

KENNETH C. BALDWIN

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Hartford, CT 06103-3597  
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Fax (860) 275-8299  
kbaldwin@rc.com  
Direct (860) 275-8345

Also admitted in Massachusetts  
and New York

March 23, 2022

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  
173 South Broad Street, Stonington (Pawcatuck), Connecticut**

Dear Attorney Bachman:

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) currently maintains an existing wireless telecommunications facility at the above-referenced property address (the “Property”). The facility consists of antennas and remote radio heads attached to a tower and associated equipment on the ground near the base of the tower. The tower was approved by the Town of Stonington (“Town”) in March of 2000. Cellco’s shared use of the tower was approved by the Siting Council (“Council”) in September of 2000 (TS-BAM-137-000828). A copy of the Town’s approval and the Council’s TS-BAM-137-000828 approval are included in Attachment 1.

Cellco now intends to modify its facility by removing six (6) existing antennas and installing three (3) new Samsung MT6407-77A antennas and six (6) new MX06FRO660-03 antennas on its existing antenna mounts. A set of project plans showing Cellco’s proposed facility modifications and the specifications for Cellco’s new antennas is 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 Stonington’s Chief Elected Official and Land Use Officer. The Town is the owner of the Property.

Melanie A. Bachman, Esq.

March 23, 2022

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 new antennas will be installed on its existing antenna mounts.

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

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

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

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

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

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

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

Melanie A. Bachman, Esq.

March 23, 2022

Page 3

Sincerely,



Kenneth C. Baldwin

Enclosures

Copy to:

Danielle Chesebrough, Stonington First Selectman

Keith Brynes, Town Planner

Alex Tyurin, Verizon Wireless

# **ATTACHMENT 1**

# ZONING PERMIT

## TOWN OF STONINGTON PLANNING & ZONING COMMISSION

Date Issued: March 24, 2000

Permit No.: #00-067 ZON

NAME OF PROPERTY OWNER: TOWN OF STONINGTON; OWNER  
SBA, INC., APPLICANT

LOCATION OF PROPERTY: 173 SOUTH BROAD ST., PAWCATUCK

MAP: 37 BLOCK: 1 LOT: 2 ZONE: GC-60

PERMITTED ACTIVITY: INSTALLATION OF A 180 FT. RADIO TOWER.

STIPULATIONS OR SPECIAL CONDITIONS: As per Planning and Zoning  
Commission approval.

BY: \_\_\_\_\_



Zoning Enforcement Officer

**CONSTRUCTION MAY NOT PROCEED UNTIL  
A BUILDING PERMIT HAS BEEN OBTAINED**

**THIS PERMIT MUST BE PROMINENTLY POSTED  
ON THE PREMISES**

**TOWN OF STONINGTON  
ZONING PERMIT APPLICATION**



OFFICE USE ONLY	APPLICATION NUMBER	00-067 ZON	WA Form 96-ZP
<input checked="" type="checkbox"/> APPROVED (Certified to comply with Zoning Regulations)		<input type="checkbox"/> DISAPPROVED	Reasons: _____
Zoning Official	Joseph M. Lakin		Date 3-24-00
Comments:	As per PZC approval.		

**YOUR APPLICATION CANNOT BE REVIEWED UNTIL ALL REQUIRED INFORMATION IS PROVIDED.**

NAME OF APPLICANT: SBA, INC. TELE (860) 659-9101

MAILING ADDRESS: 80 Eastern BLVD, Glastonbury CT 06033

NAME, ADDRESS & PHONE NUMBER OF PROPERTY OWNER (if not applicant)

TOWN of Stonington

LOCATION OF SITE: 173 South Broad Street

ASSESSOR'S MAP 37 BLOCK 1 LOT 2 ZONE GC 60

APPLICATION IS HEREBY MADE TO PERMIT:

Installation of a 180' Radio tower for use of town of Stonington and SBA Radio antennas

TYPE OF OCCUPANCY: Residential Commercial Industrial Municipal

TYPE OF CONSTRUCTION: X New Alteration Addition Repair Municipal

SUBDIVISION NAME (if any) \_\_\_\_\_

LOT INFORMATION: Frontage of Lot: 949.45 Width of lot: \_\_\_\_\_ Depth of Lot: \_\_\_\_\_ Area of Lot: 10.9988 ACR

REQUIRED SETBACKS: Front: \_\_\_\_\_ Rear: \_\_\_\_\_ Sides: \_\_\_\_\_

PROPOSED SETBACKS: Front: \_\_\_\_\_ Rear: \_\_\_\_\_ Sides: \_\_\_\_\_

SIZE OF STRUCTURE: Footprint: \_\_\_\_\_ x \_\_\_\_\_ Height: 180' Radio Tower

FLOOR AREA (sq.ft.): 1st floor \_\_\_\_\_ 2nd floor \_\_\_\_\_ Attic \_\_\_\_\_ Basement 729.55 Foundation Accessory Bldgs. \_\_\_\_\_

PROPOSED ADDITIONAL: Footprint: \_\_\_\_\_ x \_\_\_\_\_ Total Floor Area \_\_\_\_\_ Floor Area Ratio \_\_\_\_\_

ESTIMATED COST OF WORK: \$ 50,000.00

FLOOD HAZARD ZONE DESIGNATION: \_\_\_\_\_

OTHER APPROVALS REQUIRED:

Required	Appl.#	Approved	Date	Vol.	Page
P & Z (Site Plan)					
P & Z (Special Use Permit)					
Inland Wetlands					
CAM Review (PZC)					
Variance (ZBA)					
Driveway Permit (Highway Dept.)					

September 21, 2000

Sandy M. Carter  
Bell Atlantic Mobile  
20 Alexander Drive  
P.O. Box 5029  
Wallingford, CT 06492

RE: **TS-BAM-137-000828** - Cellco Partnership d/b/a Verizon Wireless request for an order to approve tower sharing at an existing telecommunications facility located at the Stonington Police Station, 171 South Broad Street, Stonington, Connecticut.

Dear Ms. Carter:

At a public meeting held Tuesday, September 19, 2000, 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 August 28, 2000.

Thank you for your attention and cooperation.

Very truly yours,

Mortimer A. Gelston  
Chairman

MAG/RKE/laf

c: Honorable Donald R. Maranell, First Selectman, Town of Stonington  
Ester K. McNany, Market Development Manager, SBA, Inc.

# **ATTACHMENT 2**

**DO NOT SCALE DRAWINGS**

CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE PROJECT OWNERS REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

**SHEET INDEX**

SHEET NUMBER	SHEET DESCRIPTION
T-1	TITLE SHEET
A-1	COMPOUND PLAN & TOWER ELEVATION
A-2	ANTENNA PLAN, DETAILS & NOTES
A-3	ANTENNA SECTOR CONFIGURATIONS, DETAILS & NOTES
A-4	RET SYSTEM WIRING SCHEMATIC

**VICINITY MAP**



**APPLICANT:**  
CELLCO PARTNERSHIP d/b/a  
VERIZON WIRELESS

**SCOPE OF WORK:**  
PROPOSED EQUIPMENT & ANTENNA MODIFICATIONS  
TO AN EXISTING VERIZON WIRELESS INSTALLATION  
AT A 180'-0"± SELF SUPPORT TOWER

Digitally signed by Jiazhu Hu, Ph.D., P.E.  
DN: cn=Jiazhu Hu, Ph.D., P.E., o=Nexius,  
ou=Engineering, email=Jiazhu.Hu@Nexius.com, c=US  
Date: 2022.03.18 14:50:13 -04'00'

**SITE NAME**  
PAWCATUCK\_CT

**LOCATION CODE**  
468000

**SITE OWNER**  
SBA

**SITE ID**  
CT03241

**ADDRESS**  
173 SOUTH BROAD STREET  
PAWCATUCK, CT 06379

**COORDINATES**  
41° 22' 08.60" N  
71° 51' 44.49" W

PREPARED BY:

**nexus**  
TRANSFORM YOUR BUSINESS...THROUGH WIRELESS

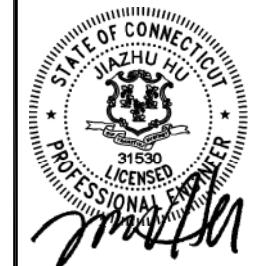
A&E OFFICE:  
300 APOLLO DRIVE, SUITE 7  
CHELMSFORD, MA 01824  
1 (978) 923-7965

APPLICANT:  
CELLCO PARTNERSHIP d/b/a

**verizon**

20 ALEXANDER DRIVE, 2ND FLOOR  
WALLINGFORD, CT 06492

PROFESSIONAL STAMP:



**NOTES**

**GENERAL NOTES:**

1. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO DETERMINE WHAT WORKS CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
2. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, ORDINANCES, AND REGULATIONS, AND SUBCONTRACTOR SHALL ISSUE ALL NECESSARY PERMIT NOTICES AND COMPLY WITH ALL ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REQUIREMENTS, LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
3. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.
4. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
5. "KITTING LIST" SUPPLIED WITH THE BID PACKAGE IDENTIFIES ITEMS THAT WILL BE SUPPLIED BY CONTRACTOR. ITEMS NOT INCLUDED IN THE BILL OF MATERIALS AND KITTING LIST SHALL BE SUPPLIED BY THE SUBCONTRACTOR.
6. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
7. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE CONTRACTOR.
8. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
9. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS, SURPLUS CABLES, CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
10. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
11. ALL CONCRETE REPAIR WORK SHALL BE DONE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 301.
12. ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL BE AN-ENTRANCED AND SHALL HAVE 4000 PSI STRENGTH AT 28 DAYS. ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS A CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

**ELECTRICAL & GROUNDING NOTES**

13. ALL STRUCTURAL STEEL WORK SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH AISI SP-16 (2016) UNLESS OTHERWISE NOTED. PIPES SHALL BE ASTM A33 Grade B (0.035 in.). ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED. TOUCHUP ALL SCRATCHES AND OTHER MARKS IN THE FIELD AFTER STEEL IS ERECTED USING A COMPATIBLE ZINC RICH PAINT.
14. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS OF THE TOWER AND SUBSTRUCTURE. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL AND PROCEEDING WITH CONSTRUCTION.
15. THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION. ANY SUBSTRUCTURE WORK BY SUBCONTRACTOR SHALL NOT AFFECT THE EXISTING FACILITY. OPERATION ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.
16. SINCE THE CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN TO ENSURE THE SAFETY OF ALL PERSONNEL. ELECTRONIC RADIATION EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF TUNNELS SHALL BE USED AND PERSONNEL SHOULD BE ADVISED TO WEAR ALERT TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.
17. APPLICABLE BUILDING CODES: SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ APPLICABLE AT THE TIME OF CONTRACT SIGNING AND EFFECTIVE ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.
18. BUILDING CODE: MASSACHUSETTS STATE BUILDING CODE, NINTH EDITION (2018 BC W/ STATE ADDENDUM), AMERICAN IRON AND STEEL INSTITUTE (AISI) REFER TO ELECTRICAL DRAWINGS LIGHTNING CODE: REFER TO ELECTRICAL DRAWINGS
19. SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:

  - TELECOMMUNICATION INDUSTRY ASSOCIATION STANDARD: ANSI/TIA-222-G-WA ADDENDUM: STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS.
  - AMERICAN INSTITUTE OF STEEL CONSTRUCTION STANDARD: AISI STEEL CONSTRUCTION MANUAL, FOURTEENTH EDITION.
  - AMERICAN CONCRETE INSTITUTE STANDARD: ACI 318-14; BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AND COMMENTARY.

20. CONNECTIONS TO USE SHALL BE ARRANGED IN THE THREE MAIN GROUPS: SOURCE PRODUCERS (COAXIAL CABLE GROUNDED INTO THE GND AND POWER PANEL GROUND), GROUNDING (ELECTRODE RING OR BUILDING STEEL), NON-SURGING OBJECTS (EGS GROUNDED IN ITS UNIT).
21. CONNECTIONS TO GND BARE SHALL BE MADE WITH TWO HOLE COMPRESSION TYPE COPPER LUGS. APPLY OXIDE INHIBITING COMPOUND TO ALL LOCATIONS
22. APPLY OXIDE INHIBITING COMPOUND TO ALL COMPRESSION TYPE GROUND CONNECTIONS.
23. BOND ANTENNA MOUNTING BRACKETS, COAXIAL CABLE GROUND KITS, AND ALNA TO EGB PLACED NEAR THE ANTENNA LOCATION.
24. BOND ANTENNA EGB'S AND MGB TO WATER MAIN.
25. TEST COMPLETED GROUND SYSTEM AND RECORD RESULTS FOR PROJECT CLOSE-OUT DOCUMENTATION.
26. BOND ANY METAL OBJECTS WITHIN 7 FEET OF PROPOSED EQUIPMENT OR CABINET TO MASTER GROUND BAR.

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DRAWING SCALES ARE INTENDED FOR 27.5x34" SIZE PRINTED MEDIA ONLY. 11x17" IS DEEMED HALF SCALE, AND ALL OTHER PRINTED SCALES ARE DEEMED "NOT TO SCALE".

SUBMITTALS

REV	DATE	DESCRIPTION	BY
4	01/06/22	PER MOD/MA	MLB
5	03/18/22	REVISED PER SA	AA

SITE INFORMATION: SITE NAME:  
PAWCATUCK\_CT

LOCATION CODE:  
468000

SITE ADDRESS:

173 SOUTH BROAD STREET  
PAWCATUCK, CT 06379

DRAWN BY:  
AA DATE:  
03/18/22

CHECKED BY:  
KB DATE:  
03/18/22

NEXIUS PROJECT NO.:  
VZ11509

SHEET TITLE:  
TITLE SHEET

SHEET NUMBER:

**T-1**

TOWER STRUCTURAL ANALYSIS REPORT PREPARED BY TOWER ENGINEERING SOLUTIONS  
TOWER STRUCTURAL ANALYSIS REPORT, PREPARED BY TOWER ENGINEERING SOLUTIONS  
ENTITLED STRUCTURAL ANALYSIS REPORT, DATED MARCH 4, 2022, STATES THAT THE  
EXISTING TOWER IS ADEQUATE FOR THE EXISTING AND PROPOSED LOADING.

MOUNT ANALYSIS REPORT PREPARED BY MASER CONSULTING CONNECTICUT  
MOUNT ANALYSIS REPORT, PREPARED BY MASER CONSULTING CONNECTICUT, ENTITLED  
REPLACEMENT ANTENNA MOUNT ANALYSIS REPORT AND PMI REQUIREMENTS, DATED  
NOVEMBER 22, 2021, STATES THAT THE PROPOSED MOUNTS ARE ADEQUATE FOR THE  
EXISTING AND PROPOSED LOADING.

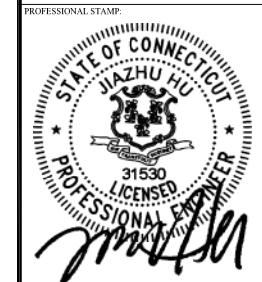
PREPARED BY:  
**nexius**  
TRANSFORM YOUR BUSINESS...THROUGH WIRELESS

A&E OFFICE:  
300 APOLLO DRIVE, SUITE 7  
CHELMSFORD, MA 19824  
1 (978) 923-7965

APPLICANT:  
CELCO PARTNERSHIP d/b/a

**verizon**

20 ALEXANDER DRIVE, 2ND FLOOR  
WALLINGFORD, CT 06492



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SUBMITTALS

REV	DATE	DESCRIPTION	BY
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5	03/18/22	REVISED PER SA	AA

SITE INFORMATION: SITE NAME:  
**PAWCATUCK\_ CT**  
LOCATION CODE:  
**468000**  
SITE ADDRESS:  
**173 SOUTH BROAD STREET  
PAWCATUCK, CT 06379**

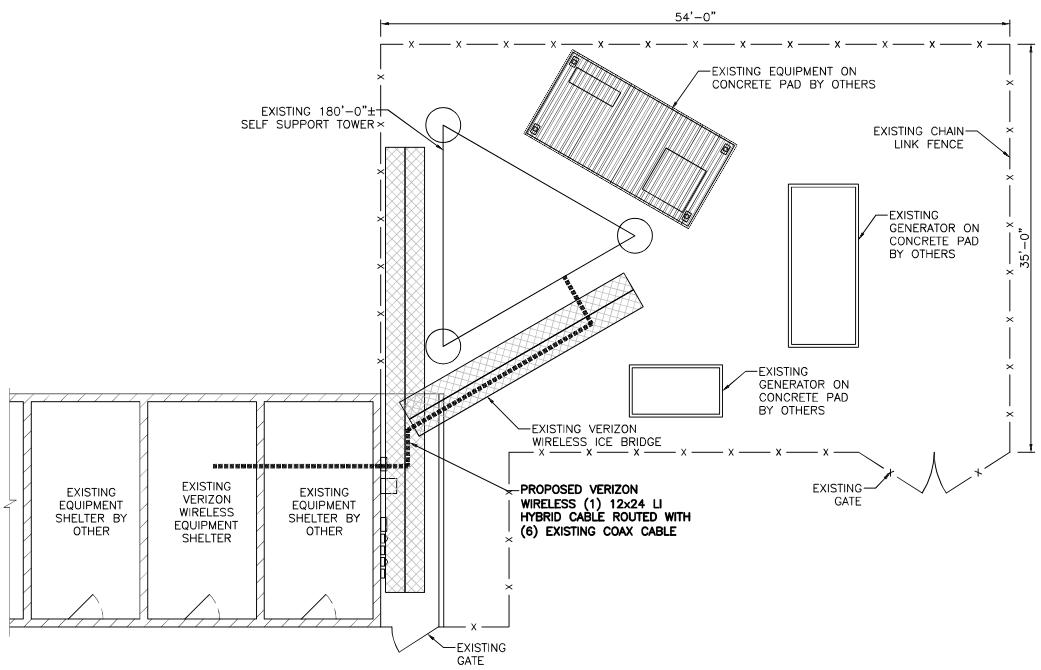
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**AA** DATE:  
03/18/22

CHECKED BY:  
**KB** DATE:  
03/18/22

NEXIUS PROJECT NO.:  
**VZ11509**

SHEET TITLE:  
**COMPUND PLAN &  
TOWER ELEVATION**

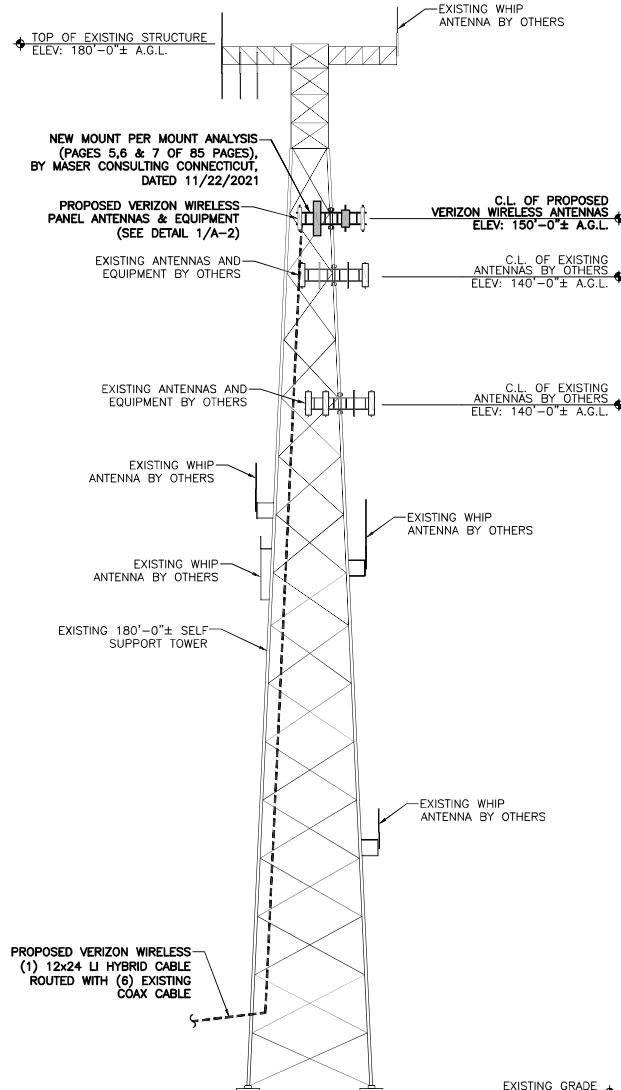
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**A-1**



APPROX. NORTH

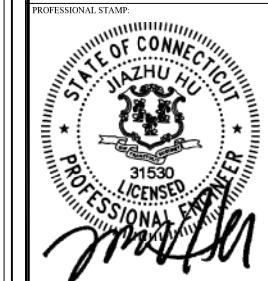
① COMPOUND PLAN  
SCALE: 3/16" = 1'-0"

GRAPHIC SCALE: 3/16" = 1'-0"  
0 2'-8" 5'-4" 10'-8"



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

GRAPHIC SCALE: 3/32" = 1'-0"  
0 2'-8" 5'-4" 10'-8" 21'-4"



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SUBMITTALS

REV	DATE	DESCRIPTION	BY
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5	03/18/22	REVISED PER SA	AA

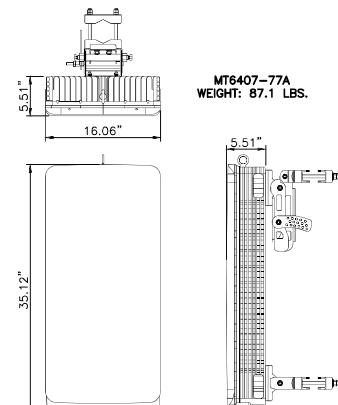
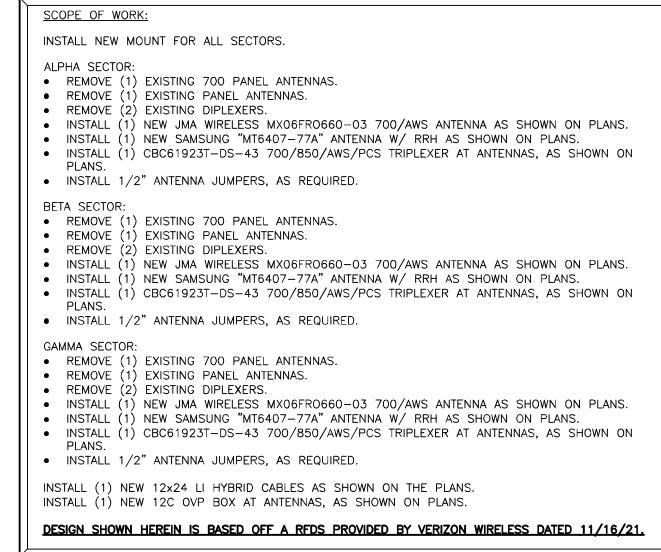
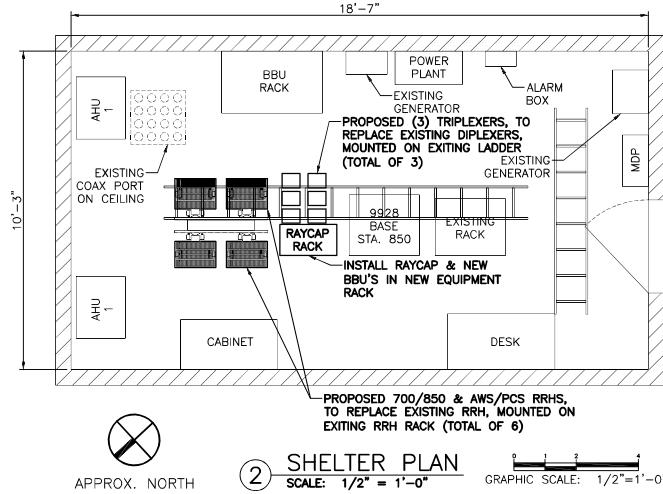
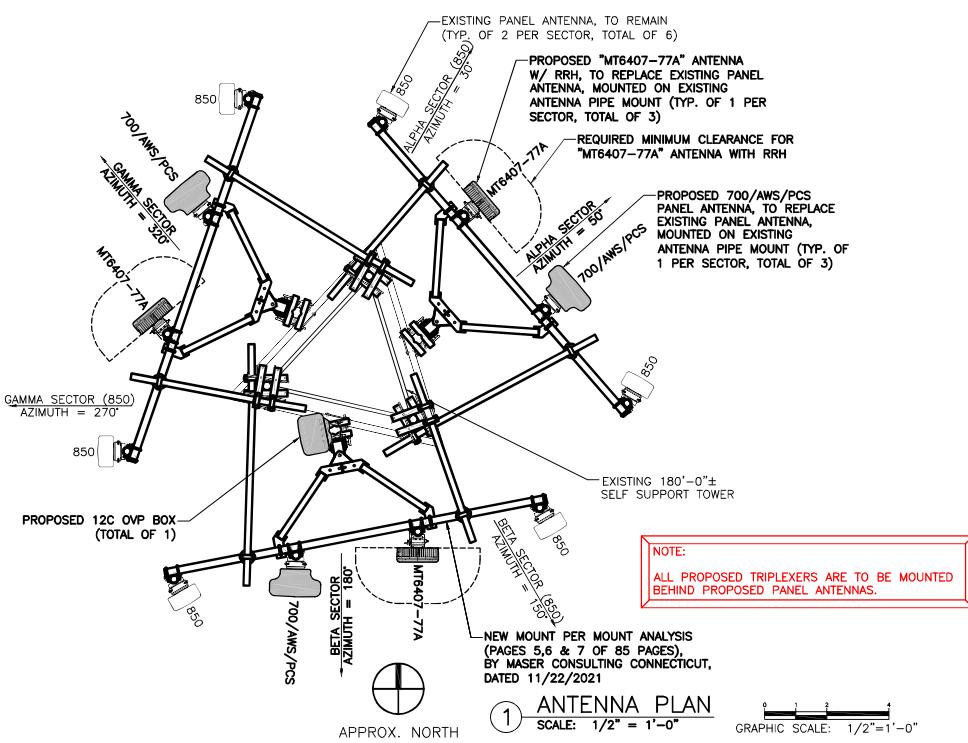
SITE INFORMATION: SITE NAME: PAWCATUCK\_CT  
 LOCATION CODE: 468000  
 SITE ADDRESS: 173 SOUTH BROAD STREET  
 PAWCATUCK, CT 06379

DRAWN BY: AA DATE: 03/18/22  
 CHECKED BY: KB DATE: 03/18/22

NEXIUS PROJECT NO.: VZ11509

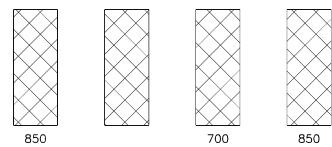
SHEET TITLE: ANTENNA PLAN,  
 DETAILS & NOTES

SHEET NUMBER: A-2

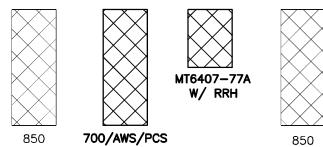


3 ANTENNA SPEC.  
 (NOT TO EXCEED)  
 SCALE: N.T.S.

NOTE: ALL ANTENNAS ARE VIEWED FROM THE FRONT

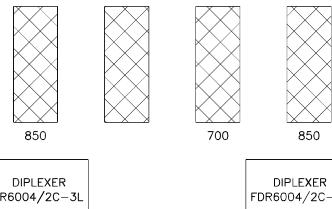


EXISTING CONFIGURATION

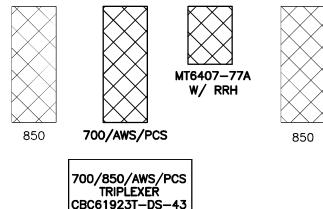


PROPOSED CONFIGURATION

### ALPHA SECTOR ANTENNA CONFIGURATION



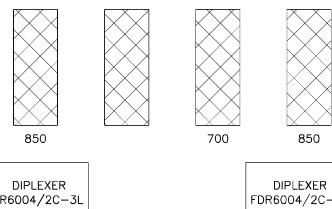
EXISTING CONFIGURATION



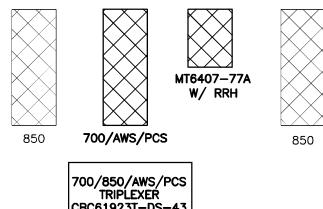
12C OVP  
BOX

PROPOSED CONFIGURATION

### BETA SECTOR ANTENNA CONFIGURATION



EXISTING CONFIGURATION



PROPOSED CONFIGURATION

### GAMMA SECTOR ANTENNA CONFIGURATION

#### GENERAL NOTES:

1. INSTALL ALL EQUIPMENT, MOUNTING BRACKETS, AND HARDWARE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
2. GROUND DISTRIBUTION BOXES, MOUNTING PIPES, AND RRH'S IN ACCORDANCE WITH THE NEC ARTICLE 250 & THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS.
3. INSTALLED EQUIPMENT AND MOUNTING BRACKETS SHALL NOT INTERFERE WITH CLIMBING ACCESS NOR ANY INSTALLED SAFETY DEVICES.

PREPARED BY:

**nexus**  
TRANSFORM YOUR BUSINESS...THROUGH WIRELESS

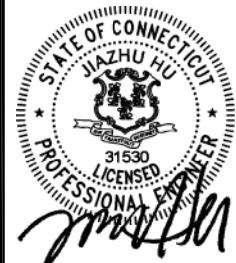
A&E OFFICE:  
300 APOLLO DRIVE, SUITE 7  
CHELMSFORD, MA 19824  
1 (978) 923-7965

APPLICANT:  
CELCO PARTNERSHIP d/b/a

**verizon**

20 ALEXANDER DRIVE, 2ND FLOOR  
WALLINGFORD, CT 06492

PROFESSIONAL STAMP:



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DRAWING SCALES ARE INTENDED FOR 27.34" SIZE PRINTED MEDIA ONLY. 11"X17" IS DEEMED HALF SCALE, AND ALL OTHER PRINTED SIZES ARE DEEMED "NOT TO SCALE".

SUBMITTALS

REV	DATE	DESCRIPTION	BY
4	01/06/22	PER MOD/MA	MLB
5	03/18/22	REVISED PER SA	AA

SITE INFORMATION: SITE NAME:  
**PAWCATUCK\_CT**

LOCATION CODE:  
**468000**

SITE ADDRESS:

**173 SOUTH BROAD STREET  
PAWCATUCK, CT 06379**

DRAWN BY:  
**AA** DATE:  
**03/18/22**

CHECKED BY:  
**KB** DATE:  
**03/18/22**

NEXUS PROJECT NO.:  
**VZ11509**

SHEET TITLE:  
**ANTENNA SECTOR  
CONFIGURATIONS, DETAILS  
& NOTES**

SHEET NUMBER:

**A-3**



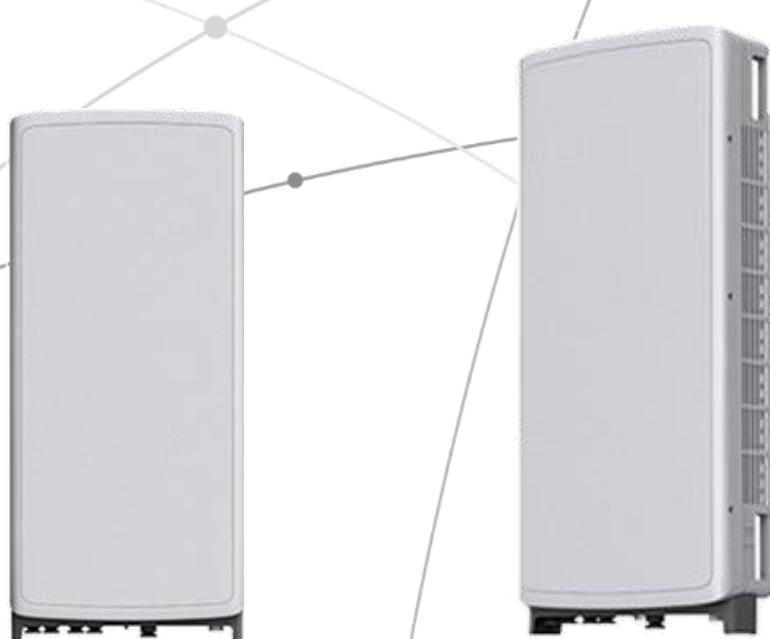
**SAMSUNG**

# **SAMSUNG C-Band 64T64R Massive MIMO Radio**

**for High Capacity and Wide Coverage**

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

Model Code : MT6407-77A

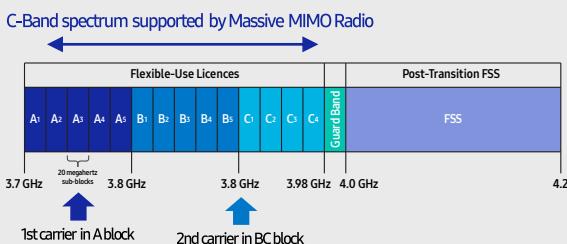


# Points of Differentiation

## Wide Bandwidth

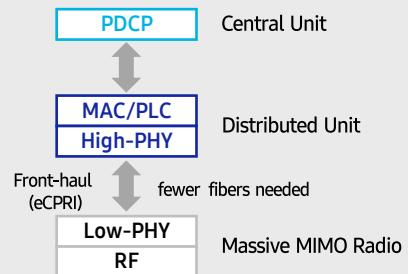
With capability to support up to 2 CC carrier configuration, Samsung C-Band massive MIMO Radio supports 200 MHz bandwidth in the C-Band spectrum.

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



## Future Proof Product

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



## Enhanced Performance

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

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

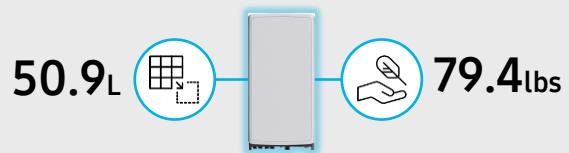
Furthermore, as C-Band massive MIMO Radio supports MU-MIMO(Multi-user MIMO), it enables to increase user throughput by minimizing interference.



## Well Matched Design

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

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



## Technical Specifications

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

## 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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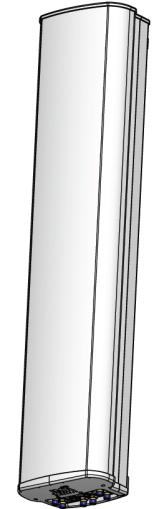
# MX06FRO660-03

## NWAV™ X-Pol Hex-Port Antenna

**X-Pol Hex-Port 6 ft 60° Fast Roll Off antenna with independent tilt on 700 & 850 MHz:**

**2 ports 698-798, 824-894 MHz and 4 ports 1695-2180 MHz**

- Fast Roll Off (FRO™) azimuth beam pattern improves Intra- and Inter-cell SINR
- Compatible with dual band 700/850 MHz radios with independent low band EDT without external diplexers
- Fully integrated (iRETs) with independent RET control for low and high bands for ease of network optimization
- SON-Ready array spacing supports beamforming capabilities
- Suitable for LTE/CDMA/PCS/UMTS/GSM air interface technologies
- Integrated Smart Bias-Ts reduce leasing costs



**NWAV™**

### Fast Roll-Off antennas increase data throughput without compromising coverage

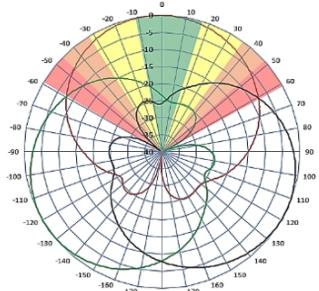
The horizontal beam produced by Fast Roll-Off (FRO) technology increases the Signal to Interference & Noise Ratio (SINR) by eliminating overlap between sectors.

#### Non-FRO antenna

Large traditional antenna pattern overlap creates harmful interference.

JMA's FRO antenna pattern minimizes overlap, thereby minimizing interference.

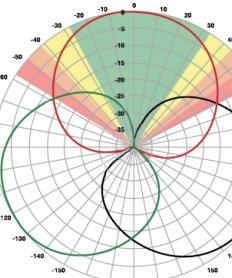
#### JMA FRO antenna



LTE throughput	SINR	Speed (bps/Hz)	Speed increase	CQI
Excellent	>18	>4.5	333+%	8-10
Good	15-18	3.3-4.5	277%	6-7
Fair	10-15	2-3.3	160%	4-6
Poor	<10	<2	0%	1-3

The LTE radio automatically selects the best throughput based on measured SINR.

#### JMA FRO antenna



Electrical specification (minimum/maximum)	Ports 1, 2		Ports 3, 4, 5, 6		
Frequency bands, MHz	698-798	824-894	1695-1880	1850-1990	1920-2180
Polarization	$\pm 45^\circ$		$\pm 45^\circ$		
Average gain over all tilts, dBi	14.4	14.0	17.6	18.0	18.2
Horizontal beamwidth (HBW), degrees	60.5	53.0	55.0	55.0	55.5
Front-to-back ratio, co-polar power @ $180^\circ \pm 30^\circ$ , dB	>24	>24.0	>25.0	>25.0	>25.0
X-Pol discrimination (CPR) at boresight, dB	>15.0	>14.2	>18	>18	>15
Sector power ratio, percent	<3.5	<3.0	<3.7	<3.8	<3.6
Vertical beamwidth (VBW), degrees <sup>1</sup>	13.1	11.8	6.0	5.5	5.5
Electrical downtilt (EDT) range, degrees	2-14	2-14	0-9		
First upper side lobe (USLS) suppression, dB <sup>1</sup>	$\leq -15.0$	$\leq -16.5$	$\leq -16.0$	$\leq -16.0$	$\leq -16.0$
Cross-polar isolation, port-to-port, dB <sup>1</sup>	25	25	25	25	25
Max VSWR / return loss, dB	1.5:1 / -14.0		1.5:1 / -14.0		
Max passive intermodulation (PIM), 2x20W carrier, dBc	-153		-153		
Max input power per any port, watts	300		250		
Total composite power all ports, watts	1500				

<sup>1</sup> Typical value over frequency and tilt

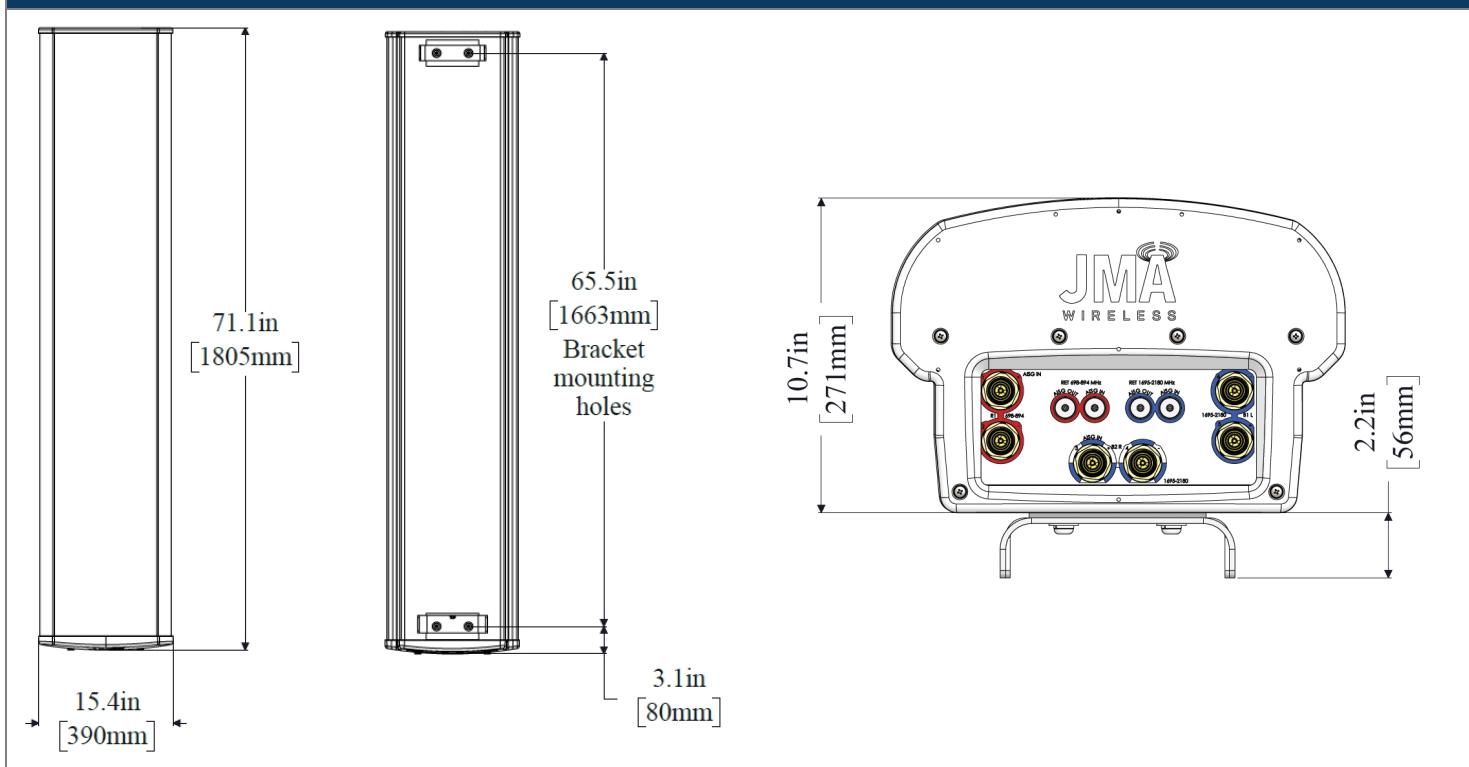
### Mechanical specifications

<b>Dimensions height/width/depth, inches (mm)</b>	71.3/ 15.4/ 10.7 (1811/ 392/ 273)
<b>Shipping dimensions length/width/height, inches (mm)</b>	82/ 20/ 15 (2083/ 508/ 381)
<b>No. of RF input ports, connector type, and location</b>	6 x 4.3-10 female, bottom
<b>RF connector torque</b>	96 lbf-in (10.85 N·m or 8 lbf-ft)
<b>Net antenna weight, lb (kg)</b>	60 (27.0)
<b>Shipping weight, lb (kg)</b>	90 (41.0)
<b>Antenna mounting and downtilt kit included with antenna</b>	91900318
<b>Net weight of the mounting and downtilt kit, lb (kg)</b>	18 (8.18)
<b>Range of mechanical up/down tilt</b>	-2° to 14°
<b>Rated wind survival speed, mph (km/h)</b>	150 (241)
<b>Frontal, lateral, and rear wind loading @ 150 km/h, lbf (N)</b>	154 (685), 73 (325), 158 (703)
<b>Equivalent flat plate @ 100 mph and Cd=2, sq ft</b>	2.6

Front view

Back view

Bottom view



### Ordering information

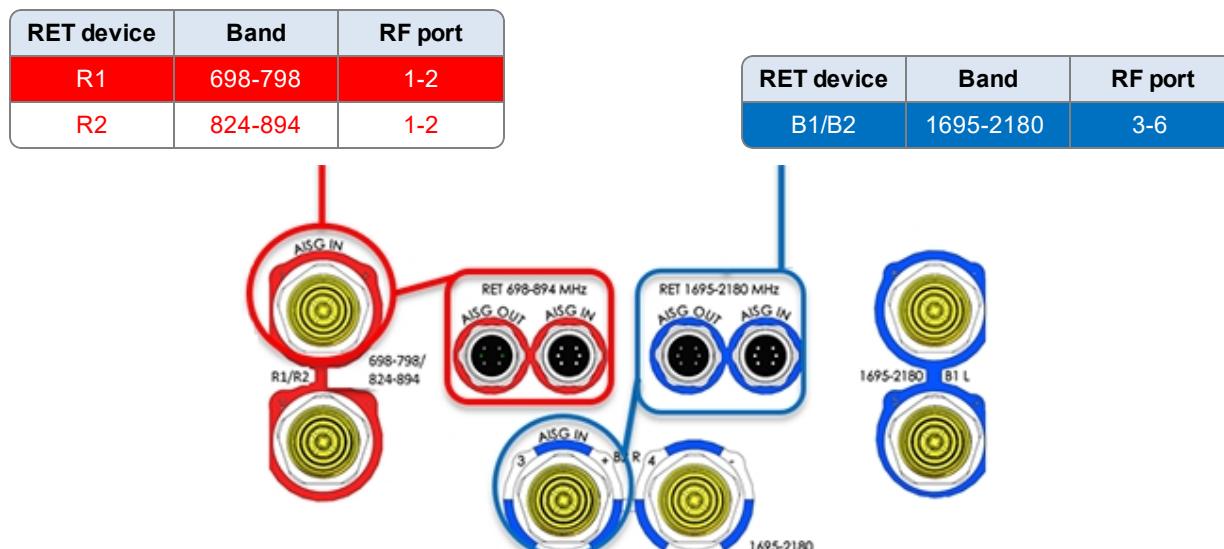
Antenna model	Description
MX06FRO660-03	6F X-Pol HEX FRO 60° independent tilt 700/850 RET, 4.3-10 & SBT
<b>Optional accessories</b>	
<a href="#">AISG cables</a>	M/F cables for AISG connections
<a href="#">PCU-1000 RET controller</a>	Stand-alone controller for RET control and configurations

