Robinson+Cole

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Also admitted in Massachusetts
and New York

December 8, 2021

Via Electronic Mail

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

Re: **Notice of Exempt Modification – Facility Modification**
5 Exeter Drive (a/k/a 7 Exeter Drive), Sterling, Connecticut

Dear Attorney Bachman:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains an existing wireless telecommunications facility at the above-referenced property address (the "Property"). The facility consists of antennas and remote radio heads attached to a tower and related equipment on the ground, near the base of the tower. The tower and Cellco's use of the tower were approved by the Siting Council ("Council") in February of 2008 (Docket No 345). A copy of the Council's Docket No. 345 Decision and Order is included in Attachment 1.

Cellco now intends to modify its facility by removing nine (9) existing antennas and installing three (3) new Samsung MT6407-77A antennas, three (3) BXA-70063-6CF antennas, and six (6) JAHH-65B-R3B antennas. Cellco also intends to install six (6) remote radio heads ("RRHs"). All new equipment will be installed on Cellco's existing antenna mounts. A set of project plans showing Cellco's proposed facility modifications and specification 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 the Town's Chief Executive Officer and Land Use Officer. The Town of Sterling is the Property Owner.

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

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

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

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

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

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

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

A copy of the parcel map and Property owner information is included in Attachment 5. A Certificate of Mailing verifying that this filing was sent to municipal officials 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:
Lincoln Cooper, First Selectman
Melissa Gil, Zoning Enforcement Officer
Karla Hanna, Verizon Wireless

ATTACHMENT 1

DOCKET NO. 345 - MCF Communications bg, Inc. and Cellco Partnership d/b/a Verizon Wireless application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located off Exeter Drive in Sterling, Connecticut.	}	Connecticut Siting Council February 14, 2008

Decision and Order

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, operation, and maintenance of a telecommunications facility, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate, either alone or cumulatively with other effects, when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application, and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by General Statutes § 16-50k, be issued to MCF Communications bg, Inc. (MCF) and Cellco Partnership d/b/a Verizon Wireless (Verizon Wireless), hereinafter referred to as the Certificate Holder, for a telecommunications facility at Exeter Drive, Sterling, Connecticut.

The facility shall be constructed, operated, and maintained substantially as specified in the Council's record in this matter, and subject to the following conditions:

1. The tower shall be constructed as a monopole, no taller than necessary to provide the proposed telecommunications services, sufficient to accommodate the antennas of Verizon Wireless and other entities, both public and private, but such tower shall not exceed a height of 140 feet above ground level. The height at the top of the Certificate Holder's antennas shall not exceed 140 feet above ground level.

2. Such tower shall incorporate a yield point to eliminate the potential fall radius onto the adjacent property and Exeter Drive.

3. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. The D&M Plan shall be served on the Town of Sterling for comment, and all parties and intervenors as listed in the service list, and submitted to and approved by the Council prior to the commencement of facility construction and shall include:
    a) a final site plan(s) of site development to include specifications for the tower, tower foundation, antennas, equipment compound, radio equipment, access road, utility line; and
    b) construction plans for site clearing, grading, water drainage, and erosion and sedimentation controls consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended.

4. The Certificate Holder shall, prior to the commencement of operation, provide the Council worst-case modeling of the electromagnetic radio frequency power density of all proposed entities' antennas at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin No. 65, August 1997. The Certificate Holder shall ensure a recalculated report of the electromagnetic radio frequency power density be submitted to the Council if and when circumstances in operation cause a change in power density above the levels calculated and provided pursuant to this Decision and Order.

5. Upon the establishment of any new State or federal radio frequency standards applicable to frequencies of this facility, the facility granted herein shall be brought into compliance with such standards.

6. The Certificate Holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.

7. The Certificate Holder shall provide reasonable space on the tower for no compensation for any Town of Sterling public safety services (police, fire and medical services), provided such use can be accommodated and is compatible with the structural integrity of the tower.

8. Unless otherwise approved by the Council, if the facility authorized herein is not fully constructed and providing wireless services within eighteen months from the date of the mailing of the Council's Findings of Fact, Opinion, and Decision and Order (collectively called "Final Decision"), this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made. The time between the filing and resolution of any appeals of the Council's Final Decision shall not be counted in calculating this deadline.

9. Any request for extension of the time period referred to in Condition 8 shall be filed with the Council not later than 60 days prior to the expiration date of this Certificate and shall be served on all parties and intervenors, as listed in the service list, and the Town of Sterling. Any proposed modifications to this Decision and Order shall likewise be so served.

10. If the facility ceases to provide wireless services for a period of one year, this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made.

11. The Certificate Holder shall remove any nonfunctioning antenna, and associated antenna mounting equipment, within 60 days of the date the antenna ceased to function.

12. In accordance with Section 16-50j-77 of the Regulations of Connecticut State Agencies, the Certificate Holder shall provide the Council with written notice two weeks prior to the commencement of site construction activities. In addition, the Certificate Holder shall provide the Council with written notice of the completion of site construction and the commencement of site operation.

Pursuant to General Statutes § 16-50p, the Council hereby directs that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below, and notice of issuance shall be published in the Norwich Bulletin and The Hartford Courant.

By this Decision and Order, the Council disposes of the legal rights, duties, and privileges of each party named or admitted to the proceeding in accordance with Section 16-50j-17 of the Regulations of Connecticut State Agencies.

The parties and intervenors to this proceeding are:

Applicant	**Its Representative**
MCF Communications bg, Inc. and Cellco Partnership d/b/a Verizon Wireless	Kenneth C. Baldwin, Esq. Robinson and Cole LLP Hartford, CT 06103-3597 (860) 275-8200 Brad Gannon MCF Communications bg, Inc. 733 Turnpike Street, Suite 105 North Andover, MA 01845 Sandy Carter Regulatory Manager Verizon Wireless 99 East River Drive East Hartford, CT 06108

ATTACHMENT 2

STERLING_CT

7 EXETER DRIVE
STERLING, CT 06377
SBA SITE I.D.#: CT11560

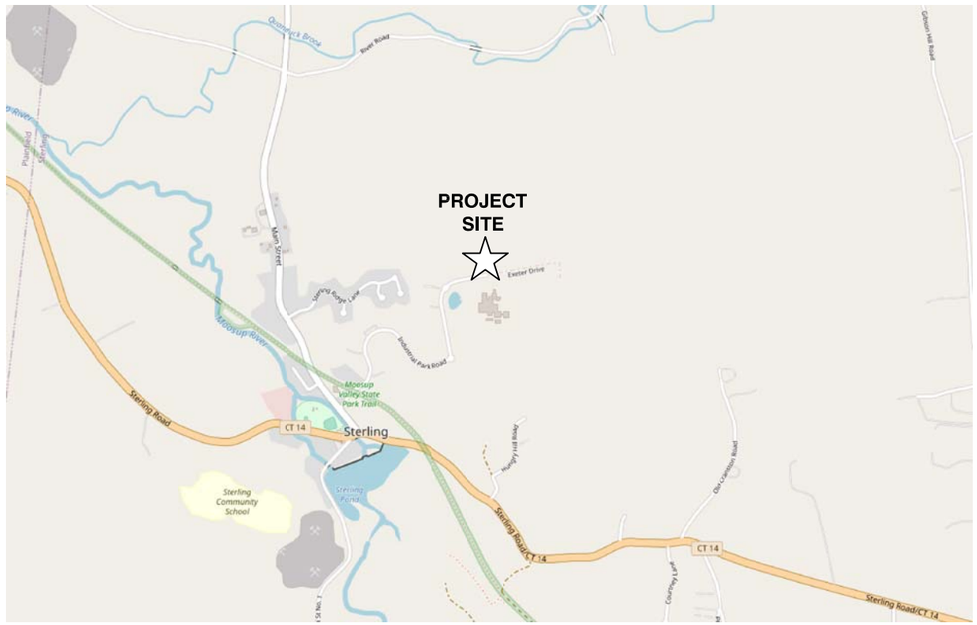
LOCATION CODE (PSLC): 468461
FUZE ID: 16281619
EQUIPMENT UPGRADE PROJECT
RFDS DATE: 11/03/21

PROJECT SUMMARY

SCOPE OF WORK:	EXISTING TELECOMMUNICATIONS FACILITY EQUIPMENT ALTERATION
SITE NAME:	STERLING_CT
LOCATION CODE (PSLC):	468461
FUZE PROJECT ID:	16281619
SITE ADDRESS:	7 EXETER DRIVE STERLING, CT 06377
LATITUDE:	41.714028 N (RFDS)
LONGITUDE:	−71.822722 W (RFDS)
FACILITY:	SBA MONOPOLE SBA SITE I.D.#: CT11560
APPLICANT, LESSEE/LICENSEE, PROJECT OWNER:	CELLCO PARTNERSHIP dba VERIZON WIRELESS 118 FLANDERS ROAD THIRD FLOOR WESTBOROUGH, MA 01581
ENGINEER:	PROTERRA DESIGN GROUP, LLC 4 BAY ROAD BUILDING A, SUITE 200 HADLEY, MA 01035

SHEET INDEX

LOCATION MAP



N

IMAGE SOURCE: OPENSTREETMAP

GENERAL NOTES

1. VERIFY COAX CONFIGURATION, ANTENNA CONFIGURATION, AND ANTENNA HEIGHT WITH LATEST RF DATA SHEET PRIOR TO INSTALLATION.
2. THE CONTRACTOR SHALL SCHEDULE AND SEQUENCE ALL REQUIRED WORK WITH THE OWNER'S REPRESENTATIVE AND CONSTRUCTION MANAGER.
3. REPAIR ANY DAMAGE DURING CONSTRUCTION TO MATCH EXISTING PRE−CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE CONSTRUCTION MANAGER
4. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES FOR THE WORK.
5. ANTENNAS TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS, GLOBAL STRUCTURAL ANALYSIS, AND LOCAL ANTENNA MOUNT ANALYSIS INCLUDING ANTENNA MOUNT MODIFICATIONS AND STRUCTURAL AUGMENTS AS APPLICABLE.
6. REPLACE AND/OR REUSE (E) MOUNTING HARDWARE, INSPECT FOR DAMAGE, AND REPLACE AS NECESSARY TO THE SATISFACTION OF THE ENGINEER.
7. EQUIPMENT LOCATIONS AND CONDITIONS TO BE FIELD VERIFIED PRIOR TO COMMENCEMENT OF CONSTRUCTION. ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES OR BE RESPONSIBLE FOR THE SAME.
8. NORTH SHOWN IS APPROXIMATE. NOT ALL (E) OR (P) IMPROVEMENTS REQUIRED MAY BE SHOWN FOR CLARITY.
9. ANTENNA ELEVATIONS SHALL BE PER ZONING OR AS APPROVALS DICTATE.
10. THESE CONSTRUCTION DRAWINGS ARE CONTINGENT UPON A PASSING GLOBAL STRUCTURAL ANALYSIS INCLUDING THE INSTALLATION OF ANY REQUIRED MODIFICATIONS AND INSPECTION REPORTS AS A RESULT THEREIN.

STRUCTURAL NOTES

GLOBAL TOWER STRUCTURAL ANALYSIS REPORT:

PASSING REPORT − NO MODIFICATIONS REQUIRED
BY TOWER ENGINEERING SOLUTIONS DATED 11/18/21.

LOCAL ANTENNA MOUNT ANALYSIS REPORT:

MOUNT MODIFICATIONS REQUIRED − PER PASSING REPORT & MODIFICATION DRAWINGS
BY MASER CONSULTING DATED 11/09/21

CONTRACTOR MOUNT POST MODIFICATION INSPECTION (PMI) REPORT REQUIREMENTS

PMI ONLINE ACCESS:	https://pmi.vzwsmart.com
SMART TOOL VENDOR PROJECT NUMBER:	10063411
VzW LOCATION CODE (PSLC):	468461

*** PMI AND REQUIREMENTS ALSO EMBEDDED IN ANTENNA MOUNT ANALYSIS REPORT BY MASER CONSULTING DATED 11/09/21.

MOUNT MODIFICATIONS REQUIRED (Y/N): **YES**

VZW APPROVED SMART KIT VENDORS

REFER TO MOUNT MODIFICATION DRAWINGS PAGE FOR VzW SMART KIT APPROVED VENDORS

verizon
118 FLANDERS ROAD
THIRD FLOOR
WESTBOROUGH, MA 01581

PREPARED BY:
ProTerra DESIGN GROUP, LLC
4 Bay Road, Bldg A
Suite 200
Hadley, MA 01035
Ph:(413)320−4918

REVISIONS

REV	DATE	DESCRIPTION	BY	CHK	APP'D
0	05/20/21	PER RFDS DATED 03/02/21	TBD	JWG	JMM
1	06/21/21	PER RFDS DATED 03/02/21	TBD	JWG	JMM
2	07/07/21	PER RFDS DATED 06/18/21	TBD	JWG	JMM
3	08/13/21	PER RFDS DATED 07/15/21	TBD	JWG	JMM
4	11/11/21	PER RFDS DATED 11/03/21	TBD	JWG	JMM
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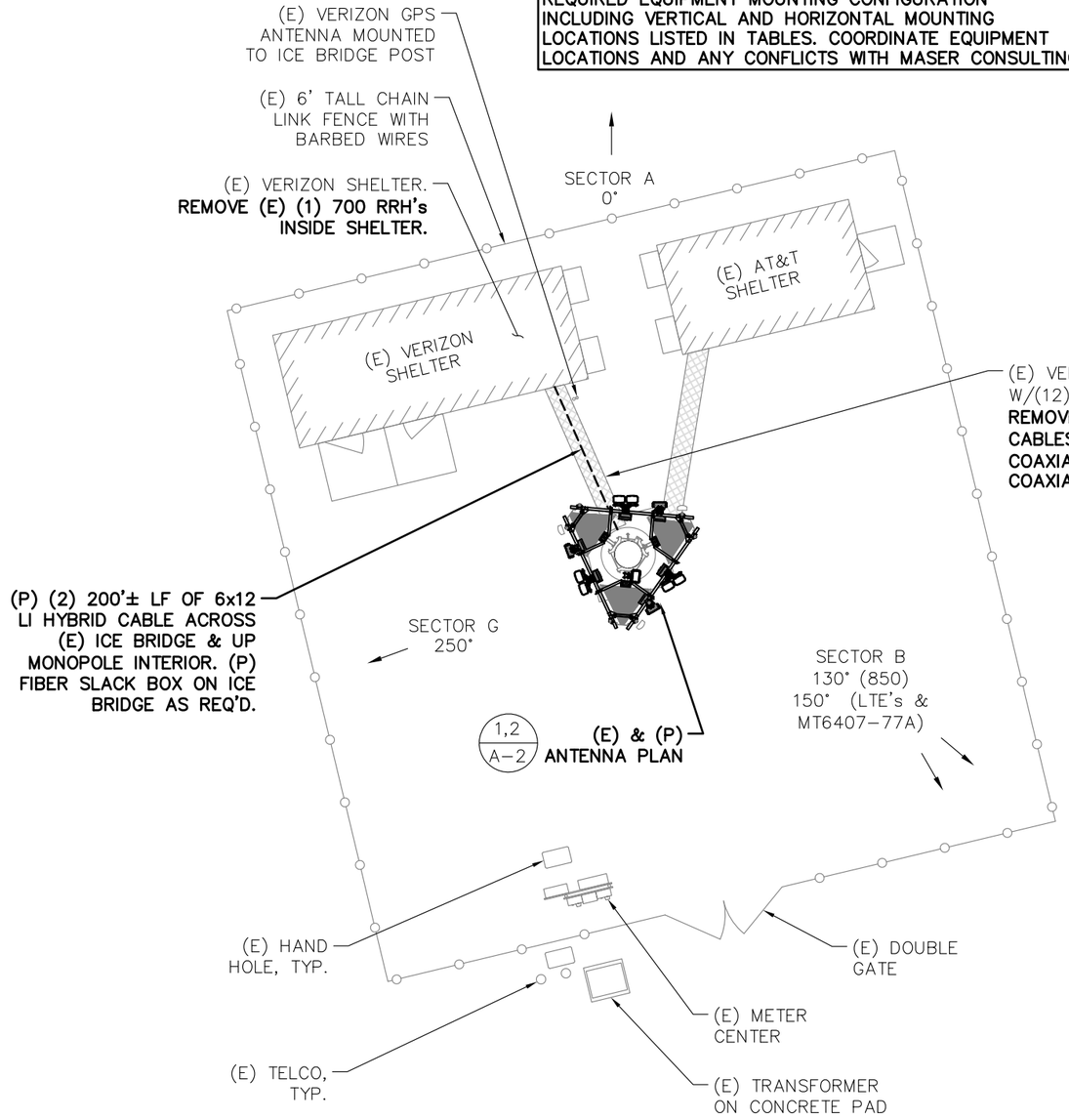
STATE OF CONNECTICUT
JESSE M. MORENO
No. 24389
LICENSED PROFESSIONAL ENGINEER
12-6-2021

STERLING_CT
7 EXETER DRIVE
STERLING, CT 06377
FUZE PROJECT ID: 16281619
SBA SITE I.D.#: CT11560

T-1

NOTE: AGL ELEVATIONS SHOWN HEREON FOR GENERAL REFERENCE ONLY, REFER TO LOCAL ANTENNA MOUNT ANALYSIS BY MASER CONSULTING AND SHEET X-1 FOR REQUIRED EQUIPMENT MOUNTING CONFIGURATION INCLUDING VERTICAL AND HORIZONTAL MOUNTING LOCATIONS LISTED IN TABLES. COORDINATE EQUIPMENT LOCATIONS AND ANY CONFLICTS WITH MASER CONSULTING.



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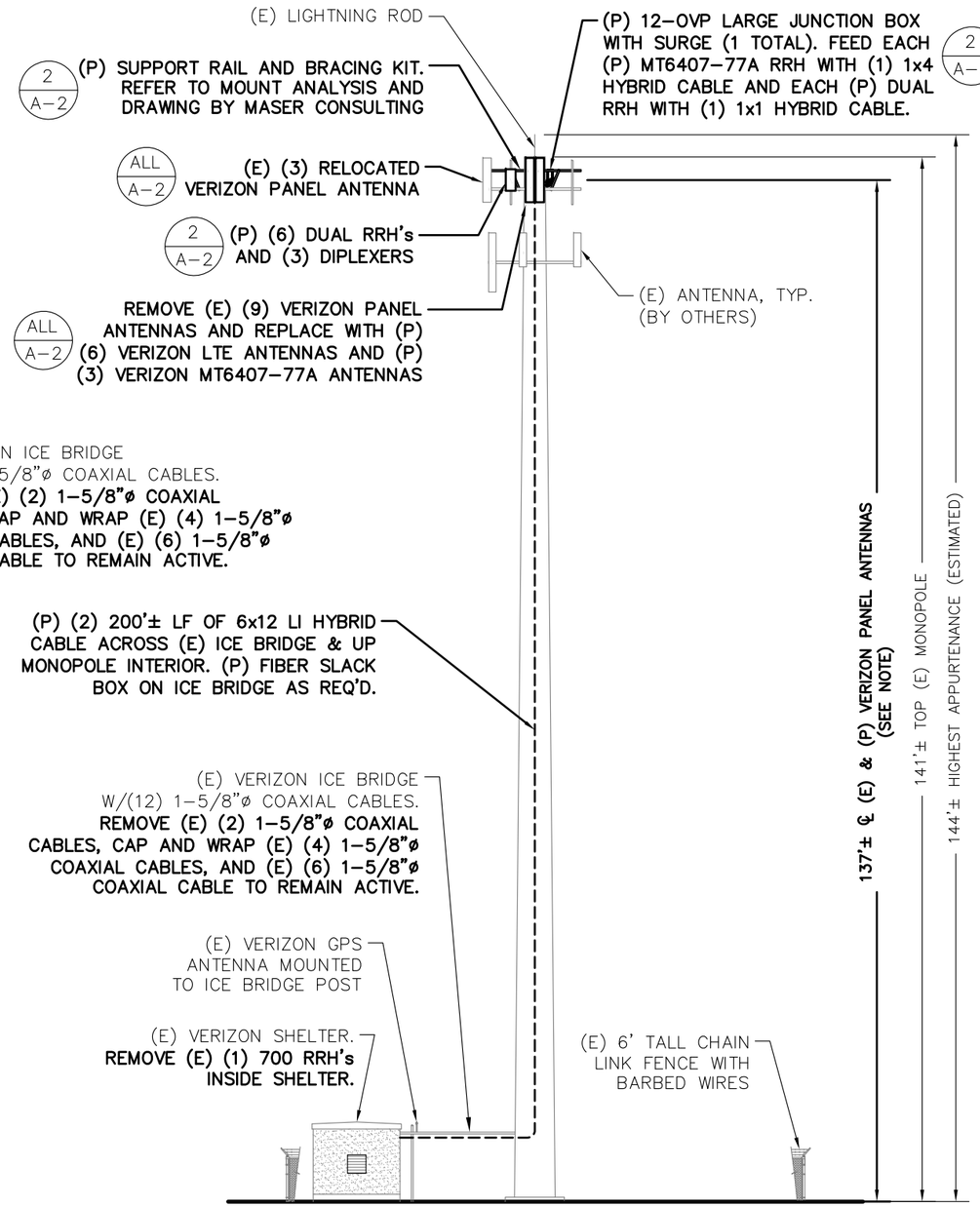
COMPOUND PLAN

1 / A-1

SCALE: 1"=15' (11x17)

15 7.5 0 15



SOUTHWEST ELEVATION

2 / A-1

SCALE: 1"=20' (11x17)

20 10 0 20

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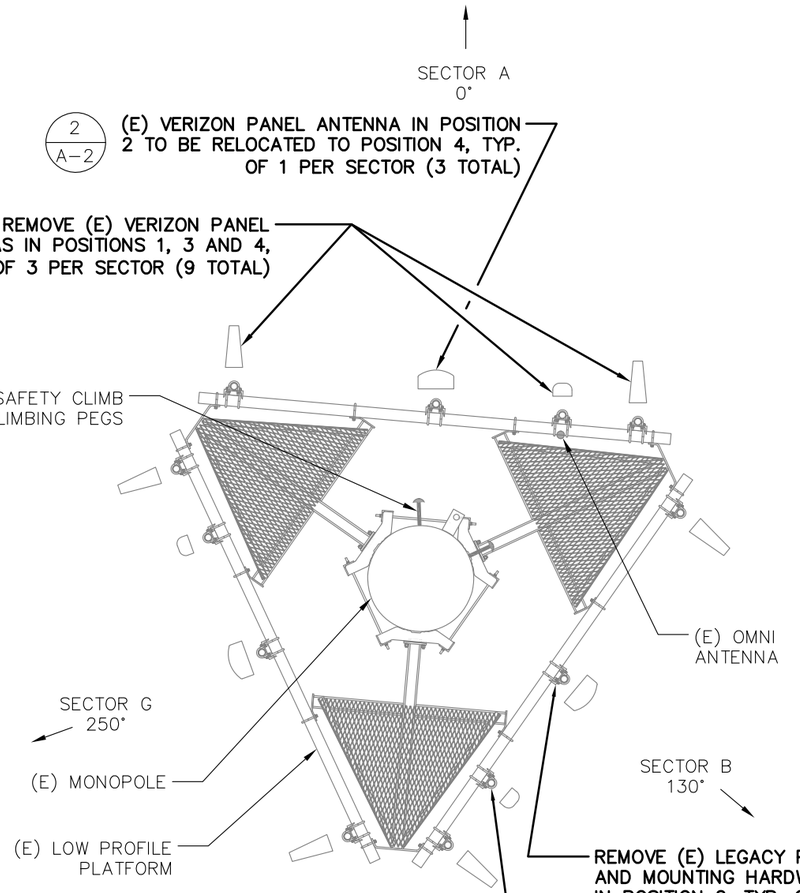
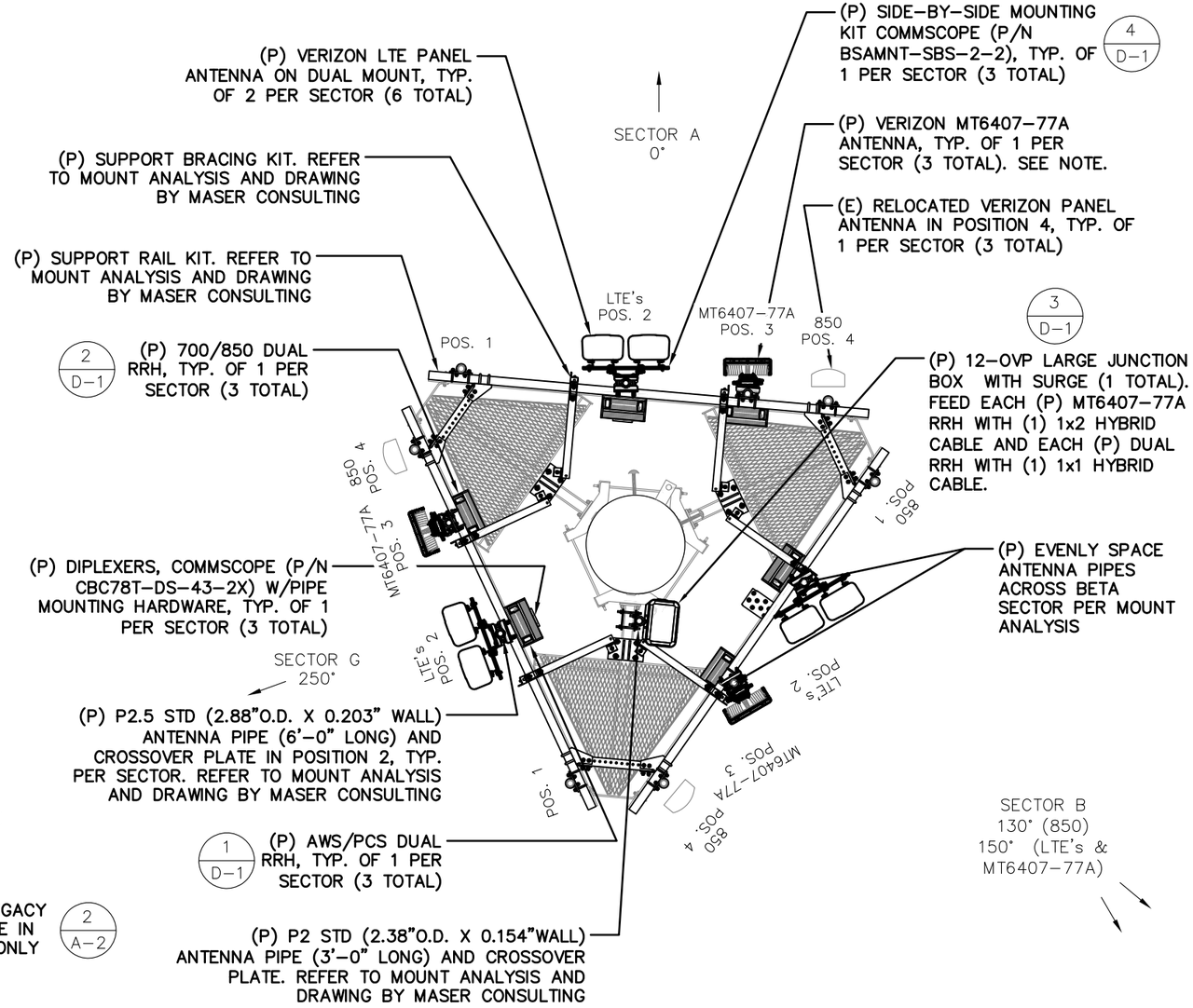
A-1





N

(E) ANTENNA PLAN

1
A-2

SCALE: 1"=4'

4 2 0 4

N

(P) ANTENNA PLAN

2
A-2

SCALE: 1"=4'

4 2 0 4

NOTE: AT TIME OF PUBLICATION, THE DESIGN OF THE VERIZON MT6407-77A ANTENNA WAS NOT FINALIZED. BASED UPON DIRECTIVE BY VERIZON WIRELESS, FOR DESIGN PURPOSES THE PROPOSED EQUIPMENT HAS BEEN CONSIDERED TO BE A MAXIMUM SIZE NOT TO EXCEED 35.1"±H x 16.1"±W x 5.6"±D AND WEIGH APPROXIMATELY 87.1±LBS. IF ANY OF THESE PARAMETERS ARE EXCEEDED BY THE EQUIPMENT THE ENGINEER(S) SHALL BE NOTIFIED TO REVISE THE DRAWINGS, STRUCTURAL ANALYSIS, AND MOUNT ANALYSIS.

verizon

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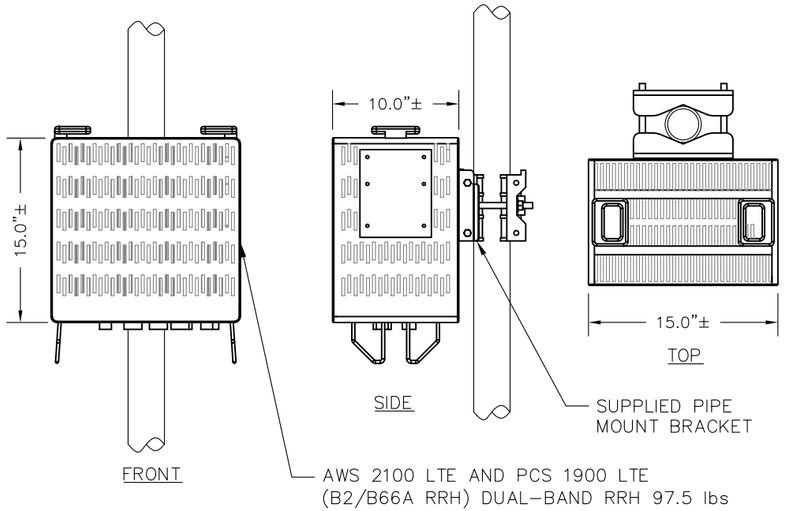
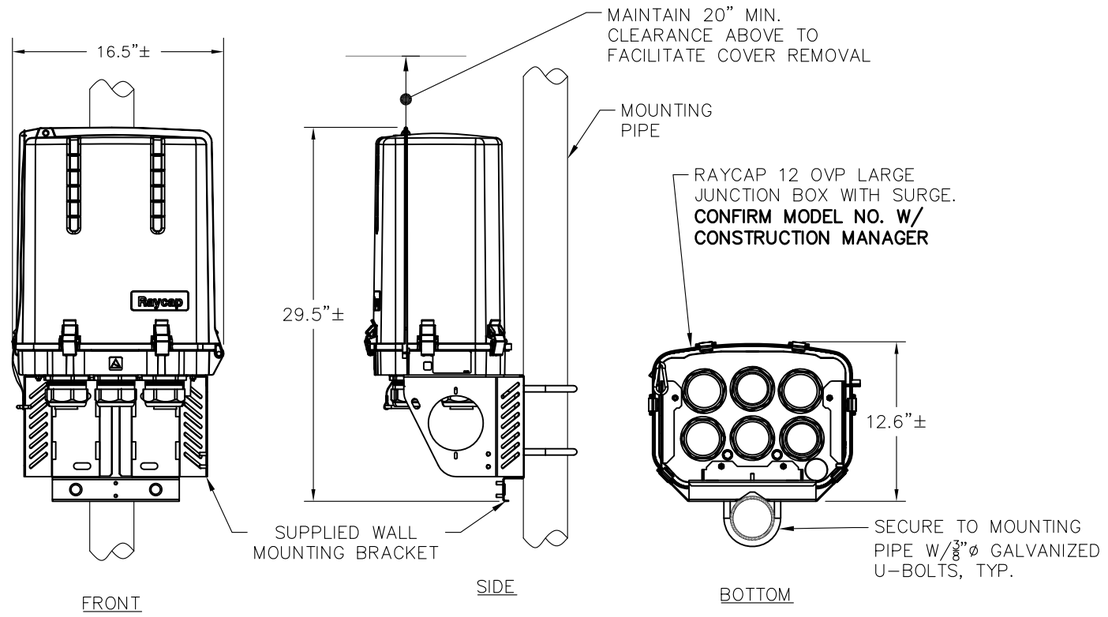
A-2



(P) AWS/PCS RRH MOUNTING DETAIL

SCALE: NONE

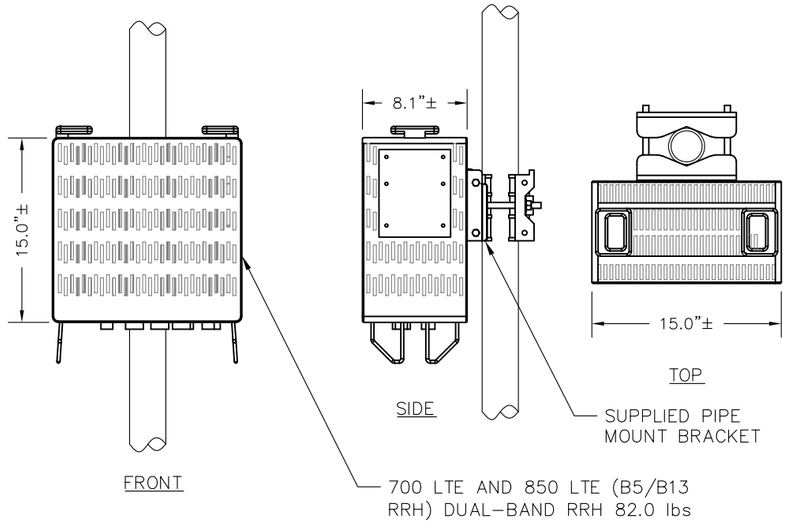
1 / D-1



(P) LARGE JUNCTION BOX MOUNTING DETAIL

SCALE: NONE

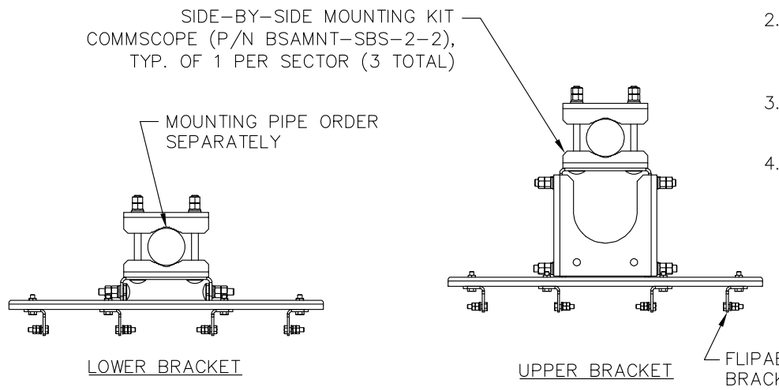
3 / D-1



(P) 700/850 RRH MOUNTING DETAIL

SCALE: NONE

2 / D-1



INSTALLATION 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. INSTALL EQUIPMENT AND MOUNTING BRACKETS TO PRESERVE CLIMBING ACCESS ON TOWER.
4. EQUIPMENT TO BE INSTALLED AT VERIZON RAD. CENTER IN ACCORDANCE WITH GLOBAL TOWER STRUCTURAL ANALYSIS AND MOUNT ANALYSIS (BY OTHERS).

(P) DUAL ANTENNA MOUNTING DETAIL

SCALE: NONE

4 / D-1

verizon

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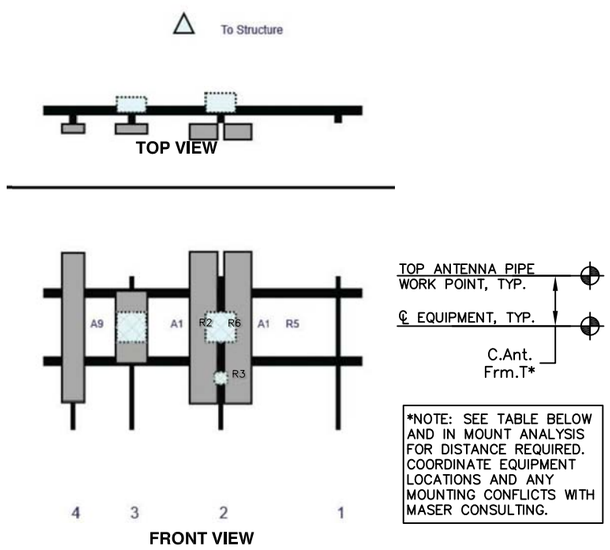
SBA SITE I.D.#: CT11560

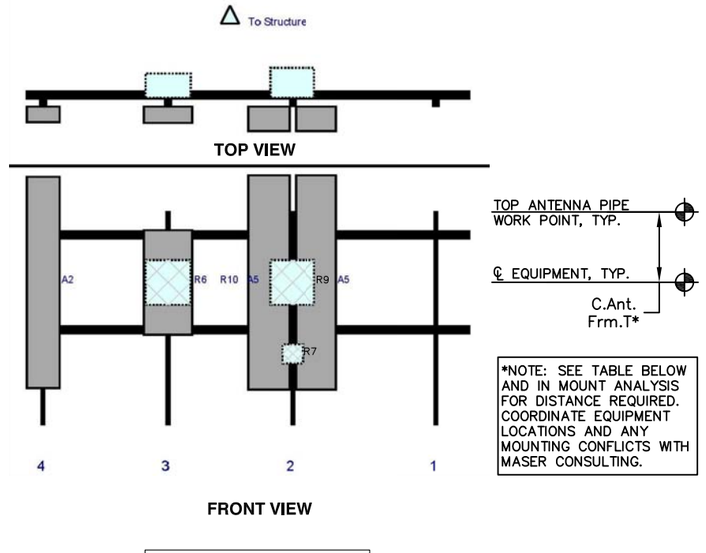
D-1

ANTENNA LAYOUT SCHEMATIC RENDERINGS SHOWN HEREON PROVIDED BY OTHERS

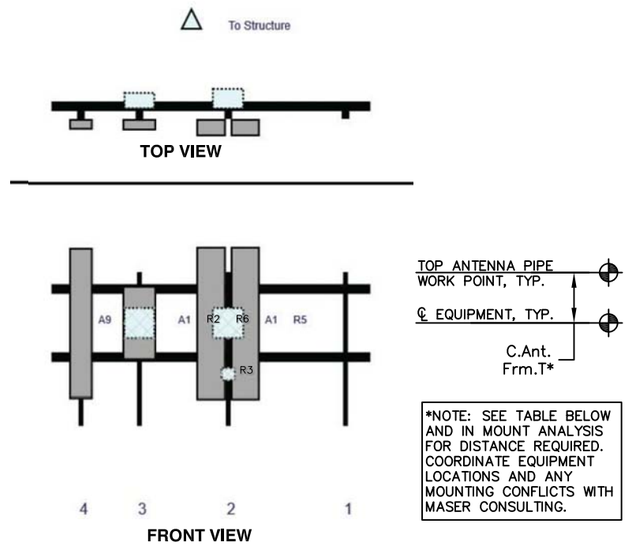
REFER TO ANTENNA MOUNT ANALYSIS REPORT BY MASER CONSULTING DATED 11/09/21 AND MODIFICATION DRAWINGS DATED 11/09/21 FOR ADDITIONAL DETAIL



ALPHA



BETA



GAMMA

ALPHA

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
A1	JAHH-65B-R3B	72	13.8	83	2	a	Front	24	8	Added	
A1	JAHH-65B-R3B	72	13.8	83	2	b	Front	24	-8	Added	
R3	CBC78T-DS-43-2X	6.4	6.9	83	2	a	Behind	48	0	Added	
R5	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	83	2	a	Behind	24	0	Added	
R2	MT6407-77A	35.1	16.1	41.5	3	a	Front	24	0	Added	
R6	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	41.5	3	a	Behind	24	0	Added	
A9	BXA-70063-6CF-2	71	11.2	14	4	a	Front	24	0	Added	

BETA

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
A5	JAHH-65B-R3B	72	13.8	90	2	a	Front	24	8	Added	
A5	JAHH-65B-R3B	72	13.8	90	2	b	Front	24	-8	Added	
R7	CBC78T-DS-43-2X	6.4	6.9	90	2	a	Behind	48	0	Added	
R9	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	90	2	a	Behind	24	0	Added	
R6	MT6407-77A	35.1	16.1	48	3	a	Front	24	0	Added	
R10	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	48	3	a	Behind	24	0	Added	
A2	BXA-70063-6CF-2	71	11.2	6	4	a	Front	24	0	Added	

GAMMA

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
A1	JAHH-65B-R3B	72	13.8	83	2	a	Front	24	8	Added	
A1	JAHH-65B-R3B	72	13.8	83	2	b	Front	24	-8	Added	
R3	CBC78T-DS-43-2X	6.4	6.9	83	2	a	Behind	48	0	Added	
R5	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	83	2	a	Behind	24	0	Added	
R2	MT6407-77A	35.1	16.1	41.5	3	a	Front	24	0	Added	
R6	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	41.5	3	a	Behind	24	0	Added	
A9	BXA-70063-6CF-2	71	11.2	14	4	a	Front	24	0	Added	

CONTRACTOR MOUNT POST MODIFICATION INSPECTION (PMI) REPORT REQUIREMENTS

PMI ONLINE ACCESS: https://pmi.vzwsmart.com

SMART TOOL VENDOR PROJECT NUMBER: 10063411

VzW LOCATION CODE (PSLC): 468461

*** PMI AND REQUIREMENTS ALSO EMBEDDED IN ANTENNA MOUNT ANALYSIS REPORT BY MASER CONSULTING DATED 11/09/21.

MOUNT MODIFICATIONS REQUIRED (Y/N): **YES**

VZW APPROVED SMART KIT VENDORS

REFER TO MOUNT MODIFICATION DRAWINGS PAGE FOR VzW SMART KIT APPROVED VENDORS

verizon
118 FLANDERS ROAD
THIRD FLOOR
WESTBOROUGH, MA 01581

PREPARED BY:
ProTerra DESIGN GROUP, LLC
4 Bay Road, Bldg A
Suite 200
Hadley, MA 01035
Ph:(413)320-4918

REVISIONS

REV	DATE	DESCRIPTION	BY	CHK	APP'D
0	05/20/21	PER RFDS DATED 03/02/21	TBD	JWG	JMM
1	06/21/21	PER RFDS DATED 03/02/21	TBD	JWG	JMM
2	07/07/21	PER RFDS DATED 06/18/21	TBD	JWG	JMM
3	08/13/21	PER RFDS DATED 07/15/21	TBD	JWG	JMM
4	11/11/21	PER RFDS DATED 11/03/21	TBD	JWG	JMM
5	12/06/21	PER RFDS DATED 11/03/21	TBD	JWG	JMM

RENDERINGS BY:
MASER CONSULTING
MT. LAUREL OFFICE
2000 MIDLANTIC DRIVE - SUITE 100
MOUNT LAUREL, NJ 08054
Phone: 856-797-0412

STERLING_CT
7 EXETER DRIVE
STERLING, CT 06377
FUZE PROJECT ID: 16281619
SBA SITE I.D.#: CT11560

X-1

SAMSUNG

Dual-Band Radio Unit
AWS/PCS (B66/B2)
RFV01U-D1A

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

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

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

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

Features and Benefits

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

Key Technical Specifications

Duplex Type: FDD
Operating Frequencies:
    B66: DL(2,110-2,180MHz)/UL(1,710-1,780MHz)
    B2: DL(1,930-1,990MHz)/UL(1,850-1,910MHz)
Instantaneous Bandwidth:
    70MHz(B66) + 60MHz(B2)
RF Chain: 4T4R/2T4R/2T2R
Output Power: Total 320W
DU-RU Interface: CPRI (10Gbps)
Dimensions: 380 x 380 x 255mm (36.8L)
Weight: 38.3kg
Input Power: -48V DC
Operating Temp.: -40 - 55°(w/o solar load)
Cooling: Natural convection

SAMSUNG

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

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

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

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

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

Features and Benefits

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

Key Technical Specifications

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

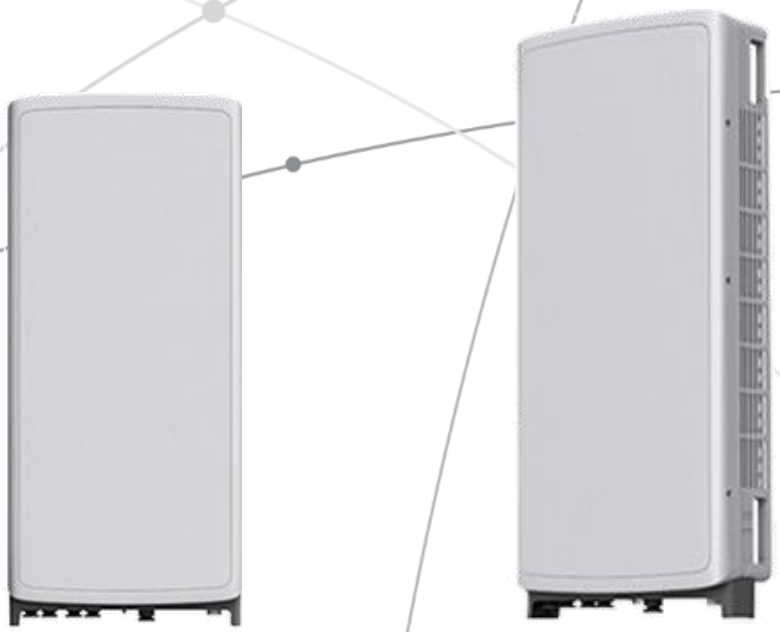
SAMSUNG

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

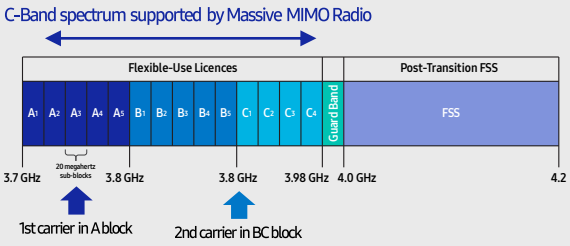


Points of Differentiation

Wide Bandwidth

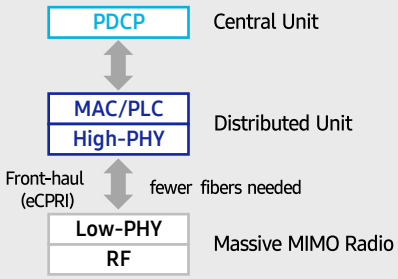
With capability to support up to 2 CC carrier configuration, Samsung C-Band massive MIMO Radio supports 200 MHz bandwidth in the C-Band spectrum.

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.

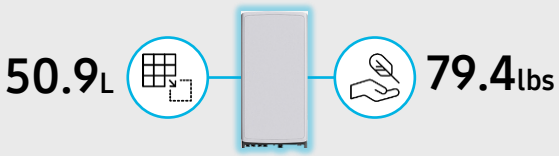
This helps operators reduce their CAPEX as they now need less products to cover the same area than before.

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

BXA-70063-6CF-EDIN-X

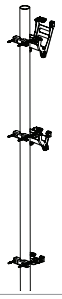
Single Band | Panel Antenna | X-Pol | 63° | 16.6 dBi | Fixed Tilt

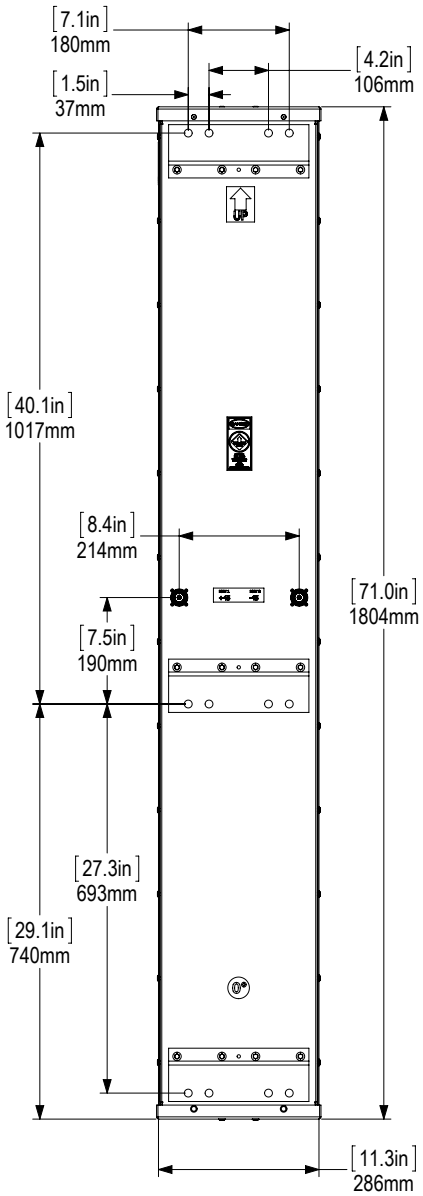
- Single band, panel antenna with fixed electrical tilt

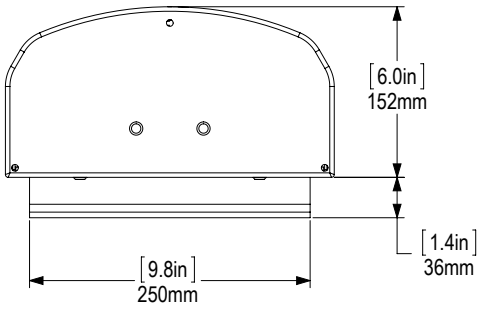
Ordering Options					
When ordering, replace the "X" in the model number with the electrical downtilt. Select from the options listed in the Electrical Downtilt section below.					
Electrical Characteristics		**696-900 MHz**			
Frequency Bands		696-806 MHz		806-900 MHz	
Polarization		±45°			
Horizontal Beamwidth		65°		63°	
Vertical Beamwidth		13°		11°	
Gain		16.1 dBi		16.6 dBi	
Electrical Downtilt		(X) 0, 2, 5			
Impedance		50Ω			
IM3 (2x20W carrier)		-147 dBc			
Upper Sidelobe Suppression (0°)		-18.3 dB		-18.2 dB	
Front-to-Back Ratio (±30°)		-33.4 dB		-36.3 dB	
VSWR		1.5:1			
Null Fill		5% (-26.02 dB)			
Isolation Between Ports		20 dB			
Input Power		500 W			
Total Number of Connectors		Antenna has 2 connectors located on the center (back) of the antenna			
Connectors Per Band	696-900 MHz	2 Connectors, Elongated 7/16-DIN Female (EDIN)			
Lightning Protection		Direct Ground			
Mechanical Characteristics					
Dimensions (Length x Width x Depth)		1804 x 286 x 152	mm	71.0 x 11.3 x 6.0	in
Depth with z-brackets		188	mm	7.4	in
Weight without Mounting Brackets		7.9	kg	17	lbs
Wind Area	Front	0.52	m²	5.6	ft²
	Side	0.45	m²	4.8	ft²
Survival Wind Speed		> 201	km/hr	> 125	mph
Wind Load (161 km/hr or 100 mph)	Front	741	N	167	lbf
	Side	526	N	118	lbf

BXA-70063-6CF-EDIN-X

Single Band | Panel Antenna | X-Pol | 63° | 16.6 dBi | Fixed Tilt

Mounting Options	Part Number	Image	Fits Pipe Diameter	Weight
All mounting bracket kits are ordered separately unless otherwise indicated. Select from the options listed below.				
3-Point Mounting and Downtilt Bracket Kit	36210008		40-115 mm 1.57-4.5 in	6.9 kg 15.2 lbs



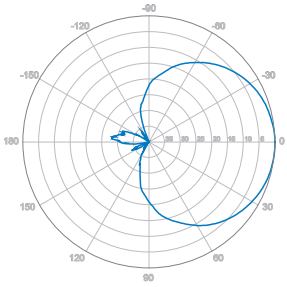


Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.

BXA-70063-6CF-EDIN-X

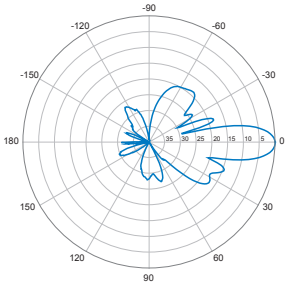
Single Band | Panel Antenna | X-Pol | 63° | 16.6 dBi | Fixed Tilt

BXA-70063-6CF-EDIN-X



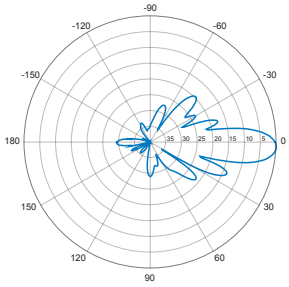
Horizontal | 750 MHz

BXA-70063-6CF-EDIN-0



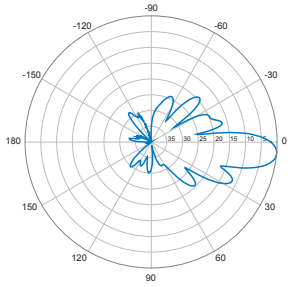
0° | Vertical | 750 MHz

BXA-70063-6CF-EDIN-2

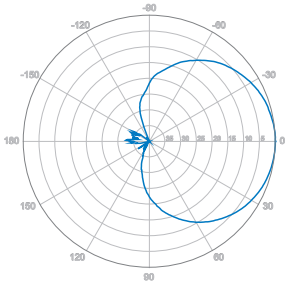


2° | Vertical | 750 MHz

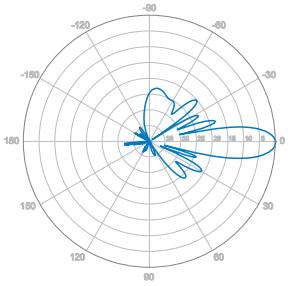
BXA-70063-6CF-EDIN-5



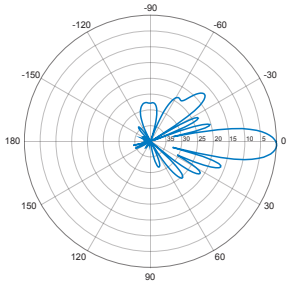
5° | Vertical | 750 MHz



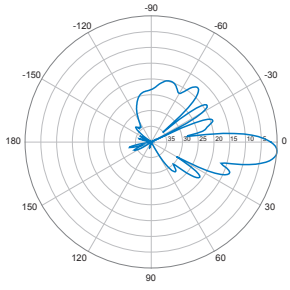
Horizontal | 850 MHz



0° | Vertical | 850 MHz

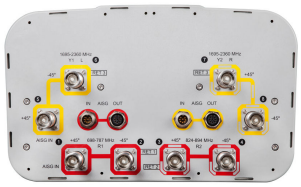


2° | Vertical | 850 MHz



5° | Vertical | 850 MHz

JAHH-65B-R3B



8-port sector antenna, 2x 698–787, 2x 824-894 and 4x 1695–2360 MHz, 65° HPBW, 3x RET and low bands have diplexers. Internal SBT's on first LB(Port 1) and first HB(Port 5).

- Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable
- One RET for 700MHz, one RET for 850MHz, and one RET for both high bands to ensure same tilt level for 4x Rx or 4x MIMO
- Internal filter on low band and interleaved dipole technology providing for attractive, low wind load mechanical package
- Separate RS-485 RET input/output for low and high band

General Specifications

Antenna Type	Sector
Band	Multiband
Color	Light gray
Effective Projective Area (EPA), frontal	0.28 m^2 | 3.014 ft^2
Effective Projective Area (EPA), lateral	0.24 m^2 | 2.583 ft^2
Grounding Type	RF connector body grounded to reflector and mounting bracket
Performance Note	Outdoor usage | Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
Radome Material	Fiberglass, UV resistant
Radiator Material	Aluminum | Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	4
RF Connector Quantity, low band	4
RF Connector Quantity, total	8

Remote Electrical Tilt (RET) Information, General

RET Interface	8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity	2 female | 2 male

Dimensions

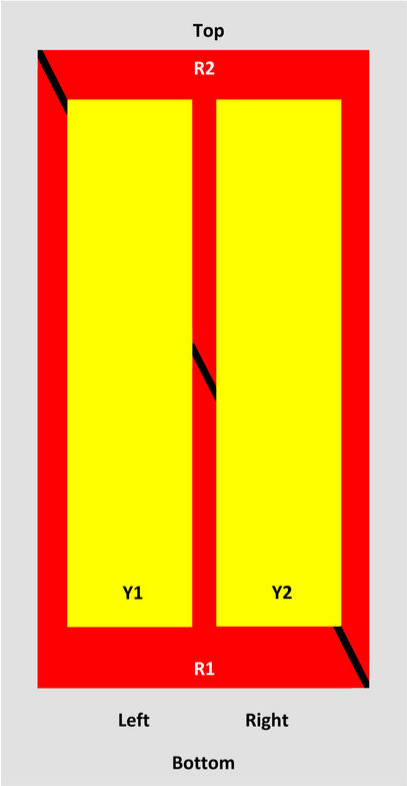
Width	350 mm | 13.78 in

JAHH-65B-R3B

Length	1828 mm | 71.969 in
Depth	208 mm | 8.189 in

Array Layout

JAHH-65A-R3B JAHH-65B-R3B JAHH-65C-R3B



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	698-798	1-2	1	ANxxxxxxxxxxxxxxx1
R2	824-894	3-4	2	ANxxxxxxxxxxxxxxx2
Y1	1695-2360	5-6	3	ANxxxxxxxxxxxxxxx3
Y2	1695-2360	7-8		

View from the front of the antenna

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

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2360 MHz | 698 – 787 MHz | 824 – 894 MHz
Polarization	±45°

Remote Electrical Tilt (RET) Information, Electrical

Protocol	3GPP/AISG 2.0 (Single RET)
Power Consumption, idle state, maximum	2 W

JAHH-65B-R3B

Power Consumption, normal conditions, maximum	13 W
Input Voltage	10–30 Vdc
Internal Bias Tee	Port 1 | Port 5
Internal RET	High band (1) | Low band (2)

Electrical Specifications

Frequency Band, MHz	**698–787**	**824–894**	**1695–1880**	**1850–1990**	**1920–2200**	**2300–2360**
Gain, dBi	14.5	15.8	18	18.4	18.5	18.8
Beamwidth, Horizontal, degrees	67	65	63	63	65	68
Beamwidth, Vertical, degrees	12.4	10.5	5.7	5.2	4.9	4.4
Beam Tilt, degrees	2–14	2–14	0–10	0–10	0–10	0–10
USLS (First Lobe), dB	18	18	20	20	21	23
Front-to-Back Ratio at 180°, dB	32	34	31	35	36	38
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	30	30	30	30	30	30
VSWR | Return loss, dB	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153
Input Power per Port at 50° C, maximum, watts	200	200	300	300	300	250

Electrical Specifications, BASTA

Frequency Band, MHz	**698–787**	**824–894**	**1695–1880**	**1850–1990**	**1920–2200**	**2300–2360**
Gain by all Beam Tilts, average, dBi	14.3	14.9	17.6	18.1	18.2	18.5
Gain by all Beam Tilts Tolerance, dB	±0.3	±0.5	±0.6	±0.4	±0.5	±0.6
Gain by Beam Tilt, average, dBi	2 ° | 14.3 8 ° | 14.3 14 ° | 14.3	2 ° | 15.0 8 ° | 14.9 14 ° | 15.4	0 ° | 17.2 5 ° | 17.6 10 ° | 17.6	0 ° | 17.6 5 ° | 18.2 10 ° | 18.2	0 ° | 17.7 5 ° | 18.3 10 ° | 18.3	0 ° | 17.9 5 ° | 18.7 10 ° | 18.7
Beamwidth, Horizontal Tolerance, degrees	±1.2	±1.4	±4	±2.4	±2.9	±2.7
Beamwidth, Vertical Tolerance, degrees	±0.9	±0.5	±0.3	±0.2	±0.3	±0.1
USLS, beampeak to 20° above beampeak, dB	18	17	17	18	19	18
Front-to-Back Total Power at 180° ± 30°, dB	25	24	26	29	27	29
CPR at Boresight, dB	22	23	20	21	21	24

JAHH-65B-R3B

CPR at Sector, dB	11	12	11	11	11	8

Mechanical Specifications

Wind Loading at Velocity, frontal	301.0 N @ 150 km/h | 67.7 lbf @ 150 km/h
Wind Loading at Velocity, lateral	254.0 N @ 150 km/h | 57.1 lbf @ 150 km/h
Wind Loading at Velocity, maximum	143.4 lbf @ 150 km/h | 638.0 N @ 150 km/h
Wind Speed, maximum	241 km/h | 149.75 mph

Packaging and Weights

Width, packed	456 mm | 17.953 in
Depth, packed	357 mm | 14.055 in
Length, packed	1975 mm | 77.756 in
Net Weight, without mounting kit	29.2 kg | 64.375 lb
Weight, gross	42.5 kg | 93.696 lb

Regulatory Compliance/Certifications

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

Included Products

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

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance

ATTACHMENT 3

	General	Power	Density					
Site Name: Sterling								
Tower Height: Verizon @ 137ft								
CARRIER	**# OF CHAN.**	**WATTS ERP**	**HEIGHT**	**FREQ.**	**CALC. POWER DENS**	**MAX. PERMISS.EXP.**	**FRACTION MPE**	**Total**
*AT&T	1	565	130	880	0.01321445	0.586666667	0.002252463	
*AT&T	1	2951	130	700	0.069019191	0.466666667	0.014789827	
*AT&T	2	3664	130	1900	0.171390251	1	0.017139025	
*AT&T	1	1476	130	700	0.03452129	0.466666667	0.007397419	
*AT&T	1	1000	130	850	0.023388408	0.566666667	0.004127366	
*AT&T	1	5070	130	2100	0.118579226	1	0.011857923	
*AT&T	1	1000	130	850	0.023388408	0.566666667	0.004127366	
VZW 700	**4**	**628**	**137**	**751**	**0.0048**	**0.5007**	**0.96%**	
VZW CDMA	**2**	**499**	**137**	**877.26**	**0.0019**	**0.5848**	**0.33%**	
VZW Cellular	**4**	**725**	**137**	**874**	**0.0056**	**0.5827**	**0.95%**	
VZW PCS	**4**	**1592**	**137**	**1977.5**	**0.0122**	**1.0000**	**1.22%**	
VZW AWS	**4**	**1493**	**137**	**2120**	**0.0114**	**1.0000**	**1.14%**	
VZW CBAND	**2**	**6531**	**137**	**3730.08**	**0.0250**	**1.0000**	**2.50%**	
								13.28%
* 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 140 ft Nudd Corporation Monopole
Customer Name: SBA Communications Corp
Customer Site Number: CT11560-A
Customer Site Name: Sterling 6, CT
Carrier Name: Verizon (App#: 152549, V#5)
Carrier Site ID / Name: 468461 / STERLING CT
Site Location: 7 Exeter Drive,
Sterling, Windham County,
CT 06377, Connecticut
Latitude: 41.714047
Longitude: -71.822735

Analysis Result:

Max Structural Usage: 80.7% [Pass]
Max Foundation Usage: 41.0% [Pass]
Additional Usage Caused by Mount Modification: +1.67%

Report Prepared By: Ikram Hasan Efaz

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Max Foundation Usage: 41.0% [Pass]

Additional Usage Caused by Mount Modification: +1.67%

Report Prepared By: Ikram Hasan Efaz

Introduction

The purpose of this report is to summarize the analysis results on the 140 ft Nudd Corporation 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	Fred A. Nudd, Corp. Dated 03-17-2008. Drawing No 308-13078-1. Project No 308-13078.
Foundation Drawing	Fred A. Nudd, Corp. Dated 03-17-2008. Drawing No 308-13078-2. Project No 308-13078.
Geotechnical Report	Fred A. Nudd, Corp. Dated 03-17-2008. Drawing No 308-13078-1. Project No 308-13078
Modification Drawings	N/A
Mount Analysis	Mount Analysis by Maser Consulting Connecticut Project #:21777642A (Rev. 3), Dated 11/09/2021. Mount Modification Drawings by Maser Consulting Connecticut, Project #:21777642A, Dated 11/10/2021

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} = 131 mph (3-Sec. Gust)/ Nominal Design Wind Speed V_{asd} = 101.0 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:	B
Structure Class:	II
Topographic Category:	1
Crest Height:	0 ft
Seismic Parameters:	S_S = 0.17, S_1 = 0.061

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
-	137.0	2	Antel- BXA-70080/6CF- Panel	Low Profile Platform	(2) 1 5/8" (10) 1 5/8" (1) 1 5/8" Hybrid (1) 1/2''	Verizon
-		4	Antel- BXA-70063/6CF- Panel			
-		6	Commscope- HBXX-6517DS-A2M- Panel			
-		6	Rfs Celwave- FD9R6004- Diplexer			
-		3	Alcatel Lucent- RRH 2X60-AWS- RRU			
-		3	Alcatel-Lucent- RRH 2X60-PCS- RRU			
-		1	Rfs Celwave- DB-T1-6Z-8AB-0Z- OVp Box			
8	130.0	6	Powerwave LGP21901 - Diplexer	(1) Modified Low Profile Platform (Valmont LWRM) W/ (1) SitePro1 HRK12 (Handrail Kit), (3) 2 1/2" standard (Pipe Masts) & (3) SitePro1 SCX4-K (Crossover Plate Kit)	(12) 1 5/8" (2) 1" DC Power (1) 7/16" Fiber	AT&T
9		6	Powerwave 7770.00 - Panel			
10		6	Powerwave LGP21401 - TMA			
11		1	Raycap-DC6-48-60-18-8F-OVP			
12		3	Cci HPA-65R-BU8AA - Panel			
13		3	Cci DMP65R-BU8DA - Panel			
14		6	Powerwave LGP17201 TMA			
15		3	Ericsson RRUS 8843 B2 B66A			
16		3	Ericsson RRUS 4449 B5/B12			

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
1	137.0	3	Samsung B5/B13 RRH-BR04C	(1) Low Profile Platform w/Handrails+ Kicker support	(10) 1 5/8" (2) 1 5/8" Hybrid	Verizon
2		3	Samsung B2/B66A RRH-BR049			
3		1	Raycap OVP-12			
4		3	Antel BXA-70063-6CF-2- Panel			
5		6	Andrew JAHH-65B-R3B - Panel			
6		3	Samsung MT6407-77A - Panel			
7		3	Commscope CBC78T-DS-43-2X			

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:	**37.9%**	**45.2%**	**80.7%**
Pass/Fail	**Pass**	**Pass**	**Pass**

Foundations

	Moment (Kip-Ft)	Shear (Kips)	Axial (Kips)
Analysis Reactions	2571.2	25.7	48.4

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 0.4250 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 37.97% at 25.0ft

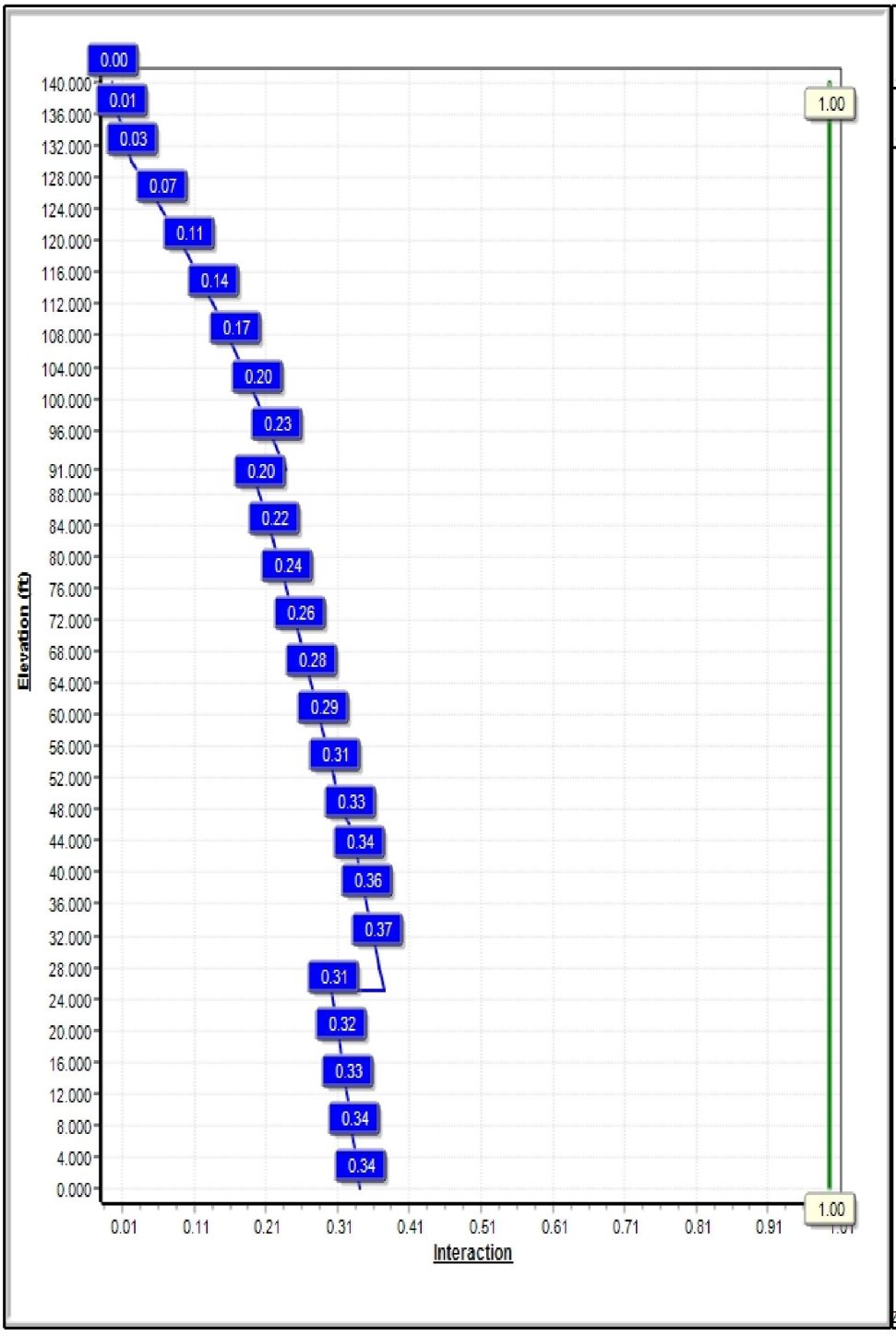
Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021
Site Name:	Sterling 6, CT	**Exposure:**	B	
Height:	140.00 (ft)	**Gh:**	1.1	
Base Elev:	1.000 (ft)			Page: 1

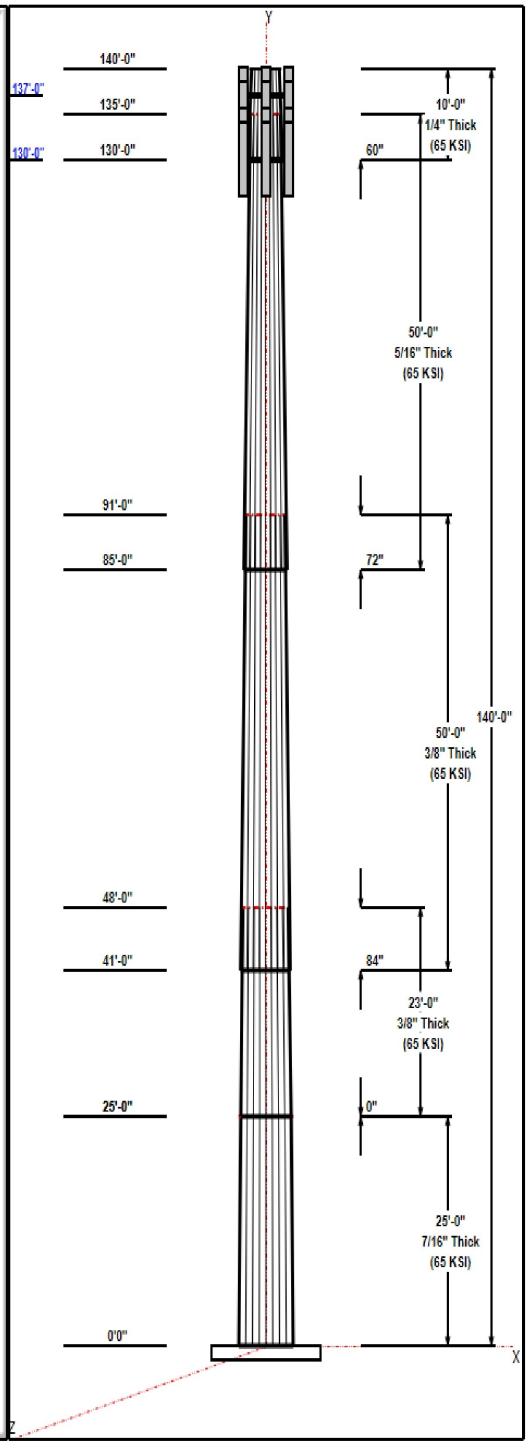
Tower Engineering Solutions

Dead Load Factor:	1.20
Wind Load Factor:	1.60

Load Case : 1.2D + 1.6W 101 mph Wind

Iterations: 22





Structure: CT11560-A-SBA

Type: Tapered
Site Name: Sterling 6, CT
Height: 140.00 (ft)
Base Elev: 1.00 (ft)

Base Shape: 18 Sided
Taper: 0.23518

11/18/2021

Tower Engineering Solutions

Shaft Properties

Seq	Length (ft)	Top (in)	Bottom (in)	Thick (in)	Joint Type	Taper	Grade (ksi)
1	25.00	58.62	64.50	0.438		0.23518	65
2	23.00	53.21	58.62	0.375	Butt	0.23518	65
3	50.00	43.85	55.61	0.375	Slip	0.23518	65
4	50.00	34.13	45.88	0.313	Slip	0.23518	65
5	10.00	33.45	35.80	0.250	Slip	0.23518	65

Discrete Appurtenances

Attach Elev (ft)	Force Elev (ft)	Qty	Description	Carrier
137.00	137.00	3	B5/B13 RRHBR04C	Verizon
137.00	137.00	3	B2/B66A RRHBR049	Verizon
137.00	137.00	1	Low Profile Platform	Verizon
137.00	137.00	3	Antel LPA-80063/6CF	Verizon
137.00	137.00	6	JAHH-65B-R3B	Verizon
137.00	137.00	1	HRK12 (Handrail Kit)	Verizon
137.00	137.00	1	PRK-1245 (kicker kit)	Verizon
137.00	137.00	1	RCMDC-6627-PF-48	Verizon
137.00	137.00	3	MT6407-77A	Verizon
137.00	137.00	3	CBC78T-DS-43	Verizon
137.00	137.00	1	(3) Stabilizer Kit (4' FW)	T-Mobile
130.00	130.00	3	15'x2.875"mount pipe	AT&T
130.00	130.00	6	7770.00	AT&T
130.00	130.00	6	Powerwave LGP21401 -	AT&T
130.00	130.00	1	DC6-48-60-18-8F	AT&T
130.00	130.00	1	Low Profile Platform	AT&T
130.00	130.00	6	Powerwave LGP21901 -	AT&T
130.00	130.00	3	HPA-65R-BU8AA	AT&T
130.00	130.00	3	DMP65R-BU8DA	AT&T
130.00	130.00	1	HRK12 (Handrail Kit)	AT&T
130.00	130.00	6	LGP17201	AT&T
130.00	130.00	3	RRUS 8843 B2 B66A	AT&T
130.00	130.00	3	RRUS 4449 B5/B12	AT&T

