 WEST/MASSACHUSETTS TURNPIKE. USE THE RIGHT 2 LANES TO TAKE EXIT 9 FOR I-84 TOWARD US-20/HARTFORD/NEW YORK CITY. CONTINUE ONTO I-84. USE THE RIGHT 2 LANES TO TAKE EXIT 39 TOWARD FARMINGTON/CT-4. TAKE CT-4 WEST TO MAHAWK MOUNTAIN ROAD IN CORNWALL. CONTINUE ONTO STATE HWY 508. STATE HWY 508 TURNS SLIGHTLY RIGHT AND BECOMES CT-4 WEST. SLIGHTLY RIGHT TO STAY ON CT-4 WEST. TURN LEFT ONTO CT-4. TURN RIGHT ONTO CT-4 WEST/BRIDGE PARK ROAD. TURN LEFT ONTO EAST MAIN STREET. TURN RIGHT ONTO EAST ELM STREET. CONTINUE ONTO MIGEON AVE. CONTINUE ONTO CT-4 WEST/GOSHEN ROAD. AT THE TRAFFIC CIRCLE, CONTINUE STRAIGHT ONTO CT-4. TURN LEFT ONTO ALLYN ROAD. CONTINUE ONTO MOHAWK MOUNTAIN ROAD.

LOCATION MAP



PROJECT
LTE 3C/4C/RETROFIT

SITE NAME
CORNWALL

CELL SITE ID
CTL01025

FA SITE NUMBER
10035044

PACE ID
MRCTB040565/MRCTB040492
MRCTB040730/MRCTB039876

SITE ADDRESS
36 MOHAWK MOUNTAIN
CORNWALL, CT 06753

STRUCTURE TYPE
SELF SUPPORT

PROJECT TEAM



PROJECT MANAGER



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

ENGINEER

SCOPE OF WORK (PER LTE RFDS, DATED 05/23/2019 V1.00):

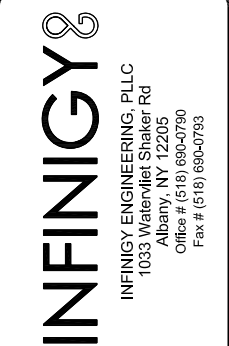
- HANDICAP ACCESS REQUIREMENTS ARE NOT REQUIRED.
 - FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION.
 - FACILITY HAS NO PLUMBING OR REFRIGERANTS.
 - THIS FACILITY SHALL MEET OR EXCEED ALL FAA AND FCC REGULATORY REQUIREMENTS.
 - ALL NEW MATERIAL SHALL BE FURNISHED AND INSTALLED BY CONTRACTOR UNLESS NOTED OTHERWISE. EQUIPMENT, ANTENNAS/RRU AND CABLES FURNISHED BY OWNER AND INSTALLED BY CONTRACTOR.
- TOWER**
- REMOVE (6) PANEL ANTENNAS
 - INSTALL (6) PANEL ANTENNAS
 - REMOVE (3) RRU-11 B12
 - INSTALL (3) 4449 B2/B66A
 - INSTALL (3) B14 4478
 - REMOVE (3) TMAs
 - INSTALL (1) DC6 SQUID W/ (1) FIBER AND (2) DC CABLES
 - INSTALL MOUNT MODIFICATIONS
- GROUND**
- SWAP DUS WITH 6630
 - ADD IDLe CABLE
 - ADD 5G 6630
 - REMOVE (6) DIPLEXERS

PROJECT SUMMARY

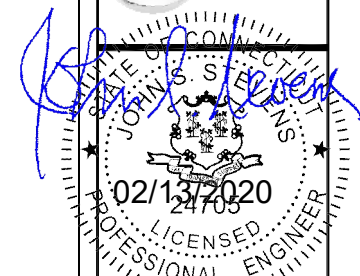
SITE NAME: CORNWALL
CELL SITE ID: CTL01025
FA SITE #: 10035044
SITE ADDRESS: 36 MOHAWK MOUNTAIN CORNWALL, CT 06753
COUNTY: LITCHFIELD
SITE COORDINATES:
LATITUDE: 41.8212981° N (NAD 83)
LONGITUDE: 73.2964431° W (NAD 83)
RAD CENTER: ±65' (AGL)
LANDLORD: AMERICAN TOWER CORPORATION
10 PRESIDENTIAL WAY
WOBURN, MA 01801
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.

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
CONNECTICUT STATUTE REQUIRES MIN OF 2 WORKING DAYS NOTICE BEFORE YOU EXCAVATE



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



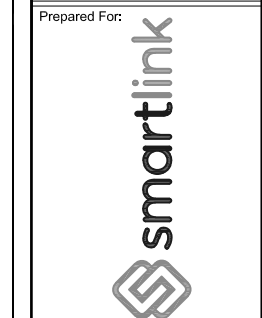
UNAUTHORIZED REPRODUCTION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF APPLICABLE STATE AND/OR LOCAL LAWS

No.	Submission / Revision	App'd	Date
3	REVISED FOR PERMIT	BMM	02/13/20
2	REVISED FOR PERMIT	BMM	12/03/19
1	ISSUED FOR PERMIT	ASW	10/23/19
0	ISSUED FOR REVIEW	BMM	08/27/19

Drawn: BMM Date: 08/27/19
Designed: ASW Date: 08/27/19
Checked: AD Date: 08/27/19

Project Number: 499-006

Project Title:
CORNWALL
CTL01025
FA# 10035044
36 MOHAWK MOUNTAIN
CORNWALL, CT 06753



Drawing Scale: AS NOTED
Date: 02/13/20
CD

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.

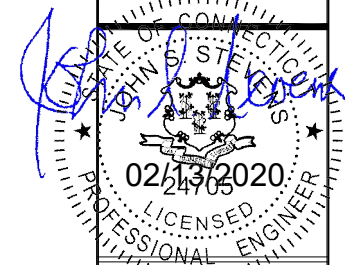
SYMBOL	DESCRIPTION
	CIRCUIT BREAKER
	NON-FUSIBLE DISCONNECT SWITCH
	FUSIBLE DISCONNECT SWITCH
	SURFACE MOUNTED PANEL BOARD
	TRANSFORMER
	KILOWATT HOUR METER
	JUNCTION BOX
	PULL BOX TO NEC/TELCO STANDARDS
	UNDERGROUND UTILITIES
	EXOTHERMIC WELD CONNECTION
	MECHANICAL CONNECTION
	GROUND ROD
	GROUND ROD 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

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



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

3	REVISED FOR PERMIT	BMM	02/13/20
2	REVISED FOR PERMIT	BMM	12/03/19
1	ISSUED FOR PERMIT	ASW	10/23/19
0	ISSUED FOR REVIEW	BMM	08/27/19
No.	Submittal / Revision	App'd	Date
Drawn:	BMM	Date:	08/27/19
Designed:	ASW	Date:	08/27/19
Checked:	AB	Date:	08/27/19

Project Number:
499-006

Project Title:

CORNWALL

CTL01025
FA# 10035044
 36 MOHAWK MOUNTAIN
 CORNWALL, CT 06753

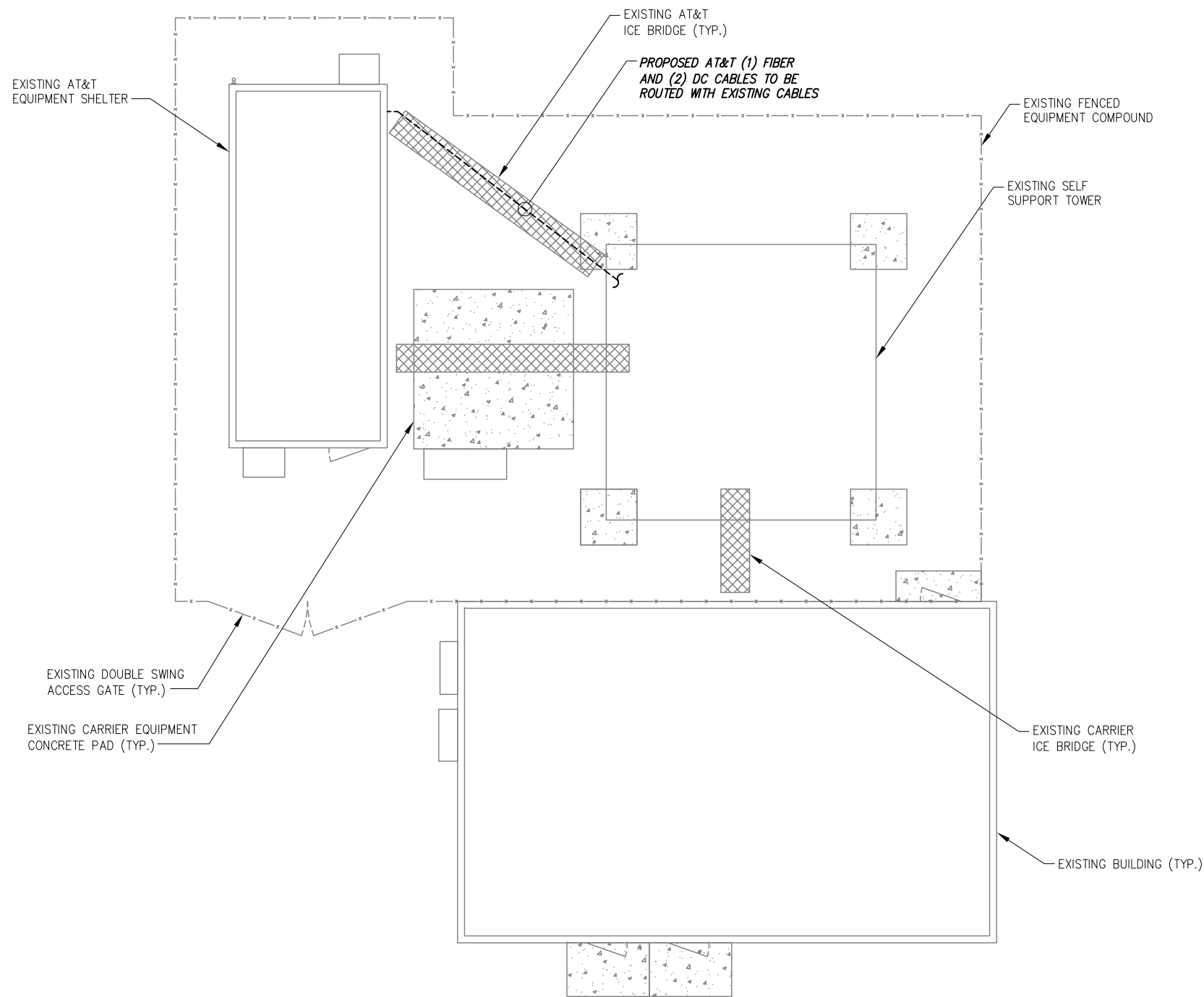
Prepared For:

smartlink

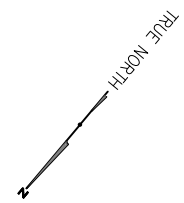
Drawing Scale:
AS NOTED
 Date:
02/13/20
CD

