

KENNETH C. BALDWIN

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Hartford, CT 06103-3597
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Direct (860) 275-8345

Also admitted in Massachusetts
and New York

October 25, 2021

Via Electronic Mail

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

Re: **Notice of Exempt Modification – Facility Modification
1 Hartford Square, New Britain, Connecticut**

Dear Attorney Bachman:

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) currently maintains an existing wireless telecommunications facility at the above-referenced property address (the “Property”). The facility consists of antennas and remote radio heads attached to a tower and related equipment on the ground, near the base of the tower. The tower was approved by the City of New Britain (“City”) in July of 2000. Cellco’s shared use of the tower was approved by the Siting Council (“Council”) in April of 2001 (TS-VER-089-010328). A copy of the City’s approval and the Council’s TS-VER-089-010328 approval are included in Attachment 1.

Cellco now intends to modify its facility by replacing six (6) existing antennas with three (3) new Samsung MT6407-77A antennas and three (3) CBRS antennas on new antenna mounts. Cellco also intends to replace six (6) remote radio heads (“RRHs”) with six (6) new RRHs behind its antennas. A set of project plans showing Cellco’s proposed facility modifications and specifications for the 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 New Britain’s Chief Elected Official and Land Use Officer.

Melanie A. Bachman, Esq.
October 25, 2021
Page 2

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 mounting structure.

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 power density table for Cellco's modified facility are 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 antenna mounts, 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 and the property owner is included in Attachment 6.

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

Melanie A. Bachman, Esq.
October 25, 2021
Page 3

Sincerely,

A handwritten signature in black ink, appearing to read "Kenneth C. Baldwin". The signature is fluid and cursive, with a long horizontal stroke at the end.

Kenneth C. Baldwin

Enclosures

Copy to:

Erin Stewart, Mayor for the City of New Britain
Steven Schiller, AICP, New Britain City Planner
Hartford Square Associates LLC, the Property Owner
Aleksey Tyurin

ATTACHMENT 1



City of New Britain

New Britain, Connecticut 06051

DEPT. OF MUNICIPAL DEVELOPMENT

"New Britain:
A City for
All People"

27 West Main Street - Room 311

(860) 826-3330

FAX: (860) 826-2682

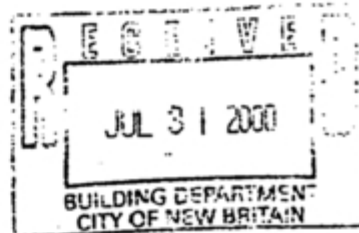
MEMORANDUM

TO: Frank M. Wiatr, Director of Licenses and Permits

FROM: Steven P. Schiller, Planner II

DATE: July 27, 2000

SUBJECT: Site Plan Review for:




ONE HARTFORD SQUARE
SBA CELL TOWER, AMODIO PROPERTY
PLAN DATED: 7/17/00

As requested, a review of the above Site Plan was made and we recommend that the Site Plan be APPROVED as submitted. City Plan approval indicates that the Site Plan and/or Landscaping Plan appears to conform to professional planning standards, but in no way shall be construed as confirmation of the accuracy or adequacy of the contents of the plans and shall not relieve the owner of the obligation to construct facilities which function safely and conform to all applicable statutes, ordinances and regulations.

NOTE: APPROVAL IS CONTINGENT UPON ZONING ENFORCEMENT OFFICIAL'S CONCURRENCE THAT THE PROPOSED USE IS PERMISSIBLE IN THE I-2 DISTRICT AND THAT THE 135 FOOT TOWER IS EXEMPTED FROM THE 125 FOOT MAXIMUM HEIGHT RESTRICTION, PURSUANT TO SECTION 230-30.

cc: Clarence Corbin, City Engineer


 Kenneth A. Malinowski, Director
 Department of Municipal Development

SITE # 10125-077
 FILE TYPE CONS
 SECTION Permitting

April 16, 2001

Sandy M. Carter
Verizon Wireless
20 Alexander Drive
P.O. Box 5029
Wallingford, CT 06492

RE: **TS-VER-089-010328** - Cellco Partnership d/b/a Verizon Wireless request for an order to approve tower sharing at an existing telecommunications facility located at 1 Hartford Square, New Britain, Connecticut.

Dear Ms. Carter:

At a public meeting held April 12, 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 letter dated March 28, 2001.

Thank you for your attention and cooperation.

Very truly yours,

Mortimer A. Gelston
Chairman

MAG/RKE/laf

c: Honorable Lucian J. Pawlak, Mayor, City of New Britain
Planning and Zoning Department, Town of New Britain
Esther McNany, SBA, Inc.
Ronald C. Clark, Nextel Communications, Inc.
Stephen J. Humes, Esq., LeBoeuf, Lamb, Greene & MacRae

ATTACHMENT 2



NEW BRITAIN 2 CT 1 HARTFORD SQUARE, NEW BRITAIN, CT 06052

GENERAL NOTES

- ALL WORK SHALL BE IN ACCORDANCE WITH THE 2015 INTERNATIONAL BUILDING CODE AS MODIFIED BY THE 2018 CONNECTICUT SUPPLEMENT, INCLUDING THE IBC/ISA-222 REVISION "C" STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND SUPPORTING STRUCTURES, 2017 CONNECTICUT FIRE SAFETY CODE, NATIONAL ELECTRICAL CODE, AND LOCAL CODES.
- SHOULD ANY FIELD CONDITIONS PRECLUDE COMPLIANCE WITH THE DRAWINGS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND SHALL NOT PROCEED WITH ANY AFFECTED WORK.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- DRAWINGS INDICATE THE MINIMUM STANDARDS, BUT IF ANY WORK SHOULD BE INDICATED TO BE SUBSTANTIAL 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.

SITE DIRECTIONS

FROM:	TO:
20 ALEXANDER DRIVE WALLINGFORD, CONNECTICUT	1 HARTFORD SQ. NEW BRITAIN, CT 06052

- START OUT GOING NORTH ON ALEXANDER DR TOWARD BARNES INDUSTRIAL RD. 0.18 MI
- TURN RIGHT ONTO BARNES INDUSTRIAL RD. 0.11 MI
- TAKE THE 1ST LEFT ONTO CT-68 0.35 MI
- TURN RIGHT ONTO RAMP. 0.17 MI
- TURN RIGHT ONTO N COLONY RD/US-5 N. 0.30 MI
- MERGE ONTO CT-15 N TOWARD HARTFORD. 9.18 MI
- TURN LEFT ONTO WORTHINGTON RDG. 1.42 MI
- TURN LEFT ONTO FRONTAGE RD. 0.11 MI
- MERGE ONTO CT-9 N VIA THE RAMP ON THE LEFT TOWARD NEW BRITAIN. 1.68 MI
- MERGE ONTO CT-571 VIA EXIT 24 ON THE LEFT TOWARD CT-71/KENSINGTON/CT-372. 1.60 MI
- STAY STRAIGHT TO GO ONTO CT-372/CT-571. CONTINUE TO FOLLOW CT-372. 1.17 MI
- TURN LEFT ONTO BLACK ROCK AVE. 0.42 MI
- TAKE THE 2ND RIGHT ONTO WARREN ST. 0.03 MI
- TURN LEFT ONTO HARTFORD SQ. 0.10 MI
- 1 HARTFORD SQ, NEW BRITAIN, CT 06052-1107, 1 HARTFORD SQ IS ON THE RIGHT.



PROJECT SUMMARY

1. THE PROPOSED UPGRADE SCOPE OF WORK AT THE EXISTING UNMANNED TELECOMMUNICATIONS FACILITY GENERALLY INCLUDES THE FOLLOWING:
- A. AT THE EXISTING LATTICE TOWER MOUNTED ANTENNA SECTORS:
- REMOVE (6) EXISTING NOKIA RRUs.
 - REMOVE (3) EXISTING KATHREIN 800107350V1 ANTENNAS.
 - REMOVE (1) NON-LOW INDUCTANCE HYBRID CABLE.
 - REMOVE (1) OVP-6 BOX.
 - RETAIN (6) EXISTING ANDREW SBRHH-1D658 ANTENNAS.
 - RETAIN (3) EXISTING ANTEL - 6XA-80080/4CF FP ANTENNAS.
 - RETAIN (6) EXISTING 1-5/8" COAX CABLES.
 - INSTALL (3) NEW SAMSUNG X200MM-12.5-05-ST-CBR5 ANTENNAS.
 - INSTALL (3) NEW SAMSUNG M76407-77A ALL-IN-ONE ANTENNA/ RRUs.
 - INSTALL (3) NEW SAMSUNG B2/B66A RRH-BRO49 & (3) NEW SAMSUNG B5/B13 RRH-BRO4C RRUs.
 - INSTALL (3) NEW COMSCOPE CBR5 RRH - RT4401-48A RRUs.
 - INSTALL (3) NEW COMSCOPE - BASMNT-SBS-1-2 ANTENNA UNITS.
 - INSTALL (1) NEW OVP-12 BOX.
 - INSTALL (2) NEW 6x12 HYBRIFLEX CABLES.
 - PERFORM ANTENNA MOUNT MODIFICATIONS (DESIGNED BY OTHERS AS REFERENCED HEREIN).

PROJECT INFORMATION

SITE NAME: NEW BRITAIN 2 CT
SITE ADDRESS: 1 HARTFORD SQ.
NEW BRITAIN, CT 06052
LESSEE/TENANT: CELCO PARTNERSHIP
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492
CONTACT PERSON: WALTER CHARCZSKI (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°-39'-59.0798"N
LONGITUDE: 72°-48'-46.0908"W
 COORDINATES AND GROUND ELEVATION BASED ON VERIZON WIRELESS RFD5 DATED JUNE 4, 2021.

SHEET INDEX

SHT. NO.	DESCRIPTION	REV.
T-1	TITLE SHEET	0
N-1	NOTES AND SPECIFICATIONS	0
B-1	RF BILL OF MATERIALS	0
C-1	COMPOUND PLAN AND ELEVATION	0
C-2	ANTENNA SECTOR CONFIGURATION DETAILS	0
C-3	RF DETAILS	0
E-1	ELECTRICAL DETAILS AND SPECIFICATIONS	0

PROFESSIONAL ENGINEER SEAL

CONSTRUCTION DRAWINGS - ISSUED FOR CONSTRUCTION
 MECHANICAL DRAWINGS - ISSUED FOR CLEAR REVIEW

CENTEK Engineering
 Connecticut LLC
 63-2 North Branford Road
 Branford, CT 06405
 www.CentekEng.com

Verizon Wireless

Celco Partnership d/b/a Verizon Wireless

NEW BRITAIN 2 CT
 1 HARTFORD SQUARE,
 NEW BRITAIN, CT 06052

DATE: 07/22/21
 SCALE: AS NOTED
 JOB NO. 2100736

TITLE SHEET

T-1
 Sheet No. 1 of 1

NOTES AND SPECIFICATIONS

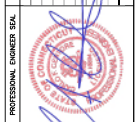
DESIGN BASIS:

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)
 - ULTIMATE DESIGN SPEED (TOWER): 97 MPH (Vwd) (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.

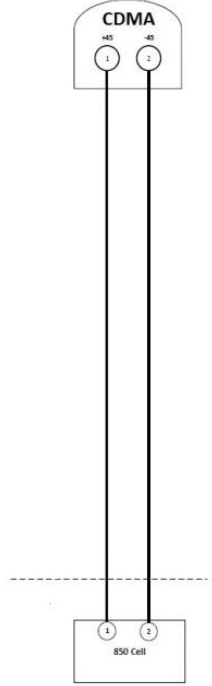
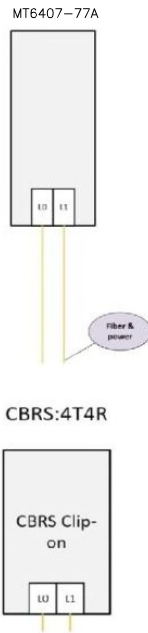
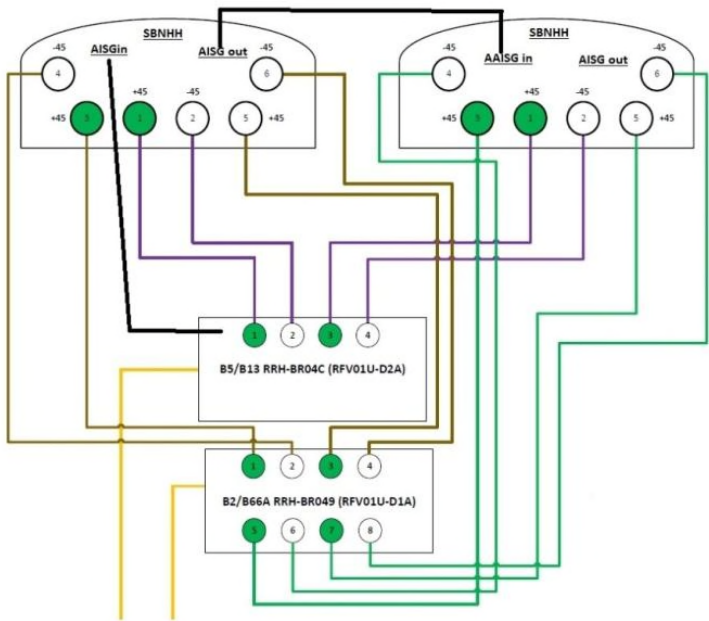


CENTEK Engineering
 Central Engineering
 (203) 664-2500
 (203) 668-8587 Fax
 652 North Meriden Road
 Meriden, CT 06460
 www.CentralEng.com

Cellco Partnership d/b/a Verizon Wireless
NEW BRITAIN 2 CT
 1 HARTFORD SQUARE,
 NEW BRITAIN, CT 06052

DATE: 07/22/21
 SCALE: AS NOTED
 JOB NO. 2100736

NOTES AND SPECIFICATIONS



NOTES:
 1. INFORMATION SHOWN HEREIN IS FOR USE BY VERIZON WIRELESS EQUIPMENT OPERATIONS.
 2. THIS B.O.M. DRAWING IS BASED ON FACILITY UPGRADE DESIGN DRAWINGS PREPARED BY CENTEK ENGINEERING (REV.0 DATED: 09.23.21), & VERIZON WIRELESS RF ANTENNA EQUIPMENT RECOMMENDATION (DATED 06.04.21).

BILL OF MATERIALS		
TECHNOLOGY	QUANTITY	ANTENNA
CBRS LTE	3	SAMSUNG ANTENNA MODEL: XXDWM-12.5-65-BT-CBRS
5G	3	SAMSUNG ANTENNA MODEL: MT6407-77A

RADIOS	QUANTITY	COMMENTS
LTE 700	3	SAMSUNG MODEL: B5/B13 RRH-BR04C
LTE 850		
LTE PCS 1900		
LTE AWS 2100	3	SAMSUNG MODEL: B2/B66A RRH-BR049
CBRS LTE	3	SAMSUNG MODEL: CBRS RRH - RT4401-48A
5G	3	INTEGRATED INTO MT6407-77A ANTENNA

ANTENNA MOUNT	QUANTITY	COMMENTS
SIDE-BY-SIDE MOUNTING KIT	3	COMMSCOPE MODEL: BASMNT-SBS-1-2

CABLES	QUANTITY	LENGTH EA.	COMMENTS
HYBRID CABLES	2	±230 EACH	6x12 HYBRIFLEX

DIPLEXERS	QUANTITY	COMMENTS
LTE 700	-	-
LTE 850	-	-

OVP BOXES	QUANTITY	COMMENTS
TOWER OVP-12	1	RAYCAP MODEL: RHSDC-6627-PF-48

PROFESSIONAL ENGINEER SEAL

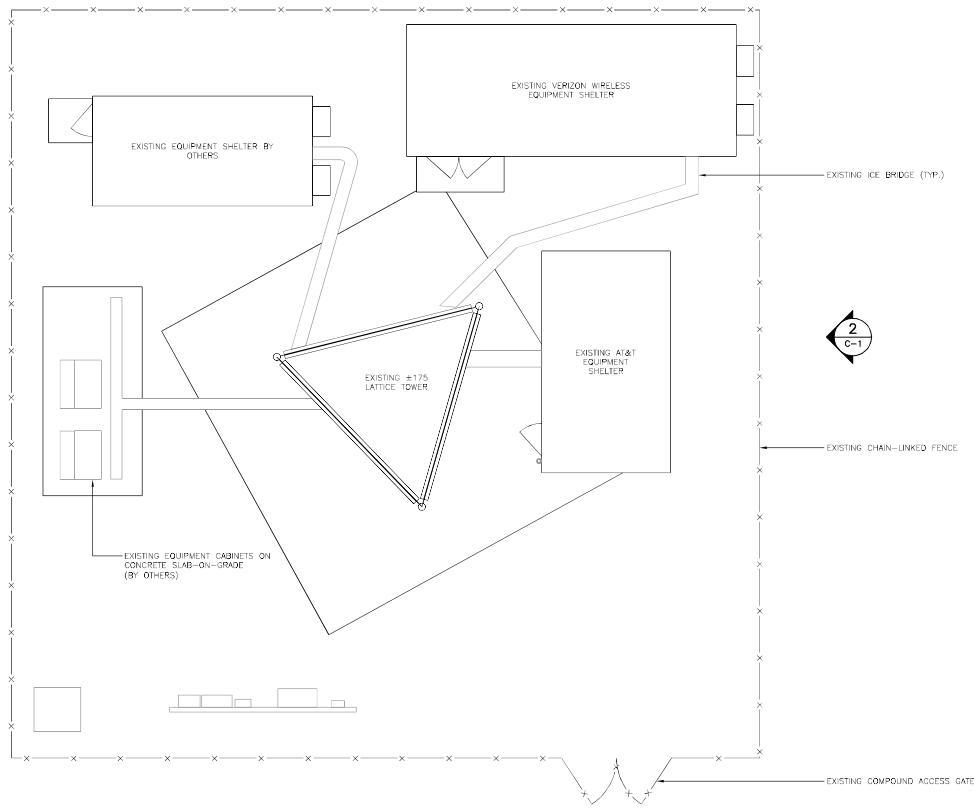
CENTEK Engineering, Inc.
 02031 686-6360
 02031 688-8387 Fax
 652 North Branch Road
 Meriden, CT 06460
 www.CentekEng.com

Cellco Partnership d/b/a Verizon Wireless
NEW BRITAIN 2 CT
 1 HARTFORD SQUARE,
 NEW BRITAIN, CT 06052

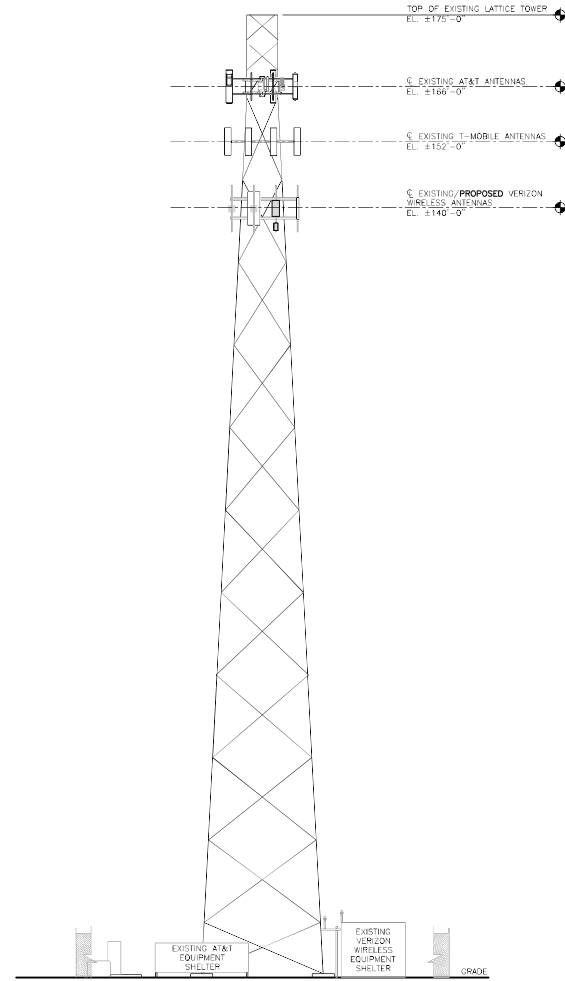
DATE: 07/22/21
 SCALE: AS NOTED
 JOB NO. 21007.36

RF BILL OF MATERIALS

B-1
 Sheet No. 2 of 1



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



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

DATE	07/22/21
SCALE	AS NOTED
JOB NO.	2100736
CONSTRUCTION DRAWINGS - ISSUED FOR CONSTRUCTION	
ISSUED FOR CLIENT REVIEW	
DATE	07/23/21
BY	AWC
DATE	
BY	AWC
DATE	
BY	AWC
DATE	
BY	AWC
DATE	
BY	AWC



CENTEK Engineering
 Centek on Solutions
 (203) 466-6360
 (203) 466-6367 Fax
 652 North Branford Road
 Branford, CT 06405
 www.CentekEng.com

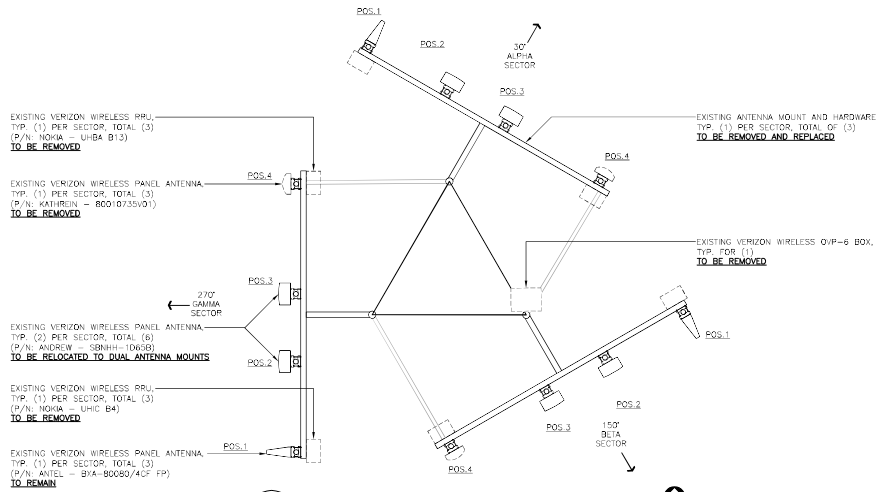
Cellco Partnership d/b/a Verizon Wireless
NEW BRITAIN 2 CT
 1 HARTFORD SQUARE,
 NEW BRITAIN, CT 06052

DATE: 07/22/21
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COMPOUND
 PLAN AND
 ELEVATION

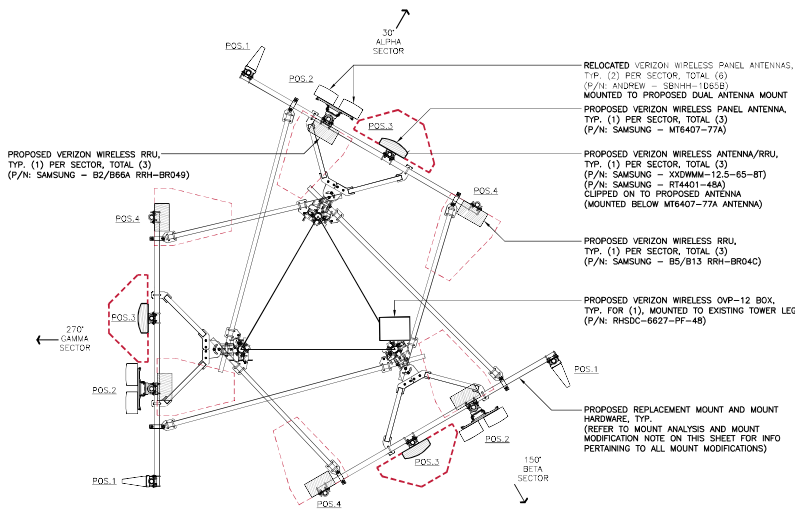
C-1
 Sheet No. 4 of 1

EXISTING ANTENNA CONFIGURATIONS



1 EXISTING SECTOR CONFIGURATION PLAN
SCALE: 3/8" = 1'-0"
APPROXIMATE NORTH

PROPOSED ANTENNA CONFIGURATIONS

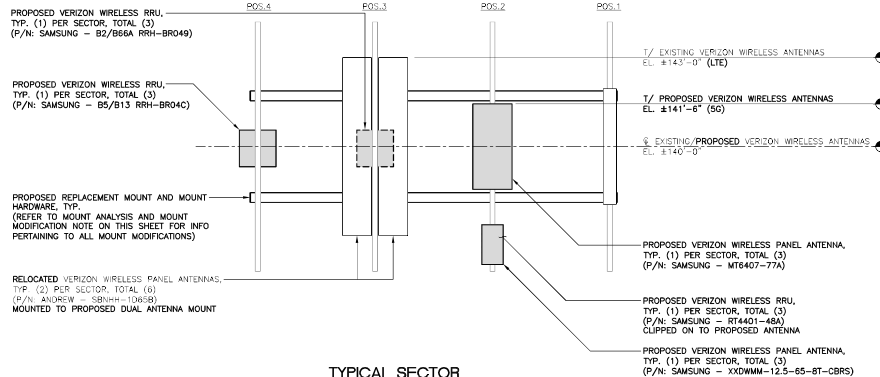


2 PROPOSED SECTOR CONFIGURATION PLAN
SCALE: 3/8" = 1'-0"
APPROXIMATE NORTH

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
VERIZON WIRELESS RRU REQUIRED ANTENNA CLEARANCE LIMITS (PER DETAILS ON SHEET C-3)	
RRU CLEARANCE STATUS	ALPHA SECTOR: COMPLIANT BETA SECTOR: COMPLIANT GAMMA SECTOR: COMPLIANT

ANTENNA MOUNT ANALYSIS AND MOD NOTE:
REFER TO FINAL VERIZON WIRELESS PASSING MOUNT ANALYSIS REPORT PREPARED BY MASER CONSULTING CONNECTICUT DATED 07/07/2021 FOR ANTENNA MOUNT REPLACEMENT AND ADDITIONAL INFORMATION.



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

PROFESSIONAL ENGINEER SEAL

CONSTRUCTION DRAWINGS - ISSUED FOR CONSTRUCTION
CONSTRUCTION DRAWINGS - ISSUED FOR CLIENT REVIEW

DATE: 07/22/21
SCALE: AS NOTED
JOB NO.: 2100736

ANTENNA SECTOR CONFIGURATION DETAILS

C-2
Sheet No. 2 of 1

verizon
CENTEK Engineering
2031 868-6360
2031 868-6387 Fax
652 North Branch Road
Hartford, CT 06185
www.CentekEng.com

Cellco Partnership d/b/a Verizon Wireless
NEW BRITAIN 2 CT
1 HARTFORD SQUARE,
NEW BRITAIN, CT 06052



ANTENNA FRONT

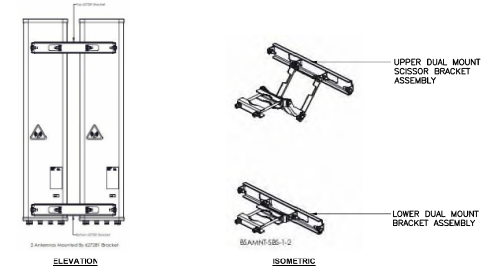
SECTOR ANTENNA		
EQUIPMENT	DIMENSIONS	WEIGHT
MAKE: SAMSUNG MODEL: MT6407-77A	35.1" H x 16.1" W x 5.5" D (NOT TO EXCEED)	87 LBS. (NOT TO EXCEED)
CLEARANCES AND SERVICE AREA		
TOP: 31.5"	HORIZONTAL DISTANCE: (ANT. TO ANT.): 31.5"	
FRONT, SIDES & BOTTOM: 15.7"	VERTICAL DISTANCE: (ANT. TO ANT.): 63.0"	
NOTES: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

1 SECTOR ANTENNA DETAIL
C-3 NOT TO SCALE



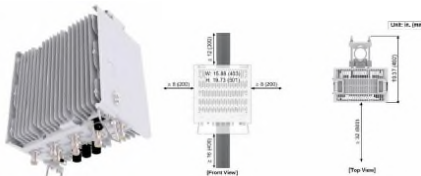
CBRS CLIP-ON ANTENNA			CBRS RRH (REMOTE RADIO UNIT)			
EQUIPMENT	DIMENSIONS	WEIGHT	EQUIPMENT	BAND	DIMENSIONS	WEIGHT
MAKE: SAMSUNG MODEL: XX0WMM-12.5-65-BT	12.5" H x 8.7" W x 1.4" D	2.9 LBS.	MAKE: SAMSUNG MODEL: CBRS RRH-RT4401-48A	CBRS	12.1" H x 8.5" W x 4.1" D	18.6 LBS.
NOTES: 1. CONTRACTOR TO COORDINATE FINAL EQUIPMENT MODEL SELECTION WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING.						

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



SIDE-BY-SIDE ANTENNA MOUNTING KIT			
MOUNT	DESCRIPTION	SUPPORTED ANTENNAS	GAP BETWEEN ANTENNAS
MAKE: COMMSCOPE MODEL: BSMANT-SBS-1-2	(2) BRACKET KIT FOR MOUNTING (2) ANTENNAS SIDE-BY-SIDE	SRNH 65" AND 85" NRH 65" AND 85"	3-3/8"
NOTES: 1. MOUNT ACCOMMODATES MAST DIAMETERS FROM 2.375" TO 4.5" (O.D.). 2. CONTRACTOR TO CONFIRM MOUNT MAKE/MODEL AND QUANTITY WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING.			

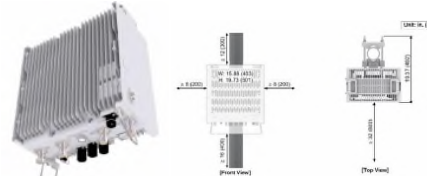
3 PROPOSED SIDE-BY-SIDE ANTENNA MOUNT
C-3 NOT TO SCALE



RRH ISOMETRIC RRH CLEARANCES

DUAL BAND RRH (REMOTE RADIO UNIT)			
EQUIPMENT	BANDS	DIMENSIONS	WEIGHT
MAKE: SAMSUNG MODEL: S2/856A RRH-BRD49 (RFV01U-D1A)	B2: PCS (1900 MHz) B66: AWS (2100 MHz)	15.0" H x 15.0" W x 10.0" D	84.4 LBS.
NOTES: 1. CONTRACTOR TO COORDINATE FINAL EQUIPMENT MODEL SELECTION WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING.			

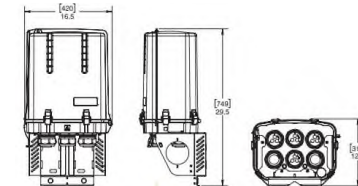
4 DUAL-BAND AWS/PCS RADIO UNIT DETAIL
C-3 NOT TO SCALE



RRH ISOMETRIC RRH CLEARANCES

DUAL BAND RRH (REMOTE RADIO UNIT)			
EQUIPMENT	BANDS	DIMENSIONS	WEIGHT
MAKE: SAMSUNG MODEL: S5/813 RRH-BRD4C (RFV01U-D2A)	B5: 850 MHz B13: 700 MHz	15.0" H x 15.0" W x 8.1" D	70.3 LBS.
NOTES: 1. CONTRACTOR TO COORDINATE FINAL EQUIPMENT MODEL SELECTION WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING.			

5 DUAL-BAND 700/850 MHz RADIO UNIT DETAIL
C-3 NOT TO SCALE

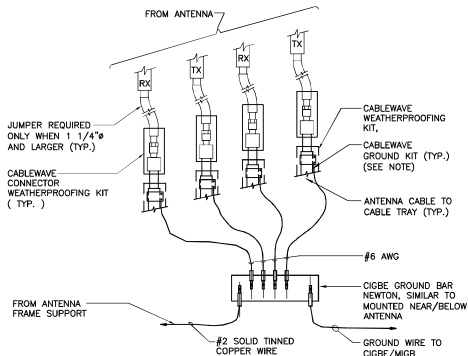


OVP-12 BOX		
EQUIPMENT	DIMENSIONS	WEIGHT
MAKE: RAYCAP MODEL: RPSDC-6627-PF-48	29.5" H x 16.5" W x 12.6" D	32.0 LBS.
NOTES: 1. CONTRACTOR TO CONFIRM OVP BOX MAKE/MODEL AND QUANTITY WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING. 2. UNIT PROVIDES DC SURGE PROTECTION FOR 12 RRH UNITS.		

6 PROPOSED OVER-VOLTAGE PROTECTION BOX
C-3 NOT TO SCALE

PROFESSIONAL ENGINEER SEAL

verizon
CENTEK Engineering, Inc.
 02031 686-6360
 02031 688-8587 Fax
 65-2 North Branch Road
 Hartford, CT 06145
 www.CentekEng.com
Cellco Partnership d/b/a Verizon Wireless
NEW BRITAIN 2 CT
 1 HARTFORD SQUARE,
 NEW BRITAIN, CT 06052
 DATE: 07/22/21
 SCALE: AS NOTED
 JOB NO. 21007.36
 RF DETAILS
C-3
 Sheet No. 11 of 11



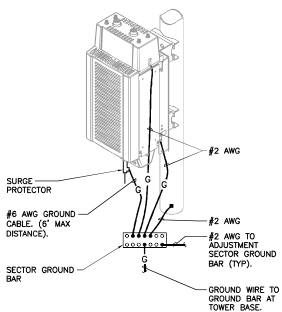
NOTES

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

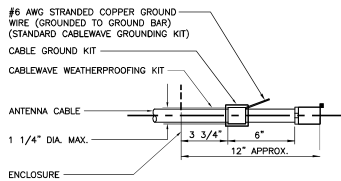
1 CONNECTION OF GROUND WIRES TO GROUND BAR
E-1 NOT TO SCALE

EACH RRH CABINET SHALL BE GROUNDED IN THE FOLLOWING MANNER:

- AT TOP OF THE CABINET
- AT RIGHT SIDE OF THE CABINET.



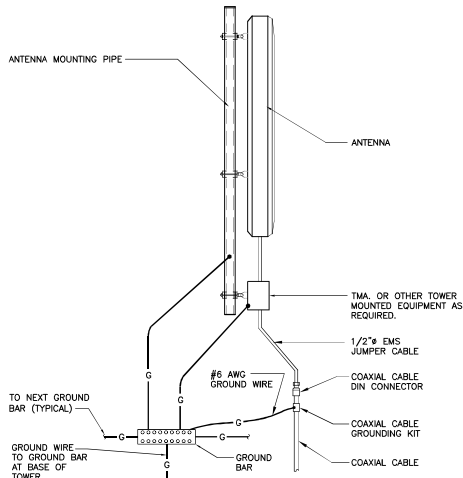
2 RRH POLE MOUNT GROUNDING
E-1 NOT TO SCALE



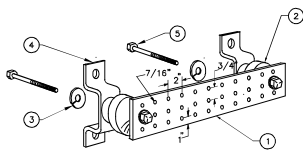
NOTES

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

3 ANTENNA CABLE GROUNDING DETAIL
E-1 NOT TO SCALE



4 TYPICAL ANTENNA GROUNDING DETAIL
E-1 NOT TO SCALE



NOTES

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

5 GROUND BAR DETAIL
E-1 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:

1.02. 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 OWNERS 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:

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

- GROUND BARS
- 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.

PROFESSIONAL ENGINEER SEAL

CONSTRUCTION DRAWINGS - ISSUED FOR CONSTRUCTION
CONSTRUCTION DRAWINGS - ISSUED FOR CLIENT REVIEW

DATE: 07/22/21
SCALE: AS NOTED
JOB NO. 2100736

verizon

CENTEK engineering
Contractors & Builders

10031 864-9360
10033 868-8387 Fax
65-2 North Avon Road
Hartford, CT 06185
www.CentekEng.com

Cellco Partnership d/b/a Verizon Wireless

NEW BRITAIN 2 CT
1 HARTFORD SQUARE,
NEW BRITAIN, CT 06052

E-1

Sheet No. 2 of 1

[CBRS] Clip-on Antenna Specifications

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

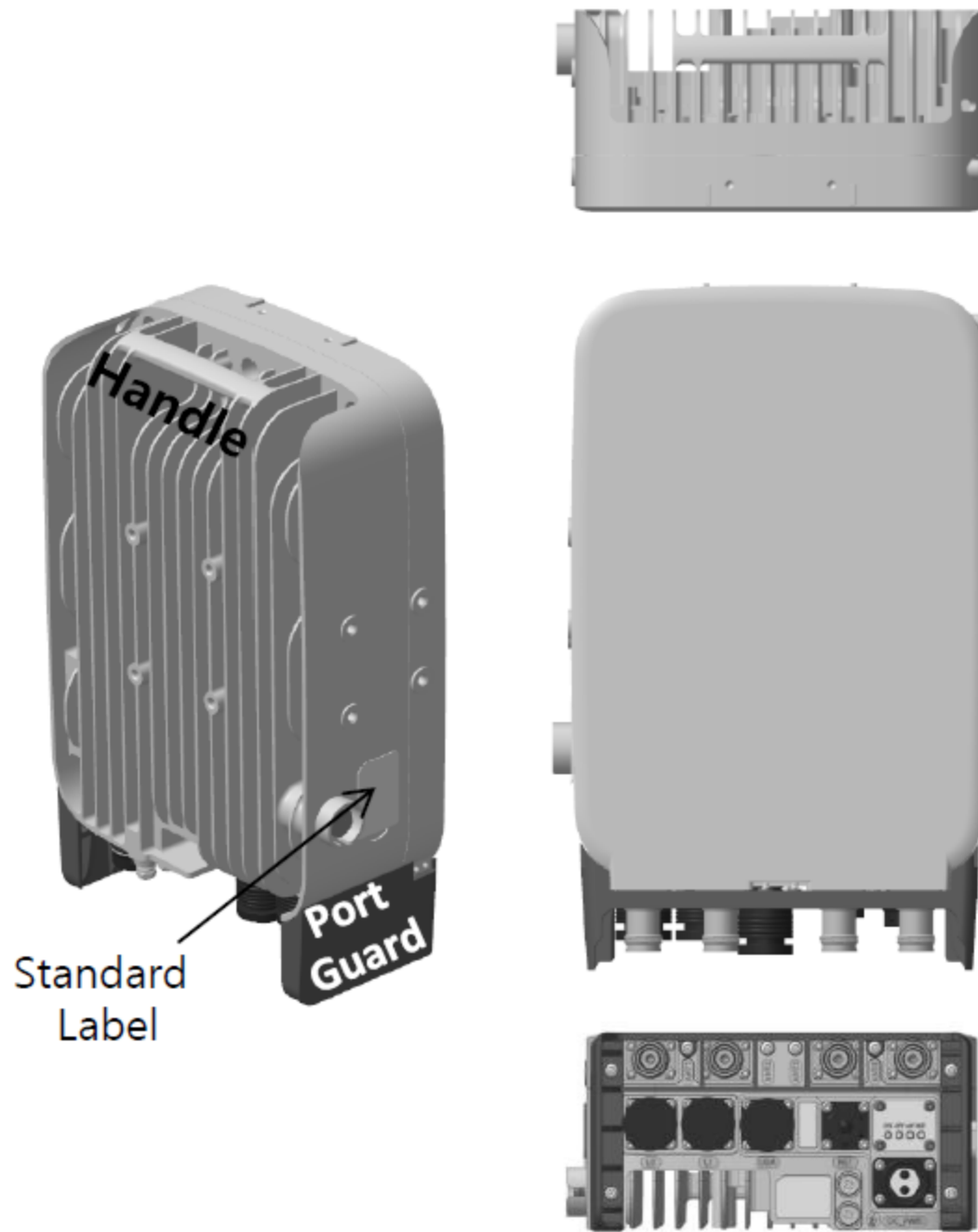


Items	Clip-on Antenna, BASTA**
Antenna Gain	12.5 ± 0.5 dBi (Max 13 dBi)
Horizontal BW (-3dB)	65° ± 5°
Vertical BW (-3dB)	17° ± 3°
Electrical Tilt	8° (fixed) ± 2°
Front-to-Back Ratio	> 25 dB
Port-to-Port Tracking	< 3 dB
VSWR	< 1.5
Isolation	> 25 dB
Ingress Protection	IP55
Size	220(W)×313(H)×34.3(D) mm (*) (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

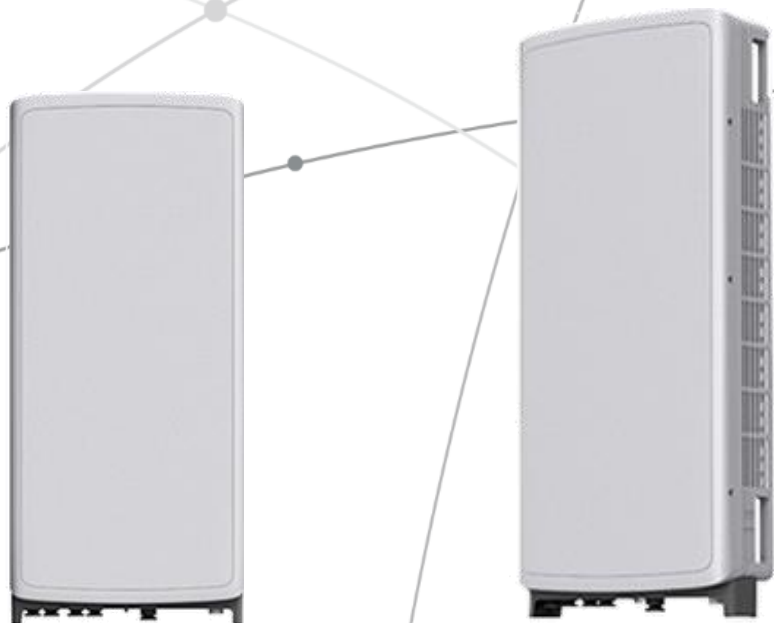
Item	Specification
Band	Band 48 (3.5 GHz)
Frequency	3550~3700 MHz
IBW	150 MHz
OBW	80 MHz
# of Carriers	5/10/15/20 MHz x 4 carriers
RF Chain	4TX / 4RX
RF Output Power & EIRP	4 path x 5 W (Total: 20 W = 43 dBm) (EIRP: 47 dBm / 10 MHz)
RX Sensitivity	Typical : -101.5 dBm @ 1 Rx (3GPP 36.104, Wide Area)
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

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



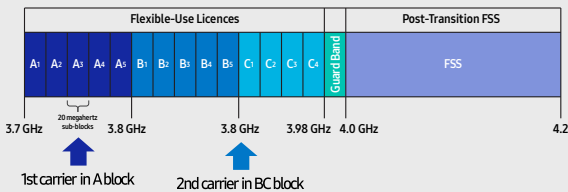
Points of Differentiation

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

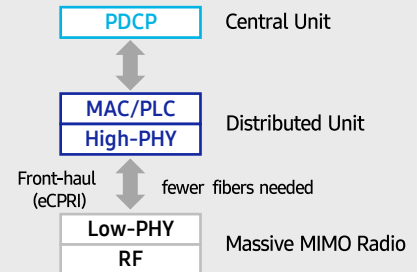
C-Band spectrum supported by Massive MIMO Radio



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.

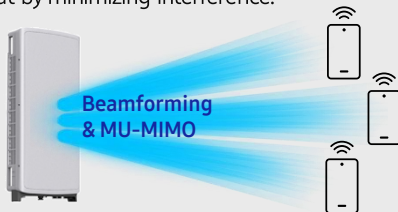


Enhanced Performance

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.

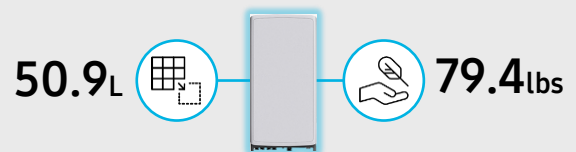
Furthermore, as C-Band massive MIMO Radio supports MU-MIMO (Multi-user MIMO), it enables to increase user throughput by minimizing interference.



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.

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

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SAMSUNG

Dual-Band Radio Unit AWS/PCS (B66/B2)

RFV01U-D1A

Samsung's RFV01U-D1A is a compact remote Radio Unit (RU) designed for deployments that require flexibility in installation and rapid onlining, without compromising on coverage, capacity or operational expenses.



The RFV01U-D1A RU targets dual-band support across Band 66 (AWS) and Band 2 (PCS), making it an ideal product for broad coverage footprints across multiple common mid-range frequencies.

The RU handles all Radio Frequency (RF) processing in a single, compact unit, and is designed to interface via CPRI with Samsung's CDU baseband offerings, in both distributed- and central-RAN configurations.

In addition to its minimal footprint and ease of installation, the RU is also designed to reduce cost of ownership through its integrated spectrum analyzer, which allows for remote RF monitoring, greatly reducing the need for on-site maintenance visits.