Linear Appurtenances

Elev From (ft)	Elev To (ft)	Placement	Description	Carrier
0.00	137.00	Inside	1 5/8" Hybrid	Verizon
3.00	137.00	Inside	1 5/8" Coax	Verizon
3.00	130.00	Inside	1 5/8" Coax	AT&T
3.00	130.00	Outside	1" DC Power	AT&T
3.00	130.00	Outside	7/16" Fiber	AT&T

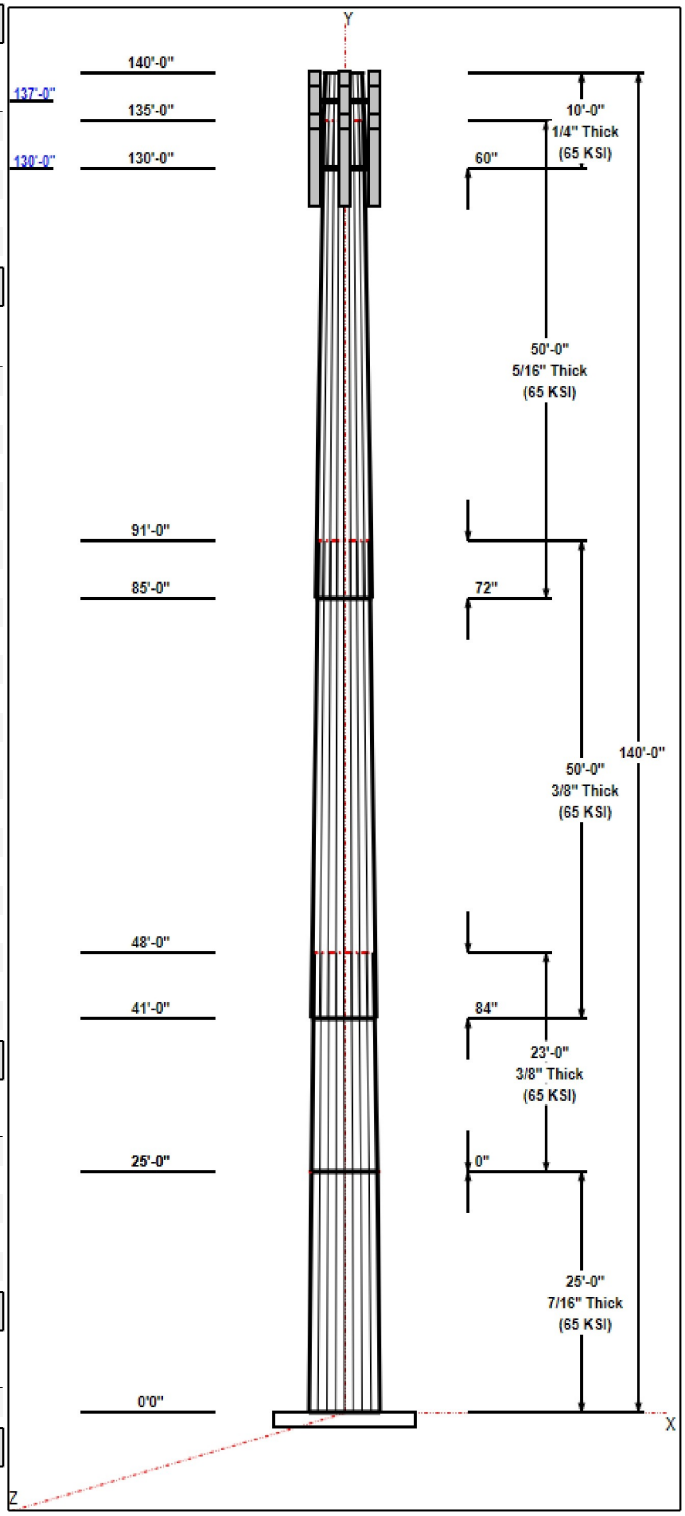
Anchor Bolts

Qty	Specifications	Grade (ksi)	Arrangement
20	2.00" F1554 105	105.0	Radial

Base Plate

Thickness (in)	Specifications (in)	Grade (ksi)	Geometry
2.0000	68.0	50.0	Round

Reactions



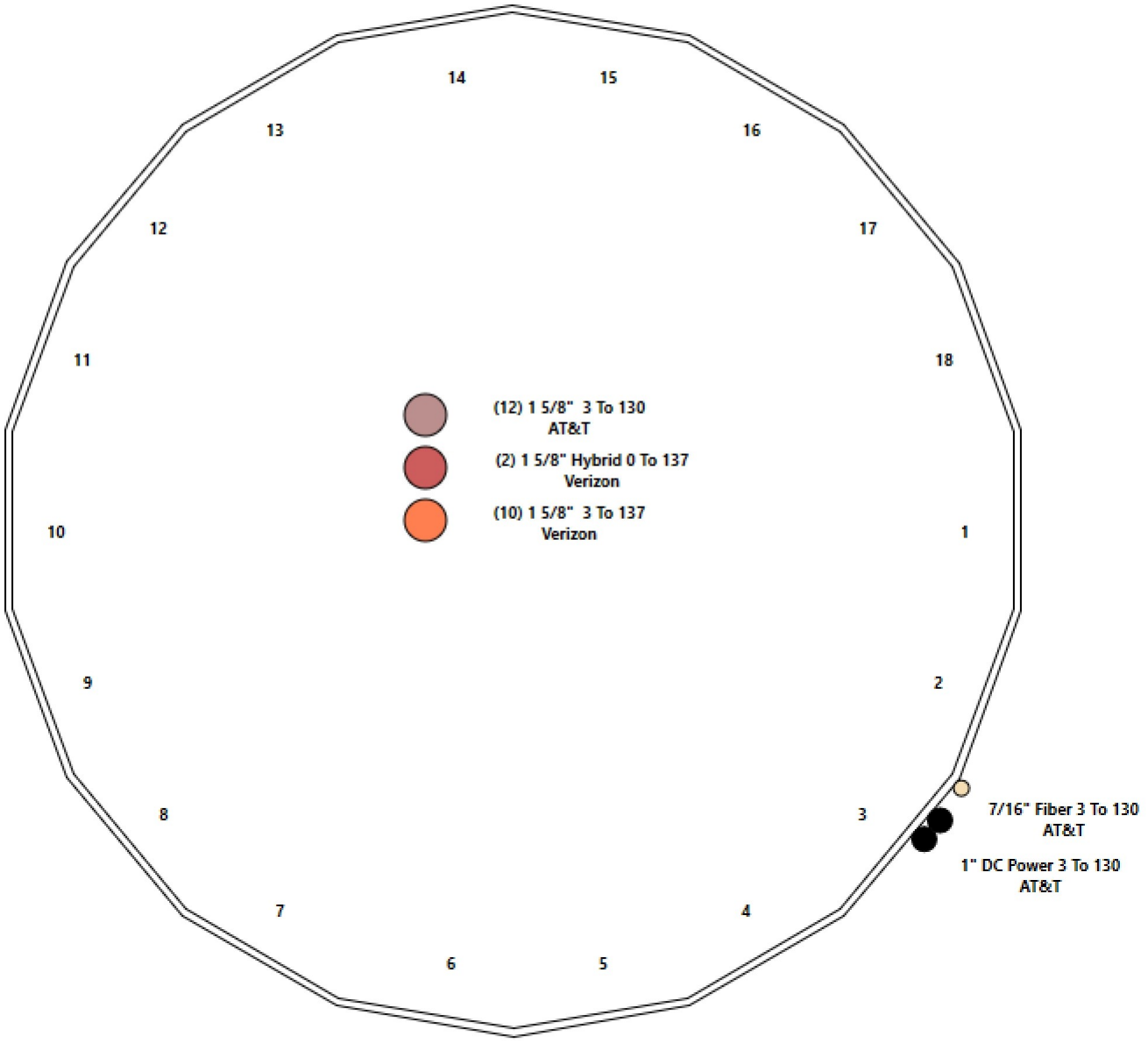
Load Case	Moment (FT-Kips)	Shear (Kips)	Axial (Kips)
1.2D + 1.6W 101 mph Wind	2576.5	25.7	48.7
0.9D + 1.6W 101 mph Wind	2563.3	25.7	36.5
1.2D + 1.0Di + 1.0Wi 50 mph Wind	670.3	6.9	73.1
1.2D + 1.0E	245.5	2.1	48.7
0.9D + 1.0E	244.1	2.1	36.5
1.0D + 1.0W 60 mph Wind	566.4	5.7	40.6

Structure: CT11560-A-SBA - Coax Line Placement

Type: Monopole
Site Name: Sterling 6, CT
Height: 140.00 (ft)

11/18/2021

Tower Engineering Solutions



Shaft Properties

Structure:	CT11560-A-SBA		**Code:**	EIA/TIA-222-G	11/18/2021
Site Name:	Sterling 6, CT		**Exposure:**	B	
Height:	140.00 (ft)		**Crest Height:**	0.00	
Base Elev:	1.000 (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	25.000	0.4375	65		0.00	7,220
2	18	23.000	0.3750	65	Flange	0.00	5,174
3	18	50.000	0.3750	65	Slip	84.00	9,994
4	18	50.000	0.3125	65	Slip	72.00	6,698
5	18	10.000	0.2500	65	Slip	60.00	928
					Total Shaft Weight:		**30,014**

	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	64.50	0.00	88.96	46124.76	24.59	147.43	58.62	25.00	80.79	34555.0	22.22	133.9	0.235179
2	58.62	25.00	69.32	29714.17	26.15	156.32	53.21	48.00	62.89	22180.7	23.61	141.9	0.235179
3	55.61	41.00	65.74	25337.51	24.74	148.29	43.85	91.00	51.74	12355.4	19.21	116.9	0.235179
4	45.88	85.00	45.20	11860.36	24.48	146.83	34.13	135.00	33.54	4844.63	17.84	109.2	0.235179
5	35.80	130.0	28.21	4504.73	23.84	143.21	33.45	140.00	26.34	3668.59	22.18	133.8	0.235179

Load Summary

Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (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	137.00	B5/B13 RRHBR04C	3	70.30	1.85	0.67	112.59	2.388	0.67	0.00	0.00
2	137.00	B2/B66A RRHBR049	3	84.50	1.88	0.67	135.34	2.427	0.67	0.00	0.00
3	137.00	Low Profile Platform	1	1500.00	22.00	1.00	2798.04	39.515	1.00	0.00	0.00
4	137.00	Antel LPA-80063/6CF	3	27.00	9.60	0.94	312.32	10.941	0.94	0.00	0.00
5	137.00	JAHH-65B-R3B	6	63.30	9.11	0.83	291.53	10.445	0.83	0.00	0.00
6	137.00	HRK12 (Handrail Kit)	1	261.72	6.75	1.00	569.74	13.292	1.00	0.00	0.00
7	137.00	PRK-1245 (kicker kit)	1	464.91	9.50	1.00	786.76	19.365	1.00	0.00	0.00
8	137.00	RCMDC-6627-PF-48	1	32.00	4.06	0.67	144.98	4.875	0.67	0.00	0.00
9	137.00	MT6407-77A	3	79.40	4.69	0.70	197.74	5.629	0.70	0.00	0.00
10	137.00	CBC78T-DS-43	3	10.40	0.37	0.67	30.89	0.650	0.67	0.00	0.00
11	137.00	(3) Stabilizer Kit (4' FW)	1	140.00	3.70	1.00	314.46	7.542	1.00	0.00	0.00
12	130.00	15'x2.875"mount pipe	3	87.00	4.31	1.00	218.82	9.623	1.00	0.00	0.00
13	130.00	7770.00	6	27.00	5.50	0.73	159.95	6.550	0.73	0.00	0.00
14	130.00	Powerwave LGP21401 - TMA	6	17.50	1.29	0.67	48.11	2.115	0.67	0.00	0.00
15	130.00	DC6-48-60-18-8F	1	32.80	1.30	0.67	95.71	1.911	0.67	0.00	0.00
16	130.00	Low Profile Platform	1	1500.00	22.00	1.00	2791.30	39.424	1.00	0.00	0.00
17	130.00	Powerwave LGP21901 - Diplexer	6	31.00	1.67	0.67	73.76	4.306	0.67	0.00	0.00
18	130.00	HPA-65R-BU8AA	3	54.00	11.23	0.86	316.31	12.870	0.86	0.00	0.00
19	130.00	DMP65R-BU8DA	3	95.70	17.87	0.72	549.54	19.642	0.72	0.00	0.00
20	130.00	HRK12 (Handrail Kit)	1	261.72	10.00	1.00	568.14	19.642	1.00	0.00	0.00
21	130.00	LGP17201	6	10.00	1.95	0.67	22.16	2.933	0.67	0.00	0.00
22	130.00	RRUS 8843 B2 B66A	3	72.00	1.64	0.67	118.21	2.130	0.67	0.00	0.00
23	130.00	RRUS 4449 B5/B12	3	71.00	1.97	0.67	123.66	2.510	0.67	0.00	0.00
		Totals:	**68**	**7,039.85**			**17,988.46**				

Linear Appurtenances

Bottom Elev. (ft)	**Top Elev. (ft)**	**Description**	**Exposed Width**	**Exposed**
0.00	137.00	(2) 1 5/8" Hybrid	0.00	Inside
3.00	137.00	(10) 1 5/8" Coax	0.00	Inside
3.00	130.00	(12) 1 5/8" Coax	0.00	Inside
3.00	130.00	(2) 1" DC Power	1.00	Outside
3.00	130.00	(1) 7/16" Fiber	0.00	Outside

Shaft Section Properties

Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 7	

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		0.4375	64.500	88.956	46124.8	24.59	147.43	72.5	1408.	0.0
2.00		0.4375	64.030	88.302	45116.2	24.40	146.35	72.7	1387.	603.2
4.00		0.4375	63.559	87.649	44122.5	24.21	145.28	72.9	1367.	598.7
6.00		0.4375	63.089	86.996	43143.5	24.02	144.20	73.2	1346.	594.3
8.00		0.4375	62.619	86.343	42179.1	23.83	143.13	73.4	1326.	589.8
10.00		0.4375	62.148	85.690	41229.1	23.64	142.05	73.6	1306.	585.4
12.00		0.4375	61.678	85.037	40293.6	23.45	140.98	73.8	1286.	580.9
14.00		0.4375	61.208	84.384	39372.2	23.26	139.90	74.0	1267.	576.5
16.00		0.4375	60.737	83.731	38465.1	23.07	138.83	74.3	1247.	572.1
18.00		0.4375	60.267	83.077	37572.0	22.88	137.75	74.5	1227.	567.6
20.00		0.4375	59.796	82.424	36692.8	22.69	136.68	74.7	1208.	563.2
22.00		0.4375	59.326	81.771	35827.4	22.50	135.60	74.9	1189.	558.7
24.00		0.4375	58.856	81.118	34975.8	22.31	134.53	75.2	1170.	554.3
25.00	Top - Section 1	0.4375	58.621	80.792	34555.1	22.22	133.99	75.3	1161.	275.5
25.00	Bot - Section 2	0.3750	58.621	69.324	29714.2	25.92	156.32	70.6	998.4	
26.00		0.3750	58.385	69.044	29355.7	26.04	155.69	70.8	990.3	235.4
28.00		0.3750	57.915	68.485	28647.4	25.82	154.44	71.0	974.3	468.0
30.00		0.3750	57.445	67.925	27950.6	25.60	153.19	71.3	958.3	464.2
32.00		0.3750	56.974	67.365	27265.2	25.38	151.93	71.6	942.6	460.4
34.00		0.3750	56.504	66.805	26591.1	25.16	150.68	71.8	926.9	456.6
36.00		0.3750	56.034	66.245	25928.2	24.94	149.42	72.1	911.4	452.7
38.00		0.3750	55.563	65.685	25276.4	24.72	148.17	72.3	896.0	448.9
40.00		0.3750	55.093	65.126	24635.6	24.49	146.91	72.6	880.7	445.1
41.00	Bot - Section 3	0.3750	54.858	64.846	24319.3	24.38	146.29	72.7	873.2	221.1
42.00		0.3750	54.623	64.566	24005.7	24.27	145.66	72.9	865.6	443.4
44.00		0.3750	54.152	64.006	23386.7	24.05	144.41	73.1	850.6	881.1
46.00		0.3750	53.682	63.446	22778.4	23.83	143.15	73.4	835.8	873.5
48.00	Top - Section 2	0.3750	53.961	63.779	23138.8	23.96	143.90	0.0	0.0	865.8
50.00		0.3750	53.491	63.219	22534.8	23.74	142.64	73.5	829.8	432.1
52.00		0.3750	53.021	62.659	21941.4	23.52	141.39	73.7	815.1	428.3
54.00		0.3750	52.550	62.099	21358.6	23.30	140.13	74.0	800.5	424.5
56.00		0.3750	52.080	61.540	20786.1	23.08	138.88	74.3	786.1	420.7
58.00		0.3750	51.610	60.980	20224.0	22.86	137.63	74.5	771.8	416.9
60.00		0.3750	51.139	60.420	19672.1	22.64	136.37	74.8	757.7	413.1
62.00		0.3750	50.669	59.860	19130.3	22.41	135.12	75.0	743.6	409.3
64.00		0.3750	50.199	59.300	18598.6	22.19	133.86	75.3	729.7	405.5
66.00		0.3750	49.728	58.741	18076.8	21.97	132.61	75.6	716.0	401.7
68.00		0.3750	49.258	58.181	17564.9	21.75	131.35	75.8	702.3	397.9
70.00		0.3750	48.788	57.621	17062.7	21.53	130.10	76.1	688.8	394.0
72.00		0.3750	48.317	57.061	16570.2	21.31	128.85	76.3	675.5	390.2
74.00		0.3750	47.847	56.501	16087.3	21.09	127.59	76.6	662.2	386.4
76.00		0.3750	47.376	55.941	15613.8	20.87	126.34	76.9	649.1	382.6
78.00		0.3750	46.906	55.382	15149.7	20.64	125.08	77.1	636.1	378.8
80.00		0.3750	46.436	54.822	14694.9	20.42	123.83	77.4	623.3	375.0
82.00		0.3750	45.965	54.262	14249.3	20.20	122.57	77.6	610.6	371.2
84.00		0.3750	45.495	53.702	13812.8	19.98	121.32	77.9	598.0	367.4
85.00	Bot - Section 4	0.3750	45.260	53.422	13598.0	19.87	120.69	78.0	591.8	182.3
86.00		0.3750	45.025	53.142	13385.3	19.76	120.07	78.2	585.5	334.7
88.00		0.3750	44.554	52.583	12966.8	19.54	118.81	78.4	573.2	664.2
90.00		0.3750	44.084	52.023	12557.0	19.32	117.56	78.7	561.0	657.2

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)
91.00	Top - Section 3	0.3125	44.474	43.801	10792.4	23.68	142.32	0.0	0.0	326.0
92.00		0.3125	44.239	43.568	10620.9	23.55	141.56	73.7	472.9	148.6
94.00		0.3125	43.768	43.101	10283.4	23.29	140.06	74.0	462.8	294.9
96.00		0.3125	43.298	42.635	9953.0	23.02	138.55	74.3	452.8	291.7
98.00		0.3125	42.828	42.168	9629.9	22.75	137.05	74.6	442.9	288.6
100.00		0.3125	42.357	41.702	9313.8	22.49	135.54	74.9	433.1	285.4
102.00		0.3125	41.887	41.235	9004.7	22.22	134.04	75.3	423.4	282.2
104.00		0.3125	41.416	40.768	8702.5	21.96	132.53	75.6	413.9	279.0
106.00		0.3125	40.946	40.302	8407.2	21.69	131.03	75.9	404.4	275.9
108.00		0.3125	40.476	39.835	8118.6	21.43	129.52	76.2	395.1	272.7
110.00		0.3125	40.005	39.369	7836.7	21.16	128.02	76.5	385.8	269.5
112.00		0.3125	39.535	38.902	7561.4	20.90	126.51	76.8	376.7	266.3
114.00		0.3125	39.065	38.436	7292.6	20.63	125.01	77.1	367.7	263.2
116.00		0.3125	38.594	37.969	7030.3	20.37	123.50	77.4	358.8	260.0
118.00		0.3125	38.124	37.503	6774.3	20.10	122.00	77.8	350.0	256.8
120.00		0.3125	37.654	37.036	6524.6	19.84	120.49	78.1	341.3	253.6
122.00		0.3125	37.183	36.570	6281.1	19.57	118.99	78.4	332.7	250.5
124.00		0.3125	36.713	36.103	6043.8	19.30	117.48	78.7	324.2	247.3
126.00		0.3125	36.243	35.637	5812.5	19.04	115.98	79.0	315.9	244.1
128.00		0.3125	35.772	35.170	5587.2	18.77	114.47	79.3	307.6	240.9
130.00	Bot - Section 5	0.3125	35.302	34.704	5367.8	18.51	112.97	79.6	299.5	237.8
132.00		0.3125	34.831	34.237	5154.3	18.24	111.46	79.9	291.5	425.3
134.00		0.3125	34.361	33.771	4946.4	17.98	109.96	80.3	283.5	419.6
135.00	Top - Section 4	0.2500	34.626	27.276	4072.4	23.01	138.50	0.0	0.0	207.6
136.00		0.2500	34.391	27.090	3989.4	22.85	137.56	74.5	228.5	92.5
137.00		0.2500	34.156	26.903	3907.5	22.68	136.62	74.7	225.3	91.9
138.00		0.2500	33.920	26.716	3826.7	22.51	135.68	74.9	222.2	91.2
140.00		0.2500	33.450	26.343	3668.6	22.18	133.80	75.3	216.0	180.6
										30014.2

Wind Loading - Shaft

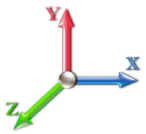
Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 9	

Tower Engineering Solutions

Load Case: 1.2D + 1.6W 101 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 22

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	0.70	17.366	19.10	461.21	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.70	17.366	19.10	457.85	0.650	0.000	2.00	10.876	7.07	216.1	0.0	723.8
4.00		1.00	0.70	17.366	19.10	454.48	0.650	0.000	2.00	10.796	7.02	214.5	0.0	718.5
6.00		1.00	0.70	17.366	19.10	451.12	0.650	0.000	2.00	10.717	6.97	212.9	0.0	713.1
8.00		1.00	0.70	17.366	19.10	447.76	0.650	0.000	2.00	10.637	6.91	211.3	0.0	707.8
10.00		1.00	0.70	17.366	19.10	444.39	0.650	0.000	2.00	10.558	6.86	209.7	0.0	702.5
12.00		1.00	0.70	17.366	19.10	441.03	0.650	0.000	2.00	10.478	6.81	208.2	0.0	697.1
14.00		1.00	0.70	17.366	19.10	437.67	0.650	0.000	2.00	10.398	6.76	206.6	0.0	691.8
16.00		1.00	0.70	17.366	19.10	434.30	0.650	0.000	2.00	10.319	6.71	205.0	0.0	686.5
18.00		1.00	0.70	17.366	19.10	430.94	0.650	0.000	2.00	10.239	6.66	203.4	0.0	681.1
20.00		1.00	0.70	17.366	19.10	427.58	0.650	0.000	2.00	10.160	6.60	201.8	0.0	675.8
22.00		1.00	0.70	17.366	19.10	424.21	0.650	0.000	2.00	10.080	6.55	200.3	0.0	670.5
24.00		1.00	0.70	17.366	19.10	420.85	0.650	0.000	2.00	10.000	6.50	198.7	0.0	665.1
25.00	Top - Section 1	1.00	0.70	17.366	19.10	419.17	0.650	0.000	1.00	4.970	3.23	98.7	0.0	330.6
26.00		1.00	0.70	17.366	19.10	417.49	0.650	0.000	1.00	4.950	3.22	98.4	0.0	282.5
28.00		1.00	0.70	17.366	19.10	414.12	0.650	0.000	2.00	9.841	6.40	195.5	0.0	561.6
30.00		1.00	0.71	17.544	19.30	412.86	0.650	0.000	2.00	9.762	6.35	195.9	0.0	557.0
32.00		1.00	0.72	17.861	19.65	413.16	0.650	0.000	2.00	9.682	6.29	197.8	0.0	552.4
34.00		1.00	0.73	18.163	19.98	413.20	0.650	0.000	2.00	9.602	6.24	199.5	0.0	547.9
36.00		1.00	0.74	18.454	20.30	413.03	0.650	0.000	2.00	9.523	6.19	201.0	0.0	543.3
38.00		1.00	0.76	18.734	20.61	412.65	0.650	0.000	2.00	9.443	6.14	202.4	0.0	538.7
40.00		1.00	0.77	19.003	20.90	412.09	0.650	0.000	2.00	9.364	6.09	203.6	0.0	534.1
41.00	Bot - Section 3	1.00	0.77	19.135	21.05	411.75	0.650	0.000	1.00	4.652	3.02	101.8	0.0	265.4
42.00		1.00	0.78	19.264	21.19	411.37	0.650	0.000	1.00	4.696	3.05	103.5	0.0	532.1
44.00		1.00	0.79	19.516	21.47	410.48	0.650	0.000	2.00	9.331	6.07	208.3	0.0	1057.3
46.00		1.00	0.80	19.760	21.74	409.45	0.650	0.000	2.00	9.252	6.01	209.1	0.0	1048.1
48.00	Top - Section 2	1.00	0.81	19.996	22.00	408.29	0.650	0.000	2.00	9.172	5.96	209.8	0.0	1039.0
50.00		1.00	0.82	20.226	22.25	412.78	0.650	0.000	2.00	9.093	5.91	210.4	0.0	518.6
52.00		1.00	0.82	20.450	22.49	411.41	0.650	0.000	2.00	9.013	5.86	210.9	0.0	514.0
54.00		1.00	0.83	20.667	22.73	409.92	0.650	0.000	2.00	8.933	5.81	211.2	0.0	509.4
56.00		1.00	0.84	20.879	22.97	408.33	0.650	0.000	2.00	8.854	5.75	211.5	0.0	504.9
58.00		1.00	0.85	21.086	23.19	406.64	0.650	0.000	2.00	8.774	5.70	211.7	0.0	500.3
60.00		1.00	0.86	21.288	23.42	404.86	0.650	0.000	2.00	8.694	5.65	211.7	0.0	495.7
62.00		1.00	0.87	21.485	23.63	402.99	0.650	0.000	2.00	8.615	5.60	211.7	0.0	491.1
64.00		1.00	0.87	21.678	23.85	401.04	0.650	0.000	2.00	8.535	5.55	211.7	0.0	486.6
66.00		1.00	0.88	21.866	24.05	399.00	0.650	0.000	2.00	8.456	5.50	211.5	0.0	482.0
68.00		1.00	0.89	22.051	24.26	396.89	0.650	0.000	2.00	8.376	5.44	211.3	0.0	477.4
70.00		1.00	0.90	22.231	24.45	394.71	0.650	0.000	2.00	8.296	5.39	211.0	0.0	472.9
72.00		1.00	0.90	22.409	24.65	392.46	0.650	0.000	2.00	8.217	5.34	210.6	0.0	468.3
74.00		1.00	0.91	22.582	24.84	390.14	0.650	0.000	2.00	8.137	5.29	210.2	0.0	463.7
76.00		1.00	0.92	22.753	25.03	387.76	0.650	0.000	2.00	8.058	5.24	209.7	0.0	459.1
78.00		1.00	0.92	22.920	25.21	385.32	0.650	0.000	2.00	7.978	5.19	209.2	0.0	454.6
80.00		1.00	0.93	23.084	25.39	382.82	0.650	0.000	2.00	7.898	5.13	208.6	0.0	450.0
82.00		1.00	0.94	23.246	25.57	380.27	0.650	0.000	2.00	7.819	5.08	207.9	0.0	445.4
84.00		1.00	0.94	23.404	25.74	377.66	0.650	0.000	2.00	7.739	5.03	207.2	0.0	440.9
85.00	Bot - Section 4	1.00	0.95	23.483	25.83	376.33	0.650	0.000	1.00	3.840	2.50	103.2	0.0	218.7
86.00		1.00	0.95	23.561	25.92	375.00	0.650	0.000	1.00	3.873	2.52	104.4	0.0	401.7

Wind Loading - Shaft

Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 10

Tower Engineering Solutions

88.00		1.00	0.96	23.714	26.09	372.29	0.650	0.000	2.00	7.686	5.00	208.5	0.0	797.0
90.00		1.00	0.96	23.865	26.25	369.53	0.650	0.000	2.00	7.606	4.94	207.7	0.0	788.7
91.00	Top - Section 3	1.00	0.96	23.940	26.33	368.13	0.650	0.000	1.00	3.773	2.45	103.3	0.0	391.2
92.00		1.00	0.97	24.014	26.42	371.98	0.650	0.000	1.00	3.753	2.44	103.1	0.0	178.4
94.00		1.00	0.97	24.160	26.58	369.14	0.650	0.000	2.00	7.447	4.84	205.8	0.0	353.9
96.00		1.00	0.98	24.304	26.73	366.26	0.650	0.000	2.00	7.367	4.79	204.8	0.0	350.1
98.00		1.00	0.99	24.447	26.89	363.34	0.650	0.000	2.00	7.288	4.74	203.8	0.0	346.3
100.00		1.00	0.99	24.587	27.05	360.38	0.650	0.000	2.00	7.208	4.69	202.7	0.0	342.5
102.00		1.00	1.00	24.725	27.20	357.38	0.650	0.000	2.00	7.129	4.63	201.6	0.0	338.7
104.00		1.00	1.00	24.861	27.35	354.34	0.650	0.000	2.00	7.049	4.58	200.5	0.0	334.8
106.00		1.00	1.01	24.995	27.49	351.26	0.650	0.000	2.00	6.969	4.53	199.3	0.0	331.0
108.00		1.00	1.01	25.128	27.64	348.14	0.650	0.000	2.00	6.890	4.48	198.1	0.0	327.2
110.00		1.00	1.02	25.259	27.78	344.99	0.650	0.000	2.00	6.810	4.43	196.8	0.0	323.4
112.00		1.00	1.02	25.388	27.93	341.81	0.650	0.000	2.00	6.731	4.37	195.5	0.0	319.6
114.00		1.00	1.03	25.516	28.07	338.59	0.650	0.000	2.00	6.651	4.32	194.1	0.0	315.8
116.00		1.00	1.03	25.642	28.21	335.34	0.650	0.000	2.00	6.571	4.27	192.8	0.0	312.0
118.00		1.00	1.04	25.766	28.34	332.05	0.650	0.000	2.00	6.492	4.22	191.4	0.0	308.2
120.00		1.00	1.04	25.889	28.48	328.74	0.650	0.000	2.00	6.412	4.17	189.9	0.0	304.4
122.00		1.00	1.05	26.011	28.61	325.39	0.650	0.000	2.00	6.333	4.12	188.4	0.0	300.6
124.00		1.00	1.05	26.131	28.74	322.02	0.650	0.000	2.00	6.253	4.06	186.9	0.0	296.7
126.00		1.00	1.06	26.250	28.87	318.61	0.650	0.000	2.00	6.173	4.01	185.4	0.0	292.9
128.00		1.00	1.06	26.367	29.00	315.18	0.650	0.000	2.00	6.094	3.96	183.8	0.0	289.1
130.00	Bot - Section 5	1.00	1.07	26.483	29.13	311.72	0.650	0.000	2.00	6.014	3.91	182.2	0.0	285.3
132.00		1.00	1.07	26.598	29.26	308.24	0.650	0.000	2.00	6.019	3.91	183.2	0.0	510.4
134.00		1.00	1.08	26.712	29.38	304.72	0.650	0.000	2.00	5.940	3.86	181.5	0.0	503.5
135.00	Top - Section 4	1.00	1.08	26.768	29.44	302.96	0.650	0.000	1.00	2.940	1.91	90.0	0.0	249.2
136.00		1.00	1.08	26.824	29.51	305.63	0.650	0.000	1.00	2.920	1.90	89.6	0.0	111.0
137.00	Appurtenance(s)	1.00	1.08	26.880	29.57	303.85	0.650	0.000	1.00	2.900	1.89	89.2	0.0	110.2
138.00		1.00	1.09	26.936	29.63	302.07	0.650	0.000	1.00	2.880	1.87	88.8	0.0	109.5
140.00		1.00	1.09	27.046	29.75	298.49	0.650	0.000	2.00	5.701	3.71	176.4	0.0	216.7
								Totals:	**140.00**			**14,134.7**		**36,017.0**

Discrete Appurtenance Forces

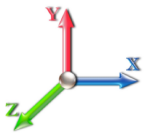
Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 11	

Tower Engineering Solutions

Load Case: 1.2D + 1.6W 101 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 22

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	137.00	HRK12 (Handrail Kit)	1	26.880	29.568	1.00	1.00	6.75	314.06	0.000	0.000	319.34	0.00	0.00
2	137.00	(3) Stabilizer Kit (4' FW)	1	26.880	29.568	1.00	1.00	3.70	168.00	0.000	0.000	175.04	0.00	0.00
3	137.00	B2/B66A RRHBR049	3	26.880	29.568	0.50	0.75	2.83	304.20	0.000	0.000	134.08	0.00	0.00
4	137.00	RCMDC-6627-PF-48	1	26.880	29.568	0.50	0.75	2.04	38.40	0.000	0.000	96.52	0.00	0.00
5	137.00	Antel LPA-80063/6CF	3	26.880	29.568	0.70	0.75	20.30	97.20	0.000	0.000	960.56	0.00	0.00
6	137.00	JAHH-65B-R3B	6	26.880	29.568	0.62	0.75	34.03	455.76	0.000	0.000	1609.73	0.00	0.00
7	137.00	B5/B13 RRHBR04C	3	26.880	29.568	0.50	0.75	2.79	253.08	0.000	0.000	131.94	0.00	0.00
8	137.00	PRK-1245 (kicker kit)	1	26.880	29.568	1.00	1.00	9.50	557.89	0.000	0.000	449.43	0.00	0.00
9	137.00	MT6407-77A	3	26.880	29.568	0.52	0.75	7.39	285.84	0.000	0.000	349.46	0.00	0.00
10	137.00	CBC78T-DS-43	3	26.880	29.568	0.50	0.75	0.56	37.44	0.000	0.000	26.39	0.00	0.00
11	137.00	Low Profile Platform	1	26.880	29.568	1.00	1.00	22.00	1800.00	0.000	0.000	1040.80	0.00	0.00
12	130.00	7770.00	6	26.483	29.132	0.55	0.75	18.07	194.40	0.000	0.000	842.13	0.00	0.00
13	130.00	Powerwave LGP21901 -	6	26.483	29.132	0.50	0.75	5.04	223.20	0.000	0.000	234.69	0.00	0.00
14	130.00	RRUS 4449 B5/B12	3	26.483	29.132	0.50	0.75	2.97	255.60	0.000	0.000	138.42	0.00	0.00
15	130.00	RRUS 8843 B2 B66A	3	26.483	29.132	0.50	0.75	2.47	259.20	0.000	0.000	115.24	0.00	0.00
16	130.00	LGP17201	6	26.483	29.132	0.50	0.75	5.88	72.00	0.000	0.000	274.03	0.00	0.00
17	130.00	HRK12 (Handrail Kit)	1	26.483	29.132	1.00	1.00	10.00	314.06	0.000	0.000	466.10	0.00	0.00
18	130.00	DMP65R-BU8DA	3	26.483	29.132	0.54	0.75	28.95	344.52	0.000	0.000	1349.35	0.00	0.00
19	130.00	HPA-65R-BU8AA	3	26.483	29.132	0.65	0.75	21.73	194.40	0.000	0.000	1012.85	0.00	0.00
20	130.00	15'x2.875"mount pipe	3	26.483	29.132	1.00	1.00	12.93	313.20	0.000	0.000	602.67	0.00	0.00
21	130.00	Low Profile Platform	1	26.483	29.132	1.00	1.00	22.00	1800.00	0.000	0.000	1025.43	0.00	0.00
22	130.00	DC6-48-60-18-8F	1	26.483	29.132	0.50	0.75	0.65	39.36	0.000	0.000	30.45	0.00	0.00
23	130.00	Powerwave LGP21401 -	6	26.483	29.132	0.50	0.75	3.89	126.00	0.000	0.000	181.28	0.00	0.00
							Totals:		**8,447.82**			**11,565.93**		

Total Applied Force Summary

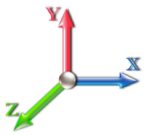
Structure:	CT11560-A-SBA		**Code:**	EIA/TIA-222-G	11/18/2021
Site Name:	Sterling 6, CT		**Exposure:**	B	
Height:	140.00 (ft)		**Crest Height:**	0.00	
Base Elev:	1.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 12

Tower Engineering Solutions

Load Case: 1.2D + 1.6W 101 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 22

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		216.07	729.08	0.00	0.00
4.00		214.49	753.70	0.00	0.00
6.00		212.91	778.32	0.00	0.00
8.00		211.33	772.99	0.00	0.00
10.00		209.75	767.65	0.00	0.00
12.00		208.17	762.32	0.00	0.00
14.00		206.58	756.98	0.00	0.00
16.00		205.00	751.65	0.00	0.00
18.00		203.42	746.32	0.00	0.00
20.00		201.84	740.98	0.00	0.00
22.00		200.26	735.65	0.00	0.00
24.00		198.68	730.32	0.00	0.00
25.00		98.75	363.16	0.00	0.00
26.00		98.35	315.09	0.00	0.00
28.00		195.51	626.76	0.00	0.00
30.00		195.92	622.19	0.00	0.00
32.00		197.83	617.62	0.00	0.00
34.00		199.53	613.04	0.00	0.00
36.00		201.04	608.47	0.00	0.00
38.00		202.38	603.90	0.00	0.00
40.00		203.56	599.33	0.00	0.00
41.00		101.83	297.95	0.00	0.00
42.00		103.48	564.67	0.00	0.00
44.00		208.33	1122.48	0.00	0.00
46.00		209.14	1113.33	0.00	0.00
48.00		209.82	1104.19	0.00	0.00
50.00		210.39	583.76	0.00	0.00
52.00		210.85	579.19	0.00	0.00
54.00		211.21	574.62	0.00	0.00
56.00		211.48	570.04	0.00	0.00
58.00		211.65	565.47	0.00	0.00
60.00		211.74	560.90	0.00	0.00
62.00		211.74	556.33	0.00	0.00
64.00		211.67	551.76	0.00	0.00
66.00		211.52	547.18	0.00	0.00
68.00		211.29	542.61	0.00	0.00
70.00		211.00	538.04	0.00	0.00
72.00		210.64	533.47	0.00	0.00
74.00		210.22	528.90	0.00	0.00
76.00		209.73	524.32	0.00	0.00
78.00		209.19	519.75	0.00	0.00
80.00		208.59	515.18	0.00	0.00
82.00		207.93	510.61	0.00	0.00
84.00		207.22	506.04	0.00	0.00
85.00		103.15	251.30	0.00	0.00
86.00		104.38	434.25	0.00	0.00

Total Applied Force Summary

Structure:	CT11560-A-SBA		**Code:**	EIA/TIA-222-G	11/18/2021
Site Name:	Sterling 6, CT		**Exposure:**	B	
Height:	140.00 (ft)		**Crest Height:**	0.00	
Base Elev:	1.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 13

88.00		208.51	862.22	0.00	0.00
90.00		207.66	853.84	0.00	0.00
91.00		103.34	423.78	0.00	0.00
92.00		103.11	210.97	0.00	0.00
94.00		205.83	419.08	0.00	0.00
96.00		204.85	415.27	0.00	0.00
98.00		203.82	411.46	0.00	0.00
100.00		202.75	407.65	0.00	0.00
102.00		201.63	403.84	0.00	0.00
104.00		200.48	400.03	0.00	0.00
106.00		199.29	396.22	0.00	0.00
108.00		198.06	392.41	0.00	0.00
110.00		196.79	388.60	0.00	0.00
112.00		195.48	384.79	0.00	0.00
114.00		194.14	380.98	0.00	0.00
116.00		192.77	377.17	0.00	0.00
118.00		191.36	373.36	0.00	0.00
120.00		189.91	369.55	0.00	0.00
122.00		188.43	365.74	0.00	0.00
124.00		186.93	361.93	0.00	0.00
126.00		185.38	358.12	0.00	0.00
128.00		183.81	354.31	0.00	0.00
130.00	(42) attachments	6454.86	4486.45	0.00	0.00
132.00		183.15	540.60	0.00	0.00
134.00		181.50	533.74	0.00	0.00
135.00		90.03	264.30	0.00	0.00
136.00		89.61	126.12	0.00	0.00
137.00	(26) attachments	5382.46	4437.23	0.00	0.00
138.00		88.75	109.47	0.00	0.00
140.00		176.38	216.66	0.00	0.00
	Totals:	**25,700.67**	**48,717.79**	**0.00**	**0.00**

Linear Appurtenance Segment Forces (Factored)

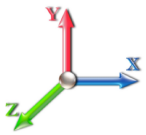
Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 14	

Tower Engineering Solutions

Load Case: 1.2D + 1.6W 101 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 22

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)
4.00	1" DC Power	Yes	1.00	0.000	1.00	0.08	0.00	0.008	0.000	17.366	0.00	2.40
4.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.008	0.000	17.366	0.00	0.10
6.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.016	0.000	17.366	0.00	4.80
6.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	17.366	0.00	0.19
8.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.016	0.000	17.366	0.00	4.80
8.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	17.366	0.00	0.19
10.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.016	0.000	17.366	0.00	4.80
10.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	17.366	0.00	0.19
12.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.016	0.000	17.366	0.00	4.80
12.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	17.366	0.00	0.19
14.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.016	0.000	17.366	0.00	4.80
14.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	17.366	0.00	0.19
16.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.016	0.000	17.366	0.00	4.80
16.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	17.366	0.00	0.19
18.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.016	0.000	17.366	0.00	4.80
18.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	17.366	0.00	0.19
20.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.016	0.000	17.366	0.00	4.80
20.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	17.366	0.00	0.19
22.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.017	0.000	17.366	0.00	4.80
22.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.017	0.000	17.366	0.00	0.19
24.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.017	0.000	17.366	0.00	4.80
24.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.017	0.000	17.366	0.00	0.19
25.00	1" DC Power	Yes	1.00	0.000	1.00	0.08	0.00	0.017	0.000	17.366	0.00	2.40
25.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.017	0.000	17.366	0.00	0.10
26.00	1" DC Power	Yes	1.00	0.000	1.00	0.08	0.00	0.017	0.000	17.366	0.00	2.40
26.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.017	0.000	17.366	0.00	0.10
28.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.017	0.000	17.366	0.00	4.80
28.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.017	0.000	17.366	0.00	0.19
30.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.017	0.000	17.544	0.00	4.80
30.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.017	0.000	17.544	0.00	0.19
32.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.017	0.000	17.861	0.00	4.80
32.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.017	0.000	17.861	0.00	0.19
34.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.017	0.000	18.163	0.00	4.80
34.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.017	0.000	18.163	0.00	0.19
36.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.018	0.000	18.454	0.00	4.80
36.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	18.454	0.00	0.19
38.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.018	0.000	18.734	0.00	4.80
38.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	18.734	0.00	0.19
40.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.018	0.000	19.003	0.00	4.80
40.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	19.003	0.00	0.19
41.00	1" DC Power	Yes	1.00	0.000	1.00	0.08	0.00	0.018	0.000	19.135	0.00	2.40
41.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.018	0.000	19.135	0.00	0.10
42.00	1" DC Power	Yes	1.00	0.000	1.00	0.08	0.00	0.018	0.000	19.264	0.00	2.40
42.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.018	0.000	19.264	0.00	0.10
44.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.018	0.000	19.516	0.00	4.80
44.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	19.516	0.00	0.19
46.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.018	0.000	19.760	0.00	4.80

Linear Appurtenance Segment Forces (Factored)

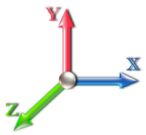
Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 15	

Tower Engineering Solutions

Load Case: 1.2D + 1.6W 101 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 22

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	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	19.760	0.00	0.19
48.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.018	0.000	19.996	0.00	4.80
48.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	19.996	0.00	0.19
50.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.018	0.000	20.226	0.00	4.80
50.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	20.226	0.00	0.19
52.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.018	0.000	20.450	0.00	4.80
52.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	20.450	0.00	0.19
54.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.019	0.000	20.667	0.00	4.80
54.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.019	0.000	20.667	0.00	0.19
56.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.019	0.000	20.879	0.00	4.80
56.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.019	0.000	20.879	0.00	0.19
58.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.019	0.000	21.086	0.00	4.80
58.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.019	0.000	21.086	0.00	0.19
60.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.019	0.000	21.288	0.00	4.80
60.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.019	0.000	21.288	0.00	0.19
62.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.019	0.000	21.485	0.00	4.80
62.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.019	0.000	21.485	0.00	0.19
64.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.020	0.000	21.678	0.00	4.80
64.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.020	0.000	21.678	0.00	0.19
66.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.020	0.000	21.866	0.00	4.80
66.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.020	0.000	21.866	0.00	0.19
68.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.020	0.000	22.051	0.00	4.80
68.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.020	0.000	22.051	0.00	0.19
70.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.020	0.000	22.231	0.00	4.80
70.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.020	0.000	22.231	0.00	0.19
72.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.020	0.000	22.409	0.00	4.80
72.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.020	0.000	22.409	0.00	0.19
74.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.020	0.000	22.582	0.00	4.80
74.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.020	0.000	22.582	0.00	0.19
76.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.021	0.000	22.753	0.00	4.80
76.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.021	0.000	22.753	0.00	0.19
78.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.021	0.000	22.920	0.00	4.80
78.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.021	0.000	22.920	0.00	0.19
80.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.021	0.000	23.084	0.00	4.80
80.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.021	0.000	23.084	0.00	0.19
82.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.021	0.000	23.246	0.00	4.80
82.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.021	0.000	23.246	0.00	0.19
84.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.022	0.000	23.404	0.00	4.80
84.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.022	0.000	23.404	0.00	0.19
85.00	1" DC Power	Yes	1.00	0.000	1.00	0.08	0.00	0.022	0.000	23.483	0.00	2.40
85.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.022	0.000	23.483	0.00	0.10
86.00	1" DC Power	Yes	1.00	0.000	1.00	0.08	0.00	0.022	0.000	23.561	0.00	2.40
86.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.022	0.000	23.561	0.00	0.10
88.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.022	0.000	23.714	0.00	4.80
88.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.022	0.000	23.714	0.00	0.19
90.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.022	0.000	23.865	0.00	4.80
90.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.022	0.000	23.865	0.00	0.19

Linear Appurtenance Segment Forces (Factored)

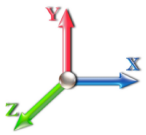
Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 16	

Tower Engineering Solutions

Load Case: 1.2D + 1.6W 101 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 22

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)
91.00	1" DC Power	Yes	1.00	0.000	1.00	0.08	0.00	0.022	0.000	23.940	0.00	2.40
91.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.022	0.000	23.940	0.00	0.10
92.00	1" DC Power	Yes	1.00	0.000	1.00	0.08	0.00	0.022	0.000	24.014	0.00	2.40
92.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.022	0.000	24.014	0.00	0.10
94.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.022	0.000	24.160	0.00	4.80
94.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.022	0.000	24.160	0.00	0.19
96.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.023	0.000	24.304	0.00	4.80
96.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.023	0.000	24.304	0.00	0.19
98.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.023	0.000	24.447	0.00	4.80
98.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.023	0.000	24.447	0.00	0.19
100.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.023	0.000	24.587	0.00	4.80
100.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.023	0.000	24.587	0.00	0.19
102.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.023	0.000	24.725	0.00	4.80
102.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.023	0.000	24.725	0.00	0.19
104.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.024	0.000	24.861	0.00	4.80
104.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.024	0.000	24.861	0.00	0.19
106.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.024	0.000	24.995	0.00	4.80
106.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.024	0.000	24.995	0.00	0.19
108.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.024	0.000	25.128	0.00	4.80
108.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.024	0.000	25.128	0.00	0.19
110.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.024	0.000	25.259	0.00	4.80
110.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.024	0.000	25.259	0.00	0.19
112.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.025	0.000	25.388	0.00	4.80
112.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.025	0.000	25.388	0.00	0.19
114.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.025	0.000	25.516	0.00	4.80
114.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.025	0.000	25.516	0.00	0.19
116.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.025	0.000	25.642	0.00	4.80
116.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.025	0.000	25.642	0.00	0.19
118.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.026	0.000	25.766	0.00	4.80
118.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.026	0.000	25.766	0.00	0.19
120.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.026	0.000	25.889	0.00	4.80
120.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.026	0.000	25.889	0.00	0.19
122.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.026	0.000	26.011	0.00	4.80
122.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.026	0.000	26.011	0.00	0.19
124.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.027	0.000	26.131	0.00	4.80
124.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.027	0.000	26.131	0.00	0.19
126.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.027	0.000	26.250	0.00	4.80
126.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.027	0.000	26.250	0.00	0.19
128.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.027	0.000	26.367	0.00	4.80
128.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.027	0.000	26.367	0.00	0.19
130.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.028	0.000	26.483	0.00	4.80
130.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.028	0.000	26.483	0.00	0.19
									Totals:		**0.0**	**317.0**

Calculated Forces

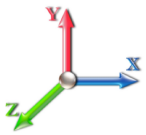
Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 17	

Tower Engineering Solutions

Load Case: 1.2D + 1.6W 101 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 22

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	-48.71	-25.71	0.00	-2576.5	0.00	2576.54	5803.10	2901.55	15291.3	7657.05	0.00	0.000	0.000	0.345
2.00	-47.97	-25.52	0.00	-2525.1	0.00	2525.12	5778.21	2889.11	15113.2	7567.86	0.01	-0.031	0.000	0.342
4.00	-47.20	-25.34	0.00	-2474.0	0.00	2474.07	5753.06	2876.53	14935.4	7478.80	0.03	-0.063	0.000	0.339
6.00	-46.41	-25.15	0.00	-2423.4	0.00	2423.40	5727.65	2863.83	14757.8	7389.90	0.06	-0.095	0.000	0.336
8.00	-45.62	-24.96	0.00	-2373.1	0.00	2373.11	5701.98	2850.99	14580.6	7301.16	0.11	-0.126	0.000	0.333
10.00	-44.84	-24.77	0.00	-2323.1	0.00	2323.19	5676.04	2838.02	14403.7	7212.59	0.17	-0.158	0.000	0.330
12.00	-44.07	-24.59	0.00	-2273.6	0.00	2273.65	5649.84	2824.92	14227.2	7124.20	0.24	-0.190	0.000	0.327
14.00	-43.30	-24.40	0.00	-2224.4	0.00	2224.48	5623.38	2811.69	14051.0	7035.98	0.33	-0.221	0.000	0.324
16.00	-42.53	-24.22	0.00	-2175.6	0.00	2175.68	5596.66	2798.33	13875.2	6947.96	0.43	-0.253	0.000	0.321
18.00	-41.77	-24.03	0.00	-2127.2	0.00	2127.24	5569.67	2784.84	13699.9	6860.14	0.54	-0.285	0.000	0.318
20.00	-41.02	-23.85	0.00	-2079.1	0.00	2079.18	5542.43	2771.21	13524.9	6772.52	0.67	-0.317	0.000	0.314
22.00	-40.27	-23.67	0.00	-2031.4	0.00	2031.48	5514.92	2757.46	13350.3	6685.11	0.81	-0.349	0.000	0.311
24.00	-39.53	-23.48	0.00	-1984.1	0.00	1984.15	5487.15	2743.57	13176.2	6597.93	0.96	-0.381	0.000	0.308
25.00	-39.16	-23.39	0.00	-1960.6	0.00	1960.67	5473.16	2736.58	13089.3	6554.42	1.04	-0.397	0.000	0.306
25.00	-39.16	-23.39	0.00	-1960.6	0.00	1960.67	4407.37	2203.68	10563.1	5289.42	1.04	-0.397	0.000	0.380
26.00	-38.84	-23.31	0.00	-1937.2	0.00	1937.28	4397.65	2198.83	10497.0	5256.32	1.13	-0.413	0.000	0.378
28.00	-38.20	-23.13	0.00	-1890.6	0.00	1890.66	4378.03	2189.01	10364.9	5190.16	1.31	-0.450	0.000	0.373
30.00	-37.56	-22.96	0.00	-1844.4	0.00	1844.40	4358.14	2179.07	10232.9	5124.08	1.50	-0.487	0.000	0.369
32.00	-36.93	-22.78	0.00	-1798.4	0.00	1798.49	4338.00	2169.00	10101.1	5058.08	1.72	-0.524	0.000	0.364
34.00	-36.31	-22.59	0.00	-1752.9	0.00	1752.93	4317.58	2158.79	9969.51	4992.17	1.94	-0.561	0.000	0.360
36.00	-35.69	-22.41	0.00	-1707.7	0.00	1707.75	4296.91	2148.46	9838.08	4926.35	2.19	-0.598	0.000	0.355
38.00	-35.07	-22.22	0.00	-1662.9	0.00	1662.93	4275.98	2137.99	9706.86	4860.65	2.45	-0.635	0.000	0.350
40.00	-34.46	-22.03	0.00	-1618.4	0.00	1618.48	4254.78	2127.39	9575.87	4795.05	2.72	-0.672	0.000	0.346
41.00	-34.16	-21.94	0.00	-1596.4	0.00	1596.45	4244.08	2122.04	9510.46	4762.30	2.86	-0.691	0.000	0.343
42.00	-33.58	-21.84	0.00	-1574.5	0.00	1574.51	4233.32	2116.66	9445.12	4729.58	3.01	-0.709	0.000	0.341
44.00	-32.45	-21.64	0.00	-1530.8	0.00	1530.83	4211.60	2105.80	9314.62	4664.23	3.32	-0.746	0.000	0.336
46.00	-31.33	-21.44	0.00	-1487.5	0.00	1487.55	4189.62	2094.81	9184.40	4599.03	3.64	-0.783	0.000	0.331
48.00	-30.21	-21.23	0.00	-1444.6	0.00	1444.68	4202.72	2101.36	9261.79	4637.78	3.97	-0.819	0.000	0.319
50.00	-29.62	-21.03	0.00	-1402.2	0.00	1402.22	4180.63	2090.32	9131.68	4572.63	4.32	-0.856	0.000	0.314
52.00	-29.03	-20.83	0.00	-1360.1	0.00	1360.16	4158.28	2079.14	9001.86	4507.62	4.69	-0.891	0.000	0.309
54.00	-28.45	-20.62	0.00	-1318.5	0.00	1318.50	4135.67	2067.83	8872.35	4442.77	5.07	-0.925	0.000	0.304
56.00	-27.87	-20.42	0.00	-1277.2	0.00	1277.26	4112.79	2056.39	8743.17	4378.08	5.47	-0.960	0.000	0.299
58.00	-27.29	-20.22	0.00	-1236.4	0.00	1236.41	4089.65	2044.83	8614.32	4313.56	5.88	-0.994	0.000	0.293
60.00	-26.72	-20.01	0.00	-1195.9	0.00	1195.98	4066.25	2033.13	8485.83	4249.22	6.30	-1.029	0.000	0.288
62.00	-26.16	-19.80	0.00	-1155.9	0.00	1155.96	4042.59	2021.29	8357.71	4185.07	6.74	-1.063	0.000	0.283
64.00	-25.60	-19.60	0.00	-1116.3	0.00	1116.36	4018.67	2009.33	8229.97	4121.10	7.19	-1.096	0.000	0.277
66.00	-25.05	-19.39	0.00	-1077.1	0.00	1077.16	3994.48	1997.24	8102.64	4057.34	7.66	-1.130	0.000	0.272
68.00	-24.50	-19.18	0.00	-1038.3	0.00	1038.39	3970.03	1985.02	7975.72	3993.79	8.14	-1.163	0.000	0.266
70.00	-23.95	-18.97	0.00	-1000.0	0.00	1000.02	3945.32	1972.66	7849.23	3930.45	8.63	-1.196	0.000	0.261
72.00	-23.41	-18.76	0.00	-962.08	0.00	962.08	3920.35	1960.17	7723.19	3867.33	9.14	-1.229	0.000	0.255
74.00	-22.88	-18.56	0.00	-924.55	0.00	924.55	3895.11	1947.56	7597.60	3804.45	9.67	-1.261	0.000	0.249
76.00	-22.35	-18.35	0.00	-887.44	0.00	887.44	3869.62	1934.81	7472.50	3741.80	10.20	-1.293	0.000	0.243
78.00	-21.82	-18.14	0.00	-850.75	0.00	850.75	3843.86	1921.93	7347.89	3679.40	10.75	-1.325	0.000	0.237
80.00	-21.30	-17.93	0.00	-814.47	0.00	814.47	3817.84	1908.92	7223.78	3617.26	11.31	-1.356	0.000	0.231
82.00	-20.79	-17.72	0.00	-778.62	0.00	778.62	3791.55	1895.78	7100.20	3555.38	11.89	-1.387	0.000	0.225
84.00	-20.28	-17.51	0.00	-743.18	0.00	743.18	3765.01	1882.50	6977.16	3493.76	12.48	-1.418	0.000	0.218
85.00	-20.03	-17.40	0.00	-725.67	0.00	725.67	3751.64	1875.82	6915.84	3463.06	12.77	-1.433	0.000	0.215
86.00	-19.59	-17.30	0.00	-708.27	0.00	708.27	3738.20	1869.10	6854.67	3432.43	13.08	-1.448	0.000	0.212

Calculated Forces

Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 18

Tower Engineering Solutions

88.00	-18.73	-17.08	0.00	-673.67	0.00	673.67	3711.13	1855.57	6732.75	3371.38	13.69	-1.477	0.000	0.205
90.00	-17.87	-16.85	0.00	-639.52	0.00	639.52	3683.80	1841.90	6611.41	3310.62	14.31	-1.506	0.000	0.198
91.00	-17.45	-16.74	0.00	-622.67	0.00	622.67	2899.19	1449.59	5264.94	2636.38	14.63	-1.520	0.000	0.242
92.00	-17.23	-16.64	0.00	-605.93	0.00	605.93	2889.87	1444.93	5219.87	2613.82	14.95	-1.534	0.000	0.238
94.00	-16.81	-16.43	0.00	-572.65	0.00	572.65	2871.03	1435.52	5129.93	2568.78	15.60	-1.566	0.000	0.229
96.00	-16.39	-16.23	0.00	-539.78	0.00	539.78	2851.93	1425.97	5040.25	2523.87	16.26	-1.597	0.000	0.220
98.00	-15.98	-16.02	0.00	-507.33	0.00	507.33	2832.57	1416.29	4950.87	2479.11	16.94	-1.627	0.000	0.210
100.00	-15.57	-15.81	0.00	-475.30	0.00	475.30	2812.95	1406.48	4861.78	2434.50	17.63	-1.656	0.000	0.201
102.00	-15.16	-15.61	0.00	-443.68	0.00	443.68	2793.07	1396.53	4773.01	2390.05	18.33	-1.684	0.000	0.191
104.00	-14.76	-15.40	0.00	-412.47	0.00	412.47	2772.92	1386.46	4684.57	2345.77	19.04	-1.711	0.000	0.181
106.00	-14.36	-15.20	0.00	-381.67	0.00	381.67	2752.51	1376.26	4596.48	2301.65	19.76	-1.737	0.000	0.171
108.00	-13.97	-14.99	0.00	-351.28	0.00	351.28	2731.84	1365.92	4508.75	2257.73	20.50	-1.761	0.000	0.161
110.00	-13.58	-14.79	0.00	-321.29	0.00	321.29	2710.91	1355.45	4421.40	2213.98	21.24	-1.785	0.000	0.150
112.00	-13.20	-14.59	0.00	-291.72	0.00	291.72	2689.71	1344.86	4334.44	2170.44	21.99	-1.807	0.000	0.139
114.00	-12.82	-14.38	0.00	-262.55	0.00	262.55	2668.26	1334.13	4247.89	2127.10	22.75	-1.828	0.000	0.128
116.00	-12.44	-14.18	0.00	-233.78	0.00	233.78	2646.54	1323.27	4161.76	2083.97	23.52	-1.848	0.000	0.117
118.00	-12.07	-13.98	0.00	-205.42	0.00	205.42	2624.55	1312.28	4076.08	2041.07	24.30	-1.865	0.000	0.105
120.00	-11.71	-13.78	0.00	-177.45	0.00	177.45	2602.31	1301.16	3990.84	1998.39	25.09	-1.881	0.000	0.093
122.00	-11.34	-13.59	0.00	-149.88	0.00	149.88	2579.81	1289.90	3906.08	1955.94	25.88	-1.896	0.000	0.081
124.00	-10.99	-13.39	0.00	-122.71	0.00	122.71	2557.04	1278.52	3821.80	1913.74	26.68	-1.908	0.000	0.069
126.00	-10.63	-13.19	0.00	-95.93	0.00	95.93	2534.01	1267.00	3738.03	1871.79	27.48	-1.918	0.000	0.056
128.00	-10.28	-13.00	0.00	-69.54	0.00	69.54	2510.72	1255.36	3654.77	1830.10	28.28	-1.926	0.000	0.042
130.00	-6.02	-6.40	0.00	-43.54	0.00	43.54	2487.16	1243.58	3572.03	1788.67	29.09	-1.932	0.000	0.027
132.00	-5.48	-6.20	0.00	-30.74	0.00	30.74	2463.34	1231.67	3489.85	1747.52	29.90	-1.936	0.000	0.020
134.00	-4.95	-6.00	0.00	-18.35	0.00	18.35	2439.27	1219.63	3408.23	1706.65	30.71	-1.939	0.000	0.013
135.00	-4.69	-5.90	0.00	-12.35	0.00	12.35	1824.83	912.42	2579.10	1291.47	31.12	-1.940	0.000	0.012
136.00	-4.57	-5.81	0.00	-6.45	0.00	6.45	1817.10	908.55	2550.48	1277.14	31.53	-1.940	0.000	0.008
137.00	-0.32	-0.28	0.00	-0.64	0.00	0.64	1809.31	904.66	2521.92	1262.84	31.93	-1.940	0.000	0.001
138.00	-0.21	-0.18	0.00	-0.37	0.00	0.37	1801.45	900.73	2493.42	1248.56	32.34	-1.941	0.000	0.000
140.00	0.00	-0.18	0.00	0.00	0.00	0.00	1785.54	892.77	2436.62	1220.12	33.15	-1.941	0.000	0.000

Wind Loading - Shaft

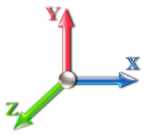
Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 19	

Tower Engineering Solutions

Load Case: 0.9D + 1.6W 101 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 22

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	0.70	17.366	19.10	461.21	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.70	17.366	19.10	457.85	0.650	0.000	2.00	10.876	7.07	216.1	0.0	542.9
4.00		1.00	0.70	17.366	19.10	454.48	0.650	0.000	2.00	10.796	7.02	214.5	0.0	538.9
6.00		1.00	0.70	17.366	19.10	451.12	0.650	0.000	2.00	10.717	6.97	212.9	0.0	534.9
8.00		1.00	0.70	17.366	19.10	447.76	0.650	0.000	2.00	10.637	6.91	211.3	0.0	530.9
10.00		1.00	0.70	17.366	19.10	444.39	0.650	0.000	2.00	10.558	6.86	209.7	0.0	526.9
12.00		1.00	0.70	17.366	19.10	441.03	0.650	0.000	2.00	10.478	6.81	208.2	0.0	522.9
14.00		1.00	0.70	17.366	19.10	437.67	0.650	0.000	2.00	10.398	6.76	206.6	0.0	518.9
16.00		1.00	0.70	17.366	19.10	434.30	0.650	0.000	2.00	10.319	6.71	205.0	0.0	514.8
18.00		1.00	0.70	17.366	19.10	430.94	0.650	0.000	2.00	10.239	6.66	203.4	0.0	510.8
20.00		1.00	0.70	17.366	19.10	427.58	0.650	0.000	2.00	10.160	6.60	201.8	0.0	506.8
22.00		1.00	0.70	17.366	19.10	424.21	0.650	0.000	2.00	10.080	6.55	200.3	0.0	502.8
24.00		1.00	0.70	17.366	19.10	420.85	0.650	0.000	2.00	10.000	6.50	198.7	0.0	498.8
25.00	Top - Section 1	1.00	0.70	17.366	19.10	419.17	0.650	0.000	1.00	4.970	3.23	98.7	0.0	247.9
26.00		1.00	0.70	17.366	19.10	417.49	0.650	0.000	1.00	4.950	3.22	98.4	0.0	211.9
28.00		1.00	0.70	17.366	19.10	414.12	0.650	0.000	2.00	9.841	6.40	195.5	0.0	421.2
30.00		1.00	0.71	17.544	19.30	412.86	0.650	0.000	2.00	9.762	6.35	195.9	0.0	417.8
32.00		1.00	0.72	17.861	19.65	413.16	0.650	0.000	2.00	9.682	6.29	197.8	0.0	414.3
34.00		1.00	0.73	18.163	19.98	413.20	0.650	0.000	2.00	9.602	6.24	199.5	0.0	410.9
36.00		1.00	0.74	18.454	20.30	413.03	0.650	0.000	2.00	9.523	6.19	201.0	0.0	407.5
38.00		1.00	0.76	18.734	20.61	412.65	0.650	0.000	2.00	9.443	6.14	202.4	0.0	404.0
40.00		1.00	0.77	19.003	20.90	412.09	0.650	0.000	2.00	9.364	6.09	203.6	0.0	400.6
41.00	Bot - Section 3	1.00	0.77	19.135	21.05	411.75	0.650	0.000	1.00	4.652	3.02	101.8	0.0	199.0
42.00		1.00	0.78	19.264	21.19	411.37	0.650	0.000	1.00	4.696	3.05	103.5	0.0	399.1
44.00		1.00	0.79	19.516	21.47	410.48	0.650	0.000	2.00	9.331	6.07	208.3	0.0	793.0
46.00		1.00	0.80	19.760	21.74	409.45	0.650	0.000	2.00	9.252	6.01	209.1	0.0	786.1
48.00	Top - Section 2	1.00	0.81	19.996	22.00	408.29	0.650	0.000	2.00	9.172	5.96	209.8	0.0	779.3
50.00		1.00	0.82	20.226	22.25	412.78	0.650	0.000	2.00	9.093	5.91	210.4	0.0	388.9
52.00		1.00	0.82	20.450	22.49	411.41	0.650	0.000	2.00	9.013	5.86	210.9	0.0	385.5
54.00		1.00	0.83	20.667	22.73	409.92	0.650	0.000	2.00	8.933	5.81	211.2	0.0	382.1
56.00		1.00	0.84	20.879	22.97	408.33	0.650	0.000	2.00	8.854	5.75	211.5	0.0	378.6
58.00		1.00	0.85	21.086	23.19	406.64	0.650	0.000	2.00	8.774	5.70	211.7	0.0	375.2
60.00		1.00	0.86	21.288	23.42	404.86	0.650	0.000	2.00	8.694	5.65	211.7	0.0	371.8
62.00		1.00	0.87	21.485	23.63	402.99	0.650	0.000	2.00	8.615	5.60	211.7	0.0	368.4
64.00		1.00	0.87	21.678	23.85	401.04	0.650	0.000	2.00	8.535	5.55	211.7	0.0	364.9
66.00		1.00	0.88	21.866	24.05	399.00	0.650	0.000	2.00	8.456	5.50	211.5	0.0	361.5
68.00		1.00	0.89	22.051	24.26	396.89	0.650	0.000	2.00	8.376	5.44	211.3	0.0	358.1
70.00		1.00	0.90	22.231	24.45	394.71	0.650	0.000	2.00	8.296	5.39	211.0	0.0	354.6
72.00		1.00	0.90	22.409	24.65	392.46	0.650	0.000	2.00	8.217	5.34	210.6	0.0	351.2
74.00		1.00	0.91	22.582	24.84	390.14	0.650	0.000	2.00	8.137	5.29	210.2	0.0	347.8
76.00		1.00	0.92	22.753	25.03	387.76	0.650	0.000	2.00	8.058	5.24	209.7	0.0	344.4
78.00		1.00	0.92	22.920	25.21	385.32	0.650	0.000	2.00	7.978	5.19	209.2	0.0	340.9
80.00		1.00	0.93	23.084	25.39	382.82	0.650	0.000	2.00	7.898	5.13	208.6	0.0	337.5
82.00		1.00	0.94	23.246	25.57	380.27	0.650	0.000	2.00	7.819	5.08	207.9	0.0	334.1
84.00		1.00	0.94	23.404	25.74	377.66	0.650	0.000	2.00	7.739	5.03	207.2	0.0	330.6
85.00	Bot - Section 4	1.00	0.95	23.483	25.83	376.33	0.650	0.000	1.00	3.840	2.50	103.2	0.0	164.0
86.00		1.00	0.95	23.561	25.92	375.00	0.650	0.000	1.00	3.873	2.52	104.4	0.0	301.2

Wind Loading - Shaft

Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 20

88.00		1.00	0.96	23.714	26.09	372.29	0.650	0.000	2.00	7.686	5.00	208.5	0.0	597.8
90.00		1.00	0.96	23.865	26.25	369.53	0.650	0.000	2.00	7.606	4.94	207.7	0.0	591.5
91.00	Top - Section 3	1.00	0.96	23.940	26.33	368.13	0.650	0.000	1.00	3.773	2.45	103.3	0.0	293.4
92.00		1.00	0.97	24.014	26.42	371.98	0.650	0.000	1.00	3.753	2.44	103.1	0.0	133.8
94.00		1.00	0.97	24.160	26.58	369.14	0.650	0.000	2.00	7.447	4.84	205.8	0.0	265.4
96.00		1.00	0.98	24.304	26.73	366.26	0.650	0.000	2.00	7.367	4.79	204.8	0.0	262.6
98.00		1.00	0.99	24.447	26.89	363.34	0.650	0.000	2.00	7.288	4.74	203.8	0.0	259.7
100.00		1.00	0.99	24.587	27.05	360.38	0.650	0.000	2.00	7.208	4.69	202.7	0.0	256.9
102.00		1.00	1.00	24.725	27.20	357.38	0.650	0.000	2.00	7.129	4.63	201.6	0.0	254.0
104.00		1.00	1.00	24.861	27.35	354.34	0.650	0.000	2.00	7.049	4.58	200.5	0.0	251.1
106.00		1.00	1.01	24.995	27.49	351.26	0.650	0.000	2.00	6.969	4.53	199.3	0.0	248.3
108.00		1.00	1.01	25.128	27.64	348.14	0.650	0.000	2.00	6.890	4.48	198.1	0.0	245.4
110.00		1.00	1.02	25.259	27.78	344.99	0.650	0.000	2.00	6.810	4.43	196.8	0.0	242.6
112.00		1.00	1.02	25.388	27.93	341.81	0.650	0.000	2.00	6.731	4.37	195.5	0.0	239.7
114.00		1.00	1.03	25.516	28.07	338.59	0.650	0.000	2.00	6.651	4.32	194.1	0.0	236.8
116.00		1.00	1.03	25.642	28.21	335.34	0.650	0.000	2.00	6.571	4.27	192.8	0.0	234.0
118.00		1.00	1.04	25.766	28.34	332.05	0.650	0.000	2.00	6.492	4.22	191.4	0.0	231.1
120.00		1.00	1.04	25.889	28.48	328.74	0.650	0.000	2.00	6.412	4.17	189.9	0.0	228.3
122.00		1.00	1.05	26.011	28.61	325.39	0.650	0.000	2.00	6.333	4.12	188.4	0.0	225.4
124.00		1.00	1.05	26.131	28.74	322.02	0.650	0.000	2.00	6.253	4.06	186.9	0.0	222.6
126.00		1.00	1.06	26.250	28.87	318.61	0.650	0.000	2.00	6.173	4.01	185.4	0.0	219.7
128.00		1.00	1.06	26.367	29.00	315.18	0.650	0.000	2.00	6.094	3.96	183.8	0.0	216.8
130.00	Bot - Section 5	1.00	1.07	26.483	29.13	311.72	0.650	0.000	2.00	6.014	3.91	182.2	0.0	214.0
132.00		1.00	1.07	26.598	29.26	308.24	0.650	0.000	2.00	6.019	3.91	183.2	0.0	382.8
134.00		1.00	1.08	26.712	29.38	304.72	0.650	0.000	2.00	5.940	3.86	181.5	0.0	377.6
135.00	Top - Section 4	1.00	1.08	26.768	29.44	302.96	0.650	0.000	1.00	2.940	1.91	90.0	0.0	186.9
136.00		1.00	1.08	26.824	29.51	305.63	0.650	0.000	1.00	2.920	1.90	89.6	0.0	83.2
137.00	Appurtenance(s)	1.00	1.08	26.880	29.57	303.85	0.650	0.000	1.00	2.900	1.89	89.2	0.0	82.7
138.00		1.00	1.09	26.936	29.63	302.07	0.650	0.000	1.00	2.880	1.87	88.8	0.0	82.1
140.00		1.00	1.09	27.046	29.75	298.49	0.650	0.000	2.00	5.701	3.71	176.4	0.0	162.5
								Totals:	**140.00**			**14,134.7**		**27,012.8**

Discrete Appurtenance Forces

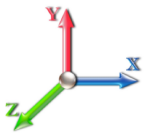
Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 21	

Tower Engineering Solutions

Load Case: 0.9D + 1.6W 101 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 22

