Crown Castle
3 Corporate Park Drive, Suite 101
Clifton Park, NY 12065

August 2, 2020

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

RE: **Notice of Exempt Modification for AT&T - 806377**
197 South Street, Vernon, CT 06066
Latitude: 41° 51′ 12.51″ / Longitude: -72° 27′ 7.52″

Dear Ms. Bachman:

AT&T currently maintains nine (9) antennas at the 104-foot mount on the existing 132-foot Self-Support Tower, located at 197 South Street, Vernon, CT. The property is owned by the Connecticut Water Company and the Tower is owned by Crown Castle. AT&T now intends to remove and replace three (3) existing antennas with six (6) new antennas for a final antenna inventory of twelve (12) antennas. The new antennas will be installed at the 104-ft level of the tower.

The facility was approved by the Connecticut Siting Council in Docket No. 58A on April 22, 1987. The approval was given with conditions which this exempt modification follows.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Daniel Champagne, Mayor for the Town of Vernon, George McGregor, Town Planner, the Connecticut Water Company as the property owner and Crown Castle is the tower owner.

1. The proposed modifications will not result in an increase in the height of the existing tower.

2. The proposed modifications will not require the extension of the site boundary.

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

4. The operation of the replacement antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communication Commission safety standard.
5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.

6. The existing structure and its foundation can support the proposed loading.

For the foregoing reasons, AT&T respectfully submits that the proposed modifications to the above-reference telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2). Please send approval/rejection letter to Attn: Anne Marie Zsamba.

Sincerely,

Anne Marie Zsamba
Site Acquisition Specialist
3 Corporate Park Drive, Suite 101
Clifton Park, NY 12065
(201) 236-9224
AnneMarie.Zsamba@crowncastle.com

Attachments

cc:

The Honorable Daniel Champagne, Mayor (*via email only to dchampagne@vernon-ct.gov*)
Vernon Town Hall
14 Park Place, 3rd Floor
Vernon, CT 06066

George McGregor, Town Planner (*via email only to gmcgregor@vernon-ct.gov*)
55 West Main Street, 2nd Floor
Vernon, CT 06066

Connecticut Water Company (*via email only to abraig@ctwater.com*)
93 West Main Street
Clinton, CT 06413-1600

Crown Castle, Tower Owner

From: Zsamba, Anne Marie
To: abraig@ctwater.com
Subject: Notice of Exempt Modification - AT&T - 197 South Street, Vernon - 806377
Date: Sunday, August 2, 2020 3:57:00 PM
Attachments: EM-AT&T-197 South Street Vernon-806377-notice.pdf

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Dear Connecticut Water Company:

Attached please find AT&T's exempt modification application that is being submitted to the Connecticut Siting Council, this coming Monday, August 3, 2020.

In light of the present circumstances with Covid-19, The Council has advised that electronic notification of this filing is acceptable. If you could kindly confirm receipt. Thank you.

Best,
Anne Marie Zsamba

ANNE MARIE ZSAMBA
Site Acquisition Specialist
T: (201) 236-9224
M: (518) 350-3639
F: (724) 416-6112

CROWN CASTLE
3 Corporate Park Drive, Suite 101
Clifton Park, NY 12065
CrownCastle.com

From: Zsamba, Anne Marie
To: "dchampagne@vernon-ct.gov"
Subject: Notice of Exempt Modification - AT&T - 197 South Street, Vernon - 806377
Date: Sunday, August 2, 2020 3:56:00 PM
Attachments: EM-AT&T-197 South Street Vernon-806377-notice.pdf

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Dear Mayor Champagne:

Attached please find AT&T's exempt modification application that is being submitted to the Connecticut Siting Council, this coming Monday, August 3, 2020.

In light of the present circumstances with Covid-19, The Council has advised that electronic notification of this filing is acceptable. If you could kindly confirm receipt. Thank you.

Best,
Anne Marie Zsamba

ANNE MARIE ZSAMBA
Site Acquisition Specialist
T: (201) 236-9224
M: (518) 350-3639
F: (724) 416-6112

CROWN CASTLE
3 Corporate Park Drive, Suite 101
Clifton Park, NY 12065
CrownCastle.com

From: Zsamba, Anne Marie
To: gmcgregor@vernon-ct.gov
Subject: Notice of Exempt Modification - AT&T - 197 South Street, Vernon - 806377
Date: Sunday, August 2, 2020 3:57:00 PM
Attachments: EM-AT&T-197 South Street Vernon-806377-notice.pdf

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Dear Town Planner McGregor:

Attached please find AT&T's exempt modification application that is being submitted to the Connecticut Siting Council, this coming Monday, August 3, 2020.

In light of the present circumstances with Covid-19, The Council has advised that electronic notification of this filing is acceptable. If you could kindly confirm receipt. Thank you.

Best,
Anne Marie Zsamba

ANNE MARIE ZSAMBA
Site Acquisition Specialist
T: (201) 236-9224
M: (518) 350-3639
F: (724) 416-6112

CROWN CASTLE
3 Corporate Park Drive, Suite 101
Clifton Park, NY 12065
CrownCastle.com

Exhibit A

Original Facility Approval

B1

DOCKET NO. 58A

AN APPLICATION FOR AN AMENDMENT TO THE CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR TELECOMMUNICATIONS TOWERS AND ASSOCIATED EQUIPMENT TO PROVIDE CELLULAR SERVICE IN HARTFORD, MIDDLESEX, AND TOLLAND COUNTIES.	:	CONNECTICUT SITING COUNCIL
	:	April 22, 1987

DECISION AND ORDER

The Connecticut Siting Council (Council) hereby amends the Certificate of Environmental Compatibility and Public Need issued pursuant to sections 16-50g through 16-50x of the Connecticut General Statutes of Connecticut (CGS) for the construction, operation, and maintenance of cellular mobile telephone telecommunications towers and associated equipment in Hartford, Tolland, and Middlesex Counties to permit the relocation of the Vernon tower 250 feet to the west, subject to the conditions below.

1. The tower shall be no taller than necessary to provide the proposed service, and in no event shall exceed a total height, including antennas, of 143 feet.
2. The Certificate holder shall submit a development and management plan (D&M plan) for the Vernon site, pursuant to sections 16-50j-75 through 16-50j-77 of the Regulations of State Agencies (RSA). The D&M plan shall provide plans for evergreen screening around the fenced perimeter of the tower site.
3. This facility shall be constructed, operated, and maintained as specified in the Council's record and in the plan required by order number 2.

4. The certificate holder shall comply with any future radiofrequency (RF) standards promulgated by state or federal regulatory agencies. Upon the establishment of any new governmental RF standards, the facility shall be brought into compliance with such standards.

5. The certificate holder shall permit public or private entities to share space on the tower approved herein, for due consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing. In addition to complying with section 16-50j-73 of the RSA, the certificate holder shall notify the Council of the addition of any equipment to the approved tower.

6. A chain link fence not lower than eight feet shall surround the tower and associated equipment.

7. Unless necessary to comply with order eight, no lights shall be installed on this tower.

8. The facility's construction and any future tower sharing shall be in accordance with all applicable federal, state, and municipal laws and regulations. Shared uses by entities not subject to Council jurisdiction pursuant to Section 16-50k of the CGS shall be subject to all applicable federal, state, and municipal laws and regulations.

9. Construction activities shall take place during daylight working hours.

Exhibit B

Property Card

Tax ID 39-065B-0016A Printed 02/02/2019

CONNECTICUT WATER CO
93 WEST MAIN ST
CLINTON, CT 06413-1600
CENSUS TRACT: 530400

Neighborhood Number
11900
Neighborhood Name
General Commercial A
TAXING DISTRICT INFORMATION

Jurisdiction Name	Town of Vernon
Area	146
Routing Number	5887

Transfer of Ownership

Owner	Consideration	Transfer Date	Deed Book/Page	Deed Type
NA	0	12/21/1978	351 39	

Site Description

Topography

Public Utilities
Water, Sewer, Gas, Electric
Street or Road
Paved
Neighborhood

Zoning:
R-22
Legal Acres:
2.0000

Valuation Record

Assessment Year		2011	2016	2018					
Reason for Change		2011 REVAL	2016 Reval	2018 ASMT					
Market	L	156820	183200	183200					
	I	270220	263240	263240					
	T	427040	446440	446440					
70% Assessed/Use	L	109770	128240	128240					
	I	189160	184270	184270					
	T	298930	312510	312510					

Land Size

Land Type	Rating, Soil ID - or - Actual Frontage	Acreage - or - Effective Frontage	Square Feet - or - Effective Depth	Influence Factor

Tax ID 39-065B-0016A Printed 02/02/2019

Physical Characteristics

ROOFING

Other

WALLS

	B	1	2	U
Frame		Yes		
Guard	Yes	Yes	Yes	Yes

FRAMING

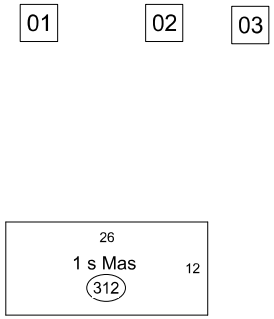
	B	1	2	U
F Res	0	312	0	0

FINISH

	UF	SF	FO	FD
1	312	0	0	0
Total	312	0	0	0

HEATING AND AIR CONDITIONING

	B	1	2	U



Special Features

Description

Summary of Improvements

ID	USE	Story Height	Const Type	Grade	Year Cons	Eff Year	Cond	Size or Area
C	UTLSTOR	0.00		Avg	1963	1995	AV	312
01	FENCECL	6.00	51C	Avg	1963	1985	AV	510
02	UTLSHED	0.00	4	Avg	1963	1985	AV	300
03	TANKWATR	0.00	51	Good	1963	2000	AV	125000

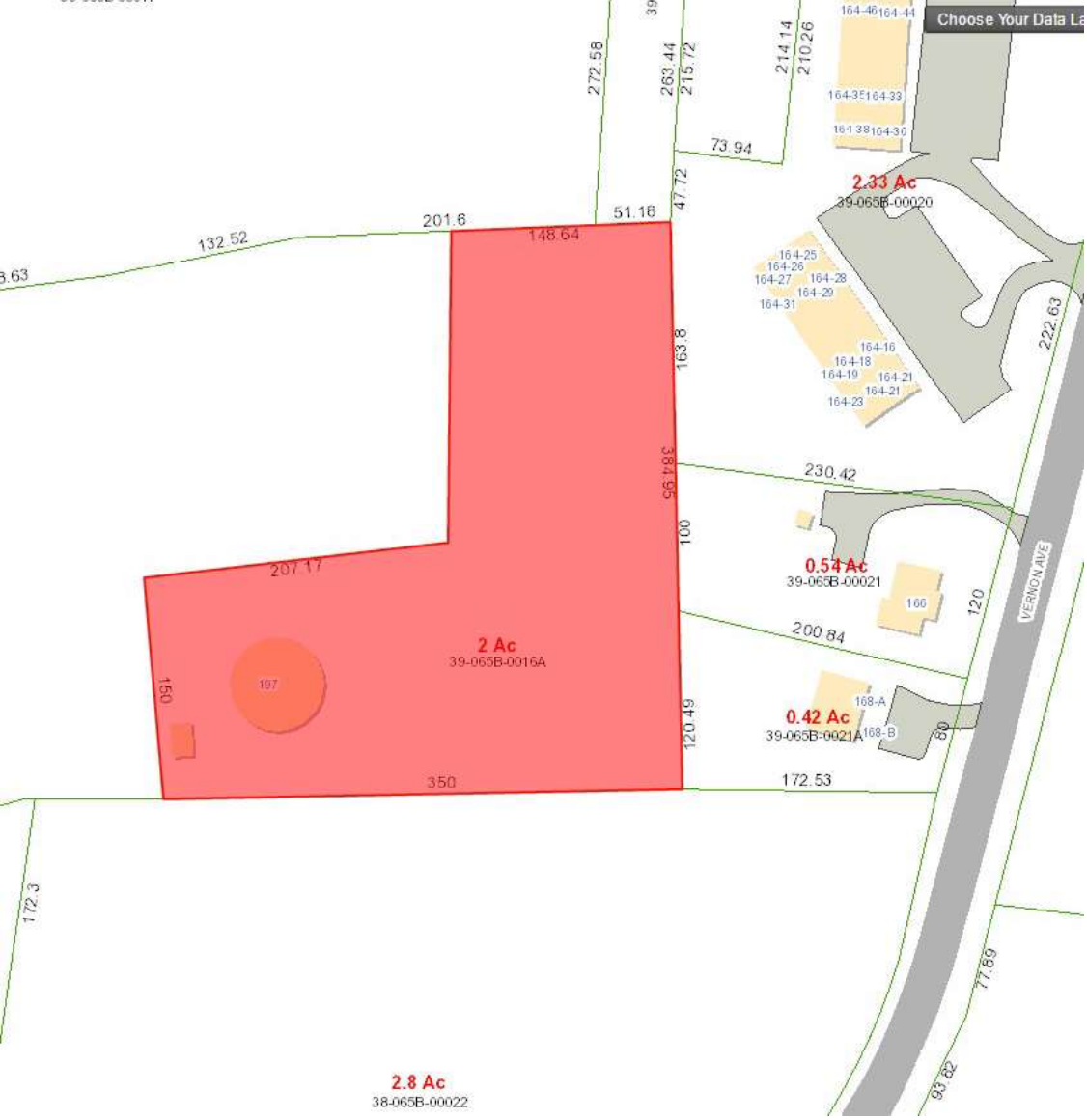

Choose Your Data La
2 Ac
39-065B-0016A
2.33 Ac
39-065B-00020
0.54 Ac
39-065B-00021
0.42 Ac
39-065B-0021A
2.8 Ac
38-065B-00022
VERNON AVE
197
166
168-A
168-B
164-46
164-44
164-35
164-33
164-38
164-30
164-25
164-26
164-27
164-28
164-29
164-31
164-16
164-18
164-19
164-21
164-21
164-23
272.58
263.44
215.72
214.14
210.26
73.94
47.72
51.16
148.64
201.6
132.52
163.8
384.95
100
230.42
222.63
207.17
200.84
120
150
120.49
350
172.53
80
172.3
77.89
93.62

Exhibit C

Construction Drawings

AT&T

AT&T SITE NUMBER:	CTL01082
AT&T SITE NAME:	VERNON NE
AT&T FA CODE:	10035095
AT&T PACE NUMBER:	MRCTB047494, MRCTB047495, MRCTB047522, MRCTB047512, MRCTB047523
AT&T PTN NUMBER:	2051A0VN06, 2051A0VMPV, 2051A0VM0J, 2051A0VMXX, 2051A0VMS4
BUSINESS UNIT #:	806377
SITE ADDRESS:	197 SOUTH ST VERNON CT, 06066
COUNTY:	TOLLAND
TOWER HEIGHT:	132'-0"
SITE TYPE:	SELF-SUPPORT TOWER

PROJECT: AT&T 4C/5C/5G NR

SITE INFORMATION

CROWN CASTLE USA INC. SITE NAME:	HRT 084 943242
SITE ADDRESS:	197 SOUTH ST VERNON CT, 06066
COUNTY:	TOLLAND
MAP/PARCEL #:	T.B.D.
AREA OF CONSTRUCTION:	EXISTING
LATITUDE:	41.853463
LONGITUDE:	-72.452081
LAT/LONG TYPE:	NAD83
GROUND ELEVATION:	650'
CURRENT ZONING:	RESIDENTIAL
JURISDICTION:	CITY OF VERNON
OCCUPANCY CLASSIFICATION:	U
TYPE OF CONSTRUCTION:	IIB
A.D.A. COMPLIANCE:	FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION
PROPERTY OWNER:	CITY OF VERNON
TOWER OWNER:	CROWN CASTLE USA INC 2000 CORPORATE DRIVE CANONSBURG, PA 15317
CARRIER/APPLICANT:	AT&T TOWER ASSET GROUP 575 MOROSGO DRIVE ATLANTA, GA 30324-3300
ELECTRIC PROVIDER:	NOT PROVIDED
TELCO PROVIDER:	NOT PROVIDED

PROJECT TEAM

A&E FIRM:	B+T GROUP 1717 S BOULDER AVE, SUITE 300 TULSA, OK 74119 moakes@btgrp.com
CROWN CASTLE USA INC. DISTRICT CONTACTS:	3530 TORINGDON WAY, SUITE 300 CHARLOTTE, NC 28277 TODD WEBER - PROJECT MANAGER todd.weber@crowncastle.com

DRAWING INDEX

SHEET #	SHEET DESCRIPTION
T-1	TITLE SHEET
T-2	GENERAL NOTES
C-1.1	SITE PLAN
C-1.2	FINAL EQUIPMENT PLAN
C-2	FINAL ELEVATION & ANTENNA PLANS
C-3	FINAL ANTENNA & FEEDLINE SCHEDULE
C-4	EQUIPMENT DETAILS
G-1	GROUNDING SCHEMATIC
G-2	GROUNDING DETAILS
ATTACHED	PLUMBING DIAGRAM

ALL DRAWINGS CONTAINED HEREIN ARE FORMATTED FOR 24x36. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

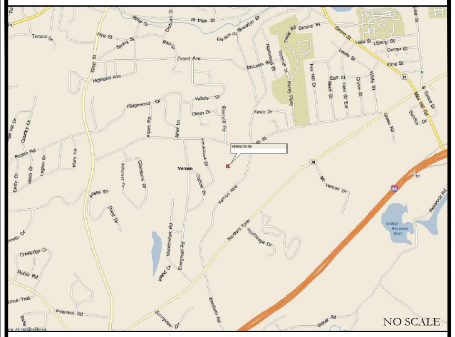
PROJECT DESCRIPTION

THE PURPOSE OF THIS PROJECT IS TO ENHANCE BROADBAND CONNECTIVITY AND CAPACITY TO THE EXISTING ELIGIBLE WIRELESS FACILITY.

TOWER SCOPE OF WORK
- REMOVE (1) CCI - TPA-65R-LCUUUU-H8-K ANTENNAS
- REMOVE (2) QUINTEL - QS6512-2 ANTENNAS
- REMOVE (3) ALCATEL LUCENT - RRUS-11 B12 RRHs
- REMOVE (3) CCI - DTMABP7819VG12A TMAs
- RELOCATE (3) ERICSSON - RRUS-32 B30 RRHs
- INSTALL (2) CCI - TPA65R-BU6DA-K ANTENNAS
- INSTALL (1) CCI - TPA65R-BU8DA-K ANTENNAS
- INSTALL (2) CCI - DMP65R-BU6DA ANTENNAS
- INSTALL (1) CCI - DMP65R-BU8DA ANTENNAS
- INSTALL (3) ERICSSON - 4478 B14 RRHs
- INSTALL (3) ERICSSON - 4449 B5/B12
- INSTALL (3) ERICSSON - 8843 B2/B66A
- INSTALL (6) VALMONT - RRUDSM BACK TO BACK RRH MOUNTS
- INSTALL (1) RAYCAP - DC9-48-60-RM SQUID
- INSTALL (3) DC TRUNKS
- INSTALL (1) 24 PAIR FIBER TRUNK

GROUND SCOPE OF WORK
- REMOVE (6) KATHREIN - 782-10250 DIPLEXERS
- REMOVE (1) 6601
- INSTALL (1) 6630 & (1) IDLe
- INSTALL (1) RAYCAP - DC12-48-60-25E
- INSTALL (21) UP CONVERTERS

LOCATION MAP



DEPART 20 LINDBERGH DR HARTFORD, CT 06114. HEAD NORTH ON LINDBERGH DR TOWARD MAXIM RD. TURN LEFT ONTO MAXIM RD. CONTINUE ONTO BRAINARD RD. TURN RIGHT ONTO THE RAMP TO I-91 N/I-84 N/SPRINGFIELD/BOSTON. MERGE ONTO US-5 N. CONTINUE ONTO CT-15 N. TAKE THE EXIT ON THE LEFT ONTO I-84 E TOWARD BOSTON. TAKE EXIT 66 FOR S FRONTAGE RD TOWARD TUNNEL RD. TURN LEFT ONTO CT-541/S FRONTAGE RD (SIGNS FOR BOLTON RD). TURN LEFT AT THE 1ST CROSS STREET ONTO CT-541. TURN RIGHT ONTO CT-30 N. TURN LEFT ONTO MEADOWLARK RD. TURN RIGHT ONTO EVERGREEN RD. TURN RIGHT ONTO OXBOW DR. TURN RIGHT ONTO KNOLLWOOD DR. ARRIVE AT VERNON NE.

SITE PHOTO

APPLICABLE CODES/REFERENCE DOCUMENTS

ALL WORK SHALL BE PERFORMED AND MATERIALS 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 THESE CODES:

CODE TYPE	CODE
BUILDING	2018 CONNECTICUT STATE BUILDING CODE (2015 IBC)
MECHANICAL	2018 CONNECTICUT STATE BUILDING CODE (2015 IMC)
ELECTRICAL	2018 CONNECTICUT STATE BUILDING CODE (2017 NEC)

REFERENCE DOCUMENTS:

STRUCTURAL ANALYSIS:	BLACK & VEATCH
DATED:	JUNE 9, 2020
MOUNT ANALYSIS:	POD GROUP
DATED:	JUNE 8, 2020
RFDS REVISION:	2
DATED:	6/3/20
ORDER ID:	517065
REVISION:	0

NOTE:
PRIOR TO ACCESSING/ENTERING THE SITE YOU MUST CONTACT THE CROWN NOC AT (800) 788-7011 & CROWN CONSTRUCTION MANAGER

CALL CONNECTICUT ONE CALL
(800) 922-4455 CBYD.COM
CALL 2 WORKING DAYS
BEFORE YOU DIG!

AT&T
575 MOROSGO DRIVE
ATLANTA, GA 30324-3300

CROWN CASTLE
3530 TORINGDON WAY, SUITE 300
CHARLOTTE, NC 28277

B+T GRP
1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

AT&T SITE NUMBER: **CTL01082**

BU #: **806377**
HRT 084 943242

197 SOUTH ST
VERNON CT, 06066

EXISTING
132'-0" SELF-SUPPORT TOWER

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	7/14/20	JCO	PRELIMINARY REVIEW	MJP
1	7/28/20	MLC	PRELIMINARY REVIEW	FWP

7/28/20

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/21

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

SHEET NUMBER:	REVISION:
T-1	1

78785_806377_HRT 084 943242.dwg - SheetT-1 - User: scody - Jul 30, 2020 - 9:50am

CROWN CASTLE USA INC. SITE ACTIVITY REQUIREMENTS:

1. NOTICE TO PROCEED– NO WORK SHALL COMMENCE PRIOR TO CROWN CASTLE USA INC. WRITTEN NOTICE TO PROCEED (NTP) AND THE ISSUANCE OF A PURCHASE ORDER. PRIOR TO ACCESSING/ENTERING THE SITE YOU MUST CONTACT THE CROWN CASTLE USA INC. NOC AT 800–788–7011 & THE CROWN CASTLE USA INC. CONSTRUCTION MANAGER.
2. "LOOK UP" – CROWN CASTLE USA INC. SAFETY CLIMB REQUIREMENT: THE INTEGRITY OF THE SAFETY CLIMB AND ALL COMPONENTS OF THE CLIMBING FACILITY SHALL BE CONSIDERED DURING ALL STAGES OF DESIGN, INSTALLATION, AND INSPECTION. TOWER MODIFICATION, MOUNT REINFORCEMENTS, AND/OR EQUIPMENT INSTALLATIONS SHALL NOT COMPROMISE THE INTEGRITY OR FUNCTIONAL USE OF THE SAFETY CLIMB OR ANY COMPONENTS OF THE CLIMBING FACILITY ON THE STRUCTURE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: PINCHING OF THE WIRE ROPE, BENDING OF THE WIRE ROPE FROM ITS SUPPORTS, DIRECT CONTACT OR CLOSE PROXIMITY TO THE WIRE ROPE WHICH MAY CAUSE FRICTIONAL WEAR, IMPACT TO THE ANCHORAGE POINTS IN ANY WAY, OR TO IMPEDE/BLOCK ITS INTENDED USE. ANY COMPROMISED SAFETY CLIMB, INCLUDING EXISTING CONDITIONS MUST BE TAGGED OUT AND REPORTED TO YOUR CROWN CASTLE USA INC. POC OR CALL THE NOC TO GENERATE A SAFETY CLIMB MAINTENANCE AND CONTRACTOR NOTICE TICKET.
3. PRIOR TO THE START OF CONSTRUCTION, ALL REQUIRED JURISDICTIONAL PERMITS SHALL BE OBTAINED. THIS INCLUDES, BUT IS NOT LIMITED TO, BUILDING, ELECTRICAL, MECHANICAL, FIRE, FLOOD ZONE, ENVIRONMENTAL, AND ZONING. AFTER ONSITE ACTIVITIES AND CONSTRUCTION ARE COMPLETED, ALL REQUIRED PERMITS SHALL BE SATISFIED AND CLOSED OUT ACCORDING TO LOCAL JURISDICTIONAL REQUIREMENTS.
4. ALL CONSTRUCTION MEANS AND METHODS; INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN, AND SHALL MEET ANSI/ASSE A10.48 (LATEST EDITION); FEDERAL, STATE, AND LOCAL REGULATIONS; AND ANY APPLICABLE INDUSTRY CONSENSUS STANDARDS RELATED TO THE CONSTRUCTION ACTIVITIES BEING PERFORMED. ALL RIGGING PLANS SHALL ADHERE TO ANSI/ASSE A10.48 (LATEST EDITION) AND CROWN CASTLE USA INC. STANDARD CED–STD–10253, INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION, TO CERTIFY THE SUPPORTING STRUCTURE(S) IN ACCORDANCE WITH ANSI/TIA–322 (LATEST EDITION).
5. ALL SITE WORK TO COMPLY WITH QAS–STD–10068 "INSTALLATION STANDARDS FOR CONSTRUCTION ACTIVITIES ON CROWN CASTLE USA INC. TOWER SITE" AND LATEST VERSION OF ANSI/TIA–1019–A–2012 "STANDARD FOR INSTALLATION, ALTERATION, AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS."
6. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY CROWN CASTLE USA INC. PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
7. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
8. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
9. THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
10. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION E) CONSTRUCTION SAFETY PROCEDURES.
11. ALL SITE WORK SHALL BE AS INDICATED ON THE STAMPED CONSTRUCTION DRAWINGS AND PROJECT SPECIFICATIONS, LATEST APPROVED REVISION.
12. CONTRACTOR SHALL KEEP THE SITE FREE FROM ACCUMULATING WASTE MATERIAL, DEBRIS, AND TRASH AT THE COMPLETION OF THE WORK. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
13. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK. SUBJECT TO THE APPROVAL OF CONTRACTOR, TOWER OWNER, CROWN CASTLE USA INC., AND/OR LOCAL UTILITIES.
14. THE CONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE REQUIRED BY LOCAL JURISDICTION AND SIGNAGE REQUIRED ON INDIVIDUAL PIECES OF EQUIPMENT, ROOMS, AND SHELTERS.
15. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE CARRIER'S EQUIPMENT AND TOWER AREAS.
16. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
17. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION AS SPECIFIED ON THE CONSTRUCTION DRAWINGS AND/OR PROJECT SPECIFICATIONS.
18. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
19. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
20. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
21. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.
22. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.

GENERAL NOTES:

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
   CONTRACTOR: GENERAL CONTRACTOR RESPONSIBLE FOR CONSTRUCTION
   CARRIER: AT&T
   TOWER OWNER: CROWN CASTLE USA INC.
2. THESE DRAWINGS HAVE BEEN PREPARED USING STANDARDS OF PROFESSIONAL CARE AND COMPLETENESS NORMALLY EXERCISED UNDER SIMILAR CIRCUMSTANCES BY REPUTABLE ENGINEERS IN THIS OR SIMILAR LOCALITIES. IT IS ASSUMED THAT THE WORK DEPICTED WILL BE PERFORMED BY AN EXPERIENCED CONTRACTOR AND/OR WORKPEOPLE WHO HAVE A WORKING KNOWLEDGE OF THE APPLICABLE CODE STANDARDS AND REQUIREMENTS AND OF INDUSTRY ACCEPTED STANDARD GOOD PRACTICE. AS NOT EVERY CONDITION OR ELEMENT IS (OR CAN BE) EXPLICITLY SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL USE INDUSTRY ACCEPTED STANDARD GOOD PRACTICE FOR MISCELLANEOUS WORK NOT EXPLICITLY SHOWN.
3. THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE MEANS OR METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY FOR PROTECTION OF LIFE AND PROPERTY DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, FORMWORK, SHORING, ETC. SITE VISITS BY THE ENGINEER OR HIS REPRESENTATIVE WILL NOT INCLUDE INSPECTION OF THESE ITEMS AND IS FOR STRUCTURAL OBSERVATION OF THE FINISHED STRUCTURE ONLY.
4. NOTES AND DETAILS IN THE CONSTRUCTION DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT, AND/OR AS PROVIDED FOR IN THE CONTRACT DOCUMENTS. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL NOTES, AND SPECIFICATIONS, THE GREATER, MORE STRICT REQUIREMENTS, SHALL GOVERN. IF FURTHER CLARIFICATION IS REQUIRED CONTACT THE ENGINEER OF RECORD.
5. SUBSTANTIAL EFFORT HAS BEEN MADE TO PROVIDE ACCURATE DIMENSIONS AND MEASUREMENTS ON THE DRAWINGS TO ASSIST IN THE FABRICATION AND/OR PLACEMENT OF CONSTRUCTION ELEMENTS BUT IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE DIMENSIONS, MEASUREMENTS, AND/OR CLEARANCES SHOWN IN THE CONSTRUCTION DRAWINGS PRIOR TO FABRICATION OR CUTTING OF ANY NEW OR EXISTING CONSTRUCTION ELEMENTS. IF IT IS DETERMINED THAT THERE ARE DISCREPANCIES AND/OR CONFLICTS WITH THE CONSTRUCTION DRAWINGS THE ENGINEER OF RECORD IS TO BE NOTIFIED AS SOON AS POSSIBLE.
6. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING CONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CROWN CASTLE.
7. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
8. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
9. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
10. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CARRIER AND CROWN CASTLE PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
11. CONTRACTOR IS TO PERFORM A SITE INVESTIGATION AND IS TO DETERMINE THE BEST ROUTING OF ALL CONDUITS FOR POWER, AND TELCO AND FOR GROUNDING CABLES AS SHOWN IN THE POWER, TELCO, AND GROUNDING PLAN DRAWINGS.
12. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF CROWN CASTLE USA INC.
13. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
14. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.

CONCRETE, FOUNDATIONS, AND REINFORCING STEEL:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST–IN–PLACE CONCRETE.
2. UNLESS NOTED OTHERWISE, SOIL BEARING PRESSURE USED FOR DESIGN OF SLABS AND FOUNDATIONS IS ASSUMED TO BE 1000 psf.
3. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (f'c) OF 3000 psi AT 28 DAYS, UNLESS NOTED OTHERWISE. NO MORE THAN 90 MINUTES SHALL ELAPSE FROM BATCH TIME TO TIME OF PLACEMENT UNLESS APPROVED BY THE ENGINEER OF RECORD. TEMPERATURE OF CONCRETE SHALL NOT EXCEED 90° AT TIME OF PLACEMENT.
4. CONCRETE EXPOSED TO FREEZE–THAW CYCLES SHALL CONTAIN AIR ENTRAINING ADMIXTURES. AMOUNT OF AIR ENTRAINMENT TO BE BASED ON SIZE OF AGGREGATE AND F3 CLASS EXPOSURE (VERY SEVERE). CEMENT USED TO BE TYPE II PORTLAND CEMENT WITH A MAXIMUM WATER–TO–CEMENT RATIO (W/C) OF 0.45.
5. ALL STEEL REINFORCING SHALL CONFORM TO ASTM A615. ALL WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A185. ALL SPLICES SHALL BE CLASS "B" TENSION SPLICES, UNLESS NOTED OTHERWISE. ALL HOOKS SHALL BE STANDARD 90 DEGREE HOOKS, UNLESS NOTED OTHERWISE. YIELD STRENGTH (Fy) OF STANDARD DEFORMED BARS ARE AS FOLLOWS:
   #4 BARS AND SMALLER . . . . . 40 ksi
   #5 BARS AND LARGER . . . . . 60 ksi
6. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:
   CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH . . . . . 3"
   CONCRETE EXPOSED TO EARTH OR WEATHER:
   #6 BARS AND LARGER . . . . . 2"
   #5 BARS AND SMALLER . . . . . 1–1/2"
   CONCRETE NOT EXPOSED TO EARTH OR WEATHER: . . . . . .
   SLAB AND WALLS . . . . . 3/4"
   BEAMS AND COLUMNS . . . . . 1–1/2"
7. A TOOLED EDGE OR A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNLESS NOTED OTHERWISE, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4. . . . . .

GREENFIELD GROUNDING NOTES:

1. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION AND AC POWER GES'S) SHALL BE BONDED TOGETHER AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
2. THE CONTRACTOR SHALL PERFORM IEEE FALL–OF–POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS, THE CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
3. THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT AND PROVIDE TESTING RESULTS.
4. METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
5. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
6. EACH CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, #6 STRANDED COPPER OR LARGER FOR INDOOR BTS; #2 BARE SOLID TINNED COPPER FOR OUTDOOR BTS.
7. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED BACK TO BACK CONNECTIONS ON OPPOSITE SIDE OF THE GROUND BUS ARE PERMITTED.
8. ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING SHALL BE #2 SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
11. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
12. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR AND EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
13. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
14. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.
15. APPROVED ANTIOXIDANT COATINGS (i.e. CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
16. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
17. MISCELLANEOUS ELECTRICAL AND NON–ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
18. BOND ALL METALLIC OBJECTS WITHIN 6 ft OF MAIN GROUND RING WITH (1) #2 BARE SOLID TINNED COPPER GROUND CONDUCTOR.
19. GROUND CONDUCTORS USED FOR THE FACILITY GROUNDING AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON–METALLIC MATERIAL SUCH AS PVC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (i.e., NONMETALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.
20. ALL GROUNDS THAT TRANSITION FROM BELOW GRADE TO ABOVE GRADE MUST BE #2 BARE SOLID TINNED COPPER IN 3/4" NON–METALLIC, FLEXIBLE CONDUIT FROM 24" BELOW GRADE TO WITHIN 3" TO 6" OF CAD–WELD TERMINATION POINT. THE EXPOSED END OF THE CONDUIT MUST BE SEALED WITH SILICONE CAULK. (ADD TRANSITIONING GROUND STANDARD DETAIL AS WELL).
21. BUILDINGS WHERE THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE, THE CONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS FROM THE ROOFTOP, TOWERS, AND WATER TOWERS GROUNDING RING, TO THE EXISTING GROUNDING SYSTEM, THE GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN 2/0 COPPER. ROOFTOP GROUNDING RING SHALL BE BONDED TO THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL COLUMNS, LIGHTNING PROTECTION SYSTEM, AND BUILDING MAIN WATER LINE (FERROUS OR NONFERROUS METAL PIPING ONLY).

ELECTRICAL INSTALLATION NOTES:

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES/ORDINANCES.
2. CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED AND TRIP HAZARDS ARE ELIMINATED.
3. WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.
4. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
   4.1. ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OF APPROVAL, AND SHALL CONFORM TO REQUIREMENT OF THE NATIONAL ELECTRICAL CODE.
   4.2. ALL OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING CURRENT RATING THAT SHALL BE GREATER THAN THE SHORT CIRCUIT CURRENT TO WHICH THEY ARE SUBJECTED, 22,000 AIC MINIMUM. VERYIFY AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ARTICLE 110.24 NEC OR THE MOST CURRENT ADOPTED CODE PRE THE GOVERNING JURISDICTION.
5. EACH END OF EVERY POWER PHASE CONDUCTOR, GROUNDING CONDUCTOR, AND TELCO CONDUCTOR OR CABLE SHALL BE LABELED WITH COLOR–CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2" PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA.
6. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH LAMICOID TAGS SHOWING THEIR RATED VOLTAGE, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING AND BRANCH CIRCUIT ID NUMBERS (i.e. PANEL BOARD AND CIRCUIT ID'S).
7. PANEL BOARDS (ID NUMBERS) SHALL BE CLEARLY LABELED WITH PLASTIC LABELS.
8. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
9. ALL POWER AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE COPPER CONDUCTOR (#14 OR LARGER) WITH TYPE THHW, THWN, THWN–2, XHHW, XHHW–2, THW, THW–2, RHW, OR RHW–2 INSULATION UNLESS OTHERWISE SPECIFIED.
10. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE COPPER CONDUCTOR (#6 OR LARGER) WITH TYPE THHW, THWN, THWN–2, XHHW, XHHW–2, THW, THW–2, RHW, OR RHW–2 INSULATION UNLESS OTHERWISE SPECIFIED.
11. POWER AND CONTROL WIRING IN FLEXIBLE CORD SHALL BE MULTI–CONDUCTOR, TYPE SOOW CORD (#14 OR LARGER) UNLESS OTHERWISE SPECIFIED.
12. POWER AND CONTROL WIRING FOR USE IN CABLE TRAY SHALL BE MULTI–CONDUCTOR, TYPE TC CABLE (#14 OR LARGER), WITH TYPE THHW, THWN, THWN–2, XHHW, XHHW–2, THW, THW–2, RHW, OR RHW–2 INSULATION UNLESS OTHERWISE SPECIFIED.
13. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP–STYLE, COMPRESSION WIRE LUGS AND WIRE NUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRE NUTS SHALL BE RATED FOR OPERATION NOT LESS THAN 75° C (90° C IF AVAILABLE).
14. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.
15. ELECTRICAL METALLIC TUBING (EMT), INTERMEDIATE METAL CONDUIT (IMC), OR RIGID METAL CONDUIT (RMC) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
16. ELECTRICAL METALLIC TUBING (EMT) OR METAL–CLAD CABLE (MC) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
17. SCHEDULE 40 PVC UNDERGROUND ON STRAIGHTS AND SCHEDULE 80 PVC FOR ALL ELBOWS/90s AND ALL APPROVED ABOVE GRADE PVC CONDUIT.
18. LIQUID–TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID–TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
19. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION–TYPE AND APPROVED FOR THE LOCATION USED. SET SCREW FITTINGS ARE NOT ACCEPTABLE.
20. CABINETS, BOXES AND WIRE WAYS SHALL BE LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.
21. WIREWAYS SHALL BE METAL WITH AN ENAMEL FINISH AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS (WIREMOLD SPECMATE WIREWAY).
22. SLOTTED WIRING DUCT SHALL BE PVC AND INCLUDE COVER (PANDUIT TYPE E OR EQUAL).
23. CONDUITS SHALL BE FASTENED SECURELY IN PLACE WITH APPROVED NON–PERFORATED STRAPS AND HANGERS. EXPLOSIVE DEVICES (i.e. POWDER–ACTUATED) FOR ATTACHING HANGERS TO STRUCTURE WILL NOT BE PERMITTED. CLOSELY FOLLOW THE LINES OF THE STRUCTURE, MAINTAIN CLOSE PROXIMITY TO THE STRUCTURE AND KEEP CONDUITS IN TIGHT ENVELOPES. CHANGES IN DIRECTION TO ROUTE AROUND OBSTACLES SHALL BE MADE WITH CONDUIT OUTLET BODIES. CONDUIT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. PARALLEL AND PERPENDICULAR TO STRUCTURE WALL AND CEILING LINES. ALL CONDUIT SHALL BE FISHED TO CLEAR OBSTRUCTIONS. ENDS OF CONDUITS SHALL BE TEMPORARILY CAPPED FLUSH TO FINISH GRADE TO PREVENT CONCRETE, PLASTER OR DIRT FROM ENTERING. CONDUITS SHALL BE RIGIDLY CLAMPED TO BOXES BY GALVANIZED MALLEABLE IRON BUSHING ON INSIDE AND GALVANIZED MALLEABLE IRON LOCKNUT ON OUTSIDE AND INSIDE.
24. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES AND PULL BOXES SHALL BE GALVANIZED OR EPOXY–COATED SHEET STEEL. SHALL MEET OR EXCEED UL 50 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND NEMA 3R (OR BETTER) FOR EXTERIOR LOCATIONS.
25. METAL RECEPTACLE, SWITCH AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY–COATED OR NON–CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.
26. NONMETALLIC RECEPTACLE, SWITCH AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2 (NEWEST REVISION) AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.
27. THE CONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CARRIER AND/OR CROWN CASTLE USA INC. BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
28. THE CONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD LIFE AND PROPERTY.
29. INSTALL LAMICOID LABEL ON THE METER CENTER TO SHOW "AT&T".
30. ALL EMPTY/SPARE CONDUITS THAT ARE INSTALLED ARE TO HAVE A METERED MULE TAPE PULL CORD INSTALLED.

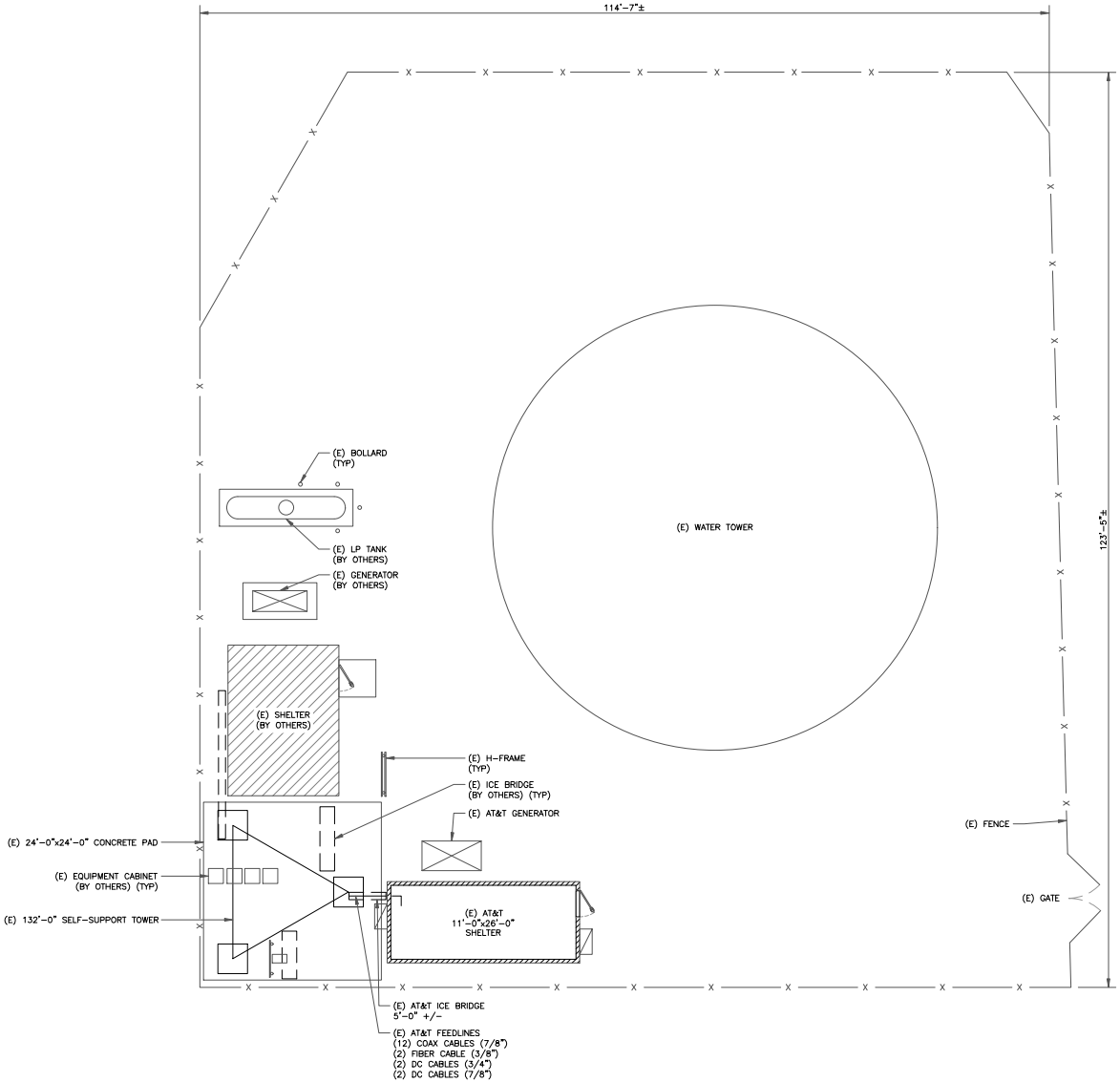
CONDUCTOR COLOR CODE

SYSTEM	CONDUCTOR	COLOR
120/240V, 1Ø	A PHASE	BLACK
	B PHASE	RED
	NEUTRAL	WHITE
	GROUND	GREEN
120/208V, 3Ø	A PHASE	BLACK
	B PHASE	RED
	C PHASE	BLUE
	NEUTRAL	WHITE
	GROUND	GREEN
277/480V, 3Ø	A PHASE	BROWN
	B PHASE	ORANGE OR PURPLE
	C PHASE	YELLOW
	NEUTRAL	GREY
	GROUND	GREEN
DC VOLTAGE	POS (+)	RED**
	NEG (–)	BLACK**

* SEE NEC 210.5(C)(1) AND (2)
** POLARITY MARKED AT TERMINATION

APWA UNIFORM COLOR CODE:

WHITE	PROPOSED EXCAVATION
PINK	TEMPORARY SURVEY MARKINGS
RED	ELECTRIC POWER LINES, CABLES, CONDUIT, AND LIGHTING CABLES
YELLOW	GAS, OIL, STEAM, PETROLE



1 SITE PLAN

SCALE: 8' 6' 4' 2' 0' 8' 1/8"=1'-0" (FULL SIZE) 1/16"=1'-0" (11x17)

N

AT&T
575 MOROSGO DRIVE
ATLANTA, GA 30324-3300

CROWN CASTLE
3530 TORINGDON WAY, SUITE 300
CHARLOTTE, NC 28277

B+T GRP
1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

AT&T SITE NUMBER: **CTL01082**

BU #: **806377**
HRT 084 943242

197 SOUTH ST
VERNON CT, 06066

EXISTING
132'-0" SELF-SUPPORT TOWER

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES /QA
0	7/14/20	JCO	PRELIMINARY REVIEW	MJP
1	7/28/20	MLC	PRELIMINARY REVIEW	FWP

7/28/20

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/21

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

SHEET NUMBER: C-1.1

REVISION: 1

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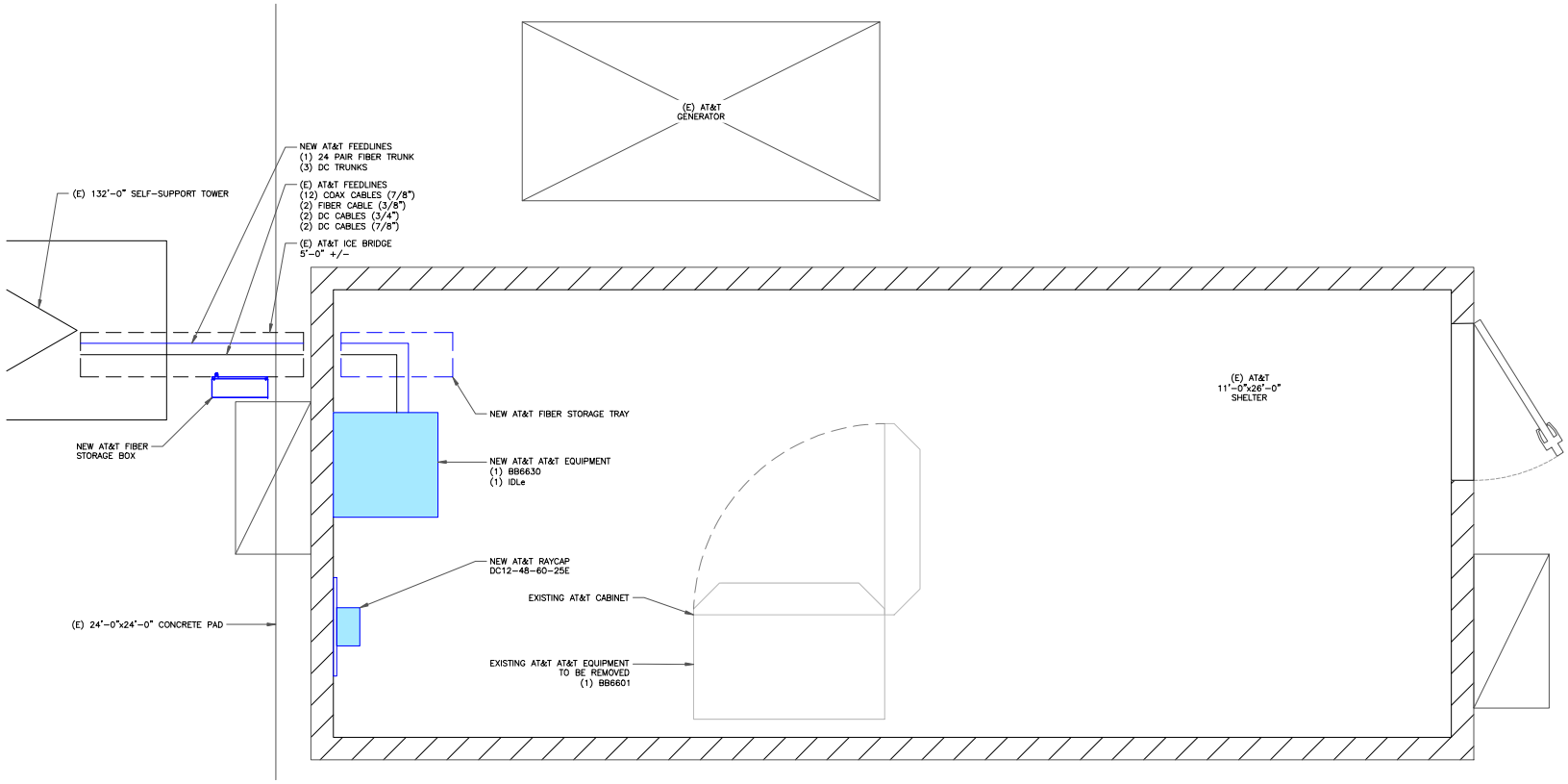
NOTE:
NO PHOTOS OR SITE PLANS OF SHELTER INTERIOR PROVIDED. CONTRACTOR TO VERIFY LOCATION OF EQUIPMENT BEFORE INSTALLATION

GROUND SCOPE OF WORK:

- REMOVE (1) 6601
- INSTALL (1) 6630 & (1) IDLe
- INSTALL (1) DC12-48-60-25E RAYCAP
- INSTALL (1) FIBER STORAGE TRAY
- INSTALL (1) FIBER STORAGE BOX
- INSTALL (3) DC TRUNKS
- INSTALL (1) 24 PAIR FIBER TRUNK



1 FINAL EQUIPMENT PLAN
SCALE: 1' 0" 0 1' 3/4"=1'-0" (FULL SIZE) 3/8"=1'-0" (11x17)

N

AT&T
575 MOROSGO DRIVE
ATLANTA, GA 30324-3300

CROWN CASTLE
3530 TORINGDON WAY, SUITE 300
CHARLOTTE, NC 28277

B+T GRP
1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

AT&T SITE NUMBER: **CTL01082**

BU #: **806377**
HRT 084 943242

197 SOUTH ST
VERNON CT, 06066

EXISTING
132'-0" SELF-SUPPORT TOWER

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	7/14/20	JCO	PRELIMINARY REVIEW	MJP
1	7/28/20	MLC	PRELIMINARY REVIEW	PWP

STATE OF CONNECTICUT
31627
LICENSED
PROFESSIONAL ENGINEER

7/28/20

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/21

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

SHEET NUMBER:	REVISION:
C-1.2	1

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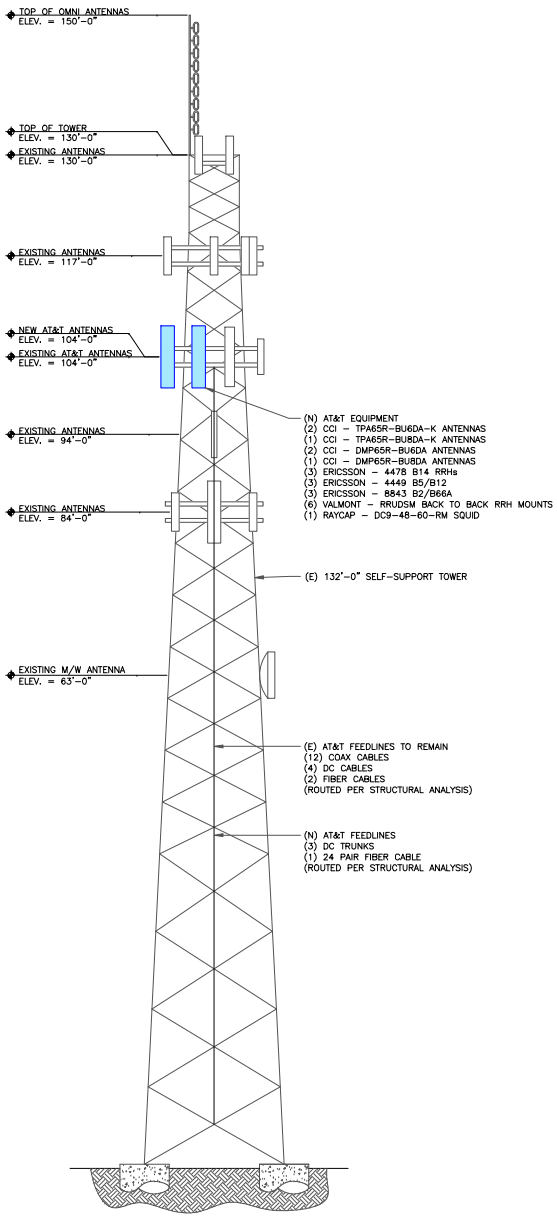
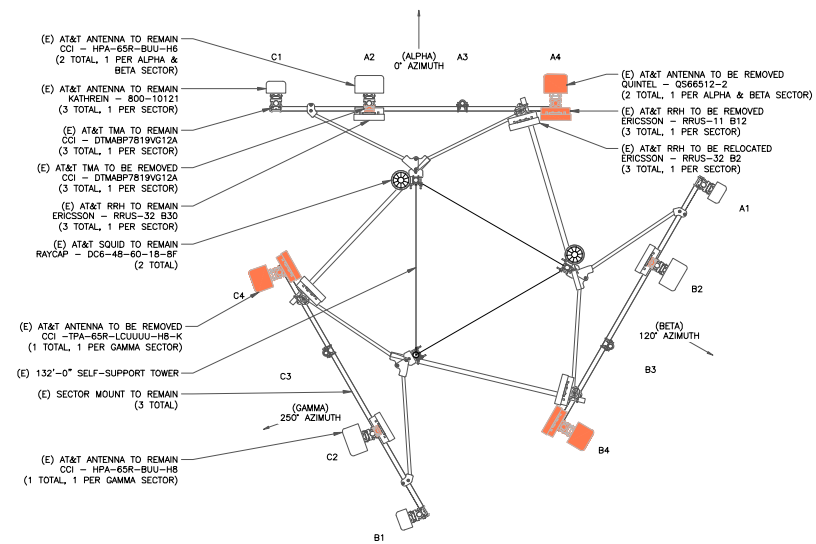
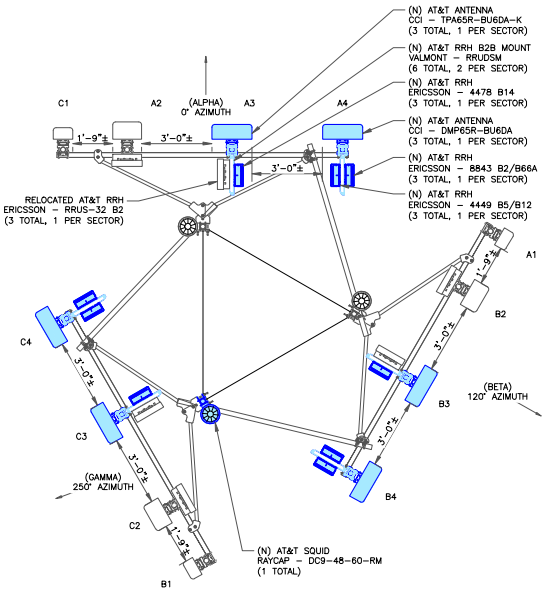


1 FINAL ELEVATION
SCALE: NOT TO SCALE



2 EXISTING ANTENNA PLAN
SCALE: NOT TO SCALE



3 FINAL ANTENNA PLAN
SCALE: NOT TO SCALE

"LOOK UP" – CROWN CASTLE USA INC. SAFETY CLIMB REQUIREMENT:

THE INTEGRITY OF THE SAFETY CLIMB AND ALL COMPONENTS OF THE CLIMBING FACILITY SHALL BE CONSIDERED DURING ALL STAGES OF DESIGN, INSTALLATION, AND INSPECTION. TOWER MODIFICATION, MOUNT REINFORCEMENTS, AND/OR EQUIPMENT INSTALLATIONS SHALL NOT COMPROMISE THE INTEGRITY OR FUNCTIONAL USE OF THE SAFETY CLIMB OR ANY COMPONENTS OF THE CLIMBING FACILITY ON THE STRUCTURE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: PINCHING OF THE WIRE ROPE, BENDING OF THE WIRE ROPE FROM ITS SUPPORTS, DIRECT CONTACT OR CLOSE PROXIMITY TO THE WIRE ROPE WHICH MAY CAUSE FRICTIONAL WEAR, IMPACT TO THE ANCHORAGE POINTS IN ANY WAY, OR TO IMPEDE/BLOCK ITS INTENDED USE. ANY COMPROMISED SAFETY CLIMB, INCLUDING EXISTING CONDITIONS MUST BE TAGGED OUT AND REPORTED TO YOUR CROWN CASTLE USA INC. POC OR CALL THE NOC TO GENERATE A SAFETY CLIMB MAINTENANCE AND CONTRACTOR NOTICE TICKET.

NOTES:

1. REFERENCE C-3 FOR FINAL EQUIPMENT SCHEDULE.
2. REFERENCE C-4 FOR NEW EQUIPMENT SPECIFICATIONS.
3. CONTRACTOR TO VERIFY ALL ANTENNA TIP HEIGHTS DO NOT EXCEED BEACON BASE HEIGHT.

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ATLANTA, GA 30324-3300

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PH: (918) 587-4630
www.btgrp.com

AT&T SITE NUMBER: **CTL01082**

BU #: **806377**
HRT 084 943242

197 SOUTH ST
VERNON CT, 06066

EXISTING
132'-0" SELF-SUPPORT TOWER

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES /QA
0	7/14/20	JCO	PRELIMINARY REVIEW	MJP
1	7/28/20	MLC	PRELIMINARY REVIEW	FWP

7/28/20

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SHEET NUMBER: C-2
REVISION: 1

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FINAL ANTENNA AND FEEDLINE SCHEDULE

POS.	TECH	STATUS	AZIMUTH	ANTENNA TYPE	ANTENNA RAD CENTER	MECHANICAL DOWNTILT	ELECTRICAL DOWNTILT	MAIN COAX SIZE	MAIN COAX LENGTH	COAX QTY	TMA QTY AND MODEL	SURGE PROTECTION	DC/FIBER CABLES	RRHs QTY & MODEL ON TOWER	LOCATION	DIPLEXER ON TOWER	DIPLEXER ON GROUND	RET CABLE
ALPHA SECTOR																		
A1	UMTS	EXISTING	0°	KATHREIN 800-10121	104'-0"	0°	2°/0°	7/8"	125'-0"	2	(1) 782-10250	DC6-48-60-18-8F	(1) 3/8" FIBER (1) 3/4" DC LINES (1) 7/8" DC LINES	–	–	N	Y (2)	Y
A2	LTE	EXISTING	0°	CCI HPA-65R-BUU-H6	104'-0"	0°	0°	7/8"	125'-0"	2	–			(1) RRUS-32 B30	TOWER	N	N	Y
A3	LTE	NEW	0°	CCI TPA65R-BU6DA-K	104'-0"	0°	2°/7°/7°/7°	–	–	–	–			(1) RRUS-32 B2 (1) 4478 B14	TOWER	N	N	Y
A4	LTE	NEW	0°	CCI DMP65R-BU6DA	104'-0"	0°	2°/2°/7°/2°	–	–	–	–			(1) 4449 B5/B12 (1) 8843 B2/B66A	TOWER	N	N	Y
BETA SECTOR																		
B1	UMTS	EXISTING	120°	KATHREIN 800-10121	104'-0"	0°	12°/0°	7/8"	125'-0"	2	(1) 782-10250	DC6-48-60-18-8F	(1) 3/8" FIBER (2) 3/4" DC LINES	–	–	N	Y (2)	Y
B2	LTE	EXISTING	120°	CCI HPA-65R-BUU-H6	104'-0"	0°	0°	7/8"	125'-0"	2	–			(1) RRUS-32 B30	TOWER	N	N	Y
B3	LTE	NEW	120°	CCI TPA65R-BU6DA-K	104'-0"	0°	2°/7°/7°/7°	–	–	–	–			(1) RRUS-32 B2 (1) 4478 B14	TOWER	N	N	Y
B4	LTE	NEW	120°	CCI DMP65R-BU6DA	104'-0"	0°	2°/2°/7°/2°	–	–	–	–			(1) 4449 B5/B12 (1) 8843 B2/B66A	TOWER	N	N	Y
GAMMA SECTOR																		
C1	UMTS	EXISTING	250°	KATHREIN 800-10121	104'-0"	0°	1°/0°	7/8"	125'-0"	2	(1) 782-10250	DC9-48-60-RM	(1) 3/8" FIBER (2) 3/4" DC LINES	–	–	N	Y (2)	Y
C2	LTE	EXISTING	250°	CCI HPA-65R-BUU-H8	104'-0"	0°	0°	7/8"	125'-0"	2	–			(1) RRUS-32 B30	TOWER	N	N	Y
C3	LTE	NEW	250°	CCI TPA65R-BU8DA-K	104'-0"	0°	9°/3°/3°/3°	–	–	–	–			(1) RRUS-32 B2 (1) 4478 B14	TOWER	N	N	Y
C4	LTE	NEW	250°	CCI DMP65R-BU8DA	104'-0"	0°	9°/9°/6°/9°	–	–	–	–			(1) 4449 B5/B12 (1) 8843 B2/B66A	TOWER	N	N	Y

NOTE: BOLD DENOTES NEW EQUIPMENT

1 FINAL ANTENNA AND FEEDLINE SCHEDULE
SCALE: NOT TO SCALE

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HRT 084 943242

197 SOUTH ST
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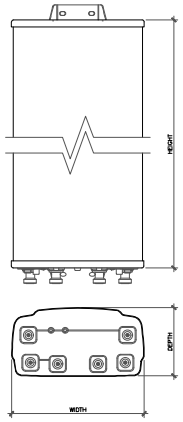
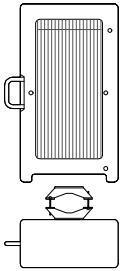
SHEET NUMBER: C-3
REVISION: 1

78785_806377_HRT 084 943242.dwg – Sheet:C-3 – User: scody – Jul 30, 2020 – 9:50am



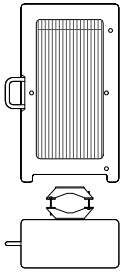
ANTENNA DIMENSIONS (INCHES)				
MODEL	HEIGHT	WIDTH	DEPTH	WEIGHT
TPA65R–BU6DA	71.2"	20.7"	7.7"	69 lbs
TPA65R–BU8DA	96"	20.7"	7.7"	87.1 lbs
DMP65R–BU6DA	71.2"	20.7"	7.7"	79.4 lbs
DMP65R–BU8DA	96"	20.7"	7.7"	95.7 lbs

1 NOT USED
SCALE: NOT TO SCALE



ERICSSON – 4478 B14
WEIGHT (FULLY EQUIPPED): 59.9 LBS
SIZE (HxWxD): 16.5x13.4x7.7 IN.
CONNECTOR TYPE: 4.3–10 FEMALE (4 TOTAL PORTS)

2 ERICSSON – 4478 B14
SCALE: NOT TO SCALE

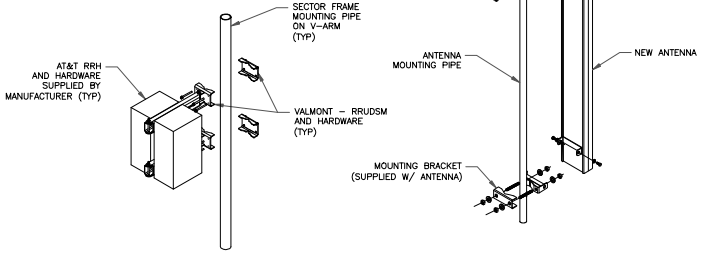


NOKIA – 4449 B5/B12
WEIGHT (FULLY EQUIPPED): 71 LBS
SIZE (HxWxD): 17.9x13.19x9.44 IN.
CONNECTOR TYPE: 4.3–10 FEMALE (4 TOTAL PORTS)

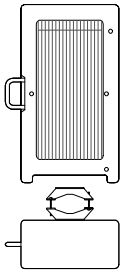
3 4449 B5/B12
SCALE: NOT TO SCALE

INSTALLER NOTES:

1. COMPLY WITH MANUFACTURERS INSTRUCTIONS TO ENSURE THAT ALL RRHs RECEIVE ELECTRICAL POWER WITHIN 24 HOURS OF BEING REMOVED FROM THE MANUFACTURER'S PACKAGING.
2. DO NOT OPEN RRH PACKAGES IN THE RAIN.
3. ALL PIPES, BRACKETS, AND MISCELLANEOUS HARDWARE TO BE GALVANIZED UNLESS NOTED OTHERWISE.



4 ANTENNA WITH RRHs MOUNTING DETAIL
SCALE: NOT TO SCALE



NOKIA – 8843 B2/B66A
WEIGHT (FULLY EQUIPPED): 72 LBS
SIZE (HxWxD): 14.9x13.2x10.9 IN.
CONNECTOR TYPE: 4.3–10 FEMALE (4 TOTAL PORTS)

5 ERICSSON – 8843 B2/B66A
SCALE: NOT TO SCALE

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SHEET NUMBER: C-4
REVISION: 1

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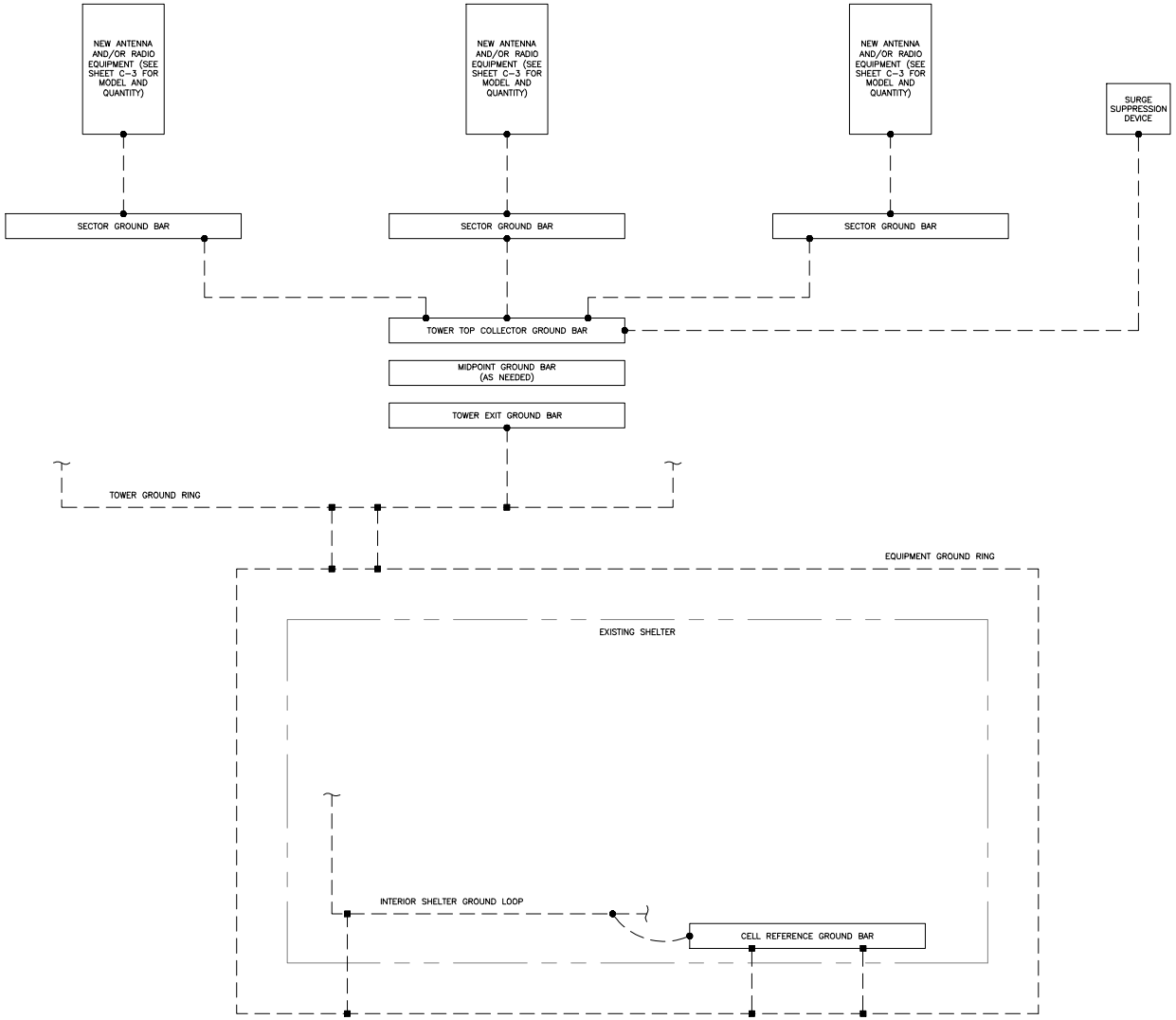

1 GROUNDING SCHEMATIC
SCALE: NOT TO SCALE

GROUNDING PLAN LEGEND:

--- GROUND WIRE
■ EXOTHERMIC WELD
● MECHANICAL CONNECTION
COPPER GROUND ROD
GROUND ROD W/ TEST WELL

CELL REFERENCE GROUND BAR: POINT OF GROUND REFERENCE FOR ALL COMMUNICATIONS EQUIPMENT FRAMES. ALL BONDS ARE MADE WITH #2 STRANDED GREEN INSULATED COPPER CONDUCTORS. BOND TO GROUND RING WITH (2) #2 SOLID TINNED COPPER CONDUITS (ATT-TP-76416 7.6.7).

HATCH PLATE GROUND BAR: BOND TO THE INTERIOR GROUND RING WITH (2) #2 STRANDED GREEN INSULATED COPPER CONDUCTORS. WHEN A HATCH-PLATE AND A CELL REFERENCE GROUND BAR ARE BOTH PRESENT, THE CELL SITE REFERENCE GROUND BAR MUST BE CONNECTED TO THE HATCH-PLATE AND TO THE INTERIOR GROUND RING USING (2) #2 STRANDED GREEN INSULATED COPPER CONDUCTORS.

EXTERIOR CABLE ENTRY PORT GROUND BARS: LOCATED AT THE ENTRANCE TO THE CELL SITE BUILDING. BOND TO GROUND RING WITH A #2 SOLID TINNED COPPER CONDUCTORS WITH AN EXOTHERMIC WELD AND INSPECTION SLEEVE (ATT-TP-76416 7.6.7.2).

