Robinson+Cole

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Also admitted in Massachusetts
and New York

January 28, 2022

Via Electronic Mail

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

Re: **Notice of Exempt Modification – Facility Modification**
231 Kettletown Road, Southbury, Connecticut

Dear Attorney Bachman:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains an existing wireless telecommunications facility at the above-referenced property address (the "Property"). The facility consists of antennas and remote radio heads attached to a tower and associated equipment on the ground near the base of the tower. The tower was approved by the Town of Southbury ("Town") in February of 1999. Cellco's use of the tower was approved by the Siting Council ("Council") in November 2001 (TS-VER-130-011023). A copy of the Town's approval and Council's TS-VER-130-011023 approval are included in Attachment 1.

Cellco now intends to modify its facility by removing fifteen (15) antennas and installing (3) new Samsung MT6407-77A antennas, three (3) new NNH-65B-R6 antennas, and three (3) new Samsung CBRS antennas on Cellco's existing antenna platform. Cellco also intends install six (6) remote radio heads ("RRHs") behind its antennas and rotate its antenna platform twenty degrees to accommodate new antenna azimuths. A set of project plans showing Cellco's proposed facility modifications and the specifications for Cellco's new antennas and RRHs are included in Attachment 2.

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

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

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

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

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

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

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

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

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

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

Sincerely,

Kenneth C. Baldwin

Enclosures
Copy to:
Jeff Manville, Southbury First Selectman
Jessica Townsend, Land Use Administrator
Alex Tyurin, Verizon Wireless

ATTACHMENT 1

TOWN OF SOUTHBURY

ZONING BOARD OF APPEALS

February 2, 1999

At the Regular Meeting on February 2, 1999 the following motion was unanimously approved.

Peirce Behardt motioned to approve the request from Omnipoint Application # 763 for a variance of Section Schedule B 6 of the Zoning Regulations, relating to Height Requirements with all of the changes set forth by the Zoning Board of Appeals as to permit construction of a monopole telecommunications tower for PCS coverage.

I hereby move that the application of the Omnipoint communications, Inc. dated August 14, 1998 seeking a variance to construct a 199 foot monopole, and an associated equipment cabinet for use as a PCS communications facility on parcel of land to be leased from the town of Southbury on Kettletown Road adjacent to the existing recycling facility in the R-60 zone, as requested in said application and as shown on the site plan submitted therewith, be granted subject to the following conditions:

1. The monopole and equipment cabinet will be completely surrounded by and eight-foot high, chain link, security fence (30' x 30') topped with barbed wire.
2. Omnipoint will obtain access to the site by means of a proposed road leading from Kettletown Road as shown on the site plan submitted with its application.
3. An Omnipoint employee will visit the site as least once a month for equipment checks and routine maintenance.
4. There is no requirement for water supply or sewerage or solid waste disposal.
5. No lights will be mounted on the monopole
6. The monopole shall be able to support at least four (4) additional carriers and shall have a non-reflecting galvanized finish.

November 8, 2001

Kenneth C. Baldwin
Robinson & Cole
280 Trumbull Street
Hartford, CT 06103-3597

RE: **TS-VER-130-011023** - Cellco Partnership d/b/a Verizon Wireless request for an order to approve tower sharing at a telecommunications facility located at 231 Kettletown Road, Southbury, Connecticut.

Dear Attorney Baldwin:

At a public meeting held November 7, 2001, the Connecticut Siting Council (Council) ruled that the shared use of this existing tower site is technically, legally, environmentally, and economically feasible and meets public safety concerns, and therefore, in compliance with General Statutes § 16-50aa, the Council has ordered the shared use of this facility to avoid the unnecessary proliferation of tower structures. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Any additional change to this facility may require an explicit request to this agency pursuant to General Statutes § 16-50aa or notice pursuant to Regulations of Connecticut State Agencies Section 16-50j-73, as applicable. Such request or notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

This decision applies only to this request for tower sharing and is not applicable to any other request or construction.

The proposed shared use is to be implemented as specified in your letters dated October 22, 2001, and November 1, 2001.

Thank you for your attention and cooperation.

Very truly yours,

Mortimer A. Gelston
Chairman

MAG/RKE/laf

c: Honorable Alfio A. Candido, Jr., First Selectman, Town of Southbury
Mark D. Cody, Zoning Enforcement Officer, Town of Southbury
Stephen J. Humes, Esq., LeBoeuf, Lamb, Greene & MacRae
Christopher B. Fisher, Esq., Cuddy & Feder & Worby LLP
Julie M. Donaldson, Esq., Hurwitz & Sagarin LLC
Peter W. van Wilgen, SNET Mobility LLC

ATTACHMENT 2

verizon

SOUTHBURY 2 CT
231 KETTLETOWN RD.
SOUTHBURY, CT 06488

GENERAL NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2015 INTERNATIONAL BUILDING CODE AS MODIFIED BY THE 2018 CONNECTICUT SUPPLEMENT, INCLUDING THE TIA/EIA-222 REVISION "G" STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND SUPPORTING STRUCTURES, 2017 CONNECTICUT FIRE SAFETY CODE, NATIONAL ELECTRICAL CODE, AND LOCAL CODES.
2. SHOULD ANY FIELD CONDITIONS PRECLUDE COMPLIANCE WITH THE DRAWINGS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND SHALL NOT PROCEED WITH ANY AFFECTED WORK.
3. CONTRACTOR SHALL REVIEW ALL DRAWINGS AND SPECIFICATIONS IN THE CONTRACT DOCUMENT SET. CONTRACTOR SHALL COORDINATE ALL WORK SHOWN IN THE SET OF DRAWINGS. THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF DRAWINGS TO ALL SUBCONTRACTORS AND ALL RELATED PARTIES. THE SUBCONTRACTORS SHALL EXAMINE ALL THE DRAWINGS AND SPECIFICATIONS FOR THE INFORMATION THAT AFFECTS THEIR WORK.
4. CONTRACTOR SHALL PROVIDE A COMPLETE BUILD-OUT WITH ALL FINISHES, STRUCTURAL, MECHANICAL, AND ELECTRICAL COMPONENTS AND PROVIDE ALL ITEMS AS SHOWN OR INDICATED ON THE DRAWINGS OR IN THE WRITTEN SPECIFICATIONS.
5. CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR AND EQUIPMENT TO COMPLETE THE WORK AND FURNISH A COMPLETED JOB ALL IN ACCORDANCE WITH LOCAL AND STATE GOVERNING AUTHORITIES AND OTHER AUTHORITIES HAVING LAWFUL JURISDICTION OVER THE WORK.
6. CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND ALL INSPECTIONS REQUIRED AND SHALL ALSO PAY FEES REQUIRED FOR THE GENERAL CONSTRUCTION, AND ALL TRADES AS APPLICABLE PERMITS SHALL BE PAID FOR BY THE RESPECTIVE SUBCONTRACTORS.
7. CONTRACTOR SHALL MAINTAIN A CURRENT SET OF DRAWINGS AND SPECIFICATIONS ON SITE AT ALL TIMES AND INSURE DISTRIBUTION OF NEW DRAWINGS TO SUBCONTRACTORS AND OTHER RELEVANT PARTIES AS SOON AS THEY ARE MADE AVAILABLE. ALL OLD DRAWINGS SHALL BE MARKED VOID AND REMOVED FROM THE CONTRACT AREA. THE CONTRACTOR SHALL FURNISH AN "AS-BUILT" SET OF DRAWINGS TO OWNER UPON COMPLETION OF PROJECT.
8. LOCATION OF EQUIPMENT, AND WORK SUPPLIED BY OTHERS THAT IS DIAGRAMMATICALLY INDICATED ON THE DRAWINGS SHALL BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL DETERMINE LOCATIONS AND DIMENSIONS SUBJECT TO STRUCTURAL CONDITIONS AND WORK OF THE SUBCONTRACTORS.
9. THE CONTRACTOR IS SOLELY RESPONSIBLE TO DETERMINE CONSTRUCTION PROCEDURE AND SEQUENCE, AND TO ENSURE THE SAFETY OF THE EXISTING STRUCTURES AND ITS COMPONENT PARTS DURING CONSTRUCTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, BRACING, UNDERPINNING, ETC. THAT MAY BE NECESSARY. MAINTAIN EXISTING BUILDING'S/PROPERTY'S OPERATIONS, COORDINATE WORK WITH BUILDING/PROPERTY OWNER.
10. DRAWINGS INDICATE THE MINIMUM STANDARDS, BUT IF ANY WORK SHOULD BE INDICATED TO BE SUBSTANDARD TO ANY ORDINANCES, LAWS, CODES, RULES, OR REGULATIONS BEARING ON THE WORK, THE CONTRACTOR SHALL INCLUDE IN HIS WORK AND SHALL EXECUTE THE WORK CORRECTLY IN ACCORDANCE WITH SUCH ORDINANCES, LAWS, CODES, RULES OR REGULATIONS WITH NO INCREASE IN COSTS.
11. ALL UTILITY WORK SHALL BE IN ACCORDANCE WITH LOCAL UTILITY COMPANY REQUIREMENTS AND SPECIFICATIONS.
12. ALL EQUIPMENT AND PRODUCTS PURCHASED ARE TO BE REVIEWED BY CONTRACTOR AND ALL APPLICABLE SUBCONTRACTORS FOR ANY CONDITION PER MFR.'S RECOMMENDATIONS. CONTRACTOR TO SUPPLY THESE ITEMS AT NO COST TO OWNER OR CONSTRUCTION MANAGER.
13. ANY AND ALL ERRORS, DISCREPANCIES, AND "MISSED" ITEMS ARE TO BE BROUGHT TO THE ATTENTION OF THE VERIZON WIRELESS CONSTRUCTION MANAGER DURING THE BIDDING PROCESS BY THE CONTRACTOR. ALL THESE ITEMS ARE TO BE INCLUDED IN THE BID. NO "EXTRA" WILL BE ALLOWED FOR MISSED ITEMS.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE SAFETY FROM THE TIME THE JOB IS AWARDED UNTIL ALL WORK IS COMPLETE AND ACCEPTED BY THE OWNER.
15. CONTRACTOR TO REVIEW ALL SHOP DRAWINGS AND SUBMIT COPY TO ENGINEER FOR APPROVAL. DRAWINGS MUST BEAR THE CHECKER'S INITIALS BEFORE SUBMITTING TO THE CONSTRUCTION MANAGER FOR REVIEW.
16. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, ANGLES, AND EXISTING CONDITIONS AT THE SITE, PRIOR TO FABRICATION AND/OR INSTALLATION OF ANY WORK IN THE CONTRACT AREA.
17. COORDINATION, LAYOUT, FURNISHING AND INSTALLATION OF CONDUIT AND ALL APPURTENANCES REQUIRED FOR PROPER INSTALLATION OF ELECTRICAL AND TELECOMMUNICATION SERVICE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
18. ALL EQUIPMENT AND PRODUCTS PURCHASED ARE TO BE REVIEWED BY CONTRACTOR AND ALL APPLICABLE SUB- CONTRACTORS FOR ANY CONDITION PER THE MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR TO SUPPLY THESE ITEMS AT NO COST TO OWNER OR CONSTRUCTION MANAGER.
19. ALL DAMAGE CAUSED TO ANY EXISTING STRUCTURE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE HELD LIABLE FOR ALL REPAIRS REQUIRED FOR EXISTING STRUCTURES IF DAMAGED DURING CONSTRUCTION ACTIVITIES.
20. THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" AT LEAST 48 HOURS PRIOR TO ANY EXCAVATIONS AT 1-800-922-4455. ALL UTILITIES SHALL BE IDENTIFIED AND CLEARLY MARKED PRIOR TO ANY EXCAVATION WORK. CONTRACTOR SHALL MAINTAIN AND PROTECT MARKED UTILITIES THROUGHOUT PROJECT COMPLETION.

SITE DIRECTIONS

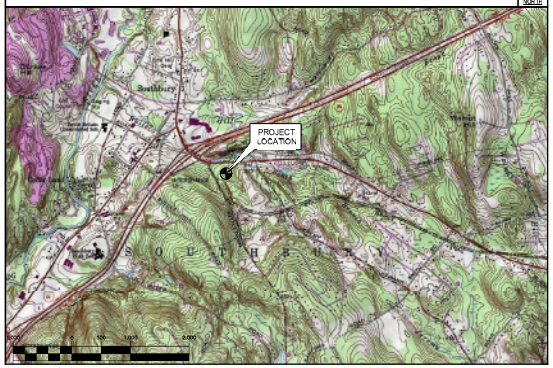
FROM: 20 ALEXANDER DRIVE, WALLINGFORD, CONNECTICUT

TO: 231 KETTLETOWN RD., SOUTHBURY, CT 06488

1.	START OUT GOING NORTH ON ALEXANDER DR TOWARD BARNES INDUSTRIAL RD.	0.18 MI
2.	TURN RIGHT ONTO BARNES INDUSTRIAL RD.	0.11 MI
3.	TAKE FIRST LEFT ONTO CT-68.	4.35 MI
4.	TURN LEFT ONTO S MERIDEN RD/CT-70/CT-68. CONTINUE TO FOLLOW CT-70/CT-68.	1.24 MI
5.	TURN RIGHT ONTO S MAIN ST/CT-10/CT-70/CT-68.	0.15 MI
6.	TURN LEFT ONTO MAIN ST/CT-70/CT-68.	0.29 MI
7.	TURN LEFT ONTO W MAIN ST/CT-70/CT-68. CONTINUE TO FOLLOW CT-70.	4.06 MI
8.	MERGE ONTO I-84 W VIA THE RAMP ON THE LEFT.	15.87 MI
9.	TAKE THE CT-67/US-6 E EXIT, EXIT 15, TOWARD SOUTHBURY.	0.18 MI
10.	KEEP LEFT TO TAKE THE RAMP TOWARD SOUTHFORD.	0.03 MI
11.	TURN LEFT ONTO SOUTHFORD RD/CT-67.	0.19 MI
12.	TURN RIGHT ONTO KETTLETOWN RD.	0.44 MI
13.	231 KETTLETOWN RD, SOUTHBURY, CT 06488-2637, 231 KETTLETOWN RD IS ON THE LEFT.	

VICINITY MAP

SCALE: 1" = 1000'



PROJECT SUMMARY

1. THE PROPOSED UPGRADE SCOPE OF WORK AT THE EXISTING UNMANNED TELECOMMUNICATIONS FACILITY GENERALLY INCLUDES THE FOLLOWING:

A. AT THE EXISTING MONOPOLE TOWER MOUNTED ANTENNA SECTORS:

- REMOVE (6) EXISTING ANDREW – HBXX-6516DS-VTM ANTENNAS.
- REMOVE (1) EXISTING ANTEL – BXA-70063-4CF ANTENNAS.
- REMOVE (2) EXISTING SWEDCOM – SLCP 2X6014 ANTENNAS.
- REMOVE (6) EXISTING RFS – FD9R6004/2C-3L DIPLEXERS.
- REMOVE (2) EXISTING 1-5/8" COAXIAL CABLES.
- REMOVE (6) EXISTING DECIBEL PRODUCTS – 844H90EXYBAM ANTENNAS.
- PERFORM MOUNT MODIFICATIONS AS DESCRIBED AND/OR REFERENCED HEREIN.
- RETAIN (10) EXISTING 1-5/8" SPARE COAXIAL CABLES.
- RETAIN (6) EXISTING 1-5/8" CDMA COAXIAL CABLES.
- INSTALL (3) COMMSCOPE – NHH4-65B-R6 ANTENNAS.
- INSTALL (3) SAMSUNG – MT6407-77A ALL-IN-ONE ANTENNA/ RRUs.
- INSTALL (3) SAMSUNG – XXDWMM-12.5-65-8T-CBRS ANTENNAS.
- INSTALL (3) SAMSUNG – CBRS RRH – RT4401-48A RRUs.
- INSTALL (3) SAMSUNG – RF4439d-25A RRUs.
- INSTALL (3) SAMSUNG – RF4440d-13A RRUs.
- INSTALL (2) 6x12 HYBRIFLEX LI 1-5/8"ø CABLES.
- INSTALL (1) OVP-12 BOX.

B. AT THE EXISTING PAD MOUNTED EQUIPMENT AREA:

- REMOVE (3) EXISTING COMMSCOPE – CBC7823T-DS-43 TRIPLEXERS.
- REMOVE (4) NOKIA RRUs.

PROJECT INFORMATION

SITE NAME:	SOUTHBURY 2 CT
SITE ADDRESS:	231 KETTLETOWN RD. SOUTHBURY, CT 06488
LESSEE/TENANT:	CELLCO PARTNERSHIP d.b.a. VERIZON WIRELESS 20 ALEXANDER DRIVE WALLINGFORD, CT 06492
CONTACT PERSON:	WALTER CHARCZNSKI (CONSTRUCTION MANAGER) VERIZON WIRELESS (860) 306-1806
ENGINEER:	CENTEK ENGINEERING, INC. 63-2 NORTH BRANFORD RD. BRANFORD, CT. 06405 (203) 488-0580
PROJECT COORDINATES:	LATITUDE: 41°-28'-16.33" N LONGITUDE: 73°-12'-20.03" W COORDINATES BASED ON FAA ARCHIVE SEARCH RESULTS FORM 7460-1 FOR ASN 2018-ANE-6078-OE, COMPLETION DATE OF 11/27/2018.

SHEET INDEX

SHT. NO.	DESCRIPTION	REV.
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C-1	COMPOUND PLAN AND ELEVATION	1
C-2	ANTENNA SECTOR CONFIGURATION DETAILS	1
C-3	RF DETAILS	1
E-1	ELECTRICAL DETAILS AND SPECIFICATIONS	1

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
1	09/08/21	DMD	ANC	CONSTRUCTION DRAWINGS (REVISED SITE COORDINATES)
0	12/02/21	DMD	ANC	CONSTRUCTION DRAWINGS – ISSUED FOR CONSTRUCTION
B	11/08/21	ANC	DMD	CONSTRUCTION DRAWINGS – REVISED PER RFDS DATED 10/27/2021
A	08/24/21	ANC	DMD	CONSTRUCTION DRAWINGS – ISSUED FOR CLIENT REVIEW

PROFESSIONAL ENGINEER SEAL

verizon

CENTEK engineering
Centered on Solutions
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Branford, CT 06405
www.CentekEng.com

Cellco Partnership d/b/a Verizon Wireless

SOUTHBURY 2 CT
231 KETTLETOWN ROAD
SOUTHBURY, CT 06488

DATE: 08/24/21
SCALE: AS NOTED
JOB NO. 21007.43

TITLE SHEET

T-1

Sheet No. 1 of 7

NOTES AND SPECIFICATIONS

DESIGN BASIS:

GOVERNING CODE: 2015 INTERNATIONAL BUILDING (IBC) AS MODIFIED BY THE 2018 CT STATE BUILDING CODE AND AMENDMENTS.

1. DESIGN CRITERIA:

- RISK CATEGORY: II (BASED ON TABLE 1604.5 OF THE 2015 IBC)
- NOMINAL DESIGN SPEED (TOWER): 97 MPH (Vasd) (EXPOSURE B/IMPORTANCE FACTOR 1.0 BASED ON ASCE 7-10) PER 2015 INTERNATIONAL BUILDING CODE (IBC) AS MODIFIED BY THE 2018 CONNECTICUT STATE BUILDING CODE.
- SEISMIC LOAD (DOES NOT CONTROL): PER ASCE 7-10 MINIMUM DESIGN LOADS FOR BUILDING AND OTHER STRUCTURES.

GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE GOVERNING BUILDING CODE.
2. DRAWINGS INDICATE THE MINIMUM STANDARDS, BUT IF ANY WORK SHOULD BE INDICATED TO BE SUBSTANDARD TO ANY ORDINANCES, LAWS, CODES, RULES, OR REGULATIONS BEARING ON THE WORK, THE CONTRACTOR SHALL INCLUDE IN HIS WORK AND SHALL EXECUTE THE WORK CORRECTLY IN ACCORDANCE WITH SUCH ORDINANCES, LAWS, CODES, RULES OR REGULATIONS WITH NO INCREASE IN COSTS.
3. BEFORE BEGINNING THE WORK, THE CONTRACTOR IS RESPONSIBLE FOR MAKING SUCH INVESTIGATIONS CONCERNING PHYSICAL CONDITIONS (SURFACE AND SUBSURFACE) AT OR CONTIGUOUS TO THE SITE WHICH MAY AFFECT PERFORMANCE AND COST OF THE WORK.
4. DIMENSIONS AND DETAILS SHALL BE CHECKED AGAINST EXISTING FIELD CONDITIONS.
5. THE CONTRACTOR SHALL VERIFY AND COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS, SLEEVES AND ANCHOR BOLTS AS REQUIRED BY ALL TRADES.
6. ALL DIMENSIONS, ELEVATIONS, AND OTHER REFERENCES TO EXISTING STRUCTURES, SURFACE, AND SUBSURFACE CONDITIONS ARE APPROXIMATE. NO GUARANTEE IS MADE FOR THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS, ELEVATIONS, ANGLES WITH EXISTING CONDITIONS AND WITH ARCHITECTURAL AND SITE DRAWINGS BEFORE PROCEEDING WITH ANY WORK.
7. AS THE WORK PROGRESSES, THE CONTRACTOR SHALL NOTIFY THE OWNER OF ANY CONDITIONS WHICH ARE IN CONFLICT OR OTHERWISE NOT CONSISTENT WITH THE CONSTRUCTION DOCUMENTS AND SHALL NOT PROCEED WITH SUCH WORK UNTIL THE CONFLICT IS SATISFACTORILY RESOLVED.
8. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING AND MAINTAINING ADEQUATE SHORING, BRACING, AND BARRICADES AS MAY BE REQUIRED FOR THE PROTECTION OF EXISTING PROPERTY, CONSTRUCTION WORKERS, AND FOR PUBLIC SAFETY.
9. THE CONTRACTOR IS SOLELY RESPONSIBLE TO DETERMINE CONSTRUCTION PROCEDURE AND SEQUENCE, AND TO ENSURE THE SAFETY OF THE EXISTING STRUCTURES AND ITS COMPONENT PARTS DURING CONSTRUCTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, BRACING, UNDERPINNING, ETC. THAT MAY BE NECESSARY. MAINTAIN EXISTING SITE OPERATIONS, COORDINATE WORK WITH NORTHEAST UTILITIES
10. ALL DAMAGE CAUSED TO ANY EXISTING STRUCTURE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE HELD LIABLE FOR ALL REPAIRS REQUIRED FOR EXISTING STRUCTURES IF DAMAGED DURING CONSTRUCTION ACTIVITIES.
11. REFER TO DRAWING T1 FOR ADDITIONAL NOTES AND REQUIREMENTS.

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
A	08/24/21	ANC	DMD	CONSTRUCTION DRAWINGS – ISSUED FOR CLIENT REVIEW
0	11/08/21	ANC	DMD	CONSTRUCTION DRAWINGS – REVISED PER RFDS DATED 10/27/2021
1	12/02/21	DMD	ANC	CONSTRUCTION DRAWINGS – ISSUED FOR CONSTRUCTION
2	12/08/21	DMD	ANC	CONSTRUCTION DRAWINGS (REVISED SITE COORDINATES)

PROFESSIONAL ENGINEER SEAL

verizon

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Cellco Partnership d/b/a Verizon Wireless

SOUTHBURY 2 CT

231 KETTLETOWN ROAD
SOUTHBURY, CT 06488

DATE: 08/24/21
SCALE: AS NOTED
JOB NO. 21007.43

NOTES AND SPECIFICATIONS

N-1

Sheet No. 2 of 7

PLUMBING DIAGRAM NOTES:

1. PORTS 1 & 2 ARE FOR LOW BAND (698–896 MHz).
2. PORTS 3, 4, 5 & 5 ARE FOR HIGH BAND (1695–2360 MHz).
3. SMART BIAS TEE (SBT) IS THROUGH ANTENNA PORTS 1 & 3 (1 FOR LOW BAND AND 3 FOR HIGH BAND).
4. AISG CABLE IS ONLY NEEDED WHEN DRAWN IN THE DIAGRAMS ABOVE. IF IT IS NOT DRAWN THEN SBT IS ENOUGH TO CONTROL ALL RET MOTORS.
5. NOT ALL SBT PORTS ARE NEEDED TO CONTROL RET. ONLY GREEN PORT CONNECTION TO GREEN PORT WILL CONTROL RET.

RET DC SIGNAL PASS FOR RET
(PORT THAT WILL CONTROL RET)

PLUMBING DIAGRAM COMMENTS:

A. DIAGRAMS SHOW ANTENNA PORT CONFIGURATIONS AS VIEWED FROM BELOW ANTENNAS.

B. ANTENNA POSITIONS ARE INDICATED AS VIEWED FROM IN FRONT OF ANTENNAS.

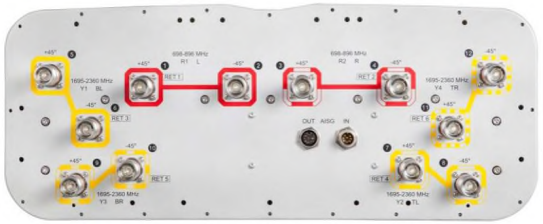
C. CAP AND WEATHERPROOF UNUSED ANTENNA PORTS.

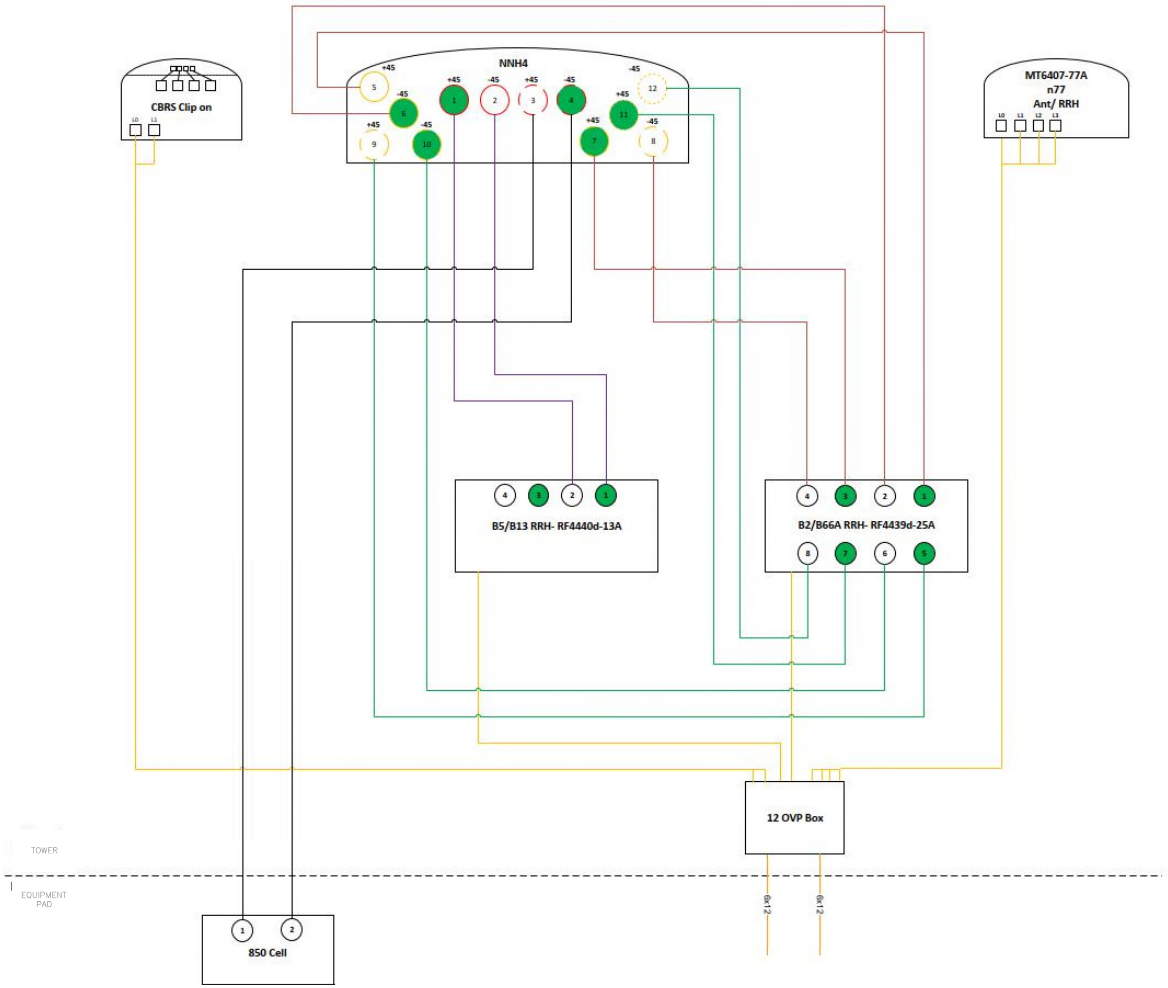
D. ALL PLUMBING DIAGRAM COLORS ARE IRRELEVANT EXCEPT FOR AISG AND HYBRIFLEX CABLE. (FOR THE COAX COLORS, FOLLOW COAX COLORS GUIDE ABOVE)

DC SIGNAL CAPABLE PORT

AISG CABLE

RET DC SIGNAL PASS FOR RET (PORT THAT WILL CONTROL RET)





NOTES:

1. INFORMATION SHOWN HEREIN IS FOR USE BY VERIZON WIRELESS EQUIPMENT OPERATIONS.
2. THIS B.O.M. DRAWING IS BASED OFF FACILITY UPGRADE DESIGN DRAWINGS PREPARED BY CENTEK ENGINEERING (REV.1 DATED: 12.08.21), & VERIZON WIRELESS RF ANTENNA EQUIPMENT RECOMMENDATION (DATED 10.27.21).

BILL OF MATERIALS

TECHNOLOGY	QUANTITY	ANTENNA
LTE 700	3	COMMSCOPE ANTENNA MODEL: NHH4-65B-R6
LTE 850 5G		
LTE 1900		
LTE AWS 2100		
5G	3	SAMSUNG ANTENNA MODEL: MT6407-77A
LTE CBRS	3	SAMSUNG ANTENNA MODEL: XXDWMM-12.5-65-8T-CBRS

CABLES	QUANTITY	LENGTH	COMMENTS
HYBRID CABLE	2	±245FT EA	6X12 HYBRIFLEX LI 1-5/8"ø

RADIOS	QUANTITY	COMMENTS
LTE PCS 1900	3	SAMSUNG MODEL: RF4439d-25A
LTE AWS 2100		
LTE 700	3	SAMSUNG MODEL: RF4440d-13A
LTE 850 5G		
5G	3	SAMSUNG MODEL: MT6407-77A
LTE CBRS	3	SAMSUNG MODEL: CBRS RRH-RT4401-48A

DIPLEXERS	QUANTITY	COMMENTS
–	–	–

OVP BOXES	QUANTITY	COMMENTS
TOWER OVP-12	1	RAYCAP MODEL: DB-C1-12C-24AB-0Z

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
–	08/24/21	ANC	DMD	CONSTRUCTION DRAWINGS – ISSUED FOR CLIENT REVIEW
A	11/08/21	ANC	DMD	CONSTRUCTION DRAWINGS – REVISED PER RFDS DATED 10/27/2021
B	12/02/21	ANC	DMD	CONSTRUCTION DRAWINGS – ISSUED FOR CONSTRUCTION
C	12/06/21	ANC	DMD	CONSTRUCTION DRAWINGS (REVISED SITE COORDINATES)

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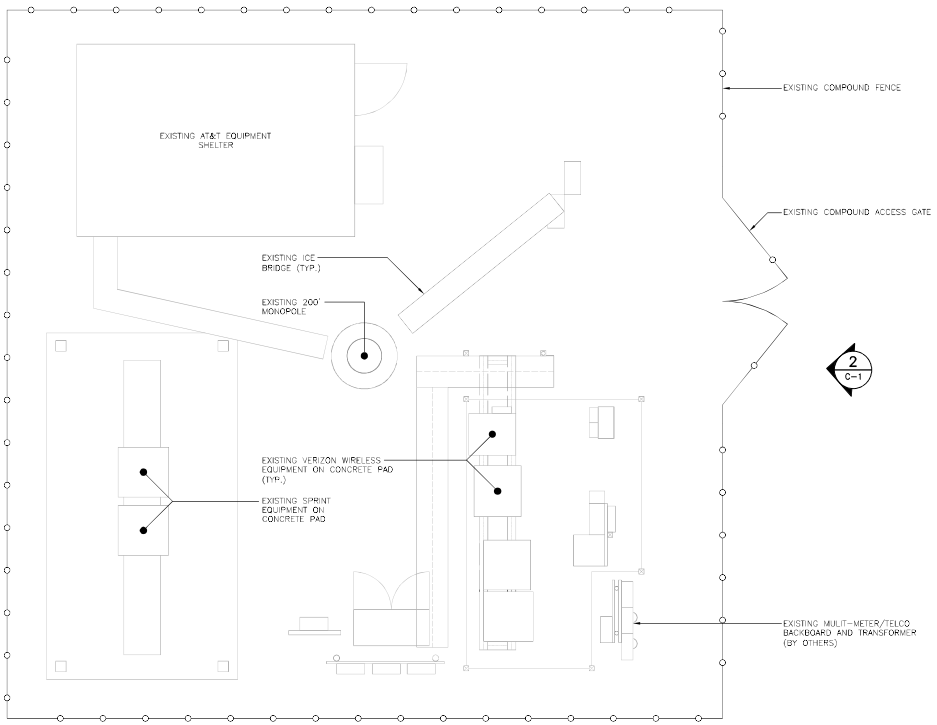
RF BILL OF MATERIALS

B-1
Sheet No. 3 of 7

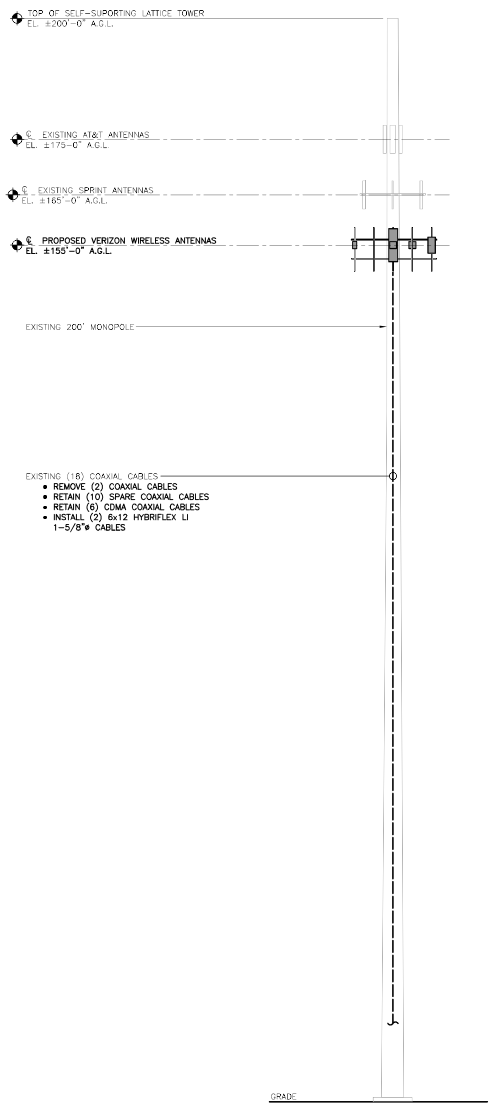


1 C-1 **COMPOUND PLAN** SCALE: 1/4" = 1'

APPROXIMATE NORTH

TOWER STRUCTURAL NOTES:

1. TOWER STRUCTURAL ANALYSIS TO BE PERFORMED BY OTHERS.
2. TOWER STRUCTURAL ANALYSIS REPORT, SIGNED AND SEALED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF CONNECTICUT, TO BE PROVIDED PRIOR TO INSTALLATION OF THE ADDITIONAL TOWER LOADING DEPICTED HEREIN.
3. ALL ANTENNAS, CABLES AND APPURTENANCES TO BE INSTALLED IN ACCORDANCE WITH STRUCTURAL ANALYSIS.



2 C-1 **TOWER ELEVATION - PROPOSED** SCALE: 3/32" = 1'-0"

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
1	09/08/21	DMD	ANC	CONSTRUCTION DRAWINGS (REVISED SITE COORDINATES)
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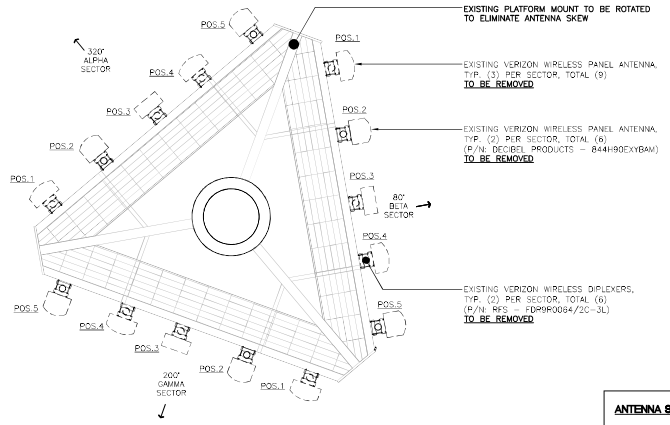
COMPOUND PLAN AND ELEVATION

C-1

Sheet No. 4 of 7

EXISTING ANTENNA CONFIGURATIONS



1 C-2 **EXISTING SECTOR CONFIGURATION PLAN**
SCALE: 1/2" = 1'-0"

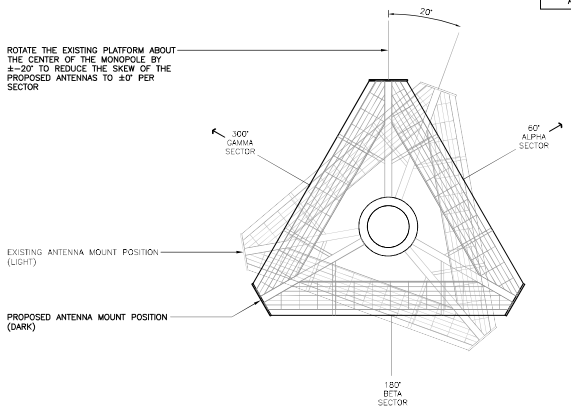
APPROXIMATE NORTH

ANTENNA SECTOR NOTES:

1. EXISTING ALPHA SECTOR (320°) TO BECOME PROPOSED GAMMA SECTOR (300°).
2. EXISTING BETA SECTOR (80°) TO BECOME PROPOSED ALPHA SECTOR (60°).
3. EXISTING GAMMA SECTOR (200°) TO BECOME PROPOSED BETA SECTOR (180°).

ANTENNA MOUNT ANALYSIS AND MOD. NOTES:

1. REFER TO PASSING VERIZON WIRELESS MOUNT ANALYSIS REPORT PREPARED BY COLLIERS ENGINEERING & DESIGN DATED 11/04/2021 FOR ADDITIONAL INFORMATION.
2. REFER TO FINAL VERIZON WIRELESS MOUNT MODIFICATION DESIGN PREPARED BY COLLIERS ENGINEERING & DESIGN DATED 11/04/2021 FOR ALL ANTENNA MOUNT MODIFICATIONS.

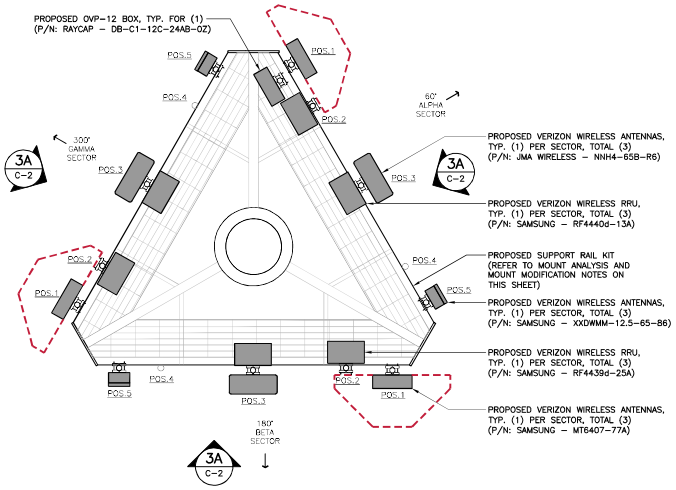


2 C-2 **PROPOSED ANTENNA PLATFORM MOUNT ROTATION**
SCALE: 3/8" = 1'-0"

APPROXIMATE NORTH

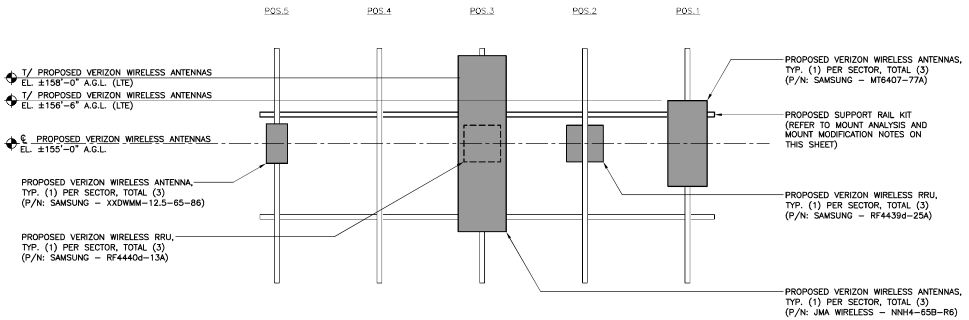
PROPOSED ANTENNA CONFIGURATIONS

LEGEND	
– – –	VERIZON WIRELESS MT6407–77A REQUIRED ANTENNA CLEARANCE LIMITS (PER DETAILS ON SHEET C–3)
ANTENNA CLEARANCE STATUS	ALPHA SECTOR: COMPLIANT BETA SECTOR: COMPLIANT GAMMA SECTOR: COMPLIANT



3 C-2 **PROPOSED SECTOR CONFIGURATION PLAN**
SCALE: 1/2" = 1'-0"

APPROXIMATE NORTH



3A C-2 **PROPOSED SECTOR CONFIGURATION ELEVATION**
SCALE: 1/2" = 1'-0"

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ANTENNA SECTOR CONFIGURATION DETAILS

C-2
Sheet No. 5 of 7

ANTENNA FRONT

SECTOR ANTENNA		
EQUIPMENT	DIMENSIONS	WEIGHT
MAKE: SAMSUNG MODEL: MT6407-77A	35.1"h x 16.1"W x 5.5"D (NOT TO EXCEED)	87 LBS. (NOT TO EXCEED)
CLEARANCES AND SERVICE AREA		
TOP: 31.5"	HORIZONTAL DISTANCE: 31.5" (ANT. TO ANT.)	
FRONT, SIDES & BOTTOM: 15.7"	VERTICAL DISTANCE: 63.0" (ANT. TO ANT.)	
NOTES: 1. THIS ANTENNA HAS ITS OWN BUILT-IN RRH.		

1 C-3 **SECTOR ANTENNA DETAIL**
NOT TO SCALE

CLIP-ON ANTENNA ONLY

ALL-IN-ONE ANTENNA & RRH

RRH ONLY

CBRS CLIP-ON ANTENNA			CBRS RRU (REMOTE RADIO UNIT)			
EQUIPMENT	DIMENSIONS	WEIGHT	EQUIPMENT	BAND	DIMENSIONS	WEIGHT
MAKE: SAMSUNG MODEL: XXDWMM-12.5-65-8T	12.3"H x 8.7"W x 1.4"D	2.9 LBS.	MAKE: SAMSUNG MODEL: CBRS RRH-RT4401-48A	CBRS	12.1"H x 8.5"W x 4.1"D	18.6 LBS.
NOTES: 1. CONTRACTOR TO COORDINATE FINAL EQUIPMENT MODEL SELECTION WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING.						

2 C-3 **COMBINED RRH/CLIP-ON ANTENNA DETAIL**
NOT TO SCALE

ELEVATION

NNH4-65B-R6 (BOTTOM VIEW)

ALPHA/BETA/GAMMA ANTENNA		
EQUIPMENT	DIMENSIONS	WEIGHT
MAKE: COMMSCOPE MODEL: NNH4-65B-R6	72.0"L x 19.6"W x 7.8"D	83.1 LBS.

3 C-3 **ANTENNA DETAIL**
NOT TO SCALE

OVP BOX		
EQUIPMENT	DIMENSIONS	WEIGHT
MAKE: RAYCAP MODEL: DB-C1-12C-24AB-0Z	29.5"H x 16.5"W x 12.6"D	32 LBS.
NOTES: 1. CONTRACTOR TO CONFIRM OVP BOX MAKE/MODEL AND QUANTITY WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING.		

4 C-3 **PROPOSED OVER-VOLTAGE PROTECTION BOX**
NOT TO SCALE

RRH - ISOMETRIC

DUAL BAND RRU (REMOTE RADIO UNIT)			
EQUIPMENT	BANDS	DIMENSIONS	WEIGHT
MAKE: SAMSUNG MODEL: RF4439d-25A	B25: PCS (1900 MHz) B66: AWS (2100 MHz)	15.0"H x 15.0"W x 10.0"D	74.7 LBS.
NOTES: 1. CONTRACTOR TO COORDINATE FINAL EQUIPMENT MODEL SELECTION WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING.			

5 C-3 **DUAL-BAND AWS/PCS MACRO RADIO UNIT DETAIL**
NOT TO SCALE

RRH - ISOMETRIC

DUAL BAND RRU (REMOTE RADIO UNIT)			
EQUIPMENT	BANDS	DIMENSIONS	WEIGHT
MAKE: SAMSUNG MODEL: RF440d-13A	B5: 850 MHz B13: 700 MHz	15.0"H x 15.0"W x 9.0"D	70.3 LBS.
NOTES: 1. CONTRACTOR TO COORDINATE FINAL EQUIPMENT MODEL SELECTION WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING.			

6 C-3 **DUAL-BAND 700/850 MHZ MACRO RADIO UNIT DETAIL**
NOT TO SCALE

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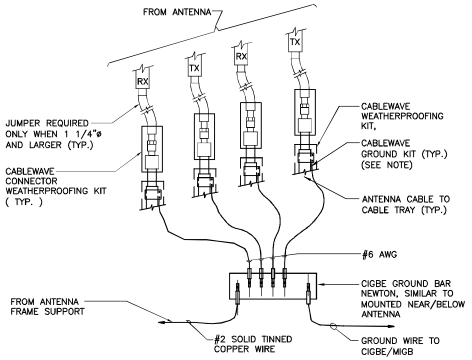
RF DETAILS

C-3
Sheet No. 6 of 7

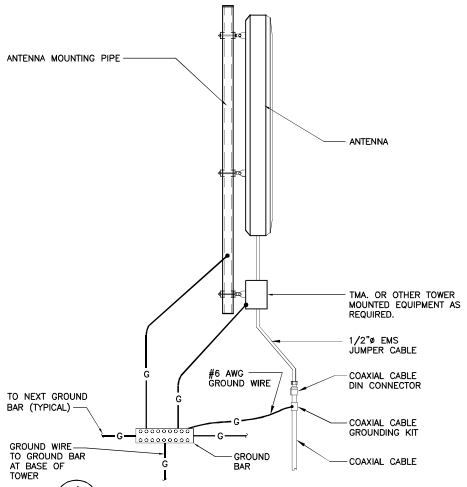


NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO CIGBE

1 E-1 CONNECTION OF GROUND WIRES TO GROUND BAR

NOT TO SCALE

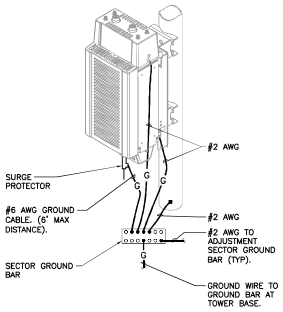


4 E-1 TYPICAL ANTENNA GROUNDING DETAIL

NOT TO SCALE

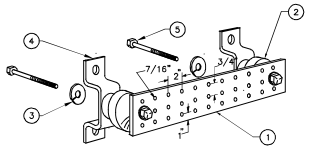
EACH RRH CABINET SHALL BE GROUNDED IN THE FOLLOWING MANNER:

1. AT TOP OF THE CABINET
2. AT RIGHT SIDE OF THE CABINET.



2 E-1 RRH POLE MOUNT GROUNDING

NOT TO SCALE

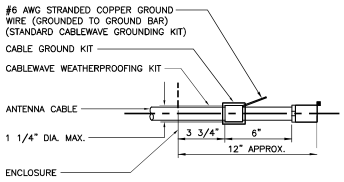


NOTES

1. TINNED COPPER GROUND BAR, 1/4" x 4" x 20", NEWTON INSTRUMENT CO. HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION.
2. INSULATORS, NEWTON INSTRUMENT CAT. NO. 3061-4.
3. 5/8" LOCK WASHERS, NEWTON INSTRUMENT CO. CAT. NO. 3015-8.
4. WALL MOUNTING BRACKET, NEWTON INSTRUMENT CO. CAT NO. A-6056.
5. 5/8-11 x 1" STAINLESS STEEL TRUSS SPANNER MACHINE SCREWS.

5 E-1 GROUND BAR DETAIL

NOT TO SCALE



NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.

3 E-1 ANTENNA CABLE GROUNDING DETAIL

NOT TO SCALE

ELECTRICAL SPECIFICATIONS

SECTION 16010

1.01. SCOPE OF WORK

A. WORK SHALL INCLUDE ALL LABOR, EQUIPMENT AND SERVICES REQUIRED TO COMPLETE (MAKE READY FOR OPERATION) ALL THE ELECTRICAL WORK INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:

1. CELLULAR GROUNDING SYSTEMS CONSISTING OF ANTENNA GROUNDING, GROUND BARS, ETC.

1.02. GENERAL REQUIREMENTS

A. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE MADE IN STRICT ACCORDANCE WITH ALL LOCAL, STATE AND NATIONAL CODES AND REGULATIONS WHICH MAY APPLY AND NOTHING IN THE DRAWINGS OR SPECIFICATIONS SHALL BE INTERPRETED AS AN INFRINGEMENT OF SUCH CODES OR REGULATIONS.

B. THE ELECTRICAL CONTRACTOR IS TO BE RESPONSIBLE FOR THE COMPLETE INSTALLATION AND COORDINATION OF THE ENTIRE ELECTRICAL SERVICE. ALL ACTIVITIES TO BE COORDINATED THROUGH OWNERS REPRESENTATIVE, DESIGN ENGINEER AND OTHER AUTHORITIES HAVING JURISDICTION OF TRADES.

C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND PAY ALL FEES THAT MAY BE REQUIRED FOR THE ELECTRICAL WORK AND FOR SCHEDULING OF ALL INSPECTIONS THAT MAY BE REQUIRED BY THE LOCAL AUTHORITY.

D. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH THE BUILDING OWNER FOR NEW AND/OR DEMOLITION WORK INVOLVED.

E. NO MATERIAL OTHER THAN THAT CONTAINED IN THE "LATEST LIST OF ELECTRICAL FITTINGS" APPROVED BY THE UNDERWRITERS' LABORATORIES, SHALL BE USED IN ANY PART OF THE WORK. ALL MATERIAL FOR WHICH LABEL SERVICE HAS BEEN ESTABLISHED SHALL BEAR THE U.L. LABEL.

F. THE CONTRACTOR SHALL GUARANTEE ALL NEW WORK FOR A PERIOD OF ONE YEAR FROM THE ACCEPTANCE DATE BY THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING WARRANTIES FROM ALL EQUIPMENT MANUFACTURERS FOR SUBMISSION TO THE OWNER.

G. DRAWINGS INDICATE GENERAL ARRANGEMENT OF WORK INCLUDED IN CONTRACT. CONTRACTOR SHALL, WITHOUT EXTRA CHARGE, MAKE MODIFICATIONS TO THE LAYOUT OF THE WORK TO PREVENT CONFLICT WITH WORK OF OTHER TRADES AND FOR THE PROPER INSTALLATION OF WORK. CHECK ALL DRAWINGS AND VISIT JOB SITE TO VERIFY SPACE AND TYPE OF EXISTING CONDITIONS IN WHICH WORK WILL BE DONE, PRIOR TO SUBMITTAL OF BID.

H. THE ELECTRICAL CONTRACTOR SHALL SUPPLY THREE (3) COMPLETE SETS OF APPROVED DRAWINGS, ENGINEERING DATA SHEETS, MAINTENANCE AND OPERATING INSTRUCTION MANUALS FOR ALL SYSTEMS AND THEIR RESPECTIVE EQUIPMENT. THESE MANUALS SHALL BE INSERTED IN VINYL COVERED 3-RING BINDERS AND TURNED OVER TO OWNER'S REPRESENTATIVE ONE (1) WEEK PRIOR TO FINAL PUNCH LIST.

I. ALL WORK SHALL BE INSTALLED IN A NEAT AND WORKMAN LIKE MANNER AND WILL BE SUBJECT TO THE APPROVAL OF THE OWNER'S REPRESENTATIVE.

J. ALL EQUIPMENT AND MATERIALS TO BE INSTALLED SHALL BE NEW, UNLESS OTHERWISE NOTED.

K. BEFORE FINAL PAYMENT, THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF PRINTS (AS-BUILTS), LEGIBLY MARKED IN RED PENCIL TO SHOW ALL CHANGES FROM THE ORIGINAL PLANS.

L. ENTIRE ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH OWNER'S SPECIFICATIONS, AND REQUIREMENTS OF ALL LOCAL AUTHORITIES HAVING JURISDICTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH APPROPRIATE INDIVIDUALS TO OBTAIN ALL SUCH SPECIFICATIONS AND REQUIREMENTS. NOTHING CONTAINED IN, OR OMITTED FROM, THESE DOCUMENTS SHALL RELIEVE CONTRACTOR FROM THIS OBLIGATION.

SECTION 16450

1.01. GROUNDING

A. ALL NON-CURRENT CARRYING PARTS OF THE ELECTRICAL AND TELEPHONE CONDUIT SYSTEMS SHALL BE MECHANICALLY AND ELECTRICALLY CONNECTED TO PROVIDE AN INDEPENDENT RETURN PATH TO THE EQUIPMENT GROUNDING SOURCES.

B. GROUNDING SYSTEM WILL BE IN ACCORDANCE WITH THE LATEST ACCEPTABLE EDITION OF THE NATIONAL ELECTRICAL CODE AND REQUIREMENTS PER LOCAL INSPECTOR HAVING JURISDICTION.

C. EQUIPMENT GROUNDING CONDUCTOR:

1. EACH EQUIPMENT GROUND CONDUCTOR SHALL BE SIZED IN ACCORDANCE WITH THE N.E.C. ARTICLE 250-122.

2. THE MINIMUM SIZE OF EQUIPMENT GROUND CONDUCTOR SHALL BE #12 AWG COPPER.

D. CELLULAR GROUNDING SYSTEM:

PROVIDE THE CELLULAR GROUNDING SYSTEM AS SPECIFIED ON DRAWINGS, INCLUDING, BUT NOT LIMITED TO:

1. GROUND BARS
2. ANTENNA GROUND CONNECTIONS AND PLATES.

E. ALL EQUIPMENT SHALL BE BONDED TO GROUND AS REQUIRED BY N.E.C., MFG. SPECIFICATIONS, AND OWNER'S SPECIFICATIONS.

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Sheet No. 7 of 7

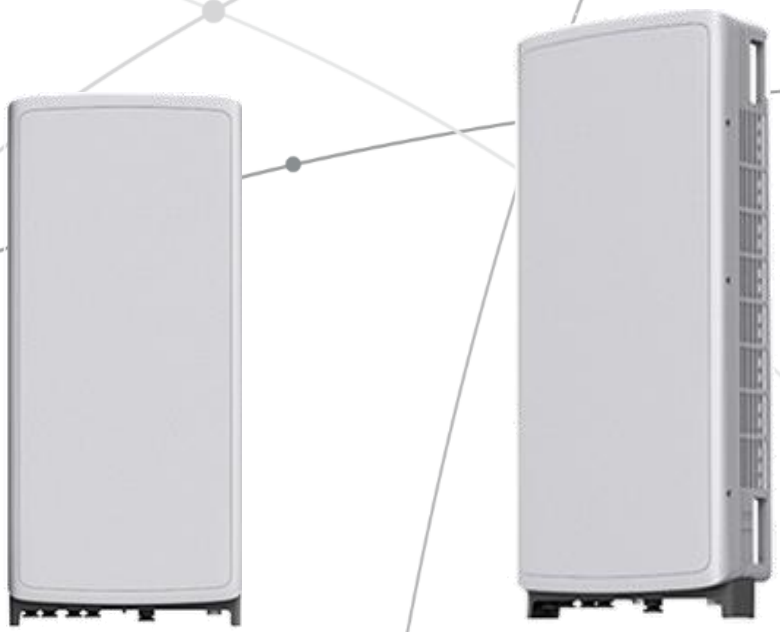
SAMSUNG

SAMSUNG C-Band 64T64R Massive MIMO Radio

for High Capacity and Wide Coverage

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

Model Code : MT6407-77A

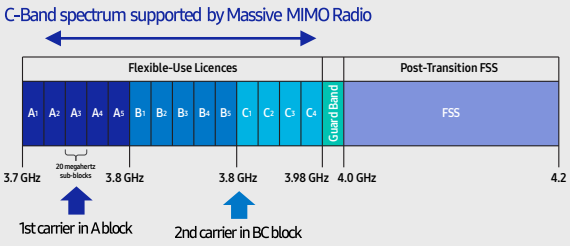


Points of Differentiation

Wide Bandwidth

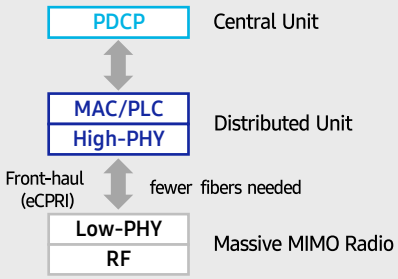
With capability to support up to 2 CC carrier configuration, Samsung C-Band massive MIMO Radio supports 200 MHz bandwidth in the C-Band spectrum.

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



Future Proof Product

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



Enhanced Performance

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

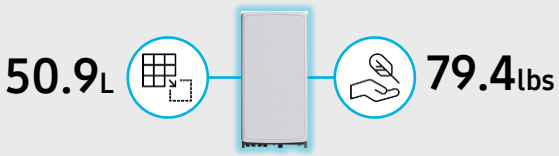
This helps operators reduce their CAPEX as they now need less products to cover the same area than before.

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

Well Matched Design

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

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



Technical Specifications

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

SAMSUNG

About Samsung Electronics Co., Ltd.

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

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SAMSUNG

700/850MHZ MACRO RADIO

DUAL-BAND AND HIGH POWER FOR MACRO COVERAGE

Samsung's future proof dual-band radio is designed to help effectively increase the coverage areas in wireless networks. This 700/850MHz 4T4R dual-band radio has 4Tx/4Rx to 2Tx/2Rx RF chains options and a total output power of 320W, making it ideal for macro sites.

Model Code	RF4440d-13A

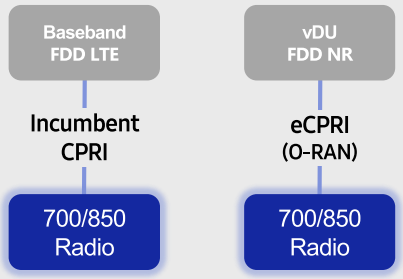
Homepage
samsungnetworks.com

Youtube
www.youtube.com/samsung5g

Points of Differentiation

Continuous Migration

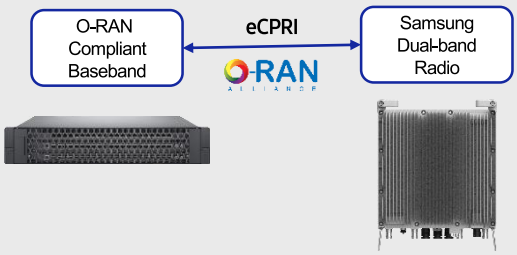
Samsung's 700/850MHz macro radio can support each incumbent CPRI interface as well as an advanced eCPRI interface. This feature provides installable options for both legacy LTE networks and added NR networks.



O-RAN Compliant

A standardized O-RAN radio can help when implementing cost-effective networks because it is capable of sending more data without compromising additional investments.

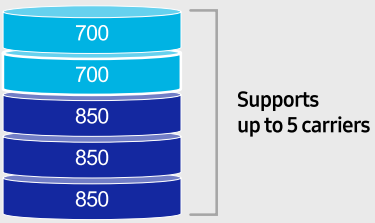
Samsung's state-of-the-art O-RAN technology will help accelerate the effort toward constructing a solid O-RAN ecosystem.



Optimum Spectrum Utilization

The number of required carriers varies according to site (region). The ability to support many carriers is essential for using all frequencies that the operator has available.

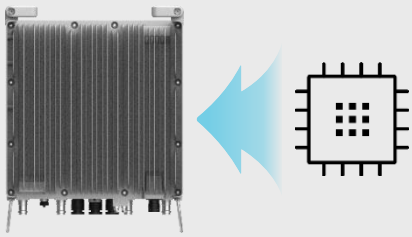
The new 700/850MHz dual-band radio can support up to 2 carriers in the B13 (700MHz) band and 3 carriers in the B5 (850MHz) band, respectively.



Secured Integrity

Access to sensitive data is allowed only to authorized software.

The Samsung radio's CPU can protect root of trust, which is credential information to verify SW integrity, and secure storage provides access control to sensitive data by using dedicated hardware (TPM).



Technical Specifications

Item	Specification
Tech	LTE / NR
Brand	B13(700MHz), B5(850MHz)
Frequency Band	DL: 746 – 756MHz, UL: 777 – 787MHz DL: 869 – 894MHz, UL: 824 – 849MHz
RF Power	(B13) 4 × 40W or 2 × 60W (B5) 4 × 40W or 2 × 60W
IBW/OBW	(B13) 10MHz / 10MHz (B5) 25MHz / 25MHz
Installation	Pole, Wall
Size/ Weight	14.96 x 14.96 x 9.05inch (33.2L) / 70.33 lb

SAMSUNG

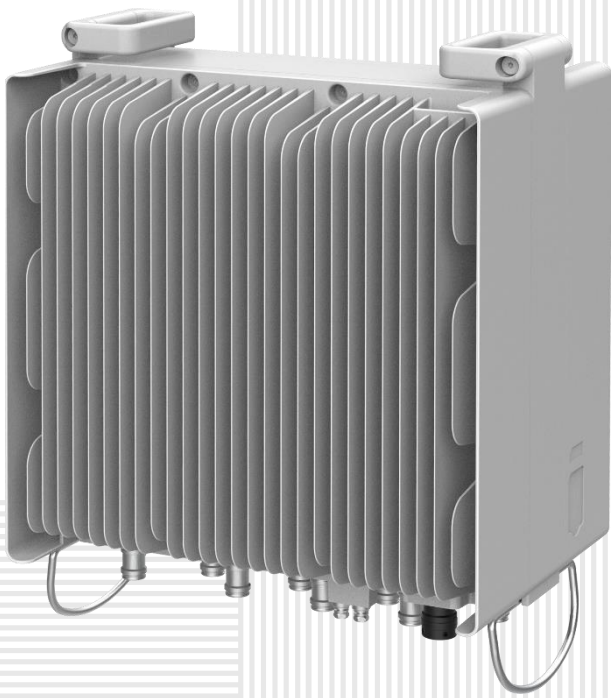
AWS/PCS MACRO RADIO

DUAL-BAND AND HIGH POWER FOR MACRO COVERAGE

Samsung's future proof dual-band radio is designed to help effectively increase the coverage areas in wireless networks. This AWS/PCS 4T4R dual-band radio has 4Tx/4Rx to 2Tx/2Rx RF chains options and a total output power of 320W, making it ideal for macro sites.

57196

Model Code	RF4439d-25A



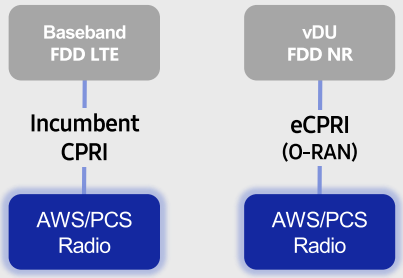
Homepage
samsungnetworks.com

Youtube
www.youtube.com/samsung5g

Points of Differentiation

Continuous Migration

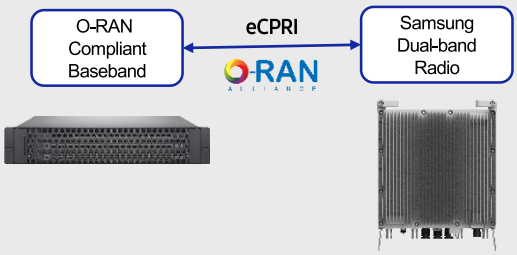
Samsung's AWS/PCS macro radio can support each incumbent CPRI interface as well as advanced eCPRI interfaces. This feature provides installable options for both legacy LTE networks and added NR networks.



O-RAN Compliant

A standardized O-RAN radio can help in implementing cost-effective networks, which are capable of sending more data without compromising additional investments.

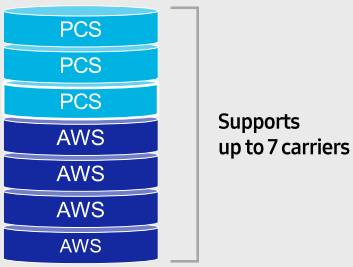
Samsung's state-of-the-art O-RAN technology will help accelerate the effort toward constructing a solid O-RAN ecosystem.



Optimum Spectrum Utilization

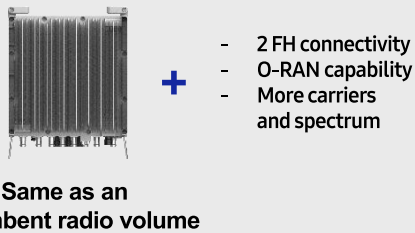
The number of required carriers varies according to site (region). Supporting many carriers is essential for using all frequencies that the operator has available.

The new AWS/PCS dual-band radio can support up to 3 carriers in the PCS (1.9GHz) band and 4 carriers in the AWS (2.1GHz) band, respectively.



Brand New Features in a Compact Size

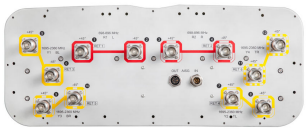
Samsung's AWS/PCS macro radio offers several features, such as dual connectivity for baseband for both CDU and vDU, O-RAN capability, more carriers and an enlarged PCS spectrum, combined into an incumbent radio volume of 36.8L.



Technical Specifications

Item	Specification
Tech	LTE / NR
Brand	B25(PCS), B66(AWS)
Frequency Band	DL: 1930 – 1995MHz, UL: 1850 – 1915MHz DL: 2110 – 2200MHz, UL: 1710 – 1780MHz
RF Power	(B25) 4 × 40W or 2 × 60W (B66) 4 × 60W or 2 × 80W
IBW/OBW	(B25) 65MHz / 30MHz (B66) DL 90MHz, UL 70MHz / 60MHz
Installation	Pole, Wall
Size/ Weight	14.96 x 14.96 x 10.04inch (36.8L) / 74.7lb

NNH4-65B-R6



12-port sector antenna, 4x 698–896 and 8x 1695–2360 MHz, 65° HPBW, 6x RET.

- Features broadband Low Band (698-896 MHz) and High Band (1695-2360 MHz) arrays for 4T4R (4X MIMO) capability for Band 14, AWS, PCS and WCS applications.
- Independent tilt for all arrays.
- Array configuration provides capability for 4T4R (4x MIMO) on Low band and Dual 4T4R (4x MIMO) on High band
- Optimized SPR performance across all operating bands
- Excellent wind loading characteristics

General Specifications

Antenna Type	Sector
Band	Multiband
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage | Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
Radome Material	Fiberglass, UV resistant
Radiator Material	Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	8
RF Connector Quantity, low band	4
RF Connector Quantity, total	12

Remote Electrical Tilt (RET) Information

RET Hardware	CommRET v2
RET Interface	8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity	1 female | 1 male
Input Voltage	10–30 Vdc
Internal RET	High band (4) | Low band (2)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	8 W

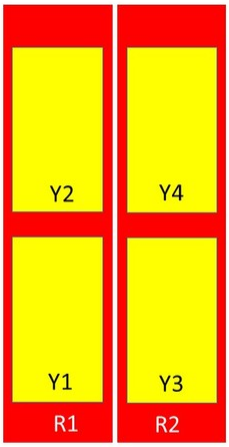
NNH4-65B-R6

Protocol	3GPP/AISG 2.0 (Multi-RET)

Dimensions

Width	498 mm | 19.606 in
Depth	197 mm | 7.756 in
Length	1828 mm | 71.969 in
Net Weight, without mounting kit	37.7 kg | 83.114 lb

Array Layout

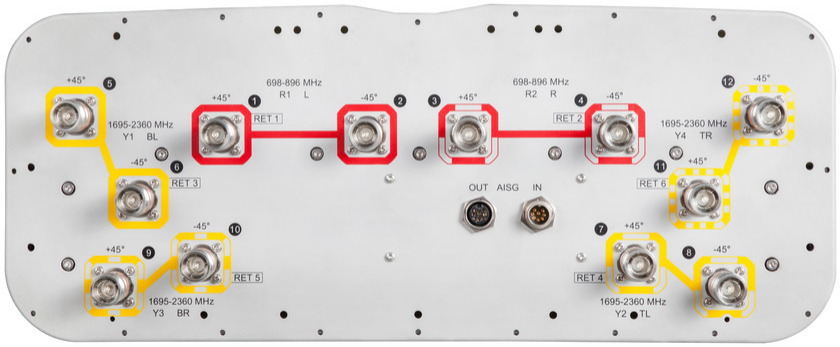


Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	698-896	1-2	1	CPxxxxxxxxxxxxxxxxmm.1
R2	698-896	3-4	2	CPxxxxxxxxxxxxxxxxmm.2
Y1	1695-2360	5-6	3	CPxxxxxxxxxxxxxxxxmm.3
Y2	1695-2360	7-8	4	CPxxxxxxxxxxxxxxxxmm.4
Y3	1695-2360	9-10	5	CPxxxxxxxxxxxxxxxxmm.5
Y4	1695-2360	11-12	6	CPxxxxxxxxxxxxxxxxmm.6

(Sizes of colored boxes are not true depictions of array sizes)

Port Configuration

NNH4-65B-R6



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2360 MHz | 698 – 896 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	**698–806**	**806–896**	**1695–1880**	**1850–1990**	**1920–2180**	**2300–2360**
Gain, dBi	14.4	15	15.7	16.3	16.5	16.9
Beamwidth, Horizontal, degrees	69	65	58	60	60	58
Beamwidth, Vertical, degrees	12	10.5	11.2	10.4	9.8	8.8
Beam Tilt, degrees	2–14	2–14	2–14	2–14	2–14	2–14
USLS (First Lobe), dB	16	18	18	19	19	17
Front-to-Back Ratio at 180°, dB	28	32	33	38	35	37
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25
VSWR | Return loss, dB	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0

PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	300	300	250	250	250	200

Electrical Specifications, BASTA

Frequency Band, MHz	**698–806**	**806–896**	**1695–1880**	**1850–1990**	**1920–2180**	**2300–2360**
Gain by all Beam Tilts, average, dBi	14	14.7	15.2	16	16.1	16.5
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.6	±0.8	±0.5	±0.4	±0.5
Gain by Beam Tilt, average, dBi	2 ° | 14.1 8 ° | 14.1 14 ° | 13.7	2 ° | 14.8 8 ° | 14.8 14 ° | 14.3	2 ° | 15.2 8 ° | 15.2 14 ° | 15.0	2 ° | 16.0 8 ° | 16.0 14 ° | 15.9	2 ° | 16.1 8 ° | 16.2 14 ° | 16.0	2 ° | 16.5 8 ° | 16.4 14 ° | 16.4
Beamwidth, Horizontal Tolerance, degrees	±3.7	±4.0	±5.7	±1.8	±2.8	±6.7
Beamwidth, Vertical Tolerance, degrees	±0.9	±0.9	±0.8	±0.5	±0.6	±0.4
USLS, beampeak to 20° above beampeak, dB	16	16	18	19	17	16
Front-to-Back Total Power at 180° ± 30°, dB	21	21	28	32	28	28
CPR at Boresight, dB	23	24	15	21	21	17
CPR at Sector, dB	10	5	9	8	7	9

Mechanical Specifications

Effective Projective Area (EPA), frontal	0.64 m² | 6.889 ft²
Effective Projective Area (EPA), lateral	0.22 m² | 2.368 ft²
Wind Loading @ Velocity, frontal	685.0 N @ 150 km/h (154.0 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	232.0 N @ 150 km/h (52.2 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	889.0 N @ 150 km/h (199.9 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	564.0 N @ 150 km/h (126.8 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h | 149.75 mph

Packaging and Weights

Width, packed	608 mm | 23.937 in
Depth, packed	352 mm | 13.858 in
Length, packed	2010 mm | 79.134 in
Weight, gross	53 kg | 116.845 lb

NNH4-65B-R6

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant/Exempted

Included Products

BSAMNT-3	–	Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance

[CBRS] Clip-on Antenna Specifications

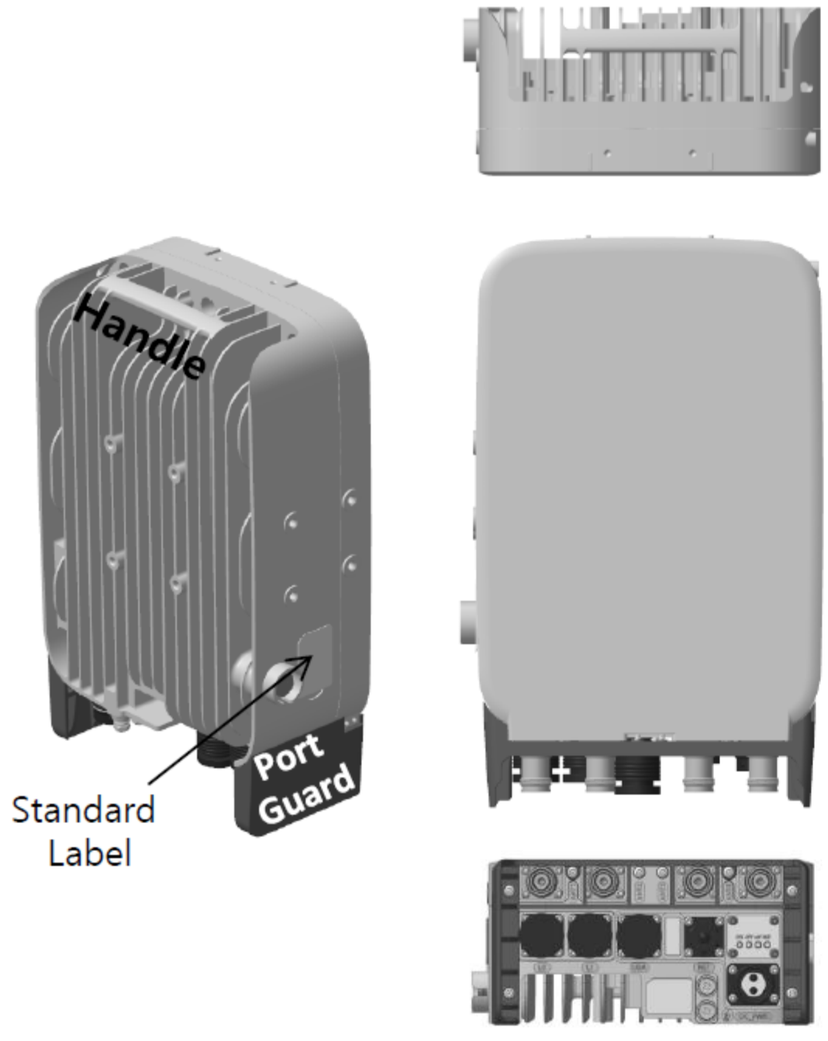
VzW accepted IP45 in FLD, but IP55 is Samsung Spec.

Items	Clip-on Antenna, BASTA**
Antenna Gain	12.5 ± 0.5 dBi (Max 13 dBi)
Horizontal BW (-3dB)	65° ± 5°
Vertical BW (-3dB)	17° ±3°
Electrical Tilt	8° (fixed) ±2°
Front-to-Back Ratio	> 25 dB
Port-to-Port Tracking	< 3 dB
VSWR	< 1.5
Isolation	> 25 dB
Ingress Protection	**IP55**
Size	220(W)×313(H)×34.3(D) mm (*) (8.7 x 12.3 x 1.4 inch.)
Weight	< **2.0** kg [Typ. 1.3 kg]
It is required that the radio should be weatherproofed properly with JMA WPS Boot with external antenna or with Weatherproof Boot for clip-on antennas.	

Antenna includes integrated cable with connector
* Design is subject to minor change

** Ant. spec. follows NGMN recommendations on Base Station Antenna Standards (BASTA). For example, 'mean ± tolerance of 86.6%' is applied to double-sided specification of statistical RF parameters.

[CBRS RRH] Spec.



Current Size: 216 x 307 x 105.5 mm (6.99L)
(8.5 x 12.1 x 4.1 inch., excluding Port Guard)
Design is subject to minor change

Item	Specification
Band	Band 48 (3.5 GHz)
Frequency	3550~3700 MHz
IBW	150 MHz
OBW	80 MHz
# of Carriers	5/10/15/20 MHz x 4 carriers
RF Chain	4TX / 4RX
RF Output Power & EIRP	4 path x 5 W (Total: 20 W = 43 dBm) (EIRP: 47 dBm / 10 MHz)
RX Sensitivity	Typical : -101.5 dBm @ 1 Rx (3GPP 36.104, Wide Area)
Modulation	256-QAM support (1024-QAM with 1~2dB power back-off)
Input Power	-48 VDC (-38 to -57 VDC, 1 SKU), with clip-on AC-DC converter (Option)
Power Consumption	About 160 Watt @ 100% RF load, typical conditions
Volume	**Under 7L** (w/o Antenna), Under 9.6L (with antenna)
Weight	**Under 8.0 kg** (**18.64** lb) (w/o Antenna), Under 10.5 Kg (with ant.)
Operating Temperature	-40°C (-40°F) ~ 55°C (131°F) (W/o solar load)
Cooling	Natural convection
Unwanted Emission	3GPP 36.104 Category A
	[B48] : FCC 47 CFR 96.41 e)
Optic Interface	20km, 2 ports (9.8Gbps x 2), SFP, single mode, duplex or Bi-Di
CPRI Cascade	Not supported
# of Antenna Port	4
External Alarm (UDA)	4
RET	AISG 2.2
TMA & built-in Bias-T I//F and PIM cancellation	Not supported
Mounting Options	Pole, wall, tower, back to back, side by side (for external ant), 3 RRH with Clip-on Antenna on the pole
Antenna Type	Integrated (Clip-on) antenna (Option), External antenna (Option)
NB-IoT	Not Supported (HW Resource reserved for 1 Guard Band NB-IoT per LTE carrier)
Spectrum Analyzer	TX/RX Support
External Alarm (UDA)	4
5G NR	Support with S/W upgrade
XRAN	Support with S/W upgrade

ATTACHMENT 3

	General	Power	Density					
Site Name: Southbury 2								
Tower Height: Verizon @ 155ft								
CARRIER	**# OF CHAN.**	**WATTS ERP**	**HEIGHT**	**FREQ.**	**CALC. POWER DENS**	**MAX. PERMISS.EXP.**	**FRACTION MPE**	**Total**
*AT&T-UMTS	1	232	185	850	0.00260391	0.566666667	0.05%	
*AT&T-LTE	1	500	185	850	0.005611875	0.566666667	0.10%	
*AT&T-LTE	1	500	185	850	0.005611875	0.566666667	0.10%	
*AT&T-LTE	1	3664	185	1900	0.041123818	1	0.41%	
*AT&T-LTE	1	1285	185	2300	0.014422518	1	0.14%	
*AT&T-LTE	1	1476	185	737	0.016566254	0.491333333	0.34%	
*AT&T-LTE	1	3837	185	2100	0.043065527	1	0.43%	
*Pocket (now MetroPCS)	3	631	175	2130	0.023835333	1	0.24%	
*Sprint	1	377	165	850	0.005362794	0.566666667	0.09%	
*Sprint	2	942	165	850	0.026799746	0.566666667	0.47%	
*Sprint	5	512	165	1900	0.03641579	1	0.36%	
*Sprint	2	1280	165	1900	0.03641579	1	0.36%	
*Sprint	8	778	165	2500	0.08853589	1	0.89%	
*T-Mobile	2	6413	195	2500	0.129125391	1	1.29%	
*T-Mobile	2	6413	195	2500	0.129125391	1	1.29%	
*T-Mobile	2	592	195	600	0.011919886	0.4	0.30%	
*T-Mobile	1	1578	195	600	0.01588647	0.4	0.40%	
*T-Mobile	2	649	195	700	0.013067578	0.466666667	0.28%	
*T-Mobile	4	1102	195	1900	0.044377415	1	0.44%	
*T-Mobile	2	2204	195	1900	0.044377415	1	0.44%	
*T-Mobile	2	2334	195	2100	0.046994958	1	0.47%	
VZW 700	**2**	**1875**	**155**	**751**	**0.0028**	**0.5007**	**0.56%**	
VZW CDMA	**2**	**698**	**155**	**877.26**	**0.0010**	**0.5848**	**0.18%**	
VZW Cellular	**2**	**2123**	**155**	**874**	**0.0032**	**0.5827**	**0.55%**	
VZW PCS	**4**	**5156**	**155**	**1975**	**0.0077**	**1.0000**	**0.77%**	
VZW AWS	**4**	**4217**	**155**	**2120**	**0.0063**	**1.0000**	**0.63%**	
VZW CBRS	**4**	**168**	**155**	**3625**	**0.0003**	**1.0000**	**0.03%**	
VZW CBAND	**2**	**44262**	**155**	**3730.08**	**0.0663**	**1.0000**	**6.63%**	
								18.24%
* Source: Siting Council								

ATTACHMENT 4

Phoenix Tower International
999 Yamato Road, Suite 100
Boca Raton, FL 33431

GPD Engineering and Architecture Professional Corporation
Chad Burton
520 South Main Street, Suite 2531
Akron, OH 44311
(614) 859-1623
cburton@gpdgroup.com

GPD# 2022791.CT1002.15 Rev 1
January 24, 2022

COMPREHENSIVE STRUCTURAL ANALYSIS REPORT

SITE DESIGNATION:	**PTI Site #:**	**US-CT-1002**
	PTI Site Name:	**Kettletown**
	VZW Site #:	**467951**
	VZW Site Name:	**Southbury 2 CT**
ANALYSIS CRITERIA:	**Codes:**	**TIA-222-H** **120 mph (3-second gust) w/ 0" ice** **50 mph (3-second gust) w/ 1" ice**
SITE DATA:		**231 Kettletown Road, Southbury, CT 06488, New Haven County** **Latitude 41° 28' 16.26" N, Longitude 73° 12' 19.99" W** **196' Modified PiROD Monopole**

To whom it may concern,

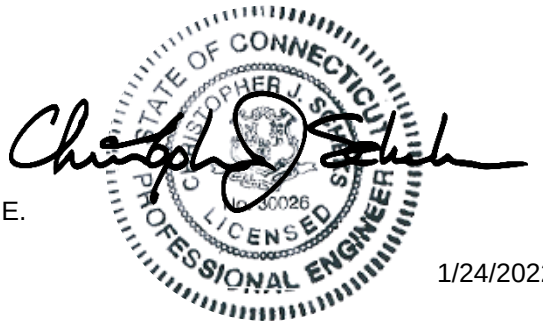
GPD is pleased to submit this Comprehensive Structural Analysis Report to determine the structural integrity of the aforementioned tower. The purpose of the analysis is to determine the suitability of the tower with the existing and proposed loading configuration detailed in the analysis report.

Analysis Results

Tower Stress Level with Proposed Equipment:	85.4%	Sufficient Capacity
Foundation Ratio with Proposed Equipment:	63.7%	Sufficient Capacity

We at GPD appreciate the opportunity of providing our continuing professional services to you and Phoenix Tower International. If you have any questions or need further assistance on this or any other projects, please do not hesitate to call.

Respectfully submitted,



Christopher J. Scheks, P.E.
Connecticut #: 0030026

1/24/2022

SUMMARY & RESULTS

The purpose of this analysis was to verify whether the existing structure is capable of carrying the proposed loading configuration as specified by Verizon Wireless and commissioned by Phoenix Tower International.

This analysis has been performed in accordance with the TIA-222-H Standard based upon a 3-second gust wind speed of 120 mph. Applicable Standard references and design criteria are listed in Appendices A & B.

Seismic loads were determined from spreadsheet calculations. It was concluded from these calculations that the wind loads control the maximum loading on the structure. The seismic loading case will not control.

TOWER SUMMARY AND RESULTS

Member	Capacity	Results
Monopole	68.0%	Pass
Flange Bolts	64.3%	Pass
Flange Plates	85.4%	Pass
Anchor Rods	70.1%	Pass
Base Plate	85.2%	Pass
Foundation	63.7%	Pass

RECOMMENDATIONS

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

ANALYSIS METHOD

tnxTower (Version 8.1.1.0), a commercially available software program, was used to create a three-dimensional model of the tower and calculate primary member stresses for various load cases. Selected output from the analysis is included the report appendices. The following table details the information provided to complete this structural analysis. This analysis is based solely on this information.

DOCUMENTS PROVIDED

Document	Remarks	Source
Collocation Application	PTI VZW Collocation Application, dated 1/5/2022	PTI
Tower Design	PiROD #: A-115080, dated 3/26/1999	PTI
Foundation Design	PiROD #: A-115080, dated 3/26/1999	PTI
Geotechnical Report	Dr. Clarence Welti, dated 10/7/1998	PTI
Previous Tower Analysis	GPD #: 2021791.CT1002.12, dated 3/10/2021	PTI
Previous PE Letter	GPD #: 2022791.CT1002.14, dated 12/16/2021	PTI
Tower Modification Design	GPD #: 2010293.91, dated 9/4/2010	PTI
Tower Modification Design	GPD #: 2013792.15 Rev. A, dated 3/11/2014	PTI
Post Modification Inspection	GPD #: 2010299.50, dated 1/12/2011	PTI
Post Modification Inspection	GPD #: 2014506.06, dated 6/3/2014	PTI
Previous Mount Analysis	Maser #: 21781081A Rev 1, dated 11/4/2021	PTI
Mount Modification Drawings	Maser #: 21781081A Rev 0, dated 11/4/2021	PTI

ASSUMPTIONS

This structural analysis is based on the theoretical capacity of the members and is not a condition assessment of the tower. This analysis is from information supplied, and therefore, its results are based on and are as accurate as that supplied data. GPD has made no independent determination, nor is it required to, of its accuracy. The following assumptions were made for this structural analysis.

1. The tower member sizes and shapes are considered accurate as supplied. The material grade is as per data supplied and/or as assumed and as stated in the materials section.
2. The appurtenance configuration is as supplied, determined from available photos, and/or as modeled in the analysis. It is assumed to be complete and accurate. All antennas, mounts, coax and waveguides are assumed to be properly installed and supported as per manufacturer requirements.
3. All mounts, if applicable, are considered adequate to support the loading. No actual analysis of the mount(s) is performed. This analysis is limited to analyzing the tower only.
4. The soil parameters are as per data supplied or as assumed and stated in the calculations.
5. Foundations are properly designed and constructed to resist the original design loads indicated in the documents provided.
6. The tower and structures have been properly maintained in accordance with TIA Standards and/or with manufacturer's specifications.
7. All welds and connections are assumed to develop at least the member capacity unless determined otherwise and explicitly stated in this report.
8. All prior structural modifications, if applicable, are assumed to be as per data supplied/available and to have been properly installed.
9. Loading interpreted from photos is accurate to ±5' AGL, antenna size accurate to ±3.3 sf, and coax equal to the number of existing antennas without reserve.
10. All existing and proposed loading has been taken from the available site photos as well as documents supplied to GPD at the time of generating this report. All such documents are listed in the Documents Provided Table and are assumed to be accurate. GPD is not responsible for loading scenarios outside those conveyed in the supplied documentation.

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

DISCLAIMER OF WARRANTIES

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

The engineering services rendered by GPD in connection with this Comprehensive Structural Analysis are limited to a computer analysis of the tower 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.

This analysis is limited to the designated maximum wind and seismic conditions per the governing tower standards and code. Wind forces resulting in tower vibrations near the structure's resonant frequencies were not considered in this analysis and are outside the scope of this analysis. Lateral loading from any dynamic response was not evaluated under a time-domain based fatigue analysis.

GPD 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 tower. GPD 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 capability 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 tower. 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 GPD, but are beyond the scope of this report.

Miscellaneous items such as antenna mounts, etc., have not been designed or detailed as a part of our work. We recommend that material of adequate size and strength be purchased from a reputable tower manufacturer.

Towers are designed to carry gravity, wind, and ice loads. All members, legs, diagonals, struts, and redundant members provide structural stability to the tower with little redundancy. Absence or removal of a member can trigger catastrophic failure unless a substitute is provided before any removal. Legs carry axial loads and derive their strength from shorter unbraced lengths by the presence of redundant members and their connection to the diagonals with bolts or welds. If the bolts or welds are removed without providing any substitute to the frame, the leg is subjected to a higher unbraced length that immediately reduces its load carrying capacity. If a diagonal is also removed in addition to the connection, the unbraced length of the leg is greatly increased, jeopardizing its load carrying capacity. Failure of one leg can result in a tower collapse because there is no redundancy. Redundant members and diagonals are critical to the stability of the tower.

GPD makes no warranties, expressed and/or implied, in connection with this report and disclaims any liability arising from material, fabrication, and erection of this tower. GPD 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 GPD pursuant to this report will be limited to the total fee received for preparation of this report.

APPENDIX A

Tower Analysis Summary Form
and Detailed Future Loading Information

Tower Analysis Summary Form

The information contained in this summary report is not to be used independently from the PE stamped tower analysis.

General Info

Site Name	Kettletown
Site Number	US-CT-1002
Date of Analysis	1/24/2022
Company Performing Analysis	GPD

Tower Info	Description	Date
Tower Type (G, SST, MP)	MP	
Tower Height (top of steel AGL)	196'	
Tower Manufacturer	n/a	
Tower Model	n/a	
Tower Design	PiROD #: A-115080	3/26/1999
Foundation Design	PiROD #: A-115080	3/26/1999
Geotechnical Report	Dr. Clarence Welti	10/7/1998
Previous Tower Analysis	GPD #: 2021791.CT1002.12	3/10/2021
Tower Mapping	n/a	
Post Modification Inspection	GPD #: 2010299.50	1/12/2011
Post Modification Inspection	GPD #: 2014506.06	6/3/2014
Modification Design	GPD #: 2010293.91	9/4/2010
Modification Design	GPD #: 2013792.15 Rev. A	3/11/2014
Previous Mount Analysis	Maser #: 21781081A Rev 1	11/4/2021
Mount Modification Drawings	Maser #: 21781081A Rev 0	11/4/2021

Design Parameters

Design Code Used	TIA-222-H
Location of Tower (County, State)	New Haven, CT
Wind Speed (mph)	120 (3-second gust)
Ice Thickness (in)	1
Risk Category (I, II, III)	II
Exposure Category (B, C, D)	B
Topographic Category (1 to 5)	1

Analysis Results (% Maximum Usage)

Existing/Reserved + Future + Proposed Condition	
Tower (%)	85.4%
Tower Base (%)	85.2%
Foundation (%)	63.7%
Foundation Adequate?	Yes

See Next Page for Detailed Future Loading Information

Existing / Reserved Loading

Antenna								Mount			Transmission Line			
Antenna Owner	Mount Height (ft)	Antenna CL (ft)	Quantity	Type	Manufacturer	Model	Azimuth	Quantity	Manufacturer	Type	Quantity	Model	Size	Attachment Int/Ext
T-Mobile	195	193	3	Panel	RFS	APXVAARR24	50/150/260	1	Unknown	LP Platform	8	Unknown	1-5/8"	Internal
T-Mobile	195	195	3	Panel	RFS	APX16DWV	50/150/260	3	Commscope	HRK12	4	Fiber	1-1/4"	Internal
T-Mobile	195	193	3	Panel	Ericsson	AIR6449				On The Same Mount				
T-Mobile	195	193	3	RRH	Ericsson	4449 B71+B12				On The Same Mount				
T-Mobile	195	193	3	RRH	Ericsson	4415 B66A				On The Same Mount				
T-Mobile	195	195	3	RRH	Ericsson	4424 B25				On The Same Mount				
T-Mobile	195	195	1	Surge	Raycap	DC4-48-60-8-20F				On The Same Mount				
AT&T Mobility	185	185	3	Panel	Powerwave	7770	23/143/263	1	Unknown	LP Platform	12	Unknown	1-1/4"	Internal
AT&T Mobility	185	185	3	Panel	CCI	HPA-65R-BUU-H8	23/143/263	1	SitePro 1	PRK-1245L Kicker Supports	4	DC Power	3/4"	Internal
AT&T Mobility	185	185	2	Panel	Quintel	QS66512-2	23/143			On The Same Mount	2	Fiber Cable	1.496"	Internal
AT&T Mobility	185	185	1	Panel	CCI	TPA-65R-LCUUUU-H8	263			On The Same Mount				
AT&T Mobility	185	185	3	TMA	Powerwave	TT19-08BP111-001				On The Same Mount				
AT&T Mobility	185	185	6	Diplexer	Powerwave	LGP 21901				On The Same Mount				
AT&T Mobility	185	185	6	Diplexer	Kathrein	782-10250				On The Same Mount				
AT&T Mobility	185	185	3	RRH	Ericsson	RRUS 11				On The Same Mount				
AT&T Mobility	185	185	3	RRH	Ericsson	RRUS 12				On The Same Mount				
AT&T Mobility	185	185	3	RRH	Ericsson	RRUS 32				On The Same Mount				
AT&T Mobility	185	185	3	RRH	Ericsson	RRUS 4426 B66				On The Same Mount				
AT&T Mobility	185	185	2	Surge	Raycap	DC6-48-60-18-8F				On The Same Mount				
Pocket	175	175	3	Panel	RFS	APXV18-206517S-C	110/230/350			Flush Mounted	6	Unknown	1-5/8"	External
Sprint	165	165	3	Panel	RFS	APXVTM14-ALU-I20	340/70/260	1	Unknown	LP Platform	4	Hybriflex	1-1/4"	External
Sprint	165	165	3	Panel	Commscope	NNVV-65B-R4	340/70/260			On The Same Mount				
Sprint	165	165	3	RRH	Alcatel Lucent	RRH 1900 4x45 65 MHz				On The Same Mount				
Sprint	165	165	3	RRH	Alcatel Lucent	800 MHz RRH				On The Same Mount				
Sprint	165	165	3	RRH	Alcatel Lucent	TD-RRH8x20-25 w/ Solar Shield				On The Same Mount				
Sprint	165	165	3	RRH	Alcatel Lucent	RRH2x50-08 (800 MHz)				On The Same Mount				
Verizon Wireless	155	155	2*	Panel	Swedcom	SLCP 2x6014	60/180/300	1	Unknown	LP Platform	10	Unknown	1-5/8"	External
Verizon Wireless	155	155	6*	Panel	Commscope	HBXX 6516DS	60/180/300			On The Same Mount	2*	Unknown	1-5/8"	External
Verizon Wireless	155	155	1*	Panel	Amphenol	BXA-70063/4C	60/180/300			On The Same Mount				
Verizon Wireless	155	155	6*	Panel	Decibel	844H90EXYBAM/				On The Same Mount				
Verizon Wireless	155	155	6*	Diplexer	Amphenol	DPX 021				On The Same Mount				
Verizon Wireless	155	155	6*	Diplexer	RFS	FD9R6004/2C-3L				On The Same Mount				
DISH	140	140	3	Panel	JMA	MX08FRO665-20_V0F	0/120/240	1	SitePro 1	SNP8HR-396	1	Unknown	1.60"	Int/Ext
DISH	140	140	3	RRH	Fujitsu	TA08025-B605				on the same mounts				
DISH	140	140	3	RRH	Fujitsu	TA08025-B604				on the same mounts				
DISH	140	140	1	Box	Unknown	Junction Box				on the same mounts				
Sprint	75	75	1	GPS	Pctel	TMG-HR-26N GPS				Pipe Mounted	1	Unknown	7/8"	External

*Indicates existing equipment/feedlines to be removed.

Proposed Loading

Antenna								Mount			Transmission Line			
Antenna Owner	Mount Height (ft)	Antenna CL (ft)	Quantity	Type	Manufacturer	Model	Azimuth	Quantity	Manufacturer	Type	Quantity	Model	Size	Attachment Int/Ext
Verizon Wireless	155	155	3	Panel	Commscope	NNH4-65B-R6	0/120/240	Varies	VZWSMART	Mount Modifications	2	Hybrid	1-5/8"	External
Verizon Wireless	155	155	3	Panel	Samsung	MT6407-77A				on the same mount				
Verizon Wireless	155	155	3	Panel	Samsung	XXDWMM				on the same mount				
Verizon Wireless	155	155	3	RRU	Samsung	RF4439d-25A				on the same mount				
Verizon Wireless	155	155	3	RRU	Samsung	RF4440d-13A				on the same mount				
Verizon Wireless	155	155	1	Surge	Raycap	RVZDC-6627-PF-48				on the same mount				

Note: The proposed loading is in addition to the remaining loading at the same elevation.

Detailed Future Loading Information

Note: Nominal equipment dimensions (Height x Width) have been utilized for the purposes of the below area calculations.