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	137.00	HRK12 (Handrail Kit)	1	26.880	29.568	1.00	1.00	6.75	235.55	0.000	0.000	319.34	0.00	0.00
2	137.00	(3) Stabilizer Kit (4' FW)	1	26.880	29.568	1.00	1.00	3.70	126.00	0.000	0.000	175.04	0.00	0.00
3	137.00	B2/B66A RRHBR049	3	26.880	29.568	0.50	0.75	2.83	228.15	0.000	0.000	134.08	0.00	0.00
4	137.00	RCMDC-6627-PF-48	1	26.880	29.568	0.50	0.75	2.04	28.80	0.000	0.000	96.52	0.00	0.00
5	137.00	Antel LPA-80063/6CF	3	26.880	29.568	0.70	0.75	20.30	72.90	0.000	0.000	960.56	0.00	0.00
6	137.00	JAHH-65B-R3B	6	26.880	29.568	0.62	0.75	34.03	341.82	0.000	0.000	1609.73	0.00	0.00
7	137.00	B5/B13 RRHBR04C	3	26.880	29.568	0.50	0.75	2.79	189.81	0.000	0.000	131.94	0.00	0.00
8	137.00	PRK-1245 (kicker kit)	1	26.880	29.568	1.00	1.00	9.50	418.42	0.000	0.000	449.43	0.00	0.00
9	137.00	MT6407-77A	3	26.880	29.568	0.52	0.75	7.39	214.38	0.000	0.000	349.46	0.00	0.00
10	137.00	CBC78T-DS-43	3	26.880	29.568	0.50	0.75	0.56	28.08	0.000	0.000	26.39	0.00	0.00
11	137.00	Low Profile Platform	1	26.880	29.568	1.00	1.00	22.00	1350.00	0.000	0.000	1040.80	0.00	0.00
12	130.00	7770.00	6	26.483	29.132	0.55	0.75	18.07	145.80	0.000	0.000	842.13	0.00	0.00
13	130.00	Powerwave LGP21901 -	6	26.483	29.132	0.50	0.75	5.04	167.40	0.000	0.000	234.69	0.00	0.00
14	130.00	RRUS 4449 B5/B12	3	26.483	29.132	0.50	0.75	2.97	191.70	0.000	0.000	138.42	0.00	0.00
15	130.00	RRUS 8843 B2 B66A	3	26.483	29.132	0.50	0.75	2.47	194.40	0.000	0.000	115.24	0.00	0.00
16	130.00	LGP17201	6	26.483	29.132	0.50	0.75	5.88	54.00	0.000	0.000	274.03	0.00	0.00
17	130.00	HRK12 (Handrail Kit)	1	26.483	29.132	1.00	1.00	10.00	235.55	0.000	0.000	466.10	0.00	0.00
18	130.00	DMP65R-BU8DA	3	26.483	29.132	0.54	0.75	28.95	258.39	0.000	0.000	1349.35	0.00	0.00
19	130.00	HPA-65R-BU8AA	3	26.483	29.132	0.65	0.75	21.73	145.80	0.000	0.000	1012.85	0.00	0.00
20	130.00	15'x2.875"mount pipe	3	26.483	29.132	1.00	1.00	12.93	234.90	0.000	0.000	602.67	0.00	0.00
21	130.00	Low Profile Platform	1	26.483	29.132	1.00	1.00	22.00	1350.00	0.000	0.000	1025.43	0.00	0.00
22	130.00	DC6-48-60-18-8F	1	26.483	29.132	0.50	0.75	0.65	29.52	0.000	0.000	30.45	0.00	0.00
23	130.00	Powerwave LGP21401 -	6	26.483	29.132	0.50	0.75	3.89	94.50	0.000	0.000	181.28	0.00	0.00
							Totals:		**6,335.87**			**11,565.93**		

Total Applied Force Summary

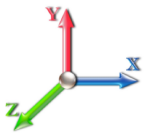
Structure:	CT11560-A-SBA		**Code:**	EIA/TIA-222-G	11/18/2021
Site Name:	Sterling 6, CT		**Exposure:**	B	
Height:	140.00 (ft)		**Crest Height:**	0.00	
Base Elev:	1.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 22

Tower Engineering Solutions

Load Case: 0.9D + 1.6W 101 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 22

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		216.07	546.81	0.00	0.00
4.00		214.49	565.28	0.00	0.00
6.00		212.91	583.74	0.00	0.00
8.00		211.33	579.74	0.00	0.00
10.00		209.75	575.74	0.00	0.00
12.00		208.17	571.74	0.00	0.00
14.00		206.58	567.74	0.00	0.00
16.00		205.00	563.74	0.00	0.00
18.00		203.42	559.74	0.00	0.00
20.00		201.84	555.74	0.00	0.00
22.00		200.26	551.74	0.00	0.00
24.00		198.68	547.74	0.00	0.00
25.00		98.75	272.37	0.00	0.00
26.00		98.35	236.32	0.00	0.00
28.00		195.51	470.07	0.00	0.00
30.00		195.92	466.64	0.00	0.00
32.00		197.83	463.21	0.00	0.00
34.00		199.53	459.78	0.00	0.00
36.00		201.04	456.35	0.00	0.00
38.00		202.38	452.93	0.00	0.00
40.00		203.56	449.50	0.00	0.00
41.00		101.83	223.46	0.00	0.00
42.00		103.48	423.50	0.00	0.00
44.00		208.33	841.86	0.00	0.00
46.00		209.14	835.00	0.00	0.00
48.00		209.82	828.14	0.00	0.00
50.00		210.39	437.82	0.00	0.00
52.00		210.85	434.39	0.00	0.00
54.00		211.21	430.96	0.00	0.00
56.00		211.48	427.53	0.00	0.00
58.00		211.65	424.10	0.00	0.00
60.00		211.74	420.68	0.00	0.00
62.00		211.74	417.25	0.00	0.00
64.00		211.67	413.82	0.00	0.00
66.00		211.52	410.39	0.00	0.00
68.00		211.29	406.96	0.00	0.00
70.00		211.00	403.53	0.00	0.00
72.00		210.64	400.10	0.00	0.00
74.00		210.22	396.67	0.00	0.00
76.00		209.73	393.24	0.00	0.00
78.00		209.19	389.81	0.00	0.00
80.00		208.59	386.39	0.00	0.00
82.00		207.93	382.96	0.00	0.00
84.00		207.22	379.53	0.00	0.00
85.00		103.15	188.48	0.00	0.00
86.00		104.38	325.69	0.00	0.00

Total Applied Force Summary

Structure:	CT11560-A-SBA		**Code:**	EIA/TIA-222-G	11/18/2021
Site Name:	Sterling 6, CT		**Exposure:**	B	
Height:	140.00 (ft)		**Crest Height:**	0.00	
Base Elev:	1.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 23

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88.00		208.51	646.67	0.00	0.00
90.00		207.66	640.38	0.00	0.00
91.00		103.34	317.83	0.00	0.00
92.00		103.11	158.23	0.00	0.00
94.00		205.83	314.31	0.00	0.00
96.00		204.85	311.45	0.00	0.00
98.00		203.82	308.60	0.00	0.00
100.00		202.75	305.74	0.00	0.00
102.00		201.63	302.88	0.00	0.00
104.00		200.48	300.02	0.00	0.00
106.00		199.29	297.17	0.00	0.00
108.00		198.06	294.31	0.00	0.00
110.00		196.79	291.45	0.00	0.00
112.00		195.48	288.59	0.00	0.00
114.00		194.14	285.74	0.00	0.00
116.00		192.77	282.88	0.00	0.00
118.00		191.36	280.02	0.00	0.00
120.00		189.91	277.16	0.00	0.00
122.00		188.43	274.31	0.00	0.00
124.00		186.93	271.45	0.00	0.00
126.00		185.38	268.59	0.00	0.00
128.00		183.81	265.73	0.00	0.00
130.00	(42) attachments	6454.86	3364.84	0.00	0.00
132.00		183.15	405.45	0.00	0.00
134.00		181.50	400.31	0.00	0.00
135.00		90.03	198.22	0.00	0.00
136.00		89.61	94.59	0.00	0.00
137.00	(26) attachments	5382.46	3327.92	0.00	0.00
138.00		88.75	82.10	0.00	0.00
140.00		176.38	162.50	0.00	0.00
	Totals:	**25,700.67**	**36,538.34**	**0.00**	**0.00**

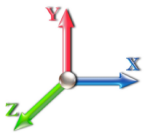
Linear Appurtenance Segment Forces (Factored)

Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 24	

Load Case: 0.9D + 1.6W 101 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 22

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)
4.00	1" DC Power	Yes	1.00	0.000	1.00	0.08	0.00	0.008	0.000	17.366	0.00	1.80
4.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.008	0.000	17.366	0.00	0.07
6.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.016	0.000	17.366	0.00	3.60
6.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	17.366	0.00	0.14
8.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.016	0.000	17.366	0.00	3.60
8.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	17.366	0.00	0.14
10.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.016	0.000	17.366	0.00	3.60
10.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	17.366	0.00	0.14
12.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.016	0.000	17.366	0.00	3.60
12.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	17.366	0.00	0.14
14.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.016	0.000	17.366	0.00	3.60
14.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	17.366	0.00	0.14
16.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.016	0.000	17.366	0.00	3.60
16.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	17.366	0.00	0.14
18.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.016	0.000	17.366	0.00	3.60
18.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	17.366	0.00	0.14
20.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.016	0.000	17.366	0.00	3.60
20.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	17.366	0.00	0.14
22.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.017	0.000	17.366	0.00	3.60
22.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.017	0.000	17.366	0.00	0.14
24.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.017	0.000	17.366	0.00	3.60
24.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.017	0.000	17.366	0.00	0.14
25.00	1" DC Power	Yes	1.00	0.000	1.00	0.08	0.00	0.017	0.000	17.366	0.00	1.80
25.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.017	0.000	17.366	0.00	0.07
26.00	1" DC Power	Yes	1.00	0.000	1.00	0.08	0.00	0.017	0.000	17.366	0.00	1.80
26.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.017	0.000	17.366	0.00	0.07
28.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.017	0.000	17.366	0.00	3.60
28.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.017	0.000	17.366	0.00	0.14
30.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.017	0.000	17.544	0.00	3.60
30.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.017	0.000	17.544	0.00	0.14
32.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.017	0.000	17.861	0.00	3.60
32.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.017	0.000	17.861	0.00	0.14
34.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.017	0.000	18.163	0.00	3.60
34.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.017	0.000	18.163	0.00	0.14
36.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.018	0.000	18.454	0.00	3.60
36.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	18.454	0.00	0.14
38.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.018	0.000	18.734	0.00	3.60
38.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	18.734	0.00	0.14
40.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.018	0.000	19.003	0.00	3.60
40.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	19.003	0.00	0.14
41.00	1" DC Power	Yes	1.00	0.000	1.00	0.08	0.00	0.018	0.000	19.135	0.00	1.80
41.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.018	0.000	19.135	0.00	0.07
42.00	1" DC Power	Yes	1.00	0.000	1.00	0.08	0.00	0.018	0.000	19.264	0.00	1.80
42.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.018	0.000	19.264	0.00	0.07
44.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.018	0.000	19.516	0.00	3.60
44.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	19.516	0.00	0.14
46.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.018	0.000	19.760	0.00	3.60

Linear Appurtenance Segment Forces (Factored)

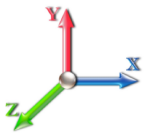
Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 25	

Tower Engineering Solutions

Load Case: 0.9D + 1.6W 101 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 22

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	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	19.760	0.00	0.14
48.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.018	0.000	19.996	0.00	3.60
48.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	19.996	0.00	0.14
50.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.018	0.000	20.226	0.00	3.60
50.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	20.226	0.00	0.14
52.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.018	0.000	20.450	0.00	3.60
52.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	20.450	0.00	0.14
54.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.019	0.000	20.667	0.00	3.60
54.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.019	0.000	20.667	0.00	0.14
56.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.019	0.000	20.879	0.00	3.60
56.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.019	0.000	20.879	0.00	0.14
58.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.019	0.000	21.086	0.00	3.60
58.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.019	0.000	21.086	0.00	0.14
60.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.019	0.000	21.288	0.00	3.60
60.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.019	0.000	21.288	0.00	0.14
62.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.019	0.000	21.485	0.00	3.60
62.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.019	0.000	21.485	0.00	0.14
64.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.020	0.000	21.678	0.00	3.60
64.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.020	0.000	21.678	0.00	0.14
66.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.020	0.000	21.866	0.00	3.60
66.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.020	0.000	21.866	0.00	0.14
68.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.020	0.000	22.051	0.00	3.60
68.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.020	0.000	22.051	0.00	0.14
70.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.020	0.000	22.231	0.00	3.60
70.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.020	0.000	22.231	0.00	0.14
72.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.020	0.000	22.409	0.00	3.60
72.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.020	0.000	22.409	0.00	0.14
74.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.020	0.000	22.582	0.00	3.60
74.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.020	0.000	22.582	0.00	0.14
76.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.021	0.000	22.753	0.00	3.60
76.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.021	0.000	22.753	0.00	0.14
78.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.021	0.000	22.920	0.00	3.60
78.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.021	0.000	22.920	0.00	0.14
80.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.021	0.000	23.084	0.00	3.60
80.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.021	0.000	23.084	0.00	0.14
82.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.021	0.000	23.246	0.00	3.60
82.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.021	0.000	23.246	0.00	0.14
84.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.022	0.000	23.404	0.00	3.60
84.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.022	0.000	23.404	0.00	0.14
85.00	1" DC Power	Yes	1.00	0.000	1.00	0.08	0.00	0.022	0.000	23.483	0.00	1.80
85.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.022	0.000	23.483	0.00	0.07
86.00	1" DC Power	Yes	1.00	0.000	1.00	0.08	0.00	0.022	0.000	23.561	0.00	1.80
86.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.022	0.000	23.561	0.00	0.07
88.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.022	0.000	23.714	0.00	3.60
88.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.022	0.000	23.714	0.00	0.14
90.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.022	0.000	23.865	0.00	3.60
90.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.022	0.000	23.865	0.00	0.14

Linear Appurtenance Segment Forces (Factored)

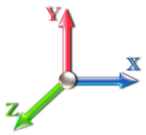
Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 26	

Tower Engineering Solutions

Load Case: 0.9D + 1.6W 101 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 22

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)
91.00	1" DC Power	Yes	1.00	0.000	1.00	0.08	0.00	0.022	0.000	23.940	0.00	1.80
91.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.022	0.000	23.940	0.00	0.07
92.00	1" DC Power	Yes	1.00	0.000	1.00	0.08	0.00	0.022	0.000	24.014	0.00	1.80
92.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.022	0.000	24.014	0.00	0.07
94.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.022	0.000	24.160	0.00	3.60
94.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.022	0.000	24.160	0.00	0.14
96.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.023	0.000	24.304	0.00	3.60
96.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.023	0.000	24.304	0.00	0.14
98.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.023	0.000	24.447	0.00	3.60
98.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.023	0.000	24.447	0.00	0.14
100.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.023	0.000	24.587	0.00	3.60
100.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.023	0.000	24.587	0.00	0.14
102.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.023	0.000	24.725	0.00	3.60
102.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.023	0.000	24.725	0.00	0.14
104.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.024	0.000	24.861	0.00	3.60
104.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.024	0.000	24.861	0.00	0.14
106.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.024	0.000	24.995	0.00	3.60
106.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.024	0.000	24.995	0.00	0.14
108.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.024	0.000	25.128	0.00	3.60
108.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.024	0.000	25.128	0.00	0.14
110.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.024	0.000	25.259	0.00	3.60
110.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.024	0.000	25.259	0.00	0.14
112.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.025	0.000	25.388	0.00	3.60
112.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.025	0.000	25.388	0.00	0.14
114.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.025	0.000	25.516	0.00	3.60
114.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.025	0.000	25.516	0.00	0.14
116.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.025	0.000	25.642	0.00	3.60
116.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.025	0.000	25.642	0.00	0.14
118.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.026	0.000	25.766	0.00	3.60
118.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.026	0.000	25.766	0.00	0.14
120.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.026	0.000	25.889	0.00	3.60
120.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.026	0.000	25.889	0.00	0.14
122.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.026	0.000	26.011	0.00	3.60
122.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.026	0.000	26.011	0.00	0.14
124.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.027	0.000	26.131	0.00	3.60
124.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.027	0.000	26.131	0.00	0.14
126.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.027	0.000	26.250	0.00	3.60
126.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.027	0.000	26.250	0.00	0.14
128.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.027	0.000	26.367	0.00	3.60
128.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.027	0.000	26.367	0.00	0.14
130.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.028	0.000	26.483	0.00	3.60
130.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.028	0.000	26.483	0.00	0.14
									Totals:		**0.0**	**237.7**

Calculated Forces

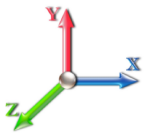
Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 27	

Tower Engineering Solutions

Load Case: 0.9D + 1.6W 101 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 22

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	-36.53	-25.71	0.00	-2563.2	0.00	2563.29	5803.10	2901.55	15291.3	7657.05	0.00	0.000	0.000	0.341
2.00	-35.97	-25.51	0.00	-2511.8	0.00	2511.87	5778.21	2889.11	15113.2	7567.86	0.01	-0.031	0.000	0.338
4.00	-35.39	-25.32	0.00	-2460.8	0.00	2460.84	5753.06	2876.53	14935.4	7478.80	0.03	-0.063	0.000	0.335
6.00	-34.79	-25.12	0.00	-2410.2	0.00	2410.20	5727.65	2863.83	14757.8	7389.90	0.06	-0.094	0.000	0.332
8.00	-34.20	-24.93	0.00	-2359.9	0.00	2359.96	5701.98	2850.99	14580.6	7301.16	0.11	-0.126	0.000	0.329
10.00	-33.61	-24.74	0.00	-2310.1	0.00	2310.10	5676.04	2838.02	14403.7	7212.59	0.17	-0.157	0.000	0.326
12.00	-33.03	-24.55	0.00	-2260.6	0.00	2260.62	5649.84	2824.92	14227.2	7124.20	0.24	-0.189	0.000	0.323
14.00	-32.45	-24.35	0.00	-2211.5	0.00	2211.53	5623.38	2811.69	14051.0	7035.98	0.33	-0.220	0.000	0.320
16.00	-31.87	-24.17	0.00	-2162.8	0.00	2162.82	5596.66	2798.33	13875.2	6947.96	0.43	-0.252	0.000	0.317
18.00	-31.30	-23.98	0.00	-2114.4	0.00	2114.49	5569.67	2784.84	13699.9	6860.14	0.54	-0.283	0.000	0.314
20.00	-30.73	-23.79	0.00	-2066.5	0.00	2066.54	5542.43	2771.21	13524.9	6772.52	0.66	-0.315	0.000	0.311
22.00	-30.17	-23.60	0.00	-2018.9	0.00	2018.96	5514.92	2757.46	13350.3	6685.11	0.80	-0.347	0.000	0.308
24.00	-29.61	-23.41	0.00	-1971.7	0.00	1971.76	5487.15	2743.57	13176.2	6597.93	0.95	-0.378	0.000	0.304
25.00	-29.33	-23.32	0.00	-1948.3	0.00	1948.35	5473.16	2736.58	13089.3	6554.42	1.04	-0.394	0.000	0.303
25.00	-29.33	-23.32	0.00	-1948.3	0.00	1948.35	4407.37	2203.68	10563.1	5289.42	1.04	-0.394	0.000	0.375
26.00	-29.09	-23.23	0.00	-1925.0	0.00	1925.03	4397.65	2198.83	10497.0	5256.32	1.12	-0.410	0.000	0.373
28.00	-28.60	-23.05	0.00	-1878.5	0.00	1878.56	4378.03	2189.01	10364.9	5190.16	1.30	-0.447	0.000	0.369
30.00	-28.12	-22.87	0.00	-1832.4	0.00	1832.46	4358.14	2179.07	10232.9	5124.08	1.50	-0.484	0.000	0.364
32.00	-27.65	-22.69	0.00	-1786.7	0.00	1786.72	4338.00	2169.00	10101.1	5058.08	1.71	-0.521	0.000	0.360
34.00	-27.18	-22.50	0.00	-1741.3	0.00	1741.35	4317.58	2158.79	9969.51	4992.17	1.93	-0.558	0.000	0.355
36.00	-26.71	-22.31	0.00	-1696.3	0.00	1696.35	4296.91	2148.46	9838.08	4926.35	2.18	-0.594	0.000	0.351
38.00	-26.24	-22.12	0.00	-1651.7	0.00	1651.72	4275.98	2137.99	9706.86	4860.65	2.43	-0.631	0.000	0.346
40.00	-25.78	-21.93	0.00	-1607.4	0.00	1607.48	4254.78	2127.39	9575.87	4795.05	2.71	-0.668	0.000	0.341
41.00	-25.55	-21.83	0.00	-1585.5	0.00	1585.56	4244.08	2122.04	9510.46	4762.30	2.85	-0.686	0.000	0.339
42.00	-25.12	-21.73	0.00	-1563.7	0.00	1563.73	4233.32	2116.66	9445.12	4729.58	2.99	-0.705	0.000	0.337
44.00	-24.27	-21.53	0.00	-1520.2	0.00	1520.26	4211.60	2105.80	9314.62	4664.23	3.30	-0.741	0.000	0.332
46.00	-23.42	-21.32	0.00	-1477.2	0.00	1477.21	4189.62	2094.81	9184.40	4599.03	3.62	-0.778	0.000	0.327
48.00	-22.58	-21.12	0.00	-1434.5	0.00	1434.56	4202.72	2101.36	9261.79	4637.78	3.95	-0.814	0.000	0.315
50.00	-22.14	-20.91	0.00	-1392.3	0.00	1392.33	4180.63	2090.32	9131.68	4572.63	4.30	-0.850	0.000	0.310
52.00	-21.69	-20.71	0.00	-1350.5	0.00	1350.50	4158.28	2079.14	9001.86	4507.62	4.66	-0.885	0.000	0.305
54.00	-21.25	-20.50	0.00	-1309.0	0.00	1309.08	4135.67	2067.83	8872.35	4442.77	5.04	-0.919	0.000	0.300
56.00	-20.82	-20.30	0.00	-1268.0	0.00	1268.07	4112.79	2056.39	8743.17	4378.08	5.43	-0.954	0.000	0.295
58.00	-20.39	-20.09	0.00	-1227.4	0.00	1227.48	4089.65	2044.83	8614.32	4313.56	5.84	-0.988	0.000	0.290
60.00	-19.96	-19.88	0.00	-1187.3	0.00	1187.30	4066.25	2033.13	8485.83	4249.22	6.26	-1.022	0.000	0.284
62.00	-19.53	-19.68	0.00	-1147.5	0.00	1147.53	4042.59	2021.29	8357.71	4185.07	6.70	-1.056	0.000	0.279
64.00	-19.11	-19.47	0.00	-1108.1	0.00	1108.18	4018.67	2009.33	8229.97	4121.10	7.15	-1.089	0.000	0.274
66.00	-18.69	-19.26	0.00	-1069.2	0.00	1069.24	3994.48	1997.24	8102.64	4057.34	7.61	-1.123	0.000	0.268
68.00	-18.28	-19.05	0.00	-1030.7	0.00	1030.72	3970.03	1985.02	7975.72	3993.79	8.09	-1.156	0.000	0.263
70.00	-17.87	-18.84	0.00	-992.62	0.00	992.62	3945.32	1972.66	7849.23	3930.45	8.58	-1.188	0.000	0.257
72.00	-17.46	-18.63	0.00	-954.94	0.00	954.94	3920.35	1960.17	7723.19	3867.33	9.09	-1.221	0.000	0.251
74.00	-17.06	-18.42	0.00	-917.67	0.00	917.67	3895.11	1947.56	7597.60	3804.45	9.61	-1.253	0.000	0.246
76.00	-16.66	-18.21	0.00	-880.83	0.00	880.83	3869.62	1934.81	7472.50	3741.80	10.14	-1.285	0.000	0.240
78.00	-16.27	-18.00	0.00	-844.40	0.00	844.40	3843.86	1921.93	7347.89	3679.40	10.68	-1.316	0.000	0.234
80.00	-15.88	-17.80	0.00	-808.39	0.00	808.39	3817.84	1908.92	7223.78	3617.26	11.24	-1.347	0.000	0.228
82.00	-15.49	-17.59	0.00	-772.80	0.00	772.80	3791.55	1895.78	7100.20	3555.38	11.81	-1.378	0.000	0.222
84.00	-15.11	-17.38	0.00	-737.63	0.00	737.63	3765.01	1882.50	6977.16	3493.76	12.40	-1.408	0.000	0.215
85.00	-14.92	-17.27	0.00	-720.25	0.00	720.25	3751.64	1875.82	6915.84	3463.06	12.69	-1.423	0.000	0.212
86.00	-14.59	-17.17	0.00	-702.98	0.00	702.98	3738.20	1869.10	6854.67	3432.43	12.99	-1.438	0.000	0.209

Calculated Forces

Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 28

Tower Engineering Solutions

88.00	-13.94	-16.95	0.00	-668.64	0.00	668.64	3711.13	1855.57	6732.75	3371.38	13.60	-1.467	0.000	0.202
90.00	-13.30	-16.73	0.00	-634.75	0.00	634.75	3683.80	1841.90	6611.41	3310.62	14.22	-1.496	0.000	0.195
91.00	-12.98	-16.62	0.00	-618.02	0.00	618.02	2899.19	1449.59	5264.94	2636.38	14.54	-1.510	0.000	0.239
92.00	-12.82	-16.52	0.00	-601.40	0.00	601.40	2889.87	1444.93	5219.87	2613.82	14.86	-1.524	0.000	0.235
94.00	-12.50	-16.31	0.00	-568.36	0.00	568.36	2871.03	1435.52	5129.93	2568.78	15.50	-1.555	0.000	0.226
96.00	-12.19	-16.10	0.00	-535.74	0.00	535.74	2851.93	1425.97	5040.25	2523.87	16.16	-1.586	0.000	0.217
98.00	-11.87	-15.90	0.00	-503.53	0.00	503.53	2832.57	1416.29	4950.87	2479.11	16.83	-1.616	0.000	0.207
100.00	-11.57	-15.69	0.00	-471.74	0.00	471.74	2812.95	1406.48	4861.78	2434.50	17.51	-1.644	0.000	0.198
102.00	-11.26	-15.49	0.00	-440.35	0.00	440.35	2793.07	1396.53	4773.01	2390.05	18.21	-1.672	0.000	0.188
104.00	-10.96	-15.28	0.00	-409.38	0.00	409.38	2772.92	1386.46	4684.57	2345.77	18.92	-1.699	0.000	0.179
106.00	-10.66	-15.08	0.00	-378.81	0.00	378.81	2752.51	1376.26	4596.48	2301.65	19.63	-1.725	0.000	0.169
108.00	-10.37	-14.88	0.00	-348.65	0.00	348.65	2731.84	1365.92	4508.75	2257.73	20.36	-1.749	0.000	0.158
110.00	-10.08	-14.68	0.00	-318.90	0.00	318.90	2710.91	1355.45	4421.40	2213.98	21.10	-1.773	0.000	0.148
112.00	-9.79	-14.47	0.00	-289.55	0.00	289.55	2689.71	1344.86	4334.44	2170.44	21.85	-1.795	0.000	0.137
114.00	-9.51	-14.28	0.00	-260.60	0.00	260.60	2668.26	1334.13	4247.89	2127.10	22.61	-1.816	0.000	0.126
116.00	-9.22	-14.08	0.00	-232.05	0.00	232.05	2646.54	1323.27	4161.76	2083.97	23.37	-1.835	0.000	0.115
118.00	-8.95	-13.88	0.00	-203.90	0.00	203.90	2624.55	1312.28	4076.08	2041.07	24.14	-1.852	0.000	0.103
120.00	-8.67	-13.68	0.00	-176.14	0.00	176.14	2602.31	1301.16	3990.84	1998.39	24.92	-1.868	0.000	0.092
122.00	-8.40	-13.49	0.00	-148.77	0.00	148.77	2579.81	1289.90	3906.08	1955.94	25.71	-1.883	0.000	0.079
124.00	-8.13	-13.29	0.00	-121.80	0.00	121.80	2557.04	1278.52	3821.80	1913.74	26.50	-1.895	0.000	0.067
126.00	-7.87	-13.10	0.00	-95.21	0.00	95.21	2534.01	1267.00	3738.03	1871.79	27.30	-1.905	0.000	0.054
128.00	-7.61	-12.91	0.00	-69.01	0.00	69.01	2510.72	1255.36	3654.77	1830.10	28.10	-1.913	0.000	0.041
130.00	-4.46	-6.34	0.00	-43.20	0.00	43.20	2487.16	1243.58	3572.03	1788.67	28.90	-1.919	0.000	0.026
132.00	-4.06	-6.15	0.00	-30.51	0.00	30.51	2463.34	1231.67	3489.85	1747.52	29.71	-1.923	0.000	0.019
134.00	-3.67	-5.95	0.00	-18.21	0.00	18.21	2439.27	1219.63	3408.23	1706.65	30.51	-1.925	0.000	0.012
135.00	-3.47	-5.86	0.00	-12.26	0.00	12.26	1824.83	912.42	2579.10	1291.47	30.91	-1.926	0.000	0.011
136.00	-3.38	-5.76	0.00	-6.40	0.00	6.40	1817.10	908.55	2550.48	1277.14	31.32	-1.927	0.000	0.007
137.00	-0.24	-0.27	0.00	-0.64	0.00	0.64	1809.31	904.66	2521.92	1262.84	31.72	-1.927	0.000	0.001
138.00	-0.16	-0.18	0.00	-0.36	0.00	0.36	1801.45	900.73	2493.42	1248.56	32.13	-1.927	0.000	0.000
140.00	0.00	-0.18	0.00	0.00	0.00	0.00	1785.54	892.77	2436.62	1220.12	32.93	-1.927	0.000	0.000

Wind Loading - Shaft

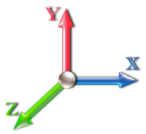
Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 29	

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 21

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	0.70	4.256	4.68	0.00	1.200	1.057	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.70	4.256	4.68	0.00	1.200	1.180	2.00	11.269	13.52	63.3	192.9	916.7
4.00		1.00	0.70	4.256	4.68	0.00	1.200	1.242	2.00	11.210	13.45	63.0	201.7	920.2
6.00		1.00	0.70	4.256	4.68	0.00	1.200	1.285	2.00	11.145	13.37	62.6	207.2	920.4
8.00		1.00	0.70	4.256	4.68	0.00	1.200	1.317	2.00	11.076	13.29	62.2	211.0	918.8
10.00		1.00	0.70	4.256	4.68	0.00	1.200	1.344	2.00	11.006	13.21	61.8	213.8	916.3
12.00		1.00	0.70	4.256	4.68	0.00	1.200	1.367	2.00	10.934	13.12	61.4	215.9	913.0
14.00		1.00	0.70	4.256	4.68	0.00	1.200	1.386	2.00	10.861	13.03	61.0	217.4	909.2
16.00		1.00	0.70	4.256	4.68	0.00	1.200	1.404	2.00	10.787	12.94	60.6	218.6	905.0
18.00		1.00	0.70	4.256	4.68	0.00	1.200	1.419	2.00	10.712	12.85	60.2	219.4	900.5
20.00		1.00	0.70	4.256	4.68	0.00	1.200	1.434	2.00	10.638	12.77	59.8	220.0	895.8
22.00		1.00	0.70	4.256	4.68	0.00	1.200	1.447	2.00	10.562	12.67	59.3	220.3	890.8
24.00		1.00	0.70	4.256	4.68	0.00	1.200	1.459	2.00	10.487	12.58	58.9	220.5	885.6
25.00	Top - Section 1	1.00	0.70	4.256	4.68	0.00	1.200	1.465	1.00	5.214	6.26	29.3	110.3	440.8
26.00		1.00	0.70	4.256	4.68	0.00	1.200	1.470	1.00	5.195	6.23	29.2	110.3	392.8
28.00		1.00	0.70	4.256	4.68	0.00	1.200	1.481	2.00	10.335	12.40	58.1	220.4	782.0
30.00		1.00	0.71	4.300	4.73	0.00	1.200	1.491	2.00	10.258	12.31	58.2	220.1	777.1
32.00		1.00	0.72	4.377	4.81	0.00	1.200	1.500	2.00	10.182	12.22	58.8	219.8	772.2
34.00		1.00	0.73	4.451	4.90	0.00	1.200	1.509	2.00	10.105	12.13	59.4	219.3	767.2
36.00		1.00	0.74	4.523	4.97	0.00	1.200	1.517	2.00	10.029	12.03	59.9	218.8	762.1
38.00		1.00	0.76	4.591	5.05	0.00	1.200	1.525	2.00	9.952	11.94	60.3	218.2	756.9
40.00		1.00	0.77	4.657	5.12	0.00	1.200	1.533	2.00	9.875	11.85	60.7	217.5	751.6
41.00	Bot - Section 3	1.00	0.77	4.689	5.16	0.00	1.200	1.537	1.00	4.908	5.89	30.4	108.6	373.9
42.00		1.00	0.78	4.721	5.19	0.00	1.200	1.540	1.00	4.952	5.94	30.9	109.8	641.9
44.00		1.00	0.79	4.783	5.26	0.00	1.200	1.547	2.00	9.847	11.82	62.2	218.8	1276.1
46.00		1.00	0.80	4.843	5.33	0.00	1.200	1.554	2.00	9.770	11.72	62.4	218.0	1266.1
48.00	Top - Section 2	1.00	0.81	4.901	5.39	0.00	1.200	1.560	2.00	9.692	11.63	62.7	217.1	1256.1
50.00		1.00	0.82	4.957	5.45	0.00	1.200	1.567	2.00	9.615	11.54	62.9	216.1	734.7
52.00		1.00	0.82	5.012	5.51	0.00	1.200	1.573	2.00	9.537	11.44	63.1	215.1	729.1
54.00		1.00	0.83	5.065	5.57	0.00	1.200	1.579	2.00	9.460	11.35	63.2	214.1	723.5
56.00		1.00	0.84	5.117	5.63	0.00	1.200	1.584	2.00	9.382	11.26	63.4	213.0	717.9
58.00		1.00	0.85	5.168	5.68	0.00	1.200	1.590	2.00	9.304	11.16	63.5	211.9	712.2
60.00		1.00	0.86	5.217	5.74	0.00	1.200	1.595	2.00	9.226	11.07	63.5	210.7	706.5
62.00		1.00	0.87	5.265	5.79	0.00	1.200	1.600	2.00	9.148	10.98	63.6	209.6	700.7
64.00		1.00	0.87	5.313	5.84	0.00	1.200	1.605	2.00	9.070	10.88	63.6	208.3	694.9
66.00		1.00	0.88	5.359	5.89	0.00	1.200	1.610	2.00	8.992	10.79	63.6	207.1	689.1
68.00		1.00	0.89	5.404	5.94	0.00	1.200	1.615	2.00	8.914	10.70	63.6	205.8	683.3
70.00		1.00	0.90	5.448	5.99	0.00	1.200	1.619	2.00	8.836	10.60	63.5	204.5	677.4
72.00		1.00	0.90	5.492	6.04	0.00	1.200	1.624	2.00	8.758	10.51	63.5	203.2	671.5
74.00		1.00	0.91	5.534	6.09	0.00	1.200	1.628	2.00	8.680	10.42	63.4	201.8	665.6
76.00		1.00	0.92	5.576	6.13	0.00	1.200	1.633	2.00	8.602	10.32	63.3	200.5	659.6
78.00		1.00	0.92	5.617	6.18	0.00	1.200	1.637	2.00	8.524	10.23	63.2	199.1	653.6
80.00		1.00	0.93	5.657	6.22	0.00	1.200	1.641	2.00	8.445	10.13	63.1	197.6	647.6
82.00		1.00	0.94	5.697	6.27	0.00	1.200	1.645	2.00	8.367	10.04	62.9	196.2	641.6
84.00		1.00	0.94	5.736	6.31	0.00	1.200	1.649	2.00	8.289	9.95	62.8	194.7	635.6
85.00	Bot - Section 4	1.00	0.95	5.755	6.33	0.00	1.200	1.651	1.00	4.115	4.94	31.3	97.0	315.7
86.00		1.00	0.95	5.774	6.35	0.00	1.200	1.653	1.00	4.148	4.98	31.6	97.9	499.6

Wind Loading - Shaft

Structure: CT11560-A-SBA
Site Name: Sterling 6, CT
Height: 140.00 (ft)
Base Elev: 1.000 (ft)
Gh: 1.1
Topography: 1

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

11/18/2021

Tower Engineering Solutions

88.00		1.00	0.96	5.812	6.39	0.00	1.200	1.656	2.00	8.238	9.89	63.2	194.4	991.4
90.00		1.00	0.96	5.849	6.43	0.00	1.200	1.660	2.00	8.160	9.79	63.0	192.9	981.5
91.00	Top - Section 3	1.00	0.96	5.867	6.45	0.00	1.200	1.662	1.00	4.050	4.86	31.4	96.0	487.2
92.00		1.00	0.97	5.885	6.47	0.00	1.200	1.664	1.00	4.031	4.84	31.3	95.7	274.0
94.00		1.00	0.97	5.921	6.51	0.00	1.200	1.667	2.00	8.003	9.60	62.5	189.8	543.7
96.00		1.00	0.98	5.956	6.55	0.00	1.200	1.671	2.00	7.924	9.51	62.3	188.2	538.3
98.00		1.00	0.99	5.991	6.59	0.00	1.200	1.674	2.00	7.846	9.42	62.0	186.6	532.9
100.00		1.00	0.99	6.026	6.63	0.00	1.200	1.678	2.00	7.767	9.32	61.8	185.1	527.5
102.00		1.00	1.00	6.059	6.67	0.00	1.200	1.681	2.00	7.689	9.23	61.5	183.5	522.1
104.00		1.00	1.00	6.093	6.70	0.00	1.200	1.684	2.00	7.610	9.13	61.2	181.8	516.7
106.00		1.00	1.01	6.126	6.74	0.00	1.200	1.687	2.00	7.532	9.04	60.9	180.2	511.2
108.00		1.00	1.01	6.158	6.77	0.00	1.200	1.690	2.00	7.453	8.94	60.6	178.6	505.8
110.00		1.00	1.02	6.190	6.81	0.00	1.200	1.693	2.00	7.375	8.85	60.3	176.9	500.3
112.00		1.00	1.02	6.222	6.84	0.00	1.200	1.696	2.00	7.296	8.76	59.9	175.2	494.8
114.00		1.00	1.03	6.253	6.88	0.00	1.200	1.699	2.00	7.217	8.66	59.6	173.5	489.3
116.00		1.00	1.03	6.284	6.91	0.00	1.200	1.702	2.00	7.139	8.57	59.2	171.8	483.8
118.00		1.00	1.04	6.315	6.95	0.00	1.200	1.705	2.00	7.060	8.47	58.8	170.1	478.3
120.00		1.00	1.04	6.345	6.98	0.00	1.200	1.708	2.00	6.982	8.38	58.5	168.4	472.8
122.00		1.00	1.05	6.375	7.01	0.00	1.200	1.711	2.00	6.903	8.28	58.1	166.7	467.3
124.00		1.00	1.05	6.404	7.04	0.00	1.200	1.714	2.00	6.824	8.19	57.7	165.0	461.7
126.00		1.00	1.06	6.433	7.08	0.00	1.200	1.716	2.00	6.746	8.09	57.3	163.2	456.1
128.00		1.00	1.06	6.462	7.11	0.00	1.200	1.719	2.00	6.667	8.00	56.9	161.4	450.6
130.00	Bot - Section 5	1.00	1.07	6.490	7.14	0.00	1.200	1.722	2.00	6.588	7.91	56.4	159.7	445.0
132.00		1.00	1.07	6.519	7.17	0.00	1.200	1.724	2.00	6.594	7.91	56.7	160.1	670.4
134.00		1.00	1.08	6.546	7.20	0.00	1.200	1.727	2.00	6.515	7.82	56.3	158.3	661.8
135.00	Top - Section 4	1.00	1.08	6.560	7.22	0.00	1.200	1.728	1.00	3.228	3.87	28.0	78.7	327.9
136.00		1.00	1.08	6.574	7.23	0.00	1.200	1.729	1.00	3.208	3.85	27.8	78.2	189.2
137.00	Appurtenance(s)	1.00	1.08	6.588	7.25	0.00	1.200	1.731	1.00	3.189	3.83	27.7	77.8	188.0
138.00		1.00	1.09	6.601	7.26	0.00	1.200	1.732	1.00	3.169	3.80	27.6	77.3	186.8
140.00		1.00	1.09	6.628	7.29	0.00	1.200	1.734	2.00	6.279	7.53	54.9	152.9	369.5
								Totals:	**140.00**			**4,262.7**		**49,795.1**

Discrete Appurtenance Forces

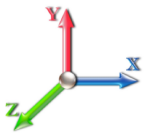
Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 31	

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 21

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	137.00	HRK12 (Handrail Kit)	1	6.588	7.246	1.00	1.00	13.29	211.39	0.000	0.000	96.32	0.00	0.00
2	137.00	(3) Stabilizer Kit (4' FW)	1	6.588	7.246	1.00	1.00	7.54	282.46	0.000	0.000	54.65	0.00	0.00
3	137.00	B2/B66A RRHBR049	3	6.588	7.246	0.50	0.75	3.66	419.21	0.000	0.000	26.51	0.00	0.00
4	137.00	RCMDC-6627-PF-48	1	6.588	7.246	0.50	0.75	2.45	126.18	0.000	0.000	17.75	0.00	0.00
5	137.00	Antel LPA-80063/6CF	3	6.588	7.246	0.70	0.75	23.14	953.15	0.000	0.000	167.68	0.00	0.00
6	137.00	JAHH-65B-R3B	6	6.588	7.246	0.62	0.75	39.01	1825.11	0.000	0.000	282.70	0.00	0.00
7	137.00	B5/B13 RRHBR04C	3	6.588	7.246	0.50	0.75	3.60	299.86	0.000	0.000	26.09	0.00	0.00
8	137.00	PRK-1245 (kicker kit)	1	6.588	7.246	1.00	1.00	19.37	784.65	0.000	0.000	140.33	0.00	0.00
9	137.00	MT6407-77A	3	6.588	7.246	0.52	0.75	8.87	640.86	0.000	0.000	64.24	0.00	0.00
10	137.00	CBC78T-DS-43	3	6.588	7.246	0.50	0.75	0.98	98.90	0.000	0.000	7.10	0.00	0.00
11	137.00	Low Profile Platform	1	6.588	7.246	1.00	1.00	39.51	2798.04	0.000	0.000	286.34	0.00	0.00
12	130.00	7770.00	6	6.490	7.139	0.55	0.75	21.52	992.08	0.000	0.000	153.61	0.00	0.00
13	130.00	Powerwave LGP21901 -	6	6.490	7.139	0.50	0.75	12.98	619.58	0.000	0.000	92.69	0.00	0.00
14	130.00	RRUS 4449 B5/B12	3	6.490	7.139	0.50	0.75	3.78	372.79	0.000	0.000	27.01	0.00	0.00
15	130.00	RRUS 8843 B2 B66A	3	6.490	7.139	0.50	0.75	3.21	361.84	0.000	0.000	22.93	0.00	0.00
16	130.00	LGP17201	6	6.490	7.139	0.50	0.75	8.84	-46.43	0.000	0.000	63.13	0.00	0.00
17	130.00	HRK12 (Handrail Kit)	1	6.490	7.139	1.00	1.00	19.64	882.20	0.000	0.000	140.23	0.00	0.00
18	130.00	DMP65R-BU8DA	3	6.490	7.139	0.54	0.75	31.82	1473.25	0.000	0.000	227.18	0.00	0.00
19	130.00	HPA-65R-BU8AA	3	6.490	7.139	0.65	0.75	24.90	981.34	0.000	0.000	177.80	0.00	0.00
20	130.00	15'x2.875"mount pipe	3	6.490	7.139	1.00	1.00	28.87	615.65	0.000	0.000	206.11	0.00	0.00
21	130.00	Low Profile Platform	1	6.490	7.139	1.00	1.00	39.42	2791.30	0.000	0.000	281.46	0.00	0.00
22	130.00	DC6-48-60-18-8F	1	6.490	7.139	0.50	0.75	0.96	85.57	0.000	0.000	6.85	0.00	0.00
23	130.00	Powerwave LGP21401 -	6	6.490	7.139	0.50	0.75	6.38	287.47	0.000	0.000	45.51	0.00	0.00
							Totals:		**17,856.47**			**2,614.24**		

Total Applied Force Summary

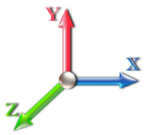
Structure:	CT11560-A-SBA		**Code:**	EIA/TIA-222-G	11/18/2021
Site Name:	Sterling 6, CT		**Exposure:**	B	
Height:	140.00 (ft)		**Crest Height:**	0.00	
Base Elev:	1.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 32

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 21

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		63.31	921.94	0.00	0.00
4.00		62.98	961.70	0.00	0.00
6.00		62.61	998.84	0.00	0.00
8.00		62.23	997.87	0.00	0.00
10.00		61.83	995.77	0.00	0.00
12.00		61.42	992.89	0.00	0.00
14.00		61.01	989.44	0.00	0.00
16.00		60.60	985.55	0.00	0.00
18.00		60.18	981.32	0.00	0.00
20.00		59.76	976.81	0.00	0.00
22.00		59.34	972.06	0.00	0.00
24.00		58.91	967.11	0.00	0.00
25.00		29.29	481.62	0.00	0.00
26.00		29.19	433.60	0.00	0.00
28.00		58.06	863.84	0.00	0.00
30.00		58.22	859.20	0.00	0.00
32.00		58.83	854.45	0.00	0.00
34.00		59.38	849.59	0.00	0.00
36.00		59.87	844.64	0.00	0.00
38.00		60.31	839.60	0.00	0.00
40.00		60.70	834.49	0.00	0.00
41.00		30.38	415.38	0.00	0.00
42.00		30.86	683.39	0.00	0.00
44.00		62.17	1359.26	0.00	0.00
46.00		62.45	1349.39	0.00	0.00
48.00		62.70	1339.46	0.00	0.00
50.00		62.91	818.20	0.00	0.00
52.00		63.09	812.75	0.00	0.00
54.00		63.24	807.25	0.00	0.00
56.00		63.37	801.71	0.00	0.00
58.00		63.47	796.12	0.00	0.00
60.00		63.54	790.50	0.00	0.00
62.00		63.58	784.84	0.00	0.00
64.00		63.61	779.15	0.00	0.00
66.00		63.61	773.43	0.00	0.00
68.00		63.59	767.67	0.00	0.00
70.00		63.55	761.89	0.00	0.00
72.00		63.49	756.08	0.00	0.00
74.00		63.41	750.24	0.00	0.00
76.00		63.31	744.38	0.00	0.00
78.00		63.20	738.49	0.00	0.00
80.00		63.07	732.58	0.00	0.00
82.00		62.92	726.65	0.00	0.00
84.00		62.76	720.70	0.00	0.00
85.00		31.26	358.28	0.00	0.00
86.00		31.62	542.18	0.00	0.00

Total Applied Force Summary

Structure:	CT11560-A-SBA		**Code:**	EIA/TIA-222-G	11/18/2021
Site Name:	Sterling 6, CT		**Exposure:**	B	
Height:	140.00 (ft)		**Crest Height:**	0.00	
Base Elev:	1.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 33

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88.00		63.20	1076.65	0.00	0.00
90.00		62.99	1066.83	0.00	0.00
91.00		31.37	529.91	0.00	0.00
92.00		31.31	316.74	0.00	0.00
94.00		62.55	629.15	0.00	0.00
96.00		62.30	623.85	0.00	0.00
98.00		62.05	618.53	0.00	0.00
100.00		61.78	613.20	0.00	0.00
102.00		61.50	607.85	0.00	0.00
104.00		61.21	602.48	0.00	0.00
106.00		60.90	597.11	0.00	0.00
108.00		60.59	591.71	0.00	0.00
110.00		60.26	586.31	0.00	0.00
112.00		59.92	580.89	0.00	0.00
114.00		59.58	575.46	0.00	0.00
116.00		59.22	570.01	0.00	0.00
118.00		58.85	564.55	0.00	0.00
120.00		58.47	559.08	0.00	0.00
122.00		58.08	553.60	0.00	0.00
124.00		57.69	548.11	0.00	0.00
126.00		57.28	542.60	0.00	0.00
128.00		56.87	537.09	0.00	0.00
130.00	(42) attachments	1500.97	9948.22	0.00	0.00
132.00		56.74	700.66	0.00	0.00
134.00		56.30	692.01	0.00	0.00
135.00		27.95	342.99	0.00	0.00
136.00		27.84	204.35	0.00	0.00
137.00	(26) attachments	1197.43	8642.96	0.00	0.00
138.00		27.61	186.81	0.00	0.00
140.00		54.94	369.52	0.00	0.00
	Totals:	**6,876.94**	**73,091.54**	**0.00**	**0.00**

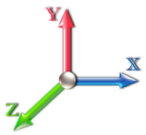
Linear Appurtenance Segment Forces (Factored)

Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (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 21

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)
4.00	1" DC Power	Yes	1.00	0.000	1.00	0.29	0.00	0.008	0.000	4.256	0.00	6.38
4.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.008	0.000	4.256	0.00	2.42
6.00	1" DC Power	Yes	2.00	0.000	1.00	0.59	0.00	0.016	0.000	4.256	0.00	13.16
6.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	4.256	0.00	5.14
8.00	1" DC Power	Yes	2.00	0.000	1.00	0.61	0.00	0.016	0.000	4.256	0.00	13.47
8.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	4.256	0.00	5.37
10.00	1" DC Power	Yes	2.00	0.000	1.00	0.61	0.00	0.016	0.000	4.256	0.00	13.73
10.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	4.256	0.00	5.56
12.00	1" DC Power	Yes	2.00	0.000	1.00	0.62	0.00	0.016	0.000	4.256	0.00	13.95
12.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	4.256	0.00	5.72
14.00	1" DC Power	Yes	2.00	0.000	1.00	0.63	0.00	0.016	0.000	4.256	0.00	14.14
14.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	4.256	0.00	5.87
16.00	1" DC Power	Yes	2.00	0.000	1.00	0.63	0.00	0.016	0.000	4.256	0.00	14.32
16.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	4.256	0.00	6.00
18.00	1" DC Power	Yes	2.00	0.000	1.00	0.64	0.00	0.016	0.000	4.256	0.00	14.47
18.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	4.256	0.00	6.12
20.00	1" DC Power	Yes	2.00	0.000	1.00	0.64	0.00	0.016	0.000	4.256	0.00	14.62
20.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	4.256	0.00	6.23
22.00	1" DC Power	Yes	2.00	0.000	1.00	0.65	0.00	0.017	0.000	4.256	0.00	14.75
22.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.017	0.000	4.256	0.00	6.33
24.00	1" DC Power	Yes	2.00	0.000	1.00	0.65	0.00	0.017	0.000	4.256	0.00	14.87
24.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.017	0.000	4.256	0.00	6.42
25.00	1" DC Power	Yes	1.00	0.000	1.00	0.33	0.00	0.017	0.000	4.256	0.00	7.47
25.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.017	0.000	4.256	0.00	3.23
26.00	1" DC Power	Yes	1.00	0.000	1.00	0.33	0.00	0.017	0.000	4.256	0.00	7.49
26.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.017	0.000	4.256	0.00	3.26
28.00	1" DC Power	Yes	2.00	0.000	1.00	0.66	0.00	0.017	0.000	4.256	0.00	15.10
28.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.017	0.000	4.256	0.00	6.60
30.00	1" DC Power	Yes	2.00	0.000	1.00	0.66	0.00	0.017	0.000	4.300	0.00	15.20
30.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.017	0.000	4.300	0.00	6.67
32.00	1" DC Power	Yes	2.00	0.000	1.00	0.67	0.00	0.017	0.000	4.377	0.00	15.30
32.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.017	0.000	4.377	0.00	6.75
34.00	1" DC Power	Yes	2.00	0.000	1.00	0.67	0.00	0.017	0.000	4.451	0.00	15.39
34.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.017	0.000	4.451	0.00	6.82
36.00	1" DC Power	Yes	2.00	0.000	1.00	0.67	0.00	0.018	0.000	4.523	0.00	15.48
36.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	4.523	0.00	6.89
38.00	1" DC Power	Yes	2.00	0.000	1.00	0.68	0.00	0.018	0.000	4.591	0.00	15.56
38.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	4.591	0.00	6.95
40.00	1" DC Power	Yes	2.00	0.000	1.00	0.68	0.00	0.018	0.000	4.657	0.00	15.64
40.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	4.657	0.00	7.02
41.00	1" DC Power	Yes	1.00	0.000	1.00	0.34	0.00	0.018	0.000	4.689	0.00	7.84
41.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.018	0.000	4.689	0.00	3.52
42.00	1" DC Power	Yes	1.00	0.000	1.00	0.34	0.00	0.018	0.000	4.721	0.00	7.86
42.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.018	0.000	4.721	0.00	3.54
44.00	1" DC Power	Yes	2.00	0.000	1.00	0.68	0.00	0.018	0.000	4.783	0.00	15.80
44.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	4.783	0.00	7.13
46.00	1" DC Power	Yes	2.00	0.000	1.00	0.68	0.00	0.018	0.000	4.843	0.00	15.87

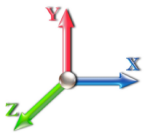
Linear Appurtenance Segment Forces (Factored)

Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 35	

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

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 21

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	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	4.843	0.00	7.19
48.00	1" DC Power	Yes	2.00	0.000	1.00	0.69	0.00	0.018	0.000	4.901	0.00	15.94
48.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	4.901	0.00	7.24
50.00	1" DC Power	Yes	2.00	0.000	1.00	0.69	0.00	0.018	0.000	4.957	0.00	16.01
50.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	4.957	0.00	7.29
52.00	1" DC Power	Yes	2.00	0.000	1.00	0.69	0.00	0.018	0.000	5.012	0.00	16.07
52.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	5.012	0.00	7.35
54.00	1" DC Power	Yes	2.00	0.000	1.00	0.69	0.00	0.019	0.000	5.065	0.00	16.13
54.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.019	0.000	5.065	0.00	7.39
56.00	1" DC Power	Yes	2.00	0.000	1.00	0.69	0.00	0.019	0.000	5.117	0.00	16.20
56.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.019	0.000	5.117	0.00	7.44
58.00	1" DC Power	Yes	2.00	0.000	1.00	0.70	0.00	0.019	0.000	5.168	0.00	16.25
58.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.019	0.000	5.168	0.00	7.49
60.00	1" DC Power	Yes	2.00	0.000	1.00	0.70	0.00	0.019	0.000	5.217	0.00	16.31
60.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.019	0.000	5.217	0.00	7.53
62.00	1" DC Power	Yes	2.00	0.000	1.00	0.70	0.00	0.019	0.000	5.265	0.00	16.37
62.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.019	0.000	5.265	0.00	7.58
64.00	1" DC Power	Yes	2.00	0.000	1.00	0.70	0.00	0.020	0.000	5.313	0.00	16.42
64.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.020	0.000	5.313	0.00	7.62
66.00	1" DC Power	Yes	2.00	0.000	1.00	0.70	0.00	0.020	0.000	5.359	0.00	16.48
66.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.020	0.000	5.359	0.00	7.66
68.00	1" DC Power	Yes	2.00	0.000	1.00	0.70	0.00	0.020	0.000	5.404	0.00	16.53
68.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.020	0.000	5.404	0.00	7.70
70.00	1" DC Power	Yes	2.00	0.000	1.00	0.71	0.00	0.020	0.000	5.448	0.00	16.58
70.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.020	0.000	5.448	0.00	7.74
72.00	1" DC Power	Yes	2.00	0.000	1.00	0.71	0.00	0.020	0.000	5.492	0.00	16.63
72.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.020	0.000	5.492	0.00	7.78
74.00	1" DC Power	Yes	2.00	0.000	1.00	0.71	0.00	0.020	0.000	5.534	0.00	16.68
74.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.020	0.000	5.534	0.00	7.82
76.00	1" DC Power	Yes	2.00	0.000	1.00	0.71	0.00	0.021	0.000	5.576	0.00	16.73
76.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.021	0.000	5.576	0.00	7.85
78.00	1" DC Power	Yes	2.00	0.000	1.00	0.71	0.00	0.021	0.000	5.617	0.00	16.77
78.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.021	0.000	5.617	0.00	7.89
80.00	1" DC Power	Yes	2.00	0.000	1.00	0.71	0.00	0.021	0.000	5.657	0.00	16.82
80.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.021	0.000	5.657	0.00	7.93
82.00	1" DC Power	Yes	2.00	0.000	1.00	0.71	0.00	0.021	0.000	5.697	0.00	16.86
82.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.021	0.000	5.697	0.00	7.96
84.00	1" DC Power	Yes	2.00	0.000	1.00	0.72	0.00	0.022	0.000	5.736	0.00	16.91
84.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.022	0.000	5.736	0.00	8.00
85.00	1" DC Power	Yes	1.00	0.000	1.00	0.36	0.00	0.022	0.000	5.755	0.00	8.46
85.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.022	0.000	5.755	0.00	4.01
86.00	1" DC Power	Yes	1.00	0.000	1.00	0.36	0.00	0.022	0.000	5.774	0.00	8.47
86.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.022	0.000	5.774	0.00	4.01
88.00	1" DC Power	Yes	2.00	0.000	1.00	0.72	0.00	0.022	0.000	5.812	0.00	16.99
88.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.022	0.000	5.812	0.00	8.06
90.00	1" DC Power	Yes	2.00	0.000	1.00	0.72	0.00	0.022	0.000	5.849	0.00	17.03
90.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.022	0.000	5.849	0.00	8.09

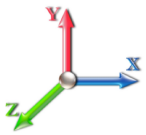
Linear Appurtenance Segment Forces (Factored)

Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 36	

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

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 21

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)
91.00	1" DC Power	Yes	1.00	0.000	1.00	0.36	0.00	0.022	0.000	5.867	0.00	8.53
91.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.022	0.000	5.867	0.00	4.06
92.00	1" DC Power	Yes	1.00	0.000	1.00	0.36	0.00	0.022	0.000	5.885	0.00	8.54
92.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.022	0.000	5.885	0.00	4.06
94.00	1" DC Power	Yes	2.00	0.000	1.00	0.72	0.00	0.022	0.000	5.921	0.00	17.11
94.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.022	0.000	5.921	0.00	8.16
96.00	1" DC Power	Yes	2.00	0.000	1.00	0.72	0.00	0.023	0.000	5.956	0.00	17.15
96.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.023	0.000	5.956	0.00	8.19
98.00	1" DC Power	Yes	2.00	0.000	1.00	0.72	0.00	0.023	0.000	5.991	0.00	17.19
98.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.023	0.000	5.991	0.00	8.22
100.00	1" DC Power	Yes	2.00	0.000	1.00	0.73	0.00	0.023	0.000	6.026	0.00	17.23
100.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.023	0.000	6.026	0.00	8.25
102.00	1" DC Power	Yes	2.00	0.000	1.00	0.73	0.00	0.023	0.000	6.059	0.00	17.27
102.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.023	0.000	6.059	0.00	8.28
104.00	1" DC Power	Yes	2.00	0.000	1.00	0.73	0.00	0.024	0.000	6.093	0.00	17.30
104.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.024	0.000	6.093	0.00	8.31
106.00	1" DC Power	Yes	2.00	0.000	1.00	0.73	0.00	0.024	0.000	6.126	0.00	17.34
106.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.024	0.000	6.126	0.00	8.34
108.00	1" DC Power	Yes	2.00	0.000	1.00	0.73	0.00	0.024	0.000	6.158	0.00	17.37
108.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.024	0.000	6.158	0.00	8.36
110.00	1" DC Power	Yes	2.00	0.000	1.00	0.73	0.00	0.024	0.000	6.190	0.00	17.41
110.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.024	0.000	6.190	0.00	8.39
112.00	1" DC Power	Yes	2.00	0.000	1.00	0.73	0.00	0.025	0.000	6.222	0.00	17.44
112.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.025	0.000	6.222	0.00	8.42
114.00	1" DC Power	Yes	2.00	0.000	1.00	0.73	0.00	0.025	0.000	6.253	0.00	17.48
114.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.025	0.000	6.253	0.00	8.44
116.00	1" DC Power	Yes	2.00	0.000	1.00	0.73	0.00	0.025	0.000	6.284	0.00	17.51
116.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.025	0.000	6.284	0.00	8.47
118.00	1" DC Power	Yes	2.00	0.000	1.00	0.74	0.00	0.026	0.000	6.315	0.00	17.54
118.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.026	0.000	6.315	0.00	8.50
120.00	1" DC Power	Yes	2.00	0.000	1.00	0.74	0.00	0.026	0.000	6.345	0.00	17.58
120.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.026	0.000	6.345	0.00	8.52
122.00	1" DC Power	Yes	2.00	0.000	1.00	0.74	0.00	0.026	0.000	6.375	0.00	17.61
122.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.026	0.000	6.375	0.00	8.55
124.00	1" DC Power	Yes	2.00	0.000	1.00	0.74	0.00	0.027	0.000	6.404	0.00	17.64
124.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.027	0.000	6.404	0.00	8.57
126.00	1" DC Power	Yes	2.00	0.000	1.00	0.74	0.00	0.027	0.000	6.433	0.00	17.67
126.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.027	0.000	6.433	0.00	8.60
128.00	1" DC Power	Yes	2.00	0.000	1.00	0.74	0.00	0.027	0.000	6.462	0.00	17.70
128.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.027	0.000	6.462	0.00	8.62
130.00	1" DC Power	Yes	2.00	0.000	1.00	0.74	0.00	0.028	0.000	6.490	0.00	17.73
130.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.028	0.000	6.490	0.00	8.65
										Totals:	**0.0**	**1,504.0**

Calculated Forces

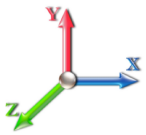
Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 37	

Tower Engineering Solutions

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

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 21

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	-73.09	-6.88	0.00	-670.33	0.00	670.33	5803.10	2901.55	15291.3	7657.05	0.00	0.000	0.000	0.100
2.00	-72.17	-6.83	0.00	-656.56	0.00	656.56	5778.21	2889.11	15113.2	7567.86	0.00	-0.008	0.000	0.099
4.00	-71.21	-6.78	0.00	-642.91	0.00	642.91	5753.06	2876.53	14935.4	7478.80	0.01	-0.016	0.000	0.098
6.00	-70.21	-6.72	0.00	-629.36	0.00	629.36	5727.65	2863.83	14757.8	7389.90	0.02	-0.025	0.000	0.097
8.00	-69.21	-6.67	0.00	-615.91	0.00	615.91	5701.98	2850.99	14580.6	7301.16	0.03	-0.033	0.000	0.097
10.00	-68.21	-6.62	0.00	-602.57	0.00	602.57	5676.04	2838.02	14403.7	7212.59	0.04	-0.041	0.000	0.096
12.00	-67.22	-6.56	0.00	-589.34	0.00	589.34	5649.84	2824.92	14227.2	7124.20	0.06	-0.049	0.000	0.095
14.00	-66.23	-6.51	0.00	-576.21	0.00	576.21	5623.38	2811.69	14051.0	7035.98	0.09	-0.057	0.000	0.094
16.00	-65.24	-6.46	0.00	-563.19	0.00	563.19	5596.66	2798.33	13875.2	6947.96	0.11	-0.066	0.000	0.093
18.00	-64.26	-6.41	0.00	-550.27	0.00	550.27	5569.67	2784.84	13699.9	6860.14	0.14	-0.074	0.000	0.092
20.00	-63.28	-6.36	0.00	-537.45	0.00	537.45	5542.43	2771.21	13524.9	6772.52	0.17	-0.082	0.000	0.091
22.00	-62.31	-6.30	0.00	-524.74	0.00	524.74	5514.92	2757.46	13350.3	6685.11	0.21	-0.090	0.000	0.090
24.00	-61.34	-6.25	0.00	-512.14	0.00	512.14	5487.15	2743.57	13176.2	6597.93	0.25	-0.099	0.000	0.089
25.00	-60.86	-6.22	0.00	-505.89	0.00	505.89	5473.16	2736.58	13089.3	6554.42	0.27	-0.103	0.000	0.088
25.00	-60.86	-6.22	0.00	-505.89	0.00	505.89	4407.37	2203.68	10563.1	5289.42	0.27	-0.103	0.000	0.109
26.00	-60.42	-6.20	0.00	-499.66	0.00	499.66	4397.65	2198.83	10497.0	5256.32	0.29	-0.107	0.000	0.109
28.00	-59.56	-6.15	0.00	-487.26	0.00	487.26	4378.03	2189.01	10364.9	5190.16	0.34	-0.116	0.000	0.107
30.00	-58.70	-6.10	0.00	-474.96	0.00	474.96	4358.14	2179.07	10232.9	5124.08	0.39	-0.126	0.000	0.106
32.00	-57.84	-6.05	0.00	-462.75	0.00	462.75	4338.00	2169.00	10101.1	5058.08	0.45	-0.136	0.000	0.105
34.00	-56.99	-6.00	0.00	-450.65	0.00	450.65	4317.58	2158.79	9969.51	4992.17	0.50	-0.145	0.000	0.103
36.00	-56.15	-5.95	0.00	-438.66	0.00	438.66	4296.91	2148.46	9838.08	4926.35	0.57	-0.155	0.000	0.102
38.00	-55.31	-5.89	0.00	-426.77	0.00	426.77	4275.98	2137.99	9706.86	4860.65	0.63	-0.164	0.000	0.101
40.00	-54.47	-5.84	0.00	-414.98	0.00	414.98	4254.78	2127.39	9575.87	4795.05	0.70	-0.174	0.000	0.099
41.00	-54.06	-5.81	0.00	-409.15	0.00	409.15	4244.08	2122.04	9510.46	4762.30	0.74	-0.178	0.000	0.099
42.00	-53.37	-5.78	0.00	-403.34	0.00	403.34	4233.32	2116.66	9445.12	4729.58	0.78	-0.183	0.000	0.098
44.00	-52.01	-5.72	0.00	-391.78	0.00	391.78	4211.60	2105.80	9314.62	4664.23	0.86	-0.193	0.000	0.096
46.00	-50.66	-5.67	0.00	-380.33	0.00	380.33	4189.62	2094.81	9184.40	4599.03	0.94	-0.202	0.000	0.095
48.00	-49.32	-5.61	0.00	-369.00	0.00	369.00	4202.72	2101.36	9261.79	4637.78	1.03	-0.211	0.000	0.091
50.00	-48.50	-5.55	0.00	-357.79	0.00	357.79	4180.63	2090.32	9131.68	4572.63	1.12	-0.221	0.000	0.090
52.00	-47.69	-5.49	0.00	-346.69	0.00	346.69	4158.28	2079.14	9001.86	4507.62	1.21	-0.230	0.000	0.088
54.00	-46.88	-5.43	0.00	-335.72	0.00	335.72	4135.67	2067.83	8872.35	4442.77	1.31	-0.238	0.000	0.087
56.00	-46.08	-5.37	0.00	-324.86	0.00	324.86	4112.79	2056.39	8743.17	4378.08	1.41	-0.247	0.000	0.085
58.00	-45.28	-5.31	0.00	-314.12	0.00	314.12	4089.65	2044.83	8614.32	4313.56	1.52	-0.256	0.000	0.084
60.00	-44.49	-5.25	0.00	-303.50	0.00	303.50	4066.25	2033.13	8485.83	4249.22	1.63	-0.265	0.000	0.082
62.00	-43.71	-5.19	0.00	-293.01	0.00	293.01	4042.59	2021.29	8357.71	4185.07	1.74	-0.273	0.000	0.081
64.00	-42.93	-5.13	0.00	-282.63	0.00	282.63	4018.67	2009.33	8229.97	4121.10	1.86	-0.282	0.000	0.079
66.00	-42.15	-5.07	0.00	-272.38	0.00	272.38	3994.48	1997.24	8102.64	4057.34	1.98	-0.290	0.000	0.078
68.00	-41.38	-5.00	0.00	-262.24	0.00	262.24	3970.03	1985.02	7975.72	3993.79	2.10	-0.299	0.000	0.076
70.00	-40.62	-4.94	0.00	-252.24	0.00	252.24	3945.32	1972.66	7849.23	3930.45	2.23	-0.307	0.000	0.074
72.00	-39.87	-4.88	0.00	-242.35	0.00	242.35	3920.35	1960.17	7723.19	3867.33	2.36	-0.315	0.000	0.073
74.00	-39.12	-4.82	0.00	-232.59	0.00	232.59	3895.11	1947.56	7597.60	3804.45	2.49	-0.323	0.000	0.071
76.00	-38.37	-4.76	0.00	-222.95	0.00	222.95	3869.62	1934.81	7472.50	3741.80	2.63	-0.331	0.000	0.070
78.00	-37.63	-4.69	0.00	-213.44	0.00	213.44	3843.86	1921.93	7347.89	3679.40	2.77	-0.339	0.000	0.068
80.00	-36.90	-4.63	0.00	-204.05	0.00	204.05	3817.84	1908.92	7223.78	3617.26	2.91	-0.347	0.000	0.066
82.00	-36.17	-4.57	0.00	-194.79	0.00	194.79	3791.55	1895.78	7100.20	3555.38	3.06	-0.355	0.000	0.064
84.00	-35.45	-4.51	0.00	-185.65	0.00	185.65	3765.01	1882.50	6977.16	3493.76	3.21	-0.363	0.000	0.063
85.00	-35.09	-4.47	0.00	-181.14	0.00	181.14	3751.64	1875.82	6915.84	3463.06	3.29	-0.366	0.000	0.062
86.00	-34.55	-4.44	0.00	-176.67	0.00	176.67	3738.20	1869.10	6854.67	3432.43	3.37	-0.370	0.000	0.061

Calculated Forces

Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 38

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88.00	-33.47	-4.38	0.00	-167.78	0.00	167.78	3711.13	1855.57	6732.75	3371.38	3.52	-0.377	0.000	0.059
90.00	-32.41	-4.31	0.00	-159.03	0.00	159.03	3683.80	1841.90	6611.41	3310.62	3.68	-0.385	0.000	0.057
91.00	-31.88	-4.28	0.00	-154.72	0.00	154.72	2899.19	1449.59	5264.94	2636.38	3.76	-0.388	0.000	0.070
92.00	-31.56	-4.25	0.00	-150.44	0.00	150.44	2889.87	1444.93	5219.87	2613.82	3.84	-0.392	0.000	0.068
94.00	-30.93	-4.18	0.00	-141.95	0.00	141.95	2871.03	1435.52	5129.93	2568.78	4.01	-0.399	0.000	0.066
96.00	-30.31	-4.12	0.00	-133.58	0.00	133.58	2851.93	1425.97	5040.25	2523.87	4.18	-0.407	0.000	0.064
98.00	-29.69	-4.06	0.00	-125.34	0.00	125.34	2832.57	1416.29	4950.87	2479.11	4.35	-0.415	0.000	0.061
100.00	-29.08	-4.00	0.00	-117.23	0.00	117.23	2812.95	1406.48	4861.78	2434.50	4.53	-0.422	0.000	0.058
102.00	-28.47	-3.93	0.00	-109.23	0.00	109.23	2793.07	1396.53	4773.01	2390.05	4.71	-0.429	0.000	0.056
104.00	-27.87	-3.87	0.00	-101.37	0.00	101.37	2772.92	1386.46	4684.57	2345.77	4.89	-0.435	0.000	0.053
106.00	-27.27	-3.81	0.00	-93.63	0.00	93.63	2752.51	1376.26	4596.48	2301.65	5.07	-0.442	0.000	0.051
108.00	-26.68	-3.75	0.00	-86.01	0.00	86.01	2731.84	1365.92	4508.75	2257.73	5.26	-0.448	0.000	0.048
110.00	-26.09	-3.68	0.00	-78.52	0.00	78.52	2710.91	1355.45	4421.40	2213.98	5.45	-0.453	0.000	0.045
112.00	-25.51	-3.62	0.00	-71.16	0.00	71.16	2689.71	1344.86	4334.44	2170.44	5.64	-0.459	0.000	0.042
114.00	-24.93	-3.56	0.00	-63.91	0.00	63.91	2668.26	1334.13	4247.89	2127.10	5.83	-0.464	0.000	0.039
116.00	-24.36	-3.50	0.00	-56.80	0.00	56.80	2646.54	1323.27	4161.76	2083.97	6.03	-0.469	0.000	0.036
118.00	-23.80	-3.44	0.00	-49.80	0.00	49.80	2624.55	1312.28	4076.08	2041.07	6.22	-0.473	0.000	0.033
120.00	-23.24	-3.37	0.00	-42.93	0.00	42.93	2602.31	1301.16	3990.84	1998.39	6.42	-0.477	0.000	0.030
122.00	-22.69	-3.31	0.00	-36.18	0.00	36.18	2579.81	1289.90	3906.08	1955.94	6.62	-0.480	0.000	0.027
124.00	-22.14	-3.25	0.00	-29.56	0.00	29.56	2557.04	1278.52	3821.80	1913.74	6.82	-0.483	0.000	0.024
126.00	-21.60	-3.19	0.00	-23.06	0.00	23.06	2534.01	1267.00	3738.03	1871.79	7.03	-0.486	0.000	0.021
128.00	-21.06	-3.13	0.00	-16.68	0.00	16.68	2510.72	1255.36	3654.77	1830.10	7.23	-0.488	0.000	0.018
130.00	-11.13	-1.54	0.00	-10.42	0.00	10.42	2487.16	1243.58	3572.03	1788.67	7.44	-0.489	0.000	0.010
132.00	-10.43	-1.48	0.00	-7.33	0.00	7.33	2463.34	1231.67	3489.85	1747.52	7.64	-0.490	0.000	0.008
134.00	-9.73	-1.42	0.00	-4.37	0.00	4.37	2439.27	1219.63	3408.23	1706.65	7.85	-0.491	0.000	0.007
135.00	-9.39	-1.39	0.00	-2.95	0.00	2.95	1824.83	912.42	2579.10	1291.47	7.95	-0.491	0.000	0.007
136.00	-9.19	-1.36	0.00	-1.56	0.00	1.56	1817.10	908.55	2550.48	1277.14	8.05	-0.491	0.000	0.006
137.00	-0.56	-0.09	0.00	-0.20	0.00	0.20	1809.31	904.66	2521.92	1262.84	8.16	-0.491	0.000	0.000
138.00	-0.37	-0.06	0.00	-0.12	0.00	0.12	1801.45	900.73	2493.42	1248.56	8.26	-0.491	0.000	0.000
140.00	0.00	-0.05	0.00	0.00	0.00	0.00	1785.54	892.77	2436.62	1220.12	8.46	-0.491	0.000	0.000

Seismic Segment Forces (Factored)

Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 39	

Tower Engineering Solutions

Load Case:	1.2D + 1.0E							**Iterations**	20
Gust Response Factor	1.10			**Sds**	0.18			**Ss**	0.17
Dead Load Factor	1.20	**Seismic Load Factor**	1.00	**Sd1**	0.10			**S1**	0.06
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.56	**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	0.01	0.00	0.00	
2.00		603.17	0.00	0.02	0.01	5.13	
4.00		598.72	0.00	0.03	0.02	7.50	
6.00		594.28	0.00	0.04	0.02	9.29	
8.00		589.84	0.01	0.05	0.03	10.63	
10.00		585.39	0.01	0.06	0.03	11.63	
12.00		580.95	0.02	0.06	0.04	12.38	
14.00		576.50	0.02	0.06	0.04	12.93	
16.00		572.06	0.03	0.07	0.04	13.34	
18.00		567.61	0.03	0.07	0.04	13.64	
20.00		563.17	0.04	0.07	0.04	13.86	
22.00		558.72	0.05	0.07	0.04	14.03	
24.00		554.28	0.06	0.07	0.04	14.17	
25.00	Top - Section 1	275.47	0.06	0.07	0.04	7.10	
26.00		235.42	0.07	0.07	0.04	6.11	
28.00		467.98	0.08	0.07	0.04	12.34	
30.00		464.17	0.09	0.07	0.04	12.42	
32.00		460.36	0.10	0.07	0.04	12.49	
34.00		456.55	0.12	0.07	0.03	12.56	
36.00		452.74	0.13	0.07	0.03	12.62	
38.00		448.93	0.14	0.07	0.03	12.66	
40.00		445.12	0.16	0.07	0.03	12.69	
41.00	Bot - Section 3	221.13	0.17	0.07	0.03	6.33	
42.00		443.40	0.18	0.07	0.03	12.75	
44.00		881.08	0.19	0.06	0.02	25.48	
46.00		873.46	0.21	0.06	0.02	25.32	
48.00	Top - Section 2	865.84	0.23	0.06	0.02	25.05	
50.00		432.15	0.25	0.06	0.02	12.42	
52.00		428.34	0.27	0.05	0.02	12.14	
54.00		424.53	0.29	0.05	0.01	11.78	
56.00		420.72	0.31	0.04	0.01	11.33	
58.00		416.91	0.33	0.04	0.01	10.78	
60.00		413.10	0.35	0.03	0.01	10.13	
62.00		409.29	0.38	0.03	0.01	9.37	
64.00		405.48	0.40	0.02	0.01	8.50	
66.00		401.67	0.43	0.01	0.01	7.53	
68.00		397.86	0.45	0.00	0.01	6.48	
70.00		394.05	0.48	-0.01	0.01	5.34	
72.00		390.24	0.51	-0.02	0.01	4.15	
74.00		386.43	0.53	-0.03	0.01	2.93	
76.00		382.62	0.56	-0.04	0.01	1.70	
78.00		378.81	0.59	-0.05	0.01	0.50	
80.00		375.00	0.62	-0.06	0.02	-0.64	
82.00		371.19	0.65	-0.07	0.02	-1.68	
84.00		367.38	0.69	-0.08	0.03	-2.61	
85.00	Bot - Section 4	182.26	0.70	-0.09	0.03	-1.50	

