CENTERLINE COMMUNICATIONS

dish WIRELESS

Gamma Purchasing L.L.C. ("DISH")

Murdock MacDonald
Real Estate Consultant
750 W. Center St, Suite 301
W. Bridgewater, MA 02379
Phone: (508) 246-0548
mmacdonald@clinellc.com

May 20, 2019

Honorable James J. Murphy, Jr., Acting Chairman
and Members of the Connecticut Siting Council
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re: **Request for Tower Share**
Gamma Purchasing L.L.C. ("DISH" a/k/a "Dish" f/k/a "Dish Network") Request for Approval of the Shared Use of an Existing Tower at 1334 Route 85, Montville, CT
DISH site number: CT0100007B (ATC: 302534)

Dear Chairman Murphy and Members of the Council:

Dish proposes to share an existing telecommunications tower located at 1334 Route 85, Montville, CT (the facility). The subject parcel is identified by the Town of Montville as Map 2, Block 3. The property is owned by the City of New London. The tower is owned by American Tower Corporation. The property is roughly 78.7± acres and accommodates the guyed tower within its fenced compound, with three utility buildings, generators and concrete pads within. The facility is and will continue to be owned and operated by American Tower Corporation.

Pursuant to Connecticut General Statues Section 16-50aa (the Statute), Dish requests a finding from the Connecticut Siting Council that the shared use of this facility is technically, legally, environmentally and economically feasible, will meet safety concerns, will avoid the unnecessary proliferation of towers and is in the public interest. It further requests an order approving the shared use of this facility.

The purpose of this request is to use an existing tower to develop Dish's wireless network to provide high speed wireless data and wireless service within the State of Connecticut and in this part of Montville: avoiding the need for an additional tower in Montville, CT.

Dish is licensed by the Federal Communications Commission ("FCC") to provide multiple technologies, including NB-IoT, PCS and AWS (1900 MHz and 2000-2020 MHz) in New London County. Dish is building and enhancing its network to take advantage of its licensed spectrum,

improve its Personal Carrier Services (PCS), and other FCC-licensed wireless data services.

Existing Facility & Proposed Modification

The existing facility is and will continue to be a 1089' guyed tower located at 1334 Route 85 in Montville. Site coordinates (NAD83) are N41° 25' 3.98" and W72° 11' 53.16" (or 41.41777222, -72.1981). Currently there is one other commercial wireless carrier licensed on this tower, whereby Dish now intends to use the vacant space near the middle of the pole. The site plan of the facility is included in the proposed Construction Drawings, prepared by Hudson Design Group LLC dated April 10, 2019 and enclosed herewith.

Dish intends to install three (3) ODI2-065R18K-GQ Comba panel antennas and five (5) Ericsson RRUs on stand-off mounts to be attached to the tower at the 400' mount level. Dish will also install one (1) 1.39" hybrid fiber cable on the tower.

Dish will install one (1) new 5'-3" stacked cabinet within the existing ATC shelter building, along with one (1) telco and one (1) power run through existing conduits from the existing shelter to an existing H-frame. A GPS antenna and an LTE backhaul antenna will be located on the existing ice bridge. Equipment will thus remain within the existing fenced compound.

Consistent with the requirements of the Statute, it is feasible for Dish to collocate at this facility. Dish is proposing to collocate on the existing guyed tower that will continue to remain in the ownership of American Tower Corporation. Included with this application is a Feasibility Structural Analysis Report from Stainless, A Business of FDH Infrastructure Services, LLC dated March 6, 2019 that shows that the existing tower can support Dish's proposed equipment.

The Proposal is Legally Feasible.

The Council has authority, pursuant to statute, to issue an order approving of the shared use of this tower. By issuing an order approving Dish's shared use of this tower, Dish will be able to proceed with obtaining a building permit for the proposed installation. American Tower Corporation has executed a Letter of Authorization that approved Dish's Request for Tower Share filing on May 20, 2019, which approval is included with this application. Dish's proposal is legally feasible.

Dish is a telecommunication provider licensed by the FCC to provide service in the State of Connecticut, including but not limited to New London County. Dish will enter into an agreement with the owner of this facility, American Tower Corporation, for the location of this proposed equipment on the existing tower so that it may provide telecommunications services to the surrounding community. Consequently, the proposal is legally feasible.

The Proposal is Environmentally Feasible.

Pursuant to the Statute, the proposal will be environmentally feasible for the following reasons:

- The overall impact on the Town of Montville will be decreased with the sharing of a single tower versus the proliferation of multiple towers.

- There will be no material increase in the visibility of the tower with the addition of the antennas and associated equipment on the tower.

- There will be no increased impact on air quality because no air pollutants will be generated during normal operation of the facility.

- There will only be a brief, slight increase in noise pollution while the site is under construction.

- During construction, the proposed project will generate a small amount of traffic as construction takes place. Upon completion, traffic will be limited to an average of one trip per month for maintenance and inspections.

- There will be no adverse impact to the health and safety of the surrounding community or workers at the facility due to the addition of Dish's new antennas to the tower. Dish has performed an analysis of the radio frequency field emanating from the transmitting antennas on the tower to ensure compliance with the National Council on Radiation Protection and measurements (NCRP) standard for maximum permissible exposure (MPE) adopted by the FCC. The analysis dated April 5, 2019 indicates that Dish and other antennas on the tower will cumulatively emit 1.84% of the NCRP standard for maximum permissible exposure. The report indicates that maximum level of exposure will be well below the FCC's mandated radio frequency exposure limits. The report is enclosed herewith and the calculations are below.

Antenna ID	Antenna Make / Model	Frequency Bands	Antenna Gain (dBd)	Channel Count	Total TX Power (W)	ERP (W)	MPE %
Antenna A1	Comba ODI2-065R18K-OQ	1900 MHz (PCS) - H Block / Band 70 (2000 to 2020 MHz)	15.65	4	160	5,876.52	0.14
						Sector A Composite MPE%	0.14
Antenna B1	Comba ODI2-065R18K-OQ	1900 MHz (PCS) - H Block / Band 70 (2000 to 2020 MHz)	15.65	4	160	5,876.52	0.14
						Sector B Composite MPE%	0.14
Antenna C1	Comba ODI2-065R18K-OQ	1900 MHz (PCS) - H Block / Band 70 (2000 to 2020 MHz)	15.65	4	160	5,876.52	0.14
						Sector C Composite MPE%	0.14

Site Composite MPE %	
Carrier	MPE %
Dish Wireless - Max Per Sector Value	0.14 %
MediaFlo	0.19 %
AT&T	1.02 %
Field Measurements	0.49 %
Site Total MPE %:	1.84 %

Dish Wireless Sector A Total:	0.14 %
Dish Wireless Sector B Total:	0.14 %
Dish Wireless Sector C Total:	0.14 %
Site Total:	1.84 %

- Dish expects to enhance safety in this portion of Montville by improving wireless telecommunications for local residents and travelers. Dish is currently developing its network to provide its customers with quality and reliable coverage to comply with their FCC license, the site is a necessary part of Dish's network development.

- Specifically, this proposal is designed to provide reliable wireless coverage for this section of Montville, CT.

Conclusions:

For the reasons stated above, the attachment of Dish's antennas and associated equipment to the tower would meet all the requirements set forth in the Statute. The proposal is legally, technically, economically and environmentally feasible and meets all public safety concerns. Therefore, Dish respectfully requests that the Council approve this request for the shared use of this tower located at 1334 Route 85, Montville, CT.

Respectfully yours,

Murdock MacDonald
Real Estate Consultant – Site Acquisition
c/o Gamma Purchasing L.L.C. (Dish)
Centerline Communications, LLC
750 West Center Street, Floor 3 / Suite 301
West Bridgewater, MA 02379
Mobile: (508) 246-0548
mmacdonald@clinellc.com

Enclosures (8)

cc: Ronald K. McDaniel, Town of Montville, Mayor of Montville - chief elected official
Nancy Woodlock, Zoning/Wetlands Officer - P&Z official
City of New London - property owner
American Tower Corporation - tower owner
DISH (e-mail)

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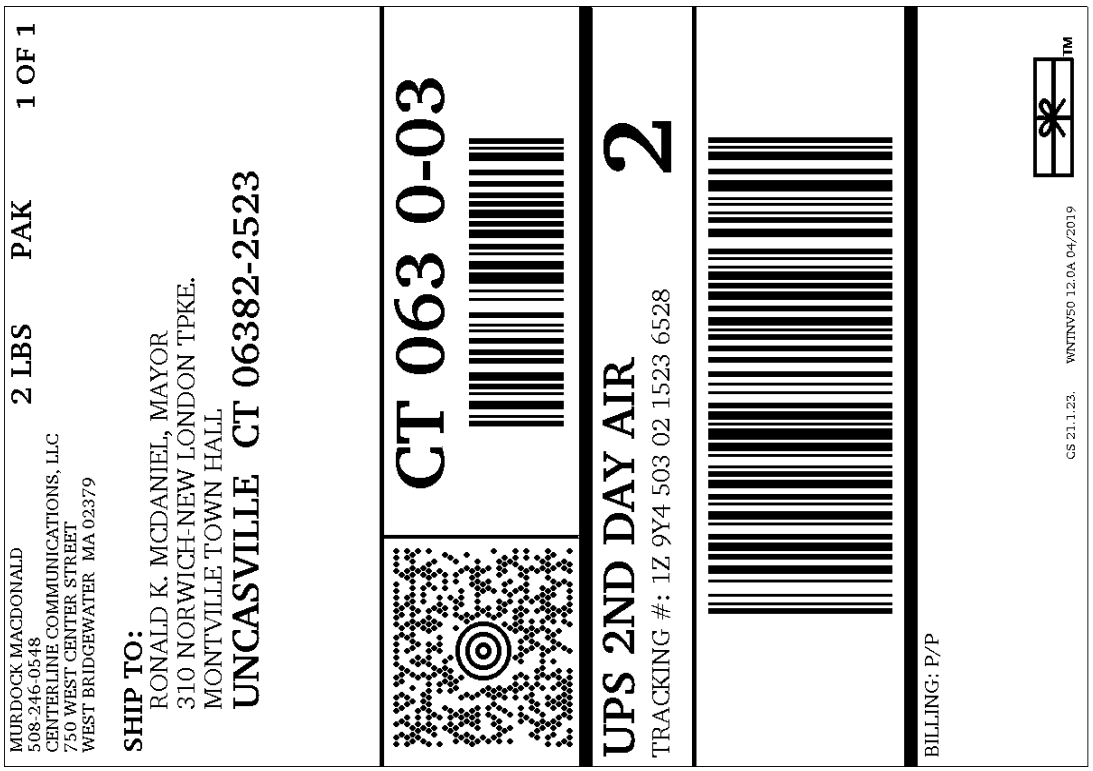

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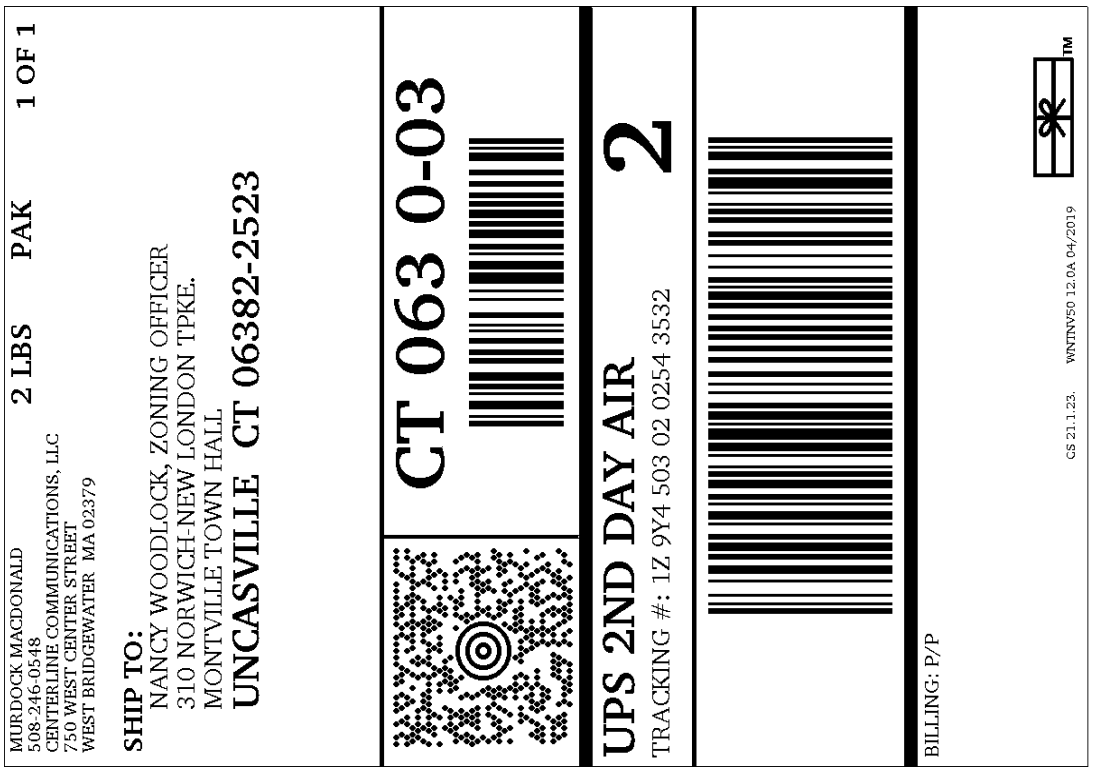

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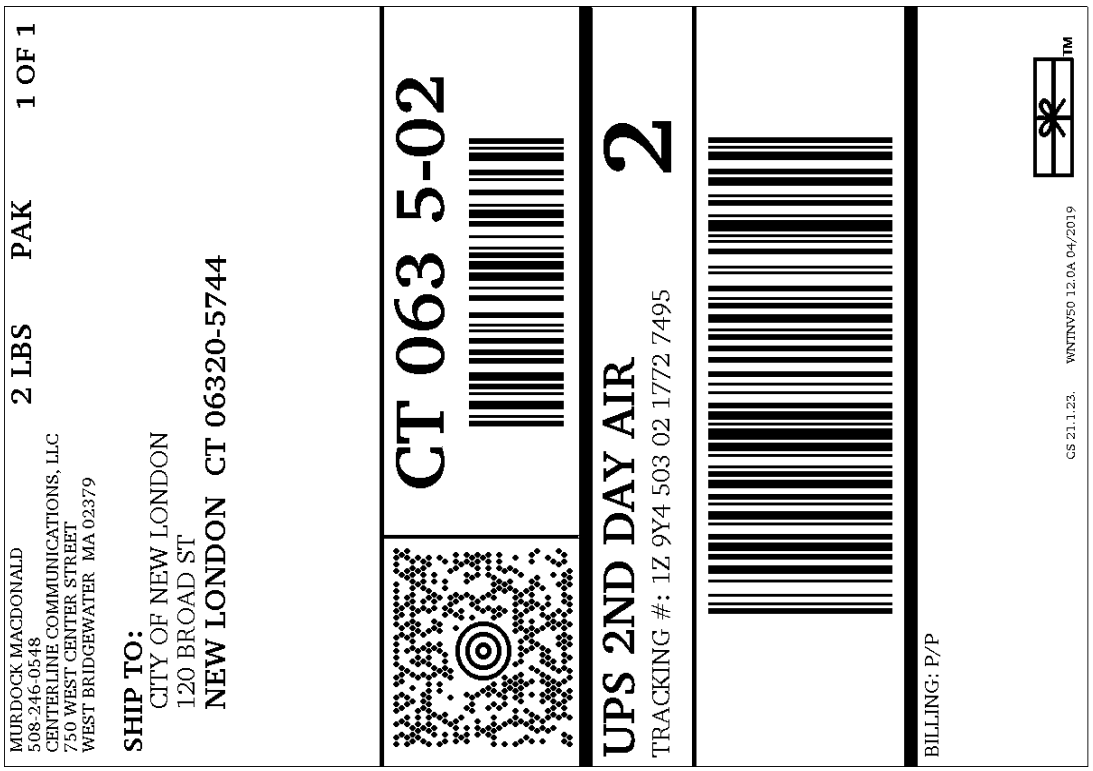

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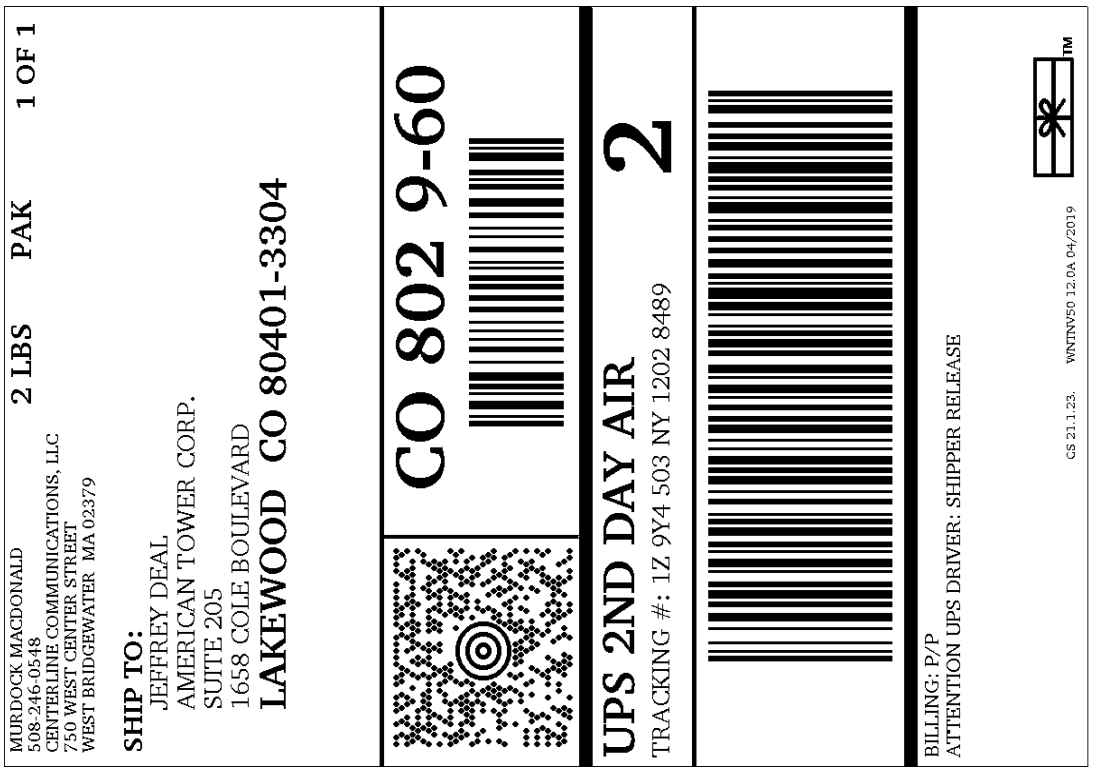


AMERICAN TOWER®
CORPORATION

LETTER OF AUTHORIZATION

LICENSEE NAME: GAMMA PURCHASING L.L.C. dba DISH NETWORK CORPORATION
@ ATC Site Name: Hartford - Nyc ATC Site #: 302532
Site Address: 1334 Route 85, Montville, CT 06370
APN: MONT-000002-000003

I, _____, of the City of New London, owner of the property identified above or duly authorized agent thereof, do hereby authorize GAMMA PURCHASING L.L.C. dba DISH NETWORK CORPORATION, American Tower*, their parents, subsidiaries, affiliates, successors, assigns, contractors, and agents, to act as my non-exclusive agent for the sole purpose of filing and consummating any current or future land-use or construction permit application(s) as may be required by the applicable permitting authorities for GAMMA PURCHASING L.L.C. dba DISH NETWORK CORPORATION's proposed equipment. The Scope of work is as follows-

THIS IS NOT AN ALL INCLUSIVE LIST. CONTRACTOR SHALL UTILIZE SPECIFIED EQUIPMENT PART OR ENGINEER APPROVED EQUIVALENT. CONTRACTOR SHALL VERIFY ALL NEEDED EQUIPMENT TO PROVIDE A FUNCTIONAL SITE.
THE PROJECT GENERALLY CONSISTS OF THE FOLLOWING:

- INSTALL (3) PROPOSED PANEL ANTENNAS (1 PER SECTOR)
- INSTALL (3) PROPOSED ANTENNA MOUNTS (1 PER SECTOR)
- INSTALL PROPOSED JUMPERS
- INSTALL (6) PROPOSED RRUs
- INSTALL (1) PROPOSED HYBRID CABLE
- INSTALL (1) PROPOSED CABLE LADDER (IF APPLICABLE)
- INSTALL (1) PROPOSED METAL PLATFORM WITH CANOPY FOR GROUND EQUIPMENT
- INSTALL (1) PROPOSED ICE BRIDGE (IF APPLICABLE)
- INSTALL (1) PROPOSED BBU IN CABINET
- INSTALL (1) PROPOSED PPC CABINET MOUNTED TO PROPOSED H-FRAME
- INSTALL (1) PROPOSED SURGE SUPPRESSION DEVICE
- INSTALL (1) PROPOSED EQUIPMENT CABINET
- INSTALL (1) PROPOSED RBS CHASSIS IN PROPOSED EQUIPMENT CABINET
- INSTALL (1) PROPOSED BASEBAND UNIT IN PROPOSED RBS CHASSIS
- INSTALL (1) PROPOSED POWER CONDUIT FROM PLATFORM TO MEET-ME-POINT DESIGNATED BY POWER COMPANY
- INSTALL (1) PROPOSED TELCO CONDUIT FROM PLATFORM TO MEET-ME-POINT DESIGNATED BY TELCO PROVIDER
- INSTALL (1) PROPOSED NEMA4 TELCO-FIBER BOX MOUNTED TO PROPOSED H-FRAME
- INSTALL (1) PROPOSED GPS ANTENNA WITH CABLE IN CONDUIT
- INSTALL (1) PROPOSED PIPE MAST
- INSTALL (1) PROPOSED LTE BACKHAUL ANTENNA ON PROPOSED PIPE MAST WITH CABLE IN CONDUIT (IF APPLICABLE)
- INSTALL (1) PROPOSED DISH ANTENNA (IF APPLICABLE)

Signature: _____

Print Name: Michael E. Passaro

(Notary Block on next page)

*American Tower as used herein includes any affiliates or subsidiaries of American Tower Corporation

AMERICAN TOWER®
CORPORATION

LOA 302532

NOTARY BLOCK

State of Connecticut)

County of New London)

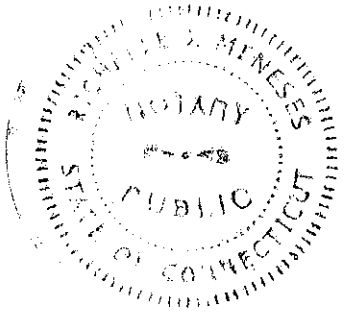
On April 5th, 2019, before me, Michael Passero personally appeared

_____, who provide to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of Connecticut that the foregoing paragraph is true and correct.

Witness my hand and official seal.

Signature _____ (Seal)
My Commission Expires:



Richelle J. Meneses
NOTARY PUBLIC
State of Connecticut
My Commission Expires 10/31/2023

AMERICAN TOWER®
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Structural Analysis Report

Structure	:	**1200 ft Guyed Tower**
ATC Site Name	:	**Hartford CT 2, CT**
ATC Site Number	:	**302534**
Engineering Number	:	**OAA746560_C3_03**
Proposed Carrier	:	**Dish Network Corporation**
Carrier Site Name	:	**N/A**
Carrier Site Number	:	**CT0100007A**
Site Location	:	**1337 Route 85** **Oakdale, CT 06370-1832** **41.417700,-72.198100**
County	:	**New London**
Date	:	**May 23, 2019**
Max Usage	:	**80%**
Result	:	**Pass**

Prepared By:
Bryan Lanier
Director, Broadcast Engineering

Reviewed By:

COA: PEC.0001553

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Table of Contents

Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 1089.8 ft guyed tower to reflect the change in loading by DISH NETWORK CORPORATION.

Supporting Documents

Tower Drawings	Central Tower Project #GT-833, dated September 29, 2000
Foundation Drawing	Central Tower Project #GT-833, dated November 29, 2000
Geotechnical Report	PSI Project #862-05163, dated October 26, 2000

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:	104 mph (3-Second Gust), V_{asd} / 132 mph (3-Second Gust), V_{ult}
Basic Wind Speed w/ Ice:	50 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:	4
Crest Height:	400 ft
Spectral Response:	$S_s = 0.17$, $S_1 = 0.06$
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

Elevation[1] (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
1169.0	1169.0	1	Dielectric TFU-31ETT/VP-R O6	Leg	(1) 6 1/8" HL	Ion Media
1073.0	1073.0	1	MRC Proscan III	Platform w/ Handrails	(1) 1" conduit (1) 7/8" Coax	Outlet Broadcasting,inc (wvit)
1003.0	1003.0	1	Valmont ISMD10	Leg	-	Meredith
996.0	996.0	1	MRC Proscan III	Platform w/ Handrails	(1) 7/8" Coax (1) 0.99" LDF2-2R	
889.0	889.0	1	Sabre 10' - 12' Ice Shield	Leg	-	Ion Media
878.0	878.0	1	8' Dish w/ Radome	Leg	(1) EW63	
356.0	356.0	1	Valmont ISMD8	Leg	-	
349.0	349.0	1	8' Dish w/ Radome	Leg	(1) EW63	
197.0	197.0	1	Raycap DC6-48-60-18-8F	Leg	(2) 0.65" 8 AWG 2C (1) 0.33" Fiber (1) 2 1/2" conduit	AT&T Mobility
192.0	192.0	6	Powerwave LGP21401	T-Arm	(6) 1 5/8" Coax	
		6	Ericsson RRUS-11 800MHz	Leg		
		3	Powerwave 7770.00	T-Arm		
		1	KMW AM-X-CD-16-65-00T-RET			
		2	Powerwave P65-17-XLH-RR			

Equipment to be Removed

Elevation[1] (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
No loading considered as to be removed						

Proposed Equipment

Elevation[1] (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
400.0	400.0	3	Ericsson Radio 0208	Stand-Off	(1) 1.39" Hybrid	Dish Network
		2	Ericsson RRUS 4415 B30			
		3	Comba ODI2-065R18K-GQ			

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

Install proposed coax anywhere on tower.

Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Legs	68%	Pass
Diagonals	80%	Pass
Horizontals	35%	Pass
Guys	58%	Pass
Leg Bolts	51%	Pass

Foundations

Reaction Component	Calculated Capacities	Analysis Reactions	% of Usage
Base Axial (kips)	2194.5	1711.7	78
Inner Shear (kips)	969.9	167.4	17
Inner Uplift (kips)	640.5	102.4	16
Outer Shear (kips)	1472.9	264.2	18
Outer Uplift (kips)	1261.6	349.7	28

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.

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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:

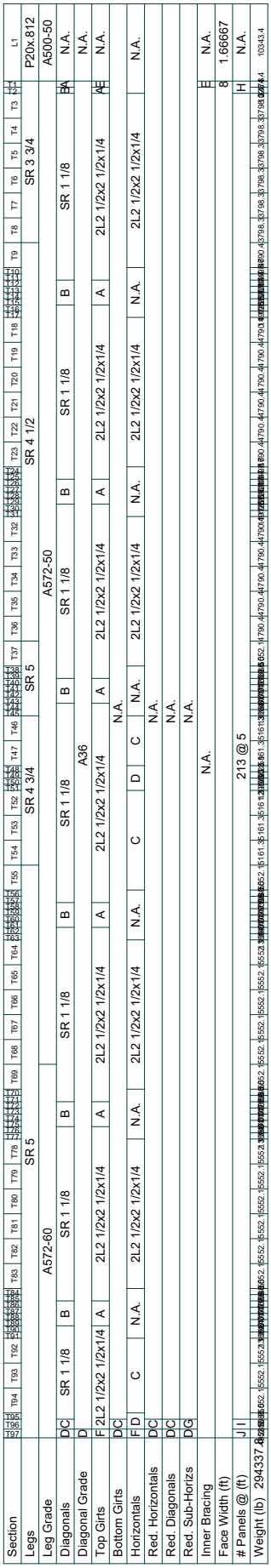
- Information supplied by the client regarding antenna, mounts and feed line loading
- Information from drawings, design and analysis documents, and field notes in the possession of A.T. Engineering Service, PLLC

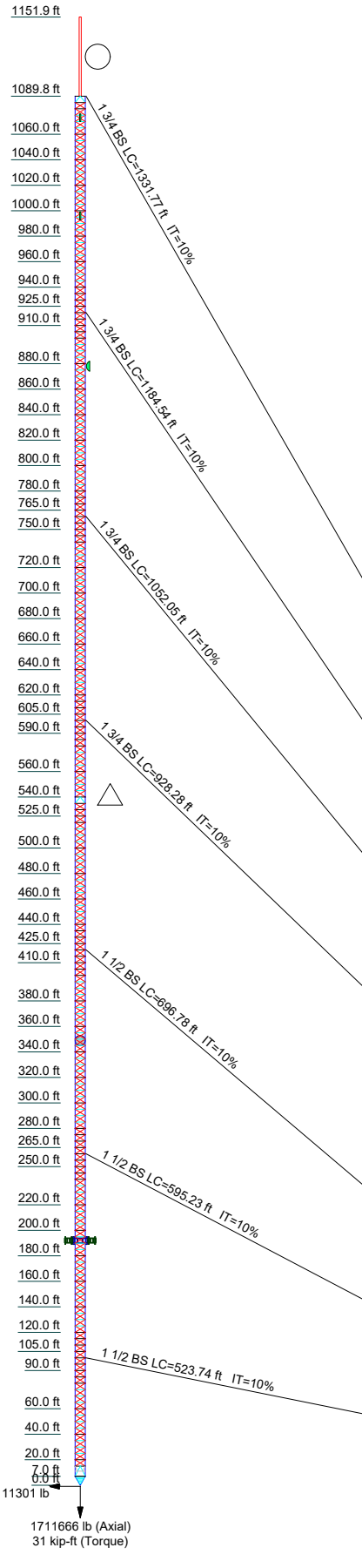
It is the responsibility of the client to ensure that the information provided to A.T. Engineering Service, PLLC and used in the performance of our engineering services is correct and complete.

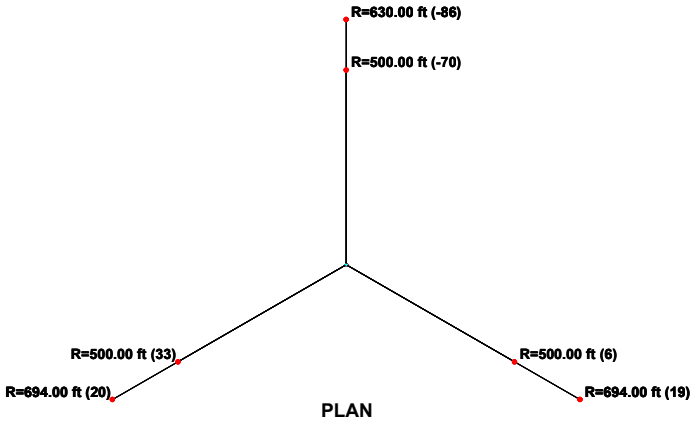
All assets of American Tower Corporation, its affiliates and subsidiaries (collectively "American Tower") are inspected at regular intervals. Based upon these inspections and in the absence of information to the contrary, American Tower assumes that all structures were constructed in accordance with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







DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
TFU-31ETT/VP-R O6	1169	ODI2-065R18K-GQ	400
Flat Side Arm	1073	ISMD8	356
Flat Side Arm	1073	8' Dish w/ Radome	349
Vislink Proscan III	1073	DC6-48-60-18-8F (23.5" Height)	197
ISMD10	1003	P65-17-XLH-RR	192
Flat Side Arm	1003	(2) LGP21401	192
Flat Side Arm	1003	7770.00	192
Vislink Proscan III	996	(2) LGP21401	192
10' - 12' Ice Shield (C30-085-103)	889	(2) RRUS-11 800 MHz	192
8' Dish w/ Radome	878	7770.00	192
RRUS 4415 B30	400	AM-X-CD-16-65-00T-RET	192
Radio 0208	400	(2) LGP21401	192
ODI2-065R18K-GQ	400	Round Side Arm	192
Radio 0208	400	Round Side Arm	192
Stand-Off	400	Round Side Arm	192
Stand-Off	400	(2) RRUS-11 800 MHz	192
Stand-Off	400	7770.00	192
Radio 0208	400	P65-17-XLH-RR	192
ODI2-065R18K-GQ	400	(2) RRUS-11 800 MHz	192

SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	2L2 1/2x2 1/2x5/16	F	C15x33.9
B	SR 1 1/4	G	2L3x3x1/4
C	2L2 1/2x2 1/2x1/4	H	2 @ 4.9
D	N.A.	I	1 @ 7.875
E	MC18x42.7	J	7 @ 0.99256

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-50	50 ksi	65 ksi	A572-60	60 ksi	75 ksi
A36	36 ksi	58 ksi			

TOWER DESIGN NOTES

1. Tower designed for Exposure B to the TIA-222-G Standard.
2. Tower designed for a 104 mph basic wind in accordance with the TIA-222-G Standard.
3. Tower is also designed for a 50 mph basic wind with 0.75 in ice. Ice is considered to increase in thickness with height.
4. Deflections are based upon a 60 mph wind.
5. Tower Structure Class II.
6. Topographic Category 4 with Crest Height of 200.00 ft
7. TOWER RATING: 79.8%

ALL REACTIONS ARE FACTORED

ABC Consulting Engineers

ABC Engineering
1234 W. Jones St.
Smallville, PA 12345
Phone: (555) 555-1234
FAX: (555) 555-1235

Job:	***Hartford CT2, CT (302534)***		
Project:	***OAA746560_C3_03***		
Client:	DISH NETWORK CORPORATION	Drawn by: bryan.lanier	App'd:
Code:	TIA-222-G	Date: 05/23/19	Scale: NTS
Path:	C:\Users\bryan.lanier\OneDrive - American Tower\TNX\302534\SWM 302534 Hartford CT2, CT.eri		Dwg No. E-1

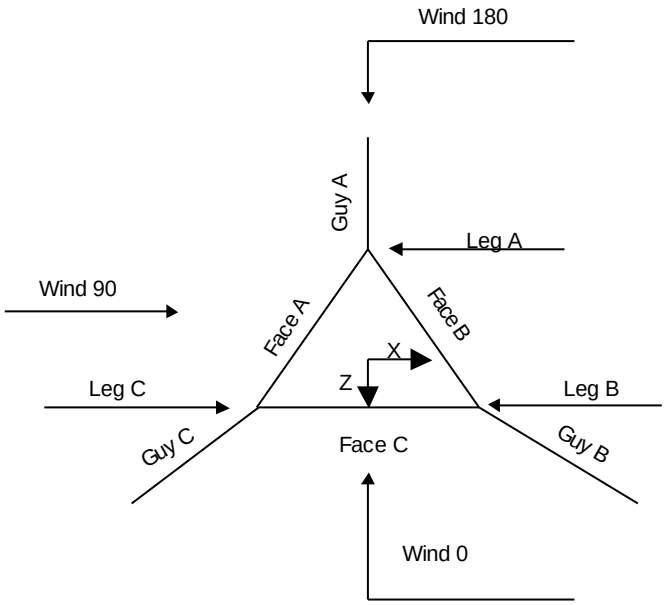
Tower Input Data

The main tower is a 3x guyed tower with an overall height of 1151.90 ft above the ground line.
The base of the tower is set at an elevation of 0.00 ft above the ground line.
The face width of the tower is 8.00 ft at the top and tapered at the base.
An index plate is provided at the 3x guyed -tower connection.
There is a pole section.
This tower is designed using the TIA-222-G standard.
The following design criteria apply:

Basic wind speed of 104 mph.
Structure Class II.
Exposure Category B.
Topographic Category 4.
Crest Height 200.00 ft.
Nominal ice thickness of 0.7500 in.
Ice thickness is considered to increase with height.
Ice density of 56 pcf.
A wind speed of 50 mph is used in combination with ice.
Temperature drop of 50 °F.
Deflections calculated using a wind speed of 60 mph.
Tension only take-up is 0.0313 in.
Pressures are calculated at each section.
Stress ratio used in pole design is 1.
Safety factor used in guy design is 1.
Stress ratio used in tower member design is 1.
Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

	Consider Moments - Legs		Distribute Leg Loads As Uniform		Use ASCE 10 X-Brace Ly Rules
	Consider Moments - Horizontals		Assume Legs Pinned	√	Calculate Redundant Bracing Forces
	Consider Moments - Diagonals	√	Assume Rigid Index Plate		Ignore Redundant Members in FEA
	Use Moment Magnification	√	Use Clear Spans For Wind Area	√	SR Leg Bolts Resist Compression
√	Use Code Stress Ratios	√	Use Clear Spans For KL/r		All Leg Panels Have Same Allowable
√	Use Code Safety Factors - Guys	√	Retension Guys To Initial Tension		Offset Girt At Foundation
	Escalate Ice	√	Bypass Mast Stability Checks	√	Consider Feed Line Torque
	Always Use Max Kz	√	Use Azimuth Dish Coefficients	√	Include Angle Block Shear Check
	Use Special Wind Profile	√	Project Wind Area of Appurt.	√	Use TIA-222-G Bracing Resist. Exemption
√	Include Bolts In Member Capacity	√	Autocalc Torque Arm Areas	√	Use TIA-222-G Tension Splice Exemption
	Leg Bolts Are At Top Of Section		Add IBC .6D+W Combination		Poles
√	Secondary Horizontal Braces Leg		Sort Capacity Reports By Component	√	Include Shear-Torsion Interaction
	Use Diamond Inner Bracing (4 Sided)	√	Triangulate Diamond Inner Bracing		Always Use Sub-Critical Flow
√	SR Members Have Cut Ends		Treat Feed Line Bundles As Cylinder		Use Top Mounted Sockets
	SR Members Are Concentric		Ignore KL/ry For 60 Deg. Angle Legs		Pole Without Linear Attachments
					Pole With Shroud Or No Appurtenances
					Outside and Inside Corner Radii Are Known



Corner & Starmount Guyed Tower

Pole Section Geometry

Section	Elevation ft	Section Length ft	Pole Size	Pole Grade	Socket Length ft
L1	1151.90-1089.80	62.10	P20x.812	A500-50 (50 ksi)	

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
L1 1151.90-1089.80				1	1	1			

Tower Section Geometry

Tower Section	Tower Elevation ft	Assembly Database	Description	Section Width ft	Number of Sections	Section Length ft
T1	1089.80-1084.90			8.00	1	4.90
T2	1084.90-1080.00			8.00	1	4.90
T3	1080.00-1060.00			8.00	1	20.00
T4	1060.00-1040.00			8.00	1	20.00
T5	1040.00-1020.00			8.00	1	20.00
T6	1020.00-1000.00			8.00	1	20.00
T7	1000.00-980.00			8.00	1	20.00
T8	980.00-960.00			8.00	1	20.00
T9	960.00-940.00			8.00	1	20.00
T10	940.00-935.00			8.00	1	5.00
T11	935.00-930.00			8.00	1	5.00
T12	930.00-925.00			8.00	1	5.00
T13	925.00-920.00			8.00	1	5.00
T14	920.00-915.00			8.00	1	5.00
T15	915.00-910.00			8.00	1	5.00
T16	910.00-905.00			8.00	1	5.00
T17	905.00-900.00			8.00	1	5.00
T18	900.00-880.00			8.00	1	20.00
T19	880.00-860.00			8.00	1	20.00
T20	860.00-840.00			8.00	1	20.00
T21	840.00-820.00			8.00	1	20.00
T22	820.00-800.00			8.00	1	20.00
T23	800.00-780.00			8.00	1	20.00
T24	780.00-775.00			8.00	1	5.00
T25	775.00-770.00			8.00	1	5.00
T26	770.00-765.00			8.00	1	5.00
T27	765.00-760.00			8.00	1	5.00
T28	760.00-755.00			8.00	1	5.00
T29	755.00-750.00			8.00	1	5.00
T30	750.00-745.00			8.00	1	5.00
T31	745.00-740.00			8.00	1	5.00
T32	740.00-720.00			8.00	1	20.00
T33	720.00-700.00			8.00	1	20.00
T34	700.00-680.00			8.00	1	20.00
T35	680.00-660.00			8.00	1	20.00
T36	660.00-640.00			8.00	1	20.00
T37	640.00-620.00			8.00	1	20.00
T38	620.00-615.00			8.00	1	5.00
T39	615.00-610.00			8.00	1	5.00
T40	610.00-605.00			8.00	1	5.00
T41	605.00-600.00			8.00	1	5.00
T42	600.00-595.00			8.00	1	5.00
T43	595.00-590.00			8.00	1	5.00
T44	590.00-585.00			8.00	1	5.00
T45	585.00-580.00			8.00	1	5.00
T46	580.00-560.00			8.00	1	20.00
T47	560.00-540.00			8.00	1	20.00
T48	540.00-535.00			8.00	1	5.00
T49	535.00-530.00			8.00	1	5.00
T50	530.00-525.00			8.00	1	5.00
T51	525.00-520.00			8.00	1	5.00
T52	520.00-500.00			8.00	1	20.00
T53	500.00-480.00			8.00	1	20.00
T54	480.00-460.00			8.00	1	20.00
T55	460.00-440.00			8.00	1	20.00
T56	440.00-435.00			8.00	1	5.00
T57	435.00-430.00			8.00	1	5.00
T58	430.00-425.00			8.00	1	5.00
T59	425.00-420.00			8.00	1	5.00
T60	420.00-415.00			8.00	1	5.00

Tower Section	Tower Elevation	Assembly Database	Description	Section Width	Number of Sections	Section Length
	ft			ft		ft
T61	415.00-410.00			8.00	1	5.00
T62	410.00-405.00			8.00	1	5.00
T63	405.00-400.00			8.00	1	5.00
T64	400.00-380.00			8.00	1	20.00
T65	380.00-360.00			8.00	1	20.00
T66	360.00-340.00			8.00	1	20.00
T67	340.00-320.00			8.00	1	20.00
T68	320.00-300.00			8.00	1	20.00
T69	300.00-280.00			8.00	1	20.00
T70	280.00-275.00			8.00	1	5.00
T71	275.00-270.00			8.00	1	5.00
T72	270.00-265.00			8.00	1	5.00
T73	265.00-260.00			8.00	1	5.00
T74	260.00-255.00			8.00	1	5.00
T75	255.00-250.00			8.00	1	5.00
T76	250.00-245.00			8.00	1	5.00
T77	245.00-240.00			8.00	1	5.00
T78	240.00-220.00			8.00	1	20.00
T79	220.00-200.00			8.00	1	20.00
T80	200.00-180.00			8.00	1	20.00
T81	180.00-160.00			8.00	1	20.00
T82	160.00-140.00			8.00	1	20.00
T83	140.00-120.00			8.00	1	20.00
T84	120.00-115.00			8.00	1	5.00
T85	115.00-110.00			8.00	1	5.00
T86	110.00-105.00			8.00	1	5.00
T87	105.00-100.00			8.00	1	5.00
T88	100.00-95.00			8.00	1	5.00
T89	95.00-90.00			8.00	1	5.00
T90	90.00-85.00			8.00	1	5.00
T91	85.00-80.00			8.00	1	5.00
T92	80.00-60.00			8.00	1	20.00
T93	60.00-40.00			8.00	1	20.00
T94	40.00-20.00			8.00	1	20.00
T95	20.00-15.00			8.00	1	5.00
T96	15.00-7.00			8.00	1	8.00
T97	7.00-0.00			8.00	1	7.00

Tower Section Geometry *(cont'd)*

Tower Section	Tower Elevation	Diagonal Spacing	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset	Bottom Girt Offset
	ft	ft				in	in
T1	1089.80-1084.90	4.90	K Brace Down	No	Yes	0.0000	0.0000
T2	1084.90-1080.00	4.90	TX Brace	No	Yes	0.0000	0.0000
T3	1080.00-1060.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T4	1060.00-1040.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T5	1040.00-1020.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T6	1020.00-1000.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T7	1000.00-980.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T8	980.00-960.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T9	960.00-940.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T10	940.00-935.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T11	935.00-930.00	5.00	TX Brace	No	Yes	0.0000	0.0000

Tower Section	Tower Elevation ft	Diagonal Spacing ft	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset in	Bottom Girt Offset in
T12	930.00-925.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T13	925.00-920.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T14	920.00-915.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T15	915.00-910.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T16	910.00-905.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T17	905.00-900.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T18	900.00-880.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T19	880.00-860.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T20	860.00-840.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T21	840.00-820.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T22	820.00-800.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T23	800.00-780.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T24	780.00-775.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T25	775.00-770.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T26	770.00-765.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T27	765.00-760.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T28	760.00-755.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T29	755.00-750.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T30	750.00-745.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T31	745.00-740.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T32	740.00-720.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T33	720.00-700.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T34	700.00-680.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T35	680.00-660.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T36	660.00-640.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T37	640.00-620.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T38	620.00-615.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T39	615.00-610.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T40	610.00-605.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T41	605.00-600.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T42	600.00-595.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T43	595.00-590.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T44	590.00-585.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T45	585.00-580.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T46	580.00-560.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T47	560.00-540.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T48	540.00-535.00	5.00	K Brace Down	No	Yes	0.0000	0.0000
T49	535.00-530.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T50	530.00-525.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T51	525.00-520.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T52	520.00-500.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T53	500.00-480.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T54	480.00-460.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T55	460.00-440.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T56	440.00-435.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T57	435.00-430.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T58	430.00-425.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T59	425.00-420.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T60	420.00-415.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T61	415.00-410.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T62	410.00-405.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T63	405.00-400.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T64	400.00-380.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T65	380.00-360.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T66	360.00-340.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T67	340.00-320.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T68	320.00-300.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T69	300.00-280.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T70	280.00-275.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T71	275.00-270.00	5.00	TX Brace	No	Yes	0.0000	0.0000

Tower Section	Tower Elevation ft	Diagonal Spacing ft	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset in	Bottom Girt Offset in
T72	270.00-265.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T73	265.00-260.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T74	260.00-255.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T75	255.00-250.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T76	250.00-245.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T77	245.00-240.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T78	240.00-220.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T79	220.00-200.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T80	200.00-180.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T81	180.00-160.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T82	160.00-140.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T83	140.00-120.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T84	120.00-115.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T85	115.00-110.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T86	110.00-105.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T87	105.00-100.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T88	100.00-95.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T89	95.00-90.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T90	90.00-85.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T91	85.00-80.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T92	80.00-60.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T93	60.00-40.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T94	40.00-20.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T95	20.00-15.00	5.00	TX Brace	No	Yes	0.0000	0.0000
T96	15.00-7.00	7.88	K1 Down	No	Yes	0.0000	1.5000
T97	7.00-0.00	0.99	X Brace	No	Yes	0.0000	0.6250

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
T1 1089.80-1084.90	Solid Round	3 3/4	A572-50 (50 ksi)	Double Equal Angle	2L2 1/2x2 1/2x5/16	A36 (36 ksi)
T2 1084.90-1080.00	Solid Round	3 3/4	A572-50 (50 ksi)	Solid Round	1 1/4	A36 (36 ksi)
T3 1080.00-1060.00	Solid Round	3 3/4	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T4 1060.00-1040.00	Solid Round	3 3/4	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T5 1040.00-1020.00	Solid Round	3 3/4	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T6 1020.00-1000.00	Solid Round	3 3/4	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T7 1000.00-980.00	Solid Round	3 3/4	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T8 980.00-960.00	Solid Round	3 3/4	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T9 960.00-940.00	Solid Round	4 1/2	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T10 940.00-935.00	Solid Round	4 1/2	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T11 935.00-930.00	Solid Round	4 1/2	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T12 930.00-925.00	Solid Round	4 1/2	A572-50 (50 ksi)	Solid Round	1 1/4	A36 (36 ksi)
T13	Solid Round	4 1/2	A572-50	Solid Round	1 1/4	A36

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
925.00-920.00			(50 ksi)			(36 ksi)
T14	Solid Round	4 1/2	A572-50	Solid Round	1 1/4	A36
920.00-915.00			(50 ksi)			(36 ksi)
T15	Solid Round	4 1/2	A572-50	Solid Round	1 1/4	A36
915.00-910.00			(50 ksi)			(36 ksi)
T16	Solid Round	4 1/2	A572-50	Solid Round	1 1/8	A36
910.00-905.00			(50 ksi)			(36 ksi)
T17	Solid Round	4 1/2	A572-50	Solid Round	1 1/8	A36
905.00-900.00			(50 ksi)			(36 ksi)
T18	Solid Round	4 1/2	A572-50	Solid Round	1 1/8	A36
900.00-880.00			(50 ksi)			(36 ksi)
T19	Solid Round	4 1/2	A572-50	Solid Round	1 1/8	A36
880.00-860.00			(50 ksi)			(36 ksi)
T20	Solid Round	4 1/2	A572-50	Solid Round	1 1/8	A36
860.00-840.00			(50 ksi)			(36 ksi)
T21	Solid Round	4 1/2	A572-50	Solid Round	1 1/8	A36
840.00-820.00			(50 ksi)			(36 ksi)
T22	Solid Round	4 1/2	A572-50	Solid Round	1 1/8	A36
820.00-800.00			(50 ksi)			(36 ksi)
T23	Solid Round	4 1/2	A572-50	Solid Round	1 1/8	A36
800.00-780.00			(50 ksi)			(36 ksi)
T24	Solid Round	4 1/2	A572-50	Solid Round	1 1/8	A36
780.00-775.00			(50 ksi)			(36 ksi)
T25	Solid Round	4 1/2	A572-50	Solid Round	1 1/8	A36
775.00-770.00			(50 ksi)			(36 ksi)
T26	Solid Round	4 1/2	A572-50	Solid Round	1 1/4	A36
770.00-765.00			(50 ksi)			(36 ksi)
T27	Solid Round	4 1/2	A572-50	Solid Round	1 1/4	A36
765.00-760.00			(50 ksi)			(36 ksi)
T28	Solid Round	4 1/2	A572-50	Solid Round	1 1/4	A36
760.00-755.00			(50 ksi)			(36 ksi)
T29	Solid Round	4 1/2	A572-50	Solid Round	1 1/4	A36
755.00-750.00			(50 ksi)			(36 ksi)
T30	Solid Round	4 1/2	A572-50	Solid Round	1 1/8	A36
750.00-745.00			(50 ksi)			(36 ksi)
T31	Solid Round	4 1/2	A572-50	Solid Round	1 1/8	A36
745.00-740.00			(50 ksi)			(36 ksi)
T32	Solid Round	4 1/2	A572-50	Solid Round	1 1/8	A36
740.00-720.00			(50 ksi)			(36 ksi)
T33	Solid Round	4 1/2	A572-50	Solid Round	1 1/8	A36
720.00-700.00			(50 ksi)			(36 ksi)
T34	Solid Round	4 1/2	A572-50	Solid Round	1 1/8	A36
700.00-680.00			(50 ksi)			(36 ksi)
T35	Solid Round	4 1/2	A572-50	Solid Round	1 1/8	A36
680.00-660.00			(50 ksi)			(36 ksi)
T36	Solid Round	4 1/2	A572-50	Solid Round	1 1/8	A36
660.00-640.00			(50 ksi)			(36 ksi)
T37	Solid Round	5	A572-50	Solid Round	1 1/8	A36
640.00-620.00			(50 ksi)			(36 ksi)
T38	Solid Round	5	A572-50	Solid Round	1 1/8	A36
620.00-615.00			(50 ksi)			(36 ksi)
T39	Solid Round	5	A572-50	Solid Round	1 1/8	A36
615.00-610.00			(50 ksi)			(36 ksi)
T40	Solid Round	5	A572-50	Solid Round	1 1/4	A36
610.00-605.00			(50 ksi)			(36 ksi)
T41	Solid Round	5	A572-50	Solid Round	1 1/4	A36
605.00-600.00			(50 ksi)			(36 ksi)
T42	Solid Round	5	A572-50	Solid Round	1 1/4	A36
600.00-595.00			(50 ksi)			(36 ksi)
T43	Solid Round	5	A572-50	Solid Round	1 1/4	A36
595.00-590.00			(50 ksi)			(36 ksi)

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
T44 590.00-585.00	Solid Round	5	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T45 585.00-580.00	Solid Round	5	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T46 580.00-560.00	Solid Round	4 3/4	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T47 560.00-540.00	Solid Round	4 3/4	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T48 540.00-535.00	Solid Round	4 3/4	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T49 535.00-530.00	Solid Round	4 3/4	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T50 530.00-525.00	Solid Round	4 3/4	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T51 525.00-520.00	Solid Round	4 3/4	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T52 520.00-500.00	Solid Round	4 3/4	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T53 500.00-480.00	Solid Round	4 3/4	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T54 480.00-460.00	Solid Round	4 3/4	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T55 460.00-440.00	Solid Round	5	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T56 440.00-435.00	Solid Round	5	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T57 435.00-430.00	Solid Round	5	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T58 430.00-425.00	Solid Round	5	A572-50 (50 ksi)	Solid Round	1 1/4	A36 (36 ksi)
T59 425.00-420.00	Solid Round	5	A572-50 (50 ksi)	Solid Round	1 1/4	A36 (36 ksi)
T60 420.00-415.00	Solid Round	5	A572-50 (50 ksi)	Solid Round	1 1/4	A36 (36 ksi)
T61 415.00-410.00	Solid Round	5	A572-50 (50 ksi)	Solid Round	1 1/4	A36 (36 ksi)
T62 410.00-405.00	Solid Round	5	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T63 405.00-400.00	Solid Round	5	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T64 400.00-380.00	Solid Round	5	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T65 380.00-360.00	Solid Round	5	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T66 360.00-340.00	Solid Round	5	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T67 340.00-320.00	Solid Round	5	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T68 320.00-300.00	Solid Round	5	A572-50 (50 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T69 300.00-280.00	Solid Round	5	A572-60 (60 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T70 280.00-275.00	Solid Round	5	A572-60 (60 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T71 275.00-270.00	Solid Round	5	A572-60 (60 ksi)	Solid Round	1 1/8	A36 (36 ksi)
T72 270.00-265.00	Solid Round	5	A572-60 (60 ksi)	Solid Round	1 1/4	A36 (36 ksi)
T73 265.00-260.00	Solid Round	5	A572-60 (60 ksi)	Solid Round	1 1/4	A36 (36 ksi)
T74	Solid Round	5	A572-60	Solid Round	1 1/4	A36

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
260.00-255.00			(60 ksi)			(36 ksi)
T75	Solid Round	5	A572-60	Solid Round	1 1/4	A36
255.00-250.00			(60 ksi)			(36 ksi)
T76	Solid Round	5	A572-60	Solid Round	1 1/8	A36
250.00-245.00			(60 ksi)			(36 ksi)
T77	Solid Round	5	A572-60	Solid Round	1 1/8	A36
245.00-240.00			(60 ksi)			(36 ksi)
T78	Solid Round	5	A572-60	Solid Round	1 1/8	A36
240.00-220.00			(60 ksi)			(36 ksi)
T79	Solid Round	5	A572-60	Solid Round	1 1/8	A36
220.00-200.00			(60 ksi)			(36 ksi)
T80	Solid Round	5	A572-60	Solid Round	1 1/8	A36
200.00-180.00			(60 ksi)			(36 ksi)
T81	Solid Round	5	A572-60	Solid Round	1 1/8	A36
180.00-160.00			(60 ksi)			(36 ksi)
T82	Solid Round	5	A572-60	Solid Round	1 1/8	A36
160.00-140.00			(60 ksi)			(36 ksi)
T83	Solid Round	5	A572-60	Solid Round	1 1/8	A36
140.00-120.00			(60 ksi)			(36 ksi)
T84	Solid Round	5	A572-60	Solid Round	1 1/8	A36
120.00-115.00			(60 ksi)			(36 ksi)
T85	Solid Round	5	A572-60	Solid Round	1 1/8	A36
115.00-110.00			(60 ksi)			(36 ksi)
T86	Solid Round	5	A572-60	Solid Round	1 1/4	A36
110.00-105.00			(60 ksi)			(36 ksi)
T87	Solid Round	5	A572-60	Solid Round	1 1/4	A36
105.00-100.00			(60 ksi)			(36 ksi)
T88 100.00-95.00	Solid Round	5	A572-60	Solid Round	1 1/4	A36
			(60 ksi)			(36 ksi)
T89 95.00-90.00	Solid Round	5	A572-60	Solid Round	1 1/4	A36
			(60 ksi)			(36 ksi)
T90 90.00-85.00	Solid Round	5	A572-60	Solid Round	1 1/8	A36
			(60 ksi)			(36 ksi)
T91 85.00-80.00	Solid Round	5	A572-60	Solid Round	1 1/8	A36
			(60 ksi)			(36 ksi)
T92 80.00-60.00	Solid Round	5	A572-60	Solid Round	1 1/8	A36
			(60 ksi)			(36 ksi)
T93 60.00-40.00	Solid Round	5	A572-60	Solid Round	1 1/8	A36
			(60 ksi)			(36 ksi)
T94 40.00-20.00	Solid Round	5	A572-60	Solid Round	1 1/8	A36
			(60 ksi)			(36 ksi)
T95 20.00-15.00	Solid Round	5	A572-60	Solid Round	1 1/8	A36
			(60 ksi)			(36 ksi)
T96 15.00-7.00	Solid Round	5	A572-60	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36
			(60 ksi)			(36 ksi)
T97 7.00-0.00	Solid Round	5	A572-60	Solid Round		A36
			(60 ksi)			(36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
T1	Channel	MC18x42.7	A36	Flat Bar		A36
1089.80-1084.90			(36 ksi)			(36 ksi)
T2	Double Equal	2L2 1/2x2 1/2x5/16	A36	Flat Bar		A36

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
1084.90-1080.00	Angle		(36 ksi)			(36 ksi)
T3	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
1080.00-1060.00	Angle		(36 ksi)			(36 ksi)
T4	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
1060.00-1040.00	Angle		(36 ksi)			(36 ksi)
T5	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
1040.00-1020.00	Angle		(36 ksi)			(36 ksi)
T6	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
1020.00-1000.00	Angle		(36 ksi)			(36 ksi)
T7	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
1000.00-980.00	Angle		(36 ksi)			(36 ksi)
T8 980.00-960.00	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
	Angle		(36 ksi)			(36 ksi)
T9 960.00-940.00	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
	Angle		(36 ksi)			(36 ksi)
T10	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
940.00-935.00	Angle		(36 ksi)			(36 ksi)
T11	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
935.00-930.00	Angle		(36 ksi)			(36 ksi)
T12	Double Equal	2L2 1/2x2 1/2x5/16	A36	Flat Bar		A36
930.00-925.00	Angle		(36 ksi)			(36 ksi)
T13	Double Equal	2L2 1/2x2 1/2x5/16	A36	Flat Bar		A36
925.00-920.00	Angle		(36 ksi)			(36 ksi)
T14	Double Equal	2L2 1/2x2 1/2x5/16	A36	Flat Bar		A36
920.00-915.00	Angle		(36 ksi)			(36 ksi)
T15	Double Equal	2L2 1/2x2 1/2x5/16	A36	Flat Bar		A36
915.00-910.00	Angle		(36 ksi)			(36 ksi)
T16	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
910.00-905.00	Angle		(36 ksi)			(36 ksi)
T17	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
905.00-900.00	Angle		(36 ksi)			(36 ksi)
T18	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
900.00-880.00	Angle		(36 ksi)			(36 ksi)
T19	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
880.00-860.00	Angle		(36 ksi)			(36 ksi)
T20	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
860.00-840.00	Angle		(36 ksi)			(36 ksi)
T21	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
840.00-820.00	Angle		(36 ksi)			(36 ksi)
T22	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
820.00-800.00	Angle		(36 ksi)			(36 ksi)
T23	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
800.00-780.00	Angle		(36 ksi)			(36 ksi)
T24	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
780.00-775.00	Angle		(36 ksi)			(36 ksi)
T25	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
775.00-770.00	Angle		(36 ksi)			(36 ksi)
T26	Double Equal	2L2 1/2x2 1/2x5/16	A36	Flat Bar		A36
770.00-765.00	Angle		(36 ksi)			(36 ksi)
T27	Double Equal	2L2 1/2x2 1/2x5/16	A36	Flat Bar		A36
765.00-760.00	Angle		(36 ksi)			(36 ksi)
T28	Double Equal	2L2 1/2x2 1/2x5/16	A36	Flat Bar		A36
760.00-755.00	Angle		(36 ksi)			(36 ksi)
T29	Double Equal	2L2 1/2x2 1/2x5/16	A36	Flat Bar		A36
755.00-750.00	Angle		(36 ksi)			(36 ksi)
T30	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
750.00-745.00	Angle		(36 ksi)			(36 ksi)
T31	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
745.00-740.00	Angle		(36 ksi)			(36 ksi)
T32	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
740.00-720.00	Angle		(36 ksi)			(36 ksi)

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
T33 720.00-700.00	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T34 700.00-680.00	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T35 680.00-660.00	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T36 660.00-640.00	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T37 640.00-620.00	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T38 620.00-615.00	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T39 615.00-610.00	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T40 610.00-605.00	Double Equal Angle	2L2 1/2x2 1/2x5/16	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T41 605.00-600.00	Double Equal Angle	2L2 1/2x2 1/2x5/16	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T42 600.00-595.00	Double Equal Angle	2L2 1/2x2 1/2x5/16	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T43 595.00-590.00	Double Equal Angle	2L2 1/2x2 1/2x5/16	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T44 590.00-585.00	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T45 585.00-580.00	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T46 580.00-560.00	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T47 560.00-540.00	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T48 540.00-535.00	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T49 535.00-530.00	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T50 530.00-525.00	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T51 525.00-520.00	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T52 520.00-500.00	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T53 500.00-480.00	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T54 480.00-460.00	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T55 460.00-440.00	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T56 440.00-435.00	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T57 435.00-430.00	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T58 430.00-425.00	Double Equal Angle	2L2 1/2x2 1/2x5/16	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T59 425.00-420.00	Double Equal Angle	2L2 1/2x2 1/2x5/16	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T60 420.00-415.00	Double Equal Angle	2L2 1/2x2 1/2x5/16	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T61 415.00-410.00	Double Equal Angle	2L2 1/2x2 1/2x5/16	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T62 410.00-405.00	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T63	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
405.00-400.00	Angle		(36 ksi)			(36 ksi)
T64	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
400.00-380.00	Angle		(36 ksi)			(36 ksi)
T65	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
380.00-360.00	Angle		(36 ksi)			(36 ksi)
T66	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
360.00-340.00	Angle		(36 ksi)			(36 ksi)
T67	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
340.00-320.00	Angle		(36 ksi)			(36 ksi)
T68	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
320.00-300.00	Angle		(36 ksi)			(36 ksi)
T69	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
300.00-280.00	Angle		(36 ksi)			(36 ksi)
T70	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
280.00-275.00	Angle		(36 ksi)			(36 ksi)
T71	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
275.00-270.00	Angle		(36 ksi)			(36 ksi)
T72	Double Equal	2L2 1/2x2 1/2x5/16	A36	Flat Bar		A36
270.00-265.00	Angle		(36 ksi)			(36 ksi)
T73	Double Equal	2L2 1/2x2 1/2x5/16	A36	Flat Bar		A36
265.00-260.00	Angle		(36 ksi)			(36 ksi)
T74	Double Equal	2L2 1/2x2 1/2x5/16	A36	Flat Bar		A36
260.00-255.00	Angle		(36 ksi)			(36 ksi)
T75	Double Equal	2L2 1/2x2 1/2x5/16	A36	Flat Bar		A36
255.00-250.00	Angle		(36 ksi)			(36 ksi)
T76	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
250.00-245.00	Angle		(36 ksi)			(36 ksi)
T77	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
245.00-240.00	Angle		(36 ksi)			(36 ksi)
T78	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
240.00-220.00	Angle		(36 ksi)			(36 ksi)
T79	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
220.00-200.00	Angle		(36 ksi)			(36 ksi)
T80	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
200.00-180.00	Angle		(36 ksi)			(36 ksi)
T81	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
180.00-160.00	Angle		(36 ksi)			(36 ksi)
T82	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
160.00-140.00	Angle		(36 ksi)			(36 ksi)
T83	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
140.00-120.00	Angle		(36 ksi)			(36 ksi)
T84	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
120.00-115.00	Angle		(36 ksi)			(36 ksi)
T85	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
115.00-110.00	Angle		(36 ksi)			(36 ksi)
T86	Double Equal	2L2 1/2x2 1/2x5/16	A36	Flat Bar		A36
110.00-105.00	Angle		(36 ksi)			(36 ksi)
T87	Double Equal	2L2 1/2x2 1/2x5/16	A36	Flat Bar		A36
105.00-100.00	Angle		(36 ksi)			(36 ksi)
T88 100.00-95.00	Double Equal	2L2 1/2x2 1/2x5/16	A36	Flat Bar		A36
	Angle		(36 ksi)			(36 ksi)
T89 95.00-90.00	Double Equal	2L2 1/2x2 1/2x5/16	A36	Flat Bar		A36
	Angle		(36 ksi)			(36 ksi)
T90 90.00-85.00	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
	Angle		(36 ksi)			(36 ksi)
T91 85.00-80.00	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
	Angle		(36 ksi)			(36 ksi)
T92 80.00-60.00	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
	Angle		(36 ksi)			(36 ksi)
T93 60.00-40.00	Double Equal	2L2 1/2x2 1/2x1/4	A36	Flat Bar		A36
	Angle		(36 ksi)			(36 ksi)

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
T94 40.00-20.00	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T95 20.00-15.00	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T96 15.00-7.00	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)
T97 7.00-0.00	Channel	C15x33.9	A36 (36 ksi)	Flat Bar		A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	No. of Mid Girts	Mid Girt Type	Mid Girt Size	Mid Girt Grade	Horizontal Type	Horizontal Size	Horizontal Grade
T1 1089.80-1084.90	None	Flat Bar		A36 (36 ksi)	Channel	MC18x42.7	A36 (36 ksi)
T2 1084.90-1080.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x5/16	A36 (36 ksi)
T3 1080.00-1060.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)
T4 1060.00-1040.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)
T5 1040.00-1020.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)
T6 1020.00-1000.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)
T7 1000.00-980.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)
T8 980.00-960.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)
T9 960.00-940.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)
T10 940.00-935.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)
T11 935.00-930.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)
T12 930.00-925.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x5/16	A36 (36 ksi)
T13 925.00-920.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x5/16	A36 (36 ksi)
T14 920.00-915.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x5/16	A36 (36 ksi)
T15 915.00-910.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x5/16	A36 (36 ksi)
T16 910.00-905.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)
T17 905.00-900.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)
T18 900.00-880.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)
T19 880.00-860.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)
T20 860.00-840.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)
T21	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36

Tower Elevation ft	No. of Mid Girts	Mid Girt Type	Mid Girt Size	Mid Girt Grade	Horizontal Type	Horizontal Size	Horizontal Grade
840.00-820.00				(36 ksi)	Angle		(36 ksi)
T22	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
820.00-800.00				(36 ksi)	Angle		(36 ksi)
T23	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
800.00-780.00				(36 ksi)	Angle		(36 ksi)
T24	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
780.00-775.00				(36 ksi)	Angle		(36 ksi)
T25	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
775.00-770.00				(36 ksi)	Angle		(36 ksi)
T26	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x5/16	A36
770.00-765.00				(36 ksi)	Angle		(36 ksi)
T27	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x5/16	A36
765.00-760.00				(36 ksi)	Angle		(36 ksi)
T28	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x5/16	A36
760.00-755.00				(36 ksi)	Angle		(36 ksi)
T29	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x5/16	A36
755.00-750.00				(36 ksi)	Angle		(36 ksi)
T30	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
750.00-745.00				(36 ksi)	Angle		(36 ksi)
T31	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
745.00-740.00				(36 ksi)	Angle		(36 ksi)
T32	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
740.00-720.00				(36 ksi)	Angle		(36 ksi)
T33	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
720.00-700.00				(36 ksi)	Angle		(36 ksi)
T34	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
700.00-680.00				(36 ksi)	Angle		(36 ksi)
T35	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
680.00-660.00				(36 ksi)	Angle		(36 ksi)
T36	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
660.00-640.00				(36 ksi)	Angle		(36 ksi)
T37	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
640.00-620.00				(36 ksi)	Angle		(36 ksi)
T38	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
620.00-615.00				(36 ksi)	Angle		(36 ksi)
T39	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
615.00-610.00				(36 ksi)	Angle		(36 ksi)
T40	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x5/16	A36
610.00-605.00				(36 ksi)	Angle		(36 ksi)
T41	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x5/16	A36
605.00-600.00				(36 ksi)	Angle		(36 ksi)
T42	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x5/16	A36
600.00-595.00				(36 ksi)	Angle		(36 ksi)
T43	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x5/16	A36
595.00-590.00				(36 ksi)	Angle		(36 ksi)
T44	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
590.00-585.00				(36 ksi)	Angle		(36 ksi)
T45	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
585.00-580.00				(36 ksi)	Angle		(36 ksi)
T46	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
580.00-560.00				(36 ksi)	Angle		(36 ksi)
T47	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
560.00-540.00				(36 ksi)	Angle		(36 ksi)
T48	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
540.00-535.00				(36 ksi)	Angle		(36 ksi)
T49	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
535.00-530.00				(36 ksi)	Angle		(36 ksi)
T50	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
530.00-525.00				(36 ksi)	Angle		(36 ksi)
T51	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36

Tower Elevation ft	No. of Mid Girts	Mid Girt Type	Mid Girt Size	Mid Girt Grade	Horizontal Type	Horizontal Size	Horizontal Grade
525.00-520.00				(36 ksi)	Angle		(36 ksi)
T52	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
520.00-500.00				(36 ksi)	Angle		(36 ksi)
T53	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
500.00-480.00				(36 ksi)	Angle		(36 ksi)
T54	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
480.00-460.00				(36 ksi)	Angle		(36 ksi)
T55	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
460.00-440.00				(36 ksi)	Angle		(36 ksi)
T56	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
440.00-435.00				(36 ksi)	Angle		(36 ksi)
T57	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
435.00-430.00				(36 ksi)	Angle		(36 ksi)
T58	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x5/16	A36
430.00-425.00				(36 ksi)	Angle		(36 ksi)
T59	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x5/16	A36
425.00-420.00				(36 ksi)	Angle		(36 ksi)
T60	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x5/16	A36
420.00-415.00				(36 ksi)	Angle		(36 ksi)
T61	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x5/16	A36
415.00-410.00				(36 ksi)	Angle		(36 ksi)
T62	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
410.00-405.00				(36 ksi)	Angle		(36 ksi)
T63	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
405.00-400.00				(36 ksi)	Angle		(36 ksi)
T64	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
400.00-380.00				(36 ksi)	Angle		(36 ksi)
T65	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
380.00-360.00				(36 ksi)	Angle		(36 ksi)
T66	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
360.00-340.00				(36 ksi)	Angle		(36 ksi)
T67	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
340.00-320.00				(36 ksi)	Angle		(36 ksi)
T68	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
320.00-300.00				(36 ksi)	Angle		(36 ksi)
T69	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
300.00-280.00				(36 ksi)	Angle		(36 ksi)
T70	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
280.00-275.00				(36 ksi)	Angle		(36 ksi)
T71	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
275.00-270.00				(36 ksi)	Angle		(36 ksi)
T72	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x5/16	A36
270.00-265.00				(36 ksi)	Angle		(36 ksi)
T73	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x5/16	A36
265.00-260.00				(36 ksi)	Angle		(36 ksi)
T74	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x5/16	A36
260.00-255.00				(36 ksi)	Angle		(36 ksi)
T75	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x5/16	A36
255.00-250.00				(36 ksi)	Angle		(36 ksi)
T76	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
250.00-245.00				(36 ksi)	Angle		(36 ksi)
T77	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
245.00-240.00				(36 ksi)	Angle		(36 ksi)
T78	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
240.00-220.00				(36 ksi)	Angle		(36 ksi)
T79	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
220.00-200.00				(36 ksi)	Angle		(36 ksi)
T80	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36
200.00-180.00				(36 ksi)	Angle		(36 ksi)
T81	None	Flat Bar		A36	Double Equal	2L2 1/2x2 1/2x1/4	A36

Tower Elevation ft	No. of Mid Girts	Mid Girt Type	Mid Girt Size	Mid Girt Grade	Horizontal Type	Horizontal Size	Horizontal Grade
180.00-160.00				(36 ksi)	Angle		(36 ksi)
T82 160.00-140.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)
T83 140.00-120.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)
T84 120.00-115.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)
T85 115.00-110.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)
T86 110.00-105.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x5/16	A36 (36 ksi)
T87 105.00-100.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x5/16	A36 (36 ksi)
T88 100.00-95.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x5/16	A36 (36 ksi)
T89 95.00-90.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x5/16	A36 (36 ksi)
T90 90.00-85.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)
T91 85.00-80.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)
T92 80.00-60.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)
T93 60.00-40.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)
T94 40.00-20.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)
T95 20.00-15.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)
T96 15.00-7.00	None	Flat Bar		A36 (36 ksi)	Double Equal Angle	2L1 1/2x1 1/2x1/8	A36 (36 ksi)
T97 7.00-0.00	None	Flat Bar		A36 (36 ksi)	Channel	C15x33.9	A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Secondary Horizontal Type	Secondary Horizontal Size	Secondary Horizontal Grade	Inner Bracing Type	Inner Bracing Size	Inner Bracing Grade
T1 1089.80-1084.90	Solid Round		A572-50 (50 ksi)	Channel	MC18x42.7	A572-50 (50 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Redundant Bracing Grade		Redundant Type	Redundant Size	K Factor
T96 15.00-7.00	A36 (36 ksi)	Horizontal (1)	Double Equal Angle	2L2 1/2x2 1/2x1/4	1
		Diagonal (1)	Double Equal Angle	2L2 1/2x2 1/2x1/4	1

Tower Elevation ft	Redundant Bracing Grade	Redundant Type	Redundant Size	K Factor
	Sub-Horizontal	Double Equal Angle	2L3x3x1/4	1

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
T1 1089.80-1084.90	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T2 1084.90-1080.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T3 1080.00-1060.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T4 1060.00-1040.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T5 1040.00-1020.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T6 1020.00-1000.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T7 1000.00-980.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T8 980.00-960.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T9 960.00-940.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T10 940.00-935.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T11 935.00-930.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T12 930.00-925.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T13 925.00-920.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T14 920.00-915.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T15 915.00-910.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T16 910.00-905.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T17 905.00-900.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T18 900.00-880.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T19 880.00-860.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T20 860.00-840.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T21	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals	Double Angle Stitch Bolt Spacing Horizontals	Double Angle Stitch Bolt Spacing Redundants
ft	ft^2	in					in	in	in
840.00-820.00			(36 ksi)						
T22	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
820.00-800.00			(36 ksi)						
T23	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
800.00-780.00			(36 ksi)						
T24	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
780.00-775.00			(36 ksi)						
T25	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
775.00-770.00			(36 ksi)						
T26	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
770.00-765.00			(36 ksi)						
T27	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
765.00-760.00			(36 ksi)						
T28	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
760.00-755.00			(36 ksi)						
T29	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
755.00-750.00			(36 ksi)						
T30	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
750.00-745.00			(36 ksi)						
T31	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
745.00-740.00			(36 ksi)						
T32	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
740.00-720.00			(36 ksi)						
T33	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
720.00-700.00			(36 ksi)						
T34	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
700.00-680.00			(36 ksi)						
T35	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
680.00-660.00			(36 ksi)						
T36	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
660.00-640.00			(36 ksi)						
T37	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
640.00-620.00			(36 ksi)						
T38	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
620.00-615.00			(36 ksi)						
T39	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
615.00-610.00			(36 ksi)						
T40	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
610.00-605.00			(36 ksi)						
T41	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
605.00-600.00			(36 ksi)						
T42	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
600.00-595.00			(36 ksi)						
T43	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
595.00-590.00			(36 ksi)						
T44	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
590.00-585.00			(36 ksi)						
T45	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
585.00-580.00			(36 ksi)						
T46	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
580.00-560.00			(36 ksi)						
T47	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
560.00-540.00			(36 ksi)						
T48	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
540.00-535.00			(36 ksi)						
T49	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
535.00-530.00			(36 ksi)						
T50	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
530.00-525.00			(36 ksi)						

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
T51 525.00-520.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T52 520.00-500.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T53 500.00-480.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T54 480.00-460.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T55 460.00-440.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T56 440.00-435.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T57 435.00-430.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T58 430.00-425.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T59 425.00-420.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T60 420.00-415.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T61 415.00-410.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T62 410.00-405.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T63 405.00-400.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T64 400.00-380.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T65 380.00-360.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T66 360.00-340.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T67 340.00-320.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T68 320.00-300.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T69 300.00-280.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T70 280.00-275.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T71 275.00-270.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T72 270.00-265.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T73 265.00-260.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T74 260.00-255.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T75 255.00-250.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T76 250.00-245.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T77 245.00-240.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T78 240.00-220.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T79 220.00-200.00	0.00	0.0000	A36 (36 ksi)	1	1	1	Third-Pt	Third-Pt	Mid-Pt
T80	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt

Tower Elevation ft	Gusset Area (per face) ft²	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
200.00-180.00			(36 ksi)						
T81	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
180.00-160.00			(36 ksi)						
T82	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
160.00-140.00			(36 ksi)						
T83	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
140.00-120.00			(36 ksi)						
T84	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
120.00-115.00			(36 ksi)						
T85	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
115.00-110.00			(36 ksi)						
T86	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
110.00-105.00			(36 ksi)						
T87	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
105.00-100.00			(36 ksi)						
T88	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
100.00-95.00			(36 ksi)						
T89	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
95.00-90.00			(36 ksi)						
T90	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
90.00-85.00			(36 ksi)						
T91	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
85.00-80.00			(36 ksi)						
T92	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
80.00-60.00			(36 ksi)						
T93	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
60.00-40.00			(36 ksi)						
T94	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
40.00-20.00			(36 ksi)						
T95	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
20.00-15.00			(36 ksi)						
T96 15.00-7.00	0.00	0.0000	A36	1	1	1	Mid-Pt	Mid-Pt	Mid-Pt
			(36 ksi)						
T97 7.00-0.00	0.00	0.0000	A36	1	1	1	Third-Pt	Third-Pt	Mid-Pt
			(36 ksi)						

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	K Factors[1] Legs	X Brace Diags X Y	K Brace Diags X Y	Single Diags X Y	Girts X Y	Horiz. X Y	Sec. Horiz. X Y	Inner Brace X Y
T1	Yes	Yes	1	1	1	1	1	1	1	1
1089.80-1084.90				1	1	1	1	1	1	1
T2	Yes	Yes	1	1	1	1	1	1	1	1
1084.90-1080.00				1	1	1	1	1	1	1
T3	Yes	Yes	1	1	1	1	1	1	1	1
1080.00-1060.00				1	1	1	1	1	1	1
T4	Yes	Yes	1	1	1	1	1	1	1	1
1060.00-1040.				1	1	1	1	1	1	1

Tower Elevation	Calc K Single Angles	Calc K Solid Rounds	K Factors[1]							
			Legs	X Brace Diags	K Brace Diags	Single Diags	Girts	Horiz.	Sec. Horiz.	Inner Brace
				X	X	X	X	X	X	X
ft				Y	Y	Y	Y	Y	Y	Y
00										
T5	Yes	Yes	1	1	1	1	1	1	1	1
1040.00-1020.00				1	1	1	1	1	1	1
T6	Yes	Yes	1	1	1	1	1	1	1	1
1020.00-1000.00				1	1	1	1	1	1	1
T7	Yes	Yes	1	1	1	1	1	1	1	1
1000.00-980.00				1	1	1	1	1	1	1
T8	Yes	Yes	1	1	1	1	1	1	1	1
980.00-960.00				1	1	1	1	1	1	1
T9	Yes	Yes	1	1	1	1	1	1	1	1
960.00-940.00				1	1	1	1	1	1	1
T10	Yes	Yes	1	1	1	1	1	1	1	1
940.00-935.00				1	1	1	1	1	1	1
T11	Yes	Yes	1	1	1	1	1	1	1	1
935.00-930.00				1	1	1	1	1	1	1
T12	Yes	Yes	1	1	1	1	1	1	1	1
930.00-925.00				1	1	1	1	1	1	1
T13	Yes	Yes	1	1	1	1	1	1	1	1
925.00-920.00				1	1	1	1	1	1	1
T14	Yes	Yes	1	1	1	1	1	1	1	1
920.00-915.00				1	1	1	1	1	1	1
T15	Yes	Yes	1	1	1	1	1	1	1	1
915.00-910.00				1	1	1	1	1	1	1
T16	Yes	Yes	1	1	1	1	1	1	1	1
910.00-905.00				1	1	1	1	1	1	1
T17	Yes	Yes	1	1	1	1	1	1	1	1
905.00-900.00				1	1	1	1	1	1	1
T18	Yes	Yes	1	1	1	1	1	1	1	1
900.00-880.00				1	1	1	1	1	1	1
T19	Yes	Yes	1	1	1	1	1	1	1	1
880.00-860.00				1	1	1	1	1	1	1
T20	Yes	Yes	1	1	1	1	1	1	1	1
860.00-840.00				1	1	1	1	1	1	1
T21	Yes	Yes	1	1	1	1	1	1	1	1
840.00-820.00				1	1	1	1	1	1	1
T22	Yes	Yes	1	1	1	1	1	1	1	1
820.00-800.00				1	1	1	1	1	1	1
T23	Yes	Yes	1	1	1	1	1	1	1	1
800.00-780.00				1	1	1	1	1	1	1
T24	Yes	Yes	1	1	1	1	1	1	1	1
780.00-775.00				1	1	1	1	1	1	1
T25	Yes	Yes	1	1	1	1	1	1	1	1
775.00-770.00				1	1	1	1	1	1	1
T26	Yes	Yes	1	1	1	1	1	1	1	1
770.00-765.00				1	1	1	1	1	1	1
T27	Yes	Yes	1	1	1	1	1	1	1	1
765.00-760.00				1	1	1	1	1	1	1
T28	Yes	Yes	1	1	1	1	1	1	1	1
760.00-755.00				1	1	1	1	1	1	1
T29	Yes	Yes	1	1	1	1	1	1	1	1
755.00-750.00				1	1	1	1	1	1	1
T30	Yes	Yes	1	1	1	1	1	1	1	1
750.00-745.00				1	1	1	1	1	1	1
T31	Yes	Yes	1	1	1	1	1	1	1	1
745.00-740.00				1	1	1	1	1	1	1

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	K Factors[1] Legs	X Brace Diags X Y	K Brace Diags X Y	Single Diags X Y	Girts X Y	Horiz. X Y	Sec. Horiz. X Y	Inner Brace X Y
T32	Yes	Yes	1	1	1	1	1	1	1	1
740.00-720.00				1	1	1	1	1	1	1
T33	Yes	Yes	1	1	1	1	1	1	1	1
720.00-700.00				1	1	1	1	1	1	1
T34	Yes	Yes	1	1	1	1	1	1	1	1
700.00-680.00				1	1	1	1	1	1	1
T35	Yes	Yes	1	1	1	1	1	1	1	1
680.00-660.00				1	1	1	1	1	1	1
T36	Yes	Yes	1	1	1	1	1	1	1	1
660.00-640.00				1	1	1	1	1	1	1
T37	Yes	Yes	1	1	1	1	1	1	1	1
640.00-620.00				1	1	1	1	1	1	1
T38	Yes	Yes	1	1	1	1	1	1	1	1
620.00-615.00				1	1	1	1	1	1	1
T39	Yes	Yes	1	1	1	1	1	1	1	1
615.00-610.00				1	1	1	1	1	1	1
T40	Yes	Yes	1	1	1	1	1	1	1	1
610.00-605.00				1	1	1	1	1	1	1
T41	Yes	Yes	1	1	1	1	1	1	1	1
605.00-600.00				1	1	1	1	1	1	1
T42	Yes	Yes	1	1	1	1	1	1	1	1
600.00-595.00				1	1	1	1	1	1	1
T43	Yes	Yes	1	1	1	1	1	1	1	1
595.00-590.00				1	1	1	1	1	1	1
T44	Yes	Yes	1	1	1	1	1	1	1	1
590.00-585.00				1	1	1	1	1	1	1
T45	Yes	Yes	1	1	1	1	1	1	1	1
585.00-580.00				1	1	1	1	1	1	1
T46	Yes	Yes	1	1	1	1	1	1	1	1
580.00-560.00				1	1	1	1	1	1	1
T47	Yes	Yes	1	1	1	1	1	1	1	1
560.00-540.00				1	1	1	1	1	1	1
T48	Yes	Yes	1	1	1	1	1	1	1	1
540.00-535.00				1	1	1	1	1	1	1
T49	Yes	Yes	1	1	1	1	1	1	1	1
535.00-530.00				1	1	1	1	1	1	1
T50	Yes	Yes	1	1	1	1	1	1	1	1
530.00-525.00				1	1	1	1	1	1	1
T51	Yes	Yes	1	1	1	1	1	1	1	1
525.00-520.00				1	1	1	1	1	1	1
T52	Yes	Yes	1	1	1	1	1	1	1	1
520.00-500.00				1	1	1	1	1	1	1
T53	Yes	Yes	1	1	1	1	1	1	1	1
500.00-480.00				1	1	1	1	1	1	1
T54	Yes	Yes	1	1	1	1	1	1	1	1
480.00-460.00				1	1	1	1	1	1	1
T55	Yes	Yes	1	1	1	1	1	1	1	1
460.00-440.00				1	1	1	1	1	1	1
T56	Yes	Yes	1	1	1	1	1	1	1	1
440.00-435.00				1	1	1	1	1	1	1
T57	Yes	Yes	1	1	1	1	1	1	1	1
435.00-430.00				1	1	1	1	1	1	1
T58	Yes	Yes	1	1	1	1	1	1	1	1
430.00-425.00				1	1	1	1	1	1	1
T59	Yes	Yes	1	1	1	1	1	1	1	1
425.00-420.00				1	1	1	1	1	1	1
T60	Yes	Yes	1	1	1	1	1	1	1	1
420.00-415.00				1	1	1	1	1	1	1

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	K Factors[1] Legs	X Brace Diags X Y	K Brace Diags X Y	Single Diags X Y	Girts X Y	Horiz. X Y	Sec. Horiz. X Y	Inner Brace X Y
T61	Yes	Yes	1	1	1	1	1	1	1	1
415.00-410.00				1	1	1	1	1	1	1
T62	Yes	Yes	1	1	1	1	1	1	1	1
410.00-405.00				1	1	1	1	1	1	1
T63	Yes	Yes	1	1	1	1	1	1	1	1
405.00-400.00				1	1	1	1	1	1	1
T64	Yes	Yes	1	1	1	1	1	1	1	1
400.00-380.00				1	1	1	1	1	1	1
T65	Yes	Yes	1	1	1	1	1	1	1	1
380.00-360.00				1	1	1	1	1	1	1
T66	Yes	Yes	1	1	1	1	1	1	1	1
360.00-340.00				1	1	1	1	1	1	1
T67	Yes	Yes	1	1	1	1	1	1	1	1
340.00-320.00				1	1	1	1	1	1	1
T68	Yes	Yes	1	1	1	1	1	1	1	1
320.00-300.00				1	1	1	1	1	1	1
T69	Yes	Yes	1	1	1	1	1	1	1	1
300.00-280.00				1	1	1	1	1	1	1
T70	Yes	Yes	1	1	1	1	1	1	1	1
280.00-275.00				1	1	1	1	1	1	1
T71	Yes	Yes	1	1	1	1	1	1	1	1
275.00-270.00				1	1	1	1	1	1	1
T72	Yes	Yes	1	1	1	1	1	1	1	1
270.00-265.00				1	1	1	1	1	1	1
T73	Yes	Yes	1	1	1	1	1	1	1	1
265.00-260.00				1	1	1	1	1	1	1
T74	Yes	Yes	1	1	1	1	1	1	1	1
260.00-255.00				1	1	1	1	1	1	1
T75	Yes	Yes	1	1	1	1	1	1	1	1
255.00-250.00				1	1	1	1	1	1	1
T76	Yes	Yes	1	1	1	1	1	1	1	1
250.00-245.00				1	1	1	1	1	1	1
T77	Yes	Yes	1	1	1	1	1	1	1	1
245.00-240.00				1	1	1	1	1	1	1
T78	Yes	Yes	1	1	1	1	1	1	1	1
240.00-220.00				1	1	1	1	1	1	1
T79	Yes	Yes	1	1	1	1	1	1	1	1
220.00-200.00				1	1	1	1	1	1	1
T80	Yes	Yes	1	1	1	1	1	1	1	1
200.00-180.00				1	1	1	1	1	1	1
T81	Yes	Yes	1	1	1	1	1	1	1	1
180.00-160.00				1	1	1	1	1	1	1
T82	Yes	Yes	1	1	1	1	1	1	1	1
160.00-140.00				1	1	1	1	1	1	1
T83	Yes	Yes	1	1	1	1	1	1	1	1
140.00-120.00				1	1	1	1	1	1	1
T84	Yes	Yes	1	1	1	1	1	1	1	1
120.00-115.00				1	1	1	1	1	1	1
T85	Yes	Yes	1	1	1	1	1	1	1	1
115.00-110.00				1	1	1	1	1	1	1
T86	Yes	Yes	1	1	1	1	1	1	1	1
110.00-105.00				1	1	1	1	1	1	1
T87	Yes	Yes	1	1	1	1	1	1	1	1
105.00-100.00				1	1	1	1	1	1	1
T88	Yes	Yes	1	1	1	1	1	1	1	1
100.00-95.00				1	1	1	1	1	1	1
T89	Yes	Yes	1	1	1	1	1	1	1	1
95.00-90.00				1	1	1	1	1	1	1

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	K Factors[1] Legs	X Brace Diags X	X Brace Diags Y	K Single Diags X	K Single Diags Y	Girts X	Girts Y	Horiz. X	Horiz. Y	Sec. Horiz. X	Sec. Horiz. Y	Inner Brace X	Inner Brace Y
T90	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1
90.00-85.00				1	1	1	1	1	1	1	1	1	1	1	1
T91	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1
85.00-80.00				1	1	1	1	1	1	1	1	1	1	1	1
T92	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1
80.00-60.00				1	1	1	1	1	1	1	1	1	1	1	1
T93	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1
60.00-40.00				1	1	1	1	1	1	1	1	1	1	1	1
T94	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1
40.00-20.00				1	1	1	1	1	1	1	1	1	1	1	1
T95	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1
20.00-15.00				1	1	1	1	1	1	1	1	1	1	1	1
T96	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1
15.00-7.00				1	1	1	1	1	1	1	1	1	1	1	1
T97 7.00-0.00	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1	1	1	1	1	1

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

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Net Width Deduct in	Leg U	Diagonal Net Width Deduct in	Diagonal U	Top Girt Net Width Deduct in	Top Girt U	Bottom Girt Net Width Deduct in	Bottom Girt U	Mid Girt Net Width Deduct in	Mid Girt U	Long Horizontal Net Width Deduct in	Long Horizontal U	Short Horizontal Net Width Deduct in	Short Horizontal U
T1	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
1089.80-1084.90														
T2	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
1084.90-1080.00														
T3	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
1080.00-1060.00														
T4	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
1060.00-1040.00														
T5	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
1040.00-1020.00														
T6	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
1020.00-1000.00														
T7	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
1000.00-980.00														
T8	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
980.00-960.00														
T9	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
960.00-940.00														

Tower Elevation ft	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T10 940.00-935.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T11 935.00-930.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T12 930.00-925.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T13 925.00-920.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T14 920.00-915.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T15 915.00-910.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T16 910.00-905.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T17 905.00-900.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T18 900.00-880.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T19 880.00-860.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T20 860.00-840.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T21 840.00-820.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T22 820.00-800.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T23 800.00-780.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T24 780.00-775.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T25 775.00-770.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T26 770.00-765.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T27 765.00-760.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T28 760.00-755.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T29 755.00-750.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T30 750.00-745.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T31 745.00-740.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T32 740.00-720.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T33 720.00-700.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T34 700.00-680.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T35 680.00-660.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T36 660.00-640.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T37 640.00-620.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75

Tower Elevation ft	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T38 620.00-615.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T39 615.00-610.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T40 610.00-605.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T41 605.00-600.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T42 600.00-595.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T43 595.00-590.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T44 590.00-585.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T45 585.00-580.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T46 580.00-560.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T47 560.00-540.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T48 540.00-535.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T49 535.00-530.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T50 530.00-525.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T51 525.00-520.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T52 520.00-500.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T53 500.00-480.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T54 480.00-460.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T55 460.00-440.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T56 440.00-435.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T57 435.00-430.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T58 430.00-425.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T59 425.00-420.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T60 420.00-415.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T61 415.00-410.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T62 410.00-405.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T63 405.00-400.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T64 400.00-380.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T65 380.00-360.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75

Tower Elevation ft	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T66 360.00-340.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T67 340.00-320.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T68 320.00-300.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T69 300.00-280.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T70 280.00-275.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T71 275.00-270.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T72 270.00-265.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T73 265.00-260.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T74 260.00-255.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T75 255.00-250.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T76 250.00-245.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T77 245.00-240.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T78 240.00-220.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T79 220.00-200.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T80 200.00-180.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T81 180.00-160.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T82 160.00-140.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T83 140.00-120.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T84 120.00-115.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T85 115.00-110.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T86 110.00-105.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T87 105.00-100.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T88 100.00-95.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T89 95.00-90.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T90 90.00-85.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T91 85.00-80.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T92 80.00-60.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T93 60.00-40.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75

Tower Elevation ft	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T94 40.00-20.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T95 20.00-15.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T96 15.00-7.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T97 7.00-0.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T1 1089.80-1084.90	Flange	0.8750 A325N	4	0.7500 A325N	2	0.7500 A325N	2	0.6250 A325N	0	0.6250 A325N	0	0.7500 A325N	2	0.6250 A325N	0
T2 1084.90-1080.00	Flange	0.8750 A325N	4	0.7500 A325N	2	0.7500 A325N	2	0.6250 A325N	0	0.6250 A325N	0	0.7500 A325N	2	0.6250 A325N	0
T3 1080.00-1060.00	Flange	0.8750 A325N	4	0.7500 A325N	2	0.7500 A325N	2	0.6250 A325N	0	0.6250 A325N	0	0.7500 A325N	2	0.6250 A325N	0
T4 1060.00-1040.00	Flange	0.8750 A325N	4	0.7500 A325N	2	0.7500 A325N	2	0.6250 A325N	0	0.6250 A325N	0	0.7500 A325N	2	0.6250 A325N	0
T5 1040.00-1020.00	Flange	0.8750 A325N	4	0.7500 A325N	2	0.7500 A325N	2	0.6250 A325N	0	0.6250 A325N	0	0.7500 A325N	2	0.6250 A325N	0
T6 1020.00-1000.00	Flange	0.8750 A325N	4	0.7500 A325N	2	0.7500 A325N	2	0.6250 A325N	0	0.6250 A325N	0	0.7500 A325N	2	0.6250 A325N	0
T7 1000.00-980.00	Flange	0.8750 A325N	4	0.7500 A325N	2	0.7500 A325N	2	0.6250 A325N	0	0.6250 A325N	0	0.7500 A325N	2	0.6250 A325N	0
T8 980.00-960.00	Flange	0.8750 A325N	4	0.7500 A325N	2	0.7500 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.7500 A325N	2	0.6250 A325N	0
T9 960.00-940.00	Flange	0.8750 A325N	4	0.7500 A325N	2	0.7500 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.7500 A325N	2	0.6250 A325N	0
T10 940.00-935.00	Flange	0.8750 A325N	0	0.7500 A325N	2	0.7500 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.7500 A325N	2	0.6250 A325N	0
T11 935.00-930.00	Flange	0.8750 A325N	0	0.7500 A325N	2	0.7500 A325N	2	0.6250 A325N	0	0.6250 A325N	0	0.7500 A325N	2	0.6250 A325N	0
T12 930.00-925.00	Flange	0.8750 A325N	0	0.7500 A325N	2	0.7500 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.7500 A325N	2	0.6250 A325N	0
T13 925.00-920.00	Flange	0.8750 A325N	4	0.7500 A325N	2	0.7500 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.7500 A325N	2	0.6250 A325N	0
T14 920.00-915.00	Flange	0.8750 A325N	0	0.7500 A325N	2	0.7500 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.7500 A325N	2	0.6250 A325N	0
T15 915.00-910.00	Flange	0.8750 A325N	0	0.7500 A325N	2	0.7500 A325N	2	0.6250 A325N	0	0.6250 A325N	0	0.7500 A325N	2	0.6250 A325N	0

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T16	Flange	0.8750	0	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
910.00-905.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T17	Flange	0.8750	4	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
905.00-900.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T18	Flange	0.8750	4	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
900.00-880.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T19	Flange	0.8750	4	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
880.00-860.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T20	Flange	0.8750	4	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
860.00-840.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T21	Flange	0.8750	4	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
840.00-820.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T22	Flange	0.8750	4	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
820.00-800.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T23	Flange	0.8750	4	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
800.00-780.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T24	Flange	0.8750	0	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
780.00-775.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T25	Flange	0.8750	0	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
775.00-770.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T26	Flange	0.8750	0	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
770.00-765.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T27	Flange	0.8750	4	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
765.00-760.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T28	Flange	0.8750	0	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
760.00-755.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T29	Flange	0.8750	0	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
755.00-750.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T30	Flange	0.8750	0	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
750.00-745.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T31	Flange	0.8750	4	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
745.00-740.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T32	Flange	0.8750	4	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
740.00-720.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T33	Flange	0.8750	4	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
720.00-700.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T34	Flange	0.8750	4	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
700.00-680.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T35	Flange	0.8750	4	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
680.00-660.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T36	Flange	0.8750	4	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
660.00-640.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T37	Flange	0.8750	4	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
640.00-620.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T38	Flange	0.8750	0	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
620.00-615.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T39	Flange	0.8750	0	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
615.00-610.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T40	Flange	0.8750	0	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
610.00-605.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T41	Flange	0.8750	4	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
605.00-600.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T42	Flange	0.8750	0	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
600.00-595.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T43	Flange	0.8750	0	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
595.00-590.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T44	Flange	0.8750	0	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
590.00-585.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T45	Flange	0.8750	4	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
585.00-580.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T46	Flange	0.8750	4	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
580.00-560.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T47	Flange	0.8750	4	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
560.00-540.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T48	Flange	0.8750	0	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
540.00-535.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T49	Flange	0.8750	0	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
535.00-530.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T50	Flange	0.8750	0	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
530.00-525.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T51	Flange	0.8750	4	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
525.00-520.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T52	Flange	0.8750	4	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
520.00-500.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T53	Flange	0.8750	4	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
500.00-480.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T54	Flange	0.8750	4	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
480.00-460.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T55	Flange	0.8750	4	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
460.00-440.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T56	Flange	0.8750	0	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
440.00-435.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T57	Flange	0.8750	0	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
435.00-430.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T58	Flange	0.8750	0	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
430.00-425.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T59	Flange	0.8750	4	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
425.00-420.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T60	Flange	0.8750	0	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
420.00-415.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T61	Flange	0.8750	0	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
415.00-410.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T62	Flange	0.8750	0	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
410.00-405.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T63	Flange	0.8750	4	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
405.00-400.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T64	Flange	0.8750	4	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
400.00-380.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T65	Flange	0.8750	4	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
380.00-360.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T66	Flange	0.8750	4	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
360.00-340.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T67	Flange	0.8750	4	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
340.00-320.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T68	Flange	0.8750	4	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
320.00-300.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T69	Flange	0.8750	4	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
300.00-280.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T70	Flange	0.8750	0	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
280.00-275.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T71	Flange	0.8750	0	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
275.00-270.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T72	Flange	0.8750	0	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
270.00-265.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T73	Flange	0.8750	4	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
265.00-260.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T74	Flange	0.8750	0	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
260.00-255.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T75	Flange	0.8750	0	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
255.00-250.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T76	Flange	0.8750	0	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
250.00-245.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T77	Flange	0.8750	4	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
245.00-240.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T78	Flange	0.8750	4	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
240.00-220.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T79	Flange	0.8750	4	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
220.00-200.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T80	Flange	0.8750	4	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
200.00-180.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T81	Flange	0.8750	4	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
180.00-160.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T82	Flange	0.8750	4	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
160.00-140.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T83	Flange	0.8750	4	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
140.00-120.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T84	Flange	0.8750	0	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
120.00-115.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T85	Flange	0.8750	0	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
115.00-110.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T86	Flange	0.8750	0	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
110.00-105.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T87	Flange	0.8750	4	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
105.00-100.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T88	Flange	0.8750	0	0.7500	2	0.7500	2	0.0000	0	0.6250	0	0.7500	2	0.6250	0
100.00-95.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T89	Flange	0.8750	0	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
95.00-90.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T90	Flange	0.8750	0	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
90.00-85.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T91	Flange	0.8750	4	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
85.00-80.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T92	Flange	0.8750	4	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
80.00-60.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T93	Flange	0.8750	4	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
60.00-40.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T94	Flange	0.8750	0	0.7500	2	0.7500	2	0.6250	0	0.6250	0	0.7500	2	0.6250	0
40.00-20.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T95	Flange	0.8750	6	0.7500	2	0.7500	2	0.7500	2	0.6250	0	0.7500	2	0.7500	2
20.00-15.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T96 15.00-7.00	Flange	0.8750	0	0.7500	0	0.7500	0	0.6250	0	0.6250	0	0.7500	0	0.6250	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T97 7.00-0.00	Flange	0.8750	0	0.7500	0	0.7500	0	0.6250	0	0.6250	0	0.7500	0	0.6250	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	

Guy Data

Guy Elevation ft	Guy Grade		Guy Size	Initial Tension lb	%	Guy Modulus ksi	Guy Weight plf	L_u ft	Anchor Radius ft	Anchor Azimuth Adj. °	Anchor Elevation ft	End Fitting Efficiency %
1089.8	BS	A	1 3/4	37600.00	10%	24000	6.430	1331.05	630.00	0.0000	-86.00	100%
		B	1 3/4	37600.00	10%	24000	6.430	1272.96	694.00	0.0000	19.00	100%
		C	1 3/4	37600.00	10%	24000	6.430	1272.12	694.00	0.0000	20.00	100%
920	BS	A	1 3/4	37600.00	10%	24000	6.430	1183.93	630.00	0.0000	-86.00	100%
		B	1 3/4	37600.00	10%	24000	6.430	1134.01	694.00	0.0000	19.00	100%
		C	1 3/4	37600.00	10%	24000	6.430	1133.22	694.00	0.0000	20.00	100%
760	BS	A	1 3/4	37600.00	10%	24000	6.430	1051.53	630.00	0.0000	-86.00	100%
		B	1 3/4	37600.00	10%	24000	6.430	1011.69	694.00	0.0000	19.00	100%
		C	1 3/4	37600.00	10%	24000	6.430	1010.96	694.00	0.0000	20.00	100%
600	BS	A	1 3/4	37600.00	10%	24000	6.430	927.84	630.00	0.0000	-86.00	100%
		B	1 3/4	37600.00	10%	24000	6.430	901.23	694.00	0.0000	19.00	100%
		C	1 3/4	37600.00	10%	24000	6.430	900.58	694.00	0.0000	20.00	100%
420	BS	A	1 1/2	27600.00	10%	24000	4.730	696.36	500.00	0.0000	-70.00	100%
		B	1 1/2	27600.00	10%	24000	4.730	645.21	500.00	0.0000	6.00	100%
		C	1 1/2	27600.00	10%	24000	4.730	628.25	500.00	0.0000	33.00	100%
260	BS	A	1 1/2	27600.00	10%	24000	4.730	594.88	500.00	0.0000	-70.00	100%
		B	1 1/2	27600.00	10%	24000	4.730	556.38	500.00	0.0000	6.00	100%
		C	1 1/2	27600.00	10%	24000	4.730	544.60	500.00	0.0000	33.00	100%
100	BS	A	1 1/2	27600.00	10%	24000	4.730	523.44	500.00	0.0000	-70.00	100%
		B	1 1/2	27600.00	10%	24000	4.730	503.94	500.00	0.0000	6.00	100%
		C	1 1/2	27600.00	10%	24000	4.730	499.61	500.00	0.0000	33.00	100%

Guy Data *(cont'd)*

Guy Elevation ft	Mount Type	Torque-Arm Spread ft	Torque-Arm Leg Angle °	Torque-Arm Style	Torque-Arm Grade	Torque-Arm Type	Torque-Arm Size
1089.8	Corner						
920	Corner						
760	Corner						
600	Corner						
420	Corner						
260	Corner						
100	Corner						

Guy Data *(cont'd)*

Guy Elevation ft	Diagonal Grade	Diagonal Type	Upper Diagonal Size	Lower Diagonal Size	Is Strap.	Pull-Off Grade	Pull-Off Type	Pull-Off Size
1089.80	A572-50 (50 ksi)	Solid Round				A36 (36 ksi)	Channel	
920.00	A572-50 (50 ksi)	Solid Round				A36 (36 ksi)	Double Equal Angle	
760.00	A572-50 (50 ksi)	Solid Round				A36 (36 ksi)	Double Equal Angle	
600.00	A572-50 (50 ksi)	Solid Round				A36 (36 ksi)	Double Equal Angle	
420.00	A572-50	Solid Round				A36	Double Equal	

Guy Elevation ft	Diagonal Grade	Diagonal Type	Upper Diagonal Size	Lower Diagonal Size	Is Strap.	Pull-Off Grade	Pull-Off Type	Pull-Off Size
	(50 ksi)					(36 ksi)	Angle	
260.00	A572-50	Solid Round				A36	Double Equal	
	(50 ksi)					(36 ksi)	Angle	
100.00	A572-50	Solid Round				A36	Double Equal	
	(50 ksi)					(36 ksi)	Angle	

Guy Data *(cont'd)*

Guy Elevation ft	Cable Weight A lb	Cable Weight B lb	Cable Weight C lb	Cable Weight D lb	Tower Intercept A ft	Tower Intercept B ft	Tower Intercept C ft	Tower Intercept D ft
1089.8	8558.65	8185.16	8179.75		137.91	127.20	127.04	
					20.3 sec/pulse	19.5 sec/pulse	19.5 sec/pulse	
920	7612.66	7291.69	7286.59		110.57	102.30	102.17	
					18.2 sec/pulse	17.5 sec/pulse	17.5 sec/pulse	
760	6761.35	6505.20	6500.50		88.33	82.47	82.36	
					16.2 sec/pulse	15.7 sec/pulse	15.7 sec/pulse	
600	5965.98	5794.88	5790.75		69.66	66.30	66.21	
					14.4 sec/pulse	14.1 sec/pulse	14.0 sec/pulse	
420	3293.76	3051.85	2971.63		39.94	34.50	32.78	
					10.9 sec/pulse	10.1 sec/pulse	9.9 sec/pulse	
260	2813.79	2631.67	2575.95		29.53	26.00	24.97	
					9.4 sec/pulse	8.8 sec/pulse	8.6 sec/pulse	
100	2475.86	2383.62	2363.16		23.17	21.62	21.30	
					8.3 sec/pulse	8.0 sec/pulse	8.0 sec/pulse	

Guy Data *(cont'd)*

Guy Elevation ft	Calc K Single Angles	Calc K Solid Rounds	Torque Arm K_x	Torque Arm K_y	Pull Off K_x	Pull Off K_y	Diagonal K_x	Diagonal K_y
1089.8	No	No			1	1	1	1
920	No	No			1	1	1	1
760	No	No			1	1	1	1
600	No	No			1	1	1	1
420	No	No			1	1	1	1
260	No	No			1	1	1	1
100	No	No			1	1	1	1

Guy Data *(cont'd)*

Guy Elevation ft	Torque-Arm Bolt Size in	Torque-Arm Number	Torque-Arm Net Width Deduct in	Torque-Arm U	Pull Off Bolt Size in	Pull Off Number	Pull Off Net Width Deduct in	Pull Off U	Diagonal Bolt Size in	Diagonal Number	Diagonal Net Width Deduct in	Diagonal U
1089.8	0.6250 A325N	0	0.0000	0.75	0.6250 A325N	0	0.0000	0.75	0.6250 A325N	0	0.0000	0.75

Guy Elevation ft	Torque-Arm				Pull Off				Diagonal			
	Bolt Size in	Number	Net Width Deduct in	U	Bolt Size in	Number	Net Width Deduct in	U	Bolt Size in	Number	Net Width Deduct in	U
920	0.6250 A325N	0	0.0000	0.75	0.6250 A325N	0	0.0000	0.75	0.6250 A325N	0	0.0000	0.75
760	0.6250 A325N	0	0.0000	0.75	0.6250 A325N	0	0.0000	0.75	0.6250 A325N	0	0.0000	0.75
600	0.6250 A325N	0	0.0000	0.75	0.6250 A325N	0	0.0000	0.75	0.6250 A325N	0	0.0000	0.75
420	0.6250 A325N	0	0.0000	0.75	0.6250 A325N	0	0.0000	0.75	0.6250 A325N	0	0.0000	0.75
260	0.6250 A325N	0	0.0000	0.75	0.6250 A325N	0	0.0000	0.75	0.6250 A325N	0	0.0000	0.75
100	0.6250 A325N	0	0.0000	0.75	0.6250 A325N	0	0.0000	0.75	0.6250 A325N	0	0.0000	0.75

Guy Pressures

Guy Elevation ft	Guy Location	z ft	q_z psf	q_z Ice psf	Ice Thickness in
1089.8	A	501.90	38	9	1.9899
	B	554.40	39	9	2.0030
	C	554.90	39	9	2.0032
920	A	417.00	37	9	1.9714
	B	469.50	38	9	1.9823
	C	470.00	38	9	1.9824
760	A	337.00	36	8	1.9604
	B	389.50	37	8	1.9666
	C	390.00	37	8	1.9667
600	A	257.00	36	8	1.9617
	B	309.50	36	8	1.9591
	C	310.00	36	8	1.9591
420	A	175.00	38	9	1.9834
	B	213.00	37	9	1.9704
	C	226.50	37	8	1.9670
260	A	95.00	40	9	2.0226
	B	133.00	39	9	2.0034
	C	146.50	38	9	1.9965
100	A	15.00	41	9	1.9087
	B	53.00	40	9	2.0256
	C	66.50	40	9	2.0296

