Robinson+Cole

KENNETH C. BALDWIN

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Also admitted in Massachusetts
and New York

July 19, 2021

Via Electronic Mail

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

Re: **Notice of Exempt Modification – Facility Modification**
11 Munn Road (a/k/a 112 Windham Avenue), Colchester, Connecticut

Dear Attorney Bachman:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains an existing wireless telecommunications facility at the above-referenced property address (the "Property"). The facility consists of antennas and remote radio heads attached to a tower and related equipment on the ground, near the base of the tower. The Connecticut State Police ("CSP") filed an "Exempt" filing with the Siting Council in 1985 for the existing tower. My office did reach out to Siting Council staff to obtain a copy of the original CSP approval letter but, given its age, a copy of the approval letter is not available. Cellco's use of the tower was approved by the Council in May of 1990 (Metro Mobile CTS of New London, Inc.). A copy of the Council's approval of Cellco's shared use is included in Attachment 1.

Cellco now intends to modify its facility by adding three (3) new MT6407-77A antennas on Cellco's existing antenna mounts. A set of project plans showing Cellco's proposed facility modifications and the new antennas specifications are included in Attachment 2.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Colchester's Chief Elected Official and Land Use Officer.

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The proposed modifications will not result in an increase in the height of the existing tower. Cellco's new antennas will be installed on Cellco's existing antenna mounts.

2. The proposed modifications will not involve any change to ground-mounted equipment and, therefore, will not require the extension of the site boundary.

3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.

4. The installation of Cellco's new antennas will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. A cumulative General Power Density table for the modified facility is included in Attachment 3. Cellco's modified facility is capable of providing 5G wireless service.

5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.

6. According to the attached Structural Analysis ("SA") and Mount Analysis ("MA"), the existing tower, tower foundation and antenna mounts, with certain modifications, can support Cellco's proposed antenna modifications. Copies of the SA and MA are included in Attachment 4.

A copy of the parcel map and Property owner information is included in Attachment 5. A Certificate of Mailing verifying that this filing was sent to municipal officials and the property owner is included in Attachment 6.

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

Sincerely,

Kenneth C. Baldwin

Enclosures
Copy to:
Andreas Bisbikos, Colchester First Selectman
Ariel Lago, Colchester Zoning Enforcement Officer
State of Connecticut, Property Owner
Aleksey Tyurin

ATTACHMENT 1

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

136 Main Street, Suite 401
New Britain, Connecticut 06051
Phone: 827-7682

May 1, 1990

Mr. David S. Malko, P.E.
Manager, Engineering & Regulatory Services
METRO MOBILE
50 Rockland Road
South Norwalk, CT 06854

RE: Metro Mobile CTS of New London, Inc., Notice of Intent to Install Cellular Antennas and Related Equipment on a tower Owned by the State of Connecticut, Department of Public Safety in the Town of Colchester, Connecticut.

Dear Mr. Malko:

At a meeting on April 30, 1990, the Connecticut Siting Council acknowledged your notice of intent to install cellular antennas and related equipment on an existing tower facility owned by the State of Connecticut, Department of Public Safety, in Colchester, Connecticut, pursuant to Section 16-50j-73 of the Regulations of State Agencies (RSA).

The proposed modifications are to be implemented as specified in your notices dated April 16 and 30, 1990. As proposed, the modifications are in compliance with the exception criteria specified in RSA 16-50j-72 as changes to an existing facility site that do not increase the tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary 6 decibels, and add radio frequency sending or receiving capability which increases the total radio frequency electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to Section 22a-162 of the Connecticut General Statutes.

The Council is pleased to note that the shared use of an existing tower meets the Council's long-term goal and the public interest to avoid proliferation of additional tower structures.

Please notify the Council upon completion of construction.

Very truly yours,

Gloria Dibble Pond

Gloria Dibble Pond
Chairperson

GDP/JMR/bd

4380E

ATTACHMENT 2

PROJECT NOTES

1. SITE INFORMATION OBTAINED FROM THE FOLLOWING:
   A. PLAN ENTITLED "850-LTE CARRIER ADD CABLE DRAWINGS" PREPARED BY ON-AIR ENGINEERING, LLC OF COLD SPRING, NY DATED 06/15/2021.
   B. POST-MODIFICATION ANTENNA MOUNT ANALYSIS REPORT PREPARED BY COLLIERS ENGINEERING & DESIGN, INC OF MOUNT LAUREL, NJ DATED 7/2/2021.
2. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, LAWS AND REGULATIONS OF ALL MUNICIPALITIES, UTILITY COMPANIES OR OTHER PUBLIC/GOVERNING AUTHORITIES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS THAT MAY BE REQUIRED BY ANY FEDERAL, STATE, COUNTY OR MUNICIPAL AUTHORITIES.
4. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER, IN WRITING, OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF BIDS OR PERFORMANCE OF WORK.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SITE IMPROVEMENTS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL REPAIR ANY DAMAGE AS A RESULT OF CONSTRUCTION OF THIS FACILITY AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
6. THE SCOPE OF WORK FOR THIS PROJECT SHALL INCLUDE PROVIDING ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED TO COMPLETE THIS PROJECT. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
7. THE CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO SUBMITTING THE BID TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND CONSTRUCTION DRAWINGS.
8. THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THESE DRAWINGS MUST BE VERIFIED. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
9. SINCE THE CELL SITE MAY BE ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE REQUIRED TO BE WORN TO ALERT OF ANY POTENTIALLY DANGEROUS EXPOSURE LEVELS.
10. THE PROPOSED FACILITY WILL CAUSE NO INCREASE IN STORM WATER RUNOFF, THEREFORE, NO DRAINAGE STRUCTURES ARE PROPOSED.
11. NO NOISE, SMOKE, DUST OR ODOR WILL RESULT FROM THIS FACILITY AS TO CAUSE A NUISANCE.
12. THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION (NO HANDICAP ACCESS IS REQUIRED).
13. THE FACILITY DOES NOT REQUIRE POTABLE WATER OR SANITARY SERVICE.
14. CONTRACTOR SHALL VERIFY ANTENNA ELEVATION AND AZIMUTHS WITH RF ENGINEERING PRIOR TO INSTALLATION.
15. ALL STRUCTURAL ELEMENTS SHALL BE HOT DIPPED GALVANIZED STEEL.
16. CONTRACTOR MUST FIELD LOCATE ALL EXISTING UNDERGROUND UTILITIES PRIOR TO ANY EXCAVATION.
17. CONSTRUCTION SHALL NOT COMMENCE UNTIL COMPLETION OF A PASSING STRUCTURAL ANALYSIS CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER. THE STRUCTURAL ANALYSIS IS TO BE PERFORMED BY OTHERS.
18. CONTRACTOR SHALL CONTACT STATE SPECIFIC ONE CALL SYSTEM THREE WORKING DAYS PRIOR TO ANY EARTH MOVING ACTIVITIES.

verizon

SITE NAME: COLCHESTER CT
PSLC NUMBER: 467126
FUZE I.D. NUMBER: 16281612

11 MUNN ROAD
COLCHESTER, CT 06415
NEW LONDON COUNTY

VICINITY MAP

SOURCE: BING MAPS

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 CODES.

1. 2018 CONNECTICUT STATE BUILDING CODE, INCORPORATING THE 2015 IBC
2. 2017 NATIONAL ELECTRICAL CODE - NFPA 70
3. 2015 NFPA 101
4. AMERICAN INSTITUTE OF STEEL CONSTRUCTION 360-10
5. AMERICAN CONCRETE INSTITUTE
6. TIA-222-H
7. TIA 607 FOR GROUNDING
8. INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS 81 IEEE C2 LATEST EDITION
9. TELCORDIA GR-1275
10. ANSI T1.311
11. PROPOSED USE: UNMANNED TELECOM FACILITY
12. HANDICAP REQUIREMENTS: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS NOT REQUIRED.
13. CONSTRUCTION TYPE: IIB
14. USE GROUP: U

PROJECT INFORMATION

SITE INFORMATION

LATITUDE:	41.5925°
LONGITUDE:	-72.321111°
GROUND ELEVATION:	591.52'± AMSL
JURISDICTION:	CONNECTICUT SITING COUNCIL

APPLICANT

COMPANY:	VERIZON WIRELESS
ADDRESS:	118 FLANDERS ROAD, THIRD FLOOR
CITY, STATE, ZIP:	WESTBOROUGH, MA 01581

PROPERTY OWNER

OWNER:	STATE OF CONNECTICUT
ADDRESS:	165 CAPITOL AVENUE
CITY, STATE, ZIP:	HARTFORD CT, 06106

SITE ACQUISITION

COMPANY:	STRUCTURE CONSULTING GROUP
ADDRESS:	49 BRATTLE STREET
CITY, STATE, ZIP:	ARLINGTON, MA 02474

ENGINEERING COMPANY

COMPANY:	COLLIERS ENGINEERING & DESIGN
CONTACT:	PETE ALBANO, PE
PHONE:	(856) 797-0412
E-MAIL:	PETER.ALBANO@COLLIERSENGINEERING.COM

CONTRACTOR PMI REQUIREMENT

PMI LOCATION	HTTPS://PMI.VZWSMART.COM
SMART TOOL VENDOR PROJECT #:	10058930.00
VZW LOCATION CODE (PSLC):	467126
ANALYSIS DATE:	7/2/2021

*** PMI AND REQUIREMENTS ARE EMBEDDED IN MOUNT ANALYSIS REPORT

HARDWARE UPGRADES REQUIRED :	YES

REFER TO MOUNT MODIFICATION DRAWINGS PAGE FOR VZW SMART KIT APPROVED VENDORS

PROJECT DESCRIPTION/ SCOPE OF WORK

THE PROPOSED PROJECT SCOPE INCLUDES MODIFYING TOWER MOUNTED EQUIPMENT AS INDICATED PER BELOW.

- REMOVE (3) EXISTING ANTENNAS
- INSTALL (3) PROPOSED ANTENNAS
- INSTALL HARDWARE UPGRADES

SHEET INDEX

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SCALE: AS SHOWN | JOB NUMBER: 21777749A

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
2	06/30/22	ISSUED FOR CONSTRUCTION	PAC	PMA
1	06/29/22	ISSUED FOR CONSTRUCTION	PAC	PMA
B	10/01/22	ISSUED FOR CONSTRUCTION	DRP	PMA
A	01/07/22	ISSUED FOR REVIEW	MJB	PMA

PETER M. ALBANO — 21 — PROFESSIONAL ENGINEER
Peter M. Albano
CONNECTICUT LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 26459
COLLIERS ENGINEERING & DESIGN CT, P.C.
CT-PEC.0001481

SITE NAME:
COLCHESTER CT
PSLC NUMBER: 467126
FUZE I.D. NUMBER: 16281612

11 MUNN ROAD
COLCHESTER, CT 06415
NEW LONDON COUNTY

Colliers Engineering & Design
MADISON
139 Nod Road
Madison, CT 06443
Phone: 860.895.0055
COLLIERSENGINEERING.COM/CT P.C.
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SHEET TITLE: TITLE SHEET

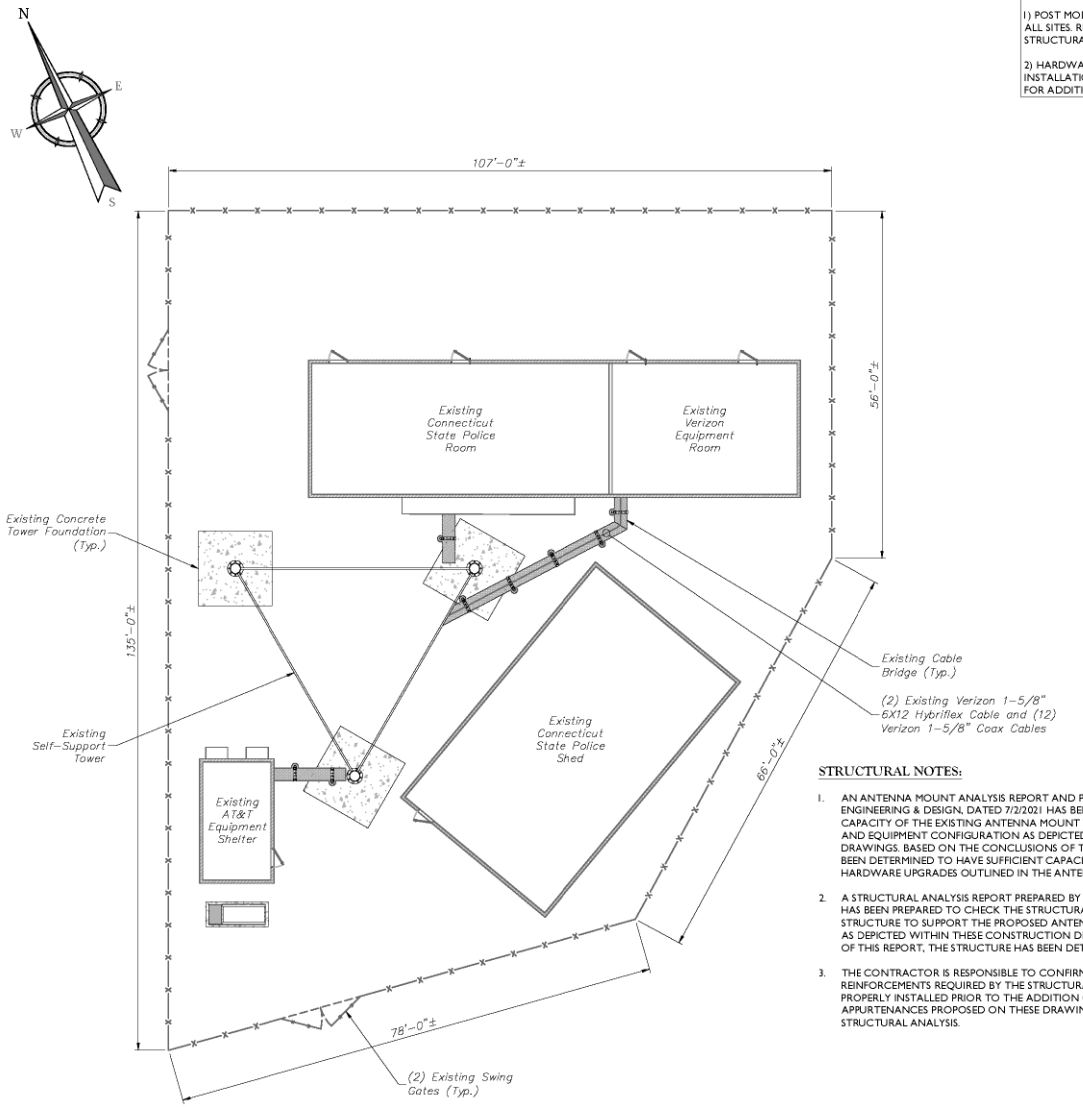
SHEET NUMBER: T-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

NOTES:

1) POST MODIFICATION INSPECTION (PMI) REQUIRED ON ALL SITES. REFER TO MOUNT ANALYSIS REFERENCED IN STRUCTURAL NOTE 1 FOR ADDITIONAL DETAILS.

2) HARDWARE UPGRADES ARE REQUIRED BEFORE ANY INSTALLATION CAN OCCUR. PLEASE REFER TO PMI NOTES FOR ADDITIONAL DETAILS.



COMPOUND LAYOUT

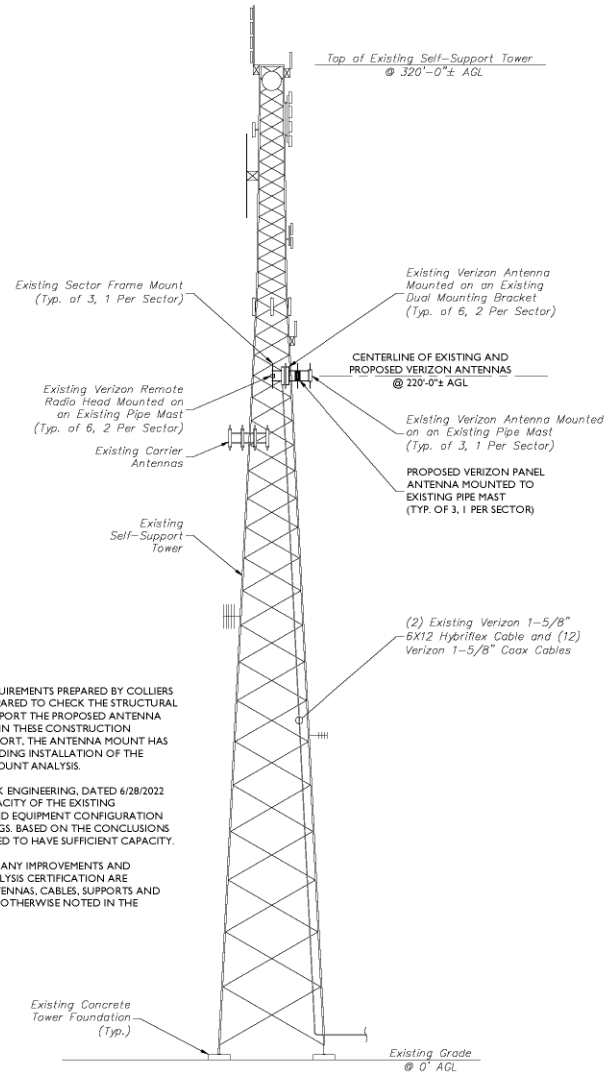
SCALE: 1" = 10' FOR 22"X34"
(SCALE: 1" = 20' FOR 11"X17")

STRUCTURAL NOTES:

1. AN ANTENNA MOUNT ANALYSIS REPORT AND PMI REQUIREMENTS PREPARED BY COLLIERS ENGINEERING & DESIGN, DATED 7/2/2021 HAS BEEN PREPARED TO CHECK THE STRUCTURAL CAPACITY OF THE EXISTING ANTENNA MOUNT TO SUPPORT THE PROPOSED ANTENNA AND EQUIPMENT CONFIGURATION AS DEPICTED WITHIN THESE CONSTRUCTION DRAWINGS. BASED ON THE CONCLUSIONS OF THIS REPORT, THE ANTENNA MOUNT HAS BEEN DETERMINED TO HAVE SUFFICIENT CAPACITY PENDING INSTALLATION OF THE HARDWARE UPGRADES OUTLINED IN THE ANTENNA MOUNT ANALYSIS.

2. A STRUCTURAL ANALYSIS REPORT PREPARED BY CENTEK ENGINEERING, DATED 6/28/2022 HAS BEEN PREPARED TO CHECK THE STRUCTURAL CAPACITY OF THE EXISTING STRUCTURE TO SUPPORT THE PROPOSED ANTENNA AND EQUIPMENT CONFIGURATION AS DEPICTED WITHIN THESE CONSTRUCTION DRAWINGS. BASED ON THE CONCLUSIONS OF THIS REPORT, THE STRUCTURE HAS BEEN DETERMINED TO HAVE SUFFICIENT CAPACITY.

3. THE CONTRACTOR IS RESPONSIBLE TO CONFIRM THAT ANY IMPROVEMENTS AND REINFORCEMENTS REQUIRED BY THE STRUCTURAL ANALYSIS CERTIFICATION ARE PROPERLY INSTALLED PRIOR TO THE ADDITION OF ANTENNAS, CABLES, SUPPORTS AND APPURTENANCES PROPOSED ON THESE DRAWINGS OR OTHERWISE NOTED IN THE STRUCTURAL ANALYSIS.



ELEVATION VIEW

SCALE: 1" = 20' FOR 22"X34"
(SCALE: 1" = 40' FOR 11"X17")

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REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
2	08/30/22	ISSUED FOR CONSTRUCTION	PAC	PMA
1	08/29/22	ISSUED FOR CONSTRUCTION	PAC	PMA
B	07/01/22	ISSUED FOR CONSTRUCTION	DRP	PMA
A	07/07/22	[illegible]	MJB	PMA

PETER M. ALBANESE 21777 REGISTERED PROFESSIONAL ENGINEER

Peter M. Albanese
CONNECTICUT LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 26459
COLLIERS ENGINEERING & DESIGN (CT), P.C.
CT-PEC.0001481

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FUZE I.D. NUMBER: 16281612

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NEW LONDON COUNTY

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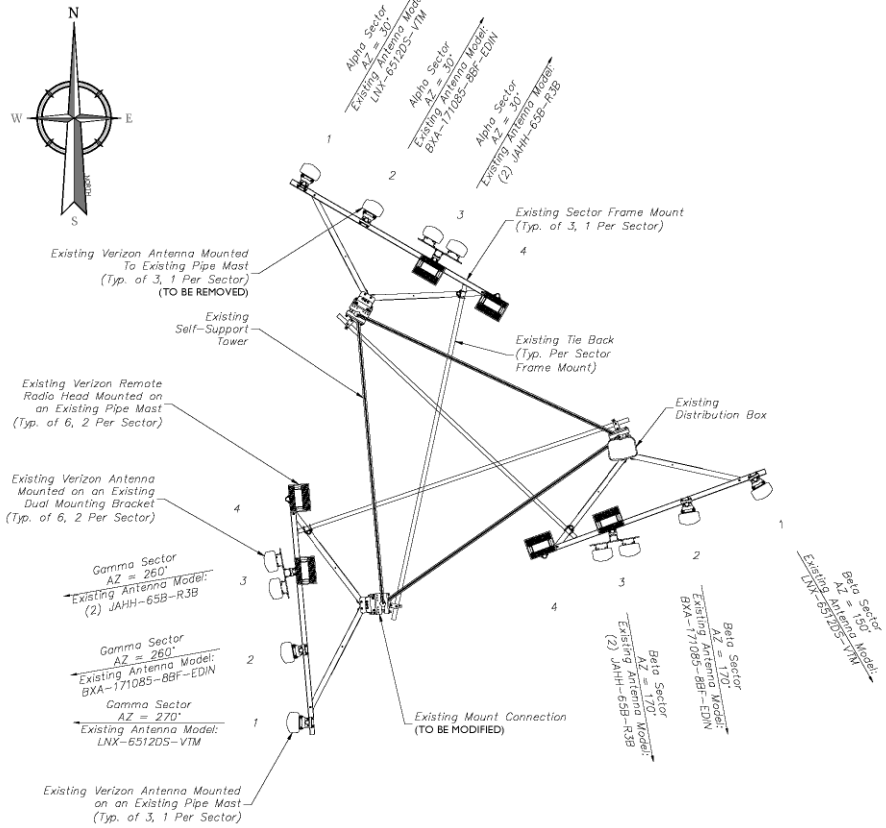
SHEET TITLE: COMPOUND LAYOUT AND ELEVATION VIEW

SHEET NUMBER: C-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

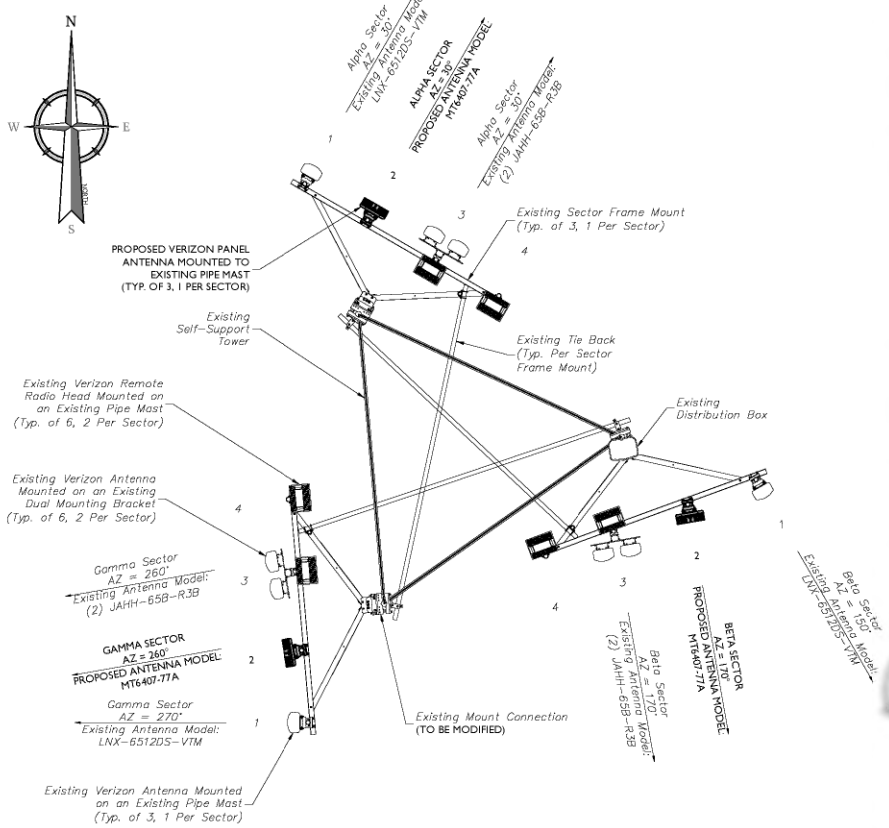


EXISTING ANTENNA LAYOUT
NOT TO SCALE

NOTES:

1) POST MODIFICATION INSPECTION (PMI) REQUIRED ON ALL SITES. REFER TO MOUNT ANALYSIS REFERENCED IN STRUCTURAL NOTE 1 ON SHEET C-1 FOR ADDITIONAL DETAILS.

2) HARDWARE UPGRADES ARE REQUIRED BEFORE ANY INSTALLATION CAN OCCUR. PLEASE REFER TO PMI NOTES FOR ADDITIONAL DETAILS.



PROPOSED ANTENNA LAYOUT
NOT TO SCALE

FINAL CABLE INFORMATION				
FINAL FIBER DISTRIBUTION / OVP BOX		FINAL CABLING SUMMARY		
MODEL NUMBER	STATUS	CABLE	STATUS	LENGTH *
OVP-12	EXISTING	(2) HYBRIFLEX LOW INDUCTIVE (12) 1 5/8" COAX	EXISTING	250'±
* ESTIMATED LENGTH OF CABLE WAS CALCULATED BY ADDING THE RAD CENTER AND THE DISTANCE FROM THE SHELTER ENTRY PLATE TO THE TOWER (ALONG THE ICE BRIDGE) AND A SAFETY FACTOR MEASUREMENT OF 25% (OF THE TWO PREVIOUS VALUES), LENGTHS REFLECTED IN THE TABLE DEFER TO THE GREATEST LENGTH.				

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A	01/07/22	[illegible] REVIEW		MJB	PMA
REV	DATE	DESCRIPTION		DRAWN BY	CHECKED BY

Peter M. Albani
CONNECTICUT LICENSED PROFESSIONAL ENGINEER
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SHEET TITLE: ANTENNA LAYOUTS

SHEET NUMBER: C-2

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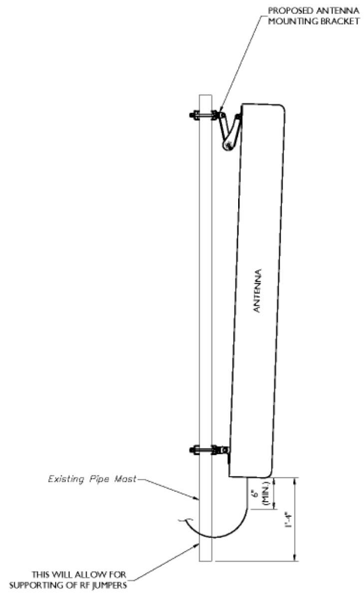
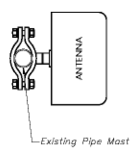
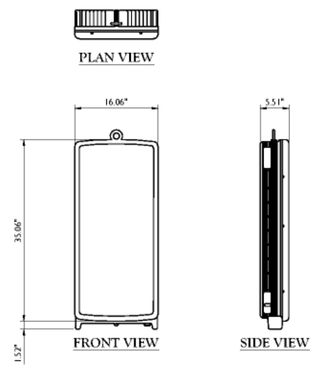


ELEVATION VIEW



PLAN VIEW

ANTENNA MOUNTING DETAIL
NOT TO SCALE



WEIGHT = 81.57 LBS

SAMSUNG MT6407-77A
NOT TO SCALE

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AS SHOWN	21777749A

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0	02/01/22	ISSUED FOR CONSTRUCTION	DRP	PMA
A	01/07/22	ISSUED FOR REVIEW	MJB	PMA
REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY

Peter M. Albano
CONNECTICUT LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 36459
COLLIERS ENGINEERING & DESIGN CT, P.C.
CT #PEC.0001589

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SITE NAME:

COLCHESTER CT
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Phone: 860.395.0055
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SHEET TITLE:
CONSTRUCTION DETAILS

SHEET NUMBER:
A-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

Antenna Summary

Added

700	850	1900	AWS	L-Sub6	Make	Model	Centerline	Tip Height	Azimuth	RET	4xRx	Inst. Type	Quantity
				5G	Samsung	MT6407-77A	220	221.5	30(0109) 170(0110) 260(0111)	false	false	PHYSICAL	3

Removed

700	850	1900	AWS	L-Sub6	Make	Model	Centerline	Tip Height	Azimuth	RET	4xRx	Inst. Type	Quantity
					AMPHENOL	BXA-171085-8BF-EDIN	220	222		false	false	SPARE	3

Retained

700	850	1900	AWS	L-Sub6	Make	Model	Centerline	Tip Height	Azimuth	RET	4xRx	Inst. Type	Quantity
LTE	LTE 5G	LTE	LTE		ANDREW	JAHH-65B-R3B	220	223	30(01) 170(02) 260(03)	true	true	PHYSICAL	6
	CDMA				ANDREW	LNX-6512DS-VTM	220	222	30(D1) 150(D2) 270(D3)	false	false	PHYSICAL	3

Added: 3 | Removed: 3 | Retained: 9

Equipment Summary

Added

Equipment Type	Location	700	850	1900	AWS	L-Sub6	Make	Model	Cable Length	Cable Size	Install Type	Quantity
RRU	Tower					5G	Samsung	MT6407-77A			PHYSICAL	3

Removed

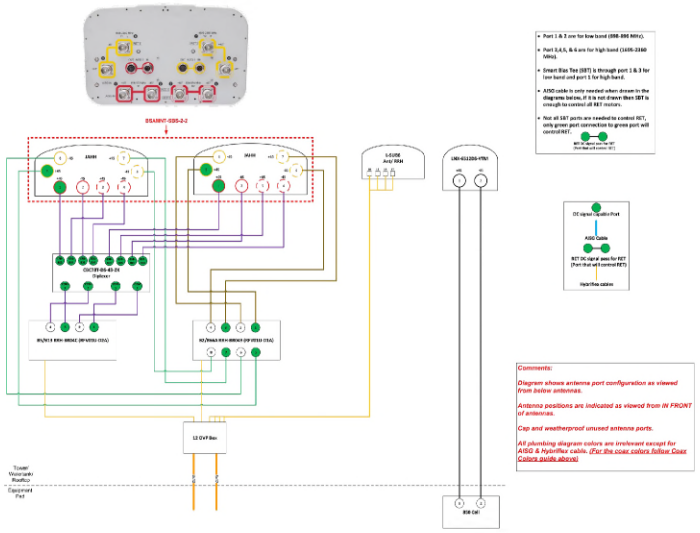
Equipment Type	Location	700	850	1900	AWS	L-Sub6	Make	Model	Cable Length	Cable Size	Install Type	Quantity

No data available.

Retained

Equipment Type	Location	700	850	1900	AWS	L-Sub6	Make	Model	Cable Length	Cable Size	Install Type	Quantity
Mount	Tower						Commscope	BSAMNT-SBS-2-2			PHYSICAL	3
Diplexer	Tower	LTE	LTE 5G				Commscope	CBC78T-DS-43-2X			PHYSICAL	3
Coaxial Cables	Tower						N/A	1-5/8" Coax		1 5/8"	SPARE	6
Coaxial Cables	Tower		CDMA				N/A	1-5/8" Coax		1 5/8"	PHYSICAL	6
Hybrid Cable	Tower	LTE	LTE 5G	LTE	LTE	5G	N/A	6x12 Hybriflex		1 5/8"	PHYSICAL	2
OVP Box	Tower	LTE	LTE 5G	LTE	LTE	5G	Raycap	OVP-12			PHYSICAL	1
RRU	Tower			LTE	LTE		Samsung	B2/B66A RRH-BR049 (RFV01U-D1A)			PHYSICAL	3
RRU	Tower	LTE	LTE 5G				Samsung	B5/B13 RRH-BR04C (RFV01U-D2A)			PHYSICAL	3

ANTENNA SCHEDULE



RF PLUMBING DIAGRAM

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REV	DATE	DESCRIPTION	BY	CHECKED BY
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1	06/29/22	ISSUED FOR CONSTRUCTION	PAC	PMA
B	05/01/22	ISSUED FOR CONSTRUCTION	DRF	PMA
A	01/07/22	ISSUED FOR REVIEW	MJB	PMA

Peter M. Albano
CONNECTICUT LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 26453
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CT-PEC.0001483

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SHEET TITLE: CONSTRUCTION DETAILS

SHEET NUMBER: A-2

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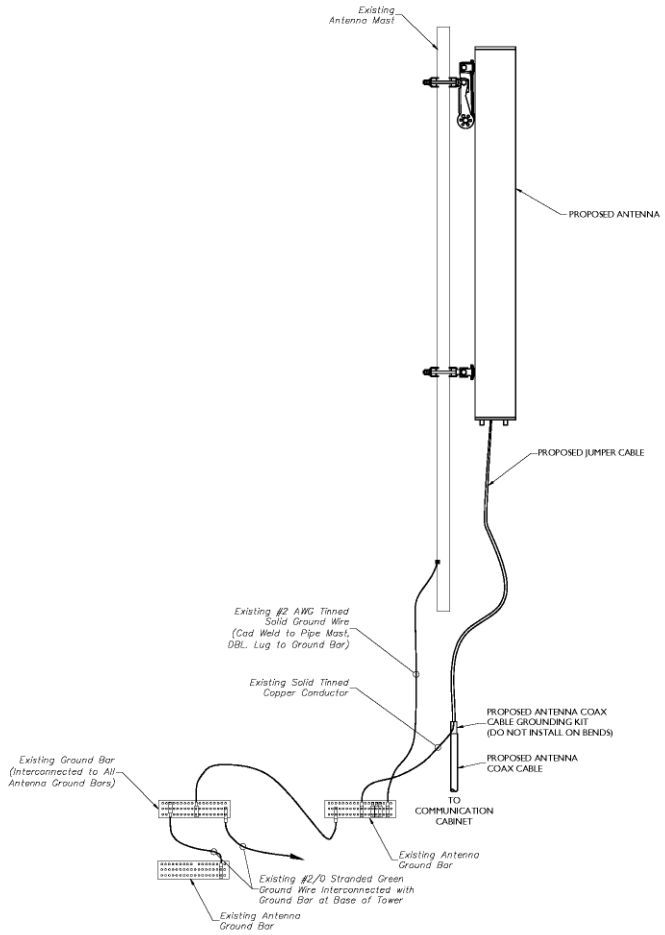

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1	06/29/22	ISSUED FOR CONSTRUCTION	PAC	PMA
0	01/01/22	ISSUED FOR CONSTRUCTION	DRF	PMA
A	01/01/22	[illegible] REVIEW	MJR	PMA

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LICENSE NUMBER: 26459
COLLIERS ENGINEERING & DESIGN (CT), P.C.
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FUZE I.D. NUMBER: 16281612

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NEW LONDON COUNTY

Colliers Engineering & Design
MADISON
139 Killingworth Road
Madison, CT 06443
Phone: 860.895.0055
COLLIERSENGINEERING.COM/CT P.C.
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SHEET TITLE:
GROUNDING DETAILS

SHEET NUMBER:
G-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

POST-MODIFICATION INSPECTION (PMI) REQUIREMENTS

1. PMI REQUIRED FOR ALL SITES, REFER TO VERIZON NSTD-446 SECTION 1.5 AND 2.3 FOR MORE INFORMATION.
2. CONTRACTOR SHALL REFER TO THE MOUNT ANALYSIS BY COLLIERS ENGINEERING & DESIGN, INC DATED 7/2/2021 FOR ADDITIONAL DETAILS.
3. GENERAL CONTRACTOR SHALL PROVIDE THE BELOW DOCUMENTATION TO THE STRUCTURAL ENGINEER OF RECORD VIA EMAIL, DROPBOX, OR OTHER FILE SHARE METHOD. PROVIDE HIGH RESOLUTION PHOTO'S (DO NOT COMPRESS).
4. STRUCTURAL ENGINEER OF RECORD WILL CONDUCT A REVIEW OF THE PROVIDED DOCUMENTS TO PREPARE A PMI REPORT. STRUCTURAL ENGINEER OF RECORD WILL NOTIFY GENERAL CONTRACTOR IF ANY ADDITIONAL DOCUMENTATION IS REQUIRED TO COMPLETE THE PMI.
5. PMI DOCUMENTATION SHALL BE SUFFICIENT TO CONFIRM THE UPGRADE WAS BUILT AS DESIGNED, INCLUDING EQUIPMENT CHANGES AND STRUCTURAL MODIFICATIONS, AND IS IN ADDITION TO ANY OTHER REQUIRED CLOSEOUT PACKAGE DOCUMENTATION.
6. REQUIRED DOCUMENTATION FOR PMI INCLUDES THE FOLLOWING AT A MINIMUM. REFER TO THE MOUNT ANALYSIS FOR POSSIBLE ADDITIONAL INFORMATION. IF STRUCTURAL MODIFICATIONS ARE REQUIRED, REFER TO THE MODIFICATION DRAWINGS FOR POSSIBLE ADDITIONAL REQUIREMENTS.
   a. PROVIDE PRE-AND-POST CONSTRUCTION PHOTOS OF EACH SECTOR FROM THE MOUNT ELEVATION AND THE GROUND. CONTRACTOR IS RESPONSIBLE FOR ENSURING THE PHOTO'S PROVIDED PROVIDE POSITIVE CONFIRMATION THAT THE MODIFICATION/UPGRADE WAS COMPLETED IN ACCORDANCE WITH THESE CONSTRUCTION DRAWINGS AND ANY STRUCTURAL/MOUNT MODIFICATION DRAWINGS. CONTRACTOR SHALL RELAY ANY DATA THAT CAN IMPACT THE PERFORMANCE OF THE MOUNT OR MOUNT MODIFICATION, INCLUDING SAFETY ISSUES, PHOTOS SHALL HAVE A DATE/TIME STAMP IN THE PHOTO. REFER TO THE MOUNT ANALYSIS FOR SCHEDULE OF REQUIRED PHOTOS. PROVIDE PHOTOS OF THE GATE SIGNS AND CARRIER SHELTER TO IDENTIFY THE TOWER OWNER, SITE NAME, SITE NUMBER, ETC.
   b. VERIFICATION OF THE MEMBER CONNECTIONS, BRACING, AND RELEVANT DIMENSIONS.
   c. VERIFICATION OF THE ANTENNA AND OTHER EQUIPMENT CONFIGURATION (PHOTOS OF MODEL NUMBERS/TAGS FOR ALL EQUIPMENT, AS WELL AS THE FEEDLINE CONFIGURATION). TAKE PHOTOS OF THE BACK SIDE OF EACH SECTOR AS WELL AS CLOSE-UPS OF ALL EQUIPMENT. PHOTOS SHOULD CONFIRM THE HORIZONTAL AND VERTICAL POSITIONING OF THE ANTENNAS AND EQUIPMENT AND SHALL HAVE TAPE MEASURES IN THE PHOTOS TO CONFIRM.
   d. FOR TIEBACKS, STRUTS, MOUNT PIPES, PHOTOS TO CONFIRM THE ANGLES AND LOCATIONS OF ATTACHMENT POINT AT BOTH ENDS OF MEMBER, AS WELL AS DIMENSIONS, THICKNESS, AND LENGTHS OF THE MEMBERS. REFER TO THE CHECKLIST IN THE MOUNT ANALYSIS OR MOUNT MOD DRAWINGS FOR ADDITIONAL INFORMATION.
   e. MATERIALS USED (TYPE, STRENGTH, DIMENSIONS, ETC.). PROVIDE BILL OF MATERIAL AND MATERIAL SPEC TO CONFIRM MATERIAL GRADES AND SIZES. PROVIDE DOCUMENTATION FOR GALVANIZATION OF MEMBERS WHETHER HOT-DIPPED OR COLD-GALVANIZED. IF MATERIALS DIFFER FROM THOSE SPECIFIED ON THESE DRAWINGS, PROVIDE DOCUMENTATION THAT THE "EQUIVALENT" MATERIAL HAS THE SAME SPECIFICATIONS.
   f. MOUNT ORIENTATION/AZIMUTH AND ELEVATION. PROVIDE TAPE DROP OF ANTENNA CENTERLINE(S) AND MOUNT ATTACHMENT POINTS TO THE SUPPORTING STRUCTURE. IF THERE ARE MULTIPLE RAD CENTERS, PROVIDE PHOTOS OF ALL ELEVATIONS.
   g. VERIFICATION THAT THE INSTALL HAS NOT CAUSED DAMAGE TO OR UNPLANNED OBSTRUCTION OF THE FOLLOWING:
      - CLIMBING FACILITIES
      - SAFETY CLIMB IF PRESENT, INCLUDING PHOTOS ABOVE AND BELOW THE MOUNT
      - LIGHTING SYSTEMS
      - OTHER INSTALLED SYSTEMS ON THE STRUCTURE
      - CONTRACTOR SHALL ENSURE THE SAFETY CLIMB IS SUPPORTED AND NOT ADVERSELY AFFECTED BY THE INSTALLATION OF NEW COMPONENTS. THIS MAY INVOLVE THE INSTALLATION OF WIRE ROPE GUIDES OR OTHER ITEMS TO PROTECT THE WIRE ROPE .
   i. OTHER ITEMS DETERMINED BY THE STRUCTURAL ENGINEER TO ENSURE THE MOUNT WILL PERFORM AS DESIGNED. PHOTOS OF RELEVANT MEASUREMENTS, WITH SUFFICIENT DETAILS TO CONFIRM CONNECTION DETAILS, PLACEMENT OF EQUIPMENT, WALL ANCHOR DETAILS, BALLAST QUANTITIES, STRUCTURAL MODIFICATION ETC. DIAMETERS AND THICKNESS OF BOLTS/THREADED RODS/ANGLES/TUBES ETC. SHALL HAVE PHOTOS CONFIRMING CALIPER MEASUREMENTS.
      - CONFIRMATION THAT ALL HARDWARE WAS PROPERLY INSTALLED, AND EXISTING HARDWARE WAS INSPECTED FOR ANY ISSUES
      - FOR BALLAST SLEDS, DOCUMENTATION OF THE WEIGHT OF BALLAST IN EACH SECTOR
      - FOR WALL ANCHORS, PHOTOS, AND MEASUREMENTS OF OUTSIDE AND INSIDE OF CONNECTIONS, DOCUMENTATIONS OF ADHESIVE USED, SIZE AND LENGTH OF ANCHORS, EFFECTIVE EMBEDMENT DEPTH OF THE ANCHORS, GROUTING OF HOLLOW WALLS, SPACING AND EDGE DISTANCE MEASUREMENTS, AND ANY THROUGH-BOLTS OR BACKING PLATES.
      - FOR STUD WELD CONNECTION, DOCUMENTATION TO CONFIRM SURFACE PREPARATION, STUD WELD SIZE, GRADE, LENGTH, AND SPACING.
      - FOR FABRICATED PARTS, SHOP DRAWINGS TO BE APPROVED BY THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION
      - FOR WELD PARTS, CERTIFIED WELD INSPECTION
      - FOR BOLTED PARTS, BOLT INSTALLATION AND TORQUE
7. CONTRACTOR SHALL PROVIDE, IN ADDITION TO THE ABOVE, AS-BUILT CDS WITH REDLINES IDENTIFYING ANY CHANGES. THE AS-BUILTS SHALL HAVE THE CONTRACTOR'S NAME, PREPARER'S SIGNATURE, AND DATE.
8. IF THE MODIFICATION INSTALLATION WOULD FAIL THE PMI ("FAILED PMI"), THE CONTRACTOR SHALL WORK WITH THE ENGINEER OF RECORD TO COORDINATE A REMEDIATION PLAN IN ONE OF TWO WAYS:
   a. CORRECT FAILING ISSUES TO COMPLY WITH THE SPECIFICATIONS CONTAINED IN THE ORIGINAL CONTRACT DOCUMENTS AND COORDINATE A SUPPLEMENTAL PMI.
   b. OR, WITH EOR'S APPROVAL, THE GC MAY WORK WITH THE EOR TO RE-ANALYZE THE MODIFICATION/REINFORCEMENT/UPGRADE USING THE AS-BUILT CONDITION
9. NOTE: IF LOADING IS DIFFERENT THAN THAT SHOWN IN THESE CONSTRUCTION DRAWINGS OR STRUCTURAL/ MOUNT MODIFICATION DRAWINGS, CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IMMEDIATELY FOR RESOLUTION.
10. THE ENGINEERING FIRM PERFORMING AN ANALYSIS SHALL PROVIDE A CONTRACTOR'S PHOTO LOG AND CHECKLIST TO BE COMPLETED BY THE INSTALLING CONTRACTOR. THE CONTRACTOR SHALL THEN PROVIDE POST-INSTALLATION INFORMATION TO THE STRUCTURAL ENGINEER. THE STRUCTURAL ENGINEER SHALL REVIEW THE DOCUMENTS FOR ANY DEFICIENCIES THAT CAN BE DETERMINED FROM THE DESKTOP REVIEW OF THE DATA. THE ENGINEERING FIRM SHALL THEN PROVIDE DOCUMENTATION TO VZW THAT THE SITE IS COMPLETED, AND THE PMI REPORT IS APPROVED.

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SCALE:	JOB NUMBER:
AS SHOWN	21777749A

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
2	06/30/22	ISSUED FOR CONSTRUCTION	FAC	PMA
1	06/29/22	ISSUED FOR CONSTRUCTION	FAC	PMA
0	02/01/22	ISSUED FOR CONSTRUCTION	DRP	PMA
A	01/07/22	ISSUED FOR REVIEW	MJB	PMA

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SITE NAME:
COLCHESTER CT
PSLC NUMBER: 467126
FUZE I.D. NUMBER: 16281612

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NEW LONDON COUNTY

Colliers Engineering & Design
MADISON
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Phone: 860.395.0055
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SHEET TITLE: PMI REQUIREMENTS

SHEET NUMBER: GN-1

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SAMSUNG

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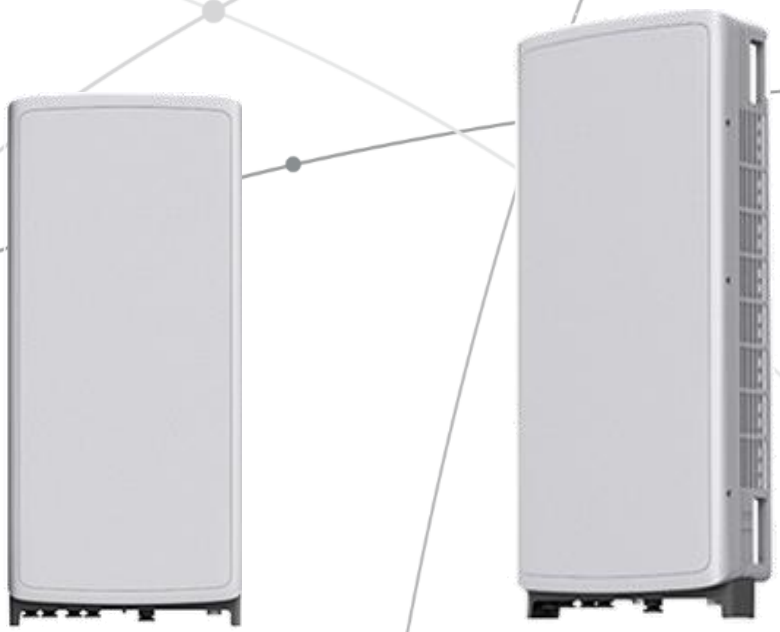
C-Band 64T64R Massive MIMO Radio

for High Capacity and Wide Coverage

Samsung C-Band 64T64R Massive MIMO Radio enables mobile operators to increase coverage range, boost data speeds and ultimately offer enriched 5G experiences to users in the U.S..

Model Code : MT6407-77A

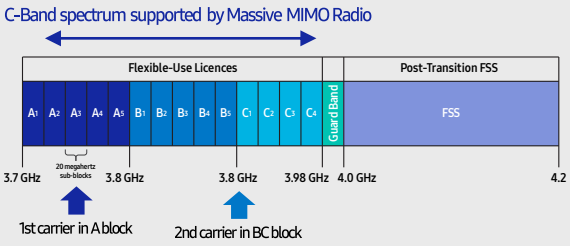


Points of Differentiation

Wide Bandwidth

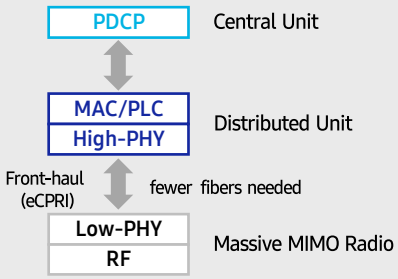
With capability to support up to 2 CC carrier configuration, Samsung C-Band massive MIMO Radio supports 200 MHz bandwidth in the C-Band spectrum.

Samsung C-Band massive MIMO Radio covers the entire C-Band 280 MHz spectrum, so it can meet the operator's needs in current A block and future B/C blocks



Future Proof Product

Samsung C-Band 64T64R Massive MIMO radio supports not only CPRI but also eCPRI as front-haul interface.
It enables operators can cut down on OPEX/CAPEX by reducing front-haul bandwidth through low layer split and using ethernet based higher efficient line.



Enhanced Performance

C-Band massive MIMO Radio creates sharp beams and extends networks' coverage on the critical mid-band spectrum using a large number of antenna elements and high output power to boost data speeds.

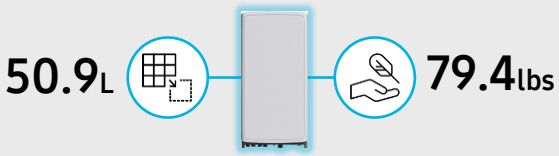
This helps operators reduce their CAPEX as they now need less products to cover the same area than before.

Furthermore, as C-Band massive MIMO Radio supports MU-MIMO(Multi-user MIMO) , it enables to increase user throughput by minimizing interference.

Well Matched Design

Samsung C-Band Massive MIMO radio utilizes 64 antennas, supports up to 280MHz bandwidth, and delivers a 200W output power. despite the above advanced performance, the Radio has a compact size of 50.9L and 79.4lbs. This makes it easy to install the Radio.

It is designed to look solid and compact, with a low profile appearance so that, when installed, harmonizes well with the surrounding environment..



Technical Specifications

Item	Specification
Tech	NR
Band	n77
Frequency Band	3700 - 3980 MHz
EIRP	78.5dBm (53.0 dBm+25.5 dBi)
IBW/OBW	280 MHz / 200 MHz
Installation	Pole/Wall
Size/ Weight	16.06 x 35.06 x 5.51 inch (50.86L)/ 79.4 lbs

SAMSUNG

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Samsung inspires the world and shapes the future with transformative ideas and technologies. The company is redefining the worlds of TVs, smartphones, wearable devices, tablets, digital appliances, network systems, and memory, system LSI, foundry and LED solutions.

129 Samsung-ro, Yeongtong-gu, Suwon-si Gyeonggi-do, Korea

ATTACHMENT 3

	General	Power	Density					
Site Name: Colchester								
Tower Height: Verizon @ 220ft								
CARRIER	**# OF CHAN.**	**WATTS ERP**	**HEIGHT**	**FREQ.**	**CALC. POWER DENS**	**MAX. PERMISS.EXP.**	**FRACTION MPE**	**Total**
*Antenna no. 2 (CSP/FBI)	1	330	320	154.665	0.0001799	0.2	0.01	
*Antenna no. 3 (CSP)	1	1015	315	2141	0.0000014	1	0	
*Antenna no. 4 (SHP)	1	398	294	151.355	0.0002404	0.2	0.01	
*Antenna no. 5 (DEP)	1	175	292	44.72	0.0001103	0.2	0.01	
*Antenna no. 6	1	100	257	153.935	0.000081	0.2	0	
*Antenna no. 7 (OEM)	1	178	243	45.2	0.0001605	0.2	0.01	
*Antenna no. 8 (CSP)	1	330	227	42.04	0.000349	0.2	0.02	
*Antenna no. 9 (DEP)	1	125	138	75.5	0.0003697	0.2	0.02	
*Antenna no. 10 (CSP)	1	569	97	2138	0.0000116	1	0	
*Antenna no. 11 (CSP)	1	252	90	2133.2	0.0000087	1	0	
*Antenna no. 12 (CSP)	1	5750	105	6795	0.0004957	1	0	
*Antenna no. 13 (CSP)	1	1545	112	10567.5	0.0000115	1	0	
*Antenna no. 14	5	200	320	867.4	0.0005254	0.578266667	0.01	
*Antenna no. 15	5	200	320	867.5	0.0005303	0.578333333	0.01	
*Antenna no. 18 (FBI)	1	473	100	453.625	0.0023223	0.302416667	0.08	
*Antenna no. 31 (CTT)	1	10	100	406	0.0000562	0.270666667	0	
*Eversource	4	124	145	217	0.009232006	0.2	0.46	
*AT&T	2	414	200	850	0.00791172	0.566666667	0.001396186	
*AT&T	2	656	200	1900	0.012536445	1	0.001253644	
*AT&T	2	826	200	700	0.0158	0.4667	0.34%	
*AT&T	4	1250	200	1900	0.0478	1.0000	0.48%	
VZW 700	**4**	**634**	**220**	**751**	**0.0019**	**0.5007**	**0.38%**	
VZW CDMA	**2**	**344**	**220**	**877.26**	**0.0005**	**0.5848**	**0.09%**	
VZW Cellular	**4**	**725**	**220**	**874**	**0.0022**	**0.5827**	**0.37%**	
VZW PCS	**4**	**1593**	**220**	**1975**	**0.0047**	**1.0000**	**0.47%**	
VZW AWS	**4**	**1633**	**220**	**2120**	**0.0049**	**1.0000**	**0.49%**	
VZW CBAND	**2**	**13335**	**220**	**3730.08**	**0.0198**	**1.0000**	**1.98%**	
								68.86%
* Source: Siting Council								

ATTACHMENT 4

CENTEK engineering

Centered on Solutions℠

Structural Analysis Report

320' Existing Lattice Tower

Verizon Antenna Installation

CSP Tower Ref: #50

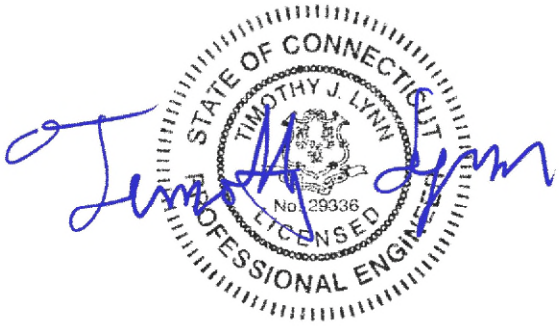
11 Munn Road
Colchester, CT

CENTEK Project No. 21007.82

~~Date: March 24, 2022~~

Rev 1: June 28, 2022

Max Stress Ratio = 95.5%



Prepared for:

Verizon Wireless
20 Alexander Drive
Wallingford, CT 06492

Table of Contents

Introduction

The purpose of this report is to summarize the results of the non-linear, P-Δ structural analysis of the antenna installation by Verizon on the existing lattice tower located in Colchester, Connecticut.

The host tower is a 320-ft, three legged, lattice tower originally designed and manufactured by Rohn Industries. File no. 43233AE dated May 10, 2001. The tower geometry, structure member sizes and foundation information were taken from a previous structural analysis report prepared by AECOM job no. EVS-010/VZ5-217/EMP-008 60626930 dated May 21, 2020. The tower has been previously reinforced. All previous reinforcements are assumed to be installed. See Primary Assumptions Section below for detailed reinforcement reference reports.

Antenna and appurtenance inventory was taken from the aforementioned structural analysis and information provided by Verizon.

The tower consists of fifteen (15) vertical sections consisting of steel pipe legs conforming to ASTM A572-50 and steel angle/pipe lateral bracing. The vertical tower sections are connected by bolted flange plates with the diagonal and horizontal bracing to pipe legs consisting of bolted connections. The width of the tower face is 6.8-ft at the top and 40.7-ft at the bottom.

Antenna and Appurtenance Summary

The existing and proposed loads considered in the analysis consist of the following:

Antenna Type	***Carrier***	***Mount***	***Antenna Centerline Elevation***	***Cable***
(1) Lightning Rod	Tower (existing)	Leg Mount	329’	N/A
(1) Lighted Beacon	Tower (existing)	Tower Mount	325’	(1) 1/2" coax cable
(1) PD-128 Omni/Dipole Antenna	ECI-1 CSP-2 (existing)	6’ Side Arm Mount	325’	(1) 7/8” coax cable (LCF78-50JA-A7)
(1) BA-1012 Omni Antenna	ECI-2 CSP-1 (existing)	6’ Side Arm Mount	320’	(1) 7/8” coax cable (LCF78-50JA-A7)
(1) ANT450F6 Antenna	ECI-3 (existing)	Pipe Mounted to tower Leg	318’	(1) 7/8” coax cable (LCF78-50JA-A7)
(1) SC479-HF1LDF Omni Antenna	ECI-4 CSP-52 (existing)	6’ Side Arm Mount	300’	(1) 1-5/8” coax cable (AVA7-50A)
(1) PD-340 Dipole Antenna	ECI-5 CSP-4 (existing)	6’ Side Arm Mount	290’	(1) 7/8” coax cable (LCF78-50JA-A7)
(1) DB-809T3 Omni Antenna	ECI-6 CSP-14 (existing)	*Shared with ECI-7 Mount*	286’	(1) 1-5/8” coax cable (AVA7-50A)

Antenna Type	***Carrier***	***Mount***	***Antenna Centerline Elevation***	***Cable***
(1) (inverted) SC479-HF1LDF (D00I-E6085) Omni Antenna	ECI-7 CSP-53 (existing)	6' Side Arm Mount @ 284'	283'	(1) 1-5/8" coax cable (AVA7-50A)
(1) PD-440 Dipole Antenna	ECI-8 DEHMS-6 (existing)	6' Side Arm Mount @ 260'	264'	(1) 7/8" coax cable (LCF78-50JA-A7)
(1) SC479-HF1LDF Omni Antenna	ECI-10 DEP-5 (existing)	*Shared with below T-Frame Mount*	251'	(1) 1-5/8" coax cable (AVA7-50A)
(1) PD-1142 Omni Antenna	ECI-14 DEHMS-7 (existing)	6' Side Arm Mount	248'	(1) 7/8" coax cable (LCF78-50JA-A7)
(2) (inverted) SC479-HF1LDF Omni Antennas (1) TMA Unit @ 247' (EL.)	ECI-11,12,13 CSP-16,17 (existing)	(1)T-Arm Frame Mount @ 246'	245'	(2) 1-5/8" coax cable (AVA7-50A) (1) 1/2" coax cable
(1) 531-70 Dipole Antenna	ECI-15 CSP-8 (existing)	6' Side Arm Mount	238'	(1) 7/8" coax cable (LCF78-50JA-A7)
(3) Samsung MT6407-77A	**VZW (Proposed)**	**See Below Mount**	**232'**	*See Below Cables*
(3) LNX-6512DS-VTM (6) JAHH-65B-R3B (3) B2/B66A RRHs (3) B5/B13 RRHs (3) CBC78T-DS-43-2X Diplexers (2) OVP-RC3DC-3315-PF-48 OVP Units	VZW (existing)	(3) V-frames (existing)	232'	(6) 1 5/8" coax cables (existing) (2) HB158-1-08U8-S8J18 Fiber Optic Cable
(2) CCI HPA-65R-BUU-H8 (1A, 1B) (1) CCI HPA-65R-BUU-H6 (1C) (3) RRUS-11 RRH Units (3) RRUS-32 B2 RRH Units (1) DC6-48-60-0-8C Surge Arrestor	AT&T (existing)	(3) SitePro1 STK-U Mount Stiff-Arm Kits added to Existing Mounts (*indicated below*)	200'	*See Below Cables*
(3) Powerwave 7770 Panel Antennas	AT&T (existing)	(3) T-Arm mounts with (1) Stiff-Arm connected to Tower Structure	200'	(6) 1 5/8" coax cables (1) Fiber Optic Cable & (2) DC Cables within 2" Flex Conduit

Antenna Type	Carrier	Mount	Antenna Centerline Elevation	Cable
(1) 1151-3N Omni Antenna	ECI-50 NEU-32 (existing)	4' Side Arm Mount	179'	(1) 7/8" coax cable (LCF78-50JA-A7)
(1) DB586-Y Omni Antenna	ECI-51 NEU-48 (existing)	*Shared with Below Mount*	177'	(1) 7/8" coax cable (LCF78-50JA-A7)
(1) TTA Unit	ECI-52 NEU-49 (existing)	*Shared with Below Mount*	176'	(1) ½" coax cable (LDF4-50A)
(1) (inverted) DB586-Y Omni Antenna	ECI-53 NEU-50 (existing)	6' Side Arm Mount @ 176'	175'	(1) 7/8" coax cable (LCF78-50JA-A7)
(1) Small Lighted Tower Beacon Light	ECI-54 Tower (existing)	Mounted to Leg	168'	(1) 3/8" coax cable
(1) Small Lighted Tower Beacon Light	ECI-55 Tower (existing)	Mounted to Leg	165'	(1) 3/8" coax cable
(1) Small Lighted Tower Beacon Light	ECI-56 Tower (existing)	Mounted to Leg	164'	(1) 3/8" coax cable
(1) Telewave ANT220F2 Omni Antenna	Eversource (existing)	(1) SitePro1 USF-4U Mount @ Elevation 160'	163'	(1) LCF78-50JA-A7
(1) ANT450F6 Antenna	ECI-57 CSP (existing)	Pipe Mounted to Leg	154'	(1) 7/8" coax cable (LCF78-50JA-A7)
(1) 6' Dish with Radome (PAR6-59W-PXA)	ECI-58 CSP (existing)	Pipe Mounted to Leg	154'	(1) EW63 elliptical cable
(1) Telewave ANT220F2 Omni Antenna	Eversource (existing)	(1) SitePro1 USF-4U Mount @ Elevation 160'	163'	(1) LCF78-50JA-A7

Antenna Type	Carrier	Mount	Antenna Centerline Elevation	Cable
(1) PD-156S Yagi Antenna	ECI-60 "DEAD" Carrier (existing)	*Shared with ECI-59 Mount*	139'	(1) 7/8" coax cable (LCF78-50JA-A7)
(1) DB-212 Dipole Antenna	ECI-59 NEU-33 (existing)	4' Side Arm Mount	139'	(1) 7/8" coax cable (LCF78-50JA-A7)
(1) 3' Ice Shield (for ECI-61 Dish)	ECI-61 CSP (existing)	Pipe Mounted to Leg	117'	N/A
(1) Ice Shield (for ECI-63 Dish)	ECI-63 CSP (existing)	Pipe Mounted to Leg	115'	N/A
(1) 3' Dish with Radome	ECI-61 CSP-13 (existing)	Pipe Mount to Leg	112'	(1) EW90 coax cable
(1) 8' "Drum" Dish Antenna w/ Shroud	ECI-63 CSP (existing)	Pipe mounted to Leg	107'	(1) EW63 Elliptical Cable
(1) PD-458 Omni Antenna	ECI-62 CTT-18 (existing)	4' Side Arm Mount	106'	(1) 7/8" coax cable (LCF78-50JA-A7)
(1) PD-688 Yagi Antenna	ECI-66 FBI-31 (existing)	Pipe Mount to Leg	94'	(1) 7/8" coax cable (LCF78-50JA-A7)

Primary Assumptions Used in the Analysis

- The tower structure's theoretical capacity not including any assessment of the condition of the tower.
- The tower carries the horizontal and vertical loads due to the weight of antennas, ice load and wind.
- Tower is properly installed and maintained.
- Tower is in plumb condition.
- Tower loading for antennas and mounts as listed in this report.
- All bolts are appropriately tightened providing the necessary connection continuity.
- All welds are fabricated with ER-70S-6 electrodes.
- All members are assumed to be as specified in the original tower design documents.
- All members are "hot dipped" galvanized in accordance with ASTM A123 and ASTM A153 Standards.
- All member protective coatings are in good condition.
- All tower members were properly designed, detailed, fabricated, installed and have been properly maintained since erection.
- Any deviation from the analyzed antenna loading will require a new analysis for verification of structural adequacy.
- All coax cables should be routed as specified in section 3 of this report.
- **All previous reinforcements per the below listed structural analysis and modification reports are assumed to be installed.**
  - **Structural report prepared by AECOM Corp for Verizon project no. VZ5-183 / 36917452 dated 8/6/15.**
  - **Structural report prepared by AECOM Corp for AT&T project no. SAI-095 / 60529362 dated 2/6/17.**
- **The tower geometry, structure member sizes and foundation information were taken from a previous structural analysis report prepared by AECOM job no. EVS-010/VZ5-217/EMP-008 60626930 dated May 21, 2020.**
- **The Verizon antenna mount information was taken from the mount analysis report prepared by Maser Consulting job no. 21777749A dated July 2, 2021**

Analysis

The existing tower was analyzed using a comprehensive computer program entitled tnxTower. The program analyzes the tower, considering the worst case loading condition. The tower is considered as loaded by concentric forces along the tower, and the model assumes that the tower members are subjected to bending, axial, and shear forces.

The existing tower was analyzed for the controlling basic wind speed with no ice and the applicable wind and ice combination to determine stresses in members as per guidelines of TIA-222-H entitled "Structural Standard for Antenna Support Structures, Antennas and Small Wind Turbine Support Structures", the American Institute of Steel Construction (AISC) and the Manual of Steel Construction; Load and Resistance Factor Design (LRFD).

The controlling wind speed is determined by evaluating the local available wind speed data as provided in Appendix N of the CSBC[1] and the wind speed data available in the TIA-222-H Standard.

Tower Loading

Tower loading was determined by the basic wind speed as applied to projected surface areas with modification factors per TIA-222-H, gravity loads of the tower structure and its components, and the application of 1.0" radial ice on the tower structure and its components.

Load Cases:	Load Case 1; 140 mph (Risk Cat III) wind speed w/ no ice plus gravity load – used in calculation of tower stresses and rotation.	*[Appendix N of the 2018 CT Building Code]*
	Load Case 2; 50 mph wind speed w/ 1.00" radial ice plus gravity load – used in calculation of tower stresses.	*[Annex B of TIA-222-H]*
	Load Case 3; 90 mph wind speed w/ 0.5" radial ice plus gravity load – used in calculation of tower twist and sway.	*[TIA-222-F used for calculation of tower twist and sway per the requirements of the CSP]*

[1] The 2015 International Building Code as amended by the 2018 Connecticut State Building Code (CSBC).

Tower Capacity

- Calculated stresses **were found to be within allowable limits**.

Tower Section	Elevation	Stress Ratio (percentage of capacity)	Result
Leg (T16)	30.0' - 60.0'	65.1%	**PASS**
Diagonal (T15)	60.0' - 80.0'	95.5%	**PASS**
Horizontal (T16)	30.0' - 60.0'	91.6%	**PASS**

- The tower combined deflection **was found to be within allowable limits**.

Deflection Criteria	Proposed (degrees)	Allowable (degrees)	Result
Sway (Tilt)	0.3591	n/a	**n/a**
Twist	0.2117	n/a	**n/a**
Combined	0.5708	0.75	**PASS**

TIA-222-F standard used for calculation of tower twist and sway per the requirements of the CSP.

NOTE: Per the Department of Energy Services and Public Protection (DESPP) / Connecticut State Police (CSP) directive, required twist and sway for this location is permitted to be measured from the highest service dishes @ 154-ft AGL. The DESPP / CSP reserves the right to update the requirements of tower Twist and Sway for this site and shall be coordinated with the Department prior to any antenna equipment installation.

Foundation and Anchors

The existing foundation consists of three (3) 7.5-ft diameter x 35.5-ft long reinforced concrete caissons. The base of the tower is connected to the foundation by means of (24) 1.00"∅ anchor bolts per leg embedded into the concrete foundation structure.

- The tower reactions developed from the governing Load Case were used in the verification of the foundation and anchor bolts:

Load Effect	Proposed Tower Reactions
Leg Shear	130 kips
Leg Compression	945 kips
Leg Tension	743 kips
Base Moment	31,307 ft-kips
Base Shear	220 kips

- The anchor bolts **were found** to be within allowable limits.

Tower Section	Component	Stress Ratio (percentage of capacity)	Result
Anchor Bolts	Combined Compression and Shear	53.5%	**PASS**

- The foundation was found to be within allowable limits.

Foundation	Design Limit	(percentage of capacity)	Result
(3) Reinforced Concrete Caisson	Uplift	82%	**PASS**
	Bearing	86%	**PASS**

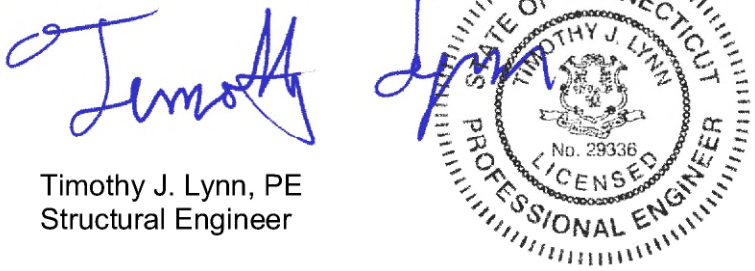
Conclusion

This analysis shows that the subject tower **is adequate** to support the proposed antenna configuration.

The analysis is based, in part, on the information provided to this office by Verizon and the CSP. If the existing conditions are different than the information in this report, Centek Engineering, Inc. must be contacted for resolution of any potential issues.

Please feel free to call with any questions or comments.

Respectfully Submitted by:



Timothy J. Lynn, PE
Structural Engineer

Standard Conditions for Furnishing of Professional Engineering Services on Existing Structures

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

- Information supplied by the client regarding the structure itself, its foundations, the soil conditions, the antenna and feed line loading on the structure and its components, or other relevant information.
- Information from the field and/or drawings in the possession of Centek Engineering, Inc. or generated by field inspections or measurements of the structure.
- It is the responsibility of the client to ensure that the information provided to Centek Engineering, Inc. and used in the performance of our engineering services is correct and complete. In the absence of information to the contrary, we assume that all structures were constructed in accordance with the drawings and specifications and are in an un-corroded condition and have not deteriorated. It is therefore assumed that its capacity has not significantly changed from the “as new” condition.
- All services will be performed to the codes specified by the client, and we do not imply to meet any other codes or requirements unless explicitly agreed in writing. If wind and ice loads or other relevant parameters are to be different from the minimum values recommended by the codes, the client shall specify the exact requirement. In the absence of information to the contrary, all work will be performed in accordance with the latest revision of ANSI/ASCE10 & ANSI/EIA-222
- All services performed, results obtained, and recommendations made are in accordance with generally accepted engineering principles and practices. Centek Engineering, Inc. is not responsible for the conclusions, opinions and recommendations made by others based on the information we supply.

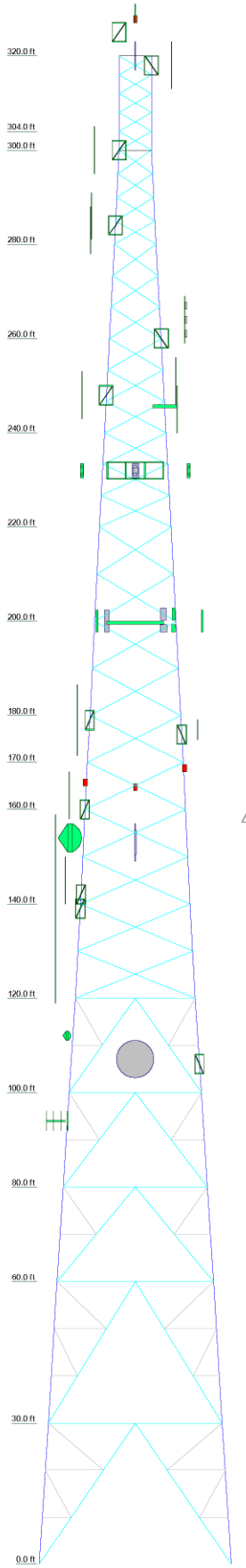
GENERAL DESCRIPTION OF STRUCTURAL ANALYSIS PROGRAM

tnxTower, is an integrated structural analysis and design software package for Designed specifically for the telecommunications industry, tnxTower, formerly RISA Tower, automates much of the tower analysis and design required by the TIA/EIA 222 Standard.

tnxTower Features:

- tnxTower can analyze and design 3- and 4-sided guyed towers, 3- and 4-sided self-supporting towers and either round or tapered ground mounted poles with or without guys.
- The program analyzes towers using the TIA-222-G (2005) standard or any of the previous TIA/EIA standards back to RS-222 (1959). Steel design is checked using the AISC ASD 9th Edition or the AISC LRFD specifications.
- Linear and non-linear (P-delta) analyses can be used in determining displacements and forces in the structure. Wind pressures and forces are automatically calculated.
- Extensive graphics plots include material take-off, shear-moment, leg compression, displacement, twist, feed line, guy anchor and stress plots.
- tnxTower contains unique features such as True Cable behavior, hog rod take-up, foundation stiffness and much more.

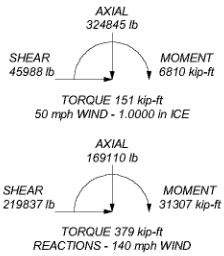
Section	T17	T16	T15	T14	T13	T12	T11	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
Legs	ROHN 12EHS w/ Angle 8x8x0.625	ROHN 12 EH w/ angle 8x8x0.5			ROHN 10 EH w/ angle 8x8x0.5					ROHN 8 EH w/ angle 8x8x0.5					ROHN 6 EH		ROHN 5 EH
Leg Grade						A572-50											
Diagonals	ROHN 4 EH			ROHN 3 XXS		L5x5x1/2		L4x4x3/8				L4x4x5/16	L3x3x1/4	L2 1/2x2 1/2x1/4	L2x2x1/4		L1 3/4x1 3/4x3/16
Diagonal Grade						A572-50									A36		
Top Girts						N.A.									L2x2x1/4	N.A.	L1 3/4x1 3/4x3/16
Horizontals	ROHN 4 EH	ROHN 3.5 EH	ROHN 3 XXS	ROHN 3 EH	ROHN 3 STD						N.A.						
Red. Horizontals	P1.5x.145	ROHN 1.5 STD	ROHN 2 STD	P1.5x.145	ROHN 1.5 STD						N.A.						
Red. Diagonals	ROHN 2.5 STD		ROHN 2 EH		ROHN 2 STD						N.A.						
Red. Hips			ROHN 1.5 STD								N.A.						
Inner Bracing			ROHN 3 STD								N.A.						
Face Width (ft)	40.69	36.8	33.14	30.47	27.97	25.39	23.21	21.3	20.26	19.22	17.09	15.09	13.08	11.04	8.85		6.81
# Panels @ (ft)		2 @ 30		3 @ 20				10 @ 10					9 @ 6.66667			4 @ 5	5 @ 4
Weight (lb)	125382.3	17941.9	15116.4	9658.6	9144.9	8675.3	8206.6	3738.3	3738.8	7298.8	6859.3	6484.4	6049.2	5597.7	2466.3	3467	1442.1



ALL REACTIONS ARE FACTORED

MAX. CORNER REACTIONS AT BASE:
DOWN: 944805 lb
SHEAR: 129483 lb

UPLIFT: -742777 lb
SHEAR: 106558 lb



TORQUE 151 kip-ft
50 mph WIND - 1.0000 in ICE

TORQUE 379 kip-ft
REACTIONS - 140 mph WIND

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Lightning Rod 5/8x4" (Lightning Rod)	329	CBC78T-DS-43-2X Diplexer (Verizon)	232
Dual Lights (Beacon)	327	CBC78T-DS-43-2X Diplexer (Verizon)	232
PD128-1 (ECI-1)	325	PIROD 12' Lightweight T-Frame (ATI)	200
6' Side Mount Standoff (ECI-1)	325	PIROD 12' Lightweight T-Frame (ATI)	200
BA1012-0 (ECI-2)	320	PIROD 12' Lightweight T-Frame (ATI)	200
6' Side Mount Standoff (ECI-2)	320	7770.00 (ATI)	200
ANT450F6 (ECI-3)	318	HPA-65R-BUU-H8 Panel (ATI)	200
4'x4" Pipe Mount (ECI-3)	318	RRUS-32 (ATI)	200
SC479-HF1LDF (ECI-4)	300	RRUS-11 (ATI)	200
6' Side Mount Standoff (ECI-4)	300	7770.00 (ATI)	200
PD340-1 (ECI-5)	290	HPA-65R-BUU-H8 Panel (ATI)	200
6' Side Mount Standoff (ECI-5)	290	RRUS-32 (ATI)	200
DB809T3E-XC (ECI-6)	286	RRUS-11 (ATI)	200
6' Side Mount Standoff (ECI-7)	284	7770.00 (ATI)	200
SC479-HF1LDF(D00IE6085) (Inverted) (ECI-7)	283	HPA-65R-BUU-H6 Panel (ATI)	200
PD440-2 (ECI-8)	264	RRUS-32 (ATI)	200
6' Side Mount Standoff (ECI-8)	260	RRUS-11 (ATI)	200
SC479-HF1LDF (ECI-10)	251	DC6-48-60-0-8C Squid / Surge Arrestor (ATI)	200
PD1142-1 (ECI-14)	248	STK-U Stiffener Side Arm Attachment (ATI)	200
6' Side Mount Standoff (ECI-14)	248	STK-U Stiffener Side Arm Attachment (ATI)	200
430-94C-09168-M-11048 TTA (ECI-11)	247	STK-U Stiffener Side Arm Attachment (ATI)	200
Sabre T-Boom (1) (ECI-10,11,12,13)	246	STK-U Stiffener Side Arm Attachment (ATI)	200
SC479-HF1LDF(D00IE6085) (Inverted) (ECI-13)	245	STK-U Stiffener Side Arm Attachment (ATI)	200
SC479-HF1LDF(D00IE6085) (Inverted) (ECI-12)	245	STK-U Stiffener Side Arm Attachment (ATI)	200
6' Side Mount Standoff (ECI-15)	238	Pirod 4' Side Mount Standoff (1) (ECI-50)	179
531-70HD Exposed Dipole Antenna (ECI-15)	238	1151-3 (ECI-50)	179
Valmont VFA-10-U V-Frame (Verizon)	232	DB586-Y (ECI-51)	177
Valmont VFA-10-U V-Frame (Verizon)	232	430-94C-09168-M-11048 TTA (ECI-52)	176
Valmont VFA-10-U V-Frame (Verizon)	232	Pirod 4' Side Mount Standoff (1) (ECI-53,52,51)	176
JAHH-65B-R3B Panel Antenna (Verizon-AWS)	232	DB586-Y (inverted) (ECI-53)	175
JAHH-65B-R3B Panel Antenna (Verizon-PCS)	232	L-810 Obstruction Lighting (1) (ECI-54)	168
LNX-6512DS-VTM (Verizon-850)	232	L-810 Obstruction Lighting (1) (ECI-55)	165
MT6407-77A (Verizon - Proposed)	232	L-810 Obstruction Lighting (1) (ECI-56)	164
BSAMNT-SBS-2-2 (JAHH Antenna Bracket (for 2)) (Verizon-PCS/AWS)	232	Telewave ANT220F2 - Omni Antenna (Eversource)	163
B2/B66A RRH (Verizon RRH)	232	Sitepro1 USF-4U Mount Assembly (Ca = 1.4 assumed) (Eversource)	160
B5/B13 RRH (Verizon RRH)	232	5'3"x4" Pipe Mount (ECI-58a (Dish Support))	154
DB-B1-6C-12AB-0Z / DC-3315-PF-48 Dist. Box (Verizon)	232	Commscope PAR6-59W-PXA/A (ECI-58)	154
		ANT450F6 (ECI-57)	153
JAHH-65B-R3B Panel Antenna (Verizon-AWS)	232	5'3"x4" Pipe Mount (ECI-57)	153
JAHH-65B-R3B Panel Antenna (Verizon-PCS)	232	Telewave ANT220F2 - Omni Antenna (Eversource)	145
LNX-6512DS-VTM (Verizon-850)	232	Sitepro1 USF-4U Mount Assembly (Ca = 1.4 assumed) (Eversource)	142
MT6407-77A (Verizon - Proposed)	232		
BSAMNT-SBS-2-2 (JAHH Antenna Bracket (for 2)) (Verizon-PCS/AWS)	232	DB212-1 (ECI-59)	139
		PD156S (ECI-60)	139
B2/B66A RRH (Verizon RRH)	232	4' Side Mount Standoff (ECI-60_59)	139
B5/B13 RRH (Verizon RRH)	232	3' Wide Ice Shield (for Dish Antennas) (Assume Ca=2.0) (ECI-61a)	117
DB-B1-6C-12AB-0Z / DC-3315-PF-48 Dist. Box (Verizon)	232	8' Wide Ice Shield (for Dish Antennas) (Assume Ca=2.0) (ECI-63a (Dish Ice Shield))	115
JAHH-65B-R3B Panel Antenna (Verizon-AWS)	232		
JAHH-65B-R3B Panel Antenna (Verizon-PCS)	232	5'3"x4" Pipe Mount (ECI-61a (Dish Support))	112
LNX-6512DS-VTM (Verizon-850)	232	Andrew 2' w/Radome (ECI-61)	112
MT6407-77A (Verizon - Proposed)	232	PA8-65 (ECI-63)	107
BSAMNT-SBS-2-2 (JAHH Antenna Bracket (for 2)) (Verizon-PCS/AWS)	232	5'3"x4" Pipe Mount (ECI-63 (Dish Support))	107
		Pirod 4' Side Mount Standoff (1) (ECI-62)	106
B2/B66A RRH (Verizon RRH)	232	PD458 (ECI-62)	106
B5/B13 RRH (Verizon RRH)	232	PD688S-4 (ECI-66)	94
CBC78T-DS-43-2X Diplexer (Verizon)	232	4'x4" Pipe Mount (ECI-66)	94

MATERIAL STRENGTH

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

TOWER DESIGN NOTES

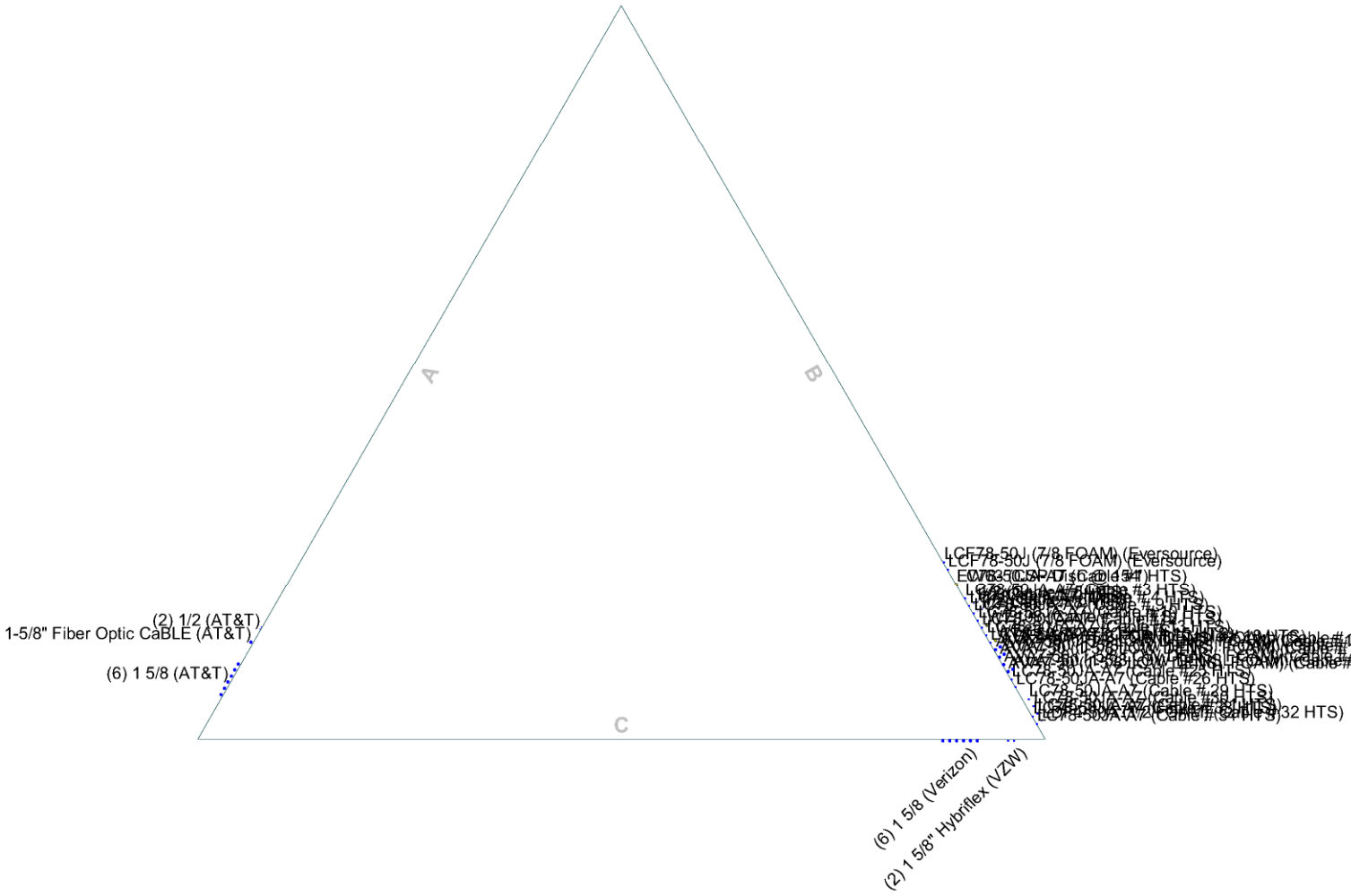
1. Tower designed for Exposure C to the TIA-222-H Standard.
2. Tower designed for a 140 mph basic wind in accordance with the TIA-222-H Standard.
3. Tower is also designed for a 50 mph basic wind with 1.00 in ice. Ice is considered to increase in thickness with height.
4. Deflections are based upon a 60 mph wind.
5. Tower Risk Category III.
6. Topographic Category 3 with Crest Height of 66.50 ft
7. P-Delta Displacement Effects are not applicable to this tower for this case (TIA-222-H Section 3.5)
8. TOWER RATING: 95.5%

Centek Engineering Inc.
63-2 North Branford Rd.
Branford, CT 06405
Phone: (203) 488-0580
FAX: (203) 488-8587