**Remote electrical tilt (RET 1000) information**

<b>RET location</b>	Integrated into antenna
<b>RET interface connector type</b>	8-pin AISG connector per IEC 60130-9
<b>RET connector torque</b>	Min 0.5 N·m to max 1.0 N·m (hand pressure & finger tight)
<b>RET interface connector quantity</b>	2 pairs of AISG male/female connectors
<b>RET interface connector location</b>	Bottom of the antenna
<b>Total no. of internal RETs (low bands)</b>	2
<b>Total no. of internal RETs (high bands)</b>	1
<b>RET input operating voltage, vdc</b>	10-30
<b>RET max power consumption, idle state, W</b>	≤ 2.0
<b>RET max power consumption, normal operating conditions, W</b>	≤ 13.0
<b>RET communication protocol</b>	AISG 2.0 / 3GPP

**RET and RF connector topology**

Each RET device can be controlled either via the designated external AISG connector or RF port as shown below:


**Array topology**

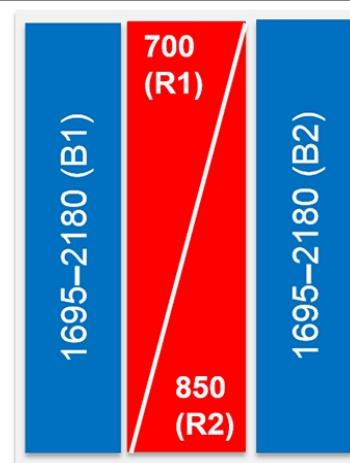
3 sets of radiating arrays

R1/R2: 698-894 MHz

B1: 1695-2180 MHz

B2: 1695-2180 MHz

Band	RF port
1695-2180	3-4
698-894	1-2
1695-2180	5-6



# **ATTACHMENT 3**

	General	Power	Density					
Site Name:	Pawcatuck (Stonington)							
Tower Height:	Verizon @ 150ft							
CARRIER	# OF CHAN.	WATTS ERP	HEIGHT	FREQ.	CALC. POWER DENS	MAX. PERMISS.EXP.	FRACTION MPE	Total
*Town Antenna 1	1	650	199	300	0.006275419	0.2	0.00313771	
*Town Antenna 2	1	100	191	300	0.001050753	0.2	0.000525376	
*Town Antenna 3	1	350	167	300	0.004855795	0.2	0.002427897	
*Town Antenna 4	1	60	102	300	0.002341277	0.2	0.001170639	
*Town Antenna 5	1	90	90	300	0.004586992	0.2	0.002293496	
*Town Antenna 6	1	60	86	300	0.003371439	0.2	0.001685719	
*Town Antenna 7	1	100	52	300	0.016995281	0.2	0.008497641	
*Town Antenna 8	1	20	41	450	0.005871349	0.3	0.001957116	
*Town Antenna 9	1	250	41	821	0.073391868	0.547333333	0.013408989	
*T-Mobile	1	982	140	2500	0.019667353	1	0.001966735	
*T-Mobile	1	982	140	2500	0.019667353	1	0.001966735	
*T-Mobile	1	15461	140	2500	0.309650658	1	0.030965066	
*T-Mobile	1	15461	140	2500	0.309650658	1	0.030965066	
*T-Mobile	4	927	140	700	0.074263284	0.466666667	0.015913561	
*T-Mobile	2	789	140	600	0.031603954	0.4	0.007900989	
*T-Mobile	2	592	140	600	0.02371298	0.4	0.59%	
*T-Mobile	1	503	140	1900	0.010074011	1	0.10%	
*T-Mobile	1	1340	140	1900	0.026837325	1	0.27%	
*T-Mobile	2	4690	140	1900	0.187861275	1	1.88%	
*T-Mobile	2	5409	140	2100	0.21666133	1	2.17%	
*MetroPCS	3	443.61	130	2140	0.031125994	1	0.31%	
*AT&T	1	566	120	850	0.015662127	0.566666667	0.28%	
*AT&T	1	1582	120	737	0.043776476	0.491333333	0.89%	
*AT&T	1	847	120	850	0.023437848	0.566666667	0.41%	
*AT&T	1	3541	120	1900	0.097985147	1	0.98%	
*AT&T	1	847	120	850	0.023437848	0.566666667	0.41%	
*AT&T	1	1775	120	763	0.049117096	0.508666667	0.97%	
*AT&T	1	4066	120	2100	0.112512739	1	1.13%	
VZW 700	2	692	150	751	0.0022	0.5007	0.44%	
VZW CDMA	2	287	150	878.49	0.0009	0.5857	0.16%	
VZW Cellular	2	501	150	874	0.0016	0.5827	0.27%	
VZW PCS	2	1566	150	1977.5	0.0050	1.0000	0.50%	
VZW AWS	2	1678	150	2120	0.0054	1.0000	0.54%	
VZW CBAND	2	13335	150	3730.08	0.0426	1.0000	4.26%	
							16.56%	

\* Source: Siting Council

# **ATTACHMENT 4**



Tower Engineering Solutions

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

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## Structural Analysis Report

**Existing 180 ft PIROD Self Supporting Tower**

**Customer Name:** SBA Communications Corp

**Customer Site Number:** CT03241-S

**Customer Site Name:** Stonington 2, CT

**Carrier Name:** Verizon (App#: 188283-2)

**Carrier Site ID / Name:** 468000 / PAWCATUCK\_CT

**Site Location:** 173 South Broad Street

Pawcatuck, Connecticut

New London County

Latitude: 41.369066

Longitude: -71.862361



### Analysis Result:

**Max Structural Usage:** 91.8% [Pass]

**Max Foundation Usage:** 74.0% [Pass]

**Additional Usage Caused by New Mount/Mount Modification:** +2.1%

**Report Prepared By:** Mohammed Al Rubaye



Tower Engineering Solutions

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

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**Report Prepared By:** Mohammed Al Rubaye

## **Introduction**

The purpose of this report is to summarize the analysis results on the 180 ft PIROD 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**

<b>Tower Drawings</b>	PiROD Eng. File # A-116770-, Archive # Q-91612, dated 02/25/2000
<b>Foundation Drawing</b>	PiROD Eng. File # A-116770-, Archive # Q-91612, dated 02/25/2000
<b>Geotechnical Report</b>	Jaworski Geotech, Inc. Project # 99731G, dated 02/15/2000
<b>Modification Drawings</b>	N/A
<b>Mount Analysis</b>	Maser Consulting Connecticut Project #: 21777773A. dated 11/22/2021

## **Analysis Criteria**

The comprehensive analysis was performed in accordance with the requirements and stipulations of the TIA-222-H. 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.

<b>Wind Speed Used in the Analysis:</b>	137.0 mph (3-Sec. Gust) (Ultimate wind speed)
<b>Wind Speed with Ice:</b>	50 mph (3-Sec. Gust) with 1" radial ice concurrent
<b>Service Load Wind Speed:</b>	60 mph + 0" Radial ice
<b>Standard/Codes:</b>	TIA-222-H / 2015 IBC / 2018 Connecticut State Building Code
<b>Exposure Category:</b>	C
<b>Risk Category:</b>	III
<b>Topographic Category:</b>	1
<b>Crest Height:</b>	0 ft
<b>Seismic Parameters:</b>	$S_s = 0.183, S_1 = 0.052$

This structural analysis is based upon the tower being classified as a Risk Category III; 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
1	190.0	2	Celwave - PD220 - Omni	(3) 10' Side Arms	(2) 7/8"	Stonington Police
2	189.3	1	Celwave - PD1142 - Omni		(2) 7/8"	
3	180.0	1	Yagi		(2) 7/8"	
4	175.0	1	10' Dipole		(1) 7/8"	
5	178.0	1	2' x 1' Panel	Direct	(1) 7/8"	-
6	173.0	2	Decibel - DB212 - Dipole	(2) Standoffs	(2) 7/8"	Stonington Police
-	150.0	6	Decibel DB844H90-XY	(3) T-Frames	(12) 1 5/8" Coax	Verizon
-		3	JMA Wireless MX06FRO660-03			
-		3	Commscope CBC426T-DS-43			
-		3	Commscope CBC1923T-DS-43			
12	140.0	3	Ericsson - AIR6449 B41 - Panel	(3) Sector Frames w/ Mods	(9) 1 5/8" (3) 1.9" Fiber	T-Mobile
13		3	Commscope - VV-65A-R1 - Panel			
14		3	RFS - APXVAALL24_43-U-NA20 - Panel			
15		3	Ericsson - KRY 112 144/1 TMAs			
16		3	Ericsson - 4449 B71 + B85 RRUs			
16		3	Ericsson - 4460 B25 + B66 RRUs			
17	120.0	6	Powerwave - 7770 - Panel	(3) T-Frames	(12) 1 5/8" (1) 1/2" Fiber (2) 3/4"DC (1) Y-cable	AT&T
18		3	Cci Antennas DMP65R-BU4DA - Panel			
19		3	Cci Antennas OPA65R-BU4DA - Panel			
20		6	Powerwave - TT19-08BP111-001 -TMA			
21		3	Ericsson 4449 B5/B12 - RRU			
22		3	Ericsson RRUS-4478 B14-RRU			
23		3	Ericsson RRUS 8843 B2 B66A-RRU			
24		2	Raycap DC6-48-60-18-8F-OVP			
25	106.0	1	10' Dipole	(2) Standoffs	(2) 7/8"	Stonington Police
26	106.9	1	Celwave - PD1167 - Omni			
27	99.167	1	Decibel - DS4C06F36D-N - Dipole	Direct	(1) 7/8"	
28	63.0	1	Decibel - DB437 - Yagi	Direct	(1) 7/8"	
29	60.167	1	Decibel - DB413 -B- Dipole	Direct	(1) 7/8"	
30	43.0	1	2' Omni	(1) Standoff	(2) 7/8"	Verizon
31	42.0	2	Decibel - DB437 - Yagi			
-	75.0	1	GPS Receiver	Direct	-	Verizon

## **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
7	150.0	3	JMA Wireless MX06FRO660-03 - Panel	(3) 12.5' V-Frames	(12) 1 5/8" (1) 1 5/8" Hybrid	Verizon
8		6	Decibel DB844H90-XY - Panel			
9		3	Samsung MT6407-77A - Panel			
10		3	Commscope CBC61923T-DS-43			
11		1	Commscope FE-16148-OVP-B12			
32	75.0	1	GPS Receiver	Direct	-	

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:	<b>91.8%</b>	<b>89.0%</b>	<b>47.7%</b>
Pass/Fail	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>

## **Foundations**

	Compression (Kips)	Uplift (Kips)	Shear (Kips)
Original Design Reactions	422.0	379.7	65.7
Analysis Reactions	412.6	368.4	40.5
Factored Reactions*	569.7	512.6	88.7
% of Design Reactions	72.4%	71.9%	45.6%

\* Per section 15.6.2 of the TIA-222-H standard, factored reactions were obtained by multiplying a 1.35 factor to the original design 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.

### **Service Load Condition (Rigidity):**

Operational characteristics of the tower are found to be within the limits prescribed by TIA-222 for the installed antennas. The maximum twist/sway at the elevation of the proposed equipment is 0.4598 degrees under the operational wind speed as specified in the Analysis Criteria.

### **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**

1. This analysis was performed based on the information supplied to **(TES) Tower Engineering Solutions, LLC**. Verification of the information provided was not included in the Scope of Work for **TES**. The accuracy of the analysis is dependent on the accuracy of the information provided.
2. 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.
3. 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 **TES**. 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, **TES** should be notified in writing and the applicable minimum values provided by the client.
4. The configuration of the existing mounts, antennas, coax and other appurtenances were supplied by the customer for the current structural analysis. **TES** 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, **TES** should be notified immediately to evaluate the effect of the discrepancy on the analysis results.
5. 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.
6. If a feasibility analysis was performed, final acceptance of changed conditions shall be based upon a rigorous structural analysis.

# Structure: CT03241-S-SBA

**Site Name:** Stonington 2, CT  
**Type:** Self Support  
**Height:** 180.00 (ft)  
**Base Elev:** 0.00 (ft)

**Code:** TIA-222-H  
**Base Shape:** Triangle  
**Base Width:** 18.00  
**Top Width:** 4.00  
**Basic WS:** 137.00  
**Basic Ice WS:** 50.00  
**Operational WS:** 60.00

3/4/2022

Page: 1

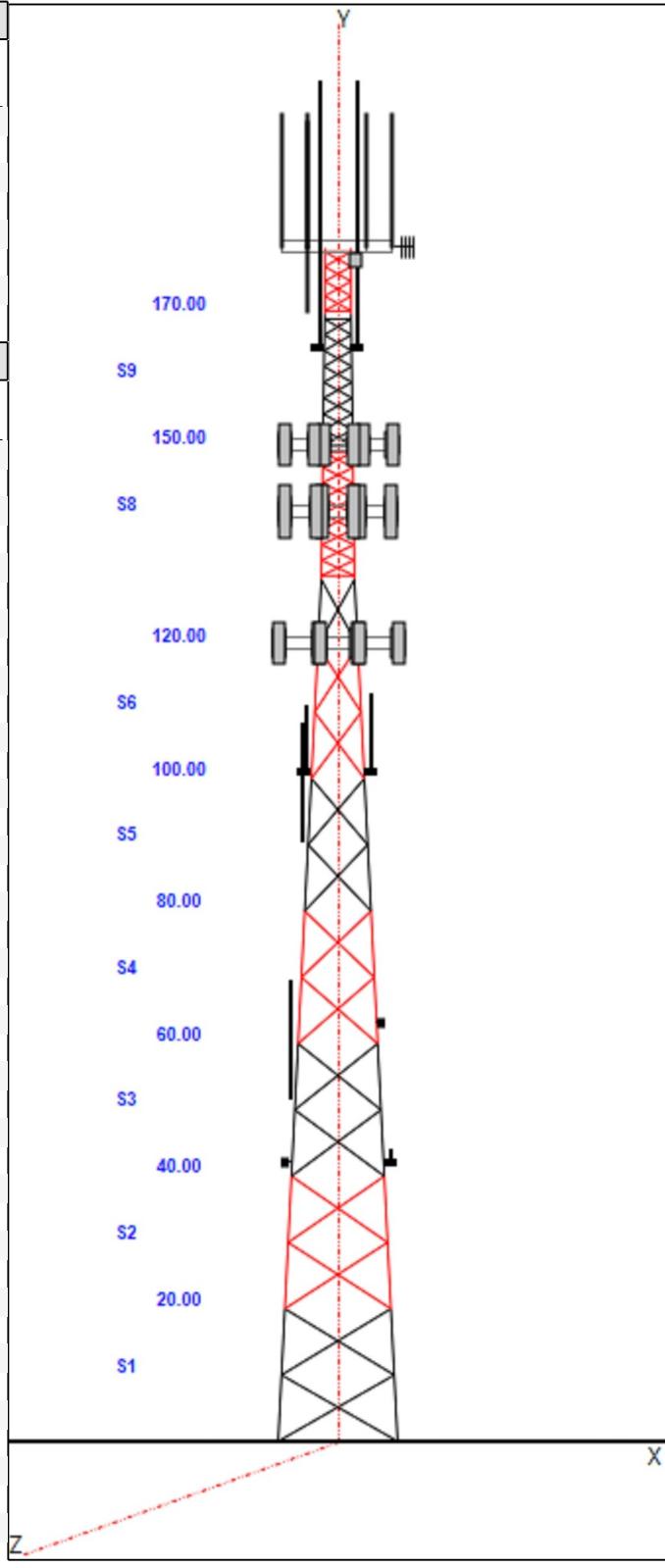


## Section Properties

Sect	Leg Members	Diagonal Members	Horizontal Members
1-2	12B 12"BD 2.25"	SAE 3.5X3.5X0.3125	
3-4	12B 12"BD 2"	SAE 3X3X0.3125	
5	12B 12"BD 1.75"	SAE 3X3X0.1875	
6	12B 12"BD 1.5"	SAE 3X3X0.1875	
7	12B 12"BD 1.25"	SAE 2.5X2.5X0.1875	
8	SOL 2" SOLID	SOL 1" SOLID	SOL 1" SOLID
9	SOL 1 1/2" SOLID	SOL 3/4" SOLID	SOL 3/4" SOLID
10	SOL 1 1/2" SOLID	SOL 3/4" SOLID	SOL 7/8" SOLID

## Discrete Appurtenances

Attach Elev (ft)	Force Elev (ft)	Qty	Description
180.00	180.00	1	Lightning Rod
180.00	180.00	1	Beacon
180.00	180.00	1	10 ft face mounted side arm
180.00	190.00	2	PD220
180.00	189.40	1	PD1142-1
180.00	180.00	1	3' Yagi
180.00	175.00	1	10' Dipole
178.00	178.00	1	24" X 12" Panel
165.00	165.00	2	Side Arm (M. Heavy)
165.00	185.00	2	DB212-2
150.00	150.00	3	MX06FRO660-03
150.00	150.00	6	DB844H90-XY
150.00	150.00	3	MT6407-77A
150.00	150.00	3	CBC61923T-DS-43
150.00	150.00	1	FE-16148-OVP-B12
150.00	150.00	1	(3) 12.5' V-Frames
140.00	140.00	3	15' Pirod Universal T-Frame
140.00	140.00	1	(3) HR w/ Double V-Brace Kits
140.00	140.00	1	(3) Stabilizer Kit (4' FW)
140.00	140.00	3	AIR6449 B41
140.00	140.00	3	VV-65A-R1
140.00	140.00	3	APXVAALL24_43-U-NA20
140.00	140.00	3	KRY 112 144/1 TMAs
140.00	140.00	3	4449 B71 + B85 RRUs
140.00	140.00	3	4460 B25 + B66 RRUs
120.00	120.00	3	15' Pirod Universal T-Frame
120.00	120.00	6	7770.00
120.00	120.00	3	DMP65R-BU4DA
120.00	120.00	6	TT19-08BP111-001
120.00	120.00	3	4449 B5/B12
120.00	120.00	2	DC6-48-60-18-8F
120.00	120.00	3	OPA65R-BU4DA
120.00	120.00	3	RRUS 4478 B14
120.00	120.00	3	B2 B66A 8843
101.00	101.00	2	Side Arm (L. Heavy)
101.00	106.00	1	10' Dipole
101.00	106.90	1	PD1167
90.00	99.17	1	DS4C06F36D-N
75.00	75.00	1	GPS
63.00	63.00	1	DB437
51.00	60.17	1	DB413-B



# Structure: CT03241-S-SBA

<b>Site Name:</b>	Stonington 2, CT	<b>Code:</b>	TIA-222-H	3/4/2022
<b>Type:</b>	Self Support	<b>Base Shape:</b>	Triangle	<b>Basic WS:</b> 137.00
<b>Height:</b>	180.00 (ft)	<b>Base Width:</b>	18.00	<b>Basic Ice WS:</b> 50.00
<b>Base Elev:</b>	0.00 (ft)	<b>Top Width:</b>	4.00	<b>Operational WS:</b> 60.00



42.00	43.00	1	2' Omni
42.00	42.00	1	Side Arm (L. Heavy)
42.00	42.00	1	DB437

## Linear Appurtenances

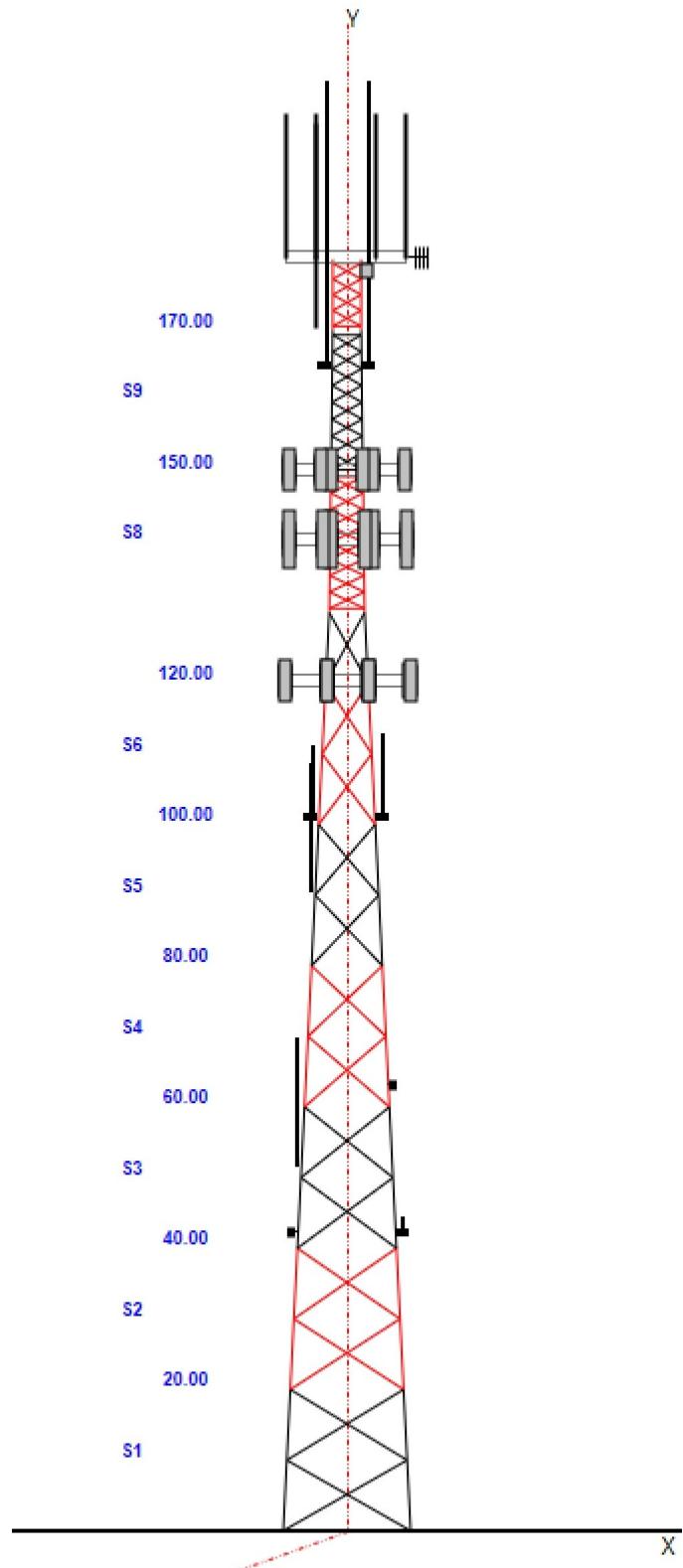
Elev From (ft)	Elev To (ft)	Qty	Description
0.00	180.00	2	7/8" Coax
0.00	180.00	2	7/8" Coax
0.00	178.00	1	7/8" Coax
0.00	165.00	2	7/8" Coax
0.00	150.00	12	1 5/8" Coax
0.00	150.00	1	1 5/8" Hybrid
0.00	150.00	1	W/G Ladder
0.00	140.00	9	1 5/8" Coax
0.00	140.00	3	1.9" Hybrid
0.00	140.00	1	W/G Ladder
0.00	120.00	12	1 5/8" Coax
0.00	120.00	1	1/2" Coax
0.00	120.00	2	3/4" DC
0.00	120.00	1	W/G Ladder
0.00	120.00	1	Y Cable
0.00	101.00	1	7/8" Coax
0.00	101.00	1	7/8" Coax
0.00	90.00	1	7/8" Coax
0.00	63.00	1	7/8" Coax
0.00	51.00	1	7/8" Coax
0.00	43.00	1	7/8" Coax
0.00	42.00	1	7/8" Coax

## Base Reactions

Leg	Overturning	
Max Uplift:	-368.35 (kips)	Moment: 6140.88 (ft-kips)
Max Down:	412.64 (kips)	Total Down: 56.10 (kips)
Max Shear:	40.46 (kips)	Total Shear: 61.80 (kips)

## Structure: CT03241-S-SBA

<b>Site Name:</b>	Stonington 2, CT	<b>Code:</b>	TIA-222-H	3/4/2022	 <b>ES</b> <small>Tower Engineering Solutions</small>
<b>Type:</b>	Self Support	<b>Base Shape:</b>	Triangle	<b>Basic WS:</b>	
<b>Height:</b>	180.00 (ft)	<b>Base Width:</b>	18.00	<b>Basic Ice WS:</b>	
<b>Base Elev:</b>	0.00 (ft)	<b>Top Width:</b>	4.00	<b>Operational WS:</b>	

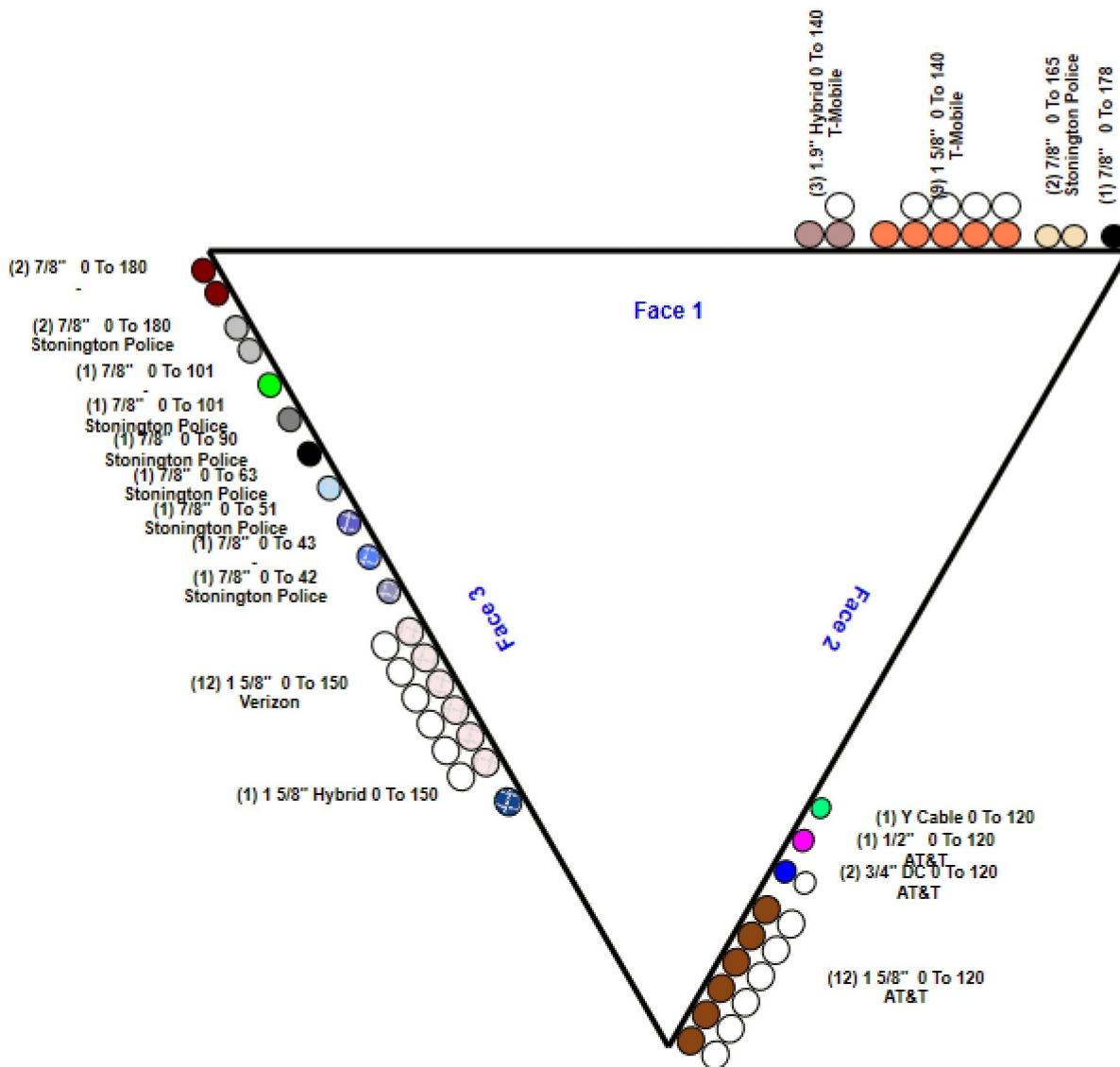


# Structure: CT03241-S-SBA - Coax Line Placement

**Type:** Self Support  
**Site Name:** Stonington 2, CT  
**Height:** 180.00 (ft)

3/4/2022

Page: 4



## Loading Summary

**Structure:** CT03241-S-SBA  
**Site Name:** Stonington 2, CT  
**Height:** 180.00 (ft)  
**Base Elev:** 0.000 (ft)  
**Gh:** 0.85

**Topography:** 1

**Code:** TIA-222-H  
**Exposure:** C  
**Crest Height:** 0.00  
**Site Class:** D - Stiff Soil

3/4/2022



Page: 5

### 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)						
180.00	Lightning Rod	1	5.00	0.500	21.31	1.859	72.000	1.000	1.000	1.00	1.00	0.000
180.00	Beacon	1	36.00	2.720	139.70	3.459	28.000	17.500	17.500	1.00	1.00	0.000
180.00	10 ft face mounted side arm	1	1400.00	40.000	4900.23	180.35	0.000	0.000	0.000	0.80	1.00	0.000
180.00	PD220	2	25.00	5.500	133.88	11.021	240.000	2.700	2.700	1.00	1.00	10.00
180.00	PD1142-1	1	10.00	3.120	77.90	8.289	225.600	1.600	1.600	1.00	1.00	9.400
180.00	3' Yagi	1	10.00	2.980	80.09	7.868	36.000	36.000	3.000	1.00	1.00	0.000
180.00	10' Dipole	1	30.00	3.760	116.88	8.432	120.000	3.000	3.000	1.00	1.00	-5.000
178.00	24" X 12" Panel	1	20.00	2.400	68.18	3.237	24.000	12.000	6.000	1.00	1.00	0.000
165.00	Side Arm (M. Heavy)	2	160.00	9.000	267.73	17.096	0.000	0.000	0.000	1.00	0.90	0.000
165.00	DB212-2	2	31.00	6.500	221.20	33.625	180.000	0.000	0.000	1.00	1.00	20.00
150.00	MX06FRO660-03	3	46.00	9.870	243.37	10.904	71.300	15.400	10.700	0.80	0.87	0.000
150.00	DB844H90-XY	6	14.00	3.050	93.34	3.701	48.000	6.500	8.000	0.80	1.12	0.000
150.00	MT6407-77A	3	79.40	4.690	165.91	5.405	35.100	16.100	5.500	0.80	0.70	0.000
150.00	CBC61923T-DS-43	3	10.40	0.370	24.45	0.574	6.400	6.900	4.800	0.80	0.67	0.000
150.00	FE-16148-OVP-B12	1	21.90	2.010	62.44	2.443	16.600	14.600	8.500	1.00	1.00	0.000
150.00	(3) 12.5' V-Frames	1	2322.00	50.700	4049.86	99.207	0.000	0.000	0.000	0.75	1.00	0.000
140.00	15' Pirod Universal T-Frame	3	500.00	17.000	898.64	33.867	0.000	0.000	0.000	0.75	0.75	0.000
140.00	(3) HR w/ Double V-Brace Kits	1	650.00	15.500	1271.88	27.858	0.000	0.000	0.000	0.75	1.00	0.000
140.00	(3) Stabilizer Kit (4' FW)	1	140.00	3.700	273.94	6.650	0.000	0.000	0.000	0.75	1.00	0.000
140.00	AIR6449 B41	3	103.00	5.650	207.40	6.374	33.100	20.500	8.300	0.80	0.71	0.000
140.00	VV-65A-R1	3	52.90	6.690	185.30	7.527	55.100	13.800	8.200	0.80	0.83	0.000
140.00	APXVAALL24_43-U-NA20	3	122.80	20.240	438.80	21.674	95.900	24.000	8.500	0.80	0.73	0.000
140.00	KRY 112 144/1 TMAs	3	11.00	0.410	19.21	0.772	6.900	6.100	2.700	0.80	0.67	0.000
140.00	4449 B71 + B85 RRUs	3	73.20	1.970	117.17	2.404	17.900	13.200	10.600	0.80	0.67	0.000
140.00	4460 B25 + B66 RRUs	3	109.00	2.850	163.75	3.364	21.800	15.700	7.500	0.80	0.67	0.000
120.00	15' Pirod Universal T-Frame	3	500.00	17.000	889.14	33.465	0.000	0.000	0.000	0.75	0.75	0.000
120.00	7770.00	6	35.00	5.500	131.03	6.265	55.000	11.000	5.000	0.80	0.77	0.000
120.00	DMP65R-BU4DA	3	79.40	12.710	298.32	13.798	71.200	20.700	7.700	0.80	0.72	0.000
120.00	TT19-08BP111-001	6	16.00	0.640	31.04	1.081	9.900	6.700	5.400	0.80	0.50	0.000
120.00	4449 B5/B12	3	71.00	1.970	110.68	2.377	17.900	13.200	9.400	0.80	0.67	0.000
120.00	DC6-48-60-18-8F	2	31.80	0.920	77.75	1.246	24.000	11.000	11.000	0.80	0.67	0.000
120.00	OPA65R-BU4DA	3	43.00	4.960	148.57	5.670	48.000	11.700	10.100	0.80	0.94	0.000
120.00	RRUS 4478 B14	3	59.40	1.650	90.22	2.035	15.000	13.200	7.300	0.80	0.67	0.000
120.00	B2 B66A 8843	3	70.00	1.640	104.18	2.024	15.000	13.200	9.300	0.80	0.67	0.000
101.00	Side Arm (L. Heavy)	2	120.00	4.500	196.28	8.322	0.000	0.000	0.000	1.00	1.00	0.000
101.00	10' Dipole	1	30.00	3.760	111.29	8.131	120.000	3.000	3.000	1.00	1.00	5.000
101.00	PD1167	1	8.00	1.470	40.40	4.508	141.600	1.200	1.200	1.00	1.00	5.900
90.00	DS4C06F36D-N	1	70.00	5.500	170.71	10.246	220.000	3.000	3.000	1.00	1.00	9.167
75.00	GPS	1	10.00	1.000	30.83	1.506	12.000	9.000	6.000	1.00	1.00	0.000
63.00	DB437	1	15.00	0.800	36.69	2.576	14.500	35.000	0.000	1.00	1.00	0.000
51.00	DB413-B	1	32.00	4.370	125.45	12.027	220.000	0.000	0.000	1.00	1.00	9.167
42.00	2' Omni	1	5.00	0.300	12.48	0.589	24.000	2.000	2.000	1.00	1.00	1.000
42.00	Side Arm (L. Heavy)	1	120.00	4.500	188.35	7.924	0.000	0.000	0.000	1.00	1.00	0.000
42.00	DB437	1	15.00	0.800	35.61	2.487	14.500	35.000	0.000	1.00	1.00	0.000

Totals:

96 11,867.00

27,455.66

Number of Appurtenances : 44

## Loading Summary

**Structure:** CT03241-S-SBA  
**Site Name:** Stonington 2, CT  
**Height:** 180.00 (ft)  
**Base Elev:** 0.000 (ft)  
**Gh:** 0.85

**Topography:** 1

**Code:** TIA-222-H  
**Exposure:** C  
**Crest Height:** 0.00  
**Site Class:** D - Stiff Soil  
**Struct Class:** III

3/4/2022

Page: 6



### 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
0.00	180.00	7/8" Coax	2	1.11	0.52	100.00	3	Individual IR	N	0.50	1.00		
0.00	180.00	7/8" Coax	2	1.11	0.52	100.00	3	Individual IR	N	0.50	1.00		
0.00	178.00	7/8" Coax	1	1.11	0.52	100.00	1	Individual NR	N	0.50	1.00		
0.00	165.00	7/8" Coax	2	1.11	0.52	100.00	1	Individual IR	N	0.50	1.00		
0.00	150.00	1 5/8" Coax	12	1.98	1.04	50.00	3	Block	N	0.50	1.00		
0.00	150.00	1 5/8" Hybrid	1	2.00	1.10	100.00	3	Individual NR	N	0.50	1.00		
0.00	150.00	W/G Ladder	1	0.50	6.00	100.00	1	Individual NR	N	0.50	1.00		
0.00	140.00	1 5/8" Coax	9	1.98	1.04	50.00	1	Block	N	0.50	1.00		
0.00	140.00	1.9" Hybrid	3	1.90	1.00	50.00	1	Block	N	0.50	1.00		
0.00	140.00	W/G Ladder	1	0.50	6.00	100.00	1	Individual NR	N	0.50	1.00		
0.00	120.00	1 5/8" Coax	12	1.98	1.04	50.00	2	Block	N	0.50	1.00		
0.00	120.00	1/2" Coax	1	0.65	0.16	100.00	2	Individual NR	N	0.50	1.00		
0.00	120.00	3/4" DC	2	0.75	0.40	50.00	2	Block	N	0.50	1.00		
0.00	120.00	W/G Ladder	1	0.50	6.00	100.00	2	Individual NR	N	0.50	1.00		
0.00	120.00	Y Cable	1	0.25	0.04	100.00	2	Individual NR	N	1.00	1.00		
0.00	101.00	7/8" Coax	1	1.11	0.52	100.00	3	Individual NR	N	0.50	1.00	0	
0.00	101.00	7/8" Coax	1	1.11	0.52	100.00	3	Individual NR	N	0.50	1.00	0	
0.00	90.00	7/8" Coax	1	1.11	0.52	100.00	3	Individual NR	N	0.50	1.00	0	
0.00	63.00	7/8" Coax	1	1.11	0.52	100.00	3	Individual NR	N	0.50	1.00	0	
0.00	51.00	7/8" Coax	1	1.11	0.52	100.00	3	Individual NR	N	0.50	1.00	0	
0.00	43.00	7/8" Coax	1	1.11	0.52	100.00	3	Individual NR	N	0.50	1.00	0	
0.00	42.00	7/8" Coax	1	1.11	0.52	100.00	3	Individual NR	N	0.50	1.00	0	

## Section Forces

**Structure:** CT03241-S-SBA  
**Site Name:** Stonington 2, CT  
**Height:** 180.00 (ft)  
**Base Elev:** 0.000 (ft)  
**Gh:** 0.85

**Code:** TIA-222-H  
**Exposure:** C  
**Crest Height:** 0.00  
**Site Class:** D - Stiff Soil  
**Struct Class:** III

3/4/2022  
  
 Page: 7



**Load Case:** 1.2D + 1.0W Normal Wind

1.2D + 1.0W 137 mph Wind at Normal To Face

Wind Load Factor: 1.00  
 Dead Load Factor: 1.20  
 Ice Dead Load Factor: 0.00

Wind Importance Factor: 1.00  
 Ice Importance Factor: 1.15

Sect Seq	Wind Height (ft)	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)	Ice Linear Area (sqft)		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
1	10.0	34.67	22.326	23.64	0.00	0.13	2.84	1.00	1.00	0.00	32.33	109.42	0.00	7,564.8	0.0	2709.53	2490.61	5,200.15	
2	30.0	40.06	20.349	23.64	0.00	0.14	2.80	1.00	1.00	0.00	30.14	109.42	0.00	7,389.1	0.0	2878.44	2878.13	5,756.57	
3	50.0	44.61	15.847	22.04	0.00	0.14	2.81	1.00	1.00	0.00	24.96	105.35	0.00	6,284.1	0.0	2658.91	3203.06	5,861.97	
4	70.0	47.88	14.323	22.04	0.00	0.16	2.74	1.00	1.00	0.00	23.63	102.29	0.00	6,128.8	0.0	2639.82	3436.69	6,076.51	
5	90.0	50.48	12.972	18.83	0.00	0.17	2.71	1.00	1.00	0.00	21.47	101.09	0.00	4,761.8	0.0	2493.73	3622.79	6,116.52	
6	110.0	52.66	11.777	17.23	0.00	0.20	2.61	1.00	1.00	0.00	20.05	96.65	0.00	4,211.0	0.0	2344.45	3776.74	6,121.19	
7	125.0	54.10	4.586	7.81	0.00	0.21	2.56	1.00	1.00	0.00	8.53	34.46	0.00	1,580.7	0.0	1004.43	1370.20	2,374.62	
8	140.0	55.41	0.000	14.27	0.00	0.15	2.79	1.00	1.00	0.00	8.23	55.00	0.00	2,454.0	0.0	1081.60	2210.81	3,292.41	
9	160.0	56.99	0.000	10.27	0.00	0.12	2.90	1.00	1.00	0.00	5.88	12.03	0.00	982.7	0.0	825.08	419.37	1,244.45	
10	175.0	58.07	0.000	5.29	0.00	0.13	2.85	1.00	1.00	0.00	3.04	4.44	0.00	503.6	0.0	428.01	157.79	585.81	
													41,860.5	0.0			42,630.20		

**Load Case:** 1.2D + 1.0W 60° Wind

1.2D + 1.0W 137 mph Wind at 60° From Face

Wind Load Factor: 1.00  
 Dead Load Factor: 1.20  
 Ice Dead Load Factor: 0.00

Wind Importance Factor: 1.00  
 Ice Importance Factor: 1.15

Sect Seq	Wind Height (ft)	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)	Ice Linear Area (sqft)		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
1	10.0	34.67	22.326	23.64	0.00	0.13	2.84	0.80	1.00	0.00	27.87	109.42	0.00	7,564.8	0.0	2335.34	2490.61	4,825.96	
2	30.0	40.06	20.349	23.64	0.00	0.14	2.80	0.80	1.00	0.00	26.07	109.42	0.00	7,389.1	0.0	2489.78	2878.13	5,367.91	
3	50.0	44.61	15.847	22.04	0.00	0.14	2.81	0.80	1.00	0.00	21.79	105.35	0.00	6,284.1	0.0	2321.30	3203.06	5,524.36	
4	70.0	47.88	14.323	22.04	0.00	0.16	2.74	0.80	1.00	0.00	20.77	102.29	0.00	6,128.8	0.0	2319.85	3436.69	5,756.54	
5	90.0	50.48	12.972	18.83	0.00	0.17	2.71	0.80	1.00	0.00	18.88	101.09	0.00	4,761.8	0.0	2192.40	3622.79	5,815.19	
6	110.0	52.66	11.777	17.23	0.00	0.20	2.61	0.80	1.00	0.00	17.70	96.65	0.00	4,211.0	0.0	2069.04	3776.74	5,845.78	
7	125.0	54.10	4.586	7.81	0.00	0.21	2.56	0.80	1.00	0.00	7.61	34.46	0.00	1,580.7	0.0	896.40	1370.20	2,266.60	
8	140.0	55.41	0.000	14.27	0.00	0.15	2.79	0.80	1.00	0.00	8.23	55.00	0.00	2,454.0	0.0	1081.60	2210.81	3,292.41	
9	160.0	56.99	0.000	10.27	0.00	0.12	2.90	0.80	1.00	0.00	5.88	12.03	0.00	982.7	0.0	825.08	419.37	1,244.45	
10	175.0	58.07	0.000	5.29	0.00	0.13	2.85	0.80	1.00	0.00	3.04	4.44	0.00	503.6	0.0	428.01	157.79	585.81	
													41,860.5	0.0			40,525.00		