Drawing Title:
GENERAL NOTES

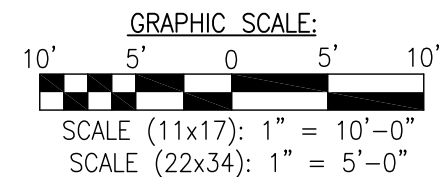
Drawing Number:
C1



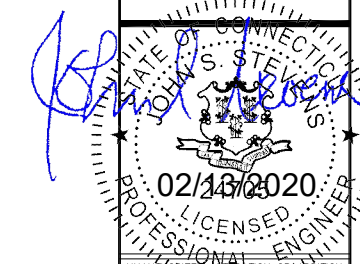
BASEMAPPING PREPARED FROM A SITE WALK PERFORMED BY INFINIGY ENGINEERING AND PROVIDED INFORMATION, AND DOES NOT REPRESENT AN ACTUAL FIELD SURVEY.



1 SITE PLAN
SCALE: AS NOTED



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



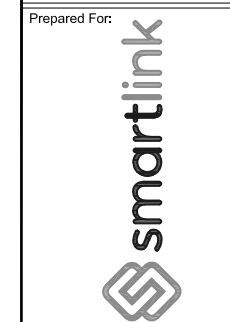
UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF APPLICABLE STATE AND/OR LOCAL LAWS.

No.	Submittal / Revision	App'd	Date
3	REVISED FOR PERMIT	BMM	02/13/20
2	REVISED FOR PERMIT	BMM	12/03/19
1	ISSUED FOR PERMIT	ASW	10/23/19
0	ISSUED FOR REVIEW	BMM	08/27/19

Drawn: BMM Date: 08/27/19
Designed: ASW Date: 08/27/19
Checked: AD Date: 08/27/19

Project Number: 499-006

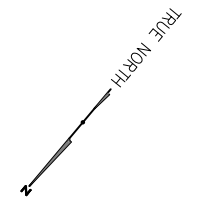
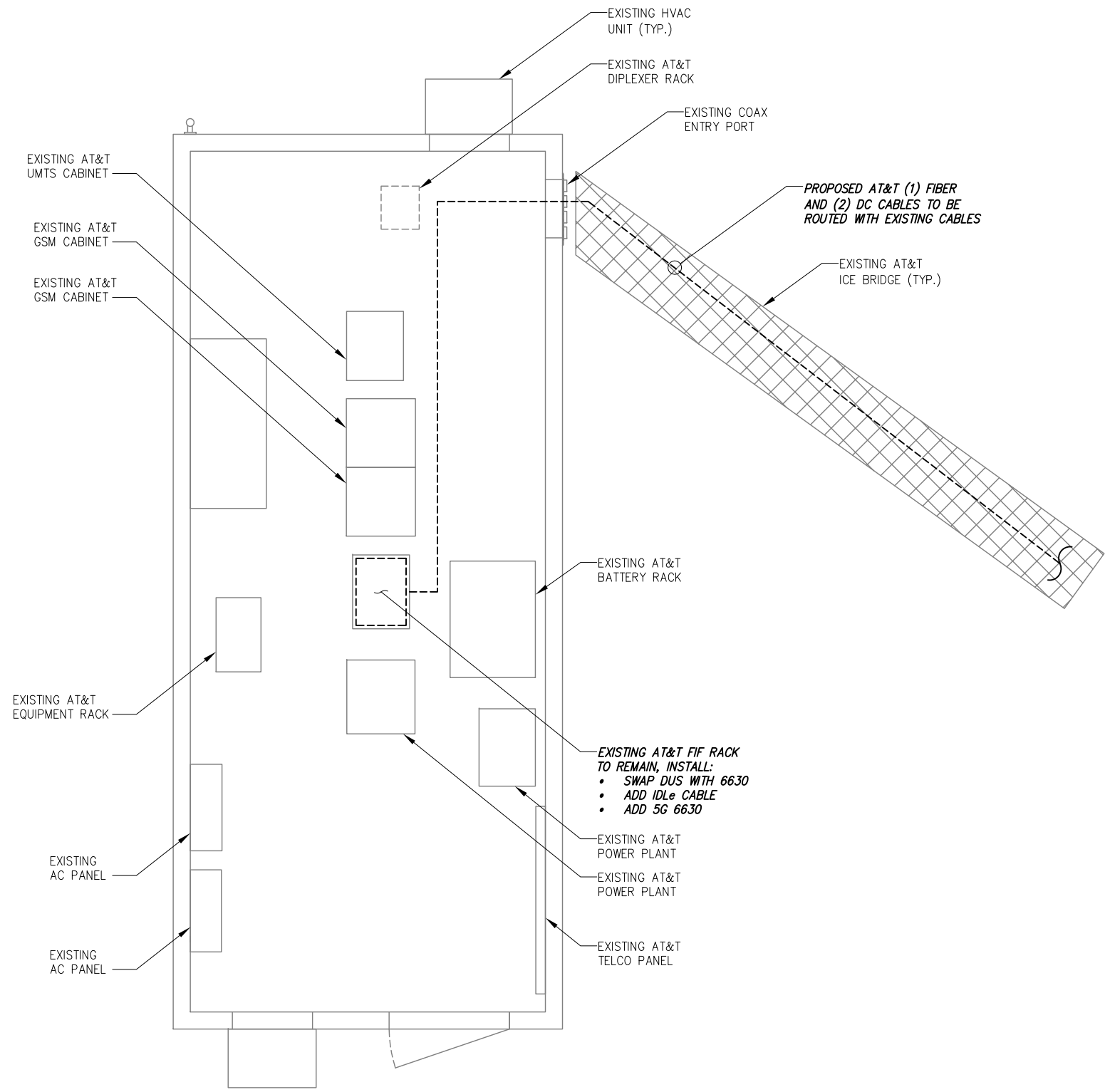
Project Title:
CORNWALL
CTL01025
FA# 10035044
36 MOHAWK MOUNTAIN
CORNWALL, CT 06753



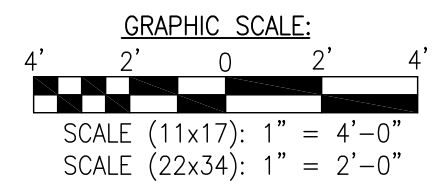
Drawing Scale: AS NOTED
Date: 02/13/20
CD

Drawing Title:
OVERALL SITE PLAN

Drawing Number:
C2

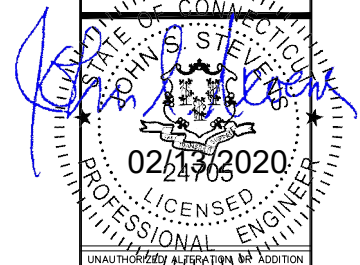


2 ENLARGED EQUIPMENT PLAN
SCALE: AS NOTED



BASEMAPPING PREPARED FROM A SITE WALK PERFORMED BY INFINIGY ENGINEERING AND PROVIDED INFORMATION, AND DOES NOT REPRESENT AN ACTUAL FIELD SURVEY.

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



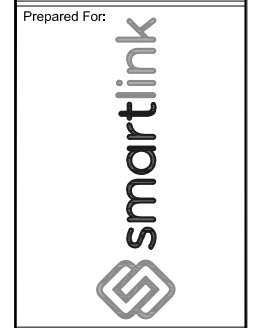
UNAUTHORIZED REPRODUCTION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF APPLICABLE STATE AND/OR LOCAL LAWS.