Seismic Segment Forces (Factored)

Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 40	

86.00			334.72	0.72	-0.09	0.03	-3.10		
88.00			664.20	0.75	-0.10	0.04	-7.28		
90.00			657.21	0.79	-0.11	0.05	-7.96		
91.00	Top - Section 3		325.99	0.80	-0.11	0.06	-4.06		
92.00			148.65	0.82	-0.12	0.06	-1.88		
94.00			294.91	0.86	-0.12	0.07	-3.68		
96.00			291.74	0.89	-0.12	0.09	-3.37		
98.00			288.56	0.93	-0.12	0.10	-2.85		
100.00			285.39	0.97	-0.12	0.12	-2.10		
102.00			282.21	1.01	-0.11	0.14	-1.13		
104.00			279.04	1.05	-0.09	0.16	0.06		
106.00			275.86	1.09	-0.08	0.18	1.47		
108.00			272.69	1.13	-0.05	0.21	3.09		
110.00			269.51	1.17	-0.02	0.23	4.92		
112.00			266.34	1.21	0.02	0.27	6.95		
114.00			263.17	1.26	0.07	0.30	9.17		
116.00			259.99	1.30	0.12	0.34	11.57		
118.00			256.82	1.35	0.19	0.38	14.15		
120.00			253.64	1.39	0.27	0.42	16.90		
122.00			250.47	1.44	0.36	0.47	19.82		
124.00			247.29	1.49	0.47	0.53	22.88		
126.00			244.12	1.53	0.59	0.58	26.10		
128.00			240.94	1.58	0.72	0.65	29.45		
130.00	Bot - Section 5		3684.3	1.63	0.88	0.71	510.30		
132.00			425.30	1.68	1.05	0.79	66.24		
134.00			419.59	1.73	1.25	0.87	72.99		
135.00	Top - Section 4		207.65	1.76	1.36	0.91	38.09		
136.00			92.50	1.78	1.47	0.95	17.87		
137.00	Appurtenance(s)		3685.0	1.81	1.59	1.00	748.50		
138.00			91.23	1.84	1.71	1.04	19.46		
140.00			180.55	1.89	1.98	1.14	42.34		
		Totals:	**37,054.0**				**2,088.0**	**Total Wind:**	**25,700.7**

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

Calculated Forces

Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 41	

Tower Engineering Solutions

Load Case:	1.2D + 1.0E							**Iterations**	20
Gust Response Factor	1.10			**Sds**	0.18			**Ss**	0.17
Dead Load Factor	1.20	**Seismic Load Factor**	1.00	**Sd1**	0.10			**S1**	0.06
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.56	**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	-48.72	-2.13	0.00	-245.46	0.00	245.46	5803.10	2901.55	15291.3	7657.05		0.00	0.00	0.040
2.00	-47.99	-2.13	0.00	-241.20	0.00	241.20	5778.21	2889.11	15113.2	7567.86		0.00	0.00	0.040
4.00	-47.23	-2.12	0.00	-236.94	0.00	236.94	5753.06	2876.53	14935.4	7478.80		0.00	-0.01	0.040
6.00	-46.46	-2.12	0.00	-232.69	0.00	232.69	5727.65	2863.83	14757.8	7389.90		0.01	-0.01	0.040
8.00	-45.68	-2.11	0.00	-228.46	0.00	228.46	5701.98	2850.99	14580.6	7301.16		0.01	-0.01	0.039
10.00	-44.92	-2.10	0.00	-224.24	0.00	224.24	5676.04	2838.02	14403.7	7212.59		0.02	-0.02	0.039
12.00	-44.15	-2.09	0.00	-220.04	0.00	220.04	5649.84	2824.92	14227.2	7124.20		0.02	-0.02	0.039
14.00	-43.40	-2.08	0.00	-215.86	0.00	215.86	5623.38	2811.69	14051.0	7035.98		0.03	-0.02	0.038
16.00	-42.64	-2.07	0.00	-211.70	0.00	211.70	5596.66	2798.33	13875.2	6947.96		0.04	-0.02	0.038
18.00	-41.90	-2.06	0.00	-207.57	0.00	207.57	5569.67	2784.84	13699.9	6860.14		0.05	-0.03	0.038
20.00	-41.16	-2.04	0.00	-203.46	0.00	203.46	5542.43	2771.21	13524.9	6772.52		0.06	-0.03	0.037
22.00	-40.42	-2.03	0.00	-199.37	0.00	199.37	5514.92	2757.46	13350.3	6685.11		0.08	-0.03	0.037
24.00	-39.69	-2.02	0.00	-195.31	0.00	195.31	5487.15	2743.57	13176.2	6597.93		0.09	-0.04	0.037
25.00	-39.33	-2.01	0.00	-193.29	0.00	193.29	5473.16	2736.58	13089.3	6554.42		0.10	-0.04	0.037
25.00	-39.33	-2.01	0.00	-193.29	0.00	193.29	4407.37	2203.68	10563.1	5289.42		0.10	-0.04	0.045
26.00	-39.01	-2.01	0.00	-191.28	0.00	191.28	4397.65	2198.83	10497.0	5256.32		0.11	-0.04	0.045
28.00	-38.39	-2.00	0.00	-187.27	0.00	187.27	4378.03	2189.01	10364.9	5190.16		0.13	-0.04	0.045
30.00	-37.76	-1.99	0.00	-183.27	0.00	183.27	4358.14	2179.07	10232.9	5124.08		0.15	-0.05	0.044
32.00	-37.15	-1.98	0.00	-179.30	0.00	179.30	4338.00	2169.00	10101.1	5058.08		0.17	-0.05	0.044
34.00	-36.53	-1.97	0.00	-175.35	0.00	175.35	4317.58	2158.79	9969.51	4992.17		0.19	-0.05	0.044
36.00	-35.92	-1.95	0.00	-171.42	0.00	171.42	4296.91	2148.46	9838.08	4926.35		0.21	-0.06	0.043
38.00	-35.32	-1.94	0.00	-167.51	0.00	167.51	4275.98	2137.99	9706.86	4860.65		0.24	-0.06	0.043
40.00	-34.72	-1.93	0.00	-163.62	0.00	163.62	4254.78	2127.39	9575.87	4795.05		0.26	-0.07	0.042
41.00	-34.42	-1.93	0.00	-161.69	0.00	161.69	4244.08	2122.04	9510.46	4762.30		0.28	-0.07	0.042
42.00	-33.86	-1.91	0.00	-159.77	0.00	159.77	4233.32	2116.66	9445.12	4729.58		0.29	-0.07	0.042
44.00	-32.73	-1.89	0.00	-155.94	0.00	155.94	4211.60	2105.80	9314.62	4664.23		0.32	-0.07	0.041
46.00	-31.62	-1.86	0.00	-152.16	0.00	152.16	4189.62	2094.81	9184.40	4599.03		0.35	-0.08	0.041
48.00	-30.52	-1.84	0.00	-148.43	0.00	148.43	4202.72	2101.36	9261.79	4637.78		0.39	-0.08	0.039
50.00	-29.93	-1.83	0.00	-144.75	0.00	144.75	4180.63	2090.32	9131.68	4572.63		0.42	-0.08	0.039
52.00	-29.35	-1.82	0.00	-141.09	0.00	141.09	4158.28	2079.14	9001.86	4507.62		0.46	-0.09	0.038
54.00	-28.78	-1.81	0.00	-137.45	0.00	137.45	4135.67	2067.83	8872.35	4442.77		0.50	-0.09	0.038
56.00	-28.21	-1.80	0.00	-133.84	0.00	133.84	4112.79	2056.39	8743.17	4378.08		0.54	-0.10	0.037
58.00	-27.64	-1.79	0.00	-130.25	0.00	130.25	4089.65	2044.83	8614.32	4313.56		0.58	-0.10	0.037
60.00	-27.08	-1.78	0.00	-126.68	0.00	126.68	4066.25	2033.13	8485.83	4249.22		0.62	-0.10	0.036
62.00	-26.53	-1.77	0.00	-123.12	0.00	123.12	4042.59	2021.29	8357.71	4185.07		0.66	-0.11	0.036
64.00	-25.97	-1.76	0.00	-119.58	0.00	119.58	4018.67	2009.33	8229.97	4121.10		0.71	-0.11	0.035
66.00	-25.43	-1.75	0.00	-116.06	0.00	116.06	3994.48	1997.24	8102.64	4057.34		0.75	-0.11	0.035
68.00	-24.88	-1.75	0.00	-112.56	0.00	112.56	3970.03	1985.02	7975.72	3993.79		0.80	-0.12	0.034
70.00	-24.35	-1.74	0.00	-109.06	0.00	109.06	3945.32	1972.66	7849.23	3930.45		0.85	-0.12	0.034
72.00	-23.81	-1.74	0.00	-105.58	0.00	105.58	3920.35	1960.17	7723.19	3867.33		0.90	-0.12	0.033
74.00	-23.28	-1.74	0.00	-102.10	0.00	102.10	3895.11	1947.56	7597.60	3804.45		0.96	-0.13	0.033
76.00	-22.76	-1.73	0.00	-98.63	0.00	98.63	3869.62	1934.81	7472.50	3741.80		1.01	-0.13	0.032
78.00	-22.24	-1.73	0.00	-95.16	0.00	95.16	3843.86	1921.93	7347.89	3679.40		1.07	-0.13	0.032
80.00	-21.72	-1.73	0.00	-91.69	0.00	91.69	3817.84	1908.92	7223.78	3617.26		1.12	-0.14	0.031
82.00	-21.21	-1.73	0.00	-88.22	0.00	88.22	3791.55	1895.78	7100.20	3555.38		1.18	-0.14	0.030
84.00	-20.71	-1.73	0.00	-84.75	0.00	84.75	3765.01	1882.50	6977.16	3493.76		1.24	-0.15	0.030
85.00	-20.46	-1.73	0.00	-83.02	0.00	83.02	3751.64	1875.82	6915.84	3463.06		1.27	-0.15	0.029

Calculated Forces

Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 42

86.00	-20.02	-1.73	0.00	-81.28	0.00	81.28	3738.20	1869.10	6854.67	3432.43	1.31	-0.15	0.029
88.00	-19.16	-1.73	0.00	-77.82	0.00	77.82	3711.13	1855.57	6732.75	3371.38	1.37	-0.15	0.028
90.00	-18.31	-1.73	0.00	-74.35	0.00	74.35	3683.80	1841.90	6611.41	3310.62	1.43	-0.16	0.027
91.00	-17.88	-1.73	0.00	-72.62	0.00	72.62	2899.19	1449.59	5264.94	2636.38	1.47	-0.16	0.034
92.00	-17.67	-1.73	0.00	-70.89	0.00	70.89	2889.87	1444.93	5219.87	2613.82	1.50	-0.16	0.033
94.00	-17.25	-1.73	0.00	-67.43	0.00	67.43	2871.03	1435.52	5129.93	2568.78	1.57	-0.16	0.032
96.00	-16.84	-1.73	0.00	-63.96	0.00	63.96	2851.93	1425.97	5040.25	2523.87	1.64	-0.17	0.031
98.00	-16.42	-1.73	0.00	-60.50	0.00	60.50	2832.57	1416.29	4950.87	2479.11	1.71	-0.17	0.030
100.00	-16.02	-1.73	0.00	-57.04	0.00	57.04	2812.95	1406.48	4861.78	2434.50	1.78	-0.17	0.029
102.00	-15.61	-1.73	0.00	-53.58	0.00	53.58	2793.07	1396.53	4773.01	2390.05	1.85	-0.18	0.028
104.00	-15.21	-1.73	0.00	-50.12	0.00	50.12	2772.92	1386.46	4684.57	2345.77	1.93	-0.18	0.027
106.00	-14.82	-1.73	0.00	-46.66	0.00	46.66	2752.51	1376.26	4596.48	2301.65	2.00	-0.18	0.026
108.00	-14.42	-1.72	0.00	-43.21	0.00	43.21	2731.84	1365.92	4508.75	2257.73	2.08	-0.19	0.024
110.00	-14.03	-1.72	0.00	-39.76	0.00	39.76	2710.91	1355.45	4421.40	2213.98	2.16	-0.19	0.023
112.00	-13.65	-1.71	0.00	-36.32	0.00	36.32	2689.71	1344.86	4334.44	2170.44	2.24	-0.19	0.022
114.00	-13.27	-1.70	0.00	-32.90	0.00	32.90	2668.26	1334.13	4247.89	2127.10	2.32	-0.19	0.020
116.00	-12.89	-1.69	0.00	-29.49	0.00	29.49	2646.54	1323.27	4161.76	2083.97	2.40	-0.20	0.019
118.00	-12.52	-1.67	0.00	-26.12	0.00	26.12	2624.55	1312.28	4076.08	2041.07	2.48	-0.20	0.018
120.00	-12.15	-1.66	0.00	-22.77	0.00	22.77	2602.31	1301.16	3990.84	1998.39	2.57	-0.20	0.016
122.00	-11.78	-1.64	0.00	-19.46	0.00	19.46	2579.81	1289.90	3906.08	1955.94	2.65	-0.20	0.015
124.00	-11.42	-1.61	0.00	-16.18	0.00	16.18	2557.04	1278.52	3821.80	1913.74	2.74	-0.20	0.013
126.00	-11.06	-1.58	0.00	-12.96	0.00	12.96	2534.01	1267.00	3738.03	1871.79	2.82	-0.21	0.011
128.00	-10.71	-1.55	0.00	-9.79	0.00	9.79	2510.72	1255.36	3654.77	1830.10	2.91	-0.21	0.010
130.00	-6.22	-1.03	0.00	-6.68	0.00	6.68	2487.16	1243.58	3572.03	1788.67	3.00	-0.21	0.006
132.00	-5.68	-0.96	0.00	-4.63	0.00	4.63	2463.34	1231.67	3489.85	1747.52	3.08	-0.21	0.005
134.00	-5.15	-0.88	0.00	-2.71	0.00	2.71	2439.27	1219.63	3408.23	1706.65	3.17	-0.21	0.004
135.00	-4.89	-0.85	0.00	-1.82	0.00	1.82	1824.83	912.42	2579.10	1291.47	3.22	-0.21	0.004
136.00	-4.76	-0.83	0.00	-0.98	0.00	0.98	1817.10	908.55	2550.48	1277.14	3.26	-0.21	0.003
137.00	-0.33	-0.06	0.00	-0.15	0.00	0.15	1809.31	904.66	2521.92	1262.84	3.30	-0.21	0.000
138.00	-0.22	-0.04	0.00	-0.09	0.00	0.09	1801.45	900.73	2493.42	1248.56	3.35	-0.21	0.000
140.00	0.00	-0.04	0.00	0.00	0.00	0.00	1785.54	892.77	2436.62	1220.12	3.44	-0.21	0.000

Seismic Segment Forces (Factored)

Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (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**	20
Gust Response Factor	1.10			**Sds**	0.18	**Ss**	0.17
Dead Load Factor	0.90	**Seismic Load Factor**	1.00	**Sd1**	0.10	**S1**	0.06
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.56	**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	0.01	0.00	0.00	
2.00		603.17	0.00	0.02	0.01	5.13	
4.00		598.72	0.00	0.03	0.02	7.50	
6.00		594.28	0.00	0.04	0.02	9.29	
8.00		589.84	0.01	0.05	0.03	10.63	
10.00		585.39	0.01	0.06	0.03	11.63	
12.00		580.95	0.02	0.06	0.04	12.38	
14.00		576.50	0.02	0.06	0.04	12.93	
16.00		572.06	0.03	0.07	0.04	13.34	
18.00		567.61	0.03	0.07	0.04	13.64	
20.00		563.17	0.04	0.07	0.04	13.86	
22.00		558.72	0.05	0.07	0.04	14.03	
24.00		554.28	0.06	0.07	0.04	14.17	
25.00	Top - Section 1	275.47	0.06	0.07	0.04	7.10	
26.00		235.42	0.07	0.07	0.04	6.11	
28.00		467.98	0.08	0.07	0.04	12.34	
30.00		464.17	0.09	0.07	0.04	12.42	
32.00		460.36	0.10	0.07	0.04	12.49	
34.00		456.55	0.12	0.07	0.03	12.56	
36.00		452.74	0.13	0.07	0.03	12.62	
38.00		448.93	0.14	0.07	0.03	12.66	
40.00		445.12	0.16	0.07	0.03	12.69	
41.00	Bot - Section 3	221.13	0.17	0.07	0.03	6.33	
42.00		443.40	0.18	0.07	0.03	12.75	
44.00		881.08	0.19	0.06	0.02	25.48	
46.00		873.46	0.21	0.06	0.02	25.32	
48.00	Top - Section 2	865.84	0.23	0.06	0.02	25.05	
50.00		432.15	0.25	0.06	0.02	12.42	
52.00		428.34	0.27	0.05	0.02	12.14	
54.00		424.53	0.29	0.05	0.01	11.78	
56.00		420.72	0.31	0.04	0.01	11.33	
58.00		416.91	0.33	0.04	0.01	10.78	
60.00		413.10	0.35	0.03	0.01	10.13	
62.00		409.29	0.38	0.03	0.01	9.37	
64.00		405.48	0.40	0.02	0.01	8.50	
66.00		401.67	0.43	0.01	0.01	7.53	
68.00		397.86	0.45	0.00	0.01	6.48	
70.00		394.05	0.48	-0.01	0.01	5.34	
72.00		390.24	0.51	-0.02	0.01	4.15	
74.00		386.43	0.53	-0.03	0.01	2.93	
76.00		382.62	0.56	-0.04	0.01	1.70	
78.00		378.81	0.59	-0.05	0.01	0.50	
80.00		375.00	0.62	-0.06	0.02	-0.64	
82.00		371.19	0.65	-0.07	0.02	-1.68	
84.00		367.38	0.69	-0.08	0.03	-2.61	
85.00	Bot - Section 4	182.26	0.70	-0.09	0.03	-1.50	

Seismic Segment Forces (Factored)

Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 44	

86.00			334.72	0.72	-0.09	0.03	-3.10		
88.00			664.20	0.75	-0.10	0.04	-7.28		
90.00			657.21	0.79	-0.11	0.05	-7.96		
91.00	Top - Section 3		325.99	0.80	-0.11	0.06	-4.06		
92.00			148.65	0.82	-0.12	0.06	-1.88		
94.00			294.91	0.86	-0.12	0.07	-3.68		
96.00			291.74	0.89	-0.12	0.09	-3.37		
98.00			288.56	0.93	-0.12	0.10	-2.85		
100.00			285.39	0.97	-0.12	0.12	-2.10		
102.00			282.21	1.01	-0.11	0.14	-1.13		
104.00			279.04	1.05	-0.09	0.16	0.06		
106.00			275.86	1.09	-0.08	0.18	1.47		
108.00			272.69	1.13	-0.05	0.21	3.09		
110.00			269.51	1.17	-0.02	0.23	4.92		
112.00			266.34	1.21	0.02	0.27	6.95		
114.00			263.17	1.26	0.07	0.30	9.17		
116.00			259.99	1.30	0.12	0.34	11.57		
118.00			256.82	1.35	0.19	0.38	14.15		
120.00			253.64	1.39	0.27	0.42	16.90		
122.00			250.47	1.44	0.36	0.47	19.82		
124.00			247.29	1.49	0.47	0.53	22.88		
126.00			244.12	1.53	0.59	0.58	26.10		
128.00			240.94	1.58	0.72	0.65	29.45		
130.00	Bot - Section 5		3684.3	1.63	0.88	0.71	510.30		
132.00			425.30	1.68	1.05	0.79	66.24		
134.00			419.59	1.73	1.25	0.87	72.99		
135.00	Top - Section 4		207.65	1.76	1.36	0.91	38.09		
136.00			92.50	1.78	1.47	0.95	17.87		
137.00	Appurtenance(s)		3685.0	1.81	1.59	1.00	748.50		
138.00			91.23	1.84	1.71	1.04	19.46		
140.00			180.55	1.89	1.98	1.14	42.34		
		Totals:	**37,054.0**				**2,088.0**	**Total Wind:**	**25,700.7**

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

Calculated Forces

Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 45	

Tower Engineering Solutions

Load Case:	0.9D + 1.0E							**Iterations**	20
Gust Response Factor	1.10			**Sds**	0.18			**Ss**	0.17
Dead Load Factor	0.90	**Seismic Load Factor**	1.00	**Sd1**	0.10			**S1**	0.06
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.56	**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	-36.54	-2.13	0.00	-244.11	0.00	244.11	5803.10	2901.55	15291.3	7657.05		0.00	0.00	0.038
2.00	-35.99	-2.13	0.00	-239.85	0.00	239.85	5778.21	2889.11	15113.2	7567.86		0.00	0.00	0.038
4.00	-35.43	-2.12	0.00	-235.59	0.00	235.59	5753.06	2876.53	14935.4	7478.80		0.00	-0.01	0.038
6.00	-34.84	-2.12	0.00	-231.35	0.00	231.35	5727.65	2863.83	14757.8	7389.90		0.01	-0.01	0.037
8.00	-34.26	-2.11	0.00	-227.12	0.00	227.12	5701.98	2850.99	14580.6	7301.16		0.01	-0.01	0.037
10.00	-33.69	-2.10	0.00	-222.91	0.00	222.91	5676.04	2838.02	14403.7	7212.59		0.02	-0.02	0.037
12.00	-33.11	-2.09	0.00	-218.71	0.00	218.71	5649.84	2824.92	14227.2	7124.20		0.02	-0.02	0.037
14.00	-32.55	-2.07	0.00	-214.54	0.00	214.54	5623.38	2811.69	14051.0	7035.98		0.03	-0.02	0.036
16.00	-31.98	-2.06	0.00	-210.40	0.00	210.40	5596.66	2798.33	13875.2	6947.96		0.04	-0.02	0.036
18.00	-31.42	-2.05	0.00	-206.27	0.00	206.27	5569.67	2784.84	13699.9	6860.14		0.05	-0.03	0.036
20.00	-30.87	-2.04	0.00	-202.17	0.00	202.17	5542.43	2771.21	13524.9	6772.52		0.06	-0.03	0.035
22.00	-30.32	-2.02	0.00	-198.10	0.00	198.10	5514.92	2757.46	13350.3	6685.11		0.08	-0.03	0.035
24.00	-29.77	-2.01	0.00	-194.05	0.00	194.05	5487.15	2743.57	13176.2	6597.93		0.09	-0.04	0.035
25.00	-29.50	-2.01	0.00	-192.04	0.00	192.04	5473.16	2736.58	13089.3	6554.42		0.10	-0.04	0.035
25.00	-29.50	-2.01	0.00	-192.04	0.00	192.04	4407.37	2203.68	10563.1	5289.42		0.10	-0.04	0.043
26.00	-29.26	-2.00	0.00	-190.03	0.00	190.03	4397.65	2198.83	10497.0	5256.32		0.11	-0.04	0.043
28.00	-28.79	-1.99	0.00	-186.03	0.00	186.03	4378.03	2189.01	10364.9	5190.16		0.13	-0.04	0.042
30.00	-28.32	-1.98	0.00	-182.05	0.00	182.05	4358.14	2179.07	10232.9	5124.08		0.14	-0.05	0.042
32.00	-27.86	-1.97	0.00	-178.10	0.00	178.10	4338.00	2169.00	10101.1	5058.08		0.16	-0.05	0.042
34.00	-27.40	-1.96	0.00	-174.16	0.00	174.16	4317.58	2158.79	9969.51	4992.17		0.19	-0.05	0.041
36.00	-26.94	-1.94	0.00	-170.25	0.00	170.25	4296.91	2148.46	9838.08	4926.35		0.21	-0.06	0.041
38.00	-26.49	-1.93	0.00	-166.36	0.00	166.36	4275.98	2137.99	9706.86	4860.65		0.24	-0.06	0.040
40.00	-26.04	-1.92	0.00	-162.49	0.00	162.49	4254.78	2127.39	9575.87	4795.05		0.26	-0.07	0.040
41.00	-25.82	-1.92	0.00	-160.57	0.00	160.57	4244.08	2122.04	9510.46	4762.30		0.28	-0.07	0.040
42.00	-25.39	-1.90	0.00	-158.66	0.00	158.66	4233.32	2116.66	9445.12	4729.58		0.29	-0.07	0.040
44.00	-24.55	-1.88	0.00	-154.85	0.00	154.85	4211.60	2105.80	9314.62	4664.23		0.32	-0.07	0.039
46.00	-23.72	-1.85	0.00	-151.09	0.00	151.09	4189.62	2094.81	9184.40	4599.03		0.35	-0.08	0.039
48.00	-22.89	-1.83	0.00	-147.39	0.00	147.39	4202.72	2101.36	9261.79	4637.78		0.38	-0.08	0.037
50.00	-22.45	-1.82	0.00	-143.73	0.00	143.73	4180.63	2090.32	9131.68	4572.63		0.42	-0.08	0.037
52.00	-22.01	-1.81	0.00	-140.09	0.00	140.09	4158.28	2079.14	9001.86	4507.62		0.46	-0.09	0.036
54.00	-21.58	-1.79	0.00	-136.48	0.00	136.48	4135.67	2067.83	8872.35	4442.77		0.49	-0.09	0.036
56.00	-21.16	-1.78	0.00	-132.89	0.00	132.89	4112.79	2056.39	8743.17	4378.08		0.53	-0.09	0.035
58.00	-20.73	-1.77	0.00	-129.32	0.00	129.32	4089.65	2044.83	8614.32	4313.56		0.57	-0.10	0.035
60.00	-20.31	-1.76	0.00	-125.77	0.00	125.77	4066.25	2033.13	8485.83	4249.22		0.61	-0.10	0.035
62.00	-19.89	-1.76	0.00	-122.25	0.00	122.25	4042.59	2021.29	8357.71	4185.07		0.66	-0.11	0.034
64.00	-19.48	-1.75	0.00	-118.73	0.00	118.73	4018.67	2009.33	8229.97	4121.10		0.70	-0.11	0.034
66.00	-19.07	-1.74	0.00	-115.24	0.00	115.24	3994.48	1997.24	8102.64	4057.34		0.75	-0.11	0.033
68.00	-18.66	-1.73	0.00	-111.76	0.00	111.76	3970.03	1985.02	7975.72	3993.79		0.80	-0.12	0.033
70.00	-18.26	-1.73	0.00	-108.29	0.00	108.29	3945.32	1972.66	7849.23	3930.45		0.85	-0.12	0.032
72.00	-17.86	-1.73	0.00	-104.83	0.00	104.83	3920.35	1960.17	7723.19	3867.33		0.90	-0.12	0.032
74.00	-17.46	-1.72	0.00	-101.38	0.00	101.38	3895.11	1947.56	7597.60	3804.45		0.95	-0.13	0.031
76.00	-17.07	-1.72	0.00	-97.93	0.00	97.93	3869.62	1934.81	7472.50	3741.80		1.00	-0.13	0.031
78.00	-16.68	-1.72	0.00	-94.49	0.00	94.49	3843.86	1921.93	7347.89	3679.40		1.06	-0.13	0.030
80.00	-16.29	-1.72	0.00	-91.05	0.00	91.05	3817.84	1908.92	7223.78	3617.26		1.12	-0.14	0.029
82.00	-15.91	-1.72	0.00	-87.61	0.00	87.61	3791.55	1895.78	7100.20	3555.38		1.18	-0.14	0.029
84.00	-15.53	-1.72	0.00	-84.17	0.00	84.17	3765.01	1882.50	6977.16	3493.76		1.24	-0.14	0.028
85.00	-15.34	-1.72	0.00	-82.45	0.00	82.45	3751.64	1875.82	6915.84	3463.06		1.27	-0.15	0.028

Calculated Forces

Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 46

86.00	-15.01	-1.72	0.00	-80.73	0.00	80.73	3738.20	1869.10	6854.67	3432.43	1.30	-0.15	0.028
88.00	-14.37	-1.72	0.00	-77.29	0.00	77.29	3711.13	1855.57	6732.75	3371.38	1.36	-0.15	0.027
90.00	-13.73	-1.72	0.00	-73.85	0.00	73.85	3683.80	1841.90	6611.41	3310.62	1.42	-0.15	0.026
91.00	-13.41	-1.72	0.00	-72.13	0.00	72.13	2899.19	1449.59	5264.94	2636.38	1.46	-0.16	0.032
92.00	-13.25	-1.72	0.00	-70.41	0.00	70.41	2889.87	1444.93	5219.87	2613.82	1.49	-0.16	0.032
94.00	-12.94	-1.72	0.00	-66.97	0.00	66.97	2871.03	1435.52	5129.93	2568.78	1.56	-0.16	0.031
96.00	-12.63	-1.72	0.00	-63.54	0.00	63.54	2851.93	1425.97	5040.25	2523.87	1.62	-0.17	0.030
98.00	-12.32	-1.72	0.00	-60.10	0.00	60.10	2832.57	1416.29	4950.87	2479.11	1.69	-0.17	0.029
100.00	-12.01	-1.72	0.00	-56.66	0.00	56.66	2812.95	1406.48	4861.78	2434.50	1.77	-0.17	0.028
102.00	-11.71	-1.72	0.00	-53.23	0.00	53.23	2793.07	1396.53	4773.01	2390.05	1.84	-0.18	0.026
104.00	-11.41	-1.72	0.00	-49.79	0.00	49.79	2772.92	1386.46	4684.57	2345.77	1.91	-0.18	0.025
106.00	-11.11	-1.72	0.00	-46.36	0.00	46.36	2752.51	1376.26	4596.48	2301.65	1.99	-0.18	0.024
108.00	-10.82	-1.71	0.00	-42.93	0.00	42.93	2731.84	1365.92	4508.75	2257.73	2.07	-0.18	0.023
110.00	-10.52	-1.71	0.00	-39.50	0.00	39.50	2710.91	1355.45	4421.40	2213.98	2.14	-0.19	0.022
112.00	-10.24	-1.70	0.00	-36.09	0.00	36.09	2689.71	1344.86	4334.44	2170.44	2.22	-0.19	0.020
114.00	-9.95	-1.69	0.00	-32.69	0.00	32.69	2668.26	1334.13	4247.89	2127.10	2.30	-0.19	0.019
116.00	-9.67	-1.68	0.00	-29.31	0.00	29.31	2646.54	1323.27	4161.76	2083.97	2.38	-0.20	0.018
118.00	-9.39	-1.66	0.00	-25.95	0.00	25.95	2624.55	1312.28	4076.08	2041.07	2.47	-0.20	0.016
120.00	-9.11	-1.65	0.00	-22.63	0.00	22.63	2602.31	1301.16	3990.84	1998.39	2.55	-0.20	0.015
122.00	-8.84	-1.63	0.00	-19.34	0.00	19.34	2579.81	1289.90	3906.08	1955.94	2.63	-0.20	0.013
124.00	-8.56	-1.60	0.00	-16.09	0.00	16.09	2557.04	1278.52	3821.80	1913.74	2.72	-0.20	0.012
126.00	-8.30	-1.57	0.00	-12.88	0.00	12.88	2534.01	1267.00	3738.03	1871.79	2.81	-0.20	0.010
128.00	-8.03	-1.54	0.00	-9.73	0.00	9.73	2510.72	1255.36	3654.77	1830.10	2.89	-0.21	0.009
130.00	-4.67	-1.02	0.00	-6.65	0.00	6.65	2487.16	1243.58	3572.03	1788.67	2.98	-0.21	0.006
132.00	-4.26	-0.95	0.00	-4.60	0.00	4.60	2463.34	1231.67	3489.85	1747.52	3.06	-0.21	0.004
134.00	-3.86	-0.88	0.00	-2.69	0.00	2.69	2439.27	1219.63	3408.23	1706.65	3.15	-0.21	0.003
135.00	-3.66	-0.84	0.00	-1.81	0.00	1.81	1824.83	912.42	2579.10	1291.47	3.19	-0.21	0.003
136.00	-3.57	-0.82	0.00	-0.97	0.00	0.97	1817.10	908.55	2550.48	1277.14	3.24	-0.21	0.003
137.00	-0.24	-0.06	0.00	-0.15	0.00	0.15	1809.31	904.66	2521.92	1262.84	3.28	-0.21	0.000
138.00	-0.16	-0.04	0.00	-0.09	0.00	0.09	1801.45	900.73	2493.42	1248.56	3.33	-0.21	0.000
140.00	0.00	-0.04	0.00	0.00	0.00	0.00	1785.54	892.77	2436.62	1220.12	3.41	-0.21	0.000

Wind Loading - Shaft

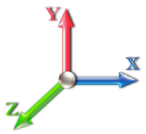
Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 47	

Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 21

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	0.70	6.129	6.74	273.99	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.70	6.129	6.74	271.99	0.650	0.000	2.00	10.876	7.07	47.7	0.0	603.2
4.00		1.00	0.70	6.129	6.74	269.99	0.650	0.000	2.00	10.796	7.02	47.3	0.0	598.7
6.00		1.00	0.70	6.129	6.74	267.99	0.650	0.000	2.00	10.717	6.97	47.0	0.0	594.3
8.00		1.00	0.70	6.129	6.74	265.99	0.650	0.000	2.00	10.637	6.91	46.6	0.0	589.8
10.00		1.00	0.70	6.129	6.74	264.00	0.650	0.000	2.00	10.558	6.86	46.3	0.0	585.4
12.00		1.00	0.70	6.129	6.74	262.00	0.650	0.000	2.00	10.478	6.81	45.9	0.0	580.9
14.00		1.00	0.70	6.129	6.74	260.00	0.650	0.000	2.00	10.398	6.76	45.6	0.0	576.5
16.00		1.00	0.70	6.129	6.74	258.00	0.650	0.000	2.00	10.319	6.71	45.2	0.0	572.1
18.00		1.00	0.70	6.129	6.74	256.00	0.650	0.000	2.00	10.239	6.66	44.9	0.0	567.6
20.00		1.00	0.70	6.129	6.74	254.01	0.650	0.000	2.00	10.160	6.60	44.5	0.0	563.2
22.00		1.00	0.70	6.129	6.74	252.01	0.650	0.000	2.00	10.080	6.55	44.2	0.0	558.7
24.00		1.00	0.70	6.129	6.74	250.01	0.650	0.000	2.00	10.000	6.50	43.8	0.0	554.3
25.00	Top - Section 1	1.00	0.70	6.129	6.74	249.01	0.650	0.000	1.00	4.970	3.23	21.8	0.0	275.5
26.00		1.00	0.70	6.129	6.74	248.01	0.650	0.000	1.00	4.950	3.22	21.7	0.0	235.4
28.00		1.00	0.70	6.129	6.74	246.01	0.650	0.000	2.00	9.841	6.40	43.1	0.0	468.0
30.00		1.00	0.71	6.192	6.81	245.26	0.650	0.000	2.00	9.762	6.35	43.2	0.0	464.2
32.00		1.00	0.72	6.303	6.93	245.44	0.650	0.000	2.00	9.682	6.29	43.6	0.0	460.4
34.00		1.00	0.73	6.410	7.05	245.47	0.650	0.000	2.00	9.602	6.24	44.0	0.0	456.6
36.00		1.00	0.74	6.513	7.16	245.36	0.650	0.000	2.00	9.523	6.19	44.3	0.0	452.7
38.00		1.00	0.76	6.611	7.27	245.14	0.650	0.000	2.00	9.443	6.14	44.6	0.0	448.9
40.00		1.00	0.77	6.706	7.38	244.81	0.650	0.000	2.00	9.364	6.09	44.9	0.0	445.1
41.00	Bot - Section 3	1.00	0.77	6.753	7.43	244.60	0.650	0.000	1.00	4.652	3.02	22.5	0.0	221.1
42.00		1.00	0.78	6.798	7.48	244.38	0.650	0.000	1.00	4.696	3.05	22.8	0.0	443.4
44.00		1.00	0.79	6.887	7.58	243.85	0.650	0.000	2.00	9.331	6.07	46.0	0.0	881.1
46.00		1.00	0.80	6.973	7.67	243.24	0.650	0.000	2.00	9.252	6.01	46.1	0.0	873.5
48.00	Top - Section 2	1.00	0.81	7.057	7.76	242.55	0.650	0.000	2.00	9.172	5.96	46.3	0.0	865.8
50.00		1.00	0.82	7.138	7.85	245.22	0.650	0.000	2.00	9.093	5.91	46.4	0.0	432.1
52.00		1.00	0.82	7.217	7.94	244.40	0.650	0.000	2.00	9.013	5.86	46.5	0.0	428.3
54.00		1.00	0.83	7.294	8.02	243.52	0.650	0.000	2.00	8.933	5.81	46.6	0.0	424.5
56.00		1.00	0.84	7.368	8.11	242.57	0.650	0.000	2.00	8.854	5.75	46.6	0.0	420.7
58.00		1.00	0.85	7.441	8.19	241.57	0.650	0.000	2.00	8.774	5.70	46.7	0.0	416.9
60.00		1.00	0.86	7.513	8.26	240.51	0.650	0.000	2.00	8.694	5.65	46.7	0.0	413.1
62.00		1.00	0.87	7.582	8.34	239.40	0.650	0.000	2.00	8.615	5.60	46.7	0.0	409.3
64.00		1.00	0.87	7.650	8.42	238.24	0.650	0.000	2.00	8.535	5.55	46.7	0.0	405.5
66.00		1.00	0.88	7.717	8.49	237.03	0.650	0.000	2.00	8.456	5.50	46.7	0.0	401.7
68.00		1.00	0.89	7.782	8.56	235.78	0.650	0.000	2.00	8.376	5.44	46.6	0.0	397.9
70.00		1.00	0.90	7.846	8.63	234.48	0.650	0.000	2.00	8.296	5.39	46.5	0.0	394.0
72.00		1.00	0.90	7.908	8.70	233.14	0.650	0.000	2.00	8.217	5.34	46.5	0.0	390.2
74.00		1.00	0.91	7.969	8.77	231.77	0.650	0.000	2.00	8.137	5.29	46.4	0.0	386.4
76.00		1.00	0.92	8.030	8.83	230.35	0.650	0.000	2.00	8.058	5.24	46.3	0.0	382.6
78.00		1.00	0.92	8.089	8.90	228.90	0.650	0.000	2.00	7.978	5.19	46.1	0.0	378.8
80.00		1.00	0.93	8.147	8.96	227.42	0.650	0.000	2.00	7.898	5.13	46.0	0.0	375.0
82.00		1.00	0.94	8.204	9.02	225.90	0.650	0.000	2.00	7.819	5.08	45.9	0.0	371.2
84.00		1.00	0.94	8.260	9.09	224.35	0.650	0.000	2.00	7.739	5.03	45.7	0.0	367.4
85.00	Bot - Section 4	1.00	0.95	8.287	9.12	223.56	0.650	0.000	1.00	3.840	2.50	22.8	0.0	182.3
86.00		1.00	0.95	8.315	9.15	222.77	0.650	0.000	1.00	3.873	2.52	23.0	0.0	334.7

Wind Loading - Shaft

Structure: CT11560-A-SBA | **Code:** EIA/TIA-222-G | 11/18/2021
Site Name: Sterling 6, CT | **Exposure:** B
Height: 140.00 (ft) | **Crest Height:** 0.00
Base Elev: 1.000 (ft) | **Site Class:** D - Stiff Soil
Gh: 1.1 | **Topography:** 1 | **Struct Class:** II | Page: 48

Tower Engineering Solutions

88.00		1.00	0.96	8.369	9.21	221.16	0.650	0.000	2.00	7.686	5.00	46.0	0.0	664.2
90.00		1.00	0.96	8.422	9.26	219.52	0.650	0.000	2.00	7.606	4.94	45.8	0.0	657.2
91.00	Top - Section 3	1.00	0.96	8.448	9.29	218.69	0.650	0.000	1.00	3.773	2.45	22.8	0.0	326.0
92.00		1.00	0.97	8.475	9.32	220.98	0.650	0.000	1.00	3.753	2.44	22.7	0.0	148.6
94.00		1.00	0.97	8.526	9.38	219.29	0.650	0.000	2.00	7.447	4.84	45.4	0.0	294.9
96.00		1.00	0.98	8.577	9.43	217.58	0.650	0.000	2.00	7.367	4.79	45.2	0.0	291.7
98.00		1.00	0.99	8.627	9.49	215.85	0.650	0.000	2.00	7.288	4.74	45.0	0.0	288.6
100.00		1.00	0.99	8.677	9.54	214.09	0.650	0.000	2.00	7.208	4.69	44.7	0.0	285.4
102.00		1.00	1.00	8.726	9.60	212.30	0.650	0.000	2.00	7.129	4.63	44.5	0.0	282.2
104.00		1.00	1.00	8.774	9.65	210.50	0.650	0.000	2.00	7.049	4.58	44.2	0.0	279.0
106.00		1.00	1.01	8.821	9.70	208.67	0.650	0.000	2.00	6.969	4.53	44.0	0.0	275.9
108.00		1.00	1.01	8.868	9.75	206.82	0.650	0.000	2.00	6.890	4.48	43.7	0.0	272.7
110.00		1.00	1.02	8.914	9.81	204.95	0.650	0.000	2.00	6.810	4.43	43.4	0.0	269.5
112.00		1.00	1.02	8.960	9.86	203.05	0.650	0.000	2.00	6.731	4.37	43.1	0.0	266.3
114.00		1.00	1.03	9.005	9.91	201.14	0.650	0.000	2.00	6.651	4.32	42.8	0.0	263.2
116.00		1.00	1.03	9.049	9.95	199.21	0.650	0.000	2.00	6.571	4.27	42.5	0.0	260.0
118.00		1.00	1.04	9.093	10.00	197.26	0.650	0.000	2.00	6.492	4.22	42.2	0.0	256.8
120.00		1.00	1.04	9.136	10.05	195.29	0.650	0.000	2.00	6.412	4.17	41.9	0.0	253.6
122.00		1.00	1.05	9.179	10.10	193.30	0.650	0.000	2.00	6.333	4.12	41.6	0.0	250.5
124.00		1.00	1.05	9.222	10.14	191.30	0.650	0.000	2.00	6.253	4.06	41.2	0.0	247.3
126.00		1.00	1.06	9.264	10.19	189.28	0.650	0.000	2.00	6.173	4.01	40.9	0.0	244.1
128.00		1.00	1.06	9.305	10.24	187.24	0.650	0.000	2.00	6.094	3.96	40.5	0.0	240.9
130.00	Bot - Section 5	1.00	1.07	9.346	10.28	185.18	0.650	0.000	2.00	6.014	3.91	40.2	0.0	237.8
132.00		1.00	1.07	9.387	10.33	183.11	0.650	0.000	2.00	6.019	3.91	40.4	0.0	425.3
134.00		1.00	1.08	9.427	10.37	181.02	0.650	0.000	2.00	5.940	3.86	40.0	0.0	419.6
135.00	Top - Section 4	1.00	1.08	9.447	10.39	179.97	0.650	0.000	1.00	2.940	1.91	19.9	0.0	207.6
136.00		1.00	1.08	9.466	10.41	181.56	0.650	0.000	1.00	2.920	1.90	19.8	0.0	92.5
137.00	Appurtenance(s)	1.00	1.08	9.486	10.43	180.51	0.650	0.000	1.00	2.900	1.89	19.7	0.0	91.9
138.00		1.00	1.09	9.506	10.46	179.45	0.650	0.000	1.00	2.880	1.87	19.6	0.0	91.2
140.00		1.00	1.09	9.545	10.50	177.32	0.650	0.000	2.00	5.701	3.71	38.9	0.0	180.6
								Totals:	**140.00**			**3,117.7**		**30,014.2**

Discrete Appurtenance Forces

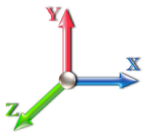
Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 49	

Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 21

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	137.00	HRK12 (Handrail Kit)	1	9.486	10.435	1.00	1.00	6.75	261.72	0.000	0.000	70.43	0.00	0.00
2	137.00	(3) Stabilizer Kit (4' FW)	1	9.486	10.435	1.00	1.00	3.70	140.00	0.000	0.000	38.61	0.00	0.00
3	137.00	B2/B66A RRHBR049	3	9.486	10.435	0.50	0.75	2.83	253.50	0.000	0.000	29.57	0.00	0.00
4	137.00	RCMDC-6627-PF-48	1	9.486	10.435	0.50	0.75	2.04	32.00	0.000	0.000	21.29	0.00	0.00
5	137.00	Antel LPA-80063/6CF	3	9.486	10.435	0.70	0.75	20.30	81.00	0.000	0.000	211.87	0.00	0.00
6	137.00	JAHH-65B-R3B	6	9.486	10.435	0.62	0.75	34.03	379.80	0.000	0.000	355.05	0.00	0.00
7	137.00	B5/B13 RRHBR04C	3	9.486	10.435	0.50	0.75	2.79	210.90	0.000	0.000	29.10	0.00	0.00
8	137.00	PRK-1245 (kicker kit)	1	9.486	10.435	1.00	1.00	9.50	464.91	0.000	0.000	99.13	0.00	0.00
9	137.00	MT6407-77A	3	9.486	10.435	0.52	0.75	7.39	238.20	0.000	0.000	77.08	0.00	0.00
10	137.00	CBC78T-DS-43	3	9.486	10.435	0.50	0.75	0.56	31.20	0.000	0.000	5.82	0.00	0.00
11	137.00	Low Profile Platform	1	9.486	10.435	1.00	1.00	22.00	1500.00	0.000	0.000	229.56	0.00	0.00
12	130.00	7770.00	6	9.346	10.281	0.55	0.75	18.07	162.00	0.000	0.000	185.75	0.00	0.00
13	130.00	Powerwave LGP21901 -	6	9.346	10.281	0.50	0.75	5.04	186.00	0.000	0.000	51.76	0.00	0.00
14	130.00	RRUS 4449 B5/B12	3	9.346	10.281	0.50	0.75	2.97	213.00	0.000	0.000	30.53	0.00	0.00
15	130.00	RRUS 8843 B2 B66A	3	9.346	10.281	0.50	0.75	2.47	216.00	0.000	0.000	25.42	0.00	0.00
16	130.00	LGP17201	6	9.346	10.281	0.50	0.75	5.88	60.00	0.000	0.000	60.44	0.00	0.00
17	130.00	HRK12 (Handrail Kit)	1	9.346	10.281	1.00	1.00	10.00	261.72	0.000	0.000	102.81	0.00	0.00
18	130.00	DMP65R-BU8DA	3	9.346	10.281	0.54	0.75	28.95	287.10	0.000	0.000	297.62	0.00	0.00
19	130.00	HPA-65R-BU8AA	3	9.346	10.281	0.65	0.75	21.73	162.00	0.000	0.000	223.40	0.00	0.00
20	130.00	15'x2.875"mount pipe	3	9.346	10.281	1.00	1.00	12.93	261.00	0.000	0.000	132.93	0.00	0.00
21	130.00	Low Profile Platform	1	9.346	10.281	1.00	1.00	22.00	1500.00	0.000	0.000	226.18	0.00	0.00
22	130.00	DC6-48-60-18-8F	1	9.346	10.281	0.50	0.75	0.65	32.80	0.000	0.000	6.72	0.00	0.00
23	130.00	Powerwave LGP21401 -	6	9.346	10.281	0.50	0.75	3.89	105.00	0.000	0.000	39.99	0.00	0.00
							Totals:		**7,039.85**			**2,551.06**		

Total Applied Force Summary

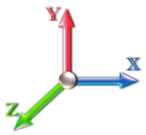
Structure:	CT11560-A-SBA		**Code:**	EIA/TIA-222-G	11/18/2021
Site Name:	Sterling 6, CT		**Exposure:**	B	
Height:	140.00 (ft)		**Crest Height:**	0.00	
Base Elev:	1.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 50

Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 21

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		47.66	607.57	0.00	0.00
4.00		47.31	628.08	0.00	0.00
6.00		46.96	648.60	0.00	0.00
8.00		46.61	644.16	0.00	0.00
10.00		46.26	639.71	0.00	0.00
12.00		45.91	635.27	0.00	0.00
14.00		45.57	630.82	0.00	0.00
16.00		45.22	626.38	0.00	0.00
18.00		44.87	621.93	0.00	0.00
20.00		44.52	617.49	0.00	0.00
22.00		44.17	613.04	0.00	0.00
24.00		43.82	608.60	0.00	0.00
25.00		21.78	302.63	0.00	0.00
26.00		21.69	262.58	0.00	0.00
28.00		43.12	522.30	0.00	0.00
30.00		43.21	518.49	0.00	0.00
32.00		43.63	514.68	0.00	0.00
34.00		44.01	510.87	0.00	0.00
36.00		44.34	507.06	0.00	0.00
38.00		44.64	503.25	0.00	0.00
40.00		44.90	499.44	0.00	0.00
41.00		22.46	248.29	0.00	0.00
42.00		22.82	470.56	0.00	0.00
44.00		45.95	935.40	0.00	0.00
46.00		46.13	927.78	0.00	0.00
48.00		46.28	920.16	0.00	0.00
50.00		46.40	486.47	0.00	0.00
52.00		46.51	482.66	0.00	0.00
54.00		46.59	478.85	0.00	0.00
56.00		46.65	475.04	0.00	0.00
58.00		46.68	471.23	0.00	0.00
60.00		46.70	467.42	0.00	0.00
62.00		46.70	463.61	0.00	0.00
64.00		46.69	459.80	0.00	0.00
66.00		46.65	455.99	0.00	0.00
68.00		46.60	452.18	0.00	0.00
70.00		46.54	448.37	0.00	0.00
72.00		46.46	444.56	0.00	0.00
74.00		46.37	440.75	0.00	0.00
76.00		46.26	436.94	0.00	0.00
78.00		46.14	433.13	0.00	0.00
80.00		46.01	429.32	0.00	0.00
82.00		45.86	425.51	0.00	0.00
84.00		45.71	421.70	0.00	0.00
85.00		22.75	209.42	0.00	0.00
86.00		23.02	361.88	0.00	0.00

Total Applied Force Summary

Structure:	CT11560-A-SBA		**Code:**	EIA/TIA-222-G	11/18/2021
Site Name:	Sterling 6, CT		**Exposure:**	B	
Height:	140.00 (ft)		**Crest Height:**	0.00	
Base Elev:	1.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 51

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88.00		45.99	718.52	0.00	0.00
90.00		45.80	711.53	0.00	0.00
91.00		22.79	353.15	0.00	0.00
92.00		22.74	175.81	0.00	0.00
94.00		45.40	349.23	0.00	0.00
96.00		45.18	346.06	0.00	0.00
98.00		44.96	342.88	0.00	0.00
100.00		44.72	339.71	0.00	0.00
102.00		44.47	336.53	0.00	0.00
104.00		44.22	333.36	0.00	0.00
106.00		43.96	330.18	0.00	0.00
108.00		43.68	327.01	0.00	0.00
110.00		43.41	323.83	0.00	0.00
112.00		43.12	320.66	0.00	0.00
114.00		42.82	317.49	0.00	0.00
116.00		42.52	314.31	0.00	0.00
118.00		42.21	311.14	0.00	0.00
120.00		41.89	307.96	0.00	0.00
122.00		41.56	304.79	0.00	0.00
124.00		41.23	301.61	0.00	0.00
126.00		40.89	298.44	0.00	0.00
128.00		40.54	295.26	0.00	0.00
130.00	(42) attachments	1423.73	3738.71	0.00	0.00
132.00		40.40	450.50	0.00	0.00
134.00		40.03	444.79	0.00	0.00
135.00		19.86	220.25	0.00	0.00
136.00		19.76	105.10	0.00	0.00
137.00	(26) attachments	1187.19	3697.69	0.00	0.00
138.00		19.58	91.23	0.00	0.00
140.00		38.90	180.55	0.00	0.00
	Totals:	**5,668.71**	**40,598.16**	**0.00**	**0.00**

Linear Appurtenance Segment Forces (Factored)

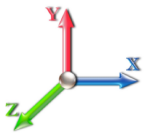
Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 52	

Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 21

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)
4.00	1" DC Power	Yes	1.00	0.000	1.00	0.08	0.00	0.008	0.000	6.129	0.00	2.00
4.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.008	0.000	6.129	0.00	0.08
6.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.016	0.000	6.129	0.00	4.00
6.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	6.129	0.00	0.16
8.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.016	0.000	6.129	0.00	4.00
8.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	6.129	0.00	0.16
10.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.016	0.000	6.129	0.00	4.00
10.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	6.129	0.00	0.16
12.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.016	0.000	6.129	0.00	4.00
12.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	6.129	0.00	0.16
14.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.016	0.000	6.129	0.00	4.00
14.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	6.129	0.00	0.16
16.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.016	0.000	6.129	0.00	4.00
16.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	6.129	0.00	0.16
18.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.016	0.000	6.129	0.00	4.00
18.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	6.129	0.00	0.16
20.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.016	0.000	6.129	0.00	4.00
20.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.016	0.000	6.129	0.00	0.16
22.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.017	0.000	6.129	0.00	4.00
22.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.017	0.000	6.129	0.00	0.16
24.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.017	0.000	6.129	0.00	4.00
24.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.017	0.000	6.129	0.00	0.16
25.00	1" DC Power	Yes	1.00	0.000	1.00	0.08	0.00	0.017	0.000	6.129	0.00	2.00
25.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.017	0.000	6.129	0.00	0.08
26.00	1" DC Power	Yes	1.00	0.000	1.00	0.08	0.00	0.017	0.000	6.129	0.00	2.00
26.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.017	0.000	6.129	0.00	0.08
28.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.017	0.000	6.129	0.00	4.00
28.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.017	0.000	6.129	0.00	0.16
30.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.017	0.000	6.192	0.00	4.00
30.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.017	0.000	6.192	0.00	0.16
32.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.017	0.000	6.303	0.00	4.00
32.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.017	0.000	6.303	0.00	0.16
34.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.017	0.000	6.410	0.00	4.00
34.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.017	0.000	6.410	0.00	0.16
36.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.018	0.000	6.513	0.00	4.00
36.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	6.513	0.00	0.16
38.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.018	0.000	6.611	0.00	4.00
38.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	6.611	0.00	0.16
40.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.018	0.000	6.706	0.00	4.00
40.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	6.706	0.00	0.16
41.00	1" DC Power	Yes	1.00	0.000	1.00	0.08	0.00	0.018	0.000	6.753	0.00	2.00
41.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.018	0.000	6.753	0.00	0.08
42.00	1" DC Power	Yes	1.00	0.000	1.00	0.08	0.00	0.018	0.000	6.798	0.00	2.00
42.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.018	0.000	6.798	0.00	0.08
44.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.018	0.000	6.887	0.00	4.00
44.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	6.887	0.00	0.16
46.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.018	0.000	6.973	0.00	4.00

Linear Appurtenance Segment Forces (Factored)

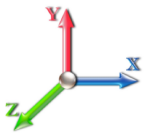
Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 53	

Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 21

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	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	6.973	0.00	0.16
48.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.018	0.000	7.057	0.00	4.00
48.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	7.057	0.00	0.16
50.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.018	0.000	7.138	0.00	4.00
50.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	7.138	0.00	0.16
52.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.018	0.000	7.217	0.00	4.00
52.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.018	0.000	7.217	0.00	0.16
54.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.019	0.000	7.294	0.00	4.00
54.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.019	0.000	7.294	0.00	0.16
56.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.019	0.000	7.368	0.00	4.00
56.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.019	0.000	7.368	0.00	0.16
58.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.019	0.000	7.441	0.00	4.00
58.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.019	0.000	7.441	0.00	0.16
60.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.019	0.000	7.513	0.00	4.00
60.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.019	0.000	7.513	0.00	0.16
62.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.019	0.000	7.582	0.00	4.00
62.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.019	0.000	7.582	0.00	0.16
64.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.020	0.000	7.650	0.00	4.00
64.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.020	0.000	7.650	0.00	0.16
66.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.020	0.000	7.717	0.00	4.00
66.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.020	0.000	7.717	0.00	0.16
68.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.020	0.000	7.782	0.00	4.00
68.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.020	0.000	7.782	0.00	0.16
70.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.020	0.000	7.846	0.00	4.00
70.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.020	0.000	7.846	0.00	0.16
72.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.020	0.000	7.908	0.00	4.00
72.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.020	0.000	7.908	0.00	0.16
74.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.020	0.000	7.969	0.00	4.00
74.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.020	0.000	7.969	0.00	0.16
76.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.021	0.000	8.030	0.00	4.00
76.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.021	0.000	8.030	0.00	0.16
78.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.021	0.000	8.089	0.00	4.00
78.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.021	0.000	8.089	0.00	0.16
80.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.021	0.000	8.147	0.00	4.00
80.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.021	0.000	8.147	0.00	0.16
82.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.021	0.000	8.204	0.00	4.00
82.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.021	0.000	8.204	0.00	0.16
84.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.022	0.000	8.260	0.00	4.00
84.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.022	0.000	8.260	0.00	0.16
85.00	1" DC Power	Yes	1.00	0.000	1.00	0.08	0.00	0.022	0.000	8.287	0.00	2.00
85.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.022	0.000	8.287	0.00	0.08
86.00	1" DC Power	Yes	1.00	0.000	1.00	0.08	0.00	0.022	0.000	8.315	0.00	2.00
86.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.022	0.000	8.315	0.00	0.08
88.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.022	0.000	8.369	0.00	4.00
88.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.022	0.000	8.369	0.00	0.16
90.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.022	0.000	8.422	0.00	4.00
90.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.022	0.000	8.422	0.00	0.16

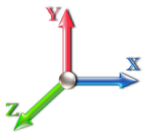
Linear Appurtenance Segment Forces (Factored)

Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 54	

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 21

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)
91.00	1" DC Power	Yes	1.00	0.000	1.00	0.08	0.00	0.022	0.000	8.448	0.00	2.00
91.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.022	0.000	8.448	0.00	0.08
92.00	1" DC Power	Yes	1.00	0.000	1.00	0.08	0.00	0.022	0.000	8.475	0.00	2.00
92.00	7/16" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.022	0.000	8.475	0.00	0.08
94.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.022	0.000	8.526	0.00	4.00
94.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.022	0.000	8.526	0.00	0.16
96.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.023	0.000	8.577	0.00	4.00
96.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.023	0.000	8.577	0.00	0.16
98.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.023	0.000	8.627	0.00	4.00
98.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.023	0.000	8.627	0.00	0.16
100.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.023	0.000	8.677	0.00	4.00
100.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.023	0.000	8.677	0.00	0.16
102.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.023	0.000	8.726	0.00	4.00
102.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.023	0.000	8.726	0.00	0.16
104.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.024	0.000	8.774	0.00	4.00
104.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.024	0.000	8.774	0.00	0.16
106.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.024	0.000	8.821	0.00	4.00
106.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.024	0.000	8.821	0.00	0.16
108.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.024	0.000	8.868	0.00	4.00
108.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.024	0.000	8.868	0.00	0.16
110.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.024	0.000	8.914	0.00	4.00
110.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.024	0.000	8.914	0.00	0.16
112.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.025	0.000	8.960	0.00	4.00
112.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.025	0.000	8.960	0.00	0.16
114.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.025	0.000	9.005	0.00	4.00
114.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.025	0.000	9.005	0.00	0.16
116.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.025	0.000	9.049	0.00	4.00
116.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.025	0.000	9.049	0.00	0.16
118.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.026	0.000	9.093	0.00	4.00
118.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.026	0.000	9.093	0.00	0.16
120.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.026	0.000	9.136	0.00	4.00
120.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.026	0.000	9.136	0.00	0.16
122.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.026	0.000	9.179	0.00	4.00
122.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.026	0.000	9.179	0.00	0.16
124.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.027	0.000	9.222	0.00	4.00
124.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.027	0.000	9.222	0.00	0.16
126.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.027	0.000	9.264	0.00	4.00
126.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.027	0.000	9.264	0.00	0.16
128.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.027	0.000	9.305	0.00	4.00
128.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.027	0.000	9.305	0.00	0.16
130.00	1" DC Power	Yes	2.00	0.000	1.00	0.17	0.00	0.028	0.000	9.346	0.00	4.00
130.00	7/16" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.028	0.000	9.346	0.00	0.16
									Totals:		**0.0**	**264.2**

Calculated Forces

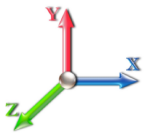
Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 55	

Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 21

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	-40.60	-5.67	0.00	-566.39	0.00	566.39	5803.10	2901.55	15291.3	7657.05	0.00	0.000	0.000	0.081
2.00	-39.99	-5.63	0.00	-555.05	0.00	555.05	5778.21	2889.11	15113.2	7567.86	0.00	-0.007	0.000	0.080
4.00	-39.36	-5.58	0.00	-543.79	0.00	543.79	5753.06	2876.53	14935.4	7478.80	0.01	-0.014	0.000	0.080
6.00	-38.71	-5.54	0.00	-532.62	0.00	532.62	5727.65	2863.83	14757.8	7389.90	0.01	-0.021	0.000	0.079
8.00	-38.07	-5.50	0.00	-521.54	0.00	521.54	5701.98	2850.99	14580.6	7301.16	0.02	-0.028	0.000	0.078
10.00	-37.43	-5.46	0.00	-510.54	0.00	510.54	5676.04	2838.02	14403.7	7212.59	0.04	-0.035	0.000	0.077
12.00	-36.79	-5.42	0.00	-499.62	0.00	499.62	5649.84	2824.92	14227.2	7124.20	0.05	-0.042	0.000	0.077
14.00	-36.16	-5.37	0.00	-488.79	0.00	488.79	5623.38	2811.69	14051.0	7035.98	0.07	-0.049	0.000	0.076
16.00	-35.53	-5.33	0.00	-478.04	0.00	478.04	5596.66	2798.33	13875.2	6947.96	0.09	-0.056	0.000	0.075
18.00	-34.91	-5.29	0.00	-467.37	0.00	467.37	5569.67	2784.84	13699.9	6860.14	0.12	-0.063	0.000	0.074
20.00	-34.29	-5.25	0.00	-456.79	0.00	456.79	5542.43	2771.21	13524.9	6772.52	0.15	-0.070	0.000	0.074
22.00	-33.68	-5.21	0.00	-446.29	0.00	446.29	5514.92	2757.46	13350.3	6685.11	0.18	-0.077	0.000	0.073
24.00	-33.07	-5.17	0.00	-435.87	0.00	435.87	5487.15	2743.57	13176.2	6597.93	0.21	-0.084	0.000	0.072
25.00	-32.77	-5.15	0.00	-430.70	0.00	430.70	5473.16	2736.58	13089.3	6554.42	0.23	-0.087	0.000	0.072
25.00	-32.77	-5.15	0.00	-430.70	0.00	430.70	4407.37	2203.68	10563.1	5289.42	0.23	-0.087	0.000	0.089
26.00	-32.50	-5.13	0.00	-425.55	0.00	425.55	4397.65	2198.83	10497.0	5256.32	0.25	-0.091	0.000	0.088
28.00	-31.98	-5.09	0.00	-415.29	0.00	415.29	4378.03	2189.01	10364.9	5190.16	0.29	-0.099	0.000	0.087
30.00	-31.46	-5.05	0.00	-405.11	0.00	405.11	4358.14	2179.07	10232.9	5124.08	0.33	-0.107	0.000	0.086
32.00	-30.95	-5.01	0.00	-395.01	0.00	395.01	4338.00	2169.00	10101.1	5058.08	0.38	-0.115	0.000	0.085
34.00	-30.43	-4.97	0.00	-384.99	0.00	384.99	4317.58	2158.79	9969.51	4992.17	0.43	-0.123	0.000	0.084
36.00	-29.93	-4.93	0.00	-375.05	0.00	375.05	4296.91	2148.46	9838.08	4926.35	0.48	-0.131	0.000	0.083
38.00	-29.42	-4.89	0.00	-365.20	0.00	365.20	4275.98	2137.99	9706.86	4860.65	0.54	-0.140	0.000	0.082
40.00	-28.92	-4.84	0.00	-355.42	0.00	355.42	4254.78	2127.39	9575.87	4795.05	0.60	-0.148	0.000	0.081
41.00	-28.67	-4.82	0.00	-350.58	0.00	350.58	4244.08	2122.04	9510.46	4762.30	0.63	-0.152	0.000	0.080
42.00	-28.20	-4.80	0.00	-345.76	0.00	345.76	4233.32	2116.66	9445.12	4729.58	0.66	-0.156	0.000	0.080
44.00	-27.27	-4.76	0.00	-336.15	0.00	336.15	4211.60	2105.80	9314.62	4664.23	0.73	-0.164	0.000	0.079
46.00	-26.34	-4.71	0.00	-326.64	0.00	326.64	4189.62	2094.81	9184.40	4599.03	0.80	-0.172	0.000	0.077
48.00	-25.42	-4.67	0.00	-317.22	0.00	317.22	4202.72	2101.36	9261.79	4637.78	0.87	-0.180	0.000	0.074
50.00	-24.93	-4.62	0.00	-307.89	0.00	307.89	4180.63	2090.32	9131.68	4572.63	0.95	-0.188	0.000	0.073
52.00	-24.45	-4.58	0.00	-298.65	0.00	298.65	4158.28	2079.14	9001.86	4507.62	1.03	-0.196	0.000	0.072
54.00	-23.97	-4.53	0.00	-289.49	0.00	289.49	4135.67	2067.83	8872.35	4442.77	1.11	-0.203	0.000	0.071
56.00	-23.49	-4.49	0.00	-280.43	0.00	280.43	4112.79	2056.39	8743.17	4378.08	1.20	-0.211	0.000	0.070
58.00	-23.02	-4.44	0.00	-271.46	0.00	271.46	4089.65	2044.83	8614.32	4313.56	1.29	-0.218	0.000	0.069
60.00	-22.55	-4.40	0.00	-262.58	0.00	262.58	4066.25	2033.13	8485.83	4249.22	1.38	-0.226	0.000	0.067
62.00	-22.09	-4.35	0.00	-253.79	0.00	253.79	4042.59	2021.29	8357.71	4185.07	1.48	-0.233	0.000	0.066
64.00	-21.63	-4.30	0.00	-245.09	0.00	245.09	4018.67	2009.33	8229.97	4121.10	1.58	-0.241	0.000	0.065
66.00	-21.17	-4.26	0.00	-236.48	0.00	236.48	3994.48	1997.24	8102.64	4057.34	1.68	-0.248	0.000	0.064
68.00	-20.72	-4.21	0.00	-227.97	0.00	227.97	3970.03	1985.02	7975.72	3993.79	1.79	-0.255	0.000	0.062
70.00	-20.27	-4.17	0.00	-219.54	0.00	219.54	3945.32	1972.66	7849.23	3930.45	1.90	-0.263	0.000	0.061
72.00	-19.83	-4.12	0.00	-211.21	0.00	211.21	3920.35	1960.17	7723.19	3867.33	2.01	-0.270	0.000	0.060
74.00	-19.39	-4.07	0.00	-202.97	0.00	202.97	3895.11	1947.56	7597.60	3804.45	2.12	-0.277	0.000	0.058
76.00	-18.95	-4.03	0.00	-194.82	0.00	194.82	3869.62	1934.81	7472.50	3741.80	2.24	-0.284	0.000	0.057
78.00	-18.52	-3.98	0.00	-186.77	0.00	186.77	3843.86	1921.93	7347.89	3679.40	2.36	-0.291	0.000	0.056
80.00	-18.09	-3.94	0.00	-178.81	0.00	178.81	3817.84	1908.92	7223.78	3617.26	2.49	-0.298	0.000	0.054
82.00	-17.66	-3.89	0.00	-170.93	0.00	170.93	3791.55	1895.78	7100.20	3555.38	2.61	-0.305	0.000	0.053
84.00	-17.24	-3.84	0.00	-163.16	0.00	163.16	3765.01	1882.50	6977.16	3493.76	2.74	-0.311	0.000	0.051
85.00	-17.03	-3.82	0.00	-159.31	0.00	159.31	3751.64	1875.82	6915.84	3463.06	2.81	-0.315	0.000	0.051
86.00	-16.67	-3.80	0.00	-155.49	0.00	155.49	3738.20	1869.10	6854.67	3432.43	2.87	-0.318	0.000	0.050

Calculated Forces

Structure:	CT11560-A-SBA	**Code:**	EIA/TIA-222-G	11/18/2021	
Site Name:	Sterling 6, CT	**Exposure:**	B		
Height:	140.00 (ft)	**Crest Height:**	0.00		
Base Elev:	1.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 56

Tower Engineering Solutions

88.00	-15.95	-3.75	0.00	-147.90	0.00	147.90	3711.13	1855.57	6732.75	3371.38	3.01	-0.324	0.000	0.048
90.00	-15.24	-3.70	0.00	-140.40	0.00	140.40	3683.80	1841.90	6611.41	3310.62	3.14	-0.331	0.000	0.047
91.00	-14.88	-3.68	0.00	-136.70	0.00	136.70	2899.19	1449.59	5264.94	2636.38	3.21	-0.334	0.000	0.057
92.00	-14.71	-3.65	0.00	-133.03	0.00	133.03	2889.87	1444.93	5219.87	2613.82	3.28	-0.337	0.000	0.056
94.00	-14.36	-3.61	0.00	-125.72	0.00	125.72	2871.03	1435.52	5129.93	2568.78	3.43	-0.344	0.000	0.054
96.00	-14.01	-3.56	0.00	-118.51	0.00	118.51	2851.93	1425.97	5040.25	2523.87	3.57	-0.351	0.000	0.052
98.00	-13.67	-3.52	0.00	-111.38	0.00	111.38	2832.57	1416.29	4950.87	2479.11	3.72	-0.357	0.000	0.050
100.00	-13.33	-3.47	0.00	-104.35	0.00	104.35	2812.95	1406.48	4861.78	2434.50	3.87	-0.364	0.000	0.048
102.00	-12.99	-3.43	0.00	-97.41	0.00	97.41	2793.07	1396.53	4773.01	2390.05	4.03	-0.370	0.000	0.045
104.00	-12.66	-3.38	0.00	-90.56	0.00	90.56	2772.92	1386.46	4684.57	2345.77	4.18	-0.376	0.000	0.043
106.00	-12.33	-3.34	0.00	-83.80	0.00	83.80	2752.51	1376.26	4596.48	2301.65	4.34	-0.381	0.000	0.041
108.00	-12.00	-3.29	0.00	-77.13	0.00	77.13	2731.84	1365.92	4508.75	2257.73	4.50	-0.387	0.000	0.039
110.00	-11.68	-3.25	0.00	-70.54	0.00	70.54	2710.91	1355.45	4421.40	2213.98	4.67	-0.392	0.000	0.036
112.00	-11.36	-3.20	0.00	-64.05	0.00	64.05	2689.71	1344.86	4334.44	2170.44	4.83	-0.397	0.000	0.034
114.00	-11.04	-3.16	0.00	-57.65	0.00	57.65	2668.26	1334.13	4247.89	2127.10	5.00	-0.401	0.000	0.031
116.00	-10.73	-3.11	0.00	-51.33	0.00	51.33	2646.54	1323.27	4161.76	2083.97	5.17	-0.406	0.000	0.029
118.00	-10.42	-3.07	0.00	-45.10	0.00	45.10	2624.55	1312.28	4076.08	2041.07	5.34	-0.410	0.000	0.026
120.00	-10.11	-3.03	0.00	-38.96	0.00	38.96	2602.31	1301.16	3990.84	1998.39	5.51	-0.413	0.000	0.023
122.00	-9.80	-2.98	0.00	-32.91	0.00	32.91	2579.81	1289.90	3906.08	1955.94	5.68	-0.416	0.000	0.021
124.00	-9.50	-2.94	0.00	-26.94	0.00	26.94	2557.04	1278.52	3821.80	1913.74	5.86	-0.419	0.000	0.018
126.00	-9.20	-2.90	0.00	-21.06	0.00	21.06	2534.01	1267.00	3738.03	1871.79	6.04	-0.421	0.000	0.015
128.00	-8.91	-2.86	0.00	-15.27	0.00	15.27	2510.72	1255.36	3654.77	1830.10	6.21	-0.423	0.000	0.012
130.00	-5.18	-1.40	0.00	-9.56	0.00	9.56	2487.16	1243.58	3572.03	1788.67	6.39	-0.424	0.000	0.007
132.00	-4.73	-1.36	0.00	-6.75	0.00	6.75	2463.34	1231.67	3489.85	1747.52	6.57	-0.425	0.000	0.006
134.00	-4.29	-1.32	0.00	-4.03	0.00	4.03	2439.27	1219.63	3408.23	1706.65	6.75	-0.426	0.000	0.004
135.00	-4.07	-1.30	0.00	-2.71	0.00	2.71	1824.83	912.42	2579.10	1291.47	6.84	-0.426	0.000	0.004
136.00	-3.96	-1.28	0.00	-1.42	0.00	1.42	1817.10	908.55	2550.48	1277.14	6.93	-0.426	0.000	0.003
137.00	-0.27	-0.06	0.00	-0.14	0.00	0.14	1809.31	904.66	2521.92	1262.84	7.01	-0.426	0.000	0.000
138.00	-0.18	-0.04	0.00	-0.08	0.00	0.08	1801.45	900.73	2493.42	1248.56	7.10	-0.426	0.000	0.000
140.00	0.00	-0.04	0.00	0.00	0.00	0.00	1785.54	892.77	2436.62	1220.12	7.28	-0.426	0.000	0.000

Final Analysis Summary

Structure:	CT11560-A-SBA		**Code:**	EIA/TIA-222-G	11/18/2021
Site Name:	Sterling 6, CT		**Exposure:**	B	
Height:	140.00 (ft)		**Crest Height:**	0.00	
Base Elev:	1.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 57

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 101 mph Wind	25.7	0.00	48.71	0.00	0.00	2576.54
0.9D + 1.6W 101 mph Wind	25.7	0.00	36.53	0.00	0.00	2563.29
1.2D + 1.0Di + 1.0Wi 50 mph Wind	6.9	0.00	73.09	0.00	0.00	670.33
1.2D + 1.0E	2.1	0.00	48.72	0.00	0.00	245.46
0.9D + 1.0E	2.1	0.00	36.54	0.00	0.00	244.11
1.0D + 1.0W 60 mph Wind	5.7	0.00	40.60	0.00	0.00	566.39

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 101 mph Wind	-39.16	-23.39	0.00	-1960.6	0.00	-1960.6	5473.16	2736.5	13089.3	6554.42	25.00	0.380
0.9D + 1.6W 101 mph Wind	-29.33	-23.32	0.00	-1948.3	0.00	-1948.3	5473.16	2736.5	13089.3	6554.42	25.00	0.375
1.2D + 1.0Di + 1.0Wi 50 mph Wind	-60.86	-6.22	0.00	-505.89	0.00	-505.89	5473.16	2736.5	13089.3	6554.42	25.00	0.109
1.2D + 1.0E	-39.33	-2.01	0.00	-193.29	0.00	-193.29	5473.16	2736.5	13089.3	6554.42	25.00	0.045
0.9D + 1.0E	-29.50	-2.01	0.00	-192.04	0.00	-192.04	5473.16	2736.5	13089.3	6554.42	25.00	0.043
1.0D + 1.0W 60 mph Wind	-32.77	-5.15	0.00	-430.70	0.00	-430.70	5473.16	2736.5	13089.3	6554.42	25.00	0.089

Monopole Mat Foundation Design

			Date: 10/7/2021
Customer Name:	Verizon	**EIA/TIA Standard:**	EIA-222-G
Site Name:		**Structure Height (Ft.):**	140
Site Number:	CT11560-A-SBA	**Engineer Name:**	M. Baker
Engr. Number:	117311	**Engineer Login ID:**	

Foundation Info Obtained from: Drawings/Calculations

Structure Type: Monopole

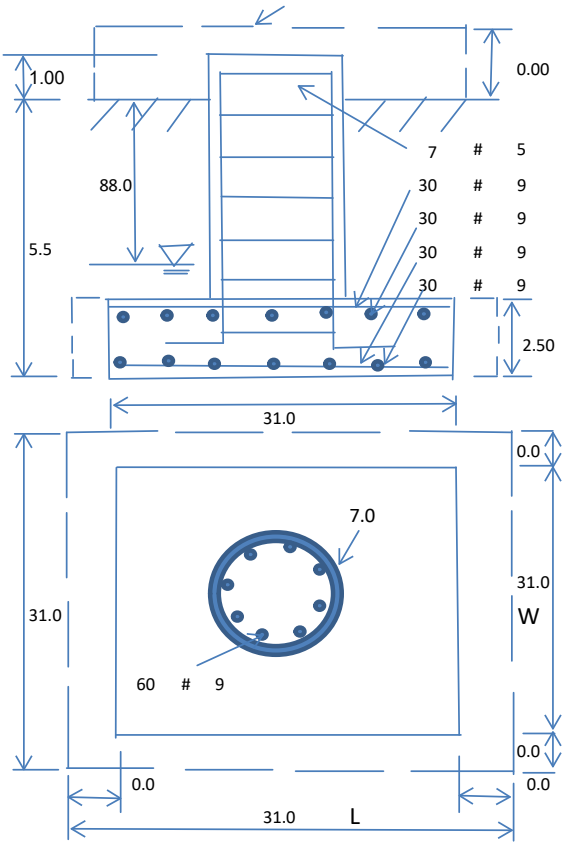
Analysis or Design? Analysis

Base Reactions (Factored):

Axial Load (Kips):	47.8	Shear Force (Kips):	24.9
Uplift Force (Kips):	0.0	Moment (Kips-ft):	2466.6
Allowable overstress %:	5.0%		

Foundation Geometries:

		Mods required -Yes/No ?:	No
Diameter of Pier (ft.):	7.0	Depth of Base BG (ft.):	5.5
Pier Height A. G. (ft.):	1.00	Thickness of Pad (ft):	2.50
Length of Pad (ft.):	31	Width of Pad (ft.):	31
Final Length of pad (ft)	31.0	Final width of pad (ft):	31.0



Material Properties and Reabr Info:

Concrete Strength (psi):	3000	Steel Elastic Modulus:	29000	ksi
Vertical bar yield (ksi)	60	Tie steel yield (ksi):	60	
Vertical Rebar Size #:	9	Tie / Stirrup Size #:	5	
Qty. of Vertical Rebars:	60	Tie Spacing (in):	12.0	
Pad Rebar Yield (Ksi):	60	Pad Steel Rebar Size (#):	9	
Concrete Cover (in.):	3	Unit Weight of Concrete:	150.0	pcf

Rebar at the bottom of the concrete pad:

Qty. of Rebar in Pad (L):	30	Qty. of Rebar in Pad (W):	30

Rebar at the top of the concrete pad:

Qty. of Rebar in Pad (L):	30	Qty. of Rebar in Pad (W):	30
Apply 1.35 factor for e/w Per G:	1.35		

Soil Design Parameters:

Soil Unit Weight (pcf):	120.0	Soil Buoyant Weight:	50.0	Pcf		
Water Table B.G.S. (ft):	88.0	Unit Weight of Water:	62.4	pcf	Angle from Top of Pad:	30
Ultimate Bearing Pressure (psf):	44891	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.):	2767.55	Total Dry Soil Weight (Kips):	332.11
Total Buoyant Soil Volume (cu. Ft.):	0.00	Total Buoyant Soil Weight (Kips):	0.00
Total Effective Soil Weight (Kips):	332.11	Weight from the Concrete Block at Top (K):	0.00
Total Dry Concrete Volume (cu. Ft.):	2556.44	Total Dry Concrete Weight (Kips):	383.47
Total Buoyant Concrete Volume (cu. Ft.):	0.00	Total Buoyant Concrete Weight (Kips):	0.00
Total Effective Concrete Weight (Kips):	383.47	Total Vertical Load on Base (Kips):	763.37

Check Soil Capacities:

					Load/ Capacity Ratio	
Calculated Maxium Net Soil Pressure under the base (psf):	1120	<	Allowable Factored Soil Bearing (psf):	33668	0.03	OK!
Allowable Foundation Overturning Resistance (kips-ft.):	10723.1	>	Design Factored Momont (kips-ft):	2628	0.25	OK!
Factor of Safety Against Overturning (O. R. Moment/Design Moment):	4.08	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):	1.00		Tie / Stirrup Area (sq. in./each):	0.31		
Calculated Moment Capacity (Mn,Kips-Ft):	9417.5	>	Design Factored Moment (Mu, Kips-F	2566.2	0.27	OK!
Calculated Shear Capacity (Kips):	663.6	>	Design Factored Shear (Kips):	24.9	0.04	OK!
Calculated Tension Capacity (Tn, Kips):	3240.0	>	Design Factored Tension (Tu Kips):	0.0	0.00	OK!
Calculated Compression Capacity (Pn, Kips):	7268.8	>	Design Factored Axial Load (Pu Kips):	47.8	0.01	OK!
Moment & Axial Strength Combination:	0.27	OK!	Check Tie Spacing (Design/Required):		1	OK!
Pier Reinforcement Ratio:	0.011		Reinforcement Ratio is satisfied per ACI			
(2).Concrete Pad:						
One-Way Design Shear Capacity (L-Direction, Kips):	808.0	>	One-Way Factored Shear (L-D. Kips):	205.4	0.25	OK!
One-Way Design Shear Capacity (W-Direction, Kips):	808.0	>	One-Way Factored Shear (W-D., Kips)	205.4	0.25	OK!
One-Way Design Shear Capacity (Corner-Corner. Kips):	845.4	>	One-Way Factored Shear (C-C, Kips):	179.1	0.21	OK!
Lower Steel Pad Reinforcement Ratio (L-Direct.):	0.0031	OK!	Lower Steel Pad Reinf. Ratio (W-Direc	0.0031		
Lower Steel Pad Moment Capacity (L-Direction. Kips-ft):	3441.0	>	Moment at Bottom (L-Dir. K-Ft):	1383.7	0.40	OK!
Lower Steel Pad Moment Capacity (W-Direction. Kips-ft):	3441.0	>	Moment at Bottom (W-Dir. K-Ft):	1383.7	0.40	OK!
Lower Steel Pad Moment Capacity (Corner-Corner,K-ft):	4831.9	>	Moment at Bottom (C-C Dir. K-Ft):	1956.8	0.40	OK!
Upper Steel Pad Reinforcement Ratio (L-Direct.):	0.0031	OK!	Upper Steel Reinf. Ratio (W-Dir.):	0.0031		
Upper Steel Pad Moment Capacity (L-Direc. Kips-ft):	3441.0	>	Moment at the top (L-Dir K-Ft):	482.5	0.14	OK!
Upper Steel Pad Moment Capacity (W-Direc. Kips-ft):	3441.0	>	Moment at the top (W-Dir K-Ft):	482.5	0.14	OK!
Upper Steel Pad Moment Capacity (Corner-Corner. K-ft):	4831.9	>	Moment at the top (C-C Dir. K-Ft):	450.4	0.09	OK!
(3).Check Punching Shear Capacity due to Moment in the Pier:						
Moment transferred by punching shear:	986.6	k-ft.	Max. factored shear stress v_{u_CD}:		1.4	Psi
Max. factored shear stress v_{u_AB}:	9.8	Psi	Factored shear Strength ϕv_n:		164.3	Psi
Max. factored shear stress v_u:	9.8	Psi	Check Usage of Punching Shear Capacity:		0.06	OK!

