Robinson+Cole

KENNETH C. BALDWIN

280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

Also admitted in Massachusetts
and New York

February 9, 2022

Via Electronic Mail

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

Re: **Notice of Exempt Modification – Facility Modification**
8 Ferris Road, Newtown, 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 Newtown effective in November of 1998. Cellco's shared use of the tower was approved by the Siting Council ("Council") in January of 2002 (TS-VER-097-020102). A copy of the Town's tower approval and the Council's TS-VER-097-020102 approval are included in Attachment 1.

Cellco now intends to modify its facility by replacing nine (9) existing antennas with three (3) new Samsung MT6407-77A antennas and six (6) new MX06FRO660-03 antennas on its existing antenna platform. Cellco also intends to replace six (6) remote radio heads ("RRHs") with six (6) new RRHs behind its antennas. A set of project plans showing Cellco's proposed facility modifications and the specifications for Cellco's new antennas and RRHs are included in Attachment 2.

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

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

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

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

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

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

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

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

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

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

Sincerely,

Kenneth C. Baldwin

Enclosures
Copy to:
Daniel Rosenthal, Newtown First Selectman
George Benson, Director of Planning
Erich and Patricia Gertsch, Property Owners
Karla Hanna, Verizon Wireless

ATTACHMENT 1

TOWN OF NEWTOWN

ZONING BOARD OF APPEALS

DOCKET DECISION 98-24

Application of Nextel Communications of the Mid-Atlantic Inc. for a Special Permit under Section 4.18.511 to construct a tower over 30 feet in height and a variance of Section 4.05.100 of the Zoning Regulations. The property is located at 8 Ferris Road in the Town of Newtown in a R-1 Zone.

Having considered the documentation and testimony presented at a public hearing held on October 7, 1998, the Board voted to APPROVE the application as presented with the following stipulations:

1. A 12' chain-link fence be erected around the area of the installation.

2. A landscape plan must be submitted to the Board for approval before installation.

3. If the current use is changed or abandoned, the complete installation must be either removed within 60 days of have reapplied to the Board within 60 days.

The Board therefore APPROVES the application as presented with the above-stated stipulations.

The Board orders further that the effective date of this decision shall be November 13, 1998, and that a certified copy hereof shall be filed in the office of the Town Clerk of the Town of Newtown and that public notice of such filing shall be published in the November 13, 1998 issue of the Newtown Bee.

ZONING BOARD OF APPEALS OF THE TOWN OF NEWTOWN

Charles E. Annett, III, Chairman

TOWN HALL SOUTH • THREE MAIN STREET • NEWTOWN, CONNECTICUT 06470
TEL. (203) 270-4260 • FAX (203) 270-1528

I hereby certify that the adoption of the foregoing decision is recorded in the minutes of the Zoning Board of Appeals of the Town of Newtown in the form of a resolution, the vote of which was as follows:

Charles E. Annett....."Yes"	Sally J. O'Neil....."Yes"
Alan Clavette....."Yes"	Michael Daubert....."Yes"
Timothy J. Cronin....."Yes"	

Sally J. O'Neil, Secretary Pro-tem

November 12, 1998

Newtown, Ct.

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@po.state.ct.us
Web Site: www.state.ct.us/csc/index.htm

January 18, 2002

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

RE: **TS-VER-097-020102** - Cellco Partnership d/b/a Verizon Wireless request for an order to approve tower sharing at an existing telecommunications facility located at 8 Ferris Road, Newtown, Connecticut.

Dear Attorney Baldwin:

At a public meeting held January 17, 2002, 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 December 31, 2001.

Thank you for your attention and cooperation.

Very truly yours,

Mortimer A. Gelston
Chairman

MAG/laf

c: Honorable Herbert C. Rosenthal, First Selectman, Town of Newtown
Gary Frenette, Zoning Enforcement Officer, Town of Newtown
Ronald C. Clark, Nextel Communications
Julie M. Donaldson, Esq., Hurwitz & Sagarin LLC

l:\siting\em\bam-ver\newtown\dc011702.doc

ATTACHMENT 2

verizon wireless

NEWTOWN WEST CT
8 FERRIS ROAD
NEWTOWN, CT

SITE NAME:	NEWTOWN WEST CT
PSLC:	468841
FUZE PROJECT ID:	16092604
SITE ADDRESS:	8 FERRIS ROAD NEWTOWN, CT 06470
PROPERTY OWNER:	ERICH & PATRICIA A. GERTSCH 8 FERRIS ROAD NEWTOWN, CT 06470
TOWER OWNER:	SBA COMMUNICATIONS 8051 CONGRESS AVENUE BOCA RATON, FL 33487
MAP/BLOCK/LOT:	7-7-11-C
APPLICANT:	VERIZON WIRELESS 118 FLANDERS ROAD, THIRD FLOOR WESTBOROUGH, MA 01581
CONTACT PERSON: CONTACT PHONE NO.:	ANDREW LEONE (781) 791-7724
HORIZONTAL DATUM: LATITUDE: LONGITUDE:	NORTH AMERICAN DATUM (NAD) 1983 41° 23' 23.0" N* 73° 20' 17.5" W*
ELEVATION:	783'* (GROUND ELEVATION)
*COORDINATES & ELEVATION TAKEN FROM ASR REGISTRATION 1258249	
CURRENT ZONING:	R-1: RESIDENTIAL

PROJECT SUMMARY

VICINITY MAP SCALE: 1"= 4,000'±

OWNER	DATE
R.F. ENGINEER	DATE
CONSTRUCTION	DATE
LEASING & ZONING	DATE
VERIZON WIRELESS	DATE

THE ABOVE PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS AND AUTHORIZE THE CONTRACTOR TO PROCEED WITH THE CONSTRUCTION DESCRIBED HEREIN. ALL CONSTRUCTION DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT AND ANY CHANGES OR MODIFICATIONS THEY MAY IMPOSE.

APPROVALS

DWG. NO.	DESCRIPTION	REV. NO.	DATE
T-1	TITLE SHEET	1	1/31/22
A-1	COMPOUND PLAN & TOWER ELEVATION	1	1/31/22
A-2	CONSTRUCTION DETAILS	1	1/31/22
A-3	ANTENNA LOCATION/ORIENTATION PLAN	1	1/31/22

DRAWING INDEX

verizon wireless
118 Flanders Road
Third Floor
Westborough, MA 01581
(508) 330-3300

SFC ENGINEERING
183 ROCKINGHAM ROAD
UNIT 3 EAST
WINDHAM, NH 03087
(603) 647-8700
www.sfceng.com

No.	Date	Revision	By
1	1/31/22	INCLUDED SA REPORT	JRR
.	11/1/21	SUBMITTED FOR REVIEW	JRR

DESIGNED BY: JMB	DATE: 11/1/21
DRAWN BY: JRR	SCALE: N/A
CHECKED BY: GRF	PROJECT NO: 663000

PROJECT TITLE

NEWTOWN WEST CT

8 FERRIS ROAD
NEWTOWN, CT
FAIRFIELD COUNTY
MAP/BLOCK/LOT: 7-7-11-C

SHEET TITLE

TITLE SHEET

SHEET NUMBER

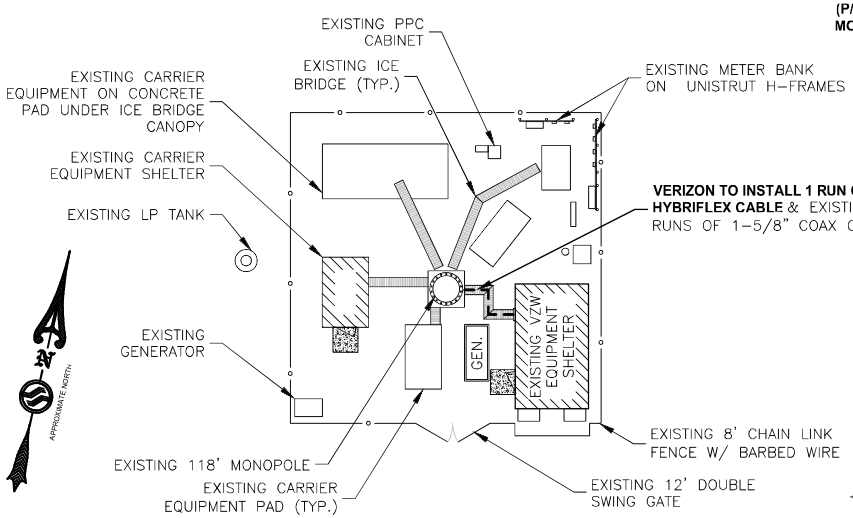
T-1

PLANS OF REFERENCE:

1. CONSTRUCTION DRAWINGS FOR DODGINGTOWN/NEXTEL TOWER, PREPARED FOR: SPRINT CORPORATION, PREPARED BY: HUDSON DESIGN GROUP LLC, DATED: MAY 14, 2014.
2. POST-MODIFICATION ANTENNA MOUNT ANALYSIS REPORT AND PMI REQUIREMENTS, SITE NAME: NEWTOWN WEST CT, PREPARED FOR: VERIZON WIRELESS, PREPARED BY: MASER CONSULTING, DATED: OCTOBER 25, 2021.
3. MOUNT MODIFICATION DRAWINGS, SITE NAME: NEWTOWN WEST CT, PREPARED FOR: VERIZON WIRELESS PREPARED BY: COLLIERS ENGINEERING AND DESIGN, DATED: OCTOBER 26, 2021.
4. STRUCTURAL ANALYSIS REPORT FOR NEWTOWN_WEST_CT PREPARED FOR: SBA COMMUNICATIONS CORP., PREPARED BY: TOWER ENGINEERING SOLUTIONS, DATED: JANUARY 20, 2022.

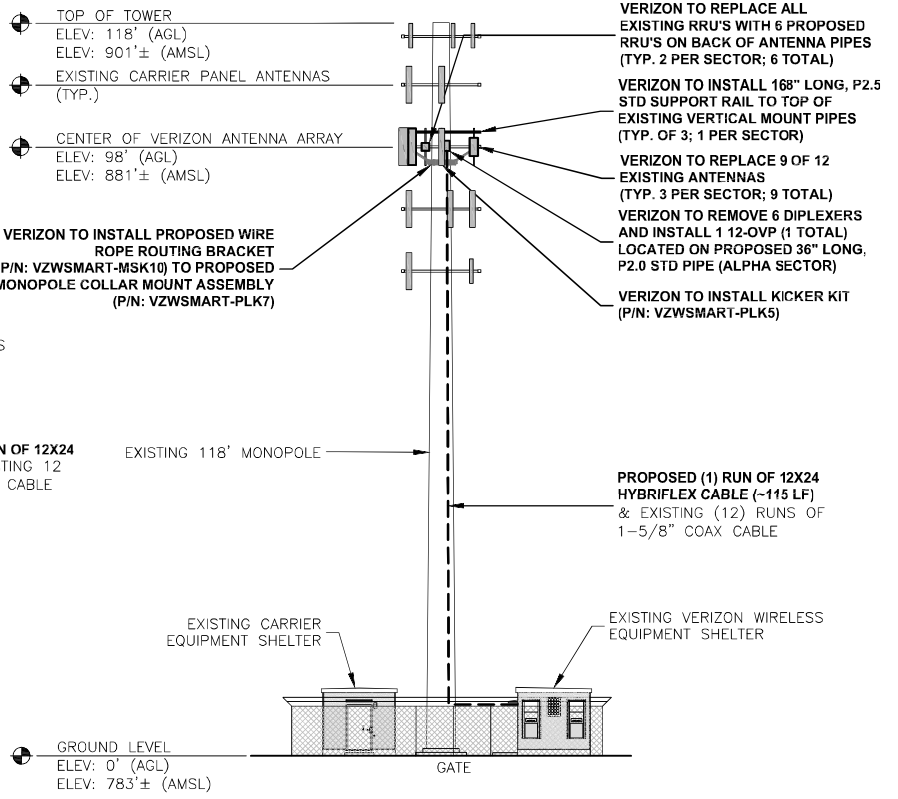
NOTES:

1. CONTRACTOR TO VERIFY EXACT COAX AND ANTENNA INSTALLATION WITH LATEST RF DATA SHEETS PRIOR TO INSTALLATION.
2. CONTRACTOR TO VERIFY EXACT ANTENNA HEIGHT WITH RF DATA SHEET PRIOR TO INSTALLATION.
3. CAP AND WEATHERPROOF UNUSED ANTENNA PORTS.
4. COMPOUND LAYOUT OBSERVED BY SFC ENGINEERING PARTNERSHIP, INC. ON OCTOBER 27, 2021.
5. CRITICAL DIMENSIONS WERE VERIFIED BY TAPE MEASURE. NO INSTRUMENT SURVEY WAS PERFORMED.
6. ESTIMATED HYBRIFLEX CABLE LENGTH: 115 FEET (TOTAL LENGTH)
7. THE EXISTING ANTENNA SECTOR MOUNTS AND PROPOSED APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH PLANS OF REFERENCE 2 & 3.



COMPOUND PLAN

SCALE: 1"=20'



TOWER ELEVATION PLAN

SCALE: 1"=20'

SCALE: 1"= 20'

0 10' 20' 40'

verizon wireless
118 Flanders Road
Third Floor
Westborough, MA 01581
(508) 330-3300

SFC ENGINEERING
183 ROCKINGHAM ROAD
UNIT 3 EAST
WINDHAM, NH 03087
(603) 647-8700
www.sfceng.com

No.	Date	Revision	By
1	1/31/22	INCLUDED SA REPORT	JRR
-	11/1/21	SUBMITTED FOR REVIEW	JRR

DESIGNED BY: JMB	DATE: 11/1/21
DRAWN BY: JRR	SCALE: 1"=20'
CHECKED BY: GRF	PROJECT NO: 663000

PROJECT TITLE

NEWTOWN WEST CT

8 FERRIS ROAD
NEWTOWN, CT
FAIRFIELD COUNTY
MAP/BLOCK/LOT: 7-7-11-C

SHEET TITLE

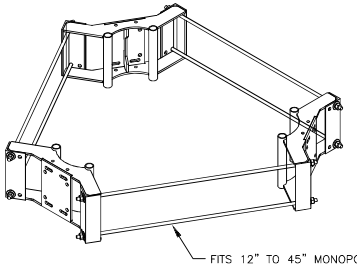
COMPOUND PLAN & TOWER ELEVATION

SHEET NUMBER

A-1

PLANS OF REFERENCE:

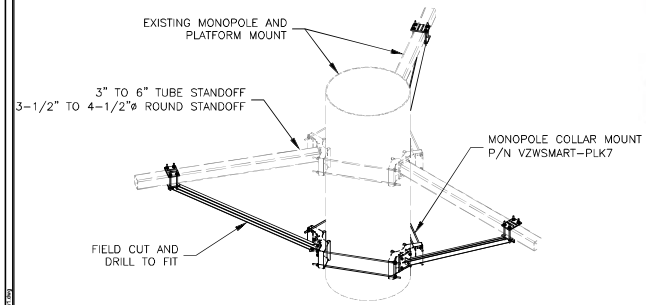
1. POST-MODIFICATION ANTENNA MOUNT ANALYSIS REPORT AND PMI REQUIREMENTS, SITE NAME: NEWTOWN WEST CT, PREPARED FOR: VERIZON WIRELESS, PREPARED BY: MASER CONSULTING DATED: OCTOBER 25, 2021
2. MOUNT MODIFICATION DRAWINGS, SITE NAME: NEWTOWN WEST CT, PREPARED FOR: VERIZON WIRELESS, PREPARED BY: COLLIERS ENGINEERING AND DESIGN, DATED: OCTOBER 26, 2021.
3. STRUCTURAL ANALYSIS REPORT FOR NEWTOWN_WEST_CT PREPARED FOR: SBA COMMUNICATIONS CORP., PREPARED BY: TOWER ENGINEERING SOLUTIONS, DATED: JANUARY 20, 2022.



MONOPOLE COLLAR MOUNT ASSEMBLY

PART NUMBER: VZWSMART-PLK7

SCALE: NTS



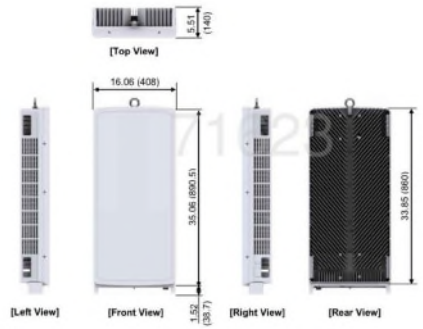
VZW SMART KICKER REINFORCEMENT KIT

PART NUMBER: VZWSMART-PLK5

SCALE: NTS

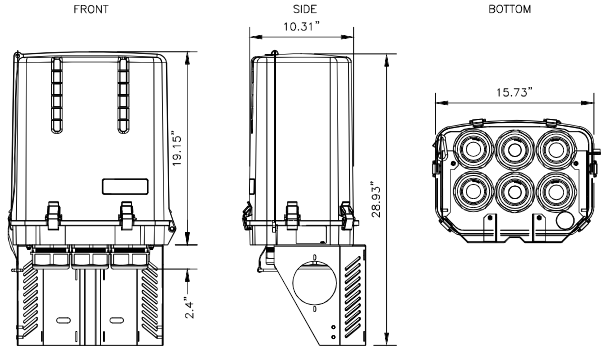
NOTES:

1. THE EXISTING PLATFORM MOUNT, PROPOSED APPURTENANCES, AND PROPOSED MOUNT MODIFICATIONS SHALL BE INSTALLED IN ACCORDANCE WITH PLANS OF REFERENCE 1 & 2.
2. VERIZON TO INSTALL PROPOSED WIRE ROPE ROUTING BRACKET (P/N: VZWSMART-MSK10) TO PROPOSED MONOPOLE COLLAR MOUNT ASSEMBLY (P/N: VZWSMART-PLK7).
3. CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH PLAN OF REFERENCE 2. CONNECT OTHER END OF KICKER KIT TO MONOPOLE COLLAR MOUNT (P/N: VZWSMART-PLK7).



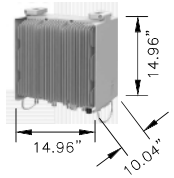
SAMSUNG LSUB6 ANTENNA/VZS01 DETAIL

SCALE: NONE



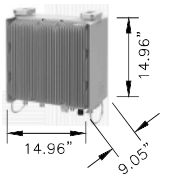
JUNCTION BOX DETAIL

SCALE: NONE



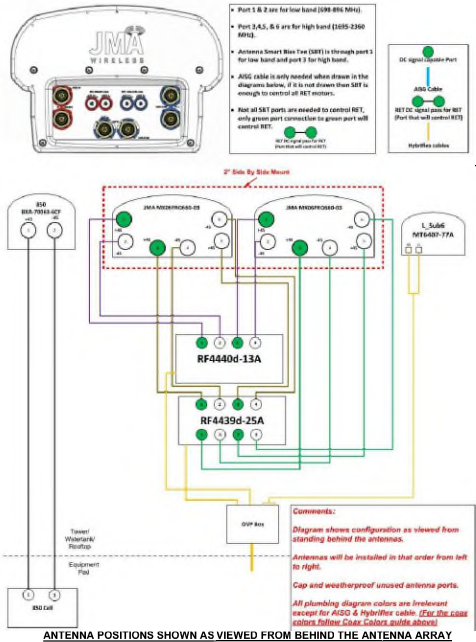
SAMSUNG RF4439d-25A DETAIL

SCALE: NONE



SAMSUNG RF4440d-13A DETAIL

SCALE: NONE



ANTENNA POSITIONS SHOWN AS VIEWED FROM BEHIND THE ANTENNA ARRAY

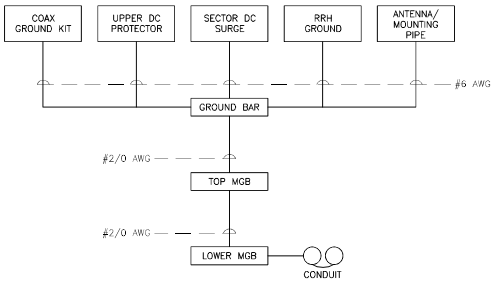
NOTE:
CONTRACTOR TO VERIFY COAX CONFIGURATION, ANTENNA CONFIGURATION AND ANTENNA HEIGHT WITH LATEST RF DATA SHEET PRIOR TO INSTALLATION.

ANTENNA SYSTEM LAYOUT

SCALE: NONE

GENERAL NOTES:

1. INSTALL ALL EQUIPMENT, MOUNTING BRACKETS, AND HARDWARE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
2. GROUND DISTRIBUTION BOXES, MOUNTING PIPES, AND RRHs IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
3. INSTALLED EQUIPMENT AND MOUNTING BRACKETS SHALL NOT INTEREFERE WITH CLIMBING ACCESS NOR ANY INSTALLED SAFETY DEVICES.
4. EQUIPMENT TO BE INSTALLED AT VERIZON'S RAD. CENTER IN ACCORDANCE WITH TOWER STRUCTURAL ANALYSIS (ANALYSIS BY OTHERS).



NOTES:

1. BOND ANTENNA GROUNDING KIT CABLE TO TOP CIBE.
2. BOND ANTENNA GROUNDING KIT CABLE TO BOTTOM CIBE.
3. TYPICAL FOR ALL SECTORS.

GROUNDING SCHEMATIC DIAGRAM

SCALE: NONE

verizon wireless
118 Flanders Road
Third Floor
Westborough, MA 01581
(508) 330-3300

SFC ENGINEERING
183 ROCKINGHAM ROAD
UNIT 3 EAST
WINDHAM, NH 03087
(603) 647-8700
www.sfceng.com

No.	Date	Revision	By
1	1/31/22	INCLUDED SA REPORT	JRR
-	11/1/21	SUBMITTED FOR REVIEW	JRR

DESIGNED BY: JMB	DATE: 11/1/21
DRAWN BY: JRR	SCALE: AS SHOWN
CHECKED BY: GRF	PROJECT NO: 663000

PROJECT TITLE

NEWTOWN WEST CT

8 FERRIS ROAD
NEWTOWN, CT
FAIRFIELD COUNTY
MAP/BLOCK/LOT: 7-7-11-C

SHEET TITLE

CONSTRUCTION DETAILS

SHEET NUMBER

A-2

PLANS OF REFERENCE:

1. POST-MODIFICATION ANTENNA MOUNT ANALYSIS REPORT AND PMI REQUIREMENTS, SITE NAME: NEWTOWN WEST CT, PREPARED FOR: VERIZON WIRELESS, PREPARED BY: MASER CONSULTING, DATED: OCTOBER 25, 2021.
2. MOUNT MODIFICATION DRAWINGS, *SITE* NAME: NEWTOWN WEST CT, PREPARED FOR: VERIZON WIRELESS, PREPARED BY: COLLIERS ENGINEERING AND DESIGN, DATED: OCTOBER 26, 2021.
3. STRUCTURAL ANALYSIS REPORT FOR NEWTOWN_WEST_CT PREPARED FOR: SBA COMMUNICATIONS CORP., PREPARED BY: TOWER ENGINEERING SOLUTIONS, DATED: JANUARY 20, 2022.

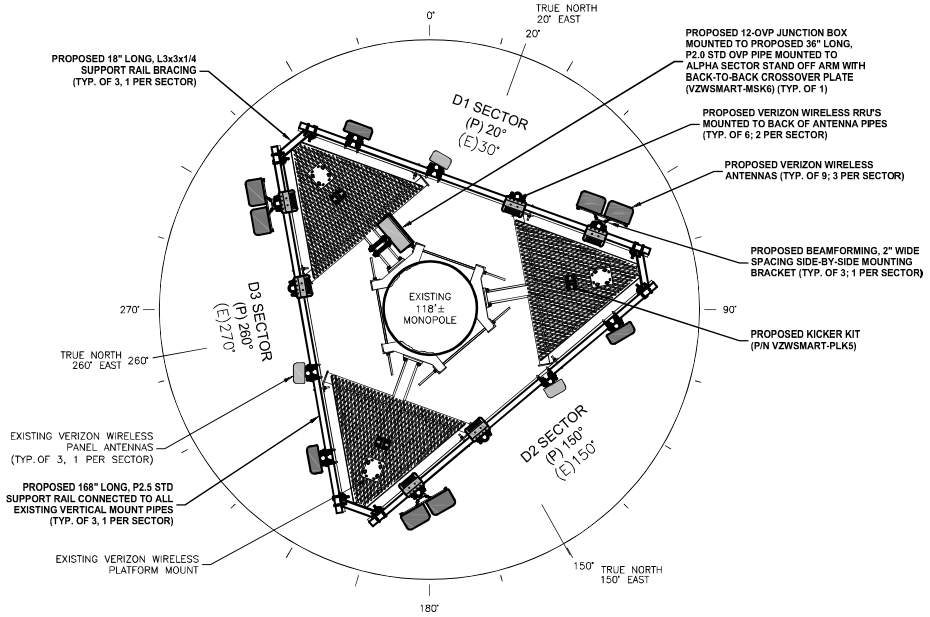
NOTES:

1. THE EXISTING PLATFORM MOUNT, PROPOSED APPURTENANCES, AND PROPOSED MOUNT MODIFICATIONS SHALL BE INSTALLED IN ACCORDANCE WITH PLANS OF REFERENCE 1 & 2.
2. VERIZON TO INSTALL PROPOSED WIRE ROPE ROUTING BRACKET (P/N: VZWSMART-MSK10) TO PROPOSED MONOPOLE COLLAR MOUNT ASSEMBLY *(P/N:* VZWSMART-PLK7).
3. CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH PLAN OF REFERENCE 2. CONNECT OTHER END OF KICKER KIT TO MONOPOLE COLLAR MOUNT (P/N: VZWSMART-PLK7).
4. SUPPORT RAILS SHALL BE GALVANIZED AND CONNECTED TO ALL EXISTING VERTICAL MOUNT PIPES WITH CROSSOVER PLATES (P/N: VZWSMART-MSK1).
5. OVP MOUNT PIPE SHALL BE GALVANIZED AND CONNECTED TO ALPHA SECTOR STANDOFF HORIZONTAL WITH BACK TO BACK CROSSOVER PLATE (P/N: VZWSMART-MSK6).
6. SUPPORT RAIL BRACING SHALL BE GALVANIZED AND CONNECTED TO CORNER BRACKETS USING THE PROVIDED (8) 5/8" DIA. BOLTS, (4) BOLTS PER CONNECTION.

ANTENNA SCHEDULE

SECTOR	BAND	DIMENSIONS (INCHES) (LxWxD)	RAD CENTER	AZIMUTH	RRH	OVP BOX	CABLE
D1	(P) 5G	35.1x16.1x5.5	98'	20°	-	(P) 12-OVP	(P) (1) 12X24 HYBRIFLEX (~115 LF PER RUN) & (E) (12) 1-5/8" COAX
	(E) 850 CDMA	71x11.3x6	98'	30°	-		
	(P) 700 LTE/850 LTE 5G/ 1900 LTE/AWS LTE	71.3x15.4x10.7	98'	20°	(P) RF4439d-25A (P) RF4440d-13A		
	(P) 700 LTE/850 LTE 5G/ 1900 LTE/AWS LTE	71.3x15.4x10.7	98'	20°			
D2	(P) 5G	35.1x16.1x5.5	98'	150°	-		
	(E) 850 CDMA	71x11.3x6	98'	150°	-		
	(P) 700 LTE/850 LTE 5G/ 1900 LTE/AWS LTE	71.3x15.4x10.7	98'	150°	(P) RF4439d-25A (P) RF4440d-13A		
	(P) 700 LTE/850 LTE 5G/ 1900 LTE/AWS LTE	71.3x15.4x10.7	98'	150°			
D3	(P) 5G	35.1x16.1x5.5	98'	260°	-		
	(E) 850 CDMA	71x11.3x6	98'	270°	-		
	(P) 700 LTE/850 LTE 5G/ 1900 LTE/AWS LTE	71.3x15.4x10.7	98'	260°	(P) RF4439d-25A (P) RF4440d-13A		
	(P) 700 LTE/850 LTE 5G/ 1900 LTE/AWS LTE	71.3x15.4x10.7	98'	260°			

NOTE: ANTENNA SCHEDULE IS BASED ON RFDS FOR NEWTOWN_WEST_CT DATED 09/27/2021. CONTRACTOR TO VERIFY FINAL RFDS WITH VERIZON WIRELESS PRIOR TO CONSTRUCTION.



ANTENNA LOCATION/ORIENTATION PLAN

SCALE: NTS

verizon wireless
118 Flanders Road
Third Floor
Westborough, MA 01581
(508) 330-3300

SFC ENGINEERING
183 ROCKINGHAM ROAD
UNIT 3 EAST
WINDHAM, NH 03087
(603) 647-8700
www.sfceng.com

No.	Date	Revision	By
1	1/31/22	INCLUDED SA REPORT	JRR
-	11/1/21	SUBMITTED FOR REVIEW	JRR

DESIGNED BY: JMB	DATE: 11/1/21
DRAWN BY: JRR	SCALE: AS SHOWN
CHECKED BY: GRF	PROJECT NO: 663000

PROJECT TITLE

NEWTOWN WEST CT

8 FERRIS ROAD
NEWTOWN, CT
FAIRFIELD COUNTY
MAP/BLOCK/LOT: 7-7-11-C

SHEET TITLE

ANTENNA LOCATION/ORIENTATION PLAN

SHEET NUMBER

A-3

SAMSUNG

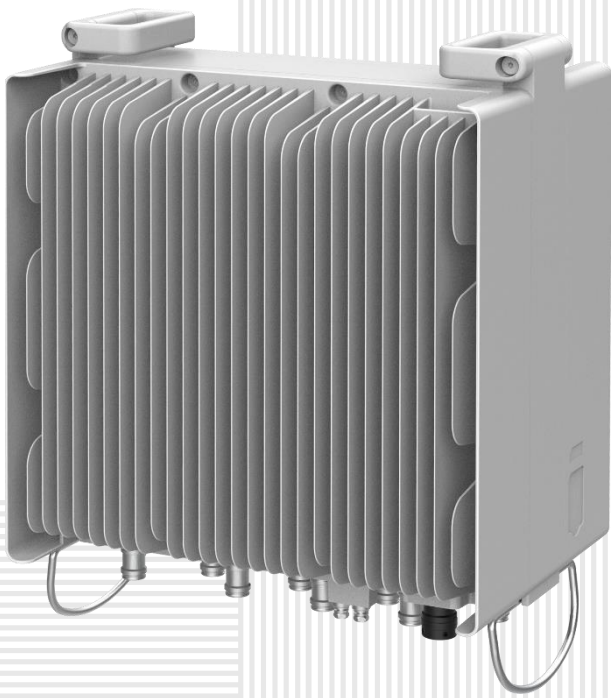
AWS/PCS MACRO RADIO

DUAL-BAND AND HIGH POWER FOR MACRO COVERAGE

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

57196

Model Code	RF4439d-25A



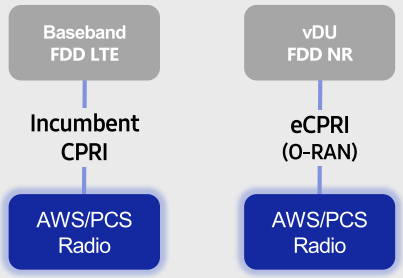
Homepage
samsungnetworks.com

Youtube
www.youtube.com/samsung5g

Points of Differentiation

Continuous Migration

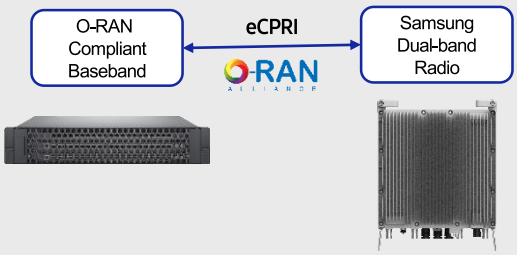
Samsung's AWS/PCS macro radio can support each incumbent CPRI interface as well as advanced eCPRI interfaces. This feature provides installable options for both legacy LTE networks and added NR networks.



O-RAN Compliant

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

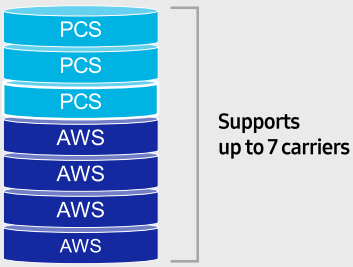
Samsung's state-of-the-art O-RAN technology will help accelerate the effort toward constructing a solid O-RAN ecosystem.



Optimum Spectrum Utilization

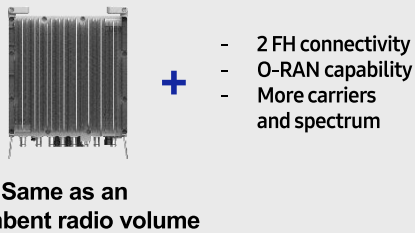
The number of required carriers varies according to site (region). Supporting many carriers is essential for using all frequencies that the operator has available.

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



Brand New Features in a Compact Size

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



Technical Specifications

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

SAMSUNG

700/850MHZ MACRO RADIO

DUAL-BAND AND HIGH POWER FOR MACRO COVERAGE

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

Model Code	RF4440d-13A

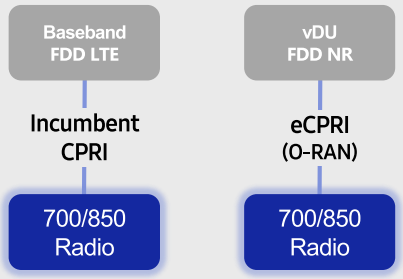
Homepage
samsungnetworks.com

Youtube
www.youtube.com/samsung5g

Points of Differentiation

Continuous Migration

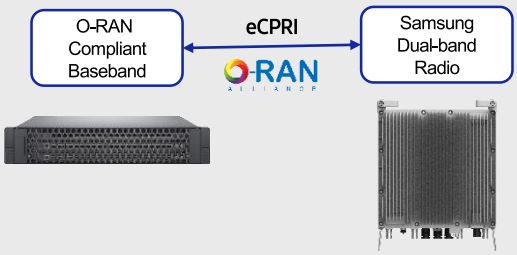
Samsung's 700/850MHz macro radio can support each incumbent CPRI interface as well as an advanced eCPRI interface. This feature provides installable options for both legacy LTE networks and added NR networks.



O-RAN Compliant

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

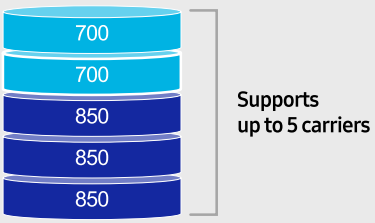
Samsung's state-of-the-art O-RAN technology will help accelerate the effort toward constructing a solid O-RAN ecosystem.



Optimum Spectrum Utilization

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

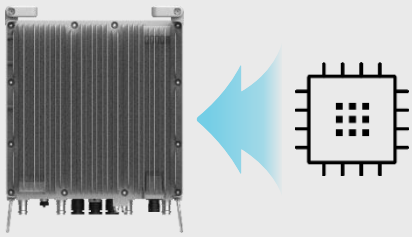
The new 700/850MHz dual-band radio can support up to 2 carriers in the B13 (700MHz) band and 3 carriers in the B5 (850MHz) band, respectively.



Secured Integrity

Access to sensitive data is allowed only to authorized software.

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



Technical Specifications

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

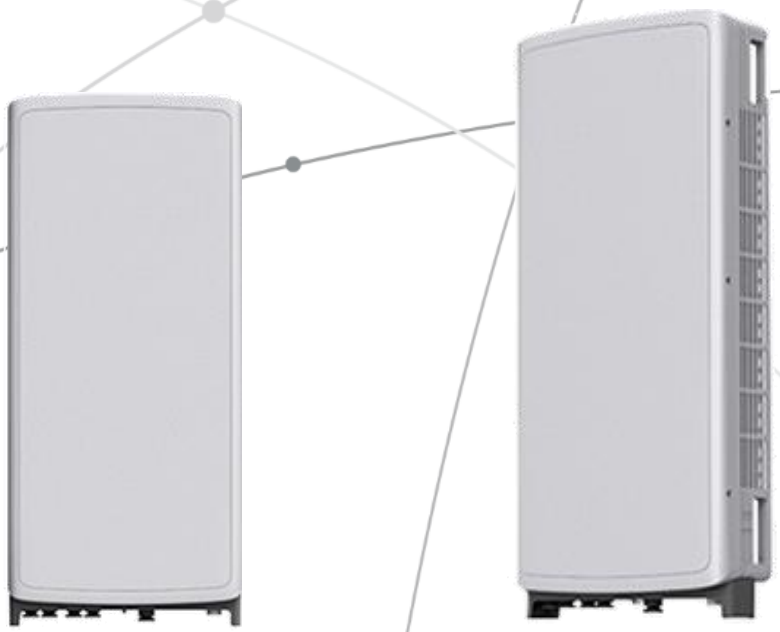
SAMSUNG

SAMSUNG C-Band 64T64R Massive MIMO Radio

for High Capacity and Wide Coverage

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

Model Code : MT6407-77A

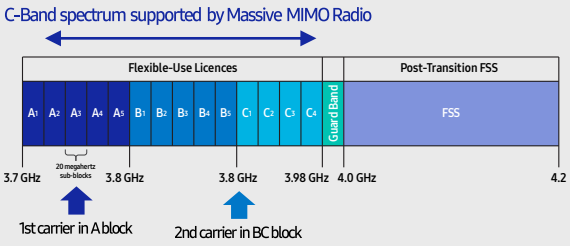


Points of Differentiation

Wide Bandwidth

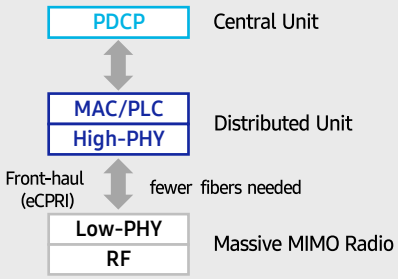
With capability to support up to 2 CC carrier configuration, Samsung C-Band massive MIMO Radio supports 200 MHz bandwidth in the C-Band spectrum.

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



Future Proof Product

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



Enhanced Performance

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

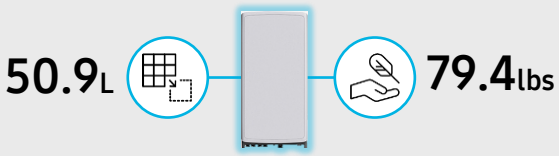
This helps operators reduce their CAPEX as they now need less products to cover the same area than before.

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

Well Matched Design

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

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



Technical Specifications

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

SAMSUNG

About Samsung Electronics Co., Ltd.

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

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

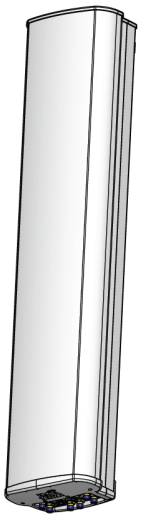
MX06FRO660-03

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

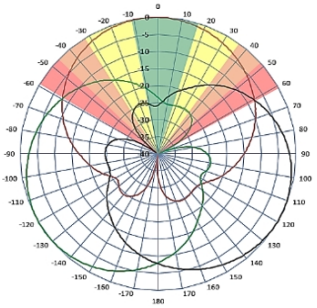
- Fast Roll Off (FRO™) azimuth beam pattern improves Intra- and Inter-cell SINR
- Compatible with dual band 700/850 MHz radios with independent low band EDT without external diplexers
- Fully integrated (iRETs) with independent RET control for low and high bands for ease of network optimization
- SON-Ready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



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



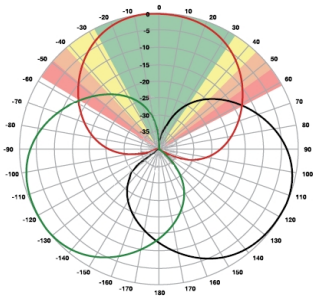
Large traditional antenna pattern overlap creates harmful interference.

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

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	± 45°		± 45°		
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°± 30°, 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[1]	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[1]	≤-15.0	≤-16.5	≤-16.0	≤-16.0	≤-16.0
Cross-polar isolation, port-to-port, dB[1]	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				

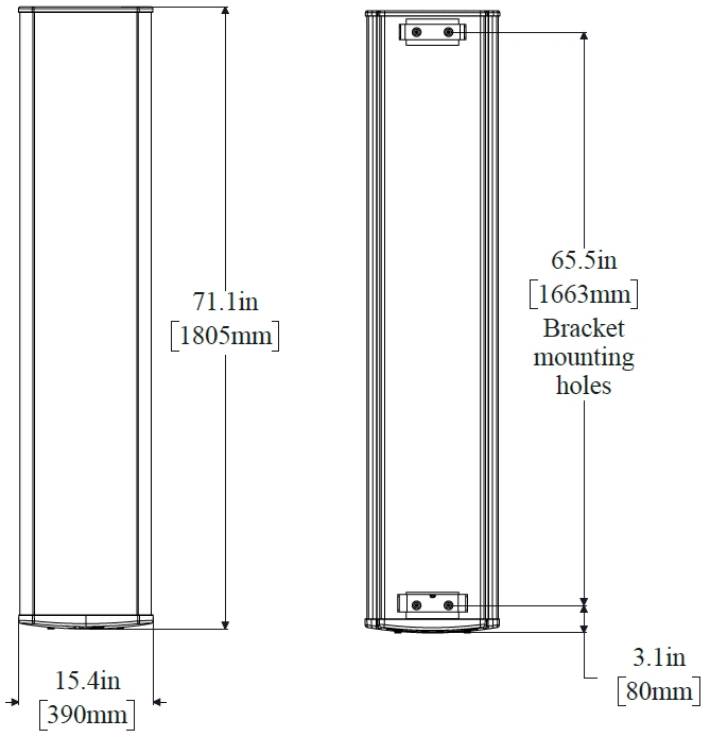
[1] Typical value over frequency and tilt

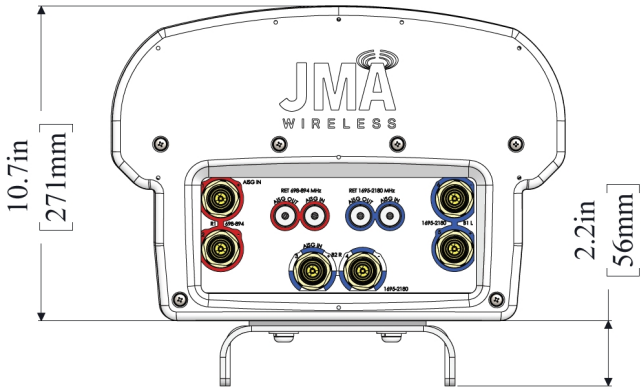
MX06FRO660-03

NWAV™ X-Pol Hex-Port Antenna

Mechanical specifications	
Dimensions height/width/depth, inches (mm)	71.3/ 15.4/ 10.7 (1811/ 392/ 273)
Shipping dimensions length/width/height, inches (mm)	82/ 20/ 15 (2083/ 508/ 381)
No. of RF input ports, connector type, and location	6 x 4.3-10 female, bottom
RF connector torque	96 lbf·in (10.85 N·m or 8 lbf·ft)
Net antenna weight, lb (kg)	60 (27.0)
Shipping weight, lb (kg)	90 (41.0)
Antenna mounting and downtilt kit included with antenna	91900318
Net weight of the mounting and downtilt kit, lb (kg)	18 (8.18)
Range of mechanical up/down tilt	-2° to 14°
Rated wind survival speed, mph (km/h)	150 (241)
Frontal, lateral, and rear wind loading @ 150 km/h, lbf (N)	154 (685), 73 (325), 158 (703)
Equivalent flat plate @ 100 mph and Cd=2, sq ft	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
Optional accessories	
AISG cables	M/F cables for AISG connections
PCU-1000 RET controller	Stand-alone controller for RET control and configurations

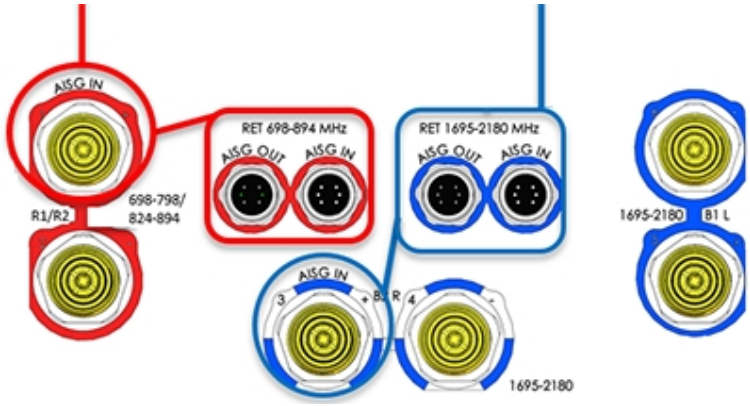
Remote electrical tilt (RET 1000) information	
RET location	Integrated into antenna
RET interface connector type	8-pin AISG connector per IEC 60130-9
RET connector torque	Min 0.5 N·m to max 1.0 N·m (hand pressure & finger tight)
RET interface connector quantity	2 pairs of AISG male/female connectors
RET interface connector location	Bottom of the antenna
Total no. of internal RETs (low bands)	2
Total no. of internal RETs (high bands)	1
RET input operating voltage, vdc	10-30
RET max power consumption, idle state, W	≤ 2.0
RET max power consumption, normal operating conditions, W	≤ 13.0
RET communication protocol	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:

RET device	Band	RF port
R1	698-798	1-2
R2	824-894	1-2

RET device	Band	RF port
B1/B2	1695-2180	3-6

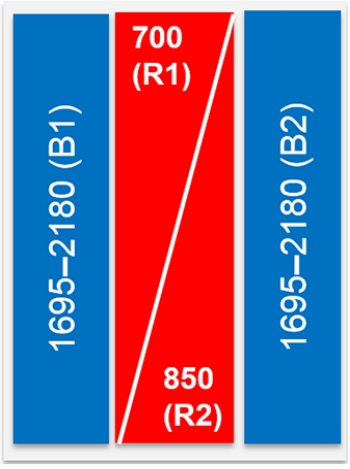


Array topology

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: Newtown W								
Tower Height: Verizon @ 98ft								
CARRIER	**# OF CHAN.**	**WATTS ERP**	**HEIGHT**	**FREQ.**	**CALC. POWER DENS**	**MAX. PERMISS.EXP.**	**FRACTION MPE**	**Total**
*Nextel	9	100	118	851	0.025801829	0.567333333	0.45%	
*Sprint	2	69	105	1900	0.005063522	1	0.05%	
*Sprint	1	39	105	850	0.001430995	0.566666667	0.03%	
*Sprint	2	69	105	2145	0.005063522	1	0.05%	
*AT&T	1	414	88	850	0.022141991	0.566666667	0.39%	
*AT&T	2	745	88	700	0.079689773	0.466666667	1.71%	
*AT&T	4	1456	88	1900	0.311485393	1	3.11%	
*AT&T	4	917	88	2300	0.196175897	1	1.96%	
*T-Mobile	1	59.5	83	11000	0.003608939	1	0.04%	
*T-Mobile	2	1102	81	1900	0.140907168	1	1.41%	
*T-Mobile	2	1653	81	2100	0.211360752	1	2.11%	
*T-Mobile	1	1102	81	1900	0.070453584	1	0.70%	
*T-Mobile	2	1140	81	700	0.145766036	0.466666667	3.12%	
*T-Mobile	1	10	81	10000	0.000639325	1	0.01%	
VZW 700	**4**	**582**	**98**	**751**	**0.0087**	**0.5007**	**1.74%**	
VZW CDMA	**2**	**427**	**98**	**877.26**	**0.0032**	**0.5848**	**0.55%**	
VZW Cellular	**4**	**582**	**98**	**874**	**0.0087**	**0.5827**	**1.50%**	
VZW PCS	**4**	**1399**	**98**	**1980**	**0.0210**	**1.0000**	**2.10%**	
VZW AWS	**4**	**1570**	**98**	**2120**	**0.0235**	**1.0000**	**2.35%**	
VZW CBAND	**2**	**19770**	**98**	**3730.08**	**0.1481**	**1.0000**	**14.81%**	
								38.20%
* Source: Siting Council								

ATTACHMENT 4

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

Structural Analysis Report

Existing 118 ft EEI Monopole

Customer Name: SBA Communications Corp

Customer Site Number: CT46132-A

Customer Site Name: Newtown-ferris Rd

Carrier Name: Verizon (App#: 180146-2)

Carrier Site ID / Name: 468841 / NEWTOWN_WEST_CT

Site Location: 8 Ferris Road

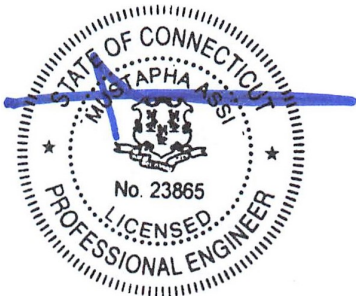
Newtown, Connecticut

Fairfield County

Latitude: 41.389747

Longitude: -73.338444

Exp. 01/31/2024



01/20/2022

Analysis Result:

Max Structural Usage: 76.5% [Pass]

Max Foundation Usage: 84.0% [Pass]

Additional Usage Caused by Mount Modification: +1.97%

Report Prepared By : Changzhi Zang

Introduction

The purpose of this report is to summarize the analysis results on the 118 ft EEI Monopole to support the proposed antennas and transmission lines in addition to those currently installed. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

Sources of Information

Tower Drawings	EEI, Job No. 5189, dated 06/30/1999.
Foundation Drawing	EEI, Job No. 5189, dated 06/30/1999.
Geotechnical Report	New England Boring Contractors & Applied Earth Technologies Inc. dated 06/14/1999.
Modification Drawings	Vertical Solutions, Project No. 100188.08, dated 5/7/2010.
Mount Analysis	TMO MA by TES, Project #95177, dated 07/09/2020 VZW MA & MMD by Maser Consulting Connecticut, Project #21777788A, dated 10/25/2021,

Analysis Criteria

The rigorous analysis was performed in accordance with the requirements and stipulations of the TIA-222-G-2**.** In accordance with this standard, the structure was analyzed using **TESPoles,** a proprietary analysis software. The program considers the structure as an elastic 3-D model with second-order effects and temperature effects incorporated in the analysis. The analysis was performed using multiple wind directions.

Wind Speed Used in the Analysis:	Ultimate Design Wind Speed V_{ult} = 120.0 mph (3-Sec. Gust)/ Nominal Design Wind Speed V_{asd} = 93.0 mph (3-Sec. Gust)
Wind Speed with Ice:	50 mph (3-Sec. Gust) with 3/4" radial ice concurrent
Operational Wind Speed:	60 mph + 0" Radial ice
Standard/Codes:	TIA-222-G-2 / 2015 IBC / 2018 Connecticut State Building Code
Exposure Category:	C
Structure Class:	II
Topographic Category:	1
Crest Height:	0 ft
Seismic Parameters:	S_S = 0.41, S_1 = 0.1

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

Existing Antennas, Mounts and Transmission Lines

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

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
1	118.0	1	Db Spectra DS 1F03F36D-N	Collar Mount	(2) 7/8"	Town of Newtown
2	107.0	3	RFS APXV9TM14-ALU-120 - Panel	Low Profile Platform	(3) 1-1/4"	Sprint
3		3	RFS APXVSPP18-C-A20 - Panel			
4		3	ALU TD-RRH8x20-25			
5		3	ALU 1900 MHz RRUs			
6		3	ALU 800 MHz RRU Filter			
7		4	RFS ACU-A20-N			
-	98.0	2	RFS APL868013 – Panel	(1) Low Profile Platform	(12) 1-5/8" Coax (2) 1-5/8" Fiber	Verizon
-		6	Andrew SBNHH-1D85C – Panel			
-		4	Andrew DB846H80E-SX – Panel			
-		3	Alcatel Lucent RRH4X45-AWS – RRU			
-		3	Alcatel Lucent RRH2x60-700 – RRU			
-		3	Alcatel-Lucent RRH2X60-1900A-4R – RRU			
-		2	RFS Celwave DB-T1-6Z-8AB-0Z			
14	91.0	3	Powerwave 7770 – Panel	Low Profile Platform	(12) 7/8" (2) 3/8" Fiber (4) 5/8" DC	AT&T
15		3	Powerwave P65-16-XLH-RR - Panel			
16		3	Quintel QS66512-2 - Panel			
17		6	Powerwave LGP21401 TMA			
18		3	Ericsson RRUS-11			
19		3	Ericsson RRUS 32 B2			
20		3	Ericsson RRUS 32 B30			
21		2	Raycap DC6-48-60-18-8F			
22	83.0	3	RFS - APXV18-209014	Modified Platform w/ Handrail includes {(3) mS-HRCP-35 (1) MS-HRECP-35 (1) MS-1436 (3) PST2375-8 (1) MS-KI22-8}	(12) 1 1/4" (1) 1/2"	T-Mobile
23		3	Commscope - LNX-6515DS-A1M			
24		1	Andrew VHLP3-11W			
25		1	Ceragon IP20C-11-40X-ACM			
26		3	RFS ATMAA1412D-1A20			
27		3	TBD S20057A1			
28		3	Kathrein 782 11054			
29	75.0	1	GPS	Direct	(1) 1/2"	Sprint
30	69.0	3	Commscope FFVV-65B-R2- Panel	(1) Commscope MC-PK8-DSH (Platform w/ Handrail)	(1) 1.75" Hybrid	Dish Wireless
31		3	Fujitsu TA08025-B605- RRH			
32		3	Fujitsu TA08025-B604- RRH			
33		1	Raycap RDIDC-9181-PF-48- OVP			

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
8	98.0	6	JMA MX06FRO660-03 - Panel	Low Profile Platform Modified w/ Kicker kit w/ Collar Mount Support Handrail Support Rail Bracing Mount Pipes	(12) 1-5/8" (1) 1 5/8" Hybrid 12 x 24	Verizon
9		3	Samsung MT6407-77A - Panel			
10		3	Amphenol BXA-70063-6CF - Panel			
11		3	Samsung RF4439d-25A - RRU			
12		3	Samsung RF4440d-13A - RRU			
13		1	Commscope FE-16148-OVP-B12 - Junction Box			

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:

	Pole shafts	Anchor Bolts	Base Plate
Max. Usage:	**76.5%**	**74.5%**	**72.4%**
Pass/Fail	**Pass**	**Pass**	**Pass**

Foundations

	Moment (Kip-Ft)	Shear (Kips)	Axial (Kips)
Analysis Reactions	2416.1	28.2	37.6

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

Operational Condition (Rigidity):

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 1.4331 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.

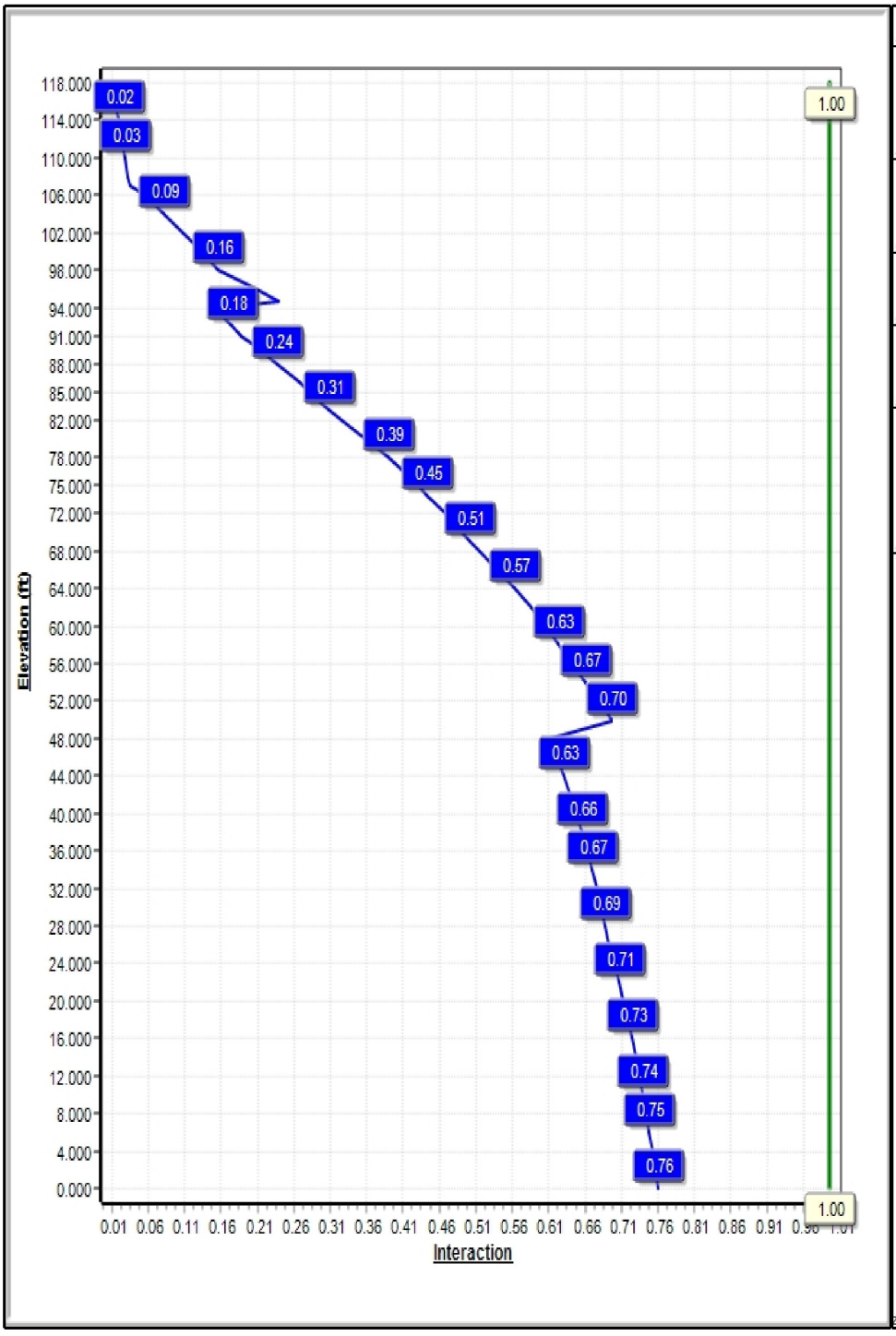
Usage Diagram - Max Ratio 76.47% at 0.0ft

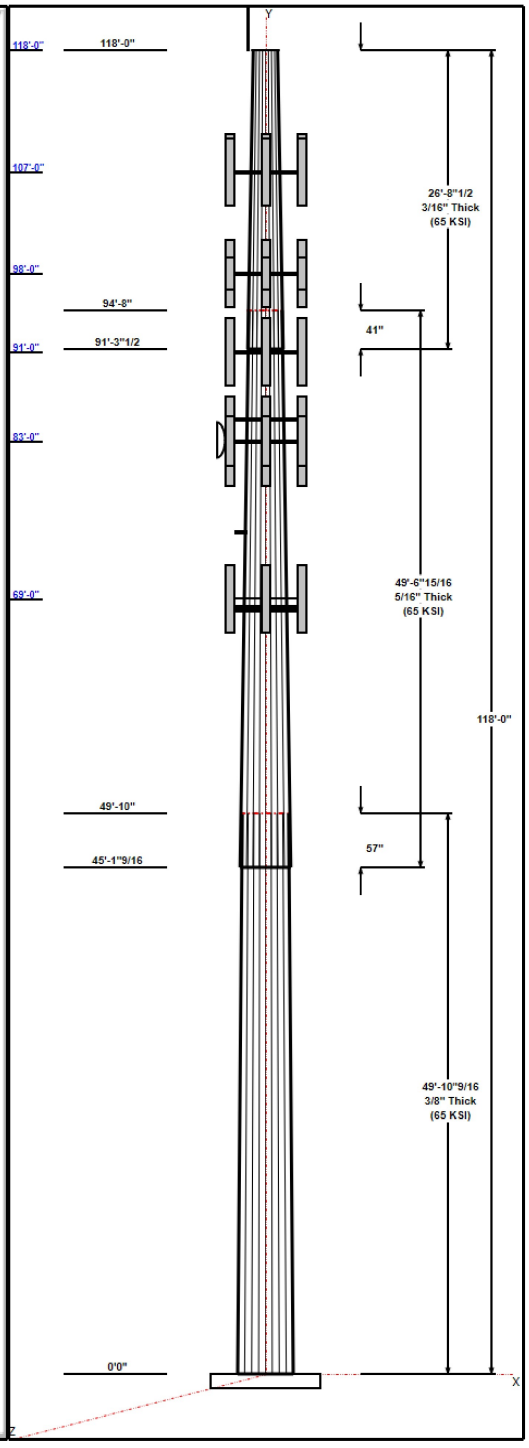
Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022
Site Name:	Newtown-ferris Rd	**Exposure:**	C	
Height:	118.00 (ft)	**Gh:**	1.1	
Base Elev:	0.000 (ft)			Page: 1

Tower Engineering Solutions

Dead Load Factor:	1.20	**Iterations:**	27
Wind Load Factor:	1.60		

Load Case : 1.2D + 1.6W 93 mph Wind





Structure: CT46132-A-SBA

Type: Tapered
Site Name: Newtown-ferris Rd
Height: 118.00 (ft)
Base Elev: 0.00 (ft)

Base Shape: 18 Sided
Taper: 0.23093

1/20/2022

Tower Engineering Solutions

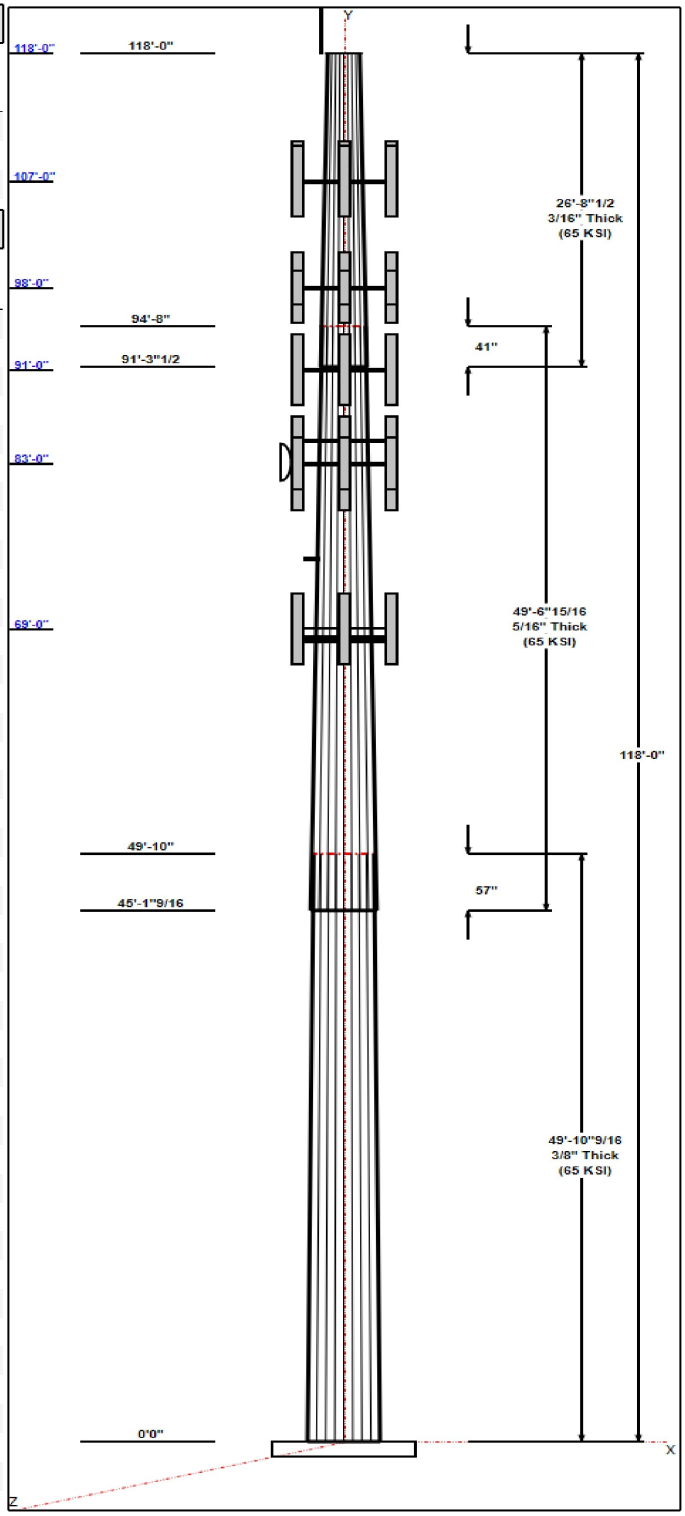
Shaft Properties

Seq	Length (ft)	Top (in)	Bottom (in)	Thick (in)	Joint Type	Taper	Grade (ksi)
1	49.88	31.73	43.25	0.375		0.23093	65
2	49.58	22.00	33.45	0.313	Slip	0.23093	65
3	26.71	17.00	23.17	0.188	Slip	0.23093	65

Discrete Appurtenances

Attach Elev (ft)	Force Elev (ft)	Qty	Description	Carrier
118.00	129.25	1	DS1F03F36D-N	Town of Newtown
118.00	118.00	1	Collar Mount	Town of Newtown
107.00	107.00	3	1900 MHz 4X45 RRH	Sprint
107.00	107.00	3	800 MHz RRU Filter	Sprint
107.00	107.00	3	TD-RRH8x20-25	Sprint
107.00	107.00	4	ACU-A20-N	Sprint
107.00	107.00	1	Universal Ring Mount	Sprint
107.00	107.00	1	Low Profile Platform	Sprint
107.00	107.00	3	APXVSPP18-C-A20	Sprint
107.00	108.00	3	APXV9TM14-ALU-120	Sprint
98.00	98.00	1	Low Profile Platform	Verizon
98.00	98.00	6	JMA MX06FRO660-03	Verizon
98.00	98.00	3	Samsung MT6407-77A	Verizon
98.00	98.00	3	Amphenol BXA-70063-6CF	Verizon
98.00	98.00	3	Samsung RF4439d-25A	Verizon
98.00	98.00	3	Samsung RF4440d-13A	Verizon
98.00	98.00	1	Commscope	Verizon
98.00	98.00	1	PRK-1245 (kicker kit)	Verizon
98.00	98.00	1	HRK12 (Handrail Kit)	Verizon
91.00	91.00	3	QS66512-2	AT&T
91.00	91.00	3	RRUS 32 B2	AT&T
91.00	91.00	3	RRUS 32 B30	AT&T
91.00	91.00	1	Low Profile Platform	AT&T
91.00	91.00	3	7770.00	AT&T
91.00	91.00	3	P65-16-XLH-RR	AT&T
91.00	91.00	6	LGP21401	AT&T
91.00	91.00	3	RRUS-11	AT&T
91.00	91.00	2	DC6-48-60-18-8F	AT&T
85.00	85.00	1	12.5' - 2" Horizontal Pipe	T-Mobile
83.00	83.00	1	Platform w/ Handrail kit	T-Mobile
83.00	83.00	1	VHLP3-11W	T-Mobile
83.00	83.00	1	IP20C	T-Mobile
83.00	83.00	3	S20057A1 TMA	T-Mobile
83.00	83.00	1	MS-KI22-5 (Kickers w/o	T-Mobile
83.00	83.00	3	RFS - APXV18-209014	T-Mobile
83.00	83.00	3	Commscope -	T-Mobile
83.00	83.00	3	RFS - ATMAA1412D-1A2	T-Mobile
83.00	83.00	3	Kathrein - 782 11054 -	T-Mobile
75.00	75.00	1	Standoff Mount	Sprint
75.00	75.00	1	GPS	Sprint
69.00	69.00	3	Commscope	Dish Wireless
69.00	69.00	3	TA08025-B604	Dish Wireless
69.00	69.00	3	TA08025-B605	Dish Wireless
69.00	69.00	1	RDIDC-9181-OF-48	Dish Wireless
69.00	69.00	1	MC-PK8-DSH	Dish Wireless

Linear Appurtenances



Elev From (ft)	Elev To (ft)	Placement	Description	Carrier
0.00	118.00	Inside	7/8" Coax	Town of Newtown
0.00	107.00	Inside	1-1/4"	Sprint
0.00	98.00	Inside	1 5/8" Hybrid 12 x 24	Verizon
0.00	98.00	Inside	1-5/8" Coax	Verizon
0.00	91.00	Inside	3/8" Fiber	AT&T
0.00	91.00	Inside	5/8" DC	AT&T
0.00	91.00	Inside	7/8"	AT&T
0.00	83.00	Inside	1 1/4" Coax	T-Mobile
0.00	83.00	Inside	1/2" Coax	T-Mobile
0.00	75.00	Outside	1/2"	Sprint
0.00	69.00	Outside	1.75" Hybrid	Dish Wireless

Anchor Bolts

Qty	Specifications	Grade (ksi)	Arrangement
12	2.25" 18J	75.0	Radial

Base Plate

Thickness (in)	Specifications (in)	Grade (ksi)	Geometry
1.7500	58.0	60.0	Round

Reactions

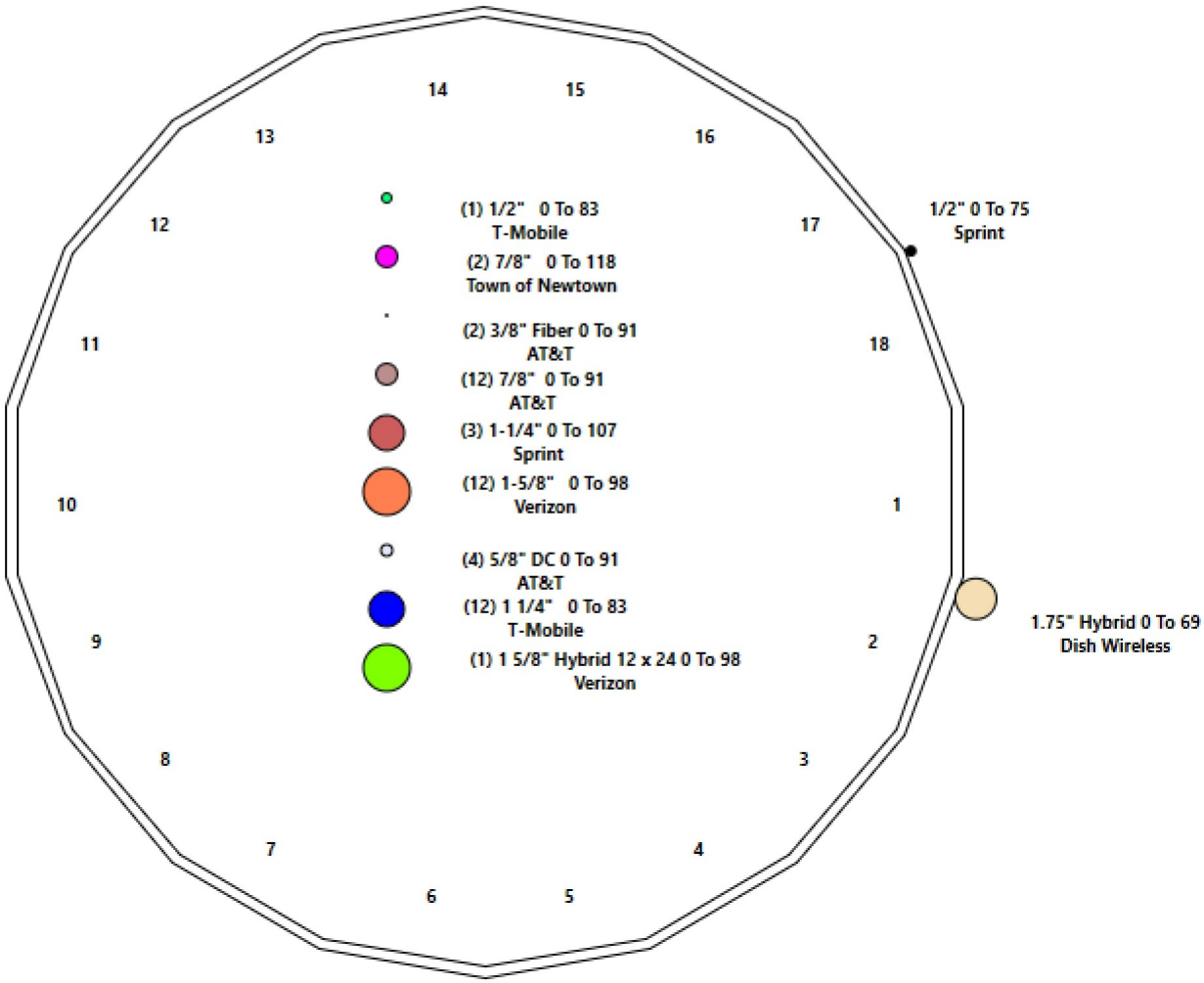
Load Case	Moment (FT-Kips)	Shear (Kips)	Axial (Kips)
1.2D + 1.6W 93 mph Wind	2416.1	28.2	37.6
0.9D + 1.6W 93 mph Wind	2385.8	28.2	28.2
1.2D + 1.0Di + 1.0Wi 50 mph Wind	720.0	8.3	63.6
1.2D + 1.0E	175.7	2.0	37.6
0.9D + 1.0E	173.4	2.0	28.2
1.0D + 1.0W 60 mph Wind	624.1	7.3	31.4

Structure: CT46132-A-SBA - Coax Line Placement

Type: Monopole
Site Name: Newtown-ferris Rd
Height: 118.00 (ft)

1/20/2022

Tower Engineering Solutions



Shaft Properties

Structure:	CT46132-A-SBA		**Code:**	EIA/TIA-222-G	1/20/2022
Site Name:	Newtown-ferris Rd		**Exposure:**	C	
Height:	118.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 5

Tower Engineering Solutions

Sec. No.	Shape	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Overlap (in)	Weight (lb)
1	18	49.880	0.3750	65		0.00	7,498
2	18	49.580	0.3125	65	Slip	57.00	4,588
3	18	26.707	0.1875	65	Slip	41.00	1,076
					Total Shaft Weight:		**13,161**

	Bottom						Top						
Sec. No.	**Dia (in)**	**Elev (ft)**	**Area (sqin)**	**Ix (in^4)**	**W/t Ratio**	**D/t Ratio**	**Dia (in)**	**Elev (ft)**	**Area (sqin)**	**Ix (in^4)**	**W/t Ratio**	**D/t Ratio**	**Taper**
1	43.25	0.00	51.03	11851.90	18.93	115.33	31.73	49.88	37.32	4635.98	13.51	84.62	0.230932
2	33.45	45.13	32.87	4561.13	17.47	107.05	22.00	94.71	21.51	1278.87	11.00	70.41	0.230932
3	23.17	91.29	13.68	912.41	20.38	123.56	17.00	118.00	10.01	357.31	14.58	90.67	0.230932

Load Summary

Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 6	

Tower Engineering Solutions

Discrete Appurtenances

				No Ice			Ice				
No.	Elev (ft)	Description	Qty	Weight (lb)	CaAa (sf)	CaAa Factor	Weight (lb)	CaAa (sf)	CaAa Factor	Hor. Ecc. (ft)	Vert Ecc (ft)
1	118.00	DS1F03F36D-N	1	71.00	6.75	1.00	236.30	14.529	1.00	0.00	11.25
2	118.00	Collar Mount	1	220.00	2.50	1.00	519.88	5.056	1.00	0.00	0.00
3	107.00	1900 MHz 4X45 RRH	3	60.00	2.71	0.67	138.07	3.932	0.69	0.00	0.00
4	107.00	800 MHz RRU Filter	3	64.00	2.40	0.67	138.64	3.482	0.69	0.00	0.00
5	107.00	TD-RRH8x20-25	3	70.00	4.05	0.67	176.05	4.834	0.69	0.00	0.00
6	107.00	ACU-A20-N	4	1.00	0.14	0.67	5.15	0.427	0.69	0.00	0.00
7	107.00	Universal Ring Mount	1	350.00	5.00	1.00	633.46	8.374	1.00	0.00	0.00
8	107.00	Low Profile Platform	1	2000.00	28.00	1.00	4109.06	34.546	1.00	0.00	0.00
9	107.00	APXVSPP18-C-A20	3	57.00	8.02	0.83	224.11	10.721	0.85	0.00	0.00
10	107.00	APXV9TM14-ALU-120	3	56.00	6.34	0.79	210.04	7.414	0.81	0.00	1.00
11	98.00	Low Profile Platform	1	2100.00	28.00	1.00	4295.14	34.488	1.00	0.00	0.00
12	98.00	JMA MX06FRO660-03	6	87.10	9.87	0.87	343.22	11.185	0.87	0.00	0.00
13	98.00	Samsung MT6407-77A	3	79.40	4.69	0.70	192.96	5.596	0.70	0.00	0.00
14	98.00	Amphenol BXA-70063-6CF	3	17.00	7.57	0.73	182.44	8.774	0.73	0.00	0.00
15	98.00	Samsung RF4439d-25A	3	74.70	1.86	0.84	124.82	2.400	0.84	0.00	0.00
16	98.00	Samsung RF4440d-13A	3	70.33	1.86	0.80	119.07	2.400	0.83	0.00	0.00
17	98.00	Commscope FE-16148-OVP-B12	1	15.21	1.87	1.00	63.70	2.413	1.00	0.00	0.00
18	98.00	PRK-1245 (kicker kit)	1	464.91	9.50	1.00	775.93	19.033	1.00	0.00	0.00
19	98.00	HRK12 (Handrail Kit)	1	261.72	6.75	1.00	559.37	13.072	1.00	0.00	0.00
20	91.00	QS66512-2	3	77.00	8.13	0.90	285.73	9.362	0.90	0.00	0.00
21	91.00	RRUS 32 B2	3	53.00	2.74	0.81	135.74	3.431	0.81	0.00	0.00
22	91.00	RRUS 32 B30	3	60.00	2.74	0.81	142.74	3.431	0.81	0.00	0.00
23	91.00	Low Profile Platform	1	1349.00	25.00	1.00	2468.76	44.092	1.00	0.00	0.00
24	91.00	7770.00	3	35.00	5.50	0.73	162.16	6.510	0.75	0.00	0.00
25	91.00	P65-16-XLH-RR	3	53.00	8.16	0.75	210.00	10.826	0.75	0.00	0.00
26	91.00	LGP21401	6	14.10	1.29	0.67	37.88	2.085	0.69	0.00	0.00
27	91.00	RRUS-11	3	55.00	4.42	0.67	140.57	5.846	0.69	0.00	0.00
28	91.00	DC6-48-60-18-8F	2	31.80	0.92	1.00	90.61	1.337	1.00	0.00	0.00
29	85.00	12.5' - 2" Horizontal Pipe	1	45.75	2.97	1.00	87.99	6.493	1.00	0.00	0.00
30	83.00	Platform w/ Handrail kit	1	1868.20	40.00	1.00	3404.73	70.267	1.00	0.00	0.00
31	83.00	VHLP3-11W	1	53.00	10.68	1.00	258.02	12.486	1.00	0.00	0.00
32	83.00	IP20C	1	11.50	1.05	0.67	35.92	1.754	0.67	0.00	0.00
33	83.00	S20057A1 TMA	3	11.00	0.01	0.67	11.01	0.010	0.67	0.00	0.00
34	83.00	MS-KI22-5 (Kickers w/o Collar)	1	146.00	6.33	1.00	338.13	12.577	1.00	0.00	0.00
35	83.00	RFS - APXV18-209014	3	18.70	3.58	0.74	100.78	4.453	0.74	0.00	0.00
36	83.00	Commscope - LNX-6515DS-A1M	3	49.80	11.47	0.80	266.16	14.549	0.80	0.00	0.00
37	83.00	RFS - ATMAA1412D-1A2	3	13.00	1.17	0.67	38.05	1.907	0.67	0.00	0.00
38	83.00	Kathrein - 782 11054 - Bias T	3	1.80	0.15	0.67	8.12	0.407	0.67	0.00	0.00
39	75.00	Standoff Mount	1	40.00	2.63	1.00	114.90	8.199	1.00	0.00	0.00
40	75.00	GPS	1	10.00	1.00	1.00	37.36	1.664	1.00	0.00	0.00
41	69.00	Commscope FFVV-65B-R2	3	70.80	11.84	0.74	671.99	14.433	0.74	0.00	0.00
42	69.00	TA08025-B604	3	63.90	1.96	0.67	110.75	2.479	0.67	0.00	0.00
43	69.00	TA08025-B605	3	75.00	1.96	0.67	123.40	2.479	0.67	0.00	0.00
44	69.00	RDIDC-9181-OF-48	1	21.90	2.01	1.00	71.17	2.536	1.00	0.00	0.00
45	69.00	MC-PK8-DSH	1	1727.00	37.59	1.00	3288.73	81.295	1.00	0.00	0.00
		Totals:	**105**	**14,986.28**			**35,527.24**				

Discrete Appurtenances

No.	Elev (ft)	Description	Qty	No Ice Weight (lb)	No Ice CaAa (sf)	No Ice CaAa Factor	Ice Weight (lb)	Ice CaAa (sf)	Ice CaAa Factor	Hor. Ecc. (ft)	Vert Ecc (ft)

Linear Appurtenances

Bottom Elev. (ft)	Top Elev. (ft)	Description	Exposed Width	Exposed
0.00	118.00	(2) 7/8" Coax	0.00	Inside
0.00	107.00	(3) 1-1/4"	0.00	Inside
0.00	98.00	(1) 1 5/8" Hybrid 12 x 24	0.00	Inside
0.00	98.00	(12) 1-5/8" Coax	0.00	Inside
0.00	91.00	(2) 3/8" Fiber	0.00	Inside
0.00	91.00	(4) 5/8" DC	0.00	Inside
0.00	91.00	(12) 7/8"	0.00	Inside
0.00	83.00	(12) 1 1/4" Coax	0.00	Inside
0.00	83.00	(1) 1/2" Coax	0.00	Inside
0.00	75.00	(1) 1/2"	0.00	Outside
0.00	69.00	(1) 1.75" Hybrid	1.75	Outside

Shaft Section Properties

Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 8	

TES Tower Engineering Solutions

Increment Length: **2 (ft)**

Elev (ft)	Description	Thick (in)	Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fpy (ksi)	S (in^3)	Weight (lb)
0.00		0.3750	43.250	51.030	11851.9	18.93	115.33	79.1	539.7	0.0
2.00		0.3750	42.788	50.480	11473.0	18.71	114.10	79.4	528.1	345.4
4.00		0.3750	42.326	49.931	11102.3	18.49	112.87	79.7	516.6	341.7
6.00		0.3750	41.864	49.381	10739.6	18.27	111.64	79.9	505.3	337.9
8.00		0.3750	41.403	48.831	10384.9	18.06	110.41	80.2	494.0	334.2
10.00		0.3750	40.941	48.282	10038.1	17.84	109.18	80.4	482.9	330.5
12.00		0.3750	40.479	47.732	9699.1	17.62	107.94	80.7	471.9	326.7
14.00		0.3750	40.017	47.182	9367.9	17.41	106.71	80.9	461.1	323.0
16.00		0.3750	39.555	46.632	9044.2	17.19	105.48	81.2	450.4	319.2
18.00		0.3750	39.093	46.083	8728.1	16.97	104.25	81.4	439.7	315.5
20.00		0.3750	38.631	45.533	8419.5	16.75	103.02	81.7	429.3	311.7
22.00		0.3750	38.169	44.983	8118.2	16.54	101.79	82.0	418.9	308.0
24.00		0.3750	37.708	44.434	7824.2	16.32	100.55	82.2	408.7	304.3
26.00		0.3750	37.246	43.884	7537.4	16.10	99.32	82.5	398.6	300.5
28.00		0.3750	36.784	43.334	7257.7	15.89	98.09	82.5	388.6	296.8
30.00		0.3750	36.322	42.784	6985.0	15.67	96.86	82.5	378.8	293.0
32.00		0.3750	35.860	42.235	6719.2	15.45	95.63	82.5	369.1	289.3
34.00		0.3750	35.398	41.685	6460.2	15.23	94.40	82.5	359.5	285.6
36.00		0.3750	34.936	41.135	6208.0	15.02	93.16	82.5	350.0	281.8
38.00		0.3750	34.475	40.586	5962.4	14.80	91.93	82.5	340.6	278.1
40.00		0.3750	34.013	40.036	5723.4	14.58	90.70	82.5	331.4	274.3
42.00		0.3750	33.551	39.486	5490.9	14.37	89.47	82.5	322.3	270.6
44.00		0.3750	33.089	38.936	5264.7	14.15	88.24	82.5	313.4	266.9
45.13	Bot - Section 2	0.3750	32.828	38.626	5139.7	14.03	87.54	82.5	308.4	149.1
46.00		0.3750	32.627	38.387	5044.9	13.93	87.01	82.5	304.5	211.0
48.00		0.3750	32.165	37.837	4831.2	13.71	85.77	82.5	295.8	480.2
49.88	Top - Section 1	0.3125	32.356	31.782	4123.0	16.85	103.54	0.0	0.0	445.1
50.00		0.3125	32.328	31.755	4112.4	16.83	103.45	81.6	250.5	13.0
52.00		0.3125	31.867	31.297	3936.9	16.57	101.97	81.9	243.3	214.5
54.00		0.3125	31.405	30.838	3766.6	16.31	100.49	82.2	236.2	211.4
56.00		0.3125	30.943	30.380	3601.2	16.05	99.02	82.5	229.2	208.3
58.00		0.3125	30.481	29.922	3440.7	15.79	97.54	82.5	222.3	205.2
60.00		0.3125	30.019	29.464	3285.1	15.53	96.06	82.5	215.5	202.1
62.00		0.3125	29.557	29.006	3134.3	15.27	94.58	82.5	208.9	199.0
64.00		0.3125	29.095	28.548	2988.1	15.01	93.11	82.5	202.3	195.8
66.00		0.3125	28.633	28.090	2846.6	14.75	91.63	82.5	195.8	192.7
68.00		0.3125	28.172	27.632	2709.5	14.49	90.15	82.5	189.4	189.6
69.00		0.3125	27.941	27.403	2642.7	14.35	89.41	82.5	186.3	93.6
70.00		0.3125	27.710	27.174	2577.0	14.22	88.67	82.5	183.2	92.9
72.00		0.3125	27.248	26.716	2448.9	13.96	87.19	82.5	177.0	183.4
74.00		0.3125	26.786	26.257	2325.0	13.70	85.72	82.5	171.0	180.3
75.00		0.3125	26.555	26.028	2264.7	13.57	84.98	82.5	168.0	89.0
76.00		0.3125	26.324	25.799	2205.5	13.44	84.24	82.5	165.0	88.2
78.00		0.3125	25.862	25.341	2090.0	13.18	82.76	82.5	159.2	174.0
80.00		0.3125	25.400	24.883	1978.7	12.92	81.28	82.5	153.4	170.9
82.00		0.3125	24.939	24.425	1871.5	12.66	79.80	82.5	147.8	167.8
83.00		0.3125	24.708	24.196	1819.3	12.53	79.06	82.5	145.0	82.7
84.00		0.3125	24.477	23.967	1768.1	12.40	78.33	82.5	142.3	81.9
85.00		0.3125	24.246	23.738	1717.9	12.27	77.59	82.5	139.6	81.2
86.00		0.3125	24.015	23.509	1668.7	12.14	76.85	82.5	136.9	80.4

Increment Length: **2 (ft)**

Elev (ft)	Description	Thick (in)	Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fpy (ksi)	S (in^3)	Weight (lb)
88.00		0.3125	23.553	23.051	1573.0	11.88	75.37	82.5	131.5	158.4
90.00		0.3125	23.091	22.593	1481.1	11.62	73.89	82.5	126.3	155.3
91.00		0.3125	22.860	22.364	1436.5	11.49	73.15	82.5	123.8	76.5
91.29	Bot - Section 3	0.3125	22.792	22.296	1423.6	11.45	72.94	82.5	123.0	22.3
92.00		0.3125	22.629	22.135	1392.8	11.36	72.41	82.5	121.2	86.2
94.00		0.3125	22.167	21.677	1308.1	11.10	70.94	82.5	116.2	240.6
94.71	Top - Section 2	0.1875	22.378	13.206	821.6	19.63	119.35	0.0	0.0	84.2
96.00		0.1875	22.081	13.029	789.0	19.35	117.76	78.6	70.4	57.6
98.00		0.1875	21.619	12.754	740.1	18.92	115.30	79.1	67.4	87.7
100.00		0.1875	21.157	12.479	693.3	18.49	112.84	79.7	64.5	85.9
102.00		0.1875	20.695	12.204	648.5	18.05	110.37	80.2	61.7	84.0
104.00		0.1875	20.233	11.929	605.6	17.62	107.91	80.7	59.0	82.1
106.00		0.1875	19.771	11.654	564.7	17.18	105.45	81.2	56.3	80.2
107.00		0.1875	19.540	11.517	545.0	16.97	104.21	81.4	54.9	39.4
108.00		0.1875	19.309	11.379	525.7	16.75	102.98	81.7	53.6	39.0
110.00		0.1875	18.847	11.105	488.5	16.31	100.52	82.2	51.1	76.5
112.00		0.1875	18.386	10.830	453.1	15.88	98.06	82.5	48.5	74.6
114.00		0.1875	17.924	10.555	419.5	15.45	95.59	82.5	46.1	72.8
116.00		0.1875	17.462	10.280	387.6	15.01	93.13	82.5	43.7	70.9
118.00		0.1875	17.000	10.005	357.3	14.58	90.67	82.5	41.4	69.0
										13161.4

Wind Loading - Shaft

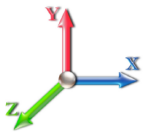
Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 10	