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight plf
6 1/8" Hard Line	C	No	Ar (CaAa)	1089.80 - 0.00	1	1	0.000 0.000	6.1250		6.83
6 1/8" Hard Line	C	No	Surface Ar (CaAa)	1151.90 - 1089.80	1	1	0.000 0.000	6.1250		6.83
***										
1" conduit	B	No	Ar (CaAa)	1073.00 -	1	1	0.000	1.3200		1.68

Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight plf
				0.00			0.000			
7/8" Coax	B	No	Ar (CaAa)	1073.00 - 0.00	1	1	0.000 0.000	1.0900		0.33
***										
7/8" Coax	A	No	Ar (CaAa)	996.00 - 0.00	1	1	0.000 0.000	1.0900		0.33
0.99" (25.1mm) LDF2-2R	A	No	Ar (CaAa)	996.00 - 0.00	1	1	0.000 0.000	0.9900		0.30
***										
EW63	B	No	Ar (CaAa)	878.00 - 0.00	1	1	0.000 0.000	2.0100		0.51
***										
1.39" (35.3mm) Hybrid	A	No	Ar (CaAa)	400.00 - 0.00	1	1	0.000 0.000	1.3900		1.36
***										
EW63	B	No	Ar (CaAa)	349.00 - 0.00	1	1	0.000 0.000	2.0100		0.51
***										
0.33" (8.7mm) Fiber	B	No	Ar (CaAa)	197.00 - 0.00	1	1	0.000 0.000	0.3300		0.05
0.65" (16.4mm) 8 AWG 2C	C	No	Ar (CaAa)	197.00 - 0.00	2	2	0.000 0.000	0.6500		0.31
2 1/2" conduit	C	No	Ar (CaAa)	197.00 - 0.00	1	1	0.000 0.000	2.8800		5.79
***										
1 5/8" Coax	C	No	Ar (CaAa)	192.00 - 0.00	6	6	0.000 0.000	1.9800		0.82
***										

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	C_AA_A ft^2/ft	Weight plf
***								

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight lb
L1	1151.90-1089.80	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	38.036	0.000	424.14
T1	1089.80-1084.90	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	1.501	0.000	33.47
T2	1084.90-1080.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	1.501	0.000	33.47

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight lb
T3	1080.00-1060.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	3.133	0.000	26.13
		C	0.000	0.000	6.125	0.000	136.60
T4	1060.00-1040.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	4.820	0.000	40.20
		C	0.000	0.000	6.125	0.000	136.60
T5	1040.00-1020.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	4.820	0.000	40.20
		C	0.000	0.000	6.125	0.000	136.60
T6	1020.00-1000.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	4.820	0.000	40.20
		C	0.000	0.000	6.125	0.000	136.60
T7	1000.00-980.00	A	0.000	0.000	3.328	0.000	10.08
		B	0.000	0.000	4.820	0.000	40.20
		C	0.000	0.000	6.125	0.000	136.60
T8	980.00-960.00	A	0.000	0.000	4.160	0.000	12.60
		B	0.000	0.000	4.820	0.000	40.20
		C	0.000	0.000	6.125	0.000	136.60
T9	960.00-940.00	A	0.000	0.000	4.160	0.000	12.60
		B	0.000	0.000	4.820	0.000	40.20
		C	0.000	0.000	6.125	0.000	136.60
T10	940.00-935.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	1.205	0.000	10.05
		C	0.000	0.000	1.531	0.000	34.15
T11	935.00-930.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	1.205	0.000	10.05
		C	0.000	0.000	1.531	0.000	34.15
T12	930.00-925.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	1.205	0.000	10.05
		C	0.000	0.000	1.531	0.000	34.15
T13	925.00-920.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	1.205	0.000	10.05
		C	0.000	0.000	1.531	0.000	34.15
T14	920.00-915.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	1.205	0.000	10.05
		C	0.000	0.000	1.531	0.000	34.15
T15	915.00-910.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	1.205	0.000	10.05
		C	0.000	0.000	1.531	0.000	34.15
T16	910.00-905.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	1.205	0.000	10.05
		C	0.000	0.000	1.531	0.000	34.15
T17	905.00-900.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	1.205	0.000	10.05
		C	0.000	0.000	1.531	0.000	34.15
T18	900.00-880.00	A	0.000	0.000	4.160	0.000	12.60
		B	0.000	0.000	4.820	0.000	40.20
		C	0.000	0.000	6.125	0.000	136.60
T19	880.00-860.00	A	0.000	0.000	4.160	0.000	12.60
		B	0.000	0.000	8.438	0.000	49.38
		C	0.000	0.000	6.125	0.000	136.60
T20	860.00-840.00	A	0.000	0.000	4.160	0.000	12.60
		B	0.000	0.000	8.840	0.000	50.40
		C	0.000	0.000	6.125	0.000	136.60
T21	840.00-820.00	A	0.000	0.000	4.160	0.000	12.60
		B	0.000	0.000	8.840	0.000	50.40
		C	0.000	0.000	6.125	0.000	136.60
T22	820.00-800.00	A	0.000	0.000	4.160	0.000	12.60
		B	0.000	0.000	8.840	0.000	50.40
		C	0.000	0.000	6.125	0.000	136.60
T23	800.00-780.00	A	0.000	0.000	4.160	0.000	12.60

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight lb
		B	0.000	0.000	8.840	0.000	50.40
		C	0.000	0.000	6.125	0.000	136.60
T24	780.00-775.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	2.210	0.000	12.60
		C	0.000	0.000	1.531	0.000	34.15
T25	775.00-770.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	2.210	0.000	12.60
		C	0.000	0.000	1.531	0.000	34.15
T26	770.00-765.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	2.210	0.000	12.60
		C	0.000	0.000	1.531	0.000	34.15
T27	765.00-760.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	2.210	0.000	12.60
		C	0.000	0.000	1.531	0.000	34.15
T28	760.00-755.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	2.210	0.000	12.60
		C	0.000	0.000	1.531	0.000	34.15
T29	755.00-750.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	2.210	0.000	12.60
		C	0.000	0.000	1.531	0.000	34.15
T30	750.00-745.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	2.210	0.000	12.60
		C	0.000	0.000	1.531	0.000	34.15
T31	745.00-740.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	2.210	0.000	12.60
		C	0.000	0.000	1.531	0.000	34.15
T32	740.00-720.00	A	0.000	0.000	4.160	0.000	12.60
		B	0.000	0.000	8.840	0.000	50.40
		C	0.000	0.000	6.125	0.000	136.60
T33	720.00-700.00	A	0.000	0.000	4.160	0.000	12.60
		B	0.000	0.000	8.840	0.000	50.40
		C	0.000	0.000	6.125	0.000	136.60
T34	700.00-680.00	A	0.000	0.000	4.160	0.000	12.60
		B	0.000	0.000	8.840	0.000	50.40
		C	0.000	0.000	6.125	0.000	136.60
T35	680.00-660.00	A	0.000	0.000	4.160	0.000	12.60
		B	0.000	0.000	8.840	0.000	50.40
		C	0.000	0.000	6.125	0.000	136.60
T36	660.00-640.00	A	0.000	0.000	4.160	0.000	12.60
		B	0.000	0.000	8.840	0.000	50.40
		C	0.000	0.000	6.125	0.000	136.60
T37	640.00-620.00	A	0.000	0.000	4.160	0.000	12.60
		B	0.000	0.000	8.840	0.000	50.40
		C	0.000	0.000	6.125	0.000	136.60
T38	620.00-615.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	2.210	0.000	12.60
		C	0.000	0.000	1.531	0.000	34.15
T39	615.00-610.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	2.210	0.000	12.60
		C	0.000	0.000	1.531	0.000	34.15
T40	610.00-605.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	2.210	0.000	12.60
		C	0.000	0.000	1.531	0.000	34.15
T41	605.00-600.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	2.210	0.000	12.60
		C	0.000	0.000	1.531	0.000	34.15
T42	600.00-595.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	2.210	0.000	12.60
		C	0.000	0.000	1.531	0.000	34.15
T43	595.00-590.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	2.210	0.000	12.60

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight lb
		C	0.000	0.000	1.531	0.000	34.15
T44	590.00-585.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	2.210	0.000	12.60
		C	0.000	0.000	1.531	0.000	34.15
T45	585.00-580.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	2.210	0.000	12.60
		C	0.000	0.000	1.531	0.000	34.15
T46	580.00-560.00	A	0.000	0.000	4.160	0.000	12.60
		B	0.000	0.000	8.840	0.000	50.40
		C	0.000	0.000	6.125	0.000	136.60
T47	560.00-540.00	A	0.000	0.000	4.160	0.000	12.60
		B	0.000	0.000	8.840	0.000	50.40
		C	0.000	0.000	6.125	0.000	136.60
T48	540.00-535.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	2.210	0.000	12.60
		C	0.000	0.000	1.531	0.000	34.15
T49	535.00-530.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	2.210	0.000	12.60
		C	0.000	0.000	1.531	0.000	34.15
T50	530.00-525.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	2.210	0.000	12.60
		C	0.000	0.000	1.531	0.000	34.15
T51	525.00-520.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	2.210	0.000	12.60
		C	0.000	0.000	1.531	0.000	34.15
T52	520.00-500.00	A	0.000	0.000	4.160	0.000	12.60
		B	0.000	0.000	8.840	0.000	50.40
		C	0.000	0.000	6.125	0.000	136.60
T53	500.00-480.00	A	0.000	0.000	4.160	0.000	12.60
		B	0.000	0.000	8.840	0.000	50.40
		C	0.000	0.000	6.125	0.000	136.60
T54	480.00-460.00	A	0.000	0.000	4.160	0.000	12.60
		B	0.000	0.000	8.840	0.000	50.40
		C	0.000	0.000	6.125	0.000	136.60
T55	460.00-440.00	A	0.000	0.000	4.160	0.000	12.60
		B	0.000	0.000	8.840	0.000	50.40
		C	0.000	0.000	6.125	0.000	136.60
T56	440.00-435.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	2.210	0.000	12.60
		C	0.000	0.000	1.531	0.000	34.15
T57	435.00-430.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	2.210	0.000	12.60
		C	0.000	0.000	1.531	0.000	34.15
T58	430.00-425.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	2.210	0.000	12.60
		C	0.000	0.000	1.531	0.000	34.15
T59	425.00-420.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	2.210	0.000	12.60
		C	0.000	0.000	1.531	0.000	34.15
T60	420.00-415.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	2.210	0.000	12.60
		C	0.000	0.000	1.531	0.000	34.15
T61	415.00-410.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	2.210	0.000	12.60
		C	0.000	0.000	1.531	0.000	34.15
T62	410.00-405.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	2.210	0.000	12.60
		C	0.000	0.000	1.531	0.000	34.15
T63	405.00-400.00	A	0.000	0.000	1.040	0.000	3.15
		B	0.000	0.000	2.210	0.000	12.60
		C	0.000	0.000	1.531	0.000	34.15

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight lb
T64	400.00-380.00	A	0.000	0.000	6.940	0.000	39.80
		B	0.000	0.000	8.840	0.000	50.40
		C	0.000	0.000	6.125	0.000	136.60
T65	380.00-360.00	A	0.000	0.000	6.940	0.000	39.80
		B	0.000	0.000	8.840	0.000	50.40
		C	0.000	0.000	6.125	0.000	136.60
T66	360.00-340.00	A	0.000	0.000	6.940	0.000	39.80
		B	0.000	0.000	10.649	0.000	54.99
		C	0.000	0.000	6.125	0.000	136.60
T67	340.00-320.00	A	0.000	0.000	6.940	0.000	39.80
		B	0.000	0.000	12.860	0.000	60.60
		C	0.000	0.000	6.125	0.000	136.60
T68	320.00-300.00	A	0.000	0.000	6.940	0.000	39.80
		B	0.000	0.000	12.860	0.000	60.60
		C	0.000	0.000	6.125	0.000	136.60
T69	300.00-280.00	A	0.000	0.000	6.940	0.000	39.80
		B	0.000	0.000	12.860	0.000	60.60
		C	0.000	0.000	6.125	0.000	136.60
T70	280.00-275.00	A	0.000	0.000	1.735	0.000	9.95
		B	0.000	0.000	3.215	0.000	15.15
		C	0.000	0.000	1.531	0.000	34.15
T71	275.00-270.00	A	0.000	0.000	1.735	0.000	9.95
		B	0.000	0.000	3.215	0.000	15.15
		C	0.000	0.000	1.531	0.000	34.15
T72	270.00-265.00	A	0.000	0.000	1.735	0.000	9.95
		B	0.000	0.000	3.215	0.000	15.15
		C	0.000	0.000	1.531	0.000	34.15
T73	265.00-260.00	A	0.000	0.000	1.735	0.000	9.95
		B	0.000	0.000	3.215	0.000	15.15
		C	0.000	0.000	1.531	0.000	34.15
T74	260.00-255.00	A	0.000	0.000	1.735	0.000	9.95
		B	0.000	0.000	3.215	0.000	15.15
		C	0.000	0.000	1.531	0.000	34.15
T75	255.00-250.00	A	0.000	0.000	1.735	0.000	9.95
		B	0.000	0.000	3.215	0.000	15.15
		C	0.000	0.000	1.531	0.000	34.15
T76	250.00-245.00	A	0.000	0.000	1.735	0.000	9.95
		B	0.000	0.000	3.215	0.000	15.15
		C	0.000	0.000	1.531	0.000	34.15
T77	245.00-240.00	A	0.000	0.000	1.735	0.000	9.95
		B	0.000	0.000	3.215	0.000	15.15
		C	0.000	0.000	1.531	0.000	34.15
T78	240.00-220.00	A	0.000	0.000	6.940	0.000	39.80
		B	0.000	0.000	12.860	0.000	60.60
		C	0.000	0.000	6.125	0.000	136.60
T79	220.00-200.00	A	0.000	0.000	6.940	0.000	39.80
		B	0.000	0.000	12.860	0.000	60.60
		C	0.000	0.000	6.125	0.000	136.60
T80	200.00-180.00	A	0.000	0.000	6.940	0.000	39.80
		B	0.000	0.000	13.421	0.000	61.45
		C	0.000	0.000	27.487	0.000	304.61
T81	180.00-160.00	A	0.000	0.000	6.940	0.000	39.80
		B	0.000	0.000	13.520	0.000	61.60
		C	0.000	0.000	38.245	0.000	363.20
T82	160.00-140.00	A	0.000	0.000	6.940	0.000	39.80
		B	0.000	0.000	13.520	0.000	61.60
		C	0.000	0.000	38.245	0.000	363.20
T83	140.00-120.00	A	0.000	0.000	6.940	0.000	39.80
		B	0.000	0.000	13.520	0.000	61.60
		C	0.000	0.000	38.235	0.000	363.20
T84	120.00-115.00	A	0.000	0.000	1.735	0.000	9.95

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight lb
		B	0.000	0.000	3.380	0.000	15.40
		C	0.000	0.000	9.552	0.000	90.80
T85	115.00-110.00	A	0.000	0.000	1.735	0.000	9.95
		B	0.000	0.000	3.380	0.000	15.40
		C	0.000	0.000	9.549	0.000	90.80
T86	110.00-105.00	A	0.000	0.000	1.735	0.000	9.95
		B	0.000	0.000	3.380	0.000	15.40
		C	0.000	0.000	9.547	0.000	90.80
T87	105.00-100.00	A	0.000	0.000	1.735	0.000	9.95
		B	0.000	0.000	3.380	0.000	15.40
		C	0.000	0.000	9.544	0.000	90.80
T88	100.00-95.00	A	0.000	0.000	1.735	0.000	9.95
		B	0.000	0.000	3.380	0.000	15.40
		C	0.000	0.000	9.542	0.000	90.80
T89	95.00-90.00	A	0.000	0.000	1.735	0.000	9.95
		B	0.000	0.000	3.380	0.000	15.40
		C	0.000	0.000	9.540	0.000	90.80
T90	90.00-85.00	A	0.000	0.000	1.735	0.000	9.95
		B	0.000	0.000	3.380	0.000	15.40
		C	0.000	0.000	9.538	0.000	90.80
T91	85.00-80.00	A	0.000	0.000	1.735	0.000	9.95
		B	0.000	0.000	3.380	0.000	15.40
		C	0.000	0.000	9.536	0.000	90.80
T92	80.00-60.00	A	0.000	0.000	6.940	0.000	39.80
		B	0.000	0.000	13.520	0.000	61.60
		C	0.000	0.000	38.136	0.000	363.20
T93	60.00-40.00	A	0.000	0.000	6.940	0.000	39.80
		B	0.000	0.000	13.520	0.000	61.60
		C	0.000	0.000	38.159	0.000	363.20
T94	40.00-20.00	A	0.000	0.000	6.940	0.000	39.80
		B	0.000	0.000	13.520	0.000	61.60
		C	0.000	0.000	38.245	0.000	363.20
T95	20.00-15.00	A	0.000	0.000	1.735	0.000	9.95
		B	0.000	0.000	3.380	0.000	15.40
		C	0.000	0.000	9.528	0.000	90.80
T96	15.00-7.00	A	0.000	0.000	2.776	0.000	15.92
		B	0.000	0.000	5.408	0.000	24.64
		C	0.000	0.000	15.205	0.000	145.28
T97	7.00-0.00	A	0.000	0.000	2.429	0.000	13.93
		B	0.000	0.000	4.732	0.000	21.56
		C	0.000	0.000	13.264	0.000	127.12

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight lb
L1	1151.90-1089.80	A	2.100	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	64.121	0.000	1734.76
T1	1089.80-1084.90	A	2.100	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	5.060	0.000	136.89
T2	1084.90-1080.00	A	2.100	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	5.060	0.000	136.89
T3	1080.00-1060.00	A	2.100	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	14.055	0.000	246.65

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight lb
		C		0.000	0.000	20.651	0.000	558.73
T4	1060.00-1040.00	A	2.100	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	21.623	0.000	379.47
		C		0.000	0.000	20.651	0.000	558.74
T5	1040.00-1020.00	A	2.100	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	21.623	0.000	379.49
		C		0.000	0.000	20.652	0.000	558.75
T6	1020.00-1000.00	A	2.100	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	21.624	0.000	379.51
		C		0.000	0.000	20.652	0.000	558.77
T7	1000.00-980.00	A	2.101	0.000	0.000	16.772	0.000	267.99
		B		0.000	0.000	21.625	0.000	379.53
		C		0.000	0.000	20.652	0.000	558.79
T8	980.00-960.00	A	2.101	0.000	0.000	20.965	0.000	335.01
		B		0.000	0.000	21.625	0.000	379.55
		C		0.000	0.000	20.653	0.000	558.81
T9	960.00-940.00	A	2.100	0.000	0.000	20.958	0.000	334.78
		B		0.000	0.000	21.618	0.000	379.31
		C		0.000	0.000	20.649	0.000	558.59
T10	940.00-935.00	A	2.097	0.000	0.000	5.234	0.000	83.52
		B		0.000	0.000	5.399	0.000	94.65
		C		0.000	0.000	5.160	0.000	139.48
T11	935.00-930.00	A	2.096	0.000	0.000	5.232	0.000	83.45
		B		0.000	0.000	5.397	0.000	94.58
		C		0.000	0.000	5.158	0.000	139.41
T12	930.00-925.00	A	2.095	0.000	0.000	5.230	0.000	83.38
		B		0.000	0.000	5.395	0.000	94.51
		C		0.000	0.000	5.157	0.000	139.34
T13	925.00-920.00	A	2.094	0.000	0.000	5.228	0.000	83.31
		B		0.000	0.000	5.393	0.000	94.43
		C		0.000	0.000	5.156	0.000	139.27
T14	920.00-915.00	A	2.093	0.000	0.000	5.225	0.000	83.24
		B		0.000	0.000	5.390	0.000	94.36
		C		0.000	0.000	5.155	0.000	139.20
T15	915.00-910.00	A	2.092	0.000	0.000	5.223	0.000	83.17
		B		0.000	0.000	5.388	0.000	94.29
		C		0.000	0.000	5.154	0.000	139.13
T16	910.00-905.00	A	2.090	0.000	0.000	5.221	0.000	83.10
		B		0.000	0.000	5.386	0.000	94.22
		C		0.000	0.000	5.153	0.000	139.06
T17	905.00-900.00	A	2.089	0.000	0.000	5.219	0.000	83.03
		B		0.000	0.000	5.384	0.000	94.14
		C		0.000	0.000	5.152	0.000	138.99
T18	900.00-880.00	A	2.087	0.000	0.000	20.852	0.000	331.41
		B		0.000	0.000	21.512	0.000	375.83
		C		0.000	0.000	20.596	0.000	555.26
T19	880.00-860.00	A	2.082	0.000	0.000	20.816	0.000	330.25
		B		0.000	0.000	32.589	0.000	571.17
		C		0.000	0.000	20.578	0.000	554.11
T20	860.00-840.00	A	2.077	0.000	0.000	20.779	0.000	329.08
		B		0.000	0.000	33.769	0.000	591.10
		C		0.000	0.000	20.560	0.000	552.95
T21	840.00-820.00	A	2.073	0.000	0.000	20.742	0.000	327.89
		B		0.000	0.000	33.712	0.000	589.17
		C		0.000	0.000	20.541	0.000	551.78
T22	820.00-800.00	A	2.068	0.000	0.000	20.704	0.000	326.69
		B		0.000	0.000	33.655	0.000	587.22
		C		0.000	0.000	20.522	0.000	550.59
T23	800.00-780.00	A	2.063	0.000	0.000	20.665	0.000	325.47
		B		0.000	0.000	33.598	0.000	585.24
		C		0.000	0.000	20.503	0.000	549.38

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight lb
T24	780.00-775.00	A	2.060	0.000	0.000	5.160	0.000	81.18
		B		0.000	0.000	8.390	0.000	146.00
		C		0.000	0.000	5.123	0.000	137.15
T25	775.00-770.00	A	2.059	0.000	0.000	5.158	0.000	81.10
		B		0.000	0.000	8.387	0.000	145.87
		C		0.000	0.000	5.121	0.000	137.08
T26	770.00-765.00	A	2.058	0.000	0.000	5.155	0.000	81.02
		B		0.000	0.000	8.383	0.000	145.75
		C		0.000	0.000	5.120	0.000	137.00
T27	765.00-760.00	A	2.056	0.000	0.000	5.153	0.000	80.94
		B		0.000	0.000	8.379	0.000	145.62
		C		0.000	0.000	5.119	0.000	136.92
T28	760.00-755.00	A	2.055	0.000	0.000	5.150	0.000	80.87
		B		0.000	0.000	8.376	0.000	145.49
		C		0.000	0.000	5.118	0.000	136.85
T29	755.00-750.00	A	2.054	0.000	0.000	5.148	0.000	80.79
		B		0.000	0.000	8.372	0.000	145.37
		C		0.000	0.000	5.116	0.000	136.77
T30	750.00-745.00	A	2.053	0.000	0.000	5.145	0.000	80.71
		B		0.000	0.000	8.368	0.000	145.24
		C		0.000	0.000	5.115	0.000	136.69
T31	745.00-740.00	A	2.051	0.000	0.000	5.143	0.000	80.63
		B		0.000	0.000	8.364	0.000	145.11
		C		0.000	0.000	5.114	0.000	136.61
T32	740.00-720.00	A	2.048	0.000	0.000	20.547	0.000	321.74
		B		0.000	0.000	33.420	0.000	579.17
		C		0.000	0.000	20.443	0.000	545.67
T33	720.00-700.00	A	2.043	0.000	0.000	20.506	0.000	320.47
		B		0.000	0.000	33.359	0.000	577.11
		C		0.000	0.000	20.423	0.000	544.41
T34	700.00-680.00	A	2.038	0.000	0.000	20.465	0.000	319.19
		B		0.000	0.000	33.298	0.000	575.03
		C		0.000	0.000	20.403	0.000	543.14
T35	680.00-660.00	A	2.033	0.000	0.000	20.424	0.000	317.91
		B		0.000	0.000	33.236	0.000	572.94
		C		0.000	0.000	20.382	0.000	541.86
T36	660.00-640.00	A	2.028	0.000	0.000	20.383	0.000	316.62
		B		0.000	0.000	33.174	0.000	570.84
		C		0.000	0.000	20.361	0.000	540.57
T37	640.00-620.00	A	2.023	0.000	0.000	20.341	0.000	315.32
		B		0.000	0.000	33.112	0.000	568.73
		C		0.000	0.000	20.341	0.000	539.27
T38	620.00-615.00	A	2.019	0.000	0.000	5.079	0.000	78.63
		B		0.000	0.000	8.268	0.000	141.85
		C		0.000	0.000	5.082	0.000	134.62
T39	615.00-610.00	A	2.018	0.000	0.000	5.076	0.000	78.55
		B		0.000	0.000	8.264	0.000	141.72
		C		0.000	0.000	5.081	0.000	134.54
T40	610.00-605.00	A	2.017	0.000	0.000	5.074	0.000	78.47
		B		0.000	0.000	8.260	0.000	141.59
		C		0.000	0.000	5.079	0.000	134.45
T41	605.00-600.00	A	2.015	0.000	0.000	5.071	0.000	78.39
		B		0.000	0.000	8.256	0.000	141.46
		C		0.000	0.000	5.078	0.000	134.37
T42	600.00-595.00	A	2.014	0.000	0.000	5.068	0.000	78.31
		B		0.000	0.000	8.252	0.000	141.33
		C		0.000	0.000	5.077	0.000	134.29
T43	595.00-590.00	A	2.013	0.000	0.000	5.066	0.000	78.23
		B		0.000	0.000	8.249	0.000	141.20
		C		0.000	0.000	5.075	0.000	134.21
T44	590.00-585.00	A	2.012	0.000	0.000	5.063	0.000	78.15

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight lb
		B		0.000	0.000	8.245	0.000	141.07
		C		0.000	0.000	5.074	0.000	134.13
T45	585.00-580.00	A	2.010	0.000	0.000	5.061	0.000	78.06
		B		0.000	0.000	8.241	0.000	140.94
		C		0.000	0.000	5.073	0.000	134.05
T46	580.00-560.00	A	2.007	0.000	0.000	20.216	0.000	311.46
		B		0.000	0.000	32.924	0.000	562.44
		C		0.000	0.000	20.278	0.000	535.40
T47	560.00-540.00	A	2.002	0.000	0.000	20.175	0.000	310.19
		B		0.000	0.000	32.863	0.000	560.38
		C		0.000	0.000	20.258	0.000	534.13
T48	540.00-535.00	A	1.999	0.000	0.000	5.037	0.000	77.35
		B		0.000	0.000	8.206	0.000	139.78
		C		0.000	0.000	5.061	0.000	133.34
T49	535.00-530.00	A	1.997	0.000	0.000	5.035	0.000	77.28
		B		0.000	0.000	8.202	0.000	139.65
		C		0.000	0.000	5.060	0.000	133.26
T50	530.00-525.00	A	1.996	0.000	0.000	5.032	0.000	77.20
		B		0.000	0.000	8.199	0.000	139.53
		C		0.000	0.000	5.059	0.000	133.18
T51	525.00-520.00	A	1.995	0.000	0.000	5.030	0.000	77.12
		B		0.000	0.000	8.195	0.000	139.40
		C		0.000	0.000	5.057	0.000	133.10
T52	520.00-500.00	A	1.992	0.000	0.000	20.095	0.000	307.73
		B		0.000	0.000	32.743	0.000	556.37
		C		0.000	0.000	20.218	0.000	531.66
T53	500.00-480.00	A	1.987	0.000	0.000	20.057	0.000	306.55
		B		0.000	0.000	32.685	0.000	554.44
		C		0.000	0.000	20.198	0.000	530.47
T54	480.00-460.00	A	1.982	0.000	0.000	20.019	0.000	305.41
		B		0.000	0.000	32.629	0.000	552.59
		C		0.000	0.000	20.180	0.000	529.32
T55	460.00-440.00	A	1.978	0.000	0.000	19.984	0.000	304.33
		B		0.000	0.000	32.576	0.000	550.83
		C		0.000	0.000	20.162	0.000	528.23
T56	440.00-435.00	A	1.975	0.000	0.000	4.991	0.000	75.92
		B		0.000	0.000	8.136	0.000	137.45
		C		0.000	0.000	5.038	0.000	131.90
T57	435.00-430.00	A	1.974	0.000	0.000	4.989	0.000	75.86
		B		0.000	0.000	8.133	0.000	137.35
		C		0.000	0.000	5.037	0.000	131.83
T58	430.00-425.00	A	1.973	0.000	0.000	4.987	0.000	75.80
		B		0.000	0.000	8.130	0.000	137.25
		C		0.000	0.000	5.036	0.000	131.77
T59	425.00-420.00	A	1.972	0.000	0.000	4.985	0.000	75.74
		B		0.000	0.000	8.127	0.000	137.15
		C		0.000	0.000	5.035	0.000	131.71
T60	420.00-415.00	A	1.971	0.000	0.000	4.983	0.000	75.68
		B		0.000	0.000	8.124	0.000	137.06
		C		0.000	0.000	5.034	0.000	131.66
T61	415.00-410.00	A	1.971	0.000	0.000	4.981	0.000	75.63
		B		0.000	0.000	8.122	0.000	136.96
		C		0.000	0.000	5.033	0.000	131.60
T62	410.00-405.00	A	1.970	0.000	0.000	4.979	0.000	75.57
		B		0.000	0.000	8.119	0.000	136.88
		C		0.000	0.000	5.032	0.000	131.54
T63	405.00-400.00	A	1.969	0.000	0.000	4.978	0.000	75.52
		B		0.000	0.000	8.116	0.000	136.79
		C		0.000	0.000	5.031	0.000	131.49
T64	400.00-380.00	A	1.967	0.000	0.000	30.540	0.000	490.09
		B		0.000	0.000	32.440	0.000	546.34

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight lb
		C		0.000	0.000	20.117	0.000	525.45
T65	380.00-360.00	A	1.964	0.000	0.000	30.506	0.000	489.01
		B		0.000	0.000	32.406	0.000	545.20
		C		0.000	0.000	20.105	0.000	524.74
T66	360.00-340.00	A	1.962	0.000	0.000	30.478	0.000	488.15
		B		0.000	0.000	37.718	0.000	634.53
		C		0.000	0.000	20.096	0.000	524.18
T67	340.00-320.00	A	1.960	0.000	0.000	30.459	0.000	487.55
		B		0.000	0.000	44.218	0.000	743.96
		C		0.000	0.000	20.090	0.000	523.78
T68	320.00-300.00	A	1.959	0.000	0.000	30.449	0.000	487.25
		B		0.000	0.000	44.205	0.000	743.52
		C		0.000	0.000	20.086	0.000	523.58
T69	300.00-280.00	A	1.959	0.000	0.000	30.450	0.000	487.28
		B		0.000	0.000	44.207	0.000	743.57
		C		0.000	0.000	20.087	0.000	523.60
T70	280.00-275.00	A	1.960	0.000	0.000	7.614	0.000	121.87
		B		0.000	0.000	11.054	0.000	185.97
		C		0.000	0.000	5.022	0.000	130.94
T71	275.00-270.00	A	1.960	0.000	0.000	7.615	0.000	121.91
		B		0.000	0.000	11.055	0.000	186.02
		C		0.000	0.000	5.023	0.000	130.96
T72	270.00-265.00	A	1.961	0.000	0.000	7.617	0.000	121.95
		B		0.000	0.000	11.057	0.000	186.08
		C		0.000	0.000	5.023	0.000	130.98
T73	265.00-260.00	A	1.961	0.000	0.000	7.618	0.000	121.99
		B		0.000	0.000	11.059	0.000	186.14
		C		0.000	0.000	5.024	0.000	131.01
T74	260.00-255.00	A	1.962	0.000	0.000	7.620	0.000	122.05
		B		0.000	0.000	11.061	0.000	186.22
		C		0.000	0.000	5.024	0.000	131.05
T75	255.00-250.00	A	1.962	0.000	0.000	7.622	0.000	122.11
		B		0.000	0.000	11.064	0.000	186.31
		C		0.000	0.000	5.025	0.000	131.09
T76	250.00-245.00	A	1.963	0.000	0.000	7.624	0.000	122.18
		B		0.000	0.000	11.067	0.000	186.41
		C		0.000	0.000	5.025	0.000	131.14
T77	245.00-240.00	A	1.964	0.000	0.000	7.626	0.000	122.25
		B		0.000	0.000	11.070	0.000	186.52
		C		0.000	0.000	5.026	0.000	131.19
T78	240.00-220.00	A	1.966	0.000	0.000	30.534	0.000	489.90
		B		0.000	0.000	44.319	0.000	747.37
		C		0.000	0.000	20.115	0.000	525.33
T79	220.00-200.00	A	1.971	0.000	0.000	30.594	0.000	491.76
		B		0.000	0.000	44.399	0.000	750.07
		C		0.000	0.000	20.135	0.000	526.56
T80	200.00-180.00	A	1.978	0.000	0.000	30.672	0.000	494.17
		B		0.000	0.000	51.787	0.000	849.21
		C		0.000	0.000	76.352	0.000	1422.78
T81	180.00-160.00	A	1.986	0.000	0.000	30.766	0.000	497.14
		B		0.000	0.000	53.231	0.000	871.22
		C		0.000	0.000	100.607	0.000	1805.96
T82	160.00-140.00	A	1.995	0.000	0.000	30.877	0.000	500.62
		B		0.000	0.000	53.415	0.000	877.23
		C		0.000	0.000	100.804	0.000	1814.12
T83	140.00-120.00	A	2.005	0.000	0.000	31.000	0.000	504.48
		B		0.000	0.000	53.620	0.000	883.91
		C		0.000	0.000	101.022	0.000	1823.17
T84	120.00-115.00	A	2.012	0.000	0.000	7.770	0.000	126.74
		B		0.000	0.000	13.438	0.000	222.06
		C		0.000	0.000	25.291	0.000	457.25

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight lb
T85	115.00-110.00	A	2.014	0.000	0.000	7.777	0.000	126.99
		B		0.000	0.000	13.451	0.000	222.48
		C		0.000	0.000	25.304	0.000	457.83
T86	110.00-105.00	A	2.017	0.000	0.000	7.785	0.000	127.23
		B		0.000	0.000	13.463	0.000	222.90
		C		0.000	0.000	25.318	0.000	458.39
T87	105.00-100.00	A	2.019	0.000	0.000	7.792	0.000	127.46
		B		0.000	0.000	13.476	0.000	223.30
		C		0.000	0.000	25.331	0.000	458.94
T88	100.00-95.00	A	2.021	0.000	0.000	7.799	0.000	127.69
		B		0.000	0.000	13.487	0.000	223.69
		C		0.000	0.000	25.343	0.000	459.46
T89	95.00-90.00	A	2.024	0.000	0.000	7.806	0.000	127.89
		B		0.000	0.000	13.498	0.000	224.04
		C		0.000	0.000	25.355	0.000	459.94
T90	90.00-85.00	A	2.026	0.000	0.000	7.812	0.000	128.08
		B		0.000	0.000	13.508	0.000	224.36
		C		0.000	0.000	25.365	0.000	460.37
T91	85.00-80.00	A	2.027	0.000	0.000	7.817	0.000	128.23
		B		0.000	0.000	13.516	0.000	224.63
		C		0.000	0.000	25.374	0.000	460.73
T92	80.00-60.00	A	2.030	0.000	0.000	31.294	0.000	513.82
		B		0.000	0.000	54.111	0.000	900.07
		C		0.000	0.000	101.546	0.000	1845.01
T93	60.00-40.00	A	2.024	0.000	0.000	31.223	0.000	511.55
		B		0.000	0.000	53.992	0.000	896.14
		C		0.000	0.000	101.419	0.000	1839.70
T94	40.00-20.00	A	1.989	0.000	0.000	30.813	0.000	498.61
		B		0.000	0.000	53.309	0.000	873.75
		C		0.000	0.000	100.690	0.000	1809.40
T95	20.00-15.00	A	1.929	0.000	0.000	7.522	0.000	119.04
		B		0.000	0.000	13.025	0.000	208.72
		C		0.000	0.000	24.851	0.000	439.10
T96	15.00-7.00	A	1.865	0.000	0.000	11.727	0.000	181.13
		B		0.000	0.000	20.326	0.000	317.79
		C		0.000	0.000	39.214	0.000	680.30
T97	7.00-0.00	A	1.688	0.000	0.000	9.519	0.000	137.14
		B		0.000	0.000	16.549	0.000	241.01
		C		0.000	0.000	32.996	0.000	543.17

Feed Line Center of Pressure

Section	Elevation ft	CP_X in	CP_Z in	CP_X Ice in	CP_Z Ice in
L1	1151.90-1089.80	0.0000	4.9617	0.0000	3.9065
T1	1089.80-1084.90	0.0000	-1.9966	0.0000	-1.6829
T2	1084.90-1080.00	0.0000	-4.7649	0.0000	-3.9176
T3	1080.00-1060.00	0.2908	-6.3214	0.5379	-6.6316
T4	1060.00-1040.00	0.4390	-7.0430	0.7998	-7.8894
T5	1040.00-1020.00	0.4388	-7.0404	0.7998	-7.8894
T6	1020.00-1000.00	0.4387	-7.0377	0.7998	-7.8893
T7	1000.00-980.00	-0.4521	-7.3038	-0.9749	-8.3425
T8	980.00-960.00	-0.6648	-7.3652	-1.3809	-8.4459
T9	960.00-940.00	-0.6526	-7.2153	-1.3388	-8.1861
T10	940.00-935.00	-0.6529	-7.2177	-1.3406	-8.1989
T11	935.00-930.00	-0.6528	-7.2168	-1.3407	-8.2003

Section	Elevation	CP_X	CP_Z	CP_X Ice	CP_Z Ice
	ft	in	in	in	in
T12	930.00-925.00	-0.6422	-7.0922	-1.3246	-8.1015
T13	925.00-920.00	-0.6421	-7.0913	-1.3247	-8.1029
T14	920.00-915.00	-0.6420	-7.0904	-1.3248	-8.1043
T15	915.00-910.00	-0.6419	-7.0895	-1.3248	-8.1057
T16	910.00-905.00	-0.6524	-7.2121	-1.3412	-8.2073
T17	905.00-900.00	-0.6523	-7.2112	-1.3413	-8.2087
T18	900.00-880.00	-0.6521	-7.2088	-1.3415	-8.2123
T19	880.00-860.00	0.2615	-7.4723	-0.2360	-8.4805
T20	860.00-840.00	0.3588	-7.4970	-0.1186	-8.5140
T21	840.00-820.00	0.3586	-7.4930	-0.1182	-8.5198
T22	820.00-800.00	0.3584	-7.4891	-0.1179	-8.5257
T23	800.00-780.00	0.3582	-7.4851	-0.1176	-8.5316
T24	780.00-775.00	0.3581	-7.4825	-0.1173	-8.5353
T25	775.00-770.00	0.3581	-7.4815	-0.1173	-8.5368
T26	770.00-765.00	0.3525	-7.3586	-0.1158	-8.4393
T27	765.00-760.00	0.3525	-7.3576	-0.1157	-8.4409
T28	760.00-755.00	0.3524	-7.3567	-0.1156	-8.4424
T29	755.00-750.00	0.3524	-7.3557	-0.1156	-8.4439
T30	750.00-745.00	0.3578	-7.4764	-0.1168	-8.5444
T31	745.00-740.00	0.3578	-7.4754	-0.1167	-8.5459
T32	740.00-720.00	0.3577	-7.4728	-0.1165	-8.5498
T33	720.00-700.00	0.3575	-7.4686	-0.1161	-8.5559
T34	700.00-680.00	0.3573	-7.4644	-0.1157	-8.5622
T35	680.00-660.00	0.3571	-7.4602	-0.1154	-8.5684
T36	660.00-640.00	0.3569	-7.4559	-0.1150	-8.5747
T37	640.00-620.00	0.3533	-7.3721	-0.1123	-8.4107
T38	620.00-615.00	0.3533	-7.3720	-0.1122	-8.4204
T39	615.00-610.00	0.3532	-7.3707	-0.1121	-8.4219
T40	610.00-605.00	0.3478	-7.2510	-0.1107	-8.3261
T41	605.00-600.00	0.3477	-7.2498	-0.1106	-8.3276
T42	600.00-595.00	0.3477	-7.2486	-0.1105	-8.3292
T43	595.00-590.00	0.3476	-7.2475	-0.1104	-8.3307
T44	590.00-585.00	0.3529	-7.3646	-0.1116	-8.4296
T45	585.00-580.00	0.3529	-7.3633	-0.1115	-8.4311
T46	580.00-560.00	0.3544	-7.3987	-0.1124	-8.5199
T47	560.00-540.00	0.3541	-7.3927	-0.1119	-8.5230
T48	540.00-535.00	0.3707	-7.7615	-0.1262	-9.6533
T49	535.00-530.00	0.3539	-7.3888	-0.1116	-8.5282
T50	530.00-525.00	0.3539	-7.3877	-0.1115	-8.5297
T51	525.00-520.00	0.3538	-7.3866	-0.1114	-8.5312
T52	520.00-500.00	0.3537	-7.3839	-0.1112	-8.5348
T53	500.00-480.00	0.3535	-7.3797	-0.1108	-8.5404
T54	480.00-460.00	0.3533	-7.3757	-0.1104	-8.5459
T55	460.00-440.00	0.3514	-7.3315	-0.1090	-8.4655
T56	440.00-435.00	0.3514	-7.3306	-0.1088	-8.4715
T57	435.00-430.00	0.3513	-7.3296	-0.1087	-8.4726
T58	430.00-425.00	0.3460	-7.2122	-0.1074	-8.3763
T59	425.00-420.00	0.3460	-7.2113	-0.1074	-8.3774
T60	420.00-415.00	0.3459	-7.2105	-0.1073	-8.3785
T61	415.00-410.00	0.3459	-7.2097	-0.1072	-8.3796
T62	410.00-405.00	0.3511	-7.3252	-0.1084	-8.4781
T63	405.00-400.00	0.3511	-7.3244	-0.1083	-8.4791
T64	400.00-380.00	-0.3111	-7.5162	-1.1027	-8.7227
T65	380.00-360.00	-0.3110	-7.5135	-1.1026	-8.7260
T66	360.00-340.00	0.1251	-7.6013	-0.5731	-8.8075
T67	340.00-320.00	0.6385	-7.7057	0.0468	-8.9016
T68	320.00-300.00	0.6384	-7.7049	0.0469	-8.9025
T69	300.00-280.00	0.6385	-7.7050	0.0468	-8.9024
T70	280.00-275.00	0.6385	-7.7056	0.0468	-8.9018
T71	275.00-270.00	0.6385	-7.7059	0.0467	-8.9014
T72	270.00-265.00	0.6296	-7.5919	0.0462	-8.8070

Section	Elevation	CP_X	CP_Z	CP_X Ice	CP_Z Ice
	ft	in	in	in	in
T73	265.00-260.00	0.6296	-7.5923	0.0461	-8.8064
T74	260.00-255.00	0.6296	-7.5928	0.0460	-8.8058
T75	255.00-250.00	0.6297	-7.5934	0.0460	-8.8051
T76	250.00-245.00	0.6387	-7.7085	0.0464	-8.8983
T77	245.00-240.00	0.6388	-7.7093	0.0463	-8.8974
T78	240.00-220.00	0.6390	-7.7115	0.0460	-8.8948
T79	220.00-200.00	0.6393	-7.7160	0.0453	-8.8894
T80	200.00-180.00	0.2887	-4.8261	0.2650	-5.3463
T81	180.00-160.00	0.2270	-3.9648	0.2851	-4.3545
T82	160.00-140.00	0.2272	-3.9687	0.2850	-4.3495
T83	140.00-120.00	-0.0287	-2.9410	0.2849	-4.3439
T84	120.00-115.00	-0.0258	-2.9547	0.2848	-4.3403
T85	115.00-110.00	-0.0246	-2.9601	0.2847	-4.3389
T86	110.00-105.00	-0.0233	-2.9267	0.2824	-4.2982
T87	105.00-100.00	-0.0222	-2.9317	0.2823	-4.2969
T88	100.00-95.00	-0.0212	-2.9364	0.2823	-4.2956
T89	95.00-90.00	-0.0203	-2.9408	0.2823	-4.2944
T90	90.00-85.00	-0.0197	-2.9837	0.2846	-4.3327
T91	85.00-80.00	-0.0190	-2.9871	0.2846	-4.3318
T92	80.00-60.00	-0.0179	-2.9919	0.2845	-4.3305
T93	60.00-40.00	-0.0205	-2.9796	0.2846	-4.3338
T94	40.00-20.00	0.2271	-3.9664	0.2851	-4.3524
T95	20.00-15.00	-0.0155	-3.0037	0.2857	-4.3847
T96	15.00-7.00	-0.0033	-2.2257	0.2206	-3.4061
T97	7.00-0.00	-0.0955	-1.0176	0.0000	0.0000

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

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L1	2	6 1/8" Hard Line	1089.80 - 1151.90	1.0000	1.0000
T1	1	6 1/8" Hard Line	1084.90 - 1089.80	1.0000	0.3521
T2	1	6 1/8" Hard Line	1080.00 - 1084.90	1.0000	0.5530
T3	1	6 1/8" Hard Line	1060.00 - 1080.00	1.0000	0.5621
T3	4	1" conduit	1060.00 - 1073.00	0.6000	0.5621
T3	5	7/8" Coax	1060.00 - 1073.00	0.6000	0.5621
T4	1	6 1/8" Hard Line	1040.00 - 1060.00	1.0000	0.5621
T4	4	1" conduit	1040.00 - 1060.00	0.6000	0.5621
T4	5	7/8" Coax	1040.00 - 1060.00	0.6000	0.5621
T5	1	6 1/8" Hard Line	1020.00 - 1040.00	1.0000	0.5621
T5	4	1" conduit	1020.00 - 1040.00	0.6000	0.5621

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T5	5	7/8" Coax	1020.00 - 1040.00	0.6000	0.5621
T6	1	6 1/8" Hard Line	1000.00 - 1020.00	1.0000	0.5621
T6	4	1" conduit	1000.00 - 1020.00	0.6000	0.5621
T6	5	7/8" Coax	1000.00 - 1020.00	0.6000	0.5621
T7	1	6 1/8" Hard Line	980.00 - 1000.00	1.0000	0.5621
T7	4	1" conduit	980.00 - 1000.00	0.6000	0.5621
T7	5	7/8" Coax	980.00 - 1000.00	0.6000	0.5621
T7	7	7/8" Coax	980.00 - 996.00	0.6000	0.5621
T7	8	0.99" (25.1mm) LDF2-2R	980.00 - 996.00	0.6000	0.5621
T8	1	6 1/8" Hard Line	960.00 - 980.00	1.0000	0.5621
T8	4	1" conduit	960.00 - 980.00	0.6000	0.5621
T8	5	7/8" Coax	960.00 - 980.00	0.6000	0.5621
T8	7	7/8" Coax	960.00 - 980.00	0.6000	0.5621
T8	8	0.99" (25.1mm) LDF2-2R	960.00 - 980.00	0.6000	0.5621
T9	1	6 1/8" Hard Line	940.00 - 960.00	1.0000	0.5529
T9	4	1" conduit	940.00 - 960.00	0.6000	0.5529
T9	5	7/8" Coax	940.00 - 960.00	0.6000	0.5529
T9	7	7/8" Coax	940.00 - 960.00	0.6000	0.5529
T9	8	0.99" (25.1mm) LDF2-2R	940.00 - 960.00	0.6000	0.5529
T10	1	6 1/8" Hard Line	935.00 - 940.00	1.0000	0.5537
T10	4	1" conduit	935.00 - 940.00	0.6000	0.5537
T10	5	7/8" Coax	935.00 - 940.00	0.6000	0.5537
T10	7	7/8" Coax	935.00 - 940.00	0.6000	0.5537
T10	8	0.99" (25.1mm) LDF2-2R	935.00 - 940.00	0.6000	0.5537
T11	1	6 1/8" Hard Line	930.00 - 935.00	1.0000	0.5538
T11	4	1" conduit	930.00 - 935.00	0.6000	0.5538
T11	5	7/8" Coax	930.00 - 935.00	0.6000	0.5538
T11	7	7/8" Coax	930.00 - 935.00	0.6000	0.5538
T11	8	0.99" (25.1mm) LDF2-2R	930.00 - 935.00	0.6000	0.5538
T12	1	6 1/8" Hard Line	925.00 - 930.00	1.0000	0.5497
T12	4	1" conduit	925.00 - 930.00	0.6000	0.5497

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T12	5	7/8" Coax	925.00 - 930.00	0.6000	0.5497
T12	7	7/8" Coax	925.00 - 930.00	0.6000	0.5497
T12	8	0.99" (25.1mm) LDF2-2R	925.00 - 930.00	0.6000	0.5497
T13	1	6 1/8" Hard Line	920.00 - 925.00	1.0000	0.5498
T13	4	1" conduit	920.00 - 925.00	0.6000	0.5498
T13	5	7/8" Coax	920.00 - 925.00	0.6000	0.5498
T13	7	7/8" Coax	920.00 - 925.00	0.6000	0.5498
T13	8	0.99" (25.1mm) LDF2-2R	920.00 - 925.00	0.6000	0.5498
T14	1	6 1/8" Hard Line	915.00 - 920.00	1.0000	0.5499
T14	4	1" conduit	915.00 - 920.00	0.6000	0.5499
T14	5	7/8" Coax	915.00 - 920.00	0.6000	0.5499
T14	7	7/8" Coax	915.00 - 920.00	0.6000	0.5499
T14	8	0.99" (25.1mm) LDF2-2R	915.00 - 920.00	0.6000	0.5499
T15	1	6 1/8" Hard Line	910.00 - 915.00	1.0000	0.5501
T15	4	1" conduit	910.00 - 915.00	0.6000	0.5501
T15	5	7/8" Coax	910.00 - 915.00	0.6000	0.5501
T15	7	7/8" Coax	910.00 - 915.00	0.6000	0.5501
T15	8	0.99" (25.1mm) LDF2-2R	910.00 - 915.00	0.6000	0.5501
T16	1	6 1/8" Hard Line	905.00 - 910.00	1.0000	0.5545
T16	4	1" conduit	905.00 - 910.00	0.6000	0.5545
T16	5	7/8" Coax	905.00 - 910.00	0.6000	0.5545
T16	7	7/8" Coax	905.00 - 910.00	0.6000	0.5545
T16	8	0.99" (25.1mm) LDF2-2R	905.00 - 910.00	0.6000	0.5545
T17	1	6 1/8" Hard Line	900.00 - 905.00	1.0000	0.5547
T17	4	1" conduit	900.00 - 905.00	0.6000	0.5547
T17	5	7/8" Coax	900.00 - 905.00	0.6000	0.5547
T17	7	7/8" Coax	900.00 - 905.00	0.6000	0.5547
T17	8	0.99" (25.1mm) LDF2-2R	900.00 - 905.00	0.6000	0.5547
T18	1	6 1/8" Hard Line	880.00 - 900.00	1.0000	0.5550
T18	4	1" conduit	880.00 - 900.00	0.6000	0.5550
T18	5	7/8" Coax	880.00 - 900.00	0.6000	0.5550

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T18	7	7/8" Coax	880.00 - 900.00	0.6000	0.5550
T18	8	0.99" (25.1mm) LDF2-2R	880.00 - 900.00	0.6000	0.5550
T19	1	6 1/8" Hard Line	860.00 - 880.00	1.0000	0.5556
T19	4	1" conduit	860.00 - 880.00	0.6000	0.5556
T19	5	7/8" Coax	860.00 - 880.00	0.6000	0.5556
T19	7	7/8" Coax	860.00 - 880.00	0.6000	0.5556
T19	8	0.99" (25.1mm) LDF2-2R	860.00 - 880.00	0.6000	0.5556
T19	10	EW63	860.00 - 878.00	0.6000	0.5556
T20	1	6 1/8" Hard Line	840.00 - 860.00	1.0000	0.5562
T20	4	1" conduit	840.00 - 860.00	0.6000	0.5562
T20	5	7/8" Coax	840.00 - 860.00	0.6000	0.5562
T20	7	7/8" Coax	840.00 - 860.00	0.6000	0.5562
T20	8	0.99" (25.1mm) LDF2-2R	840.00 - 860.00	0.6000	0.5562
T20	10	EW63	840.00 - 860.00	0.6000	0.5562
T21	1	6 1/8" Hard Line	820.00 - 840.00	1.0000	0.5568
T21	4	1" conduit	820.00 - 840.00	0.6000	0.5568
T21	5	7/8" Coax	820.00 - 840.00	0.6000	0.5568
T21	7	7/8" Coax	820.00 - 840.00	0.6000	0.5568
T21	8	0.99" (25.1mm) LDF2-2R	820.00 - 840.00	0.6000	0.5568
T21	10	EW63	820.00 - 840.00	0.6000	0.5568
T22	1	6 1/8" Hard Line	800.00 - 820.00	1.0000	0.5574
T22	4	1" conduit	800.00 - 820.00	0.6000	0.5574
T22	5	7/8" Coax	800.00 - 820.00	0.6000	0.5574
T22	7	7/8" Coax	800.00 - 820.00	0.6000	0.5574
T22	8	0.99" (25.1mm) LDF2-2R	800.00 - 820.00	0.6000	0.5574
T22	10	EW63	800.00 - 820.00	0.6000	0.5574
T23	1	6 1/8" Hard Line	780.00 - 800.00	1.0000	0.5580
T23	4	1" conduit	780.00 - 800.00	0.6000	0.5580
T23	5	7/8" Coax	780.00 - 800.00	0.6000	0.5580
T23	7	7/8" Coax	780.00 - 800.00	0.6000	0.5580
T23	8	0.99" (25.1mm) LDF2-2R	780.00 - 800.00	0.6000	0.5580

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T23	10	EW63	780.00 - 800.00	0.6000	0.5580
T24	1	6 1/8" Hard Line	775.00 - 780.00	1.0000	0.5584
T24	4	1" conduit	775.00 - 780.00	0.6000	0.5584
T24	5	7/8" Coax	775.00 - 780.00	0.6000	0.5584
T24	7	7/8" Coax	775.00 - 780.00	0.6000	0.5584
T24	8	0.99" (25.1mm) LDF2-2R	775.00 - 780.00	0.6000	0.5584
T24	10	EW63	775.00 - 780.00	0.6000	0.5584
T25	1	6 1/8" Hard Line	770.00 - 775.00	1.0000	0.5585
T25	4	1" conduit	770.00 - 775.00	0.6000	0.5585
T25	5	7/8" Coax	770.00 - 775.00	0.6000	0.5585
T25	7	7/8" Coax	770.00 - 775.00	0.6000	0.5585
T25	8	0.99" (25.1mm) LDF2-2R	770.00 - 775.00	0.6000	0.5585
T25	10	EW63	770.00 - 775.00	0.6000	0.5585
T26	1	6 1/8" Hard Line	765.00 - 770.00	1.0000	0.5544
T26	4	1" conduit	765.00 - 770.00	0.6000	0.5544
T26	5	7/8" Coax	765.00 - 770.00	0.6000	0.5544
T26	7	7/8" Coax	765.00 - 770.00	0.6000	0.5544
T26	8	0.99" (25.1mm) LDF2-2R	765.00 - 770.00	0.6000	0.5544
T26	10	EW63	765.00 - 770.00	0.6000	0.5544
T27	1	6 1/8" Hard Line	760.00 - 765.00	1.0000	0.5546
T27	4	1" conduit	760.00 - 765.00	0.6000	0.5546
T27	5	7/8" Coax	760.00 - 765.00	0.6000	0.5546
T27	7	7/8" Coax	760.00 - 765.00	0.6000	0.5546
T27	8	0.99" (25.1mm) LDF2-2R	760.00 - 765.00	0.6000	0.5546
T27	10	EW63	760.00 - 765.00	0.6000	0.5546
T28	1	6 1/8" Hard Line	755.00 - 760.00	1.0000	0.5547
T28	4	1" conduit	755.00 - 760.00	0.6000	0.5547
T28	5	7/8" Coax	755.00 - 760.00	0.6000	0.5547
T28	7	7/8" Coax	755.00 - 760.00	0.6000	0.5547
T28	8	0.99" (25.1mm) LDF2-2R	755.00 - 760.00	0.6000	0.5547
T28	10	EW63	755.00 - 760.00	0.6000	0.5547

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T29	1	6 1/8" Hard Line	750.00 - 755.00	1.0000	0.5549
T29	4	1" conduit	750.00 - 755.00	0.6000	0.5549
T29	5	7/8" Coax	750.00 - 755.00	0.6000	0.5549
T29	7	7/8" Coax	750.00 - 755.00	0.6000	0.5549
T29	8	0.99" (25.1mm) LDF2-2R	750.00 - 755.00	0.6000	0.5549
T29	10	EW63	750.00 - 755.00	0.6000	0.5549
T30	1	6 1/8" Hard Line	745.00 - 750.00	1.0000	0.5593
T30	4	1" conduit	745.00 - 750.00	0.6000	0.5593
T30	5	7/8" Coax	745.00 - 750.00	0.6000	0.5593
T30	7	7/8" Coax	745.00 - 750.00	0.6000	0.5593
T30	8	0.99" (25.1mm) LDF2-2R	745.00 - 750.00	0.6000	0.5593
T30	10	EW63	745.00 - 750.00	0.6000	0.5593
T31	1	6 1/8" Hard Line	740.00 - 745.00	1.0000	0.5595
T31	4	1" conduit	740.00 - 745.00	0.6000	0.5595
T31	5	7/8" Coax	740.00 - 745.00	0.6000	0.5595
T31	7	7/8" Coax	740.00 - 745.00	0.6000	0.5595
T31	8	0.99" (25.1mm) LDF2-2R	740.00 - 745.00	0.6000	0.5595
T31	10	EW63	740.00 - 745.00	0.6000	0.5595
T32	1	6 1/8" Hard Line	720.00 - 740.00	1.0000	0.5599
T32	4	1" conduit	720.00 - 740.00	0.6000	0.5599
T32	5	7/8" Coax	720.00 - 740.00	0.6000	0.5599
T32	7	7/8" Coax	720.00 - 740.00	0.6000	0.5599
T32	8	0.99" (25.1mm) LDF2-2R	720.00 - 740.00	0.6000	0.5599
T32	10	EW63	720.00 - 740.00	0.6000	0.5599
T33	1	6 1/8" Hard Line	700.00 - 720.00	1.0000	0.5605
T33	4	1" conduit	700.00 - 720.00	0.6000	0.5605
T33	5	7/8" Coax	700.00 - 720.00	0.6000	0.5605
T33	7	7/8" Coax	700.00 - 720.00	0.6000	0.5605
T33	8	0.99" (25.1mm) LDF2-2R	700.00 - 720.00	0.6000	0.5605
T33	10	EW63	700.00 - 720.00	0.6000	0.5605
T34	1	6 1/8" Hard Line	680.00 - 700.00	1.0000	0.5612

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T34	4	1" conduit	680.00 - 700.00	0.6000	0.5612
T34	5	7/8" Coax	680.00 - 700.00	0.6000	0.5612
T34	7	7/8" Coax	680.00 - 700.00	0.6000	0.5612
T34	8	0.99" (25.1mm) LDF2-2R	680.00 - 700.00	0.6000	0.5612
T34	10	EW63	680.00 - 700.00	0.6000	0.5612
T35	1	6 1/8" Hard Line	660.00 - 680.00	1.0000	0.5618
T35	4	1" conduit	660.00 - 680.00	0.6000	0.5618
T35	5	7/8" Coax	660.00 - 680.00	0.6000	0.5618
T35	7	7/8" Coax	660.00 - 680.00	0.6000	0.5618
T35	8	0.99" (25.1mm) LDF2-2R	660.00 - 680.00	0.6000	0.5618
T35	10	EW63	660.00 - 680.00	0.6000	0.5618
T36	1	6 1/8" Hard Line	640.00 - 660.00	1.0000	0.5625
T36	4	1" conduit	640.00 - 660.00	0.6000	0.5625
T36	5	7/8" Coax	640.00 - 660.00	0.6000	0.5625
T36	7	7/8" Coax	640.00 - 660.00	0.6000	0.5625
T36	8	0.99" (25.1mm) LDF2-2R	640.00 - 660.00	0.6000	0.5625
T36	10	EW63	640.00 - 660.00	0.6000	0.5625
T37	1	6 1/8" Hard Line	620.00 - 640.00	1.0000	0.5570
T37	4	1" conduit	620.00 - 640.00	0.6000	0.5570
T37	5	7/8" Coax	620.00 - 640.00	0.6000	0.5570
T37	7	7/8" Coax	620.00 - 640.00	0.6000	0.5570
T37	8	0.99" (25.1mm) LDF2-2R	620.00 - 640.00	0.6000	0.5570
T37	10	EW63	620.00 - 640.00	0.6000	0.5570
T38	1	6 1/8" Hard Line	615.00 - 620.00	1.0000	0.5576
T38	4	1" conduit	615.00 - 620.00	0.6000	0.5576
T38	5	7/8" Coax	615.00 - 620.00	0.6000	0.5576
T38	7	7/8" Coax	615.00 - 620.00	0.6000	0.5576
T38	8	0.99" (25.1mm) LDF2-2R	615.00 - 620.00	0.6000	0.5576
T38	10	EW63	615.00 - 620.00	0.6000	0.5576
T39	1	6 1/8" Hard Line	610.00 - 615.00	1.0000	0.5578
T39	4	1" conduit	610.00 - 615.00	0.6000	0.5578

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T39	5	7/8" Coax	610.00 - 615.00	0.6000	0.5578
T39	7	7/8" Coax	610.00 - 615.00	0.6000	0.5578
T39	8	0.99" (25.1mm) LDF2-2R	610.00 - 615.00	0.6000	0.5578
T39	10	EW63	610.00 - 615.00	0.6000	0.5578
T40	1	6 1/8" Hard Line	605.00 - 610.00	1.0000	0.5537
T40	4	1" conduit	605.00 - 610.00	0.6000	0.5537
T40	5	7/8" Coax	605.00 - 610.00	0.6000	0.5537
T40	7	7/8" Coax	605.00 - 610.00	0.6000	0.5537
T40	8	0.99" (25.1mm) LDF2-2R	605.00 - 610.00	0.6000	0.5537
T40	10	EW63	605.00 - 610.00	0.6000	0.5537
T41	1	6 1/8" Hard Line	600.00 - 605.00	1.0000	0.5539
T41	4	1" conduit	600.00 - 605.00	0.6000	0.5539
T41	5	7/8" Coax	600.00 - 605.00	0.6000	0.5539
T41	7	7/8" Coax	600.00 - 605.00	0.6000	0.5539
T41	8	0.99" (25.1mm) LDF2-2R	600.00 - 605.00	0.6000	0.5539
T41	10	EW63	600.00 - 605.00	0.6000	0.5539
T42	1	6 1/8" Hard Line	595.00 - 600.00	1.0000	0.5540
T42	4	1" conduit	595.00 - 600.00	0.6000	0.5540
T42	5	7/8" Coax	595.00 - 600.00	0.6000	0.5540
T42	7	7/8" Coax	595.00 - 600.00	0.6000	0.5540
T42	8	0.99" (25.1mm) LDF2-2R	595.00 - 600.00	0.6000	0.5540
T42	10	EW63	595.00 - 600.00	0.6000	0.5540
T43	1	6 1/8" Hard Line	590.00 - 595.00	1.0000	0.5542
T43	4	1" conduit	590.00 - 595.00	0.6000	0.5542
T43	5	7/8" Coax	590.00 - 595.00	0.6000	0.5542
T43	7	7/8" Coax	590.00 - 595.00	0.6000	0.5542
T43	8	0.99" (25.1mm) LDF2-2R	590.00 - 595.00	0.6000	0.5542
T43	10	EW63	590.00 - 595.00	0.6000	0.5542
T44	1	6 1/8" Hard Line	585.00 - 590.00	1.0000	0.5586
T44	4	1" conduit	585.00 - 590.00	0.6000	0.5586
T44	5	7/8" Coax	585.00 - 590.00	0.6000	0.5586

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T44	7	7/8" Coax	585.00 - 590.00	0.6000	0.5586
T44	8	0.99" (25.1mm) LDF2-2R	585.00 - 590.00	0.6000	0.5586
T44	10	EW63	585.00 - 590.00	0.6000	0.5586
T45	1	6 1/8" Hard Line	580.00 - 585.00	1.0000	0.5588
T45	4	1" conduit	580.00 - 585.00	0.6000	0.5588
T45	5	7/8" Coax	580.00 - 585.00	0.6000	0.5588
T45	7	7/8" Coax	580.00 - 585.00	0.6000	0.5588
T45	8	0.99" (25.1mm) LDF2-2R	580.00 - 585.00	0.6000	0.5588
T45	10	EW63	580.00 - 585.00	0.6000	0.5588
T46	1	6 1/8" Hard Line	560.00 - 580.00	1.0000	0.5623
T46	4	1" conduit	560.00 - 580.00	0.6000	0.5623
T46	5	7/8" Coax	560.00 - 580.00	0.6000	0.5623
T46	7	7/8" Coax	560.00 - 580.00	0.6000	0.5623
T46	8	0.99" (25.1mm) LDF2-2R	560.00 - 580.00	0.6000	0.5623
T46	10	EW63	560.00 - 580.00	0.6000	0.5623
T47	1	6 1/8" Hard Line	540.00 - 560.00	1.0000	0.5628
T47	4	1" conduit	540.00 - 560.00	0.6000	0.5628
T47	5	7/8" Coax	540.00 - 560.00	0.6000	0.5628
T47	7	7/8" Coax	540.00 - 560.00	0.6000	0.5628
T47	8	0.99" (25.1mm) LDF2-2R	540.00 - 560.00	0.6000	0.5628
T47	10	EW63	540.00 - 560.00	0.6000	0.5628
T48	1	6 1/8" Hard Line	535.00 - 540.00	1.0000	0.6000
T48	4	1" conduit	535.00 - 540.00	0.6000	0.6000
T48	5	7/8" Coax	535.00 - 540.00	0.6000	0.6000
T48	7	7/8" Coax	535.00 - 540.00	0.6000	0.6000
T48	8	0.99" (25.1mm) LDF2-2R	535.00 - 540.00	0.6000	0.6000
T48	10	EW63	535.00 - 540.00	0.6000	0.6000
T49	1	6 1/8" Hard Line	530.00 - 535.00	1.0000	0.5634
T49	4	1" conduit	530.00 - 535.00	0.6000	0.5634
T49	5	7/8" Coax	530.00 - 535.00	0.6000	0.5634
T49	7	7/8" Coax	530.00 - 535.00	0.6000	0.5634

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T49	8	0.99" (25.1mm) LDF2-2R	530.00 - 535.00	0.6000	0.5634
T49	10	EW63	530.00 - 535.00	0.6000	0.5634
T50	1	6 1/8" Hard Line	525.00 - 530.00	1.0000	0.5636
T50	4	1" conduit	525.00 - 530.00	0.6000	0.5636
T50	5	7/8" Coax	525.00 - 530.00	0.6000	0.5636
T50	7	7/8" Coax	525.00 - 530.00	0.6000	0.5636
T50	8	0.99" (25.1mm) LDF2-2R	525.00 - 530.00	0.6000	0.5636
T50	10	EW63	525.00 - 530.00	0.6000	0.5636
T51	1	6 1/8" Hard Line	520.00 - 525.00	1.0000	0.5637
T51	4	1" conduit	520.00 - 525.00	0.6000	0.5637
T51	5	7/8" Coax	520.00 - 525.00	0.6000	0.5637
T51	7	7/8" Coax	520.00 - 525.00	0.6000	0.5637
T51	8	0.99" (25.1mm) LDF2-2R	520.00 - 525.00	0.6000	0.5637
T51	10	EW63	520.00 - 525.00	0.6000	0.5637
T52	1	6 1/8" Hard Line	500.00 - 520.00	1.0000	0.5641
T52	4	1" conduit	500.00 - 520.00	0.6000	0.5641
T52	5	7/8" Coax	500.00 - 520.00	0.6000	0.5641
T52	7	7/8" Coax	500.00 - 520.00	0.6000	0.5641
T52	8	0.99" (25.1mm) LDF2-2R	500.00 - 520.00	0.6000	0.5641
T52	10	EW63	500.00 - 520.00	0.6000	0.5641
T53	1	6 1/8" Hard Line	480.00 - 500.00	1.0000	0.5647
T53	4	1" conduit	480.00 - 500.00	0.6000	0.5647
T53	5	7/8" Coax	480.00 - 500.00	0.6000	0.5647
T53	7	7/8" Coax	480.00 - 500.00	0.6000	0.5647
T53	8	0.99" (25.1mm) LDF2-2R	480.00 - 500.00	0.6000	0.5647
T53	10	EW63	480.00 - 500.00	0.6000	0.5647
T54	1	6 1/8" Hard Line	460.00 - 480.00	1.0000	0.5653
T54	4	1" conduit	460.00 - 480.00	0.6000	0.5653
T54	5	7/8" Coax	460.00 - 480.00	0.6000	0.5653
T54	7	7/8" Coax	460.00 - 480.00	0.6000	0.5653
T54	8	0.99" (25.1mm) LDF2-2R	460.00 - 480.00	0.6000	0.5653

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T54	10	EW63	460.00 - 480.00	0.6000	0.5653
T55	1	6 1/8" Hard Line	440.00 - 460.00	1.0000	0.5628
T55	4	1" conduit	440.00 - 460.00	0.6000	0.5628
T55	5	7/8" Coax	440.00 - 460.00	0.6000	0.5628
T55	7	7/8" Coax	440.00 - 460.00	0.6000	0.5628
T55	8	0.99" (25.1mm) LDF2-2R	440.00 - 460.00	0.6000	0.5628
T55	10	EW63	440.00 - 460.00	0.6000	0.5628
T56	1	6 1/8" Hard Line	435.00 - 440.00	1.0000	0.5632
T56	4	1" conduit	435.00 - 440.00	0.6000	0.5632
T56	5	7/8" Coax	435.00 - 440.00	0.6000	0.5632
T56	7	7/8" Coax	435.00 - 440.00	0.6000	0.5632
T56	8	0.99" (25.1mm) LDF2-2R	435.00 - 440.00	0.6000	0.5632
T56	10	EW63	435.00 - 440.00	0.6000	0.5632
T57	1	6 1/8" Hard Line	430.00 - 435.00	1.0000	0.5633
T57	4	1" conduit	430.00 - 435.00	0.6000	0.5633
T57	5	7/8" Coax	430.00 - 435.00	0.6000	0.5633
T57	7	7/8" Coax	430.00 - 435.00	0.6000	0.5633
T57	8	0.99" (25.1mm) LDF2-2R	430.00 - 435.00	0.6000	0.5633
T57	10	EW63	430.00 - 435.00	0.6000	0.5633
T58	1	6 1/8" Hard Line	425.00 - 430.00	1.0000	0.5592
T58	4	1" conduit	425.00 - 430.00	0.6000	0.5592
T58	5	7/8" Coax	425.00 - 430.00	0.6000	0.5592
T58	7	7/8" Coax	425.00 - 430.00	0.6000	0.5592
T58	8	0.99" (25.1mm) LDF2-2R	425.00 - 430.00	0.6000	0.5592
T58	10	EW63	425.00 - 430.00	0.6000	0.5592
T59	1	6 1/8" Hard Line	420.00 - 425.00	1.0000	0.5593
T59	4	1" conduit	420.00 - 425.00	0.6000	0.5593
T59	5	7/8" Coax	420.00 - 425.00	0.6000	0.5593
T59	7	7/8" Coax	420.00 - 425.00	0.6000	0.5593
T59	8	0.99" (25.1mm) LDF2-2R	420.00 - 425.00	0.6000	0.5593
T59	10	EW63	420.00 - 425.00	0.6000	0.5593

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T60	1	6 1/8" Hard Line	415.00 - 420.00	1.0000	0.5594
T60	4	1" conduit	415.00 - 420.00	0.6000	0.5594
T60	5	7/8" Coax	415.00 - 420.00	0.6000	0.5594
T60	7	7/8" Coax	415.00 - 420.00	0.6000	0.5594
T60	8	0.99" (25.1mm) LDF2-2R	415.00 - 420.00	0.6000	0.5594
T60	10	EW63	415.00 - 420.00	0.6000	0.5594
T61	1	6 1/8" Hard Line	410.00 - 415.00	1.0000	0.5596
T61	4	1" conduit	410.00 - 415.00	0.6000	0.5596
T61	5	7/8" Coax	410.00 - 415.00	0.6000	0.5596
T61	7	7/8" Coax	410.00 - 415.00	0.6000	0.5596
T61	8	0.99" (25.1mm) LDF2-2R	410.00 - 415.00	0.6000	0.5596
T61	10	EW63	410.00 - 415.00	0.6000	0.5596
T62	1	6 1/8" Hard Line	405.00 - 410.00	1.0000	0.5639
T62	4	1" conduit	405.00 - 410.00	0.6000	0.5639
T62	5	7/8" Coax	405.00 - 410.00	0.6000	0.5639
T62	7	7/8" Coax	405.00 - 410.00	0.6000	0.5639
T62	8	0.99" (25.1mm) LDF2-2R	405.00 - 410.00	0.6000	0.5639
T62	10	EW63	405.00 - 410.00	0.6000	0.5639
T63	1	6 1/8" Hard Line	400.00 - 405.00	1.0000	0.5641
T63	4	1" conduit	400.00 - 405.00	0.6000	0.5641
T63	5	7/8" Coax	400.00 - 405.00	0.6000	0.5641
T63	7	7/8" Coax	400.00 - 405.00	0.6000	0.5641
T63	8	0.99" (25.1mm) LDF2-2R	400.00 - 405.00	0.6000	0.5641
T63	10	EW63	400.00 - 405.00	0.6000	0.5641
T64	1	6 1/8" Hard Line	380.00 - 400.00	1.0000	0.5643
T64	4	1" conduit	380.00 - 400.00	0.6000	0.5643
T64	5	7/8" Coax	380.00 - 400.00	0.6000	0.5643
T64	7	7/8" Coax	380.00 - 400.00	0.6000	0.5643
T64	8	0.99" (25.1mm) LDF2-2R	380.00 - 400.00	0.6000	0.5643
T64	10	EW63	380.00 - 400.00	0.6000	0.5643
T64	12	1.39" (35.3mm) Hybrid	380.00 - 400.00	0.6000	0.5643

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T65	1	6 1/8" Hard Line	360.00 - 380.00	1.0000	0.5647
T65	4	1" conduit	360.00 - 380.00	0.6000	0.5647
T65	5	7/8" Coax	360.00 - 380.00	0.6000	0.5647
T65	7	7/8" Coax	360.00 - 380.00	0.6000	0.5647
T65	8	0.99" (25.1mm) LDF2-2R	360.00 - 380.00	0.6000	0.5647
T65	10	EW63	360.00 - 380.00	0.6000	0.5647
T65	12	1.39" (35.3mm) Hybrid	360.00 - 380.00	0.6000	0.5647
T66	1	6 1/8" Hard Line	340.00 - 360.00	1.0000	0.5650
T66	4	1" conduit	340.00 - 360.00	0.6000	0.5650
T66	5	7/8" Coax	340.00 - 360.00	0.6000	0.5650
T66	7	7/8" Coax	340.00 - 360.00	0.6000	0.5650
T66	8	0.99" (25.1mm) LDF2-2R	340.00 - 360.00	0.6000	0.5650
T66	10	EW63	340.00 - 360.00	0.6000	0.5650
T66	12	1.39" (35.3mm) Hybrid	340.00 - 360.00	0.6000	0.5650
T66	14	EW63	340.00 - 349.00	0.6000	0.5650
T67	1	6 1/8" Hard Line	320.00 - 340.00	1.0000	0.5652
T67	4	1" conduit	320.00 - 340.00	0.6000	0.5652
T67	5	7/8" Coax	320.00 - 340.00	0.6000	0.5652
T67	7	7/8" Coax	320.00 - 340.00	0.6000	0.5652
T67	8	0.99" (25.1mm) LDF2-2R	320.00 - 340.00	0.6000	0.5652
T67	10	EW63	320.00 - 340.00	0.6000	0.5652
T67	12	1.39" (35.3mm) Hybrid	320.00 - 340.00	0.6000	0.5652
T67	14	EW63	320.00 - 340.00	0.6000	0.5652
T68	1	6 1/8" Hard Line	300.00 - 320.00	1.0000	0.5653
T68	4	1" conduit	300.00 - 320.00	0.6000	0.5653
T68	5	7/8" Coax	300.00 - 320.00	0.6000	0.5653
T68	7	7/8" Coax	300.00 - 320.00	0.6000	0.5653
T68	8	0.99" (25.1mm) LDF2-2R	300.00 - 320.00	0.6000	0.5653
T68	10	EW63	300.00 - 320.00	0.6000	0.5653
T68	12	1.39" (35.3mm) Hybrid	300.00 - 320.00	0.6000	0.5653
T68	14	EW63	300.00 - 320.00	0.6000	0.5653

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T69	1	6 1/8" Hard Line	280.00 - 300.00	1.0000	0.5653
T69	4	1" conduit	280.00 - 300.00	0.6000	0.5653
T69	5	7/8" Coax	280.00 - 300.00	0.6000	0.5653
T69	7	7/8" Coax	280.00 - 300.00	0.6000	0.5653
T69	8	0.99" (25.1mm) LDF2-2R	280.00 - 300.00	0.6000	0.5653
T69	10	EW63	280.00 - 300.00	0.6000	0.5653
T69	12	1.39" (35.3mm) Hybrid	280.00 - 300.00	0.6000	0.5653
T69	14	EW63	280.00 - 300.00	0.6000	0.5653
T70	1	6 1/8" Hard Line	275.00 - 280.00	1.0000	0.5652
T70	4	1" conduit	275.00 - 280.00	0.6000	0.5652
T70	5	7/8" Coax	275.00 - 280.00	0.6000	0.5652
T70	7	7/8" Coax	275.00 - 280.00	0.6000	0.5652
T70	8	0.99" (25.1mm) LDF2-2R	275.00 - 280.00	0.6000	0.5652
T70	10	EW63	275.00 - 280.00	0.6000	0.5652
T70	12	1.39" (35.3mm) Hybrid	275.00 - 280.00	0.6000	0.5652
T70	14	EW63	275.00 - 280.00	0.6000	0.5652
T71	1	6 1/8" Hard Line	270.00 - 275.00	1.0000	0.5651
T71	4	1" conduit	270.00 - 275.00	0.6000	0.5651
T71	5	7/8" Coax	270.00 - 275.00	0.6000	0.5651
T71	7	7/8" Coax	270.00 - 275.00	0.6000	0.5651
T71	8	0.99" (25.1mm) LDF2-2R	270.00 - 275.00	0.6000	0.5651
T71	10	EW63	270.00 - 275.00	0.6000	0.5651
T71	12	1.39" (35.3mm) Hybrid	270.00 - 275.00	0.6000	0.5651
T71	14	EW63	270.00 - 275.00	0.6000	0.5651
T72	1	6 1/8" Hard Line	265.00 - 270.00	1.0000	0.5608
T72	4	1" conduit	265.00 - 270.00	0.6000	0.5608
T72	5	7/8" Coax	265.00 - 270.00	0.6000	0.5608
T72	7	7/8" Coax	265.00 - 270.00	0.6000	0.5608
T72	8	0.99" (25.1mm) LDF2-2R	265.00 - 270.00	0.6000	0.5608
T72	10	EW63	265.00 - 270.00	0.6000	0.5608
T72	12	1.39" (35.3mm) Hybrid	265.00 - 270.00	0.6000	0.5608

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T72	14	EW63	265.00 - 270.00	0.6000	0.5608
T73	1	6 1/8" Hard Line	260.00 - 265.00	1.0000	0.5608
T73	4	1" conduit	260.00 - 265.00	0.6000	0.5608
T73	5	7/8" Coax	260.00 - 265.00	0.6000	0.5608
T73	7	7/8" Coax	260.00 - 265.00	0.6000	0.5608
T73	8	0.99" (25.1mm) LDF2-2R	260.00 - 265.00	0.6000	0.5608
T73	10	EW63	260.00 - 265.00	0.6000	0.5608
T73	12	1.39" (35.3mm) Hybrid	260.00 - 265.00	0.6000	0.5608
T73	14	EW63	260.00 - 265.00	0.6000	0.5608
T74	1	6 1/8" Hard Line	255.00 - 260.00	1.0000	0.5607
T74	4	1" conduit	255.00 - 260.00	0.6000	0.5607
T74	5	7/8" Coax	255.00 - 260.00	0.6000	0.5607
T74	7	7/8" Coax	255.00 - 260.00	0.6000	0.5607
T74	8	0.99" (25.1mm) LDF2-2R	255.00 - 260.00	0.6000	0.5607
T74	10	EW63	255.00 - 260.00	0.6000	0.5607
T74	12	1.39" (35.3mm) Hybrid	255.00 - 260.00	0.6000	0.5607
T74	14	EW63	255.00 - 260.00	0.6000	0.5607
T75	1	6 1/8" Hard Line	250.00 - 255.00	1.0000	0.5606
T75	4	1" conduit	250.00 - 255.00	0.6000	0.5606
T75	5	7/8" Coax	250.00 - 255.00	0.6000	0.5606
T75	7	7/8" Coax	250.00 - 255.00	0.6000	0.5606
T75	8	0.99" (25.1mm) LDF2-2R	250.00 - 255.00	0.6000	0.5606
T75	10	EW63	250.00 - 255.00	0.6000	0.5606
T75	12	1.39" (35.3mm) Hybrid	250.00 - 255.00	0.6000	0.5606
T75	14	EW63	250.00 - 255.00	0.6000	0.5606
T76	1	6 1/8" Hard Line	245.00 - 250.00	1.0000	0.5648
T76	4	1" conduit	245.00 - 250.00	0.6000	0.5648
T76	5	7/8" Coax	245.00 - 250.00	0.6000	0.5648
T76	7	7/8" Coax	245.00 - 250.00	0.6000	0.5648
T76	8	0.99" (25.1mm) LDF2-2R	245.00 - 250.00	0.6000	0.5648
T76	10	EW63	245.00 - 250.00	0.6000	0.5648

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T76	12	1.39" (35.3mm) Hybrid	245.00 - 250.00	0.6000	0.5648
T76	14	EW63	245.00 - 250.00	0.6000	0.5648
T77	1	6 1/8" Hard Line	240.00 - 245.00	1.0000	0.5647
T77	4	1" conduit	240.00 - 245.00	0.6000	0.5647
T77	5	7/8" Coax	240.00 - 245.00	0.6000	0.5647
T77	7	7/8" Coax	240.00 - 245.00	0.6000	0.5647
T77	8	0.99" (25.1mm) LDF2-2R	240.00 - 245.00	0.6000	0.5647
T77	10	EW63	240.00 - 245.00	0.6000	0.5647
T77	12	1.39" (35.3mm) Hybrid	240.00 - 245.00	0.6000	0.5647
T77	14	EW63	240.00 - 245.00	0.6000	0.5647
T78	1	6 1/8" Hard Line	220.00 - 240.00	1.0000	0.5644
T78	4	1" conduit	220.00 - 240.00	0.6000	0.5644
T78	5	7/8" Coax	220.00 - 240.00	0.6000	0.5644
T78	7	7/8" Coax	220.00 - 240.00	0.6000	0.5644
T78	8	0.99" (25.1mm) LDF2-2R	220.00 - 240.00	0.6000	0.5644
T78	10	EW63	220.00 - 240.00	0.6000	0.5644
T78	12	1.39" (35.3mm) Hybrid	220.00 - 240.00	0.6000	0.5644
T78	14	EW63	220.00 - 240.00	0.6000	0.5644
T79	1	6 1/8" Hard Line	200.00 - 220.00	1.0000	0.5637
T79	4	1" conduit	200.00 - 220.00	0.6000	0.5637
T79	5	7/8" Coax	200.00 - 220.00	0.6000	0.5637
T79	7	7/8" Coax	200.00 - 220.00	0.6000	0.5637
T79	8	0.99" (25.1mm) LDF2-2R	200.00 - 220.00	0.6000	0.5637
T79	10	EW63	200.00 - 220.00	0.6000	0.5637
T79	12	1.39" (35.3mm) Hybrid	200.00 - 220.00	0.6000	0.5637
T79	14	EW63	200.00 - 220.00	0.6000	0.5637
T80	1	6 1/8" Hard Line	180.00 - 200.00	1.0000	0.5629
T80	4	1" conduit	180.00 - 200.00	0.6000	0.5629
T80	5	7/8" Coax	180.00 - 200.00	0.6000	0.5629
T80	7	7/8" Coax	180.00 - 200.00	0.6000	0.5629
T80	8	0.99" (25.1mm) LDF2-2R	180.00 - 200.00	0.6000	0.5629

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T80	10	EW63	180.00 - 200.00	0.6000	0.5629
T80	12	1.39" (35.3mm) Hybrid	180.00 - 200.00	0.6000	0.5629
T80	14	EW63	180.00 - 200.00	0.6000	0.5629
T80	16	0.33" (8.7mm) Fiber	180.00 - 197.00	0.6000	0.5629
T80	17	0.65" (16.4mm) 8 AWG 2C	180.00 - 197.00	0.6000	0.5629
T80	18	2 1/2" conduit	180.00 - 197.00	0.6000	0.5629
T80	20	1 5/8" Coax	180.00 - 192.00	0.6000	0.5629
T81	1	6 1/8" Hard Line	160.00 - 180.00	1.0000	0.5619
T81	4	1" conduit	160.00 - 180.00	0.6000	0.5619
T81	5	7/8" Coax	160.00 - 180.00	0.6000	0.5619
T81	7	7/8" Coax	160.00 - 180.00	0.6000	0.5619
T81	8	0.99" (25.1mm) LDF2-2R	160.00 - 180.00	0.6000	0.5619
T81	10	EW63	160.00 - 180.00	0.6000	0.5619
T81	12	1.39" (35.3mm) Hybrid	160.00 - 180.00	0.6000	0.5619
T81	14	EW63	160.00 - 180.00	0.6000	0.5619
T81	16	0.33" (8.7mm) Fiber	160.00 - 180.00	0.6000	0.5619
T81	17	0.65" (16.4mm) 8 AWG 2C	160.00 - 180.00	0.6000	0.5619
T81	18	2 1/2" conduit	160.00 - 180.00	0.6000	0.5619
T81	20	1 5/8" Coax	160.00 - 180.00	0.6000	0.5619
T82	1	6 1/8" Hard Line	140.00 - 160.00	1.0000	0.5608
T82	4	1" conduit	140.00 - 160.00	0.6000	0.5608
T82	5	7/8" Coax	140.00 - 160.00	0.6000	0.5608
T82	7	7/8" Coax	140.00 - 160.00	0.6000	0.5608
T82	8	0.99" (25.1mm) LDF2-2R	140.00 - 160.00	0.6000	0.5608
T82	10	EW63	140.00 - 160.00	0.6000	0.5608
T82	12	1.39" (35.3mm) Hybrid	140.00 - 160.00	0.6000	0.5608
T82	14	EW63	140.00 - 160.00	0.6000	0.5608
T82	16	0.33" (8.7mm) Fiber	140.00 - 160.00	0.6000	0.5608
T82	17	0.65" (16.4mm) 8 AWG 2C	140.00 - 160.00	0.6000	0.5608
T82	18	2 1/2" conduit	140.00 - 160.00	0.6000	0.5608
T82	20	1 5/8" Coax	140.00 - 160.00	0.6000	0.5608

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T83	1	6 1/8" Hard Line	120.00 - 140.00	1.0000	0.5595
T83	4	1" conduit	120.00 - 140.00	0.6000	0.5595
T83	5	7/8" Coax	120.00 - 140.00	0.6000	0.5595
T83	7	7/8" Coax	120.00 - 140.00	0.6000	0.5595
T83	8	0.99" (25.1mm) LDF2-2R	120.00 - 140.00	0.6000	0.5595
T83	10	EW63	120.00 - 140.00	0.6000	0.5595
T83	12	1.39" (35.3mm) Hybrid	120.00 - 140.00	0.6000	0.5595
T83	14	EW63	120.00 - 140.00	0.6000	0.5595
T83	16	0.33" (8.7mm) Fiber	120.00 - 140.00	0.6000	0.5595
T83	17	0.65" (16.4mm) 8 AWG 2C	120.00 - 140.00	0.6000	0.5595
T83	18	2 1/2" conduit	120.00 - 140.00	1.0000	0.5595
T83	20	1 5/8" Coax	120.00 - 140.00	0.6000	0.5595
T84	1	6 1/8" Hard Line	115.00 - 120.00	1.0000	0.5586
T84	4	1" conduit	115.00 - 120.00	0.6000	0.5586
T84	5	7/8" Coax	115.00 - 120.00	0.6000	0.5586
T84	7	7/8" Coax	115.00 - 120.00	0.6000	0.5586
T84	8	0.99" (25.1mm) LDF2-2R	115.00 - 120.00	0.6000	0.5586
T84	10	EW63	115.00 - 120.00	0.6000	0.5586
T84	12	1.39" (35.3mm) Hybrid	115.00 - 120.00	0.6000	0.5586
T84	14	EW63	115.00 - 120.00	0.6000	0.5586
T84	16	0.33" (8.7mm) Fiber	115.00 - 120.00	0.6000	0.5586
T84	17	0.65" (16.4mm) 8 AWG 2C	115.00 - 120.00	0.6000	0.5586
T84	18	2 1/2" conduit	115.00 - 120.00	1.0000	0.5586
T84	20	1 5/8" Coax	115.00 - 120.00	0.6000	0.5586
T85	1	6 1/8" Hard Line	110.00 - 115.00	1.0000	0.5583
T85	4	1" conduit	110.00 - 115.00	0.6000	0.5583
T85	5	7/8" Coax	110.00 - 115.00	0.6000	0.5583
T85	7	7/8" Coax	110.00 - 115.00	0.6000	0.5583
T85	8	0.99" (25.1mm) LDF2-2R	110.00 - 115.00	0.6000	0.5583
T85	10	EW63	110.00 - 115.00	0.6000	0.5583
T85	12	1.39" (35.3mm) Hybrid	110.00 - 115.00	0.6000	0.5583

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T85	14	EW63	110.00 - 115.00	0.6000	0.5583
T85	16	0.33" (8.7mm) Fiber	110.00 - 115.00	0.6000	0.5583
T85	17	0.65" (16.4mm) 8 AWG 2C	110.00 - 115.00	0.6000	0.5583
T85	18	2 1/2" conduit	110.00 - 115.00	1.0000	0.5583
T85	20	1 5/8" Coax	110.00 - 115.00	0.6000	0.5583
T86	1	6 1/8" Hard Line	105.00 - 110.00	1.0000	0.5537
T86	4	1" conduit	105.00 - 110.00	0.6000	0.5537
T86	5	7/8" Coax	105.00 - 110.00	0.6000	0.5537
T86	7	7/8" Coax	105.00 - 110.00	0.6000	0.5537
T86	8	0.99" (25.1mm) LDF2-2R	105.00 - 110.00	0.6000	0.5537
T86	10	EW63	105.00 - 110.00	0.6000	0.5537
T86	12	1.39" (35.3mm) Hybrid	105.00 - 110.00	0.6000	0.5537
T86	14	EW63	105.00 - 110.00	0.6000	0.5537
T86	16	0.33" (8.7mm) Fiber	105.00 - 110.00	0.6000	0.5537
T86	17	0.65" (16.4mm) 8 AWG 2C	105.00 - 110.00	0.6000	0.5537
T86	18	2 1/2" conduit	105.00 - 110.00	1.0000	0.5537
T86	20	1 5/8" Coax	105.00 - 110.00	0.6000	0.5537
T87	1	6 1/8" Hard Line	100.00 - 105.00	1.0000	0.5534
T87	4	1" conduit	100.00 - 105.00	0.6000	0.5534
T87	5	7/8" Coax	100.00 - 105.00	0.6000	0.5534
T87	7	7/8" Coax	100.00 - 105.00	0.6000	0.5534
T87	8	0.99" (25.1mm) LDF2-2R	100.00 - 105.00	0.6000	0.5534
T87	10	EW63	100.00 - 105.00	0.6000	0.5534
T87	12	1.39" (35.3mm) Hybrid	100.00 - 105.00	0.6000	0.5534
T87	14	EW63	100.00 - 105.00	0.6000	0.5534
T87	16	0.33" (8.7mm) Fiber	100.00 - 105.00	0.6000	0.5534
T87	17	0.65" (16.4mm) 8 AWG 2C	100.00 - 105.00	0.6000	0.5534
T87	18	2 1/2" conduit	100.00 - 105.00	1.0000	0.5534
T87	20	1 5/8" Coax	100.00 - 105.00	0.6000	0.5534
T88	1	6 1/8" Hard Line	95.00 - 100.00	1.0000	0.5531
T88	4	1" conduit	95.00 - 100.00	0.6000	0.5531
T88	5	7/8" Coax	95.00 - 100.00	0.6000	0.5531
T88	7	7/8" Coax	95.00 - 100.00	0.6000	0.5531

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T88	8	0.99" (25.1mm) LDF2-2R	95.00 - 100.00	0.6000	0.5531
T88	10	EW63	95.00 - 100.00	0.6000	0.5531
T88	12	1.39" (35.3mm) Hybrid	95.00 - 100.00	0.6000	0.5531
T88	14	EW63	95.00 - 100.00	0.6000	0.5531
T88	16	0.33" (8.7mm) Fiber	95.00 - 100.00	0.6000	0.5531
T88	17	0.65" (16.4mm) 8 AWG 2C	95.00 - 100.00	0.6000	0.5531
T88	18	2 1/2" conduit	95.00 - 100.00	1.0000	0.5531
T88	20	1 5/8" Coax	95.00 - 100.00	0.6000	0.5531
T89	1	6 1/8" Hard Line	90.00 - 95.00	1.0000	0.5528
T89	4	1" conduit	90.00 - 95.00	0.6000	0.5528
T89	5	7/8" Coax	90.00 - 95.00	0.6000	0.5528
T89	7	7/8" Coax	90.00 - 95.00	0.6000	0.5528
T89	8	0.99" (25.1mm) LDF2-2R	90.00 - 95.00	0.6000	0.5528
T89	10	EW63	90.00 - 95.00	0.6000	0.5528
T89	12	1.39" (35.3mm) Hybrid	90.00 - 95.00	0.6000	0.5528
T89	14	EW63	90.00 - 95.00	0.6000	0.5528
T89	16	0.33" (8.7mm) Fiber	90.00 - 95.00	0.6000	0.5528
T89	17	0.65" (16.4mm) 8 AWG 2C	90.00 - 95.00	0.6000	0.5528
T89	18	2 1/2" conduit	90.00 - 95.00	1.0000	0.5528
T89	20	1 5/8" Coax	90.00 - 95.00	0.6000	0.5528
T90	1	6 1/8" Hard Line	85.00 - 90.00	1.0000	0.5569
T90	4	1" conduit	85.00 - 90.00	0.6000	0.5569
T90	5	7/8" Coax	85.00 - 90.00	0.6000	0.5569
T90	7	7/8" Coax	85.00 - 90.00	0.6000	0.5569
T90	8	0.99" (25.1mm) LDF2-2R	85.00 - 90.00	0.6000	0.5569
T90	10	EW63	85.00 - 90.00	0.6000	0.5569
T90	12	1.39" (35.3mm) Hybrid	85.00 - 90.00	0.6000	0.5569
T90	14	EW63	85.00 - 90.00	0.6000	0.5569
T90	16	0.33" (8.7mm) Fiber	85.00 - 90.00	0.6000	0.5569
T90	17	0.65" (16.4mm) 8 AWG 2C	85.00 - 90.00	0.6000	0.5569
T90	18	2 1/2" conduit	85.00 - 90.00	1.0000	0.5569
T90	20	1 5/8" Coax	85.00 - 90.00	0.6000	0.5569
T91	1	6 1/8" Hard Line	80.00 - 85.00	1.0000	0.5566
T91	4	1" conduit	80.00 - 85.00	0.6000	0.5566
T91	5	7/8" Coax	80.00 - 85.00	0.6000	0.5566
T91	7	7/8" Coax	80.00 - 85.00	0.6000	0.5566
T91	8	0.99" (25.1mm) LDF2-2R	80.00 - 85.00	0.6000	0.5566
T91	10	EW63	80.00 - 85.00	0.6000	0.5566
T91	12	1.39" (35.3mm) Hybrid	80.00 - 85.00	0.6000	0.5566
T91	14	EW63	80.00 - 85.00	0.6000	0.5566
T91	16	0.33" (8.7mm) Fiber	80.00 - 85.00	0.6000	0.5566
T91	17	0.65" (16.4mm) 8 AWG 2C	80.00 - 85.00	0.6000	0.5566
T91	18	2 1/2" conduit	80.00 - 85.00	1.0000	0.5566
T91	20	1 5/8" Coax	80.00 - 85.00	0.6000	0.5566
T92	1	6 1/8" Hard Line	60.00 - 80.00	1.0000	0.5563
T92	4	1" conduit	60.00 - 80.00	0.6000	0.5563
T92	5	7/8" Coax	60.00 - 80.00	0.6000	0.5563
T92	7	7/8" Coax	60.00 - 80.00	0.6000	0.5563
T92	8	0.99" (25.1mm) LDF2-2R	60.00 - 80.00	0.6000	0.5563
T92	10	EW63	60.00 - 80.00	0.6000	0.5563
T92	12	1.39" (35.3mm) Hybrid	60.00 - 80.00	0.6000	0.5563
T92	14	EW63	60.00 - 80.00	0.6000	0.5563
T92	16	0.33" (8.7mm) Fiber	60.00 - 80.00	0.6000	0.5563
T92	17	0.65" (16.4mm) 8 AWG 2C	60.00 - 80.00	0.6000	0.5563
T92	18	2 1/2" conduit	60.00 - 80.00	1.0000	0.5563
T92	20	1 5/8" Coax	60.00 - 80.00	0.6000	0.5563
T93	1	6 1/8" Hard Line	40.00 - 60.00	1.0000	0.5571
T93	4	1" conduit	40.00 - 60.00	0.6000	0.5571
T93	5	7/8" Coax	40.00 - 60.00	0.6000	0.5571
T93	7	7/8" Coax	40.00 - 60.00	0.6000	0.5571
T93	8	0.99" (25.1mm) LDF2-2R	40.00 - 60.00	0.6000	0.5571
T93	10	EW63	40.00 - 60.00	0.6000	0.5571

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T93	12	1.39" (35.3mm) Hybrid	40.00 - 60.00	0.6000	0.5571
T93	14	EW63	40.00 - 60.00	0.6000	0.5571
T93	16	0.33" (8.7mm) Fiber	40.00 - 60.00	0.6000	0.5571
T93	17	0.65" (16.4mm) 8 AWG 2C	40.00 - 60.00	0.6000	0.5571
T93	18	2 1/2" conduit	40.00 - 60.00	1.0000	0.5571
T93	20	1 5/8" Coax	40.00 - 60.00	0.6000	0.5571
T94	1	6 1/8" Hard Line	20.00 - 40.00	1.0000	0.5614
T94	4	1" conduit	20.00 - 40.00	0.6000	0.5614
T94	5	7/8" Coax	20.00 - 40.00	0.6000	0.5614
T94	7	7/8" Coax	20.00 - 40.00	0.6000	0.5614
T94	8	0.99" (25.1mm) LDF2-2R	20.00 - 40.00	0.6000	0.5614
T94	10	EW63	20.00 - 40.00	0.6000	0.5614
T94	12	1.39" (35.3mm) Hybrid	20.00 - 40.00	0.6000	0.5614
T94	14	EW63	20.00 - 40.00	0.6000	0.5614
T94	16	0.33" (8.7mm) Fiber	20.00 - 40.00	0.6000	0.5614
T94	17	0.65" (16.4mm) 8 AWG 2C	20.00 - 40.00	0.6000	0.5614
T94	18	2 1/2" conduit	20.00 - 40.00	0.6000	0.5614
T94	20	1 5/8" Coax	20.00 - 40.00	0.6000	0.5614
T95	1	6 1/8" Hard Line	15.00 - 20.00	1.0000	0.5691
T95	4	1" conduit	15.00 - 20.00	0.6000	0.5691
T95	5	7/8" Coax	15.00 - 20.00	0.6000	0.5691
T95	7	7/8" Coax	15.00 - 20.00	0.6000	0.5691
T95	8	0.99" (25.1mm) LDF2-2R	15.00 - 20.00	0.6000	0.5691
T95	10	EW63	15.00 - 20.00	0.6000	0.5691
T95	12	1.39" (35.3mm) Hybrid	15.00 - 20.00	0.6000	0.5691
T95	14	EW63	15.00 - 20.00	0.6000	0.5691
T95	16	0.33" (8.7mm) Fiber	15.00 - 20.00	0.6000	0.5691
T95	17	0.65" (16.4mm) 8 AWG 2C	15.00 - 20.00	0.6000	0.5691
T95	18	2 1/2" conduit	15.00 - 20.00	1.0000	0.5691
T95	20	1 5/8" Coax	15.00 - 20.00	0.6000	0.5691
T96	1	6 1/8" Hard Line	7.00 - 15.00	1.0000	0.4784
T96	4	1" conduit	7.00 - 15.00	0.6000	0.4784
T96	5	7/8" Coax	7.00 - 15.00	0.6000	0.4784
T96	7	7/8" Coax	7.00 - 15.00	0.6000	0.4784
T96	8	0.99" (25.1mm) LDF2-2R	7.00 - 15.00	0.6000	0.4784
T96	10	EW63	7.00 - 15.00	0.6000	0.4784
T96	12	1.39" (35.3mm) Hybrid	7.00 - 15.00	0.6000	0.4784
T96	14	EW63	7.00 - 15.00	0.6000	0.4784
T96	16	0.33" (8.7mm) Fiber	7.00 - 15.00	0.6000	0.4784
T96	17	0.65" (16.4mm) 8 AWG 2C	7.00 - 15.00	0.6000	0.4784
T96	18	2 1/2" conduit	7.00 - 15.00	1.0000	0.4784
T96	20	1 5/8" Coax	7.00 - 15.00	0.6000	0.4784
T97	1	6 1/8" Hard Line	0.00 - 7.00	1.0000	0.0000
T97	4	1" conduit	0.00 - 7.00	0.0000	0.0000
T97	5	7/8" Coax	0.00 - 7.00	0.0000	0.0000
T97	7	7/8" Coax	0.00 - 7.00	0.0000	0.0000
T97	8	0.99" (25.1mm) LDF2-2R	0.00 - 7.00	0.0000	0.0000
T97	10	EW63	0.00 - 7.00	0.0000	0.0000
T97	12	1.39" (35.3mm) Hybrid	0.00 - 7.00	0.0000	0.0000
T97	14	EW63	0.00 - 7.00	0.0000	0.0000
T97	16	0.33" (8.7mm) Fiber	0.00 - 7.00	0.0000	0.0000
T97	17	0.65" (16.4mm) 8 AWG 2C	0.00 - 7.00	0.0000	0.0000
T97	18	2 1/2" conduit	0.00 - 7.00	1.0000	0.0000
T97	20	1 5/8" Coax	0.00 - 7.00	0.0000	0.0000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
TFU-31ETT/VP-R O6	A	None		0.0000	1169.00	No Ice	42.81	42.81	27628.00
						1/2" Ice	63.80	63.80	29629.00
						1" Ice	69.70	69.70	32000.00
***									
ISMD10	B	From Face	4.00	0.0000	1003.00	No Ice	5.83	1.77	421.50
			0.00			1/2" Ice	7.06	2.14	700.20
			0.00			1" Ice	8.29	2.51	978.90
***									
10' - 12' Ice Shield (C30-085-103)	B	From Leg	4.00	0.0000	889.00	No Ice	6.22	1.09	667.00
			0.00			1/2" Ice	7.83	1.37	949.80
			0.00			1" Ice	9.44	1.65	1232.60
***									
Radio 0208	A	From Leg	4.00	0.0000	400.00	No Ice	1.40	0.38	19.80
			0.00			1/2" Ice	1.90	0.52	28.80
			0.00			1" Ice	2.40	0.66	37.80
RRUS 4415 B30	A	From Leg	4.00	0.0000	400.00	No Ice	1.84	0.82	46.00
			0.00			1/2" Ice	2.45	1.09	60.10
			0.00			1" Ice	3.06	1.36	74.20
ODI2-065R18K-GQ	A	From Leg	4.00	0.0000	400.00	No Ice	4.85	1.02	25.10
			0.00			1/2" Ice	5.72	1.20	49.20
			0.00			1" Ice	6.59	1.38	73.30
***									
Radio 0208	B	From Leg	4.00	0.0000	400.00	No Ice	1.40	0.38	19.80
			0.00			1/2" Ice	1.90	0.52	28.80
			0.00			1" Ice	2.40	0.66	37.80
ODI2-065R18K-GQ	B	From Leg	4.00	0.0000	400.00	No Ice	4.85	1.02	25.10
			0.00			1/2" Ice	5.72	1.20	49.20
			0.00			1" Ice	6.59	1.38	73.30
***									
Radio 0208	C	From Leg	4.00	0.0000	400.00	No Ice	1.40	0.38	19.80
			0.00			1/2" Ice	1.90	0.52	28.80
			0.00			1" Ice	2.40	0.66	37.80
ODI2-065R18K-GQ	C	From Leg	4.00	0.0000	400.00	No Ice	4.85	1.02	25.10
			0.00			1/2" Ice	5.72	1.20	49.20
			0.00			1" Ice	6.59	1.38	73.30
***									
ISMD8	A	From Leg	4.00	30.0000	356.00	No Ice	3.73	1.41	383.40
			0.00			1/2" Ice	4.72	1.78	602.00
			0.00			1" Ice	5.71	2.15	820.60
***									
DC6-48-60-18-8F (23.5" Height)	C	From Leg	4.00	-30.0000	197.00	No Ice	1.11	1.11	20.00
			0.00			1/2" Ice	1.46	1.46	35.10
			0.00			1" Ice	1.81	1.81	50.20
***									
(2) LGP21401	A	From Leg	4.00	-30.0000	192.00	No Ice	1.10	0.35	14.10
			0.00			1/2" Ice	1.53	0.48	21.20
			0.00			1" Ice	1.96	0.61	28.30
(2) RRUS-11 800 MHz	A	From Leg	4.00	30.0000	192.00	No Ice	2.52	1.30	54.00
			0.00			1/2" Ice	3.29	1.70	75.60
			0.00			1" Ice	4.06	2.10	97.20
7770.00	A	From Leg	4.00	-30.0000	192.00	No Ice	5.51	1.70	35.00
			0.00			1/2" Ice	6.53	2.01	0.00
			0.00			1" Ice	7.55	2.32	0.00
AM-X-CD-16-65-00T-RET	A	From Leg	4.00	-30.0000	192.00	No Ice	8.02	2.70	48.50

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
			0.00			1/2" Ice	9.08	3.06	95.00
			0.00			1" Ice	10.14	3.42	141.50
***									
(2) LGP21401	B	From Leg	4.00	-20.0000	192.00	No Ice	1.10	0.35	14.10
			0.00			1/2" Ice	1.53	0.48	21.20
			0.00			1" Ice	1.96	0.61	28.30
(2) RRUS-11 800 MHz	B	From Leg	4.00	30.0000	192.00	No Ice	2.52	1.30	54.00
			0.00			1/2" Ice	3.29	1.70	75.60
			0.00			1" Ice	4.06	2.10	97.20
7770.00	B	From Leg	4.00	-20.0000	192.00	No Ice	5.51	1.70	35.00
			0.00			1/2" Ice	6.53	2.01	0.00
			0.00			1" Ice	7.55	2.32	0.00
P65-17-XLH-RR	B	From Leg	4.00	-20.0000	192.00	No Ice	11.47	4.00	59.00
			0.00			1/2" Ice	12.39	4.32	121.00
			0.00			1" Ice	13.31	4.64	183.00
***									
(2) LGP21401	C	From Leg	4.00	0.0000	192.00	No Ice	1.10	0.35	14.10
			0.00			1/2" Ice	1.53	0.48	21.20
			0.00			1" Ice	1.96	0.61	28.30
(2) RRUS-11 800 MHz	C	From Leg	4.00	30.0000	192.00	No Ice	2.52	1.30	54.00
			0.00			1/2" Ice	3.29	1.70	75.60
			0.00			1" Ice	4.06	2.10	97.20
7770.00	C	From Leg	4.00	0.0000	192.00	No Ice	5.51	1.70	35.00
			0.00			1/2" Ice	6.53	2.01	0.00
			0.00			1" Ice	7.55	2.32	0.00
P65-17-XLH-RR	C	From Leg	4.00	0.0000	192.00	No Ice	11.47	4.00	59.00
			0.00			1/2" Ice	12.39	4.32	121.00
			0.00			1" Ice	13.31	4.64	183.00
***									
Flat Side Arm	A	From Leg	4.00	-90.0000	1073.00	No Ice	2.14	6.30	150.00
			0.00			1/2" Ice	2.60	7.00	230.00
			0.00			1" Ice	3.06	7.70	310.00
Flat Side Arm	C	From Leg	4.00	90.0000	1073.00	No Ice	2.14	6.30	150.00
			0.00			1/2" Ice	2.60	7.00	230.00
			0.00			1" Ice	3.06	7.70	310.00
Flat Side Arm	A	From Leg	4.00	90.0000	1003.00	No Ice	2.14	6.30	150.00
			0.00			1/2" Ice	2.60	7.00	230.00
			0.00			1" Ice	3.06	7.70	310.00
Flat Side Arm	B	From Leg	4.00	-90.0000	1003.00	No Ice	2.14	6.30	150.00
			0.00			1/2" Ice	2.60	7.00	230.00
			0.00			1" Ice	3.06	7.70	310.00
***									
Stand-Off	A	From Leg	2.00	0.0000	400.00	No Ice	1.77	2.50	75.00
			0.00			1/2" Ice	2.00	5.50	230.00
			0.00			1" Ice	2.50	6.00	200.00
Stand-Off	B	From Leg	2.00	0.0000	400.00	No Ice	1.77	2.50	75.00
			0.00			1/2" Ice	2.00	5.50	230.00
			0.00			1" Ice	2.50	6.00	200.00
Stand-Off	C	From Leg	2.00	0.0000	400.00	No Ice	1.77	2.50	75.00
			0.00			1/2" Ice	2.00	5.50	230.00
			0.00			1" Ice	2.50	6.00	200.00
***									
Round Side Arm	A	From Leg	0.00	0.0000	192.00	No Ice	1.77	5.20	150.00
			0.00			1/2" Ice	2.00	5.50	175.00
			0.00			1" Ice	2.50	6.00	200.00
Round Side Arm	B	From Leg	0.00	0.0000	192.00	No Ice	1.77	5.20	150.00
			0.00			1/2" Ice	2.00	5.50	175.00