Maser Consulting Connecticut
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Post-Mod Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10063411
Maser Consulting Connecticut Project #: 21777642A (Rev. 3)

November 9, 2021

Site Information	*Site ID:*	*468461-VZW / STERLING CT*
	Site Name:	*STERLING CT*
	Carrier Name:	*Verizon Wireless*
	Address:	*7 Exeter Drive* *Sterling, Connecticut 06377* *Windham County*
	Latitude:	*41.714028°*
	Longitude:	*-71.822722°*
Structure Information	*Tower Type:*	*140-Ft Monopole*
	Mount Type:	*12.50-Ft Platform*

FUZE ID # 16281619

Analysis Results

Platform: **64.4% Pass**

******Contractor PMI Requirements*:**
Included at the end of this MA report
Available & Submitted via portal at https://pmi.vzwsmart.com
Contractor - Please Review Specific Site PMI Requirements Upon Award
Requirements also Noted on Mount Modification Drawings
Requirements may also be Noted on A & E drawings

Report Prepared By: Frank Centone

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 #: 324922, dated November 3, 2021*
Mount Mapping Report	*Structural Components, Site ID # 16281619, dated February 18, 2021*
Mount Analysis Report	*Maser Consulting Connecticut, Project #: 21777642A, dated July 26, 2021 (Rev. 1)*
Mount Modification Drawings	*Maser Consulting Connecticut, Project #: 21777642A, dated November 9, 2021 (Rev. 2)*
Email Correspondence	*Email Correspondence with James Gruber, dated July 15, 2021*

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H	
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT}:	124 mph
	Ice Wind Speed (3-sec. Gust):	50 mph
	Design Ice Thickness:	1.00 in
	Risk Category:	II
	Exposure Category:	C
	Topographic Category:	1
	Topographic Feature Considered:	N/A
	Topographic Method:	N/A
	Ground Elevation Factor, K_e:	0.980
Seismic Parameters:	S_S:	0.187
	S_1:	0.054
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
136.00	137.00	6	Commscope	JAHH-65B-R3B	Added
		3	Samsung	MT6407-77A	
		3	Commscope	CBC78T-DS-43-2X	
		1	Raycap	RVZDC-6627-PF-48	
		3	Samsung	B2/B66A RRH-BR049	
		3	Samsung	B5/B13 RRH-BR04C	
		3	Antel	BXA-70063-6CF-2	

Standard Conditions:

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

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

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

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

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

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

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

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

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

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

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

Analysis Results:

Component	Utilization %	Pass/Fail
Face Horizontal	17.9%	Pass
Standoff Horizontal	42.4%	Pass
Corner Plate	36.5%	Pass
Platform Crossmember	64.4%	Pass
Grating Support	50.2%	Pass
Mount Pipe	37.6%	Pass
OVP Pipe	12.3%	Pass
Cross Arm Plate	33.2%	Pass
Support Rail	28.3%	Pass
Support Rail Corner	32.9%	Pass
Support Rail Bracing	8.4%	Pass
Connection Check	63.6%	Pass

Structure Rating – *(Controlling Utilization of all Components)*	**64.4%**

Recommendation:

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

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

Attachments:

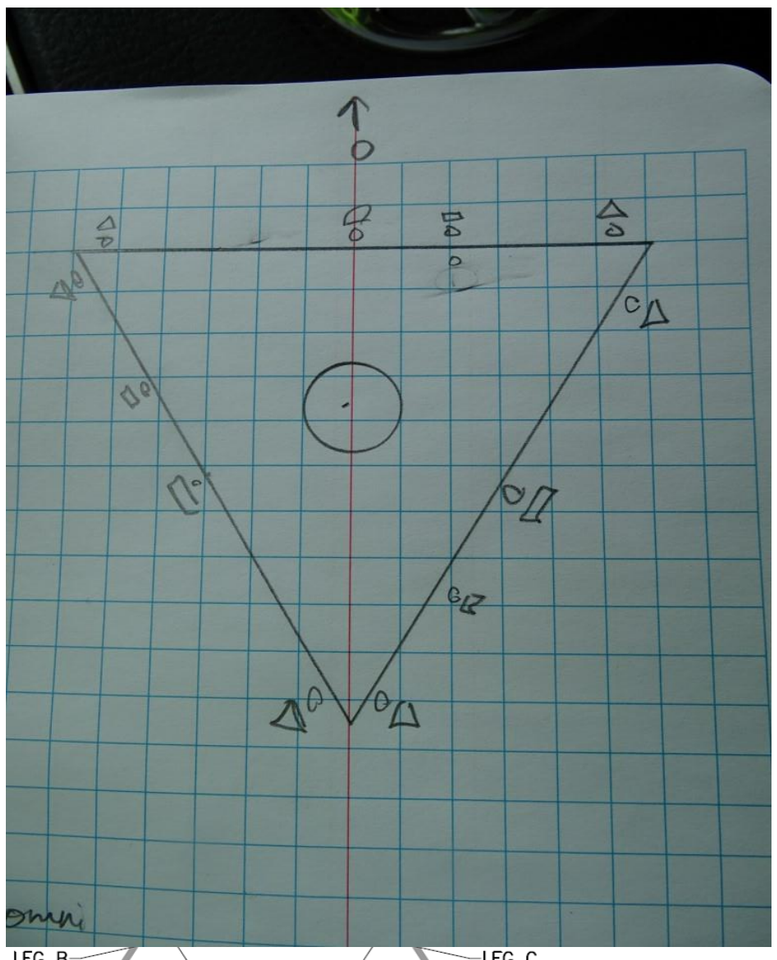
1. Mount Photos
2. Mount Mapping Report (for reference only)
3. Analysis Calculations
4. **Contractor Required PMI Report Deliverables**
5. Antenna Placement Diagrams
6. TIA Adoption and Wind Speed Usage Letter

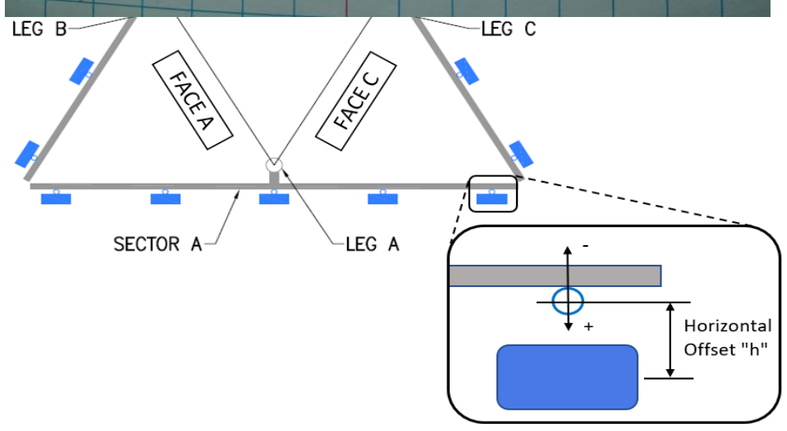
V3.0 Updated on 8-31-2020

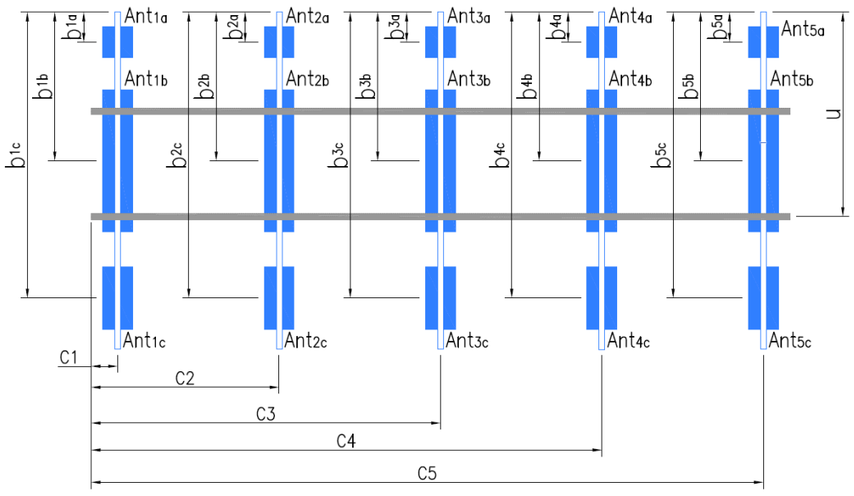
Antenna Mount Mapping Form (PATENT PENDING)

FCC #
1261045

Tower Owner:	SBA	**Mapping Date:**	2/18/2021
Site Name:	Sterling CT	**Tower Type:**	Monopole
Site Number or ID:	16281619	**Tower Height (Ft.):**	140
Mapping Contractor:	Structural Components	**Mount Elevation (Ft.):**	136







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	2-3/8 x 0.154 x 72	40.00	11.50	C1	2-3/8 x 0.154 x 72	40.00	12.00
A2	2-3/8 x 0.154 x 72	53.00	73.00	C2	2-3/8 x 0.154 x 72	53.00	75.50
A3	2-3/8 x 0.154 x 72	40.00	112.50	C3	2-3/8 x 0.154 x 72	40.00	114.00
A4	2-3/8 x 0.154 x 72	40.00	136.00	C4	2-3/8 x 0.154 x 72	40.00	138.00
A5				C5			
A6				C6			
B1	2-3/8 x 0.154 x 72	40.00	10.50	D1			
B2	2-3/8 x 0.154 x 72	53.00	73.50	D2			
B3	2-3/8 x 0.154 x 72	40.00	113.50	D3			
B4	2-3/8 x 0.154 x 72	40.00	137.50	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. :	0.00
Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) :	
Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) :	

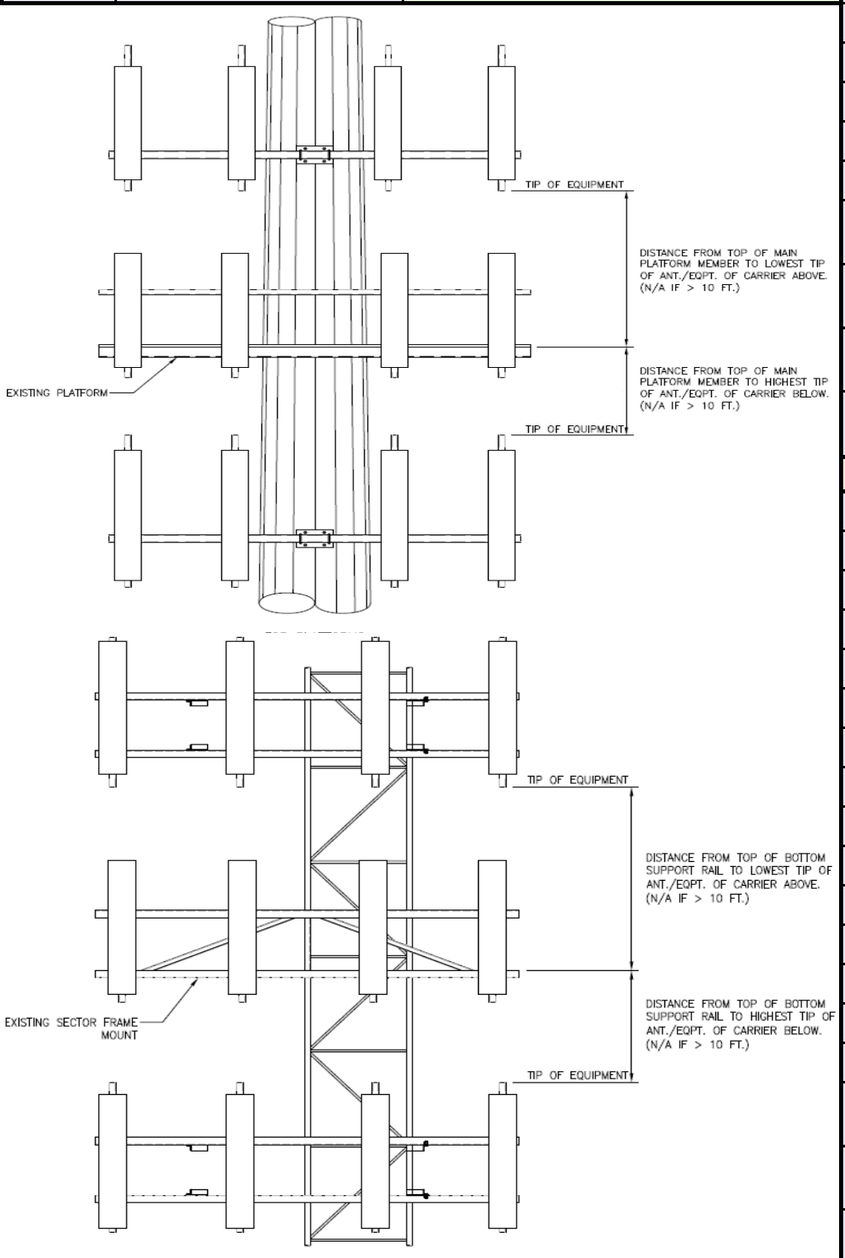
Please enter additional infomation or comments below.

Tower Face Width at Mount Elev. (ft.):		Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):	33

Ants. Items	Enter antenna model. If not labeled, enter "Unknown". Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Mounting Locations [Units are inches and degrees] Vertical Distances"b_{1a}, b_{2a}, b_{3a}, b_{1b}...." (Inches)	Horiz. Offset "h" (Use "-" if Ant. is behind)	Antenna Azimuth (Degrees)	Photos of antennas Photo Numbers
Sector A										
Ant_{1a}										
Ant_{1b}	Antel LPA80080/6CFE	6.00	13.00	71.00	1-5/8tx	136.375	35.50	17.50	0.00	7, 68
Ant_{1c}										
Ant_{2a}										
Ant_{2b}	BXA70063-6CF EDIN	11.50	4.00	71.00	1-5/8tx	137.542	34.50	8.50	0.00	7, 72
Ant_{2c}										
Ant_{3a}										
Ant_{3b}	unknown	6.00	4.00	71.00	1-5/8tx	136.375	35.50	8.00	0.00	783
Ant_{3c}	omni	2.00		24.00		140.333	-12.00	-4.00		83
Ant_{4a}										
Ant_{4b}	Antel LPA80080/6CFE	6.00	13.00	71.00	1-5/8tx	136.375	35.50	16.50	0.00	7, 95
Ant_{4c}										
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:	0.00	Deg	Leg A:		Deg
Sector B:	120.00	Deg	Leg B:		Deg
Sector C:	240.00	Deg	Leg C:		Deg
Sector D:		Deg	Leg D:		Deg

Climbing Facility Information			
Location:	20.00	Deg	
Climbing Facility	Corrosion Type:		Good condition.
	Access:		Climbing path was unobstructed.
	Condition:		Good condition.



Sector B										
Ant_{1a}										
Ant_{1b}	Antel LPA80080/6CFE	6.00	13.00	71.00	1-5/8tx	136.875	29.50	14.50	120.00	16, 108
Ant_{1c}										
Ant_{2a}										
Ant_{2b}	BXA70063-6CF EDIN	11.50	4.00	71.00	1-5/8tx	137.583	34.00	8.50	120.00	16, 113
Ant_{2c}										
Ant_{3a}										
Ant_{3b}	unknown	6.00	4.00	71.00	1-5/8tx	136.5	34.00	10.50	120.00	16, 120
Ant_{3c}										
Ant_{4a}										
Ant_{4b}	Antel LPA80080/6CFE	6.00	13.00	71.00	1-5/8tx	136.875	29.50	14.00	120.00	16, 127
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

Sector C										
Ant_{1a}										
Ant_{1b}	Antel LPA80080/6CFE	6.00	13.00	71.00	1-5/8tx	136.583	33.00	13.50	240.00	25, 131
Ant_{1c}										
Ant_{2a}										
Ant_{2b}	BXA70063-6CF EDIN	11.50	4.00	71.00	1-5/8tx	137.542	34.50	8.50	240.00	25, 136
Ant_{2c}										
Ant_{3a}										
Ant_{3b}	Unknown	6.00	4.00	71.00	1-5/8tx	136.458	34.50	9.00	240.00	25, 142
Ant_{3c}										
Ant_{4a}										
Ant_{4b}	Antel LPA80080/6CFE	6.00	13.00	71.00	1-5/8tx	136.458	34.50	13.50	240.00	25, 148
Ant_{4c}										
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		
2		
3		
4		
5		
6		
7		
8		

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

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

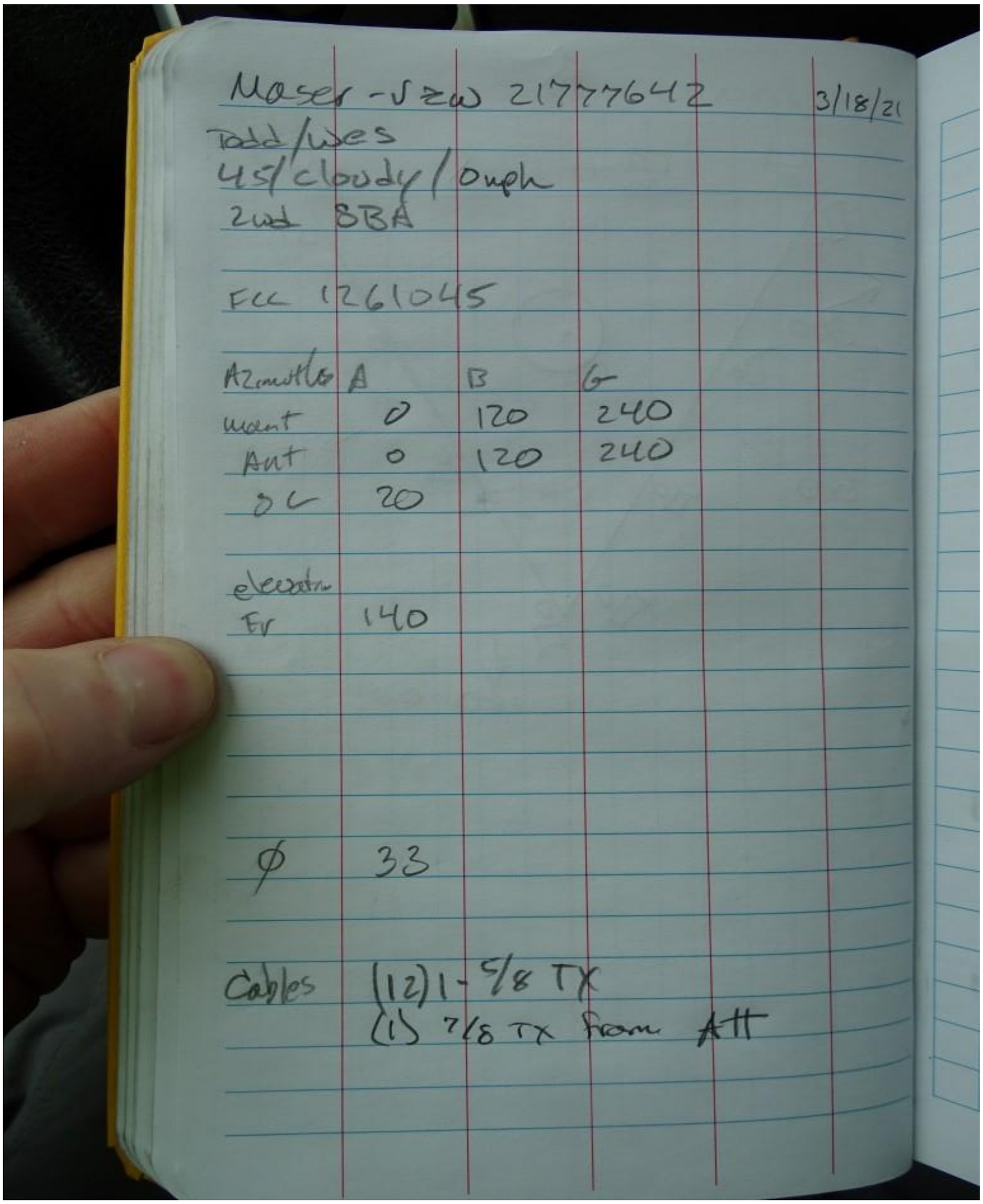
V3.0 Updated on 8-31-2020

Antenna Mount Mapping Form (PATENT PENDING)

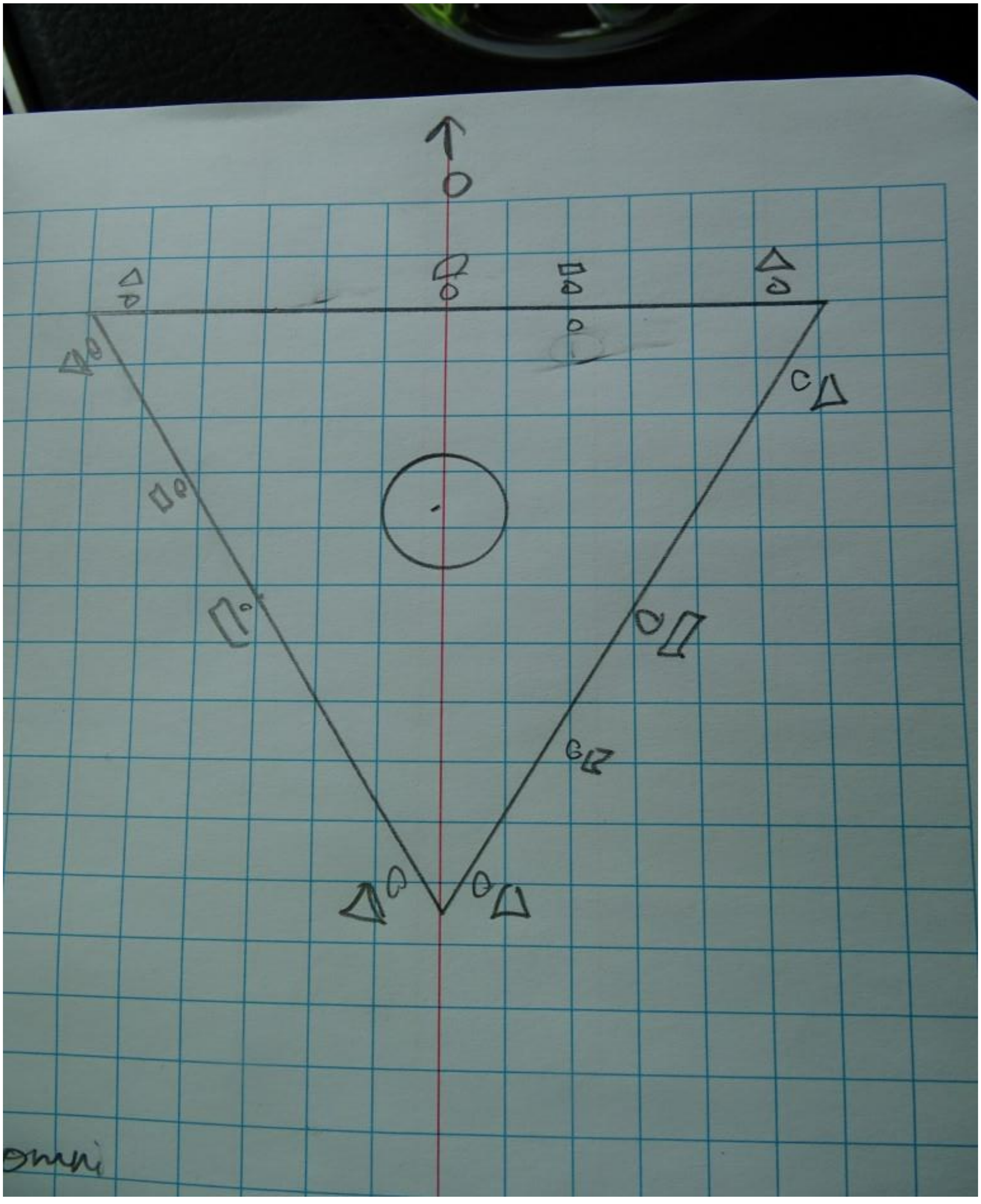
FCC #
1261045

Tower Owner:	SBA	**Mapping Date:**	2/18/2021
Site Name:	Sterling CT	**Tower Type:**	Monopole
Site Number or ID:	16281619	**Tower Height (Ft.):**	140
Mapping Contractor:	Structural Components	**Mount Elevation (Ft.):**	136

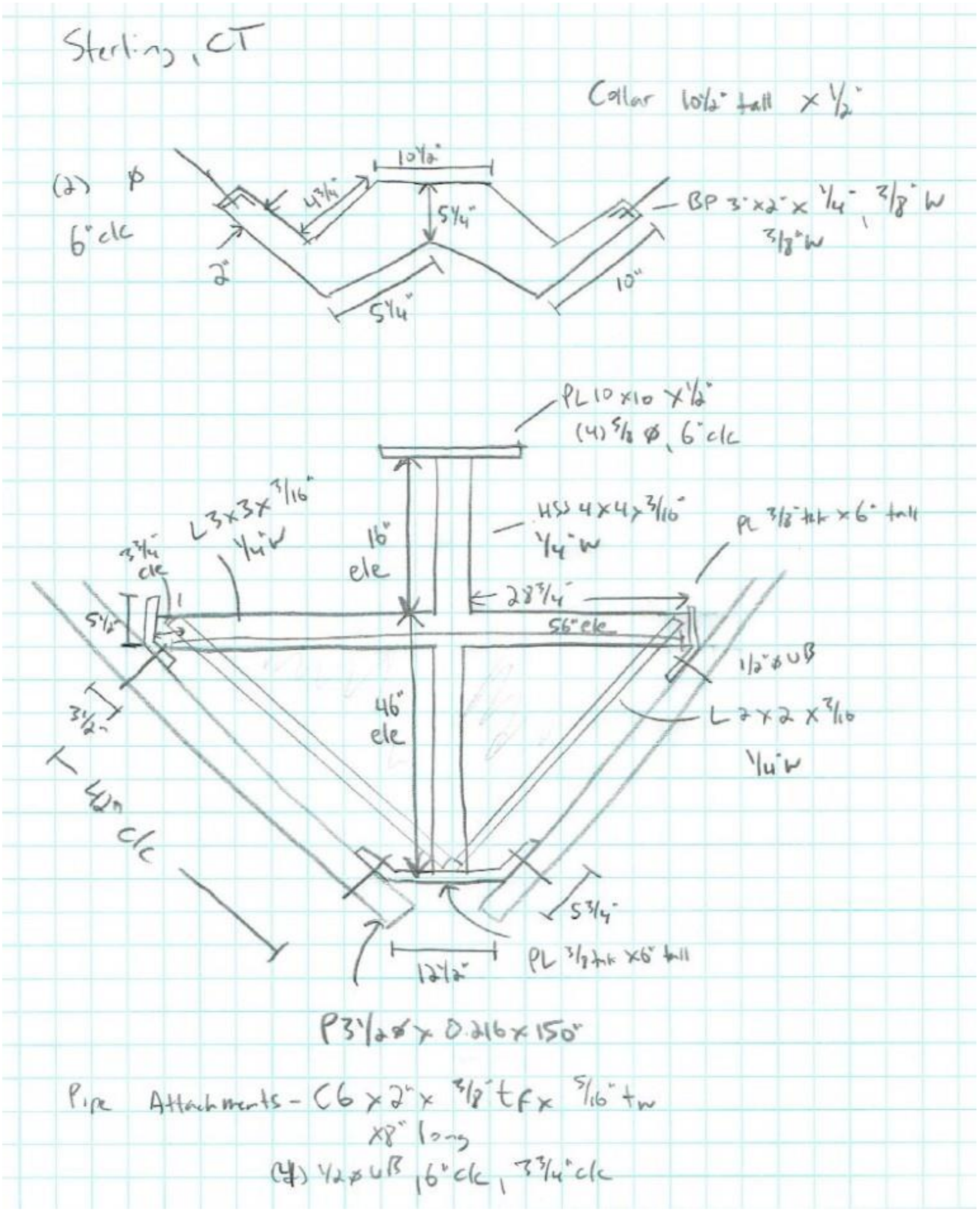
Please Insert Sketches of the Antenna Mount

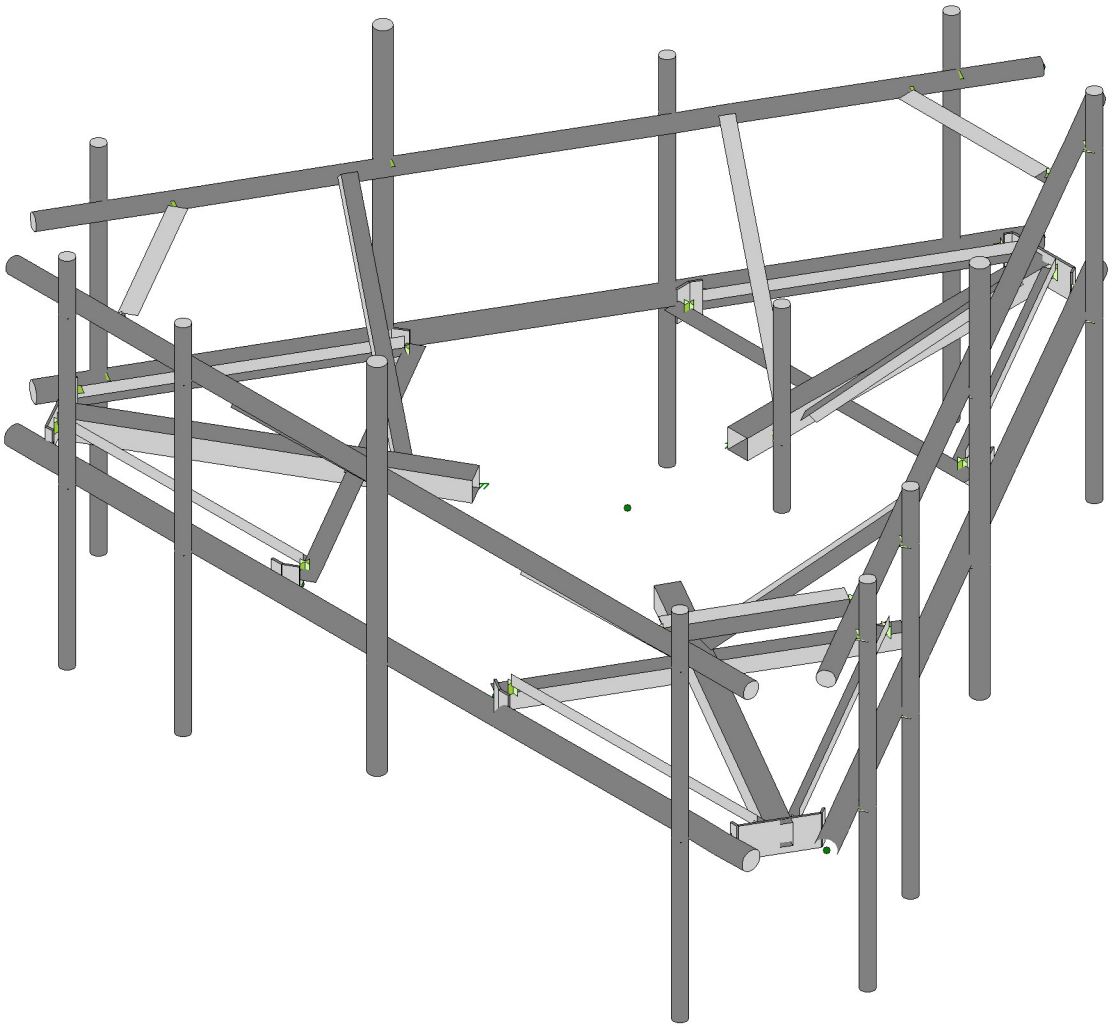


Please Insert Sketches of the Antenna Mount, cont'd



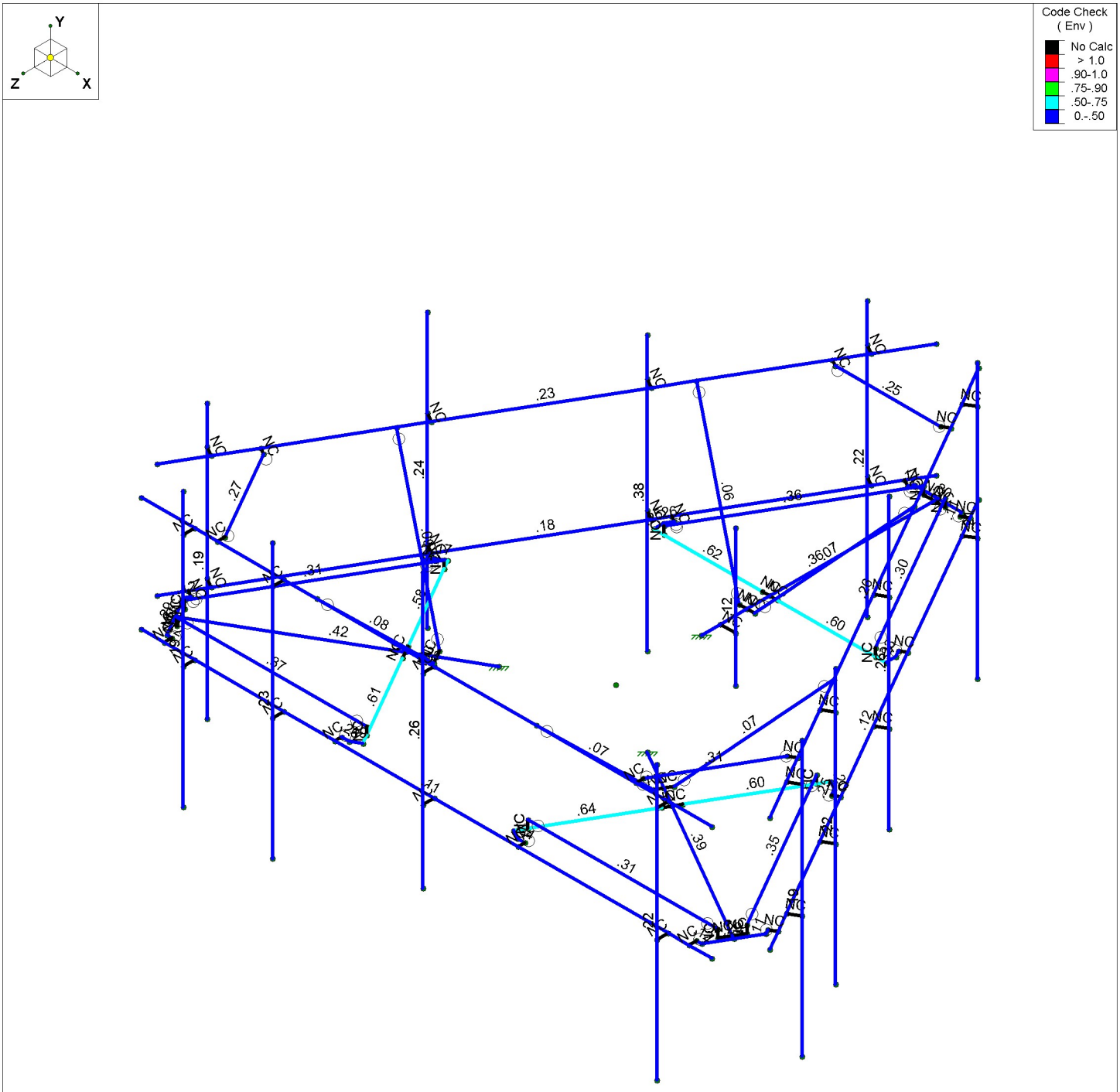
Please Insert Sketches of the Antenna Mount, cont'd





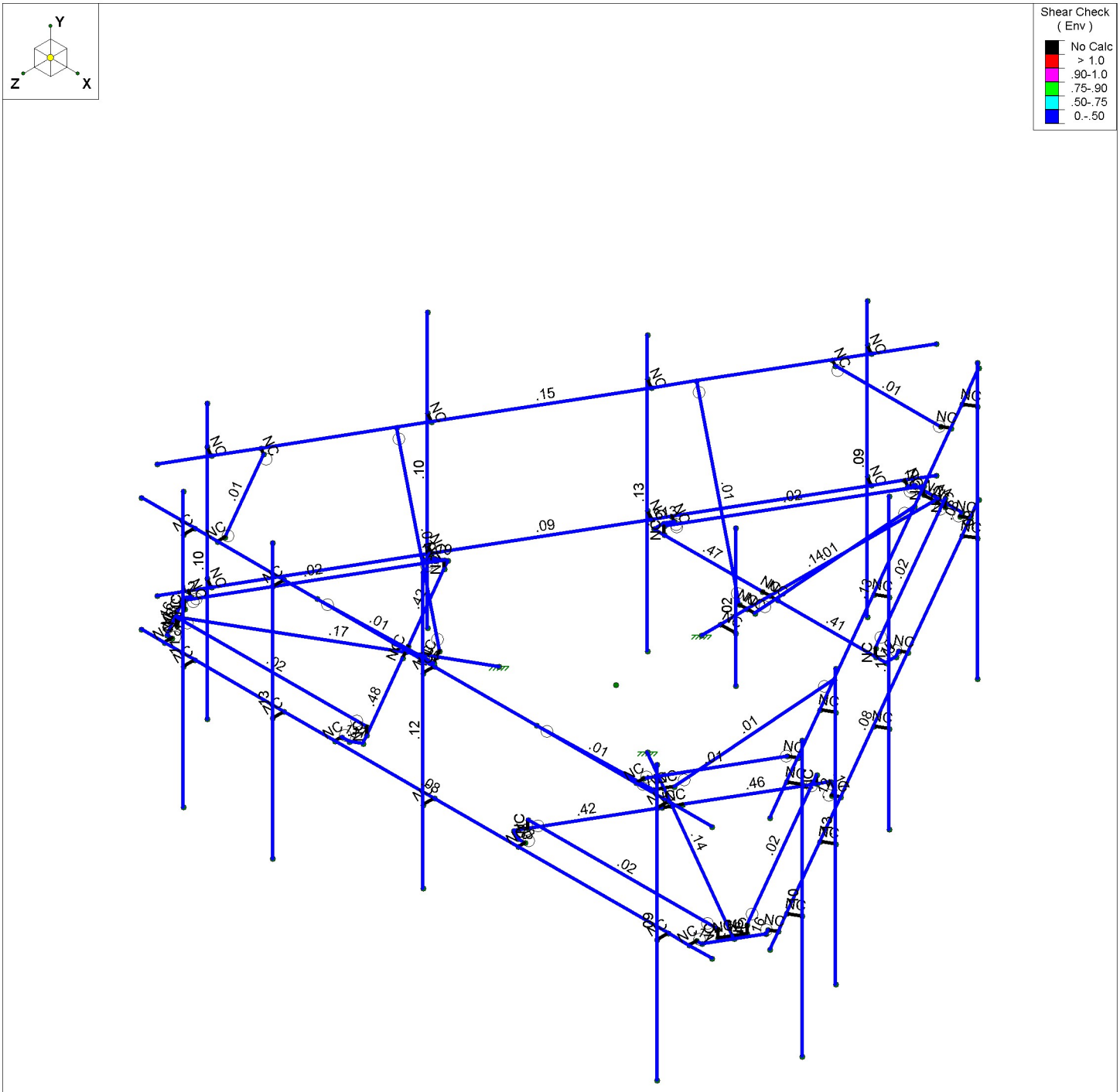
Envelope Only Solution

		SK - 1
		Aug 5, 2021 at 3:10 PM
		468461-VZW_MT_LO_H.r3d



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

		SK - 2
		Aug 5, 2021 at 3:10 PM
		468461-VZW_MT_LO_H.r3d



Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

		SK - 3
		Aug 5, 2021 at 3:10 PM
		468461-VZW_MT_LO_H.r3d

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
1	Antenna D	None					102			
2	Antenna Di	None					102			
3	Antenna Wo (0 Deg)	None					102			
4	Antenna Wo (30 Deg)	None					102			
5	Antenna Wo (60 Deg)	None					102			
6	Antenna Wo (90 Deg)	None					102			
7	Antenna Wo (120 Deg)	None					102			
8	Antenna Wo (150 Deg)	None					102			
9	Antenna Wo (180 Deg)	None					102			
10	Antenna Wo (210 Deg)	None					102			
11	Antenna Wo (240 Deg)	None					102			
12	Antenna Wo (270 Deg)	None					102			
13	Antenna Wo (300 Deg)	None					102			
14	Antenna Wo (330 Deg)	None					102			
15	Antenna Wi (0 Deg)	None					102			
16	Antenna Wi (30 Deg)	None					102			
17	Antenna Wi (60 Deg)	None					102			
18	Antenna Wi (90 Deg)	None					102			
19	Antenna Wi (120 Deg)	None					102			
20	Antenna Wi (150 Deg)	None					102			
21	Antenna Wi (180 Deg)	None					102			
22	Antenna Wi (210 Deg)	None					102			
23	Antenna Wi (240 Deg)	None					102			
24	Antenna Wi (270 Deg)	None					102			
25	Antenna Wi (300 Deg)	None					102			
26	Antenna Wi (330 Deg)	None					102			
27	Antenna Wm (0 Deg)	None					102			
28	Antenna Wm (30 Deg)	None					102			
29	Antenna Wm (60 Deg)	None					102			
30	Antenna Wm (90 Deg)	None					102			
31	Antenna Wm (120 Deg)	None					102			
32	Antenna Wm (150 Deg)	None					102			
33	Antenna Wm (180 Deg)	None					102			
34	Antenna Wm (210 Deg)	None					102			
35	Antenna Wm (240 Deg)	None					102			
36	Antenna Wm (270 Deg)	None					102			
37	Antenna Wm (300 Deg)	None					102			
38	Antenna Wm (330 Deg)	None					102			
39	Structure D	None		-1					3	
40	Structure Di	None						64	3	
41	Structure Wo (0 Deg)	None						128		
42	Structure Wo (30 Deg)	None						128		
43	Structure Wo (60 Deg)	None						128		
44	Structure Wo (90 Deg)	None						128		
45	Structure Wo (120 D...	None						128		
46	Structure Wo (150 D...	None						128		
47	Structure Wo (180 D...	None						128		
48	Structure Wo (210 D...	None						128		
49	Structure Wo (240 D...	None						128		
50	Structure Wo (270 D...	None						128		
51	Structure Wo (300 D...	None						128		
52	Structure Wo (330 D...	None						128		
53	Structure Wi (0 Deg)	None						128		

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
54	Structure Wi (30 Deg)	None						128		
55	Structure Wi (60 Deg)	None						128		
56	Structure Wi (90 Deg)	None						128		
57	Structure Wi (120 De...	None						128		
58	Structure Wi (150 De...	None						128		
59	Structure Wi (180 De...	None						128		
60	Structure Wi (210 De...	None						128		
61	Structure Wi (240 De...	None						128		
62	Structure Wi (270 De...	None						128		
63	Structure Wi (300 De...	None						128		
64	Structure Wi (330 De...	None						128		
65	Structure Wm (0 Deg)	None						128		
66	Structure Wm (30 De...	None						128		
67	Structure Wm (60 De...	None						128		
68	Structure Wm (90 De...	None						128		
69	Structure Wm (120 D...	None						128		
70	Structure Wm (150 D...	None						128		
71	Structure Wm (180 D...	None						128		
72	Structure Wm (210 D...	None						128		
73	Structure Wm (240 D...	None						128		
74	Structure Wm (270 D...	None						128		
75	Structure Wm (300 D...	None						128		
76	Structure Wm (330 D...	None						128		
77	Lm1	None					1			
78	Lm2	None					1			
79	Lv1	None					1			
80	Lv2	None					1			
81	BLC 39 Transient Are...	None						30		
82	BLC 40 Transient Are...	None						30		

Load Combinations

	Description	S...	PDelta	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
1	1.2D+1.0Wo (0 ...	Yes	Y		1	1.2	39	1.2	3	1	41	1														
2	1.2D+1.0Wo (30...	Yes	Y		1	1.2	39	1.2	4	1	42	1														
3	1.2D+1.0Wo (60...	Yes	Y		1	1.2	39	1.2	5	1	43	1														
4	1.2D+1.0Wo (90...	Yes	Y		1	1.2	39	1.2	6	1	44	1														
5	1.2D+1.0Wo (12...	Yes	Y		1	1.2	39	1.2	7	1	45	1														
6	1.2D+1.0Wo (15...	Yes	Y		1	1.2	39	1.2	8	1	46	1														
7	1.2D+1.0Wo (18...	Yes	Y		1	1.2	39	1.2	9	1	47	1														
8	1.2D+1.0Wo (21...	Yes	Y		1	1.2	39	1.2	10	1	48	1														
9	1.2D+1.0Wo (24...	Yes	Y		1	1.2	39	1.2	11	1	49	1														
10	1.2D+1.0Wo (27...	Yes	Y		1	1.2	39	1.2	12	1	50	1														
11	1.2D+1.0Wo (30...	Yes	Y		1	1.2	39	1.2	13	1	51	1														
12	1.2D+1.0Wo (33...	Yes	Y		1	1.2	39	1.2	14	1	52	1														
13	1.2D + 1.0Di + 1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1	53	1										
14	1.2D + 1.0Di + 1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1										
15	1.2D + 1.0Di + 1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1	55	1										
16	1.2D + 1.0Di + 1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1	56	1										
17	1.2D + 1.0Di + 1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1										
18	1.2D + 1.0Di + 1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1										
19	1.2D + 1.0Di + 1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1										
20	1.2D + 1.0Di + 1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1										
21	1.2D + 1.0Di + 1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1										
22	1.2D + 1.0Di + 1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1										
23	1.2D + 1.0Di + 1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1										

Load Combinations (Continued)

	Description	S...	PDelta	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
24	1.2D + 1.0Di + 1..	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1								
25	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1										
26	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1										
27	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1										
28	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1										
29	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1										
30	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1										
31	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1										
32	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1										
33	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1										
34	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1										
35	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1										
36	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1										
37	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1										
38	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1										
39	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1										
40	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1										
41	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1										
42	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1										
43	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1										
44	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1										
45	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1										
46	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1										
47	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1										
48	1.2D + 1.5Lm2 ...	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	Seismic Mass		Y		1	1	39	1																
53	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX		SY	1	SZ	-1										
54	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	.5	SY	1	SZ	-.866										
55	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	.866	SY	1	SZ	-.5										
56	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	1	SY	1	SZ											
57	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	.866	SY	1	SZ	.5										
58	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	.5	SY	1	SZ	.866										
59	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX		SY	1	SZ	1										
60	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	-.5	SY	1	SZ	.866										
61	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	-.866	SY	1	SZ	.5										
62	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	-1	SY	1	SZ											
63	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	-.866	SY	1	SZ	-.5										
64	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	-.5	SY	1	SZ	-.866										

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	0.463685	0	-7.484587	0	
2	N2	6.713685	0	3.34073	0	
3	N3	-1.623798	0	0.9375	0	
4	N5	-1.652002	0	3.888648	0	
5	N6	-4.080388	0.166667	-0.317439	0	
6	N7	-1.765284	0.166667	3.692439	0	
7	N24	-2.922836	0	1.6875	0	
8	N27	-6.116304	0	3.53125	0	
9	CP	0	0	0	0	
10	N29	-4.080388	0	-0.317439	0	
11	N30	-1.765284	0	3.692439	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
12	N101	-4.193669	0	-0.513648	0	
13	N102	-2.839502	0	1.831838	0	
14	N103A	-3.006169	0	1.543162	0	
15	N104A	-1.841445	0	3.998023	0	
16	N105	-4.383112	0	-0.404273	0	
17	N131	-4.466445	0	-0.259935	0	
18	N135	-6.318127	0	2.987729	0	
19	N144	-2.008112	0	3.998023	0	
20	N148	-5.746513	0	3.977794	0	
21	N86A	-4.592741	0	-0.332852	0	
22	N86B	-2.008112	0	4.143857	0	
23	N86C	-5.858492	0	3.977794	0	
24	N87A	-6.374117	0	3.084706	0	
25	N86D	-6.461941	0	2.904698	0	
26	N86E	-5.746513	0	4.143857	0	
27	N88A	-6.044136	0	3.489583	0	
28	N87C	-6.161254	0.166667	3.286728	0	
29	N86G	-6.161254	0	3.286728	0	
30	N87B	-5.927017	0.166667	3.692439	0	
31	N88C	-5.927017	0	3.692439	0	
32	N87D	1.623798	0	0.9375	0	
33	N88B	4.193669	0	-0.513648	0	
34	N89	1.765284	0.166667	3.692439	0	
35	N90	4.080388	0.166667	-0.317439	0	
36	N91	2.922836	0	1.6875	0	
37	N92	6.116304	0	3.53125	0	
38	N93	1.765284	0	3.692439	0	
39	N94	4.080388	0	-0.317439	0	
40	N95	1.652002	0	3.888648	0	
41	N96	3.006169	0	1.543162	0	
42	N97	2.839502	0	1.831838	0	
43	N98	4.383112	0	-0.404273	0	
44	N99	1.841445	0	3.998023	0	
45	N100	2.008112	0	3.998023	0	
46	N101A	5.746513	0	3.977794	0	
47	N102A	4.466445	0	-0.259935	0	
48	N103	6.318127	0	2.987729	0	
49	N104	2.008112	0	4.143857	0	
50	N105A	4.592741	0	-0.332852	0	
51	N106	6.374117	0	3.084706	0	
52	N107	5.858492	0	3.977794	0	
53	N108	5.746513	0	4.143857	0	
54	N109	6.461941	0	2.904698	0	
55	N110	6.044136	0	3.489583	0	
56	N111	5.927017	0.166667	3.692439	0	
57	N112	5.927017	0	3.692439	0	
58	N113	6.161254	0.166667	3.286728	0	
59	N114	6.161254	0	3.286728	0	
60	N115	0.	0	-1.875	0	
61	N116	-2.541667	0	-3.375	0	
62	N117	2.315104	0.166667	-3.375	0	
63	N118	-2.315104	0.166667	-3.375	0	
64	N119	0.	0	-3.375	0	
65	N120	-0.	0	-7.0625	0	
66	N121	2.315104	0	-3.375	0	
67	N122	-2.315104	0	-3.375	0	
68	N123	2.541667	0	-3.375	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
69	N124	-0.166667	0	-3.375	0	
70	N125	0.166667	0	-3.375	0	
71	N126	-2.541667	0	-3.59375	0	
72	N127	2.541667	0	-3.59375	0	
73	N128	2.458333	0	-3.738088	0	
74	N129	0.571615	0	-6.965523	0	
75	N130	-2.458333	0	-3.738088	0	
76	N131A	-0.571615	0	-6.965523	0	
77	N132	2.584629	0	-3.811004	0	
78	N133	-2.584629	0	-3.811004	0	
79	N134	-0.515625	0	-7.0625	0	
80	N135A	0.515625	0	-7.0625	0	
81	N136	0.715429	0	-7.048554	0	
82	N137	-0.715429	0	-7.048554	0	
83	N138	0.	0	-6.979167	0	
84	N139	0.234238	0.166667	-6.979167	0	
85	N140	0.234238	0	-6.979167	0	
86	N141	-0.234238	0.166667	-6.979167	0	
87	N142	-0.234238	0	-6.979167	0	
88	N104B	-6.713685	0	3.34073	0	
89	N105B	-0.463685	0	-7.484587	0	
90	N124A	6.25	0	4.143857	0	
91	N125A	-6.25	0	4.143857	0	
92	N92A	0.963685	0	-6.618562	0	
93	N93A	3.609518	0	-2.035844	0	
94	N94A	5.213685	0	0.742654	0	
95	N95A	6.213685	0	2.474705	0	
96	N96A	1.180191	0	-6.743562	0	
97	N97A	3.826025	0	-2.160844	0	
98	N98A	5.430191	0	0.617654	0	
99	N99A	6.430191	0	2.349705	0	
100	N100A	1.180191	3.333333	-6.743562	0	
101	N101B	5.430191	3.333333	0.617654	0	
102	N102B	6.430191	3.333333	2.349705	0	
103	N103B	1.180191	-2.666667	-6.743562	0	
104	N104C	5.430191	-2.666667	0.617654	0	
105	N105C	6.430191	-2.666667	2.349705	0	
106	N106A	3.826025	4.416667	-2.160844	0	
107	N107A	3.826025	-1.916667	-2.160844	0	
108	N108A	-6.276185	0	2.582958	0	
109	N109A	-4.512296	0	-0.472187	0	
110	N110A	-2.748407	0	-3.527332	0	
111	N111A	-0.984518	0	-6.582477	0	
112	N112A	-6.492691	0	2.457958	0	
113	N113A	-4.728803	0	-0.597187	0	
114	N114A	-2.964914	0	-3.652332	0	
115	N115A	-1.201025	0	-6.707477	0	
116	N116A	-6.492691	3.333333	2.457958	0	
117	N117A	-4.728803	4.416667	-0.597187	0	
118	N118A	-2.964914	3.333333	-3.652332	0	
119	N119A	-1.201025	3.333333	-6.707477	0	
120	N120A	-4.728803	-1.583333	-0.597187	0	
121	N121A	-6.492691	-2.666667	2.457958	0	
122	N122A	-2.964914	-2.666667	-3.652332	0	
123	N123A	-1.201025	-2.666667	-6.707477	0	
124	N124B	5.291667	0	4.143857	0	
125	N125B	0.166667	0	4.143857	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
126	N126A	-3.125	0	4.143857	0	
127	N127A	-5.083333	0	4.143857	0	
128	N128A	5.291667	0	4.393857	0	
129	N129A	0.166667	0	4.393857	0	
130	N130A	-3.125	0	4.393857	0	
131	N131B	-5.083333	0	4.393857	0	
132	N132A	5.291667	3.333333	4.393857	0	
133	N133A	0.166667	4.416667	4.393857	0	
134	N134A	-3.125	3.333333	4.393857	0	
135	N135B	-5.083333	3.333333	4.393857	0	
136	N136A	0.166667	-1.583333	4.393857	0	
137	N137A	5.291667	-2.666667	4.393857	0	
138	N138A	-3.125	-2.666667	4.393857	0	
139	N139A	-5.083333	-2.666667	4.393857	0	
140	N140A	-0.	0	-2.291667	0	
141	N141A	0.333333	0	-2.291667	0	
142	N142A	0.333333	2	-2.291667	0	
143	N143	0.333333	-1	-2.291667	0	
144	N144A	6.25	2.5	4.143857	0	
145	N145	-6.25	2.5	4.143857	0	
146	N146	5.291667	2.5	4.143857	0	
147	N147	0.166667	2.5	4.143857	0	
148	N148A	-3.125	2.5	4.143857	0	
149	N149	-5.083333	2.5	4.143857	0	
150	N150	5.291667	2.5	4.393857	0	
151	N151	0.166667	2.5	4.393857	0	
152	N152	-3.125	2.5	4.393857	0	
153	N153	-5.083333	2.5	4.393857	0	
154	N154	-4.583333	2.5	4.143857	0	
155	N155	-4.583333	2.5	3.97719	0	
156	N156	4.583333	2.5	4.143857	0	
157	N157	4.583333	2.5	3.97719	0	
158	N158	0.463685	2.5	-7.484587	0	
159	N159	6.713685	2.5	3.34073	0	
160	N168	5.880352	2.5	1.897355	0	
161	N169	5.736014	2.5	1.980688	0	
162	N170	1.297018	2.5	-6.041211	0	
163	N171	1.152681	2.5	-5.957878	0	
164	N172	-6.713685	2.5	3.34073	0	
165	N173	-0.463685	2.5	-7.484587	0	
166	N182	-1.297018	2.5	-6.041211	0	
167	N183	-1.152681	2.5	-5.957878	0	
168	N184	-5.880352	2.5	1.897355	0	
169	N185	-5.736014	2.5	1.980688	0	
170	N170A	0.963685	2.5	-6.618562	0	
171	N171A	3.609518	2.5	-2.035844	0	
172	N172A	5.213685	2.5	0.742654	0	
173	N173A	6.213685	2.5	2.474705	0	
174	N174	1.180191	2.5	-6.743562	0	
175	N175	3.826025	2.5	-2.160844	0	
176	N176	5.430191	2.5	0.617654	0	
177	N177	6.430191	2.5	2.349705	0	
178	N178	-6.276185	2.5	2.582958	0	
179	N179	-4.512296	2.5	-0.472187	0	
180	N180	-2.748407	2.5	-3.527332	0	
181	N181	-0.984518	2.5	-6.582477	0	
182	N182A	-6.492691	2.5	2.457958	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
183	N183A	-4.728803	2.5	-0.597187	0	
184	N184A	-2.964914	2.5	-3.652332	0	
185	N185A	-1.201025	2.5	-6.707477	0	
186	N186	-0.	0	-2.875	0	
187	N187	0.166667	0	-2.875	0	
188	N188	-0.166667	0	-2.875	0	
189	N189	-2.489823	0	1.4375	0	
190	N190	-2.573156	0	1.293162	0	
191	N191	-2.40649	0	1.581838	0	
192	N192	2.489823	0	1.4375	0	
193	N193	2.40649	0	1.581838	0	
194	N194	2.573156	0	1.293162	0	
195	N195	-2.40649	2.5	4.143854	0	
196	N197	2.40649	2.5	4.143854	0	
197	N199	4.791928	2.5	0.012154	0	
198	N200	2.385438	2.5	-4.156008	0	
199	N203	-2.385438	2.5	-4.156008	0	
200	N204	-4.791928	2.5	0.012154	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design L...	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Face Horizontal	PIPE_3.0	Beam	Pipe	A53 Gr.B	Typical	2.07	2.85	2.85	5.69
2	Standoff Horizontal	HSS4X4X3	Beam	SquareT...	A500 Gr.B Rect	Typical	2.58	6.21	6.21	10
3	Corner Plate	PL3/8x6	Beam	RECT	A36 Gr.36	Typical	2.25	.026	6.75	.101
4	Platform Crossme...	L3X3X3	Beam	Single A...	A36 Gr.36	Typical	1.09	.948	.948	.014
5	Grating Support	L2x2x3	Beam	Single A...	A36 Gr.36	Typical	.722	.271	.271	.009
6	Mount Pipe	PIPE_2.0	Column	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25
7	OVP Pipe	PIPE_2.0	Column	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25
8	Dual Mounted Pipe	PIPE_2.5	Column	Pipe	A53 Gr.B	Typical	1.61	1.45	1.45	2.89
9	Cross Arm Plate	PL3/8x6	Column	RECT	A36 Gr.36	Typical	2.25	.026	6.75	.101
10	Support Rail	PIPE_2.5	Beam	Pipe	A53 Gr.B	Typical	1.61	1.45	1.45	2.89
11	Support Rail Corner	L3X3X4	Beam	Single A...	A36 Gr.36	Typical	1.44	1.23	1.23	.031
12	Support Bracing Kit	L2.5x2.5x4	Beam	Single A...	A36 Gr.36	Typical	1.19	.692	.692	.026

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/1E...Density[k/ft...		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
8	Q235	29000	11154	.3	.65	.49	35	1.5	58	1.2