T-Mobile MLA Information	
Existing Area (in^2)	20,898
Proposed Area (in^2)	0
Final Area (in^2)	20,898
Future Area (in^2)	1,102
Total Wind Area (in^2)	22,000
Does T-Mobile's Loading Exceed 22,000 in^2?	No
If yes, by how much? (in^2)	n/a

DISH Wireless MLA Information	
Existing Area (in^2)	11,233
Proposed Area (in^2)	0
Final Area (in^2)	11,233
Future Area (in^2)	3,767
Total Wind Area (in^2)	15,000
Does DISH's Loading Exceed 15,000 in^2?	No
If yes, by how much? (in^2)	n/a

AT&T Area Information	
Existing Area (in^2)	19,172
Proposed Area (in^2)	0
Final Area (in^2)	19,172

Pocket Area Information	
Existing Area (in^2)	2,792
Proposed Area (in^2)	0
Final Area (in^2)	2,792

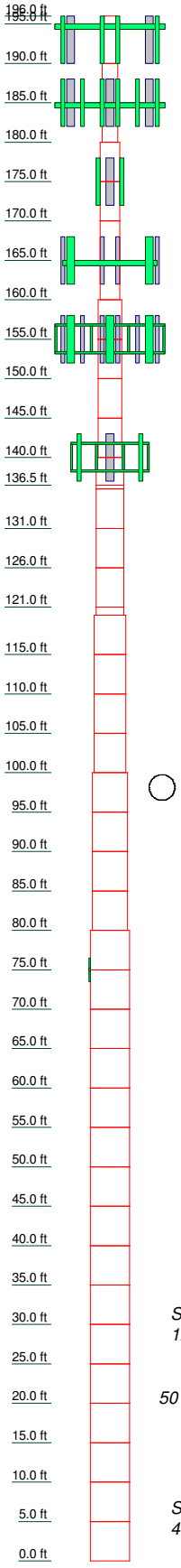
Sprint Area Information	
Existing Area (in^2)	13,979
Proposed Area (in^2)	0
Final Area (in^2)	13,979

Verizon Area Information	
Existing Area (in^2)	13,092
Proposed Area (in^2)	2,805
Final Area (in^2)	15,897

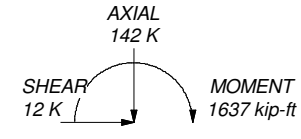
APPENDIX B

Tower Analysis Output File

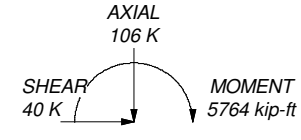
Section	Size	Length (ft)	Grade	Weight (K)
1	P60x0.375	5.00	A53-B-35	0.1
2	P60x0.375	5.00		0.5
3	P60x0.375	5.00		0.5
4	P60x0.375	5.00		0.5
5	P60x0.375	5.00		0.6
6	P60x0.375	5.00		0.6
7	P60x0.375	5.00		0.6
8	P60x0.375	5.00		0.6
9	P60x0.375	5.00		0.7
10	P60x0.375	5.00		0.7
11	P60x0.375	5.00		0.7
12	P60x0.375	5.00		0.7
13	P60x0.375	3.50		0.6
14	P60x0.375	1.50		
15	P60x0.375	5.00		1.3
16	P60x0.375	5.00		1.3
17	P60x0.375	5.00		1.3
18	P60x0.375	3.00		0.8
19	P60x0.375	5.00		1.5
20	P48x0.375	5.00		1.5
21	P48x0.375	5.00		1.5
22	P48x0.375	5.00		1.5
23	P48x0.375	5.00		1.6
24	P48x0.375	5.00		1.6
25	P48x0.375	5.00		1.6
26	P48x0.375	5.00		1.6
27	P48x0.375	5.00		1.7
28	P48x0.375	5.00		1.7
29	P48x0.375	5.00		1.7
30	P48x0.375	5.00		1.7
31	P48x0.375	5.00		2.1
32	P48x0.375	5.00		2.1
33	P48x0.375	5.00		2.1
34	P48x0.375	5.00		2.1
35	P48x0.375	5.00		2.5
36	P48x0.375	5.00		2.5
37	P48x0.375	5.00		2.5
38	P48x0.375	5.00		2.5
39	P48x0.375	5.00		2.5
40	P48x0.375	5.00		2.5
41	P48x0.375	5.00		2.5
42	P48x0.375	5.00		2.5
				58.9



ALL REACTIONS ARE FACTORED



TORQUE 1 kip-ft
50 mph WIND - 1.0000 in ICE



TORQUE 2 kip-ft
REACTIONS - 120 mph WIND

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A53-B-35	35 ksi	63 ksi			

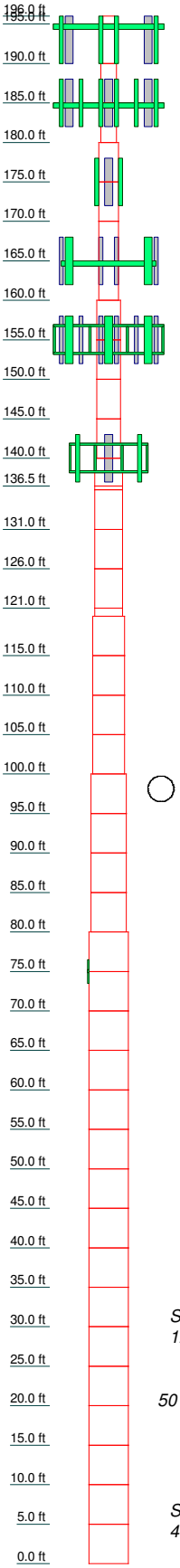
TOWER DESIGN NOTES

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

Glaus, Pyle, DeHaven Inc.
520 South Main Street, Suite 2531
Akron, OH 44311
Phone: (330) 572-2100
FAX: (330) 572-2101

Job: ***US-CT-1002***		
Project: ***2022791.CT1002.15***		
Client: PTI	Drawn by: TR	App'd:
Code: TIA-222-H	Date: 01/24/22	Scale: NTS
Path:		Dwg No. E-1

Section	Size	Length (ft)	Grade	Weight (K)
1	P60x0.375	5.00	A53-B-35	0.1
2	P60x0.375	5.00		0.5
3	P60x0.375	5.00		0.5
4	P60x0.375	5.00		0.5
5	P60x0.375	5.00		0.6
6	P60x0.375	5.00		0.6
7	P60x0.375	5.00		0.6
8	P60x0.375	5.00		0.6
9	P60x0.375	5.00		0.7
10	P60x0.375	5.00		0.7
11	P60x0.375	5.00		0.7
12	P60x0.375	5.00		0.7
13	P60x0.375	1.50		0.6
14	P60x0.375	3.50		
15	P60x0.375	5.00		1.3
16	P60x0.375	5.00		1.3
17	P60x0.375	5.00		1.3
18	P60x0.375	0.50		0.3
19	P60x0.375	5.00		1.5
20	P48x0.375	5.00		1.5
21	P48x0.375	5.00		1.5
22	P48x0.375	5.00		1.5
23	P48x0.375	5.00		1.6
24	P48x0.375	5.00		1.6
25	P48x0.375	5.00		1.6
26	P48x0.375	5.00		1.6
27	P48x0.375	5.00		1.7
28	P48x0.375	5.00		1.7
29	P48x0.375	5.00		1.7
30	P48x0.375	5.00		1.7
31	P48x0.375	5.00		2.1
32	P48x0.375	5.00		2.1
33	P48x0.375	5.00		2.1
34	P48x0.375	5.00		2.1
35	P48x0.375	5.00		2.5
36	P48x0.375	5.00		2.5
37	P48x0.375	5.00		2.5
38	P48x0.375	5.00		2.5
39	P48x0.375	5.00		2.5
40	P48x0.375	5.00		2.5
41	P48x0.375	5.00		2.5
42	P48x0.375	5.00		2.5



ALL REACTIONS ARE FACTORED

AXIAL 142 K

SHEAR 12 K

MOME 1637 ki

TORQUE 1 kip-ft
50 mph WIND - 1.0000 in ICE

AXIAL 106 K

SHEAR 40 K

MOME 5764 ki

TORQUE 2 kip-ft
REACTIONS - 120 mph WIND

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Pirod 16.5' LP Platform	195	APXVTM14-ALU-I20 w/ Mount Pipe	165
APXVAARR24 w/ Mount Pipe	195	APXVTM14-ALU-I20 w/ Mount Pipe	165
APXVAARR24 w/ Mount Pipe	195	NNVV-65B-R4 w/ Mount Pipe	165
APXVAARR24 w/ Mount Pipe	195	NNVV-65B-R4 w/ Mount Pipe	165
APX16DWV w/ Mount Pipe	195	NNVV-65B-R4 w/ Mount Pipe	165
APX16DWV w/ Mount Pipe	195	RRH 1900 4x45 65 MHz	165
APX16DWV w/ Mount Pipe	195	RRH 1900 4x45 65 MHz	165
AIR6449 w/ Mount Pipe	195	RRH 1900 4x45 65 MHz	165
AIR6449 w/ Mount Pipe	195	800 MHz RRH	165
AIR6449 w/ Mount Pipe	195	800 MHz RRH	165
RADIO 4449 B12/B71	195	800 MHz RRH	165
RADIO 4449 B12/B71	195	TD-RRH8x20-25 w/ Solar Shield	165
RADIO 4449 B12/B71	195	TD-RRH8x20-25 w/ Solar Shield	165
RADIO 4415 B66A	195	TD-RRH8x20-25 w/ Solar Shield	165
RADIO 4415 B66A	195	RRH2X50-08 (800 MHz)	165
RADIO 4415 B66A	195	RRH2X50-08 (800 MHz)	165
4424 B25	195	RRH2X50-08 (800 MHz)	165
4424 B25	195	Platform Mount [LP 404-1_KCKR]	155
4424 B25	195	Additional Mod Components	155
DC4-48-60-8-20F	195	NNH4-65B-R6 w/ Mount Pipe	155
T-Mobile Reserved	195	NNH4-65B-R6 w/ Mount Pipe	155
T-Mobile Reserved	195	NNH4-65B-R6 w/ Mount Pipe	155
T-Mobile Reserved	195	MT6407-77A w/ Mount Pipe	155
(3) Commscope VSR-MA-B w/ 15.5' Horizontal Pipe	193	MT6407-77A w/ Mount Pipe	155
		MT6407-77A w/ Mount Pipe	155
PiROD 13' Low Profile Platform (Monopole)	185	XXDWMM w/ Mount Pipe	155
		XXDWMM w/ Mount Pipe	155
7770.00 w/Mount Pipe	185	XXDWMM w/ Mount Pipe	155
7770.00 w/Mount Pipe	185	RF4439D-25A	155
7770.00 w/Mount Pipe	185	RF4439D-25A	155
HPA-65R-BUU-H8 w/ Mount Pipe	185	RF4439D-25A	155
HPA-65R-BUU-H8 w/ Mount Pipe	185	RF4440D-13A	155
HPA-65R-BUU-H8 w/ Mount Pipe	185	RF4440D-13A	155
QS66512-2 w/ Mount Pipe	185	RF4440D-13A	155
QS66512-2 w/ Mount Pipe	185	RVZDC-6627-PF-48	155
TPA-65R-LCUUUU-H8 w/ Mount Pipe	185	(2) Pipe 2 Std x 6'	155
TT19-08BP111-001	185	(2) Pipe 2 Std x 6'	155
TT19-08BP111-001	185	(2) Pipe 2 Std x 6'	155
TT19-08BP111-001	185	SNP8HR-396	140
(2) LGP21901	185	MX08FRO665-20_V0F w/ Mount Pipe	140
(2) LGP21901	185	MX08FRO665-20_V0F w/ Mount Pipe	140
(2) LGP21901	185	MX08FRO665-20_V0F w/ Mount Pipe	140
(2) 782 10250	185	TA8025-B605	140
(2) 782 10250	185	TA8025-B605	140
(2) 782 10250	185	TA8025-B605	140
RRUS 11	185	TA8025-B604	140
RRUS 11	185	TA8025-B604	140
RRUS 11	185	TA8025-B604	140
RRUS 12	185	Junction Box	140
RRUS 12	185	DISH Reserved	140
RRUS 12	185	DISH Reserved	140
RRUS 32	185	DISH Reserved	140
RRUS 32	185	(2) Pipe 2 Std x 8'	140
RRUS 32	185	(2) Pipe 2 Std x 8'	140
RRUS 4426 B66	185	(2) Pipe 2 Std x 8'	140
RRUS 4426 B66	185	Bridge Stiffener (3.25 sq ft)	120
RRUS 4426 B66	185	Bridge Stiffener (3.25 sq ft)	120
DC6-48-60-18-8F Surge Suppression Unit	185	Bridge Stiffener (3.25 sq ft)	120
DC6-48-60-18-8F Surge Suppression Unit	185	Bridge Stiffener (3.25 sq ft)	100
		Bridge Stiffener (3.25 sq ft)	100
Valmont Light Duty Tri-Bracket (1)	175	Bridge Stiffener (3.25 sq ft)	100
APXV18-206517S-C w/ Mount Pipe	175	Bridge Stiffener (3.25 sq ft)	80
APXV18-206517S-C w/ Mount Pipe	175	Bridge Stiffener (3.25 sq ft)	80
APXV18-206517S-C w/ Mount Pipe	175	Bridge Stiffener (3.25 sq ft)	80
MTS 12.5' LP Platform	165	GPS-TMG-HR-26N	75
APXVTM14-ALU-I20 w/ Mount Pipe	165	Pipe Mount 3'x4.5"	75

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A53-B-35	35 ksi	63 ksi			

TOWER DESIGN NOTES

1. Tower designed for Exposure B to the TIA-222-H Standard.
2. Tower designed for a 120 mph basic wind in accordance with the TIA-222-H Standard.
3. Tower is also designed for a 50 mph basic wind with 1.00 in ice. Ice is considered to increase in thickness with height.
4. Deflections are based upon a 60 mph wind.
5. Tower Risk Category II.

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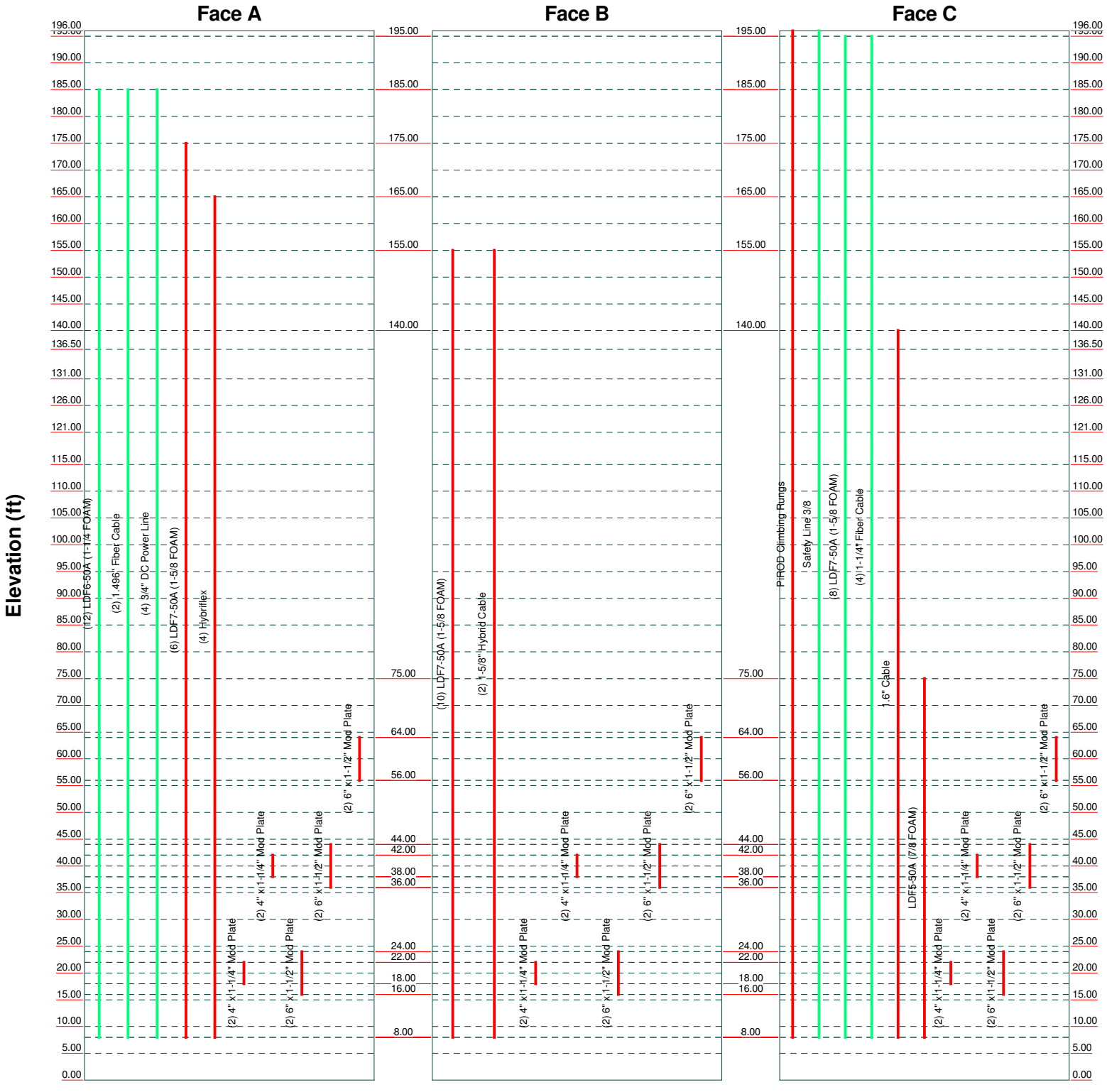
Akron, OH 44311
Phone: (330) 572-2100
FAX: (330) 572-2101

Job: *US-CT-1002*		
Project: *2022791.CT1002.15*		
Client: PTI	Drawn by: TR	App'd:
Code: TIA-222-H	Date: 01/24/22	Scale: NTS
Path:		Dwg No. E-1

Feed Line Distribution Chart
0' - 196'

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



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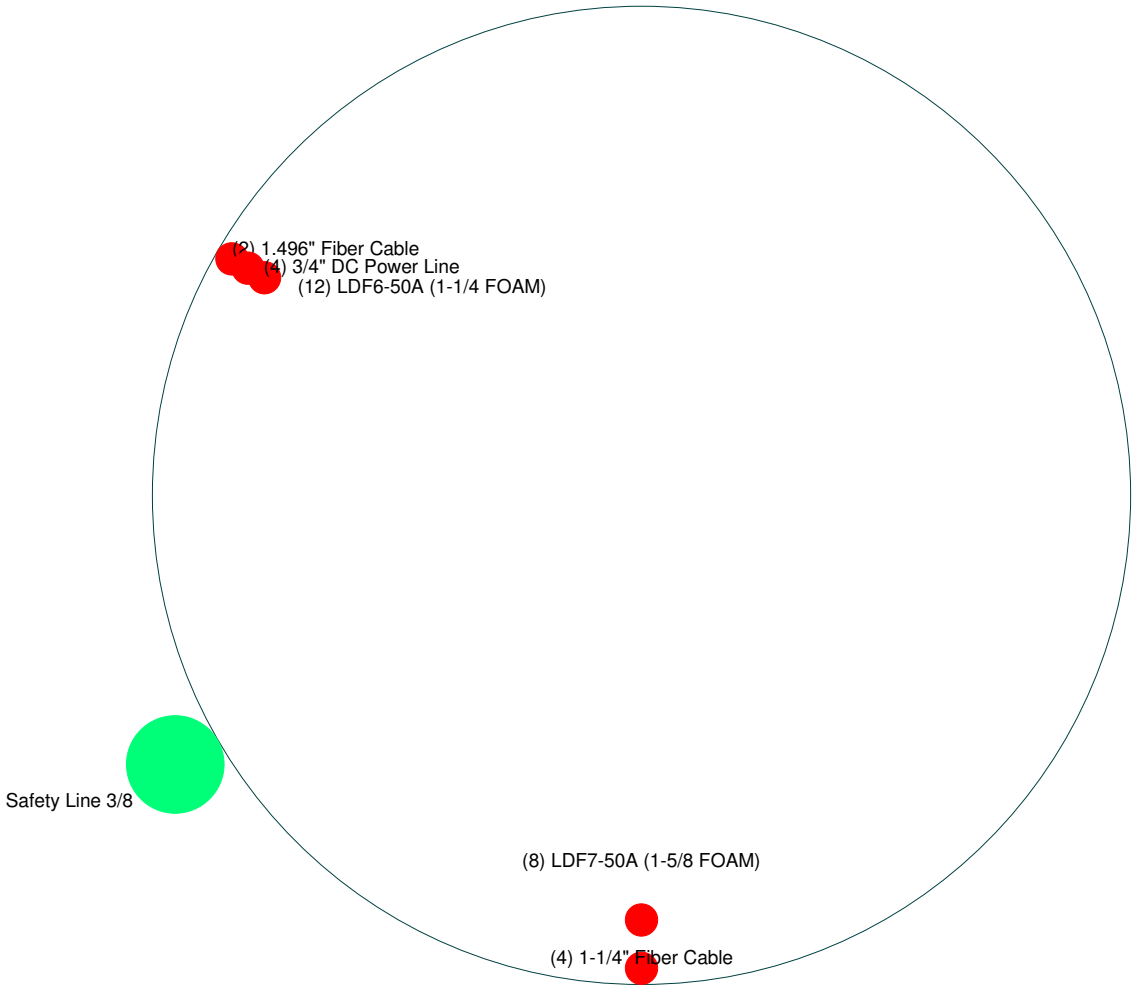
Job: ***US-CT-1002***		
Project: ***2022791.CT1002.15***		
Client: PTI	Drawn by: TR	App'd:
Code: TIA-222-H	Date: 01/24/22	Scale: NTS
Path:		Dwg No. E-7

Feed Line Plan

Round Flat App In Face App Out Face



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Phone: (330) 572-2100
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Job: ***US-CT-1002***		
Project: ***2022791.CT1002.15***		
Client: PTI	Drawn by: TR	App'd:
Code: TIA-222-H	Date: 01/24/22	Scale: NTS
Path:		Dwg No. E-7

Tower Input Data

The tower is a monopole.
This tower is designed using the TIA-222-H standard.
The following design criteria apply:

Tower base elevation above sea level: 408.00 ft.
Basic wind speed of 120 mph.
Risk Category II.
Exposure Category B.
Simplified Topographic Factor Procedure for wind speed-up calculations is used.
Topographic Category: 1.
Crest Height: 0.00 ft.
Nominal ice thickness of 1.0000 in.
Ice thickness is considered to increase with height.
Ice density of 56 pcf.
A wind speed of 50 mph is used in combination with ice.
Temperature drop of 50 °F.
Deflections calculated using a wind speed of 60 mph.
A non-linear (P-delta) analysis was used.
Pressures are calculated at each section.
Stress ratio used in pole design is 1.05.
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

Pole Section Geometry

Section	*Elevation* *ft*	*Section Length* *ft*	*Pole Size*	*Pole Grade*	*Socket Length* *ft*
L1	196.00-195.00	1.00	P18x0.375	A53-B-35 (35 ksi)	
L2	195.00-190.00	5.00	P24x0.375	A53-B-35	

Section	Elevation ft	Section Length ft	Pole Size	Pole Grade	Socket Length ft
				(35 ksi)	
L3	190.00-185.00	5.00	P24x0.375	A53-B-35 (35 ksi)	
L4	185.00-180.00	5.00	P24x0.375	A53-B-35 (35 ksi)	
L5	180.00-175.00	5.00	P30x0.375	A53-B-35 (35 ksi)	
L6	175.00-170.00	5.00	P30x0.375	A53-B-35 (35 ksi)	
L7	170.00-165.00	5.00	P30x0.375	A53-B-35 (35 ksi)	
L8	165.00-160.00	5.00	P30x0.375	A53-B-35 (35 ksi)	
L9	160.00-155.00	5.00	P36x0.375	A53-B-35 (35 ksi)	
L10	155.00-150.00	5.00	P36x0.375	A53-B-35 (35 ksi)	
L11	150.00-145.00	5.00	P36x0.375	A53-B-35 (35 ksi)	
L12	145.00-140.00	5.00	P36x0.375	A53-B-35 (35 ksi)	
L13	140.00-136.50	3.50	P42x0.375	A53-B-35 (35 ksi)	
L14	136.50-136.00	0.50	P42x0.6375	A53-B-35 (35 ksi)	
L15	136.00-131.00	5.00	P42x0.6375	A53-B-35 (35 ksi)	
L16	131.00-126.00	5.00	P42x0.6375	A53-B-35 (35 ksi)	
L17	126.00-121.00	5.00	P42x0.6375	A53-B-35 (35 ksi)	
L18	121.00-120.00	1.00	P42x0.6375	A53-B-35 (35 ksi)	
L19	120.00-115.00	5.00	P48x0.6	A53-B-35 (35 ksi)	
L20	115.00-110.00	5.00	P48x0.6	A53-B-35 (35 ksi)	
L21	110.00-105.00	5.00	P48x0.6	A53-B-35 (35 ksi)	
L22	105.00-100.00	5.00	P48x0.6	A53-B-35 (35 ksi)	
L23	100.00-95.00	5.00	P54x0.5625	A53-B-35 (35 ksi)	
L24	95.00-90.00	5.00	P54x0.5625	A53-B-35 (35 ksi)	
L25	90.00-85.00	5.00	P54x0.5625	A53-B-35 (35 ksi)	
L26	85.00-80.00	5.00	P54x0.5625	A53-B-35 (35 ksi)	
L27	80.00-75.00	5.00	P60x0.55	A53-B-35 (35 ksi)	
L28	75.00-70.00	5.00	P60x0.55	A53-B-35 (35 ksi)	
L29	70.00-65.00	5.00	P60x0.55	A53-B-35 (35 ksi)	
L30	65.00-60.00	5.00	P60x0.55	A53-B-35 (35 ksi)	
L31	60.00-55.00	5.00	P60x0.675	A53-B-35 (35 ksi)	
L32	55.00-50.00	5.00	P60x0.675	A53-B-35 (35 ksi)	

Section	Elevation ft	Section Length ft	Pole Size	Pole Grade	Socket Length ft
L33	50.00-45.00	5.00	P60x0.675	A53-B-35 (35 ksi)	
L34	45.00-40.00	5.00	P60x0.675	A53-B-35 (35 ksi)	
L35	40.00-35.00	5.00	P60x0.8	A53-B-35 (35 ksi)	
L36	35.00-30.00	5.00	P60x0.8	A53-B-35 (35 ksi)	
L37	30.00-25.00	5.00	P60x0.8	A53-B-35 (35 ksi)	
L38	25.00-20.00	5.00	P60x0.8	A53-B-35 (35 ksi)	
L39	20.00-15.00	5.00	P60x0.8	A53-B-35 (35 ksi)	
L40	15.00-10.00	5.00	P60x0.8	A53-B-35 (35 ksi)	
L41	10.00-5.00	5.00	P60x0.8	A53-B-35 (35 ksi)	
L42	5.00-0.00	5.00	P60x0.8	A53-B-35 (35 ksi)	

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
L1 196.00-195.00				1	1	1			
L2 195.00-190.00				1	1	1			
L3 190.00-185.00				1	1	1			
L4 185.00-180.00				1	1	1			
L5 180.00-175.00				1	1	1			
L6 175.00-170.00				1	1	1			
L7 170.00-165.00				1	1	1			
L8 165.00-160.00				1	1	1			
L9 160.00-155.00				1	1	1			
L10 155.00-150.00				1	1	1			
L11 150.00-145.00				1	1	1			
L12 145.00-140.00				1	1	1			
L13 140.00-136.50				1	1	1			
L14 136.50-136.00				1	1	0.945061			
L15 136.00-131.00				1	1	0.945061			
L16 131.00-126.00				1	1	0.945061			

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
L17 126.00-121.00				1	1	0.955342			
L18 121.00-120.00				1	1	0.955342			
L19 120.00-115.00				1	1	0.955342			
L20 115.00-110.00				1	1	0.955342			
L21 110.00-105.00				1	1	0.978753			
L22 105.00-100.00				1	1	0.978753			
L23 100.00-95.00				1	1	0.978753			
L24 95.00-90.00				1	1	0.978753			
L25 90.00-85.00				1	1	0.968574			
L26 85.00-80.00				1	1	0.968574			
L27 80.00-75.00				1	1	0.968574			
L28 75.00-70.00				1	1	0.968574			
L29 70.00-65.00				1	1	0.975432			
L30 65.00-60.00				1	1	0.975432			
L31 60.00-55.00				1	1	0.975432			
L32 55.00-50.00				1	1	0.975432			
L33 50.00-45.00				1	1	0.980151			
L34 45.00-40.00				1	1	0.980151			
L35 40.00-35.00				1	1	0.980151			
L36 35.00-30.00				1	1	0.980151			
L37 30.00-25.00				1	1	0.980151			
L38 25.00-20.00				1	1	0.980151			
L39 20.00-15.00				1	1	0.980151			
L40 15.00-10.00				1	1	0.980151			
L41 10.00-5.00				1	1	0.980151			
L42 5.00-0.00				1	1	0.980151			

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight klf
PiROD Climbing Rungs	C	No	Surface Ar (CaAa)	196.00 - 8.00	1	1	0.000 0.000	0.6250		0.00
LDF7-50A (1-5/8 FOAM)	A	No	Surface Ar (CaAa)	175.00 - 8.00	6	6	-0.250 0.000	1.9800		0.00
Hybriflex	A	No	Surface Ar (CaAa)	165.00 - 8.00	4	4	0.000 0.200	0.0000		0.00
LDF7-50A (1-5/8 FOAM)	B	No	Surface Ar (CaAa)	155.00 - 8.00	10	5	0.100 0.500	1.9800		0.00
1-5/8" Hybrid Cable	B	No	Surface Ar (CaAa)	155.00 - 8.00	2	1	0.000 0.100	0.0000		0.00
1.6" Cable	C	No	Surface Ar (CaAa)	140.00 - 8.00	1	1	0.000 0.000	1.6000		0.00
LDF5-50A (7/8 FOAM)	C	No	Surface Ar (CaAa)	75.00 - 8.00	1	1	0.100 0.100	0.0000		0.00
4" x 1-1/4" Mod Plate	A	No	Surface Af (CaAa)	22.00 - 18.00	2	2	0.000 0.000	4.0000	10.5000	0.02
4" x 1-1/4" Mod Plate	B	No	Surface Af (CaAa)	22.00 - 18.00	2	2	0.000 0.000	4.0000	10.5000	0.02
4" x 1-1/4" Mod Plate	C	No	Surface Af (CaAa)	22.00 - 18.00	2	2	0.000 0.000	4.0000	10.5000	0.02
4" x 1-1/4" Mod Plate	A	No	Surface Af (CaAa)	42.00 - 38.00	2	2	0.000 0.000	4.0000	10.5000	0.02
4" x 1-1/4" Mod Plate	B	No	Surface Af (CaAa)	42.00 - 38.00	2	2	0.000 0.000	4.0000	10.5000	0.02
4" x 1-1/4" Mod Plate	C	No	Surface Af (CaAa)	42.00 - 38.00	2	2	0.000 0.000	4.0000	10.5000	0.02
6" x 1-1/2" Mod Plate	A	No	Surface Af (CaAa)	24.00 - 16.00	2	2	0.000 0.000	0.0000	0.0000	0.03
6" x 1-1/2" Mod Plate	B	No	Surface Af (CaAa)	24.00 - 16.00	2	1	0.000 0.000	0.0000	0.0000	0.03
6" x 1-1/2" Mod Plate	C	No	Surface Af (CaAa)	24.00 - 16.00	2	1	0.000 0.000	0.0000	0.0000	0.03
6" x 1-1/2" Mod Plate	A	No	Surface Af (CaAa)	44.00 - 36.00	2	1	0.000 0.000	0.0000	0.0000	0.03
6" x 1-1/2" Mod Plate	B	No	Surface Af (CaAa)	44.00 - 36.00	2	1	0.000 0.000	0.0000	0.0000	0.03
6" x 1-1/2" Mod Plate	C	No	Surface Af (CaAa)	44.00 - 36.00	2	1	0.000 0.000	0.0000	0.0000	0.03
6" x 1-1/2" Mod Plate	A	No	Surface Af (CaAa)	64.00 - 56.00	2	1	0.000 0.000	0.0000	0.0000	0.03
6" x 1-1/2" Mod Plate	B	No	Surface Af (CaAa)	64.00 - 56.00	2	1	0.000 0.000	0.0000	0.0000	0.03
6" x 1-1/2" Mod Plate	C	No	Surface Af (CaAa)	64.00 - 56.00	2	1	0.000 0.000	0.0000	0.0000	0.03

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
Safety Line 3/8	C	No	No	CaAa (Out Of Face)	196.00 - 8.00	1	No Ice 1/2" Ice 1" Ice	0.04 0.14 0.24	0.00 0.00 0.00
LDF7-50A (1-5/8 FOAM)	C	No	No	Inside Pole	195.00 - 8.00	8	No Ice 1/2" Ice 1" Ice	0.00 0.00 0.00	0.00 0.00 0.00

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number		C_AA_A ft^2/ft	Weight klf
1-1/4" Fiber Cable	C	No	No	Inside Pole	195.00 - 8.00	4	No Ice	0.00	0.00
							1/2" Ice	0.00	0.00
							1" Ice	0.00	0.00
LDF6-50A (1-1/4 FOAM)	A	No	No	Inside Pole	185.00 - 8.00	12	No Ice	0.00	0.00
							1/2" Ice	0.00	0.00
							1" Ice	0.00	0.00
1.496" Fiber Cable	A	No	No	Inside Pole	185.00 - 8.00	2	No Ice	0.00	0.00
							1/2" Ice	0.00	0.00
							1" Ice	0.00	0.00
3/4" DC Power Line	A	No	No	Inside Pole	185.00 - 8.00	4	No Ice	0.00	0.00
							1/2" Ice	0.00	0.00
							1" Ice	0.00	0.00

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
L1	196.00-195.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.063	0.037	0.00
L2	195.00-190.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.313	0.188	0.07
L3	190.00-185.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.313	0.188	0.07
L4	185.00-180.00	A	0.000	0.000	0.000	0.000	0.05
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.313	0.188	0.07
L5	180.00-175.00	A	0.000	0.000	0.000	0.000	0.05
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.313	0.188	0.07
L6	175.00-170.00	A	0.000	0.000	5.940	0.000	0.08
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.313	0.188	0.07
L7	170.00-165.00	A	0.000	0.000	5.940	0.000	0.08
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.313	0.188	0.07
L8	165.00-160.00	A	0.000	0.000	5.940	0.000	0.10
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.313	0.188	0.07
L9	160.00-155.00	A	0.000	0.000	5.940	0.000	0.10
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.313	0.188	0.07
L10	155.00-150.00	A	0.000	0.000	5.940	0.000	0.10
		B	0.000	0.000	4.950	0.000	0.05
		C	0.000	0.000	0.313	0.188	0.07
L11	150.00-145.00	A	0.000	0.000	5.940	0.000	0.10
		B	0.000	0.000	4.950	0.000	0.05
		C	0.000	0.000	0.313	0.188	0.07
L12	145.00-140.00	A	0.000	0.000	5.940	0.000	0.10
		B	0.000	0.000	4.950	0.000	0.05
		C	0.000	0.000	0.313	0.188	0.07

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
L13	140.00-136.50	A	0.000	0.000	4.158	0.000	0.07
		B	0.000	0.000	3.465	0.000	0.03
		C	0.000	0.000	0.779	0.131	0.05
L14	136.50-136.00	A	0.000	0.000	0.594	0.000	0.01
		B	0.000	0.000	0.495	0.000	0.00
		C	0.000	0.000	0.111	0.019	0.01
L15	136.00-131.00	A	0.000	0.000	5.940	0.000	0.10
		B	0.000	0.000	4.950	0.000	0.05
		C	0.000	0.000	1.113	0.188	0.08
L16	131.00-126.00	A	0.000	0.000	5.940	0.000	0.10
		B	0.000	0.000	4.950	0.000	0.05
		C	0.000	0.000	1.113	0.188	0.08
L17	126.00-121.00	A	0.000	0.000	5.940	0.000	0.10
		B	0.000	0.000	4.950	0.000	0.05
		C	0.000	0.000	1.113	0.188	0.08
L18	121.00-120.00	A	0.000	0.000	1.188	0.000	0.02
		B	0.000	0.000	0.990	0.000	0.01
		C	0.000	0.000	0.223	0.037	0.02
L19	120.00-115.00	A	0.000	0.000	5.940	0.000	0.10
		B	0.000	0.000	4.950	0.000	0.05
		C	0.000	0.000	1.113	0.188	0.08
L20	115.00-110.00	A	0.000	0.000	5.940	0.000	0.10
		B	0.000	0.000	4.950	0.000	0.05
		C	0.000	0.000	1.113	0.188	0.08
L21	110.00-105.00	A	0.000	0.000	5.940	0.000	0.10
		B	0.000	0.000	4.950	0.000	0.05
		C	0.000	0.000	1.113	0.188	0.08
L22	105.00-100.00	A	0.000	0.000	5.940	0.000	0.10
		B	0.000	0.000	4.950	0.000	0.05
		C	0.000	0.000	1.113	0.188	0.08
L23	100.00-95.00	A	0.000	0.000	5.940	0.000	0.10
		B	0.000	0.000	4.950	0.000	0.05
		C	0.000	0.000	1.113	0.188	0.08
L24	95.00-90.00	A	0.000	0.000	5.940	0.000	0.10
		B	0.000	0.000	4.950	0.000	0.05
		C	0.000	0.000	1.113	0.188	0.08
L25	90.00-85.00	A	0.000	0.000	5.940	0.000	0.10
		B	0.000	0.000	4.950	0.000	0.05
		C	0.000	0.000	1.113	0.188	0.08
L26	85.00-80.00	A	0.000	0.000	5.940	0.000	0.10
		B	0.000	0.000	4.950	0.000	0.05
		C	0.000	0.000	1.113	0.188	0.08
L27	80.00-75.00	A	0.000	0.000	5.940	0.000	0.10
		B	0.000	0.000	4.950	0.000	0.05
		C	0.000	0.000	1.113	0.188	0.08
L28	75.00-70.00	A	0.000	0.000	5.940	0.000	0.10
		B	0.000	0.000	4.950	0.000	0.05
		C	0.000	0.000	1.113	0.188	0.08
L29	70.00-65.00	A	0.000	0.000	5.940	0.000	0.10
		B	0.000	0.000	4.950	0.000	0.05
		C	0.000	0.000	1.113	0.188	0.08
L30	65.00-60.00	A	0.000	0.000	5.940	0.000	0.34
		B	0.000	0.000	4.950	0.000	0.29
		C	0.000	0.000	1.113	0.188	0.32
L31	60.00-55.00	A	0.000	0.000	5.940	0.000	0.34
		B	0.000	0.000	4.950	0.000	0.29
		C	0.000	0.000	1.113	0.188	0.32
L32	55.00-50.00	A	0.000	0.000	5.940	0.000	0.10
		B	0.000	0.000	4.950	0.000	0.05
		C	0.000	0.000	1.113	0.188	0.08
L33	50.00-45.00	A	0.000	0.000	5.940	0.000	0.10

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
		B	0.000	0.000	4.950	0.000	0.05
		C	0.000	0.000	1.113	0.188	0.08
L34	45.00-40.00	A	0.000	0.000	8.005	0.000	0.41
		B	0.000	0.000	7.015	0.000	0.36
		C	0.000	0.000	3.177	0.188	0.39
L35	40.00-35.00	A	0.000	0.000	8.005	0.000	0.41
		B	0.000	0.000	7.015	0.000	0.36
		C	0.000	0.000	3.177	0.188	0.39
L36	35.00-30.00	A	0.000	0.000	5.940	0.000	0.10
		B	0.000	0.000	4.950	0.000	0.05
		C	0.000	0.000	1.113	0.188	0.08
L37	30.00-25.00	A	0.000	0.000	5.940	0.000	0.10
		B	0.000	0.000	4.950	0.000	0.05
		C	0.000	0.000	1.113	0.188	0.08
L38	25.00-20.00	A	0.000	0.000	8.005	0.000	0.41
		B	0.000	0.000	7.015	0.000	0.36
		C	0.000	0.000	3.177	0.188	0.39
L39	20.00-15.00	A	0.000	0.000	8.005	0.000	0.41
		B	0.000	0.000	7.015	0.000	0.36
		C	0.000	0.000	3.177	0.188	0.39
L40	15.00-10.00	A	0.000	0.000	5.940	0.000	0.10
		B	0.000	0.000	4.950	0.000	0.05
		C	0.000	0.000	1.113	0.188	0.08
L41	10.00-5.00	A	0.000	0.000	2.376	0.000	0.04
		B	0.000	0.000	1.980	0.000	0.02
		C	0.000	0.000	0.445	0.075	0.03
L42	5.00-0.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.00

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
L1	196.00-195.00	A	1.195	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.301	0.276	0.01
L2	195.00-190.00	A	1.193	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	1.505	1.380	0.09
L3	190.00-185.00	A	1.190	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	1.502	1.377	0.09
L4	185.00-180.00	A	1.187	0.000	0.000	0.000	0.000	0.05
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	1.499	1.374	0.09
L5	180.00-175.00	A	1.183	0.000	0.000	0.000	0.000	0.05
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	1.496	1.371	0.09
L6	175.00-170.00	A	1.180	0.000	0.000	8.900	0.000	0.15
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	1.492	1.367	0.09
L7	170.00-165.00	A	1.176	0.000	0.000	8.895	0.000	0.15
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	1.489	1.364	0.09
L8	165.00-160.00	A	1.173	0.000	0.000	10.357	0.000	0.18
		B		0.000	0.000	0.000	0.000	0.00

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
		C		0.000	0.000	1.485	1.360	0.09
L9	160.00-155.00	A	1.169	0.000	0.000	10.348	0.000	0.18
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	1.482	1.357	0.09
L10	155.00-150.00	A	1.165	0.000	0.000	10.339	0.000	0.18
		B		0.000	0.000	8.810	0.000	0.15
		C		0.000	0.000	1.478	1.353	0.09
L11	150.00-145.00	A	1.162	0.000	0.000	10.329	0.000	0.18
		B		0.000	0.000	8.801	0.000	0.15
		C		0.000	0.000	1.474	1.349	0.09
L12	145.00-140.00	A	1.158	0.000	0.000	10.319	0.000	0.18
		B		0.000	0.000	8.792	0.000	0.15
		C		0.000	0.000	1.470	1.345	0.09
L13	140.00-136.50	A	1.154	0.000	0.000	7.217	0.000	0.13
		B		0.000	0.000	6.149	0.000	0.10
		C		0.000	0.000	2.394	0.939	0.08
L14	136.50-136.00	A	1.152	0.000	0.000	1.031	0.000	0.02
		B		0.000	0.000	0.878	0.000	0.01
		C		0.000	0.000	0.342	0.134	0.01
L15	136.00-131.00	A	1.150	0.000	0.000	10.300	0.000	0.18
		B		0.000	0.000	8.775	0.000	0.15
		C		0.000	0.000	3.412	1.338	0.11
L16	131.00-126.00	A	1.146	0.000	0.000	10.289	0.000	0.18
		B		0.000	0.000	8.765	0.000	0.15
		C		0.000	0.000	3.404	1.333	0.11
L17	126.00-121.00	A	1.141	0.000	0.000	10.278	0.000	0.18
		B		0.000	0.000	8.755	0.000	0.15
		C		0.000	0.000	3.395	1.329	0.11
L18	121.00-120.00	A	1.138	0.000	0.000	2.054	0.000	0.04
		B		0.000	0.000	1.750	0.000	0.03
		C		0.000	0.000	0.678	0.265	0.02
L19	120.00-115.00	A	1.135	0.000	0.000	10.264	0.000	0.18
		B		0.000	0.000	8.742	0.000	0.14
		C		0.000	0.000	3.383	1.323	0.11
L20	115.00-110.00	A	1.130	0.000	0.000	10.251	0.000	0.18
		B		0.000	0.000	8.731	0.000	0.14
		C		0.000	0.000	3.373	1.318	0.11
L21	110.00-105.00	A	1.125	0.000	0.000	10.238	0.000	0.18
		B		0.000	0.000	8.720	0.000	0.14
		C		0.000	0.000	3.363	1.313	0.11
L22	105.00-100.00	A	1.120	0.000	0.000	10.225	0.000	0.18
		B		0.000	0.000	8.708	0.000	0.14
		C		0.000	0.000	3.353	1.308	0.11
L23	100.00-95.00	A	1.114	0.000	0.000	10.211	0.000	0.18
		B		0.000	0.000	8.695	0.000	0.14
		C		0.000	0.000	3.341	1.302	0.11
L24	95.00-90.00	A	1.109	0.000	0.000	10.196	0.000	0.18
		B		0.000	0.000	8.682	0.000	0.14
		C		0.000	0.000	3.330	1.296	0.11
L25	90.00-85.00	A	1.102	0.000	0.000	10.181	0.000	0.18
		B		0.000	0.000	8.668	0.000	0.14
		C		0.000	0.000	3.317	1.290	0.11
L26	85.00-80.00	A	1.096	0.000	0.000	10.165	0.000	0.18
		B		0.000	0.000	8.653	0.000	0.14
		C		0.000	0.000	3.304	1.283	0.11
L27	80.00-75.00	A	1.089	0.000	0.000	10.148	0.000	0.18
		B		0.000	0.000	8.638	0.000	0.14
		C		0.000	0.000	3.291	1.277	0.11
L28	75.00-70.00	A	1.082	0.000	0.000	10.130	0.000	0.18
		B		0.000	0.000	8.622	0.000	0.14
		C		0.000	0.000	4.358	1.269	0.12

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
L29	70.00-65.00	A	1.074	0.000	0.000	10.110	0.000	0.17
		B		0.000	0.000	8.604	0.000	0.14
		C		0.000	0.000	4.335	1.262	0.12
L30	65.00-60.00	A	1.066	0.000	0.000	11.597	0.000	0.43
		B		0.000	0.000	10.093	0.000	0.40
		C		0.000	0.000	5.818	1.253	0.38
L31	60.00-55.00	A	1.057	0.000	0.000	11.563	0.000	0.43
		B		0.000	0.000	10.061	0.000	0.40
		C		0.000	0.000	5.779	1.245	0.38
L32	55.00-50.00	A	1.048	0.000	0.000	10.044	0.000	0.17
		B		0.000	0.000	8.544	0.000	0.14
		C		0.000	0.000	4.255	1.235	0.12
L33	50.00-45.00	A	1.037	0.000	0.000	10.018	0.000	0.17
		B		0.000	0.000	8.521	0.000	0.14
		C		0.000	0.000	4.224	1.225	0.12
L34	45.00-40.00	A	1.026	0.000	0.000	11.440	0.000	0.51
		B		0.000	0.000	9.946	0.000	0.48
		C		0.000	0.000	5.640	1.213	0.46
L35	40.00-35.00	A	1.013	0.000	0.000	11.390	0.000	0.51
		B		0.000	0.000	9.899	0.000	0.48
		C		0.000	0.000	5.584	1.200	0.46
L36	35.00-30.00	A	0.998	0.000	0.000	9.921	0.000	0.17
		B		0.000	0.000	8.434	0.000	0.13
		C		0.000	0.000	4.108	1.186	0.12
L37	30.00-25.00	A	0.982	0.000	0.000	9.880	0.000	0.17
		B		0.000	0.000	8.397	0.000	0.13
		C		0.000	0.000	4.058	1.169	0.11
L38	25.00-20.00	A	0.962	0.000	0.000	9.831	0.000	0.50
		B		0.000	0.000	9.714	0.000	0.47
		C		0.000	0.000	5.361	1.150	0.45
L39	20.00-15.00	A	0.939	0.000	0.000	9.771	0.000	0.50
		B		0.000	0.000	9.627	0.000	0.47
		C		0.000	0.000	5.255	1.126	0.45
L40	15.00-10.00	A	0.907	0.000	0.000	9.694	0.000	0.16
		B		0.000	0.000	8.229	0.000	0.12
		C		0.000	0.000	3.835	1.095	0.11
L41	10.00-5.00	A	0.862	0.000	0.000	3.832	0.000	0.06
		B		0.000	0.000	3.251	0.000	0.05
		C		0.000	0.000	1.480	0.420	0.04
L42	5.00-0.00	A	0.773	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.00

Feed Line Center of Pressure

Section	Elevation ft	CP_X in	CP_Z in	CP_X Ice in	CP_Z Ice in
L1	196.00-195.00	-0.2923	0.7508	-0.8234	1.5481
L2	195.00-190.00	-0.2998	0.7650	-0.8922	1.6679
L3	190.00-185.00	-0.2998	0.7650	-0.8907	1.6653
L4	185.00-180.00	-0.2998	0.7650	-0.8891	1.6626
L5	180.00-175.00	-0.3045	0.7739	-0.9347	1.7420
L6	175.00-170.00	-6.7561	-1.3193	-5.0640	-0.1215
L7	170.00-165.00	-6.7561	-1.3193	-5.0635	-0.1236
L8	165.00-160.00	-6.7561	-1.3193	-5.1077	-0.5534
L9	160.00-155.00	-7.2461	-1.4109	-5.5784	-0.6007

Section	Elevation	CP_X	CP_Z	CP_X Ice	CP_Z Ice
	ft	in	in	in	in
L10	155.00-150.00	-0.6106	-0.5169	-0.6759	-0.3027
L11	150.00-145.00	-0.6106	-0.5169	-0.6754	-0.3031
L12	145.00-140.00	-0.6106	-0.5169	-0.6748	-0.3035
L13	140.00-136.50	-0.6856	0.1730	-0.7336	0.4861
L14	136.50-136.00	-0.6856	0.1730	-0.7334	0.4855
L15	136.00-131.00	-0.6856	0.1730	-0.7331	0.4848
L16	131.00-126.00	-0.6856	0.1730	-0.7325	0.4833
L17	126.00-121.00	-0.6856	0.1730	-0.7318	0.4818
L18	121.00-120.00	-0.6856	0.1730	-0.7315	0.4809
L19	120.00-115.00	-0.7739	0.1881	-0.8072	0.5155
L20	115.00-110.00	-0.7739	0.1881	-0.8064	0.5137
L21	110.00-105.00	-0.7739	0.1881	-0.8055	0.5119
L22	105.00-100.00	-0.7739	0.1881	-0.8047	0.5099
L23	100.00-95.00	-0.8551	0.2019	-0.8716	0.5392
L24	95.00-90.00	-0.8551	0.2019	-0.8706	0.5369
L25	90.00-85.00	-0.8551	0.2019	-0.8694	0.5345
L26	85.00-80.00	-0.8551	0.2019	-0.8682	0.5319
L27	80.00-75.00	-0.9285	0.2144	-0.9277	0.5568
L28	75.00-70.00	-0.9285	0.2144	-1.0189	1.0561
L29	70.00-65.00	-0.9285	0.2144	-1.0169	1.0501
L30	65.00-60.00	-0.9285	0.2144	-0.9454	0.9725
L31	60.00-55.00	-0.9285	0.2144	-0.9436	0.9665
L32	55.00-50.00	-0.9285	0.2144	-1.0097	1.0293
L33	50.00-45.00	-0.9285	0.2144	-1.0068	1.0211
L34	45.00-40.00	-0.7562	0.1746	-0.8405	0.8474
L35	40.00-35.00	-0.7562	0.1746	-0.8380	0.8394
L36	35.00-30.00	-0.9285	0.2144	-0.9962	0.9903
L37	30.00-25.00	-0.9285	0.2144	-0.9916	0.9769
L38	25.00-20.00	-0.7563	0.1746	-0.3381	1.0970
L39	20.00-15.00	-0.7563	0.1746	-0.3424	1.0759
L40	15.00-10.00	-0.9285	0.2144	-0.9704	0.9156
L41	10.00-5.00	-0.5081	0.1173	-0.5365	0.4917
L42	5.00-0.00	0.0000	0.0000	0.0000	0.0000

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

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L1	1	PiROD Climbing Rungs	195.00 - 196.00	1.0000	1.0000
L2	1	PiROD Climbing Rungs	190.00 - 195.00	1.0000	1.0000
L3	1	PiROD Climbing Rungs	185.00 - 190.00	1.0000	1.0000
L4	1	PiROD Climbing Rungs	180.00 - 185.00	1.0000	1.0000
L5	1	PiROD Climbing Rungs	175.00 - 180.00	1.0000	1.0000
L6	1	PiROD Climbing Rungs	170.00 - 175.00	1.0000	1.0000
L6	8	LDF7-50A (1-5/8 FOAM)	170.00 - 175.00	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L7	1	PiROD Climbing Rungs	165.00 - 170.00	1.0000	1.0000
L7	8	LDF7-50A (1-5/8 FOAM)	165.00 - 170.00	1.0000	1.0000
L8	1	PiROD Climbing Rungs	160.00 - 165.00	1.0000	1.0000
L8	8	LDF7-50A (1-5/8 FOAM)	160.00 - 165.00	1.0000	1.0000
L8	9	Hybriflex	160.00 - 165.00	1.0000	1.0000
L9	1	PiROD Climbing Rungs	155.00 - 160.00	1.0000	1.0000
L9	8	LDF7-50A (1-5/8 FOAM)	155.00 - 160.00	1.0000	1.0000
L9	9	Hybriflex	155.00 - 160.00	1.0000	1.0000
L10	1	PiROD Climbing Rungs	150.00 - 155.00	1.0000	1.0000
L10	8	LDF7-50A (1-5/8 FOAM)	150.00 - 155.00	1.0000	1.0000
L10	9	Hybriflex	150.00 - 155.00	1.0000	1.0000
L10	10	LDF7-50A (1-5/8 FOAM)	150.00 - 155.00	1.0000	1.0000
L10	11	1-5/8" Hybrid Cable	150.00 - 155.00	1.0000	1.0000
L11	1	PiROD Climbing Rungs	145.00 - 150.00	1.0000	1.0000
L11	8	LDF7-50A (1-5/8 FOAM)	145.00 - 150.00	1.0000	1.0000
L11	9	Hybriflex	145.00 - 150.00	1.0000	1.0000
L11	10	LDF7-50A (1-5/8 FOAM)	145.00 - 150.00	1.0000	1.0000
L11	11	1-5/8" Hybrid Cable	145.00 - 150.00	1.0000	1.0000
L12	1	PiROD Climbing Rungs	140.00 - 145.00	1.0000	1.0000
L12	8	LDF7-50A (1-5/8 FOAM)	140.00 - 145.00	1.0000	1.0000
L12	9	Hybriflex	140.00 - 145.00	1.0000	1.0000
L12	10	LDF7-50A (1-5/8 FOAM)	140.00 - 145.00	1.0000	1.0000
L12	11	1-5/8" Hybrid Cable	140.00 - 145.00	1.0000	1.0000
L13	1	PiROD Climbing Rungs	136.50 - 140.00	1.0000	1.0000
L13	8	LDF7-50A (1-5/8 FOAM)	136.50 - 140.00	1.0000	1.0000
L13	9	Hybriflex	136.50 - 140.00	1.0000	1.0000
L13	10	LDF7-50A (1-5/8 FOAM)	136.50 - 140.00	1.0000	1.0000
L13	11	1-5/8" Hybrid Cable	136.50 - 140.00	1.0000	1.0000
L13	12	1.6" Cable	136.50 - 140.00	1.0000	1.0000
L14	1	PiROD Climbing Rungs	136.00 - 136.50	1.0000	1.0000
L14	8	LDF7-50A (1-5/8 FOAM)	136.00 - 136.50	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L14	9	Hybriflex	136.00 - 136.50	1.0000	1.0000
L14	10	LDF7-50A (1-5/8 FOAM)	136.00 - 136.50	1.0000	1.0000
L14	11	1-5/8" Hybrid Cable	136.00 - 136.50	1.0000	1.0000
L14	12	1.6" Cable	136.00 - 136.50	1.0000	1.0000
L15	1	PiROD Climbing Rungs	131.00 - 136.00	1.0000	1.0000
L15	8	LDF7-50A (1-5/8 FOAM)	131.00 - 136.00	1.0000	1.0000
L15	9	Hybriflex	131.00 - 136.00	1.0000	1.0000
L15	10	LDF7-50A (1-5/8 FOAM)	131.00 - 136.00	1.0000	1.0000
L15	11	1-5/8" Hybrid Cable	131.00 - 136.00	1.0000	1.0000
L15	12	1.6" Cable	131.00 - 136.00	1.0000	1.0000
L16	1	PiROD Climbing Rungs	126.00 - 131.00	1.0000	1.0000
L16	8	LDF7-50A (1-5/8 FOAM)	126.00 - 131.00	1.0000	1.0000
L16	9	Hybriflex	126.00 - 131.00	1.0000	1.0000
L16	10	LDF7-50A (1-5/8 FOAM)	126.00 - 131.00	1.0000	1.0000
L16	11	1-5/8" Hybrid Cable	126.00 - 131.00	1.0000	1.0000
L16	12	1.6" Cable	126.00 - 131.00	1.0000	1.0000
L17	1	PiROD Climbing Rungs	121.00 - 126.00	1.0000	1.0000
L17	8	LDF7-50A (1-5/8 FOAM)	121.00 - 126.00	1.0000	1.0000
L17	9	Hybriflex	121.00 - 126.00	1.0000	1.0000
L17	10	LDF7-50A (1-5/8 FOAM)	121.00 - 126.00	1.0000	1.0000
L17	11	1-5/8" Hybrid Cable	121.00 - 126.00	1.0000	1.0000
L17	12	1.6" Cable	121.00 - 126.00	1.0000	1.0000
L18	1	PiROD Climbing Rungs	120.00 - 121.00	1.0000	1.0000
L18	8	LDF7-50A (1-5/8 FOAM)	120.00 - 121.00	1.0000	1.0000
L18	9	Hybriflex	120.00 - 121.00	1.0000	1.0000
L18	10	LDF7-50A (1-5/8 FOAM)	120.00 - 121.00	1.0000	1.0000
L18	11	1-5/8" Hybrid Cable	120.00 - 121.00	1.0000	1.0000
L18	12	1.6" Cable	120.00 - 121.00	1.0000	1.0000
L19	1	PiROD Climbing Rungs	115.00 - 120.00	1.0000	1.0000
L19	8	LDF7-50A (1-5/8 FOAM)	115.00 - 120.00	1.0000	1.0000
L19	9	Hybriflex	115.00 - 120.00	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L19	10	LDF7-50A (1-5/8 FOAM)	115.00 - 120.00	1.0000	1.0000
L19	11	1-5/8" Hybrid Cable	115.00 - 120.00	1.0000	1.0000
L19	12	1.6" Cable	115.00 - 120.00	1.0000	1.0000
L20	1	PiROD Climbing Rungs	110.00 - 115.00	1.0000	1.0000
L20	8	LDF7-50A (1-5/8 FOAM)	110.00 - 115.00	1.0000	1.0000
L20	9	Hybriflex	110.00 - 115.00	1.0000	1.0000
L20	10	LDF7-50A (1-5/8 FOAM)	110.00 - 115.00	1.0000	1.0000
L20	11	1-5/8" Hybrid Cable	110.00 - 115.00	1.0000	1.0000
L20	12	1.6" Cable	110.00 - 115.00	1.0000	1.0000
L21	1	PiROD Climbing Rungs	105.00 - 110.00	1.0000	1.0000
L21	8	LDF7-50A (1-5/8 FOAM)	105.00 - 110.00	1.0000	1.0000
L21	9	Hybriflex	105.00 - 110.00	1.0000	1.0000
L21	10	LDF7-50A (1-5/8 FOAM)	105.00 - 110.00	1.0000	1.0000
L21	11	1-5/8" Hybrid Cable	105.00 - 110.00	1.0000	1.0000
L21	12	1.6" Cable	105.00 - 110.00	1.0000	1.0000
L22	1	PiROD Climbing Rungs	100.00 - 105.00	1.0000	1.0000
L22	8	LDF7-50A (1-5/8 FOAM)	100.00 - 105.00	1.0000	1.0000
L22	9	Hybriflex	100.00 - 105.00	1.0000	1.0000
L22	10	LDF7-50A (1-5/8 FOAM)	100.00 - 105.00	1.0000	1.0000
L22	11	1-5/8" Hybrid Cable	100.00 - 105.00	1.0000	1.0000
L22	12	1.6" Cable	100.00 - 105.00	1.0000	1.0000
L23	1	PiROD Climbing Rungs	95.00 - 100.00	1.0000	1.0000
L23	8	LDF7-50A (1-5/8 FOAM)	95.00 - 100.00	1.0000	1.0000
L23	9	Hybriflex	95.00 - 100.00	1.0000	1.0000
L23	10	LDF7-50A (1-5/8 FOAM)	95.00 - 100.00	1.0000	1.0000
L23	11	1-5/8" Hybrid Cable	95.00 - 100.00	1.0000	1.0000
L23	12	1.6" Cable	95.00 - 100.00	1.0000	1.0000
L24	1	PiROD Climbing Rungs	90.00 - 95.00	1.0000	1.0000
L24	8	LDF7-50A (1-5/8 FOAM)	90.00 - 95.00	1.0000	1.0000
L24	9	Hybriflex	90.00 - 95.00	1.0000	1.0000
L24	10	LDF7-50A (1-5/8 FOAM)	90.00 - 95.00	1.0000	1.0000
L24	11	1-5/8" Hybrid Cable	90.00 - 95.00	1.0000	1.0000
L24	12	1.6" Cable	90.00 - 95.00	1.0000	1.0000
L25	1	PiROD Climbing Rungs	85.00 - 90.00	1.0000	1.0000
L25	8	LDF7-50A (1-5/8 FOAM)	85.00 - 90.00	1.0000	1.0000
L25	9	Hybriflex	85.00 - 90.00	1.0000	1.0000
L25	10	LDF7-50A (1-5/8 FOAM)	85.00 - 90.00	1.0000	1.0000
L25	11	1-5/8" Hybrid Cable	85.00 - 90.00	1.0000	1.0000
L25	12	1.6" Cable	85.00 - 90.00	1.0000	1.0000
L26	1	PiROD Climbing Rungs	80.00 - 85.00	1.0000	1.0000
L26	8	LDF7-50A (1-5/8 FOAM)	80.00 - 85.00	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L26	9	Hybriflex	80.00 - 85.00	1.0000	1.0000
L26	10	LDF7-50A (1-5/8 FOAM)	80.00 - 85.00	1.0000	1.0000
L26	11	1-5/8" Hybrid Cable	80.00 - 85.00	1.0000	1.0000
L26	12	1.6" Cable	80.00 - 85.00	1.0000	1.0000
L27	1	PiROD Climbing Rungs	75.00 - 80.00	1.0000	1.0000
L27	8	LDF7-50A (1-5/8 FOAM)	75.00 - 80.00	1.0000	1.0000
L27	9	Hybriflex	75.00 - 80.00	1.0000	1.0000
L27	10	LDF7-50A (1-5/8 FOAM)	75.00 - 80.00	1.0000	1.0000
L27	11	1-5/8" Hybrid Cable	75.00 - 80.00	1.0000	1.0000
L27	12	1.6" Cable	75.00 - 80.00	1.0000	1.0000
L28	1	PiROD Climbing Rungs	70.00 - 75.00	1.0000	1.0000
L28	8	LDF7-50A (1-5/8 FOAM)	70.00 - 75.00	1.0000	1.0000
L28	9	Hybriflex	70.00 - 75.00	1.0000	1.0000
L28	10	LDF7-50A (1-5/8 FOAM)	70.00 - 75.00	1.0000	1.0000
L28	11	1-5/8" Hybrid Cable	70.00 - 75.00	1.0000	1.0000
L28	12	1.6" Cable	70.00 - 75.00	1.0000	1.0000
L28	13	LDF5-50A (7/8 FOAM)	70.00 - 75.00	1.0000	1.0000
L29	1	PiROD Climbing Rungs	65.00 - 70.00	1.0000	1.0000
L29	8	LDF7-50A (1-5/8 FOAM)	65.00 - 70.00	1.0000	1.0000
L29	9	Hybriflex	65.00 - 70.00	1.0000	1.0000
L29	10	LDF7-50A (1-5/8 FOAM)	65.00 - 70.00	1.0000	1.0000
L29	11	1-5/8" Hybrid Cable	65.00 - 70.00	1.0000	1.0000
L29	12	1.6" Cable	65.00 - 70.00	1.0000	1.0000
L29	13	LDF5-50A (7/8 FOAM)	65.00 - 70.00	1.0000	1.0000
L30	1	PiROD Climbing Rungs	60.00 - 65.00	1.0000	1.0000
L30	8	LDF7-50A (1-5/8 FOAM)	60.00 - 65.00	1.0000	1.0000
L30	9	Hybriflex	60.00 - 65.00	1.0000	1.0000
L30	10	LDF7-50A (1-5/8 FOAM)	60.00 - 65.00	1.0000	1.0000
L30	11	1-5/8" Hybrid Cable	60.00 - 65.00	1.0000	1.0000
L30	12	1.6" Cable	60.00 - 65.00	1.0000	1.0000
L30	13	LDF5-50A (7/8 FOAM)	60.00 - 65.00	1.0000	1.0000
L30	26	6" x 1-1/2" Mod Plate	60.00 - 64.00	1.0000	1.0000
L30	27	6" x 1-1/2" Mod Plate	60.00 - 64.00	1.0000	1.0000
L30	28	6" x 1-1/2" Mod Plate	60.00 - 64.00	1.0000	1.0000
L31	1	PiROD Climbing Rungs	55.00 - 60.00	1.0000	1.0000
L31	8	LDF7-50A (1-5/8 FOAM)	55.00 - 60.00	1.0000	1.0000
L31	9	Hybriflex	55.00 - 60.00	1.0000	1.0000
L31	10	LDF7-50A (1-5/8 FOAM)	55.00 - 60.00	1.0000	1.0000
L31	11	1-5/8" Hybrid Cable	55.00 - 60.00	1.0000	1.0000
L31	12	1.6" Cable	55.00 - 60.00	1.0000	1.0000
L31	13	LDF5-50A (7/8 FOAM)	55.00 - 60.00	1.0000	1.0000
L31	26	6" x 1-1/2" Mod Plate	56.00 - 60.00	1.0000	1.0000
L31	27	6" x 1-1/2" Mod Plate	56.00 - 60.00	1.0000	1.0000
L31	28	6" x 1-1/2" Mod Plate	56.00 - 60.00	1.0000	1.0000
L32	1	PiROD Climbing Rungs	50.00 - 55.00	1.0000	1.0000
L32	8	LDF7-50A (1-5/8 FOAM)	50.00 - 55.00	1.0000	1.0000
L32	9	Hybriflex	50.00 - 55.00	1.0000	1.0000
L32	10	LDF7-50A (1-5/8 FOAM)	50.00 - 55.00	1.0000	1.0000
L32	11	1-5/8" Hybrid Cable	50.00 - 55.00	1.0000	1.0000
L32	12	1.6" Cable	50.00 - 55.00	1.0000	1.0000
L32	13	LDF5-50A (7/8 FOAM)	50.00 - 55.00	1.0000	1.0000
L33	1	PiROD Climbing Rungs	45.00 - 50.00	1.0000	1.0000
L33	8	LDF7-50A (1-5/8 FOAM)	45.00 - 50.00	1.0000	1.0000
L33	9	Hybriflex	45.00 - 50.00	1.0000	1.0000
L33	10	LDF7-50A (1-5/8 FOAM)	45.00 - 50.00	1.0000	1.0000
L33	11	1-5/8" Hybrid Cable	45.00 - 50.00	1.0000	1.0000
L33	12	1.6" Cable	45.00 - 50.00	1.0000	1.0000
L33	13	LDF5-50A (7/8 FOAM)	45.00 - 50.00	1.0000	1.0000
L34	1	PiROD Climbing Rungs	40.00 - 45.00	1.0000	1.0000
L34	8	LDF7-50A (1-5/8 FOAM)	40.00 - 45.00	1.0000	1.0000
L34	9	Hybriflex	40.00 - 45.00	1.0000	1.0000
L34	10	LDF7-50A (1-5/8 FOAM)	40.00 - 45.00	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L34	11	1-5/8" Hybrid Cable	40.00 - 45.00	1.0000	1.0000
L34	12	1.6" Cable	40.00 - 45.00	1.0000	1.0000
L34	13	LDF5-50A (7/8 FOAM)	40.00 - 45.00	1.0000	1.0000
L34	17	4" x 1-1/4" Mod Plate	40.00 - 42.00	1.0000	1.0000
L34	18	4" x 1-1/4" Mod Plate	40.00 - 42.00	1.0000	1.0000
L34	19	4" x 1-1/4" Mod Plate	40.00 - 42.00	1.0000	1.0000
L34	23	6" x 1-1/2" Mod Plate	40.00 - 44.00	1.0000	1.0000
L34	24	6" x 1-1/2" Mod Plate	40.00 - 44.00	1.0000	1.0000
L34	25	6" x 1-1/2" Mod Plate	40.00 - 44.00	1.0000	1.0000
L35	1	PiROD Climbing Rungs	35.00 - 40.00	1.0000	1.0000
L35	8	LDF7-50A (1-5/8 FOAM)	35.00 - 40.00	1.0000	1.0000
L35	9	Hybriflex	35.00 - 40.00	1.0000	1.0000
L35	10	LDF7-50A (1-5/8 FOAM)	35.00 - 40.00	1.0000	1.0000
L35	11	1-5/8" Hybrid Cable	35.00 - 40.00	1.0000	1.0000
L35	12	1.6" Cable	35.00 - 40.00	1.0000	1.0000
L35	13	LDF5-50A (7/8 FOAM)	35.00 - 40.00	1.0000	1.0000
L35	17	4" x 1-1/4" Mod Plate	38.00 - 40.00	1.0000	1.0000
L35	18	4" x 1-1/4" Mod Plate	38.00 - 40.00	1.0000	1.0000
L35	19	4" x 1-1/4" Mod Plate	38.00 - 40.00	1.0000	1.0000
L35	23	6" x 1-1/2" Mod Plate	36.00 - 40.00	1.0000	1.0000
L35	24	6" x 1-1/2" Mod Plate	36.00 - 40.00	1.0000	1.0000
L35	25	6" x 1-1/2" Mod Plate	36.00 - 40.00	1.0000	1.0000
L36	1	PiROD Climbing Rungs	30.00 - 35.00	1.0000	1.0000
L36	8	LDF7-50A (1-5/8 FOAM)	30.00 - 35.00	1.0000	1.0000
L36	9	Hybriflex	30.00 - 35.00	1.0000	1.0000
L36	10	LDF7-50A (1-5/8 FOAM)	30.00 - 35.00	1.0000	1.0000
L36	11	1-5/8" Hybrid Cable	30.00 - 35.00	1.0000	1.0000
L36	12	1.6" Cable	30.00 - 35.00	1.0000	1.0000
L36	13	LDF5-50A (7/8 FOAM)	30.00 - 35.00	1.0000	1.0000
L37	1	PiROD Climbing Rungs	25.00 - 30.00	1.0000	1.0000
L37	8	LDF7-50A (1-5/8 FOAM)	25.00 - 30.00	1.0000	1.0000
L37	9	Hybriflex	25.00 - 30.00	1.0000	1.0000
L37	10	LDF7-50A (1-5/8 FOAM)	25.00 - 30.00	1.0000	1.0000
L37	11	1-5/8" Hybrid Cable	25.00 - 30.00	1.0000	1.0000
L37	12	1.6" Cable	25.00 - 30.00	1.0000	1.0000
L37	13	LDF5-50A (7/8 FOAM)	25.00 - 30.00	1.0000	1.0000
L38	1	PiROD Climbing Rungs	20.00 - 25.00	1.0000	1.0000
L38	8	LDF7-50A (1-5/8 FOAM)	20.00 - 25.00	1.0000	1.0000
L38	9	Hybriflex	20.00 - 25.00	1.0000	1.0000
L38	10	LDF7-50A (1-5/8 FOAM)	20.00 - 25.00	1.0000	1.0000
L38	11	1-5/8" Hybrid Cable	20.00 - 25.00	1.0000	1.0000
L38	12	1.6" Cable	20.00 - 25.00	1.0000	1.0000
L38	13	LDF5-50A (7/8 FOAM)	20.00 - 25.00	1.0000	1.0000
L38	14	4" x 1-1/4" Mod Plate	20.00 - 22.00	1.0000	1.0000
L38	15	4" x 1-1/4" Mod Plate	20.00 - 22.00	1.0000	1.0000
L38	16	4" x 1-1/4" Mod Plate	20.00 - 22.00	1.0000	1.0000
L38	20	6" x 1-1/2" Mod Plate	20.00 - 24.00	1.0000	1.0000
L38	21	6" x 1-1/2" Mod Plate	20.00 - 24.00	1.0000	1.0000
L38	22	6" x 1-1/2" Mod Plate	20.00 - 24.00	1.0000	1.0000
L39	1	PiROD Climbing Rungs	15.00 - 20.00	1.0000	1.0000
L39	8	LDF7-50A (1-5/8 FOAM)	15.00 - 20.00	1.0000	1.0000
L39	9	Hybriflex	15.00 - 20.00	1.0000	1.0000
L39	10	LDF7-50A (1-5/8 FOAM)	15.00 - 20.00	1.0000	1.0000
L39	11	1-5/8" Hybrid Cable	15.00 - 20.00	1.0000	1.0000
L39	12	1.6" Cable	15.00 - 20.00	1.0000	1.0000
L39	13	LDF5-50A (7/8 FOAM)	15.00 - 20.00	1.0000	1.0000
L39	14	4" x 1-1/4" Mod Plate	18.00 - 20.00	1.0000	1.0000
L39	15	4" x 1-1/4" Mod Plate	18.00 - 20.00	1.0000	1.0000
L39	16	4" x 1-1/4" Mod Plate	18.00 - 20.00	1.0000	1.0000
L39	20	6" x 1-1/2" Mod Plate	16.00 - 20.00	1.0000	1.0000
L39	21	6" x 1-1/2" Mod Plate	16.00 - 20.00	1.0000	1.0000
L39	22	6" x 1-1/2" Mod Plate	16.00 - 20.00	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L40	1	PiROD Climbing Rungs	10.00 - 15.00	1.0000	1.0000
L40	8	LDF7-50A (1-5/8 FOAM)	10.00 - 15.00	1.0000	1.0000
L40	9	Hybriflex	10.00 - 15.00	1.0000	1.0000
L40	10	LDF7-50A (1-5/8 FOAM)	10.00 - 15.00	1.0000	1.0000
L40	11	1-5/8" Hybrid Cable	10.00 - 15.00	1.0000	1.0000
L40	12	1.6" Cable	10.00 - 15.00	1.0000	1.0000
L40	13	LDF5-50A (7/8 FOAM)	10.00 - 15.00	1.0000	1.0000
L41	1	PiROD Climbing Rungs	8.00 - 10.00	1.0000	1.0000
L41	8	LDF7-50A (1-5/8 FOAM)	8.00 - 10.00	1.0000	1.0000
L41	9	Hybriflex	8.00 - 10.00	1.0000	1.0000
L41	10	LDF7-50A (1-5/8 FOAM)	8.00 - 10.00	1.0000	1.0000
L41	11	1-5/8" Hybrid Cable	8.00 - 10.00	1.0000	1.0000
L41	12	1.6" Cable	8.00 - 10.00	1.0000	1.0000
L41	13	LDF5-50A (7/8 FOAM)	8.00 - 10.00	1.0000	1.0000

Effective Width of Flat Linear Attachments / Feed Lines

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L30	26	6" x 1-1/2" Mod Plate	60.00 - 64.00	Manual	1.0000
L30	27	6" x 1-1/2" Mod Plate	60.00 - 64.00	Manual	1.0000
L30	28	6" x 1-1/2" Mod Plate	60.00 - 64.00	Manual	1.0000
L31	26	6" x 1-1/2" Mod Plate	56.00 - 60.00	Manual	1.0000
L31	27	6" x 1-1/2" Mod Plate	56.00 - 60.00	Manual	1.0000
L31	28	6" x 1-1/2" Mod Plate	56.00 - 60.00	Manual	1.0000
L34	17	4" x 1-1/4" Mod Plate	40.00 - 42.00	Auto	1.0000
L34	18	4" x 1-1/4" Mod Plate	40.00 - 42.00	Auto	1.0000
L34	19	4" x 1-1/4" Mod Plate	40.00 - 42.00	Auto	1.0000
L34	23	6" x 1-1/2" Mod Plate	40.00 - 44.00	Manual	1.0000
L34	24	6" x 1-1/2" Mod Plate	40.00 - 44.00	Manual	1.0000
L34	25	6" x 1-1/2" Mod Plate	40.00 - 44.00	Manual	1.0000
L35	17	4" x 1-1/4" Mod Plate	38.00 - 40.00	Auto	1.0000
L35	18	4" x 1-1/4" Mod Plate	38.00 - 40.00	Auto	1.0000
L35	19	4" x 1-1/4" Mod Plate	38.00 - 40.00	Auto	1.0000
L35	23	6" x 1-1/2" Mod Plate	36.00 - 40.00	Manual	1.0000
L35	24	6" x 1-1/2" Mod Plate	36.00 - 40.00	Manual	1.0000
L35	25	6" x 1-1/2" Mod Plate	36.00 - 40.00	Manual	1.0000
L38	14	4" x 1-1/4" Mod Plate	20.00 - 22.00	Auto	1.0000
L38	15	4" x 1-1/4" Mod Plate	20.00 - 22.00	Auto	1.0000
L38	16	4" x 1-1/4" Mod Plate	20.00 - 22.00	Auto	1.0000
L38	20	6" x 1-1/2" Mod Plate	20.00 - 24.00	Manual	1.0000
L38	21	6" x 1-1/2" Mod Plate	20.00 - 24.00	Manual	1.0000
L38	22	6" x 1-1/2" Mod Plate	20.00 - 24.00	Manual	1.0000
L39	14	4" x 1-1/4" Mod Plate	18.00 - 20.00	Auto	1.0000
L39	15	4" x 1-1/4" Mod Plate	18.00 - 20.00	Auto	1.0000
L39	16	4" x 1-1/4" Mod Plate	18.00 - 20.00	Auto	1.0000
L39	20	6" x 1-1/2" Mod Plate	16.00 - 20.00	Manual	1.0000
L39	21	6" x 1-1/2" Mod Plate	16.00 - 20.00	Manual	1.0000
L39	22	6" x 1-1/2" Mod Plate	16.00 - 20.00	Manual	1.0000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft	Offsets: Vert ft	Offsets: Horz Lateral ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
Pirod 16.5' LP Platform	C	None				0.0000	195.00	No Ice	20.80	20.80	1.80
								1/2" Ice	28.10	28.10	2.07
								1" Ice	35.40	35.40	2.33
(3) Commscope VSR-MA-B w/ 15.5' Horizontal Pipe	C	None				0.0000	193.00	No Ice	16.65	16.65	0.56
								1/2" Ice	25.43	25.43	0.73
								1" Ice	34.21	34.21	0.89
APXVAARR24 w/ Mount Pipe	A	From Centroid-Leg	4.00	0.00	-2.00	50.0000	195.00	No Ice	20.24	10.79	0.16
								1/2" Ice	20.89	12.21	0.29
								1" Ice	21.55	13.49	0.44
APXVAARR24 w/ Mount Pipe	B	From Centroid-Leg	4.00	0.00	-2.00	30.0000	195.00	No Ice	20.24	10.79	0.16
								1/2" Ice	20.89	12.21	0.29
								1" Ice	21.55	13.49	0.44
APXVAARR24 w/ Mount Pipe	C	From Centroid-Leg	4.00	0.00	-2.00	20.0000	195.00	No Ice	20.24	10.79	0.16
								1/2" Ice	20.89	12.21	0.29
								1" Ice	21.55	13.49	0.44
APX16DWV w/ Mount Pipe	A	From Centroid-Leg	4.00	0.00	0.00	50.0000	195.00	No Ice	7.14	3.81	0.07
								1/2" Ice	7.76	4.88	0.12
								1" Ice	8.29	5.66	0.18
APX16DWV w/ Mount Pipe	B	From Centroid-Leg	4.00	0.00	0.00	30.0000	195.00	No Ice	7.14	3.81	0.07
								1/2" Ice	7.76	4.88	0.12
								1" Ice	8.29	5.66	0.18
APX16DWV w/ Mount Pipe	C	From Centroid-Leg	4.00	0.00	0.00	20.0000	195.00	No Ice	7.14	3.81	0.07
								1/2" Ice	7.76	4.88	0.12
								1" Ice	8.29	5.66	0.18
AIR6449 w/ Mount Pipe	A	From Centroid-Leg	4.00	0.00	0.00	0.0000	195.00	No Ice	6.45	3.92	0.13
								1/2" Ice	7.02	4.64	0.18
								1" Ice	7.53	5.25	0.24
AIR6449 w/ Mount Pipe	B	From Centroid-Leg	4.00	0.00	0.00	0.0000	195.00	No Ice	6.45	3.92	0.13
								1/2" Ice	7.02	4.64	0.18
								1" Ice	7.53	5.25	0.24
AIR6449 w/ Mount Pipe	C	From Centroid-Leg	4.00	0.00	0.00	0.0000	195.00	No Ice	6.45	3.92	0.13
								1/2" Ice	7.02	4.64	0.18
								1" Ice	7.53	5.25	0.24
RADIO 4449 B12/B71	A	From Centroid-Leg	4.00	0.00	-2.00	0.0000	195.00	No Ice	1.65	1.16	0.07
								1/2" Ice	1.81	1.30	0.09
								1" Ice	1.98	1.45	0.11
RADIO 4449 B12/B71	B	From Centroid-Leg	4.00	0.00	-2.00	0.0000	195.00	No Ice	1.65	1.16	0.07
								1/2" Ice	1.81	1.30	0.09
								1" Ice	1.98	1.45	0.11
RADIO 4449 B12/B71	C	From Centroid-Leg	4.00	0.00	-2.00	0.0000	195.00	No Ice	1.65	1.16	0.07
								1/2" Ice	1.81	1.30	0.09
								1" Ice	1.98	1.45	0.11
RADIO 4415 B66A	A	From Centroid-Leg	4.00	0.00	0.00	0.0000	195.00	No Ice	1.86	0.87	0.05
								1/2" Ice	2.03	1.00	0.06
								1" Ice	2.20	1.13	0.08
RADIO 4415 B66A	B	From Centroid-Leg	4.00	0.00	0.00	0.0000	195.00	No Ice	1.86	0.87	0.05
								1/2" Ice	2.03	1.00	0.06
								1" Ice	2.20	1.13	0.08
RADIO 4415 B66A	C	From Centroid-Leg	4.00	0.00	0.00	0.0000	195.00	No Ice	1.86	0.87	0.05
								1/2" Ice	2.03	1.00	0.06
								1" Ice	2.20	1.13	0.08

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
4424 B25	A	From Centroid-Leg	4.00 0.00 -2.00	0.0000	195.00	No Ice 1/2" Ice 1" Ice	1.86 2.03 2.20	1.32 1.47 1.62	0.09 0.11 0.13
4424 B25	B	From Centroid-Leg	4.00 0.00 -2.00	0.0000	195.00	No Ice 1/2" Ice 1" Ice	1.86 2.03 2.20	1.32 1.47 1.62	0.09 0.11 0.13
4424 B25	C	From Centroid-Leg	4.00 0.00 -2.00	0.0000	195.00	No Ice 1/2" Ice 1" Ice	1.86 2.03 2.20	1.32 1.47 1.62	0.09 0.11 0.13
DC4-48-60-8-20F	A	From Centroid-Leg	4.00 0.00 0.00	0.0000	195.00	No Ice 1/2" Ice 1" Ice	1.43 1.58 1.74	0.59 0.70 0.81	0.01 0.02 0.03
T-Mobile Reserved	A	From Centroid-Leg	4.00 0.00 0.00	50.0000	195.00	No Ice 1/2" Ice 1" Ice	5.10 5.86 6.54	6.78 7.46 8.10	0.05 0.08 0.13
T-Mobile Reserved	B	From Centroid-Leg	4.00 0.00 0.00	30.0000	195.00	No Ice 1/2" Ice 1" Ice	5.10 5.10 6.54	6.78 7.46 8.10	0.05 0.08 0.13
T-Mobile Reserved	C	From Centroid-Leg	4.00 0.00 0.00	20.0000	195.00	No Ice 1/2" Ice 1" Ice	5.10 5.10 6.54	6.78 7.46 8.10	0.05 0.08 0.13
PiROD 13' Low Profile Platform (Monopole)	C	None		0.0000	185.00	No Ice 1/2" Ice 1" Ice	15.70 20.10 24.50	15.70 20.10 24.50	1.30 1.76 2.23
7770.00 w/Mount Pipe	A	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	5.51 5.87 6.23	4.10 4.73 5.37	0.06 0.11 0.16
7770.00 w/Mount Pipe	B	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	5.51 5.87 6.23	4.10 4.73 5.37	0.06 0.11 0.16
7770.00 w/Mount Pipe	C	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	5.51 5.87 6.23	4.10 4.73 5.37	0.06 0.11 0.16
HPA-65R-BUU-H8 w/ Mount Pipe	A	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	13.05 13.66 14.27	9.42 10.82 12.07	0.09 0.19 0.29
HPA-65R-BUU-H8 w/ Mount Pipe	B	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	13.05 13.66 14.27	9.42 10.82 12.07	0.09 0.19 0.29
HPA-65R-BUU-H8 w/ Mount Pipe	C	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	13.05 13.66 14.27	9.42 10.82 12.07	0.09 0.19 0.29
QS66512-2 w/ Mount Pipe	A	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	8.37 8.93 9.46	8.46 9.66 10.55	0.14 0.21 0.30
QS66512-2 w/ Mount Pipe	B	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	8.37 8.93 9.46	8.46 9.66 10.55	0.14 0.21 0.30
TPA-65R-LCUUUU-H8 w/ Mount Pipe	C	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	13.54 14.24 14.95	10.96 12.49 14.04	0.11 0.22 0.33
TT19-08BP111-001	A	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	0.55 0.65 0.75	0.45 0.53 0.63	0.02 0.02 0.03
TT19-08BP111-001	B	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	0.55 0.65 0.75	0.45 0.53 0.63	0.02 0.02 0.03

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
TT19-08BP111-001	C	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	0.55 0.65 0.75	0.45 0.53 0.63	0.02 0.02 0.03
(2) LGP21901	A	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	0.23 0.29 0.36	0.16 0.21 0.28	0.01 0.01 0.01
(2) LGP21901	B	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	0.23 0.29 0.36	0.16 0.21 0.28	0.01 0.01 0.01
(2) LGP21901	C	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	0.23 0.29 0.36	0.16 0.21 0.28	0.01 0.01 0.01
(2) 782 10250	A	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	0.45 0.54 0.64	0.25 0.32 0.40	0.01 0.01 0.02
(2) 782 10250	B	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	0.45 0.54 0.64	0.25 0.32 0.40	0.01 0.01 0.02
(2) 782 10250	C	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	0.45 0.54 0.64	0.25 0.32 0.40	0.01 0.01 0.02
RRUS 11	A	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	2.78 2.99 3.21	1.19 1.33 1.49	0.05 0.07 0.10
RRUS 11	B	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	2.78 2.99 3.21	1.19 1.33 1.49	0.05 0.07 0.10
RRUS 11	C	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	2.78 2.99 3.21	1.19 1.33 1.49	0.05 0.07 0.10
RRUS 12	A	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	3.15 3.36 3.59	1.29 1.44 1.60	0.06 0.08 0.11
RRUS 12	B	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	3.15 3.36 3.59	1.29 1.44 1.60	0.06 0.08 0.11
RRUS 12	C	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	3.15 3.36 3.59	1.29 1.44 1.60	0.06 0.08 0.11
RRUS 32	A	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	3.31 3.56 3.81	2.42 2.64 2.86	0.08 0.10 0.14
RRUS 32	B	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	3.31 3.56 3.81	2.42 2.64 2.86	0.08 0.10 0.14
RRUS 32	C	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	3.31 3.56 3.81	2.42 2.64 2.86	0.08 0.10 0.14
RRUS 4426 B66	A	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	1.64 1.80 1.97	0.73 0.84 0.97	0.05 0.06 0.08
RRUS 4426 B66	B	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	1.64 1.80 1.97	0.73 0.84 0.97	0.05 0.06 0.08
RRUS 4426 B66	C	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	1.64 1.80 1.97	0.73 0.84 0.97	0.05 0.06 0.08

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
DC6-48-60-18-8F Surge Suppression Unit	B	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	0.92 1.46 1.64	0.92 1.46 1.64	0.02 0.04 0.06
DC6-48-60-18-8F Surge Suppression Unit	C	From Centroid-Leg	4.00 0.00 0.00	23.0000	185.00	No Ice 1/2" Ice 1" Ice	0.92 1.46 1.64	0.92 1.46 1.64	0.02 0.04 0.06
Valmont Light Duty Tri-Bracket (1)	C	None		0.0000	175.00	No Ice 1/2" Ice 1" Ice	1.76 2.08 2.40	1.76 2.08 2.40	0.05 0.07 0.09
APXV18-206517S-C w/ Mount Pipe	A	From Leg	0.50 0.00 0.00	-10.0000	175.00	No Ice 1/2" Ice 1" Ice	5.17 5.62 6.08	4.46 5.39 6.20	0.05 0.09 0.14
APXV18-206517S-C w/ Mount Pipe	B	From Leg	0.50 0.00 0.00	-10.0000	175.00	No Ice 1/2" Ice 1" Ice	5.17 5.62 6.08	4.46 5.39 6.20	0.05 0.09 0.14
APXV18-206517S-C w/ Mount Pipe	C	From Leg	0.50 0.00 0.00	-10.0000	175.00	No Ice 1/2" Ice 1" Ice	5.17 5.62 6.08	4.46 5.39 6.20	0.05 0.09 0.14
MTS 12.5' LP Platform	C	None		0.0000	165.00	No Ice 1/2" Ice 1" Ice	14.66 18.87 23.08	14.66 18.87 23.08	1.25 1.48 1.71
APXVTM14-ALU-I20 w/ Mount Pipe	A	From Centroid-Face	4.00 0.00 0.00	40.0000	165.00	No Ice 1/2" Ice 1" Ice	6.58 7.03 7.47	4.96 5.75 6.47	0.08 0.13 0.19
APXVTM14-ALU-I20 w/ Mount Pipe	B	From Centroid-Face	4.00 0.00 0.00	10.0000	165.00	No Ice 1/2" Ice 1" Ice	6.58 7.03 7.47	4.96 5.75 6.47	0.08 0.13 0.19
APXVTM14-ALU-I20 w/ Mount Pipe	C	From Centroid-Face	4.00 0.00 0.00	80.0000	165.00	No Ice 1/2" Ice 1" Ice	6.58 7.03 7.47	4.96 5.75 6.47	0.08 0.13 0.19
NNVV-65B-R4 w/ Mount Pipe	A	From Centroid-Face	4.00 0.00 0.00	40.0000	165.00	No Ice 1/2" Ice 1" Ice	12.27 12.77 13.27	7.17 8.13 8.97	0.10 0.19 0.28
NNVV-65B-R4 w/ Mount Pipe	B	From Centroid-Face	4.00 0.00 0.00	10.0000	165.00	No Ice 1/2" Ice 1" Ice	12.27 12.77 13.27	7.17 8.13 8.97	0.10 0.19 0.28
NNVV-65B-R4 w/ Mount Pipe	C	From Centroid-Face	4.00 0.00 0.00	80.0000	165.00	No Ice 1/2" Ice 1" Ice	12.27 12.77 13.27	7.17 8.13 8.97	0.10 0.19 0.28
RRH 1900 4x45 65 MHz	A	From Centroid-Face	4.00 0.00 0.00	40.0000	165.00	No Ice 1/2" Ice 1" Ice	2.29 2.50 2.71	2.29 2.50 2.71	0.06 0.08 0.11
RRH 1900 4x45 65 MHz	B	From Centroid-Face	4.00 0.00 0.00	10.0000	165.00	No Ice 1/2" Ice 1" Ice	2.29 2.50 2.71	2.29 2.50 2.71	0.06 0.08 0.11
RRH 1900 4x45 65 MHz	C	From Centroid-Face	4.00 0.00 0.00	80.0000	165.00	No Ice 1/2" Ice 1" Ice	2.29 2.50 2.71	2.29 2.50 2.71	0.06 0.08 0.11
800 MHz RRH	A	From Centroid-Face	4.00 0.00 0.00	40.0000	165.00	No Ice 1/2" Ice 1" Ice	1.70 1.86 2.03	1.28 1.43 1.58	0.05 0.07 0.09
800 MHz RRH	B	From Centroid-Face	4.00 0.00 0.00	10.0000	165.00	No Ice 1/2" Ice 1" Ice	1.70 1.86 2.03	1.28 1.43 1.58	0.05 0.07 0.09
800 MHz RRH	C	From Centroid-Face	4.00 0.00 0.00	80.0000	165.00	No Ice 1/2" Ice 1" Ice	1.70 1.86 2.03	1.28 1.43 1.58	0.05 0.07 0.09

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
TD-RRH8x20-25 w/ Solar Shield	A	From Centroid-Face	4.00 0.00 0.00	40.0000	165.00	No Ice 1/2" Ice 1" Ice	3.70 3.95 4.20	1.29 1.46 1.64	0.07 0.09 0.12
TD-RRH8x20-25 w/ Solar Shield	B	From Centroid-Face	4.00 0.00 0.00	10.0000	165.00	No Ice 1/2" Ice 1" Ice	3.70 3.95 4.20	1.29 1.46 1.64	0.07 0.09 0.12
TD-RRH8x20-25 w/ Solar Shield	C	From Centroid-Face	4.00 0.00 0.00	80.0000	165.00	No Ice 1/2" Ice 1" Ice	3.70 3.95 4.20	1.29 1.46 1.64	0.07 0.09 0.12
RRH2X50-08 (800 MHz)	A	From Centroid-Face	4.00 0.00 0.00	40.0000	165.00	No Ice 1/2" Ice 1" Ice	1.70 1.86 2.03	1.28 1.43 1.58	0.05 0.07 0.09
RRH2X50-08 (800 MHz)	B	From Centroid-Face	4.00 0.00 0.00	10.0000	165.00	No Ice 1/2" Ice 1" Ice	1.70 1.86 2.03	1.28 1.43 1.58	0.05 0.07 0.09
RRH2X50-08 (800 MHz)	C	From Centroid-Face	4.00 0.00 0.00	80.0000	165.00	No Ice 1/2" Ice 1" Ice	1.70 1.86 2.03	1.28 1.43 1.58	0.05 0.07 0.09
Platform Mount [LP 404-1_KCKR]	C	None		0.0000	155.00	No Ice 1/2" Ice 1" Ice	35.82 45.85 55.76	35.82 45.85 55.76	2.32 3.02 3.89
Additional Mod Components	C	None		0.0000	155.00	No Ice 1/2" Ice 1" Ice	6.20 7.19 8.18	6.20 7.19 8.18	0.20 0.26 0.32
NNH4-65B-R6 w/ Mount Pipe	A	From Centroid-Face	4.00 0.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice	12.27 12.77 13.27	7.17 8.13 8.97	0.11 0.20 0.29
NNH4-65B-R6 w/ Mount Pipe	B	From Centroid-Face	4.00 0.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice	12.27 12.77 13.27	7.17 8.13 8.97	0.11 0.20 0.29
NNH4-65B-R6 w/ Mount Pipe	C	From Centroid-Face	4.00 0.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice	12.27 12.77 13.27	7.17 8.13 8.97	0.11 0.20 0.29
MT6407-77A w/ Mount Pipe	A	From Centroid-Face	4.00 0.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice	4.91 5.26 5.61	2.68 3.14 3.62	0.10 0.14 0.18
MT6407-77A w/ Mount Pipe	B	From Centroid-Face	4.00 0.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice	4.91 5.26 5.61	2.68 3.14 3.62	0.10 0.14 0.18
MT6407-77A w/ Mount Pipe	C	From Centroid-Face	4.00 0.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice	4.91 5.26 5.61	2.68 3.14 3.62	0.10 0.14 0.18
XXDWMM w/ Mount Pipe	A	From Centroid-Face	4.00 0.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice	2.64 3.19 3.64	2.18 2.80 3.29	0.05 0.08 0.11
XXDWMM w/ Mount Pipe	B	From Centroid-Face	4.00 0.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice	2.64 3.19 3.64	2.18 2.80 3.29	0.05 0.08 0.11
XXDWMM w/ Mount Pipe	C	From Centroid-Face	4.00 0.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice	2.64 3.19 3.64	2.18 2.80 3.29	0.05 0.08 0.11
RF4439D-25A	A	From Centroid-Face	4.00 0.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice	1.87 2.03 2.21	1.25 1.39 1.54	0.07 0.09 0.11
RF4439D-25A	B	From Centroid-Face	4.00 0.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice	1.87 2.03 2.21	1.25 1.39 1.54	0.07 0.09 0.11

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft Vert ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
RF4439D-25A	C	From Centroid-Face	4.00 0.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice	1.87 2.03 2.21	1.25 1.39 1.54	0.07 0.09 0.11
RF4440D-13A	A	From Centroid-Face	4.00 0.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice	1.87 2.03 2.21	1.13 1.27 1.41	0.07 0.09 0.11
RF4440D-13A	B	From Centroid-Face	4.00 0.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice	1.87 2.03 2.21	1.13 1.27 1.41	0.07 0.09 0.11
RF4440D-13A	C	From Centroid-Face	4.00 0.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice	1.87 2.03 2.21	1.13 1.27 1.41	0.07 0.09 0.11
RVZDC-6627-PF-48	A	From Centroid-Face	4.00 0.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice	3.79 4.04 4.30	2.51 2.73 2.95	0.03 0.06 0.10
(2) Pipe 2 Std x 6'	A	From Centroid-Face	4.00 0.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice	1.43 1.93 2.30	1.43 1.93 2.30	0.02 0.03 0.05
(2) Pipe 2 Std x 6'	B	From Centroid-Face	4.00 0.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice	1.43 1.93 2.30	1.43 1.93 2.30	0.02 0.03 0.05
(2) Pipe 2 Std x 6'	C	From Centroid-Face	4.00 0.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice	1.43 1.93 2.30	1.43 1.93 2.30	0.02 0.03 0.05
SNP8HR-396	C	None		0.0000	140.00	No Ice 1/2" Ice 1" Ice	26.80 32.20 37.60	26.80 32.20 37.60	1.51 1.81 2.11
MX08FRO665-20_V0F w/ Mount Pipe	A	From Leg	3.00 0.00 0.00	0.0000	140.00	No Ice 1/2" Ice 1" Ice	12.96 13.67 14.34	7.77 9.05 10.19	0.08 0.18 0.28
MX08FRO665-20_V0F w/ Mount Pipe	B	From Leg	3.00 0.00 0.00	0.0000	140.00	No Ice 1/2" Ice 1" Ice	12.96 13.67 14.34	7.77 9.05 10.19	0.08 0.18 0.28
MX08FRO665-20_V0F w/ Mount Pipe	C	From Leg	3.00 0.00 0.00	0.0000	140.00	No Ice 1/2" Ice 1" Ice	12.96 13.67 14.34	7.77 9.05 10.19	0.08 0.18 0.28
TA8025-B605	A	From Leg	3.00 0.00 0.00	0.0000	140.00	No Ice 1/2" Ice 1" Ice	1.96 2.14 2.32	1.05 1.18 1.32	0.06 0.08 0.10
TA8025-B605	B	From Leg	3.00 0.00 0.00	0.0000	140.00	No Ice 1/2" Ice 1" Ice	1.96 2.14 2.32	1.05 1.18 1.32	0.06 0.08 0.10
TA8025-B605	C	From Leg	3.00 0.00 0.00	0.0000	140.00	No Ice 1/2" Ice 1" Ice	1.96 2.14 2.32	1.05 1.18 1.32	0.06 0.08 0.10
TA8025-B604	A	From Leg	3.00 0.00 0.00	0.0000	140.00	No Ice 1/2" Ice 1" Ice	1.96 2.14 2.32	1.05 1.18 1.32	0.06 0.08 0.10
TA8025-B604	B	From Leg	3.00 0.00 0.00	0.0000	140.00	No Ice 1/2" Ice 1" Ice	1.96 2.14 2.32	1.05 1.18 1.32	0.06 0.08 0.10
TA8025-B604	C	From Leg	3.00 0.00 0.00	0.0000	140.00	No Ice 1/2" Ice 1" Ice	1.96 2.14 2.32	1.05 1.18 1.32	0.06 0.08 0.10
Junction Box	A	From Leg	3.00 0.00 0.00	0.0000	140.00	No Ice 1/2" Ice 1" Ice	1.03 1.17 1.31	2.31 2.50 2.70	0.03 0.05 0.07