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
			0.00			1" Ice	2.50	6.00	200.00
Round Side Arm	C	From Leg	0.00	0.0000	192.00	No Ice	1.77	5.20	150.00
			0.00			1/2" Ice	2.00	5.50	175.00
			0.00			1" Ice	2.50	6.00	200.00
***									
Vislink Proscan III	C	From Face	2.00	0.0000	1073.00	No Ice	19.02	19.02	185.00
			0.00			1/2" Ice	19.50	19.50	400.00
			0.00			1" Ice	20.20	20.20	866.80
Vislink Proscan III	C	From Face	2.00	0.0000	996.00	No Ice	19.02	19.02	185.00
			0.00			1/2" Ice	19.50	19.50	400.00
			0.00			1" Ice	20.20	20.20	866.80

Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral ft / Vert ft	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft		Aperture Area ft^2	Weight lb
***											
***											
8' Dish w/ Radome	B	Paraboloid w/o Radome	From Leg	1.00	0.0000		878.00	8.00	No Ice	50.27	304.00
				0.00					1/2" Ice	51.32	663.20
				0.00					1" Ice	52.37	1022.40
***											
8' Dish w/ Radome	A	Paraboloid w/o Radome	From Leg	1.00	30.0000		349.00	8.00	No Ice	50.27	304.00
				0.00					1/2" Ice	51.32	663.20
				0.00					1" Ice	52.37	1022.40

Tower Pressures - No Ice

G_H = 0.850 (base tower), 0.850 (upper structure)

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft^2	Face	A_F ft^2	A_R ft^2	A_{leg} ft^2	Leg %	C_AA_A In Face ft^2	C_AA_A Out Face ft^2
L1	1120.91	1.971	46	103.500	A	0.000	103.500	103.500	100.00	0.000	0.000
1151.90-1089.80					B	0.000	103.500		100.00	0.000	0.000
					C	0.000	103.500		100.00	38.036	0.000
T1	1087.35	1.954	46	40.731	A	14.064	3.063	3.063	17.88	0.000	0.000
1089.80-1084.90					B	14.064	3.063		17.88	0.000	0.000
					C	14.064	3.063		17.88	1.501	0.000
T2	1082.45	1.952	46	40.731	A	1.602	4.941	3.063	46.81	0.000	0.000
1084.90-1080.00					B	1.602	4.941		46.81	0.000	0.000
					C	1.602	4.941		46.81	1.501	0.000
T3	1070.00	1.945	46	166.250	A	6.406	19.299	12.500	48.63	0.000	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
1080.00-1060.00					B	6.406	19.299		48.63	3.133	0.000
					C	6.406	19.299		48.63	6.125	0.000
T4	1050.00	1.935	46	166.250	A	6.406	19.299	12.500	48.63	0.000	0.000
1060.00-1040.00					B	6.406	19.299		48.63	4.820	0.000
					C	6.406	19.299		48.63	6.125	0.000
T5	1030.00	1.924	45	166.250	A	6.406	19.299	12.500	48.63	0.000	0.000
1040.00-1020.00					B	6.406	19.299		48.63	4.820	0.000
					C	6.406	19.299		48.63	6.125	0.000
T6	1010.00	1.913	45	166.250	A	6.406	19.299	12.500	48.63	0.000	0.000
1020.00-1000.00					B	6.406	19.299		48.63	4.820	0.000
					C	6.406	19.299		48.63	6.125	0.000
T7	990.00	1.903	45	166.250	A	6.406	19.299	12.500	48.63	3.328	0.000
1000.00-980.00					B	6.406	19.299		48.63	4.820	0.000
					C	6.406	19.299		48.63	6.125	0.000
T8	970.00	1.891	45	166.250	A	6.406	19.299	12.500	48.63	4.160	0.000
980.00-960.00					B	6.406	19.299		48.63	4.820	0.000
					C	6.406	19.299		48.63	6.125	0.000
T9	950.00	1.88	44	167.500	A	6.367	21.751	15.000	53.35	4.160	0.000
960.00-940.00					B	6.367	21.751		53.35	4.820	0.000
					C	6.367	21.751		53.35	6.125	0.000
T10	937.50	1.873	44	41.875	A	1.589	5.436	3.750	53.38	1.040	0.000
940.00-935.00					B	1.589	5.436		53.38	1.205	0.000
					C	1.589	5.436		53.38	1.531	0.000
T11	932.50	1.87	44	41.875	A	1.589	5.436	3.750	53.38	1.040	0.000
935.00-930.00					B	1.589	5.436		53.38	1.205	0.000
					C	1.589	5.436		53.38	1.531	0.000
T12	927.50	1.867	44	41.875	A	1.589	5.623	3.750	52.00	1.040	0.000
930.00-925.00					B	1.589	5.623		52.00	1.205	0.000
					C	1.589	5.623		52.00	1.531	0.000
T13	922.50	1.865	44	41.875	A	1.589	5.623	3.750	52.00	1.040	0.000
925.00-920.00					B	1.589	5.623		52.00	1.205	0.000
					C	1.589	5.623		52.00	1.531	0.000
T14	917.50	1.862	44	41.875	A	1.589	5.623	3.750	52.00	1.040	0.000
920.00-915.00					B	1.589	5.623		52.00	1.205	0.000
					C	1.589	5.623		52.00	1.531	0.000
T15	912.50	1.859	44	41.875	A	1.589	5.623	3.750	52.00	1.040	0.000
915.00-910.00					B	1.589	5.623		52.00	1.205	0.000
					C	1.589	5.623		52.00	1.531	0.000
T16	907.50	1.856	44	41.875	A	1.589	5.436	3.750	53.38	1.040	0.000
910.00-905.00					B	1.589	5.436		53.38	1.205	0.000
					C	1.589	5.436		53.38	1.531	0.000
T17	902.50	1.853	44	41.875	A	1.589	5.436	3.750	53.38	1.040	0.000
905.00-900.00					B	1.589	5.436		53.38	1.205	0.000
					C	1.589	5.436		53.38	1.531	0.000
T18	890.00	1.845	44	167.500	A	6.354	21.744	15.000	53.38	4.160	0.000
900.00-880.00					B	6.354	21.744		53.38	4.820	0.000
					C	6.354	21.744		53.38	6.125	0.000
T19	870.00	1.834	43	167.500	A	6.354	21.744	15.000	53.38	4.160	0.000
880.00-860.00					B	6.354	21.744		53.38	8.438	0.000
					C	6.354	21.744		53.38	6.125	0.000
T20	850.00	1.821	43	167.500	A	6.354	21.744	15.000	53.38	4.160	0.000
860.00-840.00					B	6.354	21.744		53.38	8.840	0.000
					C	6.354	21.744		53.38	6.125	0.000
T21	830.00	1.809	43	167.500	A	6.354	21.744	15.000	53.38	4.160	0.000
840.00-820.00					B	6.354	21.744		53.38	8.840	0.000
					C	6.354	21.744		53.38	6.125	0.000
T22	810.00	1.796	42	167.500	A	6.354	21.744	15.000	53.38	4.160	0.000
820.00-800.00					B	6.354	21.744		53.38	8.840	0.000
					C	6.354	21.744		53.38	6.125	0.000
T23	790.00	1.784	42	167.500	A	6.354	21.744	15.000	53.38	4.160	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
800.00-780.00					B	6.354	21.744		53.38	8.840	0.000
					C	6.354	21.744		53.38	6.125	0.000
T24	777.50	1.776	42	41.875	A	1.589	5.436	3.750	53.38	1.040	0.000
780.00-775.00					B	1.589	5.436		53.38	2.210	0.000
					C	1.589	5.436		53.38	1.531	0.000
T25	772.50	1.772	42	41.875	A	1.589	5.436	3.750	53.38	1.040	0.000
775.00-770.00					B	1.589	5.436		53.38	2.210	0.000
					C	1.589	5.436		53.38	1.531	0.000
T26	767.50	1.769	42	41.875	A	1.589	5.623	3.750	52.00	1.040	0.000
770.00-765.00					B	1.589	5.623		52.00	2.210	0.000
					C	1.589	5.623		52.00	1.531	0.000
T27	762.50	1.766	42	41.875	A	1.589	5.623	3.750	52.00	1.040	0.000
765.00-760.00					B	1.589	5.623		52.00	2.210	0.000
					C	1.589	5.623		52.00	1.531	0.000
T28	757.50	1.762	42	41.875	A	1.589	5.623	3.750	52.00	1.040	0.000
760.00-755.00					B	1.589	5.623		52.00	2.210	0.000
					C	1.589	5.623		52.00	1.531	0.000
T29	752.50	1.759	42	41.875	A	1.589	5.623	3.750	52.00	1.040	0.000
755.00-750.00					B	1.589	5.623		52.00	2.210	0.000
					C	1.589	5.623		52.00	1.531	0.000
T30	747.50	1.756	42	41.875	A	1.589	5.436	3.750	53.38	1.040	0.000
750.00-745.00					B	1.589	5.436		53.38	2.210	0.000
					C	1.589	5.436		53.38	1.531	0.000
T31	742.50	1.752	41	41.875	A	1.589	5.436	3.750	53.38	1.040	0.000
745.00-740.00					B	1.589	5.436		53.38	2.210	0.000
					C	1.589	5.436		53.38	1.531	0.000
T32	730.00	1.744	41	167.500	A	6.354	21.744	15.000	53.38	4.160	0.000
740.00-720.00					B	6.354	21.744		53.38	8.840	0.000
					C	6.354	21.744		53.38	6.125	0.000
T33	710.00	1.73	41	167.500	A	6.354	21.744	15.000	53.38	4.160	0.000
720.00-700.00					B	6.354	21.744		53.38	8.840	0.000
					C	6.354	21.744		53.38	6.125	0.000
T34	690.00	1.716	41	167.500	A	6.354	21.744	15.000	53.38	4.160	0.000
700.00-680.00					B	6.354	21.744		53.38	8.840	0.000
					C	6.354	21.744		53.38	6.125	0.000
T35	670.00	1.702	40	167.500	A	6.354	21.744	15.000	53.38	4.160	0.000
680.00-660.00					B	6.354	21.744		53.38	8.840	0.000
					C	6.354	21.744		53.38	6.125	0.000
T36	650.00	1.687	40	167.500	A	6.354	21.744	15.000	53.38	4.160	0.000
660.00-640.00					B	6.354	21.744		53.38	8.840	0.000
					C	6.354	21.744		53.38	6.125	0.000
T37	630.00	1.672	40	168.333	A	6.328	23.378	16.667	56.10	4.160	0.000
640.00-620.00					B	6.328	23.378		56.10	8.840	0.000
					C	6.328	23.378		56.10	6.125	0.000
T38	617.50	1.662	40	42.083	A	1.580	5.843	4.167	56.13	1.040	0.000
620.00-615.00					B	1.580	5.843		56.13	2.210	0.000
					C	1.580	5.843		56.13	1.531	0.000
T39	612.50	1.659	40	42.083	A	1.580	5.843	4.167	56.13	1.040	0.000
615.00-610.00					B	1.580	5.843		56.13	2.210	0.000
					C	1.580	5.843		56.13	1.531	0.000
T40	607.50	1.655	39	42.083	A	1.580	6.030	4.167	54.76	1.040	0.000
610.00-605.00					B	1.580	6.030		54.76	2.210	0.000
					C	1.580	6.030		54.76	1.531	0.000
T41	602.50	1.651	39	42.083	A	1.580	6.030	4.167	54.76	1.040	0.000
605.00-600.00					B	1.580	6.030		54.76	2.210	0.000
					C	1.580	6.030		54.76	1.531	0.000
T42	597.50	1.647	39	42.083	A	1.580	6.030	4.167	54.76	1.040	0.000
600.00-595.00					B	1.580	6.030		54.76	2.210	0.000
					C	1.580	6.030		54.76	1.531	0.000
T43	592.50	1.643	39	42.083	A	1.580	6.030	4.167	54.76	1.040	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
595.00-590.00					B	1.580	6.030		54.76	2.210	0.000
					C	1.580	6.030		54.76	1.531	0.000
T44	587.50	1.639	39	42.083	A	1.580	5.843	4.167	56.13	1.040	0.000
590.00-585.00					B	1.580	5.843		56.13	2.210	0.000
					C	1.580	5.843		56.13	1.531	0.000
T45	582.50	1.635	39	42.083	A	1.580	5.843	4.167	56.13	1.040	0.000
585.00-580.00					B	1.580	5.843		56.13	2.210	0.000
					C	1.580	5.843		56.13	1.531	0.000
T46	570.00	1.625	39	167.917	A	6.332	22.556	15.833	54.81	4.160	0.000
580.00-560.00					B	6.332	22.556		54.81	8.840	0.000
					C	6.332	22.556		54.81	6.125	0.000
T47	550.00	1.608	39	167.917	A	6.337	22.559	15.833	54.80	4.160	0.000
560.00-540.00					B	6.337	22.559		54.80	8.840	0.000
					C	6.337	22.559		54.80	6.125	0.000
T48	537.50	1.598	38	41.979	A	1.584	5.100	3.958	59.22	1.040	0.000
540.00-535.00					B	1.584	5.100		59.22	2.210	0.000
					C	1.584	5.100		59.22	1.531	0.000
T49	532.50	1.594	38	41.979	A	1.584	5.640	3.958	54.80	1.040	0.000
535.00-530.00					B	1.584	5.640		54.80	2.210	0.000
					C	1.584	5.640		54.80	1.531	0.000
T50	527.50	1.589	38	41.979	A	1.584	5.640	3.958	54.80	1.040	0.000
530.00-525.00					B	1.584	5.640		54.80	2.210	0.000
					C	1.584	5.640		54.80	1.531	0.000
T51	522.50	1.585	38	41.979	A	1.584	5.640	3.958	54.80	1.040	0.000
525.00-520.00					B	1.584	5.640		54.80	2.210	0.000
					C	1.584	5.640		54.80	1.531	0.000
T52	510.00	1.574	38	167.917	A	6.337	22.559	15.833	54.80	4.160	0.000
520.00-500.00					B	6.337	22.559		54.80	8.840	0.000
					C	6.337	22.559		54.80	6.125	0.000
T53	490.00	1.556	38	167.917	A	6.337	22.559	15.833	54.80	4.160	0.000
500.00-480.00					B	6.337	22.559		54.80	8.840	0.000
					C	6.337	22.559		54.80	6.125	0.000
T54	470.00	1.538	38	167.917	A	6.337	22.559	15.833	54.80	4.160	0.000
480.00-460.00					B	6.337	22.559		54.80	8.840	0.000
					C	6.337	22.559		54.80	6.125	0.000
T55	450.00	1.519	37	168.333	A	6.324	23.376	16.667	56.12	4.160	0.000
460.00-440.00					B	6.324	23.376		56.12	8.840	0.000
					C	6.324	23.376		56.12	6.125	0.000
T56	437.50	1.507	37	42.083	A	1.580	5.843	4.167	56.13	1.040	0.000
440.00-435.00					B	1.580	5.843		56.13	2.210	0.000
					C	1.580	5.843		56.13	1.531	0.000
T57	432.50	1.502	37	42.083	A	1.580	5.843	4.167	56.13	1.040	0.000
435.00-430.00					B	1.580	5.843		56.13	2.210	0.000
					C	1.580	5.843		56.13	1.531	0.000
T58	427.50	1.497	37	42.083	A	1.580	6.030	4.167	54.76	1.040	0.000
430.00-425.00					B	1.580	6.030		54.76	2.210	0.000
					C	1.580	6.030		54.76	1.531	0.000
T59	422.50	1.492	37	42.083	A	1.580	6.030	4.167	54.76	1.040	0.000
425.00-420.00					B	1.580	6.030		54.76	2.210	0.000
					C	1.580	6.030		54.76	1.531	0.000
T60	417.50	1.487	37	42.083	A	1.580	6.030	4.167	54.76	1.040	0.000
420.00-415.00					B	1.580	6.030		54.76	2.210	0.000
					C	1.580	6.030		54.76	1.531	0.000
T61	412.50	1.481	37	42.083	A	1.580	6.030	4.167	54.76	1.040	0.000
415.00-410.00					B	1.580	6.030		54.76	2.210	0.000
					C	1.580	6.030		54.76	1.531	0.000
T62	407.50	1.476	37	42.083	A	1.580	5.843	4.167	56.13	1.040	0.000
410.00-405.00					B	1.580	5.843		56.13	2.210	0.000
					C	1.580	5.843		56.13	1.531	0.000
T63	402.50	1.471	37	42.083	A	1.580	5.843	4.167	56.13	1.040	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
405.00-400.00					B	1.580	5.843		56.13	2.210	0.000
					C	1.580	5.843		56.13	1.531	0.000
T64	390.00	1.458	37	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000
400.00-380.00					B	6.319	23.374		56.13	8.840	0.000
					C	6.319	23.374		56.13	6.125	0.000
T65	370.00	1.436	37	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000
380.00-360.00					B	6.319	23.374		56.13	8.840	0.000
					C	6.319	23.374		56.13	6.125	0.000
T66	350.00	1.414	36	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000
360.00-340.00					B	6.319	23.374		56.13	10.649	0.000
					C	6.319	23.374		56.13	6.125	0.000
T67	330.00	1.39	36	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000
340.00-320.00					B	6.319	23.374		56.13	12.860	0.000
					C	6.319	23.374		56.13	6.125	0.000
T68	310.00	1.365	36	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000
320.00-300.00					B	6.319	23.374		56.13	12.860	0.000
					C	6.319	23.374		56.13	6.125	0.000
T69	290.00	1.34	36	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000
300.00-280.00					B	6.319	23.374		56.13	12.860	0.000
					C	6.319	23.374		56.13	6.125	0.000
T70	277.50	1.323	36	42.083	A	1.580	5.843	4.167	56.13	1.735	0.000
280.00-275.00					B	1.580	5.843		56.13	3.215	0.000
					C	1.580	5.843		56.13	1.531	0.000
T71	272.50	1.316	36	42.083	A	1.580	5.843	4.167	56.13	1.735	0.000
275.00-270.00					B	1.580	5.843		56.13	3.215	0.000
					C	1.580	5.843		56.13	1.531	0.000
T72	267.50	1.309	36	42.083	A	1.580	6.030	4.167	54.76	1.735	0.000
270.00-265.00					B	1.580	6.030		54.76	3.215	0.000
					C	1.580	6.030		54.76	1.531	0.000
T73	262.50	1.302	36	42.083	A	1.580	6.030	4.167	54.76	1.735	0.000
265.00-260.00					B	1.580	6.030		54.76	3.215	0.000
					C	1.580	6.030		54.76	1.531	0.000
T74	257.50	1.295	36	42.083	A	1.580	6.030	4.167	54.76	1.735	0.000
260.00-255.00					B	1.580	6.030		54.76	3.215	0.000
					C	1.580	6.030		54.76	1.531	0.000
T75	252.50	1.288	37	42.083	A	1.580	6.030	4.167	54.76	1.735	0.000
255.00-250.00					B	1.580	6.030		54.76	3.215	0.000
					C	1.580	6.030		54.76	1.531	0.000
T76	247.50	1.28	37	42.083	A	1.580	5.843	4.167	56.13	1.735	0.000
250.00-245.00					B	1.580	5.843		56.13	3.215	0.000
					C	1.580	5.843		56.13	1.531	0.000
T77	242.50	1.273	37	42.083	A	1.580	5.843	4.167	56.13	1.735	0.000
245.00-240.00					B	1.580	5.843		56.13	3.215	0.000
					C	1.580	5.843		56.13	1.531	0.000
T78	230.00	1.254	37	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000
240.00-220.00					B	6.319	23.374		56.13	12.860	0.000
					C	6.319	23.374		56.13	6.125	0.000
T79	210.00	1.222	37	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000
220.00-200.00					B	6.319	23.374		56.13	12.860	0.000
					C	6.319	23.374		56.13	6.125	0.000
T80	190.00	1.187	37	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000
200.00-180.00					B	6.319	23.374		56.13	13.421	0.000
					C	6.319	23.374		56.13	27.487	0.000
T81	170.00	1.15	38	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000
180.00-160.00					B	6.319	23.374		56.13	13.520	0.000
					C	6.319	23.374		56.13	38.245	0.000
T82	150.00	1.11	38	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000
160.00-140.00					B	6.319	23.374		56.13	13.520	0.000
					C	6.319	23.374		56.13	38.245	0.000
T83	130.00	1.065	39	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
140.00-120.00					B	6.319	23.374		56.13	13.520	0.000
					C	6.319	23.374		56.13	38.235	0.000
T84	117.50	1.035	39	42.083	A	1.580	5.843	4.167	56.13	1.735	0.000
120.00-115.00					B	1.580	5.843		56.13	3.380	0.000
					C	1.580	5.843		56.13	9.552	0.000
T85	112.50	1.022	39	42.083	A	1.580	5.843	4.167	56.13	1.735	0.000
115.00-110.00					B	1.580	5.843		56.13	3.380	0.000
					C	1.580	5.843		56.13	9.549	0.000
T86	107.50	1.009	39	42.083	A	1.580	6.030	4.167	54.76	1.735	0.000
110.00-105.00					B	1.580	6.030		54.76	3.380	0.000
					C	1.580	6.030		54.76	9.547	0.000
T87	102.50	0.995	40	42.083	A	1.580	6.030	4.167	54.76	1.735	0.000
105.00-100.00					B	1.580	6.030		54.76	3.380	0.000
					C	1.580	6.030		54.76	9.544	0.000
T88	97.50	0.981	40	42.083	A	1.580	6.030	4.167	54.76	1.735	0.000
100.00-95.00					B	1.580	6.030		54.76	3.380	0.000
					C	1.580	6.030		54.76	9.542	0.000
T89	92.50	0.966	40	42.083	A	1.580	6.030	4.167	54.76	1.735	0.000
95.00-90.00					B	1.580	6.030		54.76	3.380	0.000
					C	1.580	6.030		54.76	9.540	0.000
T90	87.50	0.951	40	42.083	A	1.580	5.843	4.167	56.13	1.735	0.000
90.00-85.00					B	1.580	5.843		56.13	3.380	0.000
					C	1.580	5.843		56.13	9.538	0.000
T91	82.50	0.935	40	42.083	A	1.580	5.843	4.167	56.13	1.735	0.000
85.00-80.00					B	1.580	5.843		56.13	3.380	0.000
					C	1.580	5.843		56.13	9.536	0.000
T92	70.00	0.892	40	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000
80.00-60.00					B	6.319	23.374		56.13	13.520	0.000
					C	6.319	23.374		56.13	38.136	0.000
T93	50.00	0.811	40	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000
60.00-40.00					B	6.319	23.374		56.13	13.520	0.000
					C	6.319	23.374		56.13	38.159	0.000
T94	30.00	0.701	38	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000
40.00-20.00					B	6.319	23.374		56.13	13.520	0.000
					C	6.319	23.374		56.13	38.245	0.000
T95	17.50	0.7	41	42.083	A	1.580	5.843	4.167	56.13	1.735	0.000
20.00-15.00					B	1.580	5.843		56.13	3.380	0.000
					C	1.580	5.843		56.13	9.528	0.000
T96 15.00-7.00	11.00	0.7	42	67.333	A	10.043	6.667	6.667	39.90	2.776	0.000
					B	10.043	6.667		39.90	5.408	0.000
					C	10.043	6.667		39.90	15.205	0.000
T97 7.00-0.00	3.50	0.7	44	31.359	A	36.577	6.989	6.989	16.04	2.429	0.000
					B	36.577	6.989		16.04	4.732	0.000
					C	36.577	6.989		16.04	13.264	0.000

Tower Pressure - With Ice

G_H = 0.850 (base tower), 0.850 (upper structure)

Section Elevation ft	z ft	K_Z	q_z psf	t_Z in	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
L1	1120.91	1.971	11	2.1002	125.237	A	0.000	125.237	125.237	100.00	0.000	0.000
1151.90-1089.80						B	0.000	125.237		100.00	0.000	0.000
						C	0.000	125.237		100.00	64.121	0.000

Section Elevation ft	z ft	K_Z	q_z psf	t_Z in	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
T1	1087.35	1.954	11	2.1003	42.446	A	14.064	13.439	6.493	23.61	0.000	0.000
1089.80-1084.90						B	14.064	13.439		23.61	0.000	0.000
						C	14.064	13.439		23.61	5.060	0.000
T2	1082.45	1.952	11	2.1003	42.446	A	1.602	17.373	6.493	34.22	0.000	0.000
1084.90-1080.00						B	1.602	17.373		34.22	0.000	0.000
						C	1.602	17.373		34.22	5.060	0.000
T3	1070.00	1.945	11	2.1003	173.251	A	6.406	69.452	26.502	34.94	0.000	0.000
1080.00-1060.00						B	6.406	69.452		34.94	14.055	0.000
						C	6.406	69.452		34.94	20.651	0.000
T4	1050.00	1.935	11	2.1004	173.251	A	6.406	69.454	26.502	34.94	0.000	0.000
1060.00-1040.00						B	6.406	69.454		34.94	21.623	0.000
						C	6.406	69.454		34.94	20.651	0.000
T5	1030.00	1.924	10	2.1004	173.251	A	6.406	69.455	26.503	34.94	0.000	0.000
1040.00-1020.00						B	6.406	69.455		34.94	21.623	0.000
						C	6.406	69.455		34.94	20.652	0.000
T6	1010.00	1.913	10	2.1005	173.252	A	6.406	69.457	26.503	34.94	0.000	0.000
1020.00-1000.00						B	6.406	69.457		34.94	21.624	0.000
						C	6.406	69.457		34.94	20.652	0.000
T7	990.00	1.903	10	2.1006	173.252	A	6.406	69.458	26.504	34.94	16.772	0.000
1000.00-980.00						B	6.406	69.458		34.94	21.625	0.000
						C	6.406	69.458		34.94	20.652	0.000
T8	970.00	1.891	10	2.1007	173.252	A	6.406	69.461	26.504	34.94	20.965	0.000
980.00-960.00						B	6.406	69.461		34.94	21.625	0.000
						C	6.406	69.461		34.94	20.653	0.000
T9	950.00	1.88	10	2.0998	174.499	A	6.367	71.645	28.998	37.17	20.958	0.000
960.00-940.00						B	6.367	71.645		37.17	21.618	0.000
						C	6.367	71.645		37.17	20.649	0.000
T10	937.50	1.873	10	2.0971	43.623	A	1.589	17.881	7.245	37.21	5.234	0.000
940.00-935.00						B	1.589	17.881		37.21	5.399	0.000
						C	1.589	17.881		37.21	5.160	0.000
T11	932.50	1.87	10	2.0960	43.622	A	1.589	17.875	7.243	37.21	5.232	0.000
935.00-930.00						B	1.589	17.875		37.21	5.397	0.000
						C	1.589	17.875		37.21	5.158	0.000
T12	927.50	1.867	10	2.0949	43.621	A	1.589	18.056	7.241	36.86	5.230	0.000
930.00-925.00						B	1.589	18.056		36.86	5.395	0.000
						C	1.589	18.056		36.86	5.157	0.000
T13	922.50	1.865	10	2.0938	43.620	A	1.589	18.049	7.240	36.87	5.228	0.000
925.00-920.00						B	1.589	18.049		36.87	5.393	0.000
						C	1.589	18.049		36.87	5.156	0.000
T14	917.50	1.862	10	2.0927	43.619	A	1.589	18.043	7.238	36.87	5.225	0.000
920.00-915.00						B	1.589	18.043		36.87	5.390	0.000
						C	1.589	18.043		36.87	5.155	0.000
T15	912.50	1.859	10	2.0916	43.618	A	1.589	18.036	7.236	36.87	5.223	0.000
915.00-910.00						B	1.589	18.036		36.87	5.388	0.000
						C	1.589	18.036		36.87	5.154	0.000
T16	907.50	1.856	10	2.0905	43.617	A	1.589	17.842	7.234	37.23	5.221	0.000
910.00-905.00						B	1.589	17.842		37.23	5.386	0.000
						C	1.589	17.842		37.23	5.153	0.000
T17	902.50	1.853	10	2.0893	43.616	A	1.589	17.836	7.232	37.23	5.219	0.000
905.00-900.00						B	1.589	17.836		37.23	5.384	0.000
						C	1.589	17.836		37.23	5.152	0.000
T18	890.00	1.845	10	2.0865	174.455	A	6.354	71.276	28.910	37.24	20.852	0.000
900.00-880.00						B	6.354	71.276		37.24	21.512	0.000
						C	6.354	71.276		37.24	20.596	0.000
T19	870.00	1.834	10	2.0820	174.440	A	6.354	71.168	28.880	37.25	20.816	0.000
880.00-860.00						B	6.354	71.168		37.25	32.589	0.000
						C	6.354	71.168		37.25	20.578	0.000
T20	850.00	1.821	10	2.0774	174.425	A	6.354	71.059	28.849	37.27	20.779	0.000
860.00-840.00						B	6.354	71.059		37.27	33.769	0.000
						C	6.354	71.059		37.27	20.560	0.000

Section Elevation ft	z ft	K_Z	q_z psf	t_Z in	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
T21	830.00	1.809	10	2.0727	174.409	A	6.354	70.948	28.818	37.28	20.742	0.000
840.00-820.00						B	6.354	70.948		37.28	33.712	0.000
						C	6.354	70.948		37.28	20.541	0.000
T22	810.00	1.796	10	2.0680	174.393	A	6.354	70.835	28.786	37.29	20.704	0.000
820.00-800.00						B	6.354	70.835		37.29	33.655	0.000
						C	6.354	70.835		37.29	20.522	0.000
T23	790.00	1.784	10	2.0631	174.377	A	6.354	70.721	28.754	37.31	20.665	0.000
800.00-780.00						B	6.354	70.721		37.31	33.598	0.000
						C	6.354	70.721		37.31	20.503	0.000
T24	777.50	1.776	10	2.0601	43.592	A	1.589	17.662	7.183	37.32	5.160	0.000
780.00-775.00						B	1.589	17.662		37.32	8.390	0.000
						C	1.589	17.662		37.32	5.123	0.000
T25	772.50	1.772	10	2.0589	43.591	A	1.589	17.655	7.181	37.32	5.158	0.000
775.00-770.00						B	1.589	17.655		37.32	8.387	0.000
						C	1.589	17.655		37.32	5.121	0.000
T26	767.50	1.769	10	2.0576	43.590	A	1.589	17.835	7.179	36.96	5.155	0.000
770.00-765.00						B	1.589	17.835		36.96	8.383	0.000
						C	1.589	17.835		36.96	5.120	0.000
T27	762.50	1.766	10	2.0564	43.589	A	1.589	17.828	7.177	36.97	5.153	0.000
765.00-760.00						B	1.589	17.828		36.97	8.379	0.000
						C	1.589	17.828		36.97	5.119	0.000
T28	757.50	1.762	10	2.0552	43.588	A	1.589	17.820	7.175	36.97	5.150	0.000
760.00-755.00						B	1.589	17.820		36.97	8.376	0.000
						C	1.589	17.820		36.97	5.118	0.000
T29	752.50	1.759	10	2.0539	43.587	A	1.589	17.813	7.173	36.97	5.148	0.000
755.00-750.00						B	1.589	17.813		36.97	8.372	0.000
						C	1.589	17.813		36.97	5.116	0.000
T30	747.50	1.756	10	2.0527	43.586	A	1.589	17.618	7.171	37.34	5.145	0.000
750.00-745.00						B	1.589	17.618		37.34	8.368	0.000
						C	1.589	17.618		37.34	5.115	0.000
T31	742.50	1.752	10	2.0514	43.585	A	1.589	17.611	7.169	37.34	5.143	0.000
745.00-740.00						B	1.589	17.611		37.34	8.364	0.000
						C	1.589	17.611		37.34	5.114	0.000
T32	730.00	1.744	10	2.0483	174.328	A	6.354	70.369	28.655	37.35	20.547	0.000
740.00-720.00						B	6.354	70.369		37.35	33.420	0.000
						C	6.354	70.369		37.35	20.443	0.000
T33	710.00	1.73	9	2.0433	174.311	A	6.354	70.249	28.622	37.36	20.506	0.000
720.00-700.00						B	6.354	70.249		37.36	33.359	0.000
						C	6.354	70.249		37.36	20.423	0.000
T34	690.00	1.716	9	2.0382	174.294	A	6.354	70.128	28.588	37.38	20.465	0.000
700.00-680.00						B	6.354	70.128		37.38	33.298	0.000
						C	6.354	70.128		37.38	20.403	0.000
T35	670.00	1.702	9	2.0330	174.277	A	6.354	70.005	28.553	37.39	20.424	0.000
680.00-660.00						B	6.354	70.005		37.39	33.236	0.000
						C	6.354	70.005		37.39	20.382	0.000
T36	650.00	1.687	9	2.0278	174.259	A	6.354	69.883	28.519	37.41	20.383	0.000
660.00-640.00						B	6.354	69.883		37.41	33.174	0.000
						C	6.354	69.883		37.41	20.361	0.000
T37	630.00	1.672	9	2.0226	175.075	A	6.328	71.235	30.151	38.87	20.341	0.000
640.00-620.00						B	6.328	71.235		38.87	33.112	0.000
						C	6.328	71.235		38.87	20.341	0.000
T38	617.50	1.662	9	2.0194	43.766	A	1.580	17.781	7.532	38.91	5.079	0.000
620.00-615.00						B	1.580	17.781		38.91	8.268	0.000
						C	1.580	17.781		38.91	5.082	0.000
T39	612.50	1.659	9	2.0181	43.765	A	1.580	17.773	7.530	38.91	5.076	0.000
615.00-610.00						B	1.580	17.773		38.91	8.264	0.000
						C	1.580	17.773		38.91	5.081	0.000
T40	607.50	1.655	9	2.0168	43.764	A	1.580	17.952	7.528	38.54	5.074	0.000
610.00-605.00						B	1.580	17.952		38.54	8.260	0.000
						C	1.580	17.952		38.54	5.079	0.000

Section Elevation ft	z ft	K_Z	q_z psf	t_Z in	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
T41	602.50	1.651	9	2.0155	43.763	A	1.580	17.944	7.526	38.55	5.071	0.000
605.00-600.00						B	1.580	17.944		38.55	8.256	0.000
						C	1.580	17.944		38.55	5.078	0.000
T42	597.50	1.647	9	2.0142	43.762	A	1.580	17.936	7.524	38.55	5.068	0.000
600.00-595.00						B	1.580	17.936		38.55	8.252	0.000
						C	1.580	17.936		38.55	5.077	0.000
T43	592.50	1.643	9	2.0129	43.761	A	1.580	17.929	7.521	38.55	5.066	0.000
595.00-590.00						B	1.580	17.929		38.55	8.249	0.000
						C	1.580	17.929		38.55	5.075	0.000
T44	587.50	1.639	9	2.0116	43.760	A	1.580	17.735	7.519	38.93	5.063	0.000
590.00-585.00						B	1.580	17.735		38.93	8.245	0.000
						C	1.580	17.735		38.93	5.074	0.000
T45	582.50	1.635	9	2.0103	43.759	A	1.580	17.727	7.517	38.93	5.061	0.000
585.00-580.00						B	1.580	17.727		38.93	8.241	0.000
						C	1.580	17.727		38.93	5.073	0.000
T46	570.00	1.625	9	2.0070	174.607	A	6.332	70.093	29.214	38.23	20.216	0.000
580.00-560.00						B	6.332	70.093		38.23	32.924	0.000
						C	6.332	70.093		38.23	20.278	0.000
T47	550.00	1.608	9	2.0019	174.590	A	6.337	69.989	29.179	38.23	20.175	0.000
560.00-540.00						B	6.337	69.989		38.23	32.863	0.000
						C	6.337	69.989		38.23	20.258	0.000
T48	537.50	1.598	9	1.9987	43.645	A	1.584	15.019	7.290	43.90	5.037	0.000
540.00-535.00						B	1.584	15.019		43.90	8.206	0.000
						C	1.584	15.019		43.90	5.061	0.000
T49	532.50	1.594	9	1.9975	43.644	A	1.584	17.471	7.287	38.24	5.035	0.000
535.00-530.00						B	1.584	17.471		38.24	8.202	0.000
						C	1.584	17.471		38.24	5.060	0.000
T50	527.50	1.589	9	1.9962	43.643	A	1.584	17.463	7.285	38.25	5.032	0.000
530.00-525.00						B	1.584	17.463		38.25	8.199	0.000
						C	1.584	17.463		38.25	5.059	0.000
T51	522.50	1.585	9	1.9950	43.642	A	1.584	17.456	7.283	38.25	5.030	0.000
525.00-520.00						B	1.584	17.456		38.25	8.195	0.000
						C	1.584	17.456		38.25	5.057	0.000
T52	510.00	1.574	9	1.9919	174.556	A	6.337	69.751	29.113	38.26	20.095	0.000
520.00-500.00						B	6.337	69.751		38.26	32.743	0.000
						C	6.337	69.751		38.26	20.218	0.000
T53	490.00	1.556	9	1.9871	174.540	A	6.337	69.637	29.080	38.28	20.057	0.000
500.00-480.00						B	6.337	69.637		38.28	32.685	0.000
						C	6.337	69.637		38.28	20.198	0.000
T54	470.00	1.538	9	1.9824	174.525	A	6.337	69.527	29.050	38.29	20.019	0.000
480.00-460.00						B	6.337	69.527		38.29	32.629	0.000
						C	6.337	69.527		38.29	20.180	0.000
T55	450.00	1.519	9	1.9780	174.927	A	6.324	70.162	29.853	39.03	19.984	0.000
460.00-440.00						B	6.324	70.162		39.03	32.576	0.000
						C	6.324	70.162		39.03	20.162	0.000
T56	437.50	1.507	9	1.9754	43.729	A	1.580	17.521	7.459	39.05	4.991	0.000
440.00-435.00						B	1.580	17.521		39.05	8.136	0.000
						C	1.580	17.521		39.05	5.038	0.000
T57	432.50	1.502	9	1.9744	43.729	A	1.580	17.515	7.457	39.05	4.989	0.000
435.00-430.00						B	1.580	17.515		39.05	8.133	0.000
						C	1.580	17.515		39.05	5.037	0.000
T58	427.50	1.497	9	1.9734	43.728	A	1.580	17.695	7.456	38.68	4.987	0.000
430.00-425.00						B	1.580	17.695		38.68	8.130	0.000
						C	1.580	17.695		38.68	5.036	0.000
T59	422.50	1.492	9	1.9724	43.727	A	1.580	17.689	7.454	38.68	4.985	0.000
425.00-420.00						B	1.580	17.689		38.68	8.127	0.000
						C	1.580	17.689		38.68	5.035	0.000
T60	417.50	1.487	9	1.9715	43.726	A	1.580	17.684	7.452	38.69	4.983	0.000
420.00-415.00						B	1.580	17.684		38.69	8.124	0.000
						C	1.580	17.684		38.69	5.034	0.000

Section Elevation ft	z ft	K_Z	q_z psf	t_Z in	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
T61	412.50	1.481	9	1.9705	43.725	A	1.580	17.678	7.451	38.69	4.981	0.000
415.00-410.00						B	1.580	17.678		38.69	8.122	0.000
						C	1.580	17.678		38.69	5.033	0.000
T62	407.50	1.476	9	1.9696	43.725	A	1.580	17.487	7.449	39.07	4.979	0.000
410.00-405.00						B	1.580	17.487		39.07	8.119	0.000
						C	1.580	17.487		39.07	5.032	0.000
T63	402.50	1.471	9	1.9688	43.724	A	1.580	17.482	7.448	39.07	4.978	0.000
405.00-400.00						B	1.580	17.482		39.07	8.116	0.000
						C	1.580	17.482		39.07	5.031	0.000
T64	390.00	1.458	8	1.9667	174.889	A	6.319	69.878	29.778	39.08	30.540	0.000
400.00-380.00						B	6.319	69.878		39.08	32.440	0.000
						C	6.319	69.878		39.08	20.117	0.000
T65	370.00	1.436	8	1.9638	174.879	A	6.319	69.810	29.759	39.09	30.506	0.000
380.00-360.00						B	6.319	69.810		39.09	32.406	0.000
						C	6.319	69.810		39.09	20.105	0.000
T66	350.00	1.414	8	1.9615	174.872	A	6.319	69.755	29.743	39.10	30.478	0.000
360.00-340.00						B	6.319	69.755		39.10	37.718	0.000
						C	6.319	69.755		39.10	20.096	0.000
T67	330.00	1.39	8	1.9599	174.866	A	6.319	69.717	29.733	39.10	30.459	0.000
340.00-320.00						B	6.319	69.717		39.10	44.218	0.000
						C	6.319	69.717		39.10	20.090	0.000
T68	310.00	1.365	8	1.9591	174.864	A	6.319	69.698	29.727	39.11	30.449	0.000
320.00-300.00						B	6.319	69.698		39.11	44.205	0.000
						C	6.319	69.698		39.11	20.086	0.000
T69	290.00	1.34	8	1.9592	174.864	A	6.319	69.700	29.728	39.11	30.450	0.000
300.00-280.00						B	6.319	69.700		39.11	44.207	0.000
						C	6.319	69.700		39.11	20.087	0.000
T70	277.50	1.323	8	1.9598	43.716	A	1.580	17.428	7.433	39.10	7.614	0.000
280.00-275.00						B	1.580	17.428		39.10	11.054	0.000
						C	1.580	17.428		39.10	5.022	0.000
T71	272.50	1.316	8	1.9601	43.717	A	1.580	17.430	7.434	39.10	7.615	0.000
275.00-270.00						B	1.580	17.430		39.10	11.055	0.000
						C	1.580	17.430		39.10	5.023	0.000
T72	267.50	1.309	8	1.9605	43.717	A	1.580	17.619	7.434	38.72	7.617	0.000
270.00-265.00						B	1.580	17.619		38.72	11.057	0.000
						C	1.580	17.619		38.72	5.023	0.000
T73	262.50	1.302	8	1.9610	43.718	A	1.580	17.622	7.435	38.72	7.618	0.000
265.00-260.00						B	1.580	17.622		38.72	11.059	0.000
						C	1.580	17.622		38.72	5.024	0.000
T74	257.50	1.295	8	1.9616	43.718	A	1.580	17.626	7.436	38.72	7.620	0.000
260.00-255.00						B	1.580	17.626		38.72	11.061	0.000
						C	1.580	17.626		38.72	5.024	0.000
T75	252.50	1.288	8	1.9623	43.719	A	1.580	17.629	7.437	38.72	7.622	0.000
255.00-250.00						B	1.580	17.629		38.72	11.064	0.000
						C	1.580	17.629		38.72	5.025	0.000
T76	247.50	1.28	8	1.9630	43.719	A	1.580	17.448	7.438	39.09	7.624	0.000
250.00-245.00						B	1.580	17.448		39.09	11.067	0.000
						C	1.580	17.448		39.09	5.025	0.000
T77	242.50	1.273	8	1.9638	43.720	A	1.580	17.452	7.440	39.09	7.626	0.000
245.00-240.00						B	1.580	17.452		39.09	11.070	0.000
						C	1.580	17.452		39.09	5.026	0.000
T78	230.00	1.254	8	1.9662	174.887	A	6.319	69.866	29.775	39.08	30.534	0.000
240.00-220.00						B	6.319	69.866		39.08	44.319	0.000
						C	6.319	69.866		39.08	20.115	0.000
T79	210.00	1.222	9	1.9712	174.904	A	6.319	69.984	29.808	39.07	30.594	0.000
220.00-200.00						B	6.319	69.984		39.07	44.399	0.000
						C	6.319	69.984		39.07	20.135	0.000
T80	190.00	1.187	9	1.9776	174.925	A	6.319	70.136	29.851	39.04	30.672	0.000
200.00-180.00						B	6.319	70.136		39.04	51.787	0.000
						C	6.319	70.136		39.04	76.352	0.000

Section Elevation	z	K_Z	q_z	t_Z	A_G	Face	A_F	A_R	A_{leg}	Leg %	C_AA_A In Face	C_AA_A Out Face
ft	ft		psf	in	ft^2		ft^2	ft^2	ft^2		ft^2	ft^2
T81	170.00	1.15	9	1.9855	174.952	A	6.319	70.323	29.904	39.02	30.766	0.000
180.00-160.00						B	6.319	70.323		39.02	53.231	0.000
						C	6.319	70.323		39.02	100.607	0.000
T82	150.00	1.11	9	1.9948	174.983	A	6.319	70.541	29.965	38.99	30.877	0.000
160.00-140.00						B	6.319	70.541		38.99	53.415	0.000
						C	6.319	70.541		38.99	100.804	0.000
T83	130.00	1.065	9	2.0050	175.017	A	6.319	70.783	30.033	38.95	31.000	0.000
140.00-120.00						B	6.319	70.783		38.95	53.620	0.000
						C	6.319	70.783		38.95	101.022	0.000
T84	117.50	1.035	9	2.0116	43.760	A	1.580	17.735	7.519	38.93	7.770	0.000
120.00-115.00						B	1.580	17.735		38.93	13.438	0.000
						C	1.580	17.735		38.93	25.291	0.000
T85	112.50	1.022	9	2.0142	43.762	A	1.580	17.750	7.524	38.92	7.777	0.000
115.00-110.00						B	1.580	17.750		38.92	13.451	0.000
						C	1.580	17.750		38.92	25.304	0.000
T86	107.50	1.009	9	2.0167	43.764	A	1.580	17.951	7.528	38.54	7.785	0.000
110.00-105.00						B	1.580	17.951		38.54	13.463	0.000
						C	1.580	17.951		38.54	25.318	0.000
T87	102.50	0.995	9	2.0191	43.766	A	1.580	17.966	7.532	38.54	7.792	0.000
105.00-100.00						B	1.580	17.966		38.54	13.476	0.000
						C	1.580	17.966		38.54	25.331	0.000
T88	97.50	0.981	9	2.0215	43.768	A	1.580	17.980	7.536	38.53	7.799	0.000
100.00-95.00						B	1.580	17.980		38.53	13.487	0.000
						C	1.580	17.980		38.53	25.343	0.000
T89 95.00-90.00	92.50	0.966	9	2.0236	43.770	A	1.580	17.992	7.539	38.52	7.806	0.000
						B	1.580	17.992		38.52	13.498	0.000
						C	1.580	17.992		38.52	25.355	0.000
T90 90.00-85.00	87.50	0.951	9	2.0256	43.771	A	1.580	17.817	7.543	38.88	7.812	0.000
						B	1.580	17.817		38.88	13.508	0.000
						C	1.580	17.817		38.88	25.365	0.000
T91 85.00-80.00	82.50	0.935	9	2.0272	43.773	A	1.580	17.827	7.545	38.88	7.817	0.000
						B	1.580	17.827		38.88	13.516	0.000
						C	1.580	17.827		38.88	25.374	0.000
T92 80.00-60.00	70.00	0.892	9	2.0295	175.098	A	6.319	71.364	30.197	38.87	31.294	0.000
						B	6.319	71.364		38.87	54.111	0.000
						C	6.319	71.364		38.87	101.546	0.000
T93 60.00-40.00	50.00	0.811	9	2.0236	175.079	A	6.319	71.223	30.157	38.89	31.223	0.000
						B	6.319	71.223		38.89	53.992	0.000
						C	6.319	71.223		38.89	101.419	0.000
T94 40.00-20.00	30.00	0.701	9	1.9894	174.965	A	6.319	70.415	29.930	39.00	30.813	0.000
						B	6.319	70.415		39.00	53.309	0.000
						C	6.319	70.415		39.00	100.690	0.000
T95 20.00-15.00	17.50	0.7	9	1.9290	43.691	A	1.580	17.247	7.382	39.21	7.522	0.000
						B	1.580	17.247		39.21	13.025	0.000
						C	1.580	17.247		39.21	24.851	0.000
T96 15.00-7.00	11.00	0.7	10	1.8648	69.820	A	10.043	26.374	11.639	31.96	11.727	0.000
						B	10.043	26.374		31.96	20.326	0.000
						C	10.043	26.374		31.96	39.214	0.000
T97 7.00-0.00	3.50	0.7	10	1.6881	33.628	A	36.577	19.941	11.708	20.72	9.519	0.000
						B	36.577	19.941		20.72	16.549	0.000
						C	36.577	19.941		20.72	32.996	0.000

Tower Pressure - Service

G_H = 0.850 (base tower), 0.850 (upper structure)

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
L1	1120.91	1.971	15	103.500	A	0.000	103.500	103.500	100.00	0.000	0.000
1151.90-1089.					B	0.000	103.500		100.00	0.000	0.000
80					C	0.000	103.500		100.00	38.036	0.000
T1	1087.35	1.954	15	40.731	A	14.064	3.063	3.063	17.88	0.000	0.000
1089.80-1084.					B	14.064	3.063		17.88	0.000	0.000
90					C	14.064	3.063		17.88	1.501	0.000
T2	1082.45	1.952	15	40.731	A	1.602	4.941	3.063	46.81	0.000	0.000
1084.90-1080.					B	1.602	4.941		46.81	0.000	0.000
00					C	1.602	4.941		46.81	1.501	0.000
T3	1070.00	1.945	15	166.250	A	6.406	19.299	12.500	48.63	0.000	0.000
1080.00-1060.					B	6.406	19.299		48.63	3.133	0.000
00					C	6.406	19.299		48.63	6.125	0.000
T4	1050.00	1.935	15	166.250	A	6.406	19.299	12.500	48.63	0.000	0.000
1060.00-1040.					B	6.406	19.299		48.63	4.820	0.000
00					C	6.406	19.299		48.63	6.125	0.000
T5	1030.00	1.924	15	166.250	A	6.406	19.299	12.500	48.63	0.000	0.000
1040.00-1020.					B	6.406	19.299		48.63	4.820	0.000
00					C	6.406	19.299		48.63	6.125	0.000
T6	1010.00	1.913	15	166.250	A	6.406	19.299	12.500	48.63	0.000	0.000
1020.00-1000.					B	6.406	19.299		48.63	4.820	0.000
00					C	6.406	19.299		48.63	6.125	0.000
T7	990.00	1.903	15	166.250	A	6.406	19.299	12.500	48.63	3.328	0.000
1000.00-980.0					B	6.406	19.299		48.63	4.820	0.000
0					C	6.406	19.299		48.63	6.125	0.000
T8	970.00	1.891	15	166.250	A	6.406	19.299	12.500	48.63	4.160	0.000
980.00-960.00					B	6.406	19.299		48.63	4.820	0.000
					C	6.406	19.299		48.63	6.125	0.000
T9	950.00	1.88	15	167.500	A	6.367	21.751	15.000	53.35	4.160	0.000
960.00-940.00					B	6.367	21.751		53.35	4.820	0.000
					C	6.367	21.751		53.35	6.125	0.000
T10	937.50	1.873	15	41.875	A	1.589	5.436	3.750	53.38	1.040	0.000
940.00-935.00					B	1.589	5.436		53.38	1.205	0.000
					C	1.589	5.436		53.38	1.531	0.000
T11	932.50	1.87	15	41.875	A	1.589	5.436	3.750	53.38	1.040	0.000
935.00-930.00					B	1.589	5.436		53.38	1.205	0.000
					C	1.589	5.436		53.38	1.531	0.000
T12	927.50	1.867	15	41.875	A	1.589	5.623	3.750	52.00	1.040	0.000
930.00-925.00					B	1.589	5.623		52.00	1.205	0.000
					C	1.589	5.623		52.00	1.531	0.000
T13	922.50	1.865	15	41.875	A	1.589	5.623	3.750	52.00	1.040	0.000
925.00-920.00					B	1.589	5.623		52.00	1.205	0.000
					C	1.589	5.623		52.00	1.531	0.000
T14	917.50	1.862	15	41.875	A	1.589	5.623	3.750	52.00	1.040	0.000
920.00-915.00					B	1.589	5.623		52.00	1.205	0.000
					C	1.589	5.623		52.00	1.531	0.000
T15	912.50	1.859	15	41.875	A	1.589	5.623	3.750	52.00	1.040	0.000
915.00-910.00					B	1.589	5.623		52.00	1.205	0.000
					C	1.589	5.623		52.00	1.531	0.000
T16	907.50	1.856	15	41.875	A	1.589	5.436	3.750	53.38	1.040	0.000
910.00-905.00					B	1.589	5.436		53.38	1.205	0.000
					C	1.589	5.436		53.38	1.531	0.000
T17	902.50	1.853	15	41.875	A	1.589	5.436	3.750	53.38	1.040	0.000
905.00-900.00					B	1.589	5.436		53.38	1.205	0.000
					C	1.589	5.436		53.38	1.531	0.000
T18	890.00	1.845	14	167.500	A	6.354	21.744	15.000	53.38	4.160	0.000
900.00-880.00					B	6.354	21.744		53.38	4.820	0.000
					C	6.354	21.744		53.38	6.125	0.000
T19	870.00	1.834	14	167.500	A	6.354	21.744	15.000	53.38	4.160	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
880.00-860.00					B	6.354	21.744		53.38	8.438	0.000
					C	6.354	21.744		53.38	6.125	0.000
T20	850.00	1.821	14	167.500	A	6.354	21.744	15.000	53.38	4.160	0.000
860.00-840.00					B	6.354	21.744		53.38	8.840	0.000
					C	6.354	21.744		53.38	6.125	0.000
T21	830.00	1.809	14	167.500	A	6.354	21.744	15.000	53.38	4.160	0.000
840.00-820.00					B	6.354	21.744		53.38	8.840	0.000
					C	6.354	21.744		53.38	6.125	0.000
T22	810.00	1.796	14	167.500	A	6.354	21.744	15.000	53.38	4.160	0.000
820.00-800.00					B	6.354	21.744		53.38	8.840	0.000
					C	6.354	21.744		53.38	6.125	0.000
T23	790.00	1.784	14	167.500	A	6.354	21.744	15.000	53.38	4.160	0.000
800.00-780.00					B	6.354	21.744		53.38	8.840	0.000
					C	6.354	21.744		53.38	6.125	0.000
T24	777.50	1.776	14	41.875	A	1.589	5.436	3.750	53.38	1.040	0.000
780.00-775.00					B	1.589	5.436		53.38	2.210	0.000
					C	1.589	5.436		53.38	1.531	0.000
T25	772.50	1.772	14	41.875	A	1.589	5.436	3.750	53.38	1.040	0.000
775.00-770.00					B	1.589	5.436		53.38	2.210	0.000
					C	1.589	5.436		53.38	1.531	0.000
T26	767.50	1.769	14	41.875	A	1.589	5.623	3.750	52.00	1.040	0.000
770.00-765.00					B	1.589	5.623		52.00	2.210	0.000
					C	1.589	5.623		52.00	1.531	0.000
T27	762.50	1.766	14	41.875	A	1.589	5.623	3.750	52.00	1.040	0.000
765.00-760.00					B	1.589	5.623		52.00	2.210	0.000
					C	1.589	5.623		52.00	1.531	0.000
T28	757.50	1.762	14	41.875	A	1.589	5.623	3.750	52.00	1.040	0.000
760.00-755.00					B	1.589	5.623		52.00	2.210	0.000
					C	1.589	5.623		52.00	1.531	0.000
T29	752.50	1.759	14	41.875	A	1.589	5.623	3.750	52.00	1.040	0.000
755.00-750.00					B	1.589	5.623		52.00	2.210	0.000
					C	1.589	5.623		52.00	1.531	0.000
T30	747.50	1.756	14	41.875	A	1.589	5.436	3.750	53.38	1.040	0.000
750.00-745.00					B	1.589	5.436		53.38	2.210	0.000
					C	1.589	5.436		53.38	1.531	0.000
T31	742.50	1.752	14	41.875	A	1.589	5.436	3.750	53.38	1.040	0.000
745.00-740.00					B	1.589	5.436		53.38	2.210	0.000
					C	1.589	5.436		53.38	1.531	0.000
T32	730.00	1.744	14	167.500	A	6.354	21.744	15.000	53.38	4.160	0.000
740.00-720.00					B	6.354	21.744		53.38	8.840	0.000
					C	6.354	21.744		53.38	6.125	0.000
T33	710.00	1.73	14	167.500	A	6.354	21.744	15.000	53.38	4.160	0.000
720.00-700.00					B	6.354	21.744		53.38	8.840	0.000
					C	6.354	21.744		53.38	6.125	0.000
T34	690.00	1.716	14	167.500	A	6.354	21.744	15.000	53.38	4.160	0.000
700.00-680.00					B	6.354	21.744		53.38	8.840	0.000
					C	6.354	21.744		53.38	6.125	0.000
T35	670.00	1.702	13	167.500	A	6.354	21.744	15.000	53.38	4.160	0.000
680.00-660.00					B	6.354	21.744		53.38	8.840	0.000
					C	6.354	21.744		53.38	6.125	0.000
T36	650.00	1.687	13	167.500	A	6.354	21.744	15.000	53.38	4.160	0.000
660.00-640.00					B	6.354	21.744		53.38	8.840	0.000
					C	6.354	21.744		53.38	6.125	0.000
T37	630.00	1.672	13	168.333	A	6.328	23.378	16.667	56.10	4.160	0.000
640.00-620.00					B	6.328	23.378		56.10	8.840	0.000
					C	6.328	23.378		56.10	6.125	0.000
T38	617.50	1.662	13	42.083	A	1.580	5.843	4.167	56.13	1.040	0.000
620.00-615.00					B	1.580	5.843		56.13	2.210	0.000
					C	1.580	5.843		56.13	1.531	0.000
T39	612.50	1.659	13	42.083	A	1.580	5.843	4.167	56.13	1.040	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
615.00-610.00					B	1.580	5.843		56.13	2.210	0.000
					C	1.580	5.843		56.13	1.531	0.000
T40	607.50	1.655	13	42.083	A	1.580	6.030	4.167	54.76	1.040	0.000
610.00-605.00					B	1.580	6.030		54.76	2.210	0.000
					C	1.580	6.030		54.76	1.531	0.000
T41	602.50	1.651	13	42.083	A	1.580	6.030	4.167	54.76	1.040	0.000
605.00-600.00					B	1.580	6.030		54.76	2.210	0.000
					C	1.580	6.030		54.76	1.531	0.000
T42	597.50	1.647	13	42.083	A	1.580	6.030	4.167	54.76	1.040	0.000
600.00-595.00					B	1.580	6.030		54.76	2.210	0.000
					C	1.580	6.030		54.76	1.531	0.000
T43	592.50	1.643	13	42.083	A	1.580	6.030	4.167	54.76	1.040	0.000
595.00-590.00					B	1.580	6.030		54.76	2.210	0.000
					C	1.580	6.030		54.76	1.531	0.000
T44	587.50	1.639	13	42.083	A	1.580	5.843	4.167	56.13	1.040	0.000
590.00-585.00					B	1.580	5.843		56.13	2.210	0.000
					C	1.580	5.843		56.13	1.531	0.000
T45	582.50	1.635	13	42.083	A	1.580	5.843	4.167	56.13	1.040	0.000
585.00-580.00					B	1.580	5.843		56.13	2.210	0.000
					C	1.580	5.843		56.13	1.531	0.000
T46	570.00	1.625	13	167.917	A	6.332	22.556	15.833	54.81	4.160	0.000
580.00-560.00					B	6.332	22.556		54.81	8.840	0.000
					C	6.332	22.556		54.81	6.125	0.000
T47	550.00	1.608	13	167.917	A	6.337	22.559	15.833	54.80	4.160	0.000
560.00-540.00					B	6.337	22.559		54.80	8.840	0.000
					C	6.337	22.559		54.80	6.125	0.000
T48	537.50	1.598	13	41.979	A	1.584	5.100	3.958	59.22	1.040	0.000
540.00-535.00					B	1.584	5.100		59.22	2.210	0.000
					C	1.584	5.100		59.22	1.531	0.000
T49	532.50	1.594	13	41.979	A	1.584	5.640	3.958	54.80	1.040	0.000
535.00-530.00					B	1.584	5.640		54.80	2.210	0.000
					C	1.584	5.640		54.80	1.531	0.000
T50	527.50	1.589	13	41.979	A	1.584	5.640	3.958	54.80	1.040	0.000
530.00-525.00					B	1.584	5.640		54.80	2.210	0.000
					C	1.584	5.640		54.80	1.531	0.000
T51	522.50	1.585	13	41.979	A	1.584	5.640	3.958	54.80	1.040	0.000
525.00-520.00					B	1.584	5.640		54.80	2.210	0.000
					C	1.584	5.640		54.80	1.531	0.000
T52	510.00	1.574	13	167.917	A	6.337	22.559	15.833	54.80	4.160	0.000
520.00-500.00					B	6.337	22.559		54.80	8.840	0.000
					C	6.337	22.559		54.80	6.125	0.000
T53	490.00	1.556	13	167.917	A	6.337	22.559	15.833	54.80	4.160	0.000
500.00-480.00					B	6.337	22.559		54.80	8.840	0.000
					C	6.337	22.559		54.80	6.125	0.000
T54	470.00	1.538	13	167.917	A	6.337	22.559	15.833	54.80	4.160	0.000
480.00-460.00					B	6.337	22.559		54.80	8.840	0.000
					C	6.337	22.559		54.80	6.125	0.000
T55	450.00	1.519	12	168.333	A	6.324	23.376	16.667	56.12	4.160	0.000
460.00-440.00					B	6.324	23.376		56.12	8.840	0.000
					C	6.324	23.376		56.12	6.125	0.000
T56	437.50	1.507	12	42.083	A	1.580	5.843	4.167	56.13	1.040	0.000
440.00-435.00					B	1.580	5.843		56.13	2.210	0.000
					C	1.580	5.843		56.13	1.531	0.000
T57	432.50	1.502	12	42.083	A	1.580	5.843	4.167	56.13	1.040	0.000
435.00-430.00					B	1.580	5.843		56.13	2.210	0.000
					C	1.580	5.843		56.13	1.531	0.000
T58	427.50	1.497	12	42.083	A	1.580	6.030	4.167	54.76	1.040	0.000
430.00-425.00					B	1.580	6.030		54.76	2.210	0.000
					C	1.580	6.030		54.76	1.531	0.000
T59	422.50	1.492	12	42.083	A	1.580	6.030	4.167	54.76	1.040	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
425.00-420.00					B	1.580	6.030		54.76	2.210	0.000
					C	1.580	6.030		54.76	1.531	0.000
T60	417.50	1.487	12	42.083	A	1.580	6.030	4.167	54.76	1.040	0.000
420.00-415.00					B	1.580	6.030		54.76	2.210	0.000
					C	1.580	6.030		54.76	1.531	0.000
T61	412.50	1.481	12	42.083	A	1.580	6.030	4.167	54.76	1.040	0.000
415.00-410.00					B	1.580	6.030		54.76	2.210	0.000
					C	1.580	6.030		54.76	1.531	0.000
T62	407.50	1.476	12	42.083	A	1.580	5.843	4.167	56.13	1.040	0.000
410.00-405.00					B	1.580	5.843		56.13	2.210	0.000
					C	1.580	5.843		56.13	1.531	0.000
T63	402.50	1.471	12	42.083	A	1.580	5.843	4.167	56.13	1.040	0.000
405.00-400.00					B	1.580	5.843		56.13	2.210	0.000
					C	1.580	5.843		56.13	1.531	0.000
T64	390.00	1.458	12	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000
400.00-380.00					B	6.319	23.374		56.13	8.840	0.000
					C	6.319	23.374		56.13	6.125	0.000
T65	370.00	1.436	12	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000
380.00-360.00					B	6.319	23.374		56.13	8.840	0.000
					C	6.319	23.374		56.13	6.125	0.000
T66	350.00	1.414	12	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000
360.00-340.00					B	6.319	23.374		56.13	10.649	0.000
					C	6.319	23.374		56.13	6.125	0.000
T67	330.00	1.39	12	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000
340.00-320.00					B	6.319	23.374		56.13	12.860	0.000
					C	6.319	23.374		56.13	6.125	0.000
T68	310.00	1.365	12	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000
320.00-300.00					B	6.319	23.374		56.13	12.860	0.000
					C	6.319	23.374		56.13	6.125	0.000
T69	290.00	1.34	12	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000
300.00-280.00					B	6.319	23.374		56.13	12.860	0.000
					C	6.319	23.374		56.13	6.125	0.000
T70	277.50	1.323	12	42.083	A	1.580	5.843	4.167	56.13	1.735	0.000
280.00-275.00					B	1.580	5.843		56.13	3.215	0.000
					C	1.580	5.843		56.13	1.531	0.000
T71	272.50	1.316	12	42.083	A	1.580	5.843	4.167	56.13	1.735	0.000
275.00-270.00					B	1.580	5.843		56.13	3.215	0.000
					C	1.580	5.843		56.13	1.531	0.000
T72	267.50	1.309	12	42.083	A	1.580	6.030	4.167	54.76	1.735	0.000
270.00-265.00					B	1.580	6.030		54.76	3.215	0.000
					C	1.580	6.030		54.76	1.531	0.000
T73	262.50	1.302	12	42.083	A	1.580	6.030	4.167	54.76	1.735	0.000
265.00-260.00					B	1.580	6.030		54.76	3.215	0.000
					C	1.580	6.030		54.76	1.531	0.000
T74	257.50	1.295	12	42.083	A	1.580	6.030	4.167	54.76	1.735	0.000
260.00-255.00					B	1.580	6.030		54.76	3.215	0.000
					C	1.580	6.030		54.76	1.531	0.000
T75	252.50	1.288	12	42.083	A	1.580	6.030	4.167	54.76	1.735	0.000
255.00-250.00					B	1.580	6.030		54.76	3.215	0.000
					C	1.580	6.030		54.76	1.531	0.000
T76	247.50	1.28	12	42.083	A	1.580	5.843	4.167	56.13	1.735	0.000
250.00-245.00					B	1.580	5.843		56.13	3.215	0.000
					C	1.580	5.843		56.13	1.531	0.000
T77	242.50	1.273	12	42.083	A	1.580	5.843	4.167	56.13	1.735	0.000
245.00-240.00					B	1.580	5.843		56.13	3.215	0.000
					C	1.580	5.843		56.13	1.531	0.000
T78	230.00	1.254	12	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000
240.00-220.00					B	6.319	23.374		56.13	12.860	0.000
					C	6.319	23.374		56.13	6.125	0.000
T79	210.00	1.222	12	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
220.00-200.00					B	6.319	23.374		56.13	12.860	0.000
					C	6.319	23.374		56.13	6.125	0.000
T80	190.00	1.187	12	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000
200.00-180.00					B	6.319	23.374		56.13	13.421	0.000
					C	6.319	23.374		56.13	27.487	0.000
T81	170.00	1.15	13	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000
180.00-160.00					B	6.319	23.374		56.13	13.520	0.000
					C	6.319	23.374		56.13	38.245	0.000
T82	150.00	1.11	13	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000
160.00-140.00					B	6.319	23.374		56.13	13.520	0.000
					C	6.319	23.374		56.13	38.245	0.000
T83	130.00	1.065	13	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000
140.00-120.00					B	6.319	23.374		56.13	13.520	0.000
					C	6.319	23.374		56.13	38.235	0.000
T84	117.50	1.035	13	42.083	A	1.580	5.843	4.167	56.13	1.735	0.000
120.00-115.00					B	1.580	5.843		56.13	3.380	0.000
					C	1.580	5.843		56.13	9.552	0.000
T85	112.50	1.022	13	42.083	A	1.580	5.843	4.167	56.13	1.735	0.000
115.00-110.00					B	1.580	5.843		56.13	3.380	0.000
					C	1.580	5.843		56.13	9.549	0.000
T86	107.50	1.009	13	42.083	A	1.580	6.030	4.167	54.76	1.735	0.000
110.00-105.00					B	1.580	6.030		54.76	3.380	0.000
					C	1.580	6.030		54.76	9.547	0.000
T87	102.50	0.995	13	42.083	A	1.580	6.030	4.167	54.76	1.735	0.000
105.00-100.00					B	1.580	6.030		54.76	3.380	0.000
					C	1.580	6.030		54.76	9.544	0.000
T88	97.50	0.981	13	42.083	A	1.580	6.030	4.167	54.76	1.735	0.000
100.00-95.00					B	1.580	6.030		54.76	3.380	0.000
					C	1.580	6.030		54.76	9.542	0.000
T89	92.50	0.966	13	42.083	A	1.580	6.030	4.167	54.76	1.735	0.000
95.00-90.00					B	1.580	6.030		54.76	3.380	0.000
					C	1.580	6.030		54.76	9.540	0.000
T90	87.50	0.951	13	42.083	A	1.580	5.843	4.167	56.13	1.735	0.000
90.00-85.00					B	1.580	5.843		56.13	3.380	0.000
					C	1.580	5.843		56.13	9.538	0.000
T91	82.50	0.935	13	42.083	A	1.580	5.843	4.167	56.13	1.735	0.000
85.00-80.00					B	1.580	5.843		56.13	3.380	0.000
					C	1.580	5.843		56.13	9.536	0.000
T92	70.00	0.892	13	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000
80.00-60.00					B	6.319	23.374		56.13	13.520	0.000
					C	6.319	23.374		56.13	38.136	0.000
T93	50.00	0.811	13	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000
60.00-40.00					B	6.319	23.374		56.13	13.520	0.000
					C	6.319	23.374		56.13	38.159	0.000
T94	30.00	0.701	13	168.333	A	6.319	23.374	16.667	56.13	6.940	0.000
40.00-20.00					B	6.319	23.374		56.13	13.520	0.000
					C	6.319	23.374		56.13	38.245	0.000
T95	17.50	0.7	13	42.083	A	1.580	5.843	4.167	56.13	1.735	0.000
20.00-15.00					B	1.580	5.843		56.13	3.380	0.000
					C	1.580	5.843		56.13	9.528	0.000
T96 15.00-7.00	11.00	0.7	14	67.333	A	10.043	6.667	6.667	39.90	2.776	0.000
					B	10.043	6.667		39.90	5.408	0.000
					C	10.043	6.667		39.90	15.205	0.000
T97 7.00-0.00	3.50	0.7	15	31.359	A	36.577	6.989	6.989	16.04	2.429	0.000
					B	36.577	6.989		16.04	4.732	0.000
					C	36.577	6.989		16.04	13.264	0.000

Tower Forces - No Ice - Wind Normal To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft^2	F lb	w plf	Ctrl. Face
L1	424.14	10343.38	A	1	0.777	46	1	1	103.500	3171.41	51.07	B
1151.90-1089.			B	1	0.777		1	1	103.500			
80			C	1	0.6		1	1	103.500			
T1	33.47	2474.36	A	0.42	2.025	46	1	1	15.974	1323.68	270.14	C
1089.80-1084.			B	0.42	2.025		1	1	15.974			
90			C	0.42	2.025		1	1	15.974			
T2	33.47	1026.80	A	0.161	2.733	46	1	1	4.226	509.67	104.01	C
1084.90-1080.			B	0.161	2.733		1	1	4.226			
00			C	0.161	2.733		1	1	4.226			
T3	162.73	3798.26	A	0.155	2.755	46	1	1	16.603	2092.12	104.61	C
1080.00-1060.			B	0.155	2.755		1	1	16.603			
00			C	0.155	2.755		1	1	16.603			
T4	176.80	3798.26	A	0.155	2.755	46	1	1	16.610	2120.94	106.05	C
1060.00-1040.			B	0.155	2.755		1	1	16.610			
00			C	0.155	2.755		1	1	16.610			
T5	176.80	3798.26	A	0.155	2.755	45	1	1	16.617	2110.24	105.51	C
1040.00-1020.			B	0.155	2.755		1	1	16.617			
00			C	0.155	2.755		1	1	16.617			
T6	176.80	3798.26	A	0.155	2.755	45	1	1	16.624	2099.39	104.97	C
1020.00-1000.			B	0.155	2.755		1	1	16.624			
00			C	0.155	2.755		1	1	16.624			
T7	186.88	3798.26	A	0.155	2.755	45	1	1	16.631	2164.47	108.22	C
1000.00-980.0			B	0.155	2.755		1	1	16.631			
0			C	0.155	2.755		1	1	16.631			
T8	189.40	3798.26	A	0.155	2.755	45	1	1	16.639	2171.82	108.59	C
980.00-960.00			B	0.155	2.755		1	1	16.639			
			C	0.155	2.755		1	1	16.639			
T9	189.40	4790.45	A	0.168	2.707	44	1	1	17.329	2199.70	109.99	C
960.00-940.00			B	0.168	2.707		1	1	17.329			
			C	0.168	2.707		1	1	17.329			
T10	47.35	1197.61	A	0.168	2.707	44	1	1	4.329	547.69	109.54	C
940.00-935.00			B	0.168	2.707		1	1	4.329			
			C	0.168	2.707		1	1	4.329			
T11	47.35	1197.61	A	0.168	2.707	44	1	1	4.330	546.94	109.39	C
935.00-930.00			B	0.168	2.707		1	1	4.330			
			C	0.168	2.707		1	1	4.330			
T12	47.35	1287.44	A	0.172	2.691	44	1	1	4.445	555.16	111.03	C
930.00-925.00			B	0.172	2.691		1	1	4.445			
			C	0.172	2.691		1	1	4.445			
T13	47.35	1287.44	A	0.172	2.691	44	1	1	4.446	554.39	110.88	C
925.00-920.00			B	0.172	2.691		1	1	4.446			
			C	0.172	2.691		1	1	4.446			
T14	47.35	1287.44	A	0.172	2.691	44	1	1	4.447	553.62	110.72	C
920.00-915.00			B	0.172	2.691		1	1	4.447			
			C	0.172	2.691		1	1	4.447			
T15	47.35	1287.44	A	0.172	2.691	44	1	1	4.447	552.85	110.57	C
915.00-910.00			B	0.172	2.691		1	1	4.447			
			C	0.172	2.691		1	1	4.447			
T16	47.35	1197.61	A	0.168	2.707	44	1	1	4.333	543.18	108.64	C
910.00-905.00			B	0.168	2.707		1	1	4.333			
			C	0.168	2.707		1	1	4.333			
T17	47.35	1197.61	A	0.168	2.707	44	1	1	4.334	542.42	108.48	C
905.00-900.00			B	0.168	2.707		1	1	4.334			
			C	0.168	2.707		1	1	4.334			
T18	189.40	4790.45	A	0.168	2.707	44	1	1	17.343	2162.05	108.10	C
900.00-880.00			B	0.168	2.707		1	1	17.343			
			C	0.168	2.707		1	1	17.343			

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft^2	F lb	w plf	Ctrl. Face
T19	198.58	4790.45	A	0.168	2.707	43	1	1	17.354	2229.49	111.47	C
880.00-860.00			B	0.168	2.707		1	1	17.354			
			C	0.168	2.707		1	1	17.354			
T20	199.60	4790.45	A	0.168	2.707	43	1	1	17.365	2225.31	111.27	C
860.00-840.00			B	0.168	2.707		1	1	17.365			
			C	0.168	2.707		1	1	17.365			
T21	199.60	4790.45	A	0.168	2.707	43	1	1	17.376	2212.12	110.61	C
840.00-820.00			B	0.168	2.707		1	1	17.376			
			C	0.168	2.707		1	1	17.376			
T22	199.60	4790.45	A	0.168	2.707	42	1	1	17.388	2198.78	109.94	C
820.00-800.00			B	0.168	2.707		1	1	17.388			
			C	0.168	2.707		1	1	17.388			
T23	199.60	4790.45	A	0.168	2.707	42	1	1	17.399	2185.30	109.26	C
800.00-780.00			B	0.168	2.707		1	1	17.399			
			C	0.168	2.707		1	1	17.399			
T24	49.90	1197.61	A	0.168	2.707	42	1	1	4.352	544.20	108.84	C
780.00-775.00			B	0.168	2.707		1	1	4.352			
			C	0.168	2.707		1	1	4.352			
T25	49.90	1197.61	A	0.168	2.707	42	1	1	4.352	543.35	108.67	C
775.00-770.00			B	0.168	2.707		1	1	4.352			
			C	0.168	2.707		1	1	4.352			
T26	49.90	1287.44	A	0.172	2.691	42	1	1	4.467	550.97	110.19	C
770.00-765.00			B	0.172	2.691		1	1	4.467			
			C	0.172	2.691		1	1	4.467			
T27	49.90	1287.44	A	0.172	2.691	42	1	1	4.468	550.09	110.02	C
765.00-760.00			B	0.172	2.691		1	1	4.468			
			C	0.172	2.691		1	1	4.468			
T28	49.90	1287.44	A	0.172	2.691	42	1	1	4.469	549.22	109.84	C
760.00-755.00			B	0.172	2.691		1	1	4.469			
			C	0.172	2.691		1	1	4.469			
T29	49.90	1287.44	A	0.172	2.691	42	1	1	4.470	548.34	109.67	C
755.00-750.00			B	0.172	2.691		1	1	4.470			
			C	0.172	2.691		1	1	4.470			
T30	49.90	1197.61	A	0.168	2.707	42	1	1	4.356	539.06	107.81	C
750.00-745.00			B	0.168	2.707		1	1	4.356			
			C	0.168	2.707		1	1	4.356			
T31	49.90	1197.61	A	0.168	2.707	41	1	1	4.357	538.19	107.64	C
745.00-740.00			B	0.168	2.707		1	1	4.357			
			C	0.168	2.707		1	1	4.357			
T32	199.60	4790.45	A	0.168	2.707	41	1	1	17.435	2144.10	107.21	C
740.00-720.00			B	0.168	2.707		1	1	17.435			
			C	0.168	2.707		1	1	17.435			
T33	199.60	4790.45	A	0.168	2.707	41	1	1	17.447	2130.16	106.51	C
720.00-700.00			B	0.168	2.707		1	1	17.447			
			C	0.168	2.707		1	1	17.447			
T34	199.60	4790.45	A	0.168	2.707	41	1	1	17.459	2116.13	105.81	C
700.00-680.00			B	0.168	2.707		1	1	17.459			
			C	0.168	2.707		1	1	17.459			
T35	199.60	4790.45	A	0.168	2.707	40	1	1	17.471	2102.04	105.10	C
680.00-660.00			B	0.168	2.707		1	1	17.471			
			C	0.168	2.707		1	1	17.471			
T36	199.60	4790.45	A	0.168	2.707	40	1	1	17.484	2087.92	104.40	C
660.00-640.00			B	0.168	2.707		1	1	17.484			
			C	0.168	2.707		1	1	17.484			
T37	199.60	5552.12	A	0.176	2.676	40	1	1	17.919	2093.88	104.69	C
640.00-620.00			B	0.176	2.676		1	1	17.919			
			C	0.176	2.676		1	1	17.919			
T38	49.90	1388.03	A	0.176	2.677	40	1	1	4.479	521.05	104.21	C
620.00-615.00			B	0.176	2.677		1	1	4.479			
			C	0.176	2.677		1	1	4.479			

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
T39	49.90	1388.03	A	0.176	2.677	40	1	1	4.480	520.17	104.03	C
615.00-610.00			B	0.176	2.677		1	1	4.480			
			C	0.176	2.677		1	1	4.480			
T40	49.90	1477.86	A	0.181	2.661	39	1	1	4.597	527.32	105.46	C
610.00-605.00			B	0.181	2.661		1	1	4.597			
			C	0.181	2.661		1	1	4.597			
T41	49.90	1477.86	A	0.181	2.661	39	1	1	4.598	526.43	105.29	C
605.00-600.00			B	0.181	2.661		1	1	4.598			
			C	0.181	2.661		1	1	4.598			
T42	49.90	1477.86	A	0.181	2.661	39	1	1	4.599	525.54	105.11	C
600.00-595.00			B	0.181	2.661		1	1	4.599			
			C	0.181	2.661		1	1	4.599			
T43	49.90	1477.86	A	0.181	2.661	39	1	1	4.600	524.65	104.93	C
595.00-590.00			B	0.181	2.661		1	1	4.600			
			C	0.181	2.661		1	1	4.600			
T44	49.90	1388.03	A	0.176	2.677	39	1	1	4.485	515.81	103.16	C
590.00-585.00			B	0.176	2.677		1	1	4.485			
			C	0.176	2.677		1	1	4.485			
T45	49.90	1388.03	A	0.176	2.677	39	1	1	4.486	514.94	102.99	C
585.00-580.00			B	0.176	2.677		1	1	4.486			
			C	0.176	2.677		1	1	4.486			
T46	199.60	5161.26	A	0.172	2.692	39	1	1	17.743	2041.60	102.08	C
580.00-560.00			B	0.172	2.692		1	1	17.743			
			C	0.172	2.692		1	1	17.743			
T47	199.60	5161.26	A	0.172	2.692	39	1	1	17.762	2028.34	101.42	C
560.00-540.00			B	0.172	2.692		1	1	17.762			
			C	0.172	2.692		1	1	17.762			
T48	49.90	1228.81	A	0.159	2.738	38	1	1	4.113	482.15	96.43	C
540.00-535.00			B	0.159	2.738		1	1	4.113			
			C	0.159	2.738		1	1	4.113			
T49	49.90	1290.32	A	0.172	2.692	38	1	1	4.443	504.14	100.83	C
535.00-530.00			B	0.172	2.692		1	1	4.443			
			C	0.172	2.692		1	1	4.443			
T50	49.90	1290.32	A	0.172	2.692	38	1	1	4.444	503.31	100.66	C
530.00-525.00			B	0.172	2.692		1	1	4.444			
			C	0.172	2.692		1	1	4.444			
T51	49.90	1290.32	A	0.172	2.692	38	1	1	4.445	502.48	100.50	C
525.00-520.00			B	0.172	2.692		1	1	4.445			
			C	0.172	2.692		1	1	4.445			
T52	199.60	5161.26	A	0.172	2.692	38	1	1	17.788	2001.75	100.09	C
520.00-500.00			B	0.172	2.692		1	1	17.788			
			C	0.172	2.692		1	1	17.788			
T53	199.60	5161.26	A	0.172	2.692	38	1	1	17.801	1989.03	99.45	C
500.00-480.00			B	0.172	2.692		1	1	17.801			
			C	0.172	2.692		1	1	17.801			
T54	199.60	5161.26	A	0.172	2.692	38	1	1	17.813	1976.81	98.84	C
480.00-460.00			B	0.172	2.692		1	1	17.813			
			C	0.172	2.692		1	1	17.813			
T55	199.60	5552.12	A	0.176	2.677	37	1	1	18.040	1974.97	98.75	C
460.00-440.00			B	0.176	2.677		1	1	18.040			
			C	0.176	2.677		1	1	18.040			
T56	49.90	1388.03	A	0.176	2.677	37	1	1	4.510	491.92	98.38	C
440.00-435.00			B	0.176	2.677		1	1	4.510			
			C	0.176	2.677		1	1	4.510			
T57	49.90	1388.03	A	0.176	2.677	37	1	1	4.511	491.26	98.25	C
435.00-430.00			B	0.176	2.677		1	1	4.511			
			C	0.176	2.677		1	1	4.511			
T58	49.90	1477.86	A	0.181	2.661	37	1	1	4.627	498.10	99.62	C
430.00-425.00			B	0.181	2.661		1	1	4.627			
			C	0.181	2.661		1	1	4.627			

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
T59	49.90	1477.86	A	0.181	2.661	37	1	1	4.628	497.46	99.49	C
425.00-420.00			B	0.181	2.661		1	1	4.628			
			C	0.181	2.661		1	1	4.628			
T60	49.90	1477.86	A	0.181	2.661	37	1	1	4.629	496.83	99.37	C
420.00-415.00			B	0.181	2.661		1	1	4.629			
			C	0.181	2.661		1	1	4.629			
T61	49.90	1477.86	A	0.181	2.661	37	1	1	4.629	496.22	99.24	C
415.00-410.00			B	0.181	2.661		1	1	4.629			
			C	0.181	2.661		1	1	4.629			
T62	49.90	1388.03	A	0.176	2.677	37	1	1	4.515	488.18	97.64	C
410.00-405.00			B	0.176	2.677		1	1	4.515			
			C	0.176	2.677		1	1	4.515			
T63	49.90	1388.03	A	0.176	2.677	37	1	1	4.515	487.62	97.52	C
405.00-400.00			B	0.176	2.677		1	1	4.515			
			C	0.176	2.677		1	1	4.515			
T64	226.80	5552.12	A	0.176	2.677	37	1	1	18.067	1997.23	99.86	C
400.00-380.00			B	0.176	2.677		1	1	18.067			
			C	0.176	2.677		1	1	18.067			
T65	226.80	5552.12	A	0.176	2.677	37	1	1	18.075	1989.55	99.48	C
380.00-360.00			B	0.176	2.677		1	1	18.075			
			C	0.176	2.677		1	1	18.075			
T66	231.39	5552.12	A	0.176	2.677	36	1	1	18.081	2017.08	100.85	C
360.00-340.00			B	0.176	2.677		1	1	18.081			
			C	0.176	2.677		1	1	18.081			
T67	237.00	5552.12	A	0.176	2.677	36	1	1	18.086	2053.74	102.69	C
340.00-320.00			B	0.176	2.677		1	1	18.086			
			C	0.176	2.677		1	1	18.086			
T68	237.00	5552.12	A	0.176	2.677	36	1	1	18.088	2051.48	102.57	C
320.00-300.00			B	0.176	2.677		1	1	18.088			
			C	0.176	2.677		1	1	18.088			
T69	237.00	5552.12	A	0.176	2.677	36	1	1	18.088	2051.75	102.59	C
300.00-280.00			B	0.176	2.677		1	1	18.088			
			C	0.176	2.677		1	1	18.088			
T70	59.25	1388.03	A	0.176	2.677	36	1	1	4.522	513.34	102.67	C
280.00-275.00			B	0.176	2.677		1	1	4.522			
			C	0.176	2.677		1	1	4.522			
T71	59.25	1388.03	A	0.176	2.677	36	1	1	4.521	513.58	102.72	C
275.00-270.00			B	0.176	2.677		1	1	4.521			
			C	0.176	2.677		1	1	4.521			
T72	59.25	1477.86	A	0.181	2.661	36	1	1	4.636	521.21	104.24	C
270.00-265.00			B	0.181	2.661		1	1	4.636			
			C	0.181	2.661		1	1	4.636			
T73	59.25	1477.86	A	0.181	2.661	36	1	1	4.636	521.56	104.31	C
265.00-260.00			B	0.181	2.661		1	1	4.636			
			C	0.181	2.661		1	1	4.636			
T74	59.25	1477.86	A	0.181	2.661	36	1	1	4.636	521.96	104.39	C
260.00-255.00			B	0.181	2.661		1	1	4.636			
			C	0.181	2.661		1	1	4.636			
T75	59.25	1477.86	A	0.181	2.661	37	1	1	4.635	522.42	104.48	C
255.00-250.00			B	0.181	2.661		1	1	4.635			
			C	0.181	2.661		1	1	4.635			
T76	59.25	1388.03	A	0.176	2.677	37	1	1	4.519	515.57	103.11	C
250.00-245.00			B	0.176	2.677		1	1	4.519			
			C	0.176	2.677		1	1	4.519			
T77	59.25	1388.03	A	0.176	2.677	37	1	1	4.519	516.13	103.23	C
245.00-240.00			B	0.176	2.677		1	1	4.519			
			C	0.176	2.677		1	1	4.519			
T78	237.00	5552.12	A	0.176	2.677	37	1	1	18.068	2071.18	103.56	C
240.00-220.00			B	0.176	2.677		1	1	18.068			
			C	0.176	2.677		1	1	18.068			

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft^2	F lb	w plf	Ctrl. Face
T79	237.00	5552.12	A	0.176	2.677	37	1	1	18.054	2085.03	104.25	C
220.00-200.00			B	0.176	2.677		1	1	18.054			
			C	0.176	2.677		1	1	18.054			
T80	405.86	5552.12	A	0.176	2.677	37	1	1	18.036	2520.36	126.02	C
200.00-180.00			B	0.176	2.677		1	1	18.036			
			C	0.176	2.677		1	1	18.036			
T81	464.60	5552.12	A	0.176	2.677	38	1	1	18.013	2756.37	137.82	C
180.00-160.00			B	0.176	2.677		1	1	18.013			
			C	0.176	2.677		1	1	18.013			
T82	464.60	5552.12	A	0.176	2.677	38	1	1	17.987	2790.86	139.54	C
160.00-140.00			B	0.176	2.677		1	1	17.987			
			C	0.176	2.677		1	1	17.987			
T83	464.60	5552.12	A	0.176	2.677	39	1	1	17.958	2905.01	145.25	C
140.00-120.00			B	0.176	2.677		1	1	17.958			
			C	0.176	2.677		1	1	17.958			
T84	116.15	1388.03	A	0.176	2.677	39	1	1	4.485	732.44	146.49	C
120.00-115.00			B	0.176	2.677		1	1	4.485			
			C	0.176	2.677		1	1	4.485			
T85	116.15	1388.03	A	0.176	2.677	39	1	1	4.483	734.89	146.98	C
115.00-110.00			B	0.176	2.677		1	1	4.483			
			C	0.176	2.677		1	1	4.483			
T86	116.15	1477.86	A	0.181	2.661	39	1	1	4.597	745.31	149.06	C
110.00-105.00			B	0.181	2.661		1	1	4.597			
			C	0.181	2.661		1	1	4.597			
T87	116.15	1477.86	A	0.181	2.661	40	1	1	4.595	747.66	149.53	C
105.00-100.00			B	0.181	2.661		1	1	4.595			
			C	0.181	2.661		1	1	4.595			
T88	116.15	1477.86	A	0.181	2.661	40	1	1	4.593	749.89	149.98	C
100.00-95.00			B	0.181	2.661		1	1	4.593			
			C	0.181	2.661		1	1	4.593			
T89	116.15	1477.86	A	0.181	2.661	40	1	1	4.592	751.97	150.39	C
95.00-90.00			B	0.181	2.661		1	1	4.592			
			C	0.181	2.661		1	1	4.592			
T90	116.15	1388.03	A	0.176	2.677	40	1	1	4.475	745.71	149.14	C
90.00-85.00			B	0.176	2.677		1	1	4.475			
			C	0.176	2.677		1	1	4.475			
T91	116.15	1388.03	A	0.176	2.677	40	1	1	4.474	747.28	149.46	C
85.00-80.00			B	0.176	2.677		1	1	4.474			
			C	0.176	2.677		1	1	4.474			
T92	464.60	5552.12	A	0.176	2.677	40	1	1	17.888	2998.00	149.90	C
80.00-60.00			B	0.176	2.677		1	1	17.888			
			C	0.176	2.677		1	1	17.888			
T93	464.60	5552.12	A	0.176	2.677	40	1	1	17.905	2975.29	148.76	C
60.00-40.00			B	0.176	2.677		1	1	17.905			
			C	0.176	2.677		1	1	17.905			
T94	464.60	5552.12	A	0.176	2.677	38	1	1	18.002	2770.90	138.55	C
40.00-20.00			B	0.176	2.677		1	1	18.002			
			C	0.176	2.677		1	1	18.002			
T95	116.15	1388.03	A	0.176	2.677	41	1	1	4.468	754.99	151.00	C
20.00-15.00			B	0.176	2.677		1	1	4.468			
			C	0.176	2.677		1	1	4.468			
T96	185.84	2850.83	A	0.248	2.443	42	1	1	13.347	1731.72	216.46	C
15.00-7.00			B	0.248	2.443		1	1	13.347			
			C	0.248	2.443		1	1	13.347			
T97 7.00-0.00	162.61	4952.76	A	1	2.1	44	1	1	43.382	2453.85*	350.55	C
			B	1	2.1		1	1	43.382			
			C	1	2.1		1	1	43.382			
Sum Weight:	14038.72	294337.78			*2.1A_g limit					127813.81		

Tower Forces - No Ice - Wind 60 To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft^2	F lb	w plf	Ctrl. Face
L1	424.14	10343.38	A	1	0.6	46	1	1	103.500	3171.41	51.07	C
1151.90-1089.			B	1	0.777		1	1	103.500			
80			C	1	0.777		1	1	103.500			
T1	33.47	2474.36	A	0.42	2.025	46	0.8	1	13.161	1100.94	224.68	C
1089.80-1084.			B	0.42	2.025		0.8	1	13.161			
90			C	0.42	2.025		0.8	1	13.161			
T2	33.47	1026.80	A	0.161	2.733	46	0.8	1	3.905	475.48	97.04	C
1084.90-1080.			B	0.161	2.733		0.8	1	3.905			
00			C	0.161	2.733		0.8	1	3.905			
T3	162.73	3798.26	A	0.155	2.755	46	0.8	1	15.322	1954.72	97.74	C
1080.00-1060.			B	0.155	2.755		0.8	1	15.322			
00			C	0.155	2.755		0.8	1	15.322			
T4	176.80	3798.26	A	0.155	2.755	46	0.8	1	15.329	1984.27	99.21	C
1060.00-1040.			B	0.155	2.755		0.8	1	15.329			
00			C	0.155	2.755		0.8	1	15.329			
T5	176.80	3798.26	A	0.155	2.755	45	0.8	1	15.336	1974.30	98.72	C
1040.00-1020.			B	0.155	2.755		0.8	1	15.336			
00			C	0.155	2.755		0.8	1	15.336			
T6	176.80	3798.26	A	0.155	2.755	45	0.8	1	15.343	1964.21	98.21	C
1020.00-1000.			B	0.155	2.755		0.8	1	15.343			
00			C	0.155	2.755		0.8	1	15.343			
T7	186.88	3798.26	A	0.155	2.755	45	0.8	1	15.350	2030.04	101.50	C
1000.00-980.0			B	0.155	2.755		0.8	1	15.350			
0			C	0.155	2.755		0.8	1	15.350			
T8	189.40	3798.26	A	0.155	2.755	45	0.8	1	15.357	2038.16	101.91	C
980.00-960.00			B	0.155	2.755		0.8	1	15.357			
			C	0.155	2.755		0.8	1	15.357			
T9	189.40	4790.45	A	0.168	2.707	44	0.8	1	16.056	2069.91	103.50	C
960.00-940.00			B	0.168	2.707		0.8	1	16.056			
			C	0.168	2.707		0.8	1	16.056			
T10	47.35	1197.61	A	0.168	2.707	44	0.8	1	4.012	515.42	103.08	C
940.00-935.00			B	0.168	2.707		0.8	1	4.012			
			C	0.168	2.707		0.8	1	4.012			
T11	47.35	1197.61	A	0.168	2.707	44	0.8	1	4.012	514.72	102.94	C
935.00-930.00			B	0.168	2.707		0.8	1	4.012			
			C	0.168	2.707		0.8	1	4.012			
T12	47.35	1287.44	A	0.172	2.691	44	0.8	1	4.128	523.17	104.63	C
930.00-925.00			B	0.172	2.691		0.8	1	4.128			
			C	0.172	2.691		0.8	1	4.128			
T13	47.35	1287.44	A	0.172	2.691	44	0.8	1	4.128	522.46	104.49	C
925.00-920.00			B	0.172	2.691		0.8	1	4.128			
			C	0.172	2.691		0.8	1	4.128			
T14	47.35	1287.44	A	0.172	2.691	44	0.8	1	4.129	521.74	104.35	C
920.00-915.00			B	0.172	2.691		0.8	1	4.129			
			C	0.172	2.691		0.8	1	4.129			
T15	47.35	1287.44	A	0.172	2.691	44	0.8	1	4.130	521.01	104.20	C
915.00-910.00			B	0.172	2.691		0.8	1	4.130			
			C	0.172	2.691		0.8	1	4.130			
T16	47.35	1197.61	A	0.168	2.707	44	0.8	1	4.016	511.20	102.24	C
910.00-905.00			B	0.168	2.707		0.8	1	4.016			
			C	0.168	2.707		0.8	1	4.016			
T17	47.35	1197.61	A	0.168	2.707	44	0.8	1	4.016	510.49	102.10	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft^2	F lb	w plf	Ctrl. Face
905.00-900.00			B	0.168	2.707		0.8	1	4.016			
			C	0.168	2.707		0.8	1	4.016			
T18	189.40	4790.45	A	0.168	2.707	44	0.8	1	16.072	2034.82	101.74	C
900.00-880.00			B	0.168	2.707		0.8	1	16.072			
			C	0.168	2.707		0.8	1	16.072			
T19	198.58	4790.45	A	0.168	2.707	43	0.8	1	16.083	2103.05	105.15	C
880.00-860.00			B	0.168	2.707		0.8	1	16.083			
			C	0.168	2.707		0.8	1	16.083			
T20	199.60	4790.45	A	0.168	2.707	43	0.8	1	16.094	2099.67	104.98	C
860.00-840.00			B	0.168	2.707		0.8	1	16.094			
			C	0.168	2.707		0.8	1	16.094			
T21	199.60	4790.45	A	0.168	2.707	43	0.8	1	16.106	2087.28	104.36	C
840.00-820.00			B	0.168	2.707		0.8	1	16.106			
			C	0.168	2.707		0.8	1	16.106			
T22	199.60	4790.45	A	0.168	2.707	42	0.8	1	16.117	2074.76	103.74	C
820.00-800.00			B	0.168	2.707		0.8	1	16.117			
			C	0.168	2.707		0.8	1	16.117			
T23	199.60	4790.45	A	0.168	2.707	42	0.8	1	16.129	2062.11	103.11	C
800.00-780.00			B	0.168	2.707		0.8	1	16.129			
			C	0.168	2.707		0.8	1	16.129			
T24	49.90	1197.61	A	0.168	2.707	42	0.8	1	4.034	513.53	102.71	C
780.00-775.00			B	0.168	2.707		0.8	1	4.034			
			C	0.168	2.707		0.8	1	4.034			
T25	49.90	1197.61	A	0.168	2.707	42	0.8	1	4.035	512.73	102.55	C
775.00-770.00			B	0.168	2.707		0.8	1	4.035			
			C	0.168	2.707		0.8	1	4.035			
T26	49.90	1287.44	A	0.172	2.691	42	0.8	1	4.150	520.58	104.12	C
770.00-765.00			B	0.172	2.691		0.8	1	4.150			
			C	0.172	2.691		0.8	1	4.150			
T27	49.90	1287.44	A	0.172	2.691	42	0.8	1	4.150	519.76	103.95	C
765.00-760.00			B	0.172	2.691		0.8	1	4.150			
			C	0.172	2.691		0.8	1	4.150			
T28	49.90	1287.44	A	0.172	2.691	42	0.8	1	4.151	518.94	103.79	C
760.00-755.00			B	0.172	2.691		0.8	1	4.151			
			C	0.172	2.691		0.8	1	4.151			
T29	49.90	1287.44	A	0.172	2.691	42	0.8	1	4.152	518.11	103.62	C
755.00-750.00			B	0.172	2.691		0.8	1	4.152			
			C	0.172	2.691		0.8	1	4.152			
T30	49.90	1197.61	A	0.168	2.707	42	0.8	1	4.038	508.70	101.74	C
750.00-745.00			B	0.168	2.707		0.8	1	4.038			
			C	0.168	2.707		0.8	1	4.038			
T31	49.90	1197.61	A	0.168	2.707	41	0.8	1	4.039	507.89	101.58	C
745.00-740.00			B	0.168	2.707		0.8	1	4.039			
			C	0.168	2.707		0.8	1	4.039			
T32	199.60	4790.45	A	0.168	2.707	41	0.8	1	16.164	2023.42	101.17	C
740.00-720.00			B	0.168	2.707		0.8	1	16.164			
			C	0.168	2.707		0.8	1	16.164			
T33	199.60	4790.45	A	0.168	2.707	41	0.8	1	16.176	2010.33	100.52	C
720.00-700.00			B	0.168	2.707		0.8	1	16.176			
			C	0.168	2.707		0.8	1	16.176			
T34	199.60	4790.45	A	0.168	2.707	41	0.8	1	16.188	1997.15	99.86	C
700.00-680.00			B	0.168	2.707		0.8	1	16.188			
			C	0.168	2.707		0.8	1	16.188			
T35	199.60	4790.45	A	0.168	2.707	40	0.8	1	16.201	1983.92	99.20	C
680.00-660.00			B	0.168	2.707		0.8	1	16.201			
			C	0.168	2.707		0.8	1	16.201			
T36	199.60	4790.45	A	0.168	2.707	40	0.8	1	16.213	1970.66	98.53	C
660.00-640.00			B	0.168	2.707		0.8	1	16.213			
			C	0.168	2.707		0.8	1	16.213			
T37	199.60	5552.12	A	0.176	2.676	40	0.8	1	16.654	1979.27	98.96	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
640.00-620.00			B	0.176	2.676		0.8	1	16.654			
			C	0.176	2.676		0.8	1	16.654			
T38	49.90	1388.03	A	0.176	2.677	40	0.8	1	4.163	492.56	98.51	C
620.00-615.00			B	0.176	2.677		0.8	1	4.163			
			C	0.176	2.677		0.8	1	4.163			
T39	49.90	1388.03	A	0.176	2.677	40	0.8	1	4.164	491.74	98.35	C
615.00-610.00			B	0.176	2.677		0.8	1	4.164			
			C	0.176	2.677		0.8	1	4.164			
T40	49.90	1477.86	A	0.181	2.661	39	0.8	1	4.281	499.10	99.82	C
610.00-605.00			B	0.181	2.661		0.8	1	4.281			
			C	0.181	2.661		0.8	1	4.281			
T41	49.90	1477.86	A	0.181	2.661	39	0.8	1	4.282	498.26	99.65	C
605.00-600.00			B	0.181	2.661		0.8	1	4.282			
			C	0.181	2.661		0.8	1	4.282			
T42	49.90	1477.86	A	0.181	2.661	39	0.8	1	4.283	497.42	99.48	C
600.00-595.00			B	0.181	2.661		0.8	1	4.283			
			C	0.181	2.661		0.8	1	4.283			
T43	49.90	1477.86	A	0.181	2.661	39	0.8	1	4.284	496.59	99.32	C
595.00-590.00			B	0.181	2.661		0.8	1	4.284			
			C	0.181	2.661		0.8	1	4.284			
T44	49.90	1388.03	A	0.176	2.677	39	0.8	1	4.169	487.64	97.53	C
590.00-585.00			B	0.176	2.677		0.8	1	4.169			
			C	0.176	2.677		0.8	1	4.169			
T45	49.90	1388.03	A	0.176	2.677	39	0.8	1	4.170	486.82	97.36	C
585.00-580.00			B	0.176	2.677		0.8	1	4.170			
			C	0.176	2.677		0.8	1	4.170			
T46	199.60	5161.26	A	0.172	2.692	39	0.8	1	16.476	1928.76	96.44	C
580.00-560.00			B	0.172	2.692		0.8	1	16.476			
			C	0.172	2.692		0.8	1	16.476			
T47	199.60	5161.26	A	0.172	2.692	39	0.8	1	16.495	1916.26	95.81	C
560.00-540.00			B	0.172	2.692		0.8	1	16.495			
			C	0.172	2.692		0.8	1	16.495			
T48	49.90	1228.81	A	0.159	2.738	38	0.8	1	3.796	453.78	90.76	C
540.00-535.00			B	0.159	2.738		0.8	1	3.796			
			C	0.159	2.738		0.8	1	3.796			
T49	49.90	1290.32	A	0.172	2.692	38	0.8	1	4.127	476.29	95.26	C
535.00-530.00			B	0.172	2.692		0.8	1	4.127			
			C	0.172	2.692		0.8	1	4.127			
T50	49.90	1290.32	A	0.172	2.692	38	0.8	1	4.127	475.51	95.10	C
530.00-525.00			B	0.172	2.692		0.8	1	4.127			
			C	0.172	2.692		0.8	1	4.127			
T51	49.90	1290.32	A	0.172	2.692	38	0.8	1	4.128	474.74	94.95	C
525.00-520.00			B	0.172	2.692		0.8	1	4.128			
			C	0.172	2.692		0.8	1	4.128			
T52	199.60	5161.26	A	0.172	2.692	38	0.8	1	16.521	1891.26	94.56	C
520.00-500.00			B	0.172	2.692		0.8	1	16.521			
			C	0.172	2.692		0.8	1	16.521			
T53	199.60	5161.26	A	0.172	2.692	38	0.8	1	16.533	1879.30	93.96	C
500.00-480.00			B	0.172	2.692		0.8	1	16.533			
			C	0.172	2.692		0.8	1	16.533			
T54	199.60	5161.26	A	0.172	2.692	38	0.8	1	16.545	1867.82	93.39	C
480.00-460.00			B	0.172	2.692		0.8	1	16.545			
			C	0.172	2.692		0.8	1	16.545			
T55	199.60	5552.12	A	0.176	2.677	37	0.8	1	16.776	1867.50	93.37	C
460.00-440.00			B	0.176	2.677		0.8	1	16.776			
			C	0.176	2.677		0.8	1	16.776			
T56	49.90	1388.03	A	0.176	2.677	37	0.8	1	4.195	465.18	93.04	C
440.00-435.00			B	0.176	2.677		0.8	1	4.195			
			C	0.176	2.677		0.8	1	4.195			
T57	49.90	1388.03	A	0.176	2.677	37	0.8	1	4.195	464.55	92.91	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
435.00-430.00			B	0.176	2.677		0.8	1	4.195			
			C	0.176	2.677		0.8	1	4.195			
T58	49.90	1477.86	A	0.181	2.661	37	0.8	1	4.311	471.59	94.32	C
430.00-425.00			B	0.181	2.661		0.8	1	4.311			
			C	0.181	2.661		0.8	1	4.311			
T59	49.90	1477.86	A	0.181	2.661	37	0.8	1	4.312	470.98	94.20	C
425.00-420.00			B	0.181	2.661		0.8	1	4.312			
			C	0.181	2.661		0.8	1	4.312			
T60	49.90	1477.86	A	0.181	2.661	37	0.8	1	4.313	470.39	94.08	C
420.00-415.00			B	0.181	2.661		0.8	1	4.313			
			C	0.181	2.661		0.8	1	4.313			
T61	49.90	1477.86	A	0.181	2.661	37	0.8	1	4.313	469.81	93.96	C
415.00-410.00			B	0.181	2.661		0.8	1	4.313			
			C	0.181	2.661		0.8	1	4.313			
T62	49.90	1388.03	A	0.176	2.677	37	0.8	1	4.199	461.66	92.33	C
410.00-405.00			B	0.176	2.677		0.8	1	4.199			
			C	0.176	2.677		0.8	1	4.199			
T63	49.90	1388.03	A	0.176	2.677	37	0.8	1	4.199	461.13	92.23	C
405.00-400.00			B	0.176	2.677		0.8	1	4.199			
			C	0.176	2.677		0.8	1	4.199			
T64	226.80	5552.12	A	0.176	2.677	37	0.8	1	16.803	1891.57	94.58	C
400.00-380.00			B	0.176	2.677		0.8	1	16.803			
			C	0.176	2.677		0.8	1	16.803			
T65	226.80	5552.12	A	0.176	2.677	37	0.8	1	16.811	1884.34	94.22	C
380.00-360.00			B	0.176	2.677		0.8	1	16.811			
			C	0.176	2.677		0.8	1	16.811			
T66	231.39	5552.12	A	0.176	2.677	36	0.8	1	16.817	1912.22	95.61	C
360.00-340.00			B	0.176	2.677		0.8	1	16.817			
			C	0.176	2.677		0.8	1	16.817			
T67	237.00	5552.12	A	0.176	2.677	36	0.8	1	16.822	1949.13	97.46	C
340.00-320.00			B	0.176	2.677		0.8	1	16.822			
			C	0.176	2.677		0.8	1	16.822			
T68	237.00	5552.12	A	0.176	2.677	36	0.8	1	16.824	1946.99	97.35	C
320.00-300.00			B	0.176	2.677		0.8	1	16.824			
			C	0.176	2.677		0.8	1	16.824			
T69	237.00	5552.12	A	0.176	2.677	36	0.8	1	16.824	1947.24	97.36	C
300.00-280.00			B	0.176	2.677		0.8	1	16.824			
			C	0.176	2.677		0.8	1	16.824			
T70	59.25	1388.03	A	0.176	2.677	36	0.8	1	4.206	487.19	97.44	C
280.00-275.00			B	0.176	2.677		0.8	1	4.206			
			C	0.176	2.677		0.8	1	4.206			
T71	59.25	1388.03	A	0.176	2.677	36	0.8	1	4.205	487.42	97.48	C
275.00-270.00			B	0.176	2.677		0.8	1	4.205			
			C	0.176	2.677		0.8	1	4.205			
T72	59.25	1477.86	A	0.181	2.661	36	0.8	1	4.320	495.18	99.04	C
270.00-265.00			B	0.181	2.661		0.8	1	4.320			
			C	0.181	2.661		0.8	1	4.320			
T73	59.25	1477.86	A	0.181	2.661	36	0.8	1	4.320	495.51	99.10	C
265.00-260.00			B	0.181	2.661		0.8	1	4.320			
			C	0.181	2.661		0.8	1	4.320			
T74	59.25	1477.86	A	0.181	2.661	36	0.8	1	4.320	495.89	99.18	C
260.00-255.00			B	0.181	2.661		0.8	1	4.320			
			C	0.181	2.661		0.8	1	4.320			
T75	59.25	1477.86	A	0.181	2.661	37	0.8	1	4.319	496.33	99.27	C
255.00-250.00			B	0.181	2.661		0.8	1	4.319			
			C	0.181	2.661		0.8	1	4.319			
T76	59.25	1388.03	A	0.176	2.677	37	0.8	1	4.203	489.30	97.86	C
250.00-245.00			B	0.176	2.677		0.8	1	4.203			
			C	0.176	2.677		0.8	1	4.203			
T77	59.25	1388.03	A	0.176	2.677	37	0.8	1	4.203	489.83	97.97	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
245.00-240.00			B	0.176	2.677		0.8	1	4.203			
			C	0.176	2.677		0.8	1	4.203			
T78	237.00	5552.12	A	0.176	2.677	37	0.8	1	16.804	1965.61	98.28	C
240.00-220.00			B	0.176	2.677		0.8	1	16.804			
			C	0.176	2.677		0.8	1	16.804			
T79	237.00	5552.12	A	0.176	2.677	37	0.8	1	16.790	1978.69	98.93	C
220.00-200.00			B	0.176	2.677		0.8	1	16.790			
			C	0.176	2.677		0.8	1	16.790			
T80	405.86	5552.12	A	0.176	2.677	37	0.8	1	16.772	2413.02	120.65	A
200.00-180.00			B	0.176	2.677		0.8	1	16.772			
			C	0.176	2.677		0.8	1	16.772			
T81	464.60	5552.12	A	0.176	2.677	38	0.8	1	16.749	2647.80	132.39	A
180.00-160.00			B	0.176	2.677		0.8	1	16.749			
			C	0.176	2.677		0.8	1	16.749			
T82	464.60	5552.12	A	0.176	2.677	38	0.8	1	16.723	2680.85	134.04	A
160.00-140.00			B	0.176	2.677		0.8	1	16.723			
			C	0.176	2.677		0.8	1	16.723			
T83	464.60	5552.12	A	0.176	2.677	39	0.8	1	16.694	2793.38	139.67	A
140.00-120.00			B	0.176	2.677		0.8	1	16.694			
			C	0.176	2.677		0.8	1	16.694			
T84	116.15	1388.03	A	0.176	2.677	39	0.8	1	4.169	704.27	140.85	A
120.00-115.00			B	0.176	2.677		0.8	1	4.169			
			C	0.176	2.677		0.8	1	4.169			
T85	116.15	1388.03	A	0.176	2.677	39	0.8	1	4.167	706.61	141.32	A
115.00-110.00			B	0.176	2.677		0.8	1	4.167			
			C	0.176	2.677		0.8	1	4.167			
T86	116.15	1477.86	A	0.181	2.661	39	0.8	1	4.281	717.09	143.42	A
110.00-105.00			B	0.181	2.661		0.8	1	4.281			
			C	0.181	2.661		0.8	1	4.281			
T87	116.15	1477.86	A	0.181	2.661	40	0.8	1	4.279	719.35	143.87	A
105.00-100.00			B	0.181	2.661		0.8	1	4.279			
			C	0.181	2.661		0.8	1	4.279			
T88	116.15	1477.86	A	0.181	2.661	40	0.8	1	4.278	721.49	144.30	A
100.00-95.00			B	0.181	2.661		0.8	1	4.278			
			C	0.181	2.661		0.8	1	4.278			
T89	116.15	1477.86	A	0.181	2.661	40	0.8	1	4.276	723.48	144.70	A
95.00-90.00			B	0.181	2.661		0.8	1	4.276			
			C	0.181	2.661		0.8	1	4.276			
T90	116.15	1388.03	A	0.176	2.677	40	0.8	1	4.159	716.97	143.39	A
90.00-85.00			B	0.176	2.677		0.8	1	4.159			
			C	0.176	2.677		0.8	1	4.159			
T91	116.15	1388.03	A	0.176	2.677	40	0.8	1	4.158	718.48	143.70	A
85.00-80.00			B	0.176	2.677		0.8	1	4.158			
			C	0.176	2.677		0.8	1	4.158			
T92	464.60	5552.12	A	0.176	2.677	40	0.8	1	16.624	2882.42	144.12	A
80.00-60.00			B	0.176	2.677		0.8	1	16.624			
			C	0.176	2.677		0.8	1	16.624			
T93	464.60	5552.12	A	0.176	2.677	40	0.8	1	16.641	2860.67	143.03	A
60.00-40.00			B	0.176	2.677		0.8	1	16.641			
			C	0.176	2.677		0.8	1	16.641			
T94	464.60	5552.12	A	0.176	2.677	38	0.8	1	16.738	2661.72	133.09	A
40.00-20.00			B	0.176	2.677		0.8	1	16.738			
			C	0.176	2.677		0.8	1	16.738			
T95	116.15	1388.03	A	0.176	2.677	41	0.8	1	4.152	725.86	145.17	A
20.00-15.00			B	0.176	2.677		0.8	1	4.152			
			C	0.176	2.677		0.8	1	4.152			
T96	185.84	2850.83	A	0.248	2.443	42	0.8	1	11.339	1556.52	194.57	A
15.00-7.00			B	0.248	2.443		0.8	1	11.339			
			C	0.248	2.443		0.8	1	11.339			
T97 7.00-0.00	162.61	4952.76	A	1	2.1	44	0.8	1	36.067	2453.85*	350.55	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft^2	F lb	w plf	Ctrl. Face
			B	1	2.1		0.8	1	36.067			
			C	1	2.1		0.8	1	36.067			
Sum Weight:	14038.72	294337.78			*2.1A_g limit					121183.26		