## Section Forces

**Structure:** CT03241-S-SBA  
**Site Name:** Stonington 2, CT  
**Height:** 180.00 (ft)  
**Base Elev:** 0.000 (ft)  
**Gh:** 0.85

**Code:** TIA-222-H  
**Exposure:** C  
**Crest Height:** 0.00  
**Site Class:** D - Stiff Soil  
**Struct Class:** III

3/4/2022  
  
**Page:** 8



<b>Load Case:</b> 1.2D + 1.0W 90° Wind										1.2D + 1.0W 137 mph Wind at 90° From Face									

## Section Forces

**Structure:** CT03241-S-SBA  
**Site Name:** Stonington 2, CT  
**Height:** 180.00 (ft)  
**Base Elev:** 0.000 (ft)  
**Gh:** 0.85

**Code:** TIA-222-H  
**Exposure:** C  
**Crest Height:** 0.00  
**Site Class:** D - Stiff Soil  
**Struct Class:** III

3/4/2022  
  
**Page:** 9



**Topography:** 1

**Load Case:** 0.9D + 1.0W 60° Wind

0.9D + 1.0W 137 mph Wind at 60° From Face

**Wind Load Factor:** 1.00  
**Dead Load Factor:** 0.90  
**Ice Dead Load Factor:** 0.00

**Wind Importance Factor:** 1.00  
**Ice Importance Factor:** 1.15

Sect Seq	Wind Height (ft)	qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round		Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice Linear		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
1	10.0	34.67	22.326	23.64	0.00	0.13	2.84	0.80	1.00	0.00	27.87	109.42	0.00	5,673.6	0.0	2335.34	2490.61	4,825.96	
2	30.0	40.06	20.349	23.64	0.00	0.14	2.80	0.80	1.00	0.00	26.07	109.42	0.00	5,541.8	0.0	2489.78	2878.13	5,367.91	
3	50.0	44.61	15.847	22.04	0.00	0.14	2.81	0.80	1.00	0.00	21.79	105.35	0.00	4,713.1	0.0	2321.30	3203.06	5,524.36	
4	70.0	47.88	14.323	22.04	0.00	0.16	2.74	0.80	1.00	0.00	20.77	102.29	0.00	4,596.6	0.0	2319.85	3436.69	5,756.54	
5	90.0	50.48	12.972	18.83	0.00	0.17	2.71	0.80	1.00	0.00	18.88	101.09	0.00	3,571.3	0.0	2192.40	3622.79	5,815.19	
6	110.0	52.66	11.777	17.23	0.00	0.20	2.61	0.80	1.00	0.00	17.70	96.65	0.00	3,158.2	0.0	2069.04	3776.74	5,845.78	
7	125.0	54.10	4.586	7.81	0.00	0.21	2.56	0.80	1.00	0.00	7.61	34.46	0.00	1,185.5	0.0	896.40	1370.20	2,266.60	
8	140.0	55.41	0.000	14.27	0.00	0.15	2.79	0.80	1.00	0.00	8.23	55.00	0.00	1,840.5	0.0	1081.60	2210.81	3,292.41	
9	160.0	56.99	0.000	10.27	0.00	0.12	2.90	0.80	1.00	0.00	5.88	12.03	0.00	737.0	0.0	825.08	419.37	1,244.45	
10	175.0	58.07	0.000	5.29	0.00	0.13	2.85	0.80	1.00	0.00	3.04	4.44	0.00	377.7	0.0	428.01	157.79	585.81	
												31,395.3			0.0				40,525.00

**Load Case:** 0.9D + 1.0W 90° Wind

0.9D + 1.0W 137 mph Wind at 90° From Face

**Wind Load Factor:** 1.00  
**Dead Load Factor:** 0.90  
**Ice Dead Load Factor:** 0.00

**Wind Importance Factor:** 1.00  
**Ice Importance Factor:** 1.15

Sect Seq	Wind Height (ft)	qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round		Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice Linear		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
1	10.0	34.67	22.326	23.64	0.00	0.13	2.84	0.85	1.00	0.00	28.98	109.42	0.00	5,673.6	0.0	2428.89	2490.61	4,919.50	
2	30.0	40.06	20.349	23.64	0.00	0.14	2.80	0.85	1.00	0.00	27.09	109.42	0.00	5,541.8	0.0	2586.94	2878.13	5,465.07	
3	50.0	44.61	15.847	22.04	0.00	0.14	2.81	0.85	1.00	0.00	22.58	105.35	0.00	4,713.1	0.0	2405.71	3203.06	5,608.76	
4	70.0	47.88	14.323	22.04	0.00	0.16	2.74	0.85	1.00	0.00	21.48	102.29	0.00	4,596.6	0.0	2399.85	3436.69	5,836.53	
5	90.0	50.48	12.972	18.83	0.00	0.17	2.71	0.85	1.00	0.00	19.52	101.09	0.00	3,571.3	0.0	2267.73	3622.79	5,890.52	
6	110.0	52.66	11.777	17.23	0.00	0.20	2.61	0.85	1.00	0.00	18.28	96.65	0.00	3,158.2	0.0	2137.89	3776.74	5,914.63	
7	125.0	54.10	4.586	7.81	0.00	0.21	2.56	0.85	1.00	0.00	7.84	34.46	0.00	1,185.5	0.0	923.41	1370.20	2,293.60	
8	140.0	55.41	0.000	14.27	0.00	0.15	2.79	0.85	1.00	0.00	8.23	55.00	0.00	1,840.5	0.0	1081.60	2210.81	3,292.41	
9	160.0	56.99	0.000	10.27	0.00	0.12	2.90	0.85	1.00	0.00	5.88	12.03	0.00	737.0	0.0	825.08	419.37	1,244.45	
10	175.0	58.07	0.000	5.29	0.00	0.13	2.85	0.85	1.00	0.00	3.04	4.44	0.00	377.7	0.0	428.01	157.79	585.81	
												31,395.3			0.0				41,051.30

## Section Forces

**Structure:** CT03241-S-SBA  
**Site Name:** Stonington 2, CT  
**Height:** 180.00 (ft)  
**Base Elev:** 0.000 (ft)  
**Gh:** 0.85

**Code:** TIA-222-H  
**Exposure:** C  
**Crest Height:** 0.00  
**Site Class:** D - Stiff Soil  
**Struct Class:** III

3/4/2022  
  
**Page:** 10



**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  
**Dead Load Factor:** 1.20  
**Ice Dead Load Factor:** 1.00

**Wind Importance Factor:** 1.00  
**Ice Importance Factor:** 1.15

Sect Seq	Wind Height (ft)	Total Flat		Total Round		Ice Round		Ice		Ice		Total		Struct		Linear		Total	
		qz (psf)	Area (sqft)	qz (psf)	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)	Force (lb)	Force (lb)	Force (lb)	Force (lb)
1	10.0	4.62	22.326	43.88	20.24	0.19	2.64	1.00	1.00	1.02	47.43	149.34	37.42	12,303.	4738.5	491.88	552.61	1,044.49	
2	30.0	5.34	20.349	44.94	21.30	0.21	2.57	1.00	1.00	1.14	46.22	153.68	41.77	12,599.	5210.0	539.44	662.65	1,202.10	
3	50.0	5.94	15.847	43.15	21.12	0.21	2.55	1.00	1.00	1.20	40.75	151.80	35.16	11,247.	4963.0	524.47	750.82	1,275.29	
4	70.0	6.38	14.323	42.61	20.57	0.24	2.46	1.00	1.00	1.24	39.17	150.25	29.55	11,024.	4895.4	522.64	811.97	1,334.61	
5	90.0	6.72	12.972	38.73	19.90	0.27	2.39	1.00	1.00	1.27	35.80	150.21	27.55	9,523.0	4761.2	488.51	860.48	1,349.00	
6	110.0	7.01	11.777	36.46	19.23	0.32	2.26	1.00	1.00	1.30	33.79	146.71	17.73	8,727.7	4516.7	454.50	895.60	1,350.10	
7	125.0	7.21	4.586	17.20	9.39	0.36	2.16	1.00	1.00	1.31	15.22	53.23	4.38	3,297.4	1716.7	201.08	321.67	522.75	
8	140.0	7.38	0.000	43.99	29.72	0.43	2.01	1.00	1.00	1.33	28.71	86.29	8.86	5,385.3	2931.3	362.15	511.06	873.21	
9	160.0	7.59	0.000	38.69	28.42	0.42	2.02	1.00	1.00	1.35	25.06	26.66	4.49	2,639.8	1657.1	327.35	167.56	494.92	
10	175.0	7.73	0.000	19.93	14.64	0.46	1.96	1.00	1.00	1.36	13.27	9.80	1.81	1,299.3	795.7	171.07	59.35	230.42	
												78,046.2	36185.7						
																		9,676.88	

**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  
**Dead Load Factor:** 1.20  
**Ice Dead Load Factor:** 1.00

**Wind Importance Factor:** 1.00  
**Ice Importance Factor:** 1.15

Sect Seq	Wind Height (ft)	Total Flat		Total Round		Ice Round		Ice		Ice		Total		Struct		Linear		Total	
		qz (psf)	Area (sqft)	qz (psf)	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)	Force (lb)	Force (lb)	Force (lb)	Force (lb)
1	10.0	4.62	22.326	43.88	20.24	0.19	2.64	0.80	1.00	1.02	42.97	149.34	37.42	12,303.	4738.5	445.58	552.61	998.19	
2	30.0	5.34	20.349	44.94	21.30	0.21	2.57	0.80	1.00	1.14	42.15	153.68	41.77	12,599.	5210.0	491.95	662.65	1,154.60	
3	50.0	5.94	15.847	43.15	21.12	0.21	2.55	0.80	1.00	1.20	37.58	151.80	35.16	11,247.	4963.0	483.69	750.82	1,234.51	
4	70.0	6.38	14.323	42.61	20.57	0.24	2.46	0.80	1.00	1.24	36.30	150.25	29.55	11,024.	4895.4	484.42	811.97	1,296.39	
5	90.0	6.72	12.972	38.73	19.90	0.27	2.39	0.80	1.00	1.27	33.20	150.21	27.55	9,523.0	4761.2	453.11	860.48	1,313.59	
6	110.0	7.01	11.777	36.46	19.23	0.32	2.26	0.80	1.00	1.30	31.44	146.71	17.73	8,727.7	4516.7	422.82	895.60	1,318.42	
7	125.0	7.21	4.586	17.20	9.39	0.36	2.16	0.80	1.00	1.31	14.31	53.23	4.38	3,297.4	1716.7	188.97	321.67	510.64	
8	140.0	7.38	0.000	43.99	29.72	0.43	2.01	0.80	1.00	1.33	28.71	86.29	8.86	5,385.3	2931.3	362.15	511.06	873.21	
9	160.0	7.59	0.000	38.69	28.42	0.42	2.02	0.80	1.00	1.35	25.06	26.66	4.49	2,639.8	1657.1	327.35	167.56	494.92	
10	175.0	7.73	0.000	19.93	14.64	0.46	1.96	0.80	1.00	1.36	13.27	9.80	1.81	1,299.3	795.7	171.07	59.35	230.42	
												78,046.2	36185.7						
																		9,424.87	

## Section Forces

**Structure:** CT03241-S-SBA  
**Site Name:** Stonington 2, CT  
**Height:** 180.00 (ft)  
**Base Elev:** 0.000 (ft)  
**Gh:** 0.85

**Code:** TIA-222-H  
**Exposure:** C  
**Crest Height:** 0.00  
**Site Class:** D - Stiff Soil  
**Struct Class:** III

3/4/2022  
  
**Page:** 11



**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  
**Dead Load Factor:** 1.20  
**Ice Dead Load Factor:** 1.00

**Wind Importance Factor:** 1.00  
**Ice Importance Factor:** 1.15

Sect Seq	Wind Height (ft)	Total		Total		Ice		Ice		Ice		Total		Struct		Linear		Total	
		Wind qz (psf)	Flat Area (sqft)	Round Area (sqft)	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)	Force (lb)					
1	10.0	4.62	22.326	43.88	20.24	0.19	2.64	0.85	1.00	1.02	44.08	149.34	37.42	12,303.	4738.5	457.15	552.61	1,009.77	
2	30.0	5.34	20.349	44.94	21.30	0.21	2.57	0.85	1.00	1.14	43.17	153.68	41.77	12,599.	5210.0	503.82	662.65	1,166.47	
3	50.0	5.94	15.847	43.15	21.12	0.21	2.55	0.85	1.00	1.20	38.38	151.80	35.16	11,247.	4963.0	493.88	750.82	1,244.70	
4	70.0	6.38	14.323	42.61	20.57	0.24	2.46	0.85	1.00	1.24	37.02	150.25	29.55	11,024.	4895.4	493.97	811.97	1,305.94	
5	90.0	6.72	12.972	38.73	19.90	0.27	2.39	0.85	1.00	1.27	33.85	150.21	27.55	9,523.0	4761.2	461.96	860.48	1,322.44	
6	110.0	7.01	11.777	36.46	19.23	0.32	2.26	0.85	1.00	1.30	32.02	146.71	17.73	8,727.7	4516.7	430.74	895.60	1,326.34	
7	125.0	7.21	4.586	17.20	9.39	0.36	2.16	0.85	1.00	1.31	14.54	53.23	4.38	3,297.4	1716.7	192.00	321.67	513.66	
8	140.0	7.38	0.000	43.99	29.72	0.43	2.01	0.85	1.00	1.33	28.71	86.29	8.86	5,385.3	2931.3	362.15	511.06	873.21	
9	160.0	7.59	0.000	38.69	28.42	0.42	2.02	0.85	1.00	1.35	25.06	26.66	4.49	2,639.8	1657.1	327.35	167.56	494.92	
10	175.0	7.73	0.000	19.93	14.64	0.46	1.96	0.85	1.00	1.36	13.27	9.80	1.81	1,299.3	795.7	171.07	59.35	230.42	
												<b>78,046.2</b>	<b>36185.7</b>					<b>9,487.87</b>	

**Load Case:** 1.0D + 1.0W Normal Wind

1.0D + 1.0W 60 mph Wind at Normal To 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:** 1.15

Sect Seq	Wind Height (ft)	Total		Total		Ice		Ice		Ice		Total		Struct		Linear		Total	
		Wind qz (psf)	Flat Area (sqft)	Round Area (sqft)	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)	Force (lb)					
1	10.0	6.65	22.326	23.64	0.00	0.13	2.84	1.00	1.00	0.00	35.70	109.42	0.00	6,304.0	0.0	573.86	477.71	1,051.58	
2	30.0	7.68	20.349	23.64	0.00	0.14	2.80	1.00	1.00	0.00	33.75	109.42	0.00	6,157.6	0.0	618.12	552.04	1,170.17	
3	50.0	8.56	15.847	22.04	0.00	0.14	2.81	1.00	1.00	0.00	28.33	105.35	0.00	5,236.8	0.0	578.88	614.36	1,193.25	
4	70.0	9.18	14.323	22.04	0.00	0.16	2.74	1.00	1.00	0.00	26.85	102.29	0.00	5,107.3	0.0	575.19	659.18	1,234.36	
5	90.0	9.68	12.972	18.83	0.00	0.17	2.71	1.00	1.00	0.00	23.70	101.09	0.00	3,968.1	0.0	527.94	694.87	1,222.81	
6	110.0	10.10	11.777	17.23	0.00	0.20	2.61	1.00	1.00	0.00	21.66	96.65	0.00	3,509.1	0.0	485.78	724.40	1,210.18	
7	125.0	10.38	4.586	7.81	0.00	0.21	2.56	1.00	1.00	0.00	9.09	34.46	0.00	1,317.2	0.0	205.33	262.81	468.15	
8	140.0	10.63	0.000	14.27	0.00	0.15	2.79	1.00	1.00	0.00	8.23	55.00	0.00	2,045.0	0.0	207.46	424.05	631.50	
9	160.0	10.93	0.000	10.27	0.00	0.12	2.90	1.00	1.00	0.00	5.88	12.03	0.00	818.9	0.0	158.25	80.44	238.69	
10	175.0	11.14	0.000	5.29	0.00	0.13	2.85	1.00	1.00	0.00	3.04	4.44	0.00	419.6	0.0	82.10	30.27	112.36	
												<b>34,883.7</b>	<b>0.0</b>					<b>8,533.05</b>	

## Section Forces

**Structure:** CT03241-S-SBA  
**Site Name:** Stonington 2, CT  
**Height:** 180.00 (ft)  
**Base Elev:** 0.000 (ft)  
**Gh:** 0.85

**Code:** TIA-222-H  
**Exposure:** C  
**Crest Height:** 0.00  
**Site Class:** D - Stiff Soil  
**Struct Class:** III

3/4/2022  
  
**Page:** 12



**Topography:** 1

**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:** 1.15

Sect Seq	Wind Height (ft)	qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round		Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice Linear		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Area (sqft)	Area (sqft)	Sol	Cf							Area (sqft)	Area (sqft)					
1	10.0	6.65	22.326	23.64	0.00	0.13	2.84	0.80	1.00	0.00	31.24	109.42	0.00	6,304.0	0.0	502.09	477.71	979.80	
2	30.0	7.68	20.349	23.64	0.00	0.14	2.80	0.80	1.00	0.00	29.68	109.42	0.00	6,157.6	0.0	543.58	552.04	1,095.62	
3	50.0	8.56	15.847	22.04	0.00	0.14	2.81	0.80	1.00	0.00	25.16	105.35	0.00	5,236.8	0.0	514.13	614.36	1,128.49	
4	70.0	9.18	14.323	22.04	0.00	0.16	2.74	0.80	1.00	0.00	23.98	102.29	0.00	5,107.3	0.0	513.81	659.18	1,172.99	
5	90.0	9.68	12.972	18.83	0.00	0.17	2.71	0.80	1.00	0.00	21.10	101.09	0.00	3,968.1	0.0	470.15	694.87	1,165.02	
6	110.0	10.10	11.777	17.23	0.00	0.20	2.61	0.80	1.00	0.00	19.30	96.65	0.00	3,509.1	0.0	432.96	724.40	1,157.36	
7	125.0	10.38	4.586	7.81	0.00	0.21	2.56	0.80	1.00	0.00	8.17	34.46	0.00	1,317.2	0.0	184.61	262.81	447.43	
8	140.0	10.63	0.000	14.27	0.00	0.15	2.79	0.80	1.00	0.00	8.23	55.00	0.00	2,045.0	0.0	207.46	424.05	631.50	
9	160.0	10.93	0.000	10.27	0.00	0.12	2.90	0.80	1.00	0.00	5.88	12.03	0.00	818.9	0.0	158.25	80.44	238.69	
10	175.0	11.14	0.000	5.29	0.00	0.13	2.85	0.80	1.00	0.00	3.04	4.44	0.00	419.6	0.0	82.10	30.27	112.36	
													34,883.7	0.0				8,129.26	

**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:** 1.15

Sect Seq	Wind Height (ft)	qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round		Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice Linear		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Area (sqft)	Area (sqft)	Sol	Cf							Area (sqft)	Area (sqft)					
1	10.0	6.65	22.326	23.64	0.00	0.13	2.84	0.85	1.00	0.00	32.35	109.42	0.00	6,304.0	0.0	520.03	477.71	997.75	
2	30.0	7.68	20.349	23.64	0.00	0.14	2.80	0.85	1.00	0.00	30.69	109.42	0.00	6,157.6	0.0	562.21	552.04	1,114.25	
3	50.0	8.56	15.847	22.04	0.00	0.14	2.81	0.85	1.00	0.00	25.96	105.35	0.00	5,236.8	0.0	530.32	614.36	1,144.68	
4	70.0	9.18	14.323	22.04	0.00	0.16	2.74	0.85	1.00	0.00	24.70	102.29	0.00	5,107.3	0.0	529.16	659.18	1,188.33	
5	90.0	9.68	12.972	18.83	0.00	0.17	2.71	0.85	1.00	0.00	21.75	101.09	0.00	3,968.1	0.0	484.60	694.87	1,179.47	
6	110.0	10.10	11.777	17.23	0.00	0.20	2.61	0.85	1.00	0.00	19.89	96.65	0.00	3,509.1	0.0	446.16	724.40	1,170.56	
7	125.0	10.38	4.586	7.81	0.00	0.21	2.56	0.85	1.00	0.00	8.40	34.46	0.00	1,317.2	0.0	189.79	262.81	452.61	
8	140.0	10.63	0.000	14.27	0.00	0.15	2.79	0.85	1.00	0.00	8.23	55.00	0.00	2,045.0	0.0	207.46	424.05	631.50	
9	160.0	10.93	0.000	10.27	0.00	0.12	2.90	0.85	1.00	0.00	5.88	12.03	0.00	818.9	0.0	158.25	80.44	238.69	
10	175.0	11.14	0.000	5.29	0.00	0.13	2.85	0.85	1.00	0.00	3.04	4.44	0.00	419.6	0.0	82.10	30.27	112.36	
													34,883.7	0.0				8,230.21	

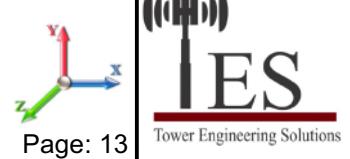
# Force/Stress Compression Summary

**Structure:** CT03241-S-SBA  
**Site Name:** Stonington 2, CT  
**Height:** 180.00 (ft)  
**Base Elev:** 0.000 (ft)  
**Gh:** 0.85

**Topography:** 1

**Code:** EIA/TIA-222-H  
**Exposure:** C  
**Crest Height:** 0.00  
**Site Class:** D - Stiff Soil  
**Struct Class:** III

3/4/2022



Page: 13

## LEG MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case	Len (ft)	Bracing %			KL/R	Fy (ksi)	Cap (kips)	Mem Use %	Leg	Controls
						X	Y	Z						
1	20	12B - 12"BD 2.25"	-402.20	1.2D + 1.0W Normal Wind	10.02	100	100	100	24.38	50.00	514.03	78.2	Member X	
2	40	12B - 12"BD 2.25"	-364.70	1.2D + 1.0W Normal Wind	10.02	100	100	100	24.38	50.00	514.03	71.0	Member X	
3	60	12B - 12"BD 2"	-321.29	1.2D + 1.0W Normal Wind	10.02	100	100	100	24.41	50.00	405.83	79.2	Member X	
4	80	12B - 12"BD 2"	-276.51	1.2D + 1.0W Normal Wind	10.02	100	100	100	24.41	50.00	405.83	68.1	Member X	
5	100	12B - 12"BD 1.75"	-228.00	1.2D + 1.0W Normal Wind	10.02	100	100	100	25.99	50.00	308.82	73.8	Member X	
6	120	12B - 12"BD 1.5"	-175.44	1.2D + 1.0W Normal Wind	10.02	100	100	100	30.32	50.00	222.99	78.7	Member X	
7	130	12B - 12"BD 1.25"	-114.54	1.2D + 1.0W Normal Wind	10.02	100	100	100	36.38	50.00	150.33	76.2	Member X	
8	150	SOL - 2" SOLID	-103.15	1.2D + 1.0W Normal Wind	2.33	100	100	100	56.01	50.00	112.40	91.8	Member X	
9	170	SOL - 1 1/2" SOLID	-39.95	1.2D + 1.0W Normal Wind	2.39	100	100	100	76.42	50.00	51.88	77.0	Member X	
10	180	SOL - 1 1/2" SOLID	-10.53	1.2D + 1.0W Normal Wind	2.23	100	100	100	71.33	50.00	54.82	19.2	Member X	

## Splices

Sect	Top Splice					Bottom Splice							
	Top Elev	Load Case	Force (kips)	Cap (kips)	Use %	Bolt Type	Num Bolts	Load Case	Force (kips)	Cap (kips)	Use %	Bolt Type	Num Bolts
1	20	1.2D + 1.0W Normal Wind	375.16	0.00	0.0			1.2D + 1.0W Normal Wind	413.40	0.00			
2	40	1.2D + 1.0W Normal Wind	332.91	0.00	0.0			1.2D + 1.0W Normal Wind	375.16	0.00	1/4 A325	6	
3	60	1.2D + 1.0W Normal Wind	288.51	0.00	0.0			1.2D + 1.0W Normal Wind	332.91	0.00	1/4 A325	6	
4	80	1.2D + 1.0W Normal Wind	241.41	0.00	0.0			1.2D + 1.0W Normal Wind	288.51	0.00	1/4 A325	6	
5	100	1.2D + 1.0W Normal Wind	190.63	0.00	0.0			1.2D + 1.0W Normal Wind	241.41	0.00	1 A325	6	
6	120	1.2D + 1.0W Normal Wind	133.61	0.00	0.0			1.2D + 1.0W Normal Wind	190.63	0.00	1 A325	6	
7	130	1.2D + 1.0W Normal Wind	108.75	0.00	0.0			1.2D + 1.0W Normal Wind	133.61	0.00	1 A325	6	
8	150	1.2D + 1.0W Normal Wind	43.32	0.00	0.0			1.2D + 1.0W Normal Wind	108.75	0.00	1 A325	6	
9	170	1.2D + 1.0W Normal Wind	12.16	0.00	0.0			1.2D + 1.0W Normal Wind	43.32	0.00			
10	180	1.2D + 1.0Di + 1.0Wi 90° Wind	2.40	0.00	0.0			1.2D + 1.0W Normal Wind	12.16	0.00			

## HORIZONTAL MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case	Len (ft)	Bracing %	KL/R	Fy (ksi)	Cap (kips)	Num Bolts	Shear Bear			Use %	Controls
											X	Y	Z	Cap Holes	Num Bolts
1	20								0.00	0	0	0	0		
2	40								0.00	0	0	0	0		
3	60								0.00	0	0	0	0		
4	80								0.00	0	0	0	0		
5	100								0.00	0	0	0	0		
6	120								0.00	0	0	0	0		
7	130								0.00	0	0	0	0		
8	150	SOL - 1" SOLID	-2.32	1.2D + 1.0W 60° Wind	4.52	100	100	100	151.83	50.00	7.70	0	0		30.1 Member X
9	170	SOL - 3/4" SOLID	-1.17	1.2D + 1.0W 90° Wind	4.49	100	100	100	201.37	50.00	2.46	0	0		47.7 Member X
10	180	SOL - 7/8" SOLID	-1.15	1.2D + 1.0W 60° Wind	4.00	100	100	100	153.56	50.00	5.76	0	0		20.0 Member X

## DIAGONAL MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case	Len (ft)	Bracing %	KL/R	Fy (ksi)	Cap (kips)	Num Bolts	Shear Bear			Use %	Controls	
											X	Y	Z	Cap Holes	Num Bolts	
1	20	SAE - 3.5X3.5X0.3125	-10.4	1.2D + 1.0W Normal Wind	20.16	50	50	50	175.28	36.00	19.47	1	1	48.32	43.5	53.5 Member Z
2	40	SAE - 3.5X3.5X0.3125	-10.3	1.2D + 1.0W 90° Wind	18.45	50	50	50	160.42	36.00	23.25	1	1	48.32	43.5	44.7 Member Z
3	60	SAE - 3X3X0.3125	-9.88	1.2D + 1.0W 90° Wind	16.80	50	50	50	171.17	36.00	17.39	1	1	48.32	43.5	56.8 Member Z
4	80	SAE - 3X3X0.3125	-9.62	1.2D + 1.0W 90° Wind	15.24	50	50	50	155.27	36.00	21.13	1	1	48.32	43.5	45.5 Member Z
5	100	SAE - 3X3X0.1875	-9.44	1.2D + 1.0W 90° Wind	13.80	50	50	50	138.89	36.00	16.17	1	1	35.34	20.8	58.4 Member Z
6	120	SAE - 3X3X0.1875	-9.94	1.2D + 1.0W 90° Wind	12.50	50	50	50	125.87	36.00	19.69	1	1	35.34	20.8	50.5 Member Z

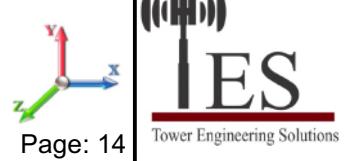
## Force/Stress Compression Summary

**Structure:** CT03241-S-SBA  
**Site Name:** Stonington 2, CT  
**Height:** 180.00 (ft)  
**Base Elev:** 0.000 (ft)  
**Gh:** 0.85

**Topography:** 1

**Code:** EIA/TIA-222-H  
**Exposure:** C  
**Crest Height:** 0.00  
**Site Class:** D - Stiff Soil  
**Struct Class:** III

3/4/2022



Page: 14

### DIAGONAL MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case	Len (ft)	Bracing %			Fy (ksi)	Mem Cap (kips)	Num Bolts	Num Holes	Shear Cap (kips)	Bear Cap (kips)	Use %	Controls
						X	Y	Z								
7	130	SAE - 2.5X2.5X0.1875	-10.1	1.2D + 1.0W Normal Wind	11.42	50	50	50	138.38	36.00	13.48	1	1	35.34	20.8	75.5 Member Z
8	150	SOL - 1" SOLID	-6.63	1.2D + 1.0W 90° Wind	5.48	50	50	50	118.33	50.00	12.67	0	0			52.3 Member X
9	170	SOL - 3/4" SOLID	-3.25	1.2D + 1.0W Normal Wind	4.75	50	50	50	136.82	50.00	5.33	0	0			60.9 Member X
10	180	SOL - 3/4" SOLID	-2.54	1.2D + 1.0W Normal Wind	4.58	50	50	50	131.88	50.00	5.74	0	0			44.3 Member X

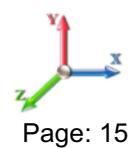
# Force/Stress Tension Summary

**Structure:** CT03241-S-SBA  
**Site Name:** Stonington 2, CT  
**Height:** 180.00 (ft)  
**Base Elev:** 0.000 (ft)  
**Gh:** 0.85

**Topography:** 1

**Code:** EIA/TIA-222-H  
**Exposure:** C  
**Crest Height:** 0.00  
**Site Class:** D - Stiff Soil  
**Struct Class:** III

3/4/2022



Page: 15

## LEG MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case		Fy (ksi)	Cap (kips)	Leg Use %	Controls
1	20	12B - 12"BD 2.25"	360.34	0.9D + 1.0W 60° Wind		50	536.85	67.1	Member
2	40	12B - 12"BD 2.25"	327.02	0.9D + 1.0W 60° Wind		50	536.85	60.9	Member
3	60	12B - 12"BD 2"	289.36	0.9D + 1.0W 60° Wind		50	423.90	68.3	Member
4	80	12B - 12"BD 2"	249.58	0.9D + 1.0W 60° Wind		50	423.90	58.9	Member
5	100	12B - 12"BD 1.75"	205.60	0.9D + 1.0W 60° Wind		50	324.45	63.4	Member
6	120	12B - 12"BD 1.5"	157.34	0.9D + 1.0W 60° Wind		50	238.50	66.0	Member
7	130	12B - 12"BD 1.25"	100.97	0.9D + 1.0W 60° Wind		50	165.60	61.0	Member
8	150	SOL - 2" SOLID	93.24	0.9D + 1.0W 60° Wind		50	141.37	66.0	Member
9	170	SOL - 1 1/2" SOLID	32.56	0.9D + 1.0W 60° Wind		50	79.52	40.9	Member
10	180	SOL - 1 1/2" SOLID	8.01	0.9D + 1.0W 60° Wind		50	79.52	12.0	Bolt Shear

## 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
1	20	0.9D + 1.0W 60° Wind	335.25	0.00	0.0			0.9D + 1.0W 60° Wind	370.4	0.00		
2	40	0.9D + 1.0W 60° Wind	297.97	0.00	0.0			0.9D + 1.0W 60° Wind	335.2	457.92	73.2	1 1/4 A325
3	60	0.9D + 1.0W 60° Wind	259.03	0.00	0.0			0.9D + 1.0W 60° Wind	297.9	457.92	65.1	1 1/4 A325
4	80	0.9D + 1.0W 60° Wind	216.32	0.00	0.0			0.9D + 1.0W 60° Wind	259.0	457.92	56.6	1 1/4 A325
5	100	0.9D + 1.0W 60° Wind	169.92	0.00	0.0			0.9D + 1.0W 60° Wind	216.3	318.06	68.0	1 A325
6	120	0.9D + 1.0W 60° Wind	115.62	0.00	0.0			0.9D + 1.0W 60° Wind	169.9	318.06	53.4	1 A325
7	130	0.9D + 1.0W 60° Wind	92.66	0.00	0.0			0.9D + 1.0W 60° Wind	115.6	318.06	36.4	1 A325
8	150	0.9D + 1.0W 60° Wind	31.73	0.00	0.0			0.9D + 1.0W 60° Wind	92.66	318.06	29.1	1 A325
9	170	0.9D + 1.0W 60° Wind	8.01	0.00	0.0			0.9D + 1.0W 60° Wind	31.73	0.00		
10	180		0.00	0.00	0.0			0.9D + 1.0W 60° Wind	8.01	0.00		

## HORIZONTAL MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case	Fy (ksi)	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	100	-			36	0.00	0	0					
6	120	-			36	0.00	0	0					
7	130	-			36	0.00	0	0					
8	150	SOL - 1" SOLID	2.41	1.2D + 1.0W Normal Wi	50	35.34	0	0				6.8	Member
9	170	SOL - 3/4" SOLID	1.52	1.2D + 1.0W 90° Wind	50	19.88	0	0				7.6	Member
10	180	SOL - 7/8" SOLID	1.77	1.2D + 1.0W Normal Wi	50	27.06	0	0				6.5	Member

## DIAGONAL MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case	Fy (ksi)	Cap (kips)	Num Bolts	Num Holes	Shear Cap (kips)	Bear Cap (kips)	B.S. Cap (kips)	Use %	Controls
1	20	SAE - 3.5X3.5X0.3125	9.77	1.2D + 1.0W 90° Wind	36	54.17	1	1	48.32	37.52	23.70	41.2	Blck Shear
2	40	SAE - 3.5X3.5X0.3125	9.90	0.9D + 1.0W 90° Wind	36	54.17	1	1	48.32	37.52	23.70	41.8	Blck Shear
3	60	SAE - 3X3X0.3125	9.44	0.9D + 1.0W 90° Wind	36	44.05	1	1	48.32	37.52	23.70	39.8	Blck Shear
4	80	SAE - 3X3X0.3125	9.20	1.2D + 1.0W 90° Wind	36	44.05	1	1	48.32	37.52	23.70	38.8	Blck Shear
5	100	SAE - 3X3X0.1875	9.00	1.2D + 1.0W 90° Wind	36	28.68	1	1	35.34	17.94	11.68	77.0	Blck Shear
6	120	SAE - 3X3X0.1875	9.94	1.2D + 1.0W 90° Wind	36	28.68	1	1	35.34	17.94	11.68	85.1	Blck Shear
7	130	SAE - 2.5X2.5X0.1875	9.49	0.9D + 1.0W 60° Wind	36	22.55	1	1	35.34	17.94	10.66	89.0	Blck Shear

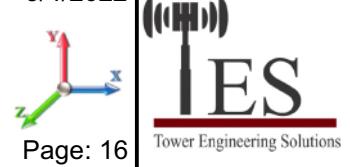
## Force/Stress Tension Summary

**Structure:** CT03241-S-SBA  
**Site Name:** Stonington 2, CT  
**Height:** 180.00 (ft)  
**Base Elev:** 0.000 (ft)  
**Gh:** 0.85

**Topography:** 1

**Code:** EIA/TIA-222-H  
**Exposure:** C  
**Crest Height:** 0.00  
**Site Class:** D - Stiff Soil  
**Struct Class:** III

3/4/2022



Page: 16

### 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	150	SOL - 1" SOLID	6.56	1.2D + 1.0W 90° Wind	50	35.34	0	0				18.6	Member
9	170	SOL - 3/4" SOLID	3.84	1.2D + 1.0W Normal Wi	50	19.88	0	0				19.3	Member
10	180	SOL - 3/4" SOLID	2.73	1.2D + 1.0W Normal Wi	50	19.88	0	0				13.7	Member

## Seismic Section Forces

**Structure:** CT03241-S-SBA  
**Site Name:** Stonington 2, CT  
**Height:** 180.00 (ft)  
**Base Elev:** 0.000 (ft)  
**Gh:** 0.85

**Topography:** 1

**Code:** TIA-222-H  
**Exposure:** C  
**Crest Height:** 0.00  
**Site Class:** D - Stiff Soil  
**Struct Class:** III

3/4/2022



Page: 17

**Load Case:** 1.2D + 1.0Ev + 1.0Eh

**Dead Load Factor** 1.20    **Sds** 0.195    **Ss** 0.1830    **Fa** 1.6000    **Ke** 1.1415    **TL** 6.0000

**Seismic Load Factor** 1.00    **Sd1** 0.083    **S1** 0.0520    **Fv** 2.4000    **Kg** 0.0000    **Cs** 0.0443

**Seismic Importance Factor** 1.25    **W1** 20.11    **R** 3.0000    **Vs** 2.0710    **T** 0.7829    **f1** 1.2772

Sect #	Elev (ft)	Wz (lb)	Lateral	Vertical
			Fsz (lbs)	Ev (lbs)
1	10.00	6303.9	24.89	246.23
2	30.00	6157.5	84.93	240.51
3	50.00	5408.7	131.22	211.26
4	70.00	5132.3	181.47	200.47
5	90.00	4038.1	183.88	157.73
6	110.00	6625.1	406.85	258.77
7	125.00	1317.2	74.48	51.45
8	140.00	8585.9	720.29	335.36
9	160.00	1200.9	88.83	46.91
10	175.00	1980.6	174.19	77.36

**Load Case:** 0.9D + 1.0Ev + 1.0Eh

**Dead Load Factor** 0.90    **Sds** 0.195    **Ss** 0.1830    **Fa** 1.6000    **Ke** 1.1415    **TL** 6.0000

**Seismic Load Factor** 1.00    **Sd1** 0.083    **S1** 0.0520    **Fv** 2.4000    **Kg** 0.0000    **Cs** 0.0443

**Seismic Importance Factor** 1.25    **W1** 20.11    **R** 3.0000    **Vs** 2.0710    **T** 0.7829    **f1** 1.2772

Sect #	Elev (ft)	Wz (lb)	Lateral	Vertical
			Fsz (lbs)	Ev (lbs)
1	10.00	6303.9	24.89	246.23
2	30.00	6157.5	84.93	240.51
3	50.00	5408.7	131.22	211.26
4	70.00	5132.3	181.47	200.47
5	90.00	4038.1	183.88	157.73
6	110.00	6625.1	406.85	258.77
7	125.00	1317.2	74.48	51.45
8	140.00	8585.9	720.29	335.36
9	160.00	1200.9	88.83	46.91
10	175.00	1980.6	174.19	77.36

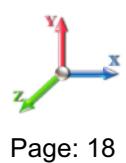
## Support Forces Summary

**Structure:** CT03241-S-SBA  
**Site Name:** Stonington 2, CT  
**Height:** 180.00 (ft)  
**Base Elev:** 0.000 (ft)  
**Gh:** 0.85

**Topography:** 1

**Code:** TIA-222-H  
**Exposure:** C  
**Crest Height:** 0.00  
**Site Class:** D - Stiff Soil

3/4/2022



Page: 18

Load Case	Node	FX (kips)	FY (kips)	FZ (kips)	(-) = Uplift (+) = Down
1.2D + 1.0W Normal Wind	1	0.02	412.64	-40.46	
	1a	14.90	-178.24	-10.68	
	1b	-14.92	-178.30	-10.65	
1.2D + 1.0W 60° Wind	1	-1.64	211.43	-20.37	
	1a	-18.31	209.01	8.93	
	1b	-31.75	-364.34	-18.40	
1.2D + 1.0W 90° Wind	1	-2.03	18.78	-1.41	
	1a	-30.18	351.52	16.54	
	1b	-28.01	-314.20	-15.13	
0.9D + 1.0W Normal Wind	1	0.02	407.28	-40.08	
	1a	15.20	-182.58	-10.87	
	1b	-15.22	-182.63	-10.84	
0.9D + 1.0W 60° Wind	1	-1.66	206.41	-20.00	
	1a	-17.99	204.02	8.73	
	1b	-32.05	-368.35	-18.58	
0.9D + 1.0W 90° Wind	1	-2.05	14.09	-1.04	
	1a	-29.86	346.29	16.34	
	1b	-28.31	-318.30	-15.30	
1.2D + 1.0Di + 1.0Wi Normal Wind	1	0.01	136.66	-7.57	
	1a	5.65	-15.30	-3.53	
	1b	-5.67	-15.37	-3.51	
1.2D + 1.0Di + 1.0Wi 60° Wind	1	-0.26	85.55	-2.76	
	1a	-2.45	84.17	1.21	
	1b	-9.73	-63.73	-5.63	
1.2D + 1.0Di + 1.0Wi 90° Wind	1	-0.32	35.45	1.91	
	1a	-5.39	120.87	3.01	
	1b	-8.72	-50.34	-4.92	
1.2D + 1.0Ev + 1.0Eh	1	0.00	34.62	7.17	
	1a	7.97	11.65	-4.60	
	1b	-7.97	11.65	-4.60	
0.9D + 1.0Ev + 1.0Eh	1	0.00	29.93	7.54	
	1a	8.29	6.99	-4.78	
	1b	-8.29	6.99	-4.78	
1.0D + 1.0W Normal Wind	1	0.00	92.53	-8.93	
	1a	2.11	-22.86	-1.64	
	1b	-2.12	-22.91	-1.64	
1.0D + 1.0W 60° Wind	1	-0.35	53.26	-4.96	
	1a	-4.44	52.76	2.20	
	1b	-5.43	-59.27	-3.15	
1.0D + 1.0W 90° Wind	1	-0.42	15.63	-1.21	
	1a	-6.79	80.59	3.72	
	1b	-4.70	-49.47	-2.50	

### Max Reactions

Leg	Overspinning
Max Uplift: -368.35 (kips)	Moment: 6140.88 (ft-kips)
Max Down: 412.64 (kips)	Total Down: 56.10 (kips)
Max Shear: 40.46 (kips)	Total Shear: 61.80 (kips)

## Analysis Summary

<b>Structure:</b> CT03241-S-SBA	<b>Code:</b> TIA-222-H	3/4/2022
<b>Site Name:</b> Stonington 2, CT	<b>Exposure:</b> C	
<b>Height:</b> 180.00 (ft)	<b>Crest Height:</b> 0.00	
<b>Base Elev:</b> 0.000 (ft)	<b>Site Class:</b> D - Stiff Soil	
<b>Gh:</b> 0.85	<b>Topography:</b> 1	<b>Struct Class:</b> III
		Page: 20



### Max Reactions

Leg		Overturning	
Max Uplift:	-368.35 (kips)	Moment:	6140.88 (ft-kips)
Max Down:	412.64 (kips)	Total Down:	56.10 (kips)
Max Shear:	40.46 (kips)	Total Shear:	61.80 (kips)

### Anchor Bolts

Bolt Size (in.): 1.25	Number Bolts: 6	Type: Grout Existing
Yield Strength (Ksi): 105.00	Tensile Strength (Ksi): 150.00	
<b>Interaction Ratios:</b>		
Tensile: 0.57	Compression: OK!	Length: 1.75

### Max Usages

Max Leg: 91.8% (1.2D + 1.0W Normal Wind - Sect 8)  
 Max Diag: 89.0% (0.9D + 1.0W 60° Wind - Sect 7)  
 Max Horiz: 47.7% (1.2D + 1.0W 90° Wind - Sect 9)