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
DISH Reserved	A	From Leg	3.00	0.0000	140.00	No Ice	17.44	14.76	0.16
			0.00			1/2" Ice	18.90	16.30	0.24
			0.00			1" Ice	20.24	17.70	0.34
DISH Reserved	B	From Leg	3.00	0.0000	140.00	No Ice	17.44	14.76	0.16
			0.00			1/2" Ice	18.90	16.30	0.24
			0.00			1" Ice	20.24	17.70	0.34
DISH Reserved	C	From Leg	3.00	0.0000	140.00	No Ice	17.44	14.76	0.16
			0.00			1/2" Ice	18.90	16.30	0.24
			0.00			1" Ice	20.24	17.70	0.34
(2) Pipe 2 Std x 8'	A	From Leg	3.00	0.0000	140.00	No Ice	1.90	1.90	0.03
			0.00			1/2" Ice	2.73	2.73	0.04
			0.00			1" Ice	3.40	3.40	0.06
(2) Pipe 2 Std x 8'	B	From Leg	3.00	0.0000	140.00	No Ice	1.90	1.90	0.03
			0.00			1/2" Ice	2.73	2.73	0.04
			0.00			1" Ice	3.40	3.40	0.06
(2) Pipe 2 Std x 8'	C	From Leg	3.00	0.0000	140.00	No Ice	1.90	1.90	0.03
			0.00			1/2" Ice	2.73	2.73	0.04
			0.00			1" Ice	3.40	3.40	0.06
Pipe Mount 3'x4.5"	C	From Leg	0.50	0.0000	75.00	No Ice	0.89	0.89	0.03
			0.00			1/2" Ice	1.12	1.12	0.04
			0.00			1" Ice	1.33	1.33	0.05
GPS-TMG-HR-26N	C	From Leg	0.50	0.0000	75.00	No Ice	0.13	0.13	0.00
			0.00			1/2" Ice	0.18	0.18	0.00
			0.00			1" Ice	0.24	0.24	0.01
Bridge Stiffener (3.25 sq ft)	A	From Leg	0.50	90.0000	120.00	No Ice	3.25	0.74	0.00
			0.00			1/2" Ice	3.60	1.25	0.00
			0.00			1" Ice	3.94	1.73	0.00
Bridge Stiffener (3.25 sq ft)	B	From Leg	0.50	90.0000	120.00	No Ice	3.25	0.74	0.00
			0.00			1/2" Ice	3.60	1.25	0.00
			0.00			1" Ice	3.94	1.73	0.00
Bridge Stiffener (3.25 sq ft)	C	From Leg	0.50	90.0000	120.00	No Ice	3.25	0.74	0.00
			0.00			1/2" Ice	3.60	1.25	0.00
			0.00			1" Ice	3.94	1.73	0.00
Bridge Stiffener (3.25 sq ft)	A	From Leg	0.50	90.0000	100.00	No Ice	3.25	0.74	0.00
			0.00			1/2" Ice	3.60	1.25	0.00
			0.00			1" Ice	3.94	1.73	0.00
Bridge Stiffener (3.25 sq ft)	B	From Leg	0.50	90.0000	100.00	No Ice	3.25	0.74	0.00
			0.00			1/2" Ice	3.60	1.25	0.00
			0.00			1" Ice	3.94	1.73	0.00
Bridge Stiffener (3.25 sq ft)	C	From Leg	0.50	90.0000	100.00	No Ice	3.25	0.74	0.00
			0.00			1/2" Ice	3.60	1.25	0.00
			0.00			1" Ice	3.94	1.73	0.00
Bridge Stiffener (3.25 sq ft)	A	From Leg	0.50	90.0000	80.00	No Ice	3.25	0.74	0.00
			0.00			1/2" Ice	3.60	1.25	0.00
			0.00			1" Ice	3.94	1.73	0.00
Bridge Stiffener (3.25 sq ft)	B	From Leg	0.50	90.0000	80.00	No Ice	3.25	0.74	0.00
			0.00			1/2" Ice	3.60	1.25	0.00
			0.00			1" Ice	3.94	1.73	0.00
Bridge Stiffener (3.25 sq ft)	C	From Leg	0.50	90.0000	80.00	No Ice	3.25	0.74	0.00
			0.00			1/2" Ice	3.60	1.25	0.00
			0.00			1" Ice	3.94	1.73	0.00

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 Tower Deflections - Service Wind

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

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	196 - 195	18.678	48	0.8631	0.0011
L2	195 - 190	18.498	48	0.8631	0.0011
L3	190 - 185	17.594	48	0.8613	0.0011
L4	185 - 180	16.696	48	0.8539	0.0011
L5	180 - 175	15.809	48	0.8387	0.0011
L6	175 - 170	14.937	48	0.8258	0.0011
L7	170 - 165	14.081	48	0.8076	0.0011
L8	165 - 160	13.248	48	0.7835	0.0010
L9	160 - 155	12.442	48	0.7529	0.0009
L10	155 - 150	11.665	48	0.7310	0.0008
L11	150 - 145	10.914	40	0.7042	0.0007
L12	145 - 140	10.195	40	0.6719	0.0006
L13	140 - 136.5	9.512	40	0.6340	0.0005
L14	136.5 - 136	9.055	40	0.6151	0.0005
L15	136 - 131	8.991	40	0.6134	0.0005
L16	131 - 126	8.359	40	0.5948	0.0005
L17	126 - 121	7.748	40	0.5735	0.0004
L18	121 - 120	7.160	40	0.5496	0.0004
L19	120 - 115	7.046	40	0.5445	0.0004
L20	115 - 110	6.486	40	0.5253	0.0004
L21	110 - 105	5.947	40	0.5041	0.0003
L22	105 - 100	5.431	40	0.4811	0.0003
L23	100 - 95	4.940	40	0.4561	0.0003
L24	95 - 90	4.473	40	0.4360	0.0003
L25	90 - 85	4.027	40	0.4143	0.0002
L26	85 - 80	3.606	40	0.3911	0.0002
L27	80 - 75	3.209	40	0.3662	0.0002
L28	75 - 70	2.836	40	0.3466	0.0002
L29	70 - 65	2.484	40	0.3257	0.0002
L30	65 - 60	2.154	40	0.3036	0.0002
L31	60 - 55	1.848	40	0.2802	0.0001
L32	55 - 50	1.565	40	0.2600	0.0001
L33	50 - 45	1.304	40	0.2387	0.0001
L34	45 - 40	1.066	40	0.2164	0.0001
L35	40 - 35	0.851	40	0.1930	0.0001
L36	35 - 30	0.660	40	0.1722	0.0001
L37	30 - 25	0.491	40	0.1505	0.0001
L38	25 - 20	0.345	40	0.1278	0.0001
L39	20 - 15	0.224	40	0.1042	0.0000
L40	15 - 10	0.127	40	0.0796	0.0000
L41	10 - 5	0.057	40	0.0540	0.0000
L42	5 - 0	0.014	40	0.0275	0.0000

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
195.00	Pirod 16.5' LP Platform	48	18.498	0.8631	0.0011	84311
193.00	(3) Commscope VSR-MA-B w/ 15.5' Horizontal Pipe	48	18.136	0.8628	0.0011	84311
185.00	PiROD 13' Low Profile Platform (Monopole)	48	16.696	0.8539	0.0011	25944
175.00	Valmont Light Duty Tri-Bracket (1)	48	14.937	0.8258	0.0011	18342
165.00	MTS 12.5' LP Platform	48	13.248	0.7835	0.0010	10515
155.00	Platform Mount [LP 404-1_KCKR]	48	11.665	0.7310	0.0008	11808
140.00	SNP8HR-396	40	9.512	0.6340	0.0005	8852

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
120.00	Bridge Stiffener (3.25 sq ft)	40	7.046	0.5445	0.0004	13096
100.00	Bridge Stiffener (3.25 sq ft)	40	4.940	0.4561	0.0003	12620
80.00	Bridge Stiffener (3.25 sq ft)	40	3.209	0.3662	0.0002	12835
75.00	Pipe Mount 3'x4.5"	40	2.836	0.3466	0.0002	14121

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	196 - 195	84.076	20	3.8874	0.0046
L2	195 - 190	83.263	20	3.8874	0.0046
L3	190 - 185	79.197	20	3.8794	0.0046
L4	185 - 180	75.153	20	3.8461	0.0047
L5	180 - 175	71.160	20	3.7774	0.0047
L6	175 - 170	67.236	20	3.7193	0.0047
L7	170 - 165	63.385	20	3.6368	0.0047
L8	165 - 160	59.633	20	3.5285	0.0047
L9	160 - 155	56.010	20	3.3906	0.0041
L10	155 - 150	52.511	20	3.2920	0.0037
L11	150 - 145	49.127	20	3.1714	0.0033
L12	145 - 140	45.881	20	3.0260	0.0028
L13	140 - 136.5	42.801	20	2.8554	0.0024
L14	136.5 - 136	40.739	20	2.7702	0.0022
L15	136 - 131	40.450	20	2.7625	0.0022
L16	131 - 126	37.601	20	2.6785	0.0020
L17	126 - 121	34.846	20	2.5827	0.0019
L18	121 - 120	32.200	4	2.4749	0.0017
L19	120 - 115	31.686	4	2.4519	0.0017
L20	115 - 110	29.167	4	2.3654	0.0016
L21	110 - 105	26.743	4	2.2702	0.0015
L22	105 - 100	24.422	4	2.1661	0.0014
L23	100 - 95	22.214	4	2.0530	0.0013
L24	95 - 90	20.113	4	1.9619	0.0012
L25	90 - 85	18.110	4	1.8639	0.0011
L26	85 - 80	16.213	4	1.7593	0.0010
L27	80 - 75	14.429	4	1.6474	0.0009
L28	75 - 70	12.750	4	1.5589	0.0009
L29	70 - 65	11.167	4	1.4649	0.0008
L30	65 - 60	9.685	4	1.3654	0.0007
L31	60 - 55	8.310	4	1.2602	0.0006
L32	55 - 50	7.037	4	1.1693	0.0006
L33	50 - 45	5.863	4	1.0736	0.0005
L34	45 - 40	4.791	4	0.9731	0.0005
L35	40 - 35	3.827	4	0.8678	0.0004
L36	35 - 30	2.966	4	0.7743	0.0004
L37	30 - 25	2.207	4	0.6765	0.0003
L38	25 - 20	1.551	4	0.5745	0.0003
L39	20 - 15	1.005	4	0.4682	0.0002
L40	15 - 10	0.572	4	0.3577	0.0002
L41	10 - 5	0.257	4	0.2428	0.0001
L42	5 - 0	0.065	4	0.1236	0.0001

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
195.00	Pirod 16.5' LP Platform	20	83.263	3.8874	0.0053	18897
193.00	(3) Commscope VSR-MA-B w/ 15.5' Horizontal Pipe	20	81.636	3.8861	0.0053	18897
185.00	PiROD 13' Low Profile Platform (Monopole)	20	75.153	3.8461	0.0052	5825
175.00	Valmont Light Duty Tri-Bracket (1)	20	67.236	3.7193	0.0047	4114
165.00	MTS 12.5' LP Platform	20	59.633	3.5285	0.0047	2354
155.00	Platform Mount [LP 404-1_KCKR]	20	52.511	3.2920	0.0037	2641
140.00	SNP8HR-396	20	42.801	2.8554	0.0024	1975
120.00	Bridge Stiffener (3.25 sq ft)	4	31.686	2.4519	0.0017	2917
100.00	Bridge Stiffener (3.25 sq ft)	4	22.214	2.0530	0.0013	2808
80.00	Bridge Stiffener (3.25 sq ft)	4	14.429	1.6474	0.0009	2853
75.00	Pipe Mount 3'x4.5"	4	12.750	1.5589	0.0009	3139

Compression Checks

Pole Design Data

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K
L1	196 - 195 (1)	P18x0.375	1.00	0.00	0.0	20.7640	-0.12
L2	195 - 190 (2)	P24x0.375	5.00	0.00	0.0	27.8325	-5.35
L3	190 - 185 (3)	P24x0.375	5.00	0.00	0.0	27.8325	-5.99
L4	185 - 180 (4)	P24x0.375	5.00	0.00	0.0	27.8325	-10.02
L5	180 - 175 (5)	P30x0.375	5.00	0.00	0.0	34.9011	-10.87
L6	175 - 170 (6)	P30x0.375	5.00	0.00	0.0	34.9011	-11.96
L7	170 - 165 (7)	P30x0.375	5.00	0.00	0.0	34.9011	-12.86
L8	165 - 160 (8)	P30x0.375	5.00	0.00	0.0	34.9011	-16.57
L9	160 - 155 (9)	P36x0.375	5.00	0.00	0.0	41.9697	-17.64
L10	155 - 150 (10)	P36x0.375	5.00	0.00	0.0	41.9697	-23.18
L11	150 - 145 (11)	P36x0.375	5.00	0.00	0.0	41.9697	-24.34
L12	145 - 140 (12)	P36x0.375	5.00	0.00	0.0	41.9697	-25.51
L13	140 - 136.5 (13)	P42x0.375	3.50	0.00	0.0	49.0383	-29.55
L14	136.5 - 136 (14)	P42x0.6375	0.50	0.00	0.0	82.8394	-29.75
L15	136 - 131 (15)	P42x0.6375	5.00	0.00	0.0	82.8394	-31.63
L16	131 - 126 (16)	P42x0.6375	5.00	0.00	0.0	82.8394	-33.53
L17	126 - 121 (17)	P42x0.6375	5.00	0.00	0.0	82.8394	-35.45
L18	121 - 120 (18)	P42x0.6375	1.00	0.00	0.0	82.8394	-35.83
L19	120 - 115 (19)	P48x0.6	5.00	0.00	0.0	89.3469	-37.87
L20	115 - 110 (20)	P48x0.6	5.00	0.00	0.0	89.3469	-39.91
L21	110 - 105 (21)	P48x0.6	5.00	0.00	0.0	89.3469	-42.00
L22	105 - 100 (22)	P48x0.6	5.00	0.00	0.0	89.3469	-44.10
L23	100 - 95 (23)	P54x0.5625	5.00	0.00	0.0	94.4319	-46.29
L24	95 - 90 (24)	P54x0.5625	5.00	0.00	0.0	94.4319	-48.49
L25	90 - 85 (25)	P54x0.5625	5.00	0.00	0.0	94.4319	-50.67
L26	85 - 80 (26)	P54x0.5625	5.00	0.00	0.0	94.4319	-52.86
L27	80 - 75 (27)	P60x0.55	5.00	0.00	0.0	102.7220	-55.20

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K
L28	75 - 70 (28)	P60x0.55	5.00	0.00	0.0	102.7220	-57.58
L29	70 - 65 (29)	P60x0.55	5.00	0.00	0.0	102.7220	-59.94
L30	65 - 60 (30)	P60x0.55	5.00	0.00	0.0	102.7220	-63.20
L31	60 - 55 (31)	P60x0.675	5.00	0.00	0.0	125.8030	-66.90
L32	55 - 50 (32)	P60x0.675	5.00	0.00	0.0	125.8030	-69.73
L33	50 - 45 (33)	P60x0.675	5.00	0.00	0.0	125.8030	-72.57
L34	45 - 40 (34)	P60x0.675	5.00	0.00	0.0	125.8030	-76.55
L35	40 - 35 (35)	P60x0.8	5.00	0.00	0.0	148.7860	-80.98
L36	35 - 30 (36)	P60x0.8	5.00	0.00	0.0	148.7860	-84.29
L37	30 - 25 (37)	P60x0.8	5.00	0.00	0.0	148.7860	-87.60
L38	25 - 20 (38)	P60x0.8	5.00	0.00	0.0	148.7860	-92.05
L39	20 - 15 (39)	P60x0.8	5.00	0.00	0.0	148.7860	-96.50
L40	15 - 10 (40)	P60x0.8	5.00	0.00	0.0	148.7860	-99.82
L41	10 - 5 (41)	P60x0.8	5.00	0.00	0.0	148.7860	-102.99
L42	5 - 0 (42)	P60x0.8	5.00	0.00	0.0	148.7860	-106.05

[1] P_u / ϕP_n controls

Pole Bending Design Data

Section No.	Elevation ft	Size	M_{ux} kip-ft	M_{uy} kip-ft
L1	196 - 195 (1)	P18x0.375	0.02	0.00
L2	195 - 190 (2)	P24x0.375	27.87	0.00
L3	190 - 185 (3)	P24x0.375	63.63	0.00
L4	185 - 180 (4)	P24x0.375	125.29	0.00
L5	180 - 175 (5)	P30x0.375	188.61	0.00
L6	175 - 170 (6)	P30x0.375	257.13	0.00
L7	170 - 165 (7)	P30x0.375	327.52	0.00
L8	165 - 160 (8)	P30x0.375	416.57	0.00
L9	160 - 155 (9)	P36x0.375	507.57	0.00
L10	155 - 150 (10)	P36x0.375	622.46	0.00
L11	150 - 145 (11)	P36x0.375	739.30	0.00
L12	145 - 140 (12)	P36x0.375	858.17	0.00
L13	140 - 136.5 (13)	P42x0.375	958.81	0.00
L14	136.5 - 136 (14)	P42x0.6375	973.27	0.00
L15	136 - 131 (15)	P42x0.6375	1119.25	0.00
L16	131 - 126 (16)	P42x0.6375	1267.58	0.00

Section No.	Elevation ft	Size	M_{ux} kip-ft	M_{uy} kip-ft
L17	126 - 121 (17)	P42x0.6375	1418.18	0.00
L18	121 - 120 (18)	P42x0.6375	1448.56	0.00
L19	120 - 115 (19)	P48x0.6	1601.95	0.00
L20	115 - 110 (20)	P48x0.6	1757.84	0.00
L21	110 - 105 (21)	P48x0.6	1916.13	0.00
L22	105 - 100 (22)	P48x0.6	2076.73	0.00
L23	100 - 95 (23)	P54x0.5625	2239.74	0.00
L24	95 - 90 (24)	P54x0.5625	2405.26	0.00
L25	90 - 85 (25)	P54x0.5625	2573.19	0.00
L26	85 - 80 (26)	P54x0.5625	2743.42	0.00
L27	80 - 75 (27)	P60x0.55	2916.03	0.00
L28	75 - 70 (28)	P60x0.55	3091.41	0.00
L29	70 - 65 (29)	P60x0.55	3269.06	0.00
L30	65 - 60 (30)	P60x0.55	3449.02	0.00
L31	60 - 55 (31)	P60x0.675	3631.27	0.00
L32	55 - 50 (32)	P60x0.675	3815.71	0.00
L33	50 - 45 (33)	P60x0.675	4003.21	0.00
L34	45 - 40 (34)	P60x0.675	4192.73	0.00
L35	40 - 35 (35)	P60x0.8	4384.13	0.00
L36	35 - 30 (36)	P60x0.8	4577.24	0.00
L37	30 - 25 (37)	P60x0.8	4771.86	0.00
L38	25 - 20 (38)	P60x0.8	4967.91	0.00
L39	20 - 15 (39)	P60x0.8	5165.32	0.00
L40	15 - 10 (40)	P60x0.8	5363.96	0.00
L41	10 - 5 (41)	P60x0.8	5563.60	0.00
L42	5 - 0 (42)	P60x0.8	5764.17	0.00

Pole Shear Design Data

Section No.	Elevation ft	Size	Actual V_u K	Actual T_u kip-ft
L1	196 - 195 (1)	P18x0.375	0.02	0.00
L2	195 - 190 (2)	P24x0.375	6.99	0.86
L3	190 - 185 (3)	P24x0.375	7.31	0.85
L4	185 - 180 (4)	P24x0.375	12.47	0.61
L5	180 - 175 (5)	P30x0.375	12.86	0.61
L6	175 - 170 (6)	P30x0.375	13.90	0.61
L7	170 - 165 (7)	P30x0.375	14.27	0.60
L8	165 - 160 (8)	P30x0.375	17.98	0.29
L9	160 - 155 (9)	P36x0.375	18.40	0.29
L10	155 - 150 (10)	P36x0.375	23.18	0.02
L11	150 - 145 (11)	P36x0.375	23.60	0.75
L12	145 - 140 (12)	P36x0.375	23.97	0.75
L13	140 - 136.5 (13)	P42x0.375	28.92	0.41
L14	136.5 - 136 (14)	P42x0.6375	28.96	0.41
L15	136 - 131 (15)	P42x0.6375	29.44	0.41
L16	131 - 126 (16)	P42x0.6375	29.90	0.42
L17	126 - 121 (17)	P42x0.6375	30.35	0.43
L18	121 - 120 (18)	P42x0.6375	30.43	0.43
L19	120 - 115 (19)	P48x0.6	30.94	0.44
L20	115 - 110 (20)	P48x0.6	31.43	0.44
L21	110 - 105 (21)	P48x0.6	31.90	0.45
L22	105 - 100 (22)	P48x0.6	32.36	0.46
L23	100 - 95 (23)	P54x0.5625	32.87	0.46

Section No.	Elevation ft	Size	Actual V_u K	Actual T_u kip-ft
L24	95 - 90 (24)	P54x0.5625	33.36	0.47
L25	90 - 85 (25)	P54x0.5625	33.83	0.48
L26	85 - 80 (26)	P54x0.5625	34.28	0.49
L27	80 - 75 (27)	P60x0.55	34.79	0.50
L28	75 - 70 (28)	P60x0.55	35.31	0.55
L29	70 - 65 (29)	P60x0.55	35.77	0.56
L30	65 - 60 (30)	P60x0.55	36.23	0.57
L31	60 - 55 (31)	P60x0.675	36.69	0.57
L32	55 - 50 (32)	P60x0.675	37.11	0.58
L33	50 - 45 (33)	P60x0.675	37.71	1.17
L34	45 - 40 (34)	P60x0.675	38.09	1.18
L35	40 - 35 (35)	P60x0.8	38.47	1.19
L36	35 - 30 (36)	P60x0.8	38.78	1.19
L37	30 - 25 (37)	P60x0.8	39.07	1.20
L38	25 - 20 (38)	P60x0.8	39.35	1.21
L39	20 - 15 (39)	P60x0.8	39.62	1.21
L40	15 - 10 (40)	P60x0.8	39.84	1.22
L41	10 - 5 (41)	P60x0.8	40.04	1.22
L42	5 - 0 (42)	P60x0.8	40.22	1.22

CCIpole

per TIA-222- H

Pole Geometry

	Pole Height Above Base (ft)	Section Length (ft)	Lap Splice Length (ft)	Number of Sides	Top Diameter (in)	Bottom Diameter (in)	Wall Thickness (in)	Bend Radius (in)	Pole Material
1	196	1		0	18	18	0.375		A53-B-42
2	195	15		0	24.00	24	0.375		A53-B-42
3	180	20		0	30.00	30	0.375		A53-B-42
4	160	20		0	36.00	36	0.375		A53-B-42
5	140	20		0	42.00	42	0.375		A53-B-42
6	120	20		0	48.00	48	0.375		A53-B-42
7	100	20		0	54.00	54	0.375		A53-B-42
8	80	20		0	60.00	60	0.375		A53-B-42
9	60	20		0	60.00	60	0.5		A53-B-42
10	40	40		0	60.00	60	0.625		A53-B-42

Reinforcement Configuration

	Bottom Effective Elevation (ft)	Top Effective Elevation (ft)	Type	Model	Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0	136.25	plate	PL6.5x1.5	3	0	120	240															
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							

Reinforcement Details

	B (in)	H (in)	Gross Area (in^2)	Pole Face to Centroid (in)	Bottom Termination Type	Bottom Termination Length (in)	Top Termination Type	Top Termination Length (in)	Lu (in)	Net Area (in2)	Bolt Hole Size (in)	Reinforcement Material
1	6.5	1.5	9.75	0.75	PC 8.8 - M20 (100)	33	PC 8.8 - M20 (100)	33.000	18.000	7.875	1.1875	A572-65

Connection Details for Custom Reinforcements

Reinforcement	End	# Bolts	N or X	Bolt Spacing (in)	Edge Dist (in)	Weld Grade (ksi)	Transverse (Horiz.) Weld Type	Horiz. Weld Length (in)	Horiz. Groove Depth (in)	Horiz. Groove Angle (deg)	Horiz. Fillet Size (in)	Vertical Weld Length (in)	Vertical Fillet Size (in)	Rev H Connection Capacity (kip)
PL6.5x1.5	Top	11	N	3	3	-	-	-	-	-	-	-	-	-
	Bottom	11	N	3	3	-	-	-	-	-	-	-	-	-

TNX Geometry Input

Increment (ft): 5 Export to TNX

	Section Height (ft)	Section Length (ft)	Lap Splice Length (ft)	Number of Sides	Top Diameter (in)	Bottom Diameter (in)	Wall Thickness (in)	Tapered Pole Grade	Weight Multiplier
1	196 - 195	1	0	0	18.000	18.000	0.375	A53-B-42	1.000
2	195 - 190	5		0	24.000	24.000	0.375	A53-B-42	1.000
3	190 - 185	5		0	24.000	24.000	0.375	A53-B-42	1.000
4	185 - 180	5	0	0	24.000	24.000	0.375	A53-B-42	1.000
5	180 - 175	5		0	30.000	30.000	0.375	A53-B-42	1.000
6	175 - 170	5		0	30.000	30.000	0.375	A53-B-42	1.000
7	170 - 165	5		0	30.000	30.000	0.375	A53-B-42	1.000
8	165 - 160	5	0	0	30.000	30.000	0.375	A53-B-42	1.000
9	160 - 155	5		0	36.000	36.000	0.375	A53-B-42	1.000
10	155 - 150	5		0	36.000	36.000	0.375	A53-B-42	1.000
11	150 - 145	5		0	36.000	36.000	0.375	A53-B-42	1.000
12	145 - 140	5	0	0	36.000	36.000	0.375	A53-B-42	1.000
13	140 - 136.25	3.75		0	42.000	42.000	0.375	A53-B-42	1.000
14	136.25 - 136	0.25		0	42.000	42.000	0.6375	A53-B-42	0.945
15	136 - 131	5		0	42.000	42.000	0.6375	A53-B-42	0.945
16	131 - 126	5		0	42.000	42.000	0.6375	A53-B-42	0.945
17	126 - 121	5		0	42.000	42.000	0.6375	A53-B-42	0.945
18	121 - 120	1	0	0	42.000	42.000	0.6375	A53-B-42	0.945
19	120 - 115	5		0	48.000	48.000	0.6	A53-B-42	0.955
20	115 - 110	5		0	48.000	48.000	0.6	A53-B-42	0.955
21	110 - 105	5		0	48.000	48.000	0.6	A53-B-42	0.955
22	105 - 100	5	0	0	48.000	48.000	0.6	A53-B-42	0.955
23	100 - 95	5		0	54.000	54.000	0.5625	A53-B-42	0.979
24	95 - 90	5		0	54.000	54.000	0.5625	A53-B-42	0.979
25	90 - 85	5		0	54.000	54.000	0.5625	A53-B-42	0.979
26	85 - 80	5	0	0	54.000	54.000	0.5625	A53-B-42	0.979
27	80 - 75	5		0	60.000	60.000	0.55	A53-B-42	0.969
28	75 - 70	5		0	60.000	60.000	0.55	A53-B-42	0.969
29	70 - 65	5		0	60.000	60.000	0.55	A53-B-42	0.969
30	65 - 60	5	0	0	60.000	60.000	0.55	A53-B-42	0.969
31	60 - 55	5		0	60.000	60.000	0.675	A53-B-42	0.975
32	55 - 50	5		0	60.000	60.000	0.675	A53-B-42	0.975
33	50 - 45	5		0	60.000	60.000	0.675	A53-B-42	0.975
34	45 - 40	5	0	0	60.000	60.000	0.675	A53-B-42	0.975
35	40 - 35	5		0	60.000	60.000	0.8	A53-B-42	0.980
36	35 - 30	5		0	60.000	60.000	0.8	A53-B-42	0.980
37	30 - 25	5		0	60.000	60.000	0.8	A53-B-42	0.980
38	25 - 20	5		0	60.000	60.000	0.8	A53-B-42	0.980
39	20 - 15	5		0	60.000	60.000	0.8	A53-B-42	0.980
40	15 - 10	5		0	60.000	60.000	0.8	A53-B-42	0.980
41	10 - 5	5		0	60.000	60.000	0.8	A53-B-42	0.980
42	5 - 0	5		0	60.000	60.000	0.8	A53-B-42	0.980

TNX Section Forces

Increment (ft):	5	TNX Output		
	Section Height (ft)	P_u (K)	M_{ux} (kip-ft)	V_u (K)
1	196 - 195	-0.12	0.02	0.02
2	195 - 190	-5.35	27.87	6.99
3	190 - 185	-5.99	63.63	7.31
4	185 - 180	-10.02	125.29	12.47
5	180 - 175	-10.87	188.61	12.86
6	175 - 170	-11.96	257.13	13.90
7	170 - 165	-12.86	327.52	14.27
8	165 - 160	-16.57	416.57	17.98
9	160 - 155	-17.64	507.57	18.40
10	155 - 150	-23.18	622.46	23.18
11	150 - 145	-24.34	739.30	23.60
12	145 - 140	-25.51	858.17	23.97
13	140 - 136.25	-29.55	958.81	28.92
14	136.25 - 136	-29.75	973.27	28.96
15	136 - 131	-31.63	1119.25	29.44
16	131 - 126	-33.53	1267.58	29.90
17	126 - 121	-35.45	1418.18	30.35
18	121 - 120	-35.83	1448.56	30.43
19	120 - 115	-37.87	1601.95	30.94
20	115 - 110	-39.91	1757.84	31.43
21	110 - 105	-42.00	1916.13	31.90
22	105 - 100	-44.10	2076.73	32.36
23	100 - 95	-46.29	2239.74	32.87
24	95 - 90	-48.49	2405.26	33.36
25	90 - 85	-50.67	2573.19	33.83
26	85 - 80	-52.86	2743.42	34.28
27	80 - 75	-55.20	2916.03	34.79
28	75 - 70	-57.58	3091.41	35.31
29	70 - 65	-59.94	3269.06	35.77
30	65 - 60	-63.20	3449.02	36.23
31	60 - 55	-66.90	3631.27	36.69
32	55 - 50	-69.73	3815.71	37.11
33	50 - 45	-72.57	4003.21	37.71
34	45 - 40	-76.55	4192.73	38.09
35	40 - 35	-80.98	4384.13	38.47
36	35 - 30	-84.29	4577.24	38.78
37	30 - 25	-87.60	4771.86	39.07
38	25 - 20	-92.05	4967.91	39.35
39	20 - 15	-96.50	5165.32	39.62
40	15 - 10	-99.82	5363.96	39.84
41	10 - 5	-102.99	5563.60	40.04
42	5 - 0	-106.05	5764.17	40.22

Analysis Results

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
196 - 195	Pole	TP18x18x0.375	Pole	0.0%	Pass
195 - 190	Pole	TP24x24x0.375	Pole	3.8%	Pass
190 - 185	Pole	TP24x24x0.375	Pole	9.2%	Pass
185 - 180	Pole	TP24x24x0.375	Pole	18.4%	Pass
180 - 175	Pole	TP30x30x0.375	Pole	18.3%	Pass
175 - 170	Pole	TP30x30x0.375	Pole	25.1%	Pass
170 - 165	Pole	TP30x30x0.375	Pole	32.1%	Pass
165 - 160	Pole	TP30x30x0.375	Pole	40.8%	Pass
160 - 155	Pole	TP36x36x0.375	Pole	35.1%	Pass
155 - 150	Pole	TP36x36x0.375	Pole	43.0%	Pass
150 - 145	Pole	TP36x36x0.375	Pole	51.3%	Pass
145 - 140	Pole	TP36x36x0.375	Pole	59.7%	Pass
140 - 136.25	Pole	TP42x42x0.375	Pole	49.5%	Pass
136.25 - 136	Pole + Reinf.	TP42x42x0.6375	Pole	30.3%	Pass
136 - 131	Pole + Reinf.	TP42x42x0.6375	Pole	34.9%	Pass
131 - 126	Pole + Reinf.	TP42x42x0.6375	Pole	39.6%	Pass
126 - 121	Pole + Reinf.	TP42x42x0.6375	Pole	44.4%	Pass
121 - 120	Pole + Reinf.	TP42x42x0.6375	Pole	45.3%	Pass
120 - 115	Pole + Reinf.	TP48x48x0.6	Pole	40.9%	Pass
115 - 110	Pole + Reinf.	TP48x48x0.6	Pole	45.0%	Pass
110 - 105	Pole + Reinf.	TP48x48x0.6	Pole	49.1%	Pass
105 - 100	Pole + Reinf.	TP48x48x0.6	Pole	53.2%	Pass
100 - 95	Pole + Reinf.	TP54x54x0.5625	Pole	47.7%	Pass
95 - 90	Pole + Reinf.	TP54x54x0.5625	Pole	51.3%	Pass
90 - 85	Pole + Reinf.	TP54x54x0.5625	Pole	54.9%	Pass
85 - 80	Pole + Reinf.	TP54x54x0.5625	Pole	58.5%	Pass
80 - 75	Pole + Reinf.	TP60x60x0.55	Pole	52.5%	Pass
75 - 70	Pole + Reinf.	TP60x60x0.55	Pole	55.7%	Pass
70 - 65	Pole + Reinf.	TP60x60x0.55	Pole	58.9%	Pass
65 - 60	Pole + Reinf.	TP60x60x0.55	Pole	62.1%	Pass
60 - 55	Pole + Reinf.	TP60x60x0.675	Pole	51.9%	Pass
55 - 50	Pole + Reinf.	TP60x60x0.675	Pole	54.6%	Pass
50 - 45	Pole + Reinf.	TP60x60x0.675	Pole	57.3%	Pass
45 - 40	Pole + Reinf.	TP60x60x0.675	Pole	60.0%	Pass
40 - 35	Pole + Reinf.	TP60x60x0.8	Pole	51.7%	Pass
35 - 30	Pole + Reinf.	TP60x60x0.8	Pole	54.0%	Pass
30 - 25	Pole + Reinf.	TP60x60x0.8	Pole	56.3%	Pass
25 - 20	Pole + Reinf.	TP60x60x0.8	Pole	58.6%	Pass
20 - 15	Pole + Reinf.	TP60x60x0.8	Pole	60.9%	Pass
15 - 10	Pole + Reinf.	TP60x60x0.8	Pole	63.2%	Pass
10 - 5	Pole + Reinf.	TP60x60x0.8	Pole	65.6%	Pass
5 - 0	Pole + Reinf.	TP60x60x0.8	Pole	68.0%	Pass
				Summary	
			Pole	68.0%	Pass
			Reinforcement	64.1%	Pass
			Overall	68.0%	Pass

Additional Calculations

Section Elevation (ft)	Moment of Inertia (in^4)			Area (in^2)			% Capacity*	
	Pole	Reinf.	Total	Pole	Reinf.	Total	Pole	R1
196 - 195	807	n/a	807	20.76	n/a	20.76	0.0%	
195 - 190	1942	n/a	1942	27.83	n/a	27.83	3.8%	
190 - 185	1942	n/a	1942	27.83	n/a	27.83	9.2%	
185 - 180	1942	n/a	1942	27.83	n/a	27.83	18.4%	
180 - 175	3829	n/a	3829	34.90	n/a	34.90	18.3%	
175 - 170	3829	n/a	3829	34.90	n/a	34.90	25.1%	
170 - 165	3829	n/a	3829	34.90	n/a	34.90	32.1%	
165 - 160	3829	n/a	3829	34.90	n/a	34.90	40.8%	
160 - 155	6659	n/a	6659	41.97	n/a	41.97	35.1%	
155 - 150	6659	n/a	6659	41.97	n/a	41.97	43.0%	
150 - 145	6659	n/a	6659	41.97	n/a	41.97	51.3%	
145 - 140	6659	n/a	6659	41.97	n/a	41.97	59.7%	
140 - 136.25	10622	n/a	10622	49.04	n/a	49.04	49.5%	
136.25 - 136	10622	6973	17594	49.04	29.25	78.29	30.3%	28.3%
136 - 131	10622	6973	17594	49.04	29.25	78.29	34.9%	31.7%
131 - 126	10622	6973	17594	49.04	29.25	78.29	39.6%	36.0%
126 - 121	10622	6973	17594	49.04	29.25	78.29	44.4%	40.3%
121 - 120	10622	6973	17594	49.04	29.25	78.29	45.3%	41.2%
120 - 115	15908	9013	24921	56.11	29.25	85.36	40.9%	36.5%
115 - 110	15908	9013	24921	56.11	29.25	85.36	45.0%	40.1%
110 - 105	15908	9013	24921	56.11	29.25	85.36	49.1%	43.7%
105 - 100	15908	9013	24921	56.11	29.25	85.36	53.2%	47.4%
100 - 95	22710	11316	34026	63.18	29.25	92.43	47.7%	41.9%
95 - 90	22710	11316	34026	63.18	29.25	92.43	51.3%	45.0%
90 - 85	22710	11316	34026	63.18	29.25	92.43	54.9%	48.2%
85 - 80	22710	11316	34026	63.18	29.25	92.43	58.5%	51.4%
80 - 75	31217	13883	45100	70.24	29.25	99.49	52.5%	45.5%
75 - 70	31217	13883	45100	70.24	29.25	99.49	55.7%	48.3%
70 - 65	31217	13883	45100	70.24	29.25	99.49	58.9%	51.1%
65 - 60	31217	13883	45100	70.24	29.25	99.49	62.1%	53.9%
60 - 55	41363	13883	55246	93.46	29.25	122.71	51.9%	46.3%
55 - 50	41363	13883	55246	93.46	29.25	122.71	54.6%	48.7%
50 - 45	41363	13883	55246	93.46	29.25	122.71	57.3%	51.1%
45 - 40	41363	13883	55246	93.46	29.25	122.71	60.0%	53.5%
40 - 35	51381	13883	65264	116.58	29.25	145.83	51.7%	47.4%
35 - 30	51381	13883	65264	116.58	29.25	145.83	54.0%	49.5%
30 - 25	51381	13883	65264	116.58	29.25	145.83	56.3%	51.6%
25 - 20	51381	13883	65264	116.58	29.25	145.83	58.6%	53.7%
20 - 15	51381	13883	65264	116.58	29.25	145.83	60.9%	55.8%
15 - 10	51381	13883	65264	116.58	29.25	145.83	63.2%	58.0%
10 - 5	51381	13883	65264	116.58	29.25	145.83	65.6%	60.1%
5 - 0	51381	13883	65264	116.58	29.25	145.83	68.0%	64.1%

Note: Section capacity checked using 5 degree increments.
Rating per TIA-222-H Section 15.5.

APPENDIX C

Additional Calculations

Existing Flange Connection @ **180'**
US-CT-1002 Kettletown
2022791.CT1002.15

Moment =	125.29	k-ft
Axial =	10.02	k
Shear =	12.47	k

Maximum Capacity	100%
Apply TIA-222-H Section 15.5?	Yes

Flange Bolts

# Bolts =	20	
Bolt Type =	A325	
Threads Included? =	Yes	
Bolt Diameter =	1	in
Bolt Circle =	27	in
ϕ_t =	0.75	
ϕ_v =	0.75	
F_{ub} =	120	ksi
A_b =	0.785	in^2
A_n =	0.606	in^2
ϕR_{nv} =	35.34	k
ϕR_{nt} =	54.54	k
ϕR_{nt} (adjusted)=	54.53	k
V_{ub} =	0.62	k
T_{ub} =	10.63	k
Max Comp. on Bolt =	11.63	k

Prying Action Check
N/A, top flange thickness > tc

Shear Capacity =	1.7%
Tensile Capacity =	18.6%
Interaction Capacity =	3.6%
Bolt Capacity =	**18.6% OK**

Upper Flange Plate

Location =	External	
Plate Strength (F_y) =	36	ksi
Plate Tensile (F_u) =	58	ksi
Plate Thickness =	1.25	in
Outer Diameter =	30.375	in
ϕ_f =	0.9	
wcalc =	12.37	in
wmax =	20.84	in
w =	12.37	in
Z =	4.83	in^3
M_u =	36.05	k-in
ϕM_n =	156.55	k-in
Upper Plate Capacity =	**21.9% OK**	

Upper Stiffeners

Configuration =	None

Pole Information

Shaft Diam. (Upper) =	24	in
Thickness (Upper)=	0.375	in
# of Sides (Upper) =	Round	
F_y (Upper) =	42	ksi
Shaft Diam. (Lower) =	30	in
Thickness (Lower)=	0.375	in
# of Sides (Lower) =	Round	
F_y (Lower) =	42	ksi

Lower Flange Plate

Location =	Internal	
Plate Strength (F_y) =	36	ksi
Plate Thickness =	1.25	in
Hole Diameter =	24.25	in
Pole Inner Diameter =	29.25	in
e =	1.13	in
w =	4.59	in
Z =	1.79	in^3
M_u =	13.08	k-in
ϕM_n =	58.15	k-in
Lower Plate Capacity =	**21.4% OK**	

Lower Stiffeners

Configuration =	None

Existing Flange Connection @ **160'**
US-CT-1002 Kettletown
2022791.CT1002.15

Moment =	416.57	k-ft
Axial =	16.57	k
Shear =	17.98	k

Maximum Capacity	100%
Apply TIA-222-H Section 15.5?	Yes

Flange Bolts		
# Bolts =	24	
Bolt Type =	A325	
Threads Included? =	Yes	
Bolt Diameter =	1	in
Bolt Circle =	33	in
ϕ_t =	0.75	
ϕ_v =	0.75	
F_{ub} =	120	ksi
A_b =	0.785	in^2
A_n =	0.606	in^2
ϕR_{nv} =	35.34	k
ϕR_{nt} =	54.54	k
ϕR_{nt} (adjusted)=	54.53	k
V_{ub} =	0.75	k
T_{ub} =	24.54	k
Max Comp. on Bolt =	25.93	k

Prying Action Check
N/A, top flange thickness > tc

Shear Capacity =	2.0%
Tensile Capacity =	42.9%
Interaction Capacity =	19.3%
Bolt Capacity =	**42.9% OK**

Upper Flange Plate		
Location =	External	
Plate Strength (F_y) =	36	ksi
Plate Tensile (F_u) =	58	ksi
Plate Thickness =	1.25	in
Outer Diameter =	36.375	in
ϕ_f =	0.9	
wcalc =	13.75	in
wmax =	21.04	in
w =	13.75	in
Z =	5.37	in^3
M_u =	85.90	k-in
ϕM_n =	173.99	k-in
Upper Plate Capacity =	**47.0% OK**	

Upper Stiffeners	
Configuration =	None

Pole Information		
Shaft Diam. (Upper) =	30	in
Thickness (Upper)=	0.375	in
# of Sides (Upper) =	Round	
F_y (Upper) =	42	ksi
Shaft Diam. (Lower) =	36	in
Thickness (Lower)=	0.375	in
# of Sides (Lower) =	Round	
F_y (Lower) =	42	ksi

Lower Flange Plate		
Location =	Internal	
Plate Strength (F_y) =	36	ksi
Plate Thickness =	1.25	in
Hole Diameter =	27.375	in
Pole Inner Diameter =	35.25	in
e =	1.13	in
w =	4.61	in
Z =	1.80	in^3
M_u =	29.17	k-in
ϕM_n =	58.40	k-in
Lower Plate Capacity =	**47.6% OK**	

Lower Stiffeners	
Configuration =	None

Existing Flange Connection @ **140'**
US-CT-1002 Kettletown
2022791.CT1002.15

Moment =	858.17	k-ft
Axial =	25.51	k
Shear =	23.97	k

Maximum Capacity	100%
Apply TIA-222-H Section 15.5?	Yes

Flange Bolts

# Bolts =	28	
Bolt Type =	A325	
Threads Included? =	Yes	
Bolt Diameter =	1	in
Bolt Circle =	39	in
ϕ_t =	0.75	
ϕ_v =	0.75	
F_{ub} =	120	ksi
A_b =	0.785	in^2
A_n =	0.606	in^2
ϕR_{nv} =	35.34	k
ϕR_{nt} =	54.54	k
ϕR_{nt} (adjusted)=	54.52	k
V_{ub} =	0.86	k
T_{ub} =	36.80	k
Max Comp. on Bolt =	38.62	k

Prying Action Check
N/A, top flange thickness > tc

Shear Capacity =	2.3%
Tensile Capacity =	64.3%
Interaction Capacity =	43.4%
Bolt Capacity =	**64.3% OK**

Upper Flange Plate

Location =	External	
Plate Strength (F_y) =	36	ksi
Plate Tensile (F_u) =	58	ksi
Plate Thickness =	1.25	in
Outer Diameter =	42.375	in
ϕ_f =	0.9	
wcalc =	15.00	in
wmax =	25.38	in
w =	15.00	in
Z =	5.86	in^3
M_u =	135.36	k-in
ϕM_n =	189.84	k-in
Upper Plate Capacity =	**67.9% OK**	

Upper Stiffeners

Configuration =	None

Pole Information

Shaft Diam. (Upper) =	36	in
Thickness (Upper)=	0.375	in
# of Sides (Upper) =	Round	
F_y (Upper) =	42	ksi
Shaft Diam. (Lower) =	42	in
Thickness (Lower)=	0.375	in
# of Sides (Lower) =	Round	
F_y (Lower) =	42	ksi

Lower Flange Plate

Location =	Internal	
Plate Strength (F_y) =	36	ksi
Plate Thickness =	1.25	in
Hole Diameter =	33.375	in
Pole Inner Diameter =	41.25	in
e =	1.13	in
w =	4.63	in
Z =	1.81	in^3
M_u =	43.45	k-in
ϕM_n =	58.58	k-in
Lower Plate Capacity =	**70.6% OK**	

Lower Stiffeners

Configuration =	None

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BOLT AND BRIDGE STIFFENER CALCULATIONS @ 120'

Moment from TNX (M) =	1448.56	kip-ft	ASIF =	1.00			
Axial from TNX (P) =	35.83	kip					
Inner Bolt Diameter =	1	in					
Inner Bolt Area (A_{inner}) =	0.79	in^2	Inner Bolt Circle (BC_{inner}) =	45	in		
Inner Bolt MOI ($I_{o.inner}$) =	0.05	in^4	Total Area ($A_{tot.in}$) =	25.13	in^2		
Number Inner Bolts (N_{inner}) =	32		Percent Total Area (η_{in}) =	48.2%		Axial, Inner Bolts ($P*\eta_{in}$) =	17.27 kips
Bridge Stiffener Width =	6.00	in					
Bridge Stiffener Thickness =	1.50	in	Connection Bolt Hole Size =	0	in		
Bridge Stiffener Unbraced Length =	12.00	in	Net Bridge Stiffener Area ($A_{e.pl}$)	9	in2		
Bridge Stiffener Area (A_{pl}) =	9.00	in^2	Bridge Stiffener Circle (BC_{pl}) =	51	in		
Bridge Stiffener MOI (I_o) =	27.00	in^4	Total Area ($A_{tot.pl}$) =	27.00	in^2		
Number Bridge Stiffeners (N_{pl})	3		Percent Total Area (η_{pl}) =	51.8%		Axial, Bridge Stiffener ($P*\eta_{pl}$) =	18.56 kips

I_{inner} =	6363.30	$in.^4$	$(N_{inner}*A_{inner}*BC_{inner}^2/8 + N_{inner}*I_{o.inner})$
I_{pl} =	8859.38	$in.^4$	$(N_{pl}*A_{pl}*BC_{pl}^2/8 + N_{pl}*I_{o.pl})$
I_{tot} =	15222.67	$in.^4$	$(I_{inner} + I_{outer} + I_{pl})$
$P_{u.t.inner}$ =	19.6	kips	$(M*(BC_{inner}/2)*A_{inner})/I_{total} - P*\eta_{in}/N_{inner})$
$P_{u.t.pl}$ =	255.9	kips	$(M*(BC_{pl}/2)*A_{pl})/I_{total} - P*\eta_{pl}/N_{pl})$
$P_{u.c.pl}$ =	268.3	kips	$(M*(BC_{pl}/2)*A_{pl})/I_{total} + P*\eta_{pl}/N_{pl})$
$\emptyset P_{nt.bolt}$ =	61.85	kips	
Bolt Rating =	30.2%	OK	

Bridge Stiffener Check

f_y =	50	ksi
f_u =	65	ksi
E =	29000	ksi
K =	0.85	
KL/r =	23.556	
F_e =	515.82	ksi
F_{cr} =	48.01	ksi
$\emptyset P_{nc}$ =	388.90	kips
$\emptyset P_{nt}$ =	438.75	kips
Bridge Stiffener Rating =	65.7%	OK

Existing Flange Connection @ 120'
US-CT-1002 Kettletown
2022791.CT1002.15

*Moment =	622.9143931	k-ft
Axial =	35.83	k
Shear =	30.43	k

*Above reactions have been adjusted due to consideration of modifications. See attached hand calculations for determination of flange bolt forces used in the analysis.

Maximum Capacity	100%
Apply TIA-222-H Section 15.5?	Yes

Flange Bolts

# Bolts =	32	
Bolt Type =	A325	
Threads Included? =	Yes	
Bolt Diameter =	1	in
Bolt Circle =	45	in
ϕ_t =	0.75	
ϕ_v =	0.75	
F_{ub} =	120	ksi
A_b =	0.785	in^2
A_n =	0.606	in^2
ϕR_{nv} =	35.34	k
ϕR_{nt} =	54.54	k
ϕR_{nt} (adjusted)=	54.52	k
V_{ub} =	0.95	k
T_{ub} =	19.64	k
Max Comp. on Bolt =	21.88	k

Prying Action Check
N/A, top flange thickness > tc

Shear Capacity =	2.6%
Tensile Capacity =	34.3%
Interaction Capacity =	12.4%
Bolt Capacity =	**34.3% OK**

Upper Flange Plate

Location =	External	
Plate Strength (F_y) =	36	ksi
Plate Tensile (F_u) =	58	ksi
Plate Thickness =	1.25	in
Outer Diameter =	48.375	in
ϕ_f =	0.9	
wcalc =	16.16	in
wmax =	25.56	in
w =	16.16	in
Z =	6.31	in^3
M_u =	82.91	k-in
ϕM_n =	204.47	k-in
Upper Plate Capacity =	**38.6% OK**	

Upper Stiffeners

Configuration =	None

Pole Information

Shaft Diam. (Upper) =	42	in
Thickness (Upper)=	0.375	in
# of Sides (Upper) =	Round	
F_y (Upper) =	42	ksi
Shaft Diam. (Lower) =	48	in
Thickness (Lower)=	0.375	in
# of Sides (Lower) =	Round	
F_y (Lower) =	42	ksi

Lower Flange Plate

Location =	Internal	
Plate Strength (F_y) =	36	ksi
Plate Thickness =	1.25	in
Hole Diameter =	39.375	in
Pole Inner Diameter =	47.25	in
e =	1.13	in
w =	4.64	in
Z =	1.81	in^3
M_u =	24.61	k-in
ϕM_n =	58.71	k-in
Lower Plate Capacity =	**39.9% OK**	

Lower Stiffeners

Configuration =	None

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BOLT AND BRIDGE STIFFENER CALCULATIONS @ 100'

Moment from TNX (M) =	2076.73	kip-ft	ASIF =	1.00			
Axial from TNX (P) =	44.10	kip					
Inner Bolt Diameter =	1	in					
Inner Bolt Area (A_{inner}) =	0.79	in^2	Inner Bolt Circle (BC_{inner}) =	51	in		
Inner Bolt MOI ($I_{o.inner}$) =	0.05	in^4	Total Area ($A_{tot.in}$) =	25.92	in^2		
Number Inner Bolts (N_{inner}) =	33		Percent Total Area (η_{in}) =	49.0%		Axial, Inner Bolts ($P*\eta_{in}$) =	21.60 kips
Bridge Stiffener Width =	6.00	in					
Bridge Stiffener Thickness =	1.50	in	Connection Bolt Hole Size =	0	in		
Bridge Stiffener Unbraced Length =	12.00	in	Net Bridge Stiffener Area ($A_{e.pl}$)	9	in2		
Bridge Stiffener Area (A_{pl}) =	9.00	in^2	Bridge Stiffener Circle (BC_{pl}) =	57	in		
Bridge Stiffener MOI (I_o) =	27.00	in^4	Total Area ($A_{tot.pl}$) =	27.00	in^2		
Number Bridge Stiffeners (N_{pl})	3		Percent Total Area (η_{pl}) =	51.0%		Axial, Bridge Stiffener ($P*\eta_{pl}$) =	22.50 kips

I_{inner} =	8428.25	$in.^4$	$(N_{inner}*A_{inner}*BC_{inner}^2/8 + N_{inner}*I_{o.inner})$
I_{pl} =	11046.38	$in.^4$	$(N_{pl}*A_{pl}*BC_{pl}^2/8 + N_{pl}*I_{o.pl})$
I_{tot} =	19474.63	$in.^4$	$(I_{inner} + I_{outer} + I_{pl})$
$P_{u.t.inner}$ =	25.0	kips	$(M*(BC_{inner}/2)*A_{inner})/I_{total} - P*\eta_{in}/N_{inner})$
$P_{u.t.pl}$ =	320.7	kips	$(M*(BC_{pl}/2)*A_{pl})/I_{total} - P*\eta_{pl}/N_{pl})$
$P_{u.c.pl}$ =	335.7	kips	$(M*(BC_{pl}/2)*A_{pl})/I_{total} + P*\eta_{pl}/N_{pl})$
$ØP_{nt.bolt}$ =	61.85	kips	
Bolt Rating =	38.5%	OK	

Bridge Stiffener Check

f_y =	50	ksi
f_u =	65	ksi
E =	29000	ksi
K =	0.85	
KL/r =	23.556	
F_e =	515.82	ksi
F_{cr} =	48.01	ksi
$ØP_{nc}$ =	388.90	kips
$ØP_{nt}$ =	438.75	kips
Bridge Stiffener Rating =	82.2%	OK

Existing Flange Connection @ **100'**
US-CT-1002 Kettletown
2022791.CT1002.15

*Moment =	1002.30439	k-ft
Axial =	44.10	k
Shear =	32.36	k

*Above reactions have been adjusted due to consideration of modifications. See attached hand calculations for determination of flange bolt forces used in the analysis.

Maximum Capacity	100%
Apply TIA-222-H Section 15.5?	Yes

Flange Bolts

# Bolts =	36	
Bolt Type =	A325	
Threads Included? =	Yes	
Bolt Diameter =	1	in
Bolt Circle =	51	in
ϕ_t =	0.75	
ϕ_v =	0.75	
F_{ub} =	120	ksi
A_b =	0.785	in^2
A_n =	0.606	in^2
ϕR_{nv} =	35.34	k
ϕR_{nt} =	54.54	k
ϕR_{nt} (adjusted)=	54.52	k
V_{ub} =	0.90	k
T_{ub} =	24.97	k
Max Comp. on Bolt =	27.42	k

Prying Action Check
N/A, top flange thickness > tc

Shear Capacity =	2.4%
Tensile Capacity =	43.6%
Interaction Capacity =	20.0%
Bolt Capacity =	**43.6% OK**

Upper Flange Plate

Location =	External	
Plate Strength (F_y) =	36	ksi
Plate Tensile (F_u) =	58	ksi
Plate Thickness =	1.25	in
Outer Diameter =	54.375	in
ϕ_f =	0.9	
wcalc =	17.23	in
wmax =	25.70	in
w =	17.23	in
Z =	6.73	in^3
M_u =	110.16	k-in
ϕM_n =	218.11	k-in
Upper Plate Capacity =	**48.1% OK**	

Upper Stiffeners

Configuration =	None

Pole Information

Shaft Diam. (Upper) =	48	in
Thickness (Upper)=	0.375	in
# of Sides (Upper) =	Round	
F_y (Upper) =	42	ksi
Shaft Diam. (Lower) =	54	in
Thickness (Lower)=	0.375	in
# of Sides (Lower) =	Round	
F_y (Lower) =	42	ksi

Lower Flange Plate

Location =	Internal	
Plate Strength (F_y) =	36	ksi
Plate Thickness =	1.25	in
Hole Diameter =	45.375	in
Pole Inner Diameter =	53.25	in
e =	1.13	in
w =	4.65	in
Z =	1.82	in^3
M_u =	30.85	k-in
ϕM_n =	58.81	k-in
Lower Plate Capacity =	**50.0% OK**	

Lower Stiffeners

Configuration =	None

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BOLT AND BRIDGE STIFFENER CALCULATIONS @ 80'

Moment from TNX (M) =	2743.42	kip-ft	ASIF =	1.00			
Axial from TNX (P) =	52.86	kip					
Inner Bolt Diameter =	1	in					
Inner Bolt Area (A_{inner}) =	0.79	in^2	Inner Bolt Circle (BC_{inner}) =	57	in		
Inner Bolt MOI ($I_{o.inner}$) =	0.05	in^4	Total Area ($A_{tot.in}$) =	37.70	in^2		
Number Inner Bolts (N_{inner}) =	48		Percent Total Area (η_{in}) =	58.3%		Axial, Inner Bolts ($P*\eta_{in}$) =	30.80 kips
Bridge Stiffener Width =	6.00	in					
Bridge Stiffener Thickness =	1.50	in	Connection Bolt Hole Size =	0	in		
Bridge Stiffener Unbraced Length =	12.00	in	Net Bridge Stiffener Area ($A_{e.pl}$)	9	in		
Bridge Stiffener Area (A_{pl}) =	9.00	in^2	Bridge Stiffener Circle (BC_{pl}) =	63	in		
Bridge Stiffener MOI (I_o) =	27.00	in^4	Total Area ($A_{tot.pl}$) =	27.00	in^2		
Number Bridge Stiffeners (N_{pl})	3		Percent Total Area (η_{pl}) =	41.7%		Axial, Bridge Stiffener ($P*\eta_{pl}$) =	22.06 kips

I_{inner} =	15312.91	$in.^4$	$(N_{inner}*A_{inner}*BC_{inner}^2/8 + N_{inner}*I_{o.inner})$
I_{pl} =	13476.38	$in.^4$	$(N_{pl}*A_{pl}*BC_{pl}^2/8 + N_{pl}*I_{o.pl})$
I_{tot} =	28789.28	$in.^4$	$(I_{inner} + I_{outer} + I_{pl})$
$P_{u.t.inner}$ =	25.0	kips	$(M*(BC_{inner}/2)*A_{inner})/I_{total} - P*\eta_{in}/N_{inner})$
$P_{u.t.pl}$ =	316.8	kips	$(M*(BC_{pl}/2)*A_{pl})/I_{total} - P*\eta_{pl}/N_{pl})$
$P_{u.c.pl}$ =	331.5	kips	$(M*(BC_{pl}/2)*A_{pl})/I_{total} + P*\eta_{pl}/N_{pl})$
$ØP_{nt.bolt}$ =	61.85	kips	
Bolt Rating =	38.4%	OK	

Bridge Stiffener Check

f_y =	50	ksi
f_u =	65	ksi
E =	29000	ksi
K =	0.85	
KL/r =	23.556	
F_e =	515.82	ksi
F_{cr} =	48.01	ksi
$ØP_{nc}$ =	388.90	kips
$ØP_{nt}$ =	438.75	kips
Bridge Stiffener Rating =	81.2%	OK

Existing Flange Connection @ **80'**
US-CT-1002 Kettletown
2022791.CT1002.15

*Moment =	1485.14977	k-ft
Axial =	52.86	k
Shear =	34.28	k

Maximum Capacity	100%
Apply TIA-222-H Section 15.5?	Yes

*Above reactions have been adjusted due to consideration of modifications. See attached hand calculations for determination of flange bolt forces used in the analysis.

Flange Bolts

# Bolts =	48	
Bolt Type =	A325	
Threads Included? =	Yes	
Bolt Diameter =	1	in
Bolt Circle =	57	in
ϕ_t =	0.75	
ϕ_v =	0.75	
F_{ub} =	120	ksi
A_b =	0.785	in^2
A_n =	0.606	in^2
ϕR_{nv} =	35.34	k
ϕR_{nt} =	54.54	k
ϕR_{nt} (adjusted)=	54.53	k
V_{ub} =	0.71	k
T_{ub} =	24.95	k
Max Comp. on Bolt =	27.15	k

Prying Action Check
N/A, top flange thickness > tc

Shear Capacity =	1.9%
Tensile Capacity =	43.6%
Interaction Capacity =	20.0%
Bolt Capacity =	**43.6% OK**

Upper Flange Plate

Location =	External	
Plate Strength (F_y) =	36	ksi
Plate Tensile (F_u) =	58	ksi
Plate Thickness =	1.25	in
Outer Diameter =	60.375	in
ϕ_f =	0.9	
b =	3.11	in
Le =	3.00	in
Z =	2.34	in^3
M_u =	34.50	k-in
ϕM_n =	75.94	k-in
Upper Plate Capacity =	**43.3% OK**	

Upper Stiffeners

Configuration =	Every Bolt	
Thickness =	0.625	in
Width =	3	in
Notch =	0.5	in
Height =	5	in
Stiffener Strength (F_y) =	36	ksi
Weld Info. Known? =	Yes	
Vertical Weld Size =	0.3125	in
Horiz. Weld Type =	Fillet	
Fillet Size =	0.3125	in
Weld Strength =	70	ksi
Stiffener Vertical Force =	15.50	k
Vert. Weld Capacity =	32.4%	
Horiz. Weld Capacity =	46.2%	
Stiffener Capacity =	51.4%	
Controlling Capacity =	**51.4%**	**OK**

Pole Information

Shaft Diam. (Upper) =	54	in
Thickness (Upper)=	0.375	in
# of Sides (Upper) =	Round	
F_y (Upper) =	42	ksi
Shaft Diam. (Lower) =	60	in
Thickness (Lower)=	0.375	in
# of Sides (Lower) =	Round	
F_y (Lower) =	42	ksi

Lower Flange Plate

Location =	Internal	
Plate Strength (F_y) =	36	ksi
Plate Thickness =	1.25	in
Hole Diameter =	51.375	in
b =	3.11	in
Le =	2.00	in
Z =	2.34	in^3
M_u =	41.19	k-in
ϕM_n =	75.94	k-in
Lower Plate Capacity =	**51.7% OK**	

Lower Stiffeners

Configuration =	Every Bolt	
Thickness =	0.625	in
Width =	2	in
Notch =	0.5	in
Height =	3.5	in
Stiffener Strength (F_y) =	36	ksi
Weld Info. Known? =	Yes	
Vertical Weld Size =	0.3125	in
Horiz. Weld Type =	Fillet	
Fillet Size =	0.3125	in
Weld Strength =	70	ksi
Stiffener Vertical Force =	10.04	k
Vert. Weld Capacity =	31.1%	
Horiz. Weld Capacity =	50.0%	
Stiffener Capacity =	47.1%	
Controlling Capacity =	**50.0%**	**OK**

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BOLT AND BRIDGE STIFFENER CALCULATIONS @ 60'

Moment from TNX (M) =	3449.02 kip-ft	ASIF =	1.00				
Axial from TNX (P) =	63.20 kip						
Inner Bolt Diameter =	1.25 in						
Inner Bolt Area (A_{inner}) =	1.23 in^2	Inner Bolt Circle (BC_{inner}) =	47 in				
Inner Bolt MOI ($I_{o.inner}$) =	0.12 in^4	Total Area ($A_{tot.in}$) =	39.27 in^2				
Number Inner Bolts (N_{inner}) =	32	Percent Total Area (η_{in}) =	29.6%	Axial, Inner Bolts ($P*\eta_{in}$) =	18.73 kips		
Outer Bolt Diameter =	1.25 in						
Outer Bolt Area (A_{outer}) =	1.23 in^2	Outer Bolt Circle (BC_{outer}) =	53 in				
Outer Bolt MOI ($I_{o.outer}$) =	0.12 in^4	Total Area ($A_{tot.out}$) =	39.27 in^2				
Number Outer Bolts (N_{outer}) =	32	Percent Total Area (η_{out}) =	29.6%	Axial, Outer Bolts ($P*\eta_{out}$) =	18.73 kips		
Bridge Stiffener Width =	6.00 in						
Bridge Stiffener Thickness =	1.50 in	Connection Bolt Hole Size =	1.21875 in				
Bridge Stiffener Unbraced Length =	30.00 in	Net Bridge Stiffener Area ($A_{e.pl}$)	7.17188 in				
Bridge Stiffener Area (A_{pl}) =	9.00 in^2	Bridge Stiffener Circle (BC_{pl}) =	63 in				
Bridge Stiffener MOI (I_o) =	27.00 in^4	Total Area ($A_{tot.pl}$) =	54.00 in^2				
Number Bridge Stiffeners (N_{pl})	6	Percent Total Area (η_{pl}) =	40.7%	Axial, Bridge Stiffener ($P*\eta_{pl}$) =	25.75 kips		

I_{inner} =	10847.24 $in.^4$	$(N_{inner}*A_{inner}*BC_{inner}^2/8 + N_{inner}*I_{o.inner})$	
I_{outer} =	13792.48 $in.^4$	$(N_{outer}*A_{outer}*BC_{outer}^2/8 + N_{outer}*I_{o.outer})$	
I_{pl} =	26952.75 $in.^4$	$(N_{pl}*A_{pl}*BC_{pl}^2/8 + N_{pl}*I_{o.pl})$	
I_{tot} =	51592.47 $in.^4$	$(I_{inner} + I_{outer} + I_{pl})$	
$P_{u.t.inner}$ =	22.5 kips	$(M*(BC_{inner}/2)*A_{inner})/I_{total} - P*\eta_{in}/N_{inner})$	
$P_{u.t.outer}$ =	25.5 kips	$(M*(BC_{outer}/2)*A_{outer})/I_{total} - P*\eta_{out}/N_{outer})$	
$P_{u.t.pl}$ =	223.1 kips	$(M*(BC_{pl}/2)*A_{pl})/I_{total} - P*\eta_{pl}/N_{pl})$	
$P_{u.c.pl}$ =	231.7 kips	$(M*(BC_{pl}/2)*A_{pl})/I_{total} + P*\eta_{pl}/N_{pl})$	
$ØP_{nt.bolt}$ =	96.64 kips		
Bolt Rating =	25.1% OK		

Bridge Stiffener Check		
f_y =	50	ksi
f_u =	65	ksi
E =	29000	ksi
K =	0.85	
KL/r =	58.890	
F_e =	82.53	ksi
F_{cr} =	38.80	ksi
$ØP_{nc}$ =	314.29	kips
$ØP_{nt}$ =	349.63	kips
Bridge Stiffener Rating =	70.2%	OK

Existing Flange Connection @ **60'**
US-CT-1002 Kettletown
2022791.CT1002.15

*Moment =	1468.560618	k-ft
Axial =	63.20	k
Shear =	36.23	k

Maximum Capacity	100%
Apply TIA-222-H Section 15.5?	Yes

*Above reactions have been adjusted due to consideration of modifications. See attached hand calculations for determination of flange bolt forces used in the analysis.

Flange Bolts

# Bolts =	32	
Bolt Type =	A325	
Threads Included? =	Yes	
Bolt Diameter =	1.75	in
Bolt Circle =	44	in
ϕ_t =	0.75	
ϕ_v =	0.75	
F_{ub} =	105	ksi
A_b =	2.405	in^2
A_n =	1.9	in^2
ϕR_{nv} =	94.71	k
ϕR_{nt} =	149.63	k
ϕR_{nt} (adjusted)=	149.61	k
V_{ub} =	1.13	k
T_{ub} =	48.05	k
Max Comp. on Bolt =	52.00	k

Prying Action Check
N/A for stiffened flange

Shear Capacity =	1.1%
Tensile Capacity =	30.6%
Interaction Capacity =	9.8%
Bolt Capacity =	**30.6% OK**

Upper Flange Plate

Location =	Internal	
Plate Strength (F_y) =	36	ksi
Plate Tensile (F_u) =	58	ksi
Plate Thickness =	1.25	in
Hole Diameter =	43	in
ϕ_f =	0.9	
b =	3.69	in
Le =	7.00	in
Z =	2.34	in^3
M_u =	30.69	k-in
ϕM_n =	75.94	k-in
Upper Plate Capacity =	**38.5% OK**	

Upper Stiffeners

Configuration =	Every Bolt	
Thickness =	0.625	in
Width =	7	in
Notch =	0.5	in
Height =	10	in
Stiffener Strength (F_y) =	36	ksi
Weld Info. Known? =	No	
Stiffener Vertical Force =	26.00	k
Vert. Weld Capacity =	*Not Verified*	
Horiz. Weld Capacity =	*Not Verified*	
Stiffener Capacity =	45.2%	
Controlling Capacity =	**45.2%**	**OK**

Pole Information

Shaft Diam. (Upper) =	60	in
Thickness (Upper)=	0.375	in
# of Sides (Upper) =	Round	
F_y (Upper) =	42	ksi
Shaft Diam. (Lower) =	60	in
Thickness (Lower)=	0.5	in
# of Sides (Lower) =	Round	
F_y (Lower) =	42	ksi

Lower Flange Plate

Location =	Internal	
Plate Strength (F_y) =	36	ksi
Plate Thickness =	1.25	in
Hole Diameter =	43	in
b =	3.69	in
Le =	7.00	in
Z =	2.34	in^3
M_u =	30.69	k-in
ϕM_n =	75.94	k-in
Lower Plate Capacity =	**38.5% OK**	

Lower Stiffeners

Configuration =	Every Bolt	
Thickness =	0.625	in
Width =	7	in
Notch =	0.5	in
Height =	10	in
Stiffener Strength (F_y) =	36	ksi
Weld Info. Known? =	No	
Stiffener Vertical Force =	22.92	k
Vert. Weld Capacity =	*Not Verified*	
Horiz. Weld Capacity =	*Not Verified*	
Stiffener Capacity =	39.8%	
Controlling Capacity =	**39.8%**	**OK**

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BOLT AND BRIDGE STIFFENER CALCULATIONS @ 40'

Moment from TNX (M) =	4192.73 kip-ft	ASIF =	1.00				
Axial from TNX (P) =	76.55 kip						
Inner Bolt Diameter =	1.25 in						
Inner Bolt Area (A_{inner}) =	1.23 in^2	Inner Bolt Circle (BC_{inner}) =	47 in				
Inner Bolt MOI ($I_{o.inner}$) =	0.12 in^4	Total Area ($A_{tot.in}$) =	39.27 in^2				
Number Inner Bolts (N_{inner}) =	32	Percent Total Area (η_{in}) =	29.6%	Axial, Inner Bolts ($P*\eta_{in}$) =	22.68 kips		
Outer Bolt Diameter =	1.25 in						
Outer Bolt Area (A_{outer}) =	1.23 in^2	Outer Bolt Circle (BC_{outer}) =	53 in				
Outer Bolt MOI ($I_{o.outer}$) =	0.12 in^4	Total Area ($A_{tot.out}$) =	39.27 in^2				
Number Outer Bolts (N_{outer}) =	32	Percent Total Area (η_{out}) =	29.6%	Axial, Outer Bolts ($P*\eta_{out}$) =	22.68 kips		
Bridge Stiffener Width =	6.00 in						
Bridge Stiffener Thickness =	1.50 in	Connection Bolt Hole Size =	1.18 in				
Bridge Stiffener Unbraced Length =	30.00 in	Net Bridge Stiffener Area ($A_{e.pl}$)	7.23 in				
Bridge Stiffener Area (A_{pl}) =	9.00 in^2	Bridge Stiffener Circle (BC_{pl}) =	63 in				
Bridge Stiffener MOI (I_o) =	27.00 in^4	Total Area ($A_{tot.pl}$) =	54.00 in^2				
Number Bridge Stiffeners (N_{pl})	6	Percent Total Area (η_{pl}) =	40.7%	Axial, Bridge Stiffener ($P*\eta_{pl}$) =	31.19 kips		

I_{inner} =	10847.24 $in.^4$	$(N_{inner}*A_{inner}*BC_{inner}^2/8 + N_{inner}*I_{o.inner})$	
I_{outer} =	13792.48 $in.^4$	$(N_{outer}*A_{outer}*BC_{outer}^2/8 + N_{outer}*I_{o.outer})$	
I_{pl} =	26952.75 $in.^4$	$(N_{pl}*A_{pl}*BC_{pl}^2/8 + N_{pl}*I_{o.pl})$	
I_{tot} =	51592.47 $in.^4$	$(I_{inner} + I_{outer} + I_{pl})$	
$P_{u.t.inner}$ =	27.4 kips	$(M*(BC_{inner}/2)*A_{inner})/I_{total} - P*\eta_{in}/N_{inner})$	
$P_{u.t.outer}$ =	31.0 kips	$(M*(BC_{outer}/2)*A_{outer})/I_{total} - P*\eta_{out}/N_{outer})$	
$P_{u.t.pl}$ =	271.3 kips	$(M*(BC_{pl}/2)*A_{pl})/I_{total} - P*\eta_{pl}/N_{pl})$	
$P_{u.c.pl}$ =	281.7 kips	$(M*(BC_{pl}/2)*A_{pl})/I_{total} + P*\eta_{pl}/N_{pl})$	
$ØP_{nt.bolt}$ =	96.64 kips		
Bolt Rating =	30.6% OK		

Bridge Stiffener Check

f_y =	50	ksi
f_u =	65	ksi
E =	29000	ksi
K =	0.85	
KL/r =	58.890	
F_e =	82.53	ksi
F_{cr} =	38.80	ksi
$ØP_{nc}$ =	314.29	kips
$ØP_{nt}$ =	352.46	kips
Bridge Stiffener Rating =	85.4%	OK

Existing Flange Connection @ **40'**
US-CT-1002 Kettletown
2022791.CT1002.15

*Moment =	2028.314499	k-ft
Axial =	76.55	k
Shear =	38.09	k

Maximum Capacity	100%
Apply TIA-222-H Section 15.5?	Yes

*Above reactions have been adjusted due to consideration of modifications. See attached hand calculations for determination of flange bolt forces used in the analysis.

Flange Bolts

# Bolts =	32	
Bolt Type =	A325	
Threads Included? =	Yes	
Bolt Diameter =	1.75	in
Bolt Circle =	50	in
ϕ_t =	0.75	
ϕ_v =	0.75	
F_{ub} =	105	ksi
A_b =	2.405	in^2
A_n =	1.9	in^2
ϕR_{nv} =	94.71	k
ϕR_{nt} =	149.63	k
ϕR_{nt} (adjusted)=	149.61	k
V_{ub} =	1.19	k
T_{ub} =	58.42	k
Max Comp. on Bolt =	63.20	k

Prying Action Check
N/A for stiffened flange

Shear Capacity =	1.2%
Tensile Capacity =	37.2%
Interaction Capacity =	14.5%
Bolt Capacity =	**37.2% OK**

Upper Flange Plate

Location =	Internal	
Plate Strength (F_y) =	36	ksi
Plate Tensile (F_u) =	58	ksi
Plate Thickness =	1.25	in
Hole Diameter =	43	in
ϕ_f =	0.9	
b =	4.28	in
Le =	7.00	in
Z =	2.34	in^3
M_u =	40.22	k-in
ϕM_n =	75.94	k-in
Upper Plate Capacity =	**50.4% OK**	

Upper Stiffeners

Configuration =	Every Bolt	
Thickness =	0.625	in
Width =	7	in
Notch =	0.5	in
Height =	10	in
Stiffener Strength (F_y) =	36	ksi
Weld Info. Known? =	No	
Stiffener Vertical Force =	31.46	k
Vert. Weld Capacity =	*Not Verified*	
Horiz. Weld Capacity =	*Not Verified*	
Stiffener Capacity =	54.7%	
Controlling Capacity =	**54.7%**	**OK**

Pole Information

Shaft Diam. (Upper) =	60	in
Thickness (Upper)=	0.5	in
# of Sides (Upper) =	Round	
F_y (Upper) =	42	ksi
Shaft Diam. (Lower) =	60	in
Thickness (Lower)=	0.625	in
# of Sides (Lower) =	Round	
F_y (Lower) =	42	ksi

Lower Flange Plate

Location =	Internal	
Plate Strength (F_y) =	36	ksi
Plate Thickness =	1.25	in
Hole Diameter =	43	in
b =	4.28	in
Le =	7.00	in
Z =	2.34	in^3
M_u =	40.22	k-in
ϕM_n =	75.94	k-in
Lower Plate Capacity =	**50.4% OK**	

Lower Stiffeners

Configuration =	Every Bolt	
Thickness =	0.625	in
Width =	7	in
Notch =	0.5	in
Height =	10	in
Stiffener Strength (F_y) =	36	ksi
Weld Info. Known? =	No	
Stiffener Vertical Force =	28.14	k
Vert. Weld Capacity =	*Not Verified*	
Horiz. Weld Capacity =	*Not Verified*	
Stiffener Capacity =	48.9%	
Controlling Capacity =	**48.9%**	**OK**

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BOLT AND BRIDGE STIFFENER CALCULATIONS @ 20'

Moment from TNX (M) =	4967.91	kip-ft	ASIF =	1.00			
Axial from TNX (P) =	92.05	kip					
Inner Bolt Diameter =	1.25	in					
Inner Bolt Area (A_{inner}) =	1.23	in^2	Inner Bolt Circle (BC_{inner}) =	47	in		
Inner Bolt MOI ($I_{o.inner}$) =	0.12	in^4	Total Area ($A_{tot.in}$) =	39.27	in^2		
Number Inner Bolts (N_{inner}) =	32		Percent Total Area (η_{in}) =	24.2%		Axial, Inner Bolts ($P*\eta_{in}$) =	22.24 kips
Outer Bolt Diameter =	1.25	in					
Outer Bolt Area (A_{outer}) =	1.23	in^2	Outer Bolt Circle (BC_{outer}) =	53	in		
Outer Bolt MOI ($I_{o.outer}$) =	0.12	in^4	Total Area ($A_{tot.out}$) =	39.27	in^2		
Number Outer Bolts (N_{outer}) =	32		Percent Total Area (η_{out}) =	24.2%		Axial, Outer Bolts ($P*\eta_{out}$) =	22.24 kips
Bridge Stiffener Width =	6.00	in					
Bridge Stiffener Thickness =	1.50	in	Connection Bolt Hole Size =	1.21875	in		
Bridge Stiffener Unbraced Length =	30.00	in	Net Bridge Stiffener Area ($A_{e.pl}$) =	7.17188	in		
Bridge Stiffener Area (A_{pl}) =	9.00	in^2	Bridge Stiffener Circle (BC_{pl}) =	60.75	in		
Bridge Stiffener MOI (I_o) =	27.00	in^4	Total Area ($A_{tot.pl}$) =	54.00	in^2		
Number Bridge Stiffeners (N_{pl})	6		Percent Total Area (η_{pl}) =	33.2%		Axial, Bridge Stiffener ($P*\eta_{pl}$) =	30.58 kips
Bridge Stiffener Width =	4.00	in					
Bridge Stiffener Thickness =	1.25	in	Connection Bolt Hole Size =	1.21875	in		
Bridge Stiffener Unbraced Length =	12.00	in	Net Bridge Stiffener Area ($A_{e.pl}$) =	3.47656	in		
Bridge Stiffener Area (A_{pl}) =	5.00	in^2	Bridge Stiffener Circle (BC_{pl}) =	60.625	in		
Bridge Stiffener MOI (I_o) =	6.67	in^4	Total Area ($A_{tot.pl}$) =	30.00	in^2		
Number Bridge Stiffeners (N_{pl})	6		Percent Total Area (η_{pl}) =	18.5%		Axial, Bridge Stiffener ($P*\eta_{pl}$) =	16.99 kips

I_{inner} =	10847.24	$in.^4$	$(N_{inner}*A_{inner}*BC_{inner}^2/8 + N_{inner}*I_{o.inner})$
I_{outer} =	13792.48	$in.^4$	$(N_{outer}*A_{outer}*BC_{outer}^2/8 + N_{outer}*I_{o.outer})$
I_{pl} =	25073.30	$in.^4$	$(N_{pl}*A_{pl}*BC_{pl}^2/8 + N_{pl}*I_{o.pl})$
I_{pl} =	13822.71	$in.^4$	$(N_{pl}*A_{pl}*BC_{pl}^2/8 + N_{pl}*I_{o.pl})$
I_{tot} =	63535.73	$in.^4$	$(I_{inner} + I_{outer} + I_{pl})$
$P_{u.t.inner}$ =	26.4	kips	$(M*(BC_{inner}/2)*A_{inner})/I_{total} - P*\eta_{in}/N_{inner})$
$P_{u.t.outer}$ =	29.8	kips	$(M*(BC_{outer}/2)*A_{outer})/I_{total} - P*\eta_{out}/N_{outer})$
$P_{u.t.pl}$ =	251.4	kips	$(M*(BC_{pl}/2)*A_{pl})/I_{total} - P*\eta_{pl}/N_{pl})$
$P_{u.c.pl}$ =	261.6	kips	$(M*(BC_{pl}/2)*A_{pl})/I_{total} + P*\eta_{pl}/N_{pl})$
$P_{u.t.pl}$ =	139.4	kips	$(M*(BC_{pl}/2)*A_{pl})/I_{total} - P*\eta_{pl}/N_{pl})$
$P_{u.c.pl}$ =	145.0	kips	$(M*(BC_{pl}/2)*A_{pl})/I_{total} + P*\eta_{pl}/N_{pl})$
$ØP_{nt.bolt}$ =	96.64	kips	
Bolt Rating =	29.4%	OK	

Bridge Stiffener Check

f_y =	50	ksi
f_u =	65	ksi
E =	29000	ksi
K =	0.85	
KL/r =	58.890	
F_e =	82.53	ksi
F_{cr} =	38.80	ksi
$ØP_{nc}$ =	314.29	kips
$ØP_{nt}$ =	349.63	kips
Bridge Stiffener Rating =	79.3%	OK

Existing Flange Connection @ **20'**
US-CT-1002 Kettletown
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*Moment =	1969.757821	k-ft
Axial =	92.05	k
Shear =	39.35	k

Maximum Capacity	100%
Apply TIA-222-H Section 15.5?	Yes

*Above reactions have been adjusted due to consideration of modifications. See attached hand calculations for determination of flange bolt forces used in the analysis.

Flange Bolts

# Bolts =	32	
Bolt Type =	A325	
Threads Included? =	Yes	
Bolt Diameter =	1.75	in
Bolt Circle =	50	in
ϕ_t =	0.75	
ϕ_v =	0.75	
F_{ub} =	105	ksi
A_b =	2.405	in^2
A_n =	1.9	in^2
ϕR_{nv} =	94.71	k
ϕR_{nt} =	149.63	k
ϕR_{nt} (adjusted)=	149.61	k
V_{ub} =	1.23	k
T_{ub} =	56.18	k
Max Comp. on Bolt =	61.93	k

Prying Action Check
N/A for stiffened flange

Shear Capacity =	1.2%
Tensile Capacity =	35.8%
Interaction Capacity =	13.4%
Bolt Capacity =	**35.8% OK**

Upper Flange Plate

Location =	Internal	
Plate Strength (F_y) =	36	ksi
Plate Tensile (F_u) =	58	ksi
Plate Thickness =	1.25	in
Hole Diameter =	43	in
ϕ_f =	0.9	
b =	4.28	in
Le =	7.00	in
Z =	2.34	in^3
M_u =	39.41	k-in
ϕM_n =	75.94	k-in
Upper Plate Capacity =	**49.4% OK**	

Upper Stiffeners

Configuration =	Every Bolt	
Thickness =	0.625	in
Width =	7	in
Notch =	0.5	in
Height =	10	in
Stiffener Strength (F_y) =	36	ksi
Weld Info. Known? =	No	
Stiffener Vertical Force =	27.62	k
Vert. Weld Capacity =	*Not Verified*	
Horiz. Weld Capacity =	*Not Verified*	
Stiffener Capacity =	48.0%	
Controlling Capacity =	**48.0%**	**OK**

Pole Information

Shaft Diam. (Upper) =	60	in
Thickness (Upper)=	0.625	in
# of Sides (Upper) =	Round	
F_y (Upper) =	42	ksi
Shaft Diam. (Lower) =	60	in
Thickness (Lower)=	0.625	in
# of Sides (Lower) =	Round	
F_y (Lower) =	42	ksi

Lower Flange Plate

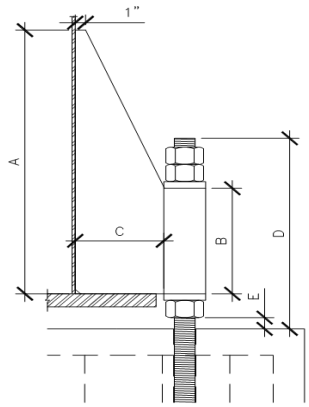
Location =	Internal	
Plate Strength (F_y) =	36	ksi
Plate Thickness =	1.25	in
Hole Diameter =	43	in
b =	4.28	in
Le =	7.00	in
Z =	2.34	in^3
M_u =	39.41	k-in
ϕM_n =	75.94	k-in
Lower Plate Capacity =	**49.4% OK**	

Lower Stiffeners

Configuration =	Every Bolt	
Thickness =	0.625	in
Width =	7	in
Notch =	0.5	in
Height =	10	in
Stiffener Strength (F_y) =	36	ksi
Weld Info. Known? =	No	
Stiffener Vertical Force =	27.62	k
Vert. Weld Capacity =	*Not Verified*	
Horiz. Weld Capacity =	*Not Verified*	
Stiffener Capacity =	48.0%	
Controlling Capacity =	**48.0%**	**OK**

ANCHOR ROD BRACKET CALCULATIONS - TIA-222-H

Site Name:	US-CT-1002 Kettletown
GPD Project No:	2022791.CT1002.15
Sheet Application:	Analysis
Max Capacity:	100%
Apply TIA-222-H Section 15.5?	Yes



Anchor Rod Properties		
F_u =	125	ksi
F_y =	105	ksi
Diameter =	1.25	in
Rod Tension Force =	66.8	kips
Rod Compression Force =	66.8	kips

Bracket Plate Properties		
A =	36	in
B =	9	in
C =	5.25	in
Unbraced Length of Anchor Rod, E =	1.25	in
Bracket Thickness =	1.25	in
F_y =	50	ksi
Fu =	65	ksi
ARB connected to flat plate?	No	

Anchor Rod Buckling		
Buckling K Factor =	1.2	
Nominal Diameter, d =	1.25	in
Gross Area, Ag =	1.227	in^2
Moment of Inertia, I =	0.120	in^4
Radius of Gyration, r =	0.313	in
KL/r =	4.80	
F_e =	12422.7	ksi
F_{cr} =	104.6	ksi
$\phi_{buckling}$ =	0.9	
Capacity =	lar <= 4d	OK

Pipe Yielding		
Pipe Size =	P 3 XX-STR	
Outer Diameter =	3.5	in
Inner Diameter =	2.3	in
Area =	5.47	in^2
Yield Stress, F_y =	35	ksi
Ultimate Stress, F_u =	60	ksi
ϕ =	0.97	
ϕP_n =	172.19	kips
Capacity =	36.9%	OK

Flexure and Combined Flexure & Shear (Pipe-to-Bracket)		
Plastic Modulus, Z =	25.31	in^3
Elastic Modulus, S =	16.88	in^3
ϕM =	0.9	
ϕV =	1.0	
$\phi M_{n,\ yield,\ LTB}$ =	1139.1	kip-in
ϕV_n =	337.5	kips
M_u =	116.9	kip-in
V_u =	66.8	kips
Capacity =	9.8%	OK

Shear Strength (Pipe-to-Bracket)		
A_w =	11.25	in^2
F_y =	50	ksi
Fu =	65	ksi
ϕ_{yield} =	1.0	
$\phi_{rupture}$ =	0.75	
$\phi V_{n,\ yield}$ =	337.5	kips
$\phi V_{n,\ rupture}$ =	329.1	kips
V_u =	66.8	kips
Capacity =	19.3%	OK

Rupture Strength at Welds (Bracket-to-Tower)		
Pole Thickness =	0.625	in
Pole Fy =	42	ksi
Pole Fu =	63	ksi
Applied Force =	1.24	k/in
Rupture Strength of Pole =	23.625	k/in
Capacity =	5.2%	OK

Pipe Punching Shear		
Eccentricity, e =	1.75	in
Induced Moment, M =	116.87	k-in
ϕ =	0.75	
$\phi M_{n,\ punching}$ =	437.4	k-in
Capacity =	25.4%	OK

Flexure and Combined Flexure & Shear (Bracket-to-Tower)		
Plastic Modulus, Z =	405.00	in^3
Elastic Modulus, S =	270.00	in^3
ϕM =	0.9	
ϕV =	1.0	
$\phi M_{n,\ yield,\ LTB}$ =	17773.7	kip-in
ϕV_n =	1350	kips
M_u =	467.5	kip-in
V_u =	66.8	kips
Capacity =	2.5%	OK

Shear Strength (Bracket-to-Tower)		
A_w =	45	in^2
F_y =	50	ksi
Fu =	65	ksi
ϕ_{yield} =	1.0	
$\phi_{rupture}$ =	0.75	
$\phi V_{n,\ yield}$ =	1350.0	kips
$\phi V_{n,\ rupture}$ =	1316.3	kips
V_u =	66.8	kips
Capacity =	4.8%	OK

Pole Punching Shear (max per unit length)		
Eccentricity, e =	7	in
Induced Moment, M =	467.46	k-in
Elastic Modulus, S =	270.00	in^3
Shear Force, fv =	2.16	kips
ϕ yield =	1.0	
ϕ rupture =	0.75	
ϕFv, yield =	31.50	kips
ϕFv, rupture =	35.4375	kips
Capacity =	6.5%	OK

Weld Check (Pipe-to-Bracket)					
Weld Length =	9	in	D =	6	
Fillet Weld Size =	0.375	in	C1 =	1	
Weld Strength =	70	ksi	C =	3.53	
e =	1.75	in	ϕ =	0.75	
a =	0.194		ϕR_n =	142.88	kips
			Capacity =	44.5%	OK

Weld Check (Bracket-to-Tower)					
Weld Length =	36	in	D =	5	
Fillet Weld Size =	0.3125	in	C1 =	1	
Weld Strength =	70	ksi	C =	3.53	
e =	7	in	ϕ =	0.75	
a =	0.194		ϕR_n =	476.25	kips
			Capacity =	13.4%	OK

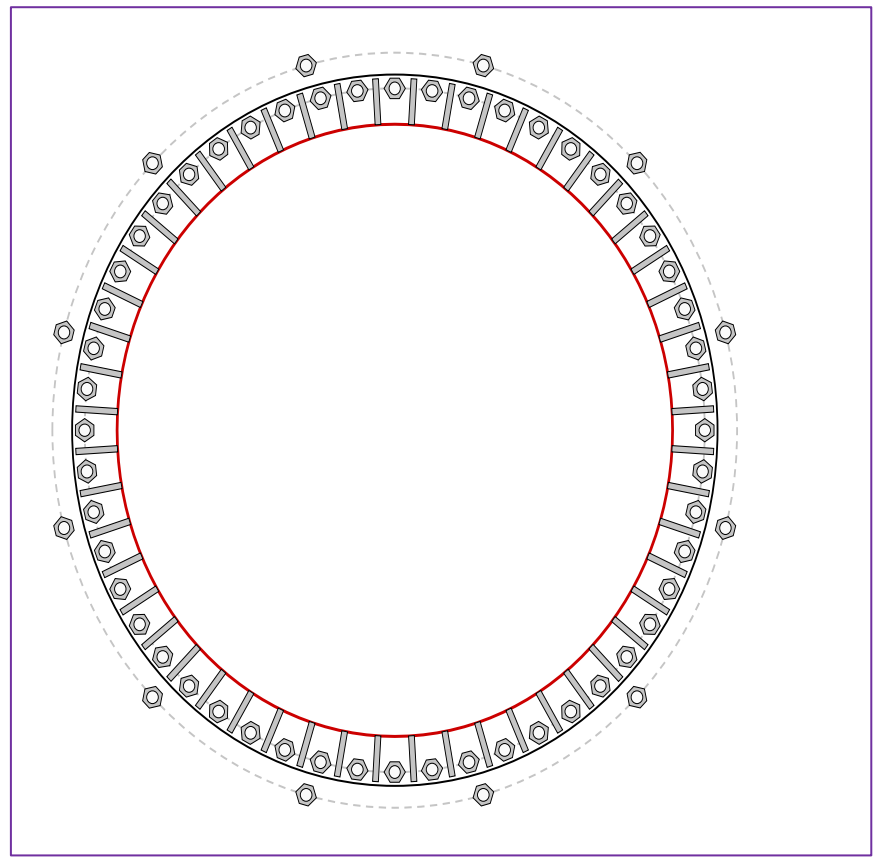
Monopole Base Plate Connection

Analysis Considerations	
TIA-222 Revision	H
Grout Considered:	See Custom Sheet
l_{ar} (in)	See Custom Sheet

**BARB CL = 1.875 ft*

Applied Loads	
Moment (kip-ft)	5764.00
Axial Force (kips)	106.00
Shear Force (kips)	40.00

**TIA-222-H Section 15.5 Applied*



Connection Properties

Anchor Rod Data

GROUP 1: (52) 1-1/4" ø bolts (A687 N; Fy=105 ksi, Fu=125 ksi) on 67" BC
GROUP 2: (12) 1-1/4" ø bolts (F1554-105 N; Fy=105 ksi, Fu=125 ksi) on 74" BC

Base Plate Data

69.75" OD x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Stiffener Data

(52) 8"H x 4.5"W x 0.625"T, Notch: 0.5"
plate: Fy= 36 ksi ; weld: Fy= 70 ksi
horiz. weld: 0.3125" fillet
vert. weld: 0.3125" fillet

Pole Data

60" x 0.625" round pole (A53-B-42; Fy=42 ksi, Fu=63 ksi)

Analysis Results

Anchor Rod Summary *(units of kips, kip-in)*

GROUP 1:

Pu_t = 66.9	ϕPn_t = 90.84	**Stress Rating**
Vu = 0.77	ϕVn = 57.52	**70.1%**
Mu = n/a	ϕMn = n/a	**Pass**

GROUP 2: (BARB)

Pu_t = 66.78	ϕPn_t = 90.84	**Stress Rating**
Vu = 0	ϕVn = 57.52	**70.0%**
Mu = n/a	ϕMn = n/a	**Pass**

Base Plate Summary

Max Stress (ksi):	6.28	(Shear)
Allowable Stress (ksi):	21.6	
Stress Rating:	**27.7%**	**Pass**

Stiffener Summary

Horizontal Weld:	**78.5%**	**Pass**
Vertical Weld:	**50.5%**	**Pass**
Plate Flexure+Shear:	**39.0%**	**Pass**
Plate Tension+Shear:	**61.2%**	**Pass**
Plate Compression:	**85.2%**	**Pass**

Pole Summary

Punching Shear:	**14.7%**	**Pass**

CCIplate

Elevation (ft)	0	*(Base)*

note: Bending interaction not considered when Grout Considered = "Yes"

Bolt Group	Resist Axial	Resist Shear	Induce Plate Bending	Grout Considered	Apply at BARB Elevation	BARB CL Elevation (ft)
1	Yes	Yes	Yes	No	No	1.875
2	Yes	No	No	No	Yes	

☐ Include Pole Reactions in Report

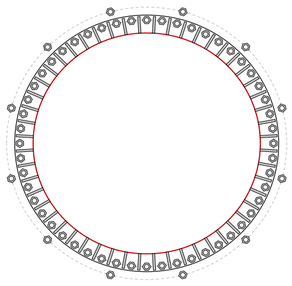
Custom Bolt Connection

Bolt	Bolt Group ID	Location (deg.)	Diameter (in)	Material	Bolt Circle (in)	Eta Factor, n:	I_{ar} (in):	Thread Type	Area Override, in^2	Tension Only
1	1	0	1.25	A687	67	0.5	1.25	N-Included		No
2	1	6.92307692	1.25	A687	67	0.5	1.25	N-Included		No
3	1	13.8461538	1.25	A687	67	0.5	1.25	N-Included		No
4	1	20.7692308	1.25	A687	67	0.5	1.25	N-Included		No
5	1	27.6923077	1.25	A687	67	0.5	1.25	N-Included		No
6	1	34.6153846	1.25	A687	67	0.5	1.25	N-Included		No
7	1	41.5384615	1.25	A687	67	0.5	1.25	N-Included		No
8	1	48.4615385	1.25	A687	67	0.5	1.25	N-Included		No
9	1	55.3846154	1.25	A687	67	0.5	1.25	N-Included		No
10	1	62.3076923	1.25	A687	67	0.5	1.25	N-Included		No
11	1	69.2307692	1.25	A687	67	0.5	1.25	N-Included		No
12	1	76.1538462	1.25	A687	67	0.5	1.25	N-Included		No
13	1	83.0769231	1.25	A687	67	0.5	1.25	N-Included		No
14	1	90	1.25	A687	67	0.5	1.25	N-Included		No
15	1	96.9230769	1.25	A687	67	0.5	1.25	N-Included		No
16	1	103.846154	1.25	A687	67	0.5	1.25	N-Included		No
17	1	110.769231	1.25	A687	67	0.5	1.25	N-Included		No
18	1	117.692308	1.25	A687	67	0.5	1.25	N-Included		No
19	1	124.615385	1.25	A687	67	0.5	1.25	N-Included		No
20	1	131.538462	1.25	A687	67	0.5	1.25	N-Included		No
21	1	138.461538	1.25	A687	67	0.5	1.25	N-Included		No
22	1	145.384615	1.25	A687	67	0.5	1.25	N-Included		No
23	1	152.307692	1.25	A687	67	0.5	1.25	N-Included		No
24	1	159.230769	1.25	A687	67	0.5	1.25	N-Included		No
25	1	166.153846	1.25	A687	67	0.5	1.25	N-Included		No
26	1	173.076923	1.25	A687	67	0.5	1.25	N-Included		No
27	1	180	1.25	A687	67	0.5	1.25	N-Included		No
28	1	186.923077	1.25	A687	67	0.5	1.25	N-Included		No
29	1	193.846154	1.25	A687	67	0.5	1.25	N-Included		No
30	1	200.769231	1.25	A687	67	0.5	1.25	N-Included		No
31	1	207.692308	1.25	A687	67	0.5	1.25	N-Included		No
32	1	214.615385	1.25	A687	67	0.5	1.25	N-Included		No
33	1	221.538462	1.25	A687	67	0.5	1.25	N-Included		No
34	1	228.461538	1.25	A687	67	0.5	1.25	N-Included		No
35	1	235.384615	1.25	A687	67	0.5	1.25	N-Included		No
36	1	242.307692	1.25	A687	67	0.5	1.25	N-Included		No
37	1	249.230769	1.25	A687	67	0.5	1.25	N-Included		No
38	1	256.153846	1.25	A687	67	0.5	1.25	N-Included		No
39	1	263.076923	1.25	A687	67	0.5	1.25	N-Included		No
40	1	270	1.25	A687	67	0.5	1.25	N-Included		No
41	1	276.923077	1.25	A687	67	0.5	1.25	N-Included		No
42	1	283.846154	1.25	A687	67	0.5	1.25	N-Included		No
43	1	290.769231	1.25	A687	67	0.5	1.25	N-Included		No
44	1	297.692308	1.25	A687	67	0.5	1.25	N-Included		No
45	1	304.615385	1.25	A687	67	0.5	1.25	N-Included		No
46	1	311.538462	1.25	A687	67	0.5	1.25	N-Included		No
47	1	318.461538	1.25	A687	67	0.5	1.25	N-Included		No
48	1	325.384615	1.25	A687	67	0.5	1.25	N-Included		No
49	1	332.307692	1.25	A687	67	0.5	1.25	N-Included		No
50	1	339.230769	1.25	A687	67	0.5	1.25	N-Included		No
51	1	346.153846	1.25	A687	67	0.5	1.25	N-Included		No
52	1	353.076923	1.25	A687	67	0.5	1.25	N-Included		No
53	2	15	1.25	F1554-105	74		1.25	N-Included		No
54	2	45	1.25	F1554-105	74		1.25	N-Included		No
55	2	75	1.25	F1554-105	74		1.25	N-Included		No
56	2	105	1.25	F1554-105	74		1.25	N-Included		No
57	2	135	1.25	F1554-105	74		1.25	N-Included		No
58	2	165	1.25	F1554-105	74		1.25	N-Included		No
59	2	195	1.25	F1554-105	74		1.25	N-Included		No
60	2	225	1.25	F1554-105	74		1.25	N-Included		No
61	2	255	1.25	F1554-105	74		1.25	N-Included		No
62	2	285	1.25	F1554-105	74		1.25	N-Included		No
63	2	315	1.25	F1554-105	74		1.25	N-Included		No
64	2	345	1.25	F1554-105	74		1.25	N-Included		No

Custom Stiffener Connection

Stiffener	Stiffener Group ID	Location (deg.)	Width (in)	Height (in)	Thickness (in)	H. Notch (in)	V. Notch (in)	Grade (ksi)	Weld Type	Groove Depth (in)	Groove Angle (deg.)	H. Fillet Weld Size (in)	V. Fillet Weld Size (in)	Weld Strength (ksi)
1	1	3.46153846	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
2	1	10.3846154	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
3	1	17.3076923	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
4	1	24.2307692	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
5	1	31.1538462	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
6	1	38.0769231	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
7	1	45	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
8	1	51.9230769	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
9	1	58.8461538	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
10	1	65.7692308	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
11	1	72.6923077	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
12	1	79.6153846	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
13	1	86.5384615	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
14	1	93.4615385	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
15	1	100.384615	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
16	1	107.307692	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
17	1	114.230769	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
18	1	121.153846	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
19	1	128.076923	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
20	1	135	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
21	1	141.923077	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
22	1	148.846154	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
23	1	155.769231	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
24	1	162.692308	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
25	1	169.615385	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
26	1	176.538462	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
27	1	183.461538	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
28	1	190.384615	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
29	1	197.307692	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
30	1	204.230769	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
31	1	211.153846	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
32	1	218.076923	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
33	1	225	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
34	1	231.923077	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
35	1	238.846154	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
36	1	245.769231	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
37	1	252.692308	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
38	1	259.615385	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
39	1	266.538462	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
40	1	273.461538	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
41	1	280.384615	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
42	1	287.307692	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
43	1	294.230769	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
44	1	301.153846	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
45	1	308.076923	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
46	1	315	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
47	1	321.923077	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
48	1	328.846154	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
49	1	335.769231	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
50	1	342.692308	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
51	1	349.615385	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70
52	1	356.538462	4.5	8	0.625	0.5	0.5	36	Fillet			0.3125	0.3125	70

Plot Graphic



Pile Analysis

US-CT-1002 Kettletown

2022791.CT1002.15

M	5764.00	k-ft
P	106.00	k
V	40.00	k
M tot	5984	k-ft
M tot 45	4231.327	k-ft
d	5.5	ft
h	46	ft
Vconc	11638	ft^3
wconc	1745.7	k

Pile Ultimate Capacities

Existing

Compression	150	k
Tension	100	k

Modification

Compression	100	k
Tension	100	k

Wequip 75 k (weight of the equipment above the pad)

n existing	24
n mod	48

Total force on piles

				X			45	
	n	x (ft)	y (ft)	Pc (k)	Pt (k)	Mu (k-ft)	Pc (k)	Pt (k)
Existing	4	0	0	25.72	25.72	0.00	25.72	25.72
	10	6	6	27.97	23.47	839.03	28.90	22.54
	10	12	12	30.22	21.22	1813.02	32.08	19.36
	24							
Mod	2	0	0	25.72	25.72	0.00	25.72	25.72
	4	3.5	3.5	27.03	24.41	189.21	27.57	23.86
	4	7	7	28.34	23.09	396.79	29.43	22.01
	4	10.5	10.5	29.65	21.78	622.75	31.29	20.15
	4	14	14	30.97	20.47	867.07	33.14	18.30
	4	17.5	17.5	32.28	19.16	1129.77	35.00	16.44
	26	21	21	33.59	17.84	9170.41	36.85	14.58
	48							

Pile Capacities

Existing

Compression	38.4%
Tension	49.0%

Modification

Compression	64.0%
Tension	49.0%

Reinforcement Capacity

Mu	15028.05	k-ft
a	4.262575	in
d	60.885	in
Phi Mn	22473.3	k-ft
Capacity	63.7%	

Maser Consulting Connecticut
1055 Washington Boulevard
Stamford, CT 06901
203.324.0800
peter.albano@colliersengineering.com

Post-Modification Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10115370
Maser Consulting Connecticut Project #: 21781081A (Rev. 1)

November 4, 2021

Site Information	*Site ID:*	*467951-VZW / SOUTHBURY 2 CT*
	Site Name:	*SOUTHBURY 2 CT*
	Carrier Name:	*Verizon Wireless*
	Address:	*231 Kettletown Rd* *Southbury, Connecticut 06488* *New Haven County*
	Latitude:	*41.474444°*
	Longitude:	*-73.208333°*
Structure Information	*Tower Type:*	*200-Ft Monopole*
	Mount Type:	*15.50-Ft Platform*

FUZE ID # 16272261

Analysis Results

Platform: **52.0% Pass**

******Contractor PMI Requirements*:**
Included at the end of this MA report
Available & Submitted via portal at https://pmi.vzwsmart.com
Contractor - Please Review Specific Site PMI Requirements Upon Award
Requirements also Noted on Mount Modification Drawings
Requirements may also be Noted on A & E drawings
For additional questions and support, please reach out to:
pmisupport@colliersengineering.com

11/4/2021

Report Prepared By: Nathan LaPorte

Executive Summary:

The objective of this report is to summarize the analysis results of the antenna support mount including the proposed modifications at the subject facility for the final wireless telecommunications configuration, per the applicable codes and standards.