Tower Engineering Solutions

Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 27

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.85	17.879	19.67	313.79	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	17.879	19.67	310.44	0.650	0.000	2.00	7.280	4.73	148.9	0.0	414.5
4.00		1.00	0.85	17.879	19.67	307.09	0.650	0.000	2.00	7.202	4.68	147.3	0.0	410.0
6.00		1.00	0.85	17.879	19.67	303.74	0.650	0.000	2.00	7.124	4.63	145.7	0.0	405.5
8.00		1.00	0.85	17.879	19.67	300.39	0.650	0.000	2.00	7.046	4.58	144.1	0.0	401.0
10.00		1.00	0.85	17.879	19.67	297.04	0.650	0.000	2.00	6.968	4.53	142.5	0.0	396.5
12.00		1.00	0.85	17.879	19.67	293.69	0.650	0.000	2.00	6.890	4.48	140.9	0.0	392.1
14.00		1.00	0.85	17.879	19.67	290.34	0.650	0.000	2.00	6.811	4.43	139.3	0.0	387.6
16.00		1.00	0.86	18.100	19.91	288.75	0.650	0.000	2.00	6.733	4.38	139.4	0.0	383.1
18.00		1.00	0.88	18.554	20.41	288.94	0.650	0.000	2.00	6.655	4.33	141.3	0.0	378.6
20.00		1.00	0.90	18.971	20.87	288.71	0.650	0.000	2.00	6.577	4.28	142.7	0.0	374.1
22.00		1.00	0.92	19.355	21.29	288.14	0.650	0.000	2.00	6.499	4.22	143.9	0.0	369.6
24.00		1.00	0.94	19.713	21.68	287.27	0.650	0.000	2.00	6.421	4.17	144.8	0.0	365.1
26.00		1.00	0.95	20.048	22.05	286.15	0.650	0.000	2.00	6.342	4.12	145.5	0.0	360.6
28.00		1.00	0.97	20.363	22.40	284.82	0.650	0.000	2.00	6.264	4.07	145.9	0.0	356.1
30.00		1.00	0.98	20.661	22.73	283.29	0.650	0.000	2.00	6.186	4.02	146.2	0.0	351.7
32.00		1.00	1.00	20.944	23.04	281.59	0.650	0.000	2.00	6.108	3.97	146.3	0.0	347.2
34.00		1.00	1.01	21.213	23.33	279.75	0.650	0.000	2.00	6.030	3.92	146.3	0.0	342.7
36.00		1.00	1.02	21.470	23.62	277.76	0.650	0.000	2.00	5.952	3.87	146.2	0.0	338.2
38.00		1.00	1.03	21.715	23.89	275.66	0.650	0.000	2.00	5.873	3.82	145.9	0.0	333.7
40.00		1.00	1.04	21.951	24.15	273.44	0.650	0.000	2.00	5.795	3.77	145.5	0.0	329.2
42.00		1.00	1.05	22.178	24.40	271.11	0.650	0.000	2.00	5.717	3.72	145.1	0.0	324.7
44.00		1.00	1.06	22.396	24.64	268.69	0.650	0.000	2.00	5.639	3.67	144.5	0.0	320.2
45.13	Bot - Section 2	1.00	1.07	22.516	24.77	267.28	0.650	0.000	1.13	3.151	2.05	81.2	0.0	178.9
46.00		1.00	1.07	22.607	24.87	266.18	0.650	0.000	0.87	2.455	1.60	63.5	0.0	253.2
48.00		1.00	1.08	22.810	25.09	263.59	0.650	0.000	2.00	5.588	3.63	145.8	0.0	576.2
49.88	Top - Section 1	1.00	1.09	22.995	25.29	261.09	0.650	0.000	1.88	5.182	3.37	136.3	0.0	534.1
50.00		1.00	1.09	23.007	25.31	266.07	0.650	0.000	0.12	0.328	0.21	8.6	0.0	15.6
52.00		1.00	1.10	23.198	25.52	263.36	0.650	0.000	2.00	5.432	3.53	144.2	0.0	257.5
54.00		1.00	1.11	23.383	25.72	260.57	0.650	0.000	2.00	5.354	3.48	143.2	0.0	253.7
56.00		1.00	1.12	23.562	25.92	257.72	0.650	0.000	2.00	5.276	3.43	142.2	0.0	250.0
58.00		1.00	1.13	23.737	26.11	254.82	0.650	0.000	2.00	5.198	3.38	141.1	0.0	246.2
60.00		1.00	1.14	23.907	26.30	251.85	0.650	0.000	2.00	5.119	3.33	140.0	0.0	242.5
62.00		1.00	1.14	24.073	26.48	248.84	0.650	0.000	2.00	5.041	3.28	138.8	0.0	238.8
64.00		1.00	1.15	24.234	26.66	245.77	0.650	0.000	2.00	4.963	3.23	137.6	0.0	235.0
66.00		1.00	1.16	24.392	26.83	242.65	0.650	0.000	2.00	4.885	3.18	136.3	0.0	231.3
68.00		1.00	1.17	24.545	27.00	239.49	0.650	0.000	2.00	4.807	3.12	135.0	0.0	227.5
69.00	Appurtenance(s)	1.00	1.17	24.621	27.08	237.89	0.650	0.000	1.00	2.374	1.54	66.9	0.0	112.4
70.00		1.00	1.17	24.696	27.17	236.28	0.650	0.000	1.00	2.355	1.53	66.5	0.0	111.4
72.00		1.00	1.18	24.843	27.33	233.03	0.650	0.000	2.00	4.650	3.02	132.2	0.0	220.0
74.00		1.00	1.19	24.986	27.48	229.74	0.650	0.000	2.00	4.572	2.97	130.7	0.0	216.3
75.00	Appurtenance(s)	1.00	1.19	25.057	27.56	228.09	0.650	0.000	1.00	2.257	1.47	64.7	0.0	106.8
76.00		1.00	1.19	25.127	27.64	226.42	0.650	0.000	1.00	2.237	1.45	64.3	0.0	105.8
78.00		1.00	1.20	25.265	27.79	223.05	0.650	0.000	2.00	4.416	2.87	127.6	0.0	208.8
80.00		1.00	1.21	25.400	27.94	219.66	0.650	0.000	2.00	4.338	2.82	126.0	0.0	205.1
82.00		1.00	1.21	25.532	28.09	216.22	0.650	0.000	2.00	4.260	2.77	124.4	0.0	201.3
83.00	Appurtenance(s)	1.00	1.22	25.597	28.16	214.49	0.650	0.000	1.00	2.101	1.37	61.5	0.0	99.3

Wind Loading - Shaft

Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 11	

84.00	1.00	1.22	25.662	28.23	212.76	0.650	0.000	1.00	2.081	1.35	61.1	0.0	98.3
85.00 Appurtenance(s)	1.00	1.22	25.726	28.30	211.01	0.650	0.000	1.00	2.061	1.34	60.7	0.0	97.4
86.00	1.00	1.23	25.789	28.37	209.26	0.650	0.000	1.00	2.042	1.33	60.2	0.0	96.5
88.00	1.00	1.23	25.915	28.51	205.73	0.650	0.000	2.00	4.025	2.62	119.3	0.0	190.1
90.00	1.00	1.24	26.037	28.64	202.18	0.650	0.000	2.00	3.947	2.57	117.6	0.0	186.4
91.00 Appurtenance(s)	1.00	1.24	26.098	28.71	200.39	0.650	0.000	1.00	1.944	1.26	58.0	0.0	91.8
91.29 Bot - Section 3	1.00	1.24	26.116	28.73	199.86	0.650	0.000	0.29	0.567	0.37	16.9	0.0	26.7
92.00	1.00	1.24	26.158	28.77	198.59	0.650	0.000	0.71	1.380	0.90	41.3	0.0	103.4
94.00	1.00	1.25	26.277	28.90	194.98	0.650	0.000	2.00	3.854	2.51	115.9	0.0	288.7
94.71 Top - Section 2	1.00	1.25	26.319	28.95	193.69	0.650	0.000	0.71	1.349	0.88	40.6	0.0	101.0
96.00	1.00	1.25	26.394	29.03	194.65	0.650	0.000	1.29	2.427	1.58	73.3	0.0	69.1
98.00 Appurtenance(s)	1.00	1.26	26.509	29.16	190.99	0.650	0.000	2.00	3.698	2.40	112.1	0.0	105.3
100.00	1.00	1.27	26.621	29.28	187.31	0.650	0.000	2.00	3.620	2.35	110.2	0.0	103.0
102.00	1.00	1.27	26.733	29.41	183.60	0.650	0.000	2.00	3.541	2.30	108.3	0.0	100.8
104.00	1.00	1.28	26.842	29.53	179.87	0.650	0.000	2.00	3.463	2.25	106.3	0.0	98.5
106.00	1.00	1.28	26.950	29.65	176.12	0.650	0.000	2.00	3.385	2.20	104.4	0.0	96.3
107.00 Appurtenance(s)	1.00	1.28	27.003	29.70	174.23	0.650	0.000	1.00	1.663	1.08	51.4	0.0	47.3
108.00	1.00	1.29	27.056	29.76	172.34	0.650	0.000	1.00	1.644	1.07	50.9	0.0	46.7
110.00	1.00	1.29	27.161	29.88	168.54	0.650	0.000	2.00	3.229	2.10	100.3	0.0	91.8
112.00	1.00	1.30	27.264	29.99	164.73	0.650	0.000	2.00	3.151	2.05	98.3	0.0	89.6
114.00	1.00	1.30	27.366	30.10	160.89	0.650	0.000	2.00	3.072	2.00	96.2	0.0	87.3
116.00	1.00	1.31	27.466	30.21	157.03	0.650	0.000	2.00	2.994	1.95	94.1	0.0	85.1
118.00 Appurtenance(s)	1.00	1.31	27.565	30.32	153.15	0.650	0.000	2.00	2.916	1.90	92.0	0.0	82.8
							Totals:	**118.00**			**7,726.6**		**15,793.7**

Discrete Appurtenance Forces

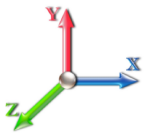
Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 12	

Tower Engineering Solutions

Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 27

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	118.00	DS1F03F36D-N	1	28.099	30.909	1.00	1.00	6.75	85.20	0.000	11.250	333.82	0.00	3755.44
2	118.00	Collar Mount	1	27.565	30.322	1.00	1.00	2.50	264.00	0.000	0.000	121.29	0.00	0.00
3	107.00	ACU-A20-N	4	27.003	29.704	0.54	0.80	0.30	4.80	0.000	0.000	14.27	0.00	0.00
4	107.00	1900 MHz 4X45 RRH	3	27.003	29.704	0.54	0.80	4.36	216.00	0.000	0.000	207.10	0.00	0.00
5	107.00	800 MHz RRU Filter	3	27.003	29.704	0.54	0.80	3.86	230.40	0.000	0.000	183.41	0.00	0.00
6	107.00	TD-RRH8x20-25	3	27.003	29.704	0.54	0.80	6.51	252.00	0.000	0.000	309.51	0.00	0.00
7	107.00	Universal Ring Mount	1	27.003	29.704	1.00	1.00	5.00	420.00	0.000	0.000	237.63	0.00	0.00
8	107.00	Low Profile Platform	1	27.003	29.704	1.00	1.00	28.00	2400.00	0.000	0.000	1330.73	0.00	0.00
9	107.00	APXVSPP18-C-A20	3	27.003	29.704	0.66	0.80	15.98	205.20	0.000	0.000	759.27	0.00	0.00
10	107.00	APXV9TM14-ALU-120	3	27.056	29.762	0.63	0.80	12.02	201.60	0.000	1.000	572.41	0.00	572.41
11	98.00	Samsung MT6407-77A	3	26.509	29.159	0.52	0.75	7.39	285.84	0.000	0.000	344.63	0.00	0.00
12	98.00	JMA MX06FRO660-03	6	26.509	29.159	0.65	0.75	38.64	627.12	0.000	0.000	1802.80	0.00	0.00
13	98.00	Amphenol	3	26.509	29.159	0.55	0.75	12.43	61.20	0.000	0.000	580.10	0.00	0.00
14	98.00	Low Profile Platform	1	26.509	29.159	1.00	1.00	28.00	2520.00	0.000	0.000	1306.34	0.00	0.00
15	98.00	HRK12 (Handrail Kit)	1	26.509	29.159	1.00	1.00	6.75	314.06	0.000	0.000	314.92	0.00	0.00
16	98.00	Samsung RF4439d-25A	3	26.509	29.159	0.63	0.75	3.50	268.92	0.000	0.000	163.23	0.00	0.00
17	98.00	Samsung RF4440d-13A	3	26.509	29.159	0.60	0.75	3.36	253.19	0.000	0.000	156.79	0.00	0.00
18	98.00	Commscope	1	26.509	29.159	0.75	0.75	1.40	18.25	0.000	0.000	65.43	0.00	0.00
19	98.00	PRK-1245 (kicker kit)	1	26.509	29.159	1.00	1.00	9.50	557.89	0.000	0.000	443.22	0.00	0.00
20	91.00	DC6-48-60-18-8F	2	26.098	28.708	1.00	1.00	1.84	76.32	0.000	0.000	84.52	0.00	0.00
21	91.00	RRUS-11	3	26.098	28.708	0.54	0.80	7.11	198.00	0.000	0.000	326.46	0.00	0.00
22	91.00	LGP21401	6	26.098	28.708	0.54	0.80	4.15	101.52	0.000	0.000	190.56	0.00	0.00
23	91.00	P65-16-XLH-RR	3	26.098	28.708	0.60	0.80	14.69	190.80	0.000	0.000	674.66	0.00	0.00
24	91.00	7770.00	3	26.098	28.708	0.58	0.80	9.64	126.00	0.000	0.000	442.61	0.00	0.00
25	91.00	Low Profile Platform	1	26.098	28.708	1.00	1.00	25.00	1618.80	0.000	0.000	1148.32	0.00	0.00
26	91.00	RRUS 32 B30	3	26.098	28.708	0.65	0.80	5.33	216.00	0.000	0.000	244.66	0.00	0.00
27	91.00	RRUS 32 B2	3	26.098	28.708	0.65	0.80	5.33	190.80	0.000	0.000	244.66	0.00	0.00
28	91.00	QS66512-2	3	26.098	28.708	0.72	0.80	17.56	277.20	0.000	0.000	806.62	0.00	0.00
29	85.00	12.5' - 2" Horizontal Pipe	1	25.726	28.299	1.00	1.00	2.97	54.90	0.000	0.000	134.42	0.00	0.00
30	83.00	Platform w/ Handrail kit	1	25.597	28.157	1.00	1.00	40.00	2241.84	0.000	0.000	1802.06	0.00	0.00
31	83.00	VHLP3-11W	1	25.597	28.157	1.00	1.00	10.68	63.60	0.000	0.000	481.15	0.00	0.00
32	83.00	IP20C	1	25.597	28.157	0.50	0.75	0.53	13.80	0.000	0.000	23.77	0.00	0.00
33	83.00	S20057A1 TMA	3	25.597	28.157	0.50	0.75	0.02	39.60	0.000	0.000	0.68	0.00	0.00
34	83.00	MS-KI22-5 (Kickers w/o	1	25.597	28.157	1.00	1.00	6.33	175.20	0.000	0.000	285.18	0.00	0.00
35	83.00	RFS - APXV18-209014	3	25.597	28.157	0.55	0.75	5.96	67.32	0.000	0.000	268.54	0.00	0.00
36	83.00	Commscope -	3	25.597	28.157	0.60	0.75	20.65	179.28	0.000	0.000	930.13	0.00	0.00
37	83.00	RFS - ATMAA1412D-1A2	3	25.597	28.157	0.50	0.75	1.76	46.80	0.000	0.000	79.46	0.00	0.00
38	83.00	Kathrein - 782 11054 -	3	25.597	28.157	0.50	0.75	0.23	6.48	0.000	0.000	10.19	0.00	0.00
39	75.00	Standoff Mount	1	25.057	27.563	1.00	1.00	2.63	48.00	0.000	0.000	115.98	0.00	0.00
40	75.00	GPS	1	25.057	27.563	1.00	1.00	1.00	12.00	0.000	0.000	44.10	0.00	0.00
41	69.00	MC-PK8-DSH	1	24.621	27.083	1.00	1.00	37.59	2072.40	0.000	0.000	1628.89	0.00	0.00
42	69.00	RDIDC-9181-OF-48	1	24.621	27.083	1.00	1.00	2.01	26.28	0.000	0.000	87.10	0.00	0.00
43	69.00	TA08025-B605	3	24.621	27.083	0.50	0.75	2.95	270.00	0.000	0.000	128.04	0.00	0.00
44	69.00	TA08025-B604	3	24.621	27.083	0.50	0.75	2.95	230.04	0.000	0.000	128.04	0.00	0.00
45	69.00	Commscope	3	24.621	27.083	0.55	0.75	19.71	254.88	0.000	0.000	854.25	0.00	0.00
							Totals:		**17,983.54**			**20,411.91**		

Total Applied Force Summary

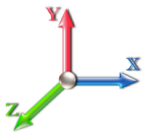
Structure:	CT46132-A-SBA		**Code:**	EIA/TIA-222-G	1/20/2022
Site Name:	Newtown-ferris Rd		**Exposure:**	C	
Height:	118.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 13

Tower Engineering Solutions

Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 27

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
2.00		148.91	498.00	0.00	0.00
4.00		147.31	493.51	0.00	0.00
6.00		145.72	489.02	0.00	0.00
8.00		144.12	484.53	0.00	0.00
10.00		142.52	480.04	0.00	0.00
12.00		140.92	475.55	0.00	0.00
14.00		139.32	471.06	0.00	0.00
16.00		139.42	466.57	0.00	0.00
18.00		141.26	462.09	0.00	0.00
20.00		142.74	457.60	0.00	0.00
22.00		143.90	453.11	0.00	0.00
24.00		144.80	448.62	0.00	0.00
26.00		145.46	444.13	0.00	0.00
28.00		145.93	439.64	0.00	0.00
30.00		146.22	435.15	0.00	0.00
32.00		146.34	430.66	0.00	0.00
34.00		146.33	426.17	0.00	0.00
36.00		146.18	421.68	0.00	0.00
38.00		145.91	417.19	0.00	0.00
40.00		145.53	412.70	0.00	0.00
42.00		145.05	408.21	0.00	0.00
44.00		144.48	403.72	0.00	0.00
45.13		81.18	226.12	0.00	0.00
46.00		63.50	289.53	0.00	0.00
48.00		145.83	659.69	0.00	0.00
49.88		136.32	612.60	0.00	0.00
50.00		8.64	20.58	0.00	0.00
52.00		144.16	340.96	0.00	0.00
54.00		143.22	337.22	0.00	0.00
56.00		142.21	333.47	0.00	0.00
58.00		141.14	329.73	0.00	0.00
60.00		140.02	325.99	0.00	0.00
62.00		138.83	322.25	0.00	0.00
64.00		137.60	318.51	0.00	0.00
66.00		136.31	314.77	0.00	0.00
68.00		134.97	311.03	0.00	0.00
69.00	(11) attachments	2893.18	3007.71	0.00	0.00
70.00		66.52	150.79	0.00	0.00
72.00		132.17	298.77	0.00	0.00
74.00		130.70	295.03	0.00	0.00
75.00	(2) attachments	224.78	206.11	0.00	0.00
76.00		64.31	144.98	0.00	0.00
78.00		127.63	287.16	0.00	0.00
80.00		126.04	283.42	0.00	0.00
82.00		124.42	279.68	0.00	0.00
83.00	(19) attachments	3942.66	2972.36	0.00	0.00

Total Applied Force Summary

Structure:	CT46132-A-SBA		**Code:**	EIA/TIA-222-G	1/20/2022
Site Name:	Newtown-ferris Rd		**Exposure:**	C	
Height:	118.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 14

Tower Engineering Solutions

84.00		61.09	127.80	0.00	0.00
85.00	(1) attachments	195.09	181.77	0.00	0.00
86.00		60.24	125.93	0.00	0.00
88.00		119.33	249.06	0.00	0.00
90.00		117.57	245.32	0.00	0.00
91.00	(27) attachments	4221.11	3116.70	0.00	0.00
91.29		16.93	32.59	0.00	0.00
92.00		41.31	117.50	0.00	0.00
94.00		115.86	328.50	0.00	0.00
94.71		40.63	115.18	0.00	0.00
96.00		73.27	94.79	0.00	0.00
98.00	(22) attachments	5289.59	5051.59	0.00	0.00
100.00		110.24	110.28	0.00	0.00
102.00		108.31	108.04	0.00	0.00
104.00		106.35	105.79	0.00	0.00
106.00		104.37	103.55	0.00	0.00
107.00	(21) attachments	3665.71	3980.93	0.00	572.41
108.00		50.88	47.99	0.00	0.00
110.00		100.33	94.31	0.00	0.00
112.00		98.27	92.06	0.00	0.00
114.00		96.19	89.82	0.00	0.00
116.00		94.09	87.57	0.00	0.00
118.00	(2) attachments	547.06	434.53	0.00	3755.44
	Totals:	**28,138.47**	**37,629.03**	**0.00**	**4,327.85**

Linear Appurtenance Segment Forces (Factored)

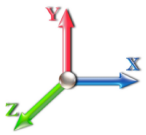
Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 15	

Tower Engineering Solutions

Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 27

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
2.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.040	0.000	17.879	0.00	0.38
2.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.040	0.000	17.879	0.00	4.78
4.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.040	0.000	17.879	0.00	0.38
4.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.040	0.000	17.879	0.00	4.78
6.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.041	0.000	17.879	0.00	0.38
6.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.041	0.000	17.879	0.00	4.78
8.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.041	0.000	17.879	0.00	0.38
8.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.041	0.000	17.879	0.00	4.78
10.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.042	0.000	17.879	0.00	0.38
10.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.042	0.000	17.879	0.00	4.78
12.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.042	0.000	17.879	0.00	0.38
12.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.042	0.000	17.879	0.00	4.78
14.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.043	0.000	17.879	0.00	0.38
14.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.043	0.000	17.879	0.00	4.78
16.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.043	0.000	18.100	0.00	0.38
16.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.043	0.000	18.100	0.00	4.78
18.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.044	0.000	18.554	0.00	0.38
18.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.044	0.000	18.554	0.00	4.78
20.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.044	0.000	18.971	0.00	0.38
20.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.044	0.000	18.971	0.00	4.78
22.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.045	0.000	19.355	0.00	0.38
22.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.045	0.000	19.355	0.00	4.78
24.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.045	0.000	19.713	0.00	0.38
24.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.045	0.000	19.713	0.00	4.78
26.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.046	0.000	20.048	0.00	0.38
26.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.046	0.000	20.048	0.00	4.78
28.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.047	0.000	20.363	0.00	0.38
28.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.047	0.000	20.363	0.00	4.78
30.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.047	0.000	20.661	0.00	0.38
30.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.047	0.000	20.661	0.00	4.78
32.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.048	0.000	20.944	0.00	0.38
32.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.048	0.000	20.944	0.00	4.78
34.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.048	0.000	21.213	0.00	0.38
34.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.048	0.000	21.213	0.00	4.78
36.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.049	0.000	21.470	0.00	0.38
36.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.049	0.000	21.470	0.00	4.78
38.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.050	0.000	21.715	0.00	0.38
38.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.050	0.000	21.715	0.00	4.78
40.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.050	0.000	21.951	0.00	0.38
40.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.050	0.000	21.951	0.00	4.78
42.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.051	0.000	22.178	0.00	0.38
42.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.051	0.000	22.178	0.00	4.78
44.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.052	0.000	22.396	0.00	0.38
44.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.052	0.000	22.396	0.00	4.78
45.13	1/2"	Yes	1.13	0.000	0.00	0.00	0.00	0.052	0.000	22.516	0.00	0.22
45.13	1.75" Hybrid	Yes	1.13	0.000	1.75	0.16	0.00	0.052	0.000	22.516	0.00	2.70
46.00	1/2"	Yes	0.87	0.000	0.00	0.00	0.00	0.053	0.000	22.607	0.00	0.17

Linear Appurtenance Segment Forces (Factored)

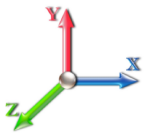
Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 16	

Tower Engineering Solutions

Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 27

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
46.00	1.75" Hybrid	Yes	0.87	0.000	1.75	0.13	0.00	0.053	0.000	22.607	0.00	2.08
48.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.053	0.000	22.810	0.00	0.38
48.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.053	0.000	22.810	0.00	4.78
49.88	1/2"	Yes	1.88	0.000	0.00	0.00	0.00	0.054	0.000	22.995	0.00	0.36
49.88	1.75" Hybrid	Yes	1.88	0.000	1.75	0.27	0.00	0.054	0.000	22.995	0.00	4.49
50.00	1/2"	Yes	0.12	0.000	0.00	0.00	0.00	0.053	0.000	23.007	0.00	0.02
50.00	1.75" Hybrid	Yes	0.12	0.000	1.75	0.02	0.00	0.053	0.000	23.007	0.00	0.29
52.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.054	0.000	23.198	0.00	0.38
52.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.054	0.000	23.198	0.00	4.78
54.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.054	0.000	23.383	0.00	0.38
54.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.054	0.000	23.383	0.00	4.78
56.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.055	0.000	23.562	0.00	0.38
56.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.055	0.000	23.562	0.00	4.78
58.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.056	0.000	23.737	0.00	0.38
58.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.056	0.000	23.737	0.00	4.78
60.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.057	0.000	23.907	0.00	0.38
60.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.057	0.000	23.907	0.00	4.78
62.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.058	0.000	24.073	0.00	0.38
62.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.058	0.000	24.073	0.00	4.78
64.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	24.234	0.00	0.38
64.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.059	0.000	24.234	0.00	4.78
66.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.060	0.000	24.392	0.00	0.38
66.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.060	0.000	24.392	0.00	4.78
68.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.061	0.000	24.545	0.00	0.38
68.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.061	0.000	24.545	0.00	4.78
69.00	1/2"	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	24.621	0.00	0.19
69.00	1.75" Hybrid	Yes	1.00	0.000	1.75	0.15	0.00	0.061	0.000	24.621	0.00	2.39
70.00	1/2"	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	24.696	0.00	0.19
72.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	24.843	0.00	0.38
74.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	24.986	0.00	0.38
75.00	1/2"	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	25.057	0.00	0.19
									Totals:		**0.0**	**179.3**

Calculated Forces

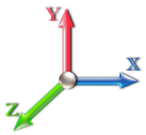
Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 17	

Tower Engineering Solutions

Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 27

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-37.60	-28.18	0.00	-2416.0	0.00	2416.06	3634.70	1817.35	6397.77	3203.64	0.00	0.000	0.000	0.765
2.00	-37.05	-28.10	0.00	-2359.7	0.00	2359.71	3607.15	1803.57	6280.28	3144.81	0.03	-0.115	0.000	0.761
4.00	-36.50	-28.03	0.00	-2303.5	0.00	2303.51	3579.34	1789.67	6163.42	3086.29	0.10	-0.230	0.000	0.757
6.00	-35.95	-27.95	0.00	-2247.4	0.00	2247.46	3551.29	1775.64	6047.19	3028.09	0.22	-0.347	0.000	0.753
8.00	-35.41	-27.88	0.00	-2191.5	0.00	2191.55	3522.98	1761.49	5931.61	2970.21	0.39	-0.464	0.000	0.748
10.00	-34.87	-27.80	0.00	-2135.8	0.00	2135.80	3494.42	1747.21	5816.69	2912.67	0.61	-0.583	0.000	0.744
12.00	-34.34	-27.73	0.00	-2080.1	0.00	2080.19	3465.61	1732.80	5702.44	2855.46	0.88	-0.703	0.000	0.739
14.00	-33.81	-27.66	0.00	-2024.7	0.00	2024.73	3436.54	1718.27	5588.89	2798.60	1.20	-0.823	0.000	0.734
16.00	-33.29	-27.58	0.00	-1969.4	0.00	1969.42	3407.22	1703.61	5476.05	2742.09	1.57	-0.944	0.000	0.728
18.00	-32.77	-27.50	0.00	-1914.2	0.00	1914.27	3377.65	1688.83	5363.92	2685.95	2.00	-1.066	0.000	0.723
20.00	-32.26	-27.42	0.00	-1859.2	0.00	1859.27	3347.83	1673.91	5252.53	2630.17	2.47	-1.189	0.000	0.717
22.00	-31.75	-27.33	0.00	-1804.4	0.00	1804.43	3317.75	1658.87	5141.89	2574.76	2.99	-1.313	0.000	0.711
24.00	-31.25	-27.25	0.00	-1749.7	0.00	1749.77	3287.42	1643.71	5032.01	2519.74	3.57	-1.438	0.000	0.704
26.00	-30.75	-27.16	0.00	-1695.2	0.00	1695.28	3256.84	1628.42	4922.91	2465.11	4.20	-1.563	0.000	0.697
28.00	-30.25	-27.06	0.00	-1640.9	0.00	1640.96	3219.51	1609.75	4804.91	2406.03	4.88	-1.689	0.000	0.692
30.00	-29.76	-26.97	0.00	-1586.8	0.00	1586.84	3178.67	1589.33	4683.16	2345.06	5.62	-1.816	0.000	0.686
32.00	-29.28	-26.88	0.00	-1532.8	0.00	1532.89	3137.83	1568.91	4562.98	2284.88	6.41	-1.943	0.000	0.681
34.00	-28.80	-26.78	0.00	-1479.1	0.00	1479.14	3096.99	1548.49	4444.36	2225.48	7.25	-2.070	0.000	0.674
36.00	-28.32	-26.68	0.00	-1425.5	0.00	1425.59	3056.15	1528.07	4327.30	2166.87	8.14	-2.198	0.000	0.667
38.00	-27.85	-26.58	0.00	-1372.2	0.00	1372.23	3015.30	1507.65	4211.81	2109.03	9.09	-2.326	0.000	0.660
40.00	-27.38	-26.48	0.00	-1319.0	0.00	1319.07	2974.46	1487.23	4097.87	2051.98	10.09	-2.455	0.000	0.652
42.00	-26.92	-26.38	0.00	-1266.1	0.00	1266.11	2933.62	1466.81	3985.50	1995.71	11.15	-2.583	0.000	0.644
44.00	-26.48	-26.26	0.00	-1213.3	0.00	1213.36	2892.78	1446.39	3874.69	1940.23	12.26	-2.712	0.000	0.635
45.13	-26.23	-26.20	0.00	-1183.6	0.00	1183.68	2869.71	1434.85	3812.78	1909.22	12.91	-2.785	0.000	0.629
46.00	-25.90	-26.16	0.00	-1160.8	0.00	1160.89	2851.94	1425.97	3765.45	1885.52	13.42	-2.841	0.000	0.625
48.00	-25.19	-26.04	0.00	-1108.5	0.00	1108.56	2811.10	1405.55	3657.76	1831.60	14.64	-2.969	0.000	0.615
49.88	-24.56	-25.90	0.00	-1059.6	0.00	1059.61	2333.69	1166.84	3066.96	1535.76	15.83	-3.089	0.000	0.701
50.00	-24.50	-25.92	0.00	-1056.5	0.00	1056.51	2332.20	1166.10	3062.32	1533.44	15.91	-3.097	0.000	0.700
52.00	-24.11	-25.82	0.00	-1004.6	0.00	1004.67	2307.18	1153.59	2985.35	1494.89	17.24	-3.240	0.000	0.683
54.00	-23.72	-25.71	0.00	-953.04	0.00	953.04	2281.92	1140.96	2909.02	1456.67	18.63	-3.381	0.000	0.665
56.00	-23.33	-25.61	0.00	-901.61	0.00	901.61	2256.40	1128.20	2833.34	1418.77	20.07	-3.521	0.000	0.646
58.00	-22.95	-25.50	0.00	-850.40	0.00	850.40	2223.07	1111.54	2748.96	1376.53	21.58	-3.660	0.000	0.629
60.00	-22.57	-25.39	0.00	-799.40	0.00	799.40	2189.04	1094.52	2665.01	1334.49	23.14	-3.796	0.000	0.610
62.00	-22.20	-25.28	0.00	-748.61	0.00	748.61	2155.00	1077.50	2582.36	1293.10	24.76	-3.930	0.000	0.590
64.00	-21.84	-25.17	0.00	-698.04	0.00	698.04	2120.97	1060.48	2501.02	1252.37	26.43	-4.061	0.000	0.568
66.00	-21.48	-25.06	0.00	-647.69	0.00	647.69	2086.94	1043.47	2420.97	1212.28	28.16	-4.190	0.000	0.545
68.00	-21.14	-24.94	0.00	-597.57	0.00	597.57	2052.90	1026.45	2342.23	1172.85	29.94	-4.314	0.000	0.520
69.00	-18.33	-21.85	0.00	-572.63	0.00	572.63	2035.88	1017.94	2303.34	1153.38	30.85	-4.375	0.000	0.506
70.00	-18.16	-21.80	0.00	-550.78	0.00	550.78	2018.87	1009.43	2264.79	1134.08	31.78	-4.436	0.000	0.495
72.00	-17.82	-21.68	0.00	-507.19	0.00	507.19	1984.83	992.42	2188.65	1095.95	33.66	-4.553	0.000	0.472
74.00	-17.51	-21.55	0.00	-463.83	0.00	463.83	1950.80	975.40	2113.81	1058.48	35.59	-4.666	0.000	0.448
75.00	-17.30	-21.32	0.00	-442.29	0.00	442.29	1933.78	966.89	2076.88	1039.98	36.57	-4.721	0.000	0.435
76.00	-17.13	-21.27	0.00	-420.96	0.00	420.96	1916.76	958.38	2040.27	1021.65	37.56	-4.775	0.000	0.421
78.00	-16.82	-21.15	0.00	-378.42	0.00	378.42	1882.73	941.37	1968.04	985.48	39.59	-4.878	0.000	0.393
80.00	-16.52	-21.03	0.00	-336.12	0.00	336.12	1848.70	924.35	1897.11	949.96	41.65	-4.976	0.000	0.363
82.00	-16.22	-20.90	0.00	-294.06	0.00	294.06	1814.66	907.33	1827.48	915.10	43.75	-5.066	0.000	0.331
83.00	-13.60	-16.72	0.00	-273.16	0.00	273.16	1797.65	898.82	1793.15	897.91	44.82	-5.109	0.000	0.312
84.00	-13.47	-16.65	0.00	-256.45	0.00	256.45	1780.63	890.31	1759.15	880.88	45.89	-5.151	0.000	0.299

Calculated Forces

Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 18

Tower Engineering Solutions

85.00	-13.29	-16.45	0.00	-239.79	0.00	239.79	1763.61	881.81	1725.48	864.02	46.97	-5.191	0.000	0.285
86.00	-13.16	-16.39	0.00	-223.34	0.00	223.34	1746.59	873.30	1692.13	847.32	48.06	-5.229	0.000	0.271
88.00	-12.90	-16.27	0.00	-190.55	0.00	190.55	1712.56	856.28	1626.40	814.41	50.27	-5.300	0.000	0.242
90.00	-12.65	-16.14	0.00	-158.02	0.00	158.02	1678.53	839.26	1561.98	782.15	52.50	-5.363	0.000	0.210
91.00	-9.94	-11.65	0.00	-141.88	0.00	141.88	1661.51	830.75	1530.26	766.27	53.62	-5.391	0.000	0.191
91.29	-9.91	-11.63	0.00	-138.46	0.00	138.46	1656.52	828.26	1521.01	761.64	53.95	-5.400	0.000	0.188
92.00	-9.79	-11.58	0.00	-130.25	0.00	130.25	1644.49	822.25	1498.86	750.54	54.75	-5.419	0.000	0.180
94.00	-9.47	-11.44	0.00	-107.08	0.00	107.08	1610.46	805.23	1437.04	719.59	57.03	-5.467	0.000	0.155
94.71	-9.35	-11.39	0.00	-98.96	0.00	98.96	930.70	465.35	848.15	424.70	57.84	-5.483	0.000	0.244
96.00	-9.26	-11.32	0.00	-84.26	0.00	84.26	922.07	461.04	828.91	415.07	59.33	-5.509	0.000	0.214
98.00	-4.74	-5.57	0.00	-61.63	0.00	61.63	908.49	454.24	799.32	400.25	61.64	-5.562	0.000	0.159
100.00	-4.63	-5.45	0.00	-50.49	0.00	50.49	894.64	447.32	770.03	385.59	63.98	-5.605	0.000	0.136
102.00	-4.53	-5.34	0.00	-39.59	0.00	39.59	880.55	440.27	741.05	371.08	66.33	-5.642	0.000	0.112
104.00	-4.44	-5.22	0.00	-28.92	0.00	28.92	866.20	433.10	712.41	356.74	68.70	-5.672	0.000	0.086
106.00	-4.34	-5.11	0.00	-18.47	0.00	18.47	851.60	425.80	684.12	342.57	71.08	-5.694	0.000	0.059
107.00	-0.74	-1.07	0.00	-12.79	0.00	12.79	844.21	422.10	670.11	335.55	72.27	-5.702	0.000	0.039
108.00	-0.70	-1.01	0.00	-11.73	0.00	11.73	836.75	418.38	656.18	328.58	73.46	-5.709	0.000	0.037
110.00	-0.62	-0.90	0.00	-9.70	0.00	9.70	821.65	410.82	628.62	314.78	75.85	-5.720	0.000	0.032
112.00	-0.54	-0.79	0.00	-7.90	0.00	7.90	804.60	402.30	600.19	300.54	78.25	-5.730	0.000	0.027
114.00	-0.46	-0.69	0.00	-6.31	0.00	6.31	784.18	392.09	569.96	285.40	80.64	-5.739	0.000	0.023
116.00	-0.38	-0.59	0.00	-4.93	0.00	4.93	763.76	381.88	540.51	270.66	83.05	-5.747	0.000	0.019
118.00	0.00	-0.55	0.00	-3.76	0.00	3.76	743.33	371.67	511.84	256.30	85.45	-5.753	0.000	0.015

Wind Loading - Shaft

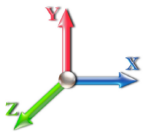
Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 19	

Tower Engineering Solutions

Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 26

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.85	17.879	19.67	313.79	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	17.879	19.67	310.44	0.650	0.000	2.00	7.280	4.73	148.9	0.0	310.9
4.00		1.00	0.85	17.879	19.67	307.09	0.650	0.000	2.00	7.202	4.68	147.3	0.0	307.5
6.00		1.00	0.85	17.879	19.67	303.74	0.650	0.000	2.00	7.124	4.63	145.7	0.0	304.1
8.00		1.00	0.85	17.879	19.67	300.39	0.650	0.000	2.00	7.046	4.58	144.1	0.0	300.8
10.00		1.00	0.85	17.879	19.67	297.04	0.650	0.000	2.00	6.968	4.53	142.5	0.0	297.4
12.00		1.00	0.85	17.879	19.67	293.69	0.650	0.000	2.00	6.890	4.48	140.9	0.0	294.0
14.00		1.00	0.85	17.879	19.67	290.34	0.650	0.000	2.00	6.811	4.43	139.3	0.0	290.7
16.00		1.00	0.86	18.100	19.91	288.75	0.650	0.000	2.00	6.733	4.38	139.4	0.0	287.3
18.00		1.00	0.88	18.554	20.41	288.94	0.650	0.000	2.00	6.655	4.33	141.3	0.0	283.9
20.00		1.00	0.90	18.971	20.87	288.71	0.650	0.000	2.00	6.577	4.28	142.7	0.0	280.6
22.00		1.00	0.92	19.355	21.29	288.14	0.650	0.000	2.00	6.499	4.22	143.9	0.0	277.2
24.00		1.00	0.94	19.713	21.68	287.27	0.650	0.000	2.00	6.421	4.17	144.8	0.0	273.8
26.00		1.00	0.95	20.048	22.05	286.15	0.650	0.000	2.00	6.342	4.12	145.5	0.0	270.5
28.00		1.00	0.97	20.363	22.40	284.82	0.650	0.000	2.00	6.264	4.07	145.9	0.0	267.1
30.00		1.00	0.98	20.661	22.73	283.29	0.650	0.000	2.00	6.186	4.02	146.2	0.0	263.7
32.00		1.00	1.00	20.944	23.04	281.59	0.650	0.000	2.00	6.108	3.97	146.3	0.0	260.4
34.00		1.00	1.01	21.213	23.33	279.75	0.650	0.000	2.00	6.030	3.92	146.3	0.0	257.0
36.00		1.00	1.02	21.470	23.62	277.76	0.650	0.000	2.00	5.952	3.87	146.2	0.0	253.6
38.00		1.00	1.03	21.715	23.89	275.66	0.650	0.000	2.00	5.873	3.82	145.9	0.0	250.3
40.00		1.00	1.04	21.951	24.15	273.44	0.650	0.000	2.00	5.795	3.77	145.5	0.0	246.9
42.00		1.00	1.05	22.178	24.40	271.11	0.650	0.000	2.00	5.717	3.72	145.1	0.0	243.5
44.00		1.00	1.06	22.396	24.64	268.69	0.650	0.000	2.00	5.639	3.67	144.5	0.0	240.2
45.13	Bot - Section 2	1.00	1.07	22.516	24.77	267.28	0.650	0.000	1.13	3.151	2.05	81.2	0.0	134.2
46.00		1.00	1.07	22.607	24.87	266.18	0.650	0.000	0.87	2.455	1.60	63.5	0.0	189.9
48.00		1.00	1.08	22.810	25.09	263.59	0.650	0.000	2.00	5.588	3.63	145.8	0.0	432.1
49.88	Top - Section 1	1.00	1.09	22.995	25.29	261.09	0.650	0.000	1.88	5.182	3.37	136.3	0.0	400.6
50.00		1.00	1.09	23.007	25.31	266.07	0.650	0.000	0.12	0.328	0.21	8.6	0.0	11.7
52.00		1.00	1.10	23.198	25.52	263.36	0.650	0.000	2.00	5.432	3.53	144.2	0.0	193.1
54.00		1.00	1.11	23.383	25.72	260.57	0.650	0.000	2.00	5.354	3.48	143.2	0.0	190.3
56.00		1.00	1.12	23.562	25.92	257.72	0.650	0.000	2.00	5.276	3.43	142.2	0.0	187.5
58.00		1.00	1.13	23.737	26.11	254.82	0.650	0.000	2.00	5.198	3.38	141.1	0.0	184.7
60.00		1.00	1.14	23.907	26.30	251.85	0.650	0.000	2.00	5.119	3.33	140.0	0.0	181.9
62.00		1.00	1.14	24.073	26.48	248.84	0.650	0.000	2.00	5.041	3.28	138.8	0.0	179.1
64.00		1.00	1.15	24.234	26.66	245.77	0.650	0.000	2.00	4.963	3.23	137.6	0.0	176.3
66.00		1.00	1.16	24.392	26.83	242.65	0.650	0.000	2.00	4.885	3.18	136.3	0.0	173.5
68.00		1.00	1.17	24.545	27.00	239.49	0.650	0.000	2.00	4.807	3.12	135.0	0.0	170.6
69.00	Appurtenance(s)	1.00	1.17	24.621	27.08	237.89	0.650	0.000	1.00	2.374	1.54	66.9	0.0	84.3
70.00		1.00	1.17	24.696	27.17	236.28	0.650	0.000	1.00	2.355	1.53	66.5	0.0	83.6
72.00		1.00	1.18	24.843	27.33	233.03	0.650	0.000	2.00	4.650	3.02	132.2	0.0	165.0
74.00		1.00	1.19	24.986	27.48	229.74	0.650	0.000	2.00	4.572	2.97	130.7	0.0	162.2
75.00	Appurtenance(s)	1.00	1.19	25.057	27.56	228.09	0.650	0.000	1.00	2.257	1.47	64.7	0.0	80.1
76.00		1.00	1.19	25.127	27.64	226.42	0.650	0.000	1.00	2.237	1.45	64.3	0.0	79.4
78.00		1.00	1.20	25.265	27.79	223.05	0.650	0.000	2.00	4.416	2.87	127.6	0.0	156.6
80.00		1.00	1.21	25.400	27.94	219.66	0.650	0.000	2.00	4.338	2.82	126.0	0.0	153.8
82.00		1.00	1.21	25.532	28.09	216.22	0.650	0.000	2.00	4.260	2.77	124.4	0.0	151.0
83.00	Appurtenance(s)	1.00	1.22	25.597	28.16	214.49	0.650	0.000	1.00	2.101	1.37	61.5	0.0	74.5

Wind Loading - Shaft

Structure: CT46132-A-SBA
Site Name: Newtown-ferris Rd
Height: 118.00 (ft)
Base Elev: 0.000 (ft)
Gh: 1.1
Topography: 1
Code: EIA/TIA-222-G
Exposure: C
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

1/20/2022

Tower Engineering Solutions

84.00		1.00	1.22	25.662	28.23	212.76	0.650	0.000	1.00	2.081	1.35	61.1	0.0	73.7
85.00	Appurtenance(s)	1.00	1.22	25.726	28.30	211.01	0.650	0.000	1.00	2.061	1.34	60.7	0.0	73.0
86.00		1.00	1.23	25.789	28.37	209.26	0.650	0.000	1.00	2.042	1.33	60.2	0.0	72.3
88.00		1.00	1.23	25.915	28.51	205.73	0.650	0.000	2.00	4.025	2.62	119.3	0.0	142.6
90.00		1.00	1.24	26.037	28.64	202.18	0.650	0.000	2.00	3.947	2.57	117.6	0.0	139.8
91.00	Appurtenance(s)	1.00	1.24	26.098	28.71	200.39	0.650	0.000	1.00	1.944	1.26	58.0	0.0	68.8
91.29	Bot - Section 3	1.00	1.24	26.116	28.73	199.86	0.650	0.000	0.29	0.567	0.37	16.9	0.0	20.1
92.00		1.00	1.24	26.158	28.77	198.59	0.650	0.000	0.71	1.380	0.90	41.3	0.0	77.6
94.00		1.00	1.25	26.277	28.90	194.98	0.650	0.000	2.00	3.854	2.51	115.9	0.0	216.5
94.71	Top - Section 2	1.00	1.25	26.319	28.95	193.69	0.650	0.000	0.71	1.349	0.88	40.6	0.0	75.8
96.00		1.00	1.25	26.394	29.03	194.65	0.650	0.000	1.29	2.427	1.58	73.3	0.0	51.8
98.00	Appurtenance(s)	1.00	1.26	26.509	29.16	190.99	0.650	0.000	2.00	3.698	2.40	112.1	0.0	79.0
100.00		1.00	1.27	26.621	29.28	187.31	0.650	0.000	2.00	3.620	2.35	110.2	0.0	77.3
102.00		1.00	1.27	26.733	29.41	183.60	0.650	0.000	2.00	3.541	2.30	108.3	0.0	75.6
104.00		1.00	1.28	26.842	29.53	179.87	0.650	0.000	2.00	3.463	2.25	106.3	0.0	73.9
106.00		1.00	1.28	26.950	29.65	176.12	0.650	0.000	2.00	3.385	2.20	104.4	0.0	72.2
107.00	Appurtenance(s)	1.00	1.28	27.003	29.70	174.23	0.650	0.000	1.00	1.663	1.08	51.4	0.0	35.5
108.00		1.00	1.29	27.056	29.76	172.34	0.650	0.000	1.00	1.644	1.07	50.9	0.0	35.1
110.00		1.00	1.29	27.161	29.88	168.54	0.650	0.000	2.00	3.229	2.10	100.3	0.0	68.9
112.00		1.00	1.30	27.264	29.99	164.73	0.650	0.000	2.00	3.151	2.05	98.3	0.0	67.2
114.00		1.00	1.30	27.366	30.10	160.89	0.650	0.000	2.00	3.072	2.00	96.2	0.0	65.5
116.00		1.00	1.31	27.466	30.21	157.03	0.650	0.000	2.00	2.994	1.95	94.1	0.0	63.8
118.00	Appurtenance(s)	1.00	1.31	27.565	30.32	153.15	0.650	0.000	2.00	2.916	1.90	92.0	0.0	62.1
								Totals:	**118.00**			**7,726.6**		**11,845.3**

Discrete Appurtenance Forces

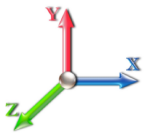
Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 21	

Tower Engineering Solutions

Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 26

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	118.00	DS1F03F36D-N	1	28.099	30.909	1.00	1.00	6.75	63.90	0.000	11.250	333.82	0.00	3755.44
2	118.00	Collar Mount	1	27.565	30.322	1.00	1.00	2.50	198.00	0.000	0.000	121.29	0.00	0.00
3	107.00	ACU-A20-N	4	27.003	29.704	0.54	0.80	0.30	3.60	0.000	0.000	14.27	0.00	0.00
4	107.00	1900 MHz 4X45 RRH	3	27.003	29.704	0.54	0.80	4.36	162.00	0.000	0.000	207.10	0.00	0.00
5	107.00	800 MHz RRU Filter	3	27.003	29.704	0.54	0.80	3.86	172.80	0.000	0.000	183.41	0.00	0.00
6	107.00	TD-RRH8x20-25	3	27.003	29.704	0.54	0.80	6.51	189.00	0.000	0.000	309.51	0.00	0.00
7	107.00	Universal Ring Mount	1	27.003	29.704	1.00	1.00	5.00	315.00	0.000	0.000	237.63	0.00	0.00
8	107.00	Low Profile Platform	1	27.003	29.704	1.00	1.00	28.00	1800.00	0.000	0.000	1330.73	0.00	0.00
9	107.00	APXVSPP18-C-A20	3	27.003	29.704	0.66	0.80	15.98	153.90	0.000	0.000	759.27	0.00	0.00
10	107.00	APXV9TM14-ALU-120	3	27.056	29.762	0.63	0.80	12.02	151.20	0.000	1.000	572.41	0.00	572.41
11	98.00	Samsung MT6407-77A	3	26.509	29.159	0.52	0.75	7.39	214.38	0.000	0.000	344.63	0.00	0.00
12	98.00	JMA MX06FRO660-03	6	26.509	29.159	0.65	0.75	38.64	470.34	0.000	0.000	1802.80	0.00	0.00
13	98.00	Amphenol	3	26.509	29.159	0.55	0.75	12.43	45.90	0.000	0.000	580.10	0.00	0.00
14	98.00	Low Profile Platform	1	26.509	29.159	1.00	1.00	28.00	1890.00	0.000	0.000	1306.34	0.00	0.00
15	98.00	HRK12 (Handrail Kit)	1	26.509	29.159	1.00	1.00	6.75	235.55	0.000	0.000	314.92	0.00	0.00
16	98.00	Samsung RF4439d-25A	3	26.509	29.159	0.63	0.75	3.50	201.69	0.000	0.000	163.23	0.00	0.00
17	98.00	Samsung RF4440d-13A	3	26.509	29.159	0.60	0.75	3.36	189.89	0.000	0.000	156.79	0.00	0.00
18	98.00	Commscope	1	26.509	29.159	0.75	0.75	1.40	13.69	0.000	0.000	65.43	0.00	0.00
19	98.00	PRK-1245 (kicker kit)	1	26.509	29.159	1.00	1.00	9.50	418.42	0.000	0.000	443.22	0.00	0.00
20	91.00	DC6-48-60-18-8F	2	26.098	28.708	1.00	1.00	1.84	57.24	0.000	0.000	84.52	0.00	0.00
21	91.00	RRUS-11	3	26.098	28.708	0.54	0.80	7.11	148.50	0.000	0.000	326.46	0.00	0.00
22	91.00	LGP21401	6	26.098	28.708	0.54	0.80	4.15	76.14	0.000	0.000	190.56	0.00	0.00
23	91.00	P65-16-XLH-RR	3	26.098	28.708	0.60	0.80	14.69	143.10	0.000	0.000	674.66	0.00	0.00
24	91.00	7770.00	3	26.098	28.708	0.58	0.80	9.64	94.50	0.000	0.000	442.61	0.00	0.00
25	91.00	Low Profile Platform	1	26.098	28.708	1.00	1.00	25.00	1214.10	0.000	0.000	1148.32	0.00	0.00
26	91.00	RRUS 32 B30	3	26.098	28.708	0.65	0.80	5.33	162.00	0.000	0.000	244.66	0.00	0.00
27	91.00	RRUS 32 B2	3	26.098	28.708	0.65	0.80	5.33	143.10	0.000	0.000	244.66	0.00	0.00
28	91.00	QS66512-2	3	26.098	28.708	0.72	0.80	17.56	207.90	0.000	0.000	806.62	0.00	0.00
29	85.00	12.5' - 2" Horizontal Pipe	1	25.726	28.299	1.00	1.00	2.97	41.18	0.000	0.000	134.42	0.00	0.00
30	83.00	Platform w/ Handrail kit	1	25.597	28.157	1.00	1.00	40.00	1681.38	0.000	0.000	1802.06	0.00	0.00
31	83.00	VHLP3-11W	1	25.597	28.157	1.00	1.00	10.68	47.70	0.000	0.000	481.15	0.00	0.00
32	83.00	IP20C	1	25.597	28.157	0.50	0.75	0.53	10.35	0.000	0.000	23.77	0.00	0.00
33	83.00	S20057A1 TMA	3	25.597	28.157	0.50	0.75	0.02	29.70	0.000	0.000	0.68	0.00	0.00
34	83.00	MS-KI22-5 (Kickers w/o	1	25.597	28.157	1.00	1.00	6.33	131.40	0.000	0.000	285.18	0.00	0.00
35	83.00	RFS - APXV18-209014	3	25.597	28.157	0.55	0.75	5.96	50.49	0.000	0.000	268.54	0.00	0.00
36	83.00	Commscope -	3	25.597	28.157	0.60	0.75	20.65	134.46	0.000	0.000	930.13	0.00	0.00
37	83.00	RFS - ATMAA1412D-1A2	3	25.597	28.157	0.50	0.75	1.76	35.10	0.000	0.000	79.46	0.00	0.00
38	83.00	Kathrein - 782 11054 -	3	25.597	28.157	0.50	0.75	0.23	4.86	0.000	0.000	10.19	0.00	0.00
39	75.00	Standoff Mount	1	25.057	27.563	1.00	1.00	2.63	36.00	0.000	0.000	115.98	0.00	0.00
40	75.00	GPS	1	25.057	27.563	1.00	1.00	1.00	9.00	0.000	0.000	44.10	0.00	0.00
41	69.00	MC-PK8-DSH	1	24.621	27.083	1.00	1.00	37.59	1554.30	0.000	0.000	1628.89	0.00	0.00
42	69.00	RDIDC-9181-OF-48	1	24.621	27.083	1.00	1.00	2.01	19.71	0.000	0.000	87.10	0.00	0.00
43	69.00	TA08025-B605	3	24.621	27.083	0.50	0.75	2.95	202.50	0.000	0.000	128.04	0.00	0.00
44	69.00	TA08025-B604	3	24.621	27.083	0.50	0.75	2.95	172.53	0.000	0.000	128.04	0.00	0.00
45	69.00	Commscope	3	24.621	27.083	0.55	0.75	19.71	191.16	0.000	0.000	854.25	0.00	0.00
							Totals:		**13,487.65**			**20,411.91**		

Total Applied Force Summary

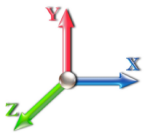
Structure:	CT46132-A-SBA		**Code:**	EIA/TIA-222-G	1/20/2022
Site Name:	Newtown-ferris Rd		**Exposure:**	C	
Height:	118.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 22

Tower Engineering Solutions

Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 26

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
2.00		148.91	373.50	0.00	0.00
4.00		147.31	370.13	0.00	0.00
6.00		145.72	366.77	0.00	0.00
8.00		144.12	363.40	0.00	0.00
10.00		142.52	360.03	0.00	0.00
12.00		140.92	356.66	0.00	0.00
14.00		139.32	353.30	0.00	0.00
16.00		139.42	349.93	0.00	0.00
18.00		141.26	346.56	0.00	0.00
20.00		142.74	343.20	0.00	0.00
22.00		143.90	339.83	0.00	0.00
24.00		144.80	336.46	0.00	0.00
26.00		145.46	333.10	0.00	0.00
28.00		145.93	329.73	0.00	0.00
30.00		146.22	326.36	0.00	0.00
32.00		146.34	322.99	0.00	0.00
34.00		146.33	319.63	0.00	0.00
36.00		146.18	316.26	0.00	0.00
38.00		145.91	312.89	0.00	0.00
40.00		145.53	309.53	0.00	0.00
42.00		145.05	306.16	0.00	0.00
44.00		144.48	302.79	0.00	0.00
45.13		81.18	169.59	0.00	0.00
46.00		63.50	217.15	0.00	0.00
48.00		145.83	494.76	0.00	0.00
49.88		136.32	459.45	0.00	0.00
50.00		8.64	15.43	0.00	0.00
52.00		144.16	255.72	0.00	0.00
54.00		143.22	252.91	0.00	0.00
56.00		142.21	250.11	0.00	0.00
58.00		141.14	247.30	0.00	0.00
60.00		140.02	244.49	0.00	0.00
62.00		138.83	241.69	0.00	0.00
64.00		137.60	238.88	0.00	0.00
66.00		136.31	236.08	0.00	0.00
68.00		134.97	233.27	0.00	0.00
69.00	(11) attachments	2893.18	2255.78	0.00	0.00
70.00		66.52	113.09	0.00	0.00
72.00		132.17	224.08	0.00	0.00
74.00		130.70	221.27	0.00	0.00
75.00	(2) attachments	224.78	154.58	0.00	0.00
76.00		64.31	108.74	0.00	0.00
78.00		127.63	215.37	0.00	0.00
80.00		126.04	212.56	0.00	0.00
82.00		124.42	209.76	0.00	0.00
83.00	(19) attachments	3942.66	2229.27	0.00	0.00

Total Applied Force Summary

Structure:	CT46132-A-SBA		**Code:**	EIA/TIA-222-G	1/20/2022
Site Name:	Newtown-ferris Rd		**Exposure:**	C	
Height:	118.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 23

Tower Engineering Solutions

84.00		61.09	95.85	0.00	0.00
85.00	(1) attachments	195.09	136.33	0.00	0.00
86.00		60.24	94.45	0.00	0.00
88.00		119.33	186.80	0.00	0.00
90.00		117.57	183.99	0.00	0.00
91.00	(27) attachments	4221.11	2337.52	0.00	0.00
91.29		16.93	24.44	0.00	0.00
92.00		41.31	88.13	0.00	0.00
94.00		115.86	246.38	0.00	0.00
94.71		40.63	86.38	0.00	0.00
96.00		73.27	71.09	0.00	0.00
98.00	(22) attachments	5289.59	3788.70	0.00	0.00
100.00		110.24	82.71	0.00	0.00
102.00		108.31	81.03	0.00	0.00
104.00		106.35	79.34	0.00	0.00
106.00		104.37	77.66	0.00	0.00
107.00	(21) attachments	3665.71	2985.70	0.00	572.41
108.00		50.88	36.00	0.00	0.00
110.00		100.33	70.73	0.00	0.00
112.00		98.27	69.05	0.00	0.00
114.00		96.19	67.36	0.00	0.00
116.00		94.09	65.68	0.00	0.00
118.00	(2) attachments	547.06	325.90	0.00	3755.44
	Totals:	**28,138.47**	**28,221.77**	**0.00**	**4,327.85**

Linear Appurtenance Segment Forces (Factored)

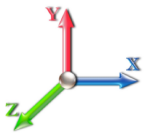
Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 24	

Tower Engineering Solutions

Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 26

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
2.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.040	0.000	17.879	0.00	0.29
2.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.040	0.000	17.879	0.00	3.58
4.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.040	0.000	17.879	0.00	0.29
4.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.040	0.000	17.879	0.00	3.58
6.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.041	0.000	17.879	0.00	0.29
6.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.041	0.000	17.879	0.00	3.58
8.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.041	0.000	17.879	0.00	0.29
8.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.041	0.000	17.879	0.00	3.58
10.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.042	0.000	17.879	0.00	0.29
10.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.042	0.000	17.879	0.00	3.58
12.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.042	0.000	17.879	0.00	0.29
12.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.042	0.000	17.879	0.00	3.58
14.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.043	0.000	17.879	0.00	0.29
14.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.043	0.000	17.879	0.00	3.58
16.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.043	0.000	18.100	0.00	0.29
16.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.043	0.000	18.100	0.00	3.58
18.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.044	0.000	18.554	0.00	0.29
18.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.044	0.000	18.554	0.00	3.58
20.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.044	0.000	18.971	0.00	0.29
20.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.044	0.000	18.971	0.00	3.58
22.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.045	0.000	19.355	0.00	0.29
22.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.045	0.000	19.355	0.00	3.58
24.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.045	0.000	19.713	0.00	0.29
24.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.045	0.000	19.713	0.00	3.58
26.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.046	0.000	20.048	0.00	0.29
26.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.046	0.000	20.048	0.00	3.58
28.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.047	0.000	20.363	0.00	0.29
28.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.047	0.000	20.363	0.00	3.58
30.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.047	0.000	20.661	0.00	0.29
30.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.047	0.000	20.661	0.00	3.58
32.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.048	0.000	20.944	0.00	0.29
32.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.048	0.000	20.944	0.00	3.58
34.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.048	0.000	21.213	0.00	0.29
34.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.048	0.000	21.213	0.00	3.58
36.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.049	0.000	21.470	0.00	0.29
36.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.049	0.000	21.470	0.00	3.58
38.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.050	0.000	21.715	0.00	0.29
38.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.050	0.000	21.715	0.00	3.58
40.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.050	0.000	21.951	0.00	0.29
40.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.050	0.000	21.951	0.00	3.58
42.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.051	0.000	22.178	0.00	0.29
42.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.051	0.000	22.178	0.00	3.58
44.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.052	0.000	22.396	0.00	0.29
44.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.052	0.000	22.396	0.00	3.58
45.13	1/2"	Yes	1.13	0.000	0.00	0.00	0.00	0.052	0.000	22.516	0.00	0.16
45.13	1.75" Hybrid	Yes	1.13	0.000	1.75	0.16	0.00	0.052	0.000	22.516	0.00	2.02
46.00	1/2"	Yes	0.87	0.000	0.00	0.00	0.00	0.053	0.000	22.607	0.00	0.13

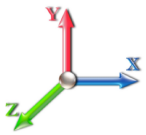
Linear Appurtenance Segment Forces (Factored)

Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 25	

Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 26

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
46.00	1.75" Hybrid	Yes	0.87	0.000	1.75	0.13	0.00	0.053	0.000	22.607	0.00	1.56
48.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.053	0.000	22.810	0.00	0.29
48.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.053	0.000	22.810	0.00	3.58
49.88	1/2"	Yes	1.88	0.000	0.00	0.00	0.00	0.054	0.000	22.995	0.00	0.27
49.88	1.75" Hybrid	Yes	1.88	0.000	1.75	0.27	0.00	0.054	0.000	22.995	0.00	3.37
50.00	1/2"	Yes	0.12	0.000	0.00	0.00	0.00	0.053	0.000	23.007	0.00	0.02
50.00	1.75" Hybrid	Yes	0.12	0.000	1.75	0.02	0.00	0.053	0.000	23.007	0.00	0.22
52.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.054	0.000	23.198	0.00	0.29
52.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.054	0.000	23.198	0.00	3.58
54.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.054	0.000	23.383	0.00	0.29
54.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.054	0.000	23.383	0.00	3.58
56.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.055	0.000	23.562	0.00	0.29
56.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.055	0.000	23.562	0.00	3.58
58.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.056	0.000	23.737	0.00	0.29
58.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.056	0.000	23.737	0.00	3.58
60.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.057	0.000	23.907	0.00	0.29
60.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.057	0.000	23.907	0.00	3.58
62.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.058	0.000	24.073	0.00	0.29
62.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.058	0.000	24.073	0.00	3.58
64.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	24.234	0.00	0.29
64.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.059	0.000	24.234	0.00	3.58
66.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.060	0.000	24.392	0.00	0.29
66.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.060	0.000	24.392	0.00	3.58
68.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.061	0.000	24.545	0.00	0.29
68.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.061	0.000	24.545	0.00	3.58
69.00	1/2"	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	24.621	0.00	0.14
69.00	1.75" Hybrid	Yes	1.00	0.000	1.75	0.15	0.00	0.061	0.000	24.621	0.00	1.79
70.00	1/2"	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	24.696	0.00	0.14
72.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	24.843	0.00	0.29
74.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	24.986	0.00	0.29
75.00	1/2"	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	25.057	0.00	0.14
									Totals:		**0.0**	**134.4**

Calculated Forces

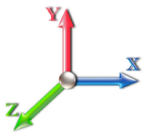
Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 26	

Tower Engineering Solutions

Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 26

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-28.19	-28.17	0.00	-2385.8	0.00	2385.84	3634.70	1817.35	6397.77	3203.64	0.00	0.000	0.000	0.753
2.00	-27.76	-28.07	0.00	-2329.5	0.00	2329.51	3607.15	1803.57	6280.28	3144.81	0.02	-0.113	0.000	0.749
4.00	-27.34	-27.98	0.00	-2273.3	0.00	2273.36	3579.34	1789.67	6163.42	3086.29	0.10	-0.227	0.000	0.744
6.00	-26.92	-27.88	0.00	-2217.4	0.00	2217.41	3551.29	1775.64	6047.19	3028.09	0.22	-0.342	0.000	0.740
8.00	-26.50	-27.79	0.00	-2161.6	0.00	2161.64	3522.98	1761.49	5931.61	2970.21	0.39	-0.458	0.000	0.736
10.00	-26.08	-27.70	0.00	-2106.0	0.00	2106.06	3494.42	1747.21	5816.69	2912.67	0.60	-0.575	0.000	0.731
12.00	-25.67	-27.61	0.00	-2050.6	0.00	2050.66	3465.61	1732.80	5702.44	2855.46	0.87	-0.693	0.000	0.726
14.00	-25.26	-27.52	0.00	-1995.4	0.00	1995.45	3436.54	1718.27	5588.89	2798.60	1.19	-0.812	0.000	0.721
16.00	-24.86	-27.42	0.00	-1940.4	0.00	1940.41	3407.22	1703.61	5476.05	2742.09	1.55	-0.931	0.000	0.715
18.00	-24.45	-27.33	0.00	-1885.5	0.00	1885.57	3377.65	1688.83	5363.92	2685.95	1.97	-1.052	0.000	0.710
20.00	-24.06	-27.23	0.00	-1830.9	0.00	1830.91	3347.83	1673.91	5252.53	2630.17	2.44	-1.173	0.000	0.704
22.00	-23.66	-27.13	0.00	-1776.4	0.00	1776.45	3317.75	1658.87	5141.89	2574.76	2.95	-1.295	0.000	0.697
24.00	-23.27	-27.03	0.00	-1722.2	0.00	1722.20	3287.42	1643.71	5032.01	2519.74	3.52	-1.417	0.000	0.691
26.00	-22.88	-26.92	0.00	-1668.1	0.00	1668.14	3256.84	1628.42	4922.91	2465.11	4.14	-1.541	0.000	0.684
28.00	-22.50	-26.82	0.00	-1614.3	0.00	1614.30	3219.51	1609.75	4804.91	2406.03	4.82	-1.665	0.000	0.678
30.00	-22.12	-26.71	0.00	-1560.6	0.00	1560.67	3178.67	1589.33	4683.16	2345.06	5.54	-1.789	0.000	0.673
32.00	-21.74	-26.60	0.00	-1507.2	0.00	1507.26	3137.83	1568.91	4562.98	2284.88	6.32	-1.914	0.000	0.667
34.00	-21.37	-26.49	0.00	-1454.0	0.00	1454.06	3096.99	1548.49	4444.36	2225.48	7.15	-2.039	0.000	0.661
36.00	-21.00	-26.38	0.00	-1401.0	0.00	1401.08	3056.15	1528.07	4327.30	2166.87	8.03	-2.165	0.000	0.654
38.00	-20.64	-26.26	0.00	-1348.3	0.00	1348.33	3015.30	1507.65	4211.81	2109.03	8.96	-2.291	0.000	0.646
40.00	-20.28	-26.15	0.00	-1295.8	0.00	1295.80	2974.46	1487.23	4097.87	2051.98	9.95	-2.417	0.000	0.639
42.00	-19.92	-26.04	0.00	-1243.5	0.00	1243.50	2933.62	1466.81	3985.50	1995.71	10.99	-2.543	0.000	0.630
44.00	-19.58	-25.91	0.00	-1191.4	0.00	1191.43	2892.78	1446.39	3874.69	1940.23	12.08	-2.670	0.000	0.621
45.13	-19.39	-25.84	0.00	-1162.1	0.00	1162.15	2869.71	1434.85	3812.78	1909.22	12.72	-2.742	0.000	0.616
46.00	-19.13	-25.80	0.00	-1139.6	0.00	1139.66	2851.94	1425.97	3765.45	1885.52	13.23	-2.797	0.000	0.611
48.00	-18.59	-25.67	0.00	-1088.0	0.00	1088.06	2811.10	1405.55	3657.76	1831.60	14.43	-2.923	0.000	0.601
49.88	-18.11	-25.53	0.00	-1039.8	0.00	1039.80	2333.69	1166.84	3066.96	1535.76	15.60	-3.040	0.000	0.685
50.00	-18.06	-25.54	0.00	-1036.7	0.00	1036.74	2332.20	1166.10	3062.32	1533.44	15.68	-3.048	0.000	0.684
52.00	-17.75	-25.43	0.00	-985.65	0.00	985.65	2307.18	1153.59	2985.35	1494.89	16.98	-3.188	0.000	0.668
54.00	-17.45	-25.31	0.00	-934.79	0.00	934.79	2281.92	1140.96	2909.02	1456.67	18.35	-3.327	0.000	0.650
56.00	-17.15	-25.20	0.00	-884.16	0.00	884.16	2256.40	1128.20	2833.34	1418.77	19.77	-3.464	0.000	0.631
58.00	-16.85	-25.08	0.00	-833.77	0.00	833.77	2223.07	1111.54	2748.96	1376.53	21.25	-3.600	0.000	0.614
60.00	-16.56	-24.97	0.00	-783.60	0.00	783.60	2189.04	1094.52	2665.01	1334.49	22.79	-3.734	0.000	0.595
62.00	-16.27	-24.85	0.00	-733.67	0.00	733.67	2155.00	1077.50	2582.36	1293.10	24.38	-3.865	0.000	0.575
64.00	-15.98	-24.73	0.00	-683.98	0.00	683.98	2120.97	1060.48	2501.02	1252.37	26.03	-3.994	0.000	0.554
66.00	-15.71	-24.61	0.00	-634.52	0.00	634.52	2086.94	1043.47	2420.97	1212.28	27.73	-4.119	0.000	0.531
68.00	-15.44	-24.48	0.00	-585.30	0.00	585.30	2052.90	1026.45	2342.23	1172.85	29.48	-4.241	0.000	0.507
69.00	-13.39	-21.44	0.00	-560.82	0.00	560.82	2035.88	1017.94	2303.34	1153.38	30.37	-4.301	0.000	0.493
70.00	-13.25	-21.39	0.00	-539.37	0.00	539.37	2018.87	1009.43	2264.79	1134.08	31.28	-4.360	0.000	0.483
72.00	-12.99	-21.27	0.00	-496.59	0.00	496.59	1984.83	992.42	2188.65	1095.95	33.13	-4.475	0.000	0.460
74.00	-12.75	-21.14	0.00	-454.06	0.00	454.06	1950.80	975.40	2113.81	1058.48	35.03	-4.585	0.000	0.436
75.00	-12.60	-20.91	0.00	-432.92	0.00	432.92	1933.78	966.89	2076.88	1039.98	35.99	-4.640	0.000	0.423
76.00	-12.47	-20.86	0.00	-412.01	0.00	412.01	1916.76	958.38	2040.27	1021.65	36.97	-4.693	0.000	0.410
78.00	-12.23	-20.73	0.00	-370.30	0.00	370.30	1882.73	941.37	1968.04	985.48	38.96	-4.794	0.000	0.383
80.00	-11.99	-20.61	0.00	-328.84	0.00	328.84	1848.70	924.35	1897.11	949.96	40.98	-4.889	0.000	0.353
82.00	-11.77	-20.48	0.00	-287.62	0.00	287.62	1814.66	907.33	1827.48	915.10	43.05	-4.977	0.000	0.321
83.00	-9.88	-16.36	0.00	-267.14	0.00	267.14	1797.65	898.82	1793.15	897.91	44.09	-5.020	0.000	0.303
84.00	-9.78	-16.30	0.00	-250.78	0.00	250.78	1780.63	890.31	1759.15	880.88	45.15	-5.060	0.000	0.291

Calculated Forces

Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 27

Tower Engineering Solutions

85.00	-9.65	-16.10	0.00	-234.48	0.00	234.48	1763.61	881.81	1725.48	864.02	46.21	-5.099	0.000	0.277
86.00	-9.55	-16.04	0.00	-218.37	0.00	218.37	1746.59	873.30	1692.13	847.32	47.28	-5.137	0.000	0.264
88.00	-9.35	-15.92	0.00	-186.29	0.00	186.29	1712.56	856.28	1626.40	814.41	49.45	-5.206	0.000	0.235
90.00	-9.17	-15.79	0.00	-154.45	0.00	154.45	1678.53	839.26	1561.98	782.15	51.64	-5.267	0.000	0.203
91.00	-7.23	-11.37	0.00	-138.66	0.00	138.66	1661.51	830.75	1530.26	766.27	52.74	-5.295	0.000	0.185
91.29	-7.20	-11.36	0.00	-135.33	0.00	135.33	1656.52	828.26	1521.01	761.64	53.07	-5.303	0.000	0.182
92.00	-7.11	-11.31	0.00	-127.30	0.00	127.30	1644.49	822.25	1498.86	750.54	53.86	-5.322	0.000	0.174
94.00	-6.87	-11.18	0.00	-104.68	0.00	104.68	1610.46	805.23	1437.04	719.59	56.09	-5.369	0.000	0.150
94.71	-6.78	-11.13	0.00	-96.74	0.00	96.74	930.70	465.35	848.15	424.70	56.89	-5.385	0.000	0.236
96.00	-6.71	-11.06	0.00	-82.38	0.00	82.38	922.07	461.04	828.91	415.07	58.35	-5.410	0.000	0.206
98.00	-3.44	-5.43	0.00	-60.27	0.00	60.27	908.49	454.24	799.32	400.25	60.62	-5.462	0.000	0.155
100.00	-3.36	-5.32	0.00	-49.40	0.00	49.40	894.64	447.32	770.03	385.59	62.92	-5.504	0.000	0.132
102.00	-3.29	-5.21	0.00	-38.76	0.00	38.76	880.55	440.27	741.05	371.08	65.23	-5.540	0.000	0.108
104.00	-3.22	-5.09	0.00	-28.35	0.00	28.35	866.20	433.10	712.41	356.74	67.55	-5.570	0.000	0.083
106.00	-3.15	-4.98	0.00	-18.16	0.00	18.16	851.60	425.80	684.12	342.57	69.89	-5.592	0.000	0.057
107.00	-0.54	-1.04	0.00	-12.61	0.00	12.61	844.21	422.10	670.11	335.55	71.06	-5.599	0.000	0.038
108.00	-0.50	-0.99	0.00	-11.56	0.00	11.56	836.75	418.38	656.18	328.58	72.23	-5.606	0.000	0.036
110.00	-0.44	-0.88	0.00	-9.58	0.00	9.58	821.65	410.82	628.62	314.78	74.58	-5.617	0.000	0.031
112.00	-0.38	-0.78	0.00	-7.82	0.00	7.82	804.60	402.30	600.19	300.54	76.93	-5.627	0.000	0.026
114.00	-0.33	-0.68	0.00	-6.26	0.00	6.26	784.18	392.09	569.96	285.40	79.28	-5.636	0.000	0.022
116.00	-0.27	-0.58	0.00	-4.91	0.00	4.91	763.76	381.88	540.51	270.66	81.64	-5.644	0.000	0.018
118.00	0.00	-0.55	0.00	-3.76	0.00	3.76	743.33	371.67	511.84	256.30	84.00	-5.650	0.000	0.015

Wind Loading - Shaft

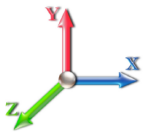
Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 28	

Tower Engineering Solutions

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 26

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.85	5.168	5.68	0.00	1.200	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	5.168	5.68	0.00	1.200	1.133	2.00	7.658	9.19	52.2	124.7	539.2
4.00		1.00	0.85	5.168	5.68	0.00	1.200	1.215	2.00	7.607	9.13	51.9	132.5	542.5
6.00		1.00	0.85	5.168	5.68	0.00	1.200	1.265	2.00	7.546	9.05	51.5	136.7	542.2
8.00		1.00	0.85	5.168	5.68	0.00	1.200	1.302	2.00	7.480	8.98	51.0	139.3	540.3
10.00		1.00	0.85	5.168	5.68	0.00	1.200	1.331	2.00	7.412	8.89	50.6	141.0	537.5
12.00		1.00	0.85	5.168	5.68	0.00	1.200	1.356	2.00	7.342	8.81	50.1	142.1	534.1
14.00		1.00	0.85	5.168	5.68	0.00	1.200	1.377	2.00	7.270	8.72	49.6	142.8	530.3
16.00		1.00	0.86	5.232	5.76	0.00	1.200	1.395	2.00	7.198	8.64	49.7	143.1	526.2
18.00		1.00	0.88	5.363	5.90	0.00	1.200	1.412	2.00	7.126	8.55	50.4	143.3	521.9
20.00		1.00	0.90	5.483	6.03	0.00	1.200	1.427	2.00	7.053	8.46	51.0	143.2	517.3
22.00		1.00	0.92	5.595	6.15	0.00	1.200	1.440	2.00	6.979	8.37	51.5	142.9	512.5
24.00		1.00	0.94	5.698	6.27	0.00	1.200	1.453	2.00	6.905	8.29	51.9	142.5	507.7
26.00		1.00	0.95	5.795	6.37	0.00	1.200	1.465	2.00	6.831	8.20	52.2	142.0	502.7
28.00		1.00	0.97	5.886	6.47	0.00	1.200	1.476	2.00	6.756	8.11	52.5	141.4	497.6
30.00		1.00	0.98	5.972	6.57	0.00	1.200	1.486	2.00	6.681	8.02	52.7	140.7	492.4
32.00		1.00	1.00	6.054	6.66	0.00	1.200	1.495	2.00	6.606	7.93	52.8	139.9	487.1
34.00		1.00	1.01	6.132	6.74	0.00	1.200	1.504	2.00	6.531	7.84	52.9	139.1	481.8
36.00		1.00	1.02	6.206	6.83	0.00	1.200	1.513	2.00	6.456	7.75	52.9	138.2	476.3
38.00		1.00	1.03	6.277	6.90	0.00	1.200	1.521	2.00	6.381	7.66	52.9	137.2	470.9
40.00		1.00	1.04	6.345	6.98	0.00	1.200	1.529	2.00	6.305	7.57	52.8	136.1	465.3
42.00		1.00	1.05	6.410	7.05	0.00	1.200	1.537	2.00	6.229	7.48	52.7	135.1	459.8
44.00		1.00	1.06	6.474	7.12	0.00	1.200	1.544	2.00	6.154	7.38	52.6	133.9	454.2
45.13	Bot - Section 2	1.00	1.07	6.508	7.16	0.00	1.200	1.548	1.13	3.443	4.13	29.6	75.3	254.2
46.00		1.00	1.07	6.534	7.19	0.00	1.200	1.551	0.87	2.680	3.22	23.1	58.8	312.0
48.00		1.00	1.08	6.593	7.25	0.00	1.200	1.557	2.00	6.108	7.33	53.2	134.0	710.2
49.88	Top - Section 1	1.00	1.09	6.647	7.31	0.00	1.200	1.563	1.88	5.672	6.81	49.8	124.9	659.0
50.00		1.00	1.09	6.650	7.32	0.00	1.200	1.564	0.12	0.360	0.43	3.2	8.0	23.5
52.00		1.00	1.10	6.705	7.38	0.00	1.200	1.570	2.00	5.955	7.15	52.7	131.5	388.9
54.00		1.00	1.11	6.759	7.43	0.00	1.200	1.576	2.00	5.879	7.06	52.5	130.2	383.9
56.00		1.00	1.12	6.811	7.49	0.00	1.200	1.581	2.00	5.803	6.96	52.2	128.8	378.8
58.00		1.00	1.13	6.861	7.55	0.00	1.200	1.587	2.00	5.727	6.87	51.9	127.5	373.7
60.00		1.00	1.14	6.910	7.60	0.00	1.200	1.592	2.00	5.650	6.78	51.5	126.1	368.6
62.00		1.00	1.14	6.958	7.65	0.00	1.200	1.598	2.00	5.574	6.69	51.2	124.7	363.4
64.00		1.00	1.15	7.005	7.71	0.00	1.200	1.603	2.00	5.497	6.60	50.8	123.2	358.2
66.00		1.00	1.16	7.050	7.76	0.00	1.200	1.608	2.00	5.421	6.51	50.4	121.8	353.0
68.00		1.00	1.17	7.095	7.80	0.00	1.200	1.612	2.00	5.344	6.41	50.1	120.3	347.8
69.00	Appurtenance(s)	1.00	1.17	7.117	7.83	0.00	1.200	1.615	1.00	2.643	3.17	24.8	59.8	172.1
70.00		1.00	1.17	7.138	7.85	0.00	1.200	1.617	1.00	2.624	3.15	24.7	59.4	170.8
72.00		1.00	1.18	7.181	7.90	0.00	1.200	1.622	2.00	5.191	6.23	49.2	117.3	337.3
74.00		1.00	1.19	7.222	7.94	0.00	1.200	1.626	2.00	5.114	6.14	48.8	115.7	332.0
75.00	Appurtenance(s)	1.00	1.19	7.243	7.97	0.00	1.200	1.628	1.00	2.528	3.03	24.2	57.5	164.2
76.00		1.00	1.19	7.263	7.99	0.00	1.200	1.631	1.00	2.509	3.01	24.1	57.1	162.9
78.00		1.00	1.20	7.303	8.03	0.00	1.200	1.635	2.00	4.961	5.95	47.8	112.6	321.4
80.00		1.00	1.21	7.342	8.08	0.00	1.200	1.639	2.00	4.884	5.86	47.3	111.0	316.1
82.00		1.00	1.21	7.380	8.12	0.00	1.200	1.643	2.00	4.807	5.77	46.8	109.4	310.7
83.00	Appurtenance(s)	1.00	1.22	7.399	8.14	0.00	1.200	1.645	1.00	2.375	2.85	23.2	54.3	153.5

Wind Loading - Shaft

Structure: CT46132-A-SBA
Site Name: Newtown-ferris Rd
Height: 118.00 (ft)
Base Elev: 0.000 (ft)
Gh: 1.1
Topography: 1
Code: EIA/TIA-222-G
Exposure: C
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

1/20/2022

Tower Engineering Solutions

84.00		1.00	1.22	7.418	8.16	0.00	1.200	1.647	1.00	2.355	2.83	23.1	53.9	152.2
85.00	Appurtenance(s)	1.00	1.22	7.436	8.18	0.00	1.200	1.649	1.00	2.336	2.80	22.9	53.5	150.9
86.00		1.00	1.23	7.454	8.20	0.00	1.200	1.651	1.00	2.317	2.78	22.8	53.0	149.5
88.00		1.00	1.23	7.491	8.24	0.00	1.200	1.655	2.00	4.577	5.49	45.3	104.4	294.6
90.00		1.00	1.24	7.526	8.28	0.00	1.200	1.658	2.00	4.500	5.40	44.7	102.8	289.2
91.00	Appurtenance(s)	1.00	1.24	7.544	8.30	0.00	1.200	1.660	1.00	2.221	2.67	22.1	51.0	142.8
91.29	Bot - Section 3	1.00	1.24	7.549	8.30	0.00	1.200	1.661	0.29	0.648	0.78	6.5	14.9	41.7
92.00		1.00	1.24	7.561	8.32	0.00	1.200	1.662	0.71	1.576	1.89	15.7	36.3	139.7
94.00		1.00	1.25	7.595	8.35	0.00	1.200	1.666	2.00	4.409	5.29	44.2	101.0	389.6
94.71	Top - Section 2	1.00	1.25	7.607	8.37	0.00	1.200	1.667	0.71	1.547	1.86	15.5	35.6	136.7
96.00		1.00	1.25	7.629	8.39	0.00	1.200	1.669	1.29	2.785	3.34	28.0	64.0	133.1
98.00	Appurtenance(s)	1.00	1.26	7.662	8.43	0.00	1.200	1.672	2.00	4.255	5.11	43.0	97.5	202.8
100.00		1.00	1.27	7.695	8.46	0.00	1.200	1.676	2.00	4.178	5.01	42.4	95.8	198.8
102.00		1.00	1.27	7.727	8.50	0.00	1.200	1.679	2.00	4.101	4.92	41.8	94.1	194.9
104.00		1.00	1.28	7.759	8.53	0.00	1.200	1.682	2.00	4.024	4.83	41.2	92.3	190.9
106.00		1.00	1.28	7.790	8.57	0.00	1.200	1.686	2.00	3.947	4.74	40.6	90.6	186.9
107.00	Appurtenance(s)	1.00	1.28	7.805	8.59	0.00	1.200	1.687	1.00	1.944	2.33	20.0	44.8	92.1
108.00		1.00	1.29	7.821	8.60	0.00	1.200	1.689	1.00	1.925	2.31	19.9	44.4	91.1
110.00		1.00	1.29	7.851	8.64	0.00	1.200	1.692	2.00	3.793	4.55	39.3	87.0	178.8
112.00		1.00	1.30	7.881	8.67	0.00	1.200	1.695	2.00	3.716	4.46	38.7	85.2	174.8
114.00		1.00	1.30	7.910	8.70	0.00	1.200	1.698	2.00	3.638	4.37	38.0	83.4	170.7
116.00		1.00	1.31	7.939	8.73	0.00	1.200	1.701	2.00	3.561	4.27	37.3	81.6	166.7
118.00	Appurtenance(s)	1.00	1.31	7.968	8.76	0.00	1.200	1.704	2.00	3.484	4.18	36.6	79.8	162.6
								Totals:	**118.00**			**2,851.2**		**22,887.2**

Discrete Appurtenance Forces

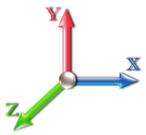
Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 30	

Tower Engineering Solutions

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 26

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	118.00	DS1F03F36D-N	1	8.122	8.934	1.00	1.00	14.53	202.00	0.000	11.250	129.81	0.00	1460.34
2	118.00	Collar Mount	1	7.968	8.765	1.00	1.00	5.06	466.88	0.000	0.000	44.31	0.00	0.00
3	107.00	ACU-A20-N	4	7.805	8.586	0.55	0.80	0.94	16.21	0.000	0.000	8.09	0.00	0.00
4	107.00	1900 MHz 4X45 RRH	3	7.805	8.586	0.55	0.80	6.51	380.92	0.000	0.000	55.90	0.00	0.00
5	107.00	800 MHz RRU Filter	3	7.805	8.586	0.55	0.80	5.77	388.02	0.000	0.000	49.51	0.00	0.00
6	107.00	TD-RRH8x20-25	3	7.805	8.586	0.55	0.80	8.01	570.16	0.000	0.000	68.73	0.00	0.00
7	107.00	Universal Ring Mount	1	7.805	8.586	1.00	1.00	8.37	603.46	0.000	0.000	71.90	0.00	0.00
8	107.00	Low Profile Platform	1	7.805	8.586	1.00	1.00	34.55	4409.06	0.000	0.000	296.60	0.00	0.00
9	107.00	APXVSPP18-C-A20	3	7.805	8.586	0.68	0.80	21.87	558.03	0.000	0.000	187.78	0.00	0.00
10	107.00	APXV9TM14-ALU-120	3	7.821	8.603	0.65	0.80	14.41	663.73	0.000	1.000	123.99	0.00	123.99
11	98.00	Samsung MT6407-77A	3	7.662	8.429	0.52	0.75	8.81	626.51	0.000	0.000	74.29	0.00	0.00
12	98.00	JMA MX06FRO660-03	6	7.662	8.429	0.65	0.75	43.79	2163.85	0.000	0.000	369.10	0.00	0.00
13	98.00	Amphenol	3	7.662	8.429	0.55	0.75	14.41	557.52	0.000	0.000	121.46	0.00	0.00
14	98.00	Low Profile Platform	1	7.662	8.429	1.00	1.00	34.49	4715.14	0.000	0.000	290.69	0.00	0.00
15	98.00	HRK12 (Handrail Kit)	1	7.662	8.429	1.00	1.00	13.07	873.44	0.000	0.000	110.18	0.00	0.00
16	98.00	Samsung RF4439d-25A	3	7.662	8.429	0.63	0.75	4.51	352.39	0.000	0.000	38.05	0.00	0.00
17	98.00	Samsung RF4440d-13A	3	7.662	8.429	0.62	0.75	4.47	319.41	0.000	0.000	37.64	0.00	0.00
18	98.00	Commscope	1	7.662	8.429	0.75	0.75	1.81	50.95	0.000	0.000	15.25	0.00	0.00
19	98.00	PRK-1245 (kicker kit)	1	7.662	8.429	1.00	1.00	19.03	773.82	0.000	0.000	160.42	0.00	0.00
20	91.00	DC6-48-60-18-8F	2	7.544	8.298	1.00	1.00	2.67	158.54	0.000	0.000	22.18	0.00	0.00
21	91.00	RRUS-11	3	7.544	8.298	0.55	0.80	9.68	377.62	0.000	0.000	80.34	0.00	0.00
22	91.00	LGP21401	6	7.544	8.298	0.55	0.80	6.91	201.61	0.000	0.000	57.30	0.00	0.00
23	91.00	P65-16-XLH-RR	3	7.544	8.298	0.60	0.80	19.49	520.21	0.000	0.000	161.70	0.00	0.00
24	91.00	7770.00	3	7.544	8.298	0.60	0.80	11.72	507.48	0.000	0.000	97.24	0.00	0.00
25	91.00	Low Profile Platform	1	7.544	8.298	1.00	1.00	44.09	2287.56	0.000	0.000	365.87	0.00	0.00
26	91.00	RRUS 32 B30	3	7.544	8.298	0.65	0.80	6.67	464.23	0.000	0.000	55.34	0.00	0.00
27	91.00	RRUS 32 B2	3	7.544	8.298	0.65	0.80	6.67	439.03	0.000	0.000	55.34	0.00	0.00
28	91.00	QS66512-2	3	7.544	8.298	0.72	0.80	20.22	903.38	0.000	0.000	167.80	0.00	0.00
29	85.00	12.5' - 2" Horizontal Pipe	1	7.436	8.180	1.00	1.00	6.49	82.89	0.000	0.000	53.11	0.00	0.00
30	83.00	Platform w/ Handrail kit	1	7.399	8.139	1.00	1.00	70.27	3846.57	0.000	0.000	571.89	0.00	0.00
31	83.00	VHLP3-11W	1	7.399	8.139	1.00	1.00	12.49	206.32	0.000	0.000	101.62	0.00	0.00
32	83.00	IP20C	1	7.399	8.139	0.50	0.75	0.88	30.82	0.000	0.000	7.17	0.00	0.00
33	83.00	S20057A1 TMA	3	7.399	8.139	0.50	0.75	0.02	72.62	0.000	0.000	0.12	0.00	0.00
34	83.00	MS-KI22-5 (Kickers w/o	1	7.399	8.139	1.00	1.00	12.58	303.33	0.000	0.000	102.37	0.00	0.00
35	83.00	RFS - APXV18-209014	3	7.399	8.139	0.55	0.75	7.41	313.55	0.000	0.000	60.35	0.00	0.00
36	83.00	Commscope -	3	7.399	8.139	0.60	0.75	26.19	630.96	0.000	0.000	213.14	0.00	0.00
37	83.00	RFS - ATMAA1412D-1A2	3	7.399	8.139	0.50	0.75	2.88	99.16	0.000	0.000	23.40	0.00	0.00
38	83.00	Kathrein - 782 11054 -	3	7.399	8.139	0.50	0.75	0.61	20.65	0.000	0.000	4.99	0.00	0.00
39	75.00	Standoff Mount	1	7.243	7.967	1.00	1.00	8.20	99.90	0.000	0.000	65.32	0.00	0.00
40	75.00	GPS	1	7.243	7.967	1.00	1.00	1.66	31.36	0.000	0.000	13.26	0.00	0.00
41	69.00	MC-PK8-DSH	1	7.117	7.828	1.00	1.00	81.29	3261.13	0.000	0.000	636.41	0.00	0.00
42	69.00	RDIDC-9181-OF-48	1	7.117	7.828	1.00	1.00	2.54	62.85	0.000	0.000	19.85	0.00	0.00
43	69.00	TA08025-B605	3	7.117	7.828	0.50	0.75	3.74	377.39	0.000	0.000	29.26	0.00	0.00
44	69.00	TA08025-B604	3	7.117	7.828	0.50	0.75	3.74	334.28	0.000	0.000	29.26	0.00	0.00
45	69.00	Commscope	3	7.117	7.828	0.55	0.75	24.03	1966.05	0.000	0.000	188.12	0.00	0.00
							Totals:		**36,290.97**			**5,436.48**		