Features and Benefits

- Dual-band support for broad frequency coverage
- Minimal footprint reduces site costs
- Rapid, easy installation
- Flexibly deployable in any location
- Remote RF monitoring capability
- Convection cooled, silent operation
- Built-in Broadcast Auxiliary Services (BAS) filter ensures compliant AWS operation without impacting footprint

Key Technical Specifications

Duplex Type: FDD

Operating Frequencies:

B66: DL(2,110-2,180MHz)/UL(1,710-1,780MHz)

B2: DL(1,930-1,990MHz)/UL(1,850-1,910MHz)

Instantaneous Bandwidth:

70MHz(B66) + 60MHz(B2)

RF Chain: 4T4R/2T4R/2T2R

Output Power: Total 320W

DU-RU Interface: CPRI (10Gbps)

Dimensions: 380 x 380 x 255mm (36.8L)

Weight: 38.3kg

Input Power: -48V DC

Operating Temp.: -40 - 55°(w/o solar load)

Cooling: Natural convection

SAMSUNG

Dual-Band Radio Unit 700/850MHz (B13/B5) RFV01U-D2A

Samsung's RFV01U-D2A is a compact remote Radio Unit (RU) designed for deployments that require flexibility in installation and rapid onlining, without compromising on coverage, capacity or operational expenses.



The RFV01U-D2A RU targets dual-band support across Band 13 (700MHz) and Band 5 (850MHz), making it an ideal product for broad coverage footprints across multiple common low-end, long-range frequencies.

The RU handles all Radio Frequency (RF) processing in a single, compact unit, and is designed to interface via CPRI with Samsung's CDU baseband offerings, in both distributed- and central-RAN configurations.

In addition to its minimal footprint and ease of installation, the RU is also designed to reduce cost of ownership through its integrated spectrum analyzer, which allows for remote RF monitoring, greatly reducing the need for on-site maintenance visits.

Features and Benefits

- Dual-band support for broad frequency coverage
- Minimal footprint reduces site costs
- Rapid, easy installation
- Flexibly deployable in any location
- Remote RF monitoring capability
- Convection cooled, silent operation

Key Technical Specifications

Duplex Type: FDD
Operating Frequencies:
 B13: DL(746-756MHz)/UL(777-787MHz)
 B5: DL(869-894MHz)/UL(824-849MHz)
Instantaneous Bandwidth: 10MHz(B13) + 25MHz(B5)
RF Chain: 4T4R/2T4R/2T2R
Output Power: Total 320W
DU-RU Interface: CPRI (10Gbps)
Dimensions: 380 x 380 x 207mm (29.9L)
Weight: 31.9kg
Input Power: -48V DC
Operating Temp.: -40 - 55°(w/o solar load)
Cooling: Natural convection

ATTACHMENT 3

	General	Power	Density					
Site Name: New Britain 2								
Tower Height: Verizon @ 136.5ft and 140ft								
CARRIER	# OF CHAN.	WATTS ERP	HEIGHT	FREQ.	CALC. POWER DENS	MAX. PERMISS. EXP.	FRACTION MPE	Total
*Sprint	1	433	172	850	0.0057	0.5667	0.10%	
*Sprint	2	433	172	850	0.0113	0.5667	0.20%	
*Sprint	5	536	172	1900	0.035	1	0.35%	
*Sprint	2	1340	172	1900	0.035	1	0.35%	
*Sprint	8	640	172	2500	0.0668	1	0.67%	
*Clearwire	2	153	172	2496	0.004	1	0.04%	
*Clearwire	1	211	172	11 GHz	0.0028	1	0.03%	
*T-Mobile	4	1028	152	1900	0.0694	1	0.69%	
*T-Mobile	2	2057	152	1900	0.0694	1.0000	0.69%	
*T-Mobile	2	2308	152	2100	0.0779	1.0000	0.78%	
*T-Mobile	2	592	152	600	0.0200	0.4000	0.50%	
*T-Mobile	1	1578	152	600	0.0266	0.4000	0.67%	
*T-Mobile	2	649	152	700	0.0219	0.4667	0.47%	
*T-Mobile	2	2204	152	1900	0.0744	1.0000	0.74%	
*T-Mobile	2	1295	152	2100	0.0437	1.0000	0.44%	
*T-Mobile	1	19239	152	2500	0.3246	1.0000	3.25%	
*T-Mobile	1	19239	152	2500	0.3246	1.0000	3.25%	
*MetroPCS CDMA	3	727	130	2135	0.0510	1.0000	0.51%	
*MetroPCS LTE	1	1200	130	2130	0.0281	1.0000	0.28%	
*AT&T	1	499	162	850	0.0074	0.5667	0.13%	
*AT&T	1	1120	162	722	0.0166	0.4813	0.34%	
*AT&T	1	2858	162	2300	0.0422	1.0000	0.42%	
*AT&T	1	2455	162	763	0.0363	0.5087	0.71%	
*AT&T	1	4468	162	1900	0.0660	1.0000	0.66%	
*AT&T	1	2400	162	737	0.0355	0.4913	0.72%	
*AT&T	1	1120	162	850	0.0166	0.5667	0.29%	
*AT&T	1	4788	162	2100	0.0708	1.0000	0.71%	
*AT&T	1	1120	162	850	0.0166	0.5667	0.29%	
VZW 700	4	697	140	751	0.0051	0.5007	1.02%	
VZW PCS	4	1593	140	1975	0.0117	1.0000	1.17%	
VZW AWS	4	1563	140	2120	0.0115	1.0000	1.15%	
VZW CBRS	4	13	136.5	3530	0.0001	1.0000	0.01%	
VZW CBAND	4	6531	140	3730.08	0.0479	1.0000	4.79%	
								26.42%
* Source: Siting Council								

ATTACHMENT 4



Tower Engineering Solutions

Phone (972) 483-0607, Fax (972) 975-9615
1320 Greenway Drive, Suite 600, Irving, Texas 75038

Structural Analysis Report

Existing 176 ft Rohn Self Supporting Tower

Customer Name: SBA Communications Corp

Customer Site Number: CT04382-S

Customer Site Name: New Britain 2, CT

Carrier Name: Verizon (App#: 170547, V1)

Carrier Site ID / Name: 467525 / New Britain 2 CT

Site Location: 1 Hartford Square

New Britain, Connecticut

Hartford County

Latitude: 41.666411

Longitude: -72.812803

Exp.10/31/2021



Analysis Result:

Max Structural Usage: 84.7% [Pass]

Max Foundation Usage: 52.0% [Pass]

09/29/2021

Additional Usage Caused by New Mount:

Report Prepared By : Linfeng Chen

Introduction

The purpose of this report is to summarize the analysis results on the 176 ft Rohn Self Supporting Tower to support the proposed antennas and transmission lines in addition to those currently installed. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

Sources of Information

Tower Drawings	Rohn Eng. File # 44545AE, Dwg. # C000882, dated 08/21/2000
Foundation Drawing	Rohn Eng. File # 44545AE, Dwg. # A001473, dated 07/26/2000
Geotechnical Report	Jaworski Geotech Project # 00309G, dated 07/05/2000
Modification Drawings	Allpro Consulting Group Job # 17-0378 rev.1, dated 02/21/2017
Mount Analysis	Maser Consulting Connecticut Project #: 21777791A, Dated 07/07/21

Analysis Criteria

The rigorous analysis was performed in accordance with the requirements and stipulations of the TIA-

In accordance with this standard, the structure was analyzed using **TESTowers**, a proprietary analysis software. The program considers the structure as an elastic 3-D model with second-order effects and temperature effects incorporated in the analysis. The analysis was performed using multiple wind directions.

Wind Speed Used in the Analysis:	Ultimate Design Wind Speed $V_{ult} = 125.0$ mph (3-Sec. Gust)/ Nominal Design Wind Speed $V_{asd} = 97.0$ mph (3-Sec. Gust)
Wind Speed with Ice:	50 mph (3-Sec. Gust) with 1" radial ice concurrent
Operational Wind Speed:	60 mph + 0" Radial ice
Standard/Codes:	TIA-222-G-2 / 2015 IBC / 2018 Connecticut State Building Code
Exposure Category:	
Structure Class:	
Topographic Category:	
Crest Height:	0 ft
Seismic Parameters:	

This structural analysis is based upon the tower being classified as a Structure Class II; however, if a different classification is required subsequent to the date hereof, the tower classification will be changed to meet such requirement and a new structural analysis will be run.

Existing Antennas, Mounts and Transmission Lines

The table below summarizes the antennas, mounts and transmission lines that were considered in the analysis as existing on the tower.

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
			Kathrein 840 10054 Panel	(3) Sector Frames w/ (3) VBrace Kits (SitePro 3/8"x6" Pipe Masts (BBPM-K1)	(4) 1/2" Fiber (6) 5/16" Fiber	Sprint Nextel
		Andrew VHLP2.5 Dish				
		Samsung U-RAS Flexible FRH				
		Dragonwave Horizon Duo				
			Cci Antennas DMP65R-BU6DA Panel	Commscope Mount	(2) 1/2" Fiber (1) 3" Conduit [(4) existing DC & (2) existing fiber in (1) 3" conduit]	
			Cci Antennas OPA65R-BU6DA Panel			
			Quintel QS66512-2 Panel			
			Ericsson 8843 B2/B66A RRU			
			Diplexer			
			Ericsson RRUS-32			
			Ericsson 4449 B5/B12 RRU			
			Ericsson 4478 B14 RRU			
			Commscope ION23 SDARS RRU			
			Commscope CBC23SR-43 Combiners			
			Raycap DC6-48-60-18-8F			
			Raycap DC6-48-60-0-8C-EV			
			Raycap DC6-48-60-18-8C-EV			
			Ericsson AIR32 KRD901146-1_B66A_B2A (Octo)	(3) Sector Frame	(1) 1 1/4" Fiber (8) 1 5/8" Coax (5) 1 5/8" Fiber	T-Mobile
			Ericsson AIR6449 B41			
			Ericsson KRY 112 144/1			
			Commscope SDX1926Q-43			
			Ericsson 4449 B71+B85			
			Ericsson 4415 B25			
			Kathrein 800 10735v01 Panel	(3) T-Frames	Hybrid	Verizon
			Antel BXA-80080/4CF Panel			
			Andrew SBNHH-1D65B Panel			
			ALU RRH-2x60-AWS			
			ALU RRH-2x60-PCS			
			RFS DB-T1-6Z-8AB-0Z Box			
			JMA Wireless MX08FRO665-21 - Panel	(3) Sector frames Commscope	(1) 1.6" Hybrid	Dish Wireless
			Fujitsu TA08025-B605 RRU -			
			Fujitsu TA08025-B604 RRU -			
			Raycap RDIDC-9181-PF-48 - OVP			
				Pipe	(2) 1/2"	Sprint Nextel

Proposed Carrier’s Final Configuration of Antennas, Mounts and Transmission Lines

Information pertaining to the proposed carrier’s final configuration of antennas and transmission lines was provided by SBA Communications Corp. The proposed antennas and lines are listed below.

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
			Andrew SBNHH-1D65B w/ Mount Pipe - Panel	(3) SitePro1 VFA12-HD Commscope	Hybrid	Verizon
			Samsung MT6407-77A - Panel			
			Antel BXA-80080/4CF - Panel			
			Samsung B2/B66A RRH-BR049 RRU			
			Raycap RVZDC-6627-PF-48 –			
		3	Samsung XXDWMM-12.5-65-8T - Panel			
			Samsung B5/B13 RRH-BR04C RRU			

See the attached coax layout for the line placement considered in the analysis.

Analysis Results

The results of the structural analysis, performed for the wind and ice loading and antenna equipment as defined above, are summarized as the following:

Tower Component	Legs	Diagonals	Horizontals
Max. Usage:			
Pass/Fail	Pass	Pass	Pass

Foundations

	Compression (Kips)	Uplift (Kips)	Shear (Kips)
Analysis Reactions			

The foundation has been investigated using the supplied documents and soils report and was found adequate. Therefore, no modification to the foundation will be required.

Operational Condition (Rigidity):

The maximum twist and sway of the microwave dishes under the operational wind speed as specified in the Analysis Criteria are listed in the table below:

Elevation (ft)	Antenna / Dish	Carrier	Twist (deg)	Sway (deg)
	Andrew - VHLP2.5 - Dish	Sprint Nextel		

It is recommended that the carriers review the twist and sway values of the microwave dishes.

Conclusions

Based on the analysis results, the existing structure and its foundation were found to be adequate to safely support the existing and proposed equipment and meet the minimum requirements per the TIA-222 Standard under the design basic wind speed as specified in the Analysis Criteria.

Standard Conditions

This analysis was performed based on the information supplied to **Tower Engineering Solutions,** Verification of the information provided was not included in the Scope of Work for . The accuracy of the analysis is dependent on the accuracy of the information provided.

The structural analysis was performance based upon the evidence available at the time of this report. All information provided by the client is considered to be accurate.

The analyses will be performed based on the codes as specified by the client or based on the best knowledge of the engineering staff of . In the absence of information to the contrary, all work will be performed in accordance with the latest relevant revision of ANSI/TIA-222. If wind speed and/or ice loads are different from the minimum values recommended by the ANSI/TIA-222 standard or other codes, should be notified in writing and the applicable minimum values provided by the client.

The configuration of the existing mounts, antennas, coax and other appurtenances were supplied by the customer for the current structural analysis. has not visited the tower site to verify the adequacy of the information provided. If there is any discrepancy found in the report regarding the existing conditions, should be notified immediately to evaluate the effect of the discrepancy on the analysis results.

The client will assume responsibility for rework associated with the differences in initially provided information, including tower and foundation information, existing and/or proposed equipment and transmission lines.

If a feasibility analysis was performed, final acceptance of changed conditions shall be based upon a rigorous structural analysis.

Structure: CT04382-S-SBA

Site Name: New Britain 2, CT

Code: EIA/TIA-222-G

9/29/2021

Type: Self Support

Base Shape: Triangle

Basic WS: 97.00

Height: 176.00 (ft)

Base Width: 21.00

Basic Ice WS: 50.00

Base Elev: 0.00 (ft)

Top Width: 4.69

Operational WS: 60.00

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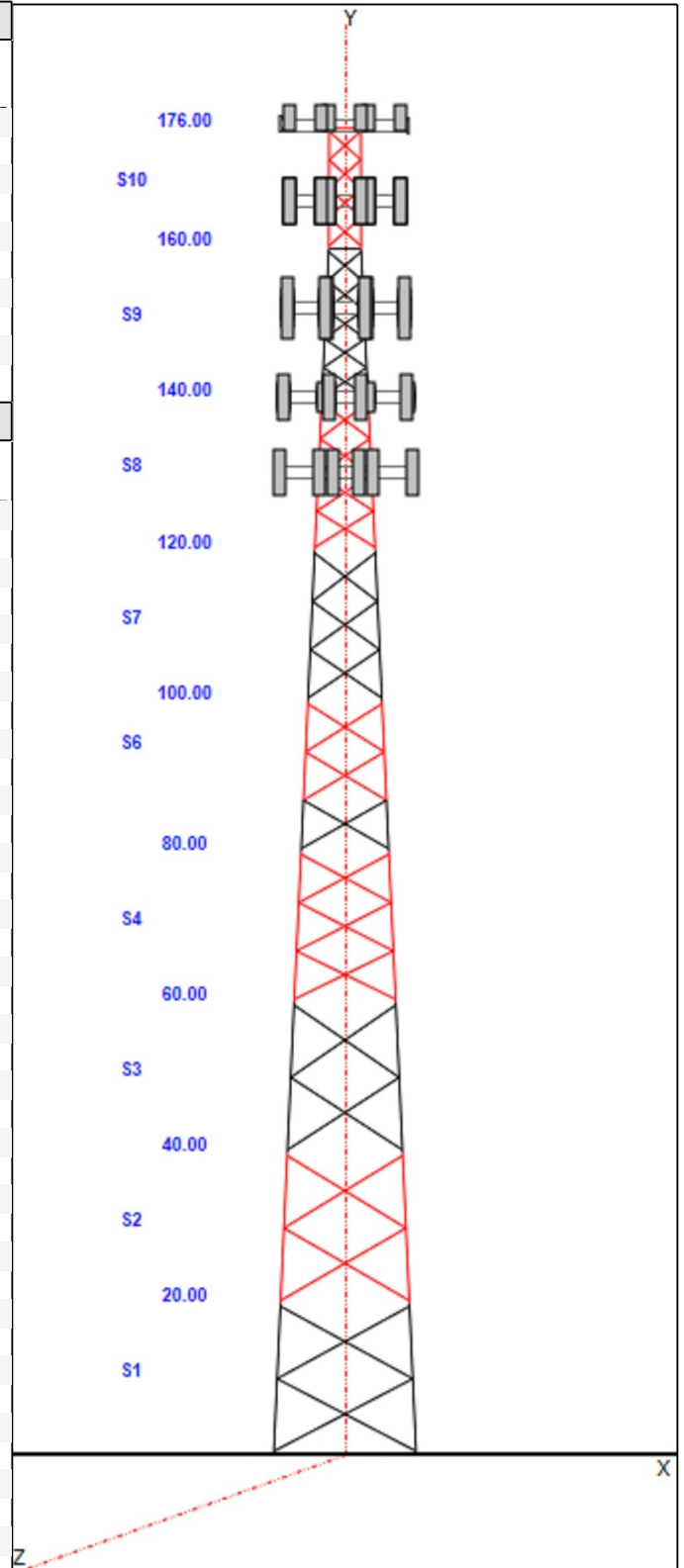


Section Properties

Sect	Leg Members	Diagonal Members	Horizontal Members
1	PX 8" DIA PIPE	SAE 4X4X0.25	
2	PX 8" DIA PIPE	SAE 3.5X3.5X0.25	
3	PSP ROHN 8 EHS	SAE 3.5X3.5X0.25	
4	PX 6" DIA PIPE	SAE 3X3X0.25	
5	PX 6" DIA PIPE	MOD 2L2.5x2.5x3/16_S	
6	PX 6" DIA PIPE	SAE 2.5X2.5X0.1875	
7	PSP ROHN 6 EHS	SAE 2.5X2.5X0.1875	
8	PX 5" DIA PIPE	SAE 2X2X0.1875	
9	PX 4" DIA PIPE	SAE 2X2X0.1875	SAE 2X2X0.1875
10	PX 3" DIA PIPE	SAE 2X2X0.25	SAE 2X2X0.25

Discrete Appurtenances

Attach Elev (ft)	Force Elev (ft)	Qty	Description
176.00	179.00	1	Lightning Rod
176.00	176.00	1	Beacon
176.00	176.00	3	Light Sector Frame
176.00	176.00	1	(3) SFS-H-L (V-Braces)
176.00	177.00	4	VHLP2.5
176.00	177.00	3	Horizon Duo
176.00	177.00	3	840 10054
176.00	177.00	3	U-RAS Flexible FRH
166.00	166.00	3	800-10121
166.00	166.00	3	QS66512-2
166.00	166.00	6	LGP21401
166.00	166.00	6	CCI TPX-070821
166.00	166.00	6	860 10025
166.00	166.00	6	RRUS 32 B2
166.00	166.00	3	RRUS 32 B66
166.00	166.00	3	RRUS 32
166.00	166.00	2	DC6-48-60-18-8F
166.00	166.00	3	DMP65R-BU6DA
166.00	166.00	3	Antennas OPA65R-BU6DA
166.00	166.00	3	4449 B5/B12
166.00	166.00	3	4478 B14
166.00	166.00	3	ION23 SDARS
166.00	166.00	3	CBC23SR-43
166.00	166.00	1	DC6-48-60-18-8C-EV
166.00	166.00	1	DC6-48-60-18-8C-EV
166.00	166.00	1	Commscope SFG22HDX
152.00	152.00	3	KRY 112 144/1
152.00	152.00	3	AIR32 KRD901146-1_B66A_B2A (Oc
152.00	152.00	3	APXVAARR24_43-U-NA20
152.00	152.00	3	AIR6449 B41
152.00	152.00	3	SDX1926Q-43
152.00	152.00	3	4449 B71 + B85
152.00	152.00	3	RRUS 4415 B25
152.00	152.00	3	Sector Frame
140.00	140.00	6	Andrew SBNHH-1D65B w/ Mount Pipe
140.00	140.00	3	Samsung MT6407-77A
140.00	140.00	3	Antel BXA-80080/4CF
140.00	140.00	3	Samsung B2/B66A RRH-BR049
140.00	140.00	3	(3) Commscope BSAMNT-SBS-2-2



Structure: CT04382-S-SBA

Site Name: New Britain 2, CT	Code: EIA/TIA-222-G	9/29/2021
Type: Self Support	Base Shape: Triangle	Basic WS: 97.00
Height: 176.00 (ft)	Base Width: 21.00	Basic Ice WS: 50.00
Base Elev: 0.00 (ft)	Top Width: 4.69	Operational WS: 60.00



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140.00	140.00	1	Raycap RVZDC-6627-PF-48
140.00	140.00	3	Samsung XXDWMM-12.5-65-8T
140.00	140.00	1	(3) SitePro1 VFA12-HD
140.00	140.00	3	Samsung B5/B13 RRH-BR04C
140.00	140.00	1	GPS
130.00	130.00	3	JMA Wireless MX08FRO665-21
130.00	130.00	1	(3) MTC3975083
130.00	130.00	3	Fujitsu TA08025-B605 RRU
130.00	130.00	3	Fujitsu TA08025-B604 RRU
130.00	130.00	1	Raycap RDIDC-9181-PF-48
82.00	82.00	1	GPS

Linear Appurtenances

Elev From (ft)	Elev To (ft)	Qty	Description
152.00	176.00	4	1/2" Fiber
152.00	176.00	6	5/16" Fiber
152.00	176.00	1	5/16" RET
152.00	176.00	1	W/G Ladder
0.00	166.00	6	1 5/8" Coax
0.00	166.00	2	1/2" Fiber
0.00	166.00	1	3" Conduit
0.00	166.00	4	3/4" DC
0.00	162.00	1	W/G Ladder
0.00	152.00	1	1 1/4" Fiber
0.00	152.00	8	1 5/8" Coax
0.00	152.00	5	1 5/8" Fiber
0.00	152.00	1	W/G Ladder
0.00	140.00	12	1 5/8" Coax
0.00	140.00	2	1 5/8" Hybrid
0.00	140.00	1	1/2" Coax
0.00	130.00	1	1.6" Hybrid
0.00	82.00	1	1/2" Coax

Base Reactions

Leg	Overturning	
Max Uplift:	-235.14 (kips)	Moment: 4698.44 (ft-kips)
Max Down:	276.97 (kips)	Total Down: 55.86 (kips)
Max Shear:	26.75 (kips)	Total Shear: 42.69 (kips)

Structure: CT04382-S-SBA

Site Name: New Britain 2, CT

Code: EIA/TIA-222-G

9/29/2021

Type: Self Support

Base Shape: Triangle

Basic WS: 97.00

Height: 176.00 (ft)

Base Width: 21.00

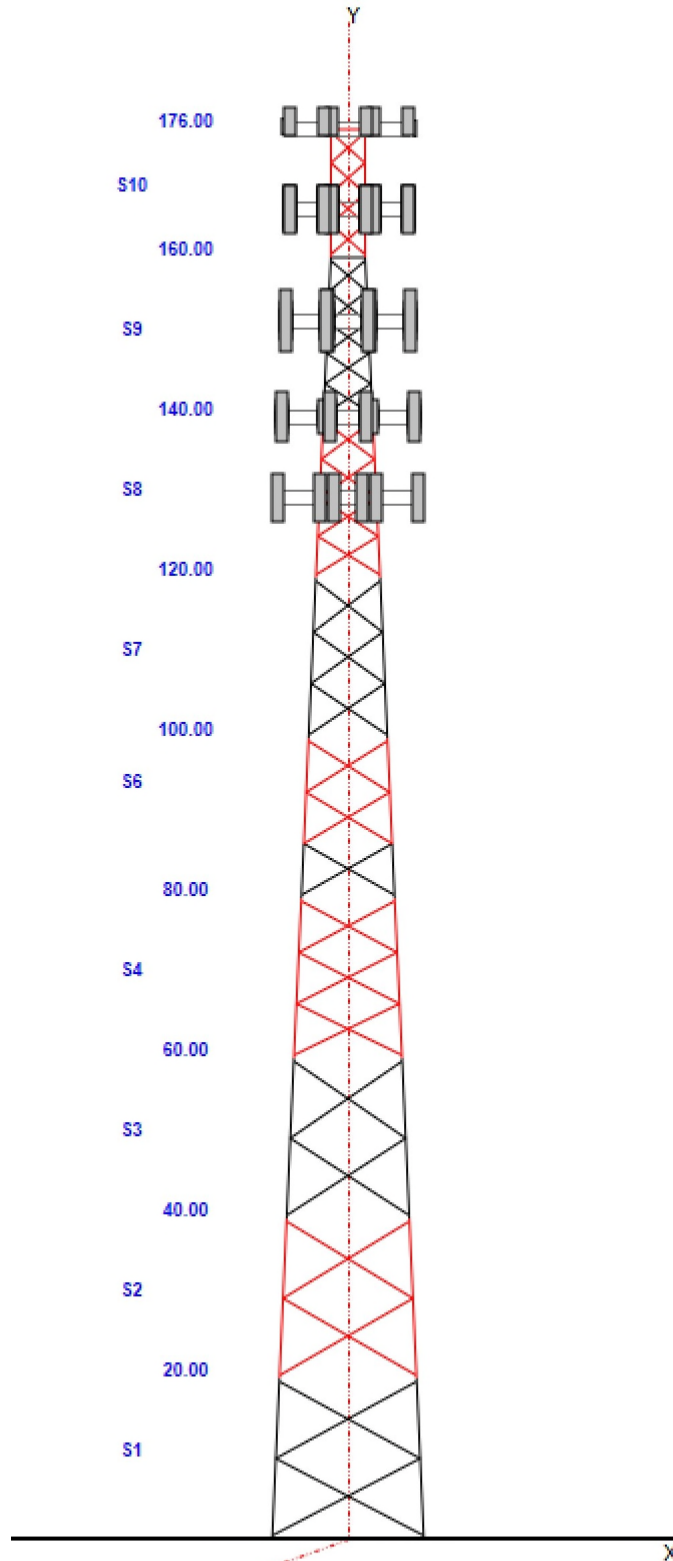
Basic Ice WS: 50.00

Base Elev: 0.00 (ft)

Top Width: 4.69

Operational WS: 60.00

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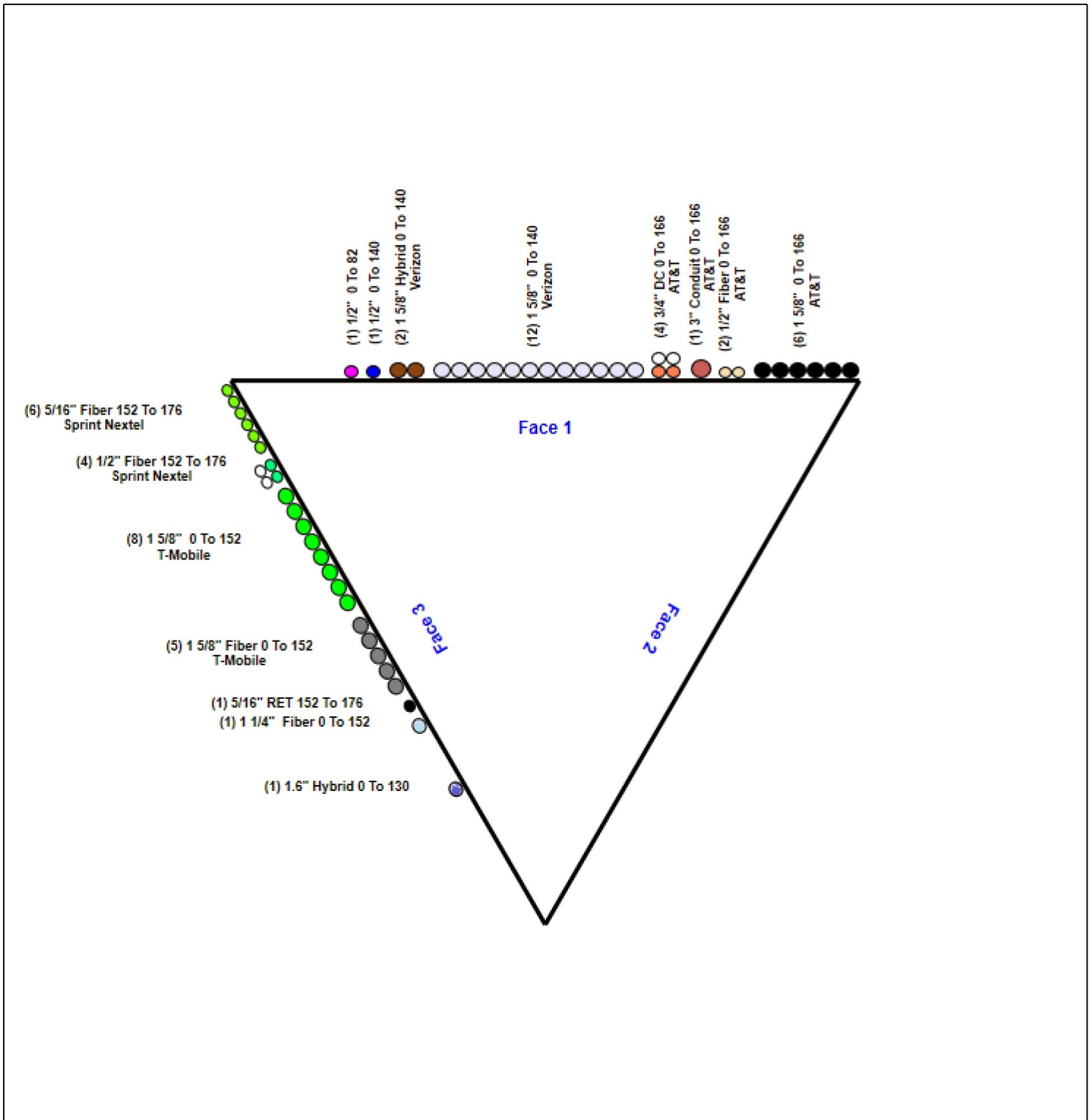
Structure: CT04382-S-SBA - Coax Line Placement

Type: Self Support
Site Name: New Britain 2, CT
Height: 176.00 (ft)

9/29/2021



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Loading Summary

Structure: CT04382-S-SBA	Code: EIA/TIA-222-G	9/29/2021
Site Name: New Britain 2, CT	Exposure: B	
Height: 176.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 0.85	Topography: 1	Struct Class: II



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Discrete Appurtenances Properties

Attach Elev (ft)	Description	Qty	No Ice		Ice		Len (in)	Width (in)	Depth (in)	Ka	Orientation Factor	Vert Ecc (ft)
			Weight (lb)	CaAa (sf)	Weight (lb)	CaAa (sf)						
176.00	Lightning Rod	1	5.00	0.500	33.24	2.853	72.000	1.000	1.000	1.00	1.00	3.000
176.00	Beacon	1	36.00	2.720	215.62	4.000	28.000	17.500	17.500	1.00	1.00	0.000
176.00	Light Sector Frame	3	500.00	17.500	1441.39	36.281	0.000	0.000	0.000	0.75	0.75	0.000
176.00	(3) SFS-H-L (V-Braces)	1	230.00	6.700	663.04	16.161	0.000	0.000	0.000	0.75	1.00	0.000
176.00	VHLP2.5	4	27.00	4.680	158.97	6.398	26.100	26.100	13.200	1.00	1.00	1.000
176.00	Horizon Duo	3	10.60	0.430	40.99	1.119	4.700	7.500	7.500	0.80	0.67	1.000
176.00	840 10054	3	30.00	4.590	143.64	6.846	42.000	12.700	2.800	0.80	0.68	1.000
176.00	U-RAS Flexible FRH	3	33.00	1.820	89.17	3.134	16.000	11.600	5.000	0.80	0.67	1.000
166.00	800-10121	3	44.10	5.150	198.99	7.991	54.500	10.300	5.900	0.80	0.79	0.000
166.00	QS66512-2	3	111.00	8.130	436.39	9.922	72.000	12.000	9.600	0.80	0.92	0.000
166.00	LGP21401	6	14.10	1.290	47.81	2.417	14.400	9.200	2.600	0.80	0.67	0.000
166.00	CCI TPX-070821	6	20.00	2.180	87.27	3.600	16.000	14.000	6.000	0.80	0.67	0.000
166.00	860 10025	6	1.20	0.180	9.29	0.691	7.600	2.400	2.000	0.80	0.67	0.000
166.00	RRUS 32 B2	6	53.00	2.740	181.79	3.750	27.200	12.100	7.000	0.80	0.67	0.000
166.00	RRUS 32 B66	3	53.00	2.740	181.79	3.750	27.200	12.100	7.000	0.80	0.67	0.000
166.00	RRUS 32	3	77.00	1.650	150.17	2.458	20.900	9.500	3.300	0.80	0.67	0.000
166.00	DC6-48-60-18-8F	2	31.80	0.920	115.17	1.511	24.000	11.000	11.000	0.80	0.67	0.000
166.00	DMP65R-BU6DA	3	79.40	12.710	476.60	14.684	71.200	20.700	7.700	0.80	0.72	0.000
166.00	Antennas OPA65R-BU6DA	3	79.40	12.710	476.60	14.684	71.200	20.700	7.700	0.80	0.72	0.000
166.00	4449 B5/B12	3	71.00	1.970	142.99	2.708	17.900	13.200	9.400	0.80	0.67	0.000
166.00	4478 B14	3	59.90	1.840	123.28	2.550	16.500	13.400	7.700	0.80	0.67	0.000
166.00	ION23 SDARS	3	15.00	3.230	160.56	4.314	32.000	12.000	7.000	0.80	0.67	0.000
166.00	CBC23SR-43	3	4.90	0.420	19.92	0.802	8.000	6.300	4.900	0.80	0.67	0.000
166.00	DC6-48-60-18-8C-EV	1	16.00	4.780	182.86	5.973	31.400	18.300	10.200	1.00	1.00	0.000
166.00	DC6-48-60-18-8C-EV	1	16.00	4.780	182.86	5.973	31.400	18.300	10.200	1.00	1.00	0.000
166.00	Commscope SFG22HDX	1	1599.0	51.900	3706.40	139.84	0.000	0.000	0.000	0.75	1.00	0.000
152.00	KRY 112 144/1	3	11.00	0.410	25.38	1.044	6.900	6.100	2.700	0.80	0.67	0.000
152.00	AIR32 KRD901146-1_B66A_B2A	3	132.20	6.510	393.25	8.098	57.000	12.900	8.700	0.80	0.87	0.000
152.00	APXVAARR24_43-U-NA20	3	128.00	20.240	709.08	22.805	95.900	24.000	7.800	0.80	0.70	0.000
152.00	AIR6449 B41	3	103.00	5.650	285.82	6.917	33.100	20.500	8.300	0.80	0.71	0.000
152.00	SDX1926Q-43	3	6.10	0.230	17.47	0.721	4.000	6.000	3.000	0.80	0.67	0.000
152.00	4449 B71 + B85	3	74.00	1.970	151.83	2.729	17.900	13.200	10.600	0.80	0.67	0.000
152.00	RRUS 4415 B25	3	46.00	1.640	100.80	2.327	15.000	13.200	5.400	0.80	0.67	0.000
152.00	Sector Frame	3	500.00	17.500	1430.78	36.069	0.000	0.000	0.000	0.75	0.75	0.000
140.00	Andrew SBNHH-1D65B w/ Mount	6	40.00	8.160	314.13	9.905	72.600	11.900	7.100	0.80	0.83	0.000
140.00	Samsung MT6407-77A	3	79.40	4.690	247.09	5.953	35.100	16.100	5.500	0.80	0.70	0.000
140.00	Antel BXA-80080/4CF	3	48.20	4.800	527.57	7.262	48.200	11.200	5.900	0.80	0.76	0.000
140.00	Samsung B2/B66A RRH-BR049	3	84.40	1.870	192.87	2.646	15.000	15.000	10.000	0.80	0.67	0.000
140.00	(3) Commscope BSAMNT-SBS-2-2	3	25.40	0.000	102.78	0.000	4.500	2.400	1.000	1.00	1.00	0.000
140.00	Raycap RVZDC-6627-PF-48	1	32.00	4.060	181.75	5.140	29.500	16.500	12.600	1.00	1.00	0.000
140.00	Samsung XXDWMM-12.5-65-8T	3	23.10	1.540	98.83	2.257	16.200	11.400	5.500	0.80	0.67	0.000
140.00	(3) SitePro1 VFA12-HD	1	2322.0	50.700	5304.79	134.43	0.000	0.000	0.000	0.75	1.00	0.000
140.00	Samsung B5/B13 RRH-BR04C	3	70.30	1.870	169.00	2.646	15.000	15.000	8.100	0.80	0.67	0.000
140.00	GPS	1	10.00	1.000	48.54	1.936	12.000	9.000	6.000	1.00	1.00	0.000
130.00	JMA Wireless MX08FRO665-21	3	64.50	12.490	446.82	14.415	72.000	20.000	8.000	0.80	0.74	0.000
130.00	(3) MTC3975083	1	1242.0	28.050	2837.45	74.377	0.000	0.000	0.000	0.75	1.00	0.000
130.00	Fujitsu TA08025-B605 RRU	3	75.00	1.960	143.75	2.697	15.800	15.000	9.100	0.80	0.67	0.000
130.00	Fujitsu TA08025-B604 RRU	3	63.90	1.960	130.45	2.697	15.800	15.000	7.900	0.80	0.67	0.000

Loading Summary

Structure: CT04382-S-SBA	Code: EIA/TIA-222-G	9/29/2021
Site Name: New Britain 2, CT	Exposure: B	
Height: 176.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 0.85	Topography: 1	Page: 6
	Struct Class: II	



130.00	Raycap RDIDC-9181-PF-48	1	21.90	2.010	91.89	2.757	16.600	14.600	8.500	1.00	1.00	0.000
82.00	GPS	1	10.00	1.000	46.86	1.895	12.000	9.000	6.000	1.00	1.00	0.000
Totals:		141	14,589.70		45,971.41					Number of Appurtenances : 50		

Loading Summary

Structure: CT04382-S-SBA	Code: EIA/TIA-222-G	9/29/2021
Site Name: New Britain 2, CT	Exposure: B	
Height: 176.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 0.85	Topography: 1	Struct Class: II



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Linear Appurtenances Properties

Elev. From (ft)	Elev. To (ft)	Description	Qty	Width (in)	Weight (lb/ft)	Pct In Block	Spread On Faces	Bundling Arrangement	Cluster Dia (in)	Out of Zone	Spacing (in)	Orientation Factor	Ka Override
152.00	176.00	1/2" Fiber	4	0.50	0.16	50.00	3	Block		N	0.50	1.00	
152.00	176.00	5/16" Fiber	6	0.32	0.95	100.00	3	Individual IR		N	0.50	1.00	
152.00	176.00	5/16" RET	1	0.32	0.08	100.00	3	Individual NR		N	1.00	1.00	
152.00	176.00	W/G Ladder	1	2.00	6.00	100.00	3	Individual NR		N	0.50	1.00	
0.00	166.00	1 5/8" Coax	6	1.98	1.04	100.00	1	Individual IR		N	0.50	1.00	
0.00	166.00	1/2" Fiber	2	0.50	0.16	100.00	1	Individual IR		N	0.50	0.00	0
0.00	166.00	3" Conduit	1	3.02	1.78	100.00	1	Individual NR		N	0.50	1.00	
0.00	166.00	3/4" DC	4	0.75	0.40	50.00	1	Block		N	0.50	0.94	0
0.00	162.00	W/G Ladder	1	0.25	6.00	100.00	1	Individual NR		N	0.50	1.00	
0.00	152.00	1 1/4" Fiber	1	1.55	0.66	100.00	3	Individual NR		N	1.00	1.00	
0.00	152.00	1 5/8" Coax	8	1.98	1.04	100.00	3	Individual IR		N	0.50	1.00	
0.00	152.00	1 5/8" Fiber	5	2.00	1.10	100.00	3	Individual IR		N	0.50	1.00	
0.00	152.00	W/G Ladder	1	0.25	6.00	100.00	3	Individual NR		N	0.50	1.00	
0.00	140.00	1 5/8" Coax	12	1.98	1.04	100.00	1	Individual IR		N	0.50	1.00	0
0.00	140.00	1 5/8" Hybrid	2	2.00	1.10	100.00	1	Individual IR		N	0.50	1.00	0
0.00	140.00	1/2" Coax	1	0.65	0.16	100.00	1	Individual NR		N	1.00	1.00	
0.00	130.00	1.6" Hybrid	1	1.55	0.66	100.00	3	Individual NR		N	1.00	1.00	
0.00	82.00	1/2" Coax	1	0.65	0.16	100.00	1	Individual NR		N	1.00	1.00	

Section Forces

Structure: CT04382-S-SBA	Code: EIA/TIA-222-G	9/29/2021
Site Name: New Britain 2, CT	Exposure: B	
Height: 176.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 0.85	Topography: 1	Struct Class: II



Load Case: 1.2D + 1.6W Normal Wind	1.2D + 1.6W 97 mph Wind at Normal To Face
Wind Load Factor: 1.60	Wind Importance Factor: 1.00
Dead Load Factor: 1.20	
Ice Dead Load Factor: 0.00	Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	Wind qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
1	10.0	14.33	28.639	28.80	0.00	0.14	2.81	1.00	1.00	0.00	41.32	125.67	0.00	6,491.8	0.0	2265.98	1087.03	3,353.01
2	30.0	14.34	22.974	28.80	0.00	0.14	2.81	1.00	1.00	0.00	35.64	125.67	0.00	6,086.8	0.0	1957.29	1087.95	3,045.23
3	50.0	16.60	20.940	28.80	0.00	0.15	2.78	1.00	1.00	0.00	33.15	125.67	0.00	5,194.7	0.0	2076.81	1258.91	3,335.72
4	70.0	18.27	22.213	22.12	0.00	0.15	2.76	1.00	1.00	0.00	32.88	125.67	0.00	4,936.5	0.0	2255.93	1385.94	3,641.87
5	83.4	19.21	0.000	17.99	0.00	0.20	2.59	1.00	1.00	0.00	9.80	42.42	0.00	1,752.5	0.0	663.12	489.93	1,153.05
6	93.4	19.84	10.586	14.61	0.00	0.16	2.74	1.00	1.00	0.00	17.51	82.27	0.00	2,769.6	0.0	1296.87	979.97	2,276.85
7	110.0	20.79	14.081	22.12	0.00	0.17	2.69	1.00	1.00	0.00	24.58	124.58	0.00	3,676.9	0.0	1868.66	1554.93	3,423.60
8	130.0	21.81	11.695	18.58	0.00	0.18	2.66	1.00	1.00	0.00	21.17	123.29	0.00	3,386.0	0.0	1669.70	1603.37	3,273.07
9	150.0	22.72	11.717	15.03	0.00	0.22	2.54	1.00	1.00	0.00	20.03	60.05	0.00	2,531.2	0.0	1573.00	1298.37	2,871.37
10	168.0	23.47	8.438	9.33	0.00	0.22	2.53	1.00	1.00	0.00	13.84	16.14	0.00	1,526.8	0.0	1115.49	401.42	1,516.91
														38,352.9	0.0			27,890.67

Load Case: 1.2D + 1.6W 60° Wind	1.2D + 1.6W 97 mph Wind at 60° From Face
Wind Load Factor: 1.60	Wind Importance Factor: 1.00
Dead Load Factor: 1.20	
Ice Dead Load Factor: 0.00	Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	Wind qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
1	10.0	14.33	28.639	28.80	0.00	0.14	2.81	0.80	1.00	0.00	35.59	125.67	0.00	6,491.8	0.0	1951.84	1087.03	3,038.87
2	30.0	14.34	22.974	28.80	0.00	0.14	2.81	0.80	1.00	0.00	31.05	125.67	0.00	6,086.8	0.0	1704.98	1087.95	2,792.92
3	50.0	16.60	20.940	28.80	0.00	0.15	2.78	0.80	1.00	0.00	28.96	125.67	0.00	5,194.7	0.0	1814.40	1258.91	3,073.31
4	70.0	18.27	22.213	22.12	0.00	0.15	2.76	0.80	1.00	0.00	28.43	125.67	0.00	4,936.5	0.0	1951.08	1385.94	3,337.02
5	83.4	19.21	0.000	17.99	0.00	0.20	2.59	0.80	1.00	0.00	9.80	42.42	0.00	1,752.5	0.0	663.12	489.93	1,153.05
6	93.4	19.84	10.586	14.61	0.00	0.16	2.74	0.80	1.00	0.00	15.39	82.27	0.00	2,769.6	0.0	1140.05	979.97	2,120.02
7	110.0	20.79	14.081	22.12	0.00	0.17	2.69	0.80	1.00	0.00	21.76	124.58	0.00	3,676.9	0.0	1654.53	1554.93	3,209.47
8	130.0	21.81	11.695	18.58	0.00	0.18	2.66	0.80	1.00	0.00	18.83	123.29	0.00	3,386.0	0.0	1485.25	1603.37	3,088.61
9	150.0	22.72	11.717	15.03	0.00	0.22	2.54	0.80	1.00	0.00	17.69	60.05	0.00	2,531.2	0.0	1389.01	1298.37	2,687.38
10	168.0	23.47	8.438	9.33	0.00	0.22	2.53	0.80	1.00	0.00	12.15	16.14	0.00	1,526.8	0.0	979.45	401.42	1,380.87
														38,352.9	0.0			25,881.52