Job:	**21007.82 - Colchester**		
Project:	***320-ft Lattice Tower (CSP #50)***		
Client: Verizon	Drawn by: TJL	App'd:	
Code: TIA-222-H	Date: 03/24/22	Scale: NTS	
Path:		Dwg No. E-1	

Feed Line Plan

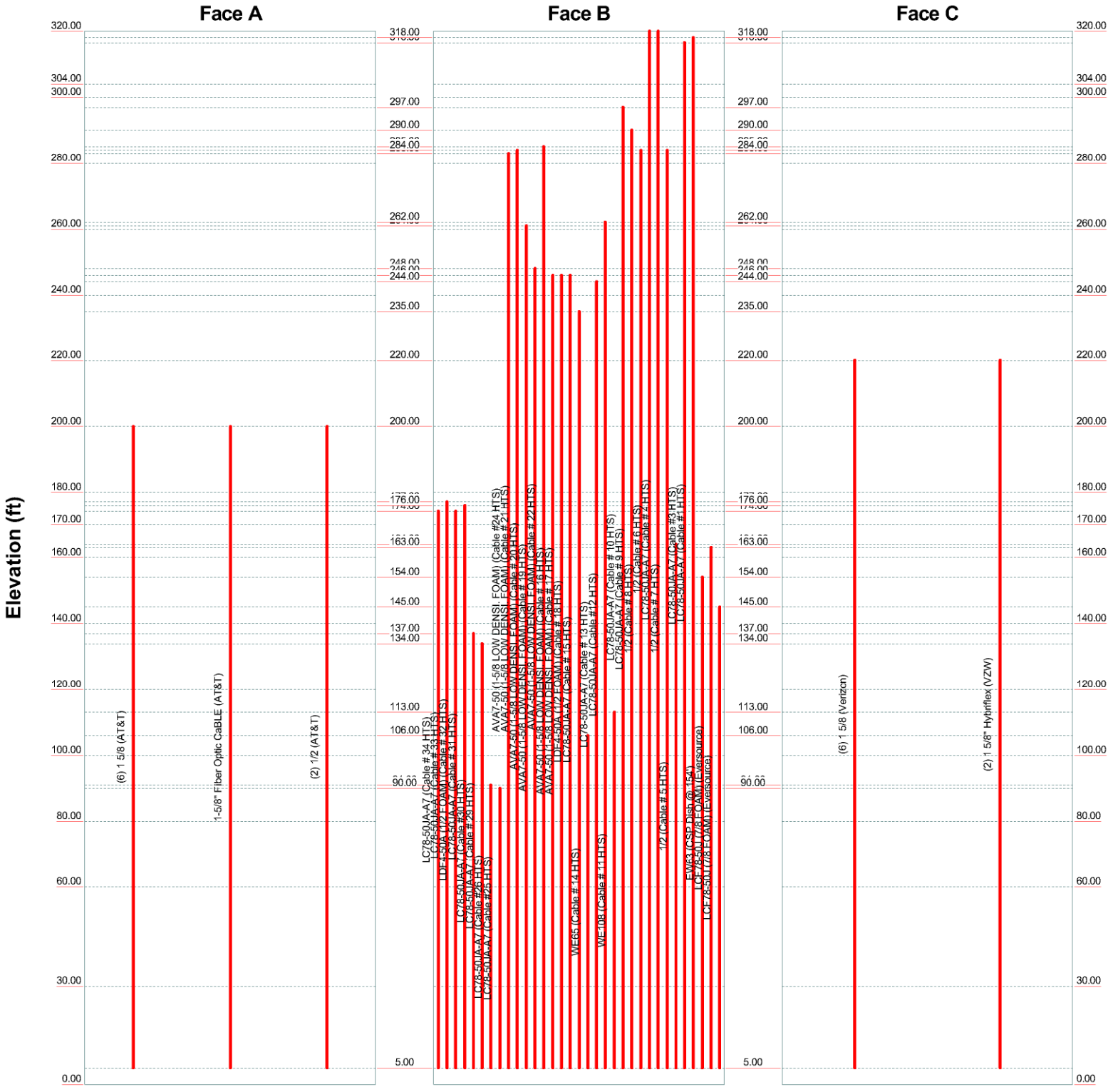
Round Flat App In Face App Out Face



Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587	Job: ***21007.82 - Colchester***		
	Project: ***320-ft Lattice Tower (CSP #50)***		
	Client: Verizon	Drawn by: TJL	App'd:
	Code: TIA-222-H	Date: 03/24/22	Scale: NTS
	Path: J:\Jobs\21007\00 WMS_Colchester CT\05_Structural\Backup Documentation\Tradewar\Mod1\station 2\220815_VZWEMP_wQBP Update.eri		Dwg No. E-7

Feed Line Distribution Chart
0' - 320'

Round | Flat | App In Face | App Out Face | Truss Leg



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Client: Verizon	Drawn by: TJL	App'd:
Code: TIA-222-H	Date: 03/24/22	Scale: NTS
Path: J:\Jobs\21007\00 WMS_Colchester CT\05_Structural\Backup Documentation\Tradewar\Mod1\astion 2\20200515_VZWEMP_wQBP Updates.eri		Dwg No. E-7

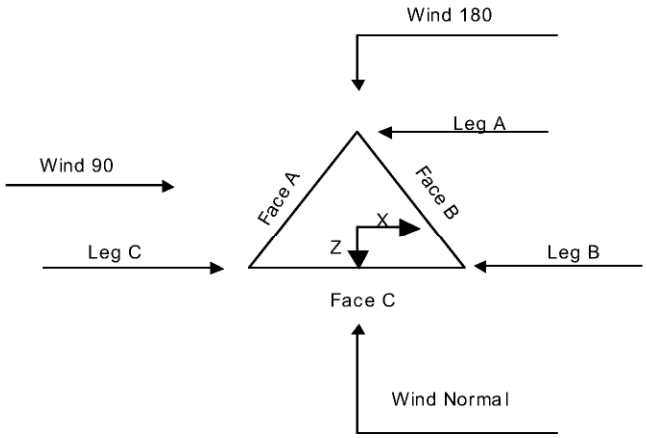
Tower Input Data

The main tower is a 3x free standing tower with an overall height of 320.00 ft above the ground line.
The base of the tower is set at an elevation of 0.00 ft above the ground line.
The face width of the tower is 6.81 ft at the top and 40.69 ft at the base.
This tower is designed using the TIA-222-H standard.
The following design criteria apply:

Tower base elevation above sea level: 0.00 ft.
Basic wind speed of 140 mph.
Risk Category III.
Exposure Category C.
Simplified Topographic Factor Procedure for wind speed-up calculations is used.
Topographic Category: 3.
Crest Height: 66.50 ft.
Nominal ice thickness of 1.0000 in.
Ice thickness is considered to increase with height.
Ice density of 56 pcf.
A wind speed of 50 mph is used in combination with ice.
Temperature drop of 50 °F.
Deflections calculated using a wind speed of 60 mph.
P-Delta Displacement Effects are not applicable to this tower for this case (TIA-222-H Section 3.5).
Pressures are calculated at each section.
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-H Bracing Resist. Exemption
√	Include Bolts In Member Capacity		Autocalc Torque Arm Areas		Use TIA-222-H 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



Triangular Tower

Tower Section Geometry

Tower Section	Tower Elevation	Assembly Database	Description	Section Width	Number of Sections	Section Length
	ft			ft		ft
T1	320.00-304.00			6.81	1	16.00
T2	304.00-300.00			6.81	1	4.00
T3	300.00-280.00			6.81	1	20.00
T4	280.00-260.00			8.85	1	20.00
T5	260.00-240.00			11.04	1	20.00
T6	240.00-220.00			13.08	1	20.00
T7	220.00-200.00			15.09	1	20.00
T8	200.00-180.00			17.09	1	20.00
T9	180.00-170.00			19.22	1	10.00
T10	170.00-160.00			20.26	1	10.00
T11	160.00-140.00			21.30	1	20.00
T12	140.00-120.00			23.21	1	20.00
T13	120.00-100.00			25.39	1	20.00
T14	100.00-80.00			27.97	1	20.00
T15	80.00-60.00			30.47	1	20.00
T16	60.00-30.00			33.14	1	30.00
T17	30.00-0.00			36.80	1	30.00

Tower Section Geometry *(cont'd)*

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
T1	320.00-304.00	4.00	X Brace	No	No	0.0000	0.0000
T2	304.00-300.00	4.00	X Brace	No	No	0.0000	0.0000
T3	300.00-280.00	5.00	X Brace	No	No	0.0000	0.0000
T4	280.00-260.00	6.67	X Brace	No	No	0.0000	0.0000
T5	260.00-240.00	6.67	X Brace	No	No	0.0000	0.0000
T6	240.00-220.00	6.67	X Brace	No	No	0.0000	0.0000
T7	220.00-200.00	10.00	X Brace	No	No	0.0000	0.0000
T8	200.00-180.00	10.00	X Brace	No	No	0.0000	0.0000
T9	180.00-170.00	10.00	X Brace	No	No	0.0000	0.0000
T10	170.00-160.00	10.00	X Brace	No	No	0.0000	0.0000
T11	160.00-140.00	10.00	X Brace	No	No	0.0000	0.0000
T12	140.00-120.00	10.00	X Brace	No	No	0.0000	0.0000
T13	120.00-100.00	20.00	K1 Down	No	Yes	0.0000	0.0000
T14	100.00-80.00	20.00	K1 Down	No	Yes	0.0000	0.0000
T15	80.00-60.00	20.00	K1 Down	No	Yes	0.0000	0.0000
T16	60.00-30.00	30.00	K2 Down	No	Yes	0.0000	0.0000
T17	30.00-0.00	30.00	K2 Down	No	Yes	0.0000	0.0000

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
T1 320.00-304.00	Pipe	ROHN 5 EH	A572-50 (50 ksi)	Equal Angle	L1 3/4x1 3/4x3/16	A36 (36 ksi)
T2 304.00-300.00	Pipe	ROHN 5 EH	A572-50 (50 ksi)	Equal Angle	L1 3/4x1 3/4x3/16	A36 (36 ksi)
T3 300.00-280.00	Pipe	ROHN 6 EH	A572-50 (50 ksi)	Equal Angle	L2x2x1/4	A36 (36 ksi)
T4 280.00-260.00	Arbitrary Shape	ROHN 8 EH w/ angle 8x8x0.5	A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x1/4	A36 (36 ksi)
T5 260.00-240.00	Arbitrary Shape	ROHN 8 EH w/ angle 8x8x0.5	A572-50 (50 ksi)	Equal Angle	L3x3x1/4	A572-50 (50 ksi)
T6 240.00-220.00	Arbitrary Shape	ROHN 8 EH w/ angle 8x8x0.5	A572-50 (50 ksi)	Equal Angle	L4x4x5/16	A572-50 (50 ksi)
T7 220.00-200.00	Arbitrary Shape	ROHN 8 EH w/ angle 8x8x0.5	A572-50 (50 ksi)	Equal Angle	L4x4x3/8	A572-50 (50 ksi)
T8 200.00-180.00	Arbitrary Shape	ROHN 10 EH w/ angle 8x8x0.5	A572-50 (50 ksi)	Equal Angle	L4x4x3/8	A572-50 (50 ksi)
T9 180.00-170.00	Arbitrary Shape	ROHN 10 EH w/ angle 8x8x0.5	A572-50 (50 ksi)	Equal Angle	L4x4x3/8	A572-50 (50 ksi)
T10 170.00-160.00	Arbitrary Shape	ROHN 10 EH w/ angle 8x8x0.5	A572-50 (50 ksi)	Equal Angle	L4x4x3/8	A572-50 (50 ksi)
T11 160.00-140.00	Arbitrary Shape	ROHN 10 EH w/ angle 8x8x0.5	A572-50 (50 ksi)	Equal Angle	L5x5x1/2	A572-50 (50 ksi)
T12 140.00-120.00	Arbitrary Shape	ROHN 10 EH w/ angle 8x8x0.5	A572-50 (50 ksi)	Equal Angle	L5x5x1/2	A572-50 (50 ksi)
T13 120.00-100.00	Arbitrary Shape	ROHN 10 EH w/ angle 8x8x0.5	A572-50 (50 ksi)	Pipe	ROHN 3 XXS	A572-50 (50 ksi)
T14 100.00-80.00	Arbitrary Shape	ROHN 10 EH w/ angle 8x8x0.5	A572-50 (50 ksi)	Pipe	ROHN 3 XXS	A572-50 (50 ksi)
T15 80.00-60.00	Arbitrary Shape	ROHN 12 EH w/ angle 8x8x0.5	A572-50 (50 ksi)	Pipe	ROHN 3 XXS	A572-50 (50 ksi)
T16 60.00-30.00	Arbitrary Shape	ROHN 12 EH w/ angle 8x8x0.5	A572-50 (50 ksi)	Pipe	ROHN 4 EH	A572-50 (50 ksi)
T17 30.00-0.00	Arbitrary Shape	ROHN 12 EHS w Angle	A572-50	Pipe	ROHN 4 EH	A572-50

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
		8x8x0.625	(50 ksi)			(50 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 320.00-304.00	Equal Angle	L1 3/4x1 3/4x3/16	A36 (36 ksi)	Solid Round		A36 (36 ksi)
T3 300.00-280.00	Equal Angle	L2x2x1/4	A36 (36 ksi)	Solid Round		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
T13 120.00-100.00	None	Flat Bar		A36 (36 ksi)	Pipe	ROHN 3 STD	A572-50 (50 ksi)
T14 100.00-80.00	None	Flat Bar		A36 (36 ksi)	Pipe	ROHN 3 EH	A572-50 (50 ksi)
T15 80.00-60.00	None	Flat Bar		A36 (36 ksi)	Pipe	ROHN 3 XXS	A572-50 (50 ksi)
T16 60.00-30.00	None	Flat Bar		A36 (36 ksi)	Pipe	ROHN 3.5 EH	A572-50 (50 ksi)
T17 30.00-0.00	None	Flat Bar		A36 (36 ksi)	Pipe	ROHN 4 EH	A572-50 (50 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
T13 120.00-100.00	Pipe		A572-50 (50 ksi)	Pipe	ROHN 3 STD	A572-50 (50 ksi)
T14 100.00-80.00	Pipe		A572-50 (50 ksi)	Pipe	ROHN 3 STD	A572-50 (50 ksi)
T15 80.00-60.00	Pipe		A572-50 (50 ksi)	Pipe	ROHN 3 STD	A572-50 (50 ksi)
T16 60.00-30.00	Pipe		A572-50 (50 ksi)	Pipe	ROHN 3 STD	A572-50 (50 ksi)
T17 30.00-0.00	Pipe		A572-50 (50 ksi)	Pipe	ROHN 3 STD	A572-50 (50 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Redundant Bracing Grade		Redundant Type	Redundant Size	K Factor
T13	A572-50	Horizontal (1)	Pipe	ROHN 1.5 STD	1
120.00-100.00	(50 ksi)	Diagonal (1)	Pipe	ROHN 2 STD	1
		Hip (1)	Pipe	ROHN 1.5 STD	1
		Hip Diagonal (1)	Pipe	ROHN 2.5 STD	1
T14	A572-50	Horizontal (1)	Pipe	P1.5x.145	1
100.00-80.00	(50 ksi)	Diagonal (1)	Pipe	ROHN 2 EH	1
		Hip (1)	Pipe	ROHN 1.5 STD	1
		Hip Diagonal (1)	Pipe	ROHN 2.5 STD	1
T15	A572-50	Horizontal (1)	Pipe	ROHN 2 STD	1
80.00-60.00	(50 ksi)	Diagonal (1)	Pipe	ROHN 2 EH	1
		Hip (1)	Pipe	ROHN 1.5 STD	1
		Hip Diagonal (1)	Pipe	ROHN 3 STD	1
T16	A572-50	Horizontal (1)	Pipe	ROHN 1.5 STD	1
60.00-30.00	(50 ksi)	Horizontal (2)		ROHN 2 XXS	
		Diagonal (1)	Pipe	ROHN 2 EH	1
		Diagonal (2)		ROHN 2.5 STD	
		Hip (1)	Pipe	ROHN 1.5 STD	1
		Hip (2)		ROHN 2 STD	
		Hip Diagonal (1)	Pipe	ROHN 2 STD	1
		Hip Diagonal (2)		ROHN 2 STD	1
T17	A572-50	Horizontal (1)	Pipe	P1.5x.145	1
30.00-0.00	(50 ksi)	Horizontal (2)		ROHN 2.5 EH	
		Diagonal (1)	Pipe	ROHN 2.5 STD	1
		Diagonal (2)		ROHN 2.5 STD	
		Hip (1)	Pipe	ROHN 1.5 STD	1
		Hip (2)		ROHN 2 STD	
		Hip Diagonal (1)	Pipe	ROHN 2.5 STD	1
		Hip Diagonal (2)		ROHN 2.5 STD	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	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
320.00-304.00			(36 ksi)						
T2	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
304.00-300.00			(36 ksi)						
T3	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
300.00-280.00			(36 ksi)						
T4	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
280.00-260.00			(36 ksi)						
T5	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
260.00-240.00			(36 ksi)						
T6	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
240.00-220.00			(36 ksi)						
T7	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
220.00-200.00			(36 ksi)						
T8	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000

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)						
T9	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
180.00-170.00			(36 ksi)						
T10	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
170.00-160.00			(36 ksi)						
T11	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
160.00-140.00			(36 ksi)						
T12	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
140.00-120.00			(36 ksi)						
T13	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
120.00-100.00			(36 ksi)						
T14	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
100.00-80.00			(36 ksi)						
T15	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
80.00-60.00			(36 ksi)						
T16	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
60.00-30.00			(36 ksi)						
T17 30.00-0.00	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
			(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	No	1	1	1	1	1	1	1	1
320.00-304.00				1	1	1	1	1	1	1
T2	Yes	No	1	1	1	1	1	1	1	1
304.00-300.00				1	1	1	1	1	1	1
T3	Yes	No	1	1	1	1	1	1	1	1
300.00-280.00				1	1	1	1	1	1	1
T4	Yes	No	1	1	1	1	1	1	1	1
280.00-260.00				1	1	1	1	1	1	1
T5	Yes	No	1	1	1	1	1	1	1	1
260.00-240.00				1	1	1	1	1	1	1
T6	Yes	No	1	1	1	1	1	1	1	1
240.00-220.00				1	1	1	1	1	1	1
T7	Yes	No	1	1	1	1	1	1	1	1
220.00-200.00				1	1	1	1	1	1	1
T8	Yes	No	1	1	1	1	1	1	1	1
200.00-180.00				1	1	1	1	1	1	1
T9	Yes	No	1	1	1	1	1	1	1	1
180.00-170.00				1	1	1	1	1	1	1
T10	Yes	No	1	1	1	1	1	1	1	1
170.00-160.00				1	1	1	1	1	1	1
T11	Yes	No	1	1	1	1	1	1	1	1
160.00-140.00				1	1	1	1	1	1	1
T12	Yes	No	1	1	1	1	1	1	1	1
140.00-120.00				1	1	1	1	1	1	1
T13	No	No	1	1	1	1	1	1	1	1
120.00-100.00				1	1	1	1	1	1	1
T14	No	No	1	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
100.00-80.00				1	1	1	1	1	1	1
T15	No	No	1	1	1	1	1	1	1	1
80.00-60.00				1	1	1	1	1	1	1
T16	No	No	1	1	1	1	1	1	1	1
60.00-30.00				1	1	1	1	1	1	1
T17	No	No	1	1	1	1	1	1	1	1
30.00-0.00				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 320.00-304.00	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
T2 304.00-300.00	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
T3 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
T4 280.00-260.00	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
T5 260.00-240.00	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
T6 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
T7 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
T8 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
T9 180.00-170.00	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
T10 170.00-160.00	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
T11 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
T12 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
T13 120.00-100.00	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
T14 100.00-80.00	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
T15 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
T16 60.00-30.00	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 30.00-0.00	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 Elevation ft	Redundant Horizontal		Redundant Diagonal		Redundant Sub-Diagonal		Redundant Sub-Horizontal		Redundant Vertical		Redundant Hip		Redundant Hip Diagonal	
	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
T1 320.00-304.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T2 304.00-300.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T3 300.00-280.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T4 280.00-260.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T5 260.00-240.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T6 240.00-220.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T7 220.00-200.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T8 200.00-180.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T9 180.00-170.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T10 170.00-160.00	0.0000	0.75	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 160.00-140.00	0.0000	0.75	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 140.00-120.00	0.0000	0.75	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 120.00-100.00	0.0000	0.75	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 100.00-80.00	0.0000	0.75	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 80.00-60.00	0.0000	0.75	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 60.00-30.00	0.0000	0.75	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 30.00-0.00	0.0000	0.75	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 320.00-304.00	Flange	1.0000 A325N	0	0.6250 A325X	1	0.6250 A325N	0	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0
T2 304.00-300.00	Flange	1.0000 A325N	6	0.6250 A325X	1	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0
T3 300.00-280.00	Flange	1.0000 A325N	8	0.6250 A325X	1	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0
T4 280.00-260.00	Flange	1.0000 A325N	8	0.7500 A325X	1	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0
T5 260.00-240.00	Flange	1.0000 A325N	8	0.7500 A325X	1	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0

Tower Elevation ft	Leg Connection Type	Leg Bolt Size in	Leg No.	Diagonal Bolt Size in	Diagonal No.	Top Girt Bolt Size in	Top Girt No.	Bottom Girt Bolt Size in	Bottom Girt No.	Mid Girt Bolt Size in	Mid Girt No.	Long Horizontal Bolt Size in	Long Horizontal No.	Short Horizontal Bolt Size in	Short Horizontal No.
T6	Flange	1.0000	8	0.7500	1	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
240.00-220.00		A325N		A325X		A325N		A325N		A325N		A325N		A325N	
T7	Flange	1.0000	12	0.7500	1	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
220.00-200.00		A325N		A325X		A325N		A325N		A325N		A325N		A325N	
T8	Flange	1.0000	12	0.8750	1	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
200.00-180.00		A325N		A325X		A325N		A325N		A325N		A325N		A325N	
T9	Flange	1.0000	12	0.8750	1	0.6250	0	0.0000	0	0.6250	0	0.6250	0	0.6250	0
180.00-170.00		A325N		A325X		A325N		A325N		A325N		A325N		A325N	
T10	Flange	1.0000	0	0.8750	1	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
170.00-160.00		A325N		A325X		A325N		A325N		A325N		A325N		A325N	
T11	Flange	1.0000	12	0.8750	1	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
160.00-140.00		A325N		A325X		A325N		A325N		A325N		A325N		A325N	
T12	Flange	1.0000	12	0.8750	1	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
140.00-120.00		A325N		A325X		A325N		A325N		A325N		A325N		A325N	
T13	Flange	1.0000	12	0.7500	3	0.6250	0	0.6250	0	0.6250	0	0.7500	2	0.6250	0
120.00-100.00		A325N		A325X		A325N		A325N		A325N		A325X		A325N	
T14	Flange	1.0000	16	0.7500	3	0.6250	0	0.6250	0	0.6250	0	0.7500	2	0.6250	0
100.00-80.00		A325N		A325X		A325N		A325N		A325N		A325X		A325N	
T15	Flange	1.0000	16	0.7500	3	0.6250	0	0.6250	0	0.6250	0	0.7500	2	0.6250	0
80.00-60.00		A325N		A325X		A325N		A325N		A325N		A325X		A325N	
T16	Flange	1.0000	16	0.8750	3	0.6250	0	0.6250	0	0.6250	0	0.7500	2	0.6250	0
60.00-30.00		A325N		A325X		A325N		A325N		A325N		A325X		A325N	
T17 30.00-0.00	Flange	1.0000	24	0.8750	3	0.6250	0	0.6250	0	0.6250	0	0.7500	2	0.6250	0
		A325N		A325X		A325N		A325N		A325N		A325X		A325N	

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
1 5/8 (AT&T)	A	No	No	Ar (CaAa)	200.00 - 5.00	0.0000	-0.42	6	6	1.9800	1.9800		1.04
1 5/8 (Verizon)	C	No	No	Ar (CaAa)	220.00 - 5.00	0.0000	-0.4	6	6	1.9800	1.9800		1.04
1 5/8" Hybriflex (VZW)	C	No	No	Ar (CaAa)	220.00 - 5.00	0.0000	-0.46	2	2	1.6000	1.6000		1.85
LC78-50JA-A7 (Cable # 34 HTS)	B	No	No	Ar (CaAa)	174.00 - 5.00	0.0000	0.48	1	1	1.0900	1.0900		0.28
LC78-50JA-A7 (Cable # 33 HTS)	B	No	No	Ar (CaAa)	177.00 - 5.00	0.0000	0.47	1	1	1.0900	1.0900		0.28
LDF4-50A (1/2 FOAM) (Cable # 32 HTS)	B	No	No	Ar (CaAa)	174.00 - 5.00	3.0000	0.48	1	1	0.6300	0.6300		0.15
LC78-50JA-A7 (Cable # 31 HTS)	B	No	No	Ar (CaAa)	176.00 - 5.00	3.0000	0.47	1	1	1.0900	1.0900		0.28

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
LC78-50JA-A 7 (Cable #30 HTS)	B	No	No	Ar (CaAa)	137.00 - 5.00	3.0000	0.46	1	1	1.0900	1.0900		0.28
LC78-50JA-A 7 (Cable # 29 HTS)	B	No	No	Ar (CaAa)	134.00 - 5.00	3.0000	0.45	1	1	1.0900	1.0900		0.28
LC78-50JA-A 7 (Cable #26 HTS)	B	No	No	Ar (CaAa)	91.00 - 5.00	0.0000	0.43	1	1	1.0900	1.0900		0.28
LC78-50JA-A 7 (Cable #25 HTS)	B	No	No	Ar (CaAa)	90.00 - 5.00	0.0000	0.42	1	1	1.0900	1.0900		0.28
AVA7-50 (1-5/8 LOW DENSI. FOAM) (Cable #24 HTS)	B	No	No	Ar (CaAa)	283.00 - 5.00	3.0000	0.41	1	1	1.9800	1.9800		0.72
AVA7-50 (1-5/8 LOW DENSI. FOAM) (Cable # 21 HTS)	B	No	No	Ar (CaAa)	284.00 - 5.00	0.0000	0.41	1	1	1.9800	1.9800		0.72
AVA7-50 (1-5/8 LOW DENSI. FOAM) (Cable # 20 HTS)	B	No	No	Ar (CaAa)	261.00 - 5.00	0.0000	0.4	1	1	1.9800	1.9800		0.72
AVA7-50 (1-5/8 LOW DENSI. FOAM) (Cable # 19 HTS)	B	No	No	Ar (CaAa)	248.00 - 5.00	0.0000	0.39	1	1	1.9800	1.9800		0.72
AVA7-50 (1-5/8 LOW DENSI. FOAM) (Cable # 22 HTS)	B	No	No	Ar (CaAa)	285.00 - 5.00	3.0000	0.39	1	1	1.9800	1.9800		0.72
AVA7-50 (1-5/8 LOW DENSI. FOAM) (Cable # 16 HTS)	B	No	No	Ar (CaAa)	246.00 - 5.00	0.0000	0.38	1	1	1.9800	1.9800		0.72
AVA7-50 (1-5/8 LOW DENSI. FOAM) (Cable # 17 HTS)	B	No	No	Ar (CaAa)	246.00 - 5.00	3.0000	0.38	1	1	1.9800	1.9800		0.72
LDF4-50A (1/2 FOAM)	B	No	No	Ar (CaAa)	246.00 - 5.00	6.0000	0.38	1	1	0.6300	0.6300		0.15

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
(Cable # 18 HTS)													
LC78-50JA-A 7	B	No	No	Ar (CaAa)	235.00 - 5.00	0.0000	0.37	1	1	1.0900	1.0900		0.28
(Cable # 15 HTS)													
WE65	B	No	No	Af (CaAa)	106.00 - 5.00	3.0000	0.37	1	1	1.5836	1.5836		0.53
(Cable # 14 HTS)													
LC78-50JA-A 7	B	No	No	Ar (CaAa)	244.00 - 5.00	0.0000	0.36	1	1	1.0900	1.0900		0.28
(Cable # 13 HTS)													
LC78-50JA-A 7	B	No	No	Ar (CaAa)	262.00 - 5.00	0.0000	0.35	1	1	1.0900	1.0900		0.28
(Cable #12 HTS)													
WE108	B	No	No	Af (CaAa)	113.00 - 5.00	3.0000	0.35	1	1	1.0149	1.0149		0.35
(Cable # 11 HTS)													
LC78-50JA-A 7	B	No	No	Ar (CaAa)	297.00 - 5.00	0.0000	0.34	1	1	1.0900	1.0900		0.28
(Cable # 10 HTS)													
LC78-50JA-A 7	B	No	No	Ar (CaAa)	290.00 - 5.00	0.0000	0.33	1	1	1.0900	1.0900		0.28
(Cable # 9 HTS)													
1/2	B	No	No	Ar (CaAa)	284.00 - 5.00	3.0000	0.33	1	1	0.5800	0.5800		0.25
(Cable # 8 HTS)													
1/2	B	No	No	Ar (CaAa)	320.00 - 5.00	6.0000	0.33	1	1	0.5800	0.5800		0.25
(Cable # 6 HTS)													
LC78-50JA-A 7	B	No	No	Ar (CaAa)	320.00 - 5.00	0.0000	0.32	1	1	1.0900	1.0900		0.28
(Cable # 4 HTS)													
1/2	B	No	No	Ar (CaAa)	284.00 - 5.00	3.0000	0.32	1	1	0.5800	0.5800		0.25
(Cable # 7 HTS)													
1/2	B	No	No	Ar (CaAa)	164.00 - 5.00	6.0000	0.32	1	1	0.5800	0.5800		0.25
(Cable # 5 HTS)													
LC78-50JA-A 7	B	No	No	Ar (CaAa)	316.50 - 5.00	0.0000	0.31	1	1	1.0900	1.0900		0.28
(Cable #3 HTS)													
LC78-50JA-A 7	B	No	No	Ar (CaAa)	318.00 - 5.00	0.0000	0.29	1	1	1.0900	1.0900		0.28
(Cable #1 HTS)													
* CSP Proposed Cables													
EW63	B	No	No	Af (CaAa)	154.00 - 5.00	0.0000	0.29	1	1	1.5742	1.5742		0.51
(CSP Dish @ 154')													
1-5/8" Fiber Optic CaBLE	A	No	No	Ar (CaAa)	200.00 - 5.00	0.0000	-0.37	1	1	1.9800	1.9800		1.85

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
(AT&T) 1/2 (AT&T)	A	No	No	Ar (CaAa)	200.00 - 5.00	0.0000	-0.35	2	2	0.5800	0.5800		0.25
* Eversource LCF78-50J (7/8 FOAM) (Eversource)	B	No	No	Ar (CaAa)	163.00 - 5.00	0.0000	0.27	1	1	1.1000	1.1000		0.53
LCF78-50J (7/8 FOAM) (Eversource)	B	No	No	Ar (CaAa)	145.00 - 5.00	0.0000	0.26	1	1	1.1000	1.1000		0.53

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
T1	320.00-304.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	5.561	0.000	15.90
		C	0.000	0.000	0.000	0.000	0.00
T2	304.00-300.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	1.540	0.000	4.36
		C	0.000	0.000	0.000	0.000	0.00
T3	300.00-280.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	13.483	0.000	40.00
		C	0.000	0.000	0.000	0.000	0.00
T4	280.00-260.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	26.676	0.000	87.48
		C	0.000	0.000	0.000	0.000	0.00
T5	260.00-240.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	37.174	0.000	122.62
		C	0.000	0.000	0.000	0.000	0.00
T6	240.00-220.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	49.355	0.000	162.20
		C	0.000	0.000	0.000	0.000	0.00
T7	220.00-200.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	49.900	0.000	163.60
		C	0.000	0.000	30.160	0.000	198.80
T8	200.00-180.00	A	0.000	0.000	30.040	0.000	171.80
		B	0.000	0.000	49.900	0.000	163.60
		C	0.000	0.000	30.160	0.000	198.80
T9	180.00-170.00	A	0.000	0.000	15.020	0.000	85.90
		B	0.000	0.000	27.055	0.000	87.16
		C	0.000	0.000	15.080	0.000	99.40
T10	170.00-160.00	A	0.000	0.000	15.020	0.000	85.90
		B	0.000	0.000	29.412	0.000	94.29
		C	0.000	0.000	15.080	0.000	99.40
T11	160.00-140.00	A	0.000	0.000	30.040	0.000	171.80
		B	0.000	0.000	65.283	0.000	208.79
		C	0.000	0.000	30.160	0.000	198.80
T12	140.00-120.00	A	0.000	0.000	30.040	0.000	171.80
		B	0.000	0.000	71.886	0.000	228.48
		C	0.000	0.000	30.160	0.000	198.80
T13	120.00-100.00	A	0.000	0.000	30.040	0.000	171.80
		B	0.000	0.000	76.650	0.000	238.73
		C	0.000	0.000	30.160	0.000	198.80
T14	100.00-80.00	A	0.000	0.000	30.040	0.000	171.80

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	83.818	0.000	254.48
		C	0.000	0.000	30.160	0.000	198.80
T15	80.00-60.00	A	0.000	0.000	30.040	0.000	171.80
		B	0.000	0.000	85.889	0.000	259.80
		C	0.000	0.000	30.160	0.000	198.80
T16	60.00-30.00	A	0.000	0.000	45.060	0.000	257.70
		B	0.000	0.000	128.833	0.000	389.70
		C	0.000	0.000	45.240	0.000	298.20
T17	30.00-0.00	A	0.000	0.000	37.550	0.000	214.75
		B	0.000	0.000	107.361	0.000	324.75
		C	0.000	0.000	37.700	0.000	248.50

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
T1	320.00-304.00	A	1.440	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	22.405	0.000	261.85
		C		0.000	0.000	0.000	0.000	0.00
T2	304.00-300.00	A	1.435	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	6.132	0.000	71.62
		C		0.000	0.000	0.000	0.000	0.00
T3	300.00-280.00	A	1.429	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	49.786	0.000	592.40
		C		0.000	0.000	0.000	0.000	0.00
T4	280.00-260.00	A	1.419	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	89.970	0.000	1098.70
		C		0.000	0.000	0.000	0.000	0.00
T5	260.00-240.00	A	1.408	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	118.862	0.000	1465.07
		C		0.000	0.000	0.000	0.000	0.00
T6	240.00-220.00	A	1.397	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	154.126	0.000	1898.59
		C		0.000	0.000	0.000	0.000	0.00
T7	220.00-200.00	A	1.385	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	155.138	0.000	1897.96
		C		0.000	0.000	84.362	0.000	1118.41
T8	200.00-180.00	A	1.372	0.000	0.000	85.834	0.000	1097.47
		B		0.000	0.000	154.148	0.000	1873.34
		C		0.000	0.000	84.196	0.000	1110.86
T9	180.00-170.00	A	1.361	0.000	0.000	42.830	0.000	545.46
		B		0.000	0.000	84.506	0.000	1014.93
		C		0.000	0.000	42.033	0.000	552.45
T10	170.00-160.00	A	1.354	0.000	0.000	42.771	0.000	543.21
		B		0.000	0.000	93.607	0.000	1112.03
		C		0.000	0.000	41.988	0.000	550.41
T11	160.00-140.00	A	1.343	0.000	0.000	85.358	0.000	1079.51
		B		0.000	0.000	204.733	0.000	2407.81
		C		0.000	0.000	83.838	0.000	1094.54
T12	140.00-120.00	A	1.329	0.000	0.000	85.111	0.000	1070.23
		B		0.000	0.000	223.633	0.000	2603.25
		C		0.000	0.000	83.653	0.000	1086.09
T13	120.00-100.00	A	1.315	0.000	0.000	84.874	0.000	1061.34
		B		0.000	0.000	234.150	0.000	2697.30
		C		0.000	0.000	83.474	0.000	1078.00
T14	100.00-80.00	A	1.303	0.000	0.000	84.672	0.000	1053.80
		B		0.000	0.000	250.822	0.000	2860.17

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	83.322	0.000	1071.12
T15	80.00-60.00	A	1.295	0.000	0.000	84.548	0.000	1049.17
		B		0.000	0.000	256.871	0.000	2914.85
		C		0.000	0.000	83.229	0.000	1066.90
T16	60.00-30.00	A	1.298	0.000	0.000	126.883	0.000	1576.02
		B		0.000	0.000	385.783	0.000	4383.52
		C		0.000	0.000	124.889	0.000	1602.42
T17	30.00-0.00	A	1.303	0.000	0.000	105.842	0.000	1317.33
		B		0.000	0.000	322.322	0.000	3672.72
		C		0.000	0.000	104.154	0.000	1338.97

Feed Line Center of Pressure

Section	Elevation ft	CP_X in	CP_Z in	CP_X Ice in	CP_Z Ice in
T1	320.00-304.00	2.5585	0.7653	5.6337	1.5661
T2	304.00-300.00	2.9423	0.8782	6.2954	1.7537
T3	300.00-280.00	5.1084	1.7478	10.0831	3.1857
T4	280.00-260.00	5.9347	2.4163	13.9913	5.1998
T5	260.00-240.00	8.6793	3.7103	19.0753	7.4793
T6	240.00-220.00	11.2158	4.8855	24.0367	9.6748
T7	220.00-200.00	18.8855	10.7084	35.8552	18.7814
T8	200.00-180.00	10.5950	13.5313	20.1947	22.9925
T9	180.00-170.00	12.1987	14.8386	23.4962	25.3656
T10	170.00-160.00	13.6862	15.8268	26.6700	27.1187
T11	160.00-140.00	14.7151	15.8660	28.9029	27.6923
T12	140.00-120.00	16.8966	17.2119	32.9481	30.0279
T13	120.00-100.00	24.6974	23.3249	42.0482	36.3965
T14	100.00-80.00	28.6992	25.8171	47.7485	39.8986
T15	80.00-60.00	29.1191	26.0771	50.1725	41.7161
T16	60.00-30.00	31.4614	28.1866	54.0369	44.9527
T17	30.00-0.00	29.4550	26.5187	52.4688	43.8449

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T1	31	1/2	304.00 - 320.00	0.6000	0.6000
T1	32	LC78-50JA-A7	304.00 - 320.00	0.6000	0.6000
T1	35	LC78-50JA-A7	304.00 - 316.50	0.6000	0.6000
T1	36	LC78-50JA-A7	304.00 - 318.00	0.6000	0.6000
T2	31	1/2	300.00 - 304.00	0.6000	0.6000
T2	32	LC78-50JA-A7	300.00 - 304.00	0.6000	0.6000
T2	35	LC78-50JA-A7	300.00 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T2	36	LC78-50JA-A7	304.00 - 300.00	0.6000	0.6000
T3	14	AVA7-50 (1-5/8 LOW DENSI. FOAM)	304.00 - 280.00	0.6000	0.6000
T3	15	AVA7-50 (1-5/8 LOW DENSI. FOAM)	283.00 - 280.00	0.6000	0.6000
T3	19	AVA7-50 (1-5/8 LOW DENSI. FOAM)	284.00 - 280.00	0.6000	0.6000
T3	28	LC78-50JA-A7	285.00 - 280.00	0.6000	0.6000
T3	29	LC78-50JA-A7	297.00 - 280.00	0.6000	0.6000
T3	30	1/2	290.00 - 280.00	0.6000	0.6000
T3	31	1/2	284.00 - 280.00	0.6000	0.6000
T3	32	LC78-50JA-A7	300.00 - 280.00	0.6000	0.6000
T3	33	1/2	300.00 - 280.00	0.6000	0.6000
T3	35	LC78-50JA-A7	284.00 - 280.00	0.6000	0.6000
T3	36	LC78-50JA-A7	300.00 - 280.00	0.6000	0.6000
T4	14	AVA7-50 (1-5/8 LOW DENSI. FOAM)	300.00 - 260.00	0.6000	0.6000
T4	15	AVA7-50 (1-5/8 LOW DENSI. FOAM)	280.00 - 260.00	0.6000	0.6000
T4	16	AVA7-50 (1-5/8 LOW DENSI. FOAM)	280.00 - 260.00	0.6000	0.6000
T4	19	AVA7-50 (1-5/8 LOW DENSI. FOAM)	261.00 - 260.00	0.6000	0.6000
T4	26	LC78-50JA-A7	280.00 - 260.00	0.6000	0.6000
T4	28	LC78-50JA-A7	262.00 - 260.00	0.6000	0.6000
T4	29	LC78-50JA-A7	280.00 - 260.00	0.6000	0.6000
T4	30	1/2	280.00 - 260.00	0.6000	0.6000
T4	31	1/2	280.00 - 260.00	0.6000	0.6000
T4	32	LC78-50JA-A7	280.00 - 260.00	0.6000	0.6000
T4	33	1/2	280.00 - 260.00	0.6000	0.6000
T4	35	LC78-50JA-A7	280.00 - 260.00	0.6000	0.6000
T4	36	LC78-50JA-A7	280.00 - 260.00	0.6000	0.6000
T5	14	AVA7-50 (1-5/8 LOW DENSI. FOAM)	280.00 - 240.00	0.6000	0.6000
T5	15	AVA7-50 (1-5/8 LOW DENSI. FOAM)	260.00 - 240.00	0.6000	0.6000
T5	16	AVA7-50 (1-5/8 LOW DENSI. FOAM)	260.00 - 240.00	0.6000	0.6000
T5	18	AVA7-50 (1-5/8 LOW DENSI. FOAM)	260.00 - 240.00	0.6000	0.6000
T5	19	AVA7-50 (1-5/8 LOW DENSI. FOAM)	248.00 - 240.00	0.6000	0.6000
T5	20	AVA7-50 (1-5/8 LOW	260.00 - 240.00	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
		DENSI. FOAM)	246.00		
T5	21	AVA7-50 (1-5/8 LOW DENSI. FOAM)	240.00 - 246.00	0.6000	0.6000
T5	22	LDF4-50A (1/2 FOAM)	240.00 - 246.00	0.6000	0.6000
T5	25	LC78-50JA-A7	240.00 - 244.00	0.6000	0.6000
T5	26	LC78-50JA-A7	240.00 - 260.00	0.6000	0.6000
T5	28	LC78-50JA-A7	240.00 - 260.00	0.6000	0.6000
T5	29	LC78-50JA-A7	240.00 - 260.00	0.6000	0.6000
T5	30	1/2	240.00 - 260.00	0.6000	0.6000
T5	31	1/2	240.00 - 260.00	0.6000	0.6000
T5	32	LC78-50JA-A7	240.00 - 260.00	0.6000	0.6000
T5	33	1/2	240.00 - 260.00	0.6000	0.6000
T5	35	LC78-50JA-A7	240.00 - 260.00	0.6000	0.6000
T5	36	LC78-50JA-A7	240.00 - 260.00	0.6000	0.6000
T6	14	AVA7-50 (1-5/8 LOW DENSI. FOAM)	220.00 - 240.00	0.6000	0.6000
T6	15	AVA7-50 (1-5/8 LOW DENSI. FOAM)	220.00 - 240.00	0.6000	0.6000
T6	16	AVA7-50 (1-5/8 LOW DENSI. FOAM)	220.00 - 240.00	0.6000	0.6000
T6	18	AVA7-50 (1-5/8 LOW DENSI. FOAM)	220.00 - 240.00	0.6000	0.6000
T6	19	AVA7-50 (1-5/8 LOW DENSI. FOAM)	220.00 - 240.00	0.6000	0.6000
T6	20	AVA7-50 (1-5/8 LOW DENSI. FOAM)	220.00 - 240.00	0.6000	0.6000
T6	21	AVA7-50 (1-5/8 LOW DENSI. FOAM)	220.00 - 240.00	0.6000	0.6000
T6	22	LDF4-50A (1/2 FOAM)	220.00 - 240.00	0.6000	0.6000
T6	23	LC78-50JA-A7	220.00 - 235.00	0.6000	0.6000
T6	25	LC78-50JA-A7	220.00 - 240.00	0.6000	0.6000
T6	26	LC78-50JA-A7	220.00 - 240.00	0.6000	0.6000
T6	28	LC78-50JA-A7	220.00 - 240.00	0.6000	0.6000
T6	29	LC78-50JA-A7	220.00 - 240.00	0.6000	0.6000
T6	30	1/2	220.00 - 240.00	0.6000	0.6000
T6	31	1/2	220.00 - 240.00	0.6000	0.6000
T6	32	LC78-50JA-A7	220.00 - 240.00	0.6000	0.6000
T6	33	1/2	220.00 - 240.00	0.6000	0.6000
T6	35	LC78-50JA-A7	220.00 - 240.00	0.6000	0.6000
T6	36	LC78-50JA-A7	220.00 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T7	2	1 5/8	200.00 - 240.00	0.6000	0.6000
T7	3	1 5/8" Hybriflex	200.00 - 220.00	0.6000	0.6000
T7	14	AVA7-50 (1-5/8 LOW DENSI. FOAM)	200.00 - 220.00	0.6000	0.6000
T7	15	AVA7-50 (1-5/8 LOW DENSI. FOAM)	200.00 - 220.00	0.6000	0.6000
T7	16	AVA7-50 (1-5/8 LOW DENSI. FOAM)	200.00 - 220.00	0.6000	0.6000
T7	18	AVA7-50 (1-5/8 LOW DENSI. FOAM)	200.00 - 220.00	0.6000	0.6000
T7	19	AVA7-50 (1-5/8 LOW DENSI. FOAM)	200.00 - 220.00	0.6000	0.6000
T7	20	AVA7-50 (1-5/8 LOW DENSI. FOAM)	200.00 - 220.00	0.6000	0.6000
T7	21	AVA7-50 (1-5/8 LOW DENSI. FOAM)	200.00 - 220.00	0.6000	0.6000
T7	22	LDF4-50A (1/2 FOAM)	200.00 - 220.00	0.6000	0.6000
T7	23	LC78-50JA-A7	200.00 - 220.00	0.6000	0.6000
T7	25	LC78-50JA-A7	200.00 - 220.00	0.6000	0.6000
T7	26	LC78-50JA-A7	200.00 - 220.00	0.6000	0.6000
T7	28	LC78-50JA-A7	200.00 - 220.00	0.6000	0.6000
T7	29	LC78-50JA-A7	200.00 - 220.00	0.6000	0.6000
T7	30	1/2	200.00 - 220.00	0.6000	0.6000
T7	31	1/2	200.00 - 220.00	0.6000	0.6000
T7	32	LC78-50JA-A7	200.00 - 220.00	0.6000	0.6000
T7	33	1/2	200.00 - 220.00	0.6000	0.6000
T7	35	LC78-50JA-A7	200.00 - 220.00	0.6000	0.6000
T7	36	LC78-50JA-A7	200.00 - 220.00	0.6000	0.6000
T8	1	1 5/8	180.00 - 200.00	0.6000	0.6000
T8	2	1 5/8	180.00 - 200.00	0.6000	0.6000
T8	3	1 5/8" Hybriflex	180.00 - 200.00	0.6000	0.6000
T8	14	AVA7-50 (1-5/8 LOW DENSI. FOAM)	180.00 - 200.00	0.6000	0.6000
T8	15	AVA7-50 (1-5/8 LOW DENSI. FOAM)	180.00 - 200.00	0.6000	0.6000
T8	16	AVA7-50 (1-5/8 LOW DENSI. FOAM)	180.00 - 200.00	0.6000	0.6000
T8	18	AVA7-50 (1-5/8 LOW DENSI. FOAM)	180.00 - 200.00	0.6000	0.6000
T8	19	AVA7-50 (1-5/8 LOW DENSI. FOAM)	180.00 - 200.00	0.6000	0.6000
T8	20	AVA7-50 (1-5/8 LOW DENSI. FOAM)	180.00 - 200.00	0.6000	0.6000
T8	21	AVA7-50 (1-5/8 LOW	180.00 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
		DENSI. FOAM)	200.00		
T8	22	LDF4-50A (1/2 FOAM)	180.00 - 200.00	0.6000	0.6000
T8	23	LC78-50JA-A7	180.00 - 200.00	0.6000	0.6000
T8	25	LC78-50JA-A7	180.00 - 200.00	0.6000	0.6000
T8	26	LC78-50JA-A7	180.00 - 200.00	0.6000	0.6000
T8	28	LC78-50JA-A7	180.00 - 200.00	0.6000	0.6000
T8	29	LC78-50JA-A7	180.00 - 200.00	0.6000	0.6000
T8	30	1/2	180.00 - 200.00	0.6000	0.6000
T8	31	1/2	180.00 - 200.00	0.6000	0.6000
T8	32	LC78-50JA-A7	180.00 - 200.00	0.6000	0.6000
T8	33	1/2	180.00 - 200.00	0.6000	0.6000
T8	35	LC78-50JA-A7	180.00 - 200.00	0.6000	0.6000
T8	36	LC78-50JA-A7	180.00 - 200.00	0.6000	0.6000
T8	41	1-5/8" Fiber Optic CaBLE	180.00 - 200.00	0.6000	0.6000
T8	42	1/2	180.00 - 200.00	0.6000	0.6000
T9	1	1 5/8	170.00 - 180.00	0.6000	0.6000
T9	2	1 5/8	170.00 - 180.00	0.6000	0.6000
T9	3	1 5/8" Hybriflex	170.00 - 180.00	0.6000	0.6000
T9	4	LC78-50JA-A7	170.00 - 174.00	0.6000	0.6000
T9	5	LC78-50JA-A7	170.00 - 177.00	0.6000	0.6000
T9	6	LDF4-50A (1/2 FOAM)	170.00 - 174.00	0.6000	0.6000
T9	7	LC78-50JA-A7	170.00 - 176.00	0.6000	0.6000
T9	14	AVA7-50 (1-5/8 LOW DENSI. FOAM)	170.00 - 180.00	0.6000	0.6000
T9	15	AVA7-50 (1-5/8 LOW DENSI. FOAM)	170.00 - 180.00	0.6000	0.6000
T9	16	AVA7-50 (1-5/8 LOW DENSI. FOAM)	170.00 - 180.00	0.6000	0.6000
T9	18	AVA7-50 (1-5/8 LOW DENSI. FOAM)	170.00 - 180.00	0.6000	0.6000
T9	19	AVA7-50 (1-5/8 LOW DENSI. FOAM)	170.00 - 180.00	0.6000	0.6000
T9	20	AVA7-50 (1-5/8 LOW DENSI. FOAM)	170.00 - 180.00	0.6000	0.6000
T9	21	AVA7-50 (1-5/8 LOW DENSI. FOAM)	170.00 - 180.00	0.6000	0.6000
T9	22	LDF4-50A (1/2 FOAM)	170.00 - 180.00	0.6000	0.6000
T9	23	LC78-50JA-A7	170.00 - 180.00	0.6000	0.6000
T9	25	LC78-50JA-A7	170.00 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T9	26	LC78-50JA-A7	170.00 - 180.00	0.6000	0.6000
T9	28	LC78-50JA-A7	170.00 - 180.00	0.6000	0.6000
T9	29	LC78-50JA-A7	170.00 - 180.00	0.6000	0.6000
T9	30	1/2	170.00 - 180.00	0.6000	0.6000
T9	31	1/2	170.00 - 180.00	0.6000	0.6000
T9	32	LC78-50JA-A7	170.00 - 180.00	0.6000	0.6000
T9	33	1/2	170.00 - 180.00	0.6000	0.6000
T9	35	LC78-50JA-A7	170.00 - 180.00	0.6000	0.6000
T9	36	LC78-50JA-A7	170.00 - 180.00	0.6000	0.6000
T9	41	1-5/8" Fiber Optic CaBLE	170.00 - 180.00	0.6000	0.6000
T9	42	1/2	170.00 - 180.00	0.6000	0.6000
T10	1	1 5/8	160.00 - 170.00	0.6000	0.6000
T10	2	1 5/8	160.00 - 170.00	0.6000	0.6000
T10	3	1 5/8" Hybriflex	160.00 - 170.00	0.6000	0.6000
T10	4	LC78-50JA-A7	160.00 - 170.00	0.6000	0.6000
T10	5	LC78-50JA-A7	160.00 - 170.00	0.6000	0.6000
T10	6	LDF4-50A (1/2 FOAM)	160.00 - 170.00	0.6000	0.6000
T10	7	LC78-50JA-A7	160.00 - 170.00	0.6000	0.6000
T10	14	AVA7-50 (1-5/8 LOW DENSI. FOAM)	160.00 - 170.00	0.6000	0.6000
T10	15	AVA7-50 (1-5/8 LOW DENSI. FOAM)	160.00 - 170.00	0.6000	0.6000
T10	16	AVA7-50 (1-5/8 LOW DENSI. FOAM)	160.00 - 170.00	0.6000	0.6000
T10	18	AVA7-50 (1-5/8 LOW DENSI. FOAM)	160.00 - 170.00	0.6000	0.6000
T10	19	AVA7-50 (1-5/8 LOW DENSI. FOAM)	160.00 - 170.00	0.6000	0.6000
T10	20	AVA7-50 (1-5/8 LOW DENSI. FOAM)	160.00 - 170.00	0.6000	0.6000
T10	21	AVA7-50 (1-5/8 LOW DENSI. FOAM)	160.00 - 170.00	0.6000	0.6000
T10	22	LDF4-50A (1/2 FOAM)	160.00 - 170.00	0.6000	0.6000
T10	23	LC78-50JA-A7	160.00 - 170.00	0.6000	0.6000
T10	25	LC78-50JA-A7	160.00 - 170.00	0.6000	0.6000
T10	26	LC78-50JA-A7	160.00 - 170.00	0.6000	0.6000
T10	28	LC78-50JA-A7	160.00 - 170.00	0.6000	0.6000
T10	29	LC78-50JA-A7	160.00 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T10	30	1/2	160.00 - 170.00	0.6000	0.6000
T10	31	1/2	160.00 - 170.00	0.6000	0.6000
T10	32	LC78-50JA-A7	160.00 - 170.00	0.6000	0.6000
T10	33	1/2	160.00 - 170.00	0.6000	0.6000
T10	34	1/2	160.00 - 164.00	0.6000	0.6000
T10	35	LC78-50JA-A7	160.00 - 170.00	0.6000	0.6000
T10	36	LC78-50JA-A7	160.00 - 170.00	0.6000	0.6000
T10	41	1-5/8" Fiber Optic CaBLE	160.00 - 170.00	0.6000	0.6000
T10	42	1/2	160.00 - 170.00	0.6000	0.6000
T10	44	LCF78-50J (7/8 FOAM)	160.00 - 163.00	0.6000	0.6000
T11	1	1 5/8	140.00 - 160.00	0.6000	0.6000
T11	2	1 5/8	140.00 - 160.00	0.6000	0.6000
T11	3	1 5/8" Hybriflex	140.00 - 160.00	0.6000	0.6000
T11	4	LC78-50JA-A7	140.00 - 160.00	0.6000	0.6000
T11	5	LC78-50JA-A7	140.00 - 160.00	0.6000	0.6000
T11	6	LDF4-50A (1/2 FOAM)	140.00 - 160.00	0.6000	0.6000
T11	7	LC78-50JA-A7	140.00 - 160.00	0.6000	0.6000
T11	14	AVA7-50 (1-5/8 LOW DENSI. FOAM)	140.00 - 160.00	0.6000	0.6000
T11	15	AVA7-50 (1-5/8 LOW DENSI. FOAM)	140.00 - 160.00	0.6000	0.6000
T11	16	AVA7-50 (1-5/8 LOW DENSI. FOAM)	140.00 - 160.00	0.6000	0.6000
T11	18	AVA7-50 (1-5/8 LOW DENSI. FOAM)	140.00 - 160.00	0.6000	0.6000
T11	19	AVA7-50 (1-5/8 LOW DENSI. FOAM)	140.00 - 160.00	0.6000	0.6000
T11	20	AVA7-50 (1-5/8 LOW DENSI. FOAM)	140.00 - 160.00	0.6000	0.6000
T11	21	AVA7-50 (1-5/8 LOW DENSI. FOAM)	140.00 - 160.00	0.6000	0.6000
T11	22	LDF4-50A (1/2 FOAM)	140.00 - 160.00	0.6000	0.6000
T11	23	LC78-50JA-A7	140.00 - 160.00	0.6000	0.6000
T11	25	LC78-50JA-A7	140.00 - 160.00	0.6000	0.6000
T11	26	LC78-50JA-A7	140.00 - 160.00	0.6000	0.6000
T11	28	LC78-50JA-A7	140.00 - 160.00	0.6000	0.6000
T11	29	LC78-50JA-A7	140.00 - 160.00	0.6000	0.6000
T11	30	1/2	140.00 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T11	31	1/2	160.00 140.00 -	0.6000	0.6000
T11	32	LC78-50JA-A7	160.00 140.00 -	0.6000	0.6000
T11	33	1/2	160.00 140.00 -	0.6000	0.6000
T11	34	1/2	160.00 140.00 -	0.6000	0.6000
T11	35	LC78-50JA-A7	160.00 140.00 -	0.6000	0.6000
T11	36	LC78-50JA-A7	160.00 140.00 -	0.6000	0.6000
T11	39	EW63	160.00 140.00 -	0.6000	0.6000
T11	41	1-5/8" Fiber Optic CaBLE	154.00 140.00 -	0.6000	0.6000
T11	42	1/2	160.00 140.00 -	0.6000	0.6000
T11	44	LCF78-50J (7/8 FOAM)	160.00 140.00 -	0.6000	0.6000
T11	45	LCF78-50J (7/8 FOAM)	160.00 140.00 -	0.6000	0.6000
T12	1	1 5/8	145.00 120.00 -	0.6000	0.6000
T12	2	1 5/8	140.00 120.00 -	0.6000	0.6000
T12	3	1 5/8" Hybriflex	140.00 120.00 -	0.6000	0.6000
T12	4	LC78-50JA-A7	140.00 120.00 -	0.6000	0.6000
T12	5	LC78-50JA-A7	140.00 120.00 -	0.6000	0.6000
T12	6	LDF4-50A (1/2 FOAM)	140.00 120.00 -	0.6000	0.6000
T12	7	LC78-50JA-A7	140.00 120.00 -	0.6000	0.6000
T12	8	LC78-50JA-A7	140.00 120.00 -	0.6000	0.6000
T12	9	LC78-50JA-A7	137.00 120.00 -	0.6000	0.6000
T12	14	AVA7-50 (1-5/8 LOW DENSI. FOAM)	134.00 120.00 -	0.6000	0.6000
T12	15	AVA7-50 (1-5/8 LOW DENSI. FOAM)	140.00 120.00 -	0.6000	0.6000
T12	16	AVA7-50 (1-5/8 LOW DENSI. FOAM)	140.00 120.00 -	0.6000	0.6000
T12	18	AVA7-50 (1-5/8 LOW DENSI. FOAM)	140.00 120.00 -	0.6000	0.6000
T12	19	AVA7-50 (1-5/8 LOW DENSI. FOAM)	140.00 120.00 -	0.6000	0.6000
T12	20	AVA7-50 (1-5/8 LOW DENSI. FOAM)	140.00 120.00 -	0.6000	0.6000
T12	21	AVA7-50 (1-5/8 LOW DENSI. FOAM)	140.00 120.00 -	0.6000	0.6000
T12	22	LDF4-50A (1/2 FOAM)	140.00 120.00 -	0.6000	0.6000
T12	23	LC78-50JA-A7	140.00 120.00 -	0.6000	0.6000
T12	25	LC78-50JA-A7	140.00 120.00 -	0.6000	0.6000
T12	26	LC78-50JA-A7	140.00 120.00 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T12	28	LC78-50JA-A7	120.00 - 140.00	0.6000	0.6000
T12	29	LC78-50JA-A7	120.00 - 140.00	0.6000	0.6000
T12	30	1/2	120.00 - 140.00	0.6000	0.6000
T12	31	1/2	120.00 - 140.00	0.6000	0.6000
T12	32	LC78-50JA-A7	120.00 - 140.00	0.6000	0.6000
T12	33	1/2	120.00 - 140.00	0.6000	0.6000
T12	34	1/2	120.00 - 140.00	0.6000	0.6000
T12	35	LC78-50JA-A7	120.00 - 140.00	0.6000	0.6000
T12	36	LC78-50JA-A7	120.00 - 140.00	0.6000	0.6000
T12	39	EW63	120.00 - 140.00	0.6000	0.6000
T12	41	1-5/8" Fiber Optic CaBLE	120.00 - 140.00	0.6000	0.6000
T12	42	1/2	120.00 - 140.00	0.6000	0.6000
T12	44	LCF78-50J (7/8 FOAM)	120.00 - 140.00	0.6000	0.6000
T12	45	LCF78-50J (7/8 FOAM)	120.00 - 140.00	0.6000	0.6000
T13	1	1 5/8	100.00 - 120.00	0.6000	0.6000
T13	2	1 5/8	100.00 - 120.00	0.6000	0.6000
T13	3	1 5/8" Hybriflex	100.00 - 120.00	0.6000	0.6000
T13	4	LC78-50JA-A7	100.00 - 120.00	0.6000	0.6000
T13	5	LC78-50JA-A7	100.00 - 120.00	0.6000	0.6000
T13	6	LDF4-50A (1/2 FOAM)	100.00 - 120.00	0.6000	0.6000
T13	7	LC78-50JA-A7	100.00 - 120.00	0.6000	0.6000
T13	8	LC78-50JA-A7	100.00 - 120.00	0.6000	0.6000
T13	9	LC78-50JA-A7	100.00 - 120.00	0.6000	0.6000
T13	14	AVA7-50 (1-5/8 LOW DENSI. FOAM)	100.00 - 120.00	0.6000	0.6000
T13	15	AVA7-50 (1-5/8 LOW DENSI. FOAM)	100.00 - 120.00	0.6000	0.6000
T13	16	AVA7-50 (1-5/8 LOW DENSI. FOAM)	100.00 - 120.00	0.6000	0.6000
T13	18	AVA7-50 (1-5/8 LOW DENSI. FOAM)	100.00 - 120.00	0.6000	0.6000
T13	19	AVA7-50 (1-5/8 LOW DENSI. FOAM)	100.00 - 120.00	0.6000	0.6000
T13	20	AVA7-50 (1-5/8 LOW DENSI. FOAM)	100.00 - 120.00	0.6000	0.6000
T13	21	AVA7-50 (1-5/8 LOW DENSI. FOAM)	100.00 - 120.00	0.6000	0.6000
T13	22	LDF4-50A (1/2 FOAM)	100.00 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T13	23	LC78-50JA-A7	120.00 100.00 - 120.00	0.6000	0.6000
T13	24	WE65	100.00 - 106.00	0.6000	0.6000
T13	25	LC78-50JA-A7	100.00 - 120.00	0.6000	0.6000
T13	26	LC78-50JA-A7	100.00 - 120.00	0.6000	0.6000
T13	27	WE108	100.00 - 113.00	0.6000	0.6000
T13	28	LC78-50JA-A7	100.00 - 120.00	0.6000	0.6000
T13	29	LC78-50JA-A7	100.00 - 120.00	0.6000	0.6000
T13	30	1/2	100.00 - 120.00	0.6000	0.6000
T13	31	1/2	100.00 - 120.00	0.6000	0.6000
T13	32	LC78-50JA-A7	100.00 - 120.00	0.6000	0.6000
T13	33	1/2	100.00 - 120.00	0.6000	0.6000
T13	34	1/2	100.00 - 120.00	0.6000	0.6000
T13	35	LC78-50JA-A7	100.00 - 120.00	0.6000	0.6000
T13	36	LC78-50JA-A7	100.00 - 120.00	0.6000	0.6000
T13	39	EW63	100.00 - 120.00	0.6000	0.6000
T13	41	1-5/8" Fiber Optic CaBLE	100.00 - 120.00	0.6000	0.6000
T13	42	1/2	100.00 - 120.00	0.6000	0.6000
T13	44	LCF78-50J (7/8 FOAM)	100.00 - 120.00	0.6000	0.6000
T13	45	LCF78-50J (7/8 FOAM)	100.00 - 120.00	0.6000	0.6000
T14	1	1 5/8	80.00 - 100.00	0.6000	0.6000
T14	2	1 5/8	80.00 - 100.00	0.6000	0.6000
T14	3	1 5/8" Hybriflex	80.00 - 100.00	0.6000	0.6000
T14	4	LC78-50JA-A7	80.00 - 100.00	0.6000	0.6000
T14	5	LC78-50JA-A7	80.00 - 100.00	0.6000	0.6000
T14	6	LDF4-50A (1/2 FOAM)	80.00 - 100.00	0.6000	0.6000
T14	7	LC78-50JA-A7	80.00 - 100.00	0.6000	0.6000
T14	8	LC78-50JA-A7	80.00 - 100.00	0.6000	0.6000
T14	9	LC78-50JA-A7	80.00 - 100.00	0.6000	0.6000
T14	12	LC78-50JA-A7	80.00 - 91.00	0.6000	0.6000
T14	13	LC78-50JA-A7	80.00 - 90.00	0.6000	0.6000
T14	14	AVA7-50 (1-5/8 LOW DENSI. FOAM)	80.00 - 100.00	0.6000	0.6000
T14	15	AVA7-50 (1-5/8 LOW DENSI. FOAM)	80.00 - 100.00	0.6000	0.6000
T14	16	AVA7-50 (1-5/8 LOW DENSI. FOAM)	80.00 - 100.00	0.6000	0.6000
T14	18	AVA7-50 (1-5/8 LOW DENSI. FOAM)	80.00 - 100.00	0.6000	0.6000
T14	19	AVA7-50 (1-5/8 LOW DENSI. FOAM)	80.00 - 100.00	0.6000	0.6000
T14	20	AVA7-50 (1-5/8 LOW DENSI. FOAM)	80.00 - 100.00	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T14	21	AVA7-50 (1-5/8 LOW DENSI. FOAM)	80.00 - 100.00	0.6000	0.6000
T14	22	LDF4-50A (1/2 FOAM)	80.00 - 100.00	0.6000	0.6000
T14	23	LC78-50JA-A7	80.00 - 100.00	0.6000	0.6000
T14	24	WE65	80.00 - 100.00	0.6000	0.6000
T14	25	LC78-50JA-A7	80.00 - 100.00	0.6000	0.6000
T14	26	LC78-50JA-A7	80.00 - 100.00	0.6000	0.6000
T14	27	WE108	80.00 - 100.00	0.6000	0.6000
T14	28	LC78-50JA-A7	80.00 - 100.00	0.6000	0.6000
T14	29	LC78-50JA-A7	80.00 - 100.00	0.6000	0.6000
T14	30	1/2	80.00 - 100.00	0.6000	0.6000
T14	31	1/2	80.00 - 100.00	0.6000	0.6000
T14	32	LC78-50JA-A7	80.00 - 100.00	0.6000	0.6000
T14	33	1/2	80.00 - 100.00	0.6000	0.6000
T14	34	1/2	80.00 - 100.00	0.6000	0.6000
T14	35	LC78-50JA-A7	80.00 - 100.00	0.6000	0.6000
T14	36	LC78-50JA-A7	80.00 - 100.00	0.6000	0.6000
T14	39	EW63	80.00 - 100.00	0.6000	0.6000
T14	41	1-5/8" Fiber Optic CaBLE	80.00 - 100.00	0.6000	0.6000
T14	42	1/2	80.00 - 100.00	0.6000	0.6000
T14	44	LCF78-50J (7/8 FOAM)	80.00 - 100.00	0.6000	0.6000
T14	45	LCF78-50J (7/8 FOAM)	80.00 - 100.00	0.6000	0.6000
T15	1	1 5/8	60.00 - 80.00	0.6000	0.6000
T15	2	1 5/8	60.00 - 80.00	0.6000	0.6000
T15	3	1 5/8" Hybriflex	60.00 - 80.00	0.6000	0.6000
T15	4	LC78-50JA-A7	60.00 - 80.00	0.6000	0.6000
T15	5	LC78-50JA-A7	60.00 - 80.00	0.6000	0.6000
T15	6	LDF4-50A (1/2 FOAM)	60.00 - 80.00	0.6000	0.6000
T15	7	LC78-50JA-A7	60.00 - 80.00	0.6000	0.6000
T15	8	LC78-50JA-A7	60.00 - 80.00	0.6000	0.6000
T15	9	LC78-50JA-A7	60.00 - 80.00	0.6000	0.6000
T15	12	LC78-50JA-A7	60.00 - 80.00	0.6000	0.6000
T15	13	LC78-50JA-A7	60.00 - 80.00	0.6000	0.6000
T15	14	AVA7-50 (1-5/8 LOW DENSI. FOAM)	60.00 - 80.00	0.6000	0.6000
T15	15	AVA7-50 (1-5/8 LOW DENSI. FOAM)	60.00 - 80.00	0.6000	0.6000
T15	16	AVA7-50 (1-5/8 LOW DENSI. FOAM)	60.00 - 80.00	0.6000	0.6000
T15	18	AVA7-50 (1-5/8 LOW DENSI. FOAM)	60.00 - 80.00	0.6000	0.6000
T15	19	AVA7-50 (1-5/8 LOW DENSI. FOAM)	60.00 - 80.00	0.6000	0.6000
T15	20	AVA7-50 (1-5/8 LOW DENSI. FOAM)	60.00 - 80.00	0.6000	0.6000
T15	21	AVA7-50 (1-5/8 LOW DENSI. FOAM)	60.00 - 80.00	0.6000	0.6000
T15	22	LDF4-50A (1/2 FOAM)	60.00 - 80.00	0.6000	0.6000
T15	23	LC78-50JA-A7	60.00 - 80.00	0.6000	0.6000
T15	24	WE65	60.00 - 80.00	0.6000	0.6000
T15	25	LC78-50JA-A7	60.00 - 80.00	0.6000	0.6000
T15	26	LC78-50JA-A7	60.00 - 80.00	0.6000	0.6000
T15	27	WE108	60.00 - 80.00	0.6000	0.6000
T15	28	LC78-50JA-A7	60.00 - 80.00	0.6000	0.6000
T15	29	LC78-50JA-A7	60.00 - 80.00	0.6000	0.6000
T15	30	1/2	60.00 - 80.00	0.6000	0.6000
T15	31	1/2	60.00 - 80.00	0.6000	0.6000
T15	32	LC78-50JA-A7	60.00 - 80.00	0.6000	0.6000
T15	33	1/2	60.00 - 80.00	0.6000	0.6000
T15	34	1/2	60.00 - 80.00	0.6000	0.6000
T15	35	LC78-50JA-A7	60.00 - 80.00	0.6000	0.6000
T15	36	LC78-50JA-A7	60.00 - 80.00	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T15	39	EW63	60.00 - 80.00	0.6000	0.6000
T15	41	1-5/8" Fiber Optic CaBLE	60.00 - 80.00	0.6000	0.6000
T15	42	1/2	60.00 - 80.00	0.6000	0.6000
T15	44	LCF78-50J (7/8 FOAM)	60.00 - 80.00	0.6000	0.6000
T15	45	LCF78-50J (7/8 FOAM)	60.00 - 80.00	0.6000	0.6000
T16	1	1 5/8	30.00 - 60.00	0.6000	0.6000
T16	2	1 5/8	30.00 - 60.00	0.6000	0.6000
T16	3	1 5/8" Hybriflex	30.00 - 60.00	0.6000	0.6000
T16	4	LC78-50JA-A7	30.00 - 60.00	0.6000	0.6000
T16	5	LC78-50JA-A7	30.00 - 60.00	0.6000	0.6000
T16	6	LDF4-50A (1/2 FOAM)	30.00 - 60.00	0.6000	0.6000
T16	7	LC78-50JA-A7	30.00 - 60.00	0.6000	0.6000
T16	8	LC78-50JA-A7	30.00 - 60.00	0.6000	0.6000
T16	9	LC78-50JA-A7	30.00 - 60.00	0.6000	0.6000
T16	12	LC78-50JA-A7	30.00 - 60.00	0.6000	0.6000
T16	13	LC78-50JA-A7	30.00 - 60.00	0.6000	0.6000
T16	14	AVA7-50 (1-5/8 LOW DENSI. FOAM)	30.00 - 60.00	0.6000	0.6000
T16	15	AVA7-50 (1-5/8 LOW DENSI. FOAM)	30.00 - 60.00	0.6000	0.6000
T16	16	AVA7-50 (1-5/8 LOW DENSI. FOAM)	30.00 - 60.00	0.6000	0.6000
T16	18	AVA7-50 (1-5/8 LOW DENSI. FOAM)	30.00 - 60.00	0.6000	0.6000
T16	19	AVA7-50 (1-5/8 LOW DENSI. FOAM)	30.00 - 60.00	0.6000	0.6000
T16	20	AVA7-50 (1-5/8 LOW DENSI. FOAM)	30.00 - 60.00	0.6000	0.6000
T16	21	AVA7-50 (1-5/8 LOW DENSI. FOAM)	30.00 - 60.00	0.6000	0.6000
T16	22	LDF4-50A (1/2 FOAM)	30.00 - 60.00	0.6000	0.6000
T16	23	LC78-50JA-A7	30.00 - 60.00	0.6000	0.6000
T16	24	WE65	30.00 - 60.00	0.6000	0.6000
T16	25	LC78-50JA-A7	30.00 - 60.00	0.6000	0.6000
T16	26	LC78-50JA-A7	30.00 - 60.00	0.6000	0.6000
T16	27	WE108	30.00 - 60.00	0.6000	0.6000
T16	28	LC78-50JA-A7	30.00 - 60.00	0.6000	0.6000
T16	29	LC78-50JA-A7	30.00 - 60.00	0.6000	0.6000
T16	30	1/2	30.00 - 60.00	0.6000	0.6000
T16	31	1/2	30.00 - 60.00	0.6000	0.6000
T16	32	LC78-50JA-A7	30.00 - 60.00	0.6000	0.6000
T16	33	1/2	30.00 - 60.00	0.6000	0.6000
T16	34	1/2	30.00 - 60.00	0.6000	0.6000
T16	35	LC78-50JA-A7	30.00 - 60.00	0.6000	0.6000
T16	36	LC78-50JA-A7	30.00 - 60.00	0.6000	0.6000
T16	39	EW63	30.00 - 60.00	0.6000	0.6000
T16	41	1-5/8" Fiber Optic CaBLE	30.00 - 60.00	0.6000	0.6000
T16	42	1/2	30.00 - 60.00	0.6000	0.6000
T16	44	LCF78-50J (7/8 FOAM)	30.00 - 60.00	0.6000	0.6000
T16	45	LCF78-50J (7/8 FOAM)	30.00 - 60.00	0.6000	0.6000
T17	1	1 5/8	5.00 - 30.00	0.6000	0.6000
T17	2	1 5/8	5.00 - 30.00	0.6000	0.6000
T17	3	1 5/8" Hybriflex	5.00 - 30.00	0.6000	0.6000
T17	4	LC78-50JA-A7	5.00 - 30.00	0.6000	0.6000
T17	5	LC78-50JA-A7	5.00 - 30.00	0.6000	0.6000
T17	6	LDF4-50A (1/2 FOAM)	5.00 - 30.00	0.6000	0.6000
T17	7	LC78-50JA-A7	5.00 - 30.00	0.6000	0.6000
T17	8	LC78-50JA-A7	5.00 - 30.00	0.6000	0.6000
T17	9	LC78-50JA-A7	5.00 - 30.00	0.6000	0.6000
T17	12	LC78-50JA-A7	5.00 - 30.00	0.6000	0.6000
T17	13	LC78-50JA-A7	5.00 - 30.00	0.6000	0.6000
T17	14	AVA7-50 (1-5/8 LOW	5.00 - 30.00	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
		DENSI. FOAM)			
T17	15	AVA7-50 (1-5/8 LOW DENSI. FOAM)	5.00 - 30.00	0.6000	0.6000
T17	16	AVA7-50 (1-5/8 LOW DENSI. FOAM)	5.00 - 30.00	0.6000	0.6000
T17	18	AVA7-50 (1-5/8 LOW DENSI. FOAM)	5.00 - 30.00	0.6000	0.6000
T17	19	AVA7-50 (1-5/8 LOW DENSI. FOAM)	5.00 - 30.00	0.6000	0.6000
T17	20	AVA7-50 (1-5/8 LOW DENSI. FOAM)	5.00 - 30.00	0.6000	0.6000
T17	21	AVA7-50 (1-5/8 LOW DENSI. FOAM)	5.00 - 30.00	0.6000	0.6000
T17	22	LDF4-50A (1/2 FOAM)	5.00 - 30.00	0.6000	0.6000
T17	23	LC78-50JA-A7	5.00 - 30.00	0.6000	0.6000
T17	24	WE65	5.00 - 30.00	0.6000	0.6000
T17	25	LC78-50JA-A7	5.00 - 30.00	0.6000	0.6000
T17	26	LC78-50JA-A7	5.00 - 30.00	0.6000	0.6000
T17	27	WE108	5.00 - 30.00	0.6000	0.6000
T17	28	LC78-50JA-A7	5.00 - 30.00	0.6000	0.6000
T17	29	LC78-50JA-A7	5.00 - 30.00	0.6000	0.6000
T17	30	1/2	5.00 - 30.00	0.6000	0.6000
T17	31	1/2	5.00 - 30.00	0.6000	0.6000
T17	32	LC78-50JA-A7	5.00 - 30.00	0.6000	0.6000
T17	33	1/2	5.00 - 30.00	0.6000	0.6000
T17	34	1/2	5.00 - 30.00	0.6000	0.6000
T17	35	LC78-50JA-A7	5.00 - 30.00	0.6000	0.6000
T17	36	LC78-50JA-A7	5.00 - 30.00	0.6000	0.6000
T17	39	EW63	5.00 - 30.00	0.6000	0.6000
T17	41	1-5/8" Fiber Optic CaBLE	5.00 - 30.00	0.6000	0.6000
T17	42	1/2	5.00 - 30.00	0.6000	0.6000
T17	44	LCF78-50J (7/8 FOAM)	5.00 - 30.00	0.6000	0.6000
T17	45	LCF78-50J (7/8 FOAM)	5.00 - 30.00	0.6000	0.6000

Discrete Tower Loads

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
* CSP Antenna Inventory - via Eastern Communications Climb/Mapping									
PD688S-4	C	From Leg	0.50	0.0000	94.00	No Ice	0.35	0.35	3.75
(ECI-66)			0.00			1/2" Ice	0.63	0.63	4.88
			0.00			1" Ice	0.91	0.91	6.00
4'x4" Pipe Mount	C	From Leg	0.00	0.0000	94.00	No Ice	1.03	1.03	44.00
(ECI-66)			0.00			1/2" Ice	1.58	1.58	56.99
			0.00			1" Ice	1.84	1.84	73.03
Pirod 4' Side Mount Standoff	B	From Leg	0.00	0.0000	106.00	No Ice	2.72	2.72	50.00
(1)			0.00			1/2" Ice	4.91	4.91	89.00
(ECI-62)			0.00			1" Ice	7.10	7.10	128.00

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft	Offsets: Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
PD458	B	From Leg	3.00	0.0000	106.00	No Ice		2.88	2.88	20.00
(ECI-62)			0.00			1/2" Ice		4.34	4.34	46.22
			0.00			1" Ice		5.83	5.83	77.59
5'3"x4" Pipe Mount	A	From Leg	0.00	0.0000	107.00	No Ice		1.39	1.39	57.00
(ECI-63 (Dish Support))			0.00			1/2" Ice		2.21	2.21	73.81
			0.00			1" Ice		2.54	2.54	94.43
8' Wide Ice Shield (for Dish	A	From Leg	0.00	0.0000	115.00	No Ice		8.34	4.76	400.00
Antennas) (Assume Ca=2.0)			0.00			1/2" Ice		11.01	6.71	756.25
(ECI-63a (Dish Ice Shield))			0.00			1" Ice		13.59	8.62	1103.65
3' Wide Ice Shield (for Dish	C	From Leg	0.00	0.0000	117.00	No Ice		8.34	4.76	400.00
Antennas) (Assume Ca=2.0)			0.00			1/2" Ice		11.01	6.71	756.25
(ECI-61a)			0.00			1" Ice		13.59	8.62	1103.65
5'3"x4" Pipe Mount	C	From Leg	0.00	0.0000	112.00	No Ice		1.39	1.39	57.00
(ECI-61a (Dish Support))			0.00			1/2" Ice		2.21	2.21	73.81
			0.00			1" Ice		2.54	2.54	94.43
DB212-1	C	From Leg	6.00	0.0000	139.00	No Ice		4.40	4.40	31.00
(ECI-59)			0.00			1/2" Ice		8.42	8.42	70.21
			0.00			1" Ice		12.45	12.45	134.11
4' Side Mount Standoff	C	From Leg	0.00	0.0000	139.00	No Ice		6.50	6.50	100.00
(ECI-60 & 59)			0.00			1/2" Ice		8.50	8.50	170.00
			0.00			1" Ice		10.50	10.50	240.00
PD156S	C	From Leg	6.00	0.0000	139.00	No Ice		0.44	0.44	5.00
(ECI-60)			0.00			1/2" Ice		0.79	0.79	6.50
			0.00			1" Ice		1.14	1.14	8.00
5'3"x4" Pipe Mount	C	From Leg	0.00	0.0000	154.00	No Ice		1.37	1.37	57.00
(ECI-58a (Dish Support))			0.00			1/2" Ice		2.21	2.21	73.81
			0.00			1" Ice		2.54	2.54	94.43
ANT450F6	A	From Leg	0.50	0.0000	153.00	No Ice		1.90	1.90	8.00
(ECI-57)			0.00			1/2" Ice		2.73	2.73	22.34
			0.00			1" Ice		3.40	3.40	41.96
5'3"x4" Pipe Mount	A	From Leg	0.00	0.0000	153.00	No Ice		1.37	1.37	57.00
(ECI-57)			0.00			1/2" Ice		2.21	2.21	73.81
			0.00			1" Ice		2.54	2.54	94.43
L-810 Obstruction Lighting	A	From Leg	0.25	0.0000	164.00	No Ice		0.36	0.36	6.65
(1)			0.00			1/2" Ice		0.52	0.52	12.44
(ECI-56)			0.00			1" Ice		0.70	0.70	19.93
L-810 Obstruction Lighting	B	From Leg	0.25	0.0000	168.00	No Ice		0.36	0.36	6.65
(1)			0.00			1/2" Ice		0.52	0.52	12.44
(ECI-54)			0.00			1" Ice		0.70	0.70	19.93
L-810 Obstruction Lighting	C	From Leg	0.25	0.0000	165.00	No Ice		0.36	0.36	6.65
(1)			0.00			1/2" Ice		0.52	0.52	12.44
(ECI-55)			0.00			1" Ice		0.70	0.70	19.93
DB586-Y (inverted)	B	From Leg	4.00	0.0000	175.00	No Ice		1.01	1.01	8.25
(ECI-53)			0.00			1/2" Ice		1.28	1.28	16.59
			0.00			1" Ice		1.56	1.56	28.01
Pirod 4' Side Mount Standoff	B	From Leg	0.00	0.0000	176.00	No Ice		2.72	2.72	50.00
(1)			0.00			1/2" Ice		4.91	4.91	89.00
(ECI-53,52,51)			0.00			1" Ice		7.10	7.10	128.00
430-94C-09168-M-11048	B	From Leg	2.00	0.0000	176.00	No Ice		1.63	0.95	30.00
TTA			0.00			1/2" Ice		1.81	1.09	37.44
(ECI-52)			0.00			1" Ice		1.99	1.24	52.22
DB586-Y	B	From Leg	4.00	0.0000	177.00	No Ice		1.01	1.01	8.25
(ECI-51)			0.00			1/2" Ice		1.28	1.28	16.59
			0.00			1" Ice		1.56	1.56	28.01
1151-3	C	From Leg	3.00	0.0000	179.00	No Ice		4.18	4.18	16.00
(ECI-50)			0.00			1/2" Ice		5.73	5.73	46.53
			0.00			1" Ice		7.30	7.30	86.79

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft	Offsets: Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
Pirod 4' Side Mount Standoff	C	From Leg	0.00	0.00	0.0000	179.00	No Ice	2.72	2.72	50.00
(1)			0.00				1/2" Ice	4.91	4.91	89.00
(ECI-50)			0.00				1" Ice	7.10	7.10	128.00
531-70HD Exposed Dipole	A	From Leg	6.00	0.00	0.0000	238.00	No Ice	5.91	5.91	50.00
Antenna			0.00				1/2" Ice	7.68	7.68	79.03
(ECI-15)			0.00				1" Ice	9.47	9.47	125.80
6' Side Mount Standoff	A	From Leg	0.00	0.00	0.0000	238.00	No Ice	6.50	6.50	100.00
(ECI-15)			0.00				1/2" Ice	8.50	8.50	170.00
			0.00				1" Ice	10.50	10.50	240.00
PD1142-1	C	From Leg	6.00	0.00	0.0000	248.00	No Ice	1.32	1.32	10.00
(ECI-14)			0.00				1/2" Ice	3.21	3.21	23.85
			0.00				1" Ice	5.12	5.12	49.42
6' Side Mount Standoff	C	From Leg	0.00	0.00	0.0000	248.00	No Ice	6.50	6.50	100.00
(ECI-14)			0.00				1/2" Ice	8.50	8.50	170.00
			0.00				1" Ice	10.50	10.50	240.00
SC479-HF1LDF(D00I-E6085	B	From Leg	3.00	0.00	0.0000	245.00	No Ice	5.06	5.06	34.00
) (Inverted)			0.00				1/2" Ice	6.54	6.54	69.82
(ECI-13)			0.00				1" Ice	8.04	8.04	114.98
SC479-HF1LDF(D00I-E6085	B	From Leg	3.00	0.00	0.0000	245.00	No Ice	5.06	5.06	34.00
) (Inverted)			0.00				1/2" Ice	6.54	6.54	69.82
(ECI-12)			0.00				1" Ice	8.04	8.04	114.98
Sabre T-Boom (1)	B	From Leg	0.00	0.00	0.0000	246.00	No Ice	35.40	35.40	471.00
(ECI-10,11,12,13)			0.00				1/2" Ice	46.90	46.90	690.00
			0.00				1" Ice	58.40	58.40	909.00
430-94C-09168-M-11048	B	From Leg	2.00	0.00	0.0000	247.00	No Ice	1.63	0.95	30.00
TTA			0.00				1/2" Ice	1.81	1.09	37.44
(ECI-11)			0.00				1" Ice	1.99	1.24	52.22
SC479-HF1LDF	B	From Leg	3.00	0.00	0.0000	251.00	No Ice	3.90	3.90	34.00
(ECI-10)			0.00				1/2" Ice	6.54	6.54	69.82
			0.00				1" Ice	8.04	8.04	114.98
6' Side Mount Standoff	B	From Leg	0.00	0.00	0.0000	260.00	No Ice	6.50	6.50	100.00
(ECI-8)			0.00				1/2" Ice	8.50	8.50	170.00
			0.00				1" Ice	10.50	10.50	240.00
PD440-2	B	From Leg	6.00	0.00	0.0000	264.00	No Ice	1.38	1.38	19.00
(ECI-8)			0.00				1/2" Ice	2.48	2.48	24.70
			0.00				1" Ice	3.59	3.59	30.40
SC479-HF1LDF(D00I-E6085	C	From Leg	6.00	0.00	0.0000	283.00	No Ice	5.06	5.06	34.00
) (Inverted)			0.00				1/2" Ice	6.54	6.54	69.82
(ECI-7)			0.00				1" Ice	8.04	8.04	114.98
6' Side Mount Standoff	C	From Leg	0.00	0.00	0.0000	284.00	No Ice	6.50	6.50	100.00
(ECI-7)			0.00				1/2" Ice	8.50	8.50	170.00
			0.00				1" Ice	10.50	10.50	240.00
DB809T3E-XC	C	From Leg	6.00	0.00	0.0000	286.00	No Ice	3.77	3.77	39.00
(ECI-6)			0.00				1/2" Ice	5.70	5.70	69.70
			0.00				1" Ice	7.17	7.17	109.50
PD340-1	A	From Leg	6.00	0.00	0.0000	290.00	No Ice	3.30	3.30	40.00
(ECI-5)			0.00				1/2" Ice	5.94	5.94	52.00
			0.00				1" Ice	8.58	8.58	64.00
6' Side Mount Standoff	A	From Leg	0.00	0.00	0.0000	290.00	No Ice	6.50	6.50	100.00
(ECI-5)			0.00				1/2" Ice	8.50	8.50	170.00
			0.00				1" Ice	10.50	10.50	240.00
SC479-HF1LDF	C	From Leg	6.00	0.00	0.0000	300.00	No Ice	3.82	3.82	34.00
(ECI-4)			0.00				1/2" Ice	6.54	6.54	69.82
			0.00				1" Ice	8.04	8.04	114.98
6' Side Mount Standoff	C	From Leg	0.00	0.00	0.0000	300.00	No Ice	6.50	6.50	100.00
(ECI-4)			0.00				1/2" Ice	8.50	8.50	170.00
			0.00				1" Ice	10.50	10.50	240.00