Tower Forces - No Ice - Wind 90 To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft^2	F lb	w plf	Ctrl. Face
L1	424.14	10343.38	A	1	0.6	46	1	1	103.500	6774.49	109.09	C
1151.90-1089.			B	1	0.6		1	1	103.500			
80			C	1	1.2		1	1	103.500			
T1	33.47	2474.36	A	0.42	2.025	46	0.85	1	13.865	1156.63	236.05	C
1089.80-1084.			B	0.42	2.025		0.85	1	13.865			
90			C	0.42	2.025		0.85	1	13.865			
T2	33.47	1026.80	A	0.161	2.733	46	0.85	1	3.986	484.03	98.78	C
1084.90-1080.			B	0.161	2.733		0.85	1	3.986			
00			C	0.161	2.733		0.85	1	3.986			
T3	162.73	3798.26	A	0.155	2.755	46	0.85	1	15.642	1989.07	99.45	C
1080.00-1060.			B	0.155	2.755		0.85	1	15.642			
00			C	0.155	2.755		0.85	1	15.642			
T4	176.80	3798.26	A	0.155	2.755	46	0.85	1	15.649	2018.44	100.92	C
1060.00-1040.			B	0.155	2.755		0.85	1	15.649			
00			C	0.155	2.755		0.85	1	15.649			
T5	176.80	3798.26	A	0.155	2.755	45	0.85	1	15.656	2008.29	100.41	C
1040.00-1020.			B	0.155	2.755		0.85	1	15.656			
00			C	0.155	2.755		0.85	1	15.656			
T6	176.80	3798.26	A	0.155	2.755	45	0.85	1	15.663	1998.00	99.90	C
1020.00-1000.			B	0.155	2.755		0.85	1	15.663			
00			C	0.155	2.755		0.85	1	15.663			
T7	186.88	3798.26	A	0.155	2.755	45	0.85	1	15.670	2063.65	103.18	C
1000.00-980.0			B	0.155	2.755		0.85	1	15.670			
0			C	0.155	2.755		0.85	1	15.670			
T8	189.40	3798.26	A	0.155	2.755	45	0.85	1	15.678	2071.58	103.58	C
980.00-960.00			B	0.155	2.755		0.85	1	15.678			
			C	0.155	2.755		0.85	1	15.678			
T9	189.40	4790.45	A	0.168	2.707	44	0.85	1	16.374	2102.36	105.12	C
960.00-940.00			B	0.168	2.707		0.85	1	16.374			
			C	0.168	2.707		0.85	1	16.374			
T10	47.35	1197.61	A	0.168	2.707	44	0.85	1	4.091	523.49	104.70	C
940.00-935.00			B	0.168	2.707		0.85	1	4.091			
			C	0.168	2.707		0.85	1	4.091			
T11	47.35	1197.61	A	0.168	2.707	44	0.85	1	4.092	522.78	104.56	C
935.00-930.00			B	0.168	2.707		0.85	1	4.092			
			C	0.168	2.707		0.85	1	4.092			
T12	47.35	1287.44	A	0.172	2.691	44	0.85	1	4.207	531.17	106.23	C
930.00-925.00			B	0.172	2.691		0.85	1	4.207			
			C	0.172	2.691		0.85	1	4.207			
T13	47.35	1287.44	A	0.172	2.691	44	0.85	1	4.208	530.44	106.09	C
925.00-920.00			B	0.172	2.691		0.85	1	4.208			
			C	0.172	2.691		0.85	1	4.208			
T14	47.35	1287.44	A	0.172	2.691	44	0.85	1	4.208	529.71	105.94	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
920.00-915.00			B	0.172	2.691		0.85	1	4.208			
			C	0.172	2.691		0.85	1	4.208			
T15	47.35	1287.44	A	0.172	2.691	44	0.85	1	4.209	528.97	105.79	C
915.00-910.00			B	0.172	2.691		0.85	1	4.209			
			C	0.172	2.691		0.85	1	4.209			
T16	47.35	1197.61	A	0.168	2.707	44	0.85	1	4.095	519.20	103.84	C
910.00-905.00			B	0.168	2.707		0.85	1	4.095			
			C	0.168	2.707		0.85	1	4.095			
T17	47.35	1197.61	A	0.168	2.707	44	0.85	1	4.096	518.47	103.69	C
905.00-900.00			B	0.168	2.707		0.85	1	4.096			
			C	0.168	2.707		0.85	1	4.096			
T18	189.40	4790.45	A	0.168	2.707	44	0.85	1	16.390	2066.62	103.33	C
900.00-880.00			B	0.168	2.707		0.85	1	16.390			
			C	0.168	2.707		0.85	1	16.390			
T19	198.58	4790.45	A	0.168	2.707	43	0.85	1	16.401	2134.66	106.73	C
880.00-860.00			B	0.168	2.707		0.85	1	16.401			
			C	0.168	2.707		0.85	1	16.401			
T20	199.60	4790.45	A	0.168	2.707	43	0.85	1	16.412	2131.08	106.55	C
860.00-840.00			B	0.168	2.707		0.85	1	16.412			
			C	0.168	2.707		0.85	1	16.412			
T21	199.60	4790.45	A	0.168	2.707	43	0.85	1	16.423	2118.49	105.92	C
840.00-820.00			B	0.168	2.707		0.85	1	16.423			
			C	0.168	2.707		0.85	1	16.423			
T22	199.60	4790.45	A	0.168	2.707	42	0.85	1	16.435	2105.76	105.29	C
820.00-800.00			B	0.168	2.707		0.85	1	16.435			
			C	0.168	2.707		0.85	1	16.435			
T23	199.60	4790.45	A	0.168	2.707	42	0.85	1	16.446	2092.90	104.65	C
800.00-780.00			B	0.168	2.707		0.85	1	16.446			
			C	0.168	2.707		0.85	1	16.446			
T24	49.90	1197.61	A	0.168	2.707	42	0.85	1	4.113	521.20	104.24	C
780.00-775.00			B	0.168	2.707		0.85	1	4.113			
			C	0.168	2.707		0.85	1	4.113			
T25	49.90	1197.61	A	0.168	2.707	42	0.85	1	4.114	520.39	104.08	C
775.00-770.00			B	0.168	2.707		0.85	1	4.114			
			C	0.168	2.707		0.85	1	4.114			
T26	49.90	1287.44	A	0.172	2.691	42	0.85	1	4.229	528.18	105.64	C
770.00-765.00			B	0.172	2.691		0.85	1	4.229			
			C	0.172	2.691		0.85	1	4.229			
T27	49.90	1287.44	A	0.172	2.691	42	0.85	1	4.230	527.34	105.47	C
765.00-760.00			B	0.172	2.691		0.85	1	4.230			
			C	0.172	2.691		0.85	1	4.230			
T28	49.90	1287.44	A	0.172	2.691	42	0.85	1	4.231	526.51	105.30	C
760.00-755.00			B	0.172	2.691		0.85	1	4.231			
			C	0.172	2.691		0.85	1	4.231			
T29	49.90	1287.44	A	0.172	2.691	42	0.85	1	4.231	525.67	105.13	C
755.00-750.00			B	0.172	2.691		0.85	1	4.231			
			C	0.172	2.691		0.85	1	4.231			
T30	49.90	1197.61	A	0.168	2.707	42	0.85	1	4.118	516.29	103.26	C
750.00-745.00			B	0.168	2.707		0.85	1	4.118			
			C	0.168	2.707		0.85	1	4.118			
T31	49.90	1197.61	A	0.168	2.707	41	0.85	1	4.119	515.47	103.09	C
745.00-740.00			B	0.168	2.707		0.85	1	4.119			
			C	0.168	2.707		0.85	1	4.119			
T32	199.60	4790.45	A	0.168	2.707	41	0.85	1	16.482	2053.59	102.68	C
740.00-720.00			B	0.168	2.707		0.85	1	16.482			
			C	0.168	2.707		0.85	1	16.482			
T33	199.60	4790.45	A	0.168	2.707	41	0.85	1	16.494	2040.28	102.01	C
720.00-700.00			B	0.168	2.707		0.85	1	16.494			
			C	0.168	2.707		0.85	1	16.494			
T34	199.60	4790.45	A	0.168	2.707	41	0.85	1	16.506	2026.90	101.34	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft^2	F lb	w plf	Ctrl. Face
700.00-680.00			B	0.168	2.707		0.85	1	16.506			
			C	0.168	2.707		0.85	1	16.506			
T35	199.60	4790.45	A	0.168	2.707	40	0.85	1	16.518	2013.45	100.67	C
680.00-660.00			B	0.168	2.707		0.85	1	16.518			
			C	0.168	2.707		0.85	1	16.518			
T36	199.60	4790.45	A	0.168	2.707	40	0.85	1	16.531	1999.97	100.00	C
660.00-640.00			B	0.168	2.707		0.85	1	16.531			
			C	0.168	2.707		0.85	1	16.531			
T37	199.60	5552.12	A	0.176	2.676	40	0.85	1	16.970	2007.92	100.40	C
640.00-620.00			B	0.176	2.676		0.85	1	16.970			
			C	0.176	2.676		0.85	1	16.970			
T38	49.90	1388.03	A	0.176	2.677	40	0.85	1	4.242	499.68	99.94	C
620.00-615.00			B	0.176	2.677		0.85	1	4.242			
			C	0.176	2.677		0.85	1	4.242			
T39	49.90	1388.03	A	0.176	2.677	40	0.85	1	4.243	498.85	99.77	C
615.00-610.00			B	0.176	2.677		0.85	1	4.243			
			C	0.176	2.677		0.85	1	4.243			
T40	49.90	1477.86	A	0.181	2.661	39	0.85	1	4.360	506.15	101.23	C
610.00-605.00			B	0.181	2.661		0.85	1	4.360			
			C	0.181	2.661		0.85	1	4.360			
T41	49.90	1477.86	A	0.181	2.661	39	0.85	1	4.361	505.30	101.06	C
605.00-600.00			B	0.181	2.661		0.85	1	4.361			
			C	0.181	2.661		0.85	1	4.361			
T42	49.90	1477.86	A	0.181	2.661	39	0.85	1	4.362	504.45	100.89	C
600.00-595.00			B	0.181	2.661		0.85	1	4.362			
			C	0.181	2.661		0.85	1	4.362			
T43	49.90	1477.86	A	0.181	2.661	39	0.85	1	4.363	503.60	100.72	C
595.00-590.00			B	0.181	2.661		0.85	1	4.363			
			C	0.181	2.661		0.85	1	4.363			
T44	49.90	1388.03	A	0.176	2.677	39	0.85	1	4.248	494.68	98.94	C
590.00-585.00			B	0.176	2.677		0.85	1	4.248			
			C	0.176	2.677		0.85	1	4.248			
T45	49.90	1388.03	A	0.176	2.677	39	0.85	1	4.249	493.85	98.77	C
585.00-580.00			B	0.176	2.677		0.85	1	4.249			
			C	0.176	2.677		0.85	1	4.249			
T46	199.60	5161.26	A	0.172	2.692	39	0.85	1	16.793	1956.97	97.85	C
580.00-560.00			B	0.172	2.692		0.85	1	16.793			
			C	0.172	2.692		0.85	1	16.793			
T47	199.60	5161.26	A	0.172	2.692	39	0.85	1	16.812	1944.28	97.21	C
560.00-540.00			B	0.172	2.692		0.85	1	16.812			
			C	0.172	2.692		0.85	1	16.812			
T48	49.90	1228.81	A	0.159	2.738	38	0.85	1	3.875	460.88	92.18	C
540.00-535.00			B	0.159	2.738		0.85	1	3.875			
			C	0.159	2.738		0.85	1	3.875			
T49	49.90	1290.32	A	0.172	2.692	38	0.85	1	4.206	483.26	96.65	C
535.00-530.00			B	0.172	2.692		0.85	1	4.206			
			C	0.172	2.692		0.85	1	4.206			
T50	49.90	1290.32	A	0.172	2.692	38	0.85	1	4.207	482.46	96.49	C
530.00-525.00			B	0.172	2.692		0.85	1	4.207			
			C	0.172	2.692		0.85	1	4.207			
T51	49.90	1290.32	A	0.172	2.692	38	0.85	1	4.207	481.67	96.33	C
525.00-520.00			B	0.172	2.692		0.85	1	4.207			
			C	0.172	2.692		0.85	1	4.207			
T52	199.60	5161.26	A	0.172	2.692	38	0.85	1	16.838	1918.88	95.94	C
520.00-500.00			B	0.172	2.692		0.85	1	16.838			
			C	0.172	2.692		0.85	1	16.838			
T53	199.60	5161.26	A	0.172	2.692	38	0.85	1	16.850	1906.73	95.34	C
500.00-480.00			B	0.172	2.692		0.85	1	16.850			
			C	0.172	2.692		0.85	1	16.850			
T54	199.60	5161.26	A	0.172	2.692	38	0.85	1	16.862	1895.07	94.75	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft^2	F lb	w plf	Ctrl. Face
480.00-460.00			B	0.172	2.692		0.85	1	16.862			
			C	0.172	2.692		0.85	1	16.862			
T55	199.60	5552.12	A	0.176	2.677	37	0.85	1	17.092	1894.37	94.72	C
460.00-440.00			B	0.176	2.677		0.85	1	17.092			
			C	0.176	2.677		0.85	1	17.092			
T56	49.90	1388.03	A	0.176	2.677	37	0.85	1	4.274	471.86	94.37	C
440.00-435.00			B	0.176	2.677		0.85	1	4.274			
			C	0.176	2.677		0.85	1	4.274			
T57	49.90	1388.03	A	0.176	2.677	37	0.85	1	4.274	471.23	94.25	C
435.00-430.00			B	0.176	2.677		0.85	1	4.274			
			C	0.176	2.677		0.85	1	4.274			
T58	49.90	1477.86	A	0.181	2.661	37	0.85	1	4.390	478.22	95.64	C
430.00-425.00			B	0.181	2.661		0.85	1	4.390			
			C	0.181	2.661		0.85	1	4.390			
T59	49.90	1477.86	A	0.181	2.661	37	0.85	1	4.391	477.60	95.52	C
425.00-420.00			B	0.181	2.661		0.85	1	4.391			
			C	0.181	2.661		0.85	1	4.391			
T60	49.90	1477.86	A	0.181	2.661	37	0.85	1	4.392	477.00	95.40	C
420.00-415.00			B	0.181	2.661		0.85	1	4.392			
			C	0.181	2.661		0.85	1	4.392			
T61	49.90	1477.86	A	0.181	2.661	37	0.85	1	4.392	476.41	95.28	C
415.00-410.00			B	0.181	2.661		0.85	1	4.392			
			C	0.181	2.661		0.85	1	4.392			
T62	49.90	1388.03	A	0.176	2.677	37	0.85	1	4.278	468.29	93.66	C
410.00-405.00			B	0.176	2.677		0.85	1	4.278			
			C	0.176	2.677		0.85	1	4.278			
T63	49.90	1388.03	A	0.176	2.677	37	0.85	1	4.278	467.75	93.55	C
405.00-400.00			B	0.176	2.677		0.85	1	4.278			
			C	0.176	2.677		0.85	1	4.278			
T64	226.80	5552.12	A	0.176	2.677	37	0.85	1	17.119	1917.99	95.90	C
400.00-380.00			B	0.176	2.677		0.85	1	17.119			
			C	0.176	2.677		0.85	1	17.119			
T65	226.80	5552.12	A	0.176	2.677	37	0.85	1	17.127	1910.64	95.53	C
380.00-360.00			B	0.176	2.677		0.85	1	17.127			
			C	0.176	2.677		0.85	1	17.127			
T66	231.39	5552.12	A	0.176	2.677	36	0.85	1	17.133	1938.44	96.92	C
360.00-340.00			B	0.176	2.677		0.85	1	17.133			
			C	0.176	2.677		0.85	1	17.133			
T67	237.00	5552.12	A	0.176	2.677	36	0.85	1	17.138	1975.28	98.76	C
340.00-320.00			B	0.176	2.677		0.85	1	17.138			
			C	0.176	2.677		0.85	1	17.138			
T68	237.00	5552.12	A	0.176	2.677	36	0.85	1	17.140	1973.12	98.66	C
320.00-300.00			B	0.176	2.677		0.85	1	17.140			
			C	0.176	2.677		0.85	1	17.140			
T69	237.00	5552.12	A	0.176	2.677	36	0.85	1	17.140	1973.37	98.67	C
300.00-280.00			B	0.176	2.677		0.85	1	17.140			
			C	0.176	2.677		0.85	1	17.140			
T70	59.25	1388.03	A	0.176	2.677	36	0.85	1	4.285	493.73	98.75	C
280.00-275.00			B	0.176	2.677		0.85	1	4.285			
			C	0.176	2.677		0.85	1	4.285			
T71	59.25	1388.03	A	0.176	2.677	36	0.85	1	4.284	493.96	98.79	C
275.00-270.00			B	0.176	2.677		0.85	1	4.284			
			C	0.176	2.677		0.85	1	4.284			
T72	59.25	1477.86	A	0.181	2.661	36	0.85	1	4.399	501.69	100.34	C
270.00-265.00			B	0.181	2.661		0.85	1	4.399			
			C	0.181	2.661		0.85	1	4.399			
T73	59.25	1477.86	A	0.181	2.661	36	0.85	1	4.399	502.02	100.40	C
265.00-260.00			B	0.181	2.661		0.85	1	4.399			
			C	0.181	2.661		0.85	1	4.399			
T74	59.25	1477.86	A	0.181	2.661	36	0.85	1	4.399	502.41	100.48	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
260.00-255.00			B	0.181	2.661		0.85	1	4.399			
			C	0.181	2.661		0.85	1	4.399			
T75	59.25	1477.86	A	0.181	2.661	37	0.85	1	4.398	502.85	100.57	C
255.00-250.00			B	0.181	2.661		0.85	1	4.398			
			C	0.181	2.661		0.85	1	4.398			
T76	59.25	1388.03	A	0.176	2.677	37	0.85	1	4.282	495.87	99.17	C
250.00-245.00			B	0.176	2.677		0.85	1	4.282			
			C	0.176	2.677		0.85	1	4.282			
T77	59.25	1388.03	A	0.176	2.677	37	0.85	1	4.282	496.41	99.28	C
245.00-240.00			B	0.176	2.677		0.85	1	4.282			
			C	0.176	2.677		0.85	1	4.282			
T78	237.00	5552.12	A	0.176	2.677	37	0.85	1	17.120	1992.00	99.60	C
240.00-220.00			B	0.176	2.677		0.85	1	17.120			
			C	0.176	2.677		0.85	1	17.120			
T79	237.00	5552.12	A	0.176	2.677	37	0.85	1	17.106	2005.27	100.26	C
220.00-200.00			B	0.176	2.677		0.85	1	17.106			
			C	0.176	2.677		0.85	1	17.106			
T80	405.86	5552.12	A	0.176	2.677	37	0.85	1	17.088	2439.86	121.99	B
200.00-180.00			B	0.176	2.677		0.85	1	17.088			
			C	0.176	2.677		0.85	1	17.088			
T81	464.60	5552.12	A	0.176	2.677	38	0.85	1	17.065	2674.94	133.75	B
180.00-160.00			B	0.176	2.677		0.85	1	17.065			
			C	0.176	2.677		0.85	1	17.065			
T82	464.60	5552.12	A	0.176	2.677	38	0.85	1	17.039	2708.35	135.42	B
160.00-140.00			B	0.176	2.677		0.85	1	17.039			
			C	0.176	2.677		0.85	1	17.039			
T83	464.60	5552.12	A	0.176	2.677	39	0.85	1	17.010	2821.29	141.06	B
140.00-120.00			B	0.176	2.677		0.85	1	17.010			
			C	0.176	2.677		0.85	1	17.010			
T84	116.15	1388.03	A	0.176	2.677	39	0.85	1	4.248	711.31	142.26	B
120.00-115.00			B	0.176	2.677		0.85	1	4.248			
			C	0.176	2.677		0.85	1	4.248			
T85	116.15	1388.03	A	0.176	2.677	39	0.85	1	4.246	713.68	142.74	B
115.00-110.00			B	0.176	2.677		0.85	1	4.246			
			C	0.176	2.677		0.85	1	4.246			
T86	116.15	1477.86	A	0.181	2.661	39	0.85	1	4.360	724.15	144.83	B
110.00-105.00			B	0.181	2.661		0.85	1	4.360			
			C	0.181	2.661		0.85	1	4.360			
T87	116.15	1477.86	A	0.181	2.661	40	0.85	1	4.358	726.42	145.28	B
105.00-100.00			B	0.181	2.661		0.85	1	4.358			
			C	0.181	2.661		0.85	1	4.358			
T88	116.15	1477.86	A	0.181	2.661	40	0.85	1	4.356	728.59	145.72	B
100.00-95.00			B	0.181	2.661		0.85	1	4.356			
			C	0.181	2.661		0.85	1	4.356			
T89	116.15	1477.86	A	0.181	2.661	40	0.85	1	4.355	730.60	146.12	B
95.00-90.00			B	0.181	2.661		0.85	1	4.355			
			C	0.181	2.661		0.85	1	4.355			
T90	116.15	1388.03	A	0.176	2.677	40	0.85	1	4.238	724.16	144.83	B
90.00-85.00			B	0.176	2.677		0.85	1	4.238			
			C	0.176	2.677		0.85	1	4.238			
T91	116.15	1388.03	A	0.176	2.677	40	0.85	1	4.237	725.68	145.14	B
85.00-80.00			B	0.176	2.677		0.85	1	4.237			
			C	0.176	2.677		0.85	1	4.237			
T92	464.60	5552.12	A	0.176	2.677	40	0.85	1	16.940	2911.31	145.57	B
80.00-60.00			B	0.176	2.677		0.85	1	16.940			
			C	0.176	2.677		0.85	1	16.940			
T93	464.60	5552.12	A	0.176	2.677	40	0.85	1	16.957	2889.32	144.47	B
60.00-40.00			B	0.176	2.677		0.85	1	16.957			
			C	0.176	2.677		0.85	1	16.957			
T94	464.60	5552.12	A	0.176	2.677	38	0.85	1	17.054	2689.02	134.45	B

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
40.00-20.00			B	0.176	2.677		0.85	1	17.054			
			C	0.176	2.677		0.85	1	17.054			
T95	116.15	1388.03	A	0.176	2.677	41	0.85	1	4.231	733.15	146.63	B
20.00-15.00			B	0.176	2.677		0.85	1	4.231			
			C	0.176	2.677		0.85	1	4.231			
T96	185.84	2850.83	A	0.248	2.443	42	0.85	1	11.841	1600.32	200.04	B
15.00-7.00			B	0.248	2.443		0.85	1	11.841			
			C	0.248	2.443		0.85	1	11.841			
T97 7.00-0.00	162.61	4952.76	A	1	2.1	44	0.85	1	37.895	2453.85*	350.55	C
			B	1	2.1		0.85	1	37.895			
			C	1	2.1		0.85	1	37.895			
Sum Weight:	14038.72	294337.78			*2.1A_g limit					126443.98		

Tower Forces - With Ice - Wind Normal To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
L1	1734.76	13864.88	A	1	1.2	11	1	1	125.237	1370.19	22.06	C
1151.90-1089.			B	1	1.2		1	1	125.237			
80			C	1	1.2		1	1	125.237			
T1	136.89	5282.80	A	0.648	1.782	11	1	1	24.480	410.45	83.77	C
1089.80-1084.			B	0.648	1.782		1	1	24.480			
90			C	0.648	1.782		1	1	24.480			
T2	136.89	2168.63	A	0.447	1.978	11	1	1	13.030	257.99	52.65	C
1084.90-1080.			B	0.447	1.978		1	1	13.030			
00			C	0.447	1.978		1	1	13.030			
T3	805.37	8321.91	A	0.438	1.994	11	1	1	51.788	1104.76	55.24	C
1080.00-1060.			B	0.438	1.994		1	1	51.788			
00			C	0.438	1.994		1	1	51.788			
T4	938.21	8322.07	A	0.438	1.994	11	1	1	51.789	1136.99	56.85	C
1060.00-1040.			B	0.438	1.994		1	1	51.789			
00			C	0.438	1.994		1	1	51.789			
T5	938.24	8322.26	A	0.438	1.994	10	1	1	51.791	1130.87	56.54	C
1040.00-1020.			B	0.438	1.994		1	1	51.791			
00			C	0.438	1.994		1	1	51.791			
T6	938.28	8322.47	A	0.438	1.994	10	1	1	51.792	1124.67	56.23	C
1020.00-1000.			B	0.438	1.994		1	1	51.792			
00			C	0.438	1.994		1	1	51.792			
T7	1206.31	8322.72	A	0.438	1.994	10	1	1	51.794	1201.40	60.07	C
1000.00-980.0			B	0.438	1.994		1	1	51.794			
0			C	0.438	1.994		1	1	51.794			
T8	1273.38	8323.01	A	0.438	1.994	10	1	1	51.795	1215.22	60.76	C
980.00-960.00			B	0.438	1.994		1	1	51.795			
			C	0.438	1.994		1	1	51.795			
T9	1272.69	9427.82	A	0.447	1.978	10	1	1	53.499	1225.40	61.27	C
960.00-940.00			B	0.447	1.978		1	1	53.499			
			C	0.447	1.978		1	1	53.499			
T10	317.65	2354.80	A	0.446	1.98	10	1	1	13.346	304.90	60.98	C
940.00-935.00			B	0.446	1.98		1	1	13.346			
			C	0.446	1.98		1	1	13.346			
T11	317.44	2353.93	A	0.446	1.98	10	1	1	13.340	304.37	60.87	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft^2	F lb	w plf	Ctrl. Face
935.00-930.00			B	0.446	1.98		1	1	13.340			
			C	0.446	1.98		1	1	13.340			
T12	317.23	2461.00	A	0.45	1.973	10	1	1	13.495	305.19	61.04	C
930.00-925.00			B	0.45	1.973		1	1	13.495			
			C	0.45	1.973		1	1	13.495			
T13	317.02	2460.11	A	0.45	1.973	10	1	1	13.490	304.66	60.93	C
925.00-920.00			B	0.45	1.973		1	1	13.490			
			C	0.45	1.973		1	1	13.490			
T14	316.80	2459.23	A	0.45	1.973	10	1	1	13.484	304.12	60.82	C
920.00-915.00			B	0.45	1.973		1	1	13.484			
			C	0.45	1.973		1	1	13.484			
T15	316.59	2458.34	A	0.45	1.974	10	1	1	13.479	303.59	60.72	C
915.00-910.00			B	0.45	1.974		1	1	13.479			
			C	0.45	1.974		1	1	13.479			
T16	316.38	2349.55	A	0.445	1.981	10	1	1	13.313	301.72	60.34	C
910.00-905.00			B	0.445	1.981		1	1	13.313			
			C	0.445	1.981		1	1	13.313			
T17	316.16	2348.66	A	0.445	1.981	10	1	1	13.307	301.19	60.24	C
905.00-900.00			B	0.445	1.981		1	1	13.307			
			C	0.445	1.981		1	1	13.307			
T18	1262.49	9385.73	A	0.445	1.982	10	1	1	53.172	1199.39	59.97	C
900.00-880.00			B	0.445	1.982		1	1	53.172			
			C	0.445	1.982		1	1	53.172			
T19	1455.54	9371.31	A	0.444	1.983	10	1	1	53.081	1243.18	62.16	C
880.00-860.00			B	0.444	1.983		1	1	53.081			
			C	0.444	1.983		1	1	53.081			
T20	1473.14	9356.68	A	0.444	1.984	10	1	1	52.989	1239.87	61.99	C
860.00-840.00			B	0.444	1.984		1	1	52.989			
			C	0.444	1.984		1	1	52.989			
T21	1468.84	9341.85	A	0.443	1.985	10	1	1	52.896	1230.65	61.53	C
840.00-820.00			B	0.443	1.985		1	1	52.896			
			C	0.443	1.985		1	1	52.896			
T22	1464.50	9326.84	A	0.443	1.986	10	1	1	52.801	1221.35	61.07	C
820.00-800.00			B	0.443	1.986		1	1	52.801			
			C	0.443	1.986		1	1	52.801			
T23	1460.09	9311.63	A	0.442	1.987	10	1	1	52.705	1211.97	60.60	C
800.00-780.00			B	0.442	1.987		1	1	52.705			
			C	0.442	1.987		1	1	52.705			
T24	364.33	2325.51	A	0.442	1.987	10	1	1	13.161	301.52	60.30	C
780.00-775.00			B	0.442	1.987		1	1	13.161			
			C	0.442	1.987		1	1	13.161			
T25	364.05	2324.54	A	0.441	1.988	10	1	1	13.155	300.92	60.18	C
775.00-770.00			B	0.441	1.988		1	1	13.155			
			C	0.441	1.988		1	1	13.155			
T26	363.77	2431.19	A	0.446	1.981	10	1	1	13.309	301.49	60.30	C
770.00-765.00			B	0.446	1.981		1	1	13.309			
			C	0.446	1.981		1	1	13.309			
T27	363.49	2430.21	A	0.445	1.981	10	1	1	13.302	300.89	60.18	C
765.00-760.00			B	0.445	1.981		1	1	13.302			
			C	0.445	1.981		1	1	13.302			
T28	363.21	2429.23	A	0.445	1.981	10	1	1	13.296	300.29	60.06	C
760.00-755.00			B	0.445	1.981		1	1	13.296			
			C	0.445	1.981		1	1	13.296			
T29	362.92	2428.24	A	0.445	1.982	10	1	1	13.290	299.69	59.94	C
755.00-750.00			B	0.445	1.982		1	1	13.290			
			C	0.445	1.982		1	1	13.290			
T30	362.64	2319.68	A	0.441	1.989	10	1	1	13.124	297.95	59.59	C
750.00-745.00			B	0.441	1.989		1	1	13.124			
			C	0.441	1.989		1	1	13.124			
T31	362.36	2318.70	A	0.441	1.989	10	1	1	13.118	297.35	59.47	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
745.00-740.00			B	0.441	1.989		1	1	13.118			
			C	0.441	1.989		1	1	13.118			
T32	1446.58	9264.95	A	0.44	1.99	10	1	1	52.411	1183.41	59.17	C
740.00-720.00			B	0.44	1.99		1	1	52.411			
			C	0.44	1.99		1	1	52.411			
T33	1441.99	9249.08	A	0.439	1.991	9	1	1	52.311	1173.78	58.69	C
720.00-700.00			B	0.439	1.991		1	1	52.311			
			C	0.439	1.991		1	1	52.311			
T34	1437.36	9233.09	A	0.439	1.992	9	1	1	52.209	1164.12	58.21	C
700.00-680.00			B	0.439	1.992		1	1	52.209			
			C	0.439	1.992		1	1	52.209			
T35	1432.70	9216.98	A	0.438	1.993	9	1	1	52.108	1154.43	57.72	C
680.00-660.00			B	0.438	1.993		1	1	52.108			
			C	0.438	1.993		1	1	52.108			
T36	1428.02	9200.80	A	0.437	1.995	9	1	1	52.005	1144.75	57.24	C
660.00-640.00			B	0.437	1.995		1	1	52.005			
			C	0.437	1.995		1	1	52.005			
T37	1423.33	10020.39	A	0.443	1.985	9	1	1	53.052	1145.03	57.25	C
640.00-620.00			B	0.443	1.985		1	1	53.052			
			C	0.443	1.985		1	1	53.052			
T38	355.10	2502.53	A	0.442	1.986	9	1	1	13.237	284.66	56.93	C
620.00-615.00			B	0.442	1.986		1	1	13.237			
			C	0.442	1.986		1	1	13.237			
T39	354.81	2501.50	A	0.442	1.986	9	1	1	13.230	284.06	56.81	C
615.00-610.00			B	0.442	1.986		1	1	13.230			
			C	0.442	1.986		1	1	13.230			
T40	354.51	2607.74	A	0.446	1.98	9	1	1	13.383	284.55	56.91	C
610.00-605.00			B	0.446	1.98		1	1	13.383			
			C	0.446	1.98		1	1	13.383			
T41	354.22	2606.70	A	0.446	1.98	9	1	1	13.376	283.95	56.79	C
605.00-600.00			B	0.446	1.98		1	1	13.376			
			C	0.446	1.98		1	1	13.376			
T42	353.93	2605.67	A	0.446	1.98	9	1	1	13.370	283.34	56.67	C
600.00-595.00			B	0.446	1.98		1	1	13.370			
			C	0.446	1.98		1	1	13.370			
T43	353.64	2604.64	A	0.446	1.98	9	1	1	13.363	282.74	56.55	C
595.00-590.00			B	0.446	1.98		1	1	13.363			
			C	0.446	1.98		1	1	13.363			
T44	353.34	2496.39	A	0.441	1.988	9	1	1	13.198	281.05	56.21	C
590.00-585.00			B	0.441	1.988		1	1	13.198			
			C	0.441	1.988		1	1	13.198			
T45	353.05	2495.37	A	0.441	1.988	9	1	1	13.192	280.45	56.09	C
585.00-580.00			B	0.441	1.988		1	1	13.192			
			C	0.441	1.988		1	1	13.192			
T46	1409.31	9543.68	A	0.438	1.994	9	1	1	52.128	1110.99	55.55	C
580.00-560.00			B	0.438	1.994		1	1	52.128			
			C	0.438	1.994		1	1	52.128			
T47	1404.71	9527.67	A	0.437	1.995	9	1	1	52.047	1101.80	55.09	C
560.00-540.00			B	0.437	1.995		1	1	52.047			
			C	0.437	1.995		1	1	52.047			
T48	350.47	2179.22	A	0.38	2.104	9	1	1	11.016	258.24	51.65	C
540.00-535.00			B	0.38	2.104		1	1	11.016			
			C	0.38	2.104		1	1	11.016			
T49	350.19	2378.47	A	0.437	1.996	9	1	1	12.990	273.44	54.69	C
535.00-530.00			B	0.437	1.996		1	1	12.990			
			C	0.437	1.996		1	1	12.990			
T50	349.91	2377.49	A	0.436	1.996	9	1	1	12.984	272.88	54.58	C
530.00-525.00			B	0.436	1.996		1	1	12.984			
			C	0.436	1.996		1	1	12.984			
T51	349.63	2376.52	A	0.436	1.997	9	1	1	12.978	272.31	54.46	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft^2	F lb	w plf	Ctrl. Face
525.00-520.00			B	0.436	1.997		1	1	12.978			
			C	0.436	1.997		1	1	12.978			
T52	1395.75	9496.50	A	0.436	1.997	9	1	1	51.850	1083.71	54.19	C
520.00-500.00			B	0.436	1.997		1	1	51.850			
			C	0.436	1.997		1	1	51.850			
T53	1391.46	9481.53	A	0.435	1.998	9	1	1	51.755	1075.09	53.75	C
500.00-480.00			B	0.435	1.998		1	1	51.755			
			C	0.435	1.998		1	1	51.755			
T54	1387.32	9467.14	A	0.435	1.999	9	1	1	51.664	1066.83	53.34	C
480.00-460.00			B	0.435	1.999		1	1	51.664			
			C	0.435	1.999		1	1	51.664			
T55	1383.40	9880.58	A	0.437	1.995	9	1	1	52.150	1063.68	53.18	C
460.00-440.00			B	0.437	1.995		1	1	52.150			
			C	0.437	1.995		1	1	52.150			
T56	345.27	2468.11	A	0.437	1.996	9	1	1	13.020	264.73	52.95	C
440.00-435.00			B	0.437	1.996		1	1	13.020			
			C	0.437	1.996		1	1	13.020			
T57	345.04	2467.32	A	0.437	1.996	9	1	1	13.015	264.28	52.86	C
435.00-430.00			B	0.437	1.996		1	1	13.015			
			C	0.437	1.996		1	1	13.015			
T58	344.82	2573.43	A	0.441	1.989	9	1	1	13.167	264.87	52.97	C
430.00-425.00			B	0.441	1.989		1	1	13.167			
			C	0.441	1.989		1	1	13.167			
T59	344.61	2572.67	A	0.441	1.989	9	1	1	13.162	264.44	52.89	C
425.00-420.00			B	0.441	1.989		1	1	13.162			
			C	0.441	1.989		1	1	13.162			
T60	344.40	2571.92	A	0.441	1.989	9	1	1	13.158	264.02	52.80	C
420.00-415.00			B	0.441	1.989		1	1	13.158			
			C	0.441	1.989		1	1	13.158			
T61	344.19	2571.19	A	0.44	1.989	9	1	1	13.153	263.61	52.72	C
415.00-410.00			B	0.44	1.989		1	1	13.153			
			C	0.44	1.989		1	1	13.153			
T62	343.99	2463.64	A	0.436	1.997	9	1	1	12.991	262.19	52.44	C
410.00-405.00			B	0.436	1.997		1	1	12.991			
			C	0.436	1.997		1	1	12.991			
T63	343.80	2462.96	A	0.436	1.997	9	1	1	12.987	261.81	52.36	C
405.00-400.00			B	0.436	1.997		1	1	12.987			
			C	0.436	1.997		1	1	12.987			
T64	1561.88	9845.44	A	0.436	1.998	8	1	1	51.908	1087.01	54.35	C
400.00-380.00			B	0.436	1.998		1	1	51.908			
			C	0.436	1.998		1	1	51.908			
T65	1558.95	9836.50	A	0.435	1.998	8	1	1	51.851	1081.78	54.09	C
380.00-360.00			B	0.435	1.998		1	1	51.851			
			C	0.435	1.998		1	1	51.851			
T66	1646.87	9829.37	A	0.435	1.999	8	1	1	51.806	1099.23	54.96	C
360.00-340.00			B	0.435	1.999		1	1	51.806			
			C	0.435	1.999		1	1	51.806			
T67	1755.30	9824.38	A	0.435	1.999	8	1	1	51.775	1122.61	56.13	C
340.00-320.00			B	0.435	1.999		1	1	51.775			
			C	0.435	1.999		1	1	51.775			
T68	1754.35	9821.84	A	0.435	1.999	8	1	1	51.759	1121.08	56.05	C
320.00-300.00			B	0.435	1.999		1	1	51.759			
			C	0.435	1.999		1	1	51.759			
T69	1754.46	9822.14	A	0.435	1.999	8	1	1	51.760	1121.26	56.06	C
300.00-280.00			B	0.435	1.999		1	1	51.760			
			C	0.435	1.999		1	1	51.760			
T70	438.78	2455.98	A	0.435	1.999	8	1	1	12.943	280.59	56.12	C
280.00-275.00			B	0.435	1.999		1	1	12.943			
			C	0.435	1.999		1	1	12.943			
T71	438.89	2456.26	A	0.435	1.999	8	1	1	12.945	280.75	56.15	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
275.00-270.00			B	0.435	1.999		1	1	12.945			
			C	0.435	1.999		1	1	12.945			
T72	439.01	2563.36	A	0.439	1.992	8	1	1	13.104	281.78	56.36	C
270.00-265.00			B	0.439	1.992		1	1	13.104			
			C	0.439	1.992		1	1	13.104			
T73	439.15	2563.75	A	0.439	1.992	8	1	1	13.106	282.02	56.40	C
265.00-260.00			B	0.439	1.992		1	1	13.106			
			C	0.439	1.992		1	1	13.106			
T74	439.32	2564.20	A	0.439	1.991	8	1	1	13.109	282.29	56.46	C
260.00-255.00			B	0.439	1.991		1	1	13.109			
			C	0.439	1.991		1	1	13.109			
T75	439.51	2564.71	A	0.439	1.991	8	1	1	13.112	282.60	56.52	C
255.00-250.00			B	0.439	1.991		1	1	13.112			
			C	0.439	1.991		1	1	13.112			
T76	439.72	2458.49	A	0.435	1.998	8	1	1	12.959	282.11	56.42	C
250.00-245.00			B	0.435	1.998		1	1	12.959			
			C	0.435	1.998		1	1	12.959			
T77	439.96	2459.12	A	0.435	1.998	8	1	1	12.963	282.49	56.50	C
245.00-240.00			B	0.435	1.998		1	1	12.963			
			C	0.435	1.998		1	1	12.963			
T78	1762.61	9843.91	A	0.436	1.998	8	1	1	51.898	1134.50	56.72	C
240.00-220.00			B	0.436	1.998		1	1	51.898			
			C	0.436	1.998		1	1	51.898			
T79	1768.39	9859.38	A	0.436	1.997	9	1	1	51.996	1143.95	57.20	C
220.00-200.00			B	0.436	1.997		1	1	51.996			
			C	0.436	1.997		1	1	51.996			
T80	2766.16	9879.41	A	0.437	1.995	9	1	1	52.123	1398.34	69.92	C
200.00-180.00			B	0.437	1.995		1	1	52.123			
			C	0.437	1.995		1	1	52.123			
T81	3174.32	9904.03	A	0.438	1.994	9	1	1	52.278	1515.82	75.79	C
180.00-160.00			B	0.438	1.994		1	1	52.278			
			C	0.438	1.994		1	1	52.278			
T82	3191.97	9932.88	A	0.439	1.992	9	1	1	52.460	1538.36	76.92	C
160.00-140.00			B	0.439	1.992		1	1	52.460			
			C	0.439	1.992		1	1	52.460			
T83	3211.56	9964.88	A	0.441	1.989	9	1	1	52.662	1563.57	78.18	C
140.00-120.00			B	0.441	1.989		1	1	52.662			
			C	0.441	1.989		1	1	52.662			
T84	806.05	2496.38	A	0.441	1.988	9	1	1	13.198	394.99	79.00	C
120.00-115.00			B	0.441	1.988		1	1	13.198			
			C	0.441	1.988		1	1	13.198			
T85	807.30	2498.42	A	0.442	1.987	9	1	1	13.211	396.61	79.32	C
115.00-110.00			B	0.442	1.987		1	1	13.211			
			C	0.442	1.987		1	1	13.211			
T86	808.52	2607.68	A	0.446	1.98	9	1	1	13.382	398.43	79.69	C
110.00-105.00			B	0.446	1.98		1	1	13.382			
			C	0.446	1.98		1	1	13.382			
T87	809.71	2609.63	A	0.447	1.979	9	1	1	13.395	399.97	79.99	C
105.00-100.00			B	0.447	1.979		1	1	13.395			
			C	0.447	1.979		1	1	13.395			
T88	810.83	2611.49	A	0.447	1.979	9	1	1	13.406	401.44	80.29	C
100.00-95.00			B	0.447	1.979		1	1	13.406			
			C	0.447	1.979		1	1	13.406			
T89	811.87	2613.20	A	0.447	1.978	9	1	1	13.417	402.80	80.56	C
95.00-90.00			B	0.447	1.978		1	1	13.417			
			C	0.447	1.978		1	1	13.417			
T90	812.80	2507.41	A	0.443	1.985	9	1	1	13.267	403.80	80.76	C
90.00-85.00			B	0.443	1.985		1	1	13.267			
			C	0.443	1.985		1	1	13.267			
T91	813.60	2508.71	A	0.443	1.985	9	1	1	13.276	404.85	80.97	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft^2	F lb	w plf	Ctrl. Face
85.00-80.00			B	0.443	1.985		1	1	13.276			
			C	0.443	1.985		1	1	13.276			
T92	3258.90	10042.20	A	0.444	1.984	9	1	1	53.148	1625.32	81.27	C
80.00-60.00			B	0.444	1.984		1	1	53.148			
			C	0.444	1.984		1	1	53.148			
T93	3247.38	10023.39	A	0.443	1.985	9	1	1	53.030	1610.19	80.51	C
60.00-40.00			B	0.443	1.985		1	1	53.030			
			C	0.443	1.985		1	1	53.030			
T94	3181.76	9916.20	A	0.439	1.993	9	1	1	52.355	1525.31	76.27	C
40.00-20.00			B	0.439	1.993		1	1	52.355			
			C	0.439	1.993		1	1	52.355			
T95	766.85	2432.33	A	0.431	2.006	9	1	1	12.793	402.94	80.59	C
20.00-15.00			B	0.431	2.006		1	1	12.793			
			C	0.431	2.006		1	1	12.793			
T96	1179.22	5622.89	A	0.522	1.874	10	1	1	28.423	711.28	88.91	C
15.00-7.00			B	0.522	1.874		1	1	28.423			
			C	0.522	1.874		1	1	28.423			
T97 7.00-0.00	921.33	8698.13	A	1	2.1	10	1	1	56.518	608.21*	86.89	C
			B	1	2.1		1	1	56.518			
			C	1	2.1		1	1	56.518			
Sum Weight:	95835.76	544129.49			*2.1A_g limit					68141.71		

Tower Forces - With Ice - Wind 60 To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft^2	F lb	w plf	Ctrl. Face
L1	1734.76	13864.88	A	1	1.2	11	1	1	125.237	1370.19	22.06	C
1151.90-1089.			B	1	1.2		1	1	125.237			
80			C	1	1.2		1	1	125.237			
T1	136.89	5282.80	A	0.648	1.782	11	0.8	1	21.667	365.14	74.52	C
1089.80-1084.			B	0.648	1.782		0.8	1	21.667			
90			C	0.648	1.782		0.8	1	21.667			
T2	136.89	2168.63	A	0.447	1.978	11	0.8	1	12.710	252.27	51.48	C
1084.90-1080.			B	0.447	1.978		0.8	1	12.710			
00			C	0.447	1.978		0.8	1	12.710			
T3	805.37	8321.91	A	0.438	1.994	11	0.8	1	50.507	1081.77	54.09	C
1080.00-1060.			B	0.438	1.994		0.8	1	50.507			
00			C	0.438	1.994		0.8	1	50.507			
T4	938.21	8322.07	A	0.438	1.994	11	0.8	1	50.508	1114.12	55.71	C
1060.00-1040.			B	0.438	1.994		0.8	1	50.508			
00			C	0.438	1.994		0.8	1	50.508			
T5	938.24	8322.26	A	0.438	1.994	10	0.8	1	50.509	1108.12	55.41	C
1040.00-1020.			B	0.438	1.994		0.8	1	50.509			
00			C	0.438	1.994		0.8	1	50.509			
T6	938.28	8322.47	A	0.438	1.994	10	0.8	1	50.511	1102.05	55.10	C
1020.00-1000.			B	0.438	1.994		0.8	1	50.511			
00			C	0.438	1.994		0.8	1	50.511			
T7	1206.31	8322.72	A	0.438	1.994	10	0.8	1	50.512	1178.91	58.95	C
1000.00-980.0			B	0.438	1.994		0.8	1	50.512			
0			C	0.438	1.994		0.8	1	50.512			
T8	1273.38	8323.01	A	0.438	1.994	10	0.8	1	50.514	1192.86	59.64	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
980.00-960.00			B	0.438	1.994		0.8	1	50.514			
			C	0.438	1.994		0.8	1	50.514			
T9	1272.69	9427.82	A	0.447	1.978	10	0.8	1	52.225	1203.47	60.17	C
960.00-940.00			B	0.447	1.978		0.8	1	52.225			
			C	0.447	1.978		0.8	1	52.225			
T10	317.65	2354.80	A	0.446	1.98	10	0.8	1	13.028	299.45	59.89	C
940.00-935.00			B	0.446	1.98		0.8	1	13.028			
			C	0.446	1.98		0.8	1	13.028			
T11	317.44	2353.93	A	0.446	1.98	10	0.8	1	13.022	298.93	59.79	C
935.00-930.00			B	0.446	1.98		0.8	1	13.022			
			C	0.446	1.98		0.8	1	13.022			
T12	317.23	2461.00	A	0.45	1.973	10	0.8	1	13.178	299.77	59.95	C
930.00-925.00			B	0.45	1.973		0.8	1	13.178			
			C	0.45	1.973		0.8	1	13.178			
T13	317.02	2460.11	A	0.45	1.973	10	0.8	1	13.172	299.24	59.85	C
925.00-920.00			B	0.45	1.973		0.8	1	13.172			
			C	0.45	1.973		0.8	1	13.172			
T14	316.80	2459.23	A	0.45	1.973	10	0.8	1	13.167	298.72	59.74	C
920.00-915.00			B	0.45	1.973		0.8	1	13.167			
			C	0.45	1.973		0.8	1	13.167			
T15	316.59	2458.34	A	0.45	1.974	10	0.8	1	13.161	298.19	59.64	C
915.00-910.00			B	0.45	1.974		0.8	1	13.161			
			C	0.45	1.974		0.8	1	13.161			
T16	316.38	2349.55	A	0.445	1.981	10	0.8	1	12.995	296.32	59.26	C
910.00-905.00			B	0.445	1.981		0.8	1	12.995			
			C	0.445	1.981		0.8	1	12.995			
T17	316.16	2348.66	A	0.445	1.981	10	0.8	1	12.989	295.79	59.16	C
905.00-900.00			B	0.445	1.981		0.8	1	12.989			
			C	0.445	1.981		0.8	1	12.989			
T18	1262.49	9385.73	A	0.445	1.982	10	0.8	1	51.901	1177.86	58.89	C
900.00-880.00			B	0.445	1.982		0.8	1	51.901			
			C	0.445	1.982		0.8	1	51.901			
T19	1455.54	9371.31	A	0.444	1.983	10	0.8	1	51.810	1221.78	61.09	C
880.00-860.00			B	0.444	1.983		0.8	1	51.810			
			C	0.444	1.983		0.8	1	51.810			
T20	1473.14	9356.68	A	0.444	1.984	10	0.8	1	51.718	1218.59	60.93	C
860.00-840.00			B	0.444	1.984		0.8	1	51.718			
			C	0.444	1.984		0.8	1	51.718			
T21	1468.84	9341.85	A	0.443	1.985	10	0.8	1	51.625	1209.50	60.47	C
840.00-820.00			B	0.443	1.985		0.8	1	51.625			
			C	0.443	1.985		0.8	1	51.625			
T22	1464.50	9326.84	A	0.443	1.986	10	0.8	1	51.530	1200.32	60.02	C
820.00-800.00			B	0.443	1.986		0.8	1	51.530			
			C	0.443	1.986		0.8	1	51.530			
T23	1460.09	9311.63	A	0.442	1.987	10	0.8	1	51.434	1191.07	59.55	C
800.00-780.00			B	0.442	1.987		0.8	1	51.434			
			C	0.442	1.987		0.8	1	51.434			
T24	364.33	2325.51	A	0.442	1.987	10	0.8	1	12.843	296.31	59.26	C
780.00-775.00			B	0.442	1.987		0.8	1	12.843			
			C	0.442	1.987		0.8	1	12.843			
T25	364.05	2324.54	A	0.441	1.988	10	0.8	1	12.837	295.73	59.15	C
775.00-770.00			B	0.441	1.988		0.8	1	12.837			
			C	0.441	1.988		0.8	1	12.837			
T26	363.77	2431.19	A	0.446	1.981	10	0.8	1	12.991	296.32	59.26	C
770.00-765.00			B	0.446	1.981		0.8	1	12.991			
			C	0.446	1.981		0.8	1	12.991			
T27	363.49	2430.21	A	0.445	1.981	10	0.8	1	12.985	295.73	59.15	C
765.00-760.00			B	0.445	1.981		0.8	1	12.985			
			C	0.445	1.981		0.8	1	12.985			
T28	363.21	2429.23	A	0.445	1.981	10	0.8	1	12.979	295.14	59.03	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft^2	F lb	w plf	Ctrl. Face
760.00-755.00			B	0.445	1.981		0.8	1	12.979			
			C	0.445	1.981		0.8	1	12.979			
T29	362.92	2428.24	A	0.445	1.982	10	0.8	1	12.972	294.55	58.91	C
755.00-750.00			B	0.445	1.982		0.8	1	12.972			
			C	0.445	1.982		0.8	1	12.972			
T30	362.64	2319.68	A	0.441	1.989	10	0.8	1	12.807	292.79	58.56	C
750.00-745.00			B	0.441	1.989		0.8	1	12.807			
			C	0.441	1.989		0.8	1	12.807			
T31	362.36	2318.70	A	0.441	1.989	10	0.8	1	12.801	292.20	58.44	C
745.00-740.00			B	0.441	1.989		0.8	1	12.801			
			C	0.441	1.989		0.8	1	12.801			
T32	1446.58	9264.95	A	0.44	1.99	10	0.8	1	51.140	1162.90	58.15	C
740.00-720.00			B	0.44	1.99		0.8	1	51.140			
			C	0.44	1.99		0.8	1	51.140			
T33	1441.99	9249.08	A	0.439	1.991	9	0.8	1	51.040	1153.41	57.67	C
720.00-700.00			B	0.439	1.991		0.8	1	51.040			
			C	0.439	1.991		0.8	1	51.040			
T34	1437.36	9233.09	A	0.439	1.992	9	0.8	1	50.939	1143.88	57.19	C
700.00-680.00			B	0.439	1.992		0.8	1	50.939			
			C	0.439	1.992		0.8	1	50.939			
T35	1432.70	9216.98	A	0.438	1.993	9	0.8	1	50.837	1134.33	56.72	C
680.00-660.00			B	0.438	1.993		0.8	1	50.837			
			C	0.438	1.993		0.8	1	50.837			
T36	1428.02	9200.80	A	0.437	1.995	9	0.8	1	50.735	1124.78	56.24	C
660.00-640.00			B	0.437	1.995		0.8	1	50.735			
			C	0.437	1.995		0.8	1	50.735			
T37	1423.33	10020.39	A	0.443	1.985	9	0.8	1	51.786	1125.39	56.27	C
640.00-620.00			B	0.443	1.985		0.8	1	51.786			
			C	0.443	1.985		0.8	1	51.786			
T38	355.10	2502.53	A	0.442	1.986	9	0.8	1	12.921	279.78	55.96	C
620.00-615.00			B	0.442	1.986		0.8	1	12.921			
			C	0.442	1.986		0.8	1	12.921			
T39	354.81	2501.50	A	0.442	1.986	9	0.8	1	12.914	279.18	55.84	C
615.00-610.00			B	0.442	1.986		0.8	1	12.914			
			C	0.442	1.986		0.8	1	12.914			
T40	354.51	2607.74	A	0.446	1.98	9	0.8	1	13.067	279.70	55.94	C
610.00-605.00			B	0.446	1.98		0.8	1	13.067			
			C	0.446	1.98		0.8	1	13.067			
T41	354.22	2606.70	A	0.446	1.98	9	0.8	1	13.060	279.10	55.82	C
605.00-600.00			B	0.446	1.98		0.8	1	13.060			
			C	0.446	1.98		0.8	1	13.060			
T42	353.93	2605.67	A	0.446	1.98	9	0.8	1	13.054	278.51	55.70	C
600.00-595.00			B	0.446	1.98		0.8	1	13.054			
			C	0.446	1.98		0.8	1	13.054			
T43	353.64	2604.64	A	0.446	1.98	9	0.8	1	13.047	277.91	55.58	C
595.00-590.00			B	0.446	1.98		0.8	1	13.047			
			C	0.446	1.98		0.8	1	13.047			
T44	353.34	2496.39	A	0.441	1.988	9	0.8	1	12.882	276.21	55.24	C
590.00-585.00			B	0.441	1.988		0.8	1	12.882			
			C	0.441	1.988		0.8	1	12.882			
T45	353.05	2495.37	A	0.441	1.988	9	0.8	1	12.876	275.62	55.12	C
585.00-580.00			B	0.441	1.988		0.8	1	12.876			
			C	0.441	1.988		0.8	1	12.876			
T46	1409.31	9543.68	A	0.438	1.994	9	0.8	1	50.861	1091.67	54.58	C
580.00-560.00			B	0.438	1.994		0.8	1	50.861			
			C	0.438	1.994		0.8	1	50.861			
T47	1404.71	9527.67	A	0.437	1.995	9	0.8	1	50.779	1082.59	54.13	C
560.00-540.00			B	0.437	1.995		0.8	1	50.779			
			C	0.437	1.995		0.8	1	50.779			
T48	350.47	2179.22	A	0.38	2.104	9	0.8	1	10.699	253.20	50.64	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
540.00-535.00			B	0.38	2.104		0.8	1	10.699			
			C	0.38	2.104		0.8	1	10.699			
T49	350.19	2378.47	A	0.437	1.996	9	0.8	1	12.673	268.67	53.73	C
535.00-530.00			B	0.437	1.996		0.8	1	12.673			
			C	0.437	1.996		0.8	1	12.673			
T50	349.91	2377.49	A	0.436	1.996	9	0.8	1	12.667	268.11	53.62	C
530.00-525.00			B	0.436	1.996		0.8	1	12.667			
			C	0.436	1.996		0.8	1	12.667			
T51	349.63	2376.52	A	0.436	1.997	9	0.8	1	12.661	267.56	53.51	C
525.00-520.00			B	0.436	1.997		0.8	1	12.661			
			C	0.436	1.997		0.8	1	12.661			
T52	1395.75	9496.50	A	0.436	1.997	9	0.8	1	50.582	1064.76	53.24	C
520.00-500.00			B	0.436	1.997		0.8	1	50.582			
			C	0.436	1.997		0.8	1	50.582			
T53	1391.46	9481.53	A	0.435	1.998	9	0.8	1	50.487	1056.26	52.81	C
500.00-480.00			B	0.435	1.998		0.8	1	50.487			
			C	0.435	1.998		0.8	1	50.487			
T54	1387.32	9467.14	A	0.435	1.999	9	0.8	1	50.396	1048.12	52.41	C
480.00-460.00			B	0.435	1.999		0.8	1	50.396			
			C	0.435	1.999		0.8	1	50.396			
T55	1383.40	9880.58	A	0.437	1.995	9	0.8	1	50.885	1045.17	52.26	C
460.00-440.00			B	0.437	1.995		0.8	1	50.885			
			C	0.437	1.995		0.8	1	50.885			
T56	345.27	2468.11	A	0.437	1.996	9	0.8	1	12.704	260.12	52.02	C
440.00-435.00			B	0.437	1.996		0.8	1	12.704			
			C	0.437	1.996		0.8	1	12.704			
T57	345.04	2467.32	A	0.437	1.996	9	0.8	1	12.699	259.67	51.93	C
435.00-430.00			B	0.437	1.996		0.8	1	12.699			
			C	0.437	1.996		0.8	1	12.699			
T58	344.82	2573.43	A	0.441	1.989	9	0.8	1	12.851	260.28	52.06	C
430.00-425.00			B	0.441	1.989		0.8	1	12.851			
			C	0.441	1.989		0.8	1	12.851			
T59	344.61	2572.67	A	0.441	1.989	9	0.8	1	12.846	259.86	51.97	C
425.00-420.00			B	0.441	1.989		0.8	1	12.846			
			C	0.441	1.989		0.8	1	12.846			
T60	344.40	2571.92	A	0.441	1.989	9	0.8	1	12.842	259.45	51.89	C
420.00-415.00			B	0.441	1.989		0.8	1	12.842			
			C	0.441	1.989		0.8	1	12.842			
T61	344.19	2571.19	A	0.44	1.989	9	0.8	1	12.837	259.05	51.81	C
415.00-410.00			B	0.44	1.989		0.8	1	12.837			
			C	0.44	1.989		0.8	1	12.837			
T62	343.99	2463.64	A	0.436	1.997	9	0.8	1	12.675	257.62	51.52	C
410.00-405.00			B	0.436	1.997		0.8	1	12.675			
			C	0.436	1.997		0.8	1	12.675			
T63	343.80	2462.96	A	0.436	1.997	9	0.8	1	12.671	257.24	51.45	C
405.00-400.00			B	0.436	1.997		0.8	1	12.671			
			C	0.436	1.997		0.8	1	12.671			
T64	1561.88	9845.44	A	0.436	1.998	8	0.8	1	50.644	1068.78	53.44	C
400.00-380.00			B	0.436	1.998		0.8	1	50.644			
			C	0.436	1.998		0.8	1	50.644			
T65	1558.95	9836.50	A	0.435	1.998	8	0.8	1	50.587	1063.62	53.18	C
380.00-360.00			B	0.435	1.998		0.8	1	50.587			
			C	0.435	1.998		0.8	1	50.587			
T66	1646.87	9829.37	A	0.435	1.999	8	0.8	1	50.542	1081.13	54.06	C
360.00-340.00			B	0.435	1.999		0.8	1	50.542			
			C	0.435	1.999		0.8	1	50.542			
T67	1755.30	9824.38	A	0.435	1.999	8	0.8	1	50.511	1104.55	55.23	C
340.00-320.00			B	0.435	1.999		0.8	1	50.511			
			C	0.435	1.999		0.8	1	50.511			
T68	1754.35	9821.84	A	0.435	1.999	8	0.8	1	50.495	1103.04	55.15	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft^2	F lb	w plf	Ctrl. Face
320.00-300.00			B	0.435	1.999		0.8	1	50.495			
			C	0.435	1.999		0.8	1	50.495			
T69	1754.46	9822.14	A	0.435	1.999	8	0.8	1	50.497	1103.21	55.16	C
300.00-280.00			B	0.435	1.999		0.8	1	50.497			
			C	0.435	1.999		0.8	1	50.497			
T70	438.78	2455.98	A	0.435	1.999	8	0.8	1	12.627	276.07	55.21	C
280.00-275.00			B	0.435	1.999		0.8	1	12.627			
			C	0.435	1.999		0.8	1	12.627			
T71	438.89	2456.26	A	0.435	1.999	8	0.8	1	12.629	276.24	55.25	C
275.00-270.00			B	0.435	1.999		0.8	1	12.629			
			C	0.435	1.999		0.8	1	12.629			
T72	439.01	2563.36	A	0.439	1.992	8	0.8	1	12.788	277.28	55.46	C
270.00-265.00			B	0.439	1.992		0.8	1	12.788			
			C	0.439	1.992		0.8	1	12.788			
T73	439.15	2563.75	A	0.439	1.992	8	0.8	1	12.790	277.51	55.50	C
265.00-260.00			B	0.439	1.992		0.8	1	12.790			
			C	0.439	1.992		0.8	1	12.790			
T74	439.32	2564.20	A	0.439	1.991	8	0.8	1	12.793	277.78	55.56	C
260.00-255.00			B	0.439	1.991		0.8	1	12.793			
			C	0.439	1.991		0.8	1	12.793			
T75	439.51	2564.71	A	0.439	1.991	8	0.8	1	12.796	278.08	55.62	C
255.00-250.00			B	0.439	1.991		0.8	1	12.796			
			C	0.439	1.991		0.8	1	12.796			
T76	439.72	2458.49	A	0.435	1.998	8	0.8	1	12.643	277.57	55.51	C
250.00-245.00			B	0.435	1.998		0.8	1	12.643			
			C	0.435	1.998		0.8	1	12.643			
T77	439.96	2459.12	A	0.435	1.998	8	0.8	1	12.647	277.95	55.59	C
245.00-240.00			B	0.435	1.998		0.8	1	12.647			
			C	0.435	1.998		0.8	1	12.647			
T78	1762.61	9843.91	A	0.436	1.998	8	0.8	1	50.634	1116.28	55.81	C
240.00-220.00			B	0.436	1.998		0.8	1	50.634			
			C	0.436	1.998		0.8	1	50.634			
T79	1768.39	9859.38	A	0.436	1.997	9	0.8	1	50.732	1125.62	56.28	C
220.00-200.00			B	0.436	1.997		0.8	1	50.732			
			C	0.436	1.997		0.8	1	50.732			
T80	2766.16	9879.41	A	0.437	1.995	9	0.8	1	50.859	1379.84	68.99	A
200.00-180.00			B	0.437	1.995		0.8	1	50.859			
			C	0.437	1.995		0.8	1	50.859			
T81	3174.32	9904.03	A	0.438	1.994	9	0.8	1	51.014	1497.13	74.86	A
180.00-160.00			B	0.438	1.994		0.8	1	51.014			
			C	0.438	1.994		0.8	1	51.014			
T82	3191.97	9932.88	A	0.439	1.992	9	0.8	1	51.196	1519.44	75.97	A
160.00-140.00			B	0.439	1.992		0.8	1	51.196			
			C	0.439	1.992		0.8	1	51.196			
T83	3211.56	9964.88	A	0.441	1.989	9	0.8	1	51.398	1544.39	77.22	A
140.00-120.00			B	0.441	1.989		0.8	1	51.398			
			C	0.441	1.989		0.8	1	51.398			
T84	806.05	2496.38	A	0.441	1.988	9	0.8	1	12.882	390.15	78.03	A
120.00-115.00			B	0.441	1.988		0.8	1	12.882			
			C	0.441	1.988		0.8	1	12.882			
T85	807.30	2498.42	A	0.442	1.987	9	0.8	1	12.895	391.76	78.35	A
115.00-110.00			B	0.442	1.987		0.8	1	12.895			
			C	0.442	1.987		0.8	1	12.895			
T86	808.52	2607.68	A	0.446	1.98	9	0.8	1	13.066	393.58	78.72	A
110.00-105.00			B	0.446	1.98		0.8	1	13.066			
			C	0.446	1.98		0.8	1	13.066			
T87	809.71	2609.63	A	0.447	1.979	9	0.8	1	13.079	395.10	79.02	A
105.00-100.00			B	0.447	1.979		0.8	1	13.079			
			C	0.447	1.979		0.8	1	13.079			
T88	810.83	2611.49	A	0.447	1.979	9	0.8	1	13.090	396.56	79.31	A

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
100.00-95.00			B	0.447	1.979		0.8	1	13.090			
			C	0.447	1.979		0.8	1	13.090			
T89	811.87	2613.20	A	0.447	1.978	9	0.8	1	13.101	397.91	79.58	A
95.00-90.00			B	0.447	1.978		0.8	1	13.101			
			C	0.447	1.978		0.8	1	13.101			
T90	812.80	2507.41	A	0.443	1.985	9	0.8	1	12.951	398.88	79.78	A
90.00-85.00			B	0.443	1.985		0.8	1	12.951			
			C	0.443	1.985		0.8	1	12.951			
T91	813.60	2508.71	A	0.443	1.985	9	0.8	1	12.960	399.91	79.98	A
85.00-80.00			B	0.443	1.985		0.8	1	12.960			
			C	0.443	1.985		0.8	1	12.960			
T92	3258.90	10042.20	A	0.444	1.984	9	0.8	1	51.885	1605.52	80.28	A
80.00-60.00			B	0.444	1.984		0.8	1	51.885			
			C	0.444	1.984		0.8	1	51.885			
T93	3247.38	10023.39	A	0.443	1.985	9	0.8	1	51.766	1590.54	79.53	A
60.00-40.00			B	0.443	1.985		0.8	1	51.766			
			C	0.443	1.985		0.8	1	51.766			
T94	3181.76	9916.20	A	0.439	1.993	9	0.8	1	51.091	1506.52	75.33	A
40.00-20.00			B	0.439	1.993		0.8	1	51.091			
			C	0.439	1.993		0.8	1	51.091			
T95	766.85	2432.33	A	0.431	2.006	9	0.8	1	12.477	397.90	79.58	A
20.00-15.00			B	0.431	2.006		0.8	1	12.477			
			C	0.431	2.006		0.8	1	12.477			
T96	1179.22	5622.89	A	0.522	1.874	10	0.8	1	26.414	680.23	85.03	A
15.00-7.00			B	0.522	1.874		0.8	1	26.414			
			C	0.522	1.874		0.8	1	26.414			
T97 7.00-0.00	921.33	8698.13	A	1	2.1	10	0.8	1	49.203	608.21*	86.89	C
			B	1	2.1		0.8	1	49.203			
			C	1	2.1		0.8	1	49.203			
Sum Weight:	95835.76	544129.49			*2.1A_g limit					67001.64		

Tower Forces - With Ice - Wind 90 To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
L1	1734.76	13864.88	A	1	1.2	11	1	1	125.237	1952.31	31.44	C
1151.90-1089.			B	1	1.2		1	1	125.237			
80			C	1	1.2		1	1	125.237			
T1	136.89	5282.80	A	0.648	1.782	11	0.85	1	22.371	376.47	76.83	C
1089.80-1084.			B	0.648	1.782		0.85	1	22.371			
90			C	0.648	1.782		0.85	1	22.371			
T2	136.89	2168.63	A	0.447	1.978	11	0.85	1	12.790	253.70	51.78	C
1084.90-1080.			B	0.447	1.978		0.85	1	12.790			
00			C	0.447	1.978		0.85	1	12.790			
T3	805.37	8321.91	A	0.438	1.994	11	0.85	1	50.828	1087.52	54.38	C
1080.00-1060.			B	0.438	1.994		0.85	1	50.828			
00			C	0.438	1.994		0.85	1	50.828			
T4	938.21	8322.07	A	0.438	1.994	11	0.85	1	50.829	1119.84	55.99	C
1060.00-1040.			B	0.438	1.994		0.85	1	50.829			
00			C	0.438	1.994		0.85	1	50.829			
T5	938.24	8322.26	A	0.438	1.994	10	0.85	1	50.830	1113.81	55.69	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
1040.00-1020.00			B	0.438	1.994		0.85	1	50.830			
			C	0.438	1.994		0.85	1	50.830			
T6 1020.00-1000.00	938.28	8322.47	A	0.438	1.994	10	0.85	1	50.831	1107.71	55.39	C
			B	0.438	1.994		0.85	1	50.831			
			C	0.438	1.994		0.85	1	50.831			
T7 1000.00-980.00	1206.31	8322.72	A	0.438	1.994	10	0.85	1	50.833	1184.53	59.23	C
			B	0.438	1.994		0.85	1	50.833			
			C	0.438	1.994		0.85	1	50.833			
T8 980.00-960.00	1273.38	8323.01	A	0.438	1.994	10	0.85	1	50.834	1198.45	59.92	C
			B	0.438	1.994		0.85	1	50.834			
			C	0.438	1.994		0.85	1	50.834			
T9 960.00-940.00	1272.69	9427.82	A	0.447	1.978	10	0.85	1	52.544	1208.95	60.45	C
			B	0.447	1.978		0.85	1	52.544			
			C	0.447	1.978		0.85	1	52.544			
T10 940.00-935.00	317.65	2354.80	A	0.446	1.98	10	0.85	1	13.107	300.81	60.16	C
			B	0.446	1.98		0.85	1	13.107			
			C	0.446	1.98		0.85	1	13.107			
T11 935.00-930.00	317.44	2353.93	A	0.446	1.98	10	0.85	1	13.102	300.29	60.06	C
			B	0.446	1.98		0.85	1	13.102			
			C	0.446	1.98		0.85	1	13.102			
T12 930.00-925.00	317.23	2461.00	A	0.45	1.973	10	0.85	1	13.257	301.12	60.22	C
			B	0.45	1.973		0.85	1	13.257			
			C	0.45	1.973		0.85	1	13.257			
T13 925.00-920.00	317.02	2460.11	A	0.45	1.973	10	0.85	1	13.252	300.60	60.12	C
			B	0.45	1.973		0.85	1	13.252			
			C	0.45	1.973		0.85	1	13.252			
T14 920.00-915.00	316.80	2459.23	A	0.45	1.973	10	0.85	1	13.246	300.07	60.01	C
			B	0.45	1.973		0.85	1	13.246			
			C	0.45	1.973		0.85	1	13.246			
T15 915.00-910.00	316.59	2458.34	A	0.45	1.974	10	0.85	1	13.241	299.54	59.91	C
			B	0.45	1.974		0.85	1	13.241			
			C	0.45	1.974		0.85	1	13.241			
T16 910.00-905.00	316.38	2349.55	A	0.445	1.981	10	0.85	1	13.074	297.67	59.53	C
			B	0.445	1.981		0.85	1	13.074			
			C	0.445	1.981		0.85	1	13.074			
T17 905.00-900.00	316.16	2348.66	A	0.445	1.981	10	0.85	1	13.069	297.14	59.43	C
			B	0.445	1.981		0.85	1	13.069			
			C	0.445	1.981		0.85	1	13.069			
T18 900.00-880.00	1262.49	9385.73	A	0.445	1.982	10	0.85	1	52.219	1183.25	59.16	C
			B	0.445	1.982		0.85	1	52.219			
			C	0.445	1.982		0.85	1	52.219			
T19 880.00-860.00	1455.54	9371.31	A	0.444	1.983	10	0.85	1	52.128	1227.13	61.36	C
			B	0.444	1.983		0.85	1	52.128			
			C	0.444	1.983		0.85	1	52.128			
T20 860.00-840.00	1473.14	9356.68	A	0.444	1.984	10	0.85	1	52.036	1223.91	61.20	C
			B	0.444	1.984		0.85	1	52.036			
			C	0.444	1.984		0.85	1	52.036			
T21 840.00-820.00	1468.84	9341.85	A	0.443	1.985	10	0.85	1	51.942	1214.79	60.74	C
			B	0.443	1.985		0.85	1	51.942			
			C	0.443	1.985		0.85	1	51.942			
T22 820.00-800.00	1464.50	9326.84	A	0.443	1.986	10	0.85	1	51.848	1205.58	60.28	C
			B	0.443	1.986		0.85	1	51.848			
			C	0.443	1.986		0.85	1	51.848			
T23 800.00-780.00	1460.09	9311.63	A	0.442	1.987	10	0.85	1	51.752	1196.29	59.81	C
			B	0.442	1.987		0.85	1	51.752			
			C	0.442	1.987		0.85	1	51.752			
T24 780.00-775.00	364.33	2325.51	A	0.442	1.987	10	0.85	1	12.923	297.61	59.52	C
			B	0.442	1.987		0.85	1	12.923			
			C	0.442	1.987		0.85	1	12.923			
T25	364.05	2324.54	A	0.441	1.988	10	0.85	1	12.917	297.03	59.41	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft^2	F lb	w plf	Ctrl. Face
775.00-770.00			B	0.441	1.988		0.85	1	12.917			
			C	0.441	1.988		0.85	1	12.917			
T26	363.77	2431.19	A	0.446	1.981	10	0.85	1	13.070	297.61	59.52	C
770.00-765.00			B	0.446	1.981		0.85	1	13.070			
			C	0.446	1.981		0.85	1	13.070			
T27	363.49	2430.21	A	0.445	1.981	10	0.85	1	13.064	297.02	59.40	C
765.00-760.00			B	0.445	1.981		0.85	1	13.064			
			C	0.445	1.981		0.85	1	13.064			
T28	363.21	2429.23	A	0.445	1.981	10	0.85	1	13.058	296.43	59.29	C
760.00-755.00			B	0.445	1.981		0.85	1	13.058			
			C	0.445	1.981		0.85	1	13.058			
T29	362.92	2428.24	A	0.445	1.982	10	0.85	1	13.052	295.84	59.17	C
755.00-750.00			B	0.445	1.982		0.85	1	13.052			
			C	0.445	1.982		0.85	1	13.052			
T30	362.64	2319.68	A	0.441	1.989	10	0.85	1	12.886	294.08	58.82	C
750.00-745.00			B	0.441	1.989		0.85	1	12.886			
			C	0.441	1.989		0.85	1	12.886			
T31	362.36	2318.70	A	0.441	1.989	10	0.85	1	12.880	293.49	58.70	C
745.00-740.00			B	0.441	1.989		0.85	1	12.880			
			C	0.441	1.989		0.85	1	12.880			
T32	1446.58	9264.95	A	0.44	1.99	10	0.85	1	51.458	1168.03	58.40	C
740.00-720.00			B	0.44	1.99		0.85	1	51.458			
			C	0.44	1.99		0.85	1	51.458			
T33	1441.99	9249.08	A	0.439	1.991	9	0.85	1	51.357	1158.50	57.93	C
720.00-700.00			B	0.439	1.991		0.85	1	51.357			
			C	0.439	1.991		0.85	1	51.357			
T34	1437.36	9233.09	A	0.439	1.992	9	0.85	1	51.256	1148.94	57.45	C
700.00-680.00			B	0.439	1.992		0.85	1	51.256			
			C	0.439	1.992		0.85	1	51.256			
T35	1432.70	9216.98	A	0.438	1.993	9	0.85	1	51.155	1139.36	56.97	C
680.00-660.00			B	0.438	1.993		0.85	1	51.155			
			C	0.438	1.993		0.85	1	51.155			
T36	1428.02	9200.80	A	0.437	1.995	9	0.85	1	51.052	1129.77	56.49	C
660.00-640.00			B	0.437	1.995		0.85	1	51.052			
			C	0.437	1.995		0.85	1	51.052			
T37	1423.33	10020.39	A	0.443	1.985	9	0.85	1	52.102	1130.30	56.51	C
640.00-620.00			B	0.443	1.985		0.85	1	52.102			
			C	0.443	1.985		0.85	1	52.102			
T38	355.10	2502.53	A	0.442	1.986	9	0.85	1	13.000	281.00	56.20	C
620.00-615.00			B	0.442	1.986		0.85	1	13.000			
			C	0.442	1.986		0.85	1	13.000			
T39	354.81	2501.50	A	0.442	1.986	9	0.85	1	12.993	280.40	56.08	C
615.00-610.00			B	0.442	1.986		0.85	1	12.993			
			C	0.442	1.986		0.85	1	12.993			
T40	354.51	2607.74	A	0.446	1.98	9	0.85	1	13.146	280.92	56.18	C
610.00-605.00			B	0.446	1.98		0.85	1	13.146			
			C	0.446	1.98		0.85	1	13.146			
T41	354.22	2606.70	A	0.446	1.98	9	0.85	1	13.139	280.32	56.06	C
605.00-600.00			B	0.446	1.98		0.85	1	13.139			
			C	0.446	1.98		0.85	1	13.139			
T42	353.93	2605.67	A	0.446	1.98	9	0.85	1	13.133	279.72	55.94	C
600.00-595.00			B	0.446	1.98		0.85	1	13.133			
			C	0.446	1.98		0.85	1	13.133			
T43	353.64	2604.64	A	0.446	1.98	9	0.85	1	13.126	279.12	55.82	C
595.00-590.00			B	0.446	1.98		0.85	1	13.126			
			C	0.446	1.98		0.85	1	13.126			
T44	353.34	2496.39	A	0.441	1.988	9	0.85	1	12.961	277.42	55.48	C
590.00-585.00			B	0.441	1.988		0.85	1	12.961			
			C	0.441	1.988		0.85	1	12.961			
T45	353.05	2495.37	A	0.441	1.988	9	0.85	1	12.955	276.83	55.37	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
585.00-580.00			B	0.441	1.988		0.85	1	12.955			
			C	0.441	1.988		0.85	1	12.955			
T46	1409.31	9543.68	A	0.438	1.994	9	0.85	1	51.178	1096.50	54.83	C
580.00-560.00			B	0.438	1.994		0.85	1	51.178			
			C	0.438	1.994		0.85	1	51.178			
T47	1404.71	9527.67	A	0.437	1.995	9	0.85	1	51.096	1087.39	54.37	C
560.00-540.00			B	0.437	1.995		0.85	1	51.096			
			C	0.437	1.995		0.85	1	51.096			
T48	350.47	2179.22	A	0.38	2.104	9	0.85	1	10.778	254.46	50.89	C
540.00-535.00			B	0.38	2.104		0.85	1	10.778			
			C	0.38	2.104		0.85	1	10.778			
T49	350.19	2378.47	A	0.437	1.996	9	0.85	1	12.752	269.86	53.97	C
535.00-530.00			B	0.437	1.996		0.85	1	12.752			
			C	0.437	1.996		0.85	1	12.752			
T50	349.91	2377.49	A	0.436	1.996	9	0.85	1	12.746	269.30	53.86	C
530.00-525.00			B	0.436	1.996		0.85	1	12.746			
			C	0.436	1.996		0.85	1	12.746			
T51	349.63	2376.52	A	0.436	1.997	9	0.85	1	12.740	268.75	53.75	C
525.00-520.00			B	0.436	1.997		0.85	1	12.740			
			C	0.436	1.997		0.85	1	12.740			
T52	1395.75	9496.50	A	0.436	1.997	9	0.85	1	50.899	1069.50	53.48	C
520.00-500.00			B	0.436	1.997		0.85	1	50.899			
			C	0.436	1.997		0.85	1	50.899			
T53	1391.46	9481.53	A	0.435	1.998	9	0.85	1	50.804	1060.97	53.05	C
500.00-480.00			B	0.435	1.998		0.85	1	50.804			
			C	0.435	1.998		0.85	1	50.804			
T54	1387.32	9467.14	A	0.435	1.999	9	0.85	1	50.713	1052.80	52.64	C
480.00-460.00			B	0.435	1.999		0.85	1	50.713			
			C	0.435	1.999		0.85	1	50.713			
T55	1383.40	9880.58	A	0.437	1.995	9	0.85	1	51.201	1049.79	52.49	C
460.00-440.00			B	0.437	1.995		0.85	1	51.201			
			C	0.437	1.995		0.85	1	51.201			
T56	345.27	2468.11	A	0.437	1.996	9	0.85	1	12.783	261.27	52.25	C
440.00-435.00			B	0.437	1.996		0.85	1	12.783			
			C	0.437	1.996		0.85	1	12.783			
T57	345.04	2467.32	A	0.437	1.996	9	0.85	1	12.778	260.83	52.17	C
435.00-430.00			B	0.437	1.996		0.85	1	12.778			
			C	0.437	1.996		0.85	1	12.778			
T58	344.82	2573.43	A	0.441	1.989	9	0.85	1	12.930	261.43	52.29	C
430.00-425.00			B	0.441	1.989		0.85	1	12.930			
			C	0.441	1.989		0.85	1	12.930			
T59	344.61	2572.67	A	0.441	1.989	9	0.85	1	12.925	261.01	52.20	C
425.00-420.00			B	0.441	1.989		0.85	1	12.925			
			C	0.441	1.989		0.85	1	12.925			
T60	344.40	2571.92	A	0.441	1.989	9	0.85	1	12.921	260.59	52.12	C
420.00-415.00			B	0.441	1.989		0.85	1	12.921			
			C	0.441	1.989		0.85	1	12.921			
T61	344.19	2571.19	A	0.44	1.989	9	0.85	1	12.916	260.19	52.04	C
415.00-410.00			B	0.44	1.989		0.85	1	12.916			
			C	0.44	1.989		0.85	1	12.916			
T62	343.99	2463.64	A	0.436	1.997	9	0.85	1	12.754	258.76	51.75	C
410.00-405.00			B	0.436	1.997		0.85	1	12.754			
			C	0.436	1.997		0.85	1	12.754			
T63	343.80	2462.96	A	0.436	1.997	9	0.85	1	12.750	258.38	51.68	C
405.00-400.00			B	0.436	1.997		0.85	1	12.750			
			C	0.436	1.997		0.85	1	12.750			
T64	1561.88	9845.44	A	0.436	1.998	8	0.85	1	50.960	1073.34	53.67	C
400.00-380.00			B	0.436	1.998		0.85	1	50.960			
			C	0.436	1.998		0.85	1	50.960			
T65	1558.95	9836.50	A	0.435	1.998	8	0.85	1	50.903	1068.16	53.41	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
380.00-360.00			B	0.435	1.998		0.85	1	50.903			
			C	0.435	1.998		0.85	1	50.903			
T66	1646.87	9829.37	A	0.435	1.999	8	0.85	1	50.858	1085.66	54.28	C
360.00-340.00			B	0.435	1.999		0.85	1	50.858			
			C	0.435	1.999		0.85	1	50.858			
T67	1755.30	9824.38	A	0.435	1.999	8	0.85	1	50.827	1109.07	55.45	C
340.00-320.00			B	0.435	1.999		0.85	1	50.827			
			C	0.435	1.999		0.85	1	50.827			
T68	1754.35	9821.84	A	0.435	1.999	8	0.85	1	50.811	1107.55	55.38	C
320.00-300.00			B	0.435	1.999		0.85	1	50.811			
			C	0.435	1.999		0.85	1	50.811			
T69	1754.46	9822.14	A	0.435	1.999	8	0.85	1	50.813	1107.72	55.39	C
300.00-280.00			B	0.435	1.999		0.85	1	50.813			
			C	0.435	1.999		0.85	1	50.813			
T70	438.78	2455.98	A	0.435	1.999	8	0.85	1	12.706	277.20	55.44	C
280.00-275.00			B	0.435	1.999		0.85	1	12.706			
			C	0.435	1.999		0.85	1	12.706			
T71	438.89	2456.26	A	0.435	1.999	8	0.85	1	12.708	277.36	55.47	C
275.00-270.00			B	0.435	1.999		0.85	1	12.708			
			C	0.435	1.999		0.85	1	12.708			
T72	439.01	2563.36	A	0.439	1.992	8	0.85	1	12.867	278.41	55.68	C
270.00-265.00			B	0.439	1.992		0.85	1	12.867			
			C	0.439	1.992		0.85	1	12.867			
T73	439.15	2563.75	A	0.439	1.992	8	0.85	1	12.869	278.64	55.73	C
265.00-260.00			B	0.439	1.992		0.85	1	12.869			
			C	0.439	1.992		0.85	1	12.869			
T74	439.32	2564.20	A	0.439	1.991	8	0.85	1	12.872	278.91	55.78	C
260.00-255.00			B	0.439	1.991		0.85	1	12.872			
			C	0.439	1.991		0.85	1	12.872			
T75	439.51	2564.71	A	0.439	1.991	8	0.85	1	12.875	279.21	55.84	C
255.00-250.00			B	0.439	1.991		0.85	1	12.875			
			C	0.439	1.991		0.85	1	12.875			
T76	439.72	2458.49	A	0.435	1.998	8	0.85	1	12.722	278.71	55.74	C
250.00-245.00			B	0.435	1.998		0.85	1	12.722			
			C	0.435	1.998		0.85	1	12.722			
T77	439.96	2459.12	A	0.435	1.998	8	0.85	1	12.726	279.09	55.82	C
245.00-240.00			B	0.435	1.998		0.85	1	12.726			
			C	0.435	1.998		0.85	1	12.726			
T78	1762.61	9843.91	A	0.436	1.998	8	0.85	1	50.950	1120.84	56.04	C
240.00-220.00			B	0.436	1.998		0.85	1	50.950			
			C	0.436	1.998		0.85	1	50.950			
T79	1768.39	9859.38	A	0.436	1.997	9	0.85	1	51.048	1130.20	56.51	C
220.00-200.00			B	0.436	1.997		0.85	1	51.048			
			C	0.436	1.997		0.85	1	51.048			
T80	2766.16	9879.41	A	0.437	1.995	9	0.85	1	51.175	1362.75	68.14	B
200.00-180.00			B	0.437	1.995		0.85	1	51.175			
			C	0.437	1.995		0.85	1	51.175			
T81	3174.32	9904.03	A	0.438	1.994	9	0.85	1	51.330	1466.50	73.33	B
180.00-160.00			B	0.438	1.994		0.85	1	51.330			
			C	0.438	1.994		0.85	1	51.330			
T82	3191.97	9932.88	A	0.439	1.992	9	0.85	1	51.512	1488.47	74.42	B
160.00-140.00			B	0.439	1.992		0.85	1	51.512			
			C	0.439	1.992		0.85	1	51.512			
T83	3211.56	9964.88	A	0.441	1.989	9	0.85	1	51.714	1513.05	75.65	B
140.00-120.00			B	0.441	1.989		0.85	1	51.714			
			C	0.441	1.989		0.85	1	51.714			
T84	806.05	2496.38	A	0.441	1.988	9	0.85	1	12.961	382.25	76.45	B
120.00-115.00			B	0.441	1.988		0.85	1	12.961			
			C	0.441	1.988		0.85	1	12.961			
T85	807.30	2498.42	A	0.442	1.987	9	0.85	1	12.974	383.84	76.77	B

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
115.00-110.00			B	0.442	1.987		0.85	1	12.974			
			C	0.442	1.987		0.85	1	12.974			
T86	808.52	2607.68	A	0.446	1.98	9	0.85	1	13.145	385.70	77.14	B
110.00-105.00			B	0.446	1.98		0.85	1	13.145			
			C	0.446	1.98		0.85	1	13.145			
T87	809.71	2609.63	A	0.447	1.979	9	0.85	1	13.158	387.20	77.44	B
105.00-100.00			B	0.447	1.979		0.85	1	13.158			
			C	0.447	1.979		0.85	1	13.158			
T88	810.83	2611.49	A	0.447	1.979	9	0.85	1	13.169	388.63	77.73	B
100.00-95.00			B	0.447	1.979		0.85	1	13.169			
			C	0.447	1.979		0.85	1	13.169			
T89	811.87	2613.20	A	0.447	1.978	9	0.85	1	13.180	389.96	77.99	B
95.00-90.00			B	0.447	1.978		0.85	1	13.180			
			C	0.447	1.978		0.85	1	13.180			
T90	812.80	2507.41	A	0.443	1.985	9	0.85	1	13.030	390.85	78.17	B
90.00-85.00			B	0.443	1.985		0.85	1	13.030			
			C	0.443	1.985		0.85	1	13.030			
T91	813.60	2508.71	A	0.443	1.985	9	0.85	1	13.039	391.87	78.37	B
85.00-80.00			B	0.443	1.985		0.85	1	13.039			
			C	0.443	1.985		0.85	1	13.039			
T92	3258.90	10042.20	A	0.444	1.984	9	0.85	1	52.201	1573.26	78.66	B
80.00-60.00			B	0.444	1.984		0.85	1	52.201			
			C	0.444	1.984		0.85	1	52.201			
T93	3247.38	10023.39	A	0.443	1.985	9	0.85	1	52.082	1558.51	77.93	B
60.00-40.00			B	0.443	1.985		0.85	1	52.082			
			C	0.443	1.985		0.85	1	52.082			
T94	3181.76	9916.20	A	0.439	1.993	9	0.85	1	51.407	1475.75	73.79	B
40.00-20.00			B	0.439	1.993		0.85	1	51.407			
			C	0.439	1.993		0.85	1	51.407			
T95	766.85	2432.33	A	0.431	2.006	9	0.85	1	12.556	389.57	77.91	B
20.00-15.00			B	0.431	2.006		0.85	1	12.556			
			C	0.431	2.006		0.85	1	12.556			
T96	1179.22	5622.89	A	0.522	1.874	10	0.85	1	26.916	674.62	84.33	B
15.00-7.00			B	0.522	1.874		0.85	1	26.916			
			C	0.522	1.874		0.85	1	26.916			
T97 7.00-0.00	921.33	8698.13	A	1	2.1	10	0.85	1	51.032	608.21*	86.89	C
			B	1	2.1		0.85	1	51.032			
			C	1	2.1		0.85	1	51.032			
Sum Weight:	95835.76	544129.49			*2.1A_g limit					67534.05		

Tower Forces - Service - Wind Normal To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
L1	424.14	10343.38	A	1	0.777	15	1	1	103.500	1055.57	17.00	B
1151.90-1089.			B	1	0.777		1	1	103.500			
80			C	1	0.6		1	1	103.500			
T1	33.47	2474.36	A	0.42	2.025	15	1	1	15.974	440.58	89.91	C
1089.80-1084.			B	0.42	2.025		1	1	15.974			
90			C	0.42	2.025		1	1	15.974			
T2	33.47	1026.80	A	0.161	2.733	15	1	1	4.226	169.64	34.62	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft^2	F lb	w plf	Ctrl. Face
1084.90-1080.			B	0.161	2.733		1	1	4.226			
00			C	0.161	2.733		1	1	4.226			
T3	162.73	3798.26	A	0.155	2.755	15	1	1	16.603	696.34	34.82	C
1080.00-1060.			B	0.155	2.755		1	1	16.603			
00			C	0.155	2.755		1	1	16.603			
T4	176.80	3798.26	A	0.155	2.755	15	1	1	16.610	705.94	35.30	C
1060.00-1040.			B	0.155	2.755		1	1	16.610			
00			C	0.155	2.755		1	1	16.610			
T5	176.80	3798.26	A	0.155	2.755	15	1	1	16.617	702.37	35.12	C
1040.00-1020.			B	0.155	2.755		1	1	16.617			
00			C	0.155	2.755		1	1	16.617			
T6	176.80	3798.26	A	0.155	2.755	15	1	1	16.624	698.76	34.94	C
1020.00-1000.			B	0.155	2.755		1	1	16.624			
00			C	0.155	2.755		1	1	16.624			
T7	186.88	3798.26	A	0.155	2.755	15	1	1	16.631	720.42	36.02	C
1000.00-980.0			B	0.155	2.755		1	1	16.631			
0			C	0.155	2.755		1	1	16.631			
T8	189.40	3798.26	A	0.155	2.755	15	1	1	16.639	722.87	36.14	C
980.00-960.00			B	0.155	2.755		1	1	16.639			
			C	0.155	2.755		1	1	16.639			
T9	189.40	4790.45	A	0.168	2.707	15	1	1	17.329	732.15	36.61	C
960.00-940.00			B	0.168	2.707		1	1	17.329			
			C	0.168	2.707		1	1	17.329			
T10	47.35	1197.61	A	0.168	2.707	15	1	1	4.329	182.29	36.46	C
940.00-935.00			B	0.168	2.707		1	1	4.329			
			C	0.168	2.707		1	1	4.329			
T11	47.35	1197.61	A	0.168	2.707	15	1	1	4.330	182.04	36.41	C
935.00-930.00			B	0.168	2.707		1	1	4.330			
			C	0.168	2.707		1	1	4.330			
T12	47.35	1287.44	A	0.172	2.691	15	1	1	4.445	184.78	36.96	C
930.00-925.00			B	0.172	2.691		1	1	4.445			
			C	0.172	2.691		1	1	4.445			
T13	47.35	1287.44	A	0.172	2.691	15	1	1	4.446	184.52	36.90	C
925.00-920.00			B	0.172	2.691		1	1	4.446			
			C	0.172	2.691		1	1	4.446			
T14	47.35	1287.44	A	0.172	2.691	15	1	1	4.447	184.27	36.85	C
920.00-915.00			B	0.172	2.691		1	1	4.447			
			C	0.172	2.691		1	1	4.447			
T15	47.35	1287.44	A	0.172	2.691	15	1	1	4.447	184.01	36.80	C
915.00-910.00			B	0.172	2.691		1	1	4.447			
			C	0.172	2.691		1	1	4.447			
T16	47.35	1197.61	A	0.168	2.707	15	1	1	4.333	180.79	36.16	C
910.00-905.00			B	0.168	2.707		1	1	4.333			
			C	0.168	2.707		1	1	4.333			
T17	47.35	1197.61	A	0.168	2.707	15	1	1	4.334	180.54	36.11	C
905.00-900.00			B	0.168	2.707		1	1	4.334			
			C	0.168	2.707		1	1	4.334			
T18	189.40	4790.45	A	0.168	2.707	14	1	1	17.343	719.62	35.98	C
900.00-880.00			B	0.168	2.707		1	1	17.343			
			C	0.168	2.707		1	1	17.343			
T19	198.58	4790.45	A	0.168	2.707	14	1	1	17.354	742.06	37.10	C
880.00-860.00			B	0.168	2.707		1	1	17.354			
			C	0.168	2.707		1	1	17.354			
T20	199.60	4790.45	A	0.168	2.707	14	1	1	17.365	740.67	37.03	C
860.00-840.00			B	0.168	2.707		1	1	17.365			
			C	0.168	2.707		1	1	17.365			
T21	199.60	4790.45	A	0.168	2.707	14	1	1	17.376	736.28	36.81	C
840.00-820.00			B	0.168	2.707		1	1	17.376			
			C	0.168	2.707		1	1	17.376			
T22	199.60	4790.45	A	0.168	2.707	14	1	1	17.388	731.84	36.59	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
820.00-800.00			B	0.168	2.707		1	1	17.388			
			C	0.168	2.707		1	1	17.388			
T23	199.60	4790.45	A	0.168	2.707	14	1	1	17.399	727.36	36.37	C
800.00-780.00			B	0.168	2.707		1	1	17.399			
			C	0.168	2.707		1	1	17.399			
T24	49.90	1197.61	A	0.168	2.707	14	1	1	4.352	181.13	36.23	C
780.00-775.00			B	0.168	2.707		1	1	4.352			
			C	0.168	2.707		1	1	4.352			
T25	49.90	1197.61	A	0.168	2.707	14	1	1	4.352	180.85	36.17	C
775.00-770.00			B	0.168	2.707		1	1	4.352			
			C	0.168	2.707		1	1	4.352			
T26	49.90	1287.44	A	0.172	2.691	14	1	1	4.467	183.38	36.68	C
770.00-765.00			B	0.172	2.691		1	1	4.467			
			C	0.172	2.691		1	1	4.467			
T27	49.90	1287.44	A	0.172	2.691	14	1	1	4.468	183.09	36.62	C
765.00-760.00			B	0.172	2.691		1	1	4.468			
			C	0.172	2.691		1	1	4.468			
T28	49.90	1287.44	A	0.172	2.691	14	1	1	4.469	182.80	36.56	C
760.00-755.00			B	0.172	2.691		1	1	4.469			
			C	0.172	2.691		1	1	4.469			
T29	49.90	1287.44	A	0.172	2.691	14	1	1	4.470	182.51	36.50	C
755.00-750.00			B	0.172	2.691		1	1	4.470			
			C	0.172	2.691		1	1	4.470			
T30	49.90	1197.61	A	0.168	2.707	14	1	1	4.356	179.42	35.88	C
750.00-745.00			B	0.168	2.707		1	1	4.356			
			C	0.168	2.707		1	1	4.356			
T31	49.90	1197.61	A	0.168	2.707	14	1	1	4.357	179.13	35.83	C
745.00-740.00			B	0.168	2.707		1	1	4.357			
			C	0.168	2.707		1	1	4.357			
T32	199.60	4790.45	A	0.168	2.707	14	1	1	17.435	713.64	35.68	C
740.00-720.00			B	0.168	2.707		1	1	17.435			
			C	0.168	2.707		1	1	17.435			
T33	199.60	4790.45	A	0.168	2.707	14	1	1	17.447	709.00	35.45	C
720.00-700.00			B	0.168	2.707		1	1	17.447			
			C	0.168	2.707		1	1	17.447			
T34	199.60	4790.45	A	0.168	2.707	14	1	1	17.459	704.33	35.22	C
700.00-680.00			B	0.168	2.707		1	1	17.459			
			C	0.168	2.707		1	1	17.459			
T35	199.60	4790.45	A	0.168	2.707	13	1	1	17.471	699.64	34.98	C
680.00-660.00			B	0.168	2.707		1	1	17.471			
			C	0.168	2.707		1	1	17.471			
T36	199.60	4790.45	A	0.168	2.707	13	1	1	17.484	694.94	34.75	C
660.00-640.00			B	0.168	2.707		1	1	17.484			
			C	0.168	2.707		1	1	17.484			
T37	199.60	5552.12	A	0.176	2.676	13	1	1	17.919	696.93	34.85	C
640.00-620.00			B	0.176	2.676		1	1	17.919			
			C	0.176	2.676		1	1	17.919			
T38	49.90	1388.03	A	0.176	2.677	13	1	1	4.479	173.43	34.69	C
620.00-615.00			B	0.176	2.677		1	1	4.479			
			C	0.176	2.677		1	1	4.479			
T39	49.90	1388.03	A	0.176	2.677	13	1	1	4.480	173.13	34.63	C
615.00-610.00			B	0.176	2.677		1	1	4.480			
			C	0.176	2.677		1	1	4.480			
T40	49.90	1477.86	A	0.181	2.661	13	1	1	4.597	175.51	35.10	C
610.00-605.00			B	0.181	2.661		1	1	4.597			
			C	0.181	2.661		1	1	4.597			
T41	49.90	1477.86	A	0.181	2.661	13	1	1	4.598	175.22	35.04	C
605.00-600.00			B	0.181	2.661		1	1	4.598			
			C	0.181	2.661		1	1	4.598			
T42	49.90	1477.86	A	0.181	2.661	13	1	1	4.599	174.92	34.98	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
600.00-595.00			B	0.181	2.661		1	1	4.599			
			C	0.181	2.661		1	1	4.599			
T43	49.90	1477.86	A	0.181	2.661	13	1	1	4.600	174.62	34.92	C
595.00-590.00			B	0.181	2.661		1	1	4.600			
			C	0.181	2.661		1	1	4.600			
T44	49.90	1388.03	A	0.176	2.677	13	1	1	4.485	171.68	34.34	C
590.00-585.00			B	0.176	2.677		1	1	4.485			
			C	0.176	2.677		1	1	4.485			
T45	49.90	1388.03	A	0.176	2.677	13	1	1	4.486	171.39	34.28	C
585.00-580.00			B	0.176	2.677		1	1	4.486			
			C	0.176	2.677		1	1	4.486			
T46	199.60	5161.26	A	0.172	2.692	13	1	1	17.743	679.53	33.98	C
580.00-560.00			B	0.172	2.692		1	1	17.743			
			C	0.172	2.692		1	1	17.743			
T47	199.60	5161.26	A	0.172	2.692	13	1	1	17.762	675.11	33.76	C
560.00-540.00			B	0.172	2.692		1	1	17.762			
			C	0.172	2.692		1	1	17.762			
T48	49.90	1228.81	A	0.159	2.738	13	1	1	4.113	160.48	32.10	C
540.00-535.00			B	0.159	2.738		1	1	4.113			
			C	0.159	2.738		1	1	4.113			
T49	49.90	1290.32	A	0.172	2.692	13	1	1	4.443	167.80	33.56	C
535.00-530.00			B	0.172	2.692		1	1	4.443			
			C	0.172	2.692		1	1	4.443			
T50	49.90	1290.32	A	0.172	2.692	13	1	1	4.444	167.52	33.50	C
530.00-525.00			B	0.172	2.692		1	1	4.444			
			C	0.172	2.692		1	1	4.444			
T51	49.90	1290.32	A	0.172	2.692	13	1	1	4.445	167.25	33.45	C
525.00-520.00			B	0.172	2.692		1	1	4.445			
			C	0.172	2.692		1	1	4.445			
T52	199.60	5161.26	A	0.172	2.692	13	1	1	17.788	666.26	33.31	C
520.00-500.00			B	0.172	2.692		1	1	17.788			
			C	0.172	2.692		1	1	17.788			
T53	199.60	5161.26	A	0.172	2.692	13	1	1	17.801	662.03	33.10	C
500.00-480.00			B	0.172	2.692		1	1	17.801			
			C	0.172	2.692		1	1	17.801			
T54	199.60	5161.26	A	0.172	2.692	13	1	1	17.813	657.96	32.90	C
480.00-460.00			B	0.172	2.692		1	1	17.813			
			C	0.172	2.692		1	1	17.813			
T55	199.60	5552.12	A	0.176	2.677	12	1	1	18.040	657.35	32.87	C
460.00-440.00			B	0.176	2.677		1	1	18.040			
			C	0.176	2.677		1	1	18.040			
T56	49.90	1388.03	A	0.176	2.677	12	1	1	4.510	163.73	32.75	C
440.00-435.00			B	0.176	2.677		1	1	4.510			
			C	0.176	2.677		1	1	4.510			
T57	49.90	1388.03	A	0.176	2.677	12	1	1	4.511	163.51	32.70	C
435.00-430.00			B	0.176	2.677		1	1	4.511			
			C	0.176	2.677		1	1	4.511			
T58	49.90	1477.86	A	0.181	2.661	12	1	1	4.627	165.79	33.16	C
430.00-425.00			B	0.181	2.661		1	1	4.627			
			C	0.181	2.661		1	1	4.627			
T59	49.90	1477.86	A	0.181	2.661	12	1	1	4.628	165.57	33.11	C
425.00-420.00			B	0.181	2.661		1	1	4.628			
			C	0.181	2.661		1	1	4.628			
T60	49.90	1477.86	A	0.181	2.661	12	1	1	4.629	165.37	33.07	C
420.00-415.00			B	0.181	2.661		1	1	4.629			
			C	0.181	2.661		1	1	4.629			
T61	49.90	1477.86	A	0.181	2.661	12	1	1	4.629	165.16	33.03	C
415.00-410.00			B	0.181	2.661		1	1	4.629			
			C	0.181	2.661		1	1	4.629			
T62	49.90	1388.03	A	0.176	2.677	12	1	1	4.515	162.49	32.50	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft^2	F lb	w plf	Ctrl. Face
410.00-405.00			B	0.176	2.677		1	1	4.515			
			C	0.176	2.677		1	1	4.515			
T63	49.90	1388.03	A	0.176	2.677	12	1	1	4.515	162.30	32.46	C
405.00-400.00			B	0.176	2.677		1	1	4.515			
			C	0.176	2.677		1	1	4.515			
T64	226.80	5552.12	A	0.176	2.677	12	1	1	18.067	664.76	33.24	C
400.00-380.00			B	0.176	2.677		1	1	18.067			
			C	0.176	2.677		1	1	18.067			
T65	226.80	5552.12	A	0.176	2.677	12	1	1	18.075	662.20	33.11	C
380.00-360.00			B	0.176	2.677		1	1	18.075			
			C	0.176	2.677		1	1	18.075			
T66	231.39	5552.12	A	0.176	2.677	12	1	1	18.081	671.37	33.57	C
360.00-340.00			B	0.176	2.677		1	1	18.081			
			C	0.176	2.677		1	1	18.081			
T67	237.00	5552.12	A	0.176	2.677	12	1	1	18.086	683.57	34.18	C
340.00-320.00			B	0.176	2.677		1	1	18.086			
			C	0.176	2.677		1	1	18.086			
T68	237.00	5552.12	A	0.176	2.677	12	1	1	18.088	682.82	34.14	C
320.00-300.00			B	0.176	2.677		1	1	18.088			
			C	0.176	2.677		1	1	18.088			
T69	237.00	5552.12	A	0.176	2.677	12	1	1	18.088	682.90	34.15	C
300.00-280.00			B	0.176	2.677		1	1	18.088			
			C	0.176	2.677		1	1	18.088			
T70	59.25	1388.03	A	0.176	2.677	12	1	1	4.522	170.86	34.17	C
280.00-275.00			B	0.176	2.677		1	1	4.522			
			C	0.176	2.677		1	1	4.522			
T71	59.25	1388.03	A	0.176	2.677	12	1	1	4.521	170.94	34.19	C
275.00-270.00			B	0.176	2.677		1	1	4.521			
			C	0.176	2.677		1	1	4.521			
T72	59.25	1477.86	A	0.181	2.661	12	1	1	4.636	173.48	34.70	C
270.00-265.00			B	0.181	2.661		1	1	4.636			
			C	0.181	2.661		1	1	4.636			
T73	59.25	1477.86	A	0.181	2.661	12	1	1	4.636	173.60	34.72	C
265.00-260.00			B	0.181	2.661		1	1	4.636			
			C	0.181	2.661		1	1	4.636			
T74	59.25	1477.86	A	0.181	2.661	12	1	1	4.636	173.73	34.75	C
260.00-255.00			B	0.181	2.661		1	1	4.636			
			C	0.181	2.661		1	1	4.636			
T75	59.25	1477.86	A	0.181	2.661	12	1	1	4.635	173.88	34.78	C
255.00-250.00			B	0.181	2.661		1	1	4.635			
			C	0.181	2.661		1	1	4.635			
T76	59.25	1388.03	A	0.176	2.677	12	1	1	4.519	171.60	34.32	C
250.00-245.00			B	0.176	2.677		1	1	4.519			
			C	0.176	2.677		1	1	4.519			
T77	59.25	1388.03	A	0.176	2.677	12	1	1	4.519	171.79	34.36	C
245.00-240.00			B	0.176	2.677		1	1	4.519			
			C	0.176	2.677		1	1	4.519			
T78	237.00	5552.12	A	0.176	2.677	12	1	1	18.068	689.37	34.47	C
240.00-220.00			B	0.176	2.677		1	1	18.068			
			C	0.176	2.677		1	1	18.068			
T79	237.00	5552.12	A	0.176	2.677	12	1	1	18.054	693.98	34.70	C
220.00-200.00			B	0.176	2.677		1	1	18.054			
			C	0.176	2.677		1	1	18.054			
T80	405.86	5552.12	A	0.176	2.677	12	1	1	18.036	838.88	41.94	C
200.00-180.00			B	0.176	2.677		1	1	18.036			
			C	0.176	2.677		1	1	18.036			
T81	464.60	5552.12	A	0.176	2.677	13	1	1	18.013	917.43	45.87	C
180.00-160.00			B	0.176	2.677		1	1	18.013			
			C	0.176	2.677		1	1	18.013			
T82	464.60	5552.12	A	0.176	2.677	13	1	1	17.987	928.91	46.45	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft^2	F lb	w plf	Ctrl. Face
160.00-140.00			B	0.176	2.677		1	1	17.987			
			C	0.176	2.677		1	1	17.987			
T83	464.60	5552.12	A	0.176	2.677	13	1	1	17.958	966.91	48.35	C
140.00-120.00			B	0.176	2.677		1	1	17.958			
			C	0.176	2.677		1	1	17.958			
T84	116.15	1388.03	A	0.176	2.677	13	1	1	4.485	243.78	48.76	C
120.00-115.00			B	0.176	2.677		1	1	4.485			
			C	0.176	2.677		1	1	4.485			
T85	116.15	1388.03	A	0.176	2.677	13	1	1	4.483	244.60	48.92	C
115.00-110.00			B	0.176	2.677		1	1	4.483			
			C	0.176	2.677		1	1	4.483			
T86	116.15	1477.86	A	0.181	2.661	13	1	1	4.597	248.07	49.61	C
110.00-105.00			B	0.181	2.661		1	1	4.597			
			C	0.181	2.661		1	1	4.597			
T87	116.15	1477.86	A	0.181	2.661	13	1	1	4.595	248.85	49.77	C
105.00-100.00			B	0.181	2.661		1	1	4.595			
			C	0.181	2.661		1	1	4.595			
T88	116.15	1477.86	A	0.181	2.661	13	1	1	4.593	249.59	49.92	C
100.00-95.00			B	0.181	2.661		1	1	4.593			
			C	0.181	2.661		1	1	4.593			
T89	116.15	1477.86	A	0.181	2.661	13	1	1	4.592	250.29	50.06	C
95.00-90.00			B	0.181	2.661		1	1	4.592			
			C	0.181	2.661		1	1	4.592			
T90	116.15	1388.03	A	0.176	2.677	13	1	1	4.475	248.20	49.64	C
90.00-85.00			B	0.176	2.677		1	1	4.475			
			C	0.176	2.677		1	1	4.475			
T91	116.15	1388.03	A	0.176	2.677	13	1	1	4.474	248.72	49.74	C
85.00-80.00			B	0.176	2.677		1	1	4.474			
			C	0.176	2.677		1	1	4.474			
T92	464.60	5552.12	A	0.176	2.677	13	1	1	17.888	997.86	49.89	C
80.00-60.00			B	0.176	2.677		1	1	17.888			
			C	0.176	2.677		1	1	17.888			
T93	464.60	5552.12	A	0.176	2.677	13	1	1	17.905	990.30	49.51	C
60.00-40.00			B	0.176	2.677		1	1	17.905			
			C	0.176	2.677		1	1	17.905			
T94	464.60	5552.12	A	0.176	2.677	13	1	1	18.002	922.27	46.11	C
40.00-20.00			B	0.176	2.677		1	1	18.002			
			C	0.176	2.677		1	1	18.002			
T95	116.15	1388.03	A	0.176	2.677	13	1	1	4.468	251.29	50.26	C
20.00-15.00			B	0.176	2.677		1	1	4.468			
			C	0.176	2.677		1	1	4.468			
T96	185.84	2850.83	A	0.248	2.443	14	1	1	13.347	576.38	72.05	C
15.00-7.00			B	0.248	2.443		1	1	13.347			
			C	0.248	2.443		1	1	13.347			
T97 7.00-0.00	162.61	4952.76	A	1	2.1	15	1	1	43.382	816.74*	116.68	C
			B	1	2.1		1	1	43.382			
			C	1	2.1		1	1	43.382			
Sum Weight:	14038.72	294337.78			*2.1A_g limit					42541.58		