Section Forces

Structure: CT04382-S-SBA
Site Name: New Britain 2, CT
Height: 176.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Topography: 1

Code: EIA/TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

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Load Case: 1.2D + 1.6W 90° Wind

1.2D + 1.6W 97 mph Wind at 90° From Face

Wind Load Factor: 1.60
Dead Load Factor: 1.20
Ice Dead Load Factor: 0.00

Wind Importance Factor: 1.00
Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	Wind qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
1	10.0	14.33	28.639	28.80	0.00	0.14	2.81	0.85	1.00	0.00	37.02	125.67	0.00	6,491.8	0.0	2030.37	1087.03	3,117.40
2	30.0	14.34	22.974	28.80	0.00	0.14	2.81	0.85	1.00	0.00	32.20	125.67	0.00	6,086.8	0.0	1768.05	1087.95	2,856.00
3	50.0	16.60	20.940	28.80	0.00	0.15	2.78	0.85	1.00	0.00	30.00	125.67	0.00	5,194.7	0.0	1880.01	1258.91	3,138.91
4	70.0	18.27	22.213	22.12	0.00	0.15	2.76	0.85	1.00	0.00	29.55	125.67	0.00	4,936.5	0.0	2027.29	1385.94	3,413.23
5	83.4	19.21	0.000	17.99	0.00	0.20	2.59	0.85	1.00	0.00	9.80	42.42	0.00	1,752.5	0.0	663.12	489.93	1,153.05
6	93.4	19.84	10.586	14.61	0.00	0.16	2.74	0.85	1.00	0.00	15.92	82.27	0.00	2,769.6	0.0	1179.25	979.97	2,159.23
7	110.0	20.79	14.081	22.12	0.00	0.17	2.69	0.85	1.00	0.00	22.46	124.58	0.00	3,676.9	0.0	1708.07	1554.93	3,263.00
8	130.0	21.81	11.695	18.58	0.00	0.18	2.66	0.85	1.00	0.00	19.42	123.29	0.00	3,386.0	0.0	1531.36	1603.37	3,134.73
9	150.0	22.72	11.717	15.03	0.00	0.22	2.54	0.85	1.00	0.00	18.28	60.05	0.00	2,531.2	0.0	1435.01	1298.37	2,733.38
10	168.0	23.47	8.438	9.33	0.00	0.22	2.53	0.85	1.00	0.00	12.57	16.14	0.00	1,526.8	0.0	1013.46	401.42	1,414.88
														38,352.9	0.0			26,383.81

Load Case: 0.9D + 1.6W Normal Wind

0.9D + 1.6W 97 mph Wind at Normal To Face

Wind Load Factor: 1.60
Dead Load Factor: 0.90
Ice Dead Load Factor: 0.00

Wind Importance Factor: 1.00
Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	Wind qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
1	10.0	14.33	28.639	28.80	0.00	0.14	2.81	1.00	1.00	0.00	41.32	125.67	0.00	4,868.9	0.0	2265.98	1087.03	3,353.01
2	30.0	14.34	22.974	28.80	0.00	0.14	2.81	1.00	1.00	0.00	35.64	125.67	0.00	4,565.1	0.0	1957.29	1087.95	3,045.23
3	50.0	16.60	20.940	28.80	0.00	0.15	2.78	1.00	1.00	0.00	33.15	125.67	0.00	3,896.0	0.0	2076.81	1258.91	3,335.72
4	70.0	18.27	22.213	22.12	0.00	0.15	2.76	1.00	1.00	0.00	32.88	125.67	0.00	3,702.3	0.0	2255.93	1385.94	3,641.87
5	83.4	19.21	0.000	17.99	0.00	0.20	2.59	1.00	1.00	0.00	9.80	42.42	0.00	1,314.4	0.0	663.12	489.93	1,153.05
6	93.4	19.84	10.586	14.61	0.00	0.16	2.74	1.00	1.00	0.00	17.51	82.27	0.00	2,077.2	0.0	1296.87	979.97	2,276.85
7	110.0	20.79	14.081	22.12	0.00	0.17	2.69	1.00	1.00	0.00	24.58	124.58	0.00	2,757.7	0.0	1868.66	1554.93	3,423.60
8	130.0	21.81	11.695	18.58	0.00	0.18	2.66	1.00	1.00	0.00	21.17	123.29	0.00	2,539.5	0.0	1669.70	1603.37	3,273.07
9	150.0	22.72	11.717	15.03	0.00	0.22	2.54	1.00	1.00	0.00	20.03	60.05	0.00	1,898.4	0.0	1573.00	1298.37	2,871.37
10	168.0	23.47	8.438	9.33	0.00	0.22	2.53	1.00	1.00	0.00	13.84	16.14	0.00	1,145.1	0.0	1115.49	401.42	1,516.91
														28,764.7	0.0			27,890.67

Section Forces

Structure: CT04382-S-SBA	Code: EIA/TIA-222-G	9/29/2021
Site Name: New Britain 2, CT	Exposure: B	
Height: 176.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 0.85	Topography: 1	Struct Class: II
		Page: 10



Load Case: 0.9D + 1.6W 60° Wind	0.9D + 1.6W 97 mph Wind at 60° From Face
Wind Load Factor: 1.60	Wind Importance Factor: 1.00
Dead Load Factor: 0.90	
Ice Dead Load Factor: 0.00	Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	Wind qz (psf)	Total		Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Flat Area (sqft)	Round Area (sqft)								Linear Area (sqft)	Linear Area (sqft)					
1	10.0	14.33	28.639	28.80	0.00	0.14	2.81	0.80	1.00	0.00	35.59	125.67	0.00	4,868.9	0.0	1951.84	1087.03	3,038.87
2	30.0	14.34	22.974	28.80	0.00	0.14	2.81	0.80	1.00	0.00	31.05	125.67	0.00	4,565.1	0.0	1704.98	1087.95	2,792.92
3	50.0	16.60	20.940	28.80	0.00	0.15	2.78	0.80	1.00	0.00	28.96	125.67	0.00	3,896.0	0.0	1814.40	1258.91	3,073.31
4	70.0	18.27	22.213	22.12	0.00	0.15	2.76	0.80	1.00	0.00	28.43	125.67	0.00	3,702.3	0.0	1951.08	1385.94	3,337.02
5	83.4	19.21	0.000	17.99	0.00	0.20	2.59	0.80	1.00	0.00	9.80	42.42	0.00	1,314.4	0.0	663.12	489.93	1,153.05
6	93.4	19.84	10.586	14.61	0.00	0.16	2.74	0.80	1.00	0.00	15.39	82.27	0.00	2,077.2	0.0	1140.05	979.97	2,120.02
7	110.0	20.79	14.081	22.12	0.00	0.17	2.69	0.80	1.00	0.00	21.76	124.58	0.00	2,757.7	0.0	1654.53	1554.93	3,209.47
8	130.0	21.81	11.695	18.58	0.00	0.18	2.66	0.80	1.00	0.00	18.83	123.29	0.00	2,539.5	0.0	1485.25	1603.37	3,088.61
9	150.0	22.72	11.717	15.03	0.00	0.22	2.54	0.80	1.00	0.00	17.69	60.05	0.00	1,898.4	0.0	1389.01	1298.37	2,687.38
10	168.0	23.47	8.438	9.33	0.00	0.22	2.53	0.80	1.00	0.00	12.15	16.14	0.00	1,145.1	0.0	979.45	401.42	1,380.87
														28,764.7	0.0			25,881.52

Load Case: 0.9D + 1.6W 90° Wind	0.9D + 1.6W 97 mph Wind at 90° From Face
Wind Load Factor: 1.60	Wind Importance Factor: 1.00
Dead Load Factor: 0.90	
Ice Dead Load Factor: 0.00	Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	Wind qz (psf)	Total		Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Flat Area (sqft)	Round Area (sqft)								Linear Area (sqft)	Linear Area (sqft)					
1	10.0	14.33	28.639	28.80	0.00	0.14	2.81	0.85	1.00	0.00	37.02	125.67	0.00	4,868.9	0.0	2030.37	1087.03	3,117.40
2	30.0	14.34	22.974	28.80	0.00	0.14	2.81	0.85	1.00	0.00	32.20	125.67	0.00	4,565.1	0.0	1768.05	1087.95	2,856.00
3	50.0	16.60	20.940	28.80	0.00	0.15	2.78	0.85	1.00	0.00	30.00	125.67	0.00	3,896.0	0.0	1880.01	1258.91	3,138.91
4	70.0	18.27	22.213	22.12	0.00	0.15	2.76	0.85	1.00	0.00	29.55	125.67	0.00	3,702.3	0.0	2027.29	1385.94	3,413.23
5	83.4	19.21	0.000	17.99	0.00	0.20	2.59	0.85	1.00	0.00	9.80	42.42	0.00	1,314.4	0.0	663.12	489.93	1,153.05
6	93.4	19.84	10.586	14.61	0.00	0.16	2.74	0.85	1.00	0.00	15.92	82.27	0.00	2,077.2	0.0	1179.25	979.97	2,159.23
7	110.0	20.79	14.081	22.12	0.00	0.17	2.69	0.85	1.00	0.00	22.46	124.58	0.00	2,757.7	0.0	1708.07	1554.93	3,263.00
8	130.0	21.81	11.695	18.58	0.00	0.18	2.66	0.85	1.00	0.00	19.42	123.29	0.00	2,539.5	0.0	1531.36	1603.37	3,134.73
9	150.0	22.72	11.717	15.03	0.00	0.22	2.54	0.85	1.00	0.00	18.28	60.05	0.00	1,898.4	0.0	1435.01	1298.37	2,733.38
10	168.0	23.47	8.438	9.33	0.00	0.22	2.53	0.85	1.00	0.00	12.57	16.14	0.00	1,145.1	0.0	1013.46	401.42	1,414.88
														28,764.7	0.0			26,383.81

Section Forces

Structure: CT04382-S-SBA
Site Name: New Britain 2, CT
Height: 176.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Topography: 1

Code: EIA/TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

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Load Case: 1.2D + 1.0Di + 1.0Wi Normal Wind

1.2D + 1.0Di + 1.0Wi 50 mph Wind at Normal From Face

Wind Load Factor: 1.00	Wind Importance Factor: 1.00
Dead Load Factor: 1.20	
Ice Dead Load Factor: 1.00	Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total Area (sqft)		Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice Area (sqft)		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Flat Area (sqft)	Round Area (sqft)								Linear Area (sqft)	Linear Area (sqft)					
1	10.0	3.81	28.639	66.92	38.12	0.23	2.51	1.00	1.00	1.77	67.44	196.33	29.58	16,076.	9584.3	547.27	452.50	999.78
2	30.0	3.81	22.974	68.98	40.18	0.24	2.46	1.00	1.00	1.98	63.19	201.83	33.02	16,298.	10211.6	504.26	472.17	976.43
3	50.0	4.41	20.940	68.67	39.87	0.26	2.40	1.00	1.00	2.08	61.33	204.60	34.75	15,751.	10556.5	551.76	554.44	1,106.20
4	70.0	4.86	22.213	69.64	47.52	0.31	2.27	1.00	1.00	2.16	64.12	206.50	35.94	15,962.	11026.3	601.34	608.70	1,210.04
5	83.4	5.10	0.000	33.28	15.29	0.36	2.14	1.00	1.00	2.19	20.93	70.21	10.67	5,780.1	4027.6	194.52	207.70	402.22
6	93.4	5.27	10.586	44.01	29.40	0.33	2.22	1.00	1.00	2.22	37.39	136.77	19.54	9,607.1	6837.5	371.55	418.33	789.88
7	110.0	5.52	14.081	63.84	41.72	0.36	2.15	1.00	1.00	2.26	53.64	208.07	30.08	13,887.	10210.2	541.57	661.89	1,203.46
8	130.0	5.79	11.695	62.14	43.57	0.42	2.02	1.00	1.00	2.29	51.88	207.80	26.76	13,247.	9861.7	516.06	645.29	1,161.35
9	150.0	6.04	11.717	59.43	44.41	0.54	1.85	1.00	1.00	2.33	53.84	117.92	15.51	9,787.0	7255.8	511.33	436.57	947.91
10	168.0	6.23	8.438	42.77	33.44	0.59	1.81	1.00	1.00	2.35	40.03	45.05	8.63	5,543.8	4017.0	383.85	167.24	551.09
														121,941.4	83588.5			9,348.35

Load Case: 1.2D + 1.0Di + 1.0Wi 60° Wind

1.2D + 1.0Di + 1.0Wi 50 mph Wind at 60° From Face

Wind Load Factor: 1.00	Wind Importance Factor: 1.00
Dead Load Factor: 1.20	
Ice Dead Load Factor: 1.00	Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total Area (sqft)		Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice Area (sqft)		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Flat Area (sqft)	Round Area (sqft)								Linear Area (sqft)	Linear Area (sqft)					
1	10.0	3.81	28.639	66.92	38.12	0.23	2.51	0.80	1.00	1.77	61.71	196.33	29.58	16,076.	9584.3	500.79	452.50	953.29
2	30.0	3.81	22.974	68.98	40.18	0.24	2.46	0.80	1.00	1.98	58.59	201.83	33.02	16,298.	10211.6	467.60	472.17	939.76
3	50.0	4.41	20.940	68.67	39.87	0.26	2.40	0.80	1.00	2.08	57.14	204.60	34.75	15,751.	10556.5	514.09	554.44	1,068.53
4	70.0	4.86	22.213	69.64	47.52	0.31	2.27	0.80	1.00	2.16	59.68	206.50	35.94	15,962.	11026.3	559.67	608.70	1,168.38
5	83.4	5.10	0.000	33.28	15.29	0.36	2.14	0.80	1.00	2.19	20.93	70.21	10.67	5,780.1	4027.6	194.52	207.70	402.22
6	93.4	5.27	10.586	44.01	29.40	0.33	2.22	0.80	1.00	2.22	35.27	136.77	19.54	9,607.1	6837.5	350.51	418.33	768.84
7	110.0	5.52	14.081	63.84	41.72	0.36	2.15	0.80	1.00	2.26	50.82	208.07	30.08	13,887.	10210.2	513.14	661.89	1,175.03
8	130.0	5.79	11.695	62.14	43.57	0.42	2.02	0.80	1.00	2.29	49.54	207.80	26.76	13,247.	9861.7	492.79	645.29	1,138.08
9	150.0	6.04	11.717	59.43	44.41	0.54	1.85	0.80	1.00	2.33	51.50	117.92	15.51	9,787.0	7255.8	489.07	436.57	925.65
10	168.0	6.23	8.438	42.77	33.44	0.59	1.81	0.80	1.00	2.35	38.34	45.05	8.63	5,543.8	4017.0	367.67	167.24	534.90
														121,941.4	83588.5			9,074.68

Section Forces

Structure: CT04382-S-SBA	Code: EIA/TIA-222-G	9/29/2021
Site Name: New Britain 2, CT	Exposure: B	
Height: 176.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 0.85	Topography: 1	Struct Class: II
		Page: 12



Load Case: 1.2D + 1.0Di + 1.0Wi 90° Wind	1.2D + 1.0Di + 1.0Wi 50 mph Wind at 90° From Face
Wind Load Factor: 1.00	Wind Importance Factor: 1.00
Dead Load Factor: 1.20	
Ice Dead Load Factor: 1.00	Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total Area (sqft)		Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice Area (sqft)		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Flat Area (sqft)	Round Area (sqft)								Linear Area (sqft)	Linear Area (sqft)					
1	10.0	3.81	28.639	66.92	38.12	0.23	2.51	0.85	1.00	1.77	63.14	196.33	29.58	16,076.	9584.3	512.41	452.50	964.91
2	30.0	3.81	22.974	68.98	40.18	0.24	2.46	0.85	1.00	1.98	59.74	201.83	33.02	16,298.	10211.6	476.76	472.17	948.93
3	50.0	4.41	20.940	68.67	39.87	0.26	2.40	0.85	1.00	2.08	58.19	204.60	34.75	15,751.	10556.5	523.51	554.44	1,077.95
4	70.0	4.86	22.213	69.64	47.52	0.31	2.27	0.85	1.00	2.16	60.79	206.50	35.94	15,962.	11026.3	570.09	608.70	1,178.79
5	83.4	5.10	0.000	33.28	15.29	0.36	2.14	0.85	1.00	2.19	20.93	70.21	10.67	5,780.1	4027.6	194.52	207.70	402.22
6	93.4	5.27	10.586	44.01	29.40	0.33	2.22	0.85	1.00	2.22	35.80	136.77	19.54	9,607.1	6837.5	355.77	418.33	774.10
7	110.0	5.52	14.081	63.84	41.72	0.36	2.15	0.85	1.00	2.26	51.52	208.07	30.08	13,887.	10210.2	520.25	661.89	1,182.14
8	130.0	5.79	11.695	62.14	43.57	0.42	2.02	0.85	1.00	2.29	50.12	207.80	26.76	13,247.	9861.7	498.61	645.29	1,143.90
9	150.0	6.04	11.717	59.43	44.41	0.54	1.85	0.85	1.00	2.33	52.08	117.92	15.51	9,787.0	7255.8	494.64	436.57	931.21
10	168.0	6.23	8.438	42.77	33.44	0.59	1.81	0.85	1.00	2.35	38.77	45.05	8.63	5,543.8	4017.0	371.71	167.24	538.95
														121,941.4	83588.5			9,143.10

Load Case: 1.0D + 1.0W Normal Wind	1.0D + 1.0W 60 mph Wind at Normal To Face
Wind Load Factor: 1.00	Wind Importance Factor: 1.00
Dead Load Factor: 1.00	
Ice Dead Load Factor: 0.00	Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total Area (sqft)		Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice Area (sqft)		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Flat Area (sqft)	Round Area (sqft)								Linear Area (sqft)	Linear Area (sqft)					
1	10.0	5.48	28.639	28.80	0.00	0.14	2.81	1.00	1.00	0.00	44.39	125.67	0.00	5,409.8	0.0	582.18	259.94	842.12
2	30.0	5.49	22.974	28.80	0.00	0.14	2.81	1.00	1.00	0.00	38.72	125.67	0.00	5,072.4	0.0	508.45	260.16	768.62
3	50.0	6.35	20.940	28.80	0.00	0.15	2.78	1.00	1.00	0.00	36.36	125.67	0.00	4,328.9	0.0	544.84	301.05	845.89
4	70.0	6.99	22.213	22.12	0.00	0.15	2.76	1.00	1.00	0.00	34.78	125.67	0.00	4,113.7	0.0	570.61	331.42	902.04
5	83.4	7.35	0.000	17.99	0.00	0.20	2.59	1.00	1.00	0.00	10.58	42.42	0.00	1,460.5	0.0	171.24	117.16	288.40
6	93.4	7.59	10.586	14.61	0.00	0.16	2.74	1.00	1.00	0.00	18.85	82.27	0.00	2,308.0	0.0	333.85	234.34	568.19
7	110.0	7.96	14.081	22.12	0.00	0.17	2.69	1.00	1.00	0.00	26.56	124.58	0.00	3,064.1	0.0	482.97	371.84	854.81
8	130.0	8.34	11.695	18.58	0.00	0.18	2.66	1.00	1.00	0.00	22.31	123.29	0.00	2,821.6	0.0	420.75	383.42	804.17
9	150.0	8.69	11.717	15.03	0.00	0.22	2.54	1.00	1.00	0.00	20.40	60.05	0.00	2,109.3	0.0	382.96	310.48	693.44
10	168.0	8.98	8.438	9.33	0.00	0.22	2.53	1.00	1.00	0.00	13.84	16.14	0.00	1,272.4	0.0	266.75	95.99	362.74
														31,960.7	0.0			6,930.42

Section Forces

Structure: CT04382-S-SBA
Site Name: New Britain 2, CT
Height: 176.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Topography: 1

Code: EIA/TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

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Load Case: 1.0D + 1.0W 60° Wind

1.0D + 1.0W 60 mph Wind at 60° From Face

Wind Load Factor: 1.00
Dead Load Factor: 1.00
Ice Dead Load Factor: 0.00

Wind Importance Factor: 1.00
Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total Area (sqft)		Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice Area (sqft)		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Flat Area (sqft)	Round Area (sqft)								Linear Area (sqft)	Linear Area (sqft)					
1	10.0	5.48	28.639	28.80	0.00	0.14	2.81	0.80	1.00	0.00	38.66	125.67	0.00	5,409.8	0.0	507.05	259.94	767.00
2	30.0	5.49	22.974	28.80	0.00	0.14	2.81	0.80	1.00	0.00	34.13	125.67	0.00	5,072.4	0.0	448.12	260.16	708.28
3	50.0	6.35	20.940	28.80	0.00	0.15	2.78	0.80	1.00	0.00	32.17	125.67	0.00	4,328.9	0.0	482.09	301.05	783.14
4	70.0	6.99	22.213	22.12	0.00	0.15	2.76	0.80	1.00	0.00	30.33	125.67	0.00	4,113.7	0.0	497.72	331.42	829.14
5	83.4	7.35	0.000	17.99	0.00	0.20	2.59	0.80	1.00	0.00	10.58	42.42	0.00	1,460.5	0.0	171.24	117.16	288.40
6	93.4	7.59	10.586	14.61	0.00	0.16	2.74	0.80	1.00	0.00	16.73	82.27	0.00	2,308.0	0.0	296.35	234.34	530.69
7	110.0	7.96	14.081	22.12	0.00	0.17	2.69	0.80	1.00	0.00	23.75	124.58	0.00	3,064.1	0.0	431.76	371.84	803.60
8	130.0	8.34	11.695	18.58	0.00	0.18	2.66	0.80	1.00	0.00	19.97	123.29	0.00	2,821.6	0.0	376.64	383.42	760.06
9	150.0	8.69	11.717	15.03	0.00	0.22	2.54	0.80	1.00	0.00	18.05	60.05	0.00	2,109.3	0.0	338.96	310.48	649.44
10	168.0	8.98	8.438	9.33	0.00	0.22	2.53	0.80	1.00	0.00	12.15	16.14	0.00	1,272.4	0.0	234.22	95.99	330.21
														31,960.7	0.0			6,449.96

Load Case: 1.0D + 1.0W 90° Wind

1.0D + 1.0W 60 mph Wind at 90° From Face

Wind Load Factor: 1.00
Dead Load Factor: 1.00
Ice Dead Load Factor: 0.00

Wind Importance Factor: 1.00
Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total Area (sqft)		Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice Area (sqft)		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Flat Area (sqft)	Round Area (sqft)								Linear Area (sqft)	Linear Area (sqft)					
1	10.0	5.48	28.639	28.80	0.00	0.14	2.81	0.85	1.00	0.00	40.09	125.67	0.00	5,409.8	0.0	525.83	259.94	785.78
2	30.0	5.49	22.974	28.80	0.00	0.14	2.81	0.85	1.00	0.00	35.27	125.67	0.00	5,072.4	0.0	463.20	260.16	723.37
3	50.0	6.35	20.940	28.80	0.00	0.15	2.78	0.85	1.00	0.00	33.22	125.67	0.00	4,328.9	0.0	497.78	301.05	798.83
4	70.0	6.99	22.213	22.12	0.00	0.15	2.76	0.85	1.00	0.00	31.44	125.67	0.00	4,113.7	0.0	515.94	331.42	847.36
5	83.4	7.35	0.000	17.99	0.00	0.20	2.59	0.85	1.00	0.00	10.58	42.42	0.00	1,460.5	0.0	171.24	117.16	288.40
6	93.4	7.59	10.586	14.61	0.00	0.16	2.74	0.85	1.00	0.00	17.26	82.27	0.00	2,308.0	0.0	305.72	234.34	540.07
7	110.0	7.96	14.081	22.12	0.00	0.17	2.69	0.85	1.00	0.00	24.45	124.58	0.00	3,064.1	0.0	444.57	371.84	816.40
8	130.0	8.34	11.695	18.58	0.00	0.18	2.66	0.85	1.00	0.00	20.56	123.29	0.00	2,821.6	0.0	387.67	383.42	771.09
9	150.0	8.69	11.717	15.03	0.00	0.22	2.54	0.85	1.00	0.00	18.64	60.05	0.00	2,109.3	0.0	349.96	310.48	660.44
10	168.0	8.98	8.438	9.33	0.00	0.22	2.53	0.85	1.00	0.00	12.57	16.14	0.00	1,272.4	0.0	242.35	95.99	338.34
														31,960.7	0.0			6,570.08

Force/Stress Compression Summary

Structure: CT04382-S-SBA	Code: EIA/TIA-222-G	9/29/2021
Site Name: New Britain 2, CT	Exposure: B	
Height: 176.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 0.85	Topography: 1	Struct Class: II



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LEG MEMBERS

Sect	Top Elev	Member	Force (kips)		Load Case	Len (ft)	Bracing %			Fy (ksi)	Mem Cap (kips)	Leg Use %	Controls
							X	Y	Z				
1	20	PX - 8" DIA PIPE	-271.01	1.2D + 1.6W	Normal Wind	9.64	100	100	100	40.20	510.21	53.1	Member X
2	40	PX - 8" DIA PIPE	-246.68	1.2D + 1.6W	Normal Wind	9.64	100	100	100	40.20	510.21	48.3	Member X
3	60	PSP - ROHN 8 EHS	-220.25	1.2D + 1.6W	Normal Wind	9.64	100	100	100	39.62	389.96	56.5	Member X
4	80	PX - 6" DIA PIPE	-194.76	1.2D + 1.6W	Normal Wind	6.43	100	100	100	35.22	345.22	56.4	Member X
5	86.79	PX - 5" DIA PIPE	-165.67	1.2D + 1.6W	Normal Wind	6.43	100	100	100	35.22	345.22	48.0	Member X
6	100	PX - 6" DIA PIPE	-155.80	1.2D + 1.6W	Normal Wind	6.43	100	100	100	35.22	345.23	45.1	Member X
7	120	PSP - ROHN 6 EHS	-133.00	1.2D + 1.6W	Normal Wind	6.43	100	100	100	34.66	276.68	48.1	Member X
8	140	PX - 5" DIA PIPE	-97.59	1.2D + 1.6W	Normal Wind	4.82	100	100	100	31.44	255.78	38.2	Member X
9	160	PX - 4" DIA PIPE	-59.18	1.2D + 1.6W	Normal Wind	0.38	100	100	100	3.05	198.32	29.8	Member X
10	176	PX - 3" DIA PIPE	-20.14	1.2D + 1.6W	Normal Wind	0.38	100	100	100	3.95	135.75	14.8	Member X

Splices

Sect	Top Elev	Load Case	Top Splice				Load Case	Bottom Splice				
			Force (kips)	Cap (kips)	Use %	Bolt Type		Num Bolts	Force (kips)	Cap (kips)	Use %	Bolt Type
1	20	1.2D + 1.6W Normal Wind	254.19	0.00	0.0		1.2D + 1.6W Normal Wind	277.60	0.00			
2	40	1.2D + 1.6W Normal Wind	228.06	0.00	0.0		1.2D + 1.6W Normal Wind	254.19	0.00		1 A325	8
3	60	1.2D + 1.6W Normal Wind	200.30	0.00	0.0		1.2D + 1.6W Normal Wind	228.06	0.00		1 A325	8
4	80	1.2D + 1.6W Normal Wind	171.98	0.00	0.0		1.2D + 1.6W Normal Wind	200.30	0.00		1 A325	8
5	86.79	1.2D + 1.6W Normal Wind	160.29	0.00	0.0		1.2D + 1.6W Normal Wind	171.98	0.00		1 A325	6
6	100	1.2D + 1.6W Normal Wind	139.72	0.00	0.0		1.2D + 1.6W Normal Wind	160.29	0.00		1 A325	6
7	120	1.2D + 1.6W Normal Wind	103.29	0.00	0.0		1.2D + 1.6W Normal Wind	139.72	0.00		1 A325	6
8	140	1.2D + 1.6W Normal Wind	60.86	0.00	0.0		1.2D + 1.6W Normal Wind	103.29	0.00		1 A325	6
9	160	1.2D + 1.6W Normal Wind	20.49	0.00	0.0		1.2D + 1.6W Normal Wind	60.86	0.00		1 A325	4
10	176	1.2D + 1.0Di + 1.0Wi Normal Wi	2.46	0.00	0.0		1.2D + 1.6W Normal Wind	20.49	0.00		7/8 A325	4

HORIZONTAL MEMBERS

Sect	Top Elev	Member	Force (kips)		Load Case	Len (ft)	Bracing %			Fy (ksi)	Mem		Shear Bear		Use %	Controls		
							X	Y	Z		KL/R	Cap (kips)	Num Bolts	Num Holes			Cap (kips)	Cap (kips)
1	20									0.00	0	0						
2	40									0.00	0	0						
3	60									0.00	0	0						
4	80									0.00	0	0						
5	86.7									0.00	0	0						
6	100									0.00	0	0						
7	120									0.00	0	0						
8	140									0.00	0	0						
9	160	SAE - 2X2X0.1875	-0.29	1.2D + 1.6W	Normal Wind	4.76	100	100	100	144.97	36.00	7.63	1	1	12.43	7.84	4	Member Z
10	176	SAE - 2X2X0.25	-0.27	1.2D + 1.6W	60° Wind	4.69	100	100	100	143.88	36.00	10.26	1	1	12.43	10.45	3	Member Z

DIAGONAL MEMBERS

Sect	Top Elev	Member	Force (kips)		Load Case	Len (ft)	Bracing %			Fy (ksi)	Mem		Shear Bear		Use %	Controls		
							X	Y	Z		KL/R	Cap (kips)	Num Bolts	Num Holes			Cap (kips)	Cap (kips)
1	20	SAE - 4X4X0.25	-7.43	0.9D + 1.6W	90° Wind	21.76	50	50	50	164.26	36.00	16.24	1	1	17.89	12.6	59	Bolt Bear
2	40	SAE - 3.5X3.5X0.25	-7.08	1.2D + 1.6W	90° Wind	20.84	50	50	50	180.15	36.00	11.76	1	1	17.89	12.6	60	Member Z
3	60	SAE - 3.5X3.5X0.25	-7.17	1.2D + 1.6W	90° Wind	18.25	50	50	50	157.82	36.00	15.33	1	1	17.89	12.6	57	Bolt Bear
4	80	SAE - 3X3X0.25	-6.24	1.2D + 1.6W	90° Wind	14.76	50	50	50	149.57	36.00	14.54	1	1	17.89	12.6	49	Bolt Bear
5	86.7	MOD - 2L2.5x2.5x3/16	-6.29	1.2D + 1.6W	90° Wind	14.10	50	50	8	113.59	36.00	29.91	1	1	12.43		51	Bolt Shear
6	100	SAE - 2.5X2.5X0.1875	-6.46	1.2D + 1.6W	90° Wind	12.97	50	50	50	157.27	36.00	8.24	1	1	12.43	7.84	82	Bolt Bear

Force/Stress Compression Summary

Structure: CT04382-S-SBA	Code: EIA/TIA-222-G	9/29/2021
Site Name: New Britain 2, CT	Exposure: B	
Height: 176.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 0.85	Topography: 1	Struct Class: II



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DIAGONAL MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case	Len (ft)	Bracing %			Fy (ksi)	Mem Cap (kips)	Num Bolts	Num Holes	Shear Cap		Bear Cap %	Use Controls	
						X	Y	Z					(kips)	(kips)			
7	120	SAE - 2.5X2.5X0.1875	-6.63	1.2D + 1.6W 90° Wind	11.28	50	50	50	136.73	36.00	10.90	1	1	12.43	7.84	85	Bolt Bear
8	140	SAE - 2X2X0.1875	-5.69	1.2D + 1.6W 90° Wind	9.88	50	50	50	150.45	36.00	7.09	1	1	12.43	7.84	80	Member Z
9	160	SAE - 2X2X0.1875	-4.25	1.2D + 1.6W 90° Wind	7.64	50	50	50	117.23	36.00	11.16	1	1	12.43	7.84	54	Bolt Bear
10	176	SAE - 2X2X0.25	-3.97	1.2D + 1.6W 90° Wind	6.09	50	50	50	100.10	36.00	17.97	1	1	12.43	10.4	38	Bolt Bear

Force/Stress Tension Summary

Structure: CT04382-S-SBA	Code: EIA/TIA-222-G	9/29/2021
Site Name: New Britain 2, CT	Exposure: B	
Height: 176.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 0.85	Topography: 1	Struct Class: II
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LEG MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case	Fy (ksi)	Mem Cap (kips)	Leg Use %	Controls
1	20	PX - 8" DIA PIPE	236.43	0.9D + 1.6W 60° Wind	50	574.20	41.2	Member
2	40	PX - 8" DIA PIPE	216.93	0.9D + 1.6W 60° Wind	50	574.20	37.8	Member
3	60	PSP - ROHN 8 EHS	195.57	0.9D + 1.6W 60° Wind	50	437.40	44.7	Member
4	80	PX - 6" DIA PIPE	172.17	0.9D + 1.6W 60° Wind	50	378.00	45.5	Member
5	86.792	PX - 6" DIA PIPE	147.89	0.9D + 1.6W 60° Wind	50	378.00	39.1	Member
6	100	PX - 6" DIA PIPE	133.70	0.9D + 1.6W 60° Wind	50	378.00	35.4	Member
7	120	PSP - ROHN 6 EHS	119.44	0.9D + 1.6W 60° Wind	50	302.09	39.5	Member
8	140	PX - 5" DIA PIPE	86.28	0.9D + 1.6W 60° Wind	50	274.95	31.4	Member
9	160	PX - 4" DIA PIPE	49.08	0.9D + 1.6W 60° Wind	50	198.45	24.7	Member
10	176	PX - 3" DIA PIPE	14.33	0.9D + 1.6W 60° Wind	50	135.90	10.5	Member

Splices

Sect	Top Elev	Top Splice					Bottom Splice						
		Load Case	Force (kips)	Cap (kips)	Use %	Bolt Type	Num Bolts	Load Case	Force (kips)	Cap (kips)	Use %	Bolt Type	Num Bolts
1	20	0.9D + 1.6W 60° Wind	216.63	0.00	0.0			0.9D + 1.6W 60° Wind	236.4	0.00			
2	40	0.9D + 1.6W 60° Wind	195.20	0.00	0.0			0.9D + 1.6W 60° Wind	216.6	424.08	51.1	1 A325	8
3	60	0.9D + 1.6W 60° Wind	171.84	0.00	0.0			0.9D + 1.6W 60° Wind	195.2	424.08	46.0	1 A325	8
4	80	0.9D + 1.6W 60° Wind	147.67	0.00	0.0			0.9D + 1.6W 60° Wind	171.8	424.08	40.5	1 A325	8
5	86.792	0.9D + 1.6W 60° Wind	137.44	0.00	0.0			0.9D + 1.6W 60° Wind	147.6	318.06	46.4	1 A325	6
6	100	0.9D + 1.6W 60° Wind	119.23	0.00	0.0			0.9D + 1.6W 60° Wind	137.4	318.06	43.2	1 A325	6
7	120	0.9D + 1.6W 60° Wind	86.09	0.00	0.0			0.9D + 1.6W 60° Wind	119.2	318.06	37.5	1 A325	6
8	140	0.9D + 1.6W 60° Wind	47.95	0.00	0.0			0.9D + 1.6W 60° Wind	86.09	318.06	27.1	1 A325	6
9	160	0.9D + 1.6W 60° Wind	14.46	0.00	0.0			0.9D + 1.6W 60° Wind	47.95	212.04	22.6	1 A325	4
10	176		0.00	0.00	0.0			0.9D + 1.6W 60° Wind	14.46	166.24	8.7	7/8 A325	4

HORIZONTAL MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case	Fy (ksi)	Mem Cap (kips)	Num Bolts	Num Holes	Shear Cap (kips)	Bear Cap (kips)	B.S. Cap (kips)	Use %	Controls
1	20	-			36	0.00	0	0					
2	40	-			36	0.00	0	0					
3	60	-			36	0.00	0	0					
4	80	-			36	0.00	0	0					
5	86.792	-			36	0.00	0	0					
6	100	-			36	0.00	0	0					
7	120	-			36	0.00	0	0					
8	140	-			36	0.00	0	0					
9	160	SAE - 2X2X0.1875	0.30	1.2D + 1.6W 60° Wind	36	23.00	1	1	12.43	7.84	7.85	3.9	Bolt Bear
10	176	SAE - 2X2X0.25	0.40	0.9D + 1.6W Normal Wi	36	30.46	1	1	12.43	10.45	10.47	3.8	Bolt Bear

DIAGONAL MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case	Fy (ksi)	Mem Cap (kips)	Num Bolts	Num Holes	Shear Cap (kips)	Bear Cap (kips)	B.S. Cap (kips)	Use %	Controls
1	20	SAE - 4X4X0.25	7.30	0.9D + 1.6W 90° Wind	36	62.86	1	1	17.89	12.62	26.92	57.9	Bolt Bear
2	40	SAE - 3.5X3.5X0.25	7.10	0.9D + 1.6W 90° Wind	36	54.76	1	1	17.89	12.62	21.48	56.3	Bolt Bear
3	60	SAE - 3.5X3.5X0.25	6.97	0.9D + 1.6W 90° Wind	36	54.76	1	1	17.89	12.62	21.48	55.2	Bolt Bear
4	80	SAE - 3X3X0.25	6.11	1.2D + 1.6W 90° Wind	36	46.66	1	1	17.89	12.62	16.04	48.4	Bolt Bear
5	86.792	MOD - 2L2.5x2.5x3/16_Spec	6.17	1.2D + 1.6W 90° Wind	36	59.00	1	1	12.43			49.6	Bolt Shear
6	100	SAE - 2.5X2.5X0.1875	6.35	1.2D + 1.6W 90° Wind	36	29.22	1	1	12.43	7.84	9.89	81.0	Bolt Bear
7	120	SAE - 2.5X2.5X0.1875	6.49	1.2D + 1.6W 90° Wind	36	29.22	1	1	12.43	7.84	9.89	82.8	Bolt Bear

Force/Stress Tension Summary

Structure: CT04382-S-SBA	Code: EIA/TIA-222-G	9/29/2021
Site Name: New Britain 2, CT	Exposure: B	
Height: 176.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 0.85	Topography: 1	Struct Class: II



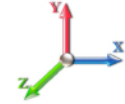
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DIAGONAL MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case	Fy (ksi)	Mem Cap (kips)	Num Bolts	Num Holes	Shear Cap (kips)	Bear Cap (kips)	B.S. Cap (kips)	Use %	Controls
8	140	SAE - 2X2X0.1875	5.77	1.2D + 1.6W 90° Wind	36	23.00	1	1	12.43	7.84	7.85	73.7	Bolt Bear
9	160	SAE - 2X2X0.1875	4.19	1.2D + 1.6W 90° Wind	36	23.00	1	1	12.43	7.84	7.85	53.4	Bolt Bear
10	176	SAE - 2X2X0.25	3.84	0.9D + 1.6W 90° Wind	36	30.46	1	1	12.43	10.45	10.47	36.8	Bolt Bear

Seismic Section Forces

Structure: CT04382-S-SBA	Code: EIA/TIA-222-G	9/29/2021
Site Name: New Britain 2, CT	Exposure: B	
Height: 176.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 0.85	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.0E

Dead Load Factor	1.20	Sds 0.195	Ss 0.1830	Fa 1.6000	Ke 0.0000
Seismic Load Factor	1.00	Sd1 0.102	S1 0.0640	Fv 2.4000	Kg 0.0000
Seismic Importance Factor	1.00	SA 0.172	R 3.0000	Vs 3.2186	f1 1.6872

Sect #	Elev (ft)	Wz (lb)	Lateral			Fsz (lb)
			a	b	c	
1	10.00	5409.8	0.01	0.05	0.03	20.47
2	30.00	5072.3	0.05	0.07	0.04	41.60
3	50.00	4328.9	0.15	0.07	0.03	58.50
4	70.00	4113.7	0.30	0.05	0.01	83.98
5	83.40	1470.4	0.42	0.01	0.01	36.92
6	93.40	2308.0	0.53	-0.03	0.01	65.67
7	110.00	3064.0	0.74	-0.10	0.04	105.76
8	130.00	8292.1	1.03	-0.10	0.15	395.58
9	150.00	5110.2	1.37	0.23	0.40	399.84
10	168.00	7380.6	1.72	1.21	0.85	961.53

Load Case: 0.9D + 1.0E

Dead Load Factor	0.90	Sds 0.195	Ss 0.1830	Fa 1.6000	Ke 0.0000
Seismic Load Factor	1.00	Sd1 0.102	S1 0.0640	Fv 2.4000	Kg 0.0000
Seismic Importance Factor	1.00	SA 0.172	R 3.0000	Vs 3.2186	f1 1.6872

Sect #	Elev (ft)	Wz (lb)	Lateral			Fsz (lb)
			a	b	c	
1	10.00	5409.8	0.01	0.05	0.03	20.47
2	30.00	5072.3	0.05	0.07	0.04	41.60
3	50.00	4328.9	0.15	0.07	0.03	58.50
4	70.00	4113.7	0.30	0.05	0.01	83.98
5	83.40	1470.4	0.42	0.01	0.01	36.92
6	93.40	2308.0	0.53	-0.03	0.01	65.67
7	110.00	3064.0	0.74	-0.10	0.04	105.76
8	130.00	8292.1	1.03	-0.10	0.15	395.58
9	150.00	5110.2	1.37	0.23	0.40	399.84
10	168.00	7380.6	1.72	1.21	0.85	961.53

Support Forces Summary

Structure: CT04382-S-SBA
Site Name: New Britain 2, CT
Height: 176.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Topography: 1

Code: EIA/TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

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Load Case	Node	FX (kips)	FY (kips)	FZ (kips)	(-) = Uplift (+) = Down
1.2D + 1.6W Normal Wind	1	-0.01	276.97	-26.75	
	1a	8.89	-110.56	-7.96	
	1b	-8.89	-110.55	-7.97	
1.2D + 1.6W 60° Wind	1	-2.24	143.39	-13.41	
	1a	-12.73	143.31	4.77	
	1b	-20.28	-230.84	-11.71	
1.2D + 1.6W 90° Wind	1	-2.65	18.62	-1.16	
	1a	-20.22	236.54	10.17	
	1b	-18.31	-199.30	-9.01	
0.9D + 1.6W Normal Wind	1	-0.01	271.94	-26.44	
	1a	9.14	-115.03	-8.12	
	1b	-9.14	-115.02	-8.13	
0.9D + 1.6W 60° Wind	1	-2.24	138.56	-13.11	
	1a	-12.47	138.48	4.61	
	1b	-20.53	-235.14	-11.85	
0.9D + 1.6W 90° Wind	1	-2.66	13.97	-0.86	
	1a	-19.96	231.57	10.01	
	1b	-18.56	-203.64	-9.15	
1.2D + 1.0Di + 1.0Wi Normal Wind	1	0.00	136.88	-8.39	
	1a	2.90	14.41	-2.55	
	1b	-2.90	14.46	-2.55	
1.2D + 1.0Di + 1.0Wi 60° Wind	1	-0.73	95.38	-4.25	
	1a	-4.05	95.35	1.49	
	1b	-6.65	-24.97	-3.84	
1.2D + 1.0Di + 1.0Wi 90° Wind	1	-0.85	55.24	-0.27	
	1a	-6.45	125.15	3.24	
	1b	-5.99	-14.64	-2.96	
1.2D + 1.0E	1	0.00	35.42	4.53	
	1a	5.69	10.22	-3.34	
	1b	-5.69	10.22	-3.34	
0.9D + 1.0E	1	0.00	30.74	4.84	
	1a	5.96	5.58	-3.49	
	1b	-5.96	5.58	-3.49	
1.0D + 1.0W Normal Wind	1	0.00	77.96	-7.24	
	1a	1.55	-15.71	-1.59	
	1b	-1.55	-15.70	-1.60	
1.0D + 1.0W 60° Wind	1	-0.56	45.68	-3.98	
	1a	-3.73	45.66	1.50	
	1b	-4.33	-44.79	-2.50	
1.0D + 1.0W 90° Wind	1	-0.66	15.51	-0.99	
	1a	-5.56	68.20	2.83	
	1b	-3.85	-37.16	-1.84	