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
ANT450F6	B	From Leg	5.00	0.0000	318.00	No Ice	1.90	1.90	8.00
(ECI-3)			0.00			1/2" Ice	2.73	2.73	22.34
			0.00			1" Ice	3.40	3.40	41.96
4'x4" Pipe Mount	B	From Leg	0.00	0.0000	318.00	No Ice	0.98	0.98	44.00
(ECI-3)			0.00			1/2" Ice	1.58	1.58	56.99
			0.00			1" Ice	1.84	1.84	73.03
BA1012-0	A	From Leg	6.00	0.0000	320.00	No Ice	0.47	0.47	2.20
(ECI-2)			0.00			1/2" Ice	0.96	0.96	6.61
			0.00			1" Ice	1.31	1.31	14.14
6' Side Mount Standoff	A	From Leg	0.00	0.0000	320.00	No Ice	6.50	6.50	100.00
(ECI-2)			0.00			1/2" Ice	8.50	8.50	170.00
			0.00			1" Ice	10.50	10.50	240.00
PD128-1	C	From Leg	6.00	0.0000	325.00	No Ice	1.00	1.00	13.00
(ECI-1)			0.00			1/2" Ice	1.80	1.80	16.90
			0.00			1" Ice	2.60	2.60	20.80
6' Side Mount Standoff	C	From Leg	0.00	0.0000	325.00	No Ice	6.50	6.50	100.00
(ECI-1)			0.00			1/2" Ice	8.50	8.50	170.00
			0.00			1" Ice	10.50	10.50	240.00
Dual Lights	A	None		0.0000	327.00	No Ice	4.00	4.00	250.00
(Beacon)						1/2" Ice	4.80	4.80	400.00
						1" Ice	5.60	5.60	550.00
Lightning Rod 5/8x4'	C	None		0.0000	329.00	No Ice	0.25	0.25	31.00
(Lightning Rod)						1/2" Ice	0.66	0.66	33.82
						1" Ice	0.97	0.97	39.29
* VZW Proposed 12/07/2018									
Valmont VFA-10-U V-Frame	A	None		0.0000	232.00	No Ice	7.95	4.45	285.00
(Verizon)						1/2" Ice	8.33	4.74	343.57
						1" Ice	8.71	5.04	407.08
Valmont VFA-10-U V-Frame	B	None		0.0000	232.00	No Ice	7.95	4.45	285.00
(Verizon)						1/2" Ice	8.33	4.74	343.57
						1" Ice	8.71	5.04	407.08
Valmont VFA-10-U V-Frame	C	None		0.0000	232.00	No Ice	7.95	4.45	285.00
(Verizon)						1/2" Ice	8.33	4.74	343.57
						1" Ice	8.71	5.04	407.08
JAHH-65B-R3B Panel	A	From Leg	5.00	0.0000	232.00	No Ice	9.66	5.98	126.30
Antenna			6.00			1/2" Ice	10.22	6.44	184.38
(Verizon-AWS)			0.00			1" Ice	10.79	6.91	248.75
JAHH-65B-R3B Panel	A	From Leg	5.00	0.0000	232.00	No Ice	9.66	5.98	126.30
Antenna			5.50			1/2" Ice	10.22	6.44	184.38
(Verizon-PCS)			0.00			1" Ice	10.79	6.91	248.75
LNX-6512DS-VTM	A	From Leg	5.00	0.0000	232.00	No Ice	5.61	3.30	30.00
(Verizon-850)			-3.00			1/2" Ice	6.01	3.66	63.32
			0.00			1" Ice	6.41	4.04	102.51
MT6407-77A	A	From Leg	5.00	0.0000	232.00	No Ice	4.71	1.84	0.09
(Verizon - Proposed)			0.00			1/2" Ice	5.00	2.06	29.40
			0.00			1" Ice	5.29	2.29	62.58
BSAMNT-SBS-2-2 (JAHH	A	From Leg	5.00	0.0000	232.00	No Ice	3.78	3.56	116.83
Antenna Bracket (for 2))			6.00			1/2" Ice	4.84	4.62	175.06
(Verizon-PCS/AWS)			0.00			1" Ice	5.64	5.41	240.44
B2/B66A RRH	A	From Leg	5.00	0.0000	232.00	No Ice	2.54	1.61	60.00
(Verizon RRH)			0.00			1/2" Ice	2.75	1.79	80.12
			0.00			1" Ice	2.97	1.98	103.35
B5/B13 RRH	A	From Leg	5.00	0.0000	232.00	No Ice	1.87	1.02	70.00
(Verizon RRH)			0.00			1/2" Ice	2.03	1.15	86.42
			0.00			1" Ice	2.21	1.29	105.50
DB-B1-6C-12AB-0Z /	A	From Leg	5.00	0.0000	232.00	No Ice	4.42	2.90	32.00
DC-3315-PF-48 Dist. Box			0.00			1/2" Ice	4.72	3.16	63.48

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
(Verizon)			0.00			1" Ice	5.02	3.43	98.72
JAHH-65B-R3B Panel	B	From Leg	5.00	0.0000	232.00	No Ice	9.66	5.98	126.30
Antenna			6.00			1/2" Ice	10.22	6.44	184.38
(Verizon-AWS)			0.00			1" Ice	10.79	6.91	248.75
JAHH-65B-R3B Panel	B	From Leg	5.00	0.0000	232.00	No Ice	9.66	5.98	126.30
Antenna			5.50			1/2" Ice	10.22	6.44	184.38
(Verizon-PCS)			0.00			1" Ice	10.79	6.91	248.75
LNX-6512DS-VTM	B	From Leg	5.00	0.0000	232.00	No Ice	5.61	3.30	30.00
(Verizon-850)			-3.00			1/2" Ice	6.01	3.66	63.32
			0.00			1" Ice	6.41	4.04	102.51
MT6407-77A	B	From Leg	5.00	0.0000	232.00	No Ice	4.71	1.84	0.09
(Verizon - Proposed)			0.00			1/2" Ice	5.00	2.06	29.40
			0.00			1" Ice	5.29	2.29	62.58
BSAMNT-SBS-2-2 (JAHH	B	From Leg	5.00	0.0000	232.00	No Ice	3.78	3.56	116.83
Antenna Bracket (for 2))			6.00			1/2" Ice	4.84	4.62	175.06
(Verizon-PCS/AWS)			0.00			1" Ice	5.64	5.41	240.44
B2/B66A RRH	B	From Leg	5.00	0.0000	232.00	No Ice	2.54	1.61	60.00
(Verizon RRH)			0.00			1/2" Ice	2.75	1.79	80.12
			0.00			1" Ice	2.97	1.98	103.35
B5/B13 RRH	B	From Leg	5.00	0.0000	232.00	No Ice	1.87	1.02	70.00
(Verizon RRH)			0.00			1/2" Ice	2.03	1.15	86.42
			0.00			1" Ice	2.21	1.29	105.50
DB-B1-6C-12AB-0Z /	B	From Leg	5.00	0.0000	232.00	No Ice	4.42	2.90	32.00
DC-3315-PF-48 Dist. Box			0.00			1/2" Ice	4.72	3.16	63.48
(Verizon)			0.00			1" Ice	5.02	3.43	98.72
JAHH-65B-R3B Panel	C	From Leg	5.00	0.0000	232.00	No Ice	9.66	5.98	126.30
Antenna			6.00			1/2" Ice	10.22	6.44	184.38
(Verizon-AWS)			0.00			1" Ice	10.79	6.91	248.75
JAHH-65B-R3B Panel	C	From Leg	5.00	0.0000	232.00	No Ice	9.66	5.98	126.30
Antenna			5.50			1/2" Ice	10.22	6.44	184.38
(Verizon-PCS)			0.00			1" Ice	10.79	6.91	248.75
LNX-6512DS-VTM	C	From Leg	5.00	0.0000	232.00	No Ice	5.61	3.30	30.00
(Verizon-850)			-3.00			1/2" Ice	6.01	3.66	63.32
			0.00			1" Ice	6.41	4.04	102.51
MT6407-77A	C	From Leg	5.00	0.0000	232.00	No Ice	4.71	1.84	0.09
(Verizon - Proposed)			0.00			1/2" Ice	5.00	2.06	29.40
			0.00			1" Ice	5.29	2.29	62.58
BSAMNT-SBS-2-2 (JAHH	C	From Leg	5.00	0.0000	232.00	No Ice	3.78	3.56	116.83
Antenna Bracket (for 2))			6.00			1/2" Ice	4.84	4.62	175.06
(Verizon-PCS/AWS)			0.00			1" Ice	5.64	5.41	240.44
B2/B66A RRH	C	From Leg	5.00	0.0000	232.00	No Ice	2.54	1.61	60.00
(Verizon RRH)			0.00			1/2" Ice	2.75	1.79	80.12
			0.00			1" Ice	2.97	1.98	103.35
B5/B13 RRH	C	From Leg	5.00	0.0000	232.00	No Ice	1.87	1.02	70.00
(Verizon RRH)			0.00			1/2" Ice	2.03	1.15	86.42
			0.00			1" Ice	2.21	1.29	105.50
CBC78T-DS-43-2X Diplexer	A	From Leg	5.00	0.0000	232.00	No Ice	0.37	0.51	22.00
(Verizon)			0.00			1/2" Ice	0.45	0.60	28.34
			0.00			1" Ice	0.53	0.70	36.37
CBC78T-DS-43-2X Diplexer	B	From Leg	5.00	0.0000	232.00	No Ice	0.37	0.51	22.00
(Verizon)			0.00			1/2" Ice	0.45	0.60	28.34
			0.00			1" Ice	0.53	0.70	36.37
CBC78T-DS-43-2X Diplexer	C	From Leg	5.00	0.0000	232.00	No Ice	0.37	0.51	22.00
(Verizon)			0.00			1/2" Ice	0.45	0.60	28.34
			0.00			1" Ice	0.53	0.70	36.37

* VZW Proposed 12/07/2018
*** EMP-005 AT&T

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
Inventory 08/2019 Updates									
PiROD 12' Lightweight T-Frame (AT&T)	A	None		0.0000	200.00	No Ice	10.20	10.20	253.00
						1/2" Ice	16.20	16.20	355.00
						1" Ice	22.20	22.20	457.00
PiROD 12' Lightweight T-Frame (AT&T)	B	None		0.0000	200.00	No Ice	10.20	10.20	253.00
						1/2" Ice	16.20	16.20	355.00
						1" Ice	22.20	22.20	457.00
PiROD 12' Lightweight T-Frame (AT&T)	C	None		0.0000	200.00	No Ice	10.20	10.20	253.00
						1/2" Ice	16.20	16.20	355.00
						1" Ice	22.20	22.20	457.00
7770.00 (AT&T)	A	From Leg	3.00 -6.00 0.00	0.0000	200.00	No Ice 1/2" Ice 1" Ice	5.51 5.87 6.23	2.93 3.27 3.63	35.00 67.63 105.06
HPA-65R-BUU-H8 Panel (AT&T)	A	From Leg	3.00 6.00 0.00	0.0000	200.00	No Ice 1/2" Ice 1" Ice	12.99 13.69 14.40	7.48 8.06 8.64	68.00 140.41 220.44
RRUS-32 (AT&T)	A	From Leg	3.00 6.00 1.50	0.0000	200.00	No Ice 1/2" Ice 1" Ice	3.31 3.56 3.81	2.42 2.64 2.86	77.00 104.93 136.47
RRUS-11 (AT&T)	A	From Leg	3.00 6.00 -1.50	0.0000	200.00	No Ice 1/2" Ice 1" Ice	2.57 2.76 2.97	1.07 1.21 1.36	50.00 69.57 92.08
7770.00 (AT&T)	B	From Leg	3.00 -6.00 0.00	0.0000	200.00	No Ice 1/2" Ice 1" Ice	5.51 5.87 6.23	2.93 3.27 3.63	35.00 67.63 105.06
HPA-65R-BUU-H8 Panel (AT&T)	B	From Leg	3.00 6.00 0.00	0.0000	200.00	No Ice 1/2" Ice 1" Ice	12.99 13.69 14.40	7.48 8.06 8.64	68.00 140.41 220.44
RRUS-32 (AT&T)	B	From Leg	3.00 6.00 1.50	0.0000	200.00	No Ice 1/2" Ice 1" Ice	3.31 3.56 3.81	2.42 2.64 2.86	77.00 104.93 136.47
RRUS-11 (AT&T)	B	From Leg	3.00 6.00 -1.50	0.0000	200.00	No Ice 1/2" Ice 1" Ice	2.57 2.76 2.97	1.07 1.21 1.36	50.00 69.57 92.08
7770.00 (AT&T)	C	From Leg	3.00 -6.00 0.00	0.0000	200.00	No Ice 1/2" Ice 1" Ice	5.51 5.87 6.23	2.93 3.27 3.63	35.00 67.63 105.06
HPA-65R-BUU-H6 Panel (AT&T)	C	From Leg	3.00 6.00 0.00	0.0000	200.00	No Ice 1/2" Ice 1" Ice	10.12 10.69 11.26	5.49 5.94 6.41	48.00 105.33 168.95
RRUS-32 (AT&T)	B	From Leg	3.00 6.00 1.50	0.0000	200.00	No Ice 1/2" Ice 1" Ice	3.31 3.56 3.81	2.42 2.64 2.86	77.00 104.93 136.47
RRUS-11 (AT&T)	B	From Leg	3.00 6.00 -1.50	0.0000	200.00	No Ice 1/2" Ice 1" Ice	2.57 2.76 2.97	1.07 1.21 1.36	50.00 69.57 92.08
DC6-48-60-0-8C Squid / Surge Arrestor (AT&T)	C	None		0.0000	200.00	No Ice 1/2" Ice 1" Ice	1.79 2.02 2.27	1.79 2.02 2.27	27.00 47.39 70.57
STK-U Stiffener Side Arm Attachment (AT&T)	A	None		0.0000	200.00	No Ice 1/2" Ice 1" Ice	0.07 0.11 0.16	4.01 5.00 6.01	63.79 95.84 138.17
STK-U Stiffener Side Arm Attachment (AT&T)	B	None		0.0000	200.00	No Ice 1/2" Ice 1" Ice	0.07 0.11 0.16	4.01 5.00 6.01	63.79 95.84 138.17
STK-U Stiffener Side Arm Attachment	C	None		0.0000	200.00	No Ice 1/2" Ice	0.07 0.11	4.01 5.00	63.79 95.84

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
(AT&T)						1" Ice	0.16	6.01	138.17
STK-U Stiffener Side Arm Attachment	A	None		0.0000	200.00	No Ice	0.07	4.01	63.79
						1/2" Ice	0.11	5.00	95.84
(AT&T)						1" Ice	0.16	6.01	138.17
STK-U Stiffener Side Arm Attachment	B	None		0.0000	200.00	No Ice	0.07	4.01	63.79
						1/2" Ice	0.11	5.00	95.84
(AT&T)						1" Ice	0.16	6.01	138.17
STK-U Stiffener Side Arm Attachment	C	None		0.0000	200.00	No Ice	0.07	4.01	63.79
						1/2" Ice	0.11	5.00	95.84
(AT&T)						1" Ice	0.16	6.01	138.17
*** EMP-005 AT&T Inventory 08/2019 Updates * Eversource Proposed									
Telewave ANT220F2 - Omni Antenna	C	From Leg	4.00	0.0000	163.00	No Ice	1.03	1.03	14.00
			0.00			1/2" Ice	1.29	1.29	22.80
(Eversource)			0.00			1" Ice	1.56	1.56	34.62
Sitepro1 USF-4U Mount Assembly (Ca = 1.4 assumed)	C	From Leg	0.00	0.0000	160.00	No Ice	2.48	5.14	165.00
			0.00			1/2" Ice	3.25	6.91	318.00
(Eversource)			0.00			1" Ice	4.03	8.67	474.00
Telewave ANT220F2 - Omni Antenna	C	From Leg	4.00	0.0000	145.00	No Ice	1.03	1.03	14.00
			0.00			1/2" Ice	1.29	1.29	22.80
(Eversource)			0.00			1" Ice	1.56	1.56	34.62
Sitepro1 USF-4U Mount Assembly (Ca = 1.4 assumed)	C	From Leg	0.00	0.0000	142.00	No Ice	2.48	5.14	165.00
			0.00			1/2" Ice	3.25	6.91	318.00
(Eversource)			0.00			1" Ice	4.03	8.67	474.00

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
* CSP Inventory from HighTower Solutions Climb											
PA8-65	A	Paraboloid	From	0.50	Worst		107.00	8.00	No Ice	50.27	285.00
(ECI-63)		w/Shroud (HP)	Leg	0.00					1/2" Ice	51.29	548.30
				0.00					1" Ice	52.31	811.60
Andrew 2' w/Radome	C	Paraboloid	From	0.50	Worst		112.00	2.00	No Ice	3.14	70.00
(ECI-61)		w/Radome	Leg	0.00					1/2" Ice	3.41	282.00
				0.00					1" Ice	3.68	494.00
* CSP Proposed											
Commscope	C	Paraboloid	From	0.50	Worst		154.00	6.00	No Ice	28.27	310.00
PAR6-59W-PXA/A		w/Radome	Leg	0.00					1/2" Ice	29.07	460.00
(ECI-58)				0.00					1" Ice	29.86	610.00

222-H Verification Constants

Constant	*Value*
K_d	0.85
Ice Thickness Importance Factor	1.15
Z_g	900
α	9.5
K_{zmin}	0.85
K_c	1
K_t	0.53
f	2
K_e	1

222-H Section Verification ArRr By Element

Section Elevation *ft*	*Elem. Num.*	*Size*	*C*	*C w/Ice*	*Face*	*e*	*e w/Ice*	A_r ft^2	A_r *w/Ice* ft^2	A_rR_r ft^2	A_rR_r *w/Ice* ft^2
T1	1	ROHN 5 EH	82.308	44.611	C	0.209	0.397	7.417	11.257	3.346	7.145
320.00-304.00											
	1	ROHN 5 EH	82.308	44.611	A	0.209	0.397	7.417	11.257	3.346	7.145
	2	ROHN 5 EH	82.308	44.611	C	0.209	0.397	7.417	11.257	3.346	7.145
	2	ROHN 5 EH	82.308	44.611	B	0.209	0.397	7.417	11.257	3.346	7.145
	3	ROHN 5 EH	82.308	44.611	B	0.209	0.397	7.417	11.257	3.346	7.145
	3	ROHN 5 EH	82.308	44.611	A	0.209	0.397	7.417	11.257	3.346	7.145
					A		Sum:	14.835	22.513	6.692	14.291
					B			14.835	22.513	6.692	14.291
					C			14.835	22.513	6.692	14.291
T2	31	ROHN 5 EH	82.028	44.41	C	0.201	0.376	1.854	2.811	0.828	1.760
304.00-300.00											
	31	ROHN 5 EH	82.028	44.41	A	0.201	0.376	1.854	2.811	0.828	1.760
	32	ROHN 5 EH	82.028	44.41	C	0.201	0.376	1.854	2.811	0.828	1.760
	32	ROHN 5 EH	82.028	44.41	B	0.201	0.376	1.854	2.811	0.828	1.760
	33	ROHN 5 EH	82.028	44.41	B	0.201	0.376	1.854	2.811	0.828	1.760
	33	ROHN 5 EH	82.028	44.41	A	0.201	0.376	1.854	2.811	0.828	1.760
					A		Sum:	3.709	5.622	1.656	3.520
					B			3.709	5.622	1.656	3.520
					C			3.709	5.622	1.656	3.520
T3	40	ROHN 6 EH	97.274	49.73	C	0.207	0.361	11.061	15.833	4.974	9.818
300.00-280.00											
	40	ROHN 6 EH	97.274	49.73	A	0.207	0.361	11.061	15.833	4.974	9.818
	41	ROHN 6 EH	97.274	49.73	C	0.207	0.361	11.061	15.833	4.974	9.818
	41	ROHN 6 EH	97.274	49.73	B	0.207	0.361	11.061	15.833	4.974	9.818
	42	ROHN 6 EH	97.274	49.73	B	0.207	0.361	11.061	15.833	4.974	9.818
	42	ROHN 6 EH	97.274	49.73	A	0.207	0.361	11.061	15.833	4.974	9.818
					A		Sum:	22.122	31.667	9.949	19.637
					B			22.122	31.667	9.949	19.637
					C			22.122	31.667	9.949	19.637
T4					A		Sum:	0.000	0.000	0.000	0.000
280.00-260.00					B			0.000	0.000	0.000	0.000
					C			0.000	0.000	0.000	0.000
T5					A		Sum:	0.000	0.000	0.000	0.000
260.00-240.00					B			0.000	0.000	0.000	0.000
					C			0.000	0.000	0.000	0.000
T6					A		Sum:	0.000	0.000	0.000	0.000
240.00-220.00					B			0.000	0.000	0.000	0.000
					C			0.000	0.000	0.000	0.000
T7					A		Sum:	0.000	0.000	0.000	0.000
220.00-200.00					B			0.000	0.000	0.000	0.000
					C			0.000	0.000	0.000	0.000
T8					A		Sum:	0.000	0.000	0.000	0.000

Section Elevation ft	Elem. Num.	Size	C	C w/Ice	Face	e	e w/Ice	A_r ft^2	A_r w/Ice ft^2	A_rR_r ft^2	A_rR_r w/Ice ft^2
200.00-180.00					B			0.000	0.000	0.000	0.000
					C			0.000	0.000	0.000	0.000
T9					A		Sum:	0.000	0.000	0.000	0.000
180.00-170.00					B			0.000	0.000	0.000	0.000
					C			0.000	0.000	0.000	0.000
T10					A		Sum:	0.000	0.000	0.000	0.000
170.00-160.00					B			0.000	0.000	0.000	0.000
					C			0.000	0.000	0.000	0.000
T11					A		Sum:	0.000	0.000	0.000	0.000
160.00-140.00					B			0.000	0.000	0.000	0.000
					C			0.000	0.000	0.000	0.000
T12					A		Sum:	0.000	0.000	0.000	0.000
140.00-120.00					B			0.000	0.000	0.000	0.000
					C			0.000	0.000	0.000	0.000
T13	214	ROHN 3 STD	47.3	29.584	C	0.131	0.181	7.130	12.487	3.797	7.135
120.00-100.00											
	215	ROHN 3 XXS	47.3	29.584	C	0.131	0.181	6.882	12.051	3.664	6.886
	216	ROHN 1.5 STD	25.677	21.861	C	0.131	0.181	0.930	2.218	0.526	1.267
	217	ROHN 2 STD	32.097	24.154	C	0.131	0.181	2.092	4.407	1.183	2.518
	218	ROHN 3 XXS	47.3	29.584	C	0.131	0.181	6.882	12.051	3.664	6.886
	219	ROHN 1.5 STD	25.677	21.861	C	0.131	0.181	0.930	2.218	0.526	1.267
	220	ROHN 2 STD	32.097	24.154	C	0.131	0.181	2.092	4.407	1.183	2.518
	221	ROHN 3 STD	47.3	29.584	B	0.131	0.181	7.130	12.487	3.797	7.135
	222	ROHN 3 XXS	47.3	29.584	B	0.131	0.181	6.882	12.051	3.664	6.886
	223	ROHN 1.5 STD	25.677	21.861	B	0.131	0.181	0.930	2.218	0.526	1.267
	224	ROHN 2 STD	32.097	24.154	B	0.131	0.181	2.092	4.407	1.183	2.518
	225	ROHN 3 XXS	47.3	29.584	B	0.131	0.181	6.882	12.051	3.664	6.886
	226	ROHN 1.5 STD	25.677	21.861	B	0.131	0.181	0.930	2.218	0.526	1.267
	227	ROHN 2 STD	32.097	24.154	B	0.131	0.181	2.092	4.407	1.183	2.518
	230	ROHN 3 STD	47.3	29.584	A	0.131	0.181	7.130	12.487	3.797	7.135
	231	ROHN 3 XXS	47.3	29.584	A	0.131	0.181	6.882	12.051	3.664	6.886
	232	ROHN 1.5 STD	25.677	21.861	A	0.131	0.181	0.930	2.218	0.526	1.267
	233	ROHN 2 STD	32.097	24.154	A	0.131	0.181	2.092	4.407	1.183	2.518
	234	ROHN 3 XXS	47.3	29.584	A	0.131	0.181	6.882	12.051	3.664	6.886
	235	ROHN 1.5 STD	25.677	21.861	A	0.131	0.181	0.930	2.218	0.526	1.267
	236	ROHN 2 STD	32.097	24.154	A	0.131	0.181	2.092	4.407	1.183	2.518
					A		Sum:	26.937	49.840	14.546	28.479
					B			26.937	49.840	14.546	28.479
					C			26.937	49.840	14.546	28.479
T14	247	ROHN 3 EH	47.038	29.305	C	0.122	0.17	7.883	13.751	4.196	7.837
100.00-80.00											
	248	ROHN 3 XXS	47.038	29.305	C	0.122	0.17	7.109	12.401	3.784	7.068
	249	P1.5x.145	25.535	21.625	C	0.122	0.17	1.033	2.448	0.584	1.395
	250	ROHN 2 EH	31.986	23.929	C	0.122	0.17	2.178	4.563	1.232	2.601
	251	ROHN 3 XXS	47.038	29.305	C	0.122	0.17	7.109	12.401	3.784	7.068
	252	P1.5x.145	25.535	21.625	C	0.122	0.17	1.033	2.448	0.584	1.395
	253	ROHN 2 EH	31.986	23.929	C	0.122	0.17	2.178	4.563	1.232	2.601
	254	ROHN 3 EH	47.038	29.305	B	0.122	0.17	7.883	13.751	4.196	7.837
	255	ROHN 3 XXS	47.038	29.305	B	0.122	0.17	7.109	12.401	3.784	7.068
	256	P1.5x.145	25.535	21.625	B	0.122	0.17	1.033	2.448	0.584	1.395
	257	ROHN 2 EH	31.986	23.929	B	0.122	0.17	2.178	4.563	1.232	2.601
	258	ROHN 3 XXS	47.038	29.305	B	0.122	0.17	7.109	12.401	3.784	7.068
	259	P1.5x.145	25.535	21.625	B	0.122	0.17	1.033	2.448	0.584	1.395
	260	ROHN 2 EH	31.986	23.929	B	0.122	0.17	2.178	4.563	1.232	2.601
	263	ROHN 3 EH	47.038	29.305	A	0.122	0.17	7.883	13.751	4.196	7.837
	264	ROHN 3 XXS	47.038	29.305	A	0.122	0.17	7.109	12.401	3.784	7.068
	265	P1.5x.145	25.535	21.625	A	0.122	0.17	1.033	2.448	0.584	1.395
	266	ROHN 2 EH	31.986	23.929	A	0.122	0.17	2.178	4.563	1.232	2.601
	267	ROHN 3 XXS	47.038	29.305	A	0.122	0.17	7.109	12.401	3.784	7.068
	268	P1.5x.145	25.535	21.625	A	0.122	0.17	1.033	2.448	0.584	1.395

Section Elevation ft	Elem. Num.	Size	C	C w/Ice	Face	e	e w/Ice	A_r ft^2	A_r w/Ice ft^2	A_rR_r ft^2	A_rR_r w/Ice ft^2
	269	ROHN 2 EH	31.986	23.929	A	0.122	0.17	2.178	4.563	1.232	2.601
					A		Sum:	28.523	52.577	15.395	29.965
					B			28.523	52.577	15.395	29.965
					C			28.523	52.577	15.395	29.965
T15 80.00-60.00	280	ROHN 3 XXS	47.101	29.273	C	0.127	0.173	8.577	14.926	4.570	8.511
	281	ROHN 3 XXS	47.101	29.273	C	0.127	0.173	7.336	12.766	3.908	7.280
	282	ROHN 2 STD	31.961	23.866	C	0.127	0.173	1.402	2.932	0.793	1.672
	283	ROHN 2 EH	32.029	23.89	C	0.127	0.173	2.232	4.662	1.262	2.658
	284	ROHN 3 XXS	47.101	29.273	C	0.127	0.173	7.336	12.766	3.908	7.280
	285	ROHN 2 STD	31.961	23.866	C	0.127	0.173	1.402	2.932	0.793	1.672
	286	ROHN 2 EH	32.029	23.89	C	0.127	0.173	2.232	4.662	1.262	2.658
	287	ROHN 3 XXS	47.101	29.273	B	0.127	0.173	8.577	14.926	4.570	8.511
	288	ROHN 3 XXS	47.101	29.273	B	0.127	0.173	7.336	12.766	3.908	7.280
	289	ROHN 2 STD	31.961	23.866	B	0.127	0.173	1.402	2.932	0.793	1.672
	290	ROHN 2 EH	32.029	23.89	B	0.127	0.173	2.232	4.662	1.262	2.658
	291	ROHN 3 XXS	47.101	29.273	B	0.127	0.173	7.336	12.766	3.908	7.280
	292	ROHN 2 STD	31.961	23.866	B	0.127	0.173	1.402	2.932	0.793	1.672
	293	ROHN 2 EH	32.029	23.89	B	0.127	0.173	2.232	4.662	1.262	2.658
	296	ROHN 3 XXS	47.101	29.273	A	0.127	0.173	8.577	14.926	4.570	8.511
	297	ROHN 3 XXS	47.101	29.273	A	0.127	0.173	7.336	12.766	3.908	7.280
	298	ROHN 2 STD	31.961	23.866	A	0.127	0.173	1.402	2.932	0.793	1.672
	299	ROHN 2 EH	32.029	23.89	A	0.127	0.173	2.232	4.662	1.262	2.658
	300	ROHN 3 XXS	47.101	29.273	A	0.127	0.173	7.336	12.766	3.908	7.280
	301	ROHN 2 STD	31.961	23.866	A	0.127	0.173	1.402	2.932	0.793	1.672
	302	ROHN 2 EH	32.029	23.89	A	0.127	0.173	2.232	4.662	1.262	2.658
					A		Sum:	30.518	55.645	16.498	31.731
					B			30.518	55.645	16.498	31.731
					C			30.518	55.645	16.498	31.731
T16 60.00-30.00	313	ROHN 3.5 EH	54.877	32.316	C	0.122	0.165	10.693	17.630	5.348	10.036
	314	ROHN 4 EH	61.736	34.766	C	0.122	0.165	12.823	20.219	6.052	11.509
	315	ROHN 1.5 STD	26.067	22.026	C	0.122	0.165	0.790	1.870	0.447	1.065
	316	ROHN 2 XXS	32.583	24.354	C	0.122	0.165	2.081	4.356	1.176	2.479
	317	ROHN 2 EH	32.652	24.378	C	0.122	0.165	1.972	4.123	1.115	2.347
	318	ROHN 2.5 STD	39.443	26.804	C	0.122	0.165	3.288	6.256	1.853	3.561
	319	ROHN 4 EH	61.736	34.766	C	0.122	0.165	12.823	20.219	6.052	11.509
	320	ROHN 1.5 STD	26.067	22.026	C	0.122	0.165	0.790	1.870	0.447	1.065
	321	ROHN 2 XXS	32.583	24.354	C	0.122	0.165	2.081	4.356	1.176	2.479
	322	ROHN 2 EH	32.652	24.378	C	0.122	0.165	1.972	4.123	1.115	2.347
	323	ROHN 2.5 STD	39.443	26.804	C	0.122	0.165	3.288	6.256	1.853	3.561
	324	ROHN 3.5 EH	54.877	32.316	B	0.122	0.165	10.693	17.630	5.348	10.036
	325	ROHN 4 EH	61.736	34.766	B	0.122	0.165	12.823	20.219	6.052	11.509
	326	ROHN 1.5 STD	26.067	22.026	B	0.122	0.165	0.790	1.870	0.447	1.065
	327	ROHN 2 XXS	32.583	24.354	B	0.122	0.165	2.081	4.356	1.176	2.479
	328	ROHN 2 EH	32.652	24.378	B	0.122	0.165	1.972	4.123	1.115	2.347
	329	ROHN 2.5 STD	39.443	26.804	B	0.122	0.165	3.288	6.256	1.853	3.561
	330	ROHN 4 EH	61.736	34.766	B	0.122	0.165	12.823	20.219	6.052	11.509
	331	ROHN 1.5 STD	26.067	22.026	B	0.122	0.165	0.790	1.870	0.447	1.065
	332	ROHN 2 XXS	32.583	24.354	B	0.122	0.165	2.081	4.356	1.176	2.479
	333	ROHN 2 EH	32.652	24.378	B	0.122	0.165	1.972	4.123	1.115	2.347
	334	ROHN 2.5 STD	39.443	26.804	B	0.122	0.165	3.288	6.256	1.853	3.561
	339	ROHN 3.5 EH	54.877	32.316	A	0.122	0.165	10.693	17.630	5.348	10.036
	340	ROHN 4 EH	61.736	34.766	A	0.122	0.165	12.823	20.219	6.052	11.509
	341	ROHN 1.5 STD	26.067	22.026	A	0.122	0.165	0.790	1.870	0.447	1.065
	342	ROHN 2 XXS	32.583	24.354	A	0.122	0.165	2.081	4.356	1.176	2.479
	343	ROHN 2 EH	32.652	24.378	A	0.122	0.165	1.972	4.123	1.115	2.347
	344	ROHN 2.5 STD	39.443	26.804	A	0.122	0.165	3.288	6.256	1.853	3.561
	345	ROHN 4 EH	61.736	34.766	A	0.122	0.165	12.823	20.219	6.052	11.509
	346	ROHN 1.5 STD	26.067	22.026	A	0.122	0.165	0.790	1.870	0.447	1.065
	347	ROHN 2 XXS	32.583	24.354	A	0.122	0.165	2.081	4.356	1.176	2.479
	348	ROHN 2 EH	32.652	24.378	A	0.122	0.165	1.972	4.123	1.115	2.347

Section Elevation ft	Elem. Num.	Size	C	C w/Ice	Face	e	e w/Ice	A_r ft^2	A_r w/Ice ft^2	A_rR_r ft^2	A_rR_r w/Ice ft^2
	349	ROHN 2.5 STD	39.443	26.804	A	0.122	0.165	3.288	6.256	1.853	3.561
					A		Sum:	52.602	91.278	26.633	51.957
					B			52.602	91.278	26.633	51.957
					C			52.602	91.278	26.633	51.957
T17 30.00-0.00	364	ROHN 4 EH	64.741	36.51	C	0.117	0.158	13.402	21.161	6.136	12.028
	365	ROHN 4 EH	64.741	36.51	C	0.117	0.158	13.245	20.914	6.065	11.887
	366	P1.5x.145	27.335	23.151	C	0.117	0.158	0.887	2.103	0.501	1.196
	367	ROHN 2.5 EH	41.363	28.16	C	0.117	0.158	2.812	5.360	1.561	3.046
	368	ROHN 2.5 STD	41.363	28.16	C	0.117	0.158	2.470	4.708	1.371	2.676
	369	ROHN 2.5 STD	41.363	28.16	C	0.117	0.158	3.506	6.683	1.946	3.799
	370	ROHN 4 EH	64.741	36.51	C	0.117	0.158	13.245	20.914	6.065	11.887
	371	P1.5x.145	27.335	23.151	C	0.117	0.158	0.887	2.103	0.501	1.196
	372	ROHN 2.5 EH	41.363	28.16	C	0.117	0.158	2.812	5.360	1.561	3.046
	373	ROHN 2.5 STD	41.363	28.16	C	0.117	0.158	2.470	4.708	1.371	2.676
	374	ROHN 2.5 STD	41.363	28.16	C	0.117	0.158	3.506	6.683	1.946	3.799
	375	ROHN 4 EH	64.741	36.51	B	0.117	0.158	13.402	21.161	6.136	12.028
	376	ROHN 4 EH	64.741	36.51	B	0.117	0.158	13.245	20.914	6.065	11.887
	377	P1.5x.145	27.335	23.151	B	0.117	0.158	0.887	2.103	0.501	1.196
	378	ROHN 2.5 EH	41.363	28.16	B	0.117	0.158	2.812	5.360	1.561	3.046
	379	ROHN 2.5 STD	41.363	28.16	B	0.117	0.158	2.470	4.708	1.371	2.676
	380	ROHN 2.5 STD	41.363	28.16	B	0.117	0.158	3.506	6.683	1.946	3.799
	381	ROHN 4 EH	64.741	36.51	B	0.117	0.158	13.245	20.914	6.065	11.887
	382	P1.5x.145	27.335	23.151	B	0.117	0.158	0.887	2.103	0.501	1.196
	383	ROHN 2.5 EH	41.363	28.16	B	0.117	0.158	2.812	5.360	1.561	3.046
	384	ROHN 2.5 STD	41.363	28.16	B	0.117	0.158	2.470	4.708	1.371	2.676
	385	ROHN 2.5 STD	41.363	28.16	B	0.117	0.158	3.506	6.683	1.946	3.799
	390	ROHN 4 EH	64.741	36.51	A	0.117	0.158	13.402	21.161	6.136	12.028
	391	ROHN 4 EH	64.741	36.51	A	0.117	0.158	13.245	20.914	6.065	11.887
	392	P1.5x.145	27.335	23.151	A	0.117	0.158	0.887	2.103	0.501	1.196
	393	ROHN 2.5 EH	41.363	28.16	A	0.117	0.158	2.812	5.360	1.561	3.046
	394	ROHN 2.5 STD	41.363	28.16	A	0.117	0.158	2.470	4.708	1.371	2.676
	395	ROHN 2.5 STD	41.363	28.16	A	0.117	0.158	3.506	6.683	1.946	3.799
	396	ROHN 4 EH	64.741	36.51	A	0.117	0.158	13.245	20.914	6.065	11.887
	397	P1.5x.145	27.335	23.151	A	0.117	0.158	0.887	2.103	0.501	1.196
	398	ROHN 2.5 EH	41.363	28.16	A	0.117	0.158	2.812	5.360	1.561	3.046
	399	ROHN 2.5 STD	41.363	28.16	A	0.117	0.158	2.470	4.708	1.371	2.676
	400	ROHN 2.5 STD	41.363	28.16	A	0.117	0.158	3.506	6.683	1.946	3.799
					A		Sum:	59.240	100.698	29.025	57.236
					B			59.240	100.698	29.025	57.236
					C			59.240	100.698	29.025	57.236

222-H Section Verification Tables - No Ice

Section Elevation ft	z_{wind} ft	z_{ice} ft	K_z	K_h	K_{zt}	t_z in	q_z psf	Face	e	A_rR_r ft^2
T1 320.00-304.00	312.00		1.608	11890.1	1		69	A	0.209	6.692
								B	0.209	6.692
								C	0.209	6.692
T2 304.00-300.00	302.00		1.597	8801.76	1		68	A	0.201	1.656
								B	0.201	1.656
								C	0.201	1.656

Section Elevation ft	z_{wind} ft	z_{ice} ft	K_z	K_h	K_{zt}	t_z in	q_z psf	Face	e	A_rR_r ft²
T3 300.00-280.00	290.00		1.584	6135.24	1		68	A	0.207	9.949
								B	0.207	9.949
								C	0.207	9.949
T4 280.00-260.00	270.00		1.56	3362.03	1		67	A	0.237	0.000
								B	0.237	0.000
								C	0.237	0.000
T5 260.00-240.00	250.00		1.535	1842.35	1.001		66	A	0.219	0.000
								B	0.219	0.000
								C	0.219	0.000
T6 240.00-220.00	230.00		1.508	1009.58	1.001		64	A	0.223	0.000
								B	0.223	0.000
								C	0.223	0.000
T7 220.00-200.00	210.00		1.48	553.239	1.002		63	A	0.181	0.000
								B	0.181	0.000
								C	0.181	0.000
T8 200.00-180.00	190.00		1.449	303.168	1.003		62	A	0.187	0.000
								B	0.187	0.000
								C	0.187	0.000
T9 180.00-170.00	175.00		1.424	193.09	1.005		61	A	0.177	0.000
								B	0.177	0.000
								C	0.177	0.000
T10 170.00-160.00	165.00		1.406	142.937	1.007		60	A	0.171	0.000
								B	0.171	0.000
								C	0.171	0.000
T11 160.00-140.00	150.00		1.378	91.038	1.012		59	A	0.181	0.000
								B	0.181	0.000
								C	0.181	0.000
T12 140.00-120.00	130.00		1.337	49.888	1.021		58	A	0.173	0.000
								B	0.173	0.000
								C	0.173	0.000
T13 120.00-100.00	110.00		1.291	27.338	1.039		57	A	0.131	14.546
								B	0.131	14.546
								C	0.131	14.546
T14 100.00-80.00	90.00		1.238	14.981	1.072		57	A	0.122	15.395
								B	0.122	15.395
								C	0.122	15.395
T15 80.00-60.00	70.00		1.174	8.209	1.133		57	A	0.127	16.498
								B	0.127	16.498
								C	0.127	16.498
T16 60.00-30.00	45.00		1.07	3.87	1.293		59	A	0.122	26.633
								B	0.122	26.633
								C	0.122	26.633
T17 30.00-0.00	15.00		0.85	1.57	1.789		65	A	0.117	29.025
								B	0.117	29.025
								C	0.117	29.025

222-H Section Verification Tables - Ice

Section Elevation ft	z_{wind} ft	z_{ice} ft	K_z	K_h	K_{zt}	t_z in	q_z psf	Face	e	A_rR_r ft²
T1 320.00-304.00	312.00	312.00	1.608	11890.1	1	1.4397	9	A	0.397	24.226
								B	0.397	24.226
								C	0.397	24.226
T2 304.00-300.00	302.00	302.00	1.597	8801.76	1	1.4350	9	A	0.376	5.724
								B	0.376	5.724

Section Elevation ft	z_{wind} ft	z_{ice} ft	K_z	K_h	K_{zt}	t_z in	q_z psf	Face	e	A_rR_r ft²
								C	0.376	5.724
T3 300.00-280.00	290.00	290.00	1.584	6135.24	1	1.4293	9	A	0.361	30.771
								B	0.361	30.771
								C	0.361	30.771
T4 280.00-260.00	270.00	270.00	1.56	3362.03	1	1.4192	8	A	0.33	9.387
								B	0.33	9.387
								C	0.33	9.387
T5 260.00-240.00	250.00	250.00	1.535	1842.35	1.001	1.4084	8	A	0.307	10.777
								B	0.307	10.777
								C	0.307	10.777
T6 240.00-220.00	230.00	230.00	1.508	1009.58	1.001	1.3969	8	A	0.307	12.230
								B	0.307	12.230
								C	0.307	12.230
T7 220.00-200.00	210.00	210.00	1.48	553.239	1.002	1.3847	8	A	0.245	9.623
								B	0.245	9.623
								C	0.245	9.623
T8 200.00-180.00	190.00	190.00	1.449	303.168	1.003	1.3717	8	A	0.246	10.497
								B	0.246	10.497
								C	0.246	10.497
T9 180.00-170.00	175.00	175.00	1.424	193.09	1.005	1.3614	8	A	0.235	5.560
								B	0.235	5.560
								C	0.235	5.560
T10 170.00-160.00	165.00	165.00	1.406	142.937	1.007	1.3543	8	A	0.228	5.765
								B	0.228	5.765
								C	0.228	5.765
T11 160.00-140.00	150.00	150.00	1.378	91.038	1.012	1.3434	8	A	0.236	12.176
								B	0.236	12.176
								C	0.236	12.176
T12 140.00-120.00	130.00	130.00	1.337	49.888	1.021	1.3288	7	A	0.226	12.970
								B	0.226	12.970
								C	0.226	12.970
T13 120.00-100.00	110.00	110.00	1.291	27.338	1.039	1.3147	7	A	0.181	28.479
								B	0.181	28.479
								C	0.181	28.479
T14 100.00-80.00	90.00	90.00	1.238	14.981	1.072	1.3027	7	A	0.17	29.965
								B	0.17	29.965
								C	0.17	29.965
T15 80.00-60.00	70.00	70.00	1.174	8.209	1.133	1.2953	7	A	0.173	31.731
								B	0.173	31.731
								C	0.173	31.731
T16 60.00-30.00	45.00	45.00	1.07	3.87	1.293	1.2977	8	A	0.165	51.957
								B	0.165	51.957
								C	0.165	51.957
T17 30.00-0.00	15.00	15.00	0.85	1.57	1.789	1.3028	8	A	0.158	57.236
								B	0.158	57.236
								C	0.158	57.236

222-H Section Verification Tables - Service

Section Elevation ft	z_{wind} ft	z_{ice} ft	K_z	K_h	K_{zt}	t_z in	q_z psf	Face	e	A_rR_r ft²
T1 320.00-304.00	312.00		1.608	11890.1	1		13	A	0.209	8.547
								B	0.209	8.547
								C	0.209	8.547
T2 304.00-300.00	302.00		1.597	8801.76	1		13	A	0.201	2.131

Section Elevation ft	z_{wind} ft	z_{ice} ft	K_z	K_h	K_{zt}	t_z in	q_z psf	Face	e	$A_r R_r$ ft²
								B	0.201	2.131
								C	0.201	2.131
T3 300.00-280.00	290.00		1.584	6135.24	1		12	A	0.207	12.544
								B	0.207	12.544
								C	0.207	12.544
T4 280.00-260.00	270.00		1.56	3362.03	1		12	A	0.237	0.000
								B	0.237	0.000
								C	0.237	0.000
T5 260.00-240.00	250.00		1.535	1842.35	1.001		12	A	0.219	0.000
								B	0.219	0.000
								C	0.219	0.000
T6 240.00-220.00	230.00		1.508	1009.58	1.001		12	A	0.223	0.000
								B	0.223	0.000
								C	0.223	0.000
T7 220.00-200.00	210.00		1.48	553.239	1.002		12	A	0.181	0.000
								B	0.181	0.000
								C	0.181	0.000
T8 200.00-180.00	190.00		1.449	303.168	1.003		11	A	0.187	0.000
								B	0.187	0.000
								C	0.187	0.000
T9 180.00-170.00	175.00		1.424	193.09	1.005		11	A	0.177	0.000
								B	0.177	0.000
								C	0.177	0.000
T10 170.00-160.00	165.00		1.406	142.937	1.007		11	A	0.171	0.000
								B	0.171	0.000
								C	0.171	0.000
T11 160.00-140.00	150.00		1.378	91.038	1.012		11	A	0.181	0.000
								B	0.181	0.000
								C	0.181	0.000
T12 140.00-120.00	130.00		1.337	49.888	1.021		11	A	0.173	0.000
								B	0.173	0.000
								C	0.173	0.000
T13 120.00-100.00	110.00		1.291	27.338	1.039		11	A	0.131	15.243
								B	0.131	15.243
								C	0.131	15.243
T14 100.00-80.00	90.00		1.238	14.981	1.072		10	A	0.122	16.124
								B	0.122	16.124
								C	0.122	16.124
T15 80.00-60.00	70.00		1.174	8.209	1.133		10	A	0.127	17.261
								B	0.127	17.261
								C	0.127	17.261
T16 60.00-30.00	45.00		1.07	3.87	1.293		11	A	0.122	29.736
								B	0.122	29.736
								C	0.122	29.736
T17 30.00-0.00	15.00		0.85	1.57	1.789		12	A	0.117	33.471
								B	0.117	33.471
								C	0.117	33.471

Tower Pressures - No Ice

$G_H = 0.850$

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	$C_A A_A$ In Face ft²	$C_A A_A$ Out Face ft²

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
T1	312.00	1.608	69	116.377	A	9.512	14.835	14.835	60.93	0.000	0.000
320.00-304.00					B	9.512	14.835		60.93	5.561	0.000
					C	9.512	14.835		60.93	0.000	0.000
T2	302.00	1.597	68	29.094	A	2.147	3.709	3.709	63.34	0.000	0.000
304.00-300.00					B	2.147	3.709		63.34	1.540	0.000
					C	2.147	3.709		63.34	0.000	0.000
T3	290.00	1.584	68	167.656	A	12.563	22.122	22.122	63.78	0.000	0.000
300.00-280.00					B	12.563	22.122		63.78	13.483	0.000
					C	12.563	22.122		63.78	0.000	0.000
T4	270.00	1.56	67	216.829	A	51.368	0.000	37.788	73.56	0.000	0.000
280.00-260.00					B	51.368	0.000		73.56	26.676	0.000
					C	51.368	0.000		73.56	0.000	0.000
T5	250.00	1.535	66	259.126	A	56.868	0.000	37.778	66.43	0.000	0.000
260.00-240.00					B	56.868	0.000		66.43	37.174	0.000
					C	56.868	0.000		66.43	0.000	0.000
T6	230.00	1.508	64	299.625	A	66.901	0.000	37.776	56.46	0.000	0.000
240.00-220.00					B	66.901	0.000		56.46	49.355	0.000
					C	66.901	0.000		56.46	0.000	0.000
T7	210.00	1.48	63	339.725	A	61.588	0.000	37.775	61.34	0.000	0.000
220.00-200.00					B	61.588	0.000		61.34	49.900	0.000
					C	61.588	0.000		61.34	30.160	0.000
T8	190.00	1.449	62	385.076	A	71.839	0.000	45.633	63.52	30.040	0.000
200.00-180.00					B	71.839	0.000		63.52	49.900	0.000
					C	71.839	0.000		63.52	30.160	0.000
T9	175.00	1.424	61	208.387	A	36.864	0.000	22.815	61.89	15.020	0.000
180.00-170.00					B	36.864	0.000		61.89	27.055	0.000
					C	36.864	0.000		61.89	15.080	0.000
T10	165.00	1.406	60	218.787	A	37.492	0.000	22.815	60.85	15.020	0.000
170.00-160.00					B	37.492	0.000		60.85	29.412	0.000
					C	37.492	0.000		60.85	15.080	0.000
T11	150.00	1.378	59	467.070	A	84.562	0.000	45.617	53.94	30.040	0.000
160.00-140.00					B	84.562	0.000		53.94	65.283	0.000
					C	84.562	0.000		53.94	30.160	0.000
T12	130.00	1.337	58	507.978	A	87.738	0.000	45.637	52.02	30.040	0.000
140.00-120.00					B	87.738	0.000		52.02	71.886	0.000
					C	87.738	0.000		52.02	30.160	0.000
T13	110.00	1.291	57	555.591	A	45.673	26.937	45.673	62.90	30.040	0.000
120.00-100.00					B	45.673	26.937		62.90	76.650	0.000
					C	45.673	26.937		62.90	30.160	0.000
T14	90.00	1.238	57	606.388	A	45.666	28.523	45.666	61.55	30.040	0.000
100.00-80.00					B	45.666	28.523		61.55	83.818	0.000
					C	45.666	28.523		61.55	30.160	0.000
T15	70.00	1.174	57	662.098	A	53.708	30.518	53.708	63.77	30.040	0.000
80.00-60.00					B	53.708	30.518		63.77	85.889	0.000
					C	53.708	30.518		63.77	30.160	0.000
T16	45.00	1.07	59	1088.08	A	80.523	52.602	80.523	60.49	45.060	0.000
60.00-30.00				3	B	80.523	52.602		60.49	128.833	0.000
					C	80.523	52.602		60.49	45.240	0.000
T17 30.00-0.00	15.00	0.85	65	1202.12	A	81.480	59.240	81.480	57.90	37.550	0.000
				2	B	81.480	59.240		57.90	107.361	0.000
					C	81.480	59.240		57.90	37.700	0.000

Tower Pressure - With Ice

$G_H = 0.850$

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	312.00	1.608	9	1.4397	120.217	A	9.512	38.165	22.513	47.22	0.000	0.000
320.00-304.00						B	9.512	38.165		47.22	22.405	0.000
						C	9.512	38.165		47.22	0.000	0.000
T2	302.00	1.597	9	1.4350	30.051	A	2.147	9.143	5.622	49.80	0.000	0.000
304.00-300.00						B	2.147	9.143		49.80	6.132	0.000
						C	2.147	9.143		49.80	0.000	0.000
T3	290.00	1.584	9	1.4293	172.426	A	12.563	49.623	31.667	50.92	0.000	0.000
300.00-280.00						B	12.563	49.623		50.92	49.786	0.000
						C	12.563	49.623		50.92	0.000	0.000
T4	270.00	1.56	8	1.4192	221.567	A	57.688	15.419	44.108	60.33	0.000	0.000
280.00-260.00						B	57.688	15.419		60.33	89.970	0.000
						C	57.688	15.419		60.33	0.000	0.000
T5	250.00	1.535	8	1.4084	263.827	A	63.139	17.925	44.048	54.34	0.000	0.000
260.00-240.00						B	63.139	17.925		54.34	118.862	0.000
						C	63.139	17.925		54.34	0.000	0.000
T6	230.00	1.508	8	1.3969	304.288	A	73.120	20.343	43.995	47.07	0.000	0.000
240.00-220.00						B	73.120	20.343		47.07	154.126	0.000
						C	73.120	20.343		47.07	0.000	0.000
T7	210.00	1.48	8	1.3847	344.347	A	67.752	16.487	43.940	52.16	0.000	0.000
220.00-200.00						B	67.752	16.487		52.16	155.138	0.000
						C	67.752	16.487		52.16	84.362	0.000
T8	190.00	1.449	8	1.3717	389.655	A	77.947	17.973	51.741	53.94	85.834	0.000
200.00-180.00						B	77.947	17.973		53.94	154.148	0.000
						C	77.947	17.973		53.94	84.196	0.000
T9	175.00	1.424	8	1.3614	210.660	A	39.895	9.563	25.845	52.26	42.830	0.000
180.00-170.00						B	39.895	9.563		52.26	84.506	0.000
						C	39.895	9.563		52.26	42.033	0.000
T10	165.00	1.406	8	1.3543	221.048	A	40.507	9.939	25.830	51.20	42.771	0.000
170.00-160.00						B	40.507	9.939		51.20	93.607	0.000
						C	40.507	9.939		51.20	41.988	0.000
T11	150.00	1.378	8	1.3434	471.554	A	90.542	20.928	51.596	46.29	85.358	0.000
160.00-140.00						B	90.542	20.928		46.29	204.733	0.000
						C	90.542	20.928		46.29	83.838	0.000
T12	130.00	1.337	7	1.3288	512.414	A	93.655	22.377	51.555	44.43	85.111	0.000
140.00-120.00						B	93.655	22.377		44.43	223.633	0.000
						C	93.655	22.377		44.43	83.653	0.000
T13	110.00	1.291	7	1.3147	559.982	A	51.533	49.840	51.533	50.83	84.874	0.000
120.00-100.00						B	51.533	49.840		50.83	234.150	0.000
						C	51.533	49.840		50.83	83.474	0.000
T14	90.00	1.238	7	1.3027	610.739	A	51.471	52.577	51.471	49.47	84.672	0.000
100.00-80.00						B	51.471	52.577		49.47	250.822	0.000
						C	51.471	52.577		49.47	83.322	0.000
T15 80.00-60.00	70.00	1.174	7	1.2953	666.426	A	59.482	55.645	59.482	51.67	84.548	0.000
						B	59.482	55.645		51.67	256.871	0.000
						C	59.482	55.645		51.67	83.229	0.000
T16 60.00-30.00	45.00	1.07	8	1.2977	1094.584	A	89.196	91.278	89.196	49.42	126.883	0.000
						B	89.196	91.278		49.42	385.783	0.000
						C	89.196	91.278		49.42	124.889	0.000
T17 30.00-0.00	15.00	0.85	8	1.3028	1208.649	A	90.189	100.698	90.189	47.25	105.842	0.000
						B	90.189	100.698		47.25	322.322	0.000
						C	90.189	100.698		47.25	104.154	0.000

Tower Pressure - Service

$G_H = 0.850$

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
T1	312.00	1.608	13	116.377	A	9.512	14.835	14.835	60.93	0.000	0.000
320.00-304.00					B	9.512	14.835		60.93	5.561	0.000
					C	9.512	14.835		60.93	0.000	0.000
T2	302.00	1.597	13	29.094	A	2.147	3.709	3.709	63.34	0.000	0.000
304.00-300.00					B	2.147	3.709		63.34	1.540	0.000
					C	2.147	3.709		63.34	0.000	0.000
T3	290.00	1.584	12	167.656	A	12.563	22.122	22.122	63.78	0.000	0.000
300.00-280.00					B	12.563	22.122		63.78	13.483	0.000
					C	12.563	22.122		63.78	0.000	0.000
T4	270.00	1.56	12	216.829	A	51.368	0.000	37.788	73.56	0.000	0.000
280.00-260.00					B	51.368	0.000		73.56	26.676	0.000
					C	51.368	0.000		73.56	0.000	0.000
T5	250.00	1.535	12	259.126	A	56.868	0.000	37.778	66.43	0.000	0.000
260.00-240.00					B	56.868	0.000		66.43	37.174	0.000
					C	56.868	0.000		66.43	0.000	0.000
T6	230.00	1.508	12	299.625	A	66.901	0.000	37.776	56.46	0.000	0.000
240.00-220.00					B	66.901	0.000		56.46	49.355	0.000
					C	66.901	0.000		56.46	0.000	0.000
T7	210.00	1.48	12	339.725	A	61.588	0.000	37.775	61.34	0.000	0.000
220.00-200.00					B	61.588	0.000		61.34	49.900	0.000
					C	61.588	0.000		61.34	30.160	0.000
T8	190.00	1.449	11	385.076	A	71.839	0.000	45.633	63.52	30.040	0.000
200.00-180.00					B	71.839	0.000		63.52	49.900	0.000
					C	71.839	0.000		63.52	30.160	0.000
T9	175.00	1.424	11	208.387	A	36.864	0.000	22.815	61.89	15.020	0.000
180.00-170.00					B	36.864	0.000		61.89	27.055	0.000
					C	36.864	0.000		61.89	15.080	0.000
T10	165.00	1.406	11	218.787	A	37.492	0.000	22.815	60.85	15.020	0.000
170.00-160.00					B	37.492	0.000		60.85	29.412	0.000
					C	37.492	0.000		60.85	15.080	0.000
T11	150.00	1.378	11	467.070	A	84.562	0.000	45.617	53.94	30.040	0.000
160.00-140.00					B	84.562	0.000		53.94	65.283	0.000
					C	84.562	0.000		53.94	30.160	0.000
T12	130.00	1.337	11	507.978	A	87.738	0.000	45.637	52.02	30.040	0.000
140.00-120.00					B	87.738	0.000		52.02	71.886	0.000
					C	87.738	0.000		52.02	30.160	0.000
T13	110.00	1.291	11	555.591	A	45.673	26.937	45.673	62.90	30.040	0.000
120.00-100.00					B	45.673	26.937		62.90	76.650	0.000
					C	45.673	26.937		62.90	30.160	0.000
T14	90.00	1.238	10	606.388	A	45.666	28.523	45.666	61.55	30.040	0.000
100.00-80.00					B	45.666	28.523		61.55	83.818	0.000
					C	45.666	28.523		61.55	30.160	0.000
T15	70.00	1.174	10	662.098	A	53.708	30.518	53.708	63.77	30.040	0.000
80.00-60.00					B	53.708	30.518		63.77	85.889	0.000
					C	53.708	30.518		63.77	30.160	0.000
T16	45.00	1.07	11	1088.08	A	80.523	52.602	80.523	60.49	45.060	0.000
60.00-30.00				3	B	80.523	52.602		60.49	128.833	0.000
					C	80.523	52.602		60.49	45.240	0.000
T17 30.00-0.00	15.00	0.85	12	1202.12	A	81.480	59.240	81.480	57.90	37.550	0.000
				2	B	81.480	59.240		57.90	107.361	0.000
					C	81.480	59.240		57.90	37.700	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 ft²	F lb	w plf	Ctrl. Face
T1	15.90	1442.07	A	0.209	2.566	69	1	1	16.204	2618.40	163.65	C
320.00-304.00			B	0.209	2.566		1	1	16.204			
			C	0.209	2.566		1	1	16.204			
T2	4.36	349.72	A	0.201	2.592	68	1	1	3.803	624.23	156.06	C
304.00-300.00			B	0.201	2.592		1	1	3.803			
			C	0.201	2.592		1	1	3.803			
T3	40.00	2496.34	A	0.207	2.573	68	1	1	22.512	3790.64	189.53	C
300.00-280.00			B	0.207	2.573		1	1	22.512			
			C	0.207	2.573		1	1	22.512			
T4	87.48	5067.66	A	0.237	2.477	67	1	1	51.368	8104.45	405.22	C
280.00-260.00			B	0.237	2.477		1	1	51.368			
			C	0.237	2.477		1	1	51.368			
T5	122.62	5409.17	A	0.219	2.532	66	1	1	56.868	9259.42	462.97	C
260.00-240.00			B	0.219	2.532		1	1	56.868			
			C	0.219	2.532		1	1	56.868			
T6	162.20	6484.36	A	0.223	2.52	64	1	1	66.901	10848.52	542.43	C
240.00-220.00			B	0.223	2.52		1	1	66.901			
			C	0.223	2.52		1	1	66.901			
T7	362.40	6406.00	A	0.181	2.66	63	1	1	61.588	11384.48	569.22	C
220.00-200.00			B	0.181	2.66		1	1	61.588			
			C	0.181	2.66		1	1	61.588			
T8	534.20	7298.65	A	0.187	2.642	62	1	1	71.839	13482.76	674.14	C
200.00-180.00			B	0.187	2.642		1	1	71.839			
			C	0.187	2.642		1	1	71.839			
T9	272.46	3730.84	A	0.177	2.675	61	1	1	36.864	6897.89	689.79	C
180.00-170.00			B	0.177	2.675		1	1	36.864			
			C	0.177	2.675		1	1	36.864			
T10	279.59	3785.29	A	0.171	2.694	60	1	1	37.492	7022.55	702.26	C
170.00-160.00			B	0.171	2.694		1	1	37.492			
			C	0.171	2.694		1	1	37.492			
T11	579.39	9608.59	A	0.181	2.661	59	1	1	84.562	15179.59	758.98	C
160.00-140.00			B	0.181	2.661		1	1	84.562			
			C	0.181	2.661		1	1	84.562			
T12	599.08	9975.29	A	0.173	2.69	58	1	1	87.738	15611.31	780.57	C
140.00-120.00			B	0.173	2.69		1	1	87.738			
			C	0.173	2.69		1	1	87.738			
T13	609.33	9144.95	A	0.131	2.844	57	1	1	60.219	12324.59	616.23	C
120.00-100.00			B	0.131	2.844		1	1	60.219			
			C	0.131	2.844		1	1	60.219			
T14	625.08	9675.54	A	0.122	2.876	57	1	1	61.061	12604.51	630.23	C
100.00-80.00			B	0.122	2.876		1	1	61.061			
			C	0.122	2.876		1	1	61.061			
T15	630.40	11450.50	A	0.127	2.857	57	1	1	70.206	13903.45	695.17	C
80.00-60.00			B	0.127	2.857		1	1	70.206			
			C	0.127	2.857		1	1	70.206			
T16	945.60	15115.36	A	0.122	2.876	59	1	1	107.156	22039.49	734.65	C
60.00-30.00			B	0.122	2.876		1	1	107.156			
			C	0.122	2.876		1	1	107.156			
T17	788.00	17941.94	A	0.117	2.896	65	1	1	110.505	23685.38	789.51	C
30.00-0.00			B	0.117	2.896		1	1	110.505			
			C	0.117	2.896		1	1	110.505			
Sum Weight:	6658.09	125382.28						OTM	25538.10 kip-ft	189381.67		

Tower Forces - No Ice - Wind 45 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
T1	15.90	1442.07	A	0.209	2.566	69	0.825	1	14.539	2369.39	148.09	C
320.00-304.00			B	0.209	2.566		0.825	1	14.539			
			C	0.209	2.566		0.825	1	14.539			
T2	4.36	349.72	A	0.201	2.592	68	0.825	1	3.427	567.84	141.96	C
304.00-300.00			B	0.201	2.592		0.825	1	3.427			
			C	0.201	2.592		0.825	1	3.427			
T3	40.00	2496.34	A	0.207	2.573	68	0.825	1	20.313	3465.81	173.29	C
300.00-280.00			B	0.207	2.573		0.825	1	20.313			
			C	0.207	2.573		0.825	1	20.313			
T4	87.48	5067.66	A	0.237	2.477	67	0.825	1	42.379	6844.62	342.23	C
280.00-260.00			B	0.237	2.477		0.825	1	42.379			
			C	0.237	2.477		0.825	1	42.379			
T5	122.62	5409.17	A	0.219	2.532	66	0.825	1	46.916	7856.34	392.82	C
260.00-240.00			B	0.219	2.532		0.825	1	46.916			
			C	0.219	2.532		0.825	1	46.916			
T6	162.20	6484.36	A	0.223	2.52	64	0.825	1	55.194	9233.67	461.68	C
240.00-220.00			B	0.223	2.52		0.825	1	55.194			
			C	0.223	2.52		0.825	1	55.194			
T7	362.40	6406.00	A	0.181	2.66	63	0.825	1	50.810	9843.96	492.20	C
220.00-200.00			B	0.181	2.66		0.825	1	50.810			
			C	0.181	2.66		0.825	1	50.810			
T8	534.20	7298.65	A	0.187	2.642	62	0.825	1	59.267	11732.56	586.63	C
200.00-180.00			B	0.187	2.642		0.825	1	59.267			
			C	0.187	2.642		0.825	1	59.267			
T9	272.46	3730.84	A	0.177	2.675	61	0.825	1	30.413	6002.24	600.22	C
180.00-170.00			B	0.177	2.675		0.825	1	30.413			
			C	0.177	2.675		0.825	1	30.413			
T10	279.59	3785.29	A	0.171	2.694	60	0.825	1	30.931	6114.55	611.46	C
170.00-160.00			B	0.171	2.694		0.825	1	30.931			
			C	0.171	2.694		0.825	1	30.931			
T11	579.39	9608.59	A	0.181	2.661	59	0.825	1	69.763	13189.24	659.46	C
160.00-140.00			B	0.181	2.661		0.825	1	69.763			
			C	0.181	2.661		0.825	1	69.763			
T12	599.08	9975.29	A	0.173	2.69	58	0.825	1	72.384	13566.16	678.31	C
140.00-120.00			B	0.173	2.69		0.825	1	72.384			
			C	0.173	2.69		0.825	1	72.384			
T13	609.33	9144.95	A	0.131	2.844	57	0.825	1	52.226	11218.90	560.95	C
120.00-100.00			B	0.131	2.844		0.825	1	52.226			
			C	0.131	2.844		0.825	1	52.226			
T14	625.08	9675.54	A	0.122	2.876	57	0.825	1	53.069	11498.90	574.95	C
100.00-80.00			B	0.122	2.876		0.825	1	53.069			
			C	0.122	2.876		0.825	1	53.069			
T15	630.40	11450.50	A	0.127	2.857	57	0.825	1	60.807	12608.13	630.41	C
80.00-60.00			B	0.127	2.857		0.825	1	60.807			
			C	0.127	2.857		0.825	1	60.807			
T16	945.60	15115.36	A	0.122	2.876	59	0.825	1	93.064	20007.96	666.93	C
60.00-30.00			B	0.122	2.876		0.825	1	93.064			
			C	0.122	2.876		0.825	1	93.064			
T17	788.00	17941.94	A	0.117	2.896	65	0.825	1	96.246	21408.56	713.62	C
30.00-0.00			B	0.117	2.896		0.825	1	96.246			
			C	0.117	2.896		0.825	1	96.246			
Sum Weight:	6658.09	125382.28						OTM	22322.43 kip-ft	167528.83		

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 ft²	F lb	w plf	Ctrl. Face
T1	15.90	1442.07	A	0.209	2.566	69	0.8	1	14.302	2333.81	145.86	C
320.00-304.00			B	0.209	2.566		0.8	1	14.302			
			C	0.209	2.566		0.8	1	14.302			
T2	4.36	349.72	A	0.201	2.592	68	0.8	1	3.373	559.79	139.95	C
304.00-300.00			B	0.201	2.592		0.8	1	3.373			
			C	0.201	2.592		0.8	1	3.373			
T3	40.00	2496.34	A	0.207	2.573	68	0.8	1	19.999	3419.40	170.97	C
300.00-280.00			B	0.207	2.573		0.8	1	19.999			
			C	0.207	2.573		0.8	1	19.999			
T4	87.48	5067.66	A	0.237	2.477	67	0.8	1	41.095	6664.65	333.23	C
280.00-260.00			B	0.237	2.477		0.8	1	41.095			
			C	0.237	2.477		0.8	1	41.095			
T5	122.62	5409.17	A	0.219	2.532	66	0.8	1	45.494	7655.90	382.79	C
260.00-240.00			B	0.219	2.532		0.8	1	45.494			
			C	0.219	2.532		0.8	1	45.494			
T6	162.20	6484.36	A	0.223	2.52	64	0.8	1	53.521	9002.97	450.15	C
240.00-220.00			B	0.223	2.52		0.8	1	53.521			
			C	0.223	2.52		0.8	1	53.521			
T7	362.40	6406.00	A	0.181	2.66	63	0.8	1	49.270	9623.88	481.19	C
220.00-200.00			B	0.181	2.66		0.8	1	49.270			
			C	0.181	2.66		0.8	1	49.270			
T8	534.20	7298.65	A	0.187	2.642	62	0.8	1	57.471	11482.53	574.13	C
200.00-180.00			B	0.187	2.642		0.8	1	57.471			
			C	0.187	2.642		0.8	1	57.471			
T9	272.46	3730.84	A	0.177	2.675	61	0.8	1	29.491	5874.29	587.43	C
180.00-170.00			B	0.177	2.675		0.8	1	29.491			
			C	0.177	2.675		0.8	1	29.491			
T10	279.59	3785.29	A	0.171	2.694	60	0.8	1	29.994	5984.84	598.48	C
170.00-160.00			B	0.171	2.694		0.8	1	29.994			
			C	0.171	2.694		0.8	1	29.994			
T11	579.39	9608.59	A	0.181	2.661	59	0.8	1	67.649	12904.91	645.25	C
160.00-140.00			B	0.181	2.661		0.8	1	67.649			
			C	0.181	2.661		0.8	1	67.649			
T12	599.08	9975.29	A	0.173	2.69	58	0.8	1	70.190	13274.00	663.70	C
140.00-120.00			B	0.173	2.69		0.8	1	70.190			
			C	0.173	2.69		0.8	1	70.190			
T13	609.33	9144.95	A	0.131	2.844	57	0.8	1	51.085	11060.95	553.05	C
120.00-100.00			B	0.131	2.844		0.8	1	51.085			
			C	0.131	2.844		0.8	1	51.085			
T14	625.08	9675.54	A	0.122	2.876	57	0.8	1	51.928	11340.96	567.05	C
100.00-80.00			B	0.122	2.876		0.8	1	51.928			
			C	0.122	2.876		0.8	1	51.928			
T15	630.40	11450.50	A	0.127	2.857	57	0.8	1	59.464	12423.09	621.15	C
80.00-60.00			B	0.127	2.857		0.8	1	59.464			
			C	0.127	2.857		0.8	1	59.464			
T16	945.60	15115.36	A	0.122	2.876	59	0.8	1	91.051	19717.74	657.26	C
60.00-30.00			B	0.122	2.876		0.8	1	91.051			
			C	0.122	2.876		0.8	1	91.051			
T17	788.00	17941.94	A	0.117	2.896	65	0.8	1	94.209	21083.30	702.78	C
30.00-0.00			B	0.117	2.896		0.8	1	94.209			
			C	0.117	2.896		0.8	1	94.209			
Sum Weight:	6658.09	125382.28						OTM	21863.05 kip-ft	164406.99		

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 ft²	F lb	w plf	Ctrl. Face
T1	15.90	1442.07	A	0.209	2.566	69	0.85	1	14.777	2404.96	150.31	C
320.00-304.00			B	0.209	2.566		0.85	1	14.777			
			C	0.209	2.566		0.85	1	14.777			
T2	4.36	349.72	A	0.201	2.592	68	0.85	1	3.481	575.90	143.97	C
304.00-300.00			B	0.201	2.592		0.85	1	3.481			
			C	0.201	2.592		0.85	1	3.481			
T3	40.00	2496.34	A	0.207	2.573	68	0.85	1	20.627	3512.21	175.61	C
300.00-280.00			B	0.207	2.573		0.85	1	20.627			
			C	0.207	2.573		0.85	1	20.627			
T4	87.48	5067.66	A	0.237	2.477	67	0.85	1	43.663	7024.60	351.23	C
280.00-260.00			B	0.237	2.477		0.85	1	43.663			
			C	0.237	2.477		0.85	1	43.663			
T5	122.62	5409.17	A	0.219	2.532	66	0.85	1	48.338	8056.78	402.84	C
260.00-240.00			B	0.219	2.532		0.85	1	48.338			
			C	0.219	2.532		0.85	1	48.338			
T6	162.20	6484.36	A	0.223	2.52	64	0.85	1	56.866	9464.36	473.22	C
240.00-220.00			B	0.223	2.52		0.85	1	56.866			
			C	0.223	2.52		0.85	1	56.866			
T7	362.40	6406.00	A	0.181	2.66	63	0.85	1	52.350	10064.03	503.20	C
220.00-200.00			B	0.181	2.66		0.85	1	52.350			
			C	0.181	2.66		0.85	1	52.350			
T8	534.20	7298.65	A	0.187	2.642	62	0.85	1	61.063	11982.59	599.13	C
200.00-180.00			B	0.187	2.642		0.85	1	61.063			
			C	0.187	2.642		0.85	1	61.063			
T9	272.46	3730.84	A	0.177	2.675	61	0.85	1	31.334	6130.19	613.02	C
180.00-170.00			B	0.177	2.675		0.85	1	31.334			
			C	0.177	2.675		0.85	1	31.334			
T10	279.59	3785.29	A	0.171	2.694	60	0.85	1	31.869	6244.27	624.43	C
170.00-160.00			B	0.171	2.694		0.85	1	31.869			
			C	0.171	2.694		0.85	1	31.869			
T11	579.39	9608.59	A	0.181	2.661	59	0.85	1	71.877	13473.58	673.68	C
160.00-140.00			B	0.181	2.661		0.85	1	71.877			
			C	0.181	2.661		0.85	1	71.877			
T12	599.08	9975.29	A	0.173	2.69	58	0.85	1	74.577	13858.33	692.92	C
140.00-120.00			B	0.173	2.69		0.85	1	74.577			
			C	0.173	2.69		0.85	1	74.577			
T13	609.33	9144.95	A	0.131	2.844	57	0.85	1	53.368	11376.86	568.84	C
120.00-100.00			B	0.131	2.844		0.85	1	53.368			
			C	0.131	2.844		0.85	1	53.368			
T14	625.08	9675.54	A	0.122	2.876	57	0.85	1	54.211	11656.85	582.84	C
100.00-80.00			B	0.122	2.876		0.85	1	54.211			
			C	0.122	2.876		0.85	1	54.211			
T15	630.40	11450.50	A	0.127	2.857	57	0.85	1	62.150	12793.18	639.66	C
80.00-60.00			B	0.127	2.857		0.85	1	62.150			
			C	0.127	2.857		0.85	1	62.150			
T16	945.60	15115.36	A	0.122	2.876	59	0.85	1	95.078	20298.18	676.61	C
60.00-30.00			B	0.122	2.876		0.85	1	95.078			
			C	0.122	2.876		0.85	1	95.078			
T17	788.00	17941.94	A	0.117	2.896	65	0.85	1	98.283	21733.82	724.46	C
30.00-0.00			B	0.117	2.896		0.85	1	98.283			
			C	0.117	2.896		0.85	1	98.283			
Sum Weight:	6658.09	125382.28						OTM	22781.81 kip-ft	170650.66		

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 ft^2	F lb	w plf	Ctrl. Face
T1	261.85	3479.11	A	0.397	2.071	9	1	1	33.738	619.55	38.72	C
320.00-304.00			B	0.397	2.071		1	1	33.738			
			C	0.397	2.071		1	1	33.738			
T2	71.62	821.79	A	0.376	2.114	9	1	1	7.871	150.08	37.52	C
304.00-300.00			B	0.376	2.114		1	1	7.871			
			C	0.376	2.114		1	1	7.871			
T3	592.40	5152.34	A	0.361	2.147	9	1	1	43.335	900.25	45.01	C
300.00-280.00			B	0.361	2.147		1	1	43.335			
			C	0.361	2.147		1	1	43.335			
T4	1098.70	9553.22	A	0.33	2.219	8	1	1	67.075	1463.66	73.18	C
280.00-260.00			B	0.33	2.219		1	1	67.075			
			C	0.33	2.219		1	1	67.075			
T5	1465.07	10434.30	A	0.307	2.277	8	1	1	73.915	1701.59	85.08	C
260.00-240.00			B	0.307	2.277		1	1	73.915			
			C	0.307	2.277		1	1	73.915			
T6	1898.59	12452.94	A	0.307	2.277	8	1	1	85.350	2002.42	100.12	C
240.00-220.00			B	0.307	2.277		1	1	85.350			
			C	0.307	2.277		1	1	85.350			
T7	3016.37	11683.11	A	0.245	2.454	8	1	1	77.376	2286.43	114.32	C
220.00-200.00			B	0.245	2.454		1	1	77.376			
			C	0.245	2.454		1	1	77.376			
T8	4081.67	13202.41	A	0.246	2.449	8	1	1	88.444	2763.64	138.18	C
200.00-180.00			B	0.246	2.449		1	1	88.444			
			C	0.246	2.449		1	1	88.444			
T9	2112.84	6756.36	A	0.235	2.484	8	1	1	45.455	1420.22	142.02	C
180.00-170.00			B	0.235	2.484		1	1	45.455			
			C	0.235	2.484		1	1	45.455			
T10	2205.64	6858.43	A	0.228	2.504	8	1	1	46.272	1460.30	146.03	C
170.00-160.00			B	0.228	2.504		1	1	46.272			
			C	0.228	2.504		1	1	46.272			
T11	4581.87	16563.91	A	0.236	2.479	8	1	1	102.718	3088.60	154.43	C
160.00-140.00			B	0.236	2.479		1	1	102.718			
			C	0.236	2.479		1	1	102.718			
T12	4759.58	17156.52	A	0.226	2.51	7	1	1	106.625	3177.75	158.89	C
140.00-120.00			B	0.226	2.51		1	1	106.625			
			C	0.226	2.51		1	1	106.625			
T13	4836.64	15024.43	A	0.181	2.661	7	1	1	80.012	2819.23	140.96	C
120.00-100.00			B	0.181	2.661		1	1	80.012			
			C	0.181	2.661		1	1	80.012			
T14	4985.09	15674.17	A	0.17	2.698	7	1	1	81.435	2890.06	144.50	C
100.00-80.00			B	0.17	2.698		1	1	81.435			
			C	0.17	2.698		1	1	81.435			
T15	5030.92	18017.30	A	0.173	2.69	7	1	1	91.214	3076.92	153.85	C
80.00-60.00			B	0.173	2.69		1	1	91.214			
			C	0.173	2.69		1	1	91.214			
T16	7561.96	25360.00	A	0.165	2.717	8	1	1	141.153	4898.66	163.29	C
60.00-30.00			B	0.165	2.717		1	1	141.153			
			C	0.165	2.717		1	1	141.153			
T17	6329.02	28872.58	A	0.158	2.743	8	1	1	147.426	5088.95	169.63	C
30.00-0.00			B	0.158	2.743		1	1	147.426			
			C	0.158	2.743		1	1	147.426			
Sum Weight:	54889.82	217062.94						OTM	5234.35 kip-ft	39808.33		

Tower Forces - With Ice - Wind 45 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
T1	261.85	3479.11	A	0.397	2.071	9	0.825	1	32.074	593.92	37.12	C
320.00-304.00			B	0.397	2.071		0.825	1	32.074			
			C	0.397	2.071		0.825	1	32.074			
T2	71.62	821.79	A	0.376	2.114	9	0.825	1	7.495	144.22	36.05	C
304.00-300.00			B	0.376	2.114		0.825	1	7.495			
			C	0.376	2.114		0.825	1	7.495			
T3	592.40	5152.34	A	0.361	2.147	9	0.825	1	41.136	865.67	43.28	C
300.00-280.00			B	0.361	2.147		0.825	1	41.136			
			C	0.361	2.147		0.825	1	41.136			
T4	1098.70	9553.22	A	0.33	2.219	8	0.825	1	56.980	1301.99	65.10	C
280.00-260.00			B	0.33	2.219		0.825	1	56.980			
			C	0.33	2.219		0.825	1	56.980			
T5	1465.07	10434.30	A	0.307	2.277	8	0.825	1	62.866	1522.94	76.15	C
260.00-240.00			B	0.307	2.277		0.825	1	62.866			
			C	0.307	2.277		0.825	1	62.866			
T6	1898.59	12452.94	A	0.307	2.277	8	0.825	1	72.554	1799.00	89.95	C
240.00-220.00			B	0.307	2.277		0.825	1	72.554			
			C	0.307	2.277		0.825	1	72.554			
T7	3016.37	11683.11	A	0.245	2.454	8	0.825	1	65.519	2087.01	104.35	C
220.00-200.00			B	0.245	2.454		0.825	1	65.519			
			C	0.245	2.454		0.825	1	65.519			
T8	4081.67	13202.41	A	0.246	2.449	8	0.825	1	74.803	2539.07	126.95	C
200.00-180.00			B	0.246	2.449		0.825	1	74.803			
			C	0.246	2.449		0.825	1	74.803			
T9	2112.84	6756.36	A	0.235	2.484	8	0.825	1	38.473	1305.41	130.54	C
180.00-170.00			B	0.235	2.484		0.825	1	38.473			
			C	0.235	2.484		0.825	1	38.473			
T10	2205.64	6858.43	A	0.228	2.504	8	0.825	1	39.183	1344.00	134.40	C
170.00-160.00			B	0.228	2.504		0.825	1	39.183			
			C	0.228	2.504		0.825	1	39.183			
T11	4581.87	16563.91	A	0.236	2.479	8	0.825	1	86.873	2835.33	141.77	C
160.00-140.00			B	0.236	2.479		0.825	1	86.873			
			C	0.236	2.479		0.825	1	86.873			
T12	4759.58	17156.52	A	0.226	2.51	7	0.825	1	90.235	2917.89	145.89	C
140.00-120.00			B	0.226	2.51		0.825	1	90.235			
			C	0.226	2.51		0.825	1	90.235			
T13	4836.64	15024.43	A	0.181	2.661	7	0.825	1	70.994	2670.36	133.52	C
120.00-100.00			B	0.181	2.661		0.825	1	70.994			
			C	0.181	2.661		0.825	1	70.994			
T14	4985.09	15674.17	A	0.17	2.698	7	0.825	1	72.428	2740.95	137.05	C
100.00-80.00			B	0.17	2.698		0.825	1	72.428			
			C	0.17	2.698		0.825	1	72.428			
T15	5030.92	18017.30	A	0.173	2.69	7	0.825	1	80.804	2904.68	145.23	C
80.00-60.00			B	0.173	2.69		0.825	1	80.804			
			C	0.173	2.69		0.825	1	80.804			
T16	7561.96	25360.00	A	0.165	2.717	8	0.825	1	125.544	4627.43	154.25	C
60.00-30.00			B	0.165	2.717		0.825	1	125.544			
			C	0.165	2.717		0.825	1	125.544			
T17	6329.02	28872.58	A	0.158	2.743	8	0.825	1	131.643	4784.58	159.49	C
30.00-0.00			B	0.158	2.743		0.825	1	131.643			
			C	0.158	2.743		0.825	1	131.643			
Sum Weight:	54889.82	217062.94						OTM	4825.22 kip-ft	36984.43		