DURING ALL DC POWER SYSTEM CHANGES INCLUDING DC SYSTEM CHANGE OUTS, RECTIFIER REPLACEMENTS OR ADDITIONS, BREAKER DISTRIBUTION CHANGES, BATTERY ADDITIONS, BATTERY REPLACEMENTS AND INSTALLATIONS OR CHANGES TO DC CONVERTER SYSTEMS IT SHALL BE REQUIRED THAT SERVICES CONTRACTORS VERIFY ALL DC POWER SYSTEMS ARE EQUIPPED WITH MASTER DC SYSTEM RETURN GROUND CONDUCTOR FROM THE DC POWER SYSTEM COMMON RETURN BUS DIRECTLY CONNECTED TO THE CELL SITE REFERENCE GROUND BAR PER TP76300 SECTION H 6 AND TP76416 FIGURE 7-11 REQUIREMENTS.

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SHEET NUMBER: G-1
REVISION: 1

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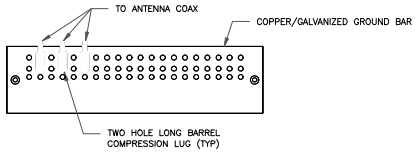
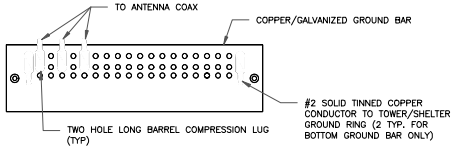


NOTES:

1. DOUBLING UP "OR STACKING" OF CONNECTIONS IS NOT PERMITTED.
2. EXTERIOR ANTIOXIDANT JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS.
3. GROUND BAR SHALL NOT BE ISOLATED FROM TOWER. MOUNT DIRECTLY TO TOWER STEEL.

1 ANTENNA GROUND BAR DETAIL
SCALE: NOT TO SCALE

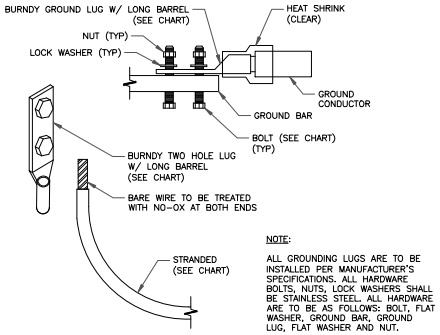


NOTES:

1. EXTERIOR ANTIOXIDANT JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS.
2. GROUND BAR SHALL NOT BE ISOLATED FROM TOWER. MOUNT DIRECTLY TO TOWER STEEL (TOWER ONLY).
3. GROUND BAR SHALL BE ISOLATED FROM BUILDING OR SHELTER.

2 TOWER/SHELTER GROUND BAR DETAIL
SCALE: NOT TO SCALE

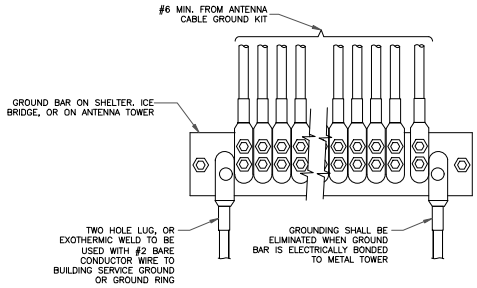
WIRE SIZE	BURNDY LUG	BOLT SIZE
#6 GREEN INSULATED	YA6C-2TC38	3/8" - 16 NC SS 2 BOLT
#2 SOLID TINNED	YA3C-2TC38	3/8" - 16 NC SS 2 BOLT
#2 STRANDED	YA2C-2TC38	3/8" - 16 NC SS 2 BOLT
#2/0 STRANDED	YA26-2TC38	3/8" - 16 NC SS 2 BOLT
#4/0 STRANDED	YA28-2N	1/2" - 16 NC SS 2 BOLT



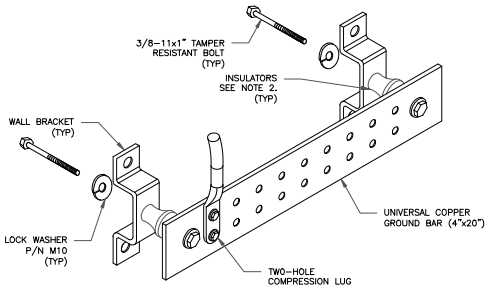
NOTE:

ALL GROUNDING LUGS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. ALL HARDWARE BOLTS, NUTS, LOCK WASHERS SHALL BE STAINLESS STEEL. ALL HARDWARE ARE TO BE AS FOLLOWS: BOLT, FLAT WASHER, GROUND BAR, GROUND LUG, FLAT WASHER AND NUT.

3 MECHANICAL LUG CONNECTION
SCALE: NOT TO SCALE



4 GROUNDWIRE INSTALLATION
SCALE: NOT TO SCALE

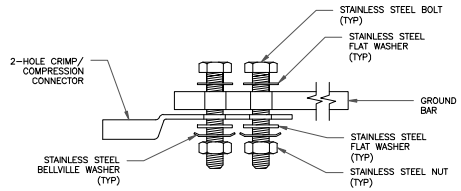


NOTES:

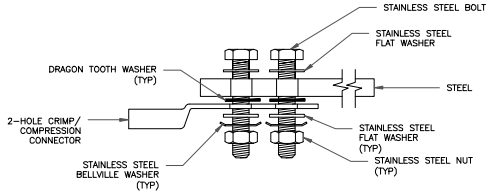
1. DOWN LEAD (HOME RUN) CONDUCTORS ARE NOT TO BE INSTALLED ON CROWN CASTLE USA INC. TOWER, PER THE GROUNDING DOWN CONDUCTOR POLICY QAS-STD-10091. NO MODIFICATION OR DRILLING TO TOWER STEEL IS ALLOWED IN ANY FORM OR FASHION, CAD-WELDING ON THE TOWER AND/OR IN THE AIR ARE NOT PERMITTED.

2. OMIT INSULATOR WHEN MOUNTING TO TOWER STEEL OR PLATFORM STEEL USE INSULATORS WHEN ATTACHING TO BUILDING OR SHELTERS.

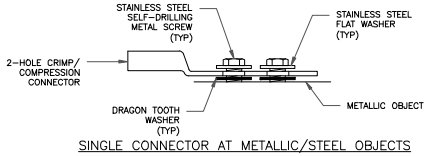
5 GROUND BAR DETAIL
SCALE: NOT TO SCALE



SINGLE CONNECTOR AT GROUND BARS

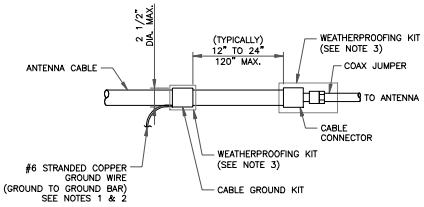


SINGLE CONNECTOR AT STEEL OBJECTS



SINGLE CONNECTOR AT METALLIC/STEEL OBJECTS

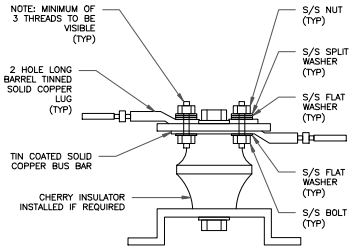
8 HARDWARE DETAIL FOR EXTERIOR CONNECTIONS
SCALE: NOT TO SCALE



NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
3. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT, COLD SHRINK SHALL NOT BE USED.

6 CABLE GROUND KIT CONNECTION
SCALE: NOT TO SCALE



7 LUG DETAIL
SCALE: NOT TO SCALE

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SHEET NUMBER: G-2
REVISION: 1

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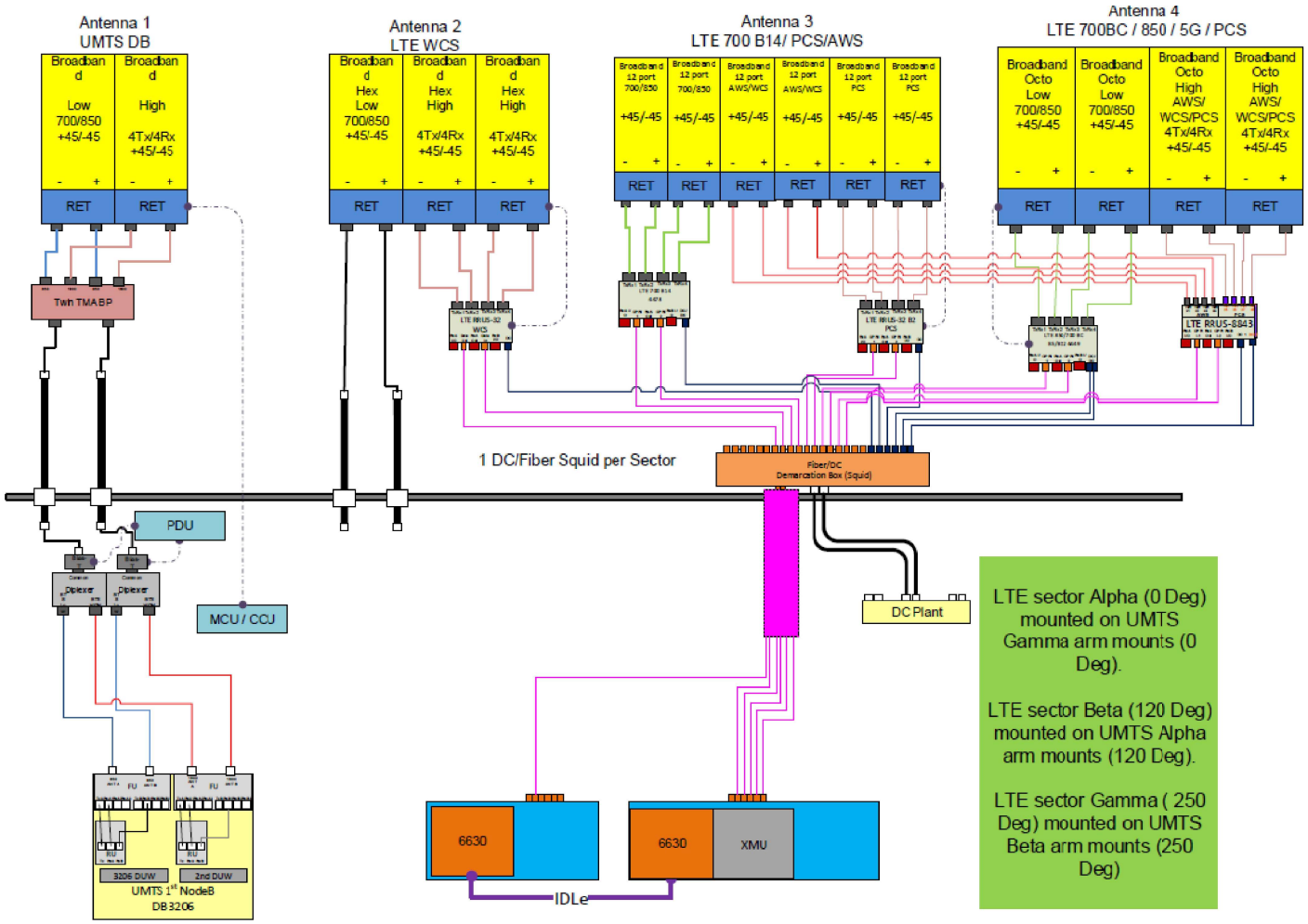
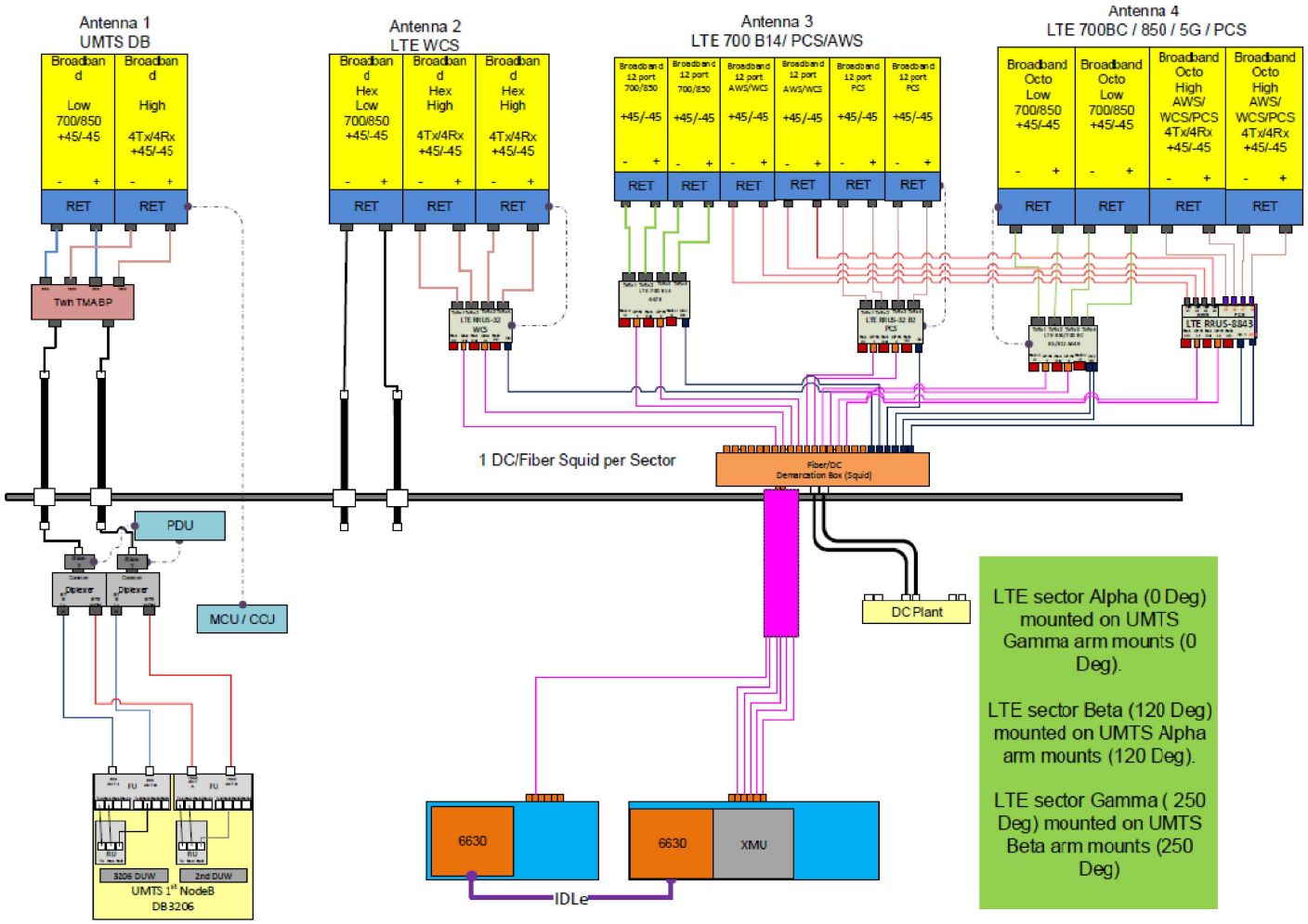
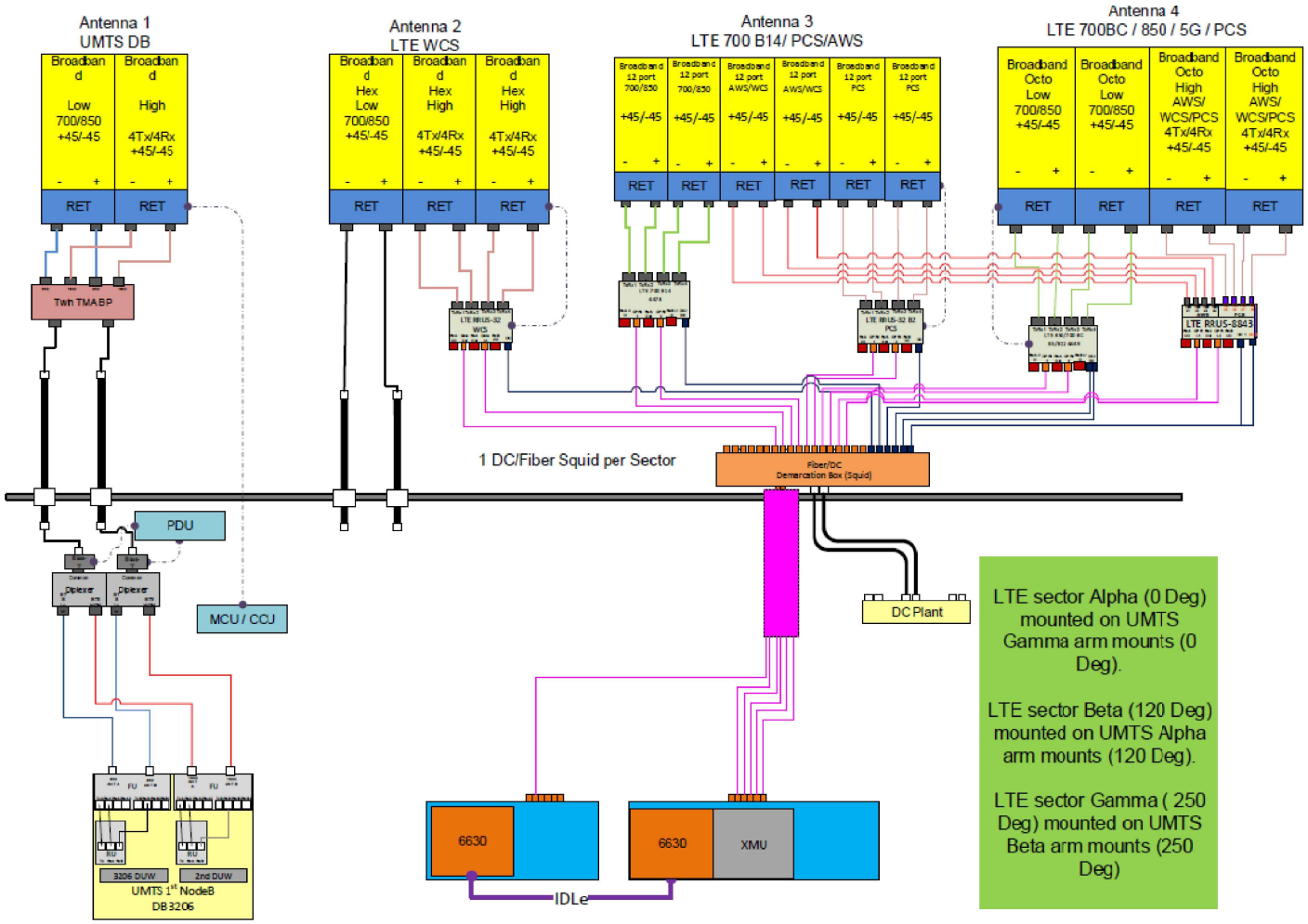

Antenna 1
UMTS DB
Broadband Low 700/850 +45/-45
Broadband High 4Tx/4Rx +45/-45
RET
Twin TMA BP
Antenna 2
LTE WCS
Broadband Hex Low 700/850 +45/-45
Broadband Hex High 4Tx/4Rx +45/-45
Antenna 3
LTE 700 B14/ PCS/AWS
Broadband 12 port 700/850 +45/-45
Broadband 12 port AWS/WCS +45/-45
Broadband 12 port PCS +45/-45
Antenna 4
LTE 700BC / 850 / 5G / PCS
Broadband Octo Low 700/850 +45/-45
Broadband Octo High AWS/ WCS/PCS 4Tx/4Rx +45/-45
LTE RRUS-8843
1 DC/Fiber Squid per Sector
Fiber/DC Demarcation Box (Squid)
PDU
Diplexer
MCU / CCU
DC Plant
6630
XMU
IDLe
3206 DUW
2nd DUW
UMTS 1st NodeB
DB3206
LTE sector Alpha (0 Deg) mounted on UMTS Gamma arm mounts (0 Deg).
LTE sector Beta (120 Deg) mounted on UMTS Alpha arm mounts (120 Deg).
LTE sector Gamma (250 Deg) mounted on UMTS Beta arm mounts (250 Deg)


Antenna 1
UMTS DB
Broadband Low 700/850 +45/-45
Broadband High 4Tx/4Rx +45/-45
RET
Twin TMA BP
Antenna 2
LTE WCS
Broadband Hex Low 700/850 +45/-45
Broadband Hex High 4Tx/4Rx +45/-45
Antenna 3
LTE 700 B14/ PCS/AWS
Broadband 12 port 700/850 +45/-45
Broadband 12 port AWS/WCS +45/-45
Broadband 12 port PCS +45/-45
Antenna 4
LTE 700BC / 850 / 5G / PCS
Broadband Octo Low 700/850 +45/-45
Broadband Octo High AWS/ WCS/PCS 4Tx/4Rx +45/-45
LTE RRUS-8843
1 DC/Fiber Squid per Sector
Fiber/DC Demarcation Box (Squid)
PDU
Diplexer
MCU / CCU
DC Plant
6630
XMU
IDLe
3206 DUW
2nd DUW
UMTS 1st NodeB
DB3206
LTE sector Alpha (0 Deg) mounted on UMTS Gamma arm mounts (0 Deg).
LTE sector Beta (120 Deg) mounted on UMTS Alpha arm mounts (120 Deg).
LTE sector Gamma (250 Deg) mounted on UMTS Beta arm mounts (250 Deg)


Antenna 1
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LTE 700 B14/ PCS/AWS
Broadband 12 port 700/850 +45/-45
Broadband 12 port AWS/WCS +45/-45
Broadband 12 port PCS +45/-45
Antenna 4
LTE 700BC / 850 / 5G / PCS
Broadband Octo Low 700/850 +45/-45
Broadband Octo High AWS/ WCS/PCS 4Tx/4Rx +45/-45
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LTE sector Alpha (0 Deg) mounted on UMTS Gamma arm mounts (0 Deg).
LTE sector Beta (120 Deg) mounted on UMTS Alpha arm mounts (120 Deg).
LTE sector Gamma (250 Deg) mounted on UMTS Beta arm mounts (250 Deg)

Exhibit D

Structural Analysis Report

Date: **June 09, 2020**

Stephanie Lipscomb
Crown Castle
370 Mallory Station Rd
Franklin, TN 37067

Black & Veatch Corp.
6800 W. 115th St., Suite 2292
Overland Park, KS 66211
(913) 458-6909

Subject:	**Structural Analysis Report**	
Carrier Designation:	***AT&T Mobility* Co-Locate**	
	Carrier Site Number:	25951
	Carrier Site Name:	CTL01082
Crown Castle Designation:	**Crown Castle BU Number:**	806377
	Crown Castle Site Name:	HRT 084 943242
	Crown Castle JDE Job Number:	605364
	Crown Castle Work Order Number:	1859487
	Crown Castle Order Number:	517065 Rev. 0
Engineering Firm Designation:	**Black & Veatch Corp. Project Number:**	400087
Site Data:	**197 South St., Vernon, Tolland County, CT**	
	Latitude *41° 51' 12.51"*, Longitude *-72° 27' 7.52"*	
	133.167 Foot - Self Support Tower	

Dear Stephanie Lipscomb,

Black & Veatch Corp. is pleased to submit this **"Structural Analysis Report"** to determine the structural integrity of the above mentioned tower.

The purpose of the analysis is to determine acceptability of the tower stress level. Based on our analysis we have determined the tower stress level for the structure and foundation, under the following load case, to be:

LC7: Proposed Equipment Configuration **Sufficient Capacity – 84.3%**

This analysis utilizes an ultimate 3-second gust wind speed of 125 mph as required by the 2018 Connecticut State Building Code. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Structural analysis prepared by: Aditya Kulkarni

Respectfully submitted by:

Joshua J Riley, P.E.

Professional Engineer

STATE OF CONNECTICUT
JOSHUA J. RILEY
33208
LICENSED
PROFESSIONAL ENGINEER
06/09/2020

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1) INTRODUCTION

This tower is a 133.167 ft Self Support tower designed by Rohn Industries, Inc.

The tower has been modified multiple times in the past to accommodate additional loading.

The tower has been modified per reinforcement drawings prepared by L&W Engineering in October of 1995. Reinforcements consist of replacement of pipe legs from elevations 60.0' to 80.0' and tower diagonals from elevations 100.0' to 120.0'. These modifications have not been considered in this analysis.

The tower was later reinforced per reinforcement drawings prepared by SSOE Group in May of 2015. Reinforcement consists of installation of secondary horizontals from 0.0' to 10.0' and 80.0' to 86.7'. These modifications have been considered effective in this analysis. Refer to Post Modification Inspection Report by Engineered Tower Solutions, PLLC. in August of 2016.

2) ANALYSIS CRITERIA

TIA-222 Revision:	TIA-222-H
Risk Category:	II
Wind Speed:	125 mph
Exposure Category:	B
Topographic Factor:	1
Ice Thickness:	2 in
Wind Speed with Ice:	50 mph
Service Wind Speed:	60 mph

Table 1 - Proposed Equipment Configuration

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
104.0	106.0	2	cci antennas	DMP65R-BU6D w/ Mount Pipe	3 4 14	3/8 3/4 7/8
		1	cci antennas	DMP65R-BU8D w/ Mount Pipe		
		2	cci antennas	HPA-65R-BUU-H6 w/ Mount Pipe		
		1	cci antennas	HPA-65R-BUU-H8 w/ Mount Pipe		
		2	cci antennas	TPA65R-BU6D_CCIV2 w/ Mount Pipe		
		1	cci antennas	TPA65R-BU8D_CCIV2 w/ Mount Pipe		
		3	kathrein	800 10121 w/ Mount Pipe		
		3	communication components inc.	DTMABP7819VG12A		
		6	ericsson	RRUS 32 B30		
		3	ericsson	RRUS 4449 B5/B12		
		3	ericsson	RRUS 4478 B14		
		3	ericsson	RRUS 8843 B2/B66A		
		6	kathrein	782-10250		
		6	kathrein	860 10025		
		3	raycap	DC6-48-60-18-8F		
	104.0	1	cci tower mounts (v2.1)	Sector Mount [SM 503-3]		

Table 2 - Other Considered Equipment

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
130.0	136.0	1	telewave	ANT450D6-9	2 1 3	7/8 5/8 1 1/4
	130.0	1	telewave	ANT450D6-9		
		3	rfs celwave	APXVSPP18-C-A20 w/ Mount Pipe		
		3	rfs celwave	APXVTM14-C-120 w/ Mount Pipe		
		3	alcatel lucent	1900MHZ RRH (65MHZ)		
		3	alcatel lucent	800MHZ 2X50W RRH w/ Filter		
		3	alcatel lucent	TD-RRH8X20-25		
		1	cci tower mounts (v2.1)	T-Arm Mount [4' TA 702-3]		
117.0	117.0	3	amphenol	QUAD656C0000X w/ Mount Pipe	12 2	7/8 1 5/8
		6	andrew	SBNHH-1D65B		
		2	andrew	LBX-6515DS-T0M w/ Mount Pipe		
		1	andrew	LNX-6514DS-T4M w/ Mount Pipe		
		2	rfs celwave	DB-T1-6Z-8AB-0Z		
		3	nokia	Airscale RRH 4T4R B5 160W		
		3	alcatel lucent	B66A RRH4X45		
		3	alcatel lucent	B13 RRH 4X30		
		3	alcatel lucent	B25 RRH2X60 PCS		
		1	cci tower mounts (v2.1)	Sector Mount [SM 504-3]		
94.0	94.0	3	kathrein	742 213 w/ Mount Pipe	6	1 5/8
84.0	84.0	3	ericsson	ERICSSON AIR 21 B2A B4P w/ Mount Pipe	10 2 1	7/8 1 3/8 1 5/8
		3	rfs celwave	APXVAARR24_43-U-NA20 w/ Mount Pipe		
		3	ericsson	AIR 32 B2A/B66AA w/ Mount Pipe		
		3	ericsson	KRY 112 144/1		
		3	ericsson	Radio 4449 B12/B71		
		3	site pro 1	VFA12-U		
63.0	63.0	1	rfs celwave	SB1-190BB	1	1/2
		1	siae microelettronica	ALFOPLUS2_CCIV3		
		1	cci tower mounts (v2.1)	Side Arm Mount [SO 311-1]		
	61.0	1	redline communications	RDL-3000		
56.0	59.0	1	maxrad	GPS-TMG-20N	1	1/2
	56.0	1	cci tower mounts (v2.1)	Side Arm Mount [SO 311-1]		
46.0	47.0	1	lucent	KS24019-L112A	1	1/2

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Remarks	Reference	Source
4-GEOTECHNICAL REPORTS	FDH Engineering, Inc.	1014866	CCISITES
4-TOWER FOUNDATION DRAWINGS/DESIGN/SPECS	FDH Engineering, Inc.	1014812	CCISITES
4-TOWER MANUFACTURER DRAWINGS	Rohn Industries, Inc.	529704	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	L&W Engineering	2240842	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	SSOE Group.	5678760	CCISITES
4-POST-MODIFICATION INSPECTION	Engineered Tower Solutions, PLLC.	5849707	CCISITES
4-EXPOSURE CATEGORY/TOPOGRAPHIC FACTOR	Crown Castle	5966024	CCISITES

3.1) Analysis Method

tnxTower (version 8.0.5.0), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A. When applicable, Crown Castle has calculated and provided the effective area for panel antennas using approved methods following the intent of the TIA-222 Standard.

3.2) Assumptions

1) Tower and structures were maintained in accordance with the TIA-222 Standard.
2) The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1 and 2 and the referenced drawings.

This analysis may be affected if any assumptions are not valid or have been made in error. Black & Veatch Corp. should be notified to determine the effect on the structural integrity of the tower.

4) ANALYSIS RESULTS

Table 4 - Section Capacity (Summary) (Self Support Tower)

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
T1	133.167 - 121.042	Leg	ROHN 2 STD	3	-3.93	38.68	10.1	Pass
T2	121.042 - 100.917	Leg	ROHN 2.5 STD	27	-23.64	59.99	39.4	Pass
T3	100.917 - 94.1042	Leg	ROHN 3 STD	57	-31.83	74.44	42.8	Pass
T4	94.1042 - 87.4375	Leg	ROHN 3 STD	65	-41.30	74.41	55.5	Pass
T5	87.4375 - 80.7708	Leg	ROHN 3 STD	74	-51.54	96.10	53.6	Pass
T6	80.7708 - 60.6042	Leg	ROHN 3 X-STR	86	-82.43	99.06	83.2	Pass
T7	60.6042 -	Leg	ROHN 4 X-STR	107	-111.86	167.91	66.6	Pass

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
	40.4167							
T8	40.4167 - 20.2083	Leg	ROHN 5 X-STR	128	-137.49	211.32	65.1	Pass
T9	20.2083 - 10.1042	Leg	ROHN 5 X-STR	143	-151.28	211.32	71.6	Pass
T10	10.1042 - 0	Leg	ROHN 5 X-STR	152	-163.54	265.96	61.5	Pass
T1	133.167 - 121.042	Diagonal	L1 3/4x1 3/4x3/16	15	-0.91	11.55	7.9 12.9 (b)	Pass
T2	121.042 - 100.917	Diagonal	L1 3/4x1 3/4x3/16	33	-3.68	6.66	55.3 60.0 (b)	Pass
T3	100.917 - 94.1042	Diagonal	L2 1/2x2 1/2x3/16	60	-4.87	15.17	32.1 58.1 (b)	Pass
T4	94.1042 - 87.4375	Diagonal	L2 1/2x2 1/2x3/16	69	-4.54	13.54	33.5 55.3 (b)	Pass
T5	87.4375 - 80.7708	Diagonal	L2 1/2x2 1/2x3/16	78	-6.17	12.58	49.0 74.2 (b)	Pass
T6	80.7708 - 60.6042	Diagonal	L2 1/2x2 1/2x3/16	91	-6.30	9.54	66.0 75.2 (b)	Pass
T7	60.6042 - 40.4167	Diagonal	L3x3x3/16	112	-6.93	13.27	52.2 84.3 (b)	Pass
T8	40.4167 - 20.2083	Diagonal	L3x3x1/4	133	-7.99	11.80	67.7	Pass
T9	20.2083 - 10.1042	Diagonal	L3 1/2x3 1/2x1/4	148	-8.17	17.40	46.9 66.5 (b)	Pass
T10	10.1042 - 0	Diagonal	L3 1/2x3 1/2x1/4	157	-8.73	16.03	54.4 55.9 (b)	Pass
T5	87.4375 - 80.7708	Secondary Horizontal	L1 1/2x1 1/2x3/16	83	-0.86	2.37	36.4	Pass
T10	10.1042 - 0	Secondary Horizontal	L2 1/2x2 1/2x3/16	161	-2.84	3.71	76.4	Pass
T1	133.167 - 121.042	Top Girt	L1 3/4x1 3/4x1/8	6	-0.12	2.78	4.4	Pass
T2	121.042 - 100.917	Top Girt	L2x2x1/8	28	-0.26	4.18	6.1	Pass
							Summary	
						Leg (T6)	83.2	Pass
						Diagonal (T7)	84.3	Pass
						Secondary Horizontal (T10)	76.4	Pass
						Top Girt (T2)	6.1	Pass
						Bolt Checks	84.3	Pass
						Rating =	**84.3**	**Pass**

Table 5 - Tower Component Stresses vs. Capacity (Self Support Tower) - LC7

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1	Anchor Rods	0	40.6	Pass
1	Base Foundation	0	8.3	Pass
	Base Foundation Soil Interaction		69.1	Pass

Structure Rating (max from all components) =	**84.3%**

Note:
1) See additional documentation in "Appendix C – Additional Calculations" for calculations supporting the % capacity consumed. Rating per TIA-222-H Section 15.5.

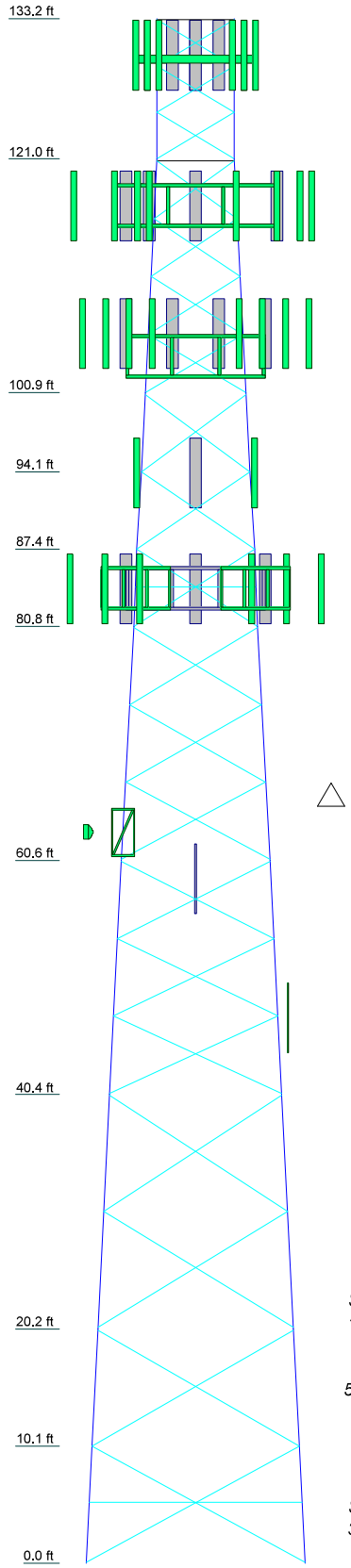
4.1) Recommendations

The tower and its foundation have sufficient capacity to carry the proposed load configuration. No modifications are required at this time.

APPENDIX A

TNXTOWER OUTPUT

Section	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10
Legs	ROHN 2 STD	ROHN 2.5 STD	ROHN 3 STD			ROHN 3 X-STR	ROHN 4 X-STR	ROHN 5 X-STR		
Leg Grade	A572-50									
Diagonals		L1 3/4x1 3/4x3/16				L2 1/2x2 1/2x3/16	L3x3x3/16	L3x3x1/4	L3 1/2x3 1/2x1/4	
Diagonal Grade		A36						A572-50		
Top Girts	L1 3/4x1 3/4x1/8	L2x2x1/8	N.A.							
Sec. Horizontals	N.A.				A	N.A.				L2 1/2x2 1/2x3/16
Face Width (ft)	6.60417	6.64583	8.6875	9.35417	10.1208	10.6875	12.7604	14.7708	16.7708	17.7708
# Panels @ (ft)	3 @ 4	4 @ 5				9 @ 6.66667		4 @ 10		
Weight (K)	0.5	0.9	0.4	0.4	0.5	1.4	2.0	2.5	1.4	1.6



SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	L1 1/2x1 1/2x3/16		

MATERIAL STRENGTH

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

TOWER DESIGN NOTES

1. Tower is located in Tolland County, Connecticut.
2. Tower designed for Exposure B to the TIA-222-H Standard.
3. Tower designed for a 125 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 50 mph basic wind with 2.00 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Risk Category II.
7. Topographic Category 1 with Crest Height of 0.00 ft
8. TOWER RATING: 84.3%

ALL REACTIONS ARE FACTORED

MAX. CORNER REACTIONS AT BASE:
DOWN: 170 K
SHEAR: 20 K

UPLIFT: -140 K
SHEAR: 17 K

AXIAL 120 K
SHEAR 10 K
MOMENT 867 kip-ft

TORQUE 14 kip-ft
50 mph WIND - 2.00 in ICE

AXIAL 38 K
SHEAR 33 K
MOMENT 2562 kip-ft

TORQUE 34 kip-ft
REACTIONS - 125 mph WIND

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FAX: (913) 458-8136

Job: *HRT 084 943242 (BU# 806377)*			
Project: *400087 (806377.1859487)*			
Client: Crown Castle	Drawn by: Aditya Kulkarni	App'd:	
Code: TIA-222-H	Date: 06/09/20	Scale: NTS	
Path:		Dwg No. E-1	

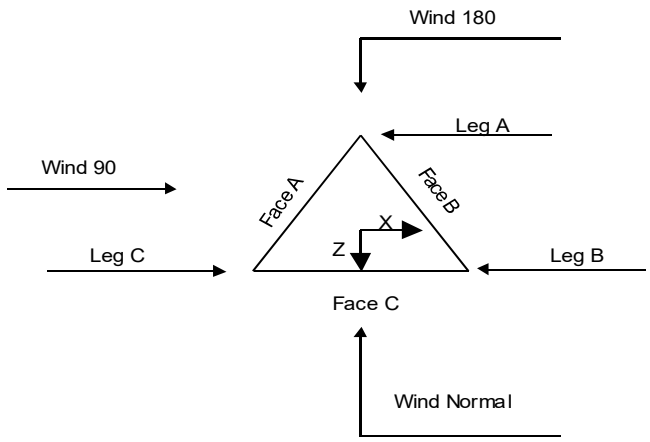
Tower Input Data

The main tower is a 3x free standing tower with an overall height of 133.17 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 6.60 ft at the top and 18.77 ft at the base.
This tower is designed using the TIA-222-H standard.
The following design criteria apply:

1. Tower is located in Tolland County, Connecticut.
2. Tower base elevation above sea level: 655.00 ft.
3. Basic wind speed of 125 mph.
4. Risk Category II.
5. Exposure Category B.
6. Simplified Topographic Factor Procedure for wind speed-up calculations is used.
7. Topographic Category: 1.
8. Crest Height: 0.00 ft.
9. Nominal ice thickness of 2.00 in.
10. Ice thickness is considered to increase with height.
11. Ice density of 56 pcf.
12. A wind speed of 50 mph is used in combination with ice.
13. Temperature drop of 50 °F.
14. Deflections calculated using a wind speed of 60 mph.
15. Pressures are calculated at each section.
16. Tower analysis based on target reliabilities in accordance with Annex S.
17. Load Modification Factors used: $K_{es}(F_w) = 0.95$, $K_{es}(t_i) = 0.85$.
18. Stress ratio used in tower member design is 1.05.
19. 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 ft	Assembly Database	Description	Section Width ft	Number of Sections	Section Length ft
T1	133.17-121.04			6.60	1	12.13
T2	121.04-100.92			6.65	1	20.13
T3	100.92-94.10			8.69	1	6.81
T4	94.10-87.44			9.35	1	6.67
T5	87.44-80.77			10.12	1	6.67
T6	80.77-60.60			10.69	1	20.17
T7	60.60-40.42			12.76	1	20.19
T8	40.42-20.21			14.77	1	20.21
T9	20.21-10.10			16.77	1	10.10
T10	10.10-0.00			17.77	1	10.10

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	133.17-121.04	4.00	X Brace	No	No	1.50	0.00
T2	121.04-100.92	5.00	X Brace	No	No	1.50	0.00
T3	100.92-94.10	6.67	X Brace	No	No	1.75	0.00
T4	94.10-87.44	6.67	X Brace	No	No	0.00	0.00
T5	87.44-80.77	6.67	X Brace	No	Yes	0.00	0.00
T6	80.77-60.60	6.67	X Brace	No	No	1.00	1.00
T7	60.60-40.42	6.67	X Brace	No	No	1.13	1.13
T8	40.42-20.21	10.00	X Brace	No	No	1.25	1.25
T9	20.21-10.10	10.00	X Brace	No	No	1.25	0.00
T10	10.10-0.00	10.00	X Brace	No	Yes	0.00	1.25

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
T1 133.17-121.04	Pipe	ROHN 2 STD	A572-50 (50 ksi)	Equal Angle	L1 3/4x1 3/4x3/16	A36 (36 ksi)
T2 121.04-100.92	Pipe	ROHN 2.5 STD	A572-50 (50 ksi)	Equal Angle	L1 3/4x1 3/4x3/16	A36 (36 ksi)
T3 100.92-94.10	Pipe	ROHN 3 STD	A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x3/16	A36 (36 ksi)
T4 94.10-87.44	Pipe	ROHN 3 STD	A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x3/16	A36 (36 ksi)
T5 87.44-80.77	Pipe	ROHN 3 STD	A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x3/16	A36 (36 ksi)
T6 80.77-60.60	Pipe	ROHN 3 X-STR	A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x3/16	A36 (36 ksi)
T7 60.60-40.42	Pipe	ROHN 4 X-STR	A572-50 (50 ksi)	Equal Angle	L3x3x3/16	A36 (36 ksi)
T8 40.42-20.21	Pipe	ROHN 5 X-STR	A572-50 (50 ksi)	Equal Angle	L3x3x1/4	A572-50 (50 ksi)
T9 20.21-10.10	Pipe	ROHN 5 X-STR	A572-50 (50 ksi)	Equal Angle	L3 1/2x3 1/2x1/4	A572-50 (50 ksi)
T10 10.10-0.00	Pipe	ROHN 5 X-STR	A572-50 (50 ksi)	Equal Angle	L3 1/2x3 1/2x1/4	A572-50 (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 133.17-121.04	Equal Angle	L1 3/4x1 3/4x1/8	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T2 121.04-100.92	Equal Angle	L2x2x1/8	A36 (36 ksi)	Flat Bar		A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Secondary Horizontal Type	Secondary Horizontal Size	Secondary Horizontal Grade	Inner Bracing Type	Inner Bracing Size	Inner Bracing Grade
T1 133.17-121.04	Solid Round		A572-50 (50 ksi)	Solid Round	9/16	A572-50 (50 ksi)
T2 121.04-100.92	Solid Round		A572-50 (50 ksi)	Solid Round	9/16	A572-50 (50 ksi)
T3 100.92-94.10	Solid Round		A572-50 (50 ksi)	Solid Round	9/16	A572-50 (50 ksi)
T4 94.10-87.44	Solid Round		A572-50 (50 ksi)	Solid Round	9/16	A572-50 (50 ksi)
T5 87.44-80.77	Equal Angle	L1 1/2x1 1/2x3/16	A36 (36 ksi)	Solid Round	9/16	A572-50 (50 ksi)
T6 80.77-60.60	Solid Round		A572-50 (50 ksi)	Solid Round	9/16	A572-50 (50 ksi)
T7 60.60-40.42	Solid Round		A572-50 (50 ksi)	Solid Round	9/16	A572-50 (50 ksi)
T8 40.42-20.21	Solid Round		A572-50 (50 ksi)	Solid Round	9/16	A572-50 (50 ksi)
T9 20.21-10.10	Solid Round		A572-50 (50 ksi)	Solid Round	9/16	A572-50 (50 ksi)
T10 10.10-0.00	Equal Angle	L2 1/2x2 1/2x3/16	A36 (36 ksi)	Solid Round	9/16	A572-50 (50 ksi)

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 133.17-121.04	0.00	0.00	A36 (36 ksi)	1.05	1	1.05	0.00	0.00	0.00
T2 121.04-100.92	0.00	0.00	A36 (36 ksi)	1.05	1	1.05	0.00	0.00	0.00
T3 100.92-94.10	0.00	0.00	A36 (36 ksi)	1.05	1	1.05	0.00	0.00	0.00
T4 94.10-87.44	0.00	0.00	A36 (36 ksi)	1.05	1	1.05	0.00	0.00	0.00
T5 87.44-80.77	0.00	0.00	A36 (36 ksi)	1.05	1	1.05	0.00	0.00	0.00
T6 80.77-60.60	0.00	0.00	A36 (36 ksi)	1.05	1	1.05	0.00	0.00	0.00
T7 60.60-40.42	0.00	0.00	A36 (36 ksi)	1.05	1	1.05	0.00	0.00	0.00
T8 40.42-20.21	0.00	0.00	A36 (36 ksi)	1.05	1	1.05	0.00	0.00	0.00
T9 20.21-10.10	0.00	0.00	A36 (36 ksi)	1.05	1	1.05	0.00	0.00	0.00
T10 10.10-0.00	0.00	0.00	A36 (36 ksi)	1.05	1	1.05	0.00	0.00	0.00

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 133.17-121.04	Yes	Yes	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T2 121.04-100.92	Yes	Yes	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T3 100.92-94.10	Yes	Yes	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T4 94.10-87.44	Yes	Yes	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T5 87.44-80.77	Yes	Yes	1	1	1	1	1	1	1	1
				1	1	1	1	0.5	1	1
T6 80.77-60.60	Yes	Yes	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T7 60.60-40.42	Yes	Yes	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T8 40.42-20.21	Yes	Yes	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T9 20.21-10.10	Yes	Yes	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T10 10.10-0.00	Yes	Yes	1	1	1	1	1	1	1	1
				1	1	1	1	0.5	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		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T1 133.17-121.04	0.00	1	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75
T2 121.04-100.92	0.00	1	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75
T3 100.92-94.10	0.00	1	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75
T4 94.10-87.44	0.00	1	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75
T5 87.44-80.77	0.00	1	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75
T6 80.77-60.60	0.00	1	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75
T7 60.60-40.42	0.00	1	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75
T8 40.42-20.21	0.00	1	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75
T9 20.21-10.10	0.00	1	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75
T10 10.10-0.00	0.00	1	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	0.75	0.00	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 133.17-121.04	Flange	0.63 A325N	4	0.63 A325N	1	0.63 A325N	1	0.63 A325N	0	0.63 A325N	0	0.63 A325N	0	0.63 A325N	0
T2 121.04-100.92	Flange	0.75 A325N	4	0.63 A325N	1	0.63 A325N	1	0.63 A325N	0	0.63 A325N	0	0.63 A325N	0	0.63 A325N	0
T3 100.92-94.10	Flange	0.00 A325N	0	0.63 A325N	1	0.50 A325N	0	0.63 A325N	0	0.63 A325N	0	0.63 A325N	0	0.63 A325N	0
T4 94.10-87.44	Flange	0.00 A325N	0	0.63 A325N	1	0.50 A325N	0	0.00 A325N	0	0.63 A325N	0	0.63 A325N	0	0.63 A325N	0
T5 87.44-80.77	Flange	0.88 A325N	4	0.63 A325N	1	0.63 A325N	0	0.00 A325N	0	0.63 A325N	0	0.63 A325N	0	0.63 A325N	1
T6 80.77-60.60	Flange	0.88 A325N	4	0.63 A325N	1	0.63 A325N	0	0.63 A325N	0	0.63 A325N	0	0.63 A325N	0	0.63 A325N	0
T7 60.60-40.42	Flange	1.00 A325N	4	0.63 A325N	1	0.50 A325N	0	0.63 A325N	0	0.63 A325N	0	0.63 A325N	0	0.63 A325N	0
T8 40.42-20.21	Flange	1.00 A325N	4	0.63 A325N	1	0.50 A325N	0	0.63 A325N	0	0.63 A325N	0	0.63 A325N	0	0.63 A325N	0
T9 20.21-10.10	Flange	0.00 A325N	0	0.63 A325N	1	0.50 A325N	0	0.63 A325N	0	0.63 A325N	0	0.63 A325N	0	0.63 A325N	0
T10 10.10-0.00	Flange	1.00 A449	0	0.75 A325N	1	0.63 A325N	0	0.00 A325N	0	0.63 A325N	0	0.63 A325N	0	0.63 A325N	1

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 klf
Safety Line 3/8 ***	B	No	No	Ar (CaAa)	98.00 - 0.00	0.00	-0.5	1	1	0.38	0.38		0.00
Feedline Ladder (Af)	B	No	No	Af (CaAa)	130.00 - 10.00	0.00	-0.42	1	1	3.00	3.00		0.01
HB078-1-08U3-M3J(7/8)	B	No	No	Ar (CaAa)	130.00 - 10.00	0.00	-0.44	2	2	0.50	1.09		0.00
LCF12-50J(1/2) ***	B	No	No	Ar (CaAa)	63.00 - 10.00	0.00	-0.425	1	1	0.50	0.64		0.00
Feedline Ladder (Af)	B	No	No	Af (CaAa)	130.00 - 5.00	0.00	0.409	1	1	3.00	3.00		0.01
HB058-1-08U1-S2F(5/8)	B	No	No	Ar (CaAa)	130.00 - 5.00	0.00	0.39	1	1	0.50	0.84		0.00
HB114-1-08U4-M5J(1-1/4)	B	No	No	Ar (CaAa)	130.00 - 5.00	0.00	0.409	3	3	0.50	1.54		0.00
LDF4-50A(1/2) ***	B	No	No	Ar (CaAa)	46.00 - 5.00	2.00	0.413	1	1	0.50	0.63		0.00
Feedline Ladder (Af)	A	No	No	Af (CaAa)	117.00 - 10.00	0.00	0.4	1	1	3.00	3.00		0.01
HB158-1-08U8-S8J18(1-5/8)	A	No	No	Ar (CaAa)	117.00 - 10.00	0.00	0.43	2	2	0.50	1.98		0.00
LDF5-50A(7/8)	A	No	No	Ar (CaAa)	117.00 - 10.00	0.00	0.37	11	9	0.50	1.03		0.00
LDF5-50A(7/8)	A	No	No	Ar (CaAa)	117.00 - 10.00	2.00	0.43	1	1	0.50	1.03		0.00
LDF4-50A(1/2) ***	B	No	No	Ar (CaAa)	56.00 - 0.00	0.00	-0.45	1	1	0.50	0.63		0.00
Feedline Ladder (Af)	C	No	No	Af (CaAa)	104.00 - 2.00	0.00	-0.38	1	1	3.00	3.00		0.01
LDF5-50A(7/8)	C	No	No	Ar (CaAa)	104.00 - 2.00	0.00	-0.38	12	12	0.50	1.03		0.00
FB-L98B-002-75000(3/8)	C	No	No	Ar (CaAa)	104.00 - 2.00	1.00	-0.46	1	1	0.39	0.39		0.00
FB-L98B-034-XXX(3/8)	C	No	No	Ar (CaAa)	104.00 - 2.00	0.00	-0.46	2	2	0.39	0.39		0.00
WR-VG86ST-BRD(3/4)	C	No	No	Ar (CaAa)	104.00 - 2.00	0.00	-0.44	4	4	0.50	0.80		0.00
WR-VG86ST-BRDA(7/8) ***	C	No	No	Ar (CaAa)	104.00 - 2.00	1.50	-0.415	2	2	0.50	0.88		0.00
T-Bracket	B	No	No	Af (CaAa)	94.00 - 5.00	-10.00	0.45	1	1	1.50	1.50		0.00
AVA7-50(1-5/8) ***	B	No	No	Ar (CaAa)	94.00 - 5.00	-10.00	0.415	6	2	0.50	2.01		0.00
AL5-50(7/8)	B	No	No	Ar (CaAa)	84.00 - 5.00	-10.00	0.45	10	3	0.50	1.10		0.00
HCS 6X12 6AWG(1-3/8)	B	No	No	Ar (CaAa)	84.00 - 5.00	-13.00	0.415	2	2	0.50	1.38		0.00
MLE HYBRID 9POWER/18 FIBER RL 2(1-5/8)	B	No	No	Ar (CaAa)	84.00 - 5.00	-13.00	0.45	1	1	0.50	1.63		0.00

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 klf
***													

Feed Line/Linear Appurtenances - Entered As Area

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

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 K
T1	133.17-121.04	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	15.802	0.000	0.20
		C	0.000	0.000	0.000	0.000	0.00
T2	121.04-100.92	A	0.000	0.000	34.290	0.000	0.24
		B	0.000	0.000	35.501	0.000	0.44
		C	0.000	0.000	7.240	0.000	0.05
T3	100.92-94.10	A	0.000	0.000	14.524	0.000	0.10
		B	0.000	0.000	12.163	0.000	0.15
		C	0.000	0.000	15.996	0.000	0.11
T4	94.10-87.44	A	0.000	0.000	14.213	0.000	0.10
		B	0.000	0.000	21.565	0.000	0.20
		C	0.000	0.000	15.654	0.000	0.11
T5	87.44-80.77	A	0.000	0.000	14.213	0.000	0.10
		B	0.000	0.000	26.685	0.000	0.23
		C	0.000	0.000	15.654	0.000	0.11
T6	80.77-60.60	A	0.000	0.000	42.995	0.000	0.30
		B	0.000	0.000	96.873	0.000	0.76
		C	0.000	0.000	47.354	0.000	0.33
T7	60.60-40.42	A	0.000	0.000	43.040	0.000	0.30
		B	0.000	0.000	99.434	0.000	0.77
		C	0.000	0.000	47.402	0.000	0.33
T8	40.42-20.21	A	0.000	0.000	43.084	0.000	0.30
		B	0.000	0.000	100.739	0.000	0.77
		C	0.000	0.000	47.451	0.000	0.33
T9	20.21-10.10	A	0.000	0.000	21.542	0.000	0.15
		B	0.000	0.000	50.369	0.000	0.39
		C	0.000	0.000	23.726	0.000	0.16
T10	10.10-0.00	A	0.000	0.000	0.222	0.000	0.00
		B	0.000	0.000	22.034	0.000	0.15
		C	0.000	0.000	19.029	0.000	0.13

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 K
T1	133.17-121.04	A	1.945	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	41.665	0.000	0.75
		C		0.000	0.000	0.000	0.000	0.00
T2	121.04-100.92	A	1.919	0.000	0.000	79.142	0.000	1.29
		B		0.000	0.000	92.919	0.000	1.65
		C		0.000	0.000	21.841	0.000	0.31
T3	100.92-94.10	A	1.895	0.000	0.000	33.343	0.000	0.54

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 K
		B		0.000	0.000	32.859	0.000	0.57
		C		0.000	0.000	47.963	0.000	0.67
T4	94.10-87.44	A	1.881	0.000	0.000	32.533	0.000	0.52
		B		0.000	0.000	48.479	0.000	0.84
		C		0.000	0.000	46.780	0.000	0.65
T5	87.44-80.77	A	1.867	0.000	0.000	32.431	0.000	0.52
		B		0.000	0.000	58.817	0.000	0.99
		C		0.000	0.000	46.614	0.000	0.64
T6	80.77-60.60	A	1.835	0.000	0.000	97.410	0.000	1.54
		B		0.000	0.000	210.182	0.000	3.45
		C		0.000	0.000	139.880	0.000	1.91
T7	60.60-40.42	A	1.774	0.000	0.000	96.203	0.000	1.49
		B		0.000	0.000	223.052	0.000	3.55
		C		0.000	0.000	137.897	0.000	1.85
T8	40.42-20.21	A	1.686	0.000	0.000	94.397	0.000	1.43
		B		0.000	0.000	224.987	0.000	3.47
		C		0.000	0.000	134.942	0.000	1.76
T9	20.21-10.10	A	1.573	0.000	0.000	45.983	0.000	0.67
		B		0.000	0.000	108.457	0.000	1.62
		C		0.000	0.000	65.494	0.000	0.82
T10	10.10-0.00	A	1.409	0.000	0.000	0.456	0.000	0.01
		B		0.000	0.000	45.298	0.000	0.62
		C		0.000	0.000	50.238	0.000	0.59

Feed Line Center of Pressure

Section	Elevation ft	CP_X in	CP_Z in	CP_X Ice in	CP_Z Ice in
T1	133.17-121.04	4.58	-1.55	5.94	-2.10
T2	121.04-100.92	6.11	-11.82	8.36	-11.48
T3	100.92-94.10	12.87	-10.90	17.55	-8.26
T4	94.10-87.44	16.02	-8.18	20.51	-6.05
T5	87.44-80.77	17.23	-6.07	21.78	-4.00
T6	80.77-60.60	21.78	-5.03	26.73	-2.74
T7	60.60-40.42	22.66	-5.91	29.07	-5.19
T8	40.42-20.21	27.23	-7.00	34.45	-6.02
T9	20.21-10.10	27.75	-7.19	36.13	-6.49
T10	10.10-0.00	21.71	8.99	31.59	11.53

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T1	3	Feedline Ladder (Af)	121.04 - 130.00	0.6000	0.5705
T1	4	HB078-1-08U3-M3J(7/8)	121.04 - 130.00	0.6000	0.5705
T1	8	Feedline Ladder (Af)	121.04 - 130.00	0.6000	0.5705
T1	9	HB058-1-08U1-S2F(5/8)	121.04 - 130.00	0.6000	0.5705
T1	10	HB114-1-08U4-M5J(1-1/4)	121.04 - 130.00	0.6000	0.5705
T2	3	Feedline Ladder (Af)	100.92 - 121.04	0.6000	0.6000
T2	4	HB078-1-08U3-M3J(7/8)	100.92 - 121.04	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T2	8	Feedline Ladder (Af)	100.92 - 121.04	0.6000	0.6000
T2	9	HB058-1-08U1-S2F(5/8)	100.92 - 121.04	0.6000	0.6000
T2	10	HB114-1-08U4-M5J(1-1/4)	100.92 - 121.04	0.6000	0.6000
T2	13	Feedline Ladder (Af)	100.92 - 117.00	0.6000	0.6000
T2	15	HB158-1-08U8-S8J18(1-5/8)	100.92 - 117.00	0.6000	0.6000
T2	16	LDF5-50A(7/8)	100.92 - 117.00	0.6000	0.6000
T2	17	LDF5-50A(7/8)	100.92 - 117.00	0.6000	0.6000
T2	20	Feedline Ladder (Af)	100.92 - 104.00	0.6000	0.6000
T2	22	LDF5-50A(7/8)	100.92 - 104.00	0.6000	0.6000
T2	23	FB-L98B-002-75000(3/8)	100.92 - 104.00	0.6000	0.6000
T2	24	FB-L98B-034-XXX(3/8)	100.92 - 104.00	0.6000	0.6000
T2	25	WR-VG86ST-BRD(3/4)	100.92 - 104.00	0.6000	0.6000
T2	26	WR-VG86ST-BRDA(7/8)	100.92 - 104.00	0.6000	0.6000
T3	1	Safety Line 3/8	94.10 - 98.00	0.6000	0.6000
T3	3	Feedline Ladder (Af)	94.10 - 100.92	0.6000	0.6000
T3	4	HB078-1-08U3-M3J(7/8)	94.10 - 100.92	0.6000	0.6000
T3	8	Feedline Ladder (Af)	94.10 - 100.92	0.6000	0.6000
T3	9	HB058-1-08U1-S2F(5/8)	94.10 - 100.92	0.6000	0.6000
T3	10	HB114-1-08U4-M5J(1-1/4)	94.10 - 100.92	0.6000	0.6000
T3	13	Feedline Ladder (Af)	94.10 - 100.92	0.6000	0.6000
T3	15	HB158-1-08U8-S8J18(1-5/8)	94.10 - 100.92	0.6000	0.6000
T3	16	LDF5-50A(7/8)	94.10 - 100.92	0.6000	0.6000
T3	17	LDF5-50A(7/8)	94.10 - 100.92	0.6000	0.6000
T3	20	Feedline Ladder (Af)	94.10 - 100.92	0.6000	0.6000
T3	22	LDF5-50A(7/8)	94.10 - 100.92	0.6000	0.6000
T3	23	FB-L98B-002-75000(3/8)	94.10 - 100.92	0.6000	0.6000
T3	24	FB-L98B-034-XXX(3/8)	94.10 - 100.92	0.6000	0.6000
T3	25	WR-VG86ST-BRD(3/4)	94.10 - 100.92	0.6000	0.6000
T3	26	WR-VG86ST-BRDA(7/8)	94.10 - 100.92	0.6000	0.6000
T4	1	Safety Line 3/8	87.44 - 94.10	0.6000	0.6000
T4	3	Feedline Ladder (Af)	87.44 - 94.10	0.6000	0.6000
T4	4	HB078-1-08U3-M3J(7/8)	87.44 - 94.10	0.6000	0.6000
T4	8	Feedline Ladder (Af)	87.44 - 94.10	0.6000	0.6000
T4	9	HB058-1-08U1-S2F(5/8)	87.44 - 94.10	0.6000	0.6000
T4	10	HB114-1-08U4-M5J(1-1/4)	87.44 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
			94.10		
T4	13	Feedline Ladder (Af)	87.44 - 94.10	0.6000	0.6000
T4	15	HB158-1-08U8-S8J18(1-5/8)	87.44 - 94.10	0.6000	0.6000
T4	16	LDF5-50A(7/8)	87.44 - 94.10	0.6000	0.6000
T4	17	LDF5-50A(7/8)	87.44 - 94.10	0.6000	0.6000
T4	20	Feedline Ladder (Af)	87.44 - 94.10	0.6000	0.6000
T4	22	LDF5-50A(7/8)	87.44 - 94.10	0.6000	0.6000
T4	23	FB-L98B-002-75000(3/8)	87.44 - 94.10	0.6000	0.6000
T4	24	FB-L98B-034-XXX(3/8)	87.44 - 94.10	0.6000	0.6000
T4	25	WR-VG86ST-BRD(3/4)	87.44 - 94.10	0.6000	0.6000
T4	26	WR-VG86ST-BRDA(7/8)	87.44 - 94.10	0.6000	0.6000
T4	28	T-Bracket	87.44 - 94.00	0.6000	0.6000
T4	29	AVA7-50(1-5/8)	87.44 - 94.00	0.6000	0.6000
T5	1	Safety Line 3/8	80.77 - 87.44	0.6000	0.6000
T5	3	Feedline Ladder (Af)	80.77 - 87.44	0.6000	0.6000
T5	4	HB078-1-08U3-M3J(7/8)	80.77 - 87.44	0.6000	0.6000
T5	8	Feedline Ladder (Af)	80.77 - 87.44	0.6000	0.6000
T5	9	HB058-1-08U1-S2F(5/8)	80.77 - 87.44	0.6000	0.6000
T5	10	HB114-1-08U4-M5J(1-1/4)	80.77 - 87.44	0.6000	0.6000
T5	13	Feedline Ladder (Af)	80.77 - 87.44	0.6000	0.6000
T5	15	HB158-1-08U8-S8J18(1-5/8)	80.77 - 87.44	0.6000	0.6000
T5	16	LDF5-50A(7/8)	80.77 - 87.44	0.6000	0.6000
T5	17	LDF5-50A(7/8)	80.77 - 87.44	0.6000	0.6000
T5	20	Feedline Ladder (Af)	80.77 - 87.44	0.6000	0.6000
T5	22	LDF5-50A(7/8)	80.77 - 87.44	0.6000	0.6000
T5	23	FB-L98B-002-75000(3/8)	80.77 - 87.44	0.6000	0.6000
T5	24	FB-L98B-034-XXX(3/8)	80.77 - 87.44	0.6000	0.6000
T5	25	WR-VG86ST-BRD(3/4)	80.77 - 87.44	0.6000	0.6000
T5	26	WR-VG86ST-BRDA(7/8)	80.77 - 87.44	0.6000	0.6000
T5	28	T-Bracket	80.77 - 87.44	0.6000	0.6000
T5	29	AVA7-50(1-5/8)	80.77 - 87.44	0.6000	0.6000
T5	31	AL5-50(7/8)	80.77 - 84.00	0.6000	0.6000
T5	32	HCS 6X12 6AWG(1-3/8)	80.77 - 84.00	0.6000	0.6000
T5	33	MLE HYBRID 9POWER/18FIBER RL 2(1-5/8)	80.77 - 84.00	0.6000	0.6000
T6	1	Safety Line 3/8	60.60 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T6	3	Feedline Ladder (Af)	80.77 60.60 - 80.77	0.6000	0.6000
T6	4	HB078-1-08U3-M3J(7/8)	60.60 - 80.77	0.6000	0.6000
T6	5	LCF12-50J(1/2)	60.60 - 80.77	0.6000	0.6000
T6	8	Feedline Ladder (Af)	60.60 - 63.00	0.6000	0.6000
T6	9	HB058-1-08U1-S2F(5/8)	60.60 - 80.77	0.6000	0.6000
T6	10	HB114-1-08U4-M5J(1-1/4)	60.60 - 80.77	0.6000	0.6000
T6	13	Feedline Ladder (Af)	60.60 - 80.77	0.6000	0.6000
T6	15	HB158-1-08U8-S8J18(1-5/8)	60.60 - 80.77	0.6000	0.6000
T6	16	LDF5-50A(7/8)	60.60 - 80.77	0.6000	0.6000
T6	17	LDF5-50A(7/8)	60.60 - 80.77	0.6000	0.6000
T6	20	Feedline Ladder (Af)	60.60 - 80.77	0.6000	0.6000
T6	22	LDF5-50A(7/8)	60.60 - 80.77	0.6000	0.6000
T6	23	FB-L98B-002-75000(3/8)	60.60 - 80.77	0.6000	0.6000
T6	24	FB-L98B-034-XXX(3/8)	60.60 - 80.77	0.6000	0.6000
T6	25	WR-VG86ST-BRD(3/4)	60.60 - 80.77	0.6000	0.6000
T6	26	WR-VG86ST-BRDA(7/8)	60.60 - 80.77	0.6000	0.6000
T6	28	T-Bracket	60.60 - 80.77	0.6000	0.6000
T6	29	AVA7-50(1-5/8)	60.60 - 80.77	0.6000	0.6000
T6	31	AL5-50(7/8)	60.60 - 80.77	0.6000	0.6000
T6	32	HCS 6X12 6AWG(1-3/8)	60.60 - 80.77	0.6000	0.6000
T6	33	MLE HYBRID 9POWER/18FIBER RL 2(1-5/8)	60.60 - 80.77	0.6000	0.6000
T7	1	Safety Line 3/8	40.42 - 60.60	0.6000	0.6000
T7	3	Feedline Ladder (Af)	40.42 - 60.60	0.6000	0.6000
T7	4	HB078-1-08U3-M3J(7/8)	40.42 - 60.60	0.6000	0.6000
T7	5	LCF12-50J(1/2)	40.42 - 60.60	0.6000	0.6000
T7	8	Feedline Ladder (Af)	40.42 - 60.60	0.6000	0.6000
T7	9	HB058-1-08U1-S2F(5/8)	40.42 - 60.60	0.6000	0.6000
T7	10	HB114-1-08U4-M5J(1-1/4)	40.42 - 60.60	0.6000	0.6000
T7	11	LDF4-50A(1/2)	40.42 - 46.00	0.6000	0.6000
T7	13	Feedline Ladder (Af)	40.42 - 60.60	0.6000	0.6000
T7	15	HB158-1-08U8-S8J18(1-5/8)	40.42 - 60.60	0.6000	0.6000
T7	16	LDF5-50A(7/8)	40.42 - 60.60	0.6000	0.6000
T7	17	LDF5-50A(7/8)	40.42 - 60.60	0.6000	0.6000
T7	18	LDF4-50A(1/2)	40.42 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
			56.00		
T7	20	Feedline Ladder (Af)	40.42 - 60.60	0.6000	0.6000
T7	22	LDF5-50A(7/8)	40.42 - 60.60	0.6000	0.6000
T7	23	FB-L98B-002-75000(3/8)	40.42 - 60.60	0.6000	0.6000
T7	24	FB-L98B-034-XXX(3/8)	40.42 - 60.60	0.6000	0.6000
T7	25	WR-VG86ST-BRD(3/4)	40.42 - 60.60	0.6000	0.6000
T7	26	WR-VG86ST-BRDA(7/8)	40.42 - 60.60	0.6000	0.6000
T7	28	T-Bracket	40.42 - 60.60	0.6000	0.6000
T7	29	AVA7-50(1-5/8)	40.42 - 60.60	0.6000	0.6000
T7	31	AL5-50(7/8)	40.42 - 60.60	0.6000	0.6000
T7	32	HCS 6X12 6AWG(1-3/8)	40.42 - 60.60	0.6000	0.6000
T7	33	MLE HYBRID 9POWER/18FIBER RL 2(1-5/8)	40.42 - 60.60	0.6000	0.6000
T8	1	Safety Line 3/8	20.21 - 40.42	0.6000	0.6000
T8	3	Feedline Ladder (Af)	20.21 - 40.42	0.6000	0.6000
T8	4	HB078-1-08U3-M3J(7/8)	20.21 - 40.42	0.6000	0.6000
T8	5	LCF12-50J(1/2)	20.21 - 40.42	0.6000	0.6000
T8	8	Feedline Ladder (Af)	20.21 - 40.42	0.6000	0.6000
T8	9	HB058-1-08U1-S2F(5/8)	20.21 - 40.42	0.6000	0.6000
T8	10	HB114-1-08U4-M5J(1-1/4)	20.21 - 40.42	0.6000	0.6000
T8	11	LDF4-50A(1/2)	20.21 - 40.42	0.6000	0.6000
T8	13	Feedline Ladder (Af)	20.21 - 40.42	0.6000	0.6000
T8	15	HB158-1-08U8-S8J18(1-5/8)	20.21 - 40.42	0.6000	0.6000
T8	16	LDF5-50A(7/8)	20.21 - 40.42	0.6000	0.6000
T8	17	LDF5-50A(7/8)	20.21 - 40.42	0.6000	0.6000
T8	18	LDF4-50A(1/2)	20.21 - 40.42	0.6000	0.6000
T8	20	Feedline Ladder (Af)	20.21 - 40.42	0.6000	0.6000
T8	22	LDF5-50A(7/8)	20.21 - 40.42	0.6000	0.6000
T8	23	FB-L98B-002-75000(3/8)	20.21 - 40.42	0.6000	0.6000
T8	24	FB-L98B-034-XXX(3/8)	20.21 - 40.42	0.6000	0.6000
T8	25	WR-VG86ST-BRD(3/4)	20.21 - 40.42	0.6000	0.6000
T8	26	WR-VG86ST-BRDA(7/8)	20.21 - 40.42	0.6000	0.6000
T8	28	T-Bracket	20.21 - 40.42	0.6000	0.6000
T8	29	AVA7-50(1-5/8)	20.21 - 40.42	0.6000	0.6000
T8	31	AL5-50(7/8)	20.21 - 40.42	0.6000	0.6000
T8	32	HCS 6X12 6AWG(1-3/8)	20.21 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
			40.42		
T8	33	MLE HYBRID 9POWER/18FIBER RL 2(1-5/8)	20.21 - 40.42	0.6000	0.6000
T9	1	Safety Line 3/8	10.10 - 20.21	0.6000	0.6000
T9	3	Feedline Ladder (Af)	10.10 - 20.21	0.6000	0.6000
T9	4	HB078-1-08U3-M3J(7/8)	10.10 - 20.21	0.6000	0.6000
T9	5	LCF12-50J(1/2)	10.10 - 20.21	0.6000	0.6000
T9	8	Feedline Ladder (Af)	10.10 - 20.21	0.6000	0.6000
T9	9	HB058-1-08U1-S2F(5/8)	10.10 - 20.21	0.6000	0.6000
T9	10	HB114-1-08U4-M5J(1-1/4)	10.10 - 20.21	0.6000	0.6000
T9	11	LDF4-50A(1/2)	10.10 - 20.21	0.6000	0.6000
T9	13	Feedline Ladder (Af)	10.10 - 20.21	0.6000	0.6000
T9	15	HB158-1-08U8-S8J18(1-5/8)	10.10 - 20.21	0.6000	0.6000
T9	16	LDF5-50A(7/8)	10.10 - 20.21	0.6000	0.6000
T9	17	LDF5-50A(7/8)	10.10 - 20.21	0.6000	0.6000
T9	18	LDF4-50A(1/2)	10.10 - 20.21	0.6000	0.6000
T9	20	Feedline Ladder (Af)	10.10 - 20.21	0.6000	0.6000
T9	22	LDF5-50A(7/8)	10.10 - 20.21	0.6000	0.6000
T9	23	FB-L98B-002-75000(3/8)	10.10 - 20.21	0.6000	0.6000
T9	24	FB-L98B-034-XXX(3/8)	10.10 - 20.21	0.6000	0.6000
T9	25	WR-VG86ST-BRD(3/4)	10.10 - 20.21	0.6000	0.6000
T9	26	WR-VG86ST-BRDA(7/8)	10.10 - 20.21	0.6000	0.6000
T9	28	T-Bracket	10.10 - 20.21	0.6000	0.6000
T9	29	AVA7-50(1-5/8)	10.10 - 20.21	0.6000	0.6000
T9	31	AL5-50(7/8)	10.10 - 20.21	0.6000	0.6000
T9	32	HCS 6X12 6AWG(1-3/8)	10.10 - 20.21	0.6000	0.6000
T9	33	MLE HYBRID 9POWER/18FIBER RL 2(1-5/8)	10.10 - 20.21	0.6000	0.6000
T10	1	Safety Line 3/8	0.00 - 10.10	0.6000	0.6000
T10	3	Feedline Ladder (Af)	10.00 - 10.10	0.6000	0.6000
T10	4	HB078-1-08U3-M3J(7/8)	10.00 - 10.10	0.6000	0.6000
T10	5	LCF12-50J(1/2)	10.00 - 10.10	0.6000	0.6000
T10	8	Feedline Ladder (Af)	5.00 - 10.10	0.6000	0.6000
T10	9	HB058-1-08U1-S2F(5/8)	5.00 - 10.10	0.6000	0.6000
T10	10	HB114-1-08U4-M5J(1-1/4)	5.00 - 10.10	0.6000	0.6000
T10	11	LDF4-50A(1/2)	5.00 - 10.10	0.6000	0.6000
T10	13	Feedline Ladder (Af)	10.00 - 10.10	0.6000	0.6000
T10	15	HB158-1-08U8-S8J18(1-5/8)	10.00 - 10.10	0.6000	0.6000
T10	16	LDF5-50A(7/8)	10.00 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
			10.10		
T10	17	LDF5-50A(7/8)	10.00 - 10.10	0.6000	0.6000
T10	18	LDF4-50A(1/2)	0.00 - 10.10	0.6000	0.6000
T10	20	Feedline Ladder (Af)	2.00 - 10.10	0.6000	0.6000
T10	22	LDF5-50A(7/8)	2.00 - 10.10	0.6000	0.6000
T10	23	FB-L98B-002-75000(3/8)	2.00 - 10.10	0.6000	0.6000
T10	24	FB-L98B-034-XXX(3/8)	2.00 - 10.10	0.6000	0.6000
T10	25	WR-VG86ST-BRD(3/4)	2.00 - 10.10	0.6000	0.6000
T10	26	WR-VG86ST-BRDA(7/8)	2.00 - 10.10	0.6000	0.6000
T10	28	T-Bracket	5.00 - 10.10	0.6000	0.6000
T10	29	AVA7-50(1-5/8)	5.00 - 10.10	0.6000	0.6000
T10	31	AL5-50(7/8)	5.00 - 10.10	0.6000	0.6000
T10	32	HCS 6X12 6AWG(1-3/8)	5.00 - 10.10	0.6000	0.6000
T10	33	MLE HYBRID 9POWER/18FIBER RL 2(1-5/8)	5.00 - 10.10	0.6000	0.6000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
***									
4'x2" Mount Pipe	A	From Leg	0.00	0.00	130.00	No Ice	0.87	0.87	0.01
			0.00			1/2"	1.11	1.11	0.02
			0.00			Ice	1.36	1.36	0.03
						1" Ice	1.90	1.90	0.06
						2" Ice			
4'x2" Mount Pipe	B	From Leg	0.00	0.00	130.00	No Ice	0.87	0.87	0.01
			0.00			1/2"	1.11	1.11	0.02
			0.00			Ice	1.36	1.36	0.03
						1" Ice	1.90	1.90	0.06
						2" Ice			
4'x2" Mount Pipe	C	From Leg	0.00	0.00	130.00	No Ice	0.87	0.87	0.01
			0.00			1/2"	1.11	1.11	0.02
			0.00			Ice	1.36	1.36	0.03
						1" Ice	1.90	1.90	0.06
						2" Ice			
12'x4" Mount Pipe	A	From Leg	0.00	0.00	130.00	No Ice	4.41	4.41	0.16
			0.00			1/2"	6.29	6.29	0.19
			0.00			Ice	7.01	7.01	0.23
						1" Ice	8.51	8.51	0.35
						2" Ice			
12'x4" Mount Pipe	B	From Leg	0.00	0.00	130.00	No Ice	4.41	4.41	0.16
			0.00			1/2"	6.29	6.29	0.19
			0.00			Ice	7.01	7.01	0.23
						1" Ice	8.51	8.51	0.35
						2" Ice			
ANT450D6-9	A	From Leg	1.00	0.00	130.00	No Ice	0.50	0.50	0.02
			0.00			1/2"	0.90	0.90	0.02
			6.00			Ice	1.30	1.30	0.03
						1" Ice	2.10	2.10	0.04
						2" Ice			
ANT450D6-9	A	From Leg	1.00	0.00	130.00	No Ice	0.50	0.50	0.02
			0.00			1/2"	0.90	0.90	0.02
			0.00			Ice	1.30	1.30	0.03
						1" Ice	2.10	2.10	0.04
						2" Ice			
130									
T-Arm Mount [4' TA 702-3]	C	None		0.00	130.00	No Ice	3.80	3.80	0.27