### Max Deflection, Twist and Sway

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)
0.9D + 1.0Ev + 1.0Eh - Normal To Face	40.00	0.0060	0.0004	0.0127
	50.00	0.0034	0.0000	0.0136
	60.00	0.0103	-0.0006	0.0178
	70.00	0.0135	0.0007	0.0211
	90.00	0.0193	0.0000	0.0301
	100.00	0.0273	-0.0012	0.0341
	120.00	0.0410	0.0015	0.0458
	139.92	0.0601	0.0015	0.0603
	150.00	0.0713	0.0016	0.0879
	164.54	0.0884	0.0008	0.0713
	177.23	0.1047	-0.0008	0.0691
	180.00	0.1081	0.0008	0.0755
0.9D + 1.0W 137 mph Wind at 60° From Face	40.00	0.0974	0.0201	0.2624
	50.00	0.1505	-0.0136	0.3422
	60.00	0.2208	0.0076	0.4208
	70.00	0.3018	0.0390	0.5017
	90.00	0.5063	-0.0224	0.6965
	100.00	0.6415	-0.0222	0.7921
	120.00	0.9700	0.0888	1.0659
	139.92	1.4040	1.1355	1.4293
	150.00	1.6717	2.1853	2.3196
	164.54	2.0768	6.8052	2.8844
	177.23	2.4631	3.3574	1.7213
	180.00	2.5432	7.9955	3.9353

0.9D + 1.0W 137 mph Wind at 90° From Face	40.00	0.0993	-0.0294	0.2630
	50.00	0.1499	-0.0385	0.3402
	60.00	0.2200	0.0103	0.4219
	70.00	0.3010	-0.0538	0.5010
	90.00	0.5057	-0.0723	0.6893
	100.00	0.6397	-0.0794	0.7894
	120.00	0.9664	-0.0964	1.0603
	139.92	1.4005	-0.5481	1.4010
	150.00	1.6648	-1.0034	2.2843
	164.54	2.0635	-2.9730	1.0562
	177.23	2.4385	0.1101	1.8705
	180.00	2.5057	-3.0377	1.6907
<hr/>				
0.9D + 1.0W 137 mph Wind at Normal To Face	40.00	0.1028	0.0061	0.2698
	50.00	0.1579	0.0000	0.3545
	60.00	0.2233	-0.0149	0.4348
	70.00	0.3096	-0.0175	0.5141
	90.00	0.5229	-0.0001	0.7246
	100.00	0.6574	-0.0271	0.8133
	120.00	0.9939	-0.0357	1.0937
	139.92	1.4415	-0.3270	1.4699
	150.00	1.7196	-0.6691	2.3884
	164.54	2.1509	-2.2476	4.4498
	177.23	2.5655	-0.1547	1.3251
	180.00	2.6854	-2.2214	6.1032
<hr/>				
1.0D + 1.0W 60 mph Wind at 60° From Face	40.00	0.0192	-0.0044	0.0512
	50.00	0.0296	-0.0057	0.0666
	60.00	0.0430	0.0005	0.0822
	70.00	0.0588	-0.0079	0.0976
	90.00	0.0988	-0.0106	0.1350
	100.00	0.1247	-0.0115	0.1537
	120.00	0.1881	-0.0135	0.2061
	139.92	0.2725	0.0506	0.2744
	150.00	0.3241	0.0926	0.4481
	164.54	0.4026	0.2693	0.4512
	177.23	0.4771	0.1249	0.3364
	180.00	0.4926	0.3168	0.6507
<hr/>				
1.0D + 1.0W 60 mph Wind at 90° From Face	40.00	0.0196	-0.0057	0.0514
	50.00	0.0294	-0.0075	0.0664
	60.00	0.0429	0.0020	0.0824
	70.00	0.0589	-0.0104	0.0976
	90.00	0.0986	-0.0140	0.1339
	100.00	0.1244	-0.0153	0.1532
	120.00	0.1883	-0.0186	0.2054
	139.92	0.2719	-0.1048	0.2712
	150.00	0.3230	-0.1918	0.4408
	164.54	0.4002	-0.5682	0.1955
	177.23	0.4726	0.0149	0.3611
	180.00	0.4859	-0.5764	0.3215
<hr/>				
1.0D + 1.0W 60 mph Wind at Normal To Face	40.00	0.0203	0.0012	0.0528
	50.00	0.0311	0.0000	0.0692
	60.00	0.0436	-0.0029	0.0850
	70.00	0.0607	-0.0034	0.1002
	90.00	0.1023	0.0000	0.1411
	100.00	0.1285	-0.0053	0.1582
	120.00	0.1941	-0.0069	0.2122
	139.92	0.2803	-0.0655	0.2847
	150.00	0.3342	-0.1337	0.4598
	164.54	0.4177	-0.4491	0.8564
	177.23	0.4979	-0.0249	0.2570
	180.00	0.5213	-0.4481	1.1741

1.2D + 1.0Di + 1.0Wi 50 mph Wind at 60° From Face	40.00	0.0244	-0.0061	0.0688
	50.00	0.0384	-0.0080	0.0893
	60.00	0.0583	0.0012	0.1119
	70.00	0.0797	-0.0110	0.1338
	90.00	0.1337	-0.0146	0.1884
	100.00	0.1710	-0.0160	0.2170
	120.00	0.2622	0.0216	0.3019
	139.92	0.3908	0.2449	0.4339
	150.00	0.4744	0.4690	0.7710
	164.54	0.6047	1.4493	1.6435
	177.23	0.7339	0.3080	0.5421
	180.00	0.7615	1.6308	0.9827
<hr/>				
1.2D + 1.0Di + 1.0Wi 50 mph Wind at 90° From Face	40.00	0.0247	-0.0100	0.0690
	50.00	0.0385	-0.0131	0.0884
	60.00	0.0576	0.0027	0.1115
	70.00	0.0789	-0.0184	0.1330
	90.00	0.1330	-0.0249	0.1853
	100.00	0.1694	-0.0278	0.2147
	120.00	0.2602	-0.0362	0.2979
	139.92	0.3869	-0.3431	0.4237
	150.00	0.4686	-0.6509	0.7510
	164.54	0.5952	-2.0019	1.3116
	177.23	0.7175	0.0289	0.5663
	180.00	0.7413	-2.0291	0.2461
<hr/>				
1.2D + 1.0Di + 1.0Wi 50 mph Wind at Normal From Face	40.00	0.0260	-0.0003	0.0710
	50.00	0.0397	0.0000	0.0930
	60.00	0.0582	-0.0035	0.1153
	70.00	0.0803	-0.0042	0.1376
	90.00	0.1380	-0.0001	0.1975
	100.00	0.1750	-0.0068	0.2245
	120.00	0.2709	-0.0096	0.3146
	139.92	0.4049	-0.2499	0.4615
	150.00	0.4940	-0.4948	0.8016
	164.54	0.6386	-1.6119	2.4451
	177.23	0.7815	-0.0509	0.4736
	180.00	0.8234	-1.6102	1.9039
<hr/>				
1.2D + 1.0Ev + 1.0Eh - Normal To Face	40.00	0.0059	0.0004	0.0127
	50.00	0.0035	0.0000	0.0136
	60.00	0.0103	-0.0006	0.0179
	70.00	0.0135	-0.0007	0.0211
	90.00	0.0194	0.0000	0.0303
	100.00	0.0273	-0.0012	0.0342
	120.00	0.0410	0.0015	0.0460
	139.92	0.0603	0.0015	0.0604
	150.00	0.0715	0.0016	0.0883
	164.54	0.0886	0.0008	0.0716
	177.23	0.1049	-0.0008	0.0693
	180.00	0.1084	0.0008	0.0758
<hr/>				
1.2D + 1.0W 137 mph Wind at 60° From Face	40.00	0.0975	0.0202	0.2629
	50.00	0.1508	-0.0135	0.3429
	60.00	0.2212	0.0076	0.4218
	70.00	0.3024	0.0391	0.5029
	90.00	0.5074	-0.0223	0.6983
	100.00	0.6428	-0.0221	0.7942
	120.00	0.9723	0.0891	1.0692
	139.92	1.4078	1.1400	1.4345
	150.00	1.6766	2.1941	2.3306
	164.54	2.0833	6.8324	2.8905
	177.23	2.4711	3.3722	1.7273
	180.00	2.5516	8.0279	3.9448

1.2D + 1.0W 137 mph Wind at 90° From Face	40.00	0.0995	-0.0294	0.2635
	50.00	0.1502	-0.0385	0.3409
	60.00	0.2203	0.0103	0.4229
	70.00	0.3015	-0.0538	0.5021
	90.00	0.5068	-0.0724	0.6911
	100.00	0.6411	-0.0794	0.7915
	120.00	0.9686	-0.0965	1.0636
	139.92	1.4043	-0.5482	1.4060
	150.00	1.6696	-1.0035	2.2952
	164.54	2.0698	-2.9726	1.0500
	177.23	2.4462	0.1111	1.8766
	180.00	2.5137	-3.0375	1.6858
<hr/>				
1.2D + 1.0W 137 mph Wind at Normal To Face	40.00	0.1030	0.0061	0.2703
	50.00	0.1582	0.0000	0.3552
	60.00	0.2236	-0.0149	0.4358
	70.00	0.3102	-0.0175	0.5153
	90.00	0.5241	-0.0001	0.7265
	100.00	0.6589	-0.0272	0.8156
	120.00	0.9966	-0.0358	1.0972
	139.92	1.4455	-0.3266	1.4752
	150.00	1.7247	-0.6684	2.4000
	164.54	2.1576	-2.2460	4.4567
	177.23	2.5738	-0.1551	1.3305
	180.00	2.6941	-2.2193	6.1181



## Mat Foundation Design for Self Supporting Tower

Date
3/1/2022

Customer Name:	SBA Communications Corp	TIA Standard:	TIA-222-H
Site Name:		Structure Height (Ft.):	180
Site Nmber:	CT03241-S-SBA	Engineer Name:	J. Tibbetts
Engr. Number:	125215	Engineer Login ID:	

**Foundation Info Obtained from:**

## Drawings/Calculations

## Analysis

3 Legs

Analysis or Design?Number of Tower Legs:Base Reactions (Factored):

## (1). Individual Leg:

Axial Load (Kips):

412.6

Shear Force (Kips):

40.5

Uplift Force (Kips):

368.4

## (2). Tower Base:

Total Vertical Load (Kips):

56.1

Moment (Kips-ft):

6140.9

Total Shear Force (Kips):

61.8

Foundation Geometries:

Leg distance (Center-to-Center ft.):

18.0

Diameter of Pier (ft.):

3.5

Tower center to mat center (ft.):

2.6

Length of Pad (ft.):

27

Thickness of Pad (ft.):

3.25

Mods required -Yes/No ?:

No

Pier Height A. G. (ft.):

0.50

Depth of Base BG (ft.):

7.0

Width of Pad (ft.):

27

Material Properties and Rebar Info:

Concrete Strength (psi):

4500

Vertical bar yield (ksi)

60

Vertical Rebar Size #:

9

Qty. of Vertical Rebars:

17

Pad Rebar Yield (Ksi):

60

Concrete Cover (in.):

3

Rebar at the bottom of the concrete pad:

41

Qty. of Rebar in Pad (L):

41

Rebar at the top of the concrete pad:

41

Qty. of Rebar in Pad (L):

41

Soil Design Parameters:

Soil Unit Weight (pcf):

120.0

Water Table B.G.S. (ft.):

13.0

Ultimate Bearing Pressure (psf):

12000

Consider Soil Lateral Resistance ?

Yes

Soil Buoyant Weight:

50.0

Unit Weight of Water:

62.4

Consider ties in concrete shear strength:

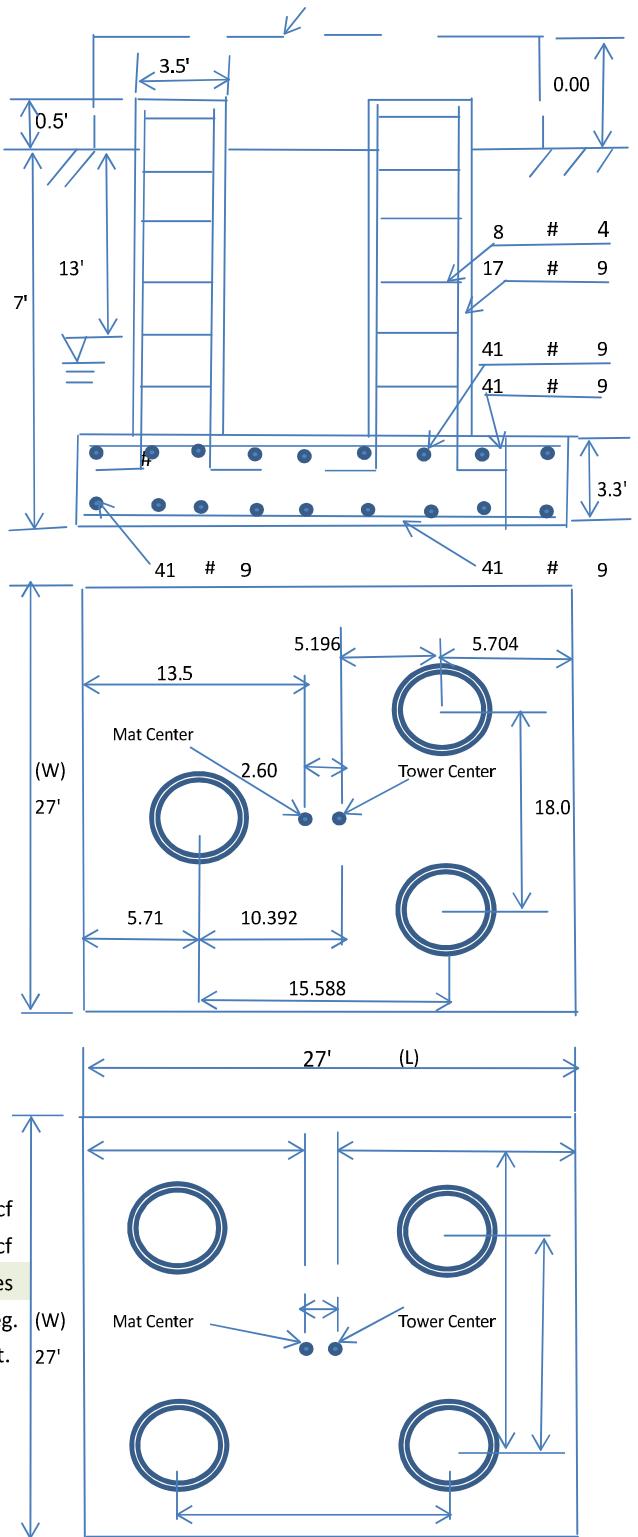
Yes

Enter soil C (psf) or Phi (deg.):

25.0

Depth to ignor lateral resistance

1.0



<b>Foundation Analysis and Design:</b>	Uplift Strength Reduction Factor:	0.75	Compression Strength Reduction Factor:	0.75		
Total Dry Soil Volume (cu. Ft.):	2625.51	Total Dry Soil Weight (Kips):	315.06			
Total Buoyant Soil Volume (cu. Ft.):	0.00	Total Buoyant Soil Weight (Kips):	0.00			
Total Effective Soil Weight (Kips):	315.06	Weight from the Concrete Block at Top (K):	0.00			
Total Dry Concrete Volume (cu. Ft.):	2491.92	Total Dry Concrete Weight (Kips):	373.79			
Total Buoyant Concrete Volume (cu. Ft.):	0.00	Total Buoyant Concrete Weight (Kips):	0.00			
Total Effective Concrete Weight (Kips):	373.79	Total Vertical Load on Base (Kips):	744.95			
<b>Check Soil Capacities:</b>					Load/ Capacity Ratio	
Calculated Maximum Net Soil Pressure under the base (psf):	3809.04	< Allowable Factored Soil Bearing (psf):	9000	0.42	OK!	
Allowable Foundation Overturning Resistance (kips-ft.):	9126.9	> Design Factored Moment (kips-ft.):	6714	0.74	OK!	
Factor of Safety Against Overturning (O. R. Moment/Design Moment):	1.36	OK!				
<b>Check the capacities of Reinforcing Concrete:</b>						
Strength reduction factor (Flexure and axial tension):	0.90	Strength reduction factor (Shear):	0.75			
Strength reduction factor (Axial compression):	0.65	Wind Load Factor on Concrete Design:	1.00			
<b>(1) Concrete Pier:</b>					Load/ Capacity Ratio	
Vertical Steel Rebar Area (sq. in./each):	1.00	Tie / Stirrup Area (sq. in./each):	0.20			
Calculated Moment Capacity (Mn,Kips-Ft):	727.8	> Design Factored Moment (Mu, Kips-Ft)	169.3	0.23	OK!	
Calculated Shear Capacity (Kips):	109.5	> Design Factored Shear (Kips):	40.5	0.37	OK!	
Calculated Tension Capacity (Tn, Kips):	918.0	> Design Factored Tension (Tu Kips):	368.4	0.40	OK!	
Calculated Compression Capacity (Pn, Kips):	2721.8	> Design Factored Axial Load (Pu Kips):	412.6	0.15	OK!	
Moment & Tension Strength Combination:	0.23	OK! Check Tie Spacing (Design/Req'd):	1.00			
Pier Reinforcement Ratio:	0.012	Reinforcement Ratio is satisfied per ACI				
<b>(2).Concrete Pad:</b>						
One-Way Design Shear Capacity (L or W Direction, Kips):	1155.3	> One-Way Factored Shear (L/W-Dir Kips	246.2	0.21	OK!	
One-Way Design Shear Capacity (Diagonal Dir., Kips):	972.6	> One-Way Factored Shear (Dia. Dir, Kips	294.4	0.30	OK!	
Lower Steel Pad Reinforcement Ratio (L or W-Direct. ):	0.0036	Lower Steel Reinf. Ratio (Dia. Dir.):	0.0032			
Lower Steel Pad Moment Capacity (L or W-Dir. Kips-ft):	6349.6	> Moment at Bottom ( L-Direct. K-Ft):	980.8	0.15	OK!	
Lower Steel Pad Moment Capacity (Dia. Direction,K-ft):	6204.0	> Moment at Bottom ( Dia. Dir. K-Ft):	2228.4	0.36	OK!	
Upper Steel Pad Reinforcement Ratio (L or W -Direction):	0.0036	Upper Steel Reinf. Ratio (Dia. Dir.):	0.0032			
Upper Steel Pad Moment Capacity (L or W-Dir., Kips-ft):	6349.6	> Moment at the top ( L-Dir Kips-Ft):	389.3	0.06	OK!	
Upper Steel Pad Moment Capacity (Dia. Direction, K-ft):	6204.0	> Moment at the top ( Dia. Dir., K-Ft):	714.8	0.12	OK!	
Punching Failure Capacity From Down Load (Kips):	1735.0	> Punch. Failure Factored Shear (K):	412.6	0.24	OK!	
Punching Failure Capacity From Uplift (Kips):	1575.3	> Punch. Failure Factored Shear (K):	368.4	0.23	OK!	
<b>(3). Check Max. eccentricity of Loading:</b>						
The maximum eccentricity of Loading:	9.01	ft.	Allowable eccentricity (0.45 W, ft.):	12.15		OK!



Maser Consulting Connecticut  
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## Replacement Antenna Mount Analysis Report and PMI Requirements

Mount Analysis-R

SMART Tool Project #: 10117341  
Maser Consulting Connecticut Project #: 21777773A

November 22, 2021

Site ID:	468000-VZW / PAWCATUCK CT
Site Name:	PAWCATUCK CT
Carrier Name:	Verizon Wireless
Address:	173 South Broad Street Pawcatuck, Connecticut 06379
	New London County
Latitude:	41.369056°
Longitude:	-71.862361°

**Structure Information**

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

FUZE ID # 16242110

**Analysis Results**

Sector Frame: 26.7% Pass w/ Mount Replacement

**\*\*\*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 may also be Noted on A & E drawings*

*For additional questions and support, please reach out to:*

*pmisupport@colliersengineering.com*

Report Prepared By: Garrett Smith



## **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: 324661, dated November 16, 2021
Mount Specification	Site Pro 1, P/N # VFA12-HD
Construction Drawings	Nexius, Project #: VZ11509, dated August 17, 2021

## **Analysis Criteria:**

Codes and Standards: ANSI/TIA-222-H

Wind Parameters: Basic Wind Speed (Ultimate 3-sec. Gust),  $V_{ULT}$ : 129 mph  
Ice Wind Speed (3-sec. Gust): 50 mph  
Design Ice Thickness: 1.00 in  
Risk Category: II  
Exposure Category: C  
Topographic Category: 1  
Topographic Feature Considered: N/A  
Topographic Method: N/A  
Ground Elevation Factor,  $K_e$ : 0.999

Seismic Parameters:  $S_s$ : 0.18 g  
 $S_1$ : 0.05 g

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
148.00	150.00	3	JMA Wireless	MX06FRO660-03	Added
		3	Samsung	MT6407-77A	
		3	Commscope	CBC61923T-DS-43	
		1	Raycap	RVZDC-6627-PF-48	
		6	Decibel	DB844H90E-XY	Retained

It is acceptable to install up to any three (3) of the OVP model numbers listed below 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 in accordance with the NSTD-446 Standard, the mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer's specifications.
4. All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected member unless otherwise specified in this report.
5. The mount was checked up to, and including, the bolts that fasten it to the mount collar/attachment and threaded rod connections in collar members if applicable. Local deformation and interaction between the mount collar/attachment and the supporting tower structure are outside the scope of this analysis.
6. All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. Maser Consulting Connecticut is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.

7. Structural Steel Grades have been assumed as follows, if applicable, unless otherwise noted in this analysis:

- |                                      |                     |
|--------------------------------------|---------------------|
| 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
Tieback	6.7%	Pass
Standoff Vertical	7.2%	Pass
Antenna Pipe	26.7%	Pass
Standoff Diagonal	5.0%	Pass
Standoff Plate	24.6%	Pass
Standoff Horizontal	21.2%	Pass
Face Horizontal	19.6%	Pass
Connection Check	9.0%	Pass

<b>Structure Rating – (Controlling Utilization of all Components)</b>	<b>26.7%</b>
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### Recommendation:

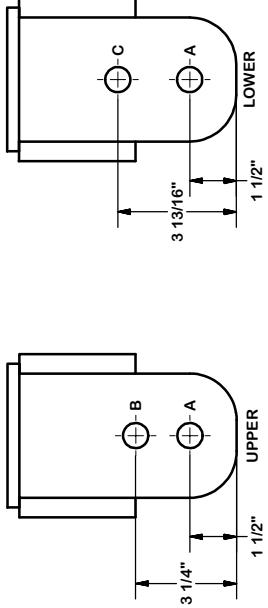
The proposed antenna mounts are **SUFFICIENT** for the final loading configuration and do not require modifications.

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:

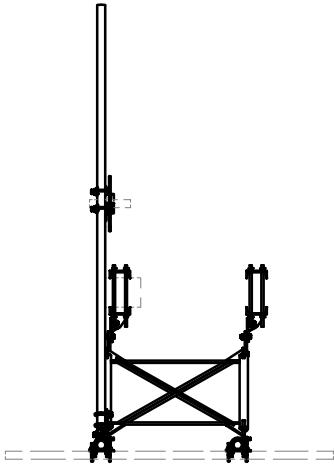
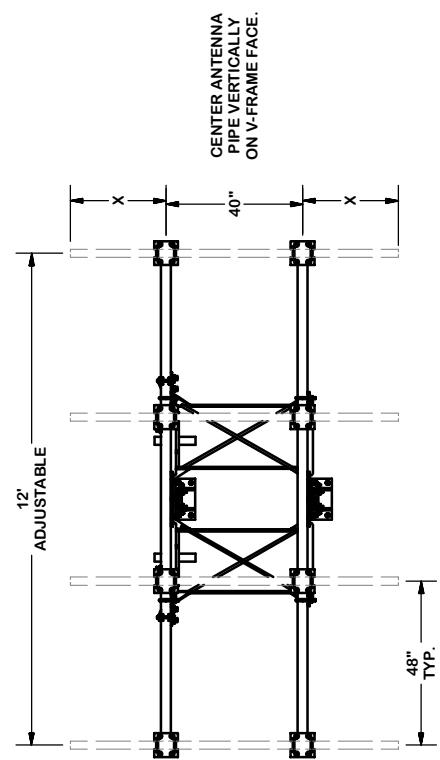
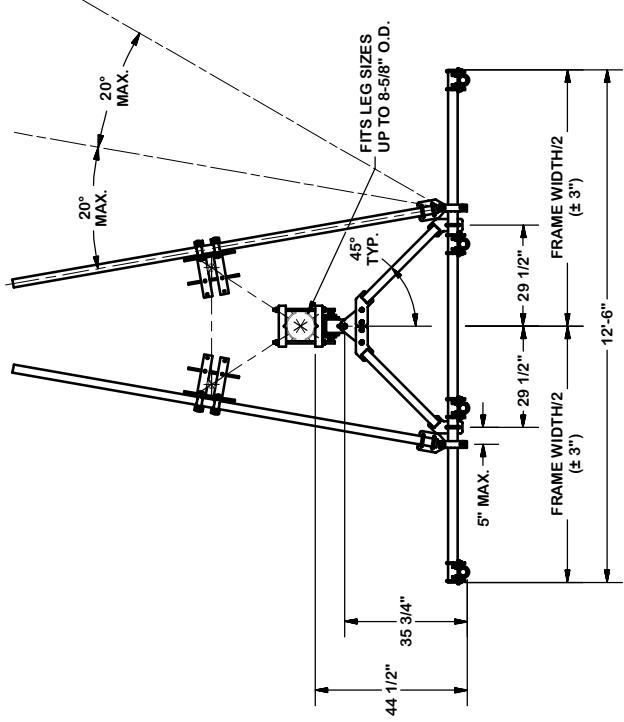
1. Mount Photos
2. Analysis Calculations
3. **Contractor Required Post Installation Inspection (PMI) Report Deliverables**
4. Antenna Placement Diagrams
5. TIA Adoption and Wind Speed Usage Letter





**NOTES:**

1. USE HOLE "A" IN UPPER AND LOWER BRACKETS FOR STRAIGHT LEGS.
2. USE HOLE "A" IN UPPER BRACKET AND HOLE "C" IN LOWER BRACKET FOR 2" IN 20' TAPER LEGS (3.309")
3. USE HOLE "B" IN UPPER BRACKET AND HOLE "C" IN LOWER BRACKET FOR 6" IN 20' TAPER LEGS. (0.827")

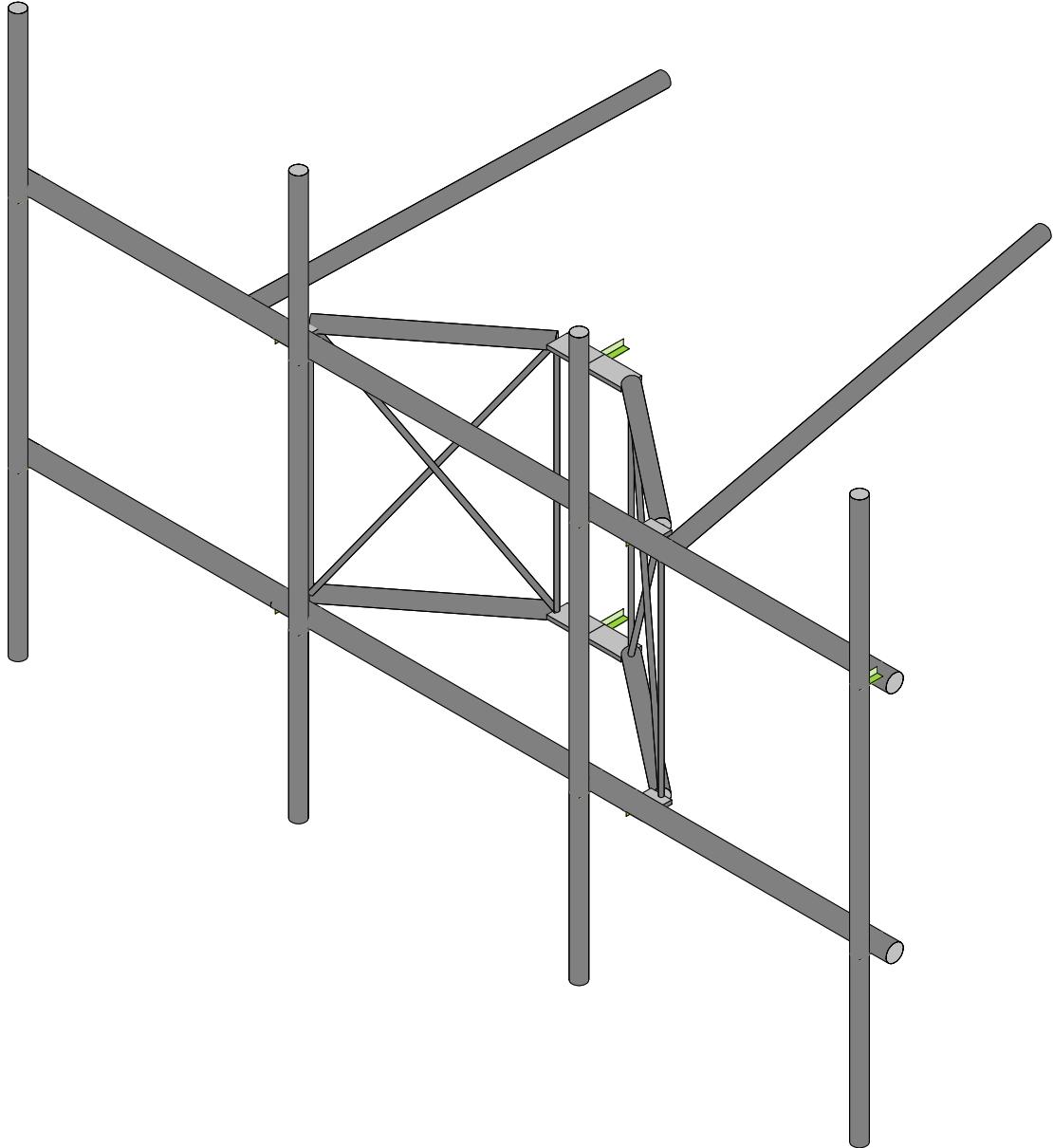
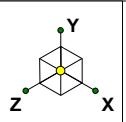


#### TOLERANCE NOTES

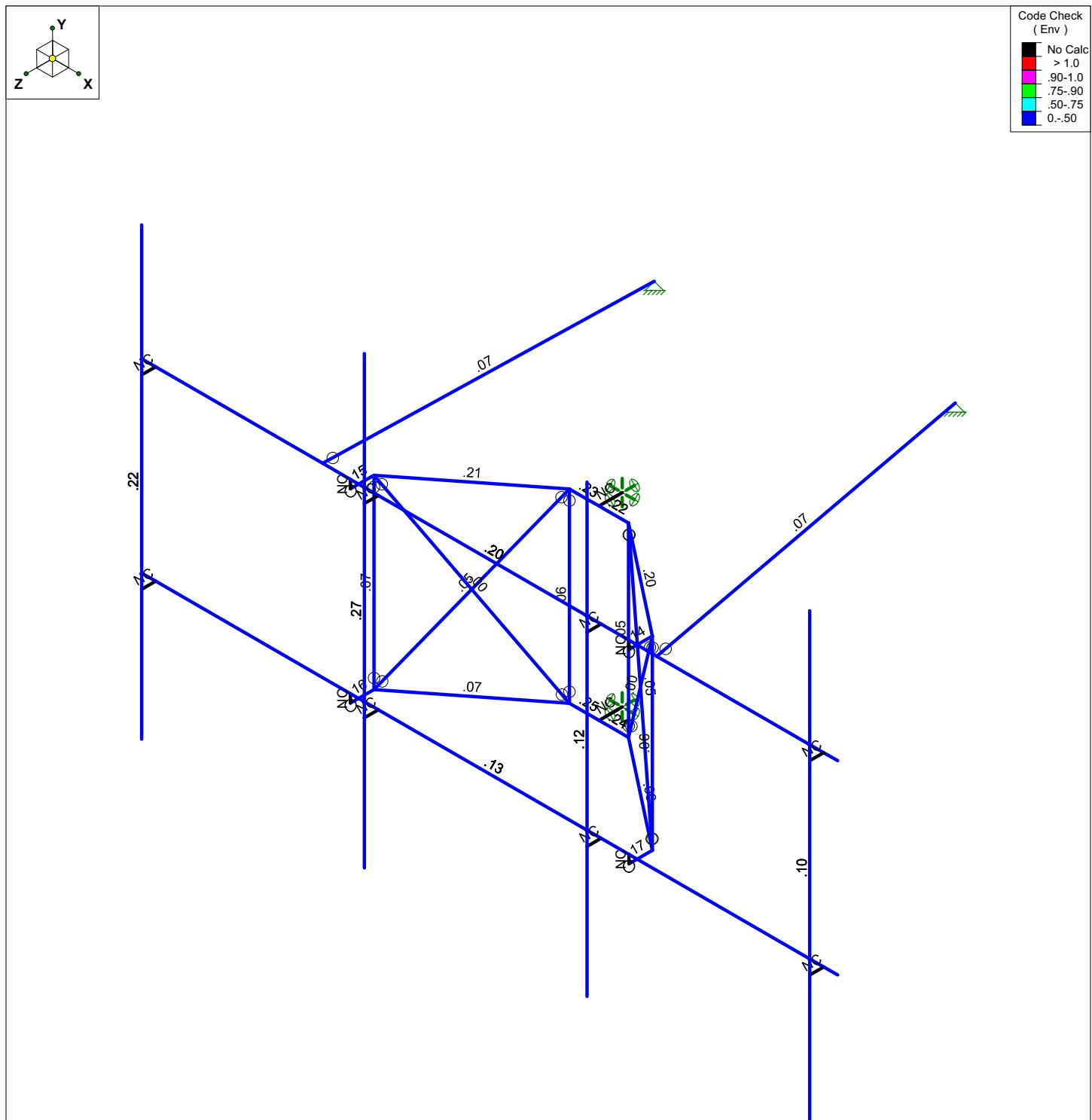
TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:  
 SAWED, SHEARED AND GAS CUT EDGES ( $\pm 0.030"$ )  
 DRILLED AND GAS CUT HOLES ( $\pm 0.030"$ ) - NO CONING OF HOLES  
 LASER CUT EDGES AND HOLES ( $\pm 0.010"$ ) - NO CONING OF HOLES  
 BENDS ARE  $\pm 1/2$  DEGREE  
 ALL OTHER MACHINING ( $\pm 0.030"$ )  
 ALL OTHER ASSEMBLY ( $\pm 0.060"$ )

PROPRIETARY NOTE:  
 THE DATA AND TECHNIQUE CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALMON INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF VALMON INDUSTRIES IS STRICTLY PROHIBITED.

SITE PRO 1			
Engineering Support Team 1-888-753-7446 ▲ valmont.com			
DESCRIPTION	12'-6" HEAVY DUTY V-FRAME ASSEMBLY WITH TWO STIFF ARMS	ENG. APPROVAL	PART NO.
CRD NO.	DRAWN BY CEK	6/1/2015	VFA12-HD
CLASS	SUB	DRAWING USAGE	DWG. NO.
81	02	CUSTOMER	BMC
REV.	DATE	CHECKED BY	2/2/2017
A	CHANGED TIE-BACK FRONT CONNECTION	OPD BY	
	DESCRIPTION OF REVISIONS	CEK	2/2/2017
REV.	REVISION HISTORY		



		SK - 1
		Nov 19, 2021 at 11:54 AM
		468000-VZW_MT_LOT_A_H.r3d

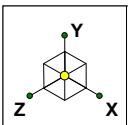


## Member Code Checks Displayed (Enveloped) Results for LC 1, 1.2D+1.0Wo (0 Deg)

SK - 2

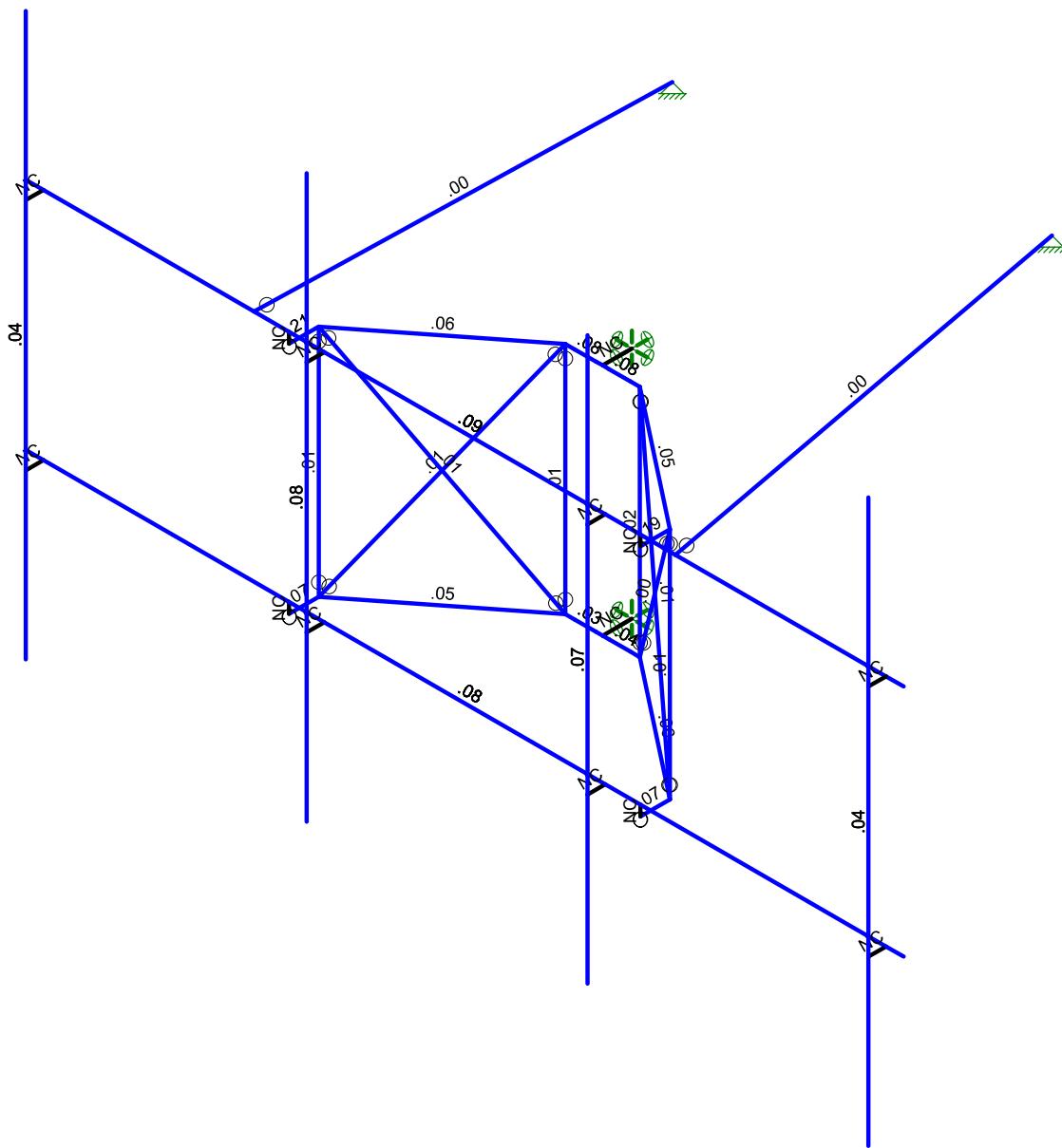
Nov 19, 2021 at 11:54 AM

468000-VZW\_MT\_LOT\_A\_H.r3d



Shear Check  
( Env )

Black	No Calc
Red	> 1.0
Magenta	.90-1.0
Green	.75-.90
Cyan	.50-.75
Blue	0-.50



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

SK - 3

Nov 19, 2021 at 11:54 AM

468000-VZW\_MT\_LOT\_A\_H.r3d

**Basic Load Cases**

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...)	Surface(P...)
1	Antenna D	None					30		
2	Antenna Di	None					30		
3	Antenna Wo (0 Deg)	None					30		
4	Antenna Wo (30 Deg)	None					30		
5	Antenna Wo (60 Deg)	None					30		
6	Antenna Wo (90 Deg)	None					30		
7	Antenna Wo (120 Deg)	None					30		
8	Antenna Wo (150 Deg)	None					30		
9	Antenna Wo (180 Deg)	None					30		
10	Antenna Wo (210 Deg)	None					30		
11	Antenna Wo (240 Deg)	None					30		
12	Antenna Wo (270 Deg)	None					30		
13	Antenna Wo (300 Deg)	None					30		
14	Antenna Wo (330 Deg)	None					30		
15	Antenna Wi (0 Deg)	None					30		
16	Antenna Wi (30 Deg)	None					30		
17	Antenna Wi (60 Deg)	None					30		
18	Antenna Wi (90 Deg)	None					30		
19	Antenna Wi (120 Deg)	None					30		
20	Antenna Wi (150 Deg)	None					30		
21	Antenna Wi (180 Deg)	None					30		
22	Antenna Wi (210 Deg)	None					30		
23	Antenna Wi (240 Deg)	None					30		
24	Antenna Wi (270 Deg)	None					30		
25	Antenna Wi (300 Deg)	None					30		
26	Antenna Wi (330 Deg)	None					30		
27	Antenna Wm (0 Deg)	None					30		
28	Antenna Wm (30 Deg)	None					30		
29	Antenna Wm (60 Deg)	None					30		
30	Antenna Wm (90 Deg)	None					30		
31	Antenna Wm (120 Deg)	None					30		
32	Antenna Wm (150 Deg)	None					30		
33	Antenna Wm (180 Deg)	None					30		
34	Antenna Wm (210 Deg)	None					30		
35	Antenna Wm (240 Deg)	None					30		
36	Antenna Wm (270 Deg)	None					30		
37	Antenna Wm (300 Deg)	None					30		
38	Antenna Wm (330 Deg)	None					30		
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 Deg)	None						56	
58 Structure Wi (150 Deg)	None						56	
59 Structure Wi (180 Deg)	None						56	
60 Structure Wi (210 Deg)	None						56	
61 Structure Wi (240 Deg)	None						56	
62 Structure Wi (270 Deg)	None						56	
63 Structure Wi (300 Deg)	None						56	
64 Structure Wi (330 Deg)	None						56	
65 Structure Wm (0 Deg)	None						56	
66 Structure Wm (30 Deg)	None						56	
67 Structure Wm (60 Deg)	None						56	
68 Structure Wm (90 Deg)	None						56	
69 Structure Wm (120 Deg)	None						56	
70 Structure Wm (150 Deg)	None						56	
71 Structure Wm (180 Deg)	None						56	
72 Structure Wm (210 Deg)	None						56	
73 Structure Wm (240 Deg)	None						56	
74 Structure Wm (270 Deg)	None						56	
75 Structure Wm (300 Deg)	None						56	
76 Structure Wm (330 Deg)	None						56	
77 Lm1	None					1		
78 Lm2	None					1		
79 Lv1	None					1		
80 Lv2	None					1		
81 Antenna Ev	None					30		
82 Antenna Eh (0 Deg)	None					20		
83 Antenna Eh (90 Deg)	None					20		
84 Structure Ev	ELY			-.02				
85 Structure Eh (0 Deg)	ELZ		-.049					
86 Structure Eh (90 Deg)	ELX				.049			