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
T1	261.85	3479.11	A	0.397	2.071	9	0.8	1	31.836	590.25	36.89	C
320.00-304.00			B	0.397	2.071		0.8	1	31.836			
			C	0.397	2.071		0.8	1	31.836			
T2	71.62	821.79	A	0.376	2.114	9	0.8	1	7.441	143.38	35.84	C
304.00-300.00			B	0.376	2.114		0.8	1	7.441			
			C	0.376	2.114		0.8	1	7.441			
T3	592.40	5152.34	A	0.361	2.147	9	0.8	1	40.822	860.73	43.04	C
300.00-280.00			B	0.361	2.147		0.8	1	40.822			
			C	0.361	2.147		0.8	1	40.822			
T4	1098.70	9553.22	A	0.33	2.219	8	0.8	1	55.538	1278.90	63.94	C
280.00-260.00			B	0.33	2.219		0.8	1	55.538			
			C	0.33	2.219		0.8	1	55.538			
T5	1465.07	10434.30	A	0.307	2.277	8	0.8	1	61.287	1497.42	74.87	C
260.00-240.00			B	0.307	2.277		0.8	1	61.287			
			C	0.307	2.277		0.8	1	61.287			
T6	1898.59	12452.94	A	0.307	2.277	8	0.8	1	70.726	1769.94	88.50	C
240.00-220.00			B	0.307	2.277		0.8	1	70.726			
			C	0.307	2.277		0.8	1	70.726			
T7	3016.37	11683.11	A	0.245	2.454	8	0.8	1	63.825	2058.52	102.93	C
220.00-200.00			B	0.245	2.454		0.8	1	63.825			
			C	0.245	2.454		0.8	1	63.825			
T8	4081.67	13202.41	A	0.246	2.449	8	0.8	1	72.855	2506.99	125.35	C
200.00-180.00			B	0.246	2.449		0.8	1	72.855			
			C	0.246	2.449		0.8	1	72.855			
T9	2112.84	6756.36	A	0.235	2.484	8	0.8	1	37.476	1289.01	128.90	C
180.00-170.00			B	0.235	2.484		0.8	1	37.476			
			C	0.235	2.484		0.8	1	37.476			
T10	2205.64	6858.43	A	0.228	2.504	8	0.8	1	38.171	1327.38	132.74	C
170.00-160.00			B	0.228	2.504		0.8	1	38.171			
			C	0.228	2.504		0.8	1	38.171			
T11	4581.87	16563.91	A	0.236	2.479	8	0.8	1	84.609	2799.14	139.96	C
160.00-140.00			B	0.236	2.479		0.8	1	84.609			
			C	0.236	2.479		0.8	1	84.609			
T12	4759.58	17156.52	A	0.226	2.51	7	0.8	1	87.894	2880.76	144.04	C
140.00-120.00			B	0.226	2.51		0.8	1	87.894			
			C	0.226	2.51		0.8	1	87.894			
T13	4836.64	15024.43	A	0.181	2.661	7	0.8	1	69.705	2649.09	132.45	C
120.00-100.00			B	0.181	2.661		0.8	1	69.705			
			C	0.181	2.661		0.8	1	69.705			
T14	4985.09	15674.17	A	0.17	2.698	7	0.8	1	71.141	2719.65	135.98	C
100.00-80.00			B	0.17	2.698		0.8	1	71.141			
			C	0.17	2.698		0.8	1	71.141			
T15	5030.92	18017.30	A	0.173	2.69	7	0.8	1	79.317	2880.07	144.00	C
80.00-60.00			B	0.173	2.69		0.8	1	79.317			
			C	0.173	2.69		0.8	1	79.317			
T16	7561.96	25360.00	A	0.165	2.717	8	0.8	1	123.314	4588.69	152.96	C
60.00-30.00			B	0.165	2.717		0.8	1	123.314			
			C	0.165	2.717		0.8	1	123.314			
T17	6329.02	28872.58	A	0.158	2.743	8	0.8	1	129.388	4741.10	158.04	C
30.00-0.00			B	0.158	2.743		0.8	1	129.388			
			C	0.158	2.743		0.8	1	129.388			
Sum Weight:	54889.82	217062.94						OTM	4766.78	36581.01		

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

Tower Forces - With Ice - Wind 90 To Face

Section Elevation	Add Weight	Self Weight	Face	e	C_F	q_z	D_F	D_R	A_E	F	w	Ctrl. Face
ft	lb	lb				psf			ft^2	lb	plf	
T1	261.85	3479.11	A	0.397	2.071	9	0.85	1	32.312	597.58	37.35	C
320.00-304.00			B	0.397	2.071		0.85	1	32.312			
			C	0.397	2.071		0.85	1	32.312			
T2	71.62	821.79	A	0.376	2.114	9	0.85	1	7.549	145.05	36.26	C
304.00-300.00			B	0.376	2.114		0.85	1	7.549			
			C	0.376	2.114		0.85	1	7.549			
T3	592.40	5152.34	A	0.361	2.147	9	0.85	1	41.450	870.61	43.53	C
300.00-280.00			B	0.361	2.147		0.85	1	41.450			
			C	0.361	2.147		0.85	1	41.450			
T4	1098.70	9553.22	A	0.33	2.219	8	0.85	1	58.422	1325.09	66.25	C
280.00-260.00			B	0.33	2.219		0.85	1	58.422			
			C	0.33	2.219		0.85	1	58.422			
T5	1465.07	10434.30	A	0.307	2.277	8	0.85	1	64.444	1548.46	77.42	C
260.00-240.00			B	0.307	2.277		0.85	1	64.444			
			C	0.307	2.277		0.85	1	64.444			
T6	1898.59	12452.94	A	0.307	2.277	8	0.85	1	74.382	1828.06	91.40	C
240.00-220.00			B	0.307	2.277		0.85	1	74.382			
			C	0.307	2.277		0.85	1	74.382			
T7	3016.37	11683.11	A	0.245	2.454	8	0.85	1	67.213	2115.49	105.77	C
220.00-200.00			B	0.245	2.454		0.85	1	67.213			
			C	0.245	2.454		0.85	1	67.213			
T8	4081.67	13202.41	A	0.246	2.449	8	0.85	1	76.752	2571.15	128.56	C
200.00-180.00			B	0.246	2.449		0.85	1	76.752			
			C	0.246	2.449		0.85	1	76.752			
T9	2112.84	6756.36	A	0.235	2.484	8	0.85	1	39.471	1321.81	132.18	C
180.00-170.00			B	0.235	2.484		0.85	1	39.471			
			C	0.235	2.484		0.85	1	39.471			
T10	2205.64	6858.43	A	0.228	2.504	8	0.85	1	40.196	1360.61	136.06	C
170.00-160.00			B	0.228	2.504		0.85	1	40.196			
			C	0.228	2.504		0.85	1	40.196			
T11	4581.87	16563.91	A	0.236	2.479	8	0.85	1	89.136	2871.51	143.58	C
160.00-140.00			B	0.236	2.479		0.85	1	89.136			
			C	0.236	2.479		0.85	1	89.136			
T12	4759.58	17156.52	A	0.226	2.51	7	0.85	1	92.577	2955.01	147.75	C
140.00-120.00			B	0.226	2.51		0.85	1	92.577			
			C	0.226	2.51		0.85	1	92.577			
T13	4836.64	15024.43	A	0.181	2.661	7	0.85	1	72.282	2691.62	134.58	C
120.00-100.00			B	0.181	2.661		0.85	1	72.282			
			C	0.181	2.661		0.85	1	72.282			
T14	4985.09	15674.17	A	0.17	2.698	7	0.85	1	73.715	2762.25	138.11	C
100.00-80.00			B	0.17	2.698		0.85	1	73.715			
			C	0.17	2.698		0.85	1	73.715			
T15	5030.92	18017.30	A	0.173	2.69	7	0.85	1	82.291	2929.28	146.46	C
80.00-60.00			B	0.173	2.69		0.85	1	82.291			
			C	0.173	2.69		0.85	1	82.291			
T16	7561.96	25360.00	A	0.165	2.717	8	0.85	1	127.774	4666.18	155.54	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
60.00-30.00			B	0.165	2.717		0.85	1	127.774			
			C	0.165	2.717		0.85	1	127.774			
T17	6329.02	28872.58	A	0.158	2.743	8	0.85	1	133.898	4828.06	160.94	C
30.00-0.00			B	0.158	2.743		0.85	1	133.898			
			C	0.158	2.743		0.85	1	133.898			
Sum Weight:	54889.82	217062.94						OTM	4883.67 kip-ft	37387.84		

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
T1	15.90	1442.07	A	0.209	2.566	13	1	1	18.059	531.91	33.24	C
320.00-304.00			B	0.209	2.566		1	1	18.059			
			C	0.209	2.566		1	1	18.059			
T2	4.36	349.72	A	0.201	2.592	13	1	1	4.278	127.76	31.94	C
304.00-300.00			B	0.201	2.592		1	1	4.278			
			C	0.201	2.592		1	1	4.278			
T3	40.00	2496.34	A	0.207	2.573	12	1	1	25.107	766.66	38.33	C
300.00-280.00			B	0.207	2.573		1	1	25.107			
			C	0.207	2.573		1	1	25.107			
T4	87.48	5067.66	A	0.237	2.477	12	1	1	51.368	1488.57	74.43	C
280.00-260.00			B	0.237	2.477		1	1	51.368			
			C	0.237	2.477		1	1	51.368			
T5	122.62	5409.17	A	0.219	2.532	12	1	1	56.868	1700.71	85.04	C
260.00-240.00			B	0.219	2.532		1	1	56.868			
			C	0.219	2.532		1	1	56.868			
T6	162.20	6484.36	A	0.223	2.52	12	1	1	66.901	1992.59	99.63	C
240.00-220.00			B	0.223	2.52		1	1	66.901			
			C	0.223	2.52		1	1	66.901			
T7	362.40	6406.00	A	0.181	2.66	12	1	1	61.588	2091.03	104.55	C
220.00-200.00			B	0.181	2.66		1	1	61.588			
			C	0.181	2.66		1	1	61.588			
T8	534.20	7298.65	A	0.187	2.642	11	1	1	71.839	2476.43	123.82	C
200.00-180.00			B	0.187	2.642		1	1	71.839			
			C	0.187	2.642		1	1	71.839			
T9	272.46	3730.84	A	0.177	2.675	11	1	1	36.864	1266.96	126.70	C
180.00-170.00			B	0.177	2.675		1	1	36.864			
			C	0.177	2.675		1	1	36.864			
T10	279.59	3785.29	A	0.171	2.694	11	1	1	37.492	1289.86	128.99	C
170.00-160.00			B	0.171	2.694		1	1	37.492			
			C	0.171	2.694		1	1	37.492			
T11	579.39	9608.59	A	0.181	2.661	11	1	1	84.562	2788.09	139.40	C
160.00-140.00			B	0.181	2.661		1	1	84.562			
			C	0.181	2.661		1	1	84.562			
T12	599.08	9975.29	A	0.173	2.69	11	1	1	87.738	2867.38	143.37	C
140.00-120.00			B	0.173	2.69		1	1	87.738			
			C	0.173	2.69		1	1	87.738			
T13	609.33	9144.95	A	0.131	2.844	11	1	1	60.916	2281.41	114.07	C
120.00-100.00			B	0.131	2.844		1	1	60.916			
			C	0.131	2.844		1	1	60.916			
T14	625.08	9675.54	A	0.122	2.876	10	1	1	61.790	2333.65	116.68	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
100.00-80.00			B	0.122	2.876		1	1	61.790			
			C	0.122	2.876		1	1	61.790			
T15	630.40	11450.50	A	0.127	2.857	10	1	1	70.970	2573.03	128.65	C
80.00-60.00			B	0.127	2.857		1	1	70.970			
			C	0.127	2.857		1	1	70.970			
T16	945.60	15115.36	A	0.122	2.876	11	1	1	110.259	4130.24	137.67	C
60.00-30.00			B	0.122	2.876		1	1	110.259			
			C	0.122	2.876		1	1	110.259			
T17	788.00	17941.94	A	0.117	2.896	12	1	1	114.951	4480.77	149.36	C
30.00-0.00			B	0.117	2.896		1	1	114.951			
			C	0.117	2.896		1	1	114.951			
Sum Weight:	6658.09	125382.28						OTM	4741.58 kip-ft	35187.03		

Tower Forces - Service - Wind 45 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
T1	15.90	1442.07	A	0.209	2.566	13	0.825	1	16.395	486.17	30.39	C
320.00-304.00			B	0.209	2.566		0.825	1	16.395			
			C	0.209	2.566		0.825	1	16.395			
T2	4.36	349.72	A	0.201	2.592	13	0.825	1	3.902	117.41	29.35	C
304.00-300.00			B	0.201	2.592		0.825	1	3.902			
			C	0.201	2.592		0.825	1	3.902			
T3	40.00	2496.34	A	0.207	2.573	12	0.825	1	22.908	707.00	35.35	C
300.00-280.00			B	0.207	2.573		0.825	1	22.908			
			C	0.207	2.573		0.825	1	22.908			
T4	87.48	5067.66	A	0.237	2.477	12	0.825	1	42.379	1257.18	62.86	C
280.00-260.00			B	0.237	2.477		0.825	1	42.379			
			C	0.237	2.477		0.825	1	42.379			
T5	122.62	5409.17	A	0.219	2.532	12	0.825	1	46.916	1443.00	72.15	C
260.00-240.00			B	0.219	2.532		0.825	1	46.916			
			C	0.219	2.532		0.825	1	46.916			
T6	162.20	6484.36	A	0.223	2.52	12	0.825	1	55.194	1695.98	84.80	C
240.00-220.00			B	0.223	2.52		0.825	1	55.194			
			C	0.223	2.52		0.825	1	55.194			
T7	362.40	6406.00	A	0.181	2.66	12	0.825	1	50.810	1808.07	90.40	C
220.00-200.00			B	0.181	2.66		0.825	1	50.810			
			C	0.181	2.66		0.825	1	50.810			
T8	534.20	7298.65	A	0.187	2.642	11	0.825	1	59.267	2154.96	107.75	C
200.00-180.00			B	0.187	2.642		0.825	1	59.267			
			C	0.187	2.642		0.825	1	59.267			
T9	272.46	3730.84	A	0.177	2.675	11	0.825	1	30.413	1102.45	110.25	C
180.00-170.00			B	0.177	2.675		0.825	1	30.413			
			C	0.177	2.675		0.825	1	30.413			
T10	279.59	3785.29	A	0.171	2.694	11	0.825	1	30.931	1123.08	112.31	C
170.00-160.00			B	0.171	2.694		0.825	1	30.931			
			C	0.171	2.694		0.825	1	30.931			
T11	579.39	9608.59	A	0.181	2.661	11	0.825	1	69.763	2422.51	121.13	C
160.00-140.00			B	0.181	2.661		0.825	1	69.763			
			C	0.181	2.661		0.825	1	69.763			
T12	599.08	9975.29	A	0.173	2.69	11	0.825	1	72.384	2491.74	124.59	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
140.00-120.00			B	0.173	2.69		0.825	1	72.384			
			C	0.173	2.69		0.825	1	72.384			
T13	609.33	9144.95	A	0.131	2.844	11	0.825	1	52.923	2078.32	103.92	C
120.00-100.00			B	0.131	2.844		0.825	1	52.923			
			C	0.131	2.844		0.825	1	52.923			
T14	625.08	9675.54	A	0.122	2.876	10	0.825	1	53.799	2130.58	106.53	C
100.00-80.00			B	0.122	2.876		0.825	1	53.799			
			C	0.122	2.876		0.825	1	53.799			
T15	630.40	11450.50	A	0.127	2.857	10	0.825	1	61.571	2335.11	116.76	C
80.00-60.00			B	0.127	2.857		0.825	1	61.571			
			C	0.127	2.857		0.825	1	61.571			
T16	945.60	15115.36	A	0.122	2.876	11	0.825	1	96.168	3757.10	125.24	C
60.00-30.00			B	0.122	2.876		0.825	1	96.168			
			C	0.122	2.876		0.825	1	96.168			
T17	788.00	17941.94	A	0.117	2.896	12	0.825	1	100.692	4062.58	135.42	C
30.00-0.00			B	0.117	2.896		0.825	1	100.692			
			C	0.117	2.896		0.825	1	100.692			
Sum Weight:	6658.09	125382.28						OTM	4150.95 kip-ft	31173.24		

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
T1	15.90	1442.07	A	0.209	2.566	13	0.8	1	16.157	479.64	29.98	C
320.00-304.00			B	0.209	2.566		0.8	1	16.157			
			C	0.209	2.566		0.8	1	16.157			
T2	4.36	349.72	A	0.201	2.592	13	0.8	1	3.849	115.93	28.98	C
304.00-300.00			B	0.201	2.592		0.8	1	3.849			
			C	0.201	2.592		0.8	1	3.849			
T3	40.00	2496.34	A	0.207	2.573	12	0.8	1	22.594	698.48	34.92	C
300.00-280.00			B	0.207	2.573		0.8	1	22.594			
			C	0.207	2.573		0.8	1	22.594			
T4	87.48	5067.66	A	0.237	2.477	12	0.8	1	41.095	1224.12	61.21	C
280.00-260.00			B	0.237	2.477		0.8	1	41.095			
			C	0.237	2.477		0.8	1	41.095			
T5	122.62	5409.17	A	0.219	2.532	12	0.8	1	45.494	1406.19	70.31	C
260.00-240.00			B	0.219	2.532		0.8	1	45.494			
			C	0.219	2.532		0.8	1	45.494			
T6	162.20	6484.36	A	0.223	2.52	12	0.8	1	53.521	1653.61	82.68	C
240.00-220.00			B	0.223	2.52		0.8	1	53.521			
			C	0.223	2.52		0.8	1	53.521			
T7	362.40	6406.00	A	0.181	2.66	12	0.8	1	49.270	1767.65	88.38	C
220.00-200.00			B	0.181	2.66		0.8	1	49.270			
			C	0.181	2.66		0.8	1	49.270			
T8	534.20	7298.65	A	0.187	2.642	11	0.8	1	57.471	2109.04	105.45	C
200.00-180.00			B	0.187	2.642		0.8	1	57.471			
			C	0.187	2.642		0.8	1	57.471			
T9	272.46	3730.84	A	0.177	2.675	11	0.8	1	29.491	1078.95	107.90	C
180.00-170.00			B	0.177	2.675		0.8	1	29.491			
			C	0.177	2.675		0.8	1	29.491			
T10	279.59	3785.29	A	0.171	2.694	11	0.8	1	29.994	1099.26	109.93	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
170.00-160.00			B	0.171	2.694		0.8	1	29.994			
			C	0.171	2.694		0.8	1	29.994			
T11	579.39	9608.59	A	0.181	2.661	11	0.8	1	67.649	2370.29	118.51	C
160.00-140.00			B	0.181	2.661		0.8	1	67.649			
			C	0.181	2.661		0.8	1	67.649			
T12	599.08	9975.29	A	0.173	2.69	11	0.8	1	70.190	2438.08	121.90	C
140.00-120.00			B	0.173	2.69		0.8	1	70.190			
			C	0.173	2.69		0.8	1	70.190			
T13	609.33	9144.95	A	0.131	2.844	11	0.8	1	51.781	2049.31	102.47	C
120.00-100.00			B	0.131	2.844		0.8	1	51.781			
			C	0.131	2.844		0.8	1	51.781			
T14	625.08	9675.54	A	0.122	2.876	10	0.8	1	52.657	2101.57	105.08	C
100.00-80.00			B	0.122	2.876		0.8	1	52.657			
			C	0.122	2.876		0.8	1	52.657			
T15	630.40	11450.50	A	0.127	2.857	10	0.8	1	60.228	2301.12	115.06	C
80.00-60.00			B	0.127	2.857		0.8	1	60.228			
			C	0.127	2.857		0.8	1	60.228			
T16	945.60	15115.36	A	0.122	2.876	11	0.8	1	94.154	3703.79	123.46	C
60.00-30.00			B	0.122	2.876		0.8	1	94.154			
			C	0.122	2.876		0.8	1	94.154			
T17	788.00	17941.94	A	0.117	2.896	12	0.8	1	98.655	4002.84	133.43	C
30.00-0.00			B	0.117	2.896		0.8	1	98.655			
			C	0.117	2.896		0.8	1	98.655			
Sum Weight:	6658.09	125382.28						OTM	4066.57 kip-ft	30599.85		

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 ft²	F lb	w plf	Ctrl. Face
T1	15.90	1442.07	A	0.209	2.566	13	0.85	1	16.633	492.70	30.79	C
320.00-304.00			B	0.209	2.566		0.85	1	16.633			
			C	0.209	2.566		0.85	1	16.633			
T2	4.36	349.72	A	0.201	2.592	13	0.85	1	3.956	118.89	29.72	C
304.00-300.00			B	0.201	2.592		0.85	1	3.956			
			C	0.201	2.592		0.85	1	3.956			
T3	40.00	2496.34	A	0.207	2.573	12	0.85	1	23.222	715.52	35.78	C
300.00-280.00			B	0.207	2.573		0.85	1	23.222			
			C	0.207	2.573		0.85	1	23.222			
T4	87.48	5067.66	A	0.237	2.477	12	0.85	1	43.663	1290.23	64.51	C
280.00-260.00			B	0.237	2.477		0.85	1	43.663			
			C	0.237	2.477		0.85	1	43.663			
T5	122.62	5409.17	A	0.219	2.532	12	0.85	1	48.338	1479.82	73.99	C
260.00-240.00			B	0.219	2.532		0.85	1	48.338			
			C	0.219	2.532		0.85	1	48.338			
T6	162.20	6484.36	A	0.223	2.52	12	0.85	1	56.866	1738.35	86.92	C
240.00-220.00			B	0.223	2.52		0.85	1	56.866			
			C	0.223	2.52		0.85	1	56.866			
T7	362.40	6406.00	A	0.181	2.66	12	0.85	1	52.350	1848.50	92.42	C
220.00-200.00			B	0.181	2.66		0.85	1	52.350			
			C	0.181	2.66		0.85	1	52.350			
T8	534.20	7298.65	A	0.187	2.642	11	0.85	1	61.063	2200.88	110.04	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
200.00-180.00			B	0.187	2.642		0.85	1	61.063			
			C	0.187	2.642		0.85	1	61.063			
T9	272.46	3730.84	A	0.177	2.675	11	0.85	1	31.334	1125.95	112.60	C
180.00-170.00			B	0.177	2.675		0.85	1	31.334			
			C	0.177	2.675		0.85	1	31.334			
T10	279.59	3785.29	A	0.171	2.694	11	0.85	1	31.869	1146.91	114.69	C
170.00-160.00			B	0.171	2.694		0.85	1	31.869			
			C	0.171	2.694		0.85	1	31.869			
T11	579.39	9608.59	A	0.181	2.661	11	0.85	1	71.877	2474.74	123.74	C
160.00-140.00			B	0.181	2.661		0.85	1	71.877			
			C	0.181	2.661		0.85	1	71.877			
T12	599.08	9975.29	A	0.173	2.69	11	0.85	1	74.577	2545.41	127.27	C
140.00-120.00			B	0.173	2.69		0.85	1	74.577			
			C	0.173	2.69		0.85	1	74.577			
T13	609.33	9144.95	A	0.131	2.844	11	0.85	1	54.065	2107.33	105.37	C
120.00-100.00			B	0.131	2.844		0.85	1	54.065			
			C	0.131	2.844		0.85	1	54.065			
T14	625.08	9675.54	A	0.122	2.876	10	0.85	1	54.940	2159.59	107.98	C
100.00-80.00			B	0.122	2.876		0.85	1	54.940			
			C	0.122	2.876		0.85	1	54.940			
T15	630.40	11450.50	A	0.127	2.857	10	0.85	1	62.913	2369.10	118.45	C
80.00-60.00			B	0.127	2.857		0.85	1	62.913			
			C	0.127	2.857		0.85	1	62.913			
T16	945.60	15115.36	A	0.122	2.876	11	0.85	1	98.181	3810.40	127.01	C
60.00-30.00			B	0.122	2.876		0.85	1	98.181			
			C	0.122	2.876		0.85	1	98.181			
T17	788.00	17941.94	A	0.117	2.896	12	0.85	1	102.729	4122.32	137.41	C
30.00-0.00			B	0.117	2.896		0.85	1	102.729			
			C	0.117	2.896		0.85	1	102.729			
Sum Weight:	6658.09	125382.28						OTM	4235.32 kip-ft	31746.64		

Force Totals

Load Case	Vertical Forces lb	Sum of Forces X lb	Sum of Forces Z lb	Sum of Overturning Moments, M_x kip-ft	Sum of Overturning Moments, M_z kip-ft	Sum of Torques kip-ft
Leg Weight	73044.53					
Bracing Weight	52337.75					
Total Member Self-Weight	125382.28			41.33	-24.48	
Total Weight	140925.07			41.33	-24.48	
Wind 0 deg - No Ice		0.00	-219836.84	-31830.29	-24.48	299.87
Wind 30 deg - No Ice		100552.92	-174162.76	-25173.29	-14582.15	377.85
Wind 45 deg - No Ice		139995.83	-139995.83	-20221.49	-20287.30	379.13
Wind 60 deg - No Ice		168755.59	-97431.08	-14056.96	-24443.43	354.58
Wind 90 deg - No Ice		201105.84	0.00	41.33	-29139.82	236.30
Wind 120 deg - No Ice		190384.29	109918.42	15977.14	-27626.11	54.70
Wind 135 deg - No Ice		148825.71	148825.71	21603.48	-21586.62	-44.95
Wind 150 deg - No Ice		100552.92	174162.76	25255.95	-14582.15	-141.55
Wind 180 deg - No Ice		0.00	194862.17	28237.91	-24.48	-299.87
Wind 210 deg - No Ice		-100552.92	174162.76	25255.95	14533.19	-377.85
Wind 225 deg - No Ice		-139995.83	139995.83	20304.15	20238.34	-379.13
Wind 240 deg - No Ice		-190384.29	109918.42	15977.14	27577.15	-354.58

Load Case	Vertical Forces lb	Sum of Forces X lb	Sum of Forces Z lb	Sum of Overturning Moments, M_x kip-ft	Sum of Overturning Moments, M_z kip-ft	Sum of Torques kip-ft
Wind 270 deg - No Ice		-201105.84	0.00	41.33	29090.86	-236.30
Wind 300 deg - No Ice		-168755.59	-97431.08	-14056.96	24394.47	-54.70
Wind 315 deg - No Ice		-139995.83	-139995.83	-20221.49	20238.34	44.95
Wind 330 deg - No Ice		-100552.92	-174162.76	-25173.29	14533.19	141.55
Member Ice	91680.66					
Total Weight Ice	296659.59			304.26	-322.50	
Wind 0 deg - Ice		0.00	-45988.09	-6242.83	-322.50	118.08
Wind 30 deg - Ice		21783.80	-37730.65	-5061.99	-3420.71	149.70
Wind 45 deg - Ice		30521.69	-30521.69	-4035.93	-4662.70	150.59
Wind 60 deg - Ice		37031.91	-21380.39	-2735.50	-5587.52	141.21
Wind 90 deg - Ice		43567.60	0.00	304.26	-6518.91	94.88
Wind 120 deg - Ice		39826.85	22994.04	3577.80	-5992.45	23.12
Wind 135 deg - Ice		31662.72	31662.72	4809.76	-4828.01	-16.41
Wind 150 deg - Ice		21783.80	37730.65	5670.50	-3420.71	-54.83
Wind 180 deg - Ice		0.00	42760.77	6383.77	-322.50	-118.08
Wind 210 deg - Ice		-21783.80	37730.65	5670.50	2775.70	-149.70
Wind 225 deg - Ice		-30521.69	30521.69	4644.45	4017.69	-150.59
Wind 240 deg - Ice		-39826.85	22994.04	3577.80	5347.44	-141.21
Wind 270 deg - Ice		-43567.60	0.00	304.26	5873.90	-94.88
Wind 300 deg - Ice		-37031.91	-21380.39	-2735.50	4942.51	-23.12
Wind 315 deg - Ice		-30521.69	-30521.69	-4035.93	4017.69	16.41
Wind 330 deg - Ice		-21783.80	-37730.65	-5061.99	2775.70	54.83
Total Weight	140925.07			41.33	-24.48	
Wind 0 deg - Service		0.00	-40835.43	-5914.76	10.56	54.89
Wind 30 deg - Service		18697.52	-32385.05	-4683.59	-2694.85	69.29
Wind 45 deg - Service		26036.83	-26036.83	-3764.05	-3755.80	69.58
Wind 60 deg - Service		31391.90	-18124.12	-2618.72	-4529.20	65.13
Wind 90 deg - Service		37395.04	0.00	2.31	-5400.26	43.52
Wind 120 deg - Service		35364.52	20417.71	2960.85	-5113.77	10.24
Wind 135 deg - Service		27658.65	27658.65	4007.33	-3994.45	-8.04
Wind 150 deg - Service		18697.52	32385.05	4688.22	-2694.85	-25.77
Wind 180 deg - Service		0.00	36248.24	5244.38	10.56	-54.89
Wind 210 deg - Service		-18697.52	32385.05	4688.22	2715.97	-69.29
Wind 225 deg - Service		-26036.83	26036.83	3768.68	3776.93	-69.58
Wind 240 deg - Service		-35364.52	20417.71	2960.85	5134.90	-65.13
Wind 270 deg - Service		-37395.04	0.00	2.31	5421.38	-43.52
Wind 300 deg - Service		-31391.90	-18124.12	-2618.72	4550.33	-10.24
Wind 315 deg - Service		-26036.83	-26036.83	-3764.05	3776.93	8.04
Wind 330 deg - Service		-18697.52	-32385.05	-4683.59	2715.97	25.77

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.0 Wind 0 deg - No Ice
3	0.9 Dead+1.0 Wind 0 deg - No Ice
4	1.2 Dead+1.0 Wind 30 deg - No Ice
5	0.9 Dead+1.0 Wind 30 deg - No Ice
6	1.2 Dead+1.0 Wind 45 deg - No Ice
7	0.9 Dead+1.0 Wind 45 deg - No Ice
8	1.2 Dead+1.0 Wind 60 deg - No Ice
9	0.9 Dead+1.0 Wind 60 deg - No Ice
10	1.2 Dead+1.0 Wind 90 deg - No Ice
11	0.9 Dead+1.0 Wind 90 deg - No Ice
12	1.2 Dead+1.0 Wind 120 deg - No Ice

Comb. No.	Description
13	0.9 Dead+1.0 Wind 120 deg - No Ice
14	1.2 Dead+1.0 Wind 135 deg - No Ice
15	0.9 Dead+1.0 Wind 135 deg - No Ice
16	1.2 Dead+1.0 Wind 150 deg - No Ice
17	0.9 Dead+1.0 Wind 150 deg - No Ice
18	1.2 Dead+1.0 Wind 180 deg - No Ice
19	0.9 Dead+1.0 Wind 180 deg - No Ice
20	1.2 Dead+1.0 Wind 210 deg - No Ice
21	0.9 Dead+1.0 Wind 210 deg - No Ice
22	1.2 Dead+1.0 Wind 225 deg - No Ice
23	0.9 Dead+1.0 Wind 225 deg - No Ice
24	1.2 Dead+1.0 Wind 240 deg - No Ice
25	0.9 Dead+1.0 Wind 240 deg - No Ice
26	1.2 Dead+1.0 Wind 270 deg - No Ice
27	0.9 Dead+1.0 Wind 270 deg - No Ice
28	1.2 Dead+1.0 Wind 300 deg - No Ice
29	0.9 Dead+1.0 Wind 300 deg - No Ice
30	1.2 Dead+1.0 Wind 315 deg - No Ice
31	0.9 Dead+1.0 Wind 315 deg - No Ice
32	1.2 Dead+1.0 Wind 330 deg - No Ice
33	0.9 Dead+1.0 Wind 330 deg - No Ice
34	1.2 Dead+1.0 Ice+1.0 Temp
35	1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp
36	1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp
37	1.2 Dead+1.0 Wind 45 deg+1.0 Ice+1.0 Temp
38	1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp
39	1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp
40	1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp
41	1.2 Dead+1.0 Wind 135 deg+1.0 Ice+1.0 Temp
42	1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp
43	1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp
44	1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp
45	1.2 Dead+1.0 Wind 225 deg+1.0 Ice+1.0 Temp
46	1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp
47	1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp
48	1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp
49	1.2 Dead+1.0 Wind 315 deg+1.0 Ice+1.0 Temp
50	1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp
51	Dead+Wind 0 deg - Service
52	Dead+Wind 30 deg - Service
53	Dead+Wind 45 deg - Service
54	Dead+Wind 60 deg - Service
55	Dead+Wind 90 deg - Service
56	Dead+Wind 120 deg - Service
57	Dead+Wind 135 deg - Service
58	Dead+Wind 150 deg - Service
59	Dead+Wind 180 deg - Service
60	Dead+Wind 210 deg - Service
61	Dead+Wind 225 deg - Service
62	Dead+Wind 240 deg - Service
63	Dead+Wind 270 deg - Service
64	Dead+Wind 300 deg - Service
65	Dead+Wind 315 deg - Service
66	Dead+Wind 330 deg - Service

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial lb	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T1	320 - 304	Leg	Max Tension	29	5560.46	0.04	0.02
			Max. Compression	24	-7158.49	-0.01	-0.00
			Max. Mx	24	-1514.77	-0.14	-0.00
			Max. My	3	328.14	-0.01	-0.17
			Max. Vy	10	-475.10	0.00	0.00
			Max. Vx	3	536.64	0.00	0.00
		Diagonal	Max Tension	20	1340.52	0.00	0.00
			Max. Compression	4	-1332.75	0.00	0.00
			Max. Mx	40	327.19	0.02	-0.00
			Max. My	20	-702.07	0.00	-0.00
			Max. Vy	40	-20.09	0.02	-0.00
			Max. Vx	20	0.12	0.00	-0.00
		Top Girt	Max Tension	13	182.33	0.00	0.00
			Max. Compression	8	-193.77	0.00	0.00
			Max. Mx	34	-30.30	-0.05	0.00
			Max. Vy	34	-32.08	0.00	0.00
T2	304 - 300	Leg	Max Tension	29	7856.86	0.01	0.00
			Max. Compression	24	-9868.91	0.32	-0.07
			Max. Mx	24	-9868.91	0.32	-0.07
			Max. My	2	-9842.29	0.09	0.31
			Max. Vy	24	-136.99	0.32	-0.07
			Max. Vx	2	-138.63	0.09	0.31
		Diagonal	Max Tension	4	1558.05	0.00	0.00
			Max. Compression	4	-1579.71	0.00	0.00
			Max. Mx	40	332.54	0.02	-0.00
			Max. My	20	-826.43	0.00	-0.00
			Max. Vy	40	-20.08	0.02	-0.00
			Max. Vx	20	0.04	0.00	0.00
T3	300 - 280	Leg	Max Tension	29	21872.21	-0.16	-0.01
			Max. Compression	24	-27177.62	0.53	-0.00
			Max. Mx	3	-26377.34	0.53	0.14
			Max. My	32	-2347.87	-0.00	0.57
			Max. Vy	2	331.63	0.31	-0.09
			Max. Vx	16	-518.81	0.02	0.11
		Diagonal	Max Tension	4	3066.10	0.00	0.00
			Max. Compression	2	-3093.64	0.00	0.00
			Max. Mx	48	472.86	0.03	0.00
			Max. My	35	402.97	0.03	0.00
			Max. Vy	48	31.15	0.03	0.00
			Max. Vx	35	-1.72	0.00	0.00
		Top Girt	Max Tension	23	47.65	0.00	0.00
			Max. Compression	28	-67.63	0.00	0.00
			Max. Mx	34	-22.49	-0.07	0.00
			Max. My	34	-20.75	0.00	0.00
			Max. Vy	34	-38.34	0.00	0.00
			Max. Vx	34	-1.13	0.00	0.00
T4	280 - 260	Leg	Max Tension	29	40928.19	-0.33	0.00
			Max. Compression	24	-51714.53	0.81	-0.11
			Max. Mx	13	-50439.58	0.82	-0.03
			Max. My	2	19420.16	-0.43	0.81
			Max. Vy	3	-365.89	0.81	0.14
			Max. Vx	20	-352.06	-0.02	0.56
		Diagonal	Max Tension	10	4723.82	0.00	0.00
			Max. Compression	12	-4792.84	0.00	0.00
			Max. Mx	43	755.44	0.06	-0.01
			Max. My	39	-1168.66	0.06	-0.01
			Max. Vy	43	46.35	0.06	-0.01
			Max. Vx	39	2.72	0.00	0.00
T5	260 - 240	Leg	Max Tension	19	67795.49	-0.32	-0.36
			Max. Compression	12	-87438.51	2.34	-0.08
			Max. Mx	24	-86808.41	2.35	0.48

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial lb	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. My	20	-7153.71	-0.00	3.01
			Max. Vy	28	-759.14	-0.32	-0.05
			Max. Vx	4	-1306.69	-0.02	0.45
		Diagonal	Max Tension	26	8216.26	0.00	0.00
			Max. Compression	24	-8474.57	0.00	0.00
			Max. Mx	43	928.53	0.09	0.01
			Max. My	37	-1548.20	0.09	-0.01
			Max. Vy	43	63.73	0.09	0.01
			Max. Vx	37	3.58	0.00	0.00
T6	240 - 220	Leg	Max Tension	9	109324.21	-1.10	0.02
			Max. Compression	12	-141250.86	2.50	0.02
			Max. Mx	3	-137986.27	2.50	-0.28
			Max. My	20	-7376.52	-0.00	3.01
			Max. Vy	28	-2468.93	-1.20	-0.07
			Max. Vx	4	-2416.31	-0.06	-0.51
		Diagonal	Max Tension	32	13662.75	0.00	0.00
			Max. Compression	32	-13647.81	0.00	0.00
			Max. Mx	38	1535.49	0.17	-0.02
			Max. My	36	-1386.01	0.15	-0.02
			Max. Vy	38	102.65	0.17	-0.02
			Max. Vx	36	5.65	0.00	0.00
T7	220 - 200	Leg	Max Tension	9	156018.46	-1.02	-0.19
			Max. Compression	12	-198631.19	2.25	-0.05
			Max. Mx	3	-162856.11	2.50	-0.28
			Max. My	4	-12152.60	-0.12	-2.69
			Max. Vy	25	577.37	2.50	0.26
			Max. Vx	4	-828.69	-0.12	-2.69
		Diagonal	Max Tension	32	16907.21	0.00	0.00
			Max. Compression	2	-17543.47	0.00	0.00
			Max. Mx	37	2025.43	0.25	-0.04
			Max. My	36	2465.57	0.24	-0.04
			Max. Vy	37	126.23	0.25	-0.04
			Max. Vx	36	7.24	0.00	0.00
T8	200 - 180	Leg	Max Tension	9	213001.13	-2.18	-0.12
			Max. Compression	12	-269962.60	3.22	-0.02
			Max. Mx	12	-269962.60	3.22	-0.02
			Max. My	4	-16740.14	-0.10	-3.12
			Max. Vy	28	-2724.85	-1.84	0.05
			Max. Vx	4	-2843.57	0.04	-0.02
		Diagonal	Max Tension	32	21084.82	0.00	0.00
			Max. Compression	2	-21374.32	0.00	0.00
			Max. Mx	38	2313.21	0.31	-0.05
			Max. My	44	-2446.83	0.27	0.05
			Max. Vy	38	140.95	0.31	-0.05
			Max. Vx	44	-8.18	0.00	0.00
T9	180 - 170	Leg	Max Tension	19	242911.13	-2.83	0.15
			Max. Compression	12	-306831.06	2.09	-0.03
			Max. Mx	12	-305564.53	3.22	-0.02
			Max. My	20	-18366.23	0.00	2.17
			Max. Vy	3	790.47	3.21	-0.14
			Max. Vx	25	834.16	-1.60	2.11
		Diagonal	Max Tension	26	22598.47	0.00	0.00
			Max. Compression	24	-22988.66	0.00	0.00
			Max. Mx	43	2521.17	0.34	0.05
			Max. My	44	-3780.51	0.32	0.05
			Max. Vy	43	147.90	0.34	0.05
			Max. Vx	44	-8.28	0.00	0.00
T10	170 - 160	Leg	Max Tension	19	273215.21	-2.05	0.03
			Max. Compression	12	-344042.23	7.48	-0.24
			Max. Mx	12	-344042.23	7.48	-0.24
			Max. My	4	-21170.55	0.15	-5.30

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial lb	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Vy	2	-1057.51	7.48	-0.46
			Max. Vx	25	-938.38	-3.55	5.12
		Diagonal	Max Tension	26	23312.68	0.00	0.00
			Max. Compression	24	-23844.34	0.00	0.00
			Max. Mx	43	2507.58	0.37	0.05
			Max. My	36	-2811.08	0.33	-0.05
			Max. Vy	43	155.09	0.37	0.05
			Max. Vx	36	8.56	0.00	0.00
T11	160 - 140	Leg	Max Tension	19	336997.86	-2.32	-0.26
			Max. Compression	12	-423691.94	5.99	-0.06
			Max. Mx	12	-381842.58	7.48	-0.24
			Max. My	4	-22013.01	0.15	-5.30
			Max. Vy	2	1312.90	7.48	-0.46
			Max. Vx	15	-1006.10	-1.70	-4.75
		Diagonal	Max Tension	26	28338.40	0.00	0.00
			Max. Compression	24	-29186.23	0.00	0.00
			Max. Mx	43	2928.98	0.62	0.08
			Max. My	45	4034.10	0.61	0.08
			Max. Vy	43	241.63	0.62	0.08
			Max. Vx	45	-12.19	0.00	0.00
T12	140 - 120	Leg	Max Tension	19	401102.57	-2.98	0.08
			Max. Compression	12	-504778.08	-2.51	0.32
			Max. Mx	12	-464344.75	5.99	-0.06
			Max. My	10	-27219.80	-1.05	6.98
			Max. Vy	2	1036.34	3.08	-0.08
			Max. Vx	20	-1142.89	-0.20	5.75
		Diagonal	Max Tension	26	30048.77	0.00	0.00
			Max. Compression	24	-30934.66	0.00	0.00
			Max. Mx	42	4907.40	0.73	-0.10
			Max. My	45	4365.72	0.71	0.11
			Max. Vy	42	263.07	0.73	-0.10
			Max. Vx	45	-14.93	0.00	0.00
T13	120 - 100	Leg	Max Tension	19	411852.79	0.51	0.18
			Max. Compression	12	-521185.73	-15.38	0.46
			Max. Mx	12	-519866.60	22.32	-0.10
			Max. My	20	-32360.09	-2.48	14.27
			Max. Vy	24	4937.90	22.29	-0.86
			Max. Vx	20	-2837.92	-2.48	14.27
		Diagonal	Max Tension	27	48160.92	-0.23	-0.04
			Max. Compression	24	-50810.41	0.00	0.00
			Max. Mx	26	16570.04	-0.37	0.03
			Max. My	26	-47109.86	-0.15	-0.19
			Max. Vy	42	-131.64	-0.32	-0.00
			Max. Vx	26	15.24	-0.15	-0.19
		Horizontal	Max Tension	26	26790.67	-0.19	0.00
			Max. Compression	25	-27071.48	-0.19	-0.03
			Max. Mx	43	-1325.34	-0.37	-0.01
			Max. My	2	3483.47	-0.11	0.06
			Max. Vy	43	136.23	-0.37	-0.01
			Max. Vx	2	-4.92	0.00	0.00
		Redund Horz 1 Bracing	Max Tension	24	5184.61	0.00	0.00
			Max. Compression	11	-4313.34	0.00	0.00
			Max. Mx	34	826.19	0.04	0.00
			Max. Vy	34	-26.75	0.00	0.00
		Redund Diag 1 Bracing	Max Tension	11	4162.41	0.00	0.00
			Max. Compression	24	-4465.48	0.00	0.00
			Max. Mx	34	-137.31	0.08	0.00
			Max. Vy	34	-29.47	0.00	0.00
		Redund Hip 1	Max Tension	27	23.32	0.00	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial lb	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
		Bracing					
			Max. Compression	10	-49.16	0.00	0.00
			Max. Mx	34	-20.79	0.04	0.00
			Max. Vy	34	26.75	0.00	0.00
		Redund Hip Diagonal 1 Bracing	Max Tension	2	98.47	0.00	0.00
			Max. Compression	18	-96.91	0.00	0.00
			Max. Mx	34	63.17	0.30	0.00
			Max. Vy	34	77.92	0.00	0.00
		Inner Bracing	Max Tension	27	7.49	0.00	0.00
			Max. Compression	2	-27.73	0.00	0.00
			Max. Mx	34	-19.45	0.34	0.00
			Max. Vy	34	-106.85	0.00	0.00
T14	100 - 80	Leg	Max Tension	19	466530.20	9.67	1.49
			Max. Compression	12	-591467.34	-17.80	-0.33
			Max. Mx	12	-590313.25	25.60	0.12
			Max. My	20	-36383.88	-2.71	14.88
			Max. Vy	12	4721.29	25.60	0.12
			Max. Vx	20	-2730.59	-2.71	14.88
		Diagonal	Max Tension	27	49617.02	-0.27	-0.04
			Max. Compression	24	-53229.81	0.00	0.00
			Max. Mx	26	23040.12	-0.42	0.05
			Max. My	26	-51276.32	-0.16	-0.18
			Max. Vy	43	143.18	-0.36	0.01
			Max. Vx	26	-14.40	-0.16	-0.18
		Horizontal	Max Tension	26	29257.68	-0.31	0.00
			Max. Compression	24	-30472.23	-0.36	-0.03
			Max. Mx	43	730.22	-0.53	-0.01
			Max. My	2	126.51	-0.22	0.06
			Max. Vy	43	-177.29	-0.53	-0.01
			Max. Vx	2	-4.57	0.00	0.00
		Redund Horz 1 Bracing	Max Tension	16	5925.57	0.00	0.00
			Max. Compression	15	-5086.50	0.00	0.00
			Max. Mx	34	1126.94	0.05	0.00
			Max. Vy	34	29.23	0.00	0.00
		Redund Diag 1 Bracing	Max Tension	15	4566.62	0.00	0.00
			Max. Compression	32	-4792.90	0.00	0.00
			Max. Mx	34	-298.39	0.11	0.00
			Max. Vy	34	37.97	0.00	0.00
		Redund Hip 1 Bracing	Max Tension	27	21.18	0.00	0.00
			Max. Compression	2	-48.04	0.00	0.00
			Max. Mx	34	-21.46	0.05	0.00
			Max. Vy	34	-29.23	0.00	0.00
		Redund Hip Diagonal 1 Bracing	Max Tension	2	91.32	0.00	0.00
			Max. Compression	18	-90.97	0.00	0.00
			Max. Mx	34	62.80	0.34	0.00
			Max. Vy	34	-84.96	0.00	0.00
		Inner Bracing	Max Tension	27	3.98	0.00	0.00
			Max. Compression	2	-27.51	0.00	0.00
			Max. Mx	34	-21.08	0.41	0.00
			Max. Vy	34	-117.08	0.00	0.00
T15	80 - 60	Leg	Max Tension	19	522694.47	11.51	1.72
			Max. Compression	12	-663079.42	-24.47	-0.30
			Max. Mx	12	-661779.45	33.50	0.23
			Max. My	20	-40982.06	-3.86	20.57
			Max. Vy	12	6245.00	33.50	0.23
			Max. Vx	20	-3476.78	-3.86	20.57

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial lb	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
		Diagonal	Max Tension	27	48528.51	-0.30	-0.04
			Max. Compression	24	-53169.30	0.00	0.00
			Max. Mx	26	17207.38	-0.43	0.04
			Max. My	26	-47667.86	-0.19	-0.16
			Max. Vy	43	155.53	-0.41	0.00
			Max. Vx	26	-12.69	0.00	0.00
		Horizontal	Max Tension	27	29934.23	-0.49	0.00
			Max. Compression	24	-31434.28	-0.72	-0.03
			Max. Mx	43	737.77	-0.92	-0.01
			Max. My	2	6143.52	-0.54	0.05
			Max. Vy	43	-287.97	-0.92	-0.01
			Max. Vx	2	-3.32	0.00	0.00
		Redund Horz 1 Bracing	Max Tension	26	7472.60	0.00	0.00
			Max. Compression	27	-6293.69	0.00	0.00
			Max. Mx	34	1441.55	0.07	0.00
			Max. Vy	34	38.83	0.00	0.00
		Redund Diag 1 Bracing	Max Tension	11	5325.69	0.00	0.00
			Max. Compression	10	-5744.39	0.00	0.00
			Max. Mx	34	-409.69	0.13	0.00
			Max. Vy	34	-41.29	0.00	0.00
		Redund Hip 1 Bracing	Max Tension	27	15.77	0.00	0.00
			Max. Compression	2	-47.05	0.00	0.00
			Max. Mx	34	-25.16	0.06	0.00
			Max. Vy	34	31.69	0.00	0.00
		Redund Hip Diagonal 1 Bracing	Max Tension	2	93.67	0.00	0.00
			Max. Compression	47	-102.10	0.00	0.00
			Max. Mx	34	76.38	0.48	0.00
			Max. Vy	34	-113.44	0.00	0.00
		Inner Bracing	Max Tension	1	0.00	0.00	0.00
			Max. Compression	2	-31.22	0.00	0.00
			Max. Mx	34	-27.89	0.48	0.00
			Max. Vy	34	-127.12	0.00	0.00
T16	60 - 30	Leg	Max Tension	19	578357.93	15.54	1.81
			Max. Compression	12	-735094.70	6.19	0.33
			Max. Mx	12	-724874.36	37.70	0.40
			Max. My	4	-46805.52	-5.58	-36.88
			Max. Vy	12	6875.72	37.70	0.40
			Max. Vx	4	5536.51	-5.58	-36.88
		Diagonal	Max Tension	27	68386.48	-0.38	-0.08
			Max. Compression	24	-75058.87	0.00	0.00
			Max. Mx	18	50503.95	-0.51	0.39
			Max. My	26	-67824.83	0.25	-0.68
			Max. Vy	24	-113.89	-0.33	0.43
			Max. Vx	24	93.32	-0.33	0.43
		Horizontal	Max Tension	10	34966.71	0.00	0.00
			Max. Compression	25	-35100.22	-0.49	-0.04
			Max. Mx	43	-1765.77	-0.88	-0.01
			Max. My	3	-1774.17	-0.23	0.08
			Max. Vy	43	246.93	-0.88	-0.01
			Max. Vx	3	-4.75	0.00	0.00
		Redund Horz 1 Bracing	Max Tension	10	6860.84	0.00	0.00
			Max. Compression	25	-5785.23	0.00	0.00
			Max. Mx	34	1069.43	0.03	0.00
			Max. Vy	34	23.02	0.00	0.00
		Redund Horz 2 Bracing	Max Tension	30	4577.85	0.00	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial lb	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Compression	25	-4510.22	0.00	0.00
			Max. Mx	34	603.59	0.25	0.00
			Max. Vy	34	-92.06	0.00	0.00
		Redund Diag 1 Bracing	Max Tension	27	6083.04	0.00	0.00
			Max. Compression	10	-6900.02	0.00	0.00
			Max. Mx	34	-397.33	0.08	0.00
			Max. Vy	34	29.25	0.00	0.00
		Redund Diag 2 Bracing	Max Tension	25	4122.67	0.00	0.00
			Max. Compression	18	-3789.39	0.00	0.00
			Max. Mx	34	-11.31	0.26	0.00
			Max. Vy	34	70.87	0.00	0.00
		Redund Hip 1 Bracing	Max Tension	25	170.55	0.00	0.00
			Max. Compression	10	-176.09	0.00	0.00
			Max. Mx	34	-9.42	0.03	0.00
			Max. Vy	34	23.02	0.00	0.00
		Redund Hip 2 Bracing	Max Tension	25	70.61	0.00	0.00
			Max. Compression	10	-95.53	0.00	0.00
			Max. Mx	34	-26.66	0.16	0.00
			Max. Vy	34	56.40	0.00	0.00
		Redund Hip Diagonal 1 Bracing	Max Tension	2	355.36	0.00	0.00
			Max. Compression	26	-361.06	0.00	0.00
			Max. Mx	34	44.35	0.18	0.00
			Max. Vy	34	-50.73	0.00	0.00
		Redund Hip Diagonal 2 Bracing	Max Tension	8	121.98	0.00	0.00
			Max. Compression	24	-143.06	0.00	0.00
			Max. Mx	34	42.80	0.34	0.00
			Max. Vy	34	-75.86	0.00	0.00
		Inner Bracing	Max Tension	25	44.23	0.00	0.00
			Max. Compression	8	-60.21	0.00	0.00
			Max. Mx	34	-21.10	0.57	0.00
			Max. Vy	34	-138.41	0.00	0.00
T17	30 - 0	Leg	Max Tension	19	662277.10	14.61	4.97
			Max. Compression	12	-842732.67	4.58	0.41
			Max. Mx	12	-837678.30	33.64	0.57
			Max. My	4	-50782.94	-5.57	-36.87
			Max. Vy	12	3865.98	33.64	0.57
			Max. Vx	4	-5372.15	-5.57	-36.87
		Diagonal	Max Tension	27	69647.20	-0.30	-0.07
			Max. Compression	24	-74010.73	0.00	0.00
			Max. Mx	18	44152.65	-0.47	0.32
			Max. My	26	-68786.25	0.14	-0.62
			Max. Vy	47	114.83	-0.27	0.07
			Max. Vx	24	82.35	-0.35	0.40
		Horizontal	Max Tension	11	37621.82	0.00	0.00
			Max. Compression	24	-41666.82	-0.89	-0.06
			Max. Mx	43	63.32	-1.17	-0.02
			Max. My	2	10881.00	-0.59	0.11
			Max. Vy	43	-313.92	-1.17	-0.02
			Max. Vx	2	6.14	-0.59	0.11
		Redund Horz 1 Bracing	Max Tension	24	4384.22	0.00	0.00
			Max. Compression	9	-3469.37	0.00	0.00
			Max. Mx	34	598.04	0.04	0.00
			Max. Vy	34	-25.64	0.00	0.00
		Redund Horz 2	Max Tension	8	3995.81	0.00	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial lb	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
		Bracing					
			Max. Compression	25	-3980.81	0.00	0.00
			Max. Mx	34	308.22	0.30	0.00
			Max. Vy	34	-97.22	0.00	0.00
		Redund Diag 1 Bracing	Max Tension	18	3507.76	0.00	0.00
			Max. Compression	2	-4021.45	0.00	0.00
			Max. Mx	34	2.32	0.11	0.00
			Max. Vy	34	37.41	0.00	0.00
		Redund Diag 2 Bracing	Max Tension	24	3569.54	0.00	0.00
			Max. Compression	19	-3076.86	0.00	0.00
			Max. Mx	34	348.29	0.30	0.00
			Max. Vy	34	-79.09	0.00	0.00
		Redund Hip 1 Bracing	Max Tension	25	147.19	0.00	0.00
			Max. Compression	10	-157.59	0.00	0.00
			Max. Mx	34	-13.26	0.04	0.00
			Max. Vy	34	-25.64	0.00	0.00
		Redund Hip 2 Bracing	Max Tension	25	61.61	0.00	0.00
			Max. Compression	10	-89.80	0.00	0.00
			Max. Mx	34	-29.27	0.19	0.00
			Max. Vy	34	-62.81	0.00	0.00
		Redund Hip Diagonal 1 Bracing	Max Tension	2	322.27	0.00	0.00
			Max. Compression	26	-327.60	0.00	0.00
			Max. Mx	34	60.79	0.28	0.00
			Max. Vy	34	-74.96	0.00	0.00
		Redund Hip Diagonal 2 Bracing	Max Tension	8	118.03	0.00	0.00
			Max. Compression	24	-140.45	0.00	0.00
			Max. Mx	34	57.40	0.54	0.00
			Max. Vy	34	-112.18	0.00	0.00
		Inner Bracing	Max Tension	25	40.14	0.00	0.00
			Max. Compression	8	-62.57	0.00	0.00
			Max. Mx	34	-26.37	0.71	0.00
			Max. Vy	34	-154.05	0.00	0.00

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical lb	Horizontal, X lb	Horizontal, Z lb
Leg C	Max. Vert	24	943360.99	114642.46	-60345.64
	Max. H_x	24	943360.99	114642.46	-60345.64
	Max. H_z	7	-727458.28	-90518.50	52051.13
	Min. Vert	9	-741734.81	-94696.74	48889.42
	Min. H_x	9	-741734.81	-94696.74	48889.42
	Min. H_z	24	943360.99	114642.46	-60345.64
Leg B	Max. Vert	12	944804.96	-112528.98	-64056.23
	Max. H_x	29	-740651.84	92557.97	52555.89
	Max. H_z	33	-657918.37	75971.85	57914.40
	Min. Vert	29	-740651.84	92557.97	52555.89
	Min. H_x	12	944804.96	-112528.98	-64056.23
	Min. H_z	14	877268.14	-100942.16	-65336.91
Leg A	Max. Vert	2	941971.75	4267.72	129430.11

Location	Condition	Gov. Load Comb.	Vertical lb	Horizontal, X lb	Horizontal, Z lb
	Max. H_x	26	54962.54	16961.50	4986.47
	Max. H_z	2	941971.75	4267.72	129430.11
	Min. Vert	19	-742776.74	-4242.44	-106473.56
	Min. H_x	13	-402282.69	-18364.58	-58480.49
	Min. H_z	19	-742776.74	-4242.44	-106473.56

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	140925.07	0.00	0.00	41.33	-24.48	0.00
1.2 Dead+1.0 Wind 0 deg - No Ice	169110.08	-0.00	-219836.86	-31207.34	-29.38	299.88
0.9 Dead+1.0 Wind 0 deg - No Ice	126832.56	-0.00	-219836.86	-31219.74	-22.03	299.88
1.2 Dead+1.0 Wind 30 deg - No Ice	169110.08	100552.93	-174162.78	-24661.99	-14296.62	377.85
0.9 Dead+1.0 Wind 30 deg - No Ice	126832.56	100552.93	-174162.78	-24674.39	-14289.27	377.85
1.2 Dead+1.0 Wind 45 deg - No Ice	169110.08	139995.84	-139995.84	-19806.48	-19885.46	379.13
0.9 Dead+1.0 Wind 45 deg - No Ice	126832.56	139995.84	-139995.84	-19818.88	-19878.11	379.13
1.2 Dead+1.0 Wind 60 deg - No Ice	169110.08	168755.60	-97431.09	-13763.90	-23955.06	354.58
0.9 Dead+1.0 Wind 60 deg - No Ice	126832.56	168755.60	-97431.09	-13776.30	-23947.71	354.58
1.2 Dead+1.0 Wind 90 deg - No Ice	169110.08	201105.85	-0.00	49.60	-28563.86	236.30
0.9 Dead+1.0 Wind 90 deg - No Ice	126832.56	201105.85	-0.00	37.20	-28556.51	236.30
1.2 Dead+1.0 Wind 120 deg - No Ice	169110.08	190384.31	109918.43	15678.07	-27098.68	54.70
0.9 Dead+1.0 Wind 120 deg - No Ice	126832.56	190384.31	109918.43	15665.67	-27091.34	54.70
1.2 Dead+1.0 Wind 135 deg - No Ice	169110.08	148825.72	148825.72	21189.06	-21168.84	-44.96
0.9 Dead+1.0 Wind 135 deg - No Ice	126832.56	148825.72	148825.72	21176.66	-21161.49	-44.96
1.2 Dead+1.0 Wind 150 deg - No Ice	169110.08	100552.93	174162.78	24761.18	-14296.62	-141.55
0.9 Dead+1.0 Wind 150 deg - No Ice	126832.56	100552.93	174162.78	24748.78	-14289.27	-141.55
1.2 Dead+1.0 Wind 180 deg - No Ice	169110.08	0.00	194862.18	27676.59	-29.38	-299.88
0.9 Dead+1.0 Wind 180 deg - No Ice	126832.56	0.00	194862.18	27664.19	-22.03	-299.88
1.2 Dead+1.0 Wind 210 deg - No Ice	169110.08	-100552.93	174162.78	24761.18	14237.86	-377.85
0.9 Dead+1.0 Wind 210 deg - No Ice	126832.56	-100552.93	174162.78	24748.78	14245.21	-377.85
1.2 Dead+1.0 Wind 225 deg - No Ice	169110.08	-139995.84	139995.84	19905.68	19826.70	-379.13
0.9 Dead+1.0 Wind 225 deg - No Ice	126832.56	-139995.84	139995.84	19893.28	19834.05	-379.13
1.2 Dead+1.0 Wind 240 deg -	169110.08	-190384.30	109918.43	15678.07	27039.93	-354.58

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
No Ice 0.9 Dead+1.0 Wind 240 deg - No Ice	126832.56	-190384.30	109918.43	15665.67	27047.27	-354.58
1.2 Dead+1.0 Wind 270 deg - No Ice	169110.08	-201105.85	0.00	49.60	28505.10	-236.30
0.9 Dead+1.0 Wind 270 deg - No Ice	126832.56	-201105.85	0.00	37.20	28512.45	-236.30
1.2 Dead+1.0 Wind 300 deg - No Ice	169110.08	-168755.60	-97431.09	-13763.90	23896.30	-54.70
0.9 Dead+1.0 Wind 300 deg - No Ice	126832.56	-168755.60	-97431.09	-13776.30	23903.65	-54.70
1.2 Dead+1.0 Wind 315 deg - No Ice	169110.08	-139995.84	-139995.84	-19806.48	19826.70	44.96
0.9 Dead+1.0 Wind 315 deg - No Ice	126832.56	-139995.84	-139995.84	-19818.88	19834.05	44.96
1.2 Dead+1.0 Wind 330 deg - No Ice	169110.08	-100552.93	-174162.78	-24661.99	14237.86	141.55
0.9 Dead+1.0 Wind 330 deg - No Ice	126832.56	-100552.93	-174162.78	-24674.39	14245.21	141.55
1.2 Dead+1.0 Ice+1.0 Temp	324844.61	0.00	0.00	312.52	-327.41	0.00
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	324844.61	0.00	-45988.09	-6056.40	-327.41	118.09
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	324844.61	21783.80	-37730.65	-4904.46	-3339.44	149.70
1.2 Dead+1.0 Wind 45 deg+1.0 Ice+1.0 Temp	324844.61	30521.69	-30521.69	-3906.49	-4546.42	150.59
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	324844.61	37031.92	-21380.39	-2642.03	-5444.84	141.21
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	324844.61	43567.60	0.00	312.52	-6351.47	94.88
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	324844.61	39826.86	22994.05	3496.99	-5843.06	23.12
1.2 Dead+1.0 Wind 135 deg+1.0 Ice+1.0 Temp	324844.61	31662.72	31662.72	4694.11	-4708.99	-16.41
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	324844.61	21783.80	37730.65	5529.51	-3339.44	-54.83
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	324844.61	0.00	42760.77	6221.63	-327.41	-118.09
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	324844.61	-21783.80	37730.65	5529.51	2684.62	-149.70
1.2 Dead+1.0 Wind 225 deg+1.0 Ice+1.0 Temp	324844.61	-30521.69	30521.69	4531.54	3891.60	-150.59
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	324844.61	-39826.86	22994.05	3496.99	5188.24	-141.21
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	324844.61	-43567.60	0.00	312.52	5696.65	-94.88
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	324844.61	-37031.92	-21380.39	-2642.03	4790.03	-23.12
1.2 Dead+1.0 Wind 315 deg+1.0 Ice+1.0 Temp	324844.61	-30521.69	-30521.69	-3906.49	3891.60	16.41
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	324844.61	-21783.80	-37730.65	-4904.46	2684.62	54.83
Dead+Wind 0 deg - Service	140925.07	-0.00	-40835.43	-5761.33	-24.48	54.89
Dead+Wind 30 deg - Service	140925.07	18697.52	-32385.06	-4550.87	-2675.79	69.29
Dead+Wind 45 deg - Service	140925.07	26036.83	-26036.84	-3649.25	-3715.07	69.58
Dead+Wind 60 deg - Service	140925.07	31391.90	-18124.12	-2526.64	-4472.33	65.13
Dead+Wind 90 deg - Service	140925.07	37395.04	-0.00	41.33	-5327.10	43.52
Dead+Wind 120 deg - Service	140925.07	35364.52	20417.72	2942.66	-5049.73	10.24
Dead+Wind 135 deg - Service	140925.07	27658.65	27658.65	3967.64	-3950.79	-8.04
Dead+Wind 150 deg - Service	140925.07	18697.52	32385.06	4633.53	-2675.79	-25.78
Dead+Wind 180 deg - Service	140925.07	0.00	36248.25	5177.27	-24.48	-54.89

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
Dead+Wind 210 deg - Service	140925.07	-18697.52	32385.06	4633.53	2626.83	-69.29
Dead+Wind 225 deg - Service	140925.07	-26036.83	26036.84	3731.92	3666.10	-69.58
Dead+Wind 240 deg - Service	140925.07	-35364.52	20417.72	2942.66	5000.77	-65.13
Dead+Wind 270 deg - Service	140925.07	-37395.04	0.00	41.33	5278.13	-43.52
Dead+Wind 300 deg - Service	140925.07	-31391.90	-18124.12	-2526.64	4423.37	-10.24
Dead+Wind 315 deg - Service	140925.07	-26036.84	-26036.83	-3649.25	3666.10	8.04
Dead+Wind 330 deg - Service	140925.07	-18697.52	-32385.06	-4550.87	2626.83	25.78

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	-140925.07	0.00	-0.00	140925.07	-0.00	0.000%
2	0.00	-169110.08	-219836.84	0.00	169110.08	219836.86	0.000%
3	0.00	-126832.56	-219836.84	0.00	126832.56	219836.86	0.000%
4	100552.92	-169110.08	-174162.76	-100552.93	169110.08	174162.78	0.000%
5	100552.92	-126832.56	-174162.76	-100552.93	126832.56	174162.78	0.000%
6	139995.83	-169110.08	-139995.83	-139995.84	169110.08	139995.84	0.000%
7	139995.83	-126832.56	-139995.83	-139995.84	126832.56	139995.84	0.000%
8	168755.59	-169110.08	-97431.08	-168755.60	169110.08	97431.09	0.000%
9	168755.59	-126832.56	-97431.08	-168755.60	126832.56	97431.09	0.000%
10	201105.84	-169110.08	0.00	-201105.85	169110.08	0.00	0.000%
11	201105.84	-126832.56	0.00	-201105.85	126832.56	0.00	0.000%
12	190384.29	-169110.08	109918.42	-190384.31	169110.08	-109918.43	0.000%
13	190384.29	-126832.56	109918.42	-190384.31	126832.56	-109918.43	0.000%
14	148825.71	-169110.08	148825.71	-148825.72	169110.08	-148825.72	0.000%
15	148825.71	-126832.56	148825.71	-148825.72	126832.56	-148825.72	0.000%
16	100552.92	-169110.08	174162.76	-100552.93	169110.08	-174162.78	0.000%
17	100552.92	-126832.56	174162.76	-100552.93	126832.56	-174162.78	0.000%
18	-0.00	-169110.08	194862.17	-0.00	169110.08	-194862.18	0.000%
19	-0.00	-126832.56	194862.17	-0.00	126832.56	-194862.18	0.000%
20	-100552.92	-169110.08	174162.76	100552.93	169110.08	-174162.78	0.000%
21	-100552.92	-126832.56	174162.76	100552.93	126832.56	-174162.78	0.000%
22	-139995.83	-169110.08	139995.83	139995.84	169110.08	-139995.84	0.000%
23	-139995.83	-126832.56	139995.83	139995.84	126832.56	-139995.84	0.000%
24	-190384.29	-169110.08	109918.42	190384.30	169110.08	-109918.43	0.000%
25	-190384.29	-126832.56	109918.42	190384.30	126832.56	-109918.43	0.000%
26	-201105.84	-169110.08	0.00	201105.85	169110.08	-0.00	0.000%
27	-201105.84	-126832.56	0.00	201105.85	126832.56	-0.00	0.000%
28	-168755.59	-169110.08	-97431.08	168755.60	169110.08	97431.09	0.000%
29	-168755.59	-126832.56	-97431.08	168755.60	126832.56	97431.09	0.000%
30	-139995.83	-169110.08	-139995.83	139995.84	169110.08	139995.84	0.000%
31	-139995.83	-126832.56	-139995.83	139995.84	126832.56	139995.84	0.000%
32	-100552.92	-169110.08	-174162.76	100552.93	169110.08	174162.78	0.000%
33	-100552.92	-126832.56	-174162.76	100552.93	126832.56	174162.78	0.000%
34	0.00	-324844.61	0.00	-0.00	324844.61	-0.00	0.000%
35	-0.00	-324844.61	-45988.09	-0.00	324844.61	45988.09	0.000%
36	21783.80	-324844.61	-37730.65	-21783.80	324844.61	37730.65	0.000%
37	30521.69	-324844.61	-30521.69	-30521.69	324844.61	30521.69	0.000%
38	37031.91	-324844.61	-21380.39	-37031.92	324844.61	21380.39	0.000%
39	43567.60	-324844.61	0.00	-43567.60	324844.61	-0.00	0.000%
40	39826.85	-324844.61	22994.04	-39826.86	324844.61	-22994.05	0.000%
41	31662.72	-324844.61	31662.72	-31662.72	324844.61	-31662.72	0.000%
42	21783.80	-324844.61	37730.65	-21783.80	324844.61	-37730.65	0.000%
43	0.00	-324844.61	42760.77	-0.00	324844.61	-42760.77	0.000%
44	-21783.80	-324844.61	37730.65	21783.80	324844.61	-37730.65	0.000%
45	-30521.69	-324844.61	30521.69	30521.69	324844.61	-30521.69	0.000%

	Sum of Applied Forces			Sum of Reactions			
Load Comb.	PX lb	PY lb	PZ lb	PX lb	PY lb	PZ lb	% Error
46	-39826.85	-324844.61	22994.04	39826.86	324844.61	-22994.05	0.000%
47	-43567.60	-324844.61	0.00	43567.60	324844.61	-0.00	0.000%
48	-37031.91	-324844.61	-21380.39	37031.92	324844.61	21380.39	0.000%
49	-30521.69	-324844.61	-30521.69	30521.69	324844.61	30521.69	0.000%
50	-21783.80	-324844.61	-37730.65	21783.80	324844.61	37730.65	0.000%
51	0.00	-140925.07	-40835.43	0.00	140925.07	40835.43	0.000%
52	18697.52	-140925.07	-32385.05	-18697.52	140925.07	32385.06	0.000%
53	26036.83	-140925.07	-26036.83	-26036.83	140925.07	26036.84	0.000%
54	31391.90	-140925.07	-18124.12	-31391.90	140925.07	18124.12	0.000%
55	37395.04	-140925.07	0.00	-37395.04	140925.07	0.00	0.000%
56	35364.52	-140925.07	20417.71	-35364.52	140925.07	-20417.72	0.000%
57	27658.65	-140925.07	27658.65	-27658.65	140925.07	-27658.65	0.000%
58	18697.52	-140925.07	32385.05	-18697.52	140925.07	-32385.06	0.000%
59	-0.00	-140925.07	36248.24	-0.00	140925.07	-36248.25	0.000%
60	-18697.52	-140925.07	32385.05	18697.52	140925.07	-32385.06	0.000%
61	-26036.83	-140925.07	26036.83	26036.83	140925.07	-26036.84	0.000%
62	-35364.52	-140925.07	20417.71	35364.52	140925.07	-20417.72	0.000%
63	-37395.04	-140925.07	0.00	37395.04	140925.07	-0.00	0.000%
64	-31391.90	-140925.07	-18124.12	31391.90	140925.07	18124.12	0.000%
65	-26036.83	-140925.07	-26036.83	26036.84	140925.07	26036.83	0.000%
66	-18697.52	-140925.07	-32385.05	18697.52	140925.07	32385.06	0.000%

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	320 - 304	4.596	56	0.1049	0.0346
T2	304 - 300	4.241	56	0.1040	0.0351
T3	300 - 280	4.152	56	0.1035	0.0352
T4	280 - 260	3.715	56	0.1004	0.0364
T5	260 - 240	3.286	56	0.0985	0.0371
T6	240 - 220	2.861	56	0.0955	0.0351
T7	220 - 200	2.450	56	0.0910	0.0322
T8	200 - 180	2.062	56	0.0848	0.0298
T9	180 - 170	1.693	56	0.0784	0.0267
T10	170 - 160	1.518	56	0.0748	0.0251
T11	160 - 140	1.350	56	0.0709	0.0234
T12	140 - 120	1.048	56	0.0621	0.0214
T13	120 - 100	0.782	56	0.0525	0.0192
T14	100 - 80	0.562	56	0.0430	0.0160
T15	80 - 60	0.384	56	0.0331	0.0135
T16	60 - 30	0.250	51	0.0241	0.0112
T17	30 - 0	0.091	51	0.0109	0.0057

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
329.00	Lightning Rod 5/8x4'	56	4.596	0.1049	0.0346	Inf
327.00	Dual Lights	56	4.596	0.1049	0.0346	Inf

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
325.00	PD128-1	56	4.596	0.1049	0.0346	Inf
320.00	BA1012-0	56	4.596	0.1049	0.0346	Inf
318.00	ANT450F6	56	4.552	0.1048	0.0347	Inf
300.00	SC479-HF1LDF	56	4.152	0.1035	0.0352	362777
290.00	PD340-1	56	3.932	0.1019	0.0357	387559
286.00	DB809T3E-XC	56	3.845	0.1012	0.0359	468220
284.00	6' Side Mount Standoff	56	3.802	0.1009	0.0361	522488
283.00	SC479-HF1LDF(D00I-E6085) (Inverted)	56	3.780	0.1008	0.0362	550965
264.00	PD440-2	56	3.371	0.0989	0.0372	Inf
260.00	6' Side Mount Standoff	56	3.286	0.0985	0.0371	Inf
251.00	SC479-HF1LDF	56	3.094	0.0974	0.0364	676535
248.00	PD1142-1	56	3.030	0.0969	0.0361	560054
247.00	430-94C-09168-M-11048 TTA	56	3.009	0.0968	0.0360	529662
246.00	Sabre T-Boom (1)	56	2.988	0.0966	0.0359	502396
245.00	SC479-HF1LDF(D00I-E6085) (Inverted)	56	2.966	0.0964	0.0357	477800
238.00	531-70HD Exposed Dipole Antenna	56	2.819	0.0952	0.0348	341555
232.00	Valmont VFA-10-U V-Frame	56	2.694	0.0940	0.0339	259302
200.00	PiROD 12' Lightweight T-Frame	56	2.062	0.0848	0.0298	276766
179.00	1151-3	56	1.676	0.0780	0.0266	190999
177.00	DB586-Y	56	1.640	0.0773	0.0262	196816
176.00	Pirod 4' Side Mount Standoff (1)	56	1.623	0.0770	0.0261	201092
175.00	DB586-Y (inverted)	56	1.605	0.0766	0.0259	205928
168.00	L-810 Obstruction Lighting (1)	56	1.484	0.0740	0.0248	167672
165.00	L-810 Obstruction Lighting (1)	56	1.433	0.0729	0.0242	123255
164.00	L-810 Obstruction Lighting (1)	56	1.416	0.0725	0.0241	112667
163.00	Telewave ANT220F2 - Omni Antenna	56	1.399	0.0721	0.0239	104223
160.00	Siteprol USF-4U Mount Assembly (Ca = 1.4 assumed)	56	1.350	0.0709	0.0234	90426
154.00	Commscope PAR6-59W-PXA/A	56	1.254	0.0684	0.0227	99217
153.00	ANT450F6	56	1.239	0.0680	0.0226	102405
145.00	Telewave ANT220F2 - Omni Antenna	56	1.119	0.0644	0.0218	137840
142.00	Siteprol USF-4U Mount Assembly (Ca = 1.4 assumed)	56	1.076	0.0630	0.0215	155829
139.00	DB212-1	56	1.034	0.0616	0.0213	161416
117.00	3' Wide Ice Shield (for Dish Antennas) (Assume Ca=2.0)	56	0.746	0.0510	0.0187	96267
115.00	8' Wide Ice Shield (for Dish Antennas) (Assume Ca=2.0)	56	0.723	0.0501	0.0184	99475
112.00	Andrew 2' w/Radome	56	0.689	0.0487	0.0180	105099
107.00	PA8-65	56	0.635	0.0464	0.0171	116032
106.00	Pirod 4' Side Mount Standoff (1)	56	0.624	0.0459	0.0170	118497
94.00	PD688S-4	56	0.504	0.0400	0.0152	117120

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	320 - 304	24.439	12	0.5540	0.1883
T2	304 - 300	22.563	12	0.5495	0.1912
T3	300 - 280	22.094	12	0.5466	0.1918
T4	280 - 260	19.790	12	0.5306	0.1978

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T5	260 - 240	17.522	12	0.5210	0.2014
T6	240 - 220	15.275	12	0.5058	0.1908
T7	220 - 200	13.094	12	0.4828	0.1751
T8	200 - 180	11.031	12	0.4505	0.1619
T9	180 - 170	9.071	12	0.4170	0.1454
T10	170 - 160	8.136	12	0.3980	0.1367
T11	160 - 140	7.237	12	0.3776	0.1277
T12	140 - 120	5.624	12	0.3311	0.1164
T13	120 - 100	4.206	12	0.2800	0.1045
T14	100 - 80	3.027	12	0.2297	0.0873
T15	80 - 60	2.069	12	0.1769	0.0734
T16	60 - 30	1.346	2	0.1285	0.0609
T17	30 - 0	0.488	2	0.0583	0.0307

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
329.00	Lightning Rod 5/8x4'	12	24.439	0.5540	0.1883	Inf
327.00	Dual Lights	12	24.439	0.5540	0.1883	Inf
325.00	PD128-1	12	24.439	0.5540	0.1883	Inf
320.00	BA1012-0	12	24.439	0.5540	0.1883	Inf
318.00	ANT450F6	12	24.205	0.5538	0.1887	Inf
300.00	SC479-HF1LDF	12	22.094	0.5466	0.1918	71611
290.00	PD340-1	12	20.935	0.5382	0.1943	79606
286.00	DB809T3E-XC	12	20.475	0.5349	0.1957	98776
284.00	6' Side Mount Standoff	12	20.247	0.5334	0.1964	112265
283.00	SC479-HF1LDF(D00I-E6085) (Inverted)	12	20.132	0.5327	0.1967	120247
264.00	PD440-2	12	17.974	0.5230	0.2018	273362
260.00	6' Side Mount Standoff	12	17.522	0.5210	0.2014	294078
251.00	SC479-HF1LDF	12	16.506	0.5152	0.1983	147762
248.00	PD1142-1	12	16.169	0.5128	0.1966	120001
247.00	430-94C-09168-M-11048 TTA	12	16.057	0.5120	0.1959	112928
246.00	Sabre T-Boom (1)	12	15.945	0.5112	0.1952	106643
245.00	SC479-HF1LDF(D00I-E6085) (Inverted)	12	15.833	0.5103	0.1946	101021
238.00	531-70HD Exposed Dipole Antenna	12	15.053	0.5039	0.1893	69931
232.00	Valmont VFA-10-U V-Frame	12	14.390	0.4977	0.1844	51474
200.00	PiROD 12' Lightweight T-Frame	12	11.031	0.4505	0.1619	55094
179.00	1151-3	12	8.976	0.4152	0.1446	36769
177.00	DB586-Y	12	8.787	0.4115	0.1428	37950
176.00	Pirod 4' Side Mount Standoff (1)	12	8.693	0.4096	0.1420	38822
175.00	DB586-Y (inverted)	12	8.599	0.4077	0.1411	39813
168.00	L-810 Obstruction Lighting (1)	12	7.952	0.3941	0.1348	32098
165.00	L-810 Obstruction Lighting (1)	12	7.680	0.3880	0.1320	23315
164.00	L-810 Obstruction Lighting (1)	12	7.590	0.3860	0.1311	21252
163.00	Telewave ANT220F2 - Omni Antenna	12	7.501	0.3839	0.1302	19614
160.00	Siteprol USF-4U Mount Assembly (Ca = 1.4 assumed)	12	7.237	0.3776	0.1277	16952
154.00	Commscope PAR6-59W-PXA/A	12	6.728	0.3645	0.1235	18614
153.00	ANT450F6	12	6.646	0.3622	0.1229	19222
145.00	Telewave ANT220F2 - Omni Antenna	12	6.008	0.3434	0.1187	26013
142.00	Siteprol USF-4U Mount Assembly	12	5.777	0.3361	0.1173	29495

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
	(Ca = 1.4 assumed)					
139.00	DB212-1	12	5.549	0.3286	0.1159	30621
117.00	3' Wide Ice Shield (for Dish Antennas) (Assume Ca=2.0)	12	4.013	0.2724	0.1021	18232
115.00	8' Wide Ice Shield (for Dish Antennas) (Assume Ca=2.0)	12	3.888	0.2674	0.1004	18814
112.00	Andrew 2' w/Radome	12	3.706	0.2600	0.0978	19833
107.00	PA8-65	12	3.413	0.2475	0.0934	21802
106.00	Pirod 4' Side Mount Standoff (1)	12	3.357	0.2450	0.0925	22243
94.00	PD688S-4	12	2.715	0.2138	0.0826	21835

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	320	Diagonal	A325X	0.6250	1	1340.52	5811.33	0.231 ✓	1	Member Block Shear
T2	304	Leg	A325N	1.0000	6	1309.48	54517.00	0.024 ✓	1	Bolt Tension
		Diagonal	A325X	0.6250	1	1558.05	5811.33	0.268 ✓	1	Member Block Shear
T3	300	Leg	A325N	1.0000	8	2734.03	54517.00	0.050 ✓	1	Bolt Tension
		Diagonal	A325X	0.6250	1	3066.10	9107.81	0.337 ✓	1	Member Block Shear
T4	280	Leg	A325N	1.0000	8	5116.02	54517.00	0.094 ✓	1	Bolt Tension
		Diagonal	A325X	0.7500	1	4723.82	11962.50	0.395 ✓	1	Member Block Shear
T5	260	Leg	A325N	1.0000	8	8474.44	54517.00	0.155 ✓	1	Bolt Tension
		Diagonal	A325X	0.7500	1	8216.26	14137.50	0.581 ✓	1	Member Bearing
T6	240	Leg	A325N	1.0000	8	13665.50	54517.00	0.251 ✓	1	Bolt Tension
		Diagonal	A325X	0.7500	1	13662.80	17671.90	0.773 ✓	1	Member Bearing
T7	220	Leg	A325N	1.0000	12	13001.50	54517.00	0.238 ✓	1	Bolt Tension
		Diagonal	A325X	0.7500	1	16907.20	21206.30	0.797 ✓	1	Member Bearing
T8	200	Leg	A325N	1.0000	12	17750.10	54517.00	0.326 ✓	1	Bolt Tension
		Diagonal	A325X	0.8750	1	21084.80	24862.50	0.848 ✓	1	Member Bearing
T9	180	Leg	A325N	1.0000	12	20242.60	54517.00	0.371 ✓	1	Bolt Tension
		Diagonal	A325X	0.8750	1	22598.50	24862.50	0.909 ✓	1	Member Bearing
T10	170	Diagonal	A325X	0.8750	1	23312.70	24862.50	0.938 ✓	1	Member Bearing
T11	160	Leg	A325N	1.0000	12	28083.20	54517.00	0.515 ✓	1	Bolt Tension
		Diagonal	A325X	0.8750	1	29186.20	33824.30	0.863 ✓	1	Bolt Shear
T12	140	Leg	A325N	1.0000	12	33425.20	54517.00	0.613 ✓	1	Bolt Tension
		Diagonal	A325X	0.8750	1	30934.70	33824.30	0.915 ✓	1	Bolt Shear
T13	120	Leg	A325N	1.0000	12	34203.90	54517.00	0.627 ✓	1	Bolt Tension
		Diagonal	A325X	0.7500	3	16936.80	24850.50	0.682 ✓	1	Bolt Shear
		Horizontal	A325X	0.7500	2	13535.70	24850.50	0.545 ✓	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
T14	100	Leg	A325N	1.0000	16	29089.20	54517.00	0.534 ✓	1	Bolt Tension
		Diagonal	A325X	0.7500	3	17743.30	24850.50	0.714 ✓	1	Bolt Shear
		Horizontal	A325X	0.7500	2	15236.10	24850.50	0.613 ✓	1	Bolt Shear
T15	80	Leg	A325N	1.0000	16	32582.70	54517.00	0.598 ✓	1	Bolt Tension
		Diagonal	A325X	0.7500	3	17723.10	24850.50	0.713 ✓	1	Bolt Shear
		Horizontal	A325X	0.7500	2	15717.10	24850.50	0.632 ✓	1	Bolt Shear
T16	60	Leg	A325N	1.0000	16	35494.50	54517.00	0.651 ✓	1	Bolt Tension
		Diagonal	A325X	0.8750	3	25019.60	33824.30	0.740 ✓	1	Bolt Shear
		Horizontal	A325X	0.7500	2	17550.10	24850.50	0.706 ✓	1	Bolt Shear
T17	30	Leg	A325N	1.0000	24	27252.00	54517.00	0.500 ✓	1	Bolt Tension
		Diagonal	A325X	0.8750	3	24670.20	33824.30	0.729 ✓	1	Bolt Shear
		Horizontal	A325X	0.7500	2	20833.40	24850.50	0.838 ✓	1	Bolt Shear

Compression Checks

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	320 - 304	ROHN 5 EH	16.00	4.00	26.1 K=1.00	6.1120	-7158.49	261674.00	0.027 [1] ✓
T2	304 - 300	ROHN 5 EH	4.00	4.00	26.1 K=1.00	6.1120	-9868.91	261674.00	0.038 [1] ✓
T3	300 - 280	ROHN 6 EH	20.03	5.01	27.4 K=1.00	8.4049	-27177.60	358043.00	0.076 [1] ✓
T4	280 - 260	ROHN 8 EH w/ angle 8x8x0.5	20.04	6.68	27.0 K=1.00	20.5036	-51714.50	874859.00	0.059 [1] ✓
T5	260 - 240	ROHN 8 EH w/ angle 8x8x0.5	20.03	6.68	27.0 K=1.00	20.5036	-87438.50	874884.00	0.100 [1] ✓
T6	240 - 220	ROHN 8 EH w/ angle 8x8x0.5	20.03	6.68	27.0 K=1.00	20.5036	-141251.00	874888.00	0.161 [1] ✓
T7	220 - 200	ROHN 8 EH w/ angle 8x8x0.5	20.03	10.02	40.4 K=1.00	20.5036	-198631.00	818638.00	0.243 [1] ✓
T8	200 - 180	ROHN 10 EH w/ angle 8x8x0.5	20.04	10.02	34.6 K=1.00	23.8453	-269963.00	982914.00	0.275 [1] ✓
T9	180 - 170	ROHN 10 EH w/ angle 8x8x0.5	10.02	10.02	34.6 K=1.00	23.8453	-306831.00	982929.00	0.312 [1] ✓
T10	170 - 160	ROHN 10 EH w/ angle 8x8x0.5	10.02	10.02	34.6 K=1.00	23.8453	-344042.00	982929.00	0.350 [1] ✓
T11	160 - 140	ROHN 10 EH w/ angle 8x8x0.5	20.03	10.02	34.6 K=1.00	23.8453	-423692.00	982978.00	0.431 [1] ✓
T12	140 - 120	ROHN 10 EH w/ angle	20.04	10.02	34.6	23.8453	-504778.00	982899.00	0.514 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
		8x8x0.5			K=1.00				✓
T13	120 - 100	ROHN 10 EH w/ angle 8x8x0.5	20.06	10.03	34.7 K=1.00	23.8453	-521186.00	982763.00	0.530 [1] ✓
T14	100 - 80	ROHN 10 EH w/ angle 8x8x0.5	20.05	10.03	34.7 K=1.00	23.8453	-591467.00	982792.00	0.602 [1] ✓
T15	80 - 60	ROHN 12 EH w/ angle 8x8x0.5	20.06	10.03	29.9 K=1.00	26.9670	-663079.00	1136630.00	0.583 [1] ✓
T16	60 - 30	ROHN 12 EH w/ angle 8x8x0.5	30.07	10.02	29.9 K=1.00	26.9670	-735095.00	1136700.00	0.647 [1] ✓
T17	30 - 0	ROHN 12 EHS w Angle 8x8x0.625	30.08	10.03	30.2 K=1.00	33.3120	-842733.00	1402320.00	0.601 [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	320 - 304	L1 3/4x1 3/4x3/16	7.90	3.56	124.4 K=1.00	0.6211	-1332.75	11479.60	0.116 [1] ✓
T2	304 - 300	L1 3/4x1 3/4x3/16	7.90	3.56	124.4 K=1.00	0.6211	-1579.71	11479.60	0.138 [1] ✓
T3	300 - 280	L2x2x1/4	9.94	4.68	143.7 K=1.00	0.9380	-3093.64	13009.80	0.238 [1] ✓
T4	280 - 260	L2 1/2x2 1/2x1/4	12.59	5.83	142.4 K=1.00	1.1900	-4792.84	16785.10	0.286 [1] ✓
T5	260 - 240	L3x3x1/4	14.38	6.72	136.3 K=1.00	1.4400	-8474.57	22180.60	0.382 [1] ✓
T6	240 - 220	L4x4x5/16	16.19	7.64	116.9 K=1.01	2.4000	-13647.80	50268.80	0.271 [1] ✓
T7	220 - 200	L4x4x3/8	19.37	9.30	141.7 K=1.00	2.8600	-17543.50	40783.20	0.430 [1] ✓
T8	200 - 180	L4x4x3/8	21.20	10.21	155.6 K=1.00	2.8600	-21374.30	33828.90	0.632 [1] ✓
T9	180 - 170	L4x4x3/8	22.13	10.68	162.6 K=1.00	2.8600	-22988.70	30962.40	0.742 [1] ✓
T10	170 - 160	L4x4x3/8	23.06	11.15	169.7 K=1.00	2.8600	-23844.30	28413.70	0.839 [1] ✓
T11	160 - 140	L5x5x1/2	24.84	12.01	146.6 K=1.00	4.7500	-29186.20	63217.20	0.462 [1] ✓
T12	140 - 120	L5x5x1/2	26.78	13.03	159.0 K=1.00	4.7500	-30934.70	53762.80	0.575 [1] ✓
T13	120 - 100	ROHN 3 XXS	24.42	12.21	139.9 K=1.00	5.4664	-50810.40	63081.40	0.805 [1] ✓
T14	100 - 80	ROHN 3 XXS	25.15	12.58	144.1 K=1.00	5.4664	-53229.80	59442.80	0.895 [1] ✓
T15	80 - 60	ROHN 3 XXS	25.98	12.99	148.9 K=1.00	5.4664	-53169.30	55698.10	0.955 [1] ✓