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N1	N2			Face Horizontal	Beam	Pipe	A53 Gr.B	Typical
2	M4	N3	N27			Standoff Horiz...	Beam	SquareTube	A500 Gr.B...	Typical
3	M10	N101	N103A		180	Platform Cross...	Beam	Single Angle	A36 Gr.36	Typical
4	M43	N102	N5		180	Platform Cross...	Beam	Single Angle	A36 Gr.36	Typical
5	M46	N86C	N87A			Corner Plate	Beam	RECT	A36 Gr.36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
6	M35A	N7	N30			RIGID	None	None	RIGID	Typical
7	M36A	N6	N29			RIGID	None	None	RIGID	Typical
8	M51B	N87C	N6			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
9	M52B	N7	N87B			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
10	M52	N87B	N88C			RIGID	None	None	RIGID	Typical
11	M58	N102	N24			RIGID	None	None	RIGID	Typical
12	M59	N24	N103A			RIGID	None	None	RIGID	Typical
13	M76	N101	N105			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
14	M77	N105	N131			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
15	M79	N131	N86A			RIGID	None	None	RIGID	Typical
16	M80	N87A	N135			Corner Plate	Beam	RECT	A36 Gr.36	Typical
17	M83	N135	N86D			RIGID	None	None	RIGID	Typical
18	M84	N5	N104A			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
19	M85	N104A	N144			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
20	M88	N144	N86B			RIGID	None	None	RIGID	Typical
21	M91	N86C	N148			Corner Plate	Beam	RECT	A36 Gr.36	Typical
22	M92	N148	N86E			RIGID	None	None	RIGID	Typical
23	M50	N88C	N88A			RIGID	None	None	RIGID	Typical
24	M51	N88A	N86G			RIGID	None	None	RIGID	Typical
25	M51A	N87C	N86G			RIGID	None	None	RIGID	Typical
26	M52A	N87D	N92			Standoff Horiz...	Beam	SquareTube	A500 Gr.B...	Typical
27	M53	N95	N97		180	Platform Cross...	Beam	Single Angle	A36 Gr.36	Typical
28	M54	N96	N88B		180	Platform Cross...	Beam	Single Angle	A36 Gr.36	Typical
29	M55	N106	N107			Corner Plate	Beam	RECT	A36 Gr.36	Typical
30	M56	N90	N94			RIGID	None	None	RIGID	Typical
31	M57	N89	N93			RIGID	None	None	RIGID	Typical
32	M58A	N111	N89			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
33	M59A	N90	N113			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
34	M60	N113	N114			RIGID	None	None	RIGID	Typical
35	M61	N96	N91			RIGID	None	None	RIGID	Typical
36	M62	N91	N97			RIGID	None	None	RIGID	Typical
37	M63	N95	N99			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
38	M64	N99	N100			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
39	M65	N100	N104			RIGID	None	None	RIGID	Typical
40	M66	N107	N101A			Corner Plate	Beam	RECT	A36 Gr.36	Typical
41	M67	N101A	N108			RIGID	None	None	RIGID	Typical
42	M68	N88B	N98			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
43	M69	N98	N102A			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
44	M70	N102A	N105A			RIGID	None	None	RIGID	Typical
45	M71	N106	N103			Corner Plate	Beam	RECT	A36 Gr.36	Typical
46	M72	N103	N109			RIGID	None	None	RIGID	Typical
47	M73	N114	N110			RIGID	None	None	RIGID	Typical
48	M74	N110	N112			RIGID	None	None	RIGID	Typical
49	M75	N111	N112			RIGID	None	None	RIGID	Typical
50	M76A	N115	N120			Standoff Horiz...	Beam	SquareTube	A500 Gr.B...	Typical
51	M77A	N123	N125		180	Platform Cross...	Beam	Single Angle	A36 Gr.36	Typical
52	M78	N124	N116		180	Platform Cross...	Beam	Single Angle	A36 Gr.36	Typical
53	M79A	N134	N135A			Corner Plate	Beam	RECT	A36 Gr.36	Typical
54	M80A	N118	N122			RIGID	None	None	RIGID	Typical
55	M81	N117	N121			RIGID	None	None	RIGID	Typical
56	M82	N139	N117			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
57	M83A	N118	N141			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
58	M84A	N141	N142			RIGID	None	None	RIGID	Typical
59	M85A	N124	N119			RIGID	None	None	RIGID	Typical
60	M86	N119	N125			RIGID	None	None	RIGID	Typical
61	M87	N123	N127			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
62	M88A	N127	N128			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
63	M89	N128	N132			RIGID	None	None	RIGID	Typical
64	M90	N135A	N129			Corner Plate	Beam	RECT	A36 Gr.36	Typical
65	M91A	N129	N136			RIGID	None	None	RIGID	Typical
66	M92A	N116	N126			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
67	M93	N126	N130			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
68	M94	N130	N133			RIGID	None	None	RIGID	Typical
69	M95	N134	N131A			Corner Plate	Beam	RECT	A36 Gr.36	Typical
70	M96	N131A	N137			RIGID	None	None	RIGID	Typical
71	M97	N142	N138			RIGID	None	None	RIGID	Typical
72	M98	N138	N140			RIGID	None	None	RIGID	Typical
73	M99	N139	N140			RIGID	None	None	RIGID	Typical
74	M82A	N104B	N105B			Face Horizontal	Beam	Pipe	A53 Gr.B	Typical
75	M91B	N124A	N125A			Face Horizontal	Beam	Pipe	A53 Gr.B	Typical
76	M76B	N95A	N99A			RIGID	None	None	RIGID	Typical
77	M77B	N94A	N98A			RIGID	None	None	RIGID	Typical
78	M78A	N92A	N96A			RIGID	None	None	RIGID	Typical
79	M79B	N93A	N97A			RIGID	None	None	RIGID	Typical
80	MP4C	N102B	N105C			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
81	MP3C	N101B	N104C			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
82	MP1C	N100A	N103B			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
83	MP2C	N106A	N107A			Dual Mounted ...	Column	Pipe	A53 Gr.B	Typical
84	M84B	N111A	N115A			RIGID	None	None	RIGID	Typical
85	M85B	N110A	N114A			RIGID	None	None	RIGID	Typical
86	M86A	N109A	N113A			RIGID	None	None	RIGID	Typical
87	M87A	N108A	N112A			RIGID	None	None	RIGID	Typical
88	MP4B	N119A	N123A			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
89	MP3B	N118A	N122A			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
90	MP1B	N116A	N121A			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
91	MP2B	N117A	N120A			Dual Mounted ...	Column	Pipe	A53 Gr.B	Typical
92	M92B	N127A	N131B			RIGID	None	None	RIGID	Typical
93	M93A	N126A	N130A			RIGID	None	None	RIGID	Typical
94	M94A	N125B	N129A			RIGID	None	None	RIGID	Typical
95	M95A	N124B	N128A			RIGID	None	None	RIGID	Typical
96	MP4A	N135B	N139A			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
97	MP3A	N134A	N138A			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
98	MP1A	N132A	N137A			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
99	MP2A	N133A	N136A			Dual Mounted ...	Column	Pipe	A53 Gr.B	Typical
100	M100	N140A	N141A			RIGID	None	None	RIGID	Typical
101	M101	N142A	N143			OVP Pipe	Column	Pipe	A53 Gr.B	Typical
102	M102	N149	N153			RIGID	None	None	RIGID	Typical
103	M103	N148A	N152			RIGID	None	None	RIGID	Typical
104	M104	N147	N151			RIGID	None	None	RIGID	Typical
105	M105	N146	N150			RIGID	None	None	RIGID	Typical
106	M106	N145	N144A			Support Rail	Beam	Pipe	A53 Gr.B	Typical
107	M107	N154	N155			RIGID	None	None	RIGID	Typical
108	M108	N156	N157			RIGID	None	None	RIGID	Typical
109	M113	N159	N158			Support Rail	Beam	Pipe	A53 Gr.B	Typical
110	M114	N168	N169			RIGID	None	None	RIGID	Typical
111	M115	N170	N171			RIGID	None	None	RIGID	Typical
112	M120	N173	N172			Support Rail	Beam	Pipe	A53 Gr.B	Typical
113	M121	N182	N183			RIGID	None	None	RIGID	Typical
114	M122	N184	N185			RIGID	None	None	RIGID	Typical
115	M123	N155	N185		90	Support Rail C...	Beam	Single Angle	A36 Gr.36	Typical
116	M124	N183	N171		90	Support Rail C...	Beam	Single Angle	A36 Gr.36	Typical
117	M125	N169	N157		90	Support Rail C...	Beam	Single Angle	A36 Gr.36	Typical
118	M118	N173A	N177			RIGID	None	None	RIGID	Typical
119	M119	N172A	N176			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
120	M120A	N170A	N174			RIGID	None	None	RIGID	Typical
121	M121A	N171A	N175			RIGID	None	None	RIGID	Typical
122	M122A	N181	N185A			RIGID	None	None	RIGID	Typical
123	M123A	N180	N184A			RIGID	None	None	RIGID	Typical
124	M124A	N179	N183A			RIGID	None	None	RIGID	Typical
125	M125A	N178	N182A			RIGID	None	None	RIGID	Typical
126	M126	N188	N186			RIGID	None	None	RIGID	Typical
127	M127	N187	N186			RIGID	None	None	RIGID	Typical
128	M128	N191	N189			RIGID	None	None	RIGID	Typical
129	M129	N190	N189			RIGID	None	None	RIGID	Typical
130	M130	N194	N192			RIGID	None	None	RIGID	Typical
131	M131	N193	N192			RIGID	None	None	RIGID	Typical
132	M132	N195	N191		90	Support Bracin...	Beam	Single Angle	A36 Gr.36	Typical
133	M133	N197	N193		180	Support Bracin...	Beam	Single Angle	A36 Gr.36	Typical
134	M134	N199	N194		90	Support Bracin...	Beam	Single Angle	A36 Gr.36	Typical
135	M135	N200	N187		180	Support Bracin...	Beam	Single Angle	A36 Gr.36	Typical
136	M136	N203	N188		90	Support Bracin...	Beam	Single Angle	A36 Gr.36	Typical
137	M137	N204	N190		180	Support Bracin...	Beam	Single Angle	A36 Gr.36	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M1						Yes	Default			None
2	M4						Yes				None
3	M10						Yes	Default			None
4	M43						Yes	Default			None
5	M46						Yes	Default			None
6	M35A						Yes	** NA **			None
7	M36A						Yes	** NA **			None
8	M51B	OOOOOX	OOOOOX				Yes	Default			None
9	M52B	OOOOOX	OOOOOX				Yes	Default			None
10	M52						Yes	** NA **			None
11	M58						Yes	** NA **			None
12	M59						Yes	** NA **			None
13	M76						Yes	** NA **			None
14	M77						Yes	** NA **			None
15	M79		BenPIN				Yes	** NA **			None
16	M80						Yes				None
17	M83		BenPIN				Yes	** NA **			None
18	M84						Yes	** NA **			None
19	M85						Yes	** NA **			None
20	M88		BenPIN				Yes	** NA **			None
21	M91						Yes				None
22	M92		BenPIN				Yes	** NA **			None
23	M50						Yes	** NA **			None
24	M51						Yes	** NA **			None
25	M51A						Yes	** NA **			None
26	M52A						Yes				None
27	M53						Yes	Default			None
28	M54						Yes	Default			None
29	M55						Yes	Default			None
30	M56						Yes	** NA **			None
31	M57						Yes	** NA **			None
32	M58A	OOOOOX	OOOOOX				Yes	Default			None
33	M59A	OOOOOX	OOOOOX				Yes	Default			None
34	M60						Yes	** NA **			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
35	M61						Yes	** NA **			None
36	M62						Yes	** NA **			None
37	M63						Yes	** NA **			None
38	M64						Yes	** NA **			None
39	M65		BenPIN				Yes	** NA **			None
40	M66						Yes				None
41	M67		BenPIN				Yes	** NA **			None
42	M68						Yes	** NA **			None
43	M69						Yes	** NA **			None
44	M70		BenPIN				Yes	** NA **			None
45	M71						Yes				None
46	M72		BenPIN				Yes	** NA **			None
47	M73						Yes	** NA **			None
48	M74						Yes	** NA **			None
49	M75						Yes	** NA **			None
50	M76A						Yes				None
51	M77A						Yes	Default			None
52	M78						Yes	Default			None
53	M79A						Yes	Default			None
54	M80A						Yes	** NA **			None
55	M81						Yes	** NA **			None
56	M82	OOOOOX	OOOOOX				Yes	Default			None
57	M83A	OOOOOX	OOOOOX				Yes	Default			None
58	M84A						Yes	** NA **			None
59	M85A						Yes	** NA **			None
60	M86						Yes	** NA **			None
61	M87						Yes	** NA **			None
62	M88A						Yes	** NA **			None
63	M89		BenPIN				Yes	** NA **			None
64	M90						Yes				None
65	M91A		BenPIN				Yes	** NA **			None
66	M92A						Yes	** NA **			None
67	M93						Yes	** NA **			None
68	M94		BenPIN				Yes	** NA **			None
69	M95						Yes				None
70	M96		BenPIN				Yes	** NA **			None
71	M97						Yes	** NA **			None
72	M98						Yes	** NA **			None
73	M99						Yes	** NA **			None
74	M82A						Yes	Default			None
75	M91B						Yes	Default			None
76	M76B						Yes	** NA **			None
77	M77B						Yes	** NA **			None
78	M78A						Yes	** NA **			None
79	M79B						Yes	** NA **			None
80	MP4C						Yes	** NA **			None
81	MP3C						Yes	** NA **			None
82	MP1C						Yes	** NA **			None
83	MP2C						Yes	** NA **			None
84	M84B						Yes	** NA **			None
85	M85B						Yes	** NA **			None
86	M86A						Yes	** NA **			None
87	M87A						Yes	** NA **			None
88	MP4B						Yes	** NA **			None
89	MP3B						Yes	** NA **			None
90	MP1B						Yes	** NA **			None
91	MP2B						Yes	** NA **			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
92	M92B						Yes	** NA **			None
93	M93A						Yes	** NA **			None
94	M94A						Yes	** NA **			None
95	M95A						Yes	** NA **			None
96	MP4A						Yes	** NA **			None
97	MP3A						Yes	** NA **			None
98	MP1A						Yes	** NA **			None
99	MP2A						Yes	** NA **			None
100	M100						Yes	** NA **			None
101	M101						Yes	** NA **			None
102	M102						Yes	** NA **			None
103	M103						Yes	** NA **			None
104	M104						Yes	** NA **			None
105	M105						Yes	** NA **			None
106	M106						Yes				None
107	M107	OOOOOX					Yes	** NA **			None
108	M108	OOOOOX					Yes	** NA **			None
109	M113						Yes				None
110	M114	OOOOOX					Yes	** NA **			None
111	M115	OOOOOX					Yes	** NA **			None
112	M120						Yes				None
113	M121	OOOOOX					Yes	** NA **			None
114	M122	OOOOOX					Yes	** NA **			None
115	M123						Yes	Default			None
116	M124						Yes				None
117	M125						Yes				None
118	M118						Yes	** NA **			None
119	M119						Yes	** NA **			None
120	M120A						Yes	** NA **			None
121	M121A						Yes	** NA **			None
122	M122A						Yes	** NA **			None
123	M123A						Yes	** NA **			None
124	M124A						Yes	** NA **			None
125	M125A						Yes	** NA **			None
126	M126						Yes	** NA **			None
127	M127						Yes	** NA **			None
128	M128						Yes	** NA **			None
129	M129						Yes	** NA **			None
130	M130						Yes	** NA **			None
131	M131						Yes	** NA **			None
132	M132	BenPIN	BenPIN				Yes				None
133	M133	BenPIN	BenPIN				Yes				None
134	M134	BenPIN	BenPIN				Yes				None
135	M135	BenPIN	BenPIN				Yes				None
136	M136	BenPIN	BenPIN				Yes				None
137	M137	BenPIN	BenPIN				Yes				None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	Y	-31.65	.5
2	MP2A	My	-.016	.5
3	MP2A	Mz	.021	.5
4	MP2A	Y	-31.65	3.5
5	MP2A	My	-.016	3.5
6	MP2A	Mz	.021	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
7	MP2B	Y	-31.65	.5
8	MP2B	My	.003	.5
9	MP2B	Mz	-.026	.5
10	MP2B	Y	-31.65	3.5
11	MP2B	My	.003	3.5
12	MP2B	Mz	-.026	3.5
13	MP2C	Y	-31.65	.5
14	MP2C	My	.025	.5
15	MP2C	Mz	.008	.5
16	MP2C	Y	-31.65	3.5
17	MP2C	My	.025	3.5
18	MP2C	Mz	.008	3.5
19	MP2A	Y	-31.65	.5
20	MP2A	My	-.016	.5
21	MP2A	Mz	-.021	.5
22	MP2A	Y	-31.65	3.5
23	MP2A	My	-.016	3.5
24	MP2A	Mz	-.021	3.5
25	MP2B	Y	-31.65	.5
26	MP2B	My	.024	.5
27	MP2B	Mz	.01	.5
28	MP2B	Y	-31.65	3.5
29	MP2B	My	.024	3.5
30	MP2B	Mz	.01	3.5
31	MP2C	Y	-31.65	.5
32	MP2C	My	-.014	.5
33	MP2C	Mz	.022	.5
34	MP2C	Y	-31.65	3.5
35	MP2C	My	-.014	3.5
36	MP2C	Mz	.022	3.5
37	MP3A	Y	-43.55	1
38	MP3A	My	-.022	1
39	MP3A	Mz	0	1
40	MP3A	Y	-43.55	3
41	MP3A	My	-.022	3
42	MP3A	Mz	0	3
43	MP3B	Y	-43.55	1
44	MP3B	My	.019	1
45	MP3B	Mz	-.011	1
46	MP3B	Y	-43.55	3
47	MP3B	My	.019	3
48	MP3B	Mz	-.011	3
49	MP3C	Y	-43.55	1
50	MP3C	My	.007	1
51	MP3C	Mz	.02	1
52	MP3C	Y	-43.55	3
53	MP3C	My	.007	3
54	MP3C	Mz	.02	3
55	MP2A	Y	-10.4	4
56	MP2A	My	-.005	4
57	MP2A	Mz	0	4
58	MP2B	Y	-10.4	4
59	MP2B	My	.005	4
60	MP2B	Mz	-.003	4
61	MP2C	Y	-10.4	4
62	MP2C	My	.002	4
63	MP2C	Mz	.005	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
64	M101	Y	-32	.75
65	M101	My	0	.75
66	M101	Mz	0	.75
67	MP2A	Y	-84.4	2
68	MP2A	My	-.042	2
69	MP2A	Mz	0	2
70	MP2B	Y	-84.4	2
71	MP2B	My	.037	2
72	MP2B	Mz	-.021	2
73	MP2C	Y	-84.4	2
74	MP2C	My	.014	2
75	MP2C	Mz	.04	2
76	MP3A	Y	-70.3	2
77	MP3A	My	-.035	2
78	MP3A	Mz	0	2
79	MP3B	Y	-70.3	2
80	MP3B	My	.03	2
81	MP3B	Mz	-.018	2
82	MP3C	Y	-70.3	2
83	MP3C	My	.012	2
84	MP3C	Mz	.033	2
85	MP4A	Y	-8.5	.25
86	MP4A	My	-.004	.25
87	MP4A	Mz	0	.25
88	MP4A	Y	-8.5	3.75
89	MP4A	My	-.004	3.75
90	MP4A	Mz	0	3.75
91	MP4B	Y	-8.5	.25
92	MP4B	My	.004	.25
93	MP4B	Mz	-.002	.25
94	MP4B	Y	-8.5	3.75
95	MP4B	My	.004	3.75
96	MP4B	Mz	-.002	3.75
97	MP4C	Y	-8.5	.25
98	MP4C	My	.001	.25
99	MP4C	Mz	.004	.25
100	MP4C	Y	-8.5	3.75
101	MP4C	My	.001	3.75
102	MP4C	Mz	.004	3.75

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	Y	-69.824	.5
2	MP2A	My	-.035	.5
3	MP2A	Mz	.047	.5
4	MP2A	Y	-69.824	3.5
5	MP2A	My	-.035	3.5
6	MP2A	Mz	.047	3.5
7	MP2B	Y	-69.824	.5
8	MP2B	My	.007	.5
9	MP2B	Mz	-.058	.5
10	MP2B	Y	-69.824	3.5
11	MP2B	My	.007	3.5
12	MP2B	Mz	-.058	3.5
13	MP2C	Y	-69.824	.5
14	MP2C	My	.056	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
15	MP2C	Mz	.017	.5
16	MP2C	Y	-69.824	3.5
17	MP2C	My	.056	3.5
18	MP2C	Mz	.017	3.5
19	MP2A	Y	-69.824	.5
20	MP2A	My	-.035	.5
21	MP2A	Mz	-.047	.5
22	MP2A	Y	-69.824	3.5
23	MP2A	My	-.035	3.5
24	MP2A	Mz	-.047	3.5
25	MP2B	Y	-69.824	.5
26	MP2B	My	.054	.5
27	MP2B	Mz	.023	.5
28	MP2B	Y	-69.824	3.5
29	MP2B	My	.054	3.5
30	MP2B	Mz	.023	3.5
31	MP2C	Y	-69.824	.5
32	MP2C	My	-.032	.5
33	MP2C	Mz	.049	.5
34	MP2C	Y	-69.824	3.5
35	MP2C	My	-.032	3.5
36	MP2C	Mz	.049	3.5
37	MP3A	Y	-35.549	1
38	MP3A	My	-.018	1
39	MP3A	Mz	0	1
40	MP3A	Y	-35.549	3
41	MP3A	My	-.018	3
42	MP3A	Mz	0	3
43	MP3B	Y	-35.549	1
44	MP3B	My	.015	1
45	MP3B	Mz	-.009	1
46	MP3B	Y	-35.549	3
47	MP3B	My	.015	3
48	MP3B	Mz	-.009	3
49	MP3C	Y	-35.549	1
50	MP3C	My	.006	1
51	MP3C	Mz	.017	1
52	MP3C	Y	-35.549	3
53	MP3C	My	.006	3
54	MP3C	Mz	.017	3
55	MP2A	Y	-10.719	4
56	MP2A	My	-.005	4
57	MP2A	Mz	0	4
58	MP2B	Y	-10.719	4
59	MP2B	My	.005	4
60	MP2B	Mz	-.003	4
61	MP2C	Y	-10.719	4
62	MP2C	My	.002	4
63	MP2C	Mz	.005	4
64	M101	Y	-75.814	.75
65	M101	My	0	.75
66	M101	Mz	0	.75
67	MP2A	Y	-44.818	2
68	MP2A	My	-.022	2
69	MP2A	Mz	0	2
70	MP2B	Y	-44.818	2
71	MP2B	My	.019	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
72	MP2B	Mz	-.011	2
73	MP2C	Y	-44.818	2
74	MP2C	My	.008	2
75	MP2C	Mz	.021	2
76	MP3A	Y	-40.305	2
77	MP3A	My	-.02	2
78	MP3A	Mz	0	2
79	MP3B	Y	-40.305	2
80	MP3B	My	.017	2
81	MP3B	Mz	-.01	2
82	MP3C	Y	-40.305	2
83	MP3C	My	.007	2
84	MP3C	Mz	.019	2
85	MP4A	Y	-51.66	.25
86	MP4A	My	-.026	.25
87	MP4A	Mz	0	.25
88	MP4A	Y	-51.66	3.75
89	MP4A	My	-.026	3.75
90	MP4A	Mz	0	3.75
91	MP4B	Y	-51.66	.25
92	MP4B	My	.022	.25
93	MP4B	Mz	-.013	.25
94	MP4B	Y	-51.66	3.75
95	MP4B	My	.022	3.75
96	MP4B	Mz	-.013	3.75
97	MP4C	Y	-51.66	.25
98	MP4C	My	.009	.25
99	MP4C	Mz	.024	.25
100	MP4C	Y	-51.66	3.75
101	MP4C	My	.009	3.75
102	MP4C	Mz	.024	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	.5
2	MP2A	Z	-202.934	.5
3	MP2A	Mx	-.135	.5
4	MP2A	X	0	3.5
5	MP2A	Z	-202.934	3.5
6	MP2A	Mx	-.135	3.5
7	MP2B	X	0	.5
8	MP2B	Z	-185.522	.5
9	MP2B	Mx	.153	.5
10	MP2B	X	0	3.5
11	MP2B	Z	-185.522	3.5
12	MP2B	Mx	.153	3.5
13	MP2C	X	0	.5
14	MP2C	Z	-141.432	.5
15	MP2C	Mx	-.034	.5
16	MP2C	X	0	3.5
17	MP2C	Z	-141.432	3.5
18	MP2C	Mx	-.034	3.5
19	MP2A	X	0	.5
20	MP2A	Z	-202.934	.5
21	MP2A	Mx	.135	.5
22	MP2A	X	0	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
23	MP2A	Z	-202.934	3.5
24	MP2A	Mx	.135	3.5
25	MP2B	X	0	.5
26	MP2B	Z	-185.522	.5
27	MP2B	Mx	-.061	.5
28	MP2B	X	0	3.5
29	MP2B	Z	-185.522	3.5
30	MP2B	Mx	-.061	3.5
31	MP2C	X	0	.5
32	MP2C	Z	-141.432	.5
33	MP2C	Mx	-.099	.5
34	MP2C	X	0	3.5
35	MP2C	Z	-141.432	3.5
36	MP2C	Mx	-.099	3.5
37	MP3A	X	0	1
38	MP3A	Z	-104.697	1
39	MP3A	Mx	0	1
40	MP3A	X	0	3
41	MP3A	Z	-104.697	3
42	MP3A	Mx	0	3
43	MP3B	X	0	1
44	MP3B	Z	-88.77	1
45	MP3B	Mx	.022	1
46	MP3B	X	0	3
47	MP3B	Z	-88.77	3
48	MP3B	Mx	.022	3
49	MP3C	X	0	1
50	MP3C	Z	-48.441	1
51	MP3C	Mx	-.023	1
52	MP3C	X	0	3
53	MP3C	Z	-48.441	3
54	MP3C	Mx	-.023	3
55	MP2A	X	0	4
56	MP2A	Z	-16.484	4
57	MP2A	Mx	0	4
58	MP2B	X	0	4
59	MP2B	Z	-15.215	4
60	MP2B	Mx	.004	4
61	MP2C	X	0	4
62	MP2C	Z	-11.999	4
63	MP2C	Mx	-.006	4
64	M101	X	0	.75
65	M101	Z	-111.767	.75
66	M101	Mx	0	.75
67	MP2A	X	0	2
68	MP2A	Z	-83.312	2
69	MP2A	Mx	0	2
70	MP2B	X	0	2
71	MP2B	Z	-76.407	2
72	MP2B	Mx	.019	2
73	MP2C	X	0	2
74	MP2C	Z	-58.921	2
75	MP2C	Mx	-.028	2
76	MP3A	X	0	2
77	MP3A	Z	-83.312	2
78	MP3A	Mx	0	2
79	MP3B	X	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
80	MP3B	Z	-73.761	2
81	MP3B	Mx	.018	2
82	MP3C	X	0	2
83	MP3C	Z	-49.578	2
84	MP3C	Mx	-.023	2
85	MP4A	X	0	.25
86	MP4A	Z	-168.629	.25
87	MP4A	Mx	0	.25
88	MP4A	X	0	3.75
89	MP4A	Z	-168.629	3.75
90	MP4A	Mx	0	3.75
91	MP4B	X	0	.25
92	MP4B	Z	-149.628	.25
93	MP4B	Mx	.037	.25
94	MP4B	X	0	3.75
95	MP4B	Z	-149.628	3.75
96	MP4B	Mx	.037	3.75
97	MP4C	X	0	.25
98	MP4C	Z	-101.517	.25
99	MP4C	Mx	-.048	.25
100	MP4C	X	0	3.75
101	MP4C	Z	-101.517	3.75
102	MP4C	Mx	-.048	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	92.761	.5
2	MP2A	Z	-160.667	.5
3	MP2A	Mx	-.153	.5
4	MP2A	X	92.761	3.5
5	MP2A	Z	-160.667	3.5
6	MP2A	Mx	-.153	3.5
7	MP2B	X	75.349	.5
8	MP2B	Z	-130.508	.5
9	MP2B	Mx	.115	.5
10	MP2B	X	75.349	3.5
11	MP2B	Z	-130.508	3.5
12	MP2B	Mx	.115	3.5
13	MP2C	X	87.078	.5
14	MP2C	Z	-150.824	.5
15	MP2C	Mx	.033	.5
16	MP2C	X	87.078	3.5
17	MP2C	Z	-150.824	3.5
18	MP2C	Mx	.033	3.5
19	MP2A	X	92.761	.5
20	MP2A	Z	-160.667	.5
21	MP2A	Mx	.061	.5
22	MP2A	X	92.761	3.5
23	MP2A	Z	-160.667	3.5
24	MP2A	Mx	.061	3.5
25	MP2B	X	75.349	.5
26	MP2B	Z	-130.508	.5
27	MP2B	Mx	.015	.5
28	MP2B	X	75.349	3.5
29	MP2B	Z	-130.508	3.5
30	MP2B	Mx	.015	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
31	MP2C	X	87.078	.5
32	MP2C	Z	-150.824	.5
33	MP2C	Mx	-.145	.5
34	MP2C	X	87.078	3.5
35	MP2C	Z	-150.824	3.5
36	MP2C	Mx	-.145	3.5
37	MP3A	X	44.385	1
38	MP3A	Z	-76.877	1
39	MP3A	Mx	-.022	1
40	MP3A	X	44.385	3
41	MP3A	Z	-76.877	3
42	MP3A	Mx	-.022	3
43	MP3B	X	28.458	1
44	MP3B	Z	-49.291	1
45	MP3B	Mx	.025	1
46	MP3B	X	28.458	3
47	MP3B	Z	-49.291	3
48	MP3B	Mx	.025	3
49	MP3C	X	39.187	1
50	MP3C	Z	-67.874	1
51	MP3C	Mx	-.025	1
52	MP3C	X	39.187	3
53	MP3C	Z	-67.874	3
54	MP3C	Mx	-.025	3
55	MP2A	X	7.607	4
56	MP2A	Z	-13.176	4
57	MP2A	Mx	-.004	4
58	MP2B	X	6.338	4
59	MP2B	Z	-10.977	4
60	MP2B	Mx	.005	4
61	MP2C	X	7.193	4
62	MP2C	Z	-12.458	4
63	MP2C	Mx	-.005	4
64	M101	X	63.019	.75
65	M101	Z	-109.152	.75
66	M101	Mx	0	.75
67	MP2A	X	38.203	2
68	MP2A	Z	-66.17	2
69	MP2A	Mx	-.019	2
70	MP2B	X	31.298	2
71	MP2B	Z	-54.209	2
72	MP2B	Mx	.027	2
73	MP2C	X	35.95	2
74	MP2C	Z	-62.267	2
75	MP2C	Mx	-.023	2
76	MP3A	X	36.881	2
77	MP3A	Z	-63.879	2
78	MP3A	Mx	-.018	2
79	MP3B	X	27.33	2
80	MP3B	Z	-47.337	2
81	MP3B	Mx	.024	2
82	MP3C	X	33.764	2
83	MP3C	Z	-58.481	2
84	MP3C	Mx	-.022	2
85	MP4A	X	74.814	.25
86	MP4A	Z	-129.582	.25
87	MP4A	Mx	-.037	.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
88	MP4A	X	74.814	3.75
89	MP4A	Z	-129.582	3.75
90	MP4A	Mx	-.037	3.75
91	MP4B	X	55.813	.25
92	MP4B	Z	-96.672	.25
93	MP4B	Mx	.048	.25
94	MP4B	X	55.813	3.75
95	MP4B	Z	-96.672	3.75
96	MP4B	Mx	.048	3.75
97	MP4C	X	68.613	.25
98	MP4C	Z	-118.842	.25
99	MP4C	Mx	-.044	.25
100	MP4C	X	68.613	3.75
101	MP4C	Z	-118.842	3.75
102	MP4C	Mx	-.044	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	130.508	.5
2	MP2A	Z	-75.349	.5
3	MP2A	Mx	-.115	.5
4	MP2A	X	130.508	3.5
5	MP2A	Z	-75.349	3.5
6	MP2A	Mx	-.115	3.5
7	MP2B	X	115.428	.5
8	MP2B	Z	-66.642	.5
9	MP2B	Mx	.067	.5
10	MP2B	X	115.428	3.5
11	MP2B	Z	-66.642	3.5
12	MP2B	Mx	.067	3.5
13	MP2C	X	173.928	.5
14	MP2C	Z	-100.417	.5
15	MP2C	Mx	.114	.5
16	MP2C	X	173.928	3.5
17	MP2C	Z	-100.417	3.5
18	MP2C	Mx	.114	3.5
19	MP2A	X	130.508	.5
20	MP2A	Z	-75.349	.5
21	MP2A	Mx	-.015	.5
22	MP2A	X	130.508	3.5
23	MP2A	Z	-75.349	3.5
24	MP2A	Mx	-.015	3.5
25	MP2B	X	115.428	.5
26	MP2B	Z	-66.642	.5
27	MP2B	Mx	.067	.5
28	MP2B	X	115.428	3.5
29	MP2B	Z	-66.642	3.5
30	MP2B	Mx	.067	3.5
31	MP2C	X	173.928	.5
32	MP2C	Z	-100.417	.5
33	MP2C	Mx	-.149	.5
34	MP2C	X	173.928	3.5
35	MP2C	Z	-100.417	3.5
36	MP2C	Mx	-.149	3.5
37	MP3A	X	49.291	1
38	MP3A	Z	-28.458	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
39	MP3A	Mx	-.025	1
40	MP3A	X	49.291	3
41	MP3A	Z	-28.458	3
42	MP3A	Mx	-.025	3
43	MP3B	X	35.497	1
44	MP3B	Z	-20.494	1
45	MP3B	Mx	.02	1
46	MP3B	X	35.497	3
47	MP3B	Z	-20.494	3
48	MP3B	Mx	.02	3
49	MP3C	X	89.007	1
50	MP3C	Z	-51.388	1
51	MP3C	Mx	-.009	1
52	MP3C	X	89.007	3
53	MP3C	Z	-51.388	3
54	MP3C	Mx	-.009	3
55	MP2A	X	10.977	4
56	MP2A	Z	-6.338	4
57	MP2A	Mx	-.005	4
58	MP2B	X	9.877	4
59	MP2B	Z	-5.703	4
60	MP2B	Mx	.006	4
61	MP2C	X	14.143	4
62	MP2C	Z	-8.166	4
63	MP2C	Mx	-.001	4
64	M101	X	133.871	.75
65	M101	Z	-77.29	.75
66	M101	Mx	0	.75
67	MP2A	X	54.209	2
68	MP2A	Z	-31.298	2
69	MP2A	Mx	-.027	2
70	MP2B	X	48.229	2
71	MP2B	Z	-27.845	2
72	MP2B	Mx	.028	2
73	MP2C	X	71.429	2
74	MP2C	Z	-41.24	2
75	MP2C	Mx	-.007	2
76	MP3A	X	47.337	2
77	MP3A	Z	-27.33	2
78	MP3A	Mx	-.024	2
79	MP3B	X	39.065	2
80	MP3B	Z	-22.554	2
81	MP3B	Mx	.023	2
82	MP3C	X	71.153	2
83	MP3C	Z	-41.08	2
84	MP3C	Mx	-.007	2
85	MP4A	X	96.672	.25
86	MP4A	Z	-55.813	.25
87	MP4A	Mx	-.048	.25
88	MP4A	X	96.672	3.75
89	MP4A	Z	-55.813	3.75
90	MP4A	Mx	-.048	3.75
91	MP4B	X	80.216	.25
92	MP4B	Z	-46.313	.25
93	MP4B	Mx	.046	.25
94	MP4B	X	80.216	3.75
95	MP4B	Z	-46.313	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
96	MP4B	Mx	.046	3.75
97	MP4C	X	144.053	.25
98	MP4C	Z	-83.169	.25
99	MP4C	Mx	-.014	.25
100	MP4C	X	144.053	3.75
101	MP4C	Z	-83.169	3.75
102	MP4C	Mx	-.014	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	133.285	.5
2	MP2A	Z	0	.5
3	MP2A	Mx	-.067	.5
4	MP2A	X	133.285	3.5
5	MP2A	Z	0	3.5
6	MP2A	Mx	-.067	3.5
7	MP2B	X	150.697	.5
8	MP2B	Z	0	.5
9	MP2B	Mx	.015	.5
10	MP2B	X	150.697	3.5
11	MP2B	Z	0	3.5
12	MP2B	Mx	.015	3.5
13	MP2C	X	194.787	.5
14	MP2C	Z	0	.5
15	MP2C	Mx	.155	.5
16	MP2C	X	194.787	3.5
17	MP2C	Z	0	3.5
18	MP2C	Mx	.155	3.5
19	MP2A	X	133.285	.5
20	MP2A	Z	0	.5
21	MP2A	Mx	-.067	.5
22	MP2A	X	133.285	3.5
23	MP2A	Z	0	3.5
24	MP2A	Mx	-.067	3.5
25	MP2B	X	150.697	.5
26	MP2B	Z	0	.5
27	MP2B	Mx	.115	.5
28	MP2B	X	150.697	3.5
29	MP2B	Z	0	3.5
30	MP2B	Mx	.115	3.5
31	MP2C	X	194.787	.5
32	MP2C	Z	0	.5
33	MP2C	Mx	-.089	.5
34	MP2C	X	194.787	3.5
35	MP2C	Z	0	3.5
36	MP2C	Mx	-.089	3.5
37	MP3A	X	40.989	1
38	MP3A	Z	0	1
39	MP3A	Mx	-.02	1
40	MP3A	X	40.989	3
41	MP3A	Z	0	3
42	MP3A	Mx	-.02	3
43	MP3B	X	56.916	1
44	MP3B	Z	0	1
45	MP3B	Mx	.025	1
46	MP3B	X	56.916	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
47	MP3B	Z	0	3
48	MP3B	Mx	.025	3
49	MP3C	X	97.245	1
50	MP3C	Z	0	1
51	MP3C	Mx	.017	1
52	MP3C	X	97.245	3
53	MP3C	Z	0	3
54	MP3C	Mx	.017	3
55	MP2A	X	11.405	4
56	MP2A	Z	0	4
57	MP2A	Mx	-.006	4
58	MP2B	X	12.675	4
59	MP2B	Z	0	4
60	MP2B	Mx	.005	4
61	MP2C	X	15.89	4
62	MP2C	Z	0	4
63	MP2C	Mx	.003	4
64	M101	X	168.852	.75
65	M101	Z	0	.75
66	M101	Mx	0	.75
67	MP2A	X	55.69	2
68	MP2A	Z	0	2
69	MP2A	Mx	-.028	2
70	MP2B	X	62.596	2
71	MP2B	Z	0	2
72	MP2B	Mx	.027	2
73	MP2C	X	80.081	2
74	MP2C	Z	0	2
75	MP2C	Mx	.014	2
76	MP3A	X	45.109	2
77	MP3A	Z	0	2
78	MP3A	Mx	-.023	2
79	MP3B	X	54.66	2
80	MP3B	Z	0	2
81	MP3B	Mx	.024	2
82	MP3C	X	78.843	2
83	MP3C	Z	0	2
84	MP3C	Mx	.013	2
85	MP4A	X	92.626	.25
86	MP4A	Z	0	.25
87	MP4A	Mx	-.046	.25
88	MP4A	X	92.626	3.75
89	MP4A	Z	0	3.75
90	MP4A	Mx	-.046	3.75
91	MP4B	X	111.627	.25
92	MP4B	Z	0	.25
93	MP4B	Mx	.048	.25
94	MP4B	X	111.627	3.75
95	MP4B	Z	0	3.75
96	MP4B	Mx	.048	3.75
97	MP4C	X	159.739	.25
98	MP4C	Z	0	.25
99	MP4C	Mx	.027	.25
100	MP4C	X	159.739	3.75
101	MP4C	Z	0	3.75
102	MP4C	Mx	.027	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	130.508	.5
2	MP2A	Z	75.349	.5
3	MP2A	Mx	-.015	.5
4	MP2A	X	130.508	3.5
5	MP2A	Z	75.349	3.5
6	MP2A	Mx	-.015	3.5
7	MP2B	X	160.667	.5
8	MP2B	Z	92.761	.5
9	MP2B	Mx	-.061	.5
10	MP2B	X	160.667	3.5
11	MP2B	Z	92.761	3.5
12	MP2B	Mx	-.061	3.5
13	MP2C	X	140.35	.5
14	MP2C	Z	81.031	.5
15	MP2C	Mx	.132	.5
16	MP2C	X	140.35	3.5
17	MP2C	Z	81.031	3.5
18	MP2C	Mx	.132	3.5
19	MP2A	X	130.508	.5
20	MP2A	Z	75.349	.5
21	MP2A	Mx	-.115	.5
22	MP2A	X	130.508	3.5
23	MP2A	Z	75.349	3.5
24	MP2A	Mx	-.115	3.5
25	MP2B	X	160.667	.5
26	MP2B	Z	92.761	.5
27	MP2B	Mx	.153	.5
28	MP2B	X	160.667	3.5
29	MP2B	Z	92.761	3.5
30	MP2B	Mx	.153	3.5
31	MP2C	X	140.35	.5
32	MP2C	Z	81.031	.5
33	MP2C	Mx	-.007	.5
34	MP2C	X	140.35	3.5
35	MP2C	Z	81.031	3.5
36	MP2C	Mx	-.007	3.5
37	MP3A	X	49.291	1
38	MP3A	Z	28.458	1
39	MP3A	Mx	-.025	1
40	MP3A	X	49.291	3
41	MP3A	Z	28.458	3
42	MP3A	Mx	-.025	3
43	MP3B	X	76.877	1
44	MP3B	Z	44.385	1
45	MP3B	Mx	.022	1
46	MP3B	X	76.877	3
47	MP3B	Z	44.385	3
48	MP3B	Mx	.022	3
49	MP3C	X	58.294	1
50	MP3C	Z	33.656	1
51	MP3C	Mx	.026	1
52	MP3C	X	58.294	3
53	MP3C	Z	33.656	3
54	MP3C	Mx	.026	3
55	MP2A	X	10.977	4
56	MP2A	Z	6.338	4
57	MP2A	Mx	-.005	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP2B	X	13.176	4
59	MP2B	Z	7.607	4
60	MP2B	Mx	.004	4
61	MP2C	X	11.695	4
62	MP2C	Z	6.752	4
63	MP2C	Mx	.005	4
64	M101	X	133.871	.75
65	M101	Z	77.29	.75
66	M101	Mx	0	.75
67	MP2A	X	54.209	2
68	MP2A	Z	31.298	2
69	MP2A	Mx	-.027	2
70	MP2B	X	66.17	2
71	MP2B	Z	38.203	2
72	MP2B	Mx	.019	2
73	MP2C	X	58.113	2
74	MP2C	Z	33.551	2
75	MP2C	Mx	.026	2
76	MP3A	X	47.337	2
77	MP3A	Z	27.33	2
78	MP3A	Mx	-.024	2
79	MP3B	X	63.879	2
80	MP3B	Z	36.881	2
81	MP3B	Mx	.018	2
82	MP3C	X	52.735	2
83	MP3C	Z	30.447	2
84	MP3C	Mx	.023	2
85	MP4A	X	96.672	.25
86	MP4A	Z	55.813	.25
87	MP4A	Mx	-.048	.25
88	MP4A	X	96.672	3.75
89	MP4A	Z	55.813	3.75
90	MP4A	Mx	-.048	3.75
91	MP4B	X	129.582	.25
92	MP4B	Z	74.814	.25
93	MP4B	Mx	.037	.25
94	MP4B	X	129.582	3.75
95	MP4B	Z	74.814	3.75
96	MP4B	Mx	.037	3.75
97	MP4C	X	107.412	.25
98	MP4C	Z	62.014	.25
99	MP4C	Mx	.048	.25
100	MP4C	X	107.412	3.75
101	MP4C	Z	62.014	3.75
102	MP4C	Mx	.048	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	92.761	.5
2	MP2A	Z	160.667	.5
3	MP2A	Mx	.061	.5
4	MP2A	X	92.761	3.5
5	MP2A	Z	160.667	3.5
6	MP2A	Mx	.061	3.5
7	MP2B	X	101.467	.5
8	MP2B	Z	175.746	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
9	MP2B	Mx	-.135	.5
10	MP2B	X	101.467	3.5
11	MP2B	Z	175.746	3.5
12	MP2B	Mx	-.135	3.5
13	MP2C	X	67.692	.5
14	MP2C	Z	117.247	.5
15	MP2C	Mx	.082	.5
16	MP2C	X	67.692	3.5
17	MP2C	Z	117.247	3.5
18	MP2C	Mx	.082	3.5
19	MP2A	X	92.761	.5
20	MP2A	Z	160.667	.5
21	MP2A	Mx	-.153	.5
22	MP2A	X	92.761	3.5
23	MP2A	Z	160.667	3.5
24	MP2A	Mx	-.153	3.5
25	MP2B	X	101.467	.5
26	MP2B	Z	175.746	.5
27	MP2B	Mx	.135	.5
28	MP2B	X	101.467	3.5
29	MP2B	Z	175.746	3.5
30	MP2B	Mx	.135	3.5
31	MP2C	X	67.692	.5
32	MP2C	Z	117.247	.5
33	MP2C	Mx	.051	.5
34	MP2C	X	67.692	3.5
35	MP2C	Z	117.247	3.5
36	MP2C	Mx	.051	3.5
37	MP3A	X	44.385	1
38	MP3A	Z	76.877	1
39	MP3A	Mx	-.022	1
40	MP3A	X	44.385	3
41	MP3A	Z	76.877	3
42	MP3A	Mx	-.022	3
43	MP3B	X	52.349	1
44	MP3B	Z	90.67	1
45	MP3B	Mx	0	1
46	MP3B	X	52.349	3
47	MP3B	Z	90.67	3
48	MP3B	Mx	0	3
49	MP3C	X	21.455	1
50	MP3C	Z	37.161	1
51	MP3C	Mx	.021	1
52	MP3C	X	21.455	3
53	MP3C	Z	37.161	3
54	MP3C	Mx	.021	3
55	MP2A	X	7.607	4
56	MP2A	Z	13.176	4
57	MP2A	Mx	-.004	4
58	MP2B	X	8.242	4
59	MP2B	Z	14.276	4
60	MP2B	Mx	0	4
61	MP2C	X	5.779	4
62	MP2C	Z	10.01	4
63	MP2C	Mx	.006	4
64	M101	X	63.019	.75
65	M101	Z	109.152	.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
66	M101	Mx	0	.75
67	MP2A	X	38.203	2
68	MP2A	Z	66.17	2
69	MP2A	Mx	-.019	2
70	MP2B	X	41.656	2
71	MP2B	Z	72.151	2
72	MP2B	Mx	0	2
73	MP2C	X	28.261	2
74	MP2C	Z	48.95	2
75	MP2C	Mx	.028	2
76	MP3A	X	36.881	2
77	MP3A	Z	63.879	2
78	MP3A	Mx	-.018	2
79	MP3B	X	41.656	2
80	MP3B	Z	72.151	2
81	MP3B	Mx	0	2
82	MP3C	X	23.13	2
83	MP3C	Z	40.063	2
84	MP3C	Mx	.023	2
85	MP4A	X	74.814	.25
86	MP4A	Z	129.582	.25
87	MP4A	Mx	-.037	.25
88	MP4A	X	74.814	3.75
89	MP4A	Z	129.582	3.75
90	MP4A	Mx	-.037	3.75
91	MP4B	X	84.315	.25
92	MP4B	Z	146.037	.25
93	MP4B	Mx	0	.25
94	MP4B	X	84.315	3.75
95	MP4B	Z	146.037	3.75
96	MP4B	Mx	0	3.75
97	MP4C	X	47.459	.25
98	MP4C	Z	82.201	.25
99	MP4C	Mx	.047	.25
100	MP4C	X	47.459	3.75
101	MP4C	Z	82.201	3.75
102	MP4C	Mx	.047	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	.5
2	MP2A	Z	202.934	.5
3	MP2A	Mx	.135	.5
4	MP2A	X	0	3.5
5	MP2A	Z	202.934	3.5
6	MP2A	Mx	.135	3.5
7	MP2B	X	0	.5
8	MP2B	Z	185.522	.5
9	MP2B	Mx	-.153	.5
10	MP2B	X	0	3.5
11	MP2B	Z	185.522	3.5
12	MP2B	Mx	-.153	3.5
13	MP2C	X	0	.5
14	MP2C	Z	141.432	.5
15	MP2C	Mx	.034	.5
16	MP2C	X	0	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP2C	Z	141.432	3.5
18	MP2C	Mx	.034	3.5
19	MP2A	X	0	.5
20	MP2A	Z	202.934	.5
21	MP2A	Mx	-.135	.5
22	MP2A	X	0	3.5
23	MP2A	Z	202.934	3.5
24	MP2A	Mx	-.135	3.5
25	MP2B	X	0	.5
26	MP2B	Z	185.522	.5
27	MP2B	Mx	.061	.5
28	MP2B	X	0	3.5
29	MP2B	Z	185.522	3.5
30	MP2B	Mx	.061	3.5
31	MP2C	X	0	.5
32	MP2C	Z	141.432	.5
33	MP2C	Mx	.099	.5
34	MP2C	X	0	3.5
35	MP2C	Z	141.432	3.5
36	MP2C	Mx	.099	3.5
37	MP3A	X	0	1
38	MP3A	Z	104.697	1
39	MP3A	Mx	0	1
40	MP3A	X	0	3
41	MP3A	Z	104.697	3
42	MP3A	Mx	0	3
43	MP3B	X	0	1
44	MP3B	Z	88.77	1
45	MP3B	Mx	-.022	1
46	MP3B	X	0	3
47	MP3B	Z	88.77	3
48	MP3B	Mx	-.022	3
49	MP3C	X	0	1
50	MP3C	Z	48.441	1
51	MP3C	Mx	.023	1
52	MP3C	X	0	3
53	MP3C	Z	48.441	3
54	MP3C	Mx	.023	3
55	MP2A	X	0	4
56	MP2A	Z	16.484	4
57	MP2A	Mx	0	4
58	MP2B	X	0	4
59	MP2B	Z	15.215	4
60	MP2B	Mx	-.004	4
61	MP2C	X	0	4
62	MP2C	Z	11.999	4
63	MP2C	Mx	.006	4
64	M101	X	0	.75
65	M101	Z	111.767	.75
66	M101	Mx	0	.75
67	MP2A	X	0	2
68	MP2A	Z	83.312	2
69	MP2A	Mx	0	2
70	MP2B	X	0	2
71	MP2B	Z	76.407	2
72	MP2B	Mx	-.019	2
73	MP2C	X	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
74	MP2C	Z	58.921	2
75	MP2C	Mx	.028	2
76	MP3A	X	0	2
77	MP3A	Z	83.312	2
78	MP3A	Mx	0	2
79	MP3B	X	0	2
80	MP3B	Z	73.761	2
81	MP3B	Mx	-.018	2
82	MP3C	X	0	2
83	MP3C	Z	49.578	2
84	MP3C	Mx	.023	2
85	MP4A	X	0	.25
86	MP4A	Z	168.629	.25
87	MP4A	Mx	0	.25
88	MP4A	X	0	3.75
89	MP4A	Z	168.629	3.75
90	MP4A	Mx	0	3.75
91	MP4B	X	0	.25
92	MP4B	Z	149.628	.25
93	MP4B	Mx	-.037	.25
94	MP4B	X	0	3.75
95	MP4B	Z	149.628	3.75
96	MP4B	Mx	-.037	3.75
97	MP4C	X	0	.25
98	MP4C	Z	101.517	.25
99	MP4C	Mx	.048	.25
100	MP4C	X	0	3.75
101	MP4C	Z	101.517	3.75
102	MP4C	Mx	.048	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-92.761	.5
2	MP2A	Z	160.667	.5
3	MP2A	Mx	.153	.5
4	MP2A	X	-92.761	3.5
5	MP2A	Z	160.667	3.5
6	MP2A	Mx	.153	3.5
7	MP2B	X	-75.349	.5
8	MP2B	Z	130.508	.5
9	MP2B	Mx	-.115	.5
10	MP2B	X	-75.349	3.5
11	MP2B	Z	130.508	3.5
12	MP2B	Mx	-.115	3.5
13	MP2C	X	-87.078	.5
14	MP2C	Z	150.824	.5
15	MP2C	Mx	-.033	.5
16	MP2C	X	-87.078	3.5
17	MP2C	Z	150.824	3.5
18	MP2C	Mx	-.033	3.5
19	MP2A	X	-92.761	.5
20	MP2A	Z	160.667	.5
21	MP2A	Mx	-.061	.5
22	MP2A	X	-92.761	3.5
23	MP2A	Z	160.667	3.5
24	MP2A	Mx	-.061	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP2B	X	-75.349	.5
26	MP2B	Z	130.508	.5
27	MP2B	Mx	-.015	.5
28	MP2B	X	-75.349	3.5
29	MP2B	Z	130.508	3.5
30	MP2B	Mx	-.015	3.5
31	MP2C	X	-87.078	.5
32	MP2C	Z	150.824	.5
33	MP2C	Mx	.145	.5
34	MP2C	X	-87.078	3.5
35	MP2C	Z	150.824	3.5
36	MP2C	Mx	.145	3.5
37	MP3A	X	-44.385	1
38	MP3A	Z	76.877	1
39	MP3A	Mx	.022	1
40	MP3A	X	-44.385	3
41	MP3A	Z	76.877	3
42	MP3A	Mx	.022	3
43	MP3B	X	-28.458	1
44	MP3B	Z	49.291	1
45	MP3B	Mx	-.025	1
46	MP3B	X	-28.458	3
47	MP3B	Z	49.291	3
48	MP3B	Mx	-.025	3
49	MP3C	X	-39.187	1
50	MP3C	Z	67.874	1
51	MP3C	Mx	.025	1
52	MP3C	X	-39.187	3
53	MP3C	Z	67.874	3
54	MP3C	Mx	.025	3
55	MP2A	X	-7.607	4
56	MP2A	Z	13.176	4
57	MP2A	Mx	.004	4
58	MP2B	X	-6.338	4
59	MP2B	Z	10.977	4
60	MP2B	Mx	-.005	4
61	MP2C	X	-7.193	4
62	MP2C	Z	12.458	4
63	MP2C	Mx	.005	4
64	M101	X	-63.019	.75
65	M101	Z	109.152	.75
66	M101	Mx	0	.75
67	MP2A	X	-38.203	2
68	MP2A	Z	66.17	2
69	MP2A	Mx	.019	2
70	MP2B	X	-31.298	2
71	MP2B	Z	54.209	2
72	MP2B	Mx	-.027	2
73	MP2C	X	-35.95	2
74	MP2C	Z	62.267	2
75	MP2C	Mx	.023	2
76	MP3A	X	-36.881	2
77	MP3A	Z	63.879	2
78	MP3A	Mx	.018	2
79	MP3B	X	-27.33	2
80	MP3B	Z	47.337	2
81	MP3B	Mx	-.024	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
82	MP3C	X	-33.764	2
83	MP3C	Z	58.481	2
84	MP3C	Mx	.022	2
85	MP4A	X	-74.814	.25
86	MP4A	Z	129.582	.25
87	MP4A	Mx	.037	.25
88	MP4A	X	-74.814	3.75
89	MP4A	Z	129.582	3.75
90	MP4A	Mx	.037	3.75
91	MP4B	X	-55.813	.25
92	MP4B	Z	96.672	.25
93	MP4B	Mx	-.048	.25
94	MP4B	X	-55.813	3.75
95	MP4B	Z	96.672	3.75
96	MP4B	Mx	-.048	3.75
97	MP4C	X	-68.613	.25
98	MP4C	Z	118.842	.25
99	MP4C	Mx	.044	.25
100	MP4C	X	-68.613	3.75
101	MP4C	Z	118.842	3.75
102	MP4C	Mx	.044	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-130.508	.5
2	MP2A	Z	75.349	.5
3	MP2A	Mx	.115	.5
4	MP2A	X	-130.508	3.5
5	MP2A	Z	75.349	3.5
6	MP2A	Mx	.115	3.5
7	MP2B	X	-115.428	.5
8	MP2B	Z	66.642	.5
9	MP2B	Mx	-.067	.5
10	MP2B	X	-115.428	3.5
11	MP2B	Z	66.642	3.5
12	MP2B	Mx	-.067	3.5
13	MP2C	X	-173.928	.5
14	MP2C	Z	100.417	.5
15	MP2C	Mx	-.114	.5
16	MP2C	X	-173.928	3.5
17	MP2C	Z	100.417	3.5
18	MP2C	Mx	-.114	3.5
19	MP2A	X	-130.508	.5
20	MP2A	Z	75.349	.5
21	MP2A	Mx	.015	.5
22	MP2A	X	-130.508	3.5
23	MP2A	Z	75.349	3.5
24	MP2A	Mx	.015	3.5
25	MP2B	X	-115.428	.5
26	MP2B	Z	66.642	.5
27	MP2B	Mx	-.067	.5
28	MP2B	X	-115.428	3.5
29	MP2B	Z	66.642	3.5
30	MP2B	Mx	-.067	3.5
31	MP2C	X	-173.928	.5
32	MP2C	Z	100.417	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP2C	Mx	.149	.5
34	MP2C	X	-173.928	3.5
35	MP2C	Z	100.417	3.5
36	MP2C	Mx	.149	3.5
37	MP3A	X	-49.291	1
38	MP3A	Z	28.458	1
39	MP3A	Mx	.025	1
40	MP3A	X	-49.291	3
41	MP3A	Z	28.458	3
42	MP3A	Mx	.025	3
43	MP3B	X	-35.497	1
44	MP3B	Z	20.494	1
45	MP3B	Mx	-.02	1
46	MP3B	X	-35.497	3
47	MP3B	Z	20.494	3
48	MP3B	Mx	-.02	3
49	MP3C	X	-89.007	1
50	MP3C	Z	51.388	1
51	MP3C	Mx	.009	1
52	MP3C	X	-89.007	3
53	MP3C	Z	51.388	3
54	MP3C	Mx	.009	3
55	MP2A	X	-10.977	4
56	MP2A	Z	6.338	4
57	MP2A	Mx	.005	4
58	MP2B	X	-9.877	4
59	MP2B	Z	5.703	4
60	MP2B	Mx	-.006	4
61	MP2C	X	-14.143	4
62	MP2C	Z	8.166	4
63	MP2C	Mx	.001	4
64	M101	X	-133.871	.75
65	M101	Z	77.29	.75
66	M101	Mx	0	.75
67	MP2A	X	-54.209	2
68	MP2A	Z	31.298	2
69	MP2A	Mx	.027	2
70	MP2B	X	-48.229	2
71	MP2B	Z	27.845	2
72	MP2B	Mx	-.028	2
73	MP2C	X	-71.429	2
74	MP2C	Z	41.24	2
75	MP2C	Mx	.007	2
76	MP3A	X	-47.337	2
77	MP3A	Z	27.33	2
78	MP3A	Mx	.024	2
79	MP3B	X	-39.065	2
80	MP3B	Z	22.554	2
81	MP3B	Mx	-.023	2
82	MP3C	X	-71.153	2
83	MP3C	Z	41.08	2
84	MP3C	Mx	.007	2
85	MP4A	X	-96.672	.25
86	MP4A	Z	55.813	.25
87	MP4A	Mx	.048	.25
88	MP4A	X	-96.672	3.75
89	MP4A	Z	55.813	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
90	MP4A	Mx	.048	3.75
91	MP4B	X	-80.216	.25
92	MP4B	Z	46.313	.25
93	MP4B	Mx	-.046	.25
94	MP4B	X	-80.216	3.75
95	MP4B	Z	46.313	3.75
96	MP4B	Mx	-.046	3.75
97	MP4C	X	-144.053	.25
98	MP4C	Z	83.169	.25
99	MP4C	Mx	.014	.25
100	MP4C	X	-144.053	3.75
101	MP4C	Z	83.169	3.75
102	MP4C	Mx	.014	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-133.285	.5
2	MP2A	Z	0	.5
3	MP2A	Mx	.067	.5
4	MP2A	X	-133.285	3.5
5	MP2A	Z	0	3.5
6	MP2A	Mx	.067	3.5
7	MP2B	X	-150.697	.5
8	MP2B	Z	0	.5
9	MP2B	Mx	-.015	.5
10	MP2B	X	-150.697	3.5
11	MP2B	Z	0	3.5
12	MP2B	Mx	-.015	3.5
13	MP2C	X	-194.787	.5
14	MP2C	Z	0	.5
15	MP2C	Mx	-.155	.5
16	MP2C	X	-194.787	3.5
17	MP2C	Z	0	3.5
18	MP2C	Mx	-.155	3.5
19	MP2A	X	-133.285	.5
20	MP2A	Z	0	.5
21	MP2A	Mx	.067	.5
22	MP2A	X	-133.285	3.5
23	MP2A	Z	0	3.5
24	MP2A	Mx	.067	3.5
25	MP2B	X	-150.697	.5
26	MP2B	Z	0	.5
27	MP2B	Mx	-.115	.5
28	MP2B	X	-150.697	3.5
29	MP2B	Z	0	3.5
30	MP2B	Mx	-.115	3.5
31	MP2C	X	-194.787	.5
32	MP2C	Z	0	.5
33	MP2C	Mx	.089	.5
34	MP2C	X	-194.787	3.5
35	MP2C	Z	0	3.5
36	MP2C	Mx	.089	3.5
37	MP3A	X	-40.989	1
38	MP3A	Z	0	1
39	MP3A	Mx	.02	1
40	MP3A	X	-40.989	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
41	MP3A	Z	0	3
42	MP3A	Mx	.02	3
43	MP3B	X	-56.916	1
44	MP3B	Z	0	1
45	MP3B	Mx	-.025	1
46	MP3B	X	-56.916	3
47	MP3B	Z	0	3
48	MP3B	Mx	-.025	3
49	MP3C	X	-97.245	1
50	MP3C	Z	0	1
51	MP3C	Mx	-.017	1
52	MP3C	X	-97.245	3
53	MP3C	Z	0	3
54	MP3C	Mx	-.017	3
55	MP2A	X	-11.405	4
56	MP2A	Z	0	4
57	MP2A	Mx	.006	4
58	MP2B	X	-12.675	4
59	MP2B	Z	0	4
60	MP2B	Mx	-.005	4
61	MP2C	X	-15.89	4
62	MP2C	Z	0	4
63	MP2C	Mx	-.003	4
64	M101	X	-168.852	.75
65	M101	Z	0	.75
66	M101	Mx	0	.75
67	MP2A	X	-55.69	2
68	MP2A	Z	0	2
69	MP2A	Mx	.028	2
70	MP2B	X	-62.596	2
71	MP2B	Z	0	2
72	MP2B	Mx	-.027	2
73	MP2C	X	-80.081	2
74	MP2C	Z	0	2
75	MP2C	Mx	-.014	2
76	MP3A	X	-45.109	2
77	MP3A	Z	0	2
78	MP3A	Mx	.023	2
79	MP3B	X	-54.66	2
80	MP3B	Z	0	2
81	MP3B	Mx	-.024	2
82	MP3C	X	-78.843	2
83	MP3C	Z	0	2
84	MP3C	Mx	-.013	2
85	MP4A	X	-92.626	.25
86	MP4A	Z	0	.25
87	MP4A	Mx	.046	.25
88	MP4A	X	-92.626	3.75
89	MP4A	Z	0	3.75
90	MP4A	Mx	.046	3.75
91	MP4B	X	-111.627	.25
92	MP4B	Z	0	.25
93	MP4B	Mx	-.048	.25
94	MP4B	X	-111.627	3.75
95	MP4B	Z	0	3.75
96	MP4B	Mx	-.048	3.75
97	MP4C	X	-159.739	.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
98	MP4C	Z	0	.25
99	MP4C	Mx	-.027	.25
100	MP4C	X	-159.739	3.75
101	MP4C	Z	0	3.75
102	MP4C	Mx	-.027	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-130.508	.5
2	MP2A	Z	-75.349	.5
3	MP2A	Mx	.015	.5
4	MP2A	X	-130.508	3.5
5	MP2A	Z	-75.349	3.5
6	MP2A	Mx	.015	3.5
7	MP2B	X	-160.667	.5
8	MP2B	Z	-92.761	.5
9	MP2B	Mx	.061	.5
10	MP2B	X	-160.667	3.5
11	MP2B	Z	-92.761	3.5
12	MP2B	Mx	.061	3.5
13	MP2C	X	-140.35	.5
14	MP2C	Z	-81.031	.5
15	MP2C	Mx	-.132	.5
16	MP2C	X	-140.35	3.5
17	MP2C	Z	-81.031	3.5
18	MP2C	Mx	-.132	3.5
19	MP2A	X	-130.508	.5
20	MP2A	Z	-75.349	.5
21	MP2A	Mx	.115	.5
22	MP2A	X	-130.508	3.5
23	MP2A	Z	-75.349	3.5
24	MP2A	Mx	.115	3.5
25	MP2B	X	-160.667	.5
26	MP2B	Z	-92.761	.5
27	MP2B	Mx	-.153	.5
28	MP2B	X	-160.667	3.5
29	MP2B	Z	-92.761	3.5
30	MP2B	Mx	-.153	3.5
31	MP2C	X	-140.35	.5
32	MP2C	Z	-81.031	.5
33	MP2C	Mx	.007	.5
34	MP2C	X	-140.35	3.5
35	MP2C	Z	-81.031	3.5
36	MP2C	Mx	.007	3.5
37	MP3A	X	-49.291	1
38	MP3A	Z	-28.458	1
39	MP3A	Mx	.025	1
40	MP3A	X	-49.291	3
41	MP3A	Z	-28.458	3
42	MP3A	Mx	.025	3
43	MP3B	X	-76.877	1
44	MP3B	Z	-44.385	1
45	MP3B	Mx	-.022	1
46	MP3B	X	-76.877	3
47	MP3B	Z	-44.385	3
48	MP3B	Mx	-.022	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
49	MP3C	X	-58.294	1
50	MP3C	Z	-33.656	1
51	MP3C	Mx	-.026	1
52	MP3C	X	-58.294	3
53	MP3C	Z	-33.656	3
54	MP3C	Mx	-.026	3
55	MP2A	X	-10.977	4
56	MP2A	Z	-6.338	4
57	MP2A	Mx	.005	4
58	MP2B	X	-13.176	4
59	MP2B	Z	-7.607	4
60	MP2B	Mx	-.004	4
61	MP2C	X	-11.695	4
62	MP2C	Z	-6.752	4
63	MP2C	Mx	-.005	4
64	M101	X	-133.871	.75
65	M101	Z	-77.29	.75
66	M101	Mx	0	.75
67	MP2A	X	-54.209	2
68	MP2A	Z	-31.298	2
69	MP2A	Mx	.027	2
70	MP2B	X	-66.17	2
71	MP2B	Z	-38.203	2
72	MP2B	Mx	-.019	2
73	MP2C	X	-58.113	2
74	MP2C	Z	-33.551	2
75	MP2C	Mx	-.026	2
76	MP3A	X	-47.337	2
77	MP3A	Z	-27.33	2
78	MP3A	Mx	.024	2
79	MP3B	X	-63.879	2
80	MP3B	Z	-36.881	2
81	MP3B	Mx	-.018	2
82	MP3C	X	-52.735	2
83	MP3C	Z	-30.447	2
84	MP3C	Mx	-.023	2
85	MP4A	X	-96.672	.25
86	MP4A	Z	-55.813	.25
87	MP4A	Mx	.048	.25
88	MP4A	X	-96.672	3.75
89	MP4A	Z	-55.813	3.75
90	MP4A	Mx	.048	3.75
91	MP4B	X	-129.582	.25
92	MP4B	Z	-74.814	.25
93	MP4B	Mx	-.037	.25
94	MP4B	X	-129.582	3.75
95	MP4B	Z	-74.814	3.75
96	MP4B	Mx	-.037	3.75
97	MP4C	X	-107.412	.25
98	MP4C	Z	-62.014	.25
99	MP4C	Mx	-.048	.25
100	MP4C	X	-107.412	3.75
101	MP4C	Z	-62.014	3.75
102	MP4C	Mx	-.048	3.75