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
						1/2" Ice	4.66	4.66	0.34
						1" Ice	5.58	5.58	0.44
						2" Ice	7.78	7.78	0.69
APXVSPP18-C-A20 w/ Mount Pipe	A	From Leg	1.00 -2.00 0.00	0.00	130.00	No Ice	4.60	4.01	0.10
						1/2" Ice	5.05	4.45	0.16
						1" Ice	5.50	4.89	0.23
						2" Ice	6.44	5.82	0.42
APXVSPP18-C-A20 w/ Mount Pipe	B	From Leg	1.00 -2.00 0.00	0.00	130.00	No Ice	4.60	4.01	0.10
						1/2" Ice	5.05	4.45	0.16
						1" Ice	5.50	4.89	0.23
						2" Ice	6.44	5.82	0.42
APXVSPP18-C-A20 w/ Mount Pipe	C	From Leg	1.00 -2.00 0.00	0.00	130.00	No Ice	4.60	4.01	0.10
						1/2" Ice	5.05	4.45	0.16
						1" Ice	5.50	4.89	0.23
						2" Ice	6.44	5.82	0.42
APXVTM14-C-120 w/ Mount Pipe	A	From Leg	1.00 2.00 0.00	0.00	130.00	No Ice	4.09	2.86	0.08
						1/2" Ice	4.48	3.23	0.13
						1" Ice	4.88	3.61	0.19
						2" Ice	5.71	4.40	0.33
APXVTM14-C-120 w/ Mount Pipe	B	From Leg	1.00 2.00 0.00	0.00	130.00	No Ice	4.09	2.86	0.08
						1/2" Ice	4.48	3.23	0.13
						1" Ice	4.88	3.61	0.19
						2" Ice	5.71	4.40	0.33
APXVTM14-C-120 w/ Mount Pipe	C	From Leg	1.00 2.00 0.00	0.00	130.00	No Ice	4.09	2.86	0.08
						1/2" Ice	4.48	3.23	0.13
						1" Ice	4.88	3.61	0.19
						2" Ice	5.71	4.40	0.33
1900MHZ RRH (65MHZ)	A	From Leg	1.00 0.00 0.00	0.00	130.00	No Ice	2.32	2.24	0.06
						1/2" Ice	2.53	2.44	0.08
						1" Ice	2.74	2.65	0.11
						2" Ice	3.19	3.09	0.17
1900MHZ RRH (65MHZ)	B	From Leg	1.00 0.00 0.00	0.00	130.00	No Ice	2.32	2.24	0.06
						1/2" Ice	2.53	2.44	0.08
						1" Ice	2.74	2.65	0.11
						2" Ice	3.19	3.09	0.17
1900MHZ RRH (65MHZ)	C	From Leg	1.00 0.00 0.00	0.00	130.00	No Ice	2.32	2.24	0.06
						1/2" Ice	2.53	2.44	0.08
						1" Ice	2.74	2.65	0.11
						2" Ice	3.19	3.09	0.17
800MHZ 2X50W RRH W/FILTER	A	From Leg	1.00 0.00 0.00	0.00	130.00	No Ice	2.06	1.93	0.06
						1/2" Ice	2.24	2.11	0.09
						1" Ice	2.43	2.29	0.11
						2" Ice	2.83	2.68	0.17
800MHZ 2X50W RRH W/FILTER	B	From Leg	1.00 0.00 0.00	0.00	130.00	No Ice	2.06	1.93	0.06
						1/2" Ice	2.24	2.11	0.09
						1" Ice	2.43	2.29	0.11
						2" Ice	2.83	2.68	0.17
800MHZ 2X50W RRH W/FILTER	C	From Leg	1.00 0.00 0.00	0.00	130.00	No Ice	2.06	1.93	0.06
						1/2" Ice	2.24	2.11	0.09
						1" Ice	2.43	2.29	0.11
						2" Ice	2.83	2.68	0.17
TD-RRH8X20-25	A	From Leg	1.00	0.00	130.00	No Ice	4.05	1.53	0.07

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			0.00			1/2"	4.30	1.71	0.10
			0.00			Ice	4.56	1.90	0.13
						1" Ice	5.10	2.30	0.20
						2" Ice			
TD-RRH8X20-25	B	From Leg	1.00	0.00	130.00	No Ice	4.05	1.53	0.07
			0.00			1/2"	4.30	1.71	0.10
			0.00			Ice	4.56	1.90	0.13
						1" Ice	5.10	2.30	0.20
						2" Ice			
TD-RRH8X20-25	C	From Leg	1.00	0.00	130.00	No Ice	4.05	1.53	0.07
			0.00			1/2"	4.30	1.71	0.10
			0.00			Ice	4.56	1.90	0.13
						1" Ice	5.10	2.30	0.20
						2" Ice			
117									
Sector Mount [SM 504-3]	C	None		0.00	117.00	No Ice	31.05	31.05	1.71
						1/2"	43.83	43.83	2.33
						Ice	56.44	56.44	3.14
						1" Ice	81.28	81.28	5.36
						2" Ice			
5'x2" Mount Pipe	A	From Leg	4.00	0.00	117.00	No Ice	1.19	1.19	0.02
			5.00			1/2"	1.50	1.50	0.03
			0.00			Ice	1.81	1.81	0.04
						1" Ice	2.46	2.46	0.08
						2" Ice			
5'x2" Mount Pipe	B	From Leg	4.00	0.00	117.00	No Ice	1.19	1.19	0.02
			5.00			1/2"	1.50	1.50	0.03
			0.00			Ice	1.81	1.81	0.04
						1" Ice	2.46	2.46	0.08
						2" Ice			
5'x2" Mount Pipe	C	From Leg	4.00	0.00	117.00	No Ice	1.19	1.19	0.02
			5.00			1/2"	1.50	1.50	0.03
			0.00			Ice	1.81	1.81	0.04
						1" Ice	2.46	2.46	0.08
						2" Ice			
6'x2" Mount Pipe	A	From Leg	4.00	0.00	117.00	No Ice	1.43	1.43	0.02
			-7.00			1/2"	1.92	1.92	0.03
			0.00			Ice	2.29	2.29	0.05
						1" Ice	3.06	3.06	0.09
						2" Ice			
6'x2" Mount Pipe	B	From Leg	4.00	0.00	117.00	No Ice	1.43	1.43	0.02
			-7.00			1/2"	1.92	1.92	0.03
			0.00			Ice	2.29	2.29	0.05
						1" Ice	3.06	3.06	0.09
						2" Ice			
6'x2" Mount Pipe	C	From Leg	4.00	0.00	117.00	No Ice	1.43	1.43	0.02
			-7.00			1/2"	1.92	1.92	0.03
			0.00			Ice	2.29	2.29	0.05
						1" Ice	3.06	3.06	0.09
						2" Ice			
8'x3" Mount Pipe	A	From Leg	4.00	0.00	117.00	No Ice	2.80	2.80	0.06
			-5.00			1/2"	3.41	3.41	0.08
			0.00			Ice	3.89	3.89	0.11
						1" Ice	4.90	4.90	0.17
						2" Ice			
8'x3" Mount Pipe	B	From Leg	4.00	0.00	117.00	No Ice	2.80	2.80	0.06
			-5.00			1/2"	3.41	3.41	0.08
			0.00			Ice	3.89	3.89	0.11
						1" Ice	4.90	4.90	0.17
						2" Ice			
8'x3" Mount Pipe	C	From Leg	4.00	0.00	117.00	No Ice	2.80	2.80	0.06
			-5.00			1/2"	3.41	3.41	0.08
			0.00			Ice	3.89	3.89	0.11
						1" Ice	4.90	4.90	0.17
						2" Ice			

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
BSAMNT-SBS-2-2 Side By Side Bracket	A	From Leg	4.00 -5.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.07 0.09 0.11 0.15
BSAMNT-SBS-2-2 Side By Side Bracket	B	From Leg	4.00 -5.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.07 0.09 0.11 0.15
BSAMNT-SBS-2-2 Side By Side Bracket	C	From Leg	4.00 -5.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.07 0.09 0.11 0.15
QUAD656C0000X w/ Mount Pipe	A	From Leg	4.00 0.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	15.07 15.79 16.48 17.89	7.33 8.55 9.50 11.38	0.08 0.17 0.28 0.51
QUAD656C0000X w/ Mount Pipe	B	From Leg	4.00 0.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	15.07 15.79 16.48 17.89	7.33 8.55 9.50 11.38	0.08 0.17 0.28 0.51
QUAD656C0000X w/ Mount Pipe	C	From Leg	4.00 0.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	15.07 15.79 16.48 17.89	7.33 8.55 9.50 11.38	0.08 0.17 0.28 0.51
SBNHH-1D65B	A	From Leg	4.00 -4.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.16 4.57 4.99 5.85	2.49 2.88 3.27 4.09	0.04 0.09 0.15 0.28
SBNHH-1D65B	B	From Leg	4.00 -4.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.16 4.57 4.99 5.85	2.49 2.88 3.27 4.09	0.04 0.09 0.15 0.28
SBNHH-1D65B	C	From Leg	4.00 -4.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.16 4.57 4.99 5.85	2.49 2.88 3.27 4.09	0.04 0.09 0.15 0.28
SBNHH-1D65B	A	From Leg	4.00 -6.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.16 4.57 4.99 5.85	2.49 2.88 3.27 4.09	0.04 0.09 0.15 0.28
SBNHH-1D65B	B	From Leg	4.00 -6.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.16 4.57 4.99 5.85	2.49 2.88 3.27 4.09	0.04 0.09 0.15 0.28
SBNHH-1D65B	C	From Leg	4.00 -6.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.16 4.57 4.99 5.85	2.49 2.88 3.27 4.09	0.04 0.09 0.15 0.28
LBX-6515DS-T0M w/ Mount Pipe	A	From Leg	4.00 7.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	8.95 9.61 10.24 11.51	6.10 7.28 8.17 9.98	0.05 0.11 0.19 0.36

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
LBX-6515DS-T0M w/ Mount Pipe	B	From Leg	4.00 7.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	8.95 9.61 10.24 11.51	6.10 7.28 8.17 9.98	0.05 0.11 0.19 0.36
LNX-6514DS-T4M w/ Mount Pipe	C	From Leg	4.00 7.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.09 4.49 4.89 5.71	3.30 3.68 4.06 4.87	0.06 0.13 0.20 0.38
DB-T1-6Z-8AB-0Z	A	From Leg	4.00 0.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.80 5.07 5.35 5.93	2.00 2.19 2.39 2.81	0.04 0.08 0.12 0.21
DB-T1-6Z-8AB-0Z	B	From Leg	4.00 0.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.80 5.07 5.35 5.93	2.00 2.19 2.39 2.81	0.04 0.08 0.12 0.21
AIRSCALE RRH 4T4R B5 160W	A	From Leg	4.00 0.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.29 1.43 1.58 1.90	0.72 0.83 0.96 1.22	0.04 0.05 0.06 0.09
AIRSCALE RRH 4T4R B5 160W	B	From Leg	4.00 0.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.29 1.43 1.58 1.90	0.72 0.83 0.96 1.22	0.04 0.05 0.06 0.09
AIRSCALE RRH 4T4R B5 160W	C	From Leg	4.00 0.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.29 1.43 1.58 1.90	0.72 0.83 0.96 1.22	0.04 0.05 0.06 0.09
B66A RRH4X45	A	From Leg	4.00 0.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	2.58 2.79 3.01 3.48	1.63 1.81 2.00 2.40	0.06 0.08 0.10 0.16
B66A RRH4X45	B	From Leg	4.00 0.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	2.58 2.79 3.01 3.48	1.63 1.81 2.00 2.40	0.06 0.08 0.10 0.16
B66A RRH4X45	C	From Leg	4.00 0.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	2.58 2.79 3.01 3.48	1.63 1.81 2.00 2.40	0.06 0.08 0.10 0.16
B13 RRH 4X30	A	From Leg	4.00 0.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	2.06 2.24 2.43 2.84	1.32 1.48 1.64 2.00	0.06 0.07 0.09 0.14
B13 RRH 4X30	B	From Leg	4.00 0.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	2.06 2.24 2.43 2.84	1.32 1.48 1.64 2.00	0.06 0.07 0.09 0.14
B13 RRH 4X30	C	From Leg	4.00 0.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	2.06 2.24 2.43 2.84	1.32 1.48 1.64 2.00	0.06 0.07 0.09 0.14

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
B25 RRH2X60 PCS	A	From Leg	4.00 0.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	2.14 2.33 2.53 2.94	1.31 1.46 1.63 1.98	0.05 0.07 0.09 0.14
B25 RRH2X60 PCS	B	From Leg	4.00 0.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	2.14 2.33 2.53 2.94	1.31 1.46 1.63 1.98	0.05 0.07 0.09 0.14
B25 RRH2X60 PCS	C	From Leg	4.00 0.00 0.00	0.00	117.00	No Ice 1/2" Ice 1" Ice 2" Ice	2.14 2.33 2.53 2.94	1.31 1.46 1.63 1.98	0.05 0.07 0.09 0.14
104 Sector Mount [SM 503-3]	C	None		0.00	104.00	No Ice 1/2" Ice 1" Ice 2" Ice	30.43 43.02 55.43 79.89	30.43 43.02 55.43 79.89	1.69 2.30 3.10 5.27
(3) 8'x2" Mount Pipe	A	From Leg	3.00 0.00 0.00	0.00	104.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.90 2.73 3.40 4.40	1.90 2.73 3.40 4.40	0.03 0.04 0.06 0.12
(3) 8'x2" Mount Pipe	B	From Leg	3.00 0.00 0.00	0.00	104.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.90 2.73 3.40 4.40	1.90 2.73 3.40 4.40	0.03 0.04 0.06 0.12
(3) 8'x2" Mount Pipe	C	From Leg	3.00 0.00 0.00	0.00	104.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.90 2.73 3.40 4.40	1.90 2.73 3.40 4.40	0.03 0.04 0.06 0.12
800 10121 w/ Mount Pipe	A	From Leg	3.00 -6.00 2.00	0.00	104.00	No Ice 1/2" Ice 1" Ice 2" Ice	3.60 4.00 4.42 5.29	2.95 3.34 3.74 4.59	0.07 0.11 0.17 0.30
DMP65R-BU6D w/ Mount Pipe	A	From Leg	3.00 -2.00 2.00	0.00	104.00	No Ice 1/2" Ice 1" Ice 2" Ice	11.96 12.70 13.46 15.02	5.97 6.63 7.30 8.69	0.11 0.20 0.30 0.53
HPA-65R-BUU-H6 w/ Mount Pipe	A	From Leg	3.00 2.00 2.00	0.00	104.00	No Ice 1/2" Ice 1" Ice 2" Ice	9.22 9.98 10.76 12.36	6.25 6.96 7.70 9.22	0.07 0.14 0.22 0.42
TPA65R-BU6D_CCIV2 w/ Mount Pipe	A	From Leg	3.00 6.00 2.00	0.00	104.00	No Ice 1/2" Ice 1" Ice 2" Ice	14.57 15.27 15.94 17.31	7.26 8.43 9.31 11.13	0.09 0.19 0.29 0.52
800 10121 w/ Mount Pipe	B	From Leg	3.00 -6.00 2.00	0.00	104.00	No Ice 1/2" Ice 1" Ice 2" Ice	3.60 4.00 4.42 5.29	2.95 3.34 3.74 4.59	0.07 0.11 0.17 0.30
TPA65R-BU6D_CCIV2 w/ Mount Pipe	B	From Leg	3.00 -2.00 2.00	0.00	104.00	No Ice 1/2" Ice 1" Ice	14.57 15.27 15.94 17.31	7.26 8.43 9.31 11.13	0.09 0.19 0.29 0.52

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
						2" Ice			
HPA-65R-BUU-H6 w/ Mount Pipe	B	From Leg	3.00	0.00	104.00	No Ice	9.22	6.25	0.07
			2.00			1/2"	9.98	6.96	0.14
			2.00			Ice	10.76	7.70	0.22
						1" Ice	12.36	9.22	0.42
						2" Ice			
DMP65R-BU6D w/ Mount Pipe	B	From Leg	3.00	0.00	104.00	No Ice	11.96	5.97	0.11
			6.00			1/2"	12.70	6.63	0.20
			2.00			Ice	13.46	7.30	0.30
						1" Ice	15.02	8.69	0.53
						2" Ice			
800 10121 w/ Mount Pipe	C	From Leg	3.00	0.00	104.00	No Ice	3.60	2.95	0.07
			-6.00			1/2"	4.00	3.34	0.11
			2.00			Ice	4.42	3.74	0.17
						1" Ice	5.29	4.59	0.30
						2" Ice			
TPA65R-BU8D_CCIV2 w/ Mount Pipe	C	From Leg	3.00	0.00	104.00	No Ice	19.56	10.26	0.12
			-2.00			1/2"	20.42	11.78	0.24
			2.00			Ice	21.30	13.33	0.37
						1" Ice	22.98	15.67	0.67
						2" Ice			
HPA-65R-BUU-H8 w/ Mount Pipe	C	From Leg	3.00	0.00	104.00	No Ice	12.25	8.33	0.10
			2.00			1/2"	13.19	9.23	0.19
			2.00			Ice	14.16	10.15	0.30
						1" Ice	16.14	12.05	0.54
						2" Ice			
DMP65R-BU8D w/ Mount Pipe	C	From Leg	3.00	0.00	104.00	No Ice	15.89	7.89	0.14
			6.00			1/2"	16.81	8.74	0.25
			2.00			Ice	17.76	9.60	0.38
						1" Ice	19.70	11.37	0.68
						2" Ice			
(2) 860 10025	A	From Leg	3.00	0.00	104.00	No Ice	0.14	0.12	0.00
			0.00			1/2"	0.20	0.17	0.00
			2.00			Ice	0.26	0.23	0.01
						1" Ice	0.41	0.38	0.01
						2" Ice			
(2) 860 10025	B	From Leg	3.00	0.00	104.00	No Ice	0.14	0.12	0.00
			0.00			1/2"	0.20	0.17	0.00
			2.00			Ice	0.26	0.23	0.01
						1" Ice	0.41	0.38	0.01
						2" Ice			
(2) 860 10025	C	From Leg	3.00	0.00	104.00	No Ice	0.14	0.12	0.00
			0.00			1/2"	0.20	0.17	0.00
			2.00			Ice	0.26	0.23	0.01
						1" Ice	0.41	0.38	0.01
						2" Ice			
(2) 782-10250	A	From Leg	3.00	0.00	104.00	No Ice	0.45	0.25	0.01
			0.00			1/2"	0.54	0.32	0.01
			2.00			Ice	0.64	0.40	0.02
						1" Ice	0.86	0.59	0.03
						2" Ice			
(2) 782-10250	B	From Leg	3.00	0.00	104.00	No Ice	0.45	0.25	0.01
			0.00			1/2"	0.54	0.32	0.01
			2.00			Ice	0.64	0.40	0.02
						1" Ice	0.86	0.59	0.03
						2" Ice			
(2) 782-10250	C	From Leg	3.00	0.00	104.00	No Ice	0.45	0.25	0.01
			0.00			1/2"	0.54	0.32	0.01
			2.00			Ice	0.64	0.40	0.02
						1" Ice	0.86	0.59	0.03
						2" Ice			
RRUS 4478 B14	A	From Leg	3.00	0.00	104.00	No Ice	1.84	1.06	0.06
			0.00			1/2"	2.01	1.20	0.08
			2.00			Ice	2.19	1.34	0.09
						1" Ice	2.57	1.66	0.14

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
						2" Ice			
RRUS 4478 B14	B	From Leg	3.00	0.00	104.00	No Ice	1.84	1.06	0.06
			0.00			1/2"	2.01	1.20	0.08
			2.00			Ice	2.19	1.34	0.09
						1" Ice	2.57	1.66	0.14
						2" Ice			
RRUS 4478 B14	C	From Leg	3.00	0.00	104.00	No Ice	1.84	1.06	0.06
			0.00			1/2"	2.01	1.20	0.08
			2.00			Ice	2.19	1.34	0.09
						1" Ice	2.57	1.66	0.14
						2" Ice			
RRUS 4449 B5/B12	A	From Leg	3.00	0.00	104.00	No Ice	1.97	1.41	0.07
			0.00			1/2"	2.14	1.56	0.09
			2.00			Ice	2.33	1.73	0.11
						1" Ice	2.72	2.07	0.16
						2" Ice			
RRUS 4449 B5/B12	B	From Leg	3.00	0.00	104.00	No Ice	1.97	1.41	0.07
			0.00			1/2"	2.14	1.56	0.09
			2.00			Ice	2.33	1.73	0.11
						1" Ice	2.72	2.07	0.16
						2" Ice			
RRUS 4449 B5/B12	C	From Leg	3.00	0.00	104.00	No Ice	1.97	1.41	0.07
			0.00			1/2"	2.14	1.56	0.09
			2.00			Ice	2.33	1.73	0.11
						1" Ice	2.72	2.07	0.16
						2" Ice			
RRUS 8843 B2/B66A	A	From Leg	3.00	0.00	104.00	No Ice	1.64	1.35	0.07
			0.00			1/2"	1.80	1.50	0.09
			2.00			Ice	1.97	1.65	0.11
						1" Ice	2.32	1.99	0.16
						2" Ice			
RRUS 8843 B2/B66A	B	From Leg	3.00	0.00	104.00	No Ice	1.64	1.35	0.07
			0.00			1/2"	1.80	1.50	0.09
			2.00			Ice	1.97	1.65	0.11
						1" Ice	2.32	1.99	0.16
						2" Ice			
RRUS 8843 B2/B66A	C	From Leg	3.00	0.00	104.00	No Ice	1.64	1.35	0.07
			0.00			1/2"	1.80	1.50	0.09
			2.00			Ice	1.97	1.65	0.11
						1" Ice	2.32	1.99	0.16
						2" Ice			
(2) RRUS 32 B30	A	From Leg	3.00	0.00	104.00	No Ice	2.69	1.57	0.06
			0.00			1/2"	2.91	1.76	0.08
			2.00			Ice	3.14	1.95	0.10
						1" Ice	3.61	2.35	0.16
						2" Ice			
(2) RRUS 32 B30	B	From Leg	3.00	0.00	104.00	No Ice	2.69	1.57	0.06
			0.00			1/2"	2.91	1.76	0.08
			2.00			Ice	3.14	1.95	0.10
						1" Ice	3.61	2.35	0.16
						2" Ice			
(2) RRUS 32 B30	C	From Leg	3.00	0.00	104.00	No Ice	2.69	1.57	0.06
			0.00			1/2"	2.91	1.76	0.08
			2.00			Ice	3.14	1.95	0.10
						1" Ice	3.61	2.35	0.16
						2" Ice			
DTMABP7819VG12A	A	From Leg	3.00	0.00	104.00	No Ice	0.98	0.34	0.02
			0.00			1/2"	1.10	0.42	0.03
			2.00			Ice	1.23	0.51	0.04
						1" Ice	1.52	0.71	0.06
						2" Ice			
DTMABP7819VG12A	B	From Leg	3.00	0.00	104.00	No Ice	0.98	0.34	0.02
			0.00			1/2"	1.10	0.42	0.03
			2.00			Ice	1.23	0.51	0.04
						1" Ice	1.52	0.71	0.06

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
						2" Ice			
DTMABP7819VG12A	C	From Leg	3.00	0.00	104.00	No Ice	0.98	0.34	0.02
			0.00			1/2"	1.10	0.42	0.03
			2.00			Ice	1.23	0.51	0.04
						1" Ice	1.52	0.71	0.06
						2" Ice			
DC6-48-60-18-8F	A	From Leg	1.00	0.00	104.00	No Ice	0.92	0.92	0.02
			0.00			1/2"	1.46	1.46	0.04
			2.00			Ice	1.64	1.64	0.06
						1" Ice	2.04	2.04	0.11
						2" Ice			
DC6-48-60-18-8F	B	From Leg	1.00	0.00	104.00	No Ice	0.92	0.92	0.02
			0.00			1/2"	1.46	1.46	0.04
			2.00			Ice	1.64	1.64	0.06
						1" Ice	2.04	2.04	0.11
						2" Ice			
DC6-48-60-18-8F	C	From Leg	3.00	0.00	104.00	No Ice	0.92	0.92	0.02
			0.00			1/2"	1.46	1.46	0.04
			2.00			Ice	1.64	1.64	0.06
						1" Ice	2.04	2.04	0.11
						2" Ice			
94									
742 213 w/ Mount Pipe	A	From Leg	0.50	0.00	94.00	No Ice	3.54	2.98	0.05
			0.00			1/2"	4.13	3.57	0.09
			0.00			Ice	4.74	4.17	0.14
						1" Ice	6.01	5.42	0.27
						2" Ice			
742 213 w/ Mount Pipe	B	From Leg	0.50	0.00	94.00	No Ice	3.54	2.98	0.05
			0.00			1/2"	4.13	3.57	0.09
			0.00			Ice	4.74	4.17	0.14
						1" Ice	6.01	5.42	0.27
						2" Ice			
742 213 w/ Mount Pipe	C	From Leg	0.50	0.00	94.00	No Ice	3.54	2.98	0.05
			0.00			1/2"	4.13	3.57	0.09
			0.00			Ice	4.74	4.17	0.14
						1" Ice	6.01	5.42	0.27
						2" Ice			
84									
Site Pro 1 VFA12-U	A	From Leg	0.00	0.00	84.00	No Ice	10.80	10.80	0.51
			0.00			1/2"	16.20	16.20	0.64
			0.00			Ice	21.60	21.60	0.83
						1" Ice	32.40	32.40	1.21
						2" Ice			
Site Pro 1 VFA12-U	B	From Leg	0.00	0.00	84.00	No Ice	10.80	10.80	0.51
			0.00			1/2"	16.20	16.20	0.64
			0.00			Ice	21.60	21.60	0.83
						1" Ice	32.40	32.40	1.21
						2" Ice			
Site Pro 1 VFA12-U	C	From Leg	0.00	0.00	84.00	No Ice	10.80	10.80	0.51
			0.00			1/2"	16.20	16.20	0.64
			0.00			Ice	21.60	21.60	0.83
						1" Ice	32.40	32.40	1.21
						2" Ice			
ERICSSON AIR 21 B2A B4P w/ Mount Pipe	A	From Leg	3.00	0.00	84.00	No Ice	6.33	5.64	0.11
			-6.00			1/2"	6.78	6.43	0.17
			0.00			Ice	7.21	7.13	0.23
						1" Ice	8.12	8.59	0.38
						2" Ice			
ERICSSON AIR 21 B2A B4P w/ Mount Pipe	B	From Leg	3.00	0.00	84.00	No Ice	6.33	5.64	0.11
			-6.00			1/2"	6.78	6.43	0.17
			0.00			Ice	7.21	7.13	0.23
						1" Ice	8.12	8.59	0.38
						2" Ice			
ERICSSON AIR 21 B2A B4P w/ Mount Pipe	C	From Leg	3.00	0.00	84.00	No Ice	6.33	5.64	0.11
			-6.00			1/2"	6.78	6.43	0.17

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			0.00			Ice	7.21	7.13	0.23
						1" Ice	8.12	8.59	0.38
						2" Ice			
APXVAARR24_43-U-NA20 w/ Mount Pipe	A	From Leg	3.00	0.00	84.00	No Ice	14.69	6.87	0.19
			0.00			1/2"	15.46	7.55	0.31
			0.00			Ice	16.23	8.25	0.46
						1" Ice	17.82	9.67	0.79
						2" Ice			
APXVAARR24_43-U-NA20 w/ Mount Pipe	B	From Leg	3.00	0.00	84.00	No Ice	14.69	6.87	0.19
			0.00			1/2"	15.46	7.55	0.31
			0.00			Ice	16.23	8.25	0.46
						1" Ice	17.82	9.67	0.79
						2" Ice			
APXVAARR24_43-U-NA20 w/ Mount Pipe	C	From Leg	3.00	0.00	84.00	No Ice	14.69	6.87	0.19
			0.00			1/2"	15.46	7.55	0.31
			0.00			Ice	16.23	8.25	0.46
						1" Ice	17.82	9.67	0.79
						2" Ice			
AIR 32 B2A/B66AA w/ Mount Pipe	A	From Leg	3.00	0.00	84.00	No Ice	6.75	6.07	0.15
			6.00			1/2"	7.20	6.87	0.21
			0.00			Ice	7.65	7.58	0.28
						1" Ice	8.57	9.06	0.44
						2" Ice			
AIR 32 B2A/B66AA w/ Mount Pipe	B	From Leg	3.00	0.00	84.00	No Ice	6.75	6.07	0.15
			6.00			1/2"	7.20	6.87	0.21
			0.00			Ice	7.65	7.58	0.28
						1" Ice	8.57	9.06	0.44
						2" Ice			
AIR 32 B2A/B66AA w/ Mount Pipe	C	From Leg	3.00	0.00	84.00	No Ice	6.75	6.07	0.15
			6.00			1/2"	7.20	6.87	0.21
			0.00			Ice	7.65	7.58	0.28
						1" Ice	8.57	9.06	0.44
						2" Ice			
KRY 112 144/1	A	From Leg	3.00	0.00	84.00	No Ice	0.35	0.17	0.01
			0.00			1/2"	0.43	0.23	0.01
			0.00			Ice	0.51	0.30	0.02
						1" Ice	0.70	0.46	0.03
						2" Ice			
KRY 112 144/1	B	From Leg	3.00	0.00	84.00	No Ice	0.35	0.17	0.01
			0.00			1/2"	0.43	0.23	0.01
			0.00			Ice	0.51	0.30	0.02
						1" Ice	0.70	0.46	0.03
						2" Ice			
KRY 112 144/1	C	From Leg	3.00	0.00	84.00	No Ice	0.35	0.17	0.01
			0.00			1/2"	0.43	0.23	0.01
			0.00			Ice	0.51	0.30	0.02
						1" Ice	0.70	0.46	0.03
						2" Ice			
RADIO 4449 B12/B71	A	From Leg	3.00	0.00	84.00	No Ice	1.65	1.30	0.08
			0.00			1/2"	1.81	1.44	0.09
			0.00			Ice	1.98	1.60	0.11
						1" Ice	2.34	1.92	0.16
						2" Ice			
RADIO 4449 B12/B71	B	From Leg	3.00	0.00	84.00	No Ice	1.65	1.30	0.08
			0.00			1/2"	1.81	1.44	0.09
			0.00			Ice	1.98	1.60	0.11
						1" Ice	2.34	1.92	0.16
						2" Ice			
RADIO 4449 B12/B71	C	From Leg	3.00	0.00	84.00	No Ice	1.65	1.30	0.08
			0.00			1/2"	1.81	1.44	0.09
			0.00			Ice	1.98	1.60	0.11
						1" Ice	2.34	1.92	0.16
						2" Ice			
63									
Side Arm Mount [SO 311-	C	From Leg	0.00	0.00	63.00	No Ice	1.67	4.53	0.06

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
1]			0.00			1/2"	2.43	6.41	0.10
			0.00			Ice	3.21	8.37	0.15
						1" Ice	4.84	12.72	0.28
						2" Ice			
RDL-3000	C	From Leg	3.00	0.00	63.00	No Ice	1.01	0.26	0.01
			0.00			1/2"	1.13	0.34	0.01
			-2.00			Ice	1.27	0.42	0.02
						1" Ice	1.56	0.61	0.04
						2" Ice			
ALFOPLUS2_CCIV3	C	From Leg	3.00	0.00	63.00	No Ice	1.25	0.66	0.03
			0.00			1/2"	1.41	0.78	0.03
			0.00			Ice	1.57	0.91	0.05
						1" Ice	1.92	1.20	0.07
						2" Ice			
56									
Side Arm Mount [SO 311-1]	A	From Leg	0.00	0.00	56.00	No Ice	1.67	4.53	0.06
			0.00			1/2"	2.43	6.41	0.10
			0.00			Ice	3.21	8.37	0.15
						1" Ice	4.84	12.72	0.28
						2" Ice			
GPS-TMG-20N	A	From Leg	3.00	0.00	56.00	No Ice	0.16	0.16	0.00
			0.00			1/2"	0.21	0.21	0.00
			3.00			Ice	0.28	0.28	0.01
						1" Ice	0.44	0.44	0.01
						2" Ice			
***									
2'x2" Mount Pipe	B	From Leg	0.50	0.00	46.00	No Ice	0.34	0.34	0.01
			0.00			1/2"	0.47	0.47	0.01
			0.00			Ice	0.61	0.61	0.02
						1" Ice	0.92	0.92	0.03
						2" Ice			
KS24019-L112A	B	From Leg	1.00	0.00	46.00	No Ice	0.14	0.14	0.01
			0.00			1/2"	0.20	0.20	0.01
			1.00			Ice	0.26	0.26	0.01
						1" Ice	0.41	0.41	0.02
						2" Ice			
***									
***									
***									
***									

Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral Vert ft	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft		Aperture Area ft^2	Weight K
SB1-190BB	C	Paraboloid w/Shroud (HP)	From Leg	3.00	-12.00		63.00	1.25	No Ice	1.23	0.01
				0.00					1/2" Ice	1.40	0.02
				0.00					1" Ice	1.57	0.03
									2" Ice	1.91	0.04
***											

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.0 Wind 0 deg - No Ice
3	0.9 Dead+1.0 Wind 0 deg - No Ice
4	1.2 Dead+1.0 Wind 30 deg - No Ice
5	0.9 Dead+1.0 Wind 30 deg - No Ice
6	1.2 Dead+1.0 Wind 60 deg - No Ice
7	0.9 Dead+1.0 Wind 60 deg - No Ice
8	1.2 Dead+1.0 Wind 90 deg - No Ice
9	0.9 Dead+1.0 Wind 90 deg - No Ice
10	1.2 Dead+1.0 Wind 120 deg - No Ice
11	0.9 Dead+1.0 Wind 120 deg - No Ice
12	1.2 Dead+1.0 Wind 150 deg - No Ice
13	0.9 Dead+1.0 Wind 150 deg - No Ice
14	1.2 Dead+1.0 Wind 180 deg - No Ice
15	0.9 Dead+1.0 Wind 180 deg - No Ice
16	1.2 Dead+1.0 Wind 210 deg - No Ice
17	0.9 Dead+1.0 Wind 210 deg - No Ice
18	1.2 Dead+1.0 Wind 240 deg - No Ice
19	0.9 Dead+1.0 Wind 240 deg - No Ice
20	1.2 Dead+1.0 Wind 270 deg - No Ice
21	0.9 Dead+1.0 Wind 270 deg - No Ice
22	1.2 Dead+1.0 Wind 300 deg - No Ice
23	0.9 Dead+1.0 Wind 300 deg - No Ice
24	1.2 Dead+1.0 Wind 330 deg - No Ice
25	0.9 Dead+1.0 Wind 330 deg - No Ice
26	1.2 Dead+1.0 Ice+1.0 Temp
27	1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp
28	1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp
29	1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp
30	1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp
31	1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp
32	1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp
33	1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp
34	1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp
35	1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp
36	1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp
37	1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp
38	1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp
39	Dead+Wind 0 deg - Service
40	Dead+Wind 30 deg - Service
41	Dead+Wind 60 deg - Service
42	Dead+Wind 90 deg - Service
43	Dead+Wind 120 deg - Service
44	Dead+Wind 150 deg - Service
45	Dead+Wind 180 deg - Service
46	Dead+Wind 210 deg - Service
47	Dead+Wind 240 deg - Service
48	Dead+Wind 270 deg - Service
49	Dead+Wind 300 deg - Service
50	Dead+Wind 330 deg - Service

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T1	133.167 - 121.042	Leg	Max Tension	7	2.05	-0.12	-0.01
			Max. Compression	27	-3.93	0.00	-0.01
			Max. Mx	14	-0.83	0.23	0.02
			Max. My	8	-0.86	-0.00	-0.25
			Max. Vy	19	-0.44	0.19	-0.00
			Max. Vx	20	0.46	-0.00	-0.19
		Diagonal	Max Tension	12	0.92	0.00	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Compression	12	-0.91	0.00	0.00
			Max. Mx	27	0.28	0.02	0.00
			Max. My	24	-0.91	0.00	-0.00
			Max. Vy	27	-0.03	0.02	0.00
			Max. Vx	24	0.00	0.00	0.00
		Top Girt	Max Tension	7	0.11	0.00	0.00
			Max. Compression	10	-0.12	0.00	0.00
			Max. Mx	26	-0.03	-0.07	0.00
			Max. My	26	-0.04	0.00	0.00
			Max. Vy	26	0.04	0.00	0.00
			Max. Vx	26	-0.00	0.00	0.00
T2	121.042 - 100.917	Leg	Max Tension	7	15.26	-0.75	0.01
			Max. Compression	2	-23.64	0.13	0.02
			Max. Mx	6	14.62	1.17	0.01
			Max. My	12	-4.35	-0.07	1.15
			Max. Vy	14	1.04	-0.52	0.04
			Max. Vx	4	1.01	-0.03	-0.39
		Diagonal	Max Tension	12	3.66	0.00	0.00
			Max. Compression	12	-3.68	0.00	0.00
			Max. Mx	28	0.29	0.04	0.00
			Max. My	38	-1.06	0.03	-0.01
			Max. Vy	28	0.03	0.03	0.00
			Max. Vx	38	0.00	0.00	0.00
		Top Girt	Max Tension	22	0.33	0.00	0.00
			Max. Compression	3	-0.26	0.00	0.00
			Max. Mx	26	0.13	-0.07	0.00
			Max. My	26	0.13	0.00	0.00
			Max. Vy	26	-0.04	0.00	0.00
			Max. Vx	26	-0.00	0.00	0.00
T3	100.917 - 94.1042	Leg	Max Tension	7	22.51	0.13	-0.01
			Max. Compression	2	-31.83	-0.04	-0.06
			Max. Mx	6	17.19	-1.03	0.01
			Max. My	8	-5.02	-0.06	0.89
			Max. Vy	11	-5.32	0.93	0.02
			Max. Vx	20	1.83	-0.07	-0.89
		Diagonal	Max Tension	13	4.78	0.00	0.00
			Max. Compression	12	-4.87	0.00	0.00
			Max. Mx	27	1.15	0.07	0.01
			Max. My	31	0.84	0.06	0.01
			Max. Vy	27	-0.05	0.07	0.01
			Max. Vx	31	-0.00	0.00	0.00
T4	94.1042 - 87.4375	Leg	Max Tension	7	30.97	-0.07	-0.01
			Max. Compression	10	-41.30	-0.03	0.02
			Max. Mx	37	-7.96	-0.18	-0.02
			Max. My	4	-5.41	-0.06	-0.37
			Max. Vy	18	0.10	-0.04	0.01
			Max. Vx	4	0.16	-0.06	-0.37
		Diagonal	Max Tension	12	4.55	0.00	0.00
			Max. Compression	12	-4.54	0.00	0.00
			Max. Mx	28	1.12	0.06	-0.01
			Max. My	32	-1.35	0.05	0.01
			Max. Vy	29	0.05	0.06	-0.01
			Max. Vx	32	-0.00	0.00	0.00
T5	87.4375 - 80.7708	Leg	Max Tension	7	38.96	-0.30	0.00
			Max. Compression	10	-51.54	-0.27	0.01
			Max. Mx	10	-50.19	0.40	0.00
			Max. My	4	-5.66	-0.06	-0.37
			Max. Vy	22	-0.96	-0.29	-0.00
			Max. Vx	16	0.73	0.05	-0.08
		Diagonal	Max Tension	13	6.10	0.03	-0.00
			Max. Compression	12	-6.17	0.00	0.00
			Max. Mx	31	1.50	0.09	-0.01
			Max. My	27	1.17	0.09	-0.01
			Max. Vy	31	-0.06	0.09	-0.01
			Max. Vx	27	0.00	0.00	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
		Secondary Horizontal	Max Tension	15	0.85	0.00	-0.00
			Max. Compression	2	-0.86	0.00	0.00
			Max. Mx	27	-0.25	0.04	0.00
			Max. My	30	-0.23	0.04	0.00
			Max. Vy	27	0.04	0.04	0.00
			Max. Vx	30	0.00	0.00	0.00
T6	80.7708 - 60.6042	Leg	Max Tension	7	70.22	-0.42	-0.02
			Max. Compression	10	-87.88	0.41	0.01
			Max. Mx	22	67.88	-0.43	-0.02
			Max. My	4	-8.72	-0.02	-0.35
			Max. Vy	2	-7.77	0.41	-0.04
			Max. Vx	16	-2.90	-0.02	0.35
		Diagonal	Max Tension	25	6.19	0.00	0.00
			Max. Compression	24	-6.30	0.00	0.00
			Max. Mx	31	1.00	0.10	0.01
			Max. My	27	-2.26	0.08	-0.01
			Max. Vy	29	0.06	0.09	0.01
			Max. Vx	27	0.00	0.00	0.00
T7	60.6042 - 40.4167	Leg	Max Tension	15	95.24	0.32	0.03
			Max. Compression	10	-117.04	0.49	0.06
			Max. Mx	3	-89.51	1.16	-0.10
			Max. My	4	-8.88	-0.01	-0.63
			Max. Vy	2	-8.45	0.50	-0.10
			Max. Vx	16	-3.50	0.02	0.34
		Diagonal	Max Tension	24	6.93	0.00	0.00
			Max. Compression	24	-6.93	0.00	0.00
			Max. Mx	31	0.98	0.14	0.02
			Max. My	33	-1.69	0.11	0.02
			Max. Vy	29	0.08	0.12	-0.02
			Max. Vx	33	-0.00	0.00	0.00
T8	40.4167 - 20.2083	Leg	Max Tension	15	118.82	0.18	0.03
			Max. Compression	10	-144.82	0.87	0.07
			Max. Mx	2	-116.18	1.38	-0.18
			Max. My	4	-11.57	-0.08	-0.78
			Max. Vy	2	-9.27	0.87	-0.13
			Max. Vx	16	-3.62	0.06	0.13
		Diagonal	Max Tension	24	7.91	0.00	0.00
			Max. Compression	24	-7.99	0.00	0.00
			Max. Mx	29	0.85	0.19	-0.02
			Max. My	27	1.74	0.17	-0.03
			Max. Vy	29	0.09	0.17	0.02
			Max. Vx	27	0.01	0.00	0.00
T9	20.2083 - 10.1042	Leg	Max Tension	15	124.08	-1.61	0.22
			Max. Compression	10	-151.28	-0.76	0.01
			Max. Mx	2	-149.73	1.84	-0.23
			Max. My	4	-13.04	-0.15	-1.04
			Max. Vy	2	-9.27	1.84	-0.23
			Max. Vx	16	-3.62	0.07	0.50
		Diagonal	Max Tension	24	8.17	0.00	0.00
			Max. Compression	24	-8.17	0.00	0.00
			Max. Mx	29	0.46	0.27	-0.03
			Max. My	32	-3.16	0.24	0.03
			Max. Vy	29	0.11	0.27	-0.03
			Max. Vx	32	-0.01	0.00	0.00
T10	10.1042 - 0	Leg	Max Tension	15	141.07	0.97	-0.11
			Max. Compression	10	-171.21	0.00	-0.00
			Max. Mx	10	-163.35	1.69	0.00
			Max. My	4	-13.39	-0.15	-1.04
			Max. Vy	2	-10.38	0.00	0.00
			Max. Vx	16	-3.54	0.00	-0.00
		Diagonal	Max Tension	25	8.30	0.11	0.01
			Max. Compression	24	-8.73	0.00	0.00
			Max. Mx	31	2.94	0.19	-0.03
			Max. My	27	2.26	0.19	-0.04

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Vy	30	0.10	0.18	0.04
			Max. Vx	27	0.01	0.00	0.00
		Secondary Horizontal	Max Tension	10	2.84	0.04	-0.00
			Max. Compression	10	-2.84	0.00	0.00
			Max. Mx	28	0.16	0.12	0.01
			Max. My	30	-0.44	0.11	0.01
			Max. Vy	28	0.07	0.12	0.01
			Max. Vx	30	-0.00	0.00	0.00

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Leg C	Max. Vert	18	164.47	17.13	-9.40
	Max. H_x	18	164.47	17.13	-9.40
	Max. H_z	7	-138.98	-14.83	8.10
	Min. Vert	7	-138.98	-14.83	8.10
	Min. H_x	7	-138.98	-14.83	8.10
	Min. H_z	18	164.47	17.13	-9.40
Leg B	Max. Vert	10	170.34	-17.04	-10.53
	Max. H_x	23	-139.60	14.68	9.13
	Max. H_z	25	-122.57	12.23	9.56
	Min. Vert	23	-139.60	14.68	9.13
	Min. H_x	10	170.34	-17.04	-10.53
	Min. H_z	10	170.34	-17.04	-10.53
Leg A	Max. Vert	2	168.98	1.07	20.05
	Max. H_x	22	87.99	2.76	10.06
	Max. H_z	2	168.98	1.07	20.05
	Min. Vert	15	-140.30	-1.02	-17.34
	Min. H_x	11	-68.38	-2.85	-8.70
	Min. H_z	15	-140.30	-1.02	-17.34

Tower Mast Reaction Summary

Load Combination	Vertical K	$Shear_x$ K	$Shear_z$ K	Overturning Moment, M_x kip-ft	Overturning Moment, M_z kip-ft	Torque kip-ft
Dead Only	31.82	0.00	0.00	-2.69	-23.36	0.00
1.2 Dead+1.0 Wind 0 deg - No Ice	38.18	0.00	-32.52	-2540.00	-27.60	33.86
0.9 Dead+1.0 Wind 0 deg - No Ice	28.63	0.00	-32.52	-2539.19	-20.59	33.86
1.2 Dead+1.0 Wind 30 deg - No Ice	38.18	15.46	-26.74	-2112.93	-1246.57	33.22
0.9 Dead+1.0 Wind 30 deg - No Ice	28.63	15.46	-26.74	-2112.12	-1239.57	33.22
1.2 Dead+1.0 Wind 60 deg - No Ice	38.18	26.06	-15.02	-1199.59	-2102.75	13.30
0.9 Dead+1.0 Wind 60 deg - No Ice	28.63	26.06	-15.02	-1198.78	-2095.74	13.30
1.2 Dead+1.0 Wind 90 deg - No Ice	38.18	30.43	-0.00	-2.68	-2453.59	-9.37
0.9 Dead+1.0 Wind 90 deg - No Ice	28.63	30.43	-0.00	-1.88	-2446.59	-9.37
1.2 Dead+1.0 Wind 120 deg - No Ice	38.18	28.09	16.19	1265.90	-2227.74	-18.86
0.9 Dead+1.0 Wind 120 deg - No Ice	28.63	28.09	16.19	1266.71	-2220.73	-18.86
1.2 Dead+1.0 Wind 150 deg	38.18	15.96	27.61	2160.29	-1278.41	-28.70

Load Combination	Vertical K	$Shear_x$ K	$Shear_z$ K	Overturning Moment, M_x kip-ft	Overturning Moment, M_z kip-ft	Torque kip-ft
- No Ice						
0.9 Dead+1.0 Wind 150 deg - No Ice	28.63	15.96	27.61	2161.10	-1271.40	-28.70
1.2 Dead+1.0 Wind 180 deg - No Ice	38.18	0.00	30.93	2435.15	-28.76	-33.87
0.9 Dead+1.0 Wind 180 deg - No Ice	28.63	0.00	30.93	2435.96	-21.75	-33.87
1.2 Dead+1.0 Wind 210 deg - No Ice	38.18	-15.46	26.74	2106.11	1190.18	-33.24
0.9 Dead+1.0 Wind 210 deg - No Ice	28.63	-15.46	26.74	2106.92	1197.18	-33.24
1.2 Dead+1.0 Wind 240 deg - No Ice	38.18	-27.42	15.80	1241.87	2131.29	-13.32
0.9 Dead+1.0 Wind 240 deg - No Ice	28.63	-27.42	15.80	1242.67	2138.30	-13.32
1.2 Dead+1.0 Wind 270 deg - No Ice	38.18	-30.42	-0.00	-3.99	2397.19	9.36
0.9 Dead+1.0 Wind 270 deg - No Ice	28.63	-30.42	-0.00	-3.19	2404.20	9.36
1.2 Dead+1.0 Wind 300 deg - No Ice	38.18	-26.71	-15.40	-1223.48	2086.65	18.84
0.9 Dead+1.0 Wind 300 deg - No Ice	28.63	-26.71	-15.40	-1222.67	2093.65	18.84
1.2 Dead+1.0 Wind 330 deg - No Ice	38.18	-15.96	-27.61	-2166.68	1222.36	28.71
0.9 Dead+1.0 Wind 330 deg - No Ice	28.63	-15.96	-27.61	-2165.87	1229.37	28.71
1.2 Dead+1.0 Ice+1.0 Temp	120.20	-0.00	0.00	-6.12	-118.16	-0.00
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	120.20	-0.00	-9.96	-776.92	-117.80	13.81
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	120.20	4.82	-8.35	-657.53	-494.38	11.98
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	120.20	8.16	-4.70	-376.36	-760.59	5.04
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	120.20	9.49	0.01	-5.73	-864.83	-2.71
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	120.20	8.50	4.90	376.31	-780.92	-7.88
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	120.20	4.91	8.49	654.49	-500.17	-11.43
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	120.20	0.01	9.75	752.04	-118.59	-13.82
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	120.20	-4.82	8.34	645.21	257.99	-11.99
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	120.20	-8.34	4.81	370.35	535.08	-5.05
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	120.20	-9.48	-0.01	-6.55	628.44	2.71
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	120.20	-8.32	-4.80	-382.29	533.69	7.87
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	120.20	-4.91	-8.49	-666.70	263.86	11.43
Dead+Wind 0 deg - Service	31.82	0.00	-7.89	-617.93	-23.25	8.21
Dead+Wind 30 deg - Service	31.82	3.75	-6.49	-514.35	-318.89	8.06
Dead+Wind 60 deg - Service	31.82	6.32	-3.64	-292.84	-526.53	3.23
Dead+Wind 90 deg - Service	31.82	7.38	-0.00	-2.56	-611.62	-2.27
Dead+Wind 120 deg - Service	31.82	6.81	3.93	305.11	-556.84	-4.57
Dead+Wind 150 deg - Service	31.82	3.87	6.70	522.02	-326.61	-6.96
Dead+Wind 180 deg - Service	31.82	0.00	7.50	588.68	-23.53	-8.21
Dead+Wind 210 deg - Service	31.82	-3.75	6.48	508.88	272.09	-8.06
Dead+Wind 240 deg - Service	31.82	-6.65	3.83	299.28	500.33	-3.23
Dead+Wind 270 deg - Service	31.82	-7.38	-0.00	-2.88	564.82	2.27
Dead+Wind 300 deg -	31.82	-6.48	-3.73	-298.63	489.51	4.57

Load Combination	Vertical K	$Shear_x$ K	$Shear_z$ K	Overturning Moment, M_x kip-ft	Overturning Moment, M_z kip-ft	Torque kip-ft
Service						
Dead+Wind 330 deg - Service	31.82	-3.87	-6.70	-527.39	279.90	6.96

Solution Summary

	Sum of Applied Forces			Sum of Reactions			
Load Comb.	PX K	PY K	PZ K	PX K	PY K	PZ K	% Error
1	0.00	-31.82	0.00	0.00	31.82	0.00	0.000%
2	0.00	-38.18	-32.52	-0.00	38.18	32.52	0.000%
3	0.00	-28.63	-32.52	-0.00	28.63	32.52	0.000%
4	15.46	-38.18	-26.74	-15.46	38.18	26.74	0.000%
5	15.46	-28.63	-26.74	-15.46	28.63	26.74	0.000%
6	26.06	-38.18	-15.02	-26.06	38.18	15.02	0.000%
7	26.06	-28.63	-15.02	-26.06	28.63	15.02	0.000%
8	30.43	-38.18	-0.00	-30.43	38.18	0.00	0.000%
9	30.43	-28.63	-0.00	-30.43	28.63	0.00	0.000%
10	28.09	-38.18	16.19	-28.09	38.18	-16.19	0.000%
11	28.09	-28.63	16.19	-28.09	28.63	-16.19	0.000%
12	15.96	-38.18	27.61	-15.96	38.18	-27.61	0.000%
13	15.96	-28.63	27.61	-15.96	28.63	-27.61	0.000%
14	0.00	-38.18	30.93	-0.00	38.18	-30.93	0.000%
15	0.00	-28.63	30.93	-0.00	28.63	-30.93	0.000%
16	-15.46	-38.18	26.74	15.46	38.18	-26.74	0.000%
17	-15.46	-28.63	26.74	15.46	28.63	-26.74	0.000%
18	-27.42	-38.18	15.80	27.42	38.18	-15.80	0.000%
19	-27.42	-28.63	15.80	27.42	28.63	-15.80	0.000%
20	-30.42	-38.18	-0.00	30.42	38.18	0.00	0.000%
21	-30.42	-28.63	-0.00	30.42	28.63	0.00	0.000%
22	-26.71	-38.18	-15.40	26.71	38.18	15.40	0.000%
23	-26.71	-28.63	-15.40	26.71	28.63	15.40	0.000%
24	-15.96	-38.18	-27.61	15.96	38.18	27.61	0.000%
25	-15.96	-28.63	-27.61	15.96	28.63	27.61	0.000%
26	0.00	-120.20	0.00	0.00	120.20	0.00	0.000%
27	-0.00	-120.20	-9.96	0.00	120.20	9.96	0.000%
28	4.82	-120.20	-8.35	-4.82	120.20	8.35	0.000%
29	8.16	-120.20	-4.70	-8.16	120.20	4.70	0.000%
30	9.49	-120.20	0.01	-9.49	120.20	-0.01	0.000%
31	8.50	-120.20	4.90	-8.50	120.20	-4.90	0.000%
32	4.91	-120.20	8.49	-4.91	120.20	-8.49	0.000%
33	0.01	-120.20	9.75	-0.01	120.20	-9.75	0.000%
34	-4.82	-120.20	8.34	4.82	120.20	-8.34	0.000%
35	-8.34	-120.20	4.81	8.34	120.20	-4.81	0.000%
36	-9.48	-120.20	-0.01	9.48	120.20	0.01	0.000%
37	-8.32	-120.20	-4.80	8.32	120.20	4.80	0.000%
38	-4.91	-120.20	-8.49	4.91	120.20	8.49	0.000%
39	0.00	-31.82	-7.89	-0.00	31.82	7.89	0.000%
40	3.75	-31.82	-6.49	-3.75	31.82	6.49	0.000%
41	6.32	-31.82	-3.64	-6.32	31.82	3.64	0.000%
42	7.38	-31.82	-0.00	-7.38	31.82	0.00	0.000%
43	6.81	-31.82	3.93	-6.81	31.82	-3.93	0.000%
44	3.87	-31.82	6.70	-3.87	31.82	-6.70	0.000%
45	0.00	-31.82	7.50	-0.00	31.82	-7.50	0.000%
46	-3.75	-31.82	6.48	3.75	31.82	-6.48	0.000%
47	-6.65	-31.82	3.83	6.65	31.82	-3.83	0.000%
48	-7.38	-31.82	-0.00	7.38	31.82	0.00	0.000%
49	-6.48	-31.82	-3.73	6.48	31.82	3.73	0.000%
50	-3.87	-31.82	-6.70	3.87	31.82	6.70	0.000%

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	133.167 - 121.042	2.31	43	0.14	0.02
T2	121.042 - 100.917	1.95	43	0.14	0.02
T3	100.917 - 94.1042	1.38	43	0.12	0.02
T4	94.1042 - 87.4375	1.20	43	0.12	0.02
T5	87.4375 - 80.7708	1.03	43	0.11	0.02
T6	80.7708 - 60.6042	0.88	43	0.10	0.01
T7	60.6042 - 40.4167	0.49	43	0.07	0.01
T8	40.4167 - 20.2083	0.23	43	0.04	0.01
T9	20.2083 - 10.1042	0.07	43	0.02	0.00
T10	10.1042 - 0	0.02	43	0.01	0.00

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
130.00	4'x2" Mount Pipe	43	2.22	0.14	0.02	806422
117.00	Sector Mount [SM 504-3]	43	1.84	0.14	0.02	250010
104.00	Sector Mount [SM 503-3]	43	1.46	0.13	0.02	61204
94.00	742 213 w/ Mount Pipe	43	1.19	0.12	0.02	51440
84.00	Site Pro 1 VFA12-U	43	0.95	0.10	0.02	38680
63.00	SB1-190BB	43	0.53	0.07	0.01	39646
56.00	Side Arm Mount [SO 311-1]	43	0.42	0.06	0.01	39960
46.00	2'x2" Mount Pipe	43	0.29	0.05	0.01	42986

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	133.167 - 121.042	9.36	10	0.57	0.09
T2	121.042 - 100.917	7.92	10	0.56	0.08
T3	100.917 - 94.1042	5.57	10	0.51	0.07
T4	94.1042 - 87.4375	4.84	10	0.48	0.07
T5	87.4375 - 80.7708	4.17	10	0.44	0.07
T6	80.7708 - 60.6042	3.55	10	0.40	0.06
T7	60.6042 - 40.4167	2.00	10	0.28	0.04
T8	40.4167 - 20.2083	0.92	10	0.17	0.03
T9	20.2083 - 10.1042	0.27	10	0.09	0.01
T10	10.1042 - 0	0.08	2	0.05	0.01

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
130.00	4'x2" Mount Pipe	10	8.98	0.57	0.08	319943
117.00	Sector Mount [SM 504-3]	10	7.44	0.55	0.08	82551
104.00	Sector Mount [SM 503-3]	10	5.92	0.52	0.07	15515
94.00	742 213 w/ Mount Pipe	10	4.83	0.48	0.07	12770
84.00	Site Pro 1 VFA12-U	10	3.84	0.42	0.06	9530
63.00	SB1-190BB	10	2.16	0.29	0.05	9802
56.00	Side Arm Mount [SO 311-1]	10	1.71	0.25	0.04	9878
46.00	2'x2" Mount Pipe	10	1.17	0.20	0.03	10623

Bolt Design Data

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load per Bolt K	Ratio Load / Allowable	Allowable Ratio	Criteria
T1	133.167	Leg	A325N	0.63	4	0.51	20.34	0.025	1.05	Bolt Tension
		Diagonal	A325N	0.63	1	0.92	6.83	0.135	1.05	Member Block Shear
		Top Girt	A325N	0.63	1	0.11	4.55	0.024	1.05	Member Block Shear
T2	121.042	Leg	A325N	0.75	4	3.81	30.10	0.127	1.05	Bolt Tension
		Diagonal	A325N	0.63	1	3.66	5.81	0.630	1.05	Member Block Shear
		Top Girt	A325N	0.63	1	0.33	5.22	0.063	1.05	Member Bearing
T3	100.917	Diagonal	A325N	0.63	1	4.78	7.83	0.610	1.05	Member Bearing
T4	94.1042	Diagonal	A325N	0.63	1	4.55	7.83	0.581	1.05	Member Bearing
T5	87.4375	Leg	A325N	0.88	4	9.73	41.56	0.234	1.05	Bolt Tension
		Diagonal	A325N	0.63	1	6.10	7.83	0.779	1.05	Member Bearing
		Secondary Horizontal	A325N	0.63	1	0.85	5.46	0.156	1.05	Member Block Shear
T6	80.7708	Leg	A325N	0.88	4	17.56	41.56	0.422	1.05	Bolt Tension
		Diagonal	A325N	0.63	1	6.19	7.83	0.790	1.05	Member Bearing
T7	60.6042	Leg	A325N	1.00	4	23.81	54.52	0.437	1.05	Bolt Tension
		Diagonal	A325N	0.63	1	6.93	7.83	0.886	1.05	Member Bearing
T8	40.4167	Leg	A325N	1.00	4	29.70	54.52	0.545	1.05	Bolt Tension
		Diagonal	A325N	0.63	1	7.91	11.70	0.676	1.05	Member Bearing
T9	20.2083	Diagonal	A325N	0.63	1	8.17	11.70	0.698	1.05	Member Bearing
T10	10.1042	Diagonal	A325N	0.75	1	8.30	14.14	0.587	1.05	Member Bearing
		Secondary Horizontal	A325N	0.63	1	2.84	9.53	0.297	1.05	Member Block Shear

Compression Checks

Leg Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	133.167 - 121.042	ROHN 2 STD	12.13	4.00	61.0 K=1.00	1.07	-3.93	36.84	0.107 [1]
T2	121.042 - 100.917	ROHN 2.5 STD	20.16	5.01	63.4 K=1.00	1.70	-23.64	57.13	0.414 [1]
T3	100.917 - 94.1042	ROHN 3 STD	6.82	6.68	68.9 K=1.00	2.23	-31.83	70.90	0.449 [1]
T4	94.1042 - 87.4375	ROHN 3 STD	6.68	6.68	68.9 K=1.00	2.23	-41.30	70.87	0.583 [1]
T5	87.4375 - 80.7708	ROHN 3 STD	6.67	3.43	35.4 K=1.00	2.23	-51.54	91.52	0.563 [1]
T6	80.7708 - 60.6042	ROHN 3 X-STR	20.20	6.68	70.5 K=1.00	3.02	-82.43	94.34	0.874 [1]
T7	60.6042 - 40.4167	ROHN 4 X-STR	20.22	6.68	54.3 K=1.00	4.41	-111.86	159.91	0.700 [1]
T8	40.4167 - 20.2083	ROHN 5 X-STR	20.24	10.02	65.4 K=1.00	6.11	-137.49	201.26	0.683 [1]
T9	20.2083 - 10.1042	ROHN 5 X-STR	10.12	10.02	65.4 K=1.00	6.11	-151.28	201.26	0.752 [1]
T10	10.1042 - 0	ROHN 5 X-STR	10.12	5.14	33.6 K=1.00	6.11	-163.54	253.29	0.646 [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 K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	133.167 - 121.042	L1 3/4x1 3/4x3/16	7.74	3.64	127.1 K=1.00	0.62	-0.91	11.00	0.083 [1]
T2	121.042 - 100.917	L1 3/4x1 3/4x3/16	9.81	4.79	167.4 K=1.00	0.62	-3.68	6.34	0.580 [1]
T3	100.917 - 94.1042	L2 1/2x2 1/2x3/16	11.22	5.51	133.7 K=1.00	0.90	-4.87	14.45	0.337 [1]
T4	94.1042 - 87.4375	L2 1/2x2 1/2x3/16	11.80	5.84	141.5 K=1.00	0.90	-4.54	12.89	0.352 [1]
T5	87.4375 - 80.7708	L2 1/2x2 1/2x3/16	12.36	6.05	146.8 K=1.00	0.90	-6.17	11.98	0.514 [1]
T6	80.7708 - 60.6042	L2 1/2x2 1/2x3/16	14.09	6.95	168.6 K=1.00	0.90	-6.30	9.09	0.693 [1]
T7	60.6042 - 40.4167	L3x3x3/16	15.90	7.80	157.1 K=1.00	1.09	-6.93	12.63	0.548 [1]
T8	40.4167 - 20.2083	L3x3x1/4	19.10	9.45	191.5 K=1.00	1.44	-7.99	11.24	0.710 [1]
T9	20.2083 - 10.1042	L3 1/2x3 1/2x1/4	19.96	9.88	170.8 K=1.00	1.69	-8.17	16.57	0.493 [1]
T10	10.1042 - 0	L3 1/2x3 1/2x1/4	20.83	10.30	178.0 K=1.00	1.69	-8.73	15.26	0.572 [1]