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

Sources of Information:

Document Type	Remarks
Radio Frequency Data Sheet (RFDS)	Verizon RFDS Site ID: 675047, dated October 27, 2021
Mount Mapping Report	Tower Engineering Professionals Site Name: NE Southbury 2 CT, dated May 4, 2020
Previous Mount Analysis	Maser Consulting Connecticut Project #: 217810981A Rev. 1, dated November 1, 2021
Mount Modification Drawings	Maser Consulting Connecticut Project #: 217810981A, dated November 4, 2021

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H	
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT}:	116 mph
	Ice Wind Speed (3-sec. Gust):	50 mph
	Design Ice Thickness:	1.00 in
	Risk Category:	II
	Exposure Category:	B
	Topographic Category:	1
	Topographic Feature Considered:	N/A
	Topographic Method:	N/A
	Ground Elevation Factor, K_e:	0.989
Seismic Parameters:	S_S:	0.20 g
	S_1:	0.05 g
Maintenance Parameters:	Wind Speed (3-sec. Gust):	30 mph
	Maintenance Live Load, Lv:	250 lbs.
	Maintenance Live Load, Lm:	500 lbs.
Analysis Software:	RISA-3D (V17)	

Final Loading Configuration:

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
154.00	155.00	3	CommScope	NHH-65B-R2B	Added
		3	Samsung	MT6407-77A	
		3	Samsung	XXDWMM-12.5-65-8T-CBRS	
		3	Samsung	RF4439d-25A	
		3	Samsung	RF4440d-13A	
		1	Raycap	RVZDC-6627-PF-48*	

* Equipment to be flush mounted directly to the Monopole. They are not mounted on the platform mount and are not included in this mount analysis.

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

Model Number	Ports	AKA
DB-B1-6C12AB-0Z	6	OVP-6
RVZDC-6627-PF-48	12	OVP-12

Standard Conditions:

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

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

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

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

3. For mount analyses completed from other data sources (including new replacement mounts) and not specifically mapped in accordance with the NSTD-446 Standard, the mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer's specifications.

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

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

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

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

8. Any mount modifications listed under Sources of Information are assumed to have been installed per the design specifications.

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

Analysis Results:

Component	Utilization %	Pass/Fail
V-Brace	19.5%	Pass
Support Rail Corner	14.2%	Pass
Support Rail	13.2%	Pass
Grating Support	10.7%	Pass
Mount Pipe	32.1%	Pass
Cross Brace	52.0%	Pass
Standoff Horizontal	18.4%	Pass
Face Horizontal	22.9%	Pass
Corner Plate	39.9%	Pass
Mount Connection	19.8 %	Pass

Structure Rating – *(Controlling Utilization of all Components)*	**52.0%**

Recommendation:

The existing mount will be **SUFFICIENT** for the final loading after the proposed modifications are successfully completed.

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

Attachments:

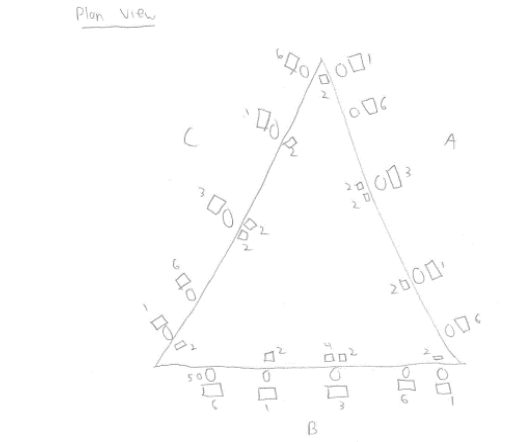
1. Mount Photos
2. Mount Mapping Report (for reference only)
3. Analysis Calculations
4. **Contractor Required PMI Report Deliverables**
5. Antenna Placement Diagrams
6. TIA Adoption and Wind Speed Usage Letter

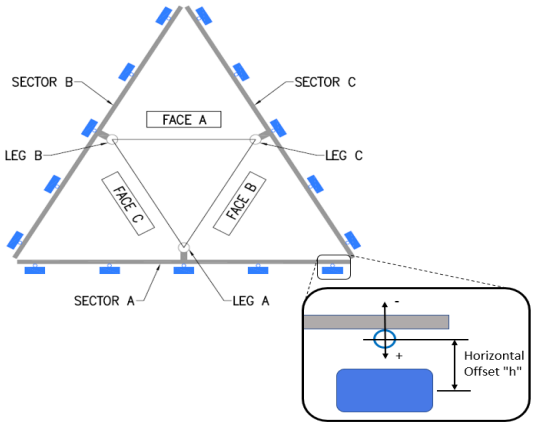
Updated on 3-03-2020

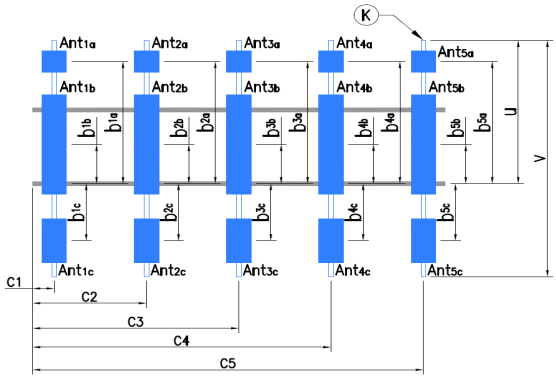
Antenna Mount Mapping Form (PATENT PENDING)

FCC #

Tower Owner:	Phoenix Tower International	**Mapping Date:**	5/4/2020
Site Name:	NE Southbury 2 CT	**Tower Type:**	Monopole
Site Number or ID:		**Tower Height (Ft.):**	200
Mapping Contractor:	Tower Engineering Professionals	**Mount Elevation (Ft.):**	155







Antenna Layout

Mount Pipe Configuration and Geometries [Unit = Inches]

Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."
A1	2.4"O.D.x7'-0" Longx 0.154"th	42.00	4.50	C1	2.4"O.D.x7'-0" Longx 0.154"th	42.00	4.50
A2	2.4"O.D.x6'-0" Longx 0.154"th	41.50	32.00	C2	2.4"O.D.x6'-0" Longx 0.154"th	41.50	32.00
A3	2.4"O.D.x6'-0" Longx 0.154"th	45.00	87.00	C3	2.4"O.D.x6'-0" Longx 0.154"th	45.00	87.00
A4	2.4"O.D.x7'-0" Longx 0.154"th	42.00	154.00	C4	2.4"O.D.x7'-0" Longx 0.154"th	42.00	154.00
A5	2.4"O.D.x7'-0" Longx 0.154"th	40.50	182.00	C5	2.4"O.D.x7'-0" Longx 0.154"th	40.50	182.00
A6				C6			
B1	2.4"O.D.x7'-0" Longx 0.154"th	42.00	4.50	D1			
B2	2.4"O.D.x6'-0" Longx 0.154"th	41.50	32.00	D2			
B3	2.4"O.D.x6'-0" Longx 0.154"th	45.00	87.00	D3			
B4	2.4"O.D.x7'-0" Longx 0.154"th	42.00	154.00	D4			
B5	2.4"O.D.x7'-0" Longx 0.154"th	40.50	182.00	D5			
B6				D6			

Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.)	66
Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.)	

Please enter additional infomation or comments below.

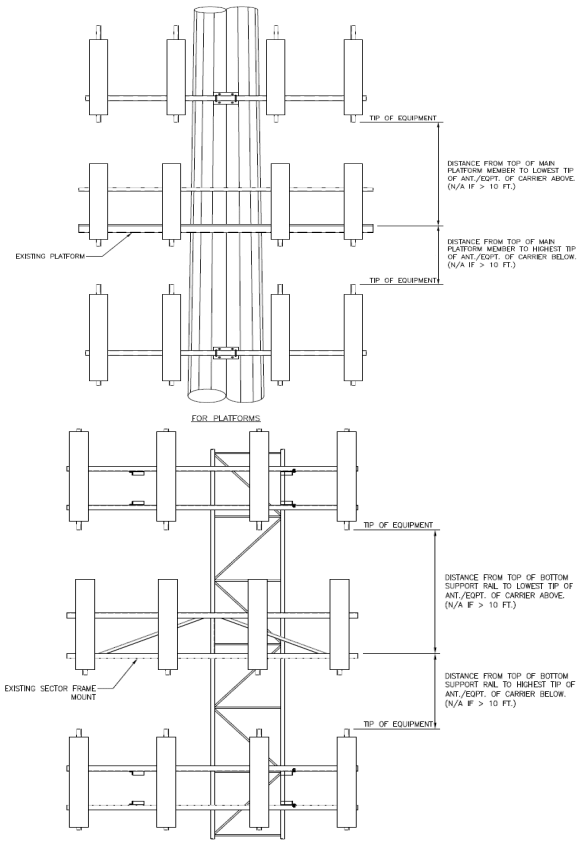
Tower Face Width at Mount Elev. (ft.):		Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):	30

	Enter antenna model. If not labled, enter "Unknown".					Mounting Locations [Units are inches and degrees]			Photos of antennas
Ants. Items	Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Vertical Distances"b_{1a}, b_{2a}, b_{3a}, b_{1b}...." (In.)	Horiz. Offset "h" (Use "-" if Ant. is behind)	Antenna Azimuth (Degrees)	Photo Numbers
Sector A									
Ant_{1a}	RFS FD9R6004/2C-3L	6.50	1.50	5.80	1) 1 5/8 FI	12.00			83
Ant_{1b}	Andrew HBXX-6516DS	12.01	6.54	51.06		22.00	5.00	320.00	083-084
Ant_{1c}									
Ant_{2a}									
Ant_{2b}	Unknown	6.50	7.75	48.00		24.00	5.00	320.00	085-086
Ant_{2c}									
Ant_{3a}	(2) RFS FD9R6004/2C-	6.50	1.50	5.80	2) 1 5/8 FI	14.00			090-093
Ant_{3b}	Amphenol BXA-70063	11.20	5.00	47.40		24.00	5.00	320.00	087-089
Ant_{3c}									
Ant_{4a}	RFS FD9R6004/2C-3L	6.50	1.50	5.80	1) 1 5/8 FI	21.00			096-097
Ant_{4b}	Andrew HBXX-6516DS	12.01	6.54	51.06		22.00	5.00	320.00	094-095
Ant_{4c}									
Ant_{5a}									
Ant_{5b}	Unknown	6.50	7.75	48.00		24.00	5.00	320.00	098-099
Ant_{5c}									
Sector B									
Ant_{1a}	RFS FD9R6004/2C-3L	6.50	1.50	5.80	1) 1 5/8 FI	12.00			103-104
Ant_{1b}	Andrew HBXX-6516DS	12.01	6.54	51.06		22.00	5.00	80.00	100-102
Ant_{1c}									
Ant_{2a}									
Ant_{2b}	Unknown	6.50	7.75	48.00		24.00	5.00	80.00	105-106
Ant_{2c}									
Ant_{3a}	RFS FD9R6004/2C-3L	6.50	1.50	5.80	1) 1 5/8 FI	14.00			111-113
Ant_{3b}	Amphenol BXA-70063	11.20	5.00	47.40		24.00	5.00	80.00	107-109
Ant_{3c}	Unknown TMA	6.00	1.75	7.50	1) 1 5/8 FI	27.00			110
Ant_{4a}	RFS FD9R6004/2C-3L	6.50	1.50	5.80	1) 1 5/8 FI	21.00			116-118
Ant_{4b}	Andrew HBXX-6516DS	12.01	6.54	51.06		22.00	5.00	80.00	114-115
Ant_{4c}									
Ant_{5a}	GPS					42.00			121
Ant_{5b}	Unknown	6.50	7.75	48.00		24.00	5.00	80.00	119-120
Ant_{5c}									

Mount Azimuth (Degree) for Each Sector and Climbing Information

Sector A:	320.00	Deg	
Sector B:	80.00	Deg	
Sector C:	200.00	Deg	
Sector D:		Deg	
Climbing	75.00	Deg	Sector B

Climbing Facility	Corrosion Type:	Good condition.
	Access:	Climbing path was unobstructed.
	Condition:	Good condition.



Sector C									
Ant_{1a}	RFS FD9R6004/2C-3L	6.50	1.50	5.80	1) 1 5/8 FI	12.00			124-125
Ant_{1b}	Andrew HBXX-6516DS	12.01	6.54	51.06		22.00	5.00	200.00	122-123
Ant_{1c}									
Ant_{2a}									
Ant_{2b}	Unknown	6.50	7.75	48.00		24.00	5.00	200.00	126-127
Ant_{2c}									
Ant_{3a}	(2) RFS FD9R6004/2C-	6.50	1.50	5.80	2) 1 5/8 FI	14.00			131-134
Ant_{3b}	Amphenol BXA-70063	11.20	5.00	47.40		24.00	5.00	200.00	128-130
Ant_{3c}									
Ant_{4a}	RFS FD9R6004/2C-3L	6.50	1.50	5.80	1) 1 5/8 FI	21.00			137-138
Ant_{4b}	Andrew HBXX-6516DS	12.01	6.54	51.06		22.00	5.00	200.00	135-136
Ant_{4c}									
Ant_{5a}									
Ant_{5b}	Unknown	6.50	7.75	48.00		24.00	5.00	200.00	139-140
Ant_{5c}									
Sector D									
Ant_{1a}									
Ant_{1b}									
Ant_{1c}									
Ant_{2a}									
Ant_{2b}									
Ant_{2c}									
Ant_{3a}									
Ant_{3b}									
Ant_{3c}									
Ant_{4a}									
Ant_{4b}									
Ant_{4c}									
Ant_{5a}									
Ant_{5b}									
Ant_{5c}									

Observed Safety and Structural Issues During the Mount Mapping

Issue #	Description of Issue	Photo #
1		
2		
3		
4		
5		
6		
7		
8		

Mapping Notes

1. Please report any visible structural or safety issues observed on the antenna mounts (Damaged members, loose connections, tilting mounts, safety climb issues, etc.)
2. If the thickness of the existing pipes or tubing can't be obtained from a general tool (such as Caliper), please use an ultrasonic measurement tool (thickness gauge) to measure the thickness.
3. Please create all required detail sketches of the mounts and insert them into the "Sketches" tab.
4. Please measure and enter the bolt sizes and types under the Members Box in the spreadsheet of the mount type.
5. Take and label the photos of the tower, mounts, connections, antennas and all measurements. Minimum 50 photos are required.
6. Please measure and report the size and length of all existing antenna mounting pipes.
7. Please measure and report the antenna information for all sectors.
8. Don't delete or rearrange any sheet or contents of any sheet from this mapping form.

Standard Conditions

1. Obvious safety and structural issues/deficiencies noticed at the time of the mount mapping are to be reported in this mapping. However, this mount mapping is not a condition assessment of the mount.

Updated on 3-03-2020

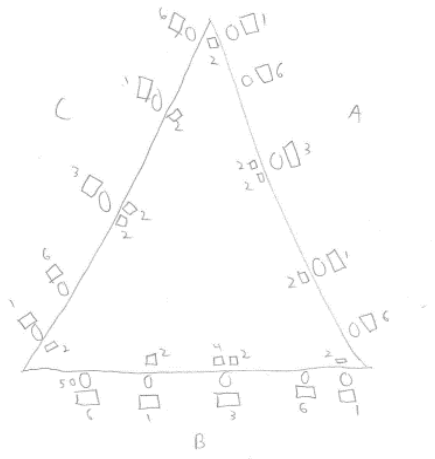
Antenna Mount Mapping Form (PATENT PENDING)

FCC #

Tower Owner:	Phoenix Tower International	**Mapping Date:**	5/4/2020
Site Name:	NE Southbury 2 CT	**Tower Type:**	Monopole
Site Number or ID:		**Tower Height (Ft.):**	200
Mapping Contractor:	Tower Engineering Professionals	**Mount Elevation (Ft.):**	155

Please Insert Sketches of the Antenna Mount

Plan View

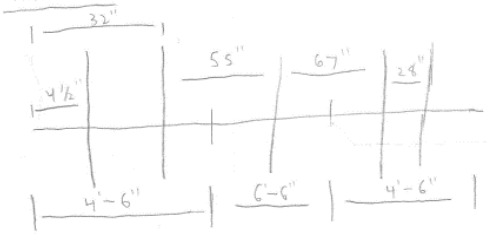


1: Andrew HBXX-6516DS-VTM
2: RFS FD9R6004/2C-3L
3: Amphenol BXA-70063-4CF-EDIN/
4: 7½"+X 6"W x 13¾" D TMA
5: GPS
6: 4'T x 6½"W x 7¾" D Panel

AZ: A: 320°
B: 80°
C: 200°

Elev: 155'

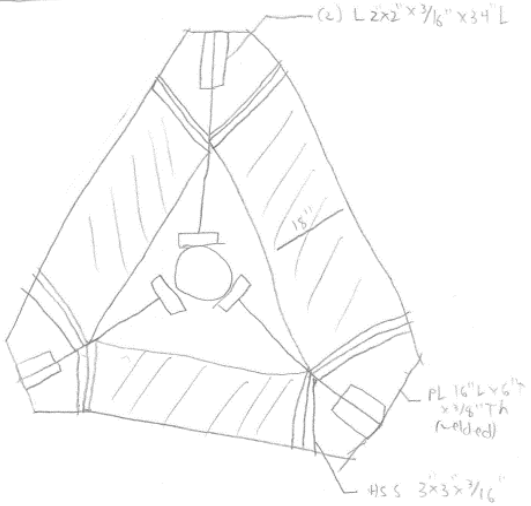
Front View



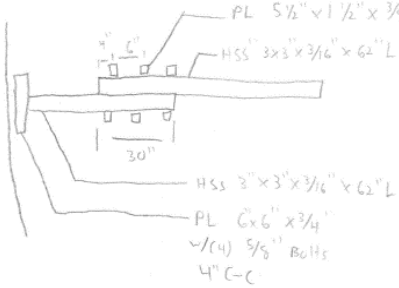
FP: 3.5"Ø
Pos 1: 2.4" x 7'
Pos 2: 2.4" x 6'
Pos 3: 2.4" x 6'
Pos 4: 2.4" x 7'
Pos 5: 2.4" x 7'

Center Lines
1: ANT: 22" TMA: 1'
2: ANT: 2'
3: ANT: 2' TMA1: 14" TMA2: 27"
4: ANT: 22" TMA: 21"
5: ANT: 2'

Plan View (Steel)



Side View

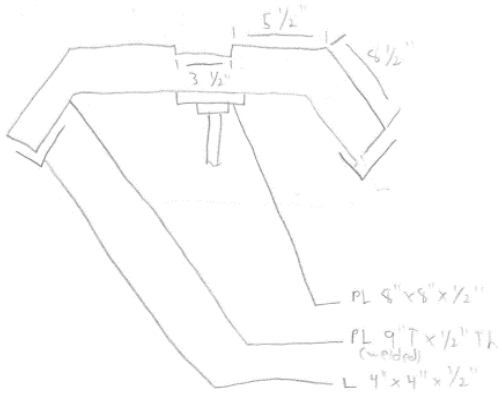


Mount Pipe Connection
PL 5"W x 8¼"T x ½" Th
w/(2) ½" SV- Bolts
To MP: 3" C-C(H), 7" C-C(V)
To FP: 4¼" C-C(V), 4" C-C(H)

FP Plate Connec
(2) PL 6" x 6" x ½"
w/(4) ½" Ø Bolts
4" C-C

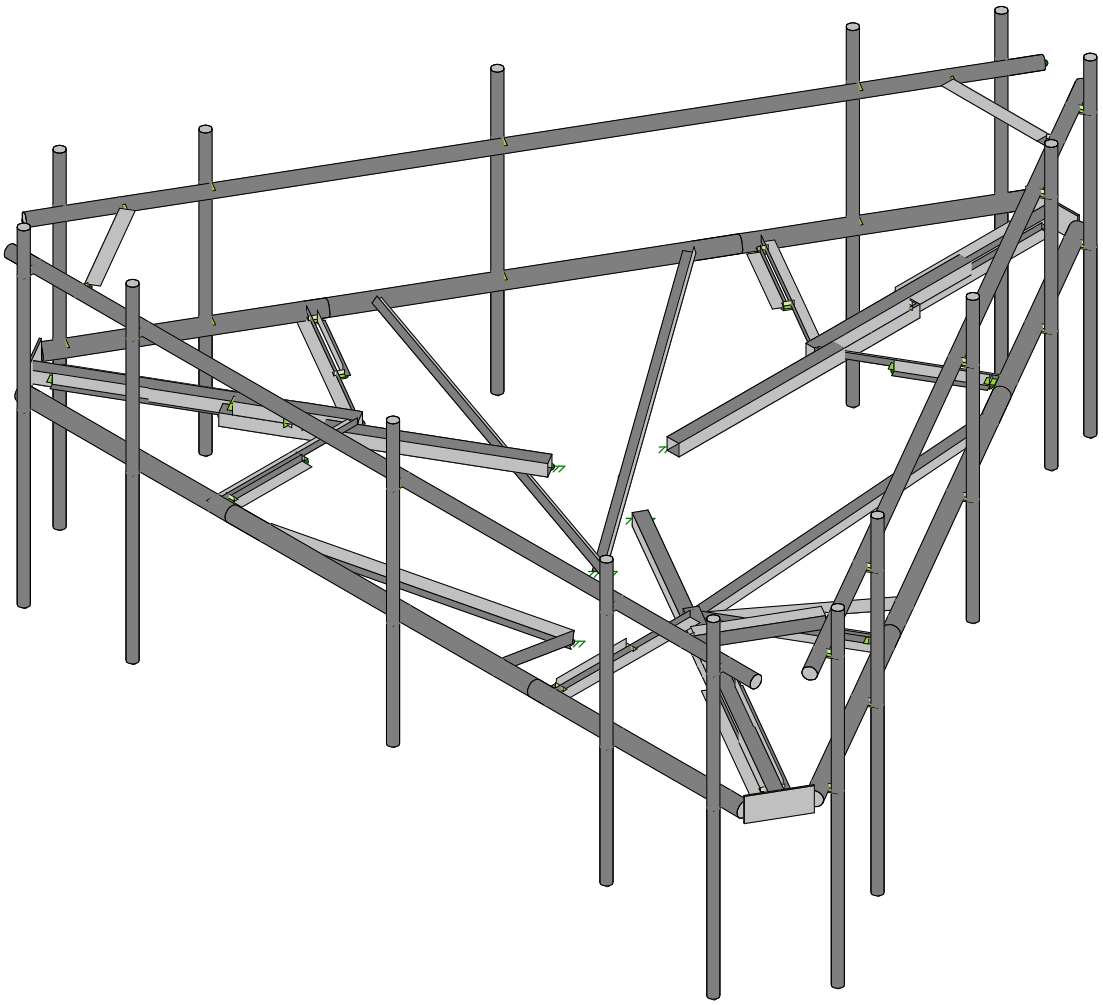
Please Insert Sketches of the Antenna Mount, cont'd

Collar



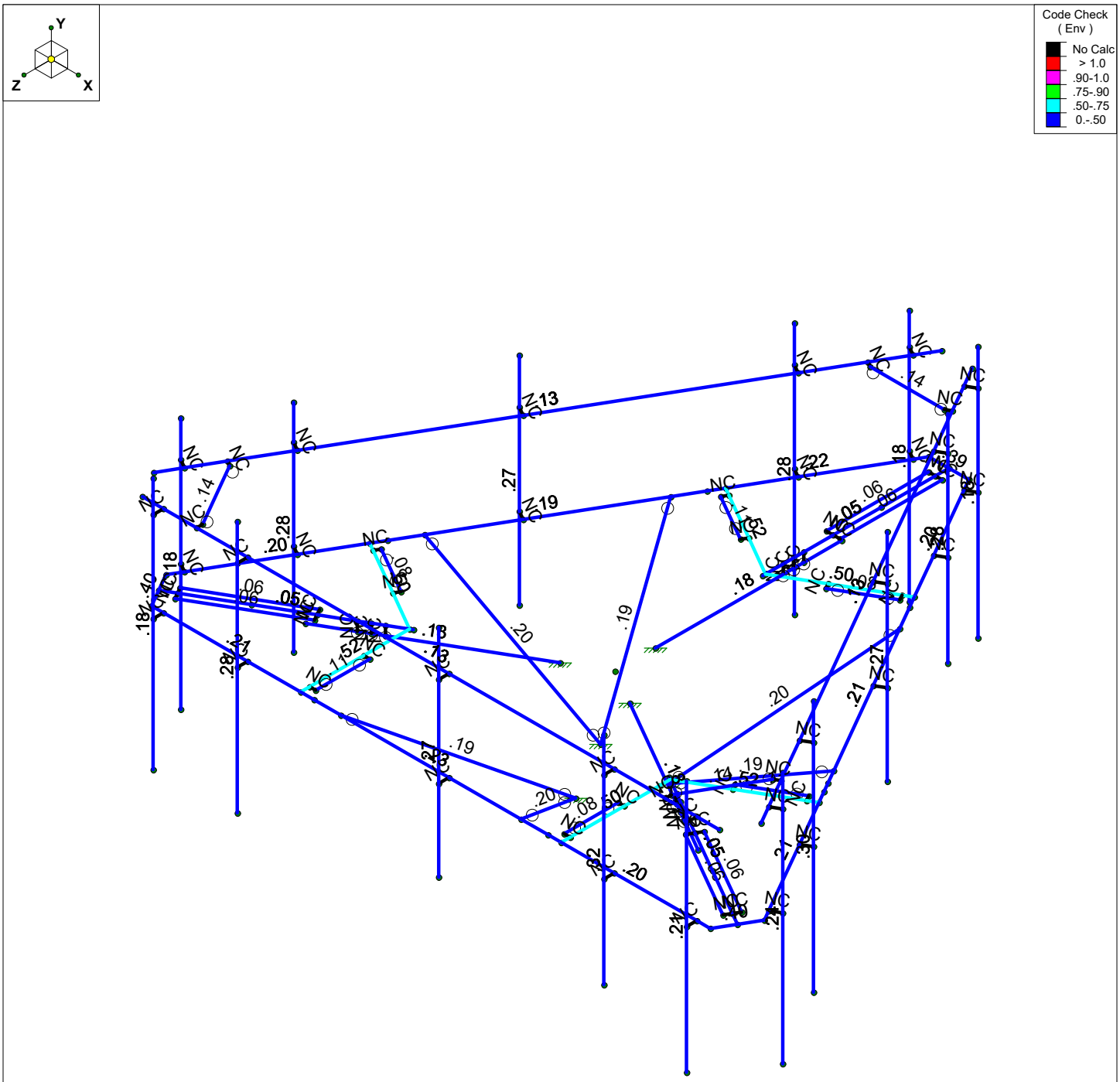
(3) 5/8" Ø Threaded Rods
2 1/2" C-C
21 1/2" Clear Spacing

Distance to above: 66"
Elev: 154.5'
Pole Ø: 30"
Coax: (12) 1 5/8" FH



Envelope Only Solution

Maser Consulting	Mount Fix	SK - 1
NL		Nov 1, 2021 at 12:53 PM
21781081A		467951-VZW_MT_LO_H.r3d



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

Maser Consulting	Mount Fix	SK - 2
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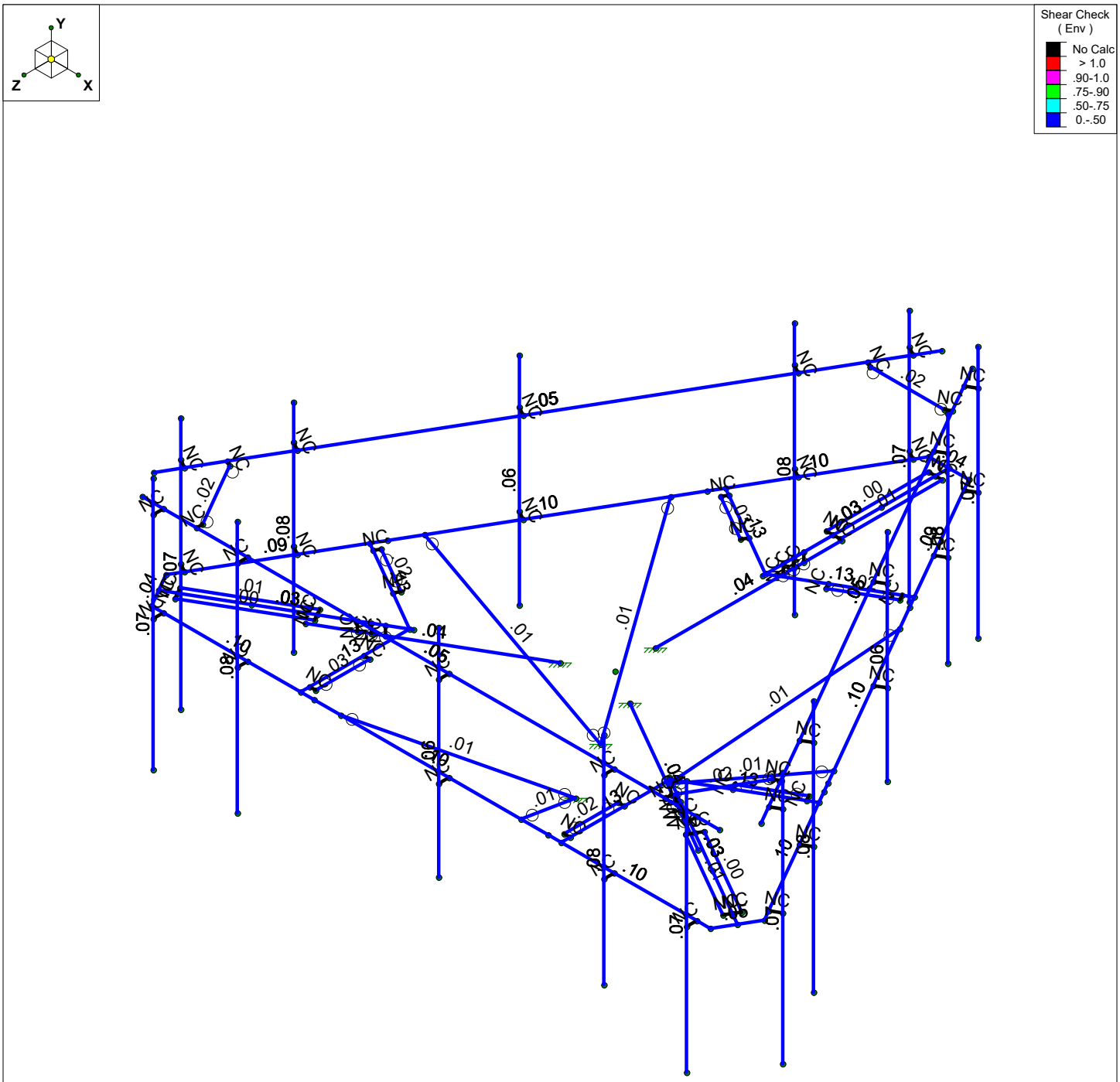


Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

Maser Consulting	Mount Fix	SK - 3
NL		Nov 1, 2021 at 12:53 PM
21781081A		467951-VZW_MT_LO_H.r3d

Basic Load Cases

	BLC Description	Category	X Grav...	Y Grav...	Z Grav...	Joint	Point	Distrib...	Area(M...	Surfac...
1	Antenna D	None					63			
2	Antenna Di	None					63			
3	Antenna Wo (0 Deg)	None					63			
4	Antenna Wo (30 Deg)	None					63			
5	Antenna Wo (60 Deg)	None					63			
6	Antenna Wo (90 Deg)	None					63			
7	Antenna Wo (120 Deg)	None					63			
8	Antenna Wo (150 Deg)	None					63			
9	Antenna Wo (180 Deg)	None					63			
10	Antenna Wo (210 Deg)	None					63			
11	Antenna Wo (240 Deg)	None					63			
12	Antenna Wo (270 Deg)	None					63			
13	Antenna Wo (300 Deg)	None					63			
14	Antenna Wo (330 Deg)	None					63			
15	Antenna Wi (0 Deg)	None					63			
16	Antenna Wi (30 Deg)	None					63			
17	Antenna Wi (60 Deg)	None					63			
18	Antenna Wi (90 Deg)	None					63			
19	Antenna Wi (120 Deg)	None					63			
20	Antenna Wi (150 Deg)	None					63			
21	Antenna Wi (180 Deg)	None					63			
22	Antenna Wi (210 Deg)	None					63			
23	Antenna Wi (240 Deg)	None					63			
24	Antenna Wi (270 Deg)	None					63			
25	Antenna Wi (300 Deg)	None					63			
26	Antenna Wi (330 Deg)	None					63			
27	Antenna Wm (0 Deg)	None					63			
28	Antenna Wm (30 Deg)	None					63			
29	Antenna Wm (60 Deg)	None					63			
30	Antenna Wm (90 Deg)	None					63			
31	Antenna Wm (120 Deg)	None					63			
32	Antenna Wm (150 Deg)	None					63			
33	Antenna Wm (180 Deg)	None					63			
34	Antenna Wm (210 Deg)	None					63			
35	Antenna Wm (240 Deg)	None					63			
36	Antenna Wm (270 Deg)	None					63			
37	Antenna Wm (300 Deg)	None					63			
38	Antenna Wm (330 Deg)	None					63			
39	Structure D	None		-1					9	
40	Structure Di	None						63	9	
41	Structure Wo (0 Deg)	None						126		
42	Structure Wo (30 Deg)	None						126		
43	Structure Wo (60 Deg)	None						126		
44	Structure Wo (90 Deg)	None						126		
45	Structure Wo (120 Deg)	None						126		
46	Structure Wo (150 Deg)	None						126		
47	Structure Wo (180 Deg)	None						126		
48	Structure Wo (210 Deg)	None						126		
49	Structure Wo (240 Deg)	None						126		
50	Structure Wo (270 Deg)	None						126		
51	Structure Wo (300 Deg)	None						126		
52	Structure Wo (330 Deg)	None						126		
53	Structure Wi (0 Deg)	None						126		
54	Structure Wi (30 Deg)	None						126		
55	Structure Wi (60 Deg)	None						126		
56	Structure Wi (90 Deg)	None						126		

Basic Load Cases (Continued)

	BLC Description	Category	X Grav...	Y Grav...	Z Grav...	Joint	Point	Distrib...	Area(M...	Surfac...
57	Structure Wi (120 Deg)	None						126		
58	Structure Wi (150 Deg)	None						126		
59	Structure Wi (180 Deg)	None						126		
60	Structure Wi (210 Deg)	None						126		
61	Structure Wi (240 Deg)	None						126		
62	Structure Wi (270 Deg)	None						126		
63	Structure Wi (300 Deg)	None						126		
64	Structure Wi (330 Deg)	None						126		
65	Structure Wm (0 Deg)	None						126		
66	Structure Wm (30 Deg)	None						126		
67	Structure Wm (60 Deg)	None						126		
68	Structure Wm (90 Deg)	None						126		
69	Structure Wm (120 Deg)	None						126		
70	Structure Wm (150 Deg)	None						126		
71	Structure Wm (180 Deg)	None						126		
72	Structure Wm (210 Deg)	None						126		
73	Structure Wm (240 Deg)	None						126		
74	Structure Wm (270 Deg)	None						126		
75	Structure Wm (300 Deg)	None						126		
76	Structure Wm (330 Deg)	None						126		
77	Lm1	None					1			
78	Lm2	None					1			
79	Lv1	None					1			
80	Lv2	None					1			
81	Antenna Ev	None					63			
82	Antenna Eh (0 Deg)	None					42			
83	Antenna Eh (90 Deg)	None					42			
84	Structure Ev	ELY								
85	Structure Eh (0 Deg)	ELZ	-.03							
86	Structure Eh (90 Deg)	ELX			.03					
87	BLC 39 Transient Area Loads	None						30		
88	BLC 40 Transient Area Loads	None						30		

Load Combinations

	Description	Solve	P...	S...	B...	Fa...	B...	Fa...	BLC	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
1	1.2D+1.0Wo (0 Deg)	Yes	Y		1	1.2	39	1.2	3	1	41	1												
2	1.2D+1.0Wo (30 Deg)	Yes	Y		1	1.2	39	1.2	4	1	42	1												
3	1.2D+1.0Wo (60 Deg)	Yes	Y		1	1.2	39	1.2	5	1	43	1												
4	1.2D+1.0Wo (90 Deg)	Yes	Y		1	1.2	39	1.2	6	1	44	1												
5	1.2D+1.0Wo (120 Deg)	Yes	Y		1	1.2	39	1.2	7	1	45	1												
6	1.2D+1.0Wo (150 Deg)	Yes	Y		1	1.2	39	1.2	8	1	46	1												
7	1.2D+1.0Wo (180 Deg)	Yes	Y		1	1.2	39	1.2	9	1	47	1												
8	1.2D+1.0Wo (210 Deg)	Yes	Y		1	1.2	39	1.2	10	1	48	1												
9	1.2D+1.0Wo (240 Deg)	Yes	Y		1	1.2	39	1.2	11	1	49	1												
10	1.2D+1.0Wo (270 Deg)	Yes	Y		1	1.2	39	1.2	12	1	50	1												
11	1.2D+1.0Wo (300 Deg)	Yes	Y		1	1.2	39	1.2	13	1	51	1												
12	1.2D+1.0Wo (330 Deg)	Yes	Y		1	1.2	39	1.2	14	1	52	1												
13	1.2D + 1.0Di + 1.0Wi (0 ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1	53	1								
14	1.2D + 1.0Di + 1.0Wi (3...	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1								
15	1.2D + 1.0Di + 1.0Wi (6...	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1	55	1								
16	1.2D + 1.0Di + 1.0Wi (9...	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1	56	1								
17	1.2D + 1.0Di + 1.0Wi (1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1								
18	1.2D + 1.0Di + 1.0Wi (1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1								
19	1.2D + 1.0Di + 1.0Wi (1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1								
20	1.2D + 1.0Di + 1.0Wi (2...	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1								

Load Combinations (Continued)

	Description	Solve	P...	S...	B...	Fa...	B...	Fa...	BLC	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
21	1.2D + 1.0Di + 1.0Wi (2...	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1								
22	1.2D + 1.0Di + 1.0Wi (2...	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1								
23	1.2D + 1.0Di + 1.0Wi (3...	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1								
24	1.2D + 1.0Di + 1.0Wi (3...	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1								
25	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1										
26	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1										
27	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1										
28	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1										
29	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1										
30	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1										
31	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1										
32	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1										
33	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1										
34	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1										
35	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1										
36	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1										
37	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1										
38	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1										
39	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1										
40	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1										
41	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1										
42	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1										
43	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1										
44	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1										
45	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1										
46	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1										
47	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1										
48	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	38	1	76	1										
49	1.2D + 1.5Lv1	Yes	Y		1	1.2	39	1.2	79	1.5														
50	1.2D + 1.5Lv2	Yes	Y		1	1.2	39	1.2	80	1.5														
51	1.4D	Yes	Y		1	1.4	39	1.4																
52	1.2D + 1.0Ev + 1.0Eh (0...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	1	83		ELZ	1	E...					
53	1.2D + 1.0Ev + 1.0Eh (3...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.866	83	.5	ELZ	.866	E...	.5				
54	1.2D + 1.0Ev + 1.0Eh (6...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.5	83	.866	ELZ	.5	E...	.866				
55	1.2D + 1.0Ev + 1.0Eh (9...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82		83	1	ELZ		E...	1				
56	1.2D + 1.0Ev + 1.0Eh (1...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.5	83	.866	ELZ	-.5	E...	.866				
57	1.2D + 1.0Ev + 1.0Eh (1...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.866	83	.5	ELZ	-.866	E...	.5				
58	1.2D + 1.0Ev + 1.0Eh (1...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-1	83		ELZ	-1	E...					
59	1.2D + 1.0Ev + 1.0Eh (2...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.866	83	-.5	ELZ	-.866	E...	-.5				
60	1.2D + 1.0Ev + 1.0Eh (2...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.5	83	-.866	ELZ	-.5	E...	-.866				
61	1.2D + 1.0Ev + 1.0Eh (2...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82		83	-1	ELZ		E...	-1				
62	1.2D + 1.0Ev + 1.0Eh (3...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.5	83	-.866	ELZ	.5	E...	-.866				
63	1.2D + 1.0Ev + 1.0Eh (3...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.866	83	-.5	ELZ	.866	E...	-.5				
64	0.9D - 1.0Ev + 1.0Eh (0 ...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	1	83		ELZ	1	E...					
65	0.9D - 1.0Ev + 1.0Eh (3...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.866	83	.5	ELZ	.866	E...	.5				
66	0.9D - 1.0Ev + 1.0Eh (6...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.5	83	.866	ELZ	.5	E...	.866				
67	0.9D - 1.0Ev + 1.0Eh (9...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82		83	1	ELZ		E...	1				
68	0.9D - 1.0Ev + 1.0Eh (1...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.5	83	.866	ELZ	-.5	E...	.866				
69	0.9D - 1.0Ev + 1.0Eh (1...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.866	83	.5	ELZ	-.866	E...	.5				
70	0.9D - 1.0Ev + 1.0Eh (1...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-1	83		ELZ	-1	E...					
71	0.9D - 1.0Ev + 1.0Eh (2...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.866	83	-.5	ELZ	-.866	E...	-.5				
72	0.9D - 1.0Ev + 1.0Eh (2...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.5	83	-.866	ELZ	-.5	E...	-.866				
73	0.9D - 1.0Ev + 1.0Eh (2...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82		83	-1	ELZ		E...	-1				
74	0.9D - 1.0Ev + 1.0Eh (3...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.5	83	-.866	ELZ	.5	E...	-.866				
75	0.9D - 1.0Ev + 1.0Eh (3...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.866	83	-.5	ELZ	.866	E...	-.5				

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	-8.296696	0	4.156742	0	
2	N2	-0.554183	0	-9.253684	0	
3	N3	-7.748204	0	5.106758	0	
4	N4	0.	-.25	-0.	0	
5	N5	7.748192	0	5.106779	0	
6	N6	5.886568	0	-0.01772	0	
7	N7	8.296684	0	4.156762	0	
8	N8	3.248192	0	5.106779	0	
9	N9	-3.236808	0	5.106779	0	
10	N10	0.000012	0	-9.258628	0	
11	N11	0.000012	0	-4.091953	0	
12	N12	0.548504	0	-9.26352	0	
13	N13	2.61661	0	-5.681457	0	
14	N14	-2.616604	0	-5.681467	0	
15	N15	0.000012	0	-7.380195	0	
16	N16	0.000012	0	-4.172389	0	
17	N17	0.000012	-.25	-1.117287	0	
18	N18	0.000012	-.25	-6.284787	0	
19	N19	0.000012	0	-4.661953	0	
20	N20	0.000012	0	-4.946953	0	
21	N21	0.000012	0	-5.231953	0	
22	N22	0.000012	-.25	-4.661953	0	
23	N23	0.000012	-.25	-4.946953	0	
24	N24	0.000012	-.25	-5.231953	0	
25	N25	0.000012	0	-8.88352	0	
26	N26	0.000012	0	-6.050187	0	
27	N27	0.190012	0	-8.88352	0	
28	N28	0.190012	0	-6.050187	0	
29	N29	-0.190012	0	-8.88352	0	
30	N30	-0.190012	0	-6.050187	0	
31	N31	7.373192	0	5.106779	0	
32	N32	7.373192	0	5.391779	0	
33	N33	7.373192	-3.5	5.391779	0	
34	N34	7.373192	3.5	5.391779	0	
35	N35	2.798504	0	-5.366406	0	
36	N36	6.041004	0	0.249769	0	
37	N37	-6.046696	0	0.259627	0	
38	N38	-2.804196	0	-5.356548	0	
39	N39	-8.022444	0	4.63176	0	
40	N40	-3.543741	0	2.045966	0	
41	N41	-6.228591	0	0.574678	0	
42	N42	-3.611993	0	5.106779	0	
43	N43	-6.391442	0	3.690087	0	
44	N44	-3.6134	0	2.086184	0	
45	N45	-0.967605	-.25	0.558633	0	
46	N46	-5.442791	-.25	3.142383	0	
47	N47	-4.037373	0	2.330966	0	
48	N48	-4.284189	0	2.473466	0	
49	N49	-4.531005	0	2.615966	0	
50	N50	-4.037376	-.25	2.330966	0	
51	N51	-4.284193	-.25	2.473466	0	
52	N52	-4.53101	-.25	2.615966	0	
53	N53	-7.693355	0	4.441759	0	
54	N54	-5.239619	0	3.025087	0	
55	N55	-7.78836	0	4.277205	0	
56	N56	-5.334621	0	2.860538	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
57	N57	-7.598348	0	4.606315	0	
58	N58	-5.14461	0	3.189649	0	
59	N59	-3.612109	0	4.856779	0	
60	N60	-3.612808	0	3.356779	0	
61	N61	-3.445326	0	4.856779	0	
62	N62	-3.445326	0	3.356779	0	
63	N63	8.022444	0	4.63176	0	
64	N64	3.543729	0	2.045987	0	
65	N65	3.611981	0	5.106779	0	
66	N66	6.228595	0	0.574689	0	
67	N67	6.39143	0	3.690108	0	
68	N68	3.613389	0	2.086204	0	
69	N69	0.967593	-.25	0.558654	0	
70	N70	5.442779	-.25	3.142404	0	
71	N71	4.037367	0	2.330987	0	
72	N72	4.284185	0	2.473487	0	
73	N73	4.531004	0	2.615987	0	
74	N74	4.037364	-.25	2.330987	0	
75	N75	4.284181	-.25	2.473487	0	
76	N76	4.530998	-.25	2.615987	0	
77	N77	7.693354	0	4.441761	0	
78	N78	5.239612	0	3.0251	0	
79	N79	7.598348	0	4.606315	0	
80	N80	5.14461	0	3.189649	0	
81	N81	7.78836	0	4.277205	0	
82	N82	5.334621	0	2.860538	0	
83	N83	3.612097	0	4.856779	0	
84	N84	3.612796	0	3.356779	0	
85	N85	3.445326	0	4.856779	0	
86	N86	3.445326	0	3.356779	0	
87	N87	5.081525	0	5.106779	0	
88	N88	5.081525	0	5.391779	0	
89	N89	5.081525	-2.541667	5.391779	0	
90	N90	5.081525	3.458333	5.391779	0	
91	N91	0.498192	0	5.106779	0	
92	N92	0.498192	0	5.391779	0	
93	N93	0.498192	-2.25	5.391779	0	
94	N94	0.498192	3.75	5.391779	0	
95	N95	-5.085142	0	5.106779	0	
96	N96	-5.085142	0	5.391779	0	
97	N97	-5.085142	-3.5	5.391779	0	
98	N98	-5.085142	3.5	5.391779	0	
99	N99	-7.418475	0	5.106779	0	
100	N100	-7.418475	0	5.391779	0	
101	N101	-7.418475	-3.625	5.391779	0	
102	N102	-7.418475	3.375	5.391779	0	
103	N103	0.736004	0	-8.938761	0	
104	N104	0.982821	0	-9.081261	0	
105	N105	0.982821	-3.5	-9.081261	0	
106	N106	0.982821	3.5	-9.081261	0	
107	N107	1.881838	0	-6.954119	0	
108	N108	2.128655	0	-7.096619	0	
109	N109	2.128655	-2.541667	-7.096619	0	
110	N110	2.128655	3.458333	-7.096619	0	
111	N111	4.173504	0	-2.984836	0	
112	N112	4.420321	0	-3.127336	0	
113	N113	4.420321	-2.25	-3.127336	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
114	N114	4.420321	3.75	-3.127336	0	
115	N115	6.965164	0	1.850477	0	
116	N116	7.211988	0	1.707972	0	
117	N117	7.211988	-3.5	1.707972	0	
118	N118	7.211988	3.5	1.707972	0	
119	N119	8.131821	0	3.871208	0	
120	N120	8.378655	0	3.728698	0	
121	N121	8.378655	-3.625	3.728698	0	
122	N122	8.378655	3.375	3.728698	0	
123	N123	-8.109196	0	3.831982	0	
124	N124	-8.356013	0	3.689482	0	
125	N125	-8.356013	-3.5	3.689482	0	
126	N126	-8.356013	3.5	3.689482	0	
127	N127	-6.963363	0	1.84734	0	
128	N128	-7.21018	0	1.70484	0	
129	N129	-7.21018	-2.541667	1.70484	0	
130	N130	-7.21018	3.458333	1.70484	0	
131	N131	-4.671696	0	-2.121943	0	
132	N132	-4.918513	0	-2.264443	0	
133	N133	-4.918513	-2.25	-2.264443	0	
134	N134	-4.918513	3.75	-2.264443	0	
135	N135	-1.880029	0	-6.957251	0	
136	N136	-2.126847	0	-7.099751	0	
137	N137	-2.126847	-3.5	-7.099751	0	
138	N138	-2.126847	3.5	-7.099751	0	
139	N139	-0.713363	0	-8.977977	0	
140	N140	-0.96018	0	-9.120477	0	
141	N141	-0.96018	-3.625	-9.120477	0	
142	N142	-0.96018	3.375	-9.120477	0	
143	N143	6.012148	0	0.699789	0	
144	N144	4.71346	0	1.450394	0	
145	N145	5.928757	0	0.555351	0	
146	N146	4.629719	0	1.305351	0	
147	N147	2.400045	0	-5.556558	0	
148	N148	1.100657	0	-4.807163	0	
149	N149	2.483431	0	-5.412129	0	
150	N150	1.184392	0	-4.662129	0	
151	N151	-2.400039	0	-5.556568	0	
152	N152	-1.100651	0	-4.807173	0	
153	N153	-2.483431	0	-5.412129	0	
154	N154	-1.184392	0	-4.662129	0	
155	N155	-6.012142	0	0.699779	0	
156	N156	-4.713454	0	1.450384	0	
157	N157	-5.928757	0	0.555351	0	
158	N158	-4.629719	0	1.305351	0	
159	N159	-7.999995	2.5	5.106758	0	
160	N160	7.999983	2.5	5.106779	0	
161	N161	7.373192	2.5	5.106779	0	
162	N162	7.373192	2.5	5.391779	0	
163	N163	5.081525	2.5	5.106779	0	
164	N164	5.081525	2.5	5.391779	0	
165	N165	0.498192	2.5	5.106779	0	
166	N166	0.498192	2.5	5.391779	0	
167	N167	-5.085142	2.5	5.106779	0	
168	N168	-5.085142	2.5	5.391779	0	
169	N169	-7.418475	2.5	5.106779	0	
170	N170	-7.418475	2.5	5.391779	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
171	N171	-6.499995	2.5	5.106758	0	
172	N172	-6.499995	2.5	4.940091	0	
173	N173	6.499995	2.5	5.106758	0	
174	N174	6.499995	2.5	4.940091	0	
175	N175	8.42258	2.5	4.37482	0	
176	N176	0.422608	2.5	-9.481578	0	
177	N177	0.736004	2.5	-8.938761	0	
178	N178	0.982821	2.5	-9.081261	0	
179	N179	1.881838	2.5	-6.954119	0	
180	N180	2.128655	2.5	-7.096619	0	
181	N181	4.173504	2.5	-2.984836	0	
182	N182	4.420321	2.5	-3.127336	0	
183	N183	6.965171	2.5	1.850472	0	
184	N184	7.211988	2.5	1.707972	0	
185	N185	8.131838	2.5	3.871198	0	
186	N186	8.378655	2.5	3.728698	0	
187	N187	7.67258	2.5	3.075782	0	
188	N188	7.528242	2.5	3.159115	0	
189	N189	1.172584	2.5	-8.18254	0	
190	N190	1.028247	2.5	-8.099207	0	
191	N191	-0.422584	2.5	-9.481578	0	
192	N192	-8.422592	2.5	4.3748	0	
193	N193	-8.109196	2.5	3.831982	0	
194	N194	-8.356013	2.5	3.689482	0	
195	N195	-6.963363	2.5	1.84734	0	
196	N196	-7.21018	2.5	1.70484	0	
197	N197	-4.671696	2.5	-2.121943	0	
198	N198	-4.918513	2.5	-2.264443	0	
199	N199	-1.880029	2.5	-6.957251	0	
200	N200	-2.126847	2.5	-7.099751	0	
201	N201	-0.713363	2.5	-8.977977	0	
202	N202	-0.96018	2.5	-9.120477	0	
203	N203	-1.172584	2.5	-8.18254	0	
204	N204	-1.028247	2.5	-8.099207	0	
205	N205	-7.67258	2.5	3.075782	0	
206	N206	-7.528242	2.5	3.159115	0	
207	N213	0	-2.75	1.092869	0	
208	N208	-2.498192	0	5.106779	0	
209	N209	2.498192	0	5.106779	0	
210	N210	0.946452	-2.75	-0.546434	0	
211	N211	5.671696	0	-0.389892	0	
212	N212	3.173504	0	-4.716887	0	
213	N213A	-0.946452	-2.75	-0.546434	0	
214	N214	-3.173504	0	-4.716887	0	
215	N215	-5.671696	0	-0.389892	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Face Horizontal	PIPE_3.0	Beam	Pipe	A53 Gr. B (35k...	Typical	2.07	2.85	2.85	5.69
2	Standoff Horizontal	HSS3X3X6	Beam	SquareTube	A500 Gr.46	Typical	3.39	3.78	3.78	6.64
3	Cross Brace	L2.5x1.5x4	Beam	Single Angle	A36 Gr.36	Typical	.947	.16	.594	.021
4	Grating Support	L2.5x1.5x4	Beam	Single Angle	A36 Gr.36	Typical	.947	.16	.594	.021
5	Coner Plate	PL3/8x6	Beam	RECT	A36 Gr.36	Typical	2.25	.026	6.75	.101
6	Mount Pipe	PIPE_2.0	Column	Pipe	A53 Gr. B (35k...	Typical	1.02	.627	.627	1.25
7	Support Rail	PIPE_2.5	Beam	Pipe	A53 Gr. B (35k...	Typical	1.61	1.45	1.45	2.89

Hot Rolled Steel Section Sets (Continued)

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
8	Support Rail Corner	L3X3X4	Beam	Single Angle	A36 Gr.36	Typical	1.44	1.23	1.23	.031
9	V-Brace	L2.5x2.5x4	Column	Single Angle	A36 Gr.36	Typical	1.19	.692	.692	.026
10	Kicker	LL3x3x3x3	Column	Double Angle (3/8 Gap)	A36 Gr.36	Typical	2.18	4.09	1.9	.027

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/1...	Density[k/ft...	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
2	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	58	1.2
3	A992	29000	11154	.3	.65	.49	50	1.1	58	1.2
4	A500 Gr.42	29000	11154	.3	.65	.49	42	1.3	58	1.1
5	A500 Gr.46	29000	11154	.3	.65	.49	46	1.2	58	1.1
6	Q235	29000	11154	.3	.65	.49	34	1.5	58	1.2
7	Grade 2	29000	11154	.3	.65	.49	57	1.1	58	1.2
8	A53 Gr. B (35ksi)	29000	11154	.3	.65	.49	35	1.5	60	1.2

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N3	N1			Coner Plate	Beam	RECT	A36 Gr.36	Typical
2	M2	N5	N8			Face Horizontal	Beam	Pipe	A53 Gr. B ...	Typical
3	M3	N7	N5			Coner Plate	Beam	RECT	A36 Gr.36	Typical
4	M4	N8	N9			Face Horizontal	Beam	Pipe	A53 Gr. B ...	Typical
5	M5	N9	N3			Face Horizontal	Beam	Pipe	A53 Gr. B ...	Typical
6	M6	N11	N10			Standoff Horiz...	Beam	SquareTube	A500 Gr.46	Typical
7	M7	N2	N12			Coner Plate	Beam	RECT	A36 Gr.36	Typical
8	M8	N17	N18			Standoff Horiz...	Beam	SquareTube	A500 Gr.46	Typical
9	M9	N22	N19			RIGID	None	None	RIGID	DR1
10	M10	N23	N20			RIGID	None	None	RIGID	DR1
11	M11	N24	N21			RIGID	None	None	RIGID	DR1
12	M12	N28	N26			RIGID	None	None	RIGID	DR1
13	M13	N27	N25			RIGID	None	None	RIGID	DR1
14	M14	N27	N28		270	Grating Support	Beam	Single Angle	A36 Gr.36	Typical
15	M15	N30	N26			RIGID	None	None	RIGID	DR1
16	M16	N29	N25			RIGID	None	None	RIGID	DR1
17	M17	N29	N30			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
18	M18	N16	N13		270	Cross Brace	Beam	Single Angle	A36 Gr.36	Typical
19	M19	N14	N16		270	Cross Brace	Beam	Single Angle	A36 Gr.36	Typical
20	M20	N32	N31			RIGID	None	None	RIGID	DR1
21	MP1A	N34	N33			Mount Pipe	Column	Pipe	A53 Gr. B ...	Typical
22	M22	N12	N35			Face Horizontal	Beam	Pipe	A53 Gr. B ...	Typical
23	M23	N35	N36			Face Horizontal	Beam	Pipe	A53 Gr. B ...	Typical
24	M24	N36	N7			Face Horizontal	Beam	Pipe	A53 Gr. B ...	Typical
25	M25	N1	N37			Face Horizontal	Beam	Pipe	A53 Gr. B ...	Typical
26	M26	N37	N38			Face Horizontal	Beam	Pipe	A53 Gr. B ...	Typical
27	M27	N38	N2			Face Horizontal	Beam	Pipe	A53 Gr. B ...	Typical
28	M28	N40	N39			Standoff Horiz...	Beam	SquareTube	A500 Gr.46	Typical
29	M29	N45	N46			Standoff Horiz...	Beam	SquareTube	A500 Gr.46	Typical
30	M30	N50	N47			RIGID	None	None	RIGID	DR1
31	M31	N51	N48			RIGID	None	None	RIGID	DR1
32	M32	N52	N49			RIGID	None	None	RIGID	DR1
33	M33	N56	N54			RIGID	None	None	RIGID	DR1
34	M34	N55	N53			RIGID	None	None	RIGID	DR1
35	M35	N55	N56		270	Grating Support	Beam	Single Angle	A36 Gr.36	Typical
36	M36	N58	N54			RIGID	None	None	RIGID	DR1
37	M37	N57	N53			RIGID	None	None	RIGID	DR1

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
38	M38	N57	N58			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
39	M39	N44	N41		270	Cross Brace	Beam	Single Angle	A36 Gr.36	Typical
40	M40	N42	N44		270	Cross Brace	Beam	Single Angle	A36 Gr.36	Typical
41	M41	N62	N61		270	Grating Support	Beam	Single Angle	A36 Gr.36	Typical
42	M42	N59	N61			RIGID	None	None	RIGID	DR1
43	M43	N60	N62			RIGID	None	None	RIGID	DR1
44	M44	N64	N63			Standoff Horiz...	Beam	SquareTube	A500 Gr.46	Typical
45	M45	N69	N70			Standoff Horiz...	Beam	SquareTube	A500 Gr.46	Typical
46	M46	N74	N71			RIGID	None	None	RIGID	DR1
47	M47	N75	N72			RIGID	None	None	RIGID	DR1
48	M48	N76	N73			RIGID	None	None	RIGID	DR1
49	M49	N80	N78			RIGID	None	None	RIGID	DR1
50	M50	N79	N77			RIGID	None	None	RIGID	DR1
51	M51	N79	N80		270	Grating Support	Beam	Single Angle	A36 Gr.36	Typical
52	M52	N82	N78			RIGID	None	None	RIGID	DR1
53	M53	N81	N77			RIGID	None	None	RIGID	DR1
54	M54	N81	N82			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
55	M55	N68	N65		270	Cross Brace	Beam	Single Angle	A36 Gr.36	Typical
56	M56	N66	N68		270	Cross Brace	Beam	Single Angle	A36 Gr.36	Typical
57	M57	N86	N85			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
58	M58	N83	N85			RIGID	None	None	RIGID	DR1
59	M59	N84	N86			RIGID	None	None	RIGID	DR1
60	M60	N88	N87			RIGID	None	None	RIGID	DR1
61	MP2A	N90	N89			Mount Pipe	Column	Pipe	A53 Gr. B ...	Typical
62	M62	N92	N91			RIGID	None	None	RIGID	DR1
63	MP3A	N94	N93			Mount Pipe	Column	Pipe	A53 Gr. B ...	Typical
64	M64	N96	N95			RIGID	None	None	RIGID	DR1
65	MP4A	N98	N97			Mount Pipe	Column	Pipe	A53 Gr. B ...	Typical
66	M66	N100	N99			RIGID	None	None	RIGID	DR1
67	MP5A	N102	N101			Mount Pipe	Column	Pipe	A53 Gr. B ...	Typical
68	M68	N104	N103			RIGID	None	None	RIGID	DR1
69	MP1C	N106	N105			Mount Pipe	Column	Pipe	A53 Gr. B ...	Typical
70	M70	N108	N107			RIGID	None	None	RIGID	DR1
71	MP2C	N110	N109			Mount Pipe	Column	Pipe	A53 Gr. B ...	Typical
72	M72	N112	N111			RIGID	None	None	RIGID	DR1
73	MP3C	N114	N113			Mount Pipe	Column	Pipe	A53 Gr. B ...	Typical
74	M74	N116	N115			RIGID	None	None	RIGID	DR1
75	MP4C	N118	N117			Mount Pipe	Column	Pipe	A53 Gr. B ...	Typical
76	M76	N120	N119			RIGID	None	None	RIGID	DR1
77	MP5C	N122	N121			Mount Pipe	Column	Pipe	A53 Gr. B ...	Typical
78	M78	N124	N123			RIGID	None	None	RIGID	DR1
79	MP1B	N126	N125			Mount Pipe	Column	Pipe	A53 Gr. B ...	Typical
80	M80	N128	N127			RIGID	None	None	RIGID	DR1
81	MP2B	N130	N129			Mount Pipe	Column	Pipe	A53 Gr. B ...	Typical
82	M82	N132	N131			RIGID	None	None	RIGID	DR1
83	MP3B	N134	N133			Mount Pipe	Column	Pipe	A53 Gr. B ...	Typical
84	M84	N136	N135			RIGID	None	None	RIGID	DR1
85	MP4B	N138	N137			Mount Pipe	Column	Pipe	A53 Gr. B ...	Typical
86	M86	N140	N139			RIGID	None	None	RIGID	DR1
87	MP5B	N142	N141			Mount Pipe	Column	Pipe	A53 Gr. B ...	Typical
88	M88	N146	N145		270	Grating Support	Beam	Single Angle	A36 Gr.36	Typical
89	M89	N143	N145			RIGID	None	None	RIGID	DR1
90	M90	N144	N146			RIGID	None	None	RIGID	DR1
91	M91	N150	N149			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
92	M92	N147	N149			RIGID	None	None	RIGID	DR1
93	M93	N148	N150			RIGID	None	None	RIGID	DR1
94	M94	N154	N153		270	Grating Support	Beam	Single Angle	A36 Gr.36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
95	M95	N151	N153			RIGID	None	None	RIGID	DR1
96	M96	N152	N154			RIGID	None	None	RIGID	DR1
97	M97	N158	N157			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
98	M98	N155	N157			RIGID	None	None	RIGID	DR1
99	M99	N156	N158			RIGID	None	None	RIGID	DR1
100	M100	N162	N161			RIGID	None	None	RIGID	DR1
101	M101	N164	N163			RIGID	None	None	RIGID	DR1
102	M102	N166	N165			RIGID	None	None	RIGID	DR1
103	M103	N168	N167			RIGID	None	None	RIGID	DR1
104	M104	N170	N169			RIGID	None	None	RIGID	DR1
105	M105	N159	N160			Support Rail	Beam	Pipe	A53 Gr. B ...	Typical
106	M106	N171	N172			RIGID	None	None	RIGID	DR1
107	M107	N173	N174			RIGID	None	None	RIGID	DR1
108	M108	N178	N177			RIGID	None	None	RIGID	DR1
109	M109	N180	N179			RIGID	None	None	RIGID	DR1
110	M110	N182	N181			RIGID	None	None	RIGID	DR1
111	M111	N184	N183			RIGID	None	None	RIGID	DR1
112	M112	N186	N185			RIGID	None	None	RIGID	DR1
113	M113	N175	N176			Support Rail	Beam	Pipe	A53 Gr. B ...	Typical
114	M114	N187	N188			RIGID	None	None	RIGID	DR1
115	M115	N189	N190			RIGID	None	None	RIGID	DR1
116	M116	N194	N193			RIGID	None	None	RIGID	DR1
117	M117	N196	N195			RIGID	None	None	RIGID	DR1
118	M118	N198	N197			RIGID	None	None	RIGID	DR1
119	M119	N200	N199			RIGID	None	None	RIGID	DR1
120	M120	N202	N201			RIGID	None	None	RIGID	DR1
121	M121	N191	N192			Support Rail	Beam	Pipe	A53 Gr. B ...	Typical
122	M122	N203	N204			RIGID	None	None	RIGID	DR1
123	M123	N205	N206			RIGID	None	None	RIGID	DR1
124	M124	N172	N206		90	Support Rail C...	Beam	Single Angle	A36 Gr.36	Typical
125	M125	N204	N190		90	Support Rail C...	Beam	Single Angle	A36 Gr.36	Typical
126	M126	N188	N174		90	Support Rail C...	Beam	Single Angle	A36 Gr.36	Typical
127	M127	N208	N213			V-Brace	Column	Single Angle	A36 Gr.36	Typical
128	M128	N209	N213		270	V-Brace	Column	Single Angle	A36 Gr.36	Typical
129	M129	N211	N210			V-Brace	Column	Single Angle	A36 Gr.36	Typical
130	M130	N212	N210		270	V-Brace	Column	Single Angle	A36 Gr.36	Typical
131	M131	N214	N213A			V-Brace	Column	Single Angle	A36 Gr.36	Typical
132	M132	N215	N213A		270	V-Brace	Column	Single Angle	A36 Gr.36	Typical

Member Advanced Data

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

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
15	M15						Yes	** NA **			None
16	M16						Yes	** NA **			None
17	M17						Yes				None
18	M18						Yes				None
19	M19						Yes				None
20	M20						Yes	** NA **			None
21	MP1A						Yes	** NA **			None
22	M22						Yes				None
23	M23						Yes				None
24	M24						Yes				None
25	M25						Yes				None
26	M26						Yes				None
27	M27						Yes				None
28	M28						Yes				None
29	M29						Yes				None
30	M30		BenPIN				Yes	** NA **			None
31	M31		BenPIN				Yes	** NA **			None
32	M32		BenPIN				Yes	** NA **			None
33	M33						Yes	** NA **			None
34	M34						Yes	** NA **			None
35	M35						Yes				None
36	M36						Yes	** NA **			None
37	M37						Yes	** NA **			None
38	M38						Yes				None
39	M39						Yes				None
40	M40						Yes				None
41	M41	BenPIN	BenPIN				Yes				None
42	M42						Yes	** NA **			None
43	M43						Yes	** NA **			None
44	M44						Yes				None
45	M45						Yes				None
46	M46		BenPIN				Yes	** NA **			None
47	M47		BenPIN				Yes	** NA **			None
48	M48		BenPIN				Yes	** NA **			None
49	M49						Yes	** NA **			None
50	M50						Yes	** NA **			None
51	M51						Yes				None
52	M52						Yes	** NA **			None
53	M53						Yes	** NA **			None
54	M54						Yes				None
55	M55						Yes				None
56	M56						Yes				None
57	M57	BenPIN	BenPIN				Yes				None
58	M58						Yes	** NA **			None
59	M59						Yes	** NA **			None
60	M60						Yes	** NA **			None
61	MP2A						Yes	** NA **			None
62	M62						Yes	** NA **			None
63	MP3A						Yes	** NA **			None
64	M64						Yes	** NA **			None
65	MP4A						Yes	** NA **			None
66	M66						Yes	** NA **			None
67	MP5A						Yes	** NA **			None
68	M68						Yes	** NA **			None
69	MP1C						Yes	** NA **			None
70	M70						Yes	** NA **			None
71	MP2C						Yes	** NA **			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
72	M72						Yes	** NA **			None
73	MP3C						Yes	** NA **			None
74	M74						Yes	** NA **			None
75	MP4C						Yes	** NA **			None
76	M76						Yes	** NA **			None
77	MP5C						Yes	** NA **			None
78	M78						Yes	** NA **			None
79	MP1B						Yes	** NA **			None
80	M80						Yes	** NA **			None
81	MP2B						Yes	** NA **			None
82	M82						Yes	** NA **			None
83	MP3B						Yes	** NA **			None
84	M84						Yes	** NA **			None
85	MP4B						Yes	** NA **			None
86	M86						Yes	** NA **			None
87	MP5B						Yes	** NA **			None
88	M88	BenPIN	BenPIN				Yes				None
89	M89						Yes	** NA **			None
90	M90						Yes	** NA **			None
91	M91	BenPIN	BenPIN				Yes				None
92	M92						Yes	** NA **			None
93	M93						Yes	** NA **			None
94	M94	BenPIN	BenPIN				Yes				None
95	M95						Yes	** NA **			None
96	M96						Yes	** NA **			None
97	M97	BenPIN	BenPIN				Yes				None
98	M98						Yes	** NA **			None
99	M99						Yes	** NA **			None
100	M100						Yes	** NA **			None
101	M101						Yes	** NA **			None
102	M102						Yes	** NA **			None
103	M103						Yes	** NA **			None
104	M104						Yes	** NA **			None
105	M105						Yes				None
106	M106	OOOOOX					Yes	** NA **			None
107	M107	OOOOOX					Yes	** NA **			None
108	M108						Yes	** NA **			None
109	M109						Yes	** NA **			None
110	M110						Yes	** NA **			None
111	M111						Yes	** NA **			None
112	M112						Yes	** NA **			None
113	M113						Yes				None
114	M114	OOOOOX					Yes	** NA **			None
115	M115	OOOOOX					Yes	** NA **			None
116	M116						Yes	** NA **			None
117	M117						Yes	** NA **			None
118	M118						Yes	** NA **			None
119	M119						Yes	** NA **			None
120	M120						Yes	** NA **			None
121	M121						Yes				None
122	M122	OOOOOX					Yes	** NA **			None
123	M123	OOOOOX					Yes	** NA **			None
124	M124						Yes				None
125	M125						Yes				None
126	M126						Yes				None
127	M127	BenPIN	BenPIN				Yes	** NA **			None
128	M128	BenPIN	BenPIN				Yes	** NA **			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
129	M129	BenPIN	BenPIN				Yes	** NA **			None
130	M130	BenPIN	BenPIN				Yes	** NA **			None
131	M131	BenPIN	BenPIN				Yes	** NA **			None
132	M132	BenPIN	BenPIN				Yes	** NA **			None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	Y	-21.85	.5
2	MP3A	My	-.011	.5
3	MP3A	Mz	0	.5
4	MP3A	Y	-21.85	5.75
5	MP3A	My	-.011	5.75
6	MP3A	Mz	0	5.75
7	MP3B	Y	-21.85	.5
8	MP3B	My	.005	.5
9	MP3B	Mz	-.009	.5
10	MP3B	Y	-21.85	5.75
11	MP3B	My	.005	5.75
12	MP3B	Mz	-.009	5.75
13	MP3C	Y	-21.85	.5
14	MP3C	My	.005	.5
15	MP3C	Mz	.009	.5
16	MP3C	Y	-21.85	5.75
17	MP3C	My	.005	5.75
18	MP3C	Mz	.009	5.75
19	MP1A	Y	-43.55	1.75
20	MP1A	My	-.033	1.75
21	MP1A	Mz	0	1.75
22	MP1A	Y	-43.55	3.75
23	MP1A	My	-.033	3.75
24	MP1A	Mz	0	3.75
25	MP1B	Y	-43.55	1.75
26	MP1B	My	.016	1.75
27	MP1B	Mz	-.028	1.75
28	MP1B	Y	-43.55	3.75
29	MP1B	My	.016	3.75
30	MP1B	Mz	-.028	3.75
31	MP1C	Y	-43.55	1.75
32	MP1C	My	.016	1.75
33	MP1C	Mz	.028	1.75
34	MP1C	Y	-43.55	3.75
35	MP1C	My	.016	3.75
36	MP1C	Mz	.028	3.75
37	MP5A	Y	-23.2	2.75
38	MP5A	My	-.017	2.75
39	MP5A	Mz	0	2.75
40	MP5B	Y	-23.2	2.75
41	MP5B	My	.009	2.75
42	MP5B	Mz	-.015	2.75
43	MP5C	Y	-23.2	2.75
44	MP5C	My	.009	2.75
45	MP5C	Mz	.015	2.75
46	MP2A	Y	-74.7	2
47	MP2A	My	.025	2
48	MP2A	Mz	0	2

Member Point Loads (BLC 1 : Antenna D) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
49	MP2B	Y	-74.7	2
50	MP2B	My	-.012	2
51	MP2B	Mz	.022	2
52	MP2C	Y	-74.7	2
53	MP2C	My	-.012	2
54	MP2C	Mz	-.022	2
55	MP3A	Y	-70.3	2
56	MP3A	My	.023	2
57	MP3A	Mz	0	2
58	MP3B	Y	-70.3	2
59	MP3B	My	-.012	2
60	MP3B	Mz	.02	2
61	MP3C	Y	-70.3	2
62	MP3C	My	-.012	2
63	MP3C	Mz	-.02	2