Total Applied Force Summary

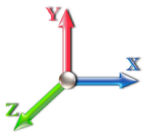
Structure:	CT46132-A-SBA		**Code:**	EIA/TIA-222-G	1/20/2022
Site Name:	Newtown-ferris Rd		**Exposure:**	C	
Height:	118.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 31

Tower Engineering Solutions

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 26

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
2.00		52.24	633.81	0.00	0.00
4.00		51.89	638.35	0.00	0.00
6.00		51.48	638.83	0.00	0.00
8.00		51.03	637.54	0.00	0.00
10.00		50.56	635.24	0.00	0.00
12.00		50.08	632.27	0.00	0.00
14.00		49.60	628.83	0.00	0.00
16.00		49.71	625.02	0.00	0.00
18.00		50.45	620.94	0.00	0.00
20.00		51.05	616.64	0.00	0.00
22.00		51.54	612.14	0.00	0.00
24.00		51.93	607.49	0.00	0.00
26.00		52.25	602.70	0.00	0.00
28.00		52.49	597.80	0.00	0.00
30.00		52.67	592.79	0.00	0.00
32.00		52.79	587.69	0.00	0.00
34.00		52.86	582.51	0.00	0.00
36.00		52.89	577.26	0.00	0.00
38.00		52.87	571.94	0.00	0.00
40.00		52.81	566.56	0.00	0.00
42.00		52.71	561.13	0.00	0.00
44.00		52.58	555.64	0.00	0.00
45.13		29.58	311.62	0.00	0.00
46.00		23.12	356.22	0.00	0.00
48.00		53.15	811.92	0.00	0.00
49.88		49.76	754.71	0.00	0.00
50.00		3.16	29.64	0.00	0.00
52.00		52.71	490.92	0.00	0.00
54.00		52.45	485.99	0.00	0.00
56.00		52.17	481.02	0.00	0.00
58.00		51.86	476.02	0.00	0.00
60.00		51.54	471.00	0.00	0.00
62.00		51.19	465.94	0.00	0.00
64.00		50.83	460.86	0.00	0.00
66.00		50.45	455.75	0.00	0.00
68.00		50.05	450.62	0.00	0.00
69.00	(11) attachments	927.72	6225.25	0.00	0.00
70.00		24.73	214.23	0.00	0.00
72.00		49.20	424.16	0.00	0.00
74.00		48.76	418.92	0.00	0.00
75.00	(2) attachments	102.75	338.94	0.00	0.00
76.00		24.05	202.06	0.00	0.00
78.00		47.82	399.73	0.00	0.00
80.00		47.33	394.40	0.00	0.00
82.00		46.83	389.05	0.00	0.00
83.00	(19) attachments	1108.26	5716.69	0.00	0.00

Total Applied Force Summary

Structure:	CT46132-A-SBA		**Code:**	EIA/TIA-222-G	1/20/2022
Site Name:	Newtown-ferris Rd		**Exposure:**	C	
Height:	118.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 32

Tower Engineering Solutions

84.00		23.06	181.68	0.00	0.00
85.00	(1) attachments	76.05	263.22	0.00	0.00
86.00		22.80	178.98	0.00	0.00
88.00		45.25	353.51	0.00	0.00
90.00		44.70	348.10	0.00	0.00
91.00	(27) attachments	1085.23	6031.89	0.00	0.00
91.29		6.45	47.50	0.00	0.00
92.00		15.73	153.77	0.00	0.00
94.00		44.21	429.46	0.00	0.00
94.71		15.53	150.81	0.00	0.00
96.00		28.05	158.81	0.00	0.00
98.00	(22) attachments	1260.12	10675.68	0.00	0.00
100.00		42.44	206.09	0.00	0.00
102.00		41.83	202.11	0.00	0.00
104.00		41.21	198.11	0.00	0.00
106.00		40.59	194.10	0.00	0.00
107.00	(21) attachments	882.55	7685.35	0.00	123.99
108.00		19.87	92.39	0.00	0.00
110.00		39.31	181.31	0.00	0.00
112.00		38.65	177.27	0.00	0.00
114.00		37.99	173.22	0.00	0.00
116.00		37.32	169.17	0.00	0.00
118.00	(2) attachments	210.76	833.97	0.00	1460.34
	Totals:	**8,287.67**	**63,635.28**	**0.00**	**1,584.33**

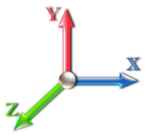
Linear Appurtenance Segment Forces (Factored)

Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 33	

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 26

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
2.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.040	0.000	5.168	0.00	4.74
2.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.67	0.00	0.040	0.000	5.168	0.00	11.51
4.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.040	0.000	5.168	0.00	5.29
4.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.70	0.00	0.040	0.000	5.168	0.00	12.20
6.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.041	0.000	5.168	0.00	5.64
6.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.71	0.00	0.041	0.000	5.168	0.00	12.64
8.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.041	0.000	5.168	0.00	5.91
8.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.73	0.00	0.041	0.000	5.168	0.00	12.97
10.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.042	0.000	5.168	0.00	6.13
10.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.74	0.00	0.042	0.000	5.168	0.00	13.24
12.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.042	0.000	5.168	0.00	6.32
12.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.74	0.00	0.042	0.000	5.168	0.00	13.47
14.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.043	0.000	5.168	0.00	6.48
14.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.75	0.00	0.043	0.000	5.168	0.00	13.67
16.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.043	0.000	5.232	0.00	6.62
16.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.76	0.00	0.043	0.000	5.232	0.00	13.84
18.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.044	0.000	5.363	0.00	6.75
18.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.76	0.00	0.044	0.000	5.363	0.00	14.00
20.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.044	0.000	5.483	0.00	6.87
20.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.77	0.00	0.044	0.000	5.483	0.00	14.15
22.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.045	0.000	5.595	0.00	6.98
22.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.77	0.00	0.045	0.000	5.595	0.00	14.28
24.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.045	0.000	5.698	0.00	7.08
24.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.78	0.00	0.045	0.000	5.698	0.00	14.40
26.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.046	0.000	5.795	0.00	7.18
26.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.78	0.00	0.046	0.000	5.795	0.00	14.52
28.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.047	0.000	5.886	0.00	7.27
28.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.78	0.00	0.047	0.000	5.886	0.00	14.63
30.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.047	0.000	5.972	0.00	7.35
30.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.79	0.00	0.047	0.000	5.972	0.00	14.73
32.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.048	0.000	6.054	0.00	7.43
32.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.79	0.00	0.048	0.000	6.054	0.00	14.82
34.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.048	0.000	6.132	0.00	7.51
34.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.79	0.00	0.048	0.000	6.132	0.00	14.92
36.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.049	0.000	6.206	0.00	7.58
36.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.80	0.00	0.049	0.000	6.206	0.00	15.00
38.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.050	0.000	6.277	0.00	7.65
38.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.80	0.00	0.050	0.000	6.277	0.00	15.09
40.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.050	0.000	6.345	0.00	7.71
40.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.80	0.00	0.050	0.000	6.345	0.00	15.17
42.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.051	0.000	6.410	0.00	7.78
42.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.80	0.00	0.051	0.000	6.410	0.00	15.24
44.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.052	0.000	6.474	0.00	7.84
44.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.81	0.00	0.052	0.000	6.474	0.00	15.32
45.13	1/2"	Yes	1.13	0.000	0.00	0.00	0.00	0.052	0.000	6.508	0.00	4.45
45.13	1.75" Hybrid	Yes	1.13	0.000	1.75	0.46	0.00	0.052	0.000	6.508	0.00	8.68
46.00	1/2"	Yes	0.87	0.000	0.00	0.00	0.00	0.053	0.000	6.534	0.00	3.44

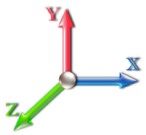
Linear Appurtenance Segment Forces (Factored)

Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 34	

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 26

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
46.00	1.75" Hybrid	Yes	0.87	0.000	1.75	0.35	0.00	0.053	0.000	6.534	0.00	6.69
48.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.053	0.000	6.593	0.00	7.95
48.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.81	0.00	0.053	0.000	6.593	0.00	15.45
49.88	1/2"	Yes	1.88	0.000	0.00	0.00	0.00	0.054	0.000	6.647	0.00	7.53
49.88	1.75" Hybrid	Yes	1.88	0.000	1.75	0.76	0.00	0.054	0.000	6.647	0.00	14.59
50.00	1/2"	Yes	0.12	0.000	0.00	0.00	0.00	0.053	0.000	6.650	0.00	0.48
50.00	1.75" Hybrid	Yes	0.12	0.000	1.75	0.05	0.00	0.053	0.000	6.650	0.00	0.93
52.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.054	0.000	6.705	0.00	8.06
52.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.81	0.00	0.054	0.000	6.705	0.00	15.58
54.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.054	0.000	6.759	0.00	8.11
54.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.82	0.00	0.054	0.000	6.759	0.00	15.65
56.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.055	0.000	6.811	0.00	8.16
56.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.82	0.00	0.055	0.000	6.811	0.00	15.71
58.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.056	0.000	6.861	0.00	8.21
58.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.82	0.00	0.056	0.000	6.861	0.00	15.76
60.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.057	0.000	6.910	0.00	8.26
60.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.82	0.00	0.057	0.000	6.910	0.00	15.82
62.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.058	0.000	6.958	0.00	8.31
62.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.82	0.00	0.058	0.000	6.958	0.00	15.88
64.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	7.005	0.00	8.35
64.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.83	0.00	0.059	0.000	7.005	0.00	15.93
66.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.060	0.000	7.050	0.00	8.40
66.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.83	0.00	0.060	0.000	7.050	0.00	15.98
68.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.061	0.000	7.095	0.00	8.44
68.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.83	0.00	0.061	0.000	7.095	0.00	16.03
69.00	1/2"	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	7.117	0.00	4.23
69.00	1.75" Hybrid	Yes	1.00	0.000	1.75	0.41	0.00	0.061	0.000	7.117	0.00	8.03
70.00	1/2"	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	7.138	0.00	4.24
72.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.181	0.00	8.52
74.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.222	0.00	8.56
75.00	1/2"	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	7.243	0.00	4.29
										Totals:	**0.0**	**784.6**

Calculated Forces

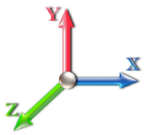
Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 35	

TES Tower Engineering Solutions

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 26

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-63.63	-8.31	0.00	-720.03	0.00	720.03	3634.70	1817.35	6397.77	3203.64	0.00	0.000	0.000	0.242
2.00	-62.99	-8.29	0.00	-703.42	0.00	703.42	3607.15	1803.57	6280.28	3144.81	0.01	-0.034	0.000	0.241
4.00	-62.35	-8.28	0.00	-686.83	0.00	686.83	3579.34	1789.67	6163.42	3086.29	0.03	-0.069	0.000	0.240
6.00	-61.71	-8.26	0.00	-670.28	0.00	670.28	3551.29	1775.64	6047.19	3028.09	0.07	-0.103	0.000	0.239
8.00	-61.06	-8.25	0.00	-653.75	0.00	653.75	3522.98	1761.49	5931.61	2970.21	0.12	-0.138	0.000	0.237
10.00	-60.42	-8.23	0.00	-637.26	0.00	637.26	3494.42	1747.21	5816.69	2912.67	0.18	-0.174	0.000	0.236
12.00	-59.79	-8.22	0.00	-620.80	0.00	620.80	3465.61	1732.80	5702.44	2855.46	0.26	-0.210	0.000	0.235
14.00	-59.15	-8.20	0.00	-604.36	0.00	604.36	3436.54	1718.27	5588.89	2798.60	0.36	-0.245	0.000	0.233
16.00	-58.52	-8.19	0.00	-587.96	0.00	587.96	3407.22	1703.61	5476.05	2742.09	0.47	-0.282	0.000	0.232
18.00	-57.90	-8.17	0.00	-571.58	0.00	571.58	3377.65	1688.83	5363.92	2685.95	0.60	-0.318	0.000	0.230
20.00	-57.28	-8.15	0.00	-555.24	0.00	555.24	3347.83	1673.91	5252.53	2630.17	0.74	-0.355	0.000	0.228
22.00	-56.66	-8.13	0.00	-538.94	0.00	538.94	3317.75	1658.87	5141.89	2574.76	0.89	-0.392	0.000	0.226
24.00	-56.05	-8.11	0.00	-522.67	0.00	522.67	3287.42	1643.71	5032.01	2519.74	1.07	-0.429	0.000	0.225
26.00	-55.44	-8.09	0.00	-506.44	0.00	506.44	3256.84	1628.42	4922.91	2465.11	1.25	-0.466	0.000	0.222
28.00	-54.84	-8.07	0.00	-490.25	0.00	490.25	3219.51	1609.75	4804.91	2406.03	1.46	-0.504	0.000	0.221
30.00	-54.24	-8.05	0.00	-474.11	0.00	474.11	3178.67	1589.33	4683.16	2345.06	1.68	-0.542	0.000	0.219
32.00	-53.65	-8.03	0.00	-458.01	0.00	458.01	3137.83	1568.91	4562.98	2284.88	1.91	-0.580	0.000	0.218
34.00	-53.06	-8.00	0.00	-441.96	0.00	441.96	3096.99	1548.49	4444.36	2225.48	2.16	-0.618	0.000	0.216
36.00	-52.48	-7.98	0.00	-425.95	0.00	425.95	3056.15	1528.07	4327.30	2166.87	2.43	-0.656	0.000	0.214
38.00	-51.90	-7.95	0.00	-409.99	0.00	409.99	3015.30	1507.65	4211.81	2109.03	2.71	-0.695	0.000	0.212
40.00	-51.33	-7.93	0.00	-394.09	0.00	394.09	2974.46	1487.23	4097.87	2051.98	3.01	-0.733	0.000	0.209
42.00	-50.76	-7.90	0.00	-378.23	0.00	378.23	2933.62	1466.81	3985.50	1995.71	3.33	-0.771	0.000	0.207
44.00	-50.20	-7.87	0.00	-362.42	0.00	362.42	2892.78	1446.39	3874.69	1940.23	3.66	-0.810	0.000	0.204
45.13	-49.89	-7.85	0.00	-353.53	0.00	353.53	2869.71	1434.85	3812.78	1909.22	3.85	-0.831	0.000	0.203
46.00	-49.53	-7.85	0.00	-346.70	0.00	346.70	2851.94	1425.97	3765.45	1885.52	4.01	-0.848	0.000	0.201
48.00	-48.72	-7.81	0.00	-331.01	0.00	331.01	2811.10	1405.55	3657.76	1831.60	4.37	-0.887	0.000	0.198
49.88	-47.96	-7.77	0.00	-316.32	0.00	316.32	2333.69	1166.84	3066.96	1535.76	4.73	-0.922	0.000	0.227
50.00	-47.93	-7.78	0.00	-315.39	0.00	315.39	2332.20	1166.10	3062.32	1533.44	4.75	-0.925	0.000	0.226
52.00	-47.43	-7.76	0.00	-299.82	0.00	299.82	2307.18	1153.59	2985.35	1494.89	5.15	-0.967	0.000	0.221
54.00	-46.94	-7.73	0.00	-284.31	0.00	284.31	2281.92	1140.96	2909.02	1456.67	5.56	-1.010	0.000	0.216
56.00	-46.45	-7.70	0.00	-268.85	0.00	268.85	2256.40	1128.20	2833.34	1418.77	5.99	-1.051	0.000	0.210
58.00	-45.97	-7.68	0.00	-253.44	0.00	253.44	2223.07	1111.54	2748.96	1376.53	6.44	-1.093	0.000	0.205
60.00	-45.50	-7.65	0.00	-238.09	0.00	238.09	2189.04	1094.52	2665.01	1334.49	6.91	-1.133	0.000	0.199
62.00	-45.03	-7.62	0.00	-222.80	0.00	222.80	2155.00	1077.50	2582.36	1293.10	7.39	-1.173	0.000	0.193
64.00	-44.56	-7.59	0.00	-207.56	0.00	207.56	2120.97	1060.48	2501.02	1252.37	7.89	-1.212	0.000	0.187
66.00	-44.10	-7.56	0.00	-192.39	0.00	192.39	2086.94	1043.47	2420.97	1212.28	8.41	-1.250	0.000	0.180
68.00	-43.65	-7.52	0.00	-177.28	0.00	177.28	2052.90	1026.45	2342.23	1172.85	8.94	-1.287	0.000	0.172
69.00	-37.45	-6.46	0.00	-169.76	0.00	169.76	2035.88	1017.94	2303.34	1153.38	9.21	-1.305	0.000	0.166
70.00	-37.23	-6.45	0.00	-163.30	0.00	163.30	2018.87	1009.43	2264.79	1134.08	9.49	-1.323	0.000	0.162
72.00	-36.80	-6.41	0.00	-150.41	0.00	150.41	1984.83	992.42	2188.65	1095.95	10.05	-1.358	0.000	0.156
74.00	-36.38	-6.37	0.00	-137.59	0.00	137.59	1950.80	975.40	2113.81	1058.48	10.63	-1.391	0.000	0.149
75.00	-36.04	-6.27	0.00	-131.22	0.00	131.22	1933.78	966.89	2076.88	1039.98	10.92	-1.408	0.000	0.145
76.00	-35.84	-6.25	0.00	-124.96	0.00	124.96	1916.76	958.38	2040.27	1021.65	11.22	-1.424	0.000	0.141
78.00	-35.44	-6.21	0.00	-112.45	0.00	112.45	1882.73	941.37	1968.04	985.48	11.82	-1.455	0.000	0.133
80.00	-35.04	-6.17	0.00	-100.03	0.00	100.03	1848.70	924.35	1897.11	949.96	12.44	-1.484	0.000	0.124
82.00	-34.65	-6.13	0.00	-87.68	0.00	87.68	1814.66	907.33	1827.48	915.10	13.06	-1.511	0.000	0.115
83.00	-28.97	-4.87	0.00	-81.55	0.00	81.55	1797.65	898.82	1793.15	897.91	13.38	-1.523	0.000	0.107
84.00	-28.78	-4.85	0.00	-76.68	0.00	76.68	1780.63	890.31	1759.15	880.88	13.70	-1.536	0.000	0.103

Calculated Forces

Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 36

Tower Engineering Solutions

85.00	-28.52	-4.78	0.00	-71.83	0.00	71.83	1763.61	881.81	1725.48	864.02	14.02	-1.548	0.000	0.099
86.00	-28.34	-4.76	0.00	-67.05	0.00	67.05	1746.59	873.30	1692.13	847.32	14.35	-1.559	0.000	0.095
88.00	-27.99	-4.71	0.00	-57.54	0.00	57.54	1712.56	856.28	1626.40	814.41	15.01	-1.580	0.000	0.087
90.00	-27.64	-4.66	0.00	-48.12	0.00	48.12	1678.53	839.26	1561.98	782.15	15.67	-1.600	0.000	0.078
91.00	-21.64	-3.41	0.00	-43.46	0.00	43.46	1661.51	830.75	1530.26	766.27	16.01	-1.608	0.000	0.070
91.29	-21.59	-3.41	0.00	-42.46	0.00	42.46	1656.52	828.26	1521.01	761.64	16.11	-1.611	0.000	0.069
92.00	-21.44	-3.39	0.00	-40.05	0.00	40.05	1644.49	822.25	1498.86	750.54	16.35	-1.617	0.000	0.066
94.00	-21.01	-3.34	0.00	-33.27	0.00	33.27	1610.46	805.23	1437.04	719.59	17.03	-1.632	0.000	0.059
94.71	-20.86	-3.32	0.00	-30.90	0.00	30.90	930.70	465.35	848.15	424.70	17.27	-1.637	0.000	0.095
96.00	-20.70	-3.29	0.00	-26.62	0.00	26.62	922.07	461.04	828.91	415.07	17.72	-1.645	0.000	0.087
98.00	-10.07	-1.73	0.00	-20.04	0.00	20.04	908.49	454.24	799.32	400.25	18.41	-1.662	0.000	0.061
100.00	-9.86	-1.68	0.00	-16.58	0.00	16.58	894.64	447.32	770.03	385.59	19.11	-1.676	0.000	0.054
102.00	-9.66	-1.63	0.00	-13.22	0.00	13.22	880.55	440.27	741.05	371.08	19.81	-1.688	0.000	0.047
104.00	-9.46	-1.59	0.00	-9.96	0.00	9.96	866.20	433.10	712.41	356.74	20.52	-1.698	0.000	0.039
106.00	-9.27	-1.54	0.00	-6.78	0.00	6.78	851.60	425.80	684.12	342.57	21.23	-1.706	0.000	0.031
107.00	-1.62	-0.43	0.00	-5.11	0.00	5.11	844.21	422.10	670.11	335.55	21.59	-1.709	0.000	0.017
108.00	-1.52	-0.41	0.00	-4.68	0.00	4.68	836.75	418.38	656.18	328.58	21.95	-1.712	0.000	0.016
110.00	-1.34	-0.37	0.00	-3.86	0.00	3.86	821.65	410.82	628.62	314.78	22.67	-1.716	0.000	0.014
112.00	-1.17	-0.32	0.00	-3.13	0.00	3.13	804.60	402.30	600.19	300.54	23.39	-1.720	0.000	0.012
114.00	-1.00	-0.28	0.00	-2.49	0.00	2.49	784.18	392.09	569.96	285.40	24.11	-1.724	0.000	0.010
116.00	-0.83	-0.24	0.00	-1.93	0.00	1.93	763.76	381.88	540.51	270.66	24.83	-1.727	0.000	0.008
118.00	0.00	-0.21	0.00	-1.46	0.00	1.46	743.33	371.67	511.84	256.30	25.56	-1.729	0.000	0.006

Seismic Segment Forces (Factored)

Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 37	

Tower Engineering Solutions

Load Case:	1.2D + 1.0E							**Iterations**	24
Gust Response Factor	1.10				**Sds**	0.40		**Ss**	0.41
Dead Load Factor	1.20	**Seismic Load Factor**	1.00		**Sd1**	0.16		**S1**	0.10
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.33		**SA**	0.05	**Seismic Importance Factor**		1.00

Top Elev (ft)	Description	Wz (lb)	a	b	c	Lateral Fs (lb)	R: 1.50
0.00		0.00	0.00	0.00	0.00	0.00	
2.00		345.42	0.00	0.02	0.01	10.29	
4.00		341.68	0.00	0.03	0.02	15.97	
6.00		337.94	0.00	0.04	0.02	19.45	
8.00		334.19	0.01	0.05	0.03	21.64	
10.00		330.45	0.01	0.06	0.03	23.03	
12.00		326.71	0.02	0.06	0.04	23.88	
14.00		322.97	0.03	0.07	0.04	24.38	
16.00		319.23	0.03	0.07	0.04	24.65	
18.00		315.49	0.04	0.07	0.04	24.78	
20.00		311.75	0.05	0.07	0.04	24.83	
22.00		308.01	0.07	0.07	0.04	24.84	
24.00		304.27	0.08	0.07	0.04	24.84	
26.00		300.52	0.09	0.07	0.04	24.84	
28.00		296.78	0.11	0.07	0.04	24.85	
30.00		293.04	0.12	0.07	0.03	24.86	
32.00		289.30	0.14	0.07	0.03	24.85	
34.00		285.56	0.16	0.07	0.03	24.81	
36.00		281.82	0.18	0.07	0.03	24.69	
38.00		278.08	0.20	0.06	0.02	24.46	
40.00		274.34	0.22	0.06	0.02	24.06	
42.00		270.60	0.24	0.06	0.02	23.45	
44.00		266.85	0.26	0.05	0.02	22.55	
45.13	Bot - Section 2	149.12	0.28	0.05	0.01	12.33	
46.00		211.01	0.29	0.05	0.01	17.07	
48.00		480.16	0.31	0.04	0.01	36.26	
49.88	Top - Section 1	445.09	0.34	0.04	0.01	30.49	
50.00		12.97	0.34	0.04	0.01	0.88	
52.00		214.55	0.37	0.03	0.01	12.44	
54.00		211.43	0.40	0.02	0.01	9.60	
56.00		208.31	0.43	0.01	0.01	6.30	
58.00		205.20	0.46	0.00	0.01	2.65	
60.00		202.08	0.49	-0.01	0.01	-1.17	
62.00		198.96	0.52	-0.02	0.01	-4.94	
64.00		195.84	0.56	-0.04	0.01	-8.44	
66.00		192.73	0.59	-0.05	0.01	-11.48	
68.00		189.61	0.63	-0.06	0.02	-13.93	
69.00	Appurtenance(s)	2471.6	0.65	-0.07	0.02	-196.10	
70.00		92.86	0.67	-0.08	0.02	-7.84	
72.00		183.37	0.70	-0.09	0.03	-16.91	
74.00		180.26	0.74	-0.10	0.04	-17.44	
75.00	Appurtenance(s)	138.96	0.76	-0.10	0.04	-13.60	
76.00		88.18	0.78	-0.11	0.05	-8.66	
78.00		174.02	0.83	-0.12	0.06	-16.84	
80.00		170.90	0.87	-0.12	0.08	-15.79	
82.00		167.79	0.91	-0.12	0.09	-14.30	

Seismic Segment Forces (Factored)

Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 38	

Tower Engineering Solutions

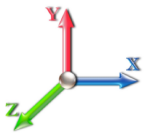
83.00	Appurtenance(s)		2444.3	0.94	-0.12	0.10	-197.10		
84.00			81.94	0.96	-0.12	0.11	-6.18		
85.00	Appurtenance(s)		126.91	0.98	-0.11	0.12	-8.82		
86.00			80.39	1.00	-0.11	0.13	-5.06		
88.00			158.43	1.05	-0.09	0.16	-7.57		
90.00			155.31	1.10	-0.07	0.19	-4.68		
91.00	Appurtenance(s)		2572.6	1.12	-0.06	0.20	-52.22		
91.29	Bot - Section 3		22.29	1.13	-0.05	0.21	-0.39		
92.00			86.19	1.15	-0.04	0.22	-0.85		
94.00			240.55	1.20	0.00	0.25	3.14		
94.71	Top - Section 2		84.20	1.22	0.02	0.27	1.84		
96.00			57.58	1.25	0.06	0.29	2.22		
98.00	Appurtenance(s)		4176.4	1.30	0.13	0.34	278.70		
100.00			85.86	1.36	0.21	0.39	8.38		
102.00			83.99	1.41	0.31	0.44	11.01		
104.00			82.12	1.47	0.43	0.51	13.75		
106.00			80.25	1.53	0.56	0.57	16.58		
107.00	Appurtenance(s)		3314.4	1.55	0.64	0.61	752.90		
108.00			38.96	1.58	0.73	0.65	9.68		
110.00			76.51	1.64	0.92	0.73	22.44		
112.00			74.64	1.70	1.13	0.82	25.45		
114.00			72.77	1.76	1.38	0.92	28.50		
116.00			70.90	1.83	1.66	1.02	31.57		
118.00	Appurtenance(s)		360.03	1.89	1.98	1.14	180.71		
		Totals:	**28,147.7**				**1,390.6**	**Total Wind:**	**28,138.5**

Seismic Base Shear is Less Than 50% of Wind Force - An Analysis is NOT Required

Calculated Forces

Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 39	

IES Tower Engineering Solutions

Load Case:	1.2D + 1.0E							**Iterations**	24
Gust Response Factor	1.10			**Sds**	0.40			**Ss**	0.41
Dead Load Factor	1.20	**Seismic Load Factor**	1.00	**Sd1**	0.16			**S1**	0.10
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.33	**SA**	0.05			**Seismic Importance Factor**	1.00

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-37.63	-2.02	0.00	-175.74	0.00	175.74	3634.70	1817.35	6397.77	3203.64		0.00	0.00	0.065
2.00	-37.13	-2.02	0.00	-171.69	0.00	171.69	3607.15	1803.57	6280.28	3144.81		0.00	-0.01	0.065
4.00	-36.64	-2.01	0.00	-167.66	0.00	167.66	3579.34	1789.67	6163.42	3086.29		0.01	-0.02	0.065
6.00	-36.15	-1.99	0.00	-163.64	0.00	163.64	3551.29	1775.64	6047.19	3028.09		0.02	-0.03	0.064
8.00	-35.66	-1.98	0.00	-159.66	0.00	159.66	3522.98	1761.49	5931.61	2970.21		0.03	-0.03	0.064
10.00	-35.18	-1.96	0.00	-155.71	0.00	155.71	3494.42	1747.21	5816.69	2912.67		0.04	-0.04	0.064
12.00	-34.71	-1.94	0.00	-151.79	0.00	151.79	3465.61	1732.80	5702.44	2855.46		0.06	-0.05	0.063
14.00	-34.24	-1.92	0.00	-147.91	0.00	147.91	3436.54	1718.27	5588.89	2798.60		0.09	-0.06	0.063
16.00	-33.77	-1.90	0.00	-144.08	0.00	144.08	3407.22	1703.61	5476.05	2742.09		0.11	-0.07	0.062
18.00	-33.31	-1.88	0.00	-140.28	0.00	140.28	3377.65	1688.83	5363.92	2685.95		0.15	-0.08	0.062
20.00	-32.85	-1.86	0.00	-136.52	0.00	136.52	3347.83	1673.91	5252.53	2630.17		0.18	-0.09	0.062
22.00	-32.39	-1.84	0.00	-132.80	0.00	132.80	3317.75	1658.87	5141.89	2574.76		0.22	-0.10	0.061
24.00	-31.95	-1.82	0.00	-129.12	0.00	129.12	3287.42	1643.71	5032.01	2519.74		0.26	-0.11	0.061
26.00	-31.50	-1.80	0.00	-125.49	0.00	125.49	3256.84	1628.42	4922.91	2465.11		0.31	-0.11	0.061
28.00	-31.06	-1.78	0.00	-121.89	0.00	121.89	3219.51	1609.75	4804.91	2406.03		0.36	-0.12	0.060
30.00	-30.63	-1.76	0.00	-118.34	0.00	118.34	3178.67	1589.33	4683.16	2345.06		0.41	-0.13	0.060
32.00	-30.20	-1.74	0.00	-114.82	0.00	114.82	3137.83	1568.91	4562.98	2284.88		0.47	-0.14	0.060
34.00	-29.77	-1.71	0.00	-111.35	0.00	111.35	3096.99	1548.49	4444.36	2225.48		0.53	-0.15	0.060
36.00	-29.35	-1.69	0.00	-107.93	0.00	107.93	3056.15	1528.07	4327.30	2166.87		0.60	-0.16	0.059
38.00	-28.93	-1.67	0.00	-104.54	0.00	104.54	3015.30	1507.65	4211.81	2109.03		0.67	-0.17	0.059
40.00	-28.52	-1.65	0.00	-101.19	0.00	101.19	2974.46	1487.23	4097.87	2051.98		0.74	-0.18	0.059
42.00	-28.11	-1.63	0.00	-97.89	0.00	97.89	2933.62	1466.81	3985.50	1995.71		0.82	-0.19	0.059
44.00	-27.70	-1.61	0.00	-94.62	0.00	94.62	2892.78	1446.39	3874.69	1940.23		0.90	-0.20	0.058
45.13	-27.48	-1.60	0.00	-92.80	0.00	92.80	2869.71	1434.85	3812.78	1909.22		0.95	-0.21	0.058
46.00	-27.19	-1.59	0.00	-91.41	0.00	91.41	2851.94	1425.97	3765.45	1885.52		0.99	-0.21	0.058
48.00	-26.53	-1.55	0.00	-88.23	0.00	88.23	2811.10	1405.55	3657.76	1831.60		1.08	-0.22	0.058
49.88	-25.92	-1.52	0.00	-85.32	0.00	85.32	2333.69	1166.84	3066.96	1535.76		1.17	-0.23	0.067
50.00	-25.90	-1.52	0.00	-85.13	0.00	85.13	2332.20	1166.10	3062.32	1533.44		1.17	-0.23	0.067
52.00	-25.55	-1.52	0.00	-82.08	0.00	82.08	2307.18	1153.59	2985.35	1494.89		1.27	-0.24	0.066
54.00	-25.22	-1.51	0.00	-79.05	0.00	79.05	2281.92	1140.96	2909.02	1456.67		1.38	-0.25	0.065
56.00	-24.88	-1.51	0.00	-76.03	0.00	76.03	2256.40	1128.20	2833.34	1418.77		1.49	-0.27	0.065
58.00	-24.55	-1.51	0.00	-73.02	0.00	73.02	2223.07	1111.54	2748.96	1376.53		1.60	-0.28	0.064
60.00	-24.23	-1.51	0.00	-70.01	0.00	70.01	2189.04	1094.52	2665.01	1334.49		1.72	-0.29	0.064
62.00	-23.90	-1.51	0.00	-66.98	0.00	66.98	2155.00	1077.50	2582.36	1293.10		1.84	-0.30	0.063
64.00	-23.59	-1.52	0.00	-63.96	0.00	63.96	2120.97	1060.48	2501.02	1252.37		1.97	-0.31	0.062
66.00	-23.27	-1.52	0.00	-60.92	0.00	60.92	2086.94	1043.47	2420.97	1212.28		2.11	-0.33	0.061
68.00	-22.96	-1.52	0.00	-57.88	0.00	57.88	2052.90	1026.45	2342.23	1172.85		2.25	-0.34	0.061
69.00	-19.95	-1.51	0.00	-56.36	0.00	56.36	2035.88	1017.94	2303.34	1153.38		2.32	-0.34	0.059
70.00	-19.80	-1.51	0.00	-54.85	0.00	54.85	2018.87	1009.43	2264.79	1134.08		2.39	-0.35	0.058
72.00	-19.50	-1.51	0.00	-51.83	0.00	51.83	1984.83	992.42	2188.65	1095.95		2.54	-0.36	0.057
74.00	-19.21	-1.51	0.00	-48.81	0.00	48.81	1950.80	975.40	2113.81	1058.48		2.69	-0.37	0.056
75.00	-19.00	-1.51	0.00	-47.30	0.00	47.30	1933.78	966.89	2076.88	1039.98		2.77	-0.38	0.055
76.00	-18.85	-1.51	0.00	-45.79	0.00	45.79	1916.76	958.38	2040.27	1021.65		2.85	-0.38	0.055
78.00	-18.57	-1.52	0.00	-42.76	0.00	42.76	1882.73	941.37	1968.04	985.48		3.02	-0.40	0.053
80.00	-18.28	-1.52	0.00	-39.73	0.00	39.73	1848.70	924.35	1897.11	949.96		3.18	-0.41	0.052
82.00	-18.00	-1.52	0.00	-36.69	0.00	36.69	1814.66	907.33	1827.48	915.10		3.36	-0.42	0.050
83.00	-15.03	-1.50	0.00	-35.17	0.00	35.17	1797.65	898.82	1793.15	897.91		3.45	-0.42	0.048

Calculated Forces

Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 40

Tower Engineering Solutions

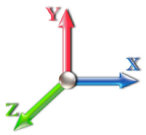
84.00	-14.90	-1.50	0.00	-33.67	0.00	33.67	1780.63	890.31	1759.15	880.88	3.53	-0.43	0.047
85.00	-14.72	-1.50	0.00	-32.18	0.00	32.18	1763.61	881.81	1725.48	864.02	3.63	-0.43	0.046
86.00	-14.59	-1.50	0.00	-30.68	0.00	30.68	1746.59	873.30	1692.13	847.32	3.72	-0.44	0.045
88.00	-14.35	-1.50	0.00	-27.68	0.00	27.68	1712.56	856.28	1626.40	814.41	3.90	-0.45	0.042
90.00	-14.10	-1.50	0.00	-24.68	0.00	24.68	1678.53	839.26	1561.98	782.15	4.09	-0.46	0.040
91.00	-10.98	-1.48	0.00	-23.18	0.00	23.18	1661.51	830.75	1530.26	766.27	4.19	-0.46	0.037
91.29	-10.95	-1.48	0.00	-22.75	0.00	22.75	1656.52	828.26	1521.01	761.64	4.22	-0.47	0.036
92.00	-10.83	-1.48	0.00	-21.70	0.00	21.70	1644.49	822.25	1498.86	750.54	4.29	-0.47	0.036
94.00	-10.50	-1.47	0.00	-18.75	0.00	18.75	1610.46	805.23	1437.04	719.59	4.49	-0.48	0.033
94.71	-10.39	-1.47	0.00	-17.71	0.00	17.71	930.70	465.35	848.15	424.70	4.56	-0.48	0.053
96.00	-10.29	-1.47	0.00	-15.81	0.00	15.81	922.07	461.04	828.91	415.07	4.69	-0.48	0.049
98.00	-5.25	-1.15	0.00	-12.88	0.00	12.88	908.49	454.24	799.32	400.25	4.89	-0.49	0.038
100.00	-5.13	-1.14	0.00	-10.59	0.00	10.59	894.64	447.32	770.03	385.59	5.10	-0.50	0.033
102.00	-5.03	-1.13	0.00	-8.31	0.00	8.31	880.55	440.27	741.05	371.08	5.32	-0.51	0.028
104.00	-4.92	-1.11	0.00	-6.06	0.00	6.06	866.20	433.10	712.41	356.74	5.53	-0.52	0.023
106.00	-4.82	-1.09	0.00	-3.83	0.00	3.83	851.60	425.80	684.12	342.57	5.75	-0.52	0.017
107.00	-0.84	-0.31	0.00	-2.74	0.00	2.74	844.21	422.10	670.11	335.55	5.86	-0.52	0.009
108.00	-0.80	-0.30	0.00	-2.43	0.00	2.43	836.75	418.38	656.18	328.58	5.97	-0.53	0.008
110.00	-0.70	-0.27	0.00	-1.84	0.00	1.84	821.65	410.82	628.62	314.78	6.19	-0.53	0.007
112.00	-0.61	-0.25	0.00	-1.30	0.00	1.30	804.60	402.30	600.19	300.54	6.41	-0.53	0.005
114.00	-0.52	-0.22	0.00	-0.80	0.00	0.80	784.18	392.09	569.96	285.40	6.63	-0.53	0.003
116.00	-0.43	-0.18	0.00	-0.37	0.00	0.37	763.76	381.88	540.51	270.66	6.86	-0.53	0.002
118.00	0.00	-0.18	0.00	0.00	0.00	0.00	743.33	371.67	511.84	256.30	7.08	-0.53	0.000

Seismic Segment Forces (Factored)

Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 41	

Tower Engineering Solutions

Load Case:	0.9D + 1.0E							**Iterations**	24
Gust Response Factor	1.10				**Sds**	0.40		**Ss**	0.41
Dead Load Factor	0.90	**Seismic Load Factor**	1.00		**Sd1**	0.16		**S1**	0.10
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.33		**SA**	0.05	**Seismic Importance Factor**		1.00



Top Elev (ft)	Description	Wz (lb)	a	b	c	Lateral Fs (lb)	R: 1.50
0.00		0.00	0.00	0.00	0.00	0.00	
2.00		345.42	0.00	0.02	0.01	10.29	
4.00		341.68	0.00	0.03	0.02	15.97	
6.00		337.94	0.00	0.04	0.02	19.45	
8.00		334.19	0.01	0.05	0.03	21.64	
10.00		330.45	0.01	0.06	0.03	23.03	
12.00		326.71	0.02	0.06	0.04	23.88	
14.00		322.97	0.03	0.07	0.04	24.38	
16.00		319.23	0.03	0.07	0.04	24.65	
18.00		315.49	0.04	0.07	0.04	24.78	
20.00		311.75	0.05	0.07	0.04	24.83	
22.00		308.01	0.07	0.07	0.04	24.84	
24.00		304.27	0.08	0.07	0.04	24.84	
26.00		300.52	0.09	0.07	0.04	24.84	
28.00		296.78	0.11	0.07	0.04	24.85	
30.00		293.04	0.12	0.07	0.03	24.86	
32.00		289.30	0.14	0.07	0.03	24.85	
34.00		285.56	0.16	0.07	0.03	24.81	
36.00		281.82	0.18	0.07	0.03	24.69	
38.00		278.08	0.20	0.06	0.02	24.46	
40.00		274.34	0.22	0.06	0.02	24.06	
42.00		270.60	0.24	0.06	0.02	23.45	
44.00		266.85	0.26	0.05	0.02	22.55	
45.13	Bot - Section 2	149.12	0.28	0.05	0.01	12.33	
46.00		211.01	0.29	0.05	0.01	17.07	
48.00		480.16	0.31	0.04	0.01	36.26	
49.88	Top - Section 1	445.09	0.34	0.04	0.01	30.49	
50.00		12.97	0.34	0.04	0.01	0.88	
52.00		214.55	0.37	0.03	0.01	12.44	
54.00		211.43	0.40	0.02	0.01	9.60	
56.00		208.31	0.43	0.01	0.01	6.30	
58.00		205.20	0.46	0.00	0.01	2.65	
60.00		202.08	0.49	-0.01	0.01	-1.17	
62.00		198.96	0.52	-0.02	0.01	-4.94	
64.00		195.84	0.56	-0.04	0.01	-8.44	
66.00		192.73	0.59	-0.05	0.01	-11.48	
68.00		189.61	0.63	-0.06	0.02	-13.93	
69.00	Appurtenance(s)	2471.6	0.65	-0.07	0.02	-196.10	
70.00		92.86	0.67	-0.08	0.02	-7.84	
72.00		183.37	0.70	-0.09	0.03	-16.91	
74.00		180.26	0.74	-0.10	0.04	-17.44	
75.00	Appurtenance(s)	138.96	0.76	-0.10	0.04	-13.60	
76.00		88.18	0.78	-0.11	0.05	-8.66	
78.00		174.02	0.83	-0.12	0.06	-16.84	
80.00		170.90	0.87	-0.12	0.08	-15.79	
82.00		167.79	0.91	-0.12	0.09	-14.30	

Seismic Segment Forces (Factored)

Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 42	

Tower Engineering Solutions

83.00	Appurtenance(s)		2444.3	0.94	-0.12	0.10	-197.10		
84.00			81.94	0.96	-0.12	0.11	-6.18		
85.00	Appurtenance(s)		126.91	0.98	-0.11	0.12	-8.82		
86.00			80.39	1.00	-0.11	0.13	-5.06		
88.00			158.43	1.05	-0.09	0.16	-7.57		
90.00			155.31	1.10	-0.07	0.19	-4.68		
91.00	Appurtenance(s)		2572.6	1.12	-0.06	0.20	-52.22		
91.29	Bot - Section 3		22.29	1.13	-0.05	0.21	-0.39		
92.00			86.19	1.15	-0.04	0.22	-0.85		
94.00			240.55	1.20	0.00	0.25	3.14		
94.71	Top - Section 2		84.20	1.22	0.02	0.27	1.84		
96.00			57.58	1.25	0.06	0.29	2.22		
98.00	Appurtenance(s)		4176.4	1.30	0.13	0.34	278.70		
100.00			85.86	1.36	0.21	0.39	8.38		
102.00			83.99	1.41	0.31	0.44	11.01		
104.00			82.12	1.47	0.43	0.51	13.75		
106.00			80.25	1.53	0.56	0.57	16.58		
107.00	Appurtenance(s)		3314.4	1.55	0.64	0.61	752.90		
108.00			38.96	1.58	0.73	0.65	9.68		
110.00			76.51	1.64	0.92	0.73	22.44		
112.00			74.64	1.70	1.13	0.82	25.45		
114.00			72.77	1.76	1.38	0.92	28.50		
116.00			70.90	1.83	1.66	1.02	31.57		
118.00	Appurtenance(s)		360.03	1.89	1.98	1.14	180.71		
		Totals:	**28,147.7**				**1,390.6**	**Total Wind:**	**28,138.5**

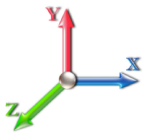
Seismic Base Shear is Less Than 50% of Wind Force - An Analysis is NOT Required

Calculated Forces

Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 43	

Tower Engineering Solutions

Load Case:	0.9D + 1.0E							**Iterations**	24
Gust Response Factor	1.10			**Sds**	0.40			**Ss**	0.41
Dead Load Factor	0.90	**Seismic Load Factor**	1.00	**Sd1**	0.16			**S1**	0.10
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.33	**SA**	0.05	**Seismic Importance Factor**			1.00



Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-28.22	-2.02	0.00	-173.37	0.00	173.37	3634.70	1817.35	6397.77	3203.64		0.00	0.00	0.062
2.00	-27.85	-2.02	0.00	-169.33	0.00	169.33	3607.15	1803.57	6280.28	3144.81		0.00	-0.01	0.062
4.00	-27.48	-2.00	0.00	-165.30	0.00	165.30	3579.34	1789.67	6163.42	3086.29		0.01	-0.02	0.061
6.00	-27.11	-1.99	0.00	-161.29	0.00	161.29	3551.29	1775.64	6047.19	3028.09		0.02	-0.02	0.061
8.00	-26.75	-1.97	0.00	-157.32	0.00	157.32	3522.98	1761.49	5931.61	2970.21		0.03	-0.03	0.061
10.00	-26.39	-1.95	0.00	-153.38	0.00	153.38	3494.42	1747.21	5816.69	2912.67		0.04	-0.04	0.060
12.00	-26.03	-1.93	0.00	-149.48	0.00	149.48	3465.61	1732.80	5702.44	2855.46		0.06	-0.05	0.060
14.00	-25.68	-1.91	0.00	-145.62	0.00	145.62	3436.54	1718.27	5588.89	2798.60		0.09	-0.06	0.060
16.00	-25.33	-1.89	0.00	-141.80	0.00	141.80	3407.22	1703.61	5476.05	2742.09		0.11	-0.07	0.059
18.00	-24.98	-1.87	0.00	-138.02	0.00	138.02	3377.65	1688.83	5363.92	2685.95		0.14	-0.08	0.059
20.00	-24.64	-1.85	0.00	-134.29	0.00	134.29	3347.83	1673.91	5252.53	2630.17		0.18	-0.09	0.058
22.00	-24.30	-1.82	0.00	-130.60	0.00	130.60	3317.75	1658.87	5141.89	2574.76		0.22	-0.09	0.058
24.00	-23.96	-1.80	0.00	-126.95	0.00	126.95	3287.42	1643.71	5032.01	2519.74		0.26	-0.10	0.058
26.00	-23.63	-1.78	0.00	-123.34	0.00	123.34	3256.84	1628.42	4922.91	2465.11		0.30	-0.11	0.057
28.00	-23.30	-1.76	0.00	-119.78	0.00	119.78	3219.51	1609.75	4804.91	2406.03		0.35	-0.12	0.057
30.00	-22.97	-1.74	0.00	-116.27	0.00	116.27	3178.67	1589.33	4683.16	2345.06		0.40	-0.13	0.057
32.00	-22.65	-1.72	0.00	-112.79	0.00	112.79	3137.83	1568.91	4562.98	2284.88		0.46	-0.14	0.057
34.00	-22.33	-1.69	0.00	-109.36	0.00	109.36	3096.99	1548.49	4444.36	2225.48		0.52	-0.15	0.056
36.00	-22.01	-1.67	0.00	-105.97	0.00	105.97	3056.15	1528.07	4327.30	2166.87		0.59	-0.16	0.056
38.00	-21.70	-1.65	0.00	-102.63	0.00	102.63	3015.30	1507.65	4211.81	2109.03		0.66	-0.17	0.056
40.00	-21.39	-1.63	0.00	-99.33	0.00	99.33	2974.46	1487.23	4097.87	2051.98		0.73	-0.18	0.056
42.00	-21.08	-1.61	0.00	-96.08	0.00	96.08	2933.62	1466.81	3985.50	1995.71		0.81	-0.19	0.055
44.00	-20.78	-1.59	0.00	-92.86	0.00	92.86	2892.78	1446.39	3874.69	1940.23		0.89	-0.20	0.055
45.13	-20.61	-1.58	0.00	-91.07	0.00	91.07	2869.71	1434.85	3812.78	1909.22		0.93	-0.20	0.055
46.00	-20.39	-1.56	0.00	-89.70	0.00	89.70	2851.94	1425.97	3765.45	1885.52		0.97	-0.21	0.055
48.00	-19.90	-1.53	0.00	-86.58	0.00	86.58	2811.10	1405.55	3657.76	1831.60		1.06	-0.22	0.054
49.88	-19.44	-1.49	0.00	-83.71	0.00	83.71	2333.69	1166.84	3066.96	1535.76		1.15	-0.23	0.063
50.00	-19.42	-1.50	0.00	-83.53	0.00	83.53	2332.20	1166.10	3062.32	1533.44		1.15	-0.23	0.063
52.00	-19.16	-1.49	0.00	-80.54	0.00	80.54	2307.18	1153.59	2985.35	1494.89		1.25	-0.24	0.062
54.00	-18.91	-1.48	0.00	-77.57	0.00	77.57	2281.92	1140.96	2909.02	1456.67		1.35	-0.25	0.062
56.00	-18.66	-1.48	0.00	-74.61	0.00	74.61	2256.40	1128.20	2833.34	1418.77		1.46	-0.26	0.061
58.00	-18.41	-1.48	0.00	-71.66	0.00	71.66	2223.07	1111.54	2748.96	1376.53		1.57	-0.27	0.060
60.00	-18.17	-1.48	0.00	-68.71	0.00	68.71	2189.04	1094.52	2665.01	1334.49		1.69	-0.29	0.060
62.00	-17.93	-1.48	0.00	-65.75	0.00	65.75	2155.00	1077.50	2582.36	1293.10		1.81	-0.30	0.059
64.00	-17.69	-1.48	0.00	-62.79	0.00	62.79	2120.97	1060.48	2501.02	1252.37		1.94	-0.31	0.058
66.00	-17.45	-1.49	0.00	-59.82	0.00	59.82	2086.94	1043.47	2420.97	1212.28		2.07	-0.32	0.058
68.00	-17.22	-1.49	0.00	-56.85	0.00	56.85	2052.90	1026.45	2342.23	1172.85		2.21	-0.33	0.057
69.00	-14.96	-1.47	0.00	-55.37	0.00	55.37	2035.88	1017.94	2303.34	1153.38		2.28	-0.34	0.055
70.00	-14.85	-1.48	0.00	-53.89	0.00	53.89	2018.87	1009.43	2264.79	1134.08		2.35	-0.34	0.055
72.00	-14.62	-1.48	0.00	-50.94	0.00	50.94	1984.83	992.42	2188.65	1095.95		2.50	-0.36	0.054
74.00	-14.40	-1.48	0.00	-47.98	0.00	47.98	1950.80	975.40	2113.81	1058.48		2.65	-0.37	0.053
75.00	-14.25	-1.48	0.00	-46.50	0.00	46.50	1933.78	966.89	2076.88	1039.98		2.73	-0.37	0.052
76.00	-14.14	-1.48	0.00	-45.02	0.00	45.02	1916.76	958.38	2040.27	1021.65		2.80	-0.38	0.051
78.00	-13.92	-1.48	0.00	-42.06	0.00	42.06	1882.73	941.37	1968.04	985.48		2.97	-0.39	0.050
80.00	-13.71	-1.48	0.00	-39.10	0.00	39.10	1848.70	924.35	1897.11	949.96		3.13	-0.40	0.049
82.00	-13.50	-1.48	0.00	-36.13	0.00	36.13	1814.66	907.33	1827.48	915.10		3.30	-0.41	0.047
83.00	-11.27	-1.47	0.00	-34.65	0.00	34.65	1797.65	898.82	1793.15	897.91		3.39	-0.42	0.045

Calculated Forces

Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 44

Tower Engineering Solutions

84.00	-11.17	-1.47	0.00	-33.18	0.00	33.18	1780.63	890.31	1759.15	880.88	3.48	-0.42	0.044
85.00	-11.04	-1.47	0.00	-31.71	0.00	31.71	1763.61	881.81	1725.48	864.02	3.56	-0.43	0.043
86.00	-10.94	-1.47	0.00	-30.24	0.00	30.24	1746.59	873.30	1692.13	847.32	3.65	-0.43	0.042
88.00	-10.76	-1.47	0.00	-27.30	0.00	27.30	1712.56	856.28	1626.40	814.41	3.84	-0.44	0.040
90.00	-10.57	-1.47	0.00	-24.36	0.00	24.36	1678.53	839.26	1561.98	782.15	4.03	-0.45	0.037
91.00	-8.23	-1.45	0.00	-22.89	0.00	22.89	1661.51	830.75	1530.26	766.27	4.12	-0.46	0.035
91.29	-8.21	-1.45	0.00	-22.47	0.00	22.47	1656.52	828.26	1521.01	761.64	4.15	-0.46	0.034
92.00	-8.12	-1.45	0.00	-21.44	0.00	21.44	1644.49	822.25	1498.86	750.54	4.22	-0.46	0.034
94.00	-7.88	-1.45	0.00	-18.54	0.00	18.54	1610.46	805.23	1437.04	719.59	4.41	-0.47	0.031
94.71	-7.79	-1.45	0.00	-17.51	0.00	17.51	930.70	465.35	848.15	424.70	4.48	-0.47	0.050
96.00	-7.72	-1.44	0.00	-15.64	0.00	15.64	922.07	461.04	828.91	415.07	4.61	-0.48	0.046
98.00	-3.93	-1.13	0.00	-12.75	0.00	12.75	908.49	454.24	799.32	400.25	4.81	-0.49	0.036
100.00	-3.85	-1.13	0.00	-10.49	0.00	10.49	894.64	447.32	770.03	385.59	5.02	-0.50	0.032
102.00	-3.77	-1.11	0.00	-8.23	0.00	8.23	880.55	440.27	741.05	371.08	5.23	-0.50	0.026
104.00	-3.69	-1.10	0.00	-6.01	0.00	6.01	866.20	433.10	712.41	356.74	5.44	-0.51	0.021
106.00	-3.61	-1.08	0.00	-3.80	0.00	3.80	851.60	425.80	684.12	342.57	5.65	-0.51	0.015
107.00	-0.63	-0.30	0.00	-2.72	0.00	2.72	844.21	422.10	670.11	335.55	5.76	-0.52	0.009
108.00	-0.60	-0.29	0.00	-2.42	0.00	2.42	836.75	418.38	656.18	328.58	5.87	-0.52	0.008
110.00	-0.53	-0.27	0.00	-1.83	0.00	1.83	821.65	410.82	628.62	314.78	6.09	-0.52	0.006
112.00	-0.46	-0.24	0.00	-1.29	0.00	1.29	804.60	402.30	600.19	300.54	6.30	-0.52	0.005
114.00	-0.39	-0.22	0.00	-0.80	0.00	0.80	784.18	392.09	569.96	285.40	6.52	-0.52	0.003
116.00	-0.32	-0.18	0.00	-0.37	0.00	0.37	763.76	381.88	540.51	270.66	6.74	-0.52	0.002
118.00	0.00	-0.18	0.00	0.00	0.00	0.00	743.33	371.67	511.84	256.30	6.96	-0.52	0.000

Wind Loading - Shaft

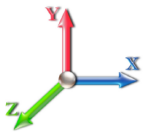
Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 45	

TES Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 25

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.85	7.442	8.19	202.45	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	7.442	8.19	200.29	0.650	0.000	2.00	7.280	4.73	38.7	0.0	345.4
4.00		1.00	0.85	7.442	8.19	198.12	0.650	0.000	2.00	7.202	4.68	38.3	0.0	341.7
6.00		1.00	0.85	7.442	8.19	195.96	0.650	0.000	2.00	7.124	4.63	37.9	0.0	337.9
8.00		1.00	0.85	7.442	8.19	193.80	0.650	0.000	2.00	7.046	4.58	37.5	0.0	334.2
10.00		1.00	0.85	7.442	8.19	191.64	0.650	0.000	2.00	6.968	4.53	37.1	0.0	330.5
12.00		1.00	0.85	7.442	8.19	189.48	0.650	0.000	2.00	6.890	4.48	36.7	0.0	326.7
14.00		1.00	0.85	7.442	8.19	187.31	0.650	0.000	2.00	6.811	4.43	36.2	0.0	323.0
16.00		1.00	0.86	7.534	8.29	186.29	0.650	0.000	2.00	6.733	4.38	36.3	0.0	319.2
18.00		1.00	0.88	7.723	8.50	186.41	0.650	0.000	2.00	6.655	4.33	36.7	0.0	315.5
20.00		1.00	0.90	7.896	8.69	186.27	0.650	0.000	2.00	6.577	4.28	37.1	0.0	311.7
22.00		1.00	0.92	8.056	8.86	185.89	0.650	0.000	2.00	6.499	4.22	37.4	0.0	308.0
24.00		1.00	0.94	8.205	9.03	185.34	0.650	0.000	2.00	6.421	4.17	37.7	0.0	304.3
26.00		1.00	0.95	8.345	9.18	184.61	0.650	0.000	2.00	6.342	4.12	37.8	0.0	300.5
28.00		1.00	0.97	8.476	9.32	183.75	0.650	0.000	2.00	6.264	4.07	38.0	0.0	296.8
30.00		1.00	0.98	8.600	9.46	182.77	0.650	0.000	2.00	6.186	4.02	38.0	0.0	293.0
32.00		1.00	1.00	8.717	9.59	181.67	0.650	0.000	2.00	6.108	3.97	38.1	0.0	289.3
34.00		1.00	1.01	8.829	9.71	180.48	0.650	0.000	2.00	6.030	3.92	38.1	0.0	285.6
36.00		1.00	1.02	8.936	9.83	179.20	0.650	0.000	2.00	5.952	3.87	38.0	0.0	281.8
38.00		1.00	1.03	9.039	9.94	177.84	0.650	0.000	2.00	5.873	3.82	38.0	0.0	278.1
40.00		1.00	1.04	9.137	10.05	176.41	0.650	0.000	2.00	5.795	3.77	37.9	0.0	274.3
42.00		1.00	1.05	9.231	10.15	174.91	0.650	0.000	2.00	5.717	3.72	37.7	0.0	270.6
44.00		1.00	1.06	9.322	10.25	173.35	0.650	0.000	2.00	5.639	3.67	37.6	0.0	266.9
45.13	Bot - Section 2	1.00	1.07	9.372	10.31	172.44	0.650	0.000	1.13	3.151	2.05	21.1	0.0	149.1
46.00		1.00	1.07	9.410	10.35	171.73	0.650	0.000	0.87	2.455	1.60	16.5	0.0	211.0
48.00		1.00	1.08	9.494	10.44	170.06	0.650	0.000	2.00	5.588	3.63	37.9	0.0	480.2
49.88	Top - Section 1	1.00	1.09	9.571	10.53	168.44	0.650	0.000	1.88	5.182	3.37	35.5	0.0	445.1
50.00		1.00	1.09	9.576	10.53	171.66	0.650	0.000	0.12	0.328	0.21	2.2	0.0	13.0
52.00		1.00	1.10	9.656	10.62	169.91	0.650	0.000	2.00	5.432	3.53	37.5	0.0	214.5
54.00		1.00	1.11	9.733	10.71	168.11	0.650	0.000	2.00	5.354	3.48	37.3	0.0	211.4
56.00		1.00	1.12	9.807	10.79	166.27	0.650	0.000	2.00	5.276	3.43	37.0	0.0	208.3
58.00		1.00	1.13	9.880	10.87	164.40	0.650	0.000	2.00	5.198	3.38	36.7	0.0	205.2
60.00		1.00	1.14	9.951	10.95	162.49	0.650	0.000	2.00	5.119	3.33	36.4	0.0	202.1
62.00		1.00	1.14	10.020	11.02	160.54	0.650	0.000	2.00	5.041	3.28	36.1	0.0	199.0
64.00		1.00	1.15	10.087	11.10	158.56	0.650	0.000	2.00	4.963	3.23	35.8	0.0	195.8
66.00		1.00	1.16	10.153	11.17	156.55	0.650	0.000	2.00	4.885	3.18	35.5	0.0	192.7
68.00		1.00	1.17	10.217	11.24	154.51	0.650	0.000	2.00	4.807	3.12	35.1	0.0	189.6
69.00	Appurtenance(s)	1.00	1.17	10.248	11.27	153.48	0.650	0.000	1.00	2.374	1.54	17.4	0.0	93.6
70.00		1.00	1.17	10.279	11.31	152.44	0.650	0.000	1.00	2.355	1.53	17.3	0.0	92.9
72.00		1.00	1.18	10.340	11.37	150.34	0.650	0.000	2.00	4.650	3.02	34.4	0.0	183.4
74.00		1.00	1.19	10.400	11.44	148.22	0.650	0.000	2.00	4.572	2.97	34.0	0.0	180.3
75.00	Appurtenance(s)	1.00	1.19	10.430	11.47	147.15	0.650	0.000	1.00	2.257	1.47	16.8	0.0	89.0
76.00		1.00	1.19	10.459	11.50	146.08	0.650	0.000	1.00	2.237	1.45	16.7	0.0	88.2
78.00		1.00	1.20	10.516	11.57	143.91	0.650	0.000	2.00	4.416	2.87	33.2	0.0	174.0
80.00		1.00	1.21	10.572	11.63	141.71	0.650	0.000	2.00	4.338	2.82	32.8	0.0	170.9
82.00		1.00	1.21	10.627	11.69	139.50	0.650	0.000	2.00	4.260	2.77	32.4	0.0	167.8
83.00	Appurtenance(s)	1.00	1.22	10.654	11.72	138.38	0.650	0.000	1.00	2.101	1.37	16.0	0.0	82.7

Wind Loading - Shaft

Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 46	

84.00	1.00	1.22	10.681	11.75	137.26	0.650	0.000	1.00	2.081	1.35	15.9	0.0	81.9
85.00 Appurtenance(s)	1.00	1.22	10.708	11.78	136.14	0.650	0.000	1.00	2.061	1.34	15.8	0.0	81.2
86.00	1.00	1.23	10.734	11.81	135.01	0.650	0.000	1.00	2.042	1.33	15.7	0.0	80.4
88.00	1.00	1.23	10.787	11.87	132.73	0.650	0.000	2.00	4.025	2.62	31.0	0.0	158.4
90.00	1.00	1.24	10.838	11.92	130.44	0.650	0.000	2.00	3.947	2.57	30.6	0.0	155.3
91.00 Appurtenance(s)	1.00	1.24	10.863	11.95	129.28	0.650	0.000	1.00	1.944	1.26	15.1	0.0	76.5
91.29 Bot - Section 3	1.00	1.24	10.870	11.96	128.94	0.650	0.000	0.29	0.567	0.37	4.4	0.0	22.3
92.00	1.00	1.24	10.888	11.98	128.12	0.650	0.000	0.71	1.380	0.90	10.7	0.0	86.2
94.00	1.00	1.25	10.937	12.03	125.79	0.650	0.000	2.00	3.854	2.51	30.1	0.0	240.6
94.71 Top - Section 2	1.00	1.25	10.955	12.05	124.96	0.650	0.000	0.71	1.349	0.88	10.6	0.0	84.2
96.00	1.00	1.25	10.986	12.08	125.58	0.650	0.000	1.29	2.427	1.58	19.1	0.0	57.6
98.00 Appurtenance(s)	1.00	1.26	11.034	12.14	123.22	0.650	0.000	2.00	3.698	2.40	29.2	0.0	87.7
100.00	1.00	1.27	11.081	12.19	120.84	0.650	0.000	2.00	3.620	2.35	28.7	0.0	85.9
102.00	1.00	1.27	11.127	12.24	118.45	0.650	0.000	2.00	3.541	2.30	28.2	0.0	84.0
104.00	1.00	1.28	11.173	12.29	116.04	0.650	0.000	2.00	3.463	2.25	27.7	0.0	82.1
106.00	1.00	1.28	11.218	12.34	113.62	0.650	0.000	2.00	3.385	2.20	27.2	0.0	80.2
107.00 Appurtenance(s)	1.00	1.28	11.240	12.36	112.41	0.650	0.000	1.00	1.663	1.08	13.4	0.0	39.4
108.00	1.00	1.29	11.262	12.39	111.19	0.650	0.000	1.00	1.644	1.07	13.2	0.0	39.0
110.00	1.00	1.29	11.305	12.44	108.74	0.650	0.000	2.00	3.229	2.10	26.1	0.0	76.5
112.00	1.00	1.30	11.348	12.48	106.27	0.650	0.000	2.00	3.151	2.05	25.6	0.0	74.6
114.00	1.00	1.30	11.391	12.53	103.80	0.650	0.000	2.00	3.072	2.00	25.0	0.0	72.8
116.00	1.00	1.31	11.432	12.58	101.31	0.650	0.000	2.00	2.994	1.95	24.5	0.0	70.9
118.00 Appurtenance(s)	1.00	1.31	11.474	12.62	98.81	0.650	0.000	2.00	2.916	1.90	23.9	0.0	69.0
							Totals:	**118.00**			**2,010.0**		**13,161.4**

Discrete Appurtenance Forces

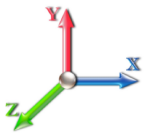
Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 47	

Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 25

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	118.00	DS1F03F36D-N	1	11.696	12.865	1.00	1.00	6.75	71.00	0.000	11.250	86.84	0.00	976.96
2	118.00	Collar Mount	1	11.474	12.621	1.00	1.00	2.50	220.00	0.000	0.000	31.55	0.00	0.00
3	107.00	ACU-A20-N	4	11.240	12.364	0.54	0.80	0.30	4.00	0.000	0.000	3.71	0.00	0.00
4	107.00	1900 MHz 4X45 RRH	3	11.240	12.364	0.54	0.80	4.36	180.00	0.000	0.000	53.88	0.00	0.00
5	107.00	800 MHz RRU Filter	3	11.240	12.364	0.54	0.80	3.86	192.00	0.000	0.000	47.71	0.00	0.00
6	107.00	TD-RRH8x20-25	3	11.240	12.364	0.54	0.80	6.51	210.00	0.000	0.000	80.52	0.00	0.00
7	107.00	Universal Ring Mount	1	11.240	12.364	1.00	1.00	5.00	350.00	0.000	0.000	61.82	0.00	0.00
8	107.00	Low Profile Platform	1	11.240	12.364	1.00	1.00	28.00	2000.00	0.000	0.000	346.18	0.00	0.00
9	107.00	APXVSPP18-C-A20	3	11.240	12.364	0.66	0.80	15.98	171.00	0.000	0.000	197.52	0.00	0.00
10	107.00	APXV9TM14-ALU-120	3	11.262	12.388	0.63	0.80	12.02	168.00	0.000	1.000	148.91	0.00	148.91
11	98.00	Samsung MT6407-77A	3	11.034	12.137	0.52	0.75	7.39	238.20	0.000	0.000	89.65	0.00	0.00
12	98.00	JMA MX06FRO660-03	6	11.034	12.137	0.65	0.75	38.64	522.60	0.000	0.000	468.99	0.00	0.00
13	98.00	Amphenol	3	11.034	12.137	0.55	0.75	12.43	51.00	0.000	0.000	150.91	0.00	0.00
14	98.00	Low Profile Platform	1	11.034	12.137	1.00	1.00	28.00	2100.00	0.000	0.000	339.84	0.00	0.00
15	98.00	HRK12 (Handrail Kit)	1	11.034	12.137	1.00	1.00	6.75	261.72	0.000	0.000	81.93	0.00	0.00
16	98.00	Samsung RF4439d-25A	3	11.034	12.137	0.63	0.75	3.50	224.10	0.000	0.000	42.46	0.00	0.00
17	98.00	Samsung RF4440d-13A	3	11.034	12.137	0.60	0.75	3.36	210.99	0.000	0.000	40.79	0.00	0.00
18	98.00	Commscope	1	11.034	12.137	0.75	0.75	1.40	15.21	0.000	0.000	17.02	0.00	0.00
19	98.00	PRK-1245 (kicker kit)	1	11.034	12.137	1.00	1.00	9.50	464.91	0.000	0.000	115.30	0.00	0.00
20	91.00	DC6-48-60-18-8F	2	10.863	11.949	1.00	1.00	1.84	63.60	0.000	0.000	21.99	0.00	0.00
21	91.00	RRUS-11	3	10.863	11.949	0.54	0.80	7.11	165.00	0.000	0.000	84.93	0.00	0.00
22	91.00	LGP21401	6	10.863	11.949	0.54	0.80	4.15	84.60	0.000	0.000	49.57	0.00	0.00
23	91.00	P65-16-XLH-RR	3	10.863	11.949	0.60	0.80	14.69	159.00	0.000	0.000	175.51	0.00	0.00
24	91.00	7770.00	3	10.863	11.949	0.58	0.80	9.64	105.00	0.000	0.000	115.14	0.00	0.00
25	91.00	Low Profile Platform	1	10.863	11.949	1.00	1.00	25.00	1349.00	0.000	0.000	298.73	0.00	0.00
26	91.00	RRUS 32 B30	3	10.863	11.949	0.65	0.80	5.33	180.00	0.000	0.000	63.65	0.00	0.00
27	91.00	RRUS 32 B2	3	10.863	11.949	0.65	0.80	5.33	159.00	0.000	0.000	63.65	0.00	0.00
28	91.00	QS66512-2	3	10.863	11.949	0.72	0.80	17.56	231.00	0.000	0.000	209.84	0.00	0.00
29	85.00	12.5' - 2" Horizontal Pipe	1	10.708	11.779	1.00	1.00	2.97	45.75	0.000	0.000	34.97	0.00	0.00
30	83.00	Platform w/ Handrail kit	1	10.654	11.720	1.00	1.00	40.00	1868.20	0.000	0.000	468.80	0.00	0.00
31	83.00	VHLP3-11W	1	10.654	11.720	1.00	1.00	10.68	53.00	0.000	0.000	125.17	0.00	0.00
32	83.00	IP20C	1	10.654	11.720	0.50	0.75	0.53	11.50	0.000	0.000	6.18	0.00	0.00
33	83.00	S20057A1 TMA	3	10.654	11.720	0.50	0.75	0.02	33.00	0.000	0.000	0.18	0.00	0.00
34	83.00	MS-KI22-5 (Kickers w/o	1	10.654	11.720	1.00	1.00	6.33	146.00	0.000	0.000	74.19	0.00	0.00
35	83.00	RFS - APXV18-209014	3	10.654	11.720	0.55	0.75	5.96	56.10	0.000	0.000	69.86	0.00	0.00
36	83.00	Commscope -	3	10.654	11.720	0.60	0.75	20.65	149.40	0.000	0.000	241.97	0.00	0.00
37	83.00	RFS - ATMAA1412D-1A2	3	10.654	11.720	0.50	0.75	1.76	39.00	0.000	0.000	20.67	0.00	0.00
38	83.00	Kathrein - 782 11054 -	3	10.654	11.720	0.50	0.75	0.23	5.40	0.000	0.000	2.65	0.00	0.00
39	75.00	Standoff Mount	1	10.430	11.473	1.00	1.00	2.63	40.00	0.000	0.000	30.17	0.00	0.00
40	75.00	GPS	1	10.430	11.473	1.00	1.00	1.00	10.00	0.000	0.000	11.47	0.00	0.00
41	69.00	MC-PK8-DSH	1	10.248	11.273	1.00	1.00	37.59	1727.00	0.000	0.000	423.75	0.00	0.00
42	69.00	RDIDC-9181-OF-48	1	10.248	11.273	1.00	1.00	2.01	21.90	0.000	0.000	22.66	0.00	0.00
43	69.00	TA08025-B605	3	10.248	11.273	0.50	0.75	2.95	225.00	0.000	0.000	33.31	0.00	0.00
44	69.00	TA08025-B604	3	10.248	11.273	0.50	0.75	2.95	191.70	0.000	0.000	33.31	0.00	0.00
45	69.00	Commscope	3	10.248	11.273	0.55	0.75	19.71	212.40	0.000	0.000	222.23	0.00	0.00
							Totals:		**14,986.28**			**5,310.07**		

Total Applied Force Summary

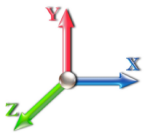
Structure:	CT46132-A-SBA		**Code:**	EIA/TIA-222-G	1/20/2022
Site Name:	Newtown-ferris Rd		**Exposure:**	C	
Height:	118.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 48

TES Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 25

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
2.00		38.74	415.00	0.00	0.00
4.00		38.32	411.26	0.00	0.00
6.00		37.91	407.52	0.00	0.00
8.00		37.49	403.78	0.00	0.00
10.00		37.08	400.04	0.00	0.00
12.00		36.66	396.29	0.00	0.00
14.00		36.24	392.55	0.00	0.00
16.00		36.27	388.81	0.00	0.00
18.00		36.75	385.07	0.00	0.00
20.00		37.13	381.33	0.00	0.00
22.00		37.43	377.59	0.00	0.00
24.00		37.67	373.85	0.00	0.00
26.00		37.84	370.11	0.00	0.00
28.00		37.96	366.37	0.00	0.00
30.00		38.04	362.62	0.00	0.00
32.00		38.07	358.88	0.00	0.00
34.00		38.07	355.14	0.00	0.00
36.00		38.03	351.40	0.00	0.00
38.00		37.96	347.66	0.00	0.00
40.00		37.86	343.92	0.00	0.00
42.00		37.73	340.18	0.00	0.00
44.00		37.58	336.44	0.00	0.00
45.13		21.12	188.43	0.00	0.00
46.00		16.52	241.28	0.00	0.00
48.00		37.94	549.74	0.00	0.00
49.88		35.46	510.50	0.00	0.00
50.00		2.25	17.15	0.00	0.00
52.00		37.50	284.13	0.00	0.00
54.00		37.26	281.01	0.00	0.00
56.00		37.00	277.90	0.00	0.00
58.00		36.72	274.78	0.00	0.00
60.00		36.42	271.66	0.00	0.00
62.00		36.12	268.54	0.00	0.00
64.00		35.80	265.43	0.00	0.00
66.00		35.46	262.31	0.00	0.00
68.00		35.11	259.19	0.00	0.00
69.00	(11) attachments	752.65	2506.43	0.00	0.00
70.00		17.30	125.66	0.00	0.00
72.00		34.38	248.97	0.00	0.00
74.00		34.00	245.86	0.00	0.00
75.00	(2) attachments	58.47	171.76	0.00	0.00
76.00		16.73	120.82	0.00	0.00
78.00		33.20	239.30	0.00	0.00
80.00		32.79	236.18	0.00	0.00
82.00		32.37	233.07	0.00	0.00
83.00	(19) attachments	1025.67	2476.96	0.00	0.00

Total Applied Force Summary

Structure:	CT46132-A-SBA		**Code:**	EIA/TIA-222-G	1/20/2022
Site Name:	Newtown-ferris Rd		**Exposure:**	C	
Height:	118.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 49

Tower Engineering Solutions

84.00		15.89	106.50	0.00	0.00
85.00	(1) attachments	50.75	151.47	0.00	0.00
86.00		15.67	104.95	0.00	0.00
88.00		31.04	207.55	0.00	0.00
90.00		30.58	204.43	0.00	0.00
91.00	(27) attachments	1098.10	2597.25	0.00	0.00
91.29		4.40	27.16	0.00	0.00
92.00		10.75	97.92	0.00	0.00
94.00		30.14	273.75	0.00	0.00
94.71		10.57	95.98	0.00	0.00
96.00		19.06	78.99	0.00	0.00
98.00	(22) attachments	1376.06	4209.66	0.00	0.00
100.00		28.68	91.90	0.00	0.00
102.00		28.18	90.03	0.00	0.00
104.00		27.67	88.16	0.00	0.00
106.00		27.15	86.29	0.00	0.00
107.00	(21) attachments	953.62	3317.44	0.00	148.91
108.00		13.24	40.00	0.00	0.00
110.00		26.10	78.59	0.00	0.00
112.00		25.56	76.72	0.00	0.00
114.00		25.02	74.85	0.00	0.00
116.00		24.48	72.98	0.00	0.00
118.00	(2) attachments	142.32	362.11	0.00	976.96
	Totals:	**7,320.10**	**31,357.52**	**0.00**	**1,125.87**

Linear Appurtenance Segment Forces (Factored)

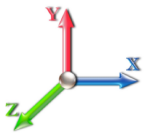
Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 50	

Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 25

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
2.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.040	0.000	7.442	0.00	0.32
2.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.040	0.000	7.442	0.00	3.98
4.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.040	0.000	7.442	0.00	0.32
4.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.040	0.000	7.442	0.00	3.98
6.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.041	0.000	7.442	0.00	0.32
6.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.041	0.000	7.442	0.00	3.98
8.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.041	0.000	7.442	0.00	0.32
8.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.041	0.000	7.442	0.00	3.98
10.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.042	0.000	7.442	0.00	0.32
10.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.042	0.000	7.442	0.00	3.98
12.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.042	0.000	7.442	0.00	0.32
12.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.042	0.000	7.442	0.00	3.98
14.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.043	0.000	7.442	0.00	0.32
14.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.043	0.000	7.442	0.00	3.98
16.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.043	0.000	7.534	0.00	0.32
16.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.043	0.000	7.534	0.00	3.98
18.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.044	0.000	7.723	0.00	0.32
18.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.044	0.000	7.723	0.00	3.98
20.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.044	0.000	7.896	0.00	0.32
20.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.044	0.000	7.896	0.00	3.98
22.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.045	0.000	8.056	0.00	0.32
22.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.045	0.000	8.056	0.00	3.98
24.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.045	0.000	8.205	0.00	0.32
24.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.045	0.000	8.205	0.00	3.98
26.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.046	0.000	8.345	0.00	0.32
26.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.046	0.000	8.345	0.00	3.98
28.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.047	0.000	8.476	0.00	0.32
28.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.047	0.000	8.476	0.00	3.98
30.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.047	0.000	8.600	0.00	0.32
30.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.047	0.000	8.600	0.00	3.98
32.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.048	0.000	8.717	0.00	0.32
32.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.048	0.000	8.717	0.00	3.98
34.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.048	0.000	8.829	0.00	0.32
34.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.048	0.000	8.829	0.00	3.98
36.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.049	0.000	8.936	0.00	0.32
36.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.049	0.000	8.936	0.00	3.98
38.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.050	0.000	9.039	0.00	0.32
38.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.050	0.000	9.039	0.00	3.98
40.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.050	0.000	9.137	0.00	0.32
40.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.050	0.000	9.137	0.00	3.98
42.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.051	0.000	9.231	0.00	0.32
42.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.051	0.000	9.231	0.00	3.98
44.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.052	0.000	9.322	0.00	0.32
44.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.052	0.000	9.322	0.00	3.98
45.13	1/2"	Yes	1.13	0.000	0.00	0.00	0.00	0.052	0.000	9.372	0.00	0.18
45.13	1.75" Hybrid	Yes	1.13	0.000	1.75	0.16	0.00	0.052	0.000	9.372	0.00	2.25
46.00	1/2"	Yes	0.87	0.000	0.00	0.00	0.00	0.053	0.000	9.410	0.00	0.14

Linear Appurtenance Segment Forces (Factored)

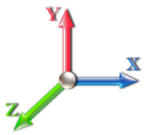
Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 51	

Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 25

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
46.00	1.75" Hybrid	Yes	0.87	0.000	1.75	0.13	0.00	0.053	0.000	9.410	0.00	1.73
48.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.053	0.000	9.494	0.00	0.32
48.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.053	0.000	9.494	0.00	3.98
49.88	1/2"	Yes	1.88	0.000	0.00	0.00	0.00	0.054	0.000	9.571	0.00	0.30
49.88	1.75" Hybrid	Yes	1.88	0.000	1.75	0.27	0.00	0.054	0.000	9.571	0.00	3.74
50.00	1/2"	Yes	0.12	0.000	0.00	0.00	0.00	0.053	0.000	9.576	0.00	0.02
50.00	1.75" Hybrid	Yes	0.12	0.000	1.75	0.02	0.00	0.053	0.000	9.576	0.00	0.24
52.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.054	0.000	9.656	0.00	0.32
52.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.054	0.000	9.656	0.00	3.98
54.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.054	0.000	9.733	0.00	0.32
54.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.054	0.000	9.733	0.00	3.98
56.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.055	0.000	9.807	0.00	0.32
56.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.055	0.000	9.807	0.00	3.98
58.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.056	0.000	9.880	0.00	0.32
58.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.056	0.000	9.880	0.00	3.98
60.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.057	0.000	9.951	0.00	0.32
60.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.057	0.000	9.951	0.00	3.98
62.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.058	0.000	10.020	0.00	0.32
62.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.058	0.000	10.020	0.00	3.98
64.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	10.087	0.00	0.32
64.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.059	0.000	10.087	0.00	3.98
66.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.060	0.000	10.153	0.00	0.32
66.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.060	0.000	10.153	0.00	3.98
68.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.061	0.000	10.217	0.00	0.32
68.00	1.75" Hybrid	Yes	2.00	0.000	1.75	0.29	0.00	0.061	0.000	10.217	0.00	3.98
69.00	1/2"	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	10.248	0.00	0.16
69.00	1.75" Hybrid	Yes	1.00	0.000	1.75	0.15	0.00	0.061	0.000	10.248	0.00	1.99
70.00	1/2"	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	10.279	0.00	0.16
72.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.340	0.00	0.32
74.00	1/2"	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.400	0.00	0.32
75.00	1/2"	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	10.430	0.00	0.16
									Totals:		**0.0**	**149.4**

Calculated Forces

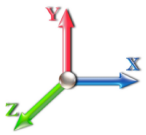
Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 52	

Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 25

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-31.36	-7.33	0.00	-624.09	0.00	624.09	3634.70	1817.35	6397.77	3203.64	0.00	0.000	0.000	0.203
2.00	-30.94	-7.30	0.00	-609.44	0.00	609.44	3607.15	1803.57	6280.28	3144.81	0.01	-0.030	0.000	0.202
4.00	-30.52	-7.28	0.00	-594.83	0.00	594.83	3579.34	1789.67	6163.42	3086.29	0.03	-0.059	0.000	0.201
6.00	-30.11	-7.26	0.00	-580.27	0.00	580.27	3551.29	1775.64	6047.19	3028.09	0.06	-0.090	0.000	0.200
8.00	-29.70	-7.24	0.00	-565.75	0.00	565.75	3522.98	1761.49	5931.61	2970.21	0.10	-0.120	0.000	0.199
10.00	-29.30	-7.21	0.00	-551.28	0.00	551.28	3494.42	1747.21	5816.69	2912.67	0.16	-0.151	0.000	0.198
12.00	-28.90	-7.19	0.00	-536.85	0.00	536.85	3465.61	1732.80	5702.44	2855.46	0.23	-0.181	0.000	0.196
14.00	-28.50	-7.17	0.00	-522.46	0.00	522.46	3436.54	1718.27	5588.89	2798.60	0.31	-0.212	0.000	0.195
16.00	-28.11	-7.15	0.00	-508.12	0.00	508.12	3407.22	1703.61	5476.05	2742.09	0.41	-0.244	0.000	0.194
18.00	-27.72	-7.12	0.00	-493.83	0.00	493.83	3377.65	1688.83	5363.92	2685.95	0.52	-0.275	0.000	0.192
20.00	-27.34	-7.10	0.00	-479.58	0.00	479.58	3347.83	1673.91	5252.53	2630.17	0.64	-0.307	0.000	0.191
22.00	-26.95	-7.08	0.00	-465.38	0.00	465.38	3317.75	1658.87	5141.89	2574.76	0.77	-0.339	0.000	0.189
24.00	-26.58	-7.05	0.00	-451.23	0.00	451.23	3287.42	1643.71	5032.01	2519.74	0.92	-0.371	0.000	0.187
26.00	-26.20	-7.03	0.00	-437.13	0.00	437.13	3256.84	1628.42	4922.91	2465.11	1.08	-0.403	0.000	0.185
28.00	-25.83	-7.00	0.00	-423.08	0.00	423.08	3219.51	1609.75	4804.91	2406.03	1.26	-0.436	0.000	0.184
30.00	-25.47	-6.97	0.00	-409.08	0.00	409.08	3178.67	1589.33	4683.16	2345.06	1.45	-0.468	0.000	0.182
32.00	-25.10	-6.95	0.00	-395.13	0.00	395.13	3137.83	1568.91	4562.98	2284.88	1.65	-0.501	0.000	0.181
34.00	-24.75	-6.92	0.00	-381.24	0.00	381.24	3096.99	1548.49	4444.36	2225.48	1.87	-0.534	0.000	0.179
36.00	-24.39	-6.89	0.00	-367.40	0.00	367.40	3056.15	1528.07	4327.30	2166.87	2.10	-0.567	0.000	0.178
38.00	-24.04	-6.86	0.00	-353.62	0.00	353.62	3015.30	1507.65	4211.81	2109.03	2.35	-0.600	0.000	0.176
40.00	-23.69	-6.84	0.00	-339.89	0.00	339.89	2974.46	1487.23	4097.87	2051.98	2.61	-0.633	0.000	0.174
42.00	-23.35	-6.81	0.00	-326.21	0.00	326.21	2933.62	1466.81	3985.50	1995.71	2.88	-0.666	0.000	0.171
44.00	-23.01	-6.78	0.00	-312.60	0.00	312.60	2892.78	1446.39	3874.69	1940.23	3.16	-0.699	0.000	0.169
45.13	-22.82	-6.76	0.00	-304.94	0.00	304.94	2869.71	1434.85	3812.78	1909.22	3.33	-0.718	0.000	0.168
46.00	-22.58	-6.75	0.00	-299.06	0.00	299.06	2851.94	1425.97	3765.45	1885.52	3.46	-0.733	0.000	0.167
48.00	-22.02	-6.72	0.00	-285.56	0.00	285.56	2811.10	1405.55	3657.76	1831.60	3.78	-0.766	0.000	0.164
49.88	-21.51	-6.68	0.00	-272.93	0.00	272.93	2333.69	1166.84	3066.96	1535.76	4.09	-0.797	0.000	0.187
50.00	-21.49	-6.69	0.00	-272.13	0.00	272.13	2332.20	1166.10	3062.32	1533.44	4.11	-0.799	0.000	0.187
52.00	-21.20	-6.66	0.00	-258.76	0.00	258.76	2307.18	1153.59	2985.35	1494.89	4.45	-0.835	0.000	0.182
54.00	-20.92	-6.63	0.00	-245.44	0.00	245.44	2281.92	1140.96	2909.02	1456.67	4.81	-0.872	0.000	0.178
56.00	-20.64	-6.60	0.00	-232.18	0.00	232.18	2256.40	1128.20	2833.34	1418.77	5.18	-0.908	0.000	0.173
58.00	-20.36	-6.57	0.00	-218.98	0.00	218.98	2223.07	1111.54	2748.96	1376.53	5.57	-0.944	0.000	0.168
60.00	-20.08	-6.54	0.00	-205.83	0.00	205.83	2189.04	1094.52	2665.01	1334.49	5.97	-0.979	0.000	0.163
62.00	-19.81	-6.52	0.00	-192.74	0.00	192.74	2155.00	1077.50	2582.36	1293.10	6.39	-1.013	0.000	0.158
64.00	-19.54	-6.49	0.00	-179.71	0.00	179.71	2120.97	1060.48	2501.02	1252.37	6.82	-1.047	0.000	0.153
66.00	-19.28	-6.46	0.00	-166.74	0.00	166.74	2086.94	1043.47	2420.97	1212.28	7.27	-1.080	0.000	0.147
68.00	-19.02	-6.42	0.00	-153.83	0.00	153.83	2052.90	1026.45	2342.23	1172.85	7.73	-1.112	0.000	0.140
69.00	-16.52	-5.63	0.00	-147.40	0.00	147.40	2035.88	1017.94	2303.34	1153.38	7.96	-1.128	0.000	0.136
70.00	-16.40	-5.61	0.00	-141.78	0.00	141.78	2018.87	1009.43	2264.79	1134.08	8.20	-1.143	0.000	0.133
72.00	-16.15	-5.58	0.00	-130.55	0.00	130.55	1984.83	992.42	2188.65	1095.95	8.68	-1.173	0.000	0.127
74.00	-15.90	-5.55	0.00	-119.38	0.00	119.38	1950.80	975.40	2113.81	1058.48	9.18	-1.203	0.000	0.121
75.00	-15.73	-5.49	0.00	-113.83	0.00	113.83	1933.78	966.89	2076.88	1039.98	9.44	-1.217	0.000	0.118
76.00	-15.60	-5.48	0.00	-108.34	0.00	108.34	1916.76	958.38	2040.27	1021.65	9.69	-1.231	0.000	0.114
78.00	-15.36	-5.45	0.00	-97.38	0.00	97.38	1882.73	941.37	1968.04	985.48	10.21	-1.257	0.000	0.107
80.00	-15.13	-5.42	0.00	-86.49	0.00	86.49	1848.70	924.35	1897.11	949.96	10.75	-1.282	0.000	0.099
82.00	-14.89	-5.38	0.00	-75.66	0.00	75.66	1814.66	907.33	1827.48	915.10	11.29	-1.306	0.000	0.091
83.00	-12.44	-4.30	0.00	-70.28	0.00	70.28	1797.65	898.82	1793.15	897.91	11.56	-1.317	0.000	0.085
84.00	-12.33	-4.29	0.00	-65.98	0.00	65.98	1780.63	890.31	1759.15	880.88	11.84	-1.327	0.000	0.082

Calculated Forces

Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 53

85.00	-12.18	-4.23	0.00	-61.69	0.00	61.69	1763.61	881.81	1725.48	864.02	12.12	-1.338	0.000	0.078
86.00	-12.08	-4.22	0.00	-57.46	0.00	57.46	1746.59	873.30	1692.13	847.32	12.40	-1.348	0.000	0.075
88.00	-11.87	-4.19	0.00	-49.02	0.00	49.02	1712.56	856.28	1626.40	814.41	12.97	-1.366	0.000	0.067
90.00	-11.66	-4.15	0.00	-40.64	0.00	40.64	1678.53	839.26	1561.98	782.15	13.55	-1.382	0.000	0.059
91.00	-9.09	-2.99	0.00	-36.49	0.00	36.49	1661.51	830.75	1530.26	766.27	13.84	-1.389	0.000	0.053
91.29	-9.07	-2.99	0.00	-35.61	0.00	35.61	1656.52	828.26	1521.01	761.64	13.92	-1.391	0.000	0.052
92.00	-8.97	-2.98	0.00	-33.50	0.00	33.50	1644.49	822.25	1498.86	750.54	14.13	-1.396	0.000	0.050
94.00	-8.69	-2.94	0.00	-27.54	0.00	27.54	1610.46	805.23	1437.04	719.59	14.72	-1.409	0.000	0.044
94.71	-8.60	-2.93	0.00	-25.46	0.00	25.46	930.70	465.35	848.15	424.70	14.93	-1.413	0.000	0.069
96.00	-8.52	-2.91	0.00	-21.68	0.00	21.68	922.07	461.04	828.91	415.07	15.31	-1.420	0.000	0.062
98.00	-4.34	-1.43	0.00	-15.86	0.00	15.86	908.49	454.24	799.32	400.25	15.91	-1.433	0.000	0.044
100.00	-4.25	-1.40	0.00	-12.99	0.00	12.99	894.64	447.32	770.03	385.59	16.51	-1.444	0.000	0.038
102.00	-4.16	-1.37	0.00	-10.19	0.00	10.19	880.55	440.27	741.05	371.08	17.12	-1.454	0.000	0.032
104.00	-4.08	-1.34	0.00	-7.45	0.00	7.45	866.20	433.10	712.41	356.74	17.73	-1.461	0.000	0.026
106.00	-3.99	-1.31	0.00	-4.77	0.00	4.77	851.60	425.80	684.12	342.57	18.34	-1.467	0.000	0.019
107.00	-0.70	-0.27	0.00	-3.30	0.00	3.30	844.21	422.10	670.11	335.55	18.65	-1.469	0.000	0.011
108.00	-0.66	-0.26	0.00	-3.03	0.00	3.03	836.75	418.38	656.18	328.58	18.96	-1.471	0.000	0.010
110.00	-0.58	-0.23	0.00	-2.51	0.00	2.51	821.65	410.82	628.62	314.78	19.57	-1.474	0.000	0.009
112.00	-0.50	-0.20	0.00	-2.05	0.00	2.05	804.60	402.30	600.19	300.54	20.19	-1.477	0.000	0.007
114.00	-0.43	-0.18	0.00	-1.64	0.00	1.64	784.18	392.09	569.96	285.40	20.81	-1.479	0.000	0.006
116.00	-0.36	-0.15	0.00	-1.28	0.00	1.28	763.76	381.88	540.51	270.66	21.43	-1.481	0.000	0.005
118.00	0.00	-0.14	0.00	-0.98	0.00	0.98	743.33	371.67	511.84	256.30	22.05	-1.483	0.000	0.004

Final Analysis Summary

Structure:	CT46132-A-SBA	**Code:**	EIA/TIA-222-G	1/20/2022	
Site Name:	Newtown-ferris Rd	**Exposure:**	C		
Height:	118.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 54	

Tower Engineering Solutions

Reactions

Load Case	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)
1.2D + 1.6W 93 mph Wind	28.2	0.00	37.60	0.00	0.00	2416.06
0.9D + 1.6W 93 mph Wind	28.2	0.00	28.19	0.00	0.00	2385.84
1.2D + 1.0Di + 1.0Wi 50 mph Wind	8.3	0.00	63.63	0.00	0.00	720.03
1.2D + 1.0E	2.0	0.00	37.63	0.00	0.00	175.74
0.9D + 1.0E	2.0	0.00	28.22	0.00	0.00	173.37
1.0D + 1.0W 60 mph Wind	7.3	0.00	31.36	0.00	0.00	624.09

Max Stresses

Load Case	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Elev (ft)	Stress Ratio
1.2D + 1.6W 93 mph Wind	-37.60	-28.18	0.00	-2416.0	0.00	-2416.0	3634.70	1817.3	6397.77	3203.64	0.00	0.765
0.9D + 1.6W 93 mph Wind	-28.19	-28.17	0.00	-2385.8	0.00	-2385.8	3634.70	1817.3	6397.77	3203.64	0.00	0.753
1.2D + 1.0Di + 1.0Wi 50 mph Wind	-63.63	-8.31	0.00	-720.03	0.00	-720.03	3634.70	1817.3	6397.77	3203.64	0.00	0.242
1.2D + 1.0E	-25.92	-1.52	0.00	-85.32	0.00	-85.32	2333.69	1166.8	3066.96	1535.76	49.88	0.067
0.9D + 1.0E	-19.44	-1.49	0.00	-83.71	0.00	-83.71	2333.69	1166.8	3066.96	1535.76	49.88	0.063
1.0D + 1.0W 60 mph Wind	-31.36	-7.33	0.00	-624.09	0.00	-624.09	3634.70	1817.3	6397.77	3203.64	0.00	0.203

Monopole Mat Foundation Design

			Date: 1/20/2022
Customer Name:	Verizon	**EIA/TIA Standard:**	EIA-222-G
Site Name:		**Structure Height (Ft.):**	118
Site Number:	CT46132-A-SBA	**Engineer Name:**	J. Tibbetts
Engr. Number:	122330	**Engineer Login ID:**	

Foundation Info Obtained from: Drawings/Calculations

Structure Type: Monopole

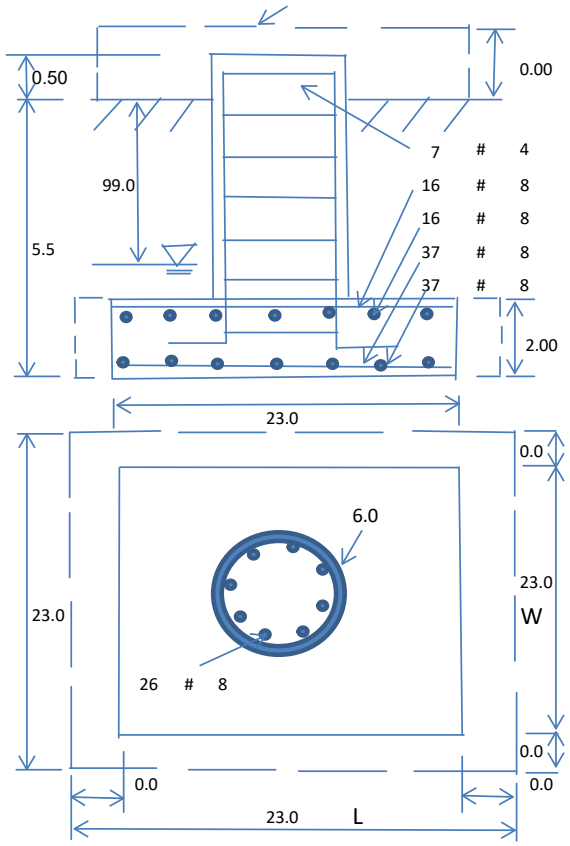
Analysis or Design? Analysis

Base Reactions (Factored):

Axial Load (Kips):	37.6	Shear Force (Kips):	28.2
Uplift Force (Kips):	0.0	Moment (Kips-ft):	2416.1
Allowable overstress %:	5.0%		

Foundation Geometries:

		Mods required -Yes/No ?:	No
Diameter of Pier (ft.):	6.0	Depth of Base BG (ft.):	5.5
Pier Height A. G. (ft.):	0.50	Thickness of Pad (ft):	2.00
Length of Pad (ft.):	23	Width of Pad (ft.):	23
Final Length of pad (ft)	23.0	Final width of pad (ft):	23.0



Material Properties and Reabr Info:

Concrete Strength (psi):	4000	Steel Elastic Modulus:	29000	ksi
Vertical bar yield (ksi)	60	Tie steel yield (ksi):	60	
Vertical Rebar Size #:	8	Tie / Stirrup Size #:	4	
Qty. of Vertical Rebars:	26	Tie Spacing (in):	12.0	
Pad Rebar Yield (Ksi):	60	Pad Steel Rebar Size (#):	8	
Concrete Cover (in.):	3	Unit Weight of Concrete:	150.0	pcf

Rebar at the bottom of the concrete pad:

Qty. of Rebar in Pad (L):	37	Qty. of Rebar in Pad (W):	37

Rebar at the top of the concrete pad:

Qty. of Rebar in Pad (L):	16	Qty. of Rebar in Pad (W):	16
Apply 1.35 factor for e/w Per G:	1.35		

Soil Design Parameters:

Soil Unit Weight (pcf):	155.0	Soil Buoyant Weight:	37.6	Pcf		
Water Table B.G.S. (ft):	99.0	Unit Weight of Water:	62.4	pcf	Angle from Top of Pad:	30
Ultimate Bearing Pressure (psf):	20000	Ultimate Skin Friction:	0	Psf	Angle from Bottm of Pad:	25
Consider Friction for O.T.M. (Y/N):	No	Consider Friction for bearing (Y/N):	Yes		Angle from Bottm of Pad:	25
Consider soil hor. resist. for OTM.:	No	Reduction factor on the maximum soil bearing pressure:	1.00			

Foundation Analysis and Design: Uplift Strength Reduction Factor: 0.75 — Compression Strength Reduction Factor: 0.75

Total Dry Soil Volume (cu. Ft.):	1752.54	Total Dry Soil Weight (Kips):	271.64
Total Buoyant Soil Volume (cu. Ft.):	0.00	Total Buoyant Soil Weight (Kips):	0.00
Total Effective Soil Weight (Kips):	271.64	Weight from the Concrete Block at Top (K):	0.00
Total Dry Concrete Volume (cu. Ft.):	1171.10	Total Dry Concrete Weight (Kips):	175.66
Total Buoyant Concrete Volume (cu. Ft.):	0.00	Total Buoyant Concrete Weight (Kips):	0.00
Total Effective Concrete Weight (Kips):	175.66	Total Vertical Load on Base (Kips):	484.91

Check Soil Capacities:

				Load/ Capacity Ratio	
Calculated Maxium Net Soil Pressure under the base (psf):	2216	<	Allowable Factored Soil Bearing (psf): 15000	0.15	OK!
Allowable Foundation Overturning Resistance (kips-ft.):	5062.0	>	Design Factored Momont (kips-ft): 2585	0.51	OK!
Factor of Safety Against Overturning (O. R. Moment/Design Moment):	1.96	OK!			