[1] P_u / ϕP_n controls

Secondary Horizontal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T5	87.4375 - 80.7708	L1 1/2x1 1/2x3/16 KL/R > 250 (C) - 83	10.40	9.83	258.4 K=1.00	0.53	-0.86	2.26	0.382 [1]
T10	10.1042 - 0	L2 1/2x2 1/2x3/16 KL/R > 250 (C) - 160	18.25	17.52	270.2 K=1.00	0.90	-2.84	3.54	0.802 [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 K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	133.167 - 121.042	L1 3/4x1 3/4x1/8 KL/R > 200 (C) - 6	6.60	6.17	213.4 K=1.00	0.42	-0.12	2.65	0.046 [1]
T2	121.042 - 100.917	L2x2x1/8	6.66	6.18	186.5 K=1.00	0.48	-0.26	3.98	0.064 [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 K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	133.167 - 121.042	ROHN 2 STD	12.13	4.00	61.0	1.07	2.05	48.35	0.042 [1]
T2	121.042 - 100.917	ROHN 2.5 STD	20.16	5.01	63.4	1.70	15.26	76.68	0.199 [1]
T3	100.917 - 94.1042	ROHN 3 STD	6.82	6.68	68.9	2.23	22.51	100.28	0.224 [1]
T4	94.1042 - 87.4375	ROHN 3 STD	6.68	6.68	68.9	2.23	30.97	100.28	0.309 [1]
T5	87.4375 - 80.7708	ROHN 3 STD	6.67	3.25	33.5	2.23	38.96	100.28	0.389 [1]
T6	80.7708 - 60.6042	ROHN 3 X-STR	20.20	0.08	0.9	3.02	70.22	135.72	0.517 [1]
T7	60.6042 - 40.4167	ROHN 4 X-STR	20.22	0.09	0.8	4.41	95.24	198.34	0.480 [1]
T8	40.4167 - 20.2083	ROHN 5 X-STR	20.24	0.10	0.7	6.11	118.82	275.04	0.432 [1]
T9	20.2083 - 10.1042	ROHN 5 X-STR	10.12	10.02	65.4	6.11	124.08	275.04	0.451 [1]
T10	10.1042 - 0	ROHN 5 X-STR	10.12	0.10	0.7	6.11	141.07	275.04	0.513 [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 K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	133.167 - 121.042	L1 3/4x1 3/4x3/16	7.74	3.64	84.0	0.36	0.92	15.68	0.059 [1]
T2	121.042 - 100.917	L1 3/4x1 3/4x3/16	9.81	4.79	109.8	0.36	3.66	15.68	0.234 [1]
T3	100.917 - 94.1042	L2 1/2x2 1/2x3/16	11.22	5.51	86.9	0.57	4.78	24.84	0.192 [1]
T4	94.1042 - 87.4375	L2 1/2x2 1/2x3/16	11.80	5.84	91.9	0.57	4.55	24.84	0.183 [1]
T5	87.4375 - 80.7708	L2 1/2x2 1/2x3/16	12.36	6.05	95.2	0.57	6.10	24.84	0.246 [1]
T6	80.7708 - 60.6042	L2 1/2x2 1/2x3/16	14.09	6.95	109.1	0.57	6.19	24.84	0.249 [1]
T7	60.6042 - 40.4167	L3x3x3/16	15.90	7.80	101.3	0.71	6.93	30.97	0.224 [1]
T8	40.4167 - 20.2083	L3x3x1/4	19.10	9.45	123.4	0.94	7.91	45.79	0.173 [1]
T9	20.2083 - 10.1042	L3 1/2x3 1/2x1/4	19.96	9.88	110.1	1.13	8.17	54.94	0.149 [1]
T10	10.1042 - 0	L3 1/2x3 1/2x1/4	20.83	10.30	114.8	1.10	8.30	53.79	0.154 [1]

[1] P_u / ϕP_n controls

Secondary Horizontal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T5	87.4375 - 80.7708	L1 1/2x1 1/2x3/16	10.40	9.83	265.5	0.29	0.85	12.62	0.067 [1]
T10	10.1042 - 0	L2 1/2x2 1/2x3/16	18.25	17.52	274.4	0.57	2.84	24.84	0.114 [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 K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	133.167 - 121.042	L1 3/4x1 3/4x1/8	6.60	6.17	140.9	0.25	0.11	10.71	0.010 [1]
T2	121.042 - 100.917	L2x2x1/8	6.66	6.18	123.0	0.29	0.33	12.74	0.026 [1]

[1] P_u / ϕP_n controls

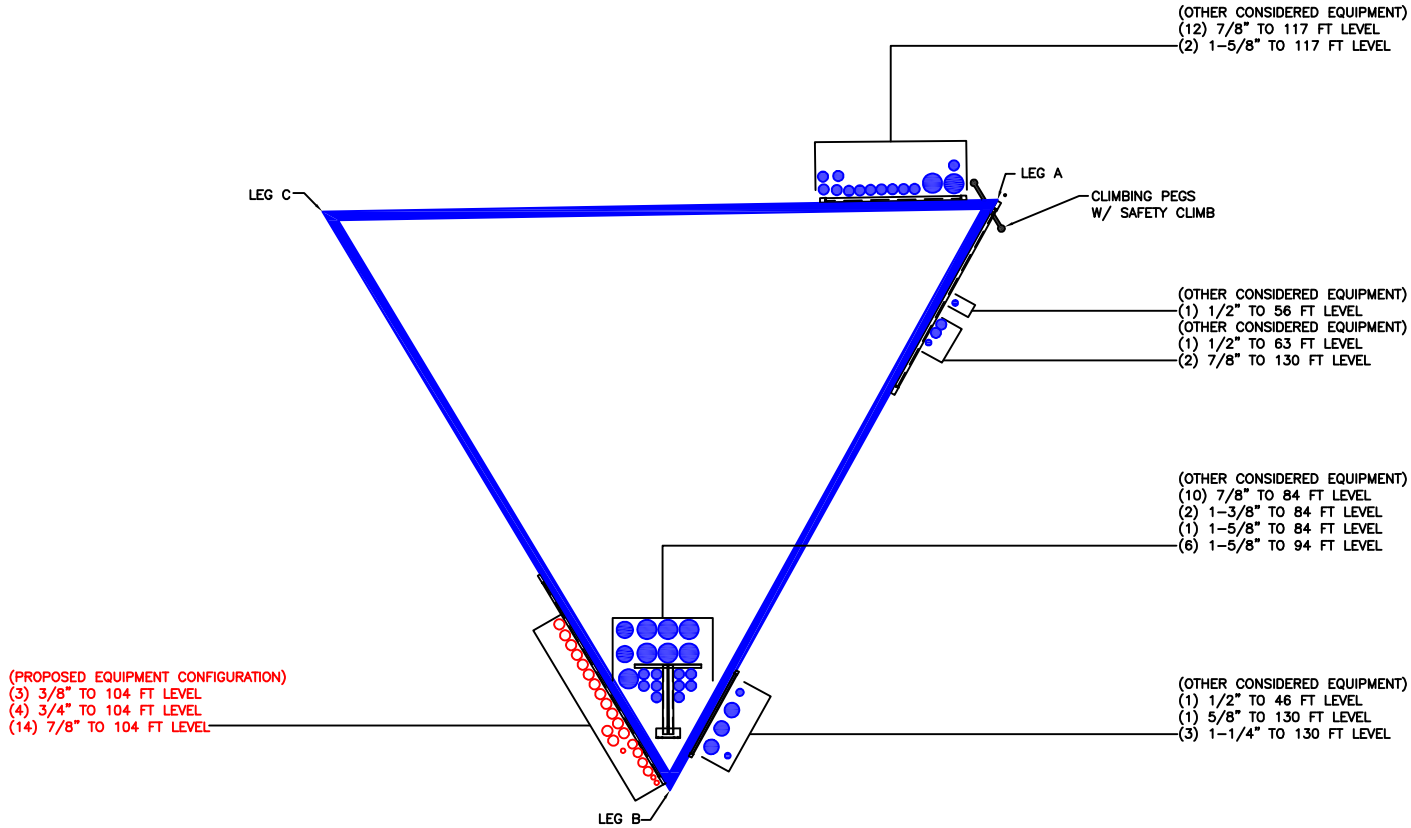
Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
T1	133.167 - 121.042	Leg	ROHN 2 STD	3	-3.93	38.68	10.1	Pass
T2	121.042 -	Leg	ROHN 2.5 STD	27	-23.64	59.99	39.4	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	$øP_{allow}$ K	% Capacity	Pass Fail
	100.917							
T3	100.917 - 94.1042	Leg	ROHN 3 STD	57	-31.83	74.44	42.8	Pass
T4	94.1042 - 87.4375	Leg	ROHN 3 STD	65	-41.30	74.41	55.5	Pass
T5	87.4375 - 80.7708	Leg	ROHN 3 STD	74	-51.54	96.10	53.6	Pass
T6	80.7708 - 60.6042	Leg	ROHN 3 X-STR	86	-82.43	99.06	83.2	Pass
T7	60.6042 - 40.4167	Leg	ROHN 4 X-STR	107	-111.86	167.91	66.6	Pass
T8	40.4167 - 20.2083	Leg	ROHN 5 X-STR	128	-137.49	211.32	65.1	Pass
T9	20.2083 - 10.1042	Leg	ROHN 5 X-STR	143	-151.28	211.32	71.6	Pass
T10	10.1042 - 0	Leg	ROHN 5 X-STR	152	-163.54	265.96	61.5	Pass
T1	133.167 - 121.042	Diagonal	L1 3/4x1 3/4x3/16	15	-0.91	11.55	7.9 12.9 (b)	Pass
T2	121.042 - 100.917	Diagonal	L1 3/4x1 3/4x3/16	33	-3.68	6.66	55.3 60.0 (b)	Pass
T3	100.917 - 94.1042	Diagonal	L2 1/2x2 1/2x3/16	60	-4.87	15.17	32.1 58.1 (b)	Pass
T4	94.1042 - 87.4375	Diagonal	L2 1/2x2 1/2x3/16	69	-4.54	13.54	33.5 55.3 (b)	Pass
T5	87.4375 - 80.7708	Diagonal	L2 1/2x2 1/2x3/16	78	-6.17	12.58	49.0 74.2 (b)	Pass
T6	80.7708 - 60.6042	Diagonal	L2 1/2x2 1/2x3/16	91	-6.30	9.54	66.0 75.2 (b)	Pass
T7	60.6042 - 40.4167	Diagonal	L3x3x3/16	112	-6.93	13.27	52.2 84.3 (b)	Pass
T8	40.4167 - 20.2083	Diagonal	L3x3x1/4	133	-7.99	11.80	67.7	Pass
T9	20.2083 - 10.1042	Diagonal	L3 1/2x3 1/2x1/4	148	-8.17	17.40	46.9 66.5 (b)	Pass
T10	10.1042 - 0	Diagonal	L3 1/2x3 1/2x1/4	157	-8.73	16.03	54.4 55.9 (b)	Pass
T5	87.4375 - 80.7708	Secondary Horizontal	L1 1/2x1 1/2x3/16	83	-0.86	2.37	36.4	Pass
T10	10.1042 - 0	Secondary Horizontal	L2 1/2x2 1/2x3/16	161	-2.84	3.71	76.4	Pass
T1	133.167 - 121.042	Top Girt	L1 3/4x1 3/4x1/8	6	-0.12	2.78	4.4	Pass
T2	121.042 - 100.917	Top Girt	L2x2x1/8	28	-0.26	4.18	6.1	Pass
							Summary	
						Leg (T6)	83.2	Pass
						Diagonal (T7)	84.3	Pass
						Secondary Horizontal (T10)	76.4	Pass
						Top Girt (T2)	6.1	Pass
						Bolt Checks	84.3	Pass
						RATING =	**84.3**	**Pass**

APPENDIX B

BASE LEVEL DRAWING



BUSINESS UNIT:806377 TOWER ID:C_BASELEVEL

APPENDIX C

ADDITIONAL CALCULATIONS

CCIplate

Project Information

BU #	806377
Site Name	HRT 084 943242
Order #	517065 Rev. 0

Tower Information

Tower Type	Self Support
TIA-222 Rev	H

☑ Apply TIA-222-H Section 15.5

Applied Loads

	Comp.	Uplift
Axial (k)	0.00	140.00
Shear (k)	0.00	17.00

Anchor Rod Data

Quantity:	4	
Diameter (in):	1	
Material Grade:	A449	Fy=92 ksi Fu=120 ksi
Grout Considered:	Yes	Not Considered, lar<=1(d)
l_{ar} (in):	0	
Eta Factor, η:	0.55	
Thread Type:	N-Included	
Configuration:	Symmetrical	

Anchor Rod Results

Axial, Pu_t (kips)	35.00	
Shear, Vu (kips)	4.25	
Moment, Mu (kip-in)	-	
Axial Cap., φPn_t (kips)	54.54	
Shear Cap., ϕVn (kips)	35.34	
Moment Cap., ϕMn (kip-in)	-	
Stress Rating	40.6%	**Pass**

SST Unit Base Foundation

BU # :	806377
Site Name:	HRT 084 943242
App. Number:	517065 Rev. 0
TIA-222 Revision:	H

Top & Bot. Pad Rein. Different?:	☐
Tower Centroid Offset?:	☑
Block Foundation?:	☐

Superstructure Analysis Reactions		
Global Moment, **M**:	2562	ft-kips
Global Axial, **P**:	38	kips
Global Shear, **V**:	33	kips
Leg Compression, $\mathbf{P_{comp}}$:	170	kips
Leg Comp. Shear, $\mathbf{V_{u_comp}}$:	20	kips
Leg Uplift, $\mathbf{P_{uplift}}$:	140	kips
Leg Uplift. Shear, $\mathbf{V_{u_uplift}}$:	17	kips
Tower Height, **H**:	133.16667	ft
Base Face Width, **BW**:	18.77083	ft
BP Dist. Above Fdn, $\mathbf{bp_{dist}}$:	3.625	in

Foundation Analysis Checks	Capacity	Demand	Rating*	Check
Lateral (Sliding) (kips)	109.57	33.00	**28.7%**	**Pass**
Bearing Pressure (ksf)	22.50	2.23	**9.9%**	**Pass**
*Overturning (kip*ft)*	4182.10	2891.17	**69.1%**	**Pass**
*Pier Flexure (Comp.) (kip*ft)*	891.11	46.00	**4.9%**	**Pass**
*Pier Flexure (Tension) (kip*ft)*	633.38	39.10	**5.9%**	**Pass**
Pier Compression (kip)	4118.72	174.51	**4.0%**	**Pass**
*Pad Flexure (kip*ft)*	3850.11	284.02	**7.0%**	**Pass**
Pad Shear - 1-way (kips)	1086.07	29.64	**2.6%**	**Pass**
Pad Shear - Comp 2-way (ksi)	0.164	0.014	**8.3%**	**Pass**
*Flexural 2-way (Comp) (kip*ft)*	1648.39	27.60	**1.6%**	**Pass**
Pad Shear - Tension 2-way (ksi)	0.164	0.013	**7.7%**	**Pass**
*Flexural 2-way (Tension) (kip*ft)*	1648.39	23.46	**1.4%**	**Pass**

**Rating per TIA-222-H Section 15.5*

Soil Rating*:	**69.1%**
Structural Rating*:	**8.3%**

Pier Properties		
Pier Shape:	Square	
Pier Diameter, **dpier**:	3.3	ft
Ext. Above Grade, **E**:	2.30	ft
Pier Rebar Size, **Sc**:	9	
Pier Rebar Quantity, **mc**:	12	
Pier Tie/Spiral Size, **St**:	5	
Pier Tie/Spiral Quantity, **mt**:	2	
Pier Reinforcement Type:	Tie	
Pier Clear Cover, $\mathbf{cc_{pier}}$:	4.25	in

Pad Properties		
Depth, **D**:	2.60	ft
Pad Width, **W**:	24.00	ft
Pad Thickness, **T**:	4.20	ft
Pad Rebar Size (Bottom), **Sp**:	8	
Pad Rebar Quantity (Bottom), **mp**:	24	
Pad Clear Cover, $\mathbf{cc_{pad}}$:	3	in

Material Properties		
Rebar Grade, **Fy**:	60	ksi
Concrete Compressive Strength, **F'c**:	3	ksi
Dry Concrete Density, δ**c**:	150	pcf

Soil Properties		
Total Soil Unit Weight, γ:	115	pcf
Ultimate Gross Bearing, Qult:	30.000	ksf
Cohesion, **Cu**:	0.000	ksf
Friction Angle, φ:	33	degrees
SPT Blow Count, $\mathbf{N_{blows}}$:		
Base Friction, μ:	0.4	
Neglected Depth, **N**:	3.3	ft
Foundation Bearing on Rock?	No	
Groundwater Depth, **gw**:	16	ft

<-- Toggle between Gross and Net

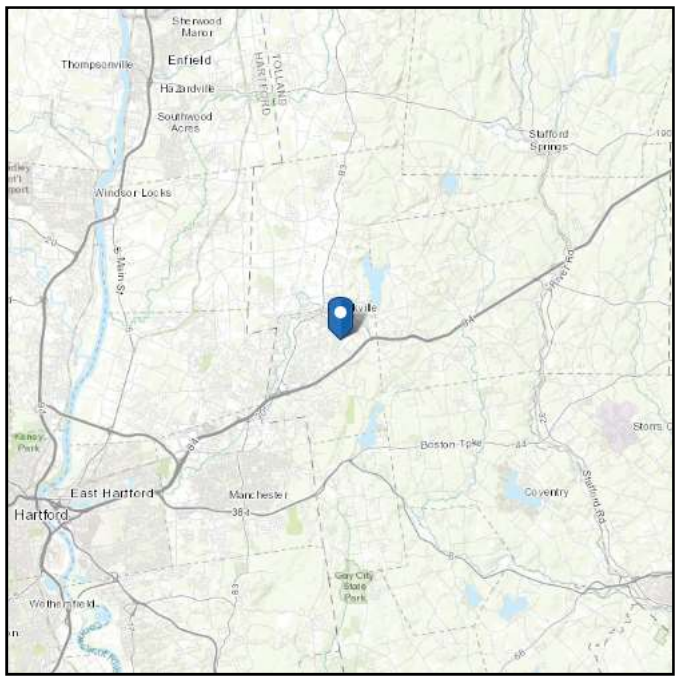
Version 3.2.1

ASCE 7 Hazards Report

Address:
No Address at This Location

Standard: ASCE/SEI 7-10
Risk Category: II
Soil Class: D - Stiff Soil

Elevation: 654.83 ft (NAVD 88)
Latitude: 41.853475
Longitude: -72.452089



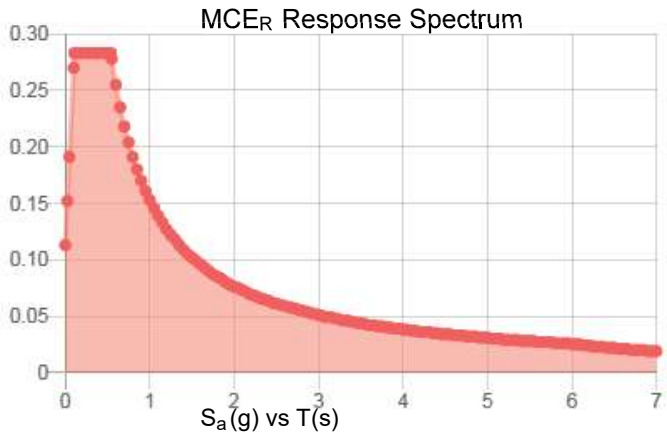
Seismic

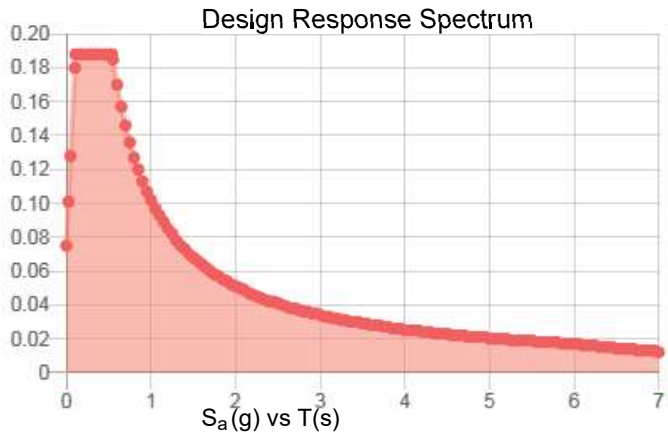
Site Soil Class: D - Stiff Soil

Results:

S_S :	0.177	S_{DS} :	0.188
S_1 :	0.064	S_{D1} :	0.102
F_a :	1.6	T_L :	6
F_v :	2.4	PGA :	0.088
S_{MS} :	0.283	PGA_M :	0.141
S_{M1} :	0.153	F_{PGA} :	1.6
		I_e :	1

Seismic Design Category B





Data Accessed: Tue Jun 09 2020

Date Source: USGS Seismic Design Maps based on ASCE/SEI 7-10, incorporating Supplement 1 and errata of March 31, 2013, and ASCE/SEI 7-10 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-10 Ch. 21 are available from USGS.

Ice

Results:

Ice Thickness:	1.00 in.
Concurrent Temperature:	5 F
Gust Speed:	50 mph
Data Source:	Standard ASCE/SEI 7-10, Figs. 10-2 through 10-8
Date Accessed:	Tue Jun 09 2020

Ice thicknesses on structures in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

Values provided are equivalent radial ice thicknesses due to freezing rain with concurrent 3-second gust speeds, for a 50-year mean recurrence interval, and temperatures concurrent with ice thicknesses due to freezing rain. Thicknesses for ice accretions caused by other sources shall be obtained from local meteorological studies. Ice thicknesses in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

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Exhibit E

Mount Analysis

Date: **June 8, 2020**

Darcy Tarr
Crown Castle
3530 Toringdon Way, Suite 300
Charlotte, NC 28277
704-405-6589

POD Group
1033 E Turkeyfoot Lake Rd. Suite 206
Akron, OH 44312
(330) 961.7432
mhoudeshell@podgrp.com

Subject:	**Mount Analysis Report**	
Carrier Designation:	**AT&T**	
	PACE Number:	**MRCTB047494**
	Carrier Site Name:	**CTL01082**
	Carrier Site Number:	**25951**
	FA Number:	**10035095**
Crown Castle Designation:	**Crown Castle BU Number:**	**806377**
	Crown Castle Site Name:	**HRT 084 943242**
	Crown Castle JDE Job Number:	**605364**
	Crown Castle Order Number:	**517065 Rev. 0**
Engineering Firm Designation:	**POD Report Designation:**	**20-64958**
Site Data:	**197 South St., Vernon, Tolland County, CT 06066**	
	Latitude 41° 51' 12.51" Longitude -72° 27' 7.52"	
Structure Information:	**Tower Height & Type:**	**132.1 ft Self Support**
	Mount Elevation:	**104 ft**
	Mount Type:	**12.5 ft Sector Frame**

Dear Darcy Tarr,

POD Group is pleased to submit this "Mount Analysis Report" to determine the structural integrity of AT&T's antenna mounting system with the proposed appurtenance and equipment addition on the abovementioned supporting tower structure. Analysis of the existing supporting tower structure is to be completed by others and therefore is not part of this analysis. Analysis of the antenna mounting system as a tie-off point for fall protection or rigging is not part of this document.

The purpose of the analysis is to determine acceptability of the mount stress level. Based on our analysis we have determined the mount stress level to be:

12.5 ft Sector Frame (Alpha & Beta Sector)	**Sufficient**
12.5 ft Sector Frame (Gamma Sector)	**Sufficient**

This analysis has been performed in accordance with the TIA-222-H Standard based upon an ultimate 3-second gust wind speed of 118 mph. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Mount structural analysis prepared by: Uma Toluganti

Respectfully submitted by:

6/8/20

STATE OF CONNECTICUT
JASON CHERONIS
PEN.0032793
LICENSED
PROFESSIONAL ENGINEER

Jason Cheronis, P.E.
Connecticut PE #: 0032793

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1) INTRODUCTION

This mount is an existing 12.5 ft Sector Frame. This mount is installed at the 104 ft elevation on the 132.1 ft Self Support.

2) ANALYSIS CRITERIA

TIA-222 Revision:	TIA-222-H
Risk Category:	II
Ultimate Wind Speed:	118 mph
Exposure Category:	B
Topographic Factor at Base:	1.000
Topographic Factor at Mount:	1.000
Ice Thickness:	1.5 in
Wind Speed with Ice:	50 mph
Seismic S_s:	0.183
Seismic S_1:	0.055
Live Loading Wind Speed:	30 mph
Man Live Load at Mid/End-Points:	250 lb
Man Live Load at Mount Pipes:	500 lb

Table 1 - Final Equipment Configuration

Mount Centerline (ft)	Antenna Centerline (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Mount / Modification Details	Note
104	106	2	CCI ANTENNAS	HPA-65R-BUU-H6	12.5 ft Sector Frame	-
		1	CCI ANTENNAS	HPA-65R-BUU-H8		
		3	KATHREIN	800 10121		
		2	CCI ANTENNAS	DMP65R-BU6D		
		1	CCI ANTENNAS	DMP65R-BU8D		
		2	CCI ANTENNAS	TPA65R-BU6D_CCIV2		
		1	CCI ANTENNAS	TPA65R-BU8D_CCIV2		
		3	COMMUNICATION COMPONENTS INC	DTMABP7819VG12A		
		6	ERICSSON	RRUS 32 B30		
		6	KATHREIN	782-10250		
		6	KATHREIN	860 10025		
		3	RAYCAP	DC6-48-60-18-8F		
		3	ERICSSON	RRUS 4449 B5/B12		
		3	ERICSSON	RRUS 4478 B14		
		3	ERICSSON	RRUS 8843 B2/B66A		

3) ANALYSIS PROCEDURE

Table 2 - Documents Provided

Document	Remarks	Reference	Source
Application	-	Crown Castle Order ID: 517065 Rev 0 Dated: 06/05/2020	Crown Castle
Elevation Drawings	-	Crown Castle Sheet #: A1-104 Dated: 09/20/2018	Crown Castle
Structural Analysis	-	Black & Veatch Project #: 400087 Dated: 05/13/2020	Crown Castle
RFDS	-	AT&T RFDS ID: 3719772 Dated: 03/09/2020	Crown Castle

3.1) Analysis Method

RISA-3D (Version 17.0.4), a commercially available analysis software package, was used to create a three-dimensional model of the antenna mounting system and calculate member stresses for various loading cases. Selected output from the analysis are included in the Appendices.

A tool internally developed, using Microsoft Excel, by POD Group, was used to calculate wind loading on all appurtenances, dishes, and mount members for various load cases. Selected output from the calculations are included in Appendices B, F.

This analysis was performed in accordance with Crown Castle's ENG-SOW-10208 Tower Mount Analysis (Revision B). In addition, this analysis is in accordance with AT&T's mount technical directive.

3.2) Assumptions

1) The antenna mounting system was properly fabricated, installed, and maintained in good condition in accordance with its original design, TIA Standards, and/or manufacturer's specifications.
2) The configuration of antennas, mounts, and other appurtenances are as specified in Table 1 and the referenced drawings.
3) 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.
4) The weight of the mount was increased 10% in the analysis to account for connections, coax, and jumpers.
5) Member sizes have been assumed from photos of the site and experience with similar mounting systems. If the sizes assumed in this report differ from the actual member sizes, POD Group shall be contacted immediately, and the results of the analysis shall be considered null and void.
6) The analysis will be required to be revised if the existing conditions in the field differ from those shown in the above-referenced documents or assumed in this analysis. No allowance was made for any damaged, missing, or rusted members.
7) Steel grades have been assumed as follows, unless noted otherwise:
   a. Pipe — ASTM A53 (GR 35)
   b. Connection Bolts — ASTM A325

If any of these assumptions are not valid or have been made in error, this analysis may be affected, and POD Group should be allowed to review any new information to determine its effect on the structural integrity of the mount.

4) ANALYSIS RESULTS

Table 3 - Mount Component Stresses vs. Capacity (12.5 ft. Sector Frame, Alpha & Beta Sector)

Notes	Component	Critical Member	Centerline (ft)	% Capacity	Pass / Fail
2	Tieback	TIEBACK	104	87.6	Pass
	Vertical	VERT1		72.5	Pass
	Mount Pipe	MP ALPHA3		47.4	Pass
	Kicker	KICKER4		39.1	Pass
	Pipe	MP 1		29.6	Pass
	Face	BOTTOMFACE		23.1	Pass
	Diagonal	DIAG1		13.6	Pass
1	Bolts	-	-	35.8	Pass

Structure Rating (max from all components) =	87.6 %

Notes:
1) See additional documentation in "Appendix D – Additional Calculations" for calculations supporting the % capacity
2) Capacity as per Table 4 Tieback Connection Data Table

Table 4 - Tieback Connection Data Table

Tower Connection Node No.	Existing / Proposed	Resultant End Reaction (lb)	Connected Member Type	Connected Member Size	Member Compressive Capacity (lb)[2]	Notes
N35	Existing	2503	Leg	ROHN 2.5 STD	2856	1

Notes:
1) Tieback connection point is within 25% of either end of the connected tower member
2) Reduced member compressive capacity according to CED-STD-10294 *Standard for Installation of Mounts and Appurtenances*

4.1) Recommendations

The mount has sufficient capacity to carry the proposed loading configuration. No modifications are required at this time.

Table 5 - Mount Component Stresses vs. Capacity (12.5 ft. Sector Frame, Gamma Sector)

Notes	Component	Critical Member	Centerline (ft)	% Capacity	Pass / Fail
2	Tieback	TIEBACK	104	81.7	Pass
	Vertical	VERT1		65.3	Pass
	Mount Pipe	MP ALPHA3		53.4	Pass
	Kicker	KICKER4		39.9	Pass
	Pipe	MP 1		31.7	Pass
	Face	BOTTOMFACE		20.5	Pass
	Diagonal	DIAG1		13.0	Pass
1	Bolts	-	-	28.8	Pass

Structure Rating (max from all components) =	81.7%

Notes:
1) See additional documentation in "Appendix H – Additional Calculations" for calculations supporting the % capacity
2) Capacity as per Table 6 Tieback Connection Data Table

Table 6 - Tieback Connection Data Table (Gamma)

Tower Connection Node No.	Existing / Proposed	Resultant End Reaction (lb)	Connected Member Type	Connected Member Size	Member Compressive Capacity (lb)[2]	Notes
N35	Existing	2336	Leg	ROHN 2.5 STD	2856	1

Notes:
1) Tieback connection point is within 25% of either end of the connected tower member
2) Reduced member compressive capacity according to CED-STD-10294 *Standard for Installation of Mounts and Appurtenances*

4.2) Recommendations (Gamma)

The mount has sufficient capacity to carry the proposed loading configuration. No modifications are required at this time.

5) DISCLAIMER OF WARRANTIES

POD Group has not performed a site visit to the structure to verify the member sizes or antenna/coax loading unless noted otherwise. If the existing conditions are not as represented in this report, we should be contacted immediately to evaluate the significance of the discrepancy. This is not a condition assessment of the structure or foundation. This report does not replace a full structure inspection. The structure, foundations, and mounting systems are assumed to have been properly fabricated, erected, maintained, in good condition, twist free, and plumb.

The engineering services rendered by POD Group in connection with this Structural Analysis are limited to a computer analysis of the structure and theoretical capacity of its main structural members. No allowance was made for any damaged, bent, missing, loose, or rusted members (above and below ground). No allowance was made for loose bolts or cracked welds.

POD Group does not analyze the fabrication of the structure (including welding). It is not possible to have all the very detailed information needed to perform a thorough analysis of every structural sub-component and connection of an existing structure. POD Group provides a limited scope of service in that we cannot verify the adequacy of every weld, plate connection detail, etc. The purpose of this report is to assess the feasibility of adding appurtenances usually accompanied by transmission lines to the structure.

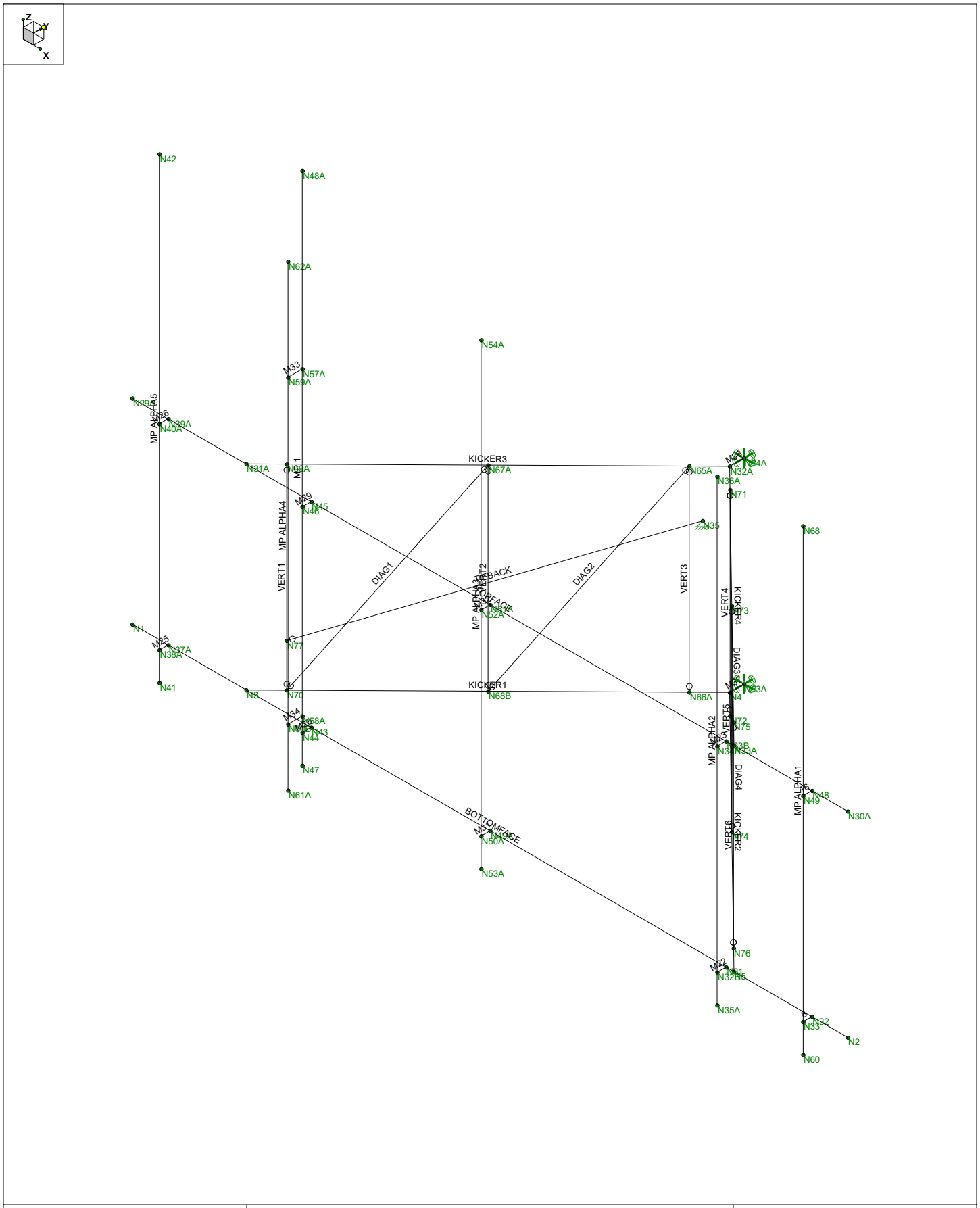
It is the owner's responsibility to determine the amount of ice accumulation in excess of the code specified amount, if any, that should be considered in the structural analysis.

The attached sketches are a schematic representation of the analyzed structure. If any material is fabricated from these sketches, the contractor shall be responsible for field verifying the existing conditions, proper fit, and clearance in the field. Any mentions of structural modifications are reasonable estimates and should not be used as a precise construction document. Precise modification drawings are obtainable from POD Group, but are beyond the scope of this report.

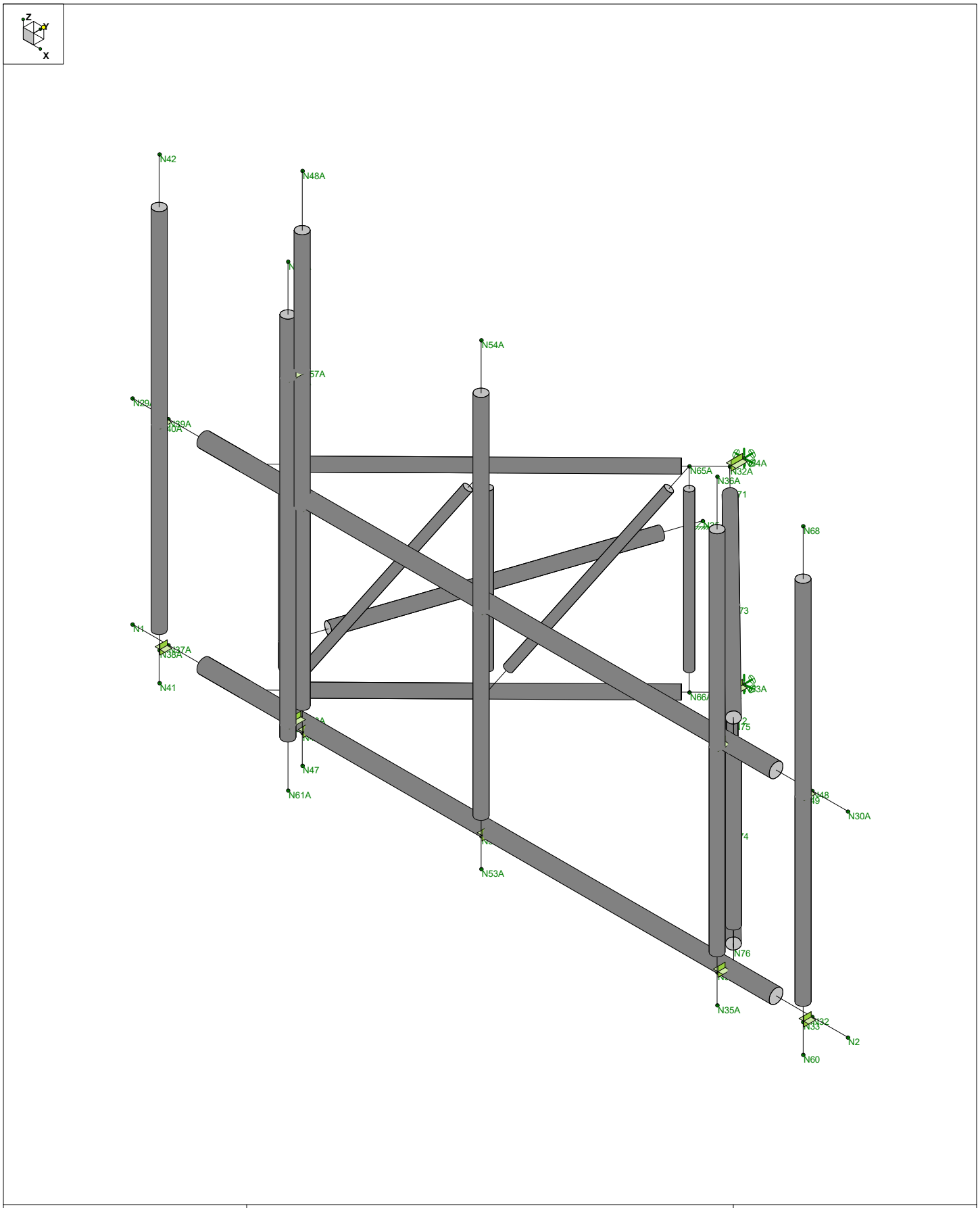
POD Group makes no warranties, expressed and/or implied, in connection with this report and disclaims any liability arising from material, fabrication, and erection of this structure. POD Group will not be responsible whatsoever, for or on account of, consequential or incidental damages sustained by any person, firm, or organization as a result of any data or conclusions contained in this report. The maximum liability of POD Group pursuant to this report will be limited to the total fee received for preparation of this report.

APPENDIX A

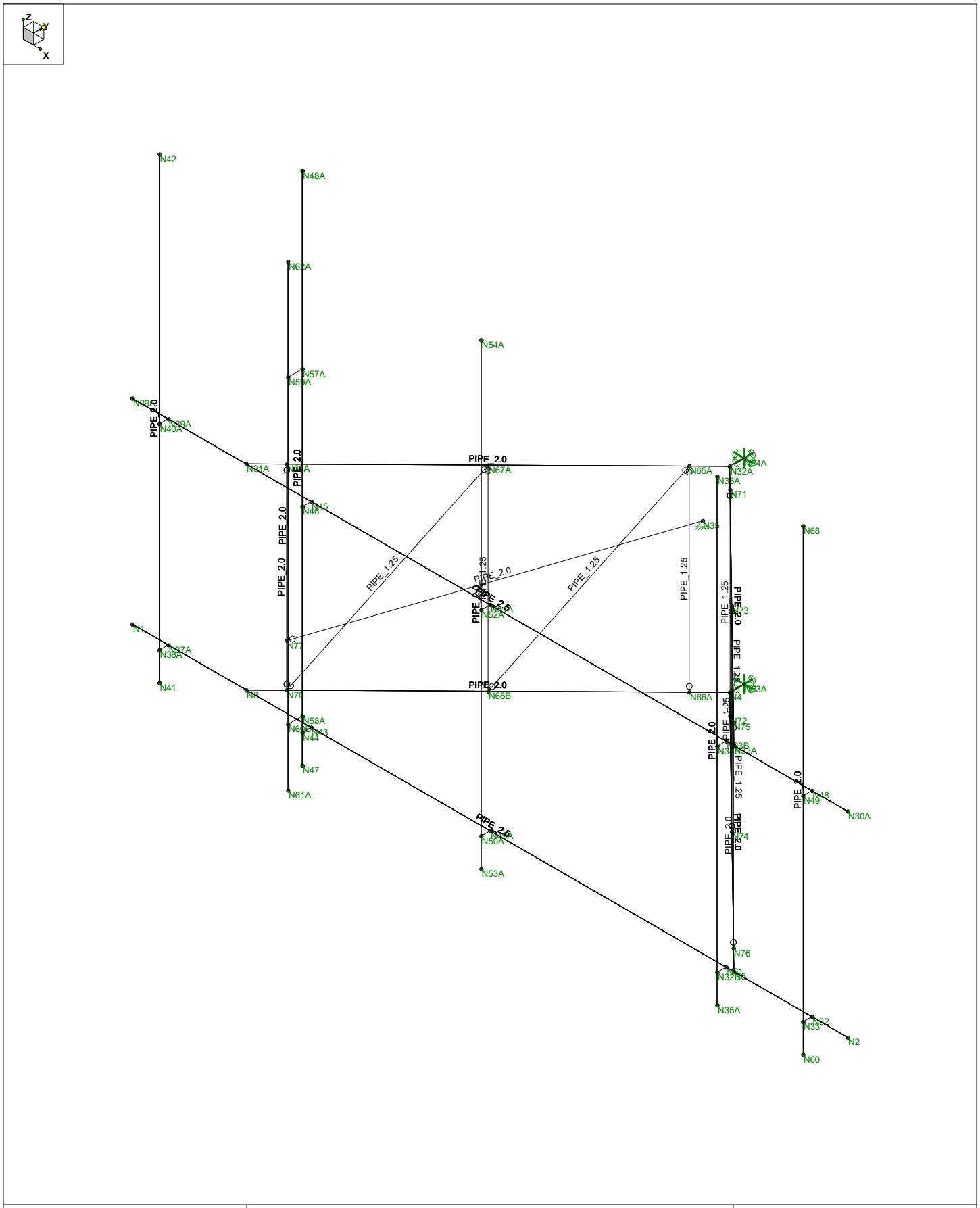
Wire Frame and Rendered Models (Alpha & Beta)



POD	806377	SK - 1
UT		June 5, 2020 at 4:49 PM
20-64958		(SF2) 20' Rohn Boom Gate.R3D



POD	806377	SK - 2
UT		June 5, 2020 at 4:49 PM
20-64958		(SF2) 20' Rohn Boom Gate.R3D



POD	806377	SK - 3
UT		June 5, 2020 at 4:49 PM
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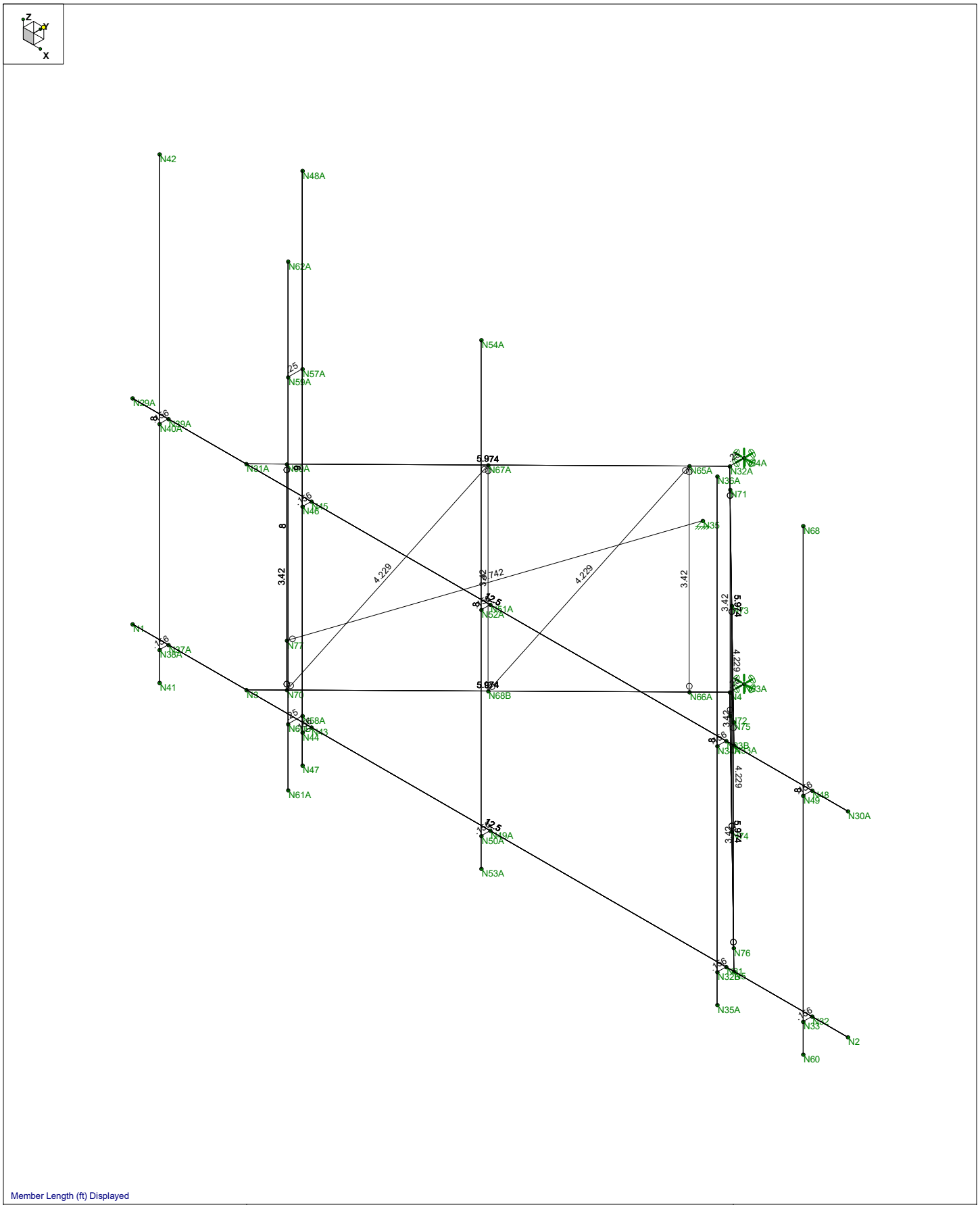
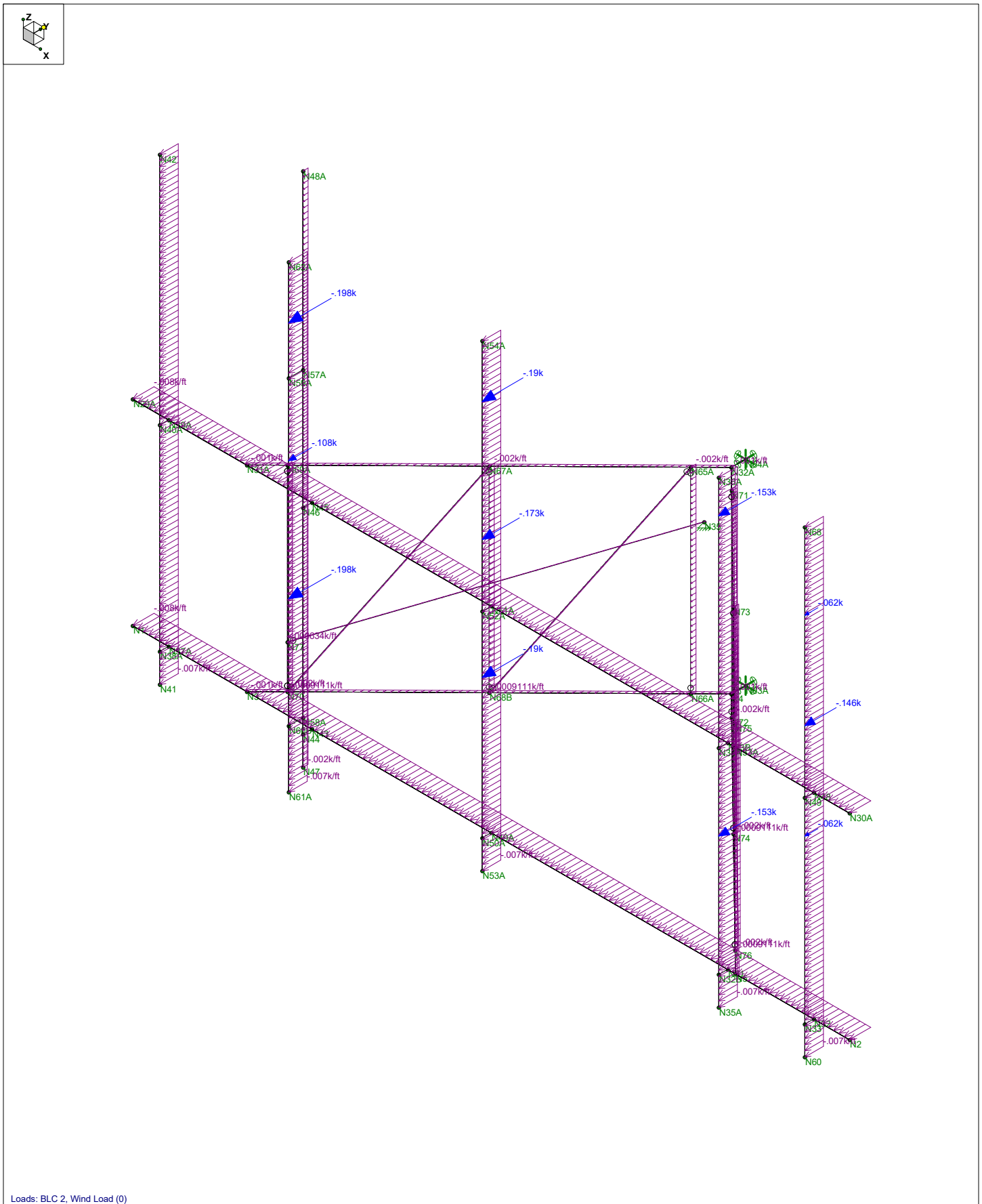


Member Length (ft) Displayed

POD	806377	SK - 4
UT		June 5, 2020 at 4:50 PM
20-64958		(SF2) 20' Rohn Boom Gate.R3D



Loads: BLC 2, Wind Load (0)

POD	806377	SK - 5
UT		June 5, 2020 at 4:50 PM
20-64958		(SF2) 20' Rohn Boom Gate.R3D

APPENDIX B

Software Input Calculations (Alpha & Beta)

POD Job #	**20-64958**
Site Number	**806377**
Site Name	**HRT 084 943242**

General Site Information

Mount Type	MF	Risk Category	II	I (seismic)	1	
V (Wind Speed)	118	I(ice)	1	Sms	0.293	
Z_s	661			Sm1	0.132	
ti	1.5	Ss	0.183	Sds	0.195	
Vi	50	S1	0.055	Sd1	0.088	
Kzt	1	Soil Site Class	D	Seismic Design Category		
Exposure	B	Fa	1.600		B	
zg	1200	Fv	2.400	Seismic Analysis Not Required		
α	7			R	2	TIA-222-H 16.7
Kmin	0.7	Tower Type	Self Support	As	1	TIA-222-H 16.7
G_H	1	Tower Height	132.1	Cs, Min	0.03	TIA-222-H 2.7.7.1.1
Ke	0.98			Cs	0.0976	TIA-222-H 2.7.7.1.1
K_D	0.95					
K_a	0.9					

Appurtenance Information

Model	Shielded	% Shielded	Centerline	Centerline on MP	Spacing (in)	Azimuth	Sector	Quantity		MP #
HPA-65R-BUU-H6			106	4	58	0	A	1	2	
800 10121			106	4	40	0	A	1	1	
DMP65R-BU6D			106	4	50	0	A	1	4	
TPA65R-BU6D_CCIV2			106	4	50	0	A	1	3	
DTMABP7819VG12A			106	4	0	0	A	1	1	
RRUS 32 B30			106	4	0	0	A	1	2	
782-10250			106	4	0	0	A	2	1	
860 10025			106	4	0	0	A	2	1	
DC6-48-60-18-8F			106	4	0	0	A	1	3	
RRUS 32 B30			106	4	0	0	A	1	3	
RRUS 4449 B5/B12			106	4	0	0	A	1	4	
RRUS 4478 B14			106	4	0	0	A	1	3	
RRUS 8843 B2/B66A			106	4	0	0	A	1	4	

Mount Information

Elevation (ft)	104	Grating Thickness (in)	
K_z	1.00	Grating Ice Weight (k/ft^2)	0.016
Kiz	1.12		
tiz	1.68		

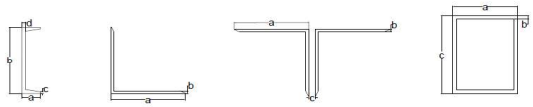
	Length (ft)	Width (in)	Centerline
Mount Pipes	8	2.375	104

Round Members

Member	Length (ft)	Width (in)	Frame Member	# of Members
Face	12.5	2.875	Yes	2
Kicker	4.789	2.375	No	4
Vertical	3.42	2.375	No	6
Diagonal	4	1.5	No	4
Tieback	6	2.375	No	1
Pipe	9	2.375	No	1

Flat Members

Member	Length (ft)	Width (in)	Shape	A	B	C	D	Frame Member	# of Members



Version 3.12

Appurtenance Wind Calculations

Model	Height	Width	Depth	Weight (lbs)	Kz	qz (lb/ft$_2$)	$(EPA)_N$ (ft^2)	$(EPA)_T$(ft^2)	Wind Force (Kips) Front	Side	Alpha	Beta	Gamma
HPA-65R-BUU-H6	72.0	14.8	9.0	47.9	1.00	33.22	9.22	4.65	0.306	0.155	0.268	0.268	0.155
800 10121	54.5	10.3	5.9	51.2	1.00	33.22	3.74	2.17	0.124	0.072	0.111	0.111	0.072
DMP65R-BU6D	71.2	20.7	7.7	89.3	1.00	33.22	11.93	4.48	0.396	0.149	0.334	0.334	0.149
TPA65R-BU6D_CCIV2	71.2	20.7	7.7	69.0	1.00	33.22	11.44	5.05	0.380	0.168	0.327	0.327	0.168
DTMABP7819VG12A	10.6	11.0	3.8	19.2	1.00	33.22	0.88	0.30	0.029	0.010	0.024	0.024	0.010
RRUS 32 B30	27.2	12.1	7.0	53.0	1.00	33.22	2.47	1.50	0.082	0.050	0.074	0.074	0.050
782-10250	11.0	4.9	2.5	6.4	1.00	33.22	0.40	0.22	0.013	0.007	0.012	0.012	0.007

Appurtenance Ice Calculations

Model	tiz (in)	Height	Width	Depth	Weight (lbs)	Kiz	qz (lb/ft$_2$)	$(EPA)_N$ (ft^2)	$(EPA)_T$(ft^2)	Wind Force (Kips) Front	Side	Alpha	Beta	Gamma
HPA-65R-BUU-H6	1.69	75.37	18.17	12.37	238.30	1.12	5.96	10.72	6.42	0.064	0.038	0.058	0.058	0.038
800 10121	1.69	57.87	13.67	9.27	130.38	1.12	5.96	4.75	3.24	0.028	0.019	0.026	0.026	0.019
DMP65R-BU6D	1.69	74.57	24.07	11.07	276.27	1.12	5.96	13.08	6.05	0.078	0.036	0.068	0.068	0.036
TPA65R-BU6D_CCIV2	1.69	74.57	24.07	11.07	276.27	1.12	5.96	8.01	4.10	0.048	0.024	0.042	0.042	0.024
DTMABP7819VG12A	1.69	14.00	14.39	7.15	32.35	1.12	5.96	0.89	0.44	0.005	0.003	0.005	0.005	0.003
RRUS 32 B30	1.69	30.57	15.47	10.37	84.31	1.12	5.96	2.07	1.41	0.012	0.008	0.011	0.011	0.008
782-10250	1.69	14.37	8.27	5.87	18.25	1.12	5.96	0.52	0.37	0.003	0.002	0.003	0.003	0.002
860 10025	1.69	10.37	5.67	5.27	9.06	1.12	5.96	0.26	0.24	0.002	0.001	0.002	0.002	0.001
DC6-48-60-18-8F	1.69	34.62	14.37	14.37	109.19	1.12	5.96	2.18	2.18	0.013	0.013	0.013	0.013	0.013
RRUS 32 B30	1.69	30.57	15.47	10.37	84.31	1.12	5.96	2.07	1.41	0.012	0.008	0.011	0.011	0.008
RRUS 4449 B5/B12	1.69	21.27	16.56	12.81	74.03	1.12	5.96	1.55	1.20	0.009	0.007	0.009	0.009	0.007
RRUS 4478 B14	1.69	19.87	16.77	11.07	64.40	1.12	5.96	1.46	0.97	0.009	0.006	0.008	0.008	0.006
RRUS 8843 B2/B66A	1.69	18.27	16.57	14.27	70.56	1.12	5.96	1.33	1.14	0.008	0.007	0.008	0.008	0.007

Round Members

Member	q_z (lb/ft^2)	Wind Calculations Ar	C	Rrf	Cas	EPA (ft^2)	Load (k/ft)	Width (in)	Weight (k/ft)	q_z (lb/ft^2)	Ice Calculations Arice	Rrfice	Cas	EPA (ft^2)	Load (k/ft)
Face	33.04	5.99	27.93	0.61	1.84	3.01	0.008	6.24	0.01	5.93	13.00	0.63	1.84	6.78	0.003
Kicker	33.04	3.79	23.07	0.61	1.20	0.62	0.002	5.74	0.01	5.93	9.16	0.63	1.20	1.56	0.001
Vertical	33.04	4.06	23.07	0.61	1.20	0.44	0.002	5.74	0.01	5.93	9.82	0.63	1.20	1.11	0.001
Diagonal	33.04	2.00	14.57	0.61	1.20	0.33	0.001	4.86	0.01	5.93	6.49	0.63	1.20	1.10	0.001
Tieback	33.04	1.19	23.07	0.61	1.20	0.78	0.002	5.74	0.01	5.93	2.87	0.63	1.20	1.95	0.001
Pipe	33.04	1.78	23.07	0.61	1.20	1.17	0.002	5.74	0.01	5.93	4.30	0.63	1.20	2.93	0.001

Appurtenance Seismic Calculations

Model	Weight	Sds	ρ	Cs	As	Ev	Eh
HPA-65R-BUU-H6	47.9	0.195	1.000	0.098	1.000	0.002	0.005
800 10121	51.2	0.195	1.000	0.098	1.000	0.002	0.005
DMP65R-BU6D	89.3	0.195	1.000	0.098	1.000	0.003	0.009
TPA65R-BU6D_CCIV2	69.0	0.195	1.000	0.098	1.000	0.003	0.007
DTMABP7819VG12A	19.2	0.195	1.000	0.098	1.000	0.001	0.002
RRUS 32 B30	53.0	0.195	1.000	0.098	1.000	0.002	0.005
782-10250	6.4	0.195	1.000	0.098	1.000	0.000	0.001
860 10025	1.2	0.195	1.000	0.098	1.000	0.000	0.000
DC6-48-60-18-8F	32.8	0.195	1.000	0.098	1.000	0.001	0.003
RRUS 32 B30	53.0	0.195	1.000	0.098	1.000	0.002	0.005
RRUS 4449 B5/B12	71.0	0.195	1.000	0.098	1.000	0.003	0.007
RRUS 4478 B14	59.9	0.195	1.000	0.098	1.000	0.002	0.006
RRUS 8843 B2/B66A	72.0	0.195	1.000	0.098	1.000	0.003	0.007

Version 3.12

APPENDIX C

Software Analysis Output (Alpha & Beta)

Hot Rolled Steel Design Parameters

	Label	Shape	Length[...	Lbyy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kyy	Kzz	Cb	Function
1	TOPFACE	PIPE_2.5	12.5	8.83		Lbyy						Lateral
2	BOTTOM...	PIPE_2.5	12.5	8.83		Lbyy						Lateral
3	KICKER1	PIPE_2.0	5.974		2.42	Lbyy						Lateral
4	KICKER2	PIPE_2.0	5.974		2.42	Lbyy						Lateral
5	KICKER3	PIPE_2.0	5.974		2.42	Lbyy						Lateral
6	KICKER4	PIPE_2.0	5.974		2.42	Lbyy						Lateral
7	VERT1	PIPE_2.0	3.42			Lbyy						Lateral
8	VERT2	PIPE_1.25	3.42			Lbyy						Lateral
9	VERT3	PIPE_1.25	3.42			Lbyy						Lateral
10	VERT4	PIPE_1.25	3.42			Lbyy						Lateral
11	VERT5	PIPE_1.25	3.42			Lbyy						Lateral
12	VERT6	PIPE_2.0	3.42			Lbyy						Lateral
13	DIAG1	PIPE_1.25	4.229			Lbyy						Lateral
14	DIAG2	PIPE_1.25	4.229			Lbyy						Lateral
15	DIAG3	PIPE_1.25	4.229			Lbyy						Lateral
16	DIAG4	PIPE_1.25	4.229			Lbyy						Lateral
17	TIEBACK	PIPE_2.0	5.742			Lbyy						Lateral
18	MP ALPH...	PIPE_2.0	8			Lbyy						Lateral
19	MP ALPH...	PIPE_2.0	8			Lbyy						Lateral
20	MP ALPH...	PIPE_2.0	8			Lbyy						Lateral
21	MP 1	PIPE_2.0	9			Lbyy						Lateral
22	MP ALPH...	PIPE_2.0	8			Lbyy						Lateral
23	MP ALPH...	PIPE_2.0	8			Lbyy						Lateral

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design R...
1	TOPFACE	N29A	N30A			PIPE_2.5	Beam	Pipe	A53 Gr.B	Typical
2	BOTTOMF...	N1	N2			PIPE_2.5	Beam	Pipe	A53 Gr.B	Typical
3	KICKER1	N3	N4			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
4	KICKER2	N4	N5			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
5	KICKER3	N31A	N32A			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
6	KICKER4	N32A	N33A			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
7	VERT1	N70	N69A		308	PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
8	VERT2	N67A	N68B		308	PIPE_1.25	Beam	Pipe	A53 Gr.B	Typical
9	VERT3	N65A	N66A		308	PIPE_1.25	Beam	Pipe	A53 Gr.B	Typical
10	VERT4	N72	N71		52	PIPE_1.25	Beam	Pipe	A53 Gr.B	Typical
11	VERT5	N74	N73		52	PIPE_1.25	Beam	Pipe	A53 Gr.B	Typical
12	VERT6	N76	N75		52	PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
13	DIAG1	N70	N67A		303	PIPE_1.25	Beam	Pipe	A53 Gr.B	Typical
14	DIAG2	N68B	N65A		303	PIPE_1.25	Beam	Pipe	A53 Gr.B	Typical
15	DIAG3	N74	N71		57	PIPE_1.25	Beam	Pipe	A53 Gr.B	Typical
16	DIAG4	N76	N73		57	PIPE_1.25	Beam	Pipe	A53 Gr.B	Typical
17	TIEBACK	N77	N35			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
18	MP ALPHA1	N60	N68			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
19	8	N32	N33			RIGID	None	None	RIGID	Typical
20	16	N48	N49			RIGID	None	None	RIGID	Typical
21	MP ALPHA2	N35A	N36A			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
22	M22	N31	N32B			RIGID	None	None	RIGID	Typical
23	M23	N33B	N34A			RIGID	None	None	RIGID	Typical
24	MP ALPHA5	N41	N42			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
25	M25	N37A	N38A			RIGID	None	None	RIGID	Typical
26	M26	N39A	N40A			RIGID	None	None	RIGID	Typical
27	MP 1	N47	N48A			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
28	M28	N43	N44			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design R...
29	M29	N45	N46			RIGID	None	None	RIGID	Typical
30	MP ALPHA3	N53A	N54A			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
31	M31	N49A	N50A			RIGID	None	None	RIGID	Typical
32	M32	N51A	N52A			RIGID	None	None	RIGID	Typical
33	M33	N59A	N57A			RIGID	None	None	RIGID	Typical
34	M34	N60B	N58A			RIGID	None	None	RIGID	Typical
35	MP ALPHA4	N61A	N62A			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
36	M36	N32A	N64A			RIGID	None	None	RIGID	Typical
37	M37	N4	N63A			RIGID	None	None	RIGID	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Ratio Options	Analysis...	Inactive	Seismi...
1	TOPFACE						Yes	Default			None
2	BOTTOM...						Yes	Default			None
3	KICKER1						Yes	Default			None
4	KICKER2						Yes	Default			None
5	KICKER3						Yes	Default			None
6	KICKER4						Yes	Default			None
7	VERT1	OOOOOX	OOOOOX				Yes				None
8	VERT2	OOOOOX	OOOOOX				Yes				None
9	VERT3	OOOOOX	OOOOOX				Yes				None
10	VERT4	OOOOOX	OOOOOX				Yes				None
11	VERT5	OOOOOX	OOOOOX				Yes				None
12	VERT6	OOOOOX	OOOOOX				Yes				None
13	DIAG1	OOOOOX	OOOOOX				Yes				None
14	DIAG2	OOOOOX	OOOOOX				Yes				None
15	DIAG3	OOOOOX	OOOOOX				Yes				None
16	DIAG4	OOOOOX	OOOOOX				Yes				None
17	TIEBACK	BenPIN					Yes				None
18	MP ALP...						Yes				None
19	8						Yes	** NA **			None
20	16						Yes	** NA **			None
21	MP ALP...						Yes				None
22	M22						Yes	** NA **			None
23	M23						Yes	** NA **			None
24	MP ALP...						Yes				None
25	M25						Yes	** NA **			None
26	M26						Yes	** NA **			None
27	MP 1						Yes				None
28	M28						Yes	** NA **			None
29	M29						Yes	** NA **			None
30	MP ALP...						Yes				None
31	M31						Yes	** NA **			None
32	M32						Yes	** NA **			None
33	M33						Yes	** NA **			None
34	M34						Yes	** NA **			None
35	MP ALP...						Yes				None
36	M36						Yes	** NA **			None
37	M37						Yes	** NA **			None

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/1E...	Density[k...	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A992	29000	11154	.3	.65	.49	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	.3	.65	.527	42	1.4	58	1.3
5	A500 Gr.B Rect	29000	11154	.3	.65	.527	46	1.4	58	1.3
6	A53 Gr.B	29000	11154	.3	.65	.49	35	1.6	60	1.2
7	A1085	29000	11154	.3	.65	.49	50	1.4	65	1.3

Member Point Loads (BLC 1 : Live Load)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	TOPFACE	Z	-.5	0

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.153	7.417
2	MP ALPHA2	Y	-.153	2.583
3	MP ALPHA1	Y	-.062	6.667
4	MP ALPHA1	Y	-.062	3.333
5	MP ALPHA4	Y	-.198	7.083
6	MP ALPHA4	Y	-.198	2.917
7	MP ALPHA3	Y	-.19	7.083
8	MP ALPHA3	Y	-.19	2.917
9	MP ALPHA1	Y	-.029	5
10	MP ALPHA1	Y	-.082	5
11	MP ALPHA1	Y	-.027	5
12	MP ALPHA1	Y	-.008	5
13	MP ALPHA3	Y	-.036	5
14	MP ALPHA3	Y	-.082	5
15	MP ALPHA4	Y	-.059	5
16	MP ALPHA3	Y	-.055	5
17	MP ALPHA4	Y	-.049	5

Member Point Loads (BLC 3 : Dead Load)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Z	-.024	7.417
2	MP ALPHA2	Z	-.024	2.583
3	MP ALPHA1	Z	-.026	6.667
4	MP ALPHA1	Z	-.026	3.333
5	MP ALPHA4	Z	-.045	7.083
6	MP ALPHA4	Z	-.045	2.917
7	MP ALPHA3	Z	-.035	7.083
8	MP ALPHA3	Z	-.035	2.917
9	MP ALPHA1	Z	-.019	5
10	MP ALPHA1	Z	-.053	5
11	MP ALPHA1	Z	-.013	5
12	MP ALPHA1	Z	-.002	5
13	MP ALPHA3	Z	-.033	5
14	MP ALPHA3	Z	-.053	5
15	MP ALPHA4	Z	-.071	5
16	MP ALPHA3	Z	-.06	5
17	MP ALPHA4	Z	-.072	5

Member Point Loads (BLC 4 : Wind Load (30))

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

Member Point Loads (BLC 4 : Wind Load (30)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.116	7.417
2	MP ALPHA2	Y	-.116	2.583
3	MP ALPHA2	X	-.067	7.417
4	MP ALPHA2	X	-.067	2.583
5	MP ALPHA1	Y	-.048	6.667
6	MP ALPHA1	Y	-.048	3.333
7	MP ALPHA1	X	-.028	6.667
8	MP ALPHA1	X	-.028	3.333
9	MP ALPHA4	Y	-.145	7.083
10	MP ALPHA4	Y	-.145	2.917
11	MP ALPHA4	X	-.084	7.083
12	MP ALPHA4	X	-.084	2.917
13	MP ALPHA3	Y	-.142	7.083
14	MP ALPHA3	Y	-.142	2.917
15	MP ALPHA3	X	-.082	7.083
16	MP ALPHA3	X	-.082	2.917
17	MP ALPHA1	Y	-.021	5
18	MP ALPHA1	X	-.012	5
19	MP ALPHA1	Y	-.064	5
20	MP ALPHA1	X	-.037	5
21	MP ALPHA1	Y	-.021	5
22	MP ALPHA1	X	-.012	5
23	MP ALPHA1	Y	-.007	5
24	MP ALPHA1	X	-.004	5
25	MP ALPHA3	Y	-.032	5
26	MP ALPHA3	X	-.019	5
27	MP ALPHA3	Y	-.064	5
28	MP ALPHA3	X	-.037	5
29	MP ALPHA4	Y	-.047	5
30	MP ALPHA4	X	-.027	5
31	MP ALPHA3	Y	-.043	5
32	MP ALPHA3	X	-.025	5
33	MP ALPHA4	Y	-.041	5
34	MP ALPHA4	X	-.023	5

Member Point Loads (BLC 5 : Wind Load (60))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.048	7.417
2	MP ALPHA2	Y	-.048	2.583
3	MP ALPHA2	X	-.083	7.417
4	MP ALPHA2	X	-.083	2.583
5	MP ALPHA1	Y	-.021	6.667
6	MP ALPHA1	Y	-.021	3.333
7	MP ALPHA1	X	-.037	6.667
8	MP ALPHA1	X	-.037	3.333
9	MP ALPHA4	Y	-.053	7.083
10	MP ALPHA4	Y	-.053	2.917
11	MP ALPHA4	X	-.091	7.083
12	MP ALPHA4	X	-.091	2.917
13	MP ALPHA3	Y	-.055	7.083
14	MP ALPHA3	Y	-.055	2.917
15	MP ALPHA3	X	-.096	7.083
16	MP ALPHA3	X	-.096	2.917
17	MP ALPHA1	Y	-.007	5
18	MP ALPHA1	X	-.013	5
19	MP ALPHA1	Y	-.029	5

Member Point Loads (BLC 5 : Wind Load (60)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
20	MP ALPHA1	X	-.05	5
21	MP ALPHA1	Y	-.009	5
22	MP ALPHA1	X	-.015	5
23	MP ALPHA1	Y	-.004	5
24	MP ALPHA1	X	-.006	5
25	MP ALPHA3	Y	-.02	5
26	MP ALPHA3	X	-.034	5
27	MP ALPHA3	Y	-.029	5
28	MP ALPHA3	X	-.05	5
29	MP ALPHA4	Y	-.023	5
30	MP ALPHA4	X	-.04	5
31	MP ALPHA3	Y	-.019	5
32	MP ALPHA3	X	-.032	5
33	MP ALPHA4	Y	-.021	5
34	MP ALPHA4	X	-.037	5