**Load Combinations**

Description	S...	PDelta	S... B... Fa...					
1 1.2D+1.0Wo (0 Deg)	Yes	Y	1 1.2 39 1.2 3 1 41 1					
2 1.2D+1.0Wo (30 Deg)	Yes	Y	1 1.2 39 1.2 4 1 42 1					
3 1.2D+1.0Wo (60 Deg)	Yes	Y	1 1.2 39 1.2 5 1 43 1					
4 1.2D+1.0Wo (90 Deg)	Yes	Y	1 1.2 39 1.2 6 1 44 1					
5 1.2D+1.0Wo (120 Deg)	Yes	Y	1 1.2 39 1.2 7 1 45 1					
6 1.2D+1.0Wo (150 Deg)	Yes	Y	1 1.2 39 1.2 8 1 46 1					
7 1.2D+1.0Wo (180 Deg)	Yes	Y	1 1.2 39 1.2 9 1 47 1					
8 1.2D+1.0Wo (210 Deg)	Yes	Y	1 1.2 39 1.2 10 1 48 1					
9 1.2D+1.0Wo (240 Deg)	Yes	Y	1 1.2 39 1.2 11 1 49 1					
10 1.2D+1.0Wo (270 Deg)	Yes	Y	1 1.2 39 1.2 12 1 50 1					
11 1.2D+1.0Wo (300 Deg)	Yes	Y	1 1.2 39 1.2 13 1 51 1					
12 1.2D+1.0Wo (330 Deg)	Yes	Y	1 1.2 39 1.2 14 1 52 1					
13 1.2D + 1.0Di + 1.0Wi (0 Deg)	Yes	Y	1 1.2 39 1.2 2 1 40 1 15 1 53 1					
14 1.2D + 1.0Di + 1.0Wi (30 Deg)	Yes	Y	1 1.2 39 1.2 2 1 40 1 16 1 54 1					
15 1.2D + 1.0Di + 1.0Wi (60 Deg)	Yes	Y	1 1.2 39 1.2 2 1 40 1 17 1 55 1					
16 1.2D + 1.0Di + 1.0Wi (90 Deg)	Yes	Y	1 1.2 39 1.2 2 1 40 1 18 1 56 1					
17 1.2D + 1.0Di + 1.0Wi (120 Deg)	Yes	Y	1 1.2 39 1.2 2 1 40 1 19 1 57 1					
18 1.2D + 1.0Di + 1.0Wi (150 Deg)	Yes	Y	1 1.2 39 1.2 2 1 40 1 20 1 58 1					
19 1.2D + 1.0Di + 1.0Wi (180 Deg)	Yes	Y	1 1.2 39 1.2 2 1 40 1 21 1 59 1					
20 1.2D + 1.0Di + 1.0Wi (210 Deg)	Yes	Y	1 1.2 39 1.2 2 1 40 1 22 1 60 1					
21 1.2D + 1.0Di + 1.0Wi (240 Deg)	Yes	Y	1 1.2 39 1.2 2 1 40 1 23 1 61 1					
22 1.2D + 1.0Di + 1.0Wi (270 Deg)	Yes	Y	1 1.2 39 1.2 2 1 40 1 24 1 62 1					

**Load Combinations (Continued)**

	Description	S...	PDelta	S...B...	Fa...B...															
23	1.2D + 1.0Di + 1.0Wi (300 Deg)	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1				
24	1.2D + 1.0Di + 1.0Wi (330 Deg)	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1				
25	1.2D + 1.5Lm1 + 1.0Wm (0 D...)	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1						
26	1.2D + 1.5Lm1 + 1.0Wm (30 ...)	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1						
27	1.2D + 1.5Lm1 + 1.0Wm (60 ...)	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1						
28	1.2D + 1.5Lm1 + 1.0Wm (90 ...)	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1						
29	1.2D + 1.5Lm1 + 1.0Wm (120 ...)	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1						
30	1.2D + 1.5Lm1 + 1.0Wm (150 ...)	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1						
31	1.2D + 1.5Lm1 + 1.0Wm (180 ...)	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1						
32	1.2D + 1.5Lm1 + 1.0Wm (210 ...)	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1						
33	1.2D + 1.5Lm1 + 1.0Wm (240 ...)	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1						
34	1.2D + 1.5Lm1 + 1.0Wm (270 ...)	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1						
35	1.2D + 1.5Lm1 + 1.0Wm (300 ...)	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1						
36	1.2D + 1.5Lm1 + 1.0Wm (330 ...)	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1						
37	1.2D + 1.5Lm2 + 1.0Wm (0 D...)	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1						
38	1.2D + 1.5Lm2 + 1.0Wm (30 ...)	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1						
39	1.2D + 1.5Lm2 + 1.0Wm (60 ...)	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1						
40	1.2D + 1.5Lm2 + 1.0Wm (90 ...)	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1						
41	1.2D + 1.5Lm2 + 1.0Wm (120 ...)	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1						
42	1.2D + 1.5Lm2 + 1.0Wm (150 ...)	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1						
43	1.2D + 1.5Lm2 + 1.0Wm (180 ...)	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1						
44	1.2D + 1.5Lm2 + 1.0Wm (210 ...)	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1						
45	1.2D + 1.5Lm2 + 1.0Wm (240 ...)	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1						
46	1.2D + 1.5Lm2 + 1.0Wm (270 ...)	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1						
47	1.2D + 1.5Lm2 + 1.0Wm (300 ...)	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1						
48	1.2D + 1.5Lm2 + 1.0Wm (330 ...)	Yes	Y		1	1.2	39	1.2	78	1.5	38	1	76	1						
49	1.2D + 1.5Lv1	Yes	Y		1	1.2	39	1.2	79	1.5										
50	1.2D + 1.5Lv2	Yes	Y		1	1.2	39	1.2	80	1.5										
51	1.4D	Yes	Y		1	1.4	39	1.4												
52	1.2D + 1.0Ev + 1.0Eh (0 Deg)	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	1	83	E...	1	E...		
53	1.2D + 1.0Ev + 1.0Eh (30 Deg)	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.866	.83	.5	E...	.866	.5	
54	1.2D + 1.0Ev + 1.0Eh (60 Deg)	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.5	.83	.866	.5	E...	.866	
55	1.2D + 1.0Ev + 1.0Eh (90 Deg)	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82		.83	1	E...	E...	1	
56	1.2D + 1.0Ev + 1.0Eh (120 Deg)	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.5	.83	.866	E...	-.5	E...	.866
57	1.2D + 1.0Ev + 1.0Eh (150 Deg)	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.8	.83	.5	E...	-.8	E...	.5
58	1.2D + 1.0Ev + 1.0Eh (180 Deg)	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-1	.83	E...	-1	E...		
59	1.2D + 1.0Ev + 1.0Eh (210 Deg)	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.8	.83	-.5	E...	-.8	E...	-.5
60	1.2D + 1.0Ev + 1.0Eh (240 Deg)	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.5	.83	-.8	E...	-.5	E...	-.8
61	1.2D + 1.0Ev + 1.0Eh (270 Deg)	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82		.83	-1	E...	E...	-1	
62	1.2D + 1.0Ev + 1.0Eh (300 Deg)	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.5	.83	-.8	E...	.5	E...	-.8
63	1.2D + 1.0Ev + 1.0Eh (330 Deg)	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.866	.83	-.5	E...	.866	E...	-.5
64	0.9D - 1.0Ev + 1.0Eh (0 Deg)	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	1	83	E...	1	E...		
65	0.9D - 1.0Ev + 1.0Eh (30 Deg)	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.866	.83	.5	E...	.866	E...	.5
66	0.9D - 1.0Ev + 1.0Eh (60 Deg)	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.5	.83	.866	.5	E...	.866	
67	0.9D - 1.0Ev + 1.0Eh (90 Deg)	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82		.83	1	E...	E...	1	
68	0.9D - 1.0Ev + 1.0Eh (120 Deg)	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.5	.83	.866	E...	-.5	E...	.866
69	0.9D - 1.0Ev + 1.0Eh (150 Deg)	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.8	.83	.5	E...	-.8	E...	.5
70	0.9D - 1.0Ev + 1.0Eh (180 Deg)	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-1	.83	E...	-1	E...		
71	0.9D - 1.0Ev + 1.0Eh (210 Deg)	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.8	.83	-.5	E...	-.8	E...	-.5
72	0.9D - 1.0Ev + 1.0Eh (240 Deg)	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.5	.83	-.8	E...	-.5	E...	-.8
73	0.9D - 1.0Ev + 1.0Eh (270 Deg)	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82		.83	-1	E...	E...	-1	
74	0.9D - 1.0Ev + 1.0Eh (300 Deg)	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.5	.83	-.8	E...	.5	E...	-.8
75	0.9D - 1.0Ev + 1.0Eh (330 Deg)	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.866	.83	-.5	E...	.866	E...	-.5

### 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	
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	N58A	-2.833333	3.479167	8.083333	0	
55	N59	-5.333333	0.145833	8.083333	0	
56	N60	-5.333333	3.479167	8.083333	0	

### Joint Coordinates and Temperatures (Continued)

Label		X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
57	N61	-0.333333	0.145833	8.083333	0	
58	N62	-0.333333	3.479167	8.083333	0	
59	N59A	-5.833333	3.479167	8.083333	0	
60	N60A	0.166667	3.479167	8.083333	0	
61	N65A	-5.833009	3.333333	2.128251	0	
62	N66A	-1.237239	3.333333	1.317893	0	

### Hot Rolled Steel Section Sets

Label	Shape	Type	Design List	Material	Design ...	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	FACE	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	LIVE2	N7	N15		RIGID	None	None	RIGID	Typical
7	M9	N10	N18		RIGID	None	None	RIGID	Typical
8	LIVE1	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	OVP	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

**Member Primary Data (Continued)**

Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
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		Antenna Pipe	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	M43	N59A	N65A		Tieback	Beam	Pipe	Q235	Typical
44	M44A	N60A	N66A		Tieback	Beam	Pipe	Q235	Typical

**Member Advanced Data**

Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	FACE					Yes				None
2	M2					Yes				None
3	M3					Yes	** NA **			None
4	M4					Yes	** NA **			None
5	M5					Yes	** NA **			None
6	LIVE2					Yes	** NA **			None
7	M9					Yes	** NA **			None
8	LIVE1					Yes	** NA **			None
9	M11					Yes	** NA **			None
10	M12					Yes	** NA **			None
11	M13					Yes	Default			None
12	M14					Yes	Default			None
13	M15					Yes				None
14	M16					Yes				None
15	OVP					Yes	Default			None
16	M18					Yes				None
17	M19					Yes				None
18	M20					Yes	Default			None
19	M21					Yes	Default			None
20	M22					Yes				None
21	M23					Yes				None
22	M24					Yes				None
23	M25	BenPIN	BenPIN		Euler Buc..	Yes	Default			None
24	M26	BenPIN	BenPIN		Euler Buc..	Yes	Default			None
25	M27	BenPIN	BenPIN		Euler Buc..	Yes				None
26	M28	BenPIN	BenPIN		Euler Buc..	Yes				None
27	M29					Yes	** NA **		Inactive	None
28	M30					Yes	** NA **		Inactive	None
29	MP4A					Yes				None
30	MP3A					Yes				None

**Member Advanced Data (Continued)**

Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
31	MP2A					Yes				None
32	MP1A					Yes				None
33	M44	BenPIN	BenPIN			Yes				None
34	M45	BenPIN	BenPIN			Yes				None
35	M46	BenPIN	BenPIN			Yes				None
36	M47	BenPIN	BenPIN			Yes	Default			None
37	M47B		OOOXOO			Yes	** NA **			None
38	M48A		OOOXOO			Yes	** NA **			None
39	M49A		OOOXOO			Yes	** NA **			None
40	M50A		OOOXOO			Yes	** NA **			None
41	M51A					Yes	** NA **			None
42	M52A					Yes	** NA **			None
43	M43	BenPIN				Yes	Default			None
44	M44A	BenPIN				Yes	Default			None

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	Y	-23
2	MP3A	My	-.011
3	MP3A	Mz	-.004
4	MP3A	Y	-23
5	MP3A	My	-.011
6	MP3A	Mz	-.004
7	MP2A	Y	-43.55
8	MP2A	My	-.02
9	MP2A	Mz	-.007
10	MP2A	Y	-43.55
11	MP2A	My	-.02
12	MP2A	Mz	-.007
13	MP3A	Y	-10.4
14	MP3A	My	.005
15	MP3A	Mz	0
16	OVP	Y	-32
17	OVP	Mv	0
18	OVP	Mz	0
19	MP1A	Y	-7
20	MP1A	My	-.004
21	MP1A	Mz	0
22	MP1A	Y	-7
23	MP1A	My	-.004
24	MP1A	Mz	0
25	MP4A	Y	-7
26	MP4A	My	-.004
27	MP4A	Mz	0
28	MP4A	Y	-7
29	MP4A	My	-.004
30	MP4A	Mz	0

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	Y	-82.955
2	MP3A	My	-.039
3	MP3A	Mz	-.014
4	MP3A	Y	-82.955
5	MP3A	My	-.039

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
6	MP3A	Mz	-.014
7	MP2A	Y	-35.831
8	MP2A	My	-.017
9	MP2A	Mz	-.006
10	MP2A	Y	-35.831
11	MP2A	My	-.017
12	MP2A	Mz	-.006
13	MP3A	Y	-10.816
14	MP3A	My	.005
15	MP3A	Mz	0
16	OVP	Y	-88.442
17	OVP	Mv	0
18	OVP	Mz	0
19	MP1A	Y	-32.517
20	MP1A	My	-.016
21	MP1A	Mz	0
22	MP1A	Y	-32.517
23	MP1A	My	-.016
24	MP1A	Mz	0
25	MP4A	Y	-32.517
26	MP4A	My	-.016
27	MP4A	Mz	0
28	MP4A	Y	-32.517
29	MP4A	My	-.016
30	MP4A	Mz	0

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP3A	X	0
2	MP3A	Z	-238.633
3	MP3A	Mx	.041
4	MP3A	X	0
5	MP3A	Z	-238.633
6	MP3A	Mx	.041
7	MP2A	X	0
8	MP2A	Z	-108.811
9	MP2A	Mx	.019
10	MP2A	X	0
11	MP2A	Z	-108.811
12	MP2A	Mx	.019
13	MP3A	X	0
14	MP3A	Z	-18.445
15	MP3A	Mx	0
16	OVP	X	0
17	OVP	Z	-190.4
18	OVP	Mx	0
19	MP1A	X	0
20	MP1A	Z	-76.023
21	MP1A	Mx	0
22	MP1A	X	0
23	MP1A	Z	-76.023
24	MP1A	Mx	0
25	MP4A	X	0
26	MP4A	Z	-76.023
27	MP4A	Mx	0
28	MP4A	X	0

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
29	MP4A	Z	-76.023
30	MP4A	Mx	0

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP3A	X	122.056
2	MP3A	Z	-211.408
3	MP3A	Mx	-.021
4	MP3A	X	122.056
5	MP3A	Z	-211.408
6	MP3A	Mx	-.021
7	MP2A	X	57.5
8	MP2A	Z	-99.594
9	MP2A	Mx	-.01
10	MP2A	X	57.5
11	MP2A	Z	-99.594
12	MP2A	Mx	-.01
13	MP3A	X	8.512
14	MP3A	Z	-14.743
15	MP3A	Mx	.004
16	OVP	X	83.205
17	OVP	Z	-144.115
18	OVP	Mx	0
19	MP1A	X	39.771
20	MP1A	Z	-68.886
21	MP1A	Mx	-.02
22	MP1A	X	39.771
23	MP1A	Z	-68.886
24	MP1A	Mx	-.02
25	MP4A	X	39.771
26	MP4A	Z	-68.886
27	MP4A	Mx	-.02
28	MP4A	X	39.771
29	MP4A	Z	-68.886
30	MP4A	Mx	-.02

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP3A	X	190.473
2	MP3A	Z	-109.969
3	MP3A	Mx	-.071
4	MP3A	X	190.473
5	MP3A	Z	-109.969
6	MP3A	Mx	-.071
7	MP2A	X	75.947
8	MP2A	Z	-43.848
9	MP2A	Mx	-.028
10	MP2A	X	75.947
11	MP2A	Z	-43.848
12	MP2A	Mx	-.028
13	MP3A	X	12.283
14	MP3A	Z	-7.091
15	MP3A	Mx	.006
16	OVP	X	133.726
17	OVP	Z	-77.207
18	OVP	Mx	0

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
19 MP1A	X	74.982	1
20 MP1A	Z	-43.291	1
21 MP1A	Mx	-.037	1
22 MP1A	X	74.982	4
23 MP1A	Z	-43.291	4
24 MP1A	Mx	-.037	4
25 MP4A	X	74.982	1
26 MP4A	Z	-43.291	1
27 MP4A	Mx	-.037	1
28 MP4A	X	74.982	4
29 MP4A	Z	-43.291	4
30 MP4A	Mx	-.037	4

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1 MP3A	X	190.286	.5
2 MP3A	Z	0	.5
3 MP3A	Mx	-.089	.5
4 MP3A	X	190.286	4.5
5 MP3A	Z	0	4.5
6 MP3A	Mx	-.089	4.5
7 MP2A	X	54.203	1.5
8 MP2A	Z	0	1.5
9 MP2A	Mx	-.025	1.5
10 MP2A	X	54.203	3.5
11 MP2A	Z	0	3.5
12 MP2A	Mx	-.025	3.5
13 MP3A	X	12.762	4
14 MP3A	Z	0	4
15 MP3A	Mx	.006	4
16 OVP	X	166.409	1.25
17 OVP	Z	0	1.25
18 OVP	Mx	0	1.25
19 MP1A	X	90.101	1
20 MP1A	Z	0	1
21 MP1A	Mx	-.045	1
22 MP1A	X	90.101	4
23 MP1A	Z	0	4
24 MP1A	Mx	-.045	4
25 MP4A	X	90.101	1
26 MP4A	Z	0	1
27 MP4A	Mx	-.045	1
28 MP4A	X	90.101	4
29 MP4A	Z	0	4
30 MP4A	Mx	-.045	4

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1 MP3A	X	160.047	.5
2 MP3A	Z	92.403	.5
3 MP3A	Mx	-.091	.5
4 MP3A	X	160.047	4.5
5 MP3A	Z	92.403	4.5
6 MP3A	Mx	-.091	4.5
7 MP2A	X	41.581	1.5
8 MP2A	Z	24.007	1.5

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
9	MP2A	Mx	-.024
10	MP2A	X	41.581
11	MP2A	Z	24.007
12	MP2A	Mx	-.024
13	MP3A	X	12.283
14	MP3A	Z	7.091
15	MP3A	Mx	.006
16	OVP	X	164.891
17	OVP	Z	95.2
18	OVP	Mx	0
19	MP1A	X	74.982
20	MP1A	Z	43.291
21	MP1A	Mx	-.037
22	MP1A	X	74.982
23	MP1A	Z	43.291
24	MP1A	Mx	-.037
25	MP4A	X	74.982
26	MP4A	Z	43.291
27	MP4A	Mx	-.037
28	MP4A	X	74.982
29	MP4A	Z	43.291
30	MP4A	Mx	-.037

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP3A	X	104.49
2	MP3A	Z	180.982
3	MP3A	Mx	-.08
4	MP3A	X	104.49
5	MP3A	Z	180.982
6	MP3A	Mx	-.08
7	MP2A	X	37.659
8	MP2A	Z	65.227
9	MP2A	Mx	-.029
10	MP2A	X	37.659
11	MP2A	Z	65.227
12	MP2A	Mx	-.029
13	MP3A	X	8.512
14	MP3A	Z	14.743
15	MP3A	Mx	.004
16	OVP	X	101.198
17	OVP	Z	175.28
18	OVP	Mx	0
19	MP1A	X	39.771
20	MP1A	Z	68.886
21	MP1A	Mx	-.02
22	MP1A	X	39.771
23	MP1A	Z	68.886
24	MP1A	Mx	-.02
25	MP4A	X	39.771
26	MP4A	Z	68.886
27	MP4A	Mx	-.02
28	MP4A	X	39.771
29	MP4A	Z	68.886
30	MP4A	Mx	-.02

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP3A	X	0	.5
2	MP3A	Z	238.633	.5
3	MP3A	Mx	-.041	.5
4	MP3A	X	0	4.5
5	MP3A	Z	238.633	4.5
6	MP3A	Mx	-.041	4.5
7	MP2A	X	0	1.5
8	MP2A	Z	108.811	1.5
9	MP2A	Mx	-.019	1.5
10	MP2A	X	0	3.5
11	MP2A	Z	108.811	3.5
12	MP2A	Mx	-.019	3.5
13	MP3A	X	0	4
14	MP3A	Z	18.445	4
15	MP3A	Mx	0	4
16	OVP	X	0	1.25
17	OVP	Z	190.4	1.25
18	OVP	Mx	0	1.25
19	MP1A	X	0	1
20	MP1A	Z	76.023	1
21	MP1A	Mx	0	1
22	MP1A	X	0	4
23	MP1A	Z	76.023	4
24	MP1A	Mx	0	4
25	MP4A	X	0	1
26	MP4A	Z	76.023	1
27	MP4A	Mx	0	1
28	MP4A	X	0	4
29	MP4A	Z	76.023	4
30	MP4A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP3A	X	-122.056	.5
2	MP3A	Z	211.408	.5
3	MP3A	Mx	.021	.5
4	MP3A	X	-122.056	4.5
5	MP3A	Z	211.408	4.5
6	MP3A	Mx	.021	4.5
7	MP2A	X	-57.5	1.5
8	MP2A	Z	99.594	1.5
9	MP2A	Mx	.01	1.5
10	MP2A	X	-57.5	3.5
11	MP2A	Z	99.594	3.5
12	MP2A	Mx	.01	3.5
13	MP3A	X	-8.512	4
14	MP3A	Z	14.743	4
15	MP3A	Mx	-.004	4
16	OVP	X	-83.205	1.25
17	OVP	Z	144.115	1.25
18	OVP	Mx	0	1.25
19	MP1A	X	-39.771	1
20	MP1A	Z	68.886	1
21	MP1A	Mx	.02	1
22	MP1A	X	-39.771	4
23	MP1A	Z	68.886	4

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
24	MP1A	Mx	.02
25	MP4A	X	-39.771
26	MP4A	Z	68.886
27	MP4A	Mx	.02
28	MP4A	X	-39.771
29	MP4A	Z	68.886
30	MP4A	Mx	.02

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP3A	X	-190.473
2	MP3A	Z	109.969
3	MP3A	Mx	.071
4	MP3A	X	-190.473
5	MP3A	Z	109.969
6	MP3A	Mx	.071
7	MP2A	X	-75.947
8	MP2A	Z	43.848
9	MP2A	Mx	.028
10	MP2A	X	-75.947
11	MP2A	Z	43.848
12	MP2A	Mx	.028
13	MP3A	X	-12.283
14	MP3A	Z	7.091
15	MP3A	Mx	-.006
16	OVP	X	-133.726
17	OVP	Z	77.207
18	OVP	Mx	0
19	MP1A	X	-74.982
20	MP1A	Z	43.291
21	MP1A	Mx	.037
22	MP1A	X	-74.982
23	MP1A	Z	43.291
24	MP1A	Mx	.037
25	MP4A	X	-74.982
26	MP4A	Z	43.291
27	MP4A	Mx	.037
28	MP4A	X	-74.982
29	MP4A	Z	43.291
30	MP4A	Mx	.037

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP3A	X	-190.286
2	MP3A	Z	0
3	MP3A	Mx	.089
4	MP3A	X	-190.286
5	MP3A	Z	0
6	MP3A	Mx	.089
7	MP2A	X	-54.203
8	MP2A	Z	0
9	MP2A	Mx	.025
10	MP2A	X	-54.203
11	MP2A	Z	0
12	MP2A	Mx	.025
13	MP3A	X	-12.762

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
14 MP3A	Z	0	4
15 MP3A	Mx	-.006	4
16 OVP	X	-166.409	1.25
17 OVP	Z	0	1.25
18 OVP	Mx	0	1.25
19 MP1A	X	-90.101	1
20 MP1A	Z	0	1
21 MP1A	Mx	.045	1
22 MP1A	X	-90.101	4
23 MP1A	Z	0	4
24 MP1A	Mx	.045	4
25 MP4A	X	-90.101	1
26 MP4A	Z	0	1
27 MP4A	Mx	.045	1
28 MP4A	X	-90.101	4
29 MP4A	Z	0	4
30 MP4A	Mx	.045	4

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1 MP3A	X	-160.047	.5
2 MP3A	Z	-92.403	.5
3 MP3A	Mx	.091	.5
4 MP3A	X	-160.047	4.5
5 MP3A	Z	-92.403	4.5
6 MP3A	Mx	.091	4.5
7 MP2A	X	-41.581	1.5
8 MP2A	Z	-24.007	1.5
9 MP2A	Mx	.024	1.5
10 MP2A	X	-41.581	3.5
11 MP2A	Z	-24.007	3.5
12 MP2A	Mx	.024	3.5
13 MP3A	X	-12.283	4
14 MP3A	Z	-7.091	4
15 MP3A	Mx	-.006	4
16 OVP	X	-164.891	1.25
17 OVP	Z	-95.2	1.25
18 OVP	Mx	0	1.25
19 MP1A	X	-74.982	1
20 MP1A	Z	-43.291	1
21 MP1A	Mx	.037	1
22 MP1A	X	-74.982	4
23 MP1A	Z	-43.291	4
24 MP1A	Mx	.037	4
25 MP4A	X	-74.982	1
26 MP4A	Z	-43.291	1
27 MP4A	Mx	.037	1
28 MP4A	X	-74.982	4
29 MP4A	Z	-43.291	4
30 MP4A	Mx	.037	4

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1 MP3A	X	-104.49	.5
2 MP3A	Z	-180.982	.5
3 MP3A	Mx	.08	.5

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
4	MP3A	X	-104.49
5	MP3A	Z	-180.982
6	MP3A	Mx	.08
7	MP2A	X	-37.659
8	MP2A	Z	-65.227
9	MP2A	Mx	.029
10	MP2A	X	-37.659
11	MP2A	Z	-65.227
12	MP2A	Mx	.029
13	MP3A	X	-8.512
14	MP3A	Z	-14.743
15	MP3A	Mx	-.004
16	OVP	X	-101.198
17	OVP	Z	-175.28
18	OVP	Mx	0
19	MP1A	X	-39.771
20	MP1A	Z	-68.886
21	MP1A	Mx	.02
22	MP1A	X	-39.771
23	MP1A	Z	-68.886
24	MP1A	Mx	.02
25	MP4A	X	-39.771
26	MP4A	Z	-68.886
27	MP4A	Mx	.02
28	MP4A	X	-39.771
29	MP4A	Z	-68.886
30	MP4A	Mx	.02

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP3A	X	0
2	MP3A	Z	-39.173
3	MP3A	Mx	.007
4	MP3A	X	0
5	MP3A	Z	-39.173
6	MP3A	Mx	.007
7	MP2A	X	0
8	MP2A	Z	-18.56
9	MP2A	Mx	.003
10	MP2A	X	0
11	MP2A	Z	-18.56
12	MP2A	Mx	.003
13	MP3A	X	0
14	MP3A	Z	-4.076
15	MP3A	Mx	0
16	OVP	X	0
17	OVP	Z	-32.583
18	OVP	Mx	0
19	MP1A	X	0
20	MP1A	Z	-13.536
21	MP1A	Mx	0
22	MP1A	X	0
23	MP1A	Z	-13.536
24	MP1A	Mx	0
25	MP4A	X	0
26	MP4A	Z	-13.536

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
27 MP4A	Mx	0	1
28 MP4A	X	0	4
29 MP4A	Z	-13.536	4
30 MP4A	Mx	0	4

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1 MP3A	X	20.013	.5
2 MP3A	Z	-34.663	.5
3 MP3A	Mx	-.003	.5
4 MP3A	X	20.013	4.5
5 MP3A	Z	-34.663	4.5
6 MP3A	Mx	-.003	4.5
7 MP2A	X	9.775	1.5
8 MP2A	Z	-16.932	1.5
9 MP2A	Mx	-.002	1.5
10 MP2A	X	9.775	3.5
11 MP2A	Z	-16.932	3.5
12 MP2A	Mx	-.002	3.5
13 MP3A	X	1.911	4
14 MP3A	Z	-3.31	4
15 MP3A	Mx	.000956	4
16 OVP	X	14.414	1.25
17 OVP	Z	-24.966	1.25
18 OVP	Mx	0	1.25
19 MP1A	X	7.037	1
20 MP1A	Z	-12.188	1
21 MP1A	Mx	-.004	1
22 MP1A	X	7.037	4
23 MP1A	Z	-12.188	4
24 MP1A	Mx	-.004	4
25 MP4A	X	7.037	1
26 MP4A	Z	-12.188	1
27 MP4A	Mx	-.004	1
28 MP4A	X	7.037	4
29 MP4A	Z	-12.188	4
30 MP4A	Mx	-.004	4

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1 MP3A	X	31.407	.5
2 MP3A	Z	-18.133	.5
3 MP3A	Mx	-.012	.5
4 MP3A	X	31.407	4.5
5 MP3A	Z	-18.133	4.5
6 MP3A	Mx	-.012	4.5
7 MP2A	X	13.145	1.5
8 MP2A	Z	-7.589	1.5
9 MP2A	Mx	-.005	1.5
10 MP2A	X	13.145	3.5
11 MP2A	Z	-7.589	3.5
12 MP2A	Mx	-.005	3.5
13 MP3A	X	2.87	4
14 MP3A	Z	-1.657	4
15 MP3A	Mx	.001	4
16 OVP	X	23.34	1.25

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
17 OVP	Z	-13.475	1.25
18 OVP	Mx	0	1.25
19 MP1A	X	13.119	1
20 MP1A	Z	-7.574	1
21 MP1A	Mx	-.007	1
22 MP1A	X	13.119	4
23 MP1A	Z	-7.574	4
24 MP1A	Mx	-.007	4
25 MP4A	X	13.119	1
26 MP4A	Z	-7.574	1
27 MP4A	Mx	-.007	1
28 MP4A	X	13.119	4
29 MP4A	Z	-7.574	4
30 MP4A	Mx	-.007	4

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1 MP3A	X	31.654	.5
2 MP3A	Z	0	.5
3 MP3A	Mx	-.015	.5
4 MP3A	X	31.654	4.5
5 MP3A	Z	0	4.5
6 MP3A	Mx	-.015	4.5
7 MP2A	X	9.814	1.5
8 MP2A	Z	0	1.5
9 MP2A	Mx	-.005	1.5
10 MP2A	X	9.814	3.5
11 MP2A	Z	0	3.5
12 MP2A	Mx	-.005	3.5
13 MP3A	X	3.06	4
14 MP3A	Z	0	4
15 MP3A	Mx	.002	4
16 OVP	X	28.828	1.25
17 OVP	Z	0	1.25
18 OVP	Mx	0	1.25
19 MP1A	X	15.687	1
20 MP1A	Z	0	1
21 MP1A	Mx	-.008	1
22 MP1A	X	15.687	4
23 MP1A	Z	0	4
24 MP1A	Mx	-.008	4
25 MP4A	X	15.687	1
26 MP4A	Z	0	1
27 MP4A	Mx	-.008	1
28 MP4A	X	15.687	4
29 MP4A	Z	0	4
30 MP4A	Mx	-.008	4

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1 MP3A	X	26.676	.5
2 MP3A	Z	15.401	.5
3 MP3A	Mx	-.015	.5
4 MP3A	X	26.676	4.5
5 MP3A	Z	15.401	4.5
6 MP3A	Mx	-.015	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
7	MP2A	X	7.641	1.5
8	MP2A	Z	4.411	1.5
9	MP2A	Mx	-.004	1.5
10	MP2A	X	7.641	3.5
11	MP2A	Z	4.411	3.5
12	MP2A	Mx	-.004	3.5
13	MP3A	X	2.87	4
14	MP3A	Z	1.657	4
15	MP3A	Mx	.001	4
16	OVP	X	28.218	1.25
17	OVP	Z	16.292	1.25
18	OVP	Mx	0	1.25
19	MP1A	X	13.119	1
20	MP1A	Z	7.574	1
21	MP1A	Mx	-.007	1
22	MP1A	X	13.119	4
23	MP1A	Z	7.574	4
24	MP1A	Mx	-.007	4
25	MP4A	X	13.119	1
26	MP4A	Z	7.574	1
27	MP4A	Mx	-.007	1
28	MP4A	X	13.119	4
29	MP4A	Z	7.574	4
30	MP4A	Mx	-.007	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP3A	X	17.281	.5
2	MP3A	Z	29.931	.5
3	MP3A	Mx	-.013	.5
4	MP3A	X	17.281	4.5
5	MP3A	Z	29.931	4.5
6	MP3A	Mx	-.013	4.5
7	MP2A	X	6.598	1.5
8	MP2A	Z	11.428	1.5
9	MP2A	Mx	-.005	1.5
10	MP2A	X	6.598	3.5
11	MP2A	Z	11.428	3.5
12	MP2A	Mx	-.005	3.5
13	MP3A	X	1.911	4
14	MP3A	Z	3.31	4
15	MP3A	Mx	.000956	4
16	OVP	X	17.23	1.25
17	OVP	Z	29.844	1.25
18	OVP	Mx	0	1.25
19	MP1A	X	7.037	1
20	MP1A	Z	12.188	1
21	MP1A	Mx	-.004	1
22	MP1A	X	7.037	4
23	MP1A	Z	12.188	4
24	MP1A	Mx	-.004	4
25	MP4A	X	7.037	1
26	MP4A	Z	12.188	1
27	MP4A	Mx	-.004	1
28	MP4A	X	7.037	4
29	MP4A	Z	12.188	4

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
30 MP4A	Mx	- .004	4

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1 MP3A	X	0	.5
2 MP3A	Z	39.173	.5
3 MP3A	Mx	-.007	.5
4 MP3A	X	0	4.5
5 MP3A	Z	39.173	4.5
6 MP3A	Mx	-.007	4.5
7 MP2A	X	0	1.5
8 MP2A	Z	18.56	1.5
9 MP2A	Mx	-.003	1.5
10 MP2A	X	0	3.5
11 MP2A	Z	18.56	3.5
12 MP2A	Mx	-.003	3.5
13 MP3A	X	0	4
14 MP3A	Z	4.076	4
15 MP3A	Mx	0	4
16 OVP	X	0	1.25
17 OVP	Z	32.583	1.25
18 OVP	Mx	0	1.25
19 MP1A	X	0	1
20 MP1A	Z	13.536	1
21 MP1A	Mx	0	1
22 MP1A	X	0	4
23 MP1A	Z	13.536	4
24 MP1A	Mx	0	4
25 MP4A	X	0	1
26 MP4A	Z	13.536	1
27 MP4A	Mx	0	1
28 MP4A	X	0	4
29 MP4A	Z	13.536	4
30 MP4A	Mx	0	4

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1 MP3A	X	-20.013	.5
2 MP3A	Z	34.663	.5
3 MP3A	Mx	.003	.5
4 MP3A	X	-20.013	4.5
5 MP3A	Z	34.663	4.5
6 MP3A	Mx	.003	4.5
7 MP2A	X	-9.775	1.5
8 MP2A	Z	16.932	1.5
9 MP2A	Mx	.002	1.5
10 MP2A	X	-9.775	3.5
11 MP2A	Z	16.932	3.5
12 MP2A	Mx	.002	3.5
13 MP3A	X	-1.911	4
14 MP3A	Z	3.31	4
15 MP3A	Mx	-.000956	4
16 OVP	X	-14.414	1.25
17 OVP	Z	24.966	1.25
18 OVP	Mx	0	1.25
19 MP1A	X	-7.037	1

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]	
20	MP1A	Z	12.188	1
21	MP1A	Mx	.004	1
22	MP1A	X	-7.037	4
23	MP1A	Z	12.188	4
24	MP1A	Mx	.004	4
25	MP4A	X	-7.037	1
26	MP4A	Z	12.188	1
27	MP4A	Mx	.004	1
28	MP4A	X	-7.037	4
29	MP4A	Z	12.188	4
30	MP4A	Mx	.004	4

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]	
1	MP3A	X	-31.407	.5
2	MP3A	Z	18.133	.5
3	MP3A	Mx	.012	.5
4	MP3A	X	-31.407	4.5
5	MP3A	Z	18.133	4.5
6	MP3A	Mx	.012	4.5
7	MP2A	X	-13.145	1.5
8	MP2A	Z	7.589	1.5
9	MP2A	Mx	.005	1.5
10	MP2A	X	-13.145	3.5
11	MP2A	Z	7.589	3.5
12	MP2A	Mx	.005	3.5
13	MP3A	X	-2.87	4
14	MP3A	Z	1.657	4
15	MP3A	Mx	-.001	4
16	OVP	X	-23.34	1.25
17	OVP	Z	13.475	1.25
18	OVP	Mx	0	1.25
19	MP1A	X	-13.119	1
20	MP1A	Z	7.574	1
21	MP1A	Mx	.007	1
22	MP1A	X	-13.119	4
23	MP1A	Z	7.574	4
24	MP1A	Mx	.007	4
25	MP4A	X	-13.119	1
26	MP4A	Z	7.574	1
27	MP4A	Mx	.007	1
28	MP4A	X	-13.119	4
29	MP4A	Z	7.574	4
30	MP4A	Mx	.007	4

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]	
1	MP3A	X	-31.654	.5
2	MP3A	Z	0	.5
3	MP3A	Mx	.015	.5
4	MP3A	X	-31.654	4.5
5	MP3A	Z	0	4.5
6	MP3A	Mx	.015	4.5
7	MP2A	X	-9.814	1.5
8	MP2A	Z	0	1.5
9	MP2A	Mx	.005	1.5

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
10	MP2A	X	-9.814
11	MP2A	Z	0
12	MP2A	Mx	.005
13	MP3A	X	-3.06
14	MP3A	Z	0
15	MP3A	Mx	-.002
16	OVP	X	-28.828
17	OVP	Z	0
18	OVP	Mx	0
19	MP1A	X	-15.687
20	MP1A	Z	0
21	MP1A	Mx	.008
22	MP1A	X	-15.687
23	MP1A	Z	0
24	MP1A	Mx	.008
25	MP4A	X	-15.687
26	MP4A	Z	0
27	MP4A	Mx	.008
28	MP4A	X	-15.687
29	MP4A	Z	0
30	MP4A	Mx	.008

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-26.676
2	MP3A	Z	-15.401
3	MP3A	Mx	.015
4	MP3A	X	-26.676
5	MP3A	Z	-15.401
6	MP3A	Mx	.015
7	MP2A	X	-7.641
8	MP2A	Z	-4.411
9	MP2A	Mx	.004
10	MP2A	X	-7.641
11	MP2A	Z	-4.411
12	MP2A	Mx	.004
13	MP3A	X	-2.87
14	MP3A	Z	-1.657
15	MP3A	Mx	-.001
16	OVP	X	-28.218
17	OVP	Z	-16.292
18	OVP	Mx	0
19	MP1A	X	-13.119
20	MP1A	Z	-7.574
21	MP1A	Mx	.007
22	MP1A	X	-13.119
23	MP1A	Z	-7.574
24	MP1A	Mx	.007
25	MP4A	X	-13.119
26	MP4A	Z	-7.574
27	MP4A	Mx	.007
28	MP4A	X	-13.119
29	MP4A	Z	-7.574
30	MP4A	Mx	.007

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1 MP3A	X	-17.281	.5
2 MP3A	Z	-29.931	.5
3 MP3A	Mx	.013	.5
4 MP3A	X	-17.281	4.5
5 MP3A	Z	-29.931	4.5
6 MP3A	Mx	.013	4.5
7 MP2A	X	-6.598	1.5
8 MP2A	Z	-11.428	1.5
9 MP2A	Mx	.005	1.5
10 MP2A	X	-6.598	3.5
11 MP2A	Z	-11.428	3.5
12 MP2A	Mx	.005	3.5
13 MP3A	X	-1.911	4
14 MP3A	Z	-3.31	4
15 MP3A	Mx	-.000956	4
16 OVP	X	-17.23	1.25
17 OVP	Z	-29.844	1.25
18 OVP	Mx	0	1.25
19 MP1A	X	-7.037	1
20 MP1A	Z	-12.188	1
21 MP1A	Mx	.004	1
22 MP1A	X	-7.037	4
23 MP1A	Z	-12.188	4
24 MP1A	Mx	.004	4
25 MP4A	X	-7.037	1
26 MP4A	Z	-12.188	1
27 MP4A	Mx	.004	1
28 MP4A	X	-7.037	4
29 MP4A	Z	-12.188	4
30 MP4A	Mx	.004	4

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1 MP3A	X	0	.5
2 MP3A	Z	-12.906	.5
3 MP3A	Mx	.002	.5
4 MP3A	X	0	4.5
5 MP3A	Z	-12.906	4.5
6 MP3A	Mx	.002	4.5
7 MP2A	X	0	1.5
8 MP2A	Z	-5.885	1.5
9 MP2A	Mx	.001	1.5
10 MP2A	X	0	3.5
11 MP2A	Z	-5.885	3.5
12 MP2A	Mx	.001	3.5
13 MP3A	X	0	4
14 MP3A	Z	-.998	4
15 MP3A	Mx	0	4
16 OVP	X	0	1.25
17 OVP	Z	-10.297	1.25
18 OVP	Mx	0	1.25
19 MP1A	X	0	1
20 MP1A	Z	-4.112	1
21 MP1A	Mx	0	1
22 MP1A	X	0	4
23 MP1A	Z	-4.112	4

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
24	MP1A	Mx	0
25	MP4A	X	0
26	MP4A	Z	-4.112
27	MP4A	Mx	0
28	MP4A	X	0
29	MP4A	Z	-4.112
30	MP4A	Mx	0
			4

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP3A	X	6.601
2	MP3A	Z	-11.434
3	MP3A	Mx	-.001
4	MP3A	X	6.601
5	MP3A	Z	-11.434
6	MP3A	Mx	-.001
7	MP2A	X	3.11
8	MP2A	Z	-5.386
9	MP2A	Mx	-.00054
10	MP2A	X	3.11
11	MP2A	Z	-5.386
12	MP2A	Mx	-.00054
13	MP3A	X	.46
14	MP3A	Z	-.797
15	MP3A	Mx	.00023
16	OVP	X	4.5
17	OVP	Z	-7.794
18	OVP	Mx	0
19	MP1A	X	2.151
20	MP1A	Z	-3.726
21	MP1A	Mx	-.001
22	MP1A	X	2.151
23	MP1A	Z	-3.726
24	MP1A	Mx	-.001
25	MP4A	X	2.151
26	MP4A	Z	-3.726
27	MP4A	Mx	-.001
28	MP4A	X	2.151
29	MP4A	Z	-3.726
30	MP4A	Mx	-.001
			4

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP3A	X	10.301
2	MP3A	Z	-5.948
3	MP3A	Mx	-.004
4	MP3A	X	10.301
5	MP3A	Z	-5.948
6	MP3A	Mx	-.004
7	MP2A	X	4.107
8	MP2A	Z	-2.371
9	MP2A	Mx	-.002
10	MP2A	X	4.107
11	MP2A	Z	-2.371
12	MP2A	Mx	-.002
13	MP3A	X	.664
			4

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
14	MP3A	Z	.384
15	MP3A	Mx	.000332
16	OVP	X	7.232
17	OVP	Z	-4.176
18	OVP	Mx	0
19	MP1A	X	4.055
20	MP1A	Z	-2.341
21	MP1A	Mx	-.002
22	MP1A	X	4.055
23	MP1A	Z	-2.341
24	MP1A	Mx	-.002
25	MP4A	X	4.055
26	MP4A	Z	-2.341
27	MP4A	Mx	-.002
28	MP4A	X	4.055
29	MP4A	Z	-2.341
30	MP4A	Mx	-.002

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP3A	X	10.291
2	MP3A	Z	0
3	MP3A	Mx	-.005
4	MP3A	X	10.291
5	MP3A	Z	0
6	MP3A	Mx	-.005
7	MP2A	X	2.931
8	MP2A	Z	0
9	MP2A	Mx	-.001
10	MP2A	X	2.931
11	MP2A	Z	0
12	MP2A	Mx	-.001
13	MP3A	X	.69
14	MP3A	Z	0
15	MP3A	Mx	.000345
16	OVP	X	9
17	OVP	Z	0
18	OVP	Mx	0
19	MP1A	X	4.873
20	MP1A	Z	0
21	MP1A	Mx	-.002
22	MP1A	X	4.873
23	MP1A	Z	0
24	MP1A	Mx	-.002
25	MP4A	X	4.873
26	MP4A	Z	0
27	MP4A	Mx	-.002
28	MP4A	X	4.873
29	MP4A	Z	0
30	MP4A	Mx	-.002

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP3A	X	8.656
2	MP3A	Z	4.997
3	MP3A	Mx	-.005