Tower Forces - Service - Wind 60 To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
L1	424.14	10343.38	A	1	0.6	15	1	1	103.500	1055.57	17.00	C
1151.90-1089.			B	1	0.777		1	1	103.500			
80			C	1	0.777		1	1	103.500			
T1	33.47	2474.36	A	0.42	2.025	15	0.8	1	13.161	366.44	74.78	C
1089.80-1084.			B	0.42	2.025		0.8	1	13.161			
90			C	0.42	2.025		0.8	1	13.161			
T2	33.47	1026.80	A	0.161	2.733	15	0.8	1	3.905	158.26	32.30	C
1084.90-1080.			B	0.161	2.733		0.8	1	3.905			
00			C	0.161	2.733		0.8	1	3.905			
T3	162.73	3798.26	A	0.155	2.755	15	0.8	1	15.322	650.61	32.53	C
1080.00-1060.			B	0.155	2.755		0.8	1	15.322			
00			C	0.155	2.755		0.8	1	15.322			
T4	176.80	3798.26	A	0.155	2.755	15	0.8	1	15.329	660.45	33.02	C
1060.00-1040.			B	0.155	2.755		0.8	1	15.329			
00			C	0.155	2.755		0.8	1	15.329			
T5	176.80	3798.26	A	0.155	2.755	15	0.8	1	15.336	657.13	32.86	C
1040.00-1020.			B	0.155	2.755		0.8	1	15.336			
00			C	0.155	2.755		0.8	1	15.336			
T6	176.80	3798.26	A	0.155	2.755	15	0.8	1	15.343	653.77	32.69	C
1020.00-1000.			B	0.155	2.755		0.8	1	15.343			
00			C	0.155	2.755		0.8	1	15.343			
T7	186.88	3798.26	A	0.155	2.755	15	0.8	1	15.350	675.68	33.78	C
1000.00-980.0			B	0.155	2.755		0.8	1	15.350			
0			C	0.155	2.755		0.8	1	15.350			
T8	189.40	3798.26	A	0.155	2.755	15	0.8	1	15.357	678.38	33.92	C
980.00-960.00			B	0.155	2.755		0.8	1	15.357			
			C	0.155	2.755		0.8	1	15.357			
T9	189.40	4790.45	A	0.168	2.707	15	0.8	1	16.056	688.95	34.45	C
960.00-940.00			B	0.168	2.707		0.8	1	16.056			
			C	0.168	2.707		0.8	1	16.056			
T10	47.35	1197.61	A	0.168	2.707	15	0.8	1	4.012	171.55	34.31	C
940.00-935.00			B	0.168	2.707		0.8	1	4.012			
			C	0.168	2.707		0.8	1	4.012			
T11	47.35	1197.61	A	0.168	2.707	15	0.8	1	4.012	171.32	34.26	C
935.00-930.00			B	0.168	2.707		0.8	1	4.012			
			C	0.168	2.707		0.8	1	4.012			
T12	47.35	1287.44	A	0.172	2.691	15	0.8	1	4.128	174.13	34.83	C
930.00-925.00			B	0.172	2.691		0.8	1	4.128			
			C	0.172	2.691		0.8	1	4.128			
T13	47.35	1287.44	A	0.172	2.691	15	0.8	1	4.128	173.89	34.78	C
925.00-920.00			B	0.172	2.691		0.8	1	4.128			
			C	0.172	2.691		0.8	1	4.128			
T14	47.35	1287.44	A	0.172	2.691	15	0.8	1	4.129	173.65	34.73	C
920.00-915.00			B	0.172	2.691		0.8	1	4.129			
			C	0.172	2.691		0.8	1	4.129			
T15	47.35	1287.44	A	0.172	2.691	15	0.8	1	4.130	173.41	34.68	C
915.00-910.00			B	0.172	2.691		0.8	1	4.130			
			C	0.172	2.691		0.8	1	4.130			
T16	47.35	1197.61	A	0.168	2.707	15	0.8	1	4.016	170.15	34.03	C
910.00-905.00			B	0.168	2.707		0.8	1	4.016			
			C	0.168	2.707		0.8	1	4.016			
T17	47.35	1197.61	A	0.168	2.707	15	0.8	1	4.016	169.91	33.98	C
905.00-900.00			B	0.168	2.707		0.8	1	4.016			
			C	0.168	2.707		0.8	1	4.016			
T18	189.40	4790.45	A	0.168	2.707	14	0.8	1	16.072	677.27	33.86	C
900.00-880.00			B	0.168	2.707		0.8	1	16.072			
			C	0.168	2.707		0.8	1	16.072			
T19	198.58	4790.45	A	0.168	2.707	14	0.8	1	16.083	699.98	35.00	C
880.00-860.00			B	0.168	2.707		0.8	1	16.083			
			C	0.168	2.707		0.8	1	16.083			

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft^2	F lb	w plf	Ctrl. Face
T20	199.60	4790.45	A	0.168	2.707	14	0.8	1	16.094	698.85	34.94	C
860.00-840.00			B	0.168	2.707		0.8	1	16.094			
			C	0.168	2.707		0.8	1	16.094			
T21	199.60	4790.45	A	0.168	2.707	14	0.8	1	16.106	694.73	34.74	C
840.00-820.00			B	0.168	2.707		0.8	1	16.106			
			C	0.168	2.707		0.8	1	16.106			
T22	199.60	4790.45	A	0.168	2.707	14	0.8	1	16.117	690.56	34.53	C
820.00-800.00			B	0.168	2.707		0.8	1	16.117			
			C	0.168	2.707		0.8	1	16.117			
T23	199.60	4790.45	A	0.168	2.707	14	0.8	1	16.129	686.35	34.32	C
800.00-780.00			B	0.168	2.707		0.8	1	16.129			
			C	0.168	2.707		0.8	1	16.129			
T24	49.90	1197.61	A	0.168	2.707	14	0.8	1	4.034	170.92	34.18	C
780.00-775.00			B	0.168	2.707		0.8	1	4.034			
			C	0.168	2.707		0.8	1	4.034			
T25	49.90	1197.61	A	0.168	2.707	14	0.8	1	4.035	170.66	34.13	C
775.00-770.00			B	0.168	2.707		0.8	1	4.035			
			C	0.168	2.707		0.8	1	4.035			
T26	49.90	1287.44	A	0.172	2.691	14	0.8	1	4.150	173.27	34.65	C
770.00-765.00			B	0.172	2.691		0.8	1	4.150			
			C	0.172	2.691		0.8	1	4.150			
T27	49.90	1287.44	A	0.172	2.691	14	0.8	1	4.150	173.00	34.60	C
765.00-760.00			B	0.172	2.691		0.8	1	4.150			
			C	0.172	2.691		0.8	1	4.150			
T28	49.90	1287.44	A	0.172	2.691	14	0.8	1	4.151	172.72	34.54	C
760.00-755.00			B	0.172	2.691		0.8	1	4.151			
			C	0.172	2.691		0.8	1	4.151			
T29	49.90	1287.44	A	0.172	2.691	14	0.8	1	4.152	172.45	34.49	C
755.00-750.00			B	0.172	2.691		0.8	1	4.152			
			C	0.172	2.691		0.8	1	4.152			
T30	49.90	1197.61	A	0.168	2.707	14	0.8	1	4.038	169.32	33.86	C
750.00-745.00			B	0.168	2.707		0.8	1	4.038			
			C	0.168	2.707		0.8	1	4.038			
T31	49.90	1197.61	A	0.168	2.707	14	0.8	1	4.039	169.05	33.81	C
745.00-740.00			B	0.168	2.707		0.8	1	4.039			
			C	0.168	2.707		0.8	1	4.039			
T32	199.60	4790.45	A	0.168	2.707	14	0.8	1	16.164	673.48	33.67	C
740.00-720.00			B	0.168	2.707		0.8	1	16.164			
			C	0.168	2.707		0.8	1	16.164			
T33	199.60	4790.45	A	0.168	2.707	14	0.8	1	16.176	669.12	33.46	C
720.00-700.00			B	0.168	2.707		0.8	1	16.176			
			C	0.168	2.707		0.8	1	16.176			
T34	199.60	4790.45	A	0.168	2.707	14	0.8	1	16.188	664.73	33.24	C
700.00-680.00			B	0.168	2.707		0.8	1	16.188			
			C	0.168	2.707		0.8	1	16.188			
T35	199.60	4790.45	A	0.168	2.707	13	0.8	1	16.201	660.33	33.02	C
680.00-660.00			B	0.168	2.707		0.8	1	16.201			
			C	0.168	2.707		0.8	1	16.201			
T36	199.60	4790.45	A	0.168	2.707	13	0.8	1	16.213	655.91	32.80	C
660.00-640.00			B	0.168	2.707		0.8	1	16.213			
			C	0.168	2.707		0.8	1	16.213			
T37	199.60	5552.12	A	0.176	2.676	13	0.8	1	16.654	658.78	32.94	C
640.00-620.00			B	0.176	2.676		0.8	1	16.654			
			C	0.176	2.676		0.8	1	16.654			
T38	49.90	1388.03	A	0.176	2.677	13	0.8	1	4.163	163.94	32.79	C
620.00-615.00			B	0.176	2.677		0.8	1	4.163			
			C	0.176	2.677		0.8	1	4.163			
T39	49.90	1388.03	A	0.176	2.677	13	0.8	1	4.164	163.67	32.73	C
615.00-610.00			B	0.176	2.677		0.8	1	4.164			
			C	0.176	2.677		0.8	1	4.164			

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft^2	F lb	w plf	Ctrl. Face
T40	49.90	1477.86	A	0.181	2.661	13	0.8	1	4.281	166.12	33.22	C
610.00-605.00			B	0.181	2.661		0.8	1	4.281			
			C	0.181	2.661		0.8	1	4.281			
T41	49.90	1477.86	A	0.181	2.661	13	0.8	1	4.282	165.84	33.17	C
605.00-600.00			B	0.181	2.661		0.8	1	4.282			
			C	0.181	2.661		0.8	1	4.282			
T42	49.90	1477.86	A	0.181	2.661	13	0.8	1	4.283	165.56	33.11	C
600.00-595.00			B	0.181	2.661		0.8	1	4.283			
			C	0.181	2.661		0.8	1	4.283			
T43	49.90	1477.86	A	0.181	2.661	13	0.8	1	4.284	165.28	33.06	C
595.00-590.00			B	0.181	2.661		0.8	1	4.284			
			C	0.181	2.661		0.8	1	4.284			
T44	49.90	1388.03	A	0.176	2.677	13	0.8	1	4.169	162.31	32.46	C
590.00-585.00			B	0.176	2.677		0.8	1	4.169			
			C	0.176	2.677		0.8	1	4.169			
T45	49.90	1388.03	A	0.176	2.677	13	0.8	1	4.170	162.03	32.41	C
585.00-580.00			B	0.176	2.677		0.8	1	4.170			
			C	0.176	2.677		0.8	1	4.170			
T46	199.60	5161.26	A	0.172	2.692	13	0.8	1	16.476	641.97	32.10	C
580.00-560.00			B	0.172	2.692		0.8	1	16.476			
			C	0.172	2.692		0.8	1	16.476			
T47	199.60	5161.26	A	0.172	2.692	13	0.8	1	16.495	637.81	31.89	C
560.00-540.00			B	0.172	2.692		0.8	1	16.495			
			C	0.172	2.692		0.8	1	16.495			
T48	49.90	1228.81	A	0.159	2.738	13	0.8	1	3.796	151.04	30.21	C
540.00-535.00			B	0.159	2.738		0.8	1	3.796			
			C	0.159	2.738		0.8	1	3.796			
T49	49.90	1290.32	A	0.172	2.692	13	0.8	1	4.127	158.53	31.71	C
535.00-530.00			B	0.172	2.692		0.8	1	4.127			
			C	0.172	2.692		0.8	1	4.127			
T50	49.90	1290.32	A	0.172	2.692	13	0.8	1	4.127	158.27	31.65	C
530.00-525.00			B	0.172	2.692		0.8	1	4.127			
			C	0.172	2.692		0.8	1	4.127			
T51	49.90	1290.32	A	0.172	2.692	13	0.8	1	4.128	158.01	31.60	C
525.00-520.00			B	0.172	2.692		0.8	1	4.128			
			C	0.172	2.692		0.8	1	4.128			
T52	199.60	5161.26	A	0.172	2.692	13	0.8	1	16.521	629.49	31.47	C
520.00-500.00			B	0.172	2.692		0.8	1	16.521			
			C	0.172	2.692		0.8	1	16.521			
T53	199.60	5161.26	A	0.172	2.692	13	0.8	1	16.533	625.51	31.28	C
500.00-480.00			B	0.172	2.692		0.8	1	16.533			
			C	0.172	2.692		0.8	1	16.533			
T54	199.60	5161.26	A	0.172	2.692	13	0.8	1	16.545	621.69	31.08	C
480.00-460.00			B	0.172	2.692		0.8	1	16.545			
			C	0.172	2.692		0.8	1	16.545			
T55	199.60	5552.12	A	0.176	2.677	12	0.8	1	16.776	621.58	31.08	C
460.00-440.00			B	0.176	2.677		0.8	1	16.776			
			C	0.176	2.677		0.8	1	16.776			
T56	49.90	1388.03	A	0.176	2.677	12	0.8	1	4.195	154.83	30.97	C
440.00-435.00			B	0.176	2.677		0.8	1	4.195			
			C	0.176	2.677		0.8	1	4.195			
T57	49.90	1388.03	A	0.176	2.677	12	0.8	1	4.195	154.62	30.92	C
435.00-430.00			B	0.176	2.677		0.8	1	4.195			
			C	0.176	2.677		0.8	1	4.195			
T58	49.90	1477.86	A	0.181	2.661	12	0.8	1	4.311	156.96	31.39	C
430.00-425.00			B	0.181	2.661		0.8	1	4.311			
			C	0.181	2.661		0.8	1	4.311			
T59	49.90	1477.86	A	0.181	2.661	12	0.8	1	4.312	156.76	31.35	C
425.00-420.00			B	0.181	2.661		0.8	1	4.312			
			C	0.181	2.661		0.8	1	4.312			

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft^2	F lb	w plf	Ctrl. Face
T60	49.90	1477.86	A	0.181	2.661	12	0.8	1	4.313	156.56	31.31	C
420.00-415.00			B	0.181	2.661		0.8	1	4.313			
			C	0.181	2.661		0.8	1	4.313			
T61	49.90	1477.86	A	0.181	2.661	12	0.8	1	4.313	156.37	31.27	C
415.00-410.00			B	0.181	2.661		0.8	1	4.313			
			C	0.181	2.661		0.8	1	4.313			
T62	49.90	1388.03	A	0.176	2.677	12	0.8	1	4.199	153.66	30.73	C
410.00-405.00			B	0.176	2.677		0.8	1	4.199			
			C	0.176	2.677		0.8	1	4.199			
T63	49.90	1388.03	A	0.176	2.677	12	0.8	1	4.199	153.48	30.70	C
405.00-400.00			B	0.176	2.677		0.8	1	4.199			
			C	0.176	2.677		0.8	1	4.199			
T64	226.80	5552.12	A	0.176	2.677	12	0.8	1	16.803	629.59	31.48	C
400.00-380.00			B	0.176	2.677		0.8	1	16.803			
			C	0.176	2.677		0.8	1	16.803			
T65	226.80	5552.12	A	0.176	2.677	12	0.8	1	16.811	627.18	31.36	C
380.00-360.00			B	0.176	2.677		0.8	1	16.811			
			C	0.176	2.677		0.8	1	16.811			
T66	231.39	5552.12	A	0.176	2.677	12	0.8	1	16.817	636.46	31.82	C
360.00-340.00			B	0.176	2.677		0.8	1	16.817			
			C	0.176	2.677		0.8	1	16.817			
T67	237.00	5552.12	A	0.176	2.677	12	0.8	1	16.822	648.75	32.44	C
340.00-320.00			B	0.176	2.677		0.8	1	16.822			
			C	0.176	2.677		0.8	1	16.822			
T68	237.00	5552.12	A	0.176	2.677	12	0.8	1	16.824	648.04	32.40	C
320.00-300.00			B	0.176	2.677		0.8	1	16.824			
			C	0.176	2.677		0.8	1	16.824			
T69	237.00	5552.12	A	0.176	2.677	12	0.8	1	16.824	648.12	32.41	C
300.00-280.00			B	0.176	2.677		0.8	1	16.824			
			C	0.176	2.677		0.8	1	16.824			
T70	59.25	1388.03	A	0.176	2.677	12	0.8	1	4.206	162.16	32.43	C
280.00-275.00			B	0.176	2.677		0.8	1	4.206			
			C	0.176	2.677		0.8	1	4.206			
T71	59.25	1388.03	A	0.176	2.677	12	0.8	1	4.205	162.23	32.45	C
275.00-270.00			B	0.176	2.677		0.8	1	4.205			
			C	0.176	2.677		0.8	1	4.205			
T72	59.25	1477.86	A	0.181	2.661	12	0.8	1	4.320	164.82	32.96	C
270.00-265.00			B	0.181	2.661		0.8	1	4.320			
			C	0.181	2.661		0.8	1	4.320			
T73	59.25	1477.86	A	0.181	2.661	12	0.8	1	4.320	164.93	32.99	C
265.00-260.00			B	0.181	2.661		0.8	1	4.320			
			C	0.181	2.661		0.8	1	4.320			
T74	59.25	1477.86	A	0.181	2.661	12	0.8	1	4.320	165.05	33.01	C
260.00-255.00			B	0.181	2.661		0.8	1	4.320			
			C	0.181	2.661		0.8	1	4.320			
T75	59.25	1477.86	A	0.181	2.661	12	0.8	1	4.319	165.20	33.04	C
255.00-250.00			B	0.181	2.661		0.8	1	4.319			
			C	0.181	2.661		0.8	1	4.319			
T76	59.25	1388.03	A	0.176	2.677	12	0.8	1	4.203	162.86	32.57	C
250.00-245.00			B	0.176	2.677		0.8	1	4.203			
			C	0.176	2.677		0.8	1	4.203			
T77	59.25	1388.03	A	0.176	2.677	12	0.8	1	4.203	163.04	32.61	C
245.00-240.00			B	0.176	2.677		0.8	1	4.203			
			C	0.176	2.677		0.8	1	4.203			
T78	237.00	5552.12	A	0.176	2.677	12	0.8	1	16.804	654.23	32.71	C
240.00-220.00			B	0.176	2.677		0.8	1	16.804			
			C	0.176	2.677		0.8	1	16.804			
T79	237.00	5552.12	A	0.176	2.677	12	0.8	1	16.790	658.59	32.93	C
220.00-200.00			B	0.176	2.677		0.8	1	16.790			
			C	0.176	2.677		0.8	1	16.790			

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft^2	F lb	w plf	Ctrl. Face
T80	405.86	5552.12	A	0.176	2.677	12	0.8	1	16.772	803.15	40.16	A
200.00-180.00			B	0.176	2.677		0.8	1	16.772			
			C	0.176	2.677		0.8	1	16.772			
T81	464.60	5552.12	A	0.176	2.677	13	0.8	1	16.749	881.29	44.06	A
180.00-160.00			B	0.176	2.677		0.8	1	16.749			
			C	0.176	2.677		0.8	1	16.749			
T82	464.60	5552.12	A	0.176	2.677	13	0.8	1	16.723	892.29	44.61	A
160.00-140.00			B	0.176	2.677		0.8	1	16.723			
			C	0.176	2.677		0.8	1	16.723			
T83	464.60	5552.12	A	0.176	2.677	13	0.8	1	16.694	929.75	46.49	A
140.00-120.00			B	0.176	2.677		0.8	1	16.694			
			C	0.176	2.677		0.8	1	16.694			
T84	116.15	1388.03	A	0.176	2.677	13	0.8	1	4.169	234.41	46.88	A
120.00-115.00			B	0.176	2.677		0.8	1	4.169			
			C	0.176	2.677		0.8	1	4.169			
T85	116.15	1388.03	A	0.176	2.677	13	0.8	1	4.167	235.19	47.04	A
115.00-110.00			B	0.176	2.677		0.8	1	4.167			
			C	0.176	2.677		0.8	1	4.167			
T86	116.15	1477.86	A	0.181	2.661	13	0.8	1	4.281	238.68	47.74	A
110.00-105.00			B	0.181	2.661		0.8	1	4.281			
			C	0.181	2.661		0.8	1	4.281			
T87	116.15	1477.86	A	0.181	2.661	13	0.8	1	4.279	239.43	47.89	A
105.00-100.00			B	0.181	2.661		0.8	1	4.279			
			C	0.181	2.661		0.8	1	4.279			
T88	116.15	1477.86	A	0.181	2.661	13	0.8	1	4.278	240.14	48.03	A
100.00-95.00			B	0.181	2.661		0.8	1	4.278			
			C	0.181	2.661		0.8	1	4.278			
T89	116.15	1477.86	A	0.181	2.661	13	0.8	1	4.276	240.80	48.16	A
95.00-90.00			B	0.181	2.661		0.8	1	4.276			
			C	0.181	2.661		0.8	1	4.276			
T90	116.15	1388.03	A	0.176	2.677	13	0.8	1	4.159	238.64	47.73	A
90.00-85.00			B	0.176	2.677		0.8	1	4.159			
			C	0.176	2.677		0.8	1	4.159			
T91	116.15	1388.03	A	0.176	2.677	13	0.8	1	4.158	239.14	47.83	A
85.00-80.00			B	0.176	2.677		0.8	1	4.158			
			C	0.176	2.677		0.8	1	4.158			
T92	464.60	5552.12	A	0.176	2.677	13	0.8	1	16.624	959.38	47.97	A
80.00-60.00			B	0.176	2.677		0.8	1	16.624			
			C	0.176	2.677		0.8	1	16.624			
T93	464.60	5552.12	A	0.176	2.677	13	0.8	1	16.641	952.15	47.61	A
60.00-40.00			B	0.176	2.677		0.8	1	16.641			
			C	0.176	2.677		0.8	1	16.641			
T94	464.60	5552.12	A	0.176	2.677	13	0.8	1	16.738	885.93	44.30	A
40.00-20.00			B	0.176	2.677		0.8	1	16.738			
			C	0.176	2.677		0.8	1	16.738			
T95	116.15	1388.03	A	0.176	2.677	13	0.8	1	4.152	241.60	48.32	A
20.00-15.00			B	0.176	2.677		0.8	1	4.152			
			C	0.176	2.677		0.8	1	4.152			
T96	185.84	2850.83	A	0.248	2.443	14	0.8	1	11.339	518.07	64.76	A
15.00-7.00			B	0.248	2.443		0.8	1	11.339			
			C	0.248	2.443		0.8	1	11.339			
T97 7.00-0.00	162.61	4952.76	A	1	2.1	15	0.8	1	36.067	816.74*	116.68	C
			B	1	2.1		0.8	1	36.067			
			C	1	2.1		0.8	1	36.067			
Sum Weight:	14038.72	294337.78			*2.1A_g limit					40334.66		

Tower Forces - Service - Wind 90 To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft^2	F lb	w plf	Ctrl. Face
L1	424.14	10343.38	A	1	0.6	15	1	1	103.500	2254.82	36.31	C
1151.90-1089.			B	1	0.6		1	1	103.500			
80			C	1	1.2		1	1	103.500			
T1	33.47	2474.36	A	0.42	2.025	15	0.85	1	13.865	384.97	78.57	C
1089.80-1084.			B	0.42	2.025		0.85	1	13.865			
90			C	0.42	2.025		0.85	1	13.865			
T2	33.47	1026.80	A	0.161	2.733	15	0.85	1	3.986	161.10	32.88	C
1084.90-1080.			B	0.161	2.733		0.85	1	3.986			
00			C	0.161	2.733		0.85	1	3.986			
T3	162.73	3798.26	A	0.155	2.755	15	0.85	1	15.642	662.04	33.10	C
1080.00-1060.			B	0.155	2.755		0.85	1	15.642			
00			C	0.155	2.755		0.85	1	15.642			
T4	176.80	3798.26	A	0.155	2.755	15	0.85	1	15.649	671.82	33.59	C
1060.00-1040.			B	0.155	2.755		0.85	1	15.649			
00			C	0.155	2.755		0.85	1	15.649			
T5	176.80	3798.26	A	0.155	2.755	15	0.85	1	15.656	668.44	33.42	C
1040.00-1020.			B	0.155	2.755		0.85	1	15.656			
00			C	0.155	2.755		0.85	1	15.656			
T6	176.80	3798.26	A	0.155	2.755	15	0.85	1	15.663	665.02	33.25	C
1020.00-1000.			B	0.155	2.755		0.85	1	15.663			
00			C	0.155	2.755		0.85	1	15.663			
T7	186.88	3798.26	A	0.155	2.755	15	0.85	1	15.670	686.86	34.34	C
1000.00-980.0			B	0.155	2.755		0.85	1	15.670			
0			C	0.155	2.755		0.85	1	15.670			
T8	189.40	3798.26	A	0.155	2.755	15	0.85	1	15.678	689.50	34.48	C
980.00-960.00			B	0.155	2.755		0.85	1	15.678			
			C	0.155	2.755		0.85	1	15.678			
T9	189.40	4790.45	A	0.168	2.707	15	0.85	1	16.374	699.75	34.99	C
960.00-940.00			B	0.168	2.707		0.85	1	16.374			
			C	0.168	2.707		0.85	1	16.374			
T10	47.35	1197.61	A	0.168	2.707	15	0.85	1	4.091	174.24	34.85	C
940.00-935.00			B	0.168	2.707		0.85	1	4.091			
			C	0.168	2.707		0.85	1	4.091			
T11	47.35	1197.61	A	0.168	2.707	15	0.85	1	4.092	174.00	34.80	C
935.00-930.00			B	0.168	2.707		0.85	1	4.092			
			C	0.168	2.707		0.85	1	4.092			
T12	47.35	1287.44	A	0.172	2.691	15	0.85	1	4.207	176.79	35.36	C
930.00-925.00			B	0.172	2.691		0.85	1	4.207			
			C	0.172	2.691		0.85	1	4.207			
T13	47.35	1287.44	A	0.172	2.691	15	0.85	1	4.208	176.55	35.31	C
925.00-920.00			B	0.172	2.691		0.85	1	4.208			
			C	0.172	2.691		0.85	1	4.208			
T14	47.35	1287.44	A	0.172	2.691	15	0.85	1	4.208	176.31	35.26	C
920.00-915.00			B	0.172	2.691		0.85	1	4.208			
			C	0.172	2.691		0.85	1	4.208			
T15	47.35	1287.44	A	0.172	2.691	15	0.85	1	4.209	176.06	35.21	C
915.00-910.00			B	0.172	2.691		0.85	1	4.209			
			C	0.172	2.691		0.85	1	4.209			
T16	47.35	1197.61	A	0.168	2.707	15	0.85	1	4.095	172.81	34.56	C
910.00-905.00			B	0.168	2.707		0.85	1	4.095			
			C	0.168	2.707		0.85	1	4.095			
T17	47.35	1197.61	A	0.168	2.707	15	0.85	1	4.096	172.57	34.51	C
905.00-900.00			B	0.168	2.707		0.85	1	4.096			
			C	0.168	2.707		0.85	1	4.096			
T18	189.40	4790.45	A	0.168	2.707	14	0.85	1	16.390	687.86	34.39	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft^2	F lb	w plf	Ctrl. Face
900.00-880.00			B	0.168	2.707		0.85	1	16.390			
			C	0.168	2.707		0.85	1	16.390			
T19	198.58	4790.45	A	0.168	2.707	14	0.85	1	16.401	710.50	35.53	C
880.00-860.00			B	0.168	2.707		0.85	1	16.401			
			C	0.168	2.707		0.85	1	16.401			
T20	199.60	4790.45	A	0.168	2.707	14	0.85	1	16.412	709.31	35.47	C
860.00-840.00			B	0.168	2.707		0.85	1	16.412			
			C	0.168	2.707		0.85	1	16.412			
T21	199.60	4790.45	A	0.168	2.707	14	0.85	1	16.423	705.12	35.26	C
840.00-820.00			B	0.168	2.707		0.85	1	16.423			
			C	0.168	2.707		0.85	1	16.423			
T22	199.60	4790.45	A	0.168	2.707	14	0.85	1	16.435	700.88	35.04	C
820.00-800.00			B	0.168	2.707		0.85	1	16.435			
			C	0.168	2.707		0.85	1	16.435			
T23	199.60	4790.45	A	0.168	2.707	14	0.85	1	16.446	696.60	34.83	C
800.00-780.00			B	0.168	2.707		0.85	1	16.446			
			C	0.168	2.707		0.85	1	16.446			
T24	49.90	1197.61	A	0.168	2.707	14	0.85	1	4.113	173.48	34.70	C
780.00-775.00			B	0.168	2.707		0.85	1	4.113			
			C	0.168	2.707		0.85	1	4.113			
T25	49.90	1197.61	A	0.168	2.707	14	0.85	1	4.114	173.21	34.64	C
775.00-770.00			B	0.168	2.707		0.85	1	4.114			
			C	0.168	2.707		0.85	1	4.114			
T26	49.90	1287.44	A	0.172	2.691	14	0.85	1	4.229	175.80	35.16	C
770.00-765.00			B	0.172	2.691		0.85	1	4.229			
			C	0.172	2.691		0.85	1	4.229			
T27	49.90	1287.44	A	0.172	2.691	14	0.85	1	4.230	175.52	35.10	C
765.00-760.00			B	0.172	2.691		0.85	1	4.230			
			C	0.172	2.691		0.85	1	4.230			
T28	49.90	1287.44	A	0.172	2.691	14	0.85	1	4.231	175.24	35.05	C
760.00-755.00			B	0.172	2.691		0.85	1	4.231			
			C	0.172	2.691		0.85	1	4.231			
T29	49.90	1287.44	A	0.172	2.691	14	0.85	1	4.231	174.96	34.99	C
755.00-750.00			B	0.172	2.691		0.85	1	4.231			
			C	0.172	2.691		0.85	1	4.231			
T30	49.90	1197.61	A	0.168	2.707	14	0.85	1	4.118	171.84	34.37	C
750.00-745.00			B	0.168	2.707		0.85	1	4.118			
			C	0.168	2.707		0.85	1	4.118			
T31	49.90	1197.61	A	0.168	2.707	14	0.85	1	4.119	171.57	34.31	C
745.00-740.00			B	0.168	2.707		0.85	1	4.119			
			C	0.168	2.707		0.85	1	4.119			
T32	199.60	4790.45	A	0.168	2.707	14	0.85	1	16.482	683.52	34.18	C
740.00-720.00			B	0.168	2.707		0.85	1	16.482			
			C	0.168	2.707		0.85	1	16.482			
T33	199.60	4790.45	A	0.168	2.707	14	0.85	1	16.494	679.09	33.95	C
720.00-700.00			B	0.168	2.707		0.85	1	16.494			
			C	0.168	2.707		0.85	1	16.494			
T34	199.60	4790.45	A	0.168	2.707	14	0.85	1	16.506	674.63	33.73	C
700.00-680.00			B	0.168	2.707		0.85	1	16.506			
			C	0.168	2.707		0.85	1	16.506			
T35	199.60	4790.45	A	0.168	2.707	13	0.85	1	16.518	670.16	33.51	C
680.00-660.00			B	0.168	2.707		0.85	1	16.518			
			C	0.168	2.707		0.85	1	16.518			
T36	199.60	4790.45	A	0.168	2.707	13	0.85	1	16.531	665.67	33.28	C
660.00-640.00			B	0.168	2.707		0.85	1	16.531			
			C	0.168	2.707		0.85	1	16.531			
T37	199.60	5552.12	A	0.176	2.676	13	0.85	1	16.970	668.32	33.42	C
640.00-620.00			B	0.176	2.676		0.85	1	16.970			
			C	0.176	2.676		0.85	1	16.970			
T38	49.90	1388.03	A	0.176	2.677	13	0.85	1	4.242	166.32	33.26	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
620.00-615.00			B	0.176	2.677		0.85	1	4.242			
			C	0.176	2.677		0.85	1	4.242			
T39	49.90	1388.03	A	0.176	2.677	13	0.85	1	4.243	166.04	33.21	C
615.00-610.00			B	0.176	2.677		0.85	1	4.243			
			C	0.176	2.677		0.85	1	4.243			
T40	49.90	1477.86	A	0.181	2.661	13	0.85	1	4.360	168.47	33.69	C
610.00-605.00			B	0.181	2.661		0.85	1	4.360			
			C	0.181	2.661		0.85	1	4.360			
T41	49.90	1477.86	A	0.181	2.661	13	0.85	1	4.361	168.19	33.64	C
605.00-600.00			B	0.181	2.661		0.85	1	4.361			
			C	0.181	2.661		0.85	1	4.361			
T42	49.90	1477.86	A	0.181	2.661	13	0.85	1	4.362	167.90	33.58	C
600.00-595.00			B	0.181	2.661		0.85	1	4.362			
			C	0.181	2.661		0.85	1	4.362			
T43	49.90	1477.86	A	0.181	2.661	13	0.85	1	4.363	167.62	33.52	C
595.00-590.00			B	0.181	2.661		0.85	1	4.363			
			C	0.181	2.661		0.85	1	4.363			
T44	49.90	1388.03	A	0.176	2.677	13	0.85	1	4.248	164.65	32.93	C
590.00-585.00			B	0.176	2.677		0.85	1	4.248			
			C	0.176	2.677		0.85	1	4.248			
T45	49.90	1388.03	A	0.176	2.677	13	0.85	1	4.249	164.37	32.87	C
585.00-580.00			B	0.176	2.677		0.85	1	4.249			
			C	0.176	2.677		0.85	1	4.249			
T46	199.60	5161.26	A	0.172	2.692	13	0.85	1	16.793	651.36	32.57	C
580.00-560.00			B	0.172	2.692		0.85	1	16.793			
			C	0.172	2.692		0.85	1	16.793			
T47	199.60	5161.26	A	0.172	2.692	13	0.85	1	16.812	647.14	32.36	C
560.00-540.00			B	0.172	2.692		0.85	1	16.812			
			C	0.172	2.692		0.85	1	16.812			
T48	49.90	1228.81	A	0.159	2.738	13	0.85	1	3.875	153.40	30.68	C
540.00-535.00			B	0.159	2.738		0.85	1	3.875			
			C	0.159	2.738		0.85	1	3.875			
T49	49.90	1290.32	A	0.172	2.692	13	0.85	1	4.206	160.85	32.17	C
535.00-530.00			B	0.172	2.692		0.85	1	4.206			
			C	0.172	2.692		0.85	1	4.206			
T50	49.90	1290.32	A	0.172	2.692	13	0.85	1	4.207	160.58	32.12	C
530.00-525.00			B	0.172	2.692		0.85	1	4.207			
			C	0.172	2.692		0.85	1	4.207			
T51	49.90	1290.32	A	0.172	2.692	13	0.85	1	4.207	160.32	32.06	C
525.00-520.00			B	0.172	2.692		0.85	1	4.207			
			C	0.172	2.692		0.85	1	4.207			
T52	199.60	5161.26	A	0.172	2.692	13	0.85	1	16.838	638.68	31.93	C
520.00-500.00			B	0.172	2.692		0.85	1	16.838			
			C	0.172	2.692		0.85	1	16.838			
T53	199.60	5161.26	A	0.172	2.692	13	0.85	1	16.850	634.64	31.73	C
500.00-480.00			B	0.172	2.692		0.85	1	16.850			
			C	0.172	2.692		0.85	1	16.850			
T54	199.60	5161.26	A	0.172	2.692	13	0.85	1	16.862	630.75	31.54	C
480.00-460.00			B	0.172	2.692		0.85	1	16.862			
			C	0.172	2.692		0.85	1	16.862			
T55	199.60	5552.12	A	0.176	2.677	12	0.85	1	17.092	630.52	31.53	C
460.00-440.00			B	0.176	2.677		0.85	1	17.092			
			C	0.176	2.677		0.85	1	17.092			
T56	49.90	1388.03	A	0.176	2.677	12	0.85	1	4.274	157.06	31.41	C
440.00-435.00			B	0.176	2.677		0.85	1	4.274			
			C	0.176	2.677		0.85	1	4.274			
T57	49.90	1388.03	A	0.176	2.677	12	0.85	1	4.274	156.85	31.37	C
435.00-430.00			B	0.176	2.677		0.85	1	4.274			
			C	0.176	2.677		0.85	1	4.274			
T58	49.90	1477.86	A	0.181	2.661	12	0.85	1	4.390	159.17	31.83	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
430.00-425.00			B	0.181	2.661		0.85	1	4.390			
			C	0.181	2.661		0.85	1	4.390			
T59	49.90	1477.86	A	0.181	2.661	12	0.85	1	4.391	158.96	31.79	C
425.00-420.00			B	0.181	2.661		0.85	1	4.391			
			C	0.181	2.661		0.85	1	4.391			
T60	49.90	1477.86	A	0.181	2.661	12	0.85	1	4.392	158.76	31.75	C
420.00-415.00			B	0.181	2.661		0.85	1	4.392			
			C	0.181	2.661		0.85	1	4.392			
T61	49.90	1477.86	A	0.181	2.661	12	0.85	1	4.392	158.57	31.71	C
415.00-410.00			B	0.181	2.661		0.85	1	4.392			
			C	0.181	2.661		0.85	1	4.392			
T62	49.90	1388.03	A	0.176	2.677	12	0.85	1	4.278	155.87	31.17	C
410.00-405.00			B	0.176	2.677		0.85	1	4.278			
			C	0.176	2.677		0.85	1	4.278			
T63	49.90	1388.03	A	0.176	2.677	12	0.85	1	4.278	155.69	31.14	C
405.00-400.00			B	0.176	2.677		0.85	1	4.278			
			C	0.176	2.677		0.85	1	4.278			
T64	226.80	5552.12	A	0.176	2.677	12	0.85	1	17.119	638.38	31.92	C
400.00-380.00			B	0.176	2.677		0.85	1	17.119			
			C	0.176	2.677		0.85	1	17.119			
T65	226.80	5552.12	A	0.176	2.677	12	0.85	1	17.127	635.94	31.80	C
380.00-360.00			B	0.176	2.677		0.85	1	17.127			
			C	0.176	2.677		0.85	1	17.127			
T66	231.39	5552.12	A	0.176	2.677	12	0.85	1	17.133	645.19	32.26	C
360.00-340.00			B	0.176	2.677		0.85	1	17.133			
			C	0.176	2.677		0.85	1	17.133			
T67	237.00	5552.12	A	0.176	2.677	12	0.85	1	17.138	657.45	32.87	C
340.00-320.00			B	0.176	2.677		0.85	1	17.138			
			C	0.176	2.677		0.85	1	17.138			
T68	237.00	5552.12	A	0.176	2.677	12	0.85	1	17.140	656.73	32.84	C
320.00-300.00			B	0.176	2.677		0.85	1	17.140			
			C	0.176	2.677		0.85	1	17.140			
T69	237.00	5552.12	A	0.176	2.677	12	0.85	1	17.140	656.82	32.84	C
300.00-280.00			B	0.176	2.677		0.85	1	17.140			
			C	0.176	2.677		0.85	1	17.140			
T70	59.25	1388.03	A	0.176	2.677	12	0.85	1	4.285	164.33	32.87	C
280.00-275.00			B	0.176	2.677		0.85	1	4.285			
			C	0.176	2.677		0.85	1	4.285			
T71	59.25	1388.03	A	0.176	2.677	12	0.85	1	4.284	164.41	32.88	C
275.00-270.00			B	0.176	2.677		0.85	1	4.284			
			C	0.176	2.677		0.85	1	4.284			
T72	59.25	1477.86	A	0.181	2.661	12	0.85	1	4.399	166.98	33.40	C
270.00-265.00			B	0.181	2.661		0.85	1	4.399			
			C	0.181	2.661		0.85	1	4.399			
T73	59.25	1477.86	A	0.181	2.661	12	0.85	1	4.399	167.09	33.42	C
265.00-260.00			B	0.181	2.661		0.85	1	4.399			
			C	0.181	2.661		0.85	1	4.399			
T74	59.25	1477.86	A	0.181	2.661	12	0.85	1	4.399	167.22	33.44	C
260.00-255.00			B	0.181	2.661		0.85	1	4.399			
			C	0.181	2.661		0.85	1	4.399			
T75	59.25	1477.86	A	0.181	2.661	12	0.85	1	4.398	167.37	33.47	C
255.00-250.00			B	0.181	2.661		0.85	1	4.398			
			C	0.181	2.661		0.85	1	4.398			
T76	59.25	1388.03	A	0.176	2.677	12	0.85	1	4.282	165.04	33.01	C
250.00-245.00			B	0.176	2.677		0.85	1	4.282			
			C	0.176	2.677		0.85	1	4.282			
T77	59.25	1388.03	A	0.176	2.677	12	0.85	1	4.282	165.22	33.04	C
245.00-240.00			B	0.176	2.677		0.85	1	4.282			
			C	0.176	2.677		0.85	1	4.282			
T78	237.00	5552.12	A	0.176	2.677	12	0.85	1	17.120	663.02	33.15	C

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
240.00-220.00			B	0.176	2.677		0.85	1	17.120			
			C	0.176	2.677		0.85	1	17.120			
T79	237.00	5552.12	A	0.176	2.677	12	0.85	1	17.106	667.44	33.37	C
220.00-200.00			B	0.176	2.677		0.85	1	17.106			
			C	0.176	2.677		0.85	1	17.106			
T80	405.86	5552.12	A	0.176	2.677	12	0.85	1	17.088	812.08	40.60	B
200.00-180.00			B	0.176	2.677		0.85	1	17.088			
			C	0.176	2.677		0.85	1	17.088			
T81	464.60	5552.12	A	0.176	2.677	13	0.85	1	17.065	890.33	44.52	B
180.00-160.00			B	0.176	2.677		0.85	1	17.065			
			C	0.176	2.677		0.85	1	17.065			
T82	464.60	5552.12	A	0.176	2.677	13	0.85	1	17.039	901.45	45.07	B
160.00-140.00			B	0.176	2.677		0.85	1	17.039			
			C	0.176	2.677		0.85	1	17.039			
T83	464.60	5552.12	A	0.176	2.677	13	0.85	1	17.010	939.04	46.95	B
140.00-120.00			B	0.176	2.677		0.85	1	17.010			
			C	0.176	2.677		0.85	1	17.010			
T84	116.15	1388.03	A	0.176	2.677	13	0.85	1	4.248	236.75	47.35	B
120.00-115.00			B	0.176	2.677		0.85	1	4.248			
			C	0.176	2.677		0.85	1	4.248			
T85	116.15	1388.03	A	0.176	2.677	13	0.85	1	4.246	237.54	47.51	B
115.00-110.00			B	0.176	2.677		0.85	1	4.246			
			C	0.176	2.677		0.85	1	4.246			
T86	116.15	1477.86	A	0.181	2.661	13	0.85	1	4.360	241.02	48.20	B
110.00-105.00			B	0.181	2.661		0.85	1	4.360			
			C	0.181	2.661		0.85	1	4.360			
T87	116.15	1477.86	A	0.181	2.661	13	0.85	1	4.358	241.78	48.36	B
105.00-100.00			B	0.181	2.661		0.85	1	4.358			
			C	0.181	2.661		0.85	1	4.358			
T88	116.15	1477.86	A	0.181	2.661	13	0.85	1	4.356	242.50	48.50	B
100.00-95.00			B	0.181	2.661		0.85	1	4.356			
			C	0.181	2.661		0.85	1	4.356			
T89	116.15	1477.86	A	0.181	2.661	13	0.85	1	4.355	243.17	48.63	B
95.00-90.00			B	0.181	2.661		0.85	1	4.355			
			C	0.181	2.661		0.85	1	4.355			
T90	116.15	1388.03	A	0.176	2.677	13	0.85	1	4.238	241.03	48.21	B
90.00-85.00			B	0.176	2.677		0.85	1	4.238			
			C	0.176	2.677		0.85	1	4.238			
T91	116.15	1388.03	A	0.176	2.677	13	0.85	1	4.237	241.53	48.31	B
85.00-80.00			B	0.176	2.677		0.85	1	4.237			
			C	0.176	2.677		0.85	1	4.237			
T92	464.60	5552.12	A	0.176	2.677	13	0.85	1	16.940	969.00	48.45	B
80.00-60.00			B	0.176	2.677		0.85	1	16.940			
			C	0.176	2.677		0.85	1	16.940			
T93	464.60	5552.12	A	0.176	2.677	13	0.85	1	16.957	961.68	48.08	B
60.00-40.00			B	0.176	2.677		0.85	1	16.957			
			C	0.176	2.677		0.85	1	16.957			
T94	464.60	5552.12	A	0.176	2.677	13	0.85	1	17.054	895.01	44.75	B
40.00-20.00			B	0.176	2.677		0.85	1	17.054			
			C	0.176	2.677		0.85	1	17.054			
T95	116.15	1388.03	A	0.176	2.677	13	0.85	1	4.231	244.02	48.80	B
20.00-15.00			B	0.176	2.677		0.85	1	4.231			
			C	0.176	2.677		0.85	1	4.231			
T96	185.84	2850.83	A	0.248	2.443	14	0.85	1	11.841	532.65	66.58	B
15.00-7.00			B	0.248	2.443		0.85	1	11.841			
			C	0.248	2.443		0.85	1	11.841			
T97 7.00-0.00	162.61	4952.76	A	1	2.1	15	0.85	1	37.895	816.74*	116.68	C
			B	1	2.1		0.85	1	37.895			
			C	1	2.1		0.85	1	37.895			
Sum Weight:	14038.72	294337.78			*2.1A_g					42085.64		

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft^2	F lb	w plf	Ctrl. Face
					limit							

Discrete Appurtenance Pressures - No Ice

G_H = 0.850 (base tower), 0.850 (upper structure)

Description	Aiming Azimuth °	Weight lb	$Offset_x$ ft	$Offset_z$ ft	z ft	K_z	q_z psf	C_AA_C Front ft^2	C_AA_C Side ft^2
TFU-31ETT/VP-R O6	0.0000	27628.00	0.00	0.00	1169.00	1.995	47	42.81	42.81
ISMD10	60.0000	421.50	5.46	-3.15	1003.00	1.910	45	5.83	1.77
10' - 12' Ice Shield (C30-085-103)	120.0000	667.00	7.46	4.31	889.00	1.845	43	6.22	1.09
Radio 0208	0.0000	19.80	0.00	-8.62	400.00	1.469	37	1.40	0.38
RRUS 4415 B30	0.0000	46.00	0.00	-8.62	400.00	1.469	37	1.84	0.82
ODI2-065R18K-GQ	0.0000	25.10	0.00	-8.62	400.00	1.469	37	4.85	1.02
Radio 0208	120.0000	19.80	7.46	4.31	400.00	1.469	37	1.40	0.38
ODI2-065R18K-GQ	120.0000	25.10	7.46	4.31	400.00	1.469	37	4.85	1.02
Radio 0208	240.0000	19.80	-7.46	4.31	400.00	1.469	37	1.40	0.38
ODI2-065R18K-GQ	240.0000	25.10	-7.46	4.31	400.00	1.469	37	4.85	1.02
ISMD8	30.0000	383.40	0.00	-8.62	356.00	1.420	36	3.73	1.41
DC6-48-60-18-8F (23.5" Height)	210.0000	20.00	-7.46	4.31	197.00	1.199	37	1.11	1.11
LGP21401	-30.0000	28.20	0.00	-8.62	192.00	1.191	37	2.20	0.70
RRUS-11 800 MHz	30.0000	108.00	0.00	-8.62	192.00	1.191	37	5.04	2.60
7770.00	-30.0000	35.00	0.00	-8.62	192.00	1.191	37	5.51	1.70
AM-X-CD-16-65-00T-RET	-30.0000	48.50	0.00	-8.62	192.00	1.191	37	8.02	2.70
LGP21401	100.0000	28.20	7.46	4.31	192.00	1.191	37	2.20	0.70
RRUS-11 800 MHz	150.0000	108.00	7.46	4.31	192.00	1.191	37	5.04	2.60
7770.00	100.0000	35.00	7.46	4.31	192.00	1.191	37	5.51	1.70
P65-17-XLH-RR	100.0000	59.00	7.46	4.31	192.00	1.191	37	11.47	4.00
LGP21401	240.0000	28.20	-7.46	4.31	192.00	1.191	37	2.20	0.70
RRUS-11 800 MHz	270.0000	108.00	-7.46	4.31	192.00	1.191	37	5.04	2.60
7770.00	240.0000	35.00	-7.46	4.31	192.00	1.191	37	5.51	1.70
P65-17-XLH-RR	240.0000	59.00	-7.46	4.31	192.00	1.191	37	11.47	4.00
Flat Side Arm	-90.0000	150.00	0.00	-8.62	1073.00	1.947	46	2.14	6.30
Flat Side Arm	330.0000	150.00	-7.46	4.31	1073.00	1.947	46	2.14	6.30
Flat Side Arm	90.0000	150.00	0.00	-8.62	1003.00	1.910	45	2.14	6.30
Flat Side Arm	30.0000	150.00	7.46	4.31	1003.00	1.910	45	2.14	6.30
Stand-Off	0.0000	75.00	0.00	-6.62	400.00	1.469	37	1.77	2.50
Stand-Off	120.0000	75.00	5.73	3.31	400.00	1.469	37	1.77	2.50
Stand-Off	240.0000	75.00	-5.73	3.31	400.00	1.469	37	1.77	2.50
Round Side Arm	0.0000	150.00	0.00	-4.62	192.00	1.191	37	1.77	5.20
Round Side Arm	120.0000	150.00	4.00	2.31	192.00	1.191	37	1.77	5.20
Round Side Arm	240.0000	150.00	-4.00	2.31	192.00	1.191	37	1.77	5.20
Vislink Proscan III	180.0000	185.00	0.00	4.31	1073.00	1.947	46	19.02	19.02
Vislink Proscan III	180.0000	185.00	0.00	4.31	996.00	1.906	45	19.02	19.02
	Sum Weight:	31625.70							

Discrete Appurtenance Pressures - With Ice

G_H = 0.850 (base tower), 0.850 (upper structure)

Description	Aiming Azimuth °	Weight lb	$Offset_x$ ft	$Offset_z$ ft	z ft	K_z	q_z psf	C_AA_C Front ft^2	C_AA_C Side ft^2	t_z in
TFU-31ETT/VP-R O6	0.0000	35250.53	0.00	0.00	1169.00	1.995	11	82.68	82.68	2.1002
ISMD10	60.0000	1592.31	5.46	-3.15	1003.00	1.910	10	11.00	3.32	2.1005
10' - 12' Ice Shield (C30-085-103)	120.0000	1847.02	7.46	4.31	889.00	1.845	10	12.94	2.26	2.0863
Radio 0208	0.0000	55.22	0.00	-8.62	400.00	1.469	9	3.37	0.93	1.9675
RRUS 4415 B30	0.0000	101.48	0.00	-8.62	400.00	1.469	9	4.24	1.88	1.9675
ODI2-065R18K-GQ	0.0000	119.94	0.00	-8.62	400.00	1.469	9	8.27	1.73	1.9675
Radio 0208	120.0000	55.22	7.46	4.31	400.00	1.469	9	3.37	0.93	1.9675
ODI2-065R18K-GQ	120.0000	119.94	7.46	4.31	400.00	1.469	9	8.27	1.73	1.9675
Radio 0208	240.0000	55.22	-7.46	4.31	400.00	1.469	9	3.37	0.93	1.9675
ODI2-065R18K-GQ	240.0000	119.94	-7.46	4.31	400.00	1.469	9	8.27	1.73	1.9675
ISMD8	30.0000	1242.43	0.00	-8.62	356.00	1.420	8	7.62	2.86	1.9649
DC6-48-60-18-8F (23.5" Height)	210.0000	79.94	-7.46	4.31	197.00	1.199	9	2.50	2.50	1.9848
LGP21401	-30.0000	84.42	0.00	-8.62	192.00	1.191	9	5.61	1.73	1.9797
RRUS-11 800 MHz	30.0000	279.05	0.00	-8.62	192.00	1.191	9	11.14	5.77	1.9797
7770.00	-30.0000	0.00	0.00	-8.62	192.00	1.191	9	9.55	2.93	1.9797
AM-X-CD-16-65-00T-RET	-30.0000	232.61	0.00	-8.62	192.00	1.191	9	12.22	4.13	1.9797
LGP21401	100.0000	84.42	7.46	4.31	192.00	1.191	9	5.61	1.73	1.9797
RRUS-11 800 MHz	150.0000	279.05	7.46	4.31	192.00	1.191	9	11.14	5.77	1.9797
7770.00	100.0000	0.00	7.46	4.31	192.00	1.191	9	9.55	2.93	1.9797
P65-17-XLH-RR	100.0000	304.48	7.46	4.31	192.00	1.191	9	15.11	5.27	1.9797
LGP21401	240.0000	84.42	-7.46	4.31	192.00	1.191	9	5.61	1.73	1.9797
RRUS-11 800 MHz	270.0000	279.05	-7.46	4.31	192.00	1.191	9	11.14	5.77	1.9797
7770.00	240.0000	0.00	-7.46	4.31	192.00	1.191	9	9.55	2.93	1.9797
P65-17-XLH-RR	240.0000	304.48	-7.46	4.31	192.00	1.191	9	15.11	5.27	1.9797
Flat Side Arm	-90.0000	486.05	0.00	-8.62	1073.00	1.947	11	4.07	9.24	2.1003
Flat Side Arm	330.0000	486.05	-7.46	4.31	1073.00	1.947	11	4.07	9.24	2.1003
Flat Side Arm	90.0000	486.08	0.00	-8.62	1003.00	1.910	10	4.07	9.24	2.1005
Flat Side Arm	30.0000	486.08	7.46	4.31	1003.00	1.910	10	4.07	9.24	2.1005
Stand-Off	0.0000	393.51	0.00	-6.62	400.00	1.469	9	2.98	6.97	1.9675
Stand-Off	120.0000	393.51	5.73	3.31	400.00	1.469	9	2.98	6.97	1.9675
Stand-Off	240.0000	393.51	-5.73	3.31	400.00	1.469	9	2.98	6.97	1.9675
Round Side Arm	0.0000	395.94	0.00	-4.62	192.00	1.191	9	2.99	6.98	1.9797
Round Side Arm	120.0000	395.94	4.00	2.31	192.00	1.191	9	2.99	6.98	1.9797
Round Side Arm	240.0000	395.94	-4.00	2.31	192.00	1.191	9	2.99	6.98	1.9797
Vislink Proscan III	180.0000	2060.19	0.00	4.31	1073.00	1.947	11	22.10	22.10	2.1003
Vislink Proscan III	180.0000	2060.34	0.00	4.31	996.00	1.906	10	22.10	22.10	2.1006
	Sum Weight:	51004.29								

Discrete Appurtenance Pressures - Service

G_H = 0.850 (base tower), 0.850 (upper structure)

Description	Aiming Azimuth °	Weight lb	$Offset_x$ ft	$Offset_z$ ft	z ft	K_z	q_z psf	C_AA_C Front ft^2	C_AA_C Side ft^2
TFU-31ETT/VP-R O6	0.0000	27628.00	0.00	0.00	1169.00	1.995	16	42.81	42.81
ISMD10	60.0000	421.50	5.46	-3.15	1003.00	1.910	15	5.83	1.77
10' - 12' Ice Shield (C30-085-103)	120.0000	667.00	7.46	4.31	889.00	1.845	14	6.22	1.09
Radio 0208	0.0000	19.80	0.00	-8.62	400.00	1.469	12	1.40	0.38
RRUS 4415 B30	0.0000	46.00	0.00	-8.62	400.00	1.469	12	1.84	0.82
ODI2-065R18K-GQ	0.0000	25.10	0.00	-8.62	400.00	1.469	12	4.85	1.02
Radio 0208	120.0000	19.80	7.46	4.31	400.00	1.469	12	1.40	0.38
ODI2-065R18K-GQ	120.0000	25.10	7.46	4.31	400.00	1.469	12	4.85	1.02
Radio 0208	240.0000	19.80	-7.46	4.31	400.00	1.469	12	1.40	0.38
ODI2-065R18K-GQ	240.0000	25.10	-7.46	4.31	400.00	1.469	12	4.85	1.02

Description	Aiming Azimuth °	Weight lb	$Offset_x$ ft	$Offset_z$ ft	z ft	K_z	q_z psf	C_AA_C Front ft^2	C_AA_C Side ft^2
ISMD8	30.0000	383.40	0.00	-8.62	356.00	1.420	12	3.73	1.41
DC6-48-60-18-8F (23.5" Height)	210.0000	20.00	-7.46	4.31	197.00	1.199	12	1.11	1.11
LGP21401	-30.0000	28.20	0.00	-8.62	192.00	1.191	12	2.20	0.70
RRUS-11 800 MHz	30.0000	108.00	0.00	-8.62	192.00	1.191	12	5.04	2.60
7770.00	-30.0000	35.00	0.00	-8.62	192.00	1.191	12	5.51	1.70
AM-X-CD-16-65-00T-RET	-30.0000	48.50	0.00	-8.62	192.00	1.191	12	8.02	2.70
LGP21401	100.0000	28.20	7.46	4.31	192.00	1.191	12	2.20	0.70
RRUS-11 800 MHz	150.0000	108.00	7.46	4.31	192.00	1.191	12	5.04	2.60
7770.00	100.0000	35.00	7.46	4.31	192.00	1.191	12	5.51	1.70
P65-17-XLH-RR	100.0000	59.00	7.46	4.31	192.00	1.191	12	11.47	4.00
LGP21401	240.0000	28.20	-7.46	4.31	192.00	1.191	12	2.20	0.70
RRUS-11 800 MHz	270.0000	108.00	-7.46	4.31	192.00	1.191	12	5.04	2.60
7770.00	240.0000	35.00	-7.46	4.31	192.00	1.191	12	5.51	1.70
P65-17-XLH-RR	240.0000	59.00	-7.46	4.31	192.00	1.191	12	11.47	4.00
Flat Side Arm	-90.0000	150.00	0.00	-8.62	1073.00	1.947	15	2.14	6.30
Flat Side Arm	330.0000	150.00	-7.46	4.31	1073.00	1.947	15	2.14	6.30
Flat Side Arm	90.0000	150.00	0.00	-8.62	1003.00	1.910	15	2.14	6.30
Flat Side Arm	30.0000	150.00	7.46	4.31	1003.00	1.910	15	2.14	6.30
Stand-Off	0.0000	75.00	0.00	-6.62	400.00	1.469	12	1.77	2.50
Stand-Off	120.0000	75.00	5.73	3.31	400.00	1.469	12	1.77	2.50
Stand-Off	240.0000	75.00	-5.73	3.31	400.00	1.469	12	1.77	2.50
Round Side Arm	0.0000	150.00	0.00	-4.62	192.00	1.191	12	1.77	5.20
Round Side Arm	120.0000	150.00	4.00	2.31	192.00	1.191	12	1.77	5.20
Round Side Arm	240.0000	150.00	-4.00	2.31	192.00	1.191	12	1.77	5.20
Vislink Proscan III	180.0000	185.00	0.00	4.31	1073.00	1.947	15	19.02	19.02
Vislink Proscan III	180.0000	185.00	0.00	4.31	996.00	1.906	15	19.02	19.02
	Sum Weight:	31625.70							

Dish Pressures - No Ice

Elevation ft	Dish Description	Aiming Azimuth °	Weight lb	$Offset_x$ ft	$Offset_z$ ft	K_z	A_A ft^2	q_z psf
878.00	8' Dish w/ Radome	120.0000	304.00	4.87	2.81	1.838	50.27	43
349.00	8' Dish w/ Radome	30.0000	304.00	0.00	-5.62	1.412	50.27	36
		Sum Weight:	608.00					

Dish Pressures - With Ice

Elevation ft	Dish Description	Aiming Azimuth °	Weight lb	$Offset_x$ ft	$Offset_z$ ft	K_z	A_A ft^2	q_z psf	t_z in
878.00	8' Dish w/ Radome	120.0000	1801.08	4.87	2.81	1.838	54.65	10	2.0839
349.00	8' Dish w/ Radome	30.0000	1712.75	0.00	-5.62	1.412	54.39	8	1.9610
		Sum Weight:	3513.83						

Dish Pressures - Service

Elevation ft	Dish Description	Aiming Azimuth °	Weight lb	$Offset_x$ ft	$Offset_z$ ft	K_z	A_A ft^2	q_z psf
878.00	8' Dish w/ Radome	120.0000	304.00	4.87	2.81	1.838	50.27	14
349.00	8' Dish w/ Radome	30.0000	304.00	0.00	-5.62	1.412	50.27	12
		Sum Weight:	608.00					

Force Totals (Does not include forces on guys)

Load Case	Vertical Forces lb	Sum of Forces X lb	Sum of Forces Z lb	Sum of Torques kip-ft
Leg Weight	203147.33			
Bracing Weight	91190.45			
Total Member Self-Weight	294337.78			
Guy Weight	108994.45			
Total Weight	449604.64			
Wind 0 deg - No Ice		-2358.52	-135637.26	5.08
Wind 30 deg - No Ice		64988.23	-112289.36	-20.09
Wind 60 deg - No Ice		110237.81	-63225.88	-44.43
Wind 90 deg - No Ice		130931.38	-156.69	-55.32
Wind 120 deg - No Ice		115873.07	66745.39	-50.82
Wind 150 deg - No Ice		63775.73	114095.60	-25.26
Wind 180 deg - No Ice		-929.13	128973.44	-2.22
Wind 210 deg - No Ice		-65337.07	112980.39	22.26
Wind 240 deg - No Ice		-117731.41	66475.95	48.42
Wind 270 deg - No Ice		-132431.98	531.34	62.66
Wind 300 deg - No Ice		-110908.29	-63921.14	50.71
Wind 330 deg - No Ice		-66637.40	-112702.32	28.34
Member Ice	249791.71			
Guy Ice	162266.64			
Total Weight Ice	965744.46			
Wind 0 deg - Ice		-600.06	-70946.39	0.28
Wind 30 deg - Ice		34809.79	-60188.59	-18.25
Wind 60 deg - Ice		59547.10	-34245.19	-33.34
Wind 90 deg - Ice		69281.99	-31.69	-38.68
Wind 120 deg - Ice		60515.70	34879.88	-33.96
Wind 150 deg - Ice		34520.02	60648.62	-17.84
Wind 180 deg - Ice		-224.60	69797.10	0.43
Wind 210 deg - Ice		-34896.99	60361.42	18.80
Wind 240 deg - Ice		-60974.43	34797.20	34.35
Wind 270 deg - Ice		-69658.27	123.72	40.52
Wind 300 deg - Ice		-59723.74	-34433.19	33.93
Wind 330 deg - Ice		-35237.60	-60300.25	18.60
Total Weight	449604.64			
Wind 0 deg - Service		-785.01	-45145.54	1.69
Wind 30 deg - Service		21630.70	-37374.42	-6.69
Wind 60 deg - Service		36691.58	-21044.12	-14.79
Wind 90 deg - Service		43579.23	-52.15	-18.41
Wind 120 deg - Service		38567.22	22215.55	-16.91
Wind 150 deg - Service		21227.13	37975.61	-8.41
Wind 180 deg - Service		-309.25	42927.55	-0.74
Wind 210 deg - Service		-21746.81	37604.42	7.41
Wind 240 deg - Service		-39185.75	22125.87	16.12
Wind 270 deg - Service		-44078.69	176.85	20.86
Wind 300 deg - Service		-36914.74	-21275.53	16.88
Wind 330 deg - Service		-22179.61	-37511.87	9.43

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2D+1.6W (pattern 1) 0 deg - No Ice+1.0 Guy
3	1.2D+1.6W (pattern 2) 0 deg - No Ice+1.0 Guy
4	1.2D+1.6W (pattern 3) 0 deg - No Ice+1.0 Guy
5	1.2D+1.6W (pattern 1) 30 deg - No Ice+1.0 Guy
6	1.2D+1.6W (pattern 2) 30 deg - No Ice+1.0 Guy
7	1.2D+1.6W (pattern 3) 30 deg - No Ice+1.0 Guy
8	1.2D+1.6W (pattern 1) 60 deg - No Ice+1.0 Guy
9	1.2D+1.6W (pattern 2) 60 deg - No Ice+1.0 Guy
10	1.2D+1.6W (pattern 3) 60 deg - No Ice+1.0 Guy
11	1.2D+1.6W (pattern 1) 90 deg - No Ice+1.0 Guy
12	1.2D+1.6W (pattern 2) 90 deg - No Ice+1.0 Guy
13	1.2D+1.6W (pattern 3) 90 deg - No Ice+1.0 Guy
14	1.2D+1.6W (pattern 1) 120 deg - No Ice+1.0 Guy
15	1.2D+1.6W (pattern 2) 120 deg - No Ice+1.0 Guy
16	1.2D+1.6W (pattern 3) 120 deg - No Ice+1.0 Guy
17	1.2D+1.6W (pattern 1) 150 deg - No Ice+1.0 Guy
18	1.2D+1.6W (pattern 2) 150 deg - No Ice+1.0 Guy
19	1.2D+1.6W (pattern 3) 150 deg - No Ice+1.0 Guy
20	1.2D+1.6W (pattern 1) 180 deg - No Ice+1.0 Guy
21	1.2D+1.6W (pattern 2) 180 deg - No Ice+1.0 Guy
22	1.2D+1.6W (pattern 3) 180 deg - No Ice+1.0 Guy
23	1.2D+1.6W (pattern 1) 210 deg - No Ice+1.0 Guy
24	1.2D+1.6W (pattern 2) 210 deg - No Ice+1.0 Guy
25	1.2D+1.6W (pattern 3) 210 deg - No Ice+1.0 Guy
26	1.2D+1.6W (pattern 1) 240 deg - No Ice+1.0 Guy
27	1.2D+1.6W (pattern 2) 240 deg - No Ice+1.0 Guy
28	1.2D+1.6W (pattern 3) 240 deg - No Ice+1.0 Guy
29	1.2D+1.6W (pattern 1) 270 deg - No Ice+1.0 Guy
30	1.2D+1.6W (pattern 2) 270 deg - No Ice+1.0 Guy
31	1.2D+1.6W (pattern 3) 270 deg - No Ice+1.0 Guy
32	1.2D+1.6W (pattern 1) 300 deg - No Ice+1.0 Guy
33	1.2D+1.6W (pattern 2) 300 deg - No Ice+1.0 Guy
34	1.2D+1.6W (pattern 3) 300 deg - No Ice+1.0 Guy
35	1.2D+1.6W (pattern 1) 330 deg - No Ice+1.0 Guy
36	1.2D+1.6W (pattern 2) 330 deg - No Ice+1.0 Guy
37	1.2D+1.6W (pattern 3) 330 deg - No Ice+1.0 Guy
38	1.2 Dead+1.0 Ice+1.0 Temp+Guy
39	1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp+1.0 Guy
40	1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp+1.0 Guy
41	1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp+1.0 Guy
42	1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp+1.0 Guy
43	1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp+1.0 Guy
44	1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp+1.0 Guy
45	1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp+1.0 Guy
46	1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp+1.0 Guy
47	1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp+1.0 Guy
48	1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp+1.0 Guy
49	1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp+1.0 Guy
50	1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp+1.0 Guy
51	Dead+Wind 0 deg - Service+Guy
52	Dead+Wind 30 deg - Service+Guy
53	Dead+Wind 60 deg - Service+Guy
54	Dead+Wind 90 deg - Service+Guy
55	Dead+Wind 120 deg - Service+Guy

Comb. No.	Description
56	Dead+Wind 150 deg - Service+Guy
57	Dead+Wind 180 deg - Service+Guy
58	Dead+Wind 210 deg - Service+Guy
59	Dead+Wind 240 deg - Service+Guy
60	Dead+Wind 270 deg - Service+Guy
61	Dead+Wind 300 deg - Service+Guy
62	Dead+Wind 330 deg - Service+Guy

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical lb	Horizontal, X lb	Horizontal, Z lb
Mast	Max. Vert	47	1711665.77	921.38	-464.68
	Max. H_x	31	1189710.40	8088.56	543.71
	Max. H_z	3	1111422.74	-32.40	11300.87
	Max. M_x	1	0.00	-23.21	-9.09
	Max. M_z	1	0.00	-23.21	-9.09
	Max. Torsion	12	30.76	-8706.26	-14.53
	Min. Vert	1	886203.58	-23.21	-9.09
	Min. H_x	13	1183241.55	-8714.71	-101.70
	Min. H_z	21	1233518.40	-384.74	-8634.31
	Min. M_x	1	0.00	-23.21	-9.09
	Min. M_z	1	0.00	-23.21	-9.09
	Min. Torsion	30	-31.40	8074.09	629.33
Guy C @ 694 ft Elev 20 ft Azimuth 240 deg	Max. Vert	28	-28557.22	-17832.32	10269.23
	Max. H_x	28	-28557.22	-17832.32	10269.23
	Max. H_z	10	-283002.01	-229686.15	132557.99
	Min. Vert	10	-283002.01	-229686.15	132557.99
	Min. H_x	10	-283002.01	-229686.15	132557.99
	Min. H_z	28	-28557.22	-17832.32	10269.23
Guy B @ 694 ft Elev 19 ft Azimuth 120 deg	Max. Vert	16	-28828.60	18074.40	10404.65
	Max. H_x	34	-286453.89	232061.69	133950.26
	Max. H_z	34	-286453.89	232061.69	133950.26
	Min. Vert	34	-286453.89	232061.69	133950.26
	Min. H_x	16	-28828.60	18074.40	10404.65
	Min. H_z	16	-28828.60	18074.40	10404.65
Guy A @ 630 ft Elev -86 ft Azimuth 0 deg	Max. Vert	4	-54273.09	6.04	-28590.91
	Max. H_x	31	-202528.50	20159.68	-146299.69
	Max. H_z	4	-54273.09	6.04	-28590.91
	Min. Vert	22	-349729.24	-18.63	-264245.04
	Min. H_x	13	-205160.31	-20165.11	-148084.65
	Min. H_z	22	-349729.24	-18.63	-264245.04
Guy C @ 500 ft Elev 33 ft Azimuth 240 deg	Max. Vert	26	-5316.15	-20877.06	12046.18
	Max. H_x	26	-5316.15	-20877.06	12046.18
	Max. H_z	8	-70582.56	-145252.72	83896.95
	Min. Vert	8	-70582.56	-145252.72	83896.95
	Min. H_x	8	-70582.56	-145252.72	83896.95
	Min. H_z	26	-5316.15	-20877.06	12046.18
Guy B @ 500 ft Elev 6 ft	Max. Vert	14	-6282.43	20285.42	11705.32

Location	Condition	Gov. Load Comb.	Vertical lb	Horizontal, X lb	Horizontal, Z lb
Azimuth 120 deg					
	Max. H_x	32	-77800.52	143615.05	82950.60
	Max. H_z	32	-77800.52	143615.05	82950.60
	Min. Vert	32	-77800.52	143615.05	82950.60
	Min. H_x	14	-6282.43	20285.42	11705.32
	Min. H_z	14	-6282.43	20285.42	11705.32
Guy A @ 500 ft Elev -70 ft Azimuth 0 deg	Max. Vert	2	-9695.80	0.67	-20847.04
	Max. H_x	29	-59179.01	7405.77	-98641.45
	Max. H_z	2	-9695.80	0.67	-20847.04
	Min. Vert	20	-102412.79	19.57	-167426.68
	Min. H_x	11	-56957.04	-7381.97	-95564.49
	Min. H_z	20	-102412.79	19.57	-167426.68

Tower Mast Reaction Summary

Load Combination	Vertical lb	$Shear_x$ lb	$Shear_z$ lb	Overturning Moment, M_x kip-ft	Overturning Moment, M_z kip-ft	Torque kip-ft
Dead Only	886203.58	23.21	9.09	0.00	0.00	0.01
1.2D+1.6W (pattern 1) 0 deg - No Ice+1.0 Guy	1121131.71	44.09	-11028.11	0.00	0.00	2.16
1.2D+1.6W (pattern 2) 0 deg - No Ice+1.0 Guy	1111422.74	32.40	-11300.87	0.00	0.00	2.19
1.2D+1.6W (pattern 3) 0 deg - No Ice+1.0 Guy	1125817.37	32.39	-11255.91	0.00	0.00	2.19
1.2D+1.6W (pattern 1) 30 deg - No Ice+1.0 Guy	1166911.86	5274.88	-8232.20	0.00	0.00	-0.97
1.2D+1.6W (pattern 2) 30 deg - No Ice+1.0 Guy	1162154.05	5289.85	-8407.38	0.00	0.00	-0.84
1.2D+1.6W (pattern 3) 30 deg - No Ice+1.0 Guy	1171437.51	5221.83	-8412.30	0.00	0.00	-0.75
1.2D+1.6W (pattern 1) 60 deg - No Ice+1.0 Guy	1198803.09	7837.23	-4187.17	0.00	0.00	-17.25
1.2D+1.6W (pattern 2) 60 deg - No Ice+1.0 Guy	1196080.12	7907.98	-4222.41	0.00	0.00	-17.15
1.2D+1.6W (pattern 3) 60 deg - No Ice+1.0 Guy	1203081.78	7856.55	-4192.88	0.00	0.00	-16.95
1.2D+1.6W (pattern 1) 90 deg - No Ice+1.0 Guy	1182138.31	8522.02	-85.14	0.00	0.00	-30.64
1.2D+1.6W (pattern 2) 90 deg - No Ice+1.0 Guy	1175222.31	8706.26	14.53	0.00	0.00	-30.76
1.2D+1.6W (pattern 3) 90 deg - No Ice+1.0 Guy	1183241.55	8714.71	101.70	0.00	0.00	-30.48
1.2D+1.6W (pattern 1) 120 deg - No Ice+1.0 Guy	1132715.79	8283.53	4623.70	0.00	0.00	-19.61
1.2D+1.6W (pattern 2) 120 deg - No Ice+1.0 Guy	1122987.16	8546.30	4803.31	0.00	0.00	-19.89
1.2D+1.6W (pattern 3) 120 deg - No Ice+1.0 Guy	1139276.13	8574.22	4837.27	0.00	0.00	-19.61
1.2D+1.6W (pattern 1) 150 deg - No Ice+1.0 Guy	1198771.18	4948.45	7707.45	0.00	0.00	0.73
1.2D+1.6W (pattern 2) 150 deg - No Ice+1.0 Guy	1194301.59	5136.91	7859.76	0.00	0.00	0.43
1.2D+1.6W (pattern 3) 150 deg - No Ice+1.0 Guy	1206409.97	5195.38	7791.80	0.00	0.00	0.51

Load Combination	Vertical	$Shear_x$	$Shear_z$	Overturning Moment, M_x	Overturning Moment, M_z	Torque
	lb	lb	lb	kip-ft	kip-ft	kip-ft
1.2D+1.6W (pattern 1) 180 deg - No Ice+1.0 Guy	1236569.66	376.89	8503.64	0.00	0.00	1.33
1.2D+1.6W (pattern 2) 180 deg - No Ice+1.0 Guy	1233518.40	384.74	8634.31	0.00	0.00	1.09
1.2D+1.6W (pattern 3) 180 deg - No Ice+1.0 Guy	1242884.32	387.73	8550.99	0.00	0.00	1.07
1.2D+1.6W (pattern 1) 210 deg - No Ice+1.0 Guy	1202454.38	-4221.74	7642.40	0.00	0.00	1.77
1.2D+1.6W (pattern 2) 210 deg - No Ice+1.0 Guy	1197118.12	-4396.36	7796.24	0.00	0.00	1.61
1.2D+1.6W (pattern 3) 210 deg - No Ice+1.0 Guy	1208778.63	-4451.09	7732.84	0.00	0.00	1.53
1.2D+1.6W (pattern 1) 240 deg - No Ice+1.0 Guy	1143235.95	-7446.39	3890.32	0.00	0.00	18.40
1.2D+1.6W (pattern 2) 240 deg - No Ice+1.0 Guy	1132977.31	-7720.16	4056.44	0.00	0.00	18.66
1.2D+1.6W (pattern 3) 240 deg - No Ice+1.0 Guy	1148747.24	-7758.17	4091.15	0.00	0.00	18.41
1.2D+1.6W (pattern 1) 270 deg - No Ice+1.0 Guy	1188692.49	-7885.33	-715.28	0.00	0.00	31.00
1.2D+1.6W (pattern 2) 270 deg - No Ice+1.0 Guy	1181954.19	-8074.09	-629.33	0.00	0.00	31.40
1.2D+1.6W (pattern 3) 270 deg - No Ice+1.0 Guy	1189710.40	-8088.56	-543.71	0.00	0.00	31.14
1.2D+1.6W (pattern 1) 300 deg - No Ice+1.0 Guy	1203003.22	-7726.41	-4024.90	0.00	0.00	17.67
1.2D+1.6W (pattern 2) 300 deg - No Ice+1.0 Guy	1201170.83	-7793.56	-4070.67	0.00	0.00	17.84
1.2D+1.6W (pattern 3) 300 deg - No Ice+1.0 Guy	1208201.99	-7740.92	-4042.21	0.00	0.00	17.64
1.2D+1.6W (pattern 1) 330 deg - No Ice+1.0 Guy	1169681.24	-5166.88	-8131.53	0.00	0.00	3.42
1.2D+1.6W (pattern 2) 330 deg - No Ice+1.0 Guy	1165956.96	-5186.53	-8308.29	0.00	0.00	3.46
1.2D+1.6W (pattern 3) 330 deg - No Ice+1.0 Guy	1175320.25	-5119.17	-8313.30	0.00	0.00	3.37
1.2 Dead+1.0 Ice+1.0 Temp+Guy	1679181.77	123.31	-45.32	0.00	0.00	-0.01
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp+1.0 Guy	1684619.33	117.68	-1672.92	0.00	0.00	0.39
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp+1.0 Guy	1682428.61	790.40	-1420.10	0.00	0.00	-0.89
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp+1.0 Guy	1683847.20	1228.38	-657.53	0.00	0.00	-7.63
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp+1.0 Guy	1695949.81	1379.43	98.42	0.00	0.00	-11.91
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp+1.0 Guy	1709119.29	1262.54	585.60	0.00	0.00	-7.46
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp+1.0 Guy	1709530.29	972.18	984.32	0.00	0.00	-0.78
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp+1.0 Guy	1707526.28	175.98	1190.81	0.00	0.00	-0.02
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp+1.0 Guy	1711057.00	-611.83	967.27	0.00	0.00	0.83
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp+1.0 Guy	1711665.77	-921.38	464.68	0.00	0.00	7.22
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp+1.0 Guy	1698632.79	-1046.78	-22.44	0.00	0.00	12.01
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp+1.0 Guy	1685931.61	-993.72	-662.77	0.00	0.00	7.82
1.2 Dead+1.0 Wind 330	1683564.28	-564.01	-1415.10	0.00	0.00	1.42

Load Combination	Vertical	$Shear_x$	$Shear_z$	Overturning Moment, M_x	Overturning Moment, M_z	Torque
	lb	lb	lb	kip-ft	kip-ft	kip-ft
deg+1.0 Ice+1.0 Temp+1.0 Guy						
Dead+Wind 0 deg - Service+Guy	891521.73	26.72	-2582.88	0.00	0.00	0.61
Dead+Wind 30 deg - Service+Guy	890073.43	1293.42	-2137.86	0.00	0.00	-0.41
Dead+Wind 60 deg - Service+Guy	889823.58	2027.60	-1110.43	0.00	0.00	-5.38
Dead+Wind 90 deg - Service+Guy	895291.56	2211.76	9.59	0.00	0.00	-8.97
Dead+Wind 120 deg - Service+Guy	901584.07	2116.94	1181.62	0.00	0.00	-5.61
Dead+Wind 150 deg - Service+Guy	901250.04	1320.53	2093.90	0.00	0.00	-0.14
Dead+Wind 180 deg - Service+Guy	899775.75	57.82	2435.26	0.00	0.00	0.26
Dead+Wind 210 deg - Service+Guy	901982.09	-1202.27	2101.08	0.00	0.00	0.68
Dead+Wind 240 deg - Service+Guy	902828.50	-2025.89	1104.73	0.00	0.00	5.36
Dead+Wind 270 deg - Service+Guy	896600.57	-2126.36	-72.12	0.00	0.00	9.38
Dead+Wind 300 deg - Service+Guy	890818.84	-2003.88	-1111.94	0.00	0.00	5.65
Dead+Wind 330 deg - Service+Guy	890627.88	-1256.99	-2142.24	0.00	0.00	1.18

Solution Summary

	Sum of Applied Forces			Sum of Reactions			
Load Comb.	PX lb	PY lb	PZ lb	PX lb	PY lb	PZ lb	% Error
1	-0.00	-449581.66	0.00	-0.38	449581.75	-10.66	0.002%
2	-2022.06	-521041.80	-315661.10	2023.38	521037.80	315523.00	0.023%
3	-3872.73	-521041.80	-313946.99	3875.56	521039.46	313832.25	0.019%
4	-3823.39	-521041.80	-325222.90	3826.29	521037.03	325060.42	0.026%
5	152886.72	-516077.39	-266039.71	-152929.08	516074.85	265902.32	0.024%
6	151641.45	-516077.39	-263849.24	-151688.97	516075.88	263708.01	0.025%
7	156933.63	-516077.39	-273017.90	-156981.62	516074.66	272863.16	0.027%
8	259897.18	-511441.85	-151324.51	-259803.54	511441.56	151489.99	0.032%
9	258311.91	-511441.85	-150025.08	-258213.70	511441.42	150192.09	0.033%
10	266771.70	-511441.85	-154967.66	-266669.76	511441.52	155149.55	0.035%
11	304660.67	-517368.55	-400.84	-304551.70	517364.10	522.68	0.027%
12	303026.18	-517368.55	-227.80	-302927.07	517365.59	346.33	0.026%
13	310411.11	-517368.55	-277.14	-310294.97	517364.57	410.39	0.029%
14	267792.72	-523385.40	156040.19	-267685.61	523381.28	-155966.50	0.021%
15	266497.23	-523385.40	155290.89	-266401.57	523383.16	-155224.68	0.019%
16	275736.00	-523385.40	160626.25	-275597.73	523380.69	-160532.81	0.027%
17	150472.55	-518994.86	268377.44	-150289.23	518991.02	-268324.46	0.032%
18	149805.17	-518994.86	266873.07	-149604.30	518992.18	-266818.19	0.035%
19	155011.89	-518994.86	275992.40	-154804.83	518990.61	-275932.45	0.035%
20	-1719.06	-514365.60	306265.97	1732.83	514358.42	-306039.19	0.038%
21	-1387.52	-514365.60	304241.34	1430.34	514359.69	-304026.89	0.037%
22	-1436.86	-514365.60	314560.80	1484.81	514357.98	-314324.26	0.040%
23	-153471.94	-519330.01	267129.73	153297.54	519326.42	-267080.17	0.030%
24	-152199.60	-519330.01	264954.88	152001.71	519327.61	-264900.56	0.034%
25	-157491.78	-519330.01	274123.55	157287.89	519326.04	-274066.34	0.035%
26	-270030.14	-523965.55	157206.74	269926.53	523961.48	-157133.74	0.021%
27	-269473.35	-523965.55	154746.96	269384.56	523963.52	-154681.22	0.018%

	Sum of Applied Forces			Sum of Reactions			
Load Comb.	PX lb	PY lb	PZ lb	PX lb	PY lb	PZ lb	% Error
28	-278761.45	-523965.55	160167.77	278630.80	523961.11	-160075.25	0.026%
29	-306440.69	-518038.85	2008.39	306330.30	518034.37	-1883.26	0.028%
30	-305427.13	-518038.85	827.25	305330.36	518036.10	-707.82	0.026%
31	-312812.07	-518038.85	876.59	312700.70	518035.16	-745.46	0.028%
32	-259900.32	-512021.99	-151550.97	259802.69	512021.72	151724.51	0.034%
33	-259381.90	-512021.99	-151250.32	259283.02	512021.65	151421.31	0.033%
34	-267792.36	-512021.99	-156107.44	267689.26	512021.76	156294.19	0.036%
35	-153867.72	-516412.54	-266114.50	153911.30	516409.99	265975.33	0.024%
36	-154383.84	-516412.54	-264643.83	154434.82	516410.99	264497.87	0.026%
37	-159590.56	-516412.54	-273763.15	159641.93	516409.73	273602.49	0.028%
38	-0.00	-1033810.21	0.00	1.58	1033809.76	71.17	0.007%
39	-624.78	-1035440.68	-124026.69	623.08	1035440.17	124087.33	0.006%
40	60790.18	-1032991.65	-105982.37	-60741.39	1032991.17	106024.11	0.006%
41	104110.78	-1030707.44	-60778.00	-103897.74	1030705.80	60943.81	0.026%
42	120301.83	-1033631.56	-47.00	-120097.12	1033630.07	246.65	0.027%
43	105049.41	-1036603.94	61423.94	-105013.42	1036603.38	-61343.72	0.008%
44	60506.93	-1034450.12	106484.33	-60502.84	1034449.13	-106386.44	0.009%
45	-199.88	-1032179.74	122877.41	203.21	1032178.52	-122772.95	0.010%
46	-60877.37	-1034628.78	106155.20	60879.20	1034627.79	-106057.52	0.009%
47	-105538.10	-1036912.98	61330.01	105504.61	1036912.45	-61250.74	0.008%
48	-120678.11	-1033988.87	139.03	120467.68	1033987.43	67.41	0.028%
49	-104257.45	-1031016.48	-60977.25	104047.97	1031014.92	61140.82	0.026%
50	-61224.51	-1033170.31	-106135.97	61173.77	1033169.81	106179.83	0.006%
51	-795.36	-450276.07	-68021.43	773.34	450275.24	68107.60	0.020%
52	32829.58	-449243.34	-57112.32	-32731.46	449242.66	57179.99	0.026%
53	55906.59	-448279.04	-32474.67	-55797.39	448278.54	32541.52	0.028%
54	65587.99	-449511.94	-57.65	-65561.33	449511.85	81.49	0.008%
55	57771.39	-450763.60	33651.80	-57756.10	450763.46	-33611.80	0.009%
56	32429.81	-449850.25	57731.09	-32432.29	449849.99	-57682.81	0.011%
57	-298.90	-448887.25	65803.44	299.92	448886.93	-65750.73	0.012%
58	-32945.69	-449919.97	57342.32	32949.92	449919.71	-57294.39	0.011%
59	-58400.76	-450884.28	33556.43	58384.73	450884.16	-33517.79	0.009%
60	-66087.45	-449651.38	182.35	66061.01	449651.30	-159.70	0.008%
61	-56118.91	-448399.72	-32711.78	56006.58	448399.22	32777.38	0.029%
62	-33382.29	-449313.06	-57267.35	33283.85	449312.39	57330.29	0.026%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	21	0.00019158	0.00001268
2	Yes	103	0.00019568	0.00002648
3	Yes	95	0.00019621	0.00001925
4	Yes	104	0.00019938	0.00002824
5	Yes	90	0.00019621	0.00002750
6	Yes	78	0.00019662	0.00002092
7	Yes	91	0.00019323	0.00002627
8	Yes	65	0.00019205	0.00002176
9	Yes	64	0.00019637	0.00002197
10	Yes	66	0.00019692	0.00002406
11	Yes	122	0.00019523	0.00003395
12	Yes	111	0.00019842	0.00002736
13	Yes	117	0.00019950	0.00003042
14	Yes	124	0.00019552	0.00002953
15	Yes	108	0.00019866	0.00001863
16	Yes	129	0.00019724	0.00002700

17	Yes	104	0.00019932	0.00003526
18	Yes	89	0.00019968	0.00002803
19	Yes	107	0.00019389	0.00003337
20	Yes	47	0.00019030	0.00004703
21	Yes	48	0.00018673	0.00004219
22	Yes	46	0.00019014	0.00004960
23	Yes	104	0.00019309	0.00003426
24	Yes	86	0.00019968	0.00002699
25	Yes	105	0.00019634	0.00003337
26	Yes	124	0.00019307	0.00002965
27	Yes	107	0.00019253	0.00001793
28	Yes	129	0.00019350	0.00002624
29	Yes	121	0.00019985	0.00003489
30	Yes	110	0.00019727	0.00002732
31	Yes	117	0.00019474	0.00002970
32	Yes	64	0.00019735	0.00002245
33	Yes	63	0.00019331	0.00002195
34	Yes	65	0.00019594	0.00002426
35	Yes	90	0.00019460	0.00002760
36	Yes	78	0.00019510	0.00002155
37	Yes	91	0.00019347	0.00002687
38	Yes	72	0.00019710	0.00000977
39	Yes	65	0.00019799	0.00001000
40	Yes	77	0.00019141	0.00000958
41	Yes	55	0.00020000	0.00002895
42	Yes	55	0.00020000	0.00002735
43	Yes	76	0.00019641	0.00001068
44	Yes	76	0.00019617	0.00001397
45	Yes	76	0.00019490	0.00001485
46	Yes	76	0.00019680	0.00001408
47	Yes	76	0.00019168	0.00001047
48	Yes	54	0.00020000	0.00002718
49	Yes	55	0.00020000	0.00002790
50	Yes	76	0.00019638	0.00000978
51	Yes	27	0.00020000	0.00002158
52	Yes	35	0.00020000	0.00002110
53	Yes	37	0.00020000	0.00002199
54	Yes	54	0.00019535	0.00000648
55	Yes	53	0.00019529	0.00000805
56	Yes	54	0.00019506	0.00000914
57	Yes	54	0.00019661	0.00000980
58	Yes	54	0.00019595	0.00000909
59	Yes	53	0.00019141	0.00000784
60	Yes	54	0.00018746	0.00000625
61	Yes	37	0.00020000	0.00002219
62	Yes	36	0.00020000	0.00002064

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection ft	Gov. Load Comb.	Tilt °	Twist °
L1	1151.9 - 1089.8	0.837	57	0.3075	0.4436
T1	1089.8 - 1084.9	0.752	57	0.1170	0.4470
T2	1084.9 - 1080	0.756	57	0.1173	0.4478
T3	1080 - 1060	0.760	57	0.1170	0.4492
T4	1060 - 1040	0.774	57	0.1115	0.4578
T5	1040 - 1020	0.784	57	0.1011	0.4663
T6	1020 - 1000	0.788	57	0.0876	0.4734
T7	1000 - 980	0.786	57	0.0724	0.4792

Section No.	Elevation ft	Horz. Deflection ft	Gov. Load Comb.	Tilt °	Twist °
T8	980 - 960	0.777	57	0.0579	0.4859
T9	960 - 940	0.764	57	0.0460	0.4919
T10	940 - 935	0.748	57	0.0433	0.4964
T11	935 - 930	0.744	57	0.0435	0.4974
T12	930 - 925	0.739	57	0.0435	0.4982
T13	925 - 920	0.735	57	0.0431	0.4988
T14	920 - 915	0.731	57	0.0424	0.4994
T15	915 - 910	0.727	57	0.0434	0.5012
T16	910 - 905	0.724	57	0.0446	0.5030
T17	905 - 900	0.720	57	0.0459	0.5050
T18	900 - 880	0.716	57	0.0475	0.5071
T19	880 - 860	0.699	57	0.0545	0.5143
T20	860 - 840	0.678	57	0.0621	0.5193
T21	840 - 820	0.655	57	0.0688	0.5228
T22	820 - 800	0.629	57	0.0736	0.5247
T23	800 - 780	0.602	57	0.0752	0.5252
T24	780 - 775	0.574	57	0.0725	0.5242
T25	775 - 770	0.567	57	0.0711	0.5238
T26	770 - 765	0.560	57	0.0693	0.5232
T27	765 - 760	0.554	57	0.0672	0.5227
T28	760 - 755	0.548	57	0.0647	0.5222
T29	755 - 750	0.542	57	0.0637	0.5230
T30	750 - 745	0.537	57	0.0629	0.5239
T31	745 - 740	0.532	57	0.0622	0.5249
T32	740 - 720	0.527	57	0.0617	0.5258
T33	720 - 700	0.506	57	0.0608	0.5285
T34	700 - 680	0.485	57	0.0609	0.5298
T35	680 - 660	0.463	57	0.0610	0.5296
T36	660 - 640	0.441	57	0.0601	0.5281
T37	640 - 620	0.420	57	0.0570	0.5251
T38	620 - 615	0.399	57	0.0520	0.5208
T39	615 - 610	0.395	57	0.0503	0.5195
T40	610 - 605	0.390	57	0.0483	0.5181
T41	605 - 600	0.385	57	0.0462	0.5169
T42	600 - 595	0.381	57	0.0438	0.5158
T43	595 - 590	0.378	57	0.0425	0.5161
T44	590 - 585	0.374	57	0.0413	0.5165
T45	585 - 580	0.371	57	0.0404	0.5169
T46	580 - 560	0.368	57	0.0396	0.5172
T47	560 - 540	0.356	57	0.0389	0.5175
T48	540 - 535	0.343	57	0.0386	0.5165
T49	535 - 530	0.340	57	0.0382	0.5159
T50	530 - 525	0.337	57	0.0378	0.5153
T51	525 - 520	0.334	57	0.0375	0.5147
T52	520 - 500	0.331	57	0.0377	0.5140
T53	500 - 480	0.317	57	0.0382	0.5103
T54	480 - 460	0.304	57	0.0378	0.5052
T55	460 - 440	0.290	57	0.0355	0.4989
T56	440 - 435	0.277	57	0.0311	0.4912
T57	435 - 430	0.274	57	0.0296	0.4891
T58	430 - 425	0.271	57	0.0278	0.4869
T59	425 - 420	0.269	57	0.0267	0.4851
T60	420 - 415	0.266	57	0.0274	0.4832
T61	415 - 410	0.265	57	0.0279	0.4824
T62	410 - 405	0.263	57	0.0282	0.4815
T63	405 - 400	0.262	57	0.0283	0.4803
T64	400 - 380	0.260	57	0.0281	0.4791
T65	380 - 360	0.255	57	0.0259	0.4730
T66	360 - 340	0.250	57	0.0217	0.4656
T67	340 - 320	0.244	57	0.0199	0.4522
T68	320 - 300	0.236	57	0.0214	0.4323

Section No.	Elevation ft	Horz. Deflection ft	Gov. Load Comb.	Tilt °	Twist °
T69	300 - 280	0.228	57	0.0216	0.4110
T70	280 - 275	0.219	57	0.0199	0.3882
T71	275 - 270	0.217	57	0.0191	0.3823
T72	270 - 265	0.215	57	0.0182	0.3764
T73	265 - 260	0.213	57	0.0172	0.3714
T74	260 - 255	0.212	57	0.0161	0.3665
T75	255 - 250	0.211	57	0.0156	0.3622
T76	250 - 245	0.210	57	0.0153	0.3579
T77	245 - 240	0.210	57	0.0151	0.3525
T78	240 - 220	0.209	57	0.0151	0.3470
T79	220 - 200	0.207	57	0.0163	0.3239
T80	200 - 180	0.202	57	0.0211	0.2994
T81	180 - 160	0.194	57	0.0296	0.2742
T82	160 - 140	0.182	57	0.0388	0.2484
T83	140 - 120	0.167	57	0.0476	0.2217
T84	120 - 115	0.147	57	0.0545	0.1942
T85	115 - 110	0.142	57	0.0558	0.1872
T86	110 - 105	0.137	57	0.0569	0.1803
T87	105 - 100	0.131	57	0.0577	0.1746
T88	100 - 95	0.126	57	0.0583	0.1689
T89	95 - 90	0.121	57	0.0593	0.1632
T90	90 - 85	0.116	57	0.0605	0.1573
T91	85 - 80	0.111	57	0.0617	0.1502
T92	80 - 60	0.106	57	0.0631	0.1429
T93	60 - 40	0.083	57	0.0692	0.1133
T94	40 - 20	0.057	57	0.0751	0.0830
T95	20 - 15	0.029	57	0.0797	0.0518
T96	15 - 7	0.022	57	0.0804	0.0444
T97	7 - 0	0.010	57	0.0814	0.0339

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection ft	Tilt °	Twist °	Radius of Curvature ft
1169.00	TFU-31ETT/VP-R O6	57	0.837	0.3075	0.4436	75972
1089.80	Guy	57	0.752	0.1170	0.4470	7840
1073.00	Flat Side Arm	57	0.765	0.1157	0.4520	124802
1003.00	ISMD10	57	0.786	0.0747	0.4783	63465
996.00	Vislink Proscan III	57	0.784	0.0694	0.4805	65604
920.00	Guy	57	0.731	0.0424	0.4994	43937
889.00	10' - 12' Ice Shield (C30-085-103)	57	0.707	0.0512	0.5113	130094
878.00	8' Dish w/ Radome	57	0.697	0.0553	0.5150	112835
760.00	Guy	57	0.548	0.0647	0.5222	33589
600.00	Guy	57	0.381	0.0438	0.5158	32320
420.00	Guy	57	0.266	0.0274	0.4832	33151
400.00	Radio 0208	57	0.260	0.0281	0.4791	396732
356.00	ISMD8	57	0.249	0.0208	0.4635	168960
349.00	8' Dish w/ Radome	57	0.247	0.0190	0.4592	168335
260.00	Guy	57	0.212	0.0161	0.3665	29775
197.00	DC6-48-60-18-8F (23.5" Height)	57	0.201	0.0223	0.2957	104512
192.00	(2) LGP21401	57	0.199	0.0243	0.2894	100464
100.00	Guy	57	0.126	0.0583	0.1689	47304

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection ft	Gov. Load Comb.	Tilt °	Twist °
L1	1151.9 - 1089.8	7.555	29	2.5722	1.5651
T1	1089.8 - 1084.9	5.606	20	0.8521	1.5865
T2	1084.9 - 1080	5.578	20	0.8476	1.5913
T3	1080 - 1060	5.552	20	0.8451	1.6005
T4	1060 - 1040	5.435	20	0.8460	1.6489
T5	1040 - 1020	5.336	22	0.8575	1.6943
T6	1020 - 1000	5.261	22	0.8728	1.7334
T7	1000 - 980	5.157	22	0.8852	1.7660
T8	980 - 960	5.025	22	0.8861	1.7982
T9	960 - 940	4.870	22	0.8657	1.8253
T10	940 - 935	4.701	22	0.8377	1.8458
T11	935 - 930	4.658	22	0.8285	1.8498
T12	930 - 925	4.614	22	0.8176	1.8535
T13	925 - 920	4.571	22	0.8048	1.8560
T14	920 - 915	4.529	22	0.7902	1.8587
T15	915 - 910	4.489	22	0.7801	1.8687
T16	910 - 905	4.449	22	0.7701	1.8791
T17	905 - 900	4.410	22	0.7603	1.8912
T18	900 - 880	4.369	22	0.7506	1.9030
T19	880 - 860	4.201	22	0.7121	1.9465
T20	860 - 840	4.021	22	0.6712	1.9790
T21	840 - 820	3.829	22	0.6303	2.0041
T22	820 - 800	3.628	22	0.6389	2.0221
T23	800 - 780	3.422	22	0.6363	2.0335
T24	780 - 775	3.217	22	0.6096	2.0528
T25	775 - 770	3.167	22	0.5985	2.0599
T26	770 - 765	3.117	22	0.5855	2.0667
T27	765 - 760	3.069	22	0.5705	2.0700
T28	760 - 755	3.023	22	0.5537	2.0695
T29	755 - 750	2.981	22	0.5401	2.0768
T30	750 - 745	2.941	22	0.5271	2.0844
T31	745 - 740	2.901	22	0.5148	2.0932
T32	740 - 720	2.861	22	0.5030	2.1016
T33	720 - 700	2.708	22	0.4599	2.1310
T34	700 - 680	2.560	22	0.4197	2.1535
T35	680 - 660	2.416	22	0.3997	2.1692
T36	660 - 640	2.294	21	0.3770	2.1780
T37	640 - 620	2.175	21	0.3453	2.1802
T38	620 - 615	2.063	21	0.3087	2.1757
T39	615 - 610	2.037	21	0.2974	2.1738
T40	610 - 605	2.011	21	0.2852	2.1719
T41	605 - 600	1.986	21	0.2720	2.1693
T42	600 - 595	1.963	21	0.2579	2.1672
T43	595 - 590	1.944	21	0.2472	2.1733
T44	590 - 585	1.926	21	0.2375	2.1781
T45	585 - 580	1.909	21	0.2288	2.1822
T46	580 - 560	1.892	21	0.2210	2.1867
T47	560 - 540	1.829	21	0.2125	2.2066
T48	540 - 535	1.769	21	0.2145	2.2250
T49	535 - 530	1.754	21	0.2134	2.2298
T50	530 - 525	1.739	21	0.2115	2.2330
T51	525 - 520	1.724	21	0.2091	2.2357
T52	520 - 500	1.709	21	0.2062	2.2381
T53	500 - 480	1.647	21	0.1918	2.2433
T54	480 - 460	1.584	21	0.1764	2.2422
T55	460 - 440	1.521	21	0.1678	2.2345
T56	440 - 435	1.463	20	0.1619	2.2205
T57	435 - 430	1.451	20	0.1629	2.2160

Section No.	Elevation ft	Horz. Deflection ft	Gov. Load Comb.	Tilt °	Twist °
T58	430 - 425	1.438	20	0.1646	2.2112
T59	425 - 420	1.426	20	0.1673	2.2068
T60	420 - 415	1.416	20	0.1707	2.2028
T61	415 - 410	1.408	20	0.1717	2.2047
T62	410 - 405	1.402	20	0.1716	2.2028
T63	405 - 400	1.396	20	0.1703	2.1991
T64	400 - 380	1.391	20	0.1678	2.1956
T65	380 - 360	1.366	20	0.1479	2.1940
T66	360 - 340	1.337	20	0.1313	2.1910
T67	340 - 320	1.300	20	0.1143	2.1589
T68	320 - 300	1.256	20	0.1246	2.0943
T69	300 - 280	1.206	20	0.1279	2.0074
T70	280 - 275	1.153	20	0.1191	1.8844
T71	275 - 270	1.140	20	0.1146	1.8470
T72	270 - 265	1.127	20	0.1089	1.8100
T73	265 - 260	1.116	20	0.1022	1.7814
T74	260 - 255	1.106	20	0.0944	1.7597
T75	255 - 250	1.100	20	0.0890	1.7356
T76	250 - 245	1.097	20	0.0853	1.7005
T77	245 - 240	1.096	20	0.0831	1.6562
T78	240 - 220	1.094	20	0.0823	1.6114
T79	220 - 200	1.083	20	0.0929	1.4435
T80	200 - 180	1.063	26	0.1219	1.2954
T81	180 - 160	1.023	26	0.1637	1.1926
T82	160 - 140	0.959	26	0.2102	1.1120
T83	140 - 120	0.872	26	0.2587	1.0096
T84	120 - 115	0.763	22	0.2965	0.8578
T85	115 - 110	0.734	22	0.3032	0.8125
T86	110 - 105	0.704	22	0.3085	0.7685
T87	105 - 100	0.674	22	0.3124	0.7349
T88	100 - 95	0.646	22	0.3150	0.7126
T89	95 - 90	0.620	22	0.3180	0.6903
T90	90 - 85	0.593	22	0.3217	0.6593
T91	85 - 80	0.567	22	0.3261	0.6210
T92	80 - 60	0.539	22	0.3310	0.5835
T93	60 - 40	0.422	22	0.3560	0.4547
T94	40 - 20	0.291	22	0.3836	0.3348
T95	20 - 15	0.148	22	0.4050	0.1793
T96	15 - 7	0.111	22	0.4087	0.1493
T97	7 - 0	0.051	22	0.4133	0.1138

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection ft	Tilt °	Twist °	Radius of Curvature ft
1169.00	TFU-31ETT/VP-R O6	29	7.555	2.5722	1.5651	13062
1089.80	Guy	20	5.606	0.8521	1.5865	1344
1073.00	Flat Side Arm	20	5.512	0.8431	1.6167	29269
1003.00	ISMD10	22	5.175	0.8838	1.7612	12168
996.00	Vislink Proscan III	22	5.133	0.8867	1.7725	12380
920.00	Guy	22	4.529	0.7902	1.8587	6449
889.00	10' - 12' Ice Shield (C30-085-103)	22	4.278	0.7295	1.9279	27277
878.00	8' Dish w/ Radome	22	4.184	0.7082	1.9502	21495
760.00	Guy	22	3.023	0.5537	2.0695	4460
600.00	Guy	21	1.963	0.2579	2.1672	5210
420.00	Guy	20	1.416	0.1707	2.2028	7137