Member Point Loads (BLC 6 : Wind Load (90))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	X	-.077	7.417
2	MP ALPHA2	X	-.077	2.583
3	MP ALPHA1	X	-.036	6.667
4	MP ALPHA1	X	-.036	3.333
5	MP ALPHA4	X	-.074	7.083
6	MP ALPHA4	X	-.074	2.917
7	MP ALPHA3	X	-.084	7.083
8	MP ALPHA3	X	-.084	2.917
9	MP ALPHA1	X	-.01	5
10	MP ALPHA1	X	-.05	5
11	MP ALPHA1	X	-.015	5
12	MP ALPHA1	X	-.007	5
13	MP ALPHA3	X	-.04	5
14	MP ALPHA3	X	-.05	5
15	MP ALPHA4	X	-.042	5
16	MP ALPHA3	X	-.032	5
17	MP ALPHA4	X	-.04	5

Member Point Loads (BLC 7 : Wind Load (120))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.048	7.417
2	MP ALPHA2	Y	.048	2.583
3	MP ALPHA2	X	-.083	7.417
4	MP ALPHA2	X	-.083	2.583
5	MP ALPHA1	Y	.021	6.667
6	MP ALPHA1	Y	.021	3.333
7	MP ALPHA1	X	-.037	6.667
8	MP ALPHA1	X	-.037	3.333
9	MP ALPHA4	Y	.053	7.083
10	MP ALPHA4	Y	.053	2.917
11	MP ALPHA4	X	-.091	7.083
12	MP ALPHA4	X	-.091	2.917
13	MP ALPHA3	Y	.055	7.083
14	MP ALPHA3	Y	.055	2.917
15	MP ALPHA3	X	-.096	7.083
16	MP ALPHA3	X	-.096	2.917
17	MP ALPHA1	Y	.007	5
18	MP ALPHA1	X	-.013	5

Member Point Loads (BLC 7 : Wind Load (120)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
19	MP ALPHA1	Y	.029	5
20	MP ALPHA1	X	-.05	5
21	MP ALPHA1	Y	.009	5
22	MP ALPHA1	X	-.015	5
23	MP ALPHA1	Y	.004	5
24	MP ALPHA1	X	-.006	5
25	MP ALPHA3	Y	.02	5
26	MP ALPHA3	X	-.034	5
27	MP ALPHA3	Y	.029	5
28	MP ALPHA3	X	-.05	5
29	MP ALPHA4	Y	.023	5
30	MP ALPHA4	X	-.04	5
31	MP ALPHA3	Y	.019	5
32	MP ALPHA3	X	-.032	5
33	MP ALPHA4	Y	.021	5
34	MP ALPHA4	X	-.037	5

Member Point Loads (BLC 8 : Wind Load (150))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.116	7.417
2	MP ALPHA2	Y	.116	2.583
3	MP ALPHA2	X	-.067	7.417
4	MP ALPHA2	X	-.067	2.583
5	MP ALPHA1	Y	.048	6.667
6	MP ALPHA1	Y	.048	3.333
7	MP ALPHA1	X	-.028	6.667
8	MP ALPHA1	X	-.028	3.333
9	MP ALPHA4	Y	.145	7.083
10	MP ALPHA4	Y	.145	2.917
11	MP ALPHA4	X	-.084	7.083
12	MP ALPHA4	X	-.084	2.917
13	MP ALPHA3	Y	.142	7.083
14	MP ALPHA3	Y	.142	2.917
15	MP ALPHA3	X	-.082	7.083
16	MP ALPHA3	X	-.082	2.917
17	MP ALPHA1	Y	.021	5
18	MP ALPHA1	X	-.012	5
19	MP ALPHA1	Y	.064	5
20	MP ALPHA1	X	-.037	5
21	MP ALPHA1	Y	.021	5
22	MP ALPHA1	X	-.012	5
23	MP ALPHA1	Y	.007	5
24	MP ALPHA1	X	-.004	5
25	MP ALPHA3	Y	.032	5
26	MP ALPHA3	X	-.019	5
27	MP ALPHA3	Y	.064	5
28	MP ALPHA3	X	-.037	5
29	MP ALPHA4	Y	.047	5
30	MP ALPHA4	X	-.027	5
31	MP ALPHA3	Y	.043	5
32	MP ALPHA3	X	-.025	5
33	MP ALPHA4	Y	.041	5
34	MP ALPHA4	X	-.023	5

Member Point Loads (BLC 9 : Wind Load (180))

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

Member Point Loads (BLC 9 : Wind Load (180)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.153	7.417
2	MP ALPHA2	Y	.153	2.583
3	MP ALPHA1	Y	.062	6.667
4	MP ALPHA1	Y	.062	3.333
5	MP ALPHA4	Y	.198	7.083
6	MP ALPHA4	Y	.198	2.917
7	MP ALPHA3	Y	.19	7.083
8	MP ALPHA3	Y	.19	2.917
9	MP ALPHA1	Y	.029	5
10	MP ALPHA1	Y	.082	5
11	MP ALPHA1	Y	.027	5
12	MP ALPHA1	Y	.008	5
13	MP ALPHA3	Y	.036	5
14	MP ALPHA3	Y	.082	5
15	MP ALPHA4	Y	.059	5
16	MP ALPHA3	Y	.055	5
17	MP ALPHA4	Y	.049	5

Member Point Loads (BLC 10 : Wind Load (210))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.116	7.417
2	MP ALPHA2	Y	.116	2.583
3	MP ALPHA2	X	.067	7.417
4	MP ALPHA2	X	.067	2.583
5	MP ALPHA1	Y	.048	6.667
6	MP ALPHA1	Y	.048	3.333
7	MP ALPHA1	X	.028	6.667
8	MP ALPHA1	X	.028	3.333
9	MP ALPHA4	Y	.145	7.083
10	MP ALPHA4	Y	.145	2.917
11	MP ALPHA4	X	.084	7.083
12	MP ALPHA4	X	.084	2.917
13	MP ALPHA3	Y	.142	7.083
14	MP ALPHA3	Y	.142	2.917
15	MP ALPHA3	X	.082	7.083
16	MP ALPHA3	X	.082	2.917
17	MP ALPHA1	Y	.021	5
18	MP ALPHA1	X	.012	5
19	MP ALPHA1	Y	.064	5
20	MP ALPHA1	X	.037	5
21	MP ALPHA1	Y	.021	5
22	MP ALPHA1	X	.012	5
23	MP ALPHA1	Y	.007	5
24	MP ALPHA1	X	.004	5
25	MP ALPHA3	Y	.032	5
26	MP ALPHA3	X	.019	5
27	MP ALPHA3	Y	.064	5
28	MP ALPHA3	X	.037	5
29	MP ALPHA4	Y	.047	5
30	MP ALPHA4	X	.027	5
31	MP ALPHA3	Y	.043	5
32	MP ALPHA3	X	.025	5
33	MP ALPHA4	Y	.041	5
34	MP ALPHA4	X	.023	5

Member Point Loads (BLC 11 : Wind Load (240))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.048	7.417
2	MP ALPHA2	Y	.048	2.583
3	MP ALPHA2	X	.083	7.417
4	MP ALPHA2	X	.083	2.583
5	MP ALPHA1	Y	.021	6.667
6	MP ALPHA1	Y	.021	3.333
7	MP ALPHA1	X	.037	6.667
8	MP ALPHA1	X	.037	3.333
9	MP ALPHA4	Y	.053	7.083
10	MP ALPHA4	Y	.053	2.917
11	MP ALPHA4	X	.091	7.083
12	MP ALPHA4	X	.091	2.917
13	MP ALPHA3	Y	.055	7.083
14	MP ALPHA3	Y	.055	2.917
15	MP ALPHA3	X	.096	7.083
16	MP ALPHA3	X	.096	2.917
17	MP ALPHA1	Y	.007	5
18	MP ALPHA1	X	.013	5
19	MP ALPHA1	Y	.029	5
20	MP ALPHA1	X	.05	5
21	MP ALPHA1	Y	.009	5
22	MP ALPHA1	X	.015	5
23	MP ALPHA1	Y	.004	5
24	MP ALPHA1	X	.006	5
25	MP ALPHA3	Y	.02	5
26	MP ALPHA3	X	.034	5
27	MP ALPHA3	Y	.029	5
28	MP ALPHA3	X	.05	5
29	MP ALPHA4	Y	.023	5
30	MP ALPHA4	X	.04	5
31	MP ALPHA3	Y	.019	5
32	MP ALPHA3	X	.032	5
33	MP ALPHA4	Y	.021	5
34	MP ALPHA4	X	.037	5

Member Point Loads (BLC 12 : Wind Load (270))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	X	.077	7.417
2	MP ALPHA2	X	.077	2.583
3	MP ALPHA1	X	.036	6.667
4	MP ALPHA1	X	.036	3.333
5	MP ALPHA4	X	.074	7.083
6	MP ALPHA4	X	.074	2.917
7	MP ALPHA3	X	.084	7.083
8	MP ALPHA3	X	.084	2.917
9	MP ALPHA1	X	.01	5
10	MP ALPHA1	X	.05	5
11	MP ALPHA1	X	.015	5
12	MP ALPHA1	X	.007	5
13	MP ALPHA3	X	.04	5
14	MP ALPHA3	X	.05	5
15	MP ALPHA4	X	.042	5
16	MP ALPHA3	X	.032	5
17	MP ALPHA4	X	.04	5

Member Point Loads (BLC 13 : Wind Load (300))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.048	7.417
2	MP ALPHA2	Y	-.048	2.583
3	MP ALPHA2	X	.083	7.417
4	MP ALPHA2	X	.083	2.583
5	MP ALPHA1	Y	-.021	6.667
6	MP ALPHA1	Y	-.021	3.333
7	MP ALPHA1	X	.037	6.667
8	MP ALPHA1	X	.037	3.333
9	MP ALPHA4	Y	-.053	7.083
10	MP ALPHA4	Y	-.053	2.917
11	MP ALPHA4	X	.091	7.083
12	MP ALPHA4	X	.091	2.917
13	MP ALPHA3	Y	-.055	7.083
14	MP ALPHA3	Y	-.055	2.917
15	MP ALPHA3	X	.096	7.083
16	MP ALPHA3	X	.096	2.917
17	MP ALPHA1	Y	-.007	5
18	MP ALPHA1	X	.013	5
19	MP ALPHA1	Y	-.029	5
20	MP ALPHA1	X	.05	5
21	MP ALPHA1	Y	-.009	5
22	MP ALPHA1	X	.015	5
23	MP ALPHA1	Y	-.004	5
24	MP ALPHA1	X	.006	5
25	MP ALPHA3	Y	-.02	5
26	MP ALPHA3	X	.034	5
27	MP ALPHA3	Y	-.029	5
28	MP ALPHA3	X	.05	5
29	MP ALPHA4	Y	-.023	5
30	MP ALPHA4	X	.04	5
31	MP ALPHA3	Y	-.019	5
32	MP ALPHA3	X	.032	5
33	MP ALPHA4	Y	-.021	5
34	MP ALPHA4	X	.037	5

Member Point Loads (BLC 14 : Wind Load (330))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.116	7.417
2	MP ALPHA2	Y	-.116	2.583
3	MP ALPHA2	X	.067	7.417
4	MP ALPHA2	X	.067	2.583
5	MP ALPHA1	Y	-.048	6.667
6	MP ALPHA1	Y	-.048	3.333
7	MP ALPHA1	X	.028	6.667
8	MP ALPHA1	X	.028	3.333
9	MP ALPHA4	Y	-.145	7.083
10	MP ALPHA4	Y	-.145	2.917
11	MP ALPHA4	X	.084	7.083
12	MP ALPHA4	X	.084	2.917
13	MP ALPHA3	Y	-.142	7.083
14	MP ALPHA3	Y	-.142	2.917
15	MP ALPHA3	X	.082	7.083
16	MP ALPHA3	X	.082	2.917
17	MP ALPHA1	Y	-.021	5
18	MP ALPHA1	X	.012	5
19	MP ALPHA1	Y	-.064	5

Member Point Loads (BLC 14 : Wind Load (330)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
20	MP ALPHA1	X	.037	5
21	MP ALPHA1	Y	-.021	5
22	MP ALPHA1	X	.012	5
23	MP ALPHA1	Y	-.007	5
24	MP ALPHA1	X	.004	5
25	MP ALPHA3	Y	-.032	5
26	MP ALPHA3	X	.019	5
27	MP ALPHA3	Y	-.064	5
28	MP ALPHA3	X	.037	5
29	MP ALPHA4	Y	-.047	5
30	MP ALPHA4	X	.027	5
31	MP ALPHA3	Y	-.043	5
32	MP ALPHA3	X	.025	5
33	MP ALPHA4	Y	-.041	5
34	MP ALPHA4	X	.023	5

Member Point Loads (BLC 15 : Maintanence (0))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.01	7.417
2	MP ALPHA2	Y	-.01	2.583
3	MP ALPHA1	Y	-.004	6.667
4	MP ALPHA1	Y	-.004	3.333
5	MP ALPHA4	Y	-.013	7.083
6	MP ALPHA4	Y	-.013	2.917
7	MP ALPHA3	Y	-.012	7.083
8	MP ALPHA3	Y	-.012	2.917
9	MP ALPHA1	Y	-.002	5
10	MP ALPHA1	Y	-.005	5
11	MP ALPHA1	Y	-.002	5
12	MP ALPHA1	Y	-.000529	5
13	MP ALPHA3	Y	-.002	5
14	MP ALPHA3	Y	-.005	5
15	MP ALPHA4	Y	-.004	5
16	MP ALPHA3	Y	-.004	5
17	MP ALPHA4	Y	-.003	5

Member Point Loads (BLC 16 : Maintanence (30))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.008	7.417
2	MP ALPHA2	Y	-.008	2.583
3	MP ALPHA2	X	-.004	7.417
4	MP ALPHA2	X	-.004	2.583
5	MP ALPHA1	Y	-.003	6.667
6	MP ALPHA1	Y	-.003	3.333
7	MP ALPHA1	X	-.002	6.667
8	MP ALPHA1	X	-.002	3.333
9	MP ALPHA4	Y	-.009	7.083
10	MP ALPHA4	Y	-.009	2.917
11	MP ALPHA4	X	-.005	7.083
12	MP ALPHA4	X	-.005	2.917
13	MP ALPHA3	Y	-.009	7.083
14	MP ALPHA3	Y	-.009	2.917
15	MP ALPHA3	X	-.005	7.083
16	MP ALPHA3	X	-.005	2.917
17	MP ALPHA1	Y	-.001	5
18	MP ALPHA1	X	-.000789	5

Member Point Loads (BLC 16 : Maintanence (30)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
19	MP ALPHA1	Y	-.004	5
20	MP ALPHA1	X	-.002	5
21	MP ALPHA1	Y	-.001	5
22	MP ALPHA1	X	-.00077	5
23	MP ALPHA1	Y	-.00044	5
24	MP ALPHA1	X	-.000254	5
25	MP ALPHA3	Y	-.002	5
26	MP ALPHA3	X	-.001	5
27	MP ALPHA3	Y	-.004	5
28	MP ALPHA3	X	-.002	5
29	MP ALPHA4	Y	-.003	5
30	MP ALPHA4	X	-.002	5
31	MP ALPHA3	Y	-.003	5
32	MP ALPHA3	X	-.002	5
33	MP ALPHA4	Y	-.003	5
34	MP ALPHA4	X	-.002	5

Member Point Loads (BLC 17 : Maintanence (60))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.003	7.417
2	MP ALPHA2	Y	-.003	2.583
3	MP ALPHA2	X	-.005	7.417
4	MP ALPHA2	X	-.005	2.583
5	MP ALPHA1	Y	-.001	6.667
6	MP ALPHA1	Y	-.001	3.333
7	MP ALPHA1	X	-.002	6.667
8	MP ALPHA1	X	-.002	3.333
9	MP ALPHA4	Y	-.003	7.083
10	MP ALPHA4	Y	-.003	2.917
11	MP ALPHA4	X	-.006	7.083
12	MP ALPHA4	X	-.006	2.917
13	MP ALPHA3	Y	-.004	7.083
14	MP ALPHA3	Y	-.004	2.917
15	MP ALPHA3	X	-.006	7.083
16	MP ALPHA3	X	-.006	2.917
17	MP ALPHA1	Y	-.000481	5
18	MP ALPHA1	X	-.000834	5
19	MP ALPHA1	Y	-.002	5
20	MP ALPHA1	X	-.003	5
21	MP ALPHA1	Y	-.000573	5
22	MP ALPHA1	X	-.000992	5
23	MP ALPHA1	Y	-.000234	5
24	MP ALPHA1	X	-.000405	5
25	MP ALPHA3	Y	-.001	5
26	MP ALPHA3	X	-.002	5
27	MP ALPHA3	Y	-.002	5
28	MP ALPHA3	X	-.003	5
29	MP ALPHA4	Y	-.001	5
30	MP ALPHA4	X	-.003	5
31	MP ALPHA3	Y	-.001	5
32	MP ALPHA3	X	-.002	5
33	MP ALPHA4	Y	-.001	5
34	MP ALPHA4	X	-.002	5

Member Point Loads (BLC 18 : Maintanence (90))

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

Member Point Loads (BLC 18 : Maintanence (90)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	X	-.005	7.417
2	MP ALPHA2	X	-.005	2.583
3	MP ALPHA1	X	-.002	6.667
4	MP ALPHA1	X	-.002	3.333
5	MP ALPHA4	X	-.005	7.083
6	MP ALPHA4	X	-.005	2.917
7	MP ALPHA3	X	-.005	7.083
8	MP ALPHA3	X	-.005	2.917
9	MP ALPHA1	X	-.000655	5
10	MP ALPHA1	X	-.003	5
11	MP ALPHA1	X	-.000948	5
12	MP ALPHA1	X	-.000447	5
13	MP ALPHA3	X	-.003	5
14	MP ALPHA3	X	-.003	5
15	MP ALPHA4	X	-.003	5
16	MP ALPHA3	X	-.002	5
17	MP ALPHA4	X	-.003	5

Member Point Loads (BLC 19 : Maintanence (120))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.003	7.417
2	MP ALPHA2	Y	.003	2.583
3	MP ALPHA2	X	-.005	7.417
4	MP ALPHA2	X	-.005	2.583
5	MP ALPHA1	Y	.001	6.667
6	MP ALPHA1	Y	.001	3.333
7	MP ALPHA1	X	-.002	6.667
8	MP ALPHA1	X	-.002	3.333
9	MP ALPHA4	Y	.003	7.083
10	MP ALPHA4	Y	.003	2.917
11	MP ALPHA4	X	-.006	7.083
12	MP ALPHA4	X	-.006	2.917
13	MP ALPHA3	Y	.004	7.083
14	MP ALPHA3	Y	.004	2.917
15	MP ALPHA3	X	-.006	7.083
16	MP ALPHA3	X	-.006	2.917
17	MP ALPHA1	Y	.000481	5
18	MP ALPHA1	X	-.000834	5
19	MP ALPHA1	Y	.002	5
20	MP ALPHA1	X	-.003	5
21	MP ALPHA1	Y	.000573	5
22	MP ALPHA1	X	-.000992	5
23	MP ALPHA1	Y	.000234	5
24	MP ALPHA1	X	-.000405	5
25	MP ALPHA3	Y	.001	5
26	MP ALPHA3	X	-.002	5
27	MP ALPHA3	Y	.002	5
28	MP ALPHA3	X	-.003	5
29	MP ALPHA4	Y	.001	5
30	MP ALPHA4	X	-.003	5
31	MP ALPHA3	Y	.001	5
32	MP ALPHA3	X	-.002	5
33	MP ALPHA4	Y	.001	5
34	MP ALPHA4	X	-.002	5

Member Point Loads (BLC 20 : Maintanence (150))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.008	7.417
2	MP ALPHA2	Y	.008	2.583
3	MP ALPHA2	X	-.004	7.417
4	MP ALPHA2	X	-.004	2.583
5	MP ALPHA1	Y	.003	6.667
6	MP ALPHA1	Y	.003	3.333
7	MP ALPHA1	X	-.002	6.667
8	MP ALPHA1	X	-.002	3.333
9	MP ALPHA4	Y	.009	7.083
10	MP ALPHA4	Y	.009	2.917
11	MP ALPHA4	X	-.005	7.083
12	MP ALPHA4	X	-.005	2.917
13	MP ALPHA3	Y	.009	7.083
14	MP ALPHA3	Y	.009	2.917
15	MP ALPHA3	X	-.005	7.083
16	MP ALPHA3	X	-.005	2.917
17	MP ALPHA1	Y	.001	5
18	MP ALPHA1	X	-.000789	5
19	MP ALPHA1	Y	.004	5
20	MP ALPHA1	X	-.002	5
21	MP ALPHA1	Y	.001	5
22	MP ALPHA1	X	-.00077	5
23	MP ALPHA1	Y	.00044	5
24	MP ALPHA1	X	-.000254	5
25	MP ALPHA3	Y	.002	5
26	MP ALPHA3	X	-.001	5
27	MP ALPHA3	Y	.004	5
28	MP ALPHA3	X	-.002	5
29	MP ALPHA4	Y	.003	5
30	MP ALPHA4	X	-.002	5
31	MP ALPHA3	Y	.003	5
32	MP ALPHA3	X	-.002	5
33	MP ALPHA4	Y	.003	5
34	MP ALPHA4	X	-.002	5

Member Point Loads (BLC 21 : Maintanence (180))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.01	7.417
2	MP ALPHA2	Y	.01	2.583
3	MP ALPHA1	Y	.004	6.667
4	MP ALPHA1	Y	.004	3.333
5	MP ALPHA4	Y	.013	7.083
6	MP ALPHA4	Y	.013	2.917
7	MP ALPHA3	Y	.012	7.083
8	MP ALPHA3	Y	.012	2.917
9	MP ALPHA1	Y	.002	5
10	MP ALPHA1	Y	.005	5
11	MP ALPHA1	Y	.002	5
12	MP ALPHA1	Y	.000529	5
13	MP ALPHA3	Y	.002	5
14	MP ALPHA3	Y	.005	5
15	MP ALPHA4	Y	.004	5
16	MP ALPHA3	Y	.004	5
17	MP ALPHA4	Y	.003	5

Member Point Loads (BLC 22 : Maintanence (210))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.008	7.417
2	MP ALPHA2	Y	.008	2.583
3	MP ALPHA2	X	.004	7.417
4	MP ALPHA2	X	.004	2.583
5	MP ALPHA1	Y	.003	6.667
6	MP ALPHA1	Y	.003	3.333
7	MP ALPHA1	X	.002	6.667
8	MP ALPHA1	X	.002	3.333
9	MP ALPHA4	Y	.009	7.083
10	MP ALPHA4	Y	.009	2.917
11	MP ALPHA4	X	.005	7.083
12	MP ALPHA4	X	.005	2.917
13	MP ALPHA3	Y	.009	7.083
14	MP ALPHA3	Y	.009	2.917
15	MP ALPHA3	X	.005	7.083
16	MP ALPHA3	X	.005	2.917
17	MP ALPHA1	Y	.001	5
18	MP ALPHA1	X	.000789	5
19	MP ALPHA1	Y	.004	5
20	MP ALPHA1	X	.002	5
21	MP ALPHA1	Y	.001	5
22	MP ALPHA1	X	.00077	5
23	MP ALPHA1	Y	.00044	5
24	MP ALPHA1	X	.000254	5
25	MP ALPHA3	Y	.002	5
26	MP ALPHA3	X	.001	5
27	MP ALPHA3	Y	.004	5
28	MP ALPHA3	X	.002	5
29	MP ALPHA4	Y	.003	5
30	MP ALPHA4	X	.002	5
31	MP ALPHA3	Y	.003	5
32	MP ALPHA3	X	.002	5
33	MP ALPHA4	Y	.003	5
34	MP ALPHA4	X	.002	5

Member Point Loads (BLC 23 : Maintanence (240))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.003	7.417
2	MP ALPHA2	Y	.003	2.583
3	MP ALPHA2	X	.005	7.417
4	MP ALPHA2	X	.005	2.583
5	MP ALPHA1	Y	.001	6.667
6	MP ALPHA1	Y	.001	3.333
7	MP ALPHA1	X	.002	6.667
8	MP ALPHA1	X	.002	3.333
9	MP ALPHA4	Y	.003	7.083
10	MP ALPHA4	Y	.003	2.917
11	MP ALPHA4	X	.006	7.083
12	MP ALPHA4	X	.006	2.917
13	MP ALPHA3	Y	.004	7.083
14	MP ALPHA3	Y	.004	2.917
15	MP ALPHA3	X	.006	7.083
16	MP ALPHA3	X	.006	2.917
17	MP ALPHA1	Y	.000481	5
18	MP ALPHA1	X	.000834	5
19	MP ALPHA1	Y	.002	5

Member Point Loads (BLC 23 : Maintanence (240)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
20	MP ALPHA1	X	.003	5
21	MP ALPHA1	Y	.000573	5
22	MP ALPHA1	X	.000992	5
23	MP ALPHA1	Y	.000234	5
24	MP ALPHA1	X	.000405	5
25	MP ALPHA3	Y	.001	5
26	MP ALPHA3	X	.002	5
27	MP ALPHA3	Y	.002	5
28	MP ALPHA3	X	.003	5
29	MP ALPHA4	Y	.001	5
30	MP ALPHA4	X	.003	5
31	MP ALPHA3	Y	.001	5
32	MP ALPHA3	X	.002	5
33	MP ALPHA4	Y	.001	5
34	MP ALPHA4	X	.002	5

Member Point Loads (BLC 24 : Maintanence (270))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	X	.005	7.417
2	MP ALPHA2	X	.005	2.583
3	MP ALPHA1	X	.002	6.667
4	MP ALPHA1	X	.002	3.333
5	MP ALPHA4	X	.005	7.083
6	MP ALPHA4	X	.005	2.917
7	MP ALPHA3	X	.005	7.083
8	MP ALPHA3	X	.005	2.917
9	MP ALPHA1	X	.000655	5
10	MP ALPHA1	X	.003	5
11	MP ALPHA1	X	.000948	5
12	MP ALPHA1	X	.000447	5
13	MP ALPHA3	X	.003	5
14	MP ALPHA3	X	.003	5
15	MP ALPHA4	X	.003	5
16	MP ALPHA3	X	.002	5
17	MP ALPHA4	X	.003	5

Member Point Loads (BLC 25 : Maintanence (300))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.003	7.417
2	MP ALPHA2	Y	-.003	2.583
3	MP ALPHA2	X	.005	7.417
4	MP ALPHA2	X	.005	2.583
5	MP ALPHA1	Y	-.001	6.667
6	MP ALPHA1	Y	-.001	3.333
7	MP ALPHA1	X	.002	6.667
8	MP ALPHA1	X	.002	3.333
9	MP ALPHA4	Y	-.003	7.083
10	MP ALPHA4	Y	-.003	2.917
11	MP ALPHA4	X	.006	7.083
12	MP ALPHA4	X	.006	2.917
13	MP ALPHA3	Y	-.004	7.083
14	MP ALPHA3	Y	-.004	2.917
15	MP ALPHA3	X	.006	7.083
16	MP ALPHA3	X	.006	2.917
17	MP ALPHA1	Y	-.000481	5
18	MP ALPHA1	X	.000834	5

Member Point Loads (BLC 25 : Maintanence (300)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
19	MP ALPHA1	Y	-.002	5
20	MP ALPHA1	X	.003	5
21	MP ALPHA1	Y	-.000573	5
22	MP ALPHA1	X	.000992	5
23	MP ALPHA1	Y	-.000234	5
24	MP ALPHA1	X	.000405	5
25	MP ALPHA3	Y	-.001	5
26	MP ALPHA3	X	.002	5
27	MP ALPHA3	Y	-.002	5
28	MP ALPHA3	X	.003	5
29	MP ALPHA4	Y	-.001	5
30	MP ALPHA4	X	.003	5
31	MP ALPHA3	Y	-.001	5
32	MP ALPHA3	X	.002	5
33	MP ALPHA4	Y	-.001	5
34	MP ALPHA4	X	.002	5

Member Point Loads (BLC 26 : Maintanence (330))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.008	7.417
2	MP ALPHA2	Y	-.008	2.583
3	MP ALPHA2	X	.004	7.417
4	MP ALPHA2	X	.004	2.583
5	MP ALPHA1	Y	-.003	6.667
6	MP ALPHA1	Y	-.003	3.333
7	MP ALPHA1	X	.002	6.667
8	MP ALPHA1	X	.002	3.333
9	MP ALPHA4	Y	-.009	7.083
10	MP ALPHA4	Y	-.009	2.917
11	MP ALPHA4	X	.005	7.083
12	MP ALPHA4	X	.005	2.917
13	MP ALPHA3	Y	-.009	7.083
14	MP ALPHA3	Y	-.009	2.917
15	MP ALPHA3	X	.005	7.083
16	MP ALPHA3	X	.005	2.917
17	MP ALPHA1	Y	-.001	5
18	MP ALPHA1	X	.000789	5
19	MP ALPHA1	Y	-.004	5
20	MP ALPHA1	X	.002	5
21	MP ALPHA1	Y	-.001	5
22	MP ALPHA1	X	.00077	5
23	MP ALPHA1	Y	-.00044	5
24	MP ALPHA1	X	.000254	5
25	MP ALPHA3	Y	-.002	5
26	MP ALPHA3	X	.001	5
27	MP ALPHA3	Y	-.004	5
28	MP ALPHA3	X	.002	5
29	MP ALPHA4	Y	-.003	5
30	MP ALPHA4	X	.002	5
31	MP ALPHA3	Y	-.003	5
32	MP ALPHA3	X	.002	5
33	MP ALPHA4	Y	-.003	5
34	MP ALPHA4	X	.002	5

Member Point Loads (BLC 27 : Ice Dead Load)

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

Member Point Loads (BLC 27 : Ice Dead Load) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Z	-.119	7.417
2	MP ALPHA2	Z	-.119	2.583
3	MP ALPHA1	Z	-.065	6.667
4	MP ALPHA1	Z	-.065	3.333
5	MP ALPHA4	Z	-.138	7.083
6	MP ALPHA4	Z	-.138	2.917
7	MP ALPHA3	Z	-.138	7.083
8	MP ALPHA3	Z	-.138	2.917
9	MP ALPHA1	Z	-.032	5
10	MP ALPHA1	Z	-.084	5
11	MP ALPHA1	Z	-.037	5
12	MP ALPHA1	Z	-.018	5
13	MP ALPHA3	Z	-.109	5
14	MP ALPHA3	Z	-.084	5
15	MP ALPHA4	Z	-.074	5
16	MP ALPHA3	Z	-.064	5
17	MP ALPHA4	Z	-.071	5

Member Point Loads (BLC 28 : Ice Wind Load (0))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.032	7.417
2	MP ALPHA2	Y	-.032	2.583
3	MP ALPHA1	Y	-.014	6.667
4	MP ALPHA1	Y	-.014	3.333
5	MP ALPHA4	Y	-.039	7.083
6	MP ALPHA4	Y	-.039	2.917
7	MP ALPHA3	Y	-.024	7.083
8	MP ALPHA3	Y	-.024	2.917
9	MP ALPHA1	Y	-.005	5
10	MP ALPHA1	Y	-.012	5
11	MP ALPHA1	Y	-.006	5
12	MP ALPHA1	Y	-.003	5
13	MP ALPHA3	Y	-.013	5
14	MP ALPHA3	Y	-.012	5
15	MP ALPHA4	Y	-.009	5
16	MP ALPHA3	Y	-.009	5
17	MP ALPHA4	Y	-.008	5

Member Point Loads (BLC 29 : Ice Wind Load (30))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.025	7.417
2	MP ALPHA2	Y	-.025	2.583
3	MP ALPHA2	X	-.014	7.417
4	MP ALPHA2	X	-.014	2.583
5	MP ALPHA1	Y	-.011	6.667
6	MP ALPHA1	Y	-.011	3.333
7	MP ALPHA1	X	-.007	6.667
8	MP ALPHA1	X	-.007	3.333
9	MP ALPHA4	Y	-.029	7.083
10	MP ALPHA4	Y	-.029	2.917
11	MP ALPHA4	X	-.017	7.083
12	MP ALPHA4	X	-.017	2.917
13	MP ALPHA3	Y	-.018	7.083
14	MP ALPHA3	Y	-.018	2.917
15	MP ALPHA3	X	-.01	7.083
16	MP ALPHA3	X	-.01	2.917

Member Point Loads (BLC 29 : Ice Wind Load (30)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
17	MP ALPHA1	Y	-.004	5
18	MP ALPHA1	X	-.002	5
19	MP ALPHA1	Y	-.01	5
20	MP ALPHA1	X	-.006	5
21	MP ALPHA1	Y	-.005	5
22	MP ALPHA1	X	-.003	5
23	MP ALPHA1	Y	-.003	5
24	MP ALPHA1	X	-.002	5
25	MP ALPHA3	Y	-.011	5
26	MP ALPHA3	X	-.006	5
27	MP ALPHA3	Y	-.01	5
28	MP ALPHA3	X	-.006	5
29	MP ALPHA4	Y	-.008	5
30	MP ALPHA4	X	-.004	5
31	MP ALPHA3	Y	-.007	5
32	MP ALPHA3	X	-.004	5
33	MP ALPHA4	Y	-.007	5
34	MP ALPHA4	X	-.004	5

Member Point Loads (BLC 30 : Ice Wind Load (60))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.011	7.417
2	MP ALPHA2	Y	-.011	2.583
3	MP ALPHA2	X	-.019	7.417
4	MP ALPHA2	X	-.019	2.583
5	MP ALPHA1	Y	-.005	6.667
6	MP ALPHA1	Y	-.005	3.333
7	MP ALPHA1	X	-.009	6.667
8	MP ALPHA1	X	-.009	3.333
9	MP ALPHA4	Y	-.012	7.083
10	MP ALPHA4	Y	-.012	2.917
11	MP ALPHA4	X	-.02	7.083
12	MP ALPHA4	X	-.02	2.917
13	MP ALPHA3	Y	-.008	7.083
14	MP ALPHA3	Y	-.008	2.917
15	MP ALPHA3	X	-.013	7.083
16	MP ALPHA3	X	-.013	2.917
17	MP ALPHA1	Y	-.002	5
18	MP ALPHA1	X	-.003	5
19	MP ALPHA1	Y	-.005	5
20	MP ALPHA1	X	-.008	5
21	MP ALPHA1	Y	-.002	5
22	MP ALPHA1	X	-.004	5
23	MP ALPHA1	Y	-.001	5
24	MP ALPHA1	X	-.003	5
25	MP ALPHA3	Y	-.006	5
26	MP ALPHA3	X	-.011	5
27	MP ALPHA3	Y	-.005	5
28	MP ALPHA3	X	-.008	5
29	MP ALPHA4	Y	-.004	5
30	MP ALPHA4	X	-.007	5
31	MP ALPHA3	Y	-.003	5
32	MP ALPHA3	X	-.006	5
33	MP ALPHA4	Y	-.004	5
34	MP ALPHA4	X	-.006	5

Member Point Loads (BLC 31 : Ice Wind Load (90))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	X	-.019	7.417
2	MP ALPHA2	X	-.019	2.583
3	MP ALPHA1	X	-.01	6.667
4	MP ALPHA1	X	-.01	3.333
5	MP ALPHA4	X	-.018	7.083
6	MP ALPHA4	X	-.018	2.917
7	MP ALPHA3	X	-.012	7.083
8	MP ALPHA3	X	-.012	2.917
9	MP ALPHA1	X	-.003	5
10	MP ALPHA1	X	-.008	5
11	MP ALPHA1	X	-.004	5
12	MP ALPHA1	X	-.003	5
13	MP ALPHA3	X	-.013	5
14	MP ALPHA3	X	-.008	5
15	MP ALPHA4	X	-.007	5
16	MP ALPHA3	X	-.006	5
17	MP ALPHA4	X	-.007	5

Member Point Loads (BLC 32 : Ice Wind Load (120))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.011	7.417
2	MP ALPHA2	Y	.011	2.583
3	MP ALPHA2	X	-.019	7.417
4	MP ALPHA2	X	-.019	2.583
5	MP ALPHA1	Y	.005	6.667
6	MP ALPHA1	Y	.005	3.333
7	MP ALPHA1	X	-.009	6.667
8	MP ALPHA1	X	-.009	3.333
9	MP ALPHA4	Y	.012	7.083
10	MP ALPHA4	Y	.012	2.917
11	MP ALPHA4	X	-.02	7.083
12	MP ALPHA4	X	-.02	2.917
13	MP ALPHA3	Y	.008	7.083
14	MP ALPHA3	Y	.008	2.917
15	MP ALPHA3	X	-.013	7.083
16	MP ALPHA3	X	-.013	2.917
17	MP ALPHA1	Y	.002	5
18	MP ALPHA1	X	-.003	5
19	MP ALPHA1	Y	.005	5
20	MP ALPHA1	X	-.008	5
21	MP ALPHA1	Y	.002	5
22	MP ALPHA1	X	-.004	5
23	MP ALPHA1	Y	.001	5
24	MP ALPHA1	X	-.003	5
25	MP ALPHA3	Y	.006	5
26	MP ALPHA3	X	-.011	5
27	MP ALPHA3	Y	.005	5
28	MP ALPHA3	X	-.008	5
29	MP ALPHA4	Y	.004	5
30	MP ALPHA4	X	-.007	5
31	MP ALPHA3	Y	.003	5
32	MP ALPHA3	X	-.006	5
33	MP ALPHA4	Y	.004	5
34	MP ALPHA4	X	-.006	5

Member Point Loads (BLC 33 : Ice Wind Load (150))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.025	7.417
2	MP ALPHA2	Y	.025	2.583
3	MP ALPHA2	X	-.014	7.417
4	MP ALPHA2	X	-.014	2.583
5	MP ALPHA1	Y	.011	6.667
6	MP ALPHA1	Y	.011	3.333
7	MP ALPHA1	X	-.007	6.667
8	MP ALPHA1	X	-.007	3.333
9	MP ALPHA4	Y	.029	7.083
10	MP ALPHA4	Y	.029	2.917
11	MP ALPHA4	X	-.017	7.083
12	MP ALPHA4	X	-.017	2.917
13	MP ALPHA3	Y	.018	7.083
14	MP ALPHA3	Y	.018	2.917
15	MP ALPHA3	X	-.01	7.083
16	MP ALPHA3	X	-.01	2.917
17	MP ALPHA1	Y	.004	5
18	MP ALPHA1	X	-.002	5
19	MP ALPHA1	Y	.01	5
20	MP ALPHA1	X	-.006	5
21	MP ALPHA1	Y	.005	5
22	MP ALPHA1	X	-.003	5
23	MP ALPHA1	Y	.003	5
24	MP ALPHA1	X	-.002	5
25	MP ALPHA3	Y	.011	5
26	MP ALPHA3	X	-.006	5
27	MP ALPHA3	Y	.01	5
28	MP ALPHA3	X	-.006	5
29	MP ALPHA4	Y	.008	5
30	MP ALPHA4	X	-.004	5
31	MP ALPHA3	Y	.007	5
32	MP ALPHA3	X	-.004	5
33	MP ALPHA4	Y	.007	5
34	MP ALPHA4	X	-.004	5

Member Point Loads (BLC 34 : Ice Wind Load (180))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.032	7.417
2	MP ALPHA2	Y	.032	2.583
3	MP ALPHA1	Y	.014	6.667
4	MP ALPHA1	Y	.014	3.333
5	MP ALPHA4	Y	.039	7.083
6	MP ALPHA4	Y	.039	2.917
7	MP ALPHA3	Y	.024	7.083
8	MP ALPHA3	Y	.024	2.917
9	MP ALPHA1	Y	.005	5
10	MP ALPHA1	Y	.012	5
11	MP ALPHA1	Y	.006	5
12	MP ALPHA1	Y	.003	5
13	MP ALPHA3	Y	.013	5
14	MP ALPHA3	Y	.012	5
15	MP ALPHA4	Y	.009	5
16	MP ALPHA3	Y	.009	5
17	MP ALPHA4	Y	.008	5

Member Point Loads (BLC 35 : Ice Wind Load (210))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.025	7.417
2	MP ALPHA2	Y	.025	2.583
3	MP ALPHA2	X	.014	7.417
4	MP ALPHA2	X	.014	2.583
5	MP ALPHA1	Y	.011	6.667
6	MP ALPHA1	Y	.011	3.333
7	MP ALPHA1	X	.007	6.667
8	MP ALPHA1	X	.007	3.333
9	MP ALPHA4	Y	.029	7.083
10	MP ALPHA4	Y	.029	2.917
11	MP ALPHA4	X	.017	7.083
12	MP ALPHA4	X	.017	2.917
13	MP ALPHA3	Y	.018	7.083
14	MP ALPHA3	Y	.018	2.917
15	MP ALPHA3	X	.01	7.083
16	MP ALPHA3	X	.01	2.917
17	MP ALPHA1	Y	.004	5
18	MP ALPHA1	X	.002	5
19	MP ALPHA1	Y	.01	5
20	MP ALPHA1	X	.006	5
21	MP ALPHA1	Y	.005	5
22	MP ALPHA1	X	.003	5
23	MP ALPHA1	Y	.003	5
24	MP ALPHA1	X	.002	5
25	MP ALPHA3	Y	.011	5
26	MP ALPHA3	X	.006	5
27	MP ALPHA3	Y	.01	5
28	MP ALPHA3	X	.006	5
29	MP ALPHA4	Y	.008	5
30	MP ALPHA4	X	.004	5
31	MP ALPHA3	Y	.007	5
32	MP ALPHA3	X	.004	5
33	MP ALPHA4	Y	.007	5
34	MP ALPHA4	X	.004	5

Member Point Loads (BLC 36 : Ice Wind Load (240))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.011	7.417
2	MP ALPHA2	Y	.011	2.583
3	MP ALPHA2	X	.019	7.417
4	MP ALPHA2	X	.019	2.583
5	MP ALPHA1	Y	.005	6.667
6	MP ALPHA1	Y	.005	3.333
7	MP ALPHA1	X	.009	6.667
8	MP ALPHA1	X	.009	3.333
9	MP ALPHA4	Y	.012	7.083
10	MP ALPHA4	Y	.012	2.917
11	MP ALPHA4	X	.02	7.083
12	MP ALPHA4	X	.02	2.917
13	MP ALPHA3	Y	.008	7.083
14	MP ALPHA3	Y	.008	2.917
15	MP ALPHA3	X	.013	7.083
16	MP ALPHA3	X	.013	2.917
17	MP ALPHA1	Y	.002	5
18	MP ALPHA1	X	.003	5
19	MP ALPHA1	Y	.005	5

Member Point Loads (BLC 36 : Ice Wind Load (240)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
20	MP ALPHA1	X	.008	5
21	MP ALPHA1	Y	.002	5
22	MP ALPHA1	X	.004	5
23	MP ALPHA1	Y	.001	5
24	MP ALPHA1	X	.003	5
25	MP ALPHA3	Y	.006	5
26	MP ALPHA3	X	.011	5
27	MP ALPHA3	Y	.005	5
28	MP ALPHA3	X	.008	5
29	MP ALPHA4	Y	.004	5
30	MP ALPHA4	X	.007	5
31	MP ALPHA3	Y	.003	5
32	MP ALPHA3	X	.006	5
33	MP ALPHA4	Y	.004	5
34	MP ALPHA4	X	.006	5

Member Point Loads (BLC 37 : Ice Wind Load (270))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	X	.019	7.417
2	MP ALPHA2	X	.019	2.583
3	MP ALPHA1	X	.01	6.667
4	MP ALPHA1	X	.01	3.333
5	MP ALPHA4	X	.018	7.083
6	MP ALPHA4	X	.018	2.917
7	MP ALPHA3	X	.012	7.083
8	MP ALPHA3	X	.012	2.917
9	MP ALPHA1	X	.003	5
10	MP ALPHA1	X	.008	5
11	MP ALPHA1	X	.004	5
12	MP ALPHA1	X	.003	5
13	MP ALPHA3	X	.013	5
14	MP ALPHA3	X	.008	5
15	MP ALPHA4	X	.007	5
16	MP ALPHA3	X	.006	5
17	MP ALPHA4	X	.007	5

Member Point Loads (BLC 38 : Ice Wind Load (300))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.011	7.417
2	MP ALPHA2	Y	-.011	2.583
3	MP ALPHA2	X	.019	7.417
4	MP ALPHA2	X	.019	2.583
5	MP ALPHA1	Y	-.005	6.667
6	MP ALPHA1	Y	-.005	3.333
7	MP ALPHA1	X	.009	6.667
8	MP ALPHA1	X	.009	3.333
9	MP ALPHA4	Y	-.012	7.083
10	MP ALPHA4	Y	-.012	2.917
11	MP ALPHA4	X	.02	7.083
12	MP ALPHA4	X	.02	2.917
13	MP ALPHA3	Y	-.008	7.083
14	MP ALPHA3	Y	-.008	2.917
15	MP ALPHA3	X	.013	7.083
16	MP ALPHA3	X	.013	2.917
17	MP ALPHA1	Y	-.002	5
18	MP ALPHA1	X	.003	5

Member Point Loads (BLC 38 : Ice Wind Load (300)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
19	MP ALPHA1	Y	-.005	5
20	MP ALPHA1	X	.008	5
21	MP ALPHA1	Y	-.002	5
22	MP ALPHA1	X	.004	5
23	MP ALPHA1	Y	-.001	5
24	MP ALPHA1	X	.003	5
25	MP ALPHA3	Y	-.006	5
26	MP ALPHA3	X	.011	5
27	MP ALPHA3	Y	-.005	5
28	MP ALPHA3	X	.008	5
29	MP ALPHA4	Y	-.004	5
30	MP ALPHA4	X	.007	5
31	MP ALPHA3	Y	-.003	5
32	MP ALPHA3	X	.006	5
33	MP ALPHA4	Y	-.004	5
34	MP ALPHA4	X	.006	5

Member Point Loads (BLC 39 : Ice Wind Load (330))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.025	7.417
2	MP ALPHA2	Y	-.025	2.583
3	MP ALPHA2	X	.014	7.417
4	MP ALPHA2	X	.014	2.583
5	MP ALPHA1	Y	-.011	6.667
6	MP ALPHA1	Y	-.011	3.333
7	MP ALPHA1	X	.007	6.667
8	MP ALPHA1	X	.007	3.333
9	MP ALPHA4	Y	-.029	7.083
10	MP ALPHA4	Y	-.029	2.917
11	MP ALPHA4	X	.017	7.083
12	MP ALPHA4	X	.017	2.917
13	MP ALPHA3	Y	-.018	7.083
14	MP ALPHA3	Y	-.018	2.917
15	MP ALPHA3	X	.01	7.083
16	MP ALPHA3	X	.01	2.917
17	MP ALPHA1	Y	-.004	5
18	MP ALPHA1	X	.002	5
19	MP ALPHA1	Y	-.01	5
20	MP ALPHA1	X	.006	5
21	MP ALPHA1	Y	-.005	5
22	MP ALPHA1	X	.003	5
23	MP ALPHA1	Y	-.003	5
24	MP ALPHA1	X	.002	5
25	MP ALPHA3	Y	-.011	5
26	MP ALPHA3	X	.006	5
27	MP ALPHA3	Y	-.01	5
28	MP ALPHA3	X	.006	5
29	MP ALPHA4	Y	-.008	5
30	MP ALPHA4	X	.004	5
31	MP ALPHA3	Y	-.007	5
32	MP ALPHA3	X	.004	5
33	MP ALPHA4	Y	-.007	5
34	MP ALPHA4	X	.004	5

Member Point Loads (BLC 40 : Earthquake (x-direction))

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

Member Point Loads (BLC 40 : Earthquake (x-direction)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	X	-.002	7.417
2	MP ALPHA2	X	-.002	2.583
3	MP ALPHA1	X	-.002	6.667
4	MP ALPHA1	X	-.002	3.333
5	MP ALPHA4	X	-.004	7.083
6	MP ALPHA4	X	-.004	2.917
7	MP ALPHA3	X	-.003	7.083
8	MP ALPHA3	X	-.003	2.917
9	MP ALPHA1	X	-.002	5
10	MP ALPHA1	X	-.005	5
11	MP ALPHA1	X	-.001	5
12	MP ALPHA1	X	-.000226	5
13	MP ALPHA3	X	-.003	5
14	MP ALPHA3	X	-.005	5
15	MP ALPHA4	X	-.007	5
16	MP ALPHA3	X	-.006	5
17	MP ALPHA4	X	-.007	5

Member Point Loads (BLC 41 : Earthquake (y-direction))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.002	7.417
2	MP ALPHA2	Y	-.002	2.583
3	MP ALPHA1	Y	-.002	6.667
4	MP ALPHA1	Y	-.002	3.333
5	MP ALPHA4	Y	-.004	7.083
6	MP ALPHA4	Y	-.004	2.917
7	MP ALPHA3	Y	-.003	7.083
8	MP ALPHA3	Y	-.003	2.917
9	MP ALPHA1	Y	-.002	5
10	MP ALPHA1	Y	-.005	5
11	MP ALPHA1	Y	-.001	5
12	MP ALPHA1	Y	-.000226	5
13	MP ALPHA3	Y	-.003	5
14	MP ALPHA3	Y	-.005	5
15	MP ALPHA4	Y	-.007	5
16	MP ALPHA3	Y	-.006	5
17	MP ALPHA4	Y	-.007	5

Member Point Loads (BLC 42 : Earthquake (z-direction))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Z	-.000935	7.417
2	MP ALPHA2	Z	-.000935	2.583
3	MP ALPHA1	Z	-.000999	6.667
4	MP ALPHA1	Z	-.000999	3.333
5	MP ALPHA4	Z	-.002	7.083
6	MP ALPHA4	Z	-.002	2.917
7	MP ALPHA3	Z	-.001	7.083
8	MP ALPHA3	Z	-.001	2.917
9	MP ALPHA1	Z	-.000749	5
10	MP ALPHA1	Z	-.002	5
11	MP ALPHA1	Z	-.0005	5
12	MP ALPHA1	Z	-9.1e-5	5
13	MP ALPHA3	Z	-.001	5
14	MP ALPHA3	Z	-.002	5
15	MP ALPHA4	Z	-.003	5
16	MP ALPHA3	Z	-.002	5

Member Point Loads (BLC 42 : Earthquake (z-direction)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
17	MP ALPHA4	Z	-.003	5

Member Distributed Loads (BLC 2 : Wind Load (0))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	-.008	-.008	0	0
2	BOTTOMFACE	PY	-.008	-.008	0	0
3	KICKER1	PY	-.002	-.002	0	0
4	KICKER2	PY	-.002	-.002	0	0
5	KICKER3	PY	-.002	-.002	0	0
6	KICKER4	PY	-.002	-.002	0	0
7	VERT1	PY	-.002	-.002	0	0
8	VERT2	PY	-.002	-.002	0	0
9	VERT3	PY	-.002	-.002	0	0
10	VERT4	PY	-.002	-.002	0	0
11	VERT5	PY	-.002	-.002	0	0
12	VERT6	PY	-.002	-.002	0	0
13	DIAG1	PY	-.001	-.001	0	0
14	DIAG2	PY	-.001	-.001	0	0
15	DIAG3	PY	-.001	-.001	0	0
16	DIAG4	PY	-.001	-.001	0	0
17	TIEBACK	PY	-.002	-.002	0	0
18	MP ALPHA1	PY	-.007	-.007	0	0
19	MP ALPHA2	PY	-.007	-.007	0	0
20	MP ALPHA5	PY	-.007	-.007	0	0
21	MP 1	PY	-.002	-.002	0	0
22	MP ALPHA3	PY	-.007	-.007	0	0
23	MP ALPHA4	PY	-.007	-.007	0	0

Member Distributed Loads (BLC 4 : Wind Load (30))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	-.007	-.007	0	0
2	BOTTOMFACE	PY	-.007	-.007	0	0
3	KICKER1	PY	-.002	-.002	0	0
4	KICKER2	PY	-.002	-.002	0	0
5	KICKER3	PY	-.002	-.002	0	0
6	KICKER4	PY	-.002	-.002	0	0
7	VERT1	PY	-.002	-.002	0	0
8	VERT2	PY	-.002	-.002	0	0
9	VERT3	PY	-.002	-.002	0	0
10	VERT4	PY	-.002	-.002	0	0
11	VERT5	PY	-.002	-.002	0	0
12	VERT6	PY	-.002	-.002	0	0
13	DIAG1	PY	-.000866	-.000866	0	0
14	DIAG2	PY	-.000866	-.000866	0	0
15	DIAG3	PY	-.000866	-.000866	0	0
16	DIAG4	PY	-.000866	-.000866	0	0
17	TIEBACK	PY	-.002	-.002	0	0
18	MP ALPHA1	PY	-.006	-.006	0	0
19	MP ALPHA2	PY	-.006	-.006	0	0
20	MP ALPHA5	PY	-.006	-.006	0	0
21	MP 1	PY	-.002	-.002	0	0
22	MP ALPHA3	PY	-.006	-.006	0	0
23	MP ALPHA4	PY	-.006	-.006	0	0
24	TOPFACE	PX	-.004	-.004	0	0
25	BOTTOMFACE	PX	-.004	-.004	0	0

Member Distributed Loads (BLC 4 : Wind Load (30)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
26	KICKER1	PX	-.001	-.001	0	0
27	KICKER2	PX	-.001	-.001	0	0
28	KICKER3	PX	-.001	-.001	0	0
29	KICKER4	PX	-.001	-.001	0	0
30	VERT1	PX	-.001	-.001	0	0
31	VERT2	PX	-.001	-.001	0	0
32	VERT3	PX	-.001	-.001	0	0
33	VERT4	PX	-.001	-.001	0	0
34	VERT5	PX	-.001	-.001	0	0
35	VERT6	PX	-.001	-.001	0	0
36	DIAG1	PX	-.0005	-.0005	0	0
37	DIAG2	PX	-.0005	-.0005	0	0
38	DIAG3	PX	-.0005	-.0005	0	0
39	DIAG4	PX	-.0005	-.0005	0	0
40	TIEBACK	PX	-.001	-.001	0	0
41	MP ALPHA1	PX	-.004	-.004	0	0
42	MP ALPHA2	PX	-.004	-.004	0	0
43	MP ALPHA5	PX	-.004	-.004	0	0
44	MP 1	PX	-.001	-.001	0	0
45	MP ALPHA3	PX	-.004	-.004	0	0
46	MP ALPHA4	PX	-.004	-.004	0	0

Member Distributed Loads (BLC 5 : Wind Load (60))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	-.004	-.004	0	0
2	BOTTOMFACE	PY	-.004	-.004	0	0
3	KICKER1	PY	-.001	-.001	0	0
4	KICKER2	PY	-.001	-.001	0	0
5	KICKER3	PY	-.001	-.001	0	0
6	KICKER4	PY	-.001	-.001	0	0
7	VERT1	PY	-.001	-.001	0	0
8	VERT2	PY	-.001	-.001	0	0
9	VERT3	PY	-.001	-.001	0	0
10	VERT4	PY	-.001	-.001	0	0
11	VERT5	PY	-.001	-.001	0	0
12	VERT6	PY	-.001	-.001	0	0
13	DIAG1	PY	-.0005	-.0005	0	0
14	DIAG2	PY	-.0005	-.0005	0	0
15	DIAG3	PY	-.0005	-.0005	0	0
16	DIAG4	PY	-.0005	-.0005	0	0
17	TIEBACK	PY	-.001	-.001	0	0
18	MP ALPHA1	PY	-.004	-.004	0	0
19	MP ALPHA2	PY	-.004	-.004	0	0
20	MP ALPHA5	PY	-.004	-.004	0	0
21	MP 1	PY	-.001	-.001	0	0
22	MP ALPHA3	PY	-.004	-.004	0	0
23	MP ALPHA4	PY	-.004	-.004	0	0
24	TOPFACE	PX	-.007	-.007	0	0
25	BOTTOMFACE	PX	-.007	-.007	0	0
26	KICKER1	PX	-.002	-.002	0	0
27	KICKER2	PX	-.002	-.002	0	0
28	KICKER3	PX	-.002	-.002	0	0
29	KICKER4	PX	-.002	-.002	0	0
30	VERT1	PX	-.002	-.002	0	0
31	VERT2	PX	-.002	-.002	0	0
32	VERT3	PX	-.002	-.002	0	0

Member Distributed Loads (BLC 5 : Wind Load (60)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
33	VERT4	PX	-.002	-.002	0	0
34	VERT5	PX	-.002	-.002	0	0
35	VERT6	PX	-.002	-.002	0	0
36	DIAG1	PX	-.000866	-.000866	0	0
37	DIAG2	PX	-.000866	-.000866	0	0
38	DIAG3	PX	-.000866	-.000866	0	0
39	DIAG4	PX	-.000866	-.000866	0	0
40	TIEBACK	PX	-.002	-.002	0	0
41	MP ALPHA1	PX	-.006	-.006	0	0
42	MP ALPHA2	PX	-.006	-.006	0	0
43	MP ALPHA5	PX	-.006	-.006	0	0
44	MP 1	PX	-.002	-.002	0	0
45	MP ALPHA3	PX	-.006	-.006	0	0
46	MP ALPHA4	PX	-.006	-.006	0	0

Member Distributed Loads (BLC 6 : Wind Load (90))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PX	-.008	-.008	0	0
2	BOTTOMFACE	PX	-.008	-.008	0	0
3	KICKER1	PX	-.002	-.002	0	0
4	KICKER2	PX	-.002	-.002	0	0
5	KICKER3	PX	-.002	-.002	0	0
6	KICKER4	PX	-.002	-.002	0	0
7	VERT1	PX	-.002	-.002	0	0
8	VERT2	PX	-.002	-.002	0	0
9	VERT3	PX	-.002	-.002	0	0
10	VERT4	PX	-.002	-.002	0	0
11	VERT5	PX	-.002	-.002	0	0
12	VERT6	PX	-.002	-.002	0	0
13	DIAG1	PX	-.001	-.001	0	0
14	DIAG2	PX	-.001	-.001	0	0
15	DIAG3	PX	-.001	-.001	0	0
16	DIAG4	PX	-.001	-.001	0	0
17	TIEBACK	PX	-.002	-.002	0	0
18	MP ALPHA1	PX	-.007	-.007	0	0
19	MP ALPHA2	PX	-.007	-.007	0	0
20	MP ALPHA5	PX	-.007	-.007	0	0
21	MP 1	PX	-.002	-.002	0	0
22	MP ALPHA3	PX	-.007	-.007	0	0
23	MP ALPHA4	PX	-.007	-.007	0	0

Member Distributed Loads (BLC 7 : Wind Load (120))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	.004	.004	0	0
2	BOTTOMFACE	PY	.004	.004	0	0
3	KICKER1	PY	.001	.001	0	0
4	KICKER2	PY	.001	.001	0	0
5	KICKER3	PY	.001	.001	0	0
6	KICKER4	PY	.001	.001	0	0
7	VERT1	PY	.001	.001	0	0
8	VERT2	PY	.001	.001	0	0
9	VERT3	PY	.001	.001	0	0
10	VERT4	PY	.001	.001	0	0
11	VERT5	PY	.001	.001	0	0
12	VERT6	PY	.001	.001	0	0
13	DIAG1	PY	.0005	.0005	0	0

Member Distributed Loads (BLC 7 : Wind Load (120)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
14	DIAG2	PY	.0005	.0005	0	0
15	DIAG3	PY	.0005	.0005	0	0
16	DIAG4	PY	.0005	.0005	0	0
17	TIEBACK	PY	.001	.001	0	0
18	MP ALPHA1	PY	.004	.004	0	0
19	MP ALPHA2	PY	.004	.004	0	0
20	MP ALPHA5	PY	.004	.004	0	0
21	MP 1	PY	.001	.001	0	0
22	MP ALPHA3	PY	.004	.004	0	0
23	MP ALPHA4	PY	.004	.004	0	0
24	TOPFACE	PX	-.007	-.007	0	0
25	BOTTOMFACE	PX	-.007	-.007	0	0
26	KICKER1	PX	-.002	-.002	0	0
27	KICKER2	PX	-.002	-.002	0	0
28	KICKER3	PX	-.002	-.002	0	0
29	KICKER4	PX	-.002	-.002	0	0
30	VERT1	PX	-.002	-.002	0	0
31	VERT2	PX	-.002	-.002	0	0
32	VERT3	PX	-.002	-.002	0	0
33	VERT4	PX	-.002	-.002	0	0
34	VERT5	PX	-.002	-.002	0	0
35	VERT6	PX	-.002	-.002	0	0
36	DIAG1	PX	-.000866	-.000866	0	0
37	DIAG2	PX	-.000866	-.000866	0	0
38	DIAG3	PX	-.000866	-.000866	0	0
39	DIAG4	PX	-.000866	-.000866	0	0
40	TIEBACK	PX	-.002	-.002	0	0
41	MP ALPHA1	PX	-.006	-.006	0	0
42	MP ALPHA2	PX	-.006	-.006	0	0
43	MP ALPHA5	PX	-.006	-.006	0	0
44	MP 1	PX	-.002	-.002	0	0
45	MP ALPHA3	PX	-.006	-.006	0	0
46	MP ALPHA4	PX	-.006	-.006	0	0

Member Distributed Loads (BLC 8 : Wind Load (150))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	.007	.007	0	0
2	BOTTOMFACE	PY	.007	.007	0	0
3	KICKER1	PY	.002	.002	0	0
4	KICKER2	PY	.002	.002	0	0
5	KICKER3	PY	.002	.002	0	0
6	KICKER4	PY	.002	.002	0	0
7	VERT1	PY	.002	.002	0	0
8	VERT2	PY	.002	.002	0	0
9	VERT3	PY	.002	.002	0	0
10	VERT4	PY	.002	.002	0	0
11	VERT5	PY	.002	.002	0	0
12	VERT6	PY	.002	.002	0	0
13	DIAG1	PY	.000866	.000866	0	0
14	DIAG2	PY	.000866	.000866	0	0
15	DIAG3	PY	.000866	.000866	0	0
16	DIAG4	PY	.000866	.000866	0	0
17	TIEBACK	PY	.002	.002	0	0
18	MP ALPHA1	PY	.006	.006	0	0
19	MP ALPHA2	PY	.006	.006	0	0
20	MP ALPHA5	PY	.006	.006	0	0

Member Distributed Loads (BLC 8 : Wind Load (150)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
21	MP 1	PY	.002	.002	0	0
22	MP ALPHA3	PY	.006	.006	0	0
23	MP ALPHA4	PY	.006	.006	0	0
24	TOPFACE	PX	-.004	-.004	0	0
25	BOTTOMFACE	PX	-.004	-.004	0	0
26	KICKER1	PX	-.001	-.001	0	0
27	KICKER2	PX	-.001	-.001	0	0
28	KICKER3	PX	-.001	-.001	0	0
29	KICKER4	PX	-.001	-.001	0	0
30	VERT1	PX	-.001	-.001	0	0
31	VERT2	PX	-.001	-.001	0	0
32	VERT3	PX	-.001	-.001	0	0
33	VERT4	PX	-.001	-.001	0	0
34	VERT5	PX	-.001	-.001	0	0
35	VERT6	PX	-.001	-.001	0	0
36	DIAG1	PX	-.0005	-.0005	0	0
37	DIAG2	PX	-.0005	-.0005	0	0
38	DIAG3	PX	-.0005	-.0005	0	0
39	DIAG4	PX	-.0005	-.0005	0	0
40	TIEBACK	PX	-.001	-.001	0	0
41	MP ALPHA1	PX	-.004	-.004	0	0
42	MP ALPHA2	PX	-.004	-.004	0	0
43	MP ALPHA5	PX	-.004	-.004	0	0
44	MP 1	PX	-.001	-.001	0	0
45	MP ALPHA3	PX	-.004	-.004	0	0
46	MP ALPHA4	PX	-.004	-.004	0	0

Member Distributed Loads (BLC 9 : Wind Load (180))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	.008	.008	0	0
2	BOTTOMFACE	PY	.008	.008	0	0
3	KICKER1	PY	.002	.002	0	0
4	KICKER2	PY	.002	.002	0	0
5	KICKER3	PY	.002	.002	0	0
6	KICKER4	PY	.002	.002	0	0
7	VERT1	PY	.002	.002	0	0
8	VERT2	PY	.002	.002	0	0
9	VERT3	PY	.002	.002	0	0
10	VERT4	PY	.002	.002	0	0
11	VERT5	PY	.002	.002	0	0
12	VERT6	PY	.002	.002	0	0
13	DIAG1	PY	.001	.001	0	0
14	DIAG2	PY	.001	.001	0	0
15	DIAG3	PY	.001	.001	0	0
16	DIAG4	PY	.001	.001	0	0
17	TIEBACK	PY	.002	.002	0	0
18	MP ALPHA1	PY	.007	.007	0	0
19	MP ALPHA2	PY	.007	.007	0	0
20	MP ALPHA5	PY	.007	.007	0	0
21	MP 1	PY	.002	.002	0	0
22	MP ALPHA3	PY	.007	.007	0	0
23	MP ALPHA4	PY	.007	.007	0	0

Member Distributed Loads (BLC 10 : Wind Load (210))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	.007	.007	0	0

Member Distributed Loads (BLC 10 : Wind Load (210)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
2	BOTTOMFACE	PY	.007	.007	0	0
3	KICKER1	PY	.002	.002	0	0
4	KICKER2	PY	.002	.002	0	0
5	KICKER3	PY	.002	.002	0	0
6	KICKER4	PY	.002	.002	0	0
7	VERT1	PY	.002	.002	0	0
8	VERT2	PY	.002	.002	0	0
9	VERT3	PY	.002	.002	0	0
10	VERT4	PY	.002	.002	0	0
11	VERT5	PY	.002	.002	0	0
12	VERT6	PY	.002	.002	0	0
13	DIAG1	PY	.000866	.000866	0	0
14	DIAG2	PY	.000866	.000866	0	0
15	DIAG3	PY	.000866	.000866	0	0
16	DIAG4	PY	.000866	.000866	0	0
17	TIEBACK	PY	.002	.002	0	0
18	MP ALPHA1	PY	.006	.006	0	0
19	MP ALPHA2	PY	.006	.006	0	0
20	MP ALPHA5	PY	.006	.006	0	0
21	MP 1	PY	.002	.002	0	0
22	MP ALPHA3	PY	.006	.006	0	0
23	MP ALPHA4	PY	.006	.006	0	0
24	TOPFACE	PX	.004	.004	0	0
25	BOTTOMFACE	PX	.004	.004	0	0
26	KICKER1	PX	.001	.001	0	0
27	KICKER2	PX	.001	.001	0	0
28	KICKER3	PX	.001	.001	0	0
29	KICKER4	PX	.001	.001	0	0
30	VERT1	PX	.001	.001	0	0
31	VERT2	PX	.001	.001	0	0
32	VERT3	PX	.001	.001	0	0
33	VERT4	PX	.001	.001	0	0
34	VERT5	PX	.001	.001	0	0
35	VERT6	PX	.001	.001	0	0
36	DIAG1	PX	.0005	.0005	0	0
37	DIAG2	PX	.0005	.0005	0	0
38	DIAG3	PX	.0005	.0005	0	0
39	DIAG4	PX	.0005	.0005	0	0
40	TIEBACK	PX	.001	.001	0	0
41	MP ALPHA1	PX	.004	.004	0	0
42	MP ALPHA2	PX	.004	.004	0	0
43	MP ALPHA5	PX	.004	.004	0	0
44	MP 1	PX	.001	.001	0	0
45	MP ALPHA3	PX	.004	.004	0	0
46	MP ALPHA4	PX	.004	.004	0	0

Member Distributed Loads (BLC 11 : Wind Load (240))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	.004	.004	0	0
2	BOTTOMFACE	PY	.004	.004	0	0
3	KICKER1	PY	.001	.001	0	0
4	KICKER2	PY	.001	.001	0	0
5	KICKER3	PY	.001	.001	0	0
6	KICKER4	PY	.001	.001	0	0
7	VERT1	PY	.001	.001	0	0
8	VERT2	PY	.001	.001	0	0

Member Distributed Loads (BLC 11 : Wind Load (240)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
9	VERT3	PY	.001	.001	0	0
10	VERT4	PY	.001	.001	0	0
11	VERT5	PY	.001	.001	0	0
12	VERT6	PY	.001	.001	0	0
13	DIAG1	PY	.0005	.0005	0	0
14	DIAG2	PY	.0005	.0005	0	0
15	DIAG3	PY	.0005	.0005	0	0
16	DIAG4	PY	.0005	.0005	0	0
17	TIEBACK	PY	.001	.001	0	0
18	MP ALPHA1	PY	.004	.004	0	0
19	MP ALPHA2	PY	.004	.004	0	0
20	MP ALPHA5	PY	.004	.004	0	0
21	MP 1	PY	.001	.001	0	0
22	MP ALPHA3	PY	.004	.004	0	0
23	MP ALPHA4	PY	.004	.004	0	0
24	TOPFACE	PX	.007	.007	0	0
25	BOTTOMFACE	PX	.007	.007	0	0
26	KICKER1	PX	.002	.002	0	0
27	KICKER2	PX	.002	.002	0	0
28	KICKER3	PX	.002	.002	0	0
29	KICKER4	PX	.002	.002	0	0
30	VERT1	PX	.002	.002	0	0
31	VERT2	PX	.002	.002	0	0
32	VERT3	PX	.002	.002	0	0
33	VERT4	PX	.002	.002	0	0
34	VERT5	PX	.002	.002	0	0
35	VERT6	PX	.002	.002	0	0
36	DIAG1	PX	.000866	.000866	0	0
37	DIAG2	PX	.000866	.000866	0	0
38	DIAG3	PX	.000866	.000866	0	0
39	DIAG4	PX	.000866	.000866	0	0
40	TIEBACK	PX	.002	.002	0	0
41	MP ALPHA1	PX	.006	.006	0	0
42	MP ALPHA2	PX	.006	.006	0	0
43	MP ALPHA5	PX	.006	.006	0	0
44	MP 1	PX	.002	.002	0	0
45	MP ALPHA3	PX	.006	.006	0	0
46	MP ALPHA4	PX	.006	.006	0	0

Member Distributed Loads (BLC 12 : Wind Load (270))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PX	.008	.008	0	0
2	BOTTOMFACE	PX	.008	.008	0	0
3	KICKER1	PX	.002	.002	0	0
4	KICKER2	PX	.002	.002	0	0
5	KICKER3	PX	.002	.002	0	0
6	KICKER4	PX	.002	.002	0	0
7	VERT1	PX	.002	.002	0	0
8	VERT2	PX	.002	.002	0	0
9	VERT3	PX	.002	.002	0	0
10	VERT4	PX	.002	.002	0	0
11	VERT5	PX	.002	.002	0	0
12	VERT6	PX	.002	.002	0	0
13	DIAG1	PX	.001	.001	0	0
14	DIAG2	PX	.001	.001	0	0
15	DIAG3	PX	.001	.001	0	0

Member Distributed Loads (BLC 12 : Wind Load (270)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
16	DIAG4	PX	.001	.001	0	0
17	TIEBACK	PX	.002	.002	0	0
18	MP ALPHA1	PX	.007	.007	0	0
19	MP ALPHA2	PX	.007	.007	0	0
20	MP ALPHA5	PX	.007	.007	0	0
21	MP 1	PX	.002	.002	0	0
22	MP ALPHA3	PX	.007	.007	0	0
23	MP ALPHA4	PX	.007	.007	0	0