No.	Submittal / Revision	App'd	Date
3	REVISED FOR PERMIT	BMM	02/13/20
2	REVISED FOR PERMIT	BMM	12/03/19
1	ISSUED FOR PERMIT	ASW	10/23/19
0	ISSUED FOR REVIEW	BMM	08/27/19

Drawn: BMM Date: 08/27/19
Designed: ASW Date: 08/27/19
Checked: AD Date: 08/27/19

Project Number: 499-006

Project Title:
CORNWALL
CTL01025
FA# 10035044
36 MOHAWK MOUNTAIN
CORNWALL, CT 06753



Drawing Scale: AS NOTED
Date: 02/13/20
CD

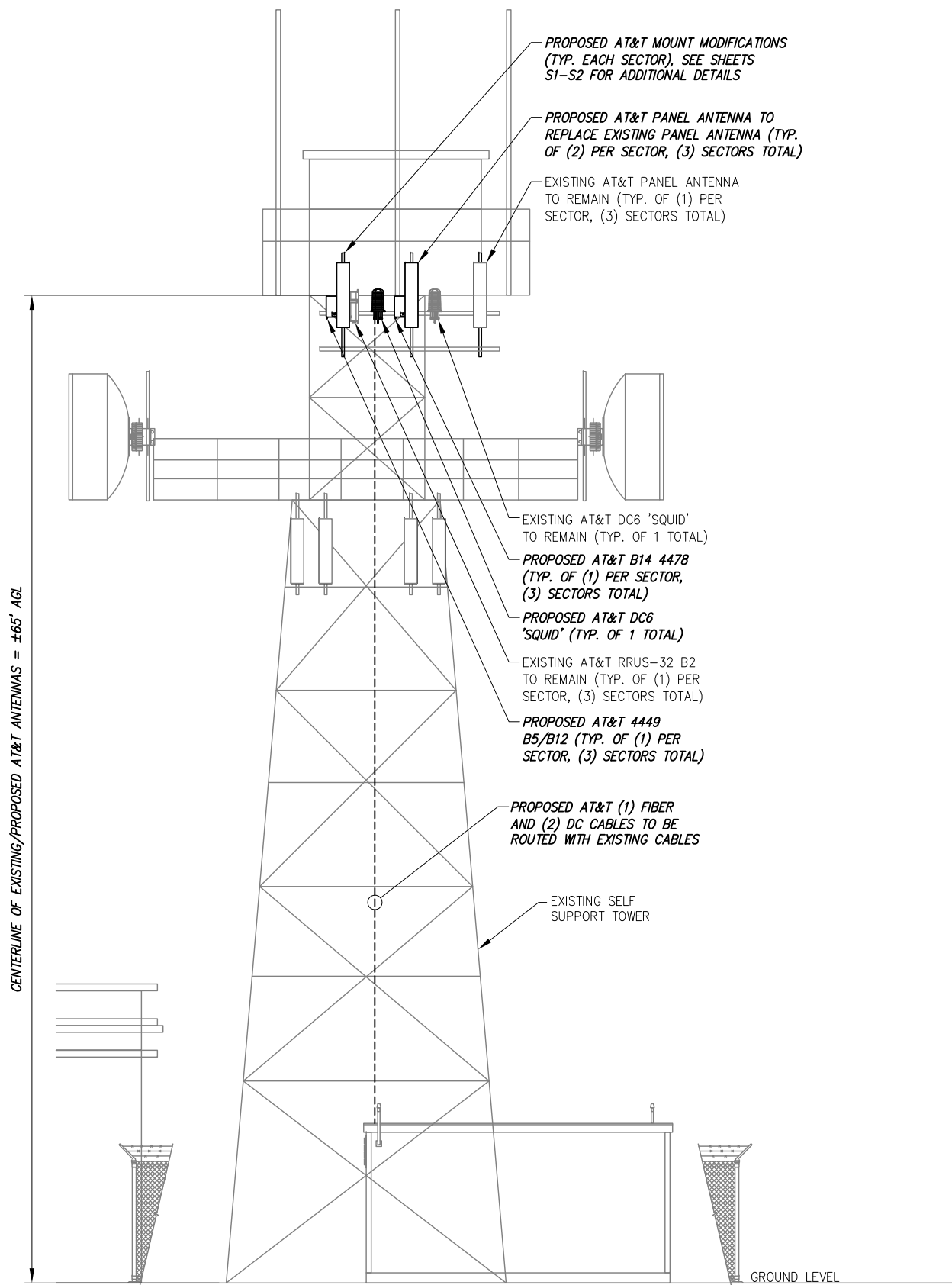
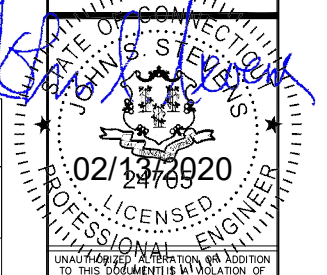
Drawing Title:
ENLARGED SITE PLAN

Drawing Number:
C2A

NOTE:
 • 3' MINIMUM SEPARATION BETWEEN ALL LTE ANTENNAS
 • 6' MINIMUM SEPARATION BETWEEN 700 BC/700 DE ANTENNAS

NOTE:
 • INFINIGY ENGINEERING HAS NOT EVALUATED THE TOWER LOADING FOR THIS SITE, AND ASSUMES NO RESPONSIBILITY FOR ITS STRUCTURAL INTEGRITY REGARDING ITS EXISTING OR PROPOSED LOADING. FINAL INSTALLATION TO COMPLY STRUCTURAL ANALYSIS.
 • FOR STRUCTURAL INFORMATION PERTAINING TO THE ANTENNA MOUNTS, SEE 'POST MOD MOUNT ANALYSIS' COMPLETED BY INFINIGY, DATED 12/02/19. SEE SHEETS S1-S2 FOR MODIFICATION DETAILS

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



FINAL ANTENNA CONFIGURATION & CABLE SCHEDULE BASED ON LTE RFDS DATED 05/23/19, V 1.00

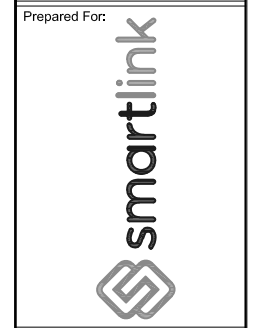
SECTOR	ANTENNA POSITION	ANTENNA STATUS & TECHNOLOGY	ANTENNA MANF/MODEL	TMA/DIPLEXER	RRUS	AZIMUTH	ANTENNA CL. HEIGHT	CABLE FEEDER		RAYCAP UNIT
								TYPE	LENGTH	
ALPHA	A-1	(E) UMTS 850	POWERWAVE 7770	(2) (E) TT19-08BP111-001	--	141°	±65'	(2) (E) 1-1/4" COAX CABLES	±110'	(1) (E) DC6 'SQUID' (1) (P) DC6 'SQUID'
	A-2	--	--	--	--	--	--	(2) (E) 1-1/4" COAX CABLES	--	
	A-3	(P) LTE 700	CCI DMP65R-BU6DA	--	(1) (P) B14 4478	51°	±65'	(1) (E) FIBER CABLE (2) (E) DC CABLES	--	
	A-4	(P) LTE 700/850/1900/5G 850	CCI DMP65R-BU6DA	--	(1) (E) RRUS-32 B2 (1) (P) 4449 B5/B12	51°	±65'	SEE A-3 FOR CABLE INFORMATION	--	
BETA	B-1	(E) UMTS 850	POWERWAVE 7770	(2) (E) TT19-08BP111-001	--	256°	±65'	(2) (E) 1-1/4" COAX CABLES	±110'	
	B-2	--	--	--	--	--	--	(2) (E) 1-1/4" COAX CABLES	--	
	B-3	(P) LTE 700	CCI DMP65R-BU6DA	--	(1) (P) B14 4478	161°	±65'	(1) (P) FIBER CABLE (2) (P) DC CABLES	--	
	B-4	(P) LTE 700/850/1900/5G 850	CCI DMP65R-BU6DA	--	(1) (E) RRUS-32 B2 (1) (P) 4449 B5/B12	161°	±65'	SEE A-3 FOR CABLE INFORMATION	--	
GAMMA	G-1	(E) UMTS 850	POWERWAVE 7770	(2) (E) TT19-08BP111-001	--	21°	±65'	(2) (E) 1-1/4" COAX CABLES	±110'	
	G-2	--	--	--	--	--	--	(2) (E) 1-1/4" COAX CABLES	--	
	G-3	(P) LTE 700	CCI DMP65R-BU4DA	--	(1) (P) B14 4478	281°	±65'	SEE A-3 FOR CABLE INFORMATION	--	
	G-4	(P) LTE 700/850/1900/5G 850	CCI DMP65R-BU4DA	--	(1) (E) RRUS-32 B2 (1) (P) 4449 B5/B12	281°	±65'	SEE A-3 FOR CABLE INFORMATION	--	

2 AT&T ANTENNA SCHEDULE
 NOT TO SCALE

1 ELEVATION VIEW
 NOT TO SCALE

3	REVISED FOR PERMIT	BMM	02/13/20
2	REVISED FOR PERMIT	BMM	12/03/19
1	ISSUED FOR PERMIT	ASW	10/23/19
0	ISSUED FOR REVIEW	BMM	08/27/19
No.	Submital / Revision	App'd	Date
Drawn:	BMM	Date:	08/27/19
Designed:	ASW	Date:	08/27/19
Checked:	AD	Date:	08/27/19
Project Number: 499-006			

Project Title:
 CORNWALL
 CTL01025
 FA# 10035044
 36 MOHAWK MOUNTAIN
 CORNWALL, CT 06753