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T16	60 - 30	ROHN 4 EH	35.21	11.74	95.4 K=1.00	4.4074	-75058.90	101988.00	0.736 [1]
T17	30 - 0	ROHN 4 EH	36.27	12.09	98.2 K=1.00	4.4074	-74010.70	97939.00	0.756 [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 $\frac{P_u}{\phi P_n}$
T13	120 - 100	ROHN 3 STD	25.39	12.22	126.1 K=1.00	2.2285	-27071.50	31679.40	0.855 [1]
T14	100 - 80	ROHN 3 EH	27.97	13.51	142.7 K=1.00	3.0159	-30472.20	33455.50	0.911 [1]
T15	80 - 60	ROHN 3 XXS	30.47	14.70	168.5 K=1.00	5.4664	-31434.30	43484.00	0.723 [1]
T16	60 - 30	ROHN 3.5 EH	33.14	16.04	147.3 K=1.00	3.6784	-35100.20	38300.30	0.916 [1]
T17	30 - 0	ROHN 4 EH	36.80	17.87	145.2 K=1.00	4.4074	-41666.80	47220.90	0.882 [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	320 - 304	L1 3/4x1 3/4x3/16	6.81	6.35	182.6 K=0.82	0.6211	-193.77	5333.23	0.036 [1]
T3	300 - 280	L2x2x1/4	6.81	6.26	164.3 K=0.86	0.9380	-471.34	9943.51	0.047 [1]

[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 $\frac{P_u}{\phi P_n}$
T13	120 - 100	ROHN 1.5 STD	6.35	5.88	113.3 K=1.00	0.7995	-9045.93	14083.10	0.642 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T14	100 - 80	P1.5x.145	6.99	6.52	125.7 K=1.00	0.7995	-10264.50	11432.70	0.898 [1]
T15	80 - 60	ROHN 2 STD	7.62	7.09	108.0 K=1.00	1.0745	-11510.40	20598.10	0.559 [1]
T16	60 - 30	ROHN 1.5 STD	5.52	4.99	96.2 K=1.00	0.7995	-12755.90	18282.30	0.698 [1]
T17	30 - 0	P1.5x.145	6.13	5.60	108.0 K=1.00	0.7995	-14627.20	15339.00	0.954 [1]

[1] P_u / ϕP_n controls

Redundant Horizontal (2) 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 $\frac{P_u}{\phi P_n}$
T16	60 - 30	ROHN 2 XXS	11.05	10.52	179.6 K=1.00	2.6559	-12755.90	18604.80	0.686 [1]
T17	30 - 0	ROHN 2.5 EH	12.27	11.74	152.4 K=1.00	2.2535	-14627.20	21919.90	0.667 [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 $\frac{P_u}{\phi P_n}$
T13	120 - 100	ROHN 2 STD	11.52	10.57	161.1 K=1.00	1.0745	-8207.03	9352.65	0.878 [1]
T14	100 - 80	ROHN 2 EH	11.86	10.98	171.6 K=1.00	1.4807	-8705.29	11364.10	0.766 [1]
T15	80 - 60	ROHN 2 EH	12.18	11.25	175.8 K=1.00	1.4807	-9205.33	10825.00	0.850 [1]
T16	60 - 30	ROHN 2 EH	11.15	9.95	155.3 K=1.00	1.4807	-12872.20	13862.10	0.929 [1]
T17	30 - 0	ROHN 2.5 STD	11.41	10.31	130.6 K=1.00	1.7040	-13607.60	22579.60	0.603 [1]

[1] P_u / ϕP_n controls

Redundant Diagonal (2) 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 $\frac{P_u}{\phi P_n}$
T16	60 - 30	ROHN 2.5 STD	14.46	13.72	173.8 K=1.00	1.7040	-8347.79	12742.30	0.655 [1] ✓
T17	30 - 0	ROHN 2.5 STD	15.33	14.63	185.3 K=1.00	1.7040	-9142.26	11206.60	0.816 [1] ✓

[1] P_u / ϕP_n controls

Redundant Hip (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 $\frac{P_u}{\phi P_n}$
T13	120 - 100	ROHN 1.5 STD	6.35	6.35	122.3 K=1.00	0.7995	-49.16	12066.60	0.004 [1] ✓
T14	100 - 80	ROHN 1.5 STD	6.99	6.99	134.8 K=1.00	0.7995	-48.04	9943.20	0.005 [1] ✓
T15	80 - 60	ROHN 1.5 STD	7.62	7.62	146.8 K=1.00	0.7995	-47.05	8378.50	0.006 [1] ✓
T16	60 - 30	ROHN 1.5 STD	5.52	5.52	106.5 K=1.00	0.7995	-176.09	15708.50	0.011 [1] ✓
T17	30 - 0	ROHN 1.5 STD	6.13	6.13	118.2 K=1.00	0.7995	-157.59	12924.00	0.012 [1] ✓

[1] P_u / ϕP_n controls

Redundant Hip (2) 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 $\frac{P_u}{\phi P_n}$
T16	60 - 30	ROHN 2 STD	11.05	11.05	168.4 K=1.00	1.0745	-95.53	8559.02	0.011 [1] ✓
T17	30 - 0	ROHN 2 STD	12.27	12.27	187.0 K=1.00	1.0745	-89.80	6941.18	0.013 [1] ✓

[1] P_u / ϕP_n controls

Redundant Hip 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 $\frac{P_u}{\phi P_n}$
T13	120 - 100	ROHN 2.5 STD	15.15	15.15	191.9	1.7040	-96.91	10450.60	0.009 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T14	100 - 80	ROHN 2.5 STD	16.00	16.00	202.6 K=1.00	1.7040	-90.97	9375.46	0.010 [1] ✓
T15	80 - 60	ROHN 3 STD	16.88	16.88	174.1 K=1.00	2.2285	-102.10	16617.70	0.006 [1] ✓
T16	60 - 30	ROHN 2 STD	14.10	14.10	214.9 K=1.00	1.0745	-361.06	5254.92	0.069 [1] ✓
T17	30 - 0	ROHN 2.5 STD	14.88	14.88	188.4 K=1.00	1.7040	-327.60	10840.00	0.030 [1] ✓

[1] P_u / ϕP_n controls

Redundant Hip Diagonal (2) 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 $\frac{P_u}{\phi P_n}$
T16	60 - 30	ROHN 2 STD	17.91	17.91	273.1 K=1.00	1.0745	-143.06	3255.91	0.044 [1] ✓
T17	30 - 0	KL/R > 250 (C) - 357 ROHN 2.5 STD	19.28	19.28	244.2 K=1.00	1.7040	-140.45	6453.40	0.022 [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 $\frac{P_u}{\phi P_n}$
T13	120 - 100	ROHN 3 STD	12.69	12.69	130.9 K=1.00	2.2285	-27.73	29370.40	0.001 [1] ✓
T14	100 - 80	ROHN 3 STD	13.99	13.99	144.2 K=1.00	2.2285	-27.51	24201.90	0.001 [1] ✓
T15	80 - 60	ROHN 3 STD	15.24	15.24	157.1 K=1.00	2.2285	-31.22	20393.40	0.002 [1] ✓
T16	60 - 30	ROHN 3 STD	16.57	16.57	170.9 K=1.00	2.2285	-60.21	17239.70	0.003 [1] ✓
T17	30 - 0	ROHN 3 STD	18.40	18.40	189.8 K=1.00	2.2285	-62.57	13981.00	0.004 [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 $\frac{P_u}{\phi P_n}$
T1	320 - 304	ROHN 5 EH	16.00	4.00	26.1	6.1120	5560.46	275039.00	0.020 [1] ✓
T2	304 - 300	ROHN 5 EH	4.00	4.00	26.1	6.1120	7856.86	275039.00	0.029 [1] ✓
T3	300 - 280	ROHN 6 EH	20.03	5.01	27.4	8.4049	21872.20	378222.00	0.058 [1] ✓
T4	280 - 260	ROHN 8 EH w/ angle 8x8x0.5	20.04	6.68	27.0	20.5036	40928.20	922662.00	0.044 [1] ✓
T5	260 - 240	ROHN 8 EH w/ angle 8x8x0.5	20.03	6.68	27.0	20.5036	67795.50	922662.00	0.073 [1] ✓
T6	240 - 220	ROHN 8 EH w/ angle 8x8x0.5	20.03	6.68	27.0	20.5036	109324.00	922662.00	0.118 [1] ✓
T7	220 - 200	ROHN 8 EH w/ angle 8x8x0.5	20.03	10.02	40.4	20.5036	156018.00	922662.00	0.169 [1] ✓
T8	200 - 180	ROHN 10 EH w/ angle 8x8x0.5	20.04	10.02	34.6	23.8453	213001.00	1073040.00	0.199 [1] ✓
T9	180 - 170	ROHN 10 EH w/ angle 8x8x0.5	10.02	10.02	34.6	23.8453	242911.00	1073040.00	0.226 [1] ✓
T10	170 - 160	ROHN 10 EH w/ angle 8x8x0.5	10.02	10.02	34.6	23.8453	273215.00	1073040.00	0.255 [1] ✓
T11	160 - 140	ROHN 10 EH w/ angle 8x8x0.5	20.03	10.02	34.6	23.8453	336998.00	1073040.00	0.314 [1] ✓
T12	140 - 120	ROHN 10 EH w/ angle 8x8x0.5	20.04	10.02	34.6	23.8453	401103.00	1073040.00	0.374 [1] ✓
T13	120 - 100	ROHN 10 EH w/ angle 8x8x0.5	20.06	10.03	34.7	23.8453	411853.00	1073040.00	0.384 [1] ✓
T14	100 - 80	ROHN 10 EH w/ angle 8x8x0.5	20.05	10.03	34.7	23.8453	466530.00	1073040.00	0.435 [1] ✓
T15	80 - 60	ROHN 12 EH w/ angle 8x8x0.5	20.06	10.03	29.9	26.9670	522694.00	1213520.00	0.431 [1] ✓
T16	60 - 30	ROHN 12 EH w/ angle 8x8x0.5	30.07	10.02	29.9	26.9670	578358.00	1213520.00	0.477 [1] ✓
T17	30 - 0	ROHN 12 EHS w Angle 8x8x0.625	30.08	10.03	30.2	33.3120	662277.00	1499040.00	0.442 [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 $\frac{P_u}{\phi P_n}$
T1	320 - 304	L1 3/4x1 3/4x3/16	7.90	3.56	82.2	0.3604	1340.52	15675.30	0.086 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T2	304 - 300	L1 3/4x1 3/4x3/16	7.90	3.56	82.2	0.3604	1558.05	15675.30	0.099 [1]
T3	300 - 280	L2x2x1/4	9.94	4.68	94.6	0.5629	3066.10	24485.10	0.125 [1]
T4	280 - 260	L2 1/2x2 1/2x1/4	12.59	5.83	93.1	0.7284	4723.82	31687.00	0.149 [1]
T5	260 - 240	L3x3x1/4	14.38	6.72	88.5	0.9159	8216.26	44652.00	0.184 [1]
T6	240 - 220	L4x4x5/16	16.19	7.64	75.2	1.5949	13662.80	77752.40	0.176 [1]
T7	220 - 200	L4x4x3/8	19.37	9.30	92.1	1.8989	16907.20	92571.70	0.183 [1]
T8	200 - 180	L4x4x3/8	21.20	10.21	101.1	1.8637	21084.80	90857.80	0.232 [1]
T9	180 - 170	L4x4x3/8	22.13	10.68	105.6	1.8637	22598.50	90857.80	0.249 [1]
T10	170 - 160	L4x4x3/8	23.06	11.15	110.2	1.8637	23312.70	90857.80	0.257 [1]
T11	160 - 140	L5x5x1/2	24.84	12.01	94.8	3.1875	28338.40	155391.00	0.182 [1]
T12	140 - 120	L5x5x1/2	26.78	13.03	102.7	3.1875	30048.80	155391.00	0.193 [1]
T13	120 - 100	ROHN 3 XXS	24.42	12.21	139.9	5.4664	48160.90	245987.00	0.196 [1]
T14	100 - 80	ROHN 3 XXS	25.15	12.58	144.1	5.4664	49617.00	245987.00	0.202 [1]
T15	80 - 60	ROHN 3 XXS	25.98	12.99	148.9	5.4664	48528.50	245987.00	0.197 [1]
T16	60 - 30	ROHN 4 EH	35.21	11.74	95.4	4.4074	68386.50	198335.00	0.345 [1]
T17	30 - 0	ROHN 4 EH	36.27	12.09	98.2	4.4074	69647.20	198335.00	0.351 [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 $\frac{P_u}{\phi P_n}$
T13	120 - 100	ROHN 3 STD	25.39	12.22	126.1	2.2285	26790.70	100281.00	0.267 [1]
T14	100 - 80	ROHN 3 EH	27.97	13.51	142.7	3.0159	29257.70	135717.00	0.216 [1]
T15	80 - 60	ROHN 3 XXS	30.47	14.70	168.5	5.4664	29934.20	245987.00	0.122 [1]
T16	60 - 30	ROHN 3.5 EH	33.14	16.04	147.3	3.6784	34966.70	165529.00	0.211 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T17	30 - 0	ROHN 4 EH	36.80	17.87	145.2	4.4074	37621.80	198335.00	0.190 [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	320 - 304	L1 3/4x1 3/4x3/16	6.81	6.35	141.8	0.6211	182.33	20123.40	0.009 [1] ✔
T3	300 - 280	L2x2x1/4	6.81	6.26	123.3	0.9380	471.34	30391.20	0.016 [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 $\frac{P_u}{\phi P_n}$
T13	120 - 100	ROHN 1.5 STD	6.35	5.88	113.3	0.7995	9045.93	35975.60	0.251 [1] ✔
T14	100 - 80	P1.5x.145	6.99	6.52	125.7	0.7995	10264.50	35975.60	0.285 [1] ✔
T15	80 - 60	ROHN 2 STD	7.62	7.09	108.0	1.0745	11510.40	48353.90	0.238 [1] ✔
T16	60 - 30	ROHN 1.5 STD	5.52	4.99	96.2	0.7995	12755.90	35975.60	0.355 [1] ✔
T17	30 - 0	P1.5x.145	6.13	5.60	108.0	0.7995	14627.20	35975.60	0.407 [1] ✔

[1] P_u / ϕP_n controls

Redundant Horizontal (2) 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 $\frac{P_u}{\phi P_n}$
T16	60 - 30	ROHN 2 XXS	11.05	10.52	179.6	2.6559	12755.90	119516.00	0.107 [1] ✔
T17	30 - 0	ROHN 2.5 EH	12.27	11.74	152.4	2.2535	14627.20	101409.00	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

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 $\frac{P_u}{\phi P_n}$
T13	120 - 100	ROHN 2 STD	11.52	10.57	161.1	1.0745	8207.03	48353.90	0.170 [1]
T14	100 - 80	ROHN 2 EH	11.86	10.98	171.6	1.4807	8705.29	66630.70	0.131 [1]
T15	80 - 60	ROHN 2 EH	12.18	11.25	175.8	1.4807	9205.33	66630.70	0.138 [1]
T16	60 - 30	ROHN 2 EH	11.15	9.95	155.3	1.4807	12872.20	66630.70	0.193 [1]
T17	30 - 0	ROHN 2.5 STD	11.41	10.31	130.6	1.7040	13607.60	76682.30	0.177 [1]

[1] P_u / ϕP_n controls

Redundant Diagonal (2) 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 $\frac{P_u}{\phi P_n}$
T16	60 - 30	ROHN 2.5 STD	14.46	13.72	173.8	1.7040	8347.79	76682.30	0.109 [1]
T17	30 - 0	ROHN 2.5 STD	15.33	14.63	185.3	1.7040	9142.26	76682.30	0.119 [1]

[1] P_u / ϕP_n controls

Redundant Hip (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 $\frac{P_u}{\phi P_n}$
T13	120 - 100	ROHN 1.5 STD	6.35	6.35	122.3	0.7995	23.32	35975.60	0.001 [1]
T14	100 - 80	ROHN 1.5 STD	6.99	6.99	134.8	0.7995	21.18	35975.60	0.001 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T15	80 - 60	ROHN 1.5 STD	7.62	7.62	146.8	0.7995	15.77	35975.60	0.000 [1] ✔
T16	60 - 30	ROHN 1.5 STD	5.52	5.52	106.5	0.7995	170.54	35975.60	0.005 [1] ✔
T17	30 - 0	ROHN 1.5 STD	6.13	6.13	118.2	0.7995	147.19	35975.60	0.004 [1] ✔

[1] P_u / ϕP_n controls

Redundant Hip (2) 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 $\frac{P_u}{\phi P_n}$
T16	60 - 30	ROHN 2 STD	11.05	11.05	168.4	1.0745	70.61	48353.90	0.001 [1] ✔
T17	30 - 0	ROHN 2 STD	12.27	12.27	187.0	1.0745	61.61	48353.90	0.001 [1] ✔

[1] P_u / ϕP_n controls

Redundant Hip 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 $\frac{P_u}{\phi P_n}$
T13	120 - 100	ROHN 2.5 STD	15.15	15.15	191.9	1.7040	98.47	76682.30	0.001 [1] ✔
T14	100 - 80	ROHN 2.5 STD	16.00	16.00	202.6	1.7040	91.32	76682.30	0.001 [1] ✔
T15	80 - 60	ROHN 3 STD	16.88	16.88	174.1	2.2285	93.67	100281.00	0.001 [1] ✔
T16	60 - 30	ROHN 2 STD	14.10	14.10	214.9	1.0745	355.36	48353.90	0.007 [1] ✔
T17	30 - 0	ROHN 2.5 STD	14.88	14.88	188.4	1.7040	322.27	76682.30	0.004 [1] ✔

[1] P_u / ϕP_n controls

Redundant Hip Diagonal (2) 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 $\frac{P_u}{\phi P_n}$
T16	60 - 30	ROHN 2 STD	17.91	17.91	273.1	1.0745	121.98	48353.90	0.003 [1] ✔
T17	30 - 0	ROHN 2.5 STD	19.28	19.28	244.2	1.7040	118.03	76682.30	0.002 [1] ✔

[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 $\frac{P_u}{\phi P_n}$
T13	120 - 100	ROHN 3 STD	12.69	12.69	130.9	2.2285	7.49	100281.00	0.000 [1] ✔
T14	100 - 80	ROHN 3 STD	13.99	13.99	144.2	2.2285	3.98	100281.00	0.000 [1] ✔
T16	60 - 30	ROHN 3 STD	16.57	16.57	170.9	2.2285	44.23	100281.00	0.000 [1] ✔
T17	30 - 0	ROHN 3 STD	18.40	18.40	189.8	2.2285	40.14	100281.00	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
T1	320 - 304	Leg	ROHN 5 EH	1	-7158.49	261674.00	2.7	Pass
		Leg	ROHN 5 EH	2	-7090.15	261674.00	2.7	Pass
		Leg	ROHN 5 EH	3	-7130.20	261674.00	2.7	Pass
T2	304 - 300	Leg	ROHN 5 EH	31	-9868.91	261674.00	3.8	Pass
		Leg	ROHN 5 EH	32	-9805.77	261674.00	3.7	Pass
		Leg	ROHN 5 EH	33	-9842.29	261674.00	3.8	Pass
T3	300 - 280	Leg	ROHN 6 EH	40	-27177.60	358043.00	7.6	Pass
		Leg	ROHN 6 EH	41	-26683.20	358043.00	7.5	Pass
		Leg	ROHN 6 EH	42	-26893.20	358043.00	7.5	Pass
T4	280 - 260	Leg	ROHN 8 EH w/ angle 8x8x0.5	70	-51714.50	874859.00	5.9 9.3 (b)	Pass
		Leg	ROHN 8 EH w/ angle 8x8x0.5	71	-51445.10	874859.00	5.9 9.4 (b)	Pass
		Leg	ROHN 8 EH w/ angle 8x8x0.5	72	-51499.80	874859.00	5.9 9.4 (b)	Pass
T5	260 - 240	Leg	ROHN 8 EH w/ angle 8x8x0.5	91	-86808.40	874884.00	9.9 15.5 (b)	Pass
		Leg	ROHN 8 EH w/ angle 8x8x0.5	92	-87438.50	874884.00	10.0 15.5 (b)	Pass
		Leg	ROHN 8 EH w/ angle 8x8x0.5	93	-86513.70	874884.00	9.9 15.5 (b)	Pass
T6	240 - 220	Leg	ROHN 8 EH w/ angle 8x8x0.5	112	-140478.00	874888.00	16.1	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
							25.1 (b)	
		Leg	ROHN 8 EH w/ angle 8x8x0.5	113	-141251.00	874888.00	16.1	Pass
							24.9 (b)	
		Leg	ROHN 8 EH w/ angle 8x8x0.5	114	-140514.00	874888.00	16.1	Pass
							25.1 (b)	
T7	220 - 200	Leg	ROHN 8 EH w/ angle 8x8x0.5	133	-197583.00	818638.00	24.1	Pass
		Leg	ROHN 8 EH w/ angle 8x8x0.5	134	-198631.00	818638.00	24.3	Pass
		Leg	ROHN 8 EH w/ angle 8x8x0.5	135	-197623.00	818638.00	24.1	Pass
T8	200 - 180	Leg	ROHN 10 EH w/ angle 8x8x0.5	148	-268445.00	982914.00	27.3	Pass
							32.6 (b)	
		Leg	ROHN 10 EH w/ angle 8x8x0.5	149	-269963.00	982914.00	27.5	Pass
							32.4 (b)	
		Leg	ROHN 10 EH w/ angle 8x8x0.5	150	-268385.00	982914.00	27.3	Pass
							32.6 (b)	
T9	180 - 170	Leg	ROHN 10 EH w/ angle 8x8x0.5	163	-305251.00	982929.00	31.1	Pass
							37.1 (b)	
		Leg	ROHN 10 EH w/ angle 8x8x0.5	164	-306831.00	982929.00	31.2	Pass
							37.0 (b)	
		Leg	ROHN 10 EH w/ angle 8x8x0.5	165	-305032.00	982929.00	31.0	Pass
							37.1 (b)	
T10	170 - 160	Leg	ROHN 10 EH w/ angle 8x8x0.5	172	-342454.00	982929.00	34.8	Pass
		Leg	ROHN 10 EH w/ angle 8x8x0.5	173	-344042.00	982929.00	35.0	Pass
		Leg	ROHN 10 EH w/ angle 8x8x0.5	174	-342144.00	982929.00	34.8	Pass
T11	160 - 140	Leg	ROHN 10 EH w/ angle 8x8x0.5	181	-422854.00	982978.00	43.0	Pass
							51.4 (b)	
		Leg	ROHN 10 EH w/ angle 8x8x0.5	182	-423692.00	982978.00	43.1	Pass
							51.3 (b)	
		Leg	ROHN 10 EH w/ angle 8x8x0.5	183	-421657.00	982978.00	42.9	Pass
							51.5 (b)	
T12	140 - 120	Leg	ROHN 10 EH w/ angle 8x8x0.5	196	-503937.00	982899.00	51.3	Pass
							61.2 (b)	
		Leg	ROHN 10 EH w/ angle 8x8x0.5	197	-504778.00	982899.00	51.4	Pass
							61.1 (b)	
		Leg	ROHN 10 EH w/ angle 8x8x0.5	198	-502521.00	982899.00	51.1	Pass
							61.3 (b)	
T13	120 - 100	Leg	ROHN 10 EH w/ angle 8x8x0.5	211	-520657.00	982763.00	53.0	Pass
							62.6 (b)	
		Leg	ROHN 10 EH w/ angle 8x8x0.5	212	-521186.00	982763.00	53.0	Pass
							62.5 (b)	
		Leg	ROHN 10 EH w/ angle 8x8x0.5	213	-519429.00	982763.00	52.9	Pass
							62.7 (b)	
T14	100 - 80	Leg	ROHN 10 EH w/ angle 8x8x0.5	244	-590748.00	982792.00	60.1	Pass
		Leg	ROHN 10 EH w/ angle 8x8x0.5	245	-591467.00	982792.00	60.2	Pass
		Leg	ROHN 10 EH w/ angle 8x8x0.5	246	-589431.00	982792.00	60.0	Pass
T15	80 - 60	Leg	ROHN 12 EH w/ angle 8x8x0.5	277	-662123.00	1136630.00	58.3	Pass
							59.7 (b)	
		Leg	ROHN 12 EH w/ angle 8x8x0.5	278	-663079.00	1136630.00	58.3	Pass
							59.6 (b)	
		Leg	ROHN 12 EH w/ angle 8x8x0.5	279	-660769.00	1136630.00	58.1	Pass
							59.8 (b)	
T16	60 - 30	Leg	ROHN 12 EH w/ angle 8x8x0.5	310	-734048.00	1136700.00	64.6	Pass
							65.0 (b)	
		Leg	ROHN 12 EH w/ angle 8x8x0.5	311	-735095.00	1136700.00	64.7	Pass
							64.9 (b)	
		Leg	ROHN 12 EH w/ angle 8x8x0.5	312	-732712.00	1136700.00	64.5	Pass
							65.1 (b)	
T17	30 - 0	Leg	ROHN 12 EHS w Angle 8x8x0.625	361	-841386.00	1402320.00	60.0	Pass
		Leg	ROHN 12 EHS w Angle 8x8x0.625	362	-842733.00	1402320.00	60.1	Pass
		Leg	ROHN 12 EHS w Angle	363	-839978.00	1402320.00	59.9	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
			8x8x0.625					
T1	320 - 304	Diagonal	L1 3/4x1 3/4x3/16	7	-1318.91	11479.60	11.5 22.8 (b)	Pass
		Diagonal	L1 3/4x1 3/4x3/16	8	-1318.07	11479.60	11.5 22.8 (b)	Pass
		Diagonal	L1 3/4x1 3/4x3/16	9	-1307.14	11479.60	11.4 22.4 (b)	Pass
		Diagonal	L1 3/4x1 3/4x3/16	10	-1293.15	11479.60	11.3 22.4 (b)	Pass
		Diagonal	L1 3/4x1 3/4x3/16	11	-1332.75	11479.60	11.6 23.1 (b)	Pass
		Diagonal	L1 3/4x1 3/4x3/16	12	-1332.10	11479.60	11.6 23.1 (b)	Pass
		Diagonal	L1 3/4x1 3/4x3/16	13	-1077.19	11479.60	9.4 18.5 (b)	Pass
		Diagonal	L1 3/4x1 3/4x3/16	14	-1077.56	11479.60	9.4 18.5 (b)	Pass
		Diagonal	L1 3/4x1 3/4x3/16	15	-1056.56	11479.60	9.2 18.0 (b)	Pass
		Diagonal	L1 3/4x1 3/4x3/16	16	-1046.75	11479.60	9.1 18.0 (b)	Pass
		Diagonal	L1 3/4x1 3/4x3/16	17	-1116.23	11479.60	9.7 19.2 (b)	Pass
		Diagonal	L1 3/4x1 3/4x3/16	18	-1116.51	11479.60	9.7 19.2 (b)	Pass
		Diagonal	L1 3/4x1 3/4x3/16	19	-852.75	11479.60	7.4 14.7 (b)	Pass
		Diagonal	L1 3/4x1 3/4x3/16	20	-852.57	11479.60	7.4 14.7 (b)	Pass
		Diagonal	L1 3/4x1 3/4x3/16	21	-828.17	11479.60	7.2 14.1 (b)	Pass
		Diagonal	L1 3/4x1 3/4x3/16	22	-815.61	11479.60	7.1 14.1 (b)	Pass
		Diagonal	L1 3/4x1 3/4x3/16	23	-901.57	11479.60	7.9 15.6 (b)	Pass
		Diagonal	L1 3/4x1 3/4x3/16	24	-901.58	11479.60	7.9 15.6 (b)	Pass
		Diagonal	L1 3/4x1 3/4x3/16	25	-538.76	11479.60	4.7 9.2 (b)	Pass
		Diagonal	L1 3/4x1 3/4x3/16	26	-593.81	11479.60	5.2 9.9 (b)	Pass
		Diagonal	L1 3/4x1 3/4x3/16	27	-543.59	11479.60	4.7 9.0 (b)	Pass
		Diagonal	L1 3/4x1 3/4x3/16	28	-495.27	11479.60	4.3 8.4 (b)	Pass
		Diagonal	L1 3/4x1 3/4x3/16	29	-707.27	11479.60	6.2 12.1 (b)	Pass
		Diagonal	L1 3/4x1 3/4x3/16	30	-707.15	11479.60	6.2 12.1 (b)	Pass
T2	304 - 300	Diagonal	L1 3/4x1 3/4x3/16	34	-1523.17	11479.60	13.3 25.9 (b)	Pass
		Diagonal	L1 3/4x1 3/4x3/16	35	-1523.25	11479.60	13.3 25.8 (b)	Pass
		Diagonal	L1 3/4x1 3/4x3/16	36	-1544.03	11479.60	13.5 25.6 (b)	Pass
		Diagonal	L1 3/4x1 3/4x3/16	37	-1506.94	11479.60	13.1 25.6 (b)	Pass
		Diagonal	L1 3/4x1 3/4x3/16	38	-1579.71	11479.60	13.8 26.8 (b)	Pass
		Diagonal	L1 3/4x1 3/4x3/16	39	-1578.78	11479.60	13.8 26.8 (b)	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
T3	300 - 280	Diagonal	L2x2x1/4	46	-2796.65	13009.80	21.5 30.6 (b)	Pass
		Diagonal	L2x2x1/4	47	-2935.07	13009.80	22.6 30.4 (b)	Pass
		Diagonal	L2x2x1/4	48	-2339.39	13009.80	18.0 24.3 (b)	Pass
		Diagonal	L2x2x1/4	49	-2233.05	13009.80	17.2 24.4 (b)	Pass
		Diagonal	L2x2x1/4	50	-3093.64	13009.80	23.8 33.6 (b)	Pass
		Diagonal	L2x2x1/4	51	-3082.89	13009.80	23.7 33.7 (b)	Pass
		Diagonal	L2x2x1/4	52	-2265.20	14300.60	15.8 24.9 (b)	Pass
		Diagonal	L2x2x1/4	53	-2278.07	14300.60	15.9 24.8 (b)	Pass
		Diagonal	L2x2x1/4	54	-2265.34	14300.60	15.8 23.8 (b)	Pass
		Diagonal	L2x2x1/4	55	-2180.97	14300.60	15.3 23.9 (b)	Pass
		Diagonal	L2x2x1/4	56	-2577.82	14300.60	18.0 28.1 (b)	Pass
		Diagonal	L2x2x1/4	57	-2578.29	14300.60	18.0 28.1 (b)	Pass
		Diagonal	L2x2x1/4	58	-2107.84	15762.10	13.4 23.2 (b)	Pass
		Diagonal	L2x2x1/4	59	-2133.85	15762.10	13.5 23.1 (b)	Pass
		Diagonal	L2x2x1/4	60	-1704.38	15762.10	10.8 18.2 (b)	Pass
		Diagonal	L2x2x1/4	61	-1668.31	15762.10	10.6 18.3 (b)	Pass
		Diagonal	L2x2x1/4	62	-2121.59	15762.10	13.5 22.9 (b)	Pass
		Diagonal	L2x2x1/4	63	-2086.14	15762.10	13.2 22.9 (b)	Pass
		Diagonal	L2x2x1/4	64	-1981.43	17400.80	11.4 21.4 (b)	Pass
		Diagonal	L2x2x1/4	65	-2052.85	17400.80	11.8 21.3 (b)	Pass
		Diagonal	L2x2x1/4	66	-1453.52	17400.80	8.4 15.2 (b)	Pass
		Diagonal	L2x2x1/4	67	-1434.54	17400.80	8.2 15.2 (b)	Pass
		Diagonal	L2x2x1/4	68	-2006.22	17400.80	11.5 20.4 (b)	Pass
		Diagonal	L2x2x1/4	69	-1901.22	17400.80	10.9 20.5 (b)	Pass
T4	280 - 260	Diagonal	L2 1/2x2 1/2x1/4	73	-4743.78	16785.10	28.3 39.5 (b)	Pass
		Diagonal	L2 1/2x2 1/2x1/4	74	-4792.84	16785.10	28.6 39.4 (b)	Pass
		Diagonal	L2 1/2x2 1/2x1/4	75	-4291.59	16785.10	25.6 34.5 (b)	Pass
		Diagonal	L2 1/2x2 1/2x1/4	76	-4199.97	16785.10	25.0 34.5 (b)	Pass
		Diagonal	L2 1/2x2 1/2x1/4	77	-4697.90	16785.10	28.0 38.1 (b)	Pass
		Diagonal	L2 1/2x2 1/2x1/4	78	-4583.84	16785.10	27.3 38.1 (b)	Pass
		Diagonal	L2 1/2x2 1/2x1/4	79	-4200.47	18668.80	22.5	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
		Diagonal	L2 1/2x2 1/2x1/4	80	-4329.69	18668.80	34.9 (b) 23.2	Pass
		Diagonal	L2 1/2x2 1/2x1/4	81	-3660.45	18668.80	34.8 (b) 19.6	Pass
		Diagonal	L2 1/2x2 1/2x1/4	82	-3521.81	18668.80	29.1 (b) 18.9	Pass
		Diagonal	L2 1/2x2 1/2x1/4	83	-4354.00	18668.80	29.2 (b) 23.3	Pass
		Diagonal	L2 1/2x2 1/2x1/4	84	-4251.73	18668.80	35.2 (b) 22.8	Pass
		Diagonal	L2 1/2x2 1/2x1/4	85	-3653.87	20825.20	35.3 (b) 17.5	Pass
		Diagonal	L2 1/2x2 1/2x1/4	86	-3834.75	20825.20	30.4 (b) 18.4	Pass
		Diagonal	L2 1/2x2 1/2x1/4	87	-2946.99	20825.20	30.3 (b) 14.2	Pass
		Diagonal	L2 1/2x2 1/2x1/4	88	-2821.79	20825.20	23.3 (b) 13.5	Pass
		Diagonal	L2 1/2x2 1/2x1/4	89	-3938.46	20825.20	23.4 (b) 18.9	Pass
		Diagonal	L2 1/2x2 1/2x1/4	90	-3845.22	20825.20	31.9 (b) 18.5	Pass
T5	260 - 240	Diagonal	L3x3x1/4	94	-8474.57	22180.60	32.0 (b) 38.2	Pass
		Diagonal	L3x3x1/4	95	-8259.49	22180.60	58.0 (b) 37.2	Pass
		Diagonal	L3x3x1/4	96	-7643.59	22180.60	58.1 (b) 34.5	Pass
		Diagonal	L3x3x1/4	97	-8127.94	22180.60	53.9 (b) 36.6	Pass
		Diagonal	L3x3x1/4	98	-6471.42	22180.60	53.6 (b) 29.2	Pass
		Diagonal	L3x3x1/4	99	-6226.32	22180.60	43.7 (b) 28.1	Pass
		Diagonal	L3x3x1/4	100	-6713.91	24277.90	43.8 (b) 27.7	Pass
		Diagonal	L3x3x1/4	101	-6687.45	24277.90	47.0 (b) 27.5	Pass
		Diagonal	L3x3x1/4	102	-6264.57	24277.90	47.0 (b) 25.8	Pass
		Diagonal	L3x3x1/4	103	-6418.99	24277.90	43.4 (b) 26.4	Pass
		Diagonal	L3x3x1/4	104	-5998.47	24277.90	43.3 (b) 24.7	Pass
		Diagonal	L3x3x1/4	105	-5800.48	24277.90	40.8 (b) 23.9	Pass
		Diagonal	L3x3x1/4	106	-5799.52	26649.70	40.9 (b) 21.8	Pass
		Diagonal	L3x3x1/4	107	-5803.68	26649.70	40.8 (b) 21.8	Pass
		Diagonal	L3x3x1/4	108	-5404.08	26649.70	40.8 (b) 20.3	Pass
		Diagonal	L3x3x1/4	109	-5412.13	26649.70	37.1 (b) 20.3	Pass
		Diagonal	L3x3x1/4	110	-5473.52	26649.70	37.1 (b) 20.5	Pass
		Diagonal	L3x3x1/4	111	-5328.11	26649.70	37.5 (b) 20.0	Pass
T6	240 - 220	Diagonal	L4x4x5/16	115	-13418.30	50268.80	37.5 (b) 26.7 75.8 (b)	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
		Diagonal	L4x4x5/16	116	-13381.80	50268.80	26.6 76.0 (b)	Pass
		Diagonal	L4x4x5/16	117	-13622.00	50268.80	27.1 77.3 (b)	Pass
		Diagonal	L4x4x5/16	118	-13647.80	50268.80	27.1 77.2 (b)	Pass
		Diagonal	L4x4x5/16	119	-11232.30	50268.80	22.3 63.6 (b)	Pass
		Diagonal	L4x4x5/16	120	-11233.40	50268.80	22.3 63.6 (b)	Pass
		Diagonal	L4x4x5/16	121	-12796.90	53365.30	24.0 69.6 (b)	Pass
		Diagonal	L4x4x5/16	122	-12397.60	53365.30	23.2 69.7 (b)	Pass
		Diagonal	L4x4x5/16	123	-12582.60	53365.30	23.6 70.7 (b)	Pass
		Diagonal	L4x4x5/16	124	-12903.30	53365.30	24.2 70.6 (b)	Pass
		Diagonal	L4x4x5/16	125	-10299.10	53365.30	19.3 57.7 (b)	Pass
		Diagonal	L4x4x5/16	126	-10347.20	53365.30	19.4 57.7 (b)	Pass
		Diagonal	L4x4x5/16	127	-10447.50	56723.40	18.4 55.3 (b)	Pass
		Diagonal	L4x4x5/16	128	-9849.96	56723.40	17.4 55.5 (b)	Pass
		Diagonal	L4x4x5/16	129	-9596.34	56723.40	16.9 54.0 (b)	Pass
		Diagonal	L4x4x5/16	130	-10305.60	56723.40	18.2 53.9 (b)	Pass
		Diagonal	L4x4x5/16	131	-7842.71	56723.40	13.8 41.9 (b)	Pass
		Diagonal	L4x4x5/16	132	-7691.40	56723.40	13.6 41.9 (b)	Pass
T7	220 - 200	Diagonal	L4x4x3/8	136	-17354.10	40783.20	42.6 78.0 (b)	Pass
		Diagonal	L4x4x3/8	137	-16637.40	40783.20	40.8 78.2 (b)	Pass
		Diagonal	L4x4x3/8	138	-16967.20	40783.20	41.6 79.7 (b)	Pass
		Diagonal	L4x4x3/8	139	-17543.50	40783.20	43.0 79.6 (b)	Pass
		Diagonal	L4x4x3/8	140	-13546.40	40783.20	33.2 63.4 (b)	Pass
		Diagonal	L4x4x3/8	141	-13738.00	40783.20	33.7 63.4 (b)	Pass
		Diagonal	L4x4x3/8	142	-15959.60	44725.40	35.7 73.4 (b)	Pass
		Diagonal	L4x4x3/8	143	-15659.70	44725.40	35.0 73.6 (b)	Pass
		Diagonal	L4x4x3/8	144	-15956.10	44725.40	35.7 75.0 (b)	Pass
		Diagonal	L4x4x3/8	145	-16129.30	44725.40	36.1 74.8 (b)	Pass
		Diagonal	L4x4x3/8	146	-12946.70	44725.40	28.9 60.7 (b)	Pass
		Diagonal	L4x4x3/8	147	-12947.90	44725.40	28.9 60.6 (b)	Pass
T8	200 - 180	Diagonal	L4x4x3/8	151	-21292.10	33828.90	62.9 84.0 (b)	Pass
		Diagonal	L4x4x3/8	152	-20936.70	33828.90	61.9	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
							84.2 (b)	
		Diagonal	L4x4x3/8	153	-21080.20	33828.90	62.3	Pass
							84.8 (b)	
		Diagonal	L4x4x3/8	154	-21374.30	33828.90	63.2	Pass
							84.6 (b)	
		Diagonal	L4x4x3/8	155	-16815.90	33828.90	49.7	Pass
							67.4 (b)	
		Diagonal	L4x4x3/8	156	-16814.50	33828.90	49.7	Pass
							67.4 (b)	
		Diagonal	L4x4x3/8	157	-20463.20	37111.10	55.1	Pass
							78.6 (b)	
		Diagonal	L4x4x3/8	158	-19695.50	37111.10	53.1	Pass
							78.8 (b)	
		Diagonal	L4x4x3/8	159	-20043.10	37111.10	54.0	Pass
							80.2 (b)	
		Diagonal	L4x4x3/8	160	-20662.40	37111.10	55.7	Pass
							80.0 (b)	
		Diagonal	L4x4x3/8	161	-15825.80	37111.10	42.6	Pass
							63.1 (b)	
		Diagonal	L4x4x3/8	162	-15933.90	37111.10	42.9	Pass
							63.1 (b)	
T9	180 - 170	Diagonal	L4x4x3/8	166	-22988.70	30962.40	74.2	Pass
							90.7 (b)	
		Diagonal	L4x4x3/8	167	-22593.50	30962.40	73.0	Pass
							90.9 (b)	
		Diagonal	L4x4x3/8	168	-22354.10	30962.40	72.2	Pass
							90.0 (b)	
		Diagonal	L4x4x3/8	169	-22855.90	30962.40	73.8	Pass
							89.7 (b)	
		Diagonal	L4x4x3/8	170	-18036.40	30962.40	58.3	Pass
							72.3 (b)	
		Diagonal	L4x4x3/8	171	-18029.70	30962.40	58.2	Pass
							72.4 (b)	
T10	170 - 160	Diagonal	L4x4x3/8	175	-23844.30	28413.70	83.9	Pass
							93.5 (b)	
		Diagonal	L4x4x3/8	176	-23430.40	28413.70	82.5	Pass
							93.8 (b)	
		Diagonal	L4x4x3/8	177	-23039.20	28413.70	81.1	Pass
							92.2 (b)	
		Diagonal	L4x4x3/8	178	-23625.40	28413.70	83.1	Pass
							92.0 (b)	
		Diagonal	L4x4x3/8	179	-18638.90	28413.70	65.6	Pass
							74.2 (b)	
		Diagonal	L4x4x3/8	180	-18630.30	28413.70	65.6	Pass
							74.3 (b)	
T11	160 - 140	Diagonal	L5x5x1/2	184	-29186.20	63217.20	46.2	Pass
							86.3 (b)	
		Diagonal	L5x5x1/2	185	-28622.40	63217.20	45.3	Pass
							85.5 (b)	
		Diagonal	L5x5x1/2	186	-27051.80	63217.20	42.8	Pass
							80.9 (b)	
		Diagonal	L5x5x1/2	187	-28308.10	63217.20	44.8	Pass
							83.7 (b)	
		Diagonal	L5x5x1/2	188	-23760.30	63217.20	37.6	Pass
							70.2 (b)	
		Diagonal	L5x5x1/2	189	-23147.00	63217.20	36.6	Pass
							69.0 (b)	
		Diagonal	L5x5x1/2	190	-27021.50	68040.50	39.7	Pass
							81.0 (b)	
		Diagonal	L5x5x1/2	191	-26914.40	68040.50	39.6	Pass
							81.1 (b)	

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
		Diagonal	L5x5x1/2	192	-25920.30	68040.50	38.1 78.2 (b)	Pass
		Diagonal	L5x5x1/2	193	-26462.70	68040.50	38.9 78.2 (b)	Pass
		Diagonal	L5x5x1/2	194	-21588.20	68040.50	31.7 64.8 (b)	Pass
		Diagonal	L5x5x1/2	195	-21562.30	68040.50	31.7 64.9 (b)	Pass
T12	140 - 120	Diagonal	L5x5x1/2	199	-30934.70	53762.80	57.5 91.5 (b)	Pass
		Diagonal	L5x5x1/2	200	-30206.20	53762.80	56.2 90.6 (b)	Pass
		Diagonal	L5x5x1/2	201	-28024.90	53762.80	52.1 84.2 (b)	Pass
		Diagonal	L5x5x1/2	202	-29708.50	53762.80	55.3 87.8 (b)	Pass
		Diagonal	L5x5x1/2	203	-25007.90	53762.80	46.5 73.9 (b)	Pass
		Diagonal	L5x5x1/2	204	-23970.50	53762.80	44.6 71.9 (b)	Pass
		Diagonal	L5x5x1/2	205	-28425.40	58159.10	48.9 85.6 (b)	Pass
		Diagonal	L5x5x1/2	206	-28396.50	58159.10	48.8 85.6 (b)	Pass
		Diagonal	L5x5x1/2	207	-26366.20	58159.10	45.3 81.3 (b)	Pass
		Diagonal	L5x5x1/2	208	-26813.10	58159.10	46.1 79.4 (b)	Pass
		Diagonal	L5x5x1/2	209	-22598.20	58159.10	38.9 67.9 (b)	Pass
		Diagonal	L5x5x1/2	210	-22541.50	58159.10	38.8 68.1 (b)	Pass
T13	120 - 100	Diagonal	ROHN 3 XXS	215	-50810.40	63081.40	80.5	Pass
		Diagonal	ROHN 3 XXS	218	-49731.70	63081.40	78.8	Pass
		Diagonal	ROHN 3 XXS	222	-47710.40	63081.40	75.6	Pass
		Diagonal	ROHN 3 XXS	225	-49732.90	63081.40	78.8	Pass
		Diagonal	ROHN 3 XXS	231	-41617.90	63081.40	66.0	Pass
		Diagonal	ROHN 3 XXS	234	-40707.30	63081.40	64.5	Pass
T14	100 - 80	Diagonal	ROHN 3 XXS	248	-53229.80	59442.80	89.5	Pass
		Diagonal	ROHN 3 XXS	251	-51505.90	59442.80	86.6	Pass
		Diagonal	ROHN 3 XXS	255	-50737.10	59442.80	85.4	Pass
		Diagonal	ROHN 3 XXS	258	-52683.50	59442.80	88.6	Pass
		Diagonal	ROHN 3 XXS	264	-43898.40	59442.80	73.8	Pass
		Diagonal	ROHN 3 XXS	267	-43251.70	59442.80	72.8	Pass
T15	80 - 60	Diagonal	ROHN 3 XXS	281	-53169.30	55698.10	95.5	Pass
		Diagonal	ROHN 3 XXS	284	-50932.70	55698.10	91.4	Pass
		Diagonal	ROHN 3 XXS	288	-49999.80	55698.10	89.8	Pass
		Diagonal	ROHN 3 XXS	291	-52497.00	55698.10	94.3	Pass
		Diagonal	ROHN 3 XXS	297	-43103.20	55698.10	77.4	Pass
		Diagonal	ROHN 3 XXS	300	-42329.10	55698.10	76.0	Pass
T16	60 - 30	Diagonal	ROHN 4 EH	314	-75058.90	101988.00	73.6 74.0 (b)	Pass
		Diagonal	ROHN 4 EH	319	-71344.50	101988.00	70.0 70.3 (b)	Pass
		Diagonal	ROHN 4 EH	325	-70410.10	101988.00	69.0 69.4 (b)	Pass
		Diagonal	ROHN 4 EH	330	-74250.90	101988.00	72.8 73.2 (b)	Pass
		Diagonal	ROHN 4 EH	340	-61616.10	101988.00	60.4 60.7 (b)	Pass
		Diagonal	ROHN 4 EH	345	-60713.90	101988.00	59.5	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
							59.8 (b)	
T17	30 - 0	Diagonal	ROHN 4 EH	365	-74010.70	97939.00	75.6	Pass
		Diagonal	ROHN 4 EH	370	-71980.40	97939.00	73.5	Pass
		Diagonal	ROHN 4 EH	376	-69434.10	97939.00	70.9	Pass
		Diagonal	ROHN 4 EH	381	-72899.60	97939.00	74.4	Pass
		Diagonal	ROHN 4 EH	391	-57740.90	97939.00	59.0	Pass
		Diagonal	ROHN 4 EH	396	-56722.90	97939.00	57.9	Pass
T13	120 - 100	Horizontal	ROHN 3 STD	214	-27071.50	31679.40	85.5	Pass
		Horizontal	ROHN 3 STD	221	-26155.70	31679.40	82.6	Pass
		Horizontal	ROHN 3 STD	230	-21437.30	31679.40	67.7	Pass
T14	100 - 80	Horizontal	ROHN 3 EH	247	-30472.20	33455.50	91.1	Pass
		Horizontal	ROHN 3 EH	254	-30135.30	33455.50	90.1	Pass
		Horizontal	ROHN 3 EH	263	-24583.70	33455.50	73.5	Pass
T15	80 - 60	Horizontal	ROHN 3 XXS	280	-31434.30	43484.00	72.3	Pass
		Horizontal	ROHN 3 XXS	287	-30934.20	43484.00	71.1	Pass
		Horizontal	ROHN 3 XXS	296	-24624.90	43484.00	56.6	Pass
T16	60 - 30	Horizontal	ROHN 3.5 EH	313	-35100.20	38300.30	91.6	Pass
		Horizontal	ROHN 3.5 EH	324	-34512.40	38300.30	90.1	Pass
		Horizontal	ROHN 3.5 EH	339	-27337.30	38300.30	71.4	Pass
T17	30 - 0	Horizontal	ROHN 4 EH	364	-41666.80	47220.90	88.2	Pass
		Horizontal	ROHN 4 EH	375	-40931.30	47220.90	86.7	Pass
		Horizontal	ROHN 4 EH	390	-32052.40	47220.90	67.9	Pass
T1	320 - 304	Top Girt	L1 3/4x1 3/4x3/16	4	-193.61	5333.23	3.6	Pass
		Top Girt	L1 3/4x1 3/4x3/16	5	-193.77	5333.23	3.6	Pass
		Top Girt	L1 3/4x1 3/4x3/16	6	-193.10	5333.23	3.6	Pass
T3	300 - 280	Top Girt	L2x2x1/4	43	-462.77	9943.51	4.7	Pass
		Top Girt	L2x2x1/4	44	-466.41	9943.51	4.7	Pass
		Top Girt	L2x2x1/4	45	-471.34	9943.51	4.7	Pass
T13	120 - 100	Redund Horz 1 Bracing	ROHN 1.5 STD	216	-9036.76	14083.10	64.2	Pass
		Redund Horz 1 Bracing	ROHN 1.5 STD	219	-9045.93	14083.10	64.2	Pass
		Redund Horz 1 Bracing	ROHN 1.5 STD	223	-9045.93	14083.10	64.2	Pass
		Redund Horz 1 Bracing	ROHN 1.5 STD	226	-9015.44	14083.10	64.0	Pass
		Redund Horz 1 Bracing	ROHN 1.5 STD	232	-9015.44	14083.10	64.0	Pass
		Redund Horz 1 Bracing	ROHN 1.5 STD	235	-9036.76	14083.10	64.2	Pass
T14	100 - 80	Redund Horz 1 Bracing	P1.5x.145	249	-10252.00	11432.70	89.7	Pass
		Redund Horz 1 Bracing	P1.5x.145	252	-10264.50	11432.70	89.8	Pass
		Redund Horz 1 Bracing	P1.5x.145	256	-10264.50	11432.70	89.8	Pass
		Redund Horz 1 Bracing	P1.5x.145	259	-10229.10	11432.70	89.5	Pass
		Redund Horz 1 Bracing	P1.5x.145	265	-10229.10	11432.70	89.5	Pass
		Redund Horz 1 Bracing	P1.5x.145	268	-10252.00	11432.70	89.7	Pass
T15	80 - 60	Redund Horz 1 Bracing	ROHN 2 STD	282	-11493.80	20598.10	55.8	Pass
		Redund Horz 1 Bracing	ROHN 2 STD	285	-11510.40	20598.10	55.9	Pass
		Redund Horz 1 Bracing	ROHN 2 STD	289	-11510.40	20598.10	55.9	Pass
		Redund Horz 1 Bracing	ROHN 2 STD	292	-11470.30	20598.10	55.7	Pass
		Redund Horz 1	ROHN 2 STD	298	-11470.30	20598.10	55.7	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
		Bracing						
		Redund Horz 1 Bracing	ROHN 2 STD	301	-11493.80	20598.10	55.8	Pass
T16	60 - 30	Redund Horz 1 Bracing	ROHN 1.5 STD	315	-12737.70	18282.30	69.7	Pass
		Redund Horz 1 Bracing	ROHN 1.5 STD	320	-12755.90	18282.30	69.8	Pass
		Redund Horz 1 Bracing	ROHN 1.5 STD	326	-12755.90	18282.30	69.8	Pass
		Redund Horz 1 Bracing	ROHN 1.5 STD	331	-12714.50	18282.30	69.5	Pass
		Redund Horz 1 Bracing	ROHN 1.5 STD	341	-12714.50	18282.30	69.5	Pass
		Redund Horz 1 Bracing	ROHN 1.5 STD	346	-12737.70	18282.30	69.7	Pass
T17	30 - 0	Redund Horz 1 Bracing	P1.5x.145	366	-14603.80	15339.00	95.2	Pass
		Redund Horz 1 Bracing	P1.5x.145	371	-14627.20	15339.00	95.4	Pass
		Redund Horz 1 Bracing	P1.5x.145	377	-14627.20	15339.00	95.4	Pass
		Redund Horz 1 Bracing	P1.5x.145	382	-14579.30	15339.00	95.0	Pass
		Redund Horz 1 Bracing	P1.5x.145	392	-14579.30	15339.00	95.0	Pass
		Redund Horz 1 Bracing	P1.5x.145	397	-14603.80	15339.00	95.2	Pass
T16	60 - 30	Redund Horz 2 Bracing	ROHN 2 XXS	316	-12737.70	18604.80	68.5	Pass
		Redund Horz 2 Bracing	ROHN 2 XXS	321	-12755.90	18604.80	68.6	Pass
		Redund Horz 2 Bracing	ROHN 2 XXS	327	-12755.90	18604.80	68.6	Pass
		Redund Horz 2 Bracing	ROHN 2 XXS	332	-12714.50	18604.80	68.3	Pass
		Redund Horz 2 Bracing	ROHN 2 XXS	342	-12714.50	18604.80	68.3	Pass
		Redund Horz 2 Bracing	ROHN 2 XXS	347	-12737.70	18604.80	68.5	Pass
T17	30 - 0	Redund Horz 2 Bracing	ROHN 2.5 EH	367	-14603.80	21919.90	66.6	Pass
		Redund Horz 2 Bracing	ROHN 2.5 EH	372	-14627.20	21919.90	66.7	Pass
		Redund Horz 2 Bracing	ROHN 2.5 EH	378	-14627.20	21919.90	66.7	Pass
		Redund Horz 2 Bracing	ROHN 2.5 EH	383	-14579.30	21919.90	66.5	Pass
		Redund Horz 2 Bracing	ROHN 2.5 EH	393	-14579.30	21919.90	66.5	Pass
		Redund Horz 2 Bracing	ROHN 2.5 EH	398	-14603.80	21919.90	66.6	Pass
T13	120 - 100	Redund Diag 1 Bracing	ROHN 2 STD	217	-8198.71	9352.65	87.7	Pass
		Redund Diag 1 Bracing	ROHN 2 STD	220	-8207.03	9352.65	87.8	Pass
		Redund Diag 1 Bracing	ROHN 2 STD	224	-8207.03	9352.65	87.8	Pass
		Redund Diag 1 Bracing	ROHN 2 STD	227	-8179.37	9352.65	87.5	Pass
		Redund Diag 1 Bracing	ROHN 2 STD	233	-8179.37	9352.65	87.5	Pass

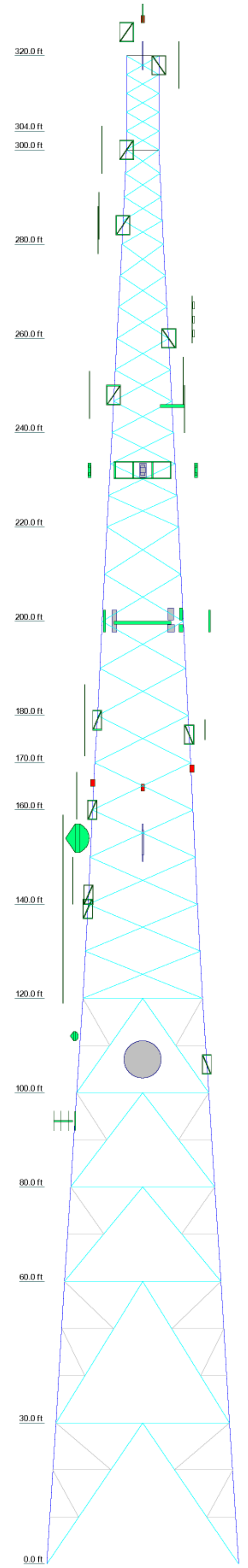
Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
		Redund Diag 1 Bracing	ROHN 2 STD	236	-8198.71	9352.65	87.7	Pass
T14	100 - 80	Redund Diag 1 Bracing	ROHN 2 EH	250	-8694.71	11364.10	76.5	Pass
		Redund Diag 1 Bracing	ROHN 2 EH	253	-8705.29	11364.10	76.6	Pass
		Redund Diag 1 Bracing	ROHN 2 EH	257	-8705.29	11364.10	76.6	Pass
		Redund Diag 1 Bracing	ROHN 2 EH	260	-8675.32	11364.10	76.3	Pass
		Redund Diag 1 Bracing	ROHN 2 EH	266	-8675.32	11364.10	76.3	Pass
		Redund Diag 1 Bracing	ROHN 2 EH	269	-8694.71	11364.10	76.5	Pass
T15	80 - 60	Redund Diag 1 Bracing	ROHN 2 EH	283	-9192.05	10825.00	84.9	Pass
		Redund Diag 1 Bracing	ROHN 2 EH	286	-9205.33	10825.00	85.0	Pass
		Redund Diag 1 Bracing	ROHN 2 EH	290	-9205.33	10825.00	85.0	Pass
		Redund Diag 1 Bracing	ROHN 2 EH	293	-9173.25	10825.00	84.7	Pass
		Redund Diag 1 Bracing	ROHN 2 EH	299	-9173.25	10825.00	84.7	Pass
		Redund Diag 1 Bracing	ROHN 2 EH	302	-9192.05	10825.00	84.9	Pass
T16	60 - 30	Redund Diag 1 Bracing	ROHN 2 EH	317	-12853.90	13862.10	92.7	Pass
		Redund Diag 1 Bracing	ROHN 2 EH	322	-12872.20	13862.10	92.9	Pass
		Redund Diag 1 Bracing	ROHN 2 EH	328	-12872.20	13862.10	92.9	Pass
		Redund Diag 1 Bracing	ROHN 2 EH	333	-12830.50	13862.10	92.6	Pass
		Redund Diag 1 Bracing	ROHN 2 EH	343	-12830.50	13862.10	92.6	Pass
		Redund Diag 1 Bracing	ROHN 2 EH	348	-12853.90	13862.10	92.7	Pass
T17	30 - 0	Redund Diag 1 Bracing	ROHN 2.5 STD	368	-13585.80	22579.60	60.2	Pass
		Redund Diag 1 Bracing	ROHN 2.5 STD	373	-13607.60	22579.60	60.3	Pass
		Redund Diag 1 Bracing	ROHN 2.5 STD	379	-13607.60	22579.60	60.3	Pass
		Redund Diag 1 Bracing	ROHN 2.5 STD	384	-13563.10	22579.60	60.1	Pass
		Redund Diag 1 Bracing	ROHN 2.5 STD	394	-13563.10	22579.60	60.1	Pass
		Redund Diag 1 Bracing	ROHN 2.5 STD	399	-13585.80	22579.60	60.2	Pass
T16	60 - 30	Redund Diag 2 Bracing	ROHN 2.5 STD	318	-8335.90	12742.30	65.4	Pass
		Redund Diag 2 Bracing	ROHN 2.5 STD	323	-8347.79	12742.30	65.5	Pass
		Redund Diag 2 Bracing	ROHN 2.5 STD	329	-8347.79	12742.30	65.5	Pass
		Redund Diag 2 Bracing	ROHN 2.5 STD	334	-8320.73	12742.30	65.3	Pass
		Redund Diag 2 Bracing	ROHN 2.5 STD	344	-8320.73	12742.30	65.3	Pass
		Redund Diag 2	ROHN 2.5 STD	349	-8335.90	12742.30	65.4	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
		Bracing						
T17	30 - 0	Redund Diag 2 Bracing	ROHN 2.5 STD	369	-9127.65	11206.60	81.4	Pass
		Redund Diag 2 Bracing	ROHN 2.5 STD	374	-9142.26	11206.60	81.6	Pass
		Redund Diag 2 Bracing	ROHN 2.5 STD	380	-9142.26	11206.60	81.6	Pass
		Redund Diag 2 Bracing	ROHN 2.5 STD	385	-9112.37	11206.60	81.3	Pass
		Redund Diag 2 Bracing	ROHN 2.5 STD	395	-9112.37	11206.60	81.3	Pass
		Redund Diag 2 Bracing	ROHN 2.5 STD	400	-9127.65	11206.60	81.4	Pass
T13	120 - 100	Redund Hip 1 Bracing	ROHN 1.5 STD	228	-48.77	12066.60	0.4	Pass
		Redund Hip 1 Bracing	ROHN 1.5 STD	237	-40.90	12066.60	0.3	Pass
		Redund Hip 1 Bracing	ROHN 1.5 STD	239	-49.16	12066.60	0.4	Pass
T14	100 - 80	Redund Hip 1 Bracing	ROHN 1.5 STD	261	-48.04	9943.20	0.5	Pass
		Redund Hip 1 Bracing	ROHN 1.5 STD	270	-41.57	9943.20	0.4	Pass
		Redund Hip 1 Bracing	ROHN 1.5 STD	272	-48.03	9943.20	0.5	Pass
T15	80 - 60	Redund Hip 1 Bracing	ROHN 1.5 STD	294	-47.05	8378.50	0.6	Pass
		Redund Hip 1 Bracing	ROHN 1.5 STD	303	-39.88	8378.50	0.5	Pass
		Redund Hip 1 Bracing	ROHN 1.5 STD	305	-46.65	8378.50	0.6	Pass
T16	60 - 30	Redund Hip 1 Bracing	ROHN 1.5 STD	335	-171.64	15708.50	1.1	Pass
		Redund Hip 1 Bracing	ROHN 1.5 STD	350	-144.44	15708.50	0.9	Pass
		Redund Hip 1 Bracing	ROHN 1.5 STD	354	-176.09	15708.50	1.1	Pass
T17	30 - 0	Redund Hip 1 Bracing	ROHN 1.5 STD	386	-152.90	12924.00	1.2	Pass
		Redund Hip 1 Bracing	ROHN 1.5 STD	401	-125.74	12924.00	1.0	Pass
		Redund Hip 1 Bracing	ROHN 1.5 STD	405	-157.59	12924.00	1.2	Pass
T16	60 - 30	Redund Hip 2 Bracing	ROHN 2 STD	336	-93.30	8559.02	1.1	Pass
		Redund Hip 2 Bracing	ROHN 2 STD	351	-78.65	8559.02	0.9	Pass
		Redund Hip 2 Bracing	ROHN 2 STD	355	-95.53	8559.02	1.1	Pass
T17	30 - 0	Redund Hip 2 Bracing	ROHN 2 STD	387	-87.54	6941.18	1.3	Pass
		Redund Hip 2 Bracing	ROHN 2 STD	402	-73.06	6941.18	1.1	Pass
		Redund Hip 2 Bracing	ROHN 2 STD	406	-89.80	6941.18	1.3	Pass
T13	120 - 100	Redund Hip Diagonal 1 Bracing	ROHN 2.5 STD	229	-96.91	10450.60	0.9	Pass
		Redund Hip Diagonal 1 Bracing	ROHN 2.5 STD	238	-80.69	10450.60	0.8	Pass
		Redund Hip Diagonal 1 Bracing	ROHN 2.5 STD	240	-96.85	10450.60	0.9	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
T14	100 - 80	Redund Hip Diagonal 1 Bracing	ROHN 2.5 STD	262	-90.97	9375.46	1.0	Pass
		Redund Hip Diagonal 1 Bracing	ROHN 2.5 STD	271	-79.57	9375.46	0.8	Pass
		Redund Hip Diagonal 1 Bracing	ROHN 2.5 STD	273	-88.26	9375.46	0.9	Pass
T15	80 - 60	Redund Hip Diagonal 1 Bracing	ROHN 3 STD	295	-102.06	16617.70	0.6	Pass
		Redund Hip Diagonal 1 Bracing	ROHN 3 STD	304	-95.74	16617.70	0.6	Pass
		Redund Hip Diagonal 1 Bracing	ROHN 3 STD	306	-102.10	16617.70	0.6	Pass
T16	60 - 30	Redund Hip Diagonal 1 Bracing	ROHN 2 STD	337	-348.52	5254.92	6.6	Pass
		Redund Hip Diagonal 1 Bracing	ROHN 2 STD	352	-279.76	5254.92	5.3	Pass
		Redund Hip Diagonal 1 Bracing	ROHN 2 STD	356	-361.06	5254.92	6.9	Pass
T17	30 - 0	Redund Hip Diagonal 1 Bracing	ROHN 2.5 STD	388	-315.01	10840.00	2.9	Pass
		Redund Hip Diagonal 1 Bracing	ROHN 2.5 STD	403	-249.83	10840.00	2.3	Pass
		Redund Hip Diagonal 1 Bracing	ROHN 2.5 STD	407	-327.60	10840.00	3.0	Pass
T16	60 - 30	Redund Hip Diagonal 2 Bracing	ROHN 2 STD	338	-141.66	3255.91	4.4	Pass
		Redund Hip Diagonal 2 Bracing	ROHN 2 STD	353	-141.17	3255.91	4.3	Pass
		Redund Hip Diagonal 2 Bracing	ROHN 2 STD	357	-143.06	3255.91	4.4	Pass
T17	30 - 0	Redund Hip Diagonal 2 Bracing	ROHN 2.5 STD	389	-139.42	6453.40	2.2	Pass
		Redund Hip Diagonal 2 Bracing	ROHN 2.5 STD	404	-139.18	6453.40	2.2	Pass
		Redund Hip Diagonal 2 Bracing	ROHN 2.5 STD	408	-140.45	6453.40	2.2	Pass
T13	120 - 100	Inner Bracing	ROHN 3 STD	241	-27.73	29370.40	0.4	Pass
		Inner Bracing	ROHN 3 STD	242	-23.50	29370.40	0.4	Pass
		Inner Bracing	ROHN 3 STD	243	-27.36	29370.40	0.4	Pass
T14	100 - 80	Inner Bracing	ROHN 3 STD	274	-27.51	24201.90	0.4	Pass
		Inner Bracing	ROHN 3 STD	275	-23.85	24201.90	0.4	Pass
		Inner Bracing	ROHN 3 STD	276	-26.44	24201.90	0.4	Pass
T15	80 - 60	Inner Bracing	ROHN 3 STD	307	-31.22	20393.40	0.4	Pass
		Inner Bracing	ROHN 3 STD	308	-28.68	20393.40	0.4	Pass
		Inner Bracing	ROHN 3 STD	309	-29.93	20393.40	0.4	Pass
T16	60 - 30	Inner Bracing	ROHN 3 STD	358	-59.88	17239.70	0.5	Pass
		Inner Bracing	ROHN 3 STD	359	-59.50	17239.70	0.5	Pass
		Inner Bracing	ROHN 3 STD	360	-60.21	17239.70	0.5	Pass
T17	30 - 0	Inner Bracing	ROHN 3 STD	409	-62.36	13981.00	0.5	Pass
		Inner Bracing	ROHN 3 STD	410	-62.04	13981.00	0.5	Pass
		Inner Bracing	ROHN 3 STD	411	-62.57	13981.00	0.6	Pass
							Summary	
						Leg (T16)	65.1	Pass
						Diagonal (T15)	95.5	Pass
						Horizontal (T16)	91.6	Pass
						Top Girt (T3)	4.7	Pass
						Redund Horz 1	95.4	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
						Bracing (T17)		
						Redund Horz 2 Bracing (T16)	68.6	Pass
						Redund Diag 1 Bracing (T16)	92.9	Pass
						Redund Diag 2 Bracing (T17)	81.6	Pass
						Redund Hip 1 Bracing (T17)	1.2	Pass
						Redund Hip 2 Bracing (T17)	1.3	Pass
						Redund Hip Diagonal 1 Bracing (T16)	6.9	Pass
						Redund Hip Diagonal 2 Bracing (T16)	4.4	Pass
						Inner Bracing (T17)	0.6	Pass
						Bolt Checks	93.8	Pass
						RATING =	**95.5**	**Pass**

Section	T17	T16	T15	T14	T13	T12	T11	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
Legs	ROHN 12 EHS w Angle 8x8x0.625	ROHN 12 EH w/ angle 8x8x0.5				ROHN 10 EH w/ angle 8x8x0.5						ROHN 8 EH w/ angle 8x8x0.5			ROHN 6 EH		ROHN 5 EH
Leg Grade							A572-50										
Diagonals	ROHN 4 EH			ROHN 3 XXS		L5x5x1/2				L4x4x3/8		L4x4x5/16	L3x3x1/4	L2 1/2x2 1/2x1/4	L2x2x1/4		L1 3/4x1 3/4x3/16
Diagonal Grade						A572-50									A36		
Top Girts						N.A.									L2x2x1/4	N.A.	L1 3/4x1 3/4x3/16
Horizontals	ROHN 4 EH	ROHN 3.5 EH	ROHN 3 XXS	ROHN 3 EH	ROHN 3 STD						N.A.						
Red. Horizontals	P1.5x.145	ROHN 1.5 STD	ROHN 2 STD	P1.5x.145	ROHN 1.5 STD						N.A.						
Red. Diagonals	ROHN 2.5 STD		ROHN 2 EH		ROHN 2 STD						N.A.						
Red. Hips			ROHN 1.5 STD								N.A.						
Inner Bracing			ROHN 3 STD								N.A.						
Face Width (ft) 40.69	36.8	33.14	30.47	27.97	25.39	23.21	21.3	20.26	19.22	17.09	15.09	13.08	11.04	8.85			6.81
# Panels @ (ft)	2 @ 30			3 @ 20				10 @ 10					9 @ 6.66667		4 @ 5		5 @ 4
Weight (lb) 125382.3	17941.9	15115.4	11450.5	9875.5	9144.9	9975.3	9908.6	3786.3	3730.8	7298.8	6408.0	6484.4	5400.2	5087.7	2498.3	349.7	1442.1



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Lightning Rod 5/8x4' (Lightning Rod)	329	CBC78T-DS-43-2X Diplexer (Verizon)	232
Dual Lights (Beacon)	327	CBC78T-DS-43-2X Diplexer (Verizon)	232
PD128-1 (ECI-1)	325	PiROD 12' Lightweight T-Frame (AT&T)	200
6' Side Mount Standoff (ECI-1)	325	PiROD 12' Lightweight T-Frame (AT&T)	200
BA1012-0 (ECI-2)	320	PiROD 12' Lightweight T-Frame (AT&T)	200
6' Side Mount Standoff (ECI-2)	320	7770.00 (AT&T)	200
ANT450F6 (ECI-3)	318	HPA-65R-BUU-H8 Panel (AT&T)	200
4'x4" Pipe Mount (ECI-3)	318	RRUS-32 (AT&T)	200
SC479-HF1LDF (ECI-4)	300	RRUS-11 (AT&T)	200
6' Side Mount Standoff (ECI-4)	300	7770.00 (AT&T)	200
PD340-1 (ECI-5)	290	HPA-65R-BUU-H8 Panel (AT&T)	200
6' Side Mount Standoff (ECI-5)	290	RRUS-32 (AT&T)	200
DB809T3E-XC (ECI-6)	286	RRUS-11 (AT&T)	200
6' Side Mount Standoff (ECI-7)	284	7770.00 (AT&T)	200
SC479-HF1LDF(D00I-E6085) (Inverted) (ECI-7)	283	HPA-65R-BUU-H6 Panel (AT&T)	200
PD440-2 (ECI-8)	264	RRUS-32 (AT&T)	200
6' Side Mount Standoff (ECI-8)	260	RRUS-11 (AT&T)	200
SC479-HF1LDF (ECI-10)	251	DC6-48-60-0-8C Squid / Surge Arrestor (AT&T)	200
PD1142-1 (ECI-14)	248	STK-U Stiffener Side Arm Attachment (AT&T)	200
6' Side Mount Standoff (ECI-14)	248	STK-U Stiffener Side Arm Attachment (AT&T)	200
430-94C-09168-M-11048 TTA (ECI-11)	247	STK-U Stiffener Side Arm Attachment (AT&T)	200
Sabre T-Boom (1) (ECI-10,11,12,13)	246	STK-U Stiffener Side Arm Attachment (AT&T)	200
SC479-HF1LDF(D00I-E6085) (Inverted) (ECI-13)	245	STK-U Stiffener Side Arm Attachment (AT&T)	200
SC479-HF1LDF(D00I-E6085) (Inverted) (ECI-12)	245	STK-U Stiffener Side Arm Attachment (AT&T)	200
6' Side Mount Standoff (ECI-15)	238	Pirod 4' Side Mount Standoff (1) (ECI-50)	179
531-70HD Exposed Dipole Antenna (ECI-15)	238	1151-3 (ECI-50)	179
Valmont VFA-10-U V-Frame (Verizon)	232	DB586-Y (ECI-51)	177
Valmont VFA-10-U V-Frame (Verizon)	232	430-94C-09168-M-11048 TTA (ECI-52)	176
Valmont VFA-10-U V-Frame (Verizon)	232	Pirod 4' Side Mount Standoff (1) (ECI-53,52,51)	176
JAHH-65B-R3B Panel Antenna (Verizon-AWS)	232	DB586-Y (inverted) (ECI-53)	175
JAHH-65B-R3B Panel Antenna (Verizon-PCS)	232	L-810 Obstruction Lighting (1) (ECI-54)	168
LNX-6512DS-VTM (Verizon-850)	232	L-810 Obstruction Lighting (1) (ECI-55)	165
MT6407-77A (Verizon - Proposed)	232	L-810 Obstruction Lighting (1) (ECI-56)	164
BSAMNT-SBS-2-2 (JAHH Antenna Bracket (for 2)) (Verizon-PCS/AWS)	232	Telewave ANT220F2 - Omni Antenna (Eversource)	163
		Sitepro1 USF-4U Mount Assembly (Ca = 1.4 assumed) (Eversource)	160
B2/B66A RRH (Verizon RRH)	232	5'3"x4" Pipe Mount (ECI-58a (Dish Support))	154
B5/B13 RRH (Verizon RRH)	232	Commscope PAR6-59W-PXA/A (ECI-58)	154
DB-B1-6C-12AB-0Z / DC-3315-PF-48 Dist. Box (Verizon)	232	ANT450F6 (ECI-57)	153
JAHH-65B-R3B Panel Antenna (Verizon-AWS)	232	5'3"x4" Pipe Mount (ECI-57)	153
JAHH-65B-R3B Panel Antenna (Verizon-PCS)	232	Telewave ANT220F2 - Omni Antenna (Eversource)	145
LNX-6512DS-VTM (Verizon-850)	232	Sitepro1 USF-4U Mount Assembly (Ca = 1.4 assumed) (Eversource)	142
MT6407-77A (Verizon - Proposed)	232		
BSAMNT-SBS-2-2 (JAHH Antenna Bracket (for 2)) (Verizon-PCS/AWS)	232	DB212-1 (ECI-59)	139
		PD156S (ECI-60)	139
B2/B66A RRH (Verizon RRH)	232	4' Side Mount Standoff (ECI-60 ,59)	139
B5/B13 RRH (Verizon RRH)	232	3' Wide Ice Shield (for Dish Antennas) (Assume Ca=2.0) (ECI-61a)	117
DB-B1-6C-12AB-0Z / DC-3315-PF-48 Dist. Box (Verizon)	232	8' Wide Ice Shield (for Dish Antennas) (Assume Ca=2.0) (ECI-63a (Dish Ice Shield))	115
JAHH-65B-R3B Panel Antenna (Verizon-AWS)	232		
JAHH-65B-R3B Panel Antenna (Verizon-PCS)	232	5'3"x4" Pipe Mount (ECI-61a (Dish Support))	112
LNX-6512DS-VTM (Verizon-850)	232	Andrew 2' w/Radome (ECI-61)	112
MT6407-77A (Verizon - Proposed)	232	PA8-65 (ECI-63)	107
BSAMNT-SBS-2-2 (JAHH Antenna Bracket (for 2)) (Verizon-PCS/AWS)	232	5'3"x4" Pipe Mount (ECI-63 (Dish Support))	107
		Pirod 4' Side Mount Standoff (1) (ECI-62)	106
B2/B66A RRH (Verizon RRH)	232	PD458 (ECI-62)	106
B5/B13 RRH (Verizon RRH)	232	PD688S-4 (ECI-66)	94
CBC78T-DS-43-2X Diplexer (Verizon)	232	4'x4" Pipe Mount (ECI-66)	94

MATERIAL STRENGTH

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

TOWER DESIGN NOTES

1. Tower designed for a 90 mph basic wind in accordance with the TIA/EIA-222-F Standard.
2. Tower is also designed for a 90 mph basic wind with 0.50 in ice.
3. Deflections are based upon a 90 mph wind.
4. P-Delta Displacement Effects are not applicable to this tower for this case (TIA-222-H Section 3.5)
5. TOWER RATING: 137.5%

MAX. CORNER REACTIONS AT BASE:
DOWN: 932737 lb
SHEAR: 122027 lb

UPLIFT: -734186 lb
SHEAR: 101814 lb

AXIAL 189255 lb
SHEAR 202328 lb
MOMENT 30645 kip-ft
TORQUE 577 kip-ft
90 mph WIND - 0.5000 in ICE

AXIAL 140925 lb
SHEAR 159086 lb
MOMENT 24339 kip-ft
TORQUE 343 kip-ft
REACTIONS - 90 mph WIND

Centek Engineering Inc.
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Branford, CT 06405
Phone: (203) 488-0580
FAX: (203) 488-8587

Job: **21007.82 - Colchester**			
Project: **320-ft Lattice Tower (CSP #50)**			
Client: Verizon	Drawn by: TJL		App'd:
Code: TIA/EIA-222-F	Date: 03/24/22		Scale: NTS
Path:			Dwg No. E-1

Load Combinations

Comb. No.	Description
1	Dead Only
2	Dead+Wind 0 deg - No Ice
3	Dead+Wind 30 deg - No Ice
4	Dead+Wind 45 deg - No Ice
5	Dead+Wind 60 deg - No Ice
6	Dead+Wind 90 deg - No Ice
7	Dead+Wind 120 deg - No Ice
8	Dead+Wind 135 deg - No Ice
9	Dead+Wind 150 deg - No Ice
10	Dead+Wind 180 deg - No Ice
11	Dead+Wind 210 deg - No Ice
12	Dead+Wind 225 deg - No Ice
13	Dead+Wind 240 deg - No Ice
14	Dead+Wind 270 deg - No Ice
15	Dead+Wind 300 deg - No Ice
16	Dead+Wind 315 deg - No Ice
17	Dead+Wind 330 deg - No Ice
18	Dead+Ice+Temp
19	Dead+Wind 0 deg+Ice+Temp
20	Dead+Wind 30 deg+Ice+Temp
21	Dead+Wind 45 deg+Ice+Temp
22	Dead+Wind 60 deg+Ice+Temp
23	Dead+Wind 90 deg+Ice+Temp
24	Dead+Wind 120 deg+Ice+Temp
25	Dead+Wind 135 deg+Ice+Temp
26	Dead+Wind 150 deg+Ice+Temp
27	Dead+Wind 180 deg+Ice+Temp
28	Dead+Wind 210 deg+Ice+Temp
29	Dead+Wind 225 deg+Ice+Temp
30	Dead+Wind 240 deg+Ice+Temp
31	Dead+Wind 270 deg+Ice+Temp
32	Dead+Wind 300 deg+Ice+Temp
33	Dead+Wind 315 deg+Ice+Temp
34	Dead+Wind 330 deg+Ice+Temp
35	Dead+Wind 0 deg - Service
36	Dead+Wind 30 deg - Service
37	Dead+Wind 45 deg - Service
38	Dead+Wind 60 deg - Service
39	Dead+Wind 90 deg - Service
40	Dead+Wind 120 deg - Service
41	Dead+Wind 135 deg - Service
42	Dead+Wind 150 deg - Service
43	Dead+Wind 180 deg - Service
44	Dead+Wind 210 deg - Service
45	Dead+Wind 225 deg - Service
46	Dead+Wind 240 deg - Service
47	Dead+Wind 270 deg - Service
48	Dead+Wind 300 deg - Service
49	Dead+Wind 315 deg - Service
50	Dead+Wind 330 deg - Service

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	320 - 304	19.277	40	0.4393	0.2011
T2	304 - 300	17.789	40	0.4358	0.2020
T3	300 - 280	17.417	40	0.4334	0.2021
T4	280 - 260	15.588	40	0.4205	0.2022
T5	260 - 240	13.790	40	0.4125	0.2000
T6	240 - 220	12.012	40	0.4000	0.1876
T7	220 - 200	10.289	40	0.3814	0.1747
T8	200 - 180	8.661	40	0.3557	0.1632
T9	180 - 170	7.114	40	0.3292	0.1480
T10	170 - 160	6.377	40	0.3142	0.1395
T11	160 - 140	5.667	40	0.2981	0.1308
T12	140 - 120	4.395	40	0.2614	0.1191
T13	120 - 100	3.276	40	0.2210	0.1065
T14	100 - 80	2.345	40	0.1814	0.0876
T15	80 - 60	1.590	40	0.1397	0.0721
T16	60 - 30	1.020	35	0.1016	0.0587
T17	30 - 0	0.352	35	0.0462	0.0284

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
329.00	Lightning Rod 5/8x4'	40	19.277	0.4393	0.2011	Inf
327.00	Dual Lights	40	19.277	0.4393	0.2011	Inf
325.00	PD128-1	40	19.277	0.4393	0.2011	Inf
320.00	BA1012-0	40	19.277	0.4393	0.2011	Inf
318.00	ANT450F6	40	19.091	0.4391	0.2012	Inf
300.00	SC479-HF1LDF	40	17.417	0.4334	0.2021	91951
290.00	PD340-1	40	16.497	0.4266	0.2022	97847
286.00	DB809T3E-XC	40	16.132	0.4240	0.2022	118949
284.00	6' Side Mount Standoff	40	15.951	0.4227	0.2022	133294
283.00	SC479-HF1LDF(D00I-E6085) (Inverted)	40	15.860	0.4221	0.2022	141608
264.00	PD440-2	40	14.148	0.4141	0.2011	299212
260.00	6' Side Mount Standoff	40	13.790	0.4125	0.2000	317572
251.00	SC479-HF1LDF	40	12.986	0.4077	0.1953	164246
248.00	PD1142-1	40	12.719	0.4058	0.1933	134969
247.00	430-94C-09168-M-11048 TTA	40	12.630	0.4051	0.1926	127399
246.00	Sabre T-Boom (1)	40	12.542	0.4044	0.1919	120633
245.00	SC479-HF1LDF(D00I-E6085) (Inverted)	40	12.453	0.4037	0.1912	114550
238.00	531-70HD Exposed Dipole Antenna	40	11.836	0.3985	0.1862	81854
232.00	Valmont VFA-10-U V-Frame	40	11.313	0.3935	0.1822	62732
200.00	PiROD 12' Lightweight T-Frame	40	8.661	0.3557	0.1632	68208
179.00	1151-3	40	7.040	0.3278	0.1472	47064
177.00	DB586-Y	40	6.891	0.3248	0.1455	48557
176.00	Pirod 4' Side Mount Standoff (1)	40	6.816	0.3233	0.1447	49650
175.00	DB586-Y (inverted)	40	6.743	0.3219	0.1438	50887
168.00	L-810 Obstruction Lighting (1)	40	6.232	0.3110	0.1377	40804
165.00	L-810 Obstruction Lighting (1)	40	6.017	0.3063	0.1350	29594
164.00	L-810 Obstruction Lighting (1)	40	5.946	0.3047	0.1342	26966
163.00	Telewave ANT220F2 - Omni Antenna	40	5.875	0.3030	0.1333	24881
160.00	Siteprol USF-4U Mount Assembly (Ca = 1.4 assumed)	40	5.667	0.2981	0.1308	21485
154.00	Commscope PAR6-59W-PXA/A	40	5.266	0.2877	0.1266	23519