Max Reactions

Leg

Overturning

Max Uplift: -235.14 (kips)

Max Down: 276.97 (kips)

Max Shear: 26.75 (kips)

Moment: 4698.44 (ft-kips)

Total Down: 55.86 (kips)

Total Shear: 42.69 (kips)

Analysis Summary

Structure: CT04382-S-SBA	Code: EIA/TIA-222-G	9/29/2021
Site Name: New Britain 2, CT	Exposure: B	
Height: 176.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 0.85	Topography: 1	Struct Class: II
		Page: 21



Max Reactions

	Leg	Overturning
Max Uplift:	-235.14 (kips)	Moment: 4698.44 (ft-kips)
Max Down:	276.97 (kips)	Total Down: 55.86 (kips)
Max Shear:	26.75 (kips)	Total Shear: 42.69 (kips)

Anchor Bolts

Bolt Size (in.): 1.00	Number Bolts: 10
Yield Strength (Ksi): 109.00	Tensile Strength (Ksi): 125.00
Detail Type: C	

Interaction Ratio: 0.47

Max Usages

Max Leg: 56.5% (1.2D + 1.6W Normal Wind - Sect 3)
 Max Diag: 84.7% (1.2D + 1.6W 90° Wind - Sect 7)
 Max Horiz: 3.9% (1.2D + 1.6W 60° Wind - Sect 9)

Max Deflection, Twist and Sway

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)
0.9D + 1.0E - Normal To Face	80.38	0.0168	0.0009	0.0255
	130.00	0.0466	0.0015	0.0473
	140.00	0.0551	0.0017	0.0555
	151.93	0.0663	0.0016	0.0580
	164.19	0.0791	0.0017	0.0604
	176.00	0.0921	0.0017	0.0651
0.9D + 1.6W 97 mph Wind at 60° From Face	80.38	0.2219	0.0158	0.3558
	130.00	0.6180	0.0258	0.5912
	140.00	0.7246	0.0288	0.6843
	151.93	0.8606	0.0273	0.6781
	164.19	1.0097	0.0304	0.6900
	176.00	1.1548	0.0341	0.7284
0.9D + 1.6W 97 mph Wind at 90° From Face	80.38	0.2234	-0.0171	0.3543
	130.00	0.6222	-0.0270	0.5927
	140.00	0.7295	-0.0298	0.6810
	151.93	0.8662	-0.0269	0.6804
	164.19	1.0162	-0.0284	0.6968
	176.00	1.1619	-0.0295	0.7084
0.9D + 1.6W 97 mph Wind at Normal To Face	80.38	0.2292	0.0138	0.3673
	130.00	0.6361	0.0214	0.6068
	140.00	0.7458	0.0234	0.7014
	151.93	0.8853	0.0205	0.6958
	164.19	1.0386	0.0208	0.7088
	176.00	1.1881	0.0199	0.8074

1.0D + 1.0W 60 mph Wind at 60° From Face	80.38	0.0536	0.0035	0.0860
	130.00	0.1488	0.0055	0.1418
	140.00	0.1744	0.0061	0.1646
	151.93	0.2070	0.0055	0.1624
	164.19	0.2428	0.0057	0.1651
	176.00	0.2775	0.0059	0.1747

1.0D + 1.0W 60 mph Wind at 90° From Face	80.38	0.0540	-0.0041	0.0855
	130.00	0.1499	-0.0064	0.1423
	140.00	0.1756	-0.0071	0.1637
	151.93	0.2084	-0.0064	0.1631
	164.19	0.2444	-0.0067	0.1669
	176.00	0.2792	-0.0069	0.1699

1.0D + 1.0W 60 mph Wind at Normal To Face	80.38	0.0555	0.0033	0.0884
	130.00	0.1534	0.0051	0.1458
	140.00	0.1796	0.0057	0.1677
	151.93	0.2131	0.0049	0.1669
	164.19	0.2498	0.0050	0.1700
	176.00	0.2856	0.0048	0.1931

1.2D + 1.0Di + 1.0Wi 50 mph Wind at 60° From Face	80.38	0.0725	0.0047	0.1146
	130.00	0.1977	0.0073	0.1860
	140.00	0.2312	0.0081	0.2164
	151.93	0.2737	0.0073	0.2124
	164.19	0.3202	0.0077	0.2162
	176.00	0.3660	0.0079	0.2312

1.2D + 1.0Di + 1.0Wi 50 mph Wind at 90° From Face	80.38	0.0727	-0.0055	0.1137
	130.00	0.1987	-0.0085	0.1869
	140.00	0.2324	-0.0094	0.2150
	151.93	0.2751	-0.0085	0.2135
	164.19	0.3219	-0.0090	0.2188
	176.00	0.3679	-0.0093	0.2260


1.2D + 1.0Di + 1.0Wi 50 mph Wind at Normal From Face	80.38	0.0729	0.0044	0.1157
	130.00	0.2004	0.0067	0.1894
	140.00	0.2345	0.0074	0.2157
	151.93	0.2777	0.0065	0.2163
	164.19	0.3252	0.0066	0.2208
	176.00	0.3718	0.0064	0.2504

1.2D + 1.0E - Normal To Face	80.38	0.0169	0.0009	0.0255
	130.00	0.0467	0.0015	0.0474
	140.00	0.0552	-0.0017	0.0555
	151.93	0.0664	0.0016	0.0582
	164.19	0.0793	-0.0017	0.0605
	176.00	0.0922	-0.0017	0.0651

1.2D + 1.6W 97 mph Wind at 60° From Face	80.38	0.2222	0.0159	0.3565
	130.00	0.6193	0.0259	0.5926
	140.00	0.7260	0.0289	0.6862
	151.93	0.8624	0.0274	0.6797
	164.19	1.0119	0.0305	0.6917
	176.00	1.1574	0.0342	0.7305

1.2D + 1.6W 97 mph Wind at 90° From Face	80.38	0.2237	-0.0171	0.3549
	130.00	0.6234	-0.0270	0.5942
	140.00	0.7310	-0.0299	0.6829
	151.93	0.8681	-0.0270	0.6822
	164.19	1.0184	-0.0285	0.6985
	176.00	1.1644	-0.0296	0.7105

1.2D + 1.6W 97 mph Wind at Normal To Face	80.38	0.2296	0.0138	0.3679
	130.00	0.6373	0.0214	0.6083
	140.00	0.7473	0.0235	0.7030
	151.93	0.8872	0.0205	0.6976
	164.19	1.0408	0.0209	0.7107
	176.00	1.1907	0.0199	0.8093

	Mat Foundation Design for Self Supporting Tower			Date 9/29/2021
	Customer Name:	SBA Communications Corp	EIA/TIA Standard:	EIA-222-G
	Site Name:		Structure Height (Ft.):	176
	Site Number:	CT04382-S-SBA	Engineer Name:	J. Chen
	Engr. Number:	116417	Engineer Login ID:	

Foundation Info Obtained from:

Analysis or Design?

Number of Tower Legs:

Base Reactions (Factored):

(1). Individual Leg:

Axial Load (Kips):	277.0	Uplift Force (Kips):	235.1
Shear Force (Kips):	26.7		

(2). Tower Base:

Total Vertical Load (Kips):	55.9	Total Shear Force (Kips):	42.7
Moment (Kips-ft):	4698.4		

Foundation Geometries:

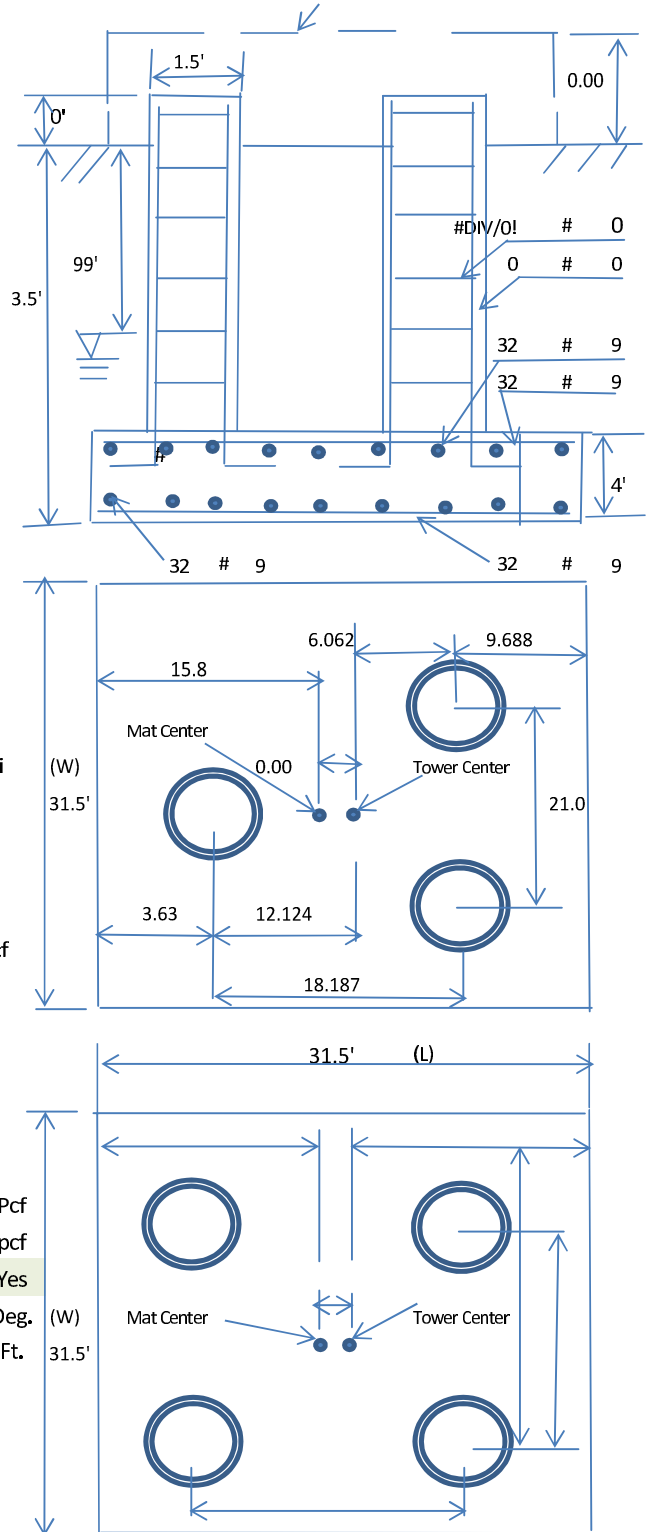
Leg distance (Center-to-Center ft.):	21.0	Mods required -Yes/No ?:	No
Diameter of Pier (ft.):	Round 1.5	Pier Height A. G. (ft.):	0.00
Tower center to mat center (ft):	0	Depth of Base BG (ft.):	3.5
Length of Pad (ft.):	31.5	Width of Pad (ft.):	31.5
Thickness of Pad (ft):	4.00		

Material Properties and Rebar Info:

Concrete Strength (psi):	3000	Steel Elastic Modulus:	290000	ksi
Vertical bar yield (ksi)		Tie steel yield (ksi):	60	
Vertical Rebar Size #:		Tie / Stirrup Size #:		
Qty. of Vertical Rebars:		Tie Spacing (in):		
Pad Rebar Yield (Ksi):	60	Pad Steel Rebar Size (#):	9	
Concrete Cover (in.):	3	Unit Weight of Concrete:	150.0	pcf
Rebar at the bottom of the concrete pad:				
Qty. of Rebar in Pad (L):	32	Qty. of Rebar in Pad (W):	32	
Rebar at the top of the concrete pad:				
Qty. of Rebar in Pad (L):	32	Qty. of Rebar in Pad (W):	32	

Soil Design Parameters:

Soil Unit Weight (pcf):	115.0	Soil Buoyant Weight:	50.0	Pcf
Water Table B.G.S. (ft):	99.0	Unit Weight of Water:	62.4	pcf
Ultimate Bearing Pressure (psf):	10000	Consider ties in concrete shear strength:	Yes	
Consider Soil Lateral Resistance ?	Yes	Enter soil C (psf) or Phi (deg.):	30.0	Deg. (W)
		Depth to ignor lateral resistance	1.0	Ft. (W)



Apply 1.35 for e/w per G/H:

Foundation Analysis and Design: Uplift Strength Reduction Factor:

Total Dry Soil Volume (cu. Ft.):

Total Buoyant Soil Volume (cu. Ft.):

Total Effective Soil Weight (Kips):

Total Dry Concrete Volume (cu. Ft.):

Total Buoyant Concrete Volume (cu. Ft.):

Total Effective Concrete Weight (Kips):

3969.04

595.36

Compression Strength Reduction Factor:

Total Dry Soil Weight (Kips):

Total Buoyant Soil Weight (Kips):

Weight from the Concrete Block at Top (K):

Total Dry Concrete Weight (Kips):

Total Buoyant Concrete Weight (Kips):

Total Vertical Load on Base (Kips):

d/
Capacity
Ratio

Check Soil Capacities:

Calculated Maxium Net Soil Pressure under the base (psf):

Allowable Foundation Overturning Resistance (kips-ft.):

Factor of Safety Against Overturning (O. R. Moment/Design Moment):

< Allowable Factored Soil Bearing (psf):

Design Factored Momont (kips-ft):

Check the capacities of Reinforcing Concrete:

Strength reduction factor (Flexure and axial tension):

Strength reduction factor (Axial compression):

Strength reduction factor (Shear):

Wind Load Factor on Concrete Design:

(2).Concrete Pad:

One-Way Design Shear Capacity (L or W Direction, Kips):

One-Way Design Shear Capacity (Diagonal Dir., Kips):

Lower Steel Pad Reinforcement Ratio (L or W-Direct.):

Lower Steel Pad Moment Capacity (L or W-Dir. Kips-ft):

Lower Steel Pad Moment Capacity (Dia. Direction,K-ft):

Upper Steel Pad Reinforcement Ratio (L or W -Direction):

Upper Steel Pad Moment Capacity (L or W-Dir., Kips-ft):

Upper Steel Pad Moment Capacity (Dia. Direction, K-ft):

Punching Failure Capacity (Kips):

One-Way Factored Shear (L/W-Dir Kips) 298.5

One-Way Factored Shear (Dia. Dir, Kips)

Lower Steel Reinf. Ratio (Dia. Dir.):

Moment at Bottom (L-Direct. K-Ft):

Moment at Bottom (Dia. Dir. K-Ft):

Upper Steel Reinf. Ratio (Dia. Dir.):

Moment at the top (L-Dir Kips-Ft):

Moment at the top (Dia. Dir., K-Ft):

Punch. Failure Factored Shear (K):



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peter.albano@colliersengineering.com

Replacement Antenna Mount Analysis Report and PMI Requirements

Mount Analysis-R

SMART Tool Project #: 10084899
Maser Consulting Connecticut Project #: 21777791A

July 7, 2021

Site Information

Site ID: 467525-VZW / NEW BRITAIN 2 CT
Site Name: NEW BRITAIN 2 CT
Carrier Name: Verizon Wireless
Address: 1 Hartford Square
New Britain, Connecticut 06052
Hartford County
Latitude: 41.666411°
Longitude: -72.812803°

Structure Information

Tower Type: 180-Ft Self Support
Mount Type: 12.50-Ft Sector Frame

FUZE ID # 16092580

Analysis Results

Sector Frame: 38.5% 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

Report Prepared By: Frank Centone



Digitally signed by Eric Anderson
Date: 2021.07.07 20:17:39-04'00'

Executive Summary:

The objective of this report is to determine the capacity of the proposed antenna support mount at the subject facility for the final wireless telecommunications configuration, per the applicable codes and standards. The proposed mount was assumed to be installed properly to the existing tower per the manufacturer’s instructions. Maser Consulting Connecticut cannot verify that the proposed mount will fit properly and is not liable for any fit-up issues during installation.

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: 324445, dated June 4, 2021
Mount Mapping Report	Elite ICT Services, Site ID: CT04382, dated April 18, 2021
Previous Mount Analysis	Maser Consulting Connecticut Project #: 21777791A, Dated July 7, 2021
Mount Specification Drawing	Site Pro 1, Part #: VFA12-HD

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT} : 117 mph Ice Wind Speed (3-sec. Gust): 50 mph Design Ice Thickness: 1.50 in Risk Category: II Exposure Category: C Topographic Category: 1 Topographic Feature Considered: N/A Topographic Method: N/A Ground Elevation Factor, K_e : 0.992
Seismic Parameters:	S_s : 0.194 S_1 : 0.055
Maintenance Parameters:	Wind Speed (3-sec. Gust): 30 mph Maintenance Live Load, L_v : 250 lbs. Maintenance Live Load, L_m : 500 lbs.
Analysis Software:	RISA-3D (V17)

Final Loading Configuration:

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
140.00	140.00	3	Samsung	XXDWMM-12.5-65-BT-CBRS	Added
		3	Samsung	MT6407-77A	
		1	Raycap	RVZDC-6627-PF-48	
		3	Samsung	B2/B66A RRH-BR049	
		3	Samsung	B5/B13 RRH-BR04C	
		3	Samsung	CBRS RRH - RT4401-48A	
		6	Andrew	SBNHH-1D65B	Retained
		3	Antel	BXA-80080/4CF FP	
		3	RFS	FD9R6004/2C-3L	

Any proposed antennas not currently installed should be mounted such that the centerline of the antennas does not exceed 6 inches vertically from the center of the antenna mounts.

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.

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

Standard Conditions:

1. All engineering services are performed on the basis that the information provided to Maser Consulting Connecticut and used in this analysis is current and correct. The existing equipment loading has been applied at locations determined from the supplied documentation. Any deviation from the loading locations specified in this report shall be communicated to Maser Consulting Connecticut to verify deviation will not adversely impact the analysis.
2. Mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer’s specifications.
3. For mount analyses completed from other data sources (including new replacement mounts) and not specifically mapped by Maser Consulting Connecticut, the mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer’s specifications.
4. All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected member unless otherwise specified in this report.
5. The mount was checked up to, and including, the bolts that fasten it to the mount collar/attachment and threaded rod connections in collar members if applicable. Local deformation and interaction between the mount collar/attachment and the supporting tower structure are outside the scope of this analysis.

6. All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. Maser Consulting Connecticut is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.
7. Structural Steel Grades have been assumed as follows, if applicable, unless otherwise noted in this analysis:
 - o Channel, Solid Round, Angle, Plate ASTM A36 (Gr. 36)
 - o HSS (Rectangular) ASTM 500 (Gr. B-46)
 - o Pipe ASTM A53 (Gr. B-35)
 - o Threaded Rod F1554 (Gr. 36)
 - o Bolts ASTM A325

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

Analysis Results:

Component	Utilization %	Pass/Fail
Face Horizontal	17.1%	Pass
Standoff Plate	38.5%	Pass
Standoff Horizontal	16.5%	Pass
Standoff Diagonal	7.1%	Pass
Antenna Pipe	24.0%	Pass
Dual Antenna Pipe	11.2%	Pass
Standoff Vertical	7.3%	Pass
Tieback	10.3%	Pass
Connection Check	11.4%	Pass

Structure Rating – (Controlling Utilization of all Components)	38.5%
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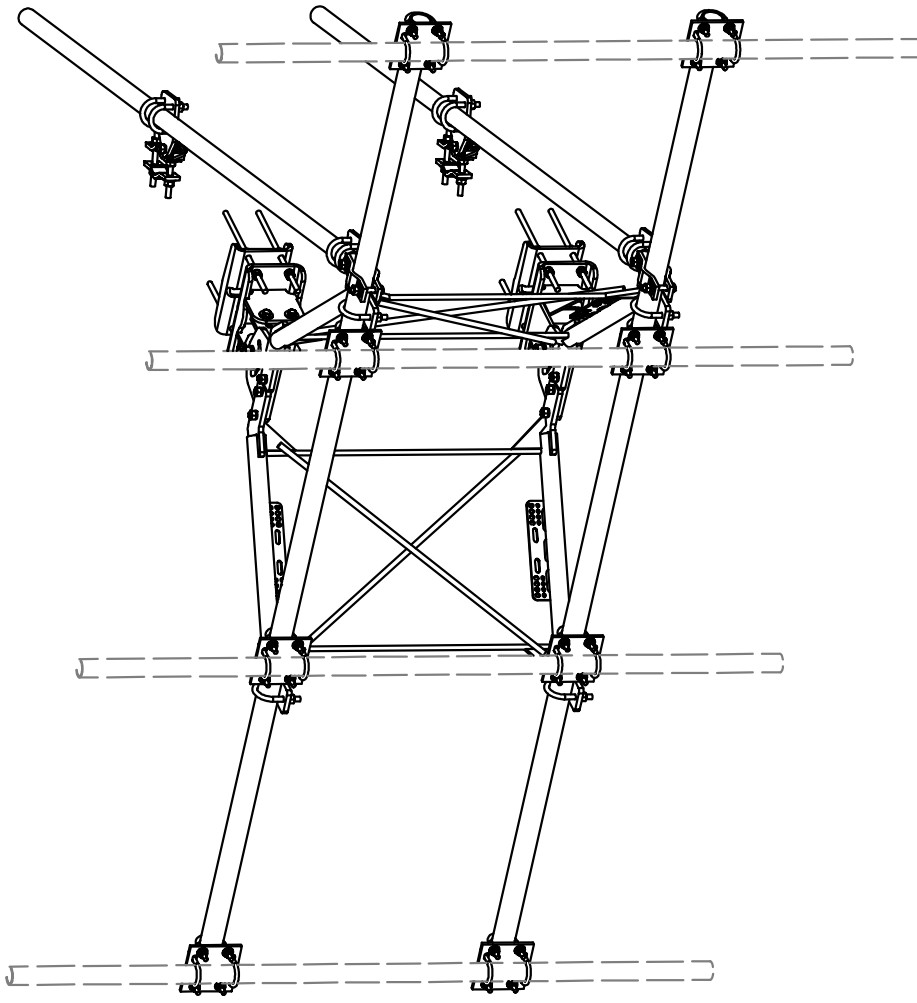
Recommendation:

The proposed antenna mounts are **SUFFICIENT** for the final loading configuration and do not require modifications.

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 Specification Drawing
2. Analysis Calculations
3. **Contractor Required Post Installation Inspection (PMI) Report Deliverables**
4. Antenna Placement Diagrams
5. TIA Adoption and Wind Speed Usage Letter

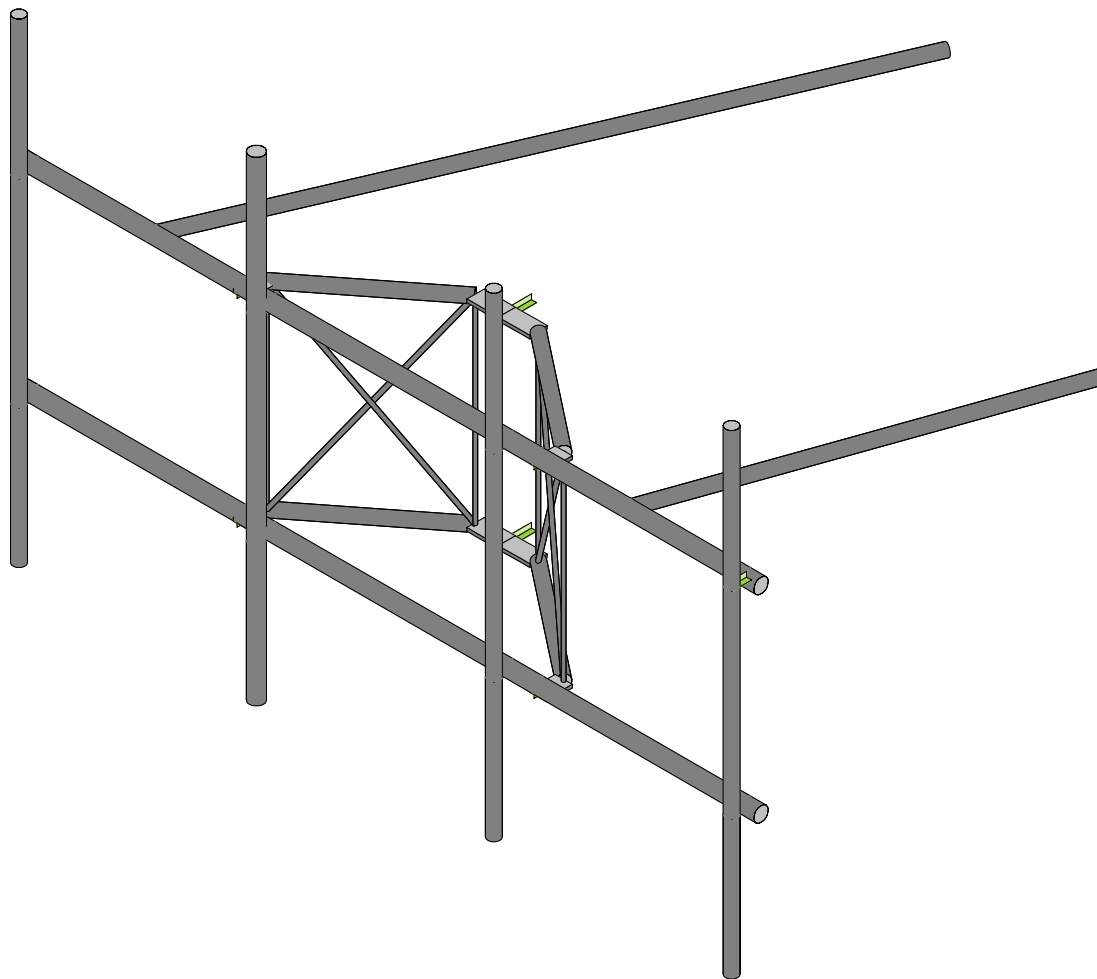
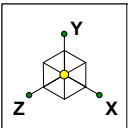


ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	2	X-VFAW	SUPPORT ARM		71.41	142.81
2	1	X-HDCAMTBW	CLAMP WELDMENT FOR BCAM-HD		33.86	33.86
3	1	X-MHTPHD	MULTI-HOLE TAPER PLATE WELDMENT		36.24	36.24
4	2	X-VFAPL4	VFA-HD PIVOT PLATE	12 in	15.88	31.77
5	2	X-LCBP4	BENT BACKING PLATE	13 in	20.04	40.09
6	1	X-HDCAMSS	ANGLE ADJUSTMENT WELDMENT FOR BCAM-HD		16.39	16.39
7	4	X-SPTB	SLIDING PIPE TIE BACK PLATE	5 1/2 in	5.87	23.49
8	1	X-HDCAMSP	POSITIONING PLATE WELDMENT FOR BCAM-HD		2.58	2.58
9	4	X-TBCA	TIE BACK CLIP ANGLE		2.01	8.02
10	8	SCX2	CROSSOVER PLATE	7 in	4.80	38.37
11	4	MCP	CLAMP HALF 1/2" THICK, 11-5/8" LONG	12 1/16 in	14.37	14.37
12	8	DCP	1/2" THICK, 5-3/4" CENTER TO CENTER CLAMP HALF	8 1/8 in	2.36	18.90
13	2	P2126	2-3/8" X 126" (2" SCH. 40) GALVANIZED PIPE	126 in	40.75	81.50
14	2	P30150	2-7/8" X 150" (2-1/2" SCH. 40) GALVANIZED PIPE	150 in	76.94	153.87
15	4	A34212	3/4" X 2-1/2" UNC HEX BOLT (A325)	2 1/2 in	0.48	1.92
16	4	G34FW	3/4" HDG USS FLATWASHER		0.06	0.24
17	4	G34LW	3/4" HDG LOCKWASHER		0.04	0.17
18	4	G34NUT	3/4" HDG HEAVY 2H HEX NUT		0.21	0.85
19	8	G58R-18	5/8" X 18" THREADED ROD (HDG.)		1.57	12.54
20	4	G58R-12	5/8" X 12" THREADED ROD (HDG.)		1.05	4.18
21	4	G58R-8	5/8" X 8" THREADED ROD (HDG.)		0.70	2.79
22	4	X-UB5300	5/8" X 3" X 5-1/4" X 2-1/2" U-BOLT (HDG.)		1.15	4.60
23	8	X-UB5258	5/8" X 2-5/8" X 4-1/2" X 2" U-BOLT (HDG.)		1.00	8.00
24	2	G5807	5/8" X 7" HDG HEX BOLT GR5 FULL THREAD	7 in	0.70	1.41
25	1	G5806	5/8" X 6" HDG HEX BOLT GR5 FULL THREAD	6 in	0.62	0.62
26	8	G5804	5/8" X 4" HDG HEX BOLT GR5		0.44	3.55
27	4	G5802	5/8" X 2" HDG HEX BOLT GR5		0.27	1.08
28	8	A582114	5/8" X 2-1/4" HDG A325 HEX BOLT	2 1/4 in	0.31	2.50
29	25	G58FW	5/8" HDG USS FLATWASHER		0.07	1.76
30	66	G58LW	5/8" HDG LOCKWASHER	1/8 in	0.03	1.72
31	71	G58NUT	5/8" HDG HEAVY 2H HEX NUT		0.13	9.22
32	32	X-UB1300	1/2" X 3" X 5" X 2" GALV U-BOLT		0.74	23.64
33	16	X-UB1212	1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.)		0.60	9.56
34	64	G12FW	1/2" HDG USS FLATWASHER	3/32 in	0.03	2.18
35	64	G12LW	1/2" HDG LOCKWASHER	1/8 in	0.01	0.89
36	64	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	4.58
					TOTAL WT. #	740.26

DESCRIPTION	CPD NO.	DRAWN BY	ENG. APPROVAL	PART NO.
12' 6" HEAVY DUTY V-FRAME ASSEMBLY WITH TWO STIFF ARMS	81	CEK	1/25/2017	VFA12-HD
		CUSTOMER	CHECKED BY	VFA12-HD
			BMC	
			12/13/2017	
			DWG. NO.	

ITEM	REV	DESCRIPTION	DATE
D		UPDATED BCAM VERSION 1 TO BCAM VERSION 2	6/23/2018
C		UPDATED PIN LEG CONNECTION TO B-CAM CONNECTION	12/17/2017
B		CHANGED TIE-BACK CONNECTION	7/31/2017
A		CHANGED TIE-BACK FRONT CONNECTION	2/2/2017
REV		DESCRIPTION OF REVISIONS	CPD BY DATE
		REVISION HISTORY	

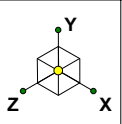
TOLERANCE NOTES	
TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE: SAWED, SHEARED AND GAS CUT EDGES (± 0.030") DRILLED AND GAS CUT HOLES (± 0.030") - NO CONING OF HOLES LASER CUT EDGES AND HOLES (± 0.010") - NO CONING OF HOLES BENDS ARE ± 1/2 DEGREE ALL OTHER MACHINING (± 0.060") ALL OTHER ASSEMBLY (± 0.060")	
PROPRIETARY NOTE: DIMENSIONS CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALMONT INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF VALMONT INDUSTRIES IS STRICTLY PROHIBITED.	



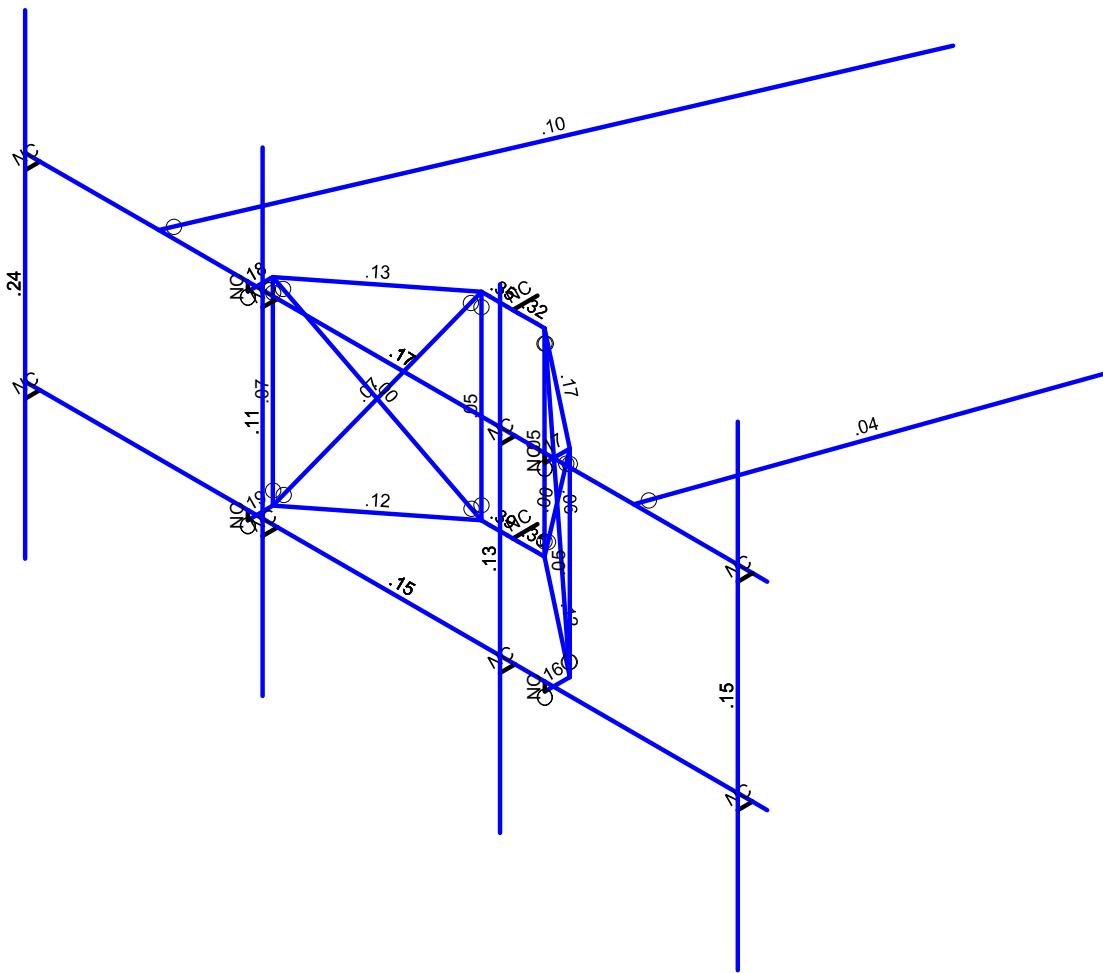
SK - 1

July 7, 2021 at 11:39 AM

REPLACEMENT_467525-VZW_M...

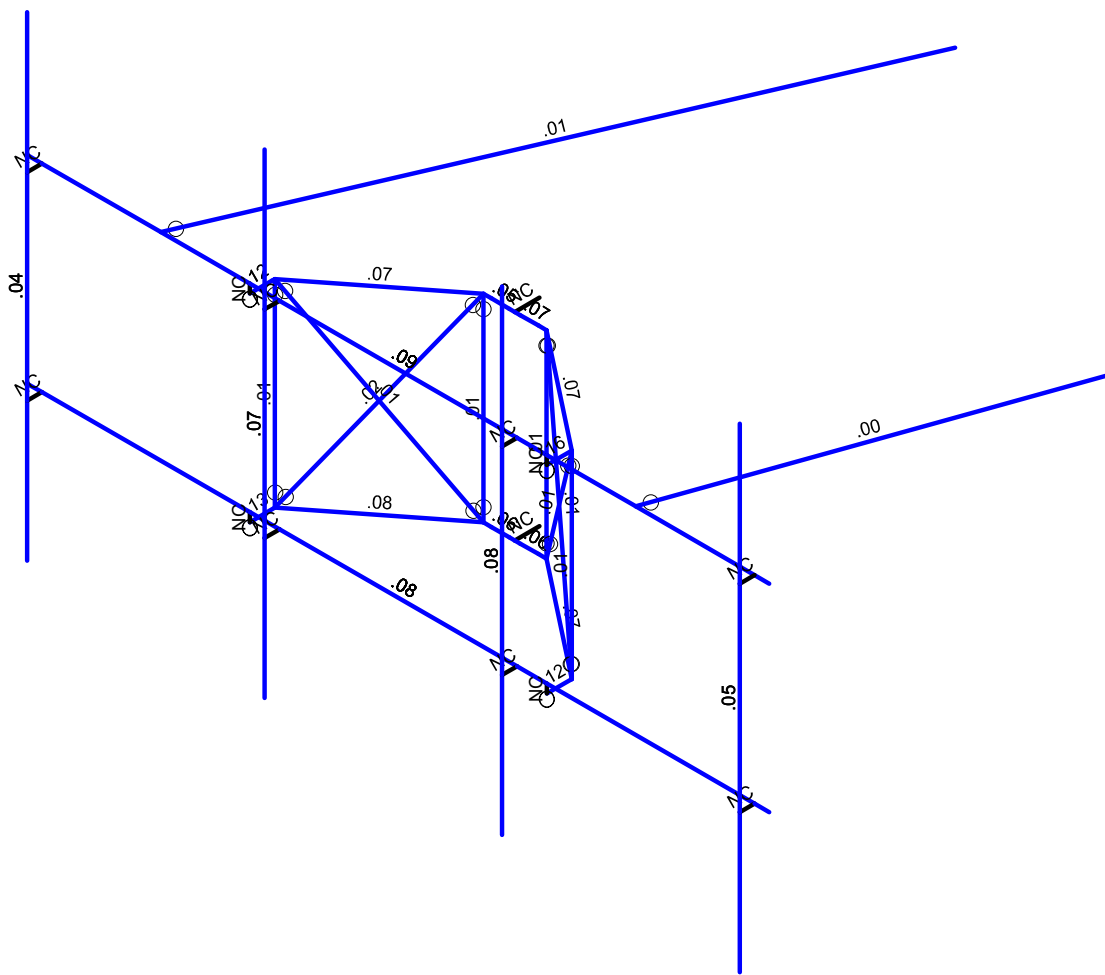
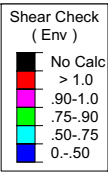
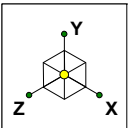


Code Check (Env)	
Black	No Calc
Red	> 1.0
Pink	.90-1.0
Green	.75-.90
Cyan	.50-.75
Blue	0.-.50



Member Code Checks Displayed (Enveloped)
Results for LC 1, 1.2D+1.0Wo (0 Deg)

	SK - 2
	July 7, 2021 at 11:39 AM
	REPLACEMENT_467525-VZW_M...



Member Shear Checks Displayed (Enveloped)
 Results for LC 1, 1.2D+1.0Wo (0 Deg)

	SK - 3
	July 7, 2021 at 11:39 AM
	REPLACEMENT_467525-VZW_M...