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	Y	-61.322	.5
2	MP3A	My	-.031	.5
3	MP3A	Mz	0	.5
4	MP3A	Y	-61.322	5.75
5	MP3A	My	-.031	5.75
6	MP3A	Mz	0	5.75
7	MP3B	Y	-61.322	.5
8	MP3B	My	.015	.5
9	MP3B	Mz	-.027	.5
10	MP3B	Y	-61.322	5.75
11	MP3B	My	.015	5.75
12	MP3B	Mz	-.027	5.75
13	MP3C	Y	-61.322	.5
14	MP3C	My	.015	.5
15	MP3C	Mz	.027	.5
16	MP3C	Y	-61.322	5.75
17	MP3C	My	.015	5.75
18	MP3C	Mz	.027	5.75
19	MP1A	Y	-36.045	1.75
20	MP1A	My	-.027	1.75
21	MP1A	Mz	0	1.75
22	MP1A	Y	-36.045	3.75
23	MP1A	My	-.027	3.75
24	MP1A	Mz	0	3.75
25	MP1B	Y	-36.045	1.75
26	MP1B	My	.014	1.75
27	MP1B	Mz	-.023	1.75
28	MP1B	Y	-36.045	3.75
29	MP1B	My	.014	3.75
30	MP1B	Mz	-.023	3.75
31	MP1C	Y	-36.045	1.75
32	MP1C	My	.014	1.75
33	MP1C	Mz	.023	1.75
34	MP1C	Y	-36.045	3.75
35	MP1C	My	.014	3.75
36	MP1C	Mz	.023	3.75
37	MP5A	Y	-30.242	2.75
38	MP5A	My	-.023	2.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
39	MP5A	Mz	0	2.75
40	MP5B	Y	-30.242	2.75
41	MP5B	My	.011	2.75
42	MP5B	Mz	-.02	2.75
43	MP5C	Y	-30.242	2.75
44	MP5C	My	.011	2.75
45	MP5C	Mz	.02	2.75
46	MP2A	Y	-45.452	2
47	MP2A	My	.015	2
48	MP2A	Mz	0	2
49	MP2B	Y	-45.452	2
50	MP2B	My	-.008	2
51	MP2B	Mz	.013	2
52	MP2C	Y	-45.452	2
53	MP2C	My	-.008	2
54	MP2C	Mz	-.013	2
55	MP3A	Y	-43.286	2
56	MP3A	My	.014	2
57	MP3A	Mz	0	2
58	MP3B	Y	-43.286	2
59	MP3B	My	-.007	2
60	MP3B	Mz	.012	2
61	MP3C	Y	-43.286	2
62	MP3C	My	-.007	2
63	MP3C	Mz	-.012	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	0	.5
2	MP3A	Z	-131.577	.5
3	MP3A	Mx	0	.5
4	MP3A	X	0	5.75
5	MP3A	Z	-131.577	5.75
6	MP3A	Mx	0	5.75
7	MP3B	X	0	.5
8	MP3B	Z	-98.133	.5
9	MP3B	Mx	.042	.5
10	MP3B	X	0	5.75
11	MP3B	Z	-98.133	5.75
12	MP3B	Mx	.042	5.75
13	MP3C	X	0	.5
14	MP3C	Z	-98.133	.5
15	MP3C	Mx	-.042	.5
16	MP3C	X	0	5.75
17	MP3C	Z	-98.133	5.75
18	MP3C	Mx	-.042	5.75
19	MP1A	X	0	1.75
20	MP1A	Z	-76.536	1.75
21	MP1A	Mx	0	1.75
22	MP1A	X	0	3.75
23	MP1A	Z	-76.536	3.75
24	MP1A	Mx	0	3.75
25	MP1B	X	0	1.75
26	MP1B	Z	-41.607	1.75
27	MP1B	Mx	.027	1.75
28	MP1B	X	0	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP1B	Z	-41.607	3.75
30	MP1B	Mx	.027	3.75
31	MP1C	X	0	1.75
32	MP1C	Z	-41.607	1.75
33	MP1C	Mx	-.027	1.75
34	MP1C	X	0	3.75
35	MP1C	Z	-41.607	3.75
36	MP1C	Mx	-.027	3.75
37	MP5A	X	0	2.75
38	MP5A	Z	-49.83	2.75
39	MP5A	Mx	0	2.75
40	MP5B	X	0	2.75
41	MP5B	Z	-30.893	2.75
42	MP5B	Mx	.02	2.75
43	MP5C	X	0	2.75
44	MP5C	Z	-30.893	2.75
45	MP5C	Mx	-.02	2.75
46	MP2A	X	0	2
47	MP2A	Z	-60.903	2
48	MP2A	Mx	0	2
49	MP2B	X	0	2
50	MP2B	Z	-45.759	2
51	MP2B	Mx	-.013	2
52	MP2C	X	0	2
53	MP2C	Z	-45.759	2
54	MP2C	Mx	.013	2
55	MP3A	X	0	2
56	MP3A	Z	-60.903	2
57	MP3A	Mx	0	2
58	MP3B	X	0	2
59	MP3B	Z	-43.011	2
60	MP3B	Mx	-.012	2
61	MP3C	X	0	2
62	MP3C	Z	-43.011	2
63	MP3C	Mx	.012	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	60.215	.5
2	MP3A	Z	-104.295	.5
3	MP3A	Mx	-.03	.5
4	MP3A	X	60.215	5.75
5	MP3A	Z	-104.295	5.75
6	MP3A	Mx	-.03	5.75
7	MP3B	X	43.493	.5
8	MP3B	Z	-75.332	.5
9	MP3B	Mx	.043	.5
10	MP3B	X	43.493	5.75
11	MP3B	Z	-75.332	5.75
12	MP3B	Mx	.043	5.75
13	MP3C	X	60.215	.5
14	MP3C	Z	-104.295	.5
15	MP3C	Mx	-.03	.5
16	MP3C	X	60.215	5.75
17	MP3C	Z	-104.295	5.75
18	MP3C	Mx	-.03	5.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
19	MP1A	X	32.447	1.75
20	MP1A	Z	-56.199	1.75
21	MP1A	Mx	-.024	1.75
22	MP1A	X	32.447	3.75
23	MP1A	Z	-56.199	3.75
24	MP1A	Mx	-.024	3.75
25	MP1B	X	14.982	1.75
26	MP1B	Z	-25.949	1.75
27	MP1B	Mx	.022	1.75
28	MP1B	X	14.982	3.75
29	MP1B	Z	-25.949	3.75
30	MP1B	Mx	.022	3.75
31	MP1C	X	32.447	1.75
32	MP1C	Z	-56.199	1.75
33	MP1C	Mx	-.024	1.75
34	MP1C	X	32.447	3.75
35	MP1C	Z	-56.199	3.75
36	MP1C	Mx	-.024	3.75
37	MP5A	X	21.759	2.75
38	MP5A	Z	-37.688	2.75
39	MP5A	Mx	-.016	2.75
40	MP5B	X	12.291	2.75
41	MP5B	Z	-21.288	2.75
42	MP5B	Mx	.018	2.75
43	MP5C	X	21.759	2.75
44	MP5C	Z	-37.688	2.75
45	MP5C	Mx	-.016	2.75
46	MP2A	X	27.928	2
47	MP2A	Z	-48.372	2
48	MP2A	Mx	.009	2
49	MP2B	X	20.355	2
50	MP2B	Z	-35.257	2
51	MP2B	Mx	-.014	2
52	MP2C	X	27.928	2
53	MP2C	Z	-48.372	2
54	MP2C	Mx	.009	2
55	MP3A	X	27.47	2
56	MP3A	Z	-47.579	2
57	MP3A	Mx	.009	2
58	MP3B	X	18.523	2
59	MP3B	Z	-32.084	2
60	MP3B	Mx	-.012	2
61	MP3C	X	27.47	2
62	MP3C	Z	-47.579	2
63	MP3C	Mx	.009	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	84.986	.5
2	MP3A	Z	-49.067	.5
3	MP3A	Mx	-.042	.5
4	MP3A	X	84.986	5.75
5	MP3A	Z	-49.067	5.75
6	MP3A	Mx	-.042	5.75
7	MP3B	X	84.986	.5
8	MP3B	Z	-49.067	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
9	MP3B	Mx	.042	.5
10	MP3B	X	84.986	5.75
11	MP3B	Z	-49.067	5.75
12	MP3B	Mx	.042	5.75
13	MP3C	X	113.949	.5
14	MP3C	Z	-65.789	.5
15	MP3C	Mx	0	.5
16	MP3C	X	113.949	5.75
17	MP3C	Z	-65.789	5.75
18	MP3C	Mx	0	5.75
19	MP1A	X	36.033	1.75
20	MP1A	Z	-20.803	1.75
21	MP1A	Mx	-.027	1.75
22	MP1A	X	36.033	3.75
23	MP1A	Z	-20.803	3.75
24	MP1A	Mx	-.027	3.75
25	MP1B	X	36.033	1.75
26	MP1B	Z	-20.803	1.75
27	MP1B	Mx	.027	1.75
28	MP1B	X	36.033	3.75
29	MP1B	Z	-20.803	3.75
30	MP1B	Mx	.027	3.75
31	MP1C	X	66.282	1.75
32	MP1C	Z	-38.268	1.75
33	MP1C	Mx	0	1.75
34	MP1C	X	66.282	3.75
35	MP1C	Z	-38.268	3.75
36	MP1C	Mx	0	3.75
37	MP5A	X	26.754	2.75
38	MP5A	Z	-15.447	2.75
39	MP5A	Mx	-.02	2.75
40	MP5B	X	26.754	2.75
41	MP5B	Z	-15.447	2.75
42	MP5B	Mx	.02	2.75
43	MP5C	X	43.154	2.75
44	MP5C	Z	-24.915	2.75
45	MP5C	Mx	0	2.75
46	MP2A	X	39.628	2
47	MP2A	Z	-22.879	2
48	MP2A	Mx	.013	2
49	MP2B	X	39.628	2
50	MP2B	Z	-22.879	2
51	MP2B	Mx	-.013	2
52	MP2C	X	52.744	2
53	MP2C	Z	-30.452	2
54	MP2C	Mx	0	2
55	MP3A	X	37.249	2
56	MP3A	Z	-21.505	2
57	MP3A	Mx	.012	2
58	MP3B	X	37.249	2
59	MP3B	Z	-21.505	2
60	MP3B	Mx	-.012	2
61	MP3C	X	52.744	2
62	MP3C	Z	-30.452	2
63	MP3C	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	86.985	.5
2	MP3A	Z	0	.5
3	MP3A	Mx	-.043	.5
4	MP3A	X	86.985	5.75
5	MP3A	Z	0	5.75
6	MP3A	Mx	-.043	5.75
7	MP3B	X	120.429	.5
8	MP3B	Z	0	.5
9	MP3B	Mx	.03	.5
10	MP3B	X	120.429	5.75
11	MP3B	Z	0	5.75
12	MP3B	Mx	.03	5.75
13	MP3C	X	120.429	.5
14	MP3C	Z	0	.5
15	MP3C	Mx	.03	.5
16	MP3C	X	120.429	5.75
17	MP3C	Z	0	5.75
18	MP3C	Mx	.03	5.75
19	MP1A	X	29.964	1.75
20	MP1A	Z	0	1.75
21	MP1A	Mx	-.022	1.75
22	MP1A	X	29.964	3.75
23	MP1A	Z	0	3.75
24	MP1A	Mx	-.022	3.75
25	MP1B	X	64.893	1.75
26	MP1B	Z	0	1.75
27	MP1B	Mx	.024	1.75
28	MP1B	X	64.893	3.75
29	MP1B	Z	0	3.75
30	MP1B	Mx	.024	3.75
31	MP1C	X	64.893	1.75
32	MP1C	Z	0	1.75
33	MP1C	Mx	.024	1.75
34	MP1C	X	64.893	3.75
35	MP1C	Z	0	3.75
36	MP1C	Mx	.024	3.75
37	MP5A	X	24.581	2.75
38	MP5A	Z	0	2.75
39	MP5A	Mx	-.018	2.75
40	MP5B	X	43.518	2.75
41	MP5B	Z	0	2.75
42	MP5B	Mx	.016	2.75
43	MP5C	X	43.518	2.75
44	MP5C	Z	0	2.75
45	MP5C	Mx	.016	2.75
46	MP2A	X	40.711	2
47	MP2A	Z	0	2
48	MP2A	Mx	.014	2
49	MP2B	X	55.855	2
50	MP2B	Z	0	2
51	MP2B	Mx	-.009	2
52	MP2C	X	55.855	2
53	MP2C	Z	0	2
54	MP2C	Mx	-.009	2
55	MP3A	X	37.047	2
56	MP3A	Z	0	2
57	MP3A	Mx	.012	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP3B	X	54.939	2
59	MP3B	Z	0	2
60	MP3B	Mx	-.009	2
61	MP3C	X	54.939	2
62	MP3C	Z	0	2
63	MP3C	Mx	-.009	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	84.986	.5
2	MP3A	Z	49.067	.5
3	MP3A	Mx	-.042	.5
4	MP3A	X	84.986	5.75
5	MP3A	Z	49.067	5.75
6	MP3A	Mx	-.042	5.75
7	MP3B	X	113.949	.5
8	MP3B	Z	65.789	.5
9	MP3B	Mx	0	.5
10	MP3B	X	113.949	5.75
11	MP3B	Z	65.789	5.75
12	MP3B	Mx	0	5.75
13	MP3C	X	84.986	.5
14	MP3C	Z	49.067	.5
15	MP3C	Mx	.042	.5
16	MP3C	X	84.986	5.75
17	MP3C	Z	49.067	5.75
18	MP3C	Mx	.042	5.75
19	MP1A	X	36.033	1.75
20	MP1A	Z	20.803	1.75
21	MP1A	Mx	-.027	1.75
22	MP1A	X	36.033	3.75
23	MP1A	Z	20.803	3.75
24	MP1A	Mx	-.027	3.75
25	MP1B	X	66.282	1.75
26	MP1B	Z	38.268	1.75
27	MP1B	Mx	0	1.75
28	MP1B	X	66.282	3.75
29	MP1B	Z	38.268	3.75
30	MP1B	Mx	0	3.75
31	MP1C	X	36.033	1.75
32	MP1C	Z	20.803	1.75
33	MP1C	Mx	.027	1.75
34	MP1C	X	36.033	3.75
35	MP1C	Z	20.803	3.75
36	MP1C	Mx	.027	3.75
37	MP5A	X	26.754	2.75
38	MP5A	Z	15.447	2.75
39	MP5A	Mx	-.02	2.75
40	MP5B	X	43.154	2.75
41	MP5B	Z	24.915	2.75
42	MP5B	Mx	0	2.75
43	MP5C	X	26.754	2.75
44	MP5C	Z	15.447	2.75
45	MP5C	Mx	.02	2.75
46	MP2A	X	39.628	2
47	MP2A	Z	22.879	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
48	MP2A	Mx	.013	2
49	MP2B	X	52.744	2
50	MP2B	Z	30.452	2
51	MP2B	Mx	0	2
52	MP2C	X	39.628	2
53	MP2C	Z	22.879	2
54	MP2C	Mx	-.013	2
55	MP3A	X	37.249	2
56	MP3A	Z	21.505	2
57	MP3A	Mx	.012	2
58	MP3B	X	52.744	2
59	MP3B	Z	30.452	2
60	MP3B	Mx	0	2
61	MP3C	X	37.249	2
62	MP3C	Z	21.505	2
63	MP3C	Mx	-.012	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	60.215	.5
2	MP3A	Z	104.295	.5
3	MP3A	Mx	-.03	.5
4	MP3A	X	60.215	5.75
5	MP3A	Z	104.295	5.75
6	MP3A	Mx	-.03	5.75
7	MP3B	X	60.215	.5
8	MP3B	Z	104.295	.5
9	MP3B	Mx	-.03	.5
10	MP3B	X	60.215	5.75
11	MP3B	Z	104.295	5.75
12	MP3B	Mx	-.03	5.75
13	MP3C	X	43.493	.5
14	MP3C	Z	75.332	.5
15	MP3C	Mx	.043	.5
16	MP3C	X	43.493	5.75
17	MP3C	Z	75.332	5.75
18	MP3C	Mx	.043	5.75
19	MP1A	X	32.447	1.75
20	MP1A	Z	56.199	1.75
21	MP1A	Mx	-.024	1.75
22	MP1A	X	32.447	3.75
23	MP1A	Z	56.199	3.75
24	MP1A	Mx	-.024	3.75
25	MP1B	X	32.447	1.75
26	MP1B	Z	56.199	1.75
27	MP1B	Mx	-.024	1.75
28	MP1B	X	32.447	3.75
29	MP1B	Z	56.199	3.75
30	MP1B	Mx	-.024	3.75
31	MP1C	X	14.982	1.75
32	MP1C	Z	25.949	1.75
33	MP1C	Mx	.022	1.75
34	MP1C	X	14.982	3.75
35	MP1C	Z	25.949	3.75
36	MP1C	Mx	.022	3.75
37	MP5A	X	21.759	2.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
38	MP5A	Z	37.688	2.75
39	MP5A	Mx	-.016	2.75
40	MP5B	X	21.759	2.75
41	MP5B	Z	37.688	2.75
42	MP5B	Mx	-.016	2.75
43	MP5C	X	12.291	2.75
44	MP5C	Z	21.288	2.75
45	MP5C	Mx	.018	2.75
46	MP2A	X	27.928	2
47	MP2A	Z	48.372	2
48	MP2A	Mx	.009	2
49	MP2B	X	27.928	2
50	MP2B	Z	48.372	2
51	MP2B	Mx	.009	2
52	MP2C	X	20.355	2
53	MP2C	Z	35.257	2
54	MP2C	Mx	-.014	2
55	MP3A	X	27.47	2
56	MP3A	Z	47.579	2
57	MP3A	Mx	.009	2
58	MP3B	X	27.47	2
59	MP3B	Z	47.579	2
60	MP3B	Mx	.009	2
61	MP3C	X	18.523	2
62	MP3C	Z	32.084	2
63	MP3C	Mx	-.012	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	0	.5
2	MP3A	Z	131.577	.5
3	MP3A	Mx	0	.5
4	MP3A	X	0	5.75
5	MP3A	Z	131.577	5.75
6	MP3A	Mx	0	5.75
7	MP3B	X	0	.5
8	MP3B	Z	98.133	.5
9	MP3B	Mx	-.042	.5
10	MP3B	X	0	5.75
11	MP3B	Z	98.133	5.75
12	MP3B	Mx	-.042	5.75
13	MP3C	X	0	.5
14	MP3C	Z	98.133	.5
15	MP3C	Mx	.042	.5
16	MP3C	X	0	5.75
17	MP3C	Z	98.133	5.75
18	MP3C	Mx	.042	5.75
19	MP1A	X	0	1.75
20	MP1A	Z	76.536	1.75
21	MP1A	Mx	0	1.75
22	MP1A	X	0	3.75
23	MP1A	Z	76.536	3.75
24	MP1A	Mx	0	3.75
25	MP1B	X	0	1.75
26	MP1B	Z	41.607	1.75
27	MP1B	Mx	-.027	1.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
28	MP1B	X	0	3.75
29	MP1B	Z	41.607	3.75
30	MP1B	Mx	-.027	3.75
31	MP1C	X	0	1.75
32	MP1C	Z	41.607	1.75
33	MP1C	Mx	.027	1.75
34	MP1C	X	0	3.75
35	MP1C	Z	41.607	3.75
36	MP1C	Mx	.027	3.75
37	MP5A	X	0	2.75
38	MP5A	Z	49.83	2.75
39	MP5A	Mx	0	2.75
40	MP5B	X	0	2.75
41	MP5B	Z	30.893	2.75
42	MP5B	Mx	-.02	2.75
43	MP5C	X	0	2.75
44	MP5C	Z	30.893	2.75
45	MP5C	Mx	.02	2.75
46	MP2A	X	0	2
47	MP2A	Z	60.903	2
48	MP2A	Mx	0	2
49	MP2B	X	0	2
50	MP2B	Z	45.759	2
51	MP2B	Mx	.013	2
52	MP2C	X	0	2
53	MP2C	Z	45.759	2
54	MP2C	Mx	-.013	2
55	MP3A	X	0	2
56	MP3A	Z	60.903	2
57	MP3A	Mx	0	2
58	MP3B	X	0	2
59	MP3B	Z	43.011	2
60	MP3B	Mx	.012	2
61	MP3C	X	0	2
62	MP3C	Z	43.011	2
63	MP3C	Mx	-.012	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-60.215	.5
2	MP3A	Z	104.295	.5
3	MP3A	Mx	.03	.5
4	MP3A	X	-60.215	5.75
5	MP3A	Z	104.295	5.75
6	MP3A	Mx	.03	5.75
7	MP3B	X	-43.493	.5
8	MP3B	Z	75.332	.5
9	MP3B	Mx	-.043	.5
10	MP3B	X	-43.493	5.75
11	MP3B	Z	75.332	5.75
12	MP3B	Mx	-.043	5.75
13	MP3C	X	-60.215	.5
14	MP3C	Z	104.295	.5
15	MP3C	Mx	.03	.5
16	MP3C	X	-60.215	5.75
17	MP3C	Z	104.295	5.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP3C	Mx	.03	5.75
19	MP1A	X	-32.447	1.75
20	MP1A	Z	56.199	1.75
21	MP1A	Mx	.024	1.75
22	MP1A	X	-32.447	3.75
23	MP1A	Z	56.199	3.75
24	MP1A	Mx	.024	3.75
25	MP1B	X	-14.982	1.75
26	MP1B	Z	25.949	1.75
27	MP1B	Mx	-.022	1.75
28	MP1B	X	-14.982	3.75
29	MP1B	Z	25.949	3.75
30	MP1B	Mx	-.022	3.75
31	MP1C	X	-32.447	1.75
32	MP1C	Z	56.199	1.75
33	MP1C	Mx	.024	1.75
34	MP1C	X	-32.447	3.75
35	MP1C	Z	56.199	3.75
36	MP1C	Mx	.024	3.75
37	MP5A	X	-21.759	2.75
38	MP5A	Z	37.688	2.75
39	MP5A	Mx	.016	2.75
40	MP5B	X	-12.291	2.75
41	MP5B	Z	21.288	2.75
42	MP5B	Mx	-.018	2.75
43	MP5C	X	-21.759	2.75
44	MP5C	Z	37.688	2.75
45	MP5C	Mx	.016	2.75
46	MP2A	X	-27.928	2
47	MP2A	Z	48.372	2
48	MP2A	Mx	-.009	2
49	MP2B	X	-20.355	2
50	MP2B	Z	35.257	2
51	MP2B	Mx	.014	2
52	MP2C	X	-27.928	2
53	MP2C	Z	48.372	2
54	MP2C	Mx	-.009	2
55	MP3A	X	-27.47	2
56	MP3A	Z	47.579	2
57	MP3A	Mx	-.009	2
58	MP3B	X	-18.523	2
59	MP3B	Z	32.084	2
60	MP3B	Mx	.012	2
61	MP3C	X	-27.47	2
62	MP3C	Z	47.579	2
63	MP3C	Mx	-.009	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-84.986	.5
2	MP3A	Z	49.067	.5
3	MP3A	Mx	.042	.5
4	MP3A	X	-84.986	5.75
5	MP3A	Z	49.067	5.75
6	MP3A	Mx	.042	5.75
7	MP3B	X	-84.986	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
8	MP3B	Z	49.067	.5
9	MP3B	Mx	-.042	.5
10	MP3B	X	-84.986	5.75
11	MP3B	Z	49.067	5.75
12	MP3B	Mx	-.042	5.75
13	MP3C	X	-113.949	.5
14	MP3C	Z	65.789	.5
15	MP3C	Mx	0	.5
16	MP3C	X	-113.949	5.75
17	MP3C	Z	65.789	5.75
18	MP3C	Mx	0	5.75
19	MP1A	X	-36.033	1.75
20	MP1A	Z	20.803	1.75
21	MP1A	Mx	.027	1.75
22	MP1A	X	-36.033	3.75
23	MP1A	Z	20.803	3.75
24	MP1A	Mx	.027	3.75
25	MP1B	X	-36.033	1.75
26	MP1B	Z	20.803	1.75
27	MP1B	Mx	-.027	1.75
28	MP1B	X	-36.033	3.75
29	MP1B	Z	20.803	3.75
30	MP1B	Mx	-.027	3.75
31	MP1C	X	-66.282	1.75
32	MP1C	Z	38.268	1.75
33	MP1C	Mx	0	1.75
34	MP1C	X	-66.282	3.75
35	MP1C	Z	38.268	3.75
36	MP1C	Mx	0	3.75
37	MP5A	X	-26.754	2.75
38	MP5A	Z	15.447	2.75
39	MP5A	Mx	.02	2.75
40	MP5B	X	-26.754	2.75
41	MP5B	Z	15.447	2.75
42	MP5B	Mx	-.02	2.75
43	MP5C	X	-43.154	2.75
44	MP5C	Z	24.915	2.75
45	MP5C	Mx	0	2.75
46	MP2A	X	-39.628	2
47	MP2A	Z	22.879	2
48	MP2A	Mx	-.013	2
49	MP2B	X	-39.628	2
50	MP2B	Z	22.879	2
51	MP2B	Mx	.013	2
52	MP2C	X	-52.744	2
53	MP2C	Z	30.452	2
54	MP2C	Mx	0	2
55	MP3A	X	-37.249	2
56	MP3A	Z	21.505	2
57	MP3A	Mx	-.012	2
58	MP3B	X	-37.249	2
59	MP3B	Z	21.505	2
60	MP3B	Mx	.012	2
61	MP3C	X	-52.744	2
62	MP3C	Z	30.452	2
63	MP3C	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-86.985	.5
2	MP3A	Z	0	.5
3	MP3A	Mx	.043	.5
4	MP3A	X	-86.985	5.75
5	MP3A	Z	0	5.75
6	MP3A	Mx	.043	5.75
7	MP3B	X	-120.429	.5
8	MP3B	Z	0	.5
9	MP3B	Mx	-.03	.5
10	MP3B	X	-120.429	5.75
11	MP3B	Z	0	5.75
12	MP3B	Mx	-.03	5.75
13	MP3C	X	-120.429	.5
14	MP3C	Z	0	.5
15	MP3C	Mx	-.03	.5
16	MP3C	X	-120.429	5.75
17	MP3C	Z	0	5.75
18	MP3C	Mx	-.03	5.75
19	MP1A	X	-29.964	1.75
20	MP1A	Z	0	1.75
21	MP1A	Mx	.022	1.75
22	MP1A	X	-29.964	3.75
23	MP1A	Z	0	3.75
24	MP1A	Mx	.022	3.75
25	MP1B	X	-64.893	1.75
26	MP1B	Z	0	1.75
27	MP1B	Mx	-.024	1.75
28	MP1B	X	-64.893	3.75
29	MP1B	Z	0	3.75
30	MP1B	Mx	-.024	3.75
31	MP1C	X	-64.893	1.75
32	MP1C	Z	0	1.75
33	MP1C	Mx	-.024	1.75
34	MP1C	X	-64.893	3.75
35	MP1C	Z	0	3.75
36	MP1C	Mx	-.024	3.75
37	MP5A	X	-24.581	2.75
38	MP5A	Z	0	2.75
39	MP5A	Mx	.018	2.75
40	MP5B	X	-43.518	2.75
41	MP5B	Z	0	2.75
42	MP5B	Mx	-.016	2.75
43	MP5C	X	-43.518	2.75
44	MP5C	Z	0	2.75
45	MP5C	Mx	-.016	2.75
46	MP2A	X	-40.711	2
47	MP2A	Z	0	2
48	MP2A	Mx	-.014	2
49	MP2B	X	-55.855	2
50	MP2B	Z	0	2
51	MP2B	Mx	.009	2
52	MP2C	X	-55.855	2
53	MP2C	Z	0	2
54	MP2C	Mx	.009	2
55	MP3A	X	-37.047	2
56	MP3A	Z	0	2
57	MP3A	Mx	-.012	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP3B	X	-54.939	2
59	MP3B	Z	0	2
60	MP3B	Mx	.009	2
61	MP3C	X	-54.939	2
62	MP3C	Z	0	2
63	MP3C	Mx	.009	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-84.986	.5
2	MP3A	Z	-49.067	.5
3	MP3A	Mx	.042	.5
4	MP3A	X	-84.986	5.75
5	MP3A	Z	-49.067	5.75
6	MP3A	Mx	.042	5.75
7	MP3B	X	-113.949	.5
8	MP3B	Z	-65.789	.5
9	MP3B	Mx	0	.5
10	MP3B	X	-113.949	5.75
11	MP3B	Z	-65.789	5.75
12	MP3B	Mx	0	5.75
13	MP3C	X	-84.986	.5
14	MP3C	Z	-49.067	.5
15	MP3C	Mx	-.042	.5
16	MP3C	X	-84.986	5.75
17	MP3C	Z	-49.067	5.75
18	MP3C	Mx	-.042	5.75
19	MP1A	X	-36.033	1.75
20	MP1A	Z	-20.803	1.75
21	MP1A	Mx	.027	1.75
22	MP1A	X	-36.033	3.75
23	MP1A	Z	-20.803	3.75
24	MP1A	Mx	.027	3.75
25	MP1B	X	-66.282	1.75
26	MP1B	Z	-38.268	1.75
27	MP1B	Mx	0	1.75
28	MP1B	X	-66.282	3.75
29	MP1B	Z	-38.268	3.75
30	MP1B	Mx	0	3.75
31	MP1C	X	-36.033	1.75
32	MP1C	Z	-20.803	1.75
33	MP1C	Mx	-.027	1.75
34	MP1C	X	-36.033	3.75
35	MP1C	Z	-20.803	3.75
36	MP1C	Mx	-.027	3.75
37	MP5A	X	-26.754	2.75
38	MP5A	Z	-15.447	2.75
39	MP5A	Mx	.02	2.75
40	MP5B	X	-43.154	2.75
41	MP5B	Z	-24.915	2.75
42	MP5B	Mx	0	2.75
43	MP5C	X	-26.754	2.75
44	MP5C	Z	-15.447	2.75
45	MP5C	Mx	-.02	2.75
46	MP2A	X	-39.628	2
47	MP2A	Z	-22.879	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
48	MP2A	Mx	-.013	2
49	MP2B	X	-52.744	2
50	MP2B	Z	-30.452	2
51	MP2B	Mx	0	2
52	MP2C	X	-39.628	2
53	MP2C	Z	-22.879	2
54	MP2C	Mx	.013	2
55	MP3A	X	-37.249	2
56	MP3A	Z	-21.505	2
57	MP3A	Mx	-.012	2
58	MP3B	X	-52.744	2
59	MP3B	Z	-30.452	2
60	MP3B	Mx	0	2
61	MP3C	X	-37.249	2
62	MP3C	Z	-21.505	2
63	MP3C	Mx	.012	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-60.215	.5
2	MP3A	Z	-104.295	.5
3	MP3A	Mx	.03	.5
4	MP3A	X	-60.215	5.75
5	MP3A	Z	-104.295	5.75
6	MP3A	Mx	.03	5.75
7	MP3B	X	-60.215	.5
8	MP3B	Z	-104.295	.5
9	MP3B	Mx	.03	.5
10	MP3B	X	-60.215	5.75
11	MP3B	Z	-104.295	5.75
12	MP3B	Mx	.03	5.75
13	MP3C	X	-43.493	.5
14	MP3C	Z	-75.332	.5
15	MP3C	Mx	-.043	.5
16	MP3C	X	-43.493	5.75
17	MP3C	Z	-75.332	5.75
18	MP3C	Mx	-.043	5.75
19	MP1A	X	-32.447	1.75
20	MP1A	Z	-56.199	1.75
21	MP1A	Mx	.024	1.75
22	MP1A	X	-32.447	3.75
23	MP1A	Z	-56.199	3.75
24	MP1A	Mx	.024	3.75
25	MP1B	X	-32.447	1.75
26	MP1B	Z	-56.199	1.75
27	MP1B	Mx	.024	1.75
28	MP1B	X	-32.447	3.75
29	MP1B	Z	-56.199	3.75
30	MP1B	Mx	.024	3.75
31	MP1C	X	-14.982	1.75
32	MP1C	Z	-25.949	1.75
33	MP1C	Mx	-.022	1.75
34	MP1C	X	-14.982	3.75
35	MP1C	Z	-25.949	3.75
36	MP1C	Mx	-.022	3.75
37	MP5A	X	-21.759	2.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
38	MP5A	Z	-37.688	2.75
39	MP5A	Mx	.016	2.75
40	MP5B	X	-21.759	2.75
41	MP5B	Z	-37.688	2.75
42	MP5B	Mx	.016	2.75
43	MP5C	X	-12.291	2.75
44	MP5C	Z	-21.288	2.75
45	MP5C	Mx	-.018	2.75
46	MP2A	X	-27.928	2
47	MP2A	Z	-48.372	2
48	MP2A	Mx	-.009	2
49	MP2B	X	-27.928	2
50	MP2B	Z	-48.372	2
51	MP2B	Mx	-.009	2
52	MP2C	X	-20.355	2
53	MP2C	Z	-35.257	2
54	MP2C	Mx	.014	2
55	MP3A	X	-27.47	2
56	MP3A	Z	-47.579	2
57	MP3A	Mx	-.009	2
58	MP3B	X	-27.47	2
59	MP3B	Z	-47.579	2
60	MP3B	Mx	-.009	2
61	MP3C	X	-18.523	2
62	MP3C	Z	-32.084	2
63	MP3C	Mx	.012	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	0	.5
2	MP3A	Z	-26.995	.5
3	MP3A	Mx	0	.5
4	MP3A	X	0	5.75
5	MP3A	Z	-26.995	5.75
6	MP3A	Mx	0	5.75
7	MP3B	X	0	.5
8	MP3B	Z	-20.716	.5
9	MP3B	Mx	.009	.5
10	MP3B	X	0	5.75
11	MP3B	Z	-20.716	5.75
12	MP3B	Mx	.009	5.75
13	MP3C	X	0	.5
14	MP3C	Z	-20.716	.5
15	MP3C	Mx	-.009	.5
16	MP3C	X	0	5.75
17	MP3C	Z	-20.716	5.75
18	MP3C	Mx	-.009	5.75
19	MP1A	X	0	1.75
20	MP1A	Z	-16.085	1.75
21	MP1A	Mx	0	1.75
22	MP1A	X	0	3.75
23	MP1A	Z	-16.085	3.75
24	MP1A	Mx	0	3.75
25	MP1B	X	0	1.75
26	MP1B	Z	-9.164	1.75
27	MP1B	Mx	.006	1.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
28	MP1B	X	0	3.75
29	MP1B	Z	-9.164	3.75
30	MP1B	Mx	.006	3.75
31	MP1C	X	0	1.75
32	MP1C	Z	-9.164	1.75
33	MP1C	Mx	-.006	1.75
34	MP1C	X	0	3.75
35	MP1C	Z	-9.164	3.75
36	MP1C	Mx	-.006	3.75
37	MP5A	X	0	2.75
38	MP5A	Z	-11.367	2.75
39	MP5A	Mx	0	2.75
40	MP5B	X	0	2.75
41	MP5B	Z	-7.448	2.75
42	MP5B	Mx	.005	2.75
43	MP5C	X	0	2.75
44	MP5C	Z	-7.448	2.75
45	MP5C	Mx	-.005	2.75
46	MP2A	X	0	2
47	MP2A	Z	-13.564	2
48	MP2A	Mx	0	2
49	MP2B	X	0	2
50	MP2B	Z	-10.471	2
51	MP2B	Mx	-.003	2
52	MP2C	X	0	2
53	MP2C	Z	-10.471	2
54	MP2C	Mx	.003	2
55	MP3A	X	0	2
56	MP3A	Z	-13.564	2
57	MP3A	Mx	0	2
58	MP3B	X	0	2
59	MP3B	Z	-9.914	2
60	MP3B	Mx	-.003	2
61	MP3C	X	0	2
62	MP3C	Z	-9.914	2
63	MP3C	Mx	.003	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	12.451	.5
2	MP3A	Z	-21.566	.5
3	MP3A	Mx	-.006	.5
4	MP3A	X	12.451	5.75
5	MP3A	Z	-21.566	5.75
6	MP3A	Mx	-.006	5.75
7	MP3B	X	9.312	.5
8	MP3B	Z	-16.128	.5
9	MP3B	Mx	.009	.5
10	MP3B	X	9.312	5.75
11	MP3B	Z	-16.128	5.75
12	MP3B	Mx	.009	5.75
13	MP3C	X	12.451	.5
14	MP3C	Z	-21.566	.5
15	MP3C	Mx	-.006	.5
16	MP3C	X	12.451	5.75
17	MP3C	Z	-21.566	5.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP3C	Mx	-.006	5.75
19	MP1A	X	6.889	1.75
20	MP1A	Z	-11.932	1.75
21	MP1A	Mx	-.005	1.75
22	MP1A	X	6.889	3.75
23	MP1A	Z	-11.932	3.75
24	MP1A	Mx	-.005	3.75
25	MP1B	X	3.429	1.75
26	MP1B	Z	-5.939	1.75
27	MP1B	Mx	.005	1.75
28	MP1B	X	3.429	3.75
29	MP1B	Z	-5.939	3.75
30	MP1B	Mx	.005	3.75
31	MP1C	X	6.889	1.75
32	MP1C	Z	-11.932	1.75
33	MP1C	Mx	-.005	1.75
34	MP1C	X	6.889	3.75
35	MP1C	Z	-11.932	3.75
36	MP1C	Mx	-.005	3.75
37	MP5A	X	5.03	2.75
38	MP5A	Z	-8.713	2.75
39	MP5A	Mx	-.004	2.75
40	MP5B	X	3.071	2.75
41	MP5B	Z	-5.319	2.75
42	MP5B	Mx	.005	2.75
43	MP5C	X	5.03	2.75
44	MP5C	Z	-8.713	2.75
45	MP5C	Mx	-.004	2.75
46	MP2A	X	6.267	2
47	MP2A	Z	-10.854	2
48	MP2A	Mx	.002	2
49	MP2B	X	4.72	2
50	MP2B	Z	-8.175	2
51	MP2B	Mx	-.003	2
52	MP2C	X	6.267	2
53	MP2C	Z	-10.854	2
54	MP2C	Mx	.002	2
55	MP3A	X	6.174	2
56	MP3A	Z	-10.693	2
57	MP3A	Mx	.002	2
58	MP3B	X	4.348	2
59	MP3B	Z	-7.532	2
60	MP3B	Mx	-.003	2
61	MP3C	X	6.174	2
62	MP3C	Z	-10.693	2
63	MP3C	Mx	.002	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	17.941	.5
2	MP3A	Z	-10.358	.5
3	MP3A	Mx	-.009	.5
4	MP3A	X	17.941	5.75
5	MP3A	Z	-10.358	5.75
6	MP3A	Mx	-.009	5.75
7	MP3B	X	17.941	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
8	MP3B	Z	-10.358	.5
9	MP3B	Mx	.009	.5
10	MP3B	X	17.941	5.75
11	MP3B	Z	-10.358	5.75
12	MP3B	Mx	.009	5.75
13	MP3C	X	23.378	.5
14	MP3C	Z	-13.497	.5
15	MP3C	Mx	0	.5
16	MP3C	X	23.378	5.75
17	MP3C	Z	-13.497	5.75
18	MP3C	Mx	0	5.75
19	MP1A	X	7.937	1.75
20	MP1A	Z	-4.582	1.75
21	MP1A	Mx	-.006	1.75
22	MP1A	X	7.937	3.75
23	MP1A	Z	-4.582	3.75
24	MP1A	Mx	-.006	3.75
25	MP1B	X	7.937	1.75
26	MP1B	Z	-4.582	1.75
27	MP1B	Mx	.006	1.75
28	MP1B	X	7.937	3.75
29	MP1B	Z	-4.582	3.75
30	MP1B	Mx	.006	3.75
31	MP1C	X	13.93	1.75
32	MP1C	Z	-8.042	1.75
33	MP1C	Mx	0	1.75
34	MP1C	X	13.93	3.75
35	MP1C	Z	-8.042	3.75
36	MP1C	Mx	0	3.75
37	MP5A	X	6.45	2.75
38	MP5A	Z	-3.724	2.75
39	MP5A	Mx	-.005	2.75
40	MP5B	X	6.45	2.75
41	MP5B	Z	-3.724	2.75
42	MP5B	Mx	.005	2.75
43	MP5C	X	9.844	2.75
44	MP5C	Z	-5.683	2.75
45	MP5C	Mx	0	2.75
46	MP2A	X	9.068	2
47	MP2A	Z	-5.235	2
48	MP2A	Mx	.003	2
49	MP2B	X	9.068	2
50	MP2B	Z	-5.235	2
51	MP2B	Mx	-.003	2
52	MP2C	X	11.747	2
53	MP2C	Z	-6.782	2
54	MP2C	Mx	0	2
55	MP3A	X	8.586	2
56	MP3A	Z	-4.957	2
57	MP3A	Mx	.003	2
58	MP3B	X	8.586	2
59	MP3B	Z	-4.957	2
60	MP3B	Mx	-.003	2
61	MP3C	X	11.747	2
62	MP3C	Z	-6.782	2
63	MP3C	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	18.623	.5
2	MP3A	Z	0	.5
3	MP3A	Mx	-.009	.5
4	MP3A	X	18.623	5.75
5	MP3A	Z	0	5.75
6	MP3A	Mx	-.009	5.75
7	MP3B	X	24.902	.5
8	MP3B	Z	0	.5
9	MP3B	Mx	.006	.5
10	MP3B	X	24.902	5.75
11	MP3B	Z	0	5.75
12	MP3B	Mx	.006	5.75
13	MP3C	X	24.902	.5
14	MP3C	Z	0	.5
15	MP3C	Mx	.006	.5
16	MP3C	X	24.902	5.75
17	MP3C	Z	0	5.75
18	MP3C	Mx	.006	5.75
19	MP1A	X	6.858	1.75
20	MP1A	Z	0	1.75
21	MP1A	Mx	-.005	1.75
22	MP1A	X	6.858	3.75
23	MP1A	Z	0	3.75
24	MP1A	Mx	-.005	3.75
25	MP1B	X	13.778	1.75
26	MP1B	Z	0	1.75
27	MP1B	Mx	.005	1.75
28	MP1B	X	13.778	3.75
29	MP1B	Z	0	3.75
30	MP1B	Mx	.005	3.75
31	MP1C	X	13.778	1.75
32	MP1C	Z	0	1.75
33	MP1C	Mx	.005	1.75
34	MP1C	X	13.778	3.75
35	MP1C	Z	0	3.75
36	MP1C	Mx	.005	3.75
37	MP5A	X	6.142	2.75
38	MP5A	Z	0	2.75
39	MP5A	Mx	-.005	2.75
40	MP5B	X	10.06	2.75
41	MP5B	Z	0	2.75
42	MP5B	Mx	.004	2.75
43	MP5C	X	10.06	2.75
44	MP5C	Z	0	2.75
45	MP5C	Mx	.004	2.75
46	MP2A	X	9.439	2
47	MP2A	Z	0	2
48	MP2A	Mx	.003	2
49	MP2B	X	12.533	2
50	MP2B	Z	0	2
51	MP2B	Mx	-.002	2
52	MP2C	X	12.533	2
53	MP2C	Z	0	2
54	MP2C	Mx	-.002	2
55	MP3A	X	8.697	2
56	MP3A	Z	0	2
57	MP3A	Mx	.003	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP3B	X	12.348	2
59	MP3B	Z	0	2
60	MP3B	Mx	-.002	2
61	MP3C	X	12.348	2
62	MP3C	Z	0	2
63	MP3C	Mx	-.002	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	17.941	.5
2	MP3A	Z	10.358	.5
3	MP3A	Mx	-.009	.5
4	MP3A	X	17.941	5.75
5	MP3A	Z	10.358	5.75
6	MP3A	Mx	-.009	5.75
7	MP3B	X	23.378	.5
8	MP3B	Z	13.497	.5
9	MP3B	Mx	0	.5
10	MP3B	X	23.378	5.75
11	MP3B	Z	13.497	5.75
12	MP3B	Mx	0	5.75
13	MP3C	X	17.941	.5
14	MP3C	Z	10.358	.5
15	MP3C	Mx	.009	.5
16	MP3C	X	17.941	5.75
17	MP3C	Z	10.358	5.75
18	MP3C	Mx	.009	5.75
19	MP1A	X	7.937	1.75
20	MP1A	Z	4.582	1.75
21	MP1A	Mx	-.006	1.75
22	MP1A	X	7.937	3.75
23	MP1A	Z	4.582	3.75
24	MP1A	Mx	-.006	3.75
25	MP1B	X	13.93	1.75
26	MP1B	Z	8.042	1.75
27	MP1B	Mx	0	1.75
28	MP1B	X	13.93	3.75
29	MP1B	Z	8.042	3.75
30	MP1B	Mx	0	3.75
31	MP1C	X	7.937	1.75
32	MP1C	Z	4.582	1.75
33	MP1C	Mx	.006	1.75
34	MP1C	X	7.937	3.75
35	MP1C	Z	4.582	3.75
36	MP1C	Mx	.006	3.75
37	MP5A	X	6.45	2.75
38	MP5A	Z	3.724	2.75
39	MP5A	Mx	-.005	2.75
40	MP5B	X	9.844	2.75
41	MP5B	Z	5.683	2.75
42	MP5B	Mx	0	2.75
43	MP5C	X	6.45	2.75
44	MP5C	Z	3.724	2.75
45	MP5C	Mx	.005	2.75
46	MP2A	X	9.068	2
47	MP2A	Z	5.235	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
48	MP2A	Mx	.003	2
49	MP2B	X	11.747	2
50	MP2B	Z	6.782	2
51	MP2B	Mx	0	2
52	MP2C	X	9.068	2
53	MP2C	Z	5.235	2
54	MP2C	Mx	-.003	2
55	MP3A	X	8.586	2
56	MP3A	Z	4.957	2
57	MP3A	Mx	.003	2
58	MP3B	X	11.747	2
59	MP3B	Z	6.782	2
60	MP3B	Mx	0	2
61	MP3C	X	8.586	2
62	MP3C	Z	4.957	2
63	MP3C	Mx	-.003	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	12.451	.5
2	MP3A	Z	21.566	.5
3	MP3A	Mx	-.006	.5
4	MP3A	X	12.451	5.75
5	MP3A	Z	21.566	5.75
6	MP3A	Mx	-.006	5.75
7	MP3B	X	12.451	.5
8	MP3B	Z	21.566	.5
9	MP3B	Mx	-.006	.5
10	MP3B	X	12.451	5.75
11	MP3B	Z	21.566	5.75
12	MP3B	Mx	-.006	5.75
13	MP3C	X	9.312	.5
14	MP3C	Z	16.128	.5
15	MP3C	Mx	.009	.5
16	MP3C	X	9.312	5.75
17	MP3C	Z	16.128	5.75
18	MP3C	Mx	.009	5.75
19	MP1A	X	6.889	1.75
20	MP1A	Z	11.932	1.75
21	MP1A	Mx	-.005	1.75
22	MP1A	X	6.889	3.75
23	MP1A	Z	11.932	3.75
24	MP1A	Mx	-.005	3.75
25	MP1B	X	6.889	1.75
26	MP1B	Z	11.932	1.75
27	MP1B	Mx	-.005	1.75
28	MP1B	X	6.889	3.75
29	MP1B	Z	11.932	3.75
30	MP1B	Mx	-.005	3.75
31	MP1C	X	3.429	1.75
32	MP1C	Z	5.939	1.75
33	MP1C	Mx	.005	1.75
34	MP1C	X	3.429	3.75
35	MP1C	Z	5.939	3.75
36	MP1C	Mx	.005	3.75
37	MP5A	X	5.03	2.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
38	MP5A	Z	8.713	2.75
39	MP5A	Mx	-.004	2.75
40	MP5B	X	5.03	2.75
41	MP5B	Z	8.713	2.75
42	MP5B	Mx	-.004	2.75
43	MP5C	X	3.071	2.75
44	MP5C	Z	5.319	2.75
45	MP5C	Mx	.005	2.75
46	MP2A	X	6.267	2
47	MP2A	Z	10.854	2
48	MP2A	Mx	.002	2
49	MP2B	X	6.267	2
50	MP2B	Z	10.854	2
51	MP2B	Mx	.002	2
52	MP2C	X	4.72	2
53	MP2C	Z	8.175	2
54	MP2C	Mx	-.003	2
55	MP3A	X	6.174	2
56	MP3A	Z	10.693	2
57	MP3A	Mx	.002	2
58	MP3B	X	6.174	2
59	MP3B	Z	10.693	2
60	MP3B	Mx	.002	2
61	MP3C	X	4.348	2
62	MP3C	Z	7.532	2
63	MP3C	Mx	-.003	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	0	.5
2	MP3A	Z	26.995	.5
3	MP3A	Mx	0	.5
4	MP3A	X	0	5.75
5	MP3A	Z	26.995	5.75
6	MP3A	Mx	0	5.75
7	MP3B	X	0	.5
8	MP3B	Z	20.716	.5
9	MP3B	Mx	-.009	.5
10	MP3B	X	0	5.75
11	MP3B	Z	20.716	5.75
12	MP3B	Mx	-.009	5.75
13	MP3C	X	0	.5
14	MP3C	Z	20.716	.5
15	MP3C	Mx	.009	.5
16	MP3C	X	0	5.75
17	MP3C	Z	20.716	5.75
18	MP3C	Mx	.009	5.75
19	MP1A	X	0	1.75
20	MP1A	Z	16.085	1.75
21	MP1A	Mx	0	1.75
22	MP1A	X	0	3.75
23	MP1A	Z	16.085	3.75
24	MP1A	Mx	0	3.75
25	MP1B	X	0	1.75
26	MP1B	Z	9.164	1.75
27	MP1B	Mx	-.006	1.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
28	MP1B	X	0	3.75
29	MP1B	Z	9.164	3.75
30	MP1B	Mx	-.006	3.75
31	MP1C	X	0	1.75
32	MP1C	Z	9.164	1.75
33	MP1C	Mx	.006	1.75
34	MP1C	X	0	3.75
35	MP1C	Z	9.164	3.75
36	MP1C	Mx	.006	3.75
37	MP5A	X	0	2.75
38	MP5A	Z	11.367	2.75
39	MP5A	Mx	0	2.75
40	MP5B	X	0	2.75
41	MP5B	Z	7.448	2.75
42	MP5B	Mx	-.005	2.75
43	MP5C	X	0	2.75
44	MP5C	Z	7.448	2.75
45	MP5C	Mx	.005	2.75
46	MP2A	X	0	2
47	MP2A	Z	13.564	2
48	MP2A	Mx	0	2
49	MP2B	X	0	2
50	MP2B	Z	10.471	2
51	MP2B	Mx	.003	2
52	MP2C	X	0	2
53	MP2C	Z	10.471	2
54	MP2C	Mx	-.003	2
55	MP3A	X	0	2
56	MP3A	Z	13.564	2
57	MP3A	Mx	0	2
58	MP3B	X	0	2
59	MP3B	Z	9.914	2
60	MP3B	Mx	.003	2
61	MP3C	X	0	2
62	MP3C	Z	9.914	2
63	MP3C	Mx	-.003	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-12.451	.5
2	MP3A	Z	21.566	.5
3	MP3A	Mx	.006	.5
4	MP3A	X	-12.451	5.75
5	MP3A	Z	21.566	5.75
6	MP3A	Mx	.006	5.75
7	MP3B	X	-9.312	.5
8	MP3B	Z	16.128	.5
9	MP3B	Mx	-.009	.5
10	MP3B	X	-9.312	5.75
11	MP3B	Z	16.128	5.75
12	MP3B	Mx	-.009	5.75
13	MP3C	X	-12.451	.5
14	MP3C	Z	21.566	.5
15	MP3C	Mx	.006	.5
16	MP3C	X	-12.451	5.75
17	MP3C	Z	21.566	5.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP3C	Mx	.006	5.75
19	MP1A	X	-6.889	1.75
20	MP1A	Z	11.932	1.75
21	MP1A	Mx	.005	1.75
22	MP1A	X	-6.889	3.75
23	MP1A	Z	11.932	3.75
24	MP1A	Mx	.005	3.75
25	MP1B	X	-3.429	1.75
26	MP1B	Z	5.939	1.75
27	MP1B	Mx	-.005	1.75
28	MP1B	X	-3.429	3.75
29	MP1B	Z	5.939	3.75
30	MP1B	Mx	-.005	3.75
31	MP1C	X	-6.889	1.75
32	MP1C	Z	11.932	1.75
33	MP1C	Mx	.005	1.75
34	MP1C	X	-6.889	3.75
35	MP1C	Z	11.932	3.75
36	MP1C	Mx	.005	3.75
37	MP5A	X	-5.03	2.75
38	MP5A	Z	8.713	2.75
39	MP5A	Mx	.004	2.75
40	MP5B	X	-3.071	2.75
41	MP5B	Z	5.319	2.75
42	MP5B	Mx	-.005	2.75
43	MP5C	X	-5.03	2.75
44	MP5C	Z	8.713	2.75
45	MP5C	Mx	.004	2.75
46	MP2A	X	-6.267	2
47	MP2A	Z	10.854	2
48	MP2A	Mx	-.002	2
49	MP2B	X	-4.72	2
50	MP2B	Z	8.175	2
51	MP2B	Mx	.003	2
52	MP2C	X	-6.267	2
53	MP2C	Z	10.854	2
54	MP2C	Mx	-.002	2
55	MP3A	X	-6.174	2
56	MP3A	Z	10.693	2
57	MP3A	Mx	-.002	2
58	MP3B	X	-4.348	2
59	MP3B	Z	7.532	2
60	MP3B	Mx	.003	2
61	MP3C	X	-6.174	2
62	MP3C	Z	10.693	2
63	MP3C	Mx	-.002	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-17.941	.5
2	MP3A	Z	10.358	.5
3	MP3A	Mx	.009	.5
4	MP3A	X	-17.941	5.75
5	MP3A	Z	10.358	5.75
6	MP3A	Mx	.009	5.75
7	MP3B	X	-17.941	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
8	MP3B	Z	10.358	.5
9	MP3B	Mx	-.009	.5
10	MP3B	X	-17.941	5.75
11	MP3B	Z	10.358	5.75
12	MP3B	Mx	-.009	5.75
13	MP3C	X	-23.378	.5
14	MP3C	Z	13.497	.5
15	MP3C	Mx	0	.5
16	MP3C	X	-23.378	5.75
17	MP3C	Z	13.497	5.75
18	MP3C	Mx	0	5.75
19	MP1A	X	-7.937	1.75
20	MP1A	Z	4.582	1.75
21	MP1A	Mx	.006	1.75
22	MP1A	X	-7.937	3.75
23	MP1A	Z	4.582	3.75
24	MP1A	Mx	.006	3.75
25	MP1B	X	-7.937	1.75
26	MP1B	Z	4.582	1.75
27	MP1B	Mx	-.006	1.75
28	MP1B	X	-7.937	3.75
29	MP1B	Z	4.582	3.75
30	MP1B	Mx	-.006	3.75
31	MP1C	X	-13.93	1.75
32	MP1C	Z	8.042	1.75
33	MP1C	Mx	0	1.75
34	MP1C	X	-13.93	3.75
35	MP1C	Z	8.042	3.75
36	MP1C	Mx	0	3.75
37	MP5A	X	-6.45	2.75
38	MP5A	Z	3.724	2.75
39	MP5A	Mx	.005	2.75
40	MP5B	X	-6.45	2.75
41	MP5B	Z	3.724	2.75
42	MP5B	Mx	-.005	2.75
43	MP5C	X	-9.844	2.75
44	MP5C	Z	5.683	2.75
45	MP5C	Mx	0	2.75
46	MP2A	X	-9.068	2
47	MP2A	Z	5.235	2
48	MP2A	Mx	-.003	2
49	MP2B	X	-9.068	2
50	MP2B	Z	5.235	2
51	MP2B	Mx	.003	2
52	MP2C	X	-11.747	2
53	MP2C	Z	6.782	2
54	MP2C	Mx	0	2
55	MP3A	X	-8.586	2
56	MP3A	Z	4.957	2
57	MP3A	Mx	-.003	2
58	MP3B	X	-8.586	2
59	MP3B	Z	4.957	2
60	MP3B	Mx	.003	2
61	MP3C	X	-11.747	2
62	MP3C	Z	6.782	2
63	MP3C	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-18.623	.5
2	MP3A	Z	0	.5
3	MP3A	Mx	.009	.5
4	MP3A	X	-18.623	5.75
5	MP3A	Z	0	5.75
6	MP3A	Mx	.009	5.75
7	MP3B	X	-24.902	.5
8	MP3B	Z	0	.5
9	MP3B	Mx	-.006	.5
10	MP3B	X	-24.902	5.75
11	MP3B	Z	0	5.75
12	MP3B	Mx	-.006	5.75
13	MP3C	X	-24.902	.5
14	MP3C	Z	0	.5
15	MP3C	Mx	-.006	.5
16	MP3C	X	-24.902	5.75
17	MP3C	Z	0	5.75
18	MP3C	Mx	-.006	5.75
19	MP1A	X	-6.858	1.75
20	MP1A	Z	0	1.75
21	MP1A	Mx	.005	1.75
22	MP1A	X	-6.858	3.75
23	MP1A	Z	0	3.75
24	MP1A	Mx	.005	3.75
25	MP1B	X	-13.778	1.75
26	MP1B	Z	0	1.75
27	MP1B	Mx	-.005	1.75
28	MP1B	X	-13.778	3.75
29	MP1B	Z	0	3.75
30	MP1B	Mx	-.005	3.75
31	MP1C	X	-13.778	1.75
32	MP1C	Z	0	1.75
33	MP1C	Mx	-.005	1.75
34	MP1C	X	-13.778	3.75
35	MP1C	Z	0	3.75
36	MP1C	Mx	-.005	3.75
37	MP5A	X	-6.142	2.75
38	MP5A	Z	0	2.75
39	MP5A	Mx	.005	2.75
40	MP5B	X	-10.06	2.75
41	MP5B	Z	0	2.75
42	MP5B	Mx	-.004	2.75
43	MP5C	X	-10.06	2.75
44	MP5C	Z	0	2.75
45	MP5C	Mx	-.004	2.75
46	MP2A	X	-9.439	2
47	MP2A	Z	0	2
48	MP2A	Mx	-.003	2
49	MP2B	X	-12.533	2
50	MP2B	Z	0	2
51	MP2B	Mx	.002	2
52	MP2C	X	-12.533	2
53	MP2C	Z	0	2
54	MP2C	Mx	.002	2
55	MP3A	X	-8.697	2
56	MP3A	Z	0	2
57	MP3A	Mx	-.003	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP3B	X	-12.348	2
59	MP3B	Z	0	2
60	MP3B	Mx	.002	2
61	MP3C	X	-12.348	2
62	MP3C	Z	0	2
63	MP3C	Mx	.002	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-17.941	.5
2	MP3A	Z	-10.358	.5
3	MP3A	Mx	.009	.5
4	MP3A	X	-17.941	5.75
5	MP3A	Z	-10.358	5.75
6	MP3A	Mx	.009	5.75
7	MP3B	X	-23.378	.5
8	MP3B	Z	-13.497	.5
9	MP3B	Mx	0	.5
10	MP3B	X	-23.378	5.75
11	MP3B	Z	-13.497	5.75
12	MP3B	Mx	0	5.75
13	MP3C	X	-17.941	.5
14	MP3C	Z	-10.358	.5
15	MP3C	Mx	-.009	.5
16	MP3C	X	-17.941	5.75
17	MP3C	Z	-10.358	5.75
18	MP3C	Mx	-.009	5.75
19	MP1A	X	-7.937	1.75
20	MP1A	Z	-4.582	1.75
21	MP1A	Mx	.006	1.75
22	MP1A	X	-7.937	3.75
23	MP1A	Z	-4.582	3.75
24	MP1A	Mx	.006	3.75
25	MP1B	X	-13.93	1.75
26	MP1B	Z	-8.042	1.75
27	MP1B	Mx	0	1.75
28	MP1B	X	-13.93	3.75
29	MP1B	Z	-8.042	3.75
30	MP1B	Mx	0	3.75
31	MP1C	X	-7.937	1.75
32	MP1C	Z	-4.582	1.75
33	MP1C	Mx	-.006	1.75
34	MP1C	X	-7.937	3.75
35	MP1C	Z	-4.582	3.75
36	MP1C	Mx	-.006	3.75
37	MP5A	X	-6.45	2.75
38	MP5A	Z	-3.724	2.75
39	MP5A	Mx	.005	2.75
40	MP5B	X	-9.844	2.75
41	MP5B	Z	-5.683	2.75
42	MP5B	Mx	0	2.75
43	MP5C	X	-6.45	2.75
44	MP5C	Z	-3.724	2.75
45	MP5C	Mx	-.005	2.75
46	MP2A	X	-9.068	2
47	MP2A	Z	-5.235	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
48	MP2A	Mx	-.003	2
49	MP2B	X	-11.747	2
50	MP2B	Z	-6.782	2
51	MP2B	Mx	0	2
52	MP2C	X	-9.068	2
53	MP2C	Z	-5.235	2
54	MP2C	Mx	.003	2
55	MP3A	X	-8.586	2
56	MP3A	Z	-4.957	2
57	MP3A	Mx	-.003	2
58	MP3B	X	-11.747	2
59	MP3B	Z	-6.782	2
60	MP3B	Mx	0	2
61	MP3C	X	-8.586	2
62	MP3C	Z	-4.957	2
63	MP3C	Mx	.003	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-12.451	.5
2	MP3A	Z	-21.566	.5
3	MP3A	Mx	.006	.5
4	MP3A	X	-12.451	5.75
5	MP3A	Z	-21.566	5.75
6	MP3A	Mx	.006	5.75
7	MP3B	X	-12.451	.5
8	MP3B	Z	-21.566	.5
9	MP3B	Mx	.006	.5
10	MP3B	X	-12.451	5.75
11	MP3B	Z	-21.566	5.75
12	MP3B	Mx	.006	5.75
13	MP3C	X	-9.312	.5
14	MP3C	Z	-16.128	.5
15	MP3C	Mx	-.009	.5
16	MP3C	X	-9.312	5.75
17	MP3C	Z	-16.128	5.75
18	MP3C	Mx	-.009	5.75
19	MP1A	X	-6.889	1.75
20	MP1A	Z	-11.932	1.75
21	MP1A	Mx	.005	1.75
22	MP1A	X	-6.889	3.75
23	MP1A	Z	-11.932	3.75
24	MP1A	Mx	.005	3.75
25	MP1B	X	-6.889	1.75
26	MP1B	Z	-11.932	1.75
27	MP1B	Mx	.005	1.75
28	MP1B	X	-6.889	3.75
29	MP1B	Z	-11.932	3.75
30	MP1B	Mx	.005	3.75
31	MP1C	X	-3.429	1.75
32	MP1C	Z	-5.939	1.75
33	MP1C	Mx	-.005	1.75
34	MP1C	X	-3.429	3.75
35	MP1C	Z	-5.939	3.75
36	MP1C	Mx	-.005	3.75
37	MP5A	X	-5.03	2.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
38	MP5A	Z	-8.713	2.75
39	MP5A	Mx	.004	2.75
40	MP5B	X	-5.03	2.75
41	MP5B	Z	-8.713	2.75
42	MP5B	Mx	.004	2.75
43	MP5C	X	-3.071	2.75
44	MP5C	Z	-5.319	2.75
45	MP5C	Mx	-.005	2.75
46	MP2A	X	-6.267	2
47	MP2A	Z	-10.854	2
48	MP2A	Mx	-.002	2
49	MP2B	X	-6.267	2
50	MP2B	Z	-10.854	2
51	MP2B	Mx	-.002	2
52	MP2C	X	-4.72	2
53	MP2C	Z	-8.175	2
54	MP2C	Mx	.003	2
55	MP3A	X	-6.174	2
56	MP3A	Z	-10.693	2
57	MP3A	Mx	-.002	2
58	MP3B	X	-6.174	2
59	MP3B	Z	-10.693	2
60	MP3B	Mx	-.002	2
61	MP3C	X	-4.348	2
62	MP3C	Z	-7.532	2
63	MP3C	Mx	.003	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	0	.5
2	MP3A	Z	-8.801	.5
3	MP3A	Mx	0	.5
4	MP3A	X	0	5.75
5	MP3A	Z	-8.801	5.75
6	MP3A	Mx	0	5.75
7	MP3B	X	0	.5
8	MP3B	Z	-6.564	.5
9	MP3B	Mx	.003	.5
10	MP3B	X	0	5.75
11	MP3B	Z	-6.564	5.75
12	MP3B	Mx	.003	5.75
13	MP3C	X	0	.5
14	MP3C	Z	-6.564	.5
15	MP3C	Mx	-.003	.5
16	MP3C	X	0	5.75
17	MP3C	Z	-6.564	5.75
18	MP3C	Mx	-.003	5.75
19	MP1A	X	0	1.75
20	MP1A	Z	-5.119	1.75
21	MP1A	Mx	0	1.75
22	MP1A	X	0	3.75
23	MP1A	Z	-5.119	3.75
24	MP1A	Mx	0	3.75
25	MP1B	X	0	1.75
26	MP1B	Z	-2.783	1.75
27	MP1B	Mx	.002	1.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
28	MP1B	X	0	3.75
29	MP1B	Z	-2.783	3.75
30	MP1B	Mx	.002	3.75
31	MP1C	X	0	1.75
32	MP1C	Z	-2.783	1.75
33	MP1C	Mx	-.002	1.75
34	MP1C	X	0	3.75
35	MP1C	Z	-2.783	3.75
36	MP1C	Mx	-.002	3.75
37	MP5A	X	0	2.75
38	MP5A	Z	-3.333	2.75
39	MP5A	Mx	0	2.75
40	MP5B	X	0	2.75
41	MP5B	Z	-2.066	2.75
42	MP5B	Mx	.001	2.75
43	MP5C	X	0	2.75
44	MP5C	Z	-2.066	2.75
45	MP5C	Mx	-.001	2.75
46	MP2A	X	0	2
47	MP2A	Z	-4.074	2
48	MP2A	Mx	0	2
49	MP2B	X	0	2
50	MP2B	Z	-3.061	2
51	MP2B	Mx	-.000884	2
52	MP2C	X	0	2
53	MP2C	Z	-3.061	2
54	MP2C	Mx	.000884	2
55	MP3A	X	0	2
56	MP3A	Z	-4.074	2
57	MP3A	Mx	0	2
58	MP3B	X	0	2
59	MP3B	Z	-2.877	2
60	MP3B	Mx	-.000831	2
61	MP3C	X	0	2
62	MP3C	Z	-2.877	2
63	MP3C	Mx	.000831	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	4.027	.5
2	MP3A	Z	-6.976	.5
3	MP3A	Mx	-.002	.5
4	MP3A	X	4.027	5.75
5	MP3A	Z	-6.976	5.75
6	MP3A	Mx	-.002	5.75
7	MP3B	X	2.909	.5
8	MP3B	Z	-5.039	.5
9	MP3B	Mx	.003	.5
10	MP3B	X	2.909	5.75
11	MP3B	Z	-5.039	5.75
12	MP3B	Mx	.003	5.75
13	MP3C	X	4.027	.5
14	MP3C	Z	-6.976	.5
15	MP3C	Mx	-.002	.5
16	MP3C	X	4.027	5.75
17	MP3C	Z	-6.976	5.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP3C	Mx	-.002	5.75
19	MP1A	X	2.17	1.75
20	MP1A	Z	-3.759	1.75
21	MP1A	Mx	-.002	1.75
22	MP1A	X	2.17	3.75
23	MP1A	Z	-3.759	3.75
24	MP1A	Mx	-.002	3.75
25	MP1B	X	1.002	1.75
26	MP1B	Z	-1.736	1.75
27	MP1B	Mx	.002	1.75
28	MP1B	X	1.002	3.75
29	MP1B	Z	-1.736	3.75
30	MP1B	Mx	.002	3.75
31	MP1C	X	2.17	1.75
32	MP1C	Z	-3.759	1.75
33	MP1C	Mx	-.002	1.75
34	MP1C	X	2.17	3.75
35	MP1C	Z	-3.759	3.75
36	MP1C	Mx	-.002	3.75
37	MP5A	X	1.455	2.75
38	MP5A	Z	-2.521	2.75
39	MP5A	Mx	-.001	2.75
40	MP5B	X	.822	2.75
41	MP5B	Z	-1.424	2.75
42	MP5B	Mx	.001	2.75
43	MP5C	X	1.455	2.75
44	MP5C	Z	-2.521	2.75
45	MP5C	Mx	-.001	2.75
46	MP2A	X	1.868	2
47	MP2A	Z	-3.235	2
48	MP2A	Mx	.000623	2
49	MP2B	X	1.361	2
50	MP2B	Z	-2.358	2
51	MP2B	Mx	-.000908	2
52	MP2C	X	1.868	2
53	MP2C	Z	-3.235	2
54	MP2C	Mx	.000623	2
55	MP3A	X	1.837	2
56	MP3A	Z	-3.182	2
57	MP3A	Mx	.000612	2
58	MP3B	X	1.239	2
59	MP3B	Z	-2.146	2
60	MP3B	Mx	-.000826	2
61	MP3C	X	1.837	2
62	MP3C	Z	-3.182	2
63	MP3C	Mx	.000612	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	5.684	.5
2	MP3A	Z	-3.282	.5
3	MP3A	Mx	-.003	.5
4	MP3A	X	5.684	5.75
5	MP3A	Z	-3.282	5.75
6	MP3A	Mx	-.003	5.75
7	MP3B	X	5.684	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
8	MP3B	Z	-3.282	.5
9	MP3B	Mx	.003	.5
10	MP3B	X	5.684	5.75
11	MP3B	Z	-3.282	5.75
12	MP3B	Mx	.003	5.75
13	MP3C	X	7.621	.5
14	MP3C	Z	-4.4	.5
15	MP3C	Mx	0	.5
16	MP3C	X	7.621	5.75
17	MP3C	Z	-4.4	5.75
18	MP3C	Mx	0	5.75
19	MP1A	X	2.41	1.75
20	MP1A	Z	-1.391	1.75
21	MP1A	Mx	-.002	1.75
22	MP1A	X	2.41	3.75
23	MP1A	Z	-1.391	3.75
24	MP1A	Mx	-.002	3.75
25	MP1B	X	2.41	1.75
26	MP1B	Z	-1.391	1.75
27	MP1B	Mx	.002	1.75
28	MP1B	X	2.41	3.75
29	MP1B	Z	-1.391	3.75
30	MP1B	Mx	.002	3.75
31	MP1C	X	4.433	1.75
32	MP1C	Z	-2.56	1.75
33	MP1C	Mx	0	1.75
34	MP1C	X	4.433	3.75
35	MP1C	Z	-2.56	3.75
36	MP1C	Mx	0	3.75
37	MP5A	X	1.789	2.75
38	MP5A	Z	-1.033	2.75
39	MP5A	Mx	-.001	2.75
40	MP5B	X	1.789	2.75
41	MP5B	Z	-1.033	2.75
42	MP5B	Mx	.001	2.75
43	MP5C	X	2.886	2.75
44	MP5C	Z	-1.666	2.75
45	MP5C	Mx	0	2.75
46	MP2A	X	2.651	2
47	MP2A	Z	-1.53	2
48	MP2A	Mx	.000884	2
49	MP2B	X	2.651	2
50	MP2B	Z	-1.53	2
51	MP2B	Mx	-.000884	2
52	MP2C	X	3.528	2
53	MP2C	Z	-2.037	2
54	MP2C	Mx	0	2
55	MP3A	X	2.491	2
56	MP3A	Z	-1.438	2
57	MP3A	Mx	.00083	2
58	MP3B	X	2.491	2
59	MP3B	Z	-1.438	2
60	MP3B	Mx	-.00083	2
61	MP3C	X	3.528	2
62	MP3C	Z	-2.037	2
63	MP3C	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	5.818	.5
2	MP3A	Z	0	.5
3	MP3A	Mx	-.003	.5
4	MP3A	X	5.818	5.75
5	MP3A	Z	0	5.75
6	MP3A	Mx	-.003	5.75
7	MP3B	X	8.055	.5
8	MP3B	Z	0	.5
9	MP3B	Mx	.002	.5
10	MP3B	X	8.055	5.75
11	MP3B	Z	0	5.75
12	MP3B	Mx	.002	5.75
13	MP3C	X	8.055	.5
14	MP3C	Z	0	.5
15	MP3C	Mx	.002	.5
16	MP3C	X	8.055	5.75
17	MP3C	Z	0	5.75
18	MP3C	Mx	.002	5.75
19	MP1A	X	2.004	1.75
20	MP1A	Z	0	1.75
21	MP1A	Mx	-.002	1.75
22	MP1A	X	2.004	3.75
23	MP1A	Z	0	3.75
24	MP1A	Mx	-.002	3.75
25	MP1B	X	4.34	1.75
26	MP1B	Z	0	1.75
27	MP1B	Mx	.002	1.75
28	MP1B	X	4.34	3.75
29	MP1B	Z	0	3.75
30	MP1B	Mx	.002	3.75
31	MP1C	X	4.34	1.75
32	MP1C	Z	0	1.75
33	MP1C	Mx	.002	1.75
34	MP1C	X	4.34	3.75
35	MP1C	Z	0	3.75
36	MP1C	Mx	.002	3.75
37	MP5A	X	1.644	2.75
38	MP5A	Z	0	2.75
39	MP5A	Mx	-.001	2.75
40	MP5B	X	2.911	2.75
41	MP5B	Z	0	2.75
42	MP5B	Mx	.001	2.75
43	MP5C	X	2.911	2.75
44	MP5C	Z	0	2.75
45	MP5C	Mx	.001	2.75
46	MP2A	X	2.723	2
47	MP2A	Z	0	2
48	MP2A	Mx	.000908	2
49	MP2B	X	3.736	2
50	MP2B	Z	0	2
51	MP2B	Mx	-.000623	2
52	MP2C	X	3.736	2
53	MP2C	Z	0	2
54	MP2C	Mx	-.000623	2
55	MP3A	X	2.478	2
56	MP3A	Z	0	2
57	MP3A	Mx	.000826	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP3B	X	3.675	2
59	MP3B	Z	0	2
60	MP3B	Mx	-.000612	2
61	MP3C	X	3.675	2
62	MP3C	Z	0	2
63	MP3C	Mx	-.000612	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	5.684	.5
2	MP3A	Z	3.282	.5
3	MP3A	Mx	-.003	.5
4	MP3A	X	5.684	5.75
5	MP3A	Z	3.282	5.75
6	MP3A	Mx	-.003	5.75
7	MP3B	X	7.621	.5
8	MP3B	Z	4.4	.5
9	MP3B	Mx	0	.5
10	MP3B	X	7.621	5.75
11	MP3B	Z	4.4	5.75
12	MP3B	Mx	0	5.75
13	MP3C	X	5.684	.5
14	MP3C	Z	3.282	.5
15	MP3C	Mx	.003	.5
16	MP3C	X	5.684	5.75
17	MP3C	Z	3.282	5.75
18	MP3C	Mx	.003	5.75
19	MP1A	X	2.41	1.75
20	MP1A	Z	1.391	1.75
21	MP1A	Mx	-.002	1.75
22	MP1A	X	2.41	3.75
23	MP1A	Z	1.391	3.75
24	MP1A	Mx	-.002	3.75
25	MP1B	X	4.433	1.75
26	MP1B	Z	2.56	1.75
27	MP1B	Mx	0	1.75
28	MP1B	X	4.433	3.75
29	MP1B	Z	2.56	3.75
30	MP1B	Mx	0	3.75
31	MP1C	X	2.41	1.75
32	MP1C	Z	1.391	1.75
33	MP1C	Mx	.002	1.75
34	MP1C	X	2.41	3.75
35	MP1C	Z	1.391	3.75
36	MP1C	Mx	.002	3.75
37	MP5A	X	1.789	2.75
38	MP5A	Z	1.033	2.75
39	MP5A	Mx	-.001	2.75
40	MP5B	X	2.886	2.75
41	MP5B	Z	1.666	2.75
42	MP5B	Mx	0	2.75
43	MP5C	X	1.789	2.75
44	MP5C	Z	1.033	2.75
45	MP5C	Mx	.001	2.75
46	MP2A	X	2.651	2
47	MP2A	Z	1.53	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
48	MP2A	Mx	.000884	2
49	MP2B	X	3.528	2
50	MP2B	Z	2.037	2
51	MP2B	Mx	0	2
52	MP2C	X	2.651	2
53	MP2C	Z	1.53	2
54	MP2C	Mx	-.000884	2
55	MP3A	X	2.491	2
56	MP3A	Z	1.438	2
57	MP3A	Mx	.00083	2
58	MP3B	X	3.528	2
59	MP3B	Z	2.037	2
60	MP3B	Mx	0	2
61	MP3C	X	2.491	2
62	MP3C	Z	1.438	2
63	MP3C	Mx	-.00083	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	4.027	.5
2	MP3A	Z	6.976	.5
3	MP3A	Mx	-.002	.5
4	MP3A	X	4.027	5.75
5	MP3A	Z	6.976	5.75
6	MP3A	Mx	-.002	5.75
7	MP3B	X	4.027	.5
8	MP3B	Z	6.976	.5
9	MP3B	Mx	-.002	.5
10	MP3B	X	4.027	5.75
11	MP3B	Z	6.976	5.75
12	MP3B	Mx	-.002	5.75
13	MP3C	X	2.909	.5
14	MP3C	Z	5.039	.5
15	MP3C	Mx	.003	.5
16	MP3C	X	2.909	5.75
17	MP3C	Z	5.039	5.75
18	MP3C	Mx	.003	5.75
19	MP1A	X	2.17	1.75
20	MP1A	Z	3.759	1.75
21	MP1A	Mx	-.002	1.75
22	MP1A	X	2.17	3.75
23	MP1A	Z	3.759	3.75
24	MP1A	Mx	-.002	3.75
25	MP1B	X	2.17	1.75
26	MP1B	Z	3.759	1.75
27	MP1B	Mx	-.002	1.75
28	MP1B	X	2.17	3.75
29	MP1B	Z	3.759	3.75
30	MP1B	Mx	-.002	3.75
31	MP1C	X	1.002	1.75
32	MP1C	Z	1.736	1.75
33	MP1C	Mx	.002	1.75
34	MP1C	X	1.002	3.75
35	MP1C	Z	1.736	3.75
36	MP1C	Mx	.002	3.75
37	MP5A	X	1.455	2.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
38	MP5A	Z	2.521	2.75
39	MP5A	Mx	-.001	2.75
40	MP5B	X	1.455	2.75
41	MP5B	Z	2.521	2.75
42	MP5B	Mx	-.001	2.75
43	MP5C	X	.822	2.75
44	MP5C	Z	1.424	2.75
45	MP5C	Mx	.001	2.75
46	MP2A	X	1.868	2
47	MP2A	Z	3.235	2
48	MP2A	Mx	.000623	2
49	MP2B	X	1.868	2
50	MP2B	Z	3.235	2
51	MP2B	Mx	.000623	2
52	MP2C	X	1.361	2
53	MP2C	Z	2.358	2
54	MP2C	Mx	-.000908	2
55	MP3A	X	1.837	2
56	MP3A	Z	3.182	2
57	MP3A	Mx	.000612	2
58	MP3B	X	1.837	2
59	MP3B	Z	3.182	2
60	MP3B	Mx	.000612	2
61	MP3C	X	1.239	2
62	MP3C	Z	2.146	2
63	MP3C	Mx	-.000826	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	0	.5
2	MP3A	Z	8.801	.5
3	MP3A	Mx	0	.5
4	MP3A	X	0	5.75
5	MP3A	Z	8.801	5.75
6	MP3A	Mx	0	5.75
7	MP3B	X	0	.5
8	MP3B	Z	6.564	.5
9	MP3B	Mx	-.003	.5
10	MP3B	X	0	5.75
11	MP3B	Z	6.564	5.75
12	MP3B	Mx	-.003	5.75
13	MP3C	X	0	.5
14	MP3C	Z	6.564	.5
15	MP3C	Mx	.003	.5
16	MP3C	X	0	5.75
17	MP3C	Z	6.564	5.75
18	MP3C	Mx	.003	5.75
19	MP1A	X	0	1.75
20	MP1A	Z	5.119	1.75
21	MP1A	Mx	0	1.75
22	MP1A	X	0	3.75
23	MP1A	Z	5.119	3.75
24	MP1A	Mx	0	3.75
25	MP1B	X	0	1.75
26	MP1B	Z	2.783	1.75
27	MP1B	Mx	-.002	1.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
28	MP1B	X	0	3.75
29	MP1B	Z	2.783	3.75
30	MP1B	Mx	-.002	3.75
31	MP1C	X	0	1.75
32	MP1C	Z	2.783	1.75
33	MP1C	Mx	.002	1.75
34	MP1C	X	0	3.75
35	MP1C	Z	2.783	3.75
36	MP1C	Mx	.002	3.75
37	MP5A	X	0	2.75
38	MP5A	Z	3.333	2.75
39	MP5A	Mx	0	2.75
40	MP5B	X	0	2.75
41	MP5B	Z	2.066	2.75
42	MP5B	Mx	-.001	2.75
43	MP5C	X	0	2.75
44	MP5C	Z	2.066	2.75
45	MP5C	Mx	.001	2.75
46	MP2A	X	0	2
47	MP2A	Z	4.074	2
48	MP2A	Mx	0	2
49	MP2B	X	0	2
50	MP2B	Z	3.061	2
51	MP2B	Mx	.000884	2
52	MP2C	X	0	2
53	MP2C	Z	3.061	2
54	MP2C	Mx	-.000884	2
55	MP3A	X	0	2
56	MP3A	Z	4.074	2
57	MP3A	Mx	0	2
58	MP3B	X	0	2
59	MP3B	Z	2.877	2
60	MP3B	Mx	.000831	2
61	MP3C	X	0	2
62	MP3C	Z	2.877	2
63	MP3C	Mx	-.000831	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-4.027	.5
2	MP3A	Z	6.976	.5
3	MP3A	Mx	.002	.5
4	MP3A	X	-4.027	5.75
5	MP3A	Z	6.976	5.75
6	MP3A	Mx	.002	5.75
7	MP3B	X	-2.909	.5
8	MP3B	Z	5.039	.5
9	MP3B	Mx	-.003	.5
10	MP3B	X	-2.909	5.75
11	MP3B	Z	5.039	5.75
12	MP3B	Mx	-.003	5.75
13	MP3C	X	-4.027	.5
14	MP3C	Z	6.976	.5
15	MP3C	Mx	.002	.5
16	MP3C	X	-4.027	5.75
17	MP3C	Z	6.976	5.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP3C	Mx	.002	5.75
19	MP1A	X	-2.17	1.75
20	MP1A	Z	3.759	1.75
21	MP1A	Mx	.002	1.75
22	MP1A	X	-2.17	3.75
23	MP1A	Z	3.759	3.75
24	MP1A	Mx	.002	3.75
25	MP1B	X	-1.002	1.75
26	MP1B	Z	1.736	1.75
27	MP1B	Mx	-.002	1.75
28	MP1B	X	-1.002	3.75
29	MP1B	Z	1.736	3.75
30	MP1B	Mx	-.002	3.75
31	MP1C	X	-2.17	1.75
32	MP1C	Z	3.759	1.75
33	MP1C	Mx	.002	1.75
34	MP1C	X	-2.17	3.75
35	MP1C	Z	3.759	3.75
36	MP1C	Mx	.002	3.75
37	MP5A	X	-1.455	2.75
38	MP5A	Z	2.521	2.75
39	MP5A	Mx	.001	2.75
40	MP5B	X	-.822	2.75
41	MP5B	Z	1.424	2.75
42	MP5B	Mx	-.001	2.75
43	MP5C	X	-1.455	2.75
44	MP5C	Z	2.521	2.75
45	MP5C	Mx	.001	2.75
46	MP2A	X	-1.868	2
47	MP2A	Z	3.235	2
48	MP2A	Mx	-.000623	2
49	MP2B	X	-1.361	2
50	MP2B	Z	2.358	2
51	MP2B	Mx	.000908	2
52	MP2C	X	-1.868	2
53	MP2C	Z	3.235	2
54	MP2C	Mx	-.000623	2
55	MP3A	X	-1.837	2
56	MP3A	Z	3.182	2
57	MP3A	Mx	-.000612	2
58	MP3B	X	-1.239	2
59	MP3B	Z	2.146	2
60	MP3B	Mx	.000826	2
61	MP3C	X	-1.837	2
62	MP3C	Z	3.182	2
63	MP3C	Mx	-.000612	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-5.684	.5
2	MP3A	Z	3.282	.5
3	MP3A	Mx	.003	.5
4	MP3A	X	-5.684	5.75
5	MP3A	Z	3.282	5.75
6	MP3A	Mx	.003	5.75
7	MP3B	X	-5.684	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
8	MP3B	Z	3.282	.5
9	MP3B	Mx	-.003	.5
10	MP3B	X	-5.684	5.75
11	MP3B	Z	3.282	5.75
12	MP3B	Mx	-.003	5.75
13	MP3C	X	-7.621	.5
14	MP3C	Z	4.4	.5
15	MP3C	Mx	0	.5
16	MP3C	X	-7.621	5.75
17	MP3C	Z	4.4	5.75
18	MP3C	Mx	0	5.75
19	MP1A	X	-2.41	1.75
20	MP1A	Z	1.391	1.75
21	MP1A	Mx	.002	1.75
22	MP1A	X	-2.41	3.75
23	MP1A	Z	1.391	3.75
24	MP1A	Mx	.002	3.75
25	MP1B	X	-2.41	1.75
26	MP1B	Z	1.391	1.75
27	MP1B	Mx	-.002	1.75
28	MP1B	X	-2.41	3.75
29	MP1B	Z	1.391	3.75
30	MP1B	Mx	-.002	3.75
31	MP1C	X	-4.433	1.75
32	MP1C	Z	2.56	1.75
33	MP1C	Mx	0	1.75
34	MP1C	X	-4.433	3.75
35	MP1C	Z	2.56	3.75
36	MP1C	Mx	0	3.75
37	MP5A	X	-1.789	2.75
38	MP5A	Z	1.033	2.75
39	MP5A	Mx	.001	2.75
40	MP5B	X	-1.789	2.75
41	MP5B	Z	1.033	2.75
42	MP5B	Mx	-.001	2.75
43	MP5C	X	-2.886	2.75
44	MP5C	Z	1.666	2.75
45	MP5C	Mx	0	2.75
46	MP2A	X	-2.651	2
47	MP2A	Z	1.53	2
48	MP2A	Mx	-.000884	2
49	MP2B	X	-2.651	2
50	MP2B	Z	1.53	2
51	MP2B	Mx	.000884	2
52	MP2C	X	-3.528	2
53	MP2C	Z	2.037	2
54	MP2C	Mx	0	2
55	MP3A	X	-2.491	2
56	MP3A	Z	1.438	2
57	MP3A	Mx	-.00083	2
58	MP3B	X	-2.491	2
59	MP3B	Z	1.438	2
60	MP3B	Mx	.00083	2
61	MP3C	X	-3.528	2
62	MP3C	Z	2.037	2
63	MP3C	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-5.818	.5
2	MP3A	Z	0	.5
3	MP3A	Mx	.003	.5
4	MP3A	X	-5.818	5.75
5	MP3A	Z	0	5.75
6	MP3A	Mx	.003	5.75
7	MP3B	X	-8.055	.5
8	MP3B	Z	0	.5
9	MP3B	Mx	-.002	.5
10	MP3B	X	-8.055	5.75
11	MP3B	Z	0	5.75
12	MP3B	Mx	-.002	5.75
13	MP3C	X	-8.055	.5
14	MP3C	Z	0	.5
15	MP3C	Mx	-.002	.5
16	MP3C	X	-8.055	5.75
17	MP3C	Z	0	5.75
18	MP3C	Mx	-.002	5.75
19	MP1A	X	-2.004	1.75
20	MP1A	Z	0	1.75
21	MP1A	Mx	.002	1.75
22	MP1A	X	-2.004	3.75
23	MP1A	Z	0	3.75
24	MP1A	Mx	.002	3.75
25	MP1B	X	-4.34	1.75
26	MP1B	Z	0	1.75
27	MP1B	Mx	-.002	1.75
28	MP1B	X	-4.34	3.75
29	MP1B	Z	0	3.75
30	MP1B	Mx	-.002	3.75
31	MP1C	X	-4.34	1.75
32	MP1C	Z	0	1.75
33	MP1C	Mx	-.002	1.75
34	MP1C	X	-4.34	3.75
35	MP1C	Z	0	3.75
36	MP1C	Mx	-.002	3.75
37	MP5A	X	-1.644	2.75
38	MP5A	Z	0	2.75
39	MP5A	Mx	.001	2.75
40	MP5B	X	-2.911	2.75
41	MP5B	Z	0	2.75
42	MP5B	Mx	-.001	2.75
43	MP5C	X	-2.911	2.75
44	MP5C	Z	0	2.75
45	MP5C	Mx	-.001	2.75
46	MP2A	X	-2.723	2
47	MP2A	Z	0	2
48	MP2A	Mx	-.000908	2
49	MP2B	X	-3.736	2
50	MP2B	Z	0	2
51	MP2B	Mx	.000623	2
52	MP2C	X	-3.736	2
53	MP2C	Z	0	2
54	MP2C	Mx	.000623	2
55	MP3A	X	-2.478	2
56	MP3A	Z	0	2
57	MP3A	Mx	-.000826	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP3B	X	-3.675	2
59	MP3B	Z	0	2
60	MP3B	Mx	.000612	2
61	MP3C	X	-3.675	2
62	MP3C	Z	0	2
63	MP3C	Mx	.000612	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-5.684	.5
2	MP3A	Z	-3.282	.5
3	MP3A	Mx	.003	.5
4	MP3A	X	-5.684	5.75
5	MP3A	Z	-3.282	5.75
6	MP3A	Mx	.003	5.75
7	MP3B	X	-7.621	.5
8	MP3B	Z	-4.4	.5
9	MP3B	Mx	0	.5
10	MP3B	X	-7.621	5.75
11	MP3B	Z	-4.4	5.75
12	MP3B	Mx	0	5.75
13	MP3C	X	-5.684	.5
14	MP3C	Z	-3.282	.5
15	MP3C	Mx	-.003	.5
16	MP3C	X	-5.684	5.75
17	MP3C	Z	-3.282	5.75
18	MP3C	Mx	-.003	5.75
19	MP1A	X	-2.41	1.75
20	MP1A	Z	-1.391	1.75
21	MP1A	Mx	.002	1.75
22	MP1A	X	-2.41	3.75
23	MP1A	Z	-1.391	3.75
24	MP1A	Mx	.002	3.75
25	MP1B	X	-4.433	1.75
26	MP1B	Z	-2.56	1.75
27	MP1B	Mx	0	1.75
28	MP1B	X	-4.433	3.75
29	MP1B	Z	-2.56	3.75
30	MP1B	Mx	0	3.75
31	MP1C	X	-2.41	1.75
32	MP1C	Z	-1.391	1.75
33	MP1C	Mx	-.002	1.75
34	MP1C	X	-2.41	3.75
35	MP1C	Z	-1.391	3.75
36	MP1C	Mx	-.002	3.75
37	MP5A	X	-1.789	2.75
38	MP5A	Z	-1.033	2.75
39	MP5A	Mx	.001	2.75
40	MP5B	X	-2.886	2.75
41	MP5B	Z	-1.666	2.75
42	MP5B	Mx	0	2.75
43	MP5C	X	-1.789	2.75
44	MP5C	Z	-1.033	2.75
45	MP5C	Mx	-.001	2.75
46	MP2A	X	-2.651	2
47	MP2A	Z	-1.53	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
48	MP2A	Mx	-.000884	2
49	MP2B	X	-3.528	2
50	MP2B	Z	-2.037	2
51	MP2B	Mx	0	2
52	MP2C	X	-2.651	2
53	MP2C	Z	-1.53	2
54	MP2C	Mx	.000884	2
55	MP3A	X	-2.491	2
56	MP3A	Z	-1.438	2
57	MP3A	Mx	-.00083	2
58	MP3B	X	-3.528	2
59	MP3B	Z	-2.037	2
60	MP3B	Mx	0	2
61	MP3C	X	-2.491	2
62	MP3C	Z	-1.438	2
63	MP3C	Mx	.00083	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-4.027	.5
2	MP3A	Z	-6.976	.5
3	MP3A	Mx	.002	.5
4	MP3A	X	-4.027	5.75
5	MP3A	Z	-6.976	5.75
6	MP3A	Mx	.002	5.75
7	MP3B	X	-4.027	.5
8	MP3B	Z	-6.976	.5
9	MP3B	Mx	.002	.5
10	MP3B	X	-4.027	5.75
11	MP3B	Z	-6.976	5.75
12	MP3B	Mx	.002	5.75
13	MP3C	X	-2.909	.5
14	MP3C	Z	-5.039	.5
15	MP3C	Mx	-.003	.5
16	MP3C	X	-2.909	5.75
17	MP3C	Z	-5.039	5.75
18	MP3C	Mx	-.003	5.75
19	MP1A	X	-2.17	1.75
20	MP1A	Z	-3.759	1.75
21	MP1A	Mx	.002	1.75
22	MP1A	X	-2.17	3.75
23	MP1A	Z	-3.759	3.75
24	MP1A	Mx	.002	3.75
25	MP1B	X	-2.17	1.75
26	MP1B	Z	-3.759	1.75
27	MP1B	Mx	.002	1.75
28	MP1B	X	-2.17	3.75
29	MP1B	Z	-3.759	3.75
30	MP1B	Mx	.002	3.75
31	MP1C	X	-1.002	1.75
32	MP1C	Z	-1.736	1.75
33	MP1C	Mx	-.002	1.75
34	MP1C	X	-1.002	3.75
35	MP1C	Z	-1.736	3.75
36	MP1C	Mx	-.002	3.75
37	MP5A	X	-1.455	2.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
38	MP5A	Z	-2.521	2.75
39	MP5A	Mx	.001	2.75
40	MP5B	X	-1.455	2.75
41	MP5B	Z	-2.521	2.75
42	MP5B	Mx	.001	2.75
43	MP5C	X	-.822	2.75
44	MP5C	Z	-1.424	2.75
45	MP5C	Mx	-.001	2.75
46	MP2A	X	-1.868	2
47	MP2A	Z	-3.235	2
48	MP2A	Mx	-.000623	2
49	MP2B	X	-1.868	2
50	MP2B	Z	-3.235	2
51	MP2B	Mx	-.000623	2
52	MP2C	X	-1.361	2
53	MP2C	Z	-2.358	2
54	MP2C	Mx	.000908	2
55	MP3A	X	-1.837	2
56	MP3A	Z	-3.182	2
57	MP3A	Mx	-.000612	2
58	MP3B	X	-1.837	2
59	MP3B	Z	-3.182	2
60	MP3B	Mx	-.000612	2
61	MP3C	X	-1.239	2
62	MP3C	Z	-2.146	2
63	MP3C	Mx	.000826	2

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M20	Y	-500	%100

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M62	Y	-500	%100

Member Point Loads (BLC 79 : Lv1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M4	Y	-250	%50

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M5	Y	-250	%100

Member Point Loads (BLC 81 : Antenna Ev)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	Y	0	.5
2	MP3A	My	0	.5
3	MP3A	Mz	0	.5
4	MP3A	Y	0	5.75
5	MP3A	My	0	5.75
6	MP3A	Mz	0	5.75
7	MP3B	Y	0	.5
8	MP3B	My	0	.5
9	MP3B	Mz	0	.5

Member Point Loads (BLC 81 : Antenna Ev) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
10	MP3B	Y	0	5.75
11	MP3B	My	0	5.75
12	MP3B	Mz	0	5.75
13	MP3C	Y	0	.5
14	MP3C	My	0	.5
15	MP3C	Mz	0	.5
16	MP3C	Y	0	5.75
17	MP3C	My	0	5.75
18	MP3C	Mz	0	5.75
19	MP1A	Y	0	1.75
20	MP1A	My	0	1.75
21	MP1A	Mz	0	1.75
22	MP1A	Y	0	3.75
23	MP1A	My	0	3.75
24	MP1A	Mz	0	3.75
25	MP1B	Y	0	1.75
26	MP1B	My	0	1.75
27	MP1B	Mz	0	1.75
28	MP1B	Y	0	3.75
29	MP1B	My	0	3.75
30	MP1B	Mz	0	3.75
31	MP1C	Y	0	1.75
32	MP1C	My	0	1.75
33	MP1C	Mz	0	1.75
34	MP1C	Y	0	3.75
35	MP1C	My	0	3.75
36	MP1C	Mz	0	3.75
37	MP5A	Y	0	2.75
38	MP5A	My	0	2.75
39	MP5A	Mz	0	2.75
40	MP5B	Y	0	2.75
41	MP5B	My	0	2.75
42	MP5B	Mz	0	2.75
43	MP5C	Y	0	2.75
44	MP5C	My	0	2.75
45	MP5C	Mz	0	2.75
46	MP2A	Y	0	2
47	MP2A	My	0	2
48	MP2A	Mz	0	2
49	MP2B	Y	0	2
50	MP2B	My	0	2
51	MP2B	Mz	0	2
52	MP2C	Y	0	2
53	MP2C	My	0	2
54	MP2C	Mz	0	2
55	MP3A	Y	0	2
56	MP3A	My	0	2
57	MP3A	Mz	0	2
58	MP3B	Y	0	2
59	MP3B	My	0	2
60	MP3B	Mz	0	2
61	MP3C	Y	0	2
62	MP3C	My	0	2
63	MP3C	Mz	0	2

Member Point Loads (BLC 82 : Antenna Eh (0 Deg))

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

Member Point Loads (BLC 82 : Antenna Eh (0 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	Z	-.655	.5
2	MP3A	Mx	0	.5
3	MP3A	Z	-.655	5.75
4	MP3A	Mx	0	5.75
5	MP3B	Z	-.655	.5
6	MP3B	Mx	.000284	.5
7	MP3B	Z	-.655	5.75
8	MP3B	Mx	.000284	5.75
9	MP3C	Z	-.655	.5
10	MP3C	Mx	-.000284	.5
11	MP3C	Z	-.655	5.75
12	MP3C	Mx	-.000284	5.75
13	MP1A	Z	-1.306	1.75
14	MP1A	Mx	0	1.75
15	MP1A	Z	-1.306	3.75
16	MP1A	Mx	0	3.75
17	MP1B	Z	-1.306	1.75
18	MP1B	Mx	.000849	1.75
19	MP1B	Z	-1.306	3.75
20	MP1B	Mx	.000849	3.75
21	MP1C	Z	-1.306	1.75
22	MP1C	Mx	-.000849	1.75
23	MP1C	Z	-1.306	3.75
24	MP1C	Mx	-.000849	3.75
25	MP5A	Z	-.696	2.75
26	MP5A	Mx	0	2.75
27	MP5B	Z	-.696	2.75
28	MP5B	Mx	.000452	2.75
29	MP5C	Z	-.696	2.75
30	MP5C	Mx	-.000452	2.75
31	MP2A	Z	-2.241	2
32	MP2A	Mx	0	2
33	MP2B	Z	-2.241	2
34	MP2B	Mx	-.000647	2
35	MP2C	Z	-2.241	2
36	MP2C	Mx	.000647	2
37	MP3A	Z	-2.109	2
38	MP3A	Mx	0	2
39	MP3B	Z	-2.109	2
40	MP3B	Mx	-.000609	2
41	MP3C	Z	-2.109	2
42	MP3C	Mx	.000609	2

Member Point Loads (BLC 83 : Antenna Eh (90 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	.655	.5
2	MP3A	Mx	-.000328	.5
3	MP3A	X	.655	5.75
4	MP3A	Mx	-.000328	5.75
5	MP3B	X	.655	.5
6	MP3B	Mx	.000164	.5
7	MP3B	X	.655	5.75
8	MP3B	Mx	.000164	5.75
9	MP3C	X	.655	.5
10	MP3C	Mx	.000164	.5
11	MP3C	X	.655	5.75

Member Point Loads (BLC 83 : Antenna Eh (90 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
12	MP3C	Mx	.000164	5.75
13	MP1A	X	1.306	1.75
14	MP1A	Mx	-.00098	1.75
15	MP1A	X	1.306	3.75
16	MP1A	Mx	-.00098	3.75
17	MP1B	X	1.306	1.75
18	MP1B	Mx	.00049	1.75
19	MP1B	X	1.306	3.75
20	MP1B	Mx	.00049	3.75
21	MP1C	X	1.306	1.75
22	MP1C	Mx	.00049	1.75
23	MP1C	X	1.306	3.75
24	MP1C	Mx	.00049	3.75
25	MP5A	X	.696	2.75
26	MP5A	Mx	-.000522	2.75
27	MP5B	X	.696	2.75
28	MP5B	Mx	.000261	2.75
29	MP5C	X	.696	2.75
30	MP5C	Mx	.000261	2.75
31	MP2A	X	2.241	2
32	MP2A	Mx	.000747	2
33	MP2B	X	2.241	2
34	MP2B	Mx	-.000374	2
35	MP2C	X	2.241	2
36	MP2C	Mx	-.000374	2
37	MP3A	X	2.109	2
38	MP3A	Mx	.000703	2
39	MP3B	X	2.109	2
40	MP3B	Mx	-.000352	2
41	MP3C	X	2.109	2
42	MP3C	Mx	-.000352	2