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
4	MP3A	X	8.656
5	MP3A	Z	4.997
6	MP3A	Mx	-.005
7	MP2A	X	2.249
8	MP2A	Z	1.298
9	MP2A	Mx	-.001
10	MP2A	X	2.249
11	MP2A	Z	1.298
12	MP2A	Mx	-.001
13	MP3A	X	.664
14	MP3A	Z	.384
15	MP3A	Mx	.000332
16	OVP	X	8.918
17	OVP	Z	5.149
18	OVP	Mx	0
19	MP1A	X	4.055
20	MP1A	Z	2.341
21	MP1A	Mx	-.002
22	MP1A	X	4.055
23	MP1A	Z	2.341
24	MP1A	Mx	-.002
25	MP4A	X	4.055
26	MP4A	Z	2.341
27	MP4A	Mx	-.002
28	MP4A	X	4.055
29	MP4A	Z	2.341
30	MP4A	Mx	-.002

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	5.651
2	MP3A	Z	9.788
3	MP3A	Mx	-.004
4	MP3A	X	5.651
5	MP3A	Z	9.788
6	MP3A	Mx	-.004
7	MP2A	X	2.037
8	MP2A	Z	3.528
9	MP2A	Mx	-.002
10	MP2A	X	2.037
11	MP2A	Z	3.528
12	MP2A	Mx	-.002
13	MP3A	X	.46
14	MP3A	Z	.797
15	MP3A	Mx	.00023
16	OVP	X	5.473
17	OVP	Z	9.48
18	OVP	Mx	0
19	MP1A	X	2.151
20	MP1A	Z	3.726
21	MP1A	Mx	-.001
22	MP1A	X	2.151
23	MP1A	Z	3.726
24	MP1A	Mx	-.001
25	MP4A	X	2.151
26	MP4A	Z	3.726

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
27 MP4A	Mx	-.001	1
28 MP4A	X	2.151	4
29 MP4A	Z	3.726	4
30 MP4A	Mx	-.001	4

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1 MP3A	X	0	.5
2 MP3A	Z	12.906	.5
3 MP3A	Mx	-.002	.5
4 MP3A	X	0	4.5
5 MP3A	Z	12.906	4.5
6 MP3A	Mx	-.002	4.5
7 MP2A	X	0	1.5
8 MP2A	Z	5.885	1.5
9 MP2A	Mx	-.001	1.5
10 MP2A	X	0	3.5
11 MP2A	Z	5.885	3.5
12 MP2A	Mx	-.001	3.5
13 MP3A	X	0	4
14 MP3A	Z	.998	4
15 MP3A	Mx	0	4
16 OVP	X	0	1.25
17 OVP	Z	10.297	1.25
18 OVP	Mx	0	1.25
19 MP1A	X	0	1
20 MP1A	Z	4.112	1
21 MP1A	Mx	0	1
22 MP1A	X	0	4
23 MP1A	Z	4.112	4
24 MP1A	Mx	0	4
25 MP4A	X	0	1
26 MP4A	Z	4.112	1
27 MP4A	Mx	0	1
28 MP4A	X	0	4
29 MP4A	Z	4.112	4
30 MP4A	Mx	0	4

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1 MP3A	X	-6.601	.5
2 MP3A	Z	11.434	.5
3 MP3A	Mx	.001	.5
4 MP3A	X	-6.601	4.5
5 MP3A	Z	11.434	4.5
6 MP3A	Mx	.001	4.5
7 MP2A	X	-3.11	1.5
8 MP2A	Z	5.386	1.5
9 MP2A	Mx	.00054	1.5
10 MP2A	X	-3.11	3.5
11 MP2A	Z	5.386	3.5
12 MP2A	Mx	.00054	3.5
13 MP3A	X	-.46	4
14 MP3A	Z	.797	4
15 MP3A	Mx	-.00023	4
16 OVP	X	-4.5	1.25

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
17 OVP	Z	7.794	1.25
18 OVP	Mx	0	1.25
19 MP1A	X	-2.151	1
20 MP1A	Z	3.726	1
21 MP1A	Mx	.001	1
22 MP1A	X	-2.151	4
23 MP1A	Z	3.726	4
24 MP1A	Mx	.001	4
25 MP4A	X	-2.151	1
26 MP4A	Z	3.726	1
27 MP4A	Mx	.001	1
28 MP4A	X	-2.151	4
29 MP4A	Z	3.726	4
30 MP4A	Mx	.001	4

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1 MP3A	X	-10.301	.5
2 MP3A	Z	5.948	.5
3 MP3A	Mx	.004	.5
4 MP3A	X	-10.301	4.5
5 MP3A	Z	5.948	4.5
6 MP3A	Mx	.004	4.5
7 MP2A	X	-4.107	1.5
8 MP2A	Z	2.371	1.5
9 MP2A	Mx	.002	1.5
10 MP2A	X	-4.107	3.5
11 MP2A	Z	2.371	3.5
12 MP2A	Mx	.002	3.5
13 MP3A	X	-.664	4
14 MP3A	Z	.384	4
15 MP3A	Mx	-.000332	4
16 OVP	X	-7.232	1.25
17 OVP	Z	4.176	1.25
18 OVP	Mx	0	1.25
19 MP1A	X	-4.055	1
20 MP1A	Z	2.341	1
21 MP1A	Mx	.002	1
22 MP1A	X	-4.055	4
23 MP1A	Z	2.341	4
24 MP1A	Mx	.002	4
25 MP4A	X	-4.055	1
26 MP4A	Z	2.341	1
27 MP4A	Mx	.002	1
28 MP4A	X	-4.055	4
29 MP4A	Z	2.341	4
30 MP4A	Mx	.002	4

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1 MP3A	X	-10.291	.5
2 MP3A	Z	0	.5
3 MP3A	Mx	.005	.5
4 MP3A	X	-10.291	4.5
5 MP3A	Z	0	4.5
6 MP3A	Mx	.005	4.5

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
7 MP2A	X	-2.931	1.5
8 MP2A	Z	0	1.5
9 MP2A	Mx	.001	1.5
10 MP2A	X	-2.931	3.5
11 MP2A	Z	0	3.5
12 MP2A	Mx	.001	3.5
13 MP3A	X	-.69	4
14 MP3A	Z	0	4
15 MP3A	Mx	-.000345	4
16 OVP	X	-9	1.25
17 OVP	Z	0	1.25
18 OVP	Mx	0	1.25
19 MP1A	X	-4.873	1
20 MP1A	Z	0	1
21 MP1A	Mx	.002	1
22 MP1A	X	-4.873	4
23 MP1A	Z	0	4
24 MP1A	Mx	.002	4
25 MP4A	X	-4.873	1
26 MP4A	Z	0	1
27 MP4A	Mx	.002	1
28 MP4A	X	-4.873	4
29 MP4A	Z	0	4
30 MP4A	Mx	.002	4

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1 MP3A	X	-8.656	.5
2 MP3A	Z	-4.997	.5
3 MP3A	Mx	.005	.5
4 MP3A	X	-8.656	4.5
5 MP3A	Z	-4.997	4.5
6 MP3A	Mx	.005	4.5
7 MP2A	X	-2.249	1.5
8 MP2A	Z	-1.298	1.5
9 MP2A	Mx	.001	1.5
10 MP2A	X	-2.249	3.5
11 MP2A	Z	-1.298	3.5
12 MP2A	Mx	.001	3.5
13 MP3A	X	-.664	4
14 MP3A	Z	-.384	4
15 MP3A	Mx	-.000332	4
16 OVP	X	-8.918	1.25
17 OVP	Z	-5.149	1.25
18 OVP	Mx	0	1.25
19 MP1A	X	-4.055	1
20 MP1A	Z	-2.341	1
21 MP1A	Mx	.002	1
22 MP1A	X	-4.055	4
23 MP1A	Z	-2.341	4
24 MP1A	Mx	.002	4
25 MP4A	X	-4.055	1
26 MP4A	Z	-2.341	1
27 MP4A	Mx	.002	1
28 MP4A	X	-4.055	4
29 MP4A	Z	-2.341	4

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
30 MP4A	Mx	.002	4

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1 MP3A	X	-5.651	.5
2 MP3A	Z	-9.788	.5
3 MP3A	Mx	.004	.5
4 MP3A	X	-5.651	4.5
5 MP3A	Z	-9.788	4.5
6 MP3A	Mx	.004	4.5
7 MP2A	X	-2.037	1.5
8 MP2A	Z	-3.528	1.5
9 MP2A	Mx	.002	1.5
10 MP2A	X	-2.037	3.5
11 MP2A	Z	-3.528	3.5
12 MP2A	Mx	.002	3.5
13 MP3A	X	-.46	4
14 MP3A	Z	-.797	4
15 MP3A	Mx	-.00023	4
16 OVP	X	-5.473	1.25
17 OVP	Z	-9.48	1.25
18 OVP	Mx	0	1.25
19 MP1A	X	-2.151	1
20 MP1A	Z	-3.726	1
21 MP1A	Mx	.001	1
22 MP1A	X	-2.151	4
23 MP1A	Z	-3.726	4
24 MP1A	Mx	.001	4
25 MP4A	X	-2.151	1
26 MP4A	Z	-3.726	1
27 MP4A	Mx	.001	1
28 MP4A	X	-2.151	4
29 MP4A	Z	-3.726	4
30 MP4A	Mx	.001	4

### **Member Point Loads (BLC 77 : Lm1)**

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1 LIVE2	Y	-500	%2

### **Member Point Loads (BLC 78 : Lm2)**

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1 LIVE1	Y	-500	0

### **Member Point Loads (BLC 79 : Lv1)**

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

### **Member Point Loads (BLC 80 : Lv2)**

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

### **Member Point Loads (BLC 81 : Antenna Ev)**

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1 MP3A	Y	-.449	.5

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
2	MP3A	My	.5
3	MP3A	Mz	.5
4	MP3A	Y	4.5
5	MP3A	My	4.5
6	MP3A	Mz	4.5
7	MP2A	Y	1.5
8	MP2A	My	1.5
9	MP2A	Mz	1.5
10	MP2A	Y	3.5
11	MP2A	My	3.5
12	MP2A	Mz	3.5
13	MP3A	Y	4
14	MP3A	My	4
15	MP3A	Mz	4
16	OVP	Y	1.25
17	OVP	My	1.25
18	OVP	Mz	1.25
19	MP1A	Y	1
20	MP1A	My	1
21	MP1A	Mz	1
22	MP1A	Y	4
23	MP1A	My	4
24	MP1A	Mz	4
25	MP4A	Y	1
26	MP4A	My	1
27	MP4A	Mz	1
28	MP4A	Y	4
29	MP4A	My	4
30	MP4A	Mz	4

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP3A	Z	.5
2	MP3A	Mx	.5
3	MP3A	Z	4.5
4	MP3A	Mx	4.5
5	MP2A	Z	1.5
6	MP2A	Mx	1.5
7	MP2A	Z	3.5
8	MP2A	Mx	3.5
9	MP3A	Z	4
10	MP3A	Mx	4
11	OVP	Z	1.25
12	OVP	Mx	1.25
13	MP1A	Z	1
14	MP1A	Mx	1
15	MP1A	Z	4
16	MP1A	Mx	4
17	MP4A	Z	1
18	MP4A	Mx	1
19	MP4A	Z	4
20	MP4A	Mx	4

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP3A	X	.5

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
2	MP3A	Mx	.000527 .5
3	MP3A	X	1.122 4.5
4	MP3A	Mx	.000527 4.5
5	MP2A	X	2.125 1.5
6	MP2A	Mx	.000999 1.5
7	MP2A	X	2.125 3.5
8	MP2A	Mx	.000999 3.5
9	MP3A	X	.508 4
10	MP3A	Mx	.000254 4
11	OVP	X	1.562 1.25
12	OVP	Mx	0 1.25
13	MP1A	X	.342 1
14	MP1A	Mx	-.000171 1
15	MP1A	X	.342 4
16	MP1A	Mx	-.000171 4
17	MP4A	X	.342 1
18	MP4A	Mx	-.000171 1
19	MP4A	X	.342 4
20	MP4A	Mx	-.000171 4

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

Member Label	Direction	Start Magnitude[lb...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	Y	-5.721 -5.721	0	%100
2	M2	Y	-5.721 -5.721	0	%100
3	M13	Y	-6.685 -6.685	0	%100
4	M14	Y	-6.685 -6.685	0	%100
5	M15	Y	-6.685 -6.685	0	%100
6	M16	Y	-6.685 -6.685	0	%100
7	OVP	Y	-5.012 -5.012	0	%100
8	M18	Y	-5.012 -5.012	0	%100
9	M19	Y	-5.012 -5.012	0	%100
10	M20	Y	-5.012 -5.012	0	%100
11	M21	Y	-6.685 -6.685	0	%100
12	M22	Y	-6.685 -6.685	0	%100
13	M23	Y	-6.685 -6.685	0	%100
14	M24	Y	-6.685 -6.685	0	%100
15	M25	Y	-2.708 -2.708	0	%100
16	M26	Y	-2.708 -2.708	0	%100
17	M27	Y	-2.708 -2.708	0	%100
18	M28	Y	-2.708 -2.708	0	%100
19	MP4A	Y	-5.012 -5.012	0	%100
20	MP3A	Y	-5.012 -5.012	0	%100
21	MP2A	Y	-5.012 -5.012	0	%100
22	MP1A	Y	-5.012 -5.012	0	%100
23	M44	Y	-2.531 -2.531	0	%100
24	M45	Y	-2.531 -2.531	0	%100
25	M46	Y	-2.531 -2.531	0	%100
26	M47	Y	-2.531 -2.531	0	%100
27	M43	Y	-5.012 -5.012	0	%100
28	M44A	Y	-5.012 -5.012	0	%100

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

Member Label	Direction	Start Magnitude[lb...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X	0 0	0	%100
2	FACE	Z	-14.332 -14.332	0	%100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
3	M2	X	0	0	%100
4	M2	Z	-14.332	-14.332	%100
5	M13	X	0	0	%100
6	M13	Z	0	0	%100
7	M14	X	0	0	%100
8	M14	Z	0	0	%100
9	M15	X	0	0	%100
10	M15	Z	0	0	%100
11	M16	X	0	0	%100
12	M16	Z	0	0	%100
13	OVP	X	0	0	%100
14	OVP	Z	-5.659	-5.659	%100
15	M18	X	0	0	%100
16	M18	Z	-5.659	-5.659	%100
17	M19	X	0	0	%100
18	M19	Z	-5.659	-5.659	%100
19	M20	X	0	0	%100
20	M20	Z	-5.659	-5.659	%100
21	M21	X	0	0	%100
22	M21	Z	-3.116	-3.116	%100
23	M22	X	0	0	%100
24	M22	Z	-3.116	-3.116	%100
25	M23	X	0	0	%100
26	M23	Z	-3.116	-3.116	%100
27	M24	X	0	0	%100
28	M24	Z	-3.116	-3.116	%100
29	M25	X	0	0	%100
30	M25	Z	-3.227	-3.227	%100
31	M26	X	0	0	%100
32	M26	Z	-3.227	-3.227	%100
33	M27	X	0	0	%100
34	M27	Z	-3.227	-3.227	%100
35	M28	X	0	0	%100
36	M28	Z	-3.227	-3.227	%100
37	MP4A	X	0	0	%100
38	MP4A	Z	-11.84	-11.84	%100
39	MP3A	X	0	0	%100
40	MP3A	Z	-11.84	-11.84	%100
41	MP2A	X	0	0	%100
42	MP2A	Z	-11.84	-11.84	%100
43	MP1A	X	0	0	%100
44	MP1A	Z	-11.84	-11.84	%100
45	M44	X	0	0	%100
46	M44	Z	-3.116	-3.116	%100
47	M45	X	0	0	%100
48	M45	Z	-3.116	-3.116	%100
49	M46	X	0	0	%100
50	M46	Z	-3.116	-3.116	%100
51	M47	X	0	0	%100
52	M47	Z	-3.116	-3.116	%100
53	M43	X	0	0	%100
54	M43	Z	-0.007	-0.007	%100
55	M44A	X	0	0	%100
56	M44A	Z	-0.494	-0.494	%100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
RISA-3D Version 17.0.4	[R:\....\....\....\....\Rev. 0\RISA\468000-VZW_MT_LOT_A_H.r3d]				Page 32

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X 5.375	5.375	0	%100
2	FACE	Z -9.309	-9.309	0	%100
3	M2	X 5.375	5.375	0	%100
4	M2	Z -9.309	-9.309	0	%100
5	M13	X .389	.389	0	%100
6	M13	Z -.675	-.675	0	%100
7	M14	X .389	.389	0	%100
8	M14	Z -.675	-.675	0	%100
9	M15	X .389	.389	0	%100
10	M15	Z -.675	-.675	0	%100
11	M16	X .389	.389	0	%100
12	M16	Z -.675	-.675	0	%100
13	OVP	X .637	.637	0	%100
14	OVP	Z -1.103	-1.103	0	%100
15	M18	X .637	.637	0	%100
16	M18	Z -1.103	-1.103	0	%100
17	M19	X 4.474	4.474	0	%100
18	M19	Z -7.75	-7.75	0	%100
19	M20	X 4.474	4.474	0	%100
20	M20	Z -7.75	-7.75	0	%100
21	M21	X 1.168	1.168	0	%100
22	M21	Z -2.024	-2.024	0	%100
23	M22	X 1.168	1.168	0	%100
24	M22	Z -2.024	-2.024	0	%100
25	M23	X 1.168	1.168	0	%100
26	M23	Z -2.024	-2.024	0	%100
27	M24	X 1.168	1.168	0	%100
28	M24	Z -2.024	-2.024	0	%100
29	M25	X 1.29	1.29	0	%100
30	M25	Z -2.235	-2.235	0	%100
31	M26	X 1.29	1.29	0	%100
32	M26	Z -2.235	-2.235	0	%100
33	M27	X 1.856	1.856	0	%100
34	M27	Z -3.215	-3.215	0	%100
35	M28	X 1.856	1.856	0	%100
36	M28	Z -3.215	-3.215	0	%100
37	MP4A	X 5.92	5.92	0	%100
38	MP4A	Z -10.253	-10.253	0	%100
39	MP3A	X 5.92	5.92	0	%100
40	MP3A	Z -10.253	-10.253	0	%100
41	MP2A	X 5.92	5.92	0	%100
42	MP2A	Z -10.253	-10.253	0	%100
43	MP1A	X 5.92	5.92	0	%100
44	MP1A	Z -10.253	-10.253	0	%100
45	M44	X 1.558	1.558	0	%100
46	M44	Z -2.698	-2.698	0	%100
47	M45	X 1.558	1.558	0	%100
48	M45	Z -2.698	-2.698	0	%100
49	M46	X 1.558	1.558	0	%100
50	M46	Z -2.698	-2.698	0	%100
51	M47	X 1.558	1.558	0	%100
52	M47	Z -2.698	-2.698	0	%100
53	M43	X 1.482	1.482	0	%100
54	M43	Z -2.567	-2.567	0	%100
55	M44A	X 2.624	2.624	0	%100
56	M44A	Z -4.544	-4.544	0	%100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X	3.103	3.103	0 %100
2	FACE	Z	-1.792	-1.792	0 %100
3	M2	X	3.103	3.103	0 %100
4	M2	Z	-1.792	-1.792	0 %100
5	M13	X	2.024	2.024	0 %100
6	M13	Z	-1.168	-1.168	0 %100
7	M14	X	2.024	2.024	0 %100
8	M14	Z	-1.168	-1.168	0 %100
9	M15	X	2.024	2.024	0 %100
10	M15	Z	-1.168	-1.168	0 %100
11	M16	X	2.024	2.024	0 %100
12	M16	Z	-1.168	-1.168	0 %100
13	OVP	X	.156	.156	0 %100
14	OVP	Z	-.09	-.09	0 %100
15	M18	X	.156	.156	0 %100
16	M18	Z	-.09	-.09	0 %100
17	M19	X	6.802	6.802	0 %100
18	M19	Z	-3.927	-3.927	0 %100
19	M20	X	6.802	6.802	0 %100
20	M20	Z	-3.927	-3.927	0 %100
21	M21	X	.675	.675	0 %100
22	M21	Z	-.389	-.389	0 %100
23	M22	X	.675	.675	0 %100
24	M22	Z	-.389	-.389	0 %100
25	M23	X	.675	.675	0 %100
26	M23	Z	-.389	-.389	0 %100
27	M24	X	.675	.675	0 %100
28	M24	Z	-.389	-.389	0 %100
29	M25	X	2.095	2.095	0 %100
30	M25	Z	-1.209	-1.209	0 %100
31	M26	X	2.095	2.095	0 %100
32	M26	Z	-1.209	-1.209	0 %100
33	M27	X	3.075	3.075	0 %100
34	M27	Z	-1.775	-1.775	0 %100
35	M28	X	3.075	3.075	0 %100
36	M28	Z	-1.775	-1.775	0 %100
37	MP4A	X	10.253	10.253	0 %100
38	MP4A	Z	-5.92	-5.92	0 %100
39	MP3A	X	10.253	10.253	0 %100
40	MP3A	Z	-5.92	-5.92	0 %100
41	MP2A	X	10.253	10.253	0 %100
42	MP2A	Z	-5.92	-5.92	0 %100
43	MP1A	X	10.253	10.253	0 %100
44	MP1A	Z	-5.92	-5.92	0 %100
45	M44	X	2.698	2.698	0 %100
46	M44	Z	-1.558	-1.558	0 %100
47	M45	X	2.698	2.698	0 %100
48	M45	Z	-1.558	-1.558	0 %100
49	M46	X	2.698	2.698	0 %100
50	M46	Z	-1.558	-1.558	0 %100
51	M47	X	2.698	2.698	0 %100
52	M47	Z	-1.558	-1.558	0 %100
53	M43	X	7.691	7.691	0 %100
54	M43	Z	-4.44	-4.44	0 %100
55	M44A	X	9.245	9.245	0 %100
56	M44A	Z	-5.338	-5.338	0 %100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X	0	0	%100
2	FACE	Z	0	0	%100
3	M2	X	0	0	%100
4	M2	Z	0	0	%100
5	M13	X	3.116	3.116	0
6	M13	Z	0	0	%100
7	M14	X	3.116	3.116	0
8	M14	Z	0	0	%100
9	M15	X	3.116	3.116	0
10	M15	Z	0	0	%100
11	M16	X	3.116	3.116	0
12	M16	Z	0	0	%100
13	OVP	X	3.47	3.47	0
14	OVP	Z	0	0	%100
15	M18	X	3.47	3.47	0
16	M18	Z	0	0	%100
17	M19	X	3.47	3.47	0
18	M19	Z	0	0	%100
19	M20	X	3.47	3.47	0
20	M20	Z	0	0	%100
21	M21	X	0	0	%100
22	M21	Z	0	0	%100
23	M22	X	0	0	%100
24	M22	Z	0	0	%100
25	M23	X	0	0	%100
26	M23	Z	0	0	%100
27	M24	X	0	0	%100
28	M24	Z	0	0	%100
29	M25	X	2.904	2.904	0
30	M25	Z	0	0	%100
31	M26	X	2.904	2.904	0
32	M26	Z	0	0	%100
33	M27	X	2.904	2.904	0
34	M27	Z	0	0	%100
35	M28	X	2.904	2.904	0
36	M28	Z	0	0	%100
37	MP4A	X	11.84	11.84	0
38	MP4A	Z	0	0	%100
39	MP3A	X	11.84	11.84	0
40	MP3A	Z	0	0	%100
41	MP2A	X	11.84	11.84	0
42	MP2A	Z	0	0	%100
43	MP1A	X	11.84	11.84	0
44	MP1A	Z	0	0	%100
45	M44	X	3.116	3.116	0
46	M44	Z	0	0	%100
47	M45	X	3.116	3.116	0
48	M45	Z	0	0	%100
49	M46	X	3.116	3.116	0
50	M46	Z	0	0	%100
51	M47	X	3.116	3.116	0
52	M47	Z	0	0	%100
53	M43	X	11.84	11.84	0
54	M43	Z	0	0	%100
55	M44A	X	11.351	11.351	0
56	M44A	Z	0	0	%100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X	3.103	3.103	0 %100
2	FACE	Z	1.792	1.792	0 %100
3	M2	X	3.103	3.103	0 %100
4	M2	Z	1.792	1.792	0 %100
5	M13	X	2.024	2.024	0 %100
6	M13	Z	1.168	1.168	0 %100
7	M14	X	2.024	2.024	0 %100
8	M14	Z	1.168	1.168	0 %100
9	M15	X	2.024	2.024	0 %100
10	M15	Z	1.168	1.168	0 %100
11	M16	X	2.024	2.024	0 %100
12	M16	Z	1.168	1.168	0 %100
13	OVP	X	6.802	6.802	0 %100
14	OVP	Z	3.927	3.927	0 %100
15	M18	X	6.802	6.802	0 %100
16	M18	Z	3.927	3.927	0 %100
17	M19	X	.156	.156	0 %100
18	M19	Z	.09	.09	0 %100
19	M20	X	.156	.156	0 %100
20	M20	Z	.09	.09	0 %100
21	M21	X	.675	.675	0 %100
22	M21	Z	.389	.389	0 %100
23	M22	X	.675	.675	0 %100
24	M22	Z	.389	.389	0 %100
25	M23	X	.675	.675	0 %100
26	M23	Z	.389	.389	0 %100
27	M24	X	.675	.675	0 %100
28	M24	Z	.389	.389	0 %100
29	M25	X	3.075	3.075	0 %100
30	M25	Z	1.775	1.775	0 %100
31	M26	X	3.075	3.075	0 %100
32	M26	Z	1.775	1.775	0 %100
33	M27	X	2.095	2.095	0 %100
34	M27	Z	1.209	1.209	0 %100
35	M28	X	2.095	2.095	0 %100
36	M28	Z	1.209	1.209	0 %100
37	MP4A	X	10.253	10.253	0 %100
38	MP4A	Z	5.92	5.92	0 %100
39	MP3A	X	10.253	10.253	0 %100
40	MP3A	Z	5.92	5.92	0 %100
41	MP2A	X	10.253	10.253	0 %100
42	MP2A	Z	5.92	5.92	0 %100
43	MP1A	X	10.253	10.253	0 %100
44	MP1A	Z	5.92	5.92	0 %100
45	M44	X	2.698	2.698	0 %100
46	M44	Z	1.558	1.558	0 %100
47	M45	X	2.698	2.698	0 %100
48	M45	Z	1.558	1.558	0 %100
49	M46	X	2.698	2.698	0 %100
50	M46	Z	1.558	1.558	0 %100
51	M47	X	2.698	2.698	0 %100
52	M47	Z	1.558	1.558	0 %100
53	M43	X	7.692	7.692	0 %100
54	M43	Z	4.441	4.441	0 %100
55	M44A	X	5.714	5.714	0 %100
56	M44A	Z	3.299	3.299	0 %100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X	5.375	5.375	0 %100
2	FACE	Z	9.309	9.309	0 %100
3	M2	X	5.375	5.375	0 %100
4	M2	Z	9.309	9.309	0 %100
5	M13	X	.389	.389	0 %100
6	M13	Z	.675	.675	0 %100
7	M14	X	.389	.389	0 %100
8	M14	Z	.675	.675	0 %100
9	M15	X	.389	.389	0 %100
10	M15	Z	.675	.675	0 %100
11	M16	X	.389	.389	0 %100
12	M16	Z	.675	.675	0 %100
13	OVP	X	4.474	4.474	0 %100
14	OVP	Z	7.75	7.75	0 %100
15	M18	X	4.474	4.474	0 %100
16	M18	Z	7.75	7.75	0 %100
17	M19	X	.637	.637	0 %100
18	M19	Z	1.103	1.103	0 %100
19	M20	X	.637	.637	0 %100
20	M20	Z	1.103	1.103	0 %100
21	M21	X	1.168	1.168	0 %100
22	M21	Z	2.024	2.024	0 %100
23	M22	X	1.168	1.168	0 %100
24	M22	Z	2.024	2.024	0 %100
25	M23	X	1.168	1.168	0 %100
26	M23	Z	2.024	2.024	0 %100
27	M24	X	1.168	1.168	0 %100
28	M24	Z	2.024	2.024	0 %100
29	M25	X	1.856	1.856	0 %100
30	M25	Z	3.215	3.215	0 %100
31	M26	X	1.856	1.856	0 %100
32	M26	Z	3.215	3.215	0 %100
33	M27	X	1.29	1.29	0 %100
34	M27	Z	2.235	2.235	0 %100
35	M28	X	1.29	1.29	0 %100
36	M28	Z	2.235	2.235	0 %100
37	MP4A	X	5.92	5.92	0 %100
38	MP4A	Z	10.253	10.253	0 %100
39	MP3A	X	5.92	5.92	0 %100
40	MP3A	Z	10.253	10.253	0 %100
41	MP2A	X	5.92	5.92	0 %100
42	MP2A	Z	10.253	10.253	0 %100
43	MP1A	X	5.92	5.92	0 %100
44	MP1A	Z	10.253	10.253	0 %100
45	M44	X	1.558	1.558	0 %100
46	M44	Z	2.698	2.698	0 %100
47	M45	X	1.558	1.558	0 %100
48	M45	Z	2.698	2.698	0 %100
49	M46	X	1.558	1.558	0 %100
50	M46	Z	2.698	2.698	0 %100
51	M47	X	1.558	1.558	0 %100
52	M47	Z	2.698	2.698	0 %100
53	M43	X	1.483	1.483	0 %100
54	M43	Z	2.568	2.568	0 %100
55	M44A	X	.585	.585	0 %100
56	M44A	Z	1.013	1.013	0 %100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X	0	0	%100
2	FACE	Z	14.332	14.332	0
3	M2	X	0	0	%100
4	M2	Z	14.332	14.332	0
5	M13	X	0	0	%100
6	M13	Z	0	0	%100
7	M14	X	0	0	%100
8	M14	Z	0	0	%100
9	M15	X	0	0	0
10	M15	Z	0	0	%100
11	M16	X	0	0	0
12	M16	Z	0	0	%100
13	OVP	X	0	0	0
14	OVP	Z	5.659	5.659	0
15	M18	X	0	0	%100
16	M18	Z	5.659	5.659	0
17	M19	X	0	0	0
18	M19	Z	5.659	5.659	0
19	M20	X	0	0	%100
20	M20	Z	5.659	5.659	0
21	M21	X	0	0	%100
22	M21	Z	3.116	3.116	0
23	M22	X	0	0	%100
24	M22	Z	3.116	3.116	0
25	M23	X	0	0	%100
26	M23	Z	3.116	3.116	0
27	M24	X	0	0	%100
28	M24	Z	3.116	3.116	0
29	M25	X	0	0	0
30	M25	Z	3.227	3.227	0
31	M26	X	0	0	%100
32	M26	Z	3.227	3.227	0
33	M27	X	0	0	%100
34	M27	Z	3.227	3.227	0
35	M28	X	0	0	%100
36	M28	Z	3.227	3.227	0
37	MP4A	X	0	0	%100
38	MP4A	Z	11.84	11.84	0
39	MP3A	X	0	0	%100
40	MP3A	Z	11.84	11.84	0
41	MP2A	X	0	0	%100
42	MP2A	Z	11.84	11.84	0
43	MP1A	X	0	0	%100
44	MP1A	Z	11.84	11.84	0
45	M44	X	0	0	%100
46	M44	Z	3.116	3.116	0
47	M45	X	0	0	%100
48	M45	Z	3.116	3.116	0
49	M46	X	0	0	%100
50	M46	Z	3.116	3.116	0
51	M47	X	0	0	%100
52	M47	Z	3.116	3.116	0
53	M43	X	0	0	0
54	M43	Z	.007	.007	%100
55	M44A	X	0	0	0
56	M44A	Z	.494	.494	0

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X	-5.375	-5.375	0 %100
2	FACE	Z	9.309	9.309	0 %100
3	M2	X	-5.375	-5.375	0 %100
4	M2	Z	9.309	9.309	0 %100
5	M13	X	-.389	-.389	0 %100
6	M13	Z	.675	.675	0 %100
7	M14	X	-.389	-.389	0 %100
8	M14	Z	.675	.675	0 %100
9	M15	X	-.389	-.389	0 %100
10	M15	Z	.675	.675	0 %100
11	M16	X	-.389	-.389	0 %100
12	M16	Z	.675	.675	0 %100
13	OVP	X	-.637	-.637	0 %100
14	OVP	Z	1.103	1.103	0 %100
15	M18	X	-.637	-.637	0 %100
16	M18	Z	1.103	1.103	0 %100
17	M19	X	-4.474	-4.474	0 %100
18	M19	Z	7.75	7.75	0 %100
19	M20	X	-4.474	-4.474	0 %100
20	M20	Z	7.75	7.75	0 %100
21	M21	X	-1.168	-1.168	0 %100
22	M21	Z	2.024	2.024	0 %100
23	M22	X	-1.168	-1.168	0 %100
24	M22	Z	2.024	2.024	0 %100
25	M23	X	-1.168	-1.168	0 %100
26	M23	Z	2.024	2.024	0 %100
27	M24	X	-1.168	-1.168	0 %100
28	M24	Z	2.024	2.024	0 %100
29	M25	X	-1.29	-1.29	0 %100
30	M25	Z	2.235	2.235	0 %100
31	M26	X	-1.29	-1.29	0 %100
32	M26	Z	2.235	2.235	0 %100
33	M27	X	-1.856	-1.856	0 %100
34	M27	Z	3.215	3.215	0 %100
35	M28	X	-1.856	-1.856	0 %100
36	M28	Z	3.215	3.215	0 %100
37	MP4A	X	-5.92	-5.92	0 %100
38	MP4A	Z	10.253	10.253	0 %100
39	MP3A	X	-5.92	-5.92	0 %100
40	MP3A	Z	10.253	10.253	0 %100
41	MP2A	X	-5.92	-5.92	0 %100
42	MP2A	Z	10.253	10.253	0 %100
43	MP1A	X	-5.92	-5.92	0 %100
44	MP1A	Z	10.253	10.253	0 %100
45	M44	X	-1.558	-1.558	0 %100
46	M44	Z	2.698	2.698	0 %100
47	M45	X	-1.558	-1.558	0 %100
48	M45	Z	2.698	2.698	0 %100
49	M46	X	-1.558	-1.558	0 %100
50	M46	Z	2.698	2.698	0 %100
51	M47	X	-1.558	-1.558	0 %100
52	M47	Z	2.698	2.698	0 %100
53	M43	X	-1.482	-1.482	0 %100
54	M43	Z	2.567	2.567	0 %100
55	M44A	X	-2.624	-2.624	0 %100
56	M44A	Z	4.544	4.544	0 %100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X -3.103	-3.103	0	%100
2	FACE	Z 1.792	1.792	0	%100
3	M2	X -3.103	-3.103	0	%100
4	M2	Z 1.792	1.792	0	%100
5	M13	X -2.024	-2.024	0	%100
6	M13	Z 1.168	1.168	0	%100
7	M14	X -2.024	-2.024	0	%100
8	M14	Z 1.168	1.168	0	%100
9	M15	X -2.024	-2.024	0	%100
10	M15	Z 1.168	1.168	0	%100
11	M16	X -2.024	-2.024	0	%100
12	M16	Z 1.168	1.168	0	%100
13	OVP	X -.156	-.156	0	%100
14	OVP	Z .09	.09	0	%100
15	M18	X -.156	-.156	0	%100
16	M18	Z .09	.09	0	%100
17	M19	X -6.802	-6.802	0	%100
18	M19	Z 3.927	3.927	0	%100
19	M20	X -6.802	-6.802	0	%100
20	M20	Z 3.927	3.927	0	%100
21	M21	X -.675	-.675	0	%100
22	M21	Z .389	.389	0	%100
23	M22	X -.675	-.675	0	%100
24	M22	Z .389	.389	0	%100
25	M23	X -.675	-.675	0	%100
26	M23	Z .389	.389	0	%100
27	M24	X -.675	-.675	0	%100
28	M24	Z .389	.389	0	%100
29	M25	X -2.095	-2.095	0	%100
30	M25	Z 1.209	1.209	0	%100
31	M26	X -2.095	-2.095	0	%100
32	M26	Z 1.209	1.209	0	%100
33	M27	X -3.075	-3.075	0	%100
34	M27	Z 1.775	1.775	0	%100
35	M28	X -3.075	-3.075	0	%100
36	M28	Z 1.775	1.775	0	%100
37	MP4A	X -10.253	-10.253	0	%100
38	MP4A	Z 5.92	5.92	0	%100
39	MP3A	X -10.253	-10.253	0	%100
40	MP3A	Z 5.92	5.92	0	%100
41	MP2A	X -10.253	-10.253	0	%100
42	MP2A	Z 5.92	5.92	0	%100
43	MP1A	X -10.253	-10.253	0	%100
44	MP1A	Z 5.92	5.92	0	%100
45	M44	X -2.698	-2.698	0	%100
46	M44	Z 1.558	1.558	0	%100
47	M45	X -2.698	-2.698	0	%100
48	M45	Z 1.558	1.558	0	%100
49	M46	X -2.698	-2.698	0	%100
50	M46	Z 1.558	1.558	0	%100
51	M47	X -2.698	-2.698	0	%100
52	M47	Z 1.558	1.558	0	%100
53	M43	X -7.691	-7.691	0	%100
54	M43	Z 4.44	4.44	0	%100
55	M44A	X -9.245	-9.245	0	%100
56	M44A	Z 5.338	5.338	0	%100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X	0	0	%100
2	FACE	Z	0	0	%100
3	M2	X	0	0	%100
4	M2	Z	0	0	%100
5	M13	X	-3.116	-3.116	0
6	M13	Z	0	0	%100
7	M14	X	-3.116	-3.116	0
8	M14	Z	0	0	%100
9	M15	X	-3.116	-3.116	0
10	M15	Z	0	0	%100
11	M16	X	-3.116	-3.116	0
12	M16	Z	0	0	%100
13	OVP	X	-3.47	-3.47	0
14	OVP	Z	0	0	%100
15	M18	X	-3.47	-3.47	0
16	M18	Z	0	0	%100
17	M19	X	-3.47	-3.47	0
18	M19	Z	0	0	%100
19	M20	X	-3.47	-3.47	0
20	M20	Z	0	0	%100
21	M21	X	0	0	%100
22	M21	Z	0	0	%100
23	M22	X	0	0	%100
24	M22	Z	0	0	%100
25	M23	X	0	0	%100
26	M23	Z	0	0	%100
27	M24	X	0	0	%100
28	M24	Z	0	0	%100
29	M25	X	-2.904	-2.904	0
30	M25	Z	0	0	%100
31	M26	X	-2.904	-2.904	0
32	M26	Z	0	0	%100
33	M27	X	-2.904	-2.904	0
34	M27	Z	0	0	%100
35	M28	X	-2.904	-2.904	0
36	M28	Z	0	0	%100
37	MP4A	X	-11.84	-11.84	0
38	MP4A	Z	0	0	%100
39	MP3A	X	-11.84	-11.84	0
40	MP3A	Z	0	0	%100
41	MP2A	X	-11.84	-11.84	0
42	MP2A	Z	0	0	%100
43	MP1A	X	-11.84	-11.84	0
44	MP1A	Z	0	0	%100
45	M44	X	-3.116	-3.116	0
46	M44	Z	0	0	%100
47	M45	X	-3.116	-3.116	0
48	M45	Z	0	0	%100
49	M46	X	-3.116	-3.116	0
50	M46	Z	0	0	%100
51	M47	X	-3.116	-3.116	0
52	M47	Z	0	0	%100
53	M43	X	-11.84	-11.84	0
54	M43	Z	0	0	%100
55	M44A	X	-11.351	-11.351	0
56	M44A	Z	0	0	%100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X -3.103	-3.103	0	%100
2	FACE	Z -1.792	-1.792	0	%100
3	M2	X -3.103	-3.103	0	%100
4	M2	Z -1.792	-1.792	0	%100
5	M13	X -2.024	-2.024	0	%100
6	M13	Z -1.168	-1.168	0	%100
7	M14	X -2.024	-2.024	0	%100
8	M14	Z -1.168	-1.168	0	%100
9	M15	X -2.024	-2.024	0	%100
10	M15	Z -1.168	-1.168	0	%100
11	M16	X -2.024	-2.024	0	%100
12	M16	Z -1.168	-1.168	0	%100
13	OVP	X -6.802	-6.802	0	%100
14	OVP	Z -3.927	-3.927	0	%100
15	M18	X -6.802	-6.802	0	%100
16	M18	Z -3.927	-3.927	0	%100
17	M19	X -.156	-.156	0	%100
18	M19	Z -.09	-.09	0	%100
19	M20	X -.156	-.156	0	%100
20	M20	Z -.09	-.09	0	%100
21	M21	X -.675	-.675	0	%100
22	M21	Z -.389	-.389	0	%100
23	M22	X -.675	-.675	0	%100
24	M22	Z -.389	-.389	0	%100
25	M23	X -.675	-.675	0	%100
26	M23	Z -.389	-.389	0	%100
27	M24	X -.675	-.675	0	%100
28	M24	Z -.389	-.389	0	%100
29	M25	X -3.075	-3.075	0	%100
30	M25	Z -1.775	-1.775	0	%100
31	M26	X -3.075	-3.075	0	%100
32	M26	Z -1.775	-1.775	0	%100
33	M27	X -2.095	-2.095	0	%100
34	M27	Z -1.209	-1.209	0	%100
35	M28	X -2.095	-2.095	0	%100
36	M28	Z -1.209	-1.209	0	%100
37	MP4A	X -10.253	-10.253	0	%100
38	MP4A	Z -5.92	-5.92	0	%100
39	MP3A	X -10.253	-10.253	0	%100
40	MP3A	Z -5.92	-5.92	0	%100
41	MP2A	X -10.253	-10.253	0	%100
42	MP2A	Z -5.92	-5.92	0	%100
43	MP1A	X -10.253	-10.253	0	%100
44	MP1A	Z -5.92	-5.92	0	%100
45	M44	X -2.698	-2.698	0	%100
46	M44	Z -1.558	-1.558	0	%100
47	M45	X -2.698	-2.698	0	%100
48	M45	Z -1.558	-1.558	0	%100
49	M46	X -2.698	-2.698	0	%100
50	M46	Z -1.558	-1.558	0	%100
51	M47	X -2.698	-2.698	0	%100
52	M47	Z -1.558	-1.558	0	%100
53	M43	X -7.692	-7.692	0	%100
54	M43	Z -4.441	-4.441	0	%100
55	M44A	X -5.714	-5.714	0	%100
56	M44A	Z -3.299	-3.299	0	%100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X -5.375	-5.375	0	%100
2	FACE	Z -9.309	-9.309	0	%100
3	M2	X -5.375	-5.375	0	%100
4	M2	Z -9.309	-9.309	0	%100
5	M13	X -.389	-.389	0	%100
6	M13	Z -.675	-.675	0	%100
7	M14	X -.389	-.389	0	%100
8	M14	Z -.675	-.675	0	%100
9	M15	X -.389	-.389	0	%100
10	M15	Z -.675	-.675	0	%100
11	M16	X -.389	-.389	0	%100
12	M16	Z -.675	-.675	0	%100
13	OVP	X -4.474	-4.474	0	%100
14	OVP	Z -7.75	-7.75	0	%100
15	M18	X -4.474	-4.474	0	%100
16	M18	Z -7.75	-7.75	0	%100
17	M19	X -.637	-.637	0	%100
18	M19	Z -1.103	-1.103	0	%100
19	M20	X -.637	-.637	0	%100
20	M20	Z -1.103	-1.103	0	%100
21	M21	X -1.168	-1.168	0	%100
22	M21	Z -2.024	-2.024	0	%100
23	M22	X -1.168	-1.168	0	%100
24	M22	Z -2.024	-2.024	0	%100
25	M23	X -1.168	-1.168	0	%100
26	M23	Z -2.024	-2.024	0	%100
27	M24	X -1.168	-1.168	0	%100
28	M24	Z -2.024	-2.024	0	%100
29	M25	X -1.856	-1.856	0	%100
30	M25	Z -3.215	-3.215	0	%100
31	M26	X -1.856	-1.856	0	%100
32	M26	Z -3.215	-3.215	0	%100
33	M27	X -1.29	-1.29	0	%100
34	M27	Z -2.235	-2.235	0	%100
35	M28	X -1.29	-1.29	0	%100
36	M28	Z -2.235	-2.235	0	%100
37	MP4A	X -5.92	-5.92	0	%100
38	MP4A	Z -10.253	-10.253	0	%100
39	MP3A	X -5.92	-5.92	0	%100
40	MP3A	Z -10.253	-10.253	0	%100
41	MP2A	X -5.92	-5.92	0	%100
42	MP2A	Z -10.253	-10.253	0	%100
43	MP1A	X -5.92	-5.92	0	%100
44	MP1A	Z -10.253	-10.253	0	%100
45	M44	X -1.558	-1.558	0	%100
46	M44	Z -2.698	-2.698	0	%100
47	M45	X -1.558	-1.558	0	%100
48	M45	Z -2.698	-2.698	0	%100
49	M46	X -1.558	-1.558	0	%100
50	M46	Z -2.698	-2.698	0	%100
51	M47	X -1.558	-1.558	0	%100
52	M47	Z -2.698	-2.698	0	%100
53	M43	X -1.483	-1.483	0	%100
54	M43	Z -2.568	-2.568	0	%100
55	M44A	X -.585	-.585	0	%100
56	M44A	Z -1.013	-1.013	0	%100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X	0	0	%100
2	FACE	Z	-3.891	-3.891	0
3	M2	X	0	0	%100
4	M2	Z	-3.891	-3.891	0
5	M13	X	0	0	%100
6	M13	Z	0	0	%100
7	M14	X	0	0	%100
8	M14	Z	0	0	%100
9	M15	X	0	0	%100
10	M15	Z	0	0	%100
11	M16	X	0	0	%100
12	M16	Z	0	0	%100
13	OVP	X	0	0	%100
14	OVP	Z	-1.687	-1.687	0
15	M18	X	0	0	%100
16	M18	Z	-1.687	-1.687	0
17	M19	X	0	0	%100
18	M19	Z	-1.687	-1.687	0
19	M20	X	0	0	%100
20	M20	Z	-1.687	-1.687	0
21	M21	X	0	0	%100
22	M21	Z	-1.49	-1.49	0
23	M22	X	0	0	%100
24	M22	Z	-1.49	-1.49	0
25	M23	X	0	0	%100
26	M23	Z	-1.49	-1.49	0
27	M24	X	0	0	%100
28	M24	Z	-1.49	-1.49	0
29	M25	X	0	0	%100
30	M25	Z	-1.889	-1.889	0
31	M26	X	0	0	%100
32	M26	Z	-1.889	-1.889	0
33	M27	X	0	0	%100
34	M27	Z	-1.889	-1.889	0
35	M28	X	0	0	%100
36	M28	Z	-1.889	-1.889	0
37	MP4A	X	0	0	%100
38	MP4A	Z	-3.517	-3.517	0
39	MP3A	X	0	0	%100
40	MP3A	Z	-3.517	-3.517	0
41	MP2A	X	0	0	%100
42	MP2A	Z	-3.517	-3.517	0
43	MP1A	X	0	0	%100
44	MP1A	Z	-3.517	-3.517	0
45	M44	X	0	0	%100
46	M44	Z	-1.956	-1.956	0
47	M45	X	0	0	%100
48	M45	Z	-1.956	-1.956	0
49	M46	X	0	0	%100
50	M46	Z	-1.956	-1.956	0
51	M47	X	0	0	%100
52	M47	Z	-1.956	-1.956	0
53	M43	X	0	0	%100
54	M43	Z	-0.002	-0.002	0
55	M44A	X	0	0	%100
56	M44A	Z	-.147	-.147	0