Basic Load Cases

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

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...	Surface(P...
57	Structure Wi (120 De..	None						56	
58	Structure Wi (150 De..	None						56	
59	Structure Wi (180 De..	None						56	
60	Structure Wi (210 De..	None						56	
61	Structure Wi (240 De..	None						56	
62	Structure Wi (270 De..	None						56	
63	Structure Wi (300 De..	None						56	
64	Structure Wi (330 De..	None						56	
65	Structure Wm (0 Deg)	None						56	
66	Structure Wm (30 De..	None						56	
67	Structure Wm (60 De..	None						56	
68	Structure Wm (90 De..	None						56	
69	Structure Wm (120 D..	None						56	
70	Structure Wm (150 D..	None						56	
71	Structure Wm (180 D..	None						56	
72	Structure Wm (210 D..	None						56	
73	Structure Wm (240 D..	None						56	
74	Structure Wm (270 D..	None						56	
75	Structure Wm (300 D..	None						56	
76	Structure Wm (330 D..	None						56	
77	Lm1	None					1		
78	Lm2	None					1		
79	Lv1	None					1		
80	Lv2	None					1		

Load Combinations

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



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Load Combinations (Continued)

	Description	Sol.	PD	SR	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.
29	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1	
30	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1	
31	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1	
32	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1	
33	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1	
34	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1	
35	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1	
36	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1	
37	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1	
38	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1	
39	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1	
40	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1	
41	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1	
42	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1	
43	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1	
44	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1	
45	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1	
46	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1	
47	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1	
48	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	38	1	76	1	
49	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	79	1.5					
50	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	80	1.5					
51	1.4D	Yes	Y		1	1.4	39	1.4							

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	3.416667	0.145833	8.083333	0	
2	N2	-9.083333	0.145833	8.083333	0	
3	N3	3.416667	3.479167	8.083333	0	
4	N4	-9.083333	3.479167	8.083333	0	
5	N5	-8.833333	0.145833	8.083333	0	
6	N6	-8.833333	3.479167	8.083333	0	
7	N7	-4.833333	0.145833	8.083333	0	
8	N8	-4.833333	3.479167	8.083333	0	
9	N9	-0.833333	0.145833	8.083333	0	
10	N10	-0.833333	3.479167	8.083333	0	
11	N11	3.166667	0.145833	8.083333	0	
12	N12	3.166667	3.479167	8.083333	0	
13	N13	-8.833333	0.145833	8.333333	0	
14	N14	-8.833333	3.479167	8.333333	0	
15	N15	-4.833333	0.145833	8.333333	0	
16	N16	-4.833333	3.479167	8.333333	0	
17	N17	-0.833333	0.145833	8.333333	0	
18	N18	-0.833333	3.479167	8.333333	0	
19	N19	3.166667	0.145833	8.333333	0	
20	N20	3.166667	3.479167	8.333333	0	
21	N21	-5.333333	0	8.083333	0	
22	N22	-5.333333	3.333333	8.083333	0	
23	N23	-0.333333	0	8.083333	0	
24	N24	-0.333333	3.333333	8.083333	0	
25	N25	-5.333333	0	7.661458	0	
26	N26	-5.333333	3.333333	7.661458	0	
27	N27	-0.333333	0	7.661458	0	
28	N28	-0.333333	3.333333	7.661458	0	
29	N29	-2.833333	0	6.119792	0	



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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
30	N30	-2.833333	3.333333	6.119792	0	
31	N31	-3.364583	0	6.119792	0	
32	N32	-3.364583	3.333333	6.119792	0	
33	N33	-2.302083	0	6.119792	0	
34	N34	-2.302083	3.333333	6.119792	0	
35	N35	-2.833333	0	5.703125	0	
36	N36	-2.833333	3.333333	5.703125	0	
37	N39	-8.833333	5.8125	8.333333	0	
38	N40	-4.833333	5.8125	8.333333	0	
39	N41	-0.833333	5.8125	8.333333	0	
40	N42	3.166667	5.8125	8.333333	0	
41	N43	-8.833333	-2.1875	8.333333	0	
42	N44	-4.833333	-2.1875	8.333333	0	
43	N45	-0.833333	-2.1875	8.333333	0	
44	N46	3.166667	-2.1875	8.333333	0	
45	N58	-5.333333	3.333333	7.708333	0	
46	N76	-2.927083	0	6.119792	0	
47	N77	-3.229167	0	6.119792	0	
48	N78	-2.739583	0	6.119792	0	
49	N79	-2.4375	0	6.119792	0	
50	N80	-2.927083	3.333333	6.119792	0	
51	N81	-3.229167	3.333333	6.119792	0	
52	N82	-2.739583	3.333333	6.119792	0	
53	N83	-2.4375	3.333333	6.119792	0	
54	N59	-5.333333	0.145833	8.083333	0	
55	N60	-5.333333	3.479167	8.083333	0	
56	N61	-0.333333	0.145833	8.083333	0	
57	N62	-0.333333	3.479167	8.083333	0	
58	N59A	-6.833333	3.479167	8.083333	0	
59	N60A	1.166667	3.479167	8.083333	0	
60	N63	3.228844	3.479167	2.203125	0	
61	N63A	-2.833333	3.479167	-1.296875	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design R...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Antenna Pipe	PIPE_2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
2	Horizontal mount pipe	PIPE_2.5	Beam	Pipe	Q235	Typical	1.61	1.45	1.45	2.89
3	Standoff Horizontal	PIPE_2.0	Beam	Pipe	Q235	Typical	1.02	.627	.627	1.25
4	Standoff Diagonal	SR_0.75	Beam	BAR	Q235	Typical	.442	.016	.016	.031
5	Tieback	PIPE_2.0	Beam	Pipe	Q235	Typical	1.02	.627	.627	1.25
6	Standoff Vertical	SR_0.625	Beam	BAR	Q235	Typical	.307	.007	.007	.015
7	Standoff Plate	PL5/8X3.5	Beam	BAR	Q235	Typical	2.188	.071	2.233	.253
8	tower pipe	PIPE_3.0	Column	Pipe	A53 Gr. B	Typical	2.07	2.85	2.85	5.69

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/1E...	Density[k/ft...	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
2	A53 Gr. B	29000	11154	.3	.65	.49	35	1.5	60	1.2
3	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	65	1.1
4	A992	29000	11154	.3	.65	.49	50	1.1	65	1.1
5	A500 Gr. B 42	29000	11154	.3	.65	.49	42	1.4	58	1.3
6	A500 Gr. B 46	29000	11154	.3	.65	.49	46	1.4	58	1.3
7	Q235	29000	11154	.3	.65	.49	35	1.5	58	1.2

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N2	N1			Horizontal mou...	Beam	Pipe	Q235	Typical
2	M2	N4	N3			Horizontal mou...	Beam	Pipe	Q235	Typical
3	M3	N5	N13			RIGID	None	None	RIGID	Typical
4	M4	N6	N14			RIGID	None	None	RIGID	Typical
5	M5	N8	N16			RIGID	None	None	RIGID	Typical
6	M6	N7	N15			RIGID	None	None	RIGID	Typical
7	M9	N10	N18			RIGID	None	None	RIGID	Typical
8	M10	N9	N17			RIGID	None	None	RIGID	Typical
9	M11	N12	N20			RIGID	None	None	RIGID	Typical
10	M12	N11	N19			RIGID	None	None	RIGID	Typical
11	M13	N22	N26		90	Standoff Plate	Beam	BAR	Q235	Typical
12	M14	N21	N25		90	Standoff Plate	Beam	BAR	Q235	Typical
13	M15	N23	N27		90	Standoff Plate	Beam	BAR	Q235	Typical
14	M16	N24	N28		90	Standoff Plate	Beam	BAR	Q235	Typical
15	M17	N26	N32			Standoff Horiz...	Beam	Pipe	Q235	Typical
16	M18	N25	N31			Standoff Horiz...	Beam	Pipe	Q235	Typical
17	M19	N27	N33			Standoff Horiz...	Beam	Pipe	Q235	Typical
18	M20	N28	N34			Standoff Horiz...	Beam	Pipe	Q235	Typical
19	M21	N32	N30		90	Standoff Plate	Beam	BAR	Q235	Typical
20	M22	N34	N30		90	Standoff Plate	Beam	BAR	Q235	Typical
21	M23	N31	N29		90	Standoff Plate	Beam	BAR	Q235	Typical
22	M24	N33	N29		90	Standoff Plate	Beam	BAR	Q235	Typical
23	M25	N31	N26			Standoff Diago...	Beam	BAR	Q235	Typical
24	M26	N32	N25			Standoff Diago...	Beam	BAR	Q235	Typical
25	M27	N33	N28			Standoff Diago...	Beam	BAR	Q235	Typical
26	M28	N27	N34			Standoff Diago...	Beam	BAR	Q235	Typical
27	M29	N29	N35			RIGID	None	None	RIGID	Typical
28	M30	N30	N36			RIGID	None	None	RIGID	Typical
29	MP4A	N39	N43			Antenna Pipe	Beam	Pipe	A53 Gr. B	Typical
30	MP3A	N40	N44			PIPE 2.5	Beam	Pipe	A53 Gr. B	Typical
31	MP2A	N41	N45			Antenna Pipe	Beam	Pipe	A53 Gr. B	Typical
32	MP1A	N42	N46			Antenna Pipe	Beam	Pipe	A53 Gr. B	Typical
33	M44	N25	N26			Standoff Vertical	Beam	BAR	Q235	Typical
34	M45	N31	N32			Standoff Vertical	Beam	BAR	Q235	Typical
35	M46	N33	N34			Standoff Vertical	Beam	BAR	Q235	Typical
36	M47	N27	N28			Standoff Vertical	Beam	BAR	Q235	Typical
37	M47B	N22	N60			RIGID	None	None	RIGID	Typical
38	M48A	N21	N59			RIGID	None	None	RIGID	Typical
39	M49A	N24	N62			RIGID	None	None	RIGID	Typical
40	M50A	N23	N61			RIGID	None	None	RIGID	Typical
41	M51A	N30	N36			RIGID	None	None	RIGID	Typical
42	M52A	N29	N35			RIGID	None	None	RIGID	Typical
43	M44A	N60A	N63			Tieback	Beam	Pipe	Q235	Typical
44	M44B	N59A	N63A			Tieback	Beam	Pipe	Q235	Typical

Hot Rolled Steel Design Parameters

	Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp top[ft]	Lcomp bot[ft]	L-torqu...	Kyy	Kzz	Cb	Function
1	M1	Horizontal ...	12.5			Lbyy						Lateral
2	M2	Horizontal ...	12.5			Lbyy						Lateral
3	M13	Standoff Pla...	.422									Lateral
4	M14	Standoff Pla...	.422									Lateral
5	M15	Standoff Pla...	.422									Lateral
6	M16	Standoff Pla...	.422									Lateral
7	M17	Standoff Ho...	2.501			Lbyy			.65	.65		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp top[ft]	Lcomp bot[ft]	L-torqu...	Kvy	Kzz	Cb	Function
8	M18	Standoff Ho...	2.501			Lbyy			.65	.65		Lateral
9	M19	Standoff Ho...	2.501			Lbyy			.65	.65		Lateral
10	M20	Standoff Ho...	2.501			Lbyy			.65	.65		Lateral
11	M21	Standoff Pla...	.531	.292								Lateral
12	M22	Standoff Pla...	.531	.292								Lateral
13	M23	Standoff Pla...	.531	.292								Lateral
14	M24	Standoff Pla...	.531	.292								Lateral
15	M25	Standoff Di...	4.167			Lbyy			.7	.7		Lateral
16	M26	Standoff Di...	4.167			Lbyy			.7	.7		Lateral
17	M27	Standoff Di...	4.167			Lbyy			.7	.7		Lateral
18	M28	Standoff Di...	4.167			Lbyy			.7	.7		Lateral
19	MP4A	Antenna Pipe	8			Lbyy						Lateral
20	MP3A	PIPE 2.5	8			Lbyy						Lateral
21	MP2A	Antenna Pipe	8			Lbyy						Lateral
22	MP1A	Antenna Pipe	8			Lbyy						Lateral
23	M44	Standoff Ve...	3.333			Lbyy			.7	.7		Lateral
24	M45	Standoff Ve...	3.333			Lbyy			.7	.7		Lateral
25	M46	Standoff Ve...	3.333			Lbyy			.7	.7		Lateral
26	M47	Standoff Ve...	3.333			Lbyy			.7	.7		Lateral
27	M44A	Tieback	6.231			Lbyy						Lateral
28	M44B	Tieback	10.197			Lbyy						Lateral

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	Y	-18.7	4
2	MP2A	My	-0.009	4
3	MP2A	Mz	0	4
4	MP2A	Y	-43.55	3
5	MP2A	My	-0.022	3
6	MP2A	Mz	0	3
7	MP2A	Y	-43.55	5
8	MP2A	My	-0.022	5
9	MP2A	Mz	0	5
10	M20	Y	-32	1
11	M20	My	0	1
12	M20	Mz	0	1
13	MP3A	Y	-84.4	4
14	MP3A	My	.042	4
15	MP3A	Mz	0	4
16	MP4A	Y	-70.3	4
17	MP4A	My	.035	4
18	MP4A	Mz	0	4
19	MP3A	Y	-20	1.5
20	MP3A	My	-0.01	1.5
21	MP3A	Mz	-0.01	1.5
22	MP3A	Y	-20	6.5
23	MP3A	My	-0.01	6.5
24	MP3A	Mz	-0.01	6.5
25	MP3A	Y	-20	1.5
26	MP3A	My	-0.01	1.5
27	MP3A	Mz	.01	1.5
28	MP3A	Y	-20	6.5
29	MP3A	My	-0.01	6.5
30	MP3A	Mz	.01	6.5
31	MP1A	Y	-7.15	2.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
32	MP1A	My	-.004	2.5
33	MP1A	Mz	0	2.5
34	MP1A	Y	-7.15	5.5
35	MP1A	My	-.004	5.5
36	MP1A	Mz	0	5.5
37	MP1A	Y	-3.1	2
38	MP1A	My	.002	2
39	MP1A	Mz	0	2

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	Y	-32.902	4
2	MP2A	My	-.016	4
3	MP2A	Mz	0	4
4	MP2A	Y	-56.559	3
5	MP2A	Mv	-.028	3
6	MP2A	Mz	0	3
7	MP2A	Y	-56.559	5
8	MP2A	My	-.028	5
9	MP2A	Mz	0	5
10	M20	Y	-138.364	1
11	M20	My	0	1
12	M20	Mz	0	1
13	MP3A	Y	-71.887	4
14	MP3A	My	.036	4
15	MP3A	Mz	0	4
16	MP4A	Y	-64.906	4
17	MP4A	My	.032	4
18	MP4A	Mz	0	4
19	MP3A	Y	-96.547	1.5
20	MP3A	My	-.048	1.5
21	MP3A	Mz	-.048	1.5
22	MP3A	Y	-96.547	6.5
23	MP3A	Mv	-.048	6.5
24	MP3A	Mz	-.048	6.5
25	MP3A	Y	-96.547	1.5
26	MP3A	My	-.048	1.5
27	MP3A	Mz	.048	1.5
28	MP3A	Y	-96.547	6.5
29	MP3A	Mv	-.048	6.5
30	MP3A	Mz	.048	6.5
31	MP1A	Y	-60.321	2.5
32	MP1A	My	-.03	2.5
33	MP1A	Mz	0	2.5
34	MP1A	Y	-60.321	5.5
35	MP1A	Mv	-.03	5.5
36	MP1A	Mz	0	5.5
37	MP1A	Y	-11.229	2
38	MP1A	My	.006	2
39	MP1A	Mz	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	0	4
2	MP2A	Z	-40.329	4
3	MP2A	Mx	0	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
4	MP2A	X	0	3
5	MP2A	Z	-94.773	3
6	MP2A	Mx	0	3
7	MP2A	X	0	5
8	MP2A	Z	-94.773	5
9	MP2A	Mx	0	5
10	M20	X	0	1
11	M20	Z	-154.031	1
12	M20	Mx	0	1
13	MP3A	X	0	4
14	MP3A	Z	-75.415	4
15	MP3A	Mx	0	4
16	MP4A	X	0	4
17	MP4A	Z	-75.415	4
18	MP4A	Mx	0	4
19	MP3A	X	0	1.5
20	MP3A	Z	-164.542	1.5
21	MP3A	Mx	.082	1.5
22	MP3A	X	0	6.5
23	MP3A	Z	-164.542	6.5
24	MP3A	Mx	.082	6.5
25	MP3A	X	0	1.5
26	MP3A	Z	-164.542	1.5
27	MP3A	Mx	-.082	1.5
28	MP3A	X	0	6.5
29	MP3A	Z	-164.542	6.5
30	MP3A	Mx	-.082	6.5
31	MP1A	X	0	2.5
32	MP1A	Z	-96.789	2.5
33	MP1A	Mx	0	2.5
34	MP1A	X	0	5.5
35	MP1A	Z	-96.789	5.5
36	MP1A	Mx	0	5.5
37	MP1A	X	0	2
38	MP1A	Z	-14.518	2
39	MP1A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	17.649	4
2	MP2A	Z	-30.57	4
3	MP2A	Mx	-.009	4
4	MP2A	X	40.178	3
5	MP2A	Z	-69.59	3
6	MP2A	Mx	-.02	3
7	MP2A	X	40.178	5
8	MP2A	Z	-69.59	5
9	MP2A	Mx	-.02	5
10	M20	X	67.312	1
11	M20	Z	-116.587	1
12	M20	Mx	0	1
13	MP3A	X	34.582	4
14	MP3A	Z	-59.898	4
15	MP3A	Mx	.017	4
16	MP4A	X	33.385	4
17	MP4A	Z	-57.824	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
18	MP4A	Mx	.017	4
19	MP3A	X	75.305	1.5
20	MP3A	Z	-130.432	1.5
21	MP3A	Mx	.028	1.5
22	MP3A	X	75.305	6.5
23	MP3A	Z	-130.432	6.5
24	MP3A	Mx	.028	6.5
25	MP3A	X	75.305	1.5
26	MP3A	Z	-130.432	1.5
27	MP3A	Mx	-.103	1.5
28	MP3A	X	75.305	6.5
29	MP3A	Z	-130.432	6.5
30	MP3A	Mx	-.103	6.5
31	MP1A	X	43.459	2.5
32	MP1A	Z	-75.273	2.5
33	MP1A	Mx	-.022	2.5
34	MP1A	X	43.459	5.5
35	MP1A	Z	-75.273	5.5
36	MP1A	Mx	-.022	5.5
37	MP1A	X	5.828	2
38	MP1A	Z	-10.095	2
39	MP1A	Mx	.003	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	21.857	4
2	MP2A	Z	-12.619	4
3	MP2A	Mx	-.011	4
4	MP2A	X	44.618	3
5	MP2A	Z	-25.76	3
6	MP2A	Mx	-.022	3
7	MP2A	X	44.618	5
8	MP2A	Z	-25.76	5
9	MP2A	Mx	-.022	5
10	M20	X	108.183	1
11	M20	Z	-62.459	1
12	M20	Mx	0	1
13	MP3A	X	49.071	4
14	MP3A	Z	-28.331	4
15	MP3A	Mx	.025	4
16	MP4A	X	42.85	4
17	MP4A	Z	-24.739	4
18	MP4A	Mx	.021	4
19	MP3A	X	106.3	1.5
20	MP3A	Z	-61.373	1.5
21	MP3A	Mx	-.022	1.5
22	MP3A	X	106.3	6.5
23	MP3A	Z	-61.373	6.5
24	MP3A	Mx	-.022	6.5
25	MP3A	X	106.3	1.5
26	MP3A	Z	-61.373	1.5
27	MP3A	Mx	-.084	1.5
28	MP3A	X	106.3	6.5
29	MP3A	Z	-61.373	6.5
30	MP3A	Mx	-.084	6.5
31	MP1A	X	58.175	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
32	MP1A	Z	-33.587	2.5
33	MP1A	Mx	-.029	2.5
34	MP1A	X	58.175	5.5
35	MP1A	Z	-33.587	5.5
36	MP1A	Mx	-.029	5.5
37	MP1A	X	5.139	2
38	MP1A	Z	-2.967	2
39	MP1A	Mx	.003	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	20.208	4
2	MP2A	Z	0	4
3	MP2A	Mx	-.01	4
4	MP2A	X	37.103	3
5	MP2A	Z	0	3
6	MP2A	Mx	-.019	3
7	MP2A	X	37.103	5
8	MP2A	Z	0	5
9	MP2A	Mx	-.019	5
10	M20	X	134.623	1
11	M20	Z	0	1
12	M20	Mx	0	1
13	MP3A	X	50.411	4
14	MP3A	Z	0	4
15	MP3A	Mx	.025	4
16	MP4A	X	40.833	4
17	MP4A	Z	0	4
18	MP4A	Mx	.02	4
19	MP3A	X	108.813	1.5
20	MP3A	Z	0	1.5
21	MP3A	Mx	-.054	1.5
22	MP3A	X	108.813	6.5
23	MP3A	Z	0	6.5
24	MP3A	Mx	-.054	6.5
25	MP3A	X	108.813	1.5
26	MP3A	Z	0	1.5
27	MP3A	Mx	-.054	1.5
28	MP3A	X	108.813	6.5
29	MP3A	Z	0	6.5
30	MP3A	Mx	-.054	6.5
31	MP1A	X	57.303	2.5
32	MP1A	Z	0	2.5
33	MP1A	Mx	-.029	2.5
34	MP1A	X	57.303	5.5
35	MP1A	Z	0	5.5
36	MP1A	Mx	-.029	5.5
37	MP1A	X	3.072	2
38	MP1A	Z	0	2
39	MP1A	Mx	.002	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	21.857	4
2	MP2A	Z	12.619	4
3	MP2A	Mx	-.011	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
4	MP2A	X	44.618	3
5	MP2A	Z	25.76	3
6	MP2A	Mx	-.022	3
7	MP2A	X	44.618	5
8	MP2A	Z	25.76	5
9	MP2A	Mx	-.022	5
10	M20	X	133.395	1
11	M20	Z	77.016	1
12	M20	Mx	0	1
13	MP3A	X	49.071	4
14	MP3A	Z	28.331	4
15	MP3A	Mx	.025	4
16	MP4A	X	42.85	4
17	MP4A	Z	24.739	4
18	MP4A	Mx	.021	4
19	MP3A	X	106.3	1.5
20	MP3A	Z	61.373	1.5
21	MP3A	Mx	-.084	1.5
22	MP3A	X	106.3	6.5
23	MP3A	Z	61.373	6.5
24	MP3A	Mx	-.084	6.5
25	MP3A	X	106.3	1.5
26	MP3A	Z	61.373	1.5
27	MP3A	Mx	-.022	1.5
28	MP3A	X	106.3	6.5
29	MP3A	Z	61.373	6.5
30	MP3A	Mx	-.022	6.5
31	MP1A	X	58.175	2.5
32	MP1A	Z	33.587	2.5
33	MP1A	Mx	-.029	2.5
34	MP1A	X	58.175	5.5
35	MP1A	Z	33.587	5.5
36	MP1A	Mx	-.029	5.5
37	MP1A	X	5.139	2
38	MP1A	Z	2.967	2
39	MP1A	Mx	.003	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP2A	X	17.649	4
2	MP2A	Z	30.57	4
3	MP2A	Mx	-.009	4
4	MP2A	X	40.178	3
5	MP2A	Z	69.59	3
6	MP2A	Mx	-.02	3
7	MP2A	X	40.178	5
8	MP2A	Z	69.59	5
9	MP2A	Mx	-.02	5
10	M20	X	81.868	1
11	M20	Z	141.799	1
12	M20	Mx	0	1
13	MP3A	X	34.582	4
14	MP3A	Z	59.898	4
15	MP3A	Mx	.017	4
16	MP4A	X	33.385	4
17	MP4A	Z	57.824	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
18	MP4A	Mx	.017	4
19	MP3A	X	75.305	1.5
20	MP3A	Z	130.432	1.5
21	MP3A	Mx	-.103	1.5
22	MP3A	X	75.305	6.5
23	MP3A	Z	130.432	6.5
24	MP3A	Mx	-.103	6.5
25	MP3A	X	75.305	1.5
26	MP3A	Z	130.432	1.5
27	MP3A	Mx	.028	1.5
28	MP3A	X	75.305	6.5
29	MP3A	Z	130.432	6.5
30	MP3A	Mx	.028	6.5
31	MP1A	X	43.459	2.5
32	MP1A	Z	75.273	2.5
33	MP1A	Mx	-.022	2.5
34	MP1A	X	43.459	5.5
35	MP1A	Z	75.273	5.5
36	MP1A	Mx	-.022	5.5
37	MP1A	X	5.828	2
38	MP1A	Z	10.095	2
39	MP1A	Mx	.003	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	0	4
2	MP2A	Z	40.329	4
3	MP2A	Mx	0	4
4	MP2A	X	0	3
5	MP2A	Z	94.773	3
6	MP2A	Mx	0	3
7	MP2A	X	0	5
8	MP2A	Z	94.773	5
9	MP2A	Mx	0	5
10	M20	X	0	1
11	M20	Z	154.031	1
12	M20	Mx	0	1
13	MP3A	X	0	4
14	MP3A	Z	75.415	4
15	MP3A	Mx	0	4
16	MP4A	X	0	4
17	MP4A	Z	75.415	4
18	MP4A	Mx	0	4
19	MP3A	X	0	1.5
20	MP3A	Z	164.542	1.5
21	MP3A	Mx	-.082	1.5
22	MP3A	X	0	6.5
23	MP3A	Z	164.542	6.5
24	MP3A	Mx	-.082	6.5
25	MP3A	X	0	1.5
26	MP3A	Z	164.542	1.5
27	MP3A	Mx	.082	1.5
28	MP3A	X	0	6.5
29	MP3A	Z	164.542	6.5
30	MP3A	Mx	.082	6.5
31	MP1A	X	0	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
32	MP1A	Z	96.789	2.5
33	MP1A	Mx	0	2.5
34	MP1A	X	0	5.5
35	MP1A	Z	96.789	5.5
36	MP1A	Mx	0	5.5
37	MP1A	X	0	2
38	MP1A	Z	14.518	2
39	MP1A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-17.649	4
2	MP2A	Z	30.57	4
3	MP2A	Mx	.009	4
4	MP2A	X	-40.178	3
5	MP2A	Z	69.59	3
6	MP2A	Mx	.02	3
7	MP2A	X	-40.178	5
8	MP2A	Z	69.59	5
9	MP2A	Mx	.02	5
10	M20	X	-67.312	1
11	M20	Z	116.587	1
12	M20	Mx	0	1
13	MP3A	X	-34.582	4
14	MP3A	Z	59.898	4
15	MP3A	Mx	-.017	4
16	MP4A	X	-33.385	4
17	MP4A	Z	57.824	4
18	MP4A	Mx	-.017	4
19	MP3A	X	-75.305	1.5
20	MP3A	Z	130.432	1.5
21	MP3A	Mx	-.028	1.5
22	MP3A	X	-75.305	6.5
23	MP3A	Z	130.432	6.5
24	MP3A	Mx	-.028	6.5
25	MP3A	X	-75.305	1.5
26	MP3A	Z	130.432	1.5
27	MP3A	Mx	.103	1.5
28	MP3A	X	-75.305	6.5
29	MP3A	Z	130.432	6.5
30	MP3A	Mx	.103	6.5
31	MP1A	X	-43.459	2.5
32	MP1A	Z	75.273	2.5
33	MP1A	Mx	.022	2.5
34	MP1A	X	-43.459	5.5
35	MP1A	Z	75.273	5.5
36	MP1A	Mx	.022	5.5
37	MP1A	X	-5.828	2
38	MP1A	Z	10.095	2
39	MP1A	Mx	-.003	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-21.857	4
2	MP2A	Z	12.619	4
3	MP2A	Mx	.011	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
4	MP2A	X	-44.618	3
5	MP2A	Z	25.76	3
6	MP2A	Mx	.022	3
7	MP2A	X	-44.618	5
8	MP2A	Z	25.76	5
9	MP2A	Mx	.022	5
10	M20	X	-108.183	1
11	M20	Z	62.459	1
12	M20	Mx	0	1
13	MP3A	X	-49.071	4
14	MP3A	Z	28.331	4
15	MP3A	Mx	-.025	4
16	MP4A	X	-42.85	4
17	MP4A	Z	24.739	4
18	MP4A	Mx	-.021	4
19	MP3A	X	-106.3	1.5
20	MP3A	Z	61.373	1.5
21	MP3A	Mx	.022	1.5
22	MP3A	X	-106.3	6.5
23	MP3A	Z	61.373	6.5
24	MP3A	Mx	.022	6.5
25	MP3A	X	-106.3	1.5
26	MP3A	Z	61.373	1.5
27	MP3A	Mx	.084	1.5
28	MP3A	X	-106.3	6.5
29	MP3A	Z	61.373	6.5
30	MP3A	Mx	.084	6.5
31	MP1A	X	-58.175	2.5
32	MP1A	Z	33.587	2.5
33	MP1A	Mx	.029	2.5
34	MP1A	X	-58.175	5.5
35	MP1A	Z	33.587	5.5
36	MP1A	Mx	.029	5.5
37	MP1A	X	-5.139	2
38	MP1A	Z	2.967	2
39	MP1A	Mx	-.003	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-20.208	4
2	MP2A	Z	0	4
3	MP2A	Mx	.01	4
4	MP2A	X	-37.103	3
5	MP2A	Z	0	3
6	MP2A	Mx	.019	3
7	MP2A	X	-37.103	5
8	MP2A	Z	0	5
9	MP2A	Mx	.019	5
10	M20	X	-134.623	1
11	M20	Z	0	1
12	M20	Mx	0	1
13	MP3A	X	-50.411	4
14	MP3A	Z	0	4
15	MP3A	Mx	-.025	4
16	MP4A	X	-40.833	4
17	MP4A	Z	0	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
18	MP4A	Mx	-.02	4
19	MP3A	X	-108.813	1.5
20	MP3A	Z	0	1.5
21	MP3A	Mx	.054	1.5
22	MP3A	X	-108.813	6.5
23	MP3A	Z	0	6.5
24	MP3A	Mx	.054	6.5
25	MP3A	X	-108.813	1.5
26	MP3A	Z	0	1.5
27	MP3A	Mx	.054	1.5
28	MP3A	X	-108.813	6.5
29	MP3A	Z	0	6.5
30	MP3A	Mx	.054	6.5
31	MP1A	X	-57.303	2.5
32	MP1A	Z	0	2.5
33	MP1A	Mx	.029	2.5
34	MP1A	X	-57.303	5.5
35	MP1A	Z	0	5.5
36	MP1A	Mx	.029	5.5
37	MP1A	X	-3.072	2
38	MP1A	Z	0	2
39	MP1A	Mx	-.002	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-21.857	4
2	MP2A	Z	-12.619	4
3	MP2A	Mx	.011	4
4	MP2A	X	-44.618	3
5	MP2A	Z	-25.76	3
6	MP2A	Mx	.022	3
7	MP2A	X	-44.618	5
8	MP2A	Z	-25.76	5
9	MP2A	Mx	.022	5
10	M20	X	-133.395	1
11	M20	Z	-77.016	1
12	M20	Mx	0	1
13	MP3A	X	-49.071	4
14	MP3A	Z	-28.331	4
15	MP3A	Mx	-.025	4
16	MP4A	X	-42.85	4
17	MP4A	Z	-24.739	4
18	MP4A	Mx	-.021	4
19	MP3A	X	-106.3	1.5
20	MP3A	Z	-61.373	1.5
21	MP3A	Mx	.084	1.5
22	MP3A	X	-106.3	6.5
23	MP3A	Z	-61.373	6.5
24	MP3A	Mx	.084	6.5
25	MP3A	X	-106.3	1.5
26	MP3A	Z	-61.373	1.5
27	MP3A	Mx	.022	1.5
28	MP3A	X	-106.3	6.5
29	MP3A	Z	-61.373	6.5
30	MP3A	Mx	.022	6.5
31	MP1A	X	-58.175	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
32	MP1A	Z	-33.587	2.5
33	MP1A	Mx	.029	2.5
34	MP1A	X	-58.175	5.5
35	MP1A	Z	-33.587	5.5
36	MP1A	Mx	.029	5.5
37	MP1A	X	-5.139	2
38	MP1A	Z	-2.967	2
39	MP1A	Mx	-.003	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-17.649	4
2	MP2A	Z	-30.57	4
3	MP2A	Mx	.009	4
4	MP2A	X	-40.178	3
5	MP2A	Z	-69.59	3
6	MP2A	Mx	.02	3
7	MP2A	X	-40.178	5
8	MP2A	Z	-69.59	5
9	MP2A	Mx	.02	5
10	M20	X	-81.868	1
11	M20	Z	-141.799	1
12	M20	Mx	0	1
13	MP3A	X	-34.582	4
14	MP3A	Z	-59.898	4
15	MP3A	Mx	-.017	4
16	MP4A	X	-33.385	4
17	MP4A	Z	-57.824	4
18	MP4A	Mx	-.017	4
19	MP3A	X	-75.305	1.5
20	MP3A	Z	-130.432	1.5
21	MP3A	Mx	.103	1.5
22	MP3A	X	-75.305	6.5
23	MP3A	Z	-130.432	6.5
24	MP3A	Mx	.103	6.5
25	MP3A	X	-75.305	1.5
26	MP3A	Z	-130.432	1.5
27	MP3A	Mx	-.028	1.5
28	MP3A	X	-75.305	6.5
29	MP3A	Z	-130.432	6.5
30	MP3A	Mx	-.028	6.5
31	MP1A	X	-43.459	2.5
32	MP1A	Z	-75.273	2.5
33	MP1A	Mx	.022	2.5
34	MP1A	X	-43.459	5.5
35	MP1A	Z	-75.273	5.5
36	MP1A	Mx	.022	5.5
37	MP1A	X	-5.828	2
38	MP1A	Z	-10.095	2
39	MP1A	Mx	-.003	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	0	4
2	MP2A	Z	-10.558	4
3	MP2A	Mx	0	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
4	MP2A	X	0	3
5	MP2A	Z	-20.733	3
6	MP2A	Mx	0	3
7	MP2A	X	0	5
8	MP2A	Z	-20.733	5
9	MP2A	Mx	0	5
10	M20	X	0	1
11	M20	Z	-34.126	1
12	M20	Mx	0	1
13	MP3A	X	0	4
14	MP3A	Z	-17.962	4
15	MP3A	Mx	0	4
16	MP4A	X	0	4
17	MP4A	Z	-17.962	4
18	MP4A	Mx	0	4
19	MP3A	X	0	1.5
20	MP3A	Z	-34.8	1.5
21	MP3A	Mx	.017	1.5
22	MP3A	X	0	6.5
23	MP3A	Z	-34.8	6.5
24	MP3A	Mx	.017	6.5
25	MP3A	X	0	1.5
26	MP3A	Z	-34.8	1.5
27	MP3A	Mx	-.017	1.5
28	MP3A	X	0	6.5
29	MP3A	Z	-34.8	6.5
30	MP3A	Mx	-.017	6.5
31	MP1A	X	0	2.5
32	MP1A	Z	-21.221	2.5
33	MP1A	Mx	0	2.5
34	MP1A	X	0	5.5
35	MP1A	Z	-21.221	5.5
36	MP1A	Mx	0	5.5
37	MP1A	X	0	2
38	MP1A	Z	-4.27	2
39	MP1A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	4.742	4
2	MP2A	Z	-8.213	4
3	MP2A	Mx	-.002	4
4	MP2A	X	8.926	3
5	MP2A	Z	-15.461	3
6	MP2A	Mx	-.004	3
7	MP2A	X	8.926	5
8	MP2A	Z	-15.461	5
9	MP2A	Mx	-.004	5
10	M20	X	15.177	1
11	M20	Z	-26.287	1
12	M20	Mx	0	1
13	MP3A	X	8.328	4
14	MP3A	Z	-14.424	4
15	MP3A	Mx	.004	4
16	MP4A	X	8.08	4
17	MP4A	Z	-13.995	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
18	MP4A	Mx	.004	4
19	MP3A	X	16.109	1.5
20	MP3A	Z	-27.902	1.5
21	MP3A	Mx	.006	1.5
22	MP3A	X	16.109	6.5
23	MP3A	Z	-27.902	6.5
24	MP3A	Mx	.006	6.5
25	MP3A	X	16.109	1.5
26	MP3A	Z	-27.902	1.5
27	MP3A	Mx	-.022	1.5
28	MP3A	X	16.109	6.5
29	MP3A	Z	-27.902	6.5
30	MP3A	Mx	-.022	6.5
31	MP1A	X	9.66	2.5
32	MP1A	Z	-16.731	2.5
33	MP1A	Mx	-.005	2.5
34	MP1A	X	9.66	5.5
35	MP1A	Z	-16.731	5.5
36	MP1A	Mx	-.005	5.5
37	MP1A	X	1.835	2
38	MP1A	Z	-3.178	2
39	MP1A	Mx	.000918	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	6.351	4
2	MP2A	Z	-3.667	4
3	MP2A	Mx	-.003	4
4	MP2A	X	10.471	3
5	MP2A	Z	-6.045	3
6	MP2A	Mx	-.005	3
7	MP2A	X	10.471	5
8	MP2A	Z	-6.045	5
9	MP2A	Mx	-.005	5
10	M20	X	24.653	1
11	M20	Z	-14.233	1
12	M20	Mx	0	1
13	MP3A	X	12.162	4
14	MP3A	Z	-7.022	4
15	MP3A	Mx	.006	4
16	MP4A	X	10.873	4
17	MP4A	Z	-6.278	4
18	MP4A	Mx	.005	4
19	MP3A	X	23.429	1.5
20	MP3A	Z	-13.527	1.5
21	MP3A	Mx	-.005	1.5
22	MP3A	X	23.429	6.5
23	MP3A	Z	-13.527	6.5
24	MP3A	Mx	-.005	6.5
25	MP3A	X	23.429	1.5
26	MP3A	Z	-13.527	1.5
27	MP3A	Mx	-.018	1.5
28	MP3A	X	23.429	6.5
29	MP3A	Z	-13.527	6.5
30	MP3A	Mx	-.018	6.5
31	MP1A	X	13.438	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
32	MP1A	Z	-7.758	2.5
33	MP1A	Mx	-0.007	2.5
34	MP1A	X	13.438	5.5
35	MP1A	Z	-7.758	5.5
36	MP1A	Mx	-0.007	5.5
37	MP1A	X	2.139	2
38	MP1A	Z	-1.235	2
39	MP1A	Mx	.001	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	6.259	4
2	MP2A	Z	0	4
3	MP2A	Mx	-0.003	4
4	MP2A	X	9.21	3
5	MP2A	Z	0	3
6	MP2A	Mx	-0.005	3
7	MP2A	X	9.21	5
8	MP2A	Z	0	5
9	MP2A	Mx	-0.005	5
10	M20	X	30.353	1
11	M20	Z	0	1
12	M20	Mx	0	1
13	MP3A	X	12.738	4
14	MP3A	Z	0	4
15	MP3A	Mx	.006	4
16	MP4A	X	10.753	4
17	MP4A	Z	0	4
18	MP4A	Mx	.005	4
19	MP3A	X	24.471	1.5
20	MP3A	Z	0	1.5
21	MP3A	Mx	-0.012	1.5
22	MP3A	X	24.471	6.5
23	MP3A	Z	0	6.5
24	MP3A	Mx	-0.012	6.5
25	MP3A	X	24.471	1.5
26	MP3A	Z	0	1.5
27	MP3A	Mx	-0.012	1.5
28	MP3A	X	24.471	6.5
29	MP3A	Z	0	6.5
30	MP3A	Mx	-0.012	6.5
31	MP1A	X	13.615	2.5
32	MP1A	Z	0	2.5
33	MP1A	Mx	-0.007	2.5
34	MP1A	X	13.615	5.5
35	MP1A	Z	0	5.5
36	MP1A	Mx	-0.007	5.5
37	MP1A	X	1.87	2
38	MP1A	Z	0	2
39	MP1A	Mx	.000935	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	6.351	4
2	MP2A	Z	3.667	4
3	MP2A	Mx	-0.003	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
4	MP2A	X	10.471	3
5	MP2A	Z	6.045	3
6	MP2A	Mx	-.005	3
7	MP2A	X	10.471	5
8	MP2A	Z	6.045	5
9	MP2A	Mx	-.005	5
10	M20	X	29.554	1
11	M20	Z	17.063	1
12	M20	Mx	0	1
13	MP3A	X	12.162	4
14	MP3A	Z	7.022	4
15	MP3A	Mx	.006	4
16	MP4A	X	10.873	4
17	MP4A	Z	6.278	4
18	MP4A	Mx	.005	4
19	MP3A	X	23.429	1.5
20	MP3A	Z	13.527	1.5
21	MP3A	Mx	-.018	1.5
22	MP3A	X	23.429	6.5
23	MP3A	Z	13.527	6.5
24	MP3A	Mx	-.018	6.5
25	MP3A	X	23.429	1.5
26	MP3A	Z	13.527	1.5
27	MP3A	Mx	-.005	1.5
28	MP3A	X	23.429	6.5
29	MP3A	Z	13.527	6.5
30	MP3A	Mx	-.005	6.5
31	MP1A	X	13.438	2.5
32	MP1A	Z	7.758	2.5
33	MP1A	Mx	-.007	2.5
34	MP1A	X	13.438	5.5
35	MP1A	Z	7.758	5.5
36	MP1A	Mx	-.007	5.5
37	MP1A	X	2.139	2
38	MP1A	Z	1.235	2
39	MP1A	Mx	.001	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	4.742	4
2	MP2A	Z	8.213	4
3	MP2A	Mx	-.002	4
4	MP2A	X	8.926	3
5	MP2A	Z	15.461	3
6	MP2A	Mx	-.004	3
7	MP2A	X	8.926	5
8	MP2A	Z	15.461	5
9	MP2A	Mx	-.004	5
10	M20	X	18.006	1
11	M20	Z	31.187	1
12	M20	Mx	0	1
13	MP3A	X	8.328	4
14	MP3A	Z	14.424	4
15	MP3A	Mx	.004	4
16	MP4A	X	8.08	4
17	MP4A	Z	13.995	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
18	MP4A	Mx	.004	4
19	MP3A	X	16.109	1.5
20	MP3A	Z	27.902	1.5
21	MP3A	Mx	-.022	1.5
22	MP3A	X	16.109	6.5
23	MP3A	Z	27.902	6.5
24	MP3A	Mx	-.022	6.5
25	MP3A	X	16.109	1.5
26	MP3A	Z	27.902	1.5
27	MP3A	Mx	.006	1.5
28	MP3A	X	16.109	6.5
29	MP3A	Z	27.902	6.5
30	MP3A	Mx	.006	6.5
31	MP1A	X	9.66	2.5
32	MP1A	Z	16.731	2.5
33	MP1A	Mx	-.005	2.5
34	MP1A	X	9.66	5.5
35	MP1A	Z	16.731	5.5
36	MP1A	Mx	-.005	5.5
37	MP1A	X	1.835	2
38	MP1A	Z	3.178	2
39	MP1A	Mx	.000918	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	0	4
2	MP2A	Z	10.558	4
3	MP2A	Mx	0	4
4	MP2A	X	0	3
5	MP2A	Z	20.733	3
6	MP2A	Mx	0	3
7	MP2A	X	0	5
8	MP2A	Z	20.733	5
9	MP2A	Mx	0	5
10	M20	X	0	1
11	M20	Z	34.126	1
12	M20	Mx	0	1
13	MP3A	X	0	4
14	MP3A	Z	17.962	4
15	MP3A	Mx	0	4
16	MP4A	X	0	4
17	MP4A	Z	17.962	4
18	MP4A	Mx	0	4
19	MP3A	X	0	1.5
20	MP3A	Z	34.8	1.5
21	MP3A	Mx	-.017	1.5
22	MP3A	X	0	6.5
23	MP3A	Z	34.8	6.5
24	MP3A	Mx	-.017	6.5
25	MP3A	X	0	1.5
26	MP3A	Z	34.8	1.5
27	MP3A	Mx	.017	1.5
28	MP3A	X	0	6.5
29	MP3A	Z	34.8	6.5
30	MP3A	Mx	.017	6.5
31	MP1A	X	0	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
32	MP1A	Z	21.221	2.5
33	MP1A	Mx	0	2.5
34	MP1A	X	0	5.5
35	MP1A	Z	21.221	5.5
36	MP1A	Mx	0	5.5
37	MP1A	X	0	2
38	MP1A	Z	4.27	2
39	MP1A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-4.742	4
2	MP2A	Z	8.213	4
3	MP2A	Mx	.002	4
4	MP2A	X	-8.926	3
5	MP2A	Z	15.461	3
6	MP2A	Mx	.004	3
7	MP2A	X	-8.926	5
8	MP2A	Z	15.461	5
9	MP2A	Mx	.004	5
10	M20	X	-15.177	1
11	M20	Z	26.287	1
12	M20	Mx	0	1
13	MP3A	X	-8.328	4
14	MP3A	Z	14.424	4
15	MP3A	Mx	-.004	4
16	MP4A	X	-8.08	4
17	MP4A	Z	13.995	4
18	MP4A	Mx	-.004	4
19	MP3A	X	-16.109	1.5
20	MP3A	Z	27.902	1.5
21	MP3A	Mx	-.006	1.5
22	MP3A	X	-16.109	6.5
23	MP3A	Z	27.902	6.5
24	MP3A	Mx	-.006	6.5
25	MP3A	X	-16.109	1.5
26	MP3A	Z	27.902	1.5
27	MP3A	Mx	.022	1.5
28	MP3A	X	-16.109	6.5
29	MP3A	Z	27.902	6.5
30	MP3A	Mx	.022	6.5
31	MP1A	X	-9.66	2.5
32	MP1A	Z	16.731	2.5
33	MP1A	Mx	.005	2.5
34	MP1A	X	-9.66	5.5
35	MP1A	Z	16.731	5.5
36	MP1A	Mx	.005	5.5
37	MP1A	X	-1.835	2
38	MP1A	Z	3.178	2
39	MP1A	Mx	-.000918	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-6.351	4
2	MP2A	Z	3.667	4
3	MP2A	Mx	.003	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
4	MP2A	X	-10.471	3
5	MP2A	Z	6.045	3
6	MP2A	Mx	.005	3
7	MP2A	X	-10.471	5
8	MP2A	Z	6.045	5
9	MP2A	Mx	.005	5
10	M20	X	-24.653	1
11	M20	Z	14.233	1
12	M20	Mx	0	1
13	MP3A	X	-12.162	4
14	MP3A	Z	7.022	4
15	MP3A	Mx	-.006	4
16	MP4A	X	-10.873	4
17	MP4A	Z	6.278	4
18	MP4A	Mx	-.005	4
19	MP3A	X	-23.429	1.5
20	MP3A	Z	13.527	1.5
21	MP3A	Mx	.005	1.5
22	MP3A	X	-23.429	6.5
23	MP3A	Z	13.527	6.5
24	MP3A	Mx	.005	6.5
25	MP3A	X	-23.429	1.5
26	MP3A	Z	13.527	1.5
27	MP3A	Mx	.018	1.5
28	MP3A	X	-23.429	6.5
29	MP3A	Z	13.527	6.5
30	MP3A	Mx	.018	6.5
31	MP1A	X	-13.438	2.5
32	MP1A	Z	7.758	2.5
33	MP1A	Mx	.007	2.5
34	MP1A	X	-13.438	5.5
35	MP1A	Z	7.758	5.5
36	MP1A	Mx	.007	5.5
37	MP1A	X	-2.139	2
38	MP1A	Z	1.235	2
39	MP1A	Mx	-.001	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-6.259	4
2	MP2A	Z	0	4
3	MP2A	Mx	.003	4
4	MP2A	X	-9.21	3
5	MP2A	Z	0	3
6	MP2A	Mx	.005	3
7	MP2A	X	-9.21	5
8	MP2A	Z	0	5
9	MP2A	Mx	.005	5
10	M20	X	-30.353	1
11	M20	Z	0	1
12	M20	Mx	0	1
13	MP3A	X	-12.738	4
14	MP3A	Z	0	4
15	MP3A	Mx	-.006	4
16	MP4A	X	-10.753	4
17	MP4A	Z	0	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
18	MP4A	Mx	-.005	4
19	MP3A	X	-24.471	1.5
20	MP3A	Z	0	1.5
21	MP3A	Mx	.012	1.5
22	MP3A	X	-24.471	6.5
23	MP3A	Z	0	6.5
24	MP3A	Mx	.012	6.5
25	MP3A	X	-24.471	1.5
26	MP3A	Z	0	1.5
27	MP3A	Mx	.012	1.5
28	MP3A	X	-24.471	6.5
29	MP3A	Z	0	6.5
30	MP3A	Mx	.012	6.5
31	MP1A	X	-13.615	2.5
32	MP1A	Z	0	2.5
33	MP1A	Mx	.007	2.5
34	MP1A	X	-13.615	5.5
35	MP1A	Z	0	5.5
36	MP1A	Mx	.007	5.5
37	MP1A	X	-1.87	2
38	MP1A	Z	0	2
39	MP1A	Mx	-.000935	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-6.351	4
2	MP2A	Z	-3.667	4
3	MP2A	Mx	.003	4
4	MP2A	X	-10.471	3
5	MP2A	Z	-6.045	3
6	MP2A	Mx	.005	3
7	MP2A	X	-10.471	5
8	MP2A	Z	-6.045	5
9	MP2A	Mx	.005	5
10	M20	X	-29.554	1
11	M20	Z	-17.063	1
12	M20	Mx	0	1
13	MP3A	X	-12.162	4
14	MP3A	Z	-7.022	4
15	MP3A	Mx	-.006	4
16	MP4A	X	-10.873	4
17	MP4A	Z	-6.278	4
18	MP4A	Mx	-.005	4
19	MP3A	X	-23.429	1.5
20	MP3A	Z	-13.527	1.5
21	MP3A	Mx	.018	1.5
22	MP3A	X	-23.429	6.5
23	MP3A	Z	-13.527	6.5
24	MP3A	Mx	.018	6.5
25	MP3A	X	-23.429	1.5
26	MP3A	Z	-13.527	1.5
27	MP3A	Mx	.005	1.5
28	MP3A	X	-23.429	6.5
29	MP3A	Z	-13.527	6.5
30	MP3A	Mx	.005	6.5
31	MP1A	X	-13.438	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
32	MP1A	Z	-7.758	2.5
33	MP1A	Mx	.007	2.5
34	MP1A	X	-13.438	5.5
35	MP1A	Z	-7.758	5.5
36	MP1A	Mx	.007	5.5
37	MP1A	X	-2.139	2
38	MP1A	Z	-1.235	2
39	MP1A	Mx	-.001	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-4.742	4
2	MP2A	Z	-8.213	4
3	MP2A	Mx	.002	4
4	MP2A	X	-8.926	3
5	MP2A	Z	-15.461	3
6	MP2A	Mx	.004	3
7	MP2A	X	-8.926	5
8	MP2A	Z	-15.461	5
9	MP2A	Mx	.004	5
10	M20	X	-18.006	1
11	M20	Z	-31.187	1
12	M20	Mx	0	1
13	MP3A	X	-8.328	4
14	MP3A	Z	-14.424	4
15	MP3A	Mx	-.004	4
16	MP4A	X	-8.08	4
17	MP4A	Z	-13.995	4
18	MP4A	Mx	-.004	4
19	MP3A	X	-16.109	1.5
20	MP3A	Z	-27.902	1.5
21	MP3A	Mx	.022	1.5
22	MP3A	X	-16.109	6.5
23	MP3A	Z	-27.902	6.5
24	MP3A	Mx	.022	6.5
25	MP3A	X	-16.109	1.5
26	MP3A	Z	-27.902	1.5
27	MP3A	Mx	-.006	1.5
28	MP3A	X	-16.109	6.5
29	MP3A	Z	-27.902	6.5
30	MP3A	Mx	-.006	6.5
31	MP1A	X	-9.66	2.5
32	MP1A	Z	-16.731	2.5
33	MP1A	Mx	.005	2.5
34	MP1A	X	-9.66	5.5
35	MP1A	Z	-16.731	5.5
36	MP1A	Mx	.005	5.5
37	MP1A	X	-1.835	2
38	MP1A	Z	-3.178	2
39	MP1A	Mx	-.000918	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	0	4
2	MP2A	Z	-2.651	4
3	MP2A	Mx	0	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
4	MP2A	X	0	3
5	MP2A	Z	-6.231	3
6	MP2A	Mx	0	3
7	MP2A	X	0	5
8	MP2A	Z	-6.231	5
9	MP2A	Mx	0	5
10	M20	X	0	1
11	M20	Z	-10.127	1
12	M20	Mx	0	1
13	MP3A	X	0	4
14	MP3A	Z	-4.958	4
15	MP3A	Mx	0	4
16	MP4A	X	0	4
17	MP4A	Z	-4.958	4
18	MP4A	Mx	0	4
19	MP3A	X	0	1.5
20	MP3A	Z	-10.818	1.5
21	MP3A	Mx	.005	1.5
22	MP3A	X	0	6.5
23	MP3A	Z	-10.818	6.5
24	MP3A	Mx	.005	6.5
25	MP3A	X	0	1.5
26	MP3A	Z	-10.818	1.5
27	MP3A	Mx	-.005	1.5
28	MP3A	X	0	6.5
29	MP3A	Z	-10.818	6.5
30	MP3A	Mx	-.005	6.5
31	MP1A	X	0	2.5
32	MP1A	Z	-6.364	2.5
33	MP1A	Mx	0	2.5
34	MP1A	X	0	5.5
35	MP1A	Z	-6.364	5.5
36	MP1A	Mx	0	5.5
37	MP1A	X	0	2
38	MP1A	Z	-.955	2
39	MP1A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	1.16	4
2	MP2A	Z	-2.01	4
3	MP2A	Mx	-.00058	4
4	MP2A	X	2.642	3
5	MP2A	Z	-4.575	3
6	MP2A	Mx	-.001	3
7	MP2A	X	2.642	5
8	MP2A	Z	-4.575	5
9	MP2A	Mx	-.001	5
10	M20	X	4.425	1
11	M20	Z	-7.665	1
12	M20	Mx	0	1
13	MP3A	X	2.274	4
14	MP3A	Z	-3.938	4
15	MP3A	Mx	.001	4
16	MP4A	X	2.195	4
17	MP4A	Z	-3.802	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
18	MP4A	Mx	.001	4
19	MP3A	X	4.951	1.5
20	MP3A	Z	-8.575	1.5
21	MP3A	Mx	.002	1.5
22	MP3A	X	4.951	6.5
23	MP3A	Z	-8.575	6.5
24	MP3A	Mx	.002	6.5
25	MP3A	X	4.951	1.5
26	MP3A	Z	-8.575	1.5
27	MP3A	Mx	-.007	1.5
28	MP3A	X	4.951	6.5
29	MP3A	Z	-8.575	6.5
30	MP3A	Mx	-.007	6.5
31	MP1A	X	2.857	2.5
32	MP1A	Z	-4.949	2.5
33	MP1A	Mx	-.001	2.5
34	MP1A	X	2.857	5.5
35	MP1A	Z	-4.949	5.5
36	MP1A	Mx	-.001	5.5
37	MP1A	X	.383	2
38	MP1A	Z	-.664	2
39	MP1A	Mx	.000192	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	1.437	4
2	MP2A	Z	-.83	4
3	MP2A	Mx	-.000718	4
4	MP2A	X	2.933	3
5	MP2A	Z	-1.694	3
6	MP2A	Mx	-.001	3
7	MP2A	X	2.933	5
8	MP2A	Z	-1.694	5
9	MP2A	Mx	-.001	5
10	M20	X	7.113	1
11	M20	Z	-4.106	1
12	M20	Mx	0	1
13	MP3A	X	3.226	4
14	MP3A	Z	-1.863	4
15	MP3A	Mx	.002	4
16	MP4A	X	2.817	4
17	MP4A	Z	-1.627	4
18	MP4A	Mx	.001	4
19	MP3A	X	6.989	1.5
20	MP3A	Z	-4.035	1.5
21	MP3A	Mx	-.001	1.5
22	MP3A	X	6.989	6.5
23	MP3A	Z	-4.035	6.5
24	MP3A	Mx	-.001	6.5
25	MP3A	X	6.989	1.5
26	MP3A	Z	-4.035	1.5
27	MP3A	Mx	-.006	1.5
28	MP3A	X	6.989	6.5
29	MP3A	Z	-4.035	6.5
30	MP3A	Mx	-.006	6.5
31	MP1A	X	3.825	2.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
32	MP1A	Z	-2.208	2.5
33	MP1A	Mx	-.002	2.5
34	MP1A	X	3.825	5.5
35	MP1A	Z	-2.208	5.5
36	MP1A	Mx	-.002	5.5
37	MP1A	X	.338	2
38	MP1A	Z	-.195	2
39	MP1A	Mx	.000169	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	1.329	4
2	MP2A	Z	0	4
3	MP2A	Mx	-.000664	4
4	MP2A	X	2.439	3
5	MP2A	Z	0	3
6	MP2A	Mx	-.001	3
7	MP2A	X	2.439	5
8	MP2A	Z	0	5
9	MP2A	Mx	-.001	5
10	M20	X	8.851	1
11	M20	Z	0	1
12	M20	Mx	0	1
13	MP3A	X	3.314	4
14	MP3A	Z	0	4
15	MP3A	Mx	.002	4
16	MP4A	X	2.685	4
17	MP4A	Z	0	4
18	MP4A	Mx	.001	4
19	MP3A	X	7.154	1.5
20	MP3A	Z	0	1.5
21	MP3A	Mx	-.004	1.5
22	MP3A	X	7.154	6.5
23	MP3A	Z	0	6.5
24	MP3A	Mx	-.004	6.5
25	MP3A	X	7.154	1.5
26	MP3A	Z	0	1.5
27	MP3A	Mx	-.004	1.5
28	MP3A	X	7.154	6.5
29	MP3A	Z	0	6.5
30	MP3A	Mx	-.004	6.5
31	MP1A	X	3.767	2.5
32	MP1A	Z	0	2.5
33	MP1A	Mx	-.002	2.5
34	MP1A	X	3.767	5.5
35	MP1A	Z	0	5.5
36	MP1A	Mx	-.002	5.5
37	MP1A	X	.202	2
38	MP1A	Z	0	2
39	MP1A	Mx	.000101	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	1.437	4
2	MP2A	Z	.83	4
3	MP2A	Mx	-.000718	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
4	MP2A	X	2.933	3
5	MP2A	Z	1.694	3
6	MP2A	Mx	-.001	3
7	MP2A	X	2.933	5
8	MP2A	Z	1.694	5
9	MP2A	Mx	-.001	5
10	M20	X	8.77	1
11	M20	Z	5.063	1
12	M20	Mx	0	1
13	MP3A	X	3.226	4
14	MP3A	Z	1.863	4
15	MP3A	Mx	.002	4
16	MP4A	X	2.817	4
17	MP4A	Z	1.627	4
18	MP4A	Mx	.001	4
19	MP3A	X	6.989	1.5
20	MP3A	Z	4.035	1.5
21	MP3A	Mx	-.006	1.5
22	MP3A	X	6.989	6.5
23	MP3A	Z	4.035	6.5
24	MP3A	Mx	-.006	6.5
25	MP3A	X	6.989	1.5
26	MP3A	Z	4.035	1.5
27	MP3A	Mx	-.001	1.5
28	MP3A	X	6.989	6.5
29	MP3A	Z	4.035	6.5
30	MP3A	Mx	-.001	6.5
31	MP1A	X	3.825	2.5
32	MP1A	Z	2.208	2.5
33	MP1A	Mx	-.002	2.5
34	MP1A	X	3.825	5.5
35	MP1A	Z	2.208	5.5
36	MP1A	Mx	-.002	5.5
37	MP1A	X	.338	2
38	MP1A	Z	.195	2
39	MP1A	Mx	.000169	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP2A	X	1.16	4
2	MP2A	Z	2.01	4
3	MP2A	Mx	-.00058	4
4	MP2A	X	2.642	3
5	MP2A	Z	4.575	3
6	MP2A	Mx	-.001	3
7	MP2A	X	2.642	5
8	MP2A	Z	4.575	5
9	MP2A	Mx	-.001	5
10	M20	X	5.382	1
11	M20	Z	9.323	1
12	M20	Mx	0	1
13	MP3A	X	2.274	4
14	MP3A	Z	3.938	4
15	MP3A	Mx	.001	4
16	MP4A	X	2.195	4
17	MP4A	Z	3.802	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
18	MP4A	Mx	.001	4
19	MP3A	X	4.951	1.5
20	MP3A	Z	8.575	1.5
21	MP3A	Mx	-.007	1.5
22	MP3A	X	4.951	6.5
23	MP3A	Z	8.575	6.5
24	MP3A	Mx	-.007	6.5
25	MP3A	X	4.951	1.5
26	MP3A	Z	8.575	1.5
27	MP3A	Mx	.002	1.5
28	MP3A	X	4.951	6.5
29	MP3A	Z	8.575	6.5
30	MP3A	Mx	.002	6.5
31	MP1A	X	2.857	2.5
32	MP1A	Z	4.949	2.5
33	MP1A	Mx	-.001	2.5
34	MP1A	X	2.857	5.5
35	MP1A	Z	4.949	5.5
36	MP1A	Mx	-.001	5.5
37	MP1A	X	.383	2
38	MP1A	Z	.664	2
39	MP1A	Mx	.000192	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	0	4
2	MP2A	Z	2.651	4
3	MP2A	Mx	0	4
4	MP2A	X	0	3
5	MP2A	Z	6.231	3
6	MP2A	Mx	0	3
7	MP2A	X	0	5
8	MP2A	Z	6.231	5
9	MP2A	Mx	0	5
10	M20	X	0	1
11	M20	Z	10.127	1
12	M20	Mx	0	1
13	MP3A	X	0	4
14	MP3A	Z	4.958	4
15	MP3A	Mx	0	4
16	MP4A	X	0	4
17	MP4A	Z	4.958	4
18	MP4A	Mx	0	4
19	MP3A	X	0	1.5
20	MP3A	Z	10.818	1.5
21	MP3A	Mx	-.005	1.5
22	MP3A	X	0	6.5
23	MP3A	Z	10.818	6.5
24	MP3A	Mx	-.005	6.5
25	MP3A	X	0	1.5
26	MP3A	Z	10.818	1.5
27	MP3A	Mx	.005	1.5
28	MP3A	X	0	6.5
29	MP3A	Z	10.818	6.5
30	MP3A	Mx	.005	6.5
31	MP1A	X	0	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
32	MP1A	Z	6.364	2.5
33	MP1A	Mx	0	2.5
34	MP1A	X	0	5.5
35	MP1A	Z	6.364	5.5
36	MP1A	Mx	0	5.5
37	MP1A	X	0	2
38	MP1A	Z	.955	2
39	MP1A	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-1.16	4
2	MP2A	Z	2.01	4
3	MP2A	Mx	.00058	4
4	MP2A	X	-2.642	3
5	MP2A	Z	4.575	3
6	MP2A	Mx	.001	3
7	MP2A	X	-2.642	5
8	MP2A	Z	4.575	5
9	MP2A	Mx	.001	5
10	M20	X	-4.425	1
11	M20	Z	7.665	1
12	M20	Mx	0	1
13	MP3A	X	-2.274	4
14	MP3A	Z	3.938	4
15	MP3A	Mx	-.001	4
16	MP4A	X	-2.195	4
17	MP4A	Z	3.802	4
18	MP4A	Mx	-.001	4
19	MP3A	X	-4.951	1.5
20	MP3A	Z	8.575	1.5
21	MP3A	Mx	-.002	1.5
22	MP3A	X	-4.951	6.5
23	MP3A	Z	8.575	6.5
24	MP3A	Mx	-.002	6.5
25	MP3A	X	-4.951	1.5
26	MP3A	Z	8.575	1.5
27	MP3A	Mx	.007	1.5
28	MP3A	X	-4.951	6.5
29	MP3A	Z	8.575	6.5
30	MP3A	Mx	.007	6.5
31	MP1A	X	-2.857	2.5
32	MP1A	Z	4.949	2.5
33	MP1A	Mx	.001	2.5
34	MP1A	X	-2.857	5.5
35	MP1A	Z	4.949	5.5
36	MP1A	Mx	.001	5.5
37	MP1A	X	-.383	2
38	MP1A	Z	.664	2
39	MP1A	Mx	-.000192	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-1.437	4
2	MP2A	Z	.83	4
3	MP2A	Mx	.000718	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
4	MP2A	X	-2.933	3
5	MP2A	Z	1.694	3
6	MP2A	Mx	.001	3
7	MP2A	X	-2.933	5
8	MP2A	Z	1.694	5
9	MP2A	Mx	.001	5
10	M20	X	-7.113	1
11	M20	Z	4.106	1
12	M20	Mx	0	1
13	MP3A	X	-3.226	4
14	MP3A	Z	1.863	4
15	MP3A	Mx	-.002	4
16	MP4A	X	-2.817	4
17	MP4A	Z	1.627	4
18	MP4A	Mx	-.001	4
19	MP3A	X	-6.989	1.5
20	MP3A	Z	4.035	1.5
21	MP3A	Mx	.001	1.5
22	MP3A	X	-6.989	6.5
23	MP3A	Z	4.035	6.5
24	MP3A	Mx	.001	6.5
25	MP3A	X	-6.989	1.5
26	MP3A	Z	4.035	1.5
27	MP3A	Mx	.006	1.5
28	MP3A	X	-6.989	6.5
29	MP3A	Z	4.035	6.5
30	MP3A	Mx	.006	6.5
31	MP1A	X	-3.825	2.5
32	MP1A	Z	2.208	2.5
33	MP1A	Mx	.002	2.5
34	MP1A	X	-3.825	5.5
35	MP1A	Z	2.208	5.5
36	MP1A	Mx	.002	5.5
37	MP1A	X	-.338	2
38	MP1A	Z	.195	2
39	MP1A	Mx	-.000169	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-1.329	4
2	MP2A	Z	0	4
3	MP2A	Mx	.000664	4
4	MP2A	X	-2.439	3
5	MP2A	Z	0	3
6	MP2A	Mx	.001	3
7	MP2A	X	-2.439	5
8	MP2A	Z	0	5
9	MP2A	Mx	.001	5
10	M20	X	-8.851	1
11	M20	Z	0	1
12	M20	Mx	0	1
13	MP3A	X	-3.314	4
14	MP3A	Z	0	4
15	MP3A	Mx	-.002	4
16	MP4A	X	-2.685	4
17	MP4A	Z	0	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
18	MP4A	Mx	-.001	4
19	MP3A	X	-7.154	1.5
20	MP3A	Z	0	1.5
21	MP3A	Mx	.004	1.5
22	MP3A	X	-7.154	6.5
23	MP3A	Z	0	6.5
24	MP3A	Mx	.004	6.5
25	MP3A	X	-7.154	1.5
26	MP3A	Z	0	1.5
27	MP3A	Mx	.004	1.5
28	MP3A	X	-7.154	6.5
29	MP3A	Z	0	6.5
30	MP3A	Mx	.004	6.5
31	MP1A	X	-3.767	2.5
32	MP1A	Z	0	2.5
33	MP1A	Mx	.002	2.5
34	MP1A	X	-3.767	5.5
35	MP1A	Z	0	5.5
36	MP1A	Mx	.002	5.5
37	MP1A	X	-.202	2
38	MP1A	Z	0	2
39	MP1A	Mx	-.000101	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-1.437	4
2	MP2A	Z	-.83	4
3	MP2A	Mx	.000718	4
4	MP2A	X	-2.933	3
5	MP2A	Z	-1.694	3
6	MP2A	Mx	.001	3
7	MP2A	X	-2.933	5
8	MP2A	Z	-1.694	5
9	MP2A	Mx	.001	5
10	M20	X	-8.77	1
11	M20	Z	-5.063	1
12	M20	Mx	0	1
13	MP3A	X	-3.226	4
14	MP3A	Z	-1.863	4
15	MP3A	Mx	-.002	4
16	MP4A	X	-2.817	4
17	MP4A	Z	-1.627	4
18	MP4A	Mx	-.001	4
19	MP3A	X	-6.989	1.5
20	MP3A	Z	-4.035	1.5
21	MP3A	Mx	.006	1.5
22	MP3A	X	-6.989	6.5
23	MP3A	Z	-4.035	6.5
24	MP3A	Mx	.006	6.5
25	MP3A	X	-6.989	1.5
26	MP3A	Z	-4.035	1.5
27	MP3A	Mx	.001	1.5
28	MP3A	X	-6.989	6.5
29	MP3A	Z	-4.035	6.5
30	MP3A	Mx	.001	6.5
31	MP1A	X	-3.825	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
32	MP1A	Z	-2.208	2.5
33	MP1A	Mx	.002	2.5
34	MP1A	X	-3.825	5.5
35	MP1A	Z	-2.208	5.5
36	MP1A	Mx	.002	5.5
37	MP1A	X	-.338	2
38	MP1A	Z	-.195	2
39	MP1A	Mx	-.000169	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-1.16	4
2	MP2A	Z	-2.01	4
3	MP2A	Mx	.00058	4
4	MP2A	X	-2.642	3
5	MP2A	Z	-4.575	3
6	MP2A	Mx	.001	3
7	MP2A	X	-2.642	5
8	MP2A	Z	-4.575	5
9	MP2A	Mx	.001	5
10	M20	X	-5.382	1
11	M20	Z	-9.323	1
12	M20	Mx	0	1
13	MP3A	X	-2.274	4
14	MP3A	Z	-3.938	4
15	MP3A	Mx	-.001	4
16	MP4A	X	-2.195	4
17	MP4A	Z	-3.802	4
18	MP4A	Mx	-.001	4
19	MP3A	X	-4.951	1.5
20	MP3A	Z	-8.575	1.5
21	MP3A	Mx	.007	1.5
22	MP3A	X	-4.951	6.5
23	MP3A	Z	-8.575	6.5
24	MP3A	Mx	.007	6.5
25	MP3A	X	-4.951	1.5
26	MP3A	Z	-8.575	1.5
27	MP3A	Mx	-.002	1.5
28	MP3A	X	-4.951	6.5
29	MP3A	Z	-8.575	6.5
30	MP3A	Mx	-.002	6.5
31	MP1A	X	-2.857	2.5
32	MP1A	Z	-4.949	2.5
33	MP1A	Mx	.001	2.5
34	MP1A	X	-2.857	5.5
35	MP1A	Z	-4.949	5.5
36	MP1A	Mx	.001	5.5
37	MP1A	X	-.383	2
38	MP1A	Z	-.664	2
39	MP1A	Mx	-.000192	2