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	Y	-10.23	-10.23	0	%100
2	M2	Y	-6.651	-6.651	0	%100
3	M3	Y	-10.23	-10.23	0	%100
4	M4	Y	-6.651	-6.651	0	%100
5	M5	Y	-6.651	-6.651	0	%100
6	M6	Y	-7.709	-7.709	0	%100
7	M7	Y	-10.23	-10.23	0	%100
8	M8	Y	-7.709	-7.709	0	%100
9	M14	Y	-5.818	-5.818	0	%100
10	M17	Y	-5.818	-5.818	0	%100
11	M18	Y	-5.818	-5.818	0	%100
12	M19	Y	-5.818	-5.818	0	%100
13	MP1A	Y	-5.047	-5.047	0	%100
14	M22	Y	-6.651	-6.651	0	%100
15	M23	Y	-6.651	-6.651	0	%100
16	M24	Y	-6.651	-6.651	0	%100
17	M25	Y	-6.651	-6.651	0	%100
18	M26	Y	-6.651	-6.651	0	%100
19	M27	Y	-6.651	-6.651	0	%100
20	M28	Y	-7.709	-7.709	0	%100
21	M29	Y	-7.709	-7.709	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
22	M35	Y	-5.818	-5.818	0	%100
23	M38	Y	-5.818	-5.818	0	%100
24	M39	Y	-5.818	-5.818	0	%100
25	M40	Y	-5.818	-5.818	0	%100
26	M41	Y	-5.818	-5.818	0	%100
27	M44	Y	-7.709	-7.709	0	%100
28	M45	Y	-7.709	-7.709	0	%100
29	M51	Y	-5.818	-5.818	0	%100
30	M54	Y	-5.818	-5.818	0	%100
31	M55	Y	-5.818	-5.818	0	%100
32	M56	Y	-5.818	-5.818	0	%100
33	M57	Y	-5.818	-5.818	0	%100
34	MP2A	Y	-5.047	-5.047	0	%100
35	MP3A	Y	-5.047	-5.047	0	%100
36	MP4A	Y	-5.047	-5.047	0	%100
37	MP5A	Y	-5.047	-5.047	0	%100
38	MP1C	Y	-5.047	-5.047	0	%100
39	MP2C	Y	-5.047	-5.047	0	%100
40	MP3C	Y	-5.047	-5.047	0	%100
41	MP4C	Y	-5.047	-5.047	0	%100
42	MP5C	Y	-5.047	-5.047	0	%100
43	MP1B	Y	-5.047	-5.047	0	%100
44	MP2B	Y	-5.047	-5.047	0	%100
45	MP3B	Y	-5.047	-5.047	0	%100
46	MP4B	Y	-5.047	-5.047	0	%100
47	MP5B	Y	-5.047	-5.047	0	%100
48	M88	Y	-5.818	-5.818	0	%100
49	M91	Y	-5.818	-5.818	0	%100
50	M94	Y	-5.818	-5.818	0	%100
51	M97	Y	-5.818	-5.818	0	%100
52	M105	Y	-5.76	-5.76	0	%100
53	M113	Y	-5.76	-5.76	0	%100
54	M121	Y	-5.76	-5.76	0	%100
55	M124	Y	-7.709	-7.709	0	%100
56	M125	Y	-7.709	-7.709	0	%100
57	M126	Y	-7.709	-7.709	0	%100
58	M127	Y	-6.701	-6.701	0	%100
59	M128	Y	-6.701	-6.701	0	%100
60	M129	Y	-6.701	-6.701	0	%100
61	M130	Y	-6.701	-6.701	0	%100
62	M131	Y	-6.701	-6.701	0	%100
63	M132	Y	-6.701	-6.701	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-4.885	-4.885	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-9.379	-9.379	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	-4.885	-4.885	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	-10.815	-10.815	0	%100
9	M5	X	0	0	0	%100
10	M5	Z	-9.387	-9.387	0	%100
11	M6	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
12	M6	Z	0	0	0	%100
13	M7	X	0	0	0	%100
14	M7	Z	-19.54	-19.54	0	%100
15	M8	X	0	0	0	%100
16	M8	Z	0	0	0	%100
17	M14	X	0	0	0	%100
18	M14	Z	0	0	0	%100
19	M17	X	0	0	0	%100
20	M17	Z	0	0	0	%100
21	M18	X	0	0	0	%100
22	M18	Z	-5.041	-5.041	0	%100
23	M19	X	0	0	0	%100
24	M19	Z	-5.041	-5.041	0	%100
25	MP1A	X	0	0	0	%100
26	MP1A	Z	-7.735	-7.735	0	%100
27	M22	X	0	0	0	%100
28	M22	Z	-2.345	-2.345	0	%100
29	M23	X	0	0	0	%100
30	M23	Z	-2.704	-2.704	0	%100
31	M24	X	0	0	0	%100
32	M24	Z	-2.347	-2.347	0	%100
33	M25	X	0	0	0	%100
34	M25	Z	-2.345	-2.345	0	%100
35	M26	X	0	0	0	%100
36	M26	Z	-2.704	-2.704	0	%100
37	M27	X	0	0	0	%100
38	M27	Z	-2.345	-2.345	0	%100
39	M28	X	0	0	0	%100
40	M28	Z	-7.121	-7.121	0	%100
41	M29	X	0	0	0	%100
42	M29	Z	-7.119	-7.119	0	%100
43	M35	X	0	0	0	%100
44	M35	Z	-4.946	-4.946	0	%100
45	M38	X	0	0	0	%100
46	M38	Z	-8.244	-8.244	0	%100
47	M39	X	0	0	0	%100
48	M39	Z	-5.035	-5.035	0	%100
49	M40	X	0	0	0	%100
50	M40	Z	-1e-6	-1e-6	0	%100
51	M41	X	0	0	0	%100
52	M41	Z	0	0	0	%100
53	M44	X	0	0	0	%100
54	M44	Z	-7.121	-7.121	0	%100
55	M45	X	0	0	0	%100
56	M45	Z	-7.119	-7.119	0	%100
57	M51	X	0	0	0	%100
58	M51	Z	-4.946	-4.946	0	%100
59	M54	X	0	0	0	%100
60	M54	Z	-8.244	-8.244	0	%100
61	M55	X	0	0	0	%100
62	M55	Z	-1e-6	-1e-6	0	%100
63	M56	X	0	0	0	%100
64	M56	Z	-5.035	-5.035	0	%100
65	M57	X	0	0	0	%100
66	M57	Z	0	0	0	%100
67	MP2A	X	0	0	0	%100
68	MP2A	Z	-7.735	-7.735	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
69	MP3A	X	0	0	0	%100
70	MP3A	Z	-7.735	-7.735	0	%100
71	MP4A	X	0	0	0	%100
72	MP4A	Z	-7.735	-7.735	0	%100
73	MP5A	X	0	0	0	%100
74	MP5A	Z	-7.735	-7.735	0	%100
75	MP1C	X	0	0	0	%100
76	MP1C	Z	-7.735	-7.735	0	%100
77	MP2C	X	0	0	0	%100
78	MP2C	Z	-7.735	-7.735	0	%100
79	MP3C	X	0	0	0	%100
80	MP3C	Z	-7.735	-7.735	0	%100
81	MP4C	X	0	0	0	%100
82	MP4C	Z	-7.735	-7.735	0	%100
83	MP5C	X	0	0	0	%100
84	MP5C	Z	-7.735	-7.735	0	%100
85	MP1B	X	0	0	0	%100
86	MP1B	Z	-7.735	-7.735	0	%100
87	MP2B	X	0	0	0	%100
88	MP2B	Z	-7.735	-7.735	0	%100
89	MP3B	X	0	0	0	%100
90	MP3B	Z	-7.735	-7.735	0	%100
91	MP4B	X	0	0	0	%100
92	MP4B	Z	-7.735	-7.735	0	%100
93	MP5B	X	0	0	0	%100
94	MP5B	Z	-7.735	-7.735	0	%100
95	M88	X	0	0	0	%100
96	M88	Z	-4.295	-4.295	0	%100
97	M91	X	0	0	0	%100
98	M91	Z	-7.158	-7.158	0	%100
99	M94	X	0	0	0	%100
100	M94	Z	-4.295	-4.295	0	%100
101	M97	X	0	0	0	%100
102	M97	Z	-7.158	-7.158	0	%100
103	M105	X	0	0	0	%100
104	M105	Z	-9.363	-9.363	0	%100
105	M113	X	0	0	0	%100
106	M113	Z	-2.341	-2.341	0	%100
107	M121	X	0	0	0	%100
108	M121	Z	-2.341	-2.341	0	%100
109	M124	X	0	0	0	%100
110	M124	Z	-2.933	-2.933	0	%100
111	M125	X	0	0	0	%100
112	M125	Z	-11.732	-11.732	0	%100
113	M126	X	0	0	0	%100
114	M126	Z	-2.933	-2.933	0	%100
115	M127	X	0	0	0	%100
116	M127	Z	-6.262	-6.262	0	%100
117	M128	X	0	0	0	%100
118	M128	Z	-6.262	-6.262	0	%100
119	M129	X	0	0	0	%100
120	M129	Z	-13.559	-13.559	0	%100
121	M130	X	0	0	0	%100
122	M130	Z	-5.68	-5.68	0	%100
123	M131	X	0	0	0	%100
124	M131	Z	-5.68	-5.68	0	%100
125	M132	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
126	M132	Z	-13.559	-13.559	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	7.328	7.328	0	%100
2	M1	Z	-12.692	-12.692	0	%100
3	M2	X	3.517	3.517	0	%100
4	M2	Z	-6.092	-6.092	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	4.056	4.056	0	%100
8	M4	Z	-7.025	-7.025	0	%100
9	M5	X	3.52	3.52	0	%100
10	M5	Z	-6.097	-6.097	0	%100
11	M6	X	1.186	1.186	0	%100
12	M6	Z	-2.055	-2.055	0	%100
13	M7	X	7.252	7.252	0	%100
14	M7	Z	-12.561	-12.561	0	%100
15	M8	X	1.187	1.187	0	%100
16	M8	Z	-2.055	-2.055	0	%100
17	M14	X	.824	.824	0	%100
18	M14	Z	-1.428	-1.428	0	%100
19	M17	X	1.374	1.374	0	%100
20	M17	Z	-2.38	-2.38	0	%100
21	M18	X	.841	.841	0	%100
22	M18	Z	-1.457	-1.457	0	%100
23	M19	X	3.359	3.359	0	%100
24	M19	Z	-5.817	-5.817	0	%100
25	MP1A	X	3.868	3.868	0	%100
26	MP1A	Z	-6.699	-6.699	0	%100
27	M22	X	3.517	3.517	0	%100
28	M22	Z	-6.092	-6.092	0	%100
29	M23	X	4.056	4.056	0	%100
30	M23	Z	-7.025	-7.025	0	%100
31	M24	X	3.52	3.52	0	%100
32	M24	Z	-6.097	-6.097	0	%100
33	M25	X	0	0	0	%100
34	M25	Z	0	0	0	%100
35	M26	X	0	0	0	%100
36	M26	Z	0	0	0	%100
37	M27	X	0	0	0	%100
38	M27	Z	0	0	0	%100
39	M28	X	1.187	1.187	0	%100
40	M28	Z	-2.056	-2.056	0	%100
41	M29	X	1.187	1.187	0	%100
42	M29	Z	-2.055	-2.055	0	%100
43	M35	X	.824	.824	0	%100
44	M35	Z	-1.428	-1.428	0	%100
45	M38	X	1.374	1.374	0	%100
46	M38	Z	-2.38	-2.38	0	%100
47	M39	X	3.359	3.359	0	%100
48	M39	Z	-5.817	-5.817	0	%100
49	M40	X	.841	.841	0	%100
50	M40	Z	-1.457	-1.457	0	%100
51	M41	X	.716	.716	0	%100
52	M41	Z	-1.24	-1.24	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
53	M44	X	4.747	4.747	0	%100
54	M44	Z	-8.223	-8.223	0	%100
55	M45	X	4.746	4.746	0	%100
56	M45	Z	-8.22	-8.22	0	%100
57	M51	X	3.298	3.298	0	%100
58	M51	Z	-5.712	-5.712	0	%100
59	M54	X	5.496	5.496	0	%100
60	M54	Z	-9.519	-9.519	0	%100
61	M55	X	.838	.838	0	%100
62	M55	Z	-1.452	-1.452	0	%100
63	M56	X	.838	.838	0	%100
64	M56	Z	-1.452	-1.452	0	%100
65	M57	X	1.193	1.193	0	%100
66	M57	Z	-2.066	-2.066	0	%100
67	MP2A	X	3.868	3.868	0	%100
68	MP2A	Z	-6.699	-6.699	0	%100
69	MP3A	X	3.868	3.868	0	%100
70	MP3A	Z	-6.699	-6.699	0	%100
71	MP4A	X	3.868	3.868	0	%100
72	MP4A	Z	-6.699	-6.699	0	%100
73	MP5A	X	3.868	3.868	0	%100
74	MP5A	Z	-6.699	-6.699	0	%100
75	MP1C	X	3.868	3.868	0	%100
76	MP1C	Z	-6.699	-6.699	0	%100
77	MP2C	X	3.868	3.868	0	%100
78	MP2C	Z	-6.699	-6.699	0	%100
79	MP3C	X	3.868	3.868	0	%100
80	MP3C	Z	-6.699	-6.699	0	%100
81	MP4C	X	3.868	3.868	0	%100
82	MP4C	Z	-6.699	-6.699	0	%100
83	MP5C	X	3.868	3.868	0	%100
84	MP5C	Z	-6.699	-6.699	0	%100
85	MP1B	X	3.868	3.868	0	%100
86	MP1B	Z	-6.699	-6.699	0	%100
87	MP2B	X	3.868	3.868	0	%100
88	MP2B	Z	-6.699	-6.699	0	%100
89	MP3B	X	3.868	3.868	0	%100
90	MP3B	Z	-6.699	-6.699	0	%100
91	MP4B	X	3.868	3.868	0	%100
92	MP4B	Z	-6.699	-6.699	0	%100
93	MP5B	X	3.868	3.868	0	%100
94	MP5B	Z	-6.699	-6.699	0	%100
95	M88	X	.716	.716	0	%100
96	M88	Z	-1.24	-1.24	0	%100
97	M91	X	1.193	1.193	0	%100
98	M91	Z	-2.066	-2.066	0	%100
99	M94	X	2.863	2.863	0	%100
100	M94	Z	-4.959	-4.959	0	%100
101	M97	X	4.772	4.772	0	%100
102	M97	Z	-8.266	-8.266	0	%100
103	M105	X	3.511	3.511	0	%100
104	M105	Z	-6.082	-6.082	0	%100
105	M113	X	3.511	3.511	0	%100
106	M113	Z	-6.082	-6.082	0	%100
107	M121	X	0	0	0	%100
108	M121	Z	0	0	0	%100
109	M124	X	4.399	4.399	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
110	M124	Z	-7.62	-7.62	0	%100
111	M125	X	4.399	4.399	0	%100
112	M125	Z	-7.62	-7.62	0	%100
113	M126	X	0	0	0	%100
114	M126	Z	0	0	0	%100
115	M127	X	1.721	1.721	0	%100
116	M127	Z	-2.981	-2.981	0	%100
117	M128	X	5.66	5.66	0	%100
118	M128	Z	-9.804	-9.804	0	%100
119	M129	X	5.66	5.66	0	%100
120	M129	Z	-9.804	-9.804	0	%100
121	M130	X	1.721	1.721	0	%100
122	M130	Z	-2.981	-2.981	0	%100
123	M131	X	5.37	5.37	0	%100
124	M131	Z	-9.3	-9.3	0	%100
125	M132	X	5.37	5.37	0	%100
126	M132	Z	-9.3	-9.3	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	16.923	16.923	0	%100
2	M1	Z	-9.771	-9.771	0	%100
3	M2	X	2.031	2.031	0	%100
4	M2	Z	-1.172	-1.172	0	%100
5	M3	X	4.231	4.231	0	%100
6	M3	Z	-2.443	-2.443	0	%100
7	M4	X	2.342	2.342	0	%100
8	M4	Z	-1.352	-1.352	0	%100
9	M5	X	2.032	2.032	0	%100
10	M5	Z	-1.173	-1.173	0	%100
11	M6	X	6.165	6.165	0	%100
12	M6	Z	-3.559	-3.559	0	%100
13	M7	X	4.101	4.101	0	%100
14	M7	Z	-2.368	-2.368	0	%100
15	M8	X	6.165	6.165	0	%100
16	M8	Z	-3.56	-3.56	0	%100
17	M14	X	4.284	4.284	0	%100
18	M14	Z	-2.473	-2.473	0	%100
19	M17	X	7.139	7.139	0	%100
20	M17	Z	-4.122	-4.122	0	%100
21	M18	X	1e-6	1e-6	0	%100
22	M18	Z	-1e-6	-1e-6	0	%100
23	M19	X	4.361	4.361	0	%100
24	M19	Z	-2.518	-2.518	0	%100
25	MP1A	X	6.699	6.699	0	%100
26	MP1A	Z	-3.868	-3.868	0	%100
27	M22	X	8.122	8.122	0	%100
28	M22	Z	-4.689	-4.689	0	%100
29	M23	X	9.366	9.366	0	%100
30	M23	Z	-5.408	-5.408	0	%100
31	M24	X	8.129	8.129	0	%100
32	M24	Z	-4.693	-4.693	0	%100
33	M25	X	2.031	2.031	0	%100
34	M25	Z	-1.172	-1.172	0	%100
35	M26	X	2.342	2.342	0	%100
36	M26	Z	-1.352	-1.352	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
37	M27	X	2.031	2.031	0	%100
38	M27	Z	-1.172	-1.172	0	%100
39	M28	X	0	0	0	%100
40	M28	Z	0	0	0	%100
41	M29	X	0	0	0	%100
42	M29	Z	0	0	0	%100
43	M35	X	0	0	0	%100
44	M35	Z	0	0	0	%100
45	M38	X	0	0	0	%100
46	M38	Z	0	0	0	%100
47	M39	X	4.365	4.365	0	%100
48	M39	Z	-2.52	-2.52	0	%100
49	M40	X	4.365	4.365	0	%100
50	M40	Z	-2.52	-2.52	0	%100
51	M41	X	3.72	3.72	0	%100
52	M41	Z	-2.147	-2.147	0	%100
53	M44	X	6.167	6.167	0	%100
54	M44	Z	-3.561	-3.561	0	%100
55	M45	X	6.165	6.165	0	%100
56	M45	Z	-3.56	-3.56	0	%100
57	M51	X	4.284	4.284	0	%100
58	M51	Z	-2.473	-2.473	0	%100
59	M54	X	7.139	7.139	0	%100
60	M54	Z	-4.122	-4.122	0	%100
61	M55	X	4.361	4.361	0	%100
62	M55	Z	-2.518	-2.518	0	%100
63	M56	X	1e-6	1e-6	0	%100
64	M56	Z	-1e-6	-1e-6	0	%100
65	M57	X	6.199	6.199	0	%100
66	M57	Z	-3.579	-3.579	0	%100
67	MP2A	X	6.699	6.699	0	%100
68	MP2A	Z	-3.868	-3.868	0	%100
69	MP3A	X	6.699	6.699	0	%100
70	MP3A	Z	-3.868	-3.868	0	%100
71	MP4A	X	6.699	6.699	0	%100
72	MP4A	Z	-3.868	-3.868	0	%100
73	MP5A	X	6.699	6.699	0	%100
74	MP5A	Z	-3.868	-3.868	0	%100
75	MP1C	X	6.699	6.699	0	%100
76	MP1C	Z	-3.868	-3.868	0	%100
77	MP2C	X	6.699	6.699	0	%100
78	MP2C	Z	-3.868	-3.868	0	%100
79	MP3C	X	6.699	6.699	0	%100
80	MP3C	Z	-3.868	-3.868	0	%100
81	MP4C	X	6.699	6.699	0	%100
82	MP4C	Z	-3.868	-3.868	0	%100
83	MP5C	X	6.699	6.699	0	%100
84	MP5C	Z	-3.868	-3.868	0	%100
85	MP1B	X	6.699	6.699	0	%100
86	MP1B	Z	-3.868	-3.868	0	%100
87	MP2B	X	6.699	6.699	0	%100
88	MP2B	Z	-3.868	-3.868	0	%100
89	MP3B	X	6.699	6.699	0	%100
90	MP3B	Z	-3.868	-3.868	0	%100
91	MP4B	X	6.699	6.699	0	%100
92	MP4B	Z	-3.868	-3.868	0	%100
93	MP5B	X	6.699	6.699	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
94	MP5B	Z	-3.868	-3.868	0	%100
95	M88	X	0	0	0	%100
96	M88	Z	0	0	0	%100
97	M91	X	0	0	0	%100
98	M91	Z	0	0	0	%100
99	M94	X	3.72	3.72	0	%100
100	M94	Z	-2.147	-2.147	0	%100
101	M97	X	6.199	6.199	0	%100
102	M97	Z	-3.579	-3.579	0	%100
103	M105	X	2.027	2.027	0	%100
104	M105	Z	-1.17	-1.17	0	%100
105	M113	X	8.109	8.109	0	%100
106	M113	Z	-4.682	-4.682	0	%100
107	M121	X	2.027	2.027	0	%100
108	M121	Z	-1.17	-1.17	0	%100
109	M124	X	10.16	10.16	0	%100
110	M124	Z	-5.866	-5.866	0	%100
111	M125	X	2.54	2.54	0	%100
112	M125	Z	-1.466	-1.466	0	%100
113	M126	X	2.54	2.54	0	%100
114	M126	Z	-1.466	-1.466	0	%100
115	M127	X	4.919	4.919	0	%100
116	M127	Z	-2.84	-2.84	0	%100
117	M128	X	11.743	11.743	0	%100
118	M128	Z	-6.78	-6.78	0	%100
119	M129	X	5.423	5.423	0	%100
120	M129	Z	-3.131	-3.131	0	%100
121	M130	X	5.423	5.423	0	%100
122	M130	Z	-3.131	-3.131	0	%100
123	M131	X	11.743	11.743	0	%100
124	M131	Z	-6.78	-6.78	0	%100
125	M132	X	4.919	4.919	0	%100
126	M132	Z	-2.84	-2.84	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	14.656	14.656	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	14.656	14.656	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	0	0	0	%100
9	M5	X	0	0	0	%100
10	M5	Z	0	0	0	%100
11	M6	X	9.492	9.492	0	%100
12	M6	Z	0	0	0	%100
13	M7	X	.002	.002	0	%100
14	M7	Z	0	0	0	%100
15	M8	X	9.492	9.492	0	%100
16	M8	Z	0	0	0	%100
17	M14	X	6.595	6.595	0	%100
18	M14	Z	0	0	0	%100
19	M17	X	10.992	10.992	0	%100
20	M17	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
21	M18	X	1.677	1.677	0	%100
22	M18	Z	0	0	0	%100
23	M19	X	1.677	1.677	0	%100
24	M19	Z	0	0	0	%100
25	MP1A	X	7.735	7.735	0	%100
26	MP1A	Z	0	0	0	%100
27	M22	X	7.034	7.034	0	%100
28	M22	Z	0	0	0	%100
29	M23	X	8.111	8.111	0	%100
30	M23	Z	0	0	0	%100
31	M24	X	7.04	7.04	0	%100
32	M24	Z	0	0	0	%100
33	M25	X	7.034	7.034	0	%100
34	M25	Z	0	0	0	%100
35	M26	X	8.111	8.111	0	%100
36	M26	Z	0	0	0	%100
37	M27	X	7.034	7.034	0	%100
38	M27	Z	0	0	0	%100
39	M28	X	2.374	2.374	0	%100
40	M28	Z	0	0	0	%100
41	M29	X	2.373	2.373	0	%100
42	M29	Z	0	0	0	%100
43	M35	X	1.649	1.649	0	%100
44	M35	Z	0	0	0	%100
45	M38	X	2.748	2.748	0	%100
46	M38	Z	0	0	0	%100
47	M39	X	1.682	1.682	0	%100
48	M39	Z	0	0	0	%100
49	M40	X	6.717	6.717	0	%100
50	M40	Z	0	0	0	%100
51	M41	X	5.727	5.727	0	%100
52	M41	Z	0	0	0	%100
53	M44	X	2.374	2.374	0	%100
54	M44	Z	0	0	0	%100
55	M45	X	2.373	2.373	0	%100
56	M45	Z	0	0	0	%100
57	M51	X	1.649	1.649	0	%100
58	M51	Z	0	0	0	%100
59	M54	X	2.748	2.748	0	%100
60	M54	Z	0	0	0	%100
61	M55	X	6.717	6.717	0	%100
62	M55	Z	0	0	0	%100
63	M56	X	1.682	1.682	0	%100
64	M56	Z	0	0	0	%100
65	M57	X	9.544	9.544	0	%100
66	M57	Z	0	0	0	%100
67	MP2A	X	7.735	7.735	0	%100
68	MP2A	Z	0	0	0	%100
69	MP3A	X	7.735	7.735	0	%100
70	MP3A	Z	0	0	0	%100
71	MP4A	X	7.735	7.735	0	%100
72	MP4A	Z	0	0	0	%100
73	MP5A	X	7.735	7.735	0	%100
74	MP5A	Z	0	0	0	%100
75	MP1C	X	7.735	7.735	0	%100
76	MP1C	Z	0	0	0	%100
77	MP2C	X	7.735	7.735	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
78	MP2C	Z	0	0	0	%100
79	MP3C	X	7.735	7.735	0	%100
80	MP3C	Z	0	0	0	%100
81	MP4C	X	7.735	7.735	0	%100
82	MP4C	Z	0	0	0	%100
83	MP5C	X	7.735	7.735	0	%100
84	MP5C	Z	0	0	0	%100
85	MP1B	X	7.735	7.735	0	%100
86	MP1B	Z	0	0	0	%100
87	MP2B	X	7.735	7.735	0	%100
88	MP2B	Z	0	0	0	%100
89	MP3B	X	7.735	7.735	0	%100
90	MP3B	Z	0	0	0	%100
91	MP4B	X	7.735	7.735	0	%100
92	MP4B	Z	0	0	0	%100
93	MP5B	X	7.735	7.735	0	%100
94	MP5B	Z	0	0	0	%100
95	M88	X	1.432	1.432	0	%100
96	M88	Z	0	0	0	%100
97	M91	X	2.386	2.386	0	%100
98	M91	Z	0	0	0	%100
99	M94	X	1.432	1.432	0	%100
100	M94	Z	0	0	0	%100
101	M97	X	2.386	2.386	0	%100
102	M97	Z	0	0	0	%100
103	M105	X	0	0	0	%100
104	M105	Z	0	0	0	%100
105	M113	X	7.023	7.023	0	%100
106	M113	Z	0	0	0	%100
107	M121	X	7.023	7.023	0	%100
108	M121	Z	0	0	0	%100
109	M124	X	8.799	8.799	0	%100
110	M124	Z	0	0	0	%100
111	M125	X	0	0	0	%100
112	M125	Z	0	0	0	%100
113	M126	X	8.799	8.799	0	%100
114	M126	Z	0	0	0	%100
115	M127	X	10.739	10.739	0	%100
116	M127	Z	0	0	0	%100
117	M128	X	10.739	10.739	0	%100
118	M128	Z	0	0	0	%100
119	M129	X	3.442	3.442	0	%100
120	M129	Z	0	0	0	%100
121	M130	X	11.32	11.32	0	%100
122	M130	Z	0	0	0	%100
123	M131	X	11.32	11.32	0	%100
124	M131	Z	0	0	0	%100
125	M132	X	3.442	3.442	0	%100
126	M132	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	4.231	4.231	0	%100
2	M1	Z	2.443	2.443	0	%100
3	M2	X	2.031	2.031	0	%100
4	M2	Z	1.172	1.172	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
5	M3	X	16.923	16.923	0	%100
6	M3	Z	9.771	9.771	0	%100
7	M4	X	2.342	2.342	0	%100
8	M4	Z	1.352	1.352	0	%100
9	M5	X	2.032	2.032	0	%100
10	M5	Z	1.173	1.173	0	%100
11	M6	X	6.165	6.165	0	%100
12	M6	Z	3.559	3.559	0	%100
13	M7	X	4.362	4.362	0	%100
14	M7	Z	2.519	2.519	0	%100
15	M8	X	6.165	6.165	0	%100
16	M8	Z	3.56	3.56	0	%100
17	M14	X	4.284	4.284	0	%100
18	M14	Z	2.473	2.473	0	%100
19	M17	X	7.139	7.139	0	%100
20	M17	Z	4.122	4.122	0	%100
21	M18	X	4.361	4.361	0	%100
22	M18	Z	2.518	2.518	0	%100
23	M19	X	1e-6	1e-6	0	%100
24	M19	Z	1e-6	1e-6	0	%100
25	MP1A	X	6.699	6.699	0	%100
26	MP1A	Z	3.868	3.868	0	%100
27	M22	X	2.031	2.031	0	%100
28	M22	Z	1.172	1.172	0	%100
29	M23	X	2.342	2.342	0	%100
30	M23	Z	1.352	1.352	0	%100
31	M24	X	2.032	2.032	0	%100
32	M24	Z	1.173	1.173	0	%100
33	M25	X	8.122	8.122	0	%100
34	M25	Z	4.689	4.689	0	%100
35	M26	X	9.366	9.366	0	%100
36	M26	Z	5.408	5.408	0	%100
37	M27	X	8.122	8.122	0	%100
38	M27	Z	4.689	4.689	0	%100
39	M28	X	6.167	6.167	0	%100
40	M28	Z	3.561	3.561	0	%100
41	M29	X	6.165	6.165	0	%100
42	M29	Z	3.56	3.56	0	%100
43	M35	X	4.284	4.284	0	%100
44	M35	Z	2.473	2.473	0	%100
45	M38	X	7.139	7.139	0	%100
46	M38	Z	4.122	4.122	0	%100
47	M39	X	1e-6	1e-6	0	%100
48	M39	Z	1e-6	1e-6	0	%100
49	M40	X	4.361	4.361	0	%100
50	M40	Z	2.518	2.518	0	%100
51	M41	X	3.72	3.72	0	%100
52	M41	Z	2.147	2.147	0	%100
53	M44	X	0	0	0	%100
54	M44	Z	0	0	0	%100
55	M45	X	0	0	0	%100
56	M45	Z	0	0	0	%100
57	M51	X	0	0	0	%100
58	M51	Z	0	0	0	%100
59	M54	X	0	0	0	%100
60	M54	Z	0	0	0	%100
61	M55	X	4.365	4.365	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
62	M55	Z	2.52	2.52	0	%100
63	M56	X	4.365	4.365	0	%100
64	M56	Z	2.52	2.52	0	%100
65	M57	X	6.199	6.199	0	%100
66	M57	Z	3.579	3.579	0	%100
67	MP2A	X	6.699	6.699	0	%100
68	MP2A	Z	3.868	3.868	0	%100
69	MP3A	X	6.699	6.699	0	%100
70	MP3A	Z	3.868	3.868	0	%100
71	MP4A	X	6.699	6.699	0	%100
72	MP4A	Z	3.868	3.868	0	%100
73	MP5A	X	6.699	6.699	0	%100
74	MP5A	Z	3.868	3.868	0	%100
75	MP1C	X	6.699	6.699	0	%100
76	MP1C	Z	3.868	3.868	0	%100
77	MP2C	X	6.699	6.699	0	%100
78	MP2C	Z	3.868	3.868	0	%100
79	MP3C	X	6.699	6.699	0	%100
80	MP3C	Z	3.868	3.868	0	%100
81	MP4C	X	6.699	6.699	0	%100
82	MP4C	Z	3.868	3.868	0	%100
83	MP5C	X	6.699	6.699	0	%100
84	MP5C	Z	3.868	3.868	0	%100
85	MP1B	X	6.699	6.699	0	%100
86	MP1B	Z	3.868	3.868	0	%100
87	MP2B	X	6.699	6.699	0	%100
88	MP2B	Z	3.868	3.868	0	%100
89	MP3B	X	6.699	6.699	0	%100
90	MP3B	Z	3.868	3.868	0	%100
91	MP4B	X	6.699	6.699	0	%100
92	MP4B	Z	3.868	3.868	0	%100
93	MP5B	X	6.699	6.699	0	%100
94	MP5B	Z	3.868	3.868	0	%100
95	M88	X	3.72	3.72	0	%100
96	M88	Z	2.147	2.147	0	%100
97	M91	X	6.199	6.199	0	%100
98	M91	Z	3.579	3.579	0	%100
99	M94	X	0	0	0	%100
100	M94	Z	0	0	0	%100
101	M97	X	0	0	0	%100
102	M97	Z	0	0	0	%100
103	M105	X	2.027	2.027	0	%100
104	M105	Z	1.17	1.17	0	%100
105	M113	X	2.027	2.027	0	%100
106	M113	Z	1.17	1.17	0	%100
107	M121	X	8.109	8.109	0	%100
108	M121	Z	4.682	4.682	0	%100
109	M124	X	2.54	2.54	0	%100
110	M124	Z	1.466	1.466	0	%100
111	M125	X	2.54	2.54	0	%100
112	M125	Z	1.466	1.466	0	%100
113	M126	X	10.16	10.16	0	%100
114	M126	Z	5.866	5.866	0	%100
115	M127	X	11.743	11.743	0	%100
116	M127	Z	6.78	6.78	0	%100
117	M128	X	4.919	4.919	0	%100
118	M128	Z	2.84	2.84	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
119	M129	X	4.919	4.919	0	%100
120	M129	Z	2.84	2.84	0	%100
121	M130	X	11.743	11.743	0	%100
122	M130	Z	6.78	6.78	0	%100
123	M131	X	5.423	5.423	0	%100
124	M131	Z	3.131	3.131	0	%100
125	M132	X	5.423	5.423	0	%100
126	M132	Z	3.131	3.131	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	3.517	3.517	0	%100
4	M2	Z	6.092	6.092	0	%100
5	M3	X	7.328	7.328	0	%100
6	M3	Z	12.692	12.692	0	%100
7	M4	X	4.056	4.056	0	%100
8	M4	Z	7.025	7.025	0	%100
9	M5	X	3.52	3.52	0	%100
10	M5	Z	6.097	6.097	0	%100
11	M6	X	1.186	1.186	0	%100
12	M6	Z	2.055	2.055	0	%100
13	M7	X	7.403	7.403	0	%100
14	M7	Z	12.822	12.822	0	%100
15	M8	X	1.187	1.187	0	%100
16	M8	Z	2.055	2.055	0	%100
17	M14	X	.824	.824	0	%100
18	M14	Z	1.428	1.428	0	%100
19	M17	X	1.374	1.374	0	%100
20	M17	Z	2.38	2.38	0	%100
21	M18	X	3.359	3.359	0	%100
22	M18	Z	5.817	5.817	0	%100
23	M19	X	.841	.841	0	%100
24	M19	Z	1.457	1.457	0	%100
25	MP1A	X	3.868	3.868	0	%100
26	MP1A	Z	6.699	6.699	0	%100
27	M22	X	0	0	0	%100
28	M22	Z	0	0	0	%100
29	M23	X	0	0	0	%100
30	M23	Z	0	0	0	%100
31	M24	X	0	0	0	%100
32	M24	Z	0	0	0	%100
33	M25	X	3.517	3.517	0	%100
34	M25	Z	6.092	6.092	0	%100
35	M26	X	4.056	4.056	0	%100
36	M26	Z	7.025	7.025	0	%100
37	M27	X	3.517	3.517	0	%100
38	M27	Z	6.092	6.092	0	%100
39	M28	X	4.747	4.747	0	%100
40	M28	Z	8.223	8.223	0	%100
41	M29	X	4.746	4.746	0	%100
42	M29	Z	8.22	8.22	0	%100
43	M35	X	3.298	3.298	0	%100
44	M35	Z	5.712	5.712	0	%100
45	M38	X	5.496	5.496	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
46	M38	Z	9.519	9.519	0	%100
47	M39	X	.838	.838	0	%100
48	M39	Z	1.452	1.452	0	%100
49	M40	X	.838	.838	0	%100
50	M40	Z	1.452	1.452	0	%100
51	M41	X	.716	.716	0	%100
52	M41	Z	1.24	1.24	0	%100
53	M44	X	1.187	1.187	0	%100
54	M44	Z	2.056	2.056	0	%100
55	M45	X	1.187	1.187	0	%100
56	M45	Z	2.055	2.055	0	%100
57	M51	X	.824	.824	0	%100
58	M51	Z	1.428	1.428	0	%100
59	M54	X	1.374	1.374	0	%100
60	M54	Z	2.38	2.38	0	%100
61	M55	X	.841	.841	0	%100
62	M55	Z	1.457	1.457	0	%100
63	M56	X	3.359	3.359	0	%100
64	M56	Z	5.817	5.817	0	%100
65	M57	X	1.193	1.193	0	%100
66	M57	Z	2.066	2.066	0	%100
67	MP2A	X	3.868	3.868	0	%100
68	MP2A	Z	6.699	6.699	0	%100
69	MP3A	X	3.868	3.868	0	%100
70	MP3A	Z	6.699	6.699	0	%100
71	MP4A	X	3.868	3.868	0	%100
72	MP4A	Z	6.699	6.699	0	%100
73	MP5A	X	3.868	3.868	0	%100
74	MP5A	Z	6.699	6.699	0	%100
75	MP1C	X	3.868	3.868	0	%100
76	MP1C	Z	6.699	6.699	0	%100
77	MP2C	X	3.868	3.868	0	%100
78	MP2C	Z	6.699	6.699	0	%100
79	MP3C	X	3.868	3.868	0	%100
80	MP3C	Z	6.699	6.699	0	%100
81	MP4C	X	3.868	3.868	0	%100
82	MP4C	Z	6.699	6.699	0	%100
83	MP5C	X	3.868	3.868	0	%100
84	MP5C	Z	6.699	6.699	0	%100
85	MP1B	X	3.868	3.868	0	%100
86	MP1B	Z	6.699	6.699	0	%100
87	MP2B	X	3.868	3.868	0	%100
88	MP2B	Z	6.699	6.699	0	%100
89	MP3B	X	3.868	3.868	0	%100
90	MP3B	Z	6.699	6.699	0	%100
91	MP4B	X	3.868	3.868	0	%100
92	MP4B	Z	6.699	6.699	0	%100
93	MP5B	X	3.868	3.868	0	%100
94	MP5B	Z	6.699	6.699	0	%100
95	M88	X	2.863	2.863	0	%100
96	M88	Z	4.959	4.959	0	%100
97	M91	X	4.772	4.772	0	%100
98	M91	Z	8.266	8.266	0	%100
99	M94	X	.716	.716	0	%100
100	M94	Z	1.24	1.24	0	%100
101	M97	X	1.193	1.193	0	%100
102	M97	Z	2.066	2.066	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
103	M105	X	3.511	3.511	0	%100
104	M105	Z	6.082	6.082	0	%100
105	M113	X	0	0	0	%100
106	M113	Z	0	0	0	%100
107	M121	X	3.511	3.511	0	%100
108	M121	Z	6.082	6.082	0	%100
109	M124	X	0	0	0	%100
110	M124	Z	0	0	0	%100
111	M125	X	4.399	4.399	0	%100
112	M125	Z	7.62	7.62	0	%100
113	M126	X	4.399	4.399	0	%100
114	M126	Z	7.62	7.62	0	%100
115	M127	X	5.66	5.66	0	%100
116	M127	Z	9.804	9.804	0	%100
117	M128	X	1.721	1.721	0	%100
118	M128	Z	2.981	2.981	0	%100
119	M129	X	5.37	5.37	0	%100
120	M129	Z	9.3	9.3	0	%100
121	M130	X	5.37	5.37	0	%100
122	M130	Z	9.3	9.3	0	%100
123	M131	X	1.721	1.721	0	%100
124	M131	Z	2.981	2.981	0	%100
125	M132	X	5.66	5.66	0	%100
126	M132	Z	9.804	9.804	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	4.885	4.885	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	9.379	9.379	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	4.885	4.885	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	10.815	10.815	0	%100
9	M5	X	0	0	0	%100
10	M5	Z	9.387	9.387	0	%100
11	M6	X	0	0	0	%100
12	M6	Z	0	0	0	%100
13	M7	X	0	0	0	%100
14	M7	Z	19.54	19.54	0	%100
15	M8	X	0	0	0	%100
16	M8	Z	0	0	0	%100
17	M14	X	0	0	0	%100
18	M14	Z	0	0	0	%100
19	M17	X	0	0	0	%100
20	M17	Z	0	0	0	%100
21	M18	X	0	0	0	%100
22	M18	Z	5.041	5.041	0	%100
23	M19	X	0	0	0	%100
24	M19	Z	5.041	5.041	0	%100
25	MP1A	X	0	0	0	%100
26	MP1A	Z	7.735	7.735	0	%100
27	M22	X	0	0	0	%100
28	M22	Z	2.345	2.345	0	%100
29	M23	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
30	M23	Z	2.704	2.704	0	%100
31	M24	X	0	0	0	%100
32	M24	Z	2.347	2.347	0	%100
33	M25	X	0	0	0	%100
34	M25	Z	2.345	2.345	0	%100
35	M26	X	0	0	0	%100
36	M26	Z	2.704	2.704	0	%100
37	M27	X	0	0	0	%100
38	M27	Z	2.345	2.345	0	%100
39	M28	X	0	0	0	%100
40	M28	Z	7.121	7.121	0	%100
41	M29	X	0	0	0	%100
42	M29	Z	7.119	7.119	0	%100
43	M35	X	0	0	0	%100
44	M35	Z	4.946	4.946	0	%100
45	M38	X	0	0	0	%100
46	M38	Z	8.244	8.244	0	%100
47	M39	X	0	0	0	%100
48	M39	Z	5.035	5.035	0	%100
49	M40	X	0	0	0	%100
50	M40	Z	1e-6	1e-6	0	%100
51	M41	X	0	0	0	%100
52	M41	Z	0	0	0	%100
53	M44	X	0	0	0	%100
54	M44	Z	7.121	7.121	0	%100
55	M45	X	0	0	0	%100
56	M45	Z	7.119	7.119	0	%100
57	M51	X	0	0	0	%100
58	M51	Z	4.946	4.946	0	%100
59	M54	X	0	0	0	%100
60	M54	Z	8.244	8.244	0	%100
61	M55	X	0	0	0	%100
62	M55	Z	1e-6	1e-6	0	%100
63	M56	X	0	0	0	%100
64	M56	Z	5.035	5.035	0	%100
65	M57	X	0	0	0	%100
66	M57	Z	0	0	0	%100
67	MP2A	X	0	0	0	%100
68	MP2A	Z	7.735	7.735	0	%100
69	MP3A	X	0	0	0	%100
70	MP3A	Z	7.735	7.735	0	%100
71	MP4A	X	0	0	0	%100
72	MP4A	Z	7.735	7.735	0	%100
73	MP5A	X	0	0	0	%100
74	MP5A	Z	7.735	7.735	0	%100
75	MP1C	X	0	0	0	%100
76	MP1C	Z	7.735	7.735	0	%100
77	MP2C	X	0	0	0	%100
78	MP2C	Z	7.735	7.735	0	%100
79	MP3C	X	0	0	0	%100
80	MP3C	Z	7.735	7.735	0	%100
81	MP4C	X	0	0	0	%100
82	MP4C	Z	7.735	7.735	0	%100
83	MP5C	X	0	0	0	%100
84	MP5C	Z	7.735	7.735	0	%100
85	MP1B	X	0	0	0	%100
86	MP1B	Z	7.735	7.735	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
87	MP2B	X	0	0	0	%100
88	MP2B	Z	7.735	7.735	0	%100
89	MP3B	X	0	0	0	%100
90	MP3B	Z	7.735	7.735	0	%100
91	MP4B	X	0	0	0	%100
92	MP4B	Z	7.735	7.735	0	%100
93	MP5B	X	0	0	0	%100
94	MP5B	Z	7.735	7.735	0	%100
95	M88	X	0	0	0	%100
96	M88	Z	4.295	4.295	0	%100
97	M91	X	0	0	0	%100
98	M91	Z	7.158	7.158	0	%100
99	M94	X	0	0	0	%100
100	M94	Z	4.295	4.295	0	%100
101	M97	X	0	0	0	%100
102	M97	Z	7.158	7.158	0	%100
103	M105	X	0	0	0	%100
104	M105	Z	9.363	9.363	0	%100
105	M113	X	0	0	0	%100
106	M113	Z	2.341	2.341	0	%100
107	M121	X	0	0	0	%100
108	M121	Z	2.341	2.341	0	%100
109	M124	X	0	0	0	%100
110	M124	Z	2.933	2.933	0	%100
111	M125	X	0	0	0	%100
112	M125	Z	11.732	11.732	0	%100
113	M126	X	0	0	0	%100
114	M126	Z	2.933	2.933	0	%100
115	M127	X	0	0	0	%100
116	M127	Z	6.262	6.262	0	%100
117	M128	X	0	0	0	%100
118	M128	Z	6.262	6.262	0	%100
119	M129	X	0	0	0	%100
120	M129	Z	13.559	13.559	0	%100
121	M130	X	0	0	0	%100
122	M130	Z	5.68	5.68	0	%100
123	M131	X	0	0	0	%100
124	M131	Z	5.68	5.68	0	%100
125	M132	X	0	0	0	%100
126	M132	Z	13.559	13.559	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-7.328	-7.328	0	%100
2	M1	Z	12.692	12.692	0	%100
3	M2	X	-3.517	-3.517	0	%100
4	M2	Z	6.092	6.092	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	-4.056	-4.056	0	%100
8	M4	Z	7.025	7.025	0	%100
9	M5	X	-3.52	-3.52	0	%100
10	M5	Z	6.097	6.097	0	%100
11	M6	X	-1.186	-1.186	0	%100
12	M6	Z	2.055	2.055	0	%100
13	M7	X	-7.252	-7.252	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
14	M7	Z	12.561	12.561	0	%100
15	M8	X	-1.187	-1.187	0	%100
16	M8	Z	2.055	2.055	0	%100
17	M14	X	-.824	-.824	0	%100
18	M14	Z	1.428	1.428	0	%100
19	M17	X	-1.374	-1.374	0	%100
20	M17	Z	2.38	2.38	0	%100
21	M18	X	-.841	-.841	0	%100
22	M18	Z	1.457	1.457	0	%100
23	M19	X	-3.359	-3.359	0	%100
24	M19	Z	5.817	5.817	0	%100
25	MP1A	X	-3.868	-3.868	0	%100
26	MP1A	Z	6.699	6.699	0	%100
27	M22	X	-3.517	-3.517	0	%100
28	M22	Z	6.092	6.092	0	%100
29	M23	X	-4.056	-4.056	0	%100
30	M23	Z	7.025	7.025	0	%100
31	M24	X	-3.52	-3.52	0	%100
32	M24	Z	6.097	6.097	0	%100
33	M25	X	0	0	0	%100
34	M25	Z	0	0	0	%100
35	M26	X	0	0	0	%100
36	M26	Z	0	0	0	%100
37	M27	X	0	0	0	%100
38	M27	Z	0	0	0	%100
39	M28	X	-1.187	-1.187	0	%100
40	M28	Z	2.056	2.056	0	%100
41	M29	X	-1.187	-1.187	0	%100
42	M29	Z	2.055	2.055	0	%100
43	M35	X	-.824	-.824	0	%100
44	M35	Z	1.428	1.428	0	%100
45	M38	X	-1.374	-1.374	0	%100
46	M38	Z	2.38	2.38	0	%100
47	M39	X	-3.359	-3.359	0	%100
48	M39	Z	5.817	5.817	0	%100
49	M40	X	-.841	-.841	0	%100
50	M40	Z	1.457	1.457	0	%100
51	M41	X	-.716	-.716	0	%100
52	M41	Z	1.24	1.24	0	%100
53	M44	X	-4.747	-4.747	0	%100
54	M44	Z	8.223	8.223	0	%100
55	M45	X	-4.746	-4.746	0	%100
56	M45	Z	8.22	8.22	0	%100
57	M51	X	-3.298	-3.298	0	%100
58	M51	Z	5.712	5.712	0	%100
59	M54	X	-5.496	-5.496	0	%100
60	M54	Z	9.519	9.519	0	%100
61	M55	X	-.838	-.838	0	%100
62	M55	Z	1.452	1.452	0	%100
63	M56	X	-.838	-.838	0	%100
64	M56	Z	1.452	1.452	0	%100
65	M57	X	-1.193	-1.193	0	%100
66	M57	Z	2.066	2.066	0	%100
67	MP2A	X	-3.868	-3.868	0	%100
68	MP2A	Z	6.699	6.699	0	%100
69	MP3A	X	-3.868	-3.868	0	%100
70	MP3A	Z	6.699	6.699	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
71	MP4A	X	-3.868	-3.868	0	%100
72	MP4A	Z	6.699	6.699	0	%100
73	MP5A	X	-3.868	-3.868	0	%100
74	MP5A	Z	6.699	6.699	0	%100
75	MP1C	X	-3.868	-3.868	0	%100
76	MP1C	Z	6.699	6.699	0	%100
77	MP2C	X	-3.868	-3.868	0	%100
78	MP2C	Z	6.699	6.699	0	%100
79	MP3C	X	-3.868	-3.868	0	%100
80	MP3C	Z	6.699	6.699	0	%100
81	MP4C	X	-3.868	-3.868	0	%100
82	MP4C	Z	6.699	6.699	0	%100
83	MP5C	X	-3.868	-3.868	0	%100
84	MP5C	Z	6.699	6.699	0	%100
85	MP1B	X	-3.868	-3.868	0	%100
86	MP1B	Z	6.699	6.699	0	%100
87	MP2B	X	-3.868	-3.868	0	%100
88	MP2B	Z	6.699	6.699	0	%100
89	MP3B	X	-3.868	-3.868	0	%100
90	MP3B	Z	6.699	6.699	0	%100
91	MP4B	X	-3.868	-3.868	0	%100
92	MP4B	Z	6.699	6.699	0	%100
93	MP5B	X	-3.868	-3.868	0	%100
94	MP5B	Z	6.699	6.699	0	%100
95	M88	X	-.716	-.716	0	%100
96	M88	Z	1.24	1.24	0	%100
97	M91	X	-1.193	-1.193	0	%100
98	M91	Z	2.066	2.066	0	%100
99	M94	X	-2.863	-2.863	0	%100
100	M94	Z	4.959	4.959	0	%100
101	M97	X	-4.772	-4.772	0	%100
102	M97	Z	8.266	8.266	0	%100
103	M105	X	-3.511	-3.511	0	%100
104	M105	Z	6.082	6.082	0	%100
105	M113	X	-3.511	-3.511	0	%100
106	M113	Z	6.082	6.082	0	%100
107	M121	X	0	0	0	%100
108	M121	Z	0	0	0	%100
109	M124	X	-4.399	-4.399	0	%100
110	M124	Z	7.62	7.62	0	%100
111	M125	X	-4.399	-4.399	0	%100
112	M125	Z	7.62	7.62	0	%100
113	M126	X	0	0	0	%100
114	M126	Z	0	0	0	%100
115	M127	X	-1.721	-1.721	0	%100
116	M127	Z	2.981	2.981	0	%100
117	M128	X	-5.66	-5.66	0	%100
118	M128	Z	9.804	9.804	0	%100
119	M129	X	-5.66	-5.66	0	%100
120	M129	Z	9.804	9.804	0	%100
121	M130	X	-1.721	-1.721	0	%100
122	M130	Z	2.981	2.981	0	%100
123	M131	X	-5.37	-5.37	0	%100
124	M131	Z	9.3	9.3	0	%100
125	M132	X	-5.37	-5.37	0	%100
126	M132	Z	9.3	9.3	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-16.923	-16.923	0	%100
2	M1	Z	9.771	9.771	0	%100
3	M2	X	-2.031	-2.031	0	%100
4	M2	Z	1.172	1.172	0	%100
5	M3	X	-4.231	-4.231	0	%100
6	M3	Z	2.443	2.443	0	%100
7	M4	X	-2.342	-2.342	0	%100
8	M4	Z	1.352	1.352	0	%100
9	M5	X	-2.032	-2.032	0	%100
10	M5	Z	1.173	1.173	0	%100
11	M6	X	-6.165	-6.165	0	%100
12	M6	Z	3.559	3.559	0	%100
13	M7	X	-4.101	-4.101	0	%100
14	M7	Z	2.368	2.368	0	%100
15	M8	X	-6.165	-6.165	0	%100
16	M8	Z	3.56	3.56	0	%100
17	M14	X	-4.284	-4.284	0	%100
18	M14	Z	2.473	2.473	0	%100
19	M17	X	-7.139	-7.139	0	%100
20	M17	Z	4.122	4.122	0	%100
21	M18	X	-1e-6	-1e-6	0	%100
22	M18	Z	1e-6	1e-6	0	%100
23	M19	X	-4.361	-4.361	0	%100
24	M19	Z	2.518	2.518	0	%100
25	MP1A	X	-6.699	-6.699	0	%100
26	MP1A	Z	3.868	3.868	0	%100
27	M22	X	-8.122	-8.122	0	%100
28	M22	Z	4.689	4.689	0	%100
29	M23	X	-9.366	-9.366	0	%100
30	M23	Z	5.408	5.408	0	%100
31	M24	X	-8.129	-8.129	0	%100
32	M24	Z	4.693	4.693	0	%100
33	M25	X	-2.031	-2.031	0	%100
34	M25	Z	1.172	1.172	0	%100
35	M26	X	-2.342	-2.342	0	%100
36	M26	Z	1.352	1.352	0	%100
37	M27	X	-2.031	-2.031	0	%100
38	M27	Z	1.172	1.172	0	%100
39	M28	X	0	0	0	%100
40	M28	Z	0	0	0	%100
41	M29	X	0	0	0	%100
42	M29	Z	0	0	0	%100
43	M35	X	0	0	0	%100
44	M35	Z	0	0	0	%100
45	M38	X	0	0	0	%100
46	M38	Z	0	0	0	%100
47	M39	X	-4.365	-4.365	0	%100
48	M39	Z	2.52	2.52	0	%100
49	M40	X	-4.365	-4.365	0	%100
50	M40	Z	2.52	2.52	0	%100
51	M41	X	-3.72	-3.72	0	%100
52	M41	Z	2.147	2.147	0	%100
53	M44	X	-6.167	-6.167	0	%100
54	M44	Z	3.561	3.561	0	%100
55	M45	X	-6.165	-6.165	0	%100
56	M45	Z	3.56	3.56	0	%100
57	M51	X	-4.284	-4.284	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
58	M51	Z	2.473	2.473	0	%100
59	M54	X	-7.139	-7.139	0	%100
60	M54	Z	4.122	4.122	0	%100
61	M55	X	-4.361	-4.361	0	%100
62	M55	Z	2.518	2.518	0	%100
63	M56	X	-1e-6	-1e-6	0	%100
64	M56	Z	1e-6	1e-6	0	%100
65	M57	X	-6.199	-6.199	0	%100
66	M57	Z	3.579	3.579	0	%100
67	MP2A	X	-6.699	-6.699	0	%100
68	MP2A	Z	3.868	3.868	0	%100
69	MP3A	X	-6.699	-6.699	0	%100
70	MP3A	Z	3.868	3.868	0	%100
71	MP4A	X	-6.699	-6.699	0	%100
72	MP4A	Z	3.868	3.868	0	%100
73	MP5A	X	-6.699	-6.699	0	%100
74	MP5A	Z	3.868	3.868	0	%100
75	MP1C	X	-6.699	-6.699	0	%100
76	MP1C	Z	3.868	3.868	0	%100
77	MP2C	X	-6.699	-6.699	0	%100
78	MP2C	Z	3.868	3.868	0	%100
79	MP3C	X	-6.699	-6.699	0	%100
80	MP3C	Z	3.868	3.868	0	%100
81	MP4C	X	-6.699	-6.699	0	%100
82	MP4C	Z	3.868	3.868	0	%100
83	MP5C	X	-6.699	-6.699	0	%100
84	MP5C	Z	3.868	3.868	0	%100
85	MP1B	X	-6.699	-6.699	0	%100
86	MP1B	Z	3.868	3.868	0	%100
87	MP2B	X	-6.699	-6.699	0	%100
88	MP2B	Z	3.868	3.868	0	%100
89	MP3B	X	-6.699	-6.699	0	%100
90	MP3B	Z	3.868	3.868	0	%100
91	MP4B	X	-6.699	-6.699	0	%100
92	MP4B	Z	3.868	3.868	0	%100
93	MP5B	X	-6.699	-6.699	0	%100
94	MP5B	Z	3.868	3.868	0	%100
95	M88	X	0	0	0	%100
96	M88	Z	0	0	0	%100
97	M91	X	0	0	0	%100
98	M91	Z	0	0	0	%100
99	M94	X	-3.72	-3.72	0	%100
100	M94	Z	2.147	2.147	0	%100
101	M97	X	-6.199	-6.199	0	%100
102	M97	Z	3.579	3.579	0	%100
103	M105	X	-2.027	-2.027	0	%100
104	M105	Z	1.17	1.17	0	%100
105	M113	X	-8.109	-8.109	0	%100
106	M113	Z	4.682	4.682	0	%100
107	M121	X	-2.027	-2.027	0	%100
108	M121	Z	1.17	1.17	0	%100
109	M124	X	-10.16	-10.16	0	%100
110	M124	Z	5.866	5.866	0	%100
111	M125	X	-2.54	-2.54	0	%100
112	M125	Z	1.466	1.466	0	%100
113	M126	X	-2.54	-2.54	0	%100
114	M126	Z	1.466	1.466	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
115	M127	X	-4.919	-4.919	0	%100
116	M127	Z	2.84	2.84	0	%100
117	M128	X	-11.743	-11.743	0	%100
118	M128	Z	6.78	6.78	0	%100
119	M129	X	-5.423	-5.423	0	%100
120	M129	Z	3.131	3.131	0	%100
121	M130	X	-5.423	-5.423	0	%100
122	M130	Z	3.131	3.131	0	%100
123	M131	X	-11.743	-11.743	0	%100
124	M131	Z	6.78	6.78	0	%100
125	M132	X	-4.919	-4.919	0	%100
126	M132	Z	2.84	2.84	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-14.656	-14.656	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	-14.656	-14.656	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	0	0	0	%100
9	M5	X	0	0	0	%100
10	M5	Z	0	0	0	%100
11	M6	X	-9.492	-9.492	0	%100
12	M6	Z	0	0	0	%100
13	M7	X	-.002	-.002	0	%100
14	M7	Z	0	0	0	%100
15	M8	X	-9.492	-9.492	0	%100
16	M8	Z	0	0	0	%100
17	M14	X	-6.595	-6.595	0	%100
18	M14	Z	0	0	0	%100
19	M17	X	-10.992	-10.992	0	%100
20	M17	Z	0	0	0	%100
21	M18	X	-1.677	-1.677	0	%100
22	M18	Z	0	0	0	%100
23	M19	X	-1.677	-1.677	0	%100
24	M19	Z	0	0	0	%100
25	MP1A	X	-7.735	-7.735	0	%100
26	MP1A	Z	0	0	0	%100
27	M22	X	-7.034	-7.034	0	%100
28	M22	Z	0	0	0	%100
29	M23	X	-8.111	-8.111	0	%100
30	M23	Z	0	0	0	%100
31	M24	X	-7.04	-7.04	0	%100
32	M24	Z	0	0	0	%100
33	M25	X	-7.034	-7.034	0	%100
34	M25	Z	0	0	0	%100
35	M26	X	-8.111	-8.111	0	%100
36	M26	Z	0	0	0	%100
37	M27	X	-7.034	-7.034	0	%100
38	M27	Z	0	0	0	%100
39	M28	X	-2.374	-2.374	0	%100
40	M28	Z	0	0	0	%100
41	M29	X	-2.373	-2.373	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
42	M29	Z	0	0	0	%100
43	M35	X	-1.649	-1.649	0	%100
44	M35	Z	0	0	0	%100
45	M38	X	-2.748	-2.748	0	%100
46	M38	Z	0	0	0	%100
47	M39	X	-1.682	-1.682	0	%100
48	M39	Z	0	0	0	%100
49	M40	X	-6.717	-6.717	0	%100
50	M40	Z	0	0	0	%100
51	M41	X	-5.727	-5.727	0	%100
52	M41	Z	0	0	0	%100
53	M44	X	-2.374	-2.374	0	%100
54	M44	Z	0	0	0	%100
55	M45	X	-2.373	-2.373	0	%100
56	M45	Z	0	0	0	%100
57	M51	X	-1.649	-1.649	0	%100
58	M51	Z	0	0	0	%100
59	M54	X	-2.748	-2.748	0	%100
60	M54	Z	0	0	0	%100
61	M55	X	-6.717	-6.717	0	%100
62	M55	Z	0	0	0	%100
63	M56	X	-1.682	-1.682	0	%100
64	M56	Z	0	0	0	%100
65	M57	X	-9.544	-9.544	0	%100
66	M57	Z	0	0	0	%100
67	MP2A	X	-7.735	-7.735	0	%100
68	MP2A	Z	0	0	0	%100
69	MP3A	X	-7.735	-7.735	0	%100
70	MP3A	Z	0	0	0	%100
71	MP4A	X	-7.735	-7.735	0	%100
72	MP4A	Z	0	0	0	%100
73	MP5A	X	-7.735	-7.735	0	%100
74	MP5A	Z	0	0	0	%100
75	MP1C	X	-7.735	-7.735	0	%100
76	MP1C	Z	0	0	0	%100
77	MP2C	X	-7.735	-7.735	0	%100
78	MP2C	Z	0	0	0	%100
79	MP3C	X	-7.735	-7.735	0	%100
80	MP3C	Z	0	0	0	%100
81	MP4C	X	-7.735	-7.735	0	%100
82	MP4C	Z	0	0	0	%100
83	MP5C	X	-7.735	-7.735	0	%100
84	MP5C	Z	0	0	0	%100
85	MP1B	X	-7.735	-7.735	0	%100
86	MP1B	Z	0	0	0	%100
87	MP2B	X	-7.735	-7.735	0	%100
88	MP2B	Z	0	0	0	%100
89	MP3B	X	-7.735	-7.735	0	%100
90	MP3B	Z	0	0	0	%100
91	MP4B	X	-7.735	-7.735	0	%100
92	MP4B	Z	0	0	0	%100
93	MP5B	X	-7.735	-7.735	0	%100
94	MP5B	Z	0	0	0	%100
95	M88	X	-1.432	-1.432	0	%100
96	M88	Z	0	0	0	%100
97	M91	X	-2.386	-2.386	0	%100
98	M91	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
99	M94	X	-1.432	-1.432	0	%100
100	M94	Z	0	0	0	%100
101	M97	X	-2.386	-2.386	0	%100
102	M97	Z	0	0	0	%100
103	M105	X	0	0	0	%100
104	M105	Z	0	0	0	%100
105	M113	X	-7.023	-7.023	0	%100
106	M113	Z	0	0	0	%100
107	M121	X	-7.023	-7.023	0	%100
108	M121	Z	0	0	0	%100
109	M124	X	-8.799	-8.799	0	%100
110	M124	Z	0	0	0	%100
111	M125	X	0	0	0	%100
112	M125	Z	0	0	0	%100
113	M126	X	-8.799	-8.799	0	%100
114	M126	Z	0	0	0	%100
115	M127	X	-10.739	-10.739	0	%100
116	M127	Z	0	0	0	%100
117	M128	X	-10.739	-10.739	0	%100
118	M128	Z	0	0	0	%100
119	M129	X	-3.442	-3.442	0	%100
120	M129	Z	0	0	0	%100
121	M130	X	-11.32	-11.32	0	%100
122	M130	Z	0	0	0	%100
123	M131	X	-11.32	-11.32	0	%100
124	M131	Z	0	0	0	%100
125	M132	X	-3.442	-3.442	0	%100
126	M132	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-4.231	-4.231	0	%100
2	M1	Z	-2.443	-2.443	0	%100
3	M2	X	-2.031	-2.031	0	%100
4	M2	Z	-1.172	-1.172	0	%100
5	M3	X	-16.923	-16.923	0	%100
6	M3	Z	-9.771	-9.771	0	%100
7	M4	X	-2.342	-2.342	0	%100
8	M4	Z	-1.352	-1.352	0	%100
9	M5	X	-2.032	-2.032	0	%100
10	M5	Z	-1.173	-1.173	0	%100
11	M6	X	-6.165	-6.165	0	%100
12	M6	Z	-3.559	-3.559	0	%100
13	M7	X	-4.362	-4.362	0	%100
14	M7	Z	-2.519	-2.519	0	%100
15	M8	X	-6.165	-6.165	0	%100
16	M8	Z	-3.56	-3.56	0	%100
17	M14	X	-4.284	-4.284	0	%100
18	M14	Z	-2.473	-2.473	0	%100
19	M17	X	-7.139	-7.139	0	%100
20	M17	Z	-4.122	-4.122	0	%100
21	M18	X	-4.361	-4.361	0	%100
22	M18	Z	-2.518	-2.518	0	%100
23	M19	X	-1e-6	-1e-6	0	%100
24	M19	Z	-1e-6	-1e-6	0	%100
25	MP1A	X	-6.699	-6.699	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
26	MP1A	Z	-3.868	-3.868	0	%100
27	M22	X	-2.031	-2.031	0	%100
28	M22	Z	-1.172	-1.172	0	%100
29	M23	X	-2.342	-2.342	0	%100
30	M23	Z	-1.352	-1.352	0	%100
31	M24	X	-2.032	-2.032	0	%100
32	M24	Z	-1.173	-1.173	0	%100
33	M25	X	-8.122	-8.122	0	%100
34	M25	Z	-4.689	-4.689	0	%100
35	M26	X	-9.366	-9.366	0	%100
36	M26	Z	-5.408	-5.408	0	%100
37	M27	X	-8.122	-8.122	0	%100
38	M27	Z	-4.689	-4.689	0	%100
39	M28	X	-6.167	-6.167	0	%100
40	M28	Z	-3.561	-3.561	0	%100
41	M29	X	-6.165	-6.165	0	%100
42	M29	Z	-3.56	-3.56	0	%100
43	M35	X	-4.284	-4.284	0	%100
44	M35	Z	-2.473	-2.473	0	%100
45	M38	X	-7.139	-7.139	0	%100
46	M38	Z	-4.122	-4.122	0	%100
47	M39	X	-1e-6	-1e-6	0	%100
48	M39	Z	-1e-6	-1e-6	0	%100
49	M40	X	-4.361	-4.361	0	%100
50	M40	Z	-2.518	-2.518	0	%100
51	M41	X	-3.72	-3.72	0	%100
52	M41	Z	-2.147	-2.147	0	%100
53	M44	X	0	0	0	%100
54	M44	Z	0	0	0	%100
55	M45	X	0	0	0	%100
56	M45	Z	0	0	0	%100
57	M51	X	0	0	0	%100
58	M51	Z	0	0	0	%100
59	M54	X	0	0	0	%100
60	M54	Z	0	0	0	%100
61	M55	X	-4.365	-4.365	0	%100
62	M55	Z	-2.52	-2.52	0	%100
63	M56	X	-4.365	-4.365	0	%100
64	M56	Z	-2.52	-2.52	0	%100
65	M57	X	-6.199	-6.199	0	%100
66	M57	Z	-3.579	-3.579	0	%100
67	MP2A	X	-6.699	-6.699	0	%100
68	MP2A	Z	-3.868	-3.868	0	%100
69	MP3A	X	-6.699	-6.699	0	%100
70	MP3A	Z	-3.868	-3.868	0	%100
71	MP4A	X	-6.699	-6.699	0	%100
72	MP4A	Z	-3.868	-3.868	0	%100
73	MP5A	X	-6.699	-6.699	0	%100
74	MP5A	Z	-3.868	-3.868	0	%100
75	MP1C	X	-6.699	-6.699	0	%100
76	MP1C	Z	-3.868	-3.868	0	%100
77	MP2C	X	-6.699	-6.699	0	%100
78	MP2C	Z	-3.868	-3.868	0	%100
79	MP3C	X	-6.699	-6.699	0	%100
80	MP3C	Z	-3.868	-3.868	0	%100
81	MP4C	X	-6.699	-6.699	0	%100
82	MP4C	Z	-3.868	-3.868	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
83	MP5C	X	-6.699	-6.699	0	%100
84	MP5C	Z	-3.868	-3.868	0	%100
85	MP1B	X	-6.699	-6.699	0	%100
86	MP1B	Z	-3.868	-3.868	0	%100
87	MP2B	X	-6.699	-6.699	0	%100
88	MP2B	Z	-3.868	-3.868	0	%100
89	MP3B	X	-6.699	-6.699	0	%100
90	MP3B	Z	-3.868	-3.868	0	%100
91	MP4B	X	-6.699	-6.699	0	%100
92	MP4B	Z	-3.868	-3.868	0	%100
93	MP5B	X	-6.699	-6.699	0	%100
94	MP5B	Z	-3.868	-3.868	0	%100
95	M88	X	-3.72	-3.72	0	%100
96	M88	Z	-2.147	-2.147	0	%100
97	M91	X	-6.199	-6.199	0	%100
98	M91	Z	-3.579	-3.579	0	%100
99	M94	X	0	0	0	%100
100	M94	Z	0	0	0	%100
101	M97	X	0	0	0	%100
102	M97	Z	0	0	0	%100
103	M105	X	-2.027	-2.027	0	%100
104	M105	Z	-1.17	-1.17	0	%100
105	M113	X	-2.027	-2.027	0	%100
106	M113	Z	-1.17	-1.17	0	%100
107	M121	X	-8.109	-8.109	0	%100
108	M121	Z	-4.682	-4.682	0	%100
109	M124	X	-2.54	-2.54	0	%100
110	M124	Z	-1.466	-1.466	0	%100
111	M125	X	-2.54	-2.54	0	%100
112	M125	Z	-1.466	-1.466	0	%100
113	M126	X	-10.16	-10.16	0	%100
114	M126	Z	-5.866	-5.866	0	%100
115	M127	X	-11.743	-11.743	0	%100
116	M127	Z	-6.78	-6.78	0	%100
117	M128	X	-4.919	-4.919	0	%100
118	M128	Z	-2.84	-2.84	0	%100
119	M129	X	-4.919	-4.919	0	%100
120	M129	Z	-2.84	-2.84	0	%100
121	M130	X	-11.743	-11.743	0	%100
122	M130	Z	-6.78	-6.78	0	%100
123	M131	X	-5.423	-5.423	0	%100
124	M131	Z	-3.131	-3.131	0	%100
125	M132	X	-5.423	-5.423	0	%100
126	M132	Z	-3.131	-3.131	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	-3.517	-3.517	0	%100
4	M2	Z	-6.092	-6.092	0	%100
5	M3	X	-7.328	-7.328	0	%100
6	M3	Z	-12.692	-12.692	0	%100
7	M4	X	-4.056	-4.056	0	%100
8	M4	Z	-7.025	-7.025	0	%100
9	M5	X	-3.52	-3.52	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
10	M5	Z	-6.097	-6.097	0	%100
11	M6	X	-1.186	-1.186	0	%100
12	M6	Z	-2.055	-2.055	0	%100
13	M7	X	-7.403	-7.403	0	%100
14	M7	Z	-12.822	-12.822	0	%100
15	M8	X	-1.187	-1.187	0	%100
16	M8	Z	-2.055	-2.055	0	%100
17	M14	X	-.824	-.824	0	%100
18	M14	Z	-1.428	-1.428	0	%100
19	M17	X	-1.374	-1.374	0	%100
20	M17	Z	-2.38	-2.38	0	%100
21	M18	X	-3.359	-3.359	0	%100
22	M18	Z	-5.817	-5.817	0	%100
23	M19	X	-.841	-.841	0	%100
24	M19	Z	-1.457	-1.457	0	%100
25	MP1A	X	-3.868	-3.868	0	%100
26	MP1A	Z	-6.699	-6.699	0	%100
27	M22	X	0	0	0	%100
28	M22	Z	0	0	0	%100
29	M23	X	0	0	0	%100
30	M23	Z	0	0	0	%100
31	M24	X	0	0	0	%100
32	M24	Z	0	0	0	%100
33	M25	X	-3.517	-3.517	0	%100
34	M25	Z	-6.092	-6.092	0	%100
35	M26	X	-4.056	-4.056	0	%100
36	M26	Z	-7.025	-7.025	0	%100
37	M27	X	-3.517	-3.517	0	%100
38	M27	Z	-6.092	-6.092	0	%100
39	M28	X	-4.747	-4.747	0	%100
40	M28	Z	-8.223	-8.223	0	%100
41	M29	X	-4.746	-4.746	0	%100
42	M29	Z	-8.22	-8.22	0	%100
43	M35	X	-3.298	-3.298	0	%100
44	M35	Z	-5.712	-5.712	0	%100
45	M38	X	-5.496	-5.496	0	%100
46	M38	Z	-9.519	-9.519	0	%100
47	M39	X	-.838	-.838	0	%100
48	M39	Z	-1.452	-1.452	0	%100
49	M40	X	-.838	-.838	0	%100
50	M40	Z	-1.452	-1.452	0	%100
51	M41	X	-.716	-.716	0	%100
52	M41	Z	-1.24	-1.24	0	%100
53	M44	X	-1.187	-1.187	0	%100
54	M44	Z	-2.056	-2.056	0	%100
55	M45	X	-1.187	-1.187	0	%100
56	M45	Z	-2.055	-2.055	0	%100
57	M51	X	-.824	-.824	0	%100
58	M51	Z	-1.428	-1.428	0	%100
59	M54	X	-1.374	-1.374	0	%100
60	M54	Z	-2.38	-2.38	0	%100
61	M55	X	-.841	-.841	0	%100
62	M55	Z	-1.457	-1.457	0	%100
63	M56	X	-3.359	-3.359	0	%100
64	M56	Z	-5.817	-5.817	0	%100
65	M57	X	-1.193	-1.193	0	%100
66	M57	Z	-2.066	-2.066	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
67	MP2A	X	-3.868	-3.868	0	%100
68	MP2A	Z	-6.699	-6.699	0	%100
69	MP3A	X	-3.868	-3.868	0	%100
70	MP3A	Z	-6.699	-6.699	0	%100
71	MP4A	X	-3.868	-3.868	0	%100
72	MP4A	Z	-6.699	-6.699	0	%100
73	MP5A	X	-3.868	-3.868	0	%100
74	MP5A	Z	-6.699	-6.699	0	%100
75	MP1C	X	-3.868	-3.868	0	%100
76	MP1C	Z	-6.699	-6.699	0	%100
77	MP2C	X	-3.868	-3.868	0	%100
78	MP2C	Z	-6.699	-6.699	0	%100
79	MP3C	X	-3.868	-3.868	0	%100
80	MP3C	Z	-6.699	-6.699	0	%100
81	MP4C	X	-3.868	-3.868	0	%100
82	MP4C	Z	-6.699	-6.699	0	%100
83	MP5C	X	-3.868	-3.868	0	%100
84	MP5C	Z	-6.699	-6.699	0	%100
85	MP1B	X	-3.868	-3.868	0	%100
86	MP1B	Z	-6.699	-6.699	0	%100
87	MP2B	X	-3.868	-3.868	0	%100
88	MP2B	Z	-6.699	-6.699	0	%100
89	MP3B	X	-3.868	-3.868	0	%100
90	MP3B	Z	-6.699	-6.699	0	%100
91	MP4B	X	-3.868	-3.868	0	%100
92	MP4B	Z	-6.699	-6.699	0	%100
93	MP5B	X	-3.868	-3.868	0	%100
94	MP5B	Z	-6.699	-6.699	0	%100
95	M88	X	-2.863	-2.863	0	%100
96	M88	Z	-4.959	-4.959	0	%100
97	M91	X	-4.772	-4.772	0	%100
98	M91	Z	-8.266	-8.266	0	%100
99	M94	X	-.716	-.716	0	%100
100	M94	Z	-1.24	-1.24	0	%100
101	M97	X	-1.193	-1.193	0	%100
102	M97	Z	-2.066	-2.066	0	%100
103	M105	X	-3.511	-3.511	0	%100
104	M105	Z	-6.082	-6.082	0	%100
105	M113	X	0	0	0	%100
106	M113	Z	0	0	0	%100
107	M121	X	-3.511	-3.511	0	%100
108	M121	Z	-6.082	-6.082	0	%100
109	M124	X	0	0	0	%100
110	M124	Z	0	0	0	%100
111	M125	X	-4.399	-4.399	0	%100
112	M125	Z	-7.62	-7.62	0	%100
113	M126	X	-4.399	-4.399	0	%100
114	M126	Z	-7.62	-7.62	0	%100
115	M127	X	-5.66	-5.66	0	%100
116	M127	Z	-9.804	-9.804	0	%100
117	M128	X	-1.721	-1.721	0	%100
118	M128	Z	-2.981	-2.981	0	%100
119	M129	X	-5.37	-5.37	0	%100
120	M129	Z	-9.3	-9.3	0	%100
121	M130	X	-5.37	-5.37	0	%100
122	M130	Z	-9.3	-9.3	0	%100
123	M131	X	-1.721	-1.721	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
124	M131	Z	-2.981	-2.981	0	%100
125	M132	X	-5.66	-5.66	0	%100
126	M132	Z	-9.804	-9.804	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-1.134	-1.134	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-3.106	-3.106	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	-1.134	-1.134	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	-3.421	-3.421	0	%100
9	M5	X	0	0	0	%100
10	M5	Z	-3.109	-3.109	0	%100
11	M6	X	0	0	0	%100
12	M6	Z	0	0	0	%100
13	M7	X	0	0	0	%100
14	M7	Z	-4.537	-4.537	0	%100
15	M8	X	0	0	0	%100
16	M8	Z	0	0	0	%100
17	M14	X	0	0	0	%100
18	M14	Z	0	0	0	%100
19	M17	X	0	0	0	%100
20	M17	Z	0	0	0	%100
21	M18	X	0	0	0	%100
22	M18	Z	-1.81	-1.81	0	%100
23	M19	X	0	0	0	%100
24	M19	Z	-1.81	-1.81	0	%100
25	MP1A	X	0	0	0	%100
26	MP1A	Z	-2.849	-2.849	0	%100
27	M22	X	0	0	0	%100
28	M22	Z	-.776	-.776	0	%100
29	M23	X	0	0	0	%100
30	M23	Z	-.855	-.855	0	%100
31	M24	X	0	0	0	%100
32	M24	Z	-.777	-.777	0	%100
33	M25	X	0	0	0	%100
34	M25	Z	-.776	-.776	0	%100
35	M26	X	0	0	0	%100
36	M26	Z	-.855	-.855	0	%100
37	M27	X	0	0	0	%100
38	M27	Z	-.776	-.776	0	%100
39	M28	X	0	0	0	%100
40	M28	Z	-2.382	-2.382	0	%100
41	M29	X	0	0	0	%100
42	M29	Z	-2.381	-2.381	0	%100
43	M35	X	0	0	0	%100
44	M35	Z	-1.773	-1.773	0	%100
45	M38	X	0	0	0	%100
46	M38	Z	-2.386	-2.386	0	%100
47	M39	X	0	0	0	%100
48	M39	Z	-1.808	-1.808	0	%100
49	M40	X	0	0	0	%100
50	M40	Z	-1e-6	-1e-6	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
51	M41	X	0	0	0	%100
52	M41	Z	0	0	0	%100
53	M44	X	0	0	0	%100
54	M44	Z	-2.382	-2.382	0	%100
55	M45	X	0	0	0	%100
56	M45	Z	-2.381	-2.381	0	%100
57	M51	X	0	0	0	%100
58	M51	Z	-1.773	-1.773	0	%100
59	M54	X	0	0	0	%100
60	M54	Z	-2.386	-2.386	0	%100
61	M55	X	0	0	0	%100
62	M55	Z	-1e-6	-1e-6	0	%100
63	M56	X	0	0	0	%100
64	M56	Z	-1.808	-1.808	0	%100
65	M57	X	0	0	0	%100
66	M57	Z	0	0	0	%100
67	MP2A	X	0	0	0	%100
68	MP2A	Z	-2.849	-2.849	0	%100
69	MP3A	X	0	0	0	%100
70	MP3A	Z	-2.849	-2.849	0	%100
71	MP4A	X	0	0	0	%100
72	MP4A	Z	-2.849	-2.849	0	%100
73	MP5A	X	0	0	0	%100
74	MP5A	Z	-2.849	-2.849	0	%100
75	MP1C	X	0	0	0	%100
76	MP1C	Z	-2.849	-2.849	0	%100
77	MP2C	X	0	0	0	%100
78	MP2C	Z	-2.849	-2.849	0	%100
79	MP3C	X	0	0	0	%100
80	MP3C	Z	-2.849	-2.849	0	%100
81	MP4C	X	0	0	0	%100
82	MP4C	Z	-2.849	-2.849	0	%100
83	MP5C	X	0	0	0	%100
84	MP5C	Z	-2.849	-2.849	0	%100
85	MP1B	X	0	0	0	%100
86	MP1B	Z	-2.849	-2.849	0	%100
87	MP2B	X	0	0	0	%100
88	MP2B	Z	-2.849	-2.849	0	%100
89	MP3B	X	0	0	0	%100
90	MP3B	Z	-2.849	-2.849	0	%100
91	MP4B	X	0	0	0	%100
92	MP4B	Z	-2.849	-2.849	0	%100
93	MP5B	X	0	0	0	%100
94	MP5B	Z	-2.849	-2.849	0	%100
95	M88	X	0	0	0	%100
96	M88	Z	-1.518	-1.518	0	%100
97	M91	X	0	0	0	%100
98	M91	Z	-2.05	-2.05	0	%100
99	M94	X	0	0	0	%100
100	M94	Z	-1.518	-1.518	0	%100
101	M97	X	0	0	0	%100
102	M97	Z	-2.05	-2.05	0	%100
103	M105	X	0	0	0	%100
104	M105	Z	-3.151	-3.151	0	%100
105	M113	X	0	0	0	%100
106	M113	Z	-.788	-.788	0	%100
107	M121	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
108	M121	Z	-.788	-.788	0	%100
109	M124	X	0	0	0	%100
110	M124	Z	-.804	-.804	0	%100
111	M125	X	0	0	0	%100
112	M125	Z	-3.214	-3.214	0	%100
113	M126	X	0	0	0	%100
114	M126	Z	-.804	-.804	0	%100
115	M127	X	0	0	0	%100
116	M127	Z	-1.815	-1.815	0	%100
117	M128	X	0	0	0	%100
118	M128	Z	-1.815	-1.815	0	%100
119	M129	X	0	0	0	%100
120	M129	Z	-3.93	-3.93	0	%100
121	M130	X	0	0	0	%100
122	M130	Z	-1.646	-1.646	0	%100
123	M131	X	0	0	0	%100
124	M131	Z	-1.646	-1.646	0	%100
125	M132	X	0	0	0	%100
126	M132	Z	-3.93	-3.93	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.701	1.701	0	%100
2	M1	Z	-2.946	-2.946	0	%100
3	M2	X	1.165	1.165	0	%100
4	M2	Z	-2.017	-2.017	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	1.283	1.283	0	%100
8	M4	Z	-2.222	-2.222	0	%100
9	M5	X	1.166	1.166	0	%100
10	M5	Z	-2.019	-2.019	0	%100
11	M6	X	.397	.397	0	%100
12	M6	Z	-.687	-.687	0	%100
13	M7	X	1.684	1.684	0	%100
14	M7	Z	-2.916	-2.916	0	%100
15	M8	X	.397	.397	0	%100
16	M8	Z	-.687	-.687	0	%100
17	M14	X	.296	.296	0	%100
18	M14	Z	-.512	-.512	0	%100
19	M17	X	.398	.398	0	%100
20	M17	Z	-.689	-.689	0	%100
21	M18	X	.302	.302	0	%100
22	M18	Z	-.523	-.523	0	%100
23	M19	X	1.206	1.206	0	%100
24	M19	Z	-2.089	-2.089	0	%100
25	MP1A	X	1.424	1.424	0	%100
26	MP1A	Z	-2.467	-2.467	0	%100
27	M22	X	1.165	1.165	0	%100
28	M22	Z	-2.017	-2.017	0	%100
29	M23	X	1.283	1.283	0	%100
30	M23	Z	-2.222	-2.222	0	%100
31	M24	X	1.166	1.166	0	%100
32	M24	Z	-2.019	-2.019	0	%100
33	M25	X	0	0	0	%100
34	M25	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
35	M26	X	0	0	0	%100
36	M26	Z	0	0	0	%100
37	M27	X	0	0	0	%100
38	M27	Z	0	0	0	%100
39	M28	X	.397	.397	0	%100
40	M28	Z	-.688	-.688	0	%100
41	M29	X	.397	.397	0	%100
42	M29	Z	-.687	-.687	0	%100
43	M35	X	.296	.296	0	%100
44	M35	Z	-.512	-.512	0	%100
45	M38	X	.398	.398	0	%100
46	M38	Z	-.689	-.689	0	%100
47	M39	X	1.206	1.206	0	%100
48	M39	Z	-2.089	-2.089	0	%100
49	M40	X	.302	.302	0	%100
50	M40	Z	-.523	-.523	0	%100
51	M41	X	.253	.253	0	%100
52	M41	Z	-.438	-.438	0	%100
53	M44	X	1.588	1.588	0	%100
54	M44	Z	-2.75	-2.75	0	%100
55	M45	X	1.588	1.588	0	%100
56	M45	Z	-2.75	-2.75	0	%100
57	M51	X	1.182	1.182	0	%100
58	M51	Z	-2.048	-2.048	0	%100
59	M54	X	1.591	1.591	0	%100
60	M54	Z	-2.755	-2.755	0	%100
61	M55	X	.301	.301	0	%100
62	M55	Z	-.521	-.521	0	%100
63	M56	X	.301	.301	0	%100
64	M56	Z	-.521	-.521	0	%100
65	M57	X	.342	.342	0	%100
66	M57	Z	-.592	-.592	0	%100
67	MP2A	X	1.424	1.424	0	%100
68	MP2A	Z	-2.467	-2.467	0	%100
69	MP3A	X	1.424	1.424	0	%100
70	MP3A	Z	-2.467	-2.467	0	%100
71	MP4A	X	1.424	1.424	0	%100
72	MP4A	Z	-2.467	-2.467	0	%100
73	MP5A	X	1.424	1.424	0	%100
74	MP5A	Z	-2.467	-2.467	0	%100
75	MP1C	X	1.424	1.424	0	%100
76	MP1C	Z	-2.467	-2.467	0	%100
77	MP2C	X	1.424	1.424	0	%100
78	MP2C	Z	-2.467	-2.467	0	%100
79	MP3C	X	1.424	1.424	0	%100
80	MP3C	Z	-2.467	-2.467	0	%100
81	MP4C	X	1.424	1.424	0	%100
82	MP4C	Z	-2.467	-2.467	0	%100
83	MP5C	X	1.424	1.424	0	%100
84	MP5C	Z	-2.467	-2.467	0	%100
85	MP1B	X	1.424	1.424	0	%100
86	MP1B	Z	-2.467	-2.467	0	%100
87	MP2B	X	1.424	1.424	0	%100
88	MP2B	Z	-2.467	-2.467	0	%100
89	MP3B	X	1.424	1.424	0	%100
90	MP3B	Z	-2.467	-2.467	0	%100
91	MP4B	X	1.424	1.424	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
92	MP4B	Z	-2.467	-2.467	0	%100
93	MP5B	X	1.424	1.424	0	%100
94	MP5B	Z	-2.467	-2.467	0	%100
95	M88	X	.253	.253	0	%100
96	M88	Z	-.438	-.438	0	%100
97	M91	X	.342	.342	0	%100
98	M91	Z	-.592	-.592	0	%100
99	M94	X	1.012	1.012	0	%100
100	M94	Z	-1.753	-1.753	0	%100
101	M97	X	1.367	1.367	0	%100
102	M97	Z	-2.367	-2.367	0	%100
103	M105	X	1.182	1.182	0	%100
104	M105	Z	-2.047	-2.047	0	%100
105	M113	X	1.182	1.182	0	%100
106	M113	Z	-2.047	-2.047	0	%100
107	M121	X	0	0	0	%100
108	M121	Z	0	0	0	%100
109	M124	X	1.205	1.205	0	%100
110	M124	Z	-2.088	-2.088	0	%100
111	M125	X	1.205	1.205	0	%100
112	M125	Z	-2.088	-2.088	0	%100
113	M126	X	0	0	0	%100
114	M126	Z	0	0	0	%100
115	M127	X	.499	.499	0	%100
116	M127	Z	-.864	-.864	0	%100
117	M128	X	1.64	1.64	0	%100
118	M128	Z	-2.841	-2.841	0	%100
119	M129	X	1.64	1.64	0	%100
120	M129	Z	-2.841	-2.841	0	%100
121	M130	X	.499	.499	0	%100
122	M130	Z	-.864	-.864	0	%100
123	M131	X	1.556	1.556	0	%100
124	M131	Z	-2.695	-2.695	0	%100
125	M132	X	1.556	1.556	0	%100
126	M132	Z	-2.695	-2.695	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	3.928	3.928	0	%100
2	M1	Z	-2.268	-2.268	0	%100
3	M2	X	.672	.672	0	%100
4	M2	Z	-.388	-.388	0	%100
5	M3	X	.982	.982	0	%100
6	M3	Z	-.567	-.567	0	%100
7	M4	X	.741	.741	0	%100
8	M4	Z	-.428	-.428	0	%100
9	M5	X	.673	.673	0	%100
10	M5	Z	-.389	-.389	0	%100
11	M6	X	2.062	2.062	0	%100
12	M6	Z	-1.191	-1.191	0	%100
13	M7	X	.952	.952	0	%100
14	M7	Z	-.55	-.55	0	%100
15	M8	X	2.062	2.062	0	%100
16	M8	Z	-1.191	-1.191	0	%100
17	M14	X	1.536	1.536	0	%100
18	M14	Z	-.887	-.887	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
19	M17	X	2.066	2.066	0	%100
20	M17	Z	-1.193	-1.193	0	%100
21	M18	X	0	0	0	%100
22	M18	Z	0	0	0	%100
23	M19	X	1.566	1.566	0	%100
24	M19	Z	-.904	-.904	0	%100
25	MP1A	X	2.467	2.467	0	%100
26	MP1A	Z	-1.424	-1.424	0	%100
27	M22	X	2.69	2.69	0	%100
28	M22	Z	-1.553	-1.553	0	%100
29	M23	X	2.963	2.963	0	%100
30	M23	Z	-1.711	-1.711	0	%100
31	M24	X	2.692	2.692	0	%100
32	M24	Z	-1.554	-1.554	0	%100
33	M25	X	.672	.672	0	%100
34	M25	Z	-.388	-.388	0	%100
35	M26	X	.741	.741	0	%100
36	M26	Z	-.428	-.428	0	%100
37	M27	X	.672	.672	0	%100
38	M27	Z	-.388	-.388	0	%100
39	M28	X	0	0	0	%100
40	M28	Z	0	0	0	%100
41	M29	X	0	0	0	%100
42	M29	Z	0	0	0	%100
43	M35	X	0	0	0	%100
44	M35	Z	0	0	0	%100
45	M38	X	0	0	0	%100
46	M38	Z	0	0	0	%100
47	M39	X	1.568	1.568	0	%100
48	M39	Z	-.905	-.905	0	%100
49	M40	X	1.568	1.568	0	%100
50	M40	Z	-.905	-.905	0	%100
51	M41	X	1.315	1.315	0	%100
52	M41	Z	-.759	-.759	0	%100
53	M44	X	2.063	2.063	0	%100
54	M44	Z	-1.191	-1.191	0	%100
55	M45	X	2.062	2.062	0	%100
56	M45	Z	-1.191	-1.191	0	%100
57	M51	X	1.536	1.536	0	%100
58	M51	Z	-.887	-.887	0	%100
59	M54	X	2.066	2.066	0	%100
60	M54	Z	-1.193	-1.193	0	%100
61	M55	X	1.566	1.566	0	%100
62	M55	Z	-.904	-.904	0	%100
63	M56	X	0	0	0	%100
64	M56	Z	0	0	0	%100
65	M57	X	1.775	1.775	0	%100
66	M57	Z	-1.025	-1.025	0	%100
67	MP2A	X	2.467	2.467	0	%100
68	MP2A	Z	-1.424	-1.424	0	%100
69	MP3A	X	2.467	2.467	0	%100
70	MP3A	Z	-1.424	-1.424	0	%100
71	MP4A	X	2.467	2.467	0	%100
72	MP4A	Z	-1.424	-1.424	0	%100
73	MP5A	X	2.467	2.467	0	%100
74	MP5A	Z	-1.424	-1.424	0	%100
75	MP1C	X	2.467	2.467	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
76	MP1C	Z	-1.424	-1.424	0	%100
77	MP2C	X	2.467	2.467	0	%100
78	MP2C	Z	-1.424	-1.424	0	%100
79	MP3C	X	2.467	2.467	0	%100
80	MP3C	Z	-1.424	-1.424	0	%100
81	MP4C	X	2.467	2.467	0	%100
82	MP4C	Z	-1.424	-1.424	0	%100
83	MP5C	X	2.467	2.467	0	%100
84	MP5C	Z	-1.424	-1.424	0	%100
85	MP1B	X	2.467	2.467	0	%100
86	MP1B	Z	-1.424	-1.424	0	%100
87	MP2B	X	2.467	2.467	0	%100
88	MP2B	Z	-1.424	-1.424	0	%100
89	MP3B	X	2.467	2.467	0	%100
90	MP3B	Z	-1.424	-1.424	0	%100
91	MP4B	X	2.467	2.467	0	%100
92	MP4B	Z	-1.424	-1.424	0	%100
93	MP5B	X	2.467	2.467	0	%100
94	MP5B	Z	-1.424	-1.424	0	%100
95	M88	X	0	0	0	%100
96	M88	Z	0	0	0	%100
97	M91	X	0	0	0	%100
98	M91	Z	0	0	0	%100
99	M94	X	1.315	1.315	0	%100
100	M94	Z	-.759	-.759	0	%100
101	M97	X	1.775	1.775	0	%100
102	M97	Z	-1.025	-1.025	0	%100
103	M105	X	.682	.682	0	%100
104	M105	Z	-.394	-.394	0	%100
105	M113	X	2.729	2.729	0	%100
106	M113	Z	-1.576	-1.576	0	%100
107	M121	X	.682	.682	0	%100
108	M121	Z	-.394	-.394	0	%100
109	M124	X	2.784	2.784	0	%100
110	M124	Z	-1.607	-1.607	0	%100
111	M125	X	.696	.696	0	%100
112	M125	Z	-.402	-.402	0	%100
113	M126	X	.696	.696	0	%100
114	M126	Z	-.402	-.402	0	%100
115	M127	X	1.426	1.426	0	%100
116	M127	Z	-.823	-.823	0	%100
117	M128	X	3.403	3.403	0	%100
118	M128	Z	-1.965	-1.965	0	%100
119	M129	X	1.572	1.572	0	%100
120	M129	Z	-.907	-.907	0	%100
121	M130	X	1.572	1.572	0	%100
122	M130	Z	-.907	-.907	0	%100
123	M131	X	3.403	3.403	0	%100
124	M131	Z	-1.965	-1.965	0	%100
125	M132	X	1.426	1.426	0	%100
126	M132	Z	-.823	-.823	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	3.402	3.402	0	%100
2	M1	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	3.402	3.402	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	0	0	0	%100
9	M5	X	0	0	0	%100
10	M5	Z	0	0	0	%100
11	M6	X	3.175	3.175	0	%100
12	M6	Z	0	0	0	%100
13	M7	X	.000361	.000361	0	%100
14	M7	Z	0	0	0	%100
15	M8	X	3.175	3.175	0	%100
16	M8	Z	0	0	0	%100
17	M14	X	2.364	2.364	0	%100
18	M14	Z	0	0	0	%100
19	M17	X	3.181	3.181	0	%100
20	M17	Z	0	0	0	%100
21	M18	X	.602	.602	0	%100
22	M18	Z	0	0	0	%100
23	M19	X	.602	.602	0	%100
24	M19	Z	0	0	0	%100
25	MP1A	X	2.849	2.849	0	%100
26	MP1A	Z	0	0	0	%100
27	M22	X	2.329	2.329	0	%100
28	M22	Z	0	0	0	%100
29	M23	X	2.566	2.566	0	%100
30	M23	Z	0	0	0	%100
31	M24	X	2.332	2.332	0	%100
32	M24	Z	0	0	0	%100
33	M25	X	2.329	2.329	0	%100
34	M25	Z	0	0	0	%100
35	M26	X	2.566	2.566	0	%100
36	M26	Z	0	0	0	%100
37	M27	X	2.329	2.329	0	%100
38	M27	Z	0	0	0	%100
39	M28	X	.794	.794	0	%100
40	M28	Z	0	0	0	%100
41	M29	X	.794	.794	0	%100
42	M29	Z	0	0	0	%100
43	M35	X	.591	.591	0	%100
44	M35	Z	0	0	0	%100
45	M38	X	.795	.795	0	%100
46	M38	Z	0	0	0	%100
47	M39	X	.604	.604	0	%100
48	M39	Z	0	0	0	%100
49	M40	X	2.412	2.412	0	%100
50	M40	Z	0	0	0	%100
51	M41	X	2.024	2.024	0	%100
52	M41	Z	0	0	0	%100
53	M44	X	.794	.794	0	%100
54	M44	Z	0	0	0	%100
55	M45	X	.794	.794	0	%100
56	M45	Z	0	0	0	%100
57	M51	X	.591	.591	0	%100
58	M51	Z	0	0	0	%100
59	M54	X	.795	.795	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
60	M54	Z	0	0	0	%100
61	M55	X	2.412	2.412	0	%100
62	M55	Z	0	0	0	%100
63	M56	X	.604	.604	0	%100
64	M56	Z	0	0	0	%100
65	M57	X	2.733	2.733	0	%100
66	M57	Z	0	0	0	%100
67	MP2A	X	2.849	2.849	0	%100
68	MP2A	Z	0	0	0	%100
69	MP3A	X	2.849	2.849	0	%100
70	MP3A	Z	0	0	0	%100
71	MP4A	X	2.849	2.849	0	%100
72	MP4A	Z	0	0	0	%100
73	MP5A	X	2.849	2.849	0	%100
74	MP5A	Z	0	0	0	%100
75	MP1C	X	2.849	2.849	0	%100
76	MP1C	Z	0	0	0	%100
77	MP2C	X	2.849	2.849	0	%100
78	MP2C	Z	0	0	0	%100
79	MP3C	X	2.849	2.849	0	%100
80	MP3C	Z	0	0	0	%100
81	MP4C	X	2.849	2.849	0	%100
82	MP4C	Z	0	0	0	%100
83	MP5C	X	2.849	2.849	0	%100
84	MP5C	Z	0	0	0	%100
85	MP1B	X	2.849	2.849	0	%100
86	MP1B	Z	0	0	0	%100
87	MP2B	X	2.849	2.849	0	%100
88	MP2B	Z	0	0	0	%100
89	MP3B	X	2.849	2.849	0	%100
90	MP3B	Z	0	0	0	%100
91	MP4B	X	2.849	2.849	0	%100
92	MP4B	Z	0	0	0	%100
93	MP5B	X	2.849	2.849	0	%100
94	MP5B	Z	0	0	0	%100
95	M88	X	.506	.506	0	%100
96	M88	Z	0	0	0	%100
97	M91	X	.683	.683	0	%100
98	M91	Z	0	0	0	%100
99	M94	X	.506	.506	0	%100
100	M94	Z	0	0	0	%100
101	M97	X	.683	.683	0	%100
102	M97	Z	0	0	0	%100
103	M105	X	0	0	0	%100
104	M105	Z	0	0	0	%100
105	M113	X	2.364	2.364	0	%100
106	M113	Z	0	0	0	%100
107	M121	X	2.364	2.364	0	%100
108	M121	Z	0	0	0	%100
109	M124	X	2.411	2.411	0	%100
110	M124	Z	0	0	0	%100
111	M125	X	0	0	0	%100
112	M125	Z	0	0	0	%100
113	M126	X	2.411	2.411	0	%100
114	M126	Z	0	0	0	%100
115	M127	X	3.112	3.112	0	%100
116	M127	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
117	M128	X	3.112	3.112	0	%100
118	M128	Z	0	0	0	%100
119	M129	X	.997	.997	0	%100
120	M129	Z	0	0	0	%100
121	M130	X	3.281	3.281	0	%100
122	M130	Z	0	0	0	%100
123	M131	X	3.281	3.281	0	%100
124	M131	Z	0	0	0	%100
125	M132	X	.997	.997	0	%100
126	M132	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.982	.982	0	%100
2	M1	Z	.567	.567	0	%100
3	M2	X	.672	.672	0	%100
4	M2	Z	.388	.388	0	%100
5	M3	X	3.928	3.928	0	%100
6	M3	Z	2.268	2.268	0	%100
7	M4	X	.741	.741	0	%100
8	M4	Z	.428	.428	0	%100
9	M5	X	.673	.673	0	%100
10	M5	Z	.389	.389	0	%100
11	M6	X	2.062	2.062	0	%100
12	M6	Z	1.191	1.191	0	%100
13	M7	X	1.013	1.013	0	%100
14	M7	Z	.585	.585	0	%100
15	M8	X	2.062	2.062	0	%100
16	M8	Z	1.191	1.191	0	%100
17	M14	X	1.536	1.536	0	%100
18	M14	Z	.887	.887	0	%100
19	M17	X	2.066	2.066	0	%100
20	M17	Z	1.193	1.193	0	%100
21	M18	X	1.566	1.566	0	%100
22	M18	Z	.904	.904	0	%100
23	M19	X	0	0	0	%100
24	M19	Z	0	0	0	%100
25	MP1A	X	2.467	2.467	0	%100
26	MP1A	Z	1.424	1.424	0	%100
27	M22	X	.672	.672	0	%100
28	M22	Z	.388	.388	0	%100
29	M23	X	.741	.741	0	%100
30	M23	Z	.428	.428	0	%100
31	M24	X	.673	.673	0	%100
32	M24	Z	.389	.389	0	%100
33	M25	X	2.69	2.69	0	%100
34	M25	Z	1.553	1.553	0	%100
35	M26	X	2.963	2.963	0	%100
36	M26	Z	1.711	1.711	0	%100
37	M27	X	2.69	2.69	0	%100
38	M27	Z	1.553	1.553	0	%100
39	M28	X	2.063	2.063	0	%100
40	M28	Z	1.191	1.191	0	%100
41	M29	X	2.062	2.062	0	%100
42	M29	Z	1.191	1.191	0	%100
43	M35	X	1.536	1.536	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
44	M35	Z	.887	.887	0	%100
45	M38	X	2.066	2.066	0	%100
46	M38	Z	1.193	1.193	0	%100
47	M39	X	0	0	0	%100
48	M39	Z	0	0	0	%100
49	M40	X	1.566	1.566	0	%100
50	M40	Z	.904	.904	0	%100
51	M41	X	1.315	1.315	0	%100
52	M41	Z	.759	.759	0	%100
53	M44	X	0	0	0	%100
54	M44	Z	0	0	0	%100
55	M45	X	0	0	0	%100
56	M45	Z	0	0	0	%100
57	M51	X	0	0	0	%100
58	M51	Z	0	0	0	%100
59	M54	X	0	0	0	%100
60	M54	Z	0	0	0	%100
61	M55	X	1.568	1.568	0	%100
62	M55	Z	.905	.905	0	%100
63	M56	X	1.568	1.568	0	%100
64	M56	Z	.905	.905	0	%100
65	M57	X	1.775	1.775	0	%100
66	M57	Z	1.025	1.025	0	%100
67	MP2A	X	2.467	2.467	0	%100
68	MP2A	Z	1.424	1.424	0	%100
69	MP3A	X	2.467	2.467	0	%100
70	MP3A	Z	1.424	1.424	0	%100
71	MP4A	X	2.467	2.467	0	%100
72	MP4A	Z	1.424	1.424	0	%100
73	MP5A	X	2.467	2.467	0	%100
74	MP5A	Z	1.424	1.424	0	%100
75	MP1C	X	2.467	2.467	0	%100
76	MP1C	Z	1.424	1.424	0	%100
77	MP2C	X	2.467	2.467	0	%100
78	MP2C	Z	1.424	1.424	0	%100
79	MP3C	X	2.467	2.467	0	%100
80	MP3C	Z	1.424	1.424	0	%100
81	MP4C	X	2.467	2.467	0	%100
82	MP4C	Z	1.424	1.424	0	%100
83	MP5C	X	2.467	2.467	0	%100
84	MP5C	Z	1.424	1.424	0	%100
85	MP1B	X	2.467	2.467	0	%100
86	MP1B	Z	1.424	1.424	0	%100
87	MP2B	X	2.467	2.467	0	%100
88	MP2B	Z	1.424	1.424	0	%100
89	MP3B	X	2.467	2.467	0	%100
90	MP3B	Z	1.424	1.424	0	%100
91	MP4B	X	2.467	2.467	0	%100
92	MP4B	Z	1.424	1.424	0	%100
93	MP5B	X	2.467	2.467	0	%100
94	MP5B	Z	1.424	1.424	0	%100
95	M88	X	1.315	1.315	0	%100
96	M88	Z	.759	.759	0	%100
97	M91	X	1.775	1.775	0	%100
98	M91	Z	1.025	1.025	0	%100
99	M94	X	0	0	0	%100
100	M94	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
101	M97	X	0	0	0	%100
102	M97	Z	0	0	0	%100
103	M105	X	.682	.682	0	%100
104	M105	Z	.394	.394	0	%100
105	M113	X	.682	.682	0	%100
106	M113	Z	.394	.394	0	%100
107	M121	X	2.729	2.729	0	%100
108	M121	Z	1.576	1.576	0	%100
109	M124	X	.696	.696	0	%100
110	M124	Z	.402	.402	0	%100
111	M125	X	.696	.696	0	%100
112	M125	Z	.402	.402	0	%100
113	M126	X	2.784	2.784	0	%100
114	M126	Z	1.607	1.607	0	%100
115	M127	X	3.403	3.403	0	%100
116	M127	Z	1.965	1.965	0	%100
117	M128	X	1.426	1.426	0	%100
118	M128	Z	.823	.823	0	%100
119	M129	X	1.426	1.426	0	%100
120	M129	Z	.823	.823	0	%100
121	M130	X	3.403	3.403	0	%100
122	M130	Z	1.965	1.965	0	%100
123	M131	X	1.572	1.572	0	%100
124	M131	Z	.907	.907	0	%100
125	M132	X	1.572	1.572	0	%100
126	M132	Z	.907	.907	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	1.165	1.165	0	%100
4	M2	Z	2.017	2.017	0	%100
5	M3	X	1.701	1.701	0	%100
6	M3	Z	2.946	2.946	0	%100
7	M4	X	1.283	1.283	0	%100
8	M4	Z	2.222	2.222	0	%100
9	M5	X	1.166	1.166	0	%100
10	M5	Z	2.019	2.019	0	%100
11	M6	X	.397	.397	0	%100
12	M6	Z	.687	.687	0	%100
13	M7	X	1.719	1.719	0	%100
14	M7	Z	2.977	2.977	0	%100
15	M8	X	.397	.397	0	%100
16	M8	Z	.687	.687	0	%100
17	M14	X	.296	.296	0	%100
18	M14	Z	.512	.512	0	%100
19	M17	X	.398	.398	0	%100
20	M17	Z	.689	.689	0	%100
21	M18	X	1.206	1.206	0	%100
22	M18	Z	2.089	2.089	0	%100
23	M19	X	.302	.302	0	%100
24	M19	Z	.523	.523	0	%100
25	MP1A	X	1.424	1.424	0	%100
26	MP1A	Z	2.467	2.467	0	%100
27	M22	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
28	M22	Z	0	0	0	%100
29	M23	X	0	0	0	%100
30	M23	Z	0	0	0	%100
31	M24	X	0	0	0	%100
32	M24	Z	0	0	0	%100
33	M25	X	1.165	1.165	0	%100
34	M25	Z	2.017	2.017	0	%100
35	M26	X	1.283	1.283	0	%100
36	M26	Z	2.222	2.222	0	%100
37	M27	X	1.165	1.165	0	%100
38	M27	Z	2.017	2.017	0	%100
39	M28	X	1.588	1.588	0	%100
40	M28	Z	2.75	2.75	0	%100
41	M29	X	1.588	1.588	0	%100
42	M29	Z	2.75	2.75	0	%100
43	M35	X	1.182	1.182	0	%100
44	M35	Z	2.048	2.048	0	%100
45	M38	X	1.591	1.591	0	%100
46	M38	Z	2.755	2.755	0	%100
47	M39	X	.301	.301	0	%100
48	M39	Z	.521	.521	0	%100
49	M40	X	.301	.301	0	%100
50	M40	Z	.521	.521	0	%100
51	M41	X	.253	.253	0	%100
52	M41	Z	.438	.438	0	%100
53	M44	X	.397	.397	0	%100
54	M44	Z	.688	.688	0	%100
55	M45	X	.397	.397	0	%100
56	M45	Z	.687	.687	0	%100
57	M51	X	.296	.296	0	%100
58	M51	Z	.512	.512	0	%100
59	M54	X	.398	.398	0	%100
60	M54	Z	.689	.689	0	%100
61	M55	X	.302	.302	0	%100
62	M55	Z	.523	.523	0	%100
63	M56	X	1.206	1.206	0	%100
64	M56	Z	2.089	2.089	0	%100
65	M57	X	.342	.342	0	%100
66	M57	Z	.592	.592	0	%100
67	MP2A	X	1.424	1.424	0	%100
68	MP2A	Z	2.467	2.467	0	%100
69	MP3A	X	1.424	1.424	0	%100
70	MP3A	Z	2.467	2.467	0	%100
71	MP4A	X	1.424	1.424	0	%100
72	MP4A	Z	2.467	2.467	0	%100
73	MP5A	X	1.424	1.424	0	%100
74	MP5A	Z	2.467	2.467	0	%100
75	MP1C	X	1.424	1.424	0	%100
76	MP1C	Z	2.467	2.467	0	%100
77	MP2C	X	1.424	1.424	0	%100
78	MP2C	Z	2.467	2.467	0	%100
79	MP3C	X	1.424	1.424	0	%100
80	MP3C	Z	2.467	2.467	0	%100
81	MP4C	X	1.424	1.424	0	%100
82	MP4C	Z	2.467	2.467	0	%100
83	MP5C	X	1.424	1.424	0	%100
84	MP5C	Z	2.467	2.467	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
85	MP1B	X	1.424	1.424	0	%100
86	MP1B	Z	2.467	2.467	0	%100
87	MP2B	X	1.424	1.424	0	%100
88	MP2B	Z	2.467	2.467	0	%100
89	MP3B	X	1.424	1.424	0	%100
90	MP3B	Z	2.467	2.467	0	%100
91	MP4B	X	1.424	1.424	0	%100
92	MP4B	Z	2.467	2.467	0	%100
93	MP5B	X	1.424	1.424	0	%100
94	MP5B	Z	2.467	2.467	0	%100
95	M88	X	1.012	1.012	0	%100
96	M88	Z	1.753	1.753	0	%100
97	M91	X	1.367	1.367	0	%100
98	M91	Z	2.367	2.367	0	%100
99	M94	X	.253	.253	0	%100
100	M94	Z	.438	.438	0	%100
101	M97	X	.342	.342	0	%100
102	M97	Z	.592	.592	0	%100
103	M105	X	1.182	1.182	0	%100
104	M105	Z	2.047	2.047	0	%100
105	M113	X	0	0	0	%100
106	M113	Z	0	0	0	%100
107	M121	X	1.182	1.182	0	%100
108	M121	Z	2.047	2.047	0	%100
109	M124	X	0	0	0	%100
110	M124	Z	0	0	0	%100
111	M125	X	1.205	1.205	0	%100
112	M125	Z	2.088	2.088	0	%100
113	M126	X	1.205	1.205	0	%100
114	M126	Z	2.088	2.088	0	%100
115	M127	X	1.64	1.64	0	%100
116	M127	Z	2.841	2.841	0	%100
117	M128	X	.499	.499	0	%100
118	M128	Z	.864	.864	0	%100
119	M129	X	1.556	1.556	0	%100
120	M129	Z	2.695	2.695	0	%100
121	M130	X	1.556	1.556	0	%100
122	M130	Z	2.695	2.695	0	%100
123	M131	X	.499	.499	0	%100
124	M131	Z	.864	.864	0	%100
125	M132	X	1.64	1.64	0	%100
126	M132	Z	2.841	2.841	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	1.134	1.134	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	3.106	3.106	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	1.134	1.134	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	3.421	3.421	0	%100
9	M5	X	0	0	0	%100
10	M5	Z	3.109	3.109	0	%100
11	M6	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
12	M6	Z	0	0	0	%100
13	M7	X	0	0	0	%100
14	M7	Z	4.537	4.537	0	%100
15	M8	X	0	0	0	%100
16	M8	Z	0	0	0	%100
17	M14	X	0	0	0	%100
18	M14	Z	0	0	0	%100
19	M17	X	0	0	0	%100
20	M17	Z	0	0	0	%100
21	M18	X	0	0	0	%100
22	M18	Z	1.81	1.81	0	%100
23	M19	X	0	0	0	%100
24	M19	Z	1.81	1.81	0	%100
25	MP1A	X	0	0	0	%100
26	MP1A	Z	2.849	2.849	0	%100
27	M22	X	0	0	0	%100
28	M22	Z	.776	.776	0	%100
29	M23	X	0	0	0	%100
30	M23	Z	.855	.855	0	%100
31	M24	X	0	0	0	%100
32	M24	Z	.777	.777	0	%100
33	M25	X	0	0	0	%100
34	M25	Z	.776	.776	0	%100
35	M26	X	0	0	0	%100
36	M26	Z	.855	.855	0	%100
37	M27	X	0	0	0	%100
38	M27	Z	.776	.776	0	%100
39	M28	X	0	0	0	%100
40	M28	Z	2.382	2.382	0	%100
41	M29	X	0	0	0	%100
42	M29	Z	2.381	2.381	0	%100
43	M35	X	0	0	0	%100
44	M35	Z	1.773	1.773	0	%100
45	M38	X	0	0	0	%100
46	M38	Z	2.386	2.386	0	%100
47	M39	X	0	0	0	%100
48	M39	Z	1.808	1.808	0	%100
49	M40	X	0	0	0	%100
50	M40	Z	1e-6	1e-6	0	%100
51	M41	X	0	0	0	%100
52	M41	Z	0	0	0	%100
53	M44	X	0	0	0	%100
54	M44	Z	2.382	2.382	0	%100
55	M45	X	0	0	0	%100
56	M45	Z	2.381	2.381	0	%100
57	M51	X	0	0	0	%100
58	M51	Z	1.773	1.773	0	%100
59	M54	X	0	0	0	%100
60	M54	Z	2.386	2.386	0	%100
61	M55	X	0	0	0	%100
62	M55	Z	1e-6	1e-6	0	%100
63	M56	X	0	0	0	%100
64	M56	Z	1.808	1.808	0	%100
65	M57	X	0	0	0	%100
66	M57	Z	0	0	0	%100
67	MP2A	X	0	0	0	%100
68	MP2A	Z	2.849	2.849	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
69	MP3A	X	0	0	0	%100
70	MP3A	Z	2.849	2.849	0	%100
71	MP4A	X	0	0	0	%100
72	MP4A	Z	2.849	2.849	0	%100
73	MP5A	X	0	0	0	%100
74	MP5A	Z	2.849	2.849	0	%100
75	MP1C	X	0	0	0	%100
76	MP1C	Z	2.849	2.849	0	%100
77	MP2C	X	0	0	0	%100
78	MP2C	Z	2.849	2.849	0	%100
79	MP3C	X	0	0	0	%100
80	MP3C	Z	2.849	2.849	0	%100
81	MP4C	X	0	0	0	%100
82	MP4C	Z	2.849	2.849	0	%100
83	MP5C	X	0	0	0	%100
84	MP5C	Z	2.849	2.849	0	%100
85	MP1B	X	0	0	0	%100
86	MP1B	Z	2.849	2.849	0	%100
87	MP2B	X	0	0	0	%100
88	MP2B	Z	2.849	2.849	0	%100
89	MP3B	X	0	0	0	%100
90	MP3B	Z	2.849	2.849	0	%100
91	MP4B	X	0	0	0	%100
92	MP4B	Z	2.849	2.849	0	%100
93	MP5B	X	0	0	0	%100
94	MP5B	Z	2.849	2.849	0	%100
95	M88	X	0	0	0	%100
96	M88	Z	1.518	1.518	0	%100
97	M91	X	0	0	0	%100
98	M91	Z	2.05	2.05	0	%100
99	M94	X	0	0	0	%100
100	M94	Z	1.518	1.518	0	%100
101	M97	X	0	0	0	%100
102	M97	Z	2.05	2.05	0	%100
103	M105	X	0	0	0	%100
104	M105	Z	3.151	3.151	0	%100
105	M113	X	0	0	0	%100
106	M113	Z	.788	.788	0	%100
107	M121	X	0	0	0	%100
108	M121	Z	.788	.788	0	%100
109	M124	X	0	0	0	%100
110	M124	Z	.804	.804	0	%100
111	M125	X	0	0	0	%100
112	M125	Z	3.214	3.214	0	%100
113	M126	X	0	0	0	%100
114	M126	Z	.804	.804	0	%100
115	M127	X	0	0	0	%100
116	M127	Z	1.815	1.815	0	%100
117	M128	X	0	0	0	%100
118	M128	Z	1.815	1.815	0	%100
119	M129	X	0	0	0	%100
120	M129	Z	3.93	3.93	0	%100
121	M130	X	0	0	0	%100
122	M130	Z	1.646	1.646	0	%100
123	M131	X	0	0	0	%100
124	M131	Z	1.646	1.646	0	%100
125	M132	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
126	M132	Z	3.93	3.93	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.701	-1.701	0	%100
2	M1	Z	2.946	2.946	0	%100
3	M2	X	-1.165	-1.165	0	%100
4	M2	Z	2.017	2.017	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	-1.283	-1.283	0	%100
8	M4	Z	2.222	2.222	0	%100
9	M5	X	-1.166	-1.166	0	%100
10	M5	Z	2.019	2.019	0	%100
11	M6	X	-.397	-.397	0	%100
12	M6	Z	.687	.687	0	%100
13	M7	X	-1.684	-1.684	0	%100
14	M7	Z	2.916	2.916	0	%100
15	M8	X	-.397	-.397	0	%100
16	M8	Z	.687	.687	0	%100
17	M14	X	-.296	-.296	0	%100
18	M14	Z	.512	.512	0	%100
19	M17	X	-.398	-.398	0	%100
20	M17	Z	.689	.689	0	%100
21	M18	X	-.302	-.302	0	%100
22	M18	Z	.523	.523	0	%100
23	M19	X	-1.206	-1.206	0	%100
24	M19	Z	2.089	2.089	0	%100
25	MP1A	X	-1.424	-1.424	0	%100
26	MP1A	Z	2.467	2.467	0	%100
27	M22	X	-1.165	-1.165	0	%100
28	M22	Z	2.017	2.017	0	%100
29	M23	X	-1.283	-1.283	0	%100
30	M23	Z	2.222	2.222	0	%100
31	M24	X	-1.166	-1.166	0	%100
32	M24	Z	2.019	2.019	0	%100
33	M25	X	0	0	0	%100
34	M25	Z	0	0	0	%100
35	M26	X	0	0	0	%100
36	M26	Z	0	0	0	%100
37	M27	X	0	0	0	%100
38	M27	Z	0	0	0	%100
39	M28	X	-.397	-.397	0	%100
40	M28	Z	.688	.688	0	%100
41	M29	X	-.397	-.397	0	%100
42	M29	Z	.687	.687	0	%100
43	M35	X	-.296	-.296	0	%100
44	M35	Z	.512	.512	0	%100
45	M38	X	-.398	-.398	0	%100
46	M38	Z	.689	.689	0	%100
47	M39	X	-1.206	-1.206	0	%100
48	M39	Z	2.089	2.089	0	%100
49	M40	X	-.302	-.302	0	%100
50	M40	Z	.523	.523	0	%100
51	M41	X	-.253	-.253	0	%100
52	M41	Z	.438	.438	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
53	M44	X	-1.588	-1.588	0	%100
54	M44	Z	2.75	2.75	0	%100
55	M45	X	-1.588	-1.588	0	%100
56	M45	Z	2.75	2.75	0	%100
57	M51	X	-1.182	-1.182	0	%100
58	M51	Z	2.048	2.048	0	%100
59	M54	X	-1.591	-1.591	0	%100
60	M54	Z	2.755	2.755	0	%100
61	M55	X	-.301	-.301	0	%100
62	M55	Z	.521	.521	0	%100
63	M56	X	-.301	-.301	0	%100
64	M56	Z	.521	.521	0	%100
65	M57	X	-.342	-.342	0	%100
66	M57	Z	.592	.592	0	%100
67	MP2A	X	-1.424	-1.424	0	%100
68	MP2A	Z	2.467	2.467	0	%100
69	MP3A	X	-1.424	-1.424	0	%100
70	MP3A	Z	2.467	2.467	0	%100
71	MP4A	X	-1.424	-1.424	0	%100
72	MP4A	Z	2.467	2.467	0	%100
73	MP5A	X	-1.424	-1.424	0	%100
74	MP5A	Z	2.467	2.467	0	%100
75	MP1C	X	-1.424	-1.424	0	%100
76	MP1C	Z	2.467	2.467	0	%100
77	MP2C	X	-1.424	-1.424	0	%100
78	MP2C	Z	2.467	2.467	0	%100
79	MP3C	X	-1.424	-1.424	0	%100
80	MP3C	Z	2.467	2.467	0	%100
81	MP4C	X	-1.424	-1.424	0	%100
82	MP4C	Z	2.467	2.467	0	%100
83	MP5C	X	-1.424	-1.424	0	%100
84	MP5C	Z	2.467	2.467	0	%100
85	MP1B	X	-1.424	-1.424	0	%100
86	MP1B	Z	2.467	2.467	0	%100
87	MP2B	X	-1.424	-1.424	0	%100
88	MP2B	Z	2.467	2.467	0	%100
89	MP3B	X	-1.424	-1.424	0	%100
90	MP3B	Z	2.467	2.467	0	%100
91	MP4B	X	-1.424	-1.424	0	%100
92	MP4B	Z	2.467	2.467	0	%100
93	MP5B	X	-1.424	-1.424	0	%100
94	MP5B	Z	2.467	2.467	0	%100
95	M88	X	-.253	-.253	0	%100
96	M88	Z	.438	.438	0	%100
97	M91	X	-.342	-.342	0	%100
98	M91	Z	.592	.592	0	%100
99	M94	X	-1.012	-1.012	0	%100
100	M94	Z	1.753	1.753	0	%100
101	M97	X	-1.367	-1.367	0	%100
102	M97	Z	2.367	2.367	0	%100
103	M105	X	-1.182	-1.182	0	%100
104	M105	Z	2.047	2.047	0	%100
105	M113	X	-1.182	-1.182	0	%100
106	M113	Z	2.047	2.047	0	%100
107	M121	X	0	0	0	%100
108	M121	Z	0	0	0	%100
109	M124	X	-1.205	-1.205	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
110	M124	Z	2.088	2.088	0	%100
111	M125	X	-1.205	-1.205	0	%100
112	M125	Z	2.088	2.088	0	%100
113	M126	X	0	0	0	%100
114	M126	Z	0	0	0	%100
115	M127	X	-.499	-.499	0	%100
116	M127	Z	.864	.864	0	%100
117	M128	X	-1.64	-1.64	0	%100
118	M128	Z	2.841	2.841	0	%100
119	M129	X	-1.64	-1.64	0	%100
120	M129	Z	2.841	2.841	0	%100
121	M130	X	-.499	-.499	0	%100
122	M130	Z	.864	.864	0	%100
123	M131	X	-1.556	-1.556	0	%100
124	M131	Z	2.695	2.695	0	%100
125	M132	X	-1.556	-1.556	0	%100
126	M132	Z	2.695	2.695	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-3.928	-3.928	0	%100
2	M1	Z	2.268	2.268	0	%100
3	M2	X	-.672	-.672	0	%100
4	M2	Z	.388	.388	0	%100
5	M3	X	-.982	-.982	0	%100
6	M3	Z	.567	.567	0	%100
7	M4	X	-.741	-.741	0	%100
8	M4	Z	.428	.428	0	%100
9	M5	X	-.673	-.673	0	%100
10	M5	Z	.389	.389	0	%100
11	M6	X	-2.062	-2.062	0	%100
12	M6	Z	1.191	1.191	0	%100
13	M7	X	-.952	-.952	0	%100
14	M7	Z	.55	.55	0	%100
15	M8	X	-2.062	-2.062	0	%100
16	M8	Z	1.191	1.191	0	%100
17	M14	X	-1.536	-1.536	0	%100
18	M14	Z	.887	.887	0	%100
19	M17	X	-2.066	-2.066	0	%100
20	M17	Z	1.193	1.193	0	%100
21	M18	X	0	0	0	%100
22	M18	Z	0	0	0	%100
23	M19	X	-1.566	-1.566	0	%100
24	M19	Z	.904	.904	0	%100
25	MP1A	X	-2.467	-2.467	0	%100
26	MP1A	Z	1.424	1.424	0	%100
27	M22	X	-2.69	-2.69	0	%100
28	M22	Z	1.553	1.553	0	%100
29	M23	X	-2.963	-2.963	0	%100
30	M23	Z	1.711	1.711	0	%100
31	M24	X	-2.692	-2.692	0	%100
32	M24	Z	1.554	1.554	0	%100
33	M25	X	-.672	-.672	0	%100
34	M25	Z	.388	.388	0	%100
35	M26	X	-.741	-.741	0	%100
36	M26	Z	.428	.428	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
37	M27	X	-.672	-.672	0	%100
38	M27	Z	.388	.388	0	%100
39	M28	X	0	0	0	%100
40	M28	Z	0	0	0	%100
41	M29	X	0	0	0	%100
42	M29	Z	0	0	0	%100
43	M35	X	0	0	0	%100
44	M35	Z	0	0	0	%100
45	M38	X	0	0	0	%100
46	M38	Z	0	0	0	%100
47	M39	X	-1.568	-1.568	0	%100
48	M39	Z	.905	.905	0	%100
49	M40	X	-1.568	-1.568	0	%100
50	M40	Z	.905	.905	0	%100
51	M41	X	-1.315	-1.315	0	%100
52	M41	Z	.759	.759	0	%100
53	M44	X	-2.063	-2.063	0	%100
54	M44	Z	1.191	1.191	0	%100
55	M45	X	-2.062	-2.062	0	%100
56	M45	Z	1.191	1.191	0	%100
57	M51	X	-1.536	-1.536	0	%100
58	M51	Z	.887	.887	0	%100
59	M54	X	-2.066	-2.066	0	%100
60	M54	Z	1.193	1.193	0	%100
61	M55	X	-1.566	-1.566	0	%100
62	M55	Z	.904	.904	0	%100
63	M56	X	0	0	0	%100
64	M56	Z	0	0	0	%100
65	M57	X	-1.775	-1.775	0	%100
66	M57	Z	1.025	1.025	0	%100
67	MP2A	X	-2.467	-2.467	0	%100
68	MP2A	Z	1.424	1.424	0	%100
69	MP3A	X	-2.467	-2.467	0	%100
70	MP3A	Z	1.424	1.424	0	%100
71	MP4A	X	-2.467	-2.467	0	%100
72	MP4A	Z	1.424	1.424	0	%100
73	MP5A	X	-2.467	-2.467	0	%100
74	MP5A	Z	1.424	1.424	0	%100
75	MP1C	X	-2.467	-2.467	0	%100
76	MP1C	Z	1.424	1.424	0	%100
77	MP2C	X	-2.467	-2.467	0	%100
78	MP2C	Z	1.424	1.424	0	%100
79	MP3C	X	-2.467	-2.467	0	%100
80	MP3C	Z	1.424	1.424	0	%100
81	MP4C	X	-2.467	-2.467	0	%100
82	MP4C	Z	1.424	1.424	0	%100
83	MP5C	X	-2.467	-2.467	0	%100
84	MP5C	Z	1.424	1.424	0	%100
85	MP1B	X	-2.467	-2.467	0	%100
86	MP1B	Z	1.424	1.424	0	%100
87	MP2B	X	-2.467	-2.467	0	%100
88	MP2B	Z	1.424	1.424	0	%100
89	MP3B	X	-2.467	-2.467	0	%100
90	MP3B	Z	1.424	1.424	0	%100
91	MP4B	X	-2.467	-2.467	0	%100
92	MP4B	Z	1.424	1.424	0	%100
93	MP5B	X	-2.467	-2.467	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
94	MP5B	Z	1.424	1.424	0	%100
95	M88	X	0	0	0	%100
96	M88	Z	0	0	0	%100
97	M91	X	0	0	0	%100
98	M91	Z	0	0	0	%100
99	M94	X	-1.315	-1.315	0	%100
100	M94	Z	.759	.759	0	%100
101	M97	X	-1.775	-1.775	0	%100
102	M97	Z	1.025	1.025	0	%100
103	M105	X	-.682	-.682	0	%100
104	M105	Z	.394	.394	0	%100
105	M113	X	-2.729	-2.729	0	%100
106	M113	Z	1.576	1.576	0	%100
107	M121	X	-.682	-.682	0	%100
108	M121	Z	.394	.394	0	%100
109	M124	X	-2.784	-2.784	0	%100
110	M124	Z	1.607	1.607	0	%100
111	M125	X	-.696	-.696	0	%100
112	M125	Z	.402	.402	0	%100
113	M126	X	-.696	-.696	0	%100
114	M126	Z	.402	.402	0	%100
115	M127	X	-1.426	-1.426	0	%100
116	M127	Z	.823	.823	0	%100
117	M128	X	-3.403	-3.403	0	%100
118	M128	Z	1.965	1.965	0	%100
119	M129	X	-1.572	-1.572	0	%100
120	M129	Z	.907	.907	0	%100
121	M130	X	-1.572	-1.572	0	%100
122	M130	Z	.907	.907	0	%100
123	M131	X	-3.403	-3.403	0	%100
124	M131	Z	1.965	1.965	0	%100
125	M132	X	-1.426	-1.426	0	%100
126	M132	Z	.823	.823	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-3.402	-3.402	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	-3.402	-3.402	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	0	0	0	%100
9	M5	X	0	0	0	%100
10	M5	Z	0	0	0	%100
11	M6	X	-3.175	-3.175	0	%100
12	M6	Z	0	0	0	%100
13	M7	X	-.000361	-.000361	0	%100
14	M7	Z	0	0	0	%100
15	M8	X	-3.175	-3.175	0	%100
16	M8	Z	0	0	0	%100
17	M14	X	-2.364	-2.364	0	%100
18	M14	Z	0	0	0	%100
19	M17	X	-3.181	-3.181	0	%100
20	M17	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
21	M18	X	-.602	-.602	0	%100
22	M18	Z	0	0	0	%100
23	M19	X	-.602	-.602	0	%100
24	M19	Z	0	0	0	%100
25	MP1A	X	-2.849	-2.849	0	%100
26	MP1A	Z	0	0	0	%100
27	M22	X	-2.329	-2.329	0	%100
28	M22	Z	0	0	0	%100
29	M23	X	-2.566	-2.566	0	%100
30	M23	Z	0	0	0	%100
31	M24	X	-2.332	-2.332	0	%100
32	M24	Z	0	0	0	%100
33	M25	X	-2.329	-2.329	0	%100
34	M25	Z	0	0	0	%100
35	M26	X	-2.566	-2.566	0	%100
36	M26	Z	0	0	0	%100
37	M27	X	-2.329	-2.329	0	%100
38	M27	Z	0	0	0	%100
39	M28	X	-.794	-.794	0	%100
40	M28	Z	0	0	0	%100
41	M29	X	-.794	-.794	0	%100
42	M29	Z	0	0	0	%100
43	M35	X	-.591	-.591	0	%100
44	M35	Z	0	0	0	%100
45	M38	X	-.795	-.795	0	%100
46	M38	Z	0	0	0	%100
47	M39	X	-.604	-.604	0	%100
48	M39	Z	0	0	0	%100
49	M40	X	-2.412	-2.412	0	%100
50	M40	Z	0	0	0	%100
51	M41	X	-2.024	-2.024	0	%100
52	M41	Z	0	0	0	%100
53	M44	X	-.794	-.794	0	%100
54	M44	Z	0	0	0	%100
55	M45	X	-.794	-.794	0	%100
56	M45	Z	0	0	0	%100
57	M51	X	-.591	-.591	0	%100
58	M51	Z	0	0	0	%100
59	M54	X	-.795	-.795	0	%100
60	M54	Z	0	0	0	%100
61	M55	X	-2.412	-2.412	0	%100
62	M55	Z	0	0	0	%100
63	M56	X	-.604	-.604	0	%100
64	M56	Z	0	0	0	%100
65	M57	X	-2.733	-2.733	0	%100
66	M57	Z	0	0	0	%100
67	MP2A	X	-2.849	-2.849	0	%100
68	MP2A	Z	0	0	0	%100
69	MP3A	X	-2.849	-2.849	0	%100
70	MP3A	Z	0	0	0	%100
71	MP4A	X	-2.849	-2.849	0	%100
72	MP4A	Z	0	0	0	%100
73	MP5A	X	-2.849	-2.849	0	%100
74	MP5A	Z	0	0	0	%100
75	MP1C	X	-2.849	-2.849	0	%100
76	MP1C	Z	0	0	0	%100
77	MP2C	X	-2.849	-2.849	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
78	MP2C	Z	0	0	0	%100
79	MP3C	X	-2.849	-2.849	0	%100
80	MP3C	Z	0	0	0	%100
81	MP4C	X	-2.849	-2.849	0	%100
82	MP4C	Z	0	0	0	%100
83	MP5C	X	-2.849	-2.849	0	%100
84	MP5C	Z	0	0	0	%100
85	MP1B	X	-2.849	-2.849	0	%100
86	MP1B	Z	0	0	0	%100
87	MP2B	X	-2.849	-2.849	0	%100
88	MP2B	Z	0	0	0	%100
89	MP3B	X	-2.849	-2.849	0	%100
90	MP3B	Z	0	0	0	%100
91	MP4B	X	-2.849	-2.849	0	%100
92	MP4B	Z	0	0	0	%100
93	MP5B	X	-2.849	-2.849	0	%100
94	MP5B	Z	0	0	0	%100
95	M88	X	-.506	-.506	0	%100
96	M88	Z	0	0	0	%100
97	M91	X	-.683	-.683	0	%100
98	M91	Z	0	0	0	%100
99	M94	X	-.506	-.506	0	%100
100	M94	Z	0	0	0	%100
101	M97	X	-.683	-.683	0	%100
102	M97	Z	0	0	0	%100
103	M105	X	0	0	0	%100
104	M105	Z	0	0	0	%100
105	M113	X	-2.364	-2.364	0	%100
106	M113	Z	0	0	0	%100
107	M121	X	-2.364	-2.364	0	%100
108	M121	Z	0	0	0	%100
109	M124	X	-2.411	-2.411	0	%100
110	M124	Z	0	0	0	%100
111	M125	X	0	0	0	%100
112	M125	Z	0	0	0	%100
113	M126	X	-2.411	-2.411	0	%100
114	M126	Z	0	0	0	%100
115	M127	X	-3.112	-3.112	0	%100
116	M127	Z	0	0	0	%100
117	M128	X	-3.112	-3.112	0	%100
118	M128	Z	0	0	0	%100
119	M129	X	-.997	-.997	0	%100
120	M129	Z	0	0	0	%100
121	M130	X	-3.281	-3.281	0	%100
122	M130	Z	0	0	0	%100
123	M131	X	-3.281	-3.281	0	%100
124	M131	Z	0	0	0	%100
125	M132	X	-.997	-.997	0	%100
126	M132	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.982	-.982	0	%100
2	M1	Z	-.567	-.567	0	%100
3	M2	X	-.672	-.672	0	%100
4	M2	Z	-.388	-.388	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
5	M3	X	-3.928	-3.928	0	%100
6	M3	Z	-2.268	-2.268	0	%100
7	M4	X	-.741	-.741	0	%100
8	M4	Z	-.428	-.428	0	%100
9	M5	X	-.673	-.673	0	%100
10	M5	Z	-.389	-.389	0	%100
11	M6	X	-2.062	-2.062	0	%100
12	M6	Z	-1.191	-1.191	0	%100
13	M7	X	-1.013	-1.013	0	%100
14	M7	Z	-.585	-.585	0	%100
15	M8	X	-2.062	-2.062	0	%100
16	M8	Z	-1.191	-1.191	0	%100
17	M14	X	-1.536	-1.536	0	%100
18	M14	Z	-.887	-.887	0	%100
19	M17	X	-2.066	-2.066	0	%100
20	M17	Z	-1.193	-1.193	0	%100
21	M18	X	-1.566	-1.566	0	%100
22	M18	Z	-.904	-.904	0	%100
23	M19	X	0	0	0	%100
24	M19	Z	0	0	0	%100
25	MP1A	X	-2.467	-2.467	0	%100
26	MP1A	Z	-1.424	-1.424	0	%100
27	M22	X	-.672	-.672	0	%100
28	M22	Z	-.388	-.388	0	%100
29	M23	X	-.741	-.741	0	%100
30	M23	Z	-.428	-.428	0	%100
31	M24	X	-.673	-.673	0	%100
32	M24	Z	-.389	-.389	0	%100
33	M25	X	-2.69	-2.69	0	%100
34	M25	Z	-1.553	-1.553	0	%100
35	M26	X	-2.963	-2.963	0	%100
36	M26	Z	-1.711	-1.711	0	%100
37	M27	X	-2.69	-2.69	0	%100
38	M27	Z	-1.553	-1.553	0	%100
39	M28	X	-2.063	-2.063	0	%100
40	M28	Z	-1.191	-1.191	0	%100
41	M29	X	-2.062	-2.062	0	%100
42	M29	Z	-1.191	-1.191	0	%100
43	M35	X	-1.536	-1.536	0	%100
44	M35	Z	-.887	-.887	0	%100
45	M38	X	-2.066	-2.066	0	%100
46	M38	Z	-1.193	-1.193	0	%100
47	M39	X	0	0	0	%100
48	M39	Z	0	0	0	%100
49	M40	X	-1.566	-1.566	0	%100
50	M40	Z	-.904	-.904	0	%100
51	M41	X	-1.315	-1.315	0	%100
52	M41	Z	-.759	-.759	0	%100
53	M44	X	0	0	0	%100
54	M44	Z	0	0	0	%100
55	M45	X	0	0	0	%100
56	M45	Z	0	0	0	%100
57	M51	X	0	0	0	%100
58	M51	Z	0	0	0	%100
59	M54	X	0	0	0	%100
60	M54	Z	0	0	0	%100
61	M55	X	-1.568	-1.568	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
62	M55	Z	-.905	-.905	0	%100
63	M56	X	-1.568	-1.568	0	%100
64	M56	Z	-.905	-.905	0	%100
65	M57	X	-1.775	-1.775	0	%100
66	M57	Z	-1.025	-1.025	0	%100
67	MP2A	X	-2.467	-2.467	0	%100
68	MP2A	Z	-1.424	-1.424	0	%100
69	MP3A	X	-2.467	-2.467	0	%100
70	MP3A	Z	-1.424	-1.424	0	%100
71	MP4A	X	-2.467	-2.467	0	%100
72	MP4A	Z	-1.424	-1.424	0	%100
73	MP5A	X	-2.467	-2.467	0	%100
74	MP5A	Z	-1.424	-1.424	0	%100
75	MP1C	X	-2.467	-2.467	0	%100
76	MP1C	Z	-1.424	-1.424	0	%100
77	MP2C	X	-2.467	-2.467	0	%100
78	MP2C	Z	-1.424	-1.424	0	%100
79	MP3C	X	-2.467	-2.467	0	%100
80	MP3C	Z	-1.424	-1.424	0	%100
81	MP4C	X	-2.467	-2.467	0	%100
82	MP4C	Z	-1.424	-1.424	0	%100
83	MP5C	X	-2.467	-2.467	0	%100
84	MP5C	Z	-1.424	-1.424	0	%100
85	MP1B	X	-2.467	-2.467	0	%100
86	MP1B	Z	-1.424	-1.424	0	%100
87	MP2B	X	-2.467	-2.467	0	%100
88	MP2B	Z	-1.424	-1.424	0	%100
89	MP3B	X	-2.467	-2.467	0	%100
90	MP3B	Z	-1.424	-1.424	0	%100
91	MP4B	X	-2.467	-2.467	0	%100
92	MP4B	Z	-1.424	-1.424	0	%100
93	MP5B	X	-2.467	-2.467	0	%100
94	MP5B	Z	-1.424	-1.424	0	%100
95	M88	X	-1.315	-1.315	0	%100
96	M88	Z	-.759	-.759	0	%100
97	M91	X	-1.775	-1.775	0	%100
98	M91	Z	-1.025	-1.025	0	%100
99	M94	X	0	0	0	%100
100	M94	Z	0	0	0	%100
101	M97	X	0	0	0	%100
102	M97	Z	0	0	0	%100
103	M105	X	-.682	-.682	0	%100
104	M105	Z	-.394	-.394	0	%100
105	M113	X	-.682	-.682	0	%100
106	M113	Z	-.394	-.394	0	%100
107	M121	X	-2.729	-2.729	0	%100
108	M121	Z	-1.576	-1.576	0	%100
109	M124	X	-.696	-.696	0	%100
110	M124	Z	-.402	-.402	0	%100
111	M125	X	-.696	-.696	0	%100
112	M125	Z	-.402	-.402	0	%100
113	M126	X	-2.784	-2.784	0	%100
114	M126	Z	-1.607	-1.607	0	%100
115	M127	X	-3.403	-3.403	0	%100
116	M127	Z	-1.965	-1.965	0	%100
117	M128	X	-1.426	-1.426	0	%100
118	M128	Z	-.823	-.823	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
119	M129	X	-1.426	-1.426	0	%100
120	M129	Z	-.823	-.823	0	%100
121	M130	X	-3.403	-3.403	0	%100
122	M130	Z	-1.965	-1.965	0	%100
123	M131	X	-1.572	-1.572	0	%100
124	M131	Z	-.907	-.907	0	%100
125	M132	X	-1.572	-1.572	0	%100
126	M132	Z	-.907	-.907	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	-1.165	-1.165	0	%100
4	M2	Z	-2.017	-2.017	0	%100
5	M3	X	-1.701	-1.701	0	%100
6	M3	Z	-2.946	-2.946	0	%100
7	M4	X	-1.283	-1.283	0	%100
8	M4	Z	-2.222	-2.222	0	%100
9	M5	X	-1.166	-1.166	0	%100
10	M5	Z	-2.019	-2.019	0	%100
11	M6	X	-.397	-.397	0	%100
12	M6	Z	-.687	-.687	0	%100
13	M7	X	-1.719	-1.719	0	%100
14	M7	Z	-2.977	-2.977	0	%100
15	M8	X	-.397	-.397	0	%100
16	M8	Z	-.687	-.687	0	%100
17	M14	X	-.296	-.296	0	%100
18	M14	Z	-.512	-.512	0	%100
19	M17	X	-.398	-.398	0	%100
20	M17	Z	-.689	-.689	0	%100
21	M18	X	-1.206	-1.206	0	%100
22	M18	Z	-2.089	-2.089	0	%100
23	M19	X	-.302	-.302	0	%100
24	M19	Z	-.523	-.523	0	%100
25	MP1A	X	-1.424	-1.424	0	%100
26	MP1A	Z	-2.467	-2.467	0	%100
27	M22	X	0	0	0	%100
28	M22	Z	0	0	0	%100
29	M23	X	0	0	0	%100
30	M23	Z	0	0	0	%100
31	M24	X	0	0	0	%100
32	M24	Z	0	0	0	%100
33	M25	X	-1.165	-1.165	0	%100
34	M25	Z	-2.017	-2.017	0	%100
35	M26	X	-1.283	-1.283	0	%100
36	M26	Z	-2.222	-2.222	0	%100
37	M27	X	-1.165	-1.165	0	%100
38	M27	Z	-2.017	-2.017	0	%100
39	M28	X	-1.588	-1.588	0	%100
40	M28	Z	-2.75	-2.75	0	%100
41	M29	X	-1.588	-1.588	0	%100
42	M29	Z	-2.75	-2.75	0	%100
43	M35	X	-1.182	-1.182	0	%100
44	M35	Z	-2.048	-2.048	0	%100
45	M38	X	-1.591	-1.591	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
46	M38	Z	-2.755	-2.755	0	%100
47	M39	X	-.301	-.301	0	%100
48	M39	Z	-.521	-.521	0	%100
49	M40	X	-.301	-.301	0	%100
50	M40	Z	-.521	-.521	0	%100
51	M41	X	-.253	-.253	0	%100
52	M41	Z	-.438	-.438	0	%100
53	M44	X	-.397	-.397	0	%100
54	M44	Z	-.688	-.688	0	%100
55	M45	X	-.397	-.397	0	%100
56	M45	Z	-.687	-.687	0	%100
57	M51	X	-.296	-.296	0	%100
58	M51	Z	-.512	-.512	0	%100
59	M54	X	-.398	-.398	0	%100
60	M54	Z	-.689	-.689	0	%100
61	M55	X	-.302	-.302	0	%100
62	M55	Z	-.523	-.523	0	%100
63	M56	X	-1.206	-1.206	0	%100
64	M56	Z	-2.089	-2.089	0	%100
65	M57	X	-.342	-.342	0	%100
66	M57	Z	-.592	-.592	0	%100
67	MP2A	X	-1.424	-1.424	0	%100
68	MP2A	Z	-2.467	-2.467	0	%100
69	MP3A	X	-1.424	-1.424	0	%100
70	MP3A	Z	-2.467	-2.467	0	%100
71	MP4A	X	-1.424	-1.424	0	%100
72	MP4A	Z	-2.467	-2.467	0	%100
73	MP5A	X	-1.424	-1.424	0	%100
74	MP5A	Z	-2.467	-2.467	0	%100
75	MP1C	X	-1.424	-1.424	0	%100
76	MP1C	Z	-2.467	-2.467	0	%100
77	MP2C	X	-1.424	-1.424	0	%100
78	MP2C	Z	-2.467	-2.467	0	%100
79	MP3C	X	-1.424	-1.424	0	%100
80	MP3C	Z	-2.467	-2.467	0	%100
81	MP4C	X	-1.424	-1.424	0	%100
82	MP4C	Z	-2.467	-2.467	0	%100
83	MP5C	X	-1.424	-1.424	0	%100
84	MP5C	Z	-2.467	-2.467	0	%100
85	MP1B	X	-1.424	-1.424	0	%100
86	MP1B	Z	-2.467	-2.467	0	%100
87	MP2B	X	-1.424	-1.424	0	%100
88	MP2B	Z	-2.467	-2.467	0	%100
89	MP3B	X	-1.424	-1.424	0	%100
90	MP3B	Z	-2.467	-2.467	0	%100
91	MP4B	X	-1.424	-1.424	0	%100
92	MP4B	Z	-2.467	-2.467	0	%100
93	MP5B	X	-1.424	-1.424	0	%100
94	MP5B	Z	-2.467	-2.467	0	%100
95	M88	X	-1.012	-1.012	0	%100
96	M88	Z	-1.753	-1.753	0	%100
97	M91	X	-1.367	-1.367	0	%100
98	M91	Z	-2.367	-2.367	0	%100
99	M94	X	-.253	-.253	0	%100
100	M94	Z	-.438	-.438	0	%100
101	M97	X	-.342	-.342	0	%100
102	M97	Z	-.592	-.592	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
103	M105	X	-1.182	-1.182	0	%100
104	M105	Z	-2.047	-2.047	0	%100
105	M113	X	0	0	0	%100
106	M113	Z	0	0	0	%100
107	M121	X	-1.182	-1.182	0	%100
108	M121	Z	-2.047	-2.047	0	%100
109	M124	X	0	0	0	%100
110	M124	Z	0	0	0	%100
111	M125	X	-1.205	-1.205	0	%100
112	M125	Z	-2.088	-2.088	0	%100
113	M126	X	-1.205	-1.205	0	%100
114	M126	Z	-2.088	-2.088	0	%100
115	M127	X	-1.64	-1.64	0	%100
116	M127	Z	-2.841	-2.841	0	%100
117	M128	X	-.499	-.499	0	%100
118	M128	Z	-.864	-.864	0	%100
119	M129	X	-1.556	-1.556	0	%100
120	M129	Z	-2.695	-2.695	0	%100
121	M130	X	-1.556	-1.556	0	%100
122	M130	Z	-2.695	-2.695	0	%100
123	M131	X	-.499	-.499	0	%100
124	M131	Z	-.864	-.864	0	%100
125	M132	X	-1.64	-1.64	0	%100
126	M132	Z	-2.841	-2.841	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-.327	-.327	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-.627	-.627	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	-.327	-.327	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	-.723	-.723	0	%100
9	M5	X	0	0	0	%100
10	M5	Z	-.628	-.628	0	%100
11	M6	X	0	0	0	%100
12	M6	Z	0	0	0	%100
13	M7	X	0	0	0	%100
14	M7	Z	-1.307	-1.307	0	%100
15	M8	X	0	0	0	%100
16	M8	Z	0	0	0	%100
17	M14	X	0	0	0	%100
18	M14	Z	0	0	0	%100
19	M17	X	0	0	0	%100
20	M17	Z	0	0	0	%100
21	M18	X	0	0	0	%100
22	M18	Z	-.337	-.337	0	%100
23	M19	X	0	0	0	%100
24	M19	Z	-.337	-.337	0	%100
25	MP1A	X	0	0	0	%100
26	MP1A	Z	-.517	-.517	0	%100
27	M22	X	0	0	0	%100
28	M22	Z	-.157	-.157	0	%100
29	M23	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
30	M23	Z	-.181	-.181	0	%100
31	M24	X	0	0	0	%100
32	M24	Z	-.157	-.157	0	%100
33	M25	X	0	0	0	%100
34	M25	Z	-.157	-.157	0	%100
35	M26	X	0	0	0	%100
36	M26	Z	-.181	-.181	0	%100
37	M27	X	0	0	0	%100
38	M27	Z	-.157	-.157	0	%100
39	M28	X	0	0	0	%100
40	M28	Z	-.476	-.476	0	%100
41	M29	X	0	0	0	%100
42	M29	Z	-.476	-.476	0	%100
43	M35	X	0	0	0	%100
44	M35	Z	-.331	-.331	0	%100
45	M38	X	0	0	0	%100
46	M38	Z	-.551	-.551	0	%100
47	M39	X	0	0	0	%100
48	M39	Z	-.337	-.337	0	%100
49	M40	X	0	0	0	%100
50	M40	Z	0	0	0	%100
51	M41	X	0	0	0	%100
52	M41	Z	0	0	0	%100
53	M44	X	0	0	0	%100
54	M44	Z	-.476	-.476	0	%100
55	M45	X	0	0	0	%100
56	M45	Z	-.476	-.476	0	%100
57	M51	X	0	0	0	%100
58	M51	Z	-.331	-.331	0	%100
59	M54	X	0	0	0	%100
60	M54	Z	-.551	-.551	0	%100
61	M55	X	0	0	0	%100
62	M55	Z	0	0	0	%100
63	M56	X	0	0	0	%100
64	M56	Z	-.337	-.337	0	%100
65	M57	X	0	0	0	%100
66	M57	Z	0	0	0	%100
67	MP2A	X	0	0	0	%100
68	MP2A	Z	-.517	-.517	0	%100
69	MP3A	X	0	0	0	%100
70	MP3A	Z	-.517	-.517	0	%100
71	MP4A	X	0	0	0	%100
72	MP4A	Z	-.517	-.517	0	%100
73	MP5A	X	0	0	0	%100
74	MP5A	Z	-.517	-.517	0	%100
75	MP1C	X	0	0	0	%100
76	MP1C	Z	-.517	-.517	0	%100
77	MP2C	X	0	0	0	%100
78	MP2C	Z	-.517	-.517	0	%100
79	MP3C	X	0	0	0	%100
80	MP3C	Z	-.517	-.517	0	%100
81	MP4C	X	0	0	0	%100
82	MP4C	Z	-.517	-.517	0	%100
83	MP5C	X	0	0	0	%100
84	MP5C	Z	-.517	-.517	0	%100
85	MP1B	X	0	0	0	%100
86	MP1B	Z	-.517	-.517	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
87	MP2B	X	0	0	0	%100
88	MP2B	Z	-.517	-.517	0	%100
89	MP3B	X	0	0	0	%100
90	MP3B	Z	-.517	-.517	0	%100
91	MP4B	X	0	0	0	%100
92	MP4B	Z	-.517	-.517	0	%100
93	MP5B	X	0	0	0	%100
94	MP5B	Z	-.517	-.517	0	%100
95	M88	X	0	0	0	%100
96	M88	Z	-.287	-.287	0	%100
97	M91	X	0	0	0	%100
98	M91	Z	-.479	-.479	0	%100
99	M94	X	0	0	0	%100
100	M94	Z	-.287	-.287	0	%100
101	M97	X	0	0	0	%100
102	M97	Z	-.479	-.479	0	%100
103	M105	X	0	0	0	%100
104	M105	Z	-.626	-.626	0	%100
105	M113	X	0	0	0	%100
106	M113	Z	-.157	-.157	0	%100
107	M121	X	0	0	0	%100
108	M121	Z	-.157	-.157	0	%100
109	M124	X	0	0	0	%100
110	M124	Z	-.196	-.196	0	%100
111	M125	X	0	0	0	%100
112	M125	Z	-.785	-.785	0	%100
113	M126	X	0	0	0	%100
114	M126	Z	-.196	-.196	0	%100
115	M127	X	0	0	0	%100
116	M127	Z	-.419	-.419	0	%100
117	M128	X	0	0	0	%100
118	M128	Z	-.419	-.419	0	%100
119	M129	X	0	0	0	%100
120	M129	Z	-.907	-.907	0	%100
121	M130	X	0	0	0	%100
122	M130	Z	-.38	-.38	0	%100
123	M131	X	0	0	0	%100
124	M131	Z	-.38	-.38	0	%100
125	M132	X	0	0	0	%100
126	M132	Z	-.907	-.907	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.49	.49	0	%100
2	M1	Z	-.849	-.849	0	%100
3	M2	X	.235	.235	0	%100
4	M2	Z	-.407	-.407	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	.271	.271	0	%100
8	M4	Z	-.47	-.47	0	%100
9	M5	X	.235	.235	0	%100
10	M5	Z	-.408	-.408	0	%100
11	M6	X	.079	.079	0	%100
12	M6	Z	-.137	-.137	0	%100
13	M7	X	.485	.485	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
14	M7	Z	-.84	-.84	0	%100
15	M8	X	.079	.079	0	%100
16	M8	Z	-.137	-.137	0	%100
17	M14	X	.055	.055	0	%100
18	M14	Z	-.096	-.096	0	%100
19	M17	X	.092	.092	0	%100
20	M17	Z	-.159	-.159	0	%100
21	M18	X	.056	.056	0	%100
22	M18	Z	-.097	-.097	0	%100
23	M19	X	.225	.225	0	%100
24	M19	Z	-.389	-.389	0	%100
25	MP1A	X	.259	.259	0	%100
26	MP1A	Z	-.448	-.448	0	%100
27	M22	X	.235	.235	0	%100
28	M22	Z	-.407	-.407	0	%100
29	M23	X	.271	.271	0	%100
30	M23	Z	-.47	-.47	0	%100
31	M24	X	.235	.235	0	%100
32	M24	Z	-.408	-.408	0	%100
33	M25	X	0	0	0	%100
34	M25	Z	0	0	0	%100
35	M26	X	0	0	0	%100
36	M26	Z	0	0	0	%100
37	M27	X	0	0	0	%100
38	M27	Z	0	0	0	%100
39	M28	X	.079	.079	0	%100
40	M28	Z	-.137	-.137	0	%100
41	M29	X	.079	.079	0	%100
42	M29	Z	-.137	-.137	0	%100
43	M35	X	.055	.055	0	%100
44	M35	Z	-.096	-.096	0	%100
45	M38	X	.092	.092	0	%100
46	M38	Z	-.159	-.159	0	%100
47	M39	X	.225	.225	0	%100
48	M39	Z	-.389	-.389	0	%100
49	M40	X	.056	.056	0	%100
50	M40	Z	-.097	-.097	0	%100
51	M41	X	.048	.048	0	%100
52	M41	Z	-.083	-.083	0	%100
53	M44	X	.318	.318	0	%100
54	M44	Z	-.55	-.55	0	%100
55	M45	X	.317	.317	0	%100
56	M45	Z	-.55	-.55	0	%100
57	M51	X	.221	.221	0	%100
58	M51	Z	-.382	-.382	0	%100
59	M54	X	.368	.368	0	%100
60	M54	Z	-.637	-.637	0	%100
61	M55	X	.056	.056	0	%100
62	M55	Z	-.097	-.097	0	%100
63	M56	X	.056	.056	0	%100
64	M56	Z	-.097	-.097	0	%100
65	M57	X	.08	.08	0	%100
66	M57	Z	-.138	-.138	0	%100
67	MP2A	X	.259	.259	0	%100
68	MP2A	Z	-.448	-.448	0	%100
69	MP3A	X	.259	.259	0	%100
70	MP3A	Z	-.448	-.448	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
71	MP4A	X	.259	.259	0	%100
72	MP4A	Z	-.448	-.448	0	%100
73	MP5A	X	.259	.259	0	%100
74	MP5A	Z	-.448	-.448	0	%100
75	MP1C	X	.259	.259	0	%100
76	MP1C	Z	-.448	-.448	0	%100
77	MP2C	X	.259	.259	0	%100
78	MP2C	Z	-.448	-.448	0	%100
79	MP3C	X	.259	.259	0	%100
80	MP3C	Z	-.448	-.448	0	%100
81	MP4C	X	.259	.259	0	%100
82	MP4C	Z	-.448	-.448	0	%100
83	MP5C	X	.259	.259	0	%100
84	MP5C	Z	-.448	-.448	0	%100
85	MP1B	X	.259	.259	0	%100
86	MP1B	Z	-.448	-.448	0	%100
87	MP2B	X	.259	.259	0	%100
88	MP2B	Z	-.448	-.448	0	%100
89	MP3B	X	.259	.259	0	%100
90	MP3B	Z	-.448	-.448	0	%100
91	MP4B	X	.259	.259	0	%100
92	MP4B	Z	-.448	-.448	0	%100
93	MP5B	X	.259	.259	0	%100
94	MP5B	Z	-.448	-.448	0	%100
95	M88	X	.048	.048	0	%100
96	M88	Z	-.083	-.083	0	%100
97	M91	X	.08	.08	0	%100
98	M91	Z	-.138	-.138	0	%100
99	M94	X	.192	.192	0	%100
100	M94	Z	-.332	-.332	0	%100
101	M97	X	.319	.319	0	%100
102	M97	Z	-.553	-.553	0	%100
103	M105	X	.235	.235	0	%100
104	M105	Z	-.407	-.407	0	%100
105	M113	X	.235	.235	0	%100
106	M113	Z	-.407	-.407	0	%100
107	M121	X	0	0	0	%100
108	M121	Z	0	0	0	%100
109	M124	X	.294	.294	0	%100
110	M124	Z	-.51	-.51	0	%100
111	M125	X	.294	.294	0	%100
112	M125	Z	-.51	-.51	0	%100
113	M126	X	0	0	0	%100
114	M126	Z	0	0	0	%100
115	M127	X	.115	.115	0	%100
116	M127	Z	-.199	-.199	0	%100
117	M128	X	.379	.379	0	%100
118	M128	Z	-.656	-.656	0	%100
119	M129	X	.379	.379	0	%100
120	M129	Z	-.656	-.656	0	%100
121	M130	X	.115	.115	0	%100
122	M130	Z	-.199	-.199	0	%100
123	M131	X	.359	.359	0	%100
124	M131	Z	-.622	-.622	0	%100
125	M132	X	.359	.359	0	%100
126	M132	Z	-.622	-.622	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.132	1.132	0	%100
2	M1	Z	-.654	-.654	0	%100
3	M2	X	.136	.136	0	%100
4	M2	Z	-.078	-.078	0	%100
5	M3	X	.283	.283	0	%100
6	M3	Z	-.163	-.163	0	%100
7	M4	X	.157	.157	0	%100
8	M4	Z	-.09	-.09	0	%100
9	M5	X	.136	.136	0	%100
10	M5	Z	-.078	-.078	0	%100
11	M6	X	.412	.412	0	%100
12	M6	Z	-.238	-.238	0	%100
13	M7	X	.274	.274	0	%100
14	M7	Z	-.158	-.158	0	%100
15	M8	X	.412	.412	0	%100
16	M8	Z	-.238	-.238	0	%100
17	M14	X	.287	.287	0	%100
18	M14	Z	-.165	-.165	0	%100
19	M17	X	.478	.478	0	%100
20	M17	Z	-.276	-.276	0	%100
21	M18	X	0	0	0	%100
22	M18	Z	0	0	0	%100
23	M19	X	.292	.292	0	%100
24	M19	Z	-.168	-.168	0	%100
25	MP1A	X	.448	.448	0	%100
26	MP1A	Z	-.259	-.259	0	%100
27	M22	X	.543	.543	0	%100
28	M22	Z	-.314	-.314	0	%100
29	M23	X	.626	.626	0	%100
30	M23	Z	-.362	-.362	0	%100
31	M24	X	.544	.544	0	%100
32	M24	Z	-.314	-.314	0	%100
33	M25	X	.136	.136	0	%100
34	M25	Z	-.078	-.078	0	%100
35	M26	X	.157	.157	0	%100
36	M26	Z	-.09	-.09	0	%100
37	M27	X	.136	.136	0	%100
38	M27	Z	-.078	-.078	0	%100
39	M28	X	0	0	0	%100
40	M28	Z	0	0	0	%100
41	M29	X	0	0	0	%100
42	M29	Z	0	0	0	%100
43	M35	X	0	0	0	%100
44	M35	Z	0	0	0	%100
45	M38	X	0	0	0	%100
46	M38	Z	0	0	0	%100
47	M39	X	.292	.292	0	%100
48	M39	Z	-.169	-.169	0	%100
49	M40	X	.292	.292	0	%100
50	M40	Z	-.169	-.169	0	%100
51	M41	X	.249	.249	0	%100
52	M41	Z	-.144	-.144	0	%100
53	M44	X	.412	.412	0	%100
54	M44	Z	-.238	-.238	0	%100
55	M45	X	.412	.412	0	%100
56	M45	Z	-.238	-.238	0	%100
57	M51	X	.287	.287	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
58	M51	Z	-.165	-.165	0	%100
59	M54	X	.478	.478	0	%100
60	M54	Z	-.276	-.276	0	%100
61	M55	X	.292	.292	0	%100
62	M55	Z	-.168	-.168	0	%100
63	M56	X	0	0	0	%100
64	M56	Z	0	0	0	%100
65	M57	X	.415	.415	0	%100
66	M57	Z	-.239	-.239	0	%100
67	MP2A	X	.448	.448	0	%100
68	MP2A	Z	-.259	-.259	0	%100
69	MP3A	X	.448	.448	0	%100
70	MP3A	Z	-.259	-.259	0	%100
71	MP4A	X	.448	.448	0	%100
72	MP4A	Z	-.259	-.259	0	%100
73	MP5A	X	.448	.448	0	%100
74	MP5A	Z	-.259	-.259	0	%100
75	MP1C	X	.448	.448	0	%100
76	MP1C	Z	-.259	-.259	0	%100
77	MP2C	X	.448	.448	0	%100
78	MP2C	Z	-.259	-.259	0	%100
79	MP3C	X	.448	.448	0	%100
80	MP3C	Z	-.259	-.259	0	%100
81	MP4C	X	.448	.448	0	%100
82	MP4C	Z	-.259	-.259	0	%100
83	MP5C	X	.448	.448	0	%100
84	MP5C	Z	-.259	-.259	0	%100
85	MP1B	X	.448	.448	0	%100
86	MP1B	Z	-.259	-.259	0	%100
87	MP2B	X	.448	.448	0	%100
88	MP2B	Z	-.259	-.259	0	%100
89	MP3B	X	.448	.448	0	%100
90	MP3B	Z	-.259	-.259	0	%100
91	MP4B	X	.448	.448	0	%100
92	MP4B	Z	-.259	-.259	0	%100
93	MP5B	X	.448	.448	0	%100
94	MP5B	Z	-.259	-.259	0	%100
95	M88	X	0	0	0	%100
96	M88	Z	0	0	0	%100
97	M91	X	0	0	0	%100
98	M91	Z	0	0	0	%100
99	M94	X	.249	.249	0	%100
100	M94	Z	-.144	-.144	0	%100
101	M97	X	.415	.415	0	%100
102	M97	Z	-.239	-.239	0	%100
103	M105	X	.136	.136	0	%100
104	M105	Z	-.078	-.078	0	%100
105	M113	X	.542	.542	0	%100
106	M113	Z	-.313	-.313	0	%100
107	M121	X	.136	.136	0	%100
108	M121	Z	-.078	-.078	0	%100
109	M124	X	.68	.68	0	%100
110	M124	Z	-.392	-.392	0	%100
111	M125	X	.17	.17	0	%100
112	M125	Z	-.098	-.098	0	%100
113	M126	X	.17	.17	0	%100
114	M126	Z	-.098	-.098	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
115	M127	X	.329	.329	0	%100
116	M127	Z	-.19	-.19	0	%100
117	M128	X	.785	.785	0	%100
118	M128	Z	-.453	-.453	0	%100
119	M129	X	.363	.363	0	%100
120	M129	Z	-.209	-.209	0	%100
121	M130	X	.363	.363	0	%100
122	M130	Z	-.209	-.209	0	%100
123	M131	X	.785	.785	0	%100
124	M131	Z	-.453	-.453	0	%100
125	M132	X	.329	.329	0	%100
126	M132	Z	-.19	-.19	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.98	.98	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	.98	.98	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	0	0	0	%100
9	M5	X	0	0	0	%100
10	M5	Z	0	0	0	%100
11	M6	X	.635	.635	0	%100
12	M6	Z	0	0	0	%100
13	M7	X	.000104	.000104	0	%100
14	M7	Z	0	0	0	%100
15	M8	X	.635	.635	0	%100
16	M8	Z	0	0	0	%100
17	M14	X	.441	.441	0	%100
18	M14	Z	0	0	0	%100
19	M17	X	.735	.735	0	%100
20	M17	Z	0	0	0	%100
21	M18	X	.112	.112	0	%100
22	M18	Z	0	0	0	%100
23	M19	X	.112	.112	0	%100
24	M19	Z	0	0	0	%100
25	MP1A	X	.517	.517	0	%100
26	MP1A	Z	0	0	0	%100
27	M22	X	.47	.47	0	%100
28	M22	Z	0	0	0	%100
29	M23	X	.543	.543	0	%100
30	M23	Z	0	0	0	%100
31	M24	X	.471	.471	0	%100
32	M24	Z	0	0	0	%100
33	M25	X	.47	.47	0	%100
34	M25	Z	0	0	0	%100
35	M26	X	.543	.543	0	%100
36	M26	Z	0	0	0	%100
37	M27	X	.47	.47	0	%100
38	M27	Z	0	0	0	%100
39	M28	X	.159	.159	0	%100
40	M28	Z	0	0	0	%100
41	M29	X	.159	.159	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
42	M29	Z	0	0	0	%100
43	M35	X	.11	.11	0	%100
44	M35	Z	0	0	0	%100
45	M38	X	.184	.184	0	%100
46	M38	Z	0	0	0	%100
47	M39	X	.112	.112	0	%100
48	M39	Z	0	0	0	%100
49	M40	X	.449	.449	0	%100
50	M40	Z	0	0	0	%100
51	M41	X	.383	.383	0	%100
52	M41	Z	0	0	0	%100
53	M44	X	.159	.159	0	%100
54	M44	Z	0	0	0	%100
55	M45	X	.159	.159	0	%100
56	M45	Z	0	0	0	%100
57	M51	X	.11	.11	0	%100
58	M51	Z	0	0	0	%100
59	M54	X	.184	.184	0	%100
60	M54	Z	0	0	0	%100
61	M55	X	.449	.449	0	%100
62	M55	Z	0	0	0	%100
63	M56	X	.113	.113	0	%100
64	M56	Z	0	0	0	%100
65	M57	X	.638	.638	0	%100
66	M57	Z	0	0	0	%100
67	MP2A	X	.517	.517	0	%100
68	MP2A	Z	0	0	0	%100
69	MP3A	X	.517	.517	0	%100
70	MP3A	Z	0	0	0	%100
71	MP4A	X	.517	.517	0	%100
72	MP4A	Z	0	0	0	%100
73	MP5A	X	.517	.517	0	%100
74	MP5A	Z	0	0	0	%100
75	MP1C	X	.517	.517	0	%100
76	MP1C	Z	0	0	0	%100
77	MP2C	X	.517	.517	0	%100
78	MP2C	Z	0	0	0	%100
79	MP3C	X	.517	.517	0	%100
80	MP3C	Z	0	0	0	%100
81	MP4C	X	.517	.517	0	%100
82	MP4C	Z	0	0	0	%100
83	MP5C	X	.517	.517	0	%100
84	MP5C	Z	0	0	0	%100
85	MP1B	X	.517	.517	0	%100
86	MP1B	Z	0	0	0	%100
87	MP2B	X	.517	.517	0	%100
88	MP2B	Z	0	0	0	%100
89	MP3B	X	.517	.517	0	%100
90	MP3B	Z	0	0	0	%100
91	MP4B	X	.517	.517	0	%100
92	MP4B	Z	0	0	0	%100
93	MP5B	X	.517	.517	0	%100
94	MP5B	Z	0	0	0	%100
95	M88	X	.096	.096	0	%100
96	M88	Z	0	0	0	%100
97	M91	X	.16	.16	0	%100
98	M91	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
99	M94	X	.096	.096	0	%100
100	M94	Z	0	0	0	%100
101	M97	X	.16	.16	0	%100
102	M97	Z	0	0	0	%100
103	M105	X	0	0	0	%100
104	M105	Z	0	0	0	%100
105	M113	X	.47	.47	0	%100
106	M113	Z	0	0	0	%100
107	M121	X	.47	.47	0	%100
108	M121	Z	0	0	0	%100
109	M124	X	.589	.589	0	%100
110	M124	Z	0	0	0	%100
111	M125	X	0	0	0	%100
112	M125	Z	0	0	0	%100
113	M126	X	.589	.589	0	%100
114	M126	Z	0	0	0	%100
115	M127	X	.718	.718	0	%100
116	M127	Z	0	0	0	%100
117	M128	X	.718	.718	0	%100
118	M128	Z	0	0	0	%100
119	M129	X	.23	.23	0	%100
120	M129	Z	0	0	0	%100
121	M130	X	.757	.757	0	%100
122	M130	Z	0	0	0	%100
123	M131	X	.757	.757	0	%100
124	M131	Z	0	0	0	%100
125	M132	X	.23	.23	0	%100
126	M132	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.283	.283	0	%100
2	M1	Z	.163	.163	0	%100
3	M2	X	.136	.136	0	%100
4	M2	Z	.078	.078	0	%100
5	M3	X	1.132	1.132	0	%100
6	M3	Z	.654	.654	0	%100
7	M4	X	.157	.157	0	%100
8	M4	Z	.09	.09	0	%100
9	M5	X	.136	.136	0	%100
10	M5	Z	.078	.078	0	%100
11	M6	X	.412	.412	0	%100
12	M6	Z	.238	.238	0	%100
13	M7	X	.292	.292	0	%100
14	M7	Z	.168	.168	0	%100
15	M8	X	.412	.412	0	%100
16	M8	Z	.238	.238	0	%100
17	M14	X	.287	.287	0	%100
18	M14	Z	.165	.165	0	%100
19	M17	X	.478	.478	0	%100
20	M17	Z	.276	.276	0	%100
21	M18	X	.292	.292	0	%100
22	M18	Z	.168	.168	0	%100
23	M19	X	0	0	0	%100
24	M19	Z	0	0	0	%100
25	MP1A	X	.448	.448	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
26	MP1A	Z	.259	.259	0	%100
27	M22	X	.136	.136	0	%100
28	M22	Z	.078	.078	0	%100
29	M23	X	.157	.157	0	%100
30	M23	Z	.09	.09	0	%100
31	M24	X	.136	.136	0	%100
32	M24	Z	.078	.078	0	%100
33	M25	X	.543	.543	0	%100
34	M25	Z	.314	.314	0	%100
35	M26	X	.626	.626	0	%100
36	M26	Z	.362	.362	0	%100
37	M27	X	.543	.543	0	%100
38	M27	Z	.314	.314	0	%100
39	M28	X	.412	.412	0	%100
40	M28	Z	.238	.238	0	%100
41	M29	X	.412	.412	0	%100
42	M29	Z	.238	.238	0	%100
43	M35	X	.287	.287	0	%100
44	M35	Z	.165	.165	0	%100
45	M38	X	.478	.478	0	%100
46	M38	Z	.276	.276	0	%100
47	M39	X	0	0	0	%100
48	M39	Z	0	0	0	%100
49	M40	X	.292	.292	0	%100
50	M40	Z	.168	.168	0	%100
51	M41	X	.249	.249	0	%100
52	M41	Z	.144	.144	0	%100
53	M44	X	0	0	0	%100
54	M44	Z	0	0	0	%100
55	M45	X	0	0	0	%100
56	M45	Z	0	0	0	%100
57	M51	X	0	0	0	%100
58	M51	Z	0	0	0	%100
59	M54	X	0	0	0	%100
60	M54	Z	0	0	0	%100
61	M55	X	.292	.292	0	%100
62	M55	Z	.169	.169	0	%100
63	M56	X	.292	.292	0	%100
64	M56	Z	.169	.169	0	%100
65	M57	X	.415	.415	0	%100
66	M57	Z	.239	.239	0	%100
67	MP2A	X	.448	.448	0	%100
68	MP2A	Z	.259	.259	0	%100
69	MP3A	X	.448	.448	0	%100
70	MP3A	Z	.259	.259	0	%100
71	MP4A	X	.448	.448	0	%100
72	MP4A	Z	.259	.259	0	%100
73	MP5A	X	.448	.448	0	%100
74	MP5A	Z	.259	.259	0	%100
75	MP1C	X	.448	.448	0	%100
76	MP1C	Z	.259	.259	0	%100
77	MP2C	X	.448	.448	0	%100
78	MP2C	Z	.259	.259	0	%100
79	MP3C	X	.448	.448	0	%100
80	MP3C	Z	.259	.259	0	%100
81	MP4C	X	.448	.448	0	%100
82	MP4C	Z	.259	.259	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
83	MP5C	X	.448	.448	0	%100
84	MP5C	Z	.259	.259	0	%100
85	MP1B	X	.448	.448	0	%100
86	MP1B	Z	.259	.259	0	%100
87	MP2B	X	.448	.448	0	%100
88	MP2B	Z	.259	.259	0	%100
89	MP3B	X	.448	.448	0	%100
90	MP3B	Z	.259	.259	0	%100
91	MP4B	X	.448	.448	0	%100
92	MP4B	Z	.259	.259	0	%100
93	MP5B	X	.448	.448	0	%100
94	MP5B	Z	.259	.259	0	%100
95	M88	X	.249	.249	0	%100
96	M88	Z	.144	.144	0	%100
97	M91	X	.415	.415	0	%100
98	M91	Z	.239	.239	0	%100
99	M94	X	0	0	0	%100
100	M94	Z	0	0	0	%100
101	M97	X	0	0	0	%100
102	M97	Z	0	0	0	%100
103	M105	X	.136	.136	0	%100
104	M105	Z	.078	.078	0	%100
105	M113	X	.136	.136	0	%100
106	M113	Z	.078	.078	0	%100
107	M121	X	.542	.542	0	%100
108	M121	Z	.313	.313	0	%100
109	M124	X	.17	.17	0	%100
110	M124	Z	.098	.098	0	%100
111	M125	X	.17	.17	0	%100
112	M125	Z	.098	.098	0	%100
113	M126	X	.68	.68	0	%100
114	M126	Z	.392	.392	0	%100
115	M127	X	.785	.785	0	%100
116	M127	Z	.453	.453	0	%100
117	M128	X	.329	.329	0	%100
118	M128	Z	.19	.19	0	%100
119	M129	X	.329	.329	0	%100
120	M129	Z	.19	.19	0	%100
121	M130	X	.785	.785	0	%100
122	M130	Z	.453	.453	0	%100
123	M131	X	.363	.363	0	%100
124	M131	Z	.209	.209	0	%100
125	M132	X	.363	.363	0	%100
126	M132	Z	.209	.209	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	.235	.235	0	%100
4	M2	Z	.407	.407	0	%100
5	M3	X	.49	.49	0	%100
6	M3	Z	.849	.849	0	%100
7	M4	X	.271	.271	0	%100
8	M4	Z	.47	.47	0	%100
9	M5	X	.235	.235	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
10	M5	Z	.408	.408	0	%100
11	M6	X	.079	.079	0	%100
12	M6	Z	.137	.137	0	%100
13	M7	X	.495	.495	0	%100
14	M7	Z	.858	.858	0	%100
15	M8	X	.079	.079	0	%100
16	M8	Z	.137	.137	0	%100
17	M14	X	.055	.055	0	%100
18	M14	Z	.096	.096	0	%100
19	M17	X	.092	.092	0	%100
20	M17	Z	.159	.159	0	%100
21	M18	X	.225	.225	0	%100
22	M18	Z	.389	.389	0	%100
23	M19	X	.056	.056	0	%100
24	M19	Z	.097	.097	0	%100
25	MP1A	X	.259	.259	0	%100
26	MP1A	Z	.448	.448	0	%100
27	M22	X	0	0	0	%100
28	M22	Z	0	0	0	%100
29	M23	X	0	0	0	%100
30	M23	Z	0	0	0	%100
31	M24	X	0	0	0	%100
32	M24	Z	0	0	0	%100
33	M25	X	.235	.235	0	%100
34	M25	Z	.407	.407	0	%100
35	M26	X	.271	.271	0	%100
36	M26	Z	.47	.47	0	%100
37	M27	X	.235	.235	0	%100
38	M27	Z	.407	.407	0	%100
39	M28	X	.318	.318	0	%100
40	M28	Z	.55	.55	0	%100
41	M29	X	.317	.317	0	%100
42	M29	Z	.55	.55	0	%100
43	M35	X	.221	.221	0	%100
44	M35	Z	.382	.382	0	%100
45	M38	X	.368	.368	0	%100
46	M38	Z	.637	.637	0	%100
47	M39	X	.056	.056	0	%100
48	M39	Z	.097	.097	0	%100
49	M40	X	.056	.056	0	%100
50	M40	Z	.097	.097	0	%100
51	M41	X	.048	.048	0	%100
52	M41	Z	.083	.083	0	%100
53	M44	X	.079	.079	0	%100
54	M44	Z	.137	.137	0	%100
55	M45	X	.079	.079	0	%100
56	M45	Z	.137	.137	0	%100
57	M51	X	.055	.055	0	%100
58	M51	Z	.096	.096	0	%100
59	M54	X	.092	.092	0	%100
60	M54	Z	.159	.159	0	%100
61	M55	X	.056	.056	0	%100
62	M55	Z	.097	.097	0	%100
63	M56	X	.225	.225	0	%100
64	M56	Z	.389	.389	0	%100
65	M57	X	.08	.08	0	%100
66	M57	Z	.138	.138	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
67	MP2A	X	.259	.259	0	%100
68	MP2A	Z	.448	.448	0	%100
69	MP3A	X	.259	.259	0	%100
70	MP3A	Z	.448	.448	0	%100
71	MP4A	X	.259	.259	0	%100
72	MP4A	Z	.448	.448	0	%100
73	MP5A	X	.259	.259	0	%100
74	MP5A	Z	.448	.448	0	%100
75	MP1C	X	.259	.259	0	%100
76	MP1C	Z	.448	.448	0	%100
77	MP2C	X	.259	.259	0	%100
78	MP2C	Z	.448	.448	0	%100
79	MP3C	X	.259	.259	0	%100
80	MP3C	Z	.448	.448	0	%100
81	MP4C	X	.259	.259	0	%100
82	MP4C	Z	.448	.448	0	%100
83	MP5C	X	.259	.259	0	%100
84	MP5C	Z	.448	.448	0	%100
85	MP1B	X	.259	.259	0	%100
86	MP1B	Z	.448	.448	0	%100
87	MP2B	X	.259	.259	0	%100
88	MP2B	Z	.448	.448	0	%100
89	MP3B	X	.259	.259	0	%100
90	MP3B	Z	.448	.448	0	%100
91	MP4B	X	.259	.259	0	%100
92	MP4B	Z	.448	.448	0	%100
93	MP5B	X	.259	.259	0	%100
94	MP5B	Z	.448	.448	0	%100
95	M88	X	.192	.192	0	%100
96	M88	Z	.332	.332	0	%100
97	M91	X	.319	.319	0	%100
98	M91	Z	.553	.553	0	%100
99	M94	X	.048	.048	0	%100
100	M94	Z	.083	.083	0	%100
101	M97	X	.08	.08	0	%100
102	M97	Z	.138	.138	0	%100
103	M105	X	.235	.235	0	%100
104	M105	Z	.407	.407	0	%100
105	M113	X	0	0	0	%100
106	M113	Z	0	0	0	%100
107	M121	X	.235	.235	0	%100
108	M121	Z	.407	.407	0	%100
109	M124	X	0	0	0	%100
110	M124	Z	0	0	0	%100
111	M125	X	.294	.294	0	%100
112	M125	Z	.51	.51	0	%100
113	M126	X	.294	.294	0	%100
114	M126	Z	.51	.51	0	%100
115	M127	X	.379	.379	0	%100
116	M127	Z	.656	.656	0	%100
117	M128	X	.115	.115	0	%100
118	M128	Z	.199	.199	0	%100
119	M129	X	.359	.359	0	%100
120	M129	Z	.622	.622	0	%100
121	M130	X	.359	.359	0	%100
122	M130	Z	.622	.622	0	%100
123	M131	X	.115	.115	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
124	M131	Z	.199	.199	0	%100
125	M132	X	.379	.379	0	%100
126	M132	Z	.656	.656	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	.327	.327	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	.627	.627	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	.327	.327	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	.723	.723	0	%100
9	M5	X	0	0	0	%100
10	M5	Z	.628	.628	0	%100
11	M6	X	0	0	0	%100
12	M6	Z	0	0	0	%100
13	M7	X	0	0	0	%100
14	M7	Z	1.307	1.307	0	%100
15	M8	X	0	0	0	%100
16	M8	Z	0	0	0	%100
17	M14	X	0	0	0	%100
18	M14	Z	0	0	0	%100
19	M17	X	0	0	0	%100
20	M17	Z	0	0	0	%100
21	M18	X	0	0	0	%100
22	M18	Z	.337	.337	0	%100
23	M19	X	0	0	0	%100
24	M19	Z	.337	.337	0	%100
25	MP1A	X	0	0	0	%100
26	MP1A	Z	.517	.517	0	%100
27	M22	X	0	0	0	%100
28	M22	Z	.157	.157	0	%100
29	M23	X	0	0	0	%100
30	M23	Z	.181	.181	0	%100
31	M24	X	0	0	0	%100
32	M24	Z	.157	.157	0	%100
33	M25	X	0	0	0	%100
34	M25	Z	.157	.157	0	%100
35	M26	X	0	0	0	%100
36	M26	Z	.181	.181	0	%100
37	M27	X	0	0	0	%100
38	M27	Z	.157	.157	0	%100
39	M28	X	0	0	0	%100
40	M28	Z	.476	.476	0	%100
41	M29	X	0	0	0	%100
42	M29	Z	.476	.476	0	%100
43	M35	X	0	0	0	%100
44	M35	Z	.331	.331	0	%100
45	M38	X	0	0	0	%100
46	M38	Z	.551	.551	0	%100
47	M39	X	0	0	0	%100
48	M39	Z	.337	.337	0	%100
49	M40	X	0	0	0	%100
50	M40	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
51	M41	X	0	0	0	%100
52	M41	Z	0	0	0	%100
53	M44	X	0	0	0	%100
54	M44	Z	.476	.476	0	%100
55	M45	X	0	0	0	%100
56	M45	Z	.476	.476	0	%100
57	M51	X	0	0	0	%100
58	M51	Z	.331	.331	0	%100
59	M54	X	0	0	0	%100
60	M54	Z	.551	.551	0	%100
61	M55	X	0	0	0	%100
62	M55	Z	0	0	0	%100
63	M56	X	0	0	0	%100
64	M56	Z	.337	.337	0	%100
65	M57	X	0	0	0	%100
66	M57	Z	0	0	0	%100
67	MP2A	X	0	0	0	%100
68	MP2A	Z	.517	.517	0	%100
69	MP3A	X	0	0	0	%100
70	MP3A	Z	.517	.517	0	%100
71	MP4A	X	0	0	0	%100
72	MP4A	Z	.517	.517	0	%100
73	MP5A	X	0	0	0	%100
74	MP5A	Z	.517	.517	0	%100
75	MP1C	X	0	0	0	%100
76	MP1C	Z	.517	.517	0	%100
77	MP2C	X	0	0	0	%100
78	MP2C	Z	.517	.517	0	%100
79	MP3C	X	0	0	0	%100
80	MP3C	Z	.517	.517	0	%100
81	MP4C	X	0	0	0	%100
82	MP4C	Z	.517	.517	0	%100
83	MP5C	X	0	0	0	%100
84	MP5C	Z	.517	.517	0	%100
85	MP1B	X	0	0	0	%100
86	MP1B	Z	.517	.517	0	%100
87	MP2B	X	0	0	0	%100
88	MP2B	Z	.517	.517	0	%100
89	MP3B	X	0	0	0	%100
90	MP3B	Z	.517	.517	0	%100
91	MP4B	X	0	0	0	%100
92	MP4B	Z	.517	.517	0	%100
93	MP5B	X	0	0	0	%100
94	MP5B	Z	.517	.517	0	%100
95	M88	X	0	0	0	%100
96	M88	Z	.287	.287	0	%100
97	M91	X	0	0	0	%100
98	M91	Z	.479	.479	0	%100
99	M94	X	0	0	0	%100
100	M94	Z	.287	.287	0	%100
101	M97	X	0	0	0	%100
102	M97	Z	.479	.479	0	%100
103	M105	X	0	0	0	%100
104	M105	Z	.626	.626	0	%100
105	M113	X	0	0	0	%100
106	M113	Z	.157	.157	0	%100
107	M121	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
108	M121	Z	.157	.157	0	%100
109	M124	X	0	0	0	%100
110	M124	Z	.196	.196	0	%100
111	M125	X	0	0	0	%100
112	M125	Z	.785	.785	0	%100
113	M126	X	0	0	0	%100
114	M126	Z	.196	.196	0	%100
115	M127	X	0	0	0	%100
116	M127	Z	.419	.419	0	%100
117	M128	X	0	0	0	%100
118	M128	Z	.419	.419	0	%100
119	M129	X	0	0	0	%100
120	M129	Z	.907	.907	0	%100
121	M130	X	0	0	0	%100
122	M130	Z	.38	.38	0	%100
123	M131	X	0	0	0	%100
124	M131	Z	.38	.38	0	%100
125	M132	X	0	0	0	%100
126	M132	Z	.907	.907	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.49	-.49	0	%100
2	M1	Z	.849	.849	0	%100
3	M2	X	-.235	-.235	0	%100
4	M2	Z	.407	.407	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	-.271	-.271	0	%100
8	M4	Z	.47	.47	0	%100
9	M5	X	-.235	-.235	0	%100
10	M5	Z	.408	.408	0	%100
11	M6	X	-.079	-.079	0	%100
12	M6	Z	.137	.137	0	%100
13	M7	X	-.485	-.485	0	%100
14	M7	Z	.84	.84	0	%100
15	M8	X	-.079	-.079	0	%100
16	M8	Z	.137	.137	0	%100
17	M14	X	-.055	-.055	0	%100
18	M14	Z	.096	.096	0	%100
19	M17	X	-.092	-.092	0	%100
20	M17	Z	.159	.159	0	%100
21	M18	X	-.056	-.056	0	%100
22	M18	Z	.097	.097	0	%100
23	M19	X	-.225	-.225	0	%100
24	M19	Z	.389	.389	0	%100
25	MP1A	X	-.259	-.259	0	%100
26	MP1A	Z	.448	.448	0	%100
27	M22	X	-.235	-.235	0	%100
28	M22	Z	.407	.407	0	%100
29	M23	X	-.271	-.271	0	%100
30	M23	Z	.47	.47	0	%100
31	M24	X	-.235	-.235	0	%100
32	M24	Z	.408	.408	0	%100
33	M25	X	0	0	0	%100
34	M25	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
35	M26	X	0	0	0	%100
36	M26	Z	0	0	0	%100
37	M27	X	0	0	0	%100
38	M27	Z	0	0	0	%100
39	M28	X	-.079	-.079	0	%100
40	M28	Z	.137	.137	0	%100
41	M29	X	-.079	-.079	0	%100
42	M29	Z	.137	.137	0	%100
43	M35	X	-.055	-.055	0	%100
44	M35	Z	.096	.096	0	%100
45	M38	X	-.092	-.092	0	%100
46	M38	Z	.159	.159	0	%100
47	M39	X	-.225	-.225	0	%100
48	M39	Z	.389	.389	0	%100
49	M40	X	-.056	-.056	0	%100
50	M40	Z	.097	.097	0	%100
51	M41	X	-.048	-.048	0	%100
52	M41	Z	.083	.083	0	%100
53	M44	X	-.318	-.318	0	%100
54	M44	Z	.55	.55	0	%100
55	M45	X	-.317	-.317	0	%100
56	M45	Z	.55	.55	0	%100
57	M51	X	-.221	-.221	0	%100
58	M51	Z	.382	.382	0	%100
59	M54	X	-.368	-.368	0	%100
60	M54	Z	.637	.637	0	%100
61	M55	X	-.056	-.056	0	%100
62	M55	Z	.097	.097	0	%100
63	M56	X	-.056	-.056	0	%100
64	M56	Z	.097	.097	0	%100
65	M57	X	-.08	-.08	0	%100
66	M57	Z	.138	.138	0	%100
67	MP2A	X	-.259	-.259	0	%100
68	MP2A	Z	.448	.448	0	%100
69	MP3A	X	-.259	-.259	0	%100
70	MP3A	Z	.448	.448	0	%100
71	MP4A	X	-.259	-.259	0	%100
72	MP4A	Z	.448	.448	0	%100
73	MP5A	X	-.259	-.259	0	%100
74	MP5A	Z	.448	.448	0	%100
75	MP1C	X	-.259	-.259	0	%100
76	MP1C	Z	.448	.448	0	%100
77	MP2C	X	-.259	-.259	0	%100
78	MP2C	Z	.448	.448	0	%100
79	MP3C	X	-.259	-.259	0	%100
80	MP3C	Z	.448	.448	0	%100
81	MP4C	X	-.259	-.259	0	%100
82	MP4C	Z	.448	.448	0	%100
83	MP5C	X	-.259	-.259	0	%100
84	MP5C	Z	.448	.448	0	%100
85	MP1B	X	-.259	-.259	0	%100
86	MP1B	Z	.448	.448	0	%100
87	MP2B	X	-.259	-.259	0	%100
88	MP2B	Z	.448	.448	0	%100
89	MP3B	X	-.259	-.259	0	%100
90	MP3B	Z	.448	.448	0	%100
91	MP4B	X	-.259	-.259	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
92	MP4B	Z	.448	.448	0	%100
93	MP5B	X	-.259	-.259	0	%100
94	MP5B	Z	.448	.448	0	%100
95	M88	X	-.048	-.048	0	%100
96	M88	Z	.083	.083	0	%100
97	M91	X	-.08	-.08	0	%100
98	M91	Z	.138	.138	0	%100
99	M94	X	-.192	-.192	0	%100
100	M94	Z	.332	.332	0	%100
101	M97	X	-.319	-.319	0	%100
102	M97	Z	.553	.553	0	%100
103	M105	X	-.235	-.235	0	%100
104	M105	Z	.407	.407	0	%100
105	M113	X	-.235	-.235	0	%100
106	M113	Z	.407	.407	0	%100
107	M121	X	0	0	0	%100
108	M121	Z	0	0	0	%100
109	M124	X	-.294	-.294	0	%100
110	M124	Z	.51	.51	0	%100
111	M125	X	-.294	-.294	0	%100
112	M125	Z	.51	.51	0	%100
113	M126	X	0	0	0	%100
114	M126	Z	0	0	0	%100
115	M127	X	-.115	-.115	0	%100
116	M127	Z	.199	.199	0	%100
117	M128	X	-.379	-.379	0	%100
118	M128	Z	.656	.656	0	%100
119	M129	X	-.379	-.379	0	%100
120	M129	Z	.656	.656	0	%100
121	M130	X	-.115	-.115	0	%100
122	M130	Z	.199	.199	0	%100
123	M131	X	-.359	-.359	0	%100
124	M131	Z	.622	.622	0	%100
125	M132	X	-.359	-.359	0	%100
126	M132	Z	.622	.622	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.132	-1.132	0	%100
2	M1	Z	.654	.654	0	%100
3	M2	X	-.136	-.136	0	%100
4	M2	Z	.078	.078	0	%100
5	M3	X	-.283	-.283	0	%100
6	M3	Z	.163	.163	0	%100
7	M4	X	-.157	-.157	0	%100
8	M4	Z	.09	.09	0	%100
9	M5	X	-.136	-.136	0	%100
10	M5	Z	.078	.078	0	%100
11	M6	X	-.412	-.412	0	%100
12	M6	Z	.238	.238	0	%100
13	M7	X	-.274	-.274	0	%100
14	M7	Z	.158	.158	0	%100
15	M8	X	-.412	-.412	0	%100
16	M8	Z	.238	.238	0	%100
17	M14	X	-.287	-.287	0	%100
18	M14	Z	.165	.165	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
19	M17	X	-.478	-.478	0	%100
20	M17	Z	.276	.276	0	%100
21	M18	X	0	0	0	%100
22	M18	Z	0	0	0	%100
23	M19	X	-.292	-.292	0	%100
24	M19	Z	.168	.168	0	%100
25	MP1A	X	-.448	-.448	0	%100
26	MP1A	Z	.259	.259	0	%100
27	M22	X	-.543	-.543	0	%100
28	M22	Z	.314	.314	0	%100
29	M23	X	-.626	-.626	0	%100
30	M23	Z	.362	.362	0	%100
31	M24	X	-.544	-.544	0	%100
32	M24	Z	.314	.314	0	%100
33	M25	X	-.136	-.136	0	%100
34	M25	Z	.078	.078	0	%100
35	M26	X	-.157	-.157	0	%100
36	M26	Z	.09	.09	0	%100
37	M27	X	-.136	-.136	0	%100
38	M27	Z	.078	.078	0	%100
39	M28	X	0	0	0	%100
40	M28	Z	0	0	0	%100
41	M29	X	0	0	0	%100
42	M29	Z	0	0	0	%100
43	M35	X	0	0	0	%100
44	M35	Z	0	0	0	%100
45	M38	X	0	0	0	%100
46	M38	Z	0	0	0	%100
47	M39	X	-.292	-.292	0	%100
48	M39	Z	.169	.169	0	%100
49	M40	X	-.292	-.292	0	%100
50	M40	Z	.169	.169	0	%100
51	M41	X	-.249	-.249	0	%100
52	M41	Z	.144	.144	0	%100
53	M44	X	-.412	-.412	0	%100
54	M44	Z	.238	.238	0	%100
55	M45	X	-.412	-.412	0	%100
56	M45	Z	.238	.238	0	%100
57	M51	X	-.287	-.287	0	%100
58	M51	Z	.165	.165	0	%100
59	M54	X	-.478	-.478	0	%100
60	M54	Z	.276	.276	0	%100
61	M55	X	-.292	-.292	0	%100
62	M55	Z	.168	.168	0	%100
63	M56	X	0	0	0	%100
64	M56	Z	0	0	0	%100
65	M57	X	-.415	-.415	0	%100
66	M57	Z	.239	.239	0	%100
67	MP2A	X	-.448	-.448	0	%100
68	MP2A	Z	.259	.259	0	%100
69	MP3A	X	-.448	-.448	0	%100
70	MP3A	Z	.259	.259	0	%100
71	MP4A	X	-.448	-.448	0	%100
72	MP4A	Z	.259	.259	0	%100
73	MP5A	X	-.448	-.448	0	%100
74	MP5A	Z	.259	.259	0	%100
75	MP1C	X	-.448	-.448	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
76	MP1C	Z	.259	.259	0	%100
77	MP2C	X	-.448	-.448	0	%100
78	MP2C	Z	.259	.259	0	%100
79	MP3C	X	-.448	-.448	0	%100
80	MP3C	Z	.259	.259	0	%100
81	MP4C	X	-.448	-.448	0	%100
82	MP4C	Z	.259	.259	0	%100
83	MP5C	X	-.448	-.448	0	%100
84	MP5C	Z	.259	.259	0	%100
85	MP1B	X	-.448	-.448	0	%100
86	MP1B	Z	.259	.259	0	%100
87	MP2B	X	-.448	-.448	0	%100
88	MP2B	Z	.259	.259	0	%100
89	MP3B	X	-.448	-.448	0	%100
90	MP3B	Z	.259	.259	0	%100
91	MP4B	X	-.448	-.448	0	%100
92	MP4B	Z	.259	.259	0	%100
93	MP5B	X	-.448	-.448	0	%100
94	MP5B	Z	.259	.259	0	%100
95	M88	X	0	0	0	%100
96	M88	Z	0	0	0	%100
97	M91	X	0	0	0	%100
98	M91	Z	0	0	0	%100
99	M94	X	-.249	-.249	0	%100
100	M94	Z	.144	.144	0	%100
101	M97	X	-.415	-.415	0	%100
102	M97	Z	.239	.239	0	%100
103	M105	X	-.136	-.136	0	%100
104	M105	Z	.078	.078	0	%100
105	M113	X	-.542	-.542	0	%100
106	M113	Z	.313	.313	0	%100
107	M121	X	-.136	-.136	0	%100
108	M121	Z	.078	.078	0	%100
109	M124	X	-.68	-.68	0	%100
110	M124	Z	.392	.392	0	%100
111	M125	X	-.17	-.17	0	%100
112	M125	Z	.098	.098	0	%100
113	M126	X	-.17	-.17	0	%100
114	M126	Z	.098	.098	0	%100
115	M127	X	-.329	-.329	0	%100
116	M127	Z	.19	.19	0	%100
117	M128	X	-.785	-.785	0	%100
118	M128	Z	.453	.453	0	%100
119	M129	X	-.363	-.363	0	%100
120	M129	Z	.209	.209	0	%100
121	M130	X	-.363	-.363	0	%100
122	M130	Z	.209	.209	0	%100
123	M131	X	-.785	-.785	0	%100
124	M131	Z	.453	.453	0	%100
125	M132	X	-.329	-.329	0	%100
126	M132	Z	.19	.19	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.98	-.98	0	%100
2	M1	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	-.98	-.98	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	0	0	0	%100
9	M5	X	0	0	0	%100
10	M5	Z	0	0	0	%100
11	M6	X	-.635	-.635	0	%100
12	M6	Z	0	0	0	%100
13	M7	X	-.000104	-.000104	0	%100
14	M7	Z	0	0	0	%100
15	M8	X	-.635	-.635	0	%100
16	M8	Z	0	0	0	%100
17	M14	X	-.441	-.441	0	%100
18	M14	Z	0	0	0	%100
19	M17	X	-.735	-.735	0	%100
20	M17	Z	0	0	0	%100
21	M18	X	-.112	-.112	0	%100
22	M18	Z	0	0	0	%100
23	M19	X	-.112	-.112	0	%100
24	M19	Z	0	0	0	%100
25	MP1A	X	-.517	-.517	0	%100
26	MP1A	Z	0	0	0	%100
27	M22	X	-.47	-.47	0	%100
28	M22	Z	0	0	0	%100
29	M23	X	-.543	-.543	0	%100
30	M23	Z	0	0	0	%100
31	M24	X	-.471	-.471	0	%100
32	M24	Z	0	0	0	%100
33	M25	X	-.47	-.47	0	%100
34	M25	Z	0	0	0	%100
35	M26	X	-.543	-.543	0	%100
36	M26	Z	0	0	0	%100
37	M27	X	-.47	-.47	0	%100
38	M27	Z	0	0	0	%100
39	M28	X	-.159	-.159	0	%100
40	M28	Z	0	0	0	%100
41	M29	X	-.159	-.159	0	%100
42	M29	Z	0	0	0	%100
43	M35	X	-.11	-.11	0	%100
44	M35	Z	0	0	0	%100
45	M38	X	-.184	-.184	0	%100
46	M38	Z	0	0	0	%100
47	M39	X	-.112	-.112	0	%100
48	M39	Z	0	0	0	%100
49	M40	X	-.449	-.449	0	%100
50	M40	Z	0	0	0	%100
51	M41	X	-.383	-.383	0	%100
52	M41	Z	0	0	0	%100
53	M44	X	-.159	-.159	0	%100
54	M44	Z	0	0	0	%100
55	M45	X	-.159	-.159	0	%100
56	M45	Z	0	0	0	%100
57	M51	X	-.11	-.11	0	%100
58	M51	Z	0	0	0	%100
59	M54	X	-.184	-.184	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
60	M54	Z	0	0	0	%100
61	M55	X	-.449	-.449	0	%100
62	M55	Z	0	0	0	%100
63	M56	X	-.113	-.113	0	%100
64	M56	Z	0	0	0	%100
65	M57	X	-.638	-.638	0	%100
66	M57	Z	0	0	0	%100
67	MP2A	X	-.517	-.517	0	%100
68	MP2A	Z	0	0	0	%100
69	MP3A	X	-.517	-.517	0	%100
70	MP3A	Z	0	0	0	%100
71	MP4A	X	-.517	-.517	0	%100
72	MP4A	Z	0	0	0	%100
73	MP5A	X	-.517	-.517	0	%100
74	MP5A	Z	0	0	0	%100
75	MP1C	X	-.517	-.517	0	%100
76	MP1C	Z	0	0	0	%100
77	MP2C	X	-.517	-.517	0	%100
78	MP2C	Z	0	0	0	%100
79	MP3C	X	-.517	-.517	0	%100
80	MP3C	Z	0	0	0	%100
81	MP4C	X	-.517	-.517	0	%100
82	MP4C	Z	0	0	0	%100
83	MP5C	X	-.517	-.517	0	%100
84	MP5C	Z	0	0	0	%100
85	MP1B	X	-.517	-.517	0	%100
86	MP1B	Z	0	0	0	%100
87	MP2B	X	-.517	-.517	0	%100
88	MP2B	Z	0	0	0	%100
89	MP3B	X	-.517	-.517	0	%100
90	MP3B	Z	0	0	0	%100
91	MP4B	X	-.517	-.517	0	%100
92	MP4B	Z	0	0	0	%100
93	MP5B	X	-.517	-.517	0	%100
94	MP5B	Z	0	0	0	%100
95	M88	X	-.096	-.096	0	%100
96	M88	Z	0	0	0	%100
97	M91	X	-.16	-.16	0	%100
98	M91	Z	0	0	0	%100
99	M94	X	-.096	-.096	0	%100
100	M94	Z	0	0	0	%100
101	M97	X	-.16	-.16	0	%100
102	M97	Z	0	0	0	%100
103	M105	X	0	0	0	%100
104	M105	Z	0	0	0	%100
105	M113	X	-.47	-.47	0	%100
106	M113	Z	0	0	0	%100
107	M121	X	-.47	-.47	0	%100
108	M121	Z	0	0	0	%100
109	M124	X	-.589	-.589	0	%100
110	M124	Z	0	0	0	%100
111	M125	X	0	0	0	%100
112	M125	Z	0	0	0	%100
113	M126	X	-.589	-.589	0	%100
114	M126	Z	0	0	0	%100
115	M127	X	-.718	-.718	0	%100
116	M127	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
117	M128	X	-.718	-.718	0	%100
118	M128	Z	0	0	0	%100
119	M129	X	-.23	-.23	0	%100
120	M129	Z	0	0	0	%100
121	M130	X	-.757	-.757	0	%100
122	M130	Z	0	0	0	%100
123	M131	X	-.757	-.757	0	%100
124	M131	Z	0	0	0	%100
125	M132	X	-.23	-.23	0	%100
126	M132	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.283	-.283	0	%100
2	M1	Z	-.163	-.163	0	%100
3	M2	X	-.136	-.136	0	%100
4	M2	Z	-.078	-.078	0	%100
5	M3	X	-1.132	-1.132	0	%100
6	M3	Z	-.654	-.654	0	%100
7	M4	X	-.157	-.157	0	%100
8	M4	Z	-.09	-.09	0	%100
9	M5	X	-.136	-.136	0	%100
10	M5	Z	-.078	-.078	0	%100
11	M6	X	-.412	-.412	0	%100
12	M6	Z	-.238	-.238	0	%100
13	M7	X	-.292	-.292	0	%100
14	M7	Z	-.168	-.168	0	%100
15	M8	X	-.412	-.412	0	%100
16	M8	Z	-.238	-.238	0	%100
17	M14	X	-.287	-.287	0	%100
18	M14	Z	-.165	-.165	0	%100
19	M17	X	-.478	-.478	0	%100
20	M17	Z	-.276	-.276	0	%100
21	M18	X	-.292	-.292	0	%100
22	M18	Z	-.168	-.168	0	%100
23	M19	X	0	0	0	%100
24	M19	Z	0	0	0	%100
25	MP1A	X	-.448	-.448	0	%100
26	MP1A	Z	-.259	-.259	0	%100
27	M22	X	-.136	-.136	0	%100
28	M22	Z	-.078	-.078	0	%100
29	M23	X	-.157	-.157	0	%100
30	M23	Z	-.09	-.09	0	%100
31	M24	X	-.136	-.136	0	%100
32	M24	Z	-.078	-.078	0	%100
33	M25	X	-.543	-.543	0	%100
34	M25	Z	-.314	-.314	0	%100
35	M26	X	-.626	-.626	0	%100
36	M26	Z	-.362	-.362	0	%100
37	M27	X	-.543	-.543	0	%100
38	M27	Z	-.314	-.314	0	%100
39	M28	X	-.412	-.412	0	%100
40	M28	Z	-.238	-.238	0	%100
41	M29	X	-.412	-.412	0	%100
42	M29	Z	-.238	-.238	0	%100
43	M35	X	-.287	-.287	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
44	M35	Z	-.165	-.165	0	%100
45	M38	X	-.478	-.478	0	%100
46	M38	Z	-.276	-.276	0	%100
47	M39	X	0	0	0	%100
48	M39	Z	0	0	0	%100
49	M40	X	-.292	-.292	0	%100
50	M40	Z	-.168	-.168	0	%100
51	M41	X	-.249	-.249	0	%100
52	M41	Z	-.144	-.144	0	%100
53	M44	X	0	0	0	%100
54	M44	Z	0	0	0	%100
55	M45	X	0	0	0	%100
56	M45	Z	0	0	0	%100
57	M51	X	0	0	0	%100
58	M51	Z	0	0	0	%100
59	M54	X	0	0	0	%100
60	M54	Z	0	0	0	%100
61	M55	X	-.292	-.292	0	%100
62	M55	Z	-.169	-.169	0	%100
63	M56	X	-.292	-.292	0	%100
64	M56	Z	-.169	-.169	0	%100
65	M57	X	-.415	-.415	0	%100
66	M57	Z	-.239	-.239	0	%100
67	MP2A	X	-.448	-.448	0	%100
68	MP2A	Z	-.259	-.259	0	%100
69	MP3A	X	-.448	-.448	0	%100
70	MP3A	Z	-.259	-.259	0	%100
71	MP4A	X	-.448	-.448	0	%100
72	MP4A	Z	-.259	-.259	0	%100
73	MP5A	X	-.448	-.448	0	%100
74	MP5A	Z	-.259	-.259	0	%100
75	MP1C	X	-.448	-.448	0	%100
76	MP1C	Z	-.259	-.259	0	%100
77	MP2C	X	-.448	-.448	0	%100
78	MP2C	Z	-.259	-.259	0	%100
79	MP3C	X	-.448	-.448	0	%100
80	MP3C	Z	-.259	-.259	0	%100
81	MP4C	X	-.448	-.448	0	%100
82	MP4C	Z	-.259	-.259	0	%100
83	MP5C	X	-.448	-.448	0	%100
84	MP5C	Z	-.259	-.259	0	%100
85	MP1B	X	-.448	-.448	0	%100
86	MP1B	Z	-.259	-.259	0	%100
87	MP2B	X	-.448	-.448	0	%100
88	MP2B	Z	-.259	-.259	0	%100
89	MP3B	X	-.448	-.448	0	%100
90	MP3B	Z	-.259	-.259	0	%100
91	MP4B	X	-.448	-.448	0	%100
92	MP4B	Z	-.259	-.259	0	%100
93	MP5B	X	-.448	-.448	0	%100
94	MP5B	Z	-.259	-.259	0	%100
95	M88	X	-.249	-.249	0	%100
96	M88	Z	-.144	-.144	0	%100
97	M91	X	-.415	-.415	0	%100
98	M91	Z	-.239	-.239	0	%100
99	M94	X	0	0	0	%100
100	M94	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
101	M97	X	0	0	0	%100
102	M97	Z	0	0	0	%100
103	M105	X	-.136	-.136	0	%100
104	M105	Z	-.078	-.078	0	%100
105	M113	X	-.136	-.136	0	%100
106	M113	Z	-.078	-.078	0	%100
107	M121	X	-.542	-.542	0	%100
108	M121	Z	-.313	-.313	0	%100
109	M124	X	-.17	-.17	0	%100
110	M124	Z	-.098	-.098	0	%100
111	M125	X	-.17	-.17	0	%100
112	M125	Z	-.098	-.098	0	%100
113	M126	X	-.68	-.68	0	%100
114	M126	Z	-.392	-.392	0	%100
115	M127	X	-.785	-.785	0	%100
116	M127	Z	-.453	-.453	0	%100
117	M128	X	-.329	-.329	0	%100
118	M128	Z	-.19	-.19	0	%100
119	M129	X	-.329	-.329	0	%100
120	M129	Z	-.19	-.19	0	%100
121	M130	X	-.785	-.785	0	%100
122	M130	Z	-.453	-.453	0	%100
123	M131	X	-.363	-.363	0	%100
124	M131	Z	-.209	-.209	0	%100
125	M132	X	-.363	-.363	0	%100
126	M132	Z	-.209	-.209	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	-.235	-.235	0	%100
4	M2	Z	-.407	-.407	0	%100
5	M3	X	-.49	-.49	0	%100
6	M3	Z	-.849	-.849	0	%100
7	M4	X	-.271	-.271	0	%100
8	M4	Z	-.47	-.47	0	%100
9	M5	X	-.235	-.235	0	%100
10	M5	Z	-.408	-.408	0	%100
11	M6	X	-.079	-.079	0	%100
12	M6	Z	-.137	-.137	0	%100
13	M7	X	-.495	-.495	0	%100
14	M7	Z	-.858	-.858	0	%100
15	M8	X	-.079	-.079	0	%100
16	M8	Z	-.137	-.137	0	%100
17	M14	X	-.055	-.055	0	%100
18	M14	Z	-.096	-.096	0	%100
19	M17	X	-.092	-.092	0	%100
20	M17	Z	-.159	-.159	0	%100
21	M18	X	-.225	-.225	0	%100
22	M18	Z	-.389	-.389	0	%100
23	M19	X	-.056	-.056	0	%100
24	M19	Z	-.097	-.097	0	%100
25	MP1A	X	-.259	-.259	0	%100
26	MP1A	Z	-.448	-.448	0	%100
27	M22	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
28	M22	Z	0	0	0	%100
29	M23	X	0	0	0	%100
30	M23	Z	0	0	0	%100
31	M24	X	0	0	0	%100
32	M24	Z	0	0	0	%100
33	M25	X	-.235	-.235	0	%100
34	M25	Z	-.407	-.407	0	%100
35	M26	X	-.271	-.271	0	%100
36	M26	Z	-.47	-.47	0	%100
37	M27	X	-.235	-.235	0	%100
38	M27	Z	-.407	-.407	0	%100
39	M28	X	-.318	-.318	0	%100
40	M28	Z	-.55	-.55	0	%100
41	M29	X	-.317	-.317	0	%100
42	M29	Z	-.55	-.55	0	%100
43	M35	X	-.221	-.221	0	%100
44	M35	Z	-.382	-.382	0	%100
45	M38	X	-.368	-.368	0	%100
46	M38	Z	-.637	-.637	0	%100
47	M39	X	-.056	-.056	0	%100
48	M39	Z	-.097	-.097	0	%100
49	M40	X	-.056	-.056	0	%100
50	M40	Z	-.097	-.097	0	%100
51	M41	X	-.048	-.048	0	%100
52	M41	Z	-.083	-.083	0	%100
53	M44	X	-.079	-.079	0	%100
54	M44	Z	-.137	-.137	0	%100
55	M45	X	-.079	-.079	0	%100
56	M45	Z	-.137	-.137	0	%100
57	M51	X	-.055	-.055	0	%100
58	M51	Z	-.096	-.096	0	%100
59	M54	X	-.092	-.092	0	%100
60	M54	Z	-.159	-.159	0	%100
61	M55	X	-.056	-.056	0	%100
62	M55	Z	-.097	-.097	0	%100
63	M56	X	-.225	-.225	0	%100
64	M56	Z	-.389	-.389	0	%100
65	M57	X	-.08	-.08	0	%100
66	M57	Z	-.138	-.138	0	%100
67	MP2A	X	-.259	-.259	0	%100
68	MP2A	Z	-.448	-.448	0	%100
69	MP3A	X	-.259	-.259	0	%100
70	MP3A	Z	-.448	-.448	0	%100
71	MP4A	X	-.259	-.259	0	%100
72	MP4A	Z	-.448	-.448	0	%100
73	MP5A	X	-.259	-.259	0	%100
74	MP5A	Z	-.448	-.448	0	%100
75	MP1C	X	-.259	-.259	0	%100
76	MP1C	Z	-.448	-.448	0	%100
77	MP2C	X	-.259	-.259	0	%100
78	MP2C	Z	-.448	-.448	0	%100
79	MP3C	X	-.259	-.259	0	%100
80	MP3C	Z	-.448	-.448	0	%100
81	MP4C	X	-.259	-.259	0	%100
82	MP4C	Z	-.448	-.448	0	%100
83	MP5C	X	-.259	-.259	0	%100
84	MP5C	Z	-.448	-.448	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
85	MP1B	X	-.259	-.259	0	%100
86	MP1B	Z	-.448	-.448	0	%100
87	MP2B	X	-.259	-.259	0	%100
88	MP2B	Z	-.448	-.448	0	%100
89	MP3B	X	-.259	-.259	0	%100
90	MP3B	Z	-.448	-.448	0	%100
91	MP4B	X	-.259	-.259	0	%100
92	MP4B	Z	-.448	-.448	0	%100
93	MP5B	X	-.259	-.259	0	%100
94	MP5B	Z	-.448	-.448	0	%100
95	M88	X	-.192	-.192	0	%100
96	M88	Z	-.332	-.332	0	%100
97	M91	X	-.319	-.319	0	%100
98	M91	Z	-.553	-.553	0	%100
99	M94	X	-.048	-.048	0	%100
100	M94	Z	-.083	-.083	0	%100
101	M97	X	-.08	-.08	0	%100
102	M97	Z	-.138	-.138	0	%100
103	M105	X	-.235	-.235	0	%100
104	M105	Z	-.407	-.407	0	%100
105	M113	X	0	0	0	%100
106	M113	Z	0	0	0	%100
107	M121	X	-.235	-.235	0	%100
108	M121	Z	-.407	-.407	0	%100
109	M124	X	0	0	0	%100
110	M124	Z	0	0	0	%100
111	M125	X	-.294	-.294	0	%100
112	M125	Z	-.51	-.51	0	%100
113	M126	X	-.294	-.294	0	%100
114	M126	Z	-.51	-.51	0	%100
115	M127	X	-.379	-.379	0	%100
116	M127	Z	-.656	-.656	0	%100
117	M128	X	-.115	-.115	0	%100
118	M128	Z	-.199	-.199	0	%100
119	M129	X	-.359	-.359	0	%100
120	M129	Z	-.622	-.622	0	%100
121	M130	X	-.359	-.359	0	%100
122	M130	Z	-.622	-.622	0	%100
123	M131	X	-.115	-.115	0	%100
124	M131	Z	-.199	-.199	0	%100
125	M132	X	-.379	-.379	0	%100
126	M132	Z	-.656	-.656	0	%100