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	MP2A	X	-92.761	.5
2	MP2A	Z	-160.667	.5
3	MP2A	Mx	-.061	.5
4	MP2A	X	-92.761	3.5
5	MP2A	Z	-160.667	3.5
6	MP2A	Mx	-.061	3.5
7	MP2B	X	-101.467	.5
8	MP2B	Z	-175.746	.5
9	MP2B	Mx	.135	.5
10	MP2B	X	-101.467	3.5
11	MP2B	Z	-175.746	3.5
12	MP2B	Mx	.135	3.5
13	MP2C	X	-67.692	.5
14	MP2C	Z	-117.247	.5
15	MP2C	Mx	-.082	.5
16	MP2C	X	-67.692	3.5
17	MP2C	Z	-117.247	3.5
18	MP2C	Mx	-.082	3.5
19	MP2A	X	-92.761	.5
20	MP2A	Z	-160.667	.5
21	MP2A	Mx	.153	.5
22	MP2A	X	-92.761	3.5
23	MP2A	Z	-160.667	3.5
24	MP2A	Mx	.153	3.5
25	MP2B	X	-101.467	.5
26	MP2B	Z	-175.746	.5
27	MP2B	Mx	-.135	.5
28	MP2B	X	-101.467	3.5
29	MP2B	Z	-175.746	3.5
30	MP2B	Mx	-.135	3.5
31	MP2C	X	-67.692	.5
32	MP2C	Z	-117.247	.5
33	MP2C	Mx	-.051	.5
34	MP2C	X	-67.692	3.5
35	MP2C	Z	-117.247	3.5
36	MP2C	Mx	-.051	3.5
37	MP3A	X	-44.385	1
38	MP3A	Z	-76.877	1
39	MP3A	Mx	.022	1
40	MP3A	X	-44.385	3
41	MP3A	Z	-76.877	3
42	MP3A	Mx	.022	3
43	MP3B	X	-52.349	1
44	MP3B	Z	-90.67	1
45	MP3B	Mx	0	1
46	MP3B	X	-52.349	3
47	MP3B	Z	-90.67	3
48	MP3B	Mx	0	3
49	MP3C	X	-21.455	1
50	MP3C	Z	-37.161	1
51	MP3C	Mx	-.021	1
52	MP3C	X	-21.455	3
53	MP3C	Z	-37.161	3
54	MP3C	Mx	-.021	3
55	MP2A	X	-7.607	4
56	MP2A	Z	-13.176	4
57	MP2A	Mx	.004	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP2B	X	-8.242	4
59	MP2B	Z	-14.276	4
60	MP2B	Mx	0	4
61	MP2C	X	-5.779	4
62	MP2C	Z	-10.01	4
63	MP2C	Mx	-.006	4
64	M101	X	-63.019	.75
65	M101	Z	-109.152	.75
66	M101	Mx	0	.75
67	MP2A	X	-38.203	2
68	MP2A	Z	-66.17	2
69	MP2A	Mx	.019	2
70	MP2B	X	-41.656	2
71	MP2B	Z	-72.151	2
72	MP2B	Mx	0	2
73	MP2C	X	-28.261	2
74	MP2C	Z	-48.95	2
75	MP2C	Mx	-.028	2
76	MP3A	X	-36.881	2
77	MP3A	Z	-63.879	2
78	MP3A	Mx	.018	2
79	MP3B	X	-41.656	2
80	MP3B	Z	-72.151	2
81	MP3B	Mx	0	2
82	MP3C	X	-23.13	2
83	MP3C	Z	-40.063	2
84	MP3C	Mx	-.023	2
85	MP4A	X	-74.814	.25
86	MP4A	Z	-129.582	.25
87	MP4A	Mx	.037	.25
88	MP4A	X	-74.814	3.75
89	MP4A	Z	-129.582	3.75
90	MP4A	Mx	.037	3.75
91	MP4B	X	-84.315	.25
92	MP4B	Z	-146.037	.25
93	MP4B	Mx	0	.25
94	MP4B	X	-84.315	3.75
95	MP4B	Z	-146.037	3.75
96	MP4B	Mx	0	3.75
97	MP4C	X	-47.459	.25
98	MP4C	Z	-82.201	.25
99	MP4C	Mx	-.047	.25
100	MP4C	X	-47.459	3.75
101	MP4C	Z	-82.201	3.75
102	MP4C	Mx	-.047	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	.5
2	MP2A	Z	-36.151	.5
3	MP2A	Mx	-.024	.5
4	MP2A	X	0	3.5
5	MP2A	Z	-36.151	3.5
6	MP2A	Mx	-.024	3.5
7	MP2B	X	0	.5
8	MP2B	Z	-33.278	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
9	MP2B	Mx	.028	.5
10	MP2B	X	0	3.5
11	MP2B	Z	-33.278	3.5
12	MP2B	Mx	.028	3.5
13	MP2C	X	0	.5
14	MP2C	Z	-26.004	.5
15	MP2C	Mx	-.006	.5
16	MP2C	X	0	3.5
17	MP2C	Z	-26.004	3.5
18	MP2C	Mx	-.006	3.5
19	MP2A	X	0	.5
20	MP2A	Z	-36.151	.5
21	MP2A	Mx	.024	.5
22	MP2A	X	0	3.5
23	MP2A	Z	-36.151	3.5
24	MP2A	Mx	.024	3.5
25	MP2B	X	0	.5
26	MP2B	Z	-33.278	.5
27	MP2B	Mx	-.011	.5
28	MP2B	X	0	3.5
29	MP2B	Z	-33.278	3.5
30	MP2B	Mx	-.011	3.5
31	MP2C	X	0	.5
32	MP2C	Z	-26.004	.5
33	MP2C	Mx	-.018	.5
34	MP2C	X	0	3.5
35	MP2C	Z	-26.004	3.5
36	MP2C	Mx	-.018	3.5
37	MP3A	X	0	1
38	MP3A	Z	-19.227	1
39	MP3A	Mx	0	1
40	MP3A	X	0	3
41	MP3A	Z	-19.227	3
42	MP3A	Mx	0	3
43	MP3B	X	0	1
44	MP3B	Z	-16.467	1
45	MP3B	Mx	.004	1
46	MP3B	X	0	3
47	MP3B	Z	-16.467	3
48	MP3B	Mx	.004	3
49	MP3C	X	0	1
50	MP3C	Z	-9.48	1
51	MP3C	Mx	-.004	1
52	MP3C	X	0	3
53	MP3C	Z	-9.48	3
54	MP3C	Mx	-.004	3
55	MP2A	X	0	4
56	MP2A	Z	-3.932	4
57	MP2A	Mx	0	4
58	MP2B	X	0	4
59	MP2B	Z	-3.686	4
60	MP2B	Mx	.000922	4
61	MP2C	X	0	4
62	MP2C	Z	-3.065	4
63	MP2C	Mx	-.001	4
64	M101	X	0	.75
65	M101	Z	-21.336	.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
66	M101	Mx	0	.75
67	MP2A	X	0	2
68	MP2A	Z	-16.203	2
69	MP2A	Mx	0	2
70	MP2B	X	0	2
71	MP2B	Z	-14.97	2
72	MP2B	Mx	.004	2
73	MP2C	X	0	2
74	MP2C	Z	-11.847	2
75	MP2C	Mx	-.006	2
76	MP3A	X	0	2
77	MP3A	Z	-16.203	2
78	MP3A	Mx	0	2
79	MP3B	X	0	2
80	MP3B	Z	-14.501	2
81	MP3B	Mx	.004	2
82	MP3C	X	0	2
83	MP3C	Z	-10.192	2
84	MP3C	Mx	-.005	2
85	MP4A	X	0	.25
86	MP4A	Z	-30.351	.25
87	MP4A	Mx	0	.25
88	MP4A	X	0	3.75
89	MP4A	Z	-30.351	3.75
90	MP4A	Mx	0	3.75
91	MP4B	X	0	.25
92	MP4B	Z	-27.208	.25
93	MP4B	Mx	.007	.25
94	MP4B	X	0	3.75
95	MP4B	Z	-27.208	3.75
96	MP4B	Mx	.007	3.75
97	MP4C	X	0	.25
98	MP4C	Z	-19.248	.25
99	MP4C	Mx	-.009	.25
100	MP4C	X	0	3.75
101	MP4C	Z	-19.248	3.75
102	MP4C	Mx	-.009	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	16.639	.5
2	MP2A	Z	-28.82	.5
3	MP2A	Mx	-.028	.5
4	MP2A	X	16.639	3.5
5	MP2A	Z	-28.82	3.5
6	MP2A	Mx	-.028	3.5
7	MP2B	X	13.766	.5
8	MP2B	Z	-23.844	.5
9	MP2B	Mx	.021	.5
10	MP2B	X	13.766	3.5
11	MP2B	Z	-23.844	3.5
12	MP2B	Mx	.021	3.5
13	MP2C	X	15.702	.5
14	MP2C	Z	-27.196	.5
15	MP2C	Mx	.006	.5
16	MP2C	X	15.702	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP2C	Z	-27.196	3.5
18	MP2C	Mx	.006	3.5
19	MP2A	X	16.639	.5
20	MP2A	Z	-28.82	.5
21	MP2A	Mx	.011	.5
22	MP2A	X	16.639	3.5
23	MP2A	Z	-28.82	3.5
24	MP2A	Mx	.011	3.5
25	MP2B	X	13.766	.5
26	MP2B	Z	-23.844	.5
27	MP2B	Mx	.003	.5
28	MP2B	X	13.766	3.5
29	MP2B	Z	-23.844	3.5
30	MP2B	Mx	.003	3.5
31	MP2C	X	15.702	.5
32	MP2C	Z	-27.196	.5
33	MP2C	Mx	-.026	.5
34	MP2C	X	15.702	3.5
35	MP2C	Z	-27.196	3.5
36	MP2C	Mx	-.026	3.5
37	MP3A	X	8.234	1
38	MP3A	Z	-14.261	1
39	MP3A	Mx	-.004	1
40	MP3A	X	8.234	3
41	MP3A	Z	-14.261	3
42	MP3A	Mx	-.004	3
43	MP3B	X	5.474	1
44	MP3B	Z	-9.482	1
45	MP3B	Mx	.005	1
46	MP3B	X	5.474	3
47	MP3B	Z	-9.482	3
48	MP3B	Mx	.005	3
49	MP3C	X	7.333	1
50	MP3C	Z	-12.701	1
51	MP3C	Mx	-.005	1
52	MP3C	X	7.333	3
53	MP3C	Z	-12.701	3
54	MP3C	Mx	-.005	3
55	MP2A	X	1.843	4
56	MP2A	Z	-3.193	4
57	MP2A	Mx	-.000922	4
58	MP2B	X	1.598	4
59	MP2B	Z	-2.767	4
60	MP2B	Mx	.001	4
61	MP2C	X	1.763	4
62	MP2C	Z	-3.054	4
63	MP2C	Mx	-.001	4
64	M101	X	11.901	.75
65	M101	Z	-20.612	.75
66	M101	Mx	0	.75
67	MP2A	X	7.485	2
68	MP2A	Z	-12.964	2
69	MP2A	Mx	-.004	2
70	MP2B	X	6.252	2
71	MP2B	Z	-10.828	2
72	MP2B	Mx	.005	2
73	MP2C	X	7.082	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
74	MP2C	Z	-12.267	2
75	MP2C	Mx	-.005	2
76	MP3A	X	7.251	2
77	MP3A	Z	-12.558	2
78	MP3A	Mx	-.004	2
79	MP3B	X	5.549	2
80	MP3B	Z	-9.611	2
81	MP3B	Mx	.005	2
82	MP3C	X	6.695	2
83	MP3C	Z	-11.596	2
84	MP3C	Mx	-.004	2
85	MP4A	X	13.604	.25
86	MP4A	Z	-23.562	.25
87	MP4A	Mx	-.007	.25
88	MP4A	X	13.604	3.75
89	MP4A	Z	-23.562	3.75
90	MP4A	Mx	-.007	3.75
91	MP4B	X	10.46	.25
92	MP4B	Z	-18.118	.25
93	MP4B	Mx	.009	.25
94	MP4B	X	10.46	3.75
95	MP4B	Z	-18.118	3.75
96	MP4B	Mx	.009	3.75
97	MP4C	X	12.578	.25
98	MP4C	Z	-21.786	.25
99	MP4C	Mx	-.008	.25
100	MP4C	X	12.578	3.75
101	MP4C	Z	-21.786	3.75
102	MP4C	Mx	-.008	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	23.844	.5
2	MP2A	Z	-13.766	.5
3	MP2A	Mx	-.021	.5
4	MP2A	X	23.844	3.5
5	MP2A	Z	-13.766	3.5
6	MP2A	Mx	-.021	3.5
7	MP2B	X	21.356	.5
8	MP2B	Z	-12.33	.5
9	MP2B	Mx	.012	.5
10	MP2B	X	21.356	3.5
11	MP2B	Z	-12.33	3.5
12	MP2B	Mx	.012	3.5
13	MP2C	X	31.008	.5
14	MP2C	Z	-17.902	.5
15	MP2C	Mx	.02	.5
16	MP2C	X	31.008	3.5
17	MP2C	Z	-17.902	3.5
18	MP2C	Mx	.02	3.5
19	MP2A	X	23.844	.5
20	MP2A	Z	-13.766	.5
21	MP2A	Mx	-.003	.5
22	MP2A	X	23.844	3.5
23	MP2A	Z	-13.766	3.5
24	MP2A	Mx	-.003	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP2B	X	21.356	.5
26	MP2B	Z	-12.33	.5
27	MP2B	Mx	.012	.5
28	MP2B	X	21.356	3.5
29	MP2B	Z	-12.33	3.5
30	MP2B	Mx	.012	3.5
31	MP2C	X	31.008	.5
32	MP2C	Z	-17.902	.5
33	MP2C	Mx	-.027	.5
34	MP2C	X	31.008	3.5
35	MP2C	Z	-17.902	3.5
36	MP2C	Mx	-.027	3.5
37	MP3A	X	9.482	1
38	MP3A	Z	-5.474	1
39	MP3A	Mx	-.005	1
40	MP3A	X	9.482	3
41	MP3A	Z	-5.474	3
42	MP3A	Mx	-.005	3
43	MP3B	X	7.092	1
44	MP3B	Z	-4.094	1
45	MP3B	Mx	.004	1
46	MP3B	X	7.092	3
47	MP3B	Z	-4.094	3
48	MP3B	Mx	.004	3
49	MP3C	X	16.363	1
50	MP3C	Z	-9.447	1
51	MP3C	Mx	-.002	1
52	MP3C	X	16.363	3
53	MP3C	Z	-9.447	3
54	MP3C	Mx	-.002	3
55	MP2A	X	2.767	4
56	MP2A	Z	-1.598	4
57	MP2A	Mx	-.001	4
58	MP2B	X	2.555	4
59	MP2B	Z	-1.475	4
60	MP2B	Mx	.001	4
61	MP2C	X	3.379	4
62	MP2C	Z	-1.951	4
63	MP2C	Mx	-.000339	4
64	M101	X	24.881	.75
65	M101	Z	-14.365	.75
66	M101	Mx	0	.75
67	MP2A	X	10.828	2
68	MP2A	Z	-6.252	2
69	MP2A	Mx	-.005	2
70	MP2B	X	9.76	2
71	MP2B	Z	-5.635	2
72	MP2B	Mx	.006	2
73	MP2C	X	13.904	2
74	MP2C	Z	-8.027	2
75	MP2C	Mx	-.001	2
76	MP3A	X	9.611	2
77	MP3A	Z	-5.549	2
78	MP3A	Mx	-.005	2
79	MP3B	X	8.137	2
80	MP3B	Z	-4.698	2
81	MP3B	Mx	.005	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
82	MP3C	X	13.855	2
83	MP3C	Z	-7.999	2
84	MP3C	Mx	-.001	2
85	MP4A	X	18.118	.25
86	MP4A	Z	-10.46	.25
87	MP4A	Mx	-.009	.25
88	MP4A	X	18.118	3.75
89	MP4A	Z	-10.46	3.75
90	MP4A	Mx	-.009	3.75
91	MP4B	X	15.396	.25
92	MP4B	Z	-8.889	.25
93	MP4B	Mx	.009	.25
94	MP4B	X	15.396	3.75
95	MP4B	Z	-8.889	3.75
96	MP4B	Mx	.009	3.75
97	MP4C	X	25.956	.25
98	MP4C	Z	-14.986	.25
99	MP4C	Mx	-.003	.25
100	MP4C	X	25.956	3.75
101	MP4C	Z	-14.986	3.75
102	MP4C	Mx	-.003	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	24.659	.5
2	MP2A	Z	0	.5
3	MP2A	Mx	-.012	.5
4	MP2A	X	24.659	3.5
5	MP2A	Z	0	3.5
6	MP2A	Mx	-.012	3.5
7	MP2B	X	27.532	.5
8	MP2B	Z	0	.5
9	MP2B	Mx	.003	.5
10	MP2B	X	27.532	3.5
11	MP2B	Z	0	3.5
12	MP2B	Mx	.003	3.5
13	MP2C	X	34.807	.5
14	MP2C	Z	0	.5
15	MP2C	Mx	.028	.5
16	MP2C	X	34.807	3.5
17	MP2C	Z	0	3.5
18	MP2C	Mx	.028	3.5
19	MP2A	X	24.659	.5
20	MP2A	Z	0	.5
21	MP2A	Mx	-.012	.5
22	MP2A	X	24.659	3.5
23	MP2A	Z	0	3.5
24	MP2A	Mx	-.012	3.5
25	MP2B	X	27.532	.5
26	MP2B	Z	0	.5
27	MP2B	Mx	.021	.5
28	MP2B	X	27.532	3.5
29	MP2B	Z	0	3.5
30	MP2B	Mx	.021	3.5
31	MP2C	X	34.807	.5
32	MP2C	Z	0	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP2C	Mx	-.016	.5
34	MP2C	X	34.807	3.5
35	MP2C	Z	0	3.5
36	MP2C	Mx	-.016	3.5
37	MP3A	X	8.189	1
38	MP3A	Z	0	1
39	MP3A	Mx	-.004	1
40	MP3A	X	8.189	3
41	MP3A	Z	0	3
42	MP3A	Mx	-.004	3
43	MP3B	X	10.948	1
44	MP3B	Z	0	1
45	MP3B	Mx	.005	1
46	MP3B	X	10.948	3
47	MP3B	Z	0	3
48	MP3B	Mx	.005	3
49	MP3C	X	17.936	1
50	MP3C	Z	0	1
51	MP3C	Mx	.003	1
52	MP3C	X	17.936	3
53	MP3C	Z	0	3
54	MP3C	Mx	.003	3
55	MP2A	X	2.95	4
56	MP2A	Z	0	4
57	MP2A	Mx	-.001	4
58	MP2B	X	3.196	4
59	MP2B	Z	0	4
60	MP2B	Mx	.001	4
61	MP2C	X	3.817	4
62	MP2C	Z	0	4
63	MP2C	Mx	.000653	4
64	M101	X	31.195	.75
65	M101	Z	0	.75
66	M101	Mx	0	.75
67	MP2A	X	11.27	2
68	MP2A	Z	0	2
69	MP2A	Mx	-.006	2
70	MP2B	X	12.503	2
71	MP2B	Z	0	2
72	MP2B	Mx	.005	2
73	MP2C	X	15.626	2
74	MP2C	Z	0	2
75	MP2C	Mx	.003	2
76	MP3A	X	9.396	2
77	MP3A	Z	0	2
78	MP3A	Mx	-.005	2
79	MP3B	X	11.097	2
80	MP3B	Z	0	2
81	MP3B	Mx	.005	2
82	MP3C	X	15.407	2
83	MP3C	Z	0	2
84	MP3C	Mx	.003	2
85	MP4A	X	17.777	.25
86	MP4A	Z	0	.25
87	MP4A	Mx	-.009	.25
88	MP4A	X	17.777	3.75
89	MP4A	Z	0	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
90	MP4A	Mx	-.009	3.75
91	MP4B	X	20.921	.25
92	MP4B	Z	0	.25
93	MP4B	Mx	.009	.25
94	MP4B	X	20.921	3.75
95	MP4B	Z	0	3.75
96	MP4B	Mx	.009	3.75
97	MP4C	X	28.88	.25
98	MP4C	Z	0	.25
99	MP4C	Mx	.005	.25
100	MP4C	X	28.88	3.75
101	MP4C	Z	0	3.75
102	MP4C	Mx	.005	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	23.844	.5
2	MP2A	Z	13.766	.5
3	MP2A	Mx	-.003	.5
4	MP2A	X	23.844	3.5
5	MP2A	Z	13.766	3.5
6	MP2A	Mx	-.003	3.5
7	MP2B	X	28.82	.5
8	MP2B	Z	16.639	.5
9	MP2B	Mx	-.011	.5
10	MP2B	X	28.82	3.5
11	MP2B	Z	16.639	3.5
12	MP2B	Mx	-.011	3.5
13	MP2C	X	25.468	.5
14	MP2C	Z	14.704	.5
15	MP2C	Mx	.024	.5
16	MP2C	X	25.468	3.5
17	MP2C	Z	14.704	3.5
18	MP2C	Mx	.024	3.5
19	MP2A	X	23.844	.5
20	MP2A	Z	13.766	.5
21	MP2A	Mx	-.021	.5
22	MP2A	X	23.844	3.5
23	MP2A	Z	13.766	3.5
24	MP2A	Mx	-.021	3.5
25	MP2B	X	28.82	.5
26	MP2B	Z	16.639	.5
27	MP2B	Mx	.028	.5
28	MP2B	X	28.82	3.5
29	MP2B	Z	16.639	3.5
30	MP2B	Mx	.028	3.5
31	MP2C	X	25.468	.5
32	MP2C	Z	14.704	.5
33	MP2C	Mx	-.001	.5
34	MP2C	X	25.468	3.5
35	MP2C	Z	14.704	3.5
36	MP2C	Mx	-.001	3.5
37	MP3A	X	9.482	1
38	MP3A	Z	5.474	1
39	MP3A	Mx	-.005	1
40	MP3A	X	9.482	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
41	MP3A	Z	5.474	3
42	MP3A	Mx	-.005	3
43	MP3B	X	14.261	1
44	MP3B	Z	8.234	1
45	MP3B	Mx	.004	1
46	MP3B	X	14.261	3
47	MP3B	Z	8.234	3
48	MP3B	Mx	.004	3
49	MP3C	X	11.041	1
50	MP3C	Z	6.375	1
51	MP3C	Mx	.005	1
52	MP3C	X	11.041	3
53	MP3C	Z	6.375	3
54	MP3C	Mx	.005	3
55	MP2A	X	2.767	4
56	MP2A	Z	1.598	4
57	MP2A	Mx	-.001	4
58	MP2B	X	3.193	4
59	MP2B	Z	1.843	4
60	MP2B	Mx	.000922	4
61	MP2C	X	2.906	4
62	MP2C	Z	1.678	4
63	MP2C	Mx	.001	4
64	M101	X	24.881	.75
65	M101	Z	14.365	.75
66	M101	Mx	0	.75
67	MP2A	X	10.828	2
68	MP2A	Z	6.252	2
69	MP2A	Mx	-.005	2
70	MP2B	X	12.964	2
71	MP2B	Z	7.485	2
72	MP2B	Mx	.004	2
73	MP2C	X	11.525	2
74	MP2C	Z	6.654	2
75	MP2C	Mx	.005	2
76	MP3A	X	9.611	2
77	MP3A	Z	5.549	2
78	MP3A	Mx	-.005	2
79	MP3B	X	12.558	2
80	MP3B	Z	7.251	2
81	MP3B	Mx	.004	2
82	MP3C	X	10.573	2
83	MP3C	Z	6.104	2
84	MP3C	Mx	.005	2
85	MP4A	X	18.118	.25
86	MP4A	Z	10.46	.25
87	MP4A	Mx	-.009	.25
88	MP4A	X	18.118	3.75
89	MP4A	Z	10.46	3.75
90	MP4A	Mx	-.009	3.75
91	MP4B	X	23.562	.25
92	MP4B	Z	13.604	.25
93	MP4B	Mx	.007	.25
94	MP4B	X	23.562	3.75
95	MP4B	Z	13.604	3.75
96	MP4B	Mx	.007	3.75
97	MP4C	X	19.895	.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
98	MP4C	Z	11.486	.25
99	MP4C	Mx	.009	.25
100	MP4C	X	19.895	3.75
101	MP4C	Z	11.486	3.75
102	MP4C	Mx	.009	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	16.639	.5
2	MP2A	Z	28.82	.5
3	MP2A	Mx	.011	.5
4	MP2A	X	16.639	3.5
5	MP2A	Z	28.82	3.5
6	MP2A	Mx	.011	3.5
7	MP2B	X	18.076	.5
8	MP2B	Z	31.308	.5
9	MP2B	Mx	-.024	.5
10	MP2B	X	18.076	3.5
11	MP2B	Z	31.308	3.5
12	MP2B	Mx	-.024	3.5
13	MP2C	X	12.503	.5
14	MP2C	Z	21.656	.5
15	MP2C	Mx	.015	.5
16	MP2C	X	12.503	3.5
17	MP2C	Z	21.656	3.5
18	MP2C	Mx	.015	3.5
19	MP2A	X	16.639	.5
20	MP2A	Z	28.82	.5
21	MP2A	Mx	-.028	.5
22	MP2A	X	16.639	3.5
23	MP2A	Z	28.82	3.5
24	MP2A	Mx	-.028	3.5
25	MP2B	X	18.076	.5
26	MP2B	Z	31.308	.5
27	MP2B	Mx	.024	.5
28	MP2B	X	18.076	3.5
29	MP2B	Z	31.308	3.5
30	MP2B	Mx	.024	3.5
31	MP2C	X	12.503	.5
32	MP2C	Z	21.656	.5
33	MP2C	Mx	.009	.5
34	MP2C	X	12.503	3.5
35	MP2C	Z	21.656	3.5
36	MP2C	Mx	.009	3.5
37	MP3A	X	8.234	1
38	MP3A	Z	14.261	1
39	MP3A	Mx	-.004	1
40	MP3A	X	8.234	3
41	MP3A	Z	14.261	3
42	MP3A	Mx	-.004	3
43	MP3B	X	9.613	1
44	MP3B	Z	16.651	1
45	MP3B	Mx	0	1
46	MP3B	X	9.613	3
47	MP3B	Z	16.651	3
48	MP3B	Mx	0	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
49	MP3C	X	4.261	1
50	MP3C	Z	7.38	1
51	MP3C	Mx	.004	1
52	MP3C	X	4.261	3
53	MP3C	Z	7.38	3
54	MP3C	Mx	.004	3
55	MP2A	X	1.843	4
56	MP2A	Z	3.193	4
57	MP2A	Mx	-.000922	4
58	MP2B	X	1.966	4
59	MP2B	Z	3.405	4
60	MP2B	Mx	0	4
61	MP2C	X	1.49	4
62	MP2C	Z	2.581	4
63	MP2C	Mx	.001	4
64	M101	X	11.901	.75
65	M101	Z	20.612	.75
66	M101	Mx	0	.75
67	MP2A	X	7.485	2
68	MP2A	Z	12.964	2
69	MP2A	Mx	-.004	2
70	MP2B	X	8.102	2
71	MP2B	Z	14.032	2
72	MP2B	Mx	0	2
73	MP2C	X	5.709	2
74	MP2C	Z	9.889	2
75	MP2C	Mx	.006	2
76	MP3A	X	7.251	2
77	MP3A	Z	12.558	2
78	MP3A	Mx	-.004	2
79	MP3B	X	8.102	2
80	MP3B	Z	14.032	2
81	MP3B	Mx	0	2
82	MP3C	X	4.8	2
83	MP3C	Z	8.315	2
84	MP3C	Mx	.005	2
85	MP4A	X	13.604	.25
86	MP4A	Z	23.562	.25
87	MP4A	Mx	-.007	.25
88	MP4A	X	13.604	3.75
89	MP4A	Z	23.562	3.75
90	MP4A	Mx	-.007	3.75
91	MP4B	X	15.175	.25
92	MP4B	Z	26.285	.25
93	MP4B	Mx	0	.25
94	MP4B	X	15.175	3.75
95	MP4B	Z	26.285	3.75
96	MP4B	Mx	0	3.75
97	MP4C	X	9.078	.25
98	MP4C	Z	15.724	.25
99	MP4C	Mx	.009	.25
100	MP4C	X	9.078	3.75
101	MP4C	Z	15.724	3.75
102	MP4C	Mx	.009	3.75

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

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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	.5
2	MP2A	Z	36.151	.5
3	MP2A	Mx	.024	.5
4	MP2A	X	0	3.5
5	MP2A	Z	36.151	3.5
6	MP2A	Mx	.024	3.5
7	MP2B	X	0	.5
8	MP2B	Z	33.278	.5
9	MP2B	Mx	-.028	.5
10	MP2B	X	0	3.5
11	MP2B	Z	33.278	3.5
12	MP2B	Mx	-.028	3.5
13	MP2C	X	0	.5
14	MP2C	Z	26.004	.5
15	MP2C	Mx	.006	.5
16	MP2C	X	0	3.5
17	MP2C	Z	26.004	3.5
18	MP2C	Mx	.006	3.5
19	MP2A	X	0	.5
20	MP2A	Z	36.151	.5
21	MP2A	Mx	-.024	.5
22	MP2A	X	0	3.5
23	MP2A	Z	36.151	3.5
24	MP2A	Mx	-.024	3.5
25	MP2B	X	0	.5
26	MP2B	Z	33.278	.5
27	MP2B	Mx	.011	.5
28	MP2B	X	0	3.5
29	MP2B	Z	33.278	3.5
30	MP2B	Mx	.011	3.5
31	MP2C	X	0	.5
32	MP2C	Z	26.004	.5
33	MP2C	Mx	.018	.5
34	MP2C	X	0	3.5
35	MP2C	Z	26.004	3.5
36	MP2C	Mx	.018	3.5
37	MP3A	X	0	1
38	MP3A	Z	19.227	1
39	MP3A	Mx	0	1
40	MP3A	X	0	3
41	MP3A	Z	19.227	3
42	MP3A	Mx	0	3
43	MP3B	X	0	1
44	MP3B	Z	16.467	1
45	MP3B	Mx	-.004	1
46	MP3B	X	0	3
47	MP3B	Z	16.467	3
48	MP3B	Mx	-.004	3
49	MP3C	X	0	1
50	MP3C	Z	9.48	1
51	MP3C	Mx	.004	1
52	MP3C	X	0	3
53	MP3C	Z	9.48	3
54	MP3C	Mx	.004	3
55	MP2A	X	0	4
56	MP2A	Z	3.932	4
57	MP2A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP2B	X	0	4
59	MP2B	Z	3.686	4
60	MP2B	Mx	-.000922	4
61	MP2C	X	0	4
62	MP2C	Z	3.065	4
63	MP2C	Mx	.001	4
64	M101	X	0	.75
65	M101	Z	21.336	.75
66	M101	Mx	0	.75
67	MP2A	X	0	2
68	MP2A	Z	16.203	2
69	MP2A	Mx	0	2
70	MP2B	X	0	2
71	MP2B	Z	14.97	2
72	MP2B	Mx	-.004	2
73	MP2C	X	0	2
74	MP2C	Z	11.847	2
75	MP2C	Mx	.006	2
76	MP3A	X	0	2
77	MP3A	Z	16.203	2
78	MP3A	Mx	0	2
79	MP3B	X	0	2
80	MP3B	Z	14.501	2
81	MP3B	Mx	-.004	2
82	MP3C	X	0	2
83	MP3C	Z	10.192	2
84	MP3C	Mx	.005	2
85	MP4A	X	0	.25
86	MP4A	Z	30.351	.25
87	MP4A	Mx	0	.25
88	MP4A	X	0	3.75
89	MP4A	Z	30.351	3.75
90	MP4A	Mx	0	3.75
91	MP4B	X	0	.25
92	MP4B	Z	27.208	.25
93	MP4B	Mx	-.007	.25
94	MP4B	X	0	3.75
95	MP4B	Z	27.208	3.75
96	MP4B	Mx	-.007	3.75
97	MP4C	X	0	.25
98	MP4C	Z	19.248	.25
99	MP4C	Mx	.009	.25
100	MP4C	X	0	3.75
101	MP4C	Z	19.248	3.75
102	MP4C	Mx	.009	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-16.639	.5
2	MP2A	Z	28.82	.5
3	MP2A	Mx	.028	.5
4	MP2A	X	-16.639	3.5
5	MP2A	Z	28.82	3.5
6	MP2A	Mx	.028	3.5
7	MP2B	X	-13.766	.5
8	MP2B	Z	23.844	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
9	MP2B	Mx	-.021	.5
10	MP2B	X	-13.766	3.5
11	MP2B	Z	23.844	3.5
12	MP2B	Mx	-.021	3.5
13	MP2C	X	-15.702	.5
14	MP2C	Z	27.196	.5
15	MP2C	Mx	-.006	.5
16	MP2C	X	-15.702	3.5
17	MP2C	Z	27.196	3.5
18	MP2C	Mx	-.006	3.5
19	MP2A	X	-16.639	.5
20	MP2A	Z	28.82	.5
21	MP2A	Mx	-.011	.5
22	MP2A	X	-16.639	3.5
23	MP2A	Z	28.82	3.5
24	MP2A	Mx	-.011	3.5
25	MP2B	X	-13.766	.5
26	MP2B	Z	23.844	.5
27	MP2B	Mx	-.003	.5
28	MP2B	X	-13.766	3.5
29	MP2B	Z	23.844	3.5
30	MP2B	Mx	-.003	3.5
31	MP2C	X	-15.702	.5
32	MP2C	Z	27.196	.5
33	MP2C	Mx	.026	.5
34	MP2C	X	-15.702	3.5
35	MP2C	Z	27.196	3.5
36	MP2C	Mx	.026	3.5
37	MP3A	X	-8.234	1
38	MP3A	Z	14.261	1
39	MP3A	Mx	.004	1
40	MP3A	X	-8.234	3
41	MP3A	Z	14.261	3
42	MP3A	Mx	.004	3
43	MP3B	X	-5.474	1
44	MP3B	Z	9.482	1
45	MP3B	Mx	-.005	1
46	MP3B	X	-5.474	3
47	MP3B	Z	9.482	3
48	MP3B	Mx	-.005	3
49	MP3C	X	-7.333	1
50	MP3C	Z	12.701	1
51	MP3C	Mx	.005	1
52	MP3C	X	-7.333	3
53	MP3C	Z	12.701	3
54	MP3C	Mx	.005	3
55	MP2A	X	-1.843	4
56	MP2A	Z	3.193	4
57	MP2A	Mx	.000922	4
58	MP2B	X	-1.598	4
59	MP2B	Z	2.767	4
60	MP2B	Mx	-.001	4
61	MP2C	X	-1.763	4
62	MP2C	Z	3.054	4
63	MP2C	Mx	.001	4
64	M101	X	-11.901	.75
65	M101	Z	20.612	.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
66	M101	Mx	0	.75
67	MP2A	X	-7.485	2
68	MP2A	Z	12.964	2
69	MP2A	Mx	.004	2
70	MP2B	X	-6.252	2
71	MP2B	Z	10.828	2
72	MP2B	Mx	-.005	2
73	MP2C	X	-7.082	2
74	MP2C	Z	12.267	2
75	MP2C	Mx	.005	2
76	MP3A	X	-7.251	2
77	MP3A	Z	12.558	2
78	MP3A	Mx	.004	2
79	MP3B	X	-5.549	2
80	MP3B	Z	9.611	2
81	MP3B	Mx	-.005	2
82	MP3C	X	-6.695	2
83	MP3C	Z	11.596	2
84	MP3C	Mx	.004	2
85	MP4A	X	-13.604	.25
86	MP4A	Z	23.562	.25
87	MP4A	Mx	.007	.25
88	MP4A	X	-13.604	3.75
89	MP4A	Z	23.562	3.75
90	MP4A	Mx	.007	3.75
91	MP4B	X	-10.46	.25
92	MP4B	Z	18.118	.25
93	MP4B	Mx	-.009	.25
94	MP4B	X	-10.46	3.75
95	MP4B	Z	18.118	3.75
96	MP4B	Mx	-.009	3.75
97	MP4C	X	-12.578	.25
98	MP4C	Z	21.786	.25
99	MP4C	Mx	.008	.25
100	MP4C	X	-12.578	3.75
101	MP4C	Z	21.786	3.75
102	MP4C	Mx	.008	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-23.844	.5
2	MP2A	Z	13.766	.5
3	MP2A	Mx	.021	.5
4	MP2A	X	-23.844	3.5
5	MP2A	Z	13.766	3.5
6	MP2A	Mx	.021	3.5
7	MP2B	X	-21.356	.5
8	MP2B	Z	12.33	.5
9	MP2B	Mx	-.012	.5
10	MP2B	X	-21.356	3.5
11	MP2B	Z	12.33	3.5
12	MP2B	Mx	-.012	3.5
13	MP2C	X	-31.008	.5
14	MP2C	Z	17.902	.5
15	MP2C	Mx	-.02	.5
16	MP2C	X	-31.008	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP2C	Z	17.902	3.5
18	MP2C	Mx	-.02	3.5
19	MP2A	X	-23.844	.5
20	MP2A	Z	13.766	.5
21	MP2A	Mx	.003	.5
22	MP2A	X	-23.844	3.5
23	MP2A	Z	13.766	3.5
24	MP2A	Mx	.003	3.5
25	MP2B	X	-21.356	.5
26	MP2B	Z	12.33	.5
27	MP2B	Mx	-.012	.5
28	MP2B	X	-21.356	3.5
29	MP2B	Z	12.33	3.5
30	MP2B	Mx	-.012	3.5
31	MP2C	X	-31.008	.5
32	MP2C	Z	17.902	.5
33	MP2C	Mx	.027	.5
34	MP2C	X	-31.008	3.5
35	MP2C	Z	17.902	3.5
36	MP2C	Mx	.027	3.5
37	MP3A	X	-9.482	1
38	MP3A	Z	5.474	1
39	MP3A	Mx	.005	1
40	MP3A	X	-9.482	3
41	MP3A	Z	5.474	3
42	MP3A	Mx	.005	3
43	MP3B	X	-7.092	1
44	MP3B	Z	4.094	1
45	MP3B	Mx	-.004	1
46	MP3B	X	-7.092	3
47	MP3B	Z	4.094	3
48	MP3B	Mx	-.004	3
49	MP3C	X	-16.363	1
50	MP3C	Z	9.447	1
51	MP3C	Mx	.002	1
52	MP3C	X	-16.363	3
53	MP3C	Z	9.447	3
54	MP3C	Mx	.002	3
55	MP2A	X	-2.767	4
56	MP2A	Z	1.598	4
57	MP2A	Mx	.001	4
58	MP2B	X	-2.555	4
59	MP2B	Z	1.475	4
60	MP2B	Mx	-.001	4
61	MP2C	X	-3.379	4
62	MP2C	Z	1.951	4
63	MP2C	Mx	.000339	4
64	M101	X	-24.881	.75
65	M101	Z	14.365	.75
66	M101	Mx	0	.75
67	MP2A	X	-10.828	2
68	MP2A	Z	6.252	2
69	MP2A	Mx	.005	2
70	MP2B	X	-9.76	2
71	MP2B	Z	5.635	2
72	MP2B	Mx	-.006	2
73	MP2C	X	-13.904	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
74	MP2C	Z	8.027	2
75	MP2C	Mx	.001	2
76	MP3A	X	-9.611	2
77	MP3A	Z	5.549	2
78	MP3A	Mx	.005	2
79	MP3B	X	-8.137	2
80	MP3B	Z	4.698	2
81	MP3B	Mx	-.005	2
82	MP3C	X	-13.855	2
83	MP3C	Z	7.999	2
84	MP3C	Mx	.001	2
85	MP4A	X	-18.118	.25
86	MP4A	Z	10.46	.25
87	MP4A	Mx	.009	.25
88	MP4A	X	-18.118	3.75
89	MP4A	Z	10.46	3.75
90	MP4A	Mx	.009	3.75
91	MP4B	X	-15.396	.25
92	MP4B	Z	8.889	.25
93	MP4B	Mx	-.009	.25
94	MP4B	X	-15.396	3.75
95	MP4B	Z	8.889	3.75
96	MP4B	Mx	-.009	3.75
97	MP4C	X	-25.956	.25
98	MP4C	Z	14.986	.25
99	MP4C	Mx	.003	.25
100	MP4C	X	-25.956	3.75
101	MP4C	Z	14.986	3.75
102	MP4C	Mx	.003	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-24.659	.5
2	MP2A	Z	0	.5
3	MP2A	Mx	.012	.5
4	MP2A	X	-24.659	3.5
5	MP2A	Z	0	3.5
6	MP2A	Mx	.012	3.5
7	MP2B	X	-27.532	.5
8	MP2B	Z	0	.5
9	MP2B	Mx	-.003	.5
10	MP2B	X	-27.532	3.5
11	MP2B	Z	0	3.5
12	MP2B	Mx	-.003	3.5
13	MP2C	X	-34.807	.5
14	MP2C	Z	0	.5
15	MP2C	Mx	-.028	.5
16	MP2C	X	-34.807	3.5
17	MP2C	Z	0	3.5
18	MP2C	Mx	-.028	3.5
19	MP2A	X	-24.659	.5
20	MP2A	Z	0	.5
21	MP2A	Mx	.012	.5
22	MP2A	X	-24.659	3.5
23	MP2A	Z	0	3.5
24	MP2A	Mx	.012	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP2B	X	-27.532	.5
26	MP2B	Z	0	.5
27	MP2B	Mx	-.021	.5
28	MP2B	X	-27.532	3.5
29	MP2B	Z	0	3.5
30	MP2B	Mx	-.021	3.5
31	MP2C	X	-34.807	.5
32	MP2C	Z	0	.5
33	MP2C	Mx	.016	.5
34	MP2C	X	-34.807	3.5
35	MP2C	Z	0	3.5
36	MP2C	Mx	.016	3.5
37	MP3A	X	-8.189	1
38	MP3A	Z	0	1
39	MP3A	Mx	.004	1
40	MP3A	X	-8.189	3
41	MP3A	Z	0	3
42	MP3A	Mx	.004	3
43	MP3B	X	-10.948	1
44	MP3B	Z	0	1
45	MP3B	Mx	-.005	1
46	MP3B	X	-10.948	3
47	MP3B	Z	0	3
48	MP3B	Mx	-.005	3
49	MP3C	X	-17.936	1
50	MP3C	Z	0	1
51	MP3C	Mx	-.003	1
52	MP3C	X	-17.936	3
53	MP3C	Z	0	3
54	MP3C	Mx	-.003	3
55	MP2A	X	-2.95	4
56	MP2A	Z	0	4
57	MP2A	Mx	.001	4
58	MP2B	X	-3.196	4
59	MP2B	Z	0	4
60	MP2B	Mx	-.001	4
61	MP2C	X	-3.817	4
62	MP2C	Z	0	4
63	MP2C	Mx	-.000653	4
64	M101	X	-31.195	.75
65	M101	Z	0	.75
66	M101	Mx	0	.75
67	MP2A	X	-11.27	2
68	MP2A	Z	0	2
69	MP2A	Mx	.006	2
70	MP2B	X	-12.503	2
71	MP2B	Z	0	2
72	MP2B	Mx	-.005	2
73	MP2C	X	-15.626	2
74	MP2C	Z	0	2
75	MP2C	Mx	-.003	2
76	MP3A	X	-9.396	2
77	MP3A	Z	0	2
78	MP3A	Mx	.005	2
79	MP3B	X	-11.097	2
80	MP3B	Z	0	2
81	MP3B	Mx	-.005	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
82	MP3C	X	-15.407	2
83	MP3C	Z	0	2
84	MP3C	Mx	-.003	2
85	MP4A	X	-17.777	.25
86	MP4A	Z	0	.25
87	MP4A	Mx	.009	.25
88	MP4A	X	-17.777	3.75
89	MP4A	Z	0	3.75
90	MP4A	Mx	.009	3.75
91	MP4B	X	-20.921	.25
92	MP4B	Z	0	.25
93	MP4B	Mx	-.009	.25
94	MP4B	X	-20.921	3.75
95	MP4B	Z	0	3.75
96	MP4B	Mx	-.009	3.75
97	MP4C	X	-28.88	.25
98	MP4C	Z	0	.25
99	MP4C	Mx	-.005	.25
100	MP4C	X	-28.88	3.75
101	MP4C	Z	0	3.75
102	MP4C	Mx	-.005	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-23.844	.5
2	MP2A	Z	-13.766	.5
3	MP2A	Mx	.003	.5
4	MP2A	X	-23.844	3.5
5	MP2A	Z	-13.766	3.5
6	MP2A	Mx	.003	3.5
7	MP2B	X	-28.82	.5
8	MP2B	Z	-16.639	.5
9	MP2B	Mx	.011	.5
10	MP2B	X	-28.82	3.5
11	MP2B	Z	-16.639	3.5
12	MP2B	Mx	.011	3.5
13	MP2C	X	-25.468	.5
14	MP2C	Z	-14.704	.5
15	MP2C	Mx	-.024	.5
16	MP2C	X	-25.468	3.5
17	MP2C	Z	-14.704	3.5
18	MP2C	Mx	-.024	3.5
19	MP2A	X	-23.844	.5
20	MP2A	Z	-13.766	.5
21	MP2A	Mx	.021	.5
22	MP2A	X	-23.844	3.5
23	MP2A	Z	-13.766	3.5
24	MP2A	Mx	.021	3.5
25	MP2B	X	-28.82	.5
26	MP2B	Z	-16.639	.5
27	MP2B	Mx	-.028	.5
28	MP2B	X	-28.82	3.5
29	MP2B	Z	-16.639	3.5
30	MP2B	Mx	-.028	3.5
31	MP2C	X	-25.468	.5
32	MP2C	Z	-14.704	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP2C	Mx	.001	.5
34	MP2C	X	-25.468	3.5
35	MP2C	Z	-14.704	3.5
36	MP2C	Mx	.001	3.5
37	MP3A	X	-9.482	1
38	MP3A	Z	-5.474	1
39	MP3A	Mx	.005	1
40	MP3A	X	-9.482	3
41	MP3A	Z	-5.474	3
42	MP3A	Mx	.005	3
43	MP3B	X	-14.261	1
44	MP3B	Z	-8.234	1
45	MP3B	Mx	-.004	1
46	MP3B	X	-14.261	3
47	MP3B	Z	-8.234	3
48	MP3B	Mx	-.004	3
49	MP3C	X	-11.041	1
50	MP3C	Z	-6.375	1
51	MP3C	Mx	-.005	1
52	MP3C	X	-11.041	3
53	MP3C	Z	-6.375	3
54	MP3C	Mx	-.005	3
55	MP2A	X	-2.767	4
56	MP2A	Z	-1.598	4
57	MP2A	Mx	.001	4
58	MP2B	X	-3.193	4
59	MP2B	Z	-1.843	4
60	MP2B	Mx	-.000922	4
61	MP2C	X	-2.906	4
62	MP2C	Z	-1.678	4
63	MP2C	Mx	-.001	4
64	M101	X	-24.881	.75
65	M101	Z	-14.365	.75
66	M101	Mx	0	.75
67	MP2A	X	-10.828	2
68	MP2A	Z	-6.252	2
69	MP2A	Mx	.005	2
70	MP2B	X	-12.964	2
71	MP2B	Z	-7.485	2
72	MP2B	Mx	-.004	2
73	MP2C	X	-11.525	2
74	MP2C	Z	-6.654	2
75	MP2C	Mx	-.005	2
76	MP3A	X	-9.611	2
77	MP3A	Z	-5.549	2
78	MP3A	Mx	.005	2
79	MP3B	X	-12.558	2
80	MP3B	Z	-7.251	2
81	MP3B	Mx	-.004	2
82	MP3C	X	-10.573	2
83	MP3C	Z	-6.104	2
84	MP3C	Mx	-.005	2
85	MP4A	X	-18.118	.25
86	MP4A	Z	-10.46	.25
87	MP4A	Mx	.009	.25
88	MP4A	X	-18.118	3.75
89	MP4A	Z	-10.46	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
90	MP4A	Mx	.009	3.75
91	MP4B	X	-23.562	.25
92	MP4B	Z	-13.604	.25
93	MP4B	Mx	-.007	.25
94	MP4B	X	-23.562	3.75
95	MP4B	Z	-13.604	3.75
96	MP4B	Mx	-.007	3.75
97	MP4C	X	-19.895	.25
98	MP4C	Z	-11.486	.25
99	MP4C	Mx	-.009	.25
100	MP4C	X	-19.895	3.75
101	MP4C	Z	-11.486	3.75
102	MP4C	Mx	-.009	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-16.639	.5
2	MP2A	Z	-28.82	.5
3	MP2A	Mx	-.011	.5
4	MP2A	X	-16.639	3.5
5	MP2A	Z	-28.82	3.5
6	MP2A	Mx	-.011	3.5
7	MP2B	X	-18.076	.5
8	MP2B	Z	-31.308	.5
9	MP2B	Mx	.024	.5
10	MP2B	X	-18.076	3.5
11	MP2B	Z	-31.308	3.5
12	MP2B	Mx	.024	3.5
13	MP2C	X	-12.503	.5
14	MP2C	Z	-21.656	.5
15	MP2C	Mx	-.015	.5
16	MP2C	X	-12.503	3.5
17	MP2C	Z	-21.656	3.5
18	MP2C	Mx	-.015	3.5
19	MP2A	X	-16.639	.5
20	MP2A	Z	-28.82	.5
21	MP2A	Mx	.028	.5
22	MP2A	X	-16.639	3.5
23	MP2A	Z	-28.82	3.5
24	MP2A	Mx	.028	3.5
25	MP2B	X	-18.076	.5
26	MP2B	Z	-31.308	.5
27	MP2B	Mx	-.024	.5
28	MP2B	X	-18.076	3.5
29	MP2B	Z	-31.308	3.5
30	MP2B	Mx	-.024	3.5
31	MP2C	X	-12.503	.5
32	MP2C	Z	-21.656	.5
33	MP2C	Mx	-.009	.5
34	MP2C	X	-12.503	3.5
35	MP2C	Z	-21.656	3.5
36	MP2C	Mx	-.009	3.5
37	MP3A	X	-8.234	1
38	MP3A	Z	-14.261	1
39	MP3A	Mx	.004	1
40	MP3A	X	-8.234	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
41	MP3A	Z	-14.261	3
42	MP3A	Mx	.004	3
43	MP3B	X	-9.613	1
44	MP3B	Z	-16.651	1
45	MP3B	Mx	0	1
46	MP3B	X	-9.613	3
47	MP3B	Z	-16.651	3
48	MP3B	Mx	0	3
49	MP3C	X	-4.261	1
50	MP3C	Z	-7.38	1
51	MP3C	Mx	-.004	1
52	MP3C	X	-4.261	3
53	MP3C	Z	-7.38	3
54	MP3C	Mx	-.004	3
55	MP2A	X	-1.843	4
56	MP2A	Z	-3.193	4
57	MP2A	Mx	.000922	4
58	MP2B	X	-1.966	4
59	MP2B	Z	-3.405	4
60	MP2B	Mx	0	4
61	MP2C	X	-1.49	4
62	MP2C	Z	-2.581	4
63	MP2C	Mx	-.001	4
64	M101	X	-11.901	.75
65	M101	Z	-20.612	.75
66	M101	Mx	0	.75
67	MP2A	X	-7.485	2
68	MP2A	Z	-12.964	2
69	MP2A	Mx	.004	2
70	MP2B	X	-8.102	2
71	MP2B	Z	-14.032	2
72	MP2B	Mx	0	2
73	MP2C	X	-5.709	2
74	MP2C	Z	-9.889	2
75	MP2C	Mx	-.006	2
76	MP3A	X	-7.251	2
77	MP3A	Z	-12.558	2
78	MP3A	Mx	.004	2
79	MP3B	X	-8.102	2
80	MP3B	Z	-14.032	2
81	MP3B	Mx	0	2
82	MP3C	X	-4.8	2
83	MP3C	Z	-8.315	2
84	MP3C	Mx	-.005	2
85	MP4A	X	-13.604	.25
86	MP4A	Z	-23.562	.25
87	MP4A	Mx	.007	.25
88	MP4A	X	-13.604	3.75
89	MP4A	Z	-23.562	3.75
90	MP4A	Mx	.007	3.75
91	MP4B	X	-15.175	.25
92	MP4B	Z	-26.285	.25
93	MP4B	Mx	0	.25
94	MP4B	X	-15.175	3.75
95	MP4B	Z	-26.285	3.75
96	MP4B	Mx	0	3.75
97	MP4C	X	-9.078	.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
98	MP4C	Z	-15.724	.25
99	MP4C	Mx	-.009	.25
100	MP4C	X	-9.078	3.75
101	MP4C	Z	-15.724	3.75
102	MP4C	Mx	-.009	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	.5
2	MP2A	Z	-11.878	.5
3	MP2A	Mx	-.008	.5
4	MP2A	X	0	3.5
5	MP2A	Z	-11.878	3.5
6	MP2A	Mx	-.008	3.5
7	MP2B	X	0	.5
8	MP2B	Z	-10.859	.5
9	MP2B	Mx	.009	.5
10	MP2B	X	0	3.5
11	MP2B	Z	-10.859	3.5
12	MP2B	Mx	.009	3.5
13	MP2C	X	0	.5
14	MP2C	Z	-8.278	.5
15	MP2C	Mx	-.002	.5
16	MP2C	X	0	3.5
17	MP2C	Z	-8.278	3.5
18	MP2C	Mx	-.002	3.5
19	MP2A	X	0	.5
20	MP2A	Z	-11.878	.5
21	MP2A	Mx	.008	.5
22	MP2A	X	0	3.5
23	MP2A	Z	-11.878	3.5
24	MP2A	Mx	.008	3.5
25	MP2B	X	0	.5
26	MP2B	Z	-10.859	.5
27	MP2B	Mx	-.004	.5
28	MP2B	X	0	3.5
29	MP2B	Z	-10.859	3.5
30	MP2B	Mx	-.004	3.5
31	MP2C	X	0	.5
32	MP2C	Z	-8.278	.5
33	MP2C	Mx	-.006	.5
34	MP2C	X	0	3.5
35	MP2C	Z	-8.278	3.5
36	MP2C	Mx	-.006	3.5
37	MP3A	X	0	1
38	MP3A	Z	-6.128	1
39	MP3A	Mx	0	1
40	MP3A	X	0	3
41	MP3A	Z	-6.128	3
42	MP3A	Mx	0	3
43	MP3B	X	0	1
44	MP3B	Z	-5.196	1
45	MP3B	Mx	.001	1
46	MP3B	X	0	3
47	MP3B	Z	-5.196	3
48	MP3B	Mx	.001	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
49	MP3C	X	0	1
50	MP3C	Z	-2.835	1
51	MP3C	Mx	-.001	1
52	MP3C	X	0	3
53	MP3C	Z	-2.835	3
54	MP3C	Mx	-.001	3
55	MP2A	X	0	4
56	MP2A	Z	-.965	4
57	MP2A	Mx	0	4
58	MP2B	X	0	4
59	MP2B	Z	-.891	4
60	MP2B	Mx	.000223	4
61	MP2C	X	0	4
62	MP2C	Z	-.702	4
63	MP2C	Mx	-.00033	4
64	M101	X	0	.75
65	M101	Z	-6.542	.75
66	M101	Mx	0	.75
67	MP2A	X	0	2
68	MP2A	Z	-4.876	2
69	MP2A	Mx	0	2
70	MP2B	X	0	2
71	MP2B	Z	-4.472	2
72	MP2B	Mx	.001	2
73	MP2C	X	0	2
74	MP2C	Z	-3.449	2
75	MP2C	Mx	-.002	2
76	MP3A	X	0	2
77	MP3A	Z	-4.876	2
78	MP3A	Mx	0	2
79	MP3B	X	0	2
80	MP3B	Z	-4.317	2
81	MP3B	Mx	.001	2
82	MP3C	X	0	2
83	MP3C	Z	-2.902	2
84	MP3C	Mx	-.001	2
85	MP4A	X	0	.25
86	MP4A	Z	-9.87	.25
87	MP4A	Mx	0	.25
88	MP4A	X	0	3.75
89	MP4A	Z	-9.87	3.75
90	MP4A	Mx	0	3.75
91	MP4B	X	0	.25
92	MP4B	Z	-8.758	.25
93	MP4B	Mx	.002	.25
94	MP4B	X	0	3.75
95	MP4B	Z	-8.758	3.75
96	MP4B	Mx	.002	3.75
97	MP4C	X	0	.25
98	MP4C	Z	-5.942	.25
99	MP4C	Mx	-.003	.25
100	MP4C	X	0	3.75
101	MP4C	Z	-5.942	3.75
102	MP4C	Mx	-.003	3.75

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

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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	5.43	.5
2	MP2A	Z	-9.404	.5
3	MP2A	Mx	-.009	.5
4	MP2A	X	5.43	3.5
5	MP2A	Z	-9.404	3.5
6	MP2A	Mx	-.009	3.5
7	MP2B	X	4.41	.5
8	MP2B	Z	-7.639	.5
9	MP2B	Mx	.007	.5
10	MP2B	X	4.41	3.5
11	MP2B	Z	-7.639	3.5
12	MP2B	Mx	.007	3.5
13	MP2C	X	5.097	.5
14	MP2C	Z	-8.828	.5
15	MP2C	Mx	.002	.5
16	MP2C	X	5.097	3.5
17	MP2C	Z	-8.828	3.5
18	MP2C	Mx	.002	3.5
19	MP2A	X	5.43	.5
20	MP2A	Z	-9.404	.5
21	MP2A	Mx	.004	.5
22	MP2A	X	5.43	3.5
23	MP2A	Z	-9.404	3.5
24	MP2A	Mx	.004	3.5
25	MP2B	X	4.41	.5
26	MP2B	Z	-7.639	.5
27	MP2B	Mx	.000879	.5
28	MP2B	X	4.41	3.5
29	MP2B	Z	-7.639	3.5
30	MP2B	Mx	.000879	3.5
31	MP2C	X	5.097	.5
32	MP2C	Z	-8.828	.5
33	MP2C	Mx	-.008	.5
34	MP2C	X	5.097	3.5
35	MP2C	Z	-8.828	3.5
36	MP2C	Mx	-.008	3.5
37	MP3A	X	2.598	1
38	MP3A	Z	-4.5	1
39	MP3A	Mx	-.001	1
40	MP3A	X	2.598	3
41	MP3A	Z	-4.5	3
42	MP3A	Mx	-.001	3
43	MP3B	X	1.666	1
44	MP3B	Z	-2.885	1
45	MP3B	Mx	.001	1
46	MP3B	X	1.666	3
47	MP3B	Z	-2.885	3
48	MP3B	Mx	.001	3
49	MP3C	X	2.294	1
50	MP3C	Z	-3.973	1
51	MP3C	Mx	-.001	1
52	MP3C	X	2.294	3
53	MP3C	Z	-3.973	3
54	MP3C	Mx	-.001	3
55	MP2A	X	.445	4
56	MP2A	Z	-.771	4
57	MP2A	Mx	-.000222	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP2B	X	.371	4
59	MP2B	Z	-.643	4
60	MP2B	Mx	.000321	4
61	MP2C	X	.421	4
62	MP2C	Z	-.729	4
63	MP2C	Mx	-.000271	4
64	M101	X	3.689	.75
65	M101	Z	-6.389	.75
66	M101	Mx	0	.75
67	MP2A	X	2.236	2
68	MP2A	Z	-3.873	2
69	MP2A	Mx	-.001	2
70	MP2B	X	1.832	2
71	MP2B	Z	-3.173	2
72	MP2B	Mx	.002	2
73	MP2C	X	2.104	2
74	MP2C	Z	-3.645	2
75	MP2C	Mx	-.001	2
76	MP3A	X	2.159	2
77	MP3A	Z	-3.739	2
78	MP3A	Mx	-.001	2
79	MP3B	X	1.6	2
80	MP3B	Z	-2.771	2
81	MP3B	Mx	.001	2
82	MP3C	X	1.976	2
83	MP3C	Z	-3.423	2
84	MP3C	Mx	-.001	2
85	MP4A	X	4.379	.25
86	MP4A	Z	-7.585	.25
87	MP4A	Mx	-.002	.25
88	MP4A	X	4.379	3.75
89	MP4A	Z	-7.585	3.75
90	MP4A	Mx	-.002	3.75
91	MP4B	X	3.267	.25
92	MP4B	Z	-5.658	.25
93	MP4B	Mx	.003	.25
94	MP4B	X	3.267	3.75
95	MP4B	Z	-5.658	3.75
96	MP4B	Mx	.003	3.75
97	MP4C	X	4.016	.25
98	MP4C	Z	-6.956	.25
99	MP4C	Mx	-.003	.25
100	MP4C	X	4.016	3.75
101	MP4C	Z	-6.956	3.75
102	MP4C	Mx	-.003	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	7.639	.5
2	MP2A	Z	-4.41	.5
3	MP2A	Mx	-.007	.5
4	MP2A	X	7.639	3.5
5	MP2A	Z	-4.41	3.5
6	MP2A	Mx	-.007	3.5
7	MP2B	X	6.756	.5
8	MP2B	Z	-3.901	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
9	MP2B	Mx	.004	.5
10	MP2B	X	6.756	3.5
11	MP2B	Z	-3.901	3.5
12	MP2B	Mx	.004	3.5
13	MP2C	X	10.18	.5
14	MP2C	Z	-5.878	.5
15	MP2C	Mx	.007	.5
16	MP2C	X	10.18	3.5
17	MP2C	Z	-5.878	3.5
18	MP2C	Mx	.007	3.5
19	MP2A	X	7.639	.5
20	MP2A	Z	-4.41	.5
21	MP2A	Mx	-.00088	.5
22	MP2A	X	7.639	3.5
23	MP2A	Z	-4.41	3.5
24	MP2A	Mx	-.00088	3.5
25	MP2B	X	6.756	.5
26	MP2B	Z	-3.901	.5
27	MP2B	Mx	.004	.5
28	MP2B	X	6.756	3.5
29	MP2B	Z	-3.901	3.5
30	MP2B	Mx	.004	3.5
31	MP2C	X	10.18	.5
32	MP2C	Z	-5.878	.5
33	MP2C	Mx	-.009	.5
34	MP2C	X	10.18	3.5
35	MP2C	Z	-5.878	3.5
36	MP2C	Mx	-.009	3.5
37	MP3A	X	2.885	1
38	MP3A	Z	-1.666	1
39	MP3A	Mx	-.001	1
40	MP3A	X	2.885	3
41	MP3A	Z	-1.666	3
42	MP3A	Mx	-.001	3
43	MP3B	X	2.078	1
44	MP3B	Z	-1.2	1
45	MP3B	Mx	.001	1
46	MP3B	X	2.078	3
47	MP3B	Z	-1.2	3
48	MP3B	Mx	.001	3
49	MP3C	X	5.21	1
50	MP3C	Z	-3.008	1
51	MP3C	Mx	-.000522	1
52	MP3C	X	5.21	3
53	MP3C	Z	-3.008	3
54	MP3C	Mx	-.000522	3
55	MP2A	X	.643	4
56	MP2A	Z	-.371	4
57	MP2A	Mx	-.000322	4
58	MP2B	X	.578	4
59	MP2B	Z	-.334	4
60	MP2B	Mx	.000334	4
61	MP2C	X	.828	4
62	MP2C	Z	-.478	4
63	MP2C	Mx	-8.3e-5	4
64	M101	X	7.836	.75
65	M101	Z	-4.524	.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
66	M101	Mx	0	.75
67	MP2A	X	3.173	2
68	MP2A	Z	-1.832	2
69	MP2A	Mx	-.002	2
70	MP2B	X	2.823	2
71	MP2B	Z	-1.63	2
72	MP2B	Mx	.002	2
73	MP2C	X	4.181	2
74	MP2C	Z	-2.414	2
75	MP2C	Mx	-.000419	2
76	MP3A	X	2.771	2
77	MP3A	Z	-1.6	2
78	MP3A	Mx	-.001	2
79	MP3B	X	2.287	2
80	MP3B	Z	-1.32	2
81	MP3B	Mx	.001	2
82	MP3C	X	4.165	2
83	MP3C	Z	-2.405	2
84	MP3C	Mx	-.000418	2
85	MP4A	X	5.658	.25
86	MP4A	Z	-3.267	.25
87	MP4A	Mx	-.003	.25
88	MP4A	X	5.658	3.75
89	MP4A	Z	-3.267	3.75
90	MP4A	Mx	-.003	3.75
91	MP4B	X	4.695	.25
92	MP4B	Z	-2.711	.25
93	MP4B	Mx	.003	.25
94	MP4B	X	4.695	3.75
95	MP4B	Z	-2.711	3.75
96	MP4B	Mx	.003	3.75
97	MP4C	X	8.432	.25
98	MP4C	Z	-4.868	.25
99	MP4C	Mx	-.000845	.25
100	MP4C	X	8.432	3.75
101	MP4C	Z	-4.868	3.75
102	MP4C	Mx	-.000845	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	7.802	.5
2	MP2A	Z	0	.5
3	MP2A	Mx	-.004	.5
4	MP2A	X	7.802	3.5
5	MP2A	Z	0	3.5
6	MP2A	Mx	-.004	3.5
7	MP2B	X	8.821	.5
8	MP2B	Z	0	.5
9	MP2B	Mx	.000879	.5
10	MP2B	X	8.821	3.5
11	MP2B	Z	0	3.5
12	MP2B	Mx	.000879	3.5
13	MP2C	X	11.401	.5
14	MP2C	Z	0	.5
15	MP2C	Mx	.009	.5
16	MP2C	X	11.401	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP2C	Z	0	3.5
18	MP2C	Mx	.009	3.5
19	MP2A	X	7.802	.5
20	MP2A	Z	0	.5
21	MP2A	Mx	-.004	.5
22	MP2A	X	7.802	3.5
23	MP2A	Z	0	3.5
24	MP2A	Mx	-.004	3.5
25	MP2B	X	8.821	.5
26	MP2B	Z	0	.5
27	MP2B	Mx	.007	.5
28	MP2B	X	8.821	3.5
29	MP2B	Z	0	3.5
30	MP2B	Mx	.007	3.5
31	MP2C	X	11.401	.5
32	MP2C	Z	0	.5
33	MP2C	Mx	-.005	.5
34	MP2C	X	11.401	3.5
35	MP2C	Z	0	3.5
36	MP2C	Mx	-.005	3.5
37	MP3A	X	2.399	1
38	MP3A	Z	0	1
39	MP3A	Mx	-.001	1
40	MP3A	X	2.399	3
41	MP3A	Z	0	3
42	MP3A	Mx	-.001	3
43	MP3B	X	3.331	1
44	MP3B	Z	0	1
45	MP3B	Mx	.001	1
46	MP3B	X	3.331	3
47	MP3B	Z	0	3
48	MP3B	Mx	.001	3
49	MP3C	X	5.692	1
50	MP3C	Z	0	1
51	MP3C	Mx	.000973	1
52	MP3C	X	5.692	3
53	MP3C	Z	0	3
54	MP3C	Mx	.000973	3
55	MP2A	X	.668	4
56	MP2A	Z	0	4
57	MP2A	Mx	-.000334	4
58	MP2B	X	.742	4
59	MP2B	Z	0	4
60	MP2B	Mx	.000321	4
61	MP2C	X	.93	4
62	MP2C	Z	0	4
63	MP2C	Mx	.000159	4
64	M101	X	9.883	.75
65	M101	Z	0	.75
66	M101	Mx	0	.75
67	MP2A	X	3.26	2
68	MP2A	Z	0	2
69	MP2A	Mx	-.002	2
70	MP2B	X	3.664	2
71	MP2B	Z	0	2
72	MP2B	Mx	.002	2
73	MP2C	X	4.687	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
74	MP2C	Z	0	2
75	MP2C	Mx	.000802	2
76	MP3A	X	2.64	2
77	MP3A	Z	0	2
78	MP3A	Mx	-.001	2
79	MP3B	X	3.199	2
80	MP3B	Z	0	2
81	MP3B	Mx	.001	2
82	MP3C	X	4.615	2
83	MP3C	Z	0	2
84	MP3C	Mx	.000789	2
85	MP4A	X	5.422	.25
86	MP4A	Z	0	.25
87	MP4A	Mx	-.003	.25
88	MP4A	X	5.422	3.75
89	MP4A	Z	0	3.75
90	MP4A	Mx	-.003	3.75
91	MP4B	X	6.534	.25
92	MP4B	Z	0	.25
93	MP4B	Mx	.003	.25
94	MP4B	X	6.534	3.75
95	MP4B	Z	0	3.75
96	MP4B	Mx	.003	3.75
97	MP4C	X	9.35	.25
98	MP4C	Z	0	.25
99	MP4C	Mx	.002	.25
100	MP4C	X	9.35	3.75
101	MP4C	Z	0	3.75
102	MP4C	Mx	.002	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	7.639	.5
2	MP2A	Z	4.41	.5
3	MP2A	Mx	-.00088	.5
4	MP2A	X	7.639	3.5
5	MP2A	Z	4.41	3.5
6	MP2A	Mx	-.00088	3.5
7	MP2B	X	9.404	.5
8	MP2B	Z	5.43	.5
9	MP2B	Mx	-.004	.5
10	MP2B	X	9.404	3.5
11	MP2B	Z	5.43	3.5
12	MP2B	Mx	-.004	3.5
13	MP2C	X	8.215	.5
14	MP2C	Z	4.743	.5
15	MP2C	Mx	.008	.5
16	MP2C	X	8.215	3.5
17	MP2C	Z	4.743	3.5
18	MP2C	Mx	.008	3.5
19	MP2A	X	7.639	.5
20	MP2A	Z	4.41	.5
21	MP2A	Mx	-.007	.5
22	MP2A	X	7.639	3.5
23	MP2A	Z	4.41	3.5
24	MP2A	Mx	-.007	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP2B	X	9.404	.5
26	MP2B	Z	5.43	.5
27	MP2B	Mx	.009	.5
28	MP2B	X	9.404	3.5
29	MP2B	Z	5.43	3.5
30	MP2B	Mx	.009	3.5
31	MP2C	X	8.215	.5
32	MP2C	Z	4.743	.5
33	MP2C	Mx	-.000432	.5
34	MP2C	X	8.215	3.5
35	MP2C	Z	4.743	3.5
36	MP2C	Mx	-.000432	3.5
37	MP3A	X	2.885	1
38	MP3A	Z	1.666	1
39	MP3A	Mx	-.001	1
40	MP3A	X	2.885	3
41	MP3A	Z	1.666	3
42	MP3A	Mx	-.001	3
43	MP3B	X	4.5	1
44	MP3B	Z	2.598	1
45	MP3B	Mx	.001	1
46	MP3B	X	4.5	3
47	MP3B	Z	2.598	3
48	MP3B	Mx	.001	3
49	MP3C	X	3.412	1
50	MP3C	Z	1.97	1
51	MP3C	Mx	.002	1
52	MP3C	X	3.412	3
53	MP3C	Z	1.97	3
54	MP3C	Mx	.002	3
55	MP2A	X	.643	4
56	MP2A	Z	.371	4
57	MP2A	Mx	-.000322	4
58	MP2B	X	.771	4
59	MP2B	Z	.445	4
60	MP2B	Mx	.000223	4
61	MP2C	X	.685	4
62	MP2C	Z	.395	4
63	MP2C	Mx	.000303	4
64	M101	X	7.836	.75
65	M101	Z	4.524	.75
66	M101	Mx	0	.75
67	MP2A	X	3.173	2
68	MP2A	Z	1.832	2
69	MP2A	Mx	-.002	2
70	MP2B	X	3.873	2
71	MP2B	Z	2.236	2
72	MP2B	Mx	.001	2
73	MP2C	X	3.402	2
74	MP2C	Z	1.964	2
75	MP2C	Mx	.002	2
76	MP3A	X	2.771	2
77	MP3A	Z	1.6	2
78	MP3A	Mx	-.001	2
79	MP3B	X	3.739	2
80	MP3B	Z	2.159	2
81	MP3B	Mx	.001	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
82	MP3C	X	3.087	2
83	MP3C	Z	1.782	2
84	MP3C	Mx	.001	2
85	MP4A	X	5.658	.25
86	MP4A	Z	3.267	.25
87	MP4A	Mx	-.003	.25
88	MP4A	X	5.658	3.75
89	MP4A	Z	3.267	3.75
90	MP4A	Mx	-.003	3.75
91	MP4B	X	7.585	.25
92	MP4B	Z	4.379	.25
93	MP4B	Mx	.002	.25
94	MP4B	X	7.585	3.75
95	MP4B	Z	4.379	3.75
96	MP4B	Mx	.002	3.75
97	MP4C	X	6.287	.25
98	MP4C	Z	3.63	.25
99	MP4C	Mx	.003	.25
100	MP4C	X	6.287	3.75
101	MP4C	Z	3.63	3.75
102	MP4C	Mx	.003	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	5.43	.5
2	MP2A	Z	9.404	.5
3	MP2A	Mx	.004	.5
4	MP2A	X	5.43	3.5
5	MP2A	Z	9.404	3.5
6	MP2A	Mx	.004	3.5
7	MP2B	X	5.939	.5
8	MP2B	Z	10.287	.5
9	MP2B	Mx	-.008	.5
10	MP2B	X	5.939	3.5
11	MP2B	Z	10.287	3.5
12	MP2B	Mx	-.008	3.5
13	MP2C	X	3.962	.5
14	MP2C	Z	6.863	.5
15	MP2C	Mx	.005	.5
16	MP2C	X	3.962	3.5
17	MP2C	Z	6.863	3.5
18	MP2C	Mx	.005	3.5
19	MP2A	X	5.43	.5
20	MP2A	Z	9.404	.5
21	MP2A	Mx	-.009	.5
22	MP2A	X	5.43	3.5
23	MP2A	Z	9.404	3.5
24	MP2A	Mx	-.009	3.5
25	MP2B	X	5.939	.5
26	MP2B	Z	10.287	.5
27	MP2B	Mx	.008	.5
28	MP2B	X	5.939	3.5
29	MP2B	Z	10.287	3.5
30	MP2B	Mx	.008	3.5
31	MP2C	X	3.962	.5
32	MP2C	Z	6.863	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP2C	Mx	.003	.5
34	MP2C	X	3.962	3.5
35	MP2C	Z	6.863	3.5
36	MP2C	Mx	.003	3.5
37	MP3A	X	2.598	1
38	MP3A	Z	4.5	1
39	MP3A	Mx	-.001	1
40	MP3A	X	2.598	3
41	MP3A	Z	4.5	3
42	MP3A	Mx	-.001	3
43	MP3B	X	3.064	1
44	MP3B	Z	5.307	1
45	MP3B	Mx	0	1
46	MP3B	X	3.064	3
47	MP3B	Z	5.307	3
48	MP3B	Mx	0	3
49	MP3C	X	1.256	1
50	MP3C	Z	2.175	1
51	MP3C	Mx	.001	1
52	MP3C	X	1.256	3
53	MP3C	Z	2.175	3
54	MP3C	Mx	.001	3
55	MP2A	X	.445	4
56	MP2A	Z	.771	4
57	MP2A	Mx	-.000222	4
58	MP2B	X	.482	4
59	MP2B	Z	.836	4
60	MP2B	Mx	0	4
61	MP2C	X	.338	4
62	MP2C	Z	.586	4
63	MP2C	Mx	.000333	4
64	M101	X	3.689	.75
65	M101	Z	6.389	.75
66	M101	Mx	0	.75
67	MP2A	X	2.236	2
68	MP2A	Z	3.873	2
69	MP2A	Mx	-.001	2
70	MP2B	X	2.438	2
71	MP2B	Z	4.223	2
72	MP2B	Mx	0	2
73	MP2C	X	1.654	2
74	MP2C	Z	2.865	2
75	MP2C	Mx	.002	2
76	MP3A	X	2.159	2
77	MP3A	Z	3.739	2
78	MP3A	Mx	-.001	2
79	MP3B	X	2.438	2
80	MP3B	Z	4.223	2
81	MP3B	Mx	0	2
82	MP3C	X	1.354	2
83	MP3C	Z	2.345	2
84	MP3C	Mx	.001	2
85	MP4A	X	4.379	.25
86	MP4A	Z	7.585	.25
87	MP4A	Mx	-.002	.25
88	MP4A	X	4.379	3.75
89	MP4A	Z	7.585	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
90	MP4A	Mx	-.002	3.75
91	MP4B	X	4.935	.25
92	MP4B	Z	8.548	.25
93	MP4B	Mx	0	.25
94	MP4B	X	4.935	3.75
95	MP4B	Z	8.548	3.75
96	MP4B	Mx	0	3.75
97	MP4C	X	2.778	.25
98	MP4C	Z	4.811	.25
99	MP4C	Mx	.003	.25
100	MP4C	X	2.778	3.75
101	MP4C	Z	4.811	3.75
102	MP4C	Mx	.003	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	.5
2	MP2A	Z	11.878	.5
3	MP2A	Mx	.008	.5
4	MP2A	X	0	3.5
5	MP2A	Z	11.878	3.5
6	MP2A	Mx	.008	3.5
7	MP2B	X	0	.5
8	MP2B	Z	10.859	.5
9	MP2B	Mx	-.009	.5
10	MP2B	X	0	3.5
11	MP2B	Z	10.859	3.5
12	MP2B	Mx	-.009	3.5
13	MP2C	X	0	.5
14	MP2C	Z	8.278	.5
15	MP2C	Mx	.002	.5
16	MP2C	X	0	3.5
17	MP2C	Z	8.278	3.5
18	MP2C	Mx	.002	3.5
19	MP2A	X	0	.5
20	MP2A	Z	11.878	.5
21	MP2A	Mx	-.008	.5
22	MP2A	X	0	3.5
23	MP2A	Z	11.878	3.5
24	MP2A	Mx	-.008	3.5
25	MP2B	X	0	.5
26	MP2B	Z	10.859	.5
27	MP2B	Mx	.004	.5
28	MP2B	X	0	3.5
29	MP2B	Z	10.859	3.5
30	MP2B	Mx	.004	3.5
31	MP2C	X	0	.5
32	MP2C	Z	8.278	.5
33	MP2C	Mx	.006	.5
34	MP2C	X	0	3.5
35	MP2C	Z	8.278	3.5
36	MP2C	Mx	.006	3.5
37	MP3A	X	0	1
38	MP3A	Z	6.128	1
39	MP3A	Mx	0	1
40	MP3A	X	0	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
41	MP3A	Z	6.128	3
42	MP3A	Mx	0	3
43	MP3B	X	0	1
44	MP3B	Z	5.196	1
45	MP3B	Mx	-.001	1
46	MP3B	X	0	3
47	MP3B	Z	5.196	3
48	MP3B	Mx	-.001	3
49	MP3C	X	0	1
50	MP3C	Z	2.835	1
51	MP3C	Mx	.001	1
52	MP3C	X	0	3
53	MP3C	Z	2.835	3
54	MP3C	Mx	.001	3
55	MP2A	X	0	4
56	MP2A	Z	.965	4
57	MP2A	Mx	0	4
58	MP2B	X	0	4
59	MP2B	Z	.891	4
60	MP2B	Mx	-.000223	4
61	MP2C	X	0	4
62	MP2C	Z	.702	4
63	MP2C	Mx	.00033	4
64	M101	X	0	.75
65	M101	Z	6.542	.75
66	M101	Mx	0	.75
67	MP2A	X	0	2
68	MP2A	Z	4.876	2
69	MP2A	Mx	0	2
70	MP2B	X	0	2
71	MP2B	Z	4.472	2
72	MP2B	Mx	-.001	2
73	MP2C	X	0	2
74	MP2C	Z	3.449	2
75	MP2C	Mx	.002	2
76	MP3A	X	0	2
77	MP3A	Z	4.876	2
78	MP3A	Mx	0	2
79	MP3B	X	0	2
80	MP3B	Z	4.317	2
81	MP3B	Mx	-.001	2
82	MP3C	X	0	2
83	MP3C	Z	2.902	2
84	MP3C	Mx	.001	2
85	MP4A	X	0	.25
86	MP4A	Z	9.87	.25
87	MP4A	Mx	0	.25
88	MP4A	X	0	3.75
89	MP4A	Z	9.87	3.75
90	MP4A	Mx	0	3.75
91	MP4B	X	0	.25
92	MP4B	Z	8.758	.25
93	MP4B	Mx	-.002	.25
94	MP4B	X	0	3.75
95	MP4B	Z	8.758	3.75
96	MP4B	Mx	-.002	3.75
97	MP4C	X	0	.25

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
98	MP4C	Z	5.942	.25
99	MP4C	Mx	.003	.25
100	MP4C	X	0	3.75
101	MP4C	Z	5.942	3.75
102	MP4C	Mx	.003	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-5.43	.5
2	MP2A	Z	9.404	.5
3	MP2A	Mx	.009	.5
4	MP2A	X	-5.43	3.5
5	MP2A	Z	9.404	3.5
6	MP2A	Mx	.009	3.5
7	MP2B	X	-4.41	.5
8	MP2B	Z	7.639	.5
9	MP2B	Mx	-.007	.5
10	MP2B	X	-4.41	3.5
11	MP2B	Z	7.639	3.5
12	MP2B	Mx	-.007	3.5
13	MP2C	X	-5.097	.5
14	MP2C	Z	8.828	.5
15	MP2C	Mx	-.002	.5
16	MP2C	X	-5.097	3.5
17	MP2C	Z	8.828	3.5
18	MP2C	Mx	-.002	3.5
19	MP2A	X	-5.43	.5
20	MP2A	Z	9.404	.5
21	MP2A	Mx	-.004	.5
22	MP2A	X	-5.43	3.5
23	MP2A	Z	9.404	3.5
24	MP2A	Mx	-.004	3.5
25	MP2B	X	-4.41	.5
26	MP2B	Z	7.639	.5
27	MP2B	Mx	-.000879	.5
28	MP2B	X	-4.41	3.5
29	MP2B	Z	7.639	3.5
30	MP2B	Mx	-.000879	3.5
31	MP2C	X	-5.097	.5
32	MP2C	Z	8.828	.5
33	MP2C	Mx	.008	.5
34	MP2C	X	-5.097	3.5
35	MP2C	Z	8.828	3.5
36	MP2C	Mx	.008	3.5
37	MP3A	X	-2.598	1
38	MP3A	Z	4.5	1
39	MP3A	Mx	.001	1
40	MP3A	X	-2.598	3
41	MP3A	Z	4.5	3
42	MP3A	Mx	.001	3
43	MP3B	X	-1.666	1
44	MP3B	Z	2.885	1
45	MP3B	Mx	-.001	1
46	MP3B	X	-1.666	3
47	MP3B	Z	2.885	3
48	MP3B	Mx	-.001	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
49	MP3C	X	-2.294	1
50	MP3C	Z	3.973	1
51	MP3C	Mx	.001	1
52	MP3C	X	-2.294	3
53	MP3C	Z	3.973	3
54	MP3C	Mx	.001	3
55	MP2A	X	-.445	4
56	MP2A	Z	.771	4
57	MP2A	Mx	.000222	4
58	MP2B	X	-.371	4
59	MP2B	Z	.643	4
60	MP2B	Mx	-.000321	4
61	MP2C	X	-.421	4
62	MP2C	Z	.729	4
63	MP2C	Mx	.000271	4
64	M101	X	-3.689	.75
65	M101	Z	6.389	.75
66	M101	Mx	0	.75
67	MP2A	X	-2.236	2
68	MP2A	Z	3.873	2
69	MP2A	Mx	.001	2
70	MP2B	X	-1.832	2
71	MP2B	Z	3.173	2
72	MP2B	Mx	-.002	2
73	MP2C	X	-2.104	2
74	MP2C	Z	3.645	2
75	MP2C	Mx	.001	2
76	MP3A	X	-2.159	2
77	MP3A	Z	3.739	2
78	MP3A	Mx	.001	2
79	MP3B	X	-1.6	2
80	MP3B	Z	2.771	2
81	MP3B	Mx	-.001	2
82	MP3C	X	-1.976	2
83	MP3C	Z	3.423	2
84	MP3C	Mx	.001	2
85	MP4A	X	-4.379	.25
86	MP4A	Z	7.585	.25
87	MP4A	Mx	.002	.25
88	MP4A	X	-4.379	3.75
89	MP4A	Z	7.585	3.75
90	MP4A	Mx	.002	3.75
91	MP4B	X	-3.267	.25
92	MP4B	Z	5.658	.25
93	MP4B	Mx	-.003	.25
94	MP4B	X	-3.267	3.75
95	MP4B	Z	5.658	3.75
96	MP4B	Mx	-.003	3.75
97	MP4C	X	-4.016	.25
98	MP4C	Z	6.956	.25
99	MP4C	Mx	.003	.25
100	MP4C	X	-4.016	3.75
101	MP4C	Z	6.956	3.75
102	MP4C	Mx	.003	3.75