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	M10	Y	-500	0



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Member Point Loads (BLC 78 : Lm2)

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

Member Point Loads (BLC 79 : Lv1)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M1	Y	-250	%50

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M1	Y	-250	0

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft.%]	End Location[ft.%]
1	M1	Y	-9.753	-9.753	0	%100
2	M2	Y	-9.753	-9.753	0	%100
3	M13	Y	-11.193	-11.193	0	%100
4	M14	Y	-11.193	-11.193	0	%100
5	M15	Y	-11.193	-11.193	0	%100
6	M16	Y	-11.193	-11.193	0	%100
7	M17	Y	-8.695	-8.695	0	%100
8	M18	Y	-8.695	-8.695	0	%100
9	M19	Y	-8.695	-8.695	0	%100
10	M20	Y	-8.695	-8.695	0	%100
11	M21	Y	-11.193	-11.193	0	%100
12	M22	Y	-11.193	-11.193	0	%100
13	M23	Y	-11.193	-11.193	0	%100
14	M24	Y	-11.193	-11.193	0	%100
15	M25	Y	-5.255	-5.255	0	%100
16	M26	Y	-5.255	-5.255	0	%100
17	M27	Y	-5.255	-5.255	0	%100
18	M28	Y	-5.255	-5.255	0	%100
19	MP4A	Y	-8.695	-8.695	0	%100
20	MP3A	Y	-8.695	-8.695	0	%100
21	MP2A	Y	-8.695	-8.695	0	%100
22	MP1A	Y	-8.695	-8.695	0	%100
23	M44	Y	-4.99	-4.99	0	%100
24	M45	Y	-4.99	-4.99	0	%100
25	M46	Y	-4.99	-4.99	0	%100
26	M47	Y	-4.99	-4.99	0	%100
27	M44A	Y	-8.695	-8.695	0	%100
28	M44B	Y	-8.695	-8.695	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	-11.595	-11.595	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-11.595	-11.595	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100



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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	M16	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	-4.578	-4.578	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	-4.578	-4.578	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	-4.578	-4.578	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	-4.578	-4.578	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	-2.521	-2.521	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	-2.521	-2.521	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	-2.521	-2.521	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	-2.521	-2.521	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	-2.611	-2.611	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	-2.611	-2.611	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	-2.611	-2.611	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	-2.611	-2.611	0	%100
37	MP4A	X	0	0	0	%100
38	MP4A	Z	-9.578	-9.578	0	%100
39	MP3A	X	0	0	0	%100
40	MP3A	Z	-9.578	-9.578	0	%100
41	MP2A	X	0	0	0	%100
42	MP2A	Z	-9.578	-9.578	0	%100
43	MP1A	X	0	0	0	%100
44	MP1A	Z	-9.578	-9.578	0	%100
45	M44	X	0	0	0	%100
46	M44	Z	-2.521	-2.521	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	-2.521	-2.521	0	%100
49	M46	X	0	0	0	%100
50	M46	Z	-2.521	-2.521	0	%100
51	M47	X	0	0	0	%100
52	M47	Z	-2.521	-2.521	0	%100
53	M44A	X	0	0	0	%100
54	M44A	Z	-1.049	-1.049	0	%100
55	M44B	X	0	0	0	%100
56	M44B	Z	-1.049	-1.049	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	4.348	4.348	0	%100
2	M1	Z	-7.531	-7.531	0	%100
3	M2	X	4.348	4.348	0	%100
4	M2	Z	-7.531	-7.531	0	%100
5	M13	X	.315	.315	0	%100
6	M13	Z	-.546	-.546	0	%100
7	M14	X	.315	.315	0	%100
8	M14	Z	-.546	-.546	0	%100



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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, %]
9	M15	X	.315	.315	0	%100
10	M15	Z	-.546	-.546	0	%100
11	M16	X	.315	.315	0	%100
12	M16	Z	-.546	-.546	0	%100
13	M17	X	.515	.515	0	%100
14	M17	Z	-.893	-.893	0	%100
15	M18	X	.515	.515	0	%100
16	M18	Z	-.893	-.893	0	%100
17	M19	X	3.62	3.62	0	%100
18	M19	Z	-6.27	-6.27	0	%100
19	M20	X	3.62	3.62	0	%100
20	M20	Z	-6.27	-6.27	0	%100
21	M21	X	.945	.945	0	%100
22	M21	Z	-1.637	-1.637	0	%100
23	M22	X	.945	.945	0	%100
24	M22	Z	-1.637	-1.637	0	%100
25	M23	X	.945	.945	0	%100
26	M23	Z	-1.637	-1.637	0	%100
27	M24	X	.945	.945	0	%100
28	M24	Z	-1.637	-1.637	0	%100
29	M25	X	1.044	1.044	0	%100
30	M25	Z	-1.808	-1.808	0	%100
31	M26	X	1.044	1.044	0	%100
32	M26	Z	-1.808	-1.808	0	%100
33	M27	X	1.502	1.502	0	%100
34	M27	Z	-2.601	-2.601	0	%100
35	M28	X	1.502	1.502	0	%100
36	M28	Z	-2.601	-2.601	0	%100
37	MP4A	X	4.789	4.789	0	%100
38	MP4A	Z	-8.295	-8.295	0	%100
39	MP3A	X	4.789	4.789	0	%100
40	MP3A	Z	-8.295	-8.295	0	%100
41	MP2A	X	4.789	4.789	0	%100
42	MP2A	Z	-8.295	-8.295	0	%100
43	MP1A	X	4.789	4.789	0	%100
44	MP1A	Z	-8.295	-8.295	0	%100
45	M44	X	1.26	1.26	0	%100
46	M44	Z	-2.183	-2.183	0	%100
47	M45	X	1.26	1.26	0	%100
48	M45	Z	-2.183	-2.183	0	%100
49	M46	X	1.26	1.26	0	%100
50	M46	Z	-2.183	-2.183	0	%100
51	M47	X	1.26	1.26	0	%100
52	M47	Z	-2.183	-2.183	0	%100
53	M44A	X	.164	.164	0	%100
54	M44A	Z	-.285	-.285	0	%100
55	M44B	X	.164	.164	0	%100
56	M44B	Z	-.285	-.285	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	2.51	2.51	0	%100
2	M1	Z	-1.449	-1.449	0	%100
3	M2	X	2.51	2.51	0	%100
4	M2	Z	-1.449	-1.449	0	%100
5	M13	X	1.637	1.637	0	%100



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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.%]
6	M13	Z	-.945	-.945	0	%100
7	M14	X	1.637	1.637	0	%100
8	M14	Z	-.945	-.945	0	%100
9	M15	X	1.637	1.637	0	%100
10	M15	Z	-.945	-.945	0	%100
11	M16	X	1.637	1.637	0	%100
12	M16	Z	-.945	-.945	0	%100
13	M17	X	.126	.126	0	%100
14	M17	Z	-.073	-.073	0	%100
15	M18	X	.126	.126	0	%100
16	M18	Z	-.073	-.073	0	%100
17	M19	X	5.503	5.503	0	%100
18	M19	Z	-3.177	-3.177	0	%100
19	M20	X	5.503	5.503	0	%100
20	M20	Z	-3.177	-3.177	0	%100
21	M21	X	.546	.546	0	%100
22	M21	Z	-.315	-.315	0	%100
23	M22	X	.546	.546	0	%100
24	M22	Z	-.315	-.315	0	%100
25	M23	X	.546	.546	0	%100
26	M23	Z	-.315	-.315	0	%100
27	M24	X	.546	.546	0	%100
28	M24	Z	-.315	-.315	0	%100
29	M25	X	1.695	1.695	0	%100
30	M25	Z	-.978	-.978	0	%100
31	M26	X	1.695	1.695	0	%100
32	M26	Z	-.978	-.978	0	%100
33	M27	X	2.488	2.488	0	%100
34	M27	Z	-1.436	-1.436	0	%100
35	M28	X	2.488	2.488	0	%100
36	M28	Z	-1.436	-1.436	0	%100
37	MP4A	X	8.295	8.295	0	%100
38	MP4A	Z	-4.789	-4.789	0	%100
39	MP3A	X	8.295	8.295	0	%100
40	MP3A	Z	-4.789	-4.789	0	%100
41	MP2A	X	8.295	8.295	0	%100
42	MP2A	Z	-4.789	-4.789	0	%100
43	MP1A	X	8.295	8.295	0	%100
44	MP1A	Z	-4.789	-4.789	0	%100
45	M44	X	2.183	2.183	0	%100
46	M44	Z	-1.26	-1.26	0	%100
47	M45	X	2.183	2.183	0	%100
48	M45	Z	-1.26	-1.26	0	%100
49	M46	X	2.183	2.183	0	%100
50	M46	Z	-1.26	-1.26	0	%100
51	M47	X	2.183	2.183	0	%100
52	M47	Z	-1.26	-1.26	0	%100
53	M44A	X	3.524	3.524	0	%100
54	M44A	Z	-2.034	-2.034	0	%100
55	M44B	X	3.524	3.524	0	%100
56	M44B	Z	-2.034	-2.034	0	%100

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

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



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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, %]	
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	2.521	2.521	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	2.521	2.521	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	2.521	2.521	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	2.521	2.521	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	2.807	2.807	0	%100
14	M17	Z	0	0	0	%100
15	M18	X	2.807	2.807	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	2.807	2.807	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	2.807	2.807	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	2.349	2.349	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	2.349	2.349	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	2.349	2.349	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	2.349	2.349	0	%100
36	M28	Z	0	0	0	%100
37	MP4A	X	9.578	9.578	0	%100
38	MP4A	Z	0	0	0	%100
39	MP3A	X	9.578	9.578	0	%100
40	MP3A	Z	0	0	0	%100
41	MP2A	X	9.578	9.578	0	%100
42	MP2A	Z	0	0	0	%100
43	MP1A	X	9.578	9.578	0	%100
44	MP1A	Z	0	0	0	%100
45	M44	X	2.521	2.521	0	%100
46	M44	Z	0	0	0	%100
47	M45	X	2.521	2.521	0	%100
48	M45	Z	0	0	0	%100
49	M46	X	2.521	2.521	0	%100
50	M46	Z	0	0	0	%100
51	M47	X	2.521	2.521	0	%100
52	M47	Z	0	0	0	%100
53	M44A	X	8.529	8.529	0	%100
54	M44A	Z	0	0	0	%100
55	M44B	X	8.529	8.529	0	%100
56	M44B	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, %]
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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, %]
1	M1	X	2.51	2.51	0	%100
2	M1	Z	1.449	1.449	0	%100
3	M2	X	2.51	2.51	0	%100
4	M2	Z	1.449	1.449	0	%100
5	M13	X	1.637	1.637	0	%100
6	M13	Z	.945	.945	0	%100
7	M14	X	1.637	1.637	0	%100
8	M14	Z	.945	.945	0	%100
9	M15	X	1.637	1.637	0	%100
10	M15	Z	.945	.945	0	%100
11	M16	X	1.637	1.637	0	%100
12	M16	Z	.945	.945	0	%100
13	M17	X	5.503	5.503	0	%100
14	M17	Z	3.177	3.177	0	%100
15	M18	X	5.503	5.503	0	%100
16	M18	Z	3.177	3.177	0	%100
17	M19	X	.126	.126	0	%100
18	M19	Z	.073	.073	0	%100
19	M20	X	.126	.126	0	%100
20	M20	Z	.073	.073	0	%100
21	M21	X	.546	.546	0	%100
22	M21	Z	.315	.315	0	%100
23	M22	X	.546	.546	0	%100
24	M22	Z	.315	.315	0	%100
25	M23	X	.546	.546	0	%100
26	M23	Z	.315	.315	0	%100
27	M24	X	.546	.546	0	%100
28	M24	Z	.315	.315	0	%100
29	M25	X	2.488	2.488	0	%100
30	M25	Z	1.436	1.436	0	%100
31	M26	X	2.488	2.488	0	%100
32	M26	Z	1.436	1.436	0	%100
33	M27	X	1.695	1.695	0	%100
34	M27	Z	.978	.978	0	%100
35	M28	X	1.695	1.695	0	%100
36	M28	Z	.978	.978	0	%100
37	MP4A	X	8.295	8.295	0	%100
38	MP4A	Z	4.789	4.789	0	%100
39	MP3A	X	8.295	8.295	0	%100
40	MP3A	Z	4.789	4.789	0	%100
41	MP2A	X	8.295	8.295	0	%100
42	MP2A	Z	4.789	4.789	0	%100
43	MP1A	X	8.295	8.295	0	%100
44	MP1A	Z	4.789	4.789	0	%100
45	M44	X	2.183	2.183	0	%100
46	M44	Z	1.26	1.26	0	%100
47	M45	X	2.183	2.183	0	%100
48	M45	Z	1.26	1.26	0	%100
49	M46	X	2.183	2.183	0	%100
50	M46	Z	1.26	1.26	0	%100
51	M47	X	2.183	2.183	0	%100
52	M47	Z	1.26	1.26	0	%100
53	M44A	X	8.01	8.01	0	%100
54	M44A	Z	4.625	4.625	0	%100
55	M44B	X	8.01	8.01	0	%100
56	M44B	Z	4.625	4.625	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	4.348	4.348	0	%100
2	M1	Z	7.531	7.531	0	%100
3	M2	X	4.348	4.348	0	%100
4	M2	Z	7.531	7.531	0	%100
5	M13	X	.315	.315	0	%100
6	M13	Z	.546	.546	0	%100
7	M14	X	.315	.315	0	%100
8	M14	Z	.546	.546	0	%100
9	M15	X	.315	.315	0	%100
10	M15	Z	.546	.546	0	%100
11	M16	X	.315	.315	0	%100
12	M16	Z	.546	.546	0	%100
13	M17	X	3.62	3.62	0	%100
14	M17	Z	6.27	6.27	0	%100
15	M18	X	3.62	3.62	0	%100
16	M18	Z	6.27	6.27	0	%100
17	M19	X	.515	.515	0	%100
18	M19	Z	.893	.893	0	%100
19	M20	X	.515	.515	0	%100
20	M20	Z	.893	.893	0	%100
21	M21	X	.945	.945	0	%100
22	M21	Z	1.637	1.637	0	%100
23	M22	X	.945	.945	0	%100
24	M22	Z	1.637	1.637	0	%100
25	M23	X	.945	.945	0	%100
26	M23	Z	1.637	1.637	0	%100
27	M24	X	.945	.945	0	%100
28	M24	Z	1.637	1.637	0	%100
29	M25	X	1.502	1.502	0	%100
30	M25	Z	2.601	2.601	0	%100
31	M26	X	1.502	1.502	0	%100
32	M26	Z	2.601	2.601	0	%100
33	M27	X	1.044	1.044	0	%100
34	M27	Z	1.808	1.808	0	%100
35	M28	X	1.044	1.044	0	%100
36	M28	Z	1.808	1.808	0	%100
37	MP4A	X	4.789	4.789	0	%100
38	MP4A	Z	8.295	8.295	0	%100
39	MP3A	X	4.789	4.789	0	%100
40	MP3A	Z	8.295	8.295	0	%100
41	MP2A	X	4.789	4.789	0	%100
42	MP2A	Z	8.295	8.295	0	%100
43	MP1A	X	4.789	4.789	0	%100
44	MP1A	Z	8.295	8.295	0	%100
45	M44	X	1.26	1.26	0	%100
46	M44	Z	2.183	2.183	0	%100
47	M45	X	1.26	1.26	0	%100
48	M45	Z	2.183	2.183	0	%100
49	M46	X	1.26	1.26	0	%100
50	M46	Z	2.183	2.183	0	%100
51	M47	X	1.26	1.26	0	%100
52	M47	Z	2.183	2.183	0	%100
53	M44A	X	2.755	2.755	0	%100
54	M44A	Z	4.771	4.771	0	%100
55	M44B	X	2.755	2.755	0	%100
56	M44B	Z	4.771	4.771	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	11.595	11.595	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	11.595	11.595	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	4.578	4.578	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	4.578	4.578	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	4.578	4.578	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	4.578	4.578	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	2.521	2.521	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	2.521	2.521	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	2.521	2.521	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	2.521	2.521	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	2.611	2.611	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	2.611	2.611	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	2.611	2.611	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	2.611	2.611	0	%100
37	MP4A	X	0	0	0	%100
38	MP4A	Z	9.578	9.578	0	%100
39	MP3A	X	0	0	0	%100
40	MP3A	Z	9.578	9.578	0	%100
41	MP2A	X	0	0	0	%100
42	MP2A	Z	9.578	9.578	0	%100
43	MP1A	X	0	0	0	%100
44	MP1A	Z	9.578	9.578	0	%100
45	M44	X	0	0	0	%100
46	M44	Z	2.521	2.521	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	2.521	2.521	0	%100
49	M46	X	0	0	0	%100
50	M46	Z	2.521	2.521	0	%100
51	M47	X	0	0	0	%100
52	M47	Z	2.521	2.521	0	%100
53	M44A	X	0	0	0	%100
54	M44A	Z	1.049	1.049	0	%100
55	M44B	X	0	0	0	%100
56	M44B	Z	1.049	1.049	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-4.348	-4.348	0	%100
2	M1	Z	7.531	7.531	0	%100
3	M2	X	-4.348	-4.348	0	%100
4	M2	Z	7.531	7.531	0	%100
5	M13	X	-.315	-.315	0	%100
6	M13	Z	.546	.546	0	%100
7	M14	X	-.315	-.315	0	%100
8	M14	Z	.546	.546	0	%100
9	M15	X	-.315	-.315	0	%100
10	M15	Z	.546	.546	0	%100
11	M16	X	-.315	-.315	0	%100
12	M16	Z	.546	.546	0	%100
13	M17	X	-.515	-.515	0	%100
14	M17	Z	.893	.893	0	%100
15	M18	X	-.515	-.515	0	%100
16	M18	Z	.893	.893	0	%100
17	M19	X	-3.62	-3.62	0	%100
18	M19	Z	6.27	6.27	0	%100
19	M20	X	-3.62	-3.62	0	%100
20	M20	Z	6.27	6.27	0	%100
21	M21	X	-.945	-.945	0	%100
22	M21	Z	1.637	1.637	0	%100
23	M22	X	-.945	-.945	0	%100
24	M22	Z	1.637	1.637	0	%100
25	M23	X	-.945	-.945	0	%100
26	M23	Z	1.637	1.637	0	%100
27	M24	X	-.945	-.945	0	%100
28	M24	Z	1.637	1.637	0	%100
29	M25	X	-1.044	-1.044	0	%100
30	M25	Z	1.808	1.808	0	%100
31	M26	X	-1.044	-1.044	0	%100
32	M26	Z	1.808	1.808	0	%100
33	M27	X	-1.502	-1.502	0	%100
34	M27	Z	2.601	2.601	0	%100
35	M28	X	-1.502	-1.502	0	%100
36	M28	Z	2.601	2.601	0	%100
37	MP4A	X	-4.789	-4.789	0	%100
38	MP4A	Z	8.295	8.295	0	%100
39	MP3A	X	-4.789	-4.789	0	%100
40	MP3A	Z	8.295	8.295	0	%100
41	MP2A	X	-4.789	-4.789	0	%100
42	MP2A	Z	8.295	8.295	0	%100
43	MP1A	X	-4.789	-4.789	0	%100
44	MP1A	Z	8.295	8.295	0	%100
45	M44	X	-1.26	-1.26	0	%100
46	M44	Z	2.183	2.183	0	%100
47	M45	X	-1.26	-1.26	0	%100
48	M45	Z	2.183	2.183	0	%100
49	M46	X	-1.26	-1.26	0	%100
50	M46	Z	2.183	2.183	0	%100
51	M47	X	-1.26	-1.26	0	%100
52	M47	Z	2.183	2.183	0	%100
53	M44A	X	-.164	-.164	0	%100
54	M44A	Z	.285	.285	0	%100
55	M44B	X	-.164	-.164	0	%100
56	M44B	Z	.285	.285	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-2.51	-2.51	0	%100
2	M1	Z	1.449	1.449	0	%100
3	M2	X	-2.51	-2.51	0	%100
4	M2	Z	1.449	1.449	0	%100
5	M13	X	-1.637	-1.637	0	%100
6	M13	Z	.945	.945	0	%100
7	M14	X	-1.637	-1.637	0	%100
8	M14	Z	.945	.945	0	%100
9	M15	X	-1.637	-1.637	0	%100
10	M15	Z	.945	.945	0	%100
11	M16	X	-1.637	-1.637	0	%100
12	M16	Z	.945	.945	0	%100
13	M17	X	-.126	-.126	0	%100
14	M17	Z	.073	.073	0	%100
15	M18	X	-.126	-.126	0	%100
16	M18	Z	.073	.073	0	%100
17	M19	X	-5.503	-5.503	0	%100
18	M19	Z	3.177	3.177	0	%100
19	M20	X	-5.503	-5.503	0	%100
20	M20	Z	3.177	3.177	0	%100
21	M21	X	-.546	-.546	0	%100
22	M21	Z	.315	.315	0	%100
23	M22	X	-.546	-.546	0	%100
24	M22	Z	.315	.315	0	%100
25	M23	X	-.546	-.546	0	%100
26	M23	Z	.315	.315	0	%100
27	M24	X	-.546	-.546	0	%100
28	M24	Z	.315	.315	0	%100
29	M25	X	-1.695	-1.695	0	%100
30	M25	Z	.978	.978	0	%100
31	M26	X	-1.695	-1.695	0	%100
32	M26	Z	.978	.978	0	%100
33	M27	X	-2.488	-2.488	0	%100
34	M27	Z	1.436	1.436	0	%100
35	M28	X	-2.488	-2.488	0	%100
36	M28	Z	1.436	1.436	0	%100
37	MP4A	X	-8.295	-8.295	0	%100
38	MP4A	Z	4.789	4.789	0	%100
39	MP3A	X	-8.295	-8.295	0	%100
40	MP3A	Z	4.789	4.789	0	%100
41	MP2A	X	-8.295	-8.295	0	%100
42	MP2A	Z	4.789	4.789	0	%100
43	MP1A	X	-8.295	-8.295	0	%100
44	MP1A	Z	4.789	4.789	0	%100
45	M44	X	-2.183	-2.183	0	%100
46	M44	Z	1.26	1.26	0	%100
47	M45	X	-2.183	-2.183	0	%100
48	M45	Z	1.26	1.26	0	%100
49	M46	X	-2.183	-2.183	0	%100
50	M46	Z	1.26	1.26	0	%100
51	M47	X	-2.183	-2.183	0	%100
52	M47	Z	1.26	1.26	0	%100
53	M44A	X	-3.524	-3.524	0	%100
54	M44A	Z	2.034	2.034	0	%100
55	M44B	X	-3.524	-3.524	0	%100
56	M44B	Z	2.034	2.034	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	-2.521	-2.521	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	-2.521	-2.521	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	-2.521	-2.521	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	-2.521	-2.521	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	-2.807	-2.807	0	%100
14	M17	Z	0	0	0	%100
15	M18	X	-2.807	-2.807	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	-2.807	-2.807	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	-2.807	-2.807	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	-2.349	-2.349	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	-2.349	-2.349	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	-2.349	-2.349	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	-2.349	-2.349	0	%100
36	M28	Z	0	0	0	%100
37	MP4A	X	-9.578	-9.578	0	%100
38	MP4A	Z	0	0	0	%100
39	MP3A	X	-9.578	-9.578	0	%100
40	MP3A	Z	0	0	0	%100
41	MP2A	X	-9.578	-9.578	0	%100
42	MP2A	Z	0	0	0	%100
43	MP1A	X	-9.578	-9.578	0	%100
44	MP1A	Z	0	0	0	%100
45	M44	X	-2.521	-2.521	0	%100
46	M44	Z	0	0	0	%100
47	M45	X	-2.521	-2.521	0	%100
48	M45	Z	0	0	0	%100
49	M46	X	-2.521	-2.521	0	%100
50	M46	Z	0	0	0	%100
51	M47	X	-2.521	-2.521	0	%100
52	M47	Z	0	0	0	%100
53	M44A	X	-8.529	-8.529	0	%100
54	M44A	Z	0	0	0	%100
55	M44B	X	-8.529	-8.529	0	%100
56	M44B	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-2.51	-2.51	0	%100
2	M1	Z	-1.449	-1.449	0	%100
3	M2	X	-2.51	-2.51	0	%100
4	M2	Z	-1.449	-1.449	0	%100
5	M13	X	-1.637	-1.637	0	%100
6	M13	Z	-.945	-.945	0	%100
7	M14	X	-1.637	-1.637	0	%100
8	M14	Z	-.945	-.945	0	%100
9	M15	X	-1.637	-1.637	0	%100
10	M15	Z	-.945	-.945	0	%100
11	M16	X	-1.637	-1.637	0	%100
12	M16	Z	-.945	-.945	0	%100
13	M17	X	-5.503	-5.503	0	%100
14	M17	Z	-3.177	-3.177	0	%100
15	M18	X	-5.503	-5.503	0	%100
16	M18	Z	-3.177	-3.177	0	%100
17	M19	X	-.126	-.126	0	%100
18	M19	Z	-.073	-.073	0	%100
19	M20	X	-.126	-.126	0	%100
20	M20	Z	-.073	-.073	0	%100
21	M21	X	-.546	-.546	0	%100
22	M21	Z	-.315	-.315	0	%100
23	M22	X	-.546	-.546	0	%100
24	M22	Z	-.315	-.315	0	%100
25	M23	X	-.546	-.546	0	%100
26	M23	Z	-.315	-.315	0	%100
27	M24	X	-.546	-.546	0	%100
28	M24	Z	-.315	-.315	0	%100
29	M25	X	-2.488	-2.488	0	%100
30	M25	Z	-1.436	-1.436	0	%100
31	M26	X	-2.488	-2.488	0	%100
32	M26	Z	-1.436	-1.436	0	%100
33	M27	X	-1.695	-1.695	0	%100
34	M27	Z	-.978	-.978	0	%100
35	M28	X	-1.695	-1.695	0	%100
36	M28	Z	-.978	-.978	0	%100
37	MP4A	X	-8.295	-8.295	0	%100
38	MP4A	Z	-4.789	-4.789	0	%100
39	MP3A	X	-8.295	-8.295	0	%100
40	MP3A	Z	-4.789	-4.789	0	%100
41	MP2A	X	-8.295	-8.295	0	%100
42	MP2A	Z	-4.789	-4.789	0	%100
43	MP1A	X	-8.295	-8.295	0	%100
44	MP1A	Z	-4.789	-4.789	0	%100
45	M44	X	-2.183	-2.183	0	%100
46	M44	Z	-1.26	-1.26	0	%100
47	M45	X	-2.183	-2.183	0	%100
48	M45	Z	-1.26	-1.26	0	%100
49	M46	X	-2.183	-2.183	0	%100
50	M46	Z	-1.26	-1.26	0	%100
51	M47	X	-2.183	-2.183	0	%100
52	M47	Z	-1.26	-1.26	0	%100
53	M44A	X	-8.01	-8.01	0	%100
54	M44A	Z	-4.625	-4.625	0	%100
55	M44B	X	-8.01	-8.01	0	%100
56	M44B	Z	-4.625	-4.625	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-4.348	-4.348	0	%100
2	M1	Z	-7.531	-7.531	0	%100
3	M2	X	-4.348	-4.348	0	%100
4	M2	Z	-7.531	-7.531	0	%100
5	M13	X	-.315	-.315	0	%100
6	M13	Z	-.546	-.546	0	%100
7	M14	X	-.315	-.315	0	%100
8	M14	Z	-.546	-.546	0	%100
9	M15	X	-.315	-.315	0	%100
10	M15	Z	-.546	-.546	0	%100
11	M16	X	-.315	-.315	0	%100
12	M16	Z	-.546	-.546	0	%100
13	M17	X	-3.62	-3.62	0	%100
14	M17	Z	-6.27	-6.27	0	%100
15	M18	X	-3.62	-3.62	0	%100
16	M18	Z	-6.27	-6.27	0	%100
17	M19	X	-.515	-.515	0	%100
18	M19	Z	-.893	-.893	0	%100
19	M20	X	-.515	-.515	0	%100
20	M20	Z	-.893	-.893	0	%100
21	M21	X	-.945	-.945	0	%100
22	M21	Z	-1.637	-1.637	0	%100
23	M22	X	-.945	-.945	0	%100
24	M22	Z	-1.637	-1.637	0	%100
25	M23	X	-.945	-.945	0	%100
26	M23	Z	-1.637	-1.637	0	%100
27	M24	X	-.945	-.945	0	%100
28	M24	Z	-1.637	-1.637	0	%100
29	M25	X	-1.502	-1.502	0	%100
30	M25	Z	-2.601	-2.601	0	%100
31	M26	X	-1.502	-1.502	0	%100
32	M26	Z	-2.601	-2.601	0	%100
33	M27	X	-1.044	-1.044	0	%100
34	M27	Z	-1.808	-1.808	0	%100
35	M28	X	-1.044	-1.044	0	%100
36	M28	Z	-1.808	-1.808	0	%100
37	MP4A	X	-4.789	-4.789	0	%100
38	MP4A	Z	-8.295	-8.295	0	%100
39	MP3A	X	-4.789	-4.789	0	%100
40	MP3A	Z	-8.295	-8.295	0	%100
41	MP2A	X	-4.789	-4.789	0	%100
42	MP2A	Z	-8.295	-8.295	0	%100
43	MP1A	X	-4.789	-4.789	0	%100
44	MP1A	Z	-8.295	-8.295	0	%100
45	M44	X	-1.26	-1.26	0	%100
46	M44	Z	-2.183	-2.183	0	%100
47	M45	X	-1.26	-1.26	0	%100
48	M45	Z	-2.183	-2.183	0	%100
49	M46	X	-1.26	-1.26	0	%100
50	M46	Z	-2.183	-2.183	0	%100
51	M47	X	-1.26	-1.26	0	%100
52	M47	Z	-2.183	-2.183	0	%100
53	M44A	X	-2.755	-2.755	0	%100
54	M44A	Z	-4.771	-4.771	0	%100
55	M44B	X	-2.755	-2.755	0	%100
56	M44B	Z	-4.771	-4.771	0	%100