Member Distributed Loads (BLC 87 : BLC 39 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M94	Y	-31.008	-31.008	0	1.5
2	M97	Y	-31.008	-31.008	0	1.5
3	M17	Y	-6.189	-5.955	0	1.275
4	M17	Y	-5.955	-5.722	1.275	2.55
5	M19	Y	-13.374	-11.034	0	1.057
6	M19	Y	-11.034	-8.694	1.057	2.114
7	M14	Y	-6.189	-5.955	0	1.275
8	M14	Y	-5.955	-5.722	1.275	2.55
9	M18	Y	-8.694	-11.034	.906	1.963
10	M18	Y	-11.034	-13.374	1.963	3.021
11	M88	Y	-31.008	-31.008	0	1.5

Member Distributed Loads (BLC 87 : BLC 39 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
12	M91	Y	-31.008	-31.008	0	1.5
13	M54	Y	-6.189	-5.955	0	1.275
14	M54	Y	-5.955	-5.722	1.275	2.55
15	M56	Y	-13.374	-11.034	0	1.057
16	M56	Y	-11.034	-8.694	1.057	2.114
17	M51	Y	-6.189	-5.955	0	1.275
18	M51	Y	-5.955	-5.722	1.275	2.55
19	M55	Y	-8.694	-11.034	.906	1.963
20	M55	Y	-11.034	-13.374	1.963	3.021
21	M41	Y	-31.008	-31.008	0	1.5
22	M57	Y	-31.008	-31.008	0	1.5
23	M38	Y	-6.189	-5.955	0	1.275
24	M38	Y	-5.955	-5.722	1.275	2.55
25	M40	Y	-13.374	-11.034	0	1.057
26	M40	Y	-11.034	-8.694	1.057	2.114
27	M35	Y	-6.189	-5.955	0	1.275
28	M35	Y	-5.955	-5.722	1.275	2.55
29	M39	Y	-8.694	-11.034	.906	1.963
30	M39	Y	-11.034	-13.374	1.963	3.021

Member Distributed Loads (BLC 88 : BLC 40 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M94	Y	-44.789	-44.789	0	1.5
2	M97	Y	-44.789	-44.789	0	1.5
3	M17	Y	-8.94	-8.602	0	1.275
4	M17	Y	-8.602	-8.265	1.275	2.55
5	M19	Y	-19.318	-15.938	0	1.057
6	M19	Y	-15.938	-12.558	1.057	2.114
7	M14	Y	-8.94	-8.602	0	1.275
8	M14	Y	-8.602	-8.265	1.275	2.55
9	M18	Y	-12.558	-15.938	.906	1.963
10	M18	Y	-15.938	-19.318	1.963	3.021
11	M88	Y	-44.789	-44.789	0	1.5
12	M91	Y	-44.789	-44.789	0	1.5
13	M54	Y	-8.94	-8.602	0	1.275
14	M54	Y	-8.602	-8.265	1.275	2.55
15	M56	Y	-19.318	-15.938	0	1.057
16	M56	Y	-15.938	-12.558	1.057	2.114
17	M51	Y	-8.94	-8.602	0	1.275
18	M51	Y	-8.602	-8.265	1.275	2.55
19	M55	Y	-12.558	-15.938	.906	1.963
20	M55	Y	-15.938	-19.318	1.963	3.021
21	M41	Y	-44.789	-44.789	0	1.5
22	M57	Y	-44.789	-44.789	0	1.5
23	M38	Y	-8.94	-8.602	0	1.275
24	M38	Y	-8.602	-8.265	1.275	2.55
25	M40	Y	-19.318	-15.938	0	1.057
26	M40	Y	-15.938	-12.558	1.057	2.114
27	M35	Y	-8.94	-8.602	0	1.275
28	M35	Y	-8.602	-8.265	1.275	2.55
29	M39	Y	-12.558	-15.938	.906	1.963
30	M39	Y	-15.938	-19.318	1.963	3.021