Drawing Scale:
 AS NOTED
 Date:
 02/13/20

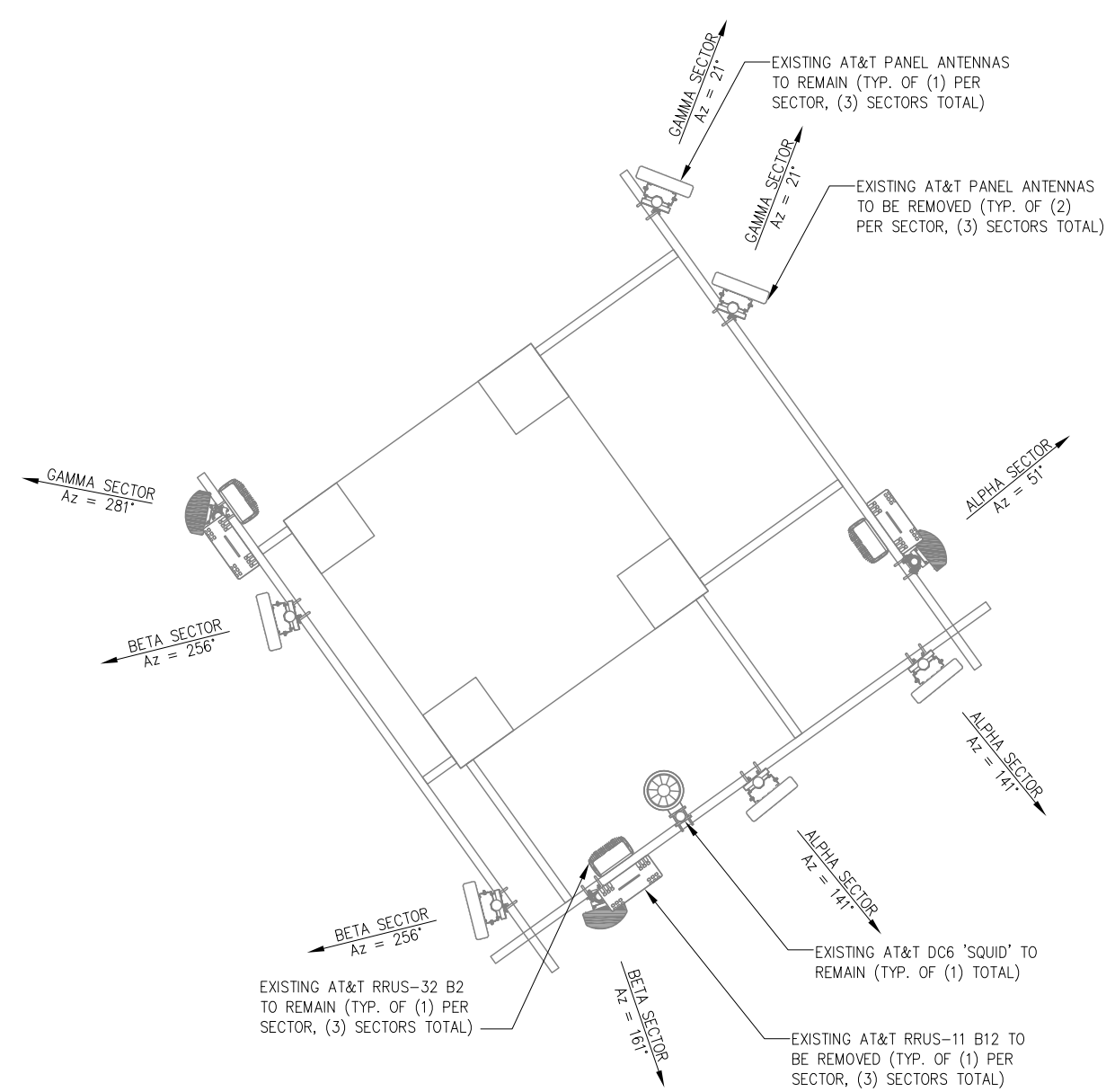
CD

Drawing Title:
ELEVATION VIEW

Drawing Number:
C3

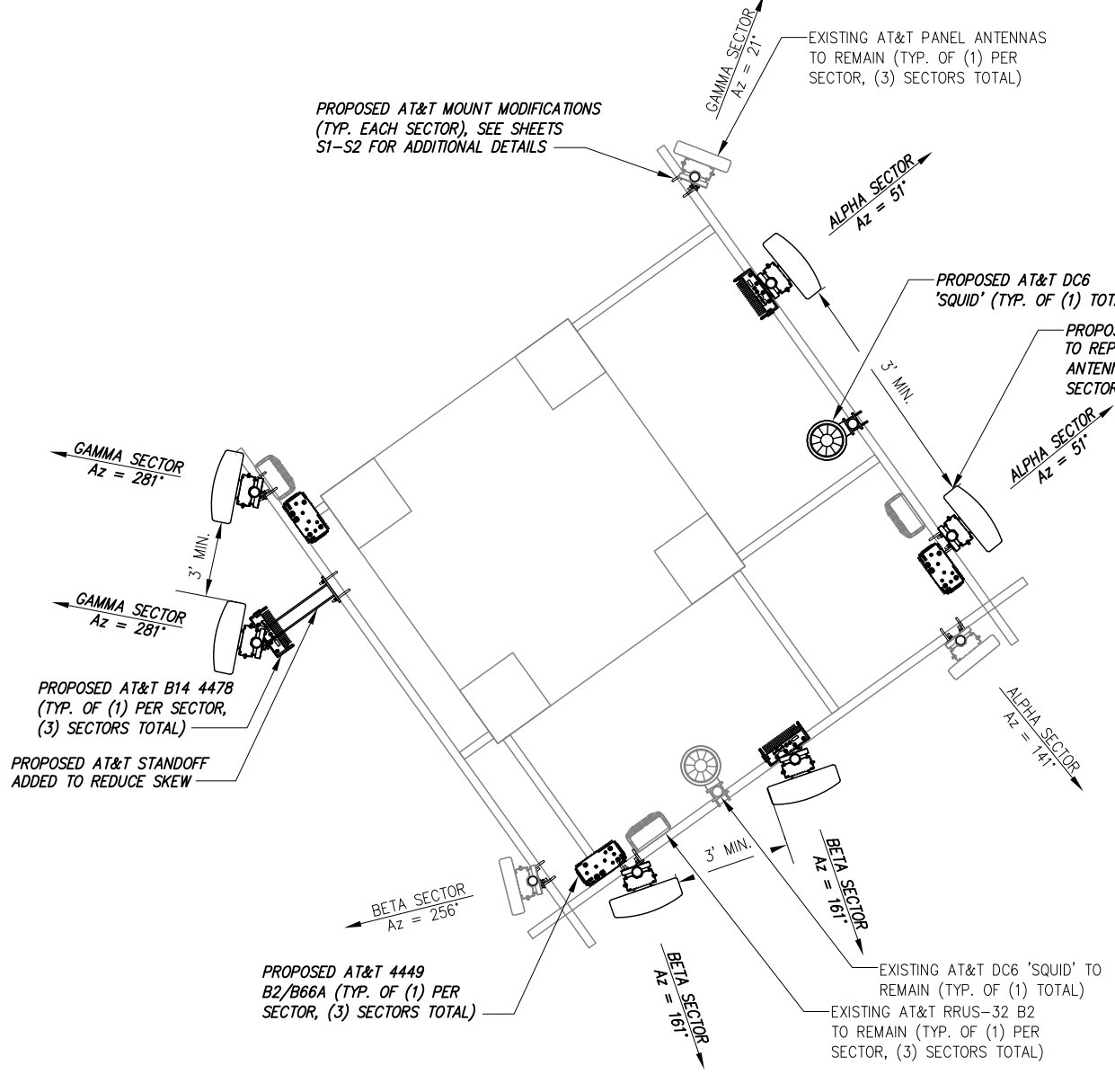
NOTE:
 • 3' MINIMUM SEPARATION BETWEEN ALL LTE ANTENNAS
 • 6' MINIMUM SEPARATION BETWEEN 700 BC/700 DE ANTENNAS

NOTE:
 • INFINIGY ENGINEERING HAS NOT EVALUATED THE TOWER LOADING FOR THIS SITE, AND ASSUMES NO RESPONSIBILITY FOR ITS STRUCTURAL INTEGRITY REGARDING ITS EXISTING OR PROPOSED LOADING. FINAL INSTALLATION TO COMPLY STRUCTURAL ANALYSIS.
 • FOR STRUCTURAL INFORMATION PERTAINING TO THE ANTENNA MOUNTS, SEE 'POST MOD MOUNT ANALYSIS' COMPLETED BY INFINIGY, DATED 12/02/19. SEE SHEETS S1-S2 FOR MODIFICATION DETAILS



TRUE NORTH

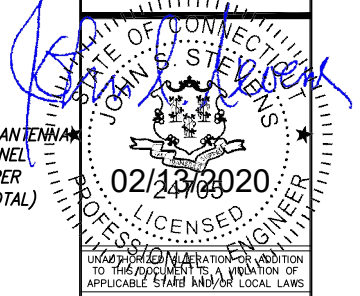
1 EXISTING ANTENNA ORIENTATION PLAN
 --- NOT TO SCALE



TRUE NORTH

2 PROPOSED ANTENNA ORIENTATION PLAN
 --- NOT TO SCALE

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

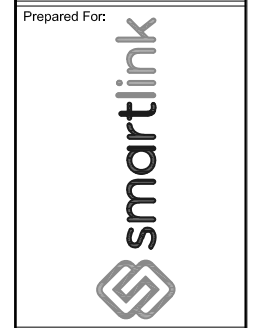


No.	Submittal / Revision	App'd	Date
3	REVISED FOR PERMIT	BMM	02/13/20
2	REVISED FOR PERMIT	BMM	12/03/19
1	ISSUED FOR PERMIT	ASW	10/23/19
0	ISSUED FOR REVIEW	BMM	08/27/19

Drawn: BMM Date: 08/27/19
 Designed: ASW Date: 08/27/19
 Checked: AD Date: 08/27/19