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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	-4.67	-4.67	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-4.67	-4.67	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	-1.939	-1.939	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	-1.939	-1.939	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	-1.939	-1.939	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	-1.939	-1.939	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	-1.949	-1.949	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	-1.949	-1.949	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	-1.949	-1.949	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	-1.949	-1.949	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	-2.248	-2.248	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	-2.248	-2.248	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	-2.248	-2.248	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	-2.248	-2.248	0	%100
37	MP4A	X	0	0	0	%100
38	MP4A	Z	-4.301	-4.301	0	%100
39	MP3A	X	0	0	0	%100
40	MP3A	Z	-4.301	-4.301	0	%100
41	MP2A	X	0	0	0	%100
42	MP2A	Z	-4.301	-4.301	0	%100
43	MP1A	X	0	0	0	%100
44	MP1A	Z	-4.301	-4.301	0	%100
45	M44	X	0	0	0	%100
46	M44	Z	-2.377	-2.377	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	-2.377	-2.377	0	%100
49	M46	X	0	0	0	%100
50	M46	Z	-2.377	-2.377	0	%100
51	M47	X	0	0	0	%100
52	M47	Z	-2.377	-2.377	0	%100
53	M44A	X	0	0	0	%100
54	M44A	Z	-.453	-.453	0	%100
55	M44B	X	0	0	0	%100
56	M44B	Z	-.453	-.453	0	%100



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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	1.751	1.751	0	%100
2	M1	Z	-3.033	-3.033	0	%100
3	M2	X	1.751	1.751	0	%100
4	M2	Z	-3.033	-3.033	0	%100
5	M13	X	.244	.244	0	%100
6	M13	Z	-.422	-.422	0	%100
7	M14	X	.244	.244	0	%100
8	M14	Z	-.422	-.422	0	%100
9	M15	X	.244	.244	0	%100
10	M15	Z	-.422	-.422	0	%100
11	M16	X	.244	.244	0	%100
12	M16	Z	-.422	-.422	0	%100
13	M17	X	.218	.218	0	%100
14	M17	Z	-.378	-.378	0	%100
15	M18	X	.218	.218	0	%100
16	M18	Z	-.378	-.378	0	%100
17	M19	X	1.534	1.534	0	%100
18	M19	Z	-2.656	-2.656	0	%100
19	M20	X	1.534	1.534	0	%100
20	M20	Z	-2.656	-2.656	0	%100
21	M21	X	.731	.731	0	%100
22	M21	Z	-1.266	-1.266	0	%100
23	M22	X	.731	.731	0	%100
24	M22	Z	-1.266	-1.266	0	%100
25	M23	X	.731	.731	0	%100
26	M23	Z	-1.266	-1.266	0	%100
27	M24	X	.731	.731	0	%100
28	M24	Z	-1.266	-1.266	0	%100
29	M25	X	.899	.899	0	%100
30	M25	Z	-1.557	-1.557	0	%100
31	M26	X	.899	.899	0	%100
32	M26	Z	-1.557	-1.557	0	%100
33	M27	X	1.293	1.293	0	%100
34	M27	Z	-2.24	-2.24	0	%100
35	M28	X	1.293	1.293	0	%100
36	M28	Z	-2.24	-2.24	0	%100
37	MP4A	X	2.151	2.151	0	%100
38	MP4A	Z	-3.725	-3.725	0	%100
39	MP3A	X	2.151	2.151	0	%100
40	MP3A	Z	-3.725	-3.725	0	%100
41	MP2A	X	2.151	2.151	0	%100
42	MP2A	Z	-3.725	-3.725	0	%100
43	MP1A	X	2.151	2.151	0	%100
44	MP1A	Z	-3.725	-3.725	0	%100
45	M44	X	1.188	1.188	0	%100
46	M44	Z	-2.058	-2.058	0	%100
47	M45	X	1.188	1.188	0	%100
48	M45	Z	-2.058	-2.058	0	%100
49	M46	X	1.188	1.188	0	%100
50	M46	Z	-2.058	-2.058	0	%100
51	M47	X	1.188	1.188	0	%100
52	M47	Z	-2.058	-2.058	0	%100
53	M44A	X	.071	.071	0	%100
54	M44A	Z	-.123	-.123	0	%100
55	M44B	X	.071	.071	0	%100
56	M44B	Z	-.123	-.123	0	%100



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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	1.011	1.011	0	%100
2	M1	Z	-.584	-.584	0	%100
3	M2	X	1.011	1.011	0	%100
4	M2	Z	-.584	-.584	0	%100
5	M13	X	1.266	1.266	0	%100
6	M13	Z	-.731	-.731	0	%100
7	M14	X	1.266	1.266	0	%100
8	M14	Z	-.731	-.731	0	%100
9	M15	X	1.266	1.266	0	%100
10	M15	Z	-.731	-.731	0	%100
11	M16	X	1.266	1.266	0	%100
12	M16	Z	-.731	-.731	0	%100
13	M17	X	.053	.053	0	%100
14	M17	Z	-.031	-.031	0	%100
15	M18	X	.053	.053	0	%100
16	M18	Z	-.031	-.031	0	%100
17	M19	X	2.331	2.331	0	%100
18	M19	Z	-1.346	-1.346	0	%100
19	M20	X	2.331	2.331	0	%100
20	M20	Z	-1.346	-1.346	0	%100
21	M21	X	.422	.422	0	%100
22	M21	Z	-.244	-.244	0	%100
23	M22	X	.422	.422	0	%100
24	M22	Z	-.244	-.244	0	%100
25	M23	X	.422	.422	0	%100
26	M23	Z	-.244	-.244	0	%100
27	M24	X	.422	.422	0	%100
28	M24	Z	-.244	-.244	0	%100
29	M25	X	1.46	1.46	0	%100
30	M25	Z	-.843	-.843	0	%100
31	M26	X	1.46	1.46	0	%100
32	M26	Z	-.843	-.843	0	%100
33	M27	X	2.143	2.143	0	%100
34	M27	Z	-1.237	-1.237	0	%100
35	M28	X	2.143	2.143	0	%100
36	M28	Z	-1.237	-1.237	0	%100
37	MP4A	X	3.725	3.725	0	%100
38	MP4A	Z	-2.151	-2.151	0	%100
39	MP3A	X	3.725	3.725	0	%100
40	MP3A	Z	-2.151	-2.151	0	%100
41	MP2A	X	3.725	3.725	0	%100
42	MP2A	Z	-2.151	-2.151	0	%100
43	MP1A	X	3.725	3.725	0	%100
44	MP1A	Z	-2.151	-2.151	0	%100
45	M44	X	2.058	2.058	0	%100
46	M44	Z	-1.188	-1.188	0	%100
47	M45	X	2.058	2.058	0	%100
48	M45	Z	-1.188	-1.188	0	%100
49	M46	X	2.058	2.058	0	%100
50	M46	Z	-1.188	-1.188	0	%100
51	M47	X	2.058	2.058	0	%100
52	M47	Z	-1.188	-1.188	0	%100
53	M44A	X	1.523	1.523	0	%100
54	M44A	Z	-.879	-.879	0	%100
55	M44B	X	1.523	1.523	0	%100
56	M44B	Z	-.879	-.879	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	1.949	1.949	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	1.949	1.949	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	1.949	1.949	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	1.949	1.949	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	1.189	1.189	0	%100
14	M17	Z	0	0	0	%100
15	M18	X	1.189	1.189	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	1.189	1.189	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	1.189	1.189	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	2.024	2.024	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	2.024	2.024	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	2.024	2.024	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	2.024	2.024	0	%100
36	M28	Z	0	0	0	%100
37	MP4A	X	4.301	4.301	0	%100
38	MP4A	Z	0	0	0	%100
39	MP3A	X	4.301	4.301	0	%100
40	MP3A	Z	0	0	0	%100
41	MP2A	X	4.301	4.301	0	%100
42	MP2A	Z	0	0	0	%100
43	MP1A	X	4.301	4.301	0	%100
44	MP1A	Z	0	0	0	%100
45	M44	X	2.377	2.377	0	%100
46	M44	Z	0	0	0	%100
47	M45	X	2.377	2.377	0	%100
48	M45	Z	0	0	0	%100
49	M46	X	2.377	2.377	0	%100
50	M46	Z	0	0	0	%100
51	M47	X	2.377	2.377	0	%100
52	M47	Z	0	0	0	%100
53	M44A	X	3.686	3.686	0	%100
54	M44A	Z	0	0	0	%100
55	M44B	X	3.686	3.686	0	%100
56	M44B	Z	0	0	0	%100



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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	1.011	1.011	0	%100
2	M1	Z	.584	.584	0	%100
3	M2	X	1.011	1.011	0	%100
4	M2	Z	.584	.584	0	%100
5	M13	X	1.266	1.266	0	%100
6	M13	Z	.731	.731	0	%100
7	M14	X	1.266	1.266	0	%100
8	M14	Z	.731	.731	0	%100
9	M15	X	1.266	1.266	0	%100
10	M15	Z	.731	.731	0	%100
11	M16	X	1.266	1.266	0	%100
12	M16	Z	.731	.731	0	%100
13	M17	X	2.331	2.331	0	%100
14	M17	Z	1.346	1.346	0	%100
15	M18	X	2.331	2.331	0	%100
16	M18	Z	1.346	1.346	0	%100
17	M19	X	.053	.053	0	%100
18	M19	Z	.031	.031	0	%100
19	M20	X	.053	.053	0	%100
20	M20	Z	.031	.031	0	%100
21	M21	X	.422	.422	0	%100
22	M21	Z	.244	.244	0	%100
23	M22	X	.422	.422	0	%100
24	M22	Z	.244	.244	0	%100
25	M23	X	.422	.422	0	%100
26	M23	Z	.244	.244	0	%100
27	M24	X	.422	.422	0	%100
28	M24	Z	.244	.244	0	%100
29	M25	X	2.143	2.143	0	%100
30	M25	Z	1.237	1.237	0	%100
31	M26	X	2.143	2.143	0	%100
32	M26	Z	1.237	1.237	0	%100
33	M27	X	1.46	1.46	0	%100
34	M27	Z	.843	.843	0	%100
35	M28	X	1.46	1.46	0	%100
36	M28	Z	.843	.843	0	%100
37	MP4A	X	3.725	3.725	0	%100
38	MP4A	Z	2.151	2.151	0	%100
39	MP3A	X	3.725	3.725	0	%100
40	MP3A	Z	2.151	2.151	0	%100
41	MP2A	X	3.725	3.725	0	%100
42	MP2A	Z	2.151	2.151	0	%100
43	MP1A	X	3.725	3.725	0	%100
44	MP1A	Z	2.151	2.151	0	%100
45	M44	X	2.058	2.058	0	%100
46	M44	Z	1.188	1.188	0	%100
47	M45	X	2.058	2.058	0	%100
48	M45	Z	1.188	1.188	0	%100
49	M46	X	2.058	2.058	0	%100
50	M46	Z	1.188	1.188	0	%100
51	M47	X	2.058	2.058	0	%100
52	M47	Z	1.188	1.188	0	%100
53	M44A	X	3.462	3.462	0	%100
54	M44A	Z	1.999	1.999	0	%100
55	M44B	X	3.462	3.462	0	%100
56	M44B	Z	1.999	1.999	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	1.751	1.751	0	%100
2	M1	Z	3.033	3.033	0	%100
3	M2	X	1.751	1.751	0	%100
4	M2	Z	3.033	3.033	0	%100
5	M13	X	.244	.244	0	%100
6	M13	Z	.422	.422	0	%100
7	M14	X	.244	.244	0	%100
8	M14	Z	.422	.422	0	%100
9	M15	X	.244	.244	0	%100
10	M15	Z	.422	.422	0	%100
11	M16	X	.244	.244	0	%100
12	M16	Z	.422	.422	0	%100
13	M17	X	1.534	1.534	0	%100
14	M17	Z	2.656	2.656	0	%100
15	M18	X	1.534	1.534	0	%100
16	M18	Z	2.656	2.656	0	%100
17	M19	X	.218	.218	0	%100
18	M19	Z	.378	.378	0	%100
19	M20	X	.218	.218	0	%100
20	M20	Z	.378	.378	0	%100
21	M21	X	.731	.731	0	%100
22	M21	Z	1.266	1.266	0	%100
23	M22	X	.731	.731	0	%100
24	M22	Z	1.266	1.266	0	%100
25	M23	X	.731	.731	0	%100
26	M23	Z	1.266	1.266	0	%100
27	M24	X	.731	.731	0	%100
28	M24	Z	1.266	1.266	0	%100
29	M25	X	1.293	1.293	0	%100
30	M25	Z	2.24	2.24	0	%100
31	M26	X	1.293	1.293	0	%100
32	M26	Z	2.24	2.24	0	%100
33	M27	X	.899	.899	0	%100
34	M27	Z	1.557	1.557	0	%100
35	M28	X	.899	.899	0	%100
36	M28	Z	1.557	1.557	0	%100
37	MP4A	X	2.151	2.151	0	%100
38	MP4A	Z	3.725	3.725	0	%100
39	MP3A	X	2.151	2.151	0	%100
40	MP3A	Z	3.725	3.725	0	%100
41	MP2A	X	2.151	2.151	0	%100
42	MP2A	Z	3.725	3.725	0	%100
43	MP1A	X	2.151	2.151	0	%100
44	MP1A	Z	3.725	3.725	0	%100
45	M44	X	1.188	1.188	0	%100
46	M44	Z	2.058	2.058	0	%100
47	M45	X	1.188	1.188	0	%100
48	M45	Z	2.058	2.058	0	%100
49	M46	X	1.188	1.188	0	%100
50	M46	Z	2.058	2.058	0	%100
51	M47	X	1.188	1.188	0	%100
52	M47	Z	2.058	2.058	0	%100
53	M44A	X	1.191	1.191	0	%100
54	M44A	Z	2.062	2.062	0	%100
55	M44B	X	1.191	1.191	0	%100
56	M44B	Z	2.062	2.062	0	%100



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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	4.67	4.67	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	4.67	4.67	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	1.939	1.939	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	1.939	1.939	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	1.939	1.939	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	1.939	1.939	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	1.949	1.949	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	1.949	1.949	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	1.949	1.949	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	1.949	1.949	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	2.248	2.248	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	2.248	2.248	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	2.248	2.248	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	2.248	2.248	0	%100
37	MP4A	X	0	0	0	%100
38	MP4A	Z	4.301	4.301	0	%100
39	MP3A	X	0	0	0	%100
40	MP3A	Z	4.301	4.301	0	%100
41	MP2A	X	0	0	0	%100
42	MP2A	Z	4.301	4.301	0	%100
43	MP1A	X	0	0	0	%100
44	MP1A	Z	4.301	4.301	0	%100
45	M44	X	0	0	0	%100
46	M44	Z	2.377	2.377	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	2.377	2.377	0	%100
49	M46	X	0	0	0	%100
50	M46	Z	2.377	2.377	0	%100
51	M47	X	0	0	0	%100
52	M47	Z	2.377	2.377	0	%100
53	M44A	X	0	0	0	%100
54	M44A	Z	.453	.453	0	%100
55	M44B	X	0	0	0	%100
56	M44B	Z	.453	.453	0	%100



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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	-1.751	-1.751	0	%100
2	M1	Z	3.033	3.033	0	%100
3	M2	X	-1.751	-1.751	0	%100
4	M2	Z	3.033	3.033	0	%100
5	M13	X	-.244	-.244	0	%100
6	M13	Z	.422	.422	0	%100
7	M14	X	-.244	-.244	0	%100
8	M14	Z	.422	.422	0	%100
9	M15	X	-.244	-.244	0	%100
10	M15	Z	.422	.422	0	%100
11	M16	X	-.244	-.244	0	%100
12	M16	Z	.422	.422	0	%100
13	M17	X	-.218	-.218	0	%100
14	M17	Z	.378	.378	0	%100
15	M18	X	-.218	-.218	0	%100
16	M18	Z	.378	.378	0	%100
17	M19	X	-1.534	-1.534	0	%100
18	M19	Z	2.656	2.656	0	%100
19	M20	X	-1.534	-1.534	0	%100
20	M20	Z	2.656	2.656	0	%100
21	M21	X	-.731	-.731	0	%100
22	M21	Z	1.266	1.266	0	%100
23	M22	X	-.731	-.731	0	%100
24	M22	Z	1.266	1.266	0	%100
25	M23	X	-.731	-.731	0	%100
26	M23	Z	1.266	1.266	0	%100
27	M24	X	-.731	-.731	0	%100
28	M24	Z	1.266	1.266	0	%100
29	M25	X	-.899	-.899	0	%100
30	M25	Z	1.557	1.557	0	%100
31	M26	X	-.899	-.899	0	%100
32	M26	Z	1.557	1.557	0	%100
33	M27	X	-1.293	-1.293	0	%100
34	M27	Z	2.24	2.24	0	%100
35	M28	X	-1.293	-1.293	0	%100
36	M28	Z	2.24	2.24	0	%100
37	MP4A	X	-2.151	-2.151	0	%100
38	MP4A	Z	3.725	3.725	0	%100
39	MP3A	X	-2.151	-2.151	0	%100
40	MP3A	Z	3.725	3.725	0	%100
41	MP2A	X	-2.151	-2.151	0	%100
42	MP2A	Z	3.725	3.725	0	%100
43	MP1A	X	-2.151	-2.151	0	%100
44	MP1A	Z	3.725	3.725	0	%100
45	M44	X	-1.188	-1.188	0	%100
46	M44	Z	2.058	2.058	0	%100
47	M45	X	-1.188	-1.188	0	%100
48	M45	Z	2.058	2.058	0	%100
49	M46	X	-1.188	-1.188	0	%100
50	M46	Z	2.058	2.058	0	%100
51	M47	X	-1.188	-1.188	0	%100
52	M47	Z	2.058	2.058	0	%100
53	M44A	X	-.071	-.071	0	%100
54	M44A	Z	.123	.123	0	%100
55	M44B	X	-.071	-.071	0	%100
56	M44B	Z	.123	.123	0	%100



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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	-1.011	-1.011	0	%100
2	M1	Z	.584	.584	0	%100
3	M2	X	-1.011	-1.011	0	%100
4	M2	Z	.584	.584	0	%100
5	M13	X	-1.266	-1.266	0	%100
6	M13	Z	.731	.731	0	%100
7	M14	X	-1.266	-1.266	0	%100
8	M14	Z	.731	.731	0	%100
9	M15	X	-1.266	-1.266	0	%100
10	M15	Z	.731	.731	0	%100
11	M16	X	-1.266	-1.266	0	%100
12	M16	Z	.731	.731	0	%100
13	M17	X	-.053	-.053	0	%100
14	M17	Z	.031	.031	0	%100
15	M18	X	-.053	-.053	0	%100
16	M18	Z	.031	.031	0	%100
17	M19	X	-2.331	-2.331	0	%100
18	M19	Z	1.346	1.346	0	%100
19	M20	X	-2.331	-2.331	0	%100
20	M20	Z	1.346	1.346	0	%100
21	M21	X	-.422	-.422	0	%100
22	M21	Z	.244	.244	0	%100
23	M22	X	-.422	-.422	0	%100
24	M22	Z	.244	.244	0	%100
25	M23	X	-.422	-.422	0	%100
26	M23	Z	.244	.244	0	%100
27	M24	X	-.422	-.422	0	%100
28	M24	Z	.244	.244	0	%100
29	M25	X	-1.46	-1.46	0	%100
30	M25	Z	.843	.843	0	%100
31	M26	X	-1.46	-1.46	0	%100
32	M26	Z	.843	.843	0	%100
33	M27	X	-2.143	-2.143	0	%100
34	M27	Z	1.237	1.237	0	%100
35	M28	X	-2.143	-2.143	0	%100
36	M28	Z	1.237	1.237	0	%100
37	MP4A	X	-3.725	-3.725	0	%100
38	MP4A	Z	2.151	2.151	0	%100
39	MP3A	X	-3.725	-3.725	0	%100
40	MP3A	Z	2.151	2.151	0	%100
41	MP2A	X	-3.725	-3.725	0	%100
42	MP2A	Z	2.151	2.151	0	%100
43	MP1A	X	-3.725	-3.725	0	%100
44	MP1A	Z	2.151	2.151	0	%100
45	M44	X	-2.058	-2.058	0	%100
46	M44	Z	1.188	1.188	0	%100
47	M45	X	-2.058	-2.058	0	%100
48	M45	Z	1.188	1.188	0	%100
49	M46	X	-2.058	-2.058	0	%100
50	M46	Z	1.188	1.188	0	%100
51	M47	X	-2.058	-2.058	0	%100
52	M47	Z	1.188	1.188	0	%100
53	M44A	X	-1.523	-1.523	0	%100
54	M44A	Z	.879	.879	0	%100
55	M44B	X	-1.523	-1.523	0	%100
56	M44B	Z	.879	.879	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	-1.949	-1.949	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	-1.949	-1.949	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	-1.949	-1.949	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	-1.949	-1.949	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	-1.189	-1.189	0	%100
14	M17	Z	0	0	0	%100
15	M18	X	-1.189	-1.189	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	-1.189	-1.189	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	-1.189	-1.189	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	-2.024	-2.024	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	-2.024	-2.024	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	-2.024	-2.024	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	-2.024	-2.024	0	%100
36	M28	Z	0	0	0	%100
37	MP4A	X	-4.301	-4.301	0	%100
38	MP4A	Z	0	0	0	%100
39	MP3A	X	-4.301	-4.301	0	%100
40	MP3A	Z	0	0	0	%100
41	MP2A	X	-4.301	-4.301	0	%100
42	MP2A	Z	0	0	0	%100
43	MP1A	X	-4.301	-4.301	0	%100
44	MP1A	Z	0	0	0	%100
45	M44	X	-2.377	-2.377	0	%100
46	M44	Z	0	0	0	%100
47	M45	X	-2.377	-2.377	0	%100
48	M45	Z	0	0	0	%100
49	M46	X	-2.377	-2.377	0	%100
50	M46	Z	0	0	0	%100
51	M47	X	-2.377	-2.377	0	%100
52	M47	Z	0	0	0	%100
53	M44A	X	-3.686	-3.686	0	%100
54	M44A	Z	0	0	0	%100
55	M44B	X	-3.686	-3.686	0	%100
56	M44B	Z	0	0	0	%100



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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	-1.011	-1.011	0	%100
2	M1	Z	-.584	-.584	0	%100
3	M2	X	-1.011	-1.011	0	%100
4	M2	Z	-.584	-.584	0	%100
5	M13	X	-1.266	-1.266	0	%100
6	M13	Z	-.731	-.731	0	%100
7	M14	X	-1.266	-1.266	0	%100
8	M14	Z	-.731	-.731	0	%100
9	M15	X	-1.266	-1.266	0	%100
10	M15	Z	-.731	-.731	0	%100
11	M16	X	-1.266	-1.266	0	%100
12	M16	Z	-.731	-.731	0	%100
13	M17	X	-2.331	-2.331	0	%100
14	M17	Z	-1.346	-1.346	0	%100
15	M18	X	-2.331	-2.331	0	%100
16	M18	Z	-1.346	-1.346	0	%100
17	M19	X	-.053	-.053	0	%100
18	M19	Z	-.031	-.031	0	%100
19	M20	X	-.053	-.053	0	%100
20	M20	Z	-.031	-.031	0	%100
21	M21	X	-.422	-.422	0	%100
22	M21	Z	-.244	-.244	0	%100
23	M22	X	-.422	-.422	0	%100
24	M22	Z	-.244	-.244	0	%100
25	M23	X	-.422	-.422	0	%100
26	M23	Z	-.244	-.244	0	%100
27	M24	X	-.422	-.422	0	%100
28	M24	Z	-.244	-.244	0	%100
29	M25	X	-2.143	-2.143	0	%100
30	M25	Z	-1.237	-1.237	0	%100
31	M26	X	-2.143	-2.143	0	%100
32	M26	Z	-1.237	-1.237	0	%100
33	M27	X	-1.46	-1.46	0	%100
34	M27	Z	-.843	-.843	0	%100
35	M28	X	-1.46	-1.46	0	%100
36	M28	Z	-.843	-.843	0	%100
37	MP4A	X	-3.725	-3.725	0	%100
38	MP4A	Z	-2.151	-2.151	0	%100
39	MP3A	X	-3.725	-3.725	0	%100
40	MP3A	Z	-2.151	-2.151	0	%100
41	MP2A	X	-3.725	-3.725	0	%100
42	MP2A	Z	-2.151	-2.151	0	%100
43	MP1A	X	-3.725	-3.725	0	%100
44	MP1A	Z	-2.151	-2.151	0	%100
45	M44	X	-2.058	-2.058	0	%100
46	M44	Z	-1.188	-1.188	0	%100
47	M45	X	-2.058	-2.058	0	%100
48	M45	Z	-1.188	-1.188	0	%100
49	M46	X	-2.058	-2.058	0	%100
50	M46	Z	-1.188	-1.188	0	%100
51	M47	X	-2.058	-2.058	0	%100
52	M47	Z	-1.188	-1.188	0	%100
53	M44A	X	-3.462	-3.462	0	%100
54	M44A	Z	-1.999	-1.999	0	%100
55	M44B	X	-3.462	-3.462	0	%100
56	M44B	Z	-1.999	-1.999	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-1.751	-1.751	0	%100
2	M1	Z	-3.033	-3.033	0	%100
3	M2	X	-1.751	-1.751	0	%100
4	M2	Z	-3.033	-3.033	0	%100
5	M13	X	-.244	-.244	0	%100
6	M13	Z	-.422	-.422	0	%100
7	M14	X	-.244	-.244	0	%100
8	M14	Z	-.422	-.422	0	%100
9	M15	X	-.244	-.244	0	%100
10	M15	Z	-.422	-.422	0	%100
11	M16	X	-.244	-.244	0	%100
12	M16	Z	-.422	-.422	0	%100
13	M17	X	-1.534	-1.534	0	%100
14	M17	Z	-2.656	-2.656	0	%100
15	M18	X	-1.534	-1.534	0	%100
16	M18	Z	-2.656	-2.656	0	%100
17	M19	X	-.218	-.218	0	%100
18	M19	Z	-.378	-.378	0	%100
19	M20	X	-.218	-.218	0	%100
20	M20	Z	-.378	-.378	0	%100
21	M21	X	-.731	-.731	0	%100
22	M21	Z	-1.266	-1.266	0	%100
23	M22	X	-.731	-.731	0	%100
24	M22	Z	-1.266	-1.266	0	%100
25	M23	X	-.731	-.731	0	%100
26	M23	Z	-1.266	-1.266	0	%100
27	M24	X	-.731	-.731	0	%100
28	M24	Z	-1.266	-1.266	0	%100
29	M25	X	-1.293	-1.293	0	%100
30	M25	Z	-2.24	-2.24	0	%100
31	M26	X	-1.293	-1.293	0	%100
32	M26	Z	-2.24	-2.24	0	%100
33	M27	X	-.899	-.899	0	%100
34	M27	Z	-1.557	-1.557	0	%100
35	M28	X	-.899	-.899	0	%100
36	M28	Z	-1.557	-1.557	0	%100
37	MP4A	X	-2.151	-2.151	0	%100
38	MP4A	Z	-3.725	-3.725	0	%100
39	MP3A	X	-2.151	-2.151	0	%100
40	MP3A	Z	-3.725	-3.725	0	%100
41	MP2A	X	-2.151	-2.151	0	%100
42	MP2A	Z	-3.725	-3.725	0	%100
43	MP1A	X	-2.151	-2.151	0	%100
44	MP1A	Z	-3.725	-3.725	0	%100
45	M44	X	-1.188	-1.188	0	%100
46	M44	Z	-2.058	-2.058	0	%100
47	M45	X	-1.188	-1.188	0	%100
48	M45	Z	-2.058	-2.058	0	%100
49	M46	X	-1.188	-1.188	0	%100
50	M46	Z	-2.058	-2.058	0	%100
51	M47	X	-1.188	-1.188	0	%100
52	M47	Z	-2.058	-2.058	0	%100
53	M44A	X	-1.191	-1.191	0	%100
54	M44A	Z	-2.062	-2.062	0	%100
55	M44B	X	-1.191	-1.191	0	%100
56	M44B	Z	-2.062	-2.062	0	%100



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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	-0.762	-0.762	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-0.762	-0.762	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	-0.301	-0.301	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	-0.301	-0.301	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	-0.301	-0.301	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	-0.301	-0.301	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	-0.166	-0.166	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	-0.166	-0.166	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	-0.166	-0.166	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	-0.166	-0.166	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	-0.172	-0.172	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	-0.172	-0.172	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	-0.172	-0.172	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	-0.172	-0.172	0	%100
37	MP4A	X	0	0	0	%100
38	MP4A	Z	-0.63	-0.63	0	%100
39	MP3A	X	0	0	0	%100
40	MP3A	Z	-0.63	-0.63	0	%100
41	MP2A	X	0	0	0	%100
42	MP2A	Z	-0.63	-0.63	0	%100
43	MP1A	X	0	0	0	%100
44	MP1A	Z	-0.63	-0.63	0	%100
45	M44	X	0	0	0	%100
46	M44	Z	-0.166	-0.166	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	-0.166	-0.166	0	%100
49	M46	X	0	0	0	%100
50	M46	Z	-0.166	-0.166	0	%100
51	M47	X	0	0	0	%100
52	M47	Z	-0.166	-0.166	0	%100
53	M44A	X	0	0	0	%100
54	M44A	Z	-0.069	-0.069	0	%100
55	M44B	X	0	0	0	%100
56	M44B	Z	-0.069	-0.069	0	%100



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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	.286	.286	0	%100
2	M1	Z	-.495	-.495	0	%100
3	M2	X	.286	.286	0	%100
4	M2	Z	-.495	-.495	0	%100
5	M13	X	.021	.021	0	%100
6	M13	Z	-.036	-.036	0	%100
7	M14	X	.021	.021	0	%100
8	M14	Z	-.036	-.036	0	%100
9	M15	X	.021	.021	0	%100
10	M15	Z	-.036	-.036	0	%100
11	M16	X	.021	.021	0	%100
12	M16	Z	-.036	-.036	0	%100
13	M17	X	.034	.034	0	%100
14	M17	Z	-.059	-.059	0	%100
15	M18	X	.034	.034	0	%100
16	M18	Z	-.059	-.059	0	%100
17	M19	X	.238	.238	0	%100
18	M19	Z	-.412	-.412	0	%100
19	M20	X	.238	.238	0	%100
20	M20	Z	-.412	-.412	0	%100
21	M21	X	.062	.062	0	%100
22	M21	Z	-.108	-.108	0	%100
23	M22	X	.062	.062	0	%100
24	M22	Z	-.108	-.108	0	%100
25	M23	X	.062	.062	0	%100
26	M23	Z	-.108	-.108	0	%100
27	M24	X	.062	.062	0	%100
28	M24	Z	-.108	-.108	0	%100
29	M25	X	.069	.069	0	%100
30	M25	Z	-.119	-.119	0	%100
31	M26	X	.069	.069	0	%100
32	M26	Z	-.119	-.119	0	%100
33	M27	X	.099	.099	0	%100
34	M27	Z	-.171	-.171	0	%100
35	M28	X	.099	.099	0	%100
36	M28	Z	-.171	-.171	0	%100
37	MP4A	X	.315	.315	0	%100
38	MP4A	Z	-.545	-.545	0	%100
39	MP3A	X	.315	.315	0	%100
40	MP3A	Z	-.545	-.545	0	%100
41	MP2A	X	.315	.315	0	%100
42	MP2A	Z	-.545	-.545	0	%100
43	MP1A	X	.315	.315	0	%100
44	MP1A	Z	-.545	-.545	0	%100
45	M44	X	.083	.083	0	%100
46	M44	Z	-.144	-.144	0	%100
47	M45	X	.083	.083	0	%100
48	M45	Z	-.144	-.144	0	%100
49	M46	X	.083	.083	0	%100
50	M46	Z	-.144	-.144	0	%100
51	M47	X	.083	.083	0	%100
52	M47	Z	-.144	-.144	0	%100
53	M44A	X	.011	.011	0	%100
54	M44A	Z	-.019	-.019	0	%100
55	M44B	X	.011	.011	0	%100
56	M44B	Z	-.019	-.019	0	%100



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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	.165	.165	0	%100
2	M1	Z	-.095	-.095	0	%100
3	M2	X	.165	.165	0	%100
4	M2	Z	-.095	-.095	0	%100
5	M13	X	.108	.108	0	%100
6	M13	Z	-.062	-.062	0	%100
7	M14	X	.108	.108	0	%100
8	M14	Z	-.062	-.062	0	%100
9	M15	X	.108	.108	0	%100
10	M15	Z	-.062	-.062	0	%100
11	M16	X	.108	.108	0	%100
12	M16	Z	-.062	-.062	0	%100
13	M17	X	.008	.008	0	%100
14	M17	Z	-.005	-.005	0	%100
15	M18	X	.008	.008	0	%100
16	M18	Z	-.005	-.005	0	%100
17	M19	X	.362	.362	0	%100
18	M19	Z	-.209	-.209	0	%100
19	M20	X	.362	.362	0	%100
20	M20	Z	-.209	-.209	0	%100
21	M21	X	.036	.036	0	%100
22	M21	Z	-.021	-.021	0	%100
23	M22	X	.036	.036	0	%100
24	M22	Z	-.021	-.021	0	%100
25	M23	X	.036	.036	0	%100
26	M23	Z	-.021	-.021	0	%100
27	M24	X	.036	.036	0	%100
28	M24	Z	-.021	-.021	0	%100
29	M25	X	.111	.111	0	%100
30	M25	Z	-.064	-.064	0	%100
31	M26	X	.111	.111	0	%100
32	M26	Z	-.064	-.064	0	%100
33	M27	X	.164	.164	0	%100
34	M27	Z	-.094	-.094	0	%100
35	M28	X	.164	.164	0	%100
36	M28	Z	-.094	-.094	0	%100
37	MP4A	X	.545	.545	0	%100
38	MP4A	Z	-.315	-.315	0	%100
39	MP3A	X	.545	.545	0	%100
40	MP3A	Z	-.315	-.315	0	%100
41	MP2A	X	.545	.545	0	%100
42	MP2A	Z	-.315	-.315	0	%100
43	MP1A	X	.545	.545	0	%100
44	MP1A	Z	-.315	-.315	0	%100
45	M44	X	.144	.144	0	%100
46	M44	Z	-.083	-.083	0	%100
47	M45	X	.144	.144	0	%100
48	M45	Z	-.083	-.083	0	%100
49	M46	X	.144	.144	0	%100
50	M46	Z	-.083	-.083	0	%100
51	M47	X	.144	.144	0	%100
52	M47	Z	-.083	-.083	0	%100
53	M44A	X	.232	.232	0	%100
54	M44A	Z	-.134	-.134	0	%100
55	M44B	X	.232	.232	0	%100
56	M44B	Z	-.134	-.134	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	.166	.166	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	.166	.166	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	.166	.166	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	.166	.166	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	.185	.185	0	%100
14	M17	Z	0	0	0	%100
15	M18	X	.185	.185	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	.185	.185	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	.185	.185	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	.154	.154	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	.154	.154	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	.154	.154	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	.154	.154	0	%100
36	M28	Z	0	0	0	%100
37	MP4A	X	.63	.63	0	%100
38	MP4A	Z	0	0	0	%100
39	MP3A	X	.63	.63	0	%100
40	MP3A	Z	0	0	0	%100
41	MP2A	X	.63	.63	0	%100
42	MP2A	Z	0	0	0	%100
43	MP1A	X	.63	.63	0	%100
44	MP1A	Z	0	0	0	%100
45	M44	X	.166	.166	0	%100
46	M44	Z	0	0	0	%100
47	M45	X	.166	.166	0	%100
48	M45	Z	0	0	0	%100
49	M46	X	.166	.166	0	%100
50	M46	Z	0	0	0	%100
51	M47	X	.166	.166	0	%100
52	M47	Z	0	0	0	%100
53	M44A	X	.561	.561	0	%100
54	M44A	Z	0	0	0	%100
55	M44B	X	.561	.561	0	%100
56	M44B	Z	0	0	0	%100



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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	.165	.165	0	%100
2	M1	Z	.095	.095	0	%100
3	M2	X	.165	.165	0	%100
4	M2	Z	.095	.095	0	%100
5	M13	X	.108	.108	0	%100
6	M13	Z	.062	.062	0	%100
7	M14	X	.108	.108	0	%100
8	M14	Z	.062	.062	0	%100
9	M15	X	.108	.108	0	%100
10	M15	Z	.062	.062	0	%100
11	M16	X	.108	.108	0	%100
12	M16	Z	.062	.062	0	%100
13	M17	X	.362	.362	0	%100
14	M17	Z	.209	.209	0	%100
15	M18	X	.362	.362	0	%100
16	M18	Z	.209	.209	0	%100
17	M19	X	.008	.008	0	%100
18	M19	Z	.005	.005	0	%100
19	M20	X	.008	.008	0	%100
20	M20	Z	.005	.005	0	%100
21	M21	X	.036	.036	0	%100
22	M21	Z	.021	.021	0	%100
23	M22	X	.036	.036	0	%100
24	M22	Z	.021	.021	0	%100
25	M23	X	.036	.036	0	%100
26	M23	Z	.021	.021	0	%100
27	M24	X	.036	.036	0	%100
28	M24	Z	.021	.021	0	%100
29	M25	X	.164	.164	0	%100
30	M25	Z	.094	.094	0	%100
31	M26	X	.164	.164	0	%100
32	M26	Z	.094	.094	0	%100
33	M27	X	.111	.111	0	%100
34	M27	Z	.064	.064	0	%100
35	M28	X	.111	.111	0	%100
36	M28	Z	.064	.064	0	%100
37	MP4A	X	.545	.545	0	%100
38	MP4A	Z	.315	.315	0	%100
39	MP3A	X	.545	.545	0	%100
40	MP3A	Z	.315	.315	0	%100
41	MP2A	X	.545	.545	0	%100
42	MP2A	Z	.315	.315	0	%100
43	MP1A	X	.545	.545	0	%100
44	MP1A	Z	.315	.315	0	%100
45	M44	X	.144	.144	0	%100
46	M44	Z	.083	.083	0	%100
47	M45	X	.144	.144	0	%100
48	M45	Z	.083	.083	0	%100
49	M46	X	.144	.144	0	%100
50	M46	Z	.083	.083	0	%100
51	M47	X	.144	.144	0	%100
52	M47	Z	.083	.083	0	%100
53	M44A	X	.527	.527	0	%100
54	M44A	Z	.304	.304	0	%100
55	M44B	X	.527	.527	0	%100
56	M44B	Z	.304	.304	0	%100