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X	1.459	1.459	0 %100
2	FACE	Z	-2.527	-2.527	0 %100
3	M2	X	1.459	1.459	0 %100
4	M2	Z	-2.527	-2.527	0 %100
5	M13	X	.185	.185	0 %100
6	M13	Z	-.321	-.321	0 %100
7	M14	X	.185	.185	0 %100
8	M14	Z	-.321	-.321	0 %100
9	M15	X	.185	.185	0 %100
10	M15	Z	-.321	-.321	0 %100
11	M16	X	.185	.185	0 %100
12	M16	Z	-.321	-.321	0 %100
13	OVP	X	.19	.19	0 %100
14	OVP	Z	-.329	-.329	0 %100
15	M18	X	.19	.19	0 %100
16	M18	Z	-.329	-.329	0 %100
17	M19	X	1.334	1.334	0 %100
18	M19	Z	-2.31	-2.31	0 %100
19	M20	X	1.334	1.334	0 %100
20	M20	Z	-2.31	-2.31	0 %100
21	M21	X	.559	.559	0 %100
22	M21	Z	-.968	-.968	0 %100
23	M22	X	.559	.559	0 %100
24	M22	Z	-.968	-.968	0 %100
25	M23	X	.559	.559	0 %100
26	M23	Z	-.968	-.968	0 %100
27	M24	X	.559	.559	0 %100
28	M24	Z	-.968	-.968	0 %100
29	M25	X	.755	.755	0 %100
30	M25	Z	-1.308	-1.308	0 %100
31	M26	X	.755	.755	0 %100
32	M26	Z	-1.308	-1.308	0 %100
33	M27	X	1.087	1.087	0 %100
34	M27	Z	-1.882	-1.882	0 %100
35	M28	X	1.087	1.087	0 %100
36	M28	Z	-1.882	-1.882	0 %100
37	MP4A	X	1.758	1.758	0 %100
38	MP4A	Z	-3.046	-3.046	0 %100
39	MP3A	X	1.758	1.758	0 %100
40	MP3A	Z	-3.046	-3.046	0 %100
41	MP2A	X	1.758	1.758	0 %100
42	MP2A	Z	-3.046	-3.046	0 %100
43	MP1A	X	1.758	1.758	0 %100
44	MP1A	Z	-3.046	-3.046	0 %100
45	M44	X	.978	.978	0 %100
46	M44	Z	-1.694	-1.694	0 %100
47	M45	X	.978	.978	0 %100
48	M45	Z	-1.694	-1.694	0 %100
49	M46	X	.978	.978	0 %100
50	M46	Z	-1.694	-1.694	0 %100
51	M47	X	.978	.978	0 %100
52	M47	Z	-1.694	-1.694	0 %100
53	M43	X	.44	.44	0 %100
54	M43	Z	-.763	-.763	0 %100
55	M44A	X	.779	.779	0 %100
56	M44A	Z	-1.35	-1.35	0 %100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X .842	.842	0	%100
2	FACE	Z -.486	-.486	0	%100
3	M2	X .842	.842	0	%100
4	M2	Z -.486	-.486	0	%100
5	M13	X .963	.963	0	%100
6	M13	Z -.556	-.556	0	%100
7	M14	X .963	.963	0	%100
8	M14	Z -.556	-.556	0	%100
9	M15	X .963	.963	0	%100
10	M15	Z -.556	-.556	0	%100
11	M16	X .963	.963	0	%100
12	M16	Z -.556	-.556	0	%100
13	OVP	X .046	.046	0	%100
14	OVP	Z -.027	-.027	0	%100
15	M18	X .046	.046	0	%100
16	M18	Z -.027	-.027	0	%100
17	M19	X 2.028	2.028	0	%100
18	M19	Z -1.171	-1.171	0	%100
19	M20	X 2.028	2.028	0	%100
20	M20	Z -1.171	-1.171	0	%100
21	M21	X .323	.323	0	%100
22	M21	Z -.186	-.186	0	%100
23	M22	X .323	.323	0	%100
24	M22	Z -.186	-.186	0	%100
25	M23	X .323	.323	0	%100
26	M23	Z -.186	-.186	0	%100
27	M24	X .323	.323	0	%100
28	M24	Z -.186	-.186	0	%100
29	M25	X 1.226	1.226	0	%100
30	M25	Z -.708	-.708	0	%100
31	M26	X 1.226	1.226	0	%100
32	M26	Z -.708	-.708	0	%100
33	M27	X 1.8	1.8	0	%100
34	M27	Z -1.039	-1.039	0	%100
35	M28	X 1.8	1.8	0	%100
36	M28	Z -1.039	-1.039	0	%100
37	MP4A	X 3.046	3.046	0	%100
38	MP4A	Z -1.758	-1.758	0	%100
39	MP3A	X 3.046	3.046	0	%100
40	MP3A	Z -1.758	-1.758	0	%100
41	MP2A	X 3.046	3.046	0	%100
42	MP2A	Z -1.758	-1.758	0	%100
43	MP1A	X 3.046	3.046	0	%100
44	MP1A	Z -1.758	-1.758	0	%100
45	M44	X 1.694	1.694	0	%100
46	M44	Z -.978	-.978	0	%100
47	M45	X 1.694	1.694	0	%100
48	M45	Z -.978	-.978	0	%100
49	M46	X 1.694	1.694	0	%100
50	M46	Z -.978	-.978	0	%100
51	M47	X 1.694	1.694	0	%100
52	M47	Z -.978	-.978	0	%100
53	M43	X 2.284	2.284	0	%100
54	M43	Z -1.319	-1.319	0	%100
55	M44A	X 2.746	2.746	0	%100
56	M44A	Z -1.585	-1.585	0	%100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X	0	0	%100
2	FACE	Z	0	0	%100
3	M2	X	0	0	%100
4	M2	Z	0	0	%100
5	M13	X	1.482	1.482	0
6	M13	Z	0	0	%100
7	M14	X	1.482	1.482	0
8	M14	Z	0	0	%100
9	M15	X	1.482	1.482	0
10	M15	Z	0	0	%100
11	M16	X	1.482	1.482	0
12	M16	Z	0	0	%100
13	OVP	X	1.034	1.034	0
14	OVP	Z	0	0	%100
15	M18	X	1.034	1.034	0
16	M18	Z	0	0	%100
17	M19	X	1.034	1.034	0
18	M19	Z	0	0	%100
19	M20	X	1.034	1.034	0
20	M20	Z	0	0	%100
21	M21	X	0	0	%100
22	M21	Z	0	0	%100
23	M22	X	0	0	%100
24	M22	Z	0	0	%100
25	M23	X	0	0	%100
26	M23	Z	0	0	%100
27	M24	X	0	0	%100
28	M24	Z	0	0	%100
29	M25	X	1.7	1.7	0
30	M25	Z	0	0	%100
31	M26	X	1.7	1.7	0
32	M26	Z	0	0	%100
33	M27	X	1.7	1.7	0
34	M27	Z	0	0	%100
35	M28	X	1.7	1.7	0
36	M28	Z	0	0	%100
37	MP4A	X	3.517	3.517	0
38	MP4A	Z	0	0	%100
39	MP3A	X	3.517	3.517	0
40	MP3A	Z	0	0	%100
41	MP2A	X	3.517	3.517	0
42	MP2A	Z	0	0	%100
43	MP1A	X	3.517	3.517	0
44	MP1A	Z	0	0	%100
45	M44	X	1.956	1.956	0
46	M44	Z	0	0	%100
47	M45	X	1.956	1.956	0
48	M45	Z	0	0	%100
49	M46	X	1.956	1.956	0
50	M46	Z	0	0	%100
51	M47	X	1.956	1.956	0
52	M47	Z	0	0	%100
53	M43	X	3.517	3.517	0
54	M43	Z	0	0	%100
55	M44A	X	3.372	3.372	0
56	M44A	Z	0	0	%100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X .842	.842	0	%100
2	FACE	Z .486	.486	0	%100
3	M2	X .842	.842	0	%100
4	M2	Z .486	.486	0	%100
5	M13	X .963	.963	0	%100
6	M13	Z .556	.556	0	%100
7	M14	X .963	.963	0	%100
8	M14	Z .556	.556	0	%100
9	M15	X .963	.963	0	%100
10	M15	Z .556	.556	0	%100
11	M16	X .963	.963	0	%100
12	M16	Z .556	.556	0	%100
13	OVP	X 2.028	2.028	0	%100
14	OVP	Z 1.171	1.171	0	%100
15	M18	X 2.028	2.028	0	%100
16	M18	Z 1.171	1.171	0	%100
17	M19	X .046	.046	0	%100
18	M19	Z .027	.027	0	%100
19	M20	X .046	.046	0	%100
20	M20	Z .027	.027	0	%100
21	M21	X .323	.323	0	%100
22	M21	Z .186	.186	0	%100
23	M22	X .323	.323	0	%100
24	M22	Z .186	.186	0	%100
25	M23	X .323	.323	0	%100
26	M23	Z .186	.186	0	%100
27	M24	X .323	.323	0	%100
28	M24	Z .186	.186	0	%100
29	M25	X 1.8	1.8	0	%100
30	M25	Z 1.039	1.039	0	%100
31	M26	X 1.8	1.8	0	%100
32	M26	Z 1.039	1.039	0	%100
33	M27	X 1.226	1.226	0	%100
34	M27	Z .708	.708	0	%100
35	M28	X 1.226	1.226	0	%100
36	M28	Z .708	.708	0	%100
37	MP4A	X 3.046	3.046	0	%100
38	MP4A	Z 1.758	1.758	0	%100
39	MP3A	X 3.046	3.046	0	%100
40	MP3A	Z 1.758	1.758	0	%100
41	MP2A	X 3.046	3.046	0	%100
42	MP2A	Z 1.758	1.758	0	%100
43	MP1A	X 3.046	3.046	0	%100
44	MP1A	Z 1.758	1.758	0	%100
45	M44	X 1.694	1.694	0	%100
46	M44	Z .978	.978	0	%100
47	M45	X 1.694	1.694	0	%100
48	M45	Z .978	.978	0	%100
49	M46	X 1.694	1.694	0	%100
50	M46	Z .978	.978	0	%100
51	M47	X 1.694	1.694	0	%100
52	M47	Z .978	.978	0	%100
53	M43	X 2.285	2.285	0	%100
54	M43	Z 1.319	1.319	0	%100
55	M44A	X 1.697	1.697	0	%100
56	M44A	Z .98	.98	0	%100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X	1.459	1.459	0 %100
2	FACE	Z	2.527	2.527	0 %100
3	M2	X	1.459	1.459	0 %100
4	M2	Z	2.527	2.527	0 %100
5	M13	X	.185	.185	0 %100
6	M13	Z	.321	.321	0 %100
7	M14	X	.185	.185	0 %100
8	M14	Z	.321	.321	0 %100
9	M15	X	.185	.185	0 %100
10	M15	Z	.321	.321	0 %100
11	M16	X	.185	.185	0 %100
12	M16	Z	.321	.321	0 %100
13	OVP	X	1.334	1.334	0 %100
14	OVP	Z	2.31	2.31	0 %100
15	M18	X	1.334	1.334	0 %100
16	M18	Z	2.31	2.31	0 %100
17	M19	X	.19	.19	0 %100
18	M19	Z	.329	.329	0 %100
19	M20	X	.19	.19	0 %100
20	M20	Z	.329	.329	0 %100
21	M21	X	.559	.559	0 %100
22	M21	Z	.968	.968	0 %100
23	M22	X	.559	.559	0 %100
24	M22	Z	.968	.968	0 %100
25	M23	X	.559	.559	0 %100
26	M23	Z	.968	.968	0 %100
27	M24	X	.559	.559	0 %100
28	M24	Z	.968	.968	0 %100
29	M25	X	1.087	1.087	0 %100
30	M25	Z	1.882	1.882	0 %100
31	M26	X	1.087	1.087	0 %100
32	M26	Z	1.882	1.882	0 %100
33	M27	X	.755	.755	0 %100
34	M27	Z	1.308	1.308	0 %100
35	M28	X	.755	.755	0 %100
36	M28	Z	1.308	1.308	0 %100
37	MP4A	X	1.758	1.758	0 %100
38	MP4A	Z	3.046	3.046	0 %100
39	MP3A	X	1.758	1.758	0 %100
40	MP3A	Z	3.046	3.046	0 %100
41	MP2A	X	1.758	1.758	0 %100
42	MP2A	Z	3.046	3.046	0 %100
43	MP1A	X	1.758	1.758	0 %100
44	MP1A	Z	3.046	3.046	0 %100
45	M44	X	.978	.978	0 %100
46	M44	Z	1.694	1.694	0 %100
47	M45	X	.978	.978	0 %100
48	M45	Z	1.694	1.694	0 %100
49	M46	X	.978	.978	0 %100
50	M46	Z	1.694	1.694	0 %100
51	M47	X	.978	.978	0 %100
52	M47	Z	1.694	1.694	0 %100
53	M43	X	.44	.44	0 %100
54	M43	Z	.763	.763	0 %100
55	M44A	X	.174	.174	0 %100
56	M44A	Z	.301	.301	0 %100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X	0	0	%100
2	FACE	Z	3.891	3.891	0
3	M2	X	0	0	%100
4	M2	Z	3.891	3.891	0
5	M13	X	0	0	%100
6	M13	Z	0	0	%100
7	M14	X	0	0	%100
8	M14	Z	0	0	%100
9	M15	X	0	0	0
10	M15	Z	0	0	%100
11	M16	X	0	0	%100
12	M16	Z	0	0	%100
13	OVP	X	0	0	0
14	OVP	Z	1.687	1.687	0
15	M18	X	0	0	%100
16	M18	Z	1.687	1.687	0
17	M19	X	0	0	0
18	M19	Z	1.687	1.687	0
19	M20	X	0	0	%100
20	M20	Z	1.687	1.687	0
21	M21	X	0	0	%100
22	M21	Z	1.49	1.49	0
23	M22	X	0	0	%100
24	M22	Z	1.49	1.49	0
25	M23	X	0	0	%100
26	M23	Z	1.49	1.49	0
27	M24	X	0	0	%100
28	M24	Z	1.49	1.49	0
29	M25	X	0	0	0
30	M25	Z	1.889	1.889	0
31	M26	X	0	0	%100
32	M26	Z	1.889	1.889	0
33	M27	X	0	0	%100
34	M27	Z	1.889	1.889	0
35	M28	X	0	0	%100
36	M28	Z	1.889	1.889	0
37	MP4A	X	0	0	%100
38	MP4A	Z	3.517	3.517	0
39	MP3A	X	0	0	%100
40	MP3A	Z	3.517	3.517	0
41	MP2A	X	0	0	%100
42	MP2A	Z	3.517	3.517	0
43	MP1A	X	0	0	%100
44	MP1A	Z	3.517	3.517	0
45	M44	X	0	0	%100
46	M44	Z	1.956	1.956	0
47	M45	X	0	0	%100
48	M45	Z	1.956	1.956	0
49	M46	X	0	0	%100
50	M46	Z	1.956	1.956	0
51	M47	X	0	0	%100
52	M47	Z	1.956	1.956	0
53	M43	X	0	0	0
54	M43	Z	.002	.002	%100
55	M44A	X	0	0	0
56	M44A	Z	.147	.147	0

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X	-1.459	-1.459	0 %100
2	FACE	Z	2.527	2.527	0 %100
3	M2	X	-1.459	-1.459	0 %100
4	M2	Z	2.527	2.527	0 %100
5	M13	X	-.185	-.185	0 %100
6	M13	Z	.321	.321	0 %100
7	M14	X	-.185	-.185	0 %100
8	M14	Z	.321	.321	0 %100
9	M15	X	-.185	-.185	0 %100
10	M15	Z	.321	.321	0 %100
11	M16	X	-.185	-.185	0 %100
12	M16	Z	.321	.321	0 %100
13	OVP	X	-.19	-.19	0 %100
14	OVP	Z	.329	.329	0 %100
15	M18	X	-.19	-.19	0 %100
16	M18	Z	.329	.329	0 %100
17	M19	X	-1.334	-1.334	0 %100
18	M19	Z	2.31	2.31	0 %100
19	M20	X	-1.334	-1.334	0 %100
20	M20	Z	2.31	2.31	0 %100
21	M21	X	-.559	-.559	0 %100
22	M21	Z	.968	.968	0 %100
23	M22	X	-.559	-.559	0 %100
24	M22	Z	.968	.968	0 %100
25	M23	X	-.559	-.559	0 %100
26	M23	Z	.968	.968	0 %100
27	M24	X	-.559	-.559	0 %100
28	M24	Z	.968	.968	0 %100
29	M25	X	-.755	-.755	0 %100
30	M25	Z	1.308	1.308	0 %100
31	M26	X	-.755	-.755	0 %100
32	M26	Z	1.308	1.308	0 %100
33	M27	X	-1.087	-1.087	0 %100
34	M27	Z	1.882	1.882	0 %100
35	M28	X	-1.087	-1.087	0 %100
36	M28	Z	1.882	1.882	0 %100
37	MP4A	X	-1.758	-1.758	0 %100
38	MP4A	Z	3.046	3.046	0 %100
39	MP3A	X	-1.758	-1.758	0 %100
40	MP3A	Z	3.046	3.046	0 %100
41	MP2A	X	-1.758	-1.758	0 %100
42	MP2A	Z	3.046	3.046	0 %100
43	MP1A	X	-1.758	-1.758	0 %100
44	MP1A	Z	3.046	3.046	0 %100
45	M44	X	-.978	-.978	0 %100
46	M44	Z	1.694	1.694	0 %100
47	M45	X	-.978	-.978	0 %100
48	M45	Z	1.694	1.694	0 %100
49	M46	X	-.978	-.978	0 %100
50	M46	Z	1.694	1.694	0 %100
51	M47	X	-.978	-.978	0 %100
52	M47	Z	1.694	1.694	0 %100
53	M43	X	-.44	-.44	0 %100
54	M43	Z	.763	.763	0 %100
55	M44A	X	-.779	-.779	0 %100
56	M44A	Z	1.35	1.35	0 %100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X .842	.842	0	%100
2	FACE	Z .486	.486	0	%100
3	M2	X -.842	-.842	0	%100
4	M2	Z .486	.486	0	%100
5	M13	X -.963	-.963	0	%100
6	M13	Z .556	.556	0	%100
7	M14	X -.963	-.963	0	%100
8	M14	Z .556	.556	0	%100
9	M15	X -.963	-.963	0	%100
10	M15	Z .556	.556	0	%100
11	M16	X -.963	-.963	0	%100
12	M16	Z .556	.556	0	%100
13	OVP	X -.046	-.046	0	%100
14	OVP	Z .027	.027	0	%100
15	M18	X -.046	-.046	0	%100
16	M18	Z .027	.027	0	%100
17	M19	X -2.028	-2.028	0	%100
18	M19	Z 1.171	1.171	0	%100
19	M20	X -2.028	-2.028	0	%100
20	M20	Z 1.171	1.171	0	%100
21	M21	X -.323	-.323	0	%100
22	M21	Z .186	.186	0	%100
23	M22	X -.323	-.323	0	%100
24	M22	Z .186	.186	0	%100
25	M23	X -.323	-.323	0	%100
26	M23	Z .186	.186	0	%100
27	M24	X -.323	-.323	0	%100
28	M24	Z .186	.186	0	%100
29	M25	X -1.226	-1.226	0	%100
30	M25	Z .708	.708	0	%100
31	M26	X -1.226	-1.226	0	%100
32	M26	Z .708	.708	0	%100
33	M27	X -1.8	-1.8	0	%100
34	M27	Z 1.039	1.039	0	%100
35	M28	X -1.8	-1.8	0	%100
36	M28	Z 1.039	1.039	0	%100
37	MP4A	X -3.046	-3.046	0	%100
38	MP4A	Z 1.758	1.758	0	%100
39	MP3A	X -3.046	-3.046	0	%100
40	MP3A	Z 1.758	1.758	0	%100
41	MP2A	X -3.046	-3.046	0	%100
42	MP2A	Z 1.758	1.758	0	%100
43	MP1A	X -3.046	-3.046	0	%100
44	MP1A	Z 1.758	1.758	0	%100
45	M44	X -1.694	-1.694	0	%100
46	M44	Z .978	.978	0	%100
47	M45	X -1.694	-1.694	0	%100
48	M45	Z .978	.978	0	%100
49	M46	X -1.694	-1.694	0	%100
50	M46	Z .978	.978	0	%100
51	M47	X -1.694	-1.694	0	%100
52	M47	Z .978	.978	0	%100
53	M43	X -2.284	-2.284	0	%100
54	M43	Z 1.319	1.319	0	%100
55	M44A	X -2.746	-2.746	0	%100
56	M44A	Z 1.585	1.585	0	%100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X	0	0	%100
2	FACE	Z	0	0	%100
3	M2	X	0	0	%100
4	M2	Z	0	0	%100
5	M13	X	-1.482	-1.482	0
6	M13	Z	0	0	%100
7	M14	X	-1.482	-1.482	0
8	M14	Z	0	0	%100
9	M15	X	-1.482	-1.482	0
10	M15	Z	0	0	%100
11	M16	X	-1.482	-1.482	0
12	M16	Z	0	0	%100
13	OVP	X	-1.034	-1.034	0
14	OVP	Z	0	0	%100
15	M18	X	-1.034	-1.034	0
16	M18	Z	0	0	%100
17	M19	X	-1.034	-1.034	0
18	M19	Z	0	0	%100
19	M20	X	-1.034	-1.034	0
20	M20	Z	0	0	%100
21	M21	X	0	0	%100
22	M21	Z	0	0	%100
23	M22	X	0	0	%100
24	M22	Z	0	0	%100
25	M23	X	0	0	%100
26	M23	Z	0	0	%100
27	M24	X	0	0	%100
28	M24	Z	0	0	%100
29	M25	X	-1.7	-1.7	0
30	M25	Z	0	0	%100
31	M26	X	-1.7	-1.7	0
32	M26	Z	0	0	%100
33	M27	X	-1.7	-1.7	0
34	M27	Z	0	0	%100
35	M28	X	-1.7	-1.7	0
36	M28	Z	0	0	%100
37	MP4A	X	-3.517	-3.517	0
38	MP4A	Z	0	0	%100
39	MP3A	X	-3.517	-3.517	0
40	MP3A	Z	0	0	%100
41	MP2A	X	-3.517	-3.517	0
42	MP2A	Z	0	0	%100
43	MP1A	X	-3.517	-3.517	0
44	MP1A	Z	0	0	%100
45	M44	X	-1.956	-1.956	0
46	M44	Z	0	0	%100
47	M45	X	-1.956	-1.956	0
48	M45	Z	0	0	%100
49	M46	X	-1.956	-1.956	0
50	M46	Z	0	0	%100
51	M47	X	-1.956	-1.956	0
52	M47	Z	0	0	%100
53	M43	X	-3.517	-3.517	0
54	M43	Z	0	0	%100
55	M44A	X	-3.372	-3.372	0
56	M44A	Z	0	0	%100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X	-.842	-.842	0 %100
2	FACE	Z	-.486	-.486	0 %100
3	M2	X	-.842	-.842	0 %100
4	M2	Z	-.486	-.486	0 %100
5	M13	X	-.963	-.963	0 %100
6	M13	Z	-.556	-.556	0 %100
7	M14	X	-.963	-.963	0 %100
8	M14	Z	-.556	-.556	0 %100
9	M15	X	-.963	-.963	0 %100
10	M15	Z	-.556	-.556	0 %100
11	M16	X	-.963	-.963	0 %100
12	M16	Z	-.556	-.556	0 %100
13	OVP	X	-2.028	-2.028	0 %100
14	OVP	Z	-1.171	-1.171	0 %100
15	M18	X	-2.028	-2.028	0 %100
16	M18	Z	-1.171	-1.171	0 %100
17	M19	X	-.046	-.046	0 %100
18	M19	Z	-.027	-.027	0 %100
19	M20	X	-.046	-.046	0 %100
20	M20	Z	-.027	-.027	0 %100
21	M21	X	-.323	-.323	0 %100
22	M21	Z	-.186	-.186	0 %100
23	M22	X	-.323	-.323	0 %100
24	M22	Z	-.186	-.186	0 %100
25	M23	X	-.323	-.323	0 %100
26	M23	Z	-.186	-.186	0 %100
27	M24	X	-.323	-.323	0 %100
28	M24	Z	-.186	-.186	0 %100
29	M25	X	-.1	-.1	0 %100
30	M25	Z	-1.039	-1.039	0 %100
31	M26	X	-.1	-.1	0 %100
32	M26	Z	-1.039	-1.039	0 %100
33	M27	X	-1.226	-1.226	0 %100
34	M27	Z	-.708	-.708	0 %100
35	M28	X	-1.226	-1.226	0 %100
36	M28	Z	-.708	-.708	0 %100
37	MP4A	X	-3.046	-3.046	0 %100
38	MP4A	Z	-1.758	-1.758	0 %100
39	MP3A	X	-3.046	-3.046	0 %100
40	MP3A	Z	-1.758	-1.758	0 %100
41	MP2A	X	-3.046	-3.046	0 %100
42	MP2A	Z	-1.758	-1.758	0 %100
43	MP1A	X	-3.046	-3.046	0 %100
44	MP1A	Z	-1.758	-1.758	0 %100
45	M44	X	-1.694	-1.694	0 %100
46	M44	Z	-.978	-.978	0 %100
47	M45	X	-1.694	-1.694	0 %100
48	M45	Z	-.978	-.978	0 %100
49	M46	X	-1.694	-1.694	0 %100
50	M46	Z	-.978	-.978	0 %100
51	M47	X	-1.694	-1.694	0 %100
52	M47	Z	-.978	-.978	0 %100
53	M43	X	-2.285	-2.285	0 %100
54	M43	Z	-1.319	-1.319	0 %100
55	M44A	X	-1.697	-1.697	0 %100
56	M44A	Z	-.98	-.98	0 %100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X	-1.459	-1.459	0 %100
2	FACE	Z	-2.527	-2.527	0 %100
3	M2	X	-1.459	-1.459	0 %100
4	M2	Z	-2.527	-2.527	0 %100
5	M13	X	-.185	-.185	0 %100
6	M13	Z	-.321	-.321	0 %100
7	M14	X	-.185	-.185	0 %100
8	M14	Z	-.321	-.321	0 %100
9	M15	X	-.185	-.185	0 %100
10	M15	Z	-.321	-.321	0 %100
11	M16	X	-.185	-.185	0 %100
12	M16	Z	-.321	-.321	0 %100
13	OVP	X	-1.334	-1.334	0 %100
14	OVP	Z	-2.31	-2.31	0 %100
15	M18	X	-1.334	-1.334	0 %100
16	M18	Z	-2.31	-2.31	0 %100
17	M19	X	-.19	-.19	0 %100
18	M19	Z	-.329	-.329	0 %100
19	M20	X	-.19	-.19	0 %100
20	M20	Z	-.329	-.329	0 %100
21	M21	X	-.559	-.559	0 %100
22	M21	Z	-.968	-.968	0 %100
23	M22	X	-.559	-.559	0 %100
24	M22	Z	-.968	-.968	0 %100
25	M23	X	-.559	-.559	0 %100
26	M23	Z	-.968	-.968	0 %100
27	M24	X	-.559	-.559	0 %100
28	M24	Z	-.968	-.968	0 %100
29	M25	X	-1.087	-1.087	0 %100
30	M25	Z	-1.882	-1.882	0 %100
31	M26	X	-1.087	-1.087	0 %100
32	M26	Z	-1.882	-1.882	0 %100
33	M27	X	-.755	-.755	0 %100
34	M27	Z	-1.308	-1.308	0 %100
35	M28	X	-.755	-.755	0 %100
36	M28	Z	-1.308	-1.308	0 %100
37	MP4A	X	-1.758	-1.758	0 %100
38	MP4A	Z	-3.046	-3.046	0 %100
39	MP3A	X	-1.758	-1.758	0 %100
40	MP3A	Z	-3.046	-3.046	0 %100
41	MP2A	X	-1.758	-1.758	0 %100
42	MP2A	Z	-3.046	-3.046	0 %100
43	MP1A	X	-1.758	-1.758	0 %100
44	MP1A	Z	-3.046	-3.046	0 %100
45	M44	X	-.978	-.978	0 %100
46	M44	Z	-1.694	-1.694	0 %100
47	M45	X	-.978	-.978	0 %100
48	M45	Z	-1.694	-1.694	0 %100
49	M46	X	-.978	-.978	0 %100
50	M46	Z	-1.694	-1.694	0 %100
51	M47	X	-.978	-.978	0 %100
52	M47	Z	-1.694	-1.694	0 %100
53	M43	X	-.44	-.44	0 %100
54	M43	Z	-.763	-.763	0 %100
55	M44A	X	-.174	-.174	0 %100
56	M44A	Z	-.301	-.301	0 %100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X	0	0	%100
2	FACE	Z	-.775	-.775	0
3	M2	X	0	0	%100
4	M2	Z	-.775	-.775	0
5	M13	X	0	0	%100
6	M13	Z	0	0	%100
7	M14	X	0	0	%100
8	M14	Z	0	0	%100
9	M15	X	0	0	%100
10	M15	Z	0	0	%100
11	M16	X	0	0	%100
12	M16	Z	0	0	%100
13	OVP	X	0	0	0
14	OVP	Z	-.306	-.306	0
15	M18	X	0	0	%100
16	M18	Z	-.306	-.306	0
17	M19	X	0	0	%100
18	M19	Z	-.306	-.306	0
19	M20	X	0	0	%100
20	M20	Z	-.306	-.306	0
21	M21	X	0	0	%100
22	M21	Z	-.169	-.169	0
23	M22	X	0	0	%100
24	M22	Z	-.169	-.169	0
25	M23	X	0	0	%100
26	M23	Z	-.169	-.169	0
27	M24	X	0	0	%100
28	M24	Z	-.169	-.169	0
29	M25	X	0	0	%100
30	M25	Z	-.175	-.175	0
31	M26	X	0	0	%100
32	M26	Z	-.175	-.175	0
33	M27	X	0	0	%100
34	M27	Z	-.175	-.175	0
35	M28	X	0	0	%100
36	M28	Z	-.175	-.175	0
37	MP4A	X	0	0	%100
38	MP4A	Z	-.64	-.64	0
39	MP3A	X	0	0	%100
40	MP3A	Z	-.64	-.64	0
41	MP2A	X	0	0	%100
42	MP2A	Z	-.64	-.64	0
43	MP1A	X	0	0	%100
44	MP1A	Z	-.64	-.64	0
45	M44	X	0	0	%100
46	M44	Z	-.169	-.169	0
47	M45	X	0	0	%100
48	M45	Z	-.169	-.169	0
49	M46	X	0	0	%100
50	M46	Z	-.169	-.169	0
51	M47	X	0	0	%100
52	M47	Z	-.169	-.169	0
53	M43	X	0	0	%100
54	M43	Z	-.000384	-.000384	0
55	M44A	X	0	0	%100
56	M44A	Z	-.027	-.027	0

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

Member Label	Direction	Start Magnitude[...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X .291	.291	0	%100
2	FACE	Z -.503	-.503	0	%100
3	M2	X .291	.291	0	%100
4	M2	Z -.503	-.503	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	OVP	X .034	.034	0	%100
14	OVP	Z -.06	-.06	0	%100
15	M18	X .034	.034	0	%100
16	M18	Z -.06	-.06	0	%100
17	M19	X .242	.242	0	%100
18	M19	Z -.419	-.419	0	%100
19	M20	X .242	.242	0	%100
20	M20	Z -.419	-.419	0	%100
21	M21	X .063	.063	0	%100
22	M21	Z -.109	-.109	0	%100
23	M22	X .063	.063	0	%100
24	M22	Z -.109	-.109	0	%100
25	M23	X .063	.063	0	%100
26	M23	Z -.109	-.109	0	%100
27	M24	X .063	.063	0	%100
28	M24	Z -.109	-.109	0	%100
29	M25	X .07	.07	0	%100
30	M25	Z -.121	-.121	0	%100
31	M26	X .07	.07	0	%100
32	M26	Z -.121	-.121	0	%100
33	M27	X .1	.1	0	%100
34	M27	Z -.174	-.174	0	%100
35	M28	X .1	.1	0	%100
36	M28	Z -.174	-.174	0	%100
37	MP4A	X .32	.32	0	%100
38	MP4A	Z -.555	-.555	0	%100
39	MP3A	X .32	.32	0	%100
40	MP3A	Z -.555	-.555	0	%100
41	MP2A	X .32	.32	0	%100
42	MP2A	Z -.555	-.555	0	%100
43	MP1A	X .32	.32	0	%100
44	MP1A	Z -.555	-.555	0	%100
45	M44	X .084	.084	0	%100
46	M44	Z -.146	-.146	0	%100
47	M45	X .084	.084	0	%100
48	M45	Z -.146	-.146	0	%100
49	M46	X .084	.084	0	%100
50	M46	Z -.146	-.146	0	%100
51	M47	X .084	.084	0	%100
52	M47	Z -.146	-.146	0	%100
53	M43	X .08	.08	0	%100
54	M43	Z -.139	-.139	0	%100
55	M44A	X .142	.142	0	%100
56	M44A	Z -.246	-.246	0	%100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X .168	.168	0	%100
2	FACE	Z -.097	-.097	0	%100
3	M2	X .168	.168	0	%100
4	M2	Z -.097	-.097	0	%100
5	M13	X .109	.109	0	%100
6	M13	Z -.063	-.063	0	%100
7	M14	X .109	.109	0	%100
8	M14	Z -.063	-.063	0	%100
9	M15	X .109	.109	0	%100
10	M15	Z -.063	-.063	0	%100
11	M16	X .109	.109	0	%100
12	M16	Z -.063	-.063	0	%100
13	OVP	X .008	.008	0	%100
14	OVP	Z -.005	-.005	0	%100
15	M18	X .008	.008	0	%100
16	M18	Z -.005	-.005	0	%100
17	M19	X .368	.368	0	%100
18	M19	Z -.212	-.212	0	%100
19	M20	X .368	.368	0	%100
20	M20	Z -.212	-.212	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 .113	.113	0	%100
30	M25	Z -.065	-.065	0	%100
31	M26	X .113	.113	0	%100
32	M26	Z -.065	-.065	0	%100
33	M27	X .166	.166	0	%100
34	M27	Z -.096	-.096	0	%100
35	M28	X .166	.166	0	%100
36	M28	Z -.096	-.096	0	%100
37	MP4A	X .555	.555	0	%100
38	MP4A	Z -.32	-.32	0	%100
39	MP3A	X .555	.555	0	%100
40	MP3A	Z -.32	-.32	0	%100
41	MP2A	X .555	.555	0	%100
42	MP2A	Z -.32	-.32	0	%100
43	MP1A	X .555	.555	0	%100
44	MP1A	Z -.32	-.32	0	%100
45	M44	X .146	.146	0	%100
46	M44	Z -.084	-.084	0	%100
47	M45	X .146	.146	0	%100
48	M45	Z -.084	-.084	0	%100
49	M46	X .146	.146	0	%100
50	M46	Z -.084	-.084	0	%100
51	M47	X .146	.146	0	%100
52	M47	Z -.084	-.084	0	%100
53	M43	X .416	.416	0	%100
54	M43	Z -.24	-.24	0	%100
55	M44A	X .5	.5	0	%100
56	M44A	Z -.289	-.289	0	%100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X	0	0	%100
2	FACE	Z	0	0	%100
3	M2	X	0	0	%100
4	M2	Z	0	0	%100
5	M13	X	.169	.169	0
6	M13	Z	0	0	%100
7	M14	X	.169	.169	0
8	M14	Z	0	0	%100
9	M15	X	.169	.169	0
10	M15	Z	0	0	%100
11	M16	X	.169	.169	0
12	M16	Z	0	0	%100
13	OVP	X	.188	.188	0
14	OVP	Z	0	0	%100
15	M18	X	.188	.188	0
16	M18	Z	0	0	%100
17	M19	X	.188	.188	0
18	M19	Z	0	0	%100
19	M20	X	.188	.188	0
20	M20	Z	0	0	%100
21	M21	X	0	0	%100
22	M21	Z	0	0	%100
23	M22	X	0	0	%100
24	M22	Z	0	0	%100
25	M23	X	0	0	%100
26	M23	Z	0	0	%100
27	M24	X	0	0	%100
28	M24	Z	0	0	%100
29	M25	X	.157	.157	0
30	M25	Z	0	0	%100
31	M26	X	.157	.157	0
32	M26	Z	0	0	%100
33	M27	X	.157	.157	0
34	M27	Z	0	0	%100
35	M28	X	.157	.157	0
36	M28	Z	0	0	%100
37	MP4A	X	.64	.64	0
38	MP4A	Z	0	0	%100
39	MP3A	X	.64	.64	0
40	MP3A	Z	0	0	%100
41	MP2A	X	.64	.64	0
42	MP2A	Z	0	0	%100
43	MP1A	X	.64	.64	0
44	MP1A	Z	0	0	%100
45	M44	X	.169	.169	0
46	M44	Z	0	0	%100
47	M45	X	.169	.169	0
48	M45	Z	0	0	%100
49	M46	X	.169	.169	0
50	M46	Z	0	0	%100
51	M47	X	.169	.169	0
52	M47	Z	0	0	%100
53	M43	X	.64	.64	0
54	M43	Z	0	0	%100
55	M44A	X	.614	.614	0
56	M44A	Z	0	0	%100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X .168	.168	0	%100
2	FACE	Z .097	.097	0	%100
3	M2	X .168	.168	0	%100
4	M2	Z .097	.097	0	%100
5	M13	X .109	.109	0	%100
6	M13	Z .063	.063	0	%100
7	M14	X .109	.109	0	%100
8	M14	Z .063	.063	0	%100
9	M15	X .109	.109	0	%100
10	M15	Z .063	.063	0	%100
11	M16	X .109	.109	0	%100
12	M16	Z .063	.063	0	%100
13	OVP	X .368	.368	0	%100
14	OVP	Z .212	.212	0	%100
15	M18	X .368	.368	0	%100
16	M18	Z .212	.212	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 .166	.166	0	%100
30	M25	Z .096	.096	0	%100
31	M26	X .166	.166	0	%100
32	M26	Z .096	.096	0	%100
33	M27	X .113	.113	0	%100
34	M27	Z .065	.065	0	%100
35	M28	X .113	.113	0	%100
36	M28	Z .065	.065	0	%100
37	MP4A	X .555	.555	0	%100
38	MP4A	Z .32	.32	0	%100
39	MP3A	X .555	.555	0	%100
40	MP3A	Z .32	.32	0	%100
41	MP2A	X .555	.555	0	%100
42	MP2A	Z .32	.32	0	%100
43	MP1A	X .555	.555	0	%100
44	MP1A	Z .32	.32	0	%100
45	M44	X .146	.146	0	%100
46	M44	Z .084	.084	0	%100
47	M45	X .146	.146	0	%100
48	M45	Z .084	.084	0	%100
49	M46	X .146	.146	0	%100
50	M46	Z .084	.084	0	%100
51	M47	X .146	.146	0	%100
52	M47	Z .084	.084	0	%100
53	M43	X .416	.416	0	%100
54	M43	Z .24	.24	0	%100
55	M44A	X .309	.309	0	%100
56	M44A	Z .178	.178	0	%100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X .291	.291	0	%100
2	FACE	Z .503	.503	0	%100
3	M2	X .291	.291	0	%100
4	M2	Z .503	.503	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	OVP	X .242	.242	0	%100
14	OVP	Z .419	.419	0	%100
15	M18	X .242	.242	0	%100
16	M18	Z .419	.419	0	%100
17	M19	X .034	.034	0	%100
18	M19	Z .06	.06	0	%100
19	M20	X .034	.034	0	%100
20	M20	Z .06	.06	0	%100
21	M21	X .063	.063	0	%100
22	M21	Z .109	.109	0	%100
23	M22	X .063	.063	0	%100
24	M22	Z .109	.109	0	%100
25	M23	X .063	.063	0	%100
26	M23	Z .109	.109	0	%100
27	M24	X .063	.063	0	%100
28	M24	Z .109	.109	0	%100
29	M25	X .1	.1	0	%100
30	M25	Z .174	.174	0	%100
31	M26	X .1	.1	0	%100
32	M26	Z .174	.174	0	%100
33	M27	X .07	.07	0	%100
34	M27	Z .121	.121	0	%100
35	M28	X .07	.07	0	%100
36	M28	Z .121	.121	0	%100
37	MP4A	X .32	.32	0	%100
38	MP4A	Z .555	.555	0	%100
39	MP3A	X .32	.32	0	%100
40	MP3A	Z .555	.555	0	%100
41	MP2A	X .32	.32	0	%100
42	MP2A	Z .555	.555	0	%100
43	MP1A	X .32	.32	0	%100
44	MP1A	Z .555	.555	0	%100
45	M44	X .084	.084	0	%100
46	M44	Z .146	.146	0	%100
47	M45	X .084	.084	0	%100
48	M45	Z .146	.146	0	%100
49	M46	X .084	.084	0	%100
50	M46	Z .146	.146	0	%100
51	M47	X .084	.084	0	%100
52	M47	Z .146	.146	0	%100
53	M43	X .08	.08	0	%100
54	M43	Z .139	.139	0	%100
55	M44A	X .032	.032	0	%100
56	M44A	Z .055	.055	0	%100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X	0	0	%100
2	FACE	Z	.775	.775	0
3	M2	X	0	0	%100
4	M2	Z	.775	.775	0
5	M13	X	0	0	%100
6	M13	Z	0	0	%100
7	M14	X	0	0	%100
8	M14	Z	0	0	%100
9	M15	X	0	0	%100
10	M15	Z	0	0	%100
11	M16	X	0	0	%100
12	M16	Z	0	0	%100
13	OVP	X	0	0	0
14	OVP	Z	.306	.306	0
15	M18	X	0	0	%100
16	M18	Z	.306	.306	0
17	M19	X	0	0	%100
18	M19	Z	.306	.306	0
19	M20	X	0	0	%100
20	M20	Z	.306	.306	0
21	M21	X	0	0	%100
22	M21	Z	.169	.169	0
23	M22	X	0	0	%100
24	M22	Z	.169	.169	0
25	M23	X	0	0	%100
26	M23	Z	.169	.169	0
27	M24	X	0	0	%100
28	M24	Z	.169	.169	0
29	M25	X	0	0	%100
30	M25	Z	.175	.175	0
31	M26	X	0	0	%100
32	M26	Z	.175	.175	0
33	M27	X	0	0	%100
34	M27	Z	.175	.175	0
35	M28	X	0	0	%100
36	M28	Z	.175	.175	0
37	MP4A	X	0	0	%100
38	MP4A	Z	.64	.64	0
39	MP3A	X	0	0	%100
40	MP3A	Z	.64	.64	0
41	MP2A	X	0	0	%100
42	MP2A	Z	.64	.64	0
43	MP1A	X	0	0	%100
44	MP1A	Z	.64	.64	0
45	M44	X	0	0	%100
46	M44	Z	.169	.169	0
47	M45	X	0	0	%100
48	M45	Z	.169	.169	0
49	M46	X	0	0	%100
50	M46	Z	.169	.169	0
51	M47	X	0	0	%100
52	M47	Z	.169	.169	0
53	M43	X	0	0	%100
54	M43	Z	.000384	.000384	0
55	M44A	X	0	0	%100
56	M44A	Z	.027	.027	0