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
153.00	ANT450F6	40	5.201	0.2859	0.1260	24270
145.00	Telewave ANT220F2 - Omni Antenna	40	4.697	0.2711	0.1217	32593
142.00	Siteprol USF-4U Mount Assembly (Ca = 1.4 assumed)	40	4.515	0.2653	0.1202	36821
139.00	DB212-1	40	4.335	0.2594	0.1186	38256
117.00	3' Wide Ice Shield (for Dish Antennas) (Assume Ca=2.0)	40	3.124	0.2151	0.1039	23417
115.00	8' Wide Ice Shield (for Dish Antennas) (Assume Ca=2.0)	40	3.026	0.2111	0.1021	24104
112.00	Andrew 2' w/Radome	40	2.881	0.2052	0.0992	25298
107.00	PA8-65	40	2.650	0.1954	0.0943	27575
106.00	Pirod 4' Side Mount Standoff (1)	40	2.606	0.1934	0.0934	28080
94.00	PD688S-4	40	2.099	0.1689	0.0824	27410

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	320 - 304	24.109	24	0.5508	0.3322
T2	304 - 300	22.244	24	0.5461	0.3330
T3	300 - 280	21.777	24	0.5431	0.3329
T4	280 - 260	19.486	24	0.5262	0.3316
T5	260 - 240	17.236	24	0.5158	0.3264
T6	240 - 220	15.014	24	0.4998	0.3074
T7	220 - 200	12.866	24	0.4761	0.2868
T8	200 - 180	10.838	24	0.4438	0.2685
T9	180 - 170	8.911	24	0.4107	0.2451
T10	170 - 160	7.992	24	0.3921	0.2319
T11	160 - 140	7.107	24	0.3720	0.2183
T12	140 - 120	5.520	24	0.3264	0.1999
T13	120 - 100	4.122	24	0.2761	0.1797
T14	100 - 80	2.958	24	0.2267	0.1486
T15	80 - 60	2.011	24	0.1749	0.1219
T16	60 - 30	1.296	19	0.1272	0.0992
T17	30 - 0	0.453	19	0.0580	0.0479

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
329.00	Lightning Rod 5/8x4'	24	24.109	0.5508	0.3322	Inf
327.00	Dual Lights	24	24.109	0.5508	0.3322	Inf
325.00	PD128-1	24	24.109	0.5508	0.3322	Inf
320.00	BA1012-0	24	24.109	0.5508	0.3322	Inf
318.00	ANT450F6	24	23.876	0.5506	0.3324	Inf
300.00	SC479-HF1LDF	24	21.777	0.5431	0.3329	71434
290.00	PD340-1	24	20.624	0.5342	0.3323	74612
286.00	DB809T3E-XC	24	20.167	0.5308	0.3321	89057
284.00	6' Side Mount Standoff	24	19.939	0.5291	0.3319	98583

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
283.00	SC479-HF1LDF(D00I-E6085) (Inverted)	24	19.826	0.5284	0.3318	103974
264.00	PD440-2	24	17.684	0.5179	0.3286	213257
260.00	6' Side Mount Standoff	24	17.236	0.5158	0.3264	226095
251.00	SC479-HF1LDF	24	16.231	0.5096	0.3192	118744
248.00	PD1142-1	24	15.897	0.5071	0.3162	98439
247.00	430-94C-09168-M-11048 TTA	24	15.787	0.5063	0.3152	93130
246.00	Sabre T-Boom (1)	24	15.676	0.5054	0.3141	88365
245.00	SC479-HF1LDF(D00I-E6085) (Inverted)	24	15.565	0.5045	0.3130	84064
238.00	531-70HD Exposed Dipole Antenna	24	14.795	0.4977	0.3051	61383
232.00	Valmont VFA-10-U V-Frame	24	14.143	0.4913	0.2983	48359
200.00	PiROD 12' Lightweight T-Frame	24	10.838	0.4438	0.2685	54651
179.00	1151-3	24	8.818	0.4089	0.2438	38333
177.00	DB586-Y	24	8.632	0.4053	0.2412	39601
176.00	Pirod 4' Side Mount Standoff (1)	24	8.540	0.4035	0.2399	40521
175.00	DB586-Y (inverted)	24	8.448	0.4016	0.2386	41563
168.00	L-810 Obstruction Lighting (1)	24	7.811	0.3882	0.2291	33168
165.00	L-810 Obstruction Lighting (1)	24	7.543	0.3822	0.2249	23915
164.00	L-810 Obstruction Lighting (1)	24	7.455	0.3802	0.2235	21761
163.00	Telewave ANT220F2 - Omni Antenna	24	7.367	0.3782	0.2222	20057
160.00	Siteprol USF-4U Mount Assembly (Ca = 1.4 assumed)	24	7.107	0.3720	0.2183	17288
154.00	Commscope PAR6-59W-PXA/A	24	6.606	0.3591	0.2117	18937
153.00	ANT450F6	24	6.525	0.3569	0.2108	19548
145.00	Telewave ANT220F2 - Omni Antenna	24	5.897	0.3384	0.2039	26340
142.00	Siteprol USF-4U Mount Assembly (Ca = 1.4 assumed)	24	5.669	0.3312	0.2015	29807
139.00	DB212-1	24	5.445	0.3239	0.1991	30982
117.00	3' Wide Ice Shield (for Dish Antennas) (Assume Ca=2.0)	24	3.932	0.2687	0.1755	18831
115.00	8' Wide Ice Shield (for Dish Antennas) (Assume Ca=2.0)	24	3.809	0.2638	0.1725	19396
112.00	Andrew 2' w/Radome	24	3.629	0.2565	0.1679	20380
107.00	PA8-65	24	3.340	0.2442	0.1598	22262
106.00	Pirod 4' Side Mount Standoff (1)	24	3.284	0.2418	0.1582	22681
94.00	PD688S-4	24	2.650	0.2112	0.1397	22116

CENTEK engineering
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Subject:	Anchor Bolt Analysis
Location:	320-ft Lattice Tower Colchester, CT
Rev. 0: 3/24/22	Prepared by: T.J.L. Checked by: C.F.C. Job No. 21007.82

Anchor Bolt Analysis:

Input Data:

Tower Reactions:

Tension Force =	Tension := 743·kips	(Input From tnxTower)
Compression Force =	Compression := 945·kips	(Input From tnxTower)
Shear Force =	Shear := 130·kips	(Input From tnxTower)

Anchor Bolt Data:

ASTMA354 Grade BC	Per ROHN Drawing A971600 dated 9/23/1999	
Number of Anchor Bolts =	N := 24	(User Input)
Bolt Ultimate Strength =	F_u := 125·ksi	(User Input)
Bolt Yield Strength =	F_y := 109·ksi	(User Input)
Bolt Modulus =	E := 29000·ksi	(User Input)
Diameter of Anchor Bolts =	D := 1.00·in	(User Input)
Threads per Inch =	n := 8	(User Input)
Length from Top of Pier to Bottom of Leveling Nut =	L_{ar} := 0·in	(User Input)

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Subject:	Anchor Bolt Analysis
Location:	320-ft Lattice Tower Colchester, CT
Rev. 0: 3/24/22	Prepared by: T.J.L. Checked by: C.F.C. Job No. 21007.82

Anchor Bolt Analysis:

Calculated Anchor Bolt Properties:

Gross Area of Bolt = $A_g := \frac{\pi}{4} \cdot D^2 = 0.785 \cdot in^2$

Net Area of Bolt = $A_n := \frac{\pi}{4} \cdot \left(D - \frac{0.9743 \cdot in}{n} \right)^2 = 0.606 \cdot in^2$

Net Diameter = $D_n := \frac{2 \cdot \sqrt{A_n}}{\sqrt{\pi}} = 0.878 \cdot in$

Radius of Gyration of Bolt = $r := \frac{D_n}{4} = 0.22 \cdot in$

Elastic Section Modulus of Bolt = $S_x := \frac{\pi \cdot D_n^3}{32} = 0.066 \cdot in^3$

Plastic Section Modulus of Bolt = $Z_x := \frac{D_n^3}{6} = 0.113 \cdot in^3$

Anchor Bolt Design Strength:

Resistance Factor for Flexure = $\phi_f := 0.9$

Resistance Factor for Compression = $\phi_c := 0.9$

Resistance Factor for Tension = $\phi_t := 0.75$

Resistance Factor for Shear = $\phi_v := 0.75$

Design Tensile Strength = $\Phi R_{nt} := \phi_t \cdot F_u \cdot A_n = 56.8 \cdot k$

Design Compression Strength = $\Phi R_{nc} := \phi_c \cdot F_y \cdot A_g = 77 \cdot k$

Design Shear Strength (Tension) = $\Phi R_{nv} := \phi_v \cdot 0.5 F_u \cdot A_g = 36.8 \cdot k$

Design Shear Strength (Compression) = $\Phi R_{nvc} := \phi_c \cdot 0.6 F_y \cdot A_g \cdot 0.75 = 34.7 \cdot k$

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Subject: Anchor Bolt Analysis

Location: 320-ft Lattice Tower
Colchester, CT

Rev. 0: 3/24/22

Prepared by: T.J.L. Checked by: C.F.C.
Job No. 21007.82

Check Anchor Bolt Tension Force:

Maximum Tensile Force = $P_{ut} := \frac{Tension}{N} = 31 \cdot kips$

Maximum Compressive Force = $P_{uc} := \frac{Compression}{N} = 39.4 \cdot kips$

Maximum Shear Force = $V_u := \frac{Shear}{N} = 5.4 \cdot kips$

Condition1 = $Condition1 := if\left[\left[\left(\frac{P_{ut}}{\Phi R_{nt}}\right)^2 + \left(\frac{V_u}{\Phi R_{nv}}\right)^2\right] \le 1.00, "OK", "Overstressed"\right]$

Condition1 = "OK"

Condition2 = $Condition2 := if\left[\left[\left(\frac{P_{uc}}{\Phi R_{nc}}\right) + \left(\frac{V_u}{\Phi R_{nvc}}\right)^2\right] \le 1.00, "OK", "Overstressed"\right]$

Condition2 = "OK"

Bolt % of Capacity = $\max\left[\left(\frac{P_{ut}}{\Phi R_{nt}}\right)^2 + \left(\frac{V_u}{\Phi R_{nv}}\right)^2, \left(\frac{P_{uc}}{\Phi R_{nc}}\right) + \left(\frac{V_u}{\Phi R_{nvc}}\right)^2\right] = 53.5 \cdot \%$

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Branford, CT 06405 F: (203) 488-8587

Subject:		FOUNDATION ANALYSIS
Location:		320-ft Lattice Tower Colchester, MA
Rev. 0: 3/24/22		Prepared by: T.J.L Checked by: C.F.C. Job no. 21007.82

Caisson Foundation:

Input Data:

Tower Data

Uplift =	Uplift := 743·kips	(User Input)
Compression =	Comp := 945·kips	(User Input)
Shear Force =	Shear := 130·kips	(User Input)
Tower Height =	H_t := 320·ft	(User Input)

Footing Data:

Length of Caisson =	L_c := 35.5·ft	(User Input)
Extension of Caisson Above Grade =	L_{cag} := 0.5·ft	(User Input)
Diameter of Caisson =	d_c := 7.5·ft	(User Input)
Length of Caisson Above Wate Table =	$L_{c.AWT}$:= 10.5·ft	(User Input)
Length of Caisson Above Wate Table =	$L_{c.BWT}$:= 25·ft	(User Input)
Conrete Pad Width =	Pad_w := 12·ft	(User Input - URS Mod 7/13/12)
Conrete Pad Depth =	Pad_d := 4·ft	(User Input - URS Mod 7/13/12)

Material Properties:

Concrete Compressive Strength =	f_c := 4000·psi	(User Input)
Steel Reinforcment Yield Strength =	f_y := 60000·psi	(User Input)
Ultimate Skin Friction (Above Water Table) =	μ_1 := 0.76·ksf	(User Input)
Ultimate Skin Friction (Below Water Table) =	μ_2 := 1.4·ksf	(User Input)
Ultimate Soil Bearing Capacity (at Bot of Caisson) =	q_{u1} := 13400·psf	(User Input)
Ultimate Soil Bearing Capacity (at Bot of Pad) =	q_{u2} := 4000·psf	(User Input)
Unit Weight of Soil =	γ_{soil} := 120·pcf	(User Input)
Unit Weight of Concrete =	γ_{conc} := 150·pcf	(User Input)
Depth to Neglect =	n := 4·ft	(User Input)
Resistance Factor for Bearing =	$\Phi_{sBearing}$:= 0.75	(TIA-222-H 9.7)
Resistance Factor for Friction =	$\Phi_{sFriction}$:= 0.75	(TIA-222-H 9.7)

Calculated Properties:

Adjusted Concrete Unit Weight = $\gamma_c := \gamma_{conc} - 62.4pcf = 87.6 \cdot pcf$

Weight of Concrete Caisson (no water) = $WT_{c.comp} := \frac{\pi}{4} \cdot \left(d_c^2 L_c\right) \cdot \gamma_{conc} = 235.251 \cdot kip$

Weight of Concrete Caisson (water) = $WT_{c.uplift} := \frac{\pi}{4} \cdot \left[\left(d_c^2 L_{c.AWT}\right) \cdot \gamma_{conc} + \left(d_c^2 L_{c.BWT}\right) \cdot \gamma_c\right] = 166.333 \cdot kip$

Weight of Concrete Pad = $WT_{pad} := \left[Pad_w^2 - \frac{\pi}{4} \cdot \left(d_c^2\right)\right] \cdot Pad_d \cdot \gamma_{conc} = 59.893 \cdot kip$

Bearing Area of Concrete Pad = $A_{pad} := \left[Pad_w^2 - \frac{\pi}{4} \cdot \left(d_c^2\right)\right] - 99.821$

Check Uplift:

Uplift Resistance from Concrete Weight = $Uplift_{conc} := \left(WT_{c.uplift} + WT_{pad}\right) \cdot 0.9 = 203.603 \cdot kips$

Uplift Resistance from Skin Friction = $Uplift_{SF} := \Phi_{sFriction} \cdot \pi \cdot d_c \cdot \left[\left(L_{c.AWT} - L_{cag} - n\right) \cdot \mu_1 + L_{c.BWT} \cdot \mu_2\right] = 699 \cdot kips$

Total Uplift Resistance = $Uplift_R := Uplift_{conc} + Uplift_{SF} = 902.686 \cdot kips$

Uplift Check = $\frac{Uplift}{Uplift_R} = 82.31 \cdot \%$

$Uplift\_Check := if\left(\frac{Uplift_R}{Uplift} \geq 1.0, "Okay", "No\ Good"\right)$

Uplift_Check = "Okay"

Check Compression:

Total Compression Force = $Comp_{tot} := WT_{c.comp} + Comp + WT_{pad} = 1240 \cdot kips$

Compression Resistance from Bearing = $Comp_{bearing} := \Phi_{sBearing} \cdot \left(\frac{\pi}{4} \cdot d_c^2 \cdot q_{u1} + A_{pad} \cdot q_{u2}\right) = 743 \cdot kips$

Compression Resistance from Skin Friction = $Comp_{SF} := \Phi_{sFriction} \cdot \pi \cdot d_c \cdot \left[\left(L_{c.AWT} - L_{cag} - n\right) \cdot \mu_1 + L_{c.BWT} \cdot \mu_2\right] = 699 \cdot kips$

Total Compression Resistance = $Comp_R := Comp_{bearing} + Comp_{SF} = 1443 \cdot kips$

Compression Check = $\frac{Comp_{tot}}{Comp_R} = 85.97 \cdot \%$

$Compression\_Check := if\left(\frac{Comp_R}{Comp_{tot}} \geq 1.0, "Okay", "No\ Good"\right)$

Compression_Check = "Okay"

Maser Consulting Connecticut
20 Alexander Drive, 2nd Floor
Wallingford, CT 06492
860.395.0055
peter.albano@colliersengineering.com

Antenna Mount Analysis Report and PMI Requirements

Mount Analysis

SMART Tool Project #: 10058930
Maser Consulting Connecticut Project #: 21777749A

July 2, 2021

Site Information	*Site ID:*	*467126-VZW / COLCHESTER CT*
	Site Name:	*COLCHESTER CT*
	Carrier Name:	*Verizon Wireless*
	Address:	*11 Munn Road* *Colchester, Connecticut 06415* *New London County*
	Latitude:	*41.592500°*
	Longitude:	*-72.321111°*
Structure Information	*Tower Type:*	*300-Ft Self Support*
	Mount Type:	*12.00-Ft Sector Frame*

FUZE ID # 16281612

Analysis Results

Sector Frame: **62.8% Pass***

*Results valid after hardware upgrades noted in the PMI Requirements are installed.

******Contractor PMI Requirements*:**
Included at the end of this MA report
Available & Submitted via portal at https://pmi.vzwsmart.com
Contractor - Please Review Specific Site PMI Requirements Upon Award
Requirements also Noted on Mount Modification Drawings
Requirements may also be Noted on A & E drawings

Report Prepared By: Frank Centone

Executive Summary:

The objective of this report is to determine the capacity of the antenna support mount at the subject facility for the final wireless telecommunications configuration, per the applicable codes and standards. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

This analysis is inclusive of the mount structure only and does not address the structural capacity of the supporting structure. This mounting frame was not analyzed as an anchor attachment point for fall protection. All climbing activities are required to have a fall protection plan completed by a competent person.

Sources of Information:

Document Type	Remarks
Radio Frequency Data Sheet (RFDS)	Verizon RFDS, Site ID: 323606, dated June 11, 2021
Mount Mapping Report	Elite ICT, Site ID: 50, dated April 22, 2021

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H	
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT}:	121 mph
	Ice Wind Speed (3-sec. Gust):	50 mph
	Design Ice Thickness:	1.00 in
	Risk Category:	II
	Exposure Category:	B
	Topographic Category:	1
	Topographic Feature Considered:	N/A
	Topographic Method:	N/A
	Ground Elevation Factor, K_e:	0.979
Seismic Parameters:	S_S:	0.204
	S_1:	0.055
Maintenance Parameters:	Wind Speed (3-sec. Gust):	30 mph
	Maintenance Live Load, Lv:	250 lbs.
	Maintenance Live Load, Lm:	500 lbs.
Analysis Software:	RISA-3D (V17)	

Final Loading Configuration:

The following equipment has been considered for the analysis of the mounts:

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
219.50	220.00	3	Samsung	MT6407-77A	Added
		6	Commscope	JAHH-65B-R3B	Retained
		3	Andrew	LNX-6512DS-VTM	
		3	Commscope	CBC78T-DS-43-2X	
		1	Raycap	RHSDC-6627-PF-48*	
		3	Samsung	B2/B66A RRH-BR049	
		3	Samsung	B5/B13 RHH-BR04C	

* Equipment to be flush mounted directly to the Self Support. They are not mounted on the sector mounts and are not included in this mount analysis.

The recent mount mapping reported existing OVP units. It is acceptable to install up to any three (3) of the OVP model numbers listed below as required at any location other than the mount face without affecting the structural capacity of the mount. If OVP units are installed on the mount face, a mount re-analysis may be required unless replacing an existing OVP.

Model Number	Ports	AKA
DB-B1-6C-12AB-0Z	6	OVP-6
RVZDC-6627-PF-48	12	OVP-12

Standard Conditions:

1. All engineering services are performed on the basis that the information provided to Maser Consulting Connecticut and used in this analysis is current and correct. The existing equipment loading has been applied at locations determined from the supplied documentation. Any deviation from the loading locations specified in this report shall be communicated to Maser Consulting Connecticut to verify deviation will not adversely impact the analysis.

2. Mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer's specifications.

   Obvious safety and structural issues/deficiencies noticed at the time of the mount mapping and reported in the Mount Mapping Report are assumed to be corrected and documented as part of the PMI process and are not considered in the mount analysis.

   The mount analysis and the mount mapping are not a condition assessment of the mount. Proper maintenance and condition assessments are still required post analysis.

3. For mount analyses completed from other data sources (including new replacement mounts) and not specifically mapped by Maser Consulting Connecticut, the mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer's specifications.

4. All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected member unless otherwise specified in this report.

5. The mount was checked up to, and including, the bolts that fasten it to the mount collar/attachment and threaded rod connections in collar members if applicable. Local deformation and interaction between the mount collar/attachment and the supporting tower structure are outside the scope of this analysis.

6. All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. Maser Consulting Connecticut is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.

7. Structural Steel Grades have been assumed as follows, if applicable, unless otherwise noted in this analysis:
   - Channel, Solid Round, Angle, Plate — ASTM A36 (Gr. 36)
   - HSS (Rectangular) — ASTM 500 (Gr. B-46)
   - Pipe — ASTM A53 (Gr. B-35)
   - Threaded Rod — F1554 (Gr. 36)
   - Bolts — ASTM A325

Discrepancies between in-field conditions and the assumptions listed above may render this analysis invalid unless explicitly approved by Maser Consulting Connecticut.

Analysis Results:

Component	Utilization %	Pass/Fail
Tie Back	*62.8%*	*Pass*
Standoff Vertical	*21.0%*	*Pass*
Standoff Diagonal	*26.0%*	*Pass*
Standoff Mast Pipe	*39.8%*	*Pass*
Standoff Plate	*52.9%*	*Pass*
Standoff Horizontal	*25.0%*	*Pass*
Mast Pipe	*15.9%*	*Pass*
Antenna Pipe	*17.4%*	*Pass*
Face Horizontal	*17.2%*	*Pass*
Connection Check	*49.9%*	*Pass*

Structure Rating – *(Controlling Utilization of all Components)*	**62.8%**

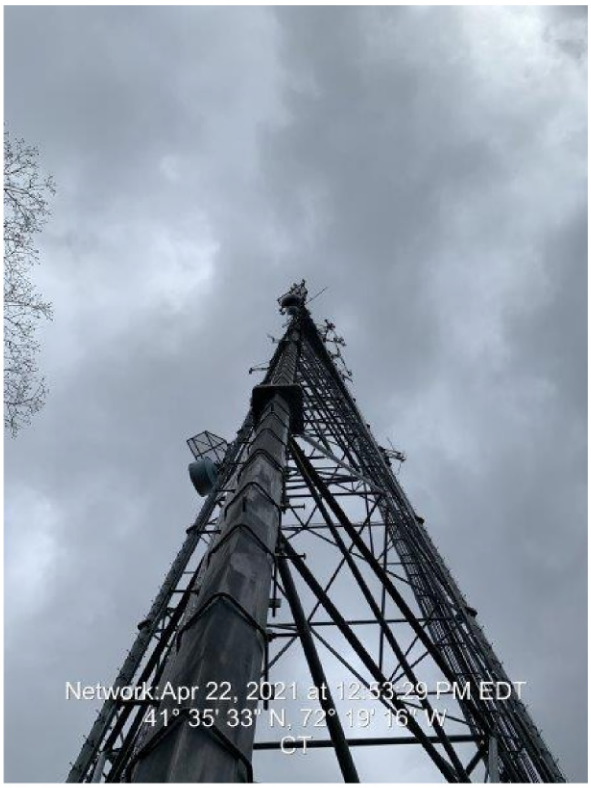
Recommendation:

The existing mounts are **SUFFICIENT** for the final loading configuration upon the completion of the recommendations listed in the Special instructions section of the below referenced PMI document.

ANSI/ASSP rigging plan review services compliant with the requirements of ANSI/TIA 322 are available for a Construction Class IV site or other, if required. Separate review fees will apply.

Attachments:

1. Mount Photos
2. Mount Mapping Report (for reference only)
3. Analysis Calculations
4. **Contractor Required Post Installation Inspection (PMI) Report Deliverables**
5. Antenna Placement Diagrams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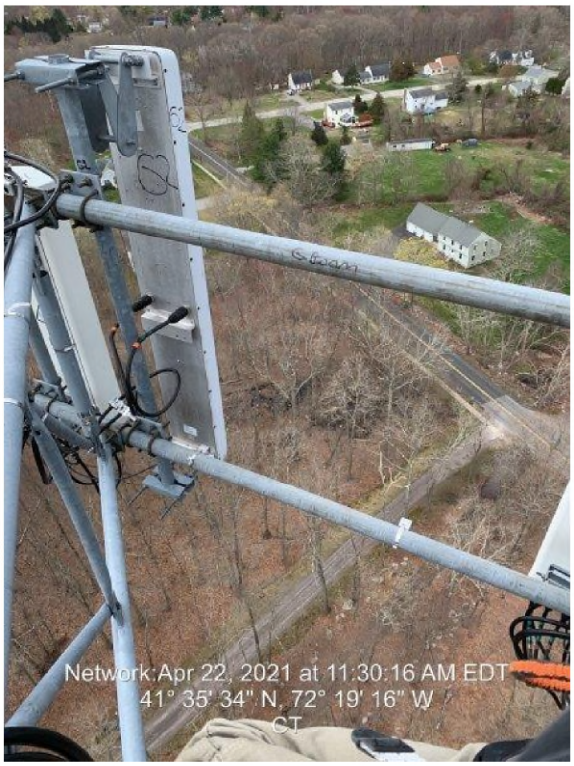
41° 35' 33" N, 72° 19' 16" W
CT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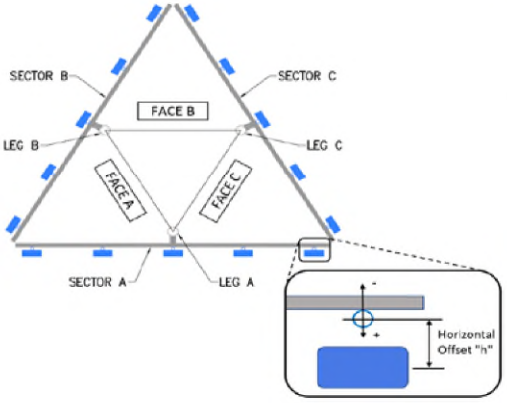
41° 35' 34" N, 72° 19' 16" W
CT

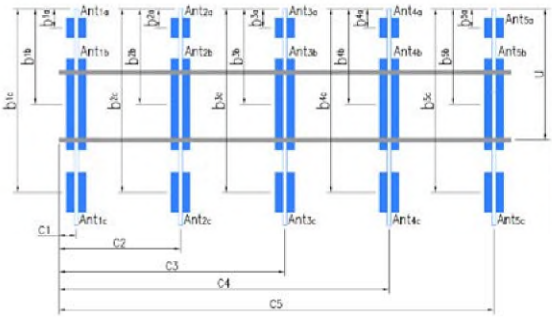
Antenna Mount Mapping Form (PATENT PENDING)

FCC # 1045079

Tower Owner:	UNKOWN	**Mapping Date:**	4/22/2021
Site Name:	COLCHESTER	**Tower Type:**	Self Support
Site Number or ID:	50	**Tower Height (Ft.):**	300
Mapping Contractor:	ELITE ICT	**Mount Elevation (Ft.):**	233

Please insert the sketches of the antenna mount from the "Sketches" tab with dimensions and members here.





Antenna Layout (Looking Out From Tower)

Mount Pipe Configuration and Geometries [Unit = Inches]

Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."
A1	60 X 2.38 STD P	53.00	3.00	C1	60 X 2.38 STD P	53.00	3.00
A2	72 X 2.38 STD P	55.00	27.00	C2	72 X 2.38 STD P	55.00	27.00
A3	60 X 2.38 STD P	53.00	103.00	C3	60 X 2.38 STD P	53.00	103.00
A4	60 X 2.38 STD P	53.00	139.00	C4	60 X 2.38 STD P	53.00	139.00
A5				C5			
A6				C6			
B1	60 X 2.38 STD P	53.00	3.00	D1			
B2	72 X 2.38 STD P	55.00	27.00	D2			
B3	60 X 2.38 STD P	53.00	103.00	D3			
B4	60 X 2.38 STD P	53.00	139.00	D4			
B5				D5			
B6				D6			

Distance between bottom rail and mount CL elevation (dim d). Unit is inches. See 'Mount Elev Ref' tab for details. :	20.00
Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) :	
Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) :	

Please enter additional infomation or comments below.

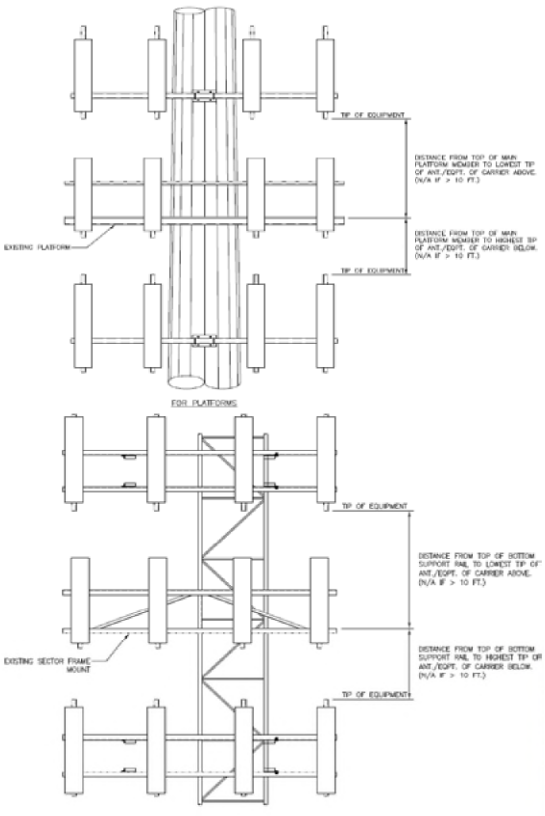
Tower Face Width at Mount Elev. (ft.):	14	Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):	10.5
For T-Arms/Platforms on monopoles, report the weld size from the main standoff to the plate bolting into the collar mount.			8-Mar

	Enter antenna model. If not labeled, enter "Unknown".						Mounting Locations [Units are inches and degrees]			Photos of antennas
Ants. Items	Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Vertical Distances"b_{1a}, b_{2a}, b_{3a}, b_{1b}...." (Inches)	Horiz. Offset "h" (Use "-" if Ant. is behind)	Antenna Azimuth (Degrees)	Photo Numbers
Sector A										
Ant_{1a}	LNX-6512DS-A1M	11.00	7.00	48.00		233.583	26.00	10.00	130.00	282
Ant_{1b}										
Ant_{1c}										
Ant_{2a}	UNKNOWN	11.00	4.00	72.00		232.917	36.00	12.00	85.00	286
Ant_{2b}										
Ant_{2c}										
Ant_{3a}	SBNHH-1D65B	11.00	7.00	72.00		234.083	20.00	9.00	30.00	292
Ant_{3b}	B13-RRH	11.00	5.00	20.00		233.583	26.00	10.00		
Ant_{3c}										
Ant_{4a}	B66A-RRH	12.00	7.00	25.00		233.417	28.00	6.00		313
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

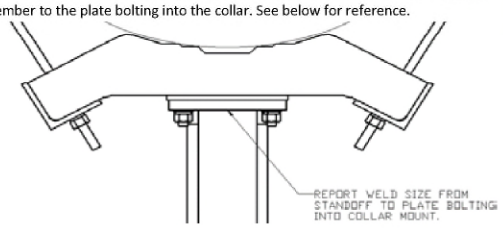
Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector	
Sector A:	60.00	Deg	Leg A:	30.00	Deg
Sector B:	90.00	Deg	Leg B:	80.00	Deg
Sector C:	320.00	Deg	Leg C:	330.00	Deg
Sector D:		Deg	Leg D:		Deg

Climbing Facility Information			
Location:	60.00	Deg	Sector A
Climbing Facility	Corrosion Type:		Good condition.
	Access:		Climbing path was unobstructed.
	Condition:		Good condition.

Please insert a photo of the mount centerline measurement here.



For T-Arms/Platforms on monopoles, record the weld size from the main standoff member to the plate bolting into the collar. See below for reference.



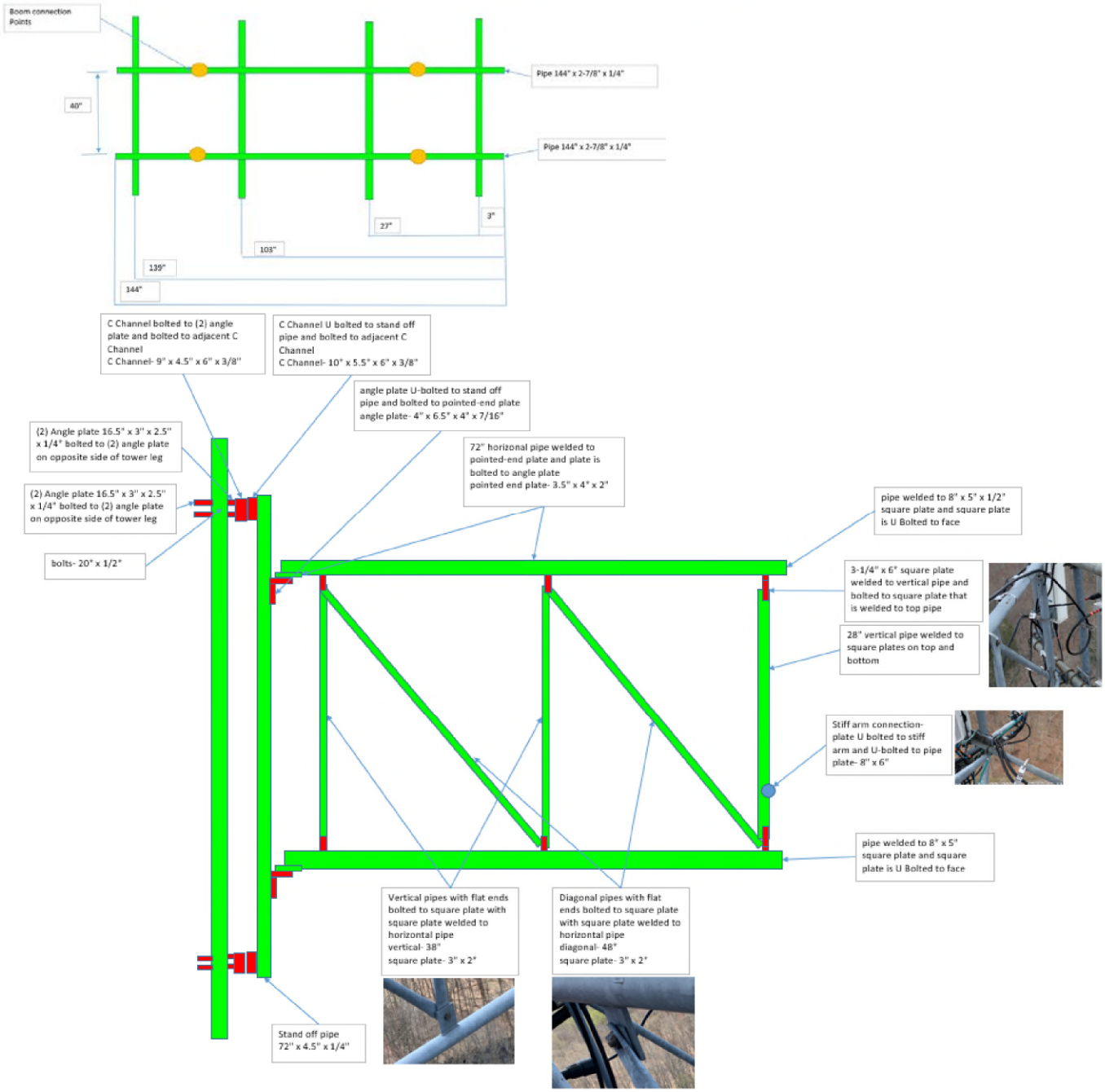
Sector B										
Ant_{1a}	LNX-6512DS-A1M	11.00	7.00	48.00		233.583	26.00	10.00	140.00	16
Ant_{1b}										
Ant_{1c}										
Ant_{2a}	UNKNOWN	11.00	4.00	72.00		232.917	36.00	9.00	130.00	32
Ant_{2b}										
Ant_{2c}										
Ant_{3a}	SBNHH-1D65B	11.00	7.00	72.00		234.083	20.00	9.00	85.00	62
Ant_{3b}	SBNHH-1D65B	11.00	7.00	72.00		234.083	20.00	9.00	85.00	5
Ant_{3c}	B13-RRH	11.00	7.50	20.00		233.583	26.00	-7.00		77
Ant_{4a}	B66A-RRH	12.00	7.00	25.00		233.417	28.00	-6.00		90
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower	RHSDC-6627-PF-48	15.00	9.00	18.00						
Ant on Tower										
Sector C										
Ant_{1a}	LNX-6512DS-A1M	11.00	7.00	48.00		233.083	32.00	10.00	335.00	131
Ant_{1b}										
Ant_{1c}										
Ant_{2a}	UNKNOWN	11.00	4.00	72.00		232.917	36.00	9.00	320.00	134
Ant_{2b}										
Ant_{2c}										
Ant_{3a}	SBNHH-1D65B	11.00	7.00	72.00		233.917	22.00	9.00	270.00	155
Ant_{3b}	B13-RRH	11.00	5.00	20.00		233.833	23.00	10.00		
Ant_{3c}										
Ant_{4a}	B66A-RRH	12.00	7.00	25.00		233.417	28.00	6.00		278
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										
Sector D										
Ant_{1a}										
Ant_{1b}										
Ant_{1c}										
Ant_{2a}										
Ant_{2b}										
Ant_{2c}										
Ant_{3a}										
Ant_{3b}										
Ant_{3c}										
Ant_{4a}										
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

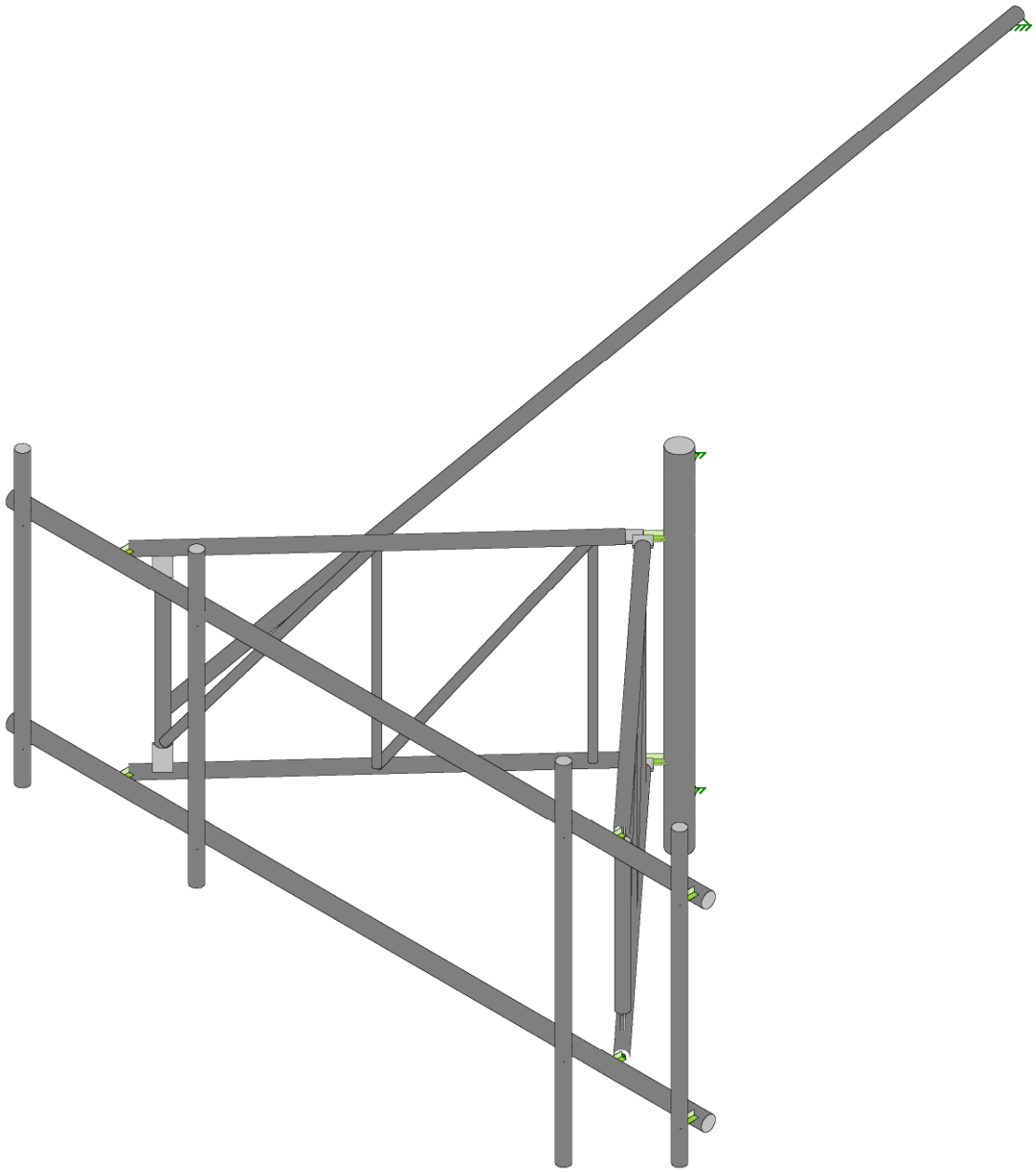
Antenna Mount Mapping Form (PATENT PENDING)

FCC # 1045079

Tower Owner:	UNKOWN	**Mapping Date:**	4/22/2021
Site Name:	COLCHESTER	**Tower Type:**	Self Support
Site Number or ID:	50	**Tower Height (Ft.):**	300
Mapping Contractor:	ELITE ICT	**Mount Elevation (Ft.):**	233

Please Insert Sketches of the Antenna Mount





Envelope Only Solution

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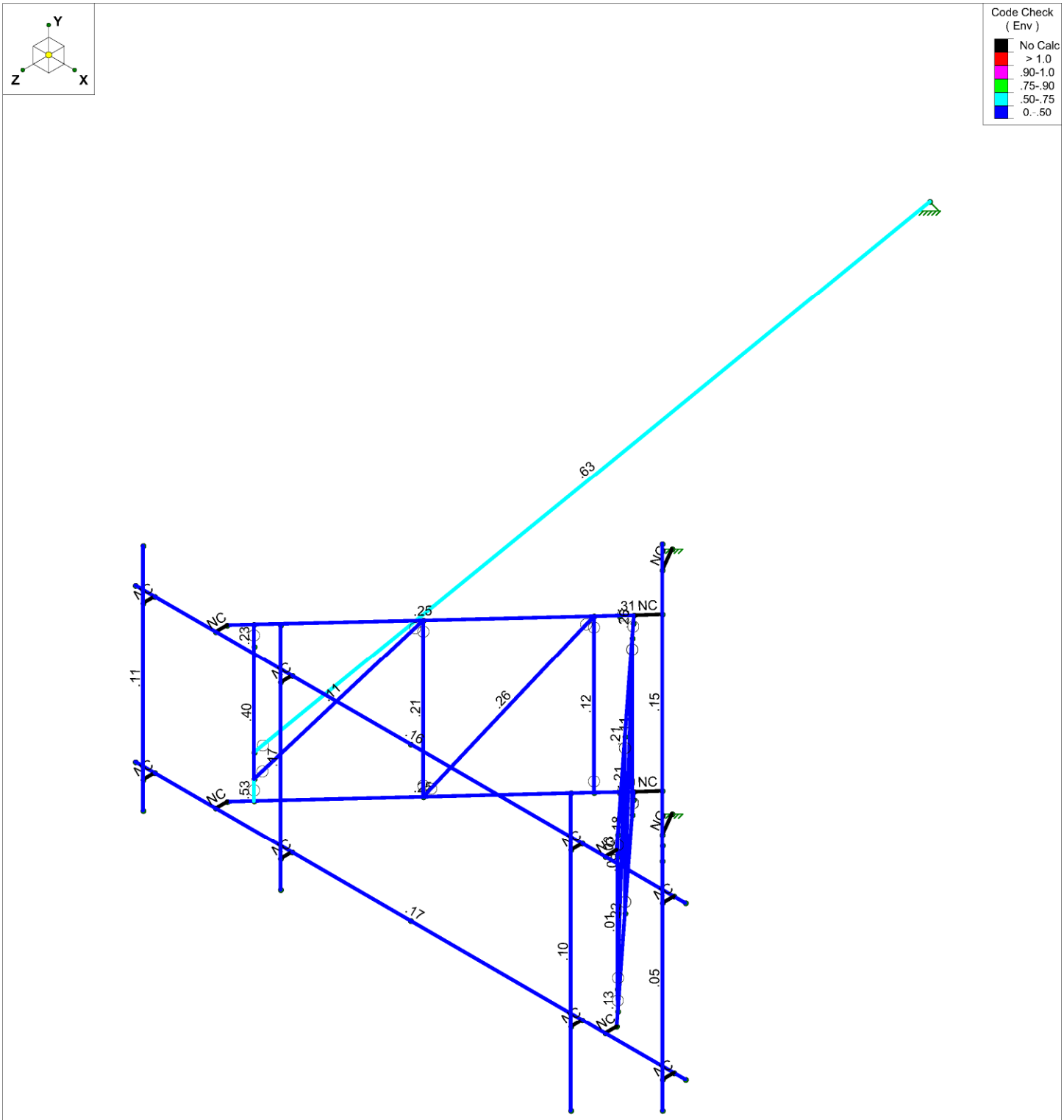

Member Code Checks Displayed (Enveloped)
Envelope Only Solution

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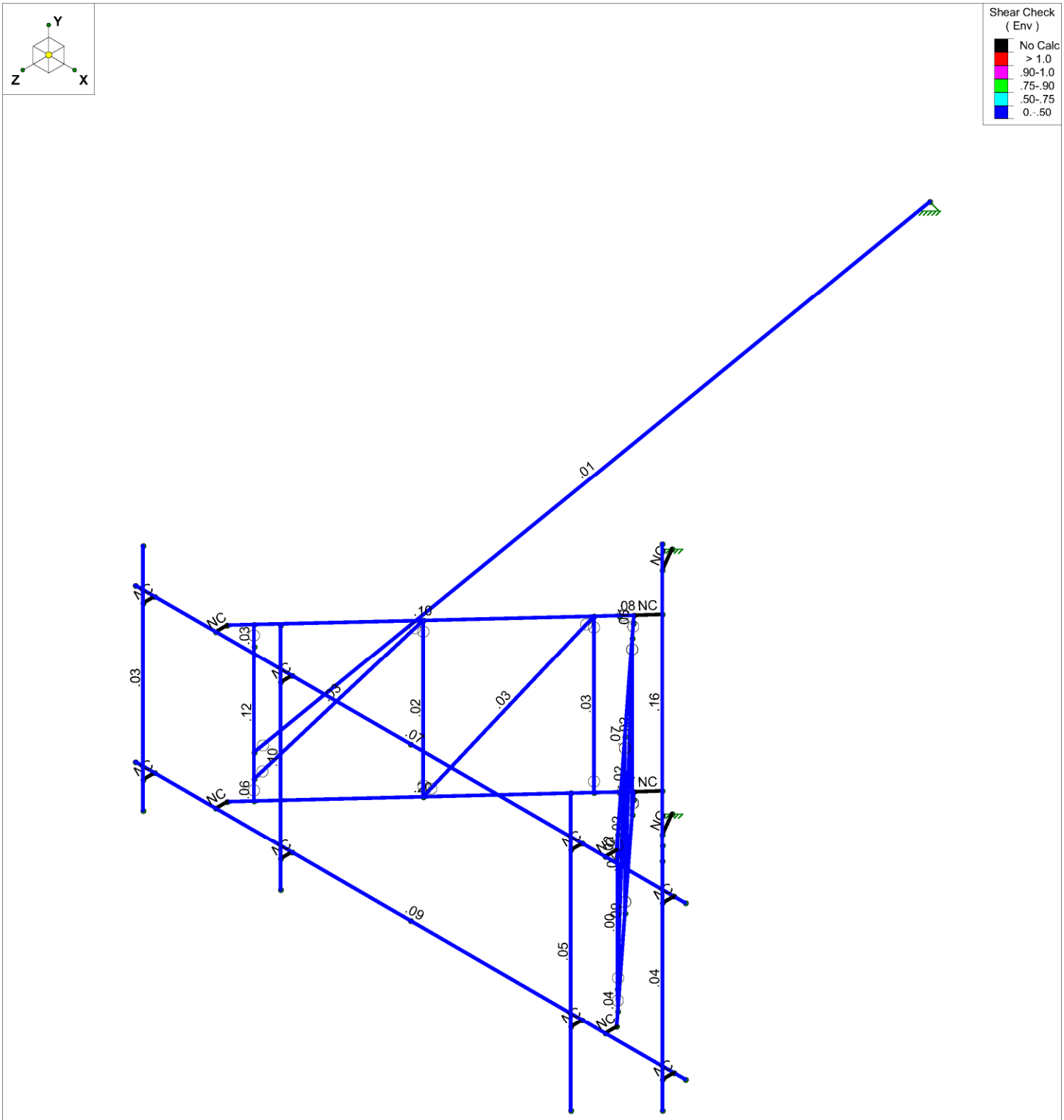

Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

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		467126-VZW_MT_LOT_A_H.r3d

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
1	Antenna D	None					33			
2	Antenna Di	None					33			
3	Antenna Wo (0 Deg)	None					33			
4	Antenna Wo (30 Deg)	None					33			
5	Antenna Wo (60 Deg)	None					33			
6	Antenna Wo (90 Deg)	None					33			
7	Antenna Wo (120 Deg)	None					33			
8	Antenna Wo (150 Deg)	None					33			
9	Antenna Wo (180 Deg)	None					33			
10	Antenna Wo (210 Deg)	None					33			
11	Antenna Wo (240 Deg)	None					33			
12	Antenna Wo (270 Deg)	None					33			
13	Antenna Wo (300 Deg)	None					33			
14	Antenna Wo (330 Deg)	None					33			
15	Antenna Wi (0 Deg)	None					33			
16	Antenna Wi (30 Deg)	None					33			
17	Antenna Wi (60 Deg)	None					33			
18	Antenna Wi (90 Deg)	None					33			
19	Antenna Wi (120 Deg)	None					33			
20	Antenna Wi (150 Deg)	None					33			
21	Antenna Wi (180 Deg)	None					33			
22	Antenna Wi (210 Deg)	None					33			
23	Antenna Wi (240 Deg)	None					33			
24	Antenna Wi (270 Deg)	None					33			
25	Antenna Wi (300 Deg)	None					33			
26	Antenna Wi (330 Deg)	None					33			
27	Antenna Wm (0 Deg)	None					33			
28	Antenna Wm (30 Deg)	None					33			
29	Antenna Wm (60 Deg)	None					33			
30	Antenna Wm (90 Deg)	None					33			
31	Antenna Wm (120 Deg)	None					33			
32	Antenna Wm (150 Deg)	None					33			
33	Antenna Wm (180 Deg)	None					33			
34	Antenna Wm (210 Deg)	None					33			
35	Antenna Wm (240 Deg)	None					33			
36	Antenna Wm (270 Deg)	None					33			
37	Antenna Wm (300 Deg)	None					33			
38	Antenna Wm (330 Deg)	None					33			
39	Structure D	None		-1						
40	Structure Di	None						30		
41	Structure Wo (0 Deg)	None						60		
42	Structure Wo (30 Deg)	None						60		
43	Structure Wo (60 Deg)	None						60		
44	Structure Wo (90 Deg)	None						60		
45	Structure Wo (120 D...	None						60		
46	Structure Wo (150 D...	None						60		
47	Structure Wo (180 D...	None						60		
48	Structure Wo (210 D...	None						60		
49	Structure Wo (240 D...	None						60		
50	Structure Wo (270 D...	None						60		
51	Structure Wo (300 D...	None						60		
52	Structure Wo (330 D...	None						60		
53	Structure Wi (0 Deg)	None						60		
54	Structure Wi (30 Deg)	None						60		
55	Structure Wi (60 Deg)	None						60		
56	Structure Wi (90 Deg)	None						60		

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
57	Structure Wi (120 De...	None						60		
58	Structure Wi (150 De...	None						60		
59	Structure Wi (180 De...	None						60		
60	Structure Wi (210 De...	None						60		
61	Structure Wi (240 De...	None						60		
62	Structure Wi (270 De...	None						60		
63	Structure Wi (300 De...	None						60		
64	Structure Wi (330 De...	None						60		
65	Structure Wm (0 Deg)	None						60		
66	Structure Wm (30 De...	None						60		
67	Structure Wm (60 De...	None						60		
68	Structure Wm (90 De...	None						60		
69	Structure Wm (120 D...	None						60		
70	Structure Wm (150 D...	None						60		
71	Structure Wm (180 D...	None						60		
72	Structure Wm (210 D...	None						60		
73	Structure Wm (240 D...	None						60		
74	Structure Wm (270 D...	None						60		
75	Structure Wm (300 D...	None						60		
76	Structure Wm (330 D...	None						60		
77	Lm1	None					1			
78	Lm2	None					1			
79	Lv1	None					1			
80	Lv2	None					1			

Load Combinations

	Description	Sol..	PD..	SR..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..
1	1.2D+1.0Wo ...	Yes	Y		1	1.2	39	1.2	3	1	41	1												
2	1.2D+1.0Wo ...	Yes	Y		1	1.2	39	1.2	4	1	42	1												
3	1.2D+1.0Wo ...	Yes	Y		1	1.2	39	1.2	5	1	43	1												
4	1.2D+1.0Wo ...	Yes	Y		1	1.2	39	1.2	6	1	44	1												
5	1.2D+1.0Wo ...	Yes	Y		1	1.2	39	1.2	7	1	45	1												
6	1.2D+1.0Wo ...	Yes	Y		1	1.2	39	1.2	8	1	46	1												
7	1.2D+1.0Wo ...	Yes	Y		1	1.2	39	1.2	9	1	47	1												
8	1.2D+1.0Wo ...	Yes	Y		1	1.2	39	1.2	10	1	48	1												
9	1.2D+1.0Wo ...	Yes	Y		1	1.2	39	1.2	11	1	49	1												
10	1.2D+1.0Wo ...	Yes	Y		1	1.2	39	1.2	12	1	50	1												
11	1.2D+1.0Wo ...	Yes	Y		1	1.2	39	1.2	13	1	51	1												
12	1.2D+1.0Wo ...	Yes	Y		1	1.2	39	1.2	14	1	52	1												
13	1.2D + 1.0Di ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1	53	1								
14	1.2D + 1.0Di ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1								
15	1.2D + 1.0Di ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1	55	1								
16	1.2D + 1.0Di ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1	56	1								
17	1.2D + 1.0Di ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1								
18	1.2D + 1.0Di ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1								
19	1.2D + 1.0Di ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1								
20	1.2D + 1.0Di ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1								
21	1.2D + 1.0Di ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1								
22	1.2D + 1.0Di ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1								
23	1.2D + 1.0Di ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1								
24	1.2D + 1.0Di ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1								
25	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1										
26	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1										
27	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1										
28	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1										

Load Combinations (Continued)

	Description	Sol..	PD..	SR..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..
29	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1										
30	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1										
31	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1										
32	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1										
33	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1										
34	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1										
35	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1										
36	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1										
37	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1										
38	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1										
39	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1										
40	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1										
41	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1										
42	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1										
43	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1										
44	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1										
45	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1										
46	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1										
47	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1										
48	1.2D + 1.5L...	Yes	Y		1	1.2	39	1.2	78	1.5	38	1	76	1										
49	1.2D + 1.5Lv1	Yes	Y		1	1.2	39	1.2	79	1.5														
50	1.2D + 1.5Lv2	Yes	Y		1	1.2	39	1.2	80	1.5														
51	1.4D	Yes	Y		1	1.4	39	1.4																
52	Seismic Mass		Y		1	1	39	1																
53	1.2D + 1.0Ev...		Y		1	1.2	39	1.2	SX		SY	1	SZ	-1										
54	1.2D + 1.0Ev...		Y		1	1.2	39	1.2	SX	.5	SY	1	SZ	-.866										
55	1.2D + 1.0Ev...		Y		1	1.2	39	1.2	SX	.866	SY	1	SZ	-.5										
56	1.2D + 1.0Ev...		Y		1	1.2	39	1.2	SX	1	SY	1	SZ											
57	1.2D + 1.0Ev...		Y		1	1.2	39	1.2	SX	.866	SY	1	SZ	.5										
58	1.2D + 1.0Ev...		Y		1	1.2	39	1.2	SX	.5	SY	1	SZ	.866										
59	1.2D + 1.0Ev...		Y		1	1.2	39	1.2	SX		SY	1	SZ	1										
60	1.2D + 1.0Ev...		Y		1	1.2	39	1.2	SX	-.5	SY	1	SZ	.866										
61	1.2D + 1.0Ev...		Y		1	1.2	39	1.2	SX	-.866	SY	1	SZ	.5										
62	1.2D + 1.0Ev...		Y		1	1.2	39	1.2	SX	-1	SY	1	SZ											
63	1.2D + 1.0Ev...		Y		1	1.2	39	1.2	SX	-.866	SY	1	SZ	-.5										
64	1.2D + 1.0Ev...		Y		1	1.2	39	1.2	SX	-.5	SY	1	SZ	-.866										

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	0	0	0	0	
2	N2	0	3.333333	0	0	
3	N3	6	0	0	0	
4	N4	6	3.333333	0	0	
5	N5	-6	0	0	0	
6	N6	-6	3.333333	0	0	
7	N7	5.75	0	0	0	
8	N8	5.75	3.333333	0	0	
9	N9	3.75	0	0	0	
10	N10	3.75	3.333333	0	0	
11	N11	-2.583333	0	0	0	
12	N12	-2.583333	3.333333	0	0	
13	N13	-5.583333	0	0	0	
14	N14	-5.583333	3.333333	0	0	
15	N15	5.75	0	.25	0	
16	N16	5.75	3.333333	.25	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
17	N17	3.75	0	.25	0	
18	N18	3.75	3.333333	.25	0	
19	N19	-2.583333	0	.25	0	
20	N20	-2.583333	3.333333	.25	0	
21	N21	-5.583333	0	.25	0	
22	N22	-5.583333	3.333333	.25	0	
23	N23	5.75	4.416667	.25	0	
24	N24	3.75	4.416667	.25	0	
25	N25	-5.583333	4.416667	.25	0	
26	N26	5.75	-0.583333	.25	0	
27	N27	3.75	-1.583333	.25	0	
28	N28	-5.583333	-0.583333	.25	0	
29	N29	-2.583333	4.416667	.25	0	
30	N30	-2.583333	-0.583333	.25	0	
31	N31	4.25	0	0	0	
32	N32	4.25	3.333333	0	0	
33	N33	-4.25	0	0	0	
34	N34	-4.25	3.333333	0	0	
35	N35	0	0	-4.875	0	
36	N36	0	3.333333	-4.875	0	
37	N37	4.25	0	-.25	0	
38	N38	4.25	3.333333	-.25	0	
39	N39	-4.25	0	-.25	0	
40	N40	-4.25	3.333333	-.25	0	
41	N41	0.150366	3.333333	-4.714315	0	
42	N42	-0.150366	3.333333	-4.714315	0	
43	N43	-0.150366	0	-4.714315	0	
44	N44	0.150366	0	-4.714315	0	
45	N45	0.291667	0	-5.203152	0	
46	N46	0.291667	3.333333	-5.203152	0	
47	N47	0.291667	4.666667	-5.203152	0	
48	N48	0.291667	-1.333333	-5.203152	0	
49	N49	0.291667	4.166667	-5.203152	0	
50	N50	0.291667	-0.833333	-5.203152	0	
51	N51	0	4.166667	-5.708333	0	
52	N52	0	-0.833333	-5.708333	0	
53	N53	3.970617	3.333333	-0.554235	0	
54	N54	-3.970617	3.333333	-0.554235	0	
55	N55	-3.970617	0	-0.554235	0	
56	N56	3.970617	0	-0.554235	0	
57	N57	3.965303	2.916667	-0.554235	0	
58	N58	-3.965303	2.916667	-0.554235	0	
59	N59	-3.965303	0.416667	-0.554235	0	
60	N60	3.965303	0.416667	-0.554235	0	
61	N69	-3.965303	0.916667	-0.554235	0	
62	N73	-7.000372	0.916667	-18.333333	0	
63	N71	2.200183	3.333333	-2.482157	0	
64	N72	-2.200183	3.333333	-2.482157	0	
65	N73A	-2.200183	0	-2.482157	0	
66	N74	2.200183	0	-2.482157	0	
67	N75	0.417164	3.333333	-4.423784	0	
68	N76	-0.417164	3.333333	-4.423784	0	
69	N77	-0.417164	0	-4.423784	0	
70	N78	0.417164	0	-4.423784	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design R...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Antenna Pipe	PIPE_2.0	Column	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
2	Face Horizontal	PIPE_2.5	Column	Pipe	A53 Gr. B	Typical	1.61	1.45	1.45	2.89
3	Standoff Horizontal	PIPE_2.0	Column	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
4	Standoff Vertical	1.5x0.06	Column	Pipe	A53 Gr. B	Typical	.271	.07	.07	.141
5	Standoff Diagonal	1.5x0.06	Column	Pipe	A53 Gr. B	Typical	.271	.07	.07	.141
6	Standoff Mast Pipe	PIPE_2.0	Column	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
7	Mast Pipe	PIPE_4.0	Column	Pipe	A53 Gr. B	Typical	2.96	6.82	6.82	13.6
8	Tie Back	PIPE_2.0	Column	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
9	Standoff Plate	PL1/2X3	Column	RECT	A36 Gr.36	Typical	1.5	.031	1.125	.112
10	Back Angle	L4X3X6	Column	Single Angle	A36 Gr.36	Typical	2.49	1.89	3.94	.123

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/1E...	Density[k/ft...	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
2	A53 Gr. B	29000	11154	.3	.65	.49	35	1.5	60	1.2
3	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	65	1.1
4	A992	29000	11154	.3	.65	.49	50	1.1	65	1.1
5	A500 Gr. B 42	29000	11154	.3	.65	.49	42	1.4	58	1.3
6	A500 Gr. B 46	29000	11154	.3	.65	.49	46	1.4	58	1.3

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N6	N4			Face Horizontal	Column	Pipe	A53 Gr. B	Typical
2	M2	N5	N3			Face Horizontal	Column	Pipe	A53 Gr. B	Typical
3	M3	N14	N22			RIGID	None	None	RIGID	Typical
4	M4	N12	N20			RIGID	None	None	RIGID	Typical
5	M5	N13	N21			RIGID	None	None	RIGID	Typical
6	M6	N11	N19			RIGID	None	None	RIGID	Typical
7	M7	N10	N18			RIGID	None	None	RIGID	Typical
8	M8	N9	N17			RIGID	None	None	RIGID	Typical
9	M9	N8	N16			RIGID	None	None	RIGID	Typical
10	M10	N7	N15			RIGID	None	None	RIGID	Typical
11	MP4A	N25	N28			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
12	MP3A	N29	N30			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
13	MP2A	N24	N27			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
14	MP1A	N23	N26			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
15	M15	N34	N40			RIGID	None	None	RIGID	Typical
16	M16	N33	N39			RIGID	None	None	RIGID	Typical
17	M17	N32	N38			RIGID	None	None	RIGID	Typical
18	M18	N31	N37			RIGID	None	None	RIGID	Typical
19	M23	N41	N36		90	Standoff Plate	Column	RECT	A36 Gr.36	Typical
20	M24	N42	N36		90	Standoff Plate	Column	RECT	A36 Gr.36	Typical
21	M25	N43	N35		90	Standoff Plate	Column	RECT	A36 Gr.36	Typical
22	M26	N44	N35		90	Standoff Plate	Column	RECT	A36 Gr.36	Typical
23	M27	N36	N46			RIGID	None	None	RIGID	Typical
24	M28	N35	N45			RIGID	None	None	RIGID	Typical
25	M29	N47	N48			Mast Pipe	Column	Pipe	A53 Gr. B	Typical
26	M30	N49	N51			RIGID	None	None	RIGID	Typical
27	M31	N50	N52			RIGID	None	None	RIGID	Typical
28	M32	N38	N41			Standoff Horiz...	Column	Pipe	A53 Gr. B	Typical
29	M33	N40	N42			Standoff Horiz...	Column	Pipe	A53 Gr. B	Typical
30	M34	N39	N43			Standoff Horiz...	Column	Pipe	A53 Gr. B	Typical
31	M35	N37	N44			Standoff Horiz...	Column	Pipe	A53 Gr. B	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
32	M36	N54	N58		135	Standoff Plate	Column	RECT	A36 Gr.36	Typical
33	M37	N53	N57		230	Standoff Plate	Column	RECT	A36 Gr.36	Typical
34	M38	N60	N56		230	Standoff Plate	Column	RECT	A36 Gr.36	Typical
35	M39	N59	N55		135	Standoff Plate	Column	RECT	A36 Gr.36	Typical
36	M40	N59	N58			Standoff Mast ...	Column	Pipe	A53 Gr. B	Typical
37	M41	N60	N57			Standoff Mast ...	Column	Pipe	A53 Gr. B	Typical
38	M42	N75	N74			Standoff Diago...	Column	Pipe	A53 Gr. B	Typical
39	M43	N71	N60			Standoff Diago...	Column	Pipe	A53 Gr. B	Typical
40	M44	N72	N59			Standoff Diago...	Column	Pipe	A53 Gr. B	Typical
41	M45	N76	N73A			Standoff Diago...	Column	Pipe	A53 Gr. B	Typical
42	M46	N72	N73A			Standoff Vertical	Column	Pipe	A53 Gr. B	Typical
43	M47	N76	N77			Standoff Vertical	Column	Pipe	A53 Gr. B	Typical
44	M48	N75	N78			Standoff Vertical	Column	Pipe	A53 Gr. B	Typical
45	M49	N71	N74			Standoff Vertical	Column	Pipe	A53 Gr. B	Typical
46	M50	N69	N73			Tie Back	Column	Pipe	A53 Gr. B	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M1						Yes	** NA **			None
2	M2						Yes	** NA **			None
3	M3						Yes	** NA **			None
4	M4						Yes	** NA **			None
5	M5						Yes	** NA **			None
6	M6						Yes	** NA **			None
7	M7						Yes	** NA **			None
8	M8						Yes	** NA **			None
9	M9						Yes	** NA **			None
10	M10						Yes	** NA **			None
11	MP4A						Yes	** NA **			None
12	MP3A						Yes	** NA **			None
13	MP2A						Yes	** NA **			None
14	MP1A						Yes	** NA **			None
15	M15						Yes	** NA **			None
16	M16						Yes	** NA **			None
17	M17						Yes	** NA **			None
18	M18						Yes	** NA **			None
19	M23		BenPIN				Yes	** NA **			None
20	M24		BenPIN				Yes	** NA **			None
21	M25		BenPIN				Yes	** NA **			None
22	M26		BenPIN				Yes	** NA **			None
23	M27						Yes	** NA **			None
24	M28						Yes	** NA **			None
25	M29						Yes	** NA **			None
26	M30						Yes	** NA **			None
27	M31						Yes	** NA **			None
28	M32						Yes	** NA **			None
29	M33						Yes	** NA **			None
30	M34						Yes	** NA **			None
31	M35						Yes	** NA **			None
32	M36		OOOOOO				Yes	** NA **			None
33	M37		OOOOOO				Yes	** NA **			None
34	M38	OOOOOX					Yes	** NA **			None
35	M39	OOOOOX					Yes	** NA **			None
36	M40						Yes	** NA **			None
37	M41						Yes	** NA **			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
38	M42	BenPIN	BenPIN				Yes	** NA **			None
39	M43	BenPIN	BenPIN				Yes	** NA **			None
40	M44	BenPIN	BenPIN				Yes	** NA **			None
41	M45	BenPIN	BenPIN				Yes	** NA **			None
42	M46	BenPIN	BenPIN				Yes	** NA **			None
43	M47	BenPIN	BenPIN				Yes	** NA **			None
44	M48	BenPIN	BenPIN				Yes	** NA **			None
45	M49	BenPIN	BenPIN				Yes	** NA **			None
46	M50	OOOOXO					Yes	** NA **			None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	Y	-43.55	2.25
2	MP2A	My	-.022	2.25
3	MP2A	Mz	0	2.25
4	MP2A	Y	-43.55	4.25
5	MP2A	My	-.022	4.25
6	MP2A	Mz	0	4.25
7	MP3A	Y	-31.65	.25
8	MP3A	My	-.016	.25
9	MP3A	Mz	-.021	.25
10	MP3A	Y	-31.65	4.75
11	MP3A	My	-.016	4.75
12	MP3A	Mz	-.021	4.75
13	MP3A	Y	-31.65	.25
14	MP3A	My	-.016	.25
15	MP3A	Mz	.021	.25
16	MP3A	Y	-31.65	4.75
17	MP3A	My	-.016	4.75
18	MP3A	Mz	.021	4.75
19	MP1A	Y	-13.9	.5
20	MP1A	My	-.007	.5
21	MP1A	Mz	0	.5
22	MP1A	Y	-13.9	4
23	MP1A	My	-.007	4
24	MP1A	Mz	0	4
25	M32	Y	-10.4	2
26	M32	My	0	2
27	M32	Mz	0	2
28	MP4A	Y	-84.4	2.5
29	MP4A	My	.042	2.5
30	MP4A	Mz	0	2.5
31	MP3A	Y	-70.3	2.5
32	MP3A	My	.03	2.5
33	MP3A	Mz	.018	2.5

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	Y	-37.5	2.25
2	MP2A	My	-.019	2.25
3	MP2A	Mz	0	2.25
4	MP2A	Y	-37.5	4.25
5	MP2A	My	-.019	4.25
6	MP2A	Mz	0	4.25
7	MP3A	Y	-73.585	.25

Member Point Loads (BLC 2 : Antenna Di) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
8	MP3A	My	-.037	.25
9	MP3A	Mz	-.049	.25
10	MP3A	Y	-73.585	4.75
11	MP3A	My	-.037	4.75
12	MP3A	Mz	-.049	4.75
13	MP3A	Y	-73.585	.25
14	MP3A	My	-.037	.25
15	MP3A	Mz	.049	.25
16	MP3A	Y	-73.585	4.75
17	MP3A	My	-.037	4.75
18	MP3A	Mz	.049	4.75
19	MP1A	Y	-44.542	.5
20	MP1A	My	-.022	.5
21	MP1A	Mz	0	.5
22	MP1A	Y	-44.542	4
23	MP1A	My	-.022	4
24	MP1A	Mz	0	4
25	M32	Y	-11.392	2
26	M32	My	0	2
27	M32	Mz	0	2
28	MP4A	Y	-47.315	2.5
29	MP4A	My	.024	2.5
30	MP4A	Mz	0	2.5
31	MP3A	Y	-42.568	2.5
32	MP3A	My	.018	2.5
33	MP3A	Mz	.011	2.5

Member Point Loads (BLC 3 : Antenna Wo (0 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	2.25
2	MP2A	Z	-91.192	2.25
3	MP2A	Mx	0	2.25
4	MP2A	X	0	4.25
5	MP2A	Z	-91.192	4.25
6	MP2A	Mx	0	4.25
7	MP3A	X	0	.25
8	MP3A	Z	-176.757	.25
9	MP3A	Mx	.118	.25
10	MP3A	X	0	4.75
11	MP3A	Z	-176.757	4.75
12	MP3A	Mx	.118	4.75
13	MP3A	X	0	.25
14	MP3A	Z	-176.757	.25
15	MP3A	Mx	-.118	.25
16	MP3A	X	0	4.75
17	MP3A	Z	-176.757	4.75
18	MP3A	Mx	-.118	4.75
19	MP1A	X	0	.5
20	MP1A	Z	-98.759	.5
21	MP1A	Mx	0	.5
22	MP1A	X	0	4
23	MP1A	Z	-98.759	4
24	MP1A	Mx	0	4
25	M32	X	0	2
26	M32	Z	-13.252	2
27	M32	Mx	0	2

Member Point Loads (BLC 3 : Antenna Wo (0 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
28	MP4A	X	0	2.5
29	MP4A	Z	-72.565	2.5
30	MP4A	Mx	0	2.5
31	MP3A	X	0	2.5
32	MP3A	Z	-64.247	2.5
33	MP3A	Mx	-.016	2.5

Member Point Loads (BLC 4 : Antenna Wo (30 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	38.66	2.25
2	MP2A	Z	-66.96	2.25
3	MP2A	Mx	-.019	2.25
4	MP2A	X	38.66	4.25
5	MP2A	Z	-66.96	4.25
6	MP2A	Mx	-.019	4.25
7	MP3A	X	80.795	.25
8	MP3A	Z	-139.942	.25
9	MP3A	Mx	.053	.25
10	MP3A	X	80.795	4.75
11	MP3A	Z	-139.942	4.75
12	MP3A	Mx	.053	4.75
13	MP3A	X	80.795	.25
14	MP3A	Z	-139.942	.25
15	MP3A	Mx	-.134	.25
16	MP3A	X	80.795	4.75
17	MP3A	Z	-139.942	4.75
18	MP3A	Mx	-.134	4.75
19	MP1A	X	45.111	.5
20	MP1A	Z	-78.134	.5
21	MP1A	Mx	-.023	.5
22	MP1A	X	45.111	4
23	MP1A	Z	-78.134	4
24	MP1A	Mx	-.023	4
25	M32	X	5.52	2
26	M32	Z	-9.561	2
27	M32	Mx	0	2
28	MP4A	X	33.275	2.5
29	MP4A	Z	-57.635	2.5
30	MP4A	Mx	.017	2.5
31	MP3A	X	36.283	2.5
32	MP3A	Z	-62.844	2.5
33	MP3A	Mx	0	2.5

Member Point Loads (BLC 5 : Antenna Wo (60 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	42.932	2.25
2	MP2A	Z	-24.787	2.25
3	MP2A	Mx	-.021	2.25
4	MP2A	X	42.932	4.25
5	MP2A	Z	-24.787	4.25
6	MP2A	Mx	-.021	4.25
7	MP3A	X	113.673	.25
8	MP3A	Z	-65.629	.25
9	MP3A	Mx	-.013	.25
10	MP3A	X	113.673	4.75
11	MP3A	Z	-65.629	4.75

Member Point Loads (BLC 5 : Antenna Wo (60 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
12	MP3A	Mx	-.013	4.75
13	MP3A	X	113.673	.25
14	MP3A	Z	-65.629	.25
15	MP3A	Mx	-.101	.25
16	MP3A	X	113.673	4.75
17	MP3A	Z	-65.629	4.75
18	MP3A	Mx	-.101	4.75
19	MP1A	X	63.346	.5
20	MP1A	Z	-36.573	.5
21	MP1A	Mx	-.032	.5
22	MP1A	X	63.346	4
23	MP1A	Z	-36.573	4
24	MP1A	Mx	-.032	4
25	M32	X	8.603	2
26	M32	Z	-4.967	2
27	M32	Mx	0	2
28	MP4A	X	47.217	2.5
29	MP4A	Z	-27.261	2.5
30	MP4A	Mx	.024	2.5
31	MP3A	X	55.639	2.5
32	MP3A	Z	-32.123	2.5
33	MP3A	Mx	.016	2.5

Member Point Loads (BLC 6 : Antenna Wo (90 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	35.701	2.25
2	MP2A	Z	0	2.25
3	MP2A	Mx	-.018	2.25
4	MP2A	X	35.701	4.25
5	MP2A	Z	0	4.25
6	MP2A	Mx	-.018	4.25
7	MP3A	X	116.092	.25
8	MP3A	Z	0	.25
9	MP3A	Mx	-.058	.25
10	MP3A	X	116.092	4.75
11	MP3A	Z	0	4.75
12	MP3A	Mx	-.058	4.75
13	MP3A	X	116.092	.25
14	MP3A	Z	0	.25
15	MP3A	Mx	-.058	.25
16	MP3A	X	116.092	4.75
17	MP3A	Z	0	4.75
18	MP3A	Mx	-.058	4.75
19	MP1A	X	64.608	.5
20	MP1A	Z	0	.5
21	MP1A	Mx	-.032	.5
22	MP1A	X	64.608	4
23	MP1A	Z	0	4
24	MP1A	Mx	-.032	4
25	M32	X	11.04	2
26	M32	Z	0	2
27	M32	Mx	0	2
28	MP4A	X	48.506	2.5
29	MP4A	Z	0	2.5
30	MP4A	Mx	.024	2.5
31	MP3A	X	47.609	2.5

Member Point Loads (BLC 6 : Antenna Wo (90 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
32	MP3A	Z	0	2.5
33	MP3A	Mx	.021	2.5

Member Point Loads (BLC 7 : Antenna Wo (120 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	42.932	2.25
2	MP2A	Z	24.787	2.25
3	MP2A	Mx	-.021	2.25
4	MP2A	X	42.932	4.25
5	MP2A	Z	24.787	4.25
6	MP2A	Mx	-.021	4.25
7	MP3A	X	113.673	.25
8	MP3A	Z	65.629	.25
9	MP3A	Mx	-.101	.25
10	MP3A	X	113.673	4.75
11	MP3A	Z	65.629	4.75
12	MP3A	Mx	-.101	4.75
13	MP3A	X	113.673	.25
14	MP3A	Z	65.629	.25
15	MP3A	Mx	-.013	.25
16	MP3A	X	113.673	4.75
17	MP3A	Z	65.629	4.75
18	MP3A	Mx	-.013	4.75
19	MP1A	X	63.346	.5
20	MP1A	Z	36.573	.5
21	MP1A	Mx	-.032	.5
22	MP1A	X	63.346	4
23	MP1A	Z	36.573	4
24	MP1A	Mx	-.032	4
25	M32	X	11.477	2
26	M32	Z	6.626	2
27	M32	Mx	0	2
28	MP4A	X	47.217	2.5
29	MP4A	Z	27.261	2.5
30	MP4A	Mx	.024	2.5
31	MP3A	X	34.026	2.5
32	MP3A	Z	19.645	2.5
33	MP3A	Mx	.02	2.5

Member Point Loads (BLC 8 : Antenna Wo (150 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	38.66	2.25
2	MP2A	Z	66.96	2.25
3	MP2A	Mx	-.019	2.25
4	MP2A	X	38.66	4.25
5	MP2A	Z	66.96	4.25
6	MP2A	Mx	-.019	4.25
7	MP3A	X	80.795	.25
8	MP3A	Z	139.942	.25
9	MP3A	Mx	-.134	.25
10	MP3A	X	80.795	4.75
11	MP3A	Z	139.942	4.75
12	MP3A	Mx	-.134	4.75
13	MP3A	X	80.795	.25
14	MP3A	Z	139.942	.25
15	MP3A	Mx	.053	.25

Member Point Loads (BLC 8 : Antenna Wo (150 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
16	MP3A	X	80.795	4.75
17	MP3A	Z	139.942	4.75
18	MP3A	Mx	.053	4.75
19	MP1A	X	45.111	.5
20	MP1A	Z	78.134	.5
21	MP1A	Mx	-.023	.5
22	MP1A	X	45.111	4
23	MP1A	Z	78.134	4
24	MP1A	Mx	-.023	4
25	M32	X	7.179	2
26	M32	Z	12.434	2
27	M32	Mx	0	2
28	MP4A	X	33.275	2.5
29	MP4A	Z	57.635	2.5
30	MP4A	Mx	.017	2.5
31	MP3A	X	23.804	2.5
32	MP3A	Z	41.231	2.5
33	MP3A	Mx	.021	2.5

Member Point Loads (BLC 9 : Antenna Wo (180 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	2.25
2	MP2A	Z	91.192	2.25
3	MP2A	Mx	0	2.25
4	MP2A	X	0	4.25
5	MP2A	Z	91.192	4.25
6	MP2A	Mx	0	4.25
7	MP3A	X	0	.25
8	MP3A	Z	176.757	.25
9	MP3A	Mx	-.118	.25
10	MP3A	X	0	4.75
11	MP3A	Z	176.757	4.75
12	MP3A	Mx	-.118	4.75
13	MP3A	X	0	.25
14	MP3A	Z	176.757	.25
15	MP3A	Mx	.118	.25
16	MP3A	X	0	4.75
17	MP3A	Z	176.757	4.75
18	MP3A	Mx	.118	4.75
19	MP1A	X	0	.5
20	MP1A	Z	98.759	.5
21	MP1A	Mx	0	.5
22	MP1A	X	0	4
23	MP1A	Z	98.759	4
24	MP1A	Mx	0	4
25	M32	X	0	2
26	M32	Z	13.252	2
27	M32	Mx	0	2
28	MP4A	X	0	2.5
29	MP4A	Z	72.565	2.5
30	MP4A	Mx	0	2.5
31	MP3A	X	0	2.5
32	MP3A	Z	64.247	2.5
33	MP3A	Mx	.016	2.5

Member Point Loads (BLC 10 : Antenna Wo (210 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-38.66	2.25
2	MP2A	Z	66.96	2.25
3	MP2A	Mx	.019	2.25
4	MP2A	X	-38.66	4.25
5	MP2A	Z	66.96	4.25
6	MP2A	Mx	.019	4.25
7	MP3A	X	-80.795	.25
8	MP3A	Z	139.942	.25
9	MP3A	Mx	-.053	.25
10	MP3A	X	-80.795	4.75
11	MP3A	Z	139.942	4.75
12	MP3A	Mx	-.053	4.75
13	MP3A	X	-80.795	.25
14	MP3A	Z	139.942	.25
15	MP3A	Mx	.134	.25
16	MP3A	X	-80.795	4.75
17	MP3A	Z	139.942	4.75
18	MP3A	Mx	.134	4.75
19	MP1A	X	-45.111	.5
20	MP1A	Z	78.134	.5
21	MP1A	Mx	.023	.5
22	MP1A	X	-45.111	4
23	MP1A	Z	78.134	4
24	MP1A	Mx	.023	4
25	M32	X	-5.52	2
26	M32	Z	9.561	2
27	M32	Mx	0	2
28	MP4A	X	-33.275	2.5
29	MP4A	Z	57.635	2.5
30	MP4A	Mx	-.017	2.5
31	MP3A	X	-36.283	2.5
32	MP3A	Z	62.844	2.5
33	MP3A	Mx	0	2.5

Member Point Loads (BLC 11 : Antenna Wo (240 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-42.932	2.25
2	MP2A	Z	24.787	2.25
3	MP2A	Mx	.021	2.25
4	MP2A	X	-42.932	4.25
5	MP2A	Z	24.787	4.25
6	MP2A	Mx	.021	4.25
7	MP3A	X	-113.673	.25
8	MP3A	Z	65.629	.25
9	MP3A	Mx	.013	.25
10	MP3A	X	-113.673	4.75
11	MP3A	Z	65.629	4.75
12	MP3A	Mx	.013	4.75
13	MP3A	X	-113.673	.25
14	MP3A	Z	65.629	.25
15	MP3A	Mx	.101	.25
16	MP3A	X	-113.673	4.75
17	MP3A	Z	65.629	4.75
18	MP3A	Mx	.101	4.75
19	MP1A	X	-63.346	.5
20	MP1A	Z	36.573	.5

Member Point Loads (BLC 11 : Antenna Wo (240 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
21	MP1A	Mx	.032	.5
22	MP1A	X	-63.346	4
23	MP1A	Z	36.573	4
24	MP1A	Mx	.032	4
25	M32	X	-8.603	2
26	M32	Z	4.967	2
27	M32	Mx	0	2
28	MP4A	X	-47.217	2.5
29	MP4A	Z	27.261	2.5
30	MP4A	Mx	-.024	2.5
31	MP3A	X	-55.639	2.5
32	MP3A	Z	32.123	2.5
33	MP3A	Mx	-.016	2.5

Member Point Loads (BLC 12 : Antenna Wo (270 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-35.701	2.25
2	MP2A	Z	0	2.25
3	MP2A	Mx	.018	2.25
4	MP2A	X	-35.701	4.25
5	MP2A	Z	0	4.25
6	MP2A	Mx	.018	4.25
7	MP3A	X	-116.092	.25
8	MP3A	Z	0	.25
9	MP3A	Mx	.058	.25
10	MP3A	X	-116.092	4.75
11	MP3A	Z	0	4.75
12	MP3A	Mx	.058	4.75
13	MP3A	X	-116.092	.25
14	MP3A	Z	0	.25
15	MP3A	Mx	.058	.25
16	MP3A	X	-116.092	4.75
17	MP3A	Z	0	4.75
18	MP3A	Mx	.058	4.75
19	MP1A	X	-64.608	.5
20	MP1A	Z	0	.5
21	MP1A	Mx	.032	.5
22	MP1A	X	-64.608	4
23	MP1A	Z	0	4
24	MP1A	Mx	.032	4
25	M32	X	-11.04	2
26	M32	Z	0	2
27	M32	Mx	0	2
28	MP4A	X	-48.506	2.5
29	MP4A	Z	0	2.5
30	MP4A	Mx	-.024	2.5
31	MP3A	X	-47.609	2.5
32	MP3A	Z	0	2.5
33	MP3A	Mx	-.021	2.5

Member Point Loads (BLC 13 : Antenna Wo (300 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-42.932	2.25
2	MP2A	Z	-24.787	2.25
3	MP2A	Mx	.021	2.25
4	MP2A	X	-42.932	4.25

Member Point Loads (BLC 13 : Antenna Wo (300 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
5	MP2A	Z	-24.787	4.25
6	MP2A	Mx	.021	4.25
7	MP3A	X	-113.673	.25
8	MP3A	Z	-65.629	.25
9	MP3A	Mx	.101	.25
10	MP3A	X	-113.673	4.75
11	MP3A	Z	-65.629	4.75
12	MP3A	Mx	.101	4.75
13	MP3A	X	-113.673	.25
14	MP3A	Z	-65.629	.25
15	MP3A	Mx	.013	.25
16	MP3A	X	-113.673	4.75
17	MP3A	Z	-65.629	4.75
18	MP3A	Mx	.013	4.75
19	MP1A	X	-63.346	.5
20	MP1A	Z	-36.573	.5
21	MP1A	Mx	.032	.5
22	MP1A	X	-63.346	4
23	MP1A	Z	-36.573	4
24	MP1A	Mx	.032	4
25	M32	X	-11.477	2
26	M32	Z	-6.626	2
27	M32	Mx	0	2
28	MP4A	X	-47.217	2.5
29	MP4A	Z	-27.261	2.5
30	MP4A	Mx	-.024	2.5
31	MP3A	X	-34.026	2.5
32	MP3A	Z	-19.645	2.5
33	MP3A	Mx	-.02	2.5

Member Point Loads (BLC 14 : Antenna Wo (330 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-38.66	2.25
2	MP2A	Z	-66.96	2.25
3	MP2A	Mx	.019	2.25
4	MP2A	X	-38.66	4.25
5	MP2A	Z	-66.96	4.25
6	MP2A	Mx	.019	4.25
7	MP3A	X	-80.795	.25
8	MP3A	Z	-139.942	.25
9	MP3A	Mx	.134	.25
10	MP3A	X	-80.795	4.75
11	MP3A	Z	-139.942	4.75
12	MP3A	Mx	.134	4.75
13	MP3A	X	-80.795	.25
14	MP3A	Z	-139.942	.25
15	MP3A	Mx	-.053	.25
16	MP3A	X	-80.795	4.75
17	MP3A	Z	-139.942	4.75
18	MP3A	Mx	-.053	4.75
19	MP1A	X	-45.111	.5
20	MP1A	Z	-78.134	.5
21	MP1A	Mx	.023	.5
22	MP1A	X	-45.111	4
23	MP1A	Z	-78.134	4
24	MP1A	Mx	.023	4