Check the capacities of Reinforceing Concrete:

Strength reduction factor (Flexure and axial tension):	0.90		Strength reduction factor (Shear):	0.75		
Strength reduction factor (Axial compresion):	0.65		Wind Load Factor on Concrete Design:	1.00		
					Load/ Capacity Ratio	
(1) Concrete Pier:						
Vertical Steel Rebar Area (sq. in./each):	0.79		Tie / Stirrup Area (sq. in./each):	0.20		
Calculated Moment Capacity (Mn,Kips-Ft):	2994.3	>	Design Factored Moment (Mu, Kips-F	2528.9	0.84	OK!
Calculated Shear Capacity (Kips):	501.5	>	Design Factored Shear (Kips):	28.2	0.06	OK!
Calculated Tension Capacity (Tn, Kips):	1109.2	>	Design Factored Tension (Tu Kips):	0.0	0.00	OK!
Calculated Compression Capacity (Pn, Kips):	7162.1	>	Design Factored Axial Load (Pu Kips):	37.6	0.01	OK!
Moment & Axial Strength Combination:	0.84	OK!	Check Tie Spacing (Design/Required):		1	OK!
Pier Reinforcement Ratio:	0.005		Reinforcement Ratio is satisfied per ACI			
(2).Concrete Pad:						
One-Way Design Shear Capacity (L-Direction, Kips):	536.8	>	One-Way Factored Shear (L-D. Kips):	178.6	0.33	OK!
One-Way Design Shear Capacity (W-Direction, Kips):	536.8	>	One-Way Factored Shear (W-D., Kips)	178.6	0.33	OK!
One-Way Design Shear Capacity (Corner-Corner. Kips):	539.3	>	One-Way Factored Shear (C-C, Kips):	179.3	0.33	OK!
Lower Steel Pad Reinforcement Ratio (L-Direct.):	0.0052	OK!	Lower Steel Pad Reinf. Ratio (W-Direc	0.0052		
Lower Steel Pad Moment Capacity (L-Direction. Kips-ft):	2573.6	>	Moment at Bottom (L-Dir. K-Ft):	844.9	0.33	OK!
Lower Steel Pad Moment Capacity (W-Direction. Kips-ft):	2573.6	>	Moment at Bottom (W-Dir. K-Ft):	844.9	0.33	OK!
Lower Steel Pad Moment Capacity (Corner-Corner,K-ft):	3600.2	>	Moment at Bottom (C-C Dir. K-Ft):	1194.9	0.33	OK!
Upper Steel Pad Reinforcement Ratio (L-Direct.):	0.0022	OK!	Upper Steel Reinf. Ratio (W-Dir.):	0.0022		
Upper Steel Pad Moment Capacity (L-Direc. Kips-ft):	1143.1	>	Moment at the top (L-Dir K-Ft):	429.0	0.38	OK!
Upper Steel Pad Moment Capacity (W-Direc. Kips-ft):	1143.1	>	Moment at the top (W-Dir K-Ft):	429.0	0.38	OK!
Upper Steel Pad Moment Capacity (Corner-Corner. K-ft):	1609.2	>	Moment at the top (C-C Dir. K-Ft):	401.6	0.25	OK!
(3).Check Punching Shear Capacity due to Moment in the Pier:						
Moment transferred by punching shear:	966.4	k-ft.	Max. factored shear stress v_{u_CD}:		4.3	Psi
Max. factored shear stress v_{u_AB}:	14.6	Psi	Factored shear Strength ϕv_n:		189.7	Psi
Max. factored shear stress v_u:	14.6	Psi	Check Usage of Punching Shear Capacity:		0.08	OK!

Maser Consulting Connecticut
2000 Midlantic Drive, Suite 100
Mt. Laurel, NJ 08054
(856) 797-0412
peter.albano@colliersengineering.com

Post-Modification Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10108307
Maser Consulting Connecticut Project #: 21777788A

October 25, 2021

Site Information	*Site ID:*	*468841-VZW / NEWTOWN WEST CT*
	Site Name:	*NEWTOWN WEST CT*
	Carrier Name:	*Verizon Wireless*
	Address:	*8 Ferris Road* *Newtown, Connecticut 06470* *Fairfield County*
	Latitude:	*41.389722°*
	Longitude:	*-73.338214°*
Structure Information	*Tower Type:*	*124-Ft Monopole*
	Mount Type:	*14.00-Ft Platform*

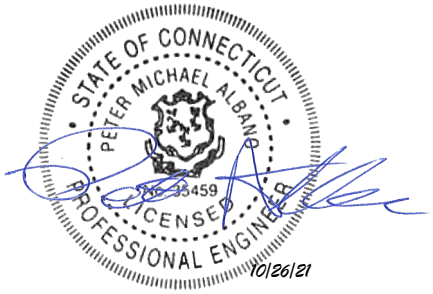
FUZE ID # 16092604

Analysis Results

Platform: **47.2% Pass**

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

Report Prepared By: Grant Walters



Executive Summary:

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

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

Sources of Information:

Document Type	Remarks
Radio Frequency Data Sheet (RFDS)	*Verizon RFDS, Site ID: 324507, dated October 22, 2021*
Mount Mapping Report	*Structural Components, Site ID: 16092604, dated April 16, 2021*
Previous Mount Analysis	*Maser Consulting Connecticut, Project #: 21777788A dated October 8, 2021*
Mount Modification Drawings	*Maser Consulting Connecticut, Project #: 21777788A dated October 26, 2021*

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H	
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT}:	116 mph
	Ice Wind Speed (3-sec. Gust):	50 mph
	Design Ice Thickness:	1.00 in
	Risk Category:	II
	Exposure Category:	B
	Topographic Category:	1
	Topographic Feature Considered:	N/A
	Topographic Method:	N/A
	Ground Elevation Factor, K_e:	0.972
Seismic Parameters:	S_S:	0.214
	S_1:	0.055
Maintenance Parameters:	Wind Speed (3-sec. Gust):	30 mph
	Maintenance Live Load, Lv:	250 lbs.
	Maintenance Live Load, Lm:	500 lbs.
Analysis Software:	RISA-3D (V17)	

Final Loading Configuration:

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
97.00	98.00	6	JMA	MX06FRO660-03	Added
		3	Samsung	MT6407-77A	
		1	Raycap	RVZDC-6627-PF-48	
		3	Samsung	RF4439d-25A	
		3	Samsung	RF4440d-13A	
		3	Amphenol Antel	BXA-70063-6CF-EDIN-X	Retained

The recent mount mapping did not report existing OVP units. However, it is acceptable to install up to any three (3) of the OVP model numbers listed below as required at any location other than the mount face without affecting the structural capacity of the mount. If OVP units are installed on the mount face, a mount re-analysis may be required.

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

BASELINE mount weight per SBA agreement: 3487.17 lbs

Increase in mount weight due to Verizon loading change per SBA agreement: 1008 lbs

The weights listed above include 3 sectors.

Standard Conditions:

1. All engineering services are performed on the basis that the information provided to Maser Consulting 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 to verify deviation will not adversely impact the analysis.

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

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

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

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

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

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

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

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

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

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

Analysis Results:

Component	Utilization %	Pass/Fail
Standoff_1	23.0 %	Pass
Standoff_2	11.4 %	Pass
Grating Angle	21.9 %	Pass
Cross Members	18.8 %	Pass
Face Horizontal	39.5 %	Pass
Mount Pipe	33.1 %	Pass
MOD Kicker	8.9 %	Pass
MOD Support Rail	8.5 %	Pass
MOD Corner Angle	25.8 %	Pass
Mount Connection	47.2 %	Pass

Structure Rating – *(Controlling Utilization of all Components)*	**47.2%**

Recommendation:

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

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

Attachments:

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


04.16.2021 14:04


04.16.2021 12:40

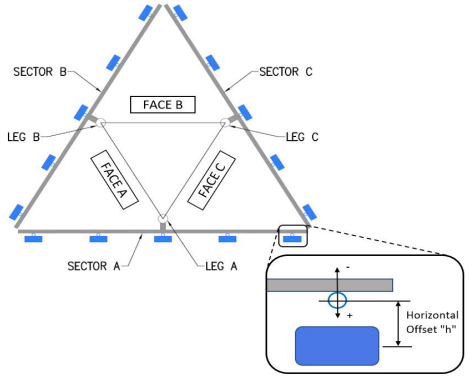
V4.0 Updated on 3-31-2021

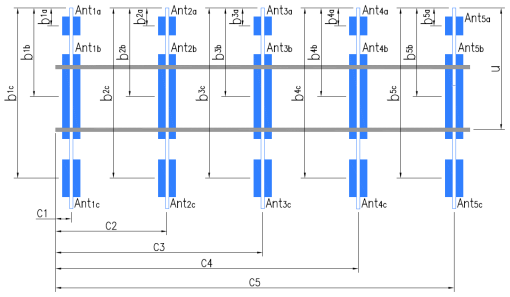
Antenna Mount Mapping Form (PATENT PENDING)

FCC #

Tower Owner:	SBA	**Mapping Date:**	4/16/2021
Site Name:	Newtown West	**Tower Type:**	Monopole
Site Number or ID:	16092604	**Tower Height (Ft.):**	124
Mapping Contractor:	Structural Components	**Mount Elevation (Ft.):**	100

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





Antenna Layout (Looking Out From Tower)

Mount Pipe Configuration and Geometries [Unit = Inches]

Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."
A1	2-3/8x .15x 72	41.25	10.00	C1	2-3/8x .15x 72	39.50	9.50
A2	2-3/8x .15x 72	47.00	85.50	C2	2-3/8x .15x 72	47.00	84.25
A3	2-3/8x .15x 72	41.00	136.00	C3	2-3/8x .15x 72	41.50	135.75
A4	2-3/8x .15x 72	41.50	160.25	C4	2-3/8x .15x 72	41.00	159.75
A5				C5			
A6				C6			
B1	2-3/8x .15x 72	41.00	9.00	D1			
B2	2-3/8x .15x 72	47.75	84.25	D2			
B3	2-3/8x .15x 72	41.00	134.25	D3			
B4	2-3/8x .15x 72	41.50	159.75	D4			
B5				D5			
B6				D6			

Distance between bottom rail and mount CL elevation (dim d). Unit is inches. See 'Mount Elev Ref' tab for details. :	
Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) :	32
Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) :	41

Please enter additional infomation or comments below.

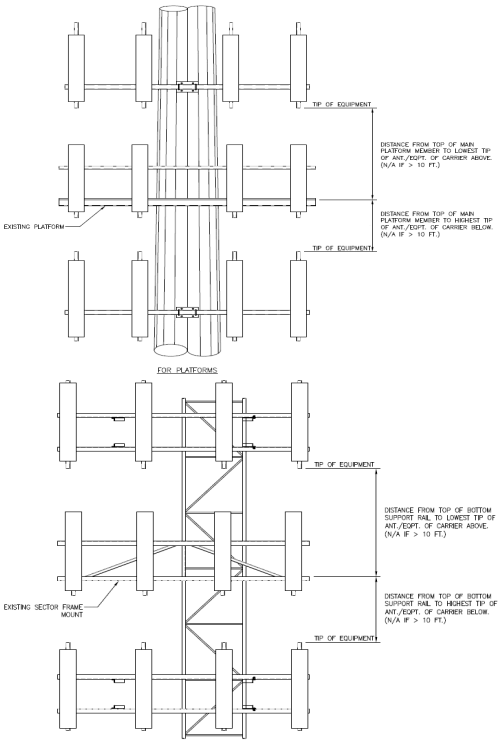
Tower Face Width at Mount Elev. (ft.):	3.75	Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):	21.5
For T-Arms/Platforms on monopoles, report the weld size from the main standoff to the plate bolting into the collar mount.			0.5

	Enter antenna model. If not labeled, enter "Unknown".						Mounting Locations [Units are inches and degrees]			Photos of antennas
Ants. Items	Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Vertical Distances"b_{1a}, b_{2a}, b_{3a}, b_{1b}...." (Inches)	Horiz. Offset "h" (Use "-" if Ant. is behind)	Antenna Azimuth (Degrees)	Photo Numbers
Sector A										
Ant_{1a}										
Ant_{1b}	unknown	6.50	8.00	72.00	jumper	100.688	33.00	10.50	60.00	85, 311
Ant_{1c}	rfsm11126427	6.75	0.75	5.00	1) 1-5/8' t	101.396	24.50	-3.25		92
Ant_{2a}										
Ant_{2b}	bxa70063/6cfedin	12.00	6.50	72.00	1) 1-5/8' t	101.125	33.50	9.75	45.00	107, 311
Ant_{2c}										
Ant_{3a}										
Ant_{3b}	mgd3-800t0	6.50	4.00	53.00	1) 1-5/8' t	101.063	28.25	7.00	60.00	122, 311
Ant_{3c}										
Ant_{4a}										
Ant_{4b}	unknown	6.50	8.00	72.00	jumper	100.75	32.50	11.25	60.00	138, 311
Ant_{4c}	rfsm11126427	6.25	0.75	5.00	1) 1-5/8' t	101.5	23.50	-4.00		145
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

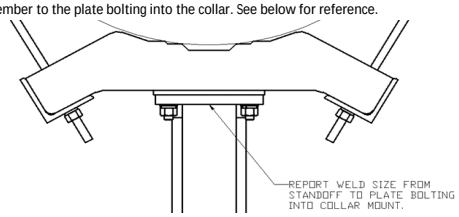
Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector	
Sector A:	60.00	Deg	Leg A:		Deg
Sector B:	180.00	Deg	Leg B:		Deg
Sector C:	300.00	Deg	Leg C:		Deg
Sector D:		Deg	Leg D:		Deg

Climbing Facility Information			
Location:	340.00	Deg	
Climbing Facility	Corrosion Type:		Moderate corrosion observed.
	Access:		Climbing path was obstructed.
	Condition:		Damaged safety cable.

Please insert a photo of the mount centerline measurement here.



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



Sector B										
Ant_{1a}										
Ant_{1b}	unknown	8.50	8.00	72.00	jumper	100.729	32.25	9.00	120.00	160, 316
Ant_{1c}	rfsm11126427	6.60	0.75	5.00	1) 1-5/8' t	101.333	25.00	-4.50		167
Ant_{2a}										
Ant_{2b}	slcp 2x6014	11.00	5.00	72.00	1) 1-5/8' t	101.188	33.50	9.00	120.00	182, 316
Ant_{2c}										
Ant_{3a}										
Ant_{3b}	bxa-171063-8bf-edin-	6.50	4.00	52.75	1) 1-5/8' t	101.052	28.38	7.00	120.00	199, 316
Ant_{3c}										
Ant_{4a}										
Ant_{4b}	unknown	6.50	8.00	72.00	jumper	100.75	32.50	9.00	120.00	216, 316
Ant_{4c}	rfsm11126427	6.50	0.75	5.00	1) 1-5/8' t	101.229	26.75	-4.50		222
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										
Sector C										
Ant_{1a}										
Ant_{1b}	unknown	6.25	8.00	48.00	jumper	101.208	25.00	9.25	240.00	237, 321
Ant_{1c}	rfsm11126427	6.25	0.75	5.00	1) 1-5/8' t	101	27.50	-4.00		244
Ant_{2a}										
Ant_{2b}	bxa70063/6cfedin	11.00	5.00	72.00	1) 1-5/8' t	101	35.00	9.00	260.00	259, 321
Ant_{2c}										
Ant_{3a}										
Ant_{3b}	mgd3-800t0	6.50	4.00	52.50	1) 1-5/8' t	101.063	28.75	7.00	260.00	275, 321
Ant_{3c}										
Ant_{4a}										
Ant_{4b}	unknown	6.25	8.00	48.00	jumper	101.354	24.75	9.50	260.00	291, 321
Ant_{4c}	rfsm11126427	6.50	0.75	5.00	1) 1-5/8' t	101.167	27.00	-4.25		298
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										
Sector D										
Ant_{1a}										
Ant_{1b}										
Ant_{1c}										
Ant_{2a}										
Ant_{2b}										
Ant_{2c}										
Ant_{3a}										
Ant_{3b}										
Ant_{3c}										
Ant_{4a}										
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

Observed Safety and Structural Issues During the Mount Mapping		
Issue #	Description of Issue	Photo #
1	safety climb was obstructed by mounts, and pretty rusty	305, 306, 307
2		
3		
4		
5		
6		
7		
8		

Observed Obstructions to Tower Lighting System					
If the tower lighting system is being obstructed by the carrier's equipment (for example: a light nested by the antennas), please provide photos and fill in the information below.					Photo #
Description of Obstruction:	305,				
Type of Light:		Photo #		Additional Comments:	
Lighting Technology:		Photo #			
Elevation (AGL) at base of light (Ft.):		Photo #			
Is a service loop available?		Photo #			
Is beacon installed on an extension?		Photo #			

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

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

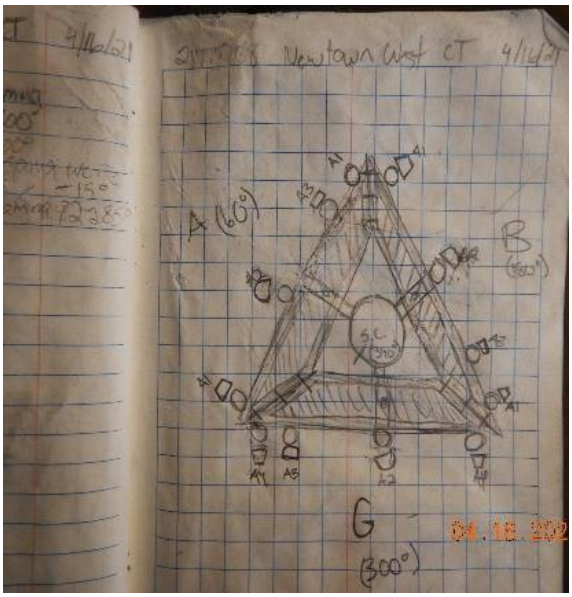
V4.0 Updated on 3-31-2021

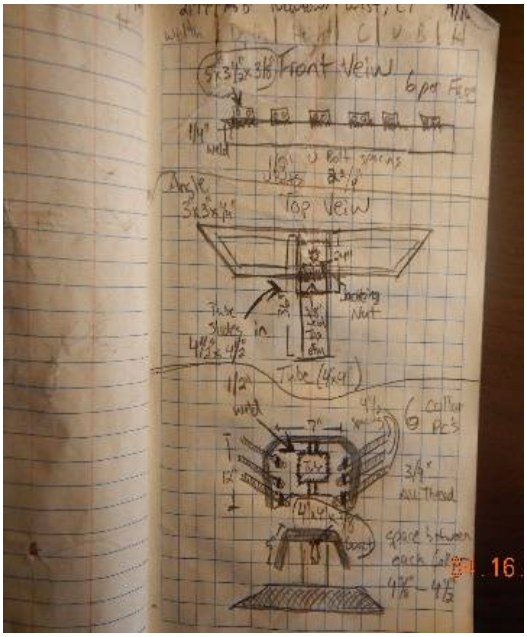
Antenna Mount Mapping Form (PATENT PENDING)

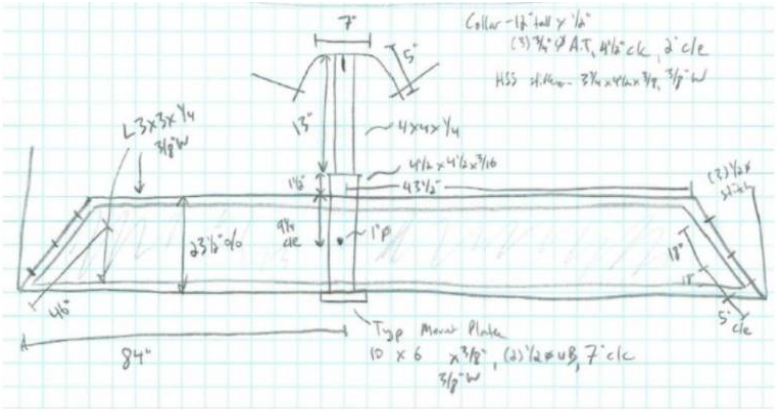
FCC #

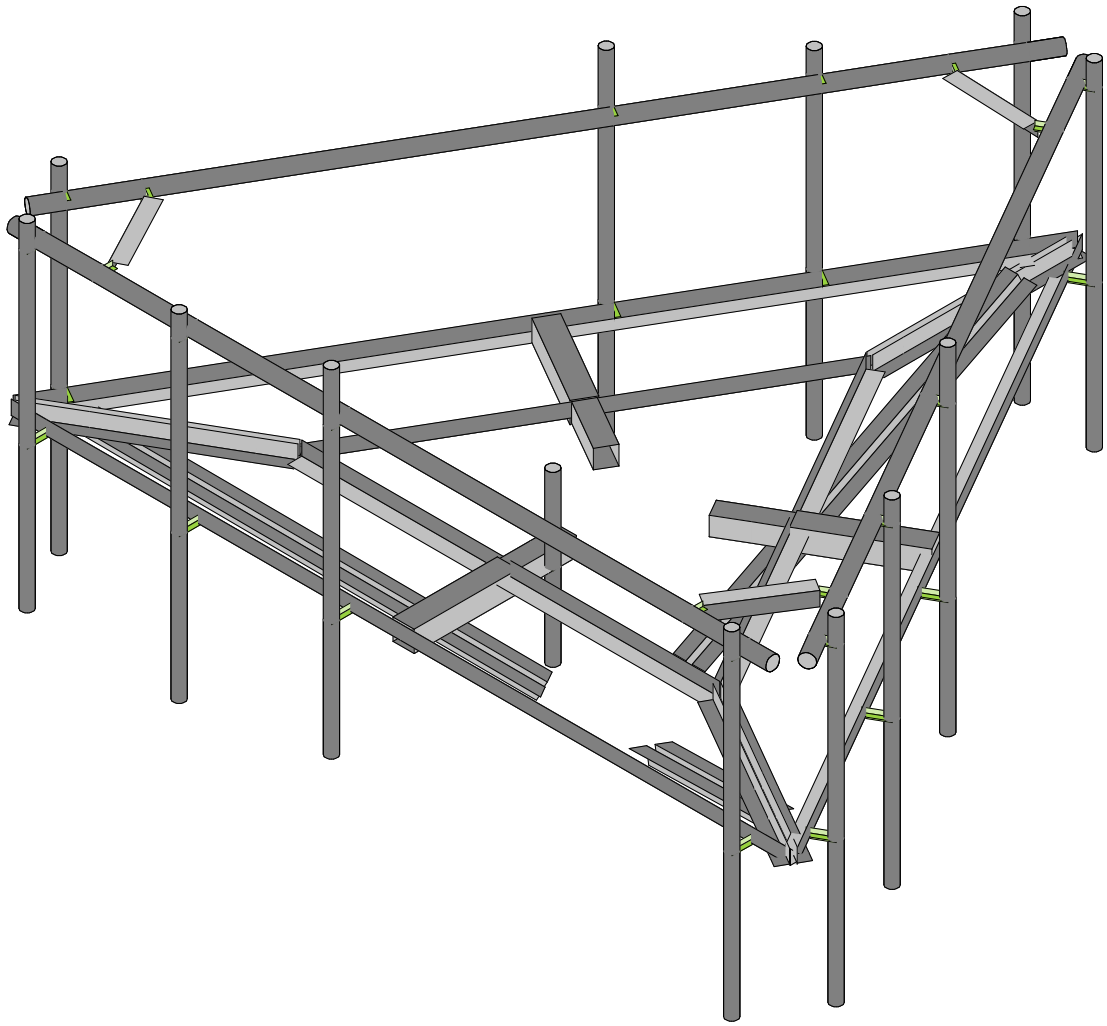
Tower Owner:	SBA	**Mapping Date:**	4/16/2021
Site Name:	Newtown West	**Tower Type:**	Monopole
Site Number or ID:	16092604	**Tower Height (Ft.):**	124
Mapping Contractor:	Structural Components	**Mount Elevation (Ft.):**	100

Please Insert Sketches of the Antenna Mount

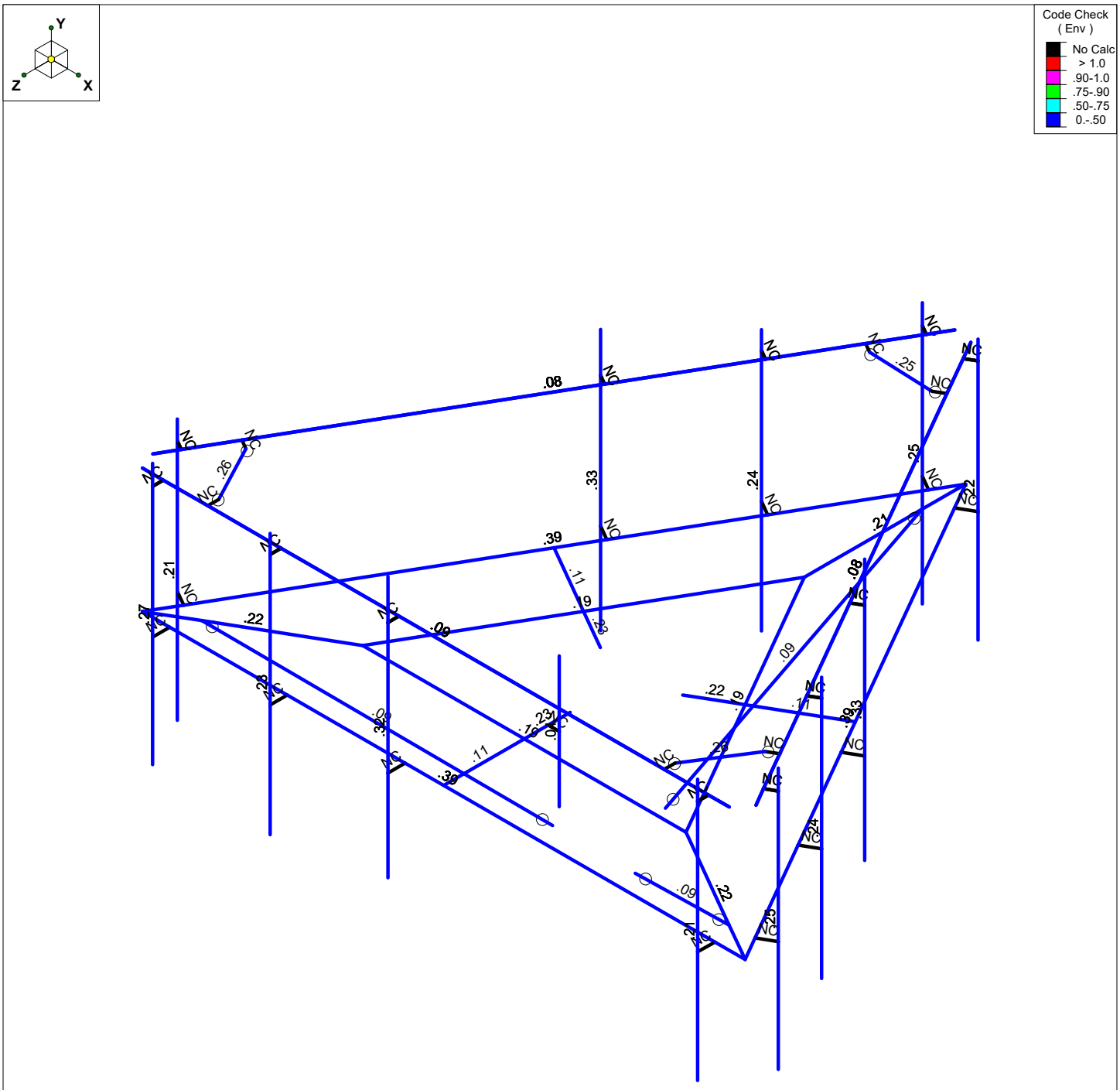






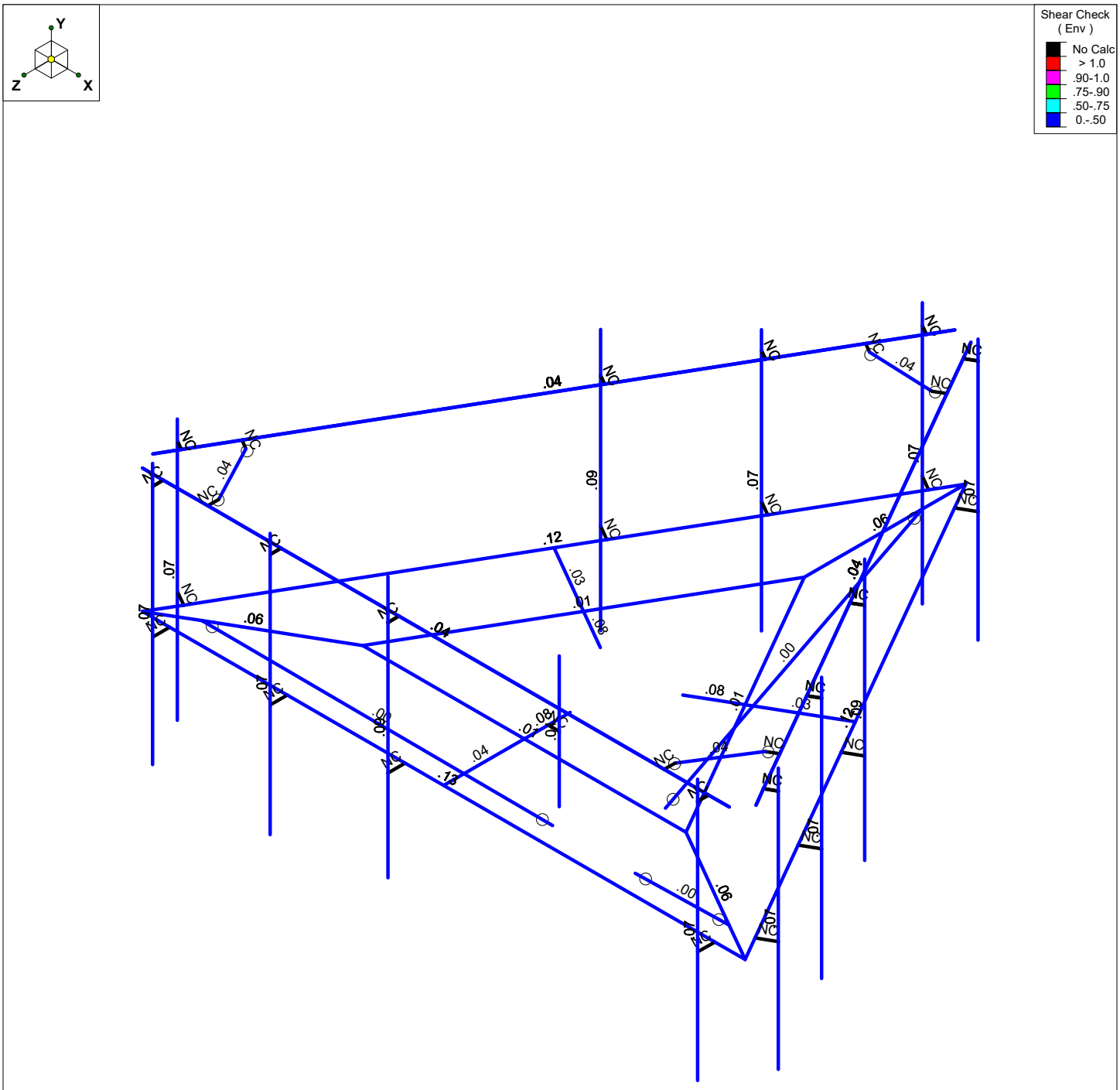


Maser Consulting	468841-VZW_MT_LO_H	SK - 1
DAB		Oct 25, 2021 at 10:25 AM
Project No. 10108307		468841-VZW_MT_LO_H loaded.r3d



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

Maser Consulting	468841-VZW_MT_LO_H	SK - 2
DAB		Oct 25, 2021 at 10:25 AM
Project No. 10108307		468841-VZW_MT_LO_H loaded.r3d



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

Maser Consulting	468841-VZW_MT_LO_H	SK - 3
DAB		Oct 25, 2021 at 10:25 AM
Project No. 10108307		468841-VZW_MT_LO_H loaded.r3d

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
1	Antenna D	None					93			
2	Antenna Di	None					93			
3	Antenna Wo (0 Deg)	None					93			
4	Antenna Wo (30 Deg)	None					93			
5	Antenna Wo (60 Deg)	None					93			
6	Antenna Wo (90 Deg)	None					93			
7	Antenna Wo (120 Deg)	None					93			
8	Antenna Wo (150 Deg)	None					93			
9	Antenna Wo (180 Deg)	None					93			
10	Antenna Wo (210 Deg)	None					93			
11	Antenna Wo (240 Deg)	None					93			
12	Antenna Wo (270 Deg)	None					93			
13	Antenna Wo (300 Deg)	None					93			
14	Antenna Wo (330 Deg)	None					93			
15	Antenna Wi (0 Deg)	None					93			
16	Antenna Wi (30 Deg)	None					93			
17	Antenna Wi (60 Deg)	None					93			
18	Antenna Wi (90 Deg)	None					93			
19	Antenna Wi (120 Deg)	None					93			
20	Antenna Wi (150 Deg)	None					93			
21	Antenna Wi (180 Deg)	None					93			
22	Antenna Wi (210 Deg)	None					93			
23	Antenna Wi (240 Deg)	None					93			
24	Antenna Wi (270 Deg)	None					93			
25	Antenna Wi (300 Deg)	None					93			
26	Antenna Wi (330 Deg)	None					93			
27	Antenna Wm (0 Deg)	None					93			
28	Antenna Wm (30 Deg)	None					93			
29	Antenna Wm (60 Deg)	None					93			
30	Antenna Wm (90 Deg)	None					93			
31	Antenna Wm (120 Deg)	None					93			
32	Antenna Wm (150 Deg)	None					93			
33	Antenna Wm (180 Deg)	None					93			
34	Antenna Wm (210 Deg)	None					93			
35	Antenna Wm (240 Deg)	None					93			
36	Antenna Wm (270 Deg)	None					93			
37	Antenna Wm (300 Deg)	None					93			
38	Antenna Wm (330 Deg)	None					93			
39	Structure D	None		-1					3	
40	Structure Di	None						40	3	
41	Structure Wo (0 Deg)	None						80		
42	Structure Wo (30 Deg)	None						80		
43	Structure Wo (60 Deg)	None						80		
44	Structure Wo (90 Deg)	None						80		
45	Structure Wo (120 D...	None						80		
46	Structure Wo (150 D...	None						80		
47	Structure Wo (180 D...	None						80		
48	Structure Wo (210 D...	None						80		
49	Structure Wo (240 D...	None						80		
50	Structure Wo (270 D...	None						80		
51	Structure Wo (300 D...	None						80		
52	Structure Wo (330 D...	None						80		
53	Structure Wi (0 Deg)	None						80		
54	Structure Wi (30 Deg)	None						80		
55	Structure Wi (60 Deg)	None						80		
56	Structure Wi (90 Deg)	None						80		

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
57	Structure Wi (120 De...	None						80		
58	Structure Wi (150 De...	None						80		
59	Structure Wi (180 De...	None						80		
60	Structure Wi (210 De...	None						80		
61	Structure Wi (240 De...	None						80		
62	Structure Wi (270 De...	None						80		
63	Structure Wi (300 De...	None						80		
64	Structure Wi (330 De...	None						80		
65	Structure Wm (0 Deg)	None						80		
66	Structure Wm (30 De...	None						80		
67	Structure Wm (60 De...	None						80		
68	Structure Wm (90 De...	None						80		
69	Structure Wm (120 D...	None						80		
70	Structure Wm (150 D...	None						80		
71	Structure Wm (180 D...	None						80		
72	Structure Wm (210 D...	None						80		
73	Structure Wm (240 D...	None						80		
74	Structure Wm (270 D...	None						80		
75	Structure Wm (300 D...	None						80		
76	Structure Wm (330 D...	None						80		
77	Lm1	None					1			
78	Lm2	None					1			
79	Lv1	None					1			
80	Lv2	None					1			
81	Antenna Ev	None					93			
82	Antenna Eh (0 Deg)	None					62			
83	Antenna Eh (90 Deg)	None					62			
84	Structure Ev	ELY								
85	Structure Eh (0 Deg)	ELZ	-.03							
86	Structure Eh (90 Deg)	ELX			.03					
87	BLC 39 Transient Are...	None						27		
88	BLC 40 Transient Are...	None						27		

Load Combinations

	Description	Solve	PD...	S...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...
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 D...	Yes	Y		1	1.2	39	1.2	7	1	45	1												
6	1.2D+1.0Wo (150 D...	Yes	Y		1	1.2	39	1.2	8	1	46	1												
7	1.2D+1.0Wo (180 D...	Yes	Y		1	1.2	39	1.2	9	1	47	1												
8	1.2D+1.0Wo (210 D...	Yes	Y		1	1.2	39	1.2	10	1	48	1												
9	1.2D+1.0Wo (240 D...	Yes	Y		1	1.2	39	1.2	11	1	49	1												
10	1.2D+1.0Wo (270 D...	Yes	Y		1	1.2	39	1.2	12	1	50	1												
11	1.2D+1.0Wo (300 D...	Yes	Y		1	1.2	39	1.2	13	1	51	1												
12	1.2D+1.0Wo (330 D...	Yes	Y		1	1.2	39	1.2	14	1	52	1												
13	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1	53	1								
14	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1								
15	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1	55	1								
16	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1	56	1								
17	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1								
18	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1								
19	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1								
20	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1								

Load Combinations (Continued)

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

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	CP	0.	0	-0.	0	
2	N2	0.	0	1.095417	0	
3	N10	-0.	0	-4.291667	0	
4	N11	-0.	0	-4.833334	0	
5	N12	-0.	0	-6.333334	0	
6	N13	-0.	0	-7.833334	0	
7	N14	-0.	0	-8.002992	0	
8	N15	-3.716692	0	2.145833	0	
9	N16	-6.930794	0	4.001496	0	
10	N17	3.716693	0	2.145833	0	
11	N18	6.930794	0	4.001496	0	
12	N15A	0.	0	2.145833	0	
13	N16A	0.	0	4.001496	0	
14	N15B	-4.18579	0	2.416667	0	
15	N16B	-5.484828	0	3.166667	0	
16	N17A	-6.783866	0	3.916667	0	
17	N18A	4.18579	0	2.416666	0	
18	N19	5.484828	0	3.166666	0	
19	N20	6.783866	0	3.916666	0	
20	N55	6.618294	0	3.46023	0	
21	N59	6.9598	0	3.263061	0	
22	N61	6.9598	3.458333	3.263061	0	
23	N62	6.9598	-2.541667	3.263061	0	
24	N71	3.909961	0	-1.230741	0	
25	N72	4.251467	0	-1.42791	0	
26	N73	0.347461	0	-7.401172	0	
27	N75	0.688967	0	-7.598341	0	
28	N79	5.605634	3.416667	0.917571	0	
29	N80	5.605634	-2.583333	0.917571	0	
30	N83	0.688967	3.4375	-7.598341	0	
31	N84	0.688967	-2.5625	-7.598341	0	
32	N75A	4.251467	3.916667	-1.42791	0	
33	N76A	4.251467	-2.083333	-1.42791	0	
34	N77	0.948658	0	-0.547709	0	
35	N78	1.858346	0	-1.072917	0	
36	N109	-0.948659	0	-0.547708	0	
37	N110	-1.858346	0	-1.072917	0	
38	N108A	3.465397	0	-2.000748	0	
39	N110A	-3.465397	0	-2.000748	0	
40	N119B	1.425334	0	-0.822917	0	
41	N120	5.605636	0	0.917575	0	
42	N121	5.264127	0	1.114745	0	
43	N128	0.	0	1.595417	0	
44	N125	0.25	1.5	1.595417	0	
45	N126A	0.25	-1.5	1.595417	0	
46	N127A	0.25	0	1.595417	0	
47	N48	-0.312499	0	-7.461726	0	
48	N49	-0.654006	0	-7.658895	0	
49	N50	-0.654006	3.458333	-7.658895	0	
50	N51	-0.654006	-2.541667	-7.658895	0	
51	N52	-3.020833	0	-2.770755	0	
52	N53	-3.362339	0	-2.967924	0	
53	N54	-6.583333	0	3.399676	0	
54	N55A	-6.924839	0	3.202507	0	
55	N56	-2.008176	3.416667	-5.313407	0	
56	N57	-2.008176	-2.583333	-5.313407	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
57	N58	-6.924839	3.4375	3.202507	0	
58	N59A	-6.924839	-2.5625	3.202507	0	
59	N60	-3.362339	3.916667	-2.967924	0	
60	N61A	-3.362339	-2.083333	-2.967924	0	
61	N62A	-2.008174	0	-5.31341	0	
62	N63	-1.666666	0	-5.11624	0	
63	N65	-6.305794	0	4.001495	0	
64	N66	-6.305794	0	4.395833	0	
65	N67	-6.305794	3.458333	4.395833	0	
66	N68	-6.305794	-2.541667	4.395833	0	
67	N69	-0.889127	0	4.001495	0	
68	N70	-0.889127	0	4.395833	0	
69	N71A	6.235873	0	4.001495	0	
70	N72A	6.235873	0	4.395833	0	
71	N73A	-3.597457	3.416667	4.395835	0	
72	N74	-3.597457	-2.583333	4.395835	0	
73	N75B	6.235873	3.4375	4.395833	0	
74	N76	6.235873	-2.5625	4.395833	0	
75	N77A	-0.889127	3.916667	4.395833	0	
76	N78A	-0.889127	-2.083333	4.395833	0	
77	N79A	-3.59746	0	4.395835	0	
78	N80A	-3.59746	0	4.001495	0	
79	N79B	-0.	0	-7.002992	0	
80	N80B	-0.	-3	-1.095417	0	
81	N81	-6.064769	0	3.501496	0	
82	N82	-0.948658	-3	0.547709	0	
83	N83A	6.064769	0	3.501496	0	
84	N84A	0.948659	-3	0.547708	0	
85	N85	-6.305794	3	4.395833	0	
86	N86	-0.889127	3	4.395833	0	
87	N87	6.235873	3	4.395833	0	
88	N88	-3.59746	3	4.395835	0	
89	N91	-6.305794	3	4.145833	0	
90	N92	-0.889127	3	4.145833	0	
91	N93	6.235873	3	4.145833	0	
92	N94	-3.59746	3	4.145835	0	
93	N95	-6.784944	3	4.145833	0	
94	N96	6.715023	3	4.145833	0	
95	N95A	6.9598	3	3.263061	0	
96	N96A	4.251466	3	-1.42791	0	
97	N97	0.688966	3	-7.598341	0	
98	N98	5.605635	3	0.917575	0	
99	N99	6.743293	3	3.388061	0	
100	N100	4.03496	3	-1.30291	0	
101	N101	0.47246	3	-7.473341	0	
102	N102	5.389129	3	1.042575	0	
103	N103	6.982868	3	3.803017	0	
104	N104	0.232885	3	-7.888297	0	
105	N105	-0.654006	3	-7.658894	0	
106	N106	-3.362339	3	-2.967923	0	
107	N107	-6.924839	3	3.202508	0	
108	N108	-2.008175	3	-5.31341	0	
109	N109A	-0.4375	3	-7.533894	0	
110	N110B	-3.145833	3	-2.842923	0	
111	N111	-6.708333	3	3.327508	0	
112	N112	-1.791668	3	-5.18841	0	
113	N113	-0.197925	3	-7.94885	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
114	N114	-6.947908	3	3.742464	0	
115	N115	5.215023	3	4.145833	0	
116	N116	-5.284944	3	4.145833	0	
117	N117	0.982885	3	-6.589259	0	
118	N118	6.232868	3	2.503979	0	
119	N119	-6.197908	3	2.443426	0	
120	N120A	-0.947925	3	-6.649812	0	
121	N121A	5.215023	3	3.895833	0	
122	N122	-5.284944	3	3.895833	0	
123	N126	0.766379	3	-6.464259	0	
124	N127	6.016363	3	2.628979	0	
125	N131	-5.981401	3	2.568425	0	
126	N132	-0.731418	3	-6.524813	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Mount Pipe	PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25
2	Dual Mount Pipe	PIPE_2.5	Beam	Pipe	A53 Gr.B	Typical	1.61	1.45	1.45	2.89
3	Support Rail	PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25
4	Bottom Corner Plate	L15X6.5X6	Beam	Single Angle	A36 Gr.36	Typical	7.922	24.473	192.705	.363
5	Standoff_2	HSS4.5X4.5...	Beam	Tube	A500 Gr.B Rect	Typical	2.93	9.02	9.02	14.4
6	Cross Members	L3X3X4	Beam	Channel	A36 Gr.36	Typical	1.44	1.23	1.23	.031
7	Face Horizontal	L3X3X4	Beam	Single Angle	A36 Gr.36	Typical	1.44	1.23	1.23	.031
8	Standoff_1	HSS4X4X4	Beam	Tube	A500 Gr.B Rect	Typical	3.37	7.8	7.8	12.8
9	Grating Angle	LL3x3x4x0	Beam	Double Angl...	A36 Gr.36	Typical	2.88	4.5	2.46	.063
10	Top Corner Plate	L2.5x2.5x4	Beam	Single Angle	A36 Gr.36	Typical	1.19	.692	.692	.026
11	MOD Kicker	LL3x3x3x6	Beam	Double Angl...	A36 Gr.36	Typical	2.18	4.97	1.9	.027
12	MOD Corner Angle	L3X3X4	Beam	Single Angle	A36 Gr.36	Typical	1.44	1.23	1.23	.031
13	MOD Support Rail	PIPE_2.5	Beam	Pipe	A53 Gr.B	Typical	1.61	1.45	1.45	2.89

Hot Rolled Steel Properties

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

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N2	N15A			Standoff_1	Beam	Tube	A500 Gr.B...	Typical
2	M2	N15A	N16A			Standoff_2	Beam	Tube	A500 Gr.B...	Typical
3	M5	N14	N10		180	Grating Angle	Beam	Double Angle ...	A36 Gr.36	Typical
4	M6	N16	N15		180	Grating Angle	Beam	Double Angle ...	A36 Gr.36	Typical
5	M7	N18	N17		180	Grating Angle	Beam	Double Angle ...	A36 Gr.36	Typical
6	M6A	N17	N15		270	Cross Members	Beam	Channel	A36 Gr.36	Typical
7	M7A	N16	N18		270	Face Horizontal	Beam	Single Angle	A36 Gr.36	Typical
8	M23A	N10	N17		270	Cross Members	Beam	Channel	A36 Gr.36	Typical
9	M24	N18	N14		270	Face Horizontal	Beam	Single Angle	A36 Gr.36	Typical
10	M27	N55	N59			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
11	MP4C	N61	N62		120	Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
12	M32	N120	N121			RIGID	None	None	RIGID	Typical
13	M33	N71	N72			RIGID	None	None	RIGID	Typical
14	M35	N73	N75			RIGID	None	None	RIGID	Typical
15	MP3C	N79	N80		120	Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
16	MP1C	N83	N84		120	Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
17	MP2C	N75A	N76A		240	Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
18	M38	N77	N78			Standoff_1	Beam	Tube	A500 Gr.B...	Typical
19	M39A	N15	N10		270	Cross Members	Beam	Channel	A36 Gr.36	Typical
20	M40	N14	N16		270	Face Horizontal	Beam	Single Angle	A36 Gr.36	Typical
21	M54	N109	N110			Standoff_1	Beam	Tube	A500 Gr.B...	Typical
22	M55	N78	N108A			Standoff_2	Beam	Tube	A500 Gr.B...	Typical
23	M56	N110	N110A			Standoff_2	Beam	Tube	A500 Gr.B...	Typical
24	M61	N125	N126A			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
25	M62A	N128	N127A			RIGID	None	None	RIGID	Typical
26	M26	N48	N49			RIGID	None	None	RIGID	Typical
27	MP4B	N50	N51		120	Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
28	M28	N62A	N63			RIGID	None	None	RIGID	Typical
29	M29	N52	N53			RIGID	None	None	RIGID	Typical
30	M30	N54	N55A			RIGID	None	None	RIGID	Typical
31	MP3B	N56	N57		120	Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
32	MP1B	N58	N59A		120	Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
33	MP2B	N60	N61A		240	Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
34	M34	N65	N66			RIGID	None	None	RIGID	Typical
35	MP4A	N67	N68			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
36	M36	N79A	N80A			RIGID	None	None	RIGID	Typical
37	M37	N69	N70			RIGID	None	None	RIGID	Typical
38	M38A	N71A	N72A			RIGID	None	None	RIGID	Typical
39	MP3A	N73A	N74			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
40	MP1A	N75B	N76		120	Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
41	MP2A	N77A	N78A			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
42	M42	N80B	N79B			MOD Kicker	Beam	Double Angle ...	A36 Gr.36	Typical
43	M43	N82	N81			MOD Kicker	Beam	Double Angle ...	A36 Gr.36	Typical
44	M44	N84A	N83A			MOD Kicker	Beam	Double Angle ...	A36 Gr.36	Typical
45	M45	N88	N94			RIGID	None	None	RIGID	Typical
46	M46	N86	N92			RIGID	None	None	RIGID	Typical
47	M47	N87	N93			RIGID	None	None	RIGID	Typical
48	M48	N85	N91			RIGID	None	None	RIGID	Typical
49	M49	N95	N96			MOD Support Rail	Beam	Pipe	A53 Gr.B	Typical
50	M50	N88	N94			RIGID	None	None	RIGID	Typical
51	M51	N86	N92			RIGID	None	None	RIGID	Typical
52	M52	N87	N93			RIGID	None	None	RIGID	Typical
53	M53	N85	N91			RIGID	None	None	RIGID	Typical
54	M54A	N95	N96			MOD Support Rail	Beam	Pipe	A53 Gr.B	Typical
55	M55A	N98	N102			RIGID	None	None	RIGID	Typical
56	M56A	N96A	N100			RIGID	None	None	RIGID	Typical
57	M57	N97	N101			RIGID	None	None	RIGID	Typical
58	M58	N95A	N99			RIGID	None	None	RIGID	Typical
59	M59	N103	N104			MOD Support Rail	Beam	Pipe	A53 Gr.B	Typical
60	M60	N98	N102			RIGID	None	None	RIGID	Typical
61	M61A	N96A	N100			RIGID	None	None	RIGID	Typical
62	M62	N97	N101			RIGID	None	None	RIGID	Typical
63	M63	N95A	N99			RIGID	None	None	RIGID	Typical
64	M64	N103	N104			MOD Support Rail	Beam	Pipe	A53 Gr.B	Typical
65	M65	N108	N112			RIGID	None	None	RIGID	Typical
66	M66	N106	N110B			RIGID	None	None	RIGID	Typical
67	M67	N107	N111			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
68	M68	N105	N109A			RIGID	None	None	RIGID	Typical
69	M69	N113	N114			MOD Support Rail	Beam	Pipe	A53 Gr.B	Typical
70	M70	N108	N112			RIGID	None	None	RIGID	Typical
71	M71	N106	N110B			RIGID	None	None	RIGID	Typical
72	M72	N107	N111			RIGID	None	None	RIGID	Typical
73	M73	N105	N109A			RIGID	None	None	RIGID	Typical
74	M74	N113	N114			MOD Support Rail	Beam	Pipe	A53 Gr.B	Typical
75	M75	N122	N131		90	MOD Corner Angle	Beam	Single Angle	A36 Gr.36	Typical
76	M76	N132	N126		90	MOD Corner Angle	Beam	Single Angle	A36 Gr.36	Typical
77	M77	N127	N121A		90	MOD Corner Angle	Beam	Single Angle	A36 Gr.36	Typical
78	M78	N121A	N115			RIGID	None	None	RIGID	Typical
79	M79	N122	N116			RIGID	None	None	RIGID	Typical
80	M80	N126	N117			RIGID	None	None	RIGID	Typical
81	M81	N127	N118			RIGID	None	None	RIGID	Typical
82	M82	N131	N119			RIGID	None	None	RIGID	Typical
83	M83	N132	N120A			RIGID	None	None	RIGID	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rati...	A...	Inactive	Seismic ...
1	M1						Yes				None
2	M2						Yes				None
3	M5						Yes				None
4	M6						Yes				None
5	M7						Yes				None
6	M6A						Yes				None
7	M7A						Yes				None
8	M23A						Yes				None
9	M24						Yes				None
10	M27						Yes	** NA **			None
11	MP4C						Yes				None
12	M32						Yes	** NA **			None
13	M33						Yes	** NA **			None
14	M35						Yes	** NA **			None
15	MP3C						Yes				None
16	MP1C						Yes				None
17	MP2C						Yes				None
18	M38						Yes				None
19	M39A						Yes				None
20	M40						Yes				None
21	M54						Yes				None
22	M55						Yes				None
23	M56						Yes				None
24	M61						Yes				None
25	M62A						Yes	** NA **			None
26	M26						Yes	** NA **			None
27	MP4B						Yes				None
28	M28						Yes	** NA **			None
29	M29						Yes	** NA **			None
30	M30						Yes	** NA **			None
31	MP3B						Yes				None
32	MP1B						Yes				None
33	MP2B						Yes				None
34	M34						Yes	** NA **			None
35	MP4A						Yes				None
36	M36						Yes	** NA **			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rati...A...		Inactive	Seismic ...
37	M37						Yes	** NA **			None
38	M38A						Yes	** NA **			None
39	MP3A						Yes				None
40	MP1A						Yes				None
41	MP2A						Yes				None
42	M42	BenPIN	BenPIN				Yes				None
43	M43	BenPIN	BenPIN				Yes				None
44	M44	BenPIN	BenPIN				Yes				None
45	M45						Yes	** NA **			None
46	M46						Yes	** NA **			None
47	M47						Yes	** NA **			None
48	M48						Yes	** NA **			None
49	M49						Yes				None
50	M50						Yes	** NA **			None
51	M51						Yes	** NA **			None
52	M52						Yes	** NA **			None
53	M53						Yes	** NA **			None
54	M54A						Yes				None
55	M55A						Yes	** NA **			None
56	M56A						Yes	** NA **			None
57	M57						Yes	** NA **			None
58	M58						Yes	** NA **			None
59	M59						Yes				None
60	M60						Yes	** NA **			None
61	M61A						Yes	** NA **			None
62	M62						Yes	** NA **			None
63	M63						Yes	** NA **			None
64	M64						Yes				None
65	M65						Yes	** NA **			None
66	M66						Yes	** NA **			None
67	M67						Yes	** NA **			None
68	M68						Yes	** NA **			None
69	M69						Yes	Default			None
70	M70						Yes	** NA **			None
71	M71						Yes	** NA **			None
72	M72						Yes	** NA **			None
73	M73						Yes	** NA **			None
74	M74						Yes				None
75	M75						Yes	Default			None
76	M76						Yes	Default			None
77	M77						Yes	Default			None
78	M78		OOOOOO				Yes	** NA **			None
79	M79		OOOOOO				Yes	** NA **			None
80	M80		OOOOOO				Yes	** NA **			None
81	M81		OOOOOO				Yes	** NA **			None
82	M82		OOOOOO				Yes	** NA **			None
83	M83		OOOOOO				Yes	** NA **			None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	Y	-23	.5
2	MP4A	My	-.011	.5
3	MP4A	Mz	.017	.5
4	MP4A	Y	-23	3.5
5	MP4A	My	-.011	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
6	MP4A	Mz	.017	3.5
7	MP4B	Y	-23	.5
8	MP4B	My	-.006	.5
9	MP4B	Mz	-.02	.5
10	MP4B	Y	-23	3.5
11	MP4B	My	-.006	3.5
12	MP4B	Mz	-.02	3.5
13	MP4C	Y	-23	.5
14	MP4C	My	.021	.5
15	MP4C	Mz	.001	.5
16	MP4C	Y	-23	3.5
17	MP4C	My	.021	3.5
18	MP4C	Mz	.001	3.5
19	MP4A	Y	-23	.5
20	MP4A	My	-.011	.5
21	MP4A	Mz	-.017	.5
22	MP4A	Y	-23	3.5
23	MP4A	My	-.011	3.5
24	MP4A	Mz	-.017	3.5
25	MP4B	Y	-23	.5
26	MP4B	My	.021	.5
27	MP4B	Mz	.002	.5
28	MP4B	Y	-23	3.5
29	MP4B	My	.021	3.5
30	MP4B	Mz	.002	3.5
31	MP4C	Y	-23	.5
32	MP4C	My	-.009	.5
33	MP4C	Mz	.019	.5
34	MP4C	Y	-23	3.5
35	MP4C	My	-.009	3.5
36	MP4C	Mz	.019	3.5
37	MP1A	Y	-43.55	.5
38	MP1A	My	-.022	.5
39	MP1A	Mz	0	.5
40	MP1A	Y	-43.55	2.5
41	MP1A	My	-.022	2.5
42	MP1A	Mz	0	2.5
43	MP1B	Y	-43.55	.5
44	MP1B	My	.014	.5
45	MP1B	Mz	-.017	.5
46	MP1B	Y	-43.55	2.5
47	MP1B	My	.014	2.5
48	MP1B	Mz	-.017	2.5
49	MP1C	Y	-43.55	.5
50	MP1C	My	.011	.5
51	MP1C	Mz	.019	.5
52	MP1C	Y	-43.55	2.5
53	MP1C	My	.011	2.5
54	MP1C	Mz	.019	2.5
55	M61	Y	-32	1
56	M61	My	-.016	1
57	M61	Mz	0	1
58	MP4A	Y	-74.7	2
59	MP4A	My	.037	2
60	MP4A	Mz	0	2
61	MP4B	Y	-74.7	2
62	MP4B	My	-.024	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
63	MP4B	Mz	.029	2
64	MP4C	Y	-74.7	2
65	MP4C	My	-.019	2
66	MP4C	Mz	-.032	2
67	MP3A	Y	-70.3	2
68	MP3A	My	.035	2
69	MP3A	Mz	0	2
70	MP3B	Y	-70.3	2
71	MP3B	My	-.023	2
72	MP3B	Mz	.027	2
73	MP3C	Y	-70.3	2
74	MP3C	My	-.018	2
75	MP3C	Mz	-.03	2
76	MP2A	Y	-8.5	.5
77	MP2A	My	-.004	.5
78	MP2A	Mz	0	.5
79	MP2A	Y	-8.5	3.5
80	MP2A	My	-.004	3.5
81	MP2A	Mz	0	3.5
82	MP2B	Y	-8.5	.5
83	MP2B	My	.003	.5
84	MP2B	Mz	-.003	.5
85	MP2B	Y	-8.5	3.5
86	MP2B	My	.003	3.5
87	MP2B	Mz	-.003	3.5
88	MP2C	Y	-8.5	.5
89	MP2C	My	.002	.5
90	MP2C	Mz	.004	.5
91	MP2C	Y	-8.5	3.5
92	MP2C	My	.002	3.5
93	MP2C	Mz	.004	3.5

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	Y	-79.367	.5
2	MP4A	My	-.04	.5
3	MP4A	Mz	.06	.5
4	MP4A	Y	-79.367	3.5
5	MP4A	My	-.04	3.5
6	MP4A	Mz	.06	3.5
7	MP4B	Y	-79.367	.5
8	MP4B	My	-.02	.5
9	MP4B	Mz	-.069	.5
10	MP4B	Y	-79.367	3.5
11	MP4B	My	-.02	3.5
12	MP4B	Mz	-.069	3.5
13	MP4C	Y	-79.367	.5
14	MP4C	My	.071	.5
15	MP4C	Mz	.005	.5
16	MP4C	Y	-79.367	3.5
17	MP4C	My	.071	3.5
18	MP4C	Mz	.005	3.5
19	MP4A	Y	-79.367	.5
20	MP4A	My	-.04	.5
21	MP4A	Mz	-.06	.5
22	MP4A	Y	-79.367	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
23	MP4A	My	-.04	3.5
24	MP4A	Mz	-.06	3.5
25	MP4B	Y	-79.367	.5
26	MP4B	My	.071	.5
27	MP4B	Mz	.008	.5
28	MP4B	Y	-79.367	3.5
29	MP4B	My	.071	3.5
30	MP4B	Mz	.008	3.5
31	MP4C	Y	-79.367	.5
32	MP4C	My	-.032	.5
33	MP4C	Mz	.064	.5
34	MP4C	Y	-79.367	3.5
35	MP4C	My	-.032	3.5
36	MP4C	Mz	.064	3.5
37	MP1A	Y	-34.238	.5
38	MP1A	My	-.017	.5
39	MP1A	Mz	0	.5
40	MP1A	Y	-34.238	2.5
41	MP1A	My	-.017	2.5
42	MP1A	Mz	0	2.5
43	MP1B	Y	-34.238	.5
44	MP1B	My	.011	.5
45	MP1B	Mz	-.013	.5
46	MP1B	Y	-34.238	2.5
47	MP1B	My	.011	2.5
48	MP1B	Mz	-.013	2.5
49	MP1C	Y	-34.238	.5
50	MP1C	My	.009	.5
51	MP1C	Mz	.015	.5
52	MP1C	Y	-34.238	2.5
53	MP1C	My	.009	2.5
54	MP1C	Mz	.015	2.5
55	M61	Y	-84.573	1
56	M61	My	-.042	1
57	M61	Mz	0	1
58	MP4A	Y	-43.142	2
59	MP4A	My	.022	2
60	MP4A	Mz	0	2
61	MP4B	Y	-43.142	2
62	MP4B	My	-.014	2
63	MP4B	Mz	.017	2
64	MP4C	Y	-43.142	2
65	MP4C	My	-.011	2
66	MP4C	Mz	-.019	2
67	MP3A	Y	-41.079	2
68	MP3A	My	.021	2
69	MP3A	Mz	0	2
70	MP3B	Y	-41.079	2
71	MP3B	My	-.013	2
72	MP3B	Mz	.016	2
73	MP3C	Y	-41.079	2
74	MP3C	My	-.01	2
75	MP3C	Mz	-.018	2
76	MP2A	Y	-49.747	.5
77	MP2A	My	-.025	.5
78	MP2A	Mz	0	.5
79	MP2A	Y	-49.747	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
80	MP2A	My	-.025	3.5
81	MP2A	Mz	0	3.5
82	MP2B	Y	-49.747	.5
83	MP2B	My	.016	.5
84	MP2B	Mz	-.019	.5
85	MP2B	Y	-49.747	3.5
86	MP2B	My	.016	3.5
87	MP2B	Mz	-.019	3.5
88	MP2C	Y	-49.747	.5
89	MP2C	My	.012	.5
90	MP2C	Mz	.022	.5
91	MP2C	Y	-49.747	3.5
92	MP2C	My	.012	3.5
93	MP2C	Mz	.022	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	0	.5
2	MP4A	Z	-138.415	.5
3	MP4A	Mx	-.104	.5
4	MP4A	X	0	3.5
5	MP4A	Z	-138.415	3.5
6	MP4A	Mx	-.104	3.5
7	MP4B	X	0	.5
8	MP4B	Z	-117.577	.5
9	MP4B	Mx	.102	.5
10	MP4B	X	0	3.5
11	MP4B	Z	-117.577	3.5
12	MP4B	Mx	.102	3.5
13	MP4C	X	0	.5
14	MP4C	Z	-111.783	.5
15	MP4C	Mx	-.006	.5
16	MP4C	X	0	3.5
17	MP4C	Z	-111.783	3.5
18	MP4C	Mx	-.006	3.5
19	MP4A	X	0	.5
20	MP4A	Z	-138.415	.5
21	MP4A	Mx	.104	.5
22	MP4A	X	0	3.5
23	MP4A	Z	-138.415	3.5
24	MP4A	Mx	.104	3.5
25	MP4B	X	0	.5
26	MP4B	Z	-117.577	.5
27	MP4B	Mx	-.012	.5
28	MP4B	X	0	3.5
29	MP4B	Z	-117.577	3.5
30	MP4B	Mx	-.012	3.5
31	MP4C	X	0	.5
32	MP4C	Z	-111.783	.5
33	MP4C	Mx	-.09	.5
34	MP4C	X	0	3.5
35	MP4C	Z	-111.783	3.5
36	MP4C	Mx	-.09	3.5
37	MP1A	X	0	.5
38	MP1A	Z	-65.912	.5
39	MP1A	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
40	MP1A	X	0	2.5
41	MP1A	Z	-65.912	2.5
42	MP1A	Mx	0	2.5
43	MP1B	X	0	.5
44	MP1B	Z	-42.376	.5
45	MP1B	Mx	.016	.5
46	MP1B	X	0	2.5
47	MP1B	Z	-42.376	2.5
48	MP1B	Mx	.016	2.5
49	MP1C	X	0	.5
50	MP1C	Z	-35.831	.5
51	MP1C	Mx	-.016	.5
52	MP1C	X	0	2.5
53	MP1C	Z	-35.831	2.5
54	MP1C	Mx	-.016	2.5
55	M61	X	0	1
56	M61	Z	-113.873	1
57	M61	Mx	0	1
58	MP4A	X	0	2
59	MP4A	Z	-52.449	2
60	MP4A	Mx	0	2
61	MP4B	X	0	2
62	MP4B	Z	-42.244	2
63	MP4B	Mx	-.016	2
64	MP4C	X	0	2
65	MP4C	Z	-39.407	2
66	MP4C	Mx	.017	2
67	MP3A	X	0	2
68	MP3A	Z	-52.449	2
69	MP3A	Mx	0	2
70	MP3B	X	0	2
71	MP3B	Z	-40.393	2
72	MP3B	Mx	-.015	2
73	MP3C	X	0	2
74	MP3C	Z	-37.04	2
75	MP3C	Mx	.016	2
76	MP2A	X	0	.5
77	MP2A	Z	-106.16	.5
78	MP2A	Mx	0	.5
79	MP2A	X	0	3.5
80	MP2A	Z	-106.16	3.5
81	MP2A	Mx	0	3.5
82	MP2B	X	0	.5
83	MP2B	Z	-78.082	.5
84	MP2B	Mx	.03	.5
85	MP2B	X	0	3.5
86	MP2B	Z	-78.082	3.5
87	MP2B	Mx	.03	3.5
88	MP2C	X	0	.5
89	MP2C	Z	-70.274	.5
90	MP2C	Mx	-.03	.5
91	MP2C	X	0	3.5
92	MP2C	Z	-70.274	3.5
93	MP2C	Mx	-.03	3.5