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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	.286	.286	0	%100
2	M1	Z	.495	.495	0	%100
3	M2	X	.286	.286	0	%100
4	M2	Z	.495	.495	0	%100
5	M13	X	.021	.021	0	%100
6	M13	Z	.036	.036	0	%100
7	M14	X	.021	.021	0	%100
8	M14	Z	.036	.036	0	%100
9	M15	X	.021	.021	0	%100
10	M15	Z	.036	.036	0	%100
11	M16	X	.021	.021	0	%100
12	M16	Z	.036	.036	0	%100
13	M17	X	.238	.238	0	%100
14	M17	Z	.412	.412	0	%100
15	M18	X	.238	.238	0	%100
16	M18	Z	.412	.412	0	%100
17	M19	X	.034	.034	0	%100
18	M19	Z	.059	.059	0	%100
19	M20	X	.034	.034	0	%100
20	M20	Z	.059	.059	0	%100
21	M21	X	.062	.062	0	%100
22	M21	Z	.108	.108	0	%100
23	M22	X	.062	.062	0	%100
24	M22	Z	.108	.108	0	%100
25	M23	X	.062	.062	0	%100
26	M23	Z	.108	.108	0	%100
27	M24	X	.062	.062	0	%100
28	M24	Z	.108	.108	0	%100
29	M25	X	.099	.099	0	%100
30	M25	Z	.171	.171	0	%100
31	M26	X	.099	.099	0	%100
32	M26	Z	.171	.171	0	%100
33	M27	X	.069	.069	0	%100
34	M27	Z	.119	.119	0	%100
35	M28	X	.069	.069	0	%100
36	M28	Z	.119	.119	0	%100
37	MP4A	X	.315	.315	0	%100
38	MP4A	Z	.545	.545	0	%100
39	MP3A	X	.315	.315	0	%100
40	MP3A	Z	.545	.545	0	%100
41	MP2A	X	.315	.315	0	%100
42	MP2A	Z	.545	.545	0	%100
43	MP1A	X	.315	.315	0	%100
44	MP1A	Z	.545	.545	0	%100
45	M44	X	.083	.083	0	%100
46	M44	Z	.144	.144	0	%100
47	M45	X	.083	.083	0	%100
48	M45	Z	.144	.144	0	%100
49	M46	X	.083	.083	0	%100
50	M46	Z	.144	.144	0	%100
51	M47	X	.083	.083	0	%100
52	M47	Z	.144	.144	0	%100
53	M44A	X	.181	.181	0	%100
54	M44A	Z	.314	.314	0	%100
55	M44B	X	.181	.181	0	%100
56	M44B	Z	.314	.314	0	%100



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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	.762	.762	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	.762	.762	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	.301	.301	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	.301	.301	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	.301	.301	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	.301	.301	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	.166	.166	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	.166	.166	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	.166	.166	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	.166	.166	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	.172	.172	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	.172	.172	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	.172	.172	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	.172	.172	0	%100
37	MP4A	X	0	0	0	%100
38	MP4A	Z	.63	.63	0	%100
39	MP3A	X	0	0	0	%100
40	MP3A	Z	.63	.63	0	%100
41	MP2A	X	0	0	0	%100
42	MP2A	Z	.63	.63	0	%100
43	MP1A	X	0	0	0	%100
44	MP1A	Z	.63	.63	0	%100
45	M44	X	0	0	0	%100
46	M44	Z	.166	.166	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	.166	.166	0	%100
49	M46	X	0	0	0	%100
50	M46	Z	.166	.166	0	%100
51	M47	X	0	0	0	%100
52	M47	Z	.166	.166	0	%100
53	M44A	X	0	0	0	%100
54	M44A	Z	.069	.069	0	%100
55	M44B	X	0	0	0	%100
56	M44B	Z	.069	.069	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

July 7, 2021
 11:39 AM
 Checked By: _____

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	-.286	-.286	0	%100
2	M1	Z	.495	.495	0	%100
3	M2	X	-.286	-.286	0	%100
4	M2	Z	.495	.495	0	%100
5	M13	X	-.021	-.021	0	%100
6	M13	Z	.036	.036	0	%100
7	M14	X	-.021	-.021	0	%100
8	M14	Z	.036	.036	0	%100
9	M15	X	-.021	-.021	0	%100
10	M15	Z	.036	.036	0	%100
11	M16	X	-.021	-.021	0	%100
12	M16	Z	.036	.036	0	%100
13	M17	X	-.034	-.034	0	%100
14	M17	Z	.059	.059	0	%100
15	M18	X	-.034	-.034	0	%100
16	M18	Z	.059	.059	0	%100
17	M19	X	-.238	-.238	0	%100
18	M19	Z	.412	.412	0	%100
19	M20	X	-.238	-.238	0	%100
20	M20	Z	.412	.412	0	%100
21	M21	X	-.062	-.062	0	%100
22	M21	Z	.108	.108	0	%100
23	M22	X	-.062	-.062	0	%100
24	M22	Z	.108	.108	0	%100
25	M23	X	-.062	-.062	0	%100
26	M23	Z	.108	.108	0	%100
27	M24	X	-.062	-.062	0	%100
28	M24	Z	.108	.108	0	%100
29	M25	X	-.069	-.069	0	%100
30	M25	Z	.119	.119	0	%100
31	M26	X	-.069	-.069	0	%100
32	M26	Z	.119	.119	0	%100
33	M27	X	-.099	-.099	0	%100
34	M27	Z	.171	.171	0	%100
35	M28	X	-.099	-.099	0	%100
36	M28	Z	.171	.171	0	%100
37	MP4A	X	-.315	-.315	0	%100
38	MP4A	Z	.545	.545	0	%100
39	MP3A	X	-.315	-.315	0	%100
40	MP3A	Z	.545	.545	0	%100
41	MP2A	X	-.315	-.315	0	%100
42	MP2A	Z	.545	.545	0	%100
43	MP1A	X	-.315	-.315	0	%100
44	MP1A	Z	.545	.545	0	%100
45	M44	X	-.083	-.083	0	%100
46	M44	Z	.144	.144	0	%100
47	M45	X	-.083	-.083	0	%100
48	M45	Z	.144	.144	0	%100
49	M46	X	-.083	-.083	0	%100
50	M46	Z	.144	.144	0	%100
51	M47	X	-.083	-.083	0	%100
52	M47	Z	.144	.144	0	%100
53	M44A	X	-.011	-.011	0	%100
54	M44A	Z	.019	.019	0	%100
55	M44B	X	-.011	-.011	0	%100
56	M44B	Z	.019	.019	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

July 7, 2021
 11:40 AM
 Checked By: _____

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	-.165	-.165	0	%100
2	M1	Z	.095	.095	0	%100
3	M2	X	-.165	-.165	0	%100
4	M2	Z	.095	.095	0	%100
5	M13	X	-.108	-.108	0	%100
6	M13	Z	.062	.062	0	%100
7	M14	X	-.108	-.108	0	%100
8	M14	Z	.062	.062	0	%100
9	M15	X	-.108	-.108	0	%100
10	M15	Z	.062	.062	0	%100
11	M16	X	-.108	-.108	0	%100
12	M16	Z	.062	.062	0	%100
13	M17	X	-.008	-.008	0	%100
14	M17	Z	.005	.005	0	%100
15	M18	X	-.008	-.008	0	%100
16	M18	Z	.005	.005	0	%100
17	M19	X	-.362	-.362	0	%100
18	M19	Z	.209	.209	0	%100
19	M20	X	-.362	-.362	0	%100
20	M20	Z	.209	.209	0	%100
21	M21	X	-.036	-.036	0	%100
22	M21	Z	.021	.021	0	%100
23	M22	X	-.036	-.036	0	%100
24	M22	Z	.021	.021	0	%100
25	M23	X	-.036	-.036	0	%100
26	M23	Z	.021	.021	0	%100
27	M24	X	-.036	-.036	0	%100
28	M24	Z	.021	.021	0	%100
29	M25	X	-.111	-.111	0	%100
30	M25	Z	.064	.064	0	%100
31	M26	X	-.111	-.111	0	%100
32	M26	Z	.064	.064	0	%100
33	M27	X	-.164	-.164	0	%100
34	M27	Z	.094	.094	0	%100
35	M28	X	-.164	-.164	0	%100
36	M28	Z	.094	.094	0	%100
37	MP4A	X	-.545	-.545	0	%100
38	MP4A	Z	.315	.315	0	%100
39	MP3A	X	-.545	-.545	0	%100
40	MP3A	Z	.315	.315	0	%100
41	MP2A	X	-.545	-.545	0	%100
42	MP2A	Z	.315	.315	0	%100
43	MP1A	X	-.545	-.545	0	%100
44	MP1A	Z	.315	.315	0	%100
45	M44	X	-.144	-.144	0	%100
46	M44	Z	.083	.083	0	%100
47	M45	X	-.144	-.144	0	%100
48	M45	Z	.083	.083	0	%100
49	M46	X	-.144	-.144	0	%100
50	M46	Z	.083	.083	0	%100
51	M47	X	-.144	-.144	0	%100
52	M47	Z	.083	.083	0	%100
53	M44A	X	-.232	-.232	0	%100
54	M44A	Z	.134	.134	0	%100
55	M44B	X	-.232	-.232	0	%100
56	M44B	Z	.134	.134	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

July 7, 2021
 11:40 AM
 Checked By: _____

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	-.166	-.166	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	-.166	-.166	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	-.166	-.166	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	-.166	-.166	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	-.185	-.185	0	%100
14	M17	Z	0	0	0	%100
15	M18	X	-.185	-.185	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	-.185	-.185	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	-.185	-.185	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	-.154	-.154	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	-.154	-.154	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	-.154	-.154	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	-.154	-.154	0	%100
36	M28	Z	0	0	0	%100
37	MP4A	X	-.63	-.63	0	%100
38	MP4A	Z	0	0	0	%100
39	MP3A	X	-.63	-.63	0	%100
40	MP3A	Z	0	0	0	%100
41	MP2A	X	-.63	-.63	0	%100
42	MP2A	Z	0	0	0	%100
43	MP1A	X	-.63	-.63	0	%100
44	MP1A	Z	0	0	0	%100
45	M44	X	-.166	-.166	0	%100
46	M44	Z	0	0	0	%100
47	M45	X	-.166	-.166	0	%100
48	M45	Z	0	0	0	%100
49	M46	X	-.166	-.166	0	%100
50	M46	Z	0	0	0	%100
51	M47	X	-.166	-.166	0	%100
52	M47	Z	0	0	0	%100
53	M44A	X	-.561	-.561	0	%100
54	M44A	Z	0	0	0	%100
55	M44B	X	-.561	-.561	0	%100
56	M44B	Z	0	0	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

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 11:40 AM
 Checked By: _____

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	-.165	-.165	0	%100
2	M1	Z	-.095	-.095	0	%100
3	M2	X	-.165	-.165	0	%100
4	M2	Z	-.095	-.095	0	%100
5	M13	X	-.108	-.108	0	%100
6	M13	Z	-.062	-.062	0	%100
7	M14	X	-.108	-.108	0	%100
8	M14	Z	-.062	-.062	0	%100
9	M15	X	-.108	-.108	0	%100
10	M15	Z	-.062	-.062	0	%100
11	M16	X	-.108	-.108	0	%100
12	M16	Z	-.062	-.062	0	%100
13	M17	X	-.362	-.362	0	%100
14	M17	Z	-.209	-.209	0	%100
15	M18	X	-.362	-.362	0	%100
16	M18	Z	-.209	-.209	0	%100
17	M19	X	-.008	-.008	0	%100
18	M19	Z	-.005	-.005	0	%100
19	M20	X	-.008	-.008	0	%100
20	M20	Z	-.005	-.005	0	%100
21	M21	X	-.036	-.036	0	%100
22	M21	Z	-.021	-.021	0	%100
23	M22	X	-.036	-.036	0	%100
24	M22	Z	-.021	-.021	0	%100
25	M23	X	-.036	-.036	0	%100
26	M23	Z	-.021	-.021	0	%100
27	M24	X	-.036	-.036	0	%100
28	M24	Z	-.021	-.021	0	%100
29	M25	X	-.164	-.164	0	%100
30	M25	Z	-.094	-.094	0	%100
31	M26	X	-.164	-.164	0	%100
32	M26	Z	-.094	-.094	0	%100
33	M27	X	-.111	-.111	0	%100
34	M27	Z	-.064	-.064	0	%100
35	M28	X	-.111	-.111	0	%100
36	M28	Z	-.064	-.064	0	%100
37	MP4A	X	-.545	-.545	0	%100
38	MP4A	Z	-.315	-.315	0	%100
39	MP3A	X	-.545	-.545	0	%100
40	MP3A	Z	-.315	-.315	0	%100
41	MP2A	X	-.545	-.545	0	%100
42	MP2A	Z	-.315	-.315	0	%100
43	MP1A	X	-.545	-.545	0	%100
44	MP1A	Z	-.315	-.315	0	%100
45	M44	X	-.144	-.144	0	%100
46	M44	Z	-.083	-.083	0	%100
47	M45	X	-.144	-.144	0	%100
48	M45	Z	-.083	-.083	0	%100
49	M46	X	-.144	-.144	0	%100
50	M46	Z	-.083	-.083	0	%100
51	M47	X	-.144	-.144	0	%100
52	M47	Z	-.083	-.083	0	%100
53	M44A	X	-.527	-.527	0	%100
54	M44A	Z	-.304	-.304	0	%100
55	M44B	X	-.527	-.527	0	%100
56	M44B	Z	-.304	-.304	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

July 7, 2021
 11:40 AM
 Checked By: _____

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	-.286	-.286	0	%100
2	M1	Z	-.495	-.495	0	%100
3	M2	X	-.286	-.286	0	%100
4	M2	Z	-.495	-.495	0	%100
5	M13	X	-.021	-.021	0	%100
6	M13	Z	-.036	-.036	0	%100
7	M14	X	-.021	-.021	0	%100
8	M14	Z	-.036	-.036	0	%100
9	M15	X	-.021	-.021	0	%100
10	M15	Z	-.036	-.036	0	%100
11	M16	X	-.021	-.021	0	%100
12	M16	Z	-.036	-.036	0	%100
13	M17	X	-.238	-.238	0	%100
14	M17	Z	-.412	-.412	0	%100
15	M18	X	-.238	-.238	0	%100
16	M18	Z	-.412	-.412	0	%100
17	M19	X	-.034	-.034	0	%100
18	M19	Z	-.059	-.059	0	%100
19	M20	X	-.034	-.034	0	%100
20	M20	Z	-.059	-.059	0	%100
21	M21	X	-.062	-.062	0	%100
22	M21	Z	-.108	-.108	0	%100
23	M22	X	-.062	-.062	0	%100
24	M22	Z	-.108	-.108	0	%100
25	M23	X	-.062	-.062	0	%100
26	M23	Z	-.108	-.108	0	%100
27	M24	X	-.062	-.062	0	%100
28	M24	Z	-.108	-.108	0	%100
29	M25	X	-.099	-.099	0	%100
30	M25	Z	-.171	-.171	0	%100
31	M26	X	-.099	-.099	0	%100
32	M26	Z	-.171	-.171	0	%100
33	M27	X	-.069	-.069	0	%100
34	M27	Z	-.119	-.119	0	%100
35	M28	X	-.069	-.069	0	%100
36	M28	Z	-.119	-.119	0	%100
37	MP4A	X	-.315	-.315	0	%100
38	MP4A	Z	-.545	-.545	0	%100
39	MP3A	X	-.315	-.315	0	%100
40	MP3A	Z	-.545	-.545	0	%100
41	MP2A	X	-.315	-.315	0	%100
42	MP2A	Z	-.545	-.545	0	%100
43	MP1A	X	-.315	-.315	0	%100
44	MP1A	Z	-.545	-.545	0	%100
45	M44	X	-.083	-.083	0	%100
46	M44	Z	-.144	-.144	0	%100
47	M45	X	-.083	-.083	0	%100
48	M45	Z	-.144	-.144	0	%100
49	M46	X	-.083	-.083	0	%100
50	M46	Z	-.144	-.144	0	%100
51	M47	X	-.083	-.083	0	%100
52	M47	Z	-.144	-.144	0	%100
53	M44A	X	-.181	-.181	0	%100
54	M44A	Z	-.314	-.314	0	%100
55	M44B	X	-.181	-.181	0	%100
56	M44B	Z	-.314	-.314	0	%100

Member Area Loads

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

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N35	max	363.138	9	1414.883	14	1916.621	13	-.159	7	0	51	.066	35
2		min	-775.321	50	461.411	8	-359.123	7	-.609	13	0	1	-.143	50
3	N36	max	1123.137	11	1354.302	20	-35.021	1	-.162	6	0	51	.063	35
4		min	-855.795	5	445.104	2	-1679.354	18	-.568	24	0	1	-.14	50
5	N63	max	215.481	9	40.264	21	572.764	3	0	51	0	51	0	51
6		min	-209.374	3	12.903	2	-588.722	9	0	1	0	1	0	1
7	N63A	max	272.536	6	65.731	18	671.762	12	0	51	0	51	0	51
8		min	-262.376	12	21.106	12	-697.178	6	0	1	0	1	0	1
9	Totals:	max	1438.921	11	2863.612	17	2142.862	1						
10		min	-1438.92	5	975.697	11	-2142.864	7						

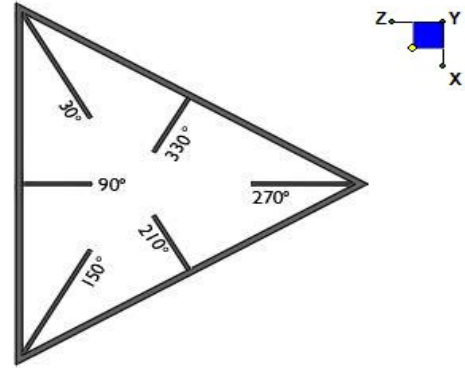
Envelope AISC 15th(360-16): LRFD Steel Code Checks

Member	Shape	Code Check	Loc[ft]	LC	Shear ...Loc[ft]	Dir	LC	phi*Pnc ...	phi*Pnt [...]	phi*Mn y...	phi*Mn z...	Cb	Eqn
1	M1	PIPE 2.5	.153	3.776	50	.079	3.776	44	14558.7...	50715	3.596	3.596	2...H1-1b
2	M2	PIPE 2.5	.171	8.724	5	.089	3.776	12	14558.7...	50715	3.596	3.596	2...H1-1b
3	M13	PL5/8X3.5	.185	.422	23	.122	.422	y 11	66184.77	68906.25	.897	5.024	1...H1-1b
4	M14	PL5/8X3.5	.189	0	42	.126	.422	y 2	66184.77	68906.25	.897	5.024	1...H1-1b
5	M15	PL5/8X3.5	.159	0	36	.121	.422	y 12	66184.77	68906.25	.897	5.024	1...H1-1b
6	M16	PL5/8X3.5	.170	.422	17	.164	.422	y 6	66184.77	68906.25	.897	5.024	1...H1-1b
7	M17	PIPE 2.0	.129	0	11	.071	0	14	31128.25	32130	1.872	1.872	2.2H1-1b
8	M18	PIPE 2.0	.123	0	2	.079	0	14	31128.25	32130	1.872	1.872	1...H1-1b
9	M19	PIPE 2.0	.118	0	12	.069	0	13	31128.25	32130	1.872	1.872	1...H1-1b
10	M20	PIPE 2.0	.165	0	6	.074	0	23	31128.25	32130	1.872	1.872	2...H1-1b
11	M21	PL5/8X3.5	.348	.531	19	.047	.531	y 8	67591.76	68906.25	.897	5.024	1...H1-1b
12	M22	PL5/8X3.5	.325	.531	19	.067	.531	y 6	67591.76	68906.25	.897	5.024	1...H1-1b
13	M23	PL5/8X3.5	.385	.531	14	.059	.531	y 1	67591.76	68906.25	.897	5.024	1...H1-1b
14	M24	PL5/8X3.5	.352	.531	24	.062	.531	y 1	67591.76	68906.25	.897	5.024	1...H1-1b
15	M25	SR 0.75	.000	0	51	.008	0	50	2863.936	13916.2...	.174	.174	1...H1-1a
16	M26	SR 0.75	.071	0	18	.016	0	3	2863.936	13916.2...	.174	.174	1...H1-1b*
17	M27	SR 0.75	.000	0	51	.009	0	20	2863.936	13916.2...	.174	.174	1...H1-1a
18	M28	SR 0.75	.058	4.167	20	.015	0	12	2863.936	13916.2...	.174	.174	1...H1-1b*
19	MP4A	PIPE 2.0	.240	5.667	50	.039	2.333	50	14916.0...	32130	1.872	1.872	4...H1-1b
20	MP3A	PIPE 2.5	.112	2.333	21	.071	5.667	6	30038.4...	50715	3.596	3.596	3...H1-1b
21	MP2A	PIPE 2.0	.132	2.333	5	.078	2.333	3	14916.0...	32130	1.872	1.872	3...H1-1b
22	MP1A	PIPE 2.0	.146	2.333	15	.052	2.333	3	14916.0...	32130	1.872	1.872	4...H1-1b
23	M44	SR 0.625	.073	0	12	.009	0	50	2158.269	9664.074	.101	.101	1...H1-1b*
24	M45	SR 0.625	.050	1.667	7	.013	0	11	2158.269	9664.074	.101	.101	1 H1-1b
25	M46	SR 0.625	.047	1.667	6	.014	0	5	2158.269	9664.074	.101	.101	1...H1-1b
26	M47	SR 0.625	.051	1.667	6	.007	0	50	2158.269	9664.074	.101	.101	1...H1-1b
27	M44A	PIPE 2.0	.038	3.116	16	.004	0	23	20170.7...	32130	1.872	1.872	1...H1-1b
28	M44B	PIPE 2.0	.103	5.099	11	.007	10.197	23	9459.33	32130	1.872	1.872	1...H1-1b

I. Mount-to-Tower Connection Check

RISA Model Data

Nodes (labeled per RISA)	Orientation (per graphic of typical platform)
N35	90
N36	90



TYPICAL PLATFORM

Tower Connection Bolt Checks

Any moment resistance?:

Bolt Quantity per Reaction:

d_x (in) (Delta X of typ. bolt config. sketch):

d_y (in) (Delta Y of typ. bolt config. sketch):

Bolt Type:

Bolt Diameter (in):

Required Tensile Strength (kips):

Required Shear Strength (kips):

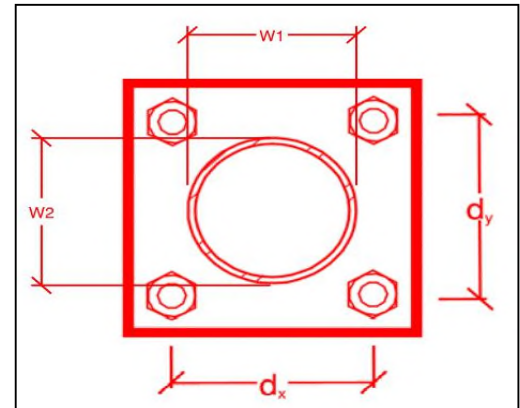
Tensile Strength / bolt (kips):

Shear Strength / bolt (kips):

Tensile Capacity Overall:

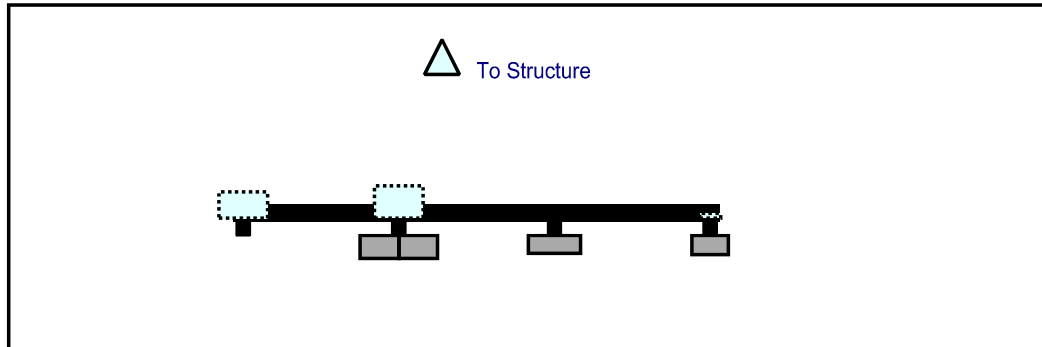
Shear Capacity Overall:

yes
4
9.5
4.5
A307
0.625
4.6
2.1
10.0
6.0
11.4%*
8.8%

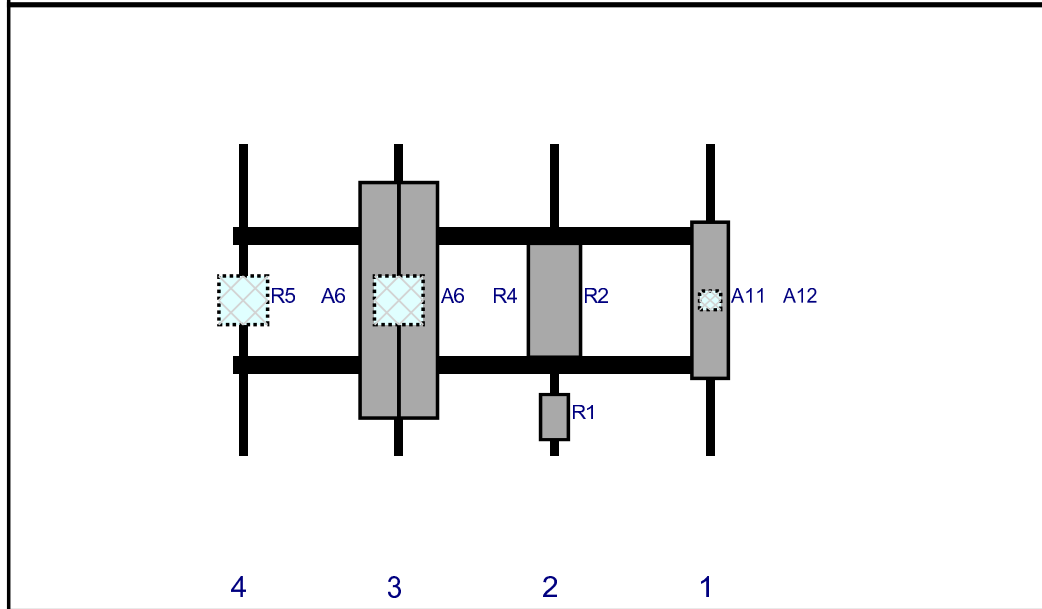


*Note: Tension reduction not required if tension or shear capacity < 30%

Plan View

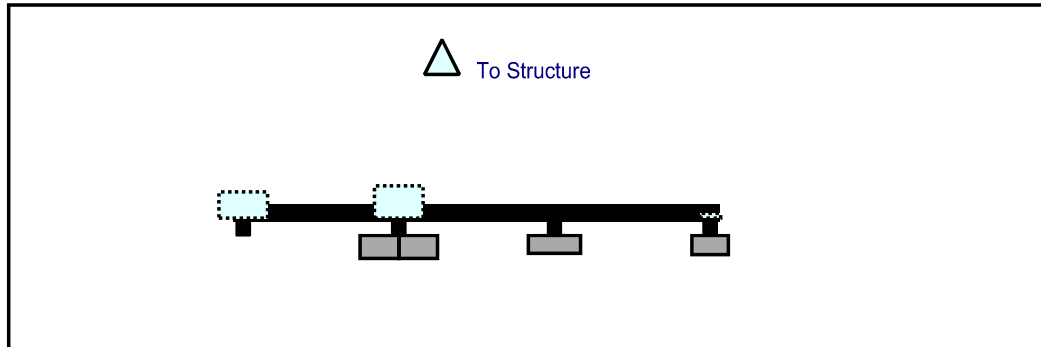


Front View
Looking at Structure

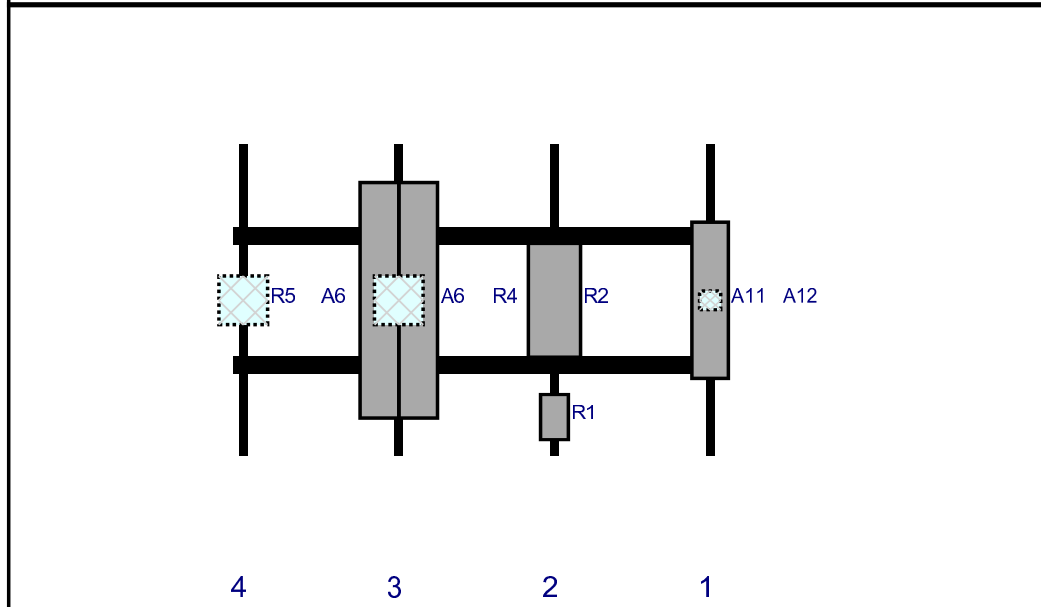


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A11	BXA-80080/4CF	48.2	11.2	147	1	a	Front	48	0	Retained	04/18/2021
A12	FD9R6004/2C-3L	5.8	6.5	147	1	a	Behind	48	0	Retained	04/18/2021
R1	XXDWMM-12.5-65-BT-CBRS	13.9	8.6	99	2	a	Front	84	0	Added	
R2	MT6407-77A	35.1	16.1	99	2	a	Front	48	0	Added	
A6	SBNHH-1D65B	72.6	11.9	51	3	a	Front	48	-6	Retained	04/18/2021
A6	SBNHH-1D65B	72.6	11.9	51	3	b	Front	48	6	Retained	04/18/2021
R4	B2/B66A RRR-BR049	15	15	51	3	a	Behind	48	0	Added	
R5	B5/B13 RRR-BR04C	15	15	3	4	a	Behind	48	0	Added	

Plan View

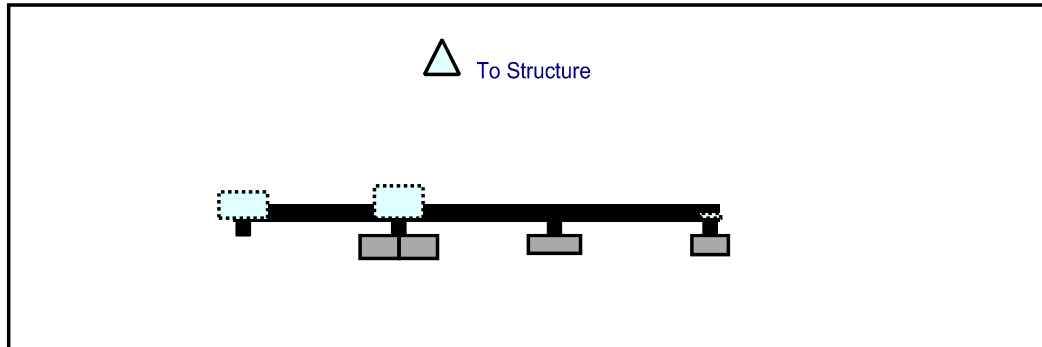


Front View
 Looking at Structure

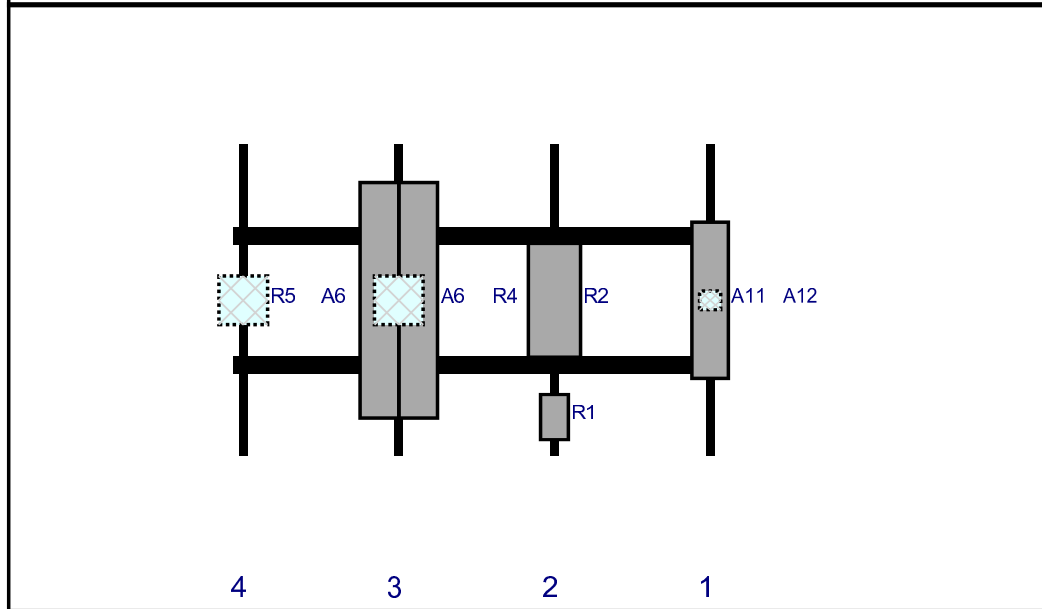


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A11	BXA-80080/4CF	48.2	11.2	147	1	a	Front	48	0	Retained	04/18/2021
A12	FD9R6004/2C-3L	5.8	6.5	147	1	a	Behind	48	0	Retained	04/18/2021
R1	XXDWMM-12.5-65-BT-CBRS	13.9	8.6	99	2	a	Front	84	0	Added	
R2	MT6407-77A	35.1	16.1	99	2	a	Front	48	0	Added	
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R4	B2/B66A RRH-BR049	15	15	51	3	a	Behind	48	0	Added	
R5	B5/B13 RRH-BR04C	15	15	3	4	a	Behind	48	0	Added	

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
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A6	SBNHH-1D65B	72.6	11.9	51	3	b	Front	48	6	Retained	04/18/2021
R4	B2/B66A RRR-BR049	15	15	51	3	a	Behind	48	0	Added	
R5	B5/B13 RRR-BR04C	15	15	3	4	a	Behind	48	0	Added	

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – **New Mount Passing MA**

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

Contractor is responsible for making certain the photos provided as noted below provide confirmation that the modification was completed in accordance with the modification drawings.

Contractor shall relay any data that can impact the performance of the mount, this includes safety issues.

Base Requirements:

Any special photos outside of the standard requirements will be indicated on the passing MA Verification that loading is as communicated in the Mount Analysis. NOTE If loading is different than what is conveyed in the modification drawing contact Maser Consulting Connecticut immediately.

Verification that the New Mount Installed is as specified in the MA

Each photo should be time and date stamped

Photos should be high resolution and submitted in a Zip File and should be organized in the file structure as depicted in Schedule A attached.

Contractor shall ensure that the safety climb wire rope is supported and not adversely impacted by the install of the modification components. This may involve the install of wire rope guides, or other items to protect the wire rope.

The photos in the file structure should be uploaded to <https://pmi.vzsmart.com> as depicted on the drawings

Photo Requirements:

Base and “During Installation Photos”

- Base pictures include
 - Photo of Gate Signs showing the tower owner, site name, and number
 - Photo of carrier shelter showing the carrier site name and number if available
 - Photos of the galvanizing compound and/or paint used (if applicable), clearly showing the label and name
- “During Installation Photos if provided - must be placed only in this folder

Photos taken at ground level

- Overall tower structure before and after installation of the modifications
- Photos of the appropriate mount before and after installation of the new mount;

Photos taken at Mount Elevation

- Photos showing each individual sector before and also after installation of equipment. These photos should also certify that the placement and geometry of the equipment on the mount is as depicted on the sketch and table in the mount analysis
- Photos showing the newly installed mount that is as specified in the Mount Analysis

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

Issue:

Install proposed OVP on the Alpha sector top left (if viewing mount from behind) standoff horizontal.


















Contractor shall install tiebacks to match the configuration shown in the rendered view of the mount analysis. Install (2) tiebacks on the top horizontal no more than 18" from the standoff connection point on either side in each sector.

Contractor to replace the mount pipe in position 3 (if viewing mount from behind from left to right) with a 96" long P2.5 STD pipe in all sectors. Connect proposed pipe to both face horizontals with crossover plates (VZWSMART – MSK1).

Response:

--

Schedule A – Photo & Document File Structure

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

Maser Consulting Connecticut

Subject

TIA-222-H Adoption and Wind Speed Usage

Site Information

Site ID: 467525-VZW / NEW BRITAIN 2 CT
Site Name: NEW BRITAIN 2 CT
Carrier Name: Verizon Wireless
Address: 1 Hartford Square
New Britain, Connecticut 06052
Hartford County
Latitude: 41.666411°
Longitude: -72.812803°

Structure Information

Tower Type: 180-Ft Self Support
Mount Type: 13.08-Ft T-Frame

FUZE ID # 16244100

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. The 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,



Eric Anderson, PE
Technical Specialist

ATTACHMENT 5

1 HARTFORD SQ

Location 1 HARTFORD SQ

Mblu F4A/ 2/ / /

Acct# 44950001

Owner HARTFORD SQUARE ASSOCIATES LLC

Assessment \$4,116,000

Appraisal \$5,880,000

PID 764

Building Count 2

Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2017	\$3,710,700	\$2,169,300	\$5,880,000

Assessment			
Valuation Year	Improvements	Land	Total
2017	\$2,597,490	\$1,518,510	\$4,116,000

Owner of Record

Owner HARTFORD SQUARE ASSOCIATES LLC
Co-Owner
Address 1 HARTFORD SQ WEST BOX #15
NEW BRITAIN, CT 06052

Sale Price \$0
Certificate
Book & Page 1903/1103
Sale Date 12/03/2014

Ownership History

Ownership History				
Owner	Sale Price	Certificate	Book & Page	Sale Date
HARTFORD SQUARE ASSOCIATES LLC	\$0		1903/1103	12/03/2014
HARTFORD SQUARE ASSOCIATES LLC	\$0		1895/0267	07/22/2014
HARTFORD SQUARE ASSOCIATES LLC	\$0		1895/0157	07/22/2014
HARTFORD SQUARE ASSOCIATES LLC	\$0	1	1830/0539	12/06/2011
HARTFORD SQUARE ASSOCIATES LLC	\$3,500,000		1813/0022	02/14/2011

Building Information

Building 1 : Section 1

Year Built: 1940
Living Area: 542,561
Replacement Cost: \$18,387,603

Building Percent 20

Good:

Replacement Cost

Less Depreciation: \$3,677,500

Building Attributes	
Field	Description
STYLE	Warehouse
MODEL	Ind/Comm
Grade	C
Stories:	2
Occupancy	31.00
Exterior Wall 1	Brick/Masonry
Exterior Wall 2	
Roof Structure	Gable
Roof Cover	Metal/Tin
Interior Wall 1	Minimum/Masonr
Interior Wall 2	
Interior Floor 1	Finished Concr
Interior Floor 2	
Central Heat	Yes
Usrflid 208	99
AC Type	Partial
Struct Class	
Bldg Use	Ind Whse MDL-96
Apt Units	
Total Bedrms	00
Total Baths	0
Comm Units	
Ind Units	
1st Floor Use:	4010
Heat/AC	Unit Heat
Frame Type	Steel
Baths/Plumbing	Average
Ceiling/Wall	Ceil & Min WL
Rooms/Prtns	Average
Wall Height	18.00
% Comn Wall	

Building 2 : Section 1

Year Built:

Living Area: 0

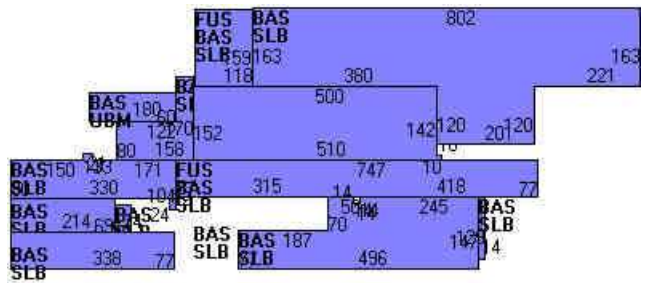
Replacement Cost: \$0

Building Photo



(<http://images.vgsi.com/photos/NewBritainCTPhotos//\00\03\49>)

Building Layout



(<http://images.vgsi.com/photos/NewBritainCTPhotos//Sketches/7>)

Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
BAS	First Floor	466,084	466,084
FUS	Finished Upper Story	76,477	76,477
SLB	Slab	455,284	0
UBM	Basement	10,800	0
		1,008,645	542,561


Building Percent**Good:****Replacement Cost****Less Depreciation:** \$0

Building Attributes : Bldg 2 of 2	
Field	Description
Style	Outbuildings
Model	
Grade	
Stories	
Occupancy	
Exterior Wall 1	
Exterior Wall 2	
Roof Structure	
Roof Cover	
Interior Wall 1	
Interior Wall 2	
Interior Flr 1	
Interior Flr 2	
Central Heat Sys	
Heat Type	
AC Type	
Total Bedrooms	
Total Full Baths	
Total Half Baths	
Total Xtra Fixtrs	
Total Rooms	
Bath Style	
Kitchen Style	
Num Kitchens	
Whirlpool Tub	
Fireplaces	
Usrflid 104	
Rec Room Finish	
Rec Room Qual	
Usrflid 107	
Bsmt Garages	
Fireplaces	
Usrflid 108	
Usrflid 101	
Usrflid 102	
Bldg Nbhd	

Building Photo

(<http://images.vgsi.com/photos/NewBritainCTPhotos//default.jpg>)

Building Layout

 Building Layout

(<http://images.vgsi.com/photos/NewBritainCTPhotos//Sketches/7>)

Building Sub-Areas (sq ft)	<u>Legend</u>
No Data for Building Sub-Areas	

Extra Features

Extra Features				Legend
Code	Description	Size	Value	Bldg #
A/C	Central A/C	18000.00 S.F.	\$11,700	1
LDL2	Load Lv Manual	8.00 Units	\$1,900	1

Land

Land Use

Use Code 4010
Description Ind Whse MDL-96
Zone I2
Neighborhood 101G
Alt Land Appr Category No

Land Line Valuation

Size (Acres) 31.10
Depth
Assessed Value \$1,518,510
Appraised Value \$2,169,300

Outbuildings

Outbuildings						Legend
Code	Description	Sub Code	Sub Description	Size	Value	Bldg #
PAV5	Conc Pad			1836.00 S.F.	\$22,000	2
UST2	Utility Metal			3036.00 S.F.	\$21,900	1
CB4	PreCastConcCel			200.00 S.F.	\$33,000	2
UST3	Utility Masonr			484.00 S.F.	\$4,600	1
CB3	PreCastConcCel			240.00 S.F.	\$55,400	2
UST2	Utility Metal			320.00 S.F.	\$2,300	1
CB3	PreCastConcCel			360.00 S.F.	\$83,200	2
UST1	Utility Frame			320.00 S.F.	\$2,800	1
FN4	Fence-8' Chain			272.00 L.F.	\$3,500	2
UST2	Utility Metal			2000.00 S.F.	\$14,400	1
SCL1	Scales-Mech			60.00 Tons	\$37,800	2
TNK2	Tank Bulk			300000.00 Gal	\$1,200	1
PAV1	Paving Asphalt			50000.00 S.F.	\$48,000	1
BLB2	Billboard 2 Side			2.00 Units	\$0	1

Valuation History

Appraisal			
Valuation Year	Improvements	Land	Total
2018	\$3,710,700	\$2,169,300	\$5,880,000
2017	\$4,021,200	\$2,169,300	\$6,190,500
2016	\$4,466,700	\$2,076,000	\$6,542,700

Assessment


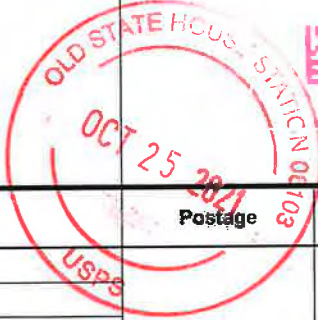
Valuation Year	Improvements	Land	Total
2018	\$2,597,490	\$1,518,510	\$4,116,000
2017	\$2,814,840	\$1,518,510	\$4,333,350
2016	\$3,126,690	\$1,453,200	\$4,579,890

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ATTACHMENT 6



NEW BRITAIN 2
Certificate of Mailing — Firm

Name and Address of Sender Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103	TOTAL NO. of Pieces Listed by Sender	TOTAL NO. of Pieces Received at Post Office™	Affix Stamp Here <i>Postmark with Date of Receipt.</i>			
	Postmaster, per (name of receiving employee)	3	neopost ^{3d} 10/25/2021 US POSTAGE \$002.99⁰  ZIP 06103 041L12203937			
USPS® Tracking Number Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)		Postage	Fee	Special Handling	Parcel Airlift
1.	Erin Stewart, Mayor City of New Britain 27 West Main Street New Britain, CT 06051					
2.	Steven Schiller, City Planner City of New Britain 27 West Main Street New Britain, CT 06051					
3.	Hartford Square Associates LLC P.O. Box 15 New Britain, CT 06052					
4.						
5.						
6.						