Member Distributed Loads (BLC 13 : Wind Load (300))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	-.004	-.004	0	0
2	BOTTOMFACE	PY	-.004	-.004	0	0
3	KICKER1	PY	-.001	-.001	0	0
4	KICKER2	PY	-.001	-.001	0	0
5	KICKER3	PY	-.001	-.001	0	0
6	KICKER4	PY	-.001	-.001	0	0
7	VERT1	PY	-.001	-.001	0	0
8	VERT2	PY	-.001	-.001	0	0
9	VERT3	PY	-.001	-.001	0	0
10	VERT4	PY	-.001	-.001	0	0
11	VERT5	PY	-.001	-.001	0	0
12	VERT6	PY	-.001	-.001	0	0
13	DIAG1	PY	-.0005	-.0005	0	0
14	DIAG2	PY	-.0005	-.0005	0	0
15	DIAG3	PY	-.0005	-.0005	0	0
16	DIAG4	PY	-.0005	-.0005	0	0
17	TIEBACK	PY	-.001	-.001	0	0
18	MP ALPHA1	PY	-.004	-.004	0	0
19	MP ALPHA2	PY	-.004	-.004	0	0
20	MP ALPHA5	PY	-.004	-.004	0	0
21	MP 1	PY	-.001	-.001	0	0
22	MP ALPHA3	PY	-.004	-.004	0	0
23	MP ALPHA4	PY	-.004	-.004	0	0
24	TOPFACE	PX	.007	.007	0	0
25	BOTTOMFACE	PX	.007	.007	0	0
26	KICKER1	PX	.002	.002	0	0
27	KICKER2	PX	.002	.002	0	0
28	KICKER3	PX	.002	.002	0	0
29	KICKER4	PX	.002	.002	0	0
30	VERT1	PX	.002	.002	0	0
31	VERT2	PX	.002	.002	0	0
32	VERT3	PX	.002	.002	0	0
33	VERT4	PX	.002	.002	0	0
34	VERT5	PX	.002	.002	0	0
35	VERT6	PX	.002	.002	0	0
36	DIAG1	PX	.000866	.000866	0	0
37	DIAG2	PX	.000866	.000866	0	0
38	DIAG3	PX	.000866	.000866	0	0
39	DIAG4	PX	.000866	.000866	0	0
40	TIEBACK	PX	.002	.002	0	0
41	MP ALPHA1	PX	.006	.006	0	0
42	MP ALPHA2	PX	.006	.006	0	0
43	MP ALPHA5	PX	.006	.006	0	0
44	MP 1	PX	.002	.002	0	0
45	MP ALPHA3	PX	.006	.006	0	0

Member Distributed Loads (BLC 13 : Wind Load (300)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
46	MP ALPHA4	PX	.006	.006	0	0

Member Distributed Loads (BLC 14 : Wind Load (330))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	-.007	-.007	0	0
2	BOTTOMFACE	PY	-.007	-.007	0	0
3	KICKER1	PY	-.002	-.002	0	0
4	KICKER2	PY	-.002	-.002	0	0
5	KICKER3	PY	-.002	-.002	0	0
6	KICKER4	PY	-.002	-.002	0	0
7	VERT1	PY	-.002	-.002	0	0
8	VERT2	PY	-.002	-.002	0	0
9	VERT3	PY	-.002	-.002	0	0
10	VERT4	PY	-.002	-.002	0	0
11	VERT5	PY	-.002	-.002	0	0
12	VERT6	PY	-.002	-.002	0	0
13	DIAG1	PY	-.000866	-.000866	0	0
14	DIAG2	PY	-.000866	-.000866	0	0
15	DIAG3	PY	-.000866	-.000866	0	0
16	DIAG4	PY	-.000866	-.000866	0	0
17	TIEBACK	PY	-.002	-.002	0	0
18	MP ALPHA1	PY	-.006	-.006	0	0
19	MP ALPHA2	PY	-.006	-.006	0	0
20	MP ALPHA5	PY	-.006	-.006	0	0
21	MP 1	PY	-.002	-.002	0	0
22	MP ALPHA3	PY	-.006	-.006	0	0
23	MP ALPHA4	PY	-.006	-.006	0	0
24	TOPFACE	PX	.004	.004	0	0
25	BOTTOMFACE	PX	.004	.004	0	0
26	KICKER1	PX	.001	.001	0	0
27	KICKER2	PX	.001	.001	0	0
28	KICKER3	PX	.001	.001	0	0
29	KICKER4	PX	.001	.001	0	0
30	VERT1	PX	.001	.001	0	0
31	VERT2	PX	.001	.001	0	0
32	VERT3	PX	.001	.001	0	0
33	VERT4	PX	.001	.001	0	0
34	VERT5	PX	.001	.001	0	0
35	VERT6	PX	.001	.001	0	0
36	DIAG1	PX	.0005	.0005	0	0
37	DIAG2	PX	.0005	.0005	0	0
38	DIAG3	PX	.0005	.0005	0	0
39	DIAG4	PX	.0005	.0005	0	0
40	TIEBACK	PX	.001	.001	0	0
41	MP ALPHA1	PX	.004	.004	0	0
42	MP ALPHA2	PX	.004	.004	0	0
43	MP ALPHA5	PX	.004	.004	0	0
44	MP 1	PX	.001	.001	0	0
45	MP ALPHA3	PX	.004	.004	0	0
46	MP ALPHA4	PX	.004	.004	0	0

Member Distributed Loads (BLC 27 : Ice Dead Load)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	Z	-.009	-.009	0	0
2	BOTTOMFACE	Z	-.009	-.009	0	0
3	KICKER1	Z	-.008	-.008	0	0

Member Distributed Loads (BLC 27 : Ice Dead Load) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
4	KICKER2	Z	-.008	-.008	0	0
5	KICKER3	Z	-.008	-.008	0	0
6	KICKER4	Z	-.008	-.008	0	0
7	VERT1	Z	-.008	-.008	0	0
8	VERT2	Z	-.008	-.008	0	0
9	VERT3	Z	-.008	-.008	0	0
10	VERT4	Z	-.008	-.008	0	0
11	VERT5	Z	-.008	-.008	0	0
12	VERT6	Z	-.008	-.008	0	0
13	DIAG1	Z	-.007	-.007	0	0
14	DIAG2	Z	-.007	-.007	0	0
15	DIAG3	Z	-.007	-.007	0	0
16	DIAG4	Z	-.007	-.007	0	0
17	TIEBACK	Z	-.008	-.008	0	0
18	MP ALPHA1	Z	-.008	-.008	0	0
19	MP ALPHA2	Z	-.008	-.008	0	0
20	MP ALPHA5	Z	-.008	-.008	0	0
21	MP 1	Z	-.008	-.008	0	0
22	MP ALPHA3	Z	-.008	-.008	0	0
23	MP ALPHA4	Z	-.008	-.008	0	0

Member Distributed Loads (BLC 28 : Ice Wind Load (0))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	-.003	-.003	0	0
2	BOTTOMFACE	PY	-.003	-.003	0	0
3	KICKER1	PY	-.001	-.001	0	0
4	KICKER2	PY	-.001	-.001	0	0
5	KICKER3	PY	-.001	-.001	0	0
6	KICKER4	PY	-.001	-.001	0	0
7	VERT1	PY	-.001	-.001	0	0
8	VERT2	PY	-.001	-.001	0	0
9	VERT3	PY	-.001	-.001	0	0
10	VERT4	PY	-.001	-.001	0	0
11	VERT5	PY	-.001	-.001	0	0
12	VERT6	PY	-.001	-.001	0	0
13	DIAG1	PY	-.001	-.001	0	0
14	DIAG2	PY	-.001	-.001	0	0
15	DIAG3	PY	-.001	-.001	0	0
16	DIAG4	PY	-.001	-.001	0	0
17	TIEBACK	PY	-.001	-.001	0	0
18	MP ALPHA1	PY	-.003	-.003	0	0
19	MP ALPHA2	PY	-.003	-.003	0	0
20	MP ALPHA5	PY	-.003	-.003	0	0
21	MP 1	PY	-.001	-.001	0	0
22	MP ALPHA3	PY	-.003	-.003	0	0
23	MP ALPHA4	PY	-.003	-.003	0	0

Member Distributed Loads (BLC 29 : Ice Wind Load (30))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	-.003	-.003	0	0
2	BOTTOMFACE	PY	-.003	-.003	0	0
3	KICKER1	PY	-.000866	-.000866	0	0
4	KICKER2	PY	-.000866	-.000866	0	0
5	KICKER3	PY	-.000866	-.000866	0	0
6	KICKER4	PY	-.000866	-.000866	0	0
7	VERT1	PY	-.000866	-.000866	0	0

Member Distributed Loads (BLC 29 : Ice Wind Load (30)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
8	VERT2	PY	-.000866	-.000866	0	0
9	VERT3	PY	-.000866	-.000866	0	0
10	VERT4	PY	-.000866	-.000866	0	0
11	VERT5	PY	-.000866	-.000866	0	0
12	VERT6	PY	-.000866	-.000866	0	0
13	DIAG1	PY	-.000866	-.000866	0	0
14	DIAG2	PY	-.000866	-.000866	0	0
15	DIAG3	PY	-.000866	-.000866	0	0
16	DIAG4	PY	-.000866	-.000866	0	0
17	TIEBACK	PY	-.000866	-.000866	0	0
18	MP ALPHA1	PY	-.003	-.003	0	0
19	MP ALPHA2	PY	-.003	-.003	0	0
20	MP ALPHA5	PY	-.003	-.003	0	0
21	MP 1	PY	-.000866	-.000866	0	0
22	MP ALPHA3	PY	-.003	-.003	0	0
23	MP ALPHA4	PY	-.003	-.003	0	0
24	TOPFACE	PX	-.002	-.002	0	0
25	BOTTOMFACE	PX	-.002	-.002	0	0
26	KICKER1	PX	-.0005	-.0005	0	0
27	KICKER2	PX	-.0005	-.0005	0	0
28	KICKER3	PX	-.0005	-.0005	0	0
29	KICKER4	PX	-.0005	-.0005	0	0
30	VERT1	PX	-.0005	-.0005	0	0
31	VERT2	PX	-.0005	-.0005	0	0
32	VERT3	PX	-.0005	-.0005	0	0
33	VERT4	PX	-.0005	-.0005	0	0
34	VERT5	PX	-.0005	-.0005	0	0
35	VERT6	PX	-.0005	-.0005	0	0
36	DIAG1	PX	-.0005	-.0005	0	0
37	DIAG2	PX	-.0005	-.0005	0	0
38	DIAG3	PX	-.0005	-.0005	0	0
39	DIAG4	PX	-.0005	-.0005	0	0
40	TIEBACK	PX	-.0005	-.0005	0	0
41	MP ALPHA1	PX	-.002	-.002	0	0
42	MP ALPHA2	PX	-.002	-.002	0	0
43	MP ALPHA5	PX	-.002	-.002	0	0
44	MP 1	PX	-.0005	-.0005	0	0
45	MP ALPHA3	PX	-.002	-.002	0	0
46	MP ALPHA4	PX	-.002	-.002	0	0

Member Distributed Loads (BLC 30 : Ice Wind Load (60))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	-.002	-.002	0	0
2	BOTTOMFACE	PY	-.002	-.002	0	0
3	KICKER1	PY	-.0005	-.0005	0	0
4	KICKER2	PY	-.0005	-.0005	0	0
5	KICKER3	PY	-.0005	-.0005	0	0
6	KICKER4	PY	-.0005	-.0005	0	0
7	VERT1	PY	-.0005	-.0005	0	0
8	VERT2	PY	-.0005	-.0005	0	0
9	VERT3	PY	-.0005	-.0005	0	0
10	VERT4	PY	-.0005	-.0005	0	0
11	VERT5	PY	-.0005	-.0005	0	0
12	VERT6	PY	-.0005	-.0005	0	0
13	DIAG1	PY	-.0005	-.0005	0	0
14	DIAG2	PY	-.0005	-.0005	0	0

Member Distributed Loads (BLC 30 : Ice Wind Load (60)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
15	DIAG3	PY	-.0005	-.0005	0	0
16	DIAG4	PY	-.0005	-.0005	0	0
17	TIEBACK	PY	-.0005	-.0005	0	0
18	MP ALPHA1	PY	-.002	-.002	0	0
19	MP ALPHA2	PY	-.002	-.002	0	0
20	MP ALPHA5	PY	-.002	-.002	0	0
21	MP 1	PY	-.0005	-.0005	0	0
22	MP ALPHA3	PY	-.002	-.002	0	0
23	MP ALPHA4	PY	-.002	-.002	0	0
24	TOPFACE	PX	-.003	-.003	0	0
25	BOTTOMFACE	PX	-.003	-.003	0	0
26	KICKER1	PX	-.000866	-.000866	0	0
27	KICKER2	PX	-.000866	-.000866	0	0
28	KICKER3	PX	-.000866	-.000866	0	0
29	KICKER4	PX	-.000866	-.000866	0	0
30	VERT1	PX	-.000866	-.000866	0	0
31	VERT2	PX	-.000866	-.000866	0	0
32	VERT3	PX	-.000866	-.000866	0	0
33	VERT4	PX	-.000866	-.000866	0	0
34	VERT5	PX	-.000866	-.000866	0	0
35	VERT6	PX	-.000866	-.000866	0	0
36	DIAG1	PX	-.000866	-.000866	0	0
37	DIAG2	PX	-.000866	-.000866	0	0
38	DIAG3	PX	-.000866	-.000866	0	0
39	DIAG4	PX	-.000866	-.000866	0	0
40	TIEBACK	PX	-.000866	-.000866	0	0
41	MP ALPHA1	PX	-.003	-.003	0	0
42	MP ALPHA2	PX	-.003	-.003	0	0
43	MP ALPHA5	PX	-.003	-.003	0	0
44	MP 1	PX	-.000866	-.000866	0	0
45	MP ALPHA3	PX	-.003	-.003	0	0
46	MP ALPHA4	PX	-.003	-.003	0	0

Member Distributed Loads (BLC 31 : Ice Wind Load (90))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PX	-.003	-.003	0	0
2	BOTTOMFACE	PX	-.003	-.003	0	0
3	KICKER1	PX	-.001	-.001	0	0
4	KICKER2	PX	-.001	-.001	0	0
5	KICKER3	PX	-.001	-.001	0	0
6	KICKER4	PX	-.001	-.001	0	0
7	VERT1	PX	-.001	-.001	0	0
8	VERT2	PX	-.001	-.001	0	0
9	VERT3	PX	-.001	-.001	0	0
10	VERT4	PX	-.001	-.001	0	0
11	VERT5	PX	-.001	-.001	0	0
12	VERT6	PX	-.001	-.001	0	0
13	DIAG1	PX	-.001	-.001	0	0
14	DIAG2	PX	-.001	-.001	0	0
15	DIAG3	PX	-.001	-.001	0	0
16	DIAG4	PX	-.001	-.001	0	0
17	TIEBACK	PX	-.001	-.001	0	0
18	MP ALPHA1	PX	-.003	-.003	0	0
19	MP ALPHA2	PX	-.003	-.003	0	0
20	MP ALPHA5	PX	-.003	-.003	0	0
21	MP 1	PX	-.001	-.001	0	0

Member Distributed Loads (BLC 31 : Ice Wind Load (90)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
22	MP ALPHA3	PX	-.003	-.003	0	0
23	MP ALPHA4	PX	-.003	-.003	0	0

Member Distributed Loads (BLC 32 : Ice Wind Load (120))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	.002	.002	0	0
2	BOTTOMFACE	PY	.002	.002	0	0
3	KICKER1	PY	.0005	.0005	0	0
4	KICKER2	PY	.0005	.0005	0	0
5	KICKER3	PY	.0005	.0005	0	0
6	KICKER4	PY	.0005	.0005	0	0
7	VERT1	PY	.0005	.0005	0	0
8	VERT2	PY	.0005	.0005	0	0
9	VERT3	PY	.0005	.0005	0	0
10	VERT4	PY	.0005	.0005	0	0
11	VERT5	PY	.0005	.0005	0	0
12	VERT6	PY	.0005	.0005	0	0
13	DIAG1	PY	.0005	.0005	0	0
14	DIAG2	PY	.0005	.0005	0	0
15	DIAG3	PY	.0005	.0005	0	0
16	DIAG4	PY	.0005	.0005	0	0
17	TIEBACK	PY	.0005	.0005	0	0
18	MP ALPHA1	PY	.002	.002	0	0
19	MP ALPHA2	PY	.002	.002	0	0
20	MP ALPHA5	PY	.002	.002	0	0
21	MP 1	PY	.0005	.0005	0	0
22	MP ALPHA3	PY	.002	.002	0	0
23	MP ALPHA4	PY	.002	.002	0	0
24	TOPFACE	PX	-.003	-.003	0	0
25	BOTTOMFACE	PX	-.003	-.003	0	0
26	KICKER1	PX	-.000866	-.000866	0	0
27	KICKER2	PX	-.000866	-.000866	0	0
28	KICKER3	PX	-.000866	-.000866	0	0
29	KICKER4	PX	-.000866	-.000866	0	0
30	VERT1	PX	-.000866	-.000866	0	0
31	VERT2	PX	-.000866	-.000866	0	0
32	VERT3	PX	-.000866	-.000866	0	0
33	VERT4	PX	-.000866	-.000866	0	0
34	VERT5	PX	-.000866	-.000866	0	0
35	VERT6	PX	-.000866	-.000866	0	0
36	DIAG1	PX	-.000866	-.000866	0	0
37	DIAG2	PX	-.000866	-.000866	0	0
38	DIAG3	PX	-.000866	-.000866	0	0
39	DIAG4	PX	-.000866	-.000866	0	0
40	TIEBACK	PX	-.000866	-.000866	0	0
41	MP ALPHA1	PX	-.003	-.003	0	0
42	MP ALPHA2	PX	-.003	-.003	0	0
43	MP ALPHA5	PX	-.003	-.003	0	0
44	MP 1	PX	-.000866	-.000866	0	0
45	MP ALPHA3	PX	-.003	-.003	0	0
46	MP ALPHA4	PX	-.003	-.003	0	0

Member Distributed Loads (BLC 33 : Ice Wind Load (150))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	.003	.003	0	0
2	BOTTOMFACE	PY	.003	.003	0	0

Member Distributed Loads (BLC 33 : Ice Wind Load (150)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
3	KICKER1	PY	.000866	.000866	0	0
4	KICKER2	PY	.000866	.000866	0	0
5	KICKER3	PY	.000866	.000866	0	0
6	KICKER4	PY	.000866	.000866	0	0
7	VERT1	PY	.000866	.000866	0	0
8	VERT2	PY	.000866	.000866	0	0
9	VERT3	PY	.000866	.000866	0	0
10	VERT4	PY	.000866	.000866	0	0
11	VERT5	PY	.000866	.000866	0	0
12	VERT6	PY	.000866	.000866	0	0
13	DIAG1	PY	.000866	.000866	0	0
14	DIAG2	PY	.000866	.000866	0	0
15	DIAG3	PY	.000866	.000866	0	0
16	DIAG4	PY	.000866	.000866	0	0
17	TIEBACK	PY	.000866	.000866	0	0
18	MP ALPHA1	PY	.003	.003	0	0
19	MP ALPHA2	PY	.003	.003	0	0
20	MP ALPHA5	PY	.003	.003	0	0
21	MP 1	PY	.000866	.000866	0	0
22	MP ALPHA3	PY	.003	.003	0	0
23	MP ALPHA4	PY	.003	.003	0	0
24	TOPFACE	PX	-.002	-.002	0	0
25	BOTTOMFACE	PX	-.002	-.002	0	0
26	KICKER1	PX	-.0005	-.0005	0	0
27	KICKER2	PX	-.0005	-.0005	0	0
28	KICKER3	PX	-.0005	-.0005	0	0
29	KICKER4	PX	-.0005	-.0005	0	0
30	VERT1	PX	-.0005	-.0005	0	0
31	VERT2	PX	-.0005	-.0005	0	0
32	VERT3	PX	-.0005	-.0005	0	0
33	VERT4	PX	-.0005	-.0005	0	0
34	VERT5	PX	-.0005	-.0005	0	0
35	VERT6	PX	-.0005	-.0005	0	0
36	DIAG1	PX	-.0005	-.0005	0	0
37	DIAG2	PX	-.0005	-.0005	0	0
38	DIAG3	PX	-.0005	-.0005	0	0
39	DIAG4	PX	-.0005	-.0005	0	0
40	TIEBACK	PX	-.0005	-.0005	0	0
41	MP ALPHA1	PX	-.002	-.002	0	0
42	MP ALPHA2	PX	-.002	-.002	0	0
43	MP ALPHA5	PX	-.002	-.002	0	0
44	MP 1	PX	-.0005	-.0005	0	0
45	MP ALPHA3	PX	-.002	-.002	0	0
46	MP ALPHA4	PX	-.002	-.002	0	0

Member Distributed Loads (BLC 34 : Ice Wind Load (180))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	.003	.003	0	0
2	BOTTOMFACE	PY	.003	.003	0	0
3	KICKER1	PY	.001	.001	0	0
4	KICKER2	PY	.001	.001	0	0
5	KICKER3	PY	.001	.001	0	0
6	KICKER4	PY	.001	.001	0	0
7	VERT1	PY	.001	.001	0	0
8	VERT2	PY	.001	.001	0	0
9	VERT3	PY	.001	.001	0	0

Member Distributed Loads (BLC 34 : Ice Wind Load (180)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
10	VERT4	PY	.001	.001	0	0
11	VERT5	PY	.001	.001	0	0
12	VERT6	PY	.001	.001	0	0
13	DIAG1	PY	.001	.001	0	0
14	DIAG2	PY	.001	.001	0	0
15	DIAG3	PY	.001	.001	0	0
16	DIAG4	PY	.001	.001	0	0
17	TIEBACK	PY	.001	.001	0	0
18	MP ALPHA1	PY	.003	.003	0	0
19	MP ALPHA2	PY	.003	.003	0	0
20	MP ALPHA5	PY	.003	.003	0	0
21	MP 1	PY	.001	.001	0	0
22	MP ALPHA3	PY	.003	.003	0	0
23	MP ALPHA4	PY	.003	.003	0	0

Member Distributed Loads (BLC 35 : Ice Wind Load (210))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	.003	.003	0	0
2	BOTTOMFACE	PY	.003	.003	0	0
3	KICKER1	PY	.000866	.000866	0	0
4	KICKER2	PY	.000866	.000866	0	0
5	KICKER3	PY	.000866	.000866	0	0
6	KICKER4	PY	.000866	.000866	0	0
7	VERT1	PY	.000866	.000866	0	0
8	VERT2	PY	.000866	.000866	0	0
9	VERT3	PY	.000866	.000866	0	0
10	VERT4	PY	.000866	.000866	0	0
11	VERT5	PY	.000866	.000866	0	0
12	VERT6	PY	.000866	.000866	0	0
13	DIAG1	PY	.000866	.000866	0	0
14	DIAG2	PY	.000866	.000866	0	0
15	DIAG3	PY	.000866	.000866	0	0
16	DIAG4	PY	.000866	.000866	0	0
17	TIEBACK	PY	.000866	.000866	0	0
18	MP ALPHA1	PY	.003	.003	0	0
19	MP ALPHA2	PY	.003	.003	0	0
20	MP ALPHA5	PY	.003	.003	0	0
21	MP 1	PY	.000866	.000866	0	0
22	MP ALPHA3	PY	.003	.003	0	0
23	MP ALPHA4	PY	.003	.003	0	0
24	TOPFACE	PX	.002	.002	0	0
25	BOTTOMFACE	PX	.002	.002	0	0
26	KICKER1	PX	.0005	.0005	0	0
27	KICKER2	PX	.0005	.0005	0	0
28	KICKER3	PX	.0005	.0005	0	0
29	KICKER4	PX	.0005	.0005	0	0
30	VERT1	PX	.0005	.0005	0	0
31	VERT2	PX	.0005	.0005	0	0
32	VERT3	PX	.0005	.0005	0	0
33	VERT4	PX	.0005	.0005	0	0
34	VERT5	PX	.0005	.0005	0	0
35	VERT6	PX	.0005	.0005	0	0
36	DIAG1	PX	.0005	.0005	0	0
37	DIAG2	PX	.0005	.0005	0	0
38	DIAG3	PX	.0005	.0005	0	0
39	DIAG4	PX	.0005	.0005	0	0

Member Distributed Loads (BLC 35 : Ice Wind Load (210)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
40	TIEBACK	PX	.0005	.0005	0	0
41	MP ALPHA1	PX	.002	.002	0	0
42	MP ALPHA2	PX	.002	.002	0	0
43	MP ALPHA5	PX	.002	.002	0	0
44	MP 1	PX	.0005	.0005	0	0
45	MP ALPHA3	PX	.002	.002	0	0
46	MP ALPHA4	PX	.002	.002	0	0

Member Distributed Loads (BLC 36 : Ice Wind Load (240))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	.002	.002	0	0
2	BOTTOMFACE	PY	.002	.002	0	0
3	KICKER1	PY	.0005	.0005	0	0
4	KICKER2	PY	.0005	.0005	0	0
5	KICKER3	PY	.0005	.0005	0	0
6	KICKER4	PY	.0005	.0005	0	0
7	VERT1	PY	.0005	.0005	0	0
8	VERT2	PY	.0005	.0005	0	0
9	VERT3	PY	.0005	.0005	0	0
10	VERT4	PY	.0005	.0005	0	0
11	VERT5	PY	.0005	.0005	0	0
12	VERT6	PY	.0005	.0005	0	0
13	DIAG1	PY	.0005	.0005	0	0
14	DIAG2	PY	.0005	.0005	0	0
15	DIAG3	PY	.0005	.0005	0	0
16	DIAG4	PY	.0005	.0005	0	0
17	TIEBACK	PY	.0005	.0005	0	0
18	MP ALPHA1	PY	.002	.002	0	0
19	MP ALPHA2	PY	.002	.002	0	0
20	MP ALPHA5	PY	.002	.002	0	0
21	MP 1	PY	.0005	.0005	0	0
22	MP ALPHA3	PY	.002	.002	0	0
23	MP ALPHA4	PY	.002	.002	0	0
24	TOPFACE	PX	.003	.003	0	0
25	BOTTOMFACE	PX	.003	.003	0	0
26	KICKER1	PX	.000866	.000866	0	0
27	KICKER2	PX	.000866	.000866	0	0
28	KICKER3	PX	.000866	.000866	0	0
29	KICKER4	PX	.000866	.000866	0	0
30	VERT1	PX	.000866	.000866	0	0
31	VERT2	PX	.000866	.000866	0	0
32	VERT3	PX	.000866	.000866	0	0
33	VERT4	PX	.000866	.000866	0	0
34	VERT5	PX	.000866	.000866	0	0
35	VERT6	PX	.000866	.000866	0	0
36	DIAG1	PX	.000866	.000866	0	0
37	DIAG2	PX	.000866	.000866	0	0
38	DIAG3	PX	.000866	.000866	0	0
39	DIAG4	PX	.000866	.000866	0	0
40	TIEBACK	PX	.000866	.000866	0	0
41	MP ALPHA1	PX	.003	.003	0	0
42	MP ALPHA2	PX	.003	.003	0	0
43	MP ALPHA5	PX	.003	.003	0	0
44	MP 1	PX	.000866	.000866	0	0
45	MP ALPHA3	PX	.003	.003	0	0
46	MP ALPHA4	PX	.003	.003	0	0

Member Distributed Loads (BLC 37 : Ice Wind Load (270))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PX	.003	.003	0	0
2	BOTTOMFACE	PX	.003	.003	0	0
3	KICKER1	PX	.001	.001	0	0
4	KICKER2	PX	.001	.001	0	0
5	KICKER3	PX	.001	.001	0	0
6	KICKER4	PX	.001	.001	0	0
7	VERT1	PX	.001	.001	0	0
8	VERT2	PX	.001	.001	0	0
9	VERT3	PX	.001	.001	0	0
10	VERT4	PX	.001	.001	0	0
11	VERT5	PX	.001	.001	0	0
12	VERT6	PX	.001	.001	0	0
13	DIAG1	PX	.001	.001	0	0
14	DIAG2	PX	.001	.001	0	0
15	DIAG3	PX	.001	.001	0	0
16	DIAG4	PX	.001	.001	0	0
17	TIEBACK	PX	.001	.001	0	0
18	MP ALPHA1	PX	.003	.003	0	0
19	MP ALPHA2	PX	.003	.003	0	0
20	MP ALPHA5	PX	.003	.003	0	0
21	MP 1	PX	.001	.001	0	0
22	MP ALPHA3	PX	.003	.003	0	0
23	MP ALPHA4	PX	.003	.003	0	0

Member Distributed Loads (BLC 38 : Ice Wind Load (300))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	-.002	-.002	0	0
2	BOTTOMFACE	PY	-.002	-.002	0	0
3	KICKER1	PY	-.0005	-.0005	0	0
4	KICKER2	PY	-.0005	-.0005	0	0
5	KICKER3	PY	-.0005	-.0005	0	0
6	KICKER4	PY	-.0005	-.0005	0	0
7	VERT1	PY	-.0005	-.0005	0	0
8	VERT2	PY	-.0005	-.0005	0	0
9	VERT3	PY	-.0005	-.0005	0	0
10	VERT4	PY	-.0005	-.0005	0	0
11	VERT5	PY	-.0005	-.0005	0	0
12	VERT6	PY	-.0005	-.0005	0	0
13	DIAG1	PY	-.0005	-.0005	0	0
14	DIAG2	PY	-.0005	-.0005	0	0
15	DIAG3	PY	-.0005	-.0005	0	0
16	DIAG4	PY	-.0005	-.0005	0	0
17	TIEBACK	PY	-.0005	-.0005	0	0
18	MP ALPHA1	PY	-.002	-.002	0	0
19	MP ALPHA2	PY	-.002	-.002	0	0
20	MP ALPHA5	PY	-.002	-.002	0	0
21	MP 1	PY	-.0005	-.0005	0	0
22	MP ALPHA3	PY	-.002	-.002	0	0
23	MP ALPHA4	PY	-.002	-.002	0	0
24	TOPFACE	PX	.003	.003	0	0
25	BOTTOMFACE	PX	.003	.003	0	0
26	KICKER1	PX	.000866	.000866	0	0
27	KICKER2	PX	.000866	.000866	0	0
28	KICKER3	PX	.000866	.000866	0	0
29	KICKER4	PX	.000866	.000866	0	0
30	VERT1	PX	.000866	.000866	0	0

Member Distributed Loads (BLC 38 : Ice Wind Load (300)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
31	VERT2	PX	.000866	.000866	0	0
32	VERT3	PX	.000866	.000866	0	0
33	VERT4	PX	.000866	.000866	0	0
34	VERT5	PX	.000866	.000866	0	0
35	VERT6	PX	.000866	.000866	0	0
36	DIAG1	PX	.000866	.000866	0	0
37	DIAG2	PX	.000866	.000866	0	0
38	DIAG3	PX	.000866	.000866	0	0
39	DIAG4	PX	.000866	.000866	0	0
40	TIEBACK	PX	.000866	.000866	0	0
41	MP ALPHA1	PX	.003	.003	0	0
42	MP ALPHA2	PX	.003	.003	0	0
43	MP ALPHA5	PX	.003	.003	0	0
44	MP 1	PX	.000866	.000866	0	0
45	MP ALPHA3	PX	.003	.003	0	0
46	MP ALPHA4	PX	.003	.003	0	0

Member Distributed Loads (BLC 39 : Ice Wind Load (330))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	-.003	-.003	0	0
2	BOTTOMFACE	PY	-.003	-.003	0	0
3	KICKER1	PY	-.000866	-.000866	0	0
4	KICKER2	PY	-.000866	-.000866	0	0
5	KICKER3	PY	-.000866	-.000866	0	0
6	KICKER4	PY	-.000866	-.000866	0	0
7	VERT1	PY	-.000866	-.000866	0	0
8	VERT2	PY	-.000866	-.000866	0	0
9	VERT3	PY	-.000866	-.000866	0	0
10	VERT4	PY	-.000866	-.000866	0	0
11	VERT5	PY	-.000866	-.000866	0	0
12	VERT6	PY	-.000866	-.000866	0	0
13	DIAG1	PY	-.000866	-.000866	0	0
14	DIAG2	PY	-.000866	-.000866	0	0
15	DIAG3	PY	-.000866	-.000866	0	0
16	DIAG4	PY	-.000866	-.000866	0	0
17	TIEBACK	PY	-.000866	-.000866	0	0
18	MP ALPHA1	PY	-.003	-.003	0	0
19	MP ALPHA2	PY	-.003	-.003	0	0
20	MP ALPHA5	PY	-.003	-.003	0	0
21	MP 1	PY	-.000866	-.000866	0	0
22	MP ALPHA3	PY	-.003	-.003	0	0
23	MP ALPHA4	PY	-.003	-.003	0	0
24	TOPFACE	PX	.002	.002	0	0
25	BOTTOMFACE	PX	.002	.002	0	0
26	KICKER1	PX	.0005	.0005	0	0
27	KICKER2	PX	.0005	.0005	0	0
28	KICKER3	PX	.0005	.0005	0	0
29	KICKER4	PX	.0005	.0005	0	0
30	VERT1	PX	.0005	.0005	0	0
31	VERT2	PX	.0005	.0005	0	0
32	VERT3	PX	.0005	.0005	0	0
33	VERT4	PX	.0005	.0005	0	0
34	VERT5	PX	.0005	.0005	0	0
35	VERT6	PX	.0005	.0005	0	0
36	DIAG1	PX	.0005	.0005	0	0
37	DIAG2	PX	.0005	.0005	0	0

Member Distributed Loads (BLC 39 : Ice Wind Load (330)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
38	DIAG3	PX	.0005	.0005	0	0
39	DIAG4	PX	.0005	.0005	0	0
40	TIEBACK	PX	.0005	.0005	0	0
41	MP ALPHA1	PX	.002	.002	0	0
42	MP ALPHA2	PX	.002	.002	0	0
43	MP ALPHA5	PX	.002	.002	0	0
44	MP 1	PX	.0005	.0005	0	0
45	MP ALPHA3	PX	.002	.002	0	0
46	MP ALPHA4	PX	.002	.002	0	0

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(...
1	Live Load	DL					1			
2	Wind Load (0)	DL					17	23		
3	Dead Load	DL			-1.1		17			
4	Wind Load (30)	DL					34	46		
5	Wind Load (60)	DL					34	46		
6	Wind Load (90)	DL					17	23		
7	Wind Load (120)	DL					34	46		
8	Wind Load (150)	DL					34	46		
9	Wind Load (180)	DL					17	23		
10	Wind Load (210)	DL					34	46		
11	Wind Load (240)	DL					34	46		
12	Wind Load (270)	DL					17	23		
13	Wind Load (300)	DL					34	46		
14	Wind Load (330)	DL					34	46		
15	Maintanence (0)	DL					17			
16	Maintanence (30)	DL					34			
17	Maintanence (60)	DL					34			
18	Maintanence (90)	DL					17			
19	Maintanence (120)	DL					34			
20	Maintanence (150)	DL					34			
21	Maintanence (180)	DL					17			
22	Maintanence (210)	DL					34			
23	Maintanence (240)	DL					34			
24	Maintanence (270)	DL					17			
25	Maintanence (300)	DL					34			
26	Maintanence (330)	DL					34			
27	Ice Dead Load	DL					17	23		
28	Ice Wind Load (0)	DL					17	23		
29	Ice Wind Load (30)	DL					34	46		
30	Ice Wind Load (60)	DL					34	46		
31	Ice Wind Load (90)	DL					17	23		
32	Ice Wind Load (120)	DL					34	46		
33	Ice Wind Load (150)	DL					34	46		
34	Ice Wind Load (180)	DL					17	23		
35	Ice Wind Load (210)	DL					34	46		
36	Ice Wind Load (240)	DL					34	46		
37	Ice Wind Load (270)	DL					17	23		
38	Ice Wind Load (300)	DL					34	46		
39	Ice Wind Load (330)	DL					34	46		
40	Earthquake (x-direction)	DL	-.107				17			
41	Earthquake (y-direction)	DL		-.107			17			
42	Earthquake (z-direction)	DL			-.043		17			

Load Combinations

	Description	S...	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
1	1.4D	Yes	Y		3	1.4																		
2	1.2D + 1.0W(0)	Yes	Y		3	1.2	2	1																
3	1.2D + 1.0Di + 1.0Wi(0)	Yes	Y		3	1.2	27	1	28	1														
4	1.2D + 1.5L + 1.0Wl(0)	Yes	Y		3	1.2	1	1.5	15	1														
5	1.2D + 1.0W(30)	Yes	Y		3	1.2	4	1																
6	1.2D + 1.0Di + 1.0Wi(30)	Yes	Y		3	1.2	27	1	29	1														
7	1.2D + 1.5L + 1.0Wl(30)	Yes	Y		3	1.2	1	1.5	16	1														
8	1.2D + 1.0W(60)	Yes	Y		3	1.2	5	1																
9	1.2D + 1.0Di + 1.0Wi(60)	Yes	Y		3	1.2	27	1	30	1														
10	1.2D + 1.5L + 1.0Wl(60)	Yes	Y		3	1.2	1	1.5	17	1														
11	1.2D + 1.0W(90)	Yes	Y		3	1.2	6	1																
12	1.2D + 1.0Di + 1.0Wi(90)	Yes	Y		3	1.2	27	1	31	1														
13	1.2D + 1.5L + 1.0Wl(90)	Yes	Y		3	1.2	1	1.5	18	1														
14	1.2D + 1.0W(120)	Yes	Y		3	1.2	7	1																
15	1.2D + 1.0Di + 1.0Wi(120)	Yes	Y		3	1.2	27	1	32	1														
16	1.2D + 1.5L + 1.0Wl(120)	Yes	Y		3	1.2	1	1.5	19	1														
17	1.2D + 1.0W(150)	Yes	Y		3	1.2	8	1																
18	1.2D + 1.0Di + 1.0Wi(150)	Yes	Y		3	1.2	27	1	33	1														
19	1.2D + 1.5L + 1.0Wl(150)	Yes	Y		3	1.2	1	1.5	20	1														
20	1.2D + 1.0W(180)	Yes	Y		3	1.2	9	1																
21	1.2D + 1.0Di + 1.0Wi(180)	Yes	Y		3	1.2	27	1	34	1														
22	1.2D + 1.5L + 1.0Wl(180)	Yes	Y		3	1.2	1	1.5	21	1														
23	1.2D + 1.0W(210)	Yes	Y		3	1.2	10	1																
24	1.2D + 1.0Di + 1.0Wi(210)	Yes	Y		3	1.2	27	1	35	1														
25	1.2D + 1.5L + 1.0Wl(210)	Yes	Y		3	1.2	1	1.5	22	1														
26	1.2D + 1.0W(240)	Yes	Y		3	1.2	11	1																
27	1.2D + 1.0Di + 1.0Wi(240)	Yes	Y		3	1.2	27	1	36	1														
28	1.2D + 1.5L + 1.0Wl(240)	Yes	Y		3	1.2	1	1.5	23	1														
29	1.2D + 1.0W(270)	Yes	Y		3	1.2	12	1																
30	1.2D + 1.0Di + 1.0Wi(270)	Yes	Y		3	1.2	27	1	37	1														
31	1.2D + 1.5L + 1.0Wl(270)	Yes	Y		3	1.2	1	1.5	24	1														
32	1.2D + 1.0W(300)	Yes	Y		3	1.2	13	1																
33	1.2D + 1.0Di + 1.0Wi(300)	Yes	Y		3	1.2	27	1	38	1														
34	1.2D + 1.5L + 1.0Wl(300)	Yes	Y		3	1.2	1	1.5	25	1														
35	1.2D + 1.0W(330)	Yes	Y		3	1.2	14	1																
36	1.2D + 1.0Di + 1.0Wi(330)	Yes	Y		3	1.2	27	1	39	1														
37	1.2D + 1.5L + 1.0Wl(330)	Yes	Y		3	1.2	1	1.5	26	1														
38	1.2D + 1.0E(x) + 1.0E(z) + L	Yes	Y		3	1.2	40	1	42	1	1	1												
39	1.2D + 1.0E(y) + 1.0E(z) + L	Yes	Y		3	1.2	41	1	42	1	1	1												
40	1.2D - 1.0E(x) + 1.0E(z) + L	Yes	Y		3	1.2	40	-1	42	1	1	1												
41	1.2D - 1.0E(y) + 1.0E(z) + L	Yes	Y		3	1.2	41	-1	42	1	1	1												

Envelope Joint Reactions

	Joint		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N35	max	.778	26	2.374	26	.036	27	0	41	0	41	0	41
2		min	-.794	8	-2.356	8	.012	8	0	1	0	1	0	1
3	N63A	max	.567	8	.239	8	1.561	27	-.274	23	.215	10	0	41
4		min	-1.199	25	-4.801	27	.54	8	-.891	6	-.21	26	0	1
5	N64A	max	1.465	8	4.917	3	2.457	9	-.449	17	.318	10	0	41
6		min	-1.52	26	-1.136	20	.852	26	-1.377	33	-.353	26	0	1
7	Totals:	max	1.238	8	2.227	2	4.05	33						
8		min	-1.238	26	-2.227	20	1.418	14						

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

	Member	Shape	Code Check	Lo...	LC	Shear Ch...	Lo...	...	LC	phi*...	phi*...	phi*...	phi*...	...	Eqn
1	VERT1	PIPE_2.0	.725	.7...	8	.226	0		26	27.9...	32.13	1.872	1.872	...	H1-...
2	MP ALPHA3	PIPE_2.0	.474	3....	20	.072	.5		26	14.9...	32.13	1.872	1.872	...	H1-...
3	KICKER4	PIPE_2.0	.391	0	33	.179	0		27	20.9...	32.13	1.872	1.872	...	H1-...
4	MP ALPHA2	PIPE_2.0	.341	3....	2	.063	3....		35	14.9...	32.13	1.872	1.872	...	H1-...
5	KICKER3	PIPE_2.0	.328	5....	9	.256	.4...		8	20.9...	32.13	1.872	1.872	...	H1-...
6	TOPFACE	PIPE_2.5	.322	6....	2	.188	2....		20	14.5...	50.7...	3.596	3.596	1	H1-...
7	KICKER2	PIPE_2.0	.305	0	27	.185	5....		36	20.9...	32.13	1.872	1.872	...	H1-...
8	MP 1	PIPE_2.0	.296	3....	20	.154	.5...		5	12.1...	32.13	1.872	1.872	...	H1-...
9	MP ALPHA5	PIPE_2.0	.241	3....	28	.044	3....		2	14.9...	32.13	1.872	1.872	...	H1-...
10	KICKER1	PIPE_2.0	.240	5....	25	.254	.4...		26	20.9...	32.13	1.872	1.872	...	H1-...
11	BOTTOMFACE	PIPE_2.5	.231	10...	27	.089	.6...		5	14.5...	50.7...	3.596	3.596	1	H1-...
12	MP ALPHA1	PIPE_2.0	.215	3....	2	.047	3....		23	14.9...	32.13	1.872	1.872	...	H1-...
13	MP ALPHA4	PIPE_2.0	.202	6....	2	.058	6....		23	14.9...	32.13	1.872	1.872	...	H1-...
14	VERT5	PIPE_1.25	.144	0	30	.026	0		23	14.69	19.6...	.801	.801	...	H1-...
15	DIAG1	PIPE_1.25	.136	0	8	.025	0		17	12.5...	19.6...	.801	.801	...	H1-...
16	VERT2	PIPE_1.25	.127	3....	9	.028	3....		26	14.69	19.6...	.801	.801	...	H1-...
17	TIEBACK	PIPE_2.0	.115	0	8	.004	5....		30	21.6...	32.13	1.872	1.872	...	H1-...
18	DIAG3	PIPE_1.25	.100	4....	33	.020	0		32	12.5...	19.6...	.801	.801	...	H1-...
19	DIAG2	PIPE_1.25	.099	4....	10	.033	4....		26	12.5...	19.6...	.801	.801	...	H1-...
20	DIAG4	PIPE_1.25	.086	4....	30	.026	0		23	12.5...	19.6...	.801	.801	...	H1-...
21	VERT3	PIPE_1.25	.084	0	9	.040	3....		32	14.69	19.6...	.801	.801	...	H1-...
22	VERT6	PIPE_2.0	.083	3....	35	.033	0		32	27.9...	32.13	1.872	1.872	...	H1-...
23	VERT4	PIPE_1.25	.058	0	27	.039	0		26	14.69	19.6...	.801	.801	...	H1-...

APPENDIX D

Additional Calculations (Alpha & Beta)

POD Job #	**20-64958**
Site Number	**806377**
Site Name	**HRT 084 943242**

Connection Type	Single Shear	
RISA 3D Forces		
Axial (Bolts)	2.683	kips
Shear (Bolts)	0.012	kips
Axial Force (Member)	2.683	kips
Bolt/Member Information		
Member Label	Diag3	
# of Bolts	1	
Diameter	0.5	inches
Bolt Grade	A325	
Member Grade	ASTM A53 Gr. B	
Threads Included?	Yes	
L_b	0	inches
L_c	1	inches
t	0.13	inches

Shear Capacity	**0.1%**
Axial Capacity	**21.0%**
Bearing Capacity	**35.8%**
Combined Capacity	**4.4%**

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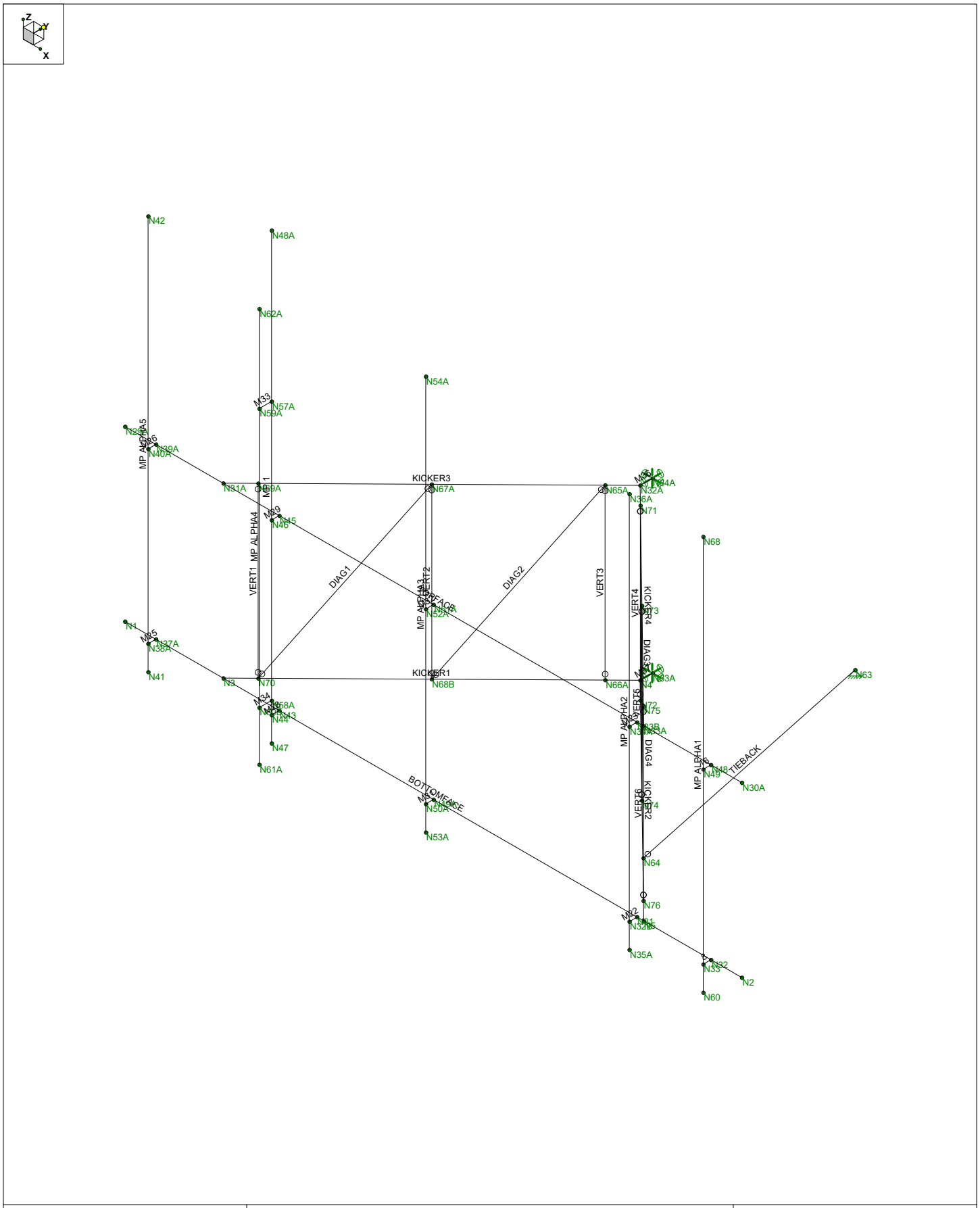
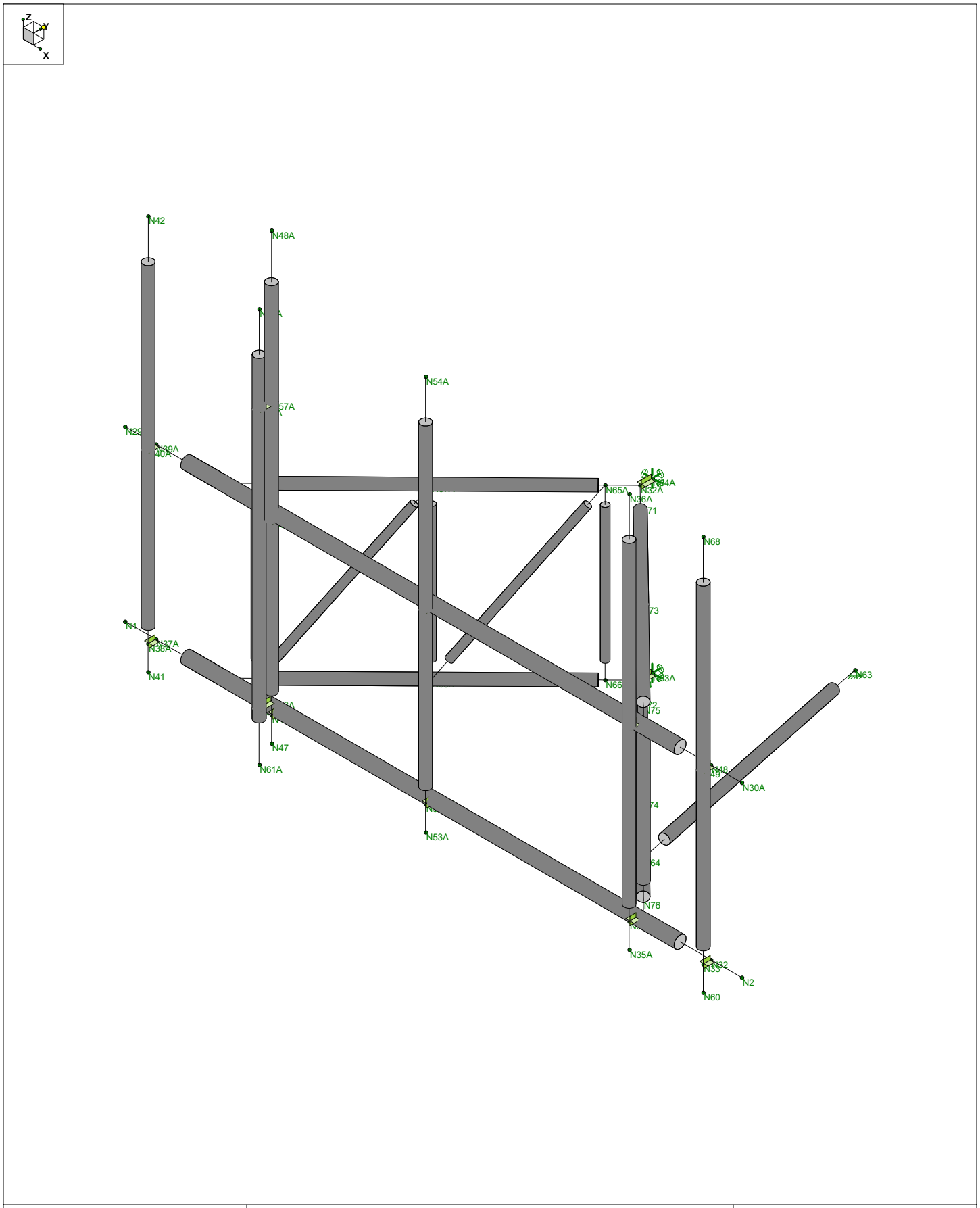
APPENDIX E

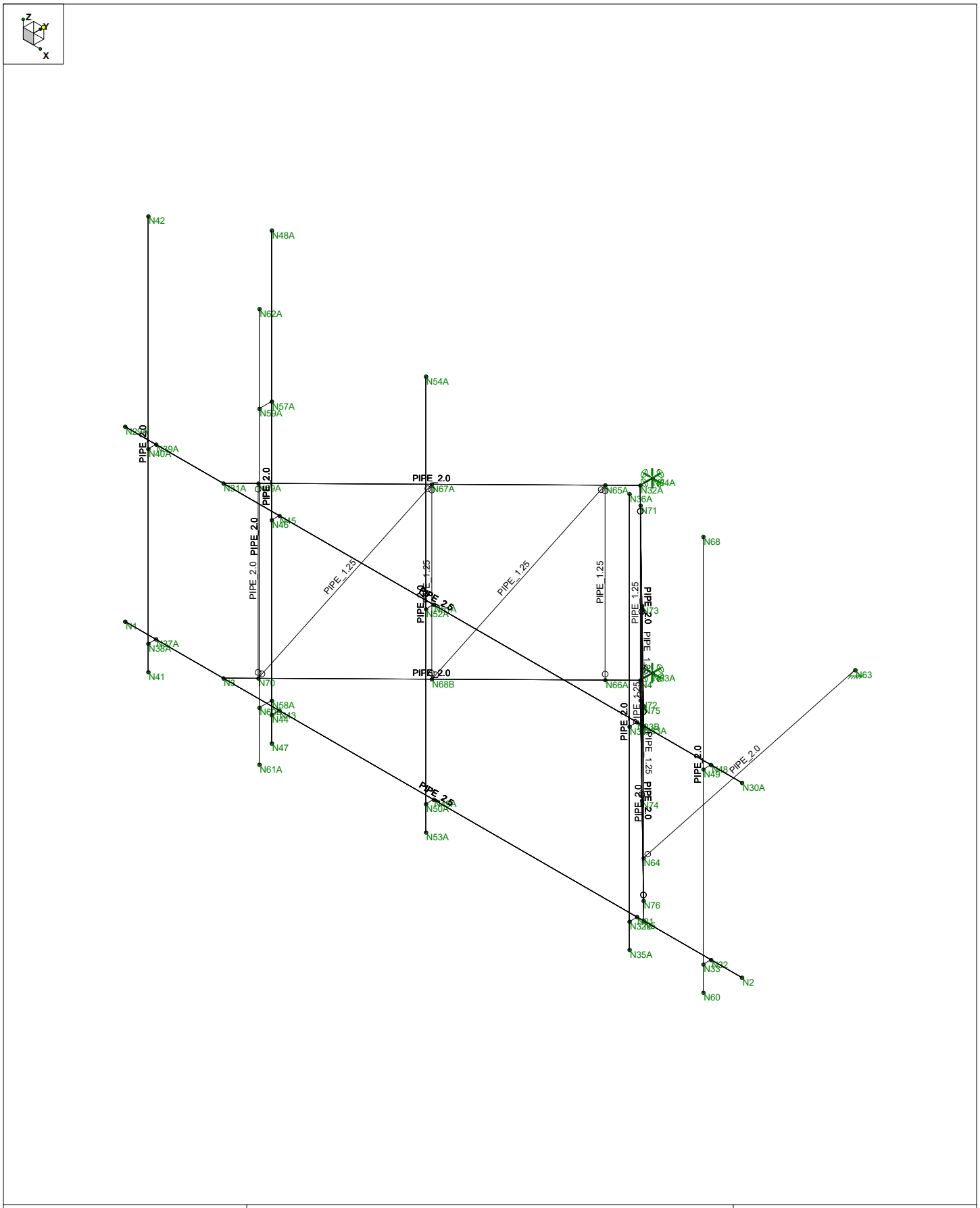
Wire Frame and Rendered Models (Gamma)



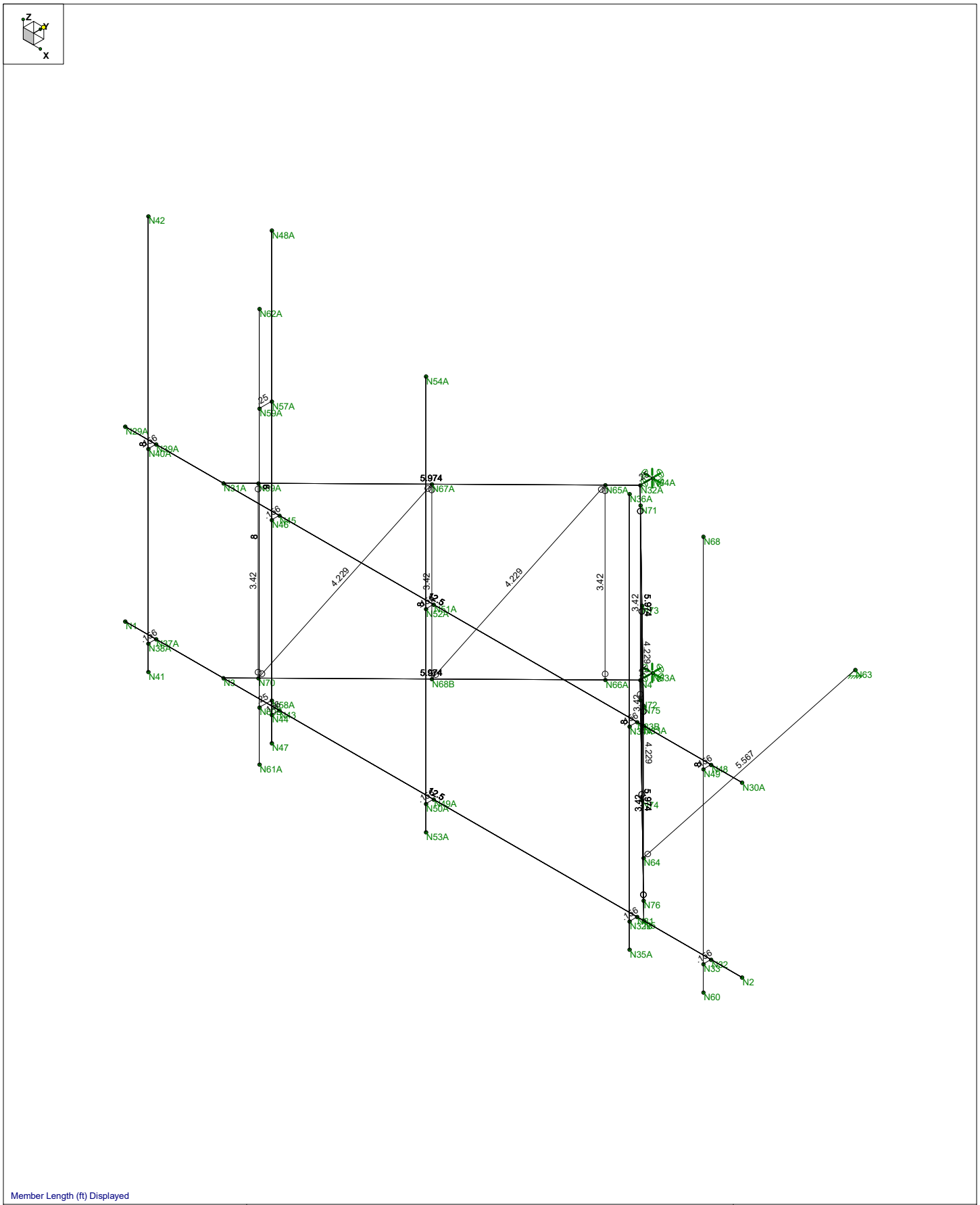
POD	806377	SK - 1
UT		June 5, 2020 at 5:02 PM
20-64958		(SF2) 20' Rohn Boom Gate Gamm...



POD	806377	SK - 2
UT		June 5, 2020 at 5:02 PM
20-64958		(SF2) 20' Rohn Boom Gate Gamm...

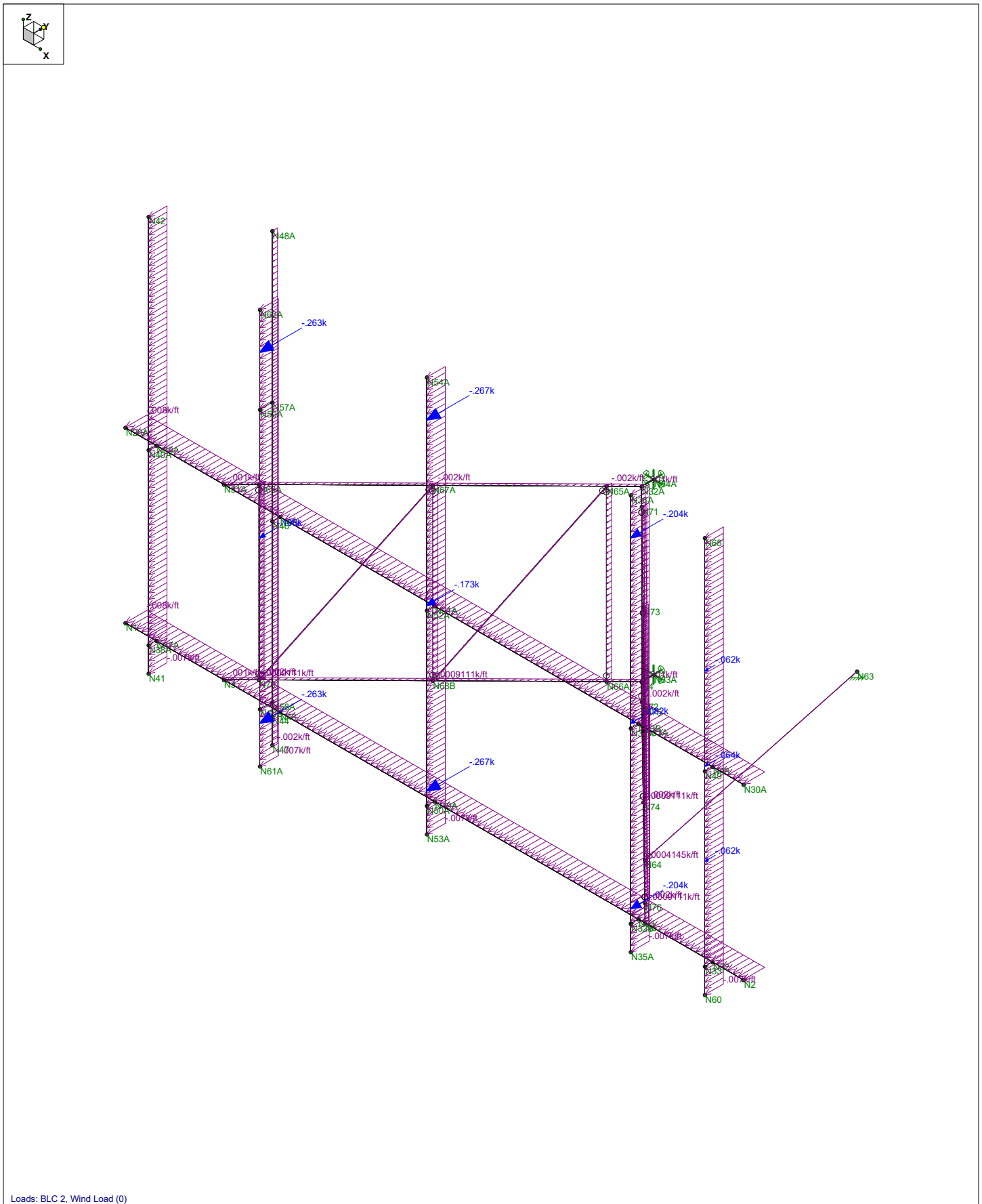


POD	806377	SK - 3
UT		June 5, 2020 at 5:03 PM
20-64958		(SF2) 20' Rohn Boom Gate Gamm...



Member Length (ft) Displayed

POD	806377	SK - 4
UT		June 5, 2020 at 5:03 PM
20-64958		(SF2) 20' Rohn Boom Gate Gamm...



Loads: BLC 2, Wind Load (0)

POD	806377	SK - 5
UT		June 5, 2020 at 5:03 PM
20-64958		(SF2) 20' Rohn Boom Gate Gamm...