Member Point Loads (BLC 14 : Antenna Wo (330 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	M32	X	-7.179	2
26	M32	Z	-12.434	2
27	M32	Mx	0	2
28	MP4A	X	-33.275	2.5
29	MP4A	Z	-57.635	2.5
30	MP4A	Mx	-.017	2.5
31	MP3A	X	-23.804	2.5
32	MP3A	Z	-41.231	2.5
33	MP3A	Mx	-.021	2.5

Member Point Loads (BLC 15 : Antenna Wi (0 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	2.25
2	MP2A	Z	-17.689	2.25
3	MP2A	Mx	0	2.25
4	MP2A	X	0	4.25
5	MP2A	Z	-17.689	4.25
6	MP2A	Mx	0	4.25
7	MP3A	X	0	.25
8	MP3A	Z	-33.216	.25
9	MP3A	Mx	.022	.25
10	MP3A	X	0	4.75
11	MP3A	Z	-33.216	4.75
12	MP3A	Mx	.022	4.75
13	MP3A	X	0	.25
14	MP3A	Z	-33.216	.25
15	MP3A	Mx	-.022	.25
16	MP3A	X	0	4.75
17	MP3A	Z	-33.216	4.75
18	MP3A	Mx	-.022	4.75
19	MP1A	X	0	.5
20	MP1A	Z	-19.085	.5
21	MP1A	Mx	0	.5
22	MP1A	X	0	4
23	MP1A	Z	-19.085	4
24	MP1A	Mx	0	4
25	M32	X	0	2
26	M32	Z	-3.436	2
27	M32	Mx	0	2
28	MP4A	X	0	2.5
29	MP4A	Z	-14.948	2.5
30	MP4A	Mx	0	2.5
31	MP3A	X	0	2.5
32	MP3A	Z	-13.385	2.5
33	MP3A	Mx	-.003	2.5

Member Point Loads (BLC 16 : Antenna Wi (30 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	7.579	2.25
2	MP2A	Z	-13.128	2.25
3	MP2A	Mx	-.004	2.25
4	MP2A	X	7.579	4.25
5	MP2A	Z	-13.128	4.25
6	MP2A	Mx	-.004	4.25
7	MP3A	X	15.293	.25
8	MP3A	Z	-26.489	.25

Member Point Loads (BLC 16 : Antenna Wi (30 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
9	MP3A	Mx	.01	.25
10	MP3A	X	15.293	4.75
11	MP3A	Z	-26.489	4.75
12	MP3A	Mx	.01	4.75
13	MP3A	X	15.293	.25
14	MP3A	Z	-26.489	.25
15	MP3A	Mx	-.025	.25
16	MP3A	X	15.293	4.75
17	MP3A	Z	-26.489	4.75
18	MP3A	Mx	-.025	4.75
19	MP1A	X	8.779	.5
20	MP1A	Z	-15.205	.5
21	MP1A	Mx	-.004	.5
22	MP1A	X	8.779	4
23	MP1A	Z	-15.205	4
24	MP1A	Mx	-.004	4
25	M32	X	1.491	2
26	M32	Z	-2.583	2
27	M32	Mx	0	2
28	MP4A	X	6.908	2.5
29	MP4A	Z	-11.964	2.5
30	MP4A	Mx	.003	2.5
31	MP3A	X	7.474	2.5
32	MP3A	Z	-12.945	2.5
33	MP3A	Mx	0	2.5

Member Point Loads (BLC 17 : Antenna Wi (60 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	8.744	2.25
2	MP2A	Z	-5.048	2.25
3	MP2A	Mx	-.004	2.25
4	MP2A	X	8.744	4.25
5	MP2A	Z	-5.048	4.25
6	MP2A	Mx	-.004	4.25
7	MP3A	X	21.934	.25
8	MP3A	Z	-12.664	.25
9	MP3A	Mx	-.003	.25
10	MP3A	X	21.934	4.75
11	MP3A	Z	-12.664	4.75
12	MP3A	Mx	-.003	4.75
13	MP3A	X	21.934	.25
14	MP3A	Z	-12.664	.25
15	MP3A	Mx	-.019	.25
16	MP3A	X	21.934	4.75
17	MP3A	Z	-12.664	4.75
18	MP3A	Mx	-.019	4.75
19	MP1A	X	12.559	.5
20	MP1A	Z	-7.251	.5
21	MP1A	Mx	-.006	.5
22	MP1A	X	12.559	4
23	MP1A	Z	-7.251	4
24	MP1A	Mx	-.006	4
25	M32	X	2.387	2
26	M32	Z	-1.378	2
27	M32	Mx	0	2
28	MP4A	X	10.003	2.5

Member Point Loads (BLC 17 : Antenna Wi (60 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP4A	Z	-5.775	2.5
30	MP4A	Mx	.005	2.5
31	MP3A	X	11.592	2.5
32	MP3A	Z	-6.692	2.5
33	MP3A	Mx	.003	2.5

Member Point Loads (BLC 18 : Antenna Wi (90 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	7.565	2.25
2	MP2A	Z	0	2.25
3	MP2A	Mx	-.004	2.25
4	MP2A	X	7.565	4.25
5	MP2A	Z	0	4.25
6	MP2A	Mx	-.004	4.25
7	MP3A	X	22.698	.25
8	MP3A	Z	0	.25
9	MP3A	Mx	-.011	.25
10	MP3A	X	22.698	4.75
11	MP3A	Z	0	4.75
12	MP3A	Mx	-.011	4.75
13	MP3A	X	22.698	.25
14	MP3A	Z	0	.25
15	MP3A	Mx	-.011	.25
16	MP3A	X	22.698	4.75
17	MP3A	Z	0	4.75
18	MP3A	Mx	-.011	4.75
19	MP1A	X	12.974	.5
20	MP1A	Z	0	.5
21	MP1A	Mx	-.006	.5
22	MP1A	X	12.974	4
23	MP1A	Z	0	4
24	MP1A	Mx	-.006	4
25	M32	X	2.983	2
26	M32	Z	0	2
27	M32	Mx	0	2
28	MP4A	X	10.417	2.5
29	MP4A	Z	0	2.5
30	MP4A	Mx	.005	2.5
31	MP3A	X	10.259	2.5
32	MP3A	Z	0	2.5
33	MP3A	Mx	.004	2.5

Member Point Loads (BLC 19 : Antenna Wi (120 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	8.744	2.25
2	MP2A	Z	5.048	2.25
3	MP2A	Mx	-.004	2.25
4	MP2A	X	8.744	4.25
5	MP2A	Z	5.048	4.25
6	MP2A	Mx	-.004	4.25
7	MP3A	X	21.934	.25
8	MP3A	Z	12.664	.25
9	MP3A	Mx	-.019	.25
10	MP3A	X	21.934	4.75
11	MP3A	Z	12.664	4.75
12	MP3A	Mx	-.019	4.75

Member Point Loads (BLC 19 : Antenna Wi (120 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
13	MP3A	X	21.934	.25
14	MP3A	Z	12.664	.25
15	MP3A	Mx	-.003	.25
16	MP3A	X	21.934	4.75
17	MP3A	Z	12.664	4.75
18	MP3A	Mx	-.003	4.75
19	MP1A	X	12.559	.5
20	MP1A	Z	7.251	.5
21	MP1A	Mx	-.006	.5
22	MP1A	X	12.559	4
23	MP1A	Z	7.251	4
24	MP1A	Mx	-.006	4
25	M32	X	2.975	2
26	M32	Z	1.718	2
27	M32	Mx	0	2
28	MP4A	X	10.003	2.5
29	MP4A	Z	5.775	2.5
30	MP4A	Mx	.005	2.5
31	MP3A	X	7.531	2.5
32	MP3A	Z	4.348	2.5
33	MP3A	Mx	.004	2.5

Member Point Loads (BLC 20 : Antenna Wi (150 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	7.579	2.25
2	MP2A	Z	13.128	2.25
3	MP2A	Mx	-.004	2.25
4	MP2A	X	7.579	4.25
5	MP2A	Z	13.128	4.25
6	MP2A	Mx	-.004	4.25
7	MP3A	X	15.293	.25
8	MP3A	Z	26.489	.25
9	MP3A	Mx	-.025	.25
10	MP3A	X	15.293	4.75
11	MP3A	Z	26.489	4.75
12	MP3A	Mx	-.025	4.75
13	MP3A	X	15.293	.25
14	MP3A	Z	26.489	.25
15	MP3A	Mx	.01	.25
16	MP3A	X	15.293	4.75
17	MP3A	Z	26.489	4.75
18	MP3A	Mx	.01	4.75
19	MP1A	X	8.779	.5
20	MP1A	Z	15.205	.5
21	MP1A	Mx	-.004	.5
22	MP1A	X	8.779	4
23	MP1A	Z	15.205	4
24	MP1A	Mx	-.004	4
25	M32	X	1.831	2
26	M32	Z	3.172	2
27	M32	Mx	0	2
28	MP4A	X	6.908	2.5
29	MP4A	Z	11.964	2.5
30	MP4A	Mx	.003	2.5
31	MP3A	X	5.129	2.5
32	MP3A	Z	8.884	2.5

Member Point Loads (BLC 20 : Antenna Wi (150 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP3A	Mx	.004	2.5

Member Point Loads (BLC 21 : Antenna Wi (180 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	2.25
2	MP2A	Z	17.689	2.25
3	MP2A	Mx	0	2.25
4	MP2A	X	0	4.25
5	MP2A	Z	17.689	4.25
6	MP2A	Mx	0	4.25
7	MP3A	X	0	.25
8	MP3A	Z	33.216	.25
9	MP3A	Mx	-.022	.25
10	MP3A	X	0	4.75
11	MP3A	Z	33.216	4.75
12	MP3A	Mx	-.022	4.75
13	MP3A	X	0	.25
14	MP3A	Z	33.216	.25
15	MP3A	Mx	.022	.25
16	MP3A	X	0	4.75
17	MP3A	Z	33.216	4.75
18	MP3A	Mx	.022	4.75
19	MP1A	X	0	.5
20	MP1A	Z	19.085	.5
21	MP1A	Mx	0	.5
22	MP1A	X	0	4
23	MP1A	Z	19.085	4
24	MP1A	Mx	0	4
25	M32	X	0	2
26	M32	Z	3.436	2
27	M32	Mx	0	2
28	MP4A	X	0	2.5
29	MP4A	Z	14.948	2.5
30	MP4A	Mx	0	2.5
31	MP3A	X	0	2.5
32	MP3A	Z	13.385	2.5
33	MP3A	Mx	.003	2.5

Member Point Loads (BLC 22 : Antenna Wi (210 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-7.579	2.25
2	MP2A	Z	13.128	2.25
3	MP2A	Mx	.004	2.25
4	MP2A	X	-7.579	4.25
5	MP2A	Z	13.128	4.25
6	MP2A	Mx	.004	4.25
7	MP3A	X	-15.293	.25
8	MP3A	Z	26.489	.25
9	MP3A	Mx	-.01	.25
10	MP3A	X	-15.293	4.75
11	MP3A	Z	26.489	4.75
12	MP3A	Mx	-.01	4.75
13	MP3A	X	-15.293	.25
14	MP3A	Z	26.489	.25
15	MP3A	Mx	.025	.25
16	MP3A	X	-15.293	4.75

Member Point Loads (BLC 22 : Antenna Wi (210 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP3A	Z	26.489	4.75
18	MP3A	Mx	.025	4.75
19	MP1A	X	-8.779	.5
20	MP1A	Z	15.205	.5
21	MP1A	Mx	.004	.5
22	MP1A	X	-8.779	4
23	MP1A	Z	15.205	4
24	MP1A	Mx	.004	4
25	M32	X	-1.491	2
26	M32	Z	2.583	2
27	M32	Mx	0	2
28	MP4A	X	-6.908	2.5
29	MP4A	Z	11.964	2.5
30	MP4A	Mx	-.003	2.5
31	MP3A	X	-7.474	2.5
32	MP3A	Z	12.945	2.5
33	MP3A	Mx	0	2.5

Member Point Loads (BLC 23 : Antenna Wi (240 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-8.744	2.25
2	MP2A	Z	5.048	2.25
3	MP2A	Mx	.004	2.25
4	MP2A	X	-8.744	4.25
5	MP2A	Z	5.048	4.25
6	MP2A	Mx	.004	4.25
7	MP3A	X	-21.934	.25
8	MP3A	Z	12.664	.25
9	MP3A	Mx	.003	.25
10	MP3A	X	-21.934	4.75
11	MP3A	Z	12.664	4.75
12	MP3A	Mx	.003	4.75
13	MP3A	X	-21.934	.25
14	MP3A	Z	12.664	.25
15	MP3A	Mx	.019	.25
16	MP3A	X	-21.934	4.75
17	MP3A	Z	12.664	4.75
18	MP3A	Mx	.019	4.75
19	MP1A	X	-12.559	.5
20	MP1A	Z	7.251	.5
21	MP1A	Mx	.006	.5
22	MP1A	X	-12.559	4
23	MP1A	Z	7.251	4
24	MP1A	Mx	.006	4
25	M32	X	-2.387	2
26	M32	Z	1.378	2
27	M32	Mx	0	2
28	MP4A	X	-10.003	2.5
29	MP4A	Z	5.775	2.5
30	MP4A	Mx	-.005	2.5
31	MP3A	X	-11.592	2.5
32	MP3A	Z	6.692	2.5
33	MP3A	Mx	-.003	2.5

Member Point Loads (BLC 24 : Antenna Wi (270 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]

Member Point Loads (BLC 24 : Antenna Wi (270 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-7.565	2.25
2	MP2A	Z	0	2.25
3	MP2A	Mx	.004	2.25
4	MP2A	X	-7.565	4.25
5	MP2A	Z	0	4.25
6	MP2A	Mx	.004	4.25
7	MP3A	X	-22.698	.25
8	MP3A	Z	0	.25
9	MP3A	Mx	.011	.25
10	MP3A	X	-22.698	4.75
11	MP3A	Z	0	4.75
12	MP3A	Mx	.011	4.75
13	MP3A	X	-22.698	.25
14	MP3A	Z	0	.25
15	MP3A	Mx	.011	.25
16	MP3A	X	-22.698	4.75
17	MP3A	Z	0	4.75
18	MP3A	Mx	.011	4.75
19	MP1A	X	-12.974	.5
20	MP1A	Z	0	.5
21	MP1A	Mx	.006	.5
22	MP1A	X	-12.974	4
23	MP1A	Z	0	4
24	MP1A	Mx	.006	4
25	M32	X	-2.983	2
26	M32	Z	0	2
27	M32	Mx	0	2
28	MP4A	X	-10.417	2.5
29	MP4A	Z	0	2.5
30	MP4A	Mx	-.005	2.5
31	MP3A	X	-10.259	2.5
32	MP3A	Z	0	2.5
33	MP3A	Mx	-.004	2.5

Member Point Loads (BLC 25 : Antenna Wi (300 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-8.744	2.25
2	MP2A	Z	-5.048	2.25
3	MP2A	Mx	.004	2.25
4	MP2A	X	-8.744	4.25
5	MP2A	Z	-5.048	4.25
6	MP2A	Mx	.004	4.25
7	MP3A	X	-21.934	.25
8	MP3A	Z	-12.664	.25
9	MP3A	Mx	.019	.25
10	MP3A	X	-21.934	4.75
11	MP3A	Z	-12.664	4.75
12	MP3A	Mx	.019	4.75
13	MP3A	X	-21.934	.25
14	MP3A	Z	-12.664	.25
15	MP3A	Mx	.003	.25
16	MP3A	X	-21.934	4.75
17	MP3A	Z	-12.664	4.75
18	MP3A	Mx	.003	4.75
19	MP1A	X	-12.559	.5
20	MP1A	Z	-7.251	.5

Member Point Loads (BLC 25 : Antenna Wi (300 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
21	MP1A	Mx	.006	.5
22	MP1A	X	-12.559	4
23	MP1A	Z	-7.251	4
24	MP1A	Mx	.006	4
25	M32	X	-2.975	2
26	M32	Z	-1.718	2
27	M32	Mx	0	2
28	MP4A	X	-10.003	2.5
29	MP4A	Z	-5.775	2.5
30	MP4A	Mx	-.005	2.5
31	MP3A	X	-7.531	2.5
32	MP3A	Z	-4.348	2.5
33	MP3A	Mx	-.004	2.5

Member Point Loads (BLC 26 : Antenna Wi (330 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-7.579	2.25
2	MP2A	Z	-13.128	2.25
3	MP2A	Mx	.004	2.25
4	MP2A	X	-7.579	4.25
5	MP2A	Z	-13.128	4.25
6	MP2A	Mx	.004	4.25
7	MP3A	X	-15.293	.25
8	MP3A	Z	-26.489	.25
9	MP3A	Mx	.025	.25
10	MP3A	X	-15.293	4.75
11	MP3A	Z	-26.489	4.75
12	MP3A	Mx	.025	4.75
13	MP3A	X	-15.293	.25
14	MP3A	Z	-26.489	.25
15	MP3A	Mx	-.01	.25
16	MP3A	X	-15.293	4.75
17	MP3A	Z	-26.489	4.75
18	MP3A	Mx	-.01	4.75
19	MP1A	X	-8.779	.5
20	MP1A	Z	-15.205	.5
21	MP1A	Mx	.004	.5
22	MP1A	X	-8.779	4
23	MP1A	Z	-15.205	4
24	MP1A	Mx	.004	4
25	M32	X	-1.831	2
26	M32	Z	-3.172	2
27	M32	Mx	0	2
28	MP4A	X	-6.908	2.5
29	MP4A	Z	-11.964	2.5
30	MP4A	Mx	-.003	2.5
31	MP3A	X	-5.129	2.5
32	MP3A	Z	-8.884	2.5
33	MP3A	Mx	-.004	2.5

Member Point Loads (BLC 27 : Antenna Wm (0 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	2.25
2	MP2A	Z	-5.606	2.25
3	MP2A	Mx	0	2.25
4	MP2A	X	0	4.25

Member Point Loads (BLC 27 : Antenna Wm (0 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
5	MP2A	Z	-5.606	4.25
6	MP2A	Mx	0	4.25
7	MP3A	X	0	.25
8	MP3A	Z	-10.865	.25
9	MP3A	Mx	.007	.25
10	MP3A	X	0	4.75
11	MP3A	Z	-10.865	4.75
12	MP3A	Mx	.007	4.75
13	MP3A	X	0	.25
14	MP3A	Z	-10.865	.25
15	MP3A	Mx	-.007	.25
16	MP3A	X	0	4.75
17	MP3A	Z	-10.865	4.75
18	MP3A	Mx	-.007	4.75
19	MP1A	X	0	.5
20	MP1A	Z	-6.071	.5
21	MP1A	Mx	0	.5
22	MP1A	X	0	4
23	MP1A	Z	-6.071	4
24	MP1A	Mx	0	4
25	M32	X	0	2
26	M32	Z	-.815	2
27	M32	Mx	0	2
28	MP4A	X	0	2.5
29	MP4A	Z	-4.461	2.5
30	MP4A	Mx	0	2.5
31	MP3A	X	0	2.5
32	MP3A	Z	-3.949	2.5
33	MP3A	Mx	-.000987	2.5

Member Point Loads (BLC 28 : Antenna Wm (30 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	2.376	2.25
2	MP2A	Z	-4.116	2.25
3	MP2A	Mx	-.001	2.25
4	MP2A	X	2.376	4.25
5	MP2A	Z	-4.116	4.25
6	MP2A	Mx	-.001	4.25
7	MP3A	X	4.967	.25
8	MP3A	Z	-8.602	.25
9	MP3A	Mx	.003	.25
10	MP3A	X	4.967	4.75
11	MP3A	Z	-8.602	4.75
12	MP3A	Mx	.003	4.75
13	MP3A	X	4.967	.25
14	MP3A	Z	-8.602	.25
15	MP3A	Mx	-.008	.25
16	MP3A	X	4.967	4.75
17	MP3A	Z	-8.602	4.75
18	MP3A	Mx	-.008	4.75
19	MP1A	X	2.773	.5
20	MP1A	Z	-4.803	.5
21	MP1A	Mx	-.001	.5
22	MP1A	X	2.773	4
23	MP1A	Z	-4.803	4
24	MP1A	Mx	-.001	4

Member Point Loads (BLC 28 : Antenna Wm (30 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	M32	X	.339	2
26	M32	Z	-.588	2
27	M32	Mx	0	2
28	MP4A	X	2.045	2.5
29	MP4A	Z	-3.543	2.5
30	MP4A	Mx	.001	2.5
31	MP3A	X	2.23	2.5
32	MP3A	Z	-3.863	2.5
33	MP3A	Mx	0	2.5

Member Point Loads (BLC 29 : Antenna Wm (60 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	2.639	2.25
2	MP2A	Z	-1.524	2.25
3	MP2A	Mx	-.001	2.25
4	MP2A	X	2.639	4.25
5	MP2A	Z	-1.524	4.25
6	MP2A	Mx	-.001	4.25
7	MP3A	X	6.988	.25
8	MP3A	Z	-4.034	.25
9	MP3A	Mx	-.000805	.25
10	MP3A	X	6.988	4.75
11	MP3A	Z	-4.034	4.75
12	MP3A	Mx	-.000805	4.75
13	MP3A	X	6.988	.25
14	MP3A	Z	-4.034	.25
15	MP3A	Mx	-.006	.25
16	MP3A	X	6.988	4.75
17	MP3A	Z	-4.034	4.75
18	MP3A	Mx	-.006	4.75
19	MP1A	X	3.894	.5
20	MP1A	Z	-2.248	.5
21	MP1A	Mx	-.002	.5
22	MP1A	X	3.894	4
23	MP1A	Z	-2.248	4
24	MP1A	Mx	-.002	4
25	M32	X	.529	2
26	M32	Z	-.305	2
27	M32	Mx	0	2
28	MP4A	X	2.902	2.5
29	MP4A	Z	-1.676	2.5
30	MP4A	Mx	.001	2.5
31	MP3A	X	3.42	2.5
32	MP3A	Z	-1.975	2.5
33	MP3A	Mx	.000987	2.5

Member Point Loads (BLC 30 : Antenna Wm (90 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	2.195	2.25
2	MP2A	Z	0	2.25
3	MP2A	Mx	-.001	2.25
4	MP2A	X	2.195	4.25
5	MP2A	Z	0	4.25
6	MP2A	Mx	-.001	4.25
7	MP3A	X	7.136	.25
8	MP3A	Z	0	.25

Member Point Loads (BLC 30 : Antenna Wm (90 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
9	MP3A	Mx	-.004	.25
10	MP3A	X	7.136	4.75
11	MP3A	Z	0	4.75
12	MP3A	Mx	-.004	4.75
13	MP3A	X	7.136	.25
14	MP3A	Z	0	.25
15	MP3A	Mx	-.004	.25
16	MP3A	X	7.136	4.75
17	MP3A	Z	0	4.75
18	MP3A	Mx	-.004	4.75
19	MP1A	X	3.972	.5
20	MP1A	Z	0	.5
21	MP1A	Mx	-.002	.5
22	MP1A	X	3.972	4
23	MP1A	Z	0	4
24	MP1A	Mx	-.002	4
25	M32	X	.679	2
26	M32	Z	0	2
27	M32	Mx	0	2
28	MP4A	X	2.982	2.5
29	MP4A	Z	0	2.5
30	MP4A	Mx	.001	2.5
31	MP3A	X	2.927	2.5
32	MP3A	Z	0	2.5
33	MP3A	Mx	.001	2.5

Member Point Loads (BLC 31 : Antenna Wm (120 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	2.639	2.25
2	MP2A	Z	1.524	2.25
3	MP2A	Mx	-.001	2.25
4	MP2A	X	2.639	4.25
5	MP2A	Z	1.524	4.25
6	MP2A	Mx	-.001	4.25
7	MP3A	X	6.988	.25
8	MP3A	Z	4.034	.25
9	MP3A	Mx	-.006	.25
10	MP3A	X	6.988	4.75
11	MP3A	Z	4.034	4.75
12	MP3A	Mx	-.006	4.75
13	MP3A	X	6.988	.25
14	MP3A	Z	4.034	.25
15	MP3A	Mx	-.000805	.25
16	MP3A	X	6.988	4.75
17	MP3A	Z	4.034	4.75
18	MP3A	Mx	-.000805	4.75
19	MP1A	X	3.894	.5
20	MP1A	Z	2.248	.5
21	MP1A	Mx	-.002	.5
22	MP1A	X	3.894	4
23	MP1A	Z	2.248	4
24	MP1A	Mx	-.002	4
25	M32	X	.705	2
26	M32	Z	.407	2
27	M32	Mx	0	2
28	MP4A	X	2.902	2.5

Member Point Loads (BLC 31 : Antenna Wm (120 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP4A	Z	1.676	2.5
30	MP4A	Mx	.001	2.5
31	MP3A	X	2.092	2.5
32	MP3A	Z	1.208	2.5
33	MP3A	Mx	.001	2.5

Member Point Loads (BLC 32 : Antenna Wm (150 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	2.376	2.25
2	MP2A	Z	4.116	2.25
3	MP2A	Mx	-.001	2.25
4	MP2A	X	2.376	4.25
5	MP2A	Z	4.116	4.25
6	MP2A	Mx	-.001	4.25
7	MP3A	X	4.967	.25
8	MP3A	Z	8.602	.25
9	MP3A	Mx	-.008	.25
10	MP3A	X	4.967	4.75
11	MP3A	Z	8.602	4.75
12	MP3A	Mx	-.008	4.75
13	MP3A	X	4.967	.25
14	MP3A	Z	8.602	.25
15	MP3A	Mx	.003	.25
16	MP3A	X	4.967	4.75
17	MP3A	Z	8.602	4.75
18	MP3A	Mx	.003	4.75
19	MP1A	X	2.773	.5
20	MP1A	Z	4.803	.5
21	MP1A	Mx	-.001	.5
22	MP1A	X	2.773	4
23	MP1A	Z	4.803	4
24	MP1A	Mx	-.001	4
25	M32	X	.441	2
26	M32	Z	.764	2
27	M32	Mx	0	2
28	MP4A	X	2.045	2.5
29	MP4A	Z	3.543	2.5
30	MP4A	Mx	.001	2.5
31	MP3A	X	1.463	2.5
32	MP3A	Z	2.534	2.5
33	MP3A	Mx	.001	2.5

Member Point Loads (BLC 33 : Antenna Wm (180 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	2.25
2	MP2A	Z	5.606	2.25
3	MP2A	Mx	0	2.25
4	MP2A	X	0	4.25
5	MP2A	Z	5.606	4.25
6	MP2A	Mx	0	4.25
7	MP3A	X	0	.25
8	MP3A	Z	10.865	.25
9	MP3A	Mx	-.007	.25
10	MP3A	X	0	4.75
11	MP3A	Z	10.865	4.75
12	MP3A	Mx	-.007	4.75

Member Point Loads (BLC 33 : Antenna Wm (180 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
13	MP3A	X	0	.25
14	MP3A	Z	10.865	.25
15	MP3A	Mx	.007	.25
16	MP3A	X	0	4.75
17	MP3A	Z	10.865	4.75
18	MP3A	Mx	.007	4.75
19	MP1A	X	0	.5
20	MP1A	Z	6.071	.5
21	MP1A	Mx	0	.5
22	MP1A	X	0	4
23	MP1A	Z	6.071	4
24	MP1A	Mx	0	4
25	M32	X	0	2
26	M32	Z	.815	2
27	M32	Mx	0	2
28	MP4A	X	0	2.5
29	MP4A	Z	4.461	2.5
30	MP4A	Mx	0	2.5
31	MP3A	X	0	2.5
32	MP3A	Z	3.949	2.5
33	MP3A	Mx	.000987	2.5

Member Point Loads (BLC 34 : Antenna Wm (210 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-2.376	2.25
2	MP2A	Z	4.116	2.25
3	MP2A	Mx	.001	2.25
4	MP2A	X	-2.376	4.25
5	MP2A	Z	4.116	4.25
6	MP2A	Mx	.001	4.25
7	MP3A	X	-4.967	.25
8	MP3A	Z	8.602	.25
9	MP3A	Mx	-.003	.25
10	MP3A	X	-4.967	4.75
11	MP3A	Z	8.602	4.75
12	MP3A	Mx	-.003	4.75
13	MP3A	X	-4.967	.25
14	MP3A	Z	8.602	.25
15	MP3A	Mx	.008	.25
16	MP3A	X	-4.967	4.75
17	MP3A	Z	8.602	4.75
18	MP3A	Mx	.008	4.75
19	MP1A	X	-2.773	.5
20	MP1A	Z	4.803	.5
21	MP1A	Mx	.001	.5
22	MP1A	X	-2.773	4
23	MP1A	Z	4.803	4
24	MP1A	Mx	.001	4
25	M32	X	-.339	2
26	M32	Z	.588	2
27	M32	Mx	0	2
28	MP4A	X	-2.045	2.5
29	MP4A	Z	3.543	2.5
30	MP4A	Mx	-.001	2.5
31	MP3A	X	-2.23	2.5
32	MP3A	Z	3.863	2.5

Member Point Loads (BLC 34 : Antenna Wm (210 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP3A	Mx	0	2.5

Member Point Loads (BLC 35 : Antenna Wm (240 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-2.639	2.25
2	MP2A	Z	1.524	2.25
3	MP2A	Mx	.001	2.25
4	MP2A	X	-2.639	4.25
5	MP2A	Z	1.524	4.25
6	MP2A	Mx	.001	4.25
7	MP3A	X	-6.988	.25
8	MP3A	Z	4.034	.25
9	MP3A	Mx	.000805	.25
10	MP3A	X	-6.988	4.75
11	MP3A	Z	4.034	4.75
12	MP3A	Mx	.000805	4.75
13	MP3A	X	-6.988	.25
14	MP3A	Z	4.034	.25
15	MP3A	Mx	.006	.25
16	MP3A	X	-6.988	4.75
17	MP3A	Z	4.034	4.75
18	MP3A	Mx	.006	4.75
19	MP1A	X	-3.894	.5
20	MP1A	Z	2.248	.5
21	MP1A	Mx	.002	.5
22	MP1A	X	-3.894	4
23	MP1A	Z	2.248	4
24	MP1A	Mx	.002	4
25	M32	X	-.529	2
26	M32	Z	.305	2
27	M32	Mx	0	2
28	MP4A	X	-2.902	2.5
29	MP4A	Z	1.676	2.5
30	MP4A	Mx	-.001	2.5
31	MP3A	X	-3.42	2.5
32	MP3A	Z	1.975	2.5
33	MP3A	Mx	-.000987	2.5

Member Point Loads (BLC 36 : Antenna Wm (270 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-2.195	2.25
2	MP2A	Z	0	2.25
3	MP2A	Mx	.001	2.25
4	MP2A	X	-2.195	4.25
5	MP2A	Z	0	4.25
6	MP2A	Mx	.001	4.25
7	MP3A	X	-7.136	.25
8	MP3A	Z	0	.25
9	MP3A	Mx	.004	.25
10	MP3A	X	-7.136	4.75
11	MP3A	Z	0	4.75
12	MP3A	Mx	.004	4.75
13	MP3A	X	-7.136	.25
14	MP3A	Z	0	.25
15	MP3A	Mx	.004	.25
16	MP3A	X	-7.136	4.75

Member Point Loads (BLC 36 : Antenna Wm (270 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP3A	Z	0	4.75
18	MP3A	Mx	.004	4.75
19	MP1A	X	-3.972	.5
20	MP1A	Z	0	.5
21	MP1A	Mx	.002	.5
22	MP1A	X	-3.972	4
23	MP1A	Z	0	4
24	MP1A	Mx	.002	4
25	M32	X	-.679	2
26	M32	Z	0	2
27	M32	Mx	0	2
28	MP4A	X	-2.982	2.5
29	MP4A	Z	0	2.5
30	MP4A	Mx	-.001	2.5
31	MP3A	X	-2.927	2.5
32	MP3A	Z	0	2.5
33	MP3A	Mx	-.001	2.5

Member Point Loads (BLC 37 : Antenna Wm (300 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-2.639	2.25
2	MP2A	Z	-1.524	2.25
3	MP2A	Mx	.001	2.25
4	MP2A	X	-2.639	4.25
5	MP2A	Z	-1.524	4.25
6	MP2A	Mx	.001	4.25
7	MP3A	X	-6.988	.25
8	MP3A	Z	-4.034	.25
9	MP3A	Mx	.006	.25
10	MP3A	X	-6.988	4.75
11	MP3A	Z	-4.034	4.75
12	MP3A	Mx	.006	4.75
13	MP3A	X	-6.988	.25
14	MP3A	Z	-4.034	.25
15	MP3A	Mx	.000805	.25
16	MP3A	X	-6.988	4.75
17	MP3A	Z	-4.034	4.75
18	MP3A	Mx	.000805	4.75
19	MP1A	X	-3.894	.5
20	MP1A	Z	-2.248	.5
21	MP1A	Mx	.002	.5
22	MP1A	X	-3.894	4
23	MP1A	Z	-2.248	4
24	MP1A	Mx	.002	4
25	M32	X	-.705	2
26	M32	Z	-.407	2
27	M32	Mx	0	2
28	MP4A	X	-2.902	2.5
29	MP4A	Z	-1.676	2.5
30	MP4A	Mx	-.001	2.5
31	MP3A	X	-2.092	2.5
32	MP3A	Z	-1.208	2.5
33	MP3A	Mx	-.001	2.5

Member Point Loads (BLC 38 : Antenna Wm (330 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]

Member Point Loads (BLC 38 : Antenna Wm (330 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-2.376	2.25
2	MP2A	Z	-4.116	2.25
3	MP2A	Mx	.001	2.25
4	MP2A	X	-2.376	4.25
5	MP2A	Z	-4.116	4.25
6	MP2A	Mx	.001	4.25
7	MP3A	X	-4.967	.25
8	MP3A	Z	-8.602	.25
9	MP3A	Mx	.008	.25
10	MP3A	X	-4.967	4.75
11	MP3A	Z	-8.602	4.75
12	MP3A	Mx	.008	4.75
13	MP3A	X	-4.967	.25
14	MP3A	Z	-8.602	.25
15	MP3A	Mx	-.003	.25
16	MP3A	X	-4.967	4.75
17	MP3A	Z	-8.602	4.75
18	MP3A	Mx	-.003	4.75
19	MP1A	X	-2.773	.5
20	MP1A	Z	-4.803	.5
21	MP1A	Mx	.001	.5
22	MP1A	X	-2.773	4
23	MP1A	Z	-4.803	4
24	MP1A	Mx	.001	4
25	M32	X	-.441	2
26	M32	Z	-.764	2
27	M32	Mx	0	2
28	MP4A	X	-2.045	2.5
29	MP4A	Z	-3.543	2.5
30	MP4A	Mx	-.001	2.5
31	MP3A	X	-1.463	2.5
32	MP3A	Z	-2.534	2.5
33	MP3A	Mx	-.001	2.5

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M8	Y	-500	0

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M6	Y	-500	0

Member Point Loads (BLC 79 : Lv1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M2	Y	-250	%50

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M2	Y	-250	0

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	Y	-6.03	-6.03	0	%100

Member Distributed Loads (BLC 40 : Structure Di) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
2	M2	Y	-6.03	-6.03	0	%100
3	MP4A	Y	-5.292	-5.292	0	%100
4	MP3A	Y	-5.292	-5.292	0	%100
5	MP2A	Y	-5.292	-5.292	0	%100
6	MP1A	Y	-5.292	-5.292	0	%100
7	M23	Y	-6.276	-6.276	0	%100
8	M24	Y	-6.276	-6.276	0	%100
9	M25	Y	-6.276	-6.276	0	%100
10	M26	Y	-6.276	-6.276	0	%100
11	M29	Y	-8.429	-8.429	0	%100
12	M32	Y	-5.292	-5.292	0	%100
13	M33	Y	-5.292	-5.292	0	%100
14	M34	Y	-5.292	-5.292	0	%100
15	M35	Y	-5.292	-5.292	0	%100
16	M36	Y	-6.276	-6.276	0	%100
17	M37	Y	-6.276	-6.276	0	%100
18	M38	Y	-6.276	-6.276	0	%100
19	M39	Y	-6.276	-6.276	0	%100
20	M40	Y	-5.292	-5.292	0	%100
21	M41	Y	-5.292	-5.292	0	%100
22	M42	Y	-4.236	-4.236	0	%100
23	M43	Y	-4.236	-4.236	0	%100
24	M44	Y	-4.236	-4.236	0	%100
25	M45	Y	-4.236	-4.236	0	%100
26	M46	Y	-4.236	-4.236	0	%100
27	M47	Y	-4.236	-4.236	0	%100
28	M48	Y	-4.236	-4.236	0	%100
29	M49	Y	-4.236	-4.236	0	%100
30	M50	Y	-5.292	-5.292	0	%100

Member Distributed Loads (BLC 41 : Structure Wo (0 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-11.156	-11.156	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-11.156	-11.156	0	%100
5	MP4A	X	0	0	0	%100
6	MP4A	Z	-9.216	-9.216	0	%100
7	MP3A	X	0	0	0	%100
8	MP3A	Z	-9.216	-9.216	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	-9.216	-9.216	0	%100
11	MP1A	X	0	0	0	%100
12	MP1A	Z	-9.216	-9.216	0	%100
13	M23	X	0	0	0	%100
14	M23	Z	-.906	-.906	0	%100
15	M24	X	0	0	0	%100
16	M24	Z	-.906	-.906	0	%100
17	M25	X	0	0	0	%100
18	M25	Z	-.906	-.906	0	%100
19	M26	X	0	0	0	%100
20	M26	Z	-.906	-.906	0	%100
21	M29	X	0	0	0	%100
22	M29	Z	-12.074	-12.074	0	%100
23	M32	X	0	0	0	%100
24	M32	Z	-4.216	-4.216	0	%100

Member Distributed Loads (BLC 41 : Structure Wo (0 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
25	M33	X	0	0	0	%100
26	M33	Z	-4.216	-4.216	0	%100
27	M34	X	0	0	0	%100
28	M34	Z	-4.216	-4.216	0	%100
29	M35	X	0	0	0	%100
30	M35	Z	-4.216	-4.216	0	%100
31	M36	X	0	0	0	%100
32	M36	Z	-11.642	-11.642	0	%100
33	M37	X	0	0	0	%100
34	M37	Z	-11.642	-11.642	0	%100
35	M38	X	0	0	0	%100
36	M38	Z	-11.642	-11.642	0	%100
37	M39	X	0	0	0	%100
38	M39	Z	-11.642	-11.642	0	%100
39	M40	X	0	0	0	%100
40	M40	Z	-7.105	-7.105	0	%100
41	M41	X	0	0	0	%100
42	M41	Z	-7.105	-7.105	0	%100
43	M42	X	0	0	0	%100
44	M42	Z	-5.097	-5.097	0	%100
45	M43	X	0	0	0	%100
46	M43	Z	-4.881	-4.881	0	%100
47	M44	X	0	0	0	%100
48	M44	Z	-4.881	-4.881	0	%100
49	M45	X	0	0	0	%100
50	M45	Z	-5.097	-5.097	0	%100
51	M46	X	0	0	0	%100
52	M46	Z	-6.334	-6.334	0	%100
53	M47	X	0	0	0	%100
54	M47	Z	-6.334	-6.334	0	%100
55	M48	X	0	0	0	%100
56	M48	Z	-6.334	-6.334	0	%100
57	M49	X	0	0	0	%100
58	M49	Z	-6.334	-6.334	0	%100
59	M50	X	0	0	0	%100
60	M50	Z	-.261	-.261	0	%100

Member Distributed Loads (BLC 42 : Structure Wo (30 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	4.184	4.184	0	%100
2	M1	Z	-7.246	-7.246	0	%100
3	M2	X	4.184	4.184	0	%100
4	M2	Z	-7.246	-7.246	0	%100
5	MP4A	X	4.608	4.608	0	%100
6	MP4A	Z	-7.981	-7.981	0	%100
7	MP3A	X	4.608	4.608	0	%100
8	MP3A	Z	-7.981	-7.981	0	%100
9	MP2A	X	4.608	4.608	0	%100
10	MP2A	Z	-7.981	-7.981	0	%100
11	MP1A	X	4.608	4.608	0	%100
12	MP1A	Z	-7.981	-7.981	0	%100
13	M23	X	.888	.888	0	%100
14	M23	Z	-1.538	-1.538	0	%100
15	M24	X	.05	.05	0	%100
16	M24	Z	-.086	-.086	0	%100
17	M25	X	.05	.05	0	%100

Member Distributed Loads (BLC 42 : Structure Wo (30 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
18	M25	Z	-.086	-.086	0	%100
19	M26	X	.888	.888	0	%100
20	M26	Z	-1.538	-1.538	0	%100
21	M29	X	6.037	6.037	0	%100
22	M29	Z	-10.457	-10.457	0	%100
23	M32	X	4.194	4.194	0	%100
24	M32	Z	-7.265	-7.265	0	%100
25	M33	X	.218	.218	0	%100
26	M33	Z	-.378	-.378	0	%100
27	M34	X	.218	.218	0	%100
28	M34	Z	-.378	-.378	0	%100
29	M35	X	4.194	4.194	0	%100
30	M35	Z	-7.265	-7.265	0	%100
31	M36	X	4.669	4.669	0	%100
32	M36	Z	-8.086	-8.086	0	%100
33	M37	X	4.669	4.669	0	%100
34	M37	Z	-8.086	-8.086	0	%100
35	M38	X	4.669	4.669	0	%100
36	M38	Z	-8.086	-8.086	0	%100
37	M39	X	4.669	4.669	0	%100
38	M39	Z	-8.086	-8.086	0	%100
39	M40	X	3.553	3.553	0	%100
40	M40	Z	-6.153	-6.153	0	%100
41	M41	X	3.553	3.553	0	%100
42	M41	Z	-6.153	-6.153	0	%100
43	M42	X	3.11	3.11	0	%100
44	M42	Z	-5.386	-5.386	0	%100
45	M43	X	3.091	3.091	0	%100
46	M43	Z	-5.353	-5.353	0	%100
47	M44	X	1.853	1.853	0	%100
48	M44	Z	-3.21	-3.21	0	%100
49	M45	X	2.04	2.04	0	%100
50	M45	Z	-3.534	-3.534	0	%100
51	M46	X	3.167	3.167	0	%100
52	M46	Z	-5.485	-5.485	0	%100
53	M47	X	3.167	3.167	0	%100
54	M47	Z	-5.485	-5.485	0	%100
55	M48	X	3.167	3.167	0	%100
56	M48	Z	-5.485	-5.485	0	%100
57	M49	X	3.167	3.167	0	%100
58	M49	Z	-5.485	-5.485	0	%100
59	M50	X	1.879	1.879	0	%100
60	M50	Z	-3.255	-3.255	0	%100

Member Distributed Loads (BLC 43 : Structure Wo (60 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	2.415	2.415	0	%100
2	M1	Z	-1.395	-1.395	0	%100
3	M2	X	2.415	2.415	0	%100
4	M2	Z	-1.395	-1.395	0	%100
5	MP4A	X	7.981	7.981	0	%100
6	MP4A	Z	-4.608	-4.608	0	%100
7	MP3A	X	7.981	7.981	0	%100
8	MP3A	Z	-4.608	-4.608	0	%100
9	MP2A	X	7.981	7.981	0	%100
10	MP2A	Z	-4.608	-4.608	0	%100

Member Distributed Loads (BLC 43 : Structure Wo (60 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
11	MP1A	X	7.981	7.981	0	%100
12	MP1A	Z	-4.608	-4.608	0	%100
13	M23	X	1.594	1.594	0	%100
14	M23	Z	-.92	-.92	0	%100
15	M24	X	.142	.142	0	%100
16	M24	Z	-.082	-.082	0	%100
17	M25	X	.142	.142	0	%100
18	M25	Z	-.082	-.082	0	%100
19	M26	X	1.594	1.594	0	%100
20	M26	Z	-.92	-.92	0	%100
21	M29	X	10.457	10.457	0	%100
22	M29	Z	-6.037	-6.037	0	%100
23	M32	X	7.604	7.604	0	%100
24	M32	Z	-4.39	-4.39	0	%100
25	M33	X	.717	.717	0	%100
26	M33	Z	-.414	-.414	0	%100
27	M34	X	.717	.717	0	%100
28	M34	Z	-.414	-.414	0	%100
29	M35	X	7.604	7.604	0	%100
30	M35	Z	-4.39	-4.39	0	%100
31	M36	X	4.096	4.096	0	%100
32	M36	Z	-2.365	-2.365	0	%100
33	M37	X	4.096	4.096	0	%100
34	M37	Z	-2.365	-2.365	0	%100
35	M38	X	4.096	4.096	0	%100
36	M38	Z	-2.365	-2.365	0	%100
37	M39	X	4.096	4.096	0	%100
38	M39	Z	-2.365	-2.365	0	%100
39	M40	X	6.153	6.153	0	%100
40	M40	Z	-3.553	-3.553	0	%100
41	M41	X	6.153	6.153	0	%100
42	M41	Z	-3.553	-3.553	0	%100
43	M42	X	5.477	5.477	0	%100
44	M42	Z	-3.162	-3.162	0	%100
45	M43	X	5.463	5.463	0	%100
46	M43	Z	-3.154	-3.154	0	%100
47	M44	X	3.319	3.319	0	%100
48	M44	Z	-1.916	-1.916	0	%100
49	M45	X	3.625	3.625	0	%100
50	M45	Z	-2.093	-2.093	0	%100
51	M46	X	5.485	5.485	0	%100
52	M46	Z	-3.167	-3.167	0	%100
53	M47	X	5.485	5.485	0	%100
54	M47	Z	-3.167	-3.167	0	%100
55	M48	X	5.485	5.485	0	%100
56	M48	Z	-3.167	-3.167	0	%100
57	M49	X	5.485	5.485	0	%100
58	M49	Z	-3.167	-3.167	0	%100
59	M50	X	7.02	7.02	0	%100
60	M50	Z	-4.053	-4.053	0	%100

Member Distributed Loads (BLC 44 : Structure Wo (90 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100

Member Distributed Loads (BLC 44 : Structure Wo (90 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
4	M2	Z	0	0	0	%100
5	MP4A	X	9.216	9.216	0	%100
6	MP4A	Z	0	0	0	%100
7	MP3A	X	9.216	9.216	0	%100
8	MP3A	Z	0	0	0	%100
9	MP2A	X	9.216	9.216	0	%100
10	MP2A	Z	0	0	0	%100
11	MP1A	X	9.216	9.216	0	%100
12	MP1A	Z	0	0	0	%100
13	M23	X	1.034	1.034	0	%100
14	M23	Z	0	0	0	%100
15	M24	X	1.034	1.034	0	%100
16	M24	Z	0	0	0	%100
17	M25	X	1.034	1.034	0	%100
18	M25	Z	0	0	0	%100
19	M26	X	1.034	1.034	0	%100
20	M26	Z	0	0	0	%100
21	M29	X	12.074	12.074	0	%100
22	M29	Z	0	0	0	%100
23	M32	X	5	5	0	%100
24	M32	Z	0	0	0	%100
25	M33	X	5	5	0	%100
26	M33	Z	0	0	0	%100
27	M34	X	5	5	0	%100
28	M34	Z	0	0	0	%100
29	M35	X	5	5	0	%100
30	M35	Z	0	0	0	%100
31	M36	X	2.425	2.425	0	%100
32	M36	Z	0	0	0	%100
33	M37	X	2.425	2.425	0	%100
34	M37	Z	0	0	0	%100
35	M38	X	2.425	2.425	0	%100
36	M38	Z	0	0	0	%100
37	M39	X	2.425	2.425	0	%100
38	M39	Z	0	0	0	%100
39	M40	X	7.105	7.105	0	%100
40	M40	Z	0	0	0	%100
41	M41	X	7.105	7.105	0	%100
42	M41	Z	0	0	0	%100
43	M42	X	5.308	5.308	0	%100
44	M42	Z	0	0	0	%100
45	M43	X	5.133	5.133	0	%100
46	M43	Z	0	0	0	%100
47	M44	X	5.133	5.133	0	%100
48	M44	Z	0	0	0	%100
49	M45	X	5.308	5.308	0	%100
50	M45	Z	0	0	0	%100
51	M46	X	6.334	6.334	0	%100
52	M46	Z	0	0	0	%100
53	M47	X	6.334	6.334	0	%100
54	M47	Z	0	0	0	%100
55	M48	X	6.334	6.334	0	%100
56	M48	Z	0	0	0	%100
57	M49	X	6.334	6.334	0	%100
58	M49	Z	0	0	0	%100
59	M50	X	8.955	8.955	0	%100
60	M50	Z	0	0	0	%100

Member Distributed Loads (BLC 45 : Structure Wo (120 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	2.415	2.415	0	%100
2	M1	Z	1.395	1.395	0	%100
3	M2	X	2.415	2.415	0	%100
4	M2	Z	1.395	1.395	0	%100
5	MP4A	X	7.981	7.981	0	%100
6	MP4A	Z	4.608	4.608	0	%100
7	MP3A	X	7.981	7.981	0	%100
8	MP3A	Z	4.608	4.608	0	%100
9	MP2A	X	7.981	7.981	0	%100
10	MP2A	Z	4.608	4.608	0	%100
11	MP1A	X	7.981	7.981	0	%100
12	MP1A	Z	4.608	4.608	0	%100
13	M23	X	.142	.142	0	%100
14	M23	Z	.082	.082	0	%100
15	M24	X	1.594	1.594	0	%100
16	M24	Z	.92	.92	0	%100
17	M25	X	1.594	1.594	0	%100
18	M25	Z	.92	.92	0	%100
19	M26	X	.142	.142	0	%100
20	M26	Z	.082	.082	0	%100
21	M29	X	10.457	10.457	0	%100
22	M29	Z	6.037	6.037	0	%100
23	M32	X	.717	.717	0	%100
24	M32	Z	.414	.414	0	%100
25	M33	X	7.604	7.604	0	%100
26	M33	Z	4.39	4.39	0	%100
27	M34	X	7.604	7.604	0	%100
28	M34	Z	4.39	4.39	0	%100
29	M35	X	.717	.717	0	%100
30	M35	Z	.414	.414	0	%100
31	M36	X	4.096	4.096	0	%100
32	M36	Z	2.365	2.365	0	%100
33	M37	X	4.096	4.096	0	%100
34	M37	Z	2.365	2.365	0	%100
35	M38	X	4.096	4.096	0	%100
36	M38	Z	2.365	2.365	0	%100
37	M39	X	4.096	4.096	0	%100
38	M39	Z	2.365	2.365	0	%100
39	M40	X	6.153	6.153	0	%100
40	M40	Z	3.553	3.553	0	%100
41	M41	X	6.153	6.153	0	%100
42	M41	Z	3.553	3.553	0	%100
43	M42	X	3.625	3.625	0	%100
44	M42	Z	2.093	2.093	0	%100
45	M43	X	3.319	3.319	0	%100
46	M43	Z	1.916	1.916	0	%100
47	M44	X	5.463	5.463	0	%100
48	M44	Z	3.154	3.154	0	%100
49	M45	X	5.477	5.477	0	%100
50	M45	Z	3.162	3.162	0	%100
51	M46	X	5.485	5.485	0	%100
52	M46	Z	3.167	3.167	0	%100
53	M47	X	5.485	5.485	0	%100
54	M47	Z	3.167	3.167	0	%100
55	M48	X	5.485	5.485	0	%100
56	M48	Z	3.167	3.167	0	%100
57	M49	X	5.485	5.485	0	%100

Member Distributed Loads (BLC 45 : Structure Wo (120 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
58	M49	Z	3.167	3.167	0	%100
59	M50	X	4.727	4.727	0	%100
60	M50	Z	2.729	2.729	0	%100

Member Distributed Loads (BLC 46 : Structure Wo (150 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	4.184	4.184	0	%100
2	M1	Z	7.246	7.246	0	%100
3	M2	X	4.184	4.184	0	%100
4	M2	Z	7.246	7.246	0	%100
5	MP4A	X	4.608	4.608	0	%100
6	MP4A	Z	7.981	7.981	0	%100
7	MP3A	X	4.608	4.608	0	%100
8	MP3A	Z	7.981	7.981	0	%100
9	MP2A	X	4.608	4.608	0	%100
10	MP2A	Z	7.981	7.981	0	%100
11	MP1A	X	4.608	4.608	0	%100
12	MP1A	Z	7.981	7.981	0	%100
13	M23	X	.05	.05	0	%100
14	M23	Z	.086	.086	0	%100
15	M24	X	.888	.888	0	%100
16	M24	Z	1.538	1.538	0	%100
17	M25	X	.888	.888	0	%100
18	M25	Z	1.538	1.538	0	%100
19	M26	X	.05	.05	0	%100
20	M26	Z	.086	.086	0	%100
21	M29	X	6.037	6.037	0	%100
22	M29	Z	10.457	10.457	0	%100
23	M32	X	.218	.218	0	%100
24	M32	Z	.378	.378	0	%100
25	M33	X	4.194	4.194	0	%100
26	M33	Z	7.265	7.265	0	%100
27	M34	X	4.194	4.194	0	%100
28	M34	Z	7.265	7.265	0	%100
29	M35	X	.218	.218	0	%100
30	M35	Z	.378	.378	0	%100
31	M36	X	4.669	4.669	0	%100
32	M36	Z	8.086	8.086	0	%100
33	M37	X	4.669	4.669	0	%100
34	M37	Z	8.086	8.086	0	%100
35	M38	X	4.669	4.669	0	%100
36	M38	Z	8.086	8.086	0	%100
37	M39	X	4.669	4.669	0	%100
38	M39	Z	8.086	8.086	0	%100
39	M40	X	3.553	3.553	0	%100
40	M40	Z	6.153	6.153	0	%100
41	M41	X	3.553	3.553	0	%100
42	M41	Z	6.153	6.153	0	%100
43	M42	X	2.04	2.04	0	%100
44	M42	Z	3.534	3.534	0	%100
45	M43	X	1.853	1.853	0	%100
46	M43	Z	3.21	3.21	0	%100
47	M44	X	3.091	3.091	0	%100
48	M44	Z	5.353	5.353	0	%100
49	M45	X	3.11	3.11	0	%100
50	M45	Z	5.386	5.386	0	%100

Member Distributed Loads (BLC 46 : Structure Wo (150 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
51	M46	X	3.167	3.167	0	%100
52	M46	Z	5.485	5.485	0	%100
53	M47	X	3.167	3.167	0	%100
54	M47	Z	5.485	5.485	0	%100
55	M48	X	3.167	3.167	0	%100
56	M48	Z	5.485	5.485	0	%100
57	M49	X	3.167	3.167	0	%100
58	M49	Z	5.485	5.485	0	%100
59	M50	X	.555	.555	0	%100
60	M50	Z	.962	.962	0	%100

Member Distributed Loads (BLC 47 : Structure Wo (180 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	11.156	11.156	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	11.156	11.156	0	%100
5	MP4A	X	0	0	0	%100
6	MP4A	Z	9.216	9.216	0	%100
7	MP3A	X	0	0	0	%100
8	MP3A	Z	9.216	9.216	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	9.216	9.216	0	%100
11	MP1A	X	0	0	0	%100
12	MP1A	Z	9.216	9.216	0	%100
13	M23	X	0	0	0	%100
14	M23	Z	.906	.906	0	%100
15	M24	X	0	0	0	%100
16	M24	Z	.906	.906	0	%100
17	M25	X	0	0	0	%100
18	M25	Z	.906	.906	0	%100
19	M26	X	0	0	0	%100
20	M26	Z	.906	.906	0	%100
21	M29	X	0	0	0	%100
22	M29	Z	12.074	12.074	0	%100
23	M32	X	0	0	0	%100
24	M32	Z	4.216	4.216	0	%100
25	M33	X	0	0	0	%100
26	M33	Z	4.216	4.216	0	%100
27	M34	X	0	0	0	%100
28	M34	Z	4.216	4.216	0	%100
29	M35	X	0	0	0	%100
30	M35	Z	4.216	4.216	0	%100
31	M36	X	0	0	0	%100
32	M36	Z	11.642	11.642	0	%100
33	M37	X	0	0	0	%100
34	M37	Z	11.642	11.642	0	%100
35	M38	X	0	0	0	%100
36	M38	Z	11.642	11.642	0	%100
37	M39	X	0	0	0	%100
38	M39	Z	11.642	11.642	0	%100
39	M40	X	0	0	0	%100
40	M40	Z	7.105	7.105	0	%100
41	M41	X	0	0	0	%100
42	M41	Z	7.105	7.105	0	%100
43	M42	X	0	0	0	%100

Member Distributed Loads (BLC 47 : Structure Wo (180 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
44	M42	Z	5.097	5.097	0	%100
45	M43	X	0	0	0	%100
46	M43	Z	4.881	4.881	0	%100
47	M44	X	0	0	0	%100
48	M44	Z	4.881	4.881	0	%100
49	M45	X	0	0	0	%100
50	M45	Z	5.097	5.097	0	%100
51	M46	X	0	0	0	%100
52	M46	Z	6.334	6.334	0	%100
53	M47	X	0	0	0	%100
54	M47	Z	6.334	6.334	0	%100
55	M48	X	0	0	0	%100
56	M48	Z	6.334	6.334	0	%100
57	M49	X	0	0	0	%100
58	M49	Z	6.334	6.334	0	%100
59	M50	X	0	0	0	%100
60	M50	Z	.261	.261	0	%100

Member Distributed Loads (BLC 48 : Structure Wo (210 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-4.184	-4.184	0	%100
2	M1	Z	7.246	7.246	0	%100
3	M2	X	-4.184	-4.184	0	%100
4	M2	Z	7.246	7.246	0	%100
5	MP4A	X	-4.608	-4.608	0	%100
6	MP4A	Z	7.981	7.981	0	%100
7	MP3A	X	-4.608	-4.608	0	%100
8	MP3A	Z	7.981	7.981	0	%100
9	MP2A	X	-4.608	-4.608	0	%100
10	MP2A	Z	7.981	7.981	0	%100
11	MP1A	X	-4.608	-4.608	0	%100
12	MP1A	Z	7.981	7.981	0	%100
13	M23	X	-.888	-.888	0	%100
14	M23	Z	1.538	1.538	0	%100
15	M24	X	-.05	-.05	0	%100
16	M24	Z	.086	.086	0	%100
17	M25	X	-.05	-.05	0	%100
18	M25	Z	.086	.086	0	%100
19	M26	X	-.888	-.888	0	%100
20	M26	Z	1.538	1.538	0	%100
21	M29	X	-6.037	-6.037	0	%100
22	M29	Z	10.457	10.457	0	%100
23	M32	X	-4.194	-4.194	0	%100
24	M32	Z	7.265	7.265	0	%100
25	M33	X	-.218	-.218	0	%100
26	M33	Z	.378	.378	0	%100
27	M34	X	-.218	-.218	0	%100
28	M34	Z	.378	.378	0	%100
29	M35	X	-4.194	-4.194	0	%100
30	M35	Z	7.265	7.265	0	%100
31	M36	X	-4.669	-4.669	0	%100
32	M36	Z	8.086	8.086	0	%100
33	M37	X	-4.669	-4.669	0	%100
34	M37	Z	8.086	8.086	0	%100
35	M38	X	-4.669	-4.669	0	%100
36	M38	Z	8.086	8.086	0	%100

Member Distributed Loads (BLC 48 : Structure Wo (210 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
37	M39	X	-4.669	-4.669	0	%100
38	M39	Z	8.086	8.086	0	%100
39	M40	X	-3.553	-3.553	0	%100
40	M40	Z	6.153	6.153	0	%100
41	M41	X	-3.553	-3.553	0	%100
42	M41	Z	6.153	6.153	0	%100
43	M42	X	-3.11	-3.11	0	%100
44	M42	Z	5.386	5.386	0	%100
45	M43	X	-3.091	-3.091	0	%100
46	M43	Z	5.353	5.353	0	%100
47	M44	X	-1.853	-1.853	0	%100
48	M44	Z	3.21	3.21	0	%100
49	M45	X	-2.04	-2.04	0	%100
50	M45	Z	3.534	3.534	0	%100
51	M46	X	-3.167	-3.167	0	%100
52	M46	Z	5.485	5.485	0	%100
53	M47	X	-3.167	-3.167	0	%100
54	M47	Z	5.485	5.485	0	%100
55	M48	X	-3.167	-3.167	0	%100
56	M48	Z	5.485	5.485	0	%100
57	M49	X	-3.167	-3.167	0	%100
58	M49	Z	5.485	5.485	0	%100
59	M50	X	-1.879	-1.879	0	%100
60	M50	Z	3.255	3.255	0	%100

Member Distributed Loads (BLC 49 : Structure Wo (240 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-2.415	-2.415	0	%100
2	M1	Z	1.395	1.395	0	%100
3	M2	X	-2.415	-2.415	0	%100
4	M2	Z	1.395	1.395	0	%100
5	MP4A	X	-7.981	-7.981	0	%100
6	MP4A	Z	4.608	4.608	0	%100
7	MP3A	X	-7.981	-7.981	0	%100
8	MP3A	Z	4.608	4.608	0	%100
9	MP2A	X	-7.981	-7.981	0	%100
10	MP2A	Z	4.608	4.608	0	%100
11	MP1A	X	-7.981	-7.981	0	%100
12	MP1A	Z	4.608	4.608	0	%100
13	M23	X	-1.594	-1.594	0	%100
14	M23	Z	.92	.92	0	%100
15	M24	X	-.142	-.142	0	%100
16	M24	Z	.082	.082	0	%100
17	M25	X	-.142	-.142	0	%100
18	M25	Z	.082	.082	0	%100
19	M26	X	-1.594	-1.594	0	%100
20	M26	Z	.92	.92	0	%100
21	M29	X	-10.457	-10.457	0	%100
22	M29	Z	6.037	6.037	0	%100
23	M32	X	-7.604	-7.604	0	%100
24	M32	Z	4.39	4.39	0	%100
25	M33	X	-.717	-.717	0	%100
26	M33	Z	.414	.414	0	%100
27	M34	X	-.717	-.717	0	%100
28	M34	Z	.414	.414	0	%100
29	M35	X	-7.604	-7.604	0	%100

Member Distributed Loads (BLC 49 : Structure Wo (240 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
30	M35	Z	4.39	4.39	0	%100
31	M36	X	-4.096	-4.096	0	%100
32	M36	Z	2.365	2.365	0	%100
33	M37	X	-4.096	-4.096	0	%100
34	M37	Z	2.365	2.365	0	%100
35	M38	X	-4.096	-4.096	0	%100
36	M38	Z	2.365	2.365	0	%100
37	M39	X	-4.096	-4.096	0	%100
38	M39	Z	2.365	2.365	0	%100
39	M40	X	-6.153	-6.153	0	%100
40	M40	Z	3.553	3.553	0	%100
41	M41	X	-6.153	-6.153	0	%100
42	M41	Z	3.553	3.553	0	%100
43	M42	X	-5.477	-5.477	0	%100
44	M42	Z	3.162	3.162	0	%100
45	M43	X	-5.463	-5.463	0	%100
46	M43	Z	3.154	3.154	0	%100
47	M44	X	-3.319	-3.319	0	%100
48	M44	Z	1.916	1.916	0	%100
49	M45	X	-3.625	-3.625	0	%100
50	M45	Z	2.093	2.093	0	%100
51	M46	X	-5.485	-5.485	0	%100
52	M46	Z	3.167	3.167	0	%100
53	M47	X	-5.485	-5.485	0	%100
54	M47	Z	3.167	3.167	0	%100
55	M48	X	-5.485	-5.485	0	%100
56	M48	Z	3.167	3.167	0	%100
57	M49	X	-5.485	-5.485	0	%100
58	M49	Z	3.167	3.167	0	%100
59	M50	X	-7.02	-7.02	0	%100
60	M50	Z	4.053	4.053	0	%100

Member Distributed Loads (BLC 50 : Structure Wo (270 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	MP4A	X	-9.216	-9.216	0	%100
6	MP4A	Z	0	0	0	%100
7	MP3A	X	-9.216	-9.216	0	%100
8	MP3A	Z	0	0	0	%100
9	MP2A	X	-9.216	-9.216	0	%100
10	MP2A	Z	0	0	0	%100
11	MP1A	X	-9.216	-9.216	0	%100
12	MP1A	Z	0	0	0	%100
13	M23	X	-1.034	-1.034	0	%100
14	M23	Z	0	0	0	%100
15	M24	X	-1.034	-1.034	0	%100
16	M24	Z	0	0	0	%100
17	M25	X	-1.034	-1.034	0	%100
18	M25	Z	0	0	0	%100
19	M26	X	-1.034	-1.034	0	%100
20	M26	Z	0	0	0	%100
21	M29	X	-12.074	-12.074	0	%100
22	M29	Z	0	0	0	%100

Member Distributed Loads (BLC 50 : Structure Wo (270 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
23	M32	X	-5	-5	0	%100
24	M32	Z	0	0	0	%100
25	M33	X	-5	-5	0	%100
26	M33	Z	0	0	0	%100
27	M34	X	-5	-5	0	%100
28	M34	Z	0	0	0	%100
29	M35	X	-5	-5	0	%100
30	M35	Z	0	0	0	%100
31	M36	X	-2.425	-2.425	0	%100
32	M36	Z	0	0	0	%100
33	M37	X	-2.425	-2.425	0	%100
34	M37	Z	0	0	0	%100
35	M38	X	-2.425	-2.425	0	%100
36	M38	Z	0	0	0	%100
37	M39	X	-2.425	-2.425	0	%100
38	M39	Z	0	0	0	%100
39	M40	X	-7.105	-7.105	0	%100
40	M40	Z	0	0	0	%100
41	M41	X	-7.105	-7.105	0	%100
42	M41	Z	0	0	0	%100
43	M42	X	-5.308	-5.308	0	%100
44	M42	Z	0	0	0	%100
45	M43	X	-5.133	-5.133	0	%100
46	M43	Z	0	0	0	%100
47	M44	X	-5.133	-5.133	0	%100
48	M44	Z	0	0	0	%100
49	M45	X	-5.308	-5.308	0	%100
50	M45	Z	0	0	0	%100
51	M46	X	-6.334	-6.334	0	%100
52	M46	Z	0	0	0	%100
53	M47	X	-6.334	-6.334	0	%100
54	M47	Z	0	0	0	%100
55	M48	X	-6.334	-6.334	0	%100
56	M48	Z	0	0	0	%100
57	M49	X	-6.334	-6.334	0	%100
58	M49	Z	0	0	0	%100
59	M50	X	-8.955	-8.955	0	%100
60	M50	Z	0	0	0	%100

Member Distributed Loads (BLC 51 : Structure Wo (300 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-2.415	-2.415	0	%100
2	M1	Z	-1.395	-1.395	0	%100
3	M2	X	-2.415	-2.415	0	%100
4	M2	Z	-1.395	-1.395	0	%100
5	MP4A	X	-7.981	-7.981	0	%100
6	MP4A	Z	-4.608	-4.608	0	%100
7	MP3A	X	-7.981	-7.981	0	%100
8	MP3A	Z	-4.608	-4.608	0	%100
9	MP2A	X	-7.981	-7.981	0	%100
10	MP2A	Z	-4.608	-4.608	0	%100
11	MP1A	X	-7.981	-7.981	0	%100
12	MP1A	Z	-4.608	-4.608	0	%100
13	M23	X	-.142	-.142	0	%100
14	M23	Z	-.082	-.082	0	%100
15	M24	X	-1.594	-1.594	0	%100

Member Distributed Loads (BLC 51 : Structure Wo (300 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
16	M24	Z	-.92	-.92	0	%100
17	M25	X	-1.594	-1.594	0	%100
18	M25	Z	-.92	-.92	0	%100
19	M26	X	-.142	-.142	0	%100
20	M26	Z	-.082	-.082	0	%100
21	M29	X	-10.457	-10.457	0	%100
22	M29	Z	-6.037	-6.037	0	%100
23	M32	X	-.717	-.717	0	%100
24	M32	Z	-.414	-.414	0	%100
25	M33	X	-7.604	-7.604	0	%100
26	M33	Z	-4.39	-4.39	0	%100
27	M34	X	-7.604	-7.604	0	%100
28	M34	Z	-4.39	-4.39	0	%100
29	M35	X	-.717	-.717	0	%100
30	M35	Z	-.414	-.414	0	%100
31	M36	X	-4.096	-4.096	0	%100
32	M36	Z	-2.365	-2.365	0	%100
33	M37	X	-4.096	-4.096	0	%100
34	M37	Z	-2.365	-2.365	0	%100
35	M38	X	-4.096	-4.096	0	%100
36	M38	Z	-2.365	-2.365	0	%100
37	M39	X	-4.096	-4.096	0	%100
38	M39	Z	-2.365	-2.365	0	%100
39	M40	X	-6.153	-6.153	0	%100
40	M40	Z	-3.553	-3.553	0	%100
41	M41	X	-6.153	-6.153	0	%100
42	M41	Z	-3.553	-3.553	0	%100
43	M42	X	-3.625	-3.625	0	%100
44	M42	Z	-2.093	-2.093	0	%100
45	M43	X	-3.319	-3.319	0	%100
46	M43	Z	-1.916	-1.916	0	%100
47	M44	X	-5.463	-5.463	0	%100
48	M44	Z	-3.154	-3.154	0	%100
49	M45	X	-5.477	-5.477	0	%100
50	M45	Z	-3.162	-3.162	0	%100
51	M46	X	-5.485	-5.485	0	%100
52	M46	Z	-3.167	-3.167	0	%100
53	M47	X	-5.485	-5.485	0	%100
54	M47	Z	-3.167	-3.167	0	%100
55	M48	X	-5.485	-5.485	0	%100
56	M48	Z	-3.167	-3.167	0	%100
57	M49	X	-5.485	-5.485	0	%100
58	M49	Z	-3.167	-3.167	0	%100
59	M50	X	-4.727	-4.727	0	%100
60	M50	Z	-2.729	-2.729	0	%100

Member Distributed Loads (BLC 52 : Structure Wo (330 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-4.184	-4.184	0	%100
2	M1	Z	-7.246	-7.246	0	%100
3	M2	X	-4.184	-4.184	0	%100
4	M2	Z	-7.246	-7.246	0	%100
5	MP4A	X	-4.608	-4.608	0	%100
6	MP4A	Z	-7.981	-7.981	0	%100
7	MP3A	X	-4.608	-4.608	0	%100
8	MP3A	Z	-7.981	-7.981	0	%100

Member Distributed Loads (BLC 52 : Structure Wo (330 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
9	MP2A	X	-4.608	-4.608	0	%100
10	MP2A	Z	-7.981	-7.981	0	%100
11	MP1A	X	-4.608	-4.608	0	%100
12	MP1A	Z	-7.981	-7.981	0	%100
13	M23	X	-.05	-.05	0	%100
14	M23	Z	-.086	-.086	0	%100
15	M24	X	-.888	-.888	0	%100
16	M24	Z	-1.538	-1.538	0	%100
17	M25	X	-.888	-.888	0	%100
18	M25	Z	-1.538	-1.538	0	%100
19	M26	X	-.05	-.05	0	%100
20	M26	Z	-.086	-.086	0	%100
21	M29	X	-6.037	-6.037	0	%100
22	M29	Z	-10.457	-10.457	0	%100
23	M32	X	-.218	-.218	0	%100
24	M32	Z	-.378	-.378	0	%100
25	M33	X	-4.194	-4.194	0	%100
26	M33	Z	-7.265	-7.265	0	%100
27	M34	X	-4.194	-4.194	0	%100
28	M34	Z	-7.265	-7.265	0	%100
29	M35	X	-.218	-.218	0	%100
30	M35	Z	-.378	-.378	0	%100
31	M36	X	-4.669	-4.669	0	%100
32	M36	Z	-8.086	-8.086	0	%100
33	M37	X	-4.669	-4.669	0	%100
34	M37	Z	-8.086	-8.086	0	%100
35	M38	X	-4.669	-4.669	0	%100
36	M38	Z	-8.086	-8.086	0	%100
37	M39	X	-4.669	-4.669	0	%100
38	M39	Z	-8.086	-8.086	0	%100
39	M40	X	-3.553	-3.553	0	%100
40	M40	Z	-6.153	-6.153	0	%100
41	M41	X	-3.553	-3.553	0	%100
42	M41	Z	-6.153	-6.153	0	%100
43	M42	X	-2.04	-2.04	0	%100
44	M42	Z	-3.534	-3.534	0	%100
45	M43	X	-1.853	-1.853	0	%100
46	M43	Z	-3.21	-3.21	0	%100
47	M44	X	-3.091	-3.091	0	%100
48	M44	Z	-5.353	-5.353	0	%100
49	M45	X	-3.11	-3.11	0	%100
50	M45	Z	-5.386	-5.386	0	%100
51	M46	X	-3.167	-3.167	0	%100
52	M46	Z	-5.485	-5.485	0	%100
53	M47	X	-3.167	-3.167	0	%100
54	M47	Z	-5.485	-5.485	0	%100
55	M48	X	-3.167	-3.167	0	%100
56	M48	Z	-5.485	-5.485	0	%100
57	M49	X	-3.167	-3.167	0	%100
58	M49	Z	-5.485	-5.485	0	%100
59	M50	X	-.555	-.555	0	%100
60	M50	Z	-.962	-.962	0	%100

Member Distributed Loads (BLC 53 : Structure Wi (0 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100

Member Distributed Loads (BLC 53 : Structure Wi (0 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
2	M1	Z	-3.507	-3.507	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-3.507	-3.507	0	%100
5	MP4A	X	0	0	0	%100
6	MP4A	Z	-3.17	-3.17	0	%100
7	MP3A	X	0	0	0	%100
8	MP3A	Z	-3.17	-3.17	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	-3.175	-3.175	0	%100
11	MP1A	X	0	0	0	%100
12	MP1A	Z	-3.17	-3.17	0	%100
13	M23	X	0	0	0	%100
14	M23	Z	-.591	-.591	0	%100
15	M24	X	0	0	0	%100
16	M24	Z	-.591	-.591	0	%100
17	M25	X	0	0	0	%100
18	M25	Z	-.591	-.591	0	%100
19	M26	X	0	0	0	%100
20	M26	Z	-.591	-.591	0	%100
21	M29	X	0	0	0	%100
22	M29	Z	-4.086	-4.086	0	%100
23	M32	X	0	0	0	%100
24	M32	Z	-1.453	-1.453	0	%100
25	M33	X	0	0	0	%100
26	M33	Z	-1.453	-1.453	0	%100
27	M34	X	0	0	0	%100
28	M34	Z	-1.453	-1.453	0	%100
29	M35	X	0	0	0	%100
30	M35	Z	-1.453	-1.453	0	%100
31	M36	X	0	0	0	%100
32	M36	Z	-2.922	-2.922	0	%100
33	M37	X	0	0	0	%100
34	M37	Z	-2.922	-2.922	0	%100
35	M38	X	0	0	0	%100
36	M38	Z	-2.922	-2.922	0	%100
37	M39	X	0	0	0	%100
38	M39	Z	-2.922	-2.922	0	%100
39	M40	X	0	0	0	%100
40	M40	Z	-2.442	-2.442	0	%100
41	M41	X	0	0	0	%100
42	M41	Z	-2.442	-2.442	0	%100
43	M42	X	0	0	0	%100
44	M42	Z	-2.046	-2.046	0	%100
45	M43	X	0	0	0	%100
46	M43	Z	-1.922	-1.922	0	%100
47	M44	X	0	0	0	%100
48	M44	Z	-1.922	-1.922	0	%100
49	M45	X	0	0	0	%100
50	M45	Z	-2.046	-2.046	0	%100
51	M46	X	0	0	0	%100
52	M46	Z	-2.433	-2.433	0	%100
53	M47	X	0	0	0	%100
54	M47	Z	-2.433	-2.433	0	%100
55	M48	X	0	0	0	%100
56	M48	Z	-2.433	-2.433	0	%100
57	M49	X	0	0	0	%100
58	M49	Z	-2.433	-2.433	0	%100

Member Distributed Loads (BLC 53 : Structure Wi (0 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
59	M50	X	0	0	0	%100
60	M50	Z	-.09	-.09	0	%100

Member Distributed Loads (BLC 54 : Structure Wi (30 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.315	1.315	0	%100
2	M1	Z	-2.278	-2.278	0	%100
3	M2	X	1.315	1.315	0	%100
4	M2	Z	-2.278	-2.278	0	%100
5	MP4A	X	1.585	1.585	0	%100
6	MP4A	Z	-2.745	-2.745	0	%100
7	MP3A	X	1.585	1.585	0	%100
8	MP3A	Z	-2.745	-2.745	0	%100
9	MP2A	X	1.588	1.588	0	%100
10	MP2A	Z	-2.75	-2.75	0	%100
11	MP1A	X	1.585	1.585	0	%100
12	MP1A	Z	-2.745	-2.745	0	%100
13	M23	X	.579	.579	0	%100
14	M23	Z	-1.003	-1.003	0	%100
15	M24	X	.033	.033	0	%100
16	M24	Z	-.056	-.056	0	%100
17	M25	X	.033	.033	0	%100
18	M25	Z	-.056	-.056	0	%100
19	M26	X	.579	.579	0	%100
20	M26	Z	-1.003	-1.003	0	%100
21	M29	X	2.043	2.043	0	%100
22	M29	Z	-3.539	-3.539	0	%100
23	M32	X	1.445	1.445	0	%100
24	M32	Z	-2.503	-2.503	0	%100
25	M33	X	.075	.075	0	%100
26	M33	Z	-.13	-.13	0	%100
27	M34	X	.075	.075	0	%100
28	M34	Z	-.13	-.13	0	%100
29	M35	X	1.445	1.445	0	%100
30	M35	Z	-2.503	-2.503	0	%100
31	M36	X	1.264	1.264	0	%100
32	M36	Z	-2.19	-2.19	0	%100
33	M37	X	1.264	1.264	0	%100
34	M37	Z	-2.19	-2.19	0	%100
35	M38	X	1.264	1.264	0	%100
36	M38	Z	-2.19	-2.19	0	%100
37	M39	X	1.264	1.264	0	%100
38	M39	Z	-2.19	-2.19	0	%100
39	M40	X	1.221	1.221	0	%100
40	M40	Z	-2.114	-2.114	0	%100
41	M41	X	1.221	1.221	0	%100
42	M41	Z	-2.114	-2.114	0	%100
43	M42	X	1.248	1.248	0	%100
44	M42	Z	-2.162	-2.162	0	%100
45	M43	X	1.217	1.217	0	%100
46	M43	Z	-2.108	-2.108	0	%100
47	M44	X	.73	.73	0	%100
48	M44	Z	-1.264	-1.264	0	%100
49	M45	X	.819	.819	0	%100
50	M45	Z	-1.419	-1.419	0	%100
51	M46	X	1.216	1.216	0	%100

Member Distributed Loads (BLC 54 : Structure Wi (30 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
52	M46	Z	-2.107	-2.107	0	%100
53	M47	X	1.216	1.216	0	%100
54	M47	Z	-2.107	-2.107	0	%100
55	M48	X	1.216	1.216	0	%100
56	M48	Z	-2.107	-2.107	0	%100
57	M49	X	1.216	1.216	0	%100
58	M49	Z	-2.107	-2.107	0	%100
59	M50	X	.647	.647	0	%100
60	M50	Z	-1.121	-1.121	0	%100

Member Distributed Loads (BLC 55 : Structure Wi (60 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.759	.759	0	%100
2	M1	Z	-.438	-.438	0	%100
3	M2	X	.759	.759	0	%100
4	M2	Z	-.438	-.438	0	%100
5	MP4A	X	2.745	2.745	0	%100
6	MP4A	Z	-1.585	-1.585	0	%100
7	MP3A	X	2.745	2.745	0	%100
8	MP3A	Z	-1.585	-1.585	0	%100
9	MP2A	X	2.75	2.75	0	%100
10	MP2A	Z	-1.588	-1.588	0	%100
11	MP1A	X	2.745	2.745	0	%100
12	MP1A	Z	-1.585	-1.585	0	%100
13	M23	X	1.04	1.04	0	%100
14	M23	Z	-.6	-.6	0	%100
15	M24	X	.093	.093	0	%100
16	M24	Z	-.053	-.053	0	%100
17	M25	X	.093	.093	0	%100
18	M25	Z	-.053	-.053	0	%100
19	M26	X	1.04	1.04	0	%100
20	M26	Z	-.6	-.6	0	%100
21	M29	X	3.539	3.539	0	%100
22	M29	Z	-2.043	-2.043	0	%100
23	M32	X	2.62	2.62	0	%100
24	M32	Z	-1.513	-1.513	0	%100
25	M33	X	.247	.247	0	%100
26	M33	Z	-.143	-.143	0	%100
27	M34	X	.247	.247	0	%100
28	M34	Z	-.143	-.143	0	%100
29	M35	X	2.62	2.62	0	%100
30	M35	Z	-1.513	-1.513	0	%100
31	M36	X	1.508	1.508	0	%100
32	M36	Z	-.871	-.871	0	%100
33	M37	X	1.508	1.508	0	%100
34	M37	Z	-.871	-.871	0	%100
35	M38	X	1.508	1.508	0	%100
36	M38	Z	-.871	-.871	0	%100
37	M39	X	1.508	1.508	0	%100
38	M39	Z	-.871	-.871	0	%100
39	M40	X	2.114	2.114	0	%100
40	M40	Z	-1.221	-1.221	0	%100
41	M41	X	2.114	2.114	0	%100
42	M41	Z	-1.221	-1.221	0	%100
43	M42	X	2.199	2.199	0	%100
44	M42	Z	-1.269	-1.269	0	%100

Member Distributed Loads (BLC 55 : Structure Wi (60 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
45	M43	X	2.151	2.151	0	%100
46	M43	Z	-1.242	-1.242	0	%100
47	M44	X	1.307	1.307	0	%100
48	M44	Z	-.755	-.755	0	%100
49	M45	X	1.455	1.455	0	%100
50	M45	Z	-.84	-.84	0	%100
51	M46	X	2.107	2.107	0	%100
52	M46	Z	-1.216	-1.216	0	%100
53	M47	X	2.107	2.107	0	%100
54	M47	Z	-1.216	-1.216	0	%100
55	M48	X	2.107	2.107	0	%100
56	M48	Z	-1.216	-1.216	0	%100
57	M49	X	2.107	2.107	0	%100
58	M49	Z	-1.216	-1.216	0	%100
59	M50	X	2.419	2.419	0	%100
60	M50	Z	-1.396	-1.396	0	%100

Member Distributed Loads (BLC 56 : Structure Wi (90 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	MP4A	X	3.17	3.17	0	%100
6	MP4A	Z	0	0	0	%100
7	MP3A	X	3.17	3.17	0	%100
8	MP3A	Z	0	0	0	%100
9	MP2A	X	3.175	3.175	0	%100
10	MP2A	Z	0	0	0	%100
11	MP1A	X	3.17	3.17	0	%100
12	MP1A	Z	0	0	0	%100
13	M23	X	.675	.675	0	%100
14	M23	Z	0	0	0	%100
15	M24	X	.675	.675	0	%100
16	M24	Z	0	0	0	%100
17	M25	X	.675	.675	0	%100
18	M25	Z	0	0	0	%100
19	M26	X	.675	.675	0	%100
20	M26	Z	0	0	0	%100
21	M29	X	4.086	4.086	0	%100
22	M29	Z	0	0	0	%100
23	M32	X	1.723	1.723	0	%100
24	M32	Z	0	0	0	%100
25	M33	X	1.723	1.723	0	%100
26	M33	Z	0	0	0	%100
27	M34	X	1.723	1.723	0	%100
28	M34	Z	0	0	0	%100
29	M35	X	1.723	1.723	0	%100
30	M35	Z	0	0	0	%100
31	M36	X	1.348	1.348	0	%100
32	M36	Z	0	0	0	%100
33	M37	X	1.348	1.348	0	%100
34	M37	Z	0	0	0	%100
35	M38	X	1.348	1.348	0	%100
36	M38	Z	0	0	0	%100
37	M39	X	1.348	1.348	0	%100

Member Distributed Loads (BLC 56 : Structure Wi (90 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
38	M39	Z	0	0	0	%100
39	M40	X	2.442	2.442	0	%100
40	M40	Z	0	0	0	%100
41	M41	X	2.442	2.442	0	%100
42	M41	Z	0	0	0	%100
43	M42	X	2.131	2.131	0	%100
44	M42	Z	0	0	0	%100
45	M43	X	2.022	2.022	0	%100
46	M43	Z	0	0	0	%100
47	M44	X	2.022	2.022	0	%100
48	M44	Z	0	0	0	%100
49	M45	X	2.131	2.131	0	%100
50	M45	Z	0	0	0	%100
51	M46	X	2.433	2.433	0	%100
52	M46	Z	0	0	0	%100
53	M47	X	2.433	2.433	0	%100
54	M47	Z	0	0	0	%100
55	M48	X	2.433	2.433	0	%100
56	M48	Z	0	0	0	%100
57	M49	X	2.433	2.433	0	%100
58	M49	Z	0	0	0	%100
59	M50	X	3.085	3.085	0	%100
60	M50	Z	0	0	0	%100

Member Distributed Loads (BLC 57 : Structure Wi (120 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.759	.759	0	%100
2	M1	Z	.438	.438	0	%100
3	M2	X	.759	.759	0	%100
4	M2	Z	.438	.438	0	%100
5	MP4A	X	2.745	2.745	0	%100
6	MP4A	Z	1.585	1.585	0	%100
7	MP3A	X	2.745	2.745	0	%100
8	MP3A	Z	1.585	1.585	0	%100
9	MP2A	X	2.75	2.75	0	%100
10	MP2A	Z	1.588	1.588	0	%100
11	MP1A	X	2.745	2.745	0	%100
12	MP1A	Z	1.585	1.585	0	%100
13	M23	X	.093	.093	0	%100
14	M23	Z	.053	.053	0	%100
15	M24	X	1.04	1.04	0	%100
16	M24	Z	.6	.6	0	%100
17	M25	X	1.04	1.04	0	%100
18	M25	Z	.6	.6	0	%100
19	M26	X	.093	.093	0	%100
20	M26	Z	.053	.053	0	%100
21	M29	X	3.539	3.539	0	%100
22	M29	Z	2.043	2.043	0	%100
23	M32	X	.247	.247	0	%100
24	M32	Z	.143	.143	0	%100
25	M33	X	2.62	2.62	0	%100
26	M33	Z	1.513	1.513	0	%100
27	M34	X	2.62	2.62	0	%100
28	M34	Z	1.513	1.513	0	%100
29	M35	X	.247	.247	0	%100
30	M35	Z	.143	.143	0	%100