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection ft	Tilt °	Twist °	Radius of Curvature ft
400.00	Radio 0208	20	1.391	0.1678	2.1956	29908
356.00	ISMD8	20	1.330	0.1273	2.1874	23673
349.00	8' Dish w/ Radome	20	1.318	0.1199	2.1777	23308
260.00	Guy	20	1.106	0.0944	1.7597	4998
197.00	DC6-48-60-18-8F (23.5" Height)	26	1.059	0.1275	1.2771	14917
192.00	(2) LGP21401	26	1.050	0.1375	1.2491	15157
100.00	Guy	22	0.646	0.3150	0.7126	7116

Bolt Design Data

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt lb	Allowable Load per Bolt lb	Ratio Load / Allowable	Allowable Ratio	Criteria
T1	1089.8	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	10667.60	35784.70	0.298 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	0.90	17892.40	0.000 ✔	1	Bolt Shear
T2	1084.9	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	6662.34	17892.40	0.372 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	2639.43	26168.00	0.101 ✔	1	Member Block Shear
T3	1080	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	5851.16	17892.40	0.327 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	4746.09	35784.70	0.133 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	5494.89	35784.70	0.154 ✔	1	Bolt Shear
T4	1060	Leg	A325N	0.8750	4	430.81	40589.10	0.011 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	4466.20	17892.40	0.250 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	4728.78	35784.70	0.132 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	4646.05	35784.70	0.130 ✔	1	Bolt Shear
T5	1040	Leg	A325N	0.8750	4	3713.82	40589.10	0.091 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	3803.17	17892.40	0.213 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	4782.26	35784.70	0.134 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	4748.79	35784.70	0.133 ✔	1	Bolt Shear
T6	1020	Leg	A325N	0.8750	4	4267.93	40589.10	0.105 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	3569.38	17892.40	0.199 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	4796.03	35784.70	0.134 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	4783.76	35784.70	0.134 ✔	1	Bolt Shear
T7	1000	Leg	A325N	0.8750	4	858.50	40589.10	0.021 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	4719.41	17892.40	0.264 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	4789.67	35784.70	0.134 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	4781.66	35784.70	0.134 ✔	1	Bolt Shear
T8	980	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	5853.83	17892.40	0.327 ✔	1	Bolt Shear

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt lb	Allowable Load per Bolt lb	Ratio Load / Allowable	Allowable Ratio	Criteria
		Horizontal	A325N	0.7500	2	4842.46	35784.70	0.135 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	4599.58	35784.70	0.129 ✔	1	Bolt Shear
T9	960	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	7012.46	17892.40	0.392 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	5815.93	35784.70	0.163 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	5088.72	35784.70	0.142 ✔	1	Bolt Shear
T10	940	Diagonal	A325N	0.7500	2	7298.22	17892.40	0.408 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	6068.48	35784.70	0.170 ✔	1	Bolt Shear
T11	935	Diagonal	A325N	0.7500	2	7485.92	17892.40	0.418 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	6243.15	35784.70	0.174 ✔	1	Bolt Shear
T12	930	Diagonal	A325N	0.7500	2	7821.31	17892.40	0.437 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	6548.50	35784.70	0.183 ✔	1	Bolt Shear
T13	925	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	8062.47	17892.40	0.451 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	7222.65	35784.70	0.202 ✔	1	Bolt Shear
T14	920	Diagonal	A325N	0.7500	2	7047.54	17892.40	0.394 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	8558.11	26168.00	0.327 ✔	1	Member Block Shear
T15	915	Diagonal	A325N	0.7500	2	5620.78	17892.40	0.314 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	6260.48	35784.70	0.175 ✔	1	Bolt Shear
T16	910	Diagonal	A325N	0.7500	2	5182.80	17892.40	0.290 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	4592.93	35784.70	0.128 ✔	1	Bolt Shear
T17	905	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	4925.39	17892.40	0.275 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	4227.48	35784.70	0.118 ✔	1	Bolt Shear
T18	900	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	4567.14	17892.40	0.255 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	4182.75	35784.70	0.117 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	4192.71	35784.70	0.117 ✔	1	Bolt Shear
T19	880	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	3556.91	17892.40	0.199 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	4329.06	35784.70	0.121 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	4414.66	35784.70	0.123 ✔	1	Bolt Shear
T20	860	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	4101.01	17892.40	0.229 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	4238.49	35784.70	0.118 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	4192.83	35784.70	0.117 ✔	1	Bolt Shear
T21	840	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	4972.51	17892.40	0.278 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	4325.19	35784.70	0.121 ✔	1	Bolt Shear

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt lb	Allowable Load per Bolt lb	Ratio Load / Allowable	Allowable Ratio	Criteria
		Top Girt	A325N	0.7500	2	4257.63	35784.70	0.119 ✔	1	Bolt Shear
T22	820	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	6056.64	17892.40	0.339 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	5054.40	35784.70	0.141 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	4367.01	35784.70	0.122 ✔	1	Bolt Shear
T23	800	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	7425.87	17892.40	0.415 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	6139.83	35784.70	0.172 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	5276.48	35784.70	0.147 ✔	1	Bolt Shear
T24	780	Diagonal	A325N	0.7500	2	7775.52	17892.40	0.435 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	6448.77	35784.70	0.180 ✔	1	Bolt Shear
T25	775	Diagonal	A325N	0.7500	2	8004.31	17892.40	0.447 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	6664.06	35784.70	0.186 ✔	1	Bolt Shear
T26	770	Diagonal	A325N	0.7500	2	8404.41	17892.40	0.470 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	7026.12	35784.70	0.196 ✔	1	Bolt Shear
T27	765	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	8391.72	17892.40	0.469 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	7034.04	35784.70	0.197 ✔	1	Bolt Shear
T28	760	Diagonal	A325N	0.7500	2	6356.71	17892.40	0.355 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	8034.54	26168.00	0.307 ✔	1	Member Block Shear
T29	755	Diagonal	A325N	0.7500	2	5109.95	17892.40	0.286 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	6085.07	35784.70	0.170 ✔	1	Bolt Shear
T30	750	Diagonal	A325N	0.7500	2	4786.28	17892.40	0.268 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	4440.91	35784.70	0.124 ✔	1	Bolt Shear
T31	745	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	4590.00	17892.40	0.257 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	4025.05	35784.70	0.112 ✔	1	Bolt Shear
T32	740	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	4297.61	17892.40	0.240 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	3069.55	20934.40	0.147 ✔	1	Member Block Shear
		Top Girt	A325N	0.7500	2	4018.46	35784.70	0.112 ✔	1	Bolt Shear
T33	720	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	3369.44	17892.40	0.188 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	2840.92	20934.40	0.136 ✔	1	Member Block Shear
		Top Girt	A325N	0.7500	2	3854.99	35784.70	0.108 ✔	1	Bolt Shear
T34	700	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	2838.04	17892.40	0.159 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	2685.82	20934.40	0.128 ✔	1	Member Block Shear

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt lb	Allowable Load per Bolt lb	Ratio Load / Allowable	Allowable Ratio	Criteria
		Top Girt	A325N	0.7500	2	3733.29	35784.70	0.104 ✔	1	Bolt Shear
T35	680	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	3345.43	17892.40	0.187 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	2752.81	20934.40	0.131 ✔	1	Member Block Shear
		Top Girt	A325N	0.7500	2	3651.29	35784.70	0.102 ✔	1	Bolt Shear
T36	660	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	4305.07	17892.40	0.241 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	2970.13	20934.40	0.142 ✔	1	Member Block Shear
		Top Girt	A325N	0.7500	2	3638.95	35784.70	0.102 ✔	1	Bolt Shear
T37	640	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	5617.01	17892.40	0.314 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	3268.10	20934.40	0.156 ✔	1	Member Block Shear
		Top Girt	A325N	0.7500	2	3861.49	35784.70	0.108 ✔	1	Bolt Shear
T38	620	Diagonal	A325N	0.7500	2	5934.53	17892.40	0.332 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	4906.38	35784.70	0.137 ✔	1	Bolt Shear
T39	615	Diagonal	A325N	0.7500	2	6127.42	17892.40	0.342 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	5084.76	35784.70	0.142 ✔	1	Bolt Shear
T40	610	Diagonal	A325N	0.7500	2	6519.20	17892.40	0.364 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	5455.11	35784.70	0.152 ✔	1	Bolt Shear
T41	605	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	6844.79	17892.40	0.383 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	6311.09	35784.70	0.176 ✔	1	Bolt Shear
T42	600	Diagonal	A325N	0.7500	2	6590.68	17892.40	0.368 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	9330.34	26168.00	0.357 ✔	1	Member Block Shear
T43	595	Diagonal	A325N	0.7500	2	6185.31	17892.40	0.346 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	5759.07	35784.70	0.161 ✔	1	Bolt Shear
T44	590	Diagonal	A325N	0.7500	2	5826.09	17892.40	0.326 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	5154.18	35784.70	0.144 ✔	1	Bolt Shear
T45	585	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	5671.28	17892.40	0.317 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	4862.54	35784.70	0.136 ✔	1	Bolt Shear
T46	580	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	5323.84	17892.40	0.298 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	3362.19	20934.40	0.161 ✔	1	Member Block Shear
		Top Girt	A325N	0.7500	2	4658.97	35784.70	0.130 ✔	1	Bolt Shear
T47	560	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	4081.76	17892.40	0.228 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	3252.80	20934.40	0.155 ✔	1	Member Block Shear

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt lb	Allowable Load per Bolt lb	Ratio Load / Allowable	Allowable Ratio	Criteria
		Top Girt	A325N	0.7500	2	3592.53	35784.70	0.100 ✔	1	Bolt Shear
T48	540	Diagonal	A325N	0.7500	2	1990.87	17892.40	0.111 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	2847.38	35784.70	0.080 ✔	1	Bolt Shear
T49	535	Diagonal	A325N	0.7500	2	3246.68	17892.40	0.181 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	1736.06	35784.70	0.049 ✔	1	Bolt Shear
T50	530	Diagonal	A325N	0.7500	2	2878.51	17892.40	0.161 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	3284.64	35784.70	0.092 ✔	1	Bolt Shear
T51	525	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	2786.65	17892.40	0.156 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	3145.55	35784.70	0.088 ✔	1	Bolt Shear
T52	520	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	2657.99	17892.40	0.149 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	3340.07	20934.40	0.160 ✔	1	Member Block Shear
		Top Girt	A325N	0.7500	2	3118.54	35784.70	0.087 ✔	1	Bolt Shear
T53	500	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	2675.04	17892.40	0.150 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	3386.15	20934.40	0.162 ✔	1	Member Block Shear
		Top Girt	A325N	0.7500	2	3114.27	35784.70	0.087 ✔	1	Bolt Shear
T54	480	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	3292.77	17892.40	0.184 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	3475.25	20934.40	0.166 ✔	1	Member Block Shear
		Top Girt	A325N	0.7500	2	3091.34	35784.70	0.086 ✔	1	Bolt Shear
T55	460	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	4544.49	17892.40	0.254 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	3614.68	20934.40	0.173 ✔	1	Member Block Shear
		Top Girt	A325N	0.7500	2	3158.08	35784.70	0.088 ✔	1	Bolt Shear
T56	440	Diagonal	A325N	0.7500	2	4861.72	17892.40	0.272 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	3993.39	35784.70	0.112 ✔	1	Bolt Shear
T57	435	Diagonal	A325N	0.7500	2	5074.56	17892.40	0.284 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	4185.98	35784.70	0.117 ✔	1	Bolt Shear
T58	430	Diagonal	A325N	0.7500	2	5471.41	17892.40	0.306 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	4534.59	35784.70	0.127 ✔	1	Bolt Shear
T59	425	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	5844.89	17892.40	0.327 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	5038.12	35784.70	0.141 ✔	1	Bolt Shear
T60	420	Diagonal	A325N	0.7500	2	6295.39	17892.40	0.352 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	6942.20	26168.00	0.265 ✔	1	Member Block Shear
T61	415	Diagonal	A325N	0.7500	2	6444.78	17892.40	0.360 ✔	1	Bolt Shear

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt lb	Allowable Load per Bolt lb	Ratio Load / Allowable	Allowable Ratio	Criteria
		Top Girt	A325N	0.7500	2	5307.63	35784.70	0.148 ✔	1	Bolt Shear
T62	410	Diagonal	A325N	0.7500	2	6061.00	17892.40	0.339 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	5336.59	35784.70	0.149 ✔	1	Bolt Shear
T63	405	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	5836.00	17892.40	0.326 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	5036.52	35784.70	0.141 ✔	1	Bolt Shear
T64	400	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	5173.83	17892.40	0.289 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	3950.25	20934.40	0.189 ✔	1	Member Block Shear
		Top Girt	A325N	0.7500	2	4662.89	35784.70	0.130 ✔	1	Bolt Shear
T65	380	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	3694.56	17892.40	0.206 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	3938.71	20934.40	0.188 ✔	1	Member Block Shear
		Top Girt	A325N	0.7500	2	3287.86	35784.70	0.092 ✔	1	Bolt Shear
T66	360	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	2985.62	17892.40	0.167 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	3977.42	20934.40	0.190 ✔	1	Member Block Shear
		Top Girt	A325N	0.7500	2	3128.47	35784.70	0.087 ✔	1	Bolt Shear
T67	340	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	3590.56	17892.40	0.201 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	4003.61	20934.40	0.191 ✔	1	Member Block Shear
		Top Girt	A325N	0.7500	2	3104.13	35784.70	0.087 ✔	1	Bolt Shear
T68	320	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	5130.94	17892.40	0.287 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	4012.47	20934.40	0.192 ✔	1	Member Block Shear
		Top Girt	A325N	0.7500	2	3252.41	35784.70	0.091 ✔	1	Bolt Shear
T69	300	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	6630.08	17892.40	0.371 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	4085.79	20934.40	0.195 ✔	1	Member Block Shear
		Top Girt	A325N	0.7500	2	4556.48	35784.70	0.127 ✔	1	Bolt Shear
T70	280	Diagonal	A325N	0.7500	2	6996.73	17892.40	0.391 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	5826.60	35784.70	0.163 ✔	1	Bolt Shear
T71	275	Diagonal	A325N	0.7500	2	7193.50	17892.40	0.402 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	6017.43	35784.70	0.168 ✔	1	Bolt Shear
T72	270	Diagonal	A325N	0.7500	2	7652.41	17892.40	0.428 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	6406.14	35784.70	0.179 ✔	1	Bolt Shear
T73	265	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	7386.76	17892.40	0.413 ✔	1	Bolt Shear

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt lb	Allowable Load per Bolt lb	Ratio Load / Allowable	Allowable Ratio	Criteria
		Top Girt	A325N	0.7500	2	6228.53	35784.70	0.174 ✔	1	Bolt Shear
T74	260	Diagonal	A325N	0.7500	2	8750.92	17892.40	0.489 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	9650.44	26168.00	0.369 ✔	1	Member Block Shear
T75	255	Diagonal	A325N	0.7500	2	9169.24	17892.40	0.512 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	7499.63	35784.70	0.210 ✔	1	Bolt Shear
T76	250	Diagonal	A325N	0.7500	2	8790.74	17892.40	0.491 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	7641.45	35784.70	0.214 ✔	1	Bolt Shear
T77	245	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	8718.36	17892.40	0.487 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	7413.63	35784.70	0.207 ✔	1	Bolt Shear
T78	240	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	8397.52	17892.40	0.469 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	4561.13	20934.40	0.218 ✔	1	Member Block Shear
		Top Girt	A325N	0.7500	2	7241.96	35784.70	0.202 ✔	1	Bolt Shear
T79	220	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	7118.98	17892.40	0.398 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	4733.31	20934.40	0.226 ✔	1	Member Block Shear
		Top Girt	A325N	0.7500	2	6170.21	35784.70	0.172 ✔	1	Bolt Shear
T80	200	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	5685.85	17892.40	0.318 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	4864.80	20934.40	0.232 ✔	1	Member Block Shear
		Top Girt	A325N	0.7500	2	4975.09	35784.70	0.139 ✔	1	Bolt Shear
T81	180	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	3199.68	17892.40	0.179 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	4928.15	20934.40	0.235 ✔	1	Member Block Shear
		Top Girt	A325N	0.7500	2	2947.72	35784.70	0.082 ✔	1	Bolt Shear
T82	160	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	5001.86	17892.40	0.280 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	4939.02	20934.40	0.236 ✔	1	Member Block Shear
		Top Girt	A325N	0.7500	2	2971.17	35784.70	0.083 ✔	1	Bolt Shear
T83	140	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	6920.30	17892.40	0.387 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	4928.71	20934.40	0.235 ✔	1	Member Block Shear
		Top Girt	A325N	0.7500	2	4514.82	35784.70	0.126 ✔	1	Bolt Shear
T84	120	Diagonal	A325N	0.7500	2	7400.63	17892.40	0.414 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	6145.07	35784.70	0.172 ✔	1	Bolt Shear
T85	115	Diagonal	A325N	0.7500	2	7702.22	17892.40	0.430 ✔	1	Bolt Shear

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt lb	Allowable Load per Bolt lb	Ratio Load / Allowable	Allowable Ratio	Criteria
		Top Girt	A325N	0.7500	2	6420.72	35784.70	0.179 ✔	1	Bolt Shear
T86	110	Diagonal	A325N	0.7500	2	8273.00	17892.40	0.462 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	6901.90	35784.70	0.193 ✔	1	Bolt Shear
T87	105	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	8089.06	17892.40	0.452 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	6827.71	35784.70	0.191 ✔	1	Bolt Shear
T88	100	Diagonal	A325N	0.7500	2	6024.73	17892.40	0.337 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	11654.40	26168.00	0.445 ✔	1	Member Block Shear
T89	95	Diagonal	A325N	0.7500	2	6017.87	17892.40	0.336 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	4968.26	35784.70	0.139 ✔	1	Bolt Shear
T90	90	Diagonal	A325N	0.7500	2	5558.13	17892.40	0.311 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	4942.56	35784.70	0.138 ✔	1	Bolt Shear
T91	85	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	5254.41	17892.40	0.294 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	4570.23	35784.70	0.128 ✔	1	Bolt Shear
T92	80	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	4782.19	17892.40	0.267 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	5104.10	20934.40	0.244 ✔	1	Member Block Shear
		Top Girt	A325N	0.7500	2	4248.06	35784.70	0.119 ✔	1	Bolt Shear
T93	60	Leg	A325N	0.8750	4	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	3781.49	17892.40	0.211 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	5108.16	20934.40	0.244 ✔	1	Member Block Shear
		Top Girt	A325N	0.7500	2	2683.25	35784.70	0.075 ✔	1	Bolt Shear
T94	40	Diagonal	A325N	0.7500	2	5023.71	17892.40	0.281 ✔	1	Bolt Shear
		Horizontal	A325N	0.7500	2	5090.50	20934.40	0.243 ✔	1	Member Block Shear
		Top Girt	A325N	0.7500	2	3226.84	35784.70	0.090 ✔	1	Bolt Shear
T95	20	Leg	A325N	0.8750	6	0.00	40589.10	0.000 ✔	1	Bolt Tension
		Diagonal	A325N	0.7500	2	5179.71	17892.40	0.289 ✔	1	Bolt Shear
		Top Girt	A325N	0.7500	2	4163.30	35784.70	0.116 ✔	1	Bolt Shear

Guy Design Data

Section No.	Elevation ft	Size	Initial Tension lb	Breaking Load lb	Actual T_u lb	Allowable ϕT_n lb	Required S.F.	Actual S.F.
T1	1089.80 (A) (2281)	1 3/4 BS	37600.00	376000.31	131089.00	225600.00	1.000	1.721 ✔

Section No.	Elevation ft	Size	Initial Tension lb	Breaking Load lb	Actual T_u lb	Allowable ϕT_n lb	Required S.F.	Actual S.F.
	1089.80 (B) (2280)	1 3/4 BS	37600.00	376000.31	119288.00	225600.00	1.000	1.891 ✔
	1089.80 (C) (2279)	1 3/4 BS	37600.00	376000.31	119332.00	225600.00	1.000	1.891 ✔
T14	920.00 (A) (2284)	1 3/4 BS	37600.00	376000.31	127238.00	225600.00	1.000	1.773 ✔
	920.00 (B) (2283)	1 3/4 BS	37600.00	376000.31	114984.00	225600.00	1.000	1.962 ✔
	920.00 (C) (2282)	1 3/4 BS	37600.00	376000.31	112877.00	225600.00	1.000	1.999 ✔
T28	760.00 (A) (2287)	1 3/4 BS	37600.00	376000.31	111855.00	225600.00	1.000	2.017 ✔
	760.00 (B) (2286)	1 3/4 BS	37600.00	376000.31	100174.00	225600.00	1.000	2.252 ✔
	760.00 (C) (2285)	1 3/4 BS	37600.00	376000.31	98433.60	225600.00	1.000	2.292 ✔
T42	600.00 (A) (2290)	1 3/4 BS	37600.00	376000.31	97261.10	225600.00	1.000	2.320 ✔
	600.00 (B) (2289)	1 3/4 BS	37600.00	376000.31	86048.40	225600.00	1.000	2.622 ✔
	600.00 (C) (2288)	1 3/4 BS	37600.00	376000.31	85512.00	225600.00	1.000	2.638 ✔
T60	420.00 (A) (2293)	1 1/2 BS	27600.00	275999.41	71938.00	165600.00	1.000	2.302 ✔
	420.00 (B) (2292)	1 1/2 BS	27600.00	275999.41	66939.00	165600.00	1.000	2.474 ✔
	420.00 (C) (2291)	1 1/2 BS	27600.00	275999.41	67025.40	165600.00	1.000	2.471 ✔
T74	260.00 (A) (2296)	1 1/2 BS	27600.00	275999.41	72372.30	165600.00	1.000	2.288 ✔
	260.00 (B) (2295)	1 1/2 BS	27600.00	275999.41	67575.00	165600.00	1.000	2.451 ✔
	260.00 (C) (2294)	1 1/2 BS	27600.00	275999.41	67046.80	165600.00	1.000	2.470 ✔
T88	100.00 (A) (2299)	1 1/2 BS	27600.00	275999.41	61721.60	165600.00	1.000	2.683 ✔
	100.00 (B) (2298)	1 1/2 BS	27600.00	275999.41	58891.10	165600.00	1.000	2.812 ✔
	100.00 (C) (2297)	1 1/2 BS	27600.00	275999.41	58018.90	165600.00	1.000	2.854 ✔

Compression Checks

Pole Design Data

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
L1	1151.9 - 1148.8	P20x.812	62.10	0.00	0.0	48.9481	-33684.60	2202660.00	0.015
	1148.8 - 1145.69					48.9481	-34306.90	2202660.00	0.016
	1145.69 -					48.9481	-34929.90	2202660.00	0.016

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
	1142.59								
	1142.59 - 1139.48					48.9481	-35553.60	2202660.00	0.016
	1139.48 - 1136.38					48.9481	-36178.40	2202660.00	0.016
	1136.38 - 1133.27					48.9481	-36804.40	2202660.00	0.017
	1133.27 - 1130.17					48.9481	-37432.00	2202660.00	0.017
	1130.17 - 1127.06					48.9481	-38061.30	2202660.00	0.017
	1127.06 - 1123.95					48.9481	-38692.80	2202660.00	0.018
	1123.95 - 1120.85					48.9481	-39326.30	2202660.00	0.018
	1120.85 - 1117.75					48.9481	-39963.00	2202660.00	0.018
	1117.75 - 1114.64					48.9481	-40602.70	2202660.00	0.018
	1114.64 - 1111.54					48.9481	-41246.00	2202660.00	0.019
	1111.54 - 1108.43					48.9481	-41893.20	2202660.00	0.019
	1108.43 - 1105.33					48.9481	-42544.60	2202660.00	0.019
	1105.33 - 1102.22					48.9481	-43200.70	2202660.00	0.020
	1102.22 - 1099.12					48.9481	-43861.90	2202660.00	0.020
	1099.12 - 1096.01					48.9481	-44528.60	2202660.00	0.020
	1096.01 - 1092.91					48.9481	-45201.20	2202660.00	0.021
	1092.91 - 1089.8					48.9481	-45880.10	2202660.00	0.021

Pole Bending Design Data

Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{nx} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} kip-ft	ϕM_{ny} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
L1	1151.9 - 1148.8	P20x.812	33.14	1121.78	0.030	0.00	1121.78	0.000
	1148.8 - 1145.69		44.57	1121.78	0.040	0.00	1121.78	0.000
	1145.69 - 1142.59		57.75	1121.78	0.051	0.00	1121.78	0.000
	1142.59 - 1139.48		72.65	1121.78	0.065	0.00	1121.78	0.000
	1139.48 - 1136.38		89.27	1121.78	0.080	0.00	1121.78	0.000
	1136.38 - 1133.27		107.58	1121.78	0.096	0.00	1121.78	0.000
	1133.27 - 1130.17		127.57	1121.78	0.114	0.00	1121.78	0.000
	1130.17 -		149.23	1121.78	0.133	0.00	1121.78	0.000

Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{nx} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} kip-ft	ϕM_{ny} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
	1127.06							
	1127.06 - 1123.95		172.52	1121.78	0.154	0.00	1121.78	0.000
	1123.95 - 1120.85		197.42	1121.78	0.176	0.00	1121.78	0.000
	1120.85 - 1117.75		223.92	1121.78	0.200	0.00	1121.78	0.000
	1117.75 - 1114.64		251.97	1121.78	0.225	0.00	1121.78	0.000
	1114.64 - 1111.54		281.55	1121.78	0.251	0.00	1121.78	0.000
	1111.54 - 1108.43		312.63	1121.78	0.279	0.00	1121.78	0.000
	1108.43 - 1105.33		345.17	1121.78	0.308	0.00	1121.78	0.000
	1105.33 - 1102.22		379.12	1121.78	0.338	0.00	1121.78	0.000
	1102.22 - 1099.12		414.45	1121.78	0.369	0.00	1121.78	0.000
	1099.12 - 1096.01		451.11	1121.78	0.402	0.00	1121.78	0.000
	1096.01 - 1092.91		489.06	1121.78	0.436	0.00	1121.78	0.000
	1092.91 - 1089.8		528.25	1121.78	0.471	0.00	1121.78	0.000

Pole Shear Design Data

Section No.	Elevation ft	Size	Actual V_u lb	ϕV_n lb	Ratio $\frac{V_u}{\phi V_n}$	Actual T_u kip-ft	ϕT_n kip-ft	Ratio $\frac{T_u}{\phi T_n}$
L1	1151.9 - 1148.8	P20x.812	3468.20	1101330.00	0.003	0.02	1692.56	0.000
	1148.8 - 1145.69		4031.20	1101330.00	0.004	0.14	1692.56	0.000
	1145.69 - 1142.59		4590.70	1101330.00	0.004	0.30	1692.56	0.000
	1142.59 - 1139.48		5146.38	1101330.00	0.005	0.47	1692.56	0.000
	1139.48 - 1136.38		5697.57	1101330.00	0.005	0.63	1692.56	0.000
	1136.38 - 1133.27		6243.64	1101330.00	0.006	0.80	1692.56	0.000
	1133.27 - 1130.17		6783.89	1101330.00	0.006	0.97	1692.56	0.001
	1130.17 - 1127.06		7317.63	1101330.00	0.007	1.13	1692.56	0.001
	1127.06 - 1123.95		7844.14	1101330.00	0.007	1.30	1692.56	0.001
	1123.95 - 1120.85		8356.55	1101330.00	0.008	1.49	1692.56	0.001
	1120.85 - 1117.75		8866.58	1101330.00	0.008	1.66	1692.56	0.001
	1117.75 - 1114.64		9367.10	1101330.00	0.009	1.84	1692.56	0.001
	1114.64 -		9857.32	1101330.00	0.009	2.01	1692.56	0.001

Section No.	Elevation ft	Size	Actual V_u lb	ϕV_n lb	Ratio $\frac{V_u}{\phi V_n}$	Actual T_u kip-ft	ϕT_n kip-ft	Ratio $\frac{T_u}{\phi T_n}$
	1111.54							
	1111.54 - 1108.43		10336.40	1101330.00	0.009	2.19	1692.56	0.001
	1108.43 - 1105.33		10803.50	1101330.00	0.010	2.38	1692.56	0.001
	1105.33 - 1102.22		11257.80	1101330.00	0.010	2.57	1692.56	0.002
	1102.22 - 1099.12		11698.40	1101330.00	0.011	2.76	1692.56	0.002
	1099.12 - 1096.01		12124.30	1101330.00	0.011	2.96	1692.56	0.002
	1096.01 - 1092.91		12534.80	1101330.00	0.011	3.16	1692.56	0.002
	1092.91 - 1089.8		12928.70	1101330.00	0.012	3.38	1692.56	0.002

Pole Interaction Design Data

Section No.	Elevation ft	Ratio $\frac{P_u}{\phi P_n}$	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	Ratio $\frac{M_{uy}}{\phi M_{ny}}$	Ratio $\frac{V_u}{\phi V_n}$	Ratio $\frac{T_u}{\phi T_n}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
L1	1151.9 - 1148.8	0.015	0.030	0.000	0.003	0.000	0.045 ✔	1.000	4.8.2 ✔
	1148.8 - 1145.69	0.016	0.040	0.000	0.004	0.000	0.055 ✔	1.000	4.8.2 ✔
	1145.69 - 1142.59	0.016	0.051	0.000	0.004	0.000	0.067 ✔	1.000	4.8.2 ✔
	1142.59 - 1139.48	0.016	0.065	0.000	0.005	0.000	0.081 ✔	1.000	4.8.2 ✔
	1139.48 - 1136.38	0.016	0.080	0.000	0.005	0.000	0.096 ✔	1.000	4.8.2 ✔
	1136.38 - 1133.27	0.017	0.096	0.000	0.006	0.000	0.113 ✔	1.000	4.8.2 ✔
	1133.27 - 1130.17	0.017	0.114	0.000	0.006	0.001	0.131 ✔	1.000	4.8.2 ✔
	1130.17 - 1127.06	0.017	0.133	0.000	0.007	0.001	0.150 ✔	1.000	4.8.2 ✔
	1127.06 - 1123.95	0.018	0.154	0.000	0.007	0.001	0.171 ✔	1.000	4.8.2 ✔
	1123.95 - 1120.85	0.018	0.176	0.000	0.008	0.001	0.194 ✔	1.000	4.8.2 ✔
	1120.85 - 1117.75	0.018	0.200	0.000	0.008	0.001	0.218 ✔	1.000	4.8.2 ✔
	1117.75 - 1114.64	0.018	0.225	0.000	0.009	0.001	0.243 ✔	1.000	4.8.2 ✔
	1114.64 - 1111.54	0.019	0.251	0.000	0.009	0.001	0.270 ✔	1.000	4.8.2 ✔
	1111.54 - 1108.43	0.019	0.279	0.000	0.009	0.001	0.298 ✔	1.000	4.8.2 ✔
	1108.43 - 1105.33	0.019	0.308	0.000	0.010	0.001	0.327	1.000	4.8.2 ✔

Section No.	Elevation ft	Ratio $\frac{P_u}{\phi P_n}$	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	Ratio $\frac{M_{uy}}{\phi M_{ny}}$	Ratio $\frac{V_u}{\phi V_n}$	Ratio $\frac{T_u}{\phi T_n}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
	1105.33 - 1102.22	0.020	0.338	0.000	0.010	0.002	0.358	1.000	4.8.2
	1102.22 - 1099.12	0.020	0.369	0.000	0.011	0.002	0.390	1.000	4.8.2
	1099.12 - 1096.01	0.020	0.402	0.000	0.011	0.002	0.423	1.000	4.8.2
	1096.01 - 1092.91	0.021	0.436	0.000	0.011	0.002	0.457	1.000	4.8.2
	1092.91 - 1089.8	0.021	0.471	0.000	0.012	0.002	0.492	1.000	4.8.2

Leg Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T1	1089.8 - 1084.9	3 3/4	4.90	4.90	62.7 K=1.00	11.0447	-88828.50	372777.00	0.238 [1]
T2	1084.9 - 1080	3 3/4	4.90	4.90	62.7 K=1.00	11.0447	-127598.00	372777.00	0.342 [1]
T3	1080 - 1060	3 3/4	20.00	5.00	64.0 K=1.00	11.0447	-158334.00	368382.00	0.430 [1]
T4	1060 - 1040	3 3/4	20.00	5.00	64.0 K=1.00	11.0447	-179325.00	368382.00	0.487 [1]
T5	1040 - 1020	3 3/4	20.00	5.00	64.0 K=1.00	11.0447	-190268.00	368382.00	0.516 [1]
T6	1020 - 1000	3 3/4	20.00	5.00	64.0 K=1.00	11.0447	-191937.00	368382.00	0.521 [1]
T7	1000 - 980	3 3/4	20.00	5.00	64.0 K=1.00	11.0447	-189634.00	368382.00	0.515 [1]
T8	980 - 960	3 3/4	20.00	5.00	64.0 K=1.00	11.0447	-172324.00	368382.00	0.468 [1]
T9	960 - 940	4 1/2	20.00	5.00	53.3 K=1.00	15.9043	-179646.00	581305.00	0.309 [1]
T10	940 - 935	4 1/2	5.00	5.00	53.3 K=1.00	15.9043	-190839.00	581305.00	0.328 [1]
T11	935 - 930	4 1/2	5.00	5.00	53.3 K=1.00	15.9043	-202477.00	581305.00	0.348 [1]
T12	930 - 925	4 1/2	5.00	5.00	53.3 K=1.00	15.9043	-215163.00	581305.00	0.370 [1]
T13	925 - 920	4 1/2	5.00	5.00	53.3 K=1.00	15.9043	-228430.00	581305.00	0.393 [1]
T14	920 - 915	4 1/2	5.00	5.00	53.3 K=1.00	15.9043	-253106.00	581305.00	0.435 [1]
T15	915 - 910	4 1/2	5.00	5.00	53.3 K=1.00	15.9043	-249041.00	581305.00	0.428 [1]
T16	910 - 905	4 1/2	5.00	5.00	53.3 K=1.00	15.9043	-246263.00	581305.00	0.424 [1]
T17	905 - 900	4 1/2	5.00	5.00	53.3 K=1.00	15.9043	-244693.00	581305.00	0.421 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T18	900 - 880	4 1/2	20.00	5.00	53.3 K=1.00	15.9043	-243291.00	581305.00	0.419 [1]
T19	880 - 860	4 1/2	20.00	5.00	53.3 K=1.00	15.9043	-244195.00	581305.00	0.420 [1]
T20	860 - 840	4 1/2	20.00	5.00	53.3 K=1.00	15.9043	-253979.00	581305.00	0.437 [1]
T21	840 - 820	4 1/2	20.00	5.00	53.3 K=1.00	15.9043	-277984.00	581305.00	0.478 [1]
T22	820 - 800	4 1/2	20.00	5.00	53.3 K=1.00	15.9043	-307362.00	581305.00	0.529 [1]
T23	800 - 780	4 1/2	20.00	5.00	53.3 K=1.00	15.9043	-341996.00	581305.00	0.588 [1]
T24	780 - 775	4 1/2	5.00	5.00	53.3 K=1.00	15.9043	-351466.00	581305.00	0.605 [1]
T25	775 - 770	4 1/2	5.00	5.00	53.3 K=1.00	15.9043	-361128.00	581305.00	0.621 [1]
T26	770 - 765	4 1/2	5.00	5.00	53.3 K=1.00	15.9043	-371382.00	581305.00	0.639 [1]
T27	765 - 760	4 1/2	5.00	5.00	53.3 K=1.00	15.9043	-382717.00	581305.00	0.658 [1]
T28	760 - 755	4 1/2	5.00	5.00	53.3 K=1.00	15.9043	-389513.00	581305.00	0.670 [1]
T29	755 - 750	4 1/2	5.00	5.00	53.3 K=1.00	15.9043	-379739.00	581305.00	0.653 [1]
T30	750 - 745	4 1/2	5.00	5.00	53.3 K=1.00	15.9043	-370701.00	581305.00	0.638 [1]
T31	745 - 740	4 1/2	5.00	5.00	53.3 K=1.00	15.9043	-362335.00	581305.00	0.623 [1]
T32	740 - 720	4 1/2	20.00	5.00	53.3 K=1.00	15.9043	-354441.00	581305.00	0.610 [1]
T33	720 - 700	4 1/2	20.00	5.00	53.3 K=1.00	15.9043	-328041.00	581305.00	0.564 [1]
T34	700 - 680	4 1/2	20.00	5.00	53.3 K=1.00	15.9043	-310132.00	581305.00	0.534 [1]
T35	680 - 660	4 1/2	20.00	5.00	53.3 K=1.00	15.9043	-317868.00	581305.00	0.547 [1]
T36	660 - 640	4 1/2	20.00	5.00	53.3 K=1.00	15.9043	-342961.00	581305.00	0.590 [1]
T37	640 - 620	5	20.00	5.00	48.0 K=1.00	19.6350	-377368.00	746587.00	0.505 [1]
T38	620 - 615	5	5.00	5.00	48.0 K=1.00	19.6350	-387250.00	746587.00	0.519 [1]
T39	615 - 610	5	5.00	5.00	48.0 K=1.00	19.6350	-397445.00	746587.00	0.532 [1]
T40	610 - 605	5	5.00	5.00	48.0 K=1.00	19.6350	-408384.00	746587.00	0.547 [1]
T41	605 - 600	5	5.00	5.00	48.0 K=1.00	19.6350	-420451.00	746587.00	0.563 [1]
T42	600 - 595	5	5.00	5.00	48.0 K=1.00	19.6350	-429845.00	746587.00	0.576 [1]
T43	595 - 590	5	5.00	5.00	48.0 K=1.00	19.6350	-419003.00	746587.00	0.561 [1]
T44	590 - 585	5	5.00	5.00	48.0 K=1.00	19.6350	-408253.00	746587.00	0.547 [1]
T45	585 - 580	5	5.00	5.00	48.0 K=1.00	19.6350	-398143.00	746587.00	0.533 [1]
T46	580 - 560	4 3/4	20.00	5.00	50.5 K=1.00	17.7205	-388232.00	661643.00	0.587 [1]
T47	560 - 540	4 3/4	20.00	5.00	50.5 K=1.00	17.7205	-375601.00	661643.00	0.568 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T48	540 - 535	4 3/4	5.00	5.00	50.5 K=1.00	17.7205	-373417.00	661643.00	0.564 [1]
T49	535 - 530	4 3/4	5.00	5.00	50.5 K=1.00	17.7205	-377946.00	661643.00	0.571 [1]
T50	530 - 525	4 3/4	5.00	5.00	50.5 K=1.00	17.7205	-378824.00	661643.00	0.573 [1]
T51	525 - 520	4 3/4	5.00	5.00	50.5 K=1.00	17.7205	-380155.00	661643.00	0.575 [1]
T52	520 - 500	4 3/4	20.00	5.00	50.5 K=1.00	17.7205	-385678.00	661643.00	0.583 [1]
T53	500 - 480	4 3/4	20.00	5.00	50.5 K=1.00	17.7205	-390999.00	661643.00	0.591 [1]
T54	480 - 460	4 3/4	20.00	5.00	50.5 K=1.00	17.7205	-401287.00	661643.00	0.607 [1]
T55	460 - 440	5	20.00	5.00	48.0 K=1.00	19.6350	-417387.00	746587.00	0.559 [1]
T56	440 - 435	5	5.00	5.00	48.0 K=1.00	19.6350	-421699.00	746587.00	0.565 [1]
T57	435 - 430	5	5.00	5.00	48.0 K=1.00	19.6350	-426200.00	746587.00	0.571 [1]
T58	430 - 425	5	5.00	5.00	48.0 K=1.00	19.6350	-431242.00	746587.00	0.578 [1]
T59	425 - 420	5	5.00	5.00	48.0 K=1.00	19.6350	-438277.00	746587.00	0.587 [1]
T60	420 - 415	5	5.00	5.00	48.0 K=1.00	19.6350	-466186.00	746587.00	0.624 [1]
T61	415 - 410	5	5.00	5.00	48.0 K=1.00	19.6350	-461677.00	746587.00	0.618 [1]
T62	410 - 405	5	5.00	5.00	48.0 K=1.00	19.6350	-459246.00	746587.00	0.615 [1]
T63	405 - 400	5	5.00	5.00	48.0 K=1.00	19.6350	-457331.00	746587.00	0.613 [1]
T64	400 - 380	5	20.00	5.00	48.0 K=1.00	19.6350	-456136.00	746587.00	0.611 [1]
T65	380 - 360	5	20.00	5.00	48.0 K=1.00	19.6350	-454803.00	746587.00	0.609 [1]
T66	360 - 340	5	20.00	5.00	48.0 K=1.00	19.6350	-459273.00	746587.00	0.615 [1]
T67	340 - 320	5	20.00	5.00	48.0 K=1.00	19.6350	-462297.00	746587.00	0.619 [1]
T68	320 - 300	5	20.00	5.00	48.0 K=1.00	19.6350	-463320.00	746587.00	0.621 [1]
T69	300 - 280	5	20.00	5.00	48.0 K=1.00	19.6350	-471786.00	866222.00	0.545 [1]
T70	280 - 275	5	5.00	5.00	48.0 K=1.00	19.6350	-474931.00	866222.00	0.548 [1]
T71	275 - 270	5	5.00	5.00	48.0 K=1.00	19.6350	-478292.00	866222.00	0.552 [1]
T72	270 - 265	5	5.00	5.00	48.0 K=1.00	19.6350	-482039.00	866222.00	0.556 [1]
T73	265 - 260	5	5.00	5.00	48.0 K=1.00	19.6350	-488590.00	866222.00	0.564 [1]
T74	260 - 255	5	5.00	5.00	48.0 K=1.00	19.6350	-508994.00	866222.00	0.588 [1]
T75	255 - 250	5	5.00	5.00	48.0 K=1.00	19.6350	-502508.00	866222.00	0.580 [1]
T76	250 - 245	5	5.00	5.00	48.0 K=1.00	19.6350	-497974.00	866222.00	0.575 [1]
T77	245 - 240	5	5.00	5.00	48.0 K=1.00	19.6350	-502182.00	866222.00	0.580 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T78	240 - 220	5	20.00	5.00	48.0 K=1.00	19.6350	-526674.00	866222.00	0.608 [1]
T79	220 - 200	5	20.00	5.00	48.0 K=1.00	19.6350	-546555.00	866222.00	0.631 [1]
T80	200 - 180	5	20.00	5.00	48.0 K=1.00	19.6350	-561739.00	866222.00	0.648 [1]
T81	180 - 160	5	20.00	5.00	48.0 K=1.00	19.6350	-569054.00	866222.00	0.657 [1]
T82	160 - 140	5	20.00	5.00	48.0 K=1.00	19.6350	-570309.00	866222.00	0.658 [1]
T83	140 - 120	5	20.00	5.00	48.0 K=1.00	19.6350	-569118.00	866222.00	0.657 [1]
T84	120 - 115	5	5.00	5.00	48.0 K=1.00	19.6350	-562375.00	866222.00	0.649 [1]
T85	115 - 110	5	5.00	5.00	48.0 K=1.00	19.6350	-559720.00	866222.00	0.646 [1]
T86	110 - 105	5	5.00	5.00	48.0 K=1.00	19.6350	-556743.00	866222.00	0.643 [1]
T87	105 - 100	5	5.00	5.00	48.0 K=1.00	19.6350	-556135.00	866222.00	0.642 [1]
T88	100 - 95	5	5.00	5.00	48.0 K=1.00	19.6350	-579061.00	866222.00	0.668 [1]
T89	95 - 90	5	5.00	5.00	48.0 K=1.00	19.6350	-578373.00	866222.00	0.668 [1]
T90	90 - 85	5	5.00	5.00	48.0 K=1.00	19.6350	-581259.00	866222.00	0.671 [1]
T91	85 - 80	5	5.00	5.00	48.0 K=1.00	19.6350	-583677.00	866222.00	0.674 [1]
T92	80 - 60	5	20.00	5.00	48.0 K=1.00	19.6350	-589371.00	866222.00	0.680 [1]
T93	60 - 40	5	20.00	5.00	48.0 K=1.00	19.6350	-589840.00	866222.00	0.681 [1]
T94	40 - 20	5	20.00	5.00	48.0 K=1.00	19.6350	-587800.00	866222.00	0.679 [1]
T95	20 - 15	5	5.00	5.00	48.0 K=1.00	19.6350	-581045.00	866222.00	0.671 [1]
T96	15 - 7	5	8.00	3.94	37.8 K=1.00	19.6350	-516052.00	935357.00	0.552 [1]
T97	7 - 0	5	8.39	1.19	11.4 K=1.00	19.6350	-680487.00	1048230.00	0.649 [1]

[1] $P_u / \phi P_n$ controls

Leg Bending Design Data (Compression)

Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{nx} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} kip-ft	ϕM_{ny} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
T1	1089.8 - 1084.9	3 3/4	0.00	32.96	0.000	0.00	32.96	0.000
T2	1084.9 - 1080	3 3/4	0.00	32.96	0.000	0.00	32.96	0.000
T3	1080 - 1060	3 3/4	0.00	32.96	0.000	0.00	32.96	0.000
T4	1060 - 1040	3 3/4	0.00	32.96	0.000	0.00	32.96	0.000
T5	1040 - 1020	3 3/4	0.00	32.96	0.000	0.00	32.96	0.000
T6	1020 - 1000	3 3/4	0.00	32.96	0.000	0.00	32.96	0.000
T7	1000 - 980	3 3/4	0.00	32.96	0.000	0.00	32.96	0.000

Section No.	Elevation	Size	M_{ux}	ϕM_{nx}	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy}	ϕM_{ny}	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
	ft		kip-ft	kip-ft		kip-ft	kip-ft	
T8	980 - 960	3 3/4	0.00	32.96	0.000	0.00	32.96	0.000
T9	960 - 940	4 1/2	0.00	56.95	0.000	0.00	56.95	0.000
T10	940 - 935	4 1/2	0.00	56.95	0.000	0.00	56.95	0.000
T11	935 - 930	4 1/2	0.00	56.95	0.000	0.00	56.95	0.000
T12	930 - 925	4 1/2	0.00	56.95	0.000	0.00	56.95	0.000
T13	925 - 920	4 1/2	0.00	56.95	0.000	0.00	56.95	0.000
T14	920 - 915	4 1/2	0.00	56.95	0.000	0.00	56.95	0.000
T15	915 - 910	4 1/2	0.00	56.95	0.000	0.00	56.95	0.000
T16	910 - 905	4 1/2	0.00	56.95	0.000	0.00	56.95	0.000
T17	905 - 900	4 1/2	0.00	56.95	0.000	0.00	56.95	0.000
T18	900 - 880	4 1/2	0.00	56.95	0.000	0.00	56.95	0.000
T19	880 - 860	4 1/2	0.00	56.95	0.000	0.00	56.95	0.000
T20	860 - 840	4 1/2	0.00	56.95	0.000	0.00	56.95	0.000
T21	840 - 820	4 1/2	0.00	56.95	0.000	0.00	56.95	0.000
T22	820 - 800	4 1/2	0.00	56.95	0.000	0.00	56.95	0.000
T23	800 - 780	4 1/2	0.00	56.95	0.000	0.00	56.95	0.000
T24	780 - 775	4 1/2	0.00	56.95	0.000	0.00	56.95	0.000
T25	775 - 770	4 1/2	0.00	56.95	0.000	0.00	56.95	0.000
T26	770 - 765	4 1/2	0.00	56.95	0.000	0.00	56.95	0.000
T27	765 - 760	4 1/2	0.00	56.95	0.000	0.00	56.95	0.000
T28	760 - 755	4 1/2	0.00	56.95	0.000	0.00	56.95	0.000
T29	755 - 750	4 1/2	0.00	56.95	0.000	0.00	56.95	0.000
T30	750 - 745	4 1/2	0.00	56.95	0.000	0.00	56.95	0.000
T31	745 - 740	4 1/2	0.00	56.95	0.000	0.00	56.95	0.000
T32	740 - 720	4 1/2	0.00	56.95	0.000	0.00	56.95	0.000
T33	720 - 700	4 1/2	0.00	56.95	0.000	0.00	56.95	0.000
T34	700 - 680	4 1/2	0.00	56.95	0.000	0.00	56.95	0.000
T35	680 - 660	4 1/2	0.00	56.95	0.000	0.00	56.95	0.000
T36	660 - 640	4 1/2	0.00	56.95	0.000	0.00	56.95	0.000
T37	640 - 620	5	0.00	78.13	0.000	0.00	78.13	0.000
T38	620 - 615	5	0.00	78.13	0.000	0.00	78.13	0.000
T39	615 - 610	5	0.00	78.13	0.000	0.00	78.13	0.000
T40	610 - 605	5	0.00	78.13	0.000	0.00	78.13	0.000
T41	605 - 600	5	0.00	78.13	0.000	0.00	78.13	0.000
T42	600 - 595	5	0.00	78.13	0.000	0.00	78.13	0.000
T43	595 - 590	5	0.00	78.13	0.000	0.00	78.13	0.000
T44	590 - 585	5	0.00	78.13	0.000	0.00	78.13	0.000
T45	585 - 580	5	0.00	78.13	0.000	0.00	78.13	0.000
T46	580 - 560	4 3/4	0.00	66.98	0.000	0.00	66.98	0.000
T47	560 - 540	4 3/4	0.00	66.98	0.000	0.00	66.98	0.000
T48	540 - 535	4 3/4	0.00	66.98	0.000	0.00	66.98	0.000
T49	535 - 530	4 3/4	0.00	66.98	0.000	0.00	66.98	0.000
T50	530 - 525	4 3/4	0.00	66.98	0.000	0.00	66.98	0.000
T51	525 - 520	4 3/4	0.00	66.98	0.000	0.00	66.98	0.000
T52	520 - 500	4 3/4	0.00	66.98	0.000	0.00	66.98	0.000
T53	500 - 480	4 3/4	0.00	66.98	0.000	0.00	66.98	0.000
T54	480 - 460	4 3/4	0.00	66.98	0.000	0.00	66.98	0.000
T55	460 - 440	5	0.00	78.13	0.000	0.00	78.13	0.000
T56	440 - 435	5	0.00	78.13	0.000	0.00	78.13	0.000
T57	435 - 430	5	0.00	78.13	0.000	0.00	78.13	0.000
T58	430 - 425	5	0.00	78.13	0.000	0.00	78.13	0.000
T59	425 - 420	5	0.00	78.13	0.000	0.00	78.13	0.000
T60	420 - 415	5	0.00	78.13	0.000	0.00	78.13	0.000
T61	415 - 410	5	0.00	78.13	0.000	0.00	78.13	0.000
T62	410 - 405	5	0.00	78.13	0.000	0.00	78.13	0.000
T63	405 - 400	5	0.00	78.13	0.000	0.00	78.13	0.000
T64	400 - 380	5	0.00	78.13	0.000	0.00	78.13	0.000
T65	380 - 360	5	0.00	78.13	0.000	0.00	78.13	0.000
T66	360 - 340	5	0.00	78.13	0.000	0.00	78.13	0.000
T67	340 - 320	5	0.00	78.13	0.000	0.00	78.13	0.000

Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{nx} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} kip-ft	ϕM_{ny} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
T68	320 - 300	5	0.00	78.13	0.000	0.00	78.13	0.000
T69	300 - 280	5	0.00	93.75	0.000	0.00	93.75	0.000
T70	280 - 275	5	0.00	93.75	0.000	0.00	93.75	0.000
T71	275 - 270	5	0.00	93.75	0.000	0.00	93.75	0.000
T72	270 - 265	5	0.00	93.75	0.000	0.00	93.75	0.000
T73	265 - 260	5	0.00	93.75	0.000	0.00	93.75	0.000
T74	260 - 255	5	0.00	93.75	0.000	0.00	93.75	0.000
T75	255 - 250	5	0.00	93.75	0.000	0.00	93.75	0.000
T76	250 - 245	5	0.00	93.75	0.000	0.00	93.75	0.000
T77	245 - 240	5	0.00	93.75	0.000	0.00	93.75	0.000
T78	240 - 220	5	0.00	93.75	0.000	0.00	93.75	0.000
T79	220 - 200	5	0.00	93.75	0.000	0.00	93.75	0.000
T80	200 - 180	5	0.00	93.75	0.000	0.00	93.75	0.000
T81	180 - 160	5	0.00	93.75	0.000	0.00	93.75	0.000
T82	160 - 140	5	0.00	93.75	0.000	0.00	93.75	0.000
T83	140 - 120	5	0.00	93.75	0.000	0.00	93.75	0.000
T84	120 - 115	5	0.00	93.75	0.000	0.00	93.75	0.000
T85	115 - 110	5	0.00	93.75	0.000	0.00	93.75	0.000
T86	110 - 105	5	0.00	93.75	0.000	0.00	93.75	0.000
T87	105 - 100	5	0.00	93.75	0.000	0.00	93.75	0.000
T88	100 - 95	5	0.00	93.75	0.000	0.00	93.75	0.000
T89	95 - 90	5	0.00	93.75	0.000	0.00	93.75	0.000
T90	90 - 85	5	0.00	93.75	0.000	0.00	93.75	0.000
T91	85 - 80	5	0.00	93.75	0.000	0.00	93.75	0.000
T92	80 - 60	5	0.00	93.75	0.000	0.00	93.75	0.000
T93	60 - 40	5	0.00	93.75	0.000	0.00	93.75	0.000
T94	40 - 20	5	0.00	93.75	0.000	0.00	93.75	0.000
T95	20 - 15	5	0.00	93.75	0.000	0.00	93.75	0.000
T96	15 - 7	5	0.00	93.75	0.000	0.00	93.75	0.000
T97	7 - 0	5	0.00	93.75	0.000	0.00	93.75	0.000

Leg Interaction Design Data (Compression)

Section No.	Elevation ft	Size	Ratio $\frac{P_u}{\phi P_n}$	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	Ratio $\frac{M_{uy}}{\phi M_{ny}}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
T1	1089.8 - 1084.9	3 3/4	0.238	0.000	0.000	0.238 [1] ✔	1.000	4.8.1 ✔
T2	1084.9 - 1080	3 3/4	0.342	0.000	0.000	0.342 [1] ✔	1.000	4.8.1 ✔
T3	1080 - 1060	3 3/4	0.430	0.000	0.000	0.430 [1] ✔	1.000	4.8.1 ✔
T4	1060 - 1040	3 3/4	0.487	0.000	0.000	0.487 [1] ✔	1.000	4.8.1 ✔
T5	1040 - 1020	3 3/4	0.516	0.000	0.000	0.516 [1] ✔	1.000	4.8.1 ✔
T6	1020 - 1000	3 3/4	0.521	0.000	0.000	0.521 [1] ✔	1.000	4.8.1 ✔
T7	1000 - 980	3 3/4	0.515	0.000	0.000	0.515 [1] ✔	1.000	4.8.1 ✔
T8	980 - 960	3 3/4	0.468	0.000	0.000	0.468 [1] ✔	1.000	4.8.1 ✔
T9	960 - 940	4 1/2	0.309	0.000	0.000	0.309 [1] ✔	1.000	4.8.1 ✔

Section No.	Elevation ft	Size	Ratio $P_u/\phi P_n$	Ratio $M_{ux}/\phi M_{nx}$	Ratio $M_{uy}/\phi M_{ny}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
T10	940 - 935	4 1/2	0.328	0.000	0.000	0.328 [1]	1.000	4.8.1
T11	935 - 930	4 1/2	0.348	0.000	0.000	0.348 [1]	1.000	4.8.1
T12	930 - 925	4 1/2	0.370	0.000	0.000	0.370 [1]	1.000	4.8.1
T13	925 - 920	4 1/2	0.393	0.000	0.000	0.393 [1]	1.000	4.8.1
T14	920 - 915	4 1/2	0.435	0.000	0.000	0.435 [1]	1.000	4.8.1
T15	915 - 910	4 1/2	0.428	0.000	0.000	0.428 [1]	1.000	4.8.1
T16	910 - 905	4 1/2	0.424	0.000	0.000	0.424 [1]	1.000	4.8.1
T17	905 - 900	4 1/2	0.421	0.000	0.000	0.421 [1]	1.000	4.8.1
T18	900 - 880	4 1/2	0.419	0.000	0.000	0.419 [1]	1.000	4.8.1
T19	880 - 860	4 1/2	0.420	0.000	0.000	0.420 [1]	1.000	4.8.1
T20	860 - 840	4 1/2	0.437	0.000	0.000	0.437 [1]	1.000	4.8.1
T21	840 - 820	4 1/2	0.478	0.000	0.000	0.478 [1]	1.000	4.8.1
T22	820 - 800	4 1/2	0.529	0.000	0.000	0.529 [1]	1.000	4.8.1
T23	800 - 780	4 1/2	0.588	0.000	0.000	0.588 [1]	1.000	4.8.1
T24	780 - 775	4 1/2	0.605	0.000	0.000	0.605 [1]	1.000	4.8.1
T25	775 - 770	4 1/2	0.621	0.000	0.000	0.621 [1]	1.000	4.8.1
T26	770 - 765	4 1/2	0.639	0.000	0.000	0.639 [1]	1.000	4.8.1
T27	765 - 760	4 1/2	0.658	0.000	0.000	0.658 [1]	1.000	4.8.1
T28	760 - 755	4 1/2	0.670	0.000	0.000	0.670 [1]	1.000	4.8.1
T29	755 - 750	4 1/2	0.653	0.000	0.000	0.653 [1]	1.000	4.8.1
T30	750 - 745	4 1/2	0.638	0.000	0.000	0.638 [1]	1.000	4.8.1
T31	745 - 740	4 1/2	0.623	0.000	0.000	0.623 [1]	1.000	4.8.1
T32	740 - 720	4 1/2	0.610	0.000	0.000	0.610 [1]	1.000	4.8.1
T33	720 - 700	4 1/2	0.564	0.000	0.000	0.564 [1]	1.000	4.8.1
T34	700 - 680	4 1/2	0.534	0.000	0.000	0.534 [1]	1.000	4.8.1
T35	680 - 660	4 1/2	0.547	0.000	0.000	0.547 [1]	1.000	4.8.1

Section No.	Elevation ft	Size	Ratio $P_u/\phi P_n$	Ratio $M_{ux}/\phi M_{nx}$	Ratio $M_{uy}/\phi M_{ny}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
T36	660 - 640	4 1/2	0.590	0.000	0.000	0.590 [1] ✔	1.000	4.8.1 ✔
T37	640 - 620	5	0.505	0.000	0.000	0.505 [1] ✔	1.000	4.8.1 ✔
T38	620 - 615	5	0.519	0.000	0.000	0.519 [1] ✔	1.000	4.8.1 ✔
T39	615 - 610	5	0.532	0.000	0.000	0.532 [1] ✔	1.000	4.8.1 ✔
T40	610 - 605	5	0.547	0.000	0.000	0.547 [1] ✔	1.000	4.8.1 ✔
T41	605 - 600	5	0.563	0.000	0.000	0.563 [1] ✔	1.000	4.8.1 ✔
T42	600 - 595	5	0.576	0.000	0.000	0.576 [1] ✔	1.000	4.8.1 ✔
T43	595 - 590	5	0.561	0.000	0.000	0.561 [1] ✔	1.000	4.8.1 ✔
T44	590 - 585	5	0.547	0.000	0.000	0.547 [1] ✔	1.000	4.8.1 ✔
T45	585 - 580	5	0.533	0.000	0.000	0.533 [1] ✔	1.000	4.8.1 ✔
T46	580 - 560	4 3/4	0.587	0.000	0.000	0.587 [1] ✔	1.000	4.8.1 ✔
T47	560 - 540	4 3/4	0.568	0.000	0.000	0.568 [1] ✔	1.000	4.8.1 ✔
T48	540 - 535	4 3/4	0.564	0.000	0.000	0.564 [1] ✔	1.000	4.8.1 ✔
T49	535 - 530	4 3/4	0.571	0.000	0.000	0.571 [1] ✔	1.000	4.8.1 ✔
T50	530 - 525	4 3/4	0.573	0.000	0.000	0.573 [1] ✔	1.000	4.8.1 ✔
T51	525 - 520	4 3/4	0.575	0.000	0.000	0.575 [1] ✔	1.000	4.8.1 ✔
T52	520 - 500	4 3/4	0.583	0.000	0.000	0.583 [1] ✔	1.000	4.8.1 ✔
T53	500 - 480	4 3/4	0.591	0.000	0.000	0.591 [1] ✔	1.000	4.8.1 ✔
T54	480 - 460	4 3/4	0.607	0.000	0.000	0.607 [1] ✔	1.000	4.8.1 ✔
T55	460 - 440	5	0.559	0.000	0.000	0.559 [1] ✔	1.000	4.8.1 ✔
T56	440 - 435	5	0.565	0.000	0.000	0.565 [1] ✔	1.000	4.8.1 ✔
T57	435 - 430	5	0.571	0.000	0.000	0.571 [1] ✔	1.000	4.8.1 ✔
T58	430 - 425	5	0.578	0.000	0.000	0.578 [1] ✔	1.000	4.8.1 ✔
T59	425 - 420	5	0.587	0.000	0.000	0.587 [1] ✔	1.000	4.8.1 ✔
T60	420 - 415	5	0.624	0.000	0.000	0.624 [1] ✔	1.000	4.8.1 ✔
T61	415 - 410	5	0.618	0.000	0.000	0.618 [1] ✔	1.000	4.8.1 ✔

Section No.	Elevation ft	Size	Ratio $P_u/\phi P_n$	Ratio $M_{ux}/\phi M_{nx}$	Ratio $M_{uy}/\phi M_{ny}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
T62	410 - 405	5	0.615	0.000	0.000	0.615 [1] ✔	1.000	4.8.1 ✔
T63	405 - 400	5	0.613	0.000	0.000	0.613 [1] ✔	1.000	4.8.1 ✔
T64	400 - 380	5	0.611	0.000	0.000	0.611 [1] ✔	1.000	4.8.1 ✔
T65	380 - 360	5	0.609	0.000	0.000	0.609 [1] ✔	1.000	4.8.1 ✔
T66	360 - 340	5	0.615	0.000	0.000	0.615 [1] ✔	1.000	4.8.1 ✔
T67	340 - 320	5	0.619	0.000	0.000	0.619 [1] ✔	1.000	4.8.1 ✔
T68	320 - 300	5	0.621	0.000	0.000	0.621 [1] ✔	1.000	4.8.1 ✔
T69	300 - 280	5	0.545	0.000	0.000	0.545 [1] ✔	1.000	4.8.1 ✔
T70	280 - 275	5	0.548	0.000	0.000	0.548 [1] ✔	1.000	4.8.1 ✔
T71	275 - 270	5	0.552	0.000	0.000	0.552 [1] ✔	1.000	4.8.1 ✔
T72	270 - 265	5	0.556	0.000	0.000	0.556 [1] ✔	1.000	4.8.1 ✔
T73	265 - 260	5	0.564	0.000	0.000	0.564 [1] ✔	1.000	4.8.1 ✔
T74	260 - 255	5	0.588	0.000	0.000	0.588 [1] ✔	1.000	4.8.1 ✔
T75	255 - 250	5	0.580	0.000	0.000	0.580 [1] ✔	1.000	4.8.1 ✔
T76	250 - 245	5	0.575	0.000	0.000	0.575 [1] ✔	1.000	4.8.1 ✔
T77	245 - 240	5	0.580	0.000	0.000	0.580 [1] ✔	1.000	4.8.1 ✔
T78	240 - 220	5	0.608	0.000	0.000	0.608 [1] ✔	1.000	4.8.1 ✔
T79	220 - 200	5	0.631	0.000	0.000	0.631 [1] ✔	1.000	4.8.1 ✔
T80	200 - 180	5	0.648	0.000	0.000	0.648 [1] ✔	1.000	4.8.1 ✔
T81	180 - 160	5	0.657	0.000	0.000	0.657 [1] ✔	1.000	4.8.1 ✔
T82	160 - 140	5	0.658	0.000	0.000	0.658 [1] ✔	1.000	4.8.1 ✔
T83	140 - 120	5	0.657	0.000	0.000	0.657 [1] ✔	1.000	4.8.1 ✔
T84	120 - 115	5	0.649	0.000	0.000	0.649 [1] ✔	1.000	4.8.1 ✔
T85	115 - 110	5	0.646	0.000	0.000	0.646 [1] ✔	1.000	4.8.1 ✔
T86	110 - 105	5	0.643	0.000	0.000	0.643 [1] ✔	1.000	4.8.1 ✔
T87	105 - 100	5	0.642	0.000	0.000	0.642 [1] ✔	1.000	4.8.1 ✔

Section No.	Elevation ft	Size	Ratio $\frac{P_u}{\phi P_n}$	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	Ratio $\frac{M_{uy}}{\phi M_{ny}}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
T88	100 - 95	5	0.668	0.000	0.000	0.668 [1] ✔	1.000	4.8.1 ✔
T89	95 - 90	5	0.668	0.000	0.000	0.668 [1] ✔	1.000	4.8.1 ✔
T90	90 - 85	5	0.671	0.000	0.000	0.671 [1] ✔	1.000	4.8.1 ✔
T91	85 - 80	5	0.674	0.000	0.000	0.674 [1] ✔	1.000	4.8.1 ✔
T92	80 - 60	5	0.680	0.000	0.000	0.680 [1] ✔	1.000	4.8.1 ✔
T93	60 - 40	5	0.681	0.000	0.000	0.681 [1] ✔	1.000	4.8.1 ✔
T94	40 - 20	5	0.679	0.000	0.000	0.679 [1] ✔	1.000	4.8.1 ✔
T95	20 - 15	5	0.671	0.000	0.000	0.671 [1] ✔	1.000	4.8.1 ✔
T96	15 - 7	5	0.552	0.000	0.000	0.552 [1] ✔	1.000	4.8.1 ✔
T97	7 - 0	5	0.649	0.000	0.000	0.649 [1] ✔	1.000	4.8.1 ✔

[1] P_u / ϕP_n controls

Diagonal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T1	1089.8 - 1084.9	2L2 1/2x2 1/2x5/16	6.33	5.62	88.6 K=1.00	2.9300	-21335.30	62785.60	0.340 [1] ✔
T48	540 - 535	1 1/8	6.40	6.09	181.8 K=0.70	0.9940	-3981.73	6796.01	0.586 [1] ✔
T96	15 - 7	2L2 1/2x2 1/2x1/4	8.83	8.37	95.7 K=1.00	2.3800	-37991.60	47619.70	0.798 [1] ✔

[1] P_u / ϕP_n controls

Horizontal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T3	1080 - 1060	2L2 1/2x2 1/2x1/4	8.00	7.23	112.8 K=1.00	2.3800	-9492.17	39461.10	0.241 [1] ✔
T4	1060 - 1040	2L2 1/2x2 1/2x1/4	8.00	7.23	112.8 K=1.00	2.3800	-9457.57	39461.10	0.240 [1] ✔
T5	1040 - 1020	2L2 1/2x2 1/2x1/4	8.00	7.23	112.8	2.3800	-9564.52	39461.10	0.242 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
					K=1.00				✔
T6	1020 - 1000	2L2 1/2x2 1/2x1/4	8.00	7.23	112.8	2.3800	-9592.06	39461.10	0.243 [1]
					K=1.00				✔
T7	1000 - 980	2L2 1/2x2 1/2x1/4	8.00	7.23	112.8	2.3800	-9579.33	39461.10	0.243 [1]
					K=1.00				✔
T8	980 - 960	2L2 1/2x2 1/2x1/4	8.00	7.23	112.8	2.3800	-9684.92	39461.10	0.245 [1]
					K=1.00				✔
T9	960 - 940	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8	2.3800	-11631.90	39918.80	0.291 [1]
					K=1.00				✔
T18	900 - 880	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8	2.3800	-8365.51	39918.80	0.210 [1]
					K=1.00				✔
T19	880 - 860	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8	2.3800	-8658.13	39918.80	0.217 [1]
					K=1.00				✔
T20	860 - 840	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8	2.3800	-8476.99	39918.80	0.212 [1]
					K=1.00				✔
T21	840 - 820	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8	2.3800	-8650.39	39918.80	0.217 [1]
					K=1.00				✔
T22	820 - 800	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8	2.3800	-10108.80	39918.80	0.253 [1]
					K=1.00				✔
T23	800 - 780	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8	2.3800	-12279.70	39918.80	0.308 [1]
					K=1.00				✔
T32	740 - 720	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8	2.3800	-7943.87	39918.80	0.199 [1]
					K=1.00				✔
T33	720 - 700	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8	2.3800	-7644.42	39918.80	0.191 [1]
					K=1.00				✔
T34	700 - 680	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8	2.3800	-7418.07	39918.80	0.186 [1]
					K=1.00				✔
T35	680 - 660	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8	2.3800	-7274.78	39918.80	0.182 [1]
					K=1.00				✔
T36	660 - 640	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8	2.3800	-7338.98	39918.80	0.184 [1]
					K=1.00				✔
T37	640 - 620	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2	2.3800	-9244.87	40224.70	0.230 [1]
					K=1.00				✔
T46	580 - 560	2L2 1/2x2 1/2x1/4	8.00	7.15	111.5	2.3800	-8775.79	40071.70	0.219 [1]
					K=1.00				✔
T47	560 - 540	2L2 1/2x2 1/2x1/4	8.00	7.15	111.5	2.3800	-6844.23	40071.70	0.171 [1]
					K=1.00				✔
T52	520 - 500	2L2 1/2x2 1/2x1/4	8.00	7.15	111.5	2.3800	-6680.13	40071.70	0.167 [1]
					K=1.00				✔
T53	500 - 480	2L2 1/2x2 1/2x1/4	8.00	7.15	111.5	2.3800	-6772.30	40071.70	0.169 [1]
					K=1.00				✔
T54	480 - 460	2L2 1/2x2 1/2x1/4	8.00	7.15	111.5	2.3800	-6950.50	40071.70	0.173 [1]
					K=1.00				✔
T55	460 - 440	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2	2.3800	-7425.22	40224.70	0.185 [1]
					K=1.00				✔
T64	400 - 380	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2	2.3800	-8440.32	40224.70	0.210 [1]
					K=1.00				✔
T65	380 - 360	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2	2.3800	-7877.41	40224.70	0.196 [1]
					K=1.00				✔
T66	360 - 340	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2	2.3800	-7954.84	40224.70	0.198 [1]
					K=1.00				✔
T67	340 - 320	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2	2.3800	-8007.21	40224.70	0.199 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
					K=1.00				✔
T68	320 - 300	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-8465.28	40224.70	0.210 [1] ✔
T69	300 - 280	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-11005.00	40224.70	0.274 [1] ✔
T78	240 - 220	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-13961.70	40224.70	0.347 [1] ✔
T79	220 - 200	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-11766.30	40224.70	0.293 [1] ✔
T80	200 - 180	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-9729.60	40224.70	0.242 [1] ✔
T81	180 - 160	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-9856.30	40224.70	0.245 [1] ✔
T82	160 - 140	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-9878.04	40224.70	0.246 [1] ✔
T83	140 - 120	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-11459.10	40224.70	0.285 [1] ✔
T92	80 - 60	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-10208.20	40224.70	0.254 [1] ✔
T93	60 - 40	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-10216.30	40224.70	0.254 [1] ✔
T94	40 - 20	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-10181.00	40224.70	0.253 [1] ✔
T97	7 - 0	C15x33.9	1.19	0.78	10.3 K=1.00	9.9600	-3951.80	320901.00	0.012 [1] ✔

[1] P_u / ϕP_n controls

Top Girt Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T1	1089.8 - 1084.9	MC18x42.7	8.00	3.84	43.1 K=1.00	12.6000	-1.79	370194.00	0.000 [1] ✔
T2	1084.9 - 1080	2L2 1/2x2 1/2x5/16	8.00	7.23	114.0 K=1.00	2.9300	-1118.91	47897.20	0.023 [*1] ✔
T3	1080 - 1060	2L2 1/2x2 1/2x1/4	8.00	7.23	112.8 K=1.00	2.3800	-10989.80	39461.10	0.278 [1] ✔
T4	1060 - 1040	2L2 1/2x2 1/2x1/4	8.00	7.23	112.8 K=1.00	2.3800	-9292.09	39461.10	0.235 [1] ✔
T5	1040 - 1020	2L2 1/2x2 1/2x1/4	8.00	7.23	112.8 K=1.00	2.3800	-9497.58	39461.10	0.241 [1] ✔
T6	1020 - 1000	2L2 1/2x2 1/2x1/4	8.00	7.23	112.8 K=1.00	2.3800	-9567.51	39461.10	0.242 [1] ✔
T7	1000 - 980	2L2 1/2x2 1/2x1/4	8.00	7.23	112.8 K=1.00	2.3800	-9563.32	39461.10	0.242 [1] ✔
T8	980 - 960	2L2 1/2x2 1/2x1/4	8.00	7.23	112.8 K=1.00	2.3800	-9199.17	39461.10	0.233 [1] ✔

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T9	960 - 940	2L2 1/2x2 1/2x1/4	8.00	7.23	112.8 K=1.00	2.3800	-10177.40	39461.10	0.258 [1] ✔
T10	940 - 935	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8 K=1.00	2.3800	-12137.00	39918.80	0.304 [1] ✔
T11	935 - 930	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8 K=1.00	2.3800	-12486.30	39918.80	0.313 [1] ✔
T12	930 - 925	2L2 1/2x2 1/2x5/16	8.00	7.17	113.0 K=1.00	2.9300	-13097.00	48464.60	0.270 [1] ✔
T13	925 - 920	2L2 1/2x2 1/2x5/16	8.00	7.17	113.0 K=1.00	2.9300	-14445.30	48464.60	0.298 [1] ✔
T14	920 - 915	2L2 1/2x2 1/2x5/16	8.00	7.17	113.0 K=1.00	2.9300	-1478.42	48464.60	0.031 [1] ✔
T15	915 - 910	2L2 1/2x2 1/2x5/16	8.00	7.17	113.0 K=1.00	2.9300	-12521.00	48464.60	0.258 [1] ✔
T16	910 - 905	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8 K=1.00	2.3800	-9185.87	39918.80	0.230 [1] ✔
T17	905 - 900	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8 K=1.00	2.3800	-8454.95	39918.80	0.212 [1] ✔
T18	900 - 880	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8 K=1.00	2.3800	-8385.43	39918.80	0.210 [1] ✔
T19	880 - 860	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8 K=1.00	2.3800	-8829.32	39918.80	0.221 [1] ✔
T20	860 - 840	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8 K=1.00	2.3800	-8385.66	39918.80	0.210 [1] ✔
T21	840 - 820	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8 K=1.00	2.3800	-8515.26	39918.80	0.213 [1] ✔
T22	820 - 800	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8 K=1.00	2.3800	-8734.03	39918.80	0.219 [1] ✔
T23	800 - 780	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8 K=1.00	2.3800	-10553.00	39918.80	0.264 [1] ✔
T24	780 - 775	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8 K=1.00	2.3800	-12897.50	39918.80	0.323 [1] ✔
T25	775 - 770	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8 K=1.00	2.3800	-13328.10	39918.80	0.334 [1] ✔
T26	770 - 765	2L2 1/2x2 1/2x5/16	8.00	7.17	113.0 K=1.00	2.9300	-14052.20	48464.60	0.290 [1] ✔
T27	765 - 760	2L2 1/2x2 1/2x5/16	8.00	7.17	113.0 K=1.00	2.9300	-14068.10	48464.60	0.290 [1] ✔
T29	755 - 750	2L2 1/2x2 1/2x5/16	8.00	7.17	113.0 K=1.00	2.9300	-12170.10	48464.60	0.251 [1] ✔
T30	750 - 745	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8 K=1.00	2.3800	-8881.82	39918.80	0.222 [1] ✔
T31	745 - 740	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8 K=1.00	2.3800	-8050.10	39918.80	0.202 [1] ✔
T32	740 - 720	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8 K=1.00	2.3800	-8036.92	39918.80	0.201 [1] ✔
T33	720 - 700	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8 K=1.00	2.3800	-7709.99	39918.80	0.193 [1] ✔
T34	700 - 680	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8 K=1.00	2.3800	-7466.58	39918.80	0.187 [1] ✔
T35	680 - 660	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8 K=1.00	2.3800	-7302.57	39918.80	0.183 [1] ✔

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T36	660 - 640	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8 K=1.00	2.3800	-7277.91	39918.80	0.182 [1] ✔
T37	640 - 620	2L2 1/2x2 1/2x1/4	8.00	7.17	111.8 K=1.00	2.3800	-7722.98	39918.80	0.193 [1] ✔
T38	620 - 615	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-9812.75	40224.70	0.244 [1] ✔
T39	615 - 610	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-10169.50	40224.70	0.253 [1] ✔
T40	610 - 605	2L2 1/2x2 1/2x5/16	8.00	7.13	112.4 K=1.00	2.9300	-10910.20	48843.90	0.223 [1] ✔
T41	605 - 600	2L2 1/2x2 1/2x5/16	8.00	7.13	112.4 K=1.00	2.9300	-12622.20	48843.90	0.258 [1] ✔
T43	595 - 590	2L2 1/2x2 1/2x5/16	8.00	7.13	112.4 K=1.00	2.9300	-11518.10	48843.90	0.236 [1] ✔
T44	590 - 585	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-10308.40	40224.70	0.256 [1] ✔
T45	585 - 580	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-9725.08	40224.70	0.242 [1] ✔
T46	580 - 560	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-9317.94	40224.70	0.232 [1] ✔
T47	560 - 540	2L2 1/2x2 1/2x1/4	8.00	7.15	111.5 K=1.00	2.3800	-7185.06	40071.70	0.179 [1] ✔
T48	540 - 535	2L2 1/2x2 1/2x1/4	8.00	5.47	62.6 K=1.00	2.3800	-5694.76	62754.10	0.091 [1] ✔
T49	535 - 530	2L2 1/2x2 1/2x1/4	8.00	7.15	111.5 K=1.00	2.3800	-3472.12	40071.70	0.087 [1] ✔
T50	530 - 525	2L2 1/2x2 1/2x1/4	8.00	7.15	111.5 K=1.00	2.3800	-6569.29	40071.70	0.164 [1] ✔
T51	525 - 520	2L2 1/2x2 1/2x1/4	8.00	7.15	111.5 K=1.00	2.3800	-6291.10	40071.70	0.157 [1] ✔
T52	520 - 500	2L2 1/2x2 1/2x1/4	8.00	7.15	111.5 K=1.00	2.3800	-6237.09	40071.70	0.156 [1] ✔
T53	500 - 480	2L2 1/2x2 1/2x1/4	8.00	7.15	111.5 K=1.00	2.3800	-6228.54	40071.70	0.155 [1] ✔
T54	480 - 460	2L2 1/2x2 1/2x1/4	8.00	7.15	111.5 K=1.00	2.3800	-6182.67	40071.70	0.154 [1] ✔
T55	460 - 440	2L2 1/2x2 1/2x1/4	8.00	7.15	111.5 K=1.00	2.3800	-6316.17	40071.70	0.158 [1] ✔
T56	440 - 435	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-7986.79	40224.70	0.199 [1] ✔
T57	435 - 430	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-8371.96	40224.70	0.208 [1] ✔
T58	430 - 425	2L2 1/2x2 1/2x5/16	8.00	7.13	112.4 K=1.00	2.9300	-9069.19	48843.90	0.186 [1] ✔
T59	425 - 420	2L2 1/2x2 1/2x5/16	8.00	7.13	112.4 K=1.00	2.9300	-10076.20	48843.90	0.206 [1] ✔
T61	415 - 410	2L2 1/2x2 1/2x5/16	8.00	7.13	112.4 K=1.00	2.9300	-10615.30	48843.90	0.217 [1] ✔
T62	410 - 405	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-10673.20	40224.70	0.265 [1] ✔
T63	405 - 400	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-10073.00	40224.70	0.250 [1] ✔

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T64	400 - 380	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-9325.78	40224.70	0.232 [1] ✔
T65	380 - 360	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-6575.72	40224.70	0.163 [1] ✔
T66	360 - 340	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-6256.94	40224.70	0.156 [1] ✔
T67	340 - 320	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-6208.26	40224.70	0.154 [1] ✔
T68	320 - 300	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-6504.82	40224.70	0.162 [1] ✔
T69	300 - 280	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-9112.97	40224.70	0.227 [1] ✔
T70	280 - 275	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-11653.20	40224.70	0.290 [1] ✔
T71	275 - 270	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-12034.90	40224.70	0.299 [1] ✔
T72	270 - 265	2L2 1/2x2 1/2x5/16	8.00	7.13	112.4 K=1.00	2.9300	-12812.30	48843.90	0.262 [1] ✔
T73	265 - 260	2L2 1/2x2 1/2x5/16	8.00	7.13	112.4 K=1.00	2.9300	-12457.10	48843.90	0.255 [1] ✔
T75	255 - 250	2L2 1/2x2 1/2x5/16	8.00	7.13	112.4 K=1.00	2.9300	-14999.30	48843.90	0.307 [1] ✔
T76	250 - 245	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-15282.90	40224.70	0.380 [1] ✔
T77	245 - 240	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-14827.30	40224.70	0.369 [1] ✔
T78	240 - 220	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-14483.90	40224.70	0.360 [1] ✔
T79	220 - 200	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-12340.40	40224.70	0.307 [1] ✔
T80	200 - 180	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-9950.19	40224.70	0.247 [1] ✔
T81	180 - 160	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-5895.43	40224.70	0.147 [1] ✔
T82	160 - 140	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-5942.34	40224.70	0.148 [1] ✔
T83	140 - 120	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-9029.65	40224.70	0.224 [1] ✔
T84	120 - 115	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-12290.10	40224.70	0.306 [1] ✔
T85	115 - 110	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-12841.40	40224.70	0.319 [1] ✔
T86	110 - 105	2L2 1/2x2 1/2x5/16	8.00	7.13	112.4 K=1.00	2.9300	-13803.80	48843.90	0.283 [1] ✔
T87	105 - 100	2L2 1/2x2 1/2x5/16	8.00	7.13	112.4 K=1.00	2.9300	-13655.40	48843.90	0.280 [1] ✔
T89	95 - 90	2L2 1/2x2 1/2x5/16	8.00	7.13	112.4 K=1.00	2.9300	-9936.52	48843.90	0.203 [1] ✔
T90	90 - 85	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-9885.12	40224.70	0.246 [1] ✔
T91	85 - 80	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-9140.47	40224.70	0.227 [1] ✔

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T92	80 - 60	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-8496.12	40224.70	0.211 [1] ✔
T93	60 - 40	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-5366.50	40224.70	0.133 [1] ✔
T94	40 - 20	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-6453.67	40224.70	0.160 [1] ✔
T95	20 - 15	2L2 1/2x2 1/2x1/4	8.00	7.13	111.2 K=1.00	2.3800	-8326.61	40224.70	0.207 [1] ✔
T96	15 - 7	2L2 1/2x2 1/2x1/4	8.00	5.69	65.0 K=1.00	2.3800	-38.78	61734.10	0.001 [1] ✔

[*] DL controls
[1] P_u / ϕP_n controls

Redundant Horizontal (1) Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T96	15 - 7	2L2 1/2x2 1/2x1/4	2.00	1.79	28.0 K=1.00	2.3800	-8938.28	74003.20	0.121 [1] ✔

[1] P_u / ϕP_n controls

Redundant Diagonal (1) Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T96	15 - 7	2L2 1/2x2 1/2x1/4	4.42	3.96	61.7 K=1.00	2.3800	-34464.80	63093.00	0.546 [1] ✔

[1] P_u / ϕP_n controls

Redundant Sub-Horizontal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T96	15 - 7	2L3x3x1/4	4.00	4.00	51.6 K=1.00	2.8800	-27675.50	81102.20	0.341 [1] ✔

[1] P_u / ϕP_n controls

Inner Bracing Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T1	1089.8 - 1084.9	MC18x42.7	4.00	4.00	44.9 K=1.00	12.6000	-1.43	489418.00	0.000 [1] ✔

[1] P_u / ϕP_n controls

Tension Checks

Leg Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T4	1060 - 1040	3 3/4	20.00	5.00	64.0	11.0447	1723.24	497010.00	0.003 [1]
T5	1040 - 1020	3 3/4	20.00	5.00	64.0	11.0447	14855.30	497010.00	0.030 [1]
T6	1020 - 1000	3 3/4	20.00	5.00	64.0	11.0447	17626.70	497010.00	0.035 [1]
T7	1000 - 980	3 3/4	20.00	5.00	64.0	11.0447	14808.70	497010.00	0.030 [1]

[1] P_u / ϕP_n controls

Leg Bending Design Data (Tension)

Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{nx} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} kip-ft	ϕM_{ny} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
T4	1060 - 1040	3 3/4	0.00	32.96	0.000	0.00	32.96	0.000
T5	1040 - 1020	3 3/4	0.00	32.96	0.000	0.00	32.96	0.000
T6	1020 - 1000	3 3/4	0.00	32.96	0.000	0.00	32.96	0.000
T7	1000 - 980	3 3/4	0.00	32.96	0.000	0.00	32.96	0.000

Leg Interaction Design Data (Tension)

Section No.	Elevation ft	Size	Ratio $\frac{P_u}{\phi P_n}$	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	Ratio $\frac{M_{uy}}{\phi M_{ny}}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
T4	1060 - 1040	3 3/4	0.003	0.000	0.000	0.003 [1] ✔	1.000	4.8.1 ✔
T5	1040 - 1020	3 3/4	0.030	0.000	0.000	0.030 [1]	1.000	4.8.1 ✔

Section No.	Elevation ft	Size	Ratio $\frac{P_u}{\phi P_n}$	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	Ratio $\frac{M_{uy}}{\phi M_{ny}}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
T6	1020 - 1000	3 3/4	0.035	0.000	0.000	0.035 [1]	1.000	4.8.1
T7	1000 - 980	3 3/4	0.030	0.000	0.000	0.030 [1]	1.000	4.8.1

[1] P_u / ϕP_n controls

Diagonal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T2	1084.9 - 1080	1 1/4	9.38	9.01	346.2	1.2272	13324.70	39760.80	0.335 [1]
T3	1080 - 1060	1 1/8	9.43	9.07	386.8	0.9940	11702.30	32206.20	0.363 [1]
T4	1060 - 1040	1 1/8	9.43	9.07	386.8	0.9940	8932.39	32206.20	0.277 [1]
T5	1040 - 1020	1 1/8	9.43	9.07	386.8	0.9940	7606.34	32206.20	0.236 [1]
T6	1020 - 1000	1 1/8	9.43	9.07	386.8	0.9940	7138.75	32206.20	0.222 [1]
T7	1000 - 980	1 1/8	9.43	9.07	386.8	0.9940	9438.81	32206.20	0.293 [1]
T8	980 - 960	1 1/8	9.43	9.07	386.8	0.9940	11707.70	32206.20	0.364 [1]
T9	960 - 940	1 1/8	9.43	8.99	383.6	0.9940	14024.90	32206.20	0.435 [1]
T10	940 - 935	1 1/8	9.43	8.99	383.6	0.9940	14596.40	32206.20	0.453 [1]
T11	935 - 930	1 1/8	9.43	8.99	383.6	0.9940	14971.80	32206.20	0.465 [1]
T12	930 - 925	1 1/4	9.43	8.99	345.3	1.2272	15642.60	39760.80	0.393 [1]
T13	925 - 920	1 1/4	9.43	8.99	345.3	1.2272	16124.90	39760.80	0.406 [1]
T14	920 - 915	1 1/4	9.43	8.99	345.3	1.2272	14095.10	39760.80	0.354 [1]
T15	915 - 910	1 1/4	9.43	8.99	345.3	1.2272	11241.60	39760.80	0.283 [1]
T16	910 - 905	1 1/8	9.43	8.99	383.6	0.9940	10365.60	32206.20	0.322 [1]
T17	905 - 900	1 1/8	9.43	8.99	383.6	0.9940	9850.78	32206.20	0.306 [1]
T18	900 - 880	1 1/8	9.43	8.99	383.6	0.9940	9134.28	32206.20	0.284 [1]
T19	880 - 860	1 1/8	9.43	8.99	383.6	0.9940	7113.82	32206.20	0.221 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T20	860 - 840	1 1/8	9.43	8.99	383.6	0.9940	8202.02	32206.20	0.255 [1] ✔
T21	840 - 820	1 1/8	9.43	8.99	383.6	0.9940	9945.02	32206.20	0.309 [1] ✔
T22	820 - 800	1 1/8	9.43	8.99	383.6	0.9940	12113.30	32206.20	0.376 [1] ✔
T23	800 - 780	1 1/8	9.43	8.99	383.6	0.9940	14851.70	32206.20	0.461 [1] ✔
T24	780 - 775	1 1/8	9.43	8.99	383.6	0.9940	15551.00	32206.20	0.483 [1] ✔
T25	775 - 770	1 1/8	9.43	8.99	383.6	0.9940	16008.60	32206.20	0.497 [1] ✔
T26	770 - 765	1 1/4	9.43	8.99	345.3	1.2272	16808.80	39760.80	0.423 [1] ✔
T27	765 - 760	1 1/4	9.43	8.99	345.3	1.2272	16783.40	39760.80	0.422 [1] ✔
T28	760 - 755	1 1/4	9.43	8.99	345.3	1.2272	12713.40	39760.80	0.320 [1] ✔
T29	755 - 750	1 1/4	9.43	8.99	345.3	1.2272	10219.90	39760.80	0.257 [1] ✔
T30	750 - 745	1 1/8	9.43	8.99	383.6	0.9940	9572.57	32206.20	0.297 [1] ✔
T31	745 - 740	1 1/8	9.43	8.99	383.6	0.9940	9180.00	32206.20	0.285 [1] ✔
T32	740 - 720	1 1/8	9.43	8.99	383.6	0.9940	8595.23	32206.20	0.267 [1] ✔
T33	720 - 700	1 1/8	9.43	8.99	383.6	0.9940	6738.87	32206.20	0.209 [1] ✔
T34	700 - 680	1 1/8	9.43	8.99	383.6	0.9940	5676.07	32206.20	0.176 [1] ✔
T35	680 - 660	1 1/8	9.43	8.99	383.6	0.9940	6690.85	32206.20	0.208 [1] ✔
T36	660 - 640	1 1/8	9.43	8.99	383.6	0.9940	8610.14	32206.20	0.267 [1] ✔
T37	640 - 620	1 1/8	9.43	8.94	381.6	0.9940	11234.00	32206.20	0.349 [1] ✔
T38	620 - 615	1 1/8	9.43	8.94	381.6	0.9940	11869.10	32206.20	0.369 [1] ✔
T39	615 - 610	1 1/8	9.43	8.94	381.6	0.9940	12254.80	32206.20	0.381 [1] ✔
T40	610 - 605	1 1/4	9.43	8.94	343.4	1.2272	13038.40	39760.80	0.328 [1] ✔
T41	605 - 600	1 1/4	9.43	8.94	343.4	1.2272	13689.60	39760.80	0.344 [1] ✔
T42	600 - 595	1 1/4	9.43	8.94	343.4	1.2272	13181.40	39760.80	0.332 [1] ✔
T43	595 - 590	1 1/4	9.43	8.94	343.4	1.2272	12370.60	39760.80	0.311 [1] ✔
T44	590 - 585	1 1/8	9.43	8.94	381.6	0.9940	11652.20	32206.20	0.362 [1] ✔
T45	585 - 580	1 1/8	9.43	8.94	381.6	0.9940	11342.60	32206.20	0.352 [1] ✔

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T46	580 - 560	1 1/8	9.43	8.97	382.6	0.9940	10647.70	32206.20	0.331 [1] ✔
T47	560 - 540	1 1/8	9.43	8.97	382.6	0.9940	8163.52	32206.20	0.253 [1] ✔
T48	540 - 535	1 1/8	6.40	6.09	259.7	0.9940	3798.18	32206.20	0.118 [1] ✔
T49	535 - 530	1 1/8	9.43	8.97	382.6	0.9940	6493.35	32206.20	0.202 [1] ✔
T50	530 - 525	1 1/8	9.43	8.97	382.6	0.9940	5757.03	32206.20	0.179 [1] ✔
T51	525 - 520	1 1/8	9.43	8.97	382.6	0.9940	5573.30	32206.20	0.173 [1] ✔
T52	520 - 500	1 1/8	9.43	8.97	382.6	0.9940	5315.97	32206.20	0.165 [1] ✔
T53	500 - 480	1 1/8	9.43	8.97	382.6	0.9940	5350.09	32206.20	0.166 [1] ✔
T54	480 - 460	1 1/8	9.43	8.97	382.6	0.9940	6585.53	32206.20	0.204 [1] ✔
T55	460 - 440	1 1/8	9.43	8.94	381.6	0.9940	9088.98	32206.20	0.282 [1] ✔
T56	440 - 435	1 1/8	9.43	8.94	381.6	0.9940	9723.45	32206.20	0.302 [1] ✔
T57	435 - 430	1 1/8	9.43	8.94	381.6	0.9940	10149.10	32206.20	0.315 [1] ✔
T58	430 - 425	1 1/4	9.43	8.94	343.4	1.2272	10942.80	39760.80	0.275 [1] ✔
T59	425 - 420	1 1/4	9.43	8.94	343.4	1.2272	11689.80	39760.80	0.294 [1] ✔
T60	420 - 415	1 1/4	9.43	8.94	343.4	1.2272	12590.80	39760.80	0.317 [1] ✔
T61	415 - 410	1 1/4	9.43	8.94	343.4	1.2272	12889.60	39760.80	0.324 [1] ✔
T62	410 - 405	1 1/8	9.43	8.94	381.6	0.9940	12122.00	32206.20	0.376 [1] ✔
T63	405 - 400	1 1/8	9.43	8.94	381.6	0.9940	11672.00	32206.20	0.362 [1] ✔
T64	400 - 380	1 1/8	9.43	8.94	381.6	0.9940	10347.70	32206.20	0.321 [1] ✔
T65	380 - 360	1 1/8	9.43	8.94	381.6	0.9940	7389.12	32206.20	0.229 [1] ✔
T66	360 - 340	1 1/8	9.43	8.94	381.6	0.9940	5971.24	32206.20	0.185 [1] ✔
T67	340 - 320	1 1/8	9.43	8.94	381.6	0.9940	7181.12	32206.20	0.223 [1] ✔
T68	320 - 300	1 1/8	9.43	8.94	381.6	0.9940	10261.90	32206.20	0.319 [1] ✔
T69	300 - 280	1 1/8	9.43	8.94	381.6	0.9940	13260.20	32206.20	0.412 [1] ✔
T70	280 - 275	1 1/8	9.43	8.94	381.6	0.9940	13993.50	32206.20	0.434 [1] ✔
T71	275 - 270	1 1/8	9.43	8.94	381.6	0.9940	14387.00	32206.20	0.447 [1] ✔

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T72	270 - 265	1 1/4	9.43	8.94	343.4	1.2272	15304.80	39760.80	0.385 [1] ✔
T73	265 - 260	1 1/4	9.43	8.94	343.4	1.2272	14773.50	39760.80	0.372 [1] ✔
T74	260 - 255	1 1/4	9.43	8.94	343.4	1.2272	17501.80	39760.80	0.440 [1] ✔
T75	255 - 250	1 1/4	9.43	8.94	343.4	1.2272	18338.50	39760.80	0.461 [1] ✔
T76	250 - 245	1 1/8	9.43	8.94	381.6	0.9940	17581.50	32206.20	0.546 [1] ✔
T77	245 - 240	1 1/8	9.43	8.94	381.6	0.9940	17436.70	32206.20	0.541 [1] ✔
T78	240 - 220	1 1/8	9.43	8.94	381.6	0.9940	16795.00	32206.20	0.521 [1] ✔
T79	220 - 200	1 1/8	9.43	8.94	381.6	0.9940	14238.00	32206.20	0.442 [1] ✔
T80	200 - 180	1 1/8	9.43	8.94	381.6	0.9940	11371.70	32206.20	0.353 [1] ✔
T81	180 - 160	1 1/8	9.43	8.94	381.6	0.9940	6399.36	32206.20	0.199 [1] ✔
T82	160 - 140	1 1/8	9.43	8.94	381.6	0.9940	10003.70	32206.20	0.311 [1] ✔
T83	140 - 120	1 1/8	9.43	8.94	381.6	0.9940	13840.60	32206.20	0.430 [1] ✔
T84	120 - 115	1 1/8	9.43	8.94	381.6	0.9940	14801.30	32206.20	0.460 [1] ✔
T85	115 - 110	1 1/8	9.43	8.94	381.6	0.9940	15404.40	32206.20	0.478 [1] ✔
T86	110 - 105	1 1/4	9.43	8.94	343.4	1.2272	16546.00	39760.80	0.416 [1] ✔
T87	105 - 100	1 1/4	9.43	8.94	343.4	1.2272	16178.10	39760.80	0.407 [1] ✔
T88	100 - 95	1 1/4	9.43	8.94	343.4	1.2272	12049.50	39760.80	0.303 [1] ✔
T89	95 - 90	1 1/4	9.43	8.94	343.4	1.2272	12035.70	39760.80	0.303 [1] ✔
T90	90 - 85	1 1/8	9.43	8.94	381.6	0.9940	11116.30	32206.20	0.345 [1] ✔
T91	85 - 80	1 1/8	9.43	8.94	381.6	0.9940	10508.80	32206.20	0.326 [1] ✔
T92	80 - 60	1 1/8	9.43	8.94	381.6	0.9940	9564.37	32206.20	0.297 [1] ✔
T93	60 - 40	1 1/8	9.43	8.94	381.6	0.9940	7562.99	32206.20	0.235 [1] ✔
T94	40 - 20	1 1/8	9.43	8.94	381.6	0.9940	10047.40	32206.20	0.312 [1] ✔
T95	20 - 15	1 1/8	9.43	8.94	381.6	0.9940	10359.40	32206.20	0.322 [1] ✔
T96	15 - 7	2L2 1/2x2 1/2x1/4	8.83	8.37	95.7	2.3800	10165.10	77112.00	0.132 [1] ✔

[1] P_u / ϕP_n controls

Horizontal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T3	1080 - 1060	2L2 1/2x2 1/2x1/4	8.00	7.23	120.0	1.4569	2742.42	63374.10	0.043 [1] ✔
T4	1060 - 1040	2L2 1/2x2 1/2x1/4	8.00	7.23	120.0	1.4569	3106.00	63374.10	0.049 [1] ✔
T5	1040 - 1020	2L2 1/2x2 1/2x1/4	8.00	7.23	120.0	1.4569	3295.53	63374.10	0.052 [1] ✔
T6	1020 - 1000	2L2 1/2x2 1/2x1/4	8.00	7.23	120.0	1.4569	3324.45	63374.10	0.052 [1] ✔
T7	1000 - 980	2L2 1/2x2 1/2x1/4	8.00	7.23	120.0	1.4569	3284.55	63374.10	0.052 [1] ✔
T8	980 - 960	2L2 1/2x2 1/2x1/4	8.00	7.23	120.0	1.4569	2984.74	63374.10	0.047 [1] ✔
T9	960 - 940	2L2 1/2x2 1/2x1/4	8.00	7.17	119.0	1.4569	3111.57	63374.10	0.049 [1] ✔
T18	900 - 880	2L2 1/2x2 1/2x1/4	8.00	7.17	119.0	1.4569	4213.93	63374.10	0.066 [1] ✔
T19	880 - 860	2L2 1/2x2 1/2x1/4	8.00	7.17	119.0	1.4569	4229.59	63374.10	0.067 [1] ✔
T20	860 - 840	2L2 1/2x2 1/2x1/4	8.00	7.17	119.0	1.4569	4399.05	63374.10	0.069 [1] ✔
T21	840 - 820	2L2 1/2x2 1/2x1/4	8.00	7.17	119.0	1.4569	4814.82	63374.10	0.076 [1] ✔
T22	820 - 800	2L2 1/2x2 1/2x1/4	8.00	7.17	119.0	1.4569	5323.67	63374.10	0.084 [1] ✔
T23	800 - 780	2L2 1/2x2 1/2x1/4	8.00	7.17	119.0	1.4569	5923.55	63374.10	0.093 [1] ✔
T32	740 - 720	2L2 1/2x2 1/2x1/4	8.00	7.17	119.0	1.4569	6139.10	63374.10	0.097 [1] ✔
T33	720 - 700	2L2 1/2x2 1/2x1/4	8.00	7.17	119.0	1.4569	5681.84	63374.10	0.090 [1] ✔
T34	700 - 680	2L2 1/2x2 1/2x1/4	8.00	7.17	119.0	1.4569	5371.64	63374.10	0.085 [1] ✔
T35	680 - 660	2L2 1/2x2 1/2x1/4	8.00	7.17	119.0	1.4569	5505.63	63374.10	0.087 [1] ✔
T36	660 - 640	2L2 1/2x2 1/2x1/4	8.00	7.17	119.0	1.4569	5940.26	63374.10	0.094 [1] ✔
T37	640 - 620	2L2 1/2x2 1/2x1/4	8.00	7.13	118.3	1.4569	6536.21	63374.10	0.103 [1] ✔
T46	580 - 560	2L2 1/2x2 1/2x1/4	8.00	7.15	118.7	1.4569	6724.38	63374.10	0.106 [1] ✔
T47	560 - 540	2L2 1/2x2 1/2x1/4	8.00	7.15	118.7	1.4569	6505.59	63374.10	0.103 [1] ✔
T52	520 - 500	2L2 1/2x2 1/2x1/4	8.00	7.15	118.7	1.4569	6680.13	63374.10	0.105 [1] ✔
T53	500 - 480	2L2 1/2x2 1/2x1/4	8.00	7.15	118.7	1.4569	6772.30	63374.10	0.107 [1] ✔
T54	480 - 460	2L2 1/2x2 1/2x1/4	8.00	7.15	118.7	1.4569	6950.50	63374.10	0.110 [1] ✔

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T55	460 - 440	2L2 1/2x2 1/2x1/4	8.00	7.13	118.3	1.4569	7229.35	63374.10	0.114 [1]
T64	400 - 380	2L2 1/2x2 1/2x1/4	8.00	7.13	118.3	1.4569	7900.51	63374.10	0.125 [1]
T65	380 - 360	2L2 1/2x2 1/2x1/4	8.00	7.13	118.3	1.4569	7877.41	63374.10	0.124 [1]
T66	360 - 340	2L2 1/2x2 1/2x1/4	8.00	7.13	118.3	1.4569	7954.84	63374.10	0.126 [1]
T67	340 - 320	2L2 1/2x2 1/2x1/4	8.00	7.13	118.3	1.4569	8007.21	63374.10	0.126 [1]
T68	320 - 300	2L2 1/2x2 1/2x1/4	8.00	7.13	118.3	1.4569	8024.94	63374.10	0.127 [1]
T69	300 - 280	2L2 1/2x2 1/2x1/4	8.00	7.13	118.3	1.4569	8171.58	63374.10	0.129 [1]
T78	240 - 220	2L2 1/2x2 1/2x1/4	8.00	7.13	118.3	1.4569	9122.27	63374.10	0.144 [1]
T79	220 - 200	2L2 1/2x2 1/2x1/4	8.00	7.13	118.3	1.4569	9466.62	63374.10	0.149 [1]
T80	200 - 180	2L2 1/2x2 1/2x1/4	8.00	7.13	118.3	1.4569	9729.60	63374.10	0.154 [1]
T81	180 - 160	2L2 1/2x2 1/2x1/4	8.00	7.13	118.3	1.4569	9856.30	63374.10	0.156 [1]
T82	160 - 140	2L2 1/2x2 1/2x1/4	8.00	7.13	118.3	1.4569	9878.04	63374.10	0.156 [1]
T83	140 - 120	2L2 1/2x2 1/2x1/4	8.00	7.13	118.3	1.4569	9857.42	63374.10	0.156 [1]
T92	80 - 60	2L2 1/2x2 1/2x1/4	8.00	7.13	118.3	1.4569	10208.20	63374.10	0.161 [1]
T93	60 - 40	2L2 1/2x2 1/2x1/4	8.00	7.13	118.3	1.4569	10216.30	63374.10	0.161 [1]
T94	40 - 20	2L2 1/2x2 1/2x1/4	8.00	7.13	118.3	1.4569	10181.00	63374.10	0.161 [1]
T97	7 - 0	C15x33.9	6.87	6.45	85.6	9.9600	37552.10	322704.00	0.116 [1]

[1] P_u / ϕP_n controls

Top Girt Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T1	1089.8 - 1084.9	MC18x42.7	8.00	3.84	43.1	9.1547	1.79	398229.00	0.000 [1]
T2	1084.9 - 1080	2L2 1/2x2 1/2x5/16	8.00	7.23	121.2	1.7873	5278.85	77749.50	0.068 [1]
T14	920 - 915	2L2 1/2x2 1/2x5/16	8.00	7.17	120.2	1.7873	17116.20	77749.50	0.220 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T28	760 - 755	2L2 1/2x2 1/2x5/16	8.00	7.17	120.2	1.7873	16069.10	77749.50	0.207 [1] ✔
T42	600 - 595	2L2 1/2x2 1/2x5/16	8.00	7.13	119.6	1.7873	18660.70	77749.50	0.240 [1] ✔
T60	420 - 415	2L2 1/2x2 1/2x5/16	8.00	7.13	119.6	1.7873	13884.40	77749.50	0.179 [1] ✔
T74	260 - 255	2L2 1/2x2 1/2x5/16	8.00	7.13	119.6	1.7873	19300.90	77749.50	0.248 [1] ✔
T88	100 - 95	2L2 1/2x2 1/2x5/16	8.00	7.13	119.6	1.7873	23308.80	77749.50	0.300 [1] ✔
T96	15 - 7	2L2 1/2x2 1/2x1/4	8.00	5.69	65.0	2.3800	13364.00	77112.00	0.173 [1] ✔
T97	7 - 0	C15x33.9	8.00	7.58	100.7	9.9600	148733.00	322704.00	0.461 [1] ✔

[1] P_u / ϕP_n controls

Bottom Girt Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T96	15 - 7	2L2 1/2x2 1/2x1/4	8.00	7.58	118.3	2.3800	37489.30	77112.00	0.486 [1] ✔

[1] P_u / ϕP_n controls

Redundant Horizontal (1) Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T96	15 - 7	2L2 1/2x2 1/2x1/4	2.00	1.79	28.0	2.3800	8938.28	77112.00	0.116 [1] ✔

[1] P_u / ϕP_n controls

Redundant Diagonal (1) Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T96	15 - 7	2L2 1/2x2 1/2x1/4	4.42	3.96	61.7	2.3800	11111.50	77112.00	0.144 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
									✔

[1] P_u / ϕP_n controls

Inner Bracing Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T1	1089.8 - 1084.9	MC18x42.7	4.00	4.00	44.9	12.6000	1.43	567000.00	0.000 [1] ✔