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

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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	64.769	.5
2	MP4A	Z	-112.183	.5
3	MP4A	Mx	-.117	.5
4	MP4A	X	64.769	3.5
5	MP4A	Z	-112.183	3.5
6	MP4A	Mx	-.117	3.5
7	MP4B	X	51.988	.5
8	MP4B	Z	-90.046	.5
9	MP4B	Mx	.065	.5
10	MP4B	X	51.988	3.5
11	MP4B	Z	-90.046	3.5
12	MP4B	Mx	.065	3.5
13	MP4C	X	64.769	.5
14	MP4C	Z	-112.183	.5
15	MP4C	Mx	.052	.5
16	MP4C	X	64.769	3.5
17	MP4C	Z	-112.183	3.5
18	MP4C	Mx	.052	3.5
19	MP4A	X	64.769	.5
20	MP4A	Z	-112.183	.5
21	MP4A	Mx	.052	.5
22	MP4A	X	64.769	3.5
23	MP4A	Z	-112.183	3.5
24	MP4A	Mx	.052	3.5
25	MP4B	X	51.988	.5
26	MP4B	Z	-90.046	.5
27	MP4B	Mx	.038	.5
28	MP4B	X	51.988	3.5
29	MP4B	Z	-90.046	3.5
30	MP4B	Mx	.038	3.5
31	MP4C	X	64.769	.5
32	MP4C	Z	-112.183	.5
33	MP4C	Mx	-.117	.5
34	MP4C	X	64.769	3.5
35	MP4C	Z	-112.183	3.5
36	MP4C	Mx	-.117	3.5
37	MP1A	X	27.942	.5
38	MP1A	Z	-48.398	.5
39	MP1A	Mx	-.014	.5
40	MP1A	X	27.942	2.5
41	MP1A	Z	-48.398	2.5
42	MP1A	Mx	-.014	2.5
43	MP1B	X	13.507	.5
44	MP1B	Z	-23.395	.5
45	MP1B	Mx	.013	.5
46	MP1B	X	13.507	2.5
47	MP1B	Z	-23.395	2.5
48	MP1B	Mx	.013	2.5
49	MP1C	X	27.942	.5
50	MP1C	Z	-48.398	.5
51	MP1C	Mx	-.014	.5
52	MP1C	X	27.942	2.5
53	MP1C	Z	-48.398	2.5
54	MP1C	Mx	-.014	2.5
55	M61	X	53.562	1
56	M61	Z	-92.772	1
57	M61	Mx	-.027	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP4A	X	24.051	2
59	MP4A	Z	-41.657	2
60	MP4A	Mx	.012	2
61	MP4B	X	17.792	2
62	MP4B	Z	-30.816	2
63	MP4B	Mx	-.018	2
64	MP4C	X	24.051	2
65	MP4C	Z	-41.657	2
66	MP4C	Mx	.012	2
67	MP3A	X	23.656	2
68	MP3A	Z	-40.974	2
69	MP3A	Mx	.012	2
70	MP3B	X	16.262	2
71	MP3B	Z	-28.166	2
72	MP3B	Mx	-.016	2
73	MP3C	X	23.656	2
74	MP3C	Z	-40.974	2
75	MP3C	Mx	.012	2
76	MP2A	X	47.099	.5
77	MP2A	Z	-81.578	.5
78	MP2A	Mx	-.024	.5
79	MP2A	X	47.099	3.5
80	MP2A	Z	-81.578	3.5
81	MP2A	Mx	-.024	3.5
82	MP2B	X	29.878	.5
83	MP2B	Z	-51.749	.5
84	MP2B	Mx	.029	.5
85	MP2B	X	29.878	3.5
86	MP2B	Z	-51.749	3.5
87	MP2B	Mx	.029	3.5
88	MP2C	X	47.099	.5
89	MP2C	Z	-81.578	.5
90	MP2C	Mx	-.024	.5
91	MP2C	X	47.099	3.5
92	MP2C	Z	-81.578	3.5
93	MP2C	Mx	-.024	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	96.807	.5
2	MP4A	Z	-55.892	.5
3	MP4A	Mx	-.09	.5
4	MP4A	X	96.807	3.5
5	MP4A	Z	-55.892	3.5
6	MP4A	Mx	-.09	3.5
7	MP4B	X	92.716	.5
8	MP4B	Z	-53.53	.5
9	MP4B	Mx	.023	.5
10	MP4B	X	92.716	3.5
11	MP4B	Z	-53.53	3.5
12	MP4B	Mx	.023	3.5
13	MP4C	X	119.871	.5
14	MP4C	Z	-69.207	.5
15	MP4C	Mx	.104	.5
16	MP4C	X	119.871	3.5
17	MP4C	Z	-69.207	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP4C	Mx	.104	3.5
19	MP4A	X	96.807	.5
20	MP4A	Z	-55.892	.5
21	MP4A	Mx	-.006	.5
22	MP4A	X	96.807	3.5
23	MP4A	Z	-55.892	3.5
24	MP4A	Mx	-.006	3.5
25	MP4B	X	92.716	.5
26	MP4B	Z	-53.53	.5
27	MP4B	Mx	.078	.5
28	MP4B	X	92.716	3.5
29	MP4B	Z	-53.53	3.5
30	MP4B	Mx	.078	3.5
31	MP4C	X	119.871	.5
32	MP4C	Z	-69.207	.5
33	MP4C	Mx	-.104	.5
34	MP4C	X	119.871	3.5
35	MP4C	Z	-69.207	3.5
36	MP4C	Mx	-.104	3.5
37	MP1A	X	31.031	.5
38	MP1A	Z	-17.916	.5
39	MP1A	Mx	-.016	.5
40	MP1A	X	31.031	2.5
41	MP1A	Z	-17.916	2.5
42	MP1A	Mx	-.016	2.5
43	MP1B	X	26.41	.5
44	MP1B	Z	-15.248	.5
45	MP1B	Mx	.014	.5
46	MP1B	X	26.41	2.5
47	MP1B	Z	-15.248	2.5
48	MP1B	Mx	.014	2.5
49	MP1C	X	57.081	.5
50	MP1C	Z	-32.956	.5
51	MP1C	Mx	0	.5
52	MP1C	X	57.081	2.5
53	MP1C	Z	-32.956	2.5
54	MP1C	Mx	0	2.5
55	M61	X	81.083	1
56	M61	Z	-46.813	1
57	M61	Mx	-.041	1
58	MP4A	X	34.127	2
59	MP4A	Z	-19.703	2
60	MP4A	Mx	.017	2
61	MP4B	X	32.124	2
62	MP4B	Z	-18.547	2
63	MP4B	Mx	-.017	2
64	MP4C	X	45.422	2
65	MP4C	Z	-26.224	2
66	MP4C	Mx	0	2
67	MP3A	X	32.078	2
68	MP3A	Z	-18.52	2
69	MP3A	Mx	.016	2
70	MP3B	X	29.711	2
71	MP3B	Z	-17.154	2
72	MP3B	Mx	-.016	2
73	MP3C	X	45.422	2
74	MP3C	Z	-26.224	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
75	MP3C	Mx	0	2
76	MP2A	X	60.859	.5
77	MP2A	Z	-35.137	.5
78	MP2A	Mx	-.03	.5
79	MP2A	X	60.859	3.5
80	MP2A	Z	-35.137	3.5
81	MP2A	Mx	-.03	3.5
82	MP2B	X	55.347	.5
83	MP2B	Z	-31.955	.5
84	MP2B	Mx	.03	.5
85	MP2B	X	55.347	3.5
86	MP2B	Z	-31.955	3.5
87	MP2B	Mx	.03	3.5
88	MP2C	X	91.937	.5
89	MP2C	Z	-53.08	.5
90	MP2C	Mx	0	.5
91	MP2C	X	91.937	3.5
92	MP2C	Z	-53.08	3.5
93	MP2C	Mx	0	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	102.906	.5
2	MP4A	Z	0	.5
3	MP4A	Mx	-.051	.5
4	MP4A	X	102.906	3.5
5	MP4A	Z	0	3.5
6	MP4A	Mx	-.051	3.5
7	MP4B	X	123.743	.5
8	MP4B	Z	0	.5
9	MP4B	Mx	-.031	.5
10	MP4B	X	123.743	3.5
11	MP4B	Z	0	3.5
12	MP4B	Mx	-.031	3.5
13	MP4C	X	129.538	.5
14	MP4C	Z	0	.5
15	MP4C	Mx	.117	.5
16	MP4C	X	129.538	3.5
17	MP4C	Z	0	3.5
18	MP4C	Mx	.117	3.5
19	MP4A	X	102.906	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	-.051	.5
22	MP4A	X	102.906	3.5
23	MP4A	Z	0	3.5
24	MP4A	Mx	-.051	3.5
25	MP4B	X	123.743	.5
26	MP4B	Z	0	.5
27	MP4B	Mx	.111	.5
28	MP4B	X	123.743	3.5
29	MP4B	Z	0	3.5
30	MP4B	Mx	.111	3.5
31	MP4C	X	129.538	.5
32	MP4C	Z	0	.5
33	MP4C	Mx	-.052	.5
34	MP4C	X	129.538	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
35	MP4C	Z	0	3.5
36	MP4C	Mx	-.052	3.5
37	MP1A	X	25.804	.5
38	MP1A	Z	0	.5
39	MP1A	Mx	-.013	.5
40	MP1A	X	25.804	2.5
41	MP1A	Z	0	2.5
42	MP1A	Mx	-.013	2.5
43	MP1B	X	49.34	.5
44	MP1B	Z	0	.5
45	MP1B	Mx	.016	.5
46	MP1B	X	49.34	2.5
47	MP1B	Z	0	2.5
48	MP1B	Mx	.016	2.5
49	MP1C	X	55.885	.5
50	MP1C	Z	0	.5
51	MP1C	Mx	.014	.5
52	MP1C	X	55.885	2.5
53	MP1C	Z	0	2.5
54	MP1C	Mx	.014	2.5
55	M61	X	86.877	1
56	M61	Z	0	1
57	M61	Mx	-.043	1
58	MP4A	X	35.059	2
59	MP4A	Z	0	2
60	MP4A	Mx	.018	2
61	MP4B	X	45.264	2
62	MP4B	Z	0	2
63	MP4B	Mx	-.015	2
64	MP4C	X	48.102	2
65	MP4C	Z	0	2
66	MP4C	Mx	-.012	2
67	MP3A	X	31.904	2
68	MP3A	Z	0	2
69	MP3A	Mx	.016	2
70	MP3B	X	43.96	2
71	MP3B	Z	0	2
72	MP3B	Mx	-.014	2
73	MP3C	X	47.313	2
74	MP3C	Z	0	2
75	MP3C	Mx	-.012	2
76	MP2A	X	58.312	.5
77	MP2A	Z	0	.5
78	MP2A	Mx	-.029	.5
79	MP2A	X	58.312	3.5
80	MP2A	Z	0	3.5
81	MP2A	Mx	-.029	3.5
82	MP2B	X	86.391	.5
83	MP2B	Z	0	.5
84	MP2B	Mx	.028	.5
85	MP2B	X	86.391	3.5
86	MP2B	Z	0	3.5
87	MP2B	Mx	.028	3.5
88	MP2C	X	94.198	.5
89	MP2C	Z	0	.5
90	MP2C	Mx	.024	.5
91	MP2C	X	94.198	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
92	MP2C	Z	0	3.5
93	MP2C	Mx	.024	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	96.807	.5
2	MP4A	Z	55.892	.5
3	MP4A	Mx	-.006	.5
4	MP4A	X	96.807	3.5
5	MP4A	Z	55.892	3.5
6	MP4A	Mx	-.006	3.5
7	MP4B	X	118.943	.5
8	MP4B	Z	68.672	.5
9	MP4B	Mx	-.09	.5
10	MP4B	X	118.943	3.5
11	MP4B	Z	68.672	3.5
12	MP4B	Mx	-.09	3.5
13	MP4C	X	96.807	.5
14	MP4C	Z	55.892	.5
15	MP4C	Mx	.09	.5
16	MP4C	X	96.807	3.5
17	MP4C	Z	55.892	3.5
18	MP4C	Mx	.09	3.5
19	MP4A	X	96.807	.5
20	MP4A	Z	55.892	.5
21	MP4A	Mx	-.09	.5
22	MP4A	X	96.807	3.5
23	MP4A	Z	55.892	3.5
24	MP4A	Mx	-.09	3.5
25	MP4B	X	118.943	.5
26	MP4B	Z	68.672	.5
27	MP4B	Mx	.113	.5
28	MP4B	X	118.943	3.5
29	MP4B	Z	68.672	3.5
30	MP4B	Mx	.113	3.5
31	MP4C	X	96.807	.5
32	MP4C	Z	55.892	.5
33	MP4C	Mx	.006	.5
34	MP4C	X	96.807	3.5
35	MP4C	Z	55.892	3.5
36	MP4C	Mx	.006	3.5
37	MP1A	X	31.031	.5
38	MP1A	Z	17.916	.5
39	MP1A	Mx	-.016	.5
40	MP1A	X	31.031	2.5
41	MP1A	Z	17.916	2.5
42	MP1A	Mx	-.016	2.5
43	MP1B	X	56.034	.5
44	MP1B	Z	32.351	.5
45	MP1B	Mx	.006	.5
46	MP1B	X	56.034	2.5
47	MP1B	Z	32.351	2.5
48	MP1B	Mx	.006	2.5
49	MP1C	X	31.031	.5
50	MP1C	Z	17.916	.5
51	MP1C	Mx	.016	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
52	MP1C	X	31.031	2.5
53	MP1C	Z	17.916	2.5
54	MP1C	Mx	.016	2.5
55	M61	X	81.083	1
56	M61	Z	46.813	1
57	M61	Mx	-.041	1
58	MP4A	X	34.127	2
59	MP4A	Z	19.703	2
60	MP4A	Mx	.017	2
61	MP4B	X	44.968	2
62	MP4B	Z	25.962	2
63	MP4B	Mx	-.005	2
64	MP4C	X	34.127	2
65	MP4C	Z	19.703	2
66	MP4C	Mx	-.017	2
67	MP3A	X	32.078	2
68	MP3A	Z	18.52	2
69	MP3A	Mx	.016	2
70	MP3B	X	44.886	2
71	MP3B	Z	25.915	2
72	MP3B	Mx	-.004	2
73	MP3C	X	32.078	2
74	MP3C	Z	18.52	2
75	MP3C	Mx	-.016	2
76	MP2A	X	60.859	.5
77	MP2A	Z	35.137	.5
78	MP2A	Mx	-.03	.5
79	MP2A	X	60.859	3.5
80	MP2A	Z	35.137	3.5
81	MP2A	Mx	-.03	3.5
82	MP2B	X	90.688	.5
83	MP2B	Z	52.359	.5
84	MP2B	Mx	.009	.5
85	MP2B	X	90.688	3.5
86	MP2B	Z	52.359	3.5
87	MP2B	Mx	.009	3.5
88	MP2C	X	60.859	.5
89	MP2C	Z	35.137	.5
90	MP2C	Mx	.03	.5
91	MP2C	X	60.859	3.5
92	MP2C	Z	35.137	3.5
93	MP2C	Mx	.03	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	64.769	.5
2	MP4A	Z	112.183	.5
3	MP4A	Mx	.052	.5
4	MP4A	X	64.769	3.5
5	MP4A	Z	112.183	3.5
6	MP4A	Mx	.052	3.5
7	MP4B	X	67.13	.5
8	MP4B	Z	116.273	.5
9	MP4B	Mx	-.118	.5
10	MP4B	X	67.13	3.5
11	MP4B	Z	116.273	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
12	MP4B	Mx	-.118	3.5
13	MP4C	X	51.453	.5
14	MP4C	Z	89.119	.5
15	MP4C	Mx	.051	.5
16	MP4C	X	51.453	3.5
17	MP4C	Z	89.119	3.5
18	MP4C	Mx	.051	3.5
19	MP4A	X	64.769	.5
20	MP4A	Z	112.183	.5
21	MP4A	Mx	-.117	.5
22	MP4A	X	64.769	3.5
23	MP4A	Z	112.183	3.5
24	MP4A	Mx	-.117	3.5
25	MP4B	X	67.13	.5
26	MP4B	Z	116.273	.5
27	MP4B	Mx	.072	.5
28	MP4B	X	67.13	3.5
29	MP4B	Z	116.273	3.5
30	MP4B	Mx	.072	3.5
31	MP4C	X	51.453	.5
32	MP4C	Z	89.119	.5
33	MP4C	Mx	.051	.5
34	MP4C	X	51.453	3.5
35	MP4C	Z	89.119	3.5
36	MP4C	Mx	.051	3.5
37	MP1A	X	27.942	.5
38	MP1A	Z	48.398	.5
39	MP1A	Mx	-.014	.5
40	MP1A	X	27.942	2.5
41	MP1A	Z	48.398	2.5
42	MP1A	Mx	-.014	2.5
43	MP1B	X	30.61	.5
44	MP1B	Z	53.018	.5
45	MP1B	Mx	-.01	.5
46	MP1B	X	30.61	2.5
47	MP1B	Z	53.018	2.5
48	MP1B	Mx	-.01	2.5
49	MP1C	X	12.902	.5
50	MP1C	Z	22.347	.5
51	MP1C	Mx	.013	.5
52	MP1C	X	12.902	2.5
53	MP1C	Z	22.347	2.5
54	MP1C	Mx	.013	2.5
55	M61	X	53.562	1
56	M61	Z	92.772	1
57	M61	Mx	-.027	1
58	MP4A	X	24.051	2
59	MP4A	Z	41.657	2
60	MP4A	Mx	.012	2
61	MP4B	X	25.207	2
62	MP4B	Z	43.66	2
63	MP4B	Mx	.009	2
64	MP4C	X	17.53	2
65	MP4C	Z	30.362	2
66	MP4C	Mx	-.018	2
67	MP3A	X	23.656	2
68	MP3A	Z	40.974	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
69	MP3A	Mx	.012	2
70	MP3B	X	25.023	2
71	MP3B	Z	43.341	2
72	MP3B	Mx	.009	2
73	MP3C	X	15.952	2
74	MP3C	Z	27.63	2
75	MP3C	Mx	-.016	2
76	MP2A	X	47.099	.5
77	MP2A	Z	81.578	.5
78	MP2A	Mx	-.024	.5
79	MP2A	X	47.099	3.5
80	MP2A	Z	81.578	3.5
81	MP2A	Mx	-.024	3.5
82	MP2B	X	50.281	.5
83	MP2B	Z	87.09	.5
84	MP2B	Mx	-.017	.5
85	MP2B	X	50.281	3.5
86	MP2B	Z	87.09	3.5
87	MP2B	Mx	-.017	3.5
88	MP2C	X	29.156	.5
89	MP2C	Z	50.5	.5
90	MP2C	Mx	.029	.5
91	MP2C	X	29.156	3.5
92	MP2C	Z	50.5	3.5
93	MP2C	Mx	.029	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	0	.5
2	MP4A	Z	138.415	.5
3	MP4A	Mx	.104	.5
4	MP4A	X	0	3.5
5	MP4A	Z	138.415	3.5
6	MP4A	Mx	.104	3.5
7	MP4B	X	0	.5
8	MP4B	Z	117.577	.5
9	MP4B	Mx	-.102	.5
10	MP4B	X	0	3.5
11	MP4B	Z	117.577	3.5
12	MP4B	Mx	-.102	3.5
13	MP4C	X	0	.5
14	MP4C	Z	111.783	.5
15	MP4C	Mx	.006	.5
16	MP4C	X	0	3.5
17	MP4C	Z	111.783	3.5
18	MP4C	Mx	.006	3.5
19	MP4A	X	0	.5
20	MP4A	Z	138.415	.5
21	MP4A	Mx	-.104	.5
22	MP4A	X	0	3.5
23	MP4A	Z	138.415	3.5
24	MP4A	Mx	-.104	3.5
25	MP4B	X	0	.5
26	MP4B	Z	117.577	.5
27	MP4B	Mx	.012	.5
28	MP4B	X	0	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP4B	Z	117.577	3.5
30	MP4B	Mx	.012	3.5
31	MP4C	X	0	.5
32	MP4C	Z	111.783	.5
33	MP4C	Mx	.09	.5
34	MP4C	X	0	3.5
35	MP4C	Z	111.783	3.5
36	MP4C	Mx	.09	3.5
37	MP1A	X	0	.5
38	MP1A	Z	65.912	.5
39	MP1A	Mx	0	.5
40	MP1A	X	0	2.5
41	MP1A	Z	65.912	2.5
42	MP1A	Mx	0	2.5
43	MP1B	X	0	.5
44	MP1B	Z	42.376	.5
45	MP1B	Mx	-.016	.5
46	MP1B	X	0	2.5
47	MP1B	Z	42.376	2.5
48	MP1B	Mx	-.016	2.5
49	MP1C	X	0	.5
50	MP1C	Z	35.831	.5
51	MP1C	Mx	.016	.5
52	MP1C	X	0	2.5
53	MP1C	Z	35.831	2.5
54	MP1C	Mx	.016	2.5
55	M61	X	0	1
56	M61	Z	113.873	1
57	M61	Mx	0	1
58	MP4A	X	0	2
59	MP4A	Z	52.449	2
60	MP4A	Mx	0	2
61	MP4B	X	0	2
62	MP4B	Z	42.244	2
63	MP4B	Mx	.016	2
64	MP4C	X	0	2
65	MP4C	Z	39.407	2
66	MP4C	Mx	-.017	2
67	MP3A	X	0	2
68	MP3A	Z	52.449	2
69	MP3A	Mx	0	2
70	MP3B	X	0	2
71	MP3B	Z	40.393	2
72	MP3B	Mx	.015	2
73	MP3C	X	0	2
74	MP3C	Z	37.04	2
75	MP3C	Mx	-.016	2
76	MP2A	X	0	.5
77	MP2A	Z	106.16	.5
78	MP2A	Mx	0	.5
79	MP2A	X	0	3.5
80	MP2A	Z	106.16	3.5
81	MP2A	Mx	0	3.5
82	MP2B	X	0	.5
83	MP2B	Z	78.082	.5
84	MP2B	Mx	-.03	.5
85	MP2B	X	0	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
86	MP2B	Z	78.082	3.5
87	MP2B	Mx	-.03	3.5
88	MP2C	X	0	.5
89	MP2C	Z	70.274	.5
90	MP2C	Mx	.03	.5
91	MP2C	X	0	3.5
92	MP2C	Z	70.274	3.5
93	MP2C	Mx	.03	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-64.769	.5
2	MP4A	Z	112.183	.5
3	MP4A	Mx	.117	.5
4	MP4A	X	-64.769	3.5
5	MP4A	Z	112.183	3.5
6	MP4A	Mx	.117	3.5
7	MP4B	X	-51.988	.5
8	MP4B	Z	90.046	.5
9	MP4B	Mx	-.065	.5
10	MP4B	X	-51.988	3.5
11	MP4B	Z	90.046	3.5
12	MP4B	Mx	-.065	3.5
13	MP4C	X	-64.769	.5
14	MP4C	Z	112.183	.5
15	MP4C	Mx	-.052	.5
16	MP4C	X	-64.769	3.5
17	MP4C	Z	112.183	3.5
18	MP4C	Mx	-.052	3.5
19	MP4A	X	-64.769	.5
20	MP4A	Z	112.183	.5
21	MP4A	Mx	-.052	.5
22	MP4A	X	-64.769	3.5
23	MP4A	Z	112.183	3.5
24	MP4A	Mx	-.052	3.5
25	MP4B	X	-51.988	.5
26	MP4B	Z	90.046	.5
27	MP4B	Mx	-.038	.5
28	MP4B	X	-51.988	3.5
29	MP4B	Z	90.046	3.5
30	MP4B	Mx	-.038	3.5
31	MP4C	X	-64.769	.5
32	MP4C	Z	112.183	.5
33	MP4C	Mx	.117	.5
34	MP4C	X	-64.769	3.5
35	MP4C	Z	112.183	3.5
36	MP4C	Mx	.117	3.5
37	MP1A	X	-27.942	.5
38	MP1A	Z	48.398	.5
39	MP1A	Mx	.014	.5
40	MP1A	X	-27.942	2.5
41	MP1A	Z	48.398	2.5
42	MP1A	Mx	.014	2.5
43	MP1B	X	-13.507	.5
44	MP1B	Z	23.395	.5
45	MP1B	Mx	-.013	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
46	MP1B	X	-13.507	2.5
47	MP1B	Z	23.395	2.5
48	MP1B	Mx	-.013	2.5
49	MP1C	X	-27.942	.5
50	MP1C	Z	48.398	.5
51	MP1C	Mx	.014	.5
52	MP1C	X	-27.942	2.5
53	MP1C	Z	48.398	2.5
54	MP1C	Mx	.014	2.5
55	M61	X	-53.562	1
56	M61	Z	92.772	1
57	M61	Mx	.027	1
58	MP4A	X	-24.051	2
59	MP4A	Z	41.657	2
60	MP4A	Mx	-.012	2
61	MP4B	X	-17.792	2
62	MP4B	Z	30.816	2
63	MP4B	Mx	.018	2
64	MP4C	X	-24.051	2
65	MP4C	Z	41.657	2
66	MP4C	Mx	-.012	2
67	MP3A	X	-23.656	2
68	MP3A	Z	40.974	2
69	MP3A	Mx	-.012	2
70	MP3B	X	-16.262	2
71	MP3B	Z	28.166	2
72	MP3B	Mx	.016	2
73	MP3C	X	-23.656	2
74	MP3C	Z	40.974	2
75	MP3C	Mx	-.012	2
76	MP2A	X	-47.099	.5
77	MP2A	Z	81.578	.5
78	MP2A	Mx	.024	.5
79	MP2A	X	-47.099	3.5
80	MP2A	Z	81.578	3.5
81	MP2A	Mx	.024	3.5
82	MP2B	X	-29.878	.5
83	MP2B	Z	51.749	.5
84	MP2B	Mx	-.029	.5
85	MP2B	X	-29.878	3.5
86	MP2B	Z	51.749	3.5
87	MP2B	Mx	-.029	3.5
88	MP2C	X	-47.099	.5
89	MP2C	Z	81.578	.5
90	MP2C	Mx	.024	.5
91	MP2C	X	-47.099	3.5
92	MP2C	Z	81.578	3.5
93	MP2C	Mx	.024	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-96.807	.5
2	MP4A	Z	55.892	.5
3	MP4A	Mx	.09	.5
4	MP4A	X	-96.807	3.5
5	MP4A	Z	55.892	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
6	MP4A	Mx	.09	3.5
7	MP4B	X	-92.716	.5
8	MP4B	Z	53.53	.5
9	MP4B	Mx	-.023	.5
10	MP4B	X	-92.716	3.5
11	MP4B	Z	53.53	3.5
12	MP4B	Mx	-.023	3.5
13	MP4C	X	-119.871	.5
14	MP4C	Z	69.207	.5
15	MP4C	Mx	-.104	.5
16	MP4C	X	-119.871	3.5
17	MP4C	Z	69.207	3.5
18	MP4C	Mx	-.104	3.5
19	MP4A	X	-96.807	.5
20	MP4A	Z	55.892	.5
21	MP4A	Mx	.006	.5
22	MP4A	X	-96.807	3.5
23	MP4A	Z	55.892	3.5
24	MP4A	Mx	.006	3.5
25	MP4B	X	-92.716	.5
26	MP4B	Z	53.53	.5
27	MP4B	Mx	-.078	.5
28	MP4B	X	-92.716	3.5
29	MP4B	Z	53.53	3.5
30	MP4B	Mx	-.078	3.5
31	MP4C	X	-119.871	.5
32	MP4C	Z	69.207	.5
33	MP4C	Mx	.104	.5
34	MP4C	X	-119.871	3.5
35	MP4C	Z	69.207	3.5
36	MP4C	Mx	.104	3.5
37	MP1A	X	-31.031	.5
38	MP1A	Z	17.916	.5
39	MP1A	Mx	.016	.5
40	MP1A	X	-31.031	2.5
41	MP1A	Z	17.916	2.5
42	MP1A	Mx	.016	2.5
43	MP1B	X	-26.41	.5
44	MP1B	Z	15.248	.5
45	MP1B	Mx	-.014	.5
46	MP1B	X	-26.41	2.5
47	MP1B	Z	15.248	2.5
48	MP1B	Mx	-.014	2.5
49	MP1C	X	-57.081	.5
50	MP1C	Z	32.956	.5
51	MP1C	Mx	0	.5
52	MP1C	X	-57.081	2.5
53	MP1C	Z	32.956	2.5
54	MP1C	Mx	0	2.5
55	M61	X	-81.083	1
56	M61	Z	46.813	1
57	M61	Mx	.041	1
58	MP4A	X	-34.127	2
59	MP4A	Z	19.703	2
60	MP4A	Mx	-.017	2
61	MP4B	X	-32.124	2
62	MP4B	Z	18.547	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
63	MP4B	Mx	.017	2
64	MP4C	X	-45.422	2
65	MP4C	Z	26.224	2
66	MP4C	Mx	0	2
67	MP3A	X	-32.078	2
68	MP3A	Z	18.52	2
69	MP3A	Mx	-.016	2
70	MP3B	X	-29.711	2
71	MP3B	Z	17.154	2
72	MP3B	Mx	.016	2
73	MP3C	X	-45.422	2
74	MP3C	Z	26.224	2
75	MP3C	Mx	0	2
76	MP2A	X	-60.859	.5
77	MP2A	Z	35.137	.5
78	MP2A	Mx	.03	.5
79	MP2A	X	-60.859	3.5
80	MP2A	Z	35.137	3.5
81	MP2A	Mx	.03	3.5
82	MP2B	X	-55.347	.5
83	MP2B	Z	31.955	.5
84	MP2B	Mx	-.03	.5
85	MP2B	X	-55.347	3.5
86	MP2B	Z	31.955	3.5
87	MP2B	Mx	-.03	3.5
88	MP2C	X	-91.937	.5
89	MP2C	Z	53.08	.5
90	MP2C	Mx	0	.5
91	MP2C	X	-91.937	3.5
92	MP2C	Z	53.08	3.5
93	MP2C	Mx	0	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-102.906	.5
2	MP4A	Z	0	.5
3	MP4A	Mx	.051	.5
4	MP4A	X	-102.906	3.5
5	MP4A	Z	0	3.5
6	MP4A	Mx	.051	3.5
7	MP4B	X	-123.743	.5
8	MP4B	Z	0	.5
9	MP4B	Mx	.031	.5
10	MP4B	X	-123.743	3.5
11	MP4B	Z	0	3.5
12	MP4B	Mx	.031	3.5
13	MP4C	X	-129.538	.5
14	MP4C	Z	0	.5
15	MP4C	Mx	-.117	.5
16	MP4C	X	-129.538	3.5
17	MP4C	Z	0	3.5
18	MP4C	Mx	-.117	3.5
19	MP4A	X	-102.906	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	.051	.5
22	MP4A	X	-102.906	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
23	MP4A	Z	0	3.5
24	MP4A	Mx	.051	3.5
25	MP4B	X	-123.743	.5
26	MP4B	Z	0	.5
27	MP4B	Mx	-.111	.5
28	MP4B	X	-123.743	3.5
29	MP4B	Z	0	3.5
30	MP4B	Mx	-.111	3.5
31	MP4C	X	-129.538	.5
32	MP4C	Z	0	.5
33	MP4C	Mx	.052	.5
34	MP4C	X	-129.538	3.5
35	MP4C	Z	0	3.5
36	MP4C	Mx	.052	3.5
37	MP1A	X	-25.804	.5
38	MP1A	Z	0	.5
39	MP1A	Mx	.013	.5
40	MP1A	X	-25.804	2.5
41	MP1A	Z	0	2.5
42	MP1A	Mx	.013	2.5
43	MP1B	X	-49.34	.5
44	MP1B	Z	0	.5
45	MP1B	Mx	-.016	.5
46	MP1B	X	-49.34	2.5
47	MP1B	Z	0	2.5
48	MP1B	Mx	-.016	2.5
49	MP1C	X	-55.885	.5
50	MP1C	Z	0	.5
51	MP1C	Mx	-.014	.5
52	MP1C	X	-55.885	2.5
53	MP1C	Z	0	2.5
54	MP1C	Mx	-.014	2.5
55	M61	X	-86.877	1
56	M61	Z	0	1
57	M61	Mx	.043	1
58	MP4A	X	-35.059	2
59	MP4A	Z	0	2
60	MP4A	Mx	-.018	2
61	MP4B	X	-45.264	2
62	MP4B	Z	0	2
63	MP4B	Mx	.015	2
64	MP4C	X	-48.102	2
65	MP4C	Z	0	2
66	MP4C	Mx	.012	2
67	MP3A	X	-31.904	2
68	MP3A	Z	0	2
69	MP3A	Mx	-.016	2
70	MP3B	X	-43.96	2
71	MP3B	Z	0	2
72	MP3B	Mx	.014	2
73	MP3C	X	-47.313	2
74	MP3C	Z	0	2
75	MP3C	Mx	.012	2
76	MP2A	X	-58.312	.5
77	MP2A	Z	0	.5
78	MP2A	Mx	.029	.5
79	MP2A	X	-58.312	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
80	MP2A	Z	0	3.5
81	MP2A	Mx	.029	3.5
82	MP2B	X	-86.391	.5
83	MP2B	Z	0	.5
84	MP2B	Mx	-.028	.5
85	MP2B	X	-86.391	3.5
86	MP2B	Z	0	3.5
87	MP2B	Mx	-.028	3.5
88	MP2C	X	-94.198	.5
89	MP2C	Z	0	.5
90	MP2C	Mx	-.024	.5
91	MP2C	X	-94.198	3.5
92	MP2C	Z	0	3.5
93	MP2C	Mx	-.024	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-96.807	.5
2	MP4A	Z	-55.892	.5
3	MP4A	Mx	.006	.5
4	MP4A	X	-96.807	3.5
5	MP4A	Z	-55.892	3.5
6	MP4A	Mx	.006	3.5
7	MP4B	X	-118.943	.5
8	MP4B	Z	-68.672	.5
9	MP4B	Mx	.09	.5
10	MP4B	X	-118.943	3.5
11	MP4B	Z	-68.672	3.5
12	MP4B	Mx	.09	3.5
13	MP4C	X	-96.807	.5
14	MP4C	Z	-55.892	.5
15	MP4C	Mx	-.09	.5
16	MP4C	X	-96.807	3.5
17	MP4C	Z	-55.892	3.5
18	MP4C	Mx	-.09	3.5
19	MP4A	X	-96.807	.5
20	MP4A	Z	-55.892	.5
21	MP4A	Mx	.09	.5
22	MP4A	X	-96.807	3.5
23	MP4A	Z	-55.892	3.5
24	MP4A	Mx	.09	3.5
25	MP4B	X	-118.943	.5
26	MP4B	Z	-68.672	.5
27	MP4B	Mx	-.113	.5
28	MP4B	X	-118.943	3.5
29	MP4B	Z	-68.672	3.5
30	MP4B	Mx	-.113	3.5
31	MP4C	X	-96.807	.5
32	MP4C	Z	-55.892	.5
33	MP4C	Mx	-.006	.5
34	MP4C	X	-96.807	3.5
35	MP4C	Z	-55.892	3.5
36	MP4C	Mx	-.006	3.5
37	MP1A	X	-31.031	.5
38	MP1A	Z	-17.916	.5
39	MP1A	Mx	.016	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
40	MP1A	X	-31.031	2.5
41	MP1A	Z	-17.916	2.5
42	MP1A	Mx	.016	2.5
43	MP1B	X	-56.034	.5
44	MP1B	Z	-32.351	.5
45	MP1B	Mx	-.006	.5
46	MP1B	X	-56.034	2.5
47	MP1B	Z	-32.351	2.5
48	MP1B	Mx	-.006	2.5
49	MP1C	X	-31.031	.5
50	MP1C	Z	-17.916	.5
51	MP1C	Mx	-.016	.5
52	MP1C	X	-31.031	2.5
53	MP1C	Z	-17.916	2.5
54	MP1C	Mx	-.016	2.5
55	M61	X	-81.083	1
56	M61	Z	-46.813	1
57	M61	Mx	.041	1
58	MP4A	X	-34.127	2
59	MP4A	Z	-19.703	2
60	MP4A	Mx	-.017	2
61	MP4B	X	-44.968	2
62	MP4B	Z	-25.962	2
63	MP4B	Mx	.005	2
64	MP4C	X	-34.127	2
65	MP4C	Z	-19.703	2
66	MP4C	Mx	.017	2
67	MP3A	X	-32.078	2
68	MP3A	Z	-18.52	2
69	MP3A	Mx	-.016	2
70	MP3B	X	-44.886	2
71	MP3B	Z	-25.915	2
72	MP3B	Mx	.004	2
73	MP3C	X	-32.078	2
74	MP3C	Z	-18.52	2
75	MP3C	Mx	.016	2
76	MP2A	X	-60.859	.5
77	MP2A	Z	-35.137	.5
78	MP2A	Mx	.03	.5
79	MP2A	X	-60.859	3.5
80	MP2A	Z	-35.137	3.5
81	MP2A	Mx	.03	3.5
82	MP2B	X	-90.688	.5
83	MP2B	Z	-52.359	.5
84	MP2B	Mx	-.009	.5
85	MP2B	X	-90.688	3.5
86	MP2B	Z	-52.359	3.5
87	MP2B	Mx	-.009	3.5
88	MP2C	X	-60.859	.5
89	MP2C	Z	-35.137	.5
90	MP2C	Mx	-.03	.5
91	MP2C	X	-60.859	3.5
92	MP2C	Z	-35.137	3.5
93	MP2C	Mx	-.03	3.5

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

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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-64.769	.5
2	MP4A	Z	-112.183	.5
3	MP4A	Mx	-.052	.5
4	MP4A	X	-64.769	3.5
5	MP4A	Z	-112.183	3.5
6	MP4A	Mx	-.052	3.5
7	MP4B	X	-67.13	.5
8	MP4B	Z	-116.273	.5
9	MP4B	Mx	.118	.5
10	MP4B	X	-67.13	3.5
11	MP4B	Z	-116.273	3.5
12	MP4B	Mx	.118	3.5
13	MP4C	X	-51.453	.5
14	MP4C	Z	-89.119	.5
15	MP4C	Mx	-.051	.5
16	MP4C	X	-51.453	3.5
17	MP4C	Z	-89.119	3.5
18	MP4C	Mx	-.051	3.5
19	MP4A	X	-64.769	.5
20	MP4A	Z	-112.183	.5
21	MP4A	Mx	.117	.5
22	MP4A	X	-64.769	3.5
23	MP4A	Z	-112.183	3.5
24	MP4A	Mx	.117	3.5
25	MP4B	X	-67.13	.5
26	MP4B	Z	-116.273	.5
27	MP4B	Mx	-.072	.5
28	MP4B	X	-67.13	3.5
29	MP4B	Z	-116.273	3.5
30	MP4B	Mx	-.072	3.5
31	MP4C	X	-51.453	.5
32	MP4C	Z	-89.119	.5
33	MP4C	Mx	-.051	.5
34	MP4C	X	-51.453	3.5
35	MP4C	Z	-89.119	3.5
36	MP4C	Mx	-.051	3.5
37	MP1A	X	-27.942	.5
38	MP1A	Z	-48.398	.5
39	MP1A	Mx	.014	.5
40	MP1A	X	-27.942	2.5
41	MP1A	Z	-48.398	2.5
42	MP1A	Mx	.014	2.5
43	MP1B	X	-30.61	.5
44	MP1B	Z	-53.018	.5
45	MP1B	Mx	.01	.5
46	MP1B	X	-30.61	2.5
47	MP1B	Z	-53.018	2.5
48	MP1B	Mx	.01	2.5
49	MP1C	X	-12.902	.5
50	MP1C	Z	-22.347	.5
51	MP1C	Mx	-.013	.5
52	MP1C	X	-12.902	2.5
53	MP1C	Z	-22.347	2.5
54	MP1C	Mx	-.013	2.5
55	M61	X	-53.562	1
56	M61	Z	-92.772	1
57	M61	Mx	.027	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP4A	X	-24.051	2
59	MP4A	Z	-41.657	2
60	MP4A	Mx	-.012	2
61	MP4B	X	-25.207	2
62	MP4B	Z	-43.66	2
63	MP4B	Mx	-.009	2
64	MP4C	X	-17.53	2
65	MP4C	Z	-30.362	2
66	MP4C	Mx	.018	2
67	MP3A	X	-23.656	2
68	MP3A	Z	-40.974	2
69	MP3A	Mx	-.012	2
70	MP3B	X	-25.023	2
71	MP3B	Z	-43.341	2
72	MP3B	Mx	-.009	2
73	MP3C	X	-15.952	2
74	MP3C	Z	-27.63	2
75	MP3C	Mx	.016	2
76	MP2A	X	-47.099	.5
77	MP2A	Z	-81.578	.5
78	MP2A	Mx	.024	.5
79	MP2A	X	-47.099	3.5
80	MP2A	Z	-81.578	3.5
81	MP2A	Mx	.024	3.5
82	MP2B	X	-50.281	.5
83	MP2B	Z	-87.09	.5
84	MP2B	Mx	.017	.5
85	MP2B	X	-50.281	3.5
86	MP2B	Z	-87.09	3.5
87	MP2B	Mx	.017	3.5
88	MP2C	X	-29.156	.5
89	MP2C	Z	-50.5	.5
90	MP2C	Mx	-.029	.5
91	MP2C	X	-29.156	3.5
92	MP2C	Z	-50.5	3.5
93	MP2C	Mx	-.029	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	0	.5
2	MP4A	Z	-27.958	.5
3	MP4A	Mx	-.021	.5
4	MP4A	X	0	3.5
5	MP4A	Z	-27.958	3.5
6	MP4A	Mx	-.021	3.5
7	MP4B	X	0	.5
8	MP4B	Z	-23.956	.5
9	MP4B	Mx	.021	.5
10	MP4B	X	0	3.5
11	MP4B	Z	-23.956	3.5
12	MP4B	Mx	.021	3.5
13	MP4C	X	0	.5
14	MP4C	Z	-22.843	.5
15	MP4C	Mx	-.001	.5
16	MP4C	X	0	3.5
17	MP4C	Z	-22.843	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP4C	Mx	-.001	3.5
19	MP4A	X	0	.5
20	MP4A	Z	-27.958	.5
21	MP4A	Mx	.021	.5
22	MP4A	X	0	3.5
23	MP4A	Z	-27.958	3.5
24	MP4A	Mx	.021	3.5
25	MP4B	X	0	.5
26	MP4B	Z	-23.956	.5
27	MP4B	Mx	-.002	.5
28	MP4B	X	0	3.5
29	MP4B	Z	-23.956	3.5
30	MP4B	Mx	-.002	3.5
31	MP4C	X	0	.5
32	MP4C	Z	-22.843	.5
33	MP4C	Mx	-.018	.5
34	MP4C	X	0	3.5
35	MP4C	Z	-22.843	3.5
36	MP4C	Mx	-.018	3.5
37	MP1A	X	0	.5
38	MP1A	Z	-13.777	.5
39	MP1A	Mx	0	.5
40	MP1A	X	0	2.5
41	MP1A	Z	-13.777	2.5
42	MP1A	Mx	0	2.5
43	MP1B	X	0	.5
44	MP1B	Z	-9.126	.5
45	MP1B	Mx	.003	.5
46	MP1B	X	0	2.5
47	MP1B	Z	-9.126	2.5
48	MP1B	Mx	.003	2.5
49	MP1C	X	0	.5
50	MP1C	Z	-7.833	.5
51	MP1C	Mx	-.003	.5
52	MP1C	X	0	2.5
53	MP1C	Z	-7.833	2.5
54	MP1C	Mx	-.003	2.5
55	M61	X	0	1
56	M61	Z	-23.859	1
57	M61	Mx	0	1
58	MP4A	X	0	2
59	MP4A	Z	-11.589	2
60	MP4A	Mx	0	2
61	MP4B	X	0	2
62	MP4B	Z	-9.512	2
63	MP4B	Mx	-.004	2
64	MP4C	X	0	2
65	MP4C	Z	-8.935	2
66	MP4C	Mx	.004	2
67	MP3A	X	0	2
68	MP3A	Z	-11.589	2
69	MP3A	Mx	0	2
70	MP3B	X	0	2
71	MP3B	Z	-9.139	2
72	MP3B	Mx	-.004	2
73	MP3C	X	0	2
74	MP3C	Z	-8.457	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
75	MP3C	Mx	.004	2
76	MP2A	X	0	.5
77	MP2A	Z	-21.76	.5
78	MP2A	Mx	0	.5
79	MP2A	X	0	3.5
80	MP2A	Z	-21.76	3.5
81	MP2A	Mx	0	3.5
82	MP2B	X	0	.5
83	MP2B	Z	-16.454	.5
84	MP2B	Mx	.006	.5
85	MP2B	X	0	3.5
86	MP2B	Z	-16.454	3.5
87	MP2B	Mx	.006	3.5
88	MP2C	X	0	.5
89	MP2C	Z	-14.979	.5
90	MP2C	Mx	-.006	.5
91	MP2C	X	0	3.5
92	MP2C	Z	-14.979	3.5
93	MP2C	Mx	-.006	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	13.127	.5
2	MP4A	Z	-22.736	.5
3	MP4A	Mx	-.024	.5
4	MP4A	X	13.127	3.5
5	MP4A	Z	-22.736	3.5
6	MP4A	Mx	-.024	3.5
7	MP4B	X	10.671	.5
8	MP4B	Z	-18.483	.5
9	MP4B	Mx	.013	.5
10	MP4B	X	10.671	3.5
11	MP4B	Z	-18.483	3.5
12	MP4B	Mx	.013	3.5
13	MP4C	X	13.127	.5
14	MP4C	Z	-22.736	.5
15	MP4C	Mx	.01	.5
16	MP4C	X	13.127	3.5
17	MP4C	Z	-22.736	3.5
18	MP4C	Mx	.01	3.5
19	MP4A	X	13.127	.5
20	MP4A	Z	-22.736	.5
21	MP4A	Mx	.01	.5
22	MP4A	X	13.127	3.5
23	MP4A	Z	-22.736	3.5
24	MP4A	Mx	.01	3.5
25	MP4B	X	10.671	.5
26	MP4B	Z	-18.483	.5
27	MP4B	Mx	.008	.5
28	MP4B	X	10.671	3.5
29	MP4B	Z	-18.483	3.5
30	MP4B	Mx	.008	3.5
31	MP4C	X	13.127	.5
32	MP4C	Z	-22.736	.5
33	MP4C	Mx	-.024	.5
34	MP4C	X	13.127	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
35	MP4C	Z	-22.736	3.5
36	MP4C	Mx	-.024	3.5
37	MP1A	X	5.898	.5
38	MP1A	Z	-10.215	.5
39	MP1A	Mx	-.003	.5
40	MP1A	X	5.898	2.5
41	MP1A	Z	-10.215	2.5
42	MP1A	Mx	-.003	2.5
43	MP1B	X	3.045	.5
44	MP1B	Z	-5.274	.5
45	MP1B	Mx	.003	.5
46	MP1B	X	3.045	2.5
47	MP1B	Z	-5.274	2.5
48	MP1B	Mx	.003	2.5
49	MP1C	X	5.898	.5
50	MP1C	Z	-10.215	.5
51	MP1C	Mx	-.003	.5
52	MP1C	X	5.898	2.5
53	MP1C	Z	-10.215	2.5
54	MP1C	Mx	-.003	2.5
55	M61	X	11.277	1
56	M61	Z	-19.533	1
57	M61	Mx	-.006	1
58	MP4A	X	5.352	2
59	MP4A	Z	-9.27	2
60	MP4A	Mx	.003	2
61	MP4B	X	4.078	2
62	MP4B	Z	-7.064	2
63	MP4B	Mx	-.004	2
64	MP4C	X	5.352	2
65	MP4C	Z	-9.27	2
66	MP4C	Mx	.003	2
67	MP3A	X	5.273	2
68	MP3A	Z	-9.132	2
69	MP3A	Mx	.003	2
70	MP3B	X	3.77	2
71	MP3B	Z	-6.529	2
72	MP3B	Mx	-.004	2
73	MP3C	X	5.273	2
74	MP3C	Z	-9.132	2
75	MP3C	Mx	.003	2
76	MP2A	X	9.75	.5
77	MP2A	Z	-16.887	.5
78	MP2A	Mx	-.005	.5
79	MP2A	X	9.75	3.5
80	MP2A	Z	-16.887	3.5
81	MP2A	Mx	-.005	3.5
82	MP2B	X	6.496	.5
83	MP2B	Z	-11.251	.5
84	MP2B	Mx	.006	.5
85	MP2B	X	6.496	3.5
86	MP2B	Z	-11.251	3.5
87	MP2B	Mx	.006	3.5
88	MP2C	X	9.75	.5
89	MP2C	Z	-16.887	.5
90	MP2C	Mx	-.005	.5
91	MP2C	X	9.75	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
92	MP2C	Z	-16.887	3.5
93	MP2C	Mx	-.005	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	19.782	.5
2	MP4A	Z	-11.421	.5
3	MP4A	Mx	-.018	.5
4	MP4A	X	19.782	3.5
5	MP4A	Z	-11.421	3.5
6	MP4A	Mx	-.018	3.5
7	MP4B	X	18.996	.5
8	MP4B	Z	-10.968	.5
9	MP4B	Mx	.005	.5
10	MP4B	X	18.996	3.5
11	MP4B	Z	-10.968	3.5
12	MP4B	Mx	.005	3.5
13	MP4C	X	24.213	.5
14	MP4C	Z	-13.979	.5
15	MP4C	Mx	.021	.5
16	MP4C	X	24.213	3.5
17	MP4C	Z	-13.979	3.5
18	MP4C	Mx	.021	3.5
19	MP4A	X	19.782	.5
20	MP4A	Z	-11.421	.5
21	MP4A	Mx	-.001	.5
22	MP4A	X	19.782	3.5
23	MP4A	Z	-11.421	3.5
24	MP4A	Mx	-.001	3.5
25	MP4B	X	18.996	.5
26	MP4B	Z	-10.968	.5
27	MP4B	Mx	.016	.5
28	MP4B	X	18.996	3.5
29	MP4B	Z	-10.968	3.5
30	MP4B	Mx	.016	3.5
31	MP4C	X	24.213	.5
32	MP4C	Z	-13.979	.5
33	MP4C	Mx	-.021	.5
34	MP4C	X	24.213	3.5
35	MP4C	Z	-13.979	3.5
36	MP4C	Mx	-.021	3.5
37	MP1A	X	6.783	.5
38	MP1A	Z	-3.916	.5
39	MP1A	Mx	-.003	.5
40	MP1A	X	6.783	2.5
41	MP1A	Z	-3.916	2.5
42	MP1A	Mx	-.003	2.5
43	MP1B	X	5.87	.5
44	MP1B	Z	-3.389	.5
45	MP1B	Mx	.003	.5
46	MP1B	X	5.87	2.5
47	MP1B	Z	-3.389	2.5
48	MP1B	Mx	.003	2.5
49	MP1C	X	11.932	.5
50	MP1C	Z	-6.889	.5
51	MP1C	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
52	MP1C	X	11.932	2.5
53	MP1C	Z	-6.889	2.5
54	MP1C	Mx	0	2.5
55	M61	X	17.274	1
56	M61	Z	-9.973	1
57	M61	Mx	-.009	1
58	MP4A	X	7.738	2
59	MP4A	Z	-4.467	2
60	MP4A	Mx	.004	2
61	MP4B	X	7.33	2
62	MP4B	Z	-4.232	2
63	MP4B	Mx	-.004	2
64	MP4C	X	10.037	2
65	MP4C	Z	-5.795	2
66	MP4C	Mx	0	2
67	MP3A	X	7.324	2
68	MP3A	Z	-4.229	2
69	MP3A	Mx	.004	2
70	MP3B	X	6.843	2
71	MP3B	Z	-3.951	2
72	MP3B	Mx	-.004	2
73	MP3C	X	10.037	2
74	MP3C	Z	-5.795	2
75	MP3C	Mx	0	2
76	MP2A	X	12.972	.5
77	MP2A	Z	-7.489	.5
78	MP2A	Mx	-.006	.5
79	MP2A	X	12.972	3.5
80	MP2A	Z	-7.489	3.5
81	MP2A	Mx	-.006	3.5
82	MP2B	X	11.931	.5
83	MP2B	Z	-6.888	.5
84	MP2B	Mx	.006	.5
85	MP2B	X	11.931	3.5
86	MP2B	Z	-6.888	3.5
87	MP2B	Mx	.006	3.5
88	MP2C	X	18.845	.5
89	MP2C	Z	-10.88	.5
90	MP2C	Mx	0	.5
91	MP2C	X	18.845	3.5
92	MP2C	Z	-10.88	3.5
93	MP2C	Mx	0	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	21.137	.5
2	MP4A	Z	0	.5
3	MP4A	Mx	-.011	.5
4	MP4A	X	21.137	3.5
5	MP4A	Z	0	3.5
6	MP4A	Mx	-.011	3.5
7	MP4B	X	25.14	.5
8	MP4B	Z	0	.5
9	MP4B	Mx	-.006	.5
10	MP4B	X	25.14	3.5
11	MP4B	Z	0	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
12	MP4B	Mx	-.006	3.5
13	MP4C	X	26.253	.5
14	MP4C	Z	0	.5
15	MP4C	Mx	.024	.5
16	MP4C	X	26.253	3.5
17	MP4C	Z	0	3.5
18	MP4C	Mx	.024	3.5
19	MP4A	X	21.137	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	-.011	.5
22	MP4A	X	21.137	3.5
23	MP4A	Z	0	3.5
24	MP4A	Mx	-.011	3.5
25	MP4B	X	25.14	.5
26	MP4B	Z	0	.5
27	MP4B	Mx	.023	.5
28	MP4B	X	25.14	3.5
29	MP4B	Z	0	3.5
30	MP4B	Mx	.023	3.5
31	MP4C	X	26.253	.5
32	MP4C	Z	0	.5
33	MP4C	Mx	-.01	.5
34	MP4C	X	26.253	3.5
35	MP4C	Z	0	3.5
36	MP4C	Mx	-.01	3.5
37	MP1A	X	5.851	.5
38	MP1A	Z	0	.5
39	MP1A	Mx	-.003	.5
40	MP1A	X	5.851	2.5
41	MP1A	Z	0	2.5
42	MP1A	Mx	-.003	2.5
43	MP1B	X	10.502	.5
44	MP1B	Z	0	.5
45	MP1B	Mx	.003	.5
46	MP1B	X	10.502	2.5
47	MP1B	Z	0	2.5
48	MP1B	Mx	.003	2.5
49	MP1C	X	11.796	.5
50	MP1C	Z	0	.5
51	MP1C	Mx	.003	.5
52	MP1C	X	11.796	2.5
53	MP1C	Z	0	2.5
54	MP1C	Mx	.003	2.5
55	M61	X	18.642	1
56	M61	Z	0	1
57	M61	Mx	-.009	1
58	MP4A	X	8.05	2
59	MP4A	Z	0	2
60	MP4A	Mx	.004	2
61	MP4B	X	10.127	2
62	MP4B	Z	0	2
63	MP4B	Mx	-.003	2
64	MP4C	X	10.704	2
65	MP4C	Z	0	2
66	MP4C	Mx	-.003	2
67	MP3A	X	7.413	2
68	MP3A	Z	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
69	MP3A	Mx	.004	2
70	MP3B	X	9.864	2
71	MP3B	Z	0	2
72	MP3B	Mx	-.003	2
73	MP3C	X	10.545	2
74	MP3C	Z	0	2
75	MP3C	Mx	-.003	2
76	MP2A	X	12.719	.5
77	MP2A	Z	0	.5
78	MP2A	Mx	-.006	.5
79	MP2A	X	12.719	3.5
80	MP2A	Z	0	3.5
81	MP2A	Mx	-.006	3.5
82	MP2B	X	18.024	.5
83	MP2B	Z	0	.5
84	MP2B	Mx	.006	.5
85	MP2B	X	18.024	3.5
86	MP2B	Z	0	3.5
87	MP2B	Mx	.006	3.5
88	MP2C	X	19.5	.5
89	MP2C	Z	0	.5
90	MP2C	Mx	.005	.5
91	MP2C	X	19.5	3.5
92	MP2C	Z	0	3.5
93	MP2C	Mx	.005	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	19.782	.5
2	MP4A	Z	11.421	.5
3	MP4A	Mx	-.001	.5
4	MP4A	X	19.782	3.5
5	MP4A	Z	11.421	3.5
6	MP4A	Mx	-.001	3.5
7	MP4B	X	24.035	.5
8	MP4B	Z	13.876	.5
9	MP4B	Mx	-.018	.5
10	MP4B	X	24.035	3.5
11	MP4B	Z	13.876	3.5
12	MP4B	Mx	-.018	3.5
13	MP4C	X	19.782	.5
14	MP4C	Z	11.421	.5
15	MP4C	Mx	.018	.5
16	MP4C	X	19.782	3.5
17	MP4C	Z	11.421	3.5
18	MP4C	Mx	.018	3.5
19	MP4A	X	19.782	.5
20	MP4A	Z	11.421	.5
21	MP4A	Mx	-.018	.5
22	MP4A	X	19.782	3.5
23	MP4A	Z	11.421	3.5
24	MP4A	Mx	-.018	3.5
25	MP4B	X	24.035	.5
26	MP4B	Z	13.876	.5
27	MP4B	Mx	.023	.5
28	MP4B	X	24.035	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP4B	Z	13.876	3.5
30	MP4B	Mx	.023	3.5
31	MP4C	X	19.782	.5
32	MP4C	Z	11.421	.5
33	MP4C	Mx	.001	.5
34	MP4C	X	19.782	3.5
35	MP4C	Z	11.421	3.5
36	MP4C	Mx	.001	3.5
37	MP1A	X	6.783	.5
38	MP1A	Z	3.916	.5
39	MP1A	Mx	-.003	.5
40	MP1A	X	6.783	2.5
41	MP1A	Z	3.916	2.5
42	MP1A	Mx	-.003	2.5
43	MP1B	X	11.725	.5
44	MP1B	Z	6.769	.5
45	MP1B	Mx	.001	.5
46	MP1B	X	11.725	2.5
47	MP1B	Z	6.769	2.5
48	MP1B	Mx	.001	2.5
49	MP1C	X	6.783	.5
50	MP1C	Z	3.916	.5
51	MP1C	Mx	.003	.5
52	MP1C	X	6.783	2.5
53	MP1C	Z	3.916	2.5
54	MP1C	Mx	.003	2.5
55	M61	X	17.274	1
56	M61	Z	9.973	1
57	M61	Mx	-.009	1
58	MP4A	X	7.738	2
59	MP4A	Z	4.467	2
60	MP4A	Mx	.004	2
61	MP4B	X	9.944	2
62	MP4B	Z	5.741	2
63	MP4B	Mx	-.000997	2
64	MP4C	X	7.738	2
65	MP4C	Z	4.467	2
66	MP4C	Mx	-.004	2
67	MP3A	X	7.324	2
68	MP3A	Z	4.229	2
69	MP3A	Mx	.004	2
70	MP3B	X	9.927	2
71	MP3B	Z	5.732	2
72	MP3B	Mx	-.000995	2
73	MP3C	X	7.324	2
74	MP3C	Z	4.229	2
75	MP3C	Mx	-.004	2
76	MP2A	X	12.972	.5
77	MP2A	Z	7.489	.5
78	MP2A	Mx	-.006	.5
79	MP2A	X	12.972	3.5
80	MP2A	Z	7.489	3.5
81	MP2A	Mx	-.006	3.5
82	MP2B	X	18.608	.5
83	MP2B	Z	10.744	.5
84	MP2B	Mx	.002	.5
85	MP2B	X	18.608	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
86	MP2B	Z	10.744	3.5
87	MP2B	Mx	.002	3.5
88	MP2C	X	12.972	.5
89	MP2C	Z	7.489	.5
90	MP2C	Mx	.006	.5
91	MP2C	X	12.972	3.5
92	MP2C	Z	7.489	3.5
93	MP2C	Mx	.006	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	13.127	.5
2	MP4A	Z	22.736	.5
3	MP4A	Mx	.01	.5
4	MP4A	X	13.127	3.5
5	MP4A	Z	22.736	3.5
6	MP4A	Mx	.01	3.5
7	MP4B	X	13.58	.5
8	MP4B	Z	23.522	.5
9	MP4B	Mx	-.024	.5
10	MP4B	X	13.58	3.5
11	MP4B	Z	23.522	3.5
12	MP4B	Mx	-.024	3.5
13	MP4C	X	10.569	.5
14	MP4C	Z	18.305	.5
15	MP4C	Mx	.011	.5
16	MP4C	X	10.569	3.5
17	MP4C	Z	18.305	3.5
18	MP4C	Mx	.011	3.5
19	MP4A	X	13.127	.5
20	MP4A	Z	22.736	.5
21	MP4A	Mx	-.024	.5
22	MP4A	X	13.127	3.5
23	MP4A	Z	22.736	3.5
24	MP4A	Mx	-.024	3.5
25	MP4B	X	13.58	.5
26	MP4B	Z	23.522	.5
27	MP4B	Mx	.014	.5
28	MP4B	X	13.58	3.5
29	MP4B	Z	23.522	3.5
30	MP4B	Mx	.014	3.5
31	MP4C	X	10.569	.5
32	MP4C	Z	18.305	.5
33	MP4C	Mx	.011	.5
34	MP4C	X	10.569	3.5
35	MP4C	Z	18.305	3.5
36	MP4C	Mx	.011	3.5
37	MP1A	X	5.898	.5
38	MP1A	Z	10.215	.5
39	MP1A	Mx	-.003	.5
40	MP1A	X	5.898	2.5
41	MP1A	Z	10.215	2.5
42	MP1A	Mx	-.003	2.5
43	MP1B	X	6.425	.5
44	MP1B	Z	11.129	.5
45	MP1B	Mx	-.002	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
46	MP1B	X	6.425	2.5
47	MP1B	Z	11.129	2.5
48	MP1B	Mx	-.002	2.5
49	MP1C	X	2.926	.5
50	MP1C	Z	5.067	.5
51	MP1C	Mx	.003	.5
52	MP1C	X	2.926	2.5
53	MP1C	Z	5.067	2.5
54	MP1C	Mx	.003	2.5
55	M61	X	11.277	1
56	M61	Z	19.533	1
57	M61	Mx	-.006	1
58	MP4A	X	5.352	2
59	MP4A	Z	9.27	2
60	MP4A	Mx	.003	2
61	MP4B	X	5.588	2
62	MP4B	Z	9.678	2
63	MP4B	Mx	.002	2
64	MP4C	X	4.025	2
65	MP4C	Z	6.972	2
66	MP4C	Mx	-.004	2
67	MP3A	X	5.273	2
68	MP3A	Z	9.132	2
69	MP3A	Mx	.003	2
70	MP3B	X	5.55	2
71	MP3B	Z	9.613	2
72	MP3B	Mx	.002	2
73	MP3C	X	3.707	2
74	MP3C	Z	6.42	2
75	MP3C	Mx	-.004	2
76	MP2A	X	9.75	.5
77	MP2A	Z	16.887	.5
78	MP2A	Mx	-.005	.5
79	MP2A	X	9.75	3.5
80	MP2A	Z	16.887	3.5
81	MP2A	Mx	-.005	3.5
82	MP2B	X	10.351	.5
83	MP2B	Z	17.929	.5
84	MP2B	Mx	-.004	.5
85	MP2B	X	10.351	3.5
86	MP2B	Z	17.929	3.5
87	MP2B	Mx	-.004	3.5
88	MP2C	X	6.359	.5
89	MP2C	Z	11.015	.5
90	MP2C	Mx	.006	.5
91	MP2C	X	6.359	3.5
92	MP2C	Z	11.015	3.5
93	MP2C	Mx	.006	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	0	.5
2	MP4A	Z	27.958	.5
3	MP4A	Mx	.021	.5
4	MP4A	X	0	3.5
5	MP4A	Z	27.958	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
6	MP4A	Mx	.021	3.5
7	MP4B	X	0	.5
8	MP4B	Z	23.956	.5
9	MP4B	Mx	-.021	.5
10	MP4B	X	0	3.5
11	MP4B	Z	23.956	3.5
12	MP4B	Mx	-.021	3.5
13	MP4C	X	0	.5
14	MP4C	Z	22.843	.5
15	MP4C	Mx	.001	.5
16	MP4C	X	0	3.5
17	MP4C	Z	22.843	3.5
18	MP4C	Mx	.001	3.5
19	MP4A	X	0	.5
20	MP4A	Z	27.958	.5
21	MP4A	Mx	-.021	.5
22	MP4A	X	0	3.5
23	MP4A	Z	27.958	3.5
24	MP4A	Mx	-.021	3.5
25	MP4B	X	0	.5
26	MP4B	Z	23.956	.5
27	MP4B	Mx	.002	.5
28	MP4B	X	0	3.5
29	MP4B	Z	23.956	3.5
30	MP4B	Mx	.002	3.5
31	MP4C	X	0	.5
32	MP4C	Z	22.843	.5
33	MP4C	Mx	.018	.5
34	MP4C	X	0	3.5
35	MP4C	Z	22.843	3.5
36	MP4C	Mx	.018	3.5
37	MP1A	X	0	.5
38	MP1A	Z	13.777	.5
39	MP1A	Mx	0	.5
40	MP1A	X	0	2.5
41	MP1A	Z	13.777	2.5
42	MP1A	Mx	0	2.5
43	MP1B	X	0	.5
44	MP1B	Z	9.126	.5
45	MP1B	Mx	-.003	.5
46	MP1B	X	0	2.5
47	MP1B	Z	9.126	2.5
48	MP1B	Mx	-.003	2.5
49	MP1C	X	0	.5
50	MP1C	Z	7.833	.5
51	MP1C	Mx	.003	.5
52	MP1C	X	0	2.5
53	MP1C	Z	7.833	2.5
54	MP1C	Mx	.003	2.5
55	M61	X	0	1
56	M61	Z	23.859	1
57	M61	Mx	0	1
58	MP4A	X	0	2
59	MP4A	Z	11.589	2
60	MP4A	Mx	0	2
61	MP4B	X	0	2
62	MP4B	Z	9.512	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
63	MP4B	Mx	.004	2
64	MP4C	X	0	2
65	MP4C	Z	8.935	2
66	MP4C	Mx	-.004	2
67	MP3A	X	0	2
68	MP3A	Z	11.589	2
69	MP3A	Mx	0	2
70	MP3B	X	0	2
71	MP3B	Z	9.139	2
72	MP3B	Mx	.004	2
73	MP3C	X	0	2
74	MP3C	Z	8.457	2
75	MP3C	Mx	-.004	2
76	MP2A	X	0	.5
77	MP2A	Z	21.76	.5
78	MP2A	Mx	0	.5
79	MP2A	X	0	3.5
80	MP2A	Z	21.76	3.5
81	MP2A	Mx	0	3.5
82	MP2B	X	0	.5
83	MP2B	Z	16.454	.5
84	MP2B	Mx	-.006	.5
85	MP2B	X	0	3.5
86	MP2B	Z	16.454	3.5
87	MP2B	Mx	-.006	3.5
88	MP2C	X	0	.5
89	MP2C	Z	14.979	.5
90	MP2C	Mx	.006	.5
91	MP2C	X	0	3.5
92	MP2C	Z	14.979	3.5
93	MP2C	Mx	.006	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-13.127	.5
2	MP4A	Z	22.736	.5
3	MP4A	Mx	.024	.5
4	MP4A	X	-13.127	3.5
5	MP4A	Z	22.736	3.5
6	MP4A	Mx	.024	3.5
7	MP4B	X	-10.671	.5
8	MP4B	Z	18.483	.5
9	MP4B	Mx	-.013	.5
10	MP4B	X	-10.671	3.5
11	MP4B	Z	18.483	3.5
12	MP4B	Mx	-.013	3.5
13	MP4C	X	-13.127	.5
14	MP4C	Z	22.736	.5
15	MP4C	Mx	-.01	.5
16	MP4C	X	-13.127	3.5
17	MP4C	Z	22.736	3.5
18	MP4C	Mx	-.01	3.5
19	MP4A	X	-13.127	.5
20	MP4A	Z	22.736	.5
21	MP4A	Mx	-.01	.5
22	MP4A	X	-13.127	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
23	MP4A	Z	22.736	3.5
24	MP4A	Mx	-.01	3.5
25	MP4B	X	-10.671	.5
26	MP4B	Z	18.483	.5
27	MP4B	Mx	-.008	.5
28	MP4B	X	-10.671	3.5
29	MP4B	Z	18.483	3.5
30	MP4B	Mx	-.008	3.5
31	MP4C	X	-13.127	.5
32	MP4C	Z	22.736	.5
33	MP4C	Mx	.024	.5
34	MP4C	X	-13.127	3.5
35	MP4C	Z	22.736	3.5
36	MP4C	Mx	.024	3.5
37	MP1A	X	-5.898	.5
38	MP1A	Z	10.215	.5
39	MP1A	Mx	.003	.5
40	MP1A	X	-5.898	2.5
41	MP1A	Z	10.215	2.5
42	MP1A	Mx	.003	2.5
43	MP1B	X	-3.045	.5
44	MP1B	Z	5.274	.5
45	MP1B	Mx	-.003	.5
46	MP1B	X	-3.045	2.5
47	MP1B	Z	5.274	2.5
48	MP1B	Mx	-.003	2.5
49	MP1C	X	-5.898	.5
50	MP1C	Z	10.215	.5
51	MP1C	Mx	.003	.5
52	MP1C	X	-5.898	2.5
53	MP1C	Z	10.215	2.5
54	MP1C	Mx	.003	2.5
55	M61	X	-11.277	1
56	M61	Z	19.533	1
57	M61	Mx	.006	1
58	MP4A	X	-5.352	2
59	MP4A	Z	9.27	2
60	MP4A	Mx	-.003	2
61	MP4B	X	-4.078	2
62	MP4B	Z	7.064	2
63	MP4B	Mx	.004	2
64	MP4C	X	-5.352	2
65	MP4C	Z	9.27	2
66	MP4C	Mx	-.003	2
67	MP3A	X	-5.273	2
68	MP3A	Z	9.132	2
69	MP3A	Mx	-.003	2
70	MP3B	X	-3.77	2
71	MP3B	Z	6.529	2
72	MP3B	Mx	.004	2
73	MP3C	X	-5.273	2
74	MP3C	Z	9.132	2
75	MP3C	Mx	-.003	2
76	MP2A	X	-9.75	.5
77	MP2A	Z	16.887	.5
78	MP2A	Mx	.005	.5
79	MP2A	X	-9.75	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
80	MP2A	Z	16.887	3.5
81	MP2A	Mx	.005	3.5
82	MP2B	X	-6.496	.5
83	MP2B	Z	11.251	.5
84	MP2B	Mx	-.006	.5
85	MP2B	X	-6.496	3.5
86	MP2B	Z	11.251	3.5
87	MP2B	Mx	-.006	3.5
88	MP2C	X	-9.75	.5
89	MP2C	Z	16.887	.5
90	MP2C	Mx	.005	.5
91	MP2C	X	-9.75	3.5
92	MP2C	Z	16.887	3.5
93	MP2C	Mx	.005	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-19.782	.5
2	MP4A	Z	11.421	.5
3	MP4A	Mx	.018	.5
4	MP4A	X	-19.782	3.5
5	MP4A	Z	11.421	3.5
6	MP4A	Mx	.018	3.5
7	MP4B	X	-18.996	.5
8	MP4B	Z	10.968	.5
9	MP4B	Mx	-.005	.5
10	MP4B	X	-18.996	3.5
11	MP4B	Z	10.968	3.5
12	MP4B	Mx	-.005	3.5
13	MP4C	X	-24.213	.5
14	MP4C	Z	13.979	.5
15	MP4C	Mx	-.021	.5
16	MP4C	X	-24.213	3.5
17	MP4C	Z	13.979	3.5
18	MP4C	Mx	-.021	3.5
19	MP4A	X	-19.782	.5
20	MP4A	Z	11.421	.5
21	MP4A	Mx	.001	.5
22	MP4A	X	-19.782	3.5
23	MP4A	Z	11.421	3.5
24	MP4A	Mx	.001	3.5
25	MP4B	X	-18.996	.5
26	MP4B	Z	10.968	.5
27	MP4B	Mx	-.016	.5
28	MP4B	X	-18.996	3.5
29	MP4B	Z	10.968	3.5
30	MP4B	Mx	-.016	3.5
31	MP4C	X	-24.213	.5
32	MP4C	Z	13.979	.5
33	MP4C	Mx	.021	.5
34	MP4C	X	-24.213	3.5
35	MP4C	Z	13.979	3.5
36	MP4C	Mx	.021	3.5
37	MP1A	X	-6.783	.5
38	MP1A	Z	3.916	.5
39	MP1A	Mx	.003	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
40	MP1A	X	-6.783	2.5
41	MP1A	Z	3.916	2.5
42	MP1A	Mx	.003	2.5
43	MP1B	X	-5.87	.5
44	MP1B	Z	3.389	.5
45	MP1B	Mx	-.003	.5
46	MP1B	X	-5.87	2.5
47	MP1B	Z	3.389	2.5
48	MP1B	Mx	-.003	2.5
49	MP1C	X	-11.932	.5
50	MP1C	Z	6.889	.5
51	MP1C	Mx	0	.5
52	MP1C	X	-11.932	2.5
53	MP1C	Z	6.889	2.5
54	MP1C	Mx	0	2.5
55	M61	X	-17.274	1
56	M61	Z	9.973	1
57	M61	Mx	.009	1
58	MP4A	X	-7.738	2
59	MP4A	Z	4.467	2
60	MP4A	Mx	-.004	2
61	MP4B	X	-7.33	2
62	MP4B	Z	4.232	2
63	MP4B	Mx	.004	2
64	MP4C	X	-10.037	2
65	MP4C	Z	5.795	2
66	MP4C	Mx	0	2
67	MP3A	X	-7.324	2
68	MP3A	Z	4.229	2
69	MP3A	Mx	-.004	2
70	MP3B	X	-6.843	2
71	MP3B	Z	3.951	2
72	MP3B	Mx	.004	2
73	MP3C	X	-10.037	2
74	MP3C	Z	5.795	2
75	MP3C	Mx	0	2
76	MP2A	X	-12.972	.5
77	MP2A	Z	7.489	.5
78	MP2A	Mx	.006	.5
79	MP2A	X	-12.972	3.5
80	MP2A	Z	7.489	3.5
81	MP2A	Mx	.006	3.5
82	MP2B	X	-11.931	.5
83	MP2B	Z	6.888	.5
84	MP2B	Mx	-.006	.5
85	MP2B	X	-11.931	3.5
86	MP2B	Z	6.888	3.5
87	MP2B	Mx	-.006	3.5
88	MP2C	X	-18.845	.5
89	MP2C	Z	10.88	.5
90	MP2C	Mx	0	.5
91	MP2C	X	-18.845	3.5
92	MP2C	Z	10.88	3.5
93	MP2C	Mx	0	3.5

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

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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-21.137	.5
2	MP4A	Z	0	.5
3	MP4A	Mx	.011	.5
4	MP4A	X	-21.137	3.5
5	MP4A	Z	0	3.5
6	MP4A	Mx	.011	3.5
7	MP4B	X	-25.14	.5
8	MP4B	Z	0	.5
9	MP4B	Mx	.006	.5
10	MP4B	X	-25.14	3.5
11	MP4B	Z	0	3.5
12	MP4B	Mx	.006	3.5
13	MP4C	X	-26.253	.5
14	MP4C	Z	0	.5
15	MP4C	Mx	-.024	.5
16	MP4C	X	-26.253	3.5
17	MP4C	Z	0	3.5
18	MP4C	Mx	-.024	3.5
19	MP4A	X	-21.137	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	.011	.5
22	MP4A	X	-21.137	3.5
23	MP4A	Z	0	3.5
24	MP4A	Mx	.011	3.5
25	MP4B	X	-25.14	.5
26	MP4B	Z	0	.5
27	MP4B	Mx	-.023	.5
28	MP4B	X	-25.14	3.5
29	MP4B	Z	0	3.5
30	MP4B	Mx	-.023	3.5
31	MP4C	X	-26.253	.5
32	MP4C	Z	0	.5
33	MP4C	Mx	.01	.5
34	MP4C	X	-26.253	3.5
35	MP4C	Z	0	3.5
36	MP4C	Mx	.01	3.5
37	MP1A	X	-5.851	.5
38	MP1A	Z	0	.5
39	MP1A	Mx	.003	.5
40	MP1A	X	-5.851	2.5
41	MP1A	Z	0	2.5
42	MP1A	Mx	.003	2.5
43	MP1B	X	-10.502	.5
44	MP1B	Z	0	.5
45	MP1B	Mx	-.003	.5
46	MP1B	X	-10.502	2.5
47	MP1B	Z	0	2.5
48	MP1B	Mx	-.003	2.5
49	MP1C	X	-11.796	.5
50	MP1C	Z	0	.5
51	MP1C	Mx	-.003	.5
52	MP1C	X	-11.796	2.5
53	MP1C	Z	0	2.5
54	MP1C	Mx	-.003	2.5
55	M61	X	-18.642	1
56	M61	Z	0	1
57	M61	Mx	.009	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP4A	X	-8.05	2
59	MP4A	Z	0	2
60	MP4A	Mx	-.004	2
61	MP4B	X	-10.127	2
62	MP4B	Z	0	2
63	MP4B	Mx	.003	2
64	MP4C	X	-10.704	2
65	MP4C	Z	0	2
66	MP4C	Mx	.003	2
67	MP3A	X	-7.413	2
68	MP3A	Z	0	2
69	MP3A	Mx	-.004	2
70	MP3B	X	-9.864	2
71	MP3B	Z	0	2
72	MP3B	Mx	.003	2
73	MP3C	X	-10.545	2
74	MP3C	Z	0	2
75	MP3C	Mx	.003	2
76	MP2A	X	-12.719	.5
77	MP2A	Z	0	.5
78	MP2A	Mx	.006	.5
79	MP2A	X	-12.719	3.5
80	MP2A	Z	0	3.5
81	MP2A	Mx	.006	3.5
82	MP2B	X	-18.024	.5
83	MP2B	Z	0	.5
84	MP2B	Mx	-.006	.5
85	MP2B	X	-18.024	3.5
86	MP2B	Z	0	3.5
87	MP2B	Mx	-.006	3.5
88	MP2C	X	-19.5	.5
89	MP2C	Z	0	.5
90	MP2C	Mx	-.005	.5
91	MP2C	X	-19.5	3.5
92	MP2C	Z	0	3.5
93	MP2C	Mx	-.005	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-19.782	.5
2	MP4A	Z	-11.421	.5
3	MP4A	Mx	.001	.5
4	MP4A	X	-19.782	3.5
5	MP4A	Z	-11.421	3.5
6	MP4A	Mx	.001	3.5
7	MP4B	X	-24.035	.5
8	MP4B	Z	-13.876	.5
9	MP4B	Mx	.018	.5
10	MP4B	X	-24.035	3.5
11	MP4B	Z	-13.876	3.5
12	MP4B	Mx	.018	3.5
13	MP4C	X	-19.782	.5
14	MP4C	Z	-11.421	.5
15	MP4C	Mx	-.018	.5
16	MP4C	X	-19.782	3.5
17	MP4C	Z	-11.421	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP4C	Mx	-.018	3.5
19	MP4A	X	-19.782	.5
20	MP4A	Z	-11.421	.5
21	MP4A	Mx	.018	.5
22	MP4A	X	-19.782	3.5
23	MP4A	Z	-11.421	3.5
24	MP4A	Mx	.018	3.5
25	MP4B	X	-24.035	.5
26	MP4B	Z	-13.876	.5
27	MP4B	Mx	-.023	.5
28	MP4B	X	-24.035	3.5
29	MP4B	Z	-13.876	3.5
30	MP4B	Mx	-.023	3.5
31	MP4C	X	-19.782	.5
32	MP4C	Z	-11.421	.5
33	MP4C	Mx	-.001	.5
34	MP4C	X	-19.782	3.5
35	MP4C	Z	-11.421	3.5
36	MP4C	Mx	-.001	3.5
37	MP1A	X	-6.783	.5
38	MP1A	Z	-3.916	.5
39	MP1A	Mx	.003	.5
40	MP1A	X	-6.783	2.5
41	MP1A	Z	-3.916	2.5
42	MP1A	Mx	.003	2.5
43	MP1B	X	-11.725	.5
44	MP1B	Z	-6.769	.5
45	MP1B	Mx	-.001	.5
46	MP1B	X	-11.725	2.5
47	MP1B	Z	-6.769	2.5
48	MP1B	Mx	-.001	2.5
49	MP1C	X	-6.783	.5
50	MP1C	Z	-3.916	.5
51	MP1C	Mx	-.003	.5
52	MP1C	X	-6.783	2.5
53	MP1C	Z	-3.916	2.5
54	MP1C	Mx	-.003	2.5
55	M61	X	-17.274	1
56	M61	Z	-9.973	1
57	M61	Mx	.009	1
58	MP4A	X	-7.738	2
59	MP4A	Z	-4.467	2
60	MP4A	Mx	-.004	2
61	MP4B	X	-9.944	2
62	MP4B	Z	-5.741	2
63	MP4B	Mx	.000997	2
64	MP4C	X	-7.738	2
65	MP4C	Z	-4.467	2
66	MP4C	Mx	.004	2
67	MP3A	X	-7.324	2
68	MP3A	Z	-4.229	2
69	MP3A	Mx	-.004	2
70	MP3B	X	-9.927	2
71	MP3B	Z	-5.732	2
72	MP3B	Mx	.000995	2
73	MP3C	X	-7.324	2
74	MP3C	Z	-4.229	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
75	MP3C	Mx	.004	2
76	MP2A	X	-12.972	.5
77	MP2A	Z	-7.489	.5
78	MP2A	Mx	.006	.5
79	MP2A	X	-12.972	3.5
80	MP2A	Z	-7.489	3.5
81	MP2A	Mx	.006	3.5
82	MP2B	X	-18.608	.5
83	MP2B	Z	-10.744	.5
84	MP2B	Mx	-.002	.5
85	MP2B	X	-18.608	3.5
86	MP2B	Z	-10.744	3.5
87	MP2B	Mx	-.002	3.5
88	MP2C	X	-12.972	.5
89	MP2C	Z	-7.489	.5
90	MP2C	Mx	-.006	.5
91	MP2C	X	-12.972	3.5
92	MP2C	Z	-7.489	3.5
93	MP2C	Mx	-.006	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-13.127	.5
2	MP4A	Z	-22.736	.5
3	MP4A	Mx	-.01	.5
4	MP4A	X	-13.127	3.5
5	MP4A	Z	-22.736	3.5
6	MP4A	Mx	-.01	3.5
7	MP4B	X	-13.58	.5
8	MP4B	Z	-23.522	.5
9	MP4B	Mx	.024	.5
10	MP4B	X	-13.58	3.5
11	MP4B	Z	-23.522	3.5
12	MP4B	Mx	.024	3.5
13	MP4C	X	-10.569	.5
14	MP4C	Z	-18.305	.5
15	MP4C	Mx	-.011	.5
16	MP4C	X	-10.569	3.5
17	MP4C	Z	-18.305	3.5
18	MP4C	Mx	-.011	3.5
19	MP4A	X	-13.127	.5
20	MP4A	Z	-22.736	.5
21	MP4A	Mx	.024	.5
22	MP4A	X	-13.127	3.5
23	MP4A	Z	-22.736	3.5
24	MP4A	Mx	.024	3.5
25	MP4B	X	-13.58	.5
26	MP4B	Z	-23.522	.5
27	MP4B	Mx	-.014	.5
28	MP4B	X	-13.58	3.5
29	MP4B	Z	-23.522	3.5
30	MP4B	Mx	-.014	3.5
31	MP4C	X	-10.569	.5
32	MP4C	Z	-18.305	.5
33	MP4C	Mx	-.011	.5
34	MP4C	X	-10.569	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
35	MP4C	Z	-18.305	3.5
36	MP4C	Mx	-.011	3.5
37	MP1A	X	-5.898	.5
38	MP1A	Z	-10.215	.5
39	MP1A	Mx	.003	.5
40	MP1A	X	-5.898	2.5
41	MP1A	Z	-10.215	2.5
42	MP1A	Mx	.003	2.5
43	MP1B	X	-6.425	.5
44	MP1B	Z	-11.129	.5
45	MP1B	Mx	.002	.5
46	MP1B	X	-6.425	2.5
47	MP1B	Z	-11.129	2.5
48	MP1B	Mx	.002	2.5
49	MP1C	X	-2.926	.5
50	MP1C	Z	-5.067	.5
51	MP1C	Mx	-.003	.5
52	MP1C	X	-2.926	2.5
53	MP1C	Z	-5.067	2.5
54	MP1C	Mx	-.003	2.5
55	M61	X	-11.277	1
56	M61	Z	-19.533	1
57	M61	Mx	.006	1
58	MP4A	X	-5.352	2
59	MP4A	Z	-9.27	2
60	MP4A	Mx	-.003	2
61	MP4B	X	-5.588	2
62	MP4B	Z	-9.678	2
63	MP4B	Mx	-.002	2
64	MP4C	X	-4.025	2
65	MP4C	Z	-6.972	2
66	MP4C	Mx	.004	2
67	MP3A	X	-5.273	2
68	MP3A	Z	-9.132	2
69	MP3A	Mx	-.003	2
70	MP3B	X	-5.55	2
71	MP3B	Z	-9.613	2
72	MP3B	Mx	-.002	2
73	MP3C	X	-3.707	2
74	MP3C	Z	-6.42	2
75	MP3C	Mx	.004	2
76	MP2A	X	-9.75	.5
77	MP2A	Z	-16.887	.5
78	MP2A	Mx	.005	.5
79	MP2A	X	-9.75	3.5
80	MP2A	Z	-16.887	3.5
81	MP2A	Mx	.005	3.5
82	MP2B	X	-10.351	.5
83	MP2B	Z	-17.929	.5
84	MP2B	Mx	.004	.5
85	MP2B	X	-10.351	3.5
86	MP2B	Z	-17.929	3.5
87	MP2B	Mx	.004	3.5
88	MP2C	X	-6.359	.5
89	MP2C	Z	-11.015	.5
90	MP2C	Mx	-.006	.5
91	MP2C	X	-6.359	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
92	MP2C	Z	-11.015	3.5
93	MP2C	Mx	-.006	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	0	.5
2	MP4A	Z	-9.258	.5
3	MP4A	Mx	-.007	.5
4	MP4A	X	0	3.5
5	MP4A	Z	-9.258	3.5
6	MP4A	Mx	-.007	3.5
7	MP4B	X	0	.5
8	MP4B	Z	-7.864	.5
9	MP4B	Mx	.007	.5
10	MP4B	X	0	3.5
11	MP4B	Z	-7.864	3.5
12	MP4B	Mx	.007	3.5
13	MP4C	X	0	.5
14	MP4C	Z	-7.477	.5
15	MP4C	Mx	-.000434	.5
16	MP4C	X	0	3.5
17	MP4C	Z	-7.477	3.5
18	MP4C	Mx	-.000434	3.5
19	MP4A	X	0	.5
20	MP4A	Z	-9.258	.5
21	MP4A	Mx	.007	.5
22	MP4A	X	0	3.5
23	MP4A	Z	-9.258	3.5
24	MP4A	Mx	.007	3.5
25	MP4B	X	0	.5
26	MP4B	Z	-7.864	.5
27	MP4B	Mx	-.000779	.5
28	MP4B	X	0	3.5
29	MP4B	Z	-7.864	3.5
30	MP4B	Mx	-.000779	3.5
31	MP4C	X	0	.5
32	MP4C	Z	-7.477	.5
33	MP4C	Mx	-.006	.5
34	MP4C	X	0	3.5
35	MP4C	Z	-7.477	3.5
36	MP4C	Mx	-.006	3.5
37	MP1A	X	0	.5
38	MP1A	Z	-4.408	.5
39	MP1A	Mx	0	.5
40	MP1A	X	0	2.5
41	MP1A	Z	-4.408	2.5
42	MP1A	Mx	0	2.5
43	MP1B	X	0	.5
44	MP1B	Z	-2.834	.5
45	MP1B	Mx	.001	.5
46	MP1B	X	0	2.5
47	MP1B	Z	-2.834	2.5
48	MP1B	Mx	.001	2.5
49	MP1C	X	0	.5
50	MP1C	Z	-2.397	.5
51	MP1C	Mx	-.001	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
52	MP1C	X	0	2.5
53	MP1C	Z	-2.397	2.5
54	MP1C	Mx	-.001	2.5
55	M61	X	0	1
56	M61	Z	-7.616	1
57	M61	Mx	0	1
58	MP4A	X	0	2
59	MP4A	Z	-3.508	2
60	MP4A	Mx	0	2
61	MP4B	X	0	2
62	MP4B	Z	-2.826	2
63	MP4B	Mx	-.001	2
64	MP4C	X	0	2
65	MP4C	Z	-2.636	2
66	MP4C	Mx	.001	2
67	MP3A	X	0	2
68	MP3A	Z	-3.508	2
69	MP3A	Mx	0	2
70	MP3B	X	0	2
71	MP3B	Z	-2.702	2
72	MP3B	Mx	-.001	2
73	MP3C	X	0	2
74	MP3C	Z	-2.477	2
75	MP3C	Mx	.001	2
76	MP2A	X	0	.5
77	MP2A	Z	-7.1	.5
78	MP2A	Mx	0	.5
79	MP2A	X	0	3.5
80	MP2A	Z	-7.1	3.5
81	MP2A	Mx	0	3.5
82	MP2B	X	0	.5
83	MP2B	Z	-5.222	.5
84	MP2B	Mx	.002	.5
85	MP2B	X	0	3.5
86	MP2B	Z	-5.222	3.5
87	MP2B	Mx	.002	3.5
88	MP2C	X	0	.5
89	MP2C	Z	-4.7	.5
90	MP2C	Mx	-.002	.5
91	MP2C	X	0	3.5
92	MP2C	Z	-4.7	3.5
93	MP2C	Mx	-.002	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	4.332	.5
2	MP4A	Z	-7.503	.5
3	MP4A	Mx	-.008	.5
4	MP4A	X	4.332	3.5
5	MP4A	Z	-7.503	3.5
6	MP4A	Mx	-.008	3.5
7	MP4B	X	3.477	.5
8	MP4B	Z	-6.023	.5
9	MP4B	Mx	.004	.5
10	MP4B	X	3.477	3.5
11	MP4B	Z	-6.023	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
12	MP4B	Mx	.004	3.5
13	MP4C	X	4.332	.5
14	MP4C	Z	-7.503	.5
15	MP4C	Mx	.003	.5
16	MP4C	X	4.332	3.5
17	MP4C	Z	-7.503	3.5
18	MP4C	Mx	.003	3.5
19	MP4A	X	4.332	.5
20	MP4A	Z	-7.503	.5
21	MP4A	Mx	.003	.5
22	MP4A	X	4.332	3.5
23	MP4A	Z	-7.503	3.5
24	MP4A	Mx	.003	3.5
25	MP4B	X	3.477	.5
26	MP4B	Z	-6.023	.5
27	MP4B	Mx	.003	.5
28	MP4B	X	3.477	3.5
29	MP4B	Z	-6.023	3.5
30	MP4B	Mx	.003	3.5
31	MP4C	X	4.332	.5
32	MP4C	Z	-7.503	.5
33	MP4C	Mx	-.008	.5
34	MP4C	X	4.332	3.5
35	MP4C	Z	-7.503	3.5
36	MP4C	Mx	-.008	3.5
37	MP1A	X	1.869	.5
38	MP1A	Z	-3.237	.5
39	MP1A	Mx	-.000934	.5
40	MP1A	X	1.869	2.5
41	MP1A	Z	-3.237	2.5
42	MP1A	Mx	-.000934	2.5
43	MP1B	X	.903	.5
44	MP1B	Z	-1.565	.5
45	MP1B	Mx	.00089	.5
46	MP1B	X	.903	2.5
47	MP1B	Z	-1.565	2.5
48	MP1B	Mx	.00089	2.5
49	MP1C	X	1.869	.5
50	MP1C	Z	-3.237	.5
51	MP1C	Mx	-.000934	.5
52	MP1C	X	1.869	2.5
53	MP1C	Z	-3.237	2.5
54	MP1C	Mx	-.000934	2.5
55	M61	X	3.582	1
56	M61	Z	-6.205	1
57	M61	Mx	-.002	1
58	MP4A	X	1.609	2
59	MP4A	Z	-2.786	2
60	MP4A	Mx	.000804	2
61	MP4B	X	1.19	2
62	MP4B	Z	-2.061	2
63	MP4B	Mx	-.001	2
64	MP4C	X	1.609	2
65	MP4C	Z	-2.786	2
66	MP4C	Mx	.000804	2
67	MP3A	X	1.582	2
68	MP3A	Z	-2.741	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
69	MP3A	Mx	.000791	2
70	MP3B	X	1.088	2
71	MP3B	Z	-1.884	2
72	MP3B	Mx	-.001	2
73	MP3C	X	1.582	2
74	MP3C	Z	-2.741	2
75	MP3C	Mx	.000791	2
76	MP2A	X	3.15	.5
77	MP2A	Z	-5.456	.5
78	MP2A	Mx	-.002	.5
79	MP2A	X	3.15	3.5
80	MP2A	Z	-5.456	3.5
81	MP2A	Mx	-.002	3.5
82	MP2B	X	1.998	.5
83	MP2B	Z	-3.461	.5
84	MP2B	Mx	.002	.5
85	MP2B	X	1.998	3.5
86	MP2B	Z	-3.461	3.5
87	MP2B	Mx	.002	3.5
88	MP2C	X	3.15	.5
89	MP2C	Z	-5.456	.5
90	MP2C	Mx	-.002	.5
91	MP2C	X	3.15	3.5
92	MP2C	Z	-5.456	3.5
93	MP2C	Mx	-.002	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	6.475	.5
2	MP4A	Z	-3.738	.5
3	MP4A	Mx	-.006	.5
4	MP4A	X	6.475	3.5
5	MP4A	Z	-3.738	3.5
6	MP4A	Mx	-.006	3.5
7	MP4B	X	6.201	.5
8	MP4B	Z	-3.58	.5
9	MP4B	Mx	.002	.5
10	MP4B	X	6.201	3.5
11	MP4B	Z	-3.58	3.5
12	MP4B	Mx	.002	3.5
13	MP4C	X	8.018	.5
14	MP4C	Z	-4.629	.5
15	MP4C	Mx	.007	.5
16	MP4C	X	8.018	3.5
17	MP4C	Z	-4.629	3.5
18	MP4C	Mx	.007	3.5
19	MP4A	X	6.475	.5
20	MP4A	Z	-3.738	.5
21	MP4A	Mx	-.000434	.5
22	MP4A	X	6.475	3.5
23	MP4A	Z	-3.738	3.5
24	MP4A	Mx	-.000434	3.5
25	MP4B	X	6.201	.5
26	MP4B	Z	-3.58	.5
27	MP4B	Mx	.005	.5
28	MP4B	X	6.201	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP4B	Z	-3.58	3.5
30	MP4B	Mx	.005	3.5
31	MP4C	X	8.018	.5
32	MP4C	Z	-4.629	.5
33	MP4C	Mx	-.007	.5
34	MP4C	X	8.018	3.5
35	MP4C	Z	-4.629	3.5
36	MP4C	Mx	-.007	3.5
37	MP1A	X	2.075	.5
38	MP1A	Z	-1.198	.5
39	MP1A	Mx	-.001	.5
40	MP1A	X	2.075	2.5
41	MP1A	Z	-1.198	2.5
42	MP1A	Mx	-.001	2.5
43	MP1B	X	1.766	.5
44	MP1B	Z	-1.02	.5
45	MP1B	Mx	.000958	.5
46	MP1B	X	1.766	2.5
47	MP1B	Z	-1.02	2.5
48	MP1B	Mx	.000958	2.5
49	MP1C	X	3.818	.5
50	MP1C	Z	-2.204	.5
51	MP1C	Mx	0	.5
52	MP1C	X	3.818	2.5
53	MP1C	Z	-2.204	2.5
54	MP1C	Mx	0	2.5
55	M61	X	5.423	1
56	M61	Z	-3.131	1
57	M61	Mx	-.003	1
58	MP4A	X	2.283	2
59	MP4A	Z	-1.318	2
60	MP4A	Mx	.001	2
61	MP4B	X	2.149	2
62	MP4B	Z	-1.24	2
63	MP4B	Mx	-.001	2
64	MP4C	X	3.038	2
65	MP4C	Z	-1.754	2
66	MP4C	Mx	0	2
67	MP3A	X	2.146	2
68	MP3A	Z	-1.239	2
69	MP3A	Mx	.001	2
70	MP3B	X	1.987	2
71	MP3B	Z	-1.147	2
72	MP3B	Mx	-.001	2
73	MP3C	X	3.038	2
74	MP3C	Z	-1.754	2
75	MP3C	Mx	0	2
76	MP2A	X	4.071	.5
77	MP2A	Z	-2.35	.5
78	MP2A	Mx	-.002	.5
79	MP2A	X	4.071	3.5
80	MP2A	Z	-2.35	3.5
81	MP2A	Mx	-.002	3.5
82	MP2B	X	3.702	.5
83	MP2B	Z	-2.137	.5
84	MP2B	Mx	.002	.5
85	MP2B	X	3.702	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
86	MP2B	Z	-2.137	3.5
87	MP2B	Mx	.002	3.5
88	MP2C	X	6.149	.5
89	MP2C	Z	-3.55	.5
90	MP2C	Mx	0	.5
91	MP2C	X	6.149	3.5
92	MP2C	Z	-3.55	3.5
93	MP2C	Mx	0	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	6.883	.5
2	MP4A	Z	0	.5
3	MP4A	Mx	-.003	.5
4	MP4A	X	6.883	3.5
5	MP4A	Z	0	3.5
6	MP4A	Mx	-.003	3.5
7	MP4B	X	8.277	.5
8	MP4B	Z	0	.5
9	MP4B	Mx	-.002	.5
10	MP4B	X	8.277	3.5
11	MP4B	Z	0	3.5
12	MP4B	Mx	-.002	3.5
13	MP4C	X	8.664	.5
14	MP4C	Z	0	.5
15	MP4C	Mx	.008	.5
16	MP4C	X	8.664	3.5
17	MP4C	Z	0	3.5
18	MP4C	Mx	.008	3.5
19	MP4A	X	6.883	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	-.003	.5
22	MP4A	X	6.883	3.5
23	MP4A	Z	0	3.5
24	MP4A	Mx	-.003	3.5
25	MP4B	X	8.277	.5
26	MP4B	Z	0	.5
27	MP4B	Mx	.007	.5
28	MP4B	X	8.277	3.5
29	MP4B	Z	0	3.5
30	MP4B	Mx	.007	3.5
31	MP4C	X	8.664	.5
32	MP4C	Z	0	.5
33	MP4C	Mx	-.003	.5
34	MP4C	X	8.664	3.5
35	MP4C	Z	0	3.5
36	MP4C	Mx	-.003	3.5
37	MP1A	X	1.726	.5
38	MP1A	Z	0	.5
39	MP1A	Mx	-.000863	.5
40	MP1A	X	1.726	2.5
41	MP1A	Z	0	2.5
42	MP1A	Mx	-.000863	2.5
43	MP1B	X	3.3	.5
44	MP1B	Z	0	.5
45	MP1B	Mx	.001	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
46	MP1B	X	3.3	2.5
47	MP1B	Z	0	2.5
48	MP1B	Mx	.001	2.5
49	MP1C	X	3.738	.5
50	MP1C	Z	0	.5
51	MP1C	Mx	.000934	.5
52	MP1C	X	3.738	2.5
53	MP1C	Z	0	2.5
54	MP1C	Mx	.000934	2.5
55	M61	X	5.811	1
56	M61	Z	0	1
57	M61	Mx	-.003	1
58	MP4A	X	2.345	2
59	MP4A	Z	0	2
60	MP4A	Mx	.001	2
61	MP4B	X	3.027	2
62	MP4B	Z	0	2
63	MP4B	Mx	-.000973	2
64	MP4C	X	3.217	2
65	MP4C	Z	0	2
66	MP4C	Mx	-.000804	2
67	MP3A	X	2.134	2
68	MP3A	Z	0	2
69	MP3A	Mx	.001	2
70	MP3B	X	2.94	2
71	MP3B	Z	0	2
72	MP3B	Mx	-.000945	2
73	MP3C	X	3.164	2
74	MP3C	Z	0	2
75	MP3C	Mx	-.000791	2
76	MP2A	X	3.9	.5
77	MP2A	Z	0	.5
78	MP2A	Mx	-.002	.5
79	MP2A	X	3.9	3.5
80	MP2A	Z	0	3.5
81	MP2A	Mx	-.002	3.5
82	MP2B	X	5.778	.5
83	MP2B	Z	0	.5
84	MP2B	Mx	.002	.5
85	MP2B	X	5.778	3.5
86	MP2B	Z	0	3.5
87	MP2B	Mx	.002	3.5
88	MP2C	X	6.3	.5
89	MP2C	Z	0	.5
90	MP2C	Mx	.002	.5
91	MP2C	X	6.3	3.5
92	MP2C	Z	0	3.5
93	MP2C	Mx	.002	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	6.475	.5
2	MP4A	Z	3.738	.5
3	MP4A	Mx	-.000434	.5
4	MP4A	X	6.475	3.5
5	MP4A	Z	3.738	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
6	MP4A	Mx	-.000434	3.5
7	MP4B	X	7.955	.5
8	MP4B	Z	4.593	.5
9	MP4B	Mx	-.006	.5
10	MP4B	X	7.955	3.5
11	MP4B	Z	4.593	3.5
12	MP4B	Mx	-.006	3.5
13	MP4C	X	6.475	.5
14	MP4C	Z	3.738	.5
15	MP4C	Mx	.006	.5
16	MP4C	X	6.475	3.5
17	MP4C	Z	3.738	3.5
18	MP4C	Mx	.006	3.5
19	MP4A	X	6.475	.5
20	MP4A	Z	3.738	.5
21	MP4A	Mx	-.006	.5
22	MP4A	X	6.475	3.5
23	MP4A	Z	3.738	3.5
24	MP4A	Mx	-.006	3.5
25	MP4B	X	7.955	.5
26	MP4B	Z	4.593	.5
27	MP4B	Mx	.008	.5
28	MP4B	X	7.955	3.5
29	MP4B	Z	4.593	3.5
30	MP4B	Mx	.008	3.5
31	MP4C	X	6.475	.5
32	MP4C	Z	3.738	.5
33	MP4C	Mx	.000433	.5
34	MP4C	X	6.475	3.5
35	MP4C	Z	3.738	3.5
36	MP4C	Mx	.000433	3.5
37	MP1A	X	2.075	.5
38	MP1A	Z	1.198	.5
39	MP1A	Mx	-.001	.5
40	MP1A	X	2.075	2.5
41	MP1A	Z	1.198	2.5
42	MP1A	Mx	-.001	2.5
43	MP1B	X	3.748	.5
44	MP1B	Z	2.164	.5
45	MP1B	Mx	.000376	.5
46	MP1B	X	3.748	2.5
47	MP1B	Z	2.164	2.5
48	MP1B	Mx	.000376	2.5
49	MP1C	X	2.075	.5
50	MP1C	Z	1.198	.5
51	MP1C	Mx	.001	.5
52	MP1C	X	2.075	2.5
53	MP1C	Z	1.198	2.5
54	MP1C	Mx	.001	2.5
55	M61	X	5.423	1
56	M61	Z	3.131	1
57	M61	Mx	-.003	1
58	MP4A	X	2.283	2
59	MP4A	Z	1.318	2
60	MP4A	Mx	.001	2
61	MP4B	X	3.008	2
62	MP4B	Z	1.736	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
63	MP4B	Mx	-.000302	2
64	MP4C	X	2.283	2
65	MP4C	Z	1.318	2
66	MP4C	Mx	-.001	2
67	MP3A	X	2.146	2
68	MP3A	Z	1.239	2
69	MP3A	Mx	.001	2
70	MP3B	X	3.002	2
71	MP3B	Z	1.733	2
72	MP3B	Mx	-.000301	2
73	MP3C	X	2.146	2
74	MP3C	Z	1.239	2
75	MP3C	Mx	-.001	2
76	MP2A	X	4.071	.5
77	MP2A	Z	2.35	.5
78	MP2A	Mx	-.002	.5
79	MP2A	X	4.071	3.5
80	MP2A	Z	2.35	3.5
81	MP2A	Mx	-.002	3.5
82	MP2B	X	6.066	.5
83	MP2B	Z	3.502	.5
84	MP2B	Mx	.000608	.5
85	MP2B	X	6.066	3.5
86	MP2B	Z	3.502	3.5
87	MP2B	Mx	.000608	3.5
88	MP2C	X	4.071	.5
89	MP2C	Z	2.35	.5
90	MP2C	Mx	.002	.5
91	MP2C	X	4.071	3.5
92	MP2C	Z	2.35	3.5
93	MP2C	Mx	.002	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	4.332	.5
2	MP4A	Z	7.503	.5
3	MP4A	Mx	.003	.5
4	MP4A	X	4.332	3.5
5	MP4A	Z	7.503	3.5
6	MP4A	Mx	.003	3.5
7	MP4B	X	4.49	.5
8	MP4B	Z	7.777	.5
9	MP4B	Mx	-.008	.5
10	MP4B	X	4.49	3.5
11	MP4B	Z	7.777	3.5
12	MP4B	Mx	-.008	3.5
13	MP4C	X	3.441	.5
14	MP4C	Z	5.961	.5
15	MP4C	Mx	.003	.5
16	MP4C	X	3.441	3.5
17	MP4C	Z	5.961	3.5
18	MP4C	Mx	.003	3.5
19	MP4A	X	4.332	.5
20	MP4A	Z	7.503	.5
21	MP4A	Mx	-.008	.5
22	MP4A	X	4.332	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
23	MP4A	Z	7.503	3.5
24	MP4A	Mx	-.008	3.5
25	MP4B	X	4.49	.5
26	MP4B	Z	7.777	.5
27	MP4B	Mx	.005	.5
28	MP4B	X	4.49	3.5
29	MP4B	Z	7.777	3.5
30	MP4B	Mx	.005	3.5
31	MP4C	X	3.441	.5
32	MP4C	Z	5.961	.5
33	MP4C	Mx	.003	.5
34	MP4C	X	3.441	3.5
35	MP4C	Z	5.961	3.5
36	MP4C	Mx	.003	3.5
37	MP1A	X	1.869	.5
38	MP1A	Z	3.237	.5
39	MP1A	Mx	-.000934	.5
40	MP1A	X	1.869	2.5
41	MP1A	Z	3.237	2.5
42	MP1A	Mx	-.000934	2.5
43	MP1B	X	2.047	.5
44	MP1B	Z	3.546	.5
45	MP1B	Mx	-.0007	.5
46	MP1B	X	2.047	2.5
47	MP1B	Z	3.546	2.5
48	MP1B	Mx	-.0007	2.5
49	MP1C	X	.863	.5
50	MP1C	Z	1.495	.5
51	MP1C	Mx	.000863	.5
52	MP1C	X	.863	2.5
53	MP1C	Z	1.495	2.5
54	MP1C	Mx	.000863	2.5
55	M61	X	3.582	1
56	M61	Z	6.205	1
57	M61	Mx	-.002	1
58	MP4A	X	1.609	2
59	MP4A	Z	2.786	2
60	MP4A	Mx	.000804	2
61	MP4B	X	1.686	2
62	MP4B	Z	2.92	2
63	MP4B	Mx	.000577	2
64	MP4C	X	1.172	2
65	MP4C	Z	2.031	2
66	MP4C	Mx	-.001	2
67	MP3A	X	1.582	2
68	MP3A	Z	2.741	2
69	MP3A	Mx	.000791	2
70	MP3B	X	1.674	2
71	MP3B	Z	2.899	2
72	MP3B	Mx	.000572	2
73	MP3C	X	1.067	2
74	MP3C	Z	1.848	2
75	MP3C	Mx	-.001	2
76	MP2A	X	3.15	.5
77	MP2A	Z	5.456	.5
78	MP2A	Mx	-.002	.5
79	MP2A	X	3.15	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
80	MP2A	Z	5.456	3.5
81	MP2A	Mx	-.002	3.5
82	MP2B	X	3.363	.5
83	MP2B	Z	5.825	.5
84	MP2B	Mx	-.001	.5
85	MP2B	X	3.363	3.5
86	MP2B	Z	5.825	3.5
87	MP2B	Mx	-.001	3.5
88	MP2C	X	1.95	.5
89	MP2C	Z	3.378	.5
90	MP2C	Mx	.002	.5
91	MP2C	X	1.95	3.5
92	MP2C	Z	3.378	3.5
93	MP2C	Mx	.002	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	0	.5
2	MP4A	Z	9.258	.5
3	MP4A	Mx	.007	.5
4	MP4A	X	0	3.5
5	MP4A	Z	9.258	3.5
6	MP4A	Mx	.007	3.5
7	MP4B	X	0	.5
8	MP4B	Z	7.864	.5
9	MP4B	Mx	-.007	.5
10	MP4B	X	0	3.5
11	MP4B	Z	7.864	3.5
12	MP4B	Mx	-.007	3.5
13	MP4C	X	0	.5
14	MP4C	Z	7.477	.5
15	MP4C	Mx	.000434	.5
16	MP4C	X	0	3.5
17	MP4C	Z	7.477	3.5
18	MP4C	Mx	.000434	3.5
19	MP4A	X	0	.5
20	MP4A	Z	9.258	.5
21	MP4A	Mx	-.007	.5
22	MP4A	X	0	3.5
23	MP4A	Z	9.258	3.5
24	MP4A	Mx	-.007	3.5
25	MP4B	X	0	.5
26	MP4B	Z	7.864	.5
27	MP4B	Mx	.000779	.5
28	MP4B	X	0	3.5
29	MP4B	Z	7.864	3.5
30	MP4B	Mx	.000779	3.5
31	MP4C	X	0	.5
32	MP4C	Z	7.477	.5
33	MP4C	Mx	.006	.5
34	MP4C	X	0	3.5
35	MP4C	Z	7.477	3.5
36	MP4C	Mx	.006	3.5
37	MP1A	X	0	.5
38	MP1A	Z	4.408	.5
39	MP1A	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
40	MP1A	X	0	2.5
41	MP1A	Z	4.408	2.5
42	MP1A	Mx	0	2.5
43	MP1B	X	0	.5
44	MP1B	Z	2.834	.5
45	MP1B	Mx	-.001	.5
46	MP1B	X	0	2.5
47	MP1B	Z	2.834	2.5
48	MP1B	Mx	-.001	2.5
49	MP1C	X	0	.5
50	MP1C	Z	2.397	.5
51	MP1C	Mx	.001	.5
52	MP1C	X	0	2.5
53	MP1C	Z	2.397	2.5
54	MP1C	Mx	.001	2.5
55	M61	X	0	1
56	M61	Z	7.616	1
57	M61	Mx	0	1
58	MP4A	X	0	2
59	MP4A	Z	3.508	2
60	MP4A	Mx	0	2
61	MP4B	X	0	2
62	MP4B	Z	2.826	2
63	MP4B	Mx	.001	2
64	MP4C	X	0	2
65	MP4C	Z	2.636	2
66	MP4C	Mx	-.001	2
67	MP3A	X	0	2
68	MP3A	Z	3.508	2
69	MP3A	Mx	0	2
70	MP3B	X	0	2
71	MP3B	Z	2.702	2
72	MP3B	Mx	.001	2
73	MP3C	X	0	2
74	MP3C	Z	2.477	2
75	MP3C	Mx	-.001	2
76	MP2A	X	0	.5
77	MP2A	Z	7.1	.5
78	MP2A	Mx	0	.5
79	MP2A	X	0	3.5
80	MP2A	Z	7.1	3.5
81	MP2A	Mx	0	3.5
82	MP2B	X	0	.5
83	MP2B	Z	5.222	.5
84	MP2B	Mx	-.002	.5
85	MP2B	X	0	3.5
86	MP2B	Z	5.222	3.5
87	MP2B	Mx	-.002	3.5
88	MP2C	X	0	.5
89	MP2C	Z	4.7	.5
90	MP2C	Mx	.002	.5
91	MP2C	X	0	3.5
92	MP2C	Z	4.7	3.5
93	MP2C	Mx	.002	3.5