Project Number: 499-006

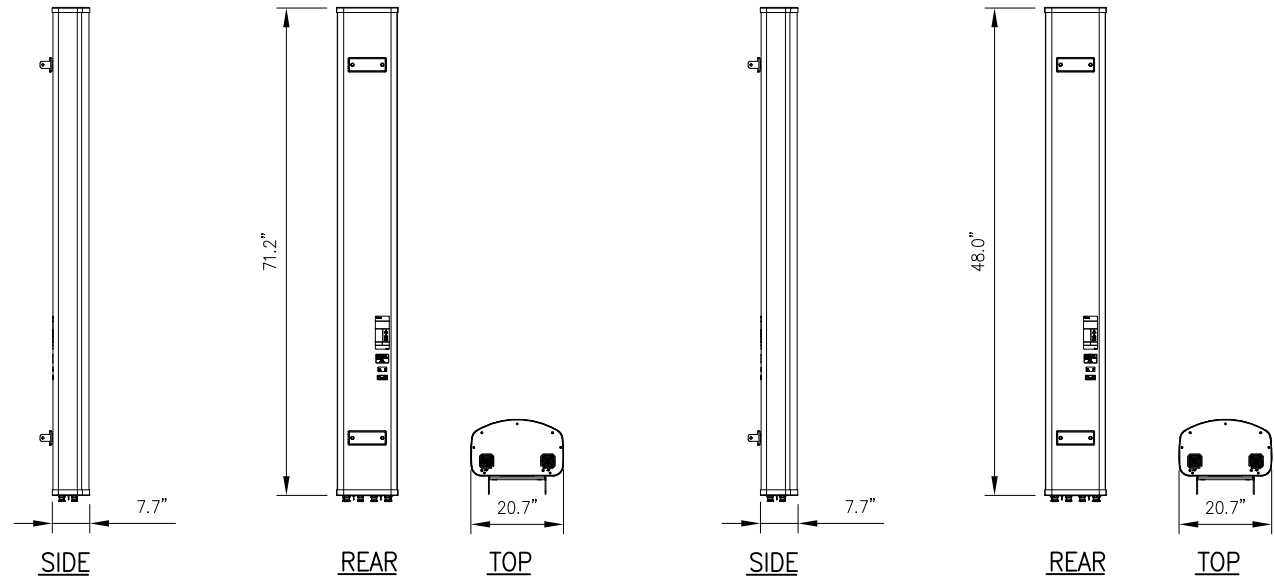
Project Title:
 CORNWALL
 CTL01025
 FA# 10035044
 36 MOHAWK MOUNTAIN
 CORNWALL, CT 06753



Drawing Scale:
 AS NOTED
 Date:
 02/13/20

Drawing Title:
ANTENNA ORIENTATION PLAN

Drawing Number:
C4

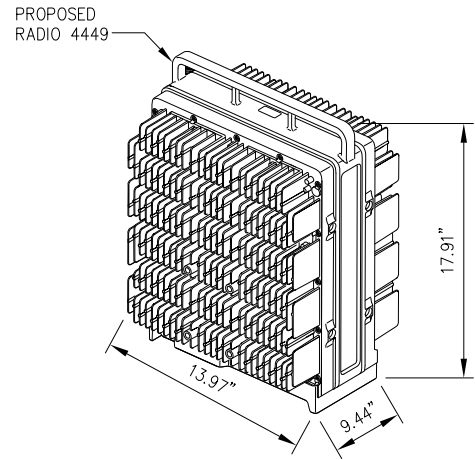


CCI MODEL NO.:	DMP65R-BU6DA
RADOME MATERIAL:	FIBERGLASS
RADOME COLOR:	LIGHT GRAY
DIMENSIONS, HxWxD:	(71.2"x20.7"x7.7")
WEIGHT, W/ PRE-MOUNTED BRACKETS:	79.4 LBS
CONNECTOR:	7-16 DIN FEMALE

CCI MODEL NO.:	DMP65R-BU4DA
RADOME MATERIAL:	FIBERGLASS
RADOME COLOR:	LIGHT GRAY
DIMENSIONS, HxWxD:	(48.0"x20.7"x7.7")
WEIGHT, W/ PRE-MOUNTED BRACKETS:	67.9 LBS
CONNECTOR:	7-16 DIN FEMALE

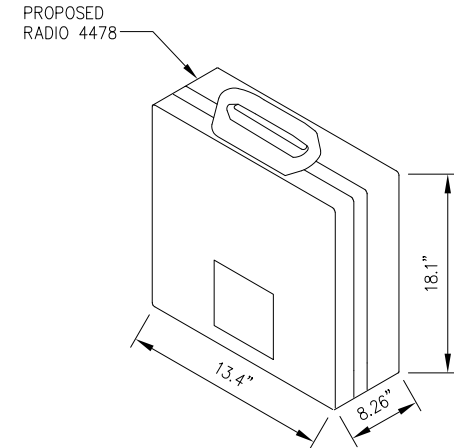
1 ANTENNA DETAIL
NOT TO SCALE

2 ANTENNA DETAIL
NOT TO SCALE



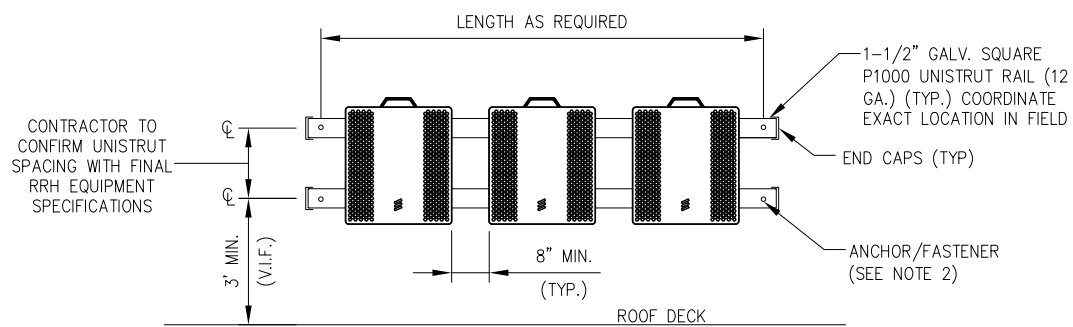
RADIO 4449 SPECIFICATIONS
• HxWxD, (INCHES) : 17.91"x13.97"x9.44"
• WEIGHT (LBS) : 70.54
• COLOR : GRAY

3 ERICSSON RADIO 4449 DETAIL
NOT TO SCALE



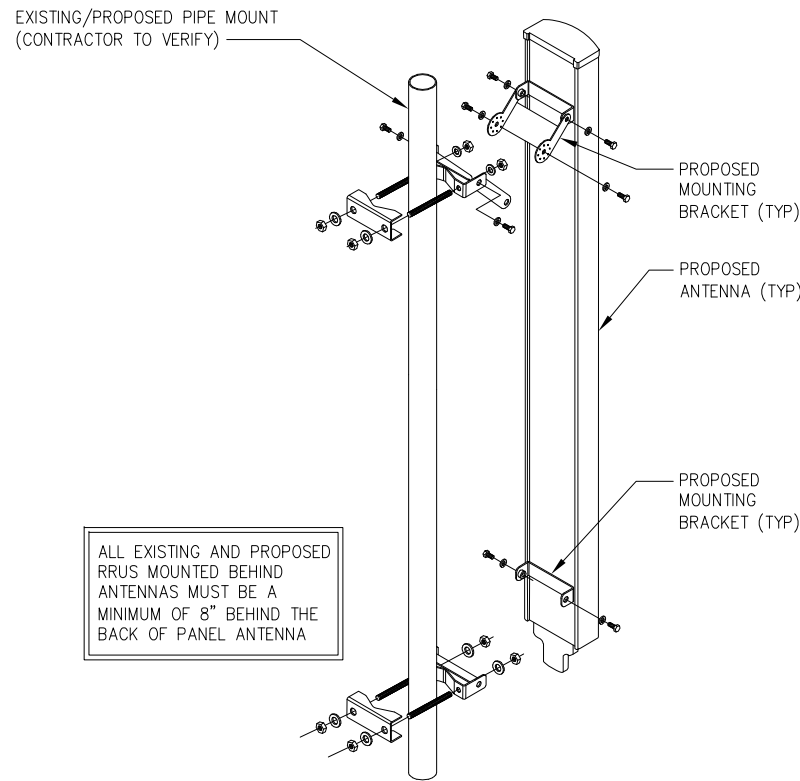
RADIO 4478-B14 SPECIFICATIONS
• HxWxD, (INCHES) : 18.1"x13.4"x8.26"
• WEIGHT (LBS) : 59.5
• COLOR : GRAY