Member Distributed Loads (BLC 57 : Structure Wi (120 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
31	M36	X	1.508	1.508	0	%100
32	M36	Z	.871	.871	0	%100
33	M37	X	1.508	1.508	0	%100
34	M37	Z	.871	.871	0	%100
35	M38	X	1.508	1.508	0	%100
36	M38	Z	.871	.871	0	%100
37	M39	X	1.508	1.508	0	%100
38	M39	Z	.871	.871	0	%100
39	M40	X	2.114	2.114	0	%100
40	M40	Z	1.221	1.221	0	%100
41	M41	X	2.114	2.114	0	%100
42	M41	Z	1.221	1.221	0	%100
43	M42	X	1.455	1.455	0	%100
44	M42	Z	.84	.84	0	%100
45	M43	X	1.307	1.307	0	%100
46	M43	Z	.755	.755	0	%100
47	M44	X	2.151	2.151	0	%100
48	M44	Z	1.242	1.242	0	%100
49	M45	X	2.199	2.199	0	%100
50	M45	Z	1.269	1.269	0	%100
51	M46	X	2.107	2.107	0	%100
52	M46	Z	1.216	1.216	0	%100
53	M47	X	2.107	2.107	0	%100
54	M47	Z	1.216	1.216	0	%100
55	M48	X	2.107	2.107	0	%100
56	M48	Z	1.216	1.216	0	%100
57	M49	X	2.107	2.107	0	%100
58	M49	Z	1.216	1.216	0	%100
59	M50	X	1.629	1.629	0	%100
60	M50	Z	.94	.94	0	%100

Member Distributed Loads (BLC 58 : Structure Wi (150 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.315	1.315	0	%100
2	M1	Z	2.278	2.278	0	%100
3	M2	X	1.315	1.315	0	%100
4	M2	Z	2.278	2.278	0	%100
5	MP4A	X	1.585	1.585	0	%100
6	MP4A	Z	2.745	2.745	0	%100
7	MP3A	X	1.585	1.585	0	%100
8	MP3A	Z	2.745	2.745	0	%100
9	MP2A	X	1.588	1.588	0	%100
10	MP2A	Z	2.75	2.75	0	%100
11	MP1A	X	1.585	1.585	0	%100
12	MP1A	Z	2.745	2.745	0	%100
13	M23	X	.033	.033	0	%100
14	M23	Z	.056	.056	0	%100
15	M24	X	.579	.579	0	%100
16	M24	Z	1.003	1.003	0	%100
17	M25	X	.579	.579	0	%100
18	M25	Z	1.003	1.003	0	%100
19	M26	X	.033	.033	0	%100
20	M26	Z	.056	.056	0	%100
21	M29	X	2.043	2.043	0	%100
22	M29	Z	3.539	3.539	0	%100
23	M32	X	.075	.075	0	%100

Member Distributed Loads (BLC 58 : Structure Wi (150 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
24	M32	Z	.13	.13	0	%100
25	M33	X	1.445	1.445	0	%100
26	M33	Z	2.503	2.503	0	%100
27	M34	X	1.445	1.445	0	%100
28	M34	Z	2.503	2.503	0	%100
29	M35	X	.075	.075	0	%100
30	M35	Z	.13	.13	0	%100
31	M36	X	1.264	1.264	0	%100
32	M36	Z	2.19	2.19	0	%100
33	M37	X	1.264	1.264	0	%100
34	M37	Z	2.19	2.19	0	%100
35	M38	X	1.264	1.264	0	%100
36	M38	Z	2.19	2.19	0	%100
37	M39	X	1.264	1.264	0	%100
38	M39	Z	2.19	2.19	0	%100
39	M40	X	1.221	1.221	0	%100
40	M40	Z	2.114	2.114	0	%100
41	M41	X	1.221	1.221	0	%100
42	M41	Z	2.114	2.114	0	%100
43	M42	X	.819	.819	0	%100
44	M42	Z	1.419	1.419	0	%100
45	M43	X	.73	.73	0	%100
46	M43	Z	1.264	1.264	0	%100
47	M44	X	1.217	1.217	0	%100
48	M44	Z	2.108	2.108	0	%100
49	M45	X	1.248	1.248	0	%100
50	M45	Z	2.162	2.162	0	%100
51	M46	X	1.216	1.216	0	%100
52	M46	Z	2.107	2.107	0	%100
53	M47	X	1.216	1.216	0	%100
54	M47	Z	2.107	2.107	0	%100
55	M48	X	1.216	1.216	0	%100
56	M48	Z	2.107	2.107	0	%100
57	M49	X	1.216	1.216	0	%100
58	M49	Z	2.107	2.107	0	%100
59	M50	X	.191	.191	0	%100
60	M50	Z	.331	.331	0	%100

Member Distributed Loads (BLC 59 : Structure Wi (180 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	3.507	3.507	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	3.507	3.507	0	%100
5	MP4A	X	0	0	0	%100
6	MP4A	Z	3.17	3.17	0	%100
7	MP3A	X	0	0	0	%100
8	MP3A	Z	3.17	3.17	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	3.175	3.175	0	%100
11	MP1A	X	0	0	0	%100
12	MP1A	Z	3.17	3.17	0	%100
13	M23	X	0	0	0	%100
14	M23	Z	.591	.591	0	%100
15	M24	X	0	0	0	%100
16	M24	Z	.591	.591	0	%100

Member Distributed Loads (BLC 59 : Structure Wi (180 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
17	M25	X	0	0	0	%100
18	M25	Z	.591	.591	0	%100
19	M26	X	0	0	0	%100
20	M26	Z	.591	.591	0	%100
21	M29	X	0	0	0	%100
22	M29	Z	4.086	4.086	0	%100
23	M32	X	0	0	0	%100
24	M32	Z	1.453	1.453	0	%100
25	M33	X	0	0	0	%100
26	M33	Z	1.453	1.453	0	%100
27	M34	X	0	0	0	%100
28	M34	Z	1.453	1.453	0	%100
29	M35	X	0	0	0	%100
30	M35	Z	1.453	1.453	0	%100
31	M36	X	0	0	0	%100
32	M36	Z	2.922	2.922	0	%100
33	M37	X	0	0	0	%100
34	M37	Z	2.922	2.922	0	%100
35	M38	X	0	0	0	%100
36	M38	Z	2.922	2.922	0	%100
37	M39	X	0	0	0	%100
38	M39	Z	2.922	2.922	0	%100
39	M40	X	0	0	0	%100
40	M40	Z	2.442	2.442	0	%100
41	M41	X	0	0	0	%100
42	M41	Z	2.442	2.442	0	%100
43	M42	X	0	0	0	%100
44	M42	Z	2.046	2.046	0	%100
45	M43	X	0	0	0	%100
46	M43	Z	1.922	1.922	0	%100
47	M44	X	0	0	0	%100
48	M44	Z	1.922	1.922	0	%100
49	M45	X	0	0	0	%100
50	M45	Z	2.046	2.046	0	%100
51	M46	X	0	0	0	%100
52	M46	Z	2.433	2.433	0	%100
53	M47	X	0	0	0	%100
54	M47	Z	2.433	2.433	0	%100
55	M48	X	0	0	0	%100
56	M48	Z	2.433	2.433	0	%100
57	M49	X	0	0	0	%100
58	M49	Z	2.433	2.433	0	%100
59	M50	X	0	0	0	%100
60	M50	Z	.09	.09	0	%100

Member Distributed Loads (BLC 60 : Structure Wi (210 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.315	-1.315	0	%100
2	M1	Z	2.278	2.278	0	%100
3	M2	X	-1.315	-1.315	0	%100
4	M2	Z	2.278	2.278	0	%100
5	MP4A	X	-1.585	-1.585	0	%100
6	MP4A	Z	2.745	2.745	0	%100
7	MP3A	X	-1.585	-1.585	0	%100
8	MP3A	Z	2.745	2.745	0	%100
9	MP2A	X	-1.588	-1.588	0	%100

Member Distributed Loads (BLC 60 : Structure Wi (210 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
10	MP2A	Z	2.75	2.75	0	%100
11	MP1A	X	-1.585	-1.585	0	%100
12	MP1A	Z	2.745	2.745	0	%100
13	M23	X	-.579	-.579	0	%100
14	M23	Z	1.003	1.003	0	%100
15	M24	X	-.033	-.033	0	%100
16	M24	Z	.056	.056	0	%100
17	M25	X	-.033	-.033	0	%100
18	M25	Z	.056	.056	0	%100
19	M26	X	-.579	-.579	0	%100
20	M26	Z	1.003	1.003	0	%100
21	M29	X	-2.043	-2.043	0	%100
22	M29	Z	3.539	3.539	0	%100
23	M32	X	-1.445	-1.445	0	%100
24	M32	Z	2.503	2.503	0	%100
25	M33	X	-.075	-.075	0	%100
26	M33	Z	.13	.13	0	%100
27	M34	X	-.075	-.075	0	%100
28	M34	Z	.13	.13	0	%100
29	M35	X	-1.445	-1.445	0	%100
30	M35	Z	2.503	2.503	0	%100
31	M36	X	-1.264	-1.264	0	%100
32	M36	Z	2.19	2.19	0	%100
33	M37	X	-1.264	-1.264	0	%100
34	M37	Z	2.19	2.19	0	%100
35	M38	X	-1.264	-1.264	0	%100
36	M38	Z	2.19	2.19	0	%100
37	M39	X	-1.264	-1.264	0	%100
38	M39	Z	2.19	2.19	0	%100
39	M40	X	-1.221	-1.221	0	%100
40	M40	Z	2.114	2.114	0	%100
41	M41	X	-1.221	-1.221	0	%100
42	M41	Z	2.114	2.114	0	%100
43	M42	X	-1.248	-1.248	0	%100
44	M42	Z	2.162	2.162	0	%100
45	M43	X	-1.217	-1.217	0	%100
46	M43	Z	2.108	2.108	0	%100
47	M44	X	-.73	-.73	0	%100
48	M44	Z	1.264	1.264	0	%100
49	M45	X	-.819	-.819	0	%100
50	M45	Z	1.419	1.419	0	%100
51	M46	X	-1.216	-1.216	0	%100
52	M46	Z	2.107	2.107	0	%100
53	M47	X	-1.216	-1.216	0	%100
54	M47	Z	2.107	2.107	0	%100
55	M48	X	-1.216	-1.216	0	%100
56	M48	Z	2.107	2.107	0	%100
57	M49	X	-1.216	-1.216	0	%100
58	M49	Z	2.107	2.107	0	%100
59	M50	X	-.647	-.647	0	%100
60	M50	Z	1.121	1.121	0	%100

Member Distributed Loads (BLC 61 : Structure Wi (240 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.759	-.759	0	%100
2	M1	Z	.438	.438	0	%100

Member Distributed Loads (BLC 61 : Structure Wi (240 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
3	M2	X	-.759	-.759	0	%100
4	M2	Z	.438	.438	0	%100
5	MP4A	X	-2.745	-2.745	0	%100
6	MP4A	Z	1.585	1.585	0	%100
7	MP3A	X	-2.745	-2.745	0	%100
8	MP3A	Z	1.585	1.585	0	%100
9	MP2A	X	-2.75	-2.75	0	%100
10	MP2A	Z	1.588	1.588	0	%100
11	MP1A	X	-2.745	-2.745	0	%100
12	MP1A	Z	1.585	1.585	0	%100
13	M23	X	-1.04	-1.04	0	%100
14	M23	Z	.6	.6	0	%100
15	M24	X	-.093	-.093	0	%100
16	M24	Z	.053	.053	0	%100
17	M25	X	-.093	-.093	0	%100
18	M25	Z	.053	.053	0	%100
19	M26	X	-1.04	-1.04	0	%100
20	M26	Z	.6	.6	0	%100
21	M29	X	-3.539	-3.539	0	%100
22	M29	Z	2.043	2.043	0	%100
23	M32	X	-2.62	-2.62	0	%100
24	M32	Z	1.513	1.513	0	%100
25	M33	X	-.247	-.247	0	%100
26	M33	Z	.143	.143	0	%100
27	M34	X	-.247	-.247	0	%100
28	M34	Z	.143	.143	0	%100
29	M35	X	-2.62	-2.62	0	%100
30	M35	Z	1.513	1.513	0	%100
31	M36	X	-1.508	-1.508	0	%100
32	M36	Z	.871	.871	0	%100
33	M37	X	-1.508	-1.508	0	%100
34	M37	Z	.871	.871	0	%100
35	M38	X	-1.508	-1.508	0	%100
36	M38	Z	.871	.871	0	%100
37	M39	X	-1.508	-1.508	0	%100
38	M39	Z	.871	.871	0	%100
39	M40	X	-2.114	-2.114	0	%100
40	M40	Z	1.221	1.221	0	%100
41	M41	X	-2.114	-2.114	0	%100
42	M41	Z	1.221	1.221	0	%100
43	M42	X	-2.199	-2.199	0	%100
44	M42	Z	1.269	1.269	0	%100
45	M43	X	-2.151	-2.151	0	%100
46	M43	Z	1.242	1.242	0	%100
47	M44	X	-1.307	-1.307	0	%100
48	M44	Z	.755	.755	0	%100
49	M45	X	-1.455	-1.455	0	%100
50	M45	Z	.84	.84	0	%100
51	M46	X	-2.107	-2.107	0	%100
52	M46	Z	1.216	1.216	0	%100
53	M47	X	-2.107	-2.107	0	%100
54	M47	Z	1.216	1.216	0	%100
55	M48	X	-2.107	-2.107	0	%100
56	M48	Z	1.216	1.216	0	%100
57	M49	X	-2.107	-2.107	0	%100
58	M49	Z	1.216	1.216	0	%100
59	M50	X	-2.419	-2.419	0	%100

Member Distributed Loads (BLC 61 : Structure Wi (240 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
60	M50	Z	1.396	1.396	0	%100

Member Distributed Loads (BLC 62 : Structure Wi (270 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	MP4A	X	-3.17	-3.17	0	%100
6	MP4A	Z	0	0	0	%100
7	MP3A	X	-3.17	-3.17	0	%100
8	MP3A	Z	0	0	0	%100
9	MP2A	X	-3.175	-3.175	0	%100
10	MP2A	Z	0	0	0	%100
11	MP1A	X	-3.17	-3.17	0	%100
12	MP1A	Z	0	0	0	%100
13	M23	X	-.675	-.675	0	%100
14	M23	Z	0	0	0	%100
15	M24	X	-.675	-.675	0	%100
16	M24	Z	0	0	0	%100
17	M25	X	-.675	-.675	0	%100
18	M25	Z	0	0	0	%100
19	M26	X	-.675	-.675	0	%100
20	M26	Z	0	0	0	%100
21	M29	X	-4.086	-4.086	0	%100
22	M29	Z	0	0	0	%100
23	M32	X	-1.723	-1.723	0	%100
24	M32	Z	0	0	0	%100
25	M33	X	-1.723	-1.723	0	%100
26	M33	Z	0	0	0	%100
27	M34	X	-1.723	-1.723	0	%100
28	M34	Z	0	0	0	%100
29	M35	X	-1.723	-1.723	0	%100
30	M35	Z	0	0	0	%100
31	M36	X	-1.348	-1.348	0	%100
32	M36	Z	0	0	0	%100
33	M37	X	-1.348	-1.348	0	%100
34	M37	Z	0	0	0	%100
35	M38	X	-1.348	-1.348	0	%100
36	M38	Z	0	0	0	%100
37	M39	X	-1.348	-1.348	0	%100
38	M39	Z	0	0	0	%100
39	M40	X	-2.442	-2.442	0	%100
40	M40	Z	0	0	0	%100
41	M41	X	-2.442	-2.442	0	%100
42	M41	Z	0	0	0	%100
43	M42	X	-2.131	-2.131	0	%100
44	M42	Z	0	0	0	%100
45	M43	X	-2.022	-2.022	0	%100
46	M43	Z	0	0	0	%100
47	M44	X	-2.022	-2.022	0	%100
48	M44	Z	0	0	0	%100
49	M45	X	-2.131	-2.131	0	%100
50	M45	Z	0	0	0	%100
51	M46	X	-2.433	-2.433	0	%100
52	M46	Z	0	0	0	%100

Member Distributed Loads (BLC 62 : Structure Wi (270 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
53	M47	X	-2.433	-2.433	0	%100
54	M47	Z	0	0	0	%100
55	M48	X	-2.433	-2.433	0	%100
56	M48	Z	0	0	0	%100
57	M49	X	-2.433	-2.433	0	%100
58	M49	Z	0	0	0	%100
59	M50	X	-3.085	-3.085	0	%100
60	M50	Z	0	0	0	%100

Member Distributed Loads (BLC 63 : Structure Wi (300 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.759	-.759	0	%100
2	M1	Z	-.438	-.438	0	%100
3	M2	X	-.759	-.759	0	%100
4	M2	Z	-.438	-.438	0	%100
5	MP4A	X	-2.745	-2.745	0	%100
6	MP4A	Z	-1.585	-1.585	0	%100
7	MP3A	X	-2.745	-2.745	0	%100
8	MP3A	Z	-1.585	-1.585	0	%100
9	MP2A	X	-2.75	-2.75	0	%100
10	MP2A	Z	-1.588	-1.588	0	%100
11	MP1A	X	-2.745	-2.745	0	%100
12	MP1A	Z	-1.585	-1.585	0	%100
13	M23	X	-.093	-.093	0	%100
14	M23	Z	-.053	-.053	0	%100
15	M24	X	-1.04	-1.04	0	%100
16	M24	Z	-.6	-.6	0	%100
17	M25	X	-1.04	-1.04	0	%100
18	M25	Z	-.6	-.6	0	%100
19	M26	X	-.093	-.093	0	%100
20	M26	Z	-.053	-.053	0	%100
21	M29	X	-3.539	-3.539	0	%100
22	M29	Z	-2.043	-2.043	0	%100
23	M32	X	-.247	-.247	0	%100
24	M32	Z	-.143	-.143	0	%100
25	M33	X	-2.62	-2.62	0	%100
26	M33	Z	-1.513	-1.513	0	%100
27	M34	X	-2.62	-2.62	0	%100
28	M34	Z	-1.513	-1.513	0	%100
29	M35	X	-.247	-.247	0	%100
30	M35	Z	-.143	-.143	0	%100
31	M36	X	-1.508	-1.508	0	%100
32	M36	Z	-.871	-.871	0	%100
33	M37	X	-1.508	-1.508	0	%100
34	M37	Z	-.871	-.871	0	%100
35	M38	X	-1.508	-1.508	0	%100
36	M38	Z	-.871	-.871	0	%100
37	M39	X	-1.508	-1.508	0	%100
38	M39	Z	-.871	-.871	0	%100
39	M40	X	-2.114	-2.114	0	%100
40	M40	Z	-1.221	-1.221	0	%100
41	M41	X	-2.114	-2.114	0	%100
42	M41	Z	-1.221	-1.221	0	%100
43	M42	X	-1.455	-1.455	0	%100
44	M42	Z	-.84	-.84	0	%100
45	M43	X	-1.307	-1.307	0	%100

Member Distributed Loads (BLC 63 : Structure Wi (300 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
46	M43	Z	-.755	-.755	0	%100
47	M44	X	-2.151	-2.151	0	%100
48	M44	Z	-1.242	-1.242	0	%100
49	M45	X	-2.199	-2.199	0	%100
50	M45	Z	-1.269	-1.269	0	%100
51	M46	X	-2.107	-2.107	0	%100
52	M46	Z	-1.216	-1.216	0	%100
53	M47	X	-2.107	-2.107	0	%100
54	M47	Z	-1.216	-1.216	0	%100
55	M48	X	-2.107	-2.107	0	%100
56	M48	Z	-1.216	-1.216	0	%100
57	M49	X	-2.107	-2.107	0	%100
58	M49	Z	-1.216	-1.216	0	%100
59	M50	X	-1.629	-1.629	0	%100
60	M50	Z	-.94	-.94	0	%100

Member Distributed Loads (BLC 64 : Structure Wi (330 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.315	-1.315	0	%100
2	M1	Z	-2.278	-2.278	0	%100
3	M2	X	-1.315	-1.315	0	%100
4	M2	Z	-2.278	-2.278	0	%100
5	MP4A	X	-1.585	-1.585	0	%100
6	MP4A	Z	-2.745	-2.745	0	%100
7	MP3A	X	-1.585	-1.585	0	%100
8	MP3A	Z	-2.745	-2.745	0	%100
9	MP2A	X	-1.588	-1.588	0	%100
10	MP2A	Z	-2.75	-2.75	0	%100
11	MP1A	X	-1.585	-1.585	0	%100
12	MP1A	Z	-2.745	-2.745	0	%100
13	M23	X	-.033	-.033	0	%100
14	M23	Z	-.056	-.056	0	%100
15	M24	X	-.579	-.579	0	%100
16	M24	Z	-1.003	-1.003	0	%100
17	M25	X	-.579	-.579	0	%100
18	M25	Z	-1.003	-1.003	0	%100
19	M26	X	-.033	-.033	0	%100
20	M26	Z	-.056	-.056	0	%100
21	M29	X	-2.043	-2.043	0	%100
22	M29	Z	-3.539	-3.539	0	%100
23	M32	X	-.075	-.075	0	%100
24	M32	Z	-.13	-.13	0	%100
25	M33	X	-1.445	-1.445	0	%100
26	M33	Z	-2.503	-2.503	0	%100
27	M34	X	-1.445	-1.445	0	%100
28	M34	Z	-2.503	-2.503	0	%100
29	M35	X	-.075	-.075	0	%100
30	M35	Z	-.13	-.13	0	%100
31	M36	X	-1.264	-1.264	0	%100
32	M36	Z	-2.19	-2.19	0	%100
33	M37	X	-1.264	-1.264	0	%100
34	M37	Z	-2.19	-2.19	0	%100
35	M38	X	-1.264	-1.264	0	%100
36	M38	Z	-2.19	-2.19	0	%100
37	M39	X	-1.264	-1.264	0	%100
38	M39	Z	-2.19	-2.19	0	%100

Member Distributed Loads (BLC 64 : Structure Wi (330 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
39	M40	X	-1.221	-1.221	0	%100
40	M40	Z	-2.114	-2.114	0	%100
41	M41	X	-1.221	-1.221	0	%100
42	M41	Z	-2.114	-2.114	0	%100
43	M42	X	-.819	-.819	0	%100
44	M42	Z	-1.419	-1.419	0	%100
45	M43	X	-.73	-.73	0	%100
46	M43	Z	-1.264	-1.264	0	%100
47	M44	X	-1.217	-1.217	0	%100
48	M44	Z	-2.108	-2.108	0	%100
49	M45	X	-1.248	-1.248	0	%100
50	M45	Z	-2.162	-2.162	0	%100
51	M46	X	-1.216	-1.216	0	%100
52	M46	Z	-2.107	-2.107	0	%100
53	M47	X	-1.216	-1.216	0	%100
54	M47	Z	-2.107	-2.107	0	%100
55	M48	X	-1.216	-1.216	0	%100
56	M48	Z	-2.107	-2.107	0	%100
57	M49	X	-1.216	-1.216	0	%100
58	M49	Z	-2.107	-2.107	0	%100
59	M50	X	-.191	-.191	0	%100
60	M50	Z	-.331	-.331	0	%100

Member Distributed Loads (BLC 65 : Structure Wm (0 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-.686	-.686	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-.686	-.686	0	%100
5	MP4A	X	0	0	0	%100
6	MP4A	Z	-.567	-.567	0	%100
7	MP3A	X	0	0	0	%100
8	MP3A	Z	-.567	-.567	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	-.567	-.567	0	%100
11	MP1A	X	0	0	0	%100
12	MP1A	Z	-.567	-.567	0	%100
13	M23	X	0	0	0	%100
14	M23	Z	-.056	-.056	0	%100
15	M24	X	0	0	0	%100
16	M24	Z	-.056	-.056	0	%100
17	M25	X	0	0	0	%100
18	M25	Z	-.056	-.056	0	%100
19	M26	X	0	0	0	%100
20	M26	Z	-.056	-.056	0	%100
21	M29	X	0	0	0	%100
22	M29	Z	-.742	-.742	0	%100
23	M32	X	0	0	0	%100
24	M32	Z	-.259	-.259	0	%100
25	M33	X	0	0	0	%100
26	M33	Z	-.259	-.259	0	%100
27	M34	X	0	0	0	%100
28	M34	Z	-.259	-.259	0	%100
29	M35	X	0	0	0	%100
30	M35	Z	-.259	-.259	0	%100
31	M36	X	0	0	0	%100

Member Distributed Loads (BLC 65 : Structure Wm (0 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
32	M36	Z	-.716	-.716	0	%100
33	M37	X	0	0	0	%100
34	M37	Z	-.716	-.716	0	%100
35	M38	X	0	0	0	%100
36	M38	Z	-.716	-.716	0	%100
37	M39	X	0	0	0	%100
38	M39	Z	-.716	-.716	0	%100
39	M40	X	0	0	0	%100
40	M40	Z	-.437	-.437	0	%100
41	M41	X	0	0	0	%100
42	M41	Z	-.437	-.437	0	%100
43	M42	X	0	0	0	%100
44	M42	Z	-.313	-.313	0	%100
45	M43	X	0	0	0	%100
46	M43	Z	-.3	-.3	0	%100
47	M44	X	0	0	0	%100
48	M44	Z	-.3	-.3	0	%100
49	M45	X	0	0	0	%100
50	M45	Z	-.313	-.313	0	%100
51	M46	X	0	0	0	%100
52	M46	Z	-.389	-.389	0	%100
53	M47	X	0	0	0	%100
54	M47	Z	-.389	-.389	0	%100
55	M48	X	0	0	0	%100
56	M48	Z	-.389	-.389	0	%100
57	M49	X	0	0	0	%100
58	M49	Z	-.389	-.389	0	%100
59	M50	X	0	0	0	%100
60	M50	Z	-.016	-.016	0	%100

Member Distributed Loads (BLC 66 : Structure Wm (30 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.257	.257	0	%100
2	M1	Z	-.445	-.445	0	%100
3	M2	X	.257	.257	0	%100
4	M2	Z	-.445	-.445	0	%100
5	MP4A	X	.283	.283	0	%100
6	MP4A	Z	-.491	-.491	0	%100
7	MP3A	X	.283	.283	0	%100
8	MP3A	Z	-.491	-.491	0	%100
9	MP2A	X	.283	.283	0	%100
10	MP2A	Z	-.491	-.491	0	%100
11	MP1A	X	.283	.283	0	%100
12	MP1A	Z	-.491	-.491	0	%100
13	M23	X	.055	.055	0	%100
14	M23	Z	-.095	-.095	0	%100
15	M24	X	.003	.003	0	%100
16	M24	Z	-.005	-.005	0	%100
17	M25	X	.003	.003	0	%100
18	M25	Z	-.005	-.005	0	%100
19	M26	X	.055	.055	0	%100
20	M26	Z	-.095	-.095	0	%100
21	M29	X	.371	.371	0	%100
22	M29	Z	-.643	-.643	0	%100
23	M32	X	.258	.258	0	%100
24	M32	Z	-.447	-.447	0	%100

Member Distributed Loads (BLC 66 : Structure Wm (30 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
25	M33	X	.013	.013	0	%100
26	M33	Z	-.023	-.023	0	%100
27	M34	X	.013	.013	0	%100
28	M34	Z	-.023	-.023	0	%100
29	M35	X	.258	.258	0	%100
30	M35	Z	-.447	-.447	0	%100
31	M36	X	.287	.287	0	%100
32	M36	Z	-.497	-.497	0	%100
33	M37	X	.287	.287	0	%100
34	M37	Z	-.497	-.497	0	%100
35	M38	X	.287	.287	0	%100
36	M38	Z	-.497	-.497	0	%100
37	M39	X	.287	.287	0	%100
38	M39	Z	-.497	-.497	0	%100
39	M40	X	.218	.218	0	%100
40	M40	Z	-.378	-.378	0	%100
41	M41	X	.218	.218	0	%100
42	M41	Z	-.378	-.378	0	%100
43	M42	X	.191	.191	0	%100
44	M42	Z	-.331	-.331	0	%100
45	M43	X	.19	.19	0	%100
46	M43	Z	-.329	-.329	0	%100
47	M44	X	.114	.114	0	%100
48	M44	Z	-.197	-.197	0	%100
49	M45	X	.125	.125	0	%100
50	M45	Z	-.217	-.217	0	%100
51	M46	X	.195	.195	0	%100
52	M46	Z	-.337	-.337	0	%100
53	M47	X	.195	.195	0	%100
54	M47	Z	-.337	-.337	0	%100
55	M48	X	.195	.195	0	%100
56	M48	Z	-.337	-.337	0	%100
57	M49	X	.195	.195	0	%100
58	M49	Z	-.337	-.337	0	%100
59	M50	X	.116	.116	0	%100
60	M50	Z	-.2	-.2	0	%100

Member Distributed Loads (BLC 67 : Structure Wm (60 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.148	.148	0	%100
2	M1	Z	-.086	-.086	0	%100
3	M2	X	.148	.148	0	%100
4	M2	Z	-.086	-.086	0	%100
5	MP4A	X	.491	.491	0	%100
6	MP4A	Z	-.283	-.283	0	%100
7	MP3A	X	.491	.491	0	%100
8	MP3A	Z	-.283	-.283	0	%100
9	MP2A	X	.491	.491	0	%100
10	MP2A	Z	-.283	-.283	0	%100
11	MP1A	X	.491	.491	0	%100
12	MP1A	Z	-.283	-.283	0	%100
13	M23	X	.098	.098	0	%100
14	M23	Z	-.057	-.057	0	%100
15	M24	X	.009	.009	0	%100
16	M24	Z	-.005	-.005	0	%100
17	M25	X	.009	.009	0	%100

Member Distributed Loads (BLC 67 : Structure Wm (60 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
18	M25	Z	-.005	-.005	0	%100
19	M26	X	.098	.098	0	%100
20	M26	Z	-.057	-.057	0	%100
21	M29	X	.643	.643	0	%100
22	M29	Z	-.371	-.371	0	%100
23	M32	X	.467	.467	0	%100
24	M32	Z	-.27	-.27	0	%100
25	M33	X	.044	.044	0	%100
26	M33	Z	-.025	-.025	0	%100
27	M34	X	.044	.044	0	%100
28	M34	Z	-.025	-.025	0	%100
29	M35	X	.467	.467	0	%100
30	M35	Z	-.27	-.27	0	%100
31	M36	X	.252	.252	0	%100
32	M36	Z	-.145	-.145	0	%100
33	M37	X	.252	.252	0	%100
34	M37	Z	-.145	-.145	0	%100
35	M38	X	.252	.252	0	%100
36	M38	Z	-.145	-.145	0	%100
37	M39	X	.252	.252	0	%100
38	M39	Z	-.145	-.145	0	%100
39	M40	X	.378	.378	0	%100
40	M40	Z	-.218	-.218	0	%100
41	M41	X	.378	.378	0	%100
42	M41	Z	-.218	-.218	0	%100
43	M42	X	.337	.337	0	%100
44	M42	Z	-.194	-.194	0	%100
45	M43	X	.336	.336	0	%100
46	M43	Z	-.194	-.194	0	%100
47	M44	X	.204	.204	0	%100
48	M44	Z	-.118	-.118	0	%100
49	M45	X	.223	.223	0	%100
50	M45	Z	-.129	-.129	0	%100
51	M46	X	.337	.337	0	%100
52	M46	Z	-.195	-.195	0	%100
53	M47	X	.337	.337	0	%100
54	M47	Z	-.195	-.195	0	%100
55	M48	X	.337	.337	0	%100
56	M48	Z	-.195	-.195	0	%100
57	M49	X	.337	.337	0	%100
58	M49	Z	-.195	-.195	0	%100
59	M50	X	.432	.432	0	%100
60	M50	Z	-.249	-.249	0	%100

Member Distributed Loads (BLC 68 : Structure Wm (90 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	MP4A	X	.567	.567	0	%100
6	MP4A	Z	0	0	0	%100
7	MP3A	X	.567	.567	0	%100
8	MP3A	Z	0	0	0	%100
9	MP2A	X	.567	.567	0	%100
10	MP2A	Z	0	0	0	%100

Member Distributed Loads (BLC 68 : Structure Wm (90 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
11	MP1A	X	.567	.567	0	%100
12	MP1A	Z	0	0	0	%100
13	M23	X	.064	.064	0	%100
14	M23	Z	0	0	0	%100
15	M24	X	.064	.064	0	%100
16	M24	Z	0	0	0	%100
17	M25	X	.064	.064	0	%100
18	M25	Z	0	0	0	%100
19	M26	X	.064	.064	0	%100
20	M26	Z	0	0	0	%100
21	M29	X	.742	.742	0	%100
22	M29	Z	0	0	0	%100
23	M32	X	.307	.307	0	%100
24	M32	Z	0	0	0	%100
25	M33	X	.307	.307	0	%100
26	M33	Z	0	0	0	%100
27	M34	X	.307	.307	0	%100
28	M34	Z	0	0	0	%100
29	M35	X	.307	.307	0	%100
30	M35	Z	0	0	0	%100
31	M36	X	.149	.149	0	%100
32	M36	Z	0	0	0	%100
33	M37	X	.149	.149	0	%100
34	M37	Z	0	0	0	%100
35	M38	X	.149	.149	0	%100
36	M38	Z	0	0	0	%100
37	M39	X	.149	.149	0	%100
38	M39	Z	0	0	0	%100
39	M40	X	.437	.437	0	%100
40	M40	Z	0	0	0	%100
41	M41	X	.437	.437	0	%100
42	M41	Z	0	0	0	%100
43	M42	X	.326	.326	0	%100
44	M42	Z	0	0	0	%100
45	M43	X	.316	.316	0	%100
46	M43	Z	0	0	0	%100
47	M44	X	.316	.316	0	%100
48	M44	Z	0	0	0	%100
49	M45	X	.326	.326	0	%100
50	M45	Z	0	0	0	%100
51	M46	X	.389	.389	0	%100
52	M46	Z	0	0	0	%100
53	M47	X	.389	.389	0	%100
54	M47	Z	0	0	0	%100
55	M48	X	.389	.389	0	%100
56	M48	Z	0	0	0	%100
57	M49	X	.389	.389	0	%100
58	M49	Z	0	0	0	%100
59	M50	X	.55	.55	0	%100
60	M50	Z	0	0	0	%100

Member Distributed Loads (BLC 69 : Structure Wm (120 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.148	.148	0	%100
2	M1	Z	.086	.086	0	%100
3	M2	X	.148	.148	0	%100

Member Distributed Loads (BLC 69 : Structure Wm (120 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
4	M2	Z	.086	.086	0	%100
5	MP4A	X	.491	.491	0	%100
6	MP4A	Z	.283	.283	0	%100
7	MP3A	X	.491	.491	0	%100
8	MP3A	Z	.283	.283	0	%100
9	MP2A	X	.491	.491	0	%100
10	MP2A	Z	.283	.283	0	%100
11	MP1A	X	.491	.491	0	%100
12	MP1A	Z	.283	.283	0	%100
13	M23	X	.009	.009	0	%100
14	M23	Z	.005	.005	0	%100
15	M24	X	.098	.098	0	%100
16	M24	Z	.057	.057	0	%100
17	M25	X	.098	.098	0	%100
18	M25	Z	.057	.057	0	%100
19	M26	X	.009	.009	0	%100
20	M26	Z	.005	.005	0	%100
21	M29	X	.643	.643	0	%100
22	M29	Z	.371	.371	0	%100
23	M32	X	.044	.044	0	%100
24	M32	Z	.025	.025	0	%100
25	M33	X	.467	.467	0	%100
26	M33	Z	.27	.27	0	%100
27	M34	X	.467	.467	0	%100
28	M34	Z	.27	.27	0	%100
29	M35	X	.044	.044	0	%100
30	M35	Z	.025	.025	0	%100
31	M36	X	.252	.252	0	%100
32	M36	Z	.145	.145	0	%100
33	M37	X	.252	.252	0	%100
34	M37	Z	.145	.145	0	%100
35	M38	X	.252	.252	0	%100
36	M38	Z	.145	.145	0	%100
37	M39	X	.252	.252	0	%100
38	M39	Z	.145	.145	0	%100
39	M40	X	.378	.378	0	%100
40	M40	Z	.218	.218	0	%100
41	M41	X	.378	.378	0	%100
42	M41	Z	.218	.218	0	%100
43	M42	X	.223	.223	0	%100
44	M42	Z	.129	.129	0	%100
45	M43	X	.204	.204	0	%100
46	M43	Z	.118	.118	0	%100
47	M44	X	.336	.336	0	%100
48	M44	Z	.194	.194	0	%100
49	M45	X	.337	.337	0	%100
50	M45	Z	.194	.194	0	%100
51	M46	X	.337	.337	0	%100
52	M46	Z	.195	.195	0	%100
53	M47	X	.337	.337	0	%100
54	M47	Z	.195	.195	0	%100
55	M48	X	.337	.337	0	%100
56	M48	Z	.195	.195	0	%100
57	M49	X	.337	.337	0	%100
58	M49	Z	.195	.195	0	%100
59	M50	X	.291	.291	0	%100
60	M50	Z	.168	.168	0	%100

Member Distributed Loads (BLC 70 : Structure Wm (150 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.257	.257	0	%100
2	M1	Z	.445	.445	0	%100
3	M2	X	.257	.257	0	%100
4	M2	Z	.445	.445	0	%100
5	MP4A	X	.283	.283	0	%100
6	MP4A	Z	.491	.491	0	%100
7	MP3A	X	.283	.283	0	%100
8	MP3A	Z	.491	.491	0	%100
9	MP2A	X	.283	.283	0	%100
10	MP2A	Z	.491	.491	0	%100
11	MP1A	X	.283	.283	0	%100
12	MP1A	Z	.491	.491	0	%100
13	M23	X	.003	.003	0	%100
14	M23	Z	.005	.005	0	%100
15	M24	X	.055	.055	0	%100
16	M24	Z	.095	.095	0	%100
17	M25	X	.055	.055	0	%100
18	M25	Z	.095	.095	0	%100
19	M26	X	.003	.003	0	%100
20	M26	Z	.005	.005	0	%100
21	M29	X	.371	.371	0	%100
22	M29	Z	.643	.643	0	%100
23	M32	X	.013	.013	0	%100
24	M32	Z	.023	.023	0	%100
25	M33	X	.258	.258	0	%100
26	M33	Z	.447	.447	0	%100
27	M34	X	.258	.258	0	%100
28	M34	Z	.447	.447	0	%100
29	M35	X	.013	.013	0	%100
30	M35	Z	.023	.023	0	%100
31	M36	X	.287	.287	0	%100
32	M36	Z	.497	.497	0	%100
33	M37	X	.287	.287	0	%100
34	M37	Z	.497	.497	0	%100
35	M38	X	.287	.287	0	%100
36	M38	Z	.497	.497	0	%100
37	M39	X	.287	.287	0	%100
38	M39	Z	.497	.497	0	%100
39	M40	X	.218	.218	0	%100
40	M40	Z	.378	.378	0	%100
41	M41	X	.218	.218	0	%100
42	M41	Z	.378	.378	0	%100
43	M42	X	.125	.125	0	%100
44	M42	Z	.217	.217	0	%100
45	M43	X	.114	.114	0	%100
46	M43	Z	.197	.197	0	%100
47	M44	X	.19	.19	0	%100
48	M44	Z	.329	.329	0	%100
49	M45	X	.191	.191	0	%100
50	M45	Z	.331	.331	0	%100
51	M46	X	.195	.195	0	%100
52	M46	Z	.337	.337	0	%100
53	M47	X	.195	.195	0	%100
54	M47	Z	.337	.337	0	%100
55	M48	X	.195	.195	0	%100
56	M48	Z	.337	.337	0	%100
57	M49	X	.195	.195	0	%100

Member Distributed Loads (BLC 70 : Structure Wm (150 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
58	M49	Z	.337	.337	0	%100
59	M50	X	.034	.034	0	%100
60	M50	Z	.059	.059	0	%100

Member Distributed Loads (BLC 71 : Structure Wm (180 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	.686	.686	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	.686	.686	0	%100
5	MP4A	X	0	0	0	%100
6	MP4A	Z	.567	.567	0	%100
7	MP3A	X	0	0	0	%100
8	MP3A	Z	.567	.567	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	.567	.567	0	%100
11	MP1A	X	0	0	0	%100
12	MP1A	Z	.567	.567	0	%100
13	M23	X	0	0	0	%100
14	M23	Z	.056	.056	0	%100
15	M24	X	0	0	0	%100
16	M24	Z	.056	.056	0	%100
17	M25	X	0	0	0	%100
18	M25	Z	.056	.056	0	%100
19	M26	X	0	0	0	%100
20	M26	Z	.056	.056	0	%100
21	M29	X	0	0	0	%100
22	M29	Z	.742	.742	0	%100
23	M32	X	0	0	0	%100
24	M32	Z	.259	.259	0	%100
25	M33	X	0	0	0	%100
26	M33	Z	.259	.259	0	%100
27	M34	X	0	0	0	%100
28	M34	Z	.259	.259	0	%100
29	M35	X	0	0	0	%100
30	M35	Z	.259	.259	0	%100
31	M36	X	0	0	0	%100
32	M36	Z	.716	.716	0	%100
33	M37	X	0	0	0	%100
34	M37	Z	.716	.716	0	%100
35	M38	X	0	0	0	%100
36	M38	Z	.716	.716	0	%100
37	M39	X	0	0	0	%100
38	M39	Z	.716	.716	0	%100
39	M40	X	0	0	0	%100
40	M40	Z	.437	.437	0	%100
41	M41	X	0	0	0	%100
42	M41	Z	.437	.437	0	%100
43	M42	X	0	0	0	%100
44	M42	Z	.313	.313	0	%100
45	M43	X	0	0	0	%100
46	M43	Z	.3	.3	0	%100
47	M44	X	0	0	0	%100
48	M44	Z	.3	.3	0	%100
49	M45	X	0	0	0	%100
50	M45	Z	.313	.313	0	%100

Member Distributed Loads (BLC 71 : Structure Wm (180 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
51	M46	X	0	0	0	%100
52	M46	Z	.389	.389	0	%100
53	M47	X	0	0	0	%100
54	M47	Z	.389	.389	0	%100
55	M48	X	0	0	0	%100
56	M48	Z	.389	.389	0	%100
57	M49	X	0	0	0	%100
58	M49	Z	.389	.389	0	%100
59	M50	X	0	0	0	%100
60	M50	Z	.016	.016	0	%100

Member Distributed Loads (BLC 72 : Structure Wm (210 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.257	-.257	0	%100
2	M1	Z	.445	.445	0	%100
3	M2	X	-.257	-.257	0	%100
4	M2	Z	.445	.445	0	%100
5	MP4A	X	-.283	-.283	0	%100
6	MP4A	Z	.491	.491	0	%100
7	MP3A	X	-.283	-.283	0	%100
8	MP3A	Z	.491	.491	0	%100
9	MP2A	X	-.283	-.283	0	%100
10	MP2A	Z	.491	.491	0	%100
11	MP1A	X	-.283	-.283	0	%100
12	MP1A	Z	.491	.491	0	%100
13	M23	X	-.055	-.055	0	%100
14	M23	Z	.095	.095	0	%100
15	M24	X	-.003	-.003	0	%100
16	M24	Z	.005	.005	0	%100
17	M25	X	-.003	-.003	0	%100
18	M25	Z	.005	.005	0	%100
19	M26	X	-.055	-.055	0	%100
20	M26	Z	.095	.095	0	%100
21	M29	X	-.371	-.371	0	%100
22	M29	Z	.643	.643	0	%100
23	M32	X	-.258	-.258	0	%100
24	M32	Z	.447	.447	0	%100
25	M33	X	-.013	-.013	0	%100
26	M33	Z	.023	.023	0	%100
27	M34	X	-.013	-.013	0	%100
28	M34	Z	.023	.023	0	%100
29	M35	X	-.258	-.258	0	%100
30	M35	Z	.447	.447	0	%100
31	M36	X	-.287	-.287	0	%100
32	M36	Z	.497	.497	0	%100
33	M37	X	-.287	-.287	0	%100
34	M37	Z	.497	.497	0	%100
35	M38	X	-.287	-.287	0	%100
36	M38	Z	.497	.497	0	%100
37	M39	X	-.287	-.287	0	%100
38	M39	Z	.497	.497	0	%100
39	M40	X	-.218	-.218	0	%100
40	M40	Z	.378	.378	0	%100
41	M41	X	-.218	-.218	0	%100
42	M41	Z	.378	.378	0	%100
43	M42	X	-.191	-.191	0	%100

Member Distributed Loads (BLC 72 : Structure Wm (210 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
44	M42	Z	.331	.331	0	%100
45	M43	X	-.19	-.19	0	%100
46	M43	Z	.329	.329	0	%100
47	M44	X	-.114	-.114	0	%100
48	M44	Z	.197	.197	0	%100
49	M45	X	-.125	-.125	0	%100
50	M45	Z	.217	.217	0	%100
51	M46	X	-.195	-.195	0	%100
52	M46	Z	.337	.337	0	%100
53	M47	X	-.195	-.195	0	%100
54	M47	Z	.337	.337	0	%100
55	M48	X	-.195	-.195	0	%100
56	M48	Z	.337	.337	0	%100
57	M49	X	-.195	-.195	0	%100
58	M49	Z	.337	.337	0	%100
59	M50	X	-.116	-.116	0	%100
60	M50	Z	.2	.2	0	%100

Member Distributed Loads (BLC 73 : Structure Wm (240 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.148	-.148	0	%100
2	M1	Z	.086	.086	0	%100
3	M2	X	-.148	-.148	0	%100
4	M2	Z	.086	.086	0	%100
5	MP4A	X	-.491	-.491	0	%100
6	MP4A	Z	.283	.283	0	%100
7	MP3A	X	-.491	-.491	0	%100
8	MP3A	Z	.283	.283	0	%100
9	MP2A	X	-.491	-.491	0	%100
10	MP2A	Z	.283	.283	0	%100
11	MP1A	X	-.491	-.491	0	%100
12	MP1A	Z	.283	.283	0	%100
13	M23	X	-.098	-.098	0	%100
14	M23	Z	.057	.057	0	%100
15	M24	X	-.009	-.009	0	%100
16	M24	Z	.005	.005	0	%100
17	M25	X	-.009	-.009	0	%100
18	M25	Z	.005	.005	0	%100
19	M26	X	-.098	-.098	0	%100
20	M26	Z	.057	.057	0	%100
21	M29	X	-.643	-.643	0	%100
22	M29	Z	.371	.371	0	%100
23	M32	X	-.467	-.467	0	%100
24	M32	Z	.27	.27	0	%100
25	M33	X	-.044	-.044	0	%100
26	M33	Z	.025	.025	0	%100
27	M34	X	-.044	-.044	0	%100
28	M34	Z	.025	.025	0	%100
29	M35	X	-.467	-.467	0	%100
30	M35	Z	.27	.27	0	%100
31	M36	X	-.252	-.252	0	%100
32	M36	Z	.145	.145	0	%100
33	M37	X	-.252	-.252	0	%100
34	M37	Z	.145	.145	0	%100
35	M38	X	-.252	-.252	0	%100
36	M38	Z	.145	.145	0	%100

Member Distributed Loads (BLC 73 : Structure Wm (240 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
37	M39	X	-.252	-.252	0	%100
38	M39	Z	.145	.145	0	%100
39	M40	X	-.378	-.378	0	%100
40	M40	Z	.218	.218	0	%100
41	M41	X	-.378	-.378	0	%100
42	M41	Z	.218	.218	0	%100
43	M42	X	-.337	-.337	0	%100
44	M42	Z	.194	.194	0	%100
45	M43	X	-.336	-.336	0	%100
46	M43	Z	.194	.194	0	%100
47	M44	X	-.204	-.204	0	%100
48	M44	Z	.118	.118	0	%100
49	M45	X	-.223	-.223	0	%100
50	M45	Z	.129	.129	0	%100
51	M46	X	-.337	-.337	0	%100
52	M46	Z	.195	.195	0	%100
53	M47	X	-.337	-.337	0	%100
54	M47	Z	.195	.195	0	%100
55	M48	X	-.337	-.337	0	%100
56	M48	Z	.195	.195	0	%100
57	M49	X	-.337	-.337	0	%100
58	M49	Z	.195	.195	0	%100
59	M50	X	-.432	-.432	0	%100
60	M50	Z	.249	.249	0	%100

Member Distributed Loads (BLC 74 : Structure Wm (270 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	MP4A	X	-.567	-.567	0	%100
6	MP4A	Z	0	0	0	%100
7	MP3A	X	-.567	-.567	0	%100
8	MP3A	Z	0	0	0	%100
9	MP2A	X	-.567	-.567	0	%100
10	MP2A	Z	0	0	0	%100
11	MP1A	X	-.567	-.567	0	%100
12	MP1A	Z	0	0	0	%100
13	M23	X	-.064	-.064	0	%100
14	M23	Z	0	0	0	%100
15	M24	X	-.064	-.064	0	%100
16	M24	Z	0	0	0	%100
17	M25	X	-.064	-.064	0	%100
18	M25	Z	0	0	0	%100
19	M26	X	-.064	-.064	0	%100
20	M26	Z	0	0	0	%100
21	M29	X	-.742	-.742	0	%100
22	M29	Z	0	0	0	%100
23	M32	X	-.307	-.307	0	%100
24	M32	Z	0	0	0	%100
25	M33	X	-.307	-.307	0	%100
26	M33	Z	0	0	0	%100
27	M34	X	-.307	-.307	0	%100
28	M34	Z	0	0	0	%100
29	M35	X	-.307	-.307	0	%100

Member Distributed Loads (BLC 74 : Structure Wm (270 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
30	M35	Z	0	0	0	%100
31	M36	X	-.149	-.149	0	%100
32	M36	Z	0	0	0	%100
33	M37	X	-.149	-.149	0	%100
34	M37	Z	0	0	0	%100
35	M38	X	-.149	-.149	0	%100
36	M38	Z	0	0	0	%100
37	M39	X	-.149	-.149	0	%100
38	M39	Z	0	0	0	%100
39	M40	X	-.437	-.437	0	%100
40	M40	Z	0	0	0	%100
41	M41	X	-.437	-.437	0	%100
42	M41	Z	0	0	0	%100
43	M42	X	-.326	-.326	0	%100
44	M42	Z	0	0	0	%100
45	M43	X	-.316	-.316	0	%100
46	M43	Z	0	0	0	%100
47	M44	X	-.316	-.316	0	%100
48	M44	Z	0	0	0	%100
49	M45	X	-.326	-.326	0	%100
50	M45	Z	0	0	0	%100
51	M46	X	-.389	-.389	0	%100
52	M46	Z	0	0	0	%100
53	M47	X	-.389	-.389	0	%100
54	M47	Z	0	0	0	%100
55	M48	X	-.389	-.389	0	%100
56	M48	Z	0	0	0	%100
57	M49	X	-.389	-.389	0	%100
58	M49	Z	0	0	0	%100
59	M50	X	-.55	-.55	0	%100
60	M50	Z	0	0	0	%100

Member Distributed Loads (BLC 75 : Structure Wm (300 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.148	-.148	0	%100
2	M1	Z	-.086	-.086	0	%100
3	M2	X	-.148	-.148	0	%100
4	M2	Z	-.086	-.086	0	%100
5	MP4A	X	-.491	-.491	0	%100
6	MP4A	Z	-.283	-.283	0	%100
7	MP3A	X	-.491	-.491	0	%100
8	MP3A	Z	-.283	-.283	0	%100
9	MP2A	X	-.491	-.491	0	%100
10	MP2A	Z	-.283	-.283	0	%100
11	MP1A	X	-.491	-.491	0	%100
12	MP1A	Z	-.283	-.283	0	%100
13	M23	X	-.009	-.009	0	%100
14	M23	Z	-.005	-.005	0	%100
15	M24	X	-.098	-.098	0	%100
16	M24	Z	-.057	-.057	0	%100
17	M25	X	-.098	-.098	0	%100
18	M25	Z	-.057	-.057	0	%100
19	M26	X	-.009	-.009	0	%100
20	M26	Z	-.005	-.005	0	%100
21	M29	X	-.643	-.643	0	%100
22	M29	Z	-.371	-.371	0	%100

Member Distributed Loads (BLC 75 : Structure Wm (300 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
23	M32	X	-.044	-.044	0	%100
24	M32	Z	-.025	-.025	0	%100
25	M33	X	-.467	-.467	0	%100
26	M33	Z	-.27	-.27	0	%100
27	M34	X	-.467	-.467	0	%100
28	M34	Z	-.27	-.27	0	%100
29	M35	X	-.044	-.044	0	%100
30	M35	Z	-.025	-.025	0	%100
31	M36	X	-.252	-.252	0	%100
32	M36	Z	-.145	-.145	0	%100
33	M37	X	-.252	-.252	0	%100
34	M37	Z	-.145	-.145	0	%100
35	M38	X	-.252	-.252	0	%100
36	M38	Z	-.145	-.145	0	%100
37	M39	X	-.252	-.252	0	%100
38	M39	Z	-.145	-.145	0	%100
39	M40	X	-.378	-.378	0	%100
40	M40	Z	-.218	-.218	0	%100
41	M41	X	-.378	-.378	0	%100
42	M41	Z	-.218	-.218	0	%100
43	M42	X	-.223	-.223	0	%100
44	M42	Z	-.129	-.129	0	%100
45	M43	X	-.204	-.204	0	%100
46	M43	Z	-.118	-.118	0	%100
47	M44	X	-.336	-.336	0	%100
48	M44	Z	-.194	-.194	0	%100
49	M45	X	-.337	-.337	0	%100
50	M45	Z	-.194	-.194	0	%100
51	M46	X	-.337	-.337	0	%100
52	M46	Z	-.195	-.195	0	%100
53	M47	X	-.337	-.337	0	%100
54	M47	Z	-.195	-.195	0	%100
55	M48	X	-.337	-.337	0	%100
56	M48	Z	-.195	-.195	0	%100
57	M49	X	-.337	-.337	0	%100
58	M49	Z	-.195	-.195	0	%100
59	M50	X	-.291	-.291	0	%100
60	M50	Z	-.168	-.168	0	%100

Member Distributed Loads (BLC 76 : Structure Wm (330 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.257	-.257	0	%100
2	M1	Z	-.445	-.445	0	%100
3	M2	X	-.257	-.257	0	%100
4	M2	Z	-.445	-.445	0	%100
5	MP4A	X	-.283	-.283	0	%100
6	MP4A	Z	-.491	-.491	0	%100
7	MP3A	X	-.283	-.283	0	%100
8	MP3A	Z	-.491	-.491	0	%100
9	MP2A	X	-.283	-.283	0	%100
10	MP2A	Z	-.491	-.491	0	%100
11	MP1A	X	-.283	-.283	0	%100
12	MP1A	Z	-.491	-.491	0	%100
13	M23	X	-.003	-.003	0	%100
14	M23	Z	-.005	-.005	0	%100
15	M24	X	-.055	-.055	0	%100

Member Distributed Loads (BLC 76 : Structure Wm (330 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
16	M24	Z	-.095	-.095	0	%100
17	M25	X	-.055	-.055	0	%100
18	M25	Z	-.095	-.095	0	%100
19	M26	X	-.003	-.003	0	%100
20	M26	Z	-.005	-.005	0	%100
21	M29	X	-.371	-.371	0	%100
22	M29	Z	-.643	-.643	0	%100
23	M32	X	-.013	-.013	0	%100
24	M32	Z	-.023	-.023	0	%100
25	M33	X	-.258	-.258	0	%100
26	M33	Z	-.447	-.447	0	%100
27	M34	X	-.258	-.258	0	%100
28	M34	Z	-.447	-.447	0	%100
29	M35	X	-.013	-.013	0	%100
30	M35	Z	-.023	-.023	0	%100
31	M36	X	-.287	-.287	0	%100
32	M36	Z	-.497	-.497	0	%100
33	M37	X	-.287	-.287	0	%100
34	M37	Z	-.497	-.497	0	%100
35	M38	X	-.287	-.287	0	%100
36	M38	Z	-.497	-.497	0	%100
37	M39	X	-.287	-.287	0	%100
38	M39	Z	-.497	-.497	0	%100
39	M40	X	-.218	-.218	0	%100
40	M40	Z	-.378	-.378	0	%100
41	M41	X	-.218	-.218	0	%100
42	M41	Z	-.378	-.378	0	%100
43	M42	X	-.125	-.125	0	%100
44	M42	Z	-.217	-.217	0	%100
45	M43	X	-.114	-.114	0	%100
46	M43	Z	-.197	-.197	0	%100
47	M44	X	-.19	-.19	0	%100
48	M44	Z	-.329	-.329	0	%100
49	M45	X	-.191	-.191	0	%100
50	M45	Z	-.331	-.331	0	%100
51	M46	X	-.195	-.195	0	%100
52	M46	Z	-.337	-.337	0	%100
53	M47	X	-.195	-.195	0	%100
54	M47	Z	-.337	-.337	0	%100
55	M48	X	-.195	-.195	0	%100
56	M48	Z	-.337	-.337	0	%100
57	M49	X	-.195	-.195	0	%100
58	M49	Z	-.337	-.337	0	%100
59	M50	X	-.034	-.034	0	%100
60	M50	Z	-.059	-.059	0	%100

Member Area Loads

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

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N51	max	916.459	10	1167.495	21	49.757	2	1.076	8	.784	10	.675	10
2		min	-498.643	28	492.081	2	-2771.027	20	-.542	2	-.303	4	-.24	4
3	N52	max	488.347	34	1092.352	14	2840.839	14	1.238	2	.245	34	.595	40
4		min	-807.396	50	465.389	8	-300.452	8	-.654	8	-.734	40	-.161	10
5	N73	max	310.752	10	66.274	15	1427.937	11	0	51	0	51	0	51
6		min	-311.493	4	27.76	9	-1427.772	5	0	1	0	1	0	1
7	Totals:	max	1531.122	10	2309.036	23	2099.394	1						
8		min	-1531.123	4	1051.084	5	-2099.393	7						

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

	Member	Shape	Code Check	Loc[ft]	LC	Shea...	Loc...	Dir	LC	phi*Pnc...	phi*Pn...	phi*Mn y-...	phi*Mn z-z [...	...	Eqn
1	M1	PIPE_2.5	.163	3.5	8	.072	1.75		20	15797.3	50715	3.596	3.596	2...	H1-1b
2	M2	PIPE_2.5	.172	3.5	8	.086	10.25		29	15797.3	50715	3.596	3.596	2...	H1-1b
3	MP4A	PIPE_2.0	.112	4.375	50	.030	4.375		11	23808.54	32130	1.872	1.872	1...	H1-1b
4	MP3A	PIPE_2.0	.174	1.042	7	.097	1.042		5	23808.54	32130	1.872	1.872	1...	H1-1b
5	MP2A	PIPE_2.0	.100	4.375	41	.047	4.375		3	20866.7...	32130	1.872	1.872	2...	H1-1b
6	MP1A	PIPE_2.0	.052	1.094	18	.036	4.375		9	23808.54	32130	1.872	1.872	1...	H1-1b
7	M23	PL1/2X3	.264	0	30	.055	.22	y	11	47751.05	48600	.506	3.038	1...	H1-1b
8	M24	PL1/2X3	.310	0	21	.081	.22	y	41	47751.05	48600	.506	3.038	1...	H1-1b
9	M25	PL1/2X3	.290	0	13	.073	.22	y	45	47751.05	48600	.506	3.038	1...	H1-1b
10	M26	PL1/2X3	.250	0	27	.052	0	y	11	47751.05	48600	.506	3.038	1...	H1-1b
11	M29	PIPE_4.0	.148	5.5	2	.159	5.5		14	83097.9...	93240	10.631	10.631	3...	H1-1b
12	M32	PIPE_2.0	.210	5.682	30	.065	6.061		33	20683.13	32130	1.872	1.872	2...	H1-1b
13	M33	PIPE_2.0	.246	5.682	21	.101	.379		11	20683.13	32130	1.872	1.872	2...	H1-1b
14	M34	PIPE_2.0	.250	5.619	14	.197	.379		5	20683.13	32130	1.872	1.872	2...	H1-1b
15	M35	PIPE_2.0	.217	5.619	27	.093	.379		27	20683.13	32130	1.872	1.872	2...	H1-1b
16	M36	PL1/2X3	.233	0	5	.034	0	y	5	45624.2...	48600	.506	3.038	1...	H1-1b
17	M37	PL1/2X3	.026	0	42	.016	0	y	11	45624.2...	48600	.506	3.038	1...	H1-1b
18	M38	PL1/2X3	.127	.417	27	.043	0	y	27	45624.2...	48600	.506	3.038	1...	H1-1b
19	M39	PL1/2X3	.529	.417	5	.064	.417	y	3	45624.2...	48600	.506	3.038	1...	H1-1b
20	M40	PIPE_2.0	.398	.521	5	.121	.495		11	29810.2...	32130	1.872	1.872	1...	H1-1b
21	M41	PIPE_2.0	.012	0	30	.005	0		5	29810.2...	32130	1.872	1.872	2...	H1-1b
22	M42	1.5x0.06	.209	2.081	26	.020	0		9	5120.784	8550.1...	.327	.327	1...	H1-1a
23	M43	1.5x0.06	.078	1.958	14	.021	3.917		8	5531.923	8550.1...	.327	.327	1...	H1-1b
24	M44	1.5x0.06	.107	1.958	24	.034	3.917		7	5531.923	8550.1...	.327	.327	1...	H1-1b
25	M45	1.5x0.06	.260	2.081	24	.026	0		12	5120.784	8550.1...	.327	.327	1...	H1-1a
26	M46	1.5x0.06	.210	1.806	22	.018	0		11	6237.37	8550.1...	.327	.327	1...	H1-1a
27	M47	1.5x0.06	.122	3.333	24	.026	0		11	6237.37	8550.1...	.327	.327	1...	H1-1b*
28	M48	1.5x0.06	.107	3.333	27	.018	0		11	6237.37	8550.1...	.327	.327	1...	H1-1b*
29	M49	1.5x0.06	.179	3.333	29	.016	0		11	6237.37	8550.1...	.327	.327	1...	H1-1b*
30	M50	PIPE_2.0	.628	9.394	10	.011	0		22	3023.78	32130	1.872	1.872	2...	H1-1a

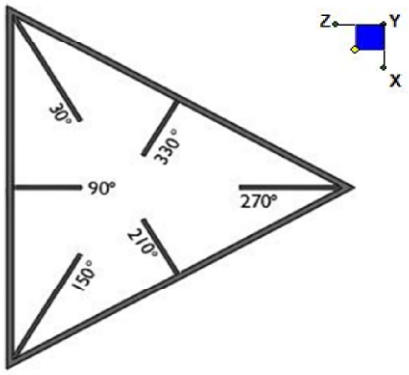
Client:	Verizon	Date:	7/2/2021
Site Name:	Colchester CT		
Project No.	21777749A		
Title:	Mount Analysis	Page:	1

Version 3.1

I. Mount-to-Tower Connection Check

RISA Model Data

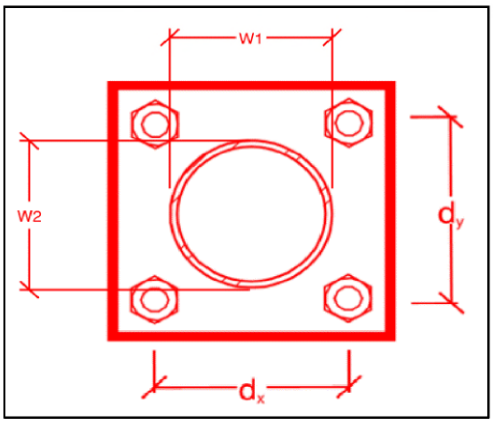
Nodes *(labeled per RISA)*	Orientation *(per graphic of typical platform)*
N51	120
N52	120



TYPICAL PLATFORM

Tower Connection Bolt Checks

Any moment resistance?:	yes
Bolt Quantity per Reaction:	4
d_x (in) *(Delta X of typ. bolt config. sketch)* :	7
d_y (in) *(Delta Y of typ. bolt config. sketch)* :	2
Bolt Type:	A307
Bolt Diameter (in):	0.5
Required Tensile Strength (kips):	12.1
Required Shear Strength (kips):	5.6
Tensile Strength / bolt (kips):	6.1
Shear Strength / bolt (kips):	3.8
Tensile Capacity Overall:	**49.9%***
Shear Capacity Overall:	**36.4%**



**Note: Tension reduction not required if tension or shear capacity < 30%*

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Passing Mount Analysis

Purpose – to provide Maser Consulting Connecticut the proper documentation in order to complete the required Mount Desktop review of the Post Modification Inspection Report.

- Contractor is responsible for making certain the photos provided as noted below provide confirmation that the installation was completed in accordance with this Passing Mount Analysis.
- Contractor shall relay any data that can impact the performance of the mount, this includes safety issues.

Base Requirements:

- Any special photos outside of the standard requirements will be indicated on the passing MA
- Verification that loading is as communicated in the Passing Mount Analysis. NOTE If loading is different than what is conveyed contact Maser Consulting Connecticut immediately.
- Each photo should be time and date stamped
- Photos should be high resolution and submitted in a Zip File and should be organized in the file structure as depicted in Schedule A attached.
- Contractor shall ensure that the safety climb wire rope is supported and not adversely impacted by the install of the modification components. This may involve the install of wire rope guides, or other items to protect the wire rope.
- The photos in the file structure should be uploaded to ***https://pmi.vzwsmart.com*** as depicted on the drawings

Photo Requirements:

- *Base and "During Installation Photos"*
  - Base pictures include
    - Photo of Gate Signs showing the tower owner, site name, and number
    - Photo of carrier shelter showing the carrier site name and number if available
    - Photos of the galvanizing compound and/or paint used (if applicable), clearly showing the label and name
  - "During Installation Photos if provided - must be placed only in this folder
- *Photos taken at ground level*
  - Overall tower structure before and after installation of the equipment modifications
  - Photos of the appropriate mount before and after installation of the modifications; if the mounts are at different rad elevations, pictures must be provided for all elevations that the modifications were installed
- *Photos taken at Mount Elevation*
  - Photos showing each individual sector before and also after installation of equipment.
    - These photos should also certify that the placement and geometry of the equipment on the mount is as depicted on the sketch and table in the mount analysis

- Photos showing the safety climb wire rope above and below the mount prior to modification.
- Photos showing the climbing facility and safety climb if present.

Antenna & equipment placement and Geometry Confirmation:

- The contractor must certify that the antenna & equipment placement and geometry is in accordance with the antenna placement diagrams as included in this mount analysis.

☐ The contractor certifies that the photos support and the equipment on the mount is as depicted on the antenna placement diagrams as included in this mount analysis.

☐ The contractor notes that the equipment on the mount is not in accordance with the antenna placement diagrams and has accordingly marked up the diagrams or provided a diagram outlining the differences.

Certifying Individual: Company _____

Name _____

Signature _____

Special Instructions / Validation as required from the MA or any other information the contractor deems necessary to share that was identified:

Issue:

1. Contractor shall reinforce the Channel connection connecting the Mast pipe and the tower leg with Pipe Mount Reinforcement Kit (Site Pro 1 Part #: R5-REINF or EOR approved equivalent).

Response:

Schedule A – Photo & Document File Structure

- VzW Site Number / Name
  - Base & “During Installation” Photos
  - Pre-Installation Photos
    - Alpha
    - Beta
    - Gamma
    - Ground Level
    - Tape Drop
  - Post-Installation Photos
    - Alpha
    - Beta
    - Gamma
    - Ground Level
    - Tape Drop
    - Photos of climbing facility and safety climb – If Present
  - Certifications – Submission of this document including certifications
  - Specific Required Additional Photos

Structure: 467126-VZW - COLCHESTER CT

Sector: **A** 6/30/2021

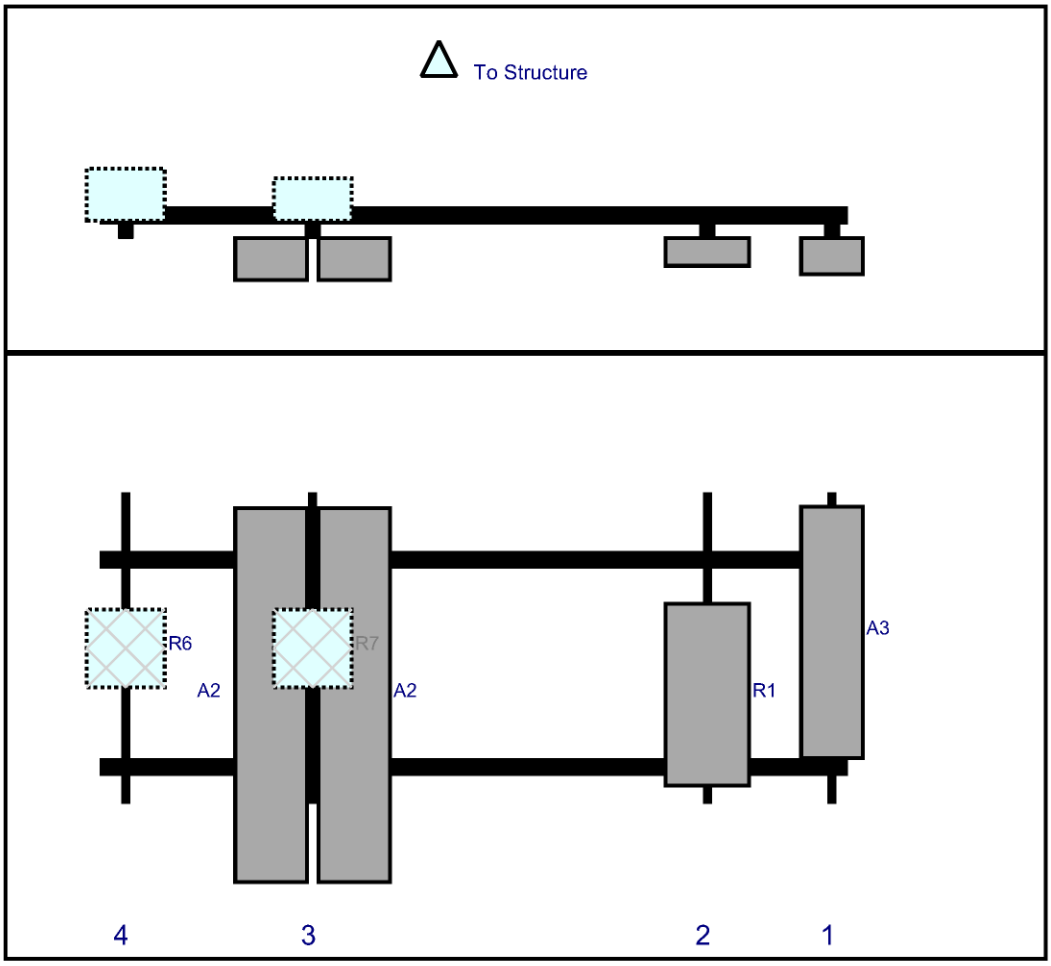
Structure Type: Self Support 10058930

Mount Elev: 219.50 Page: 1

MASER CONSULTING CONNECTICUT

Plan View

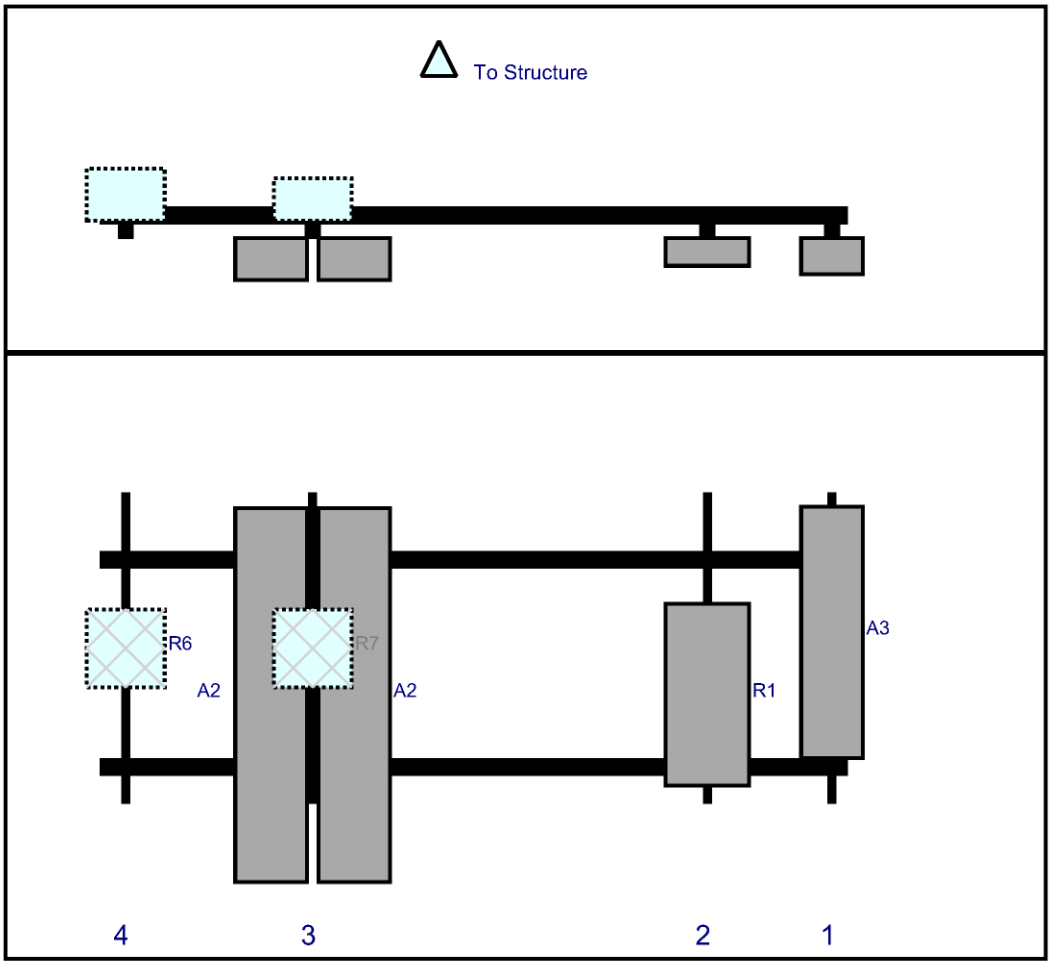
Front View
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A3	LNX-6512DS-VTM	48.5	11.9	141	1	a	Front	27	0	Retained	04/22/2021
R1	MT6407-77A	35.1	16.1	117	2	a	Front	39	0	Added	
A2	JAHH-65B-R3B	72	13.8	41	3	a	Front	39	-8	Retained	04/22/2021
A2	JAHH-65B-R3B	72	13.8	41	3	b	Front	39	8	Retained	04/22/2021
R7	B5/B13 RHH-BR04C	15	15	41	3	a	Behind	30	0	Retained	04/22/2021
R6	B2/B66A RRH-BR049	15	15	5	4	a	Behind	30	0	Retained	04/22/2021

Plan View

Front View
Looking at Structure



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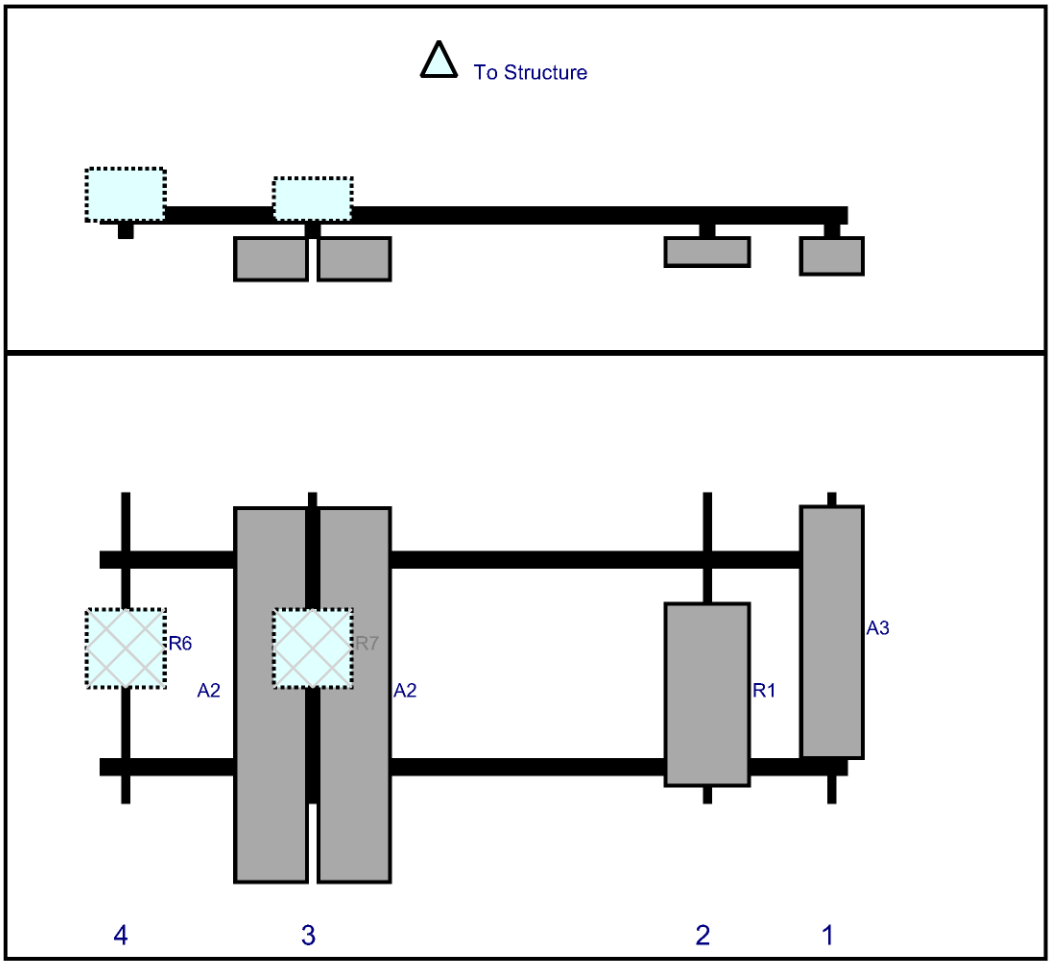
A2	JAHH-65B-R3B	72	13.8	41	3	b	Front	39	8	Retained	04/22/2021
R7	B5/B13 RHH-BR04C	15	15	41	3	a	Behind	30	0	Retained	04/22/2021
R6	B2/B66A RRH-BR049	15	15	5	4	a	Behind	30	0	Retained	04/22/2021

Plan View

Front View
Looking at Structure



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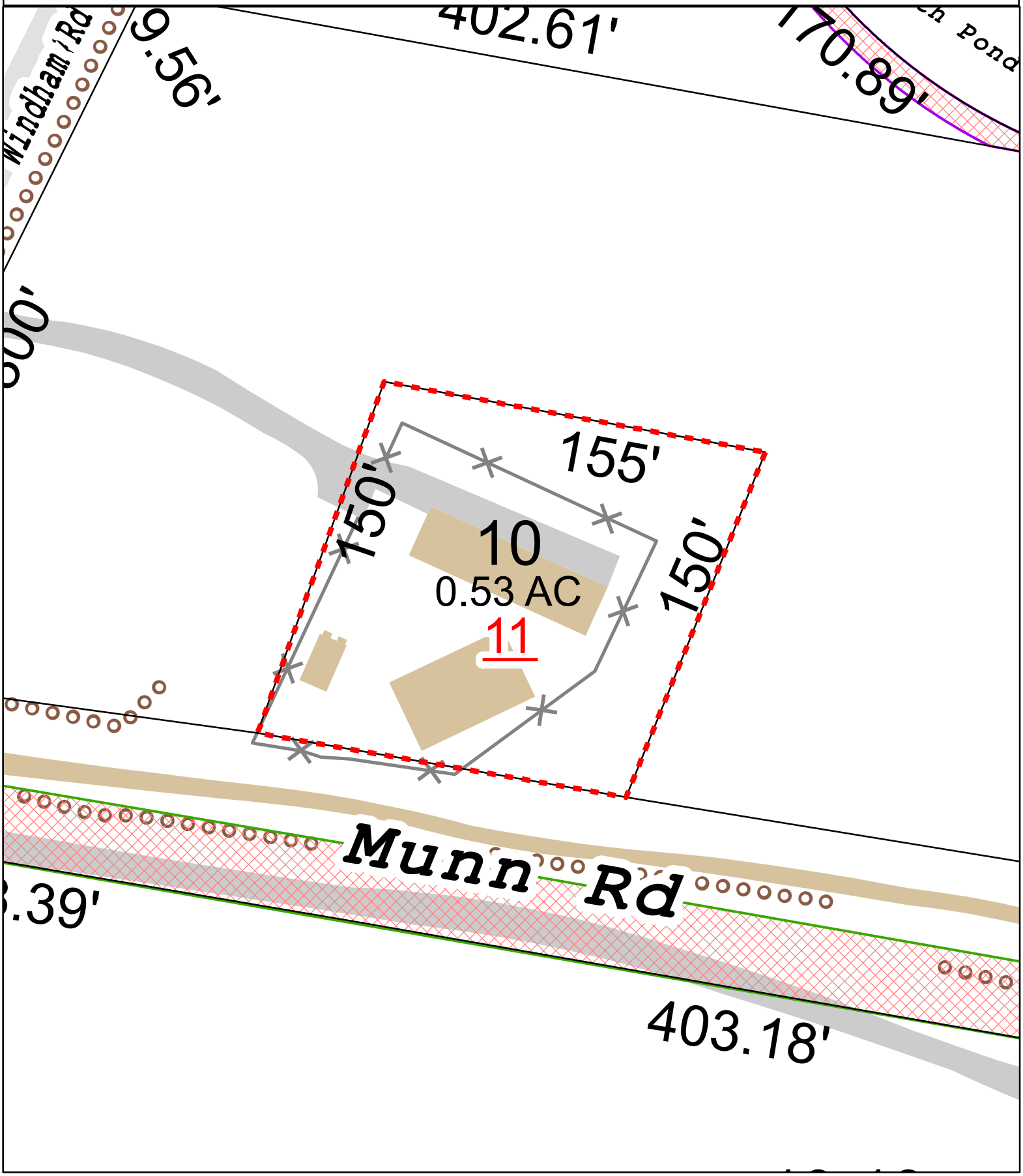
A2	JAHH-65B-R3B	72	13.8	41	3	b	Front	39	8	Retained	04/22/2021
R7	B5/B13 RHH-BR04C	15	15	41	3	a	Behind	30	0	Retained	04/22/2021
R6	B2/B66A RRH-BR049	15	15	5	4	a	Behind	30	0	Retained	04/22/2021

ATTACHMENT 5

Town of Colchester, Connecticut - Assessment Parcel Map
Parcel: 06-04-010-000
Address: 11 MUNN RD



Approximate Scale: 1 inch = 50 feet
0 25 50 75 100 Feet

Map Produced: April 2022 / Grand List: 2021

Disclaimer: This map is for informational purposes only All information is subject to verification by any user. The Town of Colchester and its mapping contractors assume no legal responsibility for the information contained herein.

Town of Colchester, CT

Property Report | Map Block Lot 06-04/010-000 | PID 5602 | Building # 1 | Section # 1 | Account C0515000

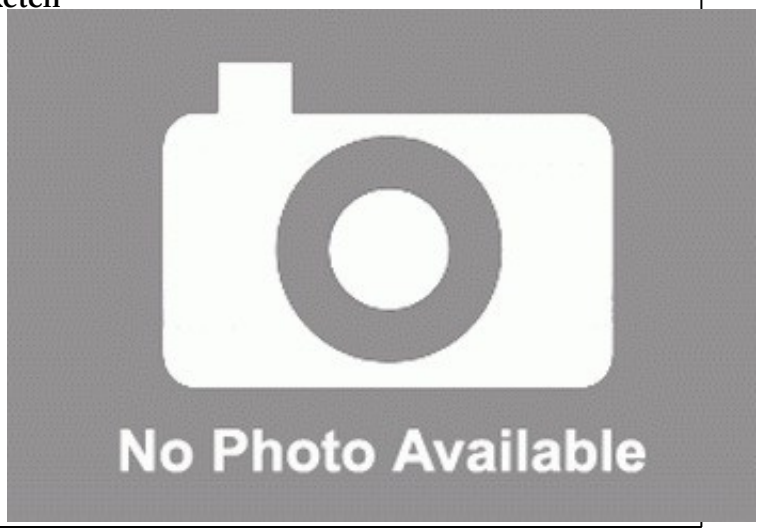
Property Information

Property Location	11 MUNN RD
Owner	CONNECTICUT STATE OF
Co-Owner	na
Mailing Address	165 CAPITOL AVE HARTFORD CT 06106
Land Use	901V State MDL-00
Land Class	E
Zoning Code	R60
Census Tract	

Neighborhood	
Acreage	0.53
Utilities	UNKNOWN
Lot Setting/Desc	UNKNOWN UNKNOWN
Additional Info	

Photo

Sketch



Primary Construction Details

Year Built	0	Bedrooms	0	Exterior Walls	
Stories		Full Bathrooms	0	Exterior Walls 2	NA
Building Style	UNKNOWN	Half Bathrooms	0	Interior Walls	
Building Use	Vacant	Extra Fixtures	0	Interior Walls 2	NA
Building Condition		Bath Style		Heating Type	
Interior Floors 1		Kitchen Style		Heating Fuel	
Interior Floors 2	NA	Roof Style		Sq. Ft. Basement	
Total Rooms	0	Roof Cover		Fin BSMT Quality	
Basement Garages		AC Type		Extra Kitchens	
Occupancy		Fireplaces	0		
Building Grade					

Report Created On 6/15/2022

Town of Colchester, CT

Property Report | Map Block Lot **06-04/010-000** | PID **5602** | Building # **1** | Section # **1** | Account **C0515000**

Valuation Summary

(Assessed value = 70% of Appraised Value)

Item	Appraised	Assessed
Buildings	0	0
Extras	0	0
Improvements		
Outbuildings	0	0
Land	62800	44000
Total	62800	44000

Outbuilding and Extra Features

Type	Description

Sub Areas

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
Total Area		0

Sales History

Owner of Record	Book/ Page	Sale Date	Sale Price
CONNECTICUT STATE OF	0082/0250	1/7/2022	0

Report Created On **6/15/2022**

ATTACHMENT 6

UNITED STATES POSTAL SERVICE®

COLCHESTER

Certificate of Mailing — Firm

Name and Address of Sender	TOTAL NO. of Pieces Listed by Sender	TOTAL NO. of Pieces Received at Post Office™	Affix Stamp Here *Postmark with Date of Receipt.*
Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103		3	neopost 07/19/2022 US POSTAGE $003.09⁰ ZIP 06103 041L12203937
	Postmaster, per *(name of receiving employee)*		

JUL 19 2022

USPS® Tracking Number / Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.	Andreas Bisbikos, First Selectman Town of Colchester 127 Norwich Avenue Colchester, CT 06415				
2.	Ariel Lago, Zoning Enforcement Officer Town of Colchester 127 Norwich Avenue Colchester, CT 06415				
3.	State of Connecticut Attn: Brian Benito Department of Emergency Services and Public Protection 1111 Country Club Road Middletown, CT 06457				
4.					
5.					
6.					