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

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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-4.332	.5
2	MP4A	Z	7.503	.5
3	MP4A	Mx	.008	.5
4	MP4A	X	-4.332	3.5
5	MP4A	Z	7.503	3.5
6	MP4A	Mx	.008	3.5
7	MP4B	X	-3.477	.5
8	MP4B	Z	6.023	.5
9	MP4B	Mx	-.004	.5
10	MP4B	X	-3.477	3.5
11	MP4B	Z	6.023	3.5
12	MP4B	Mx	-.004	3.5
13	MP4C	X	-4.332	.5
14	MP4C	Z	7.503	.5
15	MP4C	Mx	-.003	.5
16	MP4C	X	-4.332	3.5
17	MP4C	Z	7.503	3.5
18	MP4C	Mx	-.003	3.5
19	MP4A	X	-4.332	.5
20	MP4A	Z	7.503	.5
21	MP4A	Mx	-.003	.5
22	MP4A	X	-4.332	3.5
23	MP4A	Z	7.503	3.5
24	MP4A	Mx	-.003	3.5
25	MP4B	X	-3.477	.5
26	MP4B	Z	6.023	.5
27	MP4B	Mx	-.003	.5
28	MP4B	X	-3.477	3.5
29	MP4B	Z	6.023	3.5
30	MP4B	Mx	-.003	3.5
31	MP4C	X	-4.332	.5
32	MP4C	Z	7.503	.5
33	MP4C	Mx	.008	.5
34	MP4C	X	-4.332	3.5
35	MP4C	Z	7.503	3.5
36	MP4C	Mx	.008	3.5
37	MP1A	X	-1.869	.5
38	MP1A	Z	3.237	.5
39	MP1A	Mx	.000934	.5
40	MP1A	X	-1.869	2.5
41	MP1A	Z	3.237	2.5
42	MP1A	Mx	.000934	2.5
43	MP1B	X	-.903	.5
44	MP1B	Z	1.565	.5
45	MP1B	Mx	-.00089	.5
46	MP1B	X	-.903	2.5
47	MP1B	Z	1.565	2.5
48	MP1B	Mx	-.00089	2.5
49	MP1C	X	-1.869	.5
50	MP1C	Z	3.237	.5
51	MP1C	Mx	.000934	.5
52	MP1C	X	-1.869	2.5
53	MP1C	Z	3.237	2.5
54	MP1C	Mx	.000934	2.5
55	M61	X	-3.582	1
56	M61	Z	6.205	1
57	M61	Mx	.002	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP4A	X	-1.609	2
59	MP4A	Z	2.786	2
60	MP4A	Mx	-.000804	2
61	MP4B	X	-1.19	2
62	MP4B	Z	2.061	2
63	MP4B	Mx	.001	2
64	MP4C	X	-1.609	2
65	MP4C	Z	2.786	2
66	MP4C	Mx	-.000804	2
67	MP3A	X	-1.582	2
68	MP3A	Z	2.741	2
69	MP3A	Mx	-.000791	2
70	MP3B	X	-1.088	2
71	MP3B	Z	1.884	2
72	MP3B	Mx	.001	2
73	MP3C	X	-1.582	2
74	MP3C	Z	2.741	2
75	MP3C	Mx	-.000791	2
76	MP2A	X	-3.15	.5
77	MP2A	Z	5.456	.5
78	MP2A	Mx	.002	.5
79	MP2A	X	-3.15	3.5
80	MP2A	Z	5.456	3.5
81	MP2A	Mx	.002	3.5
82	MP2B	X	-1.998	.5
83	MP2B	Z	3.461	.5
84	MP2B	Mx	-.002	.5
85	MP2B	X	-1.998	3.5
86	MP2B	Z	3.461	3.5
87	MP2B	Mx	-.002	3.5
88	MP2C	X	-3.15	.5
89	MP2C	Z	5.456	.5
90	MP2C	Mx	.002	.5
91	MP2C	X	-3.15	3.5
92	MP2C	Z	5.456	3.5
93	MP2C	Mx	.002	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-6.475	.5
2	MP4A	Z	3.738	.5
3	MP4A	Mx	.006	.5
4	MP4A	X	-6.475	3.5
5	MP4A	Z	3.738	3.5
6	MP4A	Mx	.006	3.5
7	MP4B	X	-6.201	.5
8	MP4B	Z	3.58	.5
9	MP4B	Mx	-.002	.5
10	MP4B	X	-6.201	3.5
11	MP4B	Z	3.58	3.5
12	MP4B	Mx	-.002	3.5
13	MP4C	X	-8.018	.5
14	MP4C	Z	4.629	.5
15	MP4C	Mx	-.007	.5
16	MP4C	X	-8.018	3.5
17	MP4C	Z	4.629	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP4C	Mx	-.007	3.5
19	MP4A	X	-6.475	.5
20	MP4A	Z	3.738	.5
21	MP4A	Mx	.000434	.5
22	MP4A	X	-6.475	3.5
23	MP4A	Z	3.738	3.5
24	MP4A	Mx	.000434	3.5
25	MP4B	X	-6.201	.5
26	MP4B	Z	3.58	.5
27	MP4B	Mx	-.005	.5
28	MP4B	X	-6.201	3.5
29	MP4B	Z	3.58	3.5
30	MP4B	Mx	-.005	3.5
31	MP4C	X	-8.018	.5
32	MP4C	Z	4.629	.5
33	MP4C	Mx	.007	.5
34	MP4C	X	-8.018	3.5
35	MP4C	Z	4.629	3.5
36	MP4C	Mx	.007	3.5
37	MP1A	X	-2.075	.5
38	MP1A	Z	1.198	.5
39	MP1A	Mx	.001	.5
40	MP1A	X	-2.075	2.5
41	MP1A	Z	1.198	2.5
42	MP1A	Mx	.001	2.5
43	MP1B	X	-1.766	.5
44	MP1B	Z	1.02	.5
45	MP1B	Mx	-.000958	.5
46	MP1B	X	-1.766	2.5
47	MP1B	Z	1.02	2.5
48	MP1B	Mx	-.000958	2.5
49	MP1C	X	-3.818	.5
50	MP1C	Z	2.204	.5
51	MP1C	Mx	0	.5
52	MP1C	X	-3.818	2.5
53	MP1C	Z	2.204	2.5
54	MP1C	Mx	0	2.5
55	M61	X	-5.423	1
56	M61	Z	3.131	1
57	M61	Mx	.003	1
58	MP4A	X	-2.283	2
59	MP4A	Z	1.318	2
60	MP4A	Mx	-.001	2
61	MP4B	X	-2.149	2
62	MP4B	Z	1.24	2
63	MP4B	Mx	.001	2
64	MP4C	X	-3.038	2
65	MP4C	Z	1.754	2
66	MP4C	Mx	0	2
67	MP3A	X	-2.146	2
68	MP3A	Z	1.239	2
69	MP3A	Mx	-.001	2
70	MP3B	X	-1.987	2
71	MP3B	Z	1.147	2
72	MP3B	Mx	.001	2
73	MP3C	X	-3.038	2
74	MP3C	Z	1.754	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
75	MP3C	Mx	0	2
76	MP2A	X	-4.071	.5
77	MP2A	Z	2.35	.5
78	MP2A	Mx	.002	.5
79	MP2A	X	-4.071	3.5
80	MP2A	Z	2.35	3.5
81	MP2A	Mx	.002	3.5
82	MP2B	X	-3.702	.5
83	MP2B	Z	2.137	.5
84	MP2B	Mx	-.002	.5
85	MP2B	X	-3.702	3.5
86	MP2B	Z	2.137	3.5
87	MP2B	Mx	-.002	3.5
88	MP2C	X	-6.149	.5
89	MP2C	Z	3.55	.5
90	MP2C	Mx	0	.5
91	MP2C	X	-6.149	3.5
92	MP2C	Z	3.55	3.5
93	MP2C	Mx	0	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-6.883	.5
2	MP4A	Z	0	.5
3	MP4A	Mx	.003	.5
4	MP4A	X	-6.883	3.5
5	MP4A	Z	0	3.5
6	MP4A	Mx	.003	3.5
7	MP4B	X	-8.277	.5
8	MP4B	Z	0	.5
9	MP4B	Mx	.002	.5
10	MP4B	X	-8.277	3.5
11	MP4B	Z	0	3.5
12	MP4B	Mx	.002	3.5
13	MP4C	X	-8.664	.5
14	MP4C	Z	0	.5
15	MP4C	Mx	-.008	.5
16	MP4C	X	-8.664	3.5
17	MP4C	Z	0	3.5
18	MP4C	Mx	-.008	3.5
19	MP4A	X	-6.883	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	.003	.5
22	MP4A	X	-6.883	3.5
23	MP4A	Z	0	3.5
24	MP4A	Mx	.003	3.5
25	MP4B	X	-8.277	.5
26	MP4B	Z	0	.5
27	MP4B	Mx	-.007	.5
28	MP4B	X	-8.277	3.5
29	MP4B	Z	0	3.5
30	MP4B	Mx	-.007	3.5
31	MP4C	X	-8.664	.5
32	MP4C	Z	0	.5
33	MP4C	Mx	.003	.5
34	MP4C	X	-8.664	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
35	MP4C	Z	0	3.5
36	MP4C	Mx	.003	3.5
37	MP1A	X	-1.726	.5
38	MP1A	Z	0	.5
39	MP1A	Mx	.000863	.5
40	MP1A	X	-1.726	2.5
41	MP1A	Z	0	2.5
42	MP1A	Mx	.000863	2.5
43	MP1B	X	-3.3	.5
44	MP1B	Z	0	.5
45	MP1B	Mx	-.001	.5
46	MP1B	X	-3.3	2.5
47	MP1B	Z	0	2.5
48	MP1B	Mx	-.001	2.5
49	MP1C	X	-3.738	.5
50	MP1C	Z	0	.5
51	MP1C	Mx	-.000934	.5
52	MP1C	X	-3.738	2.5
53	MP1C	Z	0	2.5
54	MP1C	Mx	-.000934	2.5
55	M61	X	-5.811	1
56	M61	Z	0	1
57	M61	Mx	.003	1
58	MP4A	X	-2.345	2
59	MP4A	Z	0	2
60	MP4A	Mx	-.001	2
61	MP4B	X	-3.027	2
62	MP4B	Z	0	2
63	MP4B	Mx	.000973	2
64	MP4C	X	-3.217	2
65	MP4C	Z	0	2
66	MP4C	Mx	.000804	2
67	MP3A	X	-2.134	2
68	MP3A	Z	0	2
69	MP3A	Mx	-.001	2
70	MP3B	X	-2.94	2
71	MP3B	Z	0	2
72	MP3B	Mx	.000945	2
73	MP3C	X	-3.164	2
74	MP3C	Z	0	2
75	MP3C	Mx	.000791	2
76	MP2A	X	-3.9	.5
77	MP2A	Z	0	.5
78	MP2A	Mx	.002	.5
79	MP2A	X	-3.9	3.5
80	MP2A	Z	0	3.5
81	MP2A	Mx	.002	3.5
82	MP2B	X	-5.778	.5
83	MP2B	Z	0	.5
84	MP2B	Mx	-.002	.5
85	MP2B	X	-5.778	3.5
86	MP2B	Z	0	3.5
87	MP2B	Mx	-.002	3.5
88	MP2C	X	-6.3	.5
89	MP2C	Z	0	.5
90	MP2C	Mx	-.002	.5
91	MP2C	X	-6.3	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
92	MP2C	Z	0	3.5
93	MP2C	Mx	-.002	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-6.475	.5
2	MP4A	Z	-3.738	.5
3	MP4A	Mx	.000434	.5
4	MP4A	X	-6.475	3.5
5	MP4A	Z	-3.738	3.5
6	MP4A	Mx	.000434	3.5
7	MP4B	X	-7.955	.5
8	MP4B	Z	-4.593	.5
9	MP4B	Mx	.006	.5
10	MP4B	X	-7.955	3.5
11	MP4B	Z	-4.593	3.5
12	MP4B	Mx	.006	3.5
13	MP4C	X	-6.475	.5
14	MP4C	Z	-3.738	.5
15	MP4C	Mx	-.006	.5
16	MP4C	X	-6.475	3.5
17	MP4C	Z	-3.738	3.5
18	MP4C	Mx	-.006	3.5
19	MP4A	X	-6.475	.5
20	MP4A	Z	-3.738	.5
21	MP4A	Mx	.006	.5
22	MP4A	X	-6.475	3.5
23	MP4A	Z	-3.738	3.5
24	MP4A	Mx	.006	3.5
25	MP4B	X	-7.955	.5
26	MP4B	Z	-4.593	.5
27	MP4B	Mx	-.008	.5
28	MP4B	X	-7.955	3.5
29	MP4B	Z	-4.593	3.5
30	MP4B	Mx	-.008	3.5
31	MP4C	X	-6.475	.5
32	MP4C	Z	-3.738	.5
33	MP4C	Mx	-.000433	.5
34	MP4C	X	-6.475	3.5
35	MP4C	Z	-3.738	3.5
36	MP4C	Mx	-.000433	3.5
37	MP1A	X	-2.075	.5
38	MP1A	Z	-1.198	.5
39	MP1A	Mx	.001	.5
40	MP1A	X	-2.075	2.5
41	MP1A	Z	-1.198	2.5
42	MP1A	Mx	.001	2.5
43	MP1B	X	-3.748	.5
44	MP1B	Z	-2.164	.5
45	MP1B	Mx	-.000376	.5
46	MP1B	X	-3.748	2.5
47	MP1B	Z	-2.164	2.5
48	MP1B	Mx	-.000376	2.5
49	MP1C	X	-2.075	.5
50	MP1C	Z	-1.198	.5
51	MP1C	Mx	-.001	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
52	MP1C	X	-2.075	2.5
53	MP1C	Z	-1.198	2.5
54	MP1C	Mx	-.001	2.5
55	M61	X	-5.423	1
56	M61	Z	-3.131	1
57	M61	Mx	.003	1
58	MP4A	X	-2.283	2
59	MP4A	Z	-1.318	2
60	MP4A	Mx	-.001	2
61	MP4B	X	-3.008	2
62	MP4B	Z	-1.736	2
63	MP4B	Mx	.000302	2
64	MP4C	X	-2.283	2
65	MP4C	Z	-1.318	2
66	MP4C	Mx	.001	2
67	MP3A	X	-2.146	2
68	MP3A	Z	-1.239	2
69	MP3A	Mx	-.001	2
70	MP3B	X	-3.002	2
71	MP3B	Z	-1.733	2
72	MP3B	Mx	.000301	2
73	MP3C	X	-2.146	2
74	MP3C	Z	-1.239	2
75	MP3C	Mx	.001	2
76	MP2A	X	-4.071	.5
77	MP2A	Z	-2.35	.5
78	MP2A	Mx	.002	.5
79	MP2A	X	-4.071	3.5
80	MP2A	Z	-2.35	3.5
81	MP2A	Mx	.002	3.5
82	MP2B	X	-6.066	.5
83	MP2B	Z	-3.502	.5
84	MP2B	Mx	-.000608	.5
85	MP2B	X	-6.066	3.5
86	MP2B	Z	-3.502	3.5
87	MP2B	Mx	-.000608	3.5
88	MP2C	X	-4.071	.5
89	MP2C	Z	-2.35	.5
90	MP2C	Mx	-.002	.5
91	MP2C	X	-4.071	3.5
92	MP2C	Z	-2.35	3.5
93	MP2C	Mx	-.002	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-4.332	.5
2	MP4A	Z	-7.503	.5
3	MP4A	Mx	-.003	.5
4	MP4A	X	-4.332	3.5
5	MP4A	Z	-7.503	3.5
6	MP4A	Mx	-.003	3.5
7	MP4B	X	-4.49	.5
8	MP4B	Z	-7.777	.5
9	MP4B	Mx	.008	.5
10	MP4B	X	-4.49	3.5
11	MP4B	Z	-7.777	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
12	MP4B	Mx	.008	3.5
13	MP4C	X	-3.441	.5
14	MP4C	Z	-5.961	.5
15	MP4C	Mx	-.003	.5
16	MP4C	X	-3.441	3.5
17	MP4C	Z	-5.961	3.5
18	MP4C	Mx	-.003	3.5
19	MP4A	X	-4.332	.5
20	MP4A	Z	-7.503	.5
21	MP4A	Mx	.008	.5
22	MP4A	X	-4.332	3.5
23	MP4A	Z	-7.503	3.5
24	MP4A	Mx	.008	3.5
25	MP4B	X	-4.49	.5
26	MP4B	Z	-7.777	.5
27	MP4B	Mx	-.005	.5
28	MP4B	X	-4.49	3.5
29	MP4B	Z	-7.777	3.5
30	MP4B	Mx	-.005	3.5
31	MP4C	X	-3.441	.5
32	MP4C	Z	-5.961	.5
33	MP4C	Mx	-.003	.5
34	MP4C	X	-3.441	3.5
35	MP4C	Z	-5.961	3.5
36	MP4C	Mx	-.003	3.5
37	MP1A	X	-1.869	.5
38	MP1A	Z	-3.237	.5
39	MP1A	Mx	.000934	.5
40	MP1A	X	-1.869	2.5
41	MP1A	Z	-3.237	2.5
42	MP1A	Mx	.000934	2.5
43	MP1B	X	-2.047	.5
44	MP1B	Z	-3.546	.5
45	MP1B	Mx	.0007	.5
46	MP1B	X	-2.047	2.5
47	MP1B	Z	-3.546	2.5
48	MP1B	Mx	.0007	2.5
49	MP1C	X	-.863	.5
50	MP1C	Z	-1.495	.5
51	MP1C	Mx	-.000863	.5
52	MP1C	X	-.863	2.5
53	MP1C	Z	-1.495	2.5
54	MP1C	Mx	-.000863	2.5
55	M61	X	-3.582	1
56	M61	Z	-6.205	1
57	M61	Mx	.002	1
58	MP4A	X	-1.609	2
59	MP4A	Z	-2.786	2
60	MP4A	Mx	-.000804	2
61	MP4B	X	-1.686	2
62	MP4B	Z	-2.92	2
63	MP4B	Mx	-.000577	2
64	MP4C	X	-1.172	2
65	MP4C	Z	-2.031	2
66	MP4C	Mx	.001	2
67	MP3A	X	-1.582	2
68	MP3A	Z	-2.741	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
69	MP3A	Mx	-.000791	2
70	MP3B	X	-1.674	2
71	MP3B	Z	-2.899	2
72	MP3B	Mx	-.000572	2
73	MP3C	X	-1.067	2
74	MP3C	Z	-1.848	2
75	MP3C	Mx	.001	2
76	MP2A	X	-3.15	.5
77	MP2A	Z	-5.456	.5
78	MP2A	Mx	.002	.5
79	MP2A	X	-3.15	3.5
80	MP2A	Z	-5.456	3.5
81	MP2A	Mx	.002	3.5
82	MP2B	X	-3.363	.5
83	MP2B	Z	-5.825	.5
84	MP2B	Mx	.001	.5
85	MP2B	X	-3.363	3.5
86	MP2B	Z	-5.825	3.5
87	MP2B	Mx	.001	3.5
88	MP2C	X	-1.95	.5
89	MP2C	Z	-3.378	.5
90	MP2C	Mx	-.002	.5
91	MP2C	X	-1.95	3.5
92	MP2C	Z	-3.378	3.5
93	MP2C	Mx	-.002	3.5

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M7A	Y	-500	%24

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M7A	Y	-500	%5

Member Point Loads (BLC 79 : Lv1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M7A	Y	-250	%50

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M7A	Y	-250	0

Member Point Loads (BLC 81 : Antenna Ev)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	Y	0	.5
2	MP4A	My	0	.5
3	MP4A	Mz	0	.5
4	MP4A	Y	0	3.5
5	MP4A	My	0	3.5
6	MP4A	Mz	0	3.5
7	MP4B	Y	0	.5
8	MP4B	My	0	.5
9	MP4B	Mz	0	.5
10	MP4B	Y	0	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
11	MP4B	My	0	3.5
12	MP4B	Mz	0	3.5
13	MP4C	Y	0	.5
14	MP4C	My	0	.5
15	MP4C	Mz	0	.5
16	MP4C	Y	0	3.5
17	MP4C	My	0	3.5
18	MP4C	Mz	0	3.5
19	MP4A	Y	0	.5
20	MP4A	My	0	.5
21	MP4A	Mz	0	.5
22	MP4A	Y	0	3.5
23	MP4A	My	0	3.5
24	MP4A	Mz	0	3.5
25	MP4B	Y	0	.5
26	MP4B	My	0	.5
27	MP4B	Mz	0	.5
28	MP4B	Y	0	3.5
29	MP4B	My	0	3.5
30	MP4B	Mz	0	3.5
31	MP4C	Y	0	.5
32	MP4C	My	0	.5
33	MP4C	Mz	0	.5
34	MP4C	Y	0	3.5
35	MP4C	My	0	3.5
36	MP4C	Mz	0	3.5
37	MP1A	Y	0	.5
38	MP1A	My	0	.5
39	MP1A	Mz	0	.5
40	MP1A	Y	0	2.5
41	MP1A	My	0	2.5
42	MP1A	Mz	0	2.5
43	MP1B	Y	0	.5
44	MP1B	My	0	.5
45	MP1B	Mz	0	.5
46	MP1B	Y	0	2.5
47	MP1B	My	0	2.5
48	MP1B	Mz	0	2.5
49	MP1C	Y	0	.5
50	MP1C	My	0	.5
51	MP1C	Mz	0	.5
52	MP1C	Y	0	2.5
53	MP1C	My	0	2.5
54	MP1C	Mz	0	2.5
55	M61	Y	0	1
56	M61	My	0	1
57	M61	Mz	0	1
58	MP4A	Y	0	2
59	MP4A	My	0	2
60	MP4A	Mz	0	2
61	MP4B	Y	0	2
62	MP4B	My	0	2
63	MP4B	Mz	0	2
64	MP4C	Y	0	2
65	MP4C	My	0	2
66	MP4C	Mz	0	2
67	MP3A	Y	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
68	MP3A	My	0	2
69	MP3A	Mz	0	2
70	MP3B	Y	0	2
71	MP3B	My	0	2
72	MP3B	Mz	0	2
73	MP3C	Y	0	2
74	MP3C	My	0	2
75	MP3C	Mz	0	2
76	MP2A	Y	0	.5
77	MP2A	My	0	.5
78	MP2A	Mz	0	.5
79	MP2A	Y	0	3.5
80	MP2A	My	0	3.5
81	MP2A	Mz	0	3.5
82	MP2B	Y	0	.5
83	MP2B	My	0	.5
84	MP2B	Mz	0	.5
85	MP2B	Y	0	3.5
86	MP2B	My	0	3.5
87	MP2B	Mz	0	3.5
88	MP2C	Y	0	.5
89	MP2C	My	0	.5
90	MP2C	Mz	0	.5
91	MP2C	Y	0	3.5
92	MP2C	My	0	3.5
93	MP2C	Mz	0	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	Z	-.69	.5
2	MP4A	Mx	-.000518	.5
3	MP4A	Z	-.69	3.5
4	MP4A	Mx	-.000518	3.5
5	MP4B	Z	-.69	.5
6	MP4B	Mx	.000597	.5
7	MP4B	Z	-.69	3.5
8	MP4B	Mx	.000597	3.5
9	MP4C	Z	-.69	.5
10	MP4C	Mx	-4e-5	.5
11	MP4C	Z	-.69	3.5
12	MP4C	Mx	-4e-5	3.5
13	MP4A	Z	-.69	.5
14	MP4A	Mx	.000518	.5
15	MP4A	Z	-.69	3.5
16	MP4A	Mx	.000518	3.5
17	MP4B	Z	-.69	.5
18	MP4B	Mx	-6.8e-5	.5
19	MP4B	Z	-.69	3.5
20	MP4B	Mx	-6.8e-5	3.5
21	MP4C	Z	-.69	.5
22	MP4C	Mx	-.000558	.5
23	MP4C	Z	-.69	3.5
24	MP4C	Mx	-.000558	3.5
25	MP1A	Z	-1.306	.5
26	MP1A	Mx	0	.5
27	MP1A	Z	-1.306	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
28	MP1A	Mx	0	2.5
29	MP1B	Z	-1.306	.5
30	MP1B	Mx	.0005	.5
31	MP1B	Z	-1.306	2.5
32	MP1B	Mx	.0005	2.5
33	MP1C	Z	-1.306	.5
34	MP1C	Mx	-.000566	.5
35	MP1C	Z	-1.306	2.5
36	MP1C	Mx	-.000566	2.5
37	M61	Z	-.96	1
38	M61	Mx	0	1
39	MP4A	Z	-2.241	2
40	MP4A	Mx	0	2
41	MP4B	Z	-2.241	2
42	MP4B	Mx	-.000858	2
43	MP4C	Z	-2.241	2
44	MP4C	Mx	.00097	2
45	MP3A	Z	-2.109	2
46	MP3A	Mx	0	2
47	MP3B	Z	-2.109	2
48	MP3B	Mx	-.000808	2
49	MP3C	Z	-2.109	2
50	MP3C	Mx	.000913	2
51	MP2A	Z	-.255	.5
52	MP2A	Mx	0	.5
53	MP2A	Z	-.255	3.5
54	MP2A	Mx	0	3.5
55	MP2B	Z	-.255	.5
56	MP2B	Mx	9.8e-5	.5
57	MP2B	Z	-.255	3.5
58	MP2B	Mx	9.8e-5	3.5
59	MP2C	Z	-.255	.5
60	MP2C	Mx	-.00011	.5
61	MP2C	Z	-.255	3.5
62	MP2C	Mx	-.00011	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	.69	.5
2	MP4A	Mx	-.000345	.5
3	MP4A	X	.69	3.5
4	MP4A	Mx	-.000345	3.5
5	MP4B	X	.69	.5
6	MP4B	Mx	-.000175	.5
7	MP4B	X	.69	3.5
8	MP4B	Mx	-.000175	3.5
9	MP4C	X	.69	.5
10	MP4C	Mx	.000621	.5
11	MP4C	X	.69	3.5
12	MP4C	Mx	.000621	3.5
13	MP4A	X	.69	.5
14	MP4A	Mx	-.000345	.5
15	MP4A	X	.69	3.5
16	MP4A	Mx	-.000345	3.5
17	MP4B	X	.69	.5
18	MP4B	Mx	.000618	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
19	MP4B	X	.69	3.5
20	MP4B	Mx	.000618	3.5
21	MP4C	X	.69	.5
22	MP4C	Mx	-.000276	.5
23	MP4C	X	.69	3.5
24	MP4C	Mx	-.000276	3.5
25	MP1A	X	1.306	.5
26	MP1A	Mx	-.000653	.5
27	MP1A	X	1.306	2.5
28	MP1A	Mx	-.000653	2.5
29	MP1B	X	1.306	.5
30	MP1B	Mx	.00042	.5
31	MP1B	X	1.306	2.5
32	MP1B	Mx	.00042	2.5
33	MP1C	X	1.306	.5
34	MP1C	Mx	.000327	.5
35	MP1C	X	1.306	2.5
36	MP1C	Mx	.000327	2.5
37	M61	X	.96	1
38	M61	Mx	-.00048	1
39	MP4A	X	2.241	2
40	MP4A	Mx	.001	2
41	MP4B	X	2.241	2
42	MP4B	Mx	-.00072	2
43	MP4C	X	2.241	2
44	MP4C	Mx	-.00056	2
45	MP3A	X	2.109	2
46	MP3A	Mx	.001	2
47	MP3B	X	2.109	2
48	MP3B	Mx	-.000678	2
49	MP3C	X	2.109	2
50	MP3C	Mx	-.000527	2
51	MP2A	X	.255	.5
52	MP2A	Mx	-.000128	.5
53	MP2A	X	.255	3.5
54	MP2A	Mx	-.000128	3.5
55	MP2B	X	.255	.5
56	MP2B	Mx	8.2e-5	.5
57	MP2B	X	.255	3.5
58	MP2B	Mx	8.2e-5	3.5
59	MP2C	X	.255	.5
60	MP2C	Mx	6.4e-5	.5
61	MP2C	X	.255	3.5
62	MP2C	Mx	6.4e-5	3.5