4 ERICSSON RADIO 4478-B14 DETAIL
NOT TO SCALE

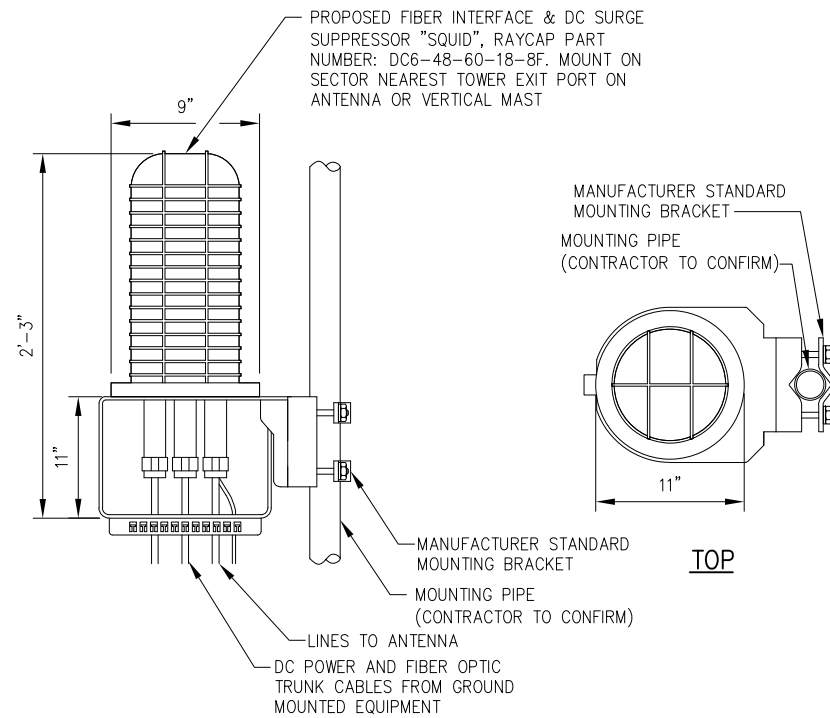


- NOTES:**
- A SUPPORT FOR A SINGLE RRU SHALL HAVE A MINIMUM OF TWO ANCHORS/FASTENERS FOR EACH UNISTRUT CHANNEL.
 - INSTALL ANCHORS/FASTENERS A MAXIMUM OF 2'-0" ON CENTERS.
 - WOOD STUDS - 5/8" LAG BOLT W/ 3.5" EMBEDMENT IN WOOD
 - CONCRETE - 1/2" HILTI KWIK BOLT III W/ 3-5/8" EMBEDMENT OR EQUIVALENT
 - THROUGH BOLT - 1/2" A36/A307 THREADED ROD W/ NUTS AND WASHERS
 ANCHORS AND UNISTRUT CHANNEL SHALL HAVE HOT-DIPPED GALVANIZED FINISH.
 - MOUNT RRU TO UNISTRUT WITH 3/8" UNISTRUT BOLTING HARDWARE AND SPRING NUTS. TYPICAL FOUR PER BRACKET. SUBCONTRACTOR SHALL SUPPLY.

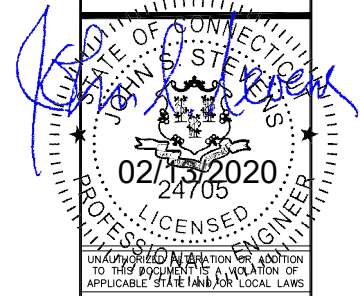
5 TYPICAL RRU MOUNTING DETAIL
NOT TO SCALE



6 ANTENNA MOUNTING DETAIL
NOT TO SCALE

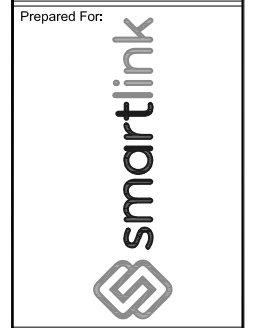


7 SQUID DETAIL
NOT TO SCALE



3	REVISED FOR PERMIT	BMM	02/13/20
2	REVISED FOR PERMIT	BMM	12/03/19
1	ISSUED FOR PERMIT	ASW	10/23/19
0	ISSUED FOR REVIEW	BMM	08/27/19
No.	Submital / Revision	App'd	Date
Drawn:	BMM	Date:	08/27/19
Designed:	ASW	Date:	08/27/19
Checked:	AD	Date:	08/27/19
Project Number: 499-006			

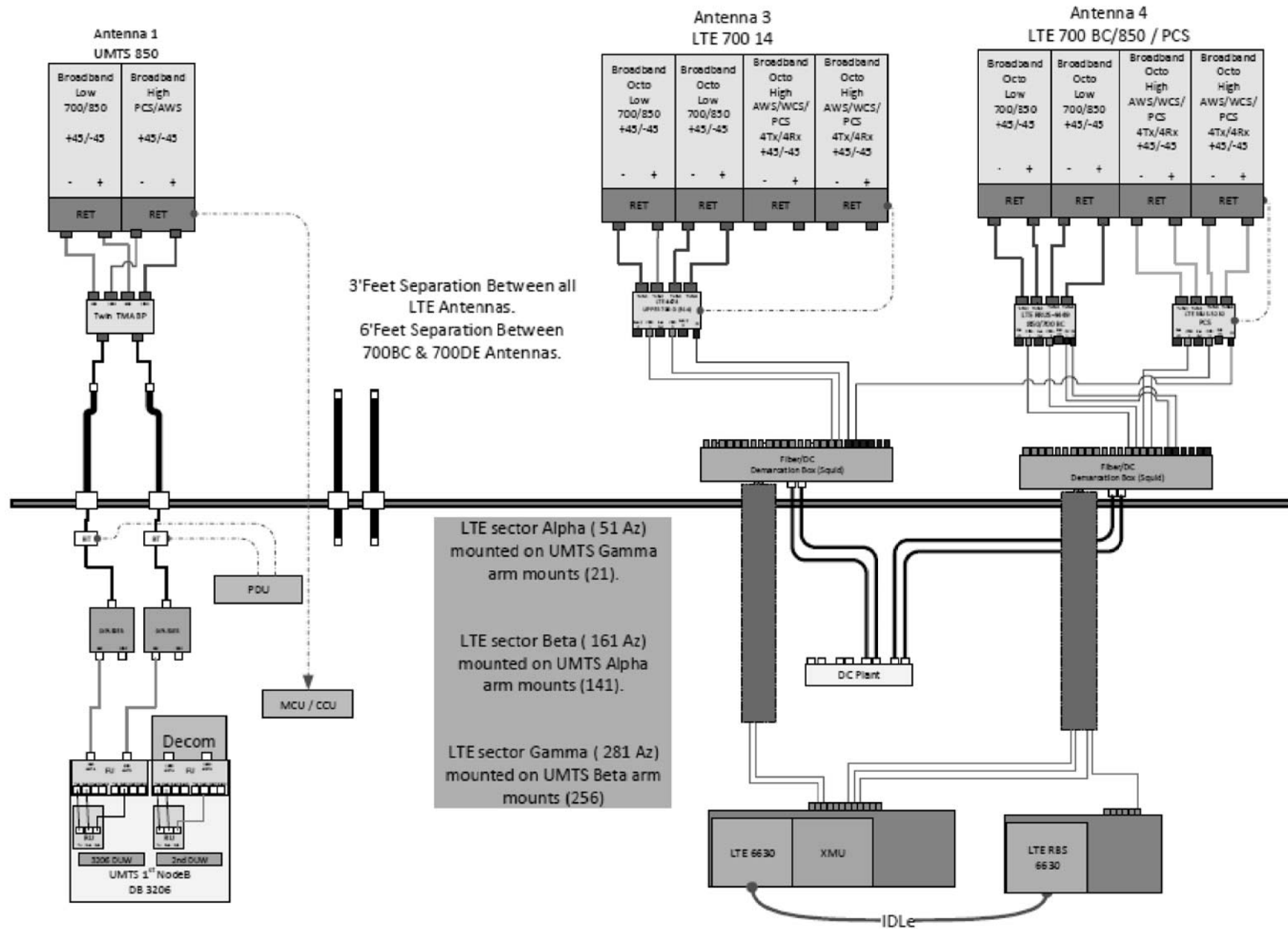
Project Title:
CORNWALL
CTL01025
FA# 10035044
36 MOHAWK MOUNTAIN
CORNWALL, CT 06753



Drawing Scale:
AS NOTED
Date:
02/13/20

Drawing Title:
EQUIPMENT DETAILS

Drawing Number:
C5



3' Feet Separation Between all LTE Antennas.
6' Feet Separation Between 700BC & 700DE Antennas.

LTE sector Alpha (51 Az)
mounted on UMTS Gamma
arm mounts (21).

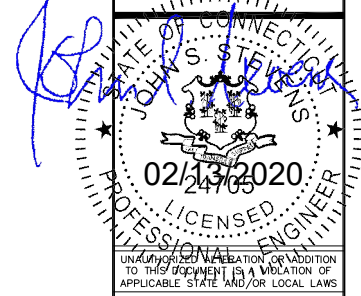
LTE sector Beta (161 Az)
mounted on UMTS Alpha
arm mounts (141).

LTE sector Gamma (281 Az)
mounted on UMTS Beta arm
mounts (256)

ALPHA/BETA/GAMMA

1 PLUMBING DIAGRAM (FINAL CONFIGURATION)
NOT TO SCALE

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

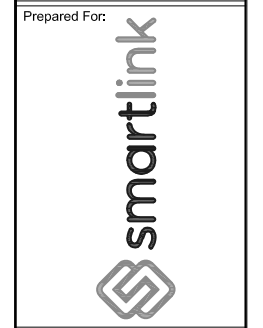


UNLAWFUL PRACTICE OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF APPLICABLE STATE AND/OR LOCAL LAWS.