APPENDIX F

Software Input Calculations (Gamma)

POD Job #	**20-64958**
Site Number	**806377**
Site Name	**HRT 084 943242**

General Site Information

Mount Type	MF	Risk Category	II	I (seismic)	1	
V (Wind Speed)	118	I(ice)	1	Sms	0.293	
Z_s	661			Sm1	0.132	
ti	1.5	Ss	0.183	Sds	0.195	
Vi	50	S1	0.055	Sd1	0.088	
Kzt	1	Soil Site Class	D	Seismic Design Category		
Exposure	B	Fa	1.600		B	
zg	1200	Fv	2.400	Seismic Analysis Not Required		
α	7			R	2	TIA-222-H 16.7
Kmin	0.7	Tower Type	Self Support	As	1	TIA-222-H 16.7
G_H	1	Tower Height	132.1	Cs, Min	0.03	TIA-222-H 2.7.7.1.1
Ke	0.98			Cs	0.0976	TIA-222-H 2.7.7.1.1
K_D	0.95					
K_a	0.9					

Appurtenance Information

Model	Shielded	% Shielded	Centerline	Centerline on MP	Spacing (in)	Azimuth	Sector	Quantity		MP #
HPA-65R-BUU-H8			106	4	78	0	A	1	2	
800 10121			106	4	40	0	A	1	1	
DMP65R-BU8D			106	4	78	0	A	1	4	
TPA65R-BU8D_CCIV2			106	4	78	0	A	1	3	
DTMABP7819VG12A			106	4	0	0	A	1	1	
RRUS 32 B30			106	4	0	0	A	1	2	
782-10250			106	4	0	0	A	2	1	
860 10025			106	4	0	0	A	2	1	
RRUS 32 B30			106	4	0	0	A	1	3	
RRUS 4449 B5/B12			106	4	0	0	A	1	4	
RRUS 4478 B14			106	4	0	0	A	1	3	
RRUS 8843 B2/B66A			106	4	0	0	A	1	4	
DC6-48-60-18-8F			106	4	0	0	A	1	3	

Mount Information

Elevation (ft)	104	Grating Thickness (in)	
K_z	1.00	Grating Ice Weight (k/ft²)	0.016
Kiz	1.12		
tiz	1.68		

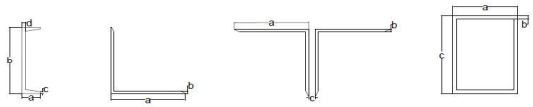
	Length (ft)	Width (in)	Centerline
Mount Pipes	8	2.375	104

Round Members

Member	Length (ft)	Width (in)	Frame Member	# of Members
Face	12.5	2.875	Yes	2
Kicker	4.789	2.375	No	4
Vertical	3.42	2.375	No	6
Diagonal	4	1.5	No	4
Tieback	6	2.375	No	1
Pipe	8	2.375	No	1

Flat Members

Member	Length (ft)	Width (in)	Shape	A	B	C	D	Frame Member	# of Members



Version 3.12

Appurtenance Wind Calculations

Model	Height	Width	Depth	Weight (lbs)	Kz	qz (lb/ft$_2$)	$(EPA)_N$ (ft^2)	$(EPA)_T$ (ft^2)	Wind Force (Kips) Front	Side	Alpha	Beta	Gamma
HPA-65R-BUU-H8	92.4	14.8	7.4	73.0	1.00	33.22	12.26	6.30	0.407	0.209	0.358	0.358	0.209
800 10121	54.5	10.3	5.9	51.2	1.00	33.22	3.74	2.17	0.124	0.072	0.111	0.111	0.072
DMP65R-BU8D	96.0	20.7	7.7	105.6	1.00	33.22	15.86	5.95	0.527	0.198	0.445	0.445	0.198
TPA65R-BU8D_CCIV2	96.0	20.7	7.7	87.1	1.00	33.22	16.08	7.31	0.534	0.243	0.461	0.461	0.243
DTMABP7819VG12A	10.6	11.0	3.8	19.2	1.00	33.22	0.88	0.30	0.029	0.010	0.024	0.024	0.010
RRUS 32 B30	27.2	12.1	7.0	53.0	1.00	33.22	2.47	1.50	0.082	0.050	0.074	0.074	0.050
782-10250	11.0	4.9	2.5	6.4	1.00	33.22	0.40	0.22	0.013	0.007	0.012	0.012	0.007

Appurtenance Ice Calculations

Model	tiz (in)	Height	Width	Depth	Weight (lbs)	Kiz	qz (lb/ft$_2$)	$(EPA)_N$ (ft^2)	$(EPA)_T$ (ft^2)	Wind Force (Kips) Front	Side	Alpha	Beta	Gamma
HPA-65R-BUU-H8	1.69	92.40	14.80	7.40	0.00	1.12	5.96	14.04	8.48	0.084	0.051	0.075	0.075	0.051
800 10121	1.69	54.50	10.30	5.90	0.00	1.12	5.96	4.75	3.24	0.028	0.019	0.026	0.026	0.019
DMP65R-BU8D	1.69	96.00	20.70	7.70	0.00	1.12	5.96	17.19	7.95	0.103	0.047	0.089	0.089	0.047
TPA65R-BU8D_CCIV2	1.69	96.00	20.70	7.70	0.00	1.12	5.96	11.01	5.81	0.066	0.035	0.058	0.058	0.035
DTMABP7819VG12A	1.69	10.63	11.02	3.78	0.00	1.12	5.96	0.89	0.44	0.005	0.003	0.005	0.005	0.003
RRUS 32 B30	1.69	27.20	12.10	7.00	0.00	1.12	5.96	2.07	1.41	0.012	0.008	0.011	0.011	0.008
782-10250	1.69	11.00	4.90	2.50	0.00	1.12	5.96	0.52	0.37	0.003	0.002	0.003	0.003	0.002
860 10025	1.69	7.00	2.30	1.90	0.00	1.12	5.96	0.26	0.24	0.002	0.001	0.002	0.002	0.001
RRUS 32 B30	1.69	27.20	12.10	7.00	0.00	1.12	5.96	2.07	1.41	0.012	0.008	0.011	0.011	0.008
RRUS 4449 B5/B12	1.69	17.90	13.19	9.44	0.00	1.12	5.96	1.55	1.20	0.009	0.007	0.009	0.009	0.007
RRUS 4478 B14	1.69	16.50	13.40	7.70	0.00	1.12	5.96	1.46	0.97	0.009	0.006	0.008	0.008	0.006
RRUS 8843 B2/B66A	1.69	14.90	13.20	10.90	0.00	1.12	5.96	1.33	1.14	0.008	0.007	0.008	0.008	0.007
DC6-48-60-18-8F	1.69	31.25	11.00	11.00	0.00	1.12	5.96	1.52	1.52	0.009	0.009	0.009	0.009	0.009

Round Members

Member	q_z (lb/ft^2)	Wind Calculations Ar	C	Rrf	Cas	EPA (ft^2)	Load (k/ft)	Width (in)	Weight (k/ft)	q_z (lb/ft^2)	Ice Calculations Arice	Rrfice	Cas	EPA (ft^2)	Load (k/ft)
Face	33.04	5.99	27.93	0.60	1.88	3.06	0.008	6.24	0.01	5.93	13.00	0.62	1.88	6.78	0.003
Kicker	33.04	3.79	23.07	0.60	1.20	0.62	0.002	5.74	0.01	5.93	9.16	0.62	1.20	1.52	0.001
Vertical	33.04	4.06	23.07	0.60	1.20	0.44	0.002	5.74	0.01	5.93	9.82	0.62	1.20	1.09	0.001
Diagonal	33.04	2.00	14.57	0.60	1.20	0.33	0.001	4.86	0.01	5.93	6.49	0.62	1.20	1.08	0.001
Tieback	33.04	1.19	23.07	0.60	1.20	0.77	0.002	5.74	0.01	5.93	2.87	0.62	1.20	1.91	0.001
Pipe	33.04	1.58	23.07	0.60	1.20	1.03	0.002	5.74	0.01	5.93	3.83	0.62	1.20	2.55	0.001

Appurtenance Seismic Calculations

Model	Weight	Sds	ρ	Cs	As	Ev	Eh
HPA-65R-BUU-H8	73.0	0.195	1.000	0.098	1.000	0.003	0.007
800 10121	51.2	0.195	1.000	0.098	1.000	0.002	0.005
DMP65R-BU8D	105.6	0.195	1.000	0.098	1.000	0.004	0.010
TPA65R-BU8D_CCIV2	87.1	0.195	1.000	0.098	1.000	0.003	0.009
DTMABP7819VG12A	19.2	0.195	1.000	0.098	1.000	0.001	0.002
RRUS 32 B30	53.0	0.195	1.000	0.098	1.000	0.002	0.005
782-10250	6.4	0.195	1.000	0.098	1.000	0.000	0.001
860 10025	1.2	0.195	1.000	0.098	1.000	0.000	0.000
RRUS 32 B30	53.0	0.195	1.000	0.098	1.000	0.002	0.005
RRUS 4449 B5/B12	71.0	0.195	1.000	0.098	1.000	0.003	0.007
RRUS 4478 B14	59.9	0.195	1.000	0.098	1.000	0.002	0.006
RRUS 8843 B2/B66A	72.0	0.195	1.000	0.098	1.000	0.003	0.007
DC6-48-60-18-8F	32.8	0.195	1.000	0.098	1.000	0.001	0.003

Version 3.12

APPENDIX G

Software Analysis Output (Gamma)

Hot Rolled Steel Design Parameters

	Label	Shape	Length[...	Lbyy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kyy	Kzz	Cb	Function
1	TOPFACE	PIPE_2.5	12.5	8.83		Lbyy						Lateral
2	BOTTOM...	PIPE_2.5	12.5	8.83		Lbyy						Lateral
3	KICKER1	PIPE_2.0	4.789		2.42	Lbyy						Lateral
4	KICKER2	PIPE_2.0	4.789		2.42	Lbyy						Lateral
5	KICKER3	PIPE_2.0	4.789		2.42	Lbyy						Lateral
6	KICKER4	PIPE_2.0	4.789		2.42	Lbyy						Lateral
7	VERT1	PIPE_2.0	3.42			Lbyy						Lateral
8	VERT2	PIPE_1.25	3.42			Lbyy						Lateral
9	VERT3	PIPE_1.25	3.42			Lbyy						Lateral
10	VERT4	PIPE_1.25	3.42			Lbyy						Lateral
11	VERT5	PIPE_1.25	3.42			Lbyy						Lateral
12	VERT6	PIPE_2.0	3.42			Lbyy						Lateral
13	DIAG1	PIPE_1.25	3.786			Lbyy						Lateral
14	DIAG2	PIPE_1.25	4.026			Lbyy						Lateral
15	DIAG3	PIPE_1.25	4.026			Lbyy						Lateral
16	DIAG4	PIPE_1.25	3.786			Lbyy						Lateral
17	TIEBACK	PIPE_2.0	5.831			Lbyy						Lateral
18	MP ALPH...	PIPE_2.0	8			Lbyy						Lateral
19	MP ALPH...	PIPE_2.0	8			Lbyy						Lateral
20	MP ALPH...	PIPE_2.0	8			Lbyy						Lateral
21	MP 1	PIPE_2.0	9			Lbyy						Lateral
22	MP ALPH...	PIPE_2.0	8			Lbyy						Lateral
23	MP ALPH...	PIPE_2.0	8			Lbyy						Lateral

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design R...
1	TOPFACE	N29A	N30A			PIPE_2.5	Beam	Pipe	A53 Gr.B	Typical
2	BOTTOMF...	N1	N2			PIPE_2.5	Beam	Pipe	A53 Gr.B	Typical
3	KICKER1	N3	N4			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
4	KICKER2	N4	N5			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
5	KICKER3	N31A	N32A			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
6	KICKER4	N32A	N33A			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
7	VERT1	N56A	N55A		308	PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
8	VERT2	N62	N61		308	PIPE_1.25	Beam	Pipe	A53 Gr.B	Typical
9	VERT3	N60A	N59		308	PIPE_1.25	Beam	Pipe	A53 Gr.B	Typical
10	VERT4	N66	N65		52	PIPE_1.25	Beam	Pipe	A53 Gr.B	Typical
11	VERT5	N68A	N67		52	PIPE_1.25	Beam	Pipe	A53 Gr.B	Typical
12	VERT6	N64	N63		52	PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
13	DIAG1	N56A	N61		303	PIPE_1.25	Beam	Pipe	A53 Gr.B	Typical
14	DIAG2	N62	N59		303	PIPE_1.25	Beam	Pipe	A53 Gr.B	Typical
15	DIAG3	N68A	N65		57	PIPE_1.25	Beam	Pipe	A53 Gr.B	Typical
16	DIAG4	N64	N67		57	PIPE_1.25	Beam	Pipe	A53 Gr.B	Typical
17	TIEBACK	N69	N35			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
18	MP ALPHA1	N60	N68			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
19	8	N32	N33			RIGID	None	None	RIGID	Typical
20	16	N48	N49			RIGID	None	None	RIGID	Typical
21	MP ALPHA2	N35A	N36A			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
22	M22	N31	N32B			RIGID	None	None	RIGID	Typical
23	M23	N33B	N34A			RIGID	None	None	RIGID	Typical
24	MP ALPHA5	N41	N42			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
25	M25	N37A	N38A			RIGID	None	None	RIGID	Typical
26	M26	N39A	N40A			RIGID	None	None	RIGID	Typical
27	MP 1	N47	N48A			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
28	M28	N43	N44			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design R...
29	M29	N45	N46			RIGID	None	None	RIGID	Typical
30	MP ALPHA3	N53A	N54A			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
31	M31	N49A	N50A			RIGID	None	None	RIGID	Typical
32	M32	N51A	N52A			RIGID	None	None	RIGID	Typical
33	M33	N59A	N57A			RIGID	None	None	RIGID	Typical
34	M34	N60B	N58A			RIGID	None	None	RIGID	Typical
35	MP ALPHA4	N61A	N62A			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Ratio Options	Analysis...	Inactive	Seismi...
1	TOPFACE						Yes	Default			None
2	BOTTOM...						Yes	Default			None
3	KICKER1						Yes	Default			None
4	KICKER2						Yes	Default			None
5	KICKER3						Yes	Default			None
6	KICKER4						Yes	Default			None
7	VERT1	OOOOOX	OOOOOX				Yes				None
8	VERT2	OOOOOX	OOOOOX				Yes				None
9	VERT3	OOOOOX	OOOOOX				Yes				None
10	VERT4	OOOOOX	OOOOOX				Yes				None
11	VERT5	OOOOOX	OOOOOX				Yes				None
12	VERT6	OOOOOX	OOOOOX				Yes				None
13	DIAG1	OOOOOX	OOOOOX				Yes				None
14	DIAG2	OOOOOX	OOOOOX				Yes				None
15	DIAG3	OOOOOX	OOOOOX				Yes				None
16	DIAG4	OOOOOX	OOOOOX				Yes				None
17	TIEBACK	BenPIN					Yes				None
18	MP ALP...						Yes				None
19	8						Yes	** NA **			None
20	16						Yes	** NA **			None
21	MP ALP...						Yes				None
22	M22						Yes	** NA **			None
23	M23						Yes	** NA **			None
24	MP ALP...						Yes				None
25	M25						Yes	** NA **			None
26	M26						Yes	** NA **			None
27	MP 1						Yes				None
28	M28						Yes	** NA **			None
29	M29						Yes	** NA **			None
30	MP ALP...						Yes				None
31	M31						Yes	** NA **			None
32	M32						Yes	** NA **			None
33	M33						Yes	** NA **			None
34	M34						Yes	** NA **			None
35	MP ALP...						Yes				None

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/1E...	Density[k...	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A992	29000	11154	.3	.65	.49	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	.3	.65	.527	42	1.4	58	1.3
5	A500 Gr.B Rect	29000	11154	.3	.65	.527	46	1.4	58	1.3
6	A53 Gr.B	29000	11154	.3	.65	.49	35	1.6	60	1.2

Hot Rolled Steel Properties (Continued)

	Label	E [ksi]	G [ksi]	Nu	Therm (/1E...	Density[k...	Yield[ksi]	Ry	Fu[ksi]	Rt
7	A1085	29000	11154	.3	.65	.49	50	1.4	65	1.3

Member Point Loads (BLC 1 : Live Load)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	TOPFACE	Z	-.5	0

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.204	7.25
2	MP ALPHA2	Y	-.204	.75
3	MP ALPHA1	Y	-.062	5.667
4	MP ALPHA1	Y	-.062	2.333
5	MP ALPHA4	Y	-.263	7.25
6	MP ALPHA4	Y	-.263	.75
7	MP ALPHA3	Y	-.267	7.25
8	MP ALPHA3	Y	-.267	.75
9	MP ALPHA1	Y	-.029	4
10	MP ALPHA2	Y	-.082	4
11	MP ALPHA1	Y	-.027	4
12	MP ALPHA1	Y	-.008	4
13	MP ALPHA3	Y	-.082	4
14	MP ALPHA4	Y	-.059	4
15	MP ALPHA3	Y	-.055	4
16	MP ALPHA4	Y	-.049	4
17	MP ALPHA3	Y	-.036	4

Member Point Loads (BLC 3 : Dead Load)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Z	-.036	7.25
2	MP ALPHA2	Z	-.036	.75
3	MP ALPHA1	Z	-.026	5.667
4	MP ALPHA1	Z	-.026	2.333
5	MP ALPHA4	Z	-.053	7.25
6	MP ALPHA4	Z	-.053	.75
7	MP ALPHA3	Z	-.044	7.25
8	MP ALPHA3	Z	-.044	.75
9	MP ALPHA1	Z	-.019	4
10	MP ALPHA2	Z	-.053	4
11	MP ALPHA1	Z	-.013	4
12	MP ALPHA1	Z	-.002	4
13	MP ALPHA3	Z	-.053	4
14	MP ALPHA4	Z	-.071	4
15	MP ALPHA3	Z	-.06	4
16	MP ALPHA4	Z	-.072	4
17	MP ALPHA3	Z	-.033	4

Member Point Loads (BLC 4 : Wind Load (30))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.155	7.25
2	MP ALPHA2	Y	-.155	.75
3	MP ALPHA2	X	-.089	7.25
4	MP ALPHA2	X	-.089	.75
5	MP ALPHA1	Y	-.048	5.667
6	MP ALPHA1	Y	-.048	2.333

Member Point Loads (BLC 4 : Wind Load (30)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
7	MP ALPHA1	X	-.028	5.667
8	MP ALPHA1	X	-.028	2.333
9	MP ALPHA4	Y	-.193	7.25
10	MP ALPHA4	Y	-.193	.75
11	MP ALPHA4	X	-.111	7.25
12	MP ALPHA4	X	-.111	.75
13	MP ALPHA3	Y	-.2	7.25
14	MP ALPHA3	Y	-.2	.75
15	MP ALPHA3	X	-.115	7.25
16	MP ALPHA3	X	-.115	.75
17	MP ALPHA1	Y	-.021	4
18	MP ALPHA1	X	-.012	4
19	MP ALPHA2	Y	-.064	4
20	MP ALPHA2	X	-.037	4
21	MP ALPHA1	Y	-.021	4
22	MP ALPHA1	X	-.012	4
23	MP ALPHA1	Y	-.007	4
24	MP ALPHA1	X	-.004	4
25	MP ALPHA3	Y	-.064	4
26	MP ALPHA3	X	-.037	4
27	MP ALPHA4	Y	-.047	4
28	MP ALPHA4	X	-.027	4
29	MP ALPHA3	Y	-.043	4
30	MP ALPHA3	X	-.025	4
31	MP ALPHA4	Y	-.041	4
32	MP ALPHA4	X	-.023	4
33	MP ALPHA3	Y	-.032	4
34	MP ALPHA3	X	-.019	4

Member Point Loads (BLC 5 : Wind Load (60))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.065	7.25
2	MP ALPHA2	Y	-.065	.75
3	MP ALPHA2	X	-.112	7.25
4	MP ALPHA2	X	-.112	.75
5	MP ALPHA1	Y	-.021	5.667
6	MP ALPHA1	Y	-.021	2.333
7	MP ALPHA1	X	-.037	5.667
8	MP ALPHA1	X	-.037	2.333
9	MP ALPHA4	Y	-.07	7.25
10	MP ALPHA4	Y	-.07	.75
11	MP ALPHA4	X	-.121	7.25
12	MP ALPHA4	X	-.121	.75
13	MP ALPHA3	Y	-.079	7.25
14	MP ALPHA3	Y	-.079	.75
15	MP ALPHA3	X	-.137	7.25
16	MP ALPHA3	X	-.137	.75
17	MP ALPHA1	Y	-.007	4
18	MP ALPHA1	X	-.013	4
19	MP ALPHA2	Y	-.029	4
20	MP ALPHA2	X	-.05	4
21	MP ALPHA1	Y	-.009	4
22	MP ALPHA1	X	-.015	4
23	MP ALPHA1	Y	-.004	4
24	MP ALPHA1	X	-.006	4
25	MP ALPHA3	Y	-.029	4

Member Point Loads (BLC 5 : Wind Load (60)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
26	MP ALPHA3	X	-.05	4
27	MP ALPHA4	Y	-.023	4
28	MP ALPHA4	X	-.04	4
29	MP ALPHA3	Y	-.019	4
30	MP ALPHA3	X	-.032	4
31	MP ALPHA4	Y	-.021	4
32	MP ALPHA4	X	-.037	4
33	MP ALPHA3	Y	-.02	4
34	MP ALPHA3	X	-.034	4

Member Point Loads (BLC 6 : Wind Load (90))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	X	-.105	7.25
2	MP ALPHA2	X	-.105	.75
3	MP ALPHA1	X	-.036	5.667
4	MP ALPHA1	X	-.036	2.333
5	MP ALPHA4	X	-.099	7.25
6	MP ALPHA4	X	-.099	.75
7	MP ALPHA3	X	-.121	7.25
8	MP ALPHA3	X	-.121	.75
9	MP ALPHA1	X	-.01	4
10	MP ALPHA2	X	-.05	4
11	MP ALPHA1	X	-.015	4
12	MP ALPHA1	X	-.007	4
13	MP ALPHA3	X	-.05	4
14	MP ALPHA4	X	-.042	4
15	MP ALPHA3	X	-.032	4
16	MP ALPHA4	X	-.04	4
17	MP ALPHA3	X	-.04	4

Member Point Loads (BLC 7 : Wind Load (120))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.065	7.25
2	MP ALPHA2	Y	.065	.75
3	MP ALPHA2	X	-.112	7.25
4	MP ALPHA2	X	-.112	.75
5	MP ALPHA1	Y	.021	5.667
6	MP ALPHA1	Y	.021	2.333
7	MP ALPHA1	X	-.037	5.667
8	MP ALPHA1	X	-.037	2.333
9	MP ALPHA4	Y	.07	7.25
10	MP ALPHA4	Y	.07	.75
11	MP ALPHA4	X	-.121	7.25
12	MP ALPHA4	X	-.121	.75
13	MP ALPHA3	Y	.079	7.25
14	MP ALPHA3	Y	.079	.75
15	MP ALPHA3	X	-.137	7.25
16	MP ALPHA3	X	-.137	.75
17	MP ALPHA1	Y	.007	4
18	MP ALPHA1	X	-.013	4
19	MP ALPHA2	Y	.029	4
20	MP ALPHA2	X	-.05	4
21	MP ALPHA1	Y	.009	4
22	MP ALPHA1	X	-.015	4
23	MP ALPHA1	Y	.004	4
24	MP ALPHA1	X	-.006	4

Member Point Loads (BLC 7 : Wind Load (120)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
25	MP ALPHA3	Y	.029	4
26	MP ALPHA3	X	-.05	4
27	MP ALPHA4	Y	.023	4
28	MP ALPHA4	X	-.04	4
29	MP ALPHA3	Y	.019	4
30	MP ALPHA3	X	-.032	4
31	MP ALPHA4	Y	.021	4
32	MP ALPHA4	X	-.037	4
33	MP ALPHA3	Y	.02	4
34	MP ALPHA3	X	-.034	4

Member Point Loads (BLC 8 : Wind Load (150))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.155	7.25
2	MP ALPHA2	Y	.155	.75
3	MP ALPHA2	X	-.089	7.25
4	MP ALPHA2	X	-.089	.75
5	MP ALPHA1	Y	.048	5.667
6	MP ALPHA1	Y	.048	2.333
7	MP ALPHA1	X	-.028	5.667
8	MP ALPHA1	X	-.028	2.333
9	MP ALPHA4	Y	.193	7.25
10	MP ALPHA4	Y	.193	.75
11	MP ALPHA4	X	-.111	7.25
12	MP ALPHA4	X	-.111	.75
13	MP ALPHA3	Y	.2	7.25
14	MP ALPHA3	Y	.2	.75
15	MP ALPHA3	X	-.115	7.25
16	MP ALPHA3	X	-.115	.75
17	MP ALPHA1	Y	.021	4
18	MP ALPHA1	X	-.012	4
19	MP ALPHA2	Y	.064	4
20	MP ALPHA2	X	-.037	4
21	MP ALPHA1	Y	.021	4
22	MP ALPHA1	X	-.012	4
23	MP ALPHA1	Y	.007	4
24	MP ALPHA1	X	-.004	4
25	MP ALPHA3	Y	.064	4
26	MP ALPHA3	X	-.037	4
27	MP ALPHA4	Y	.047	4
28	MP ALPHA4	X	-.027	4
29	MP ALPHA3	Y	.043	4
30	MP ALPHA3	X	-.025	4
31	MP ALPHA4	Y	.041	4
32	MP ALPHA4	X	-.023	4
33	MP ALPHA3	Y	.032	4
34	MP ALPHA3	X	-.019	4

Member Point Loads (BLC 9 : Wind Load (180))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.204	7.25
2	MP ALPHA2	Y	.204	.75
3	MP ALPHA1	Y	.062	5.667
4	MP ALPHA1	Y	.062	2.333
5	MP ALPHA4	Y	.263	7.25
6	MP ALPHA4	Y	.263	.75

Member Point Loads (BLC 9 : Wind Load (180)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
7	MP ALPHA3	Y	.267	7.25
8	MP ALPHA3	Y	.267	.75
9	MP ALPHA1	Y	.029	4
10	MP ALPHA2	Y	.082	4
11	MP ALPHA1	Y	.027	4
12	MP ALPHA1	Y	.008	4
13	MP ALPHA3	Y	.082	4
14	MP ALPHA4	Y	.059	4
15	MP ALPHA3	Y	.055	4
16	MP ALPHA4	Y	.049	4
17	MP ALPHA3	Y	.036	4

Member Point Loads (BLC 10 : Wind Load (210))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.155	7.25
2	MP ALPHA2	Y	.155	.75
3	MP ALPHA2	X	.089	7.25
4	MP ALPHA2	X	.089	.75
5	MP ALPHA1	Y	.048	5.667
6	MP ALPHA1	Y	.048	2.333
7	MP ALPHA1	X	.028	5.667
8	MP ALPHA1	X	.028	2.333
9	MP ALPHA4	Y	.193	7.25
10	MP ALPHA4	Y	.193	.75
11	MP ALPHA4	X	.111	7.25
12	MP ALPHA4	X	.111	.75
13	MP ALPHA3	Y	.2	7.25
14	MP ALPHA3	Y	.2	.75
15	MP ALPHA3	X	.115	7.25
16	MP ALPHA3	X	.115	.75
17	MP ALPHA1	Y	.021	4
18	MP ALPHA1	X	.012	4
19	MP ALPHA2	Y	.064	4
20	MP ALPHA2	X	.037	4
21	MP ALPHA1	Y	.021	4
22	MP ALPHA1	X	.012	4
23	MP ALPHA1	Y	.007	4
24	MP ALPHA1	X	.004	4
25	MP ALPHA3	Y	.064	4
26	MP ALPHA3	X	.037	4
27	MP ALPHA4	Y	.047	4
28	MP ALPHA4	X	.027	4
29	MP ALPHA3	Y	.043	4
30	MP ALPHA3	X	.025	4
31	MP ALPHA4	Y	.041	4
32	MP ALPHA4	X	.023	4
33	MP ALPHA3	Y	.032	4
34	MP ALPHA3	X	.019	4

Member Point Loads (BLC 11 : Wind Load (240))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.065	7.25
2	MP ALPHA2	Y	.065	.75
3	MP ALPHA2	X	.112	7.25
4	MP ALPHA2	X	.112	.75
5	MP ALPHA1	Y	.021	5.667

Member Point Loads (BLC 11 : Wind Load (240)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
6	MP ALPHA1	Y	.021	2.333
7	MP ALPHA1	X	.037	5.667
8	MP ALPHA1	X	.037	2.333
9	MP ALPHA4	Y	.07	7.25
10	MP ALPHA4	Y	.07	.75
11	MP ALPHA4	X	.121	7.25
12	MP ALPHA4	X	.121	.75
13	MP ALPHA3	Y	.079	7.25
14	MP ALPHA3	Y	.079	.75
15	MP ALPHA3	X	.137	7.25
16	MP ALPHA3	X	.137	.75
17	MP ALPHA1	Y	.007	4
18	MP ALPHA1	X	.013	4
19	MP ALPHA2	Y	.029	4
20	MP ALPHA2	X	.05	4
21	MP ALPHA1	Y	.009	4
22	MP ALPHA1	X	.015	4
23	MP ALPHA1	Y	.004	4
24	MP ALPHA1	X	.006	4
25	MP ALPHA3	Y	.029	4
26	MP ALPHA3	X	.05	4
27	MP ALPHA4	Y	.023	4
28	MP ALPHA4	X	.04	4
29	MP ALPHA3	Y	.019	4
30	MP ALPHA3	X	.032	4
31	MP ALPHA4	Y	.021	4
32	MP ALPHA4	X	.037	4
33	MP ALPHA3	Y	.02	4
34	MP ALPHA3	X	.034	4

Member Point Loads (BLC 12 : Wind Load (270))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	X	.105	7.25
2	MP ALPHA2	X	.105	.75
3	MP ALPHA1	X	.036	5.667
4	MP ALPHA1	X	.036	2.333
5	MP ALPHA4	X	.099	7.25
6	MP ALPHA4	X	.099	.75
7	MP ALPHA3	X	.121	7.25
8	MP ALPHA3	X	.121	.75
9	MP ALPHA1	X	.01	4
10	MP ALPHA2	X	.05	4
11	MP ALPHA1	X	.015	4
12	MP ALPHA1	X	.007	4
13	MP ALPHA3	X	.05	4
14	MP ALPHA4	X	.042	4
15	MP ALPHA3	X	.032	4
16	MP ALPHA4	X	.04	4
17	MP ALPHA3	X	.04	4

Member Point Loads (BLC 13 : Wind Load (300))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.065	7.25
2	MP ALPHA2	Y	-.065	.75
3	MP ALPHA2	X	.112	7.25
4	MP ALPHA2	X	.112	.75

Member Point Loads (BLC 13 : Wind Load (300)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
5	MP ALPHA1	Y	-.021	5.667
6	MP ALPHA1	Y	-.021	2.333
7	MP ALPHA1	X	.037	5.667
8	MP ALPHA1	X	.037	2.333
9	MP ALPHA4	Y	-.07	7.25
10	MP ALPHA4	Y	-.07	.75
11	MP ALPHA4	X	.121	7.25
12	MP ALPHA4	X	.121	.75
13	MP ALPHA3	Y	-.079	7.25
14	MP ALPHA3	Y	-.079	.75
15	MP ALPHA3	X	.137	7.25
16	MP ALPHA3	X	.137	.75
17	MP ALPHA1	Y	-.007	4
18	MP ALPHA1	X	.013	4
19	MP ALPHA2	Y	-.029	4
20	MP ALPHA2	X	.05	4
21	MP ALPHA1	Y	-.009	4
22	MP ALPHA1	X	.015	4
23	MP ALPHA1	Y	-.004	4
24	MP ALPHA1	X	.006	4
25	MP ALPHA3	Y	-.029	4
26	MP ALPHA3	X	.05	4
27	MP ALPHA4	Y	-.023	4
28	MP ALPHA4	X	.04	4
29	MP ALPHA3	Y	-.019	4
30	MP ALPHA3	X	.032	4
31	MP ALPHA4	Y	-.021	4
32	MP ALPHA4	X	.037	4
33	MP ALPHA3	Y	-.02	4
34	MP ALPHA3	X	.034	4

Member Point Loads (BLC 14 : Wind Load (330))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.155	7.25
2	MP ALPHA2	Y	-.155	.75
3	MP ALPHA2	X	.089	7.25
4	MP ALPHA2	X	.089	.75
5	MP ALPHA1	Y	-.048	5.667
6	MP ALPHA1	Y	-.048	2.333
7	MP ALPHA1	X	.028	5.667
8	MP ALPHA1	X	.028	2.333
9	MP ALPHA4	Y	-.193	7.25
10	MP ALPHA4	Y	-.193	.75
11	MP ALPHA4	X	.111	7.25
12	MP ALPHA4	X	.111	.75
13	MP ALPHA3	Y	-.2	7.25
14	MP ALPHA3	Y	-.2	.75
15	MP ALPHA3	X	.115	7.25
16	MP ALPHA3	X	.115	.75
17	MP ALPHA1	Y	-.021	4
18	MP ALPHA1	X	.012	4
19	MP ALPHA2	Y	-.064	4
20	MP ALPHA2	X	.037	4
21	MP ALPHA1	Y	-.021	4
22	MP ALPHA1	X	.012	4
23	MP ALPHA1	Y	-.007	4

Member Point Loads (BLC 14 : Wind Load (330)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
24	MP ALPHA1	X	.004	4
25	MP ALPHA3	Y	-.064	4
26	MP ALPHA3	X	.037	4
27	MP ALPHA4	Y	-.047	4
28	MP ALPHA4	X	.027	4
29	MP ALPHA3	Y	-.043	4
30	MP ALPHA3	X	.025	4
31	MP ALPHA4	Y	-.041	4
32	MP ALPHA4	X	.023	4
33	MP ALPHA3	Y	-.032	4
34	MP ALPHA3	X	.019	4

Member Point Loads (BLC 15 : Maintanence (0))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.013	7.25
2	MP ALPHA2	Y	-.013	.75
3	MP ALPHA1	Y	-.004	5.667
4	MP ALPHA1	Y	-.004	2.333
5	MP ALPHA4	Y	-.017	7.25
6	MP ALPHA4	Y	-.017	.75
7	MP ALPHA3	Y	-.017	7.25
8	MP ALPHA3	Y	-.017	.75
9	MP ALPHA1	Y	-.002	4
10	MP ALPHA2	Y	-.005	4
11	MP ALPHA1	Y	-.002	4
12	MP ALPHA1	Y	-.000529	4
13	MP ALPHA3	Y	-.005	4
14	MP ALPHA4	Y	-.004	4
15	MP ALPHA3	Y	-.004	4
16	MP ALPHA4	Y	-.003	4
17	MP ALPHA3	Y	-.002	4

Member Point Loads (BLC 16 : Maintanence (30))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.01	7.25
2	MP ALPHA2	Y	-.01	.75
3	MP ALPHA2	X	-.006	7.25
4	MP ALPHA2	X	-.006	.75
5	MP ALPHA1	Y	-.003	5.667
6	MP ALPHA1	Y	-.003	2.333
7	MP ALPHA1	X	-.002	5.667
8	MP ALPHA1	X	-.002	2.333
9	MP ALPHA4	Y	-.012	7.25
10	MP ALPHA4	Y	-.012	.75
11	MP ALPHA4	X	-.007	7.25
12	MP ALPHA4	X	-.007	.75
13	MP ALPHA3	Y	-.013	7.25
14	MP ALPHA3	Y	-.013	.75
15	MP ALPHA3	X	-.007	7.25
16	MP ALPHA3	X	-.007	.75
17	MP ALPHA1	Y	-.001	4
18	MP ALPHA1	X	-.000789	4
19	MP ALPHA2	Y	-.004	4
20	MP ALPHA2	X	-.002	4
21	MP ALPHA1	Y	-.001	4
22	MP ALPHA1	X	-.00077	4

Member Point Loads (BLC 16 : Maintanence (30)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
23	MP ALPHA1	Y	-.00044	4
24	MP ALPHA1	X	-.000254	4
25	MP ALPHA3	Y	-.004	4
26	MP ALPHA3	X	-.002	4
27	MP ALPHA4	Y	-.003	4
28	MP ALPHA4	X	-.002	4
29	MP ALPHA3	Y	-.003	4
30	MP ALPHA3	X	-.002	4
31	MP ALPHA4	Y	-.003	4
32	MP ALPHA4	X	-.002	4
33	MP ALPHA3	Y	-.002	4
34	MP ALPHA3	X	-.001	4

Member Point Loads (BLC 17 : Maintanence (60))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.004	7.25
2	MP ALPHA2	Y	-.004	.75
3	MP ALPHA2	X	-.007	7.25
4	MP ALPHA2	X	-.007	.75
5	MP ALPHA1	Y	-.001	5.667
6	MP ALPHA1	Y	-.001	2.333
7	MP ALPHA1	X	-.002	5.667
8	MP ALPHA1	X	-.002	2.333
9	MP ALPHA4	Y	-.005	7.25
10	MP ALPHA4	Y	-.005	.75
11	MP ALPHA4	X	-.008	7.25
12	MP ALPHA4	X	-.008	.75
13	MP ALPHA3	Y	-.005	7.25
14	MP ALPHA3	Y	-.005	.75
15	MP ALPHA3	X	-.009	7.25
16	MP ALPHA3	X	-.009	.75
17	MP ALPHA1	Y	-.000481	4
18	MP ALPHA1	X	-.000834	4
19	MP ALPHA2	Y	-.002	4
20	MP ALPHA2	X	-.003	4
21	MP ALPHA1	Y	-.000573	4
22	MP ALPHA1	X	-.000992	4
23	MP ALPHA1	Y	-.000234	4
24	MP ALPHA1	X	-.000405	4
25	MP ALPHA3	Y	-.002	4
26	MP ALPHA3	X	-.003	4
27	MP ALPHA4	Y	-.001	4
28	MP ALPHA4	X	-.003	4
29	MP ALPHA3	Y	-.001	4
30	MP ALPHA3	X	-.002	4
31	MP ALPHA4	Y	-.001	4
32	MP ALPHA4	X	-.002	4
33	MP ALPHA3	Y	-.001	4
34	MP ALPHA3	X	-.002	4

Member Point Loads (BLC 18 : Maintanence (90))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	X	-.007	7.25
2	MP ALPHA2	X	-.007	.75
3	MP ALPHA1	X	-.002	5.667
4	MP ALPHA1	X	-.002	2.333

Member Point Loads (BLC 18 : Maintanence (90)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
5	MP ALPHA4	X	-.006	7.25
6	MP ALPHA4	X	-.006	.75
7	MP ALPHA3	X	-.008	7.25
8	MP ALPHA3	X	-.008	.75
9	MP ALPHA1	X	-.000655	4
10	MP ALPHA2	X	-.003	4
11	MP ALPHA1	X	-.000948	4
12	MP ALPHA1	X	-.000447	4
13	MP ALPHA3	X	-.003	4
14	MP ALPHA4	X	-.003	4
15	MP ALPHA3	X	-.002	4
16	MP ALPHA4	X	-.003	4
17	MP ALPHA3	X	-.003	4

Member Point Loads (BLC 19 : Maintanence (120))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.004	7.25
2	MP ALPHA2	Y	.004	.75
3	MP ALPHA2	X	-.007	7.25
4	MP ALPHA2	X	-.007	.75
5	MP ALPHA1	Y	.001	5.667
6	MP ALPHA1	Y	.001	2.333
7	MP ALPHA1	X	-.002	5.667
8	MP ALPHA1	X	-.002	2.333
9	MP ALPHA4	Y	.005	7.25
10	MP ALPHA4	Y	.005	.75
11	MP ALPHA4	X	-.008	7.25
12	MP ALPHA4	X	-.008	.75
13	MP ALPHA3	Y	.005	7.25
14	MP ALPHA3	Y	.005	.75
15	MP ALPHA3	X	-.009	7.25
16	MP ALPHA3	X	-.009	.75
17	MP ALPHA1	Y	.000481	4
18	MP ALPHA1	X	-.000834	4
19	MP ALPHA2	Y	.002	4
20	MP ALPHA2	X	-.003	4
21	MP ALPHA1	Y	.000573	4
22	MP ALPHA1	X	-.000992	4
23	MP ALPHA1	Y	.000234	4
24	MP ALPHA1	X	-.000405	4
25	MP ALPHA3	Y	.002	4
26	MP ALPHA3	X	-.003	4
27	MP ALPHA4	Y	.001	4
28	MP ALPHA4	X	-.003	4
29	MP ALPHA3	Y	.001	4
30	MP ALPHA3	X	-.002	4
31	MP ALPHA4	Y	.001	4
32	MP ALPHA4	X	-.002	4
33	MP ALPHA3	Y	.001	4
34	MP ALPHA3	X	-.002	4

Member Point Loads (BLC 20 : Maintanence (150))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.01	7.25
2	MP ALPHA2	Y	.01	.75
3	MP ALPHA2	X	-.006	7.25

Member Point Loads (BLC 20 : Maintanence (150)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
4	MP ALPHA2	X	-.006	.75
5	MP ALPHA1	Y	.003	5.667
6	MP ALPHA1	Y	.003	2.333
7	MP ALPHA1	X	-.002	5.667
8	MP ALPHA1	X	-.002	2.333
9	MP ALPHA4	Y	.012	7.25
10	MP ALPHA4	Y	.012	.75
11	MP ALPHA4	X	-.007	7.25
12	MP ALPHA4	X	-.007	.75
13	MP ALPHA3	Y	.013	7.25
14	MP ALPHA3	Y	.013	.75
15	MP ALPHA3	X	-.007	7.25
16	MP ALPHA3	X	-.007	.75
17	MP ALPHA1	Y	.001	4
18	MP ALPHA1	X	-.000789	4
19	MP ALPHA2	Y	.004	4
20	MP ALPHA2	X	-.002	4
21	MP ALPHA1	Y	.001	4
22	MP ALPHA1	X	-.00077	4
23	MP ALPHA1	Y	.00044	4
24	MP ALPHA1	X	-.000254	4
25	MP ALPHA3	Y	.004	4
26	MP ALPHA3	X	-.002	4
27	MP ALPHA4	Y	.003	4
28	MP ALPHA4	X	-.002	4
29	MP ALPHA3	Y	.003	4
30	MP ALPHA3	X	-.002	4
31	MP ALPHA4	Y	.003	4
32	MP ALPHA4	X	-.002	4
33	MP ALPHA3	Y	.002	4
34	MP ALPHA3	X	-.001	4

Member Point Loads (BLC 21 : Maintanence (180))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.013	7.25
2	MP ALPHA2	Y	.013	.75
3	MP ALPHA1	Y	.004	5.667
4	MP ALPHA1	Y	.004	2.333
5	MP ALPHA4	Y	.017	7.25
6	MP ALPHA4	Y	.017	.75
7	MP ALPHA3	Y	.017	7.25
8	MP ALPHA3	Y	.017	.75
9	MP ALPHA1	Y	.002	4
10	MP ALPHA2	Y	.005	4
11	MP ALPHA1	Y	.002	4
12	MP ALPHA1	Y	.000529	4
13	MP ALPHA3	Y	.005	4
14	MP ALPHA4	Y	.004	4
15	MP ALPHA3	Y	.004	4
16	MP ALPHA4	Y	.003	4
17	MP ALPHA3	Y	.002	4

Member Point Loads (BLC 22 : Maintanence (210))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.01	7.25
2	MP ALPHA2	Y	.01	.75

Member Point Loads (BLC 22 : Maintanence (210)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
3	MP ALPHA2	X	.006	7.25
4	MP ALPHA2	X	.006	.75
5	MP ALPHA1	Y	.003	5.667
6	MP ALPHA1	Y	.003	2.333
7	MP ALPHA1	X	.002	5.667
8	MP ALPHA1	X	.002	2.333
9	MP ALPHA4	Y	.012	7.25
10	MP ALPHA4	Y	.012	.75
11	MP ALPHA4	X	.007	7.25
12	MP ALPHA4	X	.007	.75
13	MP ALPHA3	Y	.013	7.25
14	MP ALPHA3	Y	.013	.75
15	MP ALPHA3	X	.007	7.25
16	MP ALPHA3	X	.007	.75
17	MP ALPHA1	Y	.001	4
18	MP ALPHA1	X	.000789	4
19	MP ALPHA2	Y	.004	4
20	MP ALPHA2	X	.002	4
21	MP ALPHA1	Y	.001	4
22	MP ALPHA1	X	.00077	4
23	MP ALPHA1	Y	.00044	4
24	MP ALPHA1	X	.000254	4
25	MP ALPHA3	Y	.004	4
26	MP ALPHA3	X	.002	4
27	MP ALPHA4	Y	.003	4
28	MP ALPHA4	X	.002	4
29	MP ALPHA3	Y	.003	4
30	MP ALPHA3	X	.002	4
31	MP ALPHA4	Y	.003	4
32	MP ALPHA4	X	.002	4
33	MP ALPHA3	Y	.002	4
34	MP ALPHA3	X	.001	4

Member Point Loads (BLC 23 : Maintanence (240))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.004	7.25
2	MP ALPHA2	Y	.004	.75
3	MP ALPHA2	X	.007	7.25
4	MP ALPHA2	X	.007	.75
5	MP ALPHA1	Y	.001	5.667
6	MP ALPHA1	Y	.001	2.333
7	MP ALPHA1	X	.002	5.667
8	MP ALPHA1	X	.002	2.333
9	MP ALPHA4	Y	.005	7.25
10	MP ALPHA4	Y	.005	.75
11	MP ALPHA4	X	.008	7.25
12	MP ALPHA4	X	.008	.75
13	MP ALPHA3	Y	.005	7.25
14	MP ALPHA3	Y	.005	.75
15	MP ALPHA3	X	.009	7.25
16	MP ALPHA3	X	.009	.75
17	MP ALPHA1	Y	.000481	4
18	MP ALPHA1	X	.000834	4
19	MP ALPHA2	Y	.002	4
20	MP ALPHA2	X	.003	4
21	MP ALPHA1	Y	.000573	4

Member Point Loads (BLC 23 : Maintanence (240)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
22	MP ALPHA1	X	.000992	4
23	MP ALPHA1	Y	.000234	4
24	MP ALPHA1	X	.000405	4
25	MP ALPHA3	Y	.002	4
26	MP ALPHA3	X	.003	4
27	MP ALPHA4	Y	.001	4
28	MP ALPHA4	X	.003	4
29	MP ALPHA3	Y	.001	4
30	MP ALPHA3	X	.002	4
31	MP ALPHA4	Y	.001	4
32	MP ALPHA4	X	.002	4
33	MP ALPHA3	Y	.001	4
34	MP ALPHA3	X	.002	4

Member Point Loads (BLC 24 : Maintanence (270))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	X	.007	7.25
2	MP ALPHA2	X	.007	.75
3	MP ALPHA1	X	.002	5.667
4	MP ALPHA1	X	.002	2.333
5	MP ALPHA4	X	.006	7.25
6	MP ALPHA4	X	.006	.75
7	MP ALPHA3	X	.008	7.25
8	MP ALPHA3	X	.008	.75
9	MP ALPHA1	X	.000655	4
10	MP ALPHA2	X	.003	4
11	MP ALPHA1	X	.000948	4
12	MP ALPHA1	X	.000447	4
13	MP ALPHA3	X	.003	4
14	MP ALPHA4	X	.003	4
15	MP ALPHA3	X	.002	4
16	MP ALPHA4	X	.003	4
17	MP ALPHA3	X	.003	4

Member Point Loads (BLC 25 : Maintanence (300))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.004	7.25
2	MP ALPHA2	Y	-.004	.75
3	MP ALPHA2	X	.007	7.25
4	MP ALPHA2	X	.007	.75
5	MP ALPHA1	Y	-.001	5.667
6	MP ALPHA1	Y	-.001	2.333
7	MP ALPHA1	X	.002	5.667
8	MP ALPHA1	X	.002	2.333
9	MP ALPHA4	Y	-.005	7.25
10	MP ALPHA4	Y	-.005	.75
11	MP ALPHA4	X	.008	7.25
12	MP ALPHA4	X	.008	.75
13	MP ALPHA3	Y	-.005	7.25
14	MP ALPHA3	Y	-.005	.75
15	MP ALPHA3	X	.009	7.25
16	MP ALPHA3	X	.009	.75
17	MP ALPHA1	Y	-.000481	4
18	MP ALPHA1	X	.000834	4
19	MP ALPHA2	Y	-.002	4
20	MP ALPHA2	X	.003	4

Member Point Loads (BLC 25 : Maintanence (300)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
21	MP ALPHA1	Y	-.000573	4
22	MP ALPHA1	X	.000992	4
23	MP ALPHA1	Y	-.000234	4
24	MP ALPHA1	X	.000405	4
25	MP ALPHA3	Y	-.002	4
26	MP ALPHA3	X	.003	4
27	MP ALPHA4	Y	-.001	4
28	MP ALPHA4	X	.003	4
29	MP ALPHA3	Y	-.001	4
30	MP ALPHA3	X	.002	4
31	MP ALPHA4	Y	-.001	4
32	MP ALPHA4	X	.002	4
33	MP ALPHA3	Y	-.001	4
34	MP ALPHA3	X	.002	4

Member Point Loads (BLC 26 : Maintanence (330))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.01	7.25
2	MP ALPHA2	Y	-.01	.75
3	MP ALPHA2	X	.006	7.25
4	MP ALPHA2	X	.006	.75
5	MP ALPHA1	Y	-.003	5.667
6	MP ALPHA1	Y	-.003	2.333
7	MP ALPHA1	X	.002	5.667
8	MP ALPHA1	X	.002	2.333
9	MP ALPHA4	Y	-.012	7.25
10	MP ALPHA4	Y	-.012	.75
11	MP ALPHA4	X	.007	7.25
12	MP ALPHA4	X	.007	.75
13	MP ALPHA3	Y	-.013	7.25
14	MP ALPHA3	Y	-.013	.75
15	MP ALPHA3	X	.007	7.25
16	MP ALPHA3	X	.007	.75
17	MP ALPHA1	Y	-.001	4
18	MP ALPHA1	X	.000789	4
19	MP ALPHA2	Y	-.004	4
20	MP ALPHA2	X	.002	4
21	MP ALPHA1	Y	-.001	4
22	MP ALPHA1	X	.00077	4
23	MP ALPHA1	Y	-.00044	4
24	MP ALPHA1	X	.000254	4
25	MP ALPHA3	Y	-.004	4
26	MP ALPHA3	X	.002	4
27	MP ALPHA4	Y	-.003	4
28	MP ALPHA4	X	.002	4
29	MP ALPHA3	Y	-.003	4
30	MP ALPHA3	X	.002	4
31	MP ALPHA4	Y	-.003	4
32	MP ALPHA4	X	.002	4
33	MP ALPHA3	Y	-.002	4
34	MP ALPHA3	X	.001	4

Member Point Loads (BLC 27 : Ice Dead Load)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Z	0	7.25
2	MP ALPHA2	Z	0	.75

Member Point Loads (BLC 27 : Ice Dead Load) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
3	MP ALPHA1	Z	0	5.667
4	MP ALPHA1	Z	0	2.333
5	MP ALPHA4	Z	0	7.25
6	MP ALPHA4	Z	0	.75
7	MP ALPHA3	Z	0	7.25
8	MP ALPHA3	Z	0	.75
9	MP ALPHA1	Z	0	4
10	MP ALPHA2	Z	0	4
11	MP ALPHA1	Z	0	4
12	MP ALPHA1	Z	0	4
13	MP ALPHA3	Z	0	4
14	MP ALPHA4	Z	0	4
15	MP ALPHA3	Z	0	4
16	MP ALPHA4	Z	0	4
17	MP ALPHA3	Z	0	4

Member Point Loads (BLC 28 : Ice Wind Load (0))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.042	7.25
2	MP ALPHA2	Y	-.042	.75
3	MP ALPHA1	Y	-.014	5.667
4	MP ALPHA1	Y	-.014	2.333
5	MP ALPHA4	Y	-.051	7.25
6	MP ALPHA4	Y	-.051	.75
7	MP ALPHA3	Y	-.033	7.25
8	MP ALPHA3	Y	-.033	.75
9	MP ALPHA1	Y	-.005	4
10	MP ALPHA2	Y	-.012	4
11	MP ALPHA1	Y	-.006	4
12	MP ALPHA1	Y	-.003	4
13	MP ALPHA3	Y	-.012	4
14	MP ALPHA4	Y	-.009	4
15	MP ALPHA3	Y	-.009	4
16	MP ALPHA4	Y	-.008	4
17	MP ALPHA3	Y	-.009	4

Member Point Loads (BLC 29 : Ice Wind Load (30))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.033	7.25
2	MP ALPHA2	Y	-.033	.75
3	MP ALPHA2	X	-.019	7.25
4	MP ALPHA2	X	-.019	.75
5	MP ALPHA1	Y	-.011	5.667
6	MP ALPHA1	Y	-.011	2.333
7	MP ALPHA1	X	-.007	5.667
8	MP ALPHA1	X	-.007	2.333
9	MP ALPHA4	Y	-.038	7.25
10	MP ALPHA4	Y	-.038	.75
11	MP ALPHA4	X	-.022	7.25
12	MP ALPHA4	X	-.022	.75
13	MP ALPHA3	Y	-.025	7.25
14	MP ALPHA3	Y	-.025	.75
15	MP ALPHA3	X	-.014	7.25
16	MP ALPHA3	X	-.014	.75
17	MP ALPHA1	Y	-.004	4
18	MP ALPHA1	X	-.002	4

Member Point Loads (BLC 29 : Ice Wind Load (30)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
19	MP ALPHA2	Y	-.01	4
20	MP ALPHA2	X	-.006	4
21	MP ALPHA1	Y	-.005	4
22	MP ALPHA1	X	-.003	4
23	MP ALPHA1	Y	-.003	4
24	MP ALPHA1	X	-.002	4
25	MP ALPHA3	Y	-.01	4
26	MP ALPHA3	X	-.006	4
27	MP ALPHA4	Y	-.008	4
28	MP ALPHA4	X	-.004	4
29	MP ALPHA3	Y	-.007	4
30	MP ALPHA3	X	-.004	4
31	MP ALPHA4	Y	-.007	4
32	MP ALPHA4	X	-.004	4
33	MP ALPHA3	Y	-.008	4
34	MP ALPHA3	X	-.005	4

Member Point Loads (BLC 30 : Ice Wind Load (60))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.015	7.25
2	MP ALPHA2	Y	-.015	.75
3	MP ALPHA2	X	-.025	7.25
4	MP ALPHA2	X	-.025	.75
5	MP ALPHA1	Y	-.005	5.667
6	MP ALPHA1	Y	-.005	2.333
7	MP ALPHA1	X	-.009	5.667
8	MP ALPHA1	X	-.009	2.333
9	MP ALPHA4	Y	-.015	7.25
10	MP ALPHA4	Y	-.015	.75
11	MP ALPHA4	X	-.027	7.25
12	MP ALPHA4	X	-.027	.75
13	MP ALPHA3	Y	-.011	7.25
14	MP ALPHA3	Y	-.011	.75
15	MP ALPHA3	X	-.018	7.25
16	MP ALPHA3	X	-.018	.75
17	MP ALPHA1	Y	-.002	4
18	MP ALPHA1	X	-.003	4
19	MP ALPHA2	Y	-.005	4
20	MP ALPHA2	X	-.008	4
21	MP ALPHA1	Y	-.002	4
22	MP ALPHA1	X	-.004	4
23	MP ALPHA1	Y	-.001	4
24	MP ALPHA1	X	-.003	4
25	MP ALPHA3	Y	-.005	4
26	MP ALPHA3	X	-.008	4
27	MP ALPHA4	Y	-.004	4
28	MP ALPHA4	X	-.007	4
29	MP ALPHA3	Y	-.003	4
30	MP ALPHA3	X	-.006	4
31	MP ALPHA4	Y	-.004	4
32	MP ALPHA4	X	-.006	4
33	MP ALPHA3	Y	-.005	4
34	MP ALPHA3	X	-.008	4

Member Point Loads (BLC 31 : Ice Wind Load (90))

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

Member Point Loads (BLC 31 : Ice Wind Load (90)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	X	-.025	7.25
2	MP ALPHA2	X	-.025	.75
3	MP ALPHA1	X	-.01	5.667
4	MP ALPHA1	X	-.01	2.333
5	MP ALPHA4	X	-.024	7.25
6	MP ALPHA4	X	-.024	.75
7	MP ALPHA3	X	-.017	7.25
8	MP ALPHA3	X	-.017	.75
9	MP ALPHA1	X	-.003	4
10	MP ALPHA2	X	-.008	4
11	MP ALPHA1	X	-.004	4
12	MP ALPHA1	X	-.003	4
13	MP ALPHA3	X	-.008	4
14	MP ALPHA4	X	-.007	4
15	MP ALPHA3	X	-.006	4
16	MP ALPHA4	X	-.007	4
17	MP ALPHA3	X	-.009	4

Member Point Loads (BLC 32 : Ice Wind Load (120))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.015	7.25
2	MP ALPHA2	Y	.015	.75
3	MP ALPHA2	X	-.025	7.25
4	MP ALPHA2	X	-.025	.75
5	MP ALPHA1	Y	.005	5.667
6	MP ALPHA1	Y	.005	2.333
7	MP ALPHA1	X	-.009	5.667
8	MP ALPHA1	X	-.009	2.333
9	MP ALPHA4	Y	.015	7.25
10	MP ALPHA4	Y	.015	.75
11	MP ALPHA4	X	-.027	7.25
12	MP ALPHA4	X	-.027	.75
13	MP ALPHA3	Y	.011	7.25
14	MP ALPHA3	Y	.011	.75
15	MP ALPHA3	X	-.018	7.25
16	MP ALPHA3	X	-.018	.75
17	MP ALPHA1	Y	.002	4
18	MP ALPHA1	X	-.003	4
19	MP ALPHA2	Y	.005	4
20	MP ALPHA2	X	-.008	4
21	MP ALPHA1	Y	.002	4
22	MP ALPHA1	X	-.004	4
23	MP ALPHA1	Y	.001	4
24	MP ALPHA1	X	-.003	4
25	MP ALPHA3	Y	.005	4
26	MP ALPHA3	X	-.008	4
27	MP ALPHA4	Y	.004	4
28	MP ALPHA4	X	-.007	4
29	MP ALPHA3	Y	.003	4
30	MP ALPHA3	X	-.006	4
31	MP ALPHA4	Y	.004	4
32	MP ALPHA4	X	-.006	4
33	MP ALPHA3	Y	.005	4
34	MP ALPHA3	X	-.008	4

Member Point Loads (BLC 33 : Ice Wind Load (150))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.033	7.25
2	MP ALPHA2	Y	.033	.75
3	MP ALPHA2	X	-.019	7.25
4	MP ALPHA2	X	-.019	.75
5	MP ALPHA1	Y	.011	5.667
6	MP ALPHA1	Y	.011	2.333
7	MP ALPHA1	X	-.007	5.667
8	MP ALPHA1	X	-.007	2.333
9	MP ALPHA4	Y	.038	7.25
10	MP ALPHA4	Y	.038	.75
11	MP ALPHA4	X	-.022	7.25
12	MP ALPHA4	X	-.022	.75
13	MP ALPHA3	Y	.025	7.25
14	MP ALPHA3	Y	.025	.75
15	MP ALPHA3	X	-.014	7.25
16	MP ALPHA3	X	-.014	.75
17	MP ALPHA1	Y	.004	4
18	MP ALPHA1	X	-.002	4
19	MP ALPHA2	Y	.01	4
20	MP ALPHA2	X	-.006	4
21	MP ALPHA1	Y	.005	4
22	MP ALPHA1	X	-.003	4
23	MP ALPHA1	Y	.003	4
24	MP ALPHA1	X	-.002	4
25	MP ALPHA3	Y	.01	4
26	MP ALPHA3	X	-.006	4
27	MP ALPHA4	Y	.008	4
28	MP ALPHA4	X	-.004	4
29	MP ALPHA3	Y	.007	4
30	MP ALPHA3	X	-.004	4
31	MP ALPHA4	Y	.007	4
32	MP ALPHA4	X	-.004	4
33	MP ALPHA3	Y	.008	4
34	MP ALPHA3	X	-.005	4

Member Point Loads (BLC 34 : Ice Wind Load (180))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.042	7.25
2	MP ALPHA2	Y	.042	.75
3	MP ALPHA1	Y	.014	5.667
4	MP ALPHA1	Y	.014	2.333
5	MP ALPHA4	Y	.051	7.25
6	MP ALPHA4	Y	.051	.75
7	MP ALPHA3	Y	.033	7.25
8	MP ALPHA3	Y	.033	.75
9	MP ALPHA1	Y	.005	4
10	MP ALPHA2	Y	.012	4
11	MP ALPHA1	Y	.006	4
12	MP ALPHA1	Y	.003	4
13	MP ALPHA3	Y	.012	4
14	MP ALPHA4	Y	.009	4
15	MP ALPHA3	Y	.009	4
16	MP ALPHA4	Y	.008	4
17	MP ALPHA3	Y	.009	4

Member Point Loads (BLC 35 : Ice Wind Load (210))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.033	7.25
2	MP ALPHA2	Y	.033	.75
3	MP ALPHA2	X	.019	7.25
4	MP ALPHA2	X	.019	.75
5	MP ALPHA1	Y	.011	5.667
6	MP ALPHA1	Y	.011	2.333
7	MP ALPHA1	X	.007	5.667
8	MP ALPHA1	X	.007	2.333
9	MP ALPHA4	Y	.038	7.25
10	MP ALPHA4	Y	.038	.75
11	MP ALPHA4	X	.022	7.25
12	MP ALPHA4	X	.022	.75
13	MP ALPHA3	Y	.025	7.25
14	MP ALPHA3	Y	.025	.75
15	MP ALPHA3	X	.014	7.25
16	MP ALPHA3	X	.014	.75
17	MP ALPHA1	Y	.004	4
18	MP ALPHA1	X	.002	4
19	MP ALPHA2	Y	.01	4
20	MP ALPHA2	X	.006	4
21	MP ALPHA1	Y	.005	4
22	MP ALPHA1	X	.003	4
23	MP ALPHA1	Y	.003	4
24	MP ALPHA1	X	.002	4
25	MP ALPHA3	Y	.01	4
26	MP ALPHA3	X	.006	4
27	MP ALPHA4	Y	.008	4
28	MP ALPHA4	X	.004	4
29	MP ALPHA3	Y	.007	4
30	MP ALPHA3	X	.004	4
31	MP ALPHA4	Y	.007	4
32	MP ALPHA4	X	.004	4
33	MP ALPHA3	Y	.008	4
34	MP ALPHA3	X	.005	4

Member Point Loads (BLC 36 : Ice Wind Load (240))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.015	7.25
2	MP ALPHA2	Y	.015	.75
3	MP ALPHA2	X	.025	7.25
4	MP ALPHA2	X	.025	.75
5	MP ALPHA1	Y	.005	5.667
6	MP ALPHA1	Y	.005	2.333
7	MP ALPHA1	X	.009	5.667
8	MP ALPHA1	X	.009	2.333
9	MP ALPHA4	Y	.015	7.25
10	MP ALPHA4	Y	.015	.75
11	MP ALPHA4	X	.027	7.25
12	MP ALPHA4	X	.027	.75
13	MP ALPHA3	Y	.011	7.25
14	MP ALPHA3	Y	.011	.75
15	MP ALPHA3	X	.018	7.25
16	MP ALPHA3	X	.018	.75
17	MP ALPHA1	Y	.002	4
18	MP ALPHA1	X	.003	4
19	MP ALPHA2	Y	.005	4

Member Point Loads (BLC 36 : Ice Wind Load (240)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
20	MP ALPHA2	X	.008	4
21	MP ALPHA1	Y	.002	4
22	MP ALPHA1	X	.004	4
23	MP ALPHA1	Y	.001	4
24	MP ALPHA1	X	.003	4
25	MP ALPHA3	Y	.005	4
26	MP ALPHA3	X	.008	4
27	MP ALPHA4	Y	.004	4
28	MP ALPHA4	X	.007	4
29	MP ALPHA3	Y	.003	4
30	MP ALPHA3	X	.006	4
31	MP ALPHA4	Y	.004	4
32	MP ALPHA4	X	.006	4
33	MP ALPHA3	Y	.005	4
34	MP ALPHA3	X	.008	4

Member Point Loads (BLC 37 : Ice Wind Load (270))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	X	.025	7.25
2	MP ALPHA2	X	.025	.75
3	MP ALPHA1	X	.01	5.667
4	MP ALPHA1	X	.01	2.333
5	MP ALPHA4	X	.024	7.25
6	MP ALPHA4	X	.024	.75
7	MP ALPHA3	X	.017	7.25
8	MP ALPHA3	X	.017	.75
9	MP ALPHA1	X	.003	4
10	MP ALPHA2	X	.008	4
11	MP ALPHA1	X	.004	4
12	MP ALPHA1	X	.003	4
13	MP ALPHA3	X	.008	4
14	MP ALPHA4	X	.007	4
15	MP ALPHA3	X	.006	4
16	MP ALPHA4	X	.007	4
17	MP ALPHA3	X	.009	4

Member Point Loads (BLC 38 : Ice Wind Load (300))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.015	7.25
2	MP ALPHA2	Y	-.015	.75
3	MP ALPHA2	X	.025	7.25
4	MP ALPHA2	X	.025	.75
5	MP ALPHA1	Y	-.005	5.667
6	MP ALPHA1	Y	-.005	2.333
7	MP ALPHA1	X	.009	5.667
8	MP ALPHA1	X	.009	2.333
9	MP ALPHA4	Y	-.015	7.25
10	MP ALPHA4	Y	-.015	.75
11	MP ALPHA4	X	.027	7.25
12	MP ALPHA4	X	.027	.75
13	MP ALPHA3	Y	-.011	7.25
14	MP ALPHA3	Y	-.011	.75
15	MP ALPHA3	X	.018	7.25
16	MP ALPHA3	X	.018	.75
17	MP ALPHA1	Y	-.002	4
18	MP ALPHA1	X	.003	4

Member Point Loads (BLC 38 : Ice Wind Load (300)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
19	MP ALPHA2	Y	-.005	4
20	MP ALPHA2	X	.008	4
21	MP ALPHA1	Y	-.002	4
22	MP ALPHA1	X	.004	4
23	MP ALPHA1	Y	-.001	4
24	MP ALPHA1	X	.003	4
25	MP ALPHA3	Y	-.005	4
26	MP ALPHA3	X	.008	4
27	MP ALPHA4	Y	-.004	4
28	MP ALPHA4	X	.007	4
29	MP ALPHA3	Y	-.003	4
30	MP ALPHA3	X	.006	4
31	MP ALPHA4	Y	-.004	4
32	MP ALPHA4	X	.006	4
33	MP ALPHA3	Y	-.005	4
34	MP ALPHA3	X	.008	4

Member Point Loads (BLC 39 : Ice Wind Load (330))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.033	7.25
2	MP ALPHA2	Y	-.033	.75
3	MP ALPHA2	X	.019	7.25
4	MP ALPHA2	X	.019	.75
5	MP ALPHA1	Y	-.011	5.667
6	MP ALPHA1	Y	-.011	2.333
7	MP ALPHA1	X	.007	5.667
8	MP ALPHA1	X	.007	2.333
9	MP ALPHA4	Y	-.038	7.25
10	MP ALPHA4	Y	-.038	.75
11	MP ALPHA4	X	.022	7.25
12	MP ALPHA4	X	.022	.75
13	MP ALPHA3	Y	-.025	7.25
14	MP ALPHA3	Y	-.025	.75
15	MP ALPHA3	X	.014	7.25
16	MP ALPHA3	X	.014	.75
17	MP ALPHA1	Y	-.004	4
18	MP ALPHA1	X	.002	4
19	MP ALPHA2	Y	-.01	4
20	MP ALPHA2	X	.006	4
21	MP ALPHA1	Y	-.005	4
22	MP ALPHA1	X	.003	4
23	MP ALPHA1	Y	-.003	4
24	MP ALPHA1	X	.002	4
25	MP ALPHA3	Y	-.01	4
26	MP ALPHA3	X	.006	4
27	MP ALPHA4	Y	-.008	4
28	MP ALPHA4	X	.004	4
29	MP ALPHA3	Y	-.007	4
30	MP ALPHA3	X	.004	4
31	MP ALPHA4	Y	-.007	4
32	MP ALPHA4	X	.004	4
33	MP ALPHA3	Y	-.008	4
34	MP ALPHA3	X	.005	4

Member Point Loads (BLC 40 : Earthquake (x-direction))

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

Member Point Loads (BLC 40 : Earthquake (x-direction)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	X	-.004	7.25
2	MP ALPHA2	X	-.004	.75
3	MP ALPHA1	X	-.002	5.667
4	MP ALPHA1	X	-.002	2.333
5	MP ALPHA4	X	-.005	7.25
6	MP ALPHA4	X	-.005	.75
7	MP ALPHA3	X	-.004	7.25
8	MP ALPHA3	X	-.004	.75
9	MP ALPHA1	X	-.002	4
10	MP ALPHA2	X	-.005	4
11	MP ALPHA1	X	-.001	4
12	MP ALPHA1	X	-.000226	4
13	MP ALPHA3	X	-.005	4
14	MP ALPHA4	X	-.007	4
15	MP ALPHA3	X	-.006	4
16	MP ALPHA4	X	-.007	4
17	MP ALPHA3	X	-.003	4

Member Point Loads (BLC 41 : Earthquake (y-direction))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.004	7.25
2	MP ALPHA2	Y	-.004	.75
3	MP ALPHA1	Y	-.002	5.667
4	MP ALPHA1	Y	-.002	2.333
5	MP ALPHA4	Y	-.005	7.25
6	MP ALPHA4	Y	-.005	.75
7	MP ALPHA3	Y	-.004	7.25
8	MP ALPHA3	Y	-.004	.75
9	MP ALPHA1	Y	-.002	4
10	MP ALPHA2	Y	-.005	4
11	MP ALPHA1	Y	-.001	4
12	MP ALPHA1	Y	-.000226	4
13	MP ALPHA3	Y	-.005	4
14	MP ALPHA4	Y	-.007	4
15	MP ALPHA3	Y	-.006	4
16	MP ALPHA4	Y	-.007	4
17	MP ALPHA3	Y	-.003	4

Member Point Loads (BLC 42 : Earthquake (z-direction))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Z	-.001	7.25
2	MP ALPHA2	Z	-.001	.75
3	MP ALPHA1	Z	-.000999	5.667
4	MP ALPHA1	Z	-.000999	2.333
5	MP ALPHA4	Z	-.002	7.25
6	MP ALPHA4	Z	-.002	.75
7	MP ALPHA3	Z	-.002	7.25
8	MP ALPHA3	Z	-.002	.75
9	MP ALPHA1	Z	-.000749	4
10	MP ALPHA2	Z	-.002	4
11	MP ALPHA1	Z	-.0005	4
12	MP ALPHA1	Z	-9.1e-5	4
13	MP ALPHA3	Z	-.002	4
14	MP ALPHA4	Z	-.003	4
15	MP ALPHA3	Z	-.002	4
16	MP ALPHA4	Z	-.003	4

Member Point Loads (BLC 42 : Earthquake (z-direction)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
17	MP ALPHA3	Z	-.001	4

Member Distributed Loads (BLC 2 : Wind Load (0))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	-.008	-.008	0	0
2	BOTTOMFACE	PY	-.008	-.008	0	0
3	KICKER1	PY	-.002	-.002	0	0
4	KICKER2	PY	-.002	-.002	0	0
5	KICKER3	PY	-.002	-.002	0	0
6	KICKER4	PY	-.002	-.002	0	0
7	VERT1	PY	-.002	-.002	0	0
8	VERT2	PY	-.002	-.002	0	0
9	VERT3	PY	-.002	-.002	0	0
10	VERT4	PY	-.002	-.002	0	0
11	VERT5	PY	-.002	-.002	0	0
12	VERT6	PY	-.002	-.002	0	0
13	DIAG1	PY	-.001	-.001	0	0
14	DIAG2	PY	-.001	-.001	0	0
15	DIAG3	PY	-.001	-.001	0	0
16	DIAG4	PY	-.001	-.001	0	0
17	TIEBACK	PY	-.002	-.002	0	0
18	MP ALPHA1	PY	-.007	-.007	0	0
19	MP ALPHA2	PY	-.007	-.007	0	0
20	MP ALPHA5	PY	-.007	-.007	0	0
21	MP 1	PY	-.002	-.002	0	0
22	MP ALPHA3	PY	-.007	-.007	0	0
23	MP ALPHA4	PY	-.007	-.007	0	0

Member Distributed Loads (BLC 4 : Wind Load (30))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	-.007	-.007	0	0
2	BOTTOMFACE	PY	-.007	-.007	0	0
3	KICKER1	PY	-.002	-.002	0	0
4	KICKER2	PY	-.002	-.002	0	0
5	KICKER3	PY	-.002	-.002	0	0
6	KICKER4	PY	-.002	-.002	0	0
7	VERT1	PY	-.002	-.002	0	0
8	VERT2	PY	-.002	-.002	0	0
9	VERT3	PY	-.002	-.002	0	0
10	VERT4	PY	-.002	-.002	0	0
11	VERT5	PY	-.002	-.002	0	0
12	VERT6	PY	-.002	-.002	0	0
13	DIAG1	PY	-.000866	-.000866	0	0
14	DIAG2	PY	-.000866	-.000866	0	0
15	DIAG3	PY	-.000866	-.000866	0	0
16	DIAG4	PY	-.000866	-.000866	0	0
17	TIEBACK	PY	-.002	-.002	0	0
18	MP ALPHA1	PY	-.006	-.006	0	0
19	MP ALPHA2	PY	-.006	-.006	0	0
20	MP ALPHA5	PY	-.006	-.006	0	0
21	MP 1	PY	-.002	-.002	0	0
22	MP ALPHA3	PY	-.006	-.006	0	0
23	MP ALPHA4	PY	-.006	-.006	0	0
24	TOPFACE	PX	-.004	-.004	0	0
25	BOTTOMFACE	PX	-.004	-.004	0	0

Member Distributed Loads (BLC 4 : Wind Load (30)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
26	KICKER1	PX	-.001	-.001	0	0
27	KICKER2	PX	-.001	-.001	0	0
28	KICKER3	PX	-.001	-.001	0	0
29	KICKER4	PX	-.001	-.001	0	0
30	VERT1	PX	-.001	-.001	0	0
31	VERT2	PX	-.001	-.001	0	0
32	VERT3	PX	-.001	-.001	0	0
33	VERT4	PX	-.001	-.001	0	0
34	VERT5	PX	-.001	-.001	0	0
35	VERT6	PX	-.001	-.001	0	0
36	DIAG1	PX	-.0005	-.0005	0	0
37	DIAG2	PX	-.0005	-.0005	0	0
38	DIAG3	PX	-.0005	-.0005	0	0
39	DIAG4	PX	-.0005	-.0005	0	0
40	TIEBACK	PX	-.001	-.001	0	0
41	MP ALPHA1	PX	-.004	-.004	0	0
42	MP ALPHA2	PX	-.004	-.004	0	0
43	MP ALPHA5	PX	-.004	-.004	0	0
44	MP 1	PX	-.001	-.001	0	0
45	MP ALPHA3	PX	-.004	-.004	0	0
46	MP ALPHA4	PX	-.004	-.004	0	0

Member Distributed Loads (BLC 5 : Wind Load (60))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	-.004	-.004	0	0
2	BOTTOMFACE	PY	-.004	-.004	0	0
3	KICKER1	PY	-.001	-.001	0	0
4	KICKER2	PY	-.001	-.001	0	0
5	KICKER3	PY	-.001	-.001	0	0
6	KICKER4	PY	-.001	-.001	0	0
7	VERT1	PY	-.001	-.001	0	0
8	VERT2	PY	-.001	-.001	0	0
9	VERT3	PY	-.001	-.001	0	0
10	VERT4	PY	-.001	-.001	0	0
11	VERT5	PY	-.001	-.001	0	0
12	VERT6	PY	-.001	-.001	0	0
13	DIAG1	PY	-.0005	-.0005	0	0
14	DIAG2	PY	-.0005	-.0005	0	0
15	DIAG3	PY	-.0005	-.0005	0	0
16	DIAG4	PY	-.0005	-.0005	0	0
17	TIEBACK	PY	-.001	-.001	0	0
18	MP ALPHA1	PY	-.004	-.004	0	0
19	MP ALPHA2	PY	-.004	-.004	0	0
20	MP ALPHA5	PY	-.004	-.004	0	0
21	MP 1	PY	-.001	-.001	0	0
22	MP ALPHA3	PY	-.004	-.004	0	0
23	MP ALPHA4	PY	-.004	-.004	0	0
24	TOPFACE	PX	-.007	-.007	0	0
25	BOTTOMFACE	PX	-.007	-.007	0	0
26	KICKER1	PX	-.002	-.002	0	0
27	KICKER2	PX	-.002	-.002	0	0
28	KICKER3	PX	-.002	-.002	0	0
29	KICKER4	PX	-.002	-.002	0	0
30	VERT1	PX	-.002	-.002	0	0
31	VERT2	PX	-.002	-.002	0	0
32	VERT3	PX	-.002	-.002	0	0

Member Distributed Loads (BLC 5 : Wind Load (60)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
33	VERT4	PX	-.002	-.002	0	0
34	VERT5	PX	-.002	-.002	0	0
35	VERT6	PX	-.002	-.002	0	0
36	DIAG1	PX	-.000866	-.000866	0	0
37	DIAG2	PX	-.000866	-.000866	0	0
38	DIAG3	PX	-.000866	-.000866	0	0
39	DIAG4	PX	-.000866	-.000866	0	0
40	TIEBACK	PX	-.002	-.002	0	0
41	MP ALPHA1	PX	-.006	-.006	0	0
42	MP ALPHA2	PX	-.006	-.006	0	0
43	MP ALPHA5	PX	-.006	-.006	0	0
44	MP 1	PX	-.002	-.002	0	0
45	MP ALPHA3	PX	-.006	-.006	0	0
46	MP ALPHA4	PX	-.006	-.006	0	0