[1] P_u / ϕP_n controls

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
L1	1151.9 - 1089.8	Pole	P20x.812	1	-45880.10	2202660.00	49.2	Pass
T1	1089.8 - 1084.9	Leg	3 3/4	2	-88828.50	372777.00	23.8	Pass
		Diagonal	2L2 1/2x2 1/2x5/16	13	-21335.30	62785.60	34.0	Pass
		Top Girt	MC18x42.7	6	1.41	398229.00	7.6	Pass
		Inner Bracing	MC18x42.7	14	-1.18	489418.00	0.2	Pass
		Guy A@1089.8	1 3/4	2281	131089.00	225600.00	58.1	Pass
		Guy B@1089.8	1 3/4	2280	119288.00	225600.00	52.9	Pass
		Guy C@1089.8	1 3/4	2279	119332.00	225600.00	52.9	Pass
T2	1084.9 - 1080	Leg	3 3/4	19	-127598.00	372777.00	34.2	Pass
		Diagonal	1 1/4	26	13324.70	39760.80	33.5	Pass
		Top Girt	2L2 1/2x2 1/2x5/16	22	5278.85	77749.50	37.2 (b) 6.8 10.1 (b)	Pass
T3	1080 - 1060	Leg	3 3/4	31	-158334.00	368382.00	43.0	Pass
		Diagonal	1 1/8	65	11702.30	32206.20	36.3	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	60	-9492.17	39461.10	24.1	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	33	-10989.80	39461.10	27.8	Pass
T4	1060 - 1040	Leg	3 3/4	70	-179325.00	368382.00	48.7	Pass
		Diagonal	1 1/8	103	8932.39	32206.20	27.7	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	80	-9457.57	39461.10	24.0	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	71	-9292.09	39461.10	23.5	Pass
T5	1040 - 1020	Leg	3 3/4	109	-190268.00	368382.00	51.6	Pass
		Diagonal	1 1/8	142	7606.34	32206.20	23.6	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	119	-9564.52	39461.10	24.2	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	110	-9497.58	39461.10	24.1	Pass
T6	1020 - 1000	Leg	3 3/4	148	-191937.00	368382.00	52.1	Pass
		Diagonal	1 1/8	153	7138.75	32206.20	22.2	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	158	-9592.06	39461.10	24.3	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	149	-9567.51	39461.10	24.2	Pass
T7	1000 - 980	Leg	3 3/4	187	-189634.00	368382.00	51.5	Pass
		Diagonal	1 1/8	192	9438.81	32206.20	29.3	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	215	-9579.33	39461.10	24.3	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	188	-9563.32	39461.10	24.2	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
T8	980 - 960	Leg	3 3/4	226	-172324.00	368382.00	46.8	Pass
		Diagonal	1 1/8	231	11707.70	32206.20	36.4	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	236	-9684.92	39461.10	24.5	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	227	-9199.17	39461.10	23.3	Pass
T9	960 - 940	Leg	4 1/2	263	-179646.00	581305.00	30.9	Pass
		Diagonal	1 1/8	270	14024.90	32206.20	43.5	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	275	-11631.90	39918.80	29.1	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	266	-10177.40	39461.10	25.8	Pass
T10	940 - 935	Leg	4 1/2	302	-190839.00	581305.00	32.8	Pass
		Diagonal	1 1/8	309	14596.40	32206.20	45.3	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	305	-12137.00	39918.80	30.4	Pass
T11	935 - 930	Leg	4 1/2	314	-202477.00	581305.00	34.8	Pass
		Diagonal	1 1/8	321	14971.80	32206.20	46.5	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	317	-12486.30	39918.80	31.3	Pass
T12	930 - 925	Leg	4 1/2	326	-215163.00	581305.00	37.0	Pass
		Diagonal	1 1/4	333	15642.60	39760.80	39.3	Pass
							43.7 (b)	
		Top Girt	2L2 1/2x2 1/2x5/16	329	-13097.00	48464.60	27.0	Pass
T13	925 - 920	Leg	4 1/2	338	-228430.00	581305.00	39.3	Pass
		Diagonal	1 1/4	345	16124.90	39760.80	40.6	Pass
							45.1 (b)	
		Top Girt	2L2 1/2x2 1/2x5/16	342	-14445.30	48464.60	29.8	Pass
T14	920 - 915	Leg	4 1/2	350	-253106.00	581305.00	43.5	Pass
		Diagonal	1 1/4	359	14095.10	39760.80	35.4	Pass
							39.4 (b)	
		Top Girt	2L2 1/2x2 1/2x5/16	353	17116.20	77749.50	22.0	Pass
							32.7 (b)	
		Guy A@920	1 3/4	2284	127238.00	225600.00	56.4	Pass
		Guy B@920	1 3/4	2283	114984.00	225600.00	51.0	Pass
		Guy C@920	1 3/4	2282	112877.00	225600.00	50.0	Pass
T15	915 - 910	Leg	4 1/2	362	-249041.00	581305.00	42.8	Pass
		Diagonal	1 1/4	371	11241.60	39760.80	28.3	Pass
							31.4 (b)	
		Top Girt	2L2 1/2x2 1/2x5/16	366	-12521.00	48464.60	25.8	Pass
T16	910 - 905	Leg	4 1/2	374	-246263.00	581305.00	42.4	Pass
		Diagonal	1 1/8	383	10365.60	32206.20	32.2	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	378	-9185.87	39918.80	23.0	Pass
T17	905 - 900	Leg	4 1/2	386	-244693.00	581305.00	42.1	Pass
		Diagonal	1 1/8	395	9850.78	32206.20	30.6	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	390	-8454.95	39918.80	21.2	Pass
T18	900 - 880	Leg	4 1/2	398	-243291.00	581305.00	41.9	Pass
		Diagonal	1 1/8	434	9134.28	32206.20	28.4	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	411	-8365.51	39918.80	21.0	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	402	-8385.43	39918.80	21.0	Pass
T19	880 - 860	Leg	4 1/2	437	-244195.00	581305.00	42.0	Pass
		Diagonal	1 1/8	444	7113.82	32206.20	22.1	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	469	-8658.13	39918.80	21.7	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	442	-8829.32	39918.80	22.1	Pass
T20	860 - 840	Leg	4 1/2	476	-253979.00	581305.00	43.7	Pass
		Diagonal	1 1/8	483	8202.02	32206.20	25.5	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	489	-8476.99	39918.80	21.2	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	480	-8385.66	39918.80	21.0	Pass
T21	840 - 820	Leg	4 1/2	515	-277984.00	581305.00	47.8	Pass
		Diagonal	1 1/8	522	9945.02	32206.20	30.9	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	528	-8650.39	39918.80	21.7	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	519	-8515.26	39918.80	21.3	Pass
T22	820 - 800	Leg	4 1/2	554	-307362.00	581305.00	52.9	Pass
		Diagonal	1 1/8	561	12113.30	32206.20	37.6	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	566	-10108.80	39918.80	25.3	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	557	-8734.03	39918.80	21.9	Pass
T23	800 - 780	Leg	4 1/2	593	-341996.00	581305.00	58.8	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
		Diagonal	1 1/8	602	14851.70	32206.20	46.1	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	606	-12279.70	39918.80	30.8	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	596	-10553.00	39918.80	26.4	Pass
T24	780 - 775	Leg	4 1/2	632	-351466.00	581305.00	60.5	Pass
		Diagonal	1 1/8	641	15551.00	32206.20	48.3	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	636	-12897.50	39918.80	32.3	Pass
T25	775 - 770	Leg	4 1/2	644	-361128.00	581305.00	62.1	Pass
		Diagonal	1 1/8	653	16008.60	32206.20	49.7	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	648	-13328.10	39918.80	33.4	Pass
T26	770 - 765	Leg	4 1/2	656	-371382.00	581305.00	63.9	Pass
		Diagonal	1 1/4	665	16808.80	39760.80	42.3	Pass
							47.0 (b)	
		Top Girt	2L2 1/2x2 1/2x5/16	660	-14052.20	48464.60	29.0	Pass
T27	765 - 760	Leg	4 1/2	668	-382717.00	581305.00	65.8	Pass
		Diagonal	1 1/4	677	16783.40	39760.80	42.2	Pass
							46.9 (b)	
		Top Girt	2L2 1/2x2 1/2x5/16	672	-14068.10	48464.60	29.0	Pass
T28	760 - 755	Leg	4 1/2	680	-389513.00	581305.00	67.0	Pass
		Diagonal	1 1/4	690	12713.40	39760.80	32.0	Pass
							35.5 (b)	
		Top Girt	2L2 1/2x2 1/2x5/16	685	16069.10	77749.50	20.7	Pass
							30.7 (b)	
		Guy A@760	1 3/4	2287	111855.00	225600.00	49.6	Pass
		Guy B@760	1 3/4	2286	100174.00	225600.00	44.4	Pass
		Guy C@760	1 3/4	2285	98433.60	225600.00	43.6	Pass
T29	755 - 750	Leg	4 1/2	692	-379739.00	581305.00	65.3	Pass
		Diagonal	1 1/4	700	10219.90	39760.80	25.7	Pass
							28.6 (b)	
		Top Girt	2L2 1/2x2 1/2x5/16	696	-12170.10	48464.60	25.1	Pass
T30	750 - 745	Leg	4 1/2	704	-370701.00	581305.00	63.8	Pass
		Diagonal	1 1/8	712	9572.57	32206.20	29.7	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	708	-8881.82	39918.80	22.2	Pass
T31	745 - 740	Leg	4 1/2	716	-362335.00	581305.00	62.3	Pass
		Diagonal	1 1/8	724	9180.00	32206.20	28.5	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	720	-8050.10	39918.80	20.2	Pass
T32	740 - 720	Leg	4 1/2	728	-354441.00	581305.00	61.0	Pass
		Diagonal	1 1/8	763	8595.23	32206.20	26.7	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	759	-7943.87	39918.80	19.9	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	732	-8036.92	39918.80	20.1	Pass
T33	720 - 700	Leg	4 1/2	767	-328041.00	581305.00	56.4	Pass
		Diagonal	1 1/8	802	6738.87	32206.20	20.9	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	798	-7644.42	39918.80	19.1	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	771	-7709.99	39918.80	19.3	Pass
T34	700 - 680	Leg	4 1/2	806	-310132.00	581305.00	53.4	Pass
		Diagonal	1 1/8	844	5676.07	32206.20	17.6	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	837	-7418.07	39918.80	18.6	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	810	-7466.58	39918.80	18.7	Pass
T35	680 - 660	Leg	4 1/2	847	-317868.00	581305.00	54.7	Pass
		Diagonal	1 1/8	854	6690.85	32206.20	20.8	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	876	-7274.78	39918.80	18.2	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	849	-7302.57	39918.80	18.3	Pass
T36	660 - 640	Leg	4 1/2	886	-342961.00	581305.00	59.0	Pass
		Diagonal	1 1/8	893	8610.14	32206.20	26.7	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	896	-7338.98	39918.80	18.4	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	888	-7277.91	39918.80	18.2	Pass
T37	640 - 620	Leg	5	925	-377368.00	746587.00	50.5	Pass
		Diagonal	1 1/8	932	11234.00	32206.20	34.9	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	936	-9244.87	40224.70	23.0	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	926	-7722.98	39918.80	19.3	Pass
T38	620 - 615	Leg	5	964	-387250.00	746587.00	51.9	Pass
		Diagonal	1 1/8	971	11869.10	32206.20	36.9	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
		Top Girt	2L2 1/2x2 1/2x1/4	966	-9812.75	40224.70	24.4	Pass
T39	615 - 610	Leg	5	976	-397445.00	746587.00	53.2	Pass
		Diagonal	1 1/8	983	12254.80	32206.20	38.1	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	978	-10169.50	40224.70	25.3	Pass
T40	610 - 605	Leg	5	988	-408384.00	746587.00	54.7	Pass
		Diagonal	1 1/4	995	13038.40	39760.80	32.8	Pass
							36.4 (b)	
		Top Girt	2L2 1/2x2 1/2x5/16	990	-10910.20	48843.90	22.3	Pass
T41	605 - 600	Leg	5	1000	-420451.00	746587.00	56.3	Pass
		Diagonal	1 1/4	1007	13689.60	39760.80	34.4	Pass
							38.3 (b)	
		Top Girt	2L2 1/2x2 1/2x5/16	1001	-12622.20	48843.90	25.8	Pass
T42	600 - 595	Leg	5	1012	-429845.00	746587.00	57.6	Pass
		Diagonal	1 1/4	1020	13181.40	39760.80	33.2	Pass
							36.8 (b)	
		Top Girt	2L2 1/2x2 1/2x5/16	1014	18660.70	77749.50	24.0	Pass
							35.7 (b)	
		Guy A@600	1 3/4	2290	97261.10	225600.00	43.1	Pass
		Guy B@600	1 3/4	2289	86048.40	225600.00	38.1	Pass
		Guy C@600	1 3/4	2288	85512.00	225600.00	37.9	Pass
T43	595 - 590	Leg	5	1024	-419003.00	746587.00	56.1	Pass
		Diagonal	1 1/4	1031	12370.60	39760.80	31.1	Pass
							34.6 (b)	
		Top Girt	2L2 1/2x2 1/2x5/16	1025	-11518.10	48843.90	23.6	Pass
T44	590 - 585	Leg	5	1036	-408253.00	746587.00	54.7	Pass
		Diagonal	1 1/8	1043	11652.20	32206.20	36.2	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1038	-10308.40	40224.70	25.6	Pass
T45	585 - 580	Leg	5	1048	-398143.00	746587.00	53.3	Pass
		Diagonal	1 1/8	1055	11342.60	32206.20	35.2	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1050	-9725.08	40224.70	24.2	Pass
T46	580 - 560	Leg	4 3/4	1060	-388232.00	661643.00	58.7	Pass
		Diagonal	1 1/8	1094	10647.70	32206.20	33.1	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	1089	-8775.79	40071.70	21.9	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1062	-9317.94	40224.70	23.2	Pass
T47	560 - 540	Leg	4 3/4	1097	-375601.00	661643.00	56.8	Pass
		Diagonal	1 1/8	1133	8163.52	32206.20	25.3	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	1109	-6844.23	40071.70	17.1	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1101	-7185.06	40071.70	17.9	Pass
T48	540 - 535	Leg	4 3/4	1136	-373417.00	661643.00	56.4	Pass
		Diagonal	1 1/8	1144	-3981.73	6796.01	58.6	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1140	-5694.76	62754.10	9.1	Pass
T49	535 - 530	Leg	4 3/4	1148	-377946.00	661643.00	57.1	Pass
		Diagonal	1 1/8	1157	6493.35	32206.20	20.2	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1151	-3472.12	40071.70	8.7	Pass
T50	530 - 525	Leg	4 3/4	1160	-378824.00	661643.00	57.3	Pass
		Diagonal	1 1/8	1169	5757.03	32206.20	17.9	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1163	-6569.29	40071.70	16.4	Pass
T51	525 - 520	Leg	4 3/4	1173	-380155.00	661643.00	57.5	Pass
		Diagonal	1 1/8	1181	5573.30	32206.20	17.3	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1175	-6291.10	40071.70	15.7	Pass
T52	520 - 500	Leg	4 3/4	1185	-385678.00	661643.00	58.3	Pass
		Diagonal	1 1/8	1220	5315.97	32206.20	16.5	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	1206	-6680.13	40071.70	16.7	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1188	-6237.09	40071.70	15.6	Pass
T53	500 - 480	Leg	4 3/4	1224	-390999.00	661643.00	59.1	Pass
		Diagonal	1 1/8	1232	5350.09	32206.20	16.6	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	1235	-6772.30	40071.70	16.9	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1228	-6228.54	40071.70	15.5	Pass
T54	480 - 460	Leg	4 3/4	1263	-401287.00	661643.00	60.7	Pass
		Diagonal	1 1/8	1271	6585.53	32206.20	20.4	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	1283	-6950.50	40071.70	17.3	Pass

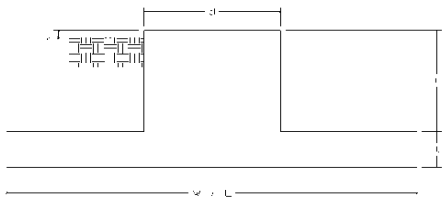
Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
		Top Girt	2L2 1/2x2 1/2x1/4	1267	-6182.67	40071.70	15.4	Pass
T55	460 - 440	Leg	5	1302	-417387.00	746587.00	55.9	Pass
		Diagonal	1 1/8	1310	9088.98	32206.20	28.2	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	1314	-7425.22	40224.70	18.5	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1306	-6316.17	40071.70	15.8	Pass
T56	440 - 435	Leg	5	1341	-421699.00	746587.00	56.5	Pass
		Diagonal	1 1/8	1349	9723.45	32206.20	30.2	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1344	-7986.79	40224.70	19.9	Pass
T57	435 - 430	Leg	5	1353	-426200.00	746587.00	57.1	Pass
		Diagonal	1 1/8	1361	10149.10	32206.20	31.5	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1356	-8371.96	40224.70	20.8	Pass
T58	430 - 425	Leg	5	1365	-431242.00	746587.00	57.8	Pass
		Diagonal	1 1/4	1373	10942.80	39760.80	27.5	Pass
							30.6 (b)	
		Top Girt	2L2 1/2x2 1/2x5/16	1368	-9069.19	48843.90	18.6	Pass
T59	425 - 420	Leg	5	1377	-438277.00	746587.00	58.7	Pass
		Diagonal	1 1/4	1384	11689.80	39760.80	29.4	Pass
							32.7 (b)	
		Top Girt	2L2 1/2x2 1/2x5/16	1381	-10076.20	48843.90	20.6	Pass
T60	420 - 415	Leg	5	1389	-466186.00	746587.00	62.4	Pass
		Diagonal	1 1/4	1399	12590.80	39760.80	31.7	Pass
							35.2 (b)	
		Top Girt	2L2 1/2x2 1/2x5/16	1392	13884.40	77749.50	17.9	Pass
							26.5 (b)	
		Guy A@420	1 1/2	2293	71938.00	165600.00	43.4	Pass
		Guy B@420	1 1/2	2292	66939.00	165600.00	40.4	Pass
		Guy C@420	1 1/2	2291	67025.40	165600.00	40.5	Pass
T61	415 - 410	Leg	5	1401	-461677.00	746587.00	61.8	Pass
		Diagonal	1 1/4	1411	12889.60	39760.80	32.4	Pass
							36.0 (b)	
		Top Girt	2L2 1/2x2 1/2x5/16	1405	-10615.30	48843.90	21.7	Pass
T62	410 - 405	Leg	5	1413	-459246.00	746587.00	61.5	Pass
		Diagonal	1 1/8	1423	12122.00	32206.20	37.6	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1417	-10673.20	40224.70	26.5	Pass
T63	405 - 400	Leg	5	1425	-457331.00	746587.00	61.3	Pass
		Diagonal	1 1/8	1435	11672.00	32206.20	36.2	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1429	-10073.00	40224.70	25.0	Pass
T64	400 - 380	Leg	5	1437	-456136.00	746587.00	61.1	Pass
		Diagonal	1 1/8	1474	10347.70	32206.20	32.1	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	1468	-8440.32	40224.70	21.0	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1441	-9325.78	40224.70	23.2	Pass
T65	380 - 360	Leg	5	1476	-454803.00	746587.00	60.9	Pass
		Diagonal	1 1/8	1513	7389.12	32206.20	22.9	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	1497	-7877.41	40224.70	19.6	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1480	-6575.72	40224.70	16.3	Pass
T66	360 - 340	Leg	5	1515	-459273.00	746587.00	61.5	Pass
		Diagonal	1 1/8	1524	5971.24	32206.20	18.5	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	1526	-7954.84	40224.70	19.8	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1517	-6256.94	40224.70	15.6	Pass
T67	340 - 320	Leg	5	1554	-462297.00	746587.00	61.9	Pass
		Diagonal	1 1/8	1563	7181.12	32206.20	22.3	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	1565	-8007.21	40224.70	19.9	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1556	-6208.26	40224.70	15.4	Pass
T68	320 - 300	Leg	5	1593	-463320.00	746587.00	62.1	Pass
		Diagonal	1 1/8	1602	10261.90	32206.20	31.9	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	1606	-8465.28	40224.70	21.0	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1597	-6504.82	40224.70	16.2	Pass
T69	300 - 280	Leg	5	1632	-471786.00	866222.00	54.5	Pass
		Diagonal	1 1/8	1641	13260.20	32206.20	41.2	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	1645	-11005.00	40224.70	27.4	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1636	-9112.97	40224.70	22.7	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
T70	280 - 275	Leg	5	1671	-474931.00	866222.00	54.8	Pass
		Diagonal	1 1/8	1680	13993.50	32206.20	43.4	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1675	-11653.20	40224.70	29.0	Pass
T71	275 - 270	Leg	5	1683	-478292.00	866222.00	55.2	Pass
		Diagonal	1 1/8	1692	14387.00	32206.20	44.7	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1687	-12034.90	40224.70	29.9	Pass
T72	270 - 265	Leg	5	1695	-482039.00	866222.00	55.6	Pass
		Diagonal	1 1/4	1704	15304.80	39760.80	38.5	Pass
							42.8 (b)	
		Top Girt	2L2 1/2x2 1/2x5/16	1699	-12812.30	48843.90	26.2	Pass
T73	265 - 260	Leg	5	1707	-488590.00	866222.00	56.4	Pass
		Diagonal	1 1/4	1716	14773.50	39760.80	37.2	Pass
							41.3 (b)	
		Top Girt	2L2 1/2x2 1/2x5/16	1711	-12457.10	48843.90	25.5	Pass
T74	260 - 255	Leg	5	1719	-508994.00	866222.00	58.8	Pass
		Diagonal	1 1/4	1725	17501.80	39760.80	44.0	Pass
							48.9 (b)	
		Top Girt	2L2 1/2x2 1/2x5/16	1722	19300.90	77749.50	24.8	Pass
							36.9 (b)	
		Guy A@260	1 1/2	2296	72372.30	165600.00	43.7	Pass
		Guy B@260	1 1/2	2295	67575.00	165600.00	40.8	Pass
		Guy C@260	1 1/2	2294	67046.80	165600.00	40.5	Pass
T75	255 - 250	Leg	5	1731	-502508.00	866222.00	58.0	Pass
		Diagonal	1 1/4	1737	18338.50	39760.80	46.1	Pass
							51.2 (b)	
		Top Girt	2L2 1/2x2 1/2x5/16	1733	-14999.30	48843.90	30.7	Pass
T76	250 - 245	Leg	5	1743	-497974.00	866222.00	57.5	Pass
		Diagonal	1 1/8	1749	17581.50	32206.20	54.6	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1745	-15282.90	40224.70	38.0	Pass
T77	245 - 240	Leg	5	1756	-502182.00	866222.00	58.0	Pass
		Diagonal	1 1/8	1761	17436.70	32206.20	54.1	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1757	-14827.30	40224.70	36.9	Pass
T78	240 - 220	Leg	5	1768	-526674.00	866222.00	60.8	Pass
		Diagonal	1 1/8	1800	16795.00	32206.20	52.1	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	1796	-13961.70	40224.70	34.7	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1769	-14483.90	40224.70	36.0	Pass
T79	220 - 200	Leg	5	1807	-546555.00	866222.00	63.1	Pass
		Diagonal	1 1/8	1839	14238.00	32206.20	44.2	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	1835	-11766.30	40224.70	29.3	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1808	-12340.40	40224.70	30.7	Pass
T80	200 - 180	Leg	5	1846	-561739.00	866222.00	64.8	Pass
		Diagonal	1 1/8	1878	11371.70	32206.20	35.3	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	1866	-9729.60	40224.70	24.2	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1847	-9950.19	40224.70	24.7	Pass
T81	180 - 160	Leg	5	1885	-569054.00	866222.00	65.7	Pass
		Diagonal	1 1/8	1893	6399.36	32206.20	19.9	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	1896	-9856.30	40224.70	24.5	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1888	-5895.43	40224.70	14.7	Pass
T82	160 - 140	Leg	5	1924	-570309.00	866222.00	65.8	Pass
		Diagonal	1 1/8	1932	10003.70	32206.20	31.1	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	1936	-9878.04	40224.70	24.6	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1927	-5942.34	40224.70	14.8	Pass
T83	140 - 120	Leg	5	1963	-569118.00	866222.00	65.7	Pass
		Diagonal	1 1/8	1970	13840.60	32206.20	43.0	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	1974	-11459.10	40224.70	28.5	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	1966	-9029.65	40224.70	22.4	Pass
T84	120 - 115	Leg	5	2002	-562375.00	866222.00	64.9	Pass
		Diagonal	1 1/8	2009	14801.30	32206.20	46.0	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	2004	-12290.10	40224.70	30.6	Pass
T85	115 - 110	Leg	5	2014	-559720.00	866222.00	64.6	Pass
		Diagonal	1 1/8	2021	15404.40	32206.20	47.8	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
		Top Girt	2L2 1/2x2 1/2x1/4	2016	-12841.40	40224.70	31.9	Pass
T86	110 - 105	Leg	5	2026	-556743.00	866222.00	64.3	Pass
		Diagonal	1 1/4	2033	16546.00	39760.80	41.6	Pass
							46.2 (b)	
		Top Girt	2L2 1/2x2 1/2x5/16	2028	-13803.80	48843.90	28.3	Pass
T87	105 - 100	Leg	5	2038	-556135.00	866222.00	64.2	Pass
		Diagonal	1 1/4	2045	16178.10	39760.80	40.7	Pass
							45.2 (b)	
		Top Girt	2L2 1/2x2 1/2x5/16	2040	-13655.40	48843.90	28.0	Pass
T88	100 - 95	Leg	5	2050	-579061.00	866222.00	66.8	Pass
		Diagonal	1 1/4	2054	12049.50	39760.80	30.3	Pass
							33.7 (b)	
		Top Girt	2L2 1/2x2 1/2x5/16	2052	23308.80	77749.50	30.0	Pass
							44.5 (b)	
		Guy A@100	1 1/2	2299	61721.60	165600.00	37.3	Pass
		Guy B@100	1 1/2	2298	58891.10	165600.00	35.6	Pass
		Guy C@100	1 1/2	2297	58018.90	165600.00	35.0	Pass
T89	95 - 90	Leg	5	2062	-578373.00	866222.00	66.8	Pass
		Diagonal	1 1/4	2066	12035.70	39760.80	30.3	Pass
							33.6 (b)	
		Top Girt	2L2 1/2x2 1/2x5/16	2063	-9936.52	48843.90	20.3	Pass
T90	90 - 85	Leg	5	2074	-581259.00	866222.00	67.1	Pass
		Diagonal	1 1/8	2078	11116.30	32206.20	34.5	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	2075	-9885.12	40224.70	24.6	Pass
T91	85 - 80	Leg	5	2086	-583677.00	866222.00	67.4	Pass
		Diagonal	1 1/8	2090	10508.80	32206.20	32.6	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	2087	-9140.47	40224.70	22.7	Pass
T92	80 - 60	Leg	5	2098	-589371.00	866222.00	68.0	Pass
		Diagonal	1 1/8	2129	9564.37	32206.20	29.7	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	2119	-10208.20	40224.70	25.4	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	2099	-8496.12	40224.70	21.1	Pass
T93	60 - 40	Leg	5	2137	-589840.00	866222.00	68.1	Pass
		Diagonal	1 1/8	2143	7562.99	32206.20	23.5	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	2157	-10216.30	40224.70	25.4	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	2138	-5366.50	40224.70	13.3	Pass
T94	40 - 20	Leg	5	2176	-587800.00	866222.00	67.9	Pass
		Diagonal	1 1/8	2183	10047.40	32206.20	31.2	Pass
		Horizontal	2L2 1/2x2 1/2x1/4	2187	-10181.00	40224.70	25.3	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	2178	-6453.67	40224.70	16.0	Pass
T95	20 - 15	Leg	5	2215	-581045.00	866222.00	67.1	Pass
		Diagonal	1 1/8	2222	10359.40	32206.20	32.2	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	2217	-8326.61	40224.70	20.7	Pass
T96	15 - 7	Leg	5	2227	-516052.00	935357.00	55.2	Pass
		Diagonal	2L2 1/2x2 1/2x1/4	2241	-37991.60	47619.70	79.8	Pass
		Top Girt	2L2 1/2x2 1/2x1/4	2229	13364.00	77112.00	17.3	Pass
		Bottom Girt	2L2 1/2x2 1/2x1/4	2232	37489.30	77112.00	48.6	Pass
		Redund Horz 1 Bracing	2L2 1/2x2 1/2x1/4	2249	-8938.28	74003.20	12.1	Pass
		Redund Diag 1 Bracing	2L2 1/2x2 1/2x1/4	2246	-34464.80	63093.00	54.6	Pass
		Redund Sub Horz Bracing	2L3x3x1/4	2247	-27675.50	81102.20	34.1	Pass
T97	7 - 0	Leg	5	2257	-680487.00	1048230.00	64.9	Pass
		Horizontal	C15x33.9	2262	-3951.80	320901.00	22.9	Pass
		Top Girt	C15x33.9	2259	148733.00	322704.00	46.1	Pass
							Summary	
						Pole (L1)	49.2	Pass
						Leg (T93)	68.1	Pass
						Diagonal (T96)	79.8	Pass
						Horizontal	34.7	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
						(T78) Top Girt	46.1	Pass
						(T97) Bottom Girt	48.6	Pass
						(T96) Redund Horz 1 Bracing	12.1	Pass
						(T96) Redund Diag 1 Bracing	54.6	Pass
						(T96) Redund Sub Horz Bracing	34.1	Pass
						(T96) Inner Bracing (T1)	0.2	Pass
						Guy A (T1)	58.1	Pass
						Guy B (T1)	52.9	Pass
						Guy C (T1)	52.9	Pass
						Bolt Checks	51.2	Pass
						RATING =	**79.8**	**Pass**

Site Name:	Hartford CT2	*Program Last Updated:*	*2/26/2019*
Site Number:	302534		
Engineering Number:	OAA746560		
Engineer:	BKL		
Date:	05/23/19		
Tower Type:	GT		



Design Loads (Factored) - Analysis per TIA-222-G Standards

Design / Analysis / Mapping:	Analysis				
Compression/Leg:	1711.7	k	Concrete Strength (f'_c):	3000	psi
Uplift/Leg:	0.0	k	Pad Tension Steel Depth:	26.0	in
Total Shear:	11.3	k	ϕ_{Shear}:	0.75	
Moment:	0.0	k-ft	$\phi_{Flexure\ /\ Tension}$:	0.9	
Total Combined Axial Compressive Load:	1711.7	k	$\phi_{Compression:}$	0.65	
Depth to Base of Foundation (l + t - h):	5.5	ft	β:	0.85	
Diameter of Pier (d):	8	ft	Bottom Pad Rebar Size #:	7	
Length of Pier (l):	3.5	ft	Dead Load Factor:	0.9	
Height of Pier above Ground (h):	0.5	ft	# of Bottom Pad Rebar:	43	
Width of Pad (W):	22	ft	Pad Bottom Steel Area:	25.8	in^2
Length of Pad (L):	22	ft	Pad Steel F_y:	60000	psi
Thickness of Pad (t):	2.5	ft	Top Pad Rebar Size #:	7	
Tower Leg Center to Center:	0	ft	# of Top Pad Rebar:	0	
Number of Tower Legs:	1	(1 if MP or GT)	Pad Top Steel Area:	0	in^2
Tower Center from Mat Center:	0	ft	Pier Rebar Size #:	6	
Depth Below Ground Surface to Water Table:	10	ft	Pier Steel Area (Single Bar):	0.44	in^2
Unit Weight of Concrete:	150	pcf	# of Pier Rebar:	105	
Unit Weight of Soil Above Water Table:	125	pcf	Pier Steel F_y:	60000	psi
Unit Weight of Water:	62.4	pcf	Pier Cage Diameter:	88.0	in
Unit Weight of Soil Below Water Table:	62.6	pcf	Rebar Strain Limit:	0.008	
Friction Angle of Uplift:	27	Degrees	Steel Elastic Modulus:	29000	ksi
Ultimate Coefficient of Shear Friction:	0.5		Tie Rebar Size #:	4	
Ultimate Compressive Bearing Pressure:	8000	psf	Tie Steel Area (Single Bar):	0.2	in^2
Ultimate Passive Pressure on Pad Face:	0	psf	Tie Spacing:	9	in
$\phi_{Soil\ and\ Concrete\ Weight}$:	0.9		Tie Steel F_y:	60000	psi
ϕ_{Soil}:	0.6				

Overturning Moment Usage

Design OTM:	67.8	k-ft
OTM Resistance:	18015.2	k-ft
Design OTM / OTM Resistance:	0.00	Result: OK

Soil Bearing Pressure Usage

Net Bearing Pressure:	3768	psf
Factored Nominal Bearing Pressure:	4800	psf
Net Bearing Pressure/Factored Nominal Bearing Pressure:	0.78	Result: OK
Load Direction Controling Design Bearing Pressure:	Diagonal to Pad Edge	

Sliding Factor of Safety

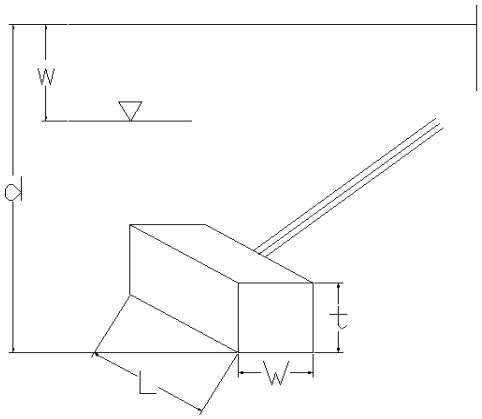
Total Factored Sliding Resistance:	646.9	k
Sliding Design / Sliding Resistance:	0.02	Result: OK

Design Tools Only, Space Intentionally Left Blank

One Way Shear, Flexual Capacity, and Punching Shear

Factored One Way Shear (V_u):	400.5	k
One Way Shear Capacity (ϕV_c):	563.9	k - ACI11.3.1.1
V_u / ϕV_c:	0.71	Result: OK
Load Direction Controling Shear Capacity:	Parallel to Pad Edge	
Lower Steel Pad Factored Moment (M_u):	2030.2	k-ft
Lower Steel Pad Moment Capacity (ϕM_n):	2905.1	k-ft - ACI10.3
M_u / ϕM_n:	0.70	Result: OK
Load Direction Controling Flexural Capacity:	Parallel to Pad Edge	
Lower Pad Flexural Reinforcement Ratio:	0.0038	OK - Minimum Reinforcement Ratio Met - ACI10.5.1
Pad Shrinkage Reinforcement Ratio:	0.0038	OK - Shrinkage Reinforcement Ratio Met - ACI7.12.2.1
Lower Pad Reinforcement Spacing:	6	in - Pad Reinforcing Spacing OK - ACI7.12.2.2 & 10.5.4
Upper Pad Reinforcement Spacing:	-256	in - Pad Reinforcing Spacing OK - ACI7.12.2.2 & 10.5.4
Factored Punching Shear (V_u):	1406.0	k
Nominal Punching Shear Capacity ($\phi_c V_n$):	1637.4	k - ACI11.12.2.1
V_u / ϕV_c:	0.86	Result: OK
Factored Moment in Pier (M_u):	39.6	k-ft
Pier Moment Capacity (ϕM_n):	8770.5	k-ft
M_u / ϕM_n:	0.00	Result: OK
Factored Shear in Pier (V_u):	11.3	k
Pier Shear Capacity (ϕV_n):	665.0	k
V_u / ϕV_c:	0.02	Result: OK
Pier Shear Reinforcement Ratio:	0.0003	No Ties Necessary for Shear - ACI11.5.6.1
Factored Tension in Pier (T_u):	0.0	k
Pier Tension Capacity (ϕT_n):	2494.8	k
T_u / ϕT_n:	0.00	Result: OK
Factored Compression in Pier (P_u):	1711.7	k
Pier Compression Capacity (ϕP_n):	9536.6	k - ACI10.3.6.2
P_u / ϕP_n:	0.18	Result: OK
Pier Compression Reinforcement Ratio:	0.006	OK - Reinforcement Ratio Met - ACI10.9.1 & 10.8.4
Minimum Depth to Develop Vertical Rebar:	14	in - ACI12.2.3
Minimum Hook Development Length:	12	in - ACI12.5
Minimum Mat Thickness / Edge Distance from Pier:	15.0	in
Minimum Foundation Depth:	2.68	ft
$M_u/\phi_B M_n + T_u/\phi_T T_n$:	0.00	Result: OK

Site Name:	Hartford CT2	*Program Last Updated:*	*2/26/2019*
Site Number:	302534	*American Tower Corporation*	
Engineering Number:	OAA746560		
Engineer:	BKL		
Date:	05/23/19		



Design Standard per TIA-222-G

Anchor Radius:	500	ft
Uplift (Factored - P_u):	102.4	k
Shear (Factored - V_u):	167.4	k
Berm Present:	N	
Design Anchor Rod:	N	
Mapped Foundation:	N	
Anchor Base Depth (d):	12	ft
Width of Anchor (W):	5	ft
Length of Anchor (L):	43	ft
Thickness of Anchor (t):	6	ft
Depth Below Ground Surface to Water Table (w):	10	ft
Soil Uplift at Base / Top of Anchor (B/T):	T	
Unit Weight of Concrete:	150	pcf
Unit Weight of Soil Above Water Table:	125	pcf
Unit Weight of Water:	62.4	pcf
Submerged Soil Unit Weight:	62.6	pcf
Internal Angle of Friction:	37	Degrees
Cohesion:	0	psf
Ultimate Skin Friction of Pad Sides to Soil:	2000	psf
Ultimate Coefficient of Shear Friction:	0.5	
Maximum Top Conical Failure Angle:	27	Degrees
Maximum Base Conical Failure Angle:	27	Degrees
Allowable Capacity Increase:	1	(Due to Transient Loads)
Uplift Strength Reduction Factor (ϕ_u):	0.75	
Shear Strength Reduction Factor (ϕ_v):	0.75	
Concrete Uplift Strength Reduction Factor (ϕ_u):	0.90	

Uplift

Weight of Concrete (Buoyancy Effect Considered):	166.7	k
Weight of Soil (Buoyancy Effect Considered):	654.0	k
Ultimate Uplift Resistance from Skin Friction:	636.0	k
Nominal Factored Uplift Resistance ($\phi_u P_n$):	640.5	k
P_u / $\phi_u P_n$:	0.16	Result: OK

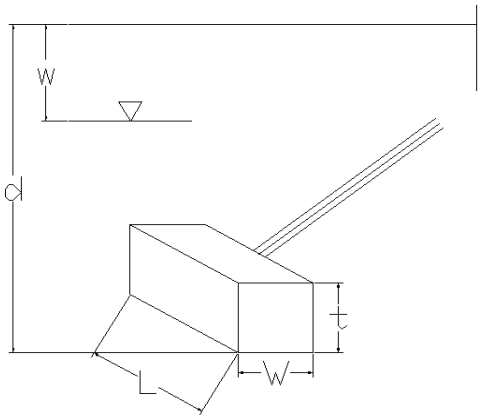
Shear

Ultimate Shear Friction Resistance Due to Normal Force - Uplift:	125.6	k
Passive Pressure:	4526	psf
Ultimate Passure Pressure Resistance:	1167.6	k
Nominal Shear Resistance ($\phi_v V_n$):	969.9	k
V_u / $\phi_v V_n$:	0.17	Result: OK

Strength Analysis of Reinforced Concrete

Concrete Compressive Srength (f'_c):	3000	psi
Longitudinal Rebar Yield Strength:	60000	psi
# Longitudinal Rebar (Top):	10	
# Longitudinal Rebar (1 Side):	9	
Rebar Size:	8	
Strength Reduction Factor for Shear (ϕ_v):	0.75	
Strength Reduction Factor for Flexure (ϕ_b):	0.9	
Compression Zone Factor (β_1):	0.85	
Area of Single Rebar:	0.79	in^2
One Way Shear due to Shear Load (V_u):	74.6	k
Nominal One Way Shear Capacity for Shear Load ($\phi_c V_n$):	331.3	k
$V_u/\phi_v V_n$:	0.23	Result: OK
One Way Shear due to Uplift (V_u):	44.5	k
Nominal One Way Shear Capacity for Uplift ($\phi_c V_n$):	335.2	k
$V_u/\phi_v V_n$:	0.13	Result: OK
Pad Flexure due to Shear Load (M_u):	899.9	k-ft
Nominal Flexural Capacity for Shear Load ($\phi_b M_n$):	1791.1	k-ft
Pad Flexure due to Uplift (M_u):	550.5	k-ft
Nominal Flexural Capacity for Uplift ($\phi_b M_n$):	2416.6	k-ft
$M_u/\phi_b M_n$ (Max.):	0.50	Result: OK

Site Name:	Hartford CT2	*Program Last Updated:* *2/26/2019*
Site Number:	302534	*American Tower Corporation*
Engineering Number:	OAA746560	
Engineer:	BKL	
Date:	05/23/19	



Design Standard per TIA-222-G

Anchor Radius:	630	ft
Uplift (Factored - P_u):	349.7	k
Shear (Factored - V_u):	264.2	k
Berm Present:	N	
Design Anchor Rod:	N	
Mapped Foundation:	N	
Anchor Base Depth (d):	12.5	ft
Width of Anchor (W):	8	ft
Length of Anchor (L):	67	ft
Thickness of Anchor (t):	5	ft
Depth Below Ground Surface to Water Table (w):	10	ft
Soil Uplift at Base / Top of Anchor (B/T):	T	
Unit Weight of Concrete:	150	pcf
Unit Weight of Soil Above Water Table:	125	pcf
Unit Weight of Water:	62.4	pcf
Submerged Soil Unit Weight:	62.6	pcf
Internal Angle of Friction:	37	Degrees
Cohesion:	0	psf
Ultimate Skin Friction of Pad Sides to Soil:	2000	psf
Ultimate Coefficient of Shear Friction:	0.5	
Maximum Top Conical Failure Angle:	27	Degrees
Maximum Base Conical Failure Angle:	27	Degrees
Allowable Capacity Increase:	1	(Due to Transient Loads)
Uplift Strength Reduction Factor (ϕ_u):	0.75	
Shear Strength Reduction Factor (ϕ_v):	0.75	
Concrete Uplift Strength Reduction Factor (ϕ_u):	0.9	

Uplift

Weight of Concrete (Buoyancy Effect Considered):	318.4	k
Weight of Soil (Buoyancy Effect Considered):	1300.1	k
Ultimate Uplift Resistance from Skin Friction:	830.0	k
Nominal Factored Uplift Resistance ($\phi_u P_n$):	1261.6	k
P_u / $\phi_u P_n$:	0.28	Result: OK

Shear

Ultimate Shear Friction Resistance Due to Normal Force - Uplift:	279.3	k
Passive Pressure:	5028	psf
Ultimate Passure Pressure Resistance:	1684.5	k
Nominal Shear Resistance ($\phi_v V_n$):	1472.9	k
V_u / $\phi_v V_n$:	0.18	Result: OK

Strength Analysis of Reinforced Concrete

Concrete Compressive Srength (f'_c):	3000	psi
Longitudinal Rebar Yield Strength:	60000	psi
# Longitudinal Rebar (Top):	13	
# Longitudinal Rebar (1 Side):	10	
Rebar Size:	9	
Strength Reduction Factor for Shear (ϕ_v):	0.75	
Strength Reduction Factor for Flexure (ϕ_b):	0.9	
Compression Zone Factor (β_1):	0.85	
Area of Single Rebar:	1.00	in^2
One Way Shear due to Shear Load (V_u):	117.0	k
Nominal One Way Shear Capacity for Shear Load ($\phi_c V_n$):	453.5	k
$V_u/\phi_v V_n$:	0.26	Result: OK
One Way Shear due to Uplift (V_u):	162.7	k
Nominal One Way Shear Capacity for Uplift ($\phi_c V_n$):	441.7	k
$V_u/\phi_v V_n$:	0.37	Result: OK
Pad Flexure due to Shear Load (M_u):	2213.1	k-ft
Nominal Flexural Capacity for Shear Load ($\phi_b M_n$):	4139.0	k-ft
Pad Flexure due to Uplift (M_u):	2929.0	k-ft
Nominal Flexural Capacity for Uplift ($\phi_b M_n$):	3274.3	k-ft
$M_u/\phi_b M_n$ (Max.):	0.89	Result: OK

Radio Frequency Emissions Analysis Report

Dish Wireless Proposed Facility

Site ID: CT0100007A

ATC Montville CT
1334 Route 85
Montville, CT 06370

April 5, 2019

Centerline Communications Project Number: 950033-011

Site Compliance Summary	
Compliance Status:	**COMPLIANT**
Site total MPE% of FCC general population allowable limit:	**1.84 %**

April 5, 2019

Dish Wireless
9601 South Meriden Blvd
Englewood, CO 80112

Emissions Analysis for Site: **CT0100007A – ATC Montville CT**

Centerline Communications, LLC ("Centerline") was directed to analyze the proposed Dish Wireless facility located at **1334 Route 85, Montville, CT**, for the purpose of determining whether the emissions from the Proposed DISH WIRELESS Antenna Installation located on this property are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter (μW/cm2). The number of $\mu W/cm^2$ calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

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

General population/uncontrolled exposure limits apply to situations in which the general population may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general population would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

General population exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu W/cm^2$). The general population exposure limit for the 1900 MHz (PCS) – H Block and Band 70 (2000 to 2020 MHz) is 1000 $\mu W/cm^2$.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were performed for the proposed Dish Wireless antenna facility located at **1334 Route 85, Montville, CT**, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since Dish Wireless is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was focused at the base of the tower. For this report the sample point is the top of a 6-foot person standing at the base of the tower.

Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. All power values expressed and analyzed are maximum power levels expected to be used on all radios.

All emissions values for additional carriers were taken from the Connecticut Siting Council (CSC) active MPE database. Values in this database are provided by the individual carriers themselves

For each sector the following channel counts, frequency bands and power levels were utilized as shown in *Table 1*:

Technology	Frequency Band	Channel Count	Transmit Power per Channel (W)
NB-IoT	1900 MHz (PCS) - H Block	2	40
NB-IoT	Band 70 (2000 to 2020 MHz)	2	40

Table 1: Channel Data Table

The following antennas listed in *Table 2* were used in the modeling for transmission in the 1900 MHz (PCS) – H Block and Band 70 (2000 to 2020 MHz) frequency bands. This is based on feedback from the carrier with regards to anticipated antenna selection. Maximum gain values for all antennas are listed in the Inventory and Power Data table below. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.

Sector	Antenna Number	Antenna Make / Model	Antenna Centerline (ft)
A	1	Comba ODI2-065R18K-GQ	400
B	1	Comba ODI2-065R18K-GQ	400
C	1	Comba ODI2-065R18K-GQ	400

Table 2: Antenna Data

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

RESULTS

Per the calculations completed for the proposed Dish Wireless configurations *Table 3* shows resulting emissions power levels and percentages of the FCC's allowable general population limit.

Antenna ID	Antenna Make / Model	Frequency Bands	Antenna Gain (dBd)	Channel Count	Total TX Power (W)	ERP (W)	MPE %
Antenna A1	Comba ODI2-065R18K-GQ	1900 MHz (PCS) - H Block / Band 70 (2000 to 2020 MHz)	15.65	4	160	5,876.52	0.14
						Sector A Composite MPE%	**0.14**
Antenna B1	Comba ODI2-065R18K-GQ	1900 MHz (PCS) - H Block / Band 70 (2000 to 2020 MHz)	15.65	4	160	5,876.52	0.14
						Sector B Composite MPE%	**0.14**
Antenna C1	Comba ODI2-065R18K-GQ	1900 MHz (PCS) - H Block / Band 70 (2000 to 2020 MHz)	15.65	4	160	5,876.52	0.14
						Sector C Composite MPE%	**0.14**

Table 3: Dish Wireless Emissions Levels

The Following table (*table 4*) shows all additional carriers on site and their MPE% as recorded in the CSC active MPE database for this facility along with the newly calculated maximum Dish Wireless MPE contributions per this report. FCC OET 65 specifies that for carriers utilizing directional antennas that the highest recorded sector value be used for composite site MPE values due to their greatly reduced emissions contributions in the directions of the adjacent sectors. For this site, all three sectors have the same configuration yielding the same results on all three sectors. *Table 5* below shows a summary for each Dish Wireless Sector as well as the composite MPE value for the site.

Site Composite MPE%	
Carrier	**MPE%**
Dish Wireless – Max Per Sector Value	**0.14 %**
MediaFlo	0.19 %
AT&T	1.02 %
Field Measurements	0.49 %
Site Total MPE %:	**1.84 %**

Table 4: All Carrier MPE Contributions

Dish Wireless Sector A Total:	0.14 %
Dish Wireless Sector B Total:	0.14 %
Dish Wireless Sector C Total:	0.14 %
Site Total:	1.84 %

Table 5: Site MPE Summary

FCC OET 65 specifies that for carriers utilizing directional antennas that the highest recorded sector value be used for composite site MPE values due to their greatly reduced emissions contributions in the directions of the adjacent sectors. *Table 6* below details a breakdown by frequency band and technology for the MPE power values for the maximum calculated Dish Wireless sector(s). For this site, all three sectors have the same configuration yielding the same results on all three sectors.

DISH WIRELESS _ Frequency Band / Technology Max Power Values (Per Sector)	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density ($\mu W/cm^2$)	Frequency (MHz)	Allowable MPE ($\mu W/cm^2$)	Calculated % MPE
Dish Wireless 1900 MHz (PCS) - H Block LTE	2	1,469.13	400	0.68	1900 MHz (PCS) - H Block	1000	0.07%
Dish Wireless Band 70 (2000 to 2020 MHz) LTE	2	1,469.13	400	0.68	Band 70 (2000 to 2020 MHz)	1000	0.07%
						Total:	**1.14%**

Table 6: Dish Wireless Maximum Sector MPE Power Values

Summary

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

The anticipated maximum composite contributions from the Dish Wireless facility as well as the site composite emissions value with regards to compliance with FCC's allowable limits for general population exposure to RF Emissions are shown here:

DISH WIRELESS Sector	Power Density Value (%)
Sector A:	0.14 %
Sector B:	0.14 %
Sector C:	0.14 %
Dish Wireless Maximum Total (per sector):	0.14 %
Site Total:	1.84 %
Site Compliance Status:	**COMPLIANT**

The anticipated composite MPE value for this site assuming all carriers present is **1.84 %** of the allowable FCC established general population limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

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

Scott Heffernan
RF Engineering Director
Centerline Communications, LLC
95 Ryan Drive, Suite 1
Raynham, MA 02767

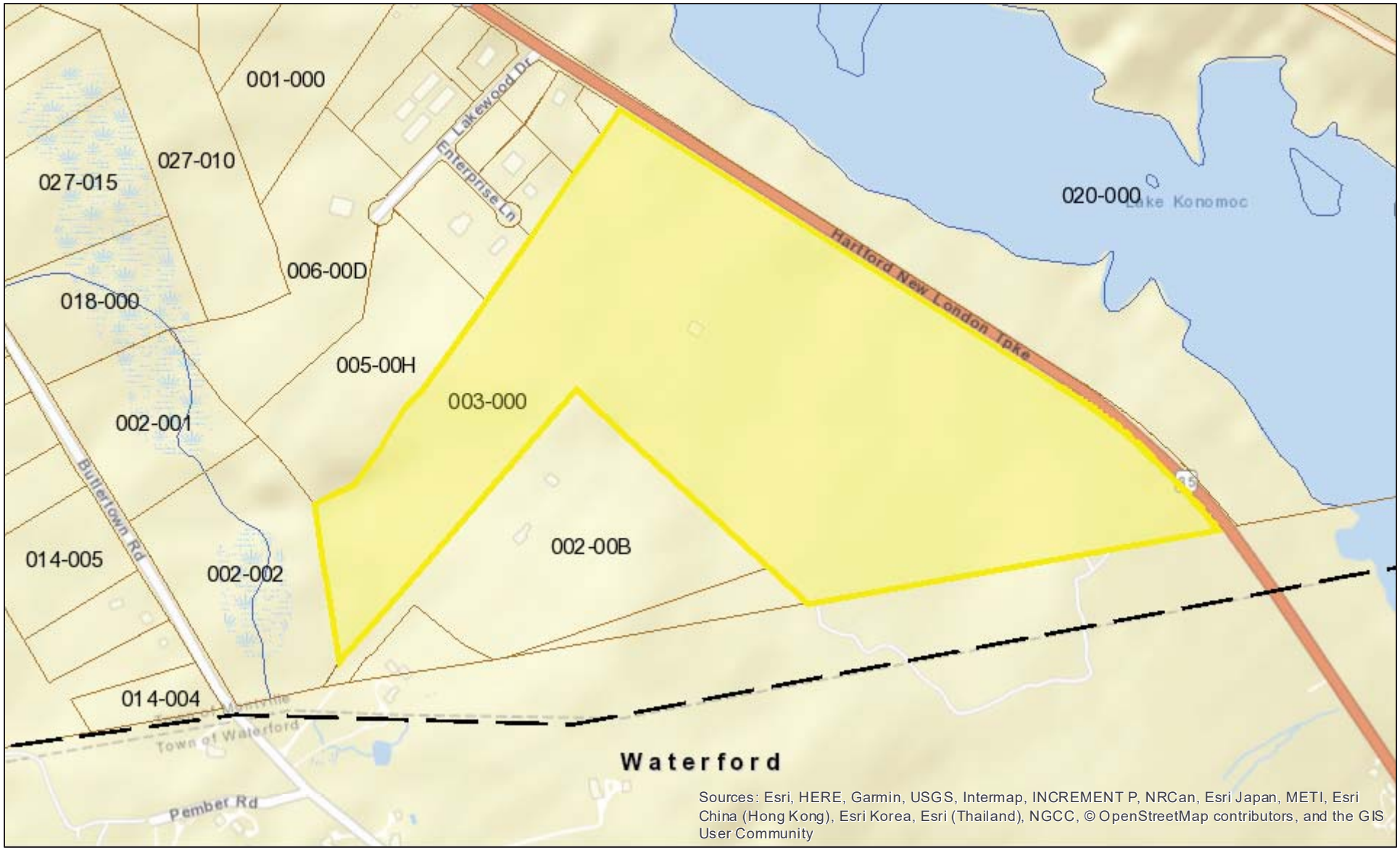
Montville, CT

April 2, 2019

1 inch = 537 Feet

0 537 1075 1613

www.cai-tech.com



Montville, CT

April 2, 2019

1 inch = 537 Feet

0 537 1075 1613

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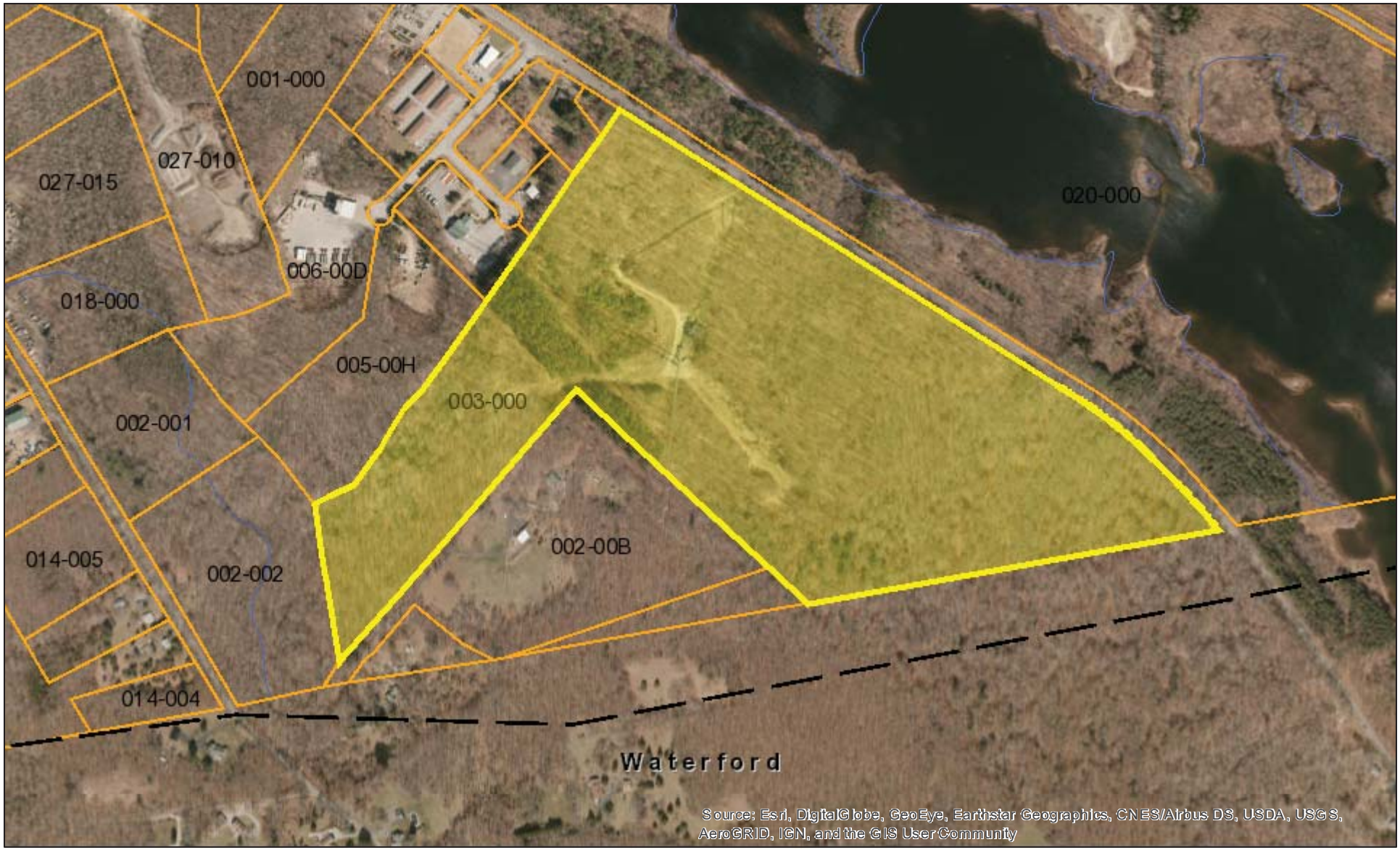

Property Card: **1334 ROUTE 85**

Town of Montville, CT

Parcel Information

Location:	1334 ROUTE 85	Property Use:	Public Utility	Primary Use:	Cell Tower
Unique ID:	02003CEL	Map Block Lot:	002-003-CEL	Acres:	0
		Zone:	R80	Volume / Page:	0001/0001
		Sale Date:	10/01/2011	Sale Price:	$0

Value Information

	Appraised Value	Assessed Value
Land	0	0
Buildings	0	0
Detached Outbuildings	356000	249200
Total	356000	249200

Owner's Information

Owner's Data
AMERICAN TOWER CORPORATION PO BOX 723597 ATLANTA, GA 311393597

Property Card: **1334 ROUTE 85**

Town of Montville, CT

Parcel Information

Location:	1334 ROUTE 85	Property Use:	Public Utility	Primary Use:	Residential
Unique ID:	Z0477310	Map Block Lot:	002-003-000	Acres:	78.7
		Zone:	R80	Volume / Page:	0001/0001
		Sale Date:	01/01/1900	Sale Price:	$0

Value Information

	Appraised Value	Assessed Value
Land	60800	77750
Buildings	0	0
Detached Outbuildings	0	0
Total	171870	77750

Owner's Information

Owner's Data
NEW LONDON CITY OF 120 BROAD ST NEW LONDON, CT 06320

DISH WIRELESS FIRST TIME INSTALL
CONSTRUCTION DRAWINGS

DISH WIRELESS SITE ID:

CT0100007A

TOWER OWNER SITE ID:

CT-302534

SITE ADDRESS:

1334 ROUTE 85
MONTVILLE, CT 06370
(NEW LONDON COUNTY)

SITE SUMMARY

PROJECT SCOPE:	PROJECT CONSISTS OF INSTALLING PROPOSED DISH WIRELESS TELECOMMUNICATION EQUIPMENT, CABLING, AND ANTENNAS AT AN EXISTING TELECOMMUNICATION SITE
SITE TYPE:	CO-LOCATION
TYPE OF OCCUPANCY:	TELECOMMUNICATIONS
TOWER TYPE:	GUYED TOWER
TOWER HEIGHT:	1089'
RAD CENTER:	400'-0"
TOWER LATITUDE:	41.41777222 N
TOWER LONGITUDE:	72.1981 W
ZONING JURISDICTION:	TOWN OF MONTVILLE
COUNTY:	NEW LONDON
POWER COMPANY:	EVERSOURCE (860) 607-6170
	VERIZON (800) 225-5499

PROJECT DIRECTORY

TOWER OWNER:	AMERICAN TOWER CORP. 10 PRESIDENTIAL WAY WOBURN, MA 01801 PHONE: (877) 282-7483
APPLICANT:	DISH WIRELESS 9601 S MERIDIAN BLVD ENGLEWOOD, CO 80112 PHONE: (866) 624-6874
PROJECT MANAGER:	CENTERLINE COMMUNICATIONS 750 WEST CENTER STREET, SUITE 301 WEST BRIDGEWATER, MA 02379 PHONE: (781) 713-4725
SITE DESIGNER:	HUDSON DESIGN GROUP, LLC 45 BEECHWOOD DRIVE NORTH ANDOVER, M 01845 PHONE: (978) 557-5553 FAX: (978) 336-5586

GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION, THEREFORE HANDICAP ACCESS IS NOT REQUIRED. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE; NO SANITARY SEWER SERVICE, POTABLE WATER, OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

UNDERGROUND SERVICE ALERT

CALL 811

48 HOURS BEFORE YOU DIG

VICINITY MAP

LOCAL MAP

CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LATEST EDITIONS OF THE FOLLOWING:

- INTERNATIONAL BUILDING CODE, 2015 WITH 2018 CONNECTICUT STATE BUILDING CODE AMENDMENTS
- ANSI/TIA/EIA-222-G
- NFPA 70-2017 – LIGHTNING PROTECTION CODE
- NATIONAL ELECTRICAL CODE – NEC 2017

DISH WIRELESS PROJECT MANAGER APPROVAL:

SIGNATURE DATE

CONSTRUCTION MANAGER APPROVAL:

SIGNATURE DATE

LEASING/SITE ACQUISITION:

SIGNATURE DATE

RF ENGINEER:

SIGNATURE DATE

LANDLORD/TOWER OWNER APPROVAL:

SIGNATURE DATE

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PLANS PREPARED FOR:

dish WIRELESS

PLANS PREPARED BY:

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STATE OF CONNECTICUT
DEREK J. CREASER
NO. 25[illegible]
LICENSED PROFESSIONAL ENGINEER

DRAWN BY: RP
CHECKED BY: HC
APPV'D: AT

SUBMITTALS

DATE	DESCRIPTION	REV	ISSUED BY
03.25.19	FOR REVIEW	A	RP
04.08.19	FOR REVIEW	1	RP
04.10.19	FOR CONSTRUCTION	2	RP

DISH WIRELESS SITE ID:
CT0100007A

TOWER OWNER SITE ID:
CT-302534

SITE ADDRESS:
1334 ROUTE 85
MONTVILLE, CT 06370

SHEET TITLE:
TITLE SHEET

SHEET NUMBER:
T-1

GENERAL NOTES:

1. EVERY EFFORT HAS BEEN MADE IN THE CONSTRUCTION DOCUMENTS TO PROVIDE A COMPLETE SCOPE OF WORK. MINOR DISCREPANCIES IN THE DRAWINGS AND/OR SPECIFICATIONS SHALL NOT EXCUSE CONTRACTORS FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.

2. ALL REFERENCES TO OWNER HEREIN SHALL BE CONSTRUED TO MEAN THE CARRIER OR ITS DESIGNATED REPRESENTATIVE.

3. BIDDING REQUIREMENTS
   a. PRIOR TO THE SUBMISSION OF BIDS, VISIT THE JOB SITE TO BECOME FAMILIAR WITH ALL CONDITIONS AFFECTING THE PROPOSED PROJECT. VISIT THE SITE WITH THE CONSTRUCTION DOCUMENTS TO VERIFY FIELD DIMENSIONS AND CONDITIONS TO CONFIRM THAT THE PROJECT WILL BE ACCOMPLISHED AS SHOWN.
   b. PROVIDE NOTIFICATION TO OWNER IN WRITING OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO SUBMISSION OF PRICE PROPOSAL. IN THE EVENT OF DISCREPANCIES, PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED OTHERWISE.
   c. WHEN TOWER IS OWNED BY A THIRD PARTY, CONTACT TOWER OWNER REPRESENTATIVE FOR PARTICIPATION IN BID WALK.
   d. WHERE ANCHORING TO A CONCRETE ROOF SLAB, CONFIRM (PRIOR TO SUBMITTING BID) THE PRESENCE OF POST TENSION TENDONS. INCLUDE PROVISIONS FOR X-RAY PROCEDURES TO LOCATE THE TENDONS PRIOR TO CONSTRUCTION.

4. DRAWINGS ARE NOT TO BE SCALED. WRITTEN DIMENSIONS TAKE PRECEDENCE. CONSTRUCTION DOCUMENTS ARE INTENDED FOR DIAGRAMMATIC PURPOSES ONLY, UNO.

5. FIELD VERIFY ALL DIMENSIONS, ELEVATIONS AND EXISTING CONDITIONS PRIOR TO BEGINNING ANY MATERIALS ORDERING, FABRICATION OR CONSTRUCTION WORK ON THIS PROJECT. BRING ANY DISCREPANCIES IMMEDIATELY TO THE ATTENTION OF THE OWNER AND RESOLVE BEFORE PROCEEDING WITH THE WORK.

6. FURNISH ALL MATERIALS, EQUIPMENT, LABOR, AND ANY REQUIREMENTS NECESSARY TO COMPLETE PROJECT AS DESCRIBED IN THE CONSTRUCTION DOCUMENTS AND CONSTRUCTION SOW.

7. SUPERVISE AND DIRECT THE PROJECT DESCRIBED IN THE CONSTRUCTION DOCUMENTS. PROVIDE ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.

8. ALL WORK PERFORMED ON THE PROJECT AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES APPLICABLE TO THE WORK.

9. CONSTRUCTION COORDINATION REQUIREMENTS
   a. NOTIFY OWNER OF ANY DISCREPANCIES PRIOR TO START OF WORK.
   b. OBTAIN ALL PERMITS. SCHEDULE AND COORDINATE ALL INSPECTIONS.
   c. PROVIDE, AT THE PROJECT SITE, A FULL, CURRENT SET OF CONSTRUCTION DOCUMENTS FOR USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.
   d. RECEIVE WRITTEN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DOCUMENTS.
   e. PERFORM WORK DURING OWNER'S PREFERRED HOURS TO AVOID DISTURBING NORMAL BUSINESS.
   f. PROVIDE FALL PROTECTION IN ACCORDANCE WITH FEDERAL, STATE, LOCAL, AND OWNER REQUIREMENTS.
   g. IF FAA LIGHTING AND MARKING IS PRESENT ON SITE AND IS POWERED BY ELECTRICAL SERVICE THAT IS TO BE INTERRUPTED, MAINTAIN THE NECESSARY LIGHTS DURING CONSTRUCTION AND NOTIFY THE PROPER AUTHORITIES IN THE EVENT OF A DISRUPTION.
   h. PROVIDE A PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 2-A OR 2-A10BC WITHIN 75 FEET TRAVEL DISTANCE TO ALL PORTIONS OF PROJECT AREA DURING CONSTRUCTION.
   i. STRUCTURAL COMPONENTS OF ADJACENT FACILITIES SHALL NOT BE ALTERED BY THIS CONSTRUCTION PROJECT, UNO. ENSURE THAT EXCAVATION DOES NOT AFFECT ADJACENT STRUCTURES.
   j. SEAL ALL PENETRATIONS THROUGH FIRE-RATED AREAS WITH U.L. LISTED OR FIRE MARSHALL-APPROVED MATERIALS, IF APPLICABLE.
   k. BURIED UTILITIES MAY EXIST IN THE AREA AND UTILITY INFORMATION SHOWN MAY NOT BE COMPLETE. CONTACT THE UTILITY LOCATE SERVICE A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
   l. COORDINATE ALL POWER INSTALLATION WITH POWER COMPANY AS REQUIRED. REPORT POWER INSTALLATION COORDINATION SOLUTION(S) TO OWNER.
   m. PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
   n. KEEP GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, AND RUBBISH. REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY OR PREMISES. SITE SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
   o. MAINTAIN THE INTEGRITY OF THE BUILDING ENVELOPE AND CONSTRUCT BARRIERS IN THE AREA OF WORK TO PREVENT DAMAGE FROM WEATHER AS WELL AS FROM CONSTRUCTION DUST AND DEBRIS.

10. INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO MANUFACTURER'S SPECIFICATIONS, UNO, OR WHERE LOCAL CODES OR ORDINANCES DIRECT OTHERWISE.

11. PROPOSED CELLULAR EQUIPMENT AND FIXTURES WILL BE FURNISHED BY OWNER AND INSTALLED BY CONTRACTOR, UNLESS NOTED OTHERWISE.

12. ANY SUBSTITUTIONS OF MATERIALS AND/OR EQUIPMENT, MUST BE APPROVED BY OWNER.

13. DOCUMENT ALL CHANGES MADE IN THE FIELD BY MARKING UP THE APPROVED CONSTRUCTION DRAWINGS AND SUBMITTING THE REDLINED SET TO OWNER UPON COMPLETION. DOCUMENT ALL WORK PERFORMED WITH PHOTOGRAPHS TO BE SUBMITTED WITH REDLINED CONSTRUCTION DRAWINGS.

14. PROVIDE SUPPORTS FOR CABLES TO THE ELEVATION OF ALL INITIAL AND FUTURE ANTENNAS IN ACCORDANCE WITH ALL MANUFACTURER'S REQUIREMENTS.

15. CONFIRM THAT THE REQUIREMENTS OF THE STRUCTURAL ANALYSIS, MOUNT ANALYSIS AND ANY ASSOCIATED MODIFICATIONS HAVE BEEN FOLLOWED AND COMPLETED AS REQUIRED TO SUPPORT THE EQUIPMENT ASSOCIATED WITH THIS PROJECT.

16. KNOW AND OBSERVE MANUFACTURER'S MINIMUM BEND RADIUS SPECIFICATIONS BEFORE HANDLING HYBRID CABLES, RF CABLES, AND FIBER OPTIC LINES.

17. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS STIPULATED IN THE CONSTRUCTION SCOPE OF WORK CONTRACT, REGARDLESS OF INCLUSION OR OMISSION FROM THE CONSTRUCTION DRAWING(S).

ABBREVIATIONS

A/C	AIR CONDITIONING
AFF	ABOVE FINISHED FLOOR
AGL	ABOVE GROUND LEVEL, ABOVE GRADE LEVEL
AWS	ADVANCED WIRELESS SERVICE
BBU	BATTERY BACKUP UNIT
BLDG	BUILDING
BLK	BLOCKING
CLG	CEILING
CLR	CLEAR
CONC	CONCRETE
CONT	CONTINUOUS
D	DEPTH
DBL	DOUBLE
DEG	DEGREE
ø, DIA	DIAMETER
DIAG	DIAGONAL
DN	DOWN
DET	DETAIL
DWG	DRAWING
E	EXISTING
EA	EACH
ELEV, EL	ELEVATION
ELEC	ELECTRICAL
EQ	EQUAL
EQUIP	EQUIPMENT
EXT	EXTERIOR
FIF	FIBER INTERFACE FRAME, FACILITY INTERFACE FRAME
FIN	FINISH
FLUOR	FLUORESCENT
FLR	FLOOR
FT	FOOT, FEET
GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GRND	GROUND
GSM	GLOBAL SYSTEM MOBILE
GYP	GYPSUM BOARD
HORZ	HORIZONTAL
HR	HOUR
HT	HEIGHT
ID	INSIDE DIAMETER
IN	INCH, INCHES
INSUL	INSULATION
INT	INTERIOR
L	LENGTH
LBS	POUNDS
LTE	LONG TERM EVOLUTION
MAX	MAXIMUM
MECH	MECHANICAL
MTL	METAL
MFR	MANUFACTURER
MGR	MANAGER
MIMO	MULTIPLE IN MULTIPLE OUT
mMIMO	MASSIVE MULTIPLE IN MULTIPLE OUT
MIN	MINIMUM
MISC	MISCELLANEOUS
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NO	NUMBER
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
PCS	PERSONAL COMMUNICATION SERVICE
PDU	POWER DISTRIBUTION UNIT
PROJ	PROJECT
PROP	PROPERTY
PT	PRESSURE TREATED
PVC	POLYVINYL CHLORIDE
REQ	REQUIRED
RF	RADIO FREQUENCY
RM	ROOM
RO	ROUGH OPENING
RRH	REMOTE RADIO HEAD
SHT	SHEET
SIM	SIMILAR
SPEC	SPECIFICATION
SF	SQUARE FOOT
SS	STAINLESS STEEL
STL	STEEL
SUSP	SUSPENDED
TMA	TOWER MOUNTED AMPLIFIER
TND	TINNED
TYP	TYPICAL
UMTS	UNIVERSAL MOBILE TELECOMMUNICATION SERVICE
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
W/	WITH
W/O	WITHOUT
WCS	WIRELESS COMMUNICATION SERVICE
WP	WATER PROOF

SCOPE OF WORK

THIS IS NOT AN ALL INCLUSIVE LIST. CONTRACTOR SHALL UTILIZE SPECIFIED EQUIPMENT PART OR ENGINEER APPROVED EQUIVALENT. CONTRACTOR SHALL VERIFY ALL NEEDED EQUIPMENT TO PROVIDE A FUNCTIONAL SITE.
THE PROJECT GENERALLY CONSISTS OF THE FOLLOWING:

- INSTALL (3) PROPOSED PANEL ANTENNAS (1 PER SECTOR)
- INSTALL (3) PROPOSED ANTENNA MOUNTS (1 PER SECTOR)
- INSTALL PROPOSED JUMPERS
- INSTALL (8) PROPOSED RRUs
- INSTALL (1) PROPOSED HYBRID CABLE
- INSTALL (1) PROPOSED CABLE LADDER (IF APPLICABLE)
- INSTALL (1) PROPOSED METAL PLATFORM WITH CANOPY FOR GROUND EQUIPMENT
- INSTALL (1) PROPOSED ICE BRIDGE (IF APPLICABLE)
- INSTALL (1) PROPOSED BBU IN CABINET
- INSTALL (1) PROPOSED PPC CABINET MOUNTED TO PROPOSED H-FRAME
- INSTALL (1) PROPOSED SURGE SUPPRESSION DEVICE
- INSTALL (1) PROPOSED EQUIPMENT CABINET
- INSTALL (1) PROPOSED RBS CHASSIS IN PROPOSED EQUIPMENT CABINET
- INSTALL (1) PROPOSED BASEBAND UNIT IN PROPOSED RBS CHASSIS
- INSTALL (1) PROPOSED POWER CONDUIT FROM PLATFORM TO MEET-ME-POINT DESIGNATED BY POWER COMPANY
- INSTALL (1) PROPOSED TELCO CONDUIT FROM PLATFORM TO MEET-ME-POINT DESIGNATED BY TELCO PROVIDER
- INSTALL (1) PROPOSED NEMA4 TELCO-FIBER BOX MOUNTED TO PROPOSED H-FRAME
- INSTALL (1) PROPOSED GPS ANTENNA WITH CABLE IN CONDUIT
- INSTALL (1) PROPOSED PIPE MAST
- INSTALL (1) PROPOSED LTE BACKHAUL ANTENNA ON PROPOSED PIPE MAST WITH CABLE IN CONDUIT

PROJECT NOTES

1. THE FOLLOWING INFORMATION HAS BEEN PROVIDED BY DISH WIRELESS FOR THIS PROJECT AND HAS NOT BEEN FIELD VERIFIED AS PART OF THIS PROJECT.
   a. EXISTING TOWER, MOUNT AND EQUIPMENT ELEVATIONS
   b. DESIGN PACKAGE BASED ON THE APPLICATION #: 297724

2. A STRUCTURAL ANALYSIS TO DETERMINE THE TOWER CAPACITY TO SUPPORT THIS PROPOSED EQUIPMENT WAS PERFORMED FOR DISH WIRELESS OUTSIDE THE SCOPE OF THIS PROJECT.

3. CONFIRM THAT THE REQUIREMENTS OF THE STRUCTURAL ANALYSIS AND ANY ASSOCIATED MODIFICATIONS HAVE BEEN FOLLOWED AND COMPLETED AS REQUIRED TO SUPPORT THE EQUIPMENT ASSOCIATED WITH THIS PROJECT.

PLANS PREPARED FOR:

dish WIRELESS

PLANS PREPARED BY:

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STATE OF CONNECTICUT
DEREK J. CREASER
No. 23554
LICENSED PROFESSIONAL ENGINEER

DRAWN BY:	RP
CHECKED BY:	HC
APPV'D:	AT

SUBMITTALS

DATE	DESCRIPTION	REV	ISSUED BY
03.25.19	FOR REVIEW	A	RP
04.08.19	FOR REVIEW	1	RP
04.10.19	FOR CONSTRUCTION	2	RP

DISH WIRELESS SITE ID:
CT0100007A

TOWER OWNER SITE ID:
CT-302534

SITE ADDRESS:
1334 ROUTE 85
MONTVILLE, CT 06370

SHEET TITLE:
GENERAL NOTES

SHEET NUMBER:
GN-1

SITE NOTES:

1. WHEN SITE WORK IS INCLUDED IN SCOPE:
   a. CLEAR AND GRUB SITE OF ALL VEGETATION, PAVING, GRAVEL BASE AND OTHER DEBRIS NOT TO REMAIN. SUBGRADES ARE TO BE SET PRIOR TO LANDSCAPE INSTALLATION.
   b. PROVIDE ELEVATION OF SUBGRADE WITHIN 0.10 FOOT OF ELEVATIONS SHOWN ON PLAN MINUS DEPTH OF TOPSOIL, FILL, AND MULCH.
   c. ROUGH GRADE ALL AREAS WITHIN 1 FOOT OF ELEVATIONS INDICATED BEFORE PLANTING. PROVIDE POSITIVE DRAINAGE AWAY FROM EQUIPMENT SLABS, BUILDINGS AND THROUGH ALL PLANTER AREAS TO AVOID LOW SPOTS AND STANDING WATER.
   d. BLEND NEW GRADES NATURALLY INTO EXISTING GRADES.
   e. MAINTAIN POSITIVE DRAINAGE ON THE SITE AT ALL TIMES.
   f. IF REQUIRED, MAINTAIN CONTINUOUS EROSION CONTROL ON THE DOWNSTREAM SIDE OF THE SITE.
   g. IN LANDSCAPE AREAS, FINISH GRADES ARE TO FOLLOW THE GRADES AND EDGE DETAILS INDICATED AND BE MOUNDED 6 INCHES IN THE CENTER OF THE BED ABOVE THE EDGE OF THE LANDSCAPE AREA.
   h. DO NOT PLACE FILL OR EMBANKMENT MATERIAL ON FROZEN GROUND. DO NOT PLACE FROZEN MATERIALS, SNOW OR ICE IN ANY FILL OR EMBANKMENT.
   i. NOTIFY OWNER IF MODIFICATIONS TO THE PROPOSED GRADING SEEM NECESSARY AND OBTAIN APPROVAL PRIOR TO START OF WORK.
2. FOOTINGS SHALL BEAR ON FIRM, NATURAL, UNDISTURBED SOIL, OR ON ENGINEERED FILL (COMPACTED TO 95% ASTM D1557). ENSURE THAT EXCAVATIONS ARE FREE OF ORGANIC MATERIAL, DEBRIS, OR OTHER FOREIGN MATERIAL. NOTIFY OWNER IF ANY UNUSUAL CONDITIONS ARE ENCOUNTERED.

3. FILL AND SLAB BASE MATERIAL SHALL BE 3/4" MINUS CRUSHED ROCK PLACED IN 8" (MAXIMUM) LOOSE LIFTS AND COMPACTED TO 98% ASTM D1557.

CONCRETE NOTES:

1. CONCRETE AND REINFORCING SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

CONCRETE CONSTRUCTION	ACI 318, f'c=4 KSI, UNO
CEMENT	ASTM C150, PORTLAND CEMENT TYPE II, UNO
REINFORCING STEEL	ASTM A615 (INCLUDING SUPPLEMENT S1), GRADE 60, fy=60 KSI, UNO
WELDED WIRE FABRIC	ASTM A185
SPIRAL REINFORCEMENT	ASTM A615, GRADE 60, fy=60 KSI
ANCHOR BOLTS	ASTM A307
GRADE 60 REBAR WELDING	ASTM A706

NOTES: ANY BARS SO NOTED ON THE DRAWINGS SHALL BE GRADE 60, fy=60 KSI. REINFORCING COMPLYING WITH ASTM A615(S1) MAY BE WELDED ONLY IF MATERIAL PROPERTY REPORTS INDICATING CONFORMANCE WITH WELDING PROCEDURES SPECIFIED IN A.W.S. D14 ARE SUBMITTED.

2. CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

FOOTINGS AND OTHER UNFORMED SURFACES, EARTH FACE		3"
FORMED SURFACES EXPOSED TO EARTH OR WEATHER	(≥ #6 BARS)	2"
FORMED SURFACES EXPOSED TO EARTH OR WEATHER	(≤ #5 BARS)	1 1/2"
SLABS AND WALLS	(INTERIOR FACE)	3/4"

3. AIR ENTRAIN ALL CONCRETE WITH SURFACES EXPOSED TO WEATHER WITH AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260, C494, C618, C989 AND C1017. AIR ENTRAIN CONCRETE EXPOSED TO FREEZING AND THAWING WHILE MOIST IN ACCORDANCE WITH ACI 318, SECTION 4.4.1.

4. DETAIL REINFORCING STEEL (INCLUDING HOOKS AND BENDS) IN ACCORDANCE WITH ACI 315 AND 318. LAP ALL CONTINUOUS REINFORCEMENT AT LEAST 30 BAR DIAMETERS OR A MINIMUM OF 2'-0". PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP CORNER BARS AT LEAST 30 BAR DIAMETERS OR A MINIMUM OF 2'-0". LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.

5. PERFORM WELDING OF GRADE 60 REINFORCING BARS (IF REQUIRED) USING LOW HYDROGEN ELECTRODES. PERFORM WELDING OF GRADE 40 REINFORCING BARS (IF REQUIRED) USING E70 XX ELECTRODES. DO NOT WELD WITHIN 4" OF COLD BENDS IN REINFORCING STEEL.

6. DO NOT FIELD BEND REINFORCING PARTIALLY EMBEDDED IN CONCRETE UNLESS SPECIFICALLY SO DETAILED OR APPROVED BY THE ENGINEER.

7. SUPPORT BARS ON CHAIRS OR DOBIE BRICKS.

8. FURNISH NON-SHRINK GROUT BY AN APPROVED MANUFACTURER. MIX AND PLACE IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED RECOMMENDATIONS. GROUT STRENGTH SHALL BE AT LEAST EQUAL TO THE MATERIAL ON WHICH IT IS PLACED (4 KSI, MINIMUM).

9. ALL EXPANSION ANCHORS TO BE HILTI BRAND, UNO. TEST ADHESIVE ANCHORS TO CONFIRM CAPACITY UNLESS WAIVED BY ENGINEER AND LOCAL JURISDICTION.

STRUCTURAL STEEL NOTES:

1. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

WIDE FLANGE SHAPES	ASTM A992, GRADE 50
SHAPES, PLATES, ANGLES, & RODS	ASTM A36, Fy 36 KSI
SPECIAL SHAPES AND PLATES	ASTM A572, Fy 50 KSI
PIPE COLUMNS	ASTM A53, GR B, Fy 35 KSI
STRUCTURAL TUBING	ASTM A500, GR B, Fy 46KSI
ANCHOR BOLTS	ASTM A307
CONNECTION BOLTS	ASTM A325 TWIST-OFF

2. BASE STRUCTURAL STEEL DESIGN, FABRICATION AND ERECTION (INCLUDING FIELD WELDING, HIGH STRENGTH FIELD BOLTING, EXPANSION BOLTS, AND THREADED EXPANSION ANCHORS) ON THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" LATEST EDITION.

3. HOT DIP GALVANIZE AFTER FABRICATION PER A123/A123M-00 ALL STEEL EXPOSED TO WEATHER AND WHERE NOTED.

4. CONFORM TO ALL AISC AND AWS STANDARDS FOR WELDING. PERFORM WELDING BY ANSI/AWS D1.1 CERTIFIED WELDERS USING E70 XX ELECTRODES. USE ONLY PRE-QUALIFIED WELDS AS DEFINED BY AWS.

5. PROVIDE COLD-FORMED STEEL FRAMING MEMBERS OF THE SHAPE, SIZE, AND GAUGE SHOWN ON THE PLANS. PROVIDE MINIMUM SECTION PROPERTIES INDICATED. ALL COLD-FORMED STEEL FRAMING SHALL CONFORM TO THE AISI "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS."

6. FOR BOLTED CONNECTIONS, USE 3/4" DIA., BEARING-TYPE, A325 BOLTS WITH A MINIMUM OF TWO BOLTS, UNO.

7. FOR NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING, USE 5/8" DIA. A307 BOLTS, UNO.

8. PREPARE AND PAINT IN ACCORDANCE WITH THE PAINT MANUFACTURERS WRITTEN INSTRUCTIONS, UNO.

9. TOUCH UP ALL FIELD DRILLING, WELDING AND CUT SURFACES WITH 2 COATS OF GALVACON (ZINC RICH PAINT) OR APPROVED EQUAL.

10. THE STRUCTURAL INTEGRITY OF THE EQUIPMENT PLATFORM HAS NOT BEEN REVIEWED BY FDH INFRASTRUCTURE SERVICES, LLC.

SPECIAL INSPECTIONS:

1. WHEN REQUIRED, PROVIDE SPECIAL INSPECTIONS PERFORMED BY AN INDEPENDENT INSPECTOR, APPROVED BY OWNER'S REPRESENTATIVE AND THE LOCAL JURISDICTION.

2. THE SPECIAL INSPECTOR SHALL PROVIDE A COPY OF THE REPORT TO THE OWNER'S REPRESENTATIVE, STRUCTURAL ENGINEER, CONTRACTOR, AND BUILDING OFFICIAL.

PLANS PREPARED FOR:

dish WIRELESS

PLANS PREPARED BY:

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STATE OF CONNECTICUT
DEREK J. CREASER
No. 28554
LICENSED PROFESSIONAL ENGINEER

DRAWN BY: RP
CHECKED BY: HC
APPV'D: AT

SUBMITTALS

DATE	DESCRIPTION	REV	ISSUED BY
03.25.19	FOR REVIEW	A	RP
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DISH WIRELESS SITE ID:
CT0100007A

TOWER OWNER SITE ID:
CT-302534

SITE ADDRESS:
1334 ROUTE 85
MONTVILLE, CT 06370

SHEET TITLE:
GENERAL NOTES

SHEET NUMBER:
GN-2

ELECTRICAL NOTES:

GENERAL

GENERAL CONDITIONS:

A. CONTRACTOR SHALL INSPECT THE EXISTING SITE CONDITIONS PRIOR TO SUBMITTING BID. ANY QUESTIONS ARISING DURING THE BID PERIOD IN REGARD TO THE CONTRACTORS FUNCTIONS, THE SCOPE OF WORK, OR ANY OTHER ISSUE RELATED TO THIS PROJECT SHALL BE ISSUED TO CONSTRUCTION MANAGER IN WRITING FOR CLARIFICATION PRIOR TO SUBMITTAL OF BID AND CONTRACT AWARD.

B. THE CONTRACTOR SHALL OBTAIN PERMITS, LICENSES, MAKE ALL DEPOSITS, AND PAY ALL FEES REQUIRED FOR THE CONSTRUCTION OF WORK UNDER THIS SECTION.

C. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL SYSTEMS AND COMPONENTS COVERED UNDER THIS SECTION. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. DRAWINGS SHALL NOT BE SCALED TO DETERMINE DIMENSIONS.

LAWS, REGULATIONS, ORDINANCES, STATUTES AND CODES:

A. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC), AND ALL APPLICABLE LOCAL LAWS, REGULATIONS, ORDINANCES, STATUTES AND CODES. CONDUIT BENDS SHALL BE THE RADIUS BEND FOR THE TRADE SIZE OF CONDUIT IN COMPLIANCE WITH THE LATEST EDITIONS OF NEC.

REFERENCES:

A. THE PUBLICATIONS LISTED BELOW ARE PART OF THIS SPECIFICATION. EACH PUBLICATION SHALL BE THE LATEST REVISION AND ADDENDUM IN EFFECT ON THE DATE. THIS SPECIFICATION IS ISSUED FOR CONSTRUCTION UNLESS OTHERWISE NOTED. EXCEPT AS MODIFIED BY THE REQUIREMENT SPECIFIED HEREIN OR THE DETAILS OF THE DRAWINGS, WORK INCLUDED IN THIS SPECIFICATION SHALL CONFORM TO THE APPLICABLE PROVISION OF THESE PUBLICATIONS.

1. ANSI/IEEE (AMERICAN NATIONAL STANDARDS INSTITUTE)
2. ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS)
3. ICEA (INSULATED CABLE ENGINEERS ASSOCIATION)
4. NEMA (NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION)
5. NFPA (NATIONAL FIRE PROTECTION ASSOCIATION)
6. OSHA (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION)
7. UL (UNDERWRITERS LABORATORIES. INC.)
8. DISH WIRELESS GROUNDING AND BONDING STANDARDS, LATEST EDITION, AND COMPLY WITH DISH WIRELESS GROUNDING CHECKLIST, LATEST VERSION
9. R56 MOTOROLA STANDARDS

SCOPE OF WORK:

A. WORK UNDER THIS SECTION SHALL CONSIST OF FURNISHING ALL LABOR, MATERIAL, AND ASSOCIATED SERVICES REQUIRED TO COMPLETE REQUIRED CONSTRUCTION AND BE OPERATIONAL.

B. ALL ELECTRICAL EQUIPMENT UNDER THIS CONTRACT SHALL BE PROPERLY TESTED, ADJUSTED, AND ALIGNED BY THE CONTRACTOR.

C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATING, DRAINING OF TRENCHES, BACKFILLING, AND REMOVAL OF EXCESS DIRT.

D. THE CONTRACTOR SHALL PREPARE A COMPLETE SET OF AS-BUILT DRAWINGS, DOCUMENT ALL WIRING EQUIPMENT CONDITIONS, AND CHANGES WHILE COMPLETING THIS CONTRACT, THE AS-BUILT DRAWINGS SHALL BE SUBMITTED AT COMPLETION OF THE PROJECT.

PRODUCTS

GENERAL:

A. ALL MATERIALS AND EQUIPMENT SHALL BE UL LISTED, NEW, AND FREE FROM DEFECTS.

B. ALL ITEMS OF MATERIALS AND EQUIPMENT SHALL BE ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION AS SUITABLE FOR THE USE INTENDED.

C. ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OF APPROVAL, AND SHALL CONFORM TO REQUIREMENT OF THE NATIONAL ELECTRICAL CODE.

D. ALL OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING CURRENT RATING EQUAL TO OR GREATER THAN THE SHORT CIRCUIT CURRENT AVAILABLE, 10,000 AIC MINIMUM. VERIFY AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT.

MATERIALS AND EQUIPMENT:

A. CONDUIT:

1. RIGID METAL CONDUIT (RMC) SHALL BE HOT-DIPPED GALVANIZED INSIDE AND OUTSIDE INCLUDING ENDS AND THREADS AND ENAMELED OR LACQUERED INSIDE IN ADDITION TO GALVANIZING.
2. LIQUID TIGHT FLEXIBLE METAL CONDUIT SHALL BE UL LISTED.
3. CONDUIT CLAMPS, STRAPS AND SUPPORTS SHALL BE STEEL OR MALLEABLE IRON. ALL FITTINGS SHALL BE COMPRESSION AND CONCRETE TIGHT TYPE.
4. NONMETALLIC CONDUIT AND FITTINGS SHALL BE SCHEDULE 40 PVC UNLESS SCHEDULE 80 PVC IS SPECIFIED. INSTALL USING SOLVENT-CEMENT-TYPE JOINTS AS RECOMMENDED BY THE MANUFACTURER.

B. CONDUCTORS AND CABLE:

1. CONDUCTORS AND CABLE SHALL BE FLAME-RETARDANT, MOISTURE AND HEAT RESISTANT THERMOPLASTIC, SINGLE CONDUCTOR, COPPER, TYPE THHN/THWN-2, 600 VOLT, SIZE AS INDICATED, #12 AWG SHALL BE THE MINIMUM SIZE CONDUCTOR USED.
2. #10 AWG AND SMALLER CONDUCTOR SHALL BE SOLID OR STRANDED AND #8 AWG AND LARGER CONDUCTORS SHALL BE STRANDED.
3. SOLDERLESS, COMPRESSION-TYPE CONNECTORS SHALL BE USED FOR TERMINATION OF ALL STRANDED CONDUCTORS.
4. STRAIN-RELIEF SUPPORTS GRIPS SHALL BE HUBBELL KELLEMS OR APPROVED EQUAL. CABLES SHALL BE SUPPORTED IN ACCORDANCE WITH THE NEC AND CABLE MANUFACTURER'S RECOMMENDATIONS.
5. ALL CONDUCTORS SHALL BE TAGGED AT BOTH ENDS OF THE CONDUCTOR, AT ALL PULL BOXES, J-BOXES, EQUIPMENT AND CABINETS AND SHALL BE IDENTIFIED WITH APPROVED PLASTIC TAGS (ACTION CRAFT, BRADY, OR APPROVED EQUAL).

C. DISCONNECT SWITCHES:

1. DISCONNECT SWITCHES SHALL BE HEAVY DUTY, DEAD-FRONT, QUICK-MAKE, QUICK-BREAK, EXTERNALLY OPERABLE, HANDLE LOCKABLE AND INTERLOCK WITH COVER IN CLOSED POSITION, RATING AS INDICATED, UL LABELED FURNISHED IN NEMA 3R ENCLOSURE, SQUARE-D OR ENGINEER APPROVED EQUAL.

D. CHEMICAL ELECTROLYTIC GROUNDING SYSTEM:

1. INSTALL CHEMICAL GROUNDING AS REQUIRED. THE SYSTEM SHALL BE ELECTROLYTIC MAINTENANCE FREE ELECTRODE CONSISTING OF RODS WITH A MINIMUM #2 AWG CU EXOTHERMICALLY WELDED PIGTAIL, PROTECTIVE BOXES, AND BACKFILL MATERIAL. MANUFACTURER SHALL BE LYNCOLE XIT GROUNDING ROD TYPES K2-(*)CS OR K2L-(*)CS (*) LENGTH AS REQUIRED.
2. GROUND ACCESS BOX SHALL BE A POLYPLASTIC BOX FOR NON-TRAFFIC APPLICATIONS, INCLUDING BOLT DOWN FLUSH COVER WITH "BREATHER" HOLES, XIT MODEL #XB-22. ALL DISCONNECT SWITCHES AND CONTROLLING DEVICES SHALL BE PROVIDED WITH ENGRAVED LAMICOID NAMEPLATES INDICATING EQUIPMENT CONTROLLED, BRANCH CIRCUITS ID NUMBERING, AND THE ELECTRICAL POWER SOURCE.
3. BACKFILL MATERIAL SHALL BE LYNCONITE AND LYNCOLE GROUNDING GRAVEL.

E. SYSTEM GROUNDING

1. ALL GROUNDING COMPONENTS SHALL BE TINNED AND GROUNDING CONDUCTOR SHALL BE #2 AWG BARE, SOLID, TINNED, COPPER. ABOVE GRADE GROUNDING CONDUCTORS SHALL BE INSULATED WHERE NOTED.
2. GROUNDING BUSES SHALL BE BARE, TINNED ANNEALED COPPER BARS OF RECTANGULAR CROSS SECTION. STANDARD BUS BARS MGB, SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. THEY SHALL NOT BE FABRICATED OR MODIFIED IN THE FIELD. ALL GROUNDING BUSES SHALL BE IDENTIFIED WITH MINIMUM 3/4" LETTERS BY WAY OF STENCILING OR DESIGNATION PLATE.
3. CONNECTORS SHALL BE HIGH-CONDUCTIVITY, HEAVY DUTY, LISTED AND LABELED AS GROUNDING CONNECTORS FOR THE MATERIALS USED. USE TWO-HOLE COMPRESSION LUGS WITH HEAT SHRINK FOR MECHANICAL CONNECTIONS. INTERIOR CONNECTIONS USE TWO-HOLE COMPRESSION LUGS WITH INSPECTION WINDOW AND CLEAR HEAT SHRINK.
4. EXOTHERMIC WELDED CONNECTIONS SHALL BE PROVIDED IN KIT FORM AND SELECTED FOR THE SPECIFIC TYPES, SIZES, AND COMBINATIONS OF CONDUCTORS AND OTHER ITEMS TO BE CONNECTED.
5. GROUND RODS SHALL BE COPPER-CLAD STEEL WITH HIGH-STRENGTH STEEL CORE AND ELECTROLYTIC-GRADE COPPER OUTER SHEATH, MOLTEN WELDED TO CORE, 5/8"X10'-0". ALL GROUNDING RODS SHALL BE INSTALLED WITH INSPECTION SLEEVES.
6. INSTALL AN EQUIPMENT GROUNDING CONDUCTOR IN ALL CONDUITS IN COMPLIANCE WITH THE DISH WIRELESS SPECIFICATIONS AND NEC. THE EQUIPMENT GROUNDING CONDUCTORS SHALL BE BONDED TO ALL METALLIC JUNCTION BOXES, PULLBOXES, DISCONNECT SWITCHES, STARTERS, AND EQUIPMENT.

F. OTHER MATERIALS:

1. THE CONTRACTOR SHALL PROVIDE OTHER MATERIALS, THOUGH NOT SPECIFICALLY DESCRIBED, WHICH ARE REQUIRED FOR A COMPLETELY OPERATIONAL SYSTEM AND PROPER INSTALLATION OF THE WORK.
2. PROVIDE PULL BOXES AND JUNCTION BOXES WHERE SHOWN OR REQUIRED BY NEC.

G. PANELS AND LOAD CENTERS:

1. ALL PANEL LABELS SHALL BE TYPEWRITTEN.

EXECUTION:

GENERAL:

A. ALL MATERIAL AND EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

B. EQUIPMENT SHALL BE TIGHTLY COVERED AND PROTECTED AGAINST DIRT OR WATER, AND AGAINST CHEMICAL OR MECHANICAL INJURY DURING INSTALLATION AND CONSTRUCTION PERIODS.

LABOR AND WORKMANSHIP:

A. ALL LABOR FOR THE INSTALLATION OF MATERIALS AND EQUIPMENT FURNISHED FOR THE ELECTRICAL SYSTEM SHALL BE INSTALLED BY EXPERIENCED WIREMEN, IN A NEAT AND WORKMAN-LIKE MANNER.

B. ALL ELECTRICAL EQUIPMENT SHALL BE ADJUSTED, ALIGNED AND TESTED BY THE CONTRACTOR AS REQUIRED TO PRODUCE THE INTENDED PERFORMANCE.

C. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL EXPOSED EQUIPMENT, REMOVE ALL LABELS AND ANY DEBRIS, CRATING OR CARTONS AND LEAVE THE INSTALLATION FINISHED AND READY FOR OPERATION.

PLANS PREPARED FOR:

dish WIRELESS

PLANS PREPARED BY:

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STATE OF CONNECTICUT
DEREK J. CREASER
No. 28554
LICENSED PROFESSIONAL ENGINEER

DRAWN BY:	RP
CHECKED BY:	HC
APPV'D:	AT

SUBMITTALS

DATE	DESCRIPTION	REV	ISSUED BY
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04.08.19	FOR REVIEW	1	RP
04.10.19	FOR CONSTRUCTION	2	RP

DISH WIRELESS SITE ID:

CT0100007A

TOWER OWNER SITE ID:

CT-302534

SITE ADDRESS:

1334 ROUTE 85
MONTVILLE, CT 06370

SHEET TITLE:

ELECTRICAL NOTES

SHEET NUMBER:

EN-1

ELECTRICAL NOTES (CONTINUED)

COORDINATION:

A. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ELECTRICAL ITEMS WITH THE OWNER–FURNISHED EQUIPMENT DELIVERY SCHEDULE TO PREVENT UNNECESSARY DELAYS IN THE TOTAL WORK.

INSTALLATION:

A. CONDUIT:

1. ALL ELECTRICAL WIRING SHALL BE INSTALLED IN CONDUIT AS SPECIFIED. NO CONDUIT OR TUBING OF LESS THAN 3/4 INCH TRADE SIZE.
2. PROVIDE RIGID PVC SCHEDULE 80 CONDUITS FOR ALL RISERS, OR WHERE RMC OTHERWISE NOTED.
3. INSTALL SCHEDULE 40 PVC CONDUIT WITH A MINIMUM COVER OF 24" UNDER ROADWAYS, PARKING LOTS, STREETS, AND ALLEYS. CONDUIT SHALL HAVE A MINIMUM COVER OF 18" IN ALL OTHER NON–TRAFFIC APPLICATIONS (REFER TO 2017 NEC, TABLE 300.5).
4. USE GALVANIZED FLEXIBLE STEEL CONDUIT WHERE DIRECT CONNECTION TO EQUIPMENT WITH MOVEMENT, VIBRATION, OR FOR EASE OF MAINTENANCE. USE LIQUID TIGHT, FLEXIBLE METAL CONDUIT FOR OUTDOOR APPLICATIONS. INSTALL GALVANIZED FLEXIBLE STEEL CONDUIT AT ALL POINTS OF CONNECTION TO EQUIPMENT MOUNTED ON SUPPORT TO ALLOW FOR EXPANSION AND CONTRACTION.
5. A RUN OF CONDUIT BETWEEN BOXES OR EQUIPMENT SHALL NOT CONTAIN MORE THAN THE EQUIVALENT OF THREE 90 DEGREE BENDS MAX. CONDUIT BEND SHALL BE MADE WITH THE UL LISTED BENDER OR FACTORY 90 DEGREE ELBOWS MAY BE USED.
6. FIELD FABRICATED CONDUITS SHALL BE CUT SQUARE WITH A CONDUIT CUTTING TOOL AND REAMED TO PROVIDE A SMOOTH INSIDE SURFACE.
7. PROVIDE INSULATED GROUNDING BUSHING FOR ALL CONDUITS.
8. CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL CONDUITS DURING CONSTRUCTION. TEMPORARY OPENINGS IN THE CONDUIT SYSTEM SHALL BE PLUGGED OR CAPPED TO PREVENT ENTRANCE OF MOISTURE OR FOREIGN MATTER. CONTRACTOR SHALL REPLACE ANY CONDUITS CONTAINING FOREIGN MATERIALS THAT CANNOT BE REMOVED.
9. ALL CONDUITS SHALL BE SWABBED CLEAN BY PULLING AN APPROPRIATE SIZE MANDREL THROUGH THE CONDUIT BEFORE INSTALLATION OF CONDUCTORS OR CABLES. CONDUIT SHALL BE FREE OF DIRT AND DEBRIS.
10. INSTALL PULL STRINGS IN ALL CLEAN EMPTY CONDUITS. IDENTIFY PULL STRINGS AT EACH END.
11. INSTALL 2" HIGHLY VISIBLE AND DETECTABLE TAPE 12" ABOVE ALL UNDERGROUND CONDUITS AND CONDUCTORS.
12. CONDUITS SHALL BE INSTALLED IN SUCH A MANNER AS TO INSURE AGAINST COLLECTION OF TRAPPED CONDENSATION.
13. PROVIDE CORE DRILLING AS NECESSARY FOR PENETRATIONS TO ALLOW FOR RACEWAYS AND CABLES TO BE ROUTED THROUGH THE BUILDING. DO NOT PENETRATE STRUCTURAL MEMBERS AND/OR SLEEVES. PENETRATIONS IN FIRE RATED CONSTRUCTION SHALL BE EFFECTIVELY SEALED WITH FIRE RATED MATERIAL WHICH SHALL MAINTAIN THE FIRE RATING OF THE WALL OR STRUCTURE. FIRE STOPS AT FLOOR PENETRATIONS SHALL PREVENT PASSAGE OF WATER, SMOKE, FIRE, AND FUMES. ALL MATERIAL SHALL BE UL APPROVED FOR THE PURPOSE.

B. CONDUCTORS AND CABLE:

1. SPLICES SHALL BE MADE ONLY AT OUTLETS, JUNCTION BOXES, OR ACCESSIBLE RACEWAY CONDUITS APPROVED FOR THIS PURPOSE.
2. PULLING LUBRICANTS SHALL BE UL APPROVED. CONTRACTOR SHALL USE NYLON OR HEMP ROPE FOR PULLING CONDUCTOR OR CABLES INTO THE CONDUIT.
3. CABLES SHALL BE NEATLY TRAINED, WITHOUT INTERLACING, AND BE OF SUFFICIENT LENGTH IN ALL BOXES AND EQUIPMENT TO PERMIT MAKING A NEAT ARRANGEMENT. CABLES SHALL BE SECURED IN A MANNER TO AVOID TENSION ON CONDUCTORS OR TERMINALS. CONDUCTORS SHALL BE PROTECTED FROM MECHANICAL INJURY AND MOISTURE. SHARP BENDS OVER CONDUIT BUSHINGS IS PROHIBITED. DAMAGED CABLES SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

C. DISCONNECT SWITCHES:

1. INSTALL DISCONNECT SWITCHES LEVEL AND PLUMB. CONNECT TO WIRING SYSTEM AND GROUNDING SYSTEM AS INDICATED.

D. GROUNDING:

1. ALL METALLIC PARTS OF ELECTRICAL EQUIPMENT WHICH DO NOT CARRY CURRENT SHALL BE GROUNDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE BUILDING MANUFACTURER, DISH WIRELESS GROUNDING AND BONDING STANDARDS, LATEST EDITION, AND COMPLY WITH DISH WIRELESS GROUNDING CHECKLIST, LATEST VERSION, AND THE NATIONAL ELECTRICAL CODE.
2. PROVIDE ELECTRICAL GROUNDING AND BONDING SYSTEM INDICATED WITH ASSEMBLY OF MATERIALS, INCLUDING GROUNDING ELECTRODES, BONDING JUMPERS AND ADDITIONAL ACCESSORIES AS REQUIRED FOR A COMPLETE INSTALLATION.
3. ALL GROUNDING CONDUCTORS SHALL PROVIDE A STRAIGHT DOWNWARD PATH TO GROUND WITH GRADUAL BEND AS REQUIRED. GROUNDING CONDUCTORS SHALL NOT BE LOOPED OR SHARPLY BENT. ROUTE GROUNDING CONNECTIONS AND CONDUCTORS TO GROUND IN THE SHORTEST AND STRAIGHTEST PATHS POSSIBLE TO MINIMIZE TRANSIENT VOLTAGE RISES.
4. BUILDINGS AND/OR NEW TOWERS GREATER THAN 75 FEET IN HEIGHT AND WHERE THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE, THE CONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS FROM THE ROOFTOP, TOWER, AND WATER TOWERS GROUNDING RING, TO THE EXISTING GROUNDING SYSTEM, THE GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN 2/0 AWG COPPER. ROOFTOP GROUNDING RING SHALL BE BONDED TO THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL COLUMNS, LIGHTNING PROTECTION SYSTEM, AND BUILDING MAIN WATER LINE (FERROUS OR NONFERROUS METAL PIPING ONLY). SEE STANDARD 6.3.2.2.
5. TIGHTEN GROUNDING AND BONDING CONNECTORS, INCLUDING SCREWS AND BOLTS, IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED TORQUE TIGHTENING VALUES FOR CONNECTORS AND BOLTS. WHERE MANUFACTURER'S TORQUING REQUIREMENTS ARE NOT AVAILABLE, TIGHTEN CONNECTIONS TO COMPLY WITH TIGHTENING TORQUE VALUES SPECIFIED IN UL TO ASSURE PERMANENT AND EFFECTIVE GROUNDING.
6. CONTRACTOR SHALL VERIFY THE LOCATIONS OF GROUNDING TIE–IN–POINTS TO THE EXISTING GROUNDING SYSTEM. ALL UNDERGROUND GROUNDING CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC WELD PROCESS AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
7. ALL GROUNDING CONNECTIONS SHALL BE INSPECTED FOR TIGHTNESS. EXOTHERMIC WELDED CONNECTIONS SHALL BE APPROVED BY THE INSPECTOR HAVING JURISDICTION BEFORE BEING PERMANENTLY CONCEALED.
8. APPLY CORROSION–RESISTANT FINISH TO FIELD CONNECTIONS AND PLACES WHERE FACTORY APPLIED PROTECTIVE COATINGS HAVE BEEN DESTROYED. USE KOPR–SHIELD ANTI–OXIDATION COMPOUND ON ALL COMPRESSION GROUNDING CONNECTIONS.
9. A SEPARATE, CONTINUOUS, INSULATED EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED IN ALL FEEDER AND BRANCH CIRCUITS.
10. BOND ALL INSULATED GROUNDING BUSHINGS WITH A BARE #6 AWG GROUNDING CONDUCTOR TO A GROUND BUS.
11. DIRECT BURIED GROUNDING CONDUCTORS SHALL BE INSTALLED AT A NOMINAL DEPTH OF 30" MINIMUM BELOW GRADE, OR 6" BELOW THE FROST LINE, USE THE GREATER OF THE TWO DISTANCES.
12. ALL GROUNDING CONDUCTORS EMBEDDED IN OR PENETRATING CONCRETE SHALL BE INSTALLED IN SCHEDULE 40 PVC CONDUIT.
13. THE INSTALLATION OF CHEMICAL ELECTROLYTIC GROUNDING SYSTEM SHALL BE IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. REMOVE SEALING TAPE FROM LEACHING AND BREATHER HOLES. INSTALL PROTECTIVE BOX FLUSH WITH GRADE.
14. DRIVE GROUND RODS UNTIL TOPS ARE A MINIMUM DISTANCE OF 30" DEPTH OR 6" BELOW FROST LINE, USING THE GREATER OF THE TWO DISTANCES.
15. CONTRACTOR SHALL REPAIR, AND/OR REPLACE, EXISTING GROUNDING SYSTEM COMPONENTS DAMAGED DURING CONSTRUCTION AT THE CONTRACTORS EXPENSE.

ACCEPTANCE TESTING:

A. CERTIFIED PERSONNEL USING CERTIFIED EQUIPMENT SHALL PERFORM REQUIRED TESTS AND SUBMIT WRITTEN TEST REPORTS UPON COMPLETION.

B. WHEN MATERIAL AND/OR WORKMANSHIP IS FOUND NOT TO COMPLY WITH THE SPECIFIED REQUIREMENTS, THE NON–COMPLYING ITEMS SHALL BE REMOVED FROM THE PROJECT SITE AND REPLACED WITH ITEMS COMPLYING WITH THE SPECIFIED REQUIREMENTS PROMPTLY AFTER RECEIPT OF NOTICE FOR NON–COMPLIANCE.

C. TEST PROCEDURES:

1. ALL FEEDERS SHALL HAVE INSULATION TESTED AFTER INSTALLATION, BEFORE CONNECTION TO DEVICES. THE CONDUCTORS SHALL TEST FREE FROM SHORT CIRCUITS AND GROUNDS. TESTING SHALL BE FOR ONE MINUTE USING 1000V DC. PROVIDE WRITTEN DOCUMENTATION FOR ALL TEST RESULTS.
2. PRIOR TO ENERGIZING CIRCUITRY, TEST WIRING DEVICES FOR ELECTRICAL CONTINUITY AND PROPER POLARITY CONNECTIONS.
3. MEASURE AND RECORD VOLTAGES BETWEEN PHASES AND BETWEEN PHASE CONDUCTORS AND NEUTRALS, SUBMIT A REPORT OF MAXIMUM AND MINIMUM VOLTAGES.
4. PERFORM GROUNDING TEST TO MEASURE GROUNDING RESISTANCE OF GROUNDING SYSTEM USING THE IEEE STANDARD 3–POINT "FALL–OF–POTENTIAL" METHOD. PROVIDE PLOTTED TEST VALUES AND LOCATION SKETCH. NOTIFY THE ENGINEER IMMEDIATELY IF MEASURED VALUE IS OVER 5 OHMS.