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	Y	-9.214	-9.214	0	%100
2	M2	Y	-10.176	-10.176	0	%100
3	M5	Y	-9.681	-9.681	0	%100
4	M6	Y	-9.681	-9.681	0	%100
5	M7	Y	-9.681	-9.681	0	%100
6	M6A	Y	-7.289	-7.289	0	%100
7	M7A	Y	-7.289	-7.289	0	%100
8	M23A	Y	-7.289	-7.289	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
9	M24	Y	-7.289	-7.289	0	%100
10	MP4C	Y	-4.748	-4.748	0	%100
11	MP3C	Y	-4.748	-4.748	0	%100
12	MP1C	Y	-4.748	-4.748	0	%100
13	MP2C	Y	-4.748	-4.748	0	%100
14	M38	Y	-9.214	-9.214	0	%100
15	M39A	Y	-7.289	-7.289	0	%100
16	M40	Y	-7.289	-7.289	0	%100
17	M54	Y	-9.214	-9.214	0	%100
18	M55	Y	-10.176	-10.176	0	%100
19	M56	Y	-10.176	-10.176	0	%100
20	M61	Y	-4.748	-4.748	0	%100
21	MP4B	Y	-4.748	-4.748	0	%100
22	MP3B	Y	-4.748	-4.748	0	%100
23	MP1B	Y	-4.748	-4.748	0	%100
24	MP2B	Y	-4.748	-4.748	0	%100
25	MP4A	Y	-4.748	-4.748	0	%100
26	MP3A	Y	-4.748	-4.748	0	%100
27	MP1A	Y	-4.748	-4.748	0	%100
28	MP2A	Y	-4.748	-4.748	0	%100
29	M42	Y	-10.701	-10.701	0	%100
30	M43	Y	-10.701	-10.701	0	%100
31	M44	Y	-10.701	-10.701	0	%100
32	M49	Y	-5.428	-5.428	0	%100
33	M54A	Y	-5.428	-5.428	0	%100
34	M59	Y	-5.428	-5.428	0	%100
35	M64	Y	-5.428	-5.428	0	%100
36	M69	Y	-5.428	-5.428	0	%100
37	M74	Y	-5.428	-5.428	0	%100
38	M75	Y	-7.289	-7.289	0	%100
39	M76	Y	-7.289	-7.289	0	%100
40	M77	Y	-7.289	-7.289	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M5	X	0	0	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	-8.738	-8.738	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	-8.738	-8.738	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	-14.024	-14.024	0	%100
13	M7A	X	0	0	0	%100
14	M7A	Z	-14.024	-14.024	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	-3.506	-3.506	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	-3.506	-3.506	0	%100
19	MP4C	X	0	0	0	%100
20	MP4C	Z	-6.661	-6.661	0	%100
21	MP3C	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
22	MP3C	Z	-6.661	-6.661	0	%100
23	MP1C	X	0	0	0	%100
24	MP1C	Z	-6.661	-6.661	0	%100
25	MP2C	X	0	0	0	%100
26	MP2C	Z	-6.661	-6.661	0	%100
27	M38	X	0	0	0	%100
28	M38	Z	-6.011	-6.011	0	%100
29	M39A	X	0	0	0	%100
30	M39A	Z	-3.506	-3.506	0	%100
31	M40	X	0	0	0	%100
32	M40	Z	-3.506	-3.506	0	%100
33	M54	X	0	0	0	%100
34	M54	Z	-6.011	-6.011	0	%100
35	M55	X	0	0	0	%100
36	M55	Z	-7.771	-7.771	0	%100
37	M56	X	0	0	0	%100
38	M56	Z	-7.771	-7.771	0	%100
39	M61	X	0	0	0	%100
40	M61	Z	-5.447	-5.447	0	%100
41	MP4B	X	0	0	0	%100
42	MP4B	Z	-6.661	-6.661	0	%100
43	MP3B	X	0	0	0	%100
44	MP3B	Z	-6.661	-6.661	0	%100
45	MP1B	X	0	0	0	%100
46	MP1B	Z	-6.661	-6.661	0	%100
47	MP2B	X	0	0	0	%100
48	MP2B	Z	-6.661	-6.661	0	%100
49	MP4A	X	0	0	0	%100
50	MP4A	Z	-6.661	-6.661	0	%100
51	MP3A	X	0	0	0	%100
52	MP3A	Z	-6.661	-6.661	0	%100
53	MP1A	X	0	0	0	%100
54	MP1A	Z	-6.661	-6.661	0	%100
55	MP2A	X	0	0	0	%100
56	MP2A	Z	-6.661	-6.661	0	%100
57	M42	X	0	0	0	%100
58	M42	Z	-5.043	-5.043	0	%100
59	M43	X	0	0	0	%100
60	M43	Z	-11.779	-11.779	0	%100
61	M44	X	0	0	0	%100
62	M44	Z	-11.779	-11.779	0	%100
63	M49	X	0	0	0	%100
64	M49	Z	-8.064	-8.064	0	%100
65	M54A	X	0	0	0	%100
66	M54A	Z	-8.064	-8.064	0	%100
67	M59	X	0	0	0	%100
68	M59	Z	-2.016	-2.016	0	%100
69	M64	X	0	0	0	%100
70	M64	Z	-2.016	-2.016	0	%100
71	M69	X	0	0	0	%100
72	M69	Z	-2.016	-2.016	0	%100
73	M74	X	0	0	0	%100
74	M74	Z	-2.016	-2.016	0	%100
75	M75	X	0	0	0	%100
76	M75	Z	-2.051	-2.051	0	%100
77	M76	X	0	0	0	%100
78	M76	Z	-9.488	-9.488	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
79	M77	X	0	0	0	%100
80	M77	Z	-2.716	-2.716	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.002	1.002	0	%100
2	M1	Z	-1.735	-1.735	0	%100
3	M2	X	1.295	1.295	0	%100
4	M2	Z	-2.243	-2.243	0	%100
5	M5	X	1.456	1.456	0	%100
6	M5	Z	-2.522	-2.522	0	%100
7	M6	X	1.456	1.456	0	%100
8	M6	Z	-2.522	-2.522	0	%100
9	M7	X	5.825	5.825	0	%100
10	M7	Z	-10.089	-10.089	0	%100
11	M6A	X	5.259	5.259	0	%100
12	M6A	Z	-9.109	-9.109	0	%100
13	M7A	X	5.259	5.259	0	%100
14	M7A	Z	-9.109	-9.109	0	%100
15	M23A	X	5.259	5.259	0	%100
16	M23A	Z	-9.109	-9.109	0	%100
17	M24	X	5.259	5.259	0	%100
18	M24	Z	-9.109	-9.109	0	%100
19	MP4C	X	3.331	3.331	0	%100
20	MP4C	Z	-5.769	-5.769	0	%100
21	MP3C	X	3.331	3.331	0	%100
22	MP3C	Z	-5.769	-5.769	0	%100
23	MP1C	X	3.331	3.331	0	%100
24	MP1C	Z	-5.769	-5.769	0	%100
25	MP2C	X	3.331	3.331	0	%100
26	MP2C	Z	-5.769	-5.769	0	%100
27	M38	X	1.002	1.002	0	%100
28	M38	Z	-1.735	-1.735	0	%100
29	M39A	X	0	0	0	%100
30	M39A	Z	0	0	0	%100
31	M40	X	0	0	0	%100
32	M40	Z	0	0	0	%100
33	M54	X	4.007	4.007	0	%100
34	M54	Z	-6.941	-6.941	0	%100
35	M55	X	1.295	1.295	0	%100
36	M55	Z	-2.243	-2.243	0	%100
37	M56	X	5.181	5.181	0	%100
38	M56	Z	-8.973	-8.973	0	%100
39	M61	X	2.724	2.724	0	%100
40	M61	Z	-4.717	-4.717	0	%100
41	MP4B	X	3.331	3.331	0	%100
42	MP4B	Z	-5.769	-5.769	0	%100
43	MP3B	X	3.331	3.331	0	%100
44	MP3B	Z	-5.769	-5.769	0	%100
45	MP1B	X	3.331	3.331	0	%100
46	MP1B	Z	-5.769	-5.769	0	%100
47	MP2B	X	3.331	3.331	0	%100
48	MP2B	Z	-5.769	-5.769	0	%100
49	MP4A	X	3.331	3.331	0	%100
50	MP4A	Z	-5.769	-5.769	0	%100
51	MP3A	X	3.331	3.331	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
52	MP3A	Z	-5.769	-5.769	0	%100
53	MP1A	X	3.331	3.331	0	%100
54	MP1A	Z	-5.769	-5.769	0	%100
55	MP2A	X	3.331	3.331	0	%100
56	MP2A	Z	-5.769	-5.769	0	%100
57	M42	X	3.644	3.644	0	%100
58	M42	Z	-6.312	-6.312	0	%100
59	M43	X	3.644	3.644	0	%100
60	M43	Z	-6.312	-6.312	0	%100
61	M44	X	7.012	7.012	0	%100
62	M44	Z	-12.145	-12.145	0	%100
63	M49	X	3.024	3.024	0	%100
64	M49	Z	-5.238	-5.238	0	%100
65	M54A	X	3.024	3.024	0	%100
66	M54A	Z	-5.238	-5.238	0	%100
67	M59	X	3.024	3.024	0	%100
68	M59	Z	-5.238	-5.238	0	%100
69	M64	X	3.024	3.024	0	%100
70	M64	Z	-5.238	-5.238	0	%100
71	M69	X	0	0	0	%100
72	M69	Z	0	0	0	%100
73	M74	X	0	0	0	%100
74	M74	Z	0	0	0	%100
75	M75	X	3.394	3.394	0	%100
76	M75	Z	-5.878	-5.878	0	%100
77	M76	X	3.726	3.726	0	%100
78	M76	Z	-6.454	-6.454	0	%100
79	M77	X	.008	.008	0	%100
80	M77	Z	-.013	-.013	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	5.206	5.206	0	%100
2	M1	Z	-3.005	-3.005	0	%100
3	M2	X	6.73	6.73	0	%100
4	M2	Z	-3.885	-3.885	0	%100
5	M5	X	7.567	7.567	0	%100
6	M5	Z	-4.369	-4.369	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	7.567	7.567	0	%100
10	M7	Z	-4.369	-4.369	0	%100
11	M6A	X	3.036	3.036	0	%100
12	M6A	Z	-1.753	-1.753	0	%100
13	M7A	X	3.036	3.036	0	%100
14	M7A	Z	-1.753	-1.753	0	%100
15	M23A	X	12.145	12.145	0	%100
16	M23A	Z	-7.012	-7.012	0	%100
17	M24	X	12.145	12.145	0	%100
18	M24	Z	-7.012	-7.012	0	%100
19	MP4C	X	5.769	5.769	0	%100
20	MP4C	Z	-3.331	-3.331	0	%100
21	MP3C	X	5.769	5.769	0	%100
22	MP3C	Z	-3.331	-3.331	0	%100
23	MP1C	X	5.769	5.769	0	%100
24	MP1C	Z	-3.331	-3.331	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
25	MP2C	X	5.769	5.769	0	%100
26	MP2C	Z	-3.331	-3.331	0	%100
27	M38	X	0	0	0	%100
28	M38	Z	0	0	0	%100
29	M39A	X	3.036	3.036	0	%100
30	M39A	Z	-1.753	-1.753	0	%100
31	M40	X	3.036	3.036	0	%100
32	M40	Z	-1.753	-1.753	0	%100
33	M54	X	5.206	5.206	0	%100
34	M54	Z	-3.005	-3.005	0	%100
35	M55	X	0	0	0	%100
36	M55	Z	0	0	0	%100
37	M56	X	6.73	6.73	0	%100
38	M56	Z	-3.885	-3.885	0	%100
39	M61	X	4.717	4.717	0	%100
40	M61	Z	-2.724	-2.724	0	%100
41	MP4B	X	5.769	5.769	0	%100
42	MP4B	Z	-3.331	-3.331	0	%100
43	MP3B	X	5.769	5.769	0	%100
44	MP3B	Z	-3.331	-3.331	0	%100
45	MP1B	X	5.769	5.769	0	%100
46	MP1B	Z	-3.331	-3.331	0	%100
47	MP2B	X	5.769	5.769	0	%100
48	MP2B	Z	-3.331	-3.331	0	%100
49	MP4A	X	5.769	5.769	0	%100
50	MP4A	Z	-3.331	-3.331	0	%100
51	MP3A	X	5.769	5.769	0	%100
52	MP3A	Z	-3.331	-3.331	0	%100
53	MP1A	X	5.769	5.769	0	%100
54	MP1A	Z	-3.331	-3.331	0	%100
55	MP2A	X	5.769	5.769	0	%100
56	MP2A	Z	-3.331	-3.331	0	%100
57	M42	X	10.201	10.201	0	%100
58	M42	Z	-5.889	-5.889	0	%100
59	M43	X	4.368	4.368	0	%100
60	M43	Z	-2.522	-2.522	0	%100
61	M44	X	10.201	10.201	0	%100
62	M44	Z	-5.889	-5.889	0	%100
63	M49	X	1.746	1.746	0	%100
64	M49	Z	-1.008	-1.008	0	%100
65	M54A	X	1.746	1.746	0	%100
66	M54A	Z	-1.008	-1.008	0	%100
67	M59	X	6.983	6.983	0	%100
68	M59	Z	-4.032	-4.032	0	%100
69	M64	X	6.983	6.983	0	%100
70	M64	Z	-4.032	-4.032	0	%100
71	M69	X	1.746	1.746	0	%100
72	M69	Z	-1.008	-1.008	0	%100
73	M74	X	1.746	1.746	0	%100
74	M74	Z	-1.008	-1.008	0	%100
75	M75	X	8.217	8.217	0	%100
76	M75	Z	-4.744	-4.744	0	%100
77	M76	X	2.352	2.352	0	%100
78	M76	Z	-1.358	-1.358	0	%100
79	M77	X	1.777	1.777	0	%100
80	M77	Z	-1.026	-1.026	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	8.014	8.014	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	10.361	10.361	0	%100
4	M2	Z	0	0	0	%100
5	M5	X	11.65	11.65	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	2.913	2.913	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	2.913	2.913	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	0	0	0	%100
13	M7A	X	0	0	0	%100
14	M7A	Z	0	0	0	%100
15	M23A	X	10.518	10.518	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	10.518	10.518	0	%100
18	M24	Z	0	0	0	%100
19	MP4C	X	6.661	6.661	0	%100
20	MP4C	Z	0	0	0	%100
21	MP3C	X	6.661	6.661	0	%100
22	MP3C	Z	0	0	0	%100
23	MP1C	X	6.661	6.661	0	%100
24	MP1C	Z	0	0	0	%100
25	MP2C	X	6.661	6.661	0	%100
26	MP2C	Z	0	0	0	%100
27	M38	X	2.004	2.004	0	%100
28	M38	Z	0	0	0	%100
29	M39A	X	10.518	10.518	0	%100
30	M39A	Z	0	0	0	%100
31	M40	X	10.518	10.518	0	%100
32	M40	Z	0	0	0	%100
33	M54	X	2.004	2.004	0	%100
34	M54	Z	0	0	0	%100
35	M55	X	2.59	2.59	0	%100
36	M55	Z	0	0	0	%100
37	M56	X	2.59	2.59	0	%100
38	M56	Z	0	0	0	%100
39	M61	X	5.447	5.447	0	%100
40	M61	Z	0	0	0	%100
41	MP4B	X	6.661	6.661	0	%100
42	MP4B	Z	0	0	0	%100
43	MP3B	X	6.661	6.661	0	%100
44	MP3B	Z	0	0	0	%100
45	MP1B	X	6.661	6.661	0	%100
46	MP1B	Z	0	0	0	%100
47	MP2B	X	6.661	6.661	0	%100
48	MP2B	Z	0	0	0	%100
49	MP4A	X	6.661	6.661	0	%100
50	MP4A	Z	0	0	0	%100
51	MP3A	X	6.661	6.661	0	%100
52	MP3A	Z	0	0	0	%100
53	MP1A	X	6.661	6.661	0	%100
54	MP1A	Z	0	0	0	%100
55	MP2A	X	6.661	6.661	0	%100
56	MP2A	Z	0	0	0	%100
57	M42	X	14.024	14.024	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
58	M42	Z	0	0	0	%100
59	M43	X	7.289	7.289	0	%100
60	M43	Z	0	0	0	%100
61	M44	X	7.289	7.289	0	%100
62	M44	Z	0	0	0	%100
63	M49	X	0	0	0	%100
64	M49	Z	0	0	0	%100
65	M54A	X	0	0	0	%100
66	M54A	Z	0	0	0	%100
67	M59	X	6.048	6.048	0	%100
68	M59	Z	0	0	0	%100
69	M64	X	6.048	6.048	0	%100
70	M64	Z	0	0	0	%100
71	M69	X	6.048	6.048	0	%100
72	M69	Z	0	0	0	%100
73	M74	X	6.048	6.048	0	%100
74	M74	Z	0	0	0	%100
75	M75	X	7.452	7.452	0	%100
76	M75	Z	0	0	0	%100
77	M76	X	.016	.016	0	%100
78	M76	Z	0	0	0	%100
79	M77	X	6.788	6.788	0	%100
80	M77	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	5.206	5.206	0	%100
2	M1	Z	3.005	3.005	0	%100
3	M2	X	6.73	6.73	0	%100
4	M2	Z	3.885	3.885	0	%100
5	M5	X	7.567	7.567	0	%100
6	M5	Z	4.369	4.369	0	%100
7	M6	X	7.567	7.567	0	%100
8	M6	Z	4.369	4.369	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	3.036	3.036	0	%100
12	M6A	Z	1.753	1.753	0	%100
13	M7A	X	3.036	3.036	0	%100
14	M7A	Z	1.753	1.753	0	%100
15	M23A	X	3.036	3.036	0	%100
16	M23A	Z	1.753	1.753	0	%100
17	M24	X	3.036	3.036	0	%100
18	M24	Z	1.753	1.753	0	%100
19	MP4C	X	5.769	5.769	0	%100
20	MP4C	Z	3.331	3.331	0	%100
21	MP3C	X	5.769	5.769	0	%100
22	MP3C	Z	3.331	3.331	0	%100
23	MP1C	X	5.769	5.769	0	%100
24	MP1C	Z	3.331	3.331	0	%100
25	MP2C	X	5.769	5.769	0	%100
26	MP2C	Z	3.331	3.331	0	%100
27	M38	X	5.206	5.206	0	%100
28	M38	Z	3.005	3.005	0	%100
29	M39A	X	12.145	12.145	0	%100
30	M39A	Z	7.012	7.012	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
31	M40	X	12.145	12.145	0	%100
32	M40	Z	7.012	7.012	0	%100
33	M54	X	0	0	0	%100
34	M54	Z	0	0	0	%100
35	M55	X	6.73	6.73	0	%100
36	M55	Z	3.885	3.885	0	%100
37	M56	X	0	0	0	%100
38	M56	Z	0	0	0	%100
39	M61	X	4.717	4.717	0	%100
40	M61	Z	2.724	2.724	0	%100
41	MP4B	X	5.769	5.769	0	%100
42	MP4B	Z	3.331	3.331	0	%100
43	MP3B	X	5.769	5.769	0	%100
44	MP3B	Z	3.331	3.331	0	%100
45	MP1B	X	5.769	5.769	0	%100
46	MP1B	Z	3.331	3.331	0	%100
47	MP2B	X	5.769	5.769	0	%100
48	MP2B	Z	3.331	3.331	0	%100
49	MP4A	X	5.769	5.769	0	%100
50	MP4A	Z	3.331	3.331	0	%100
51	MP3A	X	5.769	5.769	0	%100
52	MP3A	Z	3.331	3.331	0	%100
53	MP1A	X	5.769	5.769	0	%100
54	MP1A	Z	3.331	3.331	0	%100
55	MP2A	X	5.769	5.769	0	%100
56	MP2A	Z	3.331	3.331	0	%100
57	M42	X	10.201	10.201	0	%100
58	M42	Z	5.889	5.889	0	%100
59	M43	X	10.201	10.201	0	%100
60	M43	Z	5.889	5.889	0	%100
61	M44	X	4.368	4.368	0	%100
62	M44	Z	2.522	2.522	0	%100
63	M49	X	1.746	1.746	0	%100
64	M49	Z	1.008	1.008	0	%100
65	M54A	X	1.746	1.746	0	%100
66	M54A	Z	1.008	1.008	0	%100
67	M59	X	1.746	1.746	0	%100
68	M59	Z	1.008	1.008	0	%100
69	M64	X	1.746	1.746	0	%100
70	M64	Z	1.008	1.008	0	%100
71	M69	X	6.983	6.983	0	%100
72	M69	Z	4.032	4.032	0	%100
73	M74	X	6.983	6.983	0	%100
74	M74	Z	4.032	4.032	0	%100
75	M75	X	2.352	2.352	0	%100
76	M75	Z	1.358	1.358	0	%100
77	M76	X	1.777	1.777	0	%100
78	M76	Z	1.026	1.026	0	%100
79	M77	X	8.217	8.217	0	%100
80	M77	Z	4.744	4.744	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.002	1.002	0	%100
2	M1	Z	1.735	1.735	0	%100
3	M2	X	1.295	1.295	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
4	M2	Z	2.243	2.243	0	%100
5	M5	X	1.456	1.456	0	%100
6	M5	Z	2.522	2.522	0	%100
7	M6	X	5.825	5.825	0	%100
8	M6	Z	10.089	10.089	0	%100
9	M7	X	1.456	1.456	0	%100
10	M7	Z	2.522	2.522	0	%100
11	M6A	X	5.259	5.259	0	%100
12	M6A	Z	9.109	9.109	0	%100
13	M7A	X	5.259	5.259	0	%100
14	M7A	Z	9.109	9.109	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	0	0	0	%100
19	MP4C	X	3.331	3.331	0	%100
20	MP4C	Z	5.769	5.769	0	%100
21	MP3C	X	3.331	3.331	0	%100
22	MP3C	Z	5.769	5.769	0	%100
23	MP1C	X	3.331	3.331	0	%100
24	MP1C	Z	5.769	5.769	0	%100
25	MP2C	X	3.331	3.331	0	%100
26	MP2C	Z	5.769	5.769	0	%100
27	M38	X	4.007	4.007	0	%100
28	M38	Z	6.941	6.941	0	%100
29	M39A	X	5.259	5.259	0	%100
30	M39A	Z	9.109	9.109	0	%100
31	M40	X	5.259	5.259	0	%100
32	M40	Z	9.109	9.109	0	%100
33	M54	X	1.002	1.002	0	%100
34	M54	Z	1.735	1.735	0	%100
35	M55	X	5.181	5.181	0	%100
36	M55	Z	8.973	8.973	0	%100
37	M56	X	1.295	1.295	0	%100
38	M56	Z	2.243	2.243	0	%100
39	M61	X	2.724	2.724	0	%100
40	M61	Z	4.717	4.717	0	%100
41	MP4B	X	3.331	3.331	0	%100
42	MP4B	Z	5.769	5.769	0	%100
43	MP3B	X	3.331	3.331	0	%100
44	MP3B	Z	5.769	5.769	0	%100
45	MP1B	X	3.331	3.331	0	%100
46	MP1B	Z	5.769	5.769	0	%100
47	MP2B	X	3.331	3.331	0	%100
48	MP2B	Z	5.769	5.769	0	%100
49	MP4A	X	3.331	3.331	0	%100
50	MP4A	Z	5.769	5.769	0	%100
51	MP3A	X	3.331	3.331	0	%100
52	MP3A	Z	5.769	5.769	0	%100
53	MP1A	X	3.331	3.331	0	%100
54	MP1A	Z	5.769	5.769	0	%100
55	MP2A	X	3.331	3.331	0	%100
56	MP2A	Z	5.769	5.769	0	%100
57	M42	X	3.644	3.644	0	%100
58	M42	Z	6.312	6.312	0	%100
59	M43	X	7.012	7.012	0	%100
60	M43	Z	12.145	12.145	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
61	M44	X	3.644	3.644	0	%100
62	M44	Z	6.312	6.312	0	%100
63	M49	X	3.024	3.024	0	%100
64	M49	Z	5.238	5.238	0	%100
65	M54A	X	3.024	3.024	0	%100
66	M54A	Z	5.238	5.238	0	%100
67	M59	X	0	0	0	%100
68	M59	Z	0	0	0	%100
69	M64	X	0	0	0	%100
70	M64	Z	0	0	0	%100
71	M69	X	3.024	3.024	0	%100
72	M69	Z	5.238	5.238	0	%100
73	M74	X	3.024	3.024	0	%100
74	M74	Z	5.238	5.238	0	%100
75	M75	X	.008	.008	0	%100
76	M75	Z	.013	.013	0	%100
77	M76	X	3.394	3.394	0	%100
78	M76	Z	5.878	5.878	0	%100
79	M77	X	3.726	3.726	0	%100
80	M77	Z	6.454	6.454	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M5	X	0	0	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	8.738	8.738	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	8.738	8.738	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	14.024	14.024	0	%100
13	M7A	X	0	0	0	%100
14	M7A	Z	14.024	14.024	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	3.506	3.506	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	3.506	3.506	0	%100
19	MP4C	X	0	0	0	%100
20	MP4C	Z	6.661	6.661	0	%100
21	MP3C	X	0	0	0	%100
22	MP3C	Z	6.661	6.661	0	%100
23	MP1C	X	0	0	0	%100
24	MP1C	Z	6.661	6.661	0	%100
25	MP2C	X	0	0	0	%100
26	MP2C	Z	6.661	6.661	0	%100
27	M38	X	0	0	0	%100
28	M38	Z	6.011	6.011	0	%100
29	M39A	X	0	0	0	%100
30	M39A	Z	3.506	3.506	0	%100
31	M40	X	0	0	0	%100
32	M40	Z	3.506	3.506	0	%100
33	M54	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
34	M54	Z	6.011	6.011	0	%100
35	M55	X	0	0	0	%100
36	M55	Z	7.771	7.771	0	%100
37	M56	X	0	0	0	%100
38	M56	Z	7.771	7.771	0	%100
39	M61	X	0	0	0	%100
40	M61	Z	5.447	5.447	0	%100
41	MP4B	X	0	0	0	%100
42	MP4B	Z	6.661	6.661	0	%100
43	MP3B	X	0	0	0	%100
44	MP3B	Z	6.661	6.661	0	%100
45	MP1B	X	0	0	0	%100
46	MP1B	Z	6.661	6.661	0	%100
47	MP2B	X	0	0	0	%100
48	MP2B	Z	6.661	6.661	0	%100
49	MP4A	X	0	0	0	%100
50	MP4A	Z	6.661	6.661	0	%100
51	MP3A	X	0	0	0	%100
52	MP3A	Z	6.661	6.661	0	%100
53	MP1A	X	0	0	0	%100
54	MP1A	Z	6.661	6.661	0	%100
55	MP2A	X	0	0	0	%100
56	MP2A	Z	6.661	6.661	0	%100
57	M42	X	0	0	0	%100
58	M42	Z	5.043	5.043	0	%100
59	M43	X	0	0	0	%100
60	M43	Z	11.779	11.779	0	%100
61	M44	X	0	0	0	%100
62	M44	Z	11.779	11.779	0	%100
63	M49	X	0	0	0	%100
64	M49	Z	8.064	8.064	0	%100
65	M54A	X	0	0	0	%100
66	M54A	Z	8.064	8.064	0	%100
67	M59	X	0	0	0	%100
68	M59	Z	2.016	2.016	0	%100
69	M64	X	0	0	0	%100
70	M64	Z	2.016	2.016	0	%100
71	M69	X	0	0	0	%100
72	M69	Z	2.016	2.016	0	%100
73	M74	X	0	0	0	%100
74	M74	Z	2.016	2.016	0	%100
75	M75	X	0	0	0	%100
76	M75	Z	2.051	2.051	0	%100
77	M76	X	0	0	0	%100
78	M76	Z	9.488	9.488	0	%100
79	M77	X	0	0	0	%100
80	M77	Z	2.716	2.716	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.002	-1.002	0	%100
2	M1	Z	1.735	1.735	0	%100
3	M2	X	-1.295	-1.295	0	%100
4	M2	Z	2.243	2.243	0	%100
5	M5	X	-1.456	-1.456	0	%100
6	M5	Z	2.522	2.522	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
7	M6	X	-1.456	-1.456	0	%100
8	M6	Z	2.522	2.522	0	%100
9	M7	X	-5.825	-5.825	0	%100
10	M7	Z	10.089	10.089	0	%100
11	M6A	X	-5.259	-5.259	0	%100
12	M6A	Z	9.109	9.109	0	%100
13	M7A	X	-5.259	-5.259	0	%100
14	M7A	Z	9.109	9.109	0	%100
15	M23A	X	-5.259	-5.259	0	%100
16	M23A	Z	9.109	9.109	0	%100
17	M24	X	-5.259	-5.259	0	%100
18	M24	Z	9.109	9.109	0	%100
19	MP4C	X	-3.331	-3.331	0	%100
20	MP4C	Z	5.769	5.769	0	%100
21	MP3C	X	-3.331	-3.331	0	%100
22	MP3C	Z	5.769	5.769	0	%100
23	MP1C	X	-3.331	-3.331	0	%100
24	MP1C	Z	5.769	5.769	0	%100
25	MP2C	X	-3.331	-3.331	0	%100
26	MP2C	Z	5.769	5.769	0	%100
27	M38	X	-1.002	-1.002	0	%100
28	M38	Z	1.735	1.735	0	%100
29	M39A	X	0	0	0	%100
30	M39A	Z	0	0	0	%100
31	M40	X	0	0	0	%100
32	M40	Z	0	0	0	%100
33	M54	X	-4.007	-4.007	0	%100
34	M54	Z	6.941	6.941	0	%100
35	M55	X	-1.295	-1.295	0	%100
36	M55	Z	2.243	2.243	0	%100
37	M56	X	-5.181	-5.181	0	%100
38	M56	Z	8.973	8.973	0	%100
39	M61	X	-2.724	-2.724	0	%100
40	M61	Z	4.717	4.717	0	%100
41	MP4B	X	-3.331	-3.331	0	%100
42	MP4B	Z	5.769	5.769	0	%100
43	MP3B	X	-3.331	-3.331	0	%100
44	MP3B	Z	5.769	5.769	0	%100
45	MP1B	X	-3.331	-3.331	0	%100
46	MP1B	Z	5.769	5.769	0	%100
47	MP2B	X	-3.331	-3.331	0	%100
48	MP2B	Z	5.769	5.769	0	%100
49	MP4A	X	-3.331	-3.331	0	%100
50	MP4A	Z	5.769	5.769	0	%100
51	MP3A	X	-3.331	-3.331	0	%100
52	MP3A	Z	5.769	5.769	0	%100
53	MP1A	X	-3.331	-3.331	0	%100
54	MP1A	Z	5.769	5.769	0	%100
55	MP2A	X	-3.331	-3.331	0	%100
56	MP2A	Z	5.769	5.769	0	%100
57	M42	X	-3.644	-3.644	0	%100
58	M42	Z	6.312	6.312	0	%100
59	M43	X	-3.644	-3.644	0	%100
60	M43	Z	6.312	6.312	0	%100
61	M44	X	-7.012	-7.012	0	%100
62	M44	Z	12.145	12.145	0	%100
63	M49	X	-3.024	-3.024	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
64	M49	Z	5.238	5.238	0	%100
65	M54A	X	-3.024	-3.024	0	%100
66	M54A	Z	5.238	5.238	0	%100
67	M59	X	-3.024	-3.024	0	%100
68	M59	Z	5.238	5.238	0	%100
69	M64	X	-3.024	-3.024	0	%100
70	M64	Z	5.238	5.238	0	%100
71	M69	X	0	0	0	%100
72	M69	Z	0	0	0	%100
73	M74	X	0	0	0	%100
74	M74	Z	0	0	0	%100
75	M75	X	-3.394	-3.394	0	%100
76	M75	Z	5.878	5.878	0	%100
77	M76	X	-3.726	-3.726	0	%100
78	M76	Z	6.454	6.454	0	%100
79	M77	X	-.008	-.008	0	%100
80	M77	Z	.013	.013	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-5.206	-5.206	0	%100
2	M1	Z	3.005	3.005	0	%100
3	M2	X	-6.73	-6.73	0	%100
4	M2	Z	3.885	3.885	0	%100
5	M5	X	-7.567	-7.567	0	%100
6	M5	Z	4.369	4.369	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	-7.567	-7.567	0	%100
10	M7	Z	4.369	4.369	0	%100
11	M6A	X	-3.036	-3.036	0	%100
12	M6A	Z	1.753	1.753	0	%100
13	M7A	X	-3.036	-3.036	0	%100
14	M7A	Z	1.753	1.753	0	%100
15	M23A	X	-12.145	-12.145	0	%100
16	M23A	Z	7.012	7.012	0	%100
17	M24	X	-12.145	-12.145	0	%100
18	M24	Z	7.012	7.012	0	%100
19	MP4C	X	-5.769	-5.769	0	%100
20	MP4C	Z	3.331	3.331	0	%100
21	MP3C	X	-5.769	-5.769	0	%100
22	MP3C	Z	3.331	3.331	0	%100
23	MP1C	X	-5.769	-5.769	0	%100
24	MP1C	Z	3.331	3.331	0	%100
25	MP2C	X	-5.769	-5.769	0	%100
26	MP2C	Z	3.331	3.331	0	%100
27	M38	X	0	0	0	%100
28	M38	Z	0	0	0	%100
29	M39A	X	-3.036	-3.036	0	%100
30	M39A	Z	1.753	1.753	0	%100
31	M40	X	-3.036	-3.036	0	%100
32	M40	Z	1.753	1.753	0	%100
33	M54	X	-5.206	-5.206	0	%100
34	M54	Z	3.005	3.005	0	%100
35	M55	X	0	0	0	%100
36	M55	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
37	M56	X	-6.73	-6.73	0	%100
38	M56	Z	3.885	3.885	0	%100
39	M61	X	-4.717	-4.717	0	%100
40	M61	Z	2.724	2.724	0	%100
41	MP4B	X	-5.769	-5.769	0	%100
42	MP4B	Z	3.331	3.331	0	%100
43	MP3B	X	-5.769	-5.769	0	%100
44	MP3B	Z	3.331	3.331	0	%100
45	MP1B	X	-5.769	-5.769	0	%100
46	MP1B	Z	3.331	3.331	0	%100
47	MP2B	X	-5.769	-5.769	0	%100
48	MP2B	Z	3.331	3.331	0	%100
49	MP4A	X	-5.769	-5.769	0	%100
50	MP4A	Z	3.331	3.331	0	%100
51	MP3A	X	-5.769	-5.769	0	%100
52	MP3A	Z	3.331	3.331	0	%100
53	MP1A	X	-5.769	-5.769	0	%100
54	MP1A	Z	3.331	3.331	0	%100
55	MP2A	X	-5.769	-5.769	0	%100
56	MP2A	Z	3.331	3.331	0	%100
57	M42	X	-10.201	-10.201	0	%100
58	M42	Z	5.889	5.889	0	%100
59	M43	X	-4.368	-4.368	0	%100
60	M43	Z	2.522	2.522	0	%100
61	M44	X	-10.201	-10.201	0	%100
62	M44	Z	5.889	5.889	0	%100
63	M49	X	-1.746	-1.746	0	%100
64	M49	Z	1.008	1.008	0	%100
65	M54A	X	-1.746	-1.746	0	%100
66	M54A	Z	1.008	1.008	0	%100
67	M59	X	-6.983	-6.983	0	%100
68	M59	Z	4.032	4.032	0	%100
69	M64	X	-6.983	-6.983	0	%100
70	M64	Z	4.032	4.032	0	%100
71	M69	X	-1.746	-1.746	0	%100
72	M69	Z	1.008	1.008	0	%100
73	M74	X	-1.746	-1.746	0	%100
74	M74	Z	1.008	1.008	0	%100
75	M75	X	-8.217	-8.217	0	%100
76	M75	Z	4.744	4.744	0	%100
77	M76	X	-2.352	-2.352	0	%100
78	M76	Z	1.358	1.358	0	%100
79	M77	X	-1.777	-1.777	0	%100
80	M77	Z	1.026	1.026	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-8.014	-8.014	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	-10.361	-10.361	0	%100
4	M2	Z	0	0	0	%100
5	M5	X	-11.65	-11.65	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	-2.913	-2.913	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	-2.913	-2.913	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
10	M7	Z	0	0	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	0	0	0	%100
13	M7A	X	0	0	0	%100
14	M7A	Z	0	0	0	%100
15	M23A	X	-10.518	-10.518	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	-10.518	-10.518	0	%100
18	M24	Z	0	0	0	%100
19	MP4C	X	-6.661	-6.661	0	%100
20	MP4C	Z	0	0	0	%100
21	MP3C	X	-6.661	-6.661	0	%100
22	MP3C	Z	0	0	0	%100
23	MP1C	X	-6.661	-6.661	0	%100
24	MP1C	Z	0	0	0	%100
25	MP2C	X	-6.661	-6.661	0	%100
26	MP2C	Z	0	0	0	%100
27	M38	X	-2.004	-2.004	0	%100
28	M38	Z	0	0	0	%100
29	M39A	X	-10.518	-10.518	0	%100
30	M39A	Z	0	0	0	%100
31	M40	X	-10.518	-10.518	0	%100
32	M40	Z	0	0	0	%100
33	M54	X	-2.004	-2.004	0	%100
34	M54	Z	0	0	0	%100
35	M55	X	-2.59	-2.59	0	%100
36	M55	Z	0	0	0	%100
37	M56	X	-2.59	-2.59	0	%100
38	M56	Z	0	0	0	%100
39	M61	X	-5.447	-5.447	0	%100
40	M61	Z	0	0	0	%100
41	MP4B	X	-6.661	-6.661	0	%100
42	MP4B	Z	0	0	0	%100
43	MP3B	X	-6.661	-6.661	0	%100
44	MP3B	Z	0	0	0	%100
45	MP1B	X	-6.661	-6.661	0	%100
46	MP1B	Z	0	0	0	%100
47	MP2B	X	-6.661	-6.661	0	%100
48	MP2B	Z	0	0	0	%100
49	MP4A	X	-6.661	-6.661	0	%100
50	MP4A	Z	0	0	0	%100
51	MP3A	X	-6.661	-6.661	0	%100
52	MP3A	Z	0	0	0	%100
53	MP1A	X	-6.661	-6.661	0	%100
54	MP1A	Z	0	0	0	%100
55	MP2A	X	-6.661	-6.661	0	%100
56	MP2A	Z	0	0	0	%100
57	M42	X	-14.024	-14.024	0	%100
58	M42	Z	0	0	0	%100
59	M43	X	-7.289	-7.289	0	%100
60	M43	Z	0	0	0	%100
61	M44	X	-7.289	-7.289	0	%100
62	M44	Z	0	0	0	%100
63	M49	X	0	0	0	%100
64	M49	Z	0	0	0	%100
65	M54A	X	0	0	0	%100
66	M54A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
67	M59	X	-6.048	-6.048	0	%100
68	M59	Z	0	0	0	%100
69	M64	X	-6.048	-6.048	0	%100
70	M64	Z	0	0	0	%100
71	M69	X	-6.048	-6.048	0	%100
72	M69	Z	0	0	0	%100
73	M74	X	-6.048	-6.048	0	%100
74	M74	Z	0	0	0	%100
75	M75	X	-7.452	-7.452	0	%100
76	M75	Z	0	0	0	%100
77	M76	X	-.016	-.016	0	%100
78	M76	Z	0	0	0	%100
79	M77	X	-6.788	-6.788	0	%100
80	M77	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-5.206	-5.206	0	%100
2	M1	Z	-3.005	-3.005	0	%100
3	M2	X	-6.73	-6.73	0	%100
4	M2	Z	-3.885	-3.885	0	%100
5	M5	X	-7.567	-7.567	0	%100
6	M5	Z	-4.369	-4.369	0	%100
7	M6	X	-7.567	-7.567	0	%100
8	M6	Z	-4.369	-4.369	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	-3.036	-3.036	0	%100
12	M6A	Z	-1.753	-1.753	0	%100
13	M7A	X	-3.036	-3.036	0	%100
14	M7A	Z	-1.753	-1.753	0	%100
15	M23A	X	-3.036	-3.036	0	%100
16	M23A	Z	-1.753	-1.753	0	%100
17	M24	X	-3.036	-3.036	0	%100
18	M24	Z	-1.753	-1.753	0	%100
19	MP4C	X	-5.769	-5.769	0	%100
20	MP4C	Z	-3.331	-3.331	0	%100
21	MP3C	X	-5.769	-5.769	0	%100
22	MP3C	Z	-3.331	-3.331	0	%100
23	MP1C	X	-5.769	-5.769	0	%100
24	MP1C	Z	-3.331	-3.331	0	%100
25	MP2C	X	-5.769	-5.769	0	%100
26	MP2C	Z	-3.331	-3.331	0	%100
27	M38	X	-5.206	-5.206	0	%100
28	M38	Z	-3.005	-3.005	0	%100
29	M39A	X	-12.145	-12.145	0	%100
30	M39A	Z	-7.012	-7.012	0	%100
31	M40	X	-12.145	-12.145	0	%100
32	M40	Z	-7.012	-7.012	0	%100
33	M54	X	0	0	0	%100
34	M54	Z	0	0	0	%100
35	M55	X	-6.73	-6.73	0	%100
36	M55	Z	-3.885	-3.885	0	%100
37	M56	X	0	0	0	%100
38	M56	Z	0	0	0	%100
39	M61	X	-4.717	-4.717	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
40	M61	Z	-2.724	-2.724	0	%100
41	MP4B	X	-5.769	-5.769	0	%100
42	MP4B	Z	-3.331	-3.331	0	%100
43	MP3B	X	-5.769	-5.769	0	%100
44	MP3B	Z	-3.331	-3.331	0	%100
45	MP1B	X	-5.769	-5.769	0	%100
46	MP1B	Z	-3.331	-3.331	0	%100
47	MP2B	X	-5.769	-5.769	0	%100
48	MP2B	Z	-3.331	-3.331	0	%100
49	MP4A	X	-5.769	-5.769	0	%100
50	MP4A	Z	-3.331	-3.331	0	%100
51	MP3A	X	-5.769	-5.769	0	%100
52	MP3A	Z	-3.331	-3.331	0	%100
53	MP1A	X	-5.769	-5.769	0	%100
54	MP1A	Z	-3.331	-3.331	0	%100
55	MP2A	X	-5.769	-5.769	0	%100
56	MP2A	Z	-3.331	-3.331	0	%100
57	M42	X	-10.201	-10.201	0	%100
58	M42	Z	-5.889	-5.889	0	%100
59	M43	X	-10.201	-10.201	0	%100
60	M43	Z	-5.889	-5.889	0	%100
61	M44	X	-4.368	-4.368	0	%100
62	M44	Z	-2.522	-2.522	0	%100
63	M49	X	-1.746	-1.746	0	%100
64	M49	Z	-1.008	-1.008	0	%100
65	M54A	X	-1.746	-1.746	0	%100
66	M54A	Z	-1.008	-1.008	0	%100
67	M59	X	-1.746	-1.746	0	%100
68	M59	Z	-1.008	-1.008	0	%100
69	M64	X	-1.746	-1.746	0	%100
70	M64	Z	-1.008	-1.008	0	%100
71	M69	X	-6.983	-6.983	0	%100
72	M69	Z	-4.032	-4.032	0	%100
73	M74	X	-6.983	-6.983	0	%100
74	M74	Z	-4.032	-4.032	0	%100
75	M75	X	-2.352	-2.352	0	%100
76	M75	Z	-1.358	-1.358	0	%100
77	M76	X	-1.777	-1.777	0	%100
78	M76	Z	-1.026	-1.026	0	%100
79	M77	X	-8.217	-8.217	0	%100
80	M77	Z	-4.744	-4.744	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.002	-1.002	0	%100
2	M1	Z	-1.735	-1.735	0	%100
3	M2	X	-1.295	-1.295	0	%100
4	M2	Z	-2.243	-2.243	0	%100
5	M5	X	-1.456	-1.456	0	%100
6	M5	Z	-2.522	-2.522	0	%100
7	M6	X	-5.825	-5.825	0	%100
8	M6	Z	-10.089	-10.089	0	%100
9	M7	X	-1.456	-1.456	0	%100
10	M7	Z	-2.522	-2.522	0	%100
11	M6A	X	-5.259	-5.259	0	%100
12	M6A	Z	-9.109	-9.109	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
13	M7A	X	-5.259	-5.259	0	%100
14	M7A	Z	-9.109	-9.109	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	0	0	0	%100
19	MP4C	X	-3.331	-3.331	0	%100
20	MP4C	Z	-5.769	-5.769	0	%100
21	MP3C	X	-3.331	-3.331	0	%100
22	MP3C	Z	-5.769	-5.769	0	%100
23	MP1C	X	-3.331	-3.331	0	%100
24	MP1C	Z	-5.769	-5.769	0	%100
25	MP2C	X	-3.331	-3.331	0	%100
26	MP2C	Z	-5.769	-5.769	0	%100
27	M38	X	-4.007	-4.007	0	%100
28	M38	Z	-6.941	-6.941	0	%100
29	M39A	X	-5.259	-5.259	0	%100
30	M39A	Z	-9.109	-9.109	0	%100
31	M40	X	-5.259	-5.259	0	%100
32	M40	Z	-9.109	-9.109	0	%100
33	M54	X	-1.002	-1.002	0	%100
34	M54	Z	-1.735	-1.735	0	%100
35	M55	X	-5.181	-5.181	0	%100
36	M55	Z	-8.973	-8.973	0	%100
37	M56	X	-1.295	-1.295	0	%100
38	M56	Z	-2.243	-2.243	0	%100
39	M61	X	-2.724	-2.724	0	%100
40	M61	Z	-4.717	-4.717	0	%100
41	MP4B	X	-3.331	-3.331	0	%100
42	MP4B	Z	-5.769	-5.769	0	%100
43	MP3B	X	-3.331	-3.331	0	%100
44	MP3B	Z	-5.769	-5.769	0	%100
45	MP1B	X	-3.331	-3.331	0	%100
46	MP1B	Z	-5.769	-5.769	0	%100
47	MP2B	X	-3.331	-3.331	0	%100
48	MP2B	Z	-5.769	-5.769	0	%100
49	MP4A	X	-3.331	-3.331	0	%100
50	MP4A	Z	-5.769	-5.769	0	%100
51	MP3A	X	-3.331	-3.331	0	%100
52	MP3A	Z	-5.769	-5.769	0	%100
53	MP1A	X	-3.331	-3.331	0	%100
54	MP1A	Z	-5.769	-5.769	0	%100
55	MP2A	X	-3.331	-3.331	0	%100
56	MP2A	Z	-5.769	-5.769	0	%100
57	M42	X	-3.644	-3.644	0	%100
58	M42	Z	-6.312	-6.312	0	%100
59	M43	X	-7.012	-7.012	0	%100
60	M43	Z	-12.145	-12.145	0	%100
61	M44	X	-3.644	-3.644	0	%100
62	M44	Z	-6.312	-6.312	0	%100
63	M49	X	-3.024	-3.024	0	%100
64	M49	Z	-5.238	-5.238	0	%100
65	M54A	X	-3.024	-3.024	0	%100
66	M54A	Z	-5.238	-5.238	0	%100
67	M59	X	0	0	0	%100
68	M59	Z	0	0	0	%100
69	M64	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
70	M64	Z	0	0	0	%100
71	M69	X	-3.024	-3.024	0	%100
72	M69	Z	-5.238	-5.238	0	%100
73	M74	X	-3.024	-3.024	0	%100
74	M74	Z	-5.238	-5.238	0	%100
75	M75	X	-.008	-.008	0	%100
76	M75	Z	-.013	-.013	0	%100
77	M76	X	-3.394	-3.394	0	%100
78	M76	Z	-5.878	-5.878	0	%100
79	M77	X	-3.726	-3.726	0	%100
80	M77	Z	-6.454	-6.454	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M5	X	0	0	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	-2.413	-2.413	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	-2.413	-2.413	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	-3.766	-3.766	0	%100
13	M7A	X	0	0	0	%100
14	M7A	Z	-3.766	-3.766	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	-.942	-.942	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	-.942	-.942	0	%100
19	MP4C	X	0	0	0	%100
20	MP4C	Z	-2.398	-2.398	0	%100
21	MP3C	X	0	0	0	%100
22	MP3C	Z	-2.398	-2.398	0	%100
23	MP1C	X	0	0	0	%100
24	MP1C	Z	-2.398	-2.398	0	%100
25	MP2C	X	0	0	0	%100
26	MP2C	Z	-2.398	-2.398	0	%100
27	M38	X	0	0	0	%100
28	M38	Z	-1.676	-1.676	0	%100
29	M39A	X	0	0	0	%100
30	M39A	Z	-.942	-.942	0	%100
31	M40	X	0	0	0	%100
32	M40	Z	-.942	-.942	0	%100
33	M54	X	0	0	0	%100
34	M54	Z	-1.676	-1.676	0	%100
35	M55	X	0	0	0	%100
36	M55	Z	-2.072	-2.072	0	%100
37	M56	X	0	0	0	%100
38	M56	Z	-2.072	-2.072	0	%100
39	M61	X	0	0	0	%100
40	M61	Z	-1.983	-1.983	0	%100
41	MP4B	X	0	0	0	%100
42	MP4B	Z	-2.398	-2.398	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
43	MP3B	X	0	0	0	%100
44	MP3B	Z	-2.398	-2.398	0	%100
45	MP1B	X	0	0	0	%100
46	MP1B	Z	-2.398	-2.398	0	%100
47	MP2B	X	0	0	0	%100
48	MP2B	Z	-2.398	-2.398	0	%100
49	MP4A	X	0	0	0	%100
50	MP4A	Z	-2.398	-2.398	0	%100
51	MP3A	X	0	0	0	%100
52	MP3A	Z	-2.398	-2.398	0	%100
53	MP1A	X	0	0	0	%100
54	MP1A	Z	-2.398	-2.398	0	%100
55	MP2A	X	0	0	0	%100
56	MP2A	Z	-2.398	-2.398	0	%100
57	M42	X	0	0	0	%100
58	M42	Z	-1.175	-1.175	0	%100
59	M43	X	0	0	0	%100
60	M43	Z	-3.119	-3.119	0	%100
61	M44	X	0	0	0	%100
62	M44	Z	-3.119	-3.119	0	%100
63	M49	X	0	0	0	%100
64	M49	Z	-2.659	-2.659	0	%100
65	M54A	X	0	0	0	%100
66	M54A	Z	-2.659	-2.659	0	%100
67	M59	X	0	0	0	%100
68	M59	Z	-.665	-.665	0	%100
69	M64	X	0	0	0	%100
70	M64	Z	-.665	-.665	0	%100
71	M69	X	0	0	0	%100
72	M69	Z	-.665	-.665	0	%100
73	M74	X	0	0	0	%100
74	M74	Z	-.665	-.665	0	%100
75	M75	X	0	0	0	%100
76	M75	Z	-.553	-.553	0	%100
77	M76	X	0	0	0	%100
78	M76	Z	-2.559	-2.559	0	%100
79	M77	X	0	0	0	%100
80	M77	Z	-.732	-.732	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.279	.279	0	%100
2	M1	Z	-.484	-.484	0	%100
3	M2	X	.345	.345	0	%100
4	M2	Z	-.598	-.598	0	%100
5	M5	X	.402	.402	0	%100
6	M5	Z	-.697	-.697	0	%100
7	M6	X	.402	.402	0	%100
8	M6	Z	-.697	-.697	0	%100
9	M7	X	1.609	1.609	0	%100
10	M7	Z	-2.787	-2.787	0	%100
11	M6A	X	1.412	1.412	0	%100
12	M6A	Z	-2.446	-2.446	0	%100
13	M7A	X	1.412	1.412	0	%100
14	M7A	Z	-2.446	-2.446	0	%100
15	M23A	X	1.412	1.412	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
16	M23A	Z	-2.446	-2.446	0	%100
17	M24	X	1.412	1.412	0	%100
18	M24	Z	-2.446	-2.446	0	%100
19	MP4C	X	1.199	1.199	0	%100
20	MP4C	Z	-2.077	-2.077	0	%100
21	MP3C	X	1.199	1.199	0	%100
22	MP3C	Z	-2.077	-2.077	0	%100
23	MP1C	X	1.199	1.199	0	%100
24	MP1C	Z	-2.077	-2.077	0	%100
25	MP2C	X	1.199	1.199	0	%100
26	MP2C	Z	-2.077	-2.077	0	%100
27	M38	X	.279	.279	0	%100
28	M38	Z	-.484	-.484	0	%100
29	M39A	X	0	0	0	%100
30	M39A	Z	0	0	0	%100
31	M40	X	0	0	0	%100
32	M40	Z	0	0	0	%100
33	M54	X	1.117	1.117	0	%100
34	M54	Z	-1.935	-1.935	0	%100
35	M55	X	.345	.345	0	%100
36	M55	Z	-.598	-.598	0	%100
37	M56	X	1.382	1.382	0	%100
38	M56	Z	-2.393	-2.393	0	%100
39	M61	X	.991	.991	0	%100
40	M61	Z	-1.717	-1.717	0	%100
41	MP4B	X	1.199	1.199	0	%100
42	MP4B	Z	-2.077	-2.077	0	%100
43	MP3B	X	1.199	1.199	0	%100
44	MP3B	Z	-2.077	-2.077	0	%100
45	MP1B	X	1.199	1.199	0	%100
46	MP1B	Z	-2.077	-2.077	0	%100
47	MP2B	X	1.199	1.199	0	%100
48	MP2B	Z	-2.077	-2.077	0	%100
49	MP4A	X	1.199	1.199	0	%100
50	MP4A	Z	-2.077	-2.077	0	%100
51	MP3A	X	1.199	1.199	0	%100
52	MP3A	Z	-2.077	-2.077	0	%100
53	MP1A	X	1.199	1.199	0	%100
54	MP1A	Z	-2.077	-2.077	0	%100
55	MP2A	X	1.199	1.199	0	%100
56	MP2A	Z	-2.077	-2.077	0	%100
57	M42	X	.911	.911	0	%100
58	M42	Z	-1.579	-1.579	0	%100
59	M43	X	.911	.911	0	%100
60	M43	Z	-1.579	-1.579	0	%100
61	M44	X	1.883	1.883	0	%100
62	M44	Z	-3.262	-3.262	0	%100
63	M49	X	.997	.997	0	%100
64	M49	Z	-1.727	-1.727	0	%100
65	M54A	X	.997	.997	0	%100
66	M54A	Z	-1.727	-1.727	0	%100
67	M59	X	.997	.997	0	%100
68	M59	Z	-1.727	-1.727	0	%100
69	M64	X	.997	.997	0	%100
70	M64	Z	-1.727	-1.727	0	%100
71	M69	X	0	0	0	%100
72	M69	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
73	M74	X	0	0	0	%100
74	M74	Z	0	0	0	%100
75	M75	X	.915	.915	0	%100
76	M75	Z	-1.585	-1.585	0	%100
77	M76	X	1.005	1.005	0	%100
78	M76	Z	-1.74	-1.74	0	%100
79	M77	X	.002	.002	0	%100
80	M77	Z	-.004	-.004	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.451	1.451	0	%100
2	M1	Z	-.838	-.838	0	%100
3	M2	X	1.795	1.795	0	%100
4	M2	Z	-1.036	-1.036	0	%100
5	M5	X	2.09	2.09	0	%100
6	M5	Z	-1.207	-1.207	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	2.09	2.09	0	%100
10	M7	Z	-1.207	-1.207	0	%100
11	M6A	X	.815	.815	0	%100
12	M6A	Z	-.471	-.471	0	%100
13	M7A	X	.815	.815	0	%100
14	M7A	Z	-.471	-.471	0	%100
15	M23A	X	3.262	3.262	0	%100
16	M23A	Z	-1.883	-1.883	0	%100
17	M24	X	3.262	3.262	0	%100
18	M24	Z	-1.883	-1.883	0	%100
19	MP4C	X	2.077	2.077	0	%100
20	MP4C	Z	-1.199	-1.199	0	%100
21	MP3C	X	2.077	2.077	0	%100
22	MP3C	Z	-1.199	-1.199	0	%100
23	MP1C	X	2.077	2.077	0	%100
24	MP1C	Z	-1.199	-1.199	0	%100
25	MP2C	X	2.077	2.077	0	%100
26	MP2C	Z	-1.199	-1.199	0	%100
27	M38	X	0	0	0	%100
28	M38	Z	0	0	0	%100
29	M39A	X	.815	.815	0	%100
30	M39A	Z	-.471	-.471	0	%100
31	M40	X	.815	.815	0	%100
32	M40	Z	-.471	-.471	0	%100
33	M54	X	1.451	1.451	0	%100
34	M54	Z	-.838	-.838	0	%100
35	M55	X	0	0	0	%100
36	M55	Z	0	0	0	%100
37	M56	X	1.795	1.795	0	%100
38	M56	Z	-1.036	-1.036	0	%100
39	M61	X	1.717	1.717	0	%100
40	M61	Z	-.991	-.991	0	%100
41	MP4B	X	2.077	2.077	0	%100
42	MP4B	Z	-1.199	-1.199	0	%100
43	MP3B	X	2.077	2.077	0	%100
44	MP3B	Z	-1.199	-1.199	0	%100
45	MP1B	X	2.077	2.077	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
46	MP1B	Z	-1.199	-1.199	0	%100
47	MP2B	X	2.077	2.077	0	%100
48	MP2B	Z	-1.199	-1.199	0	%100
49	MP4A	X	2.077	2.077	0	%100
50	MP4A	Z	-1.199	-1.199	0	%100
51	MP3A	X	2.077	2.077	0	%100
52	MP3A	Z	-1.199	-1.199	0	%100
53	MP1A	X	2.077	2.077	0	%100
54	MP1A	Z	-1.199	-1.199	0	%100
55	MP2A	X	2.077	2.077	0	%100
56	MP2A	Z	-1.199	-1.199	0	%100
57	M42	X	2.701	2.701	0	%100
58	M42	Z	-1.559	-1.559	0	%100
59	M43	X	1.018	1.018	0	%100
60	M43	Z	-.588	-.588	0	%100
61	M44	X	2.701	2.701	0	%100
62	M44	Z	-1.559	-1.559	0	%100
63	M49	X	.576	.576	0	%100
64	M49	Z	-.332	-.332	0	%100
65	M54A	X	.576	.576	0	%100
66	M54A	Z	-.332	-.332	0	%100
67	M59	X	2.303	2.303	0	%100
68	M59	Z	-1.33	-1.33	0	%100
69	M64	X	2.303	2.303	0	%100
70	M64	Z	-1.33	-1.33	0	%100
71	M69	X	.576	.576	0	%100
72	M69	Z	-.332	-.332	0	%100
73	M74	X	.576	.576	0	%100
74	M74	Z	-.332	-.332	0	%100
75	M75	X	2.216	2.216	0	%100
76	M75	Z	-1.279	-1.279	0	%100
77	M76	X	.634	.634	0	%100
78	M76	Z	-.366	-.366	0	%100
79	M77	X	.479	.479	0	%100
80	M77	Z	-.277	-.277	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	2.234	2.234	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	2.763	2.763	0	%100
4	M2	Z	0	0	0	%100
5	M5	X	3.218	3.218	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	.804	.804	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	.804	.804	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	0	0	0	%100
13	M7A	X	0	0	0	%100
14	M7A	Z	0	0	0	%100
15	M23A	X	2.825	2.825	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	2.825	2.825	0	%100
18	M24	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
19	MP4C	X	2.398	2.398	0	%100
20	MP4C	Z	0	0	0	%100
21	MP3C	X	2.398	2.398	0	%100
22	MP3C	Z	0	0	0	%100
23	MP1C	X	2.398	2.398	0	%100
24	MP1C	Z	0	0	0	%100
25	MP2C	X	2.398	2.398	0	%100
26	MP2C	Z	0	0	0	%100
27	M38	X	.559	.559	0	%100
28	M38	Z	0	0	0	%100
29	M39A	X	2.825	2.825	0	%100
30	M39A	Z	0	0	0	%100
31	M40	X	2.825	2.825	0	%100
32	M40	Z	0	0	0	%100
33	M54	X	.559	.559	0	%100
34	M54	Z	0	0	0	%100
35	M55	X	.691	.691	0	%100
36	M55	Z	0	0	0	%100
37	M56	X	.691	.691	0	%100
38	M56	Z	0	0	0	%100
39	M61	X	1.983	1.983	0	%100
40	M61	Z	0	0	0	%100
41	MP4B	X	2.398	2.398	0	%100
42	MP4B	Z	0	0	0	%100
43	MP3B	X	2.398	2.398	0	%100
44	MP3B	Z	0	0	0	%100
45	MP1B	X	2.398	2.398	0	%100
46	MP1B	Z	0	0	0	%100
47	MP2B	X	2.398	2.398	0	%100
48	MP2B	Z	0	0	0	%100
49	MP4A	X	2.398	2.398	0	%100
50	MP4A	Z	0	0	0	%100
51	MP3A	X	2.398	2.398	0	%100
52	MP3A	Z	0	0	0	%100
53	MP1A	X	2.398	2.398	0	%100
54	MP1A	Z	0	0	0	%100
55	MP2A	X	2.398	2.398	0	%100
56	MP2A	Z	0	0	0	%100
57	M42	X	3.766	3.766	0	%100
58	M42	Z	0	0	0	%100
59	M43	X	1.823	1.823	0	%100
60	M43	Z	0	0	0	%100
61	M44	X	1.823	1.823	0	%100
62	M44	Z	0	0	0	%100
63	M49	X	0	0	0	%100
64	M49	Z	0	0	0	%100
65	M54A	X	0	0	0	%100
66	M54A	Z	0	0	0	%100
67	M59	X	1.994	1.994	0	%100
68	M59	Z	0	0	0	%100
69	M64	X	1.994	1.994	0	%100
70	M64	Z	0	0	0	%100
71	M69	X	1.994	1.994	0	%100
72	M69	Z	0	0	0	%100
73	M74	X	1.994	1.994	0	%100
74	M74	Z	0	0	0	%100
75	M75	X	2.01	2.01	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
76	M75	Z	0	0	0	%100
77	M76	X	.004	.004	0	%100
78	M76	Z	0	0	0	%100
79	M77	X	1.83	1.83	0	%100
80	M77	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.451	1.451	0	%100
2	M1	Z	.838	.838	0	%100
3	M2	X	1.795	1.795	0	%100
4	M2	Z	1.036	1.036	0	%100
5	M5	X	2.09	2.09	0	%100
6	M5	Z	1.207	1.207	0	%100
7	M6	X	2.09	2.09	0	%100
8	M6	Z	1.207	1.207	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	.815	.815	0	%100
12	M6A	Z	.471	.471	0	%100
13	M7A	X	.815	.815	0	%100
14	M7A	Z	.471	.471	0	%100
15	M23A	X	.815	.815	0	%100
16	M23A	Z	.471	.471	0	%100
17	M24	X	.815	.815	0	%100
18	M24	Z	.471	.471	0	%100
19	MP4C	X	2.077	2.077	0	%100
20	MP4C	Z	1.199	1.199	0	%100
21	MP3C	X	2.077	2.077	0	%100
22	MP3C	Z	1.199	1.199	0	%100
23	MP1C	X	2.077	2.077	0	%100
24	MP1C	Z	1.199	1.199	0	%100
25	MP2C	X	2.077	2.077	0	%100
26	MP2C	Z	1.199	1.199	0	%100
27	M38	X	1.451	1.451	0	%100
28	M38	Z	.838	.838	0	%100
29	M39A	X	3.262	3.262	0	%100
30	M39A	Z	1.883	1.883	0	%100
31	M40	X	3.262	3.262	0	%100
32	M40	Z	1.883	1.883	0	%100
33	M54	X	0	0	0	%100
34	M54	Z	0	0	0	%100
35	M55	X	1.795	1.795	0	%100
36	M55	Z	1.036	1.036	0	%100
37	M56	X	0	0	0	%100
38	M56	Z	0	0	0	%100
39	M61	X	1.717	1.717	0	%100
40	M61	Z	.991	.991	0	%100
41	MP4B	X	2.077	2.077	0	%100
42	MP4B	Z	1.199	1.199	0	%100
43	MP3B	X	2.077	2.077	0	%100
44	MP3B	Z	1.199	1.199	0	%100
45	MP1B	X	2.077	2.077	0	%100
46	MP1B	Z	1.199	1.199	0	%100
47	MP2B	X	2.077	2.077	0	%100
48	MP2B	Z	1.199	1.199	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
49	MP4A	X	2.077	2.077	0	%100
50	MP4A	Z	1.199	1.199	0	%100
51	MP3A	X	2.077	2.077	0	%100
52	MP3A	Z	1.199	1.199	0	%100
53	MP1A	X	2.077	2.077	0	%100
54	MP1A	Z	1.199	1.199	0	%100
55	MP2A	X	2.077	2.077	0	%100
56	MP2A	Z	1.199	1.199	0	%100
57	M42	X	2.701	2.701	0	%100
58	M42	Z	1.559	1.559	0	%100
59	M43	X	2.701	2.701	0	%100
60	M43	Z	1.559	1.559	0	%100
61	M44	X	1.018	1.018	0	%100
62	M44	Z	.588	.588	0	%100
63	M49	X	.576	.576	0	%100
64	M49	Z	.332	.332	0	%100
65	M54A	X	.576	.576	0	%100
66	M54A	Z	.332	.332	0	%100
67	M59	X	.576	.576	0	%100
68	M59	Z	.332	.332	0	%100
69	M64	X	.576	.576	0	%100
70	M64	Z	.332	.332	0	%100
71	M69	X	2.303	2.303	0	%100
72	M69	Z	1.33	1.33	0	%100
73	M74	X	2.303	2.303	0	%100
74	M74	Z	1.33	1.33	0	%100
75	M75	X	.634	.634	0	%100
76	M75	Z	.366	.366	0	%100
77	M76	X	.479	.479	0	%100
78	M76	Z	.277	.277	0	%100
79	M77	X	2.216	2.216	0	%100
80	M77	Z	1.279	1.279	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.279	.279	0	%100
2	M1	Z	.484	.484	0	%100
3	M2	X	.345	.345	0	%100
4	M2	Z	.598	.598	0	%100
5	M5	X	.402	.402	0	%100
6	M5	Z	.697	.697	0	%100
7	M6	X	1.609	1.609	0	%100
8	M6	Z	2.787	2.787	0	%100
9	M7	X	.402	.402	0	%100
10	M7	Z	.697	.697	0	%100
11	M6A	X	1.412	1.412	0	%100
12	M6A	Z	2.446	2.446	0	%100
13	M7A	X	1.412	1.412	0	%100
14	M7A	Z	2.446	2.446	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	0	0	0	%100
19	MP4C	X	1.199	1.199	0	%100
20	MP4C	Z	2.077	2.077	0	%100
21	MP3C	X	1.199	1.199	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
22	MP3C	Z	2.077	2.077	0	%100
23	MP1C	X	1.199	1.199	0	%100
24	MP1C	Z	2.077	2.077	0	%100
25	MP2C	X	1.199	1.199	0	%100
26	MP2C	Z	2.077	2.077	0	%100
27	M38	X	1.117	1.117	0	%100
28	M38	Z	1.935	1.935	0	%100
29	M39A	X	1.412	1.412	0	%100
30	M39A	Z	2.446	2.446	0	%100
31	M40	X	1.412	1.412	0	%100
32	M40	Z	2.446	2.446	0	%100
33	M54	X	.279	.279	0	%100
34	M54	Z	.484	.484	0	%100
35	M55	X	1.382	1.382	0	%100
36	M55	Z	2.393	2.393	0	%100
37	M56	X	.345	.345	0	%100
38	M56	Z	.598	.598	0	%100
39	M61	X	.991	.991	0	%100
40	M61	Z	1.717	1.717	0	%100
41	MP4B	X	1.199	1.199	0	%100
42	MP4B	Z	2.077	2.077	0	%100
43	MP3B	X	1.199	1.199	0	%100
44	MP3B	Z	2.077	2.077	0	%100
45	MP1B	X	1.199	1.199	0	%100
46	MP1B	Z	2.077	2.077	0	%100
47	MP2B	X	1.199	1.199	0	%100
48	MP2B	Z	2.077	2.077	0	%100
49	MP4A	X	1.199	1.199	0	%100
50	MP4A	Z	2.077	2.077	0	%100
51	MP3A	X	1.199	1.199	0	%100
52	MP3A	Z	2.077	2.077	0	%100
53	MP1A	X	1.199	1.199	0	%100
54	MP1A	Z	2.077	2.077	0	%100
55	MP2A	X	1.199	1.199	0	%100
56	MP2A	Z	2.077	2.077	0	%100
57	M42	X	.911	.911	0	%100
58	M42	Z	1.579	1.579	0	%100
59	M43	X	1.883	1.883	0	%100
60	M43	Z	3.262	3.262	0	%100
61	M44	X	.911	.911	0	%100
62	M44	Z	1.579	1.579	0	%100
63	M49	X	.997	.997	0	%100
64	M49	Z	1.727	1.727	0	%100
65	M54A	X	.997	.997	0	%100
66	M54A	Z	1.727	1.727	0	%100
67	M59	X	0	0	0	%100
68	M59	Z	0	0	0	%100
69	M64	X	0	0	0	%100
70	M64	Z	0	0	0	%100
71	M69	X	.997	.997	0	%100
72	M69	Z	1.727	1.727	0	%100
73	M74	X	.997	.997	0	%100
74	M74	Z	1.727	1.727	0	%100
75	M75	X	.002	.002	0	%100
76	M75	Z	.004	.004	0	%100
77	M76	X	.915	.915	0	%100
78	M76	Z	1.585	1.585	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
79	M77	X	1.005	1.005	0	%100
80	M77	Z	1.74	1.74	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M5	X	0	0	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	2.413	2.413	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	2.413	2.413	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	3.766	3.766	0	%100
13	M7A	X	0	0	0	%100
14	M7A	Z	3.766	3.766	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	.942	.942	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	.942	.942	0	%100
19	MP4C	X	0	0	0	%100
20	MP4C	Z	2.398	2.398	0	%100
21	MP3C	X	0	0	0	%100
22	MP3C	Z	2.398	2.398	0	%100
23	MP1C	X	0	0	0	%100
24	MP1C	Z	2.398	2.398	0	%100
25	MP2C	X	0	0	0	%100
26	MP2C	Z	2.398	2.398	0	%100
27	M38	X	0	0	0	%100
28	M38	Z	1.676	1.676	0	%100
29	M39A	X	0	0	0	%100
30	M39A	Z	.942	.942	0	%100
31	M40	X	0	0	0	%100
32	M40	Z	.942	.942	0	%100
33	M54	X	0	0	0	%100
34	M54	Z	1.676	1.676	0	%100
35	M55	X	0	0	0	%100
36	M55	Z	2.072	2.072	0	%100
37	M56	X	0	0	0	%100
38	M56	Z	2.072	2.072	0	%100
39	M61	X	0	0	0	%100
40	M61	Z	1.983	1.983	0	%100
41	MP4B	X	0	0	0	%100
42	MP4B	Z	2.398	2.398	0	%100
43	MP3B	X	0	0	0	%100
44	MP3B	Z	2.398	2.398	0	%100
45	MP1B	X	0	0	0	%100
46	MP1B	Z	2.398	2.398	0	%100
47	MP2B	X	0	0	0	%100
48	MP2B	Z	2.398	2.398	0	%100
49	MP4A	X	0	0	0	%100
50	MP4A	Z	2.398	2.398	0	%100
51	MP3A	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
52	MP3A	Z	2.398	2.398	0	%100
53	MP1A	X	0	0	0	%100
54	MP1A	Z	2.398	2.398	0	%100
55	MP2A	X	0	0	0	%100
56	MP2A	Z	2.398	2.398	0	%100
57	M42	X	0	0	0	%100
58	M42	Z	1.175	1.175	0	%100
59	M43	X	0	0	0	%100
60	M43	Z	3.119	3.119	0	%100
61	M44	X	0	0	0	%100
62	M44	Z	3.119	3.119	0	%100
63	M49	X	0	0	0	%100
64	M49	Z	2.659	2.659	0	%100
65	M54A	X	0	0	0	%100
66	M54A	Z	2.659	2.659	0	%100
67	M59	X	0	0	0	%100
68	M59	Z	.665	.665	0	%100
69	M64	X	0	0	0	%100
70	M64	Z	.665	.665	0	%100
71	M69	X	0	0	0	%100
72	M69	Z	.665	.665	0	%100
73	M74	X	0	0	0	%100
74	M74	Z	.665	.665	0	%100
75	M75	X	0	0	0	%100
76	M75	Z	.553	.553	0	%100
77	M76	X	0	0	0	%100
78	M76	Z	2.559	2.559	0	%100
79	M77	X	0	0	0	%100
80	M77	Z	.732	.732	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.279	-.279	0	%100
2	M1	Z	.484	.484	0	%100
3	M2	X	-.345	-.345	0	%100
4	M2	Z	.598	.598	0	%100
5	M5	X	-.402	-.402	0	%100
6	M5	Z	.697	.697	0	%100
7	M6	X	-.402	-.402	0	%100
8	M6	Z	.697	.697	0	%100
9	M7	X	-1.609	-1.609	0	%100
10	M7	Z	2.787	2.787	0	%100
11	M6A	X	-1.412	-1.412	0	%100
12	M6A	Z	2.446	2.446	0	%100
13	M7A	X	-1.412	-1.412	0	%100
14	M7A	Z	2.446	2.446	0	%100
15	M23A	X	-1.412	-1.412	0	%100
16	M23A	Z	2.446	2.446	0	%100
17	M24	X	-1.412	-1.412	0	%100
18	M24	Z	2.446	2.446	0	%100
19	MP4C	X	-1.199	-1.199	0	%100
20	MP4C	Z	2.077	2.077	0	%100
21	MP3C	X	-1.199	-1.199	0	%100
22	MP3C	Z	2.077	2.077	0	%100
23	MP1C	X	-1.199	-1.199	0	%100
24	MP1C	Z	2.077	2.077	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
25	MP2C	X	-1.199	-1.199	0	%100
26	MP2C	Z	2.077	2.077	0	%100
27	M38	X	-.279	-.279	0	%100
28	M38	Z	.484	.484	0	%100
29	M39A	X	0	0	0	%100
30	M39A	Z	0	0	0	%100
31	M40	X	0	0	0	%100
32	M40	Z	0	0	0	%100
33	M54	X	-1.117	-1.117	0	%100
34	M54	Z	1.935	1.935	0	%100
35	M55	X	-.345	-.345	0	%100
36	M55	Z	.598	.598	0	%100
37	M56	X	-1.382	-1.382	0	%100
38	M56	Z	2.393	2.393	0	%100
39	M61	X	-.991	-.991	0	%100
40	M61	Z	1.717	1.717	0	%100
41	MP4B	X	-1.199	-1.199	0	%100
42	MP4B	Z	2.077	2.077	0	%100
43	MP3B	X	-1.199	-1.199	0	%100
44	MP3B	Z	2.077	2.077	0	%100
45	MP1B	X	-1.199	-1.199	0	%100
46	MP1B	Z	2.077	2.077	0	%100
47	MP2B	X	-1.199	-1.199	0	%100
48	MP2B	Z	2.077	2.077	0	%100
49	MP4A	X	-1.199	-1.199	0	%100
50	MP4A	Z	2.077	2.077	0	%100
51	MP3A	X	-1.199	-1.199	0	%100
52	MP3A	Z	2.077	2.077	0	%100
53	MP1A	X	-1.199	-1.199	0	%100
54	MP1A	Z	2.077	2.077	0	%100
55	MP2A	X	-1.199	-1.199	0	%100
56	MP2A	Z	2.077	2.077	0	%100
57	M42	X	-.911	-.911	0	%100
58	M42	Z	1.579	1.579	0	%100
59	M43	X	-.911	-.911	0	%100
60	M43	Z	1.579	1.579	0	%100
61	M44	X	-1.883	-1.883	0	%100
62	M44	Z	3.262	3.262	0	%100
63	M49	X	-.997	-.997	0	%100
64	M49	Z	1.727	1.727	0	%100
65	M54A	X	-.997	-.997	0	%100
66	M54A	Z	1.727	1.727	0	%100
67	M59	X	-.997	-.997	0	%100
68	M59	Z	1.727	1.727	0	%100
69	M64	X	-.997	-.997	0	%100
70	M64	Z	1.727	1.727	0	%100
71	M69	X	0	0	0	%100
72	M69	Z	0	0	0	%100
73	M74	X	0	0	0	%100
74	M74	Z	0	0	0	%100
75	M75	X	-.915	-.915	0	%100
76	M75	Z	1.585	1.585	0	%100
77	M76	X	-1.005	-1.005	0	%100
78	M76	Z	1.74	1.74	0	%100
79	M77	X	-.002	-.002	0	%100
80	M77	Z	.004	.004	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.451	-1.451	0	%100
2	M1	Z	.838	.838	0	%100
3	M2	X	-1.795	-1.795	0	%100
4	M2	Z	1.036	1.036	0	%100
5	M5	X	-2.09	-2.09	0	%100
6	M5	Z	1.207	1.207	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	-2.09	-2.09	0	%100
10	M7	Z	1.207	1.207	0	%100
11	M6A	X	-.815	-.815	0	%100
12	M6A	Z	.471	.471	0	%100
13	M7A	X	-.815	-.815	0	%100
14	M7A	Z	.471	.471	0	%100
15	M23A	X	-3.262	-3.262	0	%100
16	M23A	Z	1.883	1.883	0	%100
17	M24	X	-3.262	-3.262	0	%100
18	M24	Z	1.883	1.883	0	%100
19	MP4C	X	-2.077	-2.077	0	%100
20	MP4C	Z	1.199	1.199	0	%100
21	MP3C	X	-2.077	-2.077	0	%100
22	MP3C	Z	1.199	1.199	0	%100
23	MP1C	X	-2.077	-2.077	0	%100
24	MP1C	Z	1.199	1.199	0	%100
25	MP2C	X	-2.077	-2.077	0	%100
26	MP2C	Z	1.199	1.199	0	%100
27	M38	X	0	0	0	%100
28	M38	Z	0	0	0	%100
29	M39A	X	-.815	-.815	0	%100
30	M39A	Z	.471	.471	0	%100
31	M40	X	-.815	-.815	0	%100
32	M40	Z	.471	.471	0	%100
33	M54	X	-1.451	-1.451	0	%100
34	M54	Z	.838	.838	0	%100
35	M55	X	0	0	0	%100
36	M55	Z	0	0	0	%100
37	M56	X	-1.795	-1.795	0	%100
38	M56	Z	1.036	1.036	0	%100
39	M61	X	-1.717	-1.717	0	%100
40	M61	Z	.991	.991	0	%100
41	MP4B	X	-2.077	-2.077	0	%100
42	MP4B	Z	1.199	1.199	0	%100
43	MP3B	X	-2.077	-2.077	0	%100
44	MP3B	Z	1.199	1.199	0	%100
45	MP1B	X	-2.077	-2.077	0	%100
46	MP1B	Z	1.199	1.199	0	%100
47	MP2B	X	-2.077	-2.077	0	%100
48	MP2B	Z	1.199	1.199	0	%100
49	MP4A	X	-2.077	-2.077	0	%100
50	MP4A	Z	1.199	1.199	0	%100
51	MP3A	X	-2.077	-2.077	0	%100
52	MP3A	Z	1.199	1.199	0	%100
53	MP1A	X	-2.077	-2.077	0	%100
54	MP1A	Z	1.199	1.199	0	%100
55	MP2A	X	-2.077	-2.077	0	%100
56	MP2A	Z	1.199	1.199	0	%100
57	M42	X	-2.701	-2.701	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
58	M42	Z	1.559	1.559	0	%100
59	M43	X	-1.018	-1.018	0	%100
60	M43	Z	.588	.588	0	%100
61	M44	X	-2.701	-2.701	0	%100
62	M44	Z	1.559	1.559	0	%100
63	M49	X	-.576	-.576	0	%100
64	M49	Z	.332	.332	0	%100
65	M54A	X	-.576	-.576	0	%100
66	M54A	Z	.332	.332	0	%100
67	M59	X	-2.303	-2.303	0	%100
68	M59	Z	1.33	1.33	0	%100
69	M64	X	-2.303	-2.303	0	%100
70	M64	Z	1.33	1.33	0	%100
71	M69	X	-.576	-.576	0	%100
72	M69	Z	.332	.332	0	%100
73	M74	X	-.576	-.576	0	%100
74	M74	Z	.332	.332	0	%100
75	M75	X	-2.216	-2.216	0	%100
76	M75	Z	1.279	1.279	0	%100
77	M76	X	-.634	-.634	0	%100
78	M76	Z	.366	.366	0	%100
79	M77	X	-.479	-.479	0	%100
80	M77	Z	.277	.277	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-2.234	-2.234	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	-2.763	-2.763	0	%100
4	M2	Z	0	0	0	%100
5	M5	X	-3.218	-3.218	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	-.804	-.804	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	-.804	-.804	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	0	0	0	%100
13	M7A	X	0	0	0	%100
14	M7A	Z	0	0	0	%100
15	M23A	X	-2.825	-2.825	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	-2.825	-2.825	0	%100
18	M24	Z	0	0	0	%100
19	MP4C	X	-2.398	-2.398	0	%100
20	MP4C	Z	0	0	0	%100
21	MP3C	X	-2.398	-2.398	0	%100
22	MP3C	Z	0	0	0	%100
23	MP1C	X	-2.398	-2.398	0	%100
24	MP1C	Z	0	0	0	%100
25	MP2C	X	-2.398	-2.398	0	%100
26	MP2C	Z	0	0	0	%100
27	M38	X	-.559	-.559	0	%100
28	M38	Z	0	0	0	%100
29	M39A	X	-2.825	-2.825	0	%100
30	M39A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
31	M40	X	-2.825	-2.825	0	%100
32	M40	Z	0	0	0	%100
33	M54	X	-.559	-.559	0	%100
34	M54	Z	0	0	0	%100
35	M55	X	-.691	-.691	0	%100
36	M55	Z	0	0	0	%100
37	M56	X	-.691	-.691	0	%100
38	M56	Z	0	0	0	%100
39	M61	X	-1.983	-1.983	0	%100
40	M61	Z	0	0	0	%100
41	MP4B	X	-2.398	-2.398	0	%100
42	MP4B	Z	0	0	0	%100
43	MP3B	X	-2.398	-2.398	0	%100
44	MP3B	Z	0	0	0	%100
45	MP1B	X	-2.398	-2.398	0	%100
46	MP1B	Z	0	0	0	%100
47	MP2B	X	-2.398	-2.398	0	%100
48	MP2B	Z	0	0	0	%100
49	MP4A	X	-2.398	-2.398	0	%100
50	MP4A	Z	0	0	0	%100
51	MP3A	X	-2.398	-2.398	0	%100
52	MP3A	Z	0	0	0	%100
53	MP1A	X	-2.398	-2.398	0	%100
54	MP1A	Z	0	0	0	%100
55	MP2A	X	-2.398	-2.398	0	%100
56	MP2A	Z	0	0	0	%100
57	M42	X	-3.766	-3.766	0	%100
58	M42	Z	0	0	0	%100
59	M43	X	-1.823	-1.823	0	%100
60	M43	Z	0	0	0	%100
61	M44	X	-1.823	-1.823	0	%100
62	M44	Z	0	0	0	%100
63	M49	X	0	0	0	%100
64	M49	Z	0	0	0	%100
65	M54A	X	0	0	0	%100
66	M54A	Z	0	0	0	%100
67	M59	X	-1.994	-1.994	0	%100
68	M59	Z	0	0	0	%100
69	M64	X	-1.994	-1.994	0	%100
70	M64	Z	0	0	0	%100
71	M69	X	-1.994	-1.994	0	%100
72	M69	Z	0	0	0	%100
73	M74	X	-1.994	-1.994	0	%100
74	M74	Z	0	0	0	%100
75	M75	X	-2.01	-2.01	0	%100
76	M75	Z	0	0	0	%100
77	M76	X	-.004	-.004	0	%100
78	M76	Z	0	0	0	%100
79	M77	X	-1.83	-1.83	0	%100
80	M77	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.451	-1.451	0	%100
2	M1	Z	-.838	-.838	0	%100
3	M2	X	-1.795	-1.795	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
4	M2	Z	-1.036	-1.036	0	%100
5	M5	X	-2.09	-2.09	0	%100
6	M5	Z	-1.207	-1.207	0	%100
7	M6	X	-2.09	-2.09	0	%100
8	M6	Z	-1.207	-1.207	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	-.815	-.815	0	%100
12	M6A	Z	-.471	-.471	0	%100
13	M7A	X	-.815	-.815	0	%100
14	M7A	Z	-.471	-.471	0	%100
15	M23A	X	-.815	-.815	0	%100
16	M23A	Z	-.471	-.471	0	%100
17	M24	X	-.815	-.815	0	%100
18	M24	Z	-.471	-.471	0	%100
19	MP4C	X	-2.077	-2.077	0	%100
20	MP4C	Z	-1.199	-1.199	0	%100
21	MP3C	X	-2.077	-2.077	0	%100
22	MP3C	Z	-1.199	-1.199	0	%100
23	MP1C	X	-2.077	-2.077	0	%100
24	MP1C	Z	-1.199	-1.199	0	%100
25	MP2C	X	-2.077	-2.077	0	%100
26	MP2C	Z	-1.199	-1.199	0	%100
27	M38	X	-1.451	-1.451	0	%100
28	M38	Z	-.838	-.838	0	%100
29	M39A	X	-3.262	-3.262	0	%100
30	M39A	Z	-1.883	-1.883	0	%100
31	M40	X	-3.262	-3.262	0	%100
32	M40	Z	-1.883	-1.883	0	%100
33	M54	X	0	0	0	%100
34	M54	Z	0	0	0	%100
35	M55	X	-1.795	-1.795	0	%100
36	M55	Z	-1.036	-1.036	0	%100
37	M56	X	0	0	0	%100
38	M56	Z	0	0	0	%100
39	M61	X	-1.717	-1.717	0	%100
40	M61	Z	-.991	-.991	0	%100
41	MP4B	X	-2.077	-2.077	0	%100
42	MP4B	Z	-1.199	-1.199	0	%100
43	MP3B	X	-2.077	-2.077	0	%100
44	MP3B	Z	-1.199	-1.199	0	%100
45	MP1B	X	-2.077	-2.077	0	%100
46	MP1B	Z	-1.199	-1.199	0	%100
47	MP2B	X	-2.077	-2.077	0	%100
48	MP2B	Z	-1.199	-1.199	0	%100
49	MP4A	X	-2.077	-2.077	0	%100
50	MP4A	Z	-1.199	-1.199	0	%100
51	MP3A	X	-2.077	-2.077	0	%100
52	MP3A	Z	-1.199	-1.199	0	%100
53	MP1A	X	-2.077	-2.077	0	%100
54	MP1A	Z	-1.199	-1.199	0	%100
55	MP2A	X	-2.077	-2.077	0	%100
56	MP2A	Z	-1.199	-1.199	0	%100
57	M42	X	-2.701	-2.701	0	%100
58	M42	Z	-1.559	-1.559	0	%100
59	M43	X	-2.701	-2.701	0	%100
60	M43	Z	-1.559	-1.559	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
61	M44	X	-1.018	-1.018	0	%100
62	M44	Z	-.588	-.588	0	%100
63	M49	X	-.576	-.576	0	%100
64	M49	Z	-.332	-.332	0	%100
65	M54A	X	-.576	-.576	0	%100
66	M54A	Z	-.332	-.332	0	%100
67	M59	X	-.576	-.576	0	%100
68	M59	Z	-.332	-.332	0	%100
69	M64	X	-.576	-.576	0	%100
70	M64	Z	-.332	-.332	0	%100
71	M69	X	-2.303	-2.303	0	%100
72	M69	Z	-1.33	-1.33	0	%100
73	M74	X	-2.303	-2.303	0	%100
74	M74	Z	-1.33	-1.33	0	%100
75	M75	X	-.634	-.634	0	%100
76	M75	Z	-.366	-.366	0	%100
77	M76	X	-.479	-.479	0	%100
78	M76	Z	-.277	-.277	0	%100
79	M77	X	-2.216	-2.216	0	%100
80	M77	Z	-1.279	-1.279	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.279	-.279	0	%100
2	M1	Z	-.484	-.484	0	%100
3	M2	X	-.345	-.345	0	%100
4	M2	Z	-.598	-.598	0	%100
5	M5	X	-.402	-.402	0	%100
6	M5	Z	-.697	-.697	0	%100
7	M6	X	-1.609	-1.609	0	%100
8	M6	Z	-2.787	-2.787	0	%100
9	M7	X	-.402	-.402	0	%100
10	M7	Z	-.697	-.697	0	%100
11	M6A	X	-1.412	-1.412	0	%100
12	M6A	Z	-2.446	-2.446	0	%100
13	M7A	X	-1.412	-1.412	0	%100
14	M7A	Z	-2.446	-2.446	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	0	0	0	%100
19	MP4C	X	-1.199	-1.199	0	%100
20	MP4C	Z	-2.077	-2.077	0	%100
21	MP3C	X	-1.199	-1.199	0	%100
22	MP3C	Z	-2.077	-2.077	0	%100
23	MP1C	X	-1.199	-1.199	0	%100
24	MP1C	Z	-2.077	-2.077	0	%100
25	MP2C	X	-1.199	-1.199	0	%100
26	MP2C	Z	-2.077	-2.077	0	%100
27	M38	X	-1.117	-1.117	0	%100
28	M38	Z	-1.935	-1.935	0	%100
29	M39A	X	-1.412	-1.412	0	%100
30	M39A	Z	-2.446	-2.446	0	%100
31	M40	X	-1.412	-1.412	0	%100
32	M40	Z	-2.446	-2.446	0	%100
33	M54	X	-.279	-.279	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
34	M54	Z	-.484	-.484	0	%100
35	M55	X	-1.382	-1.382	0	%100
36	M55	Z	-2.393	-2.393	0	%100
37	M56	X	-.345	-.345	0	%100
38	M56	Z	-.598	-.598	0	%100
39	M61	X	-.991	-.991	0	%100
40	M61	Z	-1.717	-1.717	0	%100
41	MP4B	X	-1.199	-1.199	0	%100
42	MP4B	Z	-2.077	-2.077	0	%100
43	MP3B	X	-1.199	-1.199	0	%100
44	MP3B	Z	-2.077	-2.077	0	%100
45	MP1B	X	-1.199	-1.199	0	%100
46	MP1B	Z	-2.077	-2.077	0	%100
47	MP2B	X	-1.199	-1.199	0	%100
48	MP2B	Z	-2.077	-2.077	0	%100
49	MP4A	X	-1.199	-1.199	0	%100
50	MP4A	Z	-2.077	-2.077	0	%100
51	MP3A	X	-1.199	-1.199	0	%100
52	MP3A	Z	-2.077	-2.077	0	%100
53	MP1A	X	-1.199	-1.199	0	%100
54	MP1A	Z	-2.077	-2.077	0	%100
55	MP2A	X	-1.199	-1.199	0	%100
56	MP2A	Z	-2.077	-2.077	0	%100
57	M42	X	-.911	-.911	0	%100
58	M42	Z	-1.579	-1.579	0	%100
59	M43	X	-1.883	-1.883	0	%100
60	M43	Z	-3.262	-3.262	0	%100
61	M44	X	-.911	-.911	0	%100
62	M44	Z	-1.579	-1.579	0	%100
63	M49	X	-.997	-.997	0	%100
64	M49	Z	-1.727	-1.727	0	%100
65	M54A	X	-.997	-.997	0	%100
66	M54A	Z	-1.727	-1.727	0	%100
67	M59	X	0	0	0	%100
68	M59	Z	0	0	0	%100
69	M64	X	0	0	0	%100
70	M64	Z	0	0	0	%100
71	M69	X	-.997	-.997	0	%100
72	M69	Z	-1.727	-1.727	0	%100
73	M74	X	-.997	-.997	0	%100
74	M74	Z	-1.727	-1.727	0	%100
75	M75	X	-.002	-.002	0	%100
76	M75	Z	-.004	-.004	0	%100
77	M76	X	-.915	-.915	0	%100
78	M76	Z	-1.585	-1.585	0	%100
79	M77	X	-1.005	-1.005	0	%100
80	M77	Z	-1.74	-1.74	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M5	X	0	0	0	%100
6	M5	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
7	M6	X	0	0	0	%100
8	M6	Z	-.584	-.584	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	-.584	-.584	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	-.938	-.938	0	%100
13	M7A	X	0	0	0	%100
14	M7A	Z	-.938	-.938	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	-.234	-.234	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	-.234	-.234	0	%100
19	MP4C	X	0	0	0	%100
20	MP4C	Z	-.446	-.446	0	%100
21	MP3C	X	0	0	0	%100
22	MP3C	Z	-.446	-.446	0	%100
23	MP1C	X	0	0	0	%100
24	MP1C	Z	-.446	-.446	0	%100
25	MP2C	X	0	0	0	%100
26	MP2C	Z	-.446	-.446	0	%100
27	M38	X	0	0	0	%100
28	M38	Z	-.402	-.402	0	%100
29	M39A	X	0	0	0	%100
30	M39A	Z	-.234	-.234	0	%100
31	M40	X	0	0	0	%100
32	M40	Z	-.234	-.234	0	%100
33	M54	X	0	0	0	%100
34	M54	Z	-.402	-.402	0	%100
35	M55	X	0	0	0	%100
36	M55	Z	-.52	-.52	0	%100
37	M56	X	0	0	0	%100
38	M56	Z	-.52	-.52	0	%100
39	M61	X	0	0	0	%100
40	M61	Z	-.364	-.364	0	%100
41	MP4B	X	0	0	0	%100
42	MP4B	Z	-.446	-.446	0	%100
43	MP3B	X	0	0	0	%100
44	MP3B	Z	-.446	-.446	0	%100
45	MP1B	X	0	0	0	%100
46	MP1B	Z	-.446	-.446	0	%100
47	MP2B	X	0	0	0	%100
48	MP2B	Z	-.446	-.446	0	%100
49	MP4A	X	0	0	0	%100
50	MP4A	Z	-.446	-.446	0	%100
51	MP3A	X	0	0	0	%100
52	MP3A	Z	-.446	-.446	0	%100
53	MP1A	X	0	0	0	%100
54	MP1A	Z	-.446	-.446	0	%100
55	MP2A	X	0	0	0	%100
56	MP2A	Z	-.446	-.446	0	%100
57	M42	X	0	0	0	%100
58	M42	Z	-.337	-.337	0	%100
59	M43	X	0	0	0	%100
60	M43	Z	-.788	-.788	0	%100
61	M44	X	0	0	0	%100
62	M44	Z	-.788	-.788	0	%100
63	M49	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
64	M49	Z	-.539	-.539	0	%100
65	M54A	X	0	0	0	%100
66	M54A	Z	-.539	-.539	0	%100
67	M59	X	0	0	0	%100
68	M59	Z	-.135	-.135	0	%100
69	M64	X	0	0	0	%100
70	M64	Z	-.135	-.135	0	%100
71	M69	X	0	0	0	%100
72	M69	Z	-.135	-.135	0	%100
73	M74	X	0	0	0	%100
74	M74	Z	-.135	-.135	0	%100
75	M75	X	0	0	0	%100
76	M75	Z	-.137	-.137	0	%100
77	M76	X	0	0	0	%100
78	M76	Z	-.635	-.635	0	%100
79	M77	X	0	0	0	%100
80	M77	Z	-.182	-.182	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.067	.067	0	%100
2	M1	Z	-.116	-.116	0	%100
3	M2	X	.087	.087	0	%100
4	M2	Z	-.15	-.15	0	%100
5	M5	X	.097	.097	0	%100
6	M5	Z	-.169	-.169	0	%100
7	M6	X	.097	.097	0	%100
8	M6	Z	-.169	-.169	0	%100
9	M7	X	.39	.39	0	%100
10	M7	Z	-.675	-.675	0	%100
11	M6A	X	.352	.352	0	%100
12	M6A	Z	-.609	-.609	0	%100
13	M7A	X	.352	.352	0	%100
14	M7A	Z	-.609	-.609	0	%100
15	M23A	X	.352	.352	0	%100
16	M23A	Z	-.609	-.609	0	%100
17	M24	X	.352	.352	0	%100
18	M24	Z	-.609	-.609	0	%100
19	MP4C	X	.223	.223	0	%100
20	MP4C	Z	-.386	-.386	0	%100
21	MP3C	X	.223	.223	0	%100
22	MP3C	Z	-.386	-.386	0	%100
23	MP1C	X	.223	.223	0	%100
24	MP1C	Z	-.386	-.386	0	%100
25	MP2C	X	.223	.223	0	%100
26	MP2C	Z	-.386	-.386	0	%100
27	M38	X	.067	.067	0	%100
28	M38	Z	-.116	-.116	0	%100
29	M39A	X	0	0	0	%100
30	M39A	Z	0	0	0	%100
31	M40	X	0	0	0	%100
32	M40	Z	0	0	0	%100
33	M54	X	.268	.268	0	%100
34	M54	Z	-.464	-.464	0	%100
35	M55	X	.087	.087	0	%100
36	M55	Z	-.15	-.15	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
37	M56	X	.347	.347	0	%100
38	M56	Z	-.6	-.6	0	%100
39	M61	X	.182	.182	0	%100
40	M61	Z	-.316	-.316	0	%100
41	MP4B	X	.223	.223	0	%100
42	MP4B	Z	-.386	-.386	0	%100
43	MP3B	X	.223	.223	0	%100
44	MP3B	Z	-.386	-.386	0	%100
45	MP1B	X	.223	.223	0	%100
46	MP1B	Z	-.386	-.386	0	%100
47	MP2B	X	.223	.223	0	%100
48	MP2B	Z	-.386	-.386	0	%100
49	MP4A	X	.223	.223	0	%100
50	MP4A	Z	-.386	-.386	0	%100
51	MP3A	X	.223	.223	0	%100
52	MP3A	Z	-.386	-.386	0	%100
53	MP1A	X	.223	.223	0	%100
54	MP1A	Z	-.386	-.386	0	%100
55	MP2A	X	.223	.223	0	%100
56	MP2A	Z	-.386	-.386	0	%100
57	M42	X	.244	.244	0	%100
58	M42	Z	-.422	-.422	0	%100
59	M43	X	.244	.244	0	%100
60	M43	Z	-.422	-.422	0	%100
61	M44	X	.469	.469	0	%100
62	M44	Z	-.812	-.812	0	%100
63	M49	X	.202	.202	0	%100
64	M49	Z	-.35	-.35	0	%100
65	M54A	X	.202	.202	0	%100
66	M54A	Z	-.35	-.35	0	%100
67	M59	X	.202	.202	0	%100
68	M59	Z	-.35	-.35	0	%100
69	M64	X	.202	.202	0	%100
70	M64	Z	-.35	-.35	0	%100
71	M69	X	0	0	0	%100
72	M69	Z	0	0	0	%100
73	M74	X	0	0	0	%100
74	M74	Z	0	0	0	%100
75	M75	X	.227	.227	0	%100
76	M75	Z	-.393	-.393	0	%100
77	M76	X	.249	.249	0	%100
78	M76	Z	-.432	-.432	0	%100
79	M77	X	.000519	.000519	0	%100
80	M77	Z	-.000898	-.000898	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.348	.348	0	%100
2	M1	Z	-.201	-.201	0	%100
3	M2	X	.45	.45	0	%100
4	M2	Z	-.26	-.26	0	%100
5	M5	X	.506	.506	0	%100
6	M5	Z	-.292	-.292	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	.506	.506	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
10	M7	Z	-.292	-.292	0	%100
11	M6A	X	.203	.203	0	%100
12	M6A	Z	-.117	-.117	0	%100
13	M7A	X	.203	.203	0	%100
14	M7A	Z	-.117	-.117	0	%100
15	M23A	X	.812	.812	0	%100
16	M23A	Z	-.469	-.469	0	%100
17	M24	X	.812	.812	0	%100
18	M24	Z	-.469	-.469	0	%100
19	MP4C	X	.386	.386	0	%100
20	MP4C	Z	-.223	-.223	0	%100
21	MP3C	X	.386	.386	0	%100
22	MP3C	Z	-.223	-.223	0	%100
23	MP1C	X	.386	.386	0	%100
24	MP1C	Z	-.223	-.223	0	%100
25	MP2C	X	.386	.386	0	%100
26	MP2C	Z	-.223	-.223	0	%100
27	M38	X	0	0	0	%100
28	M38	Z	0	0	0	%100
29	M39A	X	.203	.203	0	%100
30	M39A	Z	-.117	-.117	0	%100
31	M40	X	.203	.203	0	%100
32	M40	Z	-.117	-.117	0	%100
33	M54	X	.348	.348	0	%100
34	M54	Z	-.201	-.201	0	%100
35	M55	X	0	0	0	%100
36	M55	Z	0	0	0	%100
37	M56	X	.45	.45	0	%100
38	M56	Z	-.26	-.26	0	%100
39	M61	X	.316	.316	0	%100
40	M61	Z	-.182	-.182	0	%100
41	MP4B	X	.386	.386	0	%100
42	MP4B	Z	-.223	-.223	0	%100
43	MP3B	X	.386	.386	0	%100
44	MP3B	Z	-.223	-.223	0	%100
45	MP1B	X	.386	.386	0	%100
46	MP1B	Z	-.223	-.223	0	%100
47	MP2B	X	.386	.386	0	%100
48	MP2B	Z	-.223	-.223	0	%100
49	MP4A	X	.386	.386	0	%100
50	MP4A	Z	-.223	-.223	0	%100
51	MP3A	X	.386	.386	0	%100
52	MP3A	Z	-.223	-.223	0	%100
53	MP1A	X	.386	.386	0	%100
54	MP1A	Z	-.223	-.223	0	%100
55	MP2A	X	.386	.386	0	%100
56	MP2A	Z	-.223	-.223	0	%100
57	M42	X	.682	.682	0	%100
58	M42	Z	-.394	-.394	0	%100
59	M43	X	.292	.292	0	%100
60	M43	Z	-.169	-.169	0	%100
61	M44	X	.682	.682	0	%100
62	M44	Z	-.394	-.394	0	%100
63	M49	X	.117	.117	0	%100
64	M49	Z	-.067	-.067	0	%100
65	M54A	X	.117	.117	0	%100
66	M54A	Z	-.067	-.067	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
67	M59	X	.467	.467	0	%100
68	M59	Z	-.27	-.27	0	%100
69	M64	X	.467	.467	0	%100
70	M64	Z	-.27	-.27	0	%100
71	M69	X	.117	.117	0	%100
72	M69	Z	-.067	-.067	0	%100
73	M74	X	.117	.117	0	%100
74	M74	Z	-.067	-.067	0	%100
75	M75	X	.55	.55	0	%100
76	M75	Z	-.317	-.317	0	%100
77	M76	X	.157	.157	0	%100
78	M76	Z	-.091	-.091	0	%100
79	M77	X	.119	.119	0	%100
80	M77	Z	-.069	-.069	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.536	.536	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	.693	.693	0	%100
4	M2	Z	0	0	0	%100
5	M5	X	.779	.779	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	.195	.195	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	.195	.195	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	0	0	0	%100
13	M7A	X	0	0	0	%100
14	M7A	Z	0	0	0	%100
15	M23A	X	.703	.703	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	.703	.703	0	%100
18	M24	Z	0	0	0	%100
19	MP4C	X	.446	.446	0	%100
20	MP4C	Z	0	0	0	%100
21	MP3C	X	.446	.446	0	%100
22	MP3C	Z	0	0	0	%100
23	MP1C	X	.446	.446	0	%100
24	MP1C	Z	0	0	0	%100
25	MP2C	X	.446	.446	0	%100
26	MP2C	Z	0	0	0	%100
27	M38	X	.134	.134	0	%100
28	M38	Z	0	0	0	%100
29	M39A	X	.703	.703	0	%100
30	M39A	Z	0	0	0	%100
31	M40	X	.703	.703	0	%100
32	M40	Z	0	0	0	%100
33	M54	X	.134	.134	0	%100
34	M54	Z	0	0	0	%100
35	M55	X	.173	.173	0	%100
36	M55	Z	0	0	0	%100
37	M56	X	.173	.173	0	%100
38	M56	Z	0	0	0	%100
39	M61	X	.364	.364	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
40	M61	Z	0	0	0	%100
41	MP4B	X	.446	.446	0	%100
42	MP4B	Z	0	0	0	%100
43	MP3B	X	.446	.446	0	%100
44	MP3B	Z	0	0	0	%100
45	MP1B	X	.446	.446	0	%100
46	MP1B	Z	0	0	0	%100
47	MP2B	X	.446	.446	0	%100
48	MP2B	Z	0	0	0	%100
49	MP4A	X	.446	.446	0	%100
50	MP4A	Z	0	0	0	%100
51	MP3A	X	.446	.446	0	%100
52	MP3A	Z	0	0	0	%100
53	MP1A	X	.446	.446	0	%100
54	MP1A	Z	0	0	0	%100
55	MP2A	X	.446	.446	0	%100
56	MP2A	Z	0	0	0	%100
57	M42	X	.938	.938	0	%100
58	M42	Z	0	0	0	%100
59	M43	X	.487	.487	0	%100
60	M43	Z	0	0	0	%100
61	M44	X	.487	.487	0	%100
62	M44	Z	0	0	0	%100
63	M49	X	0	0	0	%100
64	M49	Z	0	0	0	%100
65	M54A	X	0	0	0	%100
66	M54A	Z	0	0	0	%100
67	M59	X	.405	.405	0	%100
68	M59	Z	0	0	0	%100
69	M64	X	.405	.405	0	%100
70	M64	Z	0	0	0	%100
71	M69	X	.405	.405	0	%100
72	M69	Z	0	0	0	%100
73	M74	X	.405	.405	0	%100
74	M74	Z	0	0	0	%100
75	M75	X	.498	.498	0	%100
76	M75	Z	0	0	0	%100
77	M76	X	.001	.001	0	%100
78	M76	Z	0	0	0	%100
79	M77	X	.454	.454	0	%100
80	M77	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.348	.348	0	%100
2	M1	Z	.201	.201	0	%100
3	M2	X	.45	.45	0	%100
4	M2	Z	.26	.26	0	%100
5	M5	X	.506	.506	0	%100
6	M5	Z	.292	.292	0	%100
7	M6	X	.506	.506	0	%100
8	M6	Z	.292	.292	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	.203	.203	0	%100
12	M6A	Z	.117	.117	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
13	M7A	X	.203	.203	0	%100
14	M7A	Z	.117	.117	0	%100
15	M23A	X	.203	.203	0	%100
16	M23A	Z	.117	.117	0	%100
17	M24	X	.203	.203	0	%100
18	M24	Z	.117	.117	0	%100
19	MP4C	X	.386	.386	0	%100
20	MP4C	Z	.223	.223	0	%100
21	MP3C	X	.386	.386	0	%100
22	MP3C	Z	.223	.223	0	%100
23	MP1C	X	.386	.386	0	%100
24	MP1C	Z	.223	.223	0	%100
25	MP2C	X	.386	.386	0	%100
26	MP2C	Z	.223	.223	0	%100
27	M38	X	.348	.348	0	%100
28	M38	Z	.201	.201	0	%100
29	M39A	X	.812	.812	0	%100
30	M39A	Z	.469	.469	0	%100
31	M40	X	.812	.812	0	%100
32	M40	Z	.469	.469	0	%100
33	M54	X	0	0	0	%100
34	M54	Z	0	0	0	%100
35	M55	X	.45	.45	0	%100
36	M55	Z	.26	.26	0	%100
37	M56	X	0	0	0	%100
38	M56	Z	0	0	0	%100
39	M61	X	.316	.316	0	%100
40	M61	Z	.182	.182	0	%100
41	MP4B	X	.386	.386	0	%100
42	MP4B	Z	.223	.223	0	%100
43	MP3B	X	.386	.386	0	%100
44	MP3B	Z	.223	.223	0	%100
45	MP1B	X	.386	.386	0	%100
46	MP1B	Z	.223	.223	0	%100
47	MP2B	X	.386	.386	0	%100
48	MP2B	Z	.223	.223	0	%100
49	MP4A	X	.386	.386	0	%100
50	MP4A	Z	.223	.223	0	%100
51	MP3A	X	.386	.386	0	%100
52	MP3A	Z	.223	.223	0	%100
53	MP1A	X	.386	.386	0	%100
54	MP1A	Z	.223	.223	0	%100
55	MP2A	X	.386	.386	0	%100
56	MP2A	Z	.223	.223	0	%100
57	M42	X	.682	.682	0	%100
58	M42	Z	.394	.394	0	%100
59	M43	X	.682	.682	0	%100
60	M43	Z	.394	.394	0	%100
61	M44	X	.292	.292	0	%100
62	M44	Z	.169	.169	0	%100
63	M49	X	.117	.117	0	%100
64	M49	Z	.067	.067	0	%100
65	M54A	X	.117	.117	0	%100
66	M54A	Z	.067	.067	0	%100
67	M59	X	.117	.117	0	%100
68	M59	Z	.067	.067	0	%100
69	M64	X	.117	.117	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
70	M64	Z	.067	.067	0	%100
71	M69	X	.467	.467	0	%100
72	M69	Z	.27	.27	0	%100
73	M74	X	.467	.467	0	%100
74	M74	Z	.27	.27	0	%100
75	M75	X	.157	.157	0	%100
76	M75	Z	.091	.091	0	%100
77	M76	X	.119	.119	0	%100
78	M76	Z	.069	.069	0	%100
79	M77	X	.55	.55	0	%100
80	M77	Z	.317	.317	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.067	.067	0	%100
2	M1	Z	.116	.116	0	%100
3	M2	X	.087	.087	0	%100
4	M2	Z	.15	.15	0	%100
5	M5	X	.097	.097	0	%100
6	M5	Z	.169	.169	0	%100
7	M6	X	.39	.39	0	%100
8	M6	Z	.675	.675	0	%100
9	M7	X	.097	.097	0	%100
10	M7	Z	.169	.169	0	%100
11	M6A	X	.352	.352	0	%100
12	M6A	Z	.609	.609	0	%100
13	M7A	X	.352	.352	0	%100
14	M7A	Z	.609	.609	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	0	0	0	%100
19	MP4C	X	.223	.223	0	%100
20	MP4C	Z	.386	.386	0	%100
21	MP3C	X	.223	.223	0	%100
22	MP3C	Z	.386	.386	0	%100
23	MP1C	X	.223	.223	0	%100
24	MP1C	Z	.386	.386	0	%100
25	MP2C	X	.223	.223	0	%100
26	MP2C	Z	.386	.386	0	%100
27	M38	X	.268	.268	0	%100
28	M38	Z	.464	.464	0	%100
29	M39A	X	.352	.352	0	%100
30	M39A	Z	.609	.609	0	%100
31	M40	X	.352	.352	0	%100
32	M40	Z	.609	.609	0	%100
33	M54	X	.067	.067	0	%100
34	M54	Z	.116	.116	0	%100
35	M55	X	.347	.347	0	%100
36	M55	Z	.6	.6	0	%100
37	M56	X	.087	.087	0	%100
38	M56	Z	.15	.15	0	%100
39	M61	X	.182	.182	0	%100
40	M61	Z	.316	.316	0	%100
41	MP4B	X	.223	.223	0	%100
42	MP4B	Z	.386	.386	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
43	MP3B	X	.223	.223	0	%100
44	MP3B	Z	.386	.386	0	%100
45	MP1B	X	.223	.223	0	%100
46	MP1B	Z	.386	.386	0	%100
47	MP2B	X	.223	.223	0	%100
48	MP2B	Z	.386	.386	0	%100
49	MP4A	X	.223	.223	0	%100
50	MP4A	Z	.386	.386	0	%100
51	MP3A	X	.223	.223	0	%100
52	MP3A	Z	.386	.386	0	%100
53	MP1A	X	.223	.223	0	%100
54	MP1A	Z	.386	.386	0	%100
55	MP2A	X	.223	.223	0	%100
56	MP2A	Z	.386	.386	0	%100
57	M42	X	.244	.244	0	%100
58	M42	Z	.422	.422	0	%100
59	M43	X	.469	.469	0	%100
60	M43	Z	.812	.812	0	%100
61	M44	X	.244	.244	0	%100
62	M44	Z	.422	.422	0	%100
63	M49	X	.202	.202	0	%100
64	M49	Z	.35	.35	0	%100
65	M54A	X	.202	.202	0	%100
66	M54A	Z	.35	.35	0	%100
67	M59	X	0	0	0	%100
68	M59	Z	0	0	0	%100
69	M64	X	0	0	0	%100
70	M64	Z	0	0	0	%100
71	M69	X	.202	.202	0	%100
72	M69	Z	.35	.35	0	%100
73	M74	X	.202	.202	0	%100
74	M74	Z	.35	.35	0	%100
75	M75	X	.000519	.000519	0	%100
76	M75	Z	.000898	.000898	0	%100
77	M76	X	.227	.227	0	%100
78	M76	Z	.393	.393	0	%100
79	M77	X	.249	.249	0	%100
80	M77	Z	.432	.432	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M5	X	0	0	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	.584	.584	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	.584	.584	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	.938	.938	0	%100
13	M7A	X	0	0	0	%100
14	M7A	Z	.938	.938	0	%100
15	M23A	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
16	M23A	Z	.234	.234	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	.234	.234	0	%100
19	MP4C	X	0	0	0	%100
20	MP4C	Z	.446	.446	0	%100
21	MP3C	X	0	0	0	%100
22	MP3C	Z	.446	.446	0	%100
23	MP1C	X	0	0	0	%100
24	MP1C	Z	.446	.446	0	%100
25	MP2C	X	0	0	0	%100
26	MP2C	Z	.446	.446	0	%100
27	M38	X	0	0	0	%100
28	M38	Z	.402	.402	0	%100
29	M39A	X	0	0	0	%100
30	M39A	Z	.234	.234	0	%100
31	M40	X	0	0	0	%100
32	M40	Z	.234	.234	0	%100
33	M54	X	0	0	0	%100
34	M54	Z	.402	.402	0	%100
35	M55	X	0	0	0	%100
36	M55	Z	.52	.52	0	%100
37	M56	X	0	0	0	%100
38	M56	Z	.52	.52	0	%100
39	M61	X	0	0	0	%100
40	M61	Z	.364	.364	0	%100
41	MP4B	X	0	0	0	%100
42	MP4B	Z	.446	.446	0	%100
43	MP3B	X	0	0	0	%100
44	MP3B	Z	.446	.446	0	%100
45	MP1B	X	0	0	0	%100
46	MP1B	Z	.446	.446	0	%100
47	MP2B	X	0	0	0	%100
48	MP2B	Z	.446	.446	0	%100
49	MP4A	X	0	0	0	%100
50	MP4A	Z	.446	.446	0	%100
51	MP3A	X	0	0	0	%100
52	MP3A	Z	.446	.446	0	%100
53	MP1A	X	0	0	0	%100
54	MP1A	Z	.446	.446	0	%100
55	MP2A	X	0	0	0	%100
56	MP2A	Z	.446	.446	0	%100
57	M42	X	0	0	0	%100
58	M42	Z	.337	.337	0	%100
59	M43	X	0	0	0	%100
60	M43	Z	.788	.788	0	%100
61	M44	X	0	0	0	%100
62	M44	Z	.788	.788	0	%100
63	M49	X	0	0	0	%100
64	M49	Z	.539	.539	0	%100
65	M54A	X	0	0	0	%100
66	M54A	Z	.539	.539	0	%100
67	M59	X	0	0	0	%100
68	M59	Z	.135	.135	0	%100
69	M64	X	0	0	0	%100
70	M64	Z	.135	.135	0	%100
71	M69	X	0	0	0	%100
72	M69	Z	.135	.135	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
73	M74	X	0	0	0	%100
74	M74	Z	.135	.135	0	%100
75	M75	X	0	0	0	%100
76	M75	Z	.137	.137	0	%100
77	M76	X	0	0	0	%100
78	M76	Z	.635	.635	0	%100
79	M77	X	0	0	0	%100
80	M77	Z	.182	.182	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.067	-.067	0	%100
2	M1	Z	.116	.116	0	%100
3	M2	X	-.087	-.087	0	%100
4	M2	Z	.15	.15	0	%100
5	M5	X	-.097	-.097	0	%100
6	M5	Z	.169	.169	0	%100
7	M6	X	-.097	-.097	0	%100
8	M6	Z	.169	.169	0	%100
9	M7	X	-.39	-.39	0	%100
10	M7	Z	.675	.675	0	%100
11	M6A	X	-.352	-.352	0	%100
12	M6A	Z	.609	.609	0	%100
13	M7A	X	-.352	-.352	0	%100
14	M7A	Z	.609	.609	0	%100
15	M23A	X	-.352	-.352	0	%100
16	M23A	Z	.609	.609	0	%100
17	M24	X	-.352	-.352	0	%100
18	M24	Z	.609	.609	0	%100
19	MP4C	X	-.223	-.223	0	%100
20	MP4C	Z	.386	.386	0	%100
21	MP3C	X	-.223	-.223	0	%100
22	MP3C	Z	.386	.386	0	%100
23	MP1C	X	-.223	-.223	0	%100
24	MP1C	Z	.386	.386	0	%100
25	MP2C	X	-.223	-.223	0	%100
26	MP2C	Z	.386	.386	0	%100
27	M38	X	-.067	-.067	0	%100
28	M38	Z	.116	.116	0	%100
29	M39A	X	0	0	0	%100
30	M39A	Z	0	0	0	%100
31	M40	X	0	0	0	%100
32	M40	Z	0	0	0	%100
33	M54	X	-.268	-.268	0	%100
34	M54	Z	.464	.464	0	%100
35	M55	X	-.087	-.087	0	%100
36	M55	Z	.15	.15	0	%100
37	M56	X	-.347	-.347	0	%100
38	M56	Z	.6	.6	0	%100
39	M61	X	-.182	-.182	0	%100
40	M61	Z	.316	.316	0	%100
41	MP4B	X	-.223	-.223	0	%100
42	MP4B	Z	.386	.386	0	%100
43	MP3B	X	-.223	-.223	0	%100
44	MP3B	Z	.386	.386	0	%100
45	MP1B	X	-.223	-.223	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
46	MP1B	Z	.386	.386	0	%100
47	MP2B	X	-.223	-.223	0	%100
48	MP2B	Z	.386	.386	0	%100
49	MP4A	X	-.223	-.223	0	%100
50	MP4A	Z	.386	.386	0	%100
51	MP3A	X	-.223	-.223	0	%100
52	MP3A	Z	.386	.386	0	%100
53	MP1A	X	-.223	-.223	0	%100
54	MP1A	Z	.386	.386	0	%100
55	MP2A	X	-.223	-.223	0	%100
56	MP2A	Z	.386	.386	0	%100
57	M42	X	-.244	-.244	0	%100
58	M42	Z	.422	.422	0	%100
59	M43	X	-.244	-.244	0	%100
60	M43	Z	.422	.422	0	%100
61	M44	X	-.469	-.469	0	%100
62	M44	Z	.812	.812	0	%100
63	M49	X	-.202	-.202	0	%100
64	M49	Z	.35	.35	0	%100
65	M54A	X	-.202	-.202	0	%100
66	M54A	Z	.35	.35	0	%100
67	M59	X	-.202	-.202	0	%100
68	M59	Z	.35	.35	0	%100
69	M64	X	-.202	-.202	0	%100
70	M64	Z	.35	.35	0	%100
71	M69	X	0	0	0	%100
72	M69	Z	0	0	0	%100
73	M74	X	0	0	0	%100
74	M74	Z	0	0	0	%100
75	M75	X	-.227	-.227	0	%100
76	M75	Z	.393	.393	0	%100
77	M76	X	-.249	-.249	0	%100
78	M76	Z	.432	.432	0	%100
79	M77	X	-.000519	-.000519	0	%100
80	M77	Z	.000898	.000898	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.348	-.348	0	%100
2	M1	Z	.201	.201	0	%100
3	M2	X	-.45	-.45	0	%100
4	M2	Z	.26	.26	0	%100
5	M5	X	-.506	-.506	0	%100
6	M5	Z	.292	.292	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	-.506	-.506	0	%100
10	M7	Z	.292	.292	0	%100
11	M6A	X	-.203	-.203	0	%100
12	M6A	Z	.117	.117	0	%100
13	M7A	X	-.203	-.203	0	%100
14	M7A	Z	.117	.117	0	%100
15	M23A	X	-.812	-.812	0	%100
16	M23A	Z	.469	.469	0	%100
17	M24	X	-.812	-.812	0	%100
18	M24	Z	.469	.469	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
19	MP4C	X	-.386	-.386	0	%100
20	MP4C	Z	.223	.223	0	%100
21	MP3C	X	-.386	-.386	0	%100
22	MP3C	Z	.223	.223	0	%100
23	MP1C	X	-.386	-.386	0	%100
24	MP1C	Z	.223	.223	0	%100
25	MP2C	X	-.386	-.386	0	%100
26	MP2C	Z	.223	.223	0	%100
27	M38	X	0	0	0	%100
28	M38	Z	0	0	0	%100
29	M39A	X	-.203	-.203	0	%100
30	M39A	Z	.117	.117	0	%100
31	M40	X	-.203	-.203	0	%100
32	M40	Z	.117	.117	0	%100
33	M54	X	-.348	-.348	0	%100
34	M54	Z	.201	.201	0	%100
35	M55	X	0	0	0	%100
36	M55	Z	0	0	0	%100
37	M56	X	-.45	-.45	0	%100
38	M56	Z	.26	.26	0	%100
39	M61	X	-.316	-.316	0	%100
40	M61	Z	.182	.182	0	%100
41	MP4B	X	-.386	-.386	0	%100
42	MP4B	Z	.223	.223	0	%100
43	MP3B	X	-.386	-.386	0	%100
44	MP3B	Z	.223	.223	0	%100
45	MP1B	X	-.386	-.386	0	%100
46	MP1B	Z	.223	.223	0	%100
47	MP2B	X	-.386	-.386	0	%100
48	MP2B	Z	.223	.223	0	%100
49	MP4A	X	-.386	-.386	0	%100
50	MP4A	Z	.223	.223	0	%100
51	MP3A	X	-.386	-.386	0	%100
52	MP3A	Z	.223	.223	0	%100
53	MP1A	X	-.386	-.386	0	%100
54	MP1A	Z	.223	.223	0	%100
55	MP2A	X	-.386	-.386	0	%100
56	MP2A	Z	.223	.223	0	%100
57	M42	X	-.682	-.682	0	%100
58	M42	Z	.394	.394	0	%100
59	M43	X	-.292	-.292	0	%100
60	M43	Z	.169	.169	0	%100
61	M44	X	-.682	-.682	0	%100
62	M44	Z	.394	.394	0	%100
63	M49	X	-.117	-.117	0	%100
64	M49	Z	.067	.067	0	%100
65	M54A	X	-.117	-.117	0	%100
66	M54A	Z	.067	.067	0	%100
67	M59	X	-.467	-.467	0	%100
68	M59	Z	.27	.27	0	%100
69	M64	X	-.467	-.467	0	%100
70	M64	Z	.27	.27	0	%100
71	M69	X	-.117	-.117	0	%100
72	M69	Z	.067	.067	0	%100
73	M74	X	-.117	-.117	0	%100
74	M74	Z	.067	.067	0	%100
75	M75	X	-.55	-.55	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
76	M75	Z	.317	.317	0	%100
77	M76	X	-.157	-.157	0	%100
78	M76	Z	.091	.091	0	%100
79	M77	X	-.119	-.119	0	%100
80	M77	Z	.069	.069	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.536	-.536	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	-.693	-.693	0	%100
4	M2	Z	0	0	0	%100
5	M5	X	-.779	-.779	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	-.195	-.195	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	-.195	-.195	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	0	0	0	%100
13	M7A	X	0	0	0	%100
14	M7A	Z	0	0	0	%100
15	M23A	X	-.703	-.703	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	-.703	-.703	0	%100
18	M24	Z	0	0	0	%100
19	MP4C	X	-.446	-.446	0	%100
20	MP4C	Z	0	0	0	%100
21	MP3C	X	-.446	-.446	0	%100
22	MP3C	Z	0	0	0	%100
23	MP1C	X	-.446	-.446	0	%100
24	MP1C	Z	0	0	0	%100
25	MP2C	X	-.446	-.446	0	%100
26	MP2C	Z	0	0	0	%100
27	M38	X	-.134	-.134	0	%100
28	M38	Z	0	0	0	%100
29	M39A	X	-.703	-.703	0	%100
30	M39A	Z	0	0	0	%100
31	M40	X	-.703	-.703	0	%100
32	M40	Z	0	0	0	%100
33	M54	X	-.134	-.134	0	%100
34	M54	Z	0	0	0	%100
35	M55	X	-.173	-.173	0	%100
36	M55	Z	0	0	0	%100
37	M56	X	-.173	-.173	0	%100
38	M56	Z	0	0	0	%100
39	M61	X	-.364	-.364	0	%100
40	M61	Z	0	0	0	%100
41	MP4B	X	-.446	-.446	0	%100
42	MP4B	Z	0	0	0	%100
43	MP3B	X	-.446	-.446	0	%100
44	MP3B	Z	0	0	0	%100
45	MP1B	X	-.446	-.446	0	%100
46	MP1B	Z	0	0	0	%100
47	MP2B	X	-.446	-.446	0	%100
48	MP2B	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
49	MP4A	X	-.446	-.446	0	%100
50	MP4A	Z	0	0	0	%100
51	MP3A	X	-.446	-.446	0	%100
52	MP3A	Z	0	0	0	%100
53	MP1A	X	-.446	-.446	0	%100
54	MP1A	Z	0	0	0	%100
55	MP2A	X	-.446	-.446	0	%100
56	MP2A	Z	0	0	0	%100
57	M42	X	-.938	-.938	0	%100
58	M42	Z	0	0	0	%100
59	M43	X	-.487	-.487	0	%100
60	M43	Z	0	0	0	%100
61	M44	X	-.487	-.487	0	%100
62	M44	Z	0	0	0	%100
63	M49	X	0	0	0	%100
64	M49	Z	0	0	0	%100
65	M54A	X	0	0	0	%100
66	M54A	Z	0	0	0	%100
67	M59	X	-.405	-.405	0	%100
68	M59	Z	0	0	0	%100
69	M64	X	-.405	-.405	0	%100
70	M64	Z	0	0	0	%100
71	M69	X	-.405	-.405	0	%100
72	M69	Z	0	0	0	%100
73	M74	X	-.405	-.405	0	%100
74	M74	Z	0	0	0	%100
75	M75	X	-.498	-.498	0	%100
76	M75	Z	0	0	0	%100
77	M76	X	-.001	-.001	0	%100
78	M76	Z	0	0	0	%100
79	M77	X	-.454	-.454	0	%100
80	M77	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.348	-.348	0	%100
2	M1	Z	-.201	-.201	0	%100
3	M2	X	-.45	-.45	0	%100
4	M2	Z	-.26	-.26	0	%100
5	M5	X	-.506	-.506	0	%100
6	M5	Z	-.292	-.292	0	%100
7	M6	X	-.506	-.506	0	%100
8	M6	Z	-.292	-.292	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	-.203	-.203	0	%100
12	M6A	Z	-.117	-.117	0	%100
13	M7A	X	-.203	-.203	0	%100
14	M7A	Z	-.117	-.117	0	%100
15	M23A	X	-.203	-.203	0	%100
16	M23A	Z	-.117	-.117	0	%100
17	M24	X	-.203	-.203	0	%100
18	M24	Z	-.117	-.117	0	%100
19	MP4C	X	-.386	-.386	0	%100
20	MP4C	Z	-.223	-.223	0	%100
21	MP3C	X	-.386	-.386	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
22	MP3C	Z	-.223	-.223	0	%100
23	MP1C	X	-.386	-.386	0	%100
24	MP1C	Z	-.223	-.223	0	%100
25	MP2C	X	-.386	-.386	0	%100
26	MP2C	Z	-.223	-.223	0	%100
27	M38	X	-.348	-.348	0	%100
28	M38	Z	-.201	-.201	0	%100
29	M39A	X	-.812	-.812	0	%100
30	M39A	Z	-.469	-.469	0	%100
31	M40	X	-.812	-.812	0	%100
32	M40	Z	-.469	-.469	0	%100
33	M54	X	0	0	0	%100
34	M54	Z	0	0	0	%100
35	M55	X	-.45	-.45	0	%100
36	M55	Z	-.26	-.26	0	%100
37	M56	X	0	0	0	%100
38	M56	Z	0	0	0	%100
39	M61	X	-.316	-.316	0	%100
40	M61	Z	-.182	-.182	0	%100
41	MP4B	X	-.386	-.386	0	%100
42	MP4B	Z	-.223	-.223	0	%100
43	MP3B	X	-.386	-.386	0	%100
44	MP3B	Z	-.223	-.223	0	%100
45	MP1B	X	-.386	-.386	0	%100
46	MP1B	Z	-.223	-.223	0	%100
47	MP2B	X	-.386	-.386	0	%100
48	MP2B	Z	-.223	-.223	0	%100
49	MP4A	X	-.386	-.386	0	%100
50	MP4A	Z	-.223	-.223	0	%100
51	MP3A	X	-.386	-.386	0	%100
52	MP3A	Z	-.223	-.223	0	%100
53	MP1A	X	-.386	-.386	0	%100
54	MP1A	Z	-.223	-.223	0	%100
55	MP2A	X	-.386	-.386	0	%100
56	MP2A	Z	-.223	-.223	0	%100
57	M42	X	-.682	-.682	0	%100
58	M42	Z	-.394	-.394	0	%100
59	M43	X	-.682	-.682	0	%100
60	M43	Z	-.394	-.394	0	%100
61	M44	X	-.292	-.292	0	%100
62	M44	Z	-.169	-.169	0	%100
63	M49	X	-.117	-.117	0	%100
64	M49	Z	-.067	-.067	0	%100
65	M54A	X	-.117	-.117	0	%100
66	M54A	Z	-.067	-.067	0	%100
67	M59	X	-.117	-.117	0	%100
68	M59	Z	-.067	-.067	0	%100
69	M64	X	-.117	-.117	0	%100
70	M64	Z	-.067	-.067	0	%100
71	M69	X	-.467	-.467	0	%100
72	M69	Z	-.27	-.27	0	%100
73	M74	X	-.467	-.467	0	%100
74	M74	Z	-.27	-.27	0	%100
75	M75	X	-.157	-.157	0	%100
76	M75	Z	-.091	-.091	0	%100
77	M76	X	-.119	-.119	0	%100
78	M76	Z	-.069	-.069	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
79	M77	X	-.55	-.55	0	%100
80	M77	Z	-.317	-.317	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.067	-.067	0	%100
2	M1	Z	-.116	-.116	0	%100
3	M2	X	-.087	-.087	0	%100
4	M2	Z	-.15	-.15	0	%100
5	M5	X	-.097	-.097	0	%100
6	M5	Z	-.169	-.169	0	%100
7	M6	X	-.39	-.39	0	%100
8	M6	Z	-.675	-.675	0	%100
9	M7	X	-.097	-.097	0	%100
10	M7	Z	-.169	-.169	0	%100
11	M6A	X	-.352	-.352	0	%100
12	M6A	Z	-.609	-.609	0	%100
13	M7A	X	-.352	-.352	0	%100
14	M7A	Z	-.609	-.609	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	0	0	0	%100
19	MP4C	X	-.223	-.223	0	%100
20	MP4C	Z	-.386	-.386	0	%100
21	MP3C	X	-.223	-.223	0	%100
22	MP3C	Z	-.386	-.386	0	%100
23	MP1C	X	-.223	-.223	0	%100
24	MP1C	Z	-.386	-.386	0	%100
25	MP2C	X	-.223	-.223	0	%100
26	MP2C	Z	-.386	-.386	0	%100
27	M38	X	-.268	-.268	0	%100
28	M38	Z	-.464	-.464	0	%100
29	M39A	X	-.352	-.352	0	%100
30	M39A	Z	-.609	-.609	0	%100
31	M40	X	-.352	-.352	0	%100
32	M40	Z	-.609	-.609	0	%100
33	M54	X	-.067	-.067	0	%100
34	M54	Z	-.116	-.116	0	%100
35	M55	X	-.347	-.347	0	%100
36	M55	Z	-.6	-.6	0	%100
37	M56	X	-.087	-.087	0	%100
38	M56	Z	-.15	-.15	0	%100
39	M61	X	-.182	-.182	0	%100
40	M61	Z	-.316	-.316	0	%100
41	MP4B	X	-.223	-.223	0	%100
42	MP4B	Z	-.386	-.386	0	%100
43	MP3B	X	-.223	-.223	0	%100
44	MP3B	Z	-.386	-.386	0	%100
45	MP1B	X	-.223	-.223	0	%100
46	MP1B	Z	-.386	-.386	0	%100
47	MP2B	X	-.223	-.223	0	%100
48	MP2B	Z	-.386	-.386	0	%100
49	MP4A	X	-.223	-.223	0	%100
50	MP4A	Z	-.386	-.386	0	%100
51	MP3A	X	-.223	-.223	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
52	MP3A	Z	-.386	-.386	0	%100
53	MP1A	X	-.223	-.223	0	%100
54	MP1A	Z	-.386	-.386	0	%100
55	MP2A	X	-.223	-.223	0	%100
56	MP2A	Z	-.386	-.386	0	%100
57	M42	X	-.244	-.244	0	%100
58	M42	Z	-.422	-.422	0	%100
59	M43	X	-.469	-.469	0	%100
60	M43	Z	-.812	-.812	0	%100
61	M44	X	-.244	-.244	0	%100
62	M44	Z	-.422	-.422	0	%100
63	M49	X	-.202	-.202	0	%100
64	M49	Z	-.35	-.35	0	%100
65	M54A	X	-.202	-.202	0	%100
66	M54A	Z	-.35	-.35	0	%100
67	M59	X	0	0	0	%100
68	M59	Z	0	0	0	%100
69	M64	X	0	0	0	%100
70	M64	Z	0	0	0	%100
71	M69	X	-.202	-.202	0	%100
72	M69	Z	-.35	-.35	0	%100
73	M74	X	-.202	-.202	0	%100
74	M74	Z	-.35	-.35	0	%100
75	M75	X	-.000519	-.000519	0	%100
76	M75	Z	-.000898	-.000898	0	%100
77	M76	X	-.227	-.227	0	%100
78	M76	Z	-.393	-.393	0	%100
79	M77	X	-.249	-.249	0	%100
80	M77	Z	-.432	-.432	0	%100

Member Distributed Loads (BLC 87 : BLC 39 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M6	Y	-.901	-4.557	0	1.856
2	M6	Y	-4.557	-8.213	1.856	3.711
3	M7	Y	-.901	-4.557	0	1.856
4	M7	Y	-4.557	-8.213	1.856	3.711
5	M6A	Y	-4.705	-4.705	.02	7.414
6	M7A	Y	-.257	-3.488	0	2.31
7	M7A	Y	-3.488	-4.583	2.31	4.621
8	M7A	Y	-4.583	-3.986	4.621	6.931
9	M7A	Y	-3.986	-4.583	6.931	9.241
10	M7A	Y	-4.583	-3.488	9.241	11.551
11	M7A	Y	-3.488	-.257	11.551	13.862
12	M5	Y	-.901	-4.557	0	1.856
13	M5	Y	-4.557	-8.213	1.856	3.711
14	M23A	Y	-4.705	-4.705	.02	7.414
15	M24	Y	-.257	-3.488	0	2.31
16	M24	Y	-3.488	-4.583	2.31	4.621
17	M24	Y	-4.583	-3.986	4.621	6.931
18	M24	Y	-3.986	-4.583	6.931	9.241
19	M24	Y	-4.583	-3.488	9.241	11.551
20	M24	Y	-3.488	-.257	11.551	13.862
21	M39A	Y	-4.705	-4.705	.02	7.414
22	M40	Y	-.257	-3.488	0	2.31
23	M40	Y	-3.488	-4.583	2.31	4.621
24	M40	Y	-4.583	-3.986	4.621	6.931

Member Distributed Loads (BLC 87 : BLC 39 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
25	M40	Y	-3.986	-4.583	6.931	9.241
26	M40	Y	-4.583	-3.488	9.241	11.551
27	M40	Y	-3.488	-.257	11.551	13.862

Member Distributed Loads (BLC 88 : BLC 40 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M6	Y	-3.605	-18.229	0	1.856
2	M6	Y	-18.229	-32.852	1.856	3.711
3	M7	Y	-3.605	-18.229	0	1.856
4	M7	Y	-18.229	-32.852	1.856	3.711
5	M6A	Y	-18.819	-18.819	.02	7.414
6	M7A	Y	-1.026	-13.951	0	2.31
7	M7A	Y	-13.951	-18.331	2.31	4.621
8	M7A	Y	-18.331	-15.945	4.621	6.931
9	M7A	Y	-15.945	-18.331	6.931	9.241
10	M7A	Y	-18.331	-13.951	9.241	11.551
11	M7A	Y	-13.951	-1.026	11.551	13.862
12	M5	Y	-3.605	-18.229	0	1.856
13	M5	Y	-18.229	-32.852	1.856	3.711
14	M23A	Y	-18.819	-18.819	.02	7.414
15	M24	Y	-1.026	-13.951	0	2.31
16	M24	Y	-13.951	-18.331	2.31	4.621
17	M24	Y	-18.331	-15.945	4.621	6.931
18	M24	Y	-15.945	-18.331	6.931	9.241
19	M24	Y	-18.331	-13.951	9.241	11.551
20	M24	Y	-13.951	-1.026	11.551	13.862
21	M39A	Y	-18.819	-18.819	.02	7.414
22	M40	Y	-1.026	-13.951	0	2.31
23	M40	Y	-13.951	-18.331	2.31	4.621
24	M40	Y	-18.331	-15.945	4.621	6.931
25	M40	Y	-15.945	-18.331	6.931	9.241
26	M40	Y	-18.331	-13.951	9.241	11.551
27	M40	Y	-13.951	-1.026	11.551	13.862

Member Area Loads (BLC 39 : Structure D)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N16	N15	N17	N18	Y	Two Way	-.005
2	N18	N17	N10	N14	Y	Two Way	-.005
3	N14	N10	N15	N16	Y	Two Way	-.005

Member Area Loads (BLC 40 : Structure Di)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N16	N15	N17	N18	Y	Two Way	-.02
2	N18	N17	N10	N14	Y	Two Way	-.02
3	N14	N10	N15	N16	Y	Two Way	-.02

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

	Member	Shape	Code Check	L...	LC	Shear C...	Loc.....	...	phi*P...	phi*P...	phi*M...	phi*M...	...	Eqn
1	M1	HSS4X4...	.230	0	3	.084	0	z	10	13887...	139518	16.181	16.181	...	H1-1b
2	M2	HSS4.5...	.112	0	4	.041	0	y	27	11999...	121302	16.25	16.25	...	H1-1b
3	M5	LL3x3x4...	.215	0	13	.056	.966	y	13	76568...	93312	6.48	4.369	...	H1-1b
4	M6	LL3x3x4...	.219	0	20	.058	.966	y	21	76568...	93312	6.48	4.369	...	H1-1b
5	M7	LL3x3x4...	.217	0	16	.057	.966	y	17	76568...	93312	6.48	4.369	...	H1-1b

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

	Member	Shape	Code Check	L...	LC	Shear C...	Loc...	...	...	phi*P...	phi*P...	phi*M...	phi*M...	...	Eqn
6	M6A	L3X3X4	.188	3....	12	.011	3.7...	z	14	13991...	46656	1.688	3.158	...	H2-1
7	M7A	L3X3X4	.395	0	23	.126	6.9...	y	1	15778...	46656	1.688	2.174	1	H2-1
8	M23A	L3X3X4	.185	3....	8	.011	3.7...	z	22	13991...	46656	1.688	3.166	...	H2-1
9	M24	L3X3X4	.393	0	19	.124	6.9...	y	9	15778...	46656	1.688	2.174	1	H2-1
10	MP4C	PIPE_2.0	.254	3....	6	.068	.5		7	20866...	32130	1.872	1.872	...	H1-1b
11	MP3C	PIPE_2.0	.244	.4...	12	.068	1.9...		10	20866...	32130	1.872	1.872	...	H1-1b
12	MP1C	PIPE_2.0	.219	.5	12	.068	.438		11	20866...	32130	1.872	1.872	...	H1-1b
13	MP2C	PIPE_2.0	.331	3....	12	.089	3.8...		11	20866...	32130	1.872	1.872	...	H1-1b
14	M38	HSS4X4...	.223	0	11	.084	0	z	12	13887...	139518	16.181	16.181	...	H1-1b
15	M39A	L3X3X4	.186	3....	7	.011	3.7...	z	18	13991...	46656	1.688	3.061	...	H2-1
16	M40	L3X3X4	.388	0	15	.123	6.9...	y	11	15778...	46656	1.688	2.174	1	H2-1
17	M54	HSS4X4...	.227	0	7	.082	0	z	8	13887...	139518	16.181	16.181	...	H1-1b
18	M55	HSS4.5...	.114	0	12	.033	0	y	22	11999...	121302	16.25	16.25	...	H1-1b
19	M56	HSS4.5...	.113	0	8	.034	0	y	18	11999...	121302	16.25	16.25	...	H1-1b
20	M61	PIPE_2.0	.045	1.5	7	.036	1.5		10	28843...	32130	1.872	1.872	1	H1-1b
21	MP4B	PIPE_2.0	.254	3....	2	.069	.5		4	20866...	32130	1.872	1.872	...	H1-1b
22	MP3B	PIPE_2.0	.239	.4...	8	.068	1.9...		12	20866...	32130	1.872	1.872	...	H1-1b
23	MP1B	PIPE_2.0	.215	.5	8	.066	.438		7	20866...	32130	1.872	1.872	...	H1-1b
24	MP2B	PIPE_2.0	.325	3....	8	.090	3.8...		7	20866...	32130	1.872	1.872	...	H1-1b
25	MP4A	PIPE_2.0	.268	3....	10	.070	.5		11	20866...	32130	1.872	1.872	...	H1-1b
26	MP3A	PIPE_2.0	.233	.4...	4	.070	1.9...		2	20866...	32130	1.872	1.872	...	H1-1b
27	MP1A	PIPE_2.0	.208	.5	4	.067	.438		2	20866...	32130	1.872	1.872	...	H1-1b
28	MP2A	PIPE_2.0	.317	3....	4	.087	3.8...		3	20866...	32130	1.872	1.872	...	H1-1b
29	M42	LL3x3x3...	.087	0	13	.004	0	y	24	45884...	70632	6.362	3.743	1	H1-1...
30	M43	LL3x3x3...	.088	0	21	.005	6.6...	y	20	45884...	70632	6.362	3.743	1	H1-1...
31	M44	LL3x3x3...	.089	0	17	.004	0	y	16	45884...	70632	6.362	3.743	1	H1-1...
32	M49	PIPE_2.5	.085	3....	29	.037	1.4...		8	12481...	50715	3.596	3.596	...	H1-1b
33	M54A	PIPE_2.5	.085	3....	29	.037	1.4...		8	12481...	50715	3.596	3.596	...	H1-1b
34	M59	PIPE_2.5	.080	1....	12	.039	1.4...		4	12481...	50715	3.596	3.596	...	H1-1b
35	M64	PIPE_2.5	.080	1....	12	.039	1.4...		4	12481...	50715	3.596	3.596	...	H1-1b
36	M69	PIPE_2.5	.078	1....	1	.040	1.4...		12	12481...	50715	3.596	3.596	...	H1-1b
37	M74	PIPE_2.5	.078	1....	1	.040	1.4...		12	12481...	50715	3.596	3.596	...	H1-1b
38	M75	L3X3X4	.258	0	6	.044	1.4...	y	7	44390...	46656	1.688	3.756	...	H2-1
39	M76	L3X3X4	.255	0	10	.044	1.4...	y	11	44390...	46656	1.688	3.756	...	H2-1
40	M77	L3X3X4	.258	0	2	.043	1.4...	y	3	44390...	46656	1.688	3.756	...	H2-1

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	N2	max	2974.494	10	1053.493	15	544.398	1	-.297	10	2.346	9	-.025	3
2		min	-2971.5	4	182.45	9	-542.286	7	-2.353	16	-2.323	3	-.223	33
3	N77	max	1592.469	11	882.835	23	2547.388	1	.96	24	2.233	5	1.934	24
4		min	-1573.135	5	127.578	6	-2521.049	7	.073	6	-2.239	11	.223	6
5	N109	max	1452.196	9	901.226	19	2596.396	1	1.223	20	2.308	1	-.175	2
6		min	-1451.844	3	122.109	1	-2601.888	7	.156	2	-2.291	7	-1.836	20
7	N80B	max	45.84	10	1865.768	13	-424.613	7	0	51	0	12	0	6
8		min	-45.548	4	236.815	7	-3545.094	13	0	1	0	6	0	12
9	N82	max	-390.424	3	1882.135	21	1788.644	21	0	2	0	32	0	32
10		min	-3098.163	21	250.138	3	225.437	3	0	32	0	2	0	2
11	N84A	max	3128.249	17	1899.777	17	1806.171	17	0	4	0	4	0	4
12		min	370.504	11	238.441	11	213.9	11	0	10	0	10	0	10
13	Totals:	max	4090.682	10	7974.55	19	4233.799	1						
14		min	-4090.686	4	3295.115	1	-4233.801	7						

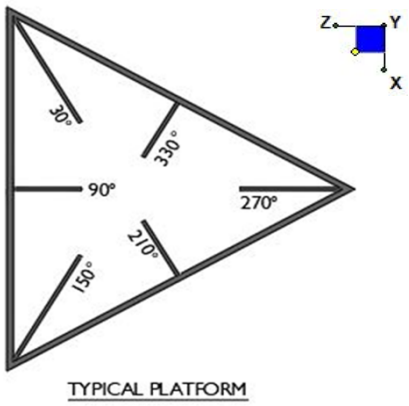
Client:	VERIZON WIRELESS	Date:	10/25/2021
Site Name:	NEWTOWN WEST CT		
Project No.	21777788A		
Title:	Mount Analysis	Page:	1

Version 3.1

I. Mount-to-Tower Connection Check

RISA Model Data

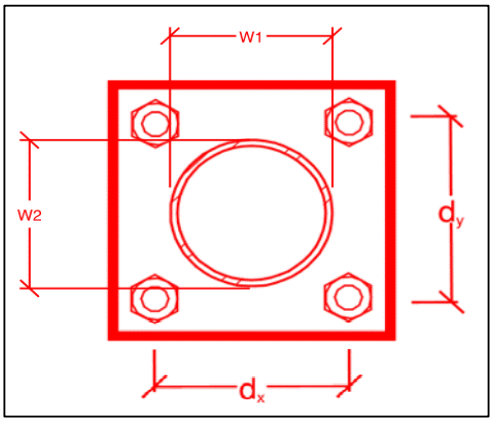
Nodes *(labeled per RISA)*	Orientation *(per graphic of typical platform)*
N2	30
N77	150
N109	270



TYPICAL PLATFORM

Tower Connection Bolt Checks

Any moment resistance?:	yes
Bolt Quantity per Reaction:	4
d_x (in) *(Delta X of typ. bolt config. sketch)* :	7
d_y (in) *(Delta Y of typ. bolt config. sketch)* :	7
Bolt Type:	A325N
Bolt Diameter (in):	0.625
Required Tensile Strength (kips):	9.1
Required Shear Strength (kips):	11.0
Tensile Strength / bolt (kips):	20.7
Shear Strength / bolt (kips):	12.4
Tensile Capacity Overall:	**11.0%***
Shear Capacity Overall:	**22.0%**



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

Tower Connection Plate and Weld Check

Connecting Standoff Member Shape:	Rect
Plate Width (in):	7
Plate Height (in):	12
W1 (in):	4
W2 (in):	4
Fy (ksi, plate):	36
t_{Plate} (in):	0.5
Weld Size (1/16 in):	6
Phi*Rn (kip/in):	8.35
Required Weld Strength (kip/in):	1.63
Plate Bending Capacity:	**47.2%**
Weld Capacity:	**19.5%**

Max Plate Bending Strengths

Mu_{xx} *(kip-in)* :	2.4
Phi*Mn_{xx} *(kip-in)* :	14.2
Mu_{yy} *(kip-in)* :	7.4
Phi*Mn_{yy} *(kip-in)* :	24.3

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Mount Modification

Electronic pdf version of this can be downloaded at https://pmi.vzwsmart.com
For additional questions and support, please reach out to pmisupport@colliersengineering.com

---

Purpose – to upload the proper documentation to the SMART Tool in order to allow the SMART Tool engineering vendor to complete the required Mount Desktop review of the Post Modification Inspection Report.