Member Distributed Loads (BLC 6 : Wind Load (90))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PX	-.008	-.008	0	0
2	BOTTOMFACE	PX	-.008	-.008	0	0
3	KICKER1	PX	-.002	-.002	0	0
4	KICKER2	PX	-.002	-.002	0	0
5	KICKER3	PX	-.002	-.002	0	0
6	KICKER4	PX	-.002	-.002	0	0
7	VERT1	PX	-.002	-.002	0	0
8	VERT2	PX	-.002	-.002	0	0
9	VERT3	PX	-.002	-.002	0	0
10	VERT4	PX	-.002	-.002	0	0
11	VERT5	PX	-.002	-.002	0	0
12	VERT6	PX	-.002	-.002	0	0
13	DIAG1	PX	-.001	-.001	0	0
14	DIAG2	PX	-.001	-.001	0	0
15	DIAG3	PX	-.001	-.001	0	0
16	DIAG4	PX	-.001	-.001	0	0
17	TIEBACK	PX	-.002	-.002	0	0
18	MP ALPHA1	PX	-.007	-.007	0	0
19	MP ALPHA2	PX	-.007	-.007	0	0
20	MP ALPHA5	PX	-.007	-.007	0	0
21	MP 1	PX	-.002	-.002	0	0
22	MP ALPHA3	PX	-.007	-.007	0	0
23	MP ALPHA4	PX	-.007	-.007	0	0

Member Distributed Loads (BLC 7 : Wind Load (120))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	.004	.004	0	0
2	BOTTOMFACE	PY	.004	.004	0	0
3	KICKER1	PY	.001	.001	0	0
4	KICKER2	PY	.001	.001	0	0
5	KICKER3	PY	.001	.001	0	0
6	KICKER4	PY	.001	.001	0	0
7	VERT1	PY	.001	.001	0	0
8	VERT2	PY	.001	.001	0	0
9	VERT3	PY	.001	.001	0	0
10	VERT4	PY	.001	.001	0	0
11	VERT5	PY	.001	.001	0	0
12	VERT6	PY	.001	.001	0	0
13	DIAG1	PY	.0005	.0005	0	0

Member Distributed Loads (BLC 7 : Wind Load (120)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
14	DIAG2	PY	.0005	.0005	0	0
15	DIAG3	PY	.0005	.0005	0	0
16	DIAG4	PY	.0005	.0005	0	0
17	TIEBACK	PY	.001	.001	0	0
18	MP ALPHA1	PY	.004	.004	0	0
19	MP ALPHA2	PY	.004	.004	0	0
20	MP ALPHA5	PY	.004	.004	0	0
21	MP 1	PY	.001	.001	0	0
22	MP ALPHA3	PY	.004	.004	0	0
23	MP ALPHA4	PY	.004	.004	0	0
24	TOPFACE	PX	-.007	-.007	0	0
25	BOTTOMFACE	PX	-.007	-.007	0	0
26	KICKER1	PX	-.002	-.002	0	0
27	KICKER2	PX	-.002	-.002	0	0
28	KICKER3	PX	-.002	-.002	0	0
29	KICKER4	PX	-.002	-.002	0	0
30	VERT1	PX	-.002	-.002	0	0
31	VERT2	PX	-.002	-.002	0	0
32	VERT3	PX	-.002	-.002	0	0
33	VERT4	PX	-.002	-.002	0	0
34	VERT5	PX	-.002	-.002	0	0
35	VERT6	PX	-.002	-.002	0	0
36	DIAG1	PX	-.000866	-.000866	0	0
37	DIAG2	PX	-.000866	-.000866	0	0
38	DIAG3	PX	-.000866	-.000866	0	0
39	DIAG4	PX	-.000866	-.000866	0	0
40	TIEBACK	PX	-.002	-.002	0	0
41	MP ALPHA1	PX	-.006	-.006	0	0
42	MP ALPHA2	PX	-.006	-.006	0	0
43	MP ALPHA5	PX	-.006	-.006	0	0
44	MP 1	PX	-.002	-.002	0	0
45	MP ALPHA3	PX	-.006	-.006	0	0
46	MP ALPHA4	PX	-.006	-.006	0	0

Member Distributed Loads (BLC 8 : Wind Load (150))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	.007	.007	0	0
2	BOTTOMFACE	PY	.007	.007	0	0
3	KICKER1	PY	.002	.002	0	0
4	KICKER2	PY	.002	.002	0	0
5	KICKER3	PY	.002	.002	0	0
6	KICKER4	PY	.002	.002	0	0
7	VERT1	PY	.002	.002	0	0
8	VERT2	PY	.002	.002	0	0
9	VERT3	PY	.002	.002	0	0
10	VERT4	PY	.002	.002	0	0
11	VERT5	PY	.002	.002	0	0
12	VERT6	PY	.002	.002	0	0
13	DIAG1	PY	.000866	.000866	0	0
14	DIAG2	PY	.000866	.000866	0	0
15	DIAG3	PY	.000866	.000866	0	0
16	DIAG4	PY	.000866	.000866	0	0
17	TIEBACK	PY	.002	.002	0	0
18	MP ALPHA1	PY	.006	.006	0	0
19	MP ALPHA2	PY	.006	.006	0	0
20	MP ALPHA5	PY	.006	.006	0	0

Member Distributed Loads (BLC 8 : Wind Load (150)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
21	MP 1	PY	.002	.002	0	0
22	MP ALPHA3	PY	.006	.006	0	0
23	MP ALPHA4	PY	.006	.006	0	0
24	TOPFACE	PX	-.004	-.004	0	0
25	BOTTOMFACE	PX	-.004	-.004	0	0
26	KICKER1	PX	-.001	-.001	0	0
27	KICKER2	PX	-.001	-.001	0	0
28	KICKER3	PX	-.001	-.001	0	0
29	KICKER4	PX	-.001	-.001	0	0
30	VERT1	PX	-.001	-.001	0	0
31	VERT2	PX	-.001	-.001	0	0
32	VERT3	PX	-.001	-.001	0	0
33	VERT4	PX	-.001	-.001	0	0
34	VERT5	PX	-.001	-.001	0	0
35	VERT6	PX	-.001	-.001	0	0
36	DIAG1	PX	-.0005	-.0005	0	0
37	DIAG2	PX	-.0005	-.0005	0	0
38	DIAG3	PX	-.0005	-.0005	0	0
39	DIAG4	PX	-.0005	-.0005	0	0
40	TIEBACK	PX	-.001	-.001	0	0
41	MP ALPHA1	PX	-.004	-.004	0	0
42	MP ALPHA2	PX	-.004	-.004	0	0
43	MP ALPHA5	PX	-.004	-.004	0	0
44	MP 1	PX	-.001	-.001	0	0
45	MP ALPHA3	PX	-.004	-.004	0	0
46	MP ALPHA4	PX	-.004	-.004	0	0

Member Distributed Loads (BLC 9 : Wind Load (180))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	.008	.008	0	0
2	BOTTOMFACE	PY	.008	.008	0	0
3	KICKER1	PY	.002	.002	0	0
4	KICKER2	PY	.002	.002	0	0
5	KICKER3	PY	.002	.002	0	0
6	KICKER4	PY	.002	.002	0	0
7	VERT1	PY	.002	.002	0	0
8	VERT2	PY	.002	.002	0	0
9	VERT3	PY	.002	.002	0	0
10	VERT4	PY	.002	.002	0	0
11	VERT5	PY	.002	.002	0	0
12	VERT6	PY	.002	.002	0	0
13	DIAG1	PY	.001	.001	0	0
14	DIAG2	PY	.001	.001	0	0
15	DIAG3	PY	.001	.001	0	0
16	DIAG4	PY	.001	.001	0	0
17	TIEBACK	PY	.002	.002	0	0
18	MP ALPHA1	PY	.007	.007	0	0
19	MP ALPHA2	PY	.007	.007	0	0
20	MP ALPHA5	PY	.007	.007	0	0
21	MP 1	PY	.002	.002	0	0
22	MP ALPHA3	PY	.007	.007	0	0
23	MP ALPHA4	PY	.007	.007	0	0

Member Distributed Loads (BLC 10 : Wind Load (210))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	.007	.007	0	0

Member Distributed Loads (BLC 10 : Wind Load (210)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
2	BOTTOMFACE	PY	.007	.007	0	0
3	KICKER1	PY	.002	.002	0	0
4	KICKER2	PY	.002	.002	0	0
5	KICKER3	PY	.002	.002	0	0
6	KICKER4	PY	.002	.002	0	0
7	VERT1	PY	.002	.002	0	0
8	VERT2	PY	.002	.002	0	0
9	VERT3	PY	.002	.002	0	0
10	VERT4	PY	.002	.002	0	0
11	VERT5	PY	.002	.002	0	0
12	VERT6	PY	.002	.002	0	0
13	DIAG1	PY	.000866	.000866	0	0
14	DIAG2	PY	.000866	.000866	0	0
15	DIAG3	PY	.000866	.000866	0	0
16	DIAG4	PY	.000866	.000866	0	0
17	TIEBACK	PY	.002	.002	0	0
18	MP ALPHA1	PY	.006	.006	0	0
19	MP ALPHA2	PY	.006	.006	0	0
20	MP ALPHA5	PY	.006	.006	0	0
21	MP 1	PY	.002	.002	0	0
22	MP ALPHA3	PY	.006	.006	0	0
23	MP ALPHA4	PY	.006	.006	0	0
24	TOPFACE	PX	.004	.004	0	0
25	BOTTOMFACE	PX	.004	.004	0	0
26	KICKER1	PX	.001	.001	0	0
27	KICKER2	PX	.001	.001	0	0
28	KICKER3	PX	.001	.001	0	0
29	KICKER4	PX	.001	.001	0	0
30	VERT1	PX	.001	.001	0	0
31	VERT2	PX	.001	.001	0	0
32	VERT3	PX	.001	.001	0	0
33	VERT4	PX	.001	.001	0	0
34	VERT5	PX	.001	.001	0	0
35	VERT6	PX	.001	.001	0	0
36	DIAG1	PX	.0005	.0005	0	0
37	DIAG2	PX	.0005	.0005	0	0
38	DIAG3	PX	.0005	.0005	0	0
39	DIAG4	PX	.0005	.0005	0	0
40	TIEBACK	PX	.001	.001	0	0
41	MP ALPHA1	PX	.004	.004	0	0
42	MP ALPHA2	PX	.004	.004	0	0
43	MP ALPHA5	PX	.004	.004	0	0
44	MP 1	PX	.001	.001	0	0
45	MP ALPHA3	PX	.004	.004	0	0
46	MP ALPHA4	PX	.004	.004	0	0

Member Distributed Loads (BLC 11 : Wind Load (240))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	.004	.004	0	0
2	BOTTOMFACE	PY	.004	.004	0	0
3	KICKER1	PY	.001	.001	0	0
4	KICKER2	PY	.001	.001	0	0
5	KICKER3	PY	.001	.001	0	0
6	KICKER4	PY	.001	.001	0	0
7	VERT1	PY	.001	.001	0	0
8	VERT2	PY	.001	.001	0	0

Member Distributed Loads (BLC 11 : Wind Load (240)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
9	VERT3	PY	.001	.001	0	0
10	VERT4	PY	.001	.001	0	0
11	VERT5	PY	.001	.001	0	0
12	VERT6	PY	.001	.001	0	0
13	DIAG1	PY	.0005	.0005	0	0
14	DIAG2	PY	.0005	.0005	0	0
15	DIAG3	PY	.0005	.0005	0	0
16	DIAG4	PY	.0005	.0005	0	0
17	TIEBACK	PY	.001	.001	0	0
18	MP ALPHA1	PY	.004	.004	0	0
19	MP ALPHA2	PY	.004	.004	0	0
20	MP ALPHA5	PY	.004	.004	0	0
21	MP 1	PY	.001	.001	0	0
22	MP ALPHA3	PY	.004	.004	0	0
23	MP ALPHA4	PY	.004	.004	0	0
24	TOPFACE	PX	.007	.007	0	0
25	BOTTOMFACE	PX	.007	.007	0	0
26	KICKER1	PX	.002	.002	0	0
27	KICKER2	PX	.002	.002	0	0
28	KICKER3	PX	.002	.002	0	0
29	KICKER4	PX	.002	.002	0	0
30	VERT1	PX	.002	.002	0	0
31	VERT2	PX	.002	.002	0	0
32	VERT3	PX	.002	.002	0	0
33	VERT4	PX	.002	.002	0	0
34	VERT5	PX	.002	.002	0	0
35	VERT6	PX	.002	.002	0	0
36	DIAG1	PX	.000866	.000866	0	0
37	DIAG2	PX	.000866	.000866	0	0
38	DIAG3	PX	.000866	.000866	0	0
39	DIAG4	PX	.000866	.000866	0	0
40	TIEBACK	PX	.002	.002	0	0
41	MP ALPHA1	PX	.006	.006	0	0
42	MP ALPHA2	PX	.006	.006	0	0
43	MP ALPHA5	PX	.006	.006	0	0
44	MP 1	PX	.002	.002	0	0
45	MP ALPHA3	PX	.006	.006	0	0
46	MP ALPHA4	PX	.006	.006	0	0

Member Distributed Loads (BLC 12 : Wind Load (270))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PX	.008	.008	0	0
2	BOTTOMFACE	PX	.008	.008	0	0
3	KICKER1	PX	.002	.002	0	0
4	KICKER2	PX	.002	.002	0	0
5	KICKER3	PX	.002	.002	0	0
6	KICKER4	PX	.002	.002	0	0
7	VERT1	PX	.002	.002	0	0
8	VERT2	PX	.002	.002	0	0
9	VERT3	PX	.002	.002	0	0
10	VERT4	PX	.002	.002	0	0
11	VERT5	PX	.002	.002	0	0
12	VERT6	PX	.002	.002	0	0
13	DIAG1	PX	.001	.001	0	0
14	DIAG2	PX	.001	.001	0	0
15	DIAG3	PX	.001	.001	0	0

Member Distributed Loads (BLC 12 : Wind Load (270)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
16	DIAG4	PX	.001	.001	0	0
17	TIEBACK	PX	.002	.002	0	0
18	MP ALPHA1	PX	.007	.007	0	0
19	MP ALPHA2	PX	.007	.007	0	0
20	MP ALPHA5	PX	.007	.007	0	0
21	MP 1	PX	.002	.002	0	0
22	MP ALPHA3	PX	.007	.007	0	0
23	MP ALPHA4	PX	.007	.007	0	0

Member Distributed Loads (BLC 13 : Wind Load (300))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	-.004	-.004	0	0
2	BOTTOMFACE	PY	-.004	-.004	0	0
3	KICKER1	PY	-.001	-.001	0	0
4	KICKER2	PY	-.001	-.001	0	0
5	KICKER3	PY	-.001	-.001	0	0
6	KICKER4	PY	-.001	-.001	0	0
7	VERT1	PY	-.001	-.001	0	0
8	VERT2	PY	-.001	-.001	0	0
9	VERT3	PY	-.001	-.001	0	0
10	VERT4	PY	-.001	-.001	0	0
11	VERT5	PY	-.001	-.001	0	0
12	VERT6	PY	-.001	-.001	0	0
13	DIAG1	PY	-.0005	-.0005	0	0
14	DIAG2	PY	-.0005	-.0005	0	0
15	DIAG3	PY	-.0005	-.0005	0	0
16	DIAG4	PY	-.0005	-.0005	0	0
17	TIEBACK	PY	-.001	-.001	0	0
18	MP ALPHA1	PY	-.004	-.004	0	0
19	MP ALPHA2	PY	-.004	-.004	0	0
20	MP ALPHA5	PY	-.004	-.004	0	0
21	MP 1	PY	-.001	-.001	0	0
22	MP ALPHA3	PY	-.004	-.004	0	0
23	MP ALPHA4	PY	-.004	-.004	0	0
24	TOPFACE	PX	.007	.007	0	0
25	BOTTOMFACE	PX	.007	.007	0	0
26	KICKER1	PX	.002	.002	0	0
27	KICKER2	PX	.002	.002	0	0
28	KICKER3	PX	.002	.002	0	0
29	KICKER4	PX	.002	.002	0	0
30	VERT1	PX	.002	.002	0	0
31	VERT2	PX	.002	.002	0	0
32	VERT3	PX	.002	.002	0	0
33	VERT4	PX	.002	.002	0	0
34	VERT5	PX	.002	.002	0	0
35	VERT6	PX	.002	.002	0	0
36	DIAG1	PX	.000866	.000866	0	0
37	DIAG2	PX	.000866	.000866	0	0
38	DIAG3	PX	.000866	.000866	0	0
39	DIAG4	PX	.000866	.000866	0	0
40	TIEBACK	PX	.002	.002	0	0
41	MP ALPHA1	PX	.006	.006	0	0
42	MP ALPHA2	PX	.006	.006	0	0
43	MP ALPHA5	PX	.006	.006	0	0
44	MP 1	PX	.002	.002	0	0
45	MP ALPHA3	PX	.006	.006	0	0

Member Distributed Loads (BLC 13 : Wind Load (300)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
46	MP ALPHA4	PX	.006	.006	0	0

Member Distributed Loads (BLC 14 : Wind Load (330))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	-.007	-.007	0	0
2	BOTTOMFACE	PY	-.007	-.007	0	0
3	KICKER1	PY	-.002	-.002	0	0
4	KICKER2	PY	-.002	-.002	0	0
5	KICKER3	PY	-.002	-.002	0	0
6	KICKER4	PY	-.002	-.002	0	0
7	VERT1	PY	-.002	-.002	0	0
8	VERT2	PY	-.002	-.002	0	0
9	VERT3	PY	-.002	-.002	0	0
10	VERT4	PY	-.002	-.002	0	0
11	VERT5	PY	-.002	-.002	0	0
12	VERT6	PY	-.002	-.002	0	0
13	DIAG1	PY	-.000866	-.000866	0	0
14	DIAG2	PY	-.000866	-.000866	0	0
15	DIAG3	PY	-.000866	-.000866	0	0
16	DIAG4	PY	-.000866	-.000866	0	0
17	TIEBACK	PY	-.002	-.002	0	0
18	MP ALPHA1	PY	-.006	-.006	0	0
19	MP ALPHA2	PY	-.006	-.006	0	0
20	MP ALPHA5	PY	-.006	-.006	0	0
21	MP 1	PY	-.002	-.002	0	0
22	MP ALPHA3	PY	-.006	-.006	0	0
23	MP ALPHA4	PY	-.006	-.006	0	0
24	TOPFACE	PX	.004	.004	0	0
25	BOTTOMFACE	PX	.004	.004	0	0
26	KICKER1	PX	.001	.001	0	0
27	KICKER2	PX	.001	.001	0	0
28	KICKER3	PX	.001	.001	0	0
29	KICKER4	PX	.001	.001	0	0
30	VERT1	PX	.001	.001	0	0
31	VERT2	PX	.001	.001	0	0
32	VERT3	PX	.001	.001	0	0
33	VERT4	PX	.001	.001	0	0
34	VERT5	PX	.001	.001	0	0
35	VERT6	PX	.001	.001	0	0
36	DIAG1	PX	.0005	.0005	0	0
37	DIAG2	PX	.0005	.0005	0	0
38	DIAG3	PX	.0005	.0005	0	0
39	DIAG4	PX	.0005	.0005	0	0
40	TIEBACK	PX	.001	.001	0	0
41	MP ALPHA1	PX	.004	.004	0	0
42	MP ALPHA2	PX	.004	.004	0	0
43	MP ALPHA5	PX	.004	.004	0	0
44	MP 1	PX	.001	.001	0	0
45	MP ALPHA3	PX	.004	.004	0	0
46	MP ALPHA4	PX	.004	.004	0	0

Member Distributed Loads (BLC 27 : Ice Dead Load)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	Z	-.009	-.009	0	0
2	BOTTOMFACE	Z	-.009	-.009	0	0
3	KICKER1	Z	-.008	-.008	0	0

Member Distributed Loads (BLC 27 : Ice Dead Load) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
4	KICKER2	Z	-.008	-.008	0	0
5	KICKER3	Z	-.008	-.008	0	0
6	KICKER4	Z	-.008	-.008	0	0
7	VERT1	Z	-.008	-.008	0	0
8	VERT2	Z	-.008	-.008	0	0
9	VERT3	Z	-.008	-.008	0	0
10	VERT4	Z	-.008	-.008	0	0
11	VERT5	Z	-.008	-.008	0	0
12	VERT6	Z	-.008	-.008	0	0
13	DIAG1	Z	-.007	-.007	0	0
14	DIAG2	Z	-.007	-.007	0	0
15	DIAG3	Z	-.007	-.007	0	0
16	DIAG4	Z	-.007	-.007	0	0
17	TIEBACK	Z	-.008	-.008	0	0
18	MP ALPHA1	Z	-.008	-.008	0	0
19	MP ALPHA2	Z	-.008	-.008	0	0
20	MP ALPHA5	Z	-.008	-.008	0	0
21	MP 1	Z	-.008	-.008	0	0
22	MP ALPHA3	Z	-.008	-.008	0	0
23	MP ALPHA4	Z	-.008	-.008	0	0

Member Distributed Loads (BLC 28 : Ice Wind Load (0))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	-.003	-.003	0	0
2	BOTTOMFACE	PY	-.003	-.003	0	0
3	KICKER1	PY	-.001	-.001	0	0
4	KICKER2	PY	-.001	-.001	0	0
5	KICKER3	PY	-.001	-.001	0	0
6	KICKER4	PY	-.001	-.001	0	0
7	VERT1	PY	-.001	-.001	0	0
8	VERT2	PY	-.001	-.001	0	0
9	VERT3	PY	-.001	-.001	0	0
10	VERT4	PY	-.001	-.001	0	0
11	VERT5	PY	-.001	-.001	0	0
12	VERT6	PY	-.001	-.001	0	0
13	DIAG1	PY	-.001	-.001	0	0
14	DIAG2	PY	-.001	-.001	0	0
15	DIAG3	PY	-.001	-.001	0	0
16	DIAG4	PY	-.001	-.001	0	0
17	TIEBACK	PY	-.001	-.001	0	0
18	MP ALPHA1	PY	-.003	-.003	0	0
19	MP ALPHA2	PY	-.003	-.003	0	0
20	MP ALPHA5	PY	-.003	-.003	0	0
21	MP 1	PY	-.001	-.001	0	0
22	MP ALPHA3	PY	-.003	-.003	0	0
23	MP ALPHA4	PY	-.003	-.003	0	0

Member Distributed Loads (BLC 29 : Ice Wind Load (30))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	-.003	-.003	0	0
2	BOTTOMFACE	PY	-.003	-.003	0	0
3	KICKER1	PY	-.000866	-.000866	0	0
4	KICKER2	PY	-.000866	-.000866	0	0
5	KICKER3	PY	-.000866	-.000866	0	0
6	KICKER4	PY	-.000866	-.000866	0	0
7	VERT1	PY	-.000866	-.000866	0	0

Member Distributed Loads (BLC 29 : Ice Wind Load (30)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
8	VERT2	PY	-.000866	-.000866	0	0
9	VERT3	PY	-.000866	-.000866	0	0
10	VERT4	PY	-.000866	-.000866	0	0
11	VERT5	PY	-.000866	-.000866	0	0
12	VERT6	PY	-.000866	-.000866	0	0
13	DIAG1	PY	-.000866	-.000866	0	0
14	DIAG2	PY	-.000866	-.000866	0	0
15	DIAG3	PY	-.000866	-.000866	0	0
16	DIAG4	PY	-.000866	-.000866	0	0
17	TIEBACK	PY	-.000866	-.000866	0	0
18	MP ALPHA1	PY	-.003	-.003	0	0
19	MP ALPHA2	PY	-.003	-.003	0	0
20	MP ALPHA5	PY	-.003	-.003	0	0
21	MP 1	PY	-.000866	-.000866	0	0
22	MP ALPHA3	PY	-.003	-.003	0	0
23	MP ALPHA4	PY	-.003	-.003	0	0
24	TOPFACE	PX	-.002	-.002	0	0
25	BOTTOMFACE	PX	-.002	-.002	0	0
26	KICKER1	PX	-.0005	-.0005	0	0
27	KICKER2	PX	-.0005	-.0005	0	0
28	KICKER3	PX	-.0005	-.0005	0	0
29	KICKER4	PX	-.0005	-.0005	0	0
30	VERT1	PX	-.0005	-.0005	0	0
31	VERT2	PX	-.0005	-.0005	0	0
32	VERT3	PX	-.0005	-.0005	0	0
33	VERT4	PX	-.0005	-.0005	0	0
34	VERT5	PX	-.0005	-.0005	0	0
35	VERT6	PX	-.0005	-.0005	0	0
36	DIAG1	PX	-.0005	-.0005	0	0
37	DIAG2	PX	-.0005	-.0005	0	0
38	DIAG3	PX	-.0005	-.0005	0	0
39	DIAG4	PX	-.0005	-.0005	0	0
40	TIEBACK	PX	-.0005	-.0005	0	0
41	MP ALPHA1	PX	-.002	-.002	0	0
42	MP ALPHA2	PX	-.002	-.002	0	0
43	MP ALPHA5	PX	-.002	-.002	0	0
44	MP 1	PX	-.0005	-.0005	0	0
45	MP ALPHA3	PX	-.002	-.002	0	0
46	MP ALPHA4	PX	-.002	-.002	0	0

Member Distributed Loads (BLC 30 : Ice Wind Load (60))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	-.002	-.002	0	0
2	BOTTOMFACE	PY	-.002	-.002	0	0
3	KICKER1	PY	-.0005	-.0005	0	0
4	KICKER2	PY	-.0005	-.0005	0	0
5	KICKER3	PY	-.0005	-.0005	0	0
6	KICKER4	PY	-.0005	-.0005	0	0
7	VERT1	PY	-.0005	-.0005	0	0
8	VERT2	PY	-.0005	-.0005	0	0
9	VERT3	PY	-.0005	-.0005	0	0
10	VERT4	PY	-.0005	-.0005	0	0
11	VERT5	PY	-.0005	-.0005	0	0
12	VERT6	PY	-.0005	-.0005	0	0
13	DIAG1	PY	-.0005	-.0005	0	0
14	DIAG2	PY	-.0005	-.0005	0	0

Member Distributed Loads (BLC 30 : Ice Wind Load (60)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
15	DIAG3	PY	-.0005	-.0005	0	0
16	DIAG4	PY	-.0005	-.0005	0	0
17	TIEBACK	PY	-.0005	-.0005	0	0
18	MP ALPHA1	PY	-.002	-.002	0	0
19	MP ALPHA2	PY	-.002	-.002	0	0
20	MP ALPHA5	PY	-.002	-.002	0	0
21	MP 1	PY	-.0005	-.0005	0	0
22	MP ALPHA3	PY	-.002	-.002	0	0
23	MP ALPHA4	PY	-.002	-.002	0	0
24	TOPFACE	PX	-.003	-.003	0	0
25	BOTTOMFACE	PX	-.003	-.003	0	0
26	KICKER1	PX	-.000866	-.000866	0	0
27	KICKER2	PX	-.000866	-.000866	0	0
28	KICKER3	PX	-.000866	-.000866	0	0
29	KICKER4	PX	-.000866	-.000866	0	0
30	VERT1	PX	-.000866	-.000866	0	0
31	VERT2	PX	-.000866	-.000866	0	0
32	VERT3	PX	-.000866	-.000866	0	0
33	VERT4	PX	-.000866	-.000866	0	0
34	VERT5	PX	-.000866	-.000866	0	0
35	VERT6	PX	-.000866	-.000866	0	0
36	DIAG1	PX	-.000866	-.000866	0	0
37	DIAG2	PX	-.000866	-.000866	0	0
38	DIAG3	PX	-.000866	-.000866	0	0
39	DIAG4	PX	-.000866	-.000866	0	0
40	TIEBACK	PX	-.000866	-.000866	0	0
41	MP ALPHA1	PX	-.003	-.003	0	0
42	MP ALPHA2	PX	-.003	-.003	0	0
43	MP ALPHA5	PX	-.003	-.003	0	0
44	MP 1	PX	-.000866	-.000866	0	0
45	MP ALPHA3	PX	-.003	-.003	0	0
46	MP ALPHA4	PX	-.003	-.003	0	0

Member Distributed Loads (BLC 31 : Ice Wind Load (90))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PX	-.003	-.003	0	0
2	BOTTOMFACE	PX	-.003	-.003	0	0
3	KICKER1	PX	-.001	-.001	0	0
4	KICKER2	PX	-.001	-.001	0	0
5	KICKER3	PX	-.001	-.001	0	0
6	KICKER4	PX	-.001	-.001	0	0
7	VERT1	PX	-.001	-.001	0	0
8	VERT2	PX	-.001	-.001	0	0
9	VERT3	PX	-.001	-.001	0	0
10	VERT4	PX	-.001	-.001	0	0
11	VERT5	PX	-.001	-.001	0	0
12	VERT6	PX	-.001	-.001	0	0
13	DIAG1	PX	-.001	-.001	0	0
14	DIAG2	PX	-.001	-.001	0	0
15	DIAG3	PX	-.001	-.001	0	0
16	DIAG4	PX	-.001	-.001	0	0
17	TIEBACK	PX	-.001	-.001	0	0
18	MP ALPHA1	PX	-.003	-.003	0	0
19	MP ALPHA2	PX	-.003	-.003	0	0
20	MP ALPHA5	PX	-.003	-.003	0	0
21	MP 1	PX	-.001	-.001	0	0

Member Distributed Loads (BLC 31 : Ice Wind Load (90)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
22	MP ALPHA3	PX	-.003	-.003	0	0
23	MP ALPHA4	PX	-.003	-.003	0	0

Member Distributed Loads (BLC 32 : Ice Wind Load (120))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	.002	.002	0	0
2	BOTTOMFACE	PY	.002	.002	0	0
3	KICKER1	PY	.0005	.0005	0	0
4	KICKER2	PY	.0005	.0005	0	0
5	KICKER3	PY	.0005	.0005	0	0
6	KICKER4	PY	.0005	.0005	0	0
7	VERT1	PY	.0005	.0005	0	0
8	VERT2	PY	.0005	.0005	0	0
9	VERT3	PY	.0005	.0005	0	0
10	VERT4	PY	.0005	.0005	0	0
11	VERT5	PY	.0005	.0005	0	0
12	VERT6	PY	.0005	.0005	0	0
13	DIAG1	PY	.0005	.0005	0	0
14	DIAG2	PY	.0005	.0005	0	0
15	DIAG3	PY	.0005	.0005	0	0
16	DIAG4	PY	.0005	.0005	0	0
17	TIEBACK	PY	.0005	.0005	0	0
18	MP ALPHA1	PY	.002	.002	0	0
19	MP ALPHA2	PY	.002	.002	0	0
20	MP ALPHA5	PY	.002	.002	0	0
21	MP 1	PY	.0005	.0005	0	0
22	MP ALPHA3	PY	.002	.002	0	0
23	MP ALPHA4	PY	.002	.002	0	0
24	TOPFACE	PX	-.003	-.003	0	0
25	BOTTOMFACE	PX	-.003	-.003	0	0
26	KICKER1	PX	-.000866	-.000866	0	0
27	KICKER2	PX	-.000866	-.000866	0	0
28	KICKER3	PX	-.000866	-.000866	0	0
29	KICKER4	PX	-.000866	-.000866	0	0
30	VERT1	PX	-.000866	-.000866	0	0
31	VERT2	PX	-.000866	-.000866	0	0
32	VERT3	PX	-.000866	-.000866	0	0
33	VERT4	PX	-.000866	-.000866	0	0
34	VERT5	PX	-.000866	-.000866	0	0
35	VERT6	PX	-.000866	-.000866	0	0
36	DIAG1	PX	-.000866	-.000866	0	0
37	DIAG2	PX	-.000866	-.000866	0	0
38	DIAG3	PX	-.000866	-.000866	0	0
39	DIAG4	PX	-.000866	-.000866	0	0
40	TIEBACK	PX	-.000866	-.000866	0	0
41	MP ALPHA1	PX	-.003	-.003	0	0
42	MP ALPHA2	PX	-.003	-.003	0	0
43	MP ALPHA5	PX	-.003	-.003	0	0
44	MP 1	PX	-.000866	-.000866	0	0
45	MP ALPHA3	PX	-.003	-.003	0	0
46	MP ALPHA4	PX	-.003	-.003	0	0

Member Distributed Loads (BLC 33 : Ice Wind Load (150))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	.003	.003	0	0
2	BOTTOMFACE	PY	.003	.003	0	0

Member Distributed Loads (BLC 33 : Ice Wind Load (150)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
3	KICKER1	PY	.000866	.000866	0	0
4	KICKER2	PY	.000866	.000866	0	0
5	KICKER3	PY	.000866	.000866	0	0
6	KICKER4	PY	.000866	.000866	0	0
7	VERT1	PY	.000866	.000866	0	0
8	VERT2	PY	.000866	.000866	0	0
9	VERT3	PY	.000866	.000866	0	0
10	VERT4	PY	.000866	.000866	0	0
11	VERT5	PY	.000866	.000866	0	0
12	VERT6	PY	.000866	.000866	0	0
13	DIAG1	PY	.000866	.000866	0	0
14	DIAG2	PY	.000866	.000866	0	0
15	DIAG3	PY	.000866	.000866	0	0
16	DIAG4	PY	.000866	.000866	0	0
17	TIEBACK	PY	.000866	.000866	0	0
18	MP ALPHA1	PY	.003	.003	0	0
19	MP ALPHA2	PY	.003	.003	0	0
20	MP ALPHA5	PY	.003	.003	0	0
21	MP 1	PY	.000866	.000866	0	0
22	MP ALPHA3	PY	.003	.003	0	0
23	MP ALPHA4	PY	.003	.003	0	0
24	TOPFACE	PX	-.002	-.002	0	0
25	BOTTOMFACE	PX	-.002	-.002	0	0
26	KICKER1	PX	-.0005	-.0005	0	0
27	KICKER2	PX	-.0005	-.0005	0	0
28	KICKER3	PX	-.0005	-.0005	0	0
29	KICKER4	PX	-.0005	-.0005	0	0
30	VERT1	PX	-.0005	-.0005	0	0
31	VERT2	PX	-.0005	-.0005	0	0
32	VERT3	PX	-.0005	-.0005	0	0
33	VERT4	PX	-.0005	-.0005	0	0
34	VERT5	PX	-.0005	-.0005	0	0
35	VERT6	PX	-.0005	-.0005	0	0
36	DIAG1	PX	-.0005	-.0005	0	0
37	DIAG2	PX	-.0005	-.0005	0	0
38	DIAG3	PX	-.0005	-.0005	0	0
39	DIAG4	PX	-.0005	-.0005	0	0
40	TIEBACK	PX	-.0005	-.0005	0	0
41	MP ALPHA1	PX	-.002	-.002	0	0
42	MP ALPHA2	PX	-.002	-.002	0	0
43	MP ALPHA5	PX	-.002	-.002	0	0
44	MP 1	PX	-.0005	-.0005	0	0
45	MP ALPHA3	PX	-.002	-.002	0	0
46	MP ALPHA4	PX	-.002	-.002	0	0

Member Distributed Loads (BLC 34 : Ice Wind Load (180))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	.003	.003	0	0
2	BOTTOMFACE	PY	.003	.003	0	0
3	KICKER1	PY	.001	.001	0	0
4	KICKER2	PY	.001	.001	0	0
5	KICKER3	PY	.001	.001	0	0
6	KICKER4	PY	.001	.001	0	0
7	VERT1	PY	.001	.001	0	0
8	VERT2	PY	.001	.001	0	0
9	VERT3	PY	.001	.001	0	0

Member Distributed Loads (BLC 34 : Ice Wind Load (180)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
10	VERT4	PY	.001	.001	0	0
11	VERT5	PY	.001	.001	0	0
12	VERT6	PY	.001	.001	0	0
13	DIAG1	PY	.001	.001	0	0
14	DIAG2	PY	.001	.001	0	0
15	DIAG3	PY	.001	.001	0	0
16	DIAG4	PY	.001	.001	0	0
17	TIEBACK	PY	.001	.001	0	0
18	MP ALPHA1	PY	.003	.003	0	0
19	MP ALPHA2	PY	.003	.003	0	0
20	MP ALPHA5	PY	.003	.003	0	0
21	MP 1	PY	.001	.001	0	0
22	MP ALPHA3	PY	.003	.003	0	0
23	MP ALPHA4	PY	.003	.003	0	0

Member Distributed Loads (BLC 35 : Ice Wind Load (210))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	.003	.003	0	0
2	BOTTOMFACE	PY	.003	.003	0	0
3	KICKER1	PY	.000866	.000866	0	0
4	KICKER2	PY	.000866	.000866	0	0
5	KICKER3	PY	.000866	.000866	0	0
6	KICKER4	PY	.000866	.000866	0	0
7	VERT1	PY	.000866	.000866	0	0
8	VERT2	PY	.000866	.000866	0	0
9	VERT3	PY	.000866	.000866	0	0
10	VERT4	PY	.000866	.000866	0	0
11	VERT5	PY	.000866	.000866	0	0
12	VERT6	PY	.000866	.000866	0	0
13	DIAG1	PY	.000866	.000866	0	0
14	DIAG2	PY	.000866	.000866	0	0
15	DIAG3	PY	.000866	.000866	0	0
16	DIAG4	PY	.000866	.000866	0	0
17	TIEBACK	PY	.000866	.000866	0	0
18	MP ALPHA1	PY	.003	.003	0	0
19	MP ALPHA2	PY	.003	.003	0	0
20	MP ALPHA5	PY	.003	.003	0	0
21	MP 1	PY	.000866	.000866	0	0
22	MP ALPHA3	PY	.003	.003	0	0
23	MP ALPHA4	PY	.003	.003	0	0
24	TOPFACE	PX	.002	.002	0	0
25	BOTTOMFACE	PX	.002	.002	0	0
26	KICKER1	PX	.0005	.0005	0	0
27	KICKER2	PX	.0005	.0005	0	0
28	KICKER3	PX	.0005	.0005	0	0
29	KICKER4	PX	.0005	.0005	0	0
30	VERT1	PX	.0005	.0005	0	0
31	VERT2	PX	.0005	.0005	0	0
32	VERT3	PX	.0005	.0005	0	0
33	VERT4	PX	.0005	.0005	0	0
34	VERT5	PX	.0005	.0005	0	0
35	VERT6	PX	.0005	.0005	0	0
36	DIAG1	PX	.0005	.0005	0	0
37	DIAG2	PX	.0005	.0005	0	0
38	DIAG3	PX	.0005	.0005	0	0
39	DIAG4	PX	.0005	.0005	0	0

Member Distributed Loads (BLC 35 : Ice Wind Load (210)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
40	TIEBACK	PX	.0005	.0005	0	0
41	MP ALPHA1	PX	.002	.002	0	0
42	MP ALPHA2	PX	.002	.002	0	0
43	MP ALPHA5	PX	.002	.002	0	0
44	MP 1	PX	.0005	.0005	0	0
45	MP ALPHA3	PX	.002	.002	0	0
46	MP ALPHA4	PX	.002	.002	0	0

Member Distributed Loads (BLC 36 : Ice Wind Load (240))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	.002	.002	0	0
2	BOTTOMFACE	PY	.002	.002	0	0
3	KICKER1	PY	.0005	.0005	0	0
4	KICKER2	PY	.0005	.0005	0	0
5	KICKER3	PY	.0005	.0005	0	0
6	KICKER4	PY	.0005	.0005	0	0
7	VERT1	PY	.0005	.0005	0	0
8	VERT2	PY	.0005	.0005	0	0
9	VERT3	PY	.0005	.0005	0	0
10	VERT4	PY	.0005	.0005	0	0
11	VERT5	PY	.0005	.0005	0	0
12	VERT6	PY	.0005	.0005	0	0
13	DIAG1	PY	.0005	.0005	0	0
14	DIAG2	PY	.0005	.0005	0	0
15	DIAG3	PY	.0005	.0005	0	0
16	DIAG4	PY	.0005	.0005	0	0
17	TIEBACK	PY	.0005	.0005	0	0
18	MP ALPHA1	PY	.002	.002	0	0
19	MP ALPHA2	PY	.002	.002	0	0
20	MP ALPHA5	PY	.002	.002	0	0
21	MP 1	PY	.0005	.0005	0	0
22	MP ALPHA3	PY	.002	.002	0	0
23	MP ALPHA4	PY	.002	.002	0	0
24	TOPFACE	PX	.003	.003	0	0
25	BOTTOMFACE	PX	.003	.003	0	0
26	KICKER1	PX	.000866	.000866	0	0
27	KICKER2	PX	.000866	.000866	0	0
28	KICKER3	PX	.000866	.000866	0	0
29	KICKER4	PX	.000866	.000866	0	0
30	VERT1	PX	.000866	.000866	0	0
31	VERT2	PX	.000866	.000866	0	0
32	VERT3	PX	.000866	.000866	0	0
33	VERT4	PX	.000866	.000866	0	0
34	VERT5	PX	.000866	.000866	0	0
35	VERT6	PX	.000866	.000866	0	0
36	DIAG1	PX	.000866	.000866	0	0
37	DIAG2	PX	.000866	.000866	0	0
38	DIAG3	PX	.000866	.000866	0	0
39	DIAG4	PX	.000866	.000866	0	0
40	TIEBACK	PX	.000866	.000866	0	0
41	MP ALPHA1	PX	.003	.003	0	0
42	MP ALPHA2	PX	.003	.003	0	0
43	MP ALPHA5	PX	.003	.003	0	0
44	MP 1	PX	.000866	.000866	0	0
45	MP ALPHA3	PX	.003	.003	0	0
46	MP ALPHA4	PX	.003	.003	0	0

Member Distributed Loads (BLC 37 : Ice Wind Load (270))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PX	.003	.003	0	0
2	BOTTOMFACE	PX	.003	.003	0	0
3	KICKER1	PX	.001	.001	0	0
4	KICKER2	PX	.001	.001	0	0
5	KICKER3	PX	.001	.001	0	0
6	KICKER4	PX	.001	.001	0	0
7	VERT1	PX	.001	.001	0	0
8	VERT2	PX	.001	.001	0	0
9	VERT3	PX	.001	.001	0	0
10	VERT4	PX	.001	.001	0	0
11	VERT5	PX	.001	.001	0	0
12	VERT6	PX	.001	.001	0	0
13	DIAG1	PX	.001	.001	0	0
14	DIAG2	PX	.001	.001	0	0
15	DIAG3	PX	.001	.001	0	0
16	DIAG4	PX	.001	.001	0	0
17	TIEBACK	PX	.001	.001	0	0
18	MP ALPHA1	PX	.003	.003	0	0
19	MP ALPHA2	PX	.003	.003	0	0
20	MP ALPHA5	PX	.003	.003	0	0
21	MP 1	PX	.001	.001	0	0
22	MP ALPHA3	PX	.003	.003	0	0
23	MP ALPHA4	PX	.003	.003	0	0

Member Distributed Loads (BLC 38 : Ice Wind Load (300))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	-.002	-.002	0	0
2	BOTTOMFACE	PY	-.002	-.002	0	0
3	KICKER1	PY	-.0005	-.0005	0	0
4	KICKER2	PY	-.0005	-.0005	0	0
5	KICKER3	PY	-.0005	-.0005	0	0
6	KICKER4	PY	-.0005	-.0005	0	0
7	VERT1	PY	-.0005	-.0005	0	0
8	VERT2	PY	-.0005	-.0005	0	0
9	VERT3	PY	-.0005	-.0005	0	0
10	VERT4	PY	-.0005	-.0005	0	0
11	VERT5	PY	-.0005	-.0005	0	0
12	VERT6	PY	-.0005	-.0005	0	0
13	DIAG1	PY	-.0005	-.0005	0	0
14	DIAG2	PY	-.0005	-.0005	0	0
15	DIAG3	PY	-.0005	-.0005	0	0
16	DIAG4	PY	-.0005	-.0005	0	0
17	TIEBACK	PY	-.0005	-.0005	0	0
18	MP ALPHA1	PY	-.002	-.002	0	0
19	MP ALPHA2	PY	-.002	-.002	0	0
20	MP ALPHA5	PY	-.002	-.002	0	0
21	MP 1	PY	-.0005	-.0005	0	0
22	MP ALPHA3	PY	-.002	-.002	0	0
23	MP ALPHA4	PY	-.002	-.002	0	0
24	TOPFACE	PX	.003	.003	0	0
25	BOTTOMFACE	PX	.003	.003	0	0
26	KICKER1	PX	.000866	.000866	0	0
27	KICKER2	PX	.000866	.000866	0	0
28	KICKER3	PX	.000866	.000866	0	0
29	KICKER4	PX	.000866	.000866	0	0
30	VERT1	PX	.000866	.000866	0	0

Member Distributed Loads (BLC 38 : Ice Wind Load (300)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
31	VERT2	PX	.000866	.000866	0	0
32	VERT3	PX	.000866	.000866	0	0
33	VERT4	PX	.000866	.000866	0	0
34	VERT5	PX	.000866	.000866	0	0
35	VERT6	PX	.000866	.000866	0	0
36	DIAG1	PX	.000866	.000866	0	0
37	DIAG2	PX	.000866	.000866	0	0
38	DIAG3	PX	.000866	.000866	0	0
39	DIAG4	PX	.000866	.000866	0	0
40	TIEBACK	PX	.000866	.000866	0	0
41	MP ALPHA1	PX	.003	.003	0	0
42	MP ALPHA2	PX	.003	.003	0	0
43	MP ALPHA5	PX	.003	.003	0	0
44	MP 1	PX	.000866	.000866	0	0
45	MP ALPHA3	PX	.003	.003	0	0
46	MP ALPHA4	PX	.003	.003	0	0

Member Distributed Loads (BLC 39 : Ice Wind Load (330))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	TOPFACE	PY	-.003	-.003	0	0
2	BOTTOMFACE	PY	-.003	-.003	0	0
3	KICKER1	PY	-.000866	-.000866	0	0
4	KICKER2	PY	-.000866	-.000866	0	0
5	KICKER3	PY	-.000866	-.000866	0	0
6	KICKER4	PY	-.000866	-.000866	0	0
7	VERT1	PY	-.000866	-.000866	0	0
8	VERT2	PY	-.000866	-.000866	0	0
9	VERT3	PY	-.000866	-.000866	0	0
10	VERT4	PY	-.000866	-.000866	0	0
11	VERT5	PY	-.000866	-.000866	0	0
12	VERT6	PY	-.000866	-.000866	0	0
13	DIAG1	PY	-.000866	-.000866	0	0
14	DIAG2	PY	-.000866	-.000866	0	0
15	DIAG3	PY	-.000866	-.000866	0	0
16	DIAG4	PY	-.000866	-.000866	0	0
17	TIEBACK	PY	-.000866	-.000866	0	0
18	MP ALPHA1	PY	-.003	-.003	0	0
19	MP ALPHA2	PY	-.003	-.003	0	0
20	MP ALPHA5	PY	-.003	-.003	0	0
21	MP 1	PY	-.000866	-.000866	0	0
22	MP ALPHA3	PY	-.003	-.003	0	0
23	MP ALPHA4	PY	-.003	-.003	0	0
24	TOPFACE	PX	.002	.002	0	0
25	BOTTOMFACE	PX	.002	.002	0	0
26	KICKER1	PX	.0005	.0005	0	0
27	KICKER2	PX	.0005	.0005	0	0
28	KICKER3	PX	.0005	.0005	0	0
29	KICKER4	PX	.0005	.0005	0	0
30	VERT1	PX	.0005	.0005	0	0
31	VERT2	PX	.0005	.0005	0	0
32	VERT3	PX	.0005	.0005	0	0
33	VERT4	PX	.0005	.0005	0	0
34	VERT5	PX	.0005	.0005	0	0
35	VERT6	PX	.0005	.0005	0	0
36	DIAG1	PX	.0005	.0005	0	0
37	DIAG2	PX	.0005	.0005	0	0

Member Distributed Loads (BLC 39 : Ice Wind Load (330)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
38	DIAG3	PX	.0005	.0005	0	0
39	DIAG4	PX	.0005	.0005	0	0
40	TIEBACK	PX	.0005	.0005	0	0
41	MP ALPHA1	PX	.002	.002	0	0
42	MP ALPHA2	PX	.002	.002	0	0
43	MP ALPHA5	PX	.002	.002	0	0
44	MP 1	PX	.0005	.0005	0	0
45	MP ALPHA3	PX	.002	.002	0	0
46	MP ALPHA4	PX	.002	.002	0	0

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(...
1	Live Load	DL					1			
2	Wind Load (0)	DL					17	23		
3	Dead Load	DL			-1.1		17			
4	Wind Load (30)	DL					34	46		
5	Wind Load (60)	DL					34	46		
6	Wind Load (90)	DL					17	23		
7	Wind Load (120)	DL					34	46		
8	Wind Load (150)	DL					34	46		
9	Wind Load (180)	DL					17	23		
10	Wind Load (210)	DL					34	46		
11	Wind Load (240)	DL					34	46		
12	Wind Load (270)	DL					17	23		
13	Wind Load (300)	DL					34	46		
14	Wind Load (330)	DL					34	46		
15	Maintanence (0)	DL					17			
16	Maintanence (30)	DL					34			
17	Maintanence (60)	DL					34			
18	Maintanence (90)	DL					17			
19	Maintanence (120)	DL					34			
20	Maintanence (150)	DL					34			
21	Maintanence (180)	DL					17			
22	Maintanence (210)	DL					34			
23	Maintanence (240)	DL					34			
24	Maintanence (270)	DL					17			
25	Maintanence (300)	DL					34			
26	Maintanence (330)	DL					34			
27	Ice Dead Load	DL					17	23		
28	Ice Wind Load (0)	DL					17	23		
29	Ice Wind Load (30)	DL					34	46		
30	Ice Wind Load (60)	DL					34	46		
31	Ice Wind Load (90)	DL					17	23		
32	Ice Wind Load (120)	DL					34	46		
33	Ice Wind Load (150)	DL					34	46		
34	Ice Wind Load (180)	DL					17	23		
35	Ice Wind Load (210)	DL					34	46		
36	Ice Wind Load (240)	DL					34	46		
37	Ice Wind Load (270)	DL					17	23		
38	Ice Wind Load (300)	DL					34	46		
39	Ice Wind Load (330)	DL					34	46		
40	Earthquake (x-direction)	DL	-.107				17			
41	Earthquake (y-direction)	DL		-.107			17			
42	Earthquake (z-direction)	DL			-.043		17			

Load Combinations

	Description	S...	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
1	1.4D	Yes	Y		3	1.4																		
2	1.2D + 1.0W(0)	Yes	Y		3	1.2	2	1																
3	1.2D + 1.0Di + 1.0Wi(0)	Yes	Y		3	1.2	27	1	28	1														
4	1.2D + 1.5L + 1.0Wl(0)	Yes	Y		3	1.2	1	1.5	15	1														
5	1.2D + 1.0W(30)	Yes	Y		3	1.2	4	1																
6	1.2D + 1.0Di + 1.0Wi(30)	Yes	Y		3	1.2	27	1	29	1														
7	1.2D + 1.5L + 1.0Wl(30)	Yes	Y		3	1.2	1	1.5	16	1														
8	1.2D + 1.0W(60)	Yes	Y		3	1.2	5	1																
9	1.2D + 1.0Di + 1.0Wi(60)	Yes	Y		3	1.2	27	1	30	1														
10	1.2D + 1.5L + 1.0Wl(60)	Yes	Y		3	1.2	1	1.5	17	1														
11	1.2D + 1.0W(90)	Yes	Y		3	1.2	6	1																
12	1.2D + 1.0Di + 1.0Wi(90)	Yes	Y		3	1.2	27	1	31	1														
13	1.2D + 1.5L + 1.0Wl(90)	Yes	Y		3	1.2	1	1.5	18	1														
14	1.2D + 1.0W(120)	Yes	Y		3	1.2	7	1																
15	1.2D + 1.0Di + 1.0Wi(120)	Yes	Y		3	1.2	27	1	32	1														
16	1.2D + 1.5L + 1.0Wl(120)	Yes	Y		3	1.2	1	1.5	19	1														
17	1.2D + 1.0W(150)	Yes	Y		3	1.2	8	1																
18	1.2D + 1.0Di + 1.0Wi(150)	Yes	Y		3	1.2	27	1	33	1														
19	1.2D + 1.5L + 1.0Wl(150)	Yes	Y		3	1.2	1	1.5	20	1														
20	1.2D + 1.0W(180)	Yes	Y		3	1.2	9	1																
21	1.2D + 1.0Di + 1.0Wi(180)	Yes	Y		3	1.2	27	1	34	1														
22	1.2D + 1.5L + 1.0Wl(180)	Yes	Y		3	1.2	1	1.5	21	1														
23	1.2D + 1.0W(210)	Yes	Y		3	1.2	10	1																
24	1.2D + 1.0Di + 1.0Wi(210)	Yes	Y		3	1.2	27	1	35	1														
25	1.2D + 1.5L + 1.0Wl(210)	Yes	Y		3	1.2	1	1.5	22	1														
26	1.2D + 1.0W(240)	Yes	Y		3	1.2	11	1																
27	1.2D + 1.0Di + 1.0Wi(240)	Yes	Y		3	1.2	27	1	36	1														
28	1.2D + 1.5L + 1.0Wl(240)	Yes	Y		3	1.2	1	1.5	23	1														
29	1.2D + 1.0W(270)	Yes	Y		3	1.2	12	1																
30	1.2D + 1.0Di + 1.0Wi(270)	Yes	Y		3	1.2	27	1	37	1														
31	1.2D + 1.5L + 1.0Wl(270)	Yes	Y		3	1.2	1	1.5	24	1														
32	1.2D + 1.0W(300)	Yes	Y		3	1.2	13	1																
33	1.2D + 1.0Di + 1.0Wi(300)	Yes	Y		3	1.2	27	1	38	1														
34	1.2D + 1.5L + 1.0Wl(300)	Yes	Y		3	1.2	1	1.5	25	1														
35	1.2D + 1.0W(330)	Yes	Y		3	1.2	14	1																
36	1.2D + 1.0Di + 1.0Wi(330)	Yes	Y		3	1.2	27	1	39	1														
37	1.2D + 1.5L + 1.0Wl(330)	Yes	Y		3	1.2	1	1.5	26	1														
38	1.2D + 1.0E(x) + 1.0E(z) + L	Yes	Y		3	1.2	40	1	42	1	1	1												
39	1.2D + 1.0E(y) + 1.0E(z) + L	Yes	Y		3	1.2	41	1	42	1	1	1												
40	1.2D - 1.0E(x) + 1.0E(z) + L	Yes	Y		3	1.2	40	-1	42	1	1	1												
41	1.2D - 1.0E(y) + 1.0E(z) + L	Yes	Y		3	1.2	41	-1	42	1	1	1												

Envelope Joint Reactions

	Joint		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N35	max	.358	26	1.175	26	.037	27	0	41	0	41	0	41
2		min	-.362	8	-1.171	8	.013	8	0	1	0	1	0	1
3	N32A	max	1.482	8	3.466	2	1.501	21	-.154	17	.265	10	0	41
4		min	-1.546	26	-1.789	20	.863	2	-.348	36	-.147	26	0	1
5	N4	max	.303	8	-.18	5	1.02	6	-.105	23	.181	10	0	41
6		min	-1.22	28	-1.519	27	.579	23	-.249	6	-.086	26	0	1
7	Totals:	max	1.423	8	2.612	2	2.555	6						
8		min	-1.423	26	-2.612	20	1.465	23						

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

	Member	Shape	Code Check	Lo...	LC	Shear Ch...	Lo...	LC	phi*...	phi*...	phi*...	phi*...	...	Eqn
1	MP ALPHA3	PIPE_2.0	.531	3....	20	.061	3....	23	14.9...	32.13	1.872	1.872	...	H1-...
2	VERT1	PIPE_2.0	.518	1....	8	.091	3....	23	27.9...	32.13	1.872	1.872	...	H1-...
3	MP ALPHA2	PIPE_2.0	.429	3....	2	.053	3....	2	14.9...	32.13	1.872	1.872	...	H1-...
4	KICKER4	PIPE_2.0	.391	4....	20	.223	4....	20	24.4...	32.13	1.872	1.872	...	H1-...
5	TOPFACE	PIPE_2.5	.368	6....	2	.240	10...	20	14.5...	50.7...	3.596	3.596	1	H1-...
6	KICKER3	PIPE_2.0	.327	0	20	.217	.4...	5	24.4...	32.13	1.872	1.872	...	H1-...
7	MP 1	PIPE_2.0	.317	3....	20	.123	.5...	5	12.1...	32.13	1.872	1.872	...	H1-...
8	KICKER2	PIPE_2.0	.246	4....	2	.158	4....	2	24.4...	32.13	1.872	1.872	...	H1-...
9	MP ALPHA5	PIPE_2.0	.243	3....	4	.034	3....	20	14.9...	32.13	1.872	1.872	...	H1-...
10	KICKER1	PIPE_2.0	.208	4....	7	.168	.4...	32	24.4...	32.13	1.872	1.872	...	H1-...
11	MP ALPHA4	PIPE_2.0	.202	6....	2	.055	6....	23	14.9...	32.13	1.872	1.872	...	H1-...
12	MP ALPHA1	PIPE_2.0	.168	3....	2	.028	3....	23	14.9...	32.13	1.872	1.872	...	H1-...
13	BOTTOMFACE	PIPE_2.5	.139	2....	4	.077	2....	35	14.5...	50.7...	3.596	3.596	1	H1-...
14	VERT2	PIPE_1.25	.117	0	7	.017	3....	32	14.69	19.6...	.801	.801	1	H1-...
15	VERT6	PIPE_2.0	.091	3....	2	.017	3....	35	27.9...	32.13	1.872	1.872	...	H1-...
16	DIAG1	PIPE_1.25	.080	0	5	.033	3....	2	13.75	19.6...	.801	.801	...	H1-...
17	VERT5	PIPE_1.25	.079	0	33	.019	0	23	14.69	19.6...	.801	.801	...	H1-...
18	TIEBACK	PIPE_2.0	.058	0	8	.004	0	30	21.3...	32.13	1.872	1.872	...	H1-...
19	DIAG2	PIPE_1.25	.056	0	5	.010	0	32	13.12	19.6...	.801	.801	...	H1-...
20	DIAG3	PIPE_1.25	.050	2....	24	.005	4....	23	13.12	19.6...	.801	.801	...	H1-...
21	VERT3	PIPE_1.25	.044	0	10	.016	3....	32	14.69	19.6...	.801	.801	1	H1-...
22	DIAG4	PIPE_1.25	.041	3....	33	.033	0	20	13.75	19.6...	.801	.801	...	H1-...
23	VERT4	PIPE_1.25	.035	0	27	.019	3....	23	14.69	19.6...	.801	.801	...	H1-...

APPENDIX H

Additional Calculations (Gamma)

POD
POWER OF DESIGN

POD Job #	**20-64958**
Site Number	**806377**
Site Name	**HRT 084 943242**

Connection Type	Single Shear

RISA 3D Forces

Axial (Bolts)	2.16	kips
Shear (Bolts)	0.010	kips
Axial Force (Member)	2.160	kips

Bolt/Member Information

Member Label	Diag1	
# of Bolts	1	
Diameter	0.5	inches
Bolt Grade	A325	
Member Grade	ASTM A53 Gr. B	
Threads Included?	Yes	
L_b	0	inches
L_c	1	inches
t	0.13	inches

Shear Capacity	**0.1%**
Axial Capacity	**16.9%**
Bearing Capacity	**28.8%**
Combined Capacity	**2.9%**

Ver 1.0 - 2/28/2020

APPENDIX I

Wind Speed Documentation

Hazards by Location

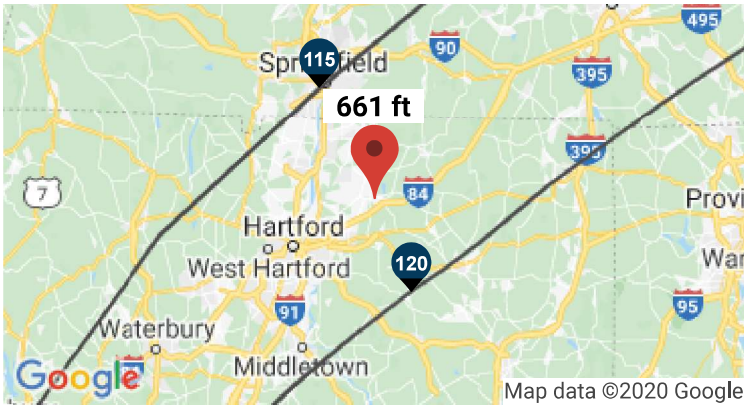
Search Information

Coordinates: 41.853475, -72.452089

Elevation: 661 ft

Timestamp: 2020-06-05T17:38:57.516Z

Hazard Type: Wind



ASCE 7-16

MRI 10-Year	75 mph
MRI 25-Year	83 mph
MRI 50-Year	90 mph
MRI 100-Year	97 mph
Risk Category I	108 mph
Risk Category II	118 mph
Risk Category III	127 mph
Risk Category IV	⚠ 131 mph

You are in a wind-borne debris region if you are also within 1 mile of the coastal mean high water line.

ASCE 7-10

MRI 10-Year	77 mph
MRI 25-Year	87 mph
MRI 50-Year	93 mph
MRI 100-Year	100 mph
Risk Category I	113 mph
Risk Category II	124 mph
Risk Category III-IV	⚠ 133 mph

If the structure under consideration is a healthcare facility and you are also within 1 mile of the coastal mean high water line, you are in a wind-borne debris region. If other occupancy, use the Risk Category II basic wind speed contours to determine if you are in a wind-borne debris region.

ASCE 7-05

ASCE 7-05 Wind Speed	99 mph

The results indicated here DO NOT reflect any state or local amendments to the values or any delineation lines made during the building code adoption process. Users should confirm any output obtained from this tool with the local Authority Having Jurisdiction before proceeding with design.

Disclaimer

Hazard loads are interpolated from data provided in ASCE 7 and rounded up to the nearest whole integer. Per ASCE 7, islands and coastal areas outside the last contour should use the last wind speed contour of the coastal area – in some cases, this website will extrapolate past the last wind speed contour and therefore, provide a wind speed that is slightly higher. NOTE: For queries near wind-borne debris region boundaries, the resulting determination is sensitive to rounding which may affect whether or not it is considered to be within a wind-borne debris region.

Mountainous terrain, gorges, ocean promontories, and special wind regions shall be examined for unusual wind conditions.

Exhibit F

Power Density/RF Emissions Report

Radio Frequency Emissions Analysis Report

AT&T Existing Facility

Site ID: CTL01082

Project Type: AT&T LTE 5C

Vernon NE
197 South Street
Vernon, CT 06066

July 9, 2020

Fullerton Project Number: 2020.01820.0007

Site Compliance Summary	
Compliance Status:	**COMPLIANT**
Site total MPE% of FCC general population allowable limit:	**36.54 %**

July 9, 2020

Crown Castle on Behalf of AT&T
Attn: Anne Marie Zsamba, Site Acquisition Specialist
3 Corporate Park Drive, Suite 101
Clifton Park, NY 12065

Emissions Analysis for Site: **CTL01082 – Vernon NE**

Fullerton Engineering Consultants, LLC ("Fullerton") was directed to analyze the proposed upgrades to the AT&T facility located at **197 South Street, Vernon, CT**, for the purpose of determining whether the emissions from the proposed AT&T antenna Installation located on this property are within specified federal limits.

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

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

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

Population exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu W/cm^2$). The general population exposure limits for the 700 MHz & 850 MHz bands are approximately 467 $\mu W/cm^2$ and 567 $\mu W/cm^2$ respectively. The general population exposure limit for the 1900 MHz (PCS), 2100 MHz (AWS) and 2300 MHz (WCS) bands is 1000 $\mu W/cm^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

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

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were performed for the proposed upgrades to the AT&T antenna facility located at **197 South Street, Vernon, CT**, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since AT&T is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB for directional panel antennas, was focused at the base of the tower. For this report, the sample point is the top of a 6-foot person standing at the base of the tower.

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

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

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

Technology	Frequency Band	Channel Count	Transmit Power per Channel (W)
UMTS	850 MHz	1	20
UMTS	1900 MHz (PCS)	1	20
LTE	2300 MHz (WCS)	4	25
LTE	700 MHz (Band 14)	4	40
LTE	1900 MHz (PCS)	8	40
LTE	2100 MHz (AWS)	4	40
LTE	700 MHz (Band 12)	4	40
LTE / 5G NR	850 MHz	4	40

Table 1: Channel Data Table

The following antennas listed in *Table 2* were used in the modeling for transmission in the 700 MHz, 850 MHz, 1900 MHz (PCS), 2100 MHz (AWS) and 2300 MHz (WCS) frequency bands. This is based on feedback from the carrier with regards to anticipated antenna selection. Maximum gain values for all antennas are listed in the Inventory and Power Data table below. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB for directional panel antennas, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.

Sector	Antenna Number	Antenna Make / Model	Antenna Centerline (ft)
A	1	Kathrein 800-10121	106
A	2	CCI HPA65R-BUU-H6	106
A	3	CCI TPA65R-BU6DA-K	106
A	4	CCI DMP65R-BU6DA	106
B	1	Kathrein 800-10121	106
B	2	CCI HPA65R-BUU-H6	106
B	3	CCI TPA65R-BU6DA-K	106
B	4	CCI DMP65R-BU6DA	106
C	1	Kathrein 800-10121	106
C	2	CCI HPA65R-BUU-H8	106
C	3	CCI TPA65R-BU8DA-K	106
C	4	CCI DMP65R-BU8DA	106

Table 2: Antenna Data

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

Cable losses were factored in the calculations for this site. For each **700 MHz** Remote Radio Unit (RRU) there was **0.18 dB** of cable loss calculated into the system gains / losses for this site. For each **850 MHz** Remote Radio Unit (RRU) there was **0.20 dB** of cable loss calculated into the system gains / losses for this site. For each **850 MHz** ground mounted radio there was **1.35 dB** of cable loss calculated into the system gains / losses for this site. For each **1900 MHz (PCS)** Remote Radio Unit (RRU) there was **0.32 dB** of cable loss calculated into the system gains / losses for this site. For each **1900 MHz (PCS)** ground mounted radio there was **2.18 dB** of cable loss calculated into the system gains / losses for this site. For each **2100 MHz (AWS)** Remote Radio Unit (RRU) there was **0.34 dB** of cable loss calculated into the system gains / losses for this site. For each **2300 MHz (WCS)** Remote Radio Unit (RRU) there was **0.35 dB** of cable loss calculated into the system gains / losses for this site These values were calculated based upon the manufacturers specifications for **10 feet** of **1/2"** coax for all Remote Radio Units (RRU) and **130 feet** of **7/8"** for all ground mounted radios.

RESULTS

Per the calculations completed for the proposed AT&T configurations *Table 3* shows resulting emissions power levels and percentages of the FCC's allowable general population limit.

Antenna ID	Antenna Make / Model	Frequency Bands	Antenna Gain (dBd)	Channel Count	Total TX Power (W)	ERP (W)	MPE %
Antenna A1	Kathrein 800-10121	850 MHz / 1900 MHz (PCS)	11.45 / 14.35	2	40	534.29	0.25
Antenna A2	CCI HPA65R-BUU-H6	2300 MHz (WCS)	16.35	4	100	3,981.07	1.43
Antenna A3	CCI TPA65R-BU6DA-K	700 MHz (Band 14) / 1900 MHz (PCS) / 2100 MHz (AWS)	12.35 / 15.95 / 16.25	12	480	14,725.65	6.37
Antenna A4	CCI DMP65R-BU6DA	700 MHz (Band 12) / 850 MHz / 1900 MHz (PCS)	11.85 / 12.45 / 15.55	12	480	10,371.19	5.43
						Sector A Composite MPE%	**13.48**
Antenna B1	Kathrein 800-10121	850 MHz / 1900 MHz (PCS)	11.45 / 14.35	2	40	534.29	0.25
Antenna B2	CCI HPA65R-BUU-H6	2300 MHz (WCS)	16.35	4	100	3,981.07	1.43
Antenna B3	CCI TPA65R-BU6DA-K	700 MHz (Band 14) / 1900 MHz (PCS) / 2100 MHz (AWS)	12.35 / 15.95 / 16.25	12	480	14,725.65	6.37
Antenna B4	CCI DMP65R-BU6DA	700 MHz (Band 12) / 850 MHz / 1900 MHz (PCS)	11.85 / 12.45 / 15.55	12	480	10,371.19	5.43
						Sector B Composite MPE%	**13.48**
Antenna C1	Kathrein 800-10121	850 MHz / 1900 MHz (PCS)	11.45 / 14.35	2	40	534.29	0.25
Antenna C2	CCI HPA65R-BUU-H8	2300 MHz (WCS)	15.55	4	100	3,311.31	1.19
Antenna C3	CCI TPA65R-BU8DA-K	700 MHz (Band 14) / 1900 MHz (PCS) / 2100 MHz (AWS)	12.35 / 15.95 / 16.25	12	480	15,343.76	6.91
Antenna C4	CCI DMP65R-BU8DA	700 MHz (Band 12) / 850 MHz / 1900 MHz (PCS)	11.85 / 12.45 / 15.55	12	480	12,194.67	6.64
						Sector C Composite MPE%	**14.99**

Table 3: AT&T *Emissions Levels*

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

Site Composite MPE%	
Carrier	**MPE%**
AT&T – Max Sector Value: Sector C	**14.99 %**
Verizon Wireless	9.03 %
XM Satellite Radio	0.14 %
Town	0.89 %
MetroPCS	1.12 %
Sprint	0.97 %
Clearwire	0.11 %
T-Mobile	9.29 %
Site Total MPE %:	**36.54 %**

Table 4: All Carrier MPE Contributions

AT&T Sector A Total:	13.48 %
AT&T Sector B Total:	13.48 %
AT&T Sector C Total:	14.99 %
Site Total:	36.54 %

Table 5: Site MPE Summary

FCC OET 65 specifies that for carriers utilizing directional antennas that the highest recorded sector value be used for composite site MPE values due to their greatly reduced emissions contributions in the directions of the adjacent sectors. *Table 6* below details a breakdown by frequency band and technology for the MPE power values for the maximum calculated AT&T sector(s). For this site, the sector with the largest calculated MPE% is **Sector C**.

AT&T _ Frequency Band / Technology Max Power Values (Sector C)	**# Channels**	**Watts ERP (Per Channel)**	**Height (feet)**	**Total Power Density (μW/cm²)**	**Frequency (MHz)**	**Allowable MPE (μW/cm²)**	**Calculated % MPE**
AT&T 850 MHz UMTS	1	204.66	106	0.74	850 MHz	567	0.13%
AT&T 1900 MHz (PCS) UMTS	1	329.63	106	1.19	1900 MHz (PCS)	1000	0.12%
AT&T 2300 MHz (WCS) LTE	4	827.83	106	11.90	2300 MHz (WCS)	1000	1.19%
AT&T 700 MHz LTE	4	849.30	106	12.21	700 MHz	467	2.62%
AT&T 1900 MHz (PCS) LTE	4	1,462.38	106	21.03	1900 MHz (PCS)	1000	2.10%
AT&T 2100 MHz (AWS) LTE	4	1,524.26	106	21.92	2100 MHz (AWS)	1000	2.19%
AT&T 700 MHz LTE	4	756.94	106	10.88	700 MHz	467	2.33%
AT&T 850 MHz LTE / 5G NR	4	926.96	106	13.33	850 MHz	567	2.35%
AT&T 1900 MHz (PCS) LTE	4	1,364.77	106	19.63	1900 MHz (PCS)	1000	1.96%
						Total:	**14.99%**

Table 6: AT&T *Maximum Sector MPE Power Values*

Summary

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

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

AT&T Sector	Power Density Value (%)
Sector A:	13.48 %
Sector B:	13.48 %
Sector C:	14.99 %
AT&T Maximum Total (Sector C):	14.99 %
Site Total:	36.54 %
Site Compliance Status:	**COMPLIANT**

The anticipated composite MPE value for this site assuming all carriers present is **36.54 %** of the allowable FCC established general population limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

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

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