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PLANS PREPARED BY:

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STATE OF CONNECTICUT
DEREK J. CREASER
No. 29554
LICENSED PROFESSIONAL ENGINEER

DRAWN BY:	RP
CHECKED BY:	HC
APPV'D:	AT

SUBMITTALS

DATE	DESCRIPTION	REV	ISSUED BY
03.25.19	FOR REVIEW	A	RP
04.08.19	FOR REVIEW	1	RP
04.10.19	FOR CONSTRUCTION	2	RP

DISH WIRELESS SITE ID:
CT0100007A

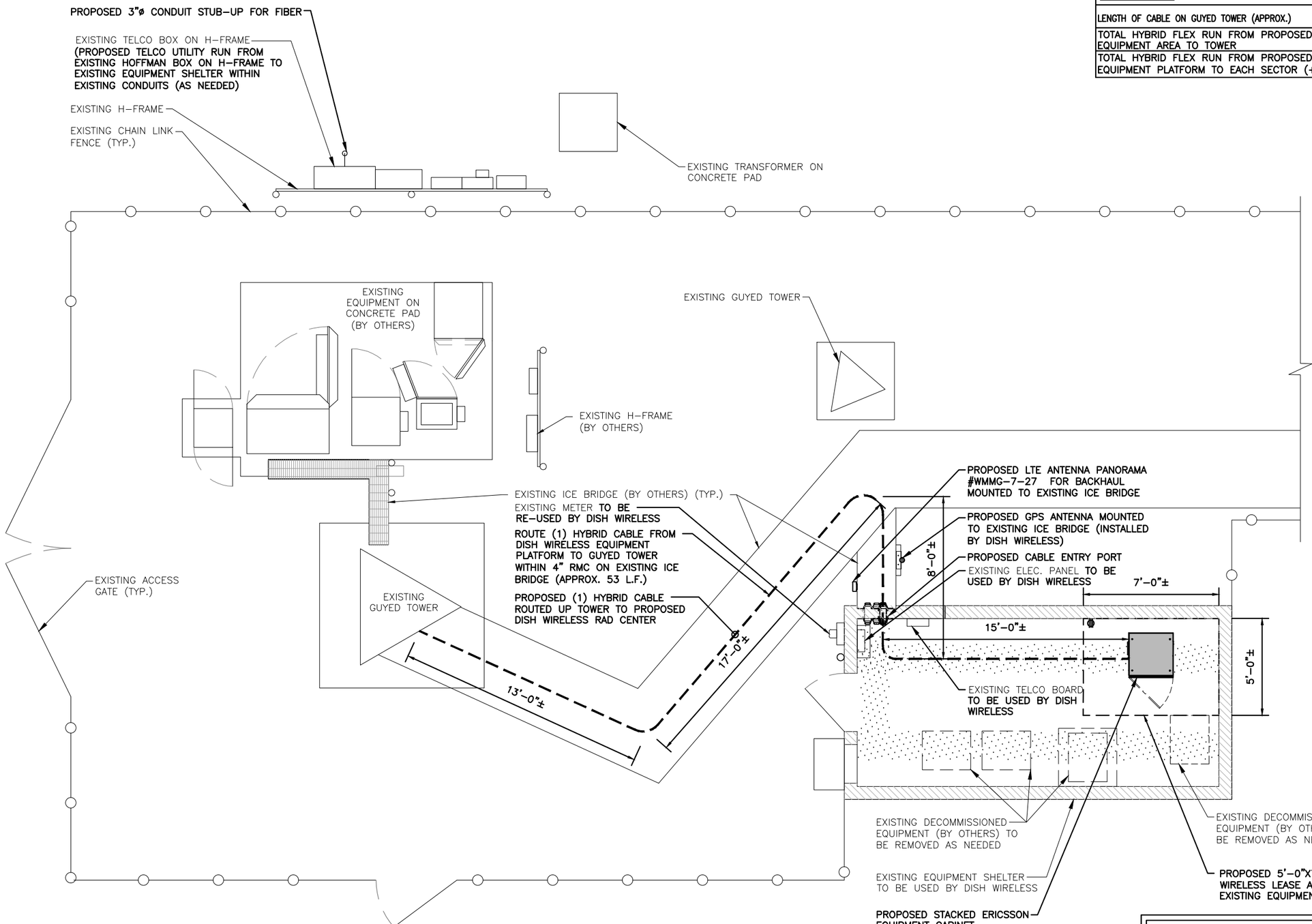
TOWER OWNER SITE ID:
CT-302534

SITE ADDRESS:
1334 ROUTE 85
MONTVILLE, CT 06370

SHEET TITLE:
ELECTRICAL NOTES

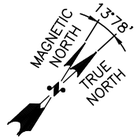
SHEET NUMBER:
EN-2

LENGNTHS:	
LENGTH OF CABLE ON GUYED TOWER (APPROX.)	400'
TOTAL HYBRID FLEX RUN FROM PROPOSED EQUIPMENT AREA TO TOWER	53'
TOTAL HYBRID FLEX RUN FROM PROPOSED EQUIPMENT PLATFORM TO EACH SECTOR (+10%)	498'



COMPOUND PLAN
SCALE: 3/16"=1'-0"

0 2'-8" 5'-4" 10'-8" 16'-0"



NOTE:

1. WHEN APPLICABLE, LTE BACKHAUL ANTENNA LOCATION TO BE VERIFIED IN THE FIELD AT TIME OF CONSTRUCTION.
2. NO DESIGNATED TELCO MEET-ME-POINT BECAUSE NO TELCO PROVIDER IN VICINITY OF SITE.

NOTES:

ALL SITE INFORMATION HAS BEEN PROVIDED BY THE CLIENT. HUDSON DESIGN ENGINEERING, PLLC IS NOT LIABLE AND DOES NOT ASSUME RESPONSIBILITY FOR THIS CONTENT.

ATC SITE NAME: HARTFORD CT2
ATC SITE #: CT-302534

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dish WIRELESS

PLANS PREPARED BY:

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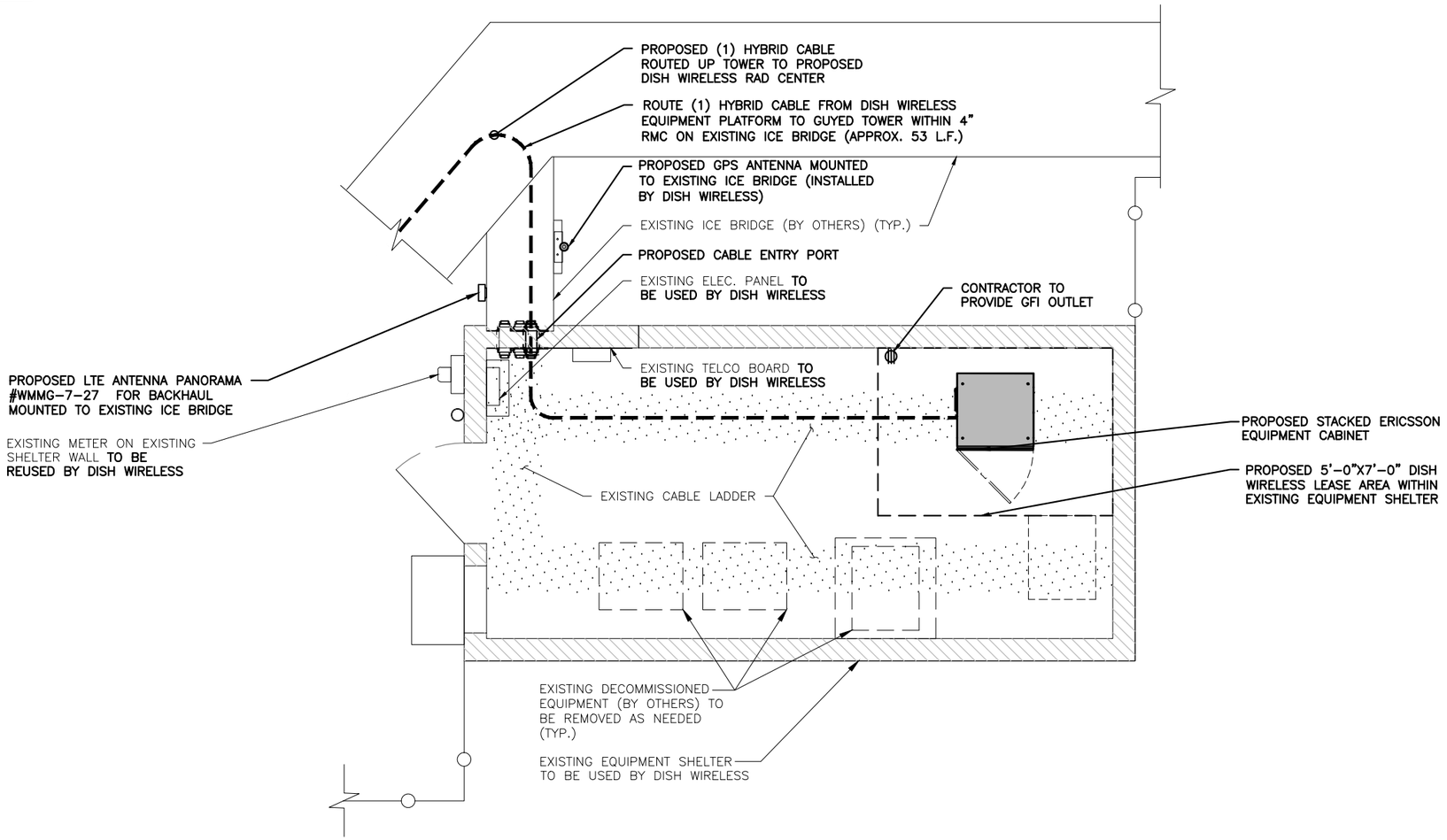
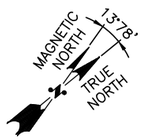
SHEET TITLE:
COMPOUND PLAN

SHEET NUMBER:
C-1

SAFETY NOTE:

WHEN APPLICABLE, CONTRACTOR SHALL COVER PROPOSED (8"x8") HOLE IN PLATFORM GRATE TO PREVENT TRIPPING HAZARD. SEE OSHA STANDARDS, SECTION 29 CFR 1926.501(b)(4)(ii).





EQUIPMENT PLAN
SCALE: 1/4"=1'-0"

0 2'-0" 4'-0" 8'-0" 12'-0"

NOTES:

1. WHEN APPLICABLE, LTE BACKHAUL ANTENNA LOCATION TO BE VERIFIED IN THE FIELD AT TIME OF CONSTRUCTION.
2. WHEN APPLICABLE, DISH WIRELESS SUPPORT PIPE SHALL BE POSITIONED AS TO AFFORD FUTURE DISH A CLEAR, UNOBSTRUCTED VIEW OF THE SOUTHERN SKY.
3. CONTRACTOR TO PROVIDE 4MIL FABRIC BENEATH PROPOSED DISH WIRELESS EQUIPMENT PLATFORM AND LEGS IF NONE PRESENT.

ATC SITE NAME: HARTFORD CT2
ATC SITE #: CT-302534

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EQUIPMENT PLAN

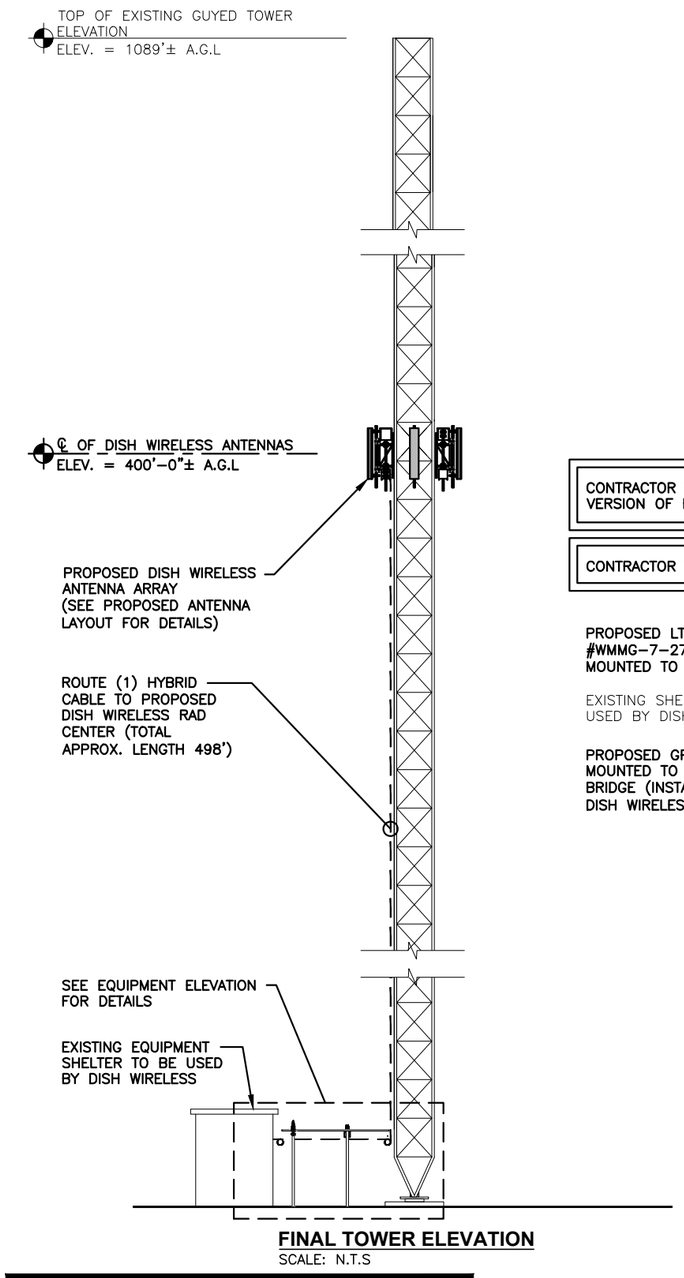
SHEET NUMBER:
C-2

NOTES:

1. DISH WIRELESS TO CONFIRM WITH TOWER OWNER THE VERTICAL LEASE AREA RIGHTS AVAILABLE PRIOR TO CONSTRUCTION. EXISTING EQUIPMENT MAY OBSTRUCT DESIRED DISH WIRELESS RAD-CENTER.
2. TOWER FACE WIDTH/DIAMETER IS AN ESTIMATE FROM STRUCTURAL ANALYSIS.

RAD CENTER

400'-0"

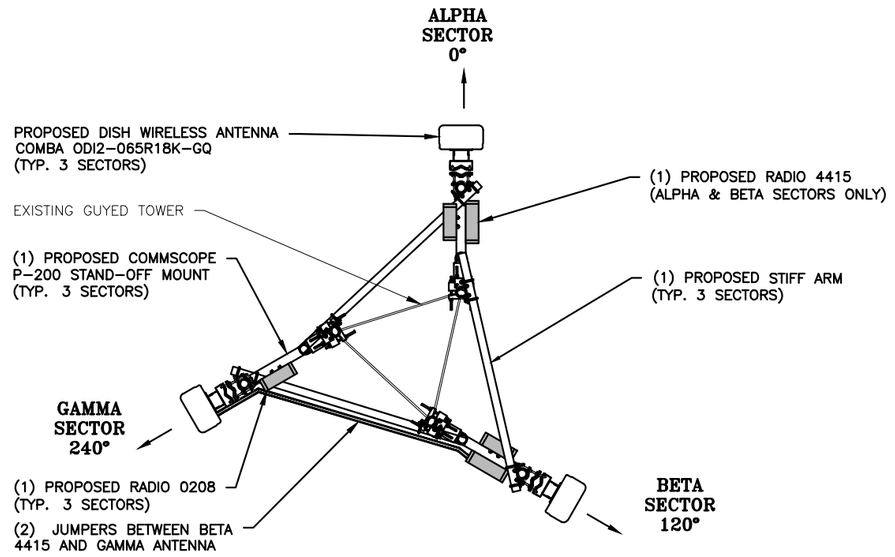


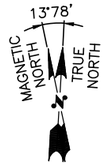
FINAL TOWER ELEVATION

SCALE: N.T.S

CONTRACTOR TO VERIFY LATEST VERSION OF RFDS WITH DISH CM

CONTRACTOR TO SUPPLY DRIP LOOP

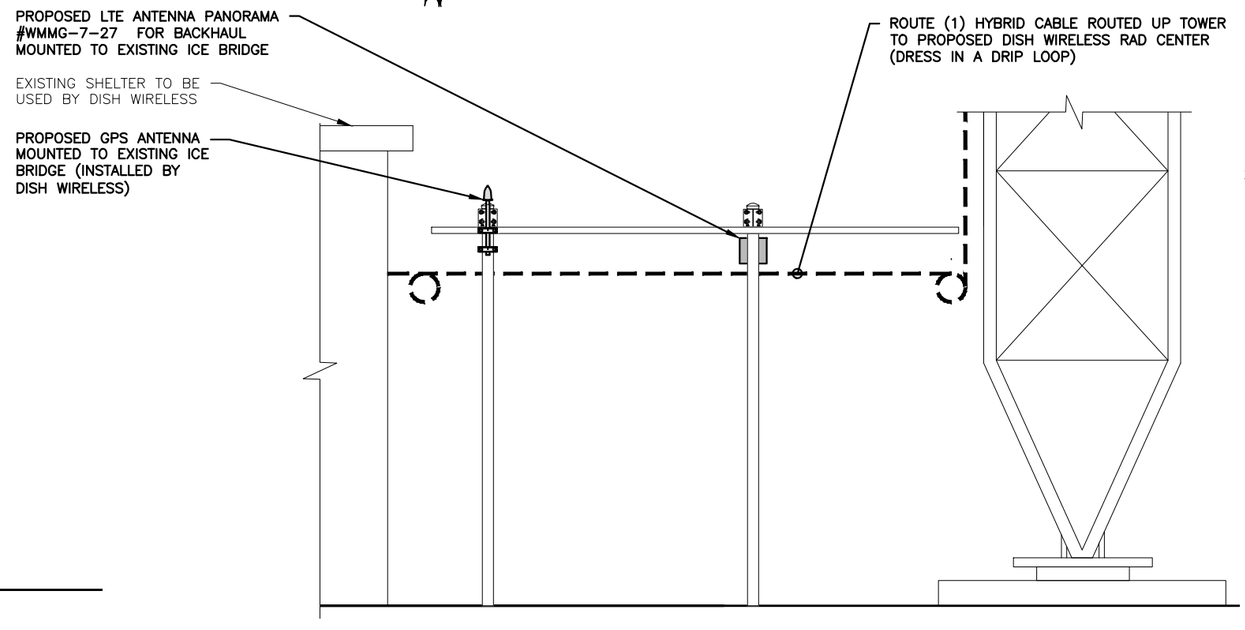




PROPOSED ANTENNA LAYOUT

SCALE: N.T.S

NOTE:
PROPOSED RET CABLE 4415 RRU TO ANTENNA (1) PER SECTOR. BETA SECTOR TO BE DAISY CHAINED TO GAMMA.



PROPOSED EQUIPMENT ELEVATION

SCALE: N.T.S

ANTENNA LAYOUT NOTES:

1. THIS ANTENNA ORIENTATION PLAN IS A SCHEMATIC. THE CONTRACTOR SHALL VERIFY TOWER ORIENTATION AND FIELD COORDINATE REQUIRED ADJUSTMENTS TO ACHIEVE THE DESIRED ANTENNA AZIMUTHS.
2. ANTENNA CENTERLINE HEIGHT REFERENCED FROM GROUND AT BASE OF TOWER, ASSUMING HEIGHT OF 0'-0" AT SAID REFERENCE POINT.
3. ALL ANTENNAS, CABLES AND MOUNTS SHALL BE INSTALLED IN ACCORDANCE WITH THE TOWER ENGINEER'S RECOMMENDATIONS IN A MANNER CONSISTENT WITH THE STRUCTURAL ANALYSIS REPORT.
4. ALL ANTENNA BRACKETS PER ANTENNA MANUFACTURER, OR EQUAL. CONTRACTOR TO COORDINATE REQUIRED MECHANICAL DOWN TILT WITH DISH WIRELESS.
5. ALL ANTENNA INFORMATION TO BE CONFIRMED WITH DISH WIRELESS RF DESIGN PRIOR TO INSTALLATION.
6. VERIFY POSITIONS AND AZIMUTH OF ANTENNAS WITH DISH WIRELESS PRIOR TO INSTALLATION.
7. SECTOR FRAMES AND ANTENNAS SHOULD HAVE IDENTIFYING TORQUE MARKS SHOWN AFTER INSTALLATION.
8. ALL CLOSE-OUT PHOTOS ADHERE TO CLOSE-OUT DOCUMENTATION.
9. THE SIZE, HEIGHT, AND DIRECTION OF ALL ANTENNAS SHALL BE ADJUSTED TO MEET SYSTEM REQUIREMENTS DEPICTED BY THE LATEST APPROVED RFDS.

EQUIPMENT TESTING:

CONTRACTOR SHALL COMPLETE THE FOLLOWING REQUIREMENTS:

1. ANTENNAS & RF JUMPERS:
- ALL RF JUMPERS & ANTENNA PORTS MUST HAVE DOCUMENTED PASSING SYSTEM SWEEP TEST.
- PIM TESTING IS REQUIRED FOR ALL INSTALLED ANTENNAS & FEEDLINES.
- SYSTEM SWEEPS SHALL BE AT A RETURN LOSS OF ≤ -16db.
- ALL SWEEPS MUST BE PROVIDED IN A PDF AS WELL AS ANRITSU (OR EQUAL) DATA FILE FORMAT.
- FINAL ACCEPTANCE: PERFORM ALL TECHNICAL TESTS SPECIFIED IN THE CONSTRUCTION SOW, SECTION XIV

2. HYBRID CABLES:
- ALL FIBER PAIRS MUST HAVE A DOCUMENTED PASSING POWER & A FIBER INSPECTION SCOPE TEST.
- PASSING POWER TEST SHALL BE ≤ 3db.
- REQUIRED FIBER TEST GEAR SHALL BE VIAVI JDSU FIT-SD103; P5000i FIBER SCOPE DIGITAL INSPECTION KIT; VIAVI 2303/11, OLS-35 OPTICAL LASER LIGHT SOURCE 1310/1550 NM, SM, INTERCHANGEABLE ADAPTER OR EQUAL.
- ALL FIBER TEST RESULTS MUST BE PROVIDED IN PDF FORMAT.
- FINAL ACCEPTANCE: PERFORM ALL TECHNICAL TESTS SPECIFIED IN THE CONSTRUCTION SOW, SECTION XIV

INSTALLER NOTES:

1. SCHEMATIC LAYOUT ONLY. REFER TO SHEETS C-1 AND C-2 FOR EXACT EQUIPMENT LAYOUT, SIZES AND LOCATIONS OF ICE BRIDGE.
2. ALL CABLE SUPPORTS SHOULD BE BLOCKS WITH GROMMETS, NO SNAP-INS ARE ALLOWED.
3. CONFIRM HOFFMAN BOX INSTALLATION WITH DISH CM PRIOR TO DRILLING OEM CABINET.

ATC SITE NAME: HARTFORD CT2
ATC SITE #: CT-302534

PLANS PREPARED FOR:

dish WIRELESS

PLANS PREPARED BY:

HUDSON Design Group LLC
45 BEECHWOOD DRIVE
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

STATE OF CONNECTICUT
DEREK J. CREASER
No. 23554
LICENSED PROFESSIONAL ENGINEER

DRAWN BY:	RP
CHECKED BY:	HC
APPV'D:	AT

SUBMITTALS

DATE	DESCRIPTION	REV	ISSUED BY
03.25.19	FOR REVIEW	A	RP
04.08.19	FOR REVIEW	1	RP
04.10.19	FOR CONSTRUCTION	2	RP

DISH WIRELESS SITE ID:
CT0100007A

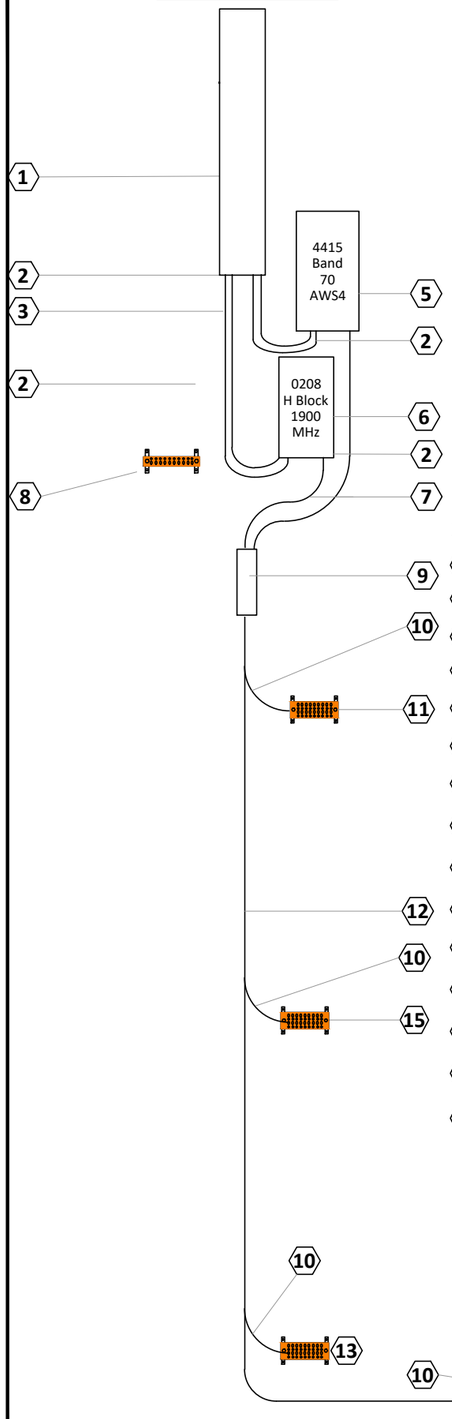
TOWER OWNER SITE ID:
CT-302534

SITE ADDRESS:
1334 ROUTE 85
MONTVILLE, CT 06370

SHEET TITLE:
TOWER ELEVATION & ANTENNA LAYOUT

SHEET NUMBER:
C-3

TYPICAL SECTOR



KEY NOTES

1. ANTENNA - COMBA ODI2-065R18K-GQ- (DISH PROVIDED)
2. CLAMSHELL WEATHER PROOFING (CONTRACTOR PROVIDED)
3. PROPOSED (6 EA.) 1/2" COAX JUMPERS FROM RRUS TO ANTENNA - (DISH PROVIDED) - VARIABLE LENGTHS
4. RRU - E2 BAND 29 700 MHZ - NOT USED
5. RRU - 4415 BAND 70 AWS4 - (DISH PROVIDED)
6. RRU - 0208 H BLOCK 1900 MHZ - (DISH PROVIDED)
7. DC/FIBER JUMPER CABLES (BREAKOUT CYLINDER TO RRU)
8. SECTOR GROUND BUS BAR – 12"X2"X¼" (DISH PROVIDED)
9. FIBER/POWER BREAKOUT CYLINDER
10. GROUND KIT ON HYBRID CABLE AND EACH RF CABLE
11. UPPER TOWER GROUND BUS BAR – 12"X4"X¼" (DISH PROVIDED)
12. HYBRID CABLE
13. LOWER TOWER GROUND BUS BAR – 12"X4"X¼" (DISH PROVIDED)
14. EQUIPMENT GROUND BUS BAR – 12"X4"X¼" (DISH PROVIDED)
15. ADD ADDITIONAL BUS BARS AND GROUND KITS ON TOWER IN 50, 100, OR 200–FOOT INCREMENTS BASED ON TOWER HEIGHT AND LIGHTNING ZONE

ANTENNA SCHEDULE

SECTOR	ANTENNA MANUFACTURER	HYBRID CABLES	AZIMUTH	RAD CENTER	MECH D–TILT	ELECT D–TILT	RRU MANUFACTURER	RRU TECHNOLOGY	RRU LOCATION	JUMPER SIZE	JUMPER QTY	JUMPER LENGTH	RET JUMPER LENGTH
ALPHA	COMBA ODI2–065R18K–GQ 53.5" X 9.8" X 2.4"	DSHYBKIT–18612–10M – 7/8"ø	0°	400'–0"	0	2	(1) ERICSSON (0208) (1) ERICSSON (4415)	H BLOCK BAND 70	SECTOR SECTOR	1/2" 1/2"	2 2	6'–0" 6'–0"	10'–0" 10'–0"
BETA	COMBA ODI2–065R18K–GQ 53.5" X 9.8" X 2.4"	SHARE WITH ALPHA	120°	400'–0"	0	2	(1) ERICSSON (0208) (1) ERICSSON (4415) (SHARED)	H BLOCK BAND 70	SECTOR SECTOR	1/2" 1/2"	2 2	6'–0" 6'–0"	10'–0" 10'–0"
GAMMA	COMBA ODI2–065R18K–GQ 53.5" X 9.8" X 2.4"	SHARE WITH ALPHA	240°	400'–0"	0	2	(1) ERICSSON (0208) 4415 SHARED	H BLOCK	SECTOR	1/2"	2	6'–0"	*15'–0" 30'–0"

* (2) JUMPERS BETWEEN BETA 4415 AND GAMMA ANTENNA

INSTALLER NOTES:

–SCHEMATIC LAYOUT ONLY. REFER TO SHEETS C–1 AND C–2 FOR EXACT EQUIPMENT LAYOUT, SIZES AND LOCATIONS OF ICE BRIDGE OR RMC.
–ALL CABLE SUPPORTS SHOULD BE BLOCKS AND GROMMETS. BUTTERFLIES AND SNAP–INS ARE NOT ALLOWED
–STRAIN–RELIEVE SUPPORT FOR ALL TOWER CABLES AND/OR FIBERS, SHALL OCCUR EVERY48" VERTICALLY, AND 24" HORIZONTALLY.
–CONTRACTOR TO REFERENCE DISH NETWORK LATEST ISSUE RFDS AND GIVE PRECEDENCE TO INFORMATION PROVIDED IN LATEST RFDS OVER INFORMATION PROVIDED IN ANTENNA SCHEDULE TABLE
–CONTRACTOR TO VERIFY PROPOSED LOADING, TOWER / FOUNDATION MODIFICATIONS AND REMOVED EQUIPMENT AS STATED IN PASSING STRUCTURAL ANALYSIS AND MOD DESIGNS AND CONTACT DISH NETWORK IMMEDIATELY IN THE EVENT OF ANY DISCREPANCIES.
–CONTRACTOR IS TO NOTE ANY APPURTENANCES ON TOWER THAT EXTENDS WITHIN 2' OF THE TOP OF AND 5' BELOW THE DISH ANTENNAS. IF ANY APPURTENANCES IS ENCROACHING THIS THRESHOLD, THE CONTRACTOR IS TO COMMUNICATE THE FINDING WITH DISH NETWORK IMMEDIATELY AND BEFORE CONSTRUCTION STARTS.

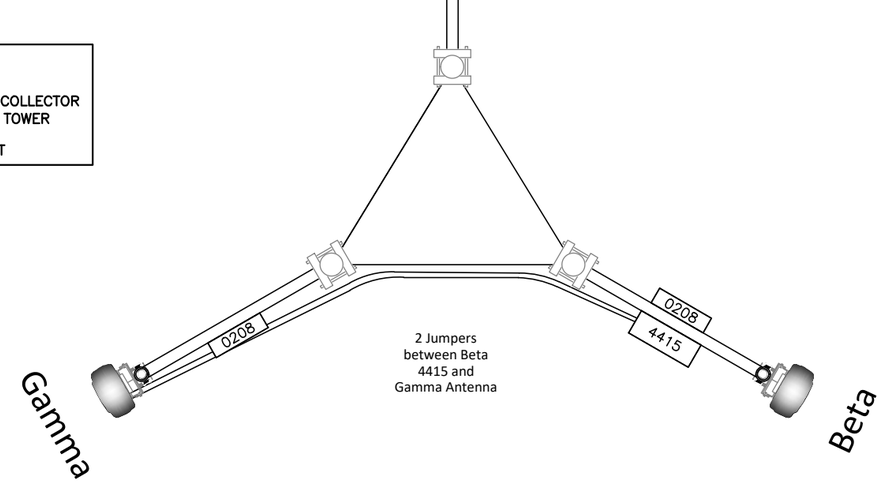
NOTE:

1. CONTRACTOR TO REFER TO, AND VALIDATE, THE LATEST RFDS PRIOR TO CONSTRUCTION.

8 BUS BAR TOTAL:

– 1 EACH SECTOR
– 1 UPPER TOWER COLLECTOR
– 1 EACH 200' UP TOWER
– 1 LOWER TOWER
– 1 BEHIND CABINET

Alpha



Comba ODI2-065R18K-GQ
Antenna - 25.1 lbs. (11.4 kg)
Mount – 2.8 lbs. (6.2 kg)

0208 H Block 1900 MHz	4415 Band 70 AWS4
19.84 lbs. (9 kg)	46 lbs. (21 kg)

Weight, excl. mounting hardware

NOTE:

PROPOSED RET CABLE 4415 RRU TO ANTENNA (1) PER SECTOR. BETA SECTOR TO BE DAISY CHAINED TO GAMMA.

PLANS PREPARED FOR:

dish WIRELESS

PLANS PREPARED BY:

HUDSON Design Group LLC
45 BEECHWOOD DRIVE
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

STATE OF CONNECTICUT
DEREK J. CREASER
NO. 28554
LICENSED PROFESSIONAL ENGINEER

DRAWN BY: RP
CHECKED BY: HC
APPV'D: AT

SUBMITTALS

DATE	DESCRIPTION	REV	ISSUED BY
03.25.19	FOR REVIEW	A	RP
04.08.19	FOR REVIEW	1	RP
04.10.19	FOR CONSTRUCTION	2	RP

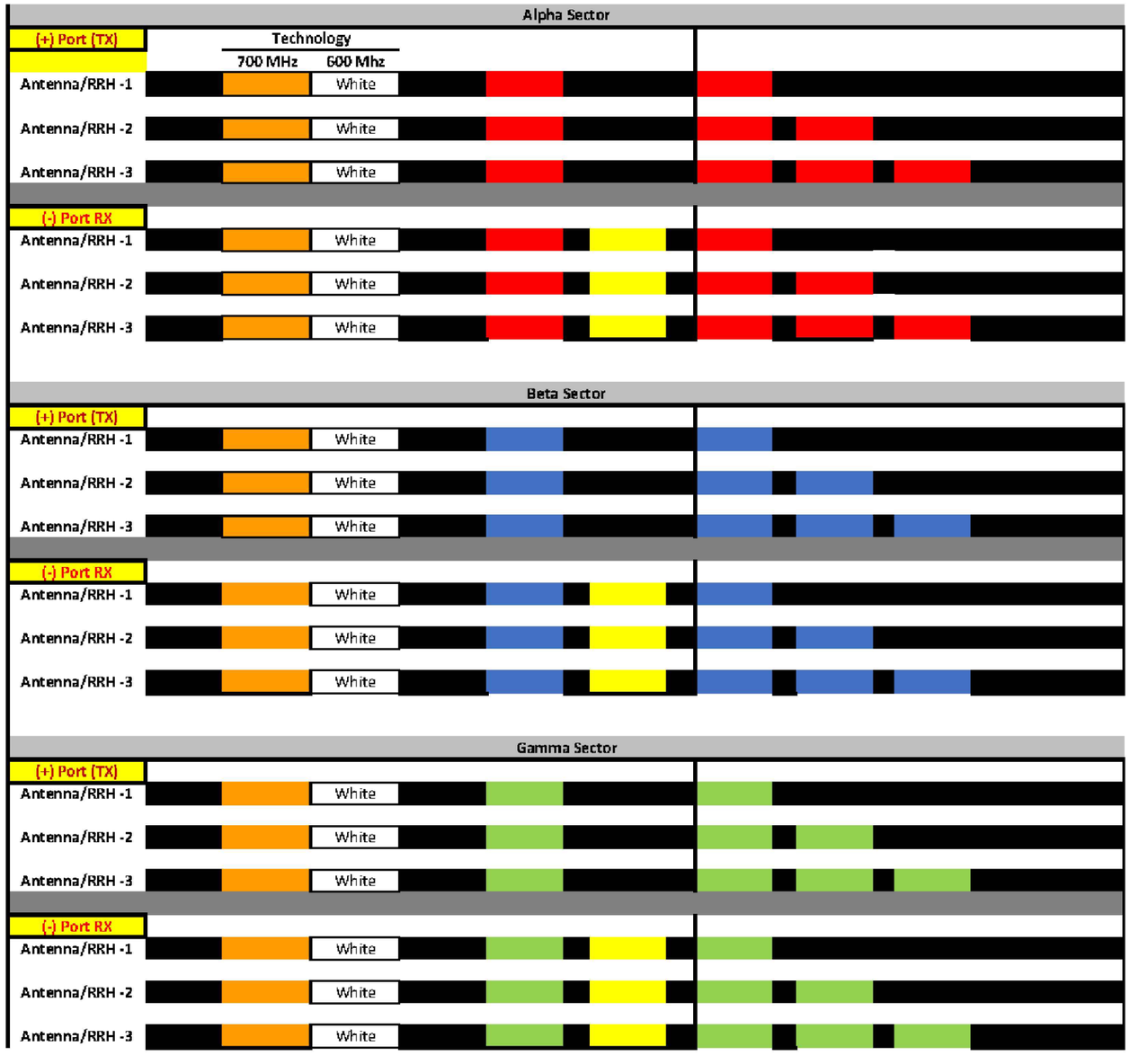
DISH WIRELESS SITE ID:
CT0100007A

TOWER OWNER SITE ID:
CT-302534

SITE ADDRESS:
1334 ROUTE 85
MONTVILLE, CT 06370

SHEET TITLE:
ANTENNA SCHEDULE & DIAGRAM

SHEET NUMBER:
1 OF 2



NOTE:

1. CONTRACTOR TO REFER TO, AND VALIDATE, THE LATEST RFDS PRIOR TO CONSTRUCTION.

CABLE COLOR CODE

PLANS PREPARED FOR:

dish WIRELESS

PLANS PREPARED BY:

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DEREK J. CREASER
NO. 28554
LICENSED PROFESSIONAL ENGINEER

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CHECKED BY:	HC
APPV'D:	AT

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CT0100007A

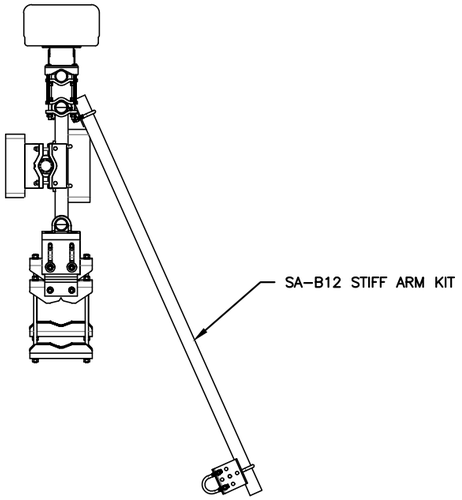
TOWER OWNER SITE ID:
CT-302534

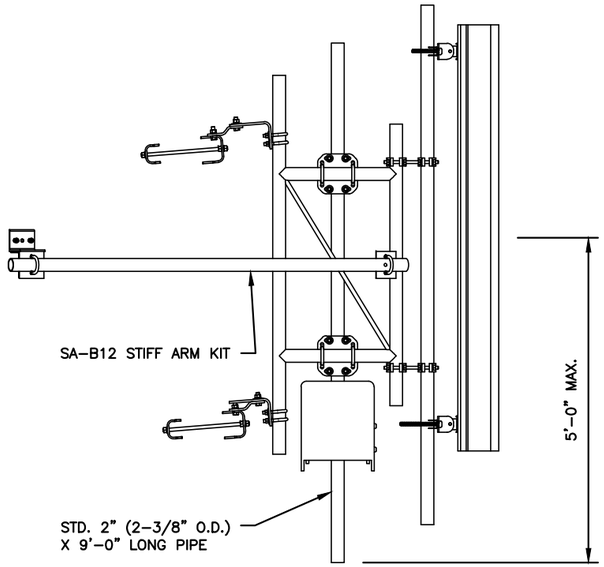
SITE ADDRESS:
1334 ROUTE 85
MONTVILLE, CT 06370

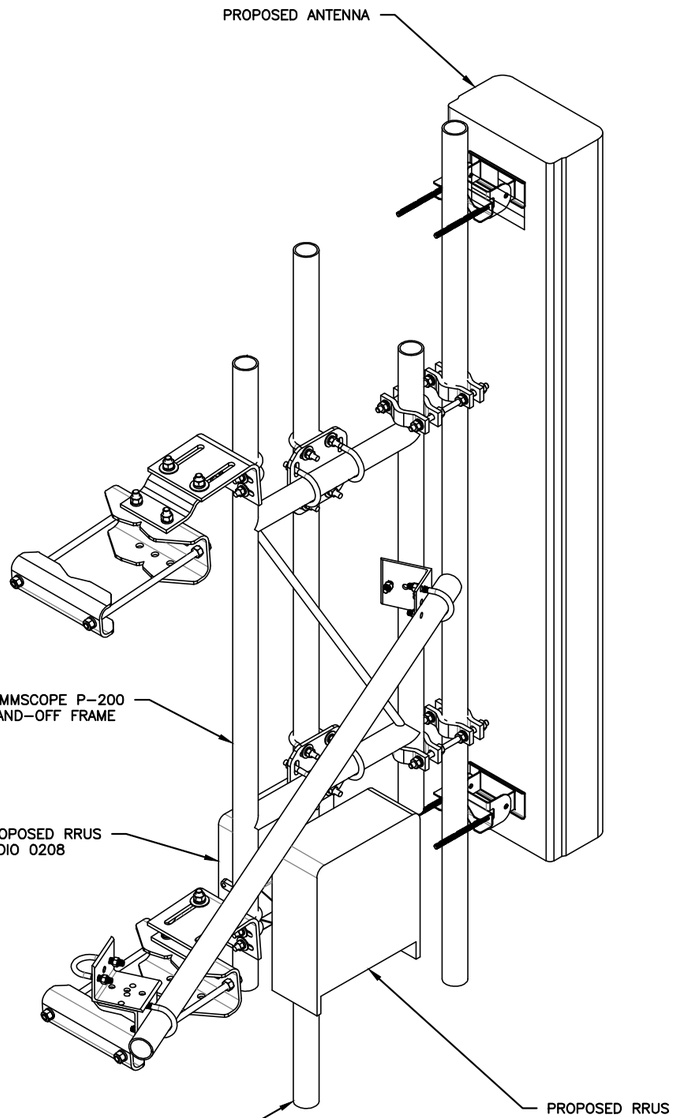
SHEET TITLE:
CABLE COLOR CODE

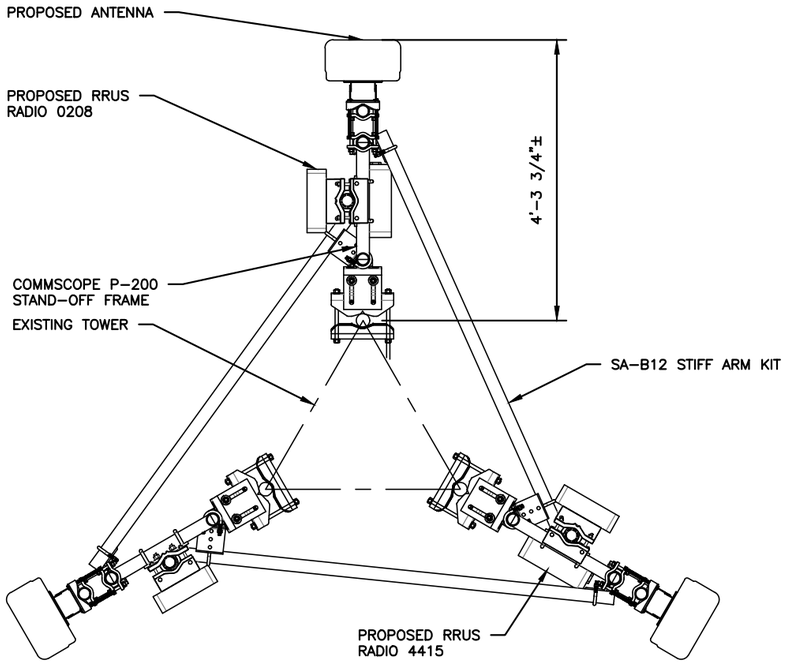
SHEET NUMBER:
2 OF 2

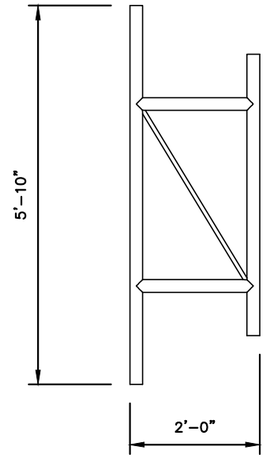
ERICSSON CONFIGURATION











COMMSCOPE P-200 STAND-OFF FRAME,
PM-SU2-B UNIVERSAL TOWER MOUNT KIT,
BC-30-10 PIPE-TO-PIPE CLAMP SET,
XP-2020 CROSSOVER BRKTS.
(2), SA-B12 STIFF ARM KIT AND
PLUS 2X MT-651-96 PLAIN END PIPES

SECTOR MOUNT DETAIL FOR TOWER

SCALE: N.T.S

PLANS PREPARED FOR:

dish WIRELESS

PLANS PREPARED BY:

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45 BEECHWOOD DRIVE
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CT0100007A

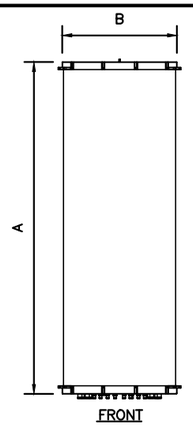
TOWER OWNER SITE ID:
CT-302534

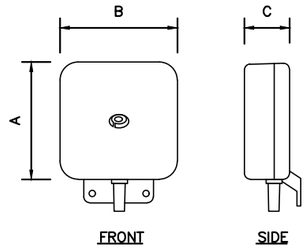
SITE ADDRESS:
1334 ROUTE 85
MONTVILLE, CT 06370

SHEET TITLE:
EQUIPMENT DETAILS

SHEET NUMBER:
C-4

ERICSSON CONFIGURATION

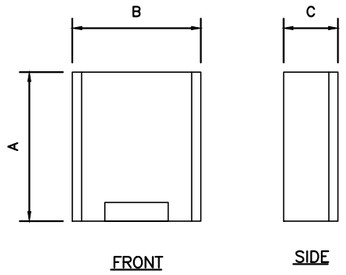




PANORAMA – WMMG–7–27

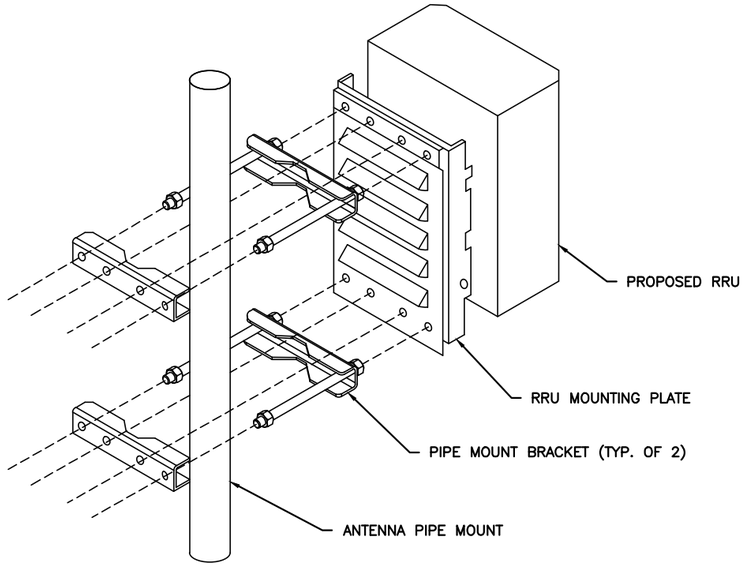
ANTENNA SPECIFICATIONS				
MODEL	LENGTH (A)	WIDTH (B)	DEPTH (C)	WEIGHT (lb)
PANORAMA – WMMG–7–27	6.10"	6.10"	2.95"	2.43
COMBA – ODI2–065R18K–GQ	53.5"	9.8"	2.4"	25.1

ANTENNA SPECIFICATIONS
SCALE: N.T.S



RADIO SPECIFICATIONS				
MODEL	LENGTH (A)	WIDTH (B)	DEPTH (C)	WEIGHT (lb)
ERICSSON – RADIO 4415	16.54"	13.64"	4.84"	44.09
ERICSSON – RADIO 0208	13.82"	11.73"	3.31"	18.52

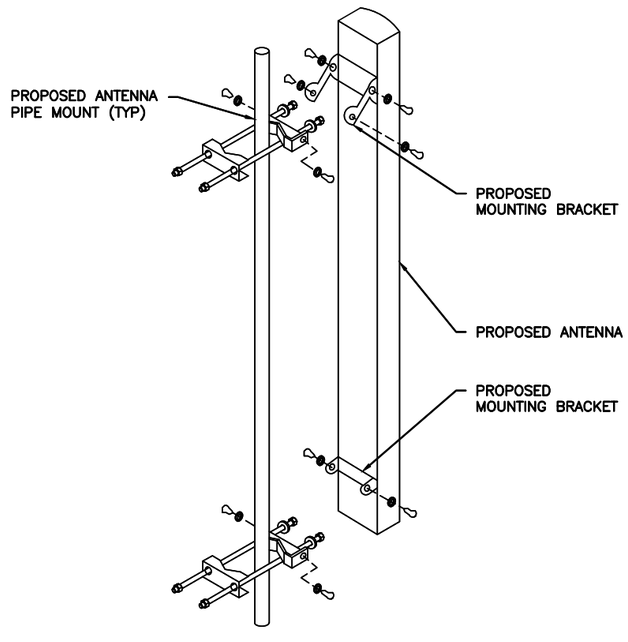
RADIO SPECIFICATIONS
SCALE: N.T.S



NOTES:

1. ERICSSON VIA DISH WIRELESS SUPPLIES RRU, RRU PIPE–MOUNTING BRACKET. SUBCONTRACTOR SHALL INSTALL ALL MOUNTING HARDWARE INCLUDING RRU PIPE–MOUNTING BRACKET.
2. NO PAINTING OF THE RRU OR SOLAR SHIELD IS ALLOWED

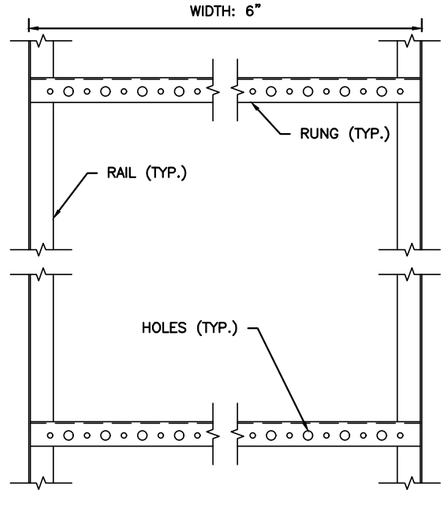
REMOTE RADIO UNIT (RRU) PIPE MOUNT
SCALE: N.T.S



ANTENNA MOUNTING
SCALE: N.T.S

LADDER NOTE:

1. LADDER TO BE PLACED ON TOWER IN 20'–0" SECTIONS UP TO PROPOSED DISH WIRELESS RAD CENTER.
2. GC TO VERIFY NEED WITH DISH WIRELESS CM. DISH WIRELESS PREFERS TO USE EXISTING CABLE SUPPORT SYSTEMS IF AVAILABLE.



CABLE LADDER DETAIL (OPTIONAL) (DETAIL NOT USED)
SCALE: N.T.S

PLANS PREPARED FOR:

dish WIRELESS

PLANS PREPARED BY:

HDG HUDSON Design Group LLC
45 BEECHWOOD DRIVE
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

DRAWN BY: RP
CHECKED BY: HC
APPV'D: AT

SUBMITTALS			
DATE	DESCRIPTION	REV	ISSUED BY
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DISH WIRELESS SITE ID:
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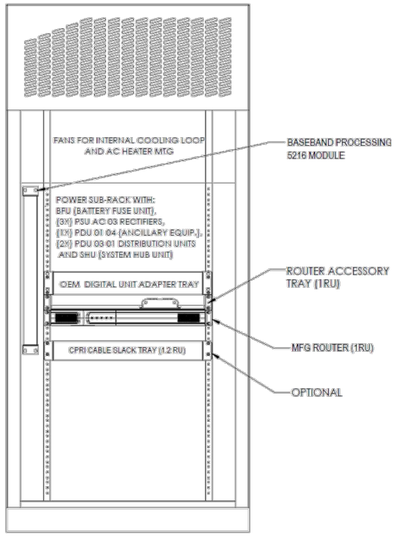
TOWER OWNER SITE ID:
CT-302534

SITE ADDRESS:
1334 ROUTE 85
MONTVILLE, CT 06370

SHEET TITLE:
EQUIPMENT DETAILS

SHEET NUMBER:
C-4A



REVISIONS					
ECO NO.	ITEM MASTER	REV	DESCRIPTION	DATE	BY
CA5181	219097	01	INITIAL RELEASE. CREATED FROM 217165. UPDATED WITH BBU6101 CABINET WITH BATTERY ENCLOSURE/PLINTH BBU6101.	12-19-18	JL

NOTES: UNLESS OTHERWISE SPECIFIED

1. POWER CABINET WEIGHT IS **180kg** (397 LBS) MAX. INCLUDES STANDARD EQUIPMENT. DISH HAS ALSO ADDED: A MFG ROUTER @ **3.72 kg** (8.2 LBS) AND/OR LTE ROUTER @ **0.58kg** (1.3 LBS) AND 1 ACCESSORY TRAY@ 0.69kg (3.73lbs).
2. BATTERY ENCLOSURE WEIGHT IS ≤ **93kg** (205 LBS) EXCLUDING THE STORAGE BATTERIES. THE **NSB 40FT HT RED** BATTERY WEIGHT IS **14kg** (30.86 LBS) EACH X 4 (**56kg** / 123.5 LBS TOTAL), EXCLUDING CABLES.
3. POWER EQUIPMENT IN THE CABINET CONVERTS AC POWER INTO **-48V DC** POWER FOR THE BASE STATION.
4. THE POWER SYSTEM CAPACITY RATING IS 10kW MAXIMUM. THE SYSTEM IS OUTFITTED WITH 3X 2500W RECTIFIERS (7.5kW), WHICH 1 RECTIFIER (2.5kW) IS FOR SYSTEM REDUNDANCY.
5. AC INPUT POWER OPTION: PLEASE SEE SEPARATE RBS6101 CABINET DOCUMENT WITH OTHER AC POWER OPTIONS.

AC INPUT	VOLTAGE RANGE V AC	NOMINAL VOLTAGE	RECOMMENDED EQUIP. AC BREAKER	RATED PWR	TYP PWR
2W + PE + N 120/240V AC, 60 Hz	200/100 240/120	115V	60A	10kW	2.5kW

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS TOLERANCES ARE: X.XXX ± .100, X.XX ± .25, X.X ± .40, X. ± .75; HOLE DIA. ±.075; ANGLES ± 5°

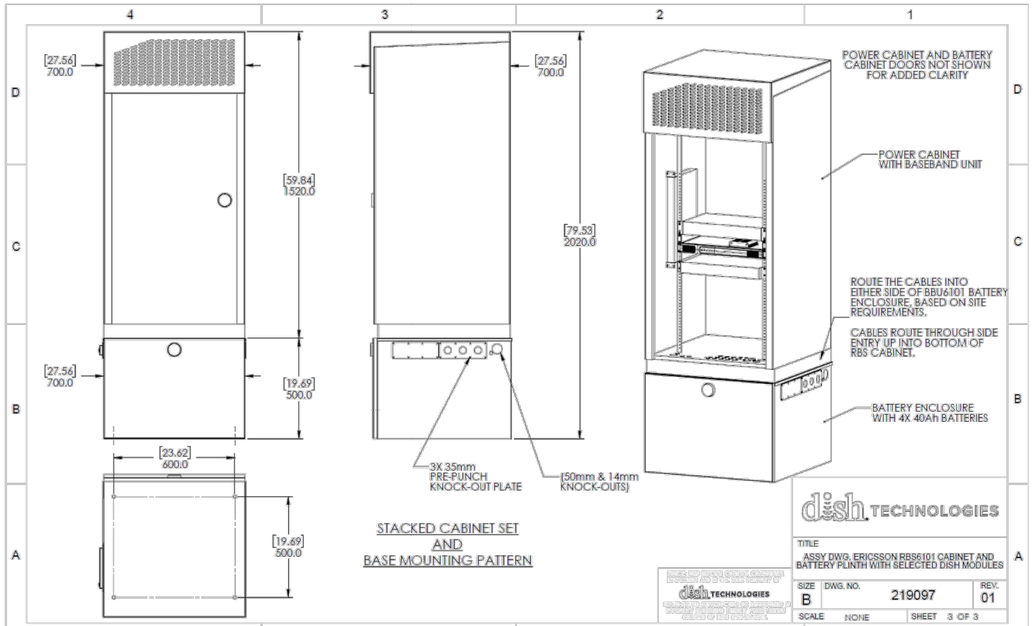
dish TECHNOLOGIES

APPROVALS	DATE
DESIGNED	
DRAWN J. LAPALME	05-04-19
CHECKED	

TITLE: ASSY DWG, ERICSSON RBS6101 CABINET AND BATTERY PLINTH WITH SELECTED DISH MODULES

SIZE	DWG. NO.	REV.
B	219097	01

SCALE NONE SHEET 1 OF 3



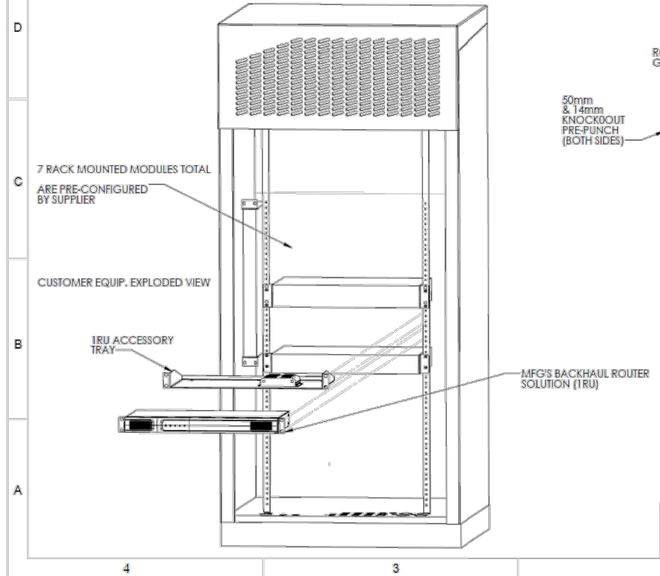
STACKED CABINET SET AND BASE MOUNTING PATTERN

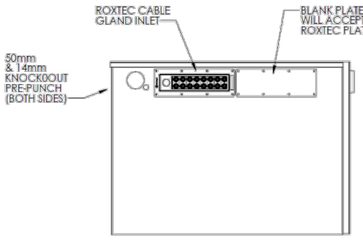
dish TECHNOLOGIES

TITLE: ASSY DWG, ERICSSON RBS6101 CABINET AND BATTERY PLINTH WITH SELECTED DISH MODULES

SIZE	DWG. NO.	REV.
B	219097	01

SCALE NONE SHEET 3 OF 3





LEFT SIDE OF BBU6101 BATTERY CABINET: WITH ROXTEC CABLE INLET AND BLANK COVER PLATE

dish TECHNOLOGIES

TITLE: ASSY DWG, ERICSSON RBS6101 CABINET AND BATTERY PLINTH WITH SELECTED DISH MODULES

SIZE	DWG. NO.	REV.
B	219097	01

SCALE NONE SHEET 2 OF 3

ERICSSON CABINET DETAIL

NOTE:
CONFIRM HOFFMAN BOX INSTALLATION WITH DISH WIRELESS CM PRIOR TO DRILLING OEM CABINET.

PLANS PREPARED FOR:

dish WIRELESS

PLANS PREPARED BY:

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03.25.19	FOR REVIEW	A	RP
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04.10.19	FOR CONSTRUCTION	2	RP

DISH WIRELESS SITE ID:
CT0100007A

TOWER OWNER SITE ID:
CT-302534

SITE ADDRESS:
1334 ROUTE 85
MONTVILLE, CT 06370

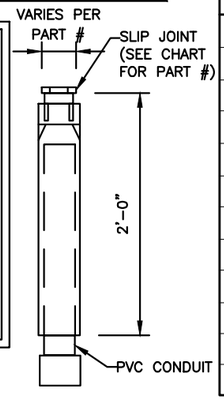
SHEET TITLE:
EQUIPMENT DETAILS

SHEET NUMBER:
C-5

NOTE: CONTRACTOR TO INSTALL EXPANSION FITTING SLIP JOINT AT METER CENTER CONDUIT TERMINATION, AS PER LOCAL UTILITY POLICY, ORDINANCE AND/OR SPECIFIED REQUIREMENT.

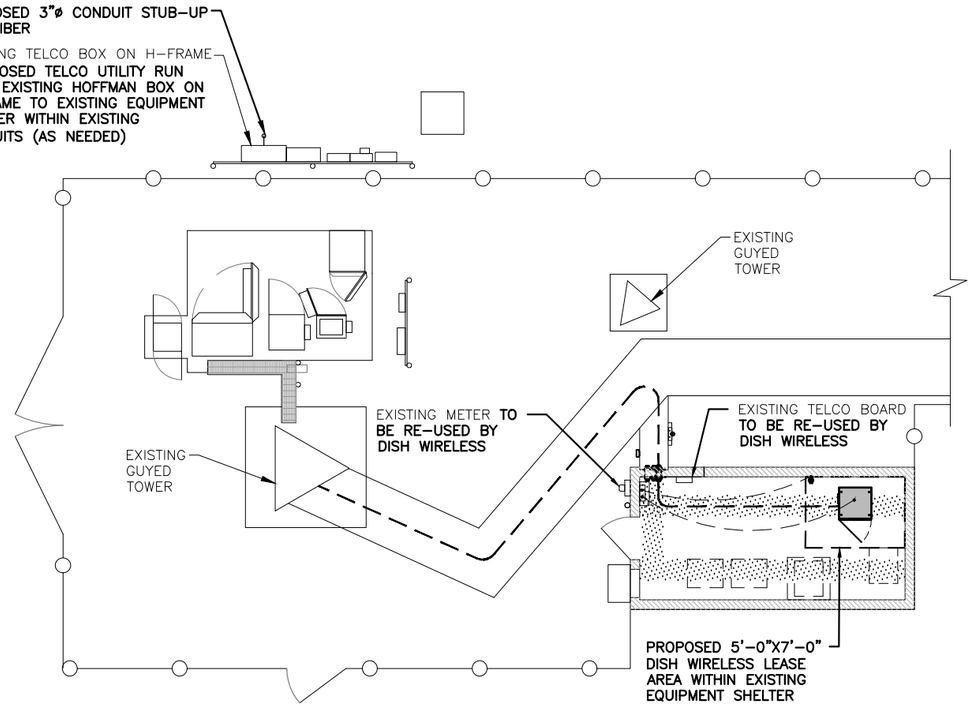
NOTES:

1. CONTRACTOR SHALL ARRANGE CONDUITS, WIRING, EQUIPMENT AND OTHER WORK AS SHOWN ON THIS PLAN AND SHEET E-2, PROVIDING REQUIRED CLEARANCES AND ACCESS PER NEC. WHERE FIELD ADJUSTMENTS ARE NECESSARY, COORDINATE WITH SITE CM AND DISH WIRELESS.
2. PULL BOX(ES) ARE REQUIRED WHEN THE EQUIVALENT OF THREE 90 DEGREE BENDS MAX, INCLUDING THE BENDS LOCATED AT AN OUTLET OR FITTING, ARE USED BETWEEN PULL POINTS; 150 FEET OF CONDUIT LENGTH IS EQUIVALENT TO AN ADDITIONAL 90 DEGREES.



CARLON EXPANSION FITTINGS

COUPLING END PART#	MALE TERMINAL ADAPTER END PART#	SIZE	STD. CTN. QTY.	TRAVEL LENGTH
E945D	E945DX	1/2"	20	4"
E945E	E945EX	3/4"	15	4"
E945F	E945FX	1"	10	4"
E945G	E945GX	1 1/4"	5	4"
E945H	E945HX	1 1/2"	5	4"
E945J	E945JX	2"	15	8"
E945K	E945KX	2 1/2"	10	8"
E945L	E945LX	3"	10	8"
E945M	E945MX	3 1/2"	5	8"
E945N	E945NX	4"	5	8"
E945P	E945PX	5"	1	8"
E945R	E945RX	6"	1	8"

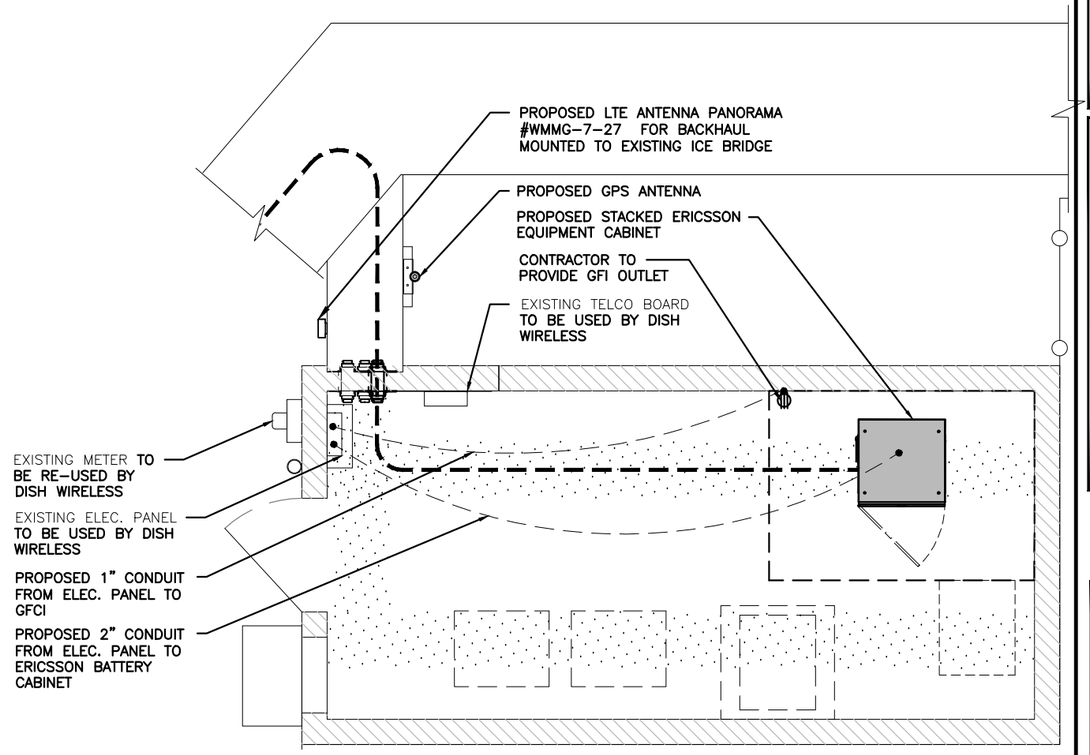


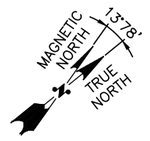
COMPOUND UTILITY PLAN

SCALE: 3/32"=1'-0"

UTILITY NOTES:

1. CONTRACTOR TO COORDINATE SERVICE ROUTING & CONNECTION WITH LOCAL TELEPHONE AND POWER COMPANIES.
2. CONTRACTOR SHALL FOLLOW LOCAL UTILITY COMPANY STANDARDS WHEN CONNECTING TO UTILITIES, PROVIDING REQUIRED CLEARANCES AND ACCESS PER NEC. LOCAL AND STATE BUILDING CODES SHALL GOVERN IN CASES WHERE UTILITY CO. STANDARDS DIFFER.
3. CONTRACTOR TO PROVIDE SPARE 3" TELCO CONDUIT W/ PULL-STRING FOR POTENTIAL FUTURE FIBER APPLICATIONS.





EQUIPMENT SHELTER UTILITY PLAN

SCALE: N.T.S

NOTES:

1. ELECTRICAL ROUTING IS A SCHEMATIC. THE CONTRACTOR SHALL VERIFY EQUIPMENT LOCATION AND ELECTRICAL ROUTING PRIOR TO INSTALLATION.

PLANS PREPARED FOR:

dish WIRELESS

PLANS PREPARED BY:

HDG HUDSON Design Group LLC
45 BEECHWOOD DRIVE
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

STATE OF CONNECTICUT
DEREK J. CREASER
No. 28554
LICENSED PROFESSIONAL ENGINEER

DRAWN BY:	RP
CHECKED BY:	HC
APPV'D:	AT

SUBMITTALS

DATE	DESCRIPTION	REV	ISSUED BY
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DISH WIRELESS SITE ID:
CT0100007A

TOWER OWNER SITE ID:
CT-302534

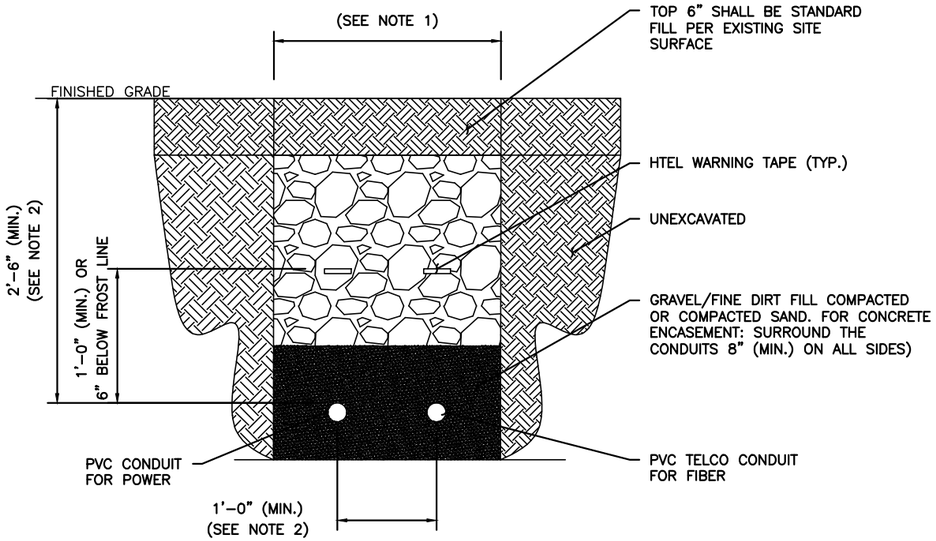
SITE ADDRESS:
1334 ROUTE 85
MONTVILLE, CT 06370

SHEET TITLE:
UTILITY PLANS

SHEET NUMBER:
E-1

CONDUIT TRENCH NOTE:

1. WIDTH OF TRENCH AS REQUIRED BY UTILITY COMPANY OR PER QUANTITY OF CONDUITS AND LOCAL CODE REQUIREMENTS.
2. VERIFY DISTANCE PER LOCAL CODE, UTILITY COMPANY, AND CLIENT REQUIREMENTS.



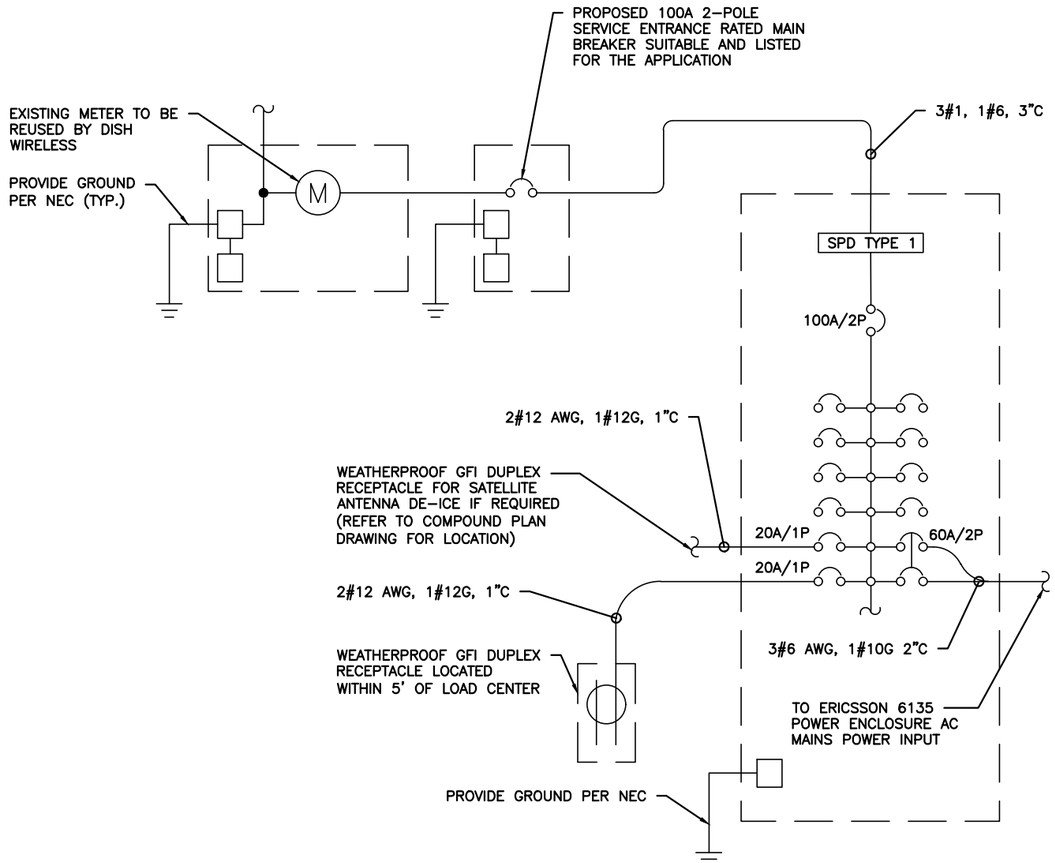
CONDUIT TRENCH DETAIL (DETAIL NOT USED)

SCALE: N.T.S

PROPOSED 100A, 120/240V POWER PANEL										
LOAD SERVED	VOLT AMPERES (WATTS)		TRIP	CKT #	PHASE	CKT #	TRIP	VOLT AMPERES (WATTS)		LOAD SERVED
	L1	L2						L1	L2	
RECTIFIER	2000		60	1	A	2	20	180		GFCI
		2000		3	B	4	20		180	GFCI
SPARE	–		–	5	A	6	–	–		SPARE
SPARE		–	–	7	B	8	–		–	SPARE
SPARE	–		–	9	A	10	–	–		SPARE
SPARE		–	–	11	B	12	–		–	SPARE
VOLT AMPS	2000	2000						180	180	VOLT AMPS
L1 VOLT AMPERES				2180		2180		L2 VOLT AMPERES		
L1 AMPS				18.2		18.2		L2 AMPS		
				18.2				MAX AMPS		
				22.8				MAX AMPS x125%		

ELECTRICAL POWER PANEL SCHEDULE

SCALE: N.T.S



ELECTRICAL ONE-LINE DIAGRAM

SCALE: N.T.S

PLANS PREPARED FOR:

dish WIRELESS

PLANS PREPARED BY:

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45 BEECHWOOD DRIVE
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STATE OF CONNECTICUT
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CT0100007A

TOWER OWNER SITE ID:
CT-302534

SITE ADDRESS:
1334 ROUTE 85
MONTVILLE, CT 06370

SHEET TITLE:
ELECTRICAL DETAILS

SHEET NUMBER:
E-2

TOWER GROUNDING NOTE:

ALL CONNECTIONS TO BE MECHANICAL ON TOWER. EXOTHERMIC WELDS ARE NOT ALLOWED.

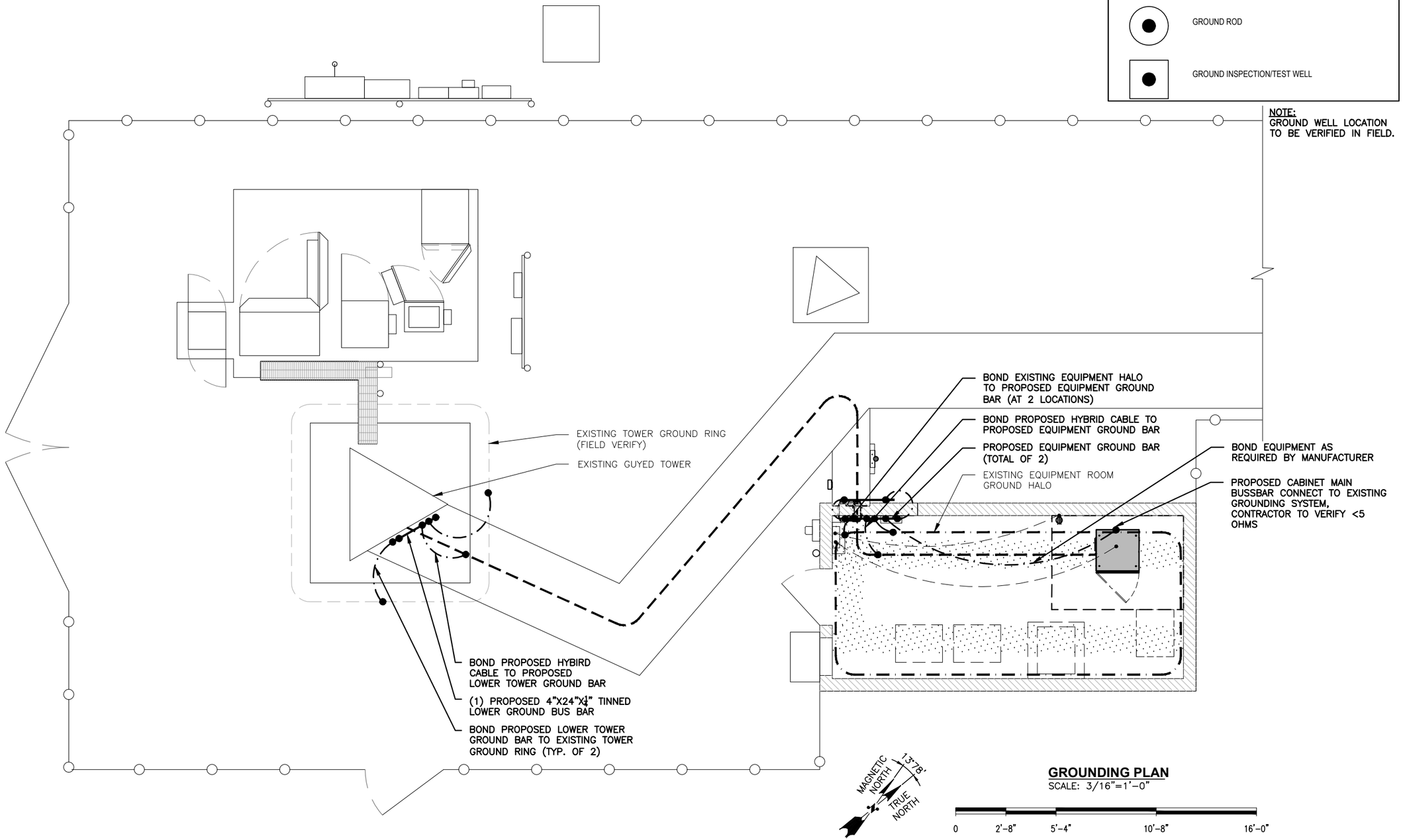
INSTALLER NOTE:

SCHEMATIC LAYOUT ONLY. REFER TO SHEETS C-1 AND C-2 FOR EXACT EQUIPMENT LAYOUT, SIZES AND LOCATIONS OF ICE BRIDGE AND ANTENNA SUPPORT STRUCTURE.

GROUNDING SYMBOL LEGEND

- GROUNDING CONDUCTOR - ABOVE GRADE
- GROUNDING CONDUCTOR - BELOW GRADE
- GROUNDING ELECTRODE SYSTEM
- 1'-6" PIGTAIL
- EXOTHERMIC CONNECTION
- MECHANICAL CONNECTION
- GROUND ROD
- GROUND INSPECTION/TEST WELL

NOTE:
GROUND WELL LOCATION TO BE VERIFIED IN FIELD.



GROUNDING PLAN
SCALE: 3/16"=1'-0"

0 2'-8" 5'-4" 10'-8" 16'-0"

PLANS PREPARED FOR:

dish WIRELESS

PLANS PREPARED BY:

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1334 ROUTE 85
MONTVILLE, CT 06370

SHEET TITLE:
GROUNDING PLAN

SHEET NUMBER:
G-1

TOWER GROUNDING NOTE:

ALL CONNECTIONS TO BE MECHANICAL ON TOWER. EXOTHERMIC WELDS ARE NOT ALLOWED.

INSTALLER NOTE:

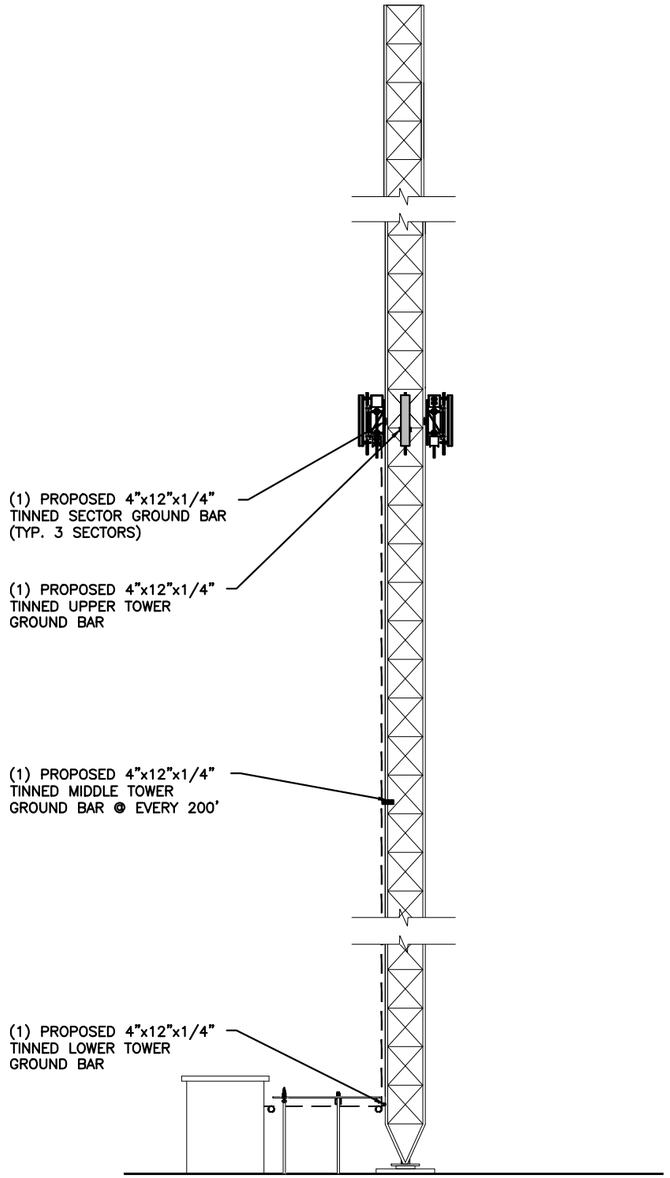
SCHEMATIC LAYOUT ONLY. REFER TO SHEETS C-1 AND C-2 FOR EXACT EQUIPMENT LAYOUT, SIZES AND LOCATIONS OF ICE BRIDGE AND ANTENNA SUPPORT STRUCTURE.

INSTALLER NOTE:

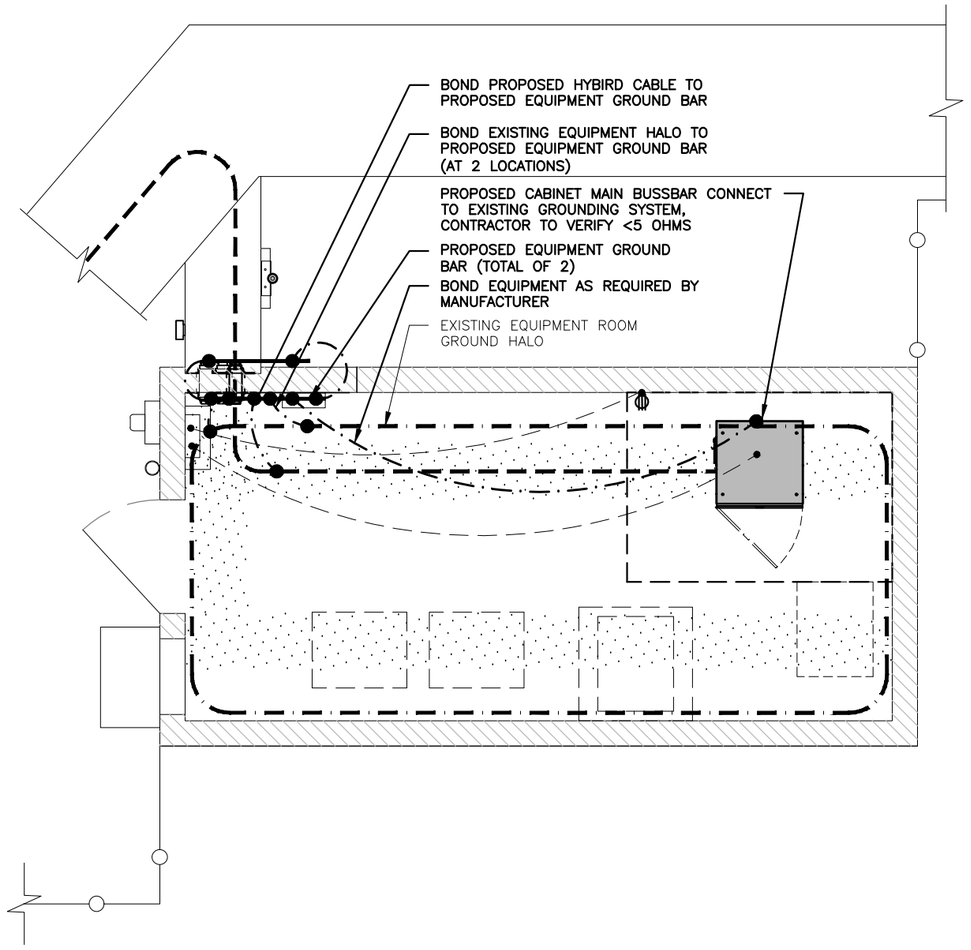
7 BUSSBARS TOTAL
ONE PER SECTOR ON ANTENNA FRAME = (3 TOTAL)
ONE TOWER TOP COLLECTOR
ONE AT 200' AGL
ON AT BOTTOM OF TOWER AT APPROX. 10' AGL
ONE BEHIND CABINET

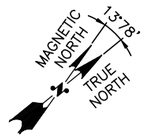
GROUNDING SYMBOL LEGEND

- GROUNDING CONDUCTOR - ABOVE GRADE
- GROUNDING CONDUCTOR - BELOW GRADE
- GROUNDING ELECTRODE SYSTEM
- 1'-6" PIGTAIL
- EXOTHERMIC CONNECTION
- MECHANICAL CONNECTION
- GROUND ROD
- GROUND INSPECTION/TEST WELL



TOWER ELEVATION GROUNDING
SCALE: N.T.S





GROUNDING PLAN
SCALE: 1/4"=1'-0"

0 2'-0" 4'-0" 8'-0" 12'-0"

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SITE ADDRESS:
1334 ROUTE 85
MONTVILLE, CT 06370

SHEET TITLE:
GROUNDING NOTES & DETAILS

SHEET NUMBER:
G-1A

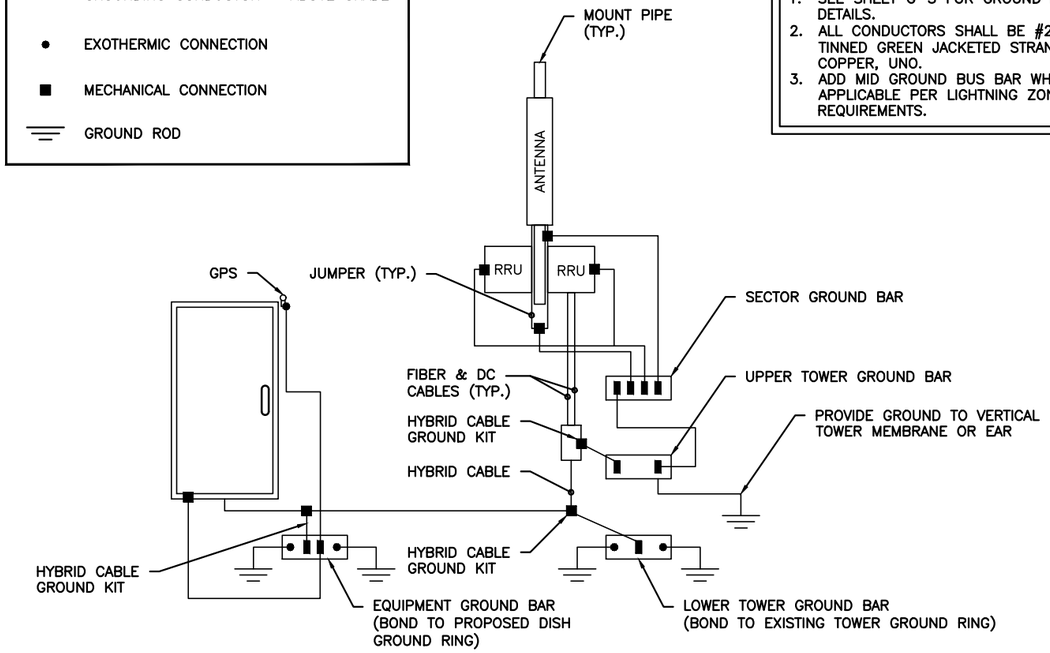
LEGEND	
———	GROUNDING CONDUCTOR – ABOVE GRADE
•	EXOTHERMIC CONNECTION
■	MECHANICAL CONNECTION
⏚	GROUND ROD

NOTE:

1. SEE SHEET G-3 FOR GROUND BAR DETAILS.
2. ALL CONDUCTORS SHALL BE #2 AWG TINNED GREEN JACKETED STRANDED COPPER, UNO.
3. ADD MID GROUND BUS BAR WHERE APPLICABLE PER LIGHTNING ZONE REQUIREMENTS.

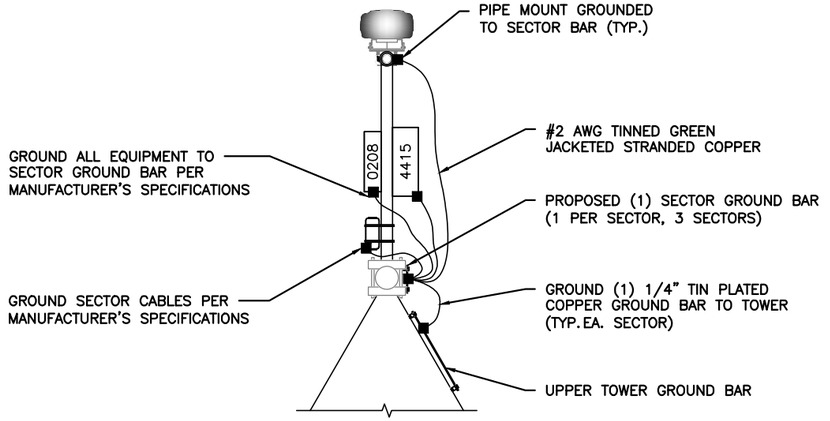
GROUNDING NOTE:

1. ALL CONNECTIONS TO BE MECHANICAL ON TOWER. EXOTHERMIC WELDS ARE ONLY ALLOWED AT GRADE.



GROUNDING RISER DIAGRAM (TYP. PER SECTOR)

SCALE: N.T.S

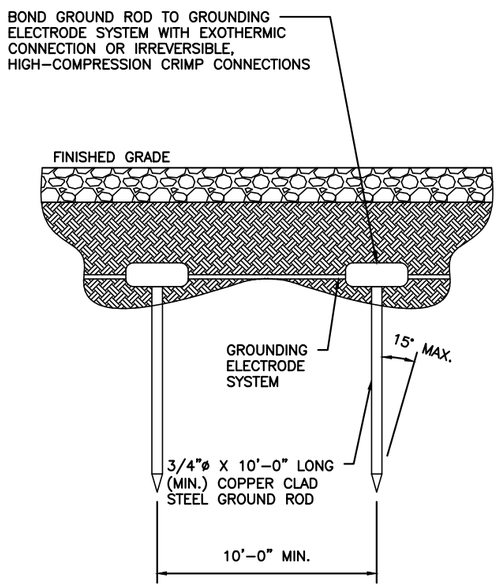


NOTE:

GROUNDING SHOWN FOR (1) SECTOR ONLY.
GROUNDING REQUIRED FOR ALL (3) SECTORS.

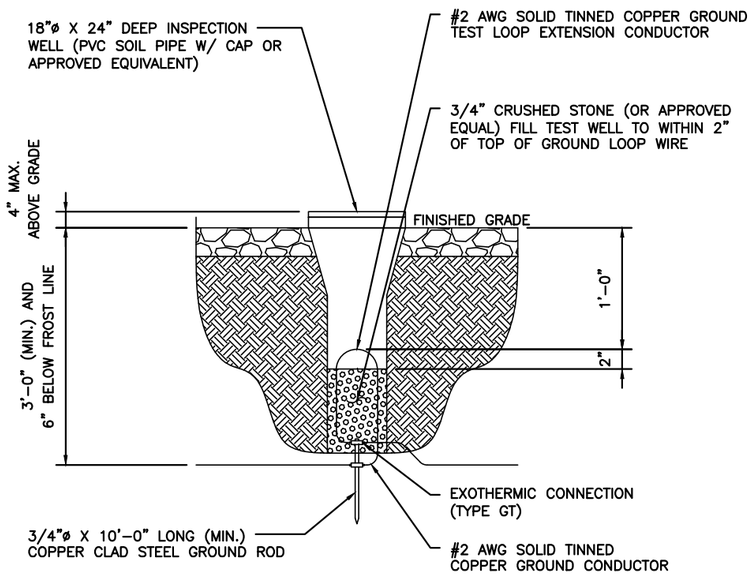
GROUND BAR AT MOUNT

SCALE: N.T.S



GROUND ROD DETAIL

SCALE: N.T.S



TEST WELL DETAIL

SCALE: N.T.S

PLANS PREPARED FOR:

dish WIRELESS

PLANS PREPARED BY:

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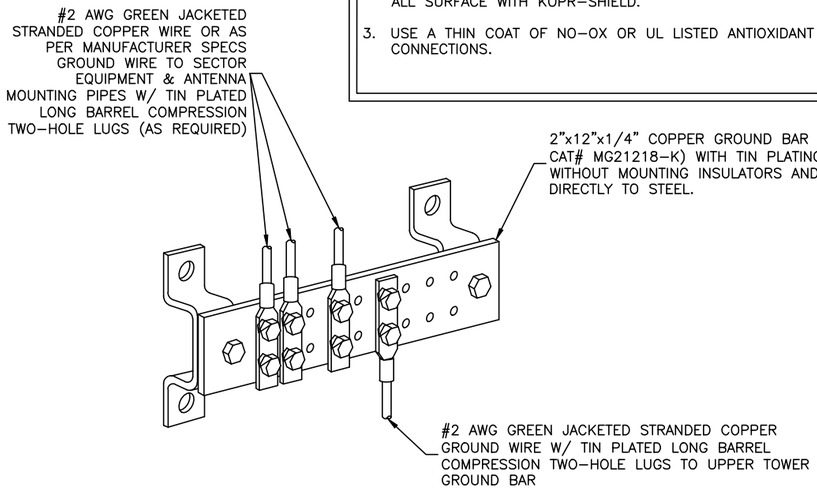
SITE ADDRESS:
1334 ROUTE 85
MONTVILLE, CT 06370

SHEET TITLE:
GROUNDING NOTES & DETAILS

SHEET NUMBER:
G-2

NOTES:

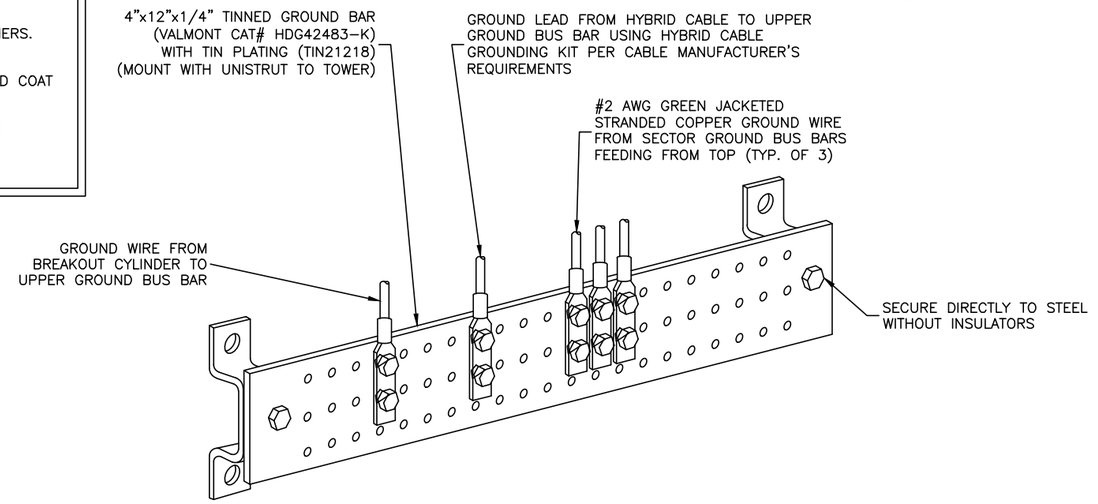
1. ALL HARDWARE SHALL BE 18–8 STAINLESS STEEL INCLUDING BELLEVILLE WASHERS. COAT ALL SURFACES WITH KOPR–SHIELD BEFORE MATING.
2. IF BONDING TO STEEL, INSERT A TOOTH WASHER BETWEEN LUG AND STEEL AND COAT ALL SURFACE WITH KOPR–SHIELD.
3. USE A THIN COAT OF NO–OX OR UL LISTED ANTIOXIDANT COMPOUND BETWEEN CONNECTIONS.



SECTOR GROUND BAR DETAIL

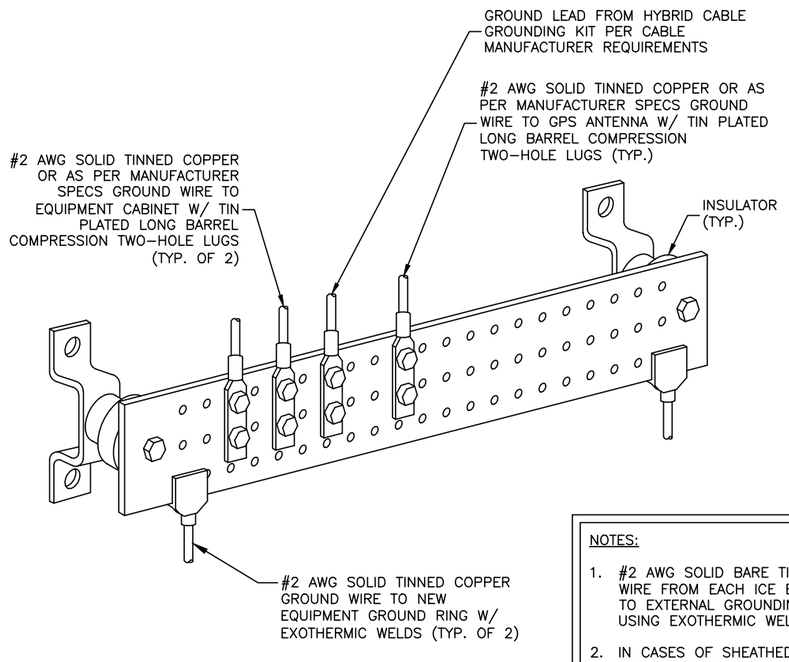
NOT TO SCALE

ERICSSON CONFIGURATION



UPPER TOWER GROUND BAR DETAIL

NOT TO SCALE



EQUIPMENT GROUND BAR DETAIL

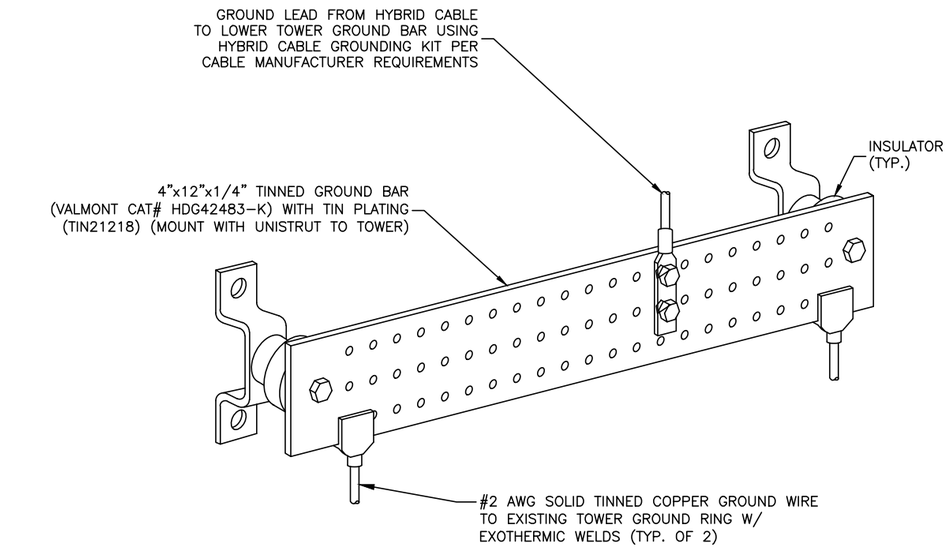
NOT TO SCALE

NOTES:

1. #2 AWG SOLID BARE TINNED COPPER WIRE FROM EACH ICE BRIDGE POST TO EXTERNAL GROUNDING SYSTEM USING EXOTHERMIC WELDS.
2. IN CASES OF SHEATHED STRANDED WIRES, CONNECTOR SHALL HAVE INSPECTION WINDOW AND NO MORE THAN 1/8" GAP BETWEEN CONNECTOR BODY AND SHEATH.

NOTE:

GROUND FROM SATELLITE DISH TO EQUIPMENT GROUND RING WHEN APPLICABLE



LOWER TOWER GROUND BAR DETAIL

NOT TO SCALE

NOTE:

#2 AWG SOLID TINNED COPPER GROUND CONDUCTOR FROM ICE BRIDGE POSTS TO BURIED GROUND RING USING EXOTHERMIC WELDS.

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CT-302534

SITE ADDRESS:

1334 ROUTE 85
MONTVILLE, CT 06370

SHEET TITLE:

GROUNDING NOTES & DETAILS

SHEET NUMBER:

G-3

RF Design Data Sheet

Site Information			
State	CT	Site ID	CT0100007A
Site Name	302534	Tower Type	Guyed
Address	1362 HARTFORD NEW LONDON TURNPIKE	City	MONTVILLE
Latitude (degrees)	41.41777222	Zip	06370
Longitude (degrees)	-72.1981	Tower Owner	ATC
RFDS Revision	0.0	Issue Date	2/18/2019
RF Engineer	Danh Mai	832-531-0378	Danh.Mai@Ericsson.com
Design Information			
Technology	**NB-IoT**		
Vendor	**Ericsson**		
Site Configuration	**4415-2 No Band 29**		
Site Type - Equipment - Band	**AWS-4**		
Sector Information (Expected Configuration)	**Sector-1 (Alpha)**	**Sector-2 (Beta)**	**Sector-3 (Gamma)**
LTE Sector Number	CT0100007A_1	CT0100007A_2	CT0100007A_3
Antenna Center Line (ft)	400	400	400
Antenna Model Number	ODI2-065R18K-GQ	ODI2-065R18K-GQ	ODI2-065R18K-GQ
Number of Antennas / Sector	1	1	1
Antenna Dimensions (LxWxD) (In)	53.5 x 9.8 x 2.4	53.5 x 9.8 x 2.4	53.5 x 9.8 x 2.4
Antenna Weight (lbs.)	25	25	25
Antenna Manufacturer	Comba	Comba	Comba
Horizontal Beamwidth	64	64	64
Gain (dBd)	17.8	17.8	17.8
Azimuth (deg) (Relative to True North)	0	120	240
Antenna Downtilt (Mechanical)	0	0	0
Antenna Downtilt 2100 (Electrical)	2	2	2
Antenna Downtilt 700 (Electrical)	2	2	2
Radio Model (Band 70)	Radio 4415	Radio 4415	-
Radio Quantity (Band 70)	1	1	-
Radio Model (H-Block)	Radio 0208	Radio 0208	Radio 0208
Radio Quantity (H-Block)	1	1	1
Radio Model (700 band)	-	-	-
Radio Quantity (700 band)	-	-	-
Number of Feeders / Sector	4	4	4
Feeder Diameter (Nominal) (in)	1/2	1/2	1/2
Feeder Length (m)	3	3	3
700 MHz Radio location	-	-	-
700 MHz Coax Cable Type (in)	-	-	-
TX/RX Diplexer Model			
TX/RX Diplexer Qty			
TX/RX Diplexer Dim (inch) / Wt (lbs)			
Description of Cabling Configuration Changes / Additions			
Mandatory : Append Sketches indicating Locations of all new Antennas, Cabling, Duplexor, Diplexors (if applicable), TMA's etc....			

NOTE:

1. CONTRACTOR TO REFER TO, AND VALIDATE, THE LATEST RFDS PRIOR TO CONSTRUCTION.

PLANS PREPARED FOR:

dish WIRELESS

PLANS PREPARED BY:

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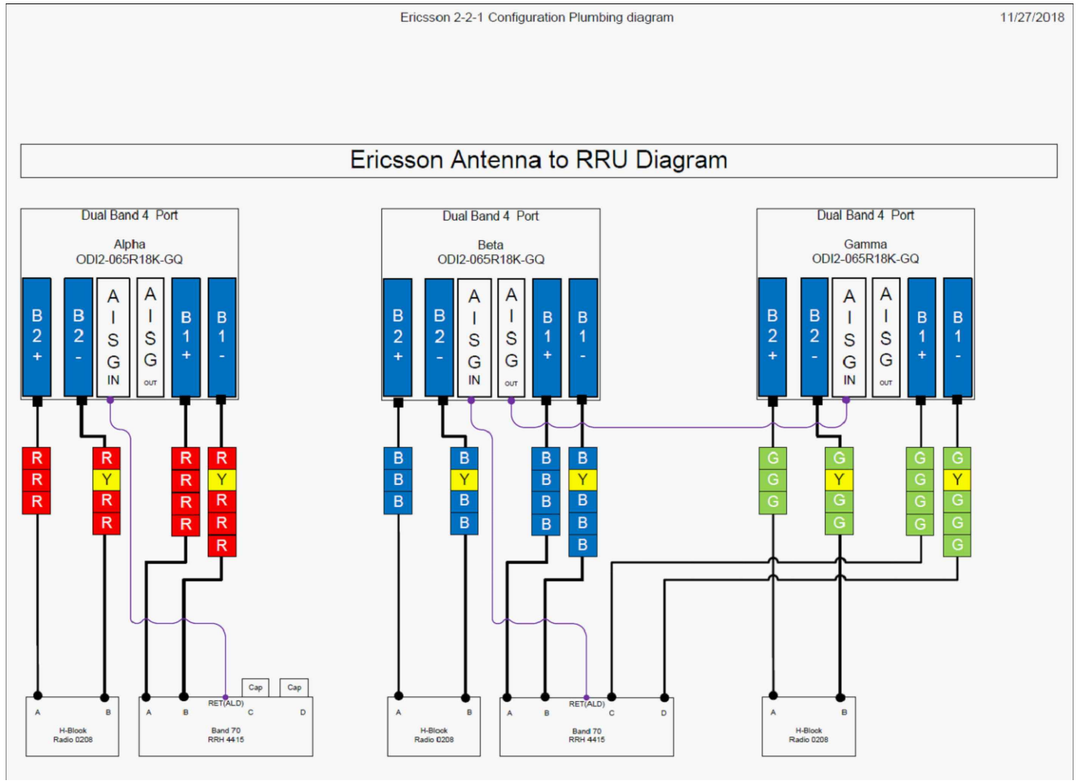
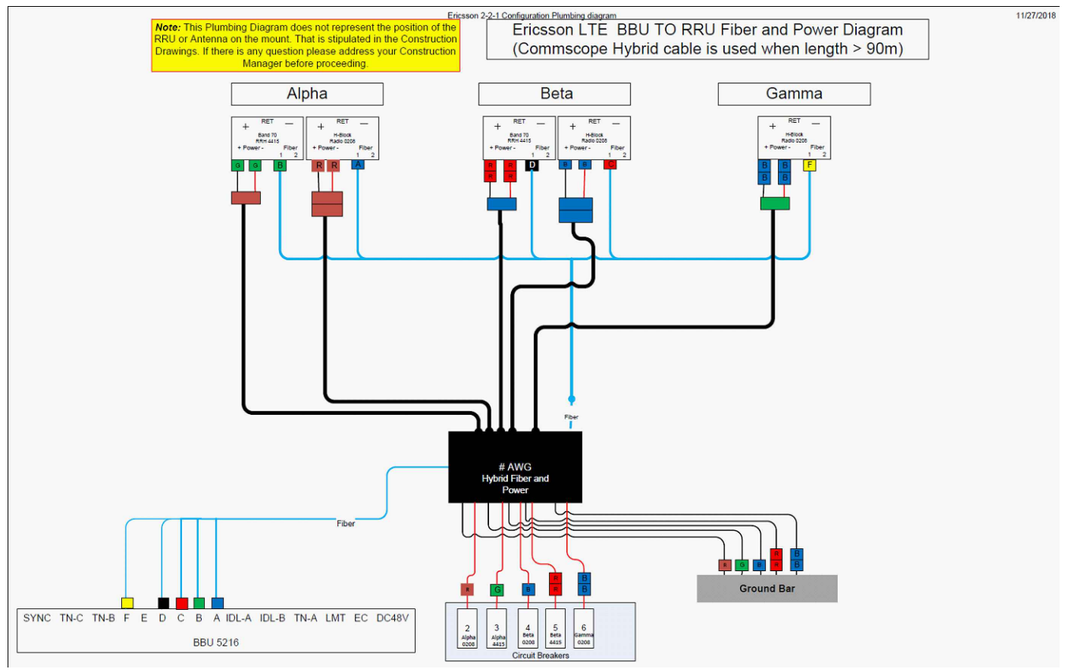
SITE ADDRESS:
1334 ROUTE 85
MONTVILLE, CT 06370

SHEET TITLE:
RF DATA SHEET

SHEET NUMBER:
RF-1





NOTE:

1. CONTRACTOR TO REFER TO, AND VALIDATE, THE LATEST RFDS PRIOR TO CONSTRUCTION.

PLANS PREPARED FOR:

dish WIRELESS

PLANS PREPARED BY:

HUDSON Design Group LLC
45 BEECHWOOD DRIVE
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

STATE OF CONNECTICUT
DEREK J. CREASER
NO. 28554
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY:	RP
CHECKED BY:	HC
APPV'D:	AT

SUBMITTALS

DATE	DESCRIPTION	REV	ISSUED BY
03.25.19	FOR REVIEW	A	RP
04.08.19	FOR REVIEW	1	RP
04.10.19	FOR CONSTRUCTION	2	RP

DISH WIRELESS SITE ID:
CT0100007A

TOWER OWNER SITE ID:
CT-302534

SITE ADDRESS:
1334 ROUTE 85
MONTVILLE, CT 06370

SHEET TITLE:
PLUMBING DIAGRAM

SHEET NUMBER:
RF-2