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

Base Requirements:

- If installation of the modification will cause damage to the structure, the climbing facility, or safety climb if present or any installed system, SMART Tool vendor to be notified prior to install. Any special photos outside of the standard requirements will be indicated on the drawings.
- Provide "as built drawings" showing contractor's name, preparer's signature, and date. Any deviations from the drawings (proposed modification) shall be shown. NOTE: If loading is different than what is conveyed in the post-modification passing mount analysis (MA) contact the SMART Tool vendor immediately.
- Each photo shall be time and date stamped.
- Photos should be high resolution.
- Contractor shall ensure that the safety climb wire rope is not adversely impacted by the install of the modification components. This may involve the install of wire rope guides, or other items to protect the wire rope. If there is conflict, contact the SMART Tool engineer for recommendations.
- The PMI can be accessed at the following portal: **https://pmi.vzwsmart.com**

Photo Requirements:

- *Photos taken at ground level*
  - Photo of Gate Signs showing the tower owner, site name, and number.
  - Overall tower structure after installation of the modifications.
  - Photos of the mount after installation of the modifications; if the mounts are at different rad elevations, pictures must be provided for all elevations that the modifications were installed

- *Photos taken at Mount Elevation*
  - Photos showing the safety climb wire rope above and below the mount prior to modification.
  - Photos showing the climbing facility and safety climb if present.
  - Photos showing each individual sector after installation of modifications. Each entire sector must be in one photo to show the interconnection of members.

        - These photos shall also certify that the placement and geometry of the equipment on the mount is as depicted in the antenna placement diagram in this form.
    - Photos that show the model number of each antenna and piece of equipment installed per sector.
    - Photos of each installed modification per the modification drawings; pictures shall also include connection hardware (U-bolts, bolts, nuts, all-threaded rods, etc.)
    - Photos showing the distances (relative distance between collars) of the installed modifications from the appropriate reference locations shown in the modification drawings.
    - Photos showing the installed modifications onto the tower (i.e. ring/collar mounts, tie-backs, V-bracing kits, etc.); if the existing mount elevation needs to be changed according to the modification drawings, an elevation measurement shall be provided before the elevation change.

Material Certification:

- Materials utilized must be as per specification on the drawings or the equivalent as validated by the SMART Tool vendor.
    - If the materials are as specified on the drawings
        - The contractor shall provide the packing list, or the materials certifications for the materials utilized to perform the mount modification
        - Commscope, Metrosite, Perfect Vision, Sabre, and Site Pro have all agreed to support Verizon vendors with the necessary material certifications
    - If seeking permission to use an equivalent
        - It is required that the SMART Tool engineering vendor approval of such is included in the contractor submission package. There may be an additional charge for approval if the equivalent submission doesn't meet specifications as prescribed in the drawings.

☐ All hardware has been properly installed, and the existing hardware was inspected.

☐ The material utilized was as specified on the SMART Tool engineering vendor Mount Modification Drawings and included in the material certification folder is a packing list or invoice for these materials.

OR

☐ The material utilized was approved by a SMART Tool as an "equivalent" and this approval is included as part of the contractor submission.

Antenna & equipment placement and Geometry Confirmation:

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

OR

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

Comments:

Certifying Individual:

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

Was the mount modification completed in conjunction with the equipment change / installation?

☐ Yes ☐ No

Special Instructions / Validation as required from the MA or Mod Drawings:

Issue:

-Contractor to install new 3’ P2 STD OVP pipe in alpha sector standoff. Connect to standoff arm using crossover plates (VZWSMART-MSK6).

Response:

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

☐ Yes ☐ No

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

☐ Yes ☐ No

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

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

Comments:

Structure: 468841-VZW - NEWTOWN WEST CT

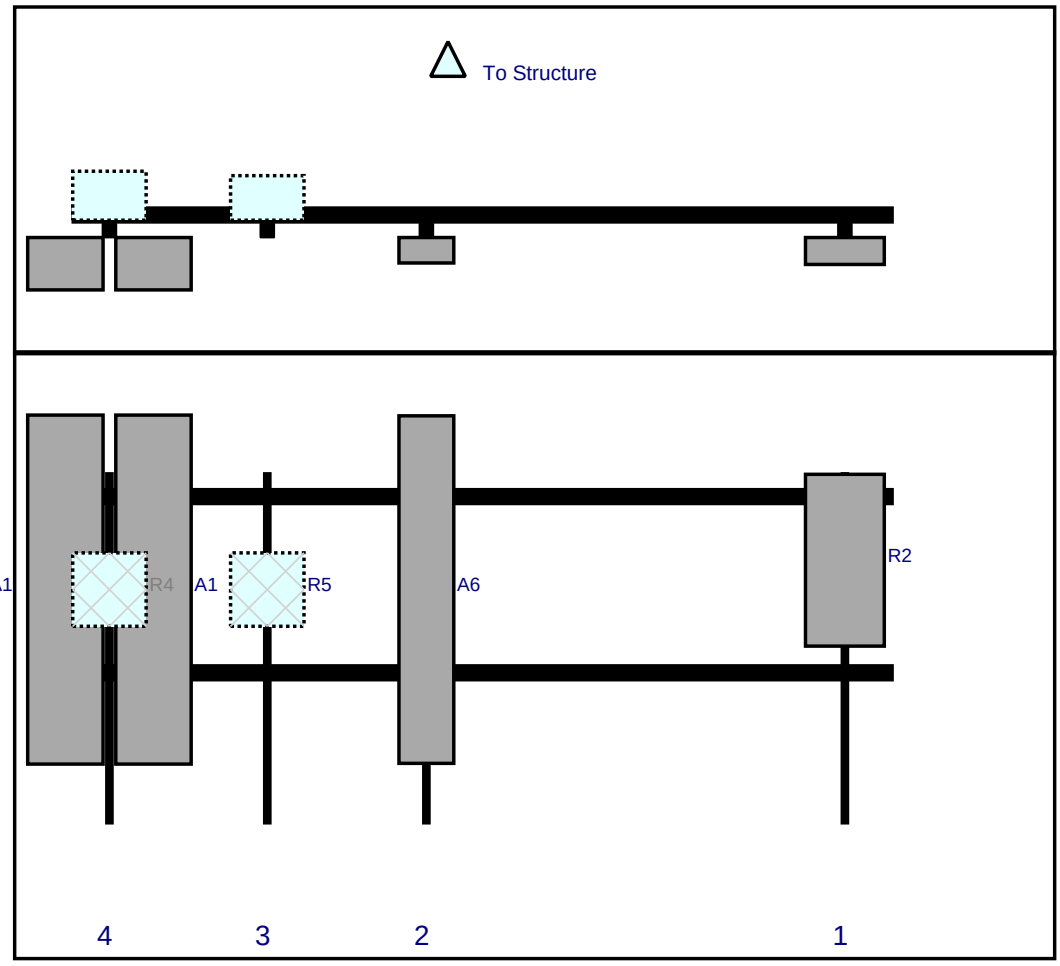
Sector: **A** 10/25/2021

Structure Type: Self Support 10108307

Mount Elev: 97.00 Page: 1

Plan View

Front View
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R2	MT6407-77A	35.1	16.1	158	1	a	Front	18	0	Added	
A6	BXA-70063-6CF-EDIN-X	71	11.2	72.5	2	a	Front	24	0	Retained	04/16/2021
R5	RF4440d-13A	15	15	40	3	a	Behind	24	0	Added	
A1	MX06FRO660-02	71.3	15.4	7.75	4	a	Front	24	9	Added	
A1	MX06FRO660-02	71.3	15.4	7.75	4	b	Front	24	-9	Added	
R4	RF4439d-25A	15	15	7.75	4	a	Behind	24	0	Added	

Structure: 468841-VZW - NEWTOWN WEST CT

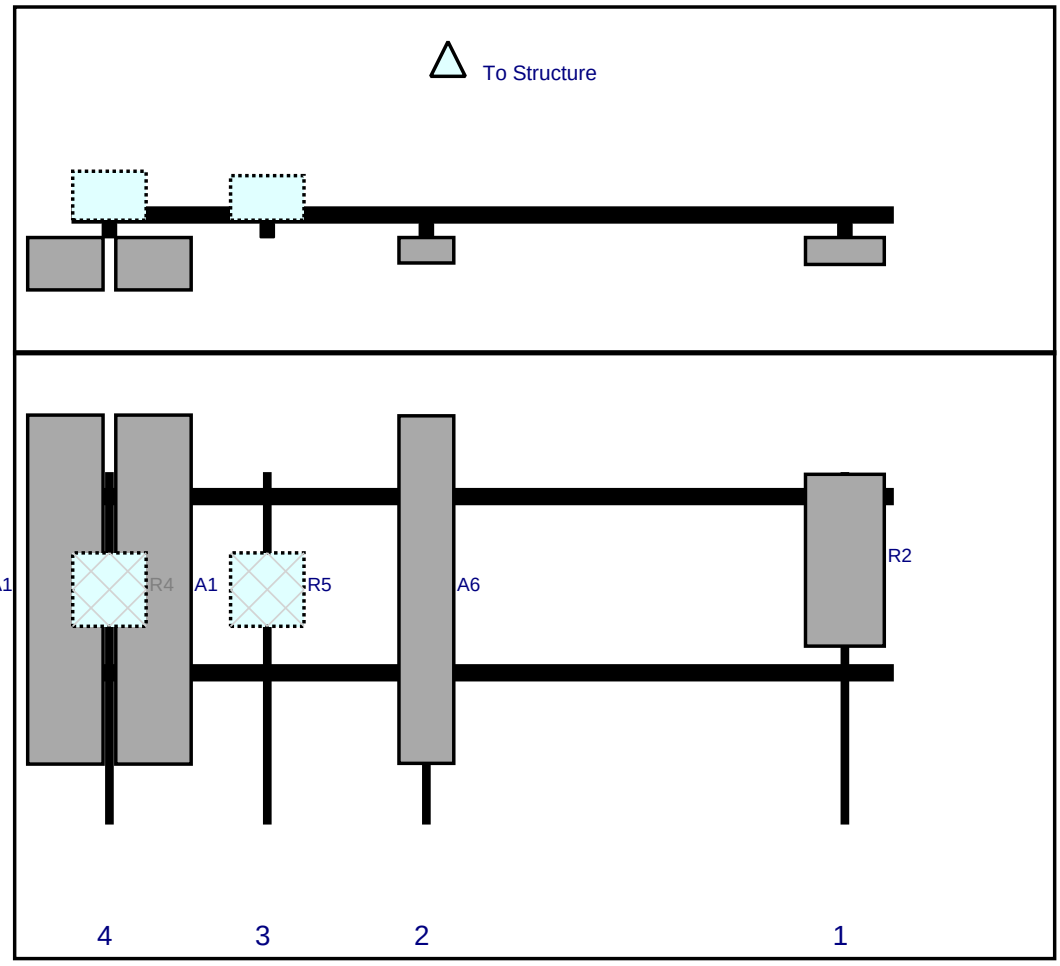
Sector: **B** 10/25/2021

Structure Type: Self Support 10108307

Mount Elev: 97.00 Page: 2

Plan View

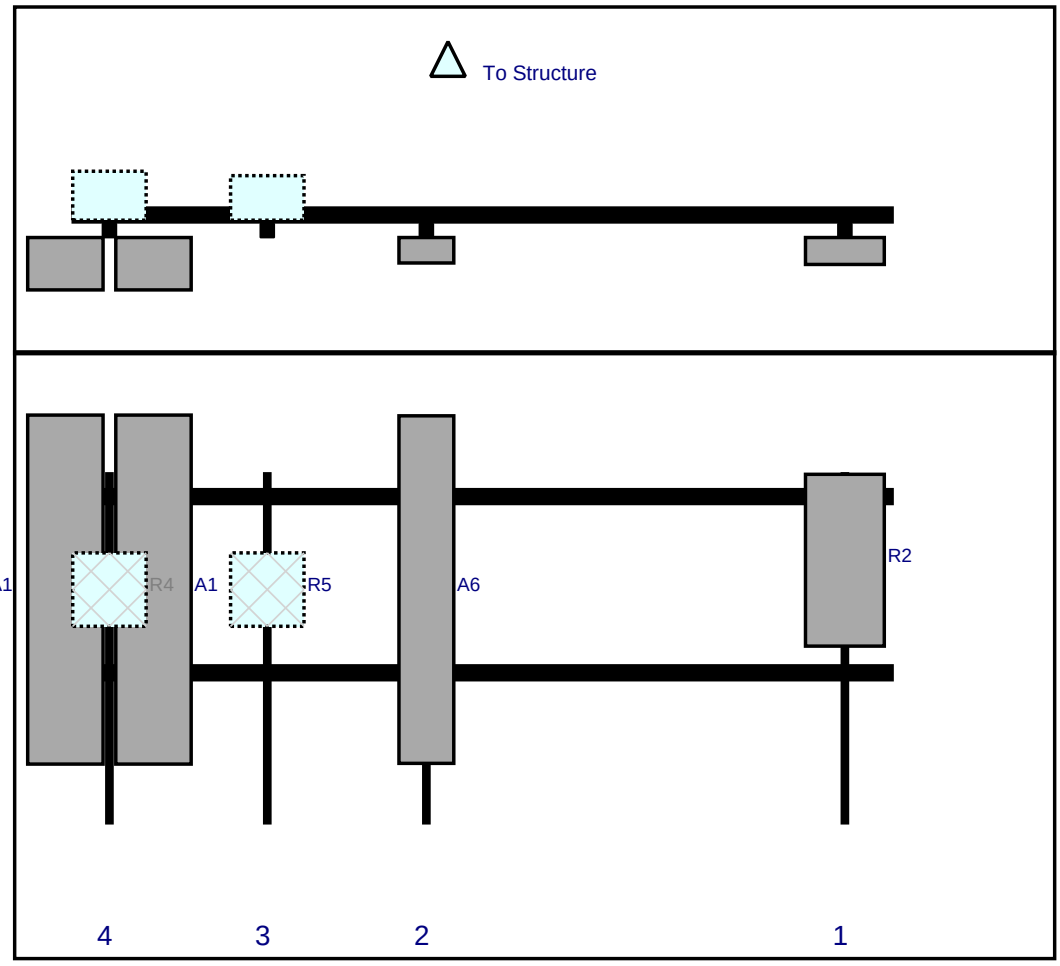
Front View
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R2	MT6407-77A	35.1	16.1	158	1	a	Front	18	0	Added	
A6	BXA-70063-6CF-EDIN-X	71	11.2	72.5	2	a	Front	24	0	Retained	04/16/2021
R5	RF4440d-13A	15	15	40	3	a	Behind	24	0	Added	
A1	MX06FRO660-02	71.3	15.4	7.75	4	a	Front	24	9	Added	
A1	MX06FRO660-02	71.3	15.4	7.75	4	b	Front	24	-9	Added	
R4	RF4439d-25A	15	15	7.75	4	a	Behind	24	0	Added	

Plan View

Front View
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R2	MT6407-77A	35.1	16.1	158	1	a	Front	18	0	Added	
A6	BXA-70063-6CF-EDIN-X	71	11.2	72.5	2	a	Front	24	0	Retained	04/16/2021
R5	RF4440d-13A	15	15	40	3	a	Behind	24	0	Added	
A1	MX06FRO660-02	71.3	15.4	7.75	4	a	Front	24	9	Added	
A1	MX06FRO660-02	71.3	15.4	7.75	4	b	Front	24	-9	Added	
R4	RF4439d-25A	15	15	7.75	4	a	Behind	24	0	Added	

Maser Consulting Connecticut

Site Information	Site ID:	468841-VZW / NEWTOWN WEST CT
	Site Name:	NEWTOWN WEST CT
	Carrier Name:	Verizon Wireless
	Address:	8 Ferris Road Newtown, Connecticut 06470 Fairfield County
	Latitude:	41.389722°
	Longitude:	-73.338214°
Structure Information	Tower Type:	124-Ft Self Support
	Mount Type:	14.00-Ft Platform

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 map 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 method, seismic analysis, 30-degree increment wind direction 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,

Pete Albano, PE
Project Manager

verizon

MOUNT MODIFICATION DRAWINGS
EXISTING 14.00' PLATFORM

TOWER OWNER: SBA
TOWER OWNER SITE NUMBER: 1258249

CARRIER SITE NAME: NEWTOWN WEST CT
CARRIER SITE NUMBER: 468841
FUZE ID: 16092604

8 FERRIS ROAD
NEWTOWN, CT 06470
FAIRFIELD COUNTY

LATITUDE: 41.389722° N
LONGITUDE: 73.338214° W

DESIGN CRITERIA

WIND LOADS

BASIC WIND SPEED (3 SECOND GUST), V = 116 MPH
EXPOSURE CATEGORY B
TOPOGRAPHIC CATEGORY 1
MEAN BASE ELEVATION (AMSL) = 782.75'

ICE LOADS

ICE WIND SPEED (3 SECOND GUST), V = 50 MPH
ICE THICKNESS = 1.00 IN

SEISMIC LOADS

SEISMIC DESIGN CATEGORY B
SHORT TERM MCER GROUND MOTION, S_S = .214
LONG TERM MCER GROUND MOTION, S_1 = .055

PROJECT INFORMATION

APPLICANT/LESSEE

COMPANY: VERIZON WIRELESS

CLIENT REPRESENTATIVE

COMPANY: VERIZON WIRELESS

PROJECT MANAGER

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

CONTRACTOR PMI REQUIREMENTS

PMI LOCATION: HTTPS://PMI.VZWSMART.COM
SMART TOOL PROJECT #: 10108307
VZW LOCATION CODE (PSLC): 468841
ANALYSIS DATE: 10/26/2021

PMI REQUIREMENTS EMBEDDED WITHIN MOUNT MODIFICATION REPORT

SHEET INDEX

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

verizon

811 Know what's below. Call before you dig.

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

SCALE: AS SHOWN
JOB NUMBER: 21777788A

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.
0	10/26/21	ISSUED FOR CONSTRUCTION	BAH	PMA

STATE OF CONNECTICUT
PETER MICHAEL ALBANO
No. 35459
LICENSED PROFESSIONAL ENGINEER

COLLIERS ENGINEERING & DESIGN CT, P.C.
C.T. PEC.0000131

10/26/21

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

SITE NAME:

NEWTOWN WEST CT
468841

8 FERRIS ROAD
NEWTOWN, CT 06470
FAIRFIELD COUNTY

Colliers Engineering & Design
MT. LAUREL
2000 Midlantic Drive,
Suite 100
Mt. Laurel, NJ 08054
Phone: 856.797.0412
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING

SHEET TITLE: TITLE SHEET

SHEET NUMBER: ST-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

BILL OF MATERIALS

SECTION 1 - VZWSMART KITS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
3	VZWSMART	VZWSMART-PLK3	SUPPORT RAIL CORNER BRACKET		30	90
1		VZWSMART-PLK5	KICKER KIT	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET SGN-1.	291	291
1		VZWSMART-PLK7	MONOPOLE COLLAR MOUNT ASSEMBLY		150	150
12		VZWSMART-MSK1	CROSSOVER PLATE		14	168
1		VZWSMART-MSK6	BACK TO BACK CROSSOVER PLATE		34	34
				-		
				-		
				-		
				-		

SECTION 2 - OTHER REQUIRED PARTS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
3	-	-	168" LONG, P2 1/2 STD	GALVANIZED	81	243
1	-	-	36" LONG, P2 STD	GALVANIZED	11	11
3	-	-	18" LONG, L3x3x1/4	GALVANIZED	7	21
					TOTAL:	1008

VZWSMART KITS - APPROVED VENDORS

COMMSCOPE	
CONTACT	SALVADOR ANGUIANO
PHONE	(817) 304-7492
EMAIL	SALVADOR.ANGUIANO@COMMSCOPE.COM
WEBSITE	WWW.COMMSCOPE.COM
METROSITE FABRICATORS, LLC	
CONTACT	KENT RAMEY
PHONE	(706) 335-7045 (O), (706) 982-9788 (M)
EMAIL	KENT@METROSITELLC.COM
WEBSITE	METROSITEFABRICATORS.COM
PERFECTVISION	
CONTACT	WIRELESS SALES
PHONE	(844) 887-6723
EMAIL	WWW.PERFECT-VISION.COM
WEBSITE	WIRELESSSALES@PERFECT-VISION.COM
SABRE INDUSTRIES, INC.	
CONTACT	ANGIE WELCH
PHONE	(866) 428-6937
EMAIL	AKWELCH@SABREINDUSTRIES.COM
WEBSITE	WWW.SABRESITESOLUTIONS.COM
SITE PRO 1	
CONTACT	PAULA BOSWELL
PHONE	(972) 236-9843
EMAIL	PAULA.BOSWELL@VALMONT.COM
WEBSITE	WWW.SITEPRO1.COM

NOTES:

1. THE MANUFACTURERS LISTED ARE THE APPROVED VENDORS FOR THE VZW MOUNT KITS. EACH MANUFACTURER WILL BE AWARE OF WHICH KITS HAVE BEEN THROUGH THE VZW APPROVAL PROCESS AND THEY ARE IN TURN APPROVED TO SELL. PLEASE NOTE THAT THE MATERIAL UTILIZED ON THE MOUNT MODIFICATIONS WILL BE REVIEWED AS A PART OF THE DESKTOP PMI COMPLETED BY THE SMART TOOL VENDOR. IT WILL BE REQUIRED THAT THE VZW KITS SPECIFIED ARE UTILIZED IN THE MODIFICATIONS.

2. ALL MATERIALS REQUIRED FOR THE DESIGNED MODIFICATIONS BUT NOT LISTED IN THIS SHEET ARE ASSUMED TO BE PROVIDED BY THE CONTRACTOR.

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

verizon

PROTECT YOURSELF

ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

811 Know what's below. Call before you dig.

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

SCALE :	JOB NUMBER :
AS SHOWN	21777788A

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.
0	10/26/21	ISSUED FOR CONSTRUCTION	BAH	PMA

STATE OF CONNECTICUT
PETER MICHAEL ALBANO
No. 35459
LICENSED PROFESSIONAL ENGINEER
COLLIERS ENGINEERING & DESIGN CT, P.C.
10/26/21

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

SITE NAME:

NEWTOWN WEST CT
468841

8 FERRIS ROAD
NEWTOWN, CT 06470
FAIRFIELD COUNTY

Colliers Engineering & Design

MT. LAUREL
2000 Midlantic Drive,
Suite 100
Mt. Laurel, NJ 08054
Phone: 856.797.0412
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING

SHEET TITLE : BILL OF MATERIALS

SHEET NUMBER : SBOM-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

PROJECT NOTES

1. SEE MODIFICATION NOTES
2. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, LAWS AND REGULATIONS OF ALL MUNICIPALITIES, UTILITY COMPANIES OR OTHER PUBLIC/GOVERNING AUTHORITIES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS THAT MAY BE REQUIRED BY ANY FEDERAL, STATE, COUNTY OR MUNICIPAL AUTHORITIES.
4. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER, IN WRITING, OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF BIDS OR PERFORMANCE OF WORK.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SITE IMPROVEMENTS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL REPAIR ANY DAMAGE AS A RESULT OF CONSTRUCTION OF THIS FACILITY AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
6. THE SCOPE OF WORK FOR THIS PROJECT SHALL INCLUDE PROVIDING ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED TO COMPLETE THIS PROJECT. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
7. THE CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO SUBMITTING THE BID TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND CONSTRUCTION DRAWINGS.
8. THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THESE DRAWINGS MUST BE VERIFIED. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
9. SINCE THE CELL SITE MAY BE ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE REQUIRED TO BE WORN TO ALERT OF ANY POTENTIALLY DANGEROUS EXPOSURE LEVELS.
10. NO NOISE, SMOKE, DUST OR ODOR WILL RESULT FROM THIS FACILITY AS TO CAUSE A NUISANCE.
11. THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION (NO HANDICAP ACCESS IS REQUIRED).

GENERAL NOTES

1. THESE MODIFICATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE TELECOMMUNICATIONS INDUSTRY STANDARD TIA-222-H. MATERIALS AND SERVICES PROVIDED BY THE CONTRACTOR SHALL CONFORM TO THE ABOVE MENTIONED CODES.
2. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT DAMAGE TO EXISTING STRUCTURES. ANY DAMAGE TO EXISTING STRUCTURES AS A RESULT OF THE CONTRACTOR'S WORK OR FROM DAMAGE DUE TO OTHER CAUSES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE BEGINNING WORK, ORDERING MATERIAL, AND PREPARING OF SHOP DRAWINGS. ANY DISCREPANCIES BETWEEN FIELD CONDITIONS AND THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER. IF THE CONTRACTOR DISCOVERS ANY EXISTING CONDITIONS THAT ARE NOT REPRESENTED ON THESE DRAWINGS, OR ANY CONDITIONS THAT WOULD INTERFERE WITH THE INSTALLATION OF THE MODIFICATIONS, NOTIFY THE ENGINEER IMMEDIATELY.
4. IT IS ASSUMED THAT ANY STRUCTURAL MODIFICATION WORK SPECIFIED ON THESE PLANS WILL BE ACCOMPLISHED BY KNOWLEDGEABLE WORKMEN WITH TOWER CONSTRUCTION EXPERIENCE.
5. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION METHODS, MEANS, TECHNIQUES, SEQUENCES, AND PROCEDURES.
6. ALL CONSTRUCTION MEANS AND METHODS; INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN AND SHALL MEET ANSI/TIA-322 (LATEST EDITION), OSHA, AND GENERAL INDUSTRY STANDARDS. ALL RIGGING PLANS SHALL ADHERE TO ANSI/TIA-322 (LATEST EDITION) INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION.
7. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PROGRAMS IN ACCORDANCE WITH APPLICABLE SAFETY CODES.
8. WORK SHALL ONLY BE PERFORMED DURING CALM DRY DAYS (WINDS LESS THAN 30-MPH). THE STRUCTURE SHOWN ON THE DRAWINGS IS STRUCTURALLY SOUND ONLY IN THE COMPLETED FORM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE STRUCTURE DURING ERECTION. CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT, SHORING, BRACING AND ANY OTHER STRUCTURAL SYSTEMS AS REQUIRED TO RESIST ALL FORCES THAT MAY OCCUR DURING HANDLING AND ERECTION UNTIL THE STRUCTURE IS FULLY COMPLETED. TEMPORARY SUPPORTS, BRACING AND OTHER STRUCTURAL SYSTEMS REQUIRED DURING CONSTRUCTION SHALL REMAIN THE CONTRACTOR'S PROPERTY AFTER THEIR USE.
9. ALL INSTALLATIONS PERFORMED ON THIS STRUCTURE SHALL BE COMPLETED IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE STANDARD FOR INSTALLATION, ALTERATION AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS, ANSI/TIA-322.
10. CONTRACTOR SHALL SECURE SITE BACK TO EXISTING CONDITION UNDER SUPERVISION OF OWNER. ALL FENCE, STONE, GEOFABRIC, GROUNDING, AND SURROUNDING GRADE SHALL BE REPLACED AND REPAIRED AS REQUIRED TO ACHIEVE OWNER APPROVAL. POSITIVE DRAINAGE AWAY FROM TOWER SITE SHALL BE MAINTAINED.
11. CONNECTIONS BETWEEN ITEMS SUPPORTED BY THE STRUCTURE AND THE STRUCTURE NOT SPECIFICALLY DETAILED IN THE CONTRACT DOCUMENTS ARE THE RESPONSIBILITY OF THE CONTRACTOR. SUCH CONNECTIONS SHALL BE DESIGNED, COORDINATED AND INSPECTED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF THE PROJECT. SUBMIT SIGNED AND SEALED CALCULATIONS DURING SHOP DRAWING REVIEW.
12. DO NOT SCALE DRAWINGS.
13. DO NOT USE THESE DRAWINGS FOR ANY OTHER SITE.
14. ALL MATERIAL UTILIZED FOR THIS PROJECT MUST BE NEW AND FREE OF ANY DEFECTS. ANY MATERIAL SUBSTITUTIONS, INCLUDING BUT NOT LIMITED TO ALTERED SIZE AND/OR STRENGTHS, MUST BE APPROVED BY THE OWNER AND ENGINEER IN WRITING.
15. THE MOUNT UNDER NO CIRCUMSTANCES SHOULD BE USED AS A TIE OFF POINT.

STRUCTURAL STEEL

1. DESIGN, DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING PUBLICATIONS EXCEPT AS SPECIFICALLY INDICATED IN THE CONTRACT DOCUMENTS.
   a. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) MANUAL OF STEEL CONSTRUCTION (15TH EDITION)
   b. SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS
   c. AISC CODE OF STANDARD PRACTICE
2. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING UNLESS OTHERWISE SHOWN:

CHANNELS, ANGLES, PLATES, ETC.	ASTM A36 (GR 36)
STEEL PIPE	ASTM A53 (GR 35)
BOLTS	ASTM A325
NUTS	ASTM A563
LOCK WASHERS	LOCKING STRUCTURAL GRADE

3. ALL SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE APPROVED IN WRITING BY THE ENGINEER. CONTRACTOR SHALL PROVIDE DOCUMENTATION TO ENGINEER FOR VERIFYING THE SUBSTITUTE IS SUITABLE FOR USE AND MEETS ORIGINAL DESIGN CRITERIA. DIFFERENCES FROM THE ORIGINAL DESIGN, INCLUDING MAINTENANCE, REPAIR AND REPLACEMENT, SHALL BE NOTED. ESTIMATES OF COSTS/CREDITS ASSOCIATED WITH THE SUBSTITUTION (INCLUDING RE-DESIGN COSTS AND COSTS TO SUB-CONTRACTORS) SHALL BE PROVIDED TO THE ENGINEER. CONTRACTOR SHALL PROVIDE ADDITIONAL DOCUMENTATION AND/OR SPECIFICATIONS TO THE ENGINEER AS REQUESTED.
4. PROVIDE STRUCTURAL STEEL SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
   a. SUBMIT SHOP DRAWINGS TO
      PETER.ALBANO@COLLIERSENGINEERING.COM
   b. PROVIDE MASER CONSULTING PROJECT # AND MASER CONSULTING PROJECT ENGINEER CONTACT IN THE BODY OF THE EMAIL.
5. DRILL NO HOLES IN ANY NEW OR EXISTING STRUCTURAL STEEL MEMBERS OTHER THAN THOSE SHOWN ON STRUCTURAL DRAWINGS WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.
6. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
7. ALL NEW STEEL SHALL BE HOT BE DIPPED GALVANIZED FOR FULL WEATHER PROTECTION. IN ADDITION ALL NEW STEEL SHALL BE PAINTED TO MATCH EXISTING STEEL. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
8. CONTRACTOR SHALL PROTECT CUT ENDS OF ALL FIELD-CUT STEEL WITH TWO (2) COATS OF COLD GALVANIZATION (ZINGA OR ZINC COTE).
9. ALL BOLT ASSEMBLIES FOR STRUCTURAL MEMBERS REPRESENTED IN THIS DRAWING REQUIRE LOCKING DEVICES TO BE INSTALLED IN ACCORDANCE WITH TIA-222-H SECTION 4.9.2 REQUIREMENTS.
10. WHERE CONNECTIONS ARE NOT FULLY DETAILED ON THESE DRAWINGS, FABRICATOR SHALL DESIGN CONNECTIONS TO RESIST LOADS AND FORCES WHERE SHOWN ON DRAWINGS AND AS OUTLINED IN SPECIFICATIONS.
11. FOR MEMBERS BEING REPLACED, PROVIDE NEW BOLTS AND MATCH EXISTING SIZE AND GRADE. MAINTAIN AISC REQUIREMENTS FOR MINIMUM BOLT DISTANCE AND SPACING.
12. ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT IS AT LEAST FLUSH WITH THE FACE OF THE NUT. IT IS NOT PERMITTED FOR THE BOLT END TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.
13. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
14. ALL EXISTING PAINTED/GALVANIZED SURFACES DAMAGED DURING REHAB INCLUDING AREAS UNDER STIFFENER PLATES SHALL BE WIRE BRUSHED CLEAN, REPAIRED BY COLD GALVANIZING (ZINGA OR ZINC COTE), AND REPAINTED TO MATCH THE EXISTING FINISH (IF APPLICABLE).
15. ALL HOLES IN STEEL MEMBERS SHALL BE SIZED 1/16" LARGER THAN THE BOLT DIAMETER. STANDARD HOLES SHALL BE USED UNLESS NOTED OTHERWISE.

WELDING NOTES

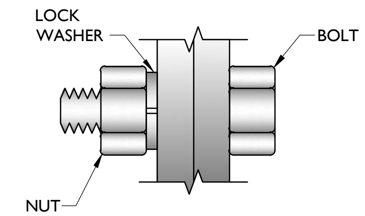
1. ALL WELDING SHALL BE DONE IN ACCORDANCE WITH AWS D1.0 (LATEST EDITION). THIS SHALL INCLUDE A CERTIFIED WELD INSPECTION (CWI) FOR ACCEPTANCE OR REJECTION OF ALL WELDING OPERATIONS, PRE, DURING, AND POST INSTALLATION, USING THE ACCEPTANCE CRITERIA OF AWS D1.1.
2. CONTRACTOR IS RESPONSIBLE FOR COMMISSIONING A THIRD PARTY CERTIFIED WELD INSPECTOR (CWI) THROUGHOUT THE ENTIRETY OF THE PROJECT. A PASSING CWI REPORT SHALL BE PROVIDED TO THE ENGINEER UPON COMPLETION OF THE PROJECT.
3. THE CERTIFIED WELD INSPECTOR SHALL INDICATE, IN A WRITTEN CWI REPORT, THAT ALL WELDING OPERATIONS PRE, DURING, AND POST INSTALLATION WERE CONDUCTED IN ACCORDANCE WITH AWS D1.1 WITH PHOTOGRAPHS AND DOCUMENTATION SUPPORTING THE ACCEPTANCE OR REJECTION OF ALL WELDING. ALL CWI WELD INSPECTION DOCUMENTATION AND PHOTOS SHALL BE SUBMITTED DURING THE PMI.
4. IN CASES WHERE A WELD IS SPECIFIED BETWEEN TWO MEMBERS IN WHICH THERE IS A GAP IN BETWEEN, THE WELD IS TO BE BUILT-UP SUCH THAT THE SIZE OF WELD ON THE MEMBER IS EQUAL TO THAT SHOWN IN THE DRAWINGS.
5. OXY FUEL GAS WELDING OR BRAZING IS STRICTLY PROHIBITED. SPECIFICALLY, NO TORCH CUTTING IS PERMITTED ON SITE. ALL HOLES SHALL BE CUT WITH A GRINDER.
6. CONTRACTOR SHALL EXERCISE CAUTION WHEN WELDING A GALVANIZED SURFACE.
7. CONTRACTOR SHALL HAVE A FIRE PROTECTION PLAN IN PLACE THAT CONFORMS WITH ALL OSHA, ANSI/ASSP A10.48, ANSI Z49.1, AND LOCAL JURISDICTIONAL REQUIREMENTS.

BOLT SCHEDULE (IN.)

BOLT DIAMETER	STANDARD HOLE	SHORT SLOT	MIN. EDGE DISTANCE	SPACING
1/2	9/16	9/16 x 11/16	7/8	1 1/2
5/8	11/16	11/16 x 7/8	1 1/8	1 7/8
3/4	13/16	13/16 x 1	1 1/4	2 1/4
7/8	15/16	15/16 x 1 1/8	1 1/2	2 5/8
1	1 1/16	1 1/16 x 1 5/16	1 3/4	3

WORKABLE GAGES (IN.)

LEG	GAGE
4	2 1/2
3 1/2	2
3	1 3/4
2 1/2	1 3/8
2	1 1/8

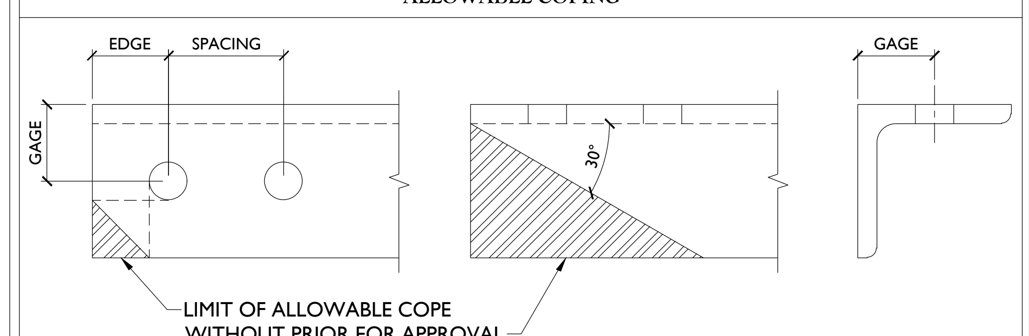


TYP. BOLT ASSEMBLY

NOTES:

1. ALL DIMENSIONS REPRESENTED IN THE ABOVE TABLES ARE AISC MINIMUM REQUIREMENTS. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ENGINEER IF DISTANCES ARE LESS THAN THOSE PROVIDED.
2. THE DIMENSIONS PROVIDED ARE MINIMUM REQUIREMENTS. ACTUAL DIMENSIONS OF PROPOSED MEMBERS WITHIN THESE DRAWINGS MAY VARY FROM THE AISC MINIMUM REQUIREMENTS.
3. SHORT SLOT HOLES SHALL ONLY BE USED WHEN DEPICTED IN THE DRAWINGS
4. MATCH EXISTING GAGES WHEN APPLICABLE, UNLESS MINIMUM EDGE DISTANCES ARE COMPROMISED.

ALLOWABLE COPING



Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

verizon

PROTECT YOURSELF

ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

811 Know what's below. Call before you dig.

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

SCALE :	JOB NUMBER :
AS SHOWN	21777788A

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.
0	10/26/21	ISSUED FOR CONSTRUCTION	BAH	PMA

COLLIERS ENGINEERING & DESIGN CT, P.C.

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

SITE NAME:

NEWTOWN WEST CT
468841

8 FERRIS ROAD
NEWTOWN, CT 06470
FAIRFIELD COUNTY

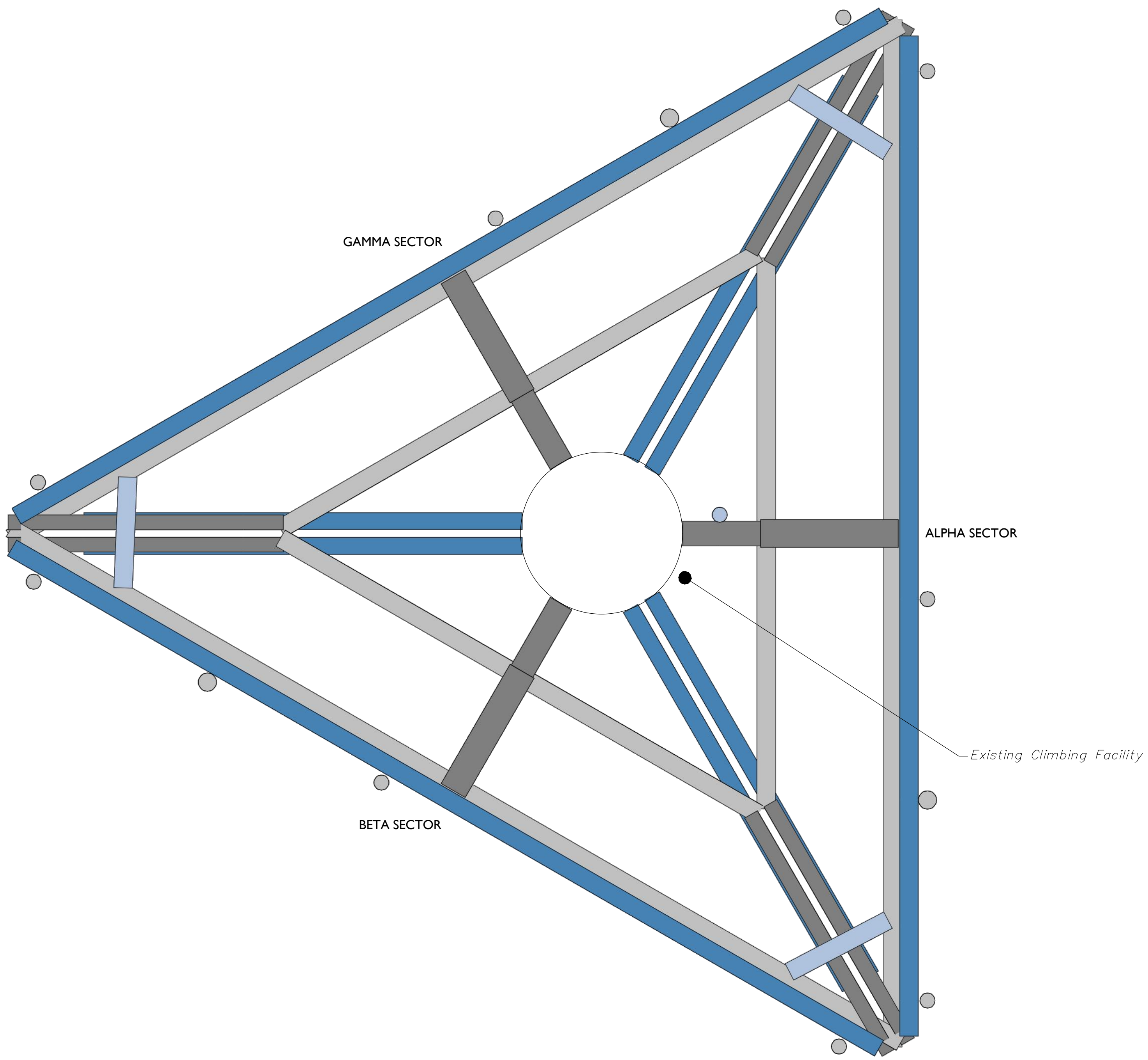
Colliers Engineering & Design

MT. LAUREL
2000 Midlantic Drive,
Suite 100
Mt. Laurel, NJ 08054
Phone: 856.797.0412
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING

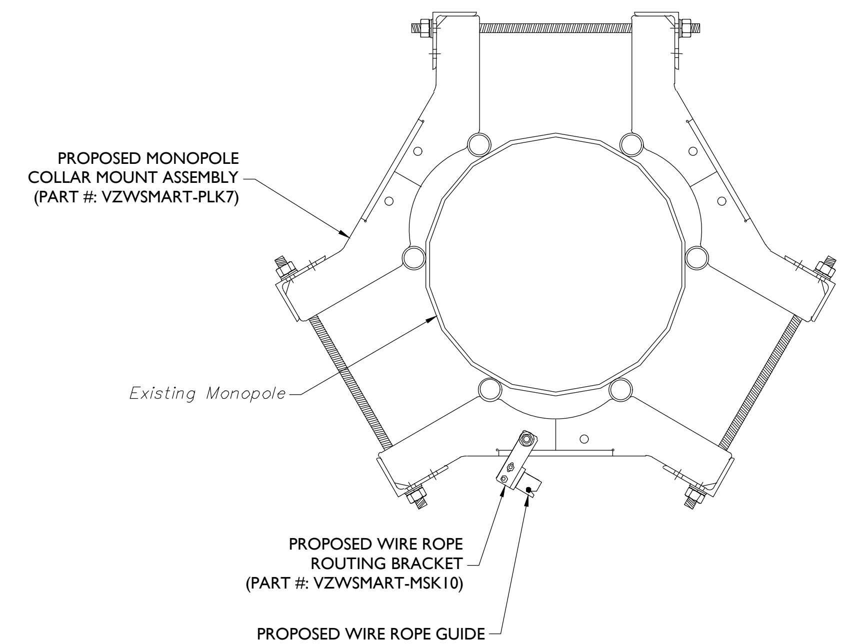
SHEET TITLE :
MODIFICATION NOTES

SHEET NUMBER :
SGN-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



1 CLIMBING FACILITY LOCATION
SCALE : N.T.S.



2 PROPOSED WIRE ROPE GUIDE ATTACHMENT - PLAN VIEW
SCALE : N.T.S.

CLIMBING FACILITY PHOTO

STRUCTURAL NOTES:

1. PER THE MOUNT MAPPING COMPLETED BY STRUCTURAL COMPONENTS ON 4/16/2021, THE SAFETY CLIMB AND CLIMBING FACILITIES UP TO THE VERIZON MOUNT ELEVATION (97'-0") ARE IN GOOD CONDITION. MASER DOES NOT WARRANT THIS INFORMATION.

2. INSTALL SHALL NOT CAUSE HARM TO THE STRUCTURE, CLIMBING FACILITY, SAFETY CLIMB, OR ANY SYSTEM INSTALLED ON THE STRUCTURE. TIMELY NOTICE AND DOCUMENTATION SHALL BE PROVIDED BY CONTRACTORS TO THE EOR (OF STRUCTURAL DESIGN) IF AN OBSTRUCTION WAS REQUIRED TO MEET THE RF SYSTEM DESIGN REQUIREMENTS AND PERFORMANCES.

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER

verizon

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
811 Know what's below. Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

SCALE:	JOB NUMBER:
AS SHOWN	21777788A

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
0	10/26/21	ISSUED FOR CONSTRUCTION	BAH	PMA

STATE OF CONNECTICUT
PETER MICHAEL ALBANO
No. 35459
LICENSED PROFESSIONAL ENGINEER
COLLIERS ENGINEERING & DESIGN CT, P.C.
10/26/21

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

SITE NAME:

NEWTOWN WEST CT
468841

8 FERRIS ROAD
NEWTOWN, CT 06470
FAIRFIELD COUNTY

Colliers Engineering & Design
MT. LAUREL
2000 Midlantic Drive, Suite 100
Mt. Laurel, NJ 08054
Phone: 856.797.0412
COLLIERS ENGINEERING & DESIGN CT, P.C. DOING BUSINESS AS MASER CONSULTING

SHEET TITLE:
CLIMBING FACILITY DETAIL

SHEET NUMBER:
SCF-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

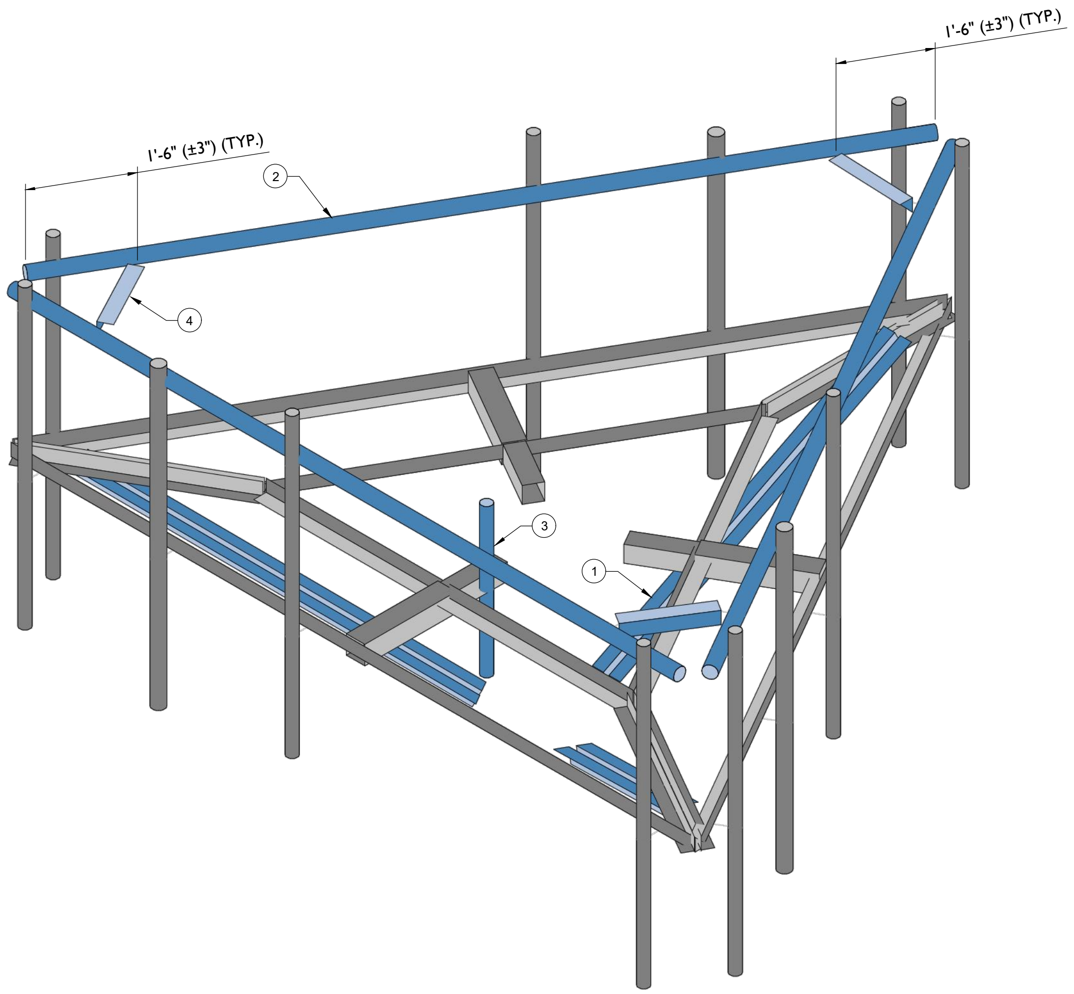
LEGEND:

- PROPOSED
- RELOCATED
- EXISTING

MOUNT MODIFICATION SCHEDULE				
NO.	ELEVATION	QUANTITY	DESCRIPTION	NOTES
1	97'-0"	1	PROPOSED KICKER KIT (PART #: VZWSMART-PLK5)	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET SGN-1. CONNECT OTHER END OF KICKER KIT TO MONOPOLE COLLAR MOUNT ASSEMBLY (PART #: VZWSMART-PLK7).
2		3	168" LONG, P2 1/2 STD SUPPORT RAIL	GALVANIZED, CONNECT NEW SUPPORT RAIL TO ALL EXISTING VERTICAL MOUNT PIPES WITH CROSSOVER PLATES (PART #: VZWSMART-MSK1).
3		1	36" LONG, P2 STD OVP PIPE	GALVANIZED, CONNECT NEW OVP PIPE TO EXISTING STANDOFF HORIZONTAL WITH BACK TO BACK CROSSOVER PLATE (VZWSMART-MSK6).
4		3	18" LONG, L3x3x1/4 SUPPORT RAIL BRACING	GALVANIZED, CONTRACTOR SHALL CONNECT PROPOSED L3X3X1/4 ANGLES TO CORNER BRACKETS USING THE PROVIDED (8) 5/8" DIA. BOLTS, (4) BOLTS PER CONNECTION.

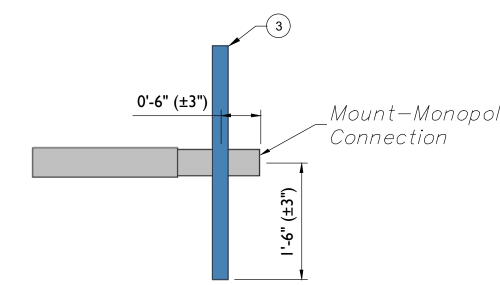
NOTES.

MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.



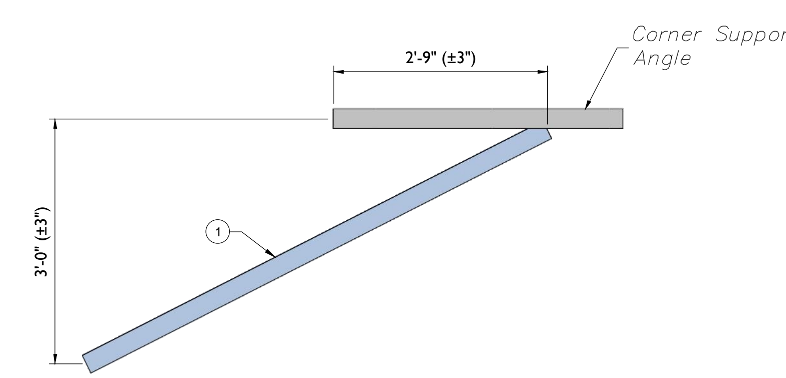
1 PROPOSED ISOMETRIC VIEW

SCALE : N.T.S.



2 PROPOSED SIDE ELEVATION OVP PIPE VIEW (ALPHA SECTOR)

SCALE : N.T.S.



3 PROPOSED SIDE ELEVATION KICKER VIEW (TYP. ALL SECTORS)

SCALE : N.T.S.

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

verizon

811 Know what's below. Call before you dig.

PROTECT YOURSELF

ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

SCALE : AS SHOWN

JOB NUMBER : 21777788A

.	.	.	.	.
.	.	.	.	.
.	.	.	.	.
0	10/26/21	ISSUED FOR CONSTRUCTION	BAH	PMA
REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY

STATE OF CONNECTICUT PETER MICHAEL ALBANO No. 35459 LICENSED PROFESSIONAL ENGINEER

COLLIERS ENGINEERING & DESIGN CT, P.C. PEC.0000131

10/26/21

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

SITE NAME:

NEWTOWN WEST CT
468841

8 FERRIS ROAD
NEWTOWN, CT 06470
FAIRFIELD COUNTY

Colliers Engineering & Design

MT. LAUREL
2000 Midlantic Drive, Suite 100
Mt. Laurel, NJ 08054
Phone: 856.797.0412
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING

SHEET TITLE : MODIFICATION DETAILS

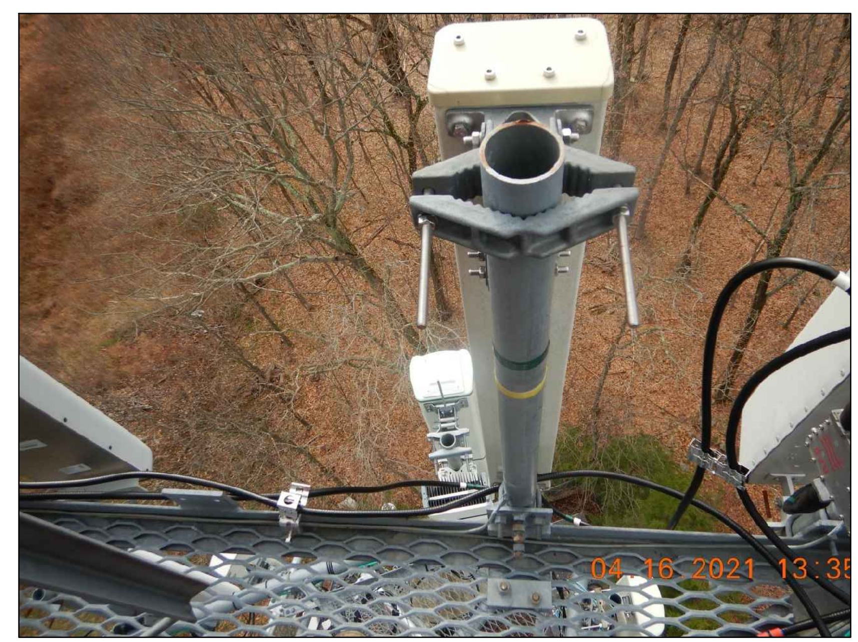
SHEET NUMBER : SS-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

MOUNT PHOTO 1

MOUNT PHOTO 2

MOUNT PHOTO 3



MOUNT PHOTO 4

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

verizon

811 Know what's below. Call before you dig.

PROTECT YOURSELF

ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

SCALE :	JOB NUMBER :
AS SHOWN	21777788A

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.
0	10/26/21	ISSUED FOR CONSTRUCTION	BAH	PMA

STATE OF CONNECTICUT PETER MICHAEL ALBANO No. 35459 LICENSED PROFESSIONAL ENGINEER

COLLIERS ENGINEERING & DESIGN CT, P.C.

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

SITE NAME:

NEWTOWN WEST CT
468841

8 FERRIS ROAD
NEWTOWN, CT 06470
FAIRFIELD COUNTY

Colliers Engineering & Design

MT. LAUREL
2000 Midlantic Drive,
Suite 100
Mt. Laurel, NJ 08054
Phone: 856.797.0412
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING

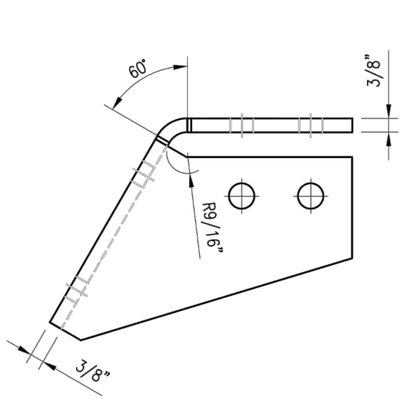
SHEET TITLE :

MOUNT PHOTOS

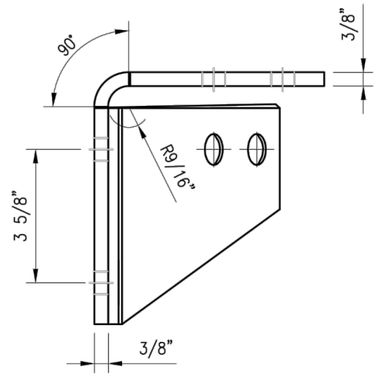
SHEET NUMBER :

SS-2

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

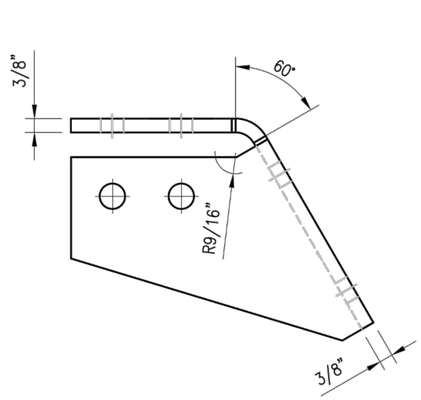


TOP VIEW

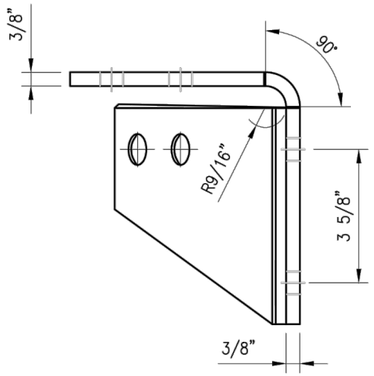


SIDE VIEW

CBP–L



TOP VIEW



SIDE VIEW

CBP–R

NOTES:
1. HOT–DIPPED GALVANIZED PER ASTM A123.

VZWSMART–PLK3 (SUPPORT RAIL CORNER BRACKET)

ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	1	CBP–L	CORNER BENT PLATE BRACKET	PLK3–F1	9
2	1	CBP–R	CORNER BENT PLATE BRACKET	PLK3–F1	9
3	4	MS02–625–300–500	RU–BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)	RBC–1	5
4	8	---	BOLT 5/8" X 2" A325	---	3
5	16	FW–625	5/8" HDG USS FLAT WASHER	---	1
6	16	LW–625	5/8" HDG LOCK WASHER	---	0
7	16	NUT–625	5/8" HDG HEX NUT	---	2
				GALVANIZED WT	30

VzW
SMART Tool©
Vendor

verizon

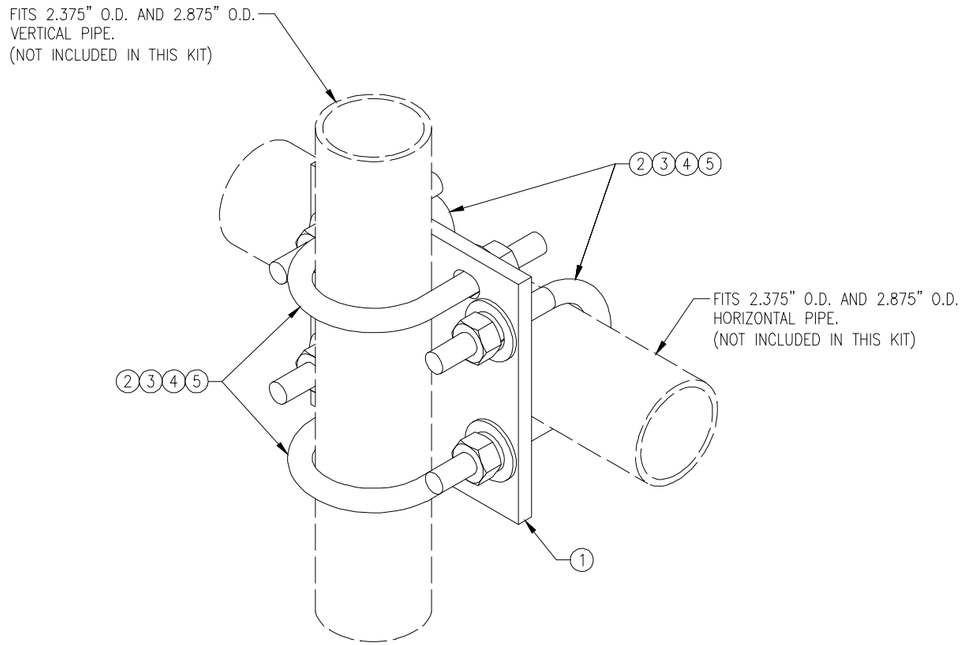
DRAWN BY: H.R | CHECKED BY: HMA

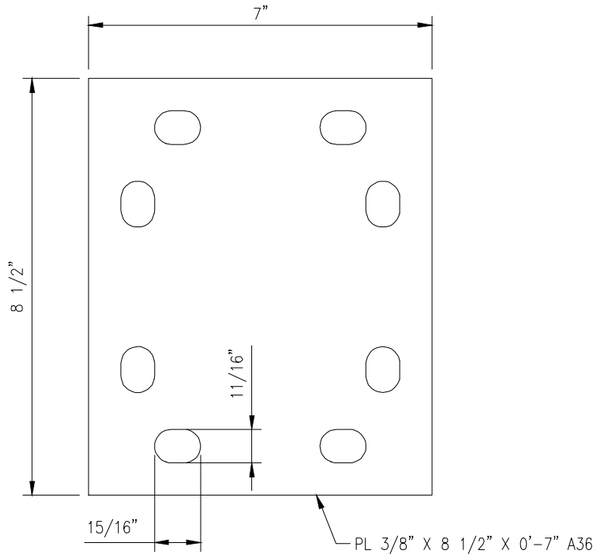
REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	H.R	05/08/20

SHEET TITLE:
VZWSMART–PLK3
SUPPORT RAIL CORNER
BRACKET

SHEET NUMBER: VZWSMART–PLK3

REV #: 0





PL375-857

NOTES:
1. HOT-DIPPED GALVANIZED PER ASTM A123.

VZWSMART-MSK1 (CROSSOVER PLATE)

ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	1	PL375-857	PL 3/8" X 8 1/2" X 0'-7" A36	MSK1-F1	6
2	4	MS02-625-300-500	RU-BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)	RBC-1	5
3	8	FW-625	5/8" HDG USS FLAT WASHER	---	1
4	8	LW-625	5/8" HDG LOCK WASHER	---	0
5	8	NUT-625	5/8" HDG HEX NUT	---	1
				GALVANIZED WT	14

VzW SMART Tool© Vendor

verizon

DRAWN BY: H.R | CHECKED BY: HMA

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	H.R	05/08/20

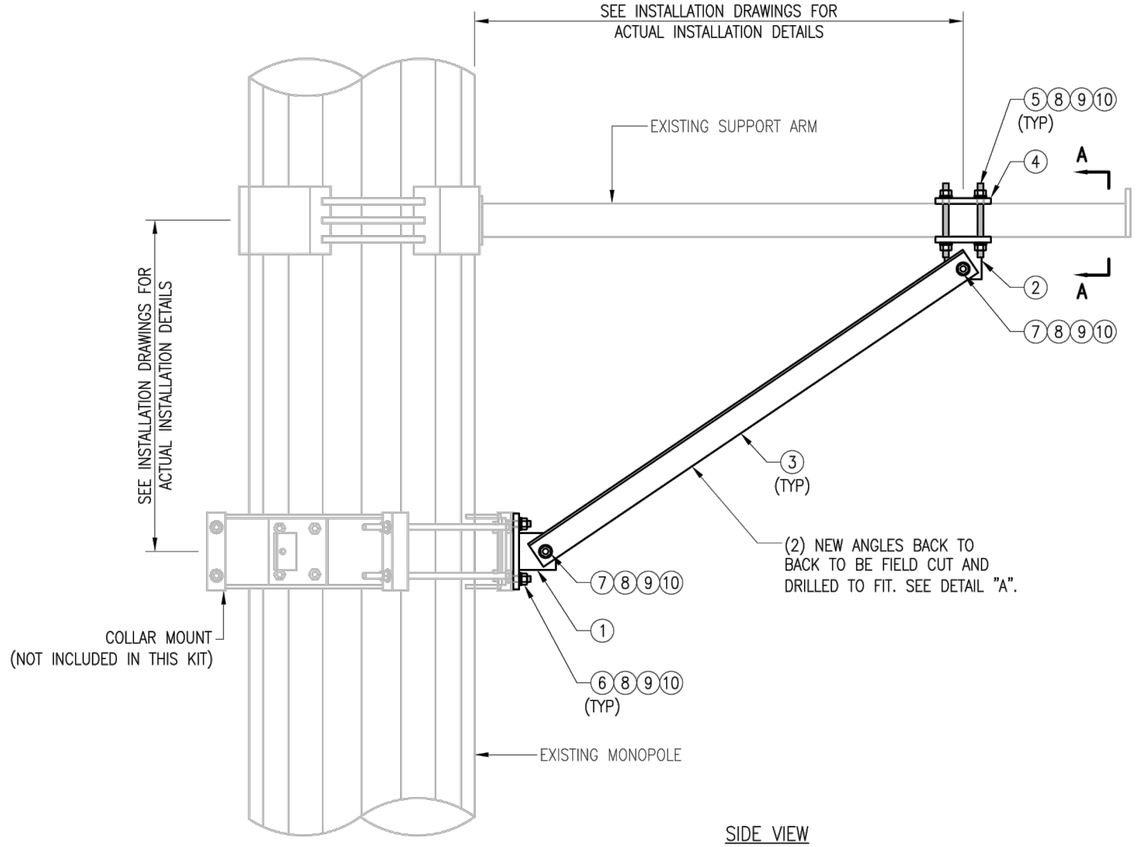
SHEET TITLE:

VZWSMART-MSK1
CROSSOVER PLATE

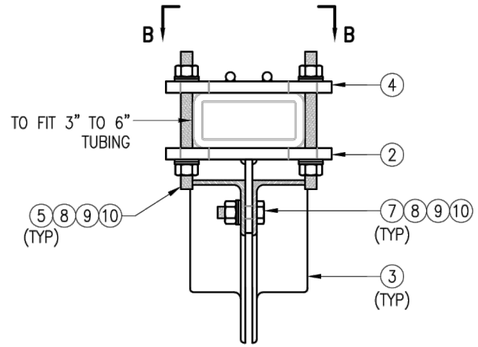
SHEET NUMBER: VZWSMART-MSK1

REV #: 0

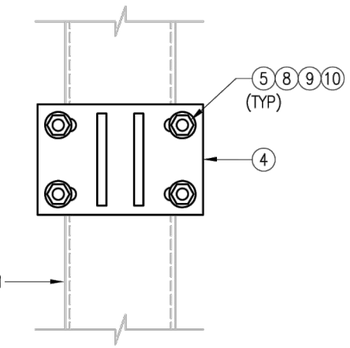
NOTE:
THE LOCATION OF KICKER AND EXISTING ANTENNA MOUNT SHOWN ON THE DRAWING IS FOR REPRESENTATION PURPOSE ONLY. SEE INSTALLATION DRAWINGS FOR ACTUAL INSTALLATION OF DETAILS.



SIDE VIEW
KICKER KIT



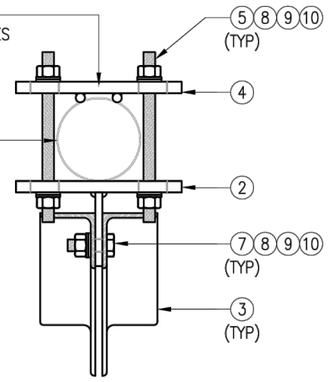
SECTION "A–A"
RECT. HSS MOUNTING



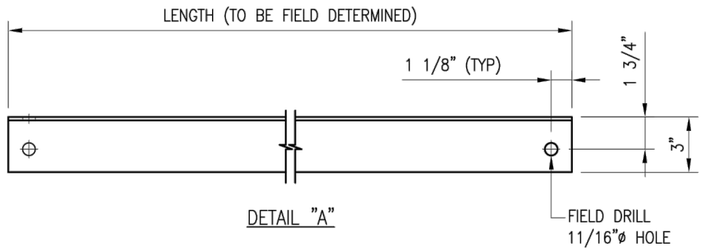
SECTION "B–B"

NOTE:
TOP PLATE FLIPPED 180° FOR ROUND PIPES

FIT 3.5" O.D. TO 4.5" O.D. PIPES



SECTION "A–A"
ROUND PIPE MOUNTING



DETAIL "A"

NOTES:
1. ALL HOLES ARE 11/16" DIA. U.N.O
2. HOT–DIPPED GALVANIZED PER ASTM A123.
3. FIT UP TO 6" SQ. TUBING OR 4 1/2" O.D. PIPE

VZWSMART–PLK5 (KICKER KIT)

ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	3	BRKW–XXX	BRACKET WELDMENT A36	PLK5–F3	43.8
2	3	BRKW–XXXX	BRACKET WELDMENT A36	PLK5–F2	35.7
3	6	L331875–8	L 3" X 3" X 3/16" X 8'–0" A36	PLK5–F4	182.9
4	3	PL–KI	PL 5/8" X 6" X 9" A36	PLK5–F1	29.0
5	12	---	THREADED ROD 5/8" DIA. X 1'–0" F1554–36 HDG	---	--
6	6	---	BOLT 5/8" X 2" A325	---	--
7	12	---	BOLT 5/8" X 2 1/2" A325	---	--
8	42	FW–625	5/8" HDG USS FLAT WASHER	---	3
9	42	LW–625	5/8" HDG LOCK WASHER	---	1
10	42	NUT–625	5/8" HDG HEX NUT	---	5
				GALVANIZED WT	291

VzW
SMART Tool©
Vendor

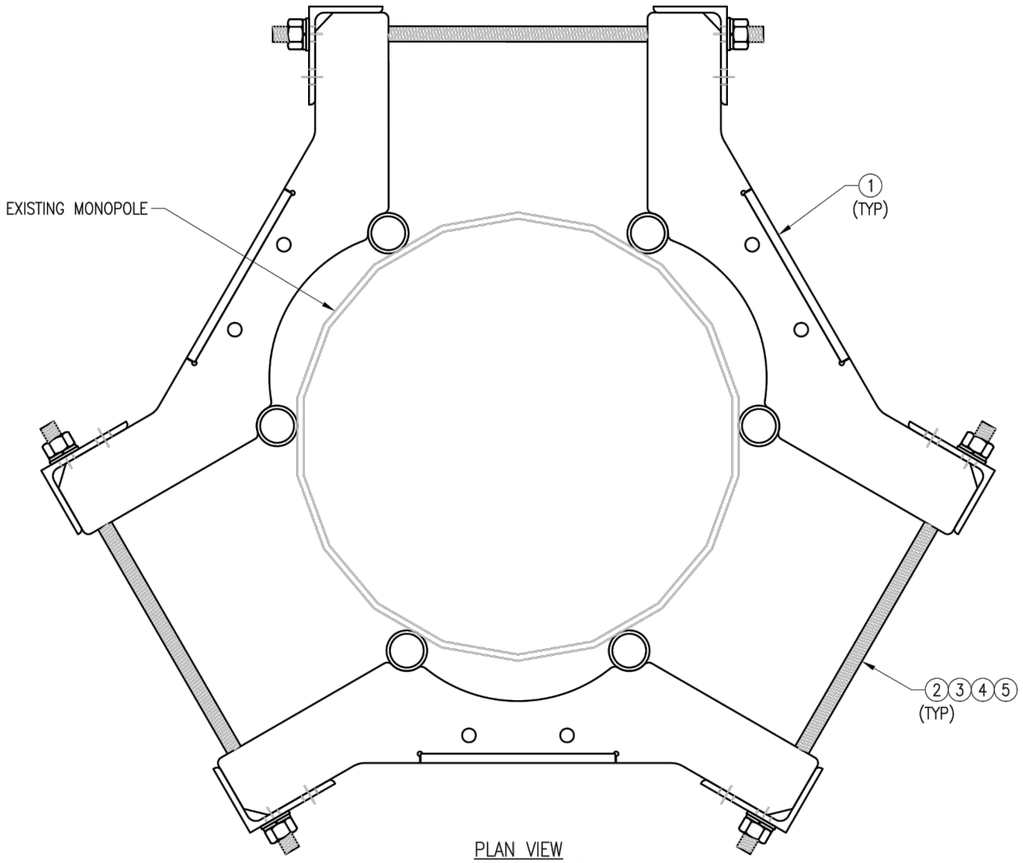
verizon

DRAWN BY: MN | CHECKED BY: HMA/KW

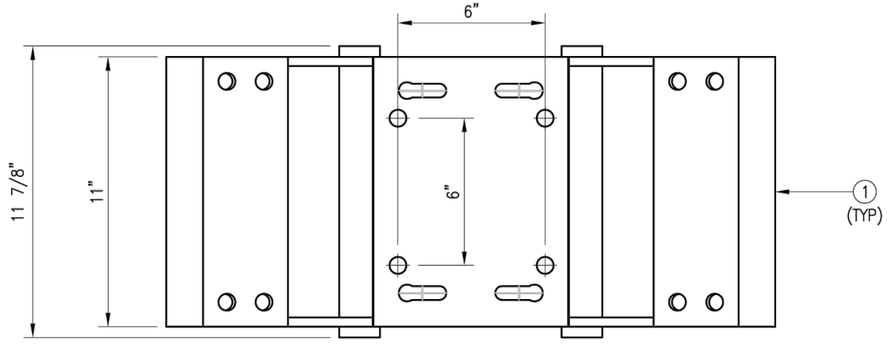
REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	MN	05/08/20

SHEET TITLE:
VZWSMART–PLK5
KICKER KIT

SHEET NUMBER: VZWSMART–PLK5
REV #: 0



PLAN VIEW
MONOPOLE COLLAR MOUNT ASSEMBLY



FRONT VIEW

NOTES:
1. FIT 12" TO 45" DIA MONOPOLE.
2. HOT-DIPPED GALVANIZED PER ASTM A123.

VZWSMART-PLK7 (MONOPOLE COLLAR MOUNT ASSEMBLY)

ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	3	CM-1245	COLLAR MOUNT ASSEMBLY	PLK7-F1	147
2	6	---	THREADED ROD 5/8" X 4'-0" A193-B7	---	
3	12	FW-625	5/8" HDG USS FLAT WASHER	---	1
4	12	LW-625	5/8" HDG LOCK WASHER	---	0
5	12	NUT-625	5/8" HDG HEX NUT	---	1
				GALVANIZED WT	150

VzW
SMART Tool©
Vendor

verizon

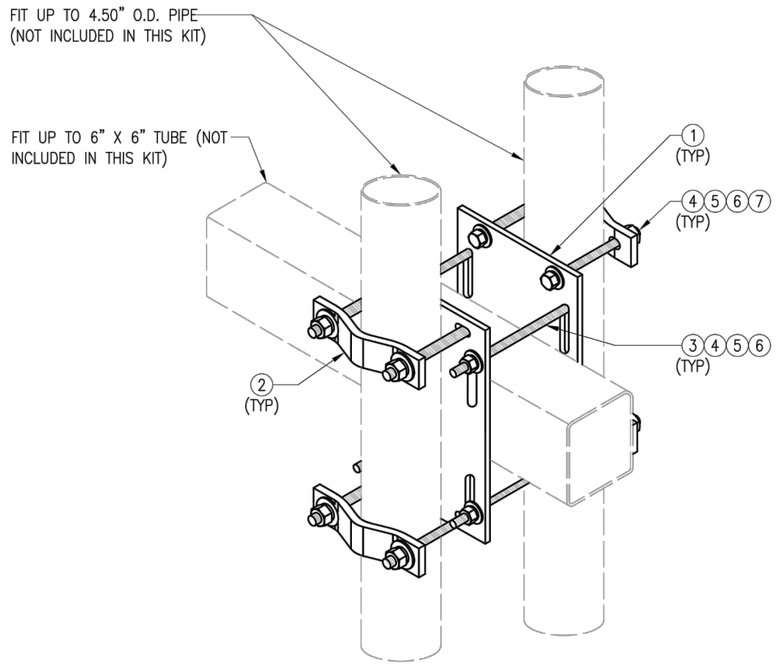
DRAWN BY: BT | CHECKED BY: HMA/KW

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	BT	05/11/20

SHEET TITLE:
VZWSMART-PLK7
MONOPOLE COLLAR
MOUNT ASSEMBLY

SHEET NUMBER: VZWSMART-PLK7

REV #: 0



ISOMETRIC VIEW
BACK TO BACK CROSSOVER

VZWSMART–MSK6 (VZWSMART–MSK6 – BACK TO BACK CROSSOVER)

ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	2	PL375–8512	PL 3/8" X 8 1/2" X 1'–0" A36	MSK6–F2	20.7
2	4	VCP	PL 1/2" X 2" X 8 5/8" A36 BENT PLATE	MSK6–F1	9.6
3	4	---	THREADED ROD 5/8" DIA. X 10" F1554–36 HDG	---	---
4	16	NUT–625	5/8" HDG HEX NUT	---	2
5	16	FW–625	5/8" HDG USS FLAT WASHER	---	1
6	16	LW–625	5/8" HDG LOCK WASHER	---	0
7	8	---	BOLT 5/8" X 6" SAE GRADE 5 ALL THREAD	---	1
				GALVANIZED WT	34

NOTES:
1. HOT–DIPPED GALVANIZED PER ASTM A123.

VzW
SMART Tool©
Vendor

verizon

DRAWN BY: SK | CHECKED BY: BT/KW

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	SK	05/08/20

SHEET TITLE:
VZWSMART–MSK6
BACK TO BACK
CROSSOVER

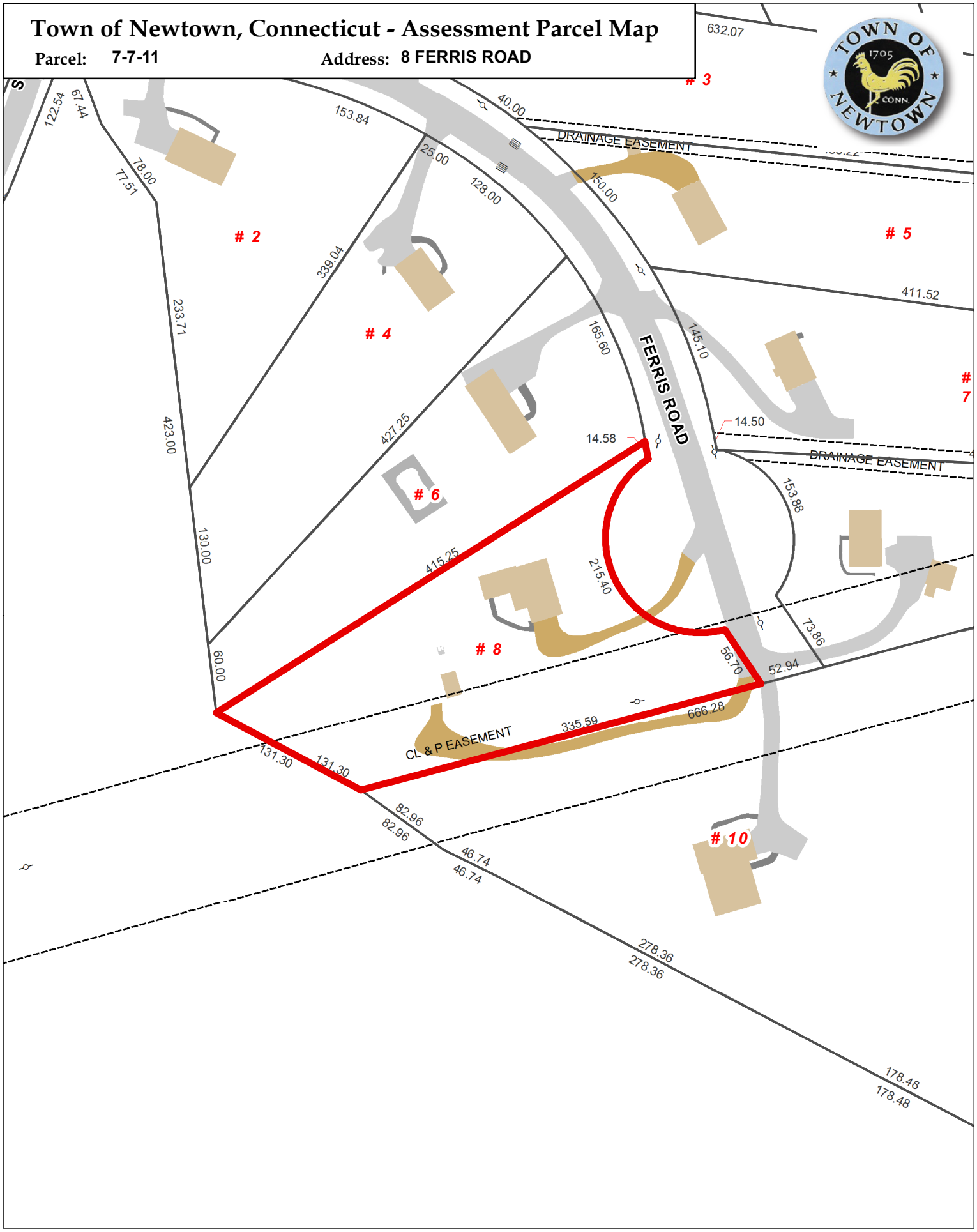
SHEET NUMBER: VZWSMART–MSK6

REV #: 0

ATTACHMENT 5

Town of Newtown, Connecticut - Assessment Parcel Map

Parcel: 7-7-11 **Address:** 8 FERRIS ROAD



Approximate Scale:

0 25 50 75 100 Feet

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

Map Produced Nov 2020

Town of Newtown, CT

Property Listing Report

Map Block Lot **7-7-11-C** Account **00871500C**

Property Information

Property Location	8 FERRIS ROAD
Owner	GERTSCH ERICH & PATRICIA A
Co-Owner	
Mailing Address	8 FERRIS RD NEWTOWN CT 06470
Land Use	4310 CELL SITE
Land Class	I
Zoning Code	R-1
Census Tract	12
Sub Lot	

Neighborhood	
Acreage	0
Utilities	Well,Septic
Lot Setting/Desc	
Survey Map	
TC Survey Numbers	

Photo

Sketch

Primary Construction Details

Year Built	
Stories	
Building Style	
Building Use	
Building Condition	
Floors	
Total Rooms	

Bedrooms	
Full Bathrooms	
Half Bathrooms	
Bath Style	
Kitchen Style	
Roof Style	
Roof Cover	

Exterior Walls	
Interior Walls	
Heating Type	
Heating Fuel	
AC Type	
Gross Bldg Area	
Total Living Area	

Report Created On **2/8/2022**

Town of Newtown, CT

Property Listing Report | **Map Block Lot** 7-7-11-C | **Account** 00871500C

Valuation Summary

(Assessed value = 70% of Appraised Value)

Item	Appraised	Assessed
Buildings		
Extras		
Outbuildings		
Land		
Total		

Outbuilding and Extra Items

Type	Description
Cell Tower	1 Units
Cell Tower	1 Units

Sub Areas

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

Sales History

Owner of Record	Book/ Page	Sale Date	Sale Price
GERTSCH ERICH & PATRICIA A	181/ 350	12/25/2009	

Report Created On 2/8/2022

ATTACHMENT 6

UNITED STATES POSTAL SERVICE®

NEWTOWN WEST

Certificate of Mailing — Firm

Name and Address of Sender	TOTAL NO. of Pieces Listed by Sender	TOTAL NO. of Pieces Received at Post Office™	Affix Stamp Here ***Postmark with Date of Receipt.***
Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103	3	3	neopost 02/09/2022 US POSTAGE $002.99⁰ ZIP 06103 041L12203937
	Postmaster, per *(name of receiving employee)*		

USPS® Tracking Number / Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.	Daniel Rosenthal, First Selectman Town of Newtown 8 Primrose Street Newtown, CT 06470				
2.	George Benson, Director of Planning Town of Newtown 8 Primrose Street Newtown, CT 06470				
3.	Erich and Patricia Gertsch 8 Ferris Road Newtown, CT 06470				
4.					
5.					
6.					

OLD STATE HOUSE STATION 06106 FEB 09 2022 USPS