Member Area Loads (BLC 39 : Structure D)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N157	N153	N154	N158	Y	A-B	-.009
2	N151	N29	N30	N152	Y	A-B	-.009
3	N28	N27	N147	N148	Y	B-C	-.009
4	N150	N149	N145	N146	Y	B-C	-.009
5	N144	N143	N81	N82	Y	B-C	-.009
6	N80	N79	N83	N84	Y	B-C	-.009
7	N85	N86	N62	N61	Y	B-C	-.009
8	N59	N60	N58	N57	Y	A-D	-.009
9	N56	N55	N155	N156	Y	B-C	-.009

Member Area Loads (BLC 40 : Structure Di)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N157	N153	N154	N158	Y	A-B	-.013
2	N151	N29	N30	N152	Y	A-B	-.013
3	N28	N27	N147	N148	Y	B-C	-.013
4	N150	N149	N145	N146	Y	B-C	-.013
5	N144	N143	N81	N82	Y	B-C	-.013
6	N80	N79	N83	N84	Y	B-C	-.013
7	N85	N86	N62	N61	Y	B-C	-.013
8	N59	N60	N58	N57	Y	A-D	-.013
9	N56	N55	N155	N156	Y	B-C	-.013

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N17	max	717.988	10	290.042	20	2447.631	1	1.078	13	1.476	4	.167	4
2		min	-715.086	4	114.757	74	-1561.612	7	.157	7	-1.524	10	-.167	10
3	N45	max	2117.302	9	290.489	16	800.347	3	-.076	3	1.479	12	-.139	3
4		min	-1352.354	3	115.034	75	-1245.745	9	-.541	21	-1.528	6	-.933	21
5	N69	max	1370	11	290.552	24	771.089	11	-.063	1	1.48	8	.953	29
6		min	-2138.032	5	114.76	69	-1211.047	5	-.565	31	-1.527	2	.135	11
7	N213	max	659.448	28	2138.641	19	3031.478	19	0	1	0	28	0	28
8		min	-393.217	10	790.957	75	1126.942	64	0	7	0	10	0	10
9	N210	max	2637.164	18	2138.426	15	-423.883	6	0	12	0	12	0	3
10		min	964.53	74	791.763	73	-1630.343	24	0	30	0	30	0	9
11	N213A	max	-984.972	68	2138.705	23	-358.964	8	0	1	0	8	0	5
12		min	-2668.894	20	789.959	68	-1564.673	14	0	7	0	2	0	11
13	Totals:	max	3270.691	10	7194.42	24	3271.947	1						
14		min	-3270.678	4	2725.975	68	-3271.699	7						

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

	Member	Shape	Code Check	Loc[...	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc...	phi*Pnt ...	phi*Mn ...	phi*Mn ...	Cb	Eqn
1	M1	PL3/8x6	.399	.548	3	.036	.548	z	4	33469.2...	72900	.57	8.962	1...	H1-1b
2	M2	PIPE_3.0	.205	4.172	19	.100	4.5		31	24571.1...	65205	5.749	5.749	1	H1-1b
3	M3	PL3/8x6	.399	.548	11	.046	0	y	33	33469.2...	72900	.57	8.965	1...	H1-1b
4	M4	PIPE_3.0	.229	.743	28	.100	.743		31	24571.1...	65205	5.749	5.749	1	H1-1b
5	M5	PIPE_3.0	.213	.329	19	.097	0		19	24571.1...	65205	5.749	5.749	1	H1-1b
6	M6	HSS3X3X6	.054	1.184	4	.026	.538	z	4	111297...	140346	11.213	11.213	1...	H1-1b
7	M7	PL3/8x6	.387	.563	7	.036	.563	z	8	33196.6...	72900	.57	8.967	1...	H1-1b
8	M8	HSS3X3X6	.183	0	10	.038	0	z	10	111289...	140346	11.213	11.213	2...	H1-1b
9	M14	L2.5x1.5x4	.059	0	10	.006	0	z	16	16997.9...	30682.8	.461	1.597	1...	H2-1
10	M17	L2.5x1.5x4	.061	0	4	.004	0	y	14	16997.9...	30682.8	.461	1.45	1...	H2-1
11	M18	L2.5x1.5x4	.504	2.8	20	.133	3.021	z	17	15681.0...	30682.8	.461	1.597	3...	H2-1

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

	Member	Shape	Code Check	Loc[...	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc...	phi*Pnt ...	phi*Mn ...	phi*Mn ...	Cb	Eqn
12	M19	L2.5x1.5x4	.520	.22	18	.131	0	z	21	15680.9...	30682.8	.461	1.597	3...	H2-1
13	MP1A	PIPE_2.0	.211	3.5	32	.071	1.021		8	17855.0...	32130	1.872	1.872	1...	H1-1b
14	M22	PIPE_3.0	.205	4.172	15	.088	4.5		15	24571.1...	65205	5.749	5.749	1	H1-1b
15	M23	PIPE_3.0	.214	5.809	30	.097	5.809		15	24571.1...	65205	5.749	5.749	1	H1-1b
16	M24	PIPE_3.0	.213	.329	15	.097	0		15	24571.1...	65205	5.749	5.749	1	H1-1b
17	M25	PIPE_3.0	.205	4.172	23	.088	4.5		23	24571.1...	65205	5.749	5.749	1	H1-1b
18	M26	PIPE_3.0	.187	5.742	14	.097	5.809		23	24571.1...	65205	5.749	5.749	1	H1-1b
19	M27	PIPE_3.0	.224	.375	23	.097	0		23	24571.1...	65205	5.749	5.749	1	H1-1b
20	M28	HSS3X3X6	.054	1.185	12	.026	.539	z	12	111249....	140346	11.213	11.213	1...	H1-1b
21	M29	HSS3X3X6	.184	0	6	.038	0	z	6	111289....	140346	11.213	11.213	2...	H1-1b
22	M35	L2.5x1.5x4	.059	0	6	.006	0	z	24	16997.9...	30682.8	.461	1.597	1...	H2-1
23	M38	L2.5x1.5x4	.061	0	12	.004	0	y	22	16997.9...	30682.8	.461	1.45	1...	H2-1
24	M39	L2.5x1.5x4	.503	2.8	16	.133	3.021	z	13	15681.0...	30682.8	.461	1.597	3...	H2-1
25	M40	L2.5x1.5x4	.519	.22	14	.131	0	z	17	15680.9...	30682.8	.461	1.597	3...	H2-1
26	M41	L2.5x1.5x4	.107	.75	14	.027	1.5	z	17	26001.8...	30682.8	.461	1.597	1...	H2-1
27	M44	HSS3X3X6	.054	1.185	8	.026	.539	z	8	111249....	140346	11.213	11.213	1...	H1-1b
28	M45	HSS3X3X6	.183	0	2	.038	0	z	2	111289....	140346	11.213	11.213	2...	H1-1b
29	M51	L2.5x1.5x4	.059	0	2	.006	0	z	20	16997.9...	30682.8	.461	1.597	1...	H2-1
30	M54	L2.5x1.5x4	.061	0	8	.004	0	y	18	16997.9...	30682.8	.461	1.449	1...	H2-1
31	M55	L2.5x1.5x4	.504	2.8	24	.134	3.021	z	20	15681.0...	30682.8	.461	1.597	3...	H2-1
32	M56	L2.5x1.5x4	.518	.22	22	.131	0	z	13	15680.9...	30682.8	.461	1.597	3...	H2-1
33	M57	L2.5x1.5x4	.082	.75	16	.024	1.5	y	21	26001.8...	30682.8	.461	1.574	1...	H2-1
34	MP2A	PIPE_2.0	.321	3.438	33	.078	3.438		7	20866.7...	32130	1.872	1.872	1.9	H1-1b
35	MP3A	PIPE_2.0	.271	3.75	10	.063	3.75		10	20866.7...	32130	1.872	1.872	1...	H1-1b
36	MP4A	PIPE_2.0	.278	3.5	17	.075	3.5		7	17855.0...	32130	1.872	1.872	1...	H1-1b
37	MP5A	PIPE_2.0	.184	3.354	18	.069	2.698		6	17855.0...	32130	1.872	1.872	3...	H1-1b
38	MP1C	PIPE_2.0	.180	3.5	16	.071	1.021		4	17855.0...	32130	1.872	1.872	2...	H1-1b
39	MP2C	PIPE_2.0	.275	3.438	17	.078	3.438		3	20866.7...	32130	1.872	1.872	1...	H1-1b
40	MP3C	PIPE_2.0	.271	3.75	6	.063	3.75		6	20866.7...	32130	1.872	1.872	1...	H1-1b
41	MP4C	PIPE_2.0	.296	3.5	25	.075	3.5		3	17855.0...	32130	1.872	1.872	1...	H1-1b
42	MP5C	PIPE_2.0	.235	3.354	26	.069	2.698		2	17855.0...	32130	1.872	1.872	3...	H1-1b
43	MP1B	PIPE_2.0	.179	3.5	24	.071	1.021		12	17855.0...	32130	1.872	1.872	1...	H1-1b
44	MP2B	PIPE_2.0	.275	3.438	13	.078	3.438		11	20866.7...	32130	1.872	1.872	1...	H1-1b
45	MP3B	PIPE_2.0	.271	3.75	2	.063	3.75		2	20866.7...	32130	1.872	1.872	1...	H1-1b
46	MP4B	PIPE_2.0	.277	3.5	21	.075	3.5		11	17855.0...	32130	1.872	1.872	1...	H1-1b
47	MP5B	PIPE_2.0	.184	.875	22	.069	2.698		10	17855.0...	32130	1.872	1.872	3...	H1-1b
48	M88	L2.5x1.5x4	.107	.75	22	.027	1.5	z	13	26001.8...	30682.8	.461	1.597	1...	H2-1
49	M91	L2.5x1.5x4	.082	.75	24	.024	0	y	17	26001.8...	30682.8	.461	1.574	1...	H2-1
50	M94	L2.5x1.5x4	.107	.75	18	.027	0	z	21	26001.8...	30682.8	.461	1.597	1...	H2-1
51	M97	L2.5x1.5x4	.082	.75	20	.024	0	y	13	26001.8...	30682.8	.461	1.574	1...	H2-1
52	M105	PIPE_2.5	.132	8.5	21	.053	14.5		7	8886.005	50715	3.596	3.596	2...	H1-1b
53	M113	PIPE_2.5	.132	8.5	17	.053	14.5		3	8886.005	50715	3.596	3.596	2...	H1-1b
54	M121	PIPE_2.5	.132	8.5	13	.053	14.5		11	8886.005	50715	3.596	3.596	2...	H1-1b
55	M124	L3X3X4	.141	0	11	.018	0	y	11	42483.6...	46656	1.688	3.756	2...	H2-1
56	M125	L3X3X4	.142	0	3	.018	0	y	3	42483.6...	46656	1.688	3.756	2...	H2-1
57	M126	L3X3X4	.141	0	7	.018	0	y	7	42483.6...	46656	1.688	3.756	2...	H2-1
58	M127	L2.5x2.5x4	.190	2.735	22	.006	5.469	z	11	14498.7...	38556	1.114	2.203	1...	H2-1
59	M128	L2.5x2.5x4	.195	2.735	16	.006	5.469	y	9	14498.7...	38556	1.114	2.203	1...	H2-1
60	M129	L2.5x2.5x4	.190	2.735	18	.006	0	z	7	14498.7...	38556	1.114	2.203	1...	H2-1
61	M130	L2.5x2.5x4	.195	2.735	24	.006	5.469	y	5	14498.7...	38556	1.114	2.203	1...	H2-1
62	M131	L2.5x2.5x4	.190	2.735	14	.006	5.469	z	3	14498.7...	38556	1.114	2.203	1...	H2-1
63	M132	L2.5x2.5x4	.195	2.735	20	.006	0	y	1	14498.7...	38556	1.114	2.203	1...	H2-1

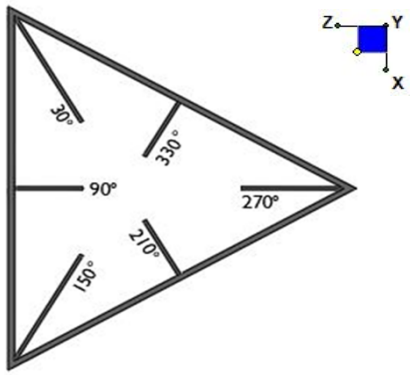
Client:	Verizon Wireless	Date:	11/1/2021
Site Name:	Southbury 2 CT		
Project No.	21781081A		
Title:	Mount Fix	Page:	1

Version 3.1

I. Mount-to-Tower Connection Check

RISA Model Data

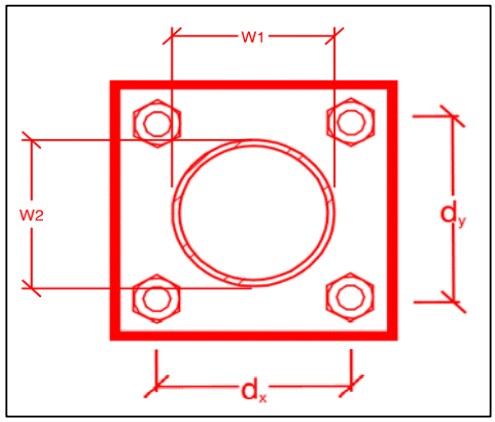
Nodes *(labeled per RISA)*	Orientation *(per graphic of typical platform)*
N45	30
N69	150
N17	270



TYPICAL PLATFORM

Tower Connection Bolt Checks

Any moment resistance?:	yes
Bolt Quantity per Reaction:	4
d_x (in) *(Delta X of typ. bolt config. sketch)* :	4
d_y (in) *(Delta Y of typ. bolt config. sketch)* :	4
Bolt Type:	A325N
Bolt Diameter (in):	0.625
Required Tensile Strength (kips):	10.1
Required Shear Strength (kips):	1.7
Tensile Strength / bolt (kips):	20.7
Shear Strength / bolt (kips):	12.4
Tensile Capacity Overall:	**12.2%***
Shear Capacity Overall:	**3.5%**



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

Tower Connection Plate and Weld Check

Connecting Standoff Member Shape:	Rect
Plate Width (in):	6
Plate Height (in):	6
W1 (in):	3
W2 (in):	3
Fy (ksi, plate):	36
t_{Plate} (in):	0.75
Weld Size (1/16 in):	6
Phi*Rn (kip/in):	8.35
Required Weld Strength (kip/in):	1.66
Plate Bending Capacity:	**11.6%**
Weld Capacity:	**19.8%**

Max Plate Bending Strengths

Mu_{xx} *(kip-in)* :	0.8
Phi*Mn_{xx} *(kip-in)* :	27.3
Mu_{yy} *(kip-in)* :	2.4
Phi*Mn_{yy} *(kip-in)* :	27.3

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Mount Modification

Electronic pdf version of this can be downloaded at https://pmi.vzwsmart.com
For additional questions and support, please reach out to pmisupport@colliersengineering.com

---

Purpose – to upload the proper documentation to the SMART Tool in order to allow the SMART Tool engineering vendor to complete the required Mount Desktop review of the Post Modification Inspection Report.

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

Base Requirements:

- If installation of the modification will cause damage to the structure, the climbing facility, or safety climb if present or any installed system, SMART Tool vendor to be notified prior to install. Any special photos outside of the standard requirements will be indicated on the drawings.
- Provide "as built drawings" showing contractor's name, preparer's signature, and date. Any deviations from the drawings (proposed modification) shall be shown. NOTE: If loading is different than what is conveyed in the post-modification passing mount analysis (MA) contact the SMART Tool vendor immediately.
- Each photo shall be time and date stamped.
- Photos should be high resolution.
- Contractor shall ensure that the safety climb wire rope is not adversely impacted by the install of the modification components. This may involve the install of wire rope guides, or other items to protect the wire rope. If there is conflict, contact the SMART Tool engineer for recommendations.
- The PMI can be accessed at the following portal: **https://pmi.vzwsmart.com**

Photo Requirements:

- *Photos taken at ground level*
  - Photo of Gate Signs showing the tower owner, site name, and number.
  - Overall tower structure after installation of the modifications.
  - Photos of the mount after installation of the modifications; if the mounts are at different rad elevations, pictures must be provided for all elevations that the modifications were installed

- *Photos taken at Mount Elevation*
  - Photos showing the safety climb wire rope above and below the mount prior to modification.
  - Photos showing the climbing facility and safety climb if present.
  - Photos showing each individual sector after installation of modifications. Each entire sector must be in one photo to show the interconnection of members.

        - These photos shall also certify that the placement and geometry of the equipment on the mount is as depicted in the antenna placement diagram in this form.
    - Photos that show the model number of each antenna and piece of equipment installed per sector.
    - Photos of each installed modification per the modification drawings; pictures shall also include connection hardware (U-bolts, bolts, nuts, all-threaded rods, etc.)
    - Photos showing the distances (relative distance between collars) of the installed modifications from the appropriate reference locations shown in the modification drawings.
    - Photos showing the installed modifications onto the tower (i.e. ring/collar mounts, tie-backs, V-bracing kits, etc.); if the existing mount elevation needs to be changed according to the modification drawings, an elevation measurement shall be provided before the elevation change.

Material Certification:

- Materials utilized must be as per specification on the drawings or the equivalent as validated by the SMART Tool vendor.
    - If the materials are as specified on the drawings
        - The contractor shall provide the packing list, or the materials certifications for the materials utilized to perform the mount modification
        - Commscope, Metrosite, Perfect Vision, Sabre, and Site Pro have all agreed to support Verizon vendors with the necessary material certifications
    - If seeking permission to use an equivalent
        - It is required that the SMART Tool engineering vendor approval of such is included in the contractor submission package. There may be an additional charge for approval if the equivalent submission doesn't meet specifications as prescribed in the drawings.

☐ All hardware has been properly installed, and the existing hardware was inspected.

☐ The material utilized was as specified on the SMART Tool engineering vendor Mount Modification Drawings and included in the material certification folder is a packing list or invoice for these materials.

OR

☐ The material utilized was approved by a SMART Tool as an "equivalent" and this approval is included as part of the contractor submission.

Antenna & equipment placement and Geometry Confirmation:

☐ The contractor certifies that the photos support and the equipment on the mount is as depicted on the sketch and table included in this form and with the mount analysis provided.

OR

☐ The contractor notes that the equipment on the mount is not in accordance with the sketch and has noted the differences below and provided photo documentation of any alterations.

Comments:

Certifying Individual:

Company:	
Employee Name:	
Contact Phone:	
Email:	
Date:	

Was the mount modification completed in conjunction with the equipment change / installation?

☐ Yes ☐ No

Special Instructions / Validation as required from the MA or Mod Drawings:

Issue:

Contractor shall install proposed OVP unit directly to the existing monopole close to mount elevation.

Response:

Contractor certifies that the climbing facility / safety climb was not damaged or obstructed prior to starting work:

☐ Yes ☐ No

Contractor certifies no new damage/obstructions created during the current installation:

☐ Yes ☐ No

Contractor to certify the condition of the safety climb and verify no obstructions when leaving the site:

☐ Safety climb in good condition with no obstructions ☐ Safety Climb Damaged
☐ Safety Climb Obstructed

Comments:

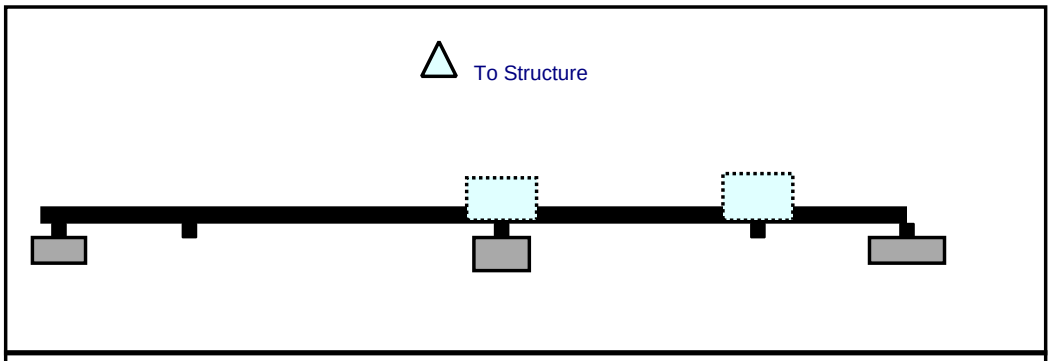
Structure: 467951-VZW - SOUTHBURY 2 CT

Sector: **A** 11/4/2021

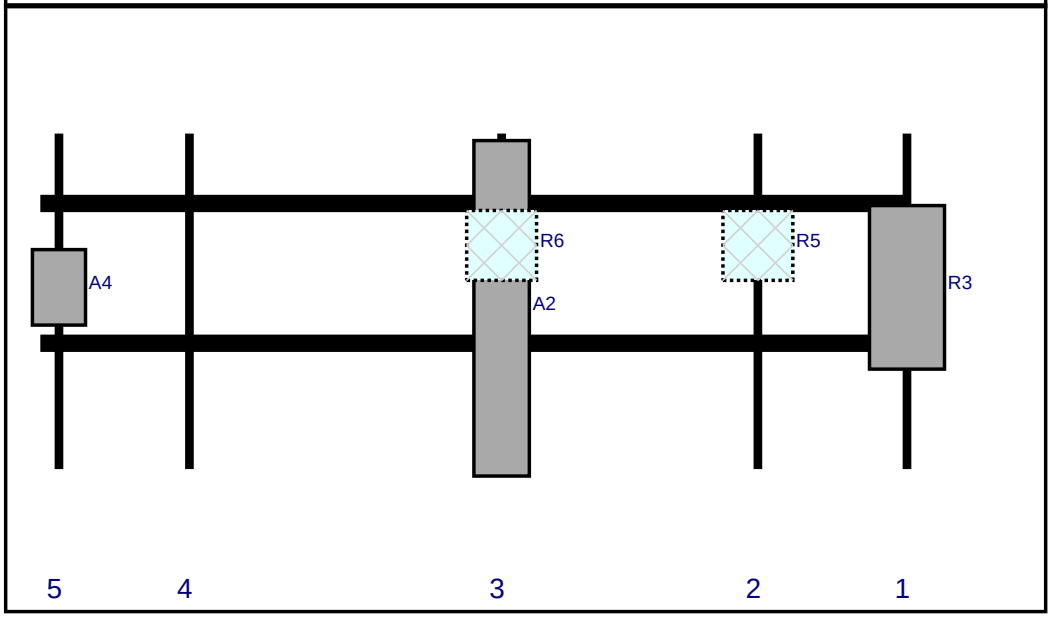
Structure Type: Monopole 10115370

Mount Elev: 154.00 Page: 1

Plan View



Front View
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R3	MT6407-77A	35.1	16.1	186	1	a	Front	33	0	Added	
R5	RF4439d-25A	15	15	154	2	a	Behind	24	0	Added	
A2	NHH-65B-R2B	72	11.9	99	3	a	Front	37.5	0	Added	
R6	RF4440d-13A	15	15	99	3	b	Behind	24	0	Added	
A4	XXDWMM-12.5-65-8T-CBRS	16.2	11.4	4	5	a	Front	33	0	Added	

Structure: 467951-VZW - SOUTHBURY 2 CT

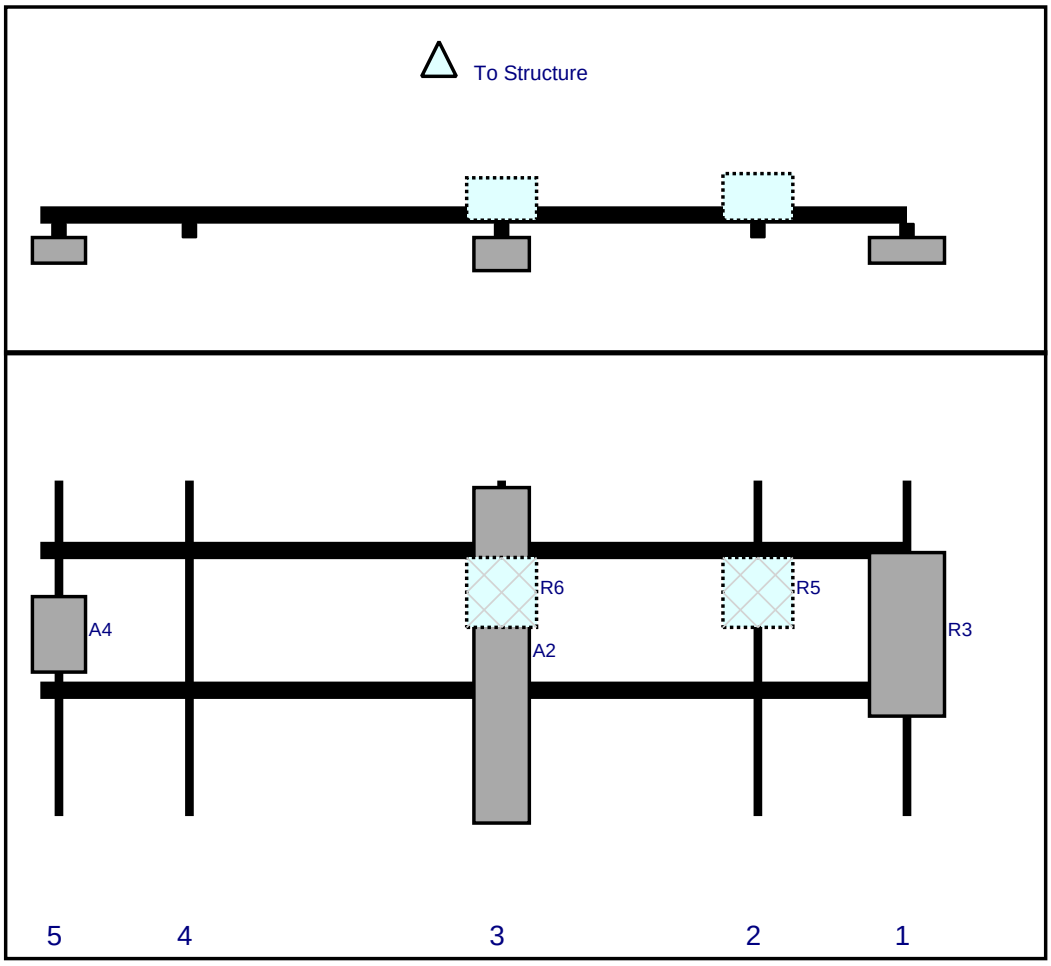
Sector: **B** 11/4/2021

Structure Type: Monopole 10115370

Mount Elev: 154.00 Page: 2

Plan View

Front View
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R3	MT6407-77A	35.1	16.1	186	1	a	Front	33	0	Added	
R5	RF4439d-25A	15	15	154	2	a	Behind	24	0	Added	
A2	NHH-65B-R2B	72	11.9	99	3	a	Front	37.5	0	Added	
R6	RF4440d-13A	15	15	99	3	b	Behind	24	0	Added	
A4	XXDWMM-12.5-65-8T-CBRS	16.2	11.4	4	5	a	Front	33	0	Added	

Structure: 467951-VZW - SOUTHBURY 2 CT

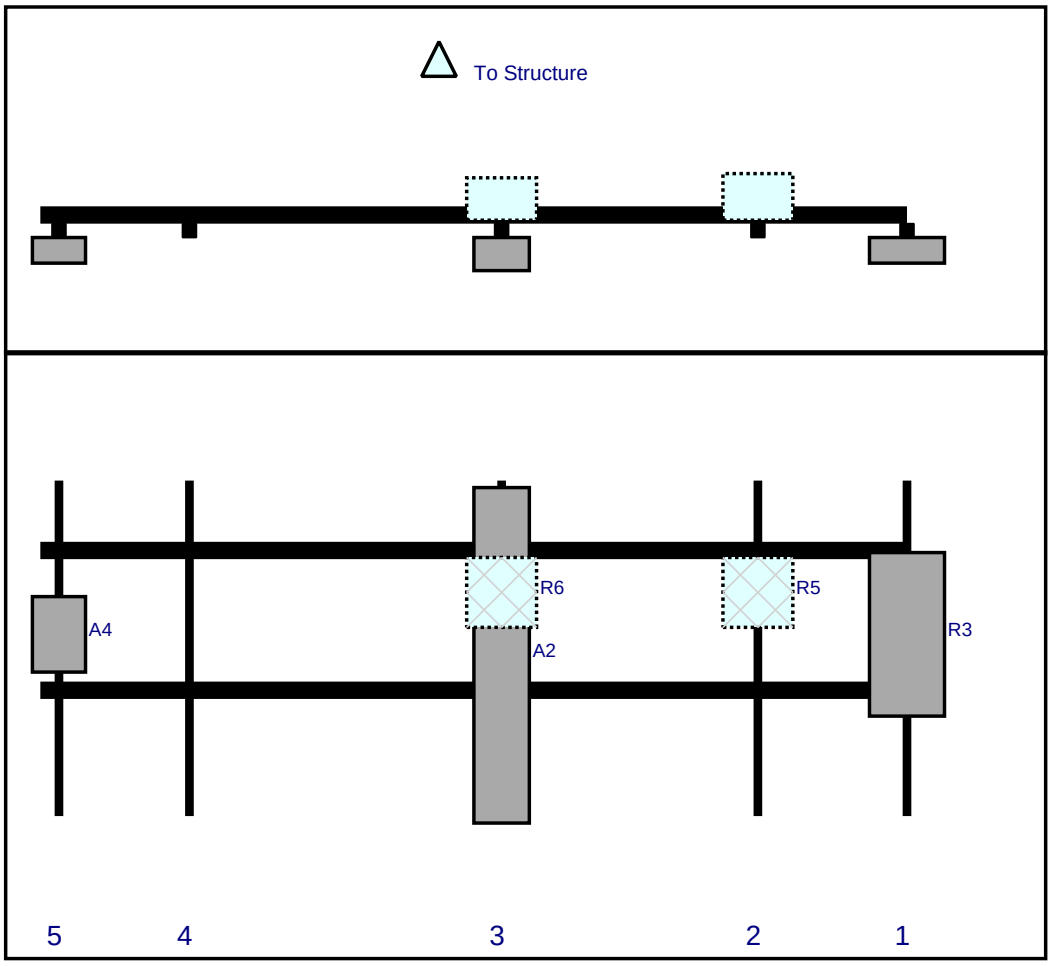
Sector: **C** 11/4/2021

Structure Type: Monopole 10115370

Mount Elev: 154.00

Plan View

Front View
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R3	MT6407-77A	35.1	16.1	186	1	a	Front	33	0	Added	
R5	RF4439d-25A	15	15	154	2	a	Behind	24	0	Added	
A2	NHH-65B-R2B	72	11.9	99	3	a	Front	37.5	0	Added	
R6	RF4440d-13A	15	15	99	3	b	Behind	24	0	Added	
A4	XXDWMM-12.5-65-8T-CBRS	16.2	11.4	4	5	a	Front	33	0	Added	

Maser Consulting Connecticut

Subject	TIA-222-H Usage	
Site Information	*Site ID:*	*467951-VZW / SOUTHBURY 2 CT*
	Site Name:	*SOUTHBURY 2 CT*
	Carrier Name:	*Verizon Wireless*
	Address:	*231 Kettletown Rd* *Southbury, Connecticut 06488* *New Haven County*
	Latitude:	*41.474444°*
	Longitude:	*-73.208333°*
Structure Information	*Tower Type:*	*200-Ft Monopole*
	Mount Type:	*15.50-Ft Platform*
	FUZE ID # 16272261	

To Whom It May Concern,

We respectfully submit the above referenced Antenna Mount Structural Analysis report in conformance with ANSI/TIA-222-H, Structural Standard for Antenna Supporting Structures and Antennas and Small Wind Turbine Support Structures.

The 2015 International Building Code states that, in Section 3108, telecommunication towers shall be designed and constructed in accordance with the provisions of TIA-222. TIA-222-H is the latest revision of the TIA-222 Standard, effective as of January 01, 2018.

As with all ANSI standards and engineering best practice is to apply the most current revision of the standard. This ensures the engineer is applying all updates. As an example, the TIA-222-H Standard includes updates to bring it in line with the latest AISC and ACI standards and it also incorporates the latest wind speed maps by ASCE 7 based on updated studies of the wind data.

The TIA-222-H standard clarifies these specific requirements for the antenna mount analysis such as modeling methods, seismic analysis, 30-degree increment wind directions and maintenance loading. Therefore, it is our opinion that TIA-222-H is the most appropriate standard for antenna mount structural analysis and is acceptable for use at this site to ensure the engineer is taking into account the most current engineering standard available.

Sincerely,

Derek Hartzell, PE
Technical Specialist

MOUNT MODIFICATION DRAWINGS
EXISTING 15.50' PLATFORM

TOWER OWNER: PHOENIX TOWER INTERNATIONAL
TOWER OWNER SITE NUMBER: CT-1002 PTI

CARRIER SITE NAME: SOUTHBURY 2 CT
CARRIER SITE NUMBER: 467951
FUZE ID: 16272261

231 KETTLETOWN RD
SOUTHBURY, CONNECTICUT 06488
NEW HAVEN COUNTY

LATITUDE: 41.474444° N
LONGITUDE: 73.208333° W

DESIGN CRITERIA

WIND LOADS

BASIC WIND SPEED (3 SECOND GUST), V = 116 MPH
EXPOSURE CATEGORY B
TOPOGRAPHIC CATEGORY 1
MEAN BASE ELEVATION (AMSL) = 302.64'

ICE LOADS

ICE WIND SPEED (3 SECOND GUST), V = 50 MPH
ICE THICKNESS = 1.00 IN

SEISMIC LOADS

SEISMIC DESIGN CATEGORY B
SHORT TERM MCER GROUND MOTION, S_S = .199
LONG TERM MCER GROUND MOTION, S_1 = .054

PROJECT INFORMATION

APPLICANT/LESSEE

COMPANY: VERIZON WIRELESS

CLIENT REPRESENTATIVE

COMPANY: VERIZON WIRELESS

PROJECT MANAGER

COMPANY: COLLIERS ENGINEERING & DESIGN
CONTACT: PETER ALBANO
PHONE: 856.797.0412
E-MAIL: PETER.ALBANO@COLLIERSENGINEERING.COM

CONTRACTOR PMI REQUIREMENTS

PMI LOCATION: HTTPS://PMI.VZWSMART.COM
SMART TOOL PROJECT #: 10115370
VZW LOCATION CODE (PSLC): 467951
ANALYSIS DATE: 11/4/2021

PMI REQUIREMENTS EMBEDDED WITHIN MOUNT MODIFICATION REPORT

SHEET INDEX

SHEET	DESCRIPTION
ST-1	TITLE SHEET
SBOM-1	BILL OF MATERIALS
SGN-1	GENERAL NOTES
SCF-1	CLIMBING FACILITY DETAIL
SS-1	MODIFICATION DETAILS
SS-2	MOUNT PHOTOS
	SPECIFICATION SHEETS

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JOB NUMBER: 21781081A

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
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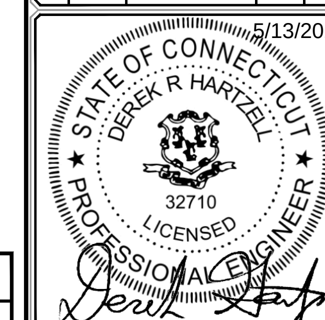
0	11/04/21	ISSUED FOR CONSTRUCTION	NL	DH



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

SITE NAME:

SOUTHBURY 2 CT
467951

231 KETTLETOWN RD
SOUTHBURY, CONNECTICUT
06488
NEW HAVEN COUNTY

Colliers Engineering & Design

STAMFORD
1055 Washington Boulevard
Stamford, CT 06901
Phone: 203.324.0800
COLLIERS ENGINEERING & DESIGN, INC.
DOING BUSINESS AS MASER CONSULTING

SHEET TITLE: TITLE SHEET

SHEET NUMBER: ST-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

BILL OF MATERIALS

SECTION 1 - VZWSMART KITS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
3	VZWSMART	VZWSMART-PLK6	V-BRACING KIT FOR MONOPOLE	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET SGN-1.	109	327
1		VZWSMART-PLK7	MONOPOLE COLLAR MOUNT ASSEMBLY		150	150
3		VZWSMART-PLK3	SUPPORT RAIL CORNER BRACKET		30	90
15		VZWSMART-MSK1	CROSSOVER PLATE		14	210
				-		
				-		
				-		
				-		
				-		

SECTION 2 - OTHER REQUIRED PARTS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
3	-	-	36" LONG, L3X3x1/4	GALVANIZED	14	42
3	-	-	192" LONG, P2 1/2 STD	GALVANIZED	93	279
					TOTAL:	1098

VZWSMART KITS - APPROVED VENDORS

COMMSCOPE	
CONTACT	SALVADOR ANGUIANO
PHONE	(817) 304-7492
EMAIL	SALVADOR.ANGUIANO@COMMSCOPE.COM
WEBSITE	WWW.COMMSCOPE.COM
METROSITE FABRICATORS, LLC	
CONTACT	KENT RAMEY
PHONE	(706) 335-7045 (O), (706) 982-9788 (M)
EMAIL	KENT@METROSITELLC.COM
WEBSITE	METROSITEFABRICATORS.COM
PERFECTVISION	
CONTACT	WIRELESS SALES
PHONE	(844) 887-6723
EMAIL	WWW.PERFECT-VISION.COM
WEBSITE	WIRELESSSALES@PERFECT-VISION.COM
SABRE INDUSTRIES, INC.	
CONTACT	ANGIE WELCH
PHONE	(866) 428-6937
EMAIL	AKWELCH@SABREINDUSTRIES.COM
WEBSITE	WWW.SABRESITESOLUTIONS.COM
SITE PRO 1	
CONTACT	PAULA BOSWELL
PHONE	(972) 236-9843
EMAIL	PAULA.BOSWELL@VALMONT.COM
WEBSITE	WWW.SITEPRO1.COM

NOTES:

1. THE MANUFACTURERS LISTED ARE THE APPROVED VENDORS FOR THE VZW MOUNT KITS. EACH MANUFACTURER WILL BE AWARE OF WHICH KITS HAVE BEEN THROUGH THE VZW APPROVAL PROCESS AND THEY ARE IN TURN APPROVED TO SELL. PLEASE NOTE THAT THE MATERIAL UTILIZED ON THE MOUNT MODIFICATIONS WILL BE REVIEWED AS A PART OF THE DESKTOP PMI COMPLETED BY THE SMART TOOL VENDOR. IT WILL BE REQUIRED THAT THE VZW KITS SPECIFIED ARE UTILIZED IN THE MODIFICATIONS.
2. ALL MATERIALS REQUIRED FOR THE DESIGNED MODIFICATIONS BUT NOT LISTED IN THIS SHEET ARE ASSUMED TO BE PROVIDED BY THE CONTRACTOR.

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SCALE: AS SHOWN
JOB NUMBER: 21781081A

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
0	11/04/21	ISSUED FOR CONSTRUCTION	NL	DH

5/13/2021
STATE OF CONNECTICUT
DEREK R HARTZELL
32710
LICENSED
PROFESSIONAL ENGINEER

SITE NAME:

SOUTHBURY 2 CT
467951

231 KETTLETOWN RD
SOUTHBURY, CONNECTICUT
06488
NEW HAVEN COUNTY

Colliers Engineering & Design
STAMFORD
1055 Washington Boulevard
Stamford, CT 06901
Phone: 203.324.0800
COLLIERS ENGINEERING & DESIGN, INC.
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SHEET TITLE: BILL OF MATERIALS

SHEET NUMBER: SBOM-1

PROJECT NOTES

1. SEE MODIFICATION NOTES
2. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, LAWS AND REGULATIONS OF ALL MUNICIPALITIES, UTILITY COMPANIES OR OTHER PUBLIC/GOVERNING AUTHORITIES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS THAT MAY BE REQUIRED BY ANY FEDERAL, STATE, COUNTY OR MUNICIPAL AUTHORITIES.
4. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER, IN WRITING, OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF BIDS OR PERFORMANCE OF WORK.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SITE IMPROVEMENTS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL REPAIR ANY DAMAGE AS A RESULT OF CONSTRUCTION OF THIS FACILITY AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
6. THE SCOPE OF WORK FOR THIS PROJECT SHALL INCLUDE PROVIDING ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED TO COMPLETE THIS PROJECT. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
7. THE CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO SUBMITTING THE BID TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND CONSTRUCTION DRAWINGS.
8. THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THESE DRAWINGS MUST BE VERIFIED. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
9. SINCE THE CELL SITE MAY BE ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE REQUIRED TO BE WORN TO ALERT OF ANY POTENTIALLY DANGEROUS EXPOSURE LEVELS.
10. NO NOISE, SMOKE, DUST OR ODOR WILL RESULT FROM THIS FACILITY AS TO CAUSE A NUISANCE.
11. THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION (NO HANDICAP ACCESS IS REQUIRED).

GENERAL NOTES

1. THESE MODIFICATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE TELECOMMUNICATIONS INDUSTRY STANDARD TIA-222-H. MATERIALS AND SERVICES PROVIDED BY THE CONTRACTOR SHALL CONFORM TO THE ABOVE MENTIONED CODES.
2. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT DAMAGE TO EXISTING STRUCTURES. ANY DAMAGE TO EXISTING STRUCTURES AS A RESULT OF THE CONTRACTOR'S WORK OR FROM DAMAGE DUE TO OTHER CAUSES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE BEGINNING WORK, ORDERING MATERIAL, AND PREPARING OF SHOP DRAWINGS. ANY DISCREPANCIES BETWEEN FIELD CONDITIONS AND THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER. IF THE CONTRACTOR DISCOVERS ANY EXISTING CONDITIONS THAT ARE NOT REPRESENTED ON THESE DRAWINGS, OR ANY CONDITIONS THAT WOULD INTERFERE WITH THE INSTALLATION OF THE MODIFICATIONS, NOTIFY THE ENGINEER IMMEDIATELY.
4. IT IS ASSUMED THAT ANY STRUCTURAL MODIFICATION WORK SPECIFIED ON THESE PLANS WILL BE ACCOMPLISHED BY KNOWLEDGEABLE WORKMEN WITH TOWER CONSTRUCTION EXPERIENCE.
5. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION METHODS, MEANS, TECHNIQUES, SEQUENCES, AND PROCEDURES.
6. 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/TIA-322 (LATEST EDITION), OSHA, AND GENERAL INDUSTRY STANDARDS. ALL RIGGING PLANS SHALL ADHERE TO ANSI/TIA-322 (LATEST EDITION) INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION.
7. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PROGRAMS IN ACCORDANCE WITH APPLICABLE SAFETY CODES.
8. WORK SHALL ONLY BE PERFORMED DURING CALM DRY DAYS (WINDS LESS THAN 30-MPH). THE STRUCTURE SHOWN ON THE DRAWINGS IS STRUCTURALLY SOUND ONLY IN THE COMPLETED FORM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE STRUCTURE DURING ERECTION. CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT, SHORING, BRACING AND ANY OTHER STRUCTURAL SYSTEMS AS REQUIRED TO RESIST ALL FORCES THAT MAY OCCUR DURING HANDLING AND ERECTION UNTIL THE STRUCTURE IS FULLY COMPLETED. TEMPORARY SUPPORTS, BRACING AND OTHER STRUCTURAL SYSTEMS REQUIRED DURING CONSTRUCTION SHALL REMAIN THE CONTRACTOR'S PROPERTY AFTER THEIR USE.
9. ALL INSTALLATIONS PERFORMED ON THIS STRUCTURE SHALL BE COMPLETED IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE STANDARD FOR INSTALLATION, ALTERATION AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS, ANSI/TIA-322.
10. CONTRACTOR SHALL SECURE SITE BACK TO EXISTING CONDITION UNDER SUPERVISION OF OWNER. ALL FENCE, STONE, GEOFABRIC, GROUNDING, AND SURROUNDING GRADE SHALL BE REPLACED AND REPAIRED AS REQUIRED TO ACHIEVE OWNER APPROVAL. POSITIVE DRAINAGE AWAY FROM TOWER SITE SHALL BE MAINTAINED.
11. CONNECTIONS BETWEEN ITEMS SUPPORTED BY THE STRUCTURE AND THE STRUCTURE NOT SPECIFICALLY DETAILED IN THE CONTRACT DOCUMENTS ARE THE RESPONSIBILITY OF THE CONTRACTOR. SUCH CONNECTIONS SHALL BE DESIGNED, COORDINATED AND INSPECTED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF THE PROJECT. SUBMIT SIGNED AND SEALED CALCULATIONS DURING SHOP DRAWING REVIEW.
12. DO NOT SCALE DRAWINGS.
13. DO NOT USE THESE DRAWINGS FOR ANY OTHER SITE.
14. ALL MATERIAL UTILIZED FOR THIS PROJECT MUST BE NEW AND FREE OF ANY DEFECTS. ANY MATERIAL SUBSTITUTIONS, INCLUDING BUT NOT LIMITED TO ALTERED SIZE AND/OR STRENGTHS, MUST BE APPROVED BY THE OWNER AND ENGINEER IN WRITING.
15. THE MOUNT UNDER NO CIRCUMSTANCES SHOULD BE USED AS A TIE OFF POINT.

STRUCTURAL STEEL

1. DESIGN, DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING PUBLICATIONS EXCEPT AS SPECIFICALLY INDICATED IN THE CONTRACT DOCUMENTS.
   a. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) MANUAL OF STEEL CONSTRUCTION (15TH EDITION)
   b. SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS
   c. AISC CODE OF STANDARD PRACTICE
2. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING UNLESS OTHERWISE SHOWN:

CHANNELS, ANGLES, PLATES, ETC.	ASTM A36 (GR 36)
STEEL PIPE	ASTM A53 (GR 35)
BOLTS	ASTM A325
NUTS	ASTM A563
LOCK WASHERS	LOCKING STRUCTURAL GRADE

3. ALL SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE APPROVED IN WRITING BY THE ENGINEER. CONTRACTOR SHALL PROVIDE DOCUMENTATION TO ENGINEER FOR VERIFYING THE SUBSTITUTE IS SUITABLE FOR USE AND MEETS ORIGINAL DESIGN CRITERIA. DIFFERENCES FROM THE ORIGINAL DESIGN, INCLUDING MAINTENANCE, REPAIR AND REPLACEMENT, SHALL BE NOTED. ESTIMATES OF COSTS/CREDITS ASSOCIATED WITH THE SUBSTITUTION (INCLUDING RE-DESIGN COSTS AND COSTS TO SUB-CONTRACTORS) SHALL BE PROVIDED TO THE ENGINEER. CONTRACTOR SHALL PROVIDE ADDITIONAL DOCUMENTATION AND/OR SPECIFICATIONS TO THE ENGINEER AS REQUESTED.
4. PROVIDE STRUCTURAL STEEL SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
   a. SUBMIT SHOP DRAWINGS TO
      PETER.ALBANO@COLLIERSENGINEERING.COM
   b. PROVIDE MASER CONSULTING PROJECT # AND MASER CONSULTING PROJECT ENGINEER CONTACT IN THE BODY OF THE EMAIL.
5. DRILL NO HOLES IN ANY NEW OR EXISTING STRUCTURAL STEEL MEMBERS OTHER THAN THOSE SHOWN ON STRUCTURAL DRAWINGS WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.
6. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
7. ALL NEW STEEL SHALL BE HOT BE DIPPED GALVANIZED FOR FULL WEATHER PROTECTION. IN ADDITION ALL NEW STEEL SHALL BE PAINTED TO MATCH EXISTING STEEL. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
8. CONTRACTOR SHALL PROTECT CUT ENDS OF ALL FIELD-CUT STEEL WITH TWO (2) COATS OF COLD GALVANIZATION (ZINGA OR ZINC COTE).
9. ALL BOLT ASSEMBLIES FOR STRUCTURAL MEMBERS REPRESENTED IN THIS DRAWING REQUIRE LOCKING DEVICES TO BE INSTALLED IN ACCORDANCE WITH TIA-222-H SECTION 4.9.2 REQUIREMENTS.
10. WHERE CONNECTIONS ARE NOT FULLY DETAILED ON THESE DRAWINGS, FABRICATOR SHALL DESIGN CONNECTIONS TO RESIST LOADS AND FORCES WHERE SHOWN ON DRAWINGS AND AS OUTLINED IN SPECIFICATIONS.
11. FOR MEMBERS BEING REPLACED, PROVIDE NEW BOLTS AND MATCH EXISTING SIZE AND GRADE. MAINTAIN AISC REQUIREMENTS FOR MINIMUM BOLT DISTANCE AND SPACING.
12. ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT IS AT LEAST FLUSH WITH THE FACE OF THE NUT. IT IS NOT PERMITTED FOR THE BOLT END TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.
13. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
14. ALL EXISTING PAINTED/GALVANIZED SURFACES DAMAGED DURING REHAB INCLUDING AREAS UNDER STIFFENER PLATES SHALL BE WIRE BRUSHED CLEAN, REPAIRED BY COLD GALVANIZING (ZINGA OR ZINC COTE), AND REPAINTED TO MATCH THE EXISTING FINISH (IF APPLICABLE).
15. ALL HOLES IN STEEL MEMBERS SHALL BE SIZED 1/16" LARGER THAN THE BOLT DIAMETER. STANDARD HOLES SHALL BE USED UNLESS NOTED OTHERWISE.

WELDING NOTES

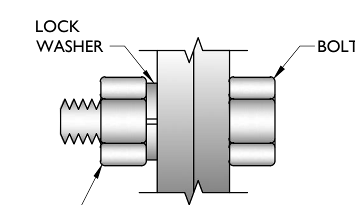
1. ALL WELDING SHALL BE DONE IN ACCORDANCE WITH AWS D1.0 (LATEST EDITION). THIS SHALL INCLUDE A CERTIFIED WELD INSPECTION (CWI) FOR ACCEPTANCE OR REJECTION OF ALL WELDING OPERATIONS, PRE, DURING, AND POST INSTALLATION, USING THE ACCEPTANCE CRITERIA OF AWS D1.1.
2. CONTRACTOR IS RESPONSIBLE FOR COMMISSIONING A THIRD PARTY CERTIFIED WELD INSPECTOR (CWI) THROUGHOUT THE ENTIRETY OF THE PROJECT. A PASSING CWI REPORT SHALL BE PROVIDED TO THE ENGINEER UPON COMPLETION OF THE PROJECT.
3. THE CERTIFIED WELD INSPECTOR SHALL INDICATE, IN A WRITTEN CWI REPORT, THAT ALL WELDING OPERATIONS PRE, DURING, AND POST INSTALLATION WERE CONDUCTED IN ACCORDANCE WITH AWS D1.1 WITH PHOTOGRAPHS AND DOCUMENTATION SUPPORTING THE ACCEPTANCE OR REJECTION OF ALL WELDING. ALL CWI WELD INSPECTION DOCUMENTATION AND PHOTOS SHALL BE SUBMITTED DURING THE PMI.
4. IN CASES WHERE A WELD IS SPECIFIED BETWEEN TWO MEMBERS IN WHICH THERE IS A GAP IN BETWEEN, THE WELD IS TO BE BUILT-UP SUCH THAT THE SIZE OF WELD ON THE MEMBER IS EQUAL TO THAT SHOWN IN THE DRAWINGS.
5. OXY FUEL GAS WELDING OR BRAZING IS STRICTLY PROHIBITED. SPECIFICALLY, NO TORCH CUTTING IS PERMITTED ON SITE. ALL HOLES SHALL BE CUT WITH A GRINDER.
6. CONTRACTOR SHALL EXERCISE CAUTION WHEN WELDING A GALVANIZED SURFACE.
7. CONTRACTOR SHALL HAVE A FIRE PROTECTION PLAN IN PLACE THAT CONFORMS WITH ALL OSHA, ANSI/ASSP A10.48, ANSI Z49.1, AND LOCAL JURISDICTIONAL REQUIREMENTS.

BOLT SCHEDULE (IN.)

BOLT DIAMETER	STANDARD HOLE	SHORT SLOT	MIN. EDGE DISTANCE	SPACING
1/2	9/16	9/16 x 11/16	7/8	1 1/2
5/8	11/16	11/16 x 7/8	1 1/8	1 7/8
3/4	13/16	13/16 x 1	1 1/4	2 1/4
7/8	15/16	15/16 x 1 1/8	1 1/2	2 5/8
1	1 1/16	1 1/16 x 1 5/16	1 3/4	3

WORKABLE GAGES (IN.)

LEG	GAGE
4	2 1/2
3 1/2	2
3	1 3/4
2 1/2	1 3/8
2	1 1/8

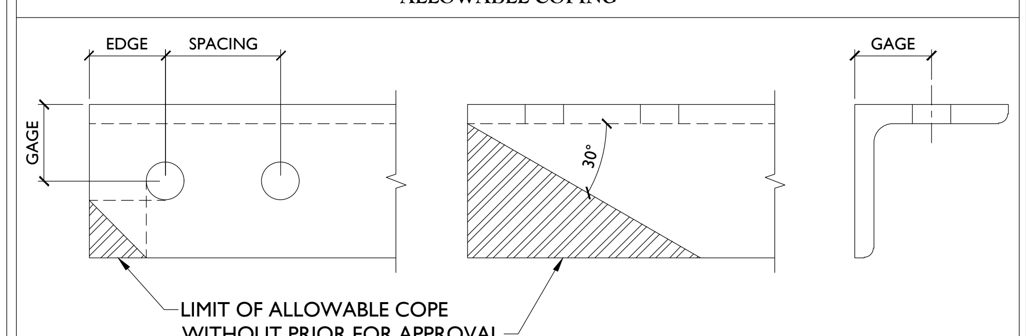


TYP. BOLT ASSEMBLY

NOTES:

1. ALL DIMENSIONS REPRESENTED IN THE ABOVE TABLES ARE AISC MINIMUM REQUIREMENTS. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ENGINEER IF DISTANCES ARE LESS THAN THOSE PROVIDED.
2. THE DIMENSIONS PROVIDED ARE MINIMUM REQUIREMENTS. ACTUAL DIMENSIONS OF PROPOSED MEMBERS WITHIN THESE DRAWINGS MAY VARY FROM THE AISC MINIMUM REQUIREMENTS.
3. SHORT SLOT HOLES SHALL ONLY BE USED WHEN DEPICTED IN THE DRAWINGS
4. MATCH EXISTING GAGES WHEN APPLICABLE, UNLESS MINIMUM EDGE DISTANCES ARE COMPROMISED.

ALLOWABLE COPING



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SCALE :	JOB NUMBER :
AS SHOWN	21781081A

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
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0	11/04/21	ISSUED FOR CONSTRUCTION	NL	DH

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SITE NAME:

SOUTHBURY 2 CT
467951

231 KETTLETOWN RD
SOUTHBURY, CONNECTICUT
06488
NEW HAVEN COUNTY

Colliers Engineering & Design

STAMFORD
1055 Washington Boulevard
Stamford, CT 06901
Phone: 203.324.0800
COLLIERS ENGINEERING & DESIGN, INC.
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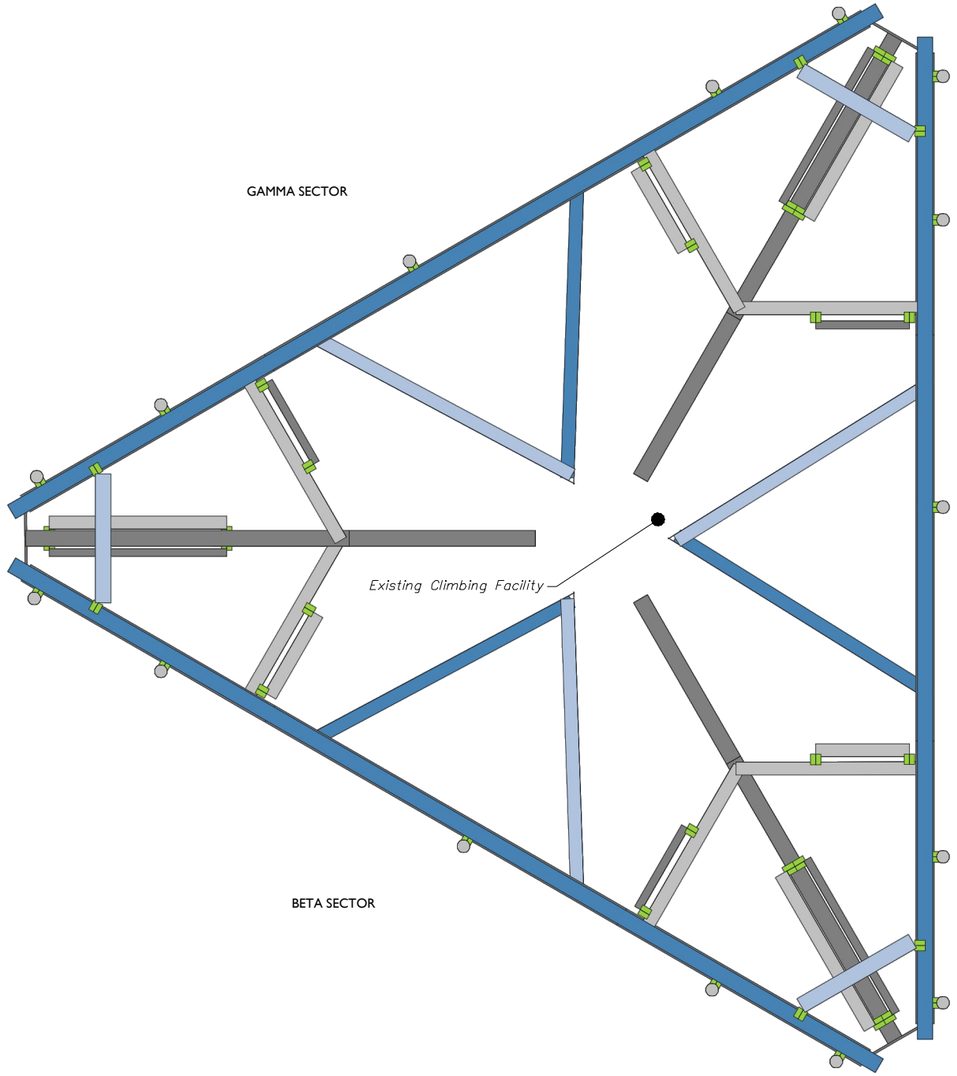
SHEET TITLE :
MODIFICATION NOTES

SHEET NUMBER :
SGN-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



1 CLIMBING FACILITY LOCATION

SCALE : N.T.S.

STRUCTURAL NOTES:

1. PER THE MOUNT MAPPING COMPLETED BY TOWER ENGINEERING PROFESSIONALS ON 5/4/2020, THE SAFETY CLIMB AND CLIMBING FACILITIES UP TO THE VERIZON MOUNT ELEVATION (154'-0") ARE IN GOOD CONDITION. MASER DOES NOT WARRANT THIS INFORMATION.

2. INSTALL SHALL NOT CAUSE HARM TO THE STRUCTURE, CLIMBING FACILITY, SAFETY CLIMB, OR ANY SYSTEM INSTALLED ON THE STRUCTURE. TIMELY NOTICE AND DOCUMENTATION SHALL BE PROVIDED BY CONTRACTORS TO THE EOR (OF STRUCTURAL DESIGN) IF AN OBSTRUCTION WAS REQUIRED TO MEET THE RF SYSTEM DESIGN REQUIREMENTS AND PERFORMANCES.

CLIMBING FACILITY PHOTO

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SCALE :	JOB NUMBER :
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5/13/2021

STATE OF CONNECTICUT
DEREK R HARTZELL
32710
LICENSED
PROFESSIONAL ENGINEER

SITE NAME:

SOUTHBURY 2 CT
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231 KETTLETOWN RD
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SHEET TITLE :
CLIMBING FACILITY DETAIL

SHEET NUMBER :
SCF-1

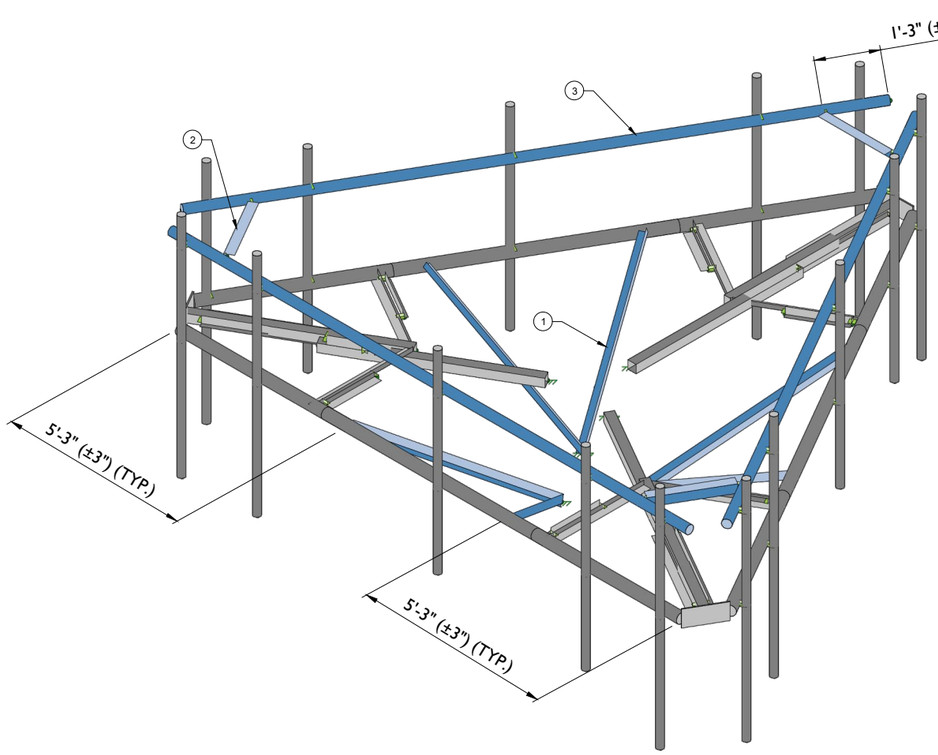
LEGEND:

- PROPOSED
- RELOCATED
- EXISTING

MOUNT MODIFICATION SCHEDULE				
NO.	ELEVATION	QUANTITY	DESCRIPTION	NOTES
1	154'-0"	3	PROPOSED V-BRACING KIT FOR MONOPOLE (PART #: VZWSMART-PLK6)	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET SGN-1. CONNECT TO EXISTING MONOPOLE USING NEW COLLAR MOUNT (VZWSMART-PLK7).
2		3	PROPOSED SUPPORT RAIL CORNER BRACKET (PART #: VZWSMART-PLK3) WITH 36" LONG L3X3X1/4 ANGLE	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET SGN-1. CONNECT PROPOSED L3X3X1/4 ANGLES TO CORNER BRACKETS USING THE PROVIDED (8) 5/8" DIA. BOLTS, (4) BOLTS PER CONNECTION.
3		3	192" LONG, P2 1/2 STD	CONNECT TO ALL EXISTING VERTICAL MOUNT PIPES USING NEW CROSSOVER PLATES (VZWSMART-MSK1). RADIO AND/OR TME POSITIONS SHALL BE ADJUSTED VERTICALLY AS NEEDED IN ORDER TO ACHIEVE INSTALLATION OF HORIZONTAL AS SHOWN. EOR SHALL BE NOTIFIED IF EQUIPMENT NEEDS TO BE RELOCATED TO ANOTHER MOUNT PIPE.

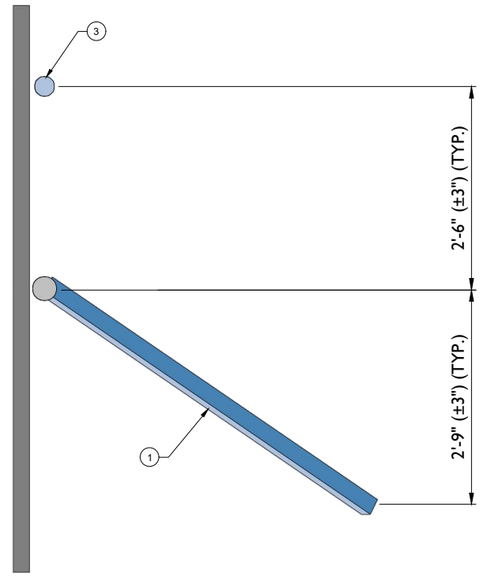
NOTES.

MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.



1 PROPOSED ISOMETRIC VIEW

SCALE : N.T.S.



2 PROPOSED SIDE ELEVATION VIEW (TYP. ALL SECTORS)

SCALE : N.T.S.

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5/13/2021

STATE OF CONNECTICUT · DEREK R HARTZELL · 32710 · LICENSED PROFESSIONAL ENGINEER

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SHEET TITLE :

MODIFICATION DETAILS

SHEET NUMBER :

SS-1

MOUNT PHOTO 1

MOUNT PHOTO 2

MOUNT PHOTO 3

MOUNT PHOTO 4

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SCALE: AS SHOWN

JOB NUMBER: 21781081A

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
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5/13/2021

STATE OF CONNECTICUT
DEREK R HARTZELL
32710
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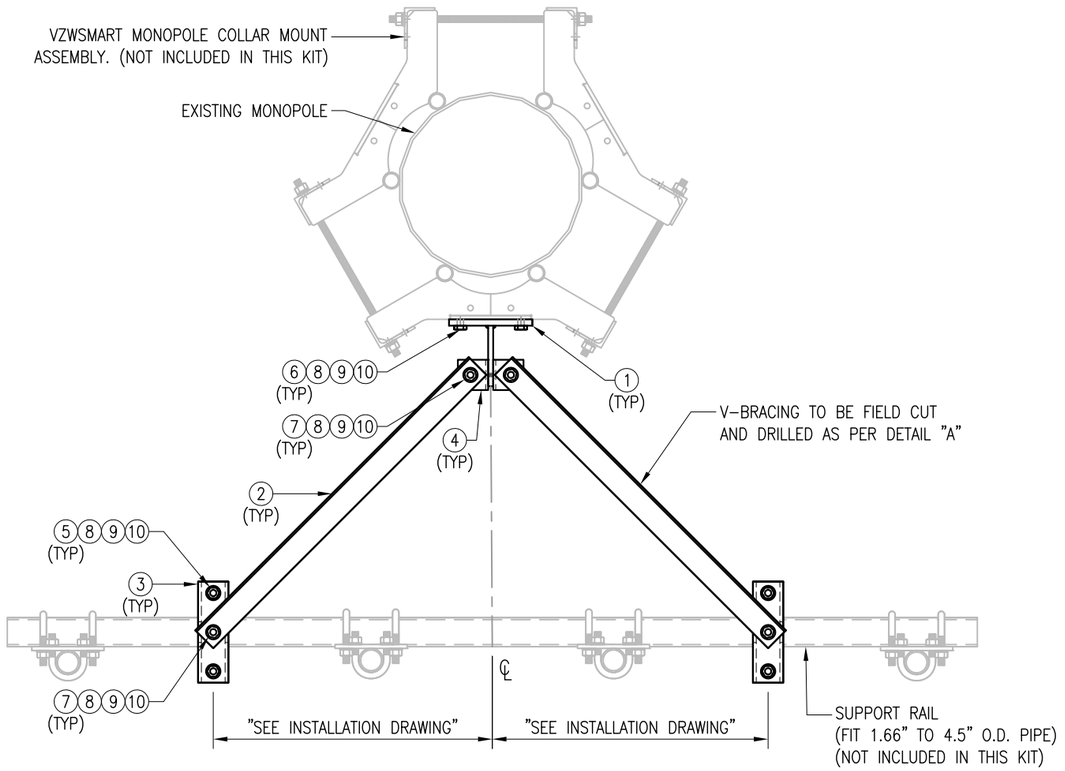
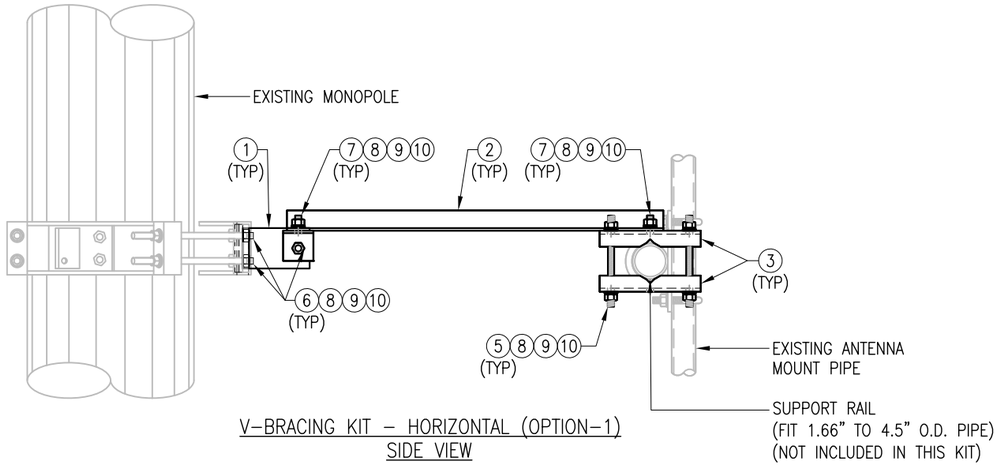
SHEET TITLE: MOUNT PHOTOS

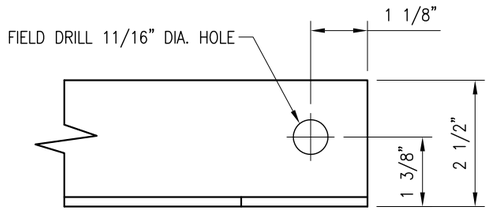
SHEET NUMBER: SS-2



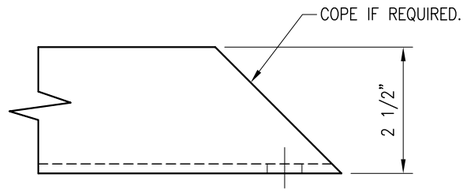
V-BRACING KIT FOR MONOPOLE
PLAN VIEW



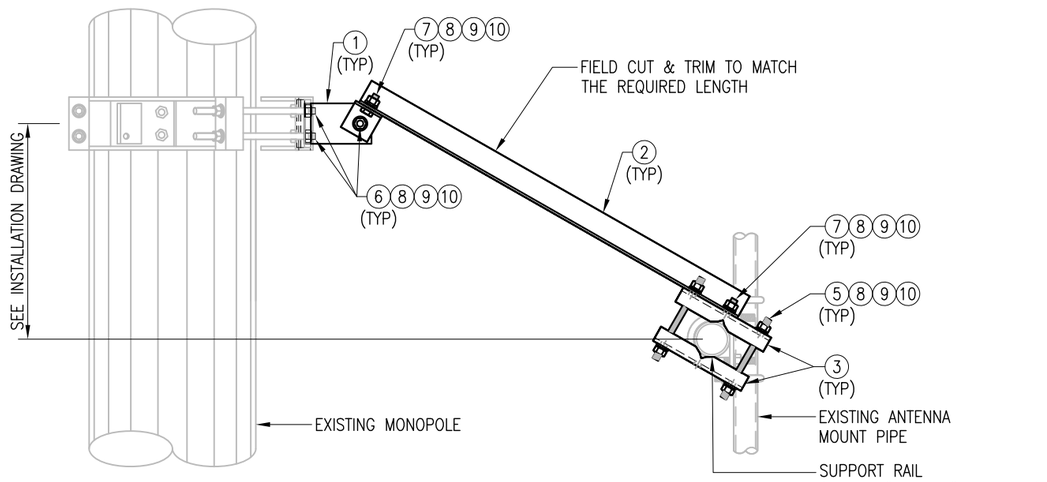
V-BRACING KIT - HORIZONTAL (OPTION-1)
SIDE VIEW



PLAN VIEW



FRONT VIEW
DETAIL "A"



V-BRACING KIT - VERTICAL (OPTION-2)
SIDE VIEW

NOTES:
1. HOT-DIPPED GALVANIZED PER ASTM A123.

VZWSMART-PLK6 (V-BRACING KIT FOR MONOPOLE)

ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	1	BRKW-6A	WELDMENT BRACKET	PLK6-F1	16
2	2	L252525-8	L 2 1/2" X 2 1/2" X 1/4" X 8'-0" A36	PLK6-F2	67
3	4	BP6875-10	PL 3/8" X 6 7/8" X 10" A36 BENT PLATE	PLK6-F2	20
4	2	AL-333	L 3" X 3" X 1/4" X 3" A36	PLK6-F2	3
5	4	---	THREADED ROD 5/8" DIA. X 10" F1554-36 HDG	---	--
6	5	---	BOLT 5/8" X 2 1/4" A325	---	--
7	4	---	BOLT 5/8" X 1 3/4" A325	---	--
8	17	FW-625	5/8" HDG USS FLAT WASHER	---	2
9	17	LW-625	5/8" HDG LOCK WASHER	---	0
10	17	NUT-625	5/8" HDG HEX NUT	---	2
				GALVANIZED WT	109

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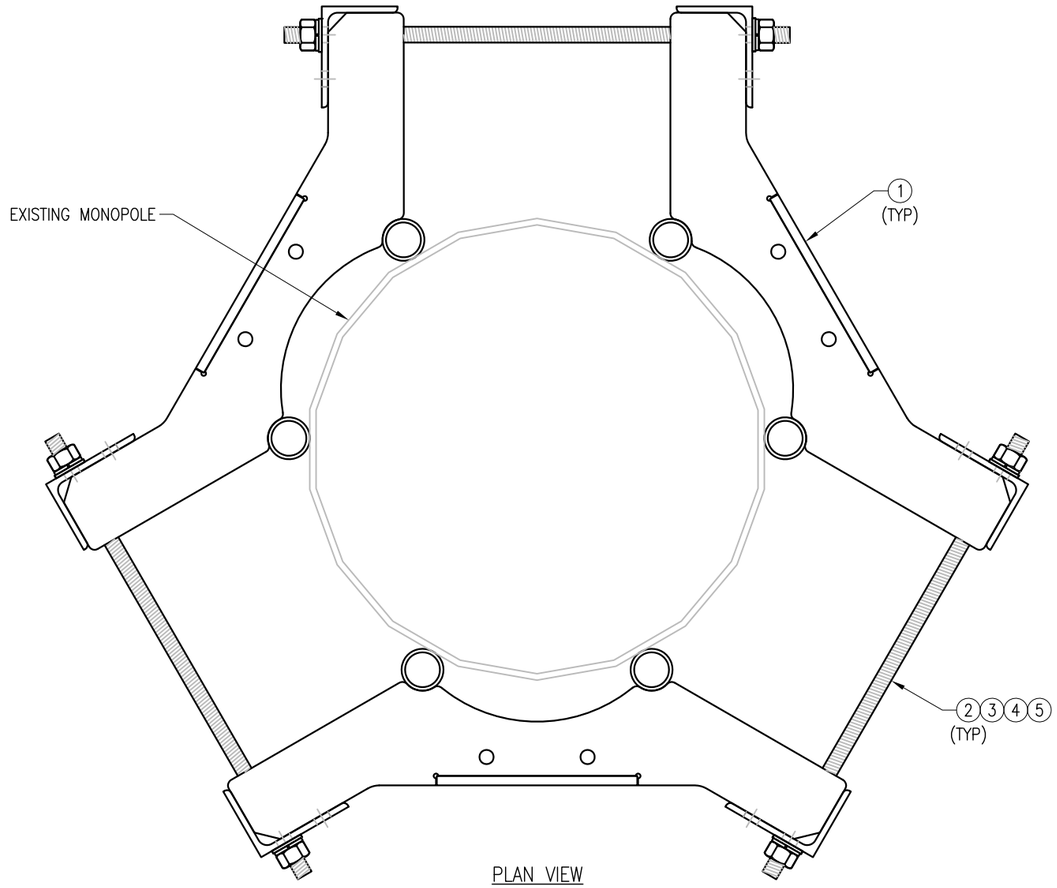
DRAWN BY: FL | CHECKED BY: KL/BT

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	FL	04/13/21

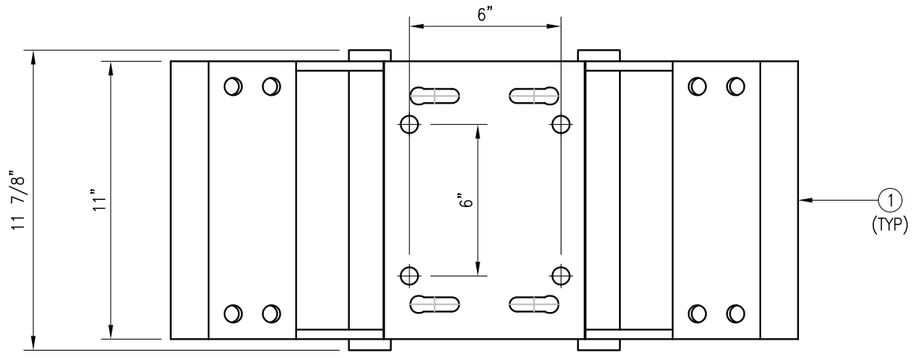
SHEET TITLE:
VZWSMART-PLK6
V-BRACING KIT FOR MONOPOLE

SHEET NUMBER: VZWSMART-PLK6

REV #: 0



PLAN VIEW
MONOPOLE COLLAR MOUNT ASSEMBLY



FRONT VIEW

NOTES:
1. FIT 12" TO 45" DIA MONOPOLE.
2. HOT-DIPPED GALVANIZED PER ASTM A123.

VZWSMART-PLK7 (MONOPOLE COLLAR MOUNT ASSEMBLY)

ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	3	CM-1245	COLLAR MOUNT ASSEMBLY	PLK7-F1	147
2	6	---	THREADED ROD 5/8" X 4'-0" A193-B7	---	
3	12	FW-625	5/8" HDG USS FLAT WASHER	---	1
4	12	LW-625	5/8" HDG LOCK WASHER	---	0
5	12	NUT-625	5/8" HDG HEX NUT	---	1
				GALVANIZED WT	150

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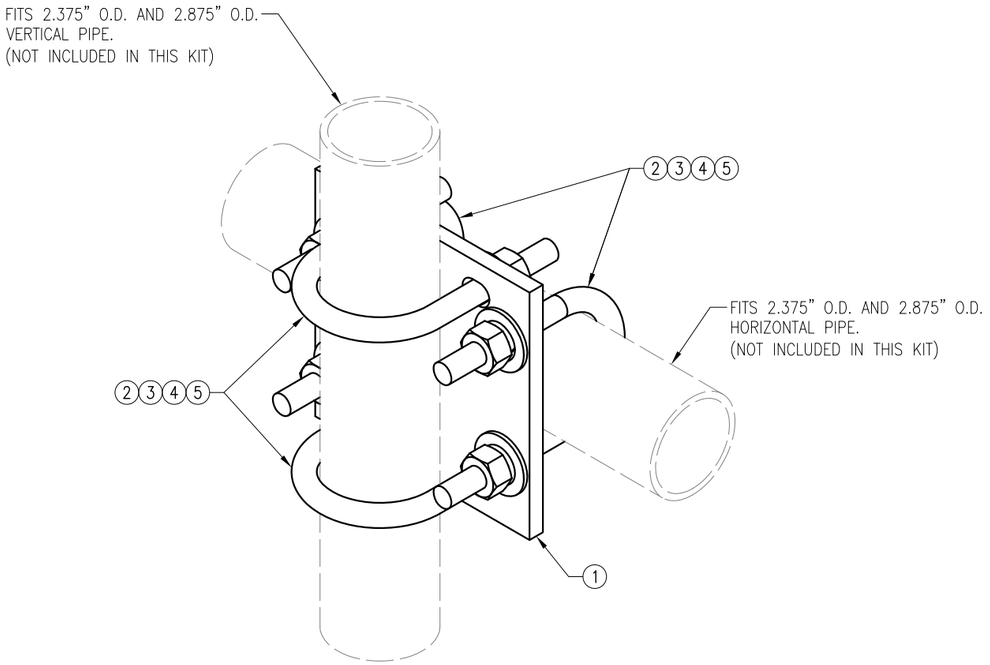
DRAWN BY: BT | CHECKED BY: HMA/KW

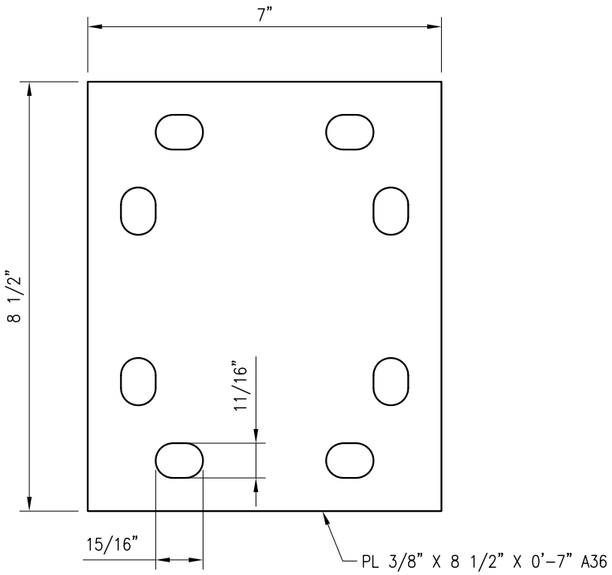
REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	BT	05/11/20

SHEET TITLE:
VZWSMART-PLK7
MONOPOLE COLLAR
MOUNT ASSEMBLY

SHEET NUMBER: VZWSMART-PLK7

REV #: 0





PL375-857

VZWSMART-MSK1 (CROSSOVER PLATE)					
ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	1	PL375-857	PL 3/8" X 8 1/2" X 0'-7" A36	MSK1-F1	6
2	4	MS02-625-300-500	RU-BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)	RBC-1	5
3	8	FW-625	5/8" HDG USS FLAT WASHER	---	1
4	8	LW-625	5/8" HDG LOCK WASHER	---	0
5	8	NUT-625	5/8" HDG HEX NUT	---	1
				GALVANIZED WT	14

NOTES:
1. HOT-DIPPED GALVANIZED PER ASTM A123.

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DRAWN BY: H.R | CHECKED BY: HMA

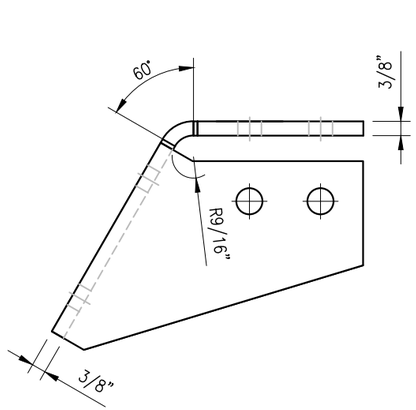
REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	H.R	05/08/20

SHEET TITLE:

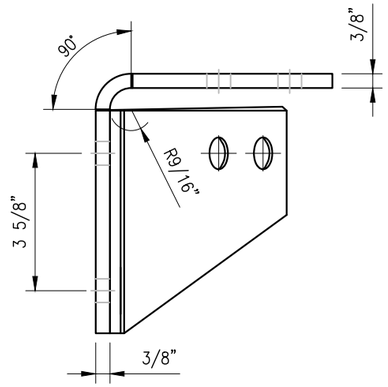
VZWSMART-MSK1
CROSSOVER PLATE

SHEET NUMBER: VZWSMART-MSK1

REV #: 0

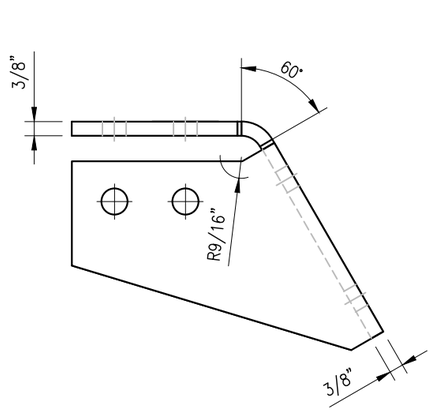


TOP VIEW

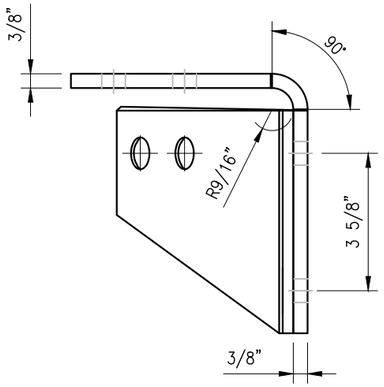


SIDE VIEW

CBP-L



TOP VIEW



SIDE VIEW

CBP-R

NOTES:
1. HOT-DIPPED GALVANIZED PER ASTM A123.

VZWSMART-PLK3 (SUPPORT RAIL CORNER BRACKET)

ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	1	CBP-L	CORNER BENT PLATE BRACKET	PLK3-F1	9
2	1	CBP-R	CORNER BENT PLATE BRACKET	PLK3-F1	9
3	4	MS02-625-300-500	RU-BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)	RBC-1	5
4	8	---	BOLT 5/8" X 2" A325	---	3
5	16	FW-625	5/8" HDG USS FLAT WASHER	---	1
6	16	LW-625	5/8" HDG LOCK WASHER	---	0
7	16	NUT-625	5/8" HDG HEX NUT	---	2
				GALVANIZED WT	30

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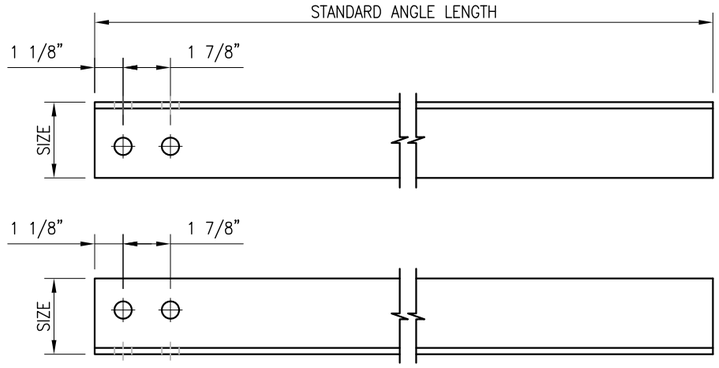
REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	H.R	05/08/20

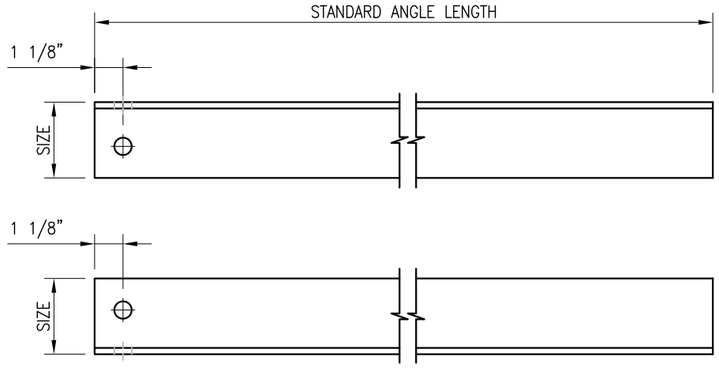
SHEET TITLE:
VZWSMART-PLK3 SUPPORT RAIL CORNER BRACKET

SHEET NUMBER: VZWSMART-PLK3

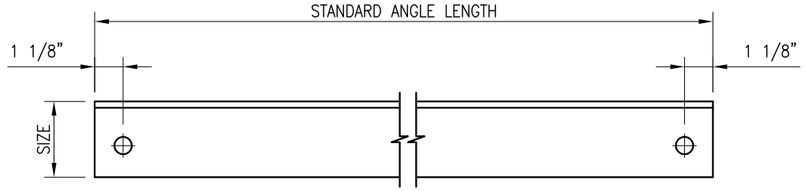
REV #: 0

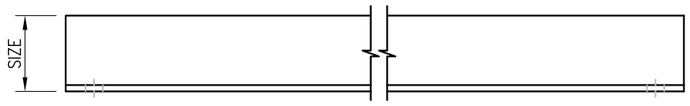


HOLE STYLE "A"

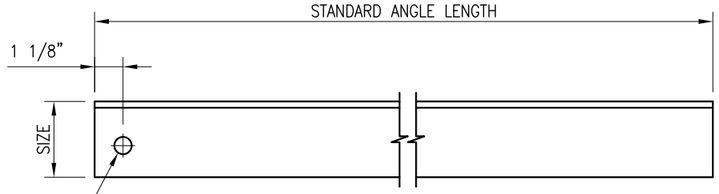


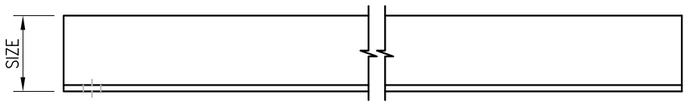
HOLE STYLE "B"





HOLE STYLE "C"





HOLE STYLE "D"

NOTE:
APPROVED SMART KIT VENDORS ARE ALLOWED TO SUBSTITUTE AT THEIR DISCRETION ANGLES LISTED ON THIS PAGE FOR CUSTOM LENGTH COMPONENTS OF MATCHING SIZE. SUBSTITUTIONS SHALL MEET THE ORIGINAL STRUCTURAL INTENT.

NOTES:
1. ALL ANGLE GRADE A36 OR BETTER.
2. HOT-DIPPED GALVANIZED PER ASTM A123.
3. ALL HOLES ARE 11/16" DIA. U.N.O
4. HOLES MAY OR MAY NOT BE PRESENT, DEPEND UPON MANUFACTURE DISCRETION.
5. ALL FIELD CUT AND DRILLED SURFACES SHALL BE REPAIRED WITH A MINIMUM OF TWO COATS OF ZINGA OR ZINC COTE PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.

VZWSMART Standard Angle					
VZWSMART Number	Size	Length	Hole Style	Hole Gage	Also Used In:
A-PLK2-01	L 3" X 3" X 1/4"	96"	A	1-3/4"	VZWSMART-PLK2
A-PLK5-01	L 3"X 3" X 3/16"	96"	B	1-3/4"	VZWSMART-PLK5
A-SFK3-01	L 2-1/2" X 2-1/2" X 1/4"	96"	C	1-3/8"	VZWSMART-SFK3,-SFK3-SL, -PLK6, & -PLK8
A-L25X25X4X120	L 2-1/2" X 2-1/2" X 1/4"	120"	D	1-5/16"	
A-L25X25X4X240	L 2-1/2" X 2-1/2" X 1/4"	240"	D	1-5/16"	
A-L30X30X4X120	L 3" X 3" X 1/4"	120"	D	1-1/2"	
A-L30X30X4X240	L 3" X 3" X 1/4"	240"	D	1-1/2"	
A-L40X40X4X120	L 4" X 4" X 1/4"	120"	D	2"	
A-L40X40X4X240	L 4" X 4" X 1/4"	240"	D	2"	
A-L50X30X6X120	L 5" X 3" X 3/8"	120"	D	2-1/2"	
A-L50X50X6X120	L 5" X 5" X 3/8"	120"	D	2-1/2"	

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DRAWN BY: BT | CHECKED BY: HMA/KW

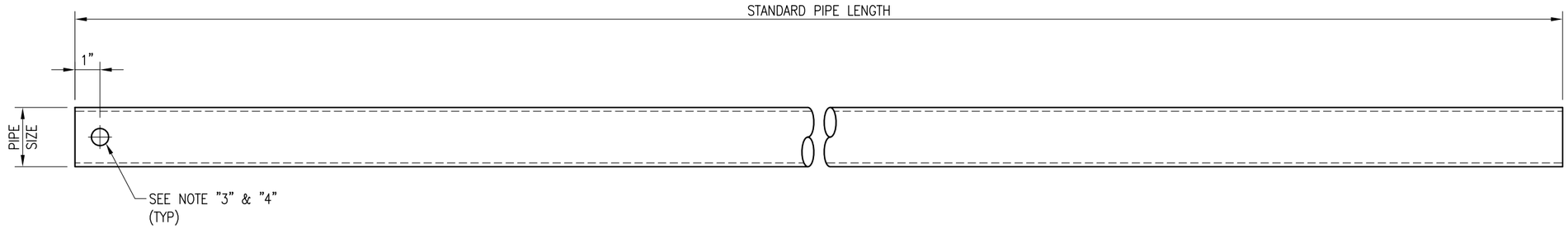
REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	BT	08/04/21

SHEET TITLE:

VZWSMART STANDARD ANGLE

SHEET NUMBER: VZWSMART-ANGLE

REV #: 0



VZWSMART Standard Pipe		
VZWSMART Number	Size	Length
P40-238X048	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	48"
P40-238X072	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	72"
P40-238X096	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	96"
P40-238X120	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	120"
P40-238X126	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	126"
P40-238X150	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	150"
P40-238X174	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	174"
P40-278X048	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	48"
P40-278X072	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	72"
P40-278X096	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	96"
P40-278X120	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	120"
P40-278X126	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	126"
P40-278X150	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	150"
P40-278X174	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	174"
P40-312X048	PIPE 3 SCH40 (3.5" OD x 0.216" THK)	48"
P40-312X072	PIPE 3 SCH40 (3.5" OD x 0.216" THK)	72"
P40-312X126	PIPE 3 SCH40 (3.5" OD x 0.216" THK)	126"
P40-312X150	PIPE 3 SCH40 (3.5" OD x 0.216" THK)	150"
P40-312X174	PIPE 3 SCH40 (3.5" OD x 0.216" THK)	174"

NOTE:
APPROVED SMART KIT VENDORS ARE ALLOWED TO SUBSTITUTE AT THEIR DISCRETION PIPES LISTED ON THIS PAGE FOR CUSTOM LENGTH COMPONENTS OF MATCHING SIZE. SUBSTITUTIONS SHALL MEET THE ORIGINAL STRUCTURAL INTENT.

NOTES:
1. ALL PIPE GRADE A53-B OR BETTER.
2. HOT-DIPPED GALVANIZED PER ASTM A123.
3. ALL HOLES ARE 11/16" DIA. U.N.O
4. HOLES MAY OR MAY NOT BE PRESENT, DEPEND UPON MANUFACTURE DISCRETION.
5. ALL FIELD CUT AND DRILLED SURFACES SHALL BE REPAIRED WITH A MINIMUM OF TWO COATS OF ZINGA OR ZINC COTE PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.

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DRAWN BY: BT | CHECKED BY: HMA/KW

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	BT	08/04/21

SHEET TITLE:
VZWSMART STANDARD PIPE

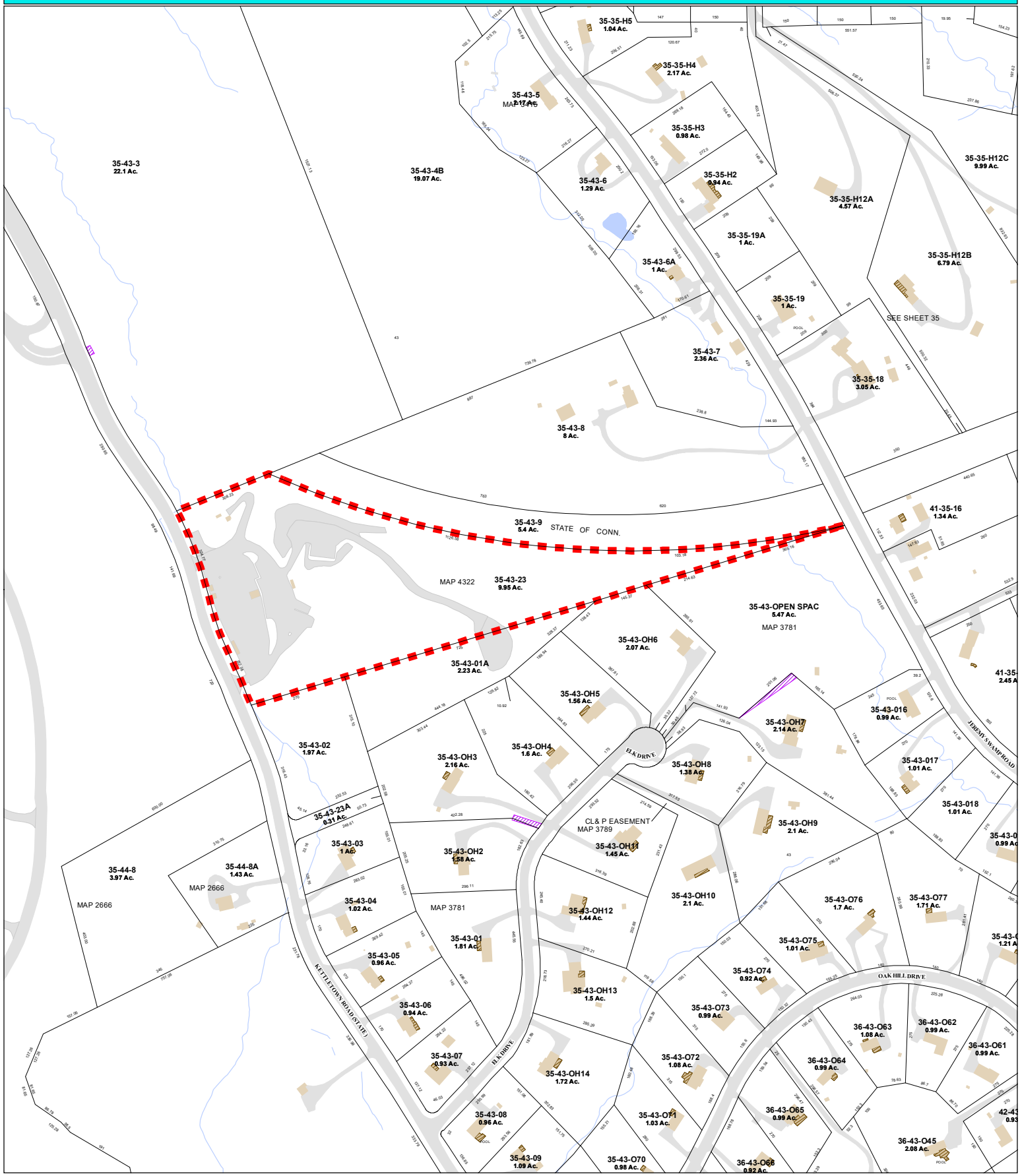
SHEET NUMBER: VZWSMART-PIPE

REV #: 0

ATTACHMENT 5

Town of Southbury Connecticut - Assessment Parcel Map

Parcel: 35-43-23 **Location:** 231 KETTLETOWN ROAD



N

Approximate Scale: 1 inch = 350 feet

0 100 200 300 400 Feet

Map Produced November 2021

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

231 KETTLETOWN ROAD

Sales | Print | Map It

Location	231 KETTLETOWN ROAD	**Mblu**	35/ 43/ 23/ /
Acct#	00369500	**Owner**	SOUTHBURY TOWN OF
Assessment	$264,210	**Appraisal**	$377,430
PID	4358	**Building Count**	1

Current Value

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2017	$85,880	$291,550	$377,430
Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2017	$60,120	$204,090	$264,210

Owner of Record

Owner	SOUTHBURY TOWN OF	**Sale Price**	$0
Co-Owner		**Certificate**	
Address	501 MAIN ST SO SOUTHBURY, CT 06488	**Book & Page**	0112/0334
		Sale Date	03/15/1973
		Instrument	25

ATTACHMENT 6

UNITED STATES POSTAL SERVICE®

SOUTHBURY 2

Certificate of Mailing — Firm

Name and Address of Sender	TOTAL NO. of Pieces Listed by Sender	TOTAL NO. of Pieces Received at Post Office™	Affix Stamp Here ***Postmark with Date of Receipt.***
Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103	2	2	neopost 01/28/2022 US POSTAGE $002.99⁰ ZIP 06103 041L12203937
	Postmaster, per *(name of receiving employee)*		

USPS® Tracking Number / Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.	Jeff Manville, First Selectman Town of Southbury 501 Main Street Southbury, CT 06488				
2.	Jessica Townsend, Land Use Administrator Town of Southbury 501 Main Street Southbury, CT 06488				
3.					
4.					
5.					
6.					

OLD STATE HOUSE STATION 06103 JAN 28 2021 USPS

See Reverse for Instructions