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X	-.291	-.291	0 %100
2	FACE	Z	.503	.503	0 %100
3	M2	X	-.291	-.291	0 %100
4	M2	Z	.503	.503	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	OVP	X	-.034	-.034	0 %100
14	OVP	Z	.06	.06	0 %100
15	M18	X	-.034	-.034	0 %100
16	M18	Z	.06	.06	0 %100
17	M19	X	-.242	-.242	0 %100
18	M19	Z	.419	.419	0 %100
19	M20	X	-.242	-.242	0 %100
20	M20	Z	.419	.419	0 %100
21	M21	X	-.063	-.063	0 %100
22	M21	Z	.109	.109	0 %100
23	M22	X	-.063	-.063	0 %100
24	M22	Z	.109	.109	0 %100
25	M23	X	-.063	-.063	0 %100
26	M23	Z	.109	.109	0 %100
27	M24	X	-.063	-.063	0 %100
28	M24	Z	.109	.109	0 %100
29	M25	X	-.07	-.07	0 %100
30	M25	Z	.121	.121	0 %100
31	M26	X	-.07	-.07	0 %100
32	M26	Z	.121	.121	0 %100
33	M27	X	-.1	-.1	0 %100
34	M27	Z	.174	.174	0 %100
35	M28	X	-.1	-.1	0 %100
36	M28	Z	.174	.174	0 %100
37	MP4A	X	-.32	-.32	0 %100
38	MP4A	Z	.555	.555	0 %100
39	MP3A	X	-.32	-.32	0 %100
40	MP3A	Z	.555	.555	0 %100
41	MP2A	X	-.32	-.32	0 %100
42	MP2A	Z	.555	.555	0 %100
43	MP1A	X	-.32	-.32	0 %100
44	MP1A	Z	.555	.555	0 %100
45	M44	X	-.084	-.084	0 %100
46	M44	Z	.146	.146	0 %100
47	M45	X	-.084	-.084	0 %100
48	M45	Z	.146	.146	0 %100
49	M46	X	-.084	-.084	0 %100
50	M46	Z	.146	.146	0 %100
51	M47	X	-.084	-.084	0 %100
52	M47	Z	.146	.146	0 %100
53	M43	X	-.08	-.08	0 %100
54	M43	Z	.139	.139	0 %100
55	M44A	X	-.142	-.142	0 %100
56	M44A	Z	.246	.246	0 %100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X .168	.168	0	%100
2	FACE	Z .097	.097	0	%100
3	M2	X -.168	-.168	0	%100
4	M2	Z .097	.097	0	%100
5	M13	X -.109	-.109	0	%100
6	M13	Z .063	.063	0	%100
7	M14	X -.109	-.109	0	%100
8	M14	Z .063	.063	0	%100
9	M15	X -.109	-.109	0	%100
10	M15	Z .063	.063	0	%100
11	M16	X -.109	-.109	0	%100
12	M16	Z .063	.063	0	%100
13	OVP	X -.008	-.008	0	%100
14	OVP	Z .005	.005	0	%100
15	M18	X -.008	-.008	0	%100
16	M18	Z .005	.005	0	%100
17	M19	X -.368	-.368	0	%100
18	M19	Z .212	.212	0	%100
19	M20	X -.368	-.368	0	%100
20	M20	Z .212	.212	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 -.113	-.113	0	%100
30	M25	Z .065	.065	0	%100
31	M26	X -.113	-.113	0	%100
32	M26	Z .065	.065	0	%100
33	M27	X -.166	-.166	0	%100
34	M27	Z .096	.096	0	%100
35	M28	X -.166	-.166	0	%100
36	M28	Z .096	.096	0	%100
37	MP4A	X -.555	-.555	0	%100
38	MP4A	Z .32	.32	0	%100
39	MP3A	X -.555	-.555	0	%100
40	MP3A	Z .32	.32	0	%100
41	MP2A	X -.555	-.555	0	%100
42	MP2A	Z .32	.32	0	%100
43	MP1A	X -.555	-.555	0	%100
44	MP1A	Z .32	.32	0	%100
45	M44	X -.146	-.146	0	%100
46	M44	Z .084	.084	0	%100
47	M45	X -.146	-.146	0	%100
48	M45	Z .084	.084	0	%100
49	M46	X -.146	-.146	0	%100
50	M46	Z .084	.084	0	%100
51	M47	X -.146	-.146	0	%100
52	M47	Z .084	.084	0	%100
53	M43	X -.416	-.416	0	%100
54	M43	Z .24	.24	0	%100
55	M44A	X -.5	-.5	0	%100
56	M44A	Z .289	.289	0	%100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X	0	0	%100
2	FACE	Z	0	0	%100
3	M2	X	0	0	%100
4	M2	Z	0	0	%100
5	M13	X	-.169	-.169	0
6	M13	Z	0	0	%100
7	M14	X	-.169	-.169	0
8	M14	Z	0	0	%100
9	M15	X	-.169	-.169	0
10	M15	Z	0	0	%100
11	M16	X	-.169	-.169	0
12	M16	Z	0	0	%100
13	OVP	X	-.188	-.188	0
14	OVP	Z	0	0	%100
15	M18	X	-.188	-.188	0
16	M18	Z	0	0	%100
17	M19	X	-.188	-.188	0
18	M19	Z	0	0	%100
19	M20	X	-.188	-.188	0
20	M20	Z	0	0	%100
21	M21	X	0	0	%100
22	M21	Z	0	0	%100
23	M22	X	0	0	%100
24	M22	Z	0	0	%100
25	M23	X	0	0	%100
26	M23	Z	0	0	%100
27	M24	X	0	0	%100
28	M24	Z	0	0	%100
29	M25	X	-.157	-.157	0
30	M25	Z	0	0	%100
31	M26	X	-.157	-.157	0
32	M26	Z	0	0	%100
33	M27	X	-.157	-.157	0
34	M27	Z	0	0	%100
35	M28	X	-.157	-.157	0
36	M28	Z	0	0	%100
37	MP4A	X	-.64	-.64	0
38	MP4A	Z	0	0	%100
39	MP3A	X	-.64	-.64	0
40	MP3A	Z	0	0	%100
41	MP2A	X	-.64	-.64	0
42	MP2A	Z	0	0	%100
43	MP1A	X	-.64	-.64	0
44	MP1A	Z	0	0	%100
45	M44	X	-.169	-.169	0
46	M44	Z	0	0	%100
47	M45	X	-.169	-.169	0
48	M45	Z	0	0	%100
49	M46	X	-.169	-.169	0
50	M46	Z	0	0	%100
51	M47	X	-.169	-.169	0
52	M47	Z	0	0	%100
53	M43	X	-.64	-.64	0
54	M43	Z	0	0	%100
55	M44A	X	-.614	-.614	0
56	M44A	Z	0	0	%100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X	-.168	0	%100
2	FACE	Z	-.097	0	%100
3	M2	X	-.168	0	%100
4	M2	Z	-.097	0	%100
5	M13	X	-.109	0	%100
6	M13	Z	-.063	0	%100
7	M14	X	-.109	0	%100
8	M14	Z	-.063	0	%100
9	M15	X	-.109	0	%100
10	M15	Z	-.063	0	%100
11	M16	X	-.109	0	%100
12	M16	Z	-.063	0	%100
13	OVP	X	-.368	0	%100
14	OVP	Z	-.212	0	%100
15	M18	X	-.368	0	%100
16	M18	Z	-.212	0	%100
17	M19	X	-.008	0	%100
18	M19	Z	-.005	0	%100
19	M20	X	-.008	0	%100
20	M20	Z	-.005	0	%100
21	M21	X	-.036	0	%100
22	M21	Z	-.021	0	%100
23	M22	X	-.036	0	%100
24	M22	Z	-.021	0	%100
25	M23	X	-.036	0	%100
26	M23	Z	-.021	0	%100
27	M24	X	-.036	0	%100
28	M24	Z	-.021	0	%100
29	M25	X	-.166	0	%100
30	M25	Z	-.096	0	%100
31	M26	X	-.166	0	%100
32	M26	Z	-.096	0	%100
33	M27	X	-.113	0	%100
34	M27	Z	-.065	0	%100
35	M28	X	-.113	0	%100
36	M28	Z	-.065	0	%100
37	MP4A	X	-.555	0	%100
38	MP4A	Z	-.32	0	%100
39	MP3A	X	-.555	0	%100
40	MP3A	Z	-.32	0	%100
41	MP2A	X	-.555	0	%100
42	MP2A	Z	-.32	0	%100
43	MP1A	X	-.555	0	%100
44	MP1A	Z	-.32	0	%100
45	M44	X	-.146	0	%100
46	M44	Z	-.084	0	%100
47	M45	X	-.146	0	%100
48	M45	Z	-.084	0	%100
49	M46	X	-.146	0	%100
50	M46	Z	-.084	0	%100
51	M47	X	-.146	0	%100
52	M47	Z	-.084	0	%100
53	M43	X	-.416	0	%100
54	M43	Z	-.24	0	%100
55	M44A	X	-.309	0	%100
56	M44A	Z	-.178	0	%100

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

Member Label	Direction	Start Magnitude[l...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	FACE	X	-.291	-.291	0 %100
2	FACE	Z	-.503	-.503	0 %100
3	M2	X	-.291	-.291	0 %100
4	M2	Z	-.503	-.503	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	OVP	X	-.242	-.242	0 %100
14	OVP	Z	-.419	-.419	0 %100
15	M18	X	-.242	-.242	0 %100
16	M18	Z	-.419	-.419	0 %100
17	M19	X	-.034	-.034	0 %100
18	M19	Z	-.06	-.06	0 %100
19	M20	X	-.034	-.034	0 %100
20	M20	Z	-.06	-.06	0 %100
21	M21	X	-.063	-.063	0 %100
22	M21	Z	-.109	-.109	0 %100
23	M22	X	-.063	-.063	0 %100
24	M22	Z	-.109	-.109	0 %100
25	M23	X	-.063	-.063	0 %100
26	M23	Z	-.109	-.109	0 %100
27	M24	X	-.063	-.063	0 %100
28	M24	Z	-.109	-.109	0 %100
29	M25	X	-.1	-.1	0 %100
30	M25	Z	-.174	-.174	0 %100
31	M26	X	-.1	-.1	0 %100
32	M26	Z	-.174	-.174	0 %100
33	M27	X	-.07	-.07	0 %100
34	M27	Z	-.121	-.121	0 %100
35	M28	X	-.07	-.07	0 %100
36	M28	Z	-.121	-.121	0 %100
37	MP4A	X	-.32	-.32	0 %100
38	MP4A	Z	-.555	-.555	0 %100
39	MP3A	X	-.32	-.32	0 %100
40	MP3A	Z	-.555	-.555	0 %100
41	MP2A	X	-.32	-.32	0 %100
42	MP2A	Z	-.555	-.555	0 %100
43	MP1A	X	-.32	-.32	0 %100
44	MP1A	Z	-.555	-.555	0 %100
45	M44	X	-.084	-.084	0 %100
46	M44	Z	-.146	-.146	0 %100
47	M45	X	-.084	-.084	0 %100
48	M45	Z	-.146	-.146	0 %100
49	M46	X	-.084	-.084	0 %100
50	M46	Z	-.146	-.146	0 %100
51	M47	X	-.084	-.084	0 %100
52	M47	Z	-.146	-.146	0 %100
53	M43	X	-.08	-.08	0 %100
54	M43	Z	-.139	-.139	0 %100
55	M44A	X	-.032	-.032	0 %100
56	M44A	Z	-.055	-.055	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 412.736	47	850.596	13	1110.273	13	-.11	66	0	75	.084	47
2	min -630.83	49	260.098	66	-98.362	7	-.365	13	0	1	-126	49
3 N36	max 1530.398	9	813.637	19	210.723	6	-.099	12	0	75	.083	47
4	min -1515.377	3	247.615	73	-874.806	24	-.351	18	0	1	-121	49
5 N65A	max 34.907	10	46.349	12	1400.648	12	0	75	0	75	0	75
6	min -35.648	4	-23.209	6	-1471.595	6	0	1	0	1	0	1
7 N66A	max 231.649	2	39.238	2	1173.9	2	0	75	0	75	0	75
8	min -248.566	8	-12.239	8	-1259.191	8	0	1	0	1	0	1
9 Totals:	max 1686.312	10	1707.197	18	2107.019	1						
10	min -1686.312	4	526.758	64	-2107.02	7						

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

Member	Shape	Code	Check	Loc[ft]	LC	Shear Ch...	Loc[ft]	Dir	LC	phi*Pnc ... phi*Pnt [...phi*Mn y...phi*Mn z...Cb	Eqn
1 FACE	PIPE 2.5	.131	3.776	49	.076	8.724		42	14558.7... 50715	3.596	3.596 2...H1-1b
2 M2	PIPE 2.5	.196	3.255	6	.092	3.255		6	14558.7... 50715	3.596	3.596 2...H1-1b
3 M13	PL5/8X3.5	.155	.422	10	.209	.422	y	11	66184.77 68906.25	.897	5.024 1...H1-1b
4 M14	PL5/8X3.5	.158	0	30	.073	.422	y	2	66184.77 68906.25	.897	5.024 1...H1-1b
5 M15	PL5/8X3.5	.165	0	45	.066	.422	v	12	66184.77 68906.25	.897	5.024 1...H1-1b
6 M16	PL5/8X3.5	.144	.422	3	.194	.422	y	3	66184.77 68906.25	.897	5.024 1...H1-1b
7 OVP	PIPE 2.0	.212	0	11	.059	0		5	31128.25 32130	1.872	1.872 2...H1-1b
8 M18	PIPE 2.0	.072	0	2	.054	0		31	31128.25 32130	1.872	1.872 1...H1-1b
9 M19	PIPE 2.0	.064	0	12	.055	0		37	31128.25 32130	1.872	1.872 1...H1-1b
10 M20	PIPE 2.0	.195	0	3	.048	0		45	31128.25 32130	1.872	1.872 2...H1-1b
11 M21	PL5/8X3.5	.230	.531	35	.077	.443	y	11	67591.76 68906.25	.897	5.024 1...H1-1b
12 M22	PL5/8X3.5	.221	.531	39	.075	.443	y	3	67591.76 68906.25	.897	5.024 1...H1-1b
13 M23	PL5/8X3.5	.246	.531	26	.031	.133	y	25	67591.76 68906.25	.897	5.024 1...H1-1b
14 M24	PL5/8X3.5	.240	.531	48	.037	.133	y	37	67591.76 68906.25	.897	5.024 1...H1-1b
15 M25	SR 0.75	.000	0	75	.009	0		6	2863.854 13916.2...	.174	.174 1...H1-1a
16 M26	SR 0.75	.050	0	31	.013	0		3	2863.854 13916.2...	.174	.174 1...H1-1b*
17 M27	SR 0.75	.000	0	75	.004	0		20	2863.854 13916.2...	.174	.174 1...H1-1a
18 M28	SR 0.75	.050	4.167	39	.012	0		9	2863.854 13916.2...	.174	.174 1...H1-1b*
19 MP4A	PIPE 2.0	.216	5.667	49	.043	2.333		10	14916.0... 32130	1.872	1.872 4...H1-1b
20 MP3A	PIPE 2.0	.267	2.333	8	.079	4.083		5	14916.0... 32130	1.872	1.872 2...H1-1b
21 MP2A	PIPE 2.0	.116	2.333	8	.065	2.333		9	14916.0... 32130	1.872	1.872 2...H1-1b
22 MP1A	PIPE 2.0	.101	2.333	16	.042	2.333		4	14916.0... 32130	1.872	1.872 3...H1-1b
23 M44	SR 0.625	.072	1.667	12	.008	0		49	2158.31 9664.079	.101	.101 1...H1-1b
24 M45	SR 0.625	.058	1.667	8	.015	0		9	2158.31 9664.079	.101	.101 1...H1-1b
25 M46	SR 0.625	.050	1.667	4	.016	0		3	2158.31 9664.079	.101	.101 1...H1-1b
26 M47	SR 0.625	.058	1.667	2	.008	0		1	2158.31 9664.079	.101	.101 1...H1-1b
27 M43	PIPE 2.0	.067	5.957	12	.004	5.957		10	20996.1... 32130	1.872	1.872 1...H1-1b*
28 M44A	PIPE 2.0	.066	6.911	2	.004	6.911		4	18121.7... 32130	1.872	1.872 1...H1-1b*

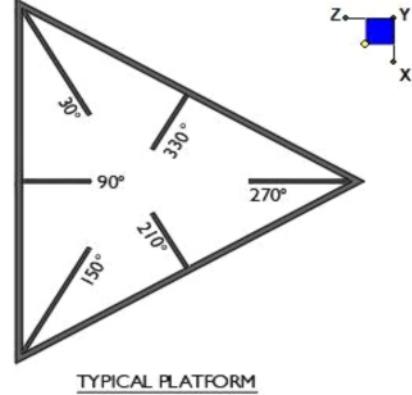


Client: Verizon Date: 11/22/2021  
 Site Name: Pawcatuck CT  
 Project No. 21777773A  
 Title: Mount Analysis Page: 1  
 Version 3.1

## I. Mount-to-Tower Connection Check

### RISA Model Data

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



### Tower Connection Bolt Checks

Any moment resistance?: yes

Bolt Quantity per Reaction: 4

$d_x$  (in) (Delta X of typ. bolt config. sketch): 9.5

$d_y$  (in) (Delta Y of typ. bolt config. sketch): 3.5

Bolt Type: A307

Bolt Diameter (in): 0.625

Required Tensile Strength (kips): 3.6

Required Shear Strength (kips): 1.6

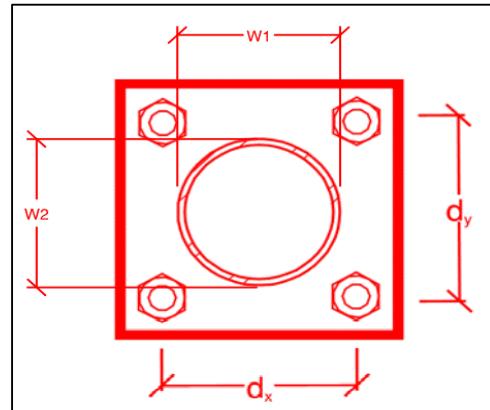
Tensile Strength / bolt (kips): 10.0

Shear Strength / bolt (kips): 6.0

Tensile Capacity Overall: 9.0%\*

Shear Capacity Overall: 6.8%

yes
4
9.5
3.5
A307
0.625
3.6
1.6
10.0
6.0
9.0%*
6.8%



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

# Mount Desktop – Post Modification Inspection (PMI) Report Requirements

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

Electronic pdf version of this can be downloaded at <https://pmi.vzwsmart.com>

For additional questions and support, please reach out to [pmisupport@colliersengineering.com](mailto:pmisupport@colliersengineering.com)

---

**Purpose** – to provide SMART Tool structural vendor the proper documentation in order to complete the required Mount Desktop review of the Post Modification Inspection Report.

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

### **Base Requirements:**

- If installation will cause damage to the structure, the climbing facility, or safety climb if present or any installed system, SMART Tool vendor to be notified prior to install. Any special photos outside of the standard requirements will be indicated on the drawings.
- Provide “as built mount drawings” showing contractor’s name, contact information, preparer’s signature, and date. Any deviations from the drawings (Proposed modification) shall be shown. NOTE: If loading is different than what is conveyed in the passing mount analysis (MA) contact the SMART Tool vendor immediately.
- Each photo should be time and date stamped.
- Photos should be high resolution.
- 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. If there is conflict, contact the SMART Tool engineer for recommendations.
- The PMI can be accessed at the following portal: <https://pmi.vzwsmart.com>

### **Photo Requirements:**

- Photos taken at ground level
  - Photo of Gate Signs showing the tower owner, site name, and number.
  - Overall tower structure after installation.
  - Photos of the mount after installation; if the mounts are at different rad elevations, pictures must be provided for all elevations that equipment was installed.
- Photos taken at Mount Elevation
  - Photos showing the safety climb wire rope above and below the mount prior to installation.
  - Photos showing the climbing facility and safety climb if present.
  - Photos showing each individual sector after installation of mounts. Each entire sector shall be in one photo to show the interconnection of members.

- These photos shall also certify that the placement and geometry of the equipment on the mount is as depicted in the antenna placement diagram in this form.
- Photos that show the model number of each antenna and piece of equipment installed per sector.
- Photos of each installed mount; pictures shall also include connection hardware (U-bolts, bolts, nuts, all-threaded rods, etc.)
- Photos showing the installed mount elevation.

**Antenna & equipment placement and Geometry Confirmation:**

- The contractor shall certify that the antenna & equipment placement and geometry is in accordance with the sketch and table as included in the mount analysis and noted below.

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

**Issue:**

Contractor shall remove existing mounts and all associated hardware.

Contractor to install safety climb cable guide (SitePro 1, Part #: 120-123-317 or EOR approved equivalent) in locations where wire rope is rubbing against mount connection. Contractor to provide photos of safety climb guide installation.

Mount to be installed at an azimuth that is skewed 10° from the tower leg (Alpha – 40°, Beta- 170°, Gamma – 310°). Supporting antennas will be rotated to achieve azimuths specified in RFDS.

Contractor shall install (2) tie backs on the top face horizontal 39" from the left and right end (as seen from behind the mount). Connect opposite ends of tiebacks to the adjacent tower legs. Contractor shall trim as required and protect cut end with two coats of zinga or zinc cote.

Install (4) mount pipes (Part #: VZWSMART-P40-238X096) in each sector. Space at 48" (C-C) and 3" from edge of the mount. Ensure the mount pipes extend 68" above the bottom face horizontal.

Install one proposed OVP on the left standoff horizontal in the Alpha sector (as seen from behind the mount).

**Response:**

**Contractor certifies that the climbing facility / safety climb was not damaged or obstructed prior to starting work:**

Yes       No

**Contractor certifies no new damage/obstructions created during the current installation:**

Yes       No

**Contractor to certify the condition of the safety climb and verify no obstructions when leaving the site:**

- Safety climb in good condition with no obstructions       Safety Climb Damaged  
 Safety Climb Obstructed

**Comments:**

**New Mount Certification:**

- The contractor certifies that the New Mount installed is as specified in the Passing Mount Analysis.  
 The contractor notes that the New Mount installed is not as specified and engineering approval was received for the New Mount installed.

**Antenna & equipment placement and Geometry Confirmation:**

- The contractor certifies that the photos support and the equipment on the mount is as depicted on the sketch and table included in this form and with the mount analysis provided.

OR

- The contractor notes that the equipment on the mount is not in accordance with the sketch and has noted the differences below and provided photo documentation of any alterations.

**Special Instruction Confirmation:**

- The contractor has read and acknowledges the above special instructions.

**Certifying Individual:**

Company:	
Employee Name:	
Contact Phone:	
Email:	
Date:	

Sector: A

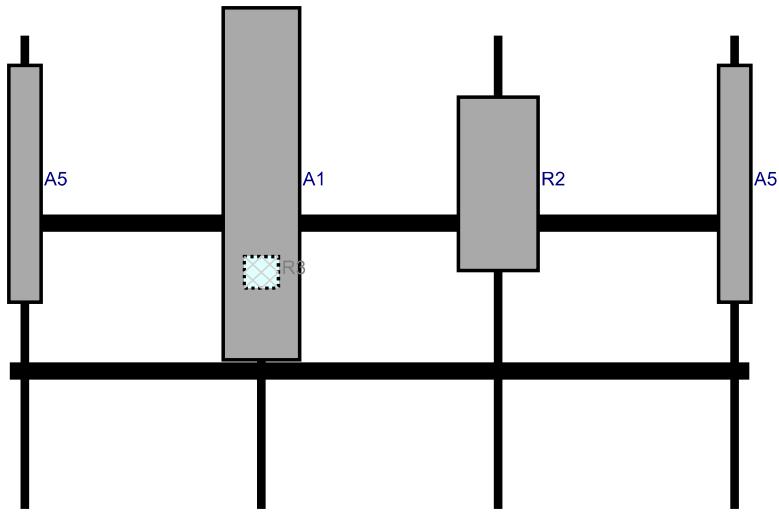
11/22/2021

Structure Type: Self Support

10117341

Mount Elev: 148.00

Page: 1

 To Structure
**Plan View****Front View**  
Looking at Structure

Ref#	Model	Height	Width	H Dist	Pipe	Pipe	Ant	C. Ant	Ant	Status	Validation
		(in)	(in)	Frm L.	#	Pos V	Pos	Frm T.	H Off		
A5	DB844H90E-XY	48	6.5	147	1	a	Front	30	0	Retained	10/28/2021
R2	MT6407-77A	35.1	16.1	99	2	a	Front	30	0	Added	
A1	MX06FRO660-03	71.3	15.4	51	3	a	Front	30	0	Added	
R3	CBC61923T-DS-43	6.4	6.9	51	3	a	Behind	48	0	Added	
A5	DB844H90E-XY	48	6.5	3	4	a	Front	30	0	Retained	10/28/2021

Sector: B

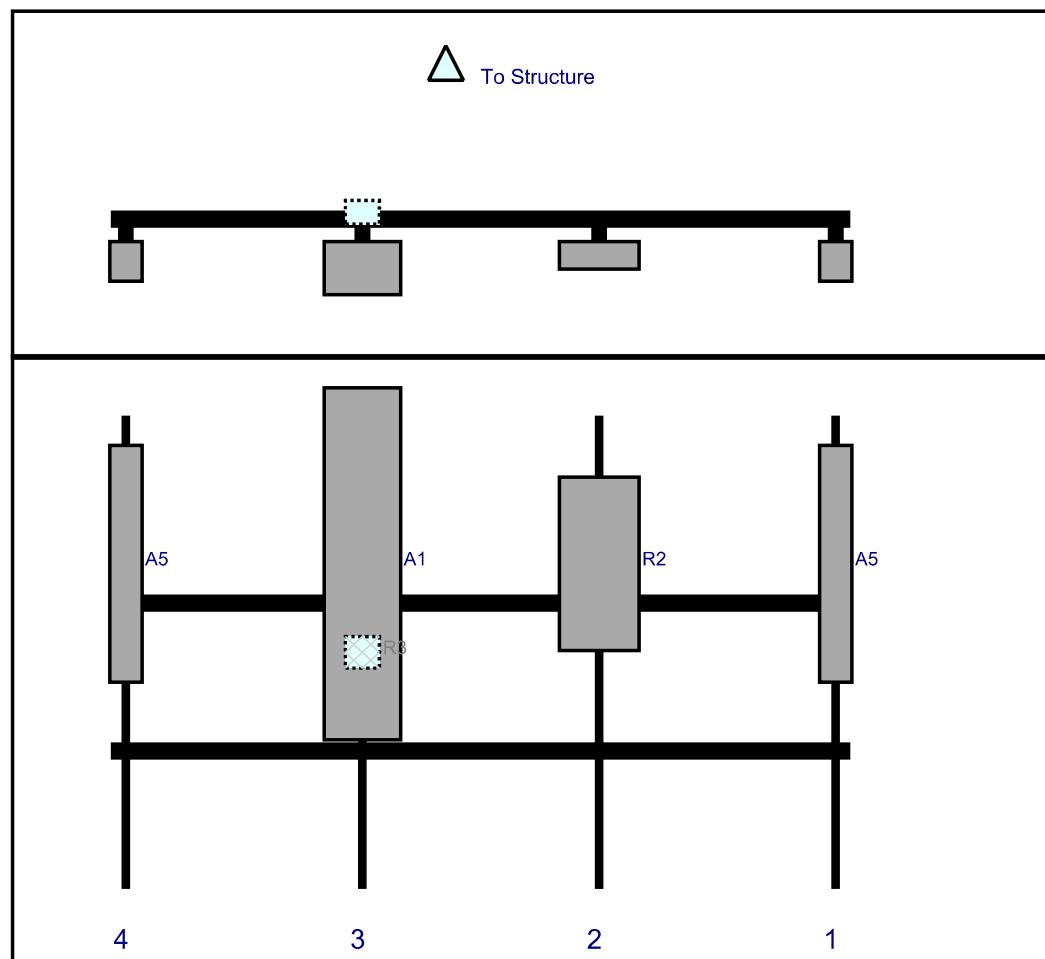
11/22/2021

Structure Type: Self Support

10117341

Mount Elev: 148.00

Page: 2



Ref#	Model	Height	Width	H Dist	Pipe	Pipe	Ant	C. Ant	Ant	Status	Validation
		(in)	(in)	Frm L.	#	Pos V	Pos	Frm T.	H Off		
A5	DB844H90E-XY	48	6.5	147	1	a	Front	30	0	Retained	10/28/2021
R2	MT6407-77A	35.1	16.1	99	2	a	Front	30	0	Added	
A1	MX06FRO660-03	71.3	15.4	51	3	a	Front	30	0	Added	
R3	CBC61923T-DS-43	6.4	6.9	51	3	a	Behind	48	0	Added	
A5	DB844H90E-XY	48	6.5	3	4	a	Front	30	0	Retained	10/28/2021

Sector: C

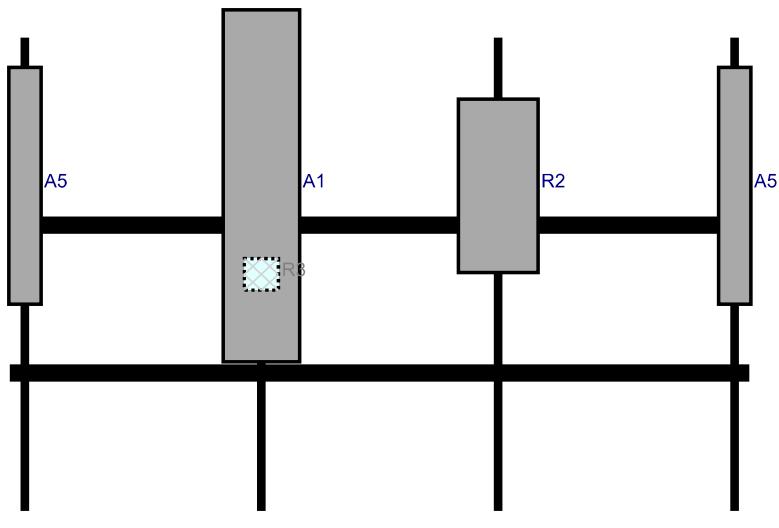
11/22/2021

Structure Type: Self Support

10117341

Mount Elev: 148.00

Page: 3

 To Structure
**Plan View****Front View**  
Looking at Structure

Ref#	Model	Height	Width	H Dist	Pipe	Pipe	Ant	C. Ant	Ant	Status	Validation
		(in)	(in)	Frm L.	#	Pos V	Pos	Frm T.	H Off		
A5	DB844H90E-XY	48	6.5	147	1	a	Front	30	0	Retained	10/28/2021
R2	MT6407-77A	35.1	16.1	99	2	a	Front	30	0	Added	
A1	MX06FRO660-03	71.3	15.4	51	3	a	Front	30	0	Added	
R3	CBC61923T-DS-43	6.4	6.9	51	3	a	Behind	48	0	Added	
A5	DB844H90E-XY	48	6.5	3	4	a	Front	30	0	Retained	10/28/2021

# Maser Consulting Connecticut

<u>Subject</u>	TIA-222-H Adoption and Wind Speed Usage	
<u>Site Information</u>	Site ID:	468000-VZW / PAWCATUCK CT
	Site Name:	PAWCATUCK CT
	Carrier Name:	Verizon Wireless
	Address:	173 South Broad Street Pawcatuck, Connecticut 06379
	Latitude:	41.369056°
	Longitude:	-71.862361°
<u>Structure Information</u>	Tower Type:	180-Ft Self Support
	Mount Type:	15.00-Ft Sector Frame

To Whom It May Concern,

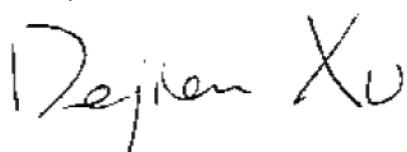
We respectfully submit the above referenced Antenna Mount Structural Analysis report in conformance with ANSI/TIA-222-H, Structural Standard for Antenna Supporting Structures and Antennas and Small Wind Turbine Support Structures.

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,



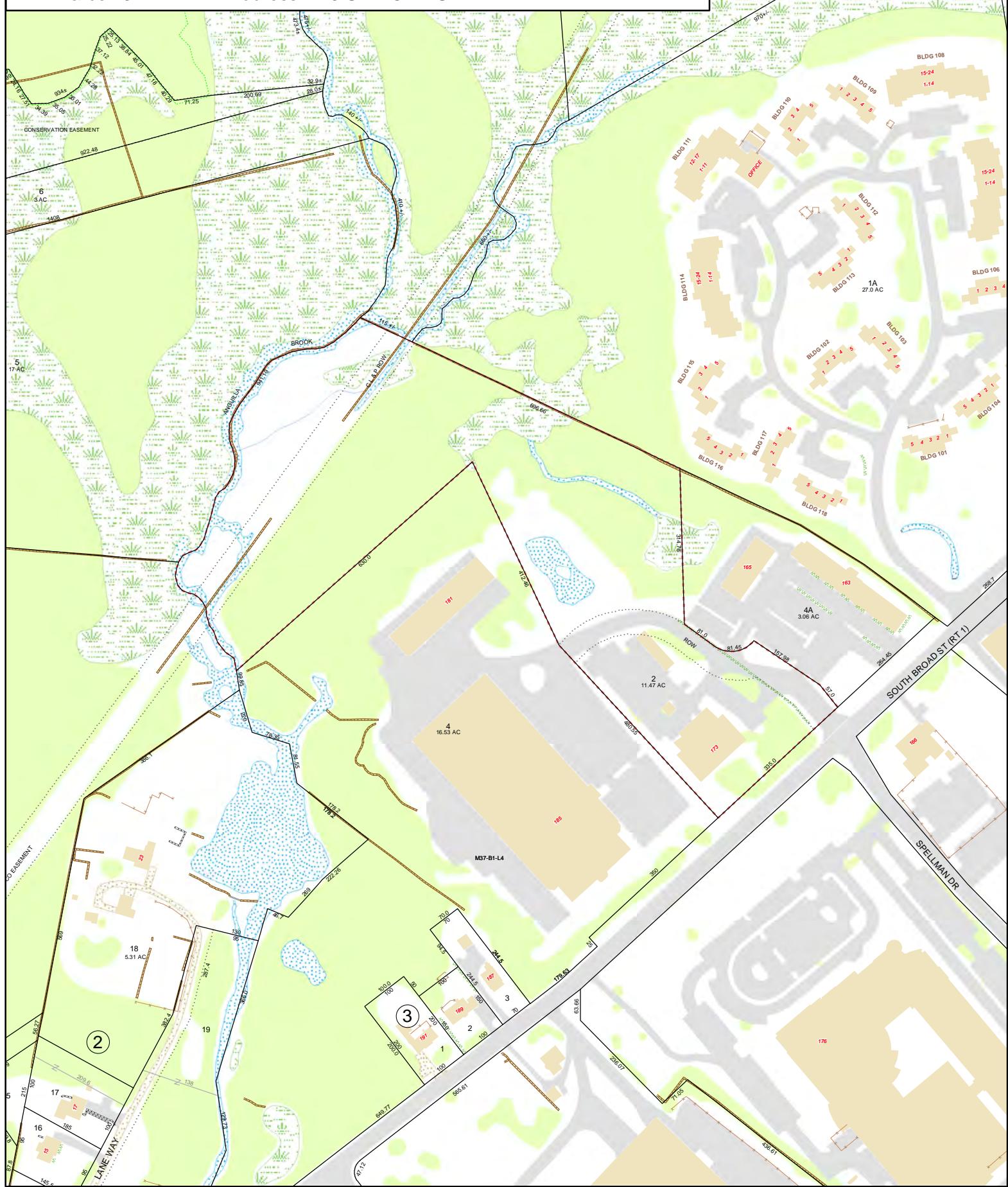
Dejian Xu, PE  
Technical Manager

# **ATTACHMENT 5**

**Town of Stonington, Connecticut - Assessment Parcel Map**

Parcel: 37-1-2

Address: 173 S BROAD ST



### **Approximate Scale:**

**1 inch = 250 feet**

Revised To Grand List: October 2021 Map Produced: February 2022

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



# Town of Stonington, CT

## Property Listing Report

Map Block Lot

37-1-2

Building # 1

PID 3466

Account

00623600

### Property Information

Property Location	<b>173 S BROAD ST</b>		
Owner	<b>STONINGTON TOWN OF</b>		
Co-Owner			
Mailing Address	<b>152 ELM ST STONINGTON CT 06378</b>		
Land Use	<b>9031 MUN POLICE</b>		
Land Class	<b>E</b>		
Zoning Code	<b>M-1</b>		
Census Tract	<b>7051</b>		

Neighborhood	<b>5000</b>		
Acreage	<b>11.47</b>		
Utilities			
Lot Setting/Desc	<b>Suburban Level</b>		
Book / Page	<b>0432/0629</b>		
Additional Info			

### Primary Construction Details

Year Built	<b>2000</b>		
Building Desc.	<b>MUN POLICE</b>		
Building Style	<b>Other Municip</b>		
Building Grade	<b>Good</b>		
Stories	<b>2</b>		
Occupancy	<b>1</b>		
Exterior Walls	<b>Brick/Masonry</b>		
Exterior Walls 2	<b>NA</b>		
Roof Style	<b>Flat</b>		
Roof Cover	<b>Tar &amp; Gravel</b>		
Interior Walls	<b>Drywall/Sheet</b>		
Interior Walls 2	<b>NA</b>		
Interior Floors 1	<b>Vinyl/Asphalt</b>		
Interior Floors 2	<b>Carpet</b>		

Heating Fuel	<b>Gas</b>		
Heating Type	<b>Forced Air-Duc</b>		
AC Type	<b>Central</b>		
Bedrooms	<b>0</b>		
Full Bathrooms	<b>0</b>		
Half Bathrooms	<b>0</b>		
Extra Fixtures			
Total Rooms	<b>0</b>		
Bath Style	<b>NA</b>		
Kitchen Style	<b>NA</b>		
Fin Bsmt Area			
Fin Bsmt Quality			
Bsmt Gar			
Fireplaces			

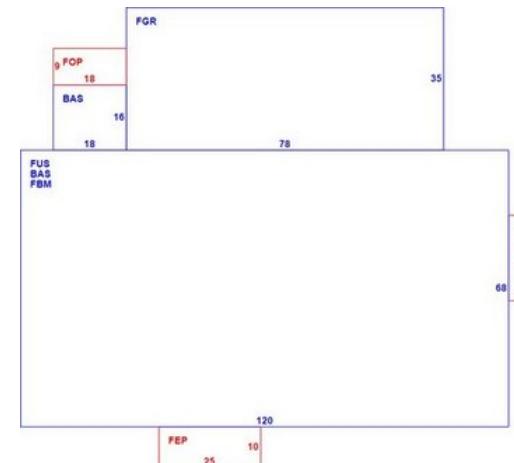
(\*Industrial / Commercial Details)

Building Use	<b>Ind/Comm</b>		
Building Condition	<b>G</b>		
Sprinkler %			
Heat / AC	<b>HEAT/AC SPLIT</b>		
Frame Type	<b>MASONRY</b>		
Baths / Plumbing	<b>ABOVE AVERAGE</b>		
Ceiling / Wall	<b>SUS-CEIL &amp; WL</b>		
Rooms / Prtns	<b>ABOVE AVERAGE</b>		
Wall Height	<b>10</b>		
First Floor Use	<b>9031</b>		
Foundation			

### Photo



### Sketch





## Town of Stonington, CT

## Property Listing Report

---

## Map Block Lo

37-1-

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Building # 1

PID 3460

---

**Account**

00623600

Valuation Summary		(Assessed value = 70% of Appraised Value)	Sub Areas		
Item	Appraised	Assessed	Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
Buildings	2454200	1717900	First Floor	8448	8448
Extras	187100	131000	Basement, Finished	8160	5712
Improvements			Porch, Enclosed	250	0
Outbuildings	277200	194100	Garage	2730	2457
Land	1394200	976000	Porch, Open	288	0
Total	4312700	3019000	Upper Story, Finished	8160	8160

## Outbuilding and Extra Features

---

## Sales History

Owner of Record	Book/ Page	Sale Date	Sale Price
STONINGTON TOWN OF	0432/0629	3/1/1999	0
STONINGTON TOWN OF	0432/0627	3/1/1999	0
OLIVERIO SAMUEL F & MARIE A	0208/0086	9/16/1974	0
OLIVERIO SAMUEL F & MARIE A	0180/0588	3/30/1971	0
OLIVERIO SAMUEL F & MARIE A	0166/0143	4/24/1968	0

# **ATTACHMENT 6**



PAWCATUCK  
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  2	TOTAL NO. of Pieces Received at Post Office™  2	Affix Stamp Here <i>Postmark with Date of Receipt.</i>		
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1.	Danielle Chesebrough, First Selectman Town of Stonington 152 Elm Street Stonington, CT 06378					
2.	Keith Brynes, Town Planner Town of Stonington 152 Elm Street Stonington, CT 06378					
3.						
4.						
5.						
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