No.	Submittal / Revision	App'd	Date
3	REVISED FOR PERMIT	BMM	02/13/20
2	REVISED FOR PERMIT	BMM	12/03/19
1	ISSUED FOR PERMIT	ASW	10/23/19
0	ISSUED FOR REVIEW	BMM	08/27/19

Drawn: BMM Date: 08/27/19
Designed: ASW Date: 08/27/19
Checked: AD Date: 08/27/19

Project Number: 499-006
Project Title: CORNWALL
CTL01025
FA# 10035044
36 MOHAWK MOUNTAIN
CORNWALL, CT 06753



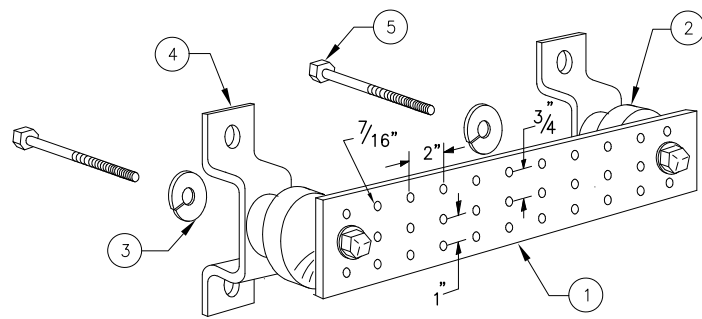
Drawing Scale: AS NOTED
Date: 02/13/20

CD

Drawing Title: **PLUMBING DIAGRAM**

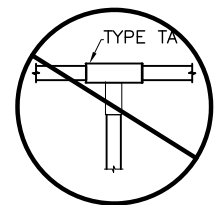
Drawing Number: **C6**

*BASED ON LTE RFDS, DATED 05/23/2019, V1.00

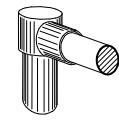


LEGEND

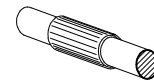
- 1 - SOLID TINNED COPPER GROUND BAR, 1/4"x 4"x 20" MIN., NEWTON INSTRUMENT CO. HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION
- 2 - INSULATORS, NEWTON INSTRUMENT CAT. NO. 3061-4
- 3 - 5/8" LOCKWASHERS, NEWTON INSTRUMENT CO. CAT. NO. 3015-8
- 4 - WALL MOUNTING BRACKET, NEWTON INSTRUMENT CO. CAT 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 ACCOMMODATE 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"



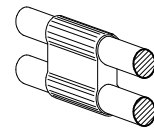
NOT PERMITTED



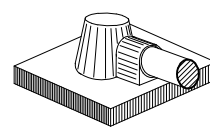
TYPE GR



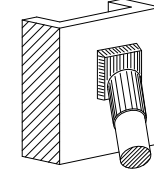
TYPE SV



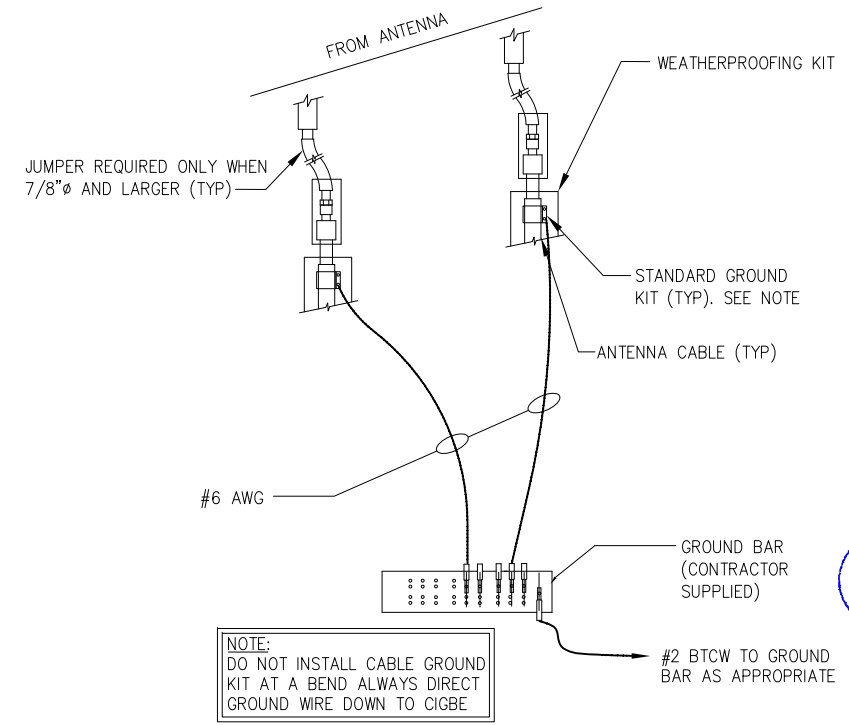
TYPE PH



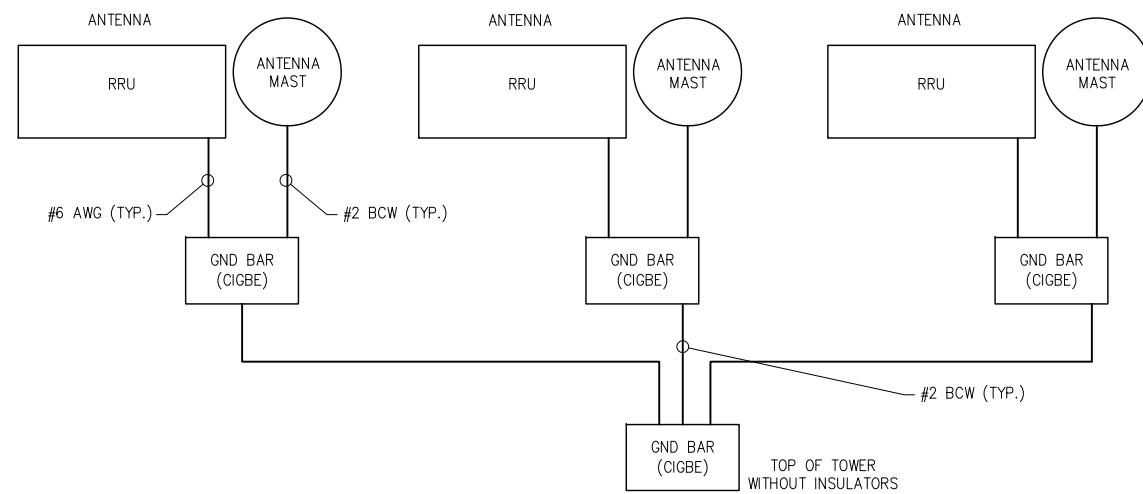
TYPE KA



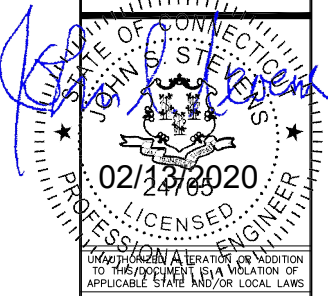
TYPE VS



NOTE:
DO NOT INSTALL CABLE GROUND KIT AT A BEND ALWAYS DIRECT GROUND WIRE DOWN TO CIGBE



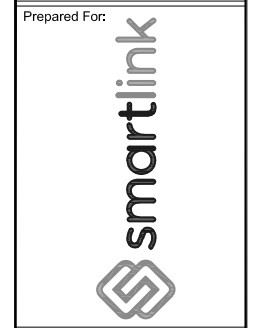
INFINIGY
INFINIGY ENGINEERING, PLLC
1033 Waterlily Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793



No.	Submittal / Revision	App'd	Date
3	REVISED FOR PERMIT	BMM	02/13/20
2	REVISED FOR PERMIT	BMM	12/03/19
1	ISSUED FOR PERMIT	ASW	10/23/19
0	ISSUED FOR REVIEW	BMM	08/27/19

Drawn: BMM Date: 08/27/19
Designed: ASW Date: 08/27/19
Checked: AD Date: 08/27/19

Project Number: 499-006
Project Title: CORNWALL
CTL01025
FA# 10035044
36 MOHAWK MOUNTAIN
CORNWALL, CT 06753



Drawing Scale: AS NOTED
Date: 02/13/20

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 GALVILITE 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. $F_y=36$ KSI, U.N.O.
 - W SHAPES TO BE A992. $F_y=50$ KSI, U.N.O.
 - RECTANGULAR HSS TO BE A500, GRADE B. $F_y=46$ KSI, U.N.O.
 - ROUND HSS TO BE A500, GRADE B. $F_y=42$ KSI, U.N.O.
 - STEEL PIPE TO BE A53, GRADE B. $F_y=35$ KSI, U.N.O.
 - BOLTS TO BE A325-X. $F_u=120$ KSI, U.N.O.
 - U-BOLTS AND LAG SCREWS TO BE A307 GR A. $F_u=60$ 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 - RE500, 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 $F_y = 5.35$ 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.

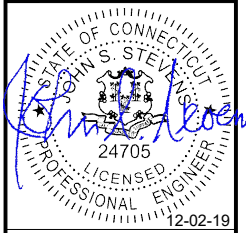
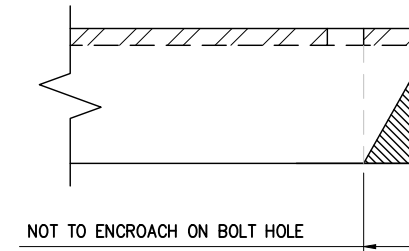
TOWER PLUMB & TENSION NOTES:

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 EPOXIED 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



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

No.	ISSUED FOR REVIEW	TM	11/21/19
	Submittal / Revision	App'd	Date

Drawn: LAM Date: 11/21/19
 Designed: TM Date: 11/21/19
 Checked: BA Date: 11/21/19

Project Number: 499-006

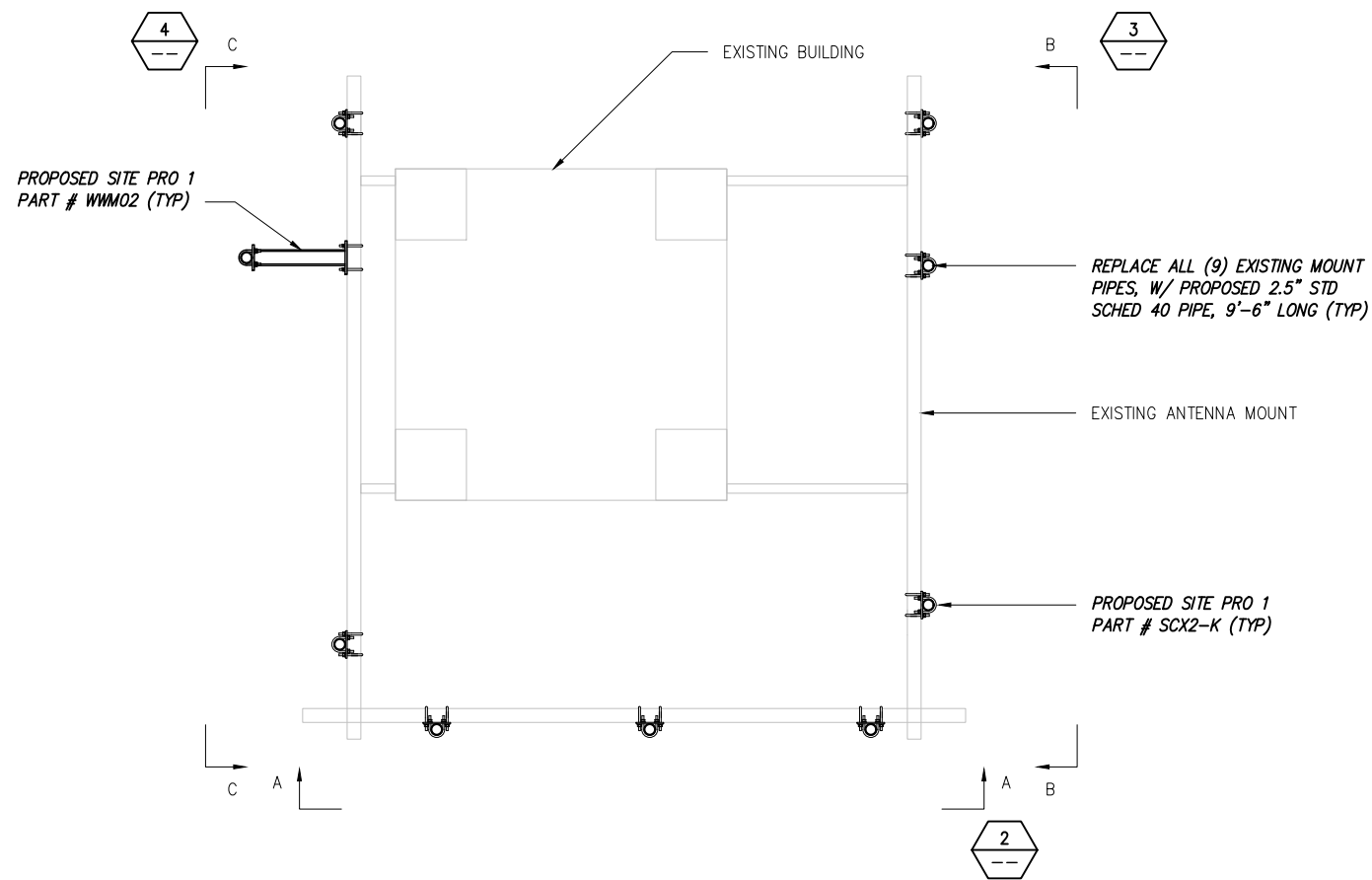
Project Title: CORNWALL
 CTL01025
 FA# 10035044
 36 MOHAWK MOUNTAIN
 CORNWALL, CT 06753



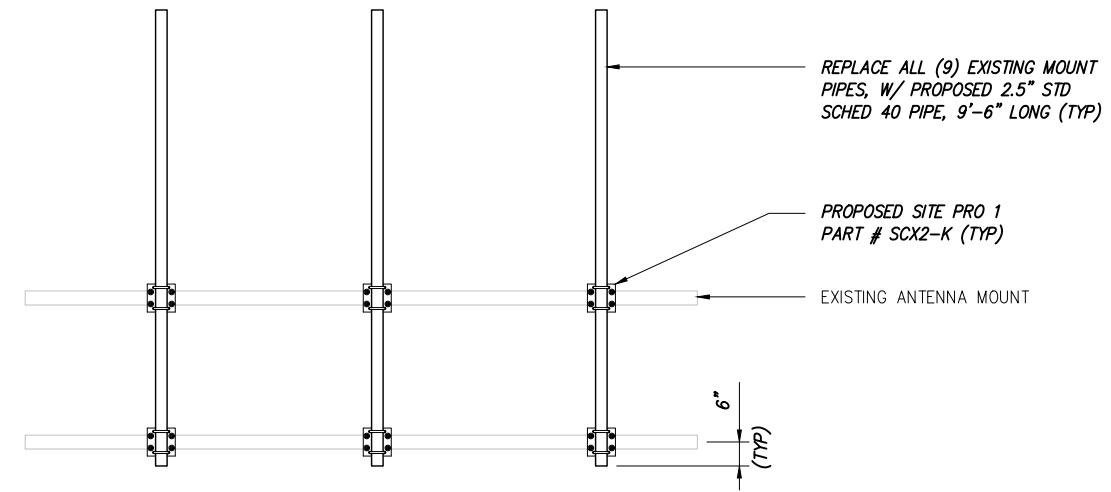
Drawing Scale: AS NOTED
 Date: 11/21/19
SD

Drawing Title: GENERAL NOTES

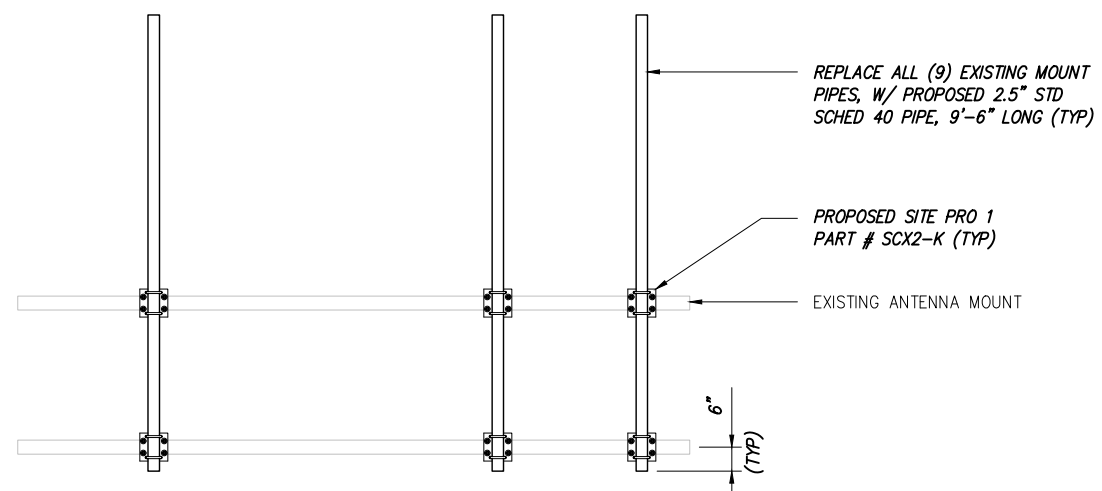
Drawing Number: S1



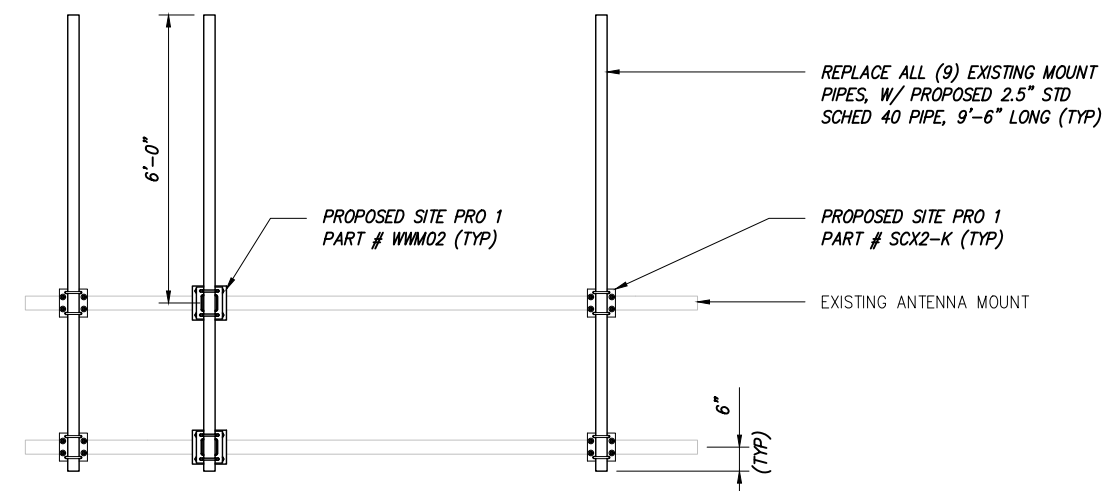
1 PLAN VIEW
SCALE: NOT TO SCALE



2 SECTION A-A
SCALE: NOT TO SCALE



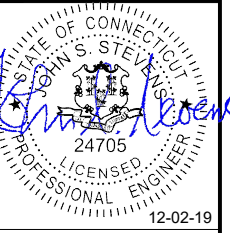
3 SECTION B-B
SCALE: NOT TO SCALE



4 SECTION C-C
SCALE: NOT TO SCALE

NOTE:
 1. VARIOUS EXISTING CONDITIONS AND PROPOSED MODIFICATIONS NOT SHOWN FOR CLARITY.
 2. ALL SITE PRO 1 PARTS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS, EXCEPT OTHERWISE NOTED.
 3. PROPOSED SITE PRO 1 PART # WMM02 MODIFICATION IS FOR GAMMA SECTOR ONLY

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



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

No.	ISSUED FOR REVIEW	TM	11/21/19
	Submittal / Revision	App'd	Date

Drawn: LAM Date: 11/21/19
 Designed: TM Date: 11/21/19
 Checked: BA Date: 11/21/19

Project Number: 499-006

Project Title:
 CORNWALL
 CTL01025
 FA# 10035044
 36 MOHAWK MOUNTAIN
 CORNWALL, CT 06753



Drawing Scale: AS NOTED **SD**
 Date: 11/21/19

Drawing Title:
MOUNT MODIFICATIONS

Drawing Number:
S2