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

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

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-7.639	.5
2	MP2A	Z	4.41	.5
3	MP2A	Mx	.007	.5
4	MP2A	X	-7.639	3.5
5	MP2A	Z	4.41	3.5
6	MP2A	Mx	.007	3.5
7	MP2B	X	-6.756	.5
8	MP2B	Z	3.901	.5
9	MP2B	Mx	-.004	.5
10	MP2B	X	-6.756	3.5
11	MP2B	Z	3.901	3.5
12	MP2B	Mx	-.004	3.5
13	MP2C	X	-10.18	.5
14	MP2C	Z	5.878	.5
15	MP2C	Mx	-.007	.5
16	MP2C	X	-10.18	3.5
17	MP2C	Z	5.878	3.5
18	MP2C	Mx	-.007	3.5
19	MP2A	X	-7.639	.5
20	MP2A	Z	4.41	.5
21	MP2A	Mx	.00088	.5
22	MP2A	X	-7.639	3.5
23	MP2A	Z	4.41	3.5
24	MP2A	Mx	.00088	3.5
25	MP2B	X	-6.756	.5
26	MP2B	Z	3.901	.5
27	MP2B	Mx	-.004	.5
28	MP2B	X	-6.756	3.5
29	MP2B	Z	3.901	3.5
30	MP2B	Mx	-.004	3.5
31	MP2C	X	-10.18	.5
32	MP2C	Z	5.878	.5
33	MP2C	Mx	.009	.5
34	MP2C	X	-10.18	3.5
35	MP2C	Z	5.878	3.5
36	MP2C	Mx	.009	3.5
37	MP3A	X	-2.885	1
38	MP3A	Z	1.666	1
39	MP3A	Mx	.001	1
40	MP3A	X	-2.885	3
41	MP3A	Z	1.666	3
42	MP3A	Mx	.001	3
43	MP3B	X	-2.078	1
44	MP3B	Z	1.2	1
45	MP3B	Mx	-.001	1
46	MP3B	X	-2.078	3
47	MP3B	Z	1.2	3
48	MP3B	Mx	-.001	3
49	MP3C	X	-5.21	1
50	MP3C	Z	3.008	1
51	MP3C	Mx	.000522	1
52	MP3C	X	-5.21	3
53	MP3C	Z	3.008	3
54	MP3C	Mx	.000522	3
55	MP2A	X	-.643	4
56	MP2A	Z	.371	4
57	MP2A	Mx	.000322	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP2B	X	-.578	4
59	MP2B	Z	.334	4
60	MP2B	Mx	-.000334	4
61	MP2C	X	-.828	4
62	MP2C	Z	.478	4
63	MP2C	Mx	8.3e-5	4
64	M101	X	-7.836	.75
65	M101	Z	4.524	.75
66	M101	Mx	0	.75
67	MP2A	X	-3.173	2
68	MP2A	Z	1.832	2
69	MP2A	Mx	.002	2
70	MP2B	X	-2.823	2
71	MP2B	Z	1.63	2
72	MP2B	Mx	-.002	2
73	MP2C	X	-4.181	2
74	MP2C	Z	2.414	2
75	MP2C	Mx	.000419	2
76	MP3A	X	-2.771	2
77	MP3A	Z	1.6	2
78	MP3A	Mx	.001	2
79	MP3B	X	-2.287	2
80	MP3B	Z	1.32	2
81	MP3B	Mx	-.001	2
82	MP3C	X	-4.165	2
83	MP3C	Z	2.405	2
84	MP3C	Mx	.000418	2
85	MP4A	X	-5.658	.25
86	MP4A	Z	3.267	.25
87	MP4A	Mx	.003	.25
88	MP4A	X	-5.658	3.75
89	MP4A	Z	3.267	3.75
90	MP4A	Mx	.003	3.75
91	MP4B	X	-4.695	.25
92	MP4B	Z	2.711	.25
93	MP4B	Mx	-.003	.25
94	MP4B	X	-4.695	3.75
95	MP4B	Z	2.711	3.75
96	MP4B	Mx	-.003	3.75
97	MP4C	X	-8.432	.25
98	MP4C	Z	4.868	.25
99	MP4C	Mx	.000845	.25
100	MP4C	X	-8.432	3.75
101	MP4C	Z	4.868	3.75
102	MP4C	Mx	.000845	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-7.802	.5
2	MP2A	Z	0	.5
3	MP2A	Mx	.004	.5
4	MP2A	X	-7.802	3.5
5	MP2A	Z	0	3.5
6	MP2A	Mx	.004	3.5
7	MP2B	X	-8.821	.5
8	MP2B	Z	0	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
9	MP2B	Mx	-.000879	.5
10	MP2B	X	-8.821	3.5
11	MP2B	Z	0	3.5
12	MP2B	Mx	-.000879	3.5
13	MP2C	X	-11.401	.5
14	MP2C	Z	0	.5
15	MP2C	Mx	-.009	.5
16	MP2C	X	-11.401	3.5
17	MP2C	Z	0	3.5
18	MP2C	Mx	-.009	3.5
19	MP2A	X	-7.802	.5
20	MP2A	Z	0	.5
21	MP2A	Mx	.004	.5
22	MP2A	X	-7.802	3.5
23	MP2A	Z	0	3.5
24	MP2A	Mx	.004	3.5
25	MP2B	X	-8.821	.5
26	MP2B	Z	0	.5
27	MP2B	Mx	-.007	.5
28	MP2B	X	-8.821	3.5
29	MP2B	Z	0	3.5
30	MP2B	Mx	-.007	3.5
31	MP2C	X	-11.401	.5
32	MP2C	Z	0	.5
33	MP2C	Mx	.005	.5
34	MP2C	X	-11.401	3.5
35	MP2C	Z	0	3.5
36	MP2C	Mx	.005	3.5
37	MP3A	X	-2.399	1
38	MP3A	Z	0	1
39	MP3A	Mx	.001	1
40	MP3A	X	-2.399	3
41	MP3A	Z	0	3
42	MP3A	Mx	.001	3
43	MP3B	X	-3.331	1
44	MP3B	Z	0	1
45	MP3B	Mx	-.001	1
46	MP3B	X	-3.331	3
47	MP3B	Z	0	3
48	MP3B	Mx	-.001	3
49	MP3C	X	-5.692	1
50	MP3C	Z	0	1
51	MP3C	Mx	-.000973	1
52	MP3C	X	-5.692	3
53	MP3C	Z	0	3
54	MP3C	Mx	-.000973	3
55	MP2A	X	-.668	4
56	MP2A	Z	0	4
57	MP2A	Mx	.000334	4
58	MP2B	X	-.742	4
59	MP2B	Z	0	4
60	MP2B	Mx	-.000321	4
61	MP2C	X	-.93	4
62	MP2C	Z	0	4
63	MP2C	Mx	-.000159	4
64	M101	X	-9.883	.75
65	M101	Z	0	.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
66	M101	Mx	0	.75
67	MP2A	X	-3.26	2
68	MP2A	Z	0	2
69	MP2A	Mx	.002	2
70	MP2B	X	-3.664	2
71	MP2B	Z	0	2
72	MP2B	Mx	-.002	2
73	MP2C	X	-4.687	2
74	MP2C	Z	0	2
75	MP2C	Mx	-.000802	2
76	MP3A	X	-2.64	2
77	MP3A	Z	0	2
78	MP3A	Mx	.001	2
79	MP3B	X	-3.199	2
80	MP3B	Z	0	2
81	MP3B	Mx	-.001	2
82	MP3C	X	-4.615	2
83	MP3C	Z	0	2
84	MP3C	Mx	-.000789	2
85	MP4A	X	-5.422	.25
86	MP4A	Z	0	.25
87	MP4A	Mx	.003	.25
88	MP4A	X	-5.422	3.75
89	MP4A	Z	0	3.75
90	MP4A	Mx	.003	3.75
91	MP4B	X	-6.534	.25
92	MP4B	Z	0	.25
93	MP4B	Mx	-.003	.25
94	MP4B	X	-6.534	3.75
95	MP4B	Z	0	3.75
96	MP4B	Mx	-.003	3.75
97	MP4C	X	-9.35	.25
98	MP4C	Z	0	.25
99	MP4C	Mx	-.002	.25
100	MP4C	X	-9.35	3.75
101	MP4C	Z	0	3.75
102	MP4C	Mx	-.002	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-7.639	.5
2	MP2A	Z	-4.41	.5
3	MP2A	Mx	.00088	.5
4	MP2A	X	-7.639	3.5
5	MP2A	Z	-4.41	3.5
6	MP2A	Mx	.00088	3.5
7	MP2B	X	-9.404	.5
8	MP2B	Z	-5.43	.5
9	MP2B	Mx	.004	.5
10	MP2B	X	-9.404	3.5
11	MP2B	Z	-5.43	3.5
12	MP2B	Mx	.004	3.5
13	MP2C	X	-8.215	.5
14	MP2C	Z	-4.743	.5
15	MP2C	Mx	-.008	.5
16	MP2C	X	-8.215	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP2C	Z	-4.743	3.5
18	MP2C	Mx	-.008	3.5
19	MP2A	X	-7.639	.5
20	MP2A	Z	-4.41	.5
21	MP2A	Mx	.007	.5
22	MP2A	X	-7.639	3.5
23	MP2A	Z	-4.41	3.5
24	MP2A	Mx	.007	3.5
25	MP2B	X	-9.404	.5
26	MP2B	Z	-5.43	.5
27	MP2B	Mx	-.009	.5
28	MP2B	X	-9.404	3.5
29	MP2B	Z	-5.43	3.5
30	MP2B	Mx	-.009	3.5
31	MP2C	X	-8.215	.5
32	MP2C	Z	-4.743	.5
33	MP2C	Mx	.000432	.5
34	MP2C	X	-8.215	3.5
35	MP2C	Z	-4.743	3.5
36	MP2C	Mx	.000432	3.5
37	MP3A	X	-2.885	1
38	MP3A	Z	-1.666	1
39	MP3A	Mx	.001	1
40	MP3A	X	-2.885	3
41	MP3A	Z	-1.666	3
42	MP3A	Mx	.001	3
43	MP3B	X	-4.5	1
44	MP3B	Z	-2.598	1
45	MP3B	Mx	-.001	1
46	MP3B	X	-4.5	3
47	MP3B	Z	-2.598	3
48	MP3B	Mx	-.001	3
49	MP3C	X	-3.412	1
50	MP3C	Z	-1.97	1
51	MP3C	Mx	-.002	1
52	MP3C	X	-3.412	3
53	MP3C	Z	-1.97	3
54	MP3C	Mx	-.002	3
55	MP2A	X	-.643	4
56	MP2A	Z	-.371	4
57	MP2A	Mx	.000322	4
58	MP2B	X	-.771	4
59	MP2B	Z	-.445	4
60	MP2B	Mx	-.000223	4
61	MP2C	X	-.685	4
62	MP2C	Z	-.395	4
63	MP2C	Mx	-.000303	4
64	M101	X	-7.836	.75
65	M101	Z	-4.524	.75
66	M101	Mx	0	.75
67	MP2A	X	-3.173	2
68	MP2A	Z	-1.832	2
69	MP2A	Mx	.002	2
70	MP2B	X	-3.873	2
71	MP2B	Z	-2.236	2
72	MP2B	Mx	-.001	2
73	MP2C	X	-3.402	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
74	MP2C	Z	-1.964	2
75	MP2C	Mx	-.002	2
76	MP3A	X	-2.771	2
77	MP3A	Z	-1.6	2
78	MP3A	Mx	.001	2
79	MP3B	X	-3.739	2
80	MP3B	Z	-2.159	2
81	MP3B	Mx	-.001	2
82	MP3C	X	-3.087	2
83	MP3C	Z	-1.782	2
84	MP3C	Mx	-.001	2
85	MP4A	X	-5.658	.25
86	MP4A	Z	-3.267	.25
87	MP4A	Mx	.003	.25
88	MP4A	X	-5.658	3.75
89	MP4A	Z	-3.267	3.75
90	MP4A	Mx	.003	3.75
91	MP4B	X	-7.585	.25
92	MP4B	Z	-4.379	.25
93	MP4B	Mx	-.002	.25
94	MP4B	X	-7.585	3.75
95	MP4B	Z	-4.379	3.75
96	MP4B	Mx	-.002	3.75
97	MP4C	X	-6.287	.25
98	MP4C	Z	-3.63	.25
99	MP4C	Mx	-.003	.25
100	MP4C	X	-6.287	3.75
101	MP4C	Z	-3.63	3.75
102	MP4C	Mx	-.003	3.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-5.43	.5
2	MP2A	Z	-9.404	.5
3	MP2A	Mx	-.004	.5
4	MP2A	X	-5.43	3.5
5	MP2A	Z	-9.404	3.5
6	MP2A	Mx	-.004	3.5
7	MP2B	X	-5.939	.5
8	MP2B	Z	-10.287	.5
9	MP2B	Mx	.008	.5
10	MP2B	X	-5.939	3.5
11	MP2B	Z	-10.287	3.5
12	MP2B	Mx	.008	3.5
13	MP2C	X	-3.962	.5
14	MP2C	Z	-6.863	.5
15	MP2C	Mx	-.005	.5
16	MP2C	X	-3.962	3.5
17	MP2C	Z	-6.863	3.5
18	MP2C	Mx	-.005	3.5
19	MP2A	X	-5.43	.5
20	MP2A	Z	-9.404	.5
21	MP2A	Mx	.009	.5
22	MP2A	X	-5.43	3.5
23	MP2A	Z	-9.404	3.5
24	MP2A	Mx	.009	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP2B	X	-5.939	.5
26	MP2B	Z	-10.287	.5
27	MP2B	Mx	-.008	.5
28	MP2B	X	-5.939	3.5
29	MP2B	Z	-10.287	3.5
30	MP2B	Mx	-.008	3.5
31	MP2C	X	-3.962	.5
32	MP2C	Z	-6.863	.5
33	MP2C	Mx	-.003	.5
34	MP2C	X	-3.962	3.5
35	MP2C	Z	-6.863	3.5
36	MP2C	Mx	-.003	3.5
37	MP3A	X	-2.598	1
38	MP3A	Z	-4.5	1
39	MP3A	Mx	.001	1
40	MP3A	X	-2.598	3
41	MP3A	Z	-4.5	3
42	MP3A	Mx	.001	3
43	MP3B	X	-3.064	1
44	MP3B	Z	-5.307	1
45	MP3B	Mx	0	1
46	MP3B	X	-3.064	3
47	MP3B	Z	-5.307	3
48	MP3B	Mx	0	3
49	MP3C	X	-1.256	1
50	MP3C	Z	-2.175	1
51	MP3C	Mx	-.001	1
52	MP3C	X	-1.256	3
53	MP3C	Z	-2.175	3
54	MP3C	Mx	-.001	3
55	MP2A	X	-.445	4
56	MP2A	Z	-.771	4
57	MP2A	Mx	.000222	4
58	MP2B	X	-.482	4
59	MP2B	Z	-.836	4
60	MP2B	Mx	0	4
61	MP2C	X	-.338	4
62	MP2C	Z	-.586	4
63	MP2C	Mx	-.000333	4
64	M101	X	-3.689	.75
65	M101	Z	-6.389	.75
66	M101	Mx	0	.75
67	MP2A	X	-2.236	2
68	MP2A	Z	-3.873	2
69	MP2A	Mx	.001	2
70	MP2B	X	-2.438	2
71	MP2B	Z	-4.223	2
72	MP2B	Mx	0	2
73	MP2C	X	-1.654	2
74	MP2C	Z	-2.865	2
75	MP2C	Mx	-.002	2
76	MP3A	X	-2.159	2
77	MP3A	Z	-3.739	2
78	MP3A	Mx	.001	2
79	MP3B	X	-2.438	2
80	MP3B	Z	-4.223	2
81	MP3B	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
82	MP3C	X	-1.354	2
83	MP3C	Z	-2.345	2
84	MP3C	Mx	-.001	2
85	MP4A	X	-4.379	.25
86	MP4A	Z	-7.585	.25
87	MP4A	Mx	.002	.25
88	MP4A	X	-4.379	3.75
89	MP4A	Z	-7.585	3.75
90	MP4A	Mx	.002	3.75
91	MP4B	X	-4.935	.25
92	MP4B	Z	-8.548	.25
93	MP4B	Mx	0	.25
94	MP4B	X	-4.935	3.75
95	MP4B	Z	-8.548	3.75
96	MP4B	Mx	0	3.75
97	MP4C	X	-2.778	.25
98	MP4C	Z	-4.811	.25
99	MP4C	Mx	-.003	.25
100	MP4C	X	-2.778	3.75
101	MP4C	Z	-4.811	3.75
102	MP4C	Mx	-.003	3.75

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M91B	Y	-500	%49

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M91B	Y	-500	%75

Member Point Loads (BLC 79 : Lv1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M91B	Y	-250	0

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M91B	Y	-250	%50

Member Area Loads (BLC 39 : Structure D)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N87C	N87B	N7	N6	Y	Two Way	-.005
2	N89	N111	N113	N90	Y	Two Way	-.005
3	N139	N141	N118	N117	Y	Two Way	-.005

Member Area Loads (BLC 40 : Structure Di)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N87C	N87B	N7	N6	Y	Two Way	-.01
2	N89	N111	N113	N90	Y	Two Way	-.01
3	N117	N139	N141	N118	Y	Two Way	-.01

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	N3	max	1627.368	10	2622.432	21	2515.17	1	.937	2	2.394	12	.976	3
2		min	-2058.202	4	10.776	3	-2298.52	7	-2.643	8	-2.481	6	-3.848	9
3	N87D	max	2431.433	10	2434.059	17	1636.249	2	.967	12	2.074	8	3.819	5
4		min	-2010.702	4	-145.144	11	-1504.258	8	-2.393	6	-2.026	2	-1.096	11
5	N115	max	1740.96	10	2233.718	13	2102.2	1	4.191	1	1.755	4	.892	4
6		min	-1730.853	4	-371.932	7	-2457.43	7	-1.637	7	-1.83	10	-.877	10
7	Totals:	max	5799.761	10	6570.052	20	6204.337	1						
8		min	-5799.757	4	3070.884	2	-6204.301	7						

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

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	L...	Dir	LC	phi*Pnc...	phi*Pnt ...	phi*Mn ...	phi*Mn ...	Cb	Eqn
1	M53	L3X3X3	.644	2.375	6	.418	....	z	5	26973.9...	35316	1.32	2.833	1...	H2-1
2	M78	L3X3X3	.622	0	12	.466	2...	z	7	26973.9...	35316	1.32	2.833	1...	H2-1
3	M43	L3X3X3	.614	0	8	.484	2...	z	8	26973.9...	35316	1.32	2.833	1...	H2-1
4	M77A	L3X3X3	.603	2.375	2	.412	....	z	7	26973.9...	35316	1.32	2.833	1...	H2-1
5	M54	L3X3X3	.601	0	4	.464	2...	z	10	26973.9...	35316	1.32	2.833	1...	H2-1
6	M10	L3X3X3	.579	2.375	11	.418	....	z	9	26973.9...	35316	1.32	2.833	1...	H2-1
7	M4	HSS4X4X3	.424	0	7	.168	0	z	6	95848.9...	106812	12.662	12.662	2...	H1-1b
8	M52A	HSS4X4X3	.385	0	3	.142	0	z	2	95848.9...	106812	12.662	12.662	2...	H1-1b
9	MP3B	PIPE_2.0	.376	3.313	1	.127	....		8	20866.7...	32130	1.872	1.872	2...	H1-1b
10	M52B	L2x2x3	.370	0	8	.018	4...	y	15	9823.122	23392.8	.558	1.106	1...	H2-1
11	M76A	HSS4X4X3	.358	0	1	.142	0	z	4	95848.9...	106812	12.662	12.662	2...	H1-1b
12	M83A	L2x2x3	.357	0	1	.018	4...	y	19	9823.122	23392.8	.558	1.078	1...	H2-1
13	M59A	L2x2x3	.345	0	4	.018	4...	y	23	9823.122	23392.8	.558	1.111	1...	H2-1
14	M125	L3X3X4	.310	2.305	16	.012	0	y	8	41474.2...	46656	1.688	3.756	1...	H2-1
15	M58A	L2x2x3	.309	4.162	5	.020	0	y	23	9823.122	23392.8	.558	1.078	1...	H2-1
16	M51B	L2x2x3	.307	4.162	9	.019	0	y	14	9823.122	23392.8	.558	1.078	1...	H2-1
17	M82	L2x2x3	.305	4.162	1	.020	0	y	19	9823.122	23392.8	.558	1.078	1...	H2-1
18	M79A	PL3/8x6	.302	.516	7	.143	....	y	12	36639.4...	72900	.57	9.113	1...	H1-1b
19	M55	PL3/8x6	.291	.516	5	.164	....	y	5	36639.4...	72900	.57	9.113	1...	H1-1b
20	M46	PL3/8x6	.287	.516	8	.157	....	y	8	36639.4...	72900	.57	9.113	1...	H1-1b
21	M106	PIPE_2.5	.283	3.906	12	.152	3...		23	14558.7...	50715	3.596	3.596	1...	H1-1b
22	M123	L3X3X4	.267	2.305	20	.007	2...	y	8	41474.2...	46656	1.688	3.756	1...	H2-1
23	M85	PL3/8x6	.263	.167	8	.124	0	y	8	71601.7...	72900	.57	9.113	1...	H1-1b
24	M113	PIPE_2.5	.262	3.906	8	.134	2...		19	14558.7...	50715	3.596	3.596	2...	H1-1b
25	M93	PL3/8x6	.260	.167	12	.128	0	y	12	71601.7...	72900	.57	9.113	1...	H1-1b
26	MP2A	PIPE_2.5	.259	4.375	4	.118	1...		10	37773.8...	50715	3.596	3.596	2...	H1-1b
27	MP2C	PIPE_2.5	.256	4.354	12	.114	1...		6	36524.1...	50715	3.596	3.596	2...	H1-1b
28	M92A	PL3/8x6	.250	0	7	.178	0	y	12	70677.9...	72900	.57	9.113	1...	H1-1b
29	M124	L3X3X4	.248	2.305	24	.014	2...	y	12	41474.2...	46656	1.688	3.756	1...	H2-1
30	M69	PL3/8x6	.248	.167	4	.123	0	y	4	71601.7...	72900	.57	9.113	1...	H1-1b
31	MP2B	PIPE_2.5	.244	4.375	8	.100	4...		10	37773.8...	50715	3.596	3.596	3...	H1-1b
32	M64	PL3/8x6	.239	.167	6	.134	0	y	6	71601.7...	72900	.57	9.113	1...	H1-1b
33	MP3A	PIPE_2.0	.229	3.313	3	.135	3...		9	20866.7...	32130	1.872	1.872	1...	H1-1b
34	M88A	PL3/8x6	.227	.167	1	.124	0	y	2	71601.7...	72900	.57	9.113	1...	H1-1b
35	M120	PIPE_2.5	.227	10.8...	20	.149	8...		19	14558.7...	50715	3.596	3.596	2...	H1-1b
36	MP4B	PIPE_2.0	.223	3.313	7	.093	3...		16	20866.7...	32130	1.872	1.872	1...	H1-1b
37	M63	PL3/8x6	.220	0	12	.200	0	y	6	70677.9...	72900	.57	9.113	1...	H1-1b
38	MP1A	PIPE_2.0	.218	3.313	11	.093	....		18	20866.7...	32130	1.872	1.872	1...	H1-1b
39	M77	PL3/8x6	.216	.167	10	.119	0	y	11	71601.7...	72900	.57	9.113	1...	H1-1b
40	MP3C	PIPE_2.0	.216	3.313	5	.132	3...		5	20866.7...	32130	1.872	1.872	2...	H1-1b
41	M87	PL3/8x6	.211	0	8	.184	0	y	2	70677.9...	72900	.57	9.113	1...	H1-1b
42	MP1C	PIPE_2.0	.210	3.313	7	.090	....		14	20866.7...	32130	1.872	1.872	1...	H1-1b
43	M68	PL3/8x6	.197	0	11	.173	0	y	3	70677.9...	72900	.57	9.113	1...	H1-1b

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

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	L...	Dir	LC	phi*Pnc...	phi*Pnt ...	phi*Mn ...	phi*Mn ...	Cb	Eqn
44	MP1B	PIPE_2.0	.193	3.313	23	.098	....		22	20866.7...	32130	1.872	1.872	1...	H1-1b
45	M84	PL3/8x6	.193	0	3	.168	0	y	8	70677.9...	72900	.57	9.113	1...	H1-1b
46	MP4C	PIPE_2.0	.190	3.313	4	.103	3...		19	20866.7...	32130	1.872	1.872	1...	H1-1b
47	MP4A	PIPE_2.0	.189	3.313	8	.110	....		21	20866.7...	32130	1.872	1.872	1...	H1-1b
48	M82A	PIPE_3.0	.179	4.427	7	.086	4...		23	28250.5...	65205	5.749	5.749	3...	H1-1b
49	M76	PL3/8x6	.169	0	1	.187	0	y	11	70677.9...	72900	.57	9.113	1...	H1-1b
50	M101	PIPE_2.0	.123	2	4	.019	2		4	28843.4...	32130	1.872	1.872	2...	H1-1b
51	M66	PL3/8x6	.121	.112	5	.107	....	y	1	72311.05	72900	.57	9.113	1...	H1-1b
52	M1	PIPE_3.0	.118	6.25	1	.078	4...		15	28250.5...	65205	5.749	5.749	1...	H1-1b
53	M91	PL3/8x6	.118	.112	9	.151	0	y	7	72311.05	72900	.57	9.113	1...	H1-1b
54	M80	PL3/8x6	.116	.112	9	.116	....	y	5	72311.05	72900	.57	9.113	1...	H1-1b
55	M90	PL3/8x6	.114	.112	1	.085	....	y	9	72311.05	72900	.57	9.113	1...	H1-1b
56	M71	PL3/8x6	.114	.112	5	.163	0	y	3	72311.05	72900	.57	9.113	1...	H1-1b
57	M91B	PIPE_3.0	.113	6.12	9	.082	4...		19	28250.5...	65205	5.749	5.749	1...	H1-1b
58	M95	PL3/8x6	.113	.112	1	.098	0	y	12	72311.05	72900	.57	9.113	1...	H1-1b
59	M137	L2.5x2.5x4	.088	1.827	7	.013	3...	y	24	25380.7...	38556	1.114	2.403	1...	H2-1
60	M132	L2.5x2.5x4	.078	1.827	11	.012	0	z	18	25380.7...	38556	1.114	2.403	1...	H2-1
61	M133	L2.5x2.5x4	.074	1.827	3	.015	0	y	19	25380.7...	38556	1.114	2.403	1...	H2-1
62	M134	L2.5x2.5x4	.073	1.827	7	.011	0	z	14	25380.7...	38556	1.114	2.403	1...	H2-1
63	M135	L2.5x2.5x4	.066	1.827	11	.014	3...	y	15	25380.7...	38556	1.114	2.403	1...	H2-1
64	M136	L2.5x2.5x4	.063	1.827	3	.013	3...	z	23	25380.7...	38556	1.114	2.403	1...	H2-1

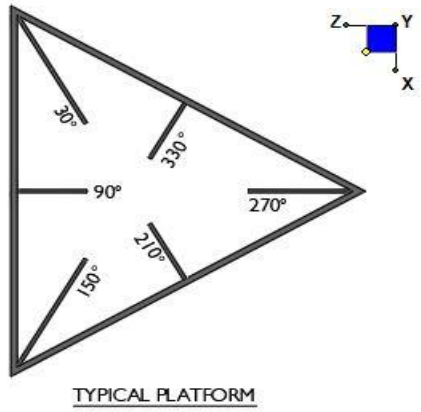
Client:	Verizon Wireless	Date:	8/5/2021
Site Name:	Sterling CT		
Project No.	21777642A		
Title:	Mount Fix	Page:	1

Version 3.1

I. Mount-to-Tower Connection Check

RISA Model Data

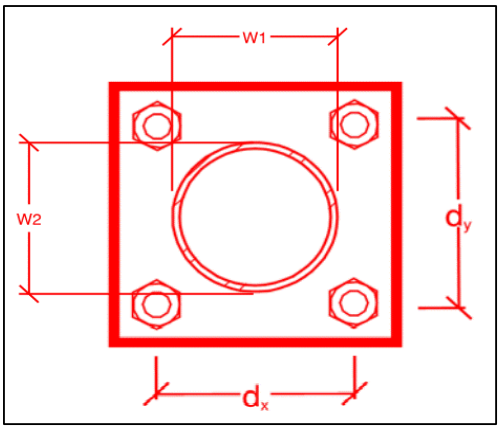
Nodes *(labeled per RISA)*	Orientation *(per graphic of typical platform)*
N3	30
N87D	150
N115	270



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)* :	6
d_y (in) *(Delta Y of typ. bolt config. sketch)* :	6
Bolt Type:	A325N
Bolt Diameter (in):	0.625
Required Tensile Strength (kips):	19.8
Required Shear Strength (kips):	6.4
Tensile Strength / bolt (kips):	20.7
Shear Strength / bolt (kips):	12.4
Tensile Capacity Overall:	**24.0%***
Shear Capacity Overall:	**13.0%**



**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):	10
Plate Height (in):	10
W1 (in):	4
W2 (in):	4
Fy (ksi, plate):	36
t_{Plate} (in):	0.5
Weld Size (1/16 in):	3
Phi*Rn (kip/in):	4.18
Required Weld Strength (kip/in):	2.65
Plate Bending Capacity:	**55.3%**
Weld Capacity:	**63.6%**

Max Plate Bending Strengths

Mu_{xx} *(kip-in)* :	7.0
Phi*Mn_{xx} *(kip-in)* :	20.3
Mu_{yy} *(kip-in)* :	4.2
Phi*Mn_{yy} *(kip-in)* :	20.3

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Mount Modification

---

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

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

Base Requirements:

- 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) must be shown.
- Notation that all hardware was properly installed, and the existing hardware was inspected for any issues.
- Verification that loading is as communicated in the modification drawings. NOTE If loading is different than what is conveyed in the modification drawing contact Maser Consulting Connecticut immediately.
- Each photo should be time and date stamped
- Photos should be high resolution and submitted in a Zip File and should be organized in the file structure as depicted in Schedule A attached.
- Contractor shall ensure that the safety climb wire rope is supported and not adversely impacted by the install of the modification components. This may involve the install of wire rope guides, or other items to protect the wire rope.
- The photos in the file structure should be uploaded **to** **https://pmi.vzwsmart.com** as depicted on the drawings

Photo Requirements:

- *Base and "During Installation Photos"*
  - Base pictures include
    - Photo of Gate Signs showing the tower owner, site name, and number
    - Photo of carrier shelter showing the carrier site name and number if available
    - Photos of the galvanizing compound and/or paint used (if applicable), clearly showing the label and name
  - "During Installation Photos if provided - must be placed only in this folder
- *Photos taken at ground level*
  - Overall tower structure before and after installation of the modifications
  - Photos of the appropriate mount before and after installation of the 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 each individual sector before and also after installation of modifications. Each entire sector must be in one photo to show in the inter-connection of members.
        - These photos should also certify that the placement and geometry of the equipment on the mount is as depicted on the sketch and table in the mount analysis
    - Close-up photos of each installed modification per the modification drawings; pictures should also include connection hardware (U-bolts, bolts, nuts, all-threaded rods, etc.)
    - Photos showing the measurements of the installed modification member sizes (i.e. lengths, widths, depths, diameters, thicknesses)
    - Photos showing the elevation or distances of the installed modifications from the appropriate reference locations shown in the modification drawings
    - Photos showing the installed modifications onto the tower with tape drop measurements (if applicable) (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, a tape drop measurement shall be provided before the elevation change
    - 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.

Material Certification:

- Materials utilized must be as per specification on the drawings or the equivalent as validated by Maser Consulting Connecticut.
    - If the drawings are as specified on the drawings
        - The contractor should provide the packing list or the materials utilized to perform the mount modification
    - If an equivalent is utilized
        - It is required that the Maser Consulting Connecticut certification of such is included in the contractor submission package. There may be an additional charge for this certification if the equivalent submission doesn't meet specifications as prescribed in the drawings.
- The contractor must certify that the materials meet these specifications by one of these methods.

☐ The Material utilized was as specified on the Maser Consulting Connecticut Mount Modification Drawings and included
in the Material certification folder is a packing list or invoice for these materials

☐ The material utilized was an "equivalent" and included as part of the contractor submission is the Maser Consulting Connecticut certification, invoices, or specifications validating accepted status

Certifying Individual: Company _____

Name _____

Signature _____

Antenna & equipment placement and Geometry Confirmation:

- The contractor must certify that the antenna & equipment placement and geometry is in accordance with the antenna placement diagrams as included in this mount analysis.

☐ The contractor certifies that the photos support and the equipment on the mount is as depicted on the antenna placement diagrams as included in this mount analysis.

☐ The contractor notes that the equipment on the mount is not in accordance with the antenna placement diagrams and has accordingly marked up the diagrams or provided a diagram outlining the differences.

Certifying Individual: Company _____

Name _____

Signature _____

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

Issue:

-Install new 36" long P2.0 STD pipe on the existing standoff horizontal member between Beta & Gamma sector for new OVP - connect to standoff using crossover plates (Site Pro 1 Part #: SQCX4-K or EOR approved equivalent). -Contractor shall re-tension existing safety climb as required. -Antenna mount pipes in Beta sector to be relocated so that they are evenly spaced. Contractor to provide photos confirming the new mount pipe spacing

Response:

Schedule A – Photo & Document File Structure

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

Structure: 468461-VZW - STERLING CT

Sector: **A**

Structure Type: Monopole

Mount Elev: 136.00

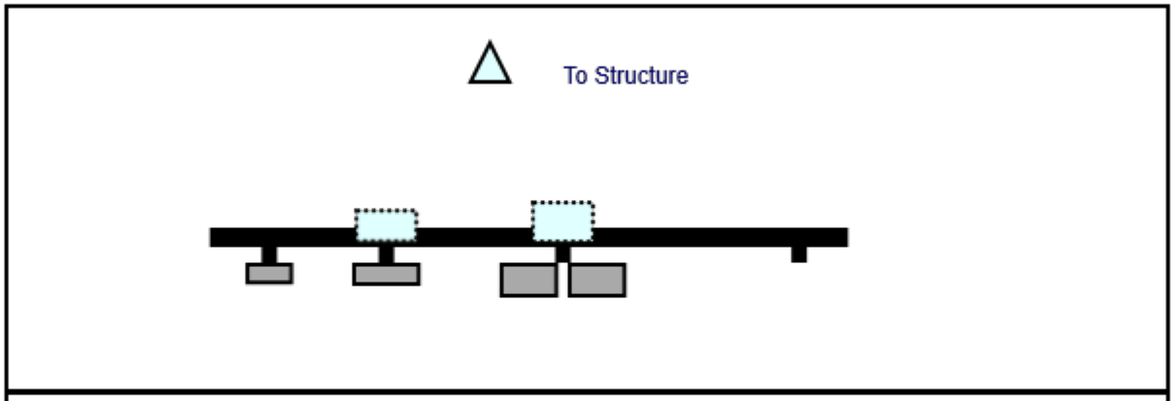
10090848

8/6/2021

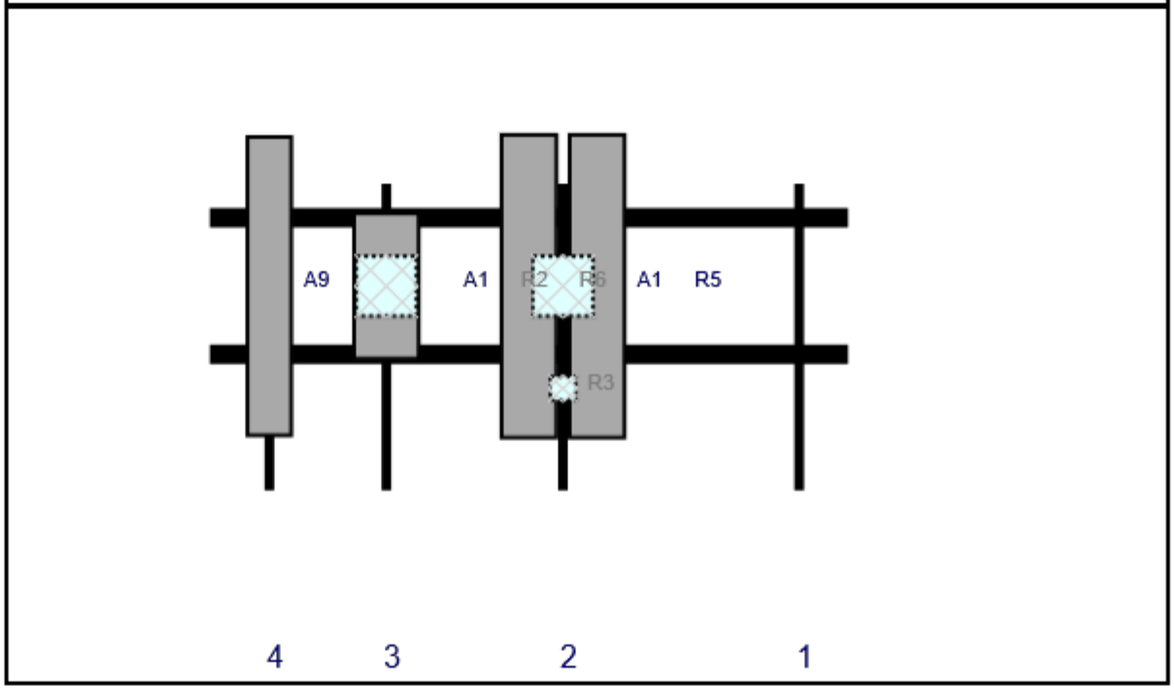
Page: 1

MASER CONSULTING — CONNECTICUT —

Plan View



Front View
Looking at Structure

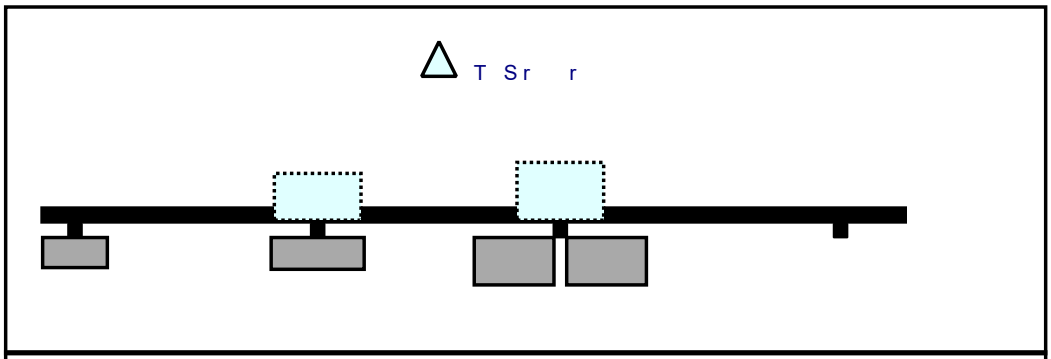


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A1	JAHH-65B-R3B	72	13.8	83	2	a	Front	24	8	Added	
A1	JAHH-65B-R3B	72	13.8	83	2	b	Front	24	-8	Added	
R3	CBC78T-DS-43-2X	6.4	6.9	83	2	a	Behind	48	0	Added	
R5	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	83	2	a	Behind	24	0	Added	
R2	MT6407-77A	35.1	16.1	41.5	3	a	Front	24	0	Added	
R6	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	41.5	3	a	Behind	24	0	Added	
A9	BXA-70063-6CF-2	71	11.2	14	4	a	Front	24	0	Added	

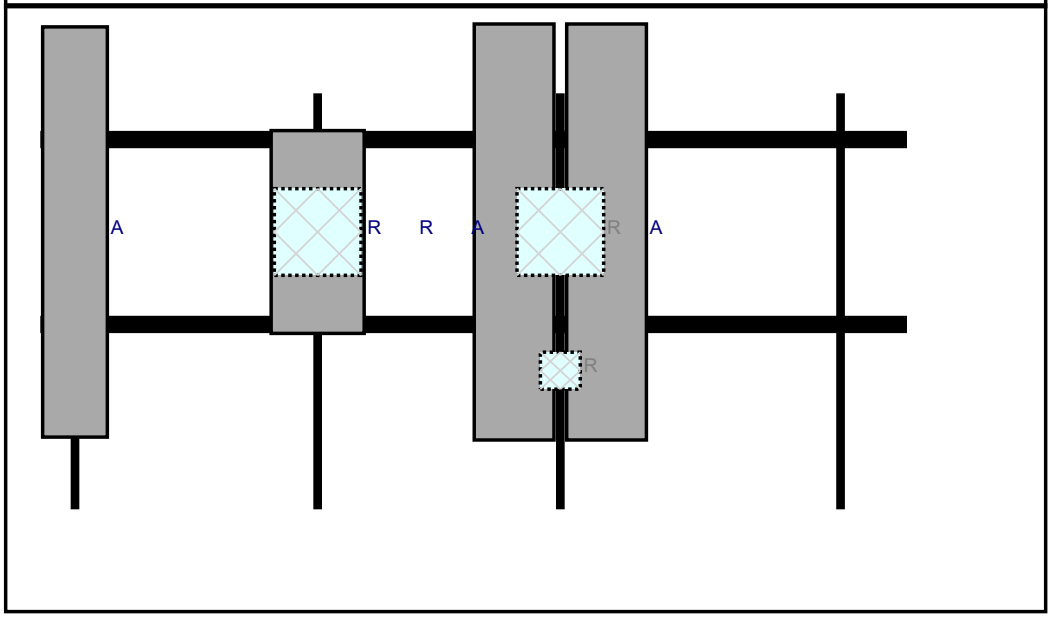
S r **B**
Sr r T M
M E . P

MASER CONSULTING — CONNECTICUT —

Plan View



Front View
L Sr r

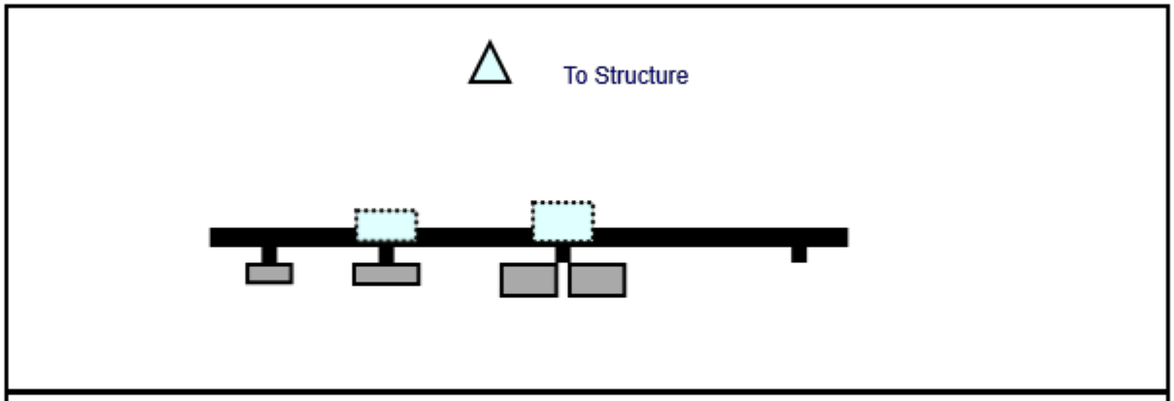


d D P P A .A A
R M d r L. P P r T. O S d

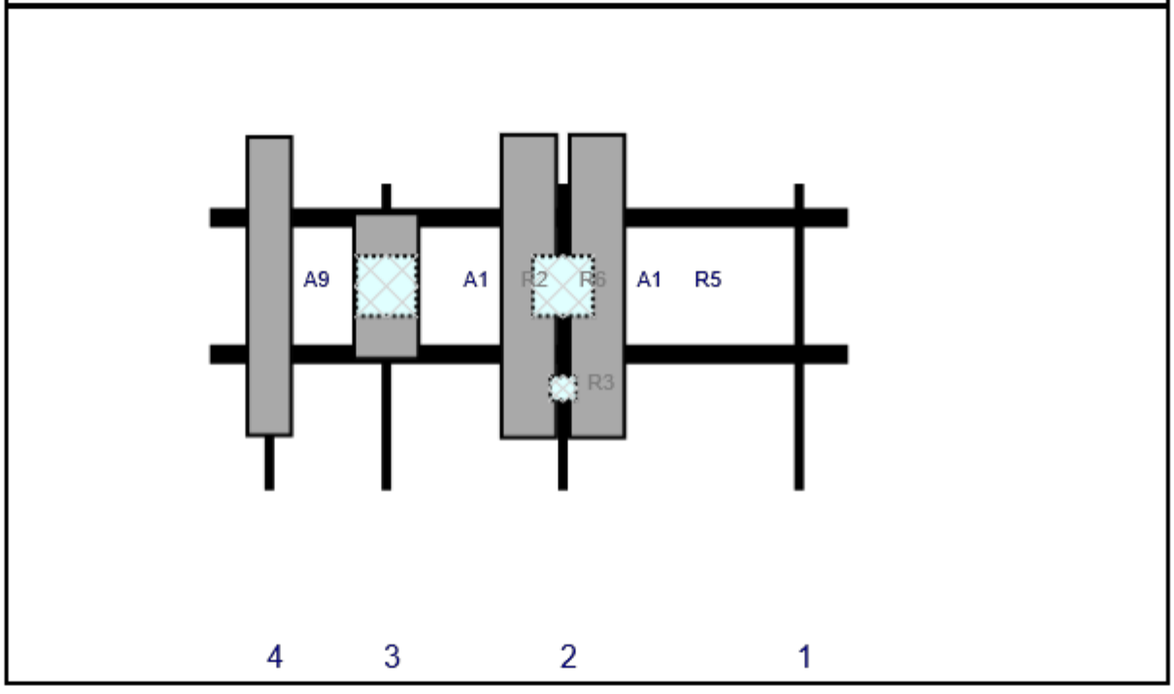
A A B R B	.	r		Add d	
A A B R B	.	r		Add d	
R B T DS	. .	B d		Add d	
R B B A RR BR R D A		B d		Add d	
R MT A	. .	r		Add d	
R B B RR BR R D A		B d		Add d	
A B A	.	r		Add d	

MASER CONSULTING — CONNECTICUT —

Plan View



Front View
Looking at Structure



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R3	CBC78T-DS-43-2X	6.4	6.9	83	2	a	Behind	48	0	Added	
R5	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	83	2	a	Behind	24	0	Added	
R2	MT6407-77A	35.1	16.1	41.5	3	a	Front	24	0	Added	
R6	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	41.5	3	a	Behind	24	0	Added	
A9	BXA-70063-6CF-2	71	11.2	14	4	a	Front	24	0	Added	

Maser Consulting Connecticut

Subject	TIA-222-H Usage	
Site Information	Site ID:	324922-VZW / Sterling CT
	Site Name:	Sterling CT
	Carrier Name:	Verizon Wireless
	Address:	7 Exeter Drive Sterling, Connecticut 06377 Windham County
	Latitude:	41.714028°
	Longitude:	-71.822722°
Structure Information	Tower Type:	140-Ft Monopole
	Mount Type:	12.50-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. TIA-222-H is the latest revision of the TIA-222 Standard, effective as of January 01, 2018.

As with all ANSI standards and engineering best practice is to apply the most current revision of the standard. This ensures the engineer is applying all updates. As an example, the TIA-222-H Standard includes updates to bring it in line with the latest AISC and ACI standards and it also incorporates the latest wind speed maps by ASCE 7 based on updated studies of the wind data.

The TIA-222-H standard clarifies these specific requirements for the antenna mount analysis such as modeling methods, seismic analysis, 30-degree increment wind directions and maintenance loading. Therefore, it is our opinion that TIA-222-H is the most appropriate standard for antenna mount structural analysis and is acceptable for use at this site to ensure the engineer is taking into account the most current engineering standard available.

Sincerely,

Peter Albano, PE
Project Manager

MOUNT MODIFICATION DRAWINGS
EXISTING 12.50' PLATFORM

SITE NAME: STERLING CT
SITE NUMBER: 468461

7 EXETER DRIVE
STERLING, CT 06377
WINDHAM COUNTY

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).

PROJECT INFORMATION

SITE INFORMATION

LATITUDE: 41.714028° N
LONGITUDE: 71.822722° W
JURISDICTION: WINDHAM COUNTY

APPLICANT/LESSEE

COMPANY: VERIZON WIRELESS

CLIENT REPRESENTATIVE

COMPANY: VERIZON WIRELESS
ADDRESS: 118 FLANDERS ROAD, THIRD FLOOR
CITY, STATE, ZIP: WESTBOROUGH, MA 01581
CONTACT: ANDREW CANDIELLO
EMAIL: ANDREW.CANDIELLO@VERIZONWIRELESS.COM

PROJECT MANAGER

COMPANY: MASER CONSULTING CONNECTICUT
CONTACT: PETER ALBANO
PHONE: (856) 797-0412
E-MAIL: PETER.ALBANO@COLLIERSENGINEERING.COM

SHEET INDEX

SHEET	DESCRIPTION
T-1	TITLE SHEET
S-1	BILL OF MATERIALS
S-2	MODIFICATION NOTES
S-3	MODIFICATION NOTES
S-4	MODIFICATION DETAILS
S-5	MODIFICATION DETAILS
S-6	MOUNT PHOTOS
	SPECIFICATION SHEETS

CONTRACTOR PMI REQUIREMENTS

PMI LOCATION: HTTPS://PMI.VZWSMART.COM
SMART TOOL PROJECT #: 10063411
VZW LOCATION CODE (PSLC): 468461
FUZE ID: 16281619

PMI REQUIREMENTS EMBEDDED WITHIN MOUNT MODIFICATION REPORT

REFERENCED DOCUMENTS

FAILING MOUNT ANALYSIS REPORT
SMART TOOL PROJECT #: 10052680
MASER CONSULTING CT PROJECT #: 21777642A
ANALYSIS DATE: 4/9/2021

Colliers Engineering & Design
www.colliersengineering.com

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SCALE: AS SHOWN
JOB NUMBER: 21777642A

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
-	-	-	-	-
2	11/9/2021	ISSUED FOR CONSTRUCTION	FAC	PMA
1	7/1/2021	ISSUED FOR CONSTRUCTION	CL	DX
0	5/11/2021	ISSUED FOR CONSTRUCTION	FAC	JL

STATE OF CONNECTICUT
PETER MICHAEL ALBANO
No. 35459
LICENSED PROFESSIONAL ENGINEER
COLLIERS ENGINEERING & DESIGN CT, P.C.
11/10/21

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:
STERLING CT
468461
7 EXETER DRIVE
STERLING, CT 06377
WINDHAM COUNTY

Colliers Engineering & Design
MADISON
135 New Road
Madison, CT 06443
Phone: 860.395.0055
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING

SHEET TITLE: TITLE SHEET

SHEET NUMBER: T-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

BILL OF MATERIALS

VZWSMART KITS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES
3	VZWSMART	VZWSMART-MSK2	CROSSOVER PLATE	
1		VZWSMART-PLK1	SUPPORT RAIL KIT	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET S-2
3		VZWSMART-PLK8	SUPPORT BRACING KIT	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET S-2

OTHER REQUIRED PARTS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES
1	SITE PRO 1	SQCX4-K	CROSSOVER PLATE WITH SQUARE U-BOLTS AND STD. U-BOLTS	OR EOR APPROVED EQUAL, CONTACT MASER CONSULTING FOR APPROVAL OF SUBSTITUTION.
1	-	-	36" LONG, P2.0 STD	GALVANIZED
3	-	-	72" LONG, P2.5 STD	GALVANIZED

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

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

NOTE: WHEN SPECIFIED, VZWSMART KITS SHALL BE REQUIRED AND WILL BE VERIFIED DURING THE DESKTOP PMI

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www.colliersengineering.com

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1	7/1/2021	ISSUED FOR CONSTRUCTION	CL	DK
0	5/11/2021	ISSUED FOR CONSTRUCTION	FAC	JL

STATE OF CONNECTICUT
PETER MICHAEL ALBANO
No. 35459
LICENSED PROFESSIONAL ENGINEER
COLLIERS ENGINEERING & DESIGN (CT), P.C.
11/10/21

SITE NAME:

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468461

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COLLIERS ENGINEERING & DESIGN CT, P.C. DOING BUSINESS AS MASER CONSULTING

SHEET TITLE : BILL OF MATERIALS

SHEET NUMBER : S-1

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.

DESIGN LOADS

WIND LOADS

a. BASIC WIND SPEED (3 SECOND GUST), V = 124 MPH
b. EXPOSURE CATEGORY C
c. TOPOGRAPHIC CATEGORY 1
d. MEAN BASE ELEVATION (AMSL) = 546.93'

ICE LOADS

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

SEISMIC LOADS

a. SEISMIC DESIGN CATEGORY B
b. SHORT TERM MCER GROUND MOTION, S_S = .187
c. LONG TERM MCER GROUND MOTION, S_1 = .054

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 CT PROJECT # AND MASER CONSULTING CT 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. 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.
9. 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.
10. FOR MEMBERS BEING REPLACED, PROVIDE NEW BOLTS AND MATCH EXISTING SIZE AND GRADE. MAINTAIN AISC REQUIREMENTS FOR MINIMUM BOLT DISTANCE AND SPACING.
11. 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.
12. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
13. ALL NEW STEEL SHALL BE HOT BE DIPPED GALVANIZED FOR FULL WEATHER PROTECTION. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
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.

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SHEET TITLE: MODIFICATION NOTES

SHEET NUMBER: S-2

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

MODIFICATION INSPECTION NOTES

MI CHECKLIST

CONSTRUCTION/ INSTALLATION INSPECTIONS AND TESTING REQUIRED (COMPLETED BY EOR)	REPORT ITEM
	PRE-CONSTRUCTION
X	MI CHECKLIST DRAWING
X	EOR APPROVED SHOP DRAWINGS
NA	FABRICATION INSPECTION
NA	FABRICATOR CERTIFIED WELD INSPECTION
X	MATERIAL TEST REPORT (MTR)
NA	FABRICATOR NDE INSPECTION
X	PACKING SLIPS
ADDITIONAL TESTING AND INSPECTIONS:	
	CONSTRUCTION
X	CONSTRUCTION INSPECTIONS
NA	CONTRACTOR'S CERTIFIED WELD INSPECTION AND NDE REPORTS
X	ON SITE COLD GALVANIZING VERIFICATION
X	GC AS-BUILT DOCUMENTS
ADDITIONAL TESTING AND INSPECTIONS:	
	POST-CONSTRUCTION
X	MI INSPECTOR REDLINE OR RECORD DRAWING(S)
X	VZW PMI DOCUMENTS
X	PHOTOGRAPHS
ADDITIONAL TESTING AND INSPECTIONS:	

NOTE: X DENOTES A DOCUMENT REQUIRED FOR THE MI REPORT
NA DENOTES A DOCUMENT THAT IS NOT REQUIRED FOR THE MI REPORT

THE MODIFICATION INSPECTION (MI) IS A VISUAL INSPECTION OF MODIFICATIONS AND A REVIEW OF CONSTRUCTION INSPECTIONS AND OTHER REPORTS TO ENSURE THE INSTALLATION WAS CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, NAMELY THE MODIFICATION DRAWINGS, AS DESIGNED BY THE ENGINEER OF RECORD (EOR).

THE MI IS TO CONFIRM INSTALLATION CONFIGURATION AND WORKMANSHIP ONLY AND IS NOT A REVIEW OF THE MODIFICATION DESIGN ITSELF, NOR DOES THE MI INSPECTOR TAKE OWNERSHIP OF THE MODIFICATION DESIGN. OWNERSHIP OF THE STRUCTURAL MODIFICATION DESIGN EFFECTIVENESS AND INTEGRITY RESIDES WITH THE EOR AT ALL TIMES.

TO ENSURE THAT THE REQUIREMENTS OF THE MI ARE MET, IT IS VITAL THAT THE GENERAL CONTRACTOR (GC) AND THE MI INSPECTOR BEGIN COMMUNICATING AND COORDINATING AS SOON AS A PURCHASE ORDER (PO) IS RECEIVED. IT IS EXPECTED THAT EACH PARTY WILL BE PROACTIVE IN REACHING OUT TO THE OTHER PARTY.

MI INSPECTOR

THE MI INSPECTOR IS REQUIRED TO CONTACT THE GC AS SOON AS RECEIVING A PO FOR THE MI TO, AT A MINIMUM:

- REVIEW THE REQUIREMENTS OF THE MI CHECKLIST
- WORK WITH THE GC TO DEVELOP A SCHEDULE TO CONDUCT ON-SITE INSPECTIONS

THE MI INSPECTOR IS RESPONSIBLE FOR COLLECTING ALL GC INSPECTION AND TEST REPORTS, REVIEWING THE DOCUMENTS FOR ADHERENCE TO THE CONTRACT DOCUMENTS, CONDUCTING THE IN-FIELD INSPECTIONS, AND SUBMITTING THE MI REPORT TO EOR.

GENERAL CONTRACTOR

THE GC IS REQUIRED TO CONTACT THE MI INSPECTOR AS SOON AS RECEIVING A PO FOR THE MODIFICATION INSTALLATION OR TURNKEY PROJECT TO, AT A MINIMUM:

- REVIEW THE REQUIREMENTS OF THE MI CHECKLIST
- WORK WITH THE MI INSPECTOR TO DEVELOP A SCHEDULE TO CONDUCT ON-SITE MI INSPECTIONS, INCLUDING FOUNDATION INSPECTIONS
- BETTER UNDERSTAND ALL INSPECTION AND TESTING REQUIREMENTS

THE GC SHALL PERFORM AND RECORD THE TEST AND INSPECTION RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE MI CHECKLIST.

RECOMMENDATIONS

THE FOLLOWING RECOMMENDATIONS AND SUGGESTIONS ARE OFFERED TO ENHANCE THE EFFICIENCY AND EFFECTIVENESS OF DELIVERING AN MI REPORT:

- IT IS SUGGESTED THAT THE GC PROVIDE A MINIMUM OF 5 BUSINESS DAYS NOTICE, PREFERABLY 10, TO THE MI INSPECTOR AS TO WHEN THE SITE WILL BE READY FOR THE MI TO BE CONDUCTED.
- THE GC AND MI INSPECTOR COORDINATE CLOSELY THROUGHOUT THE ENTIRE PROJECT.
- WHEN POSSIBLE, IT IS PREFERRED TO HAVE THE GC AND MI INSPECTOR ON-SITE SIMULTANEOUSLY FOR ANY GUY WIRE TENSIONING OR RE-TENSIONING OPERATIONS.
- IT MAY BE BENEFICIAL TO INSTALL ALL MODIFICATIONS PRIOR TO CONDUCTING THE FOUNDATION INSPECTIONS TO ALLOW THE FOUNDATION AND MI INSPECTION(S) TO COMMENCE WITH ONE SITE VISIT.
- WHEN POSSIBLE, IT IS PREFERRED TO HAVE THE GC AND MI INSPECTOR ON-SITE DURING THE MI TO HAVE ANY DEFICIENCIES CORRECTED DURING THE INITIAL MI. THEREFORE, THE GC MAY CHOOSE TO COORDINATE THE MI CAREFULLY TO ENSURE ALL CONSTRUCTION FACILITIES ARE AT THEIR DISPOSAL WHEN THE MI INSPECTOR IS ON SITE.

CORRECTION OF FAILING MI'S

IF THE MODIFICATION INSTALLATION WOULD FAIL THE MI ("FAILED MI"), THE GC SHALL WORK WITH THE OWNER TO COORDINATE A REMEDIATION PLAN:

- CORRECT FAILING ISSUES TO COMPLY WITH THE SPECIFICATIONS CONTAINED IN THE ORIGINAL CONTRACT DOCUMENTS AND COORDINATE A SUPPLEMENT MI.

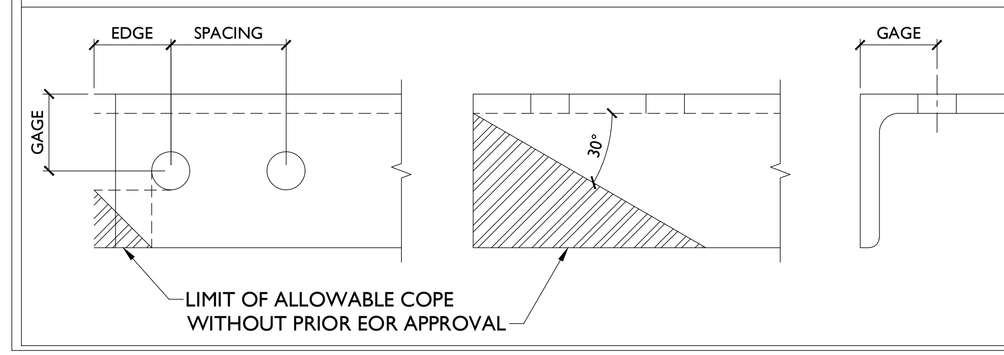
REQUIRED PHOTOS

BETWEEN THE GC AND THE MI INSPECTOR THE FOLLOWING PHOTOGRAPHS, AT A MINIMUM, ARE TO BE TAKEN AND INCLUDED IN THE MI REPORT:

- PRE-CONSTRUCTION GENERAL SITE CONDITION
- PHOTOGRAPHS DURING THE REINFORCEMENT MODIFICATION CONSTRUCTION/ERECTION AND INSPECTION
  - RAW MATERIALS
  - PHOTOS OF ALL CRITICAL DETAILS
  - FOUNDATION MODIFICATIONS
  - WELD PREPARATION
  - BOLT INSTALLATION
  - FINAL INSTALLED CONDITION
  - SURFACE COATING REPAIR
- POST CONSTRUCTION PHOTOGRAPHS
  - FINAL INFIELD CONDITION

PHOTOS OF ELEVATED MODIFICATIONS TAKEN ONLY FROM THE GROUND SHALL BE CONSIDERED INADEQUATE.

ALLOWABLE COPING

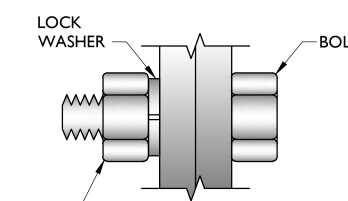


BOLT SCHEDULE (IN.)

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.

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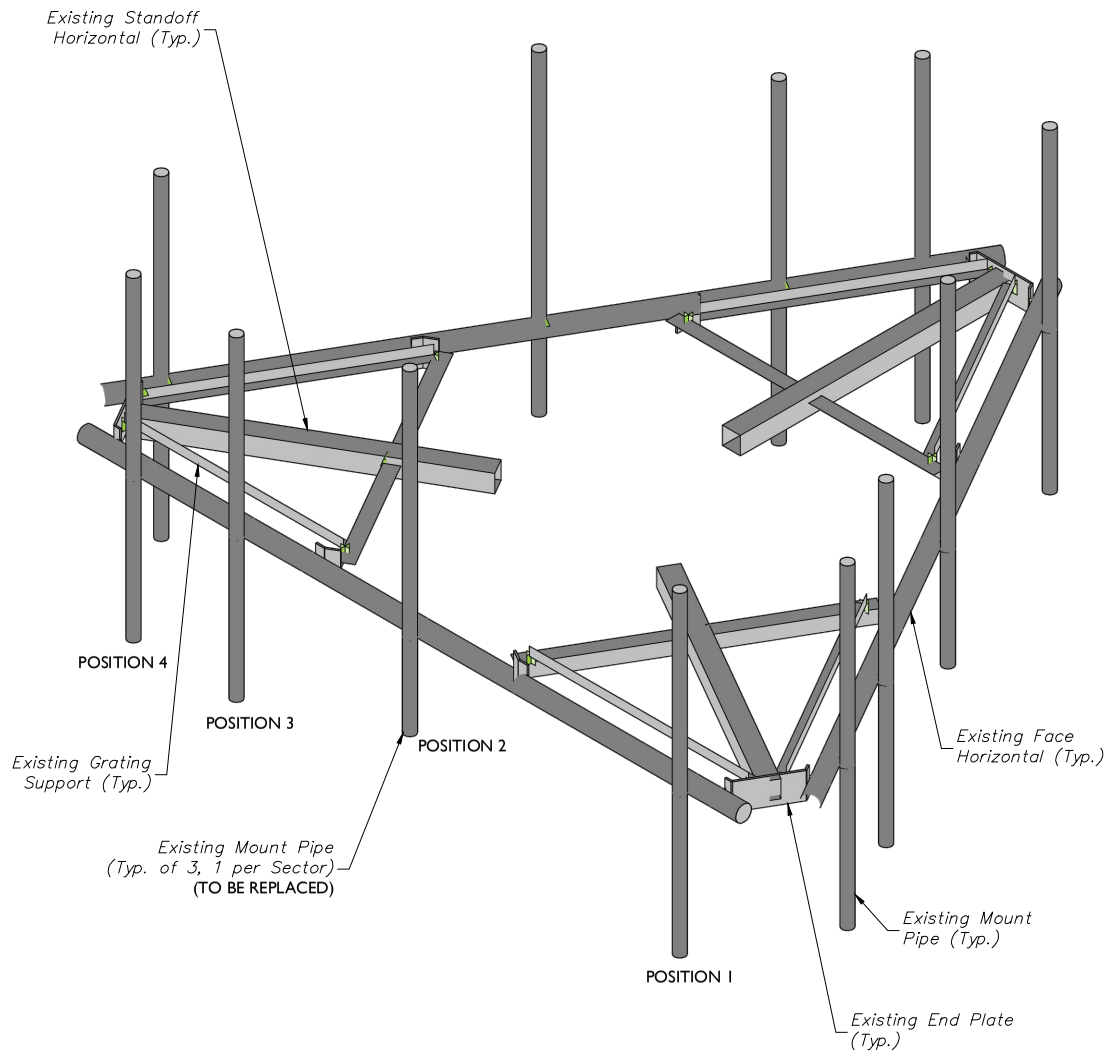
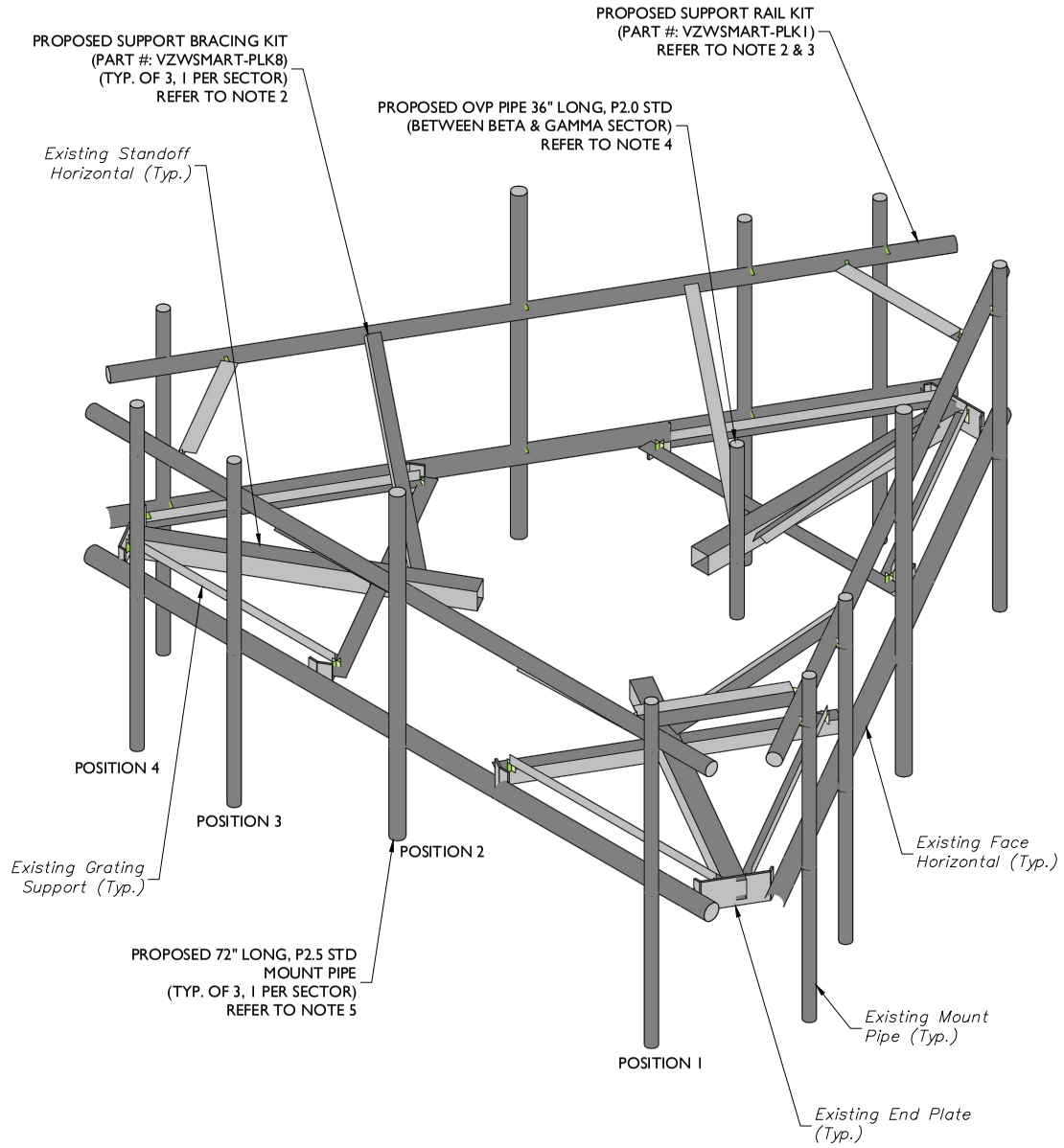
SHEET TITLE: MODIFICATION NOTES
SHEET NUMBER: S-3

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



1 EXISTING PLATFORM ISOMETRIC VIEW

SCALE : N.T.S.



2 PROPOSED PLATFORM ISOMETRIC VIEW

SCALE : N.T.S.

STRUCTURAL NOTES:

1. PER THE MOUNT MAPPING COMPLETED BY STRUCTURAL COMPONENTS, LLC ON 2/18/2021, THE SAFETY CLIMB AND CLIMBING FACILITIES UP TO THE VERIZON MOUNT ELEVATION (136'-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.

MODIFICATION NOTES:

1. MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.
2. CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET S-2.
3. RADIO AND/OR TME POSITIONS SHALL BE ADJUSTED VERTICALLY AS NEEDED IN ORDER TO ACHIEVE INSTALLATION OF HORIZONTAL AS SHOWN. EOR SHALL BE NOTIFIED IF EQUIPMENT NEEDS TO BE RELOCATED TO ANOTHER MOUNT PIPE.
4. CONNECT NEW OVP PIPE TO EXISTING STANDOFF HORIZONTAL WITH CROSSOVER PLATES (PART #: SITE PRO 1 - SQCX4-K, OR EOR APPROVED EQUAL).
5. CONNECT NEW MOUNT PIPE TO EXISTING FACE HORIZONTAL WITH CROSSOVER PLATES (PART #: VZWSMART- MSK2).
6. CONTRACTOR TO INSPECT EXISITNG SAFETY CLIMB AND RETENSION IT AS REQUIRED.

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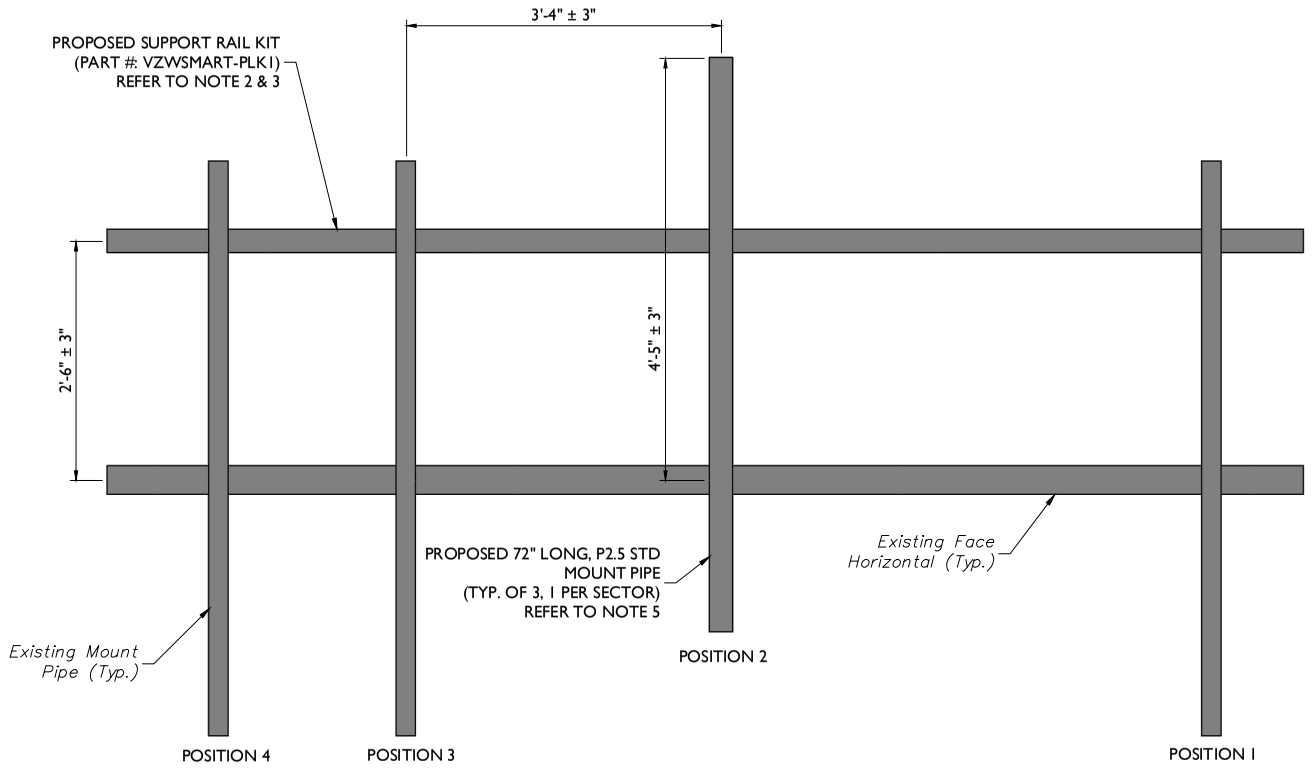
SHEET TITLE :

MODIFICATION DETAILS

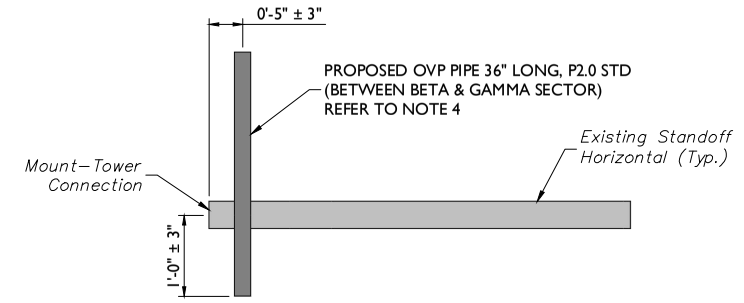
SHEET NUMBER :

S-4



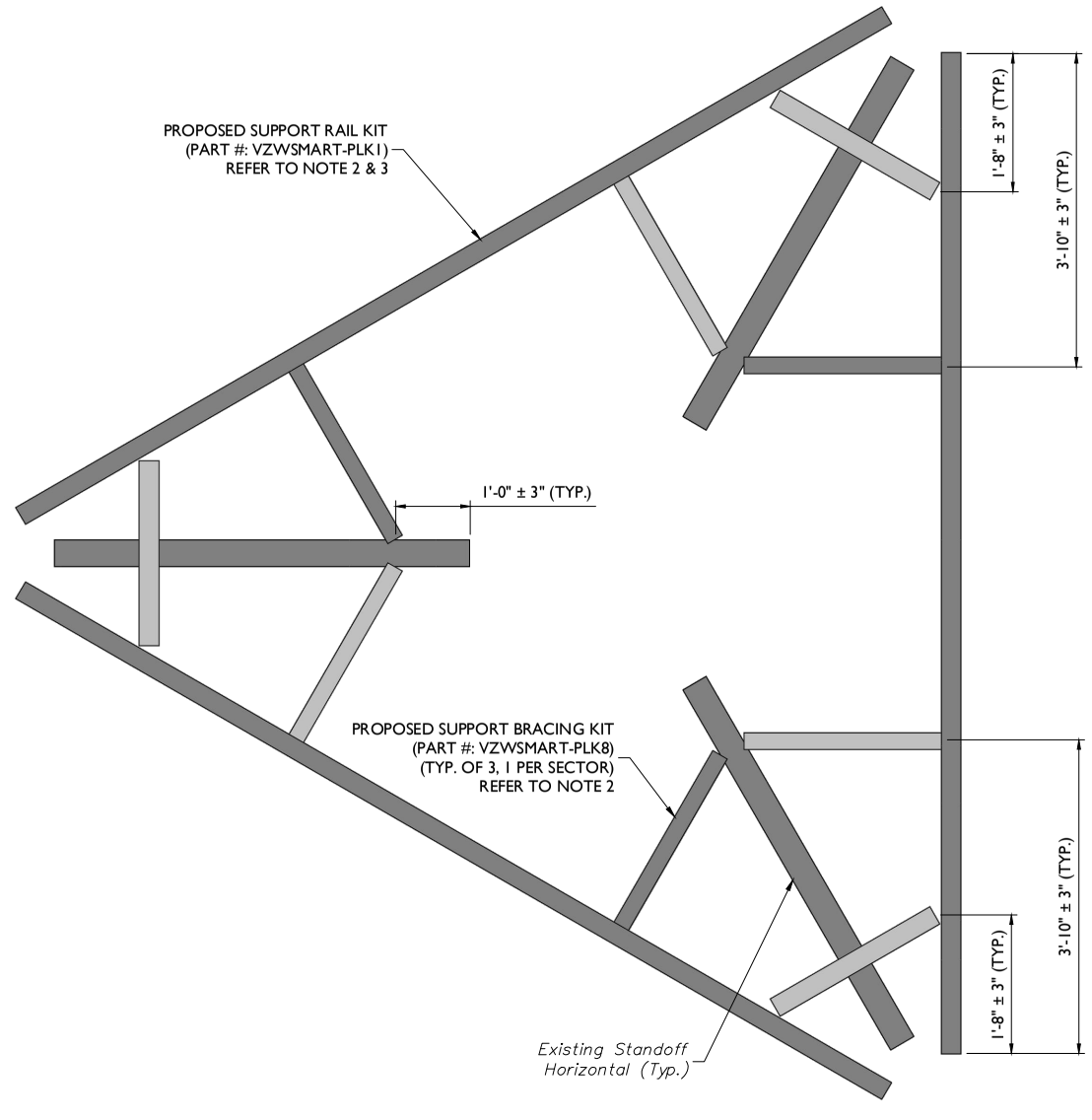
1 PROPOSED FRONT ELEVATION (TYP. ALL SECTORS)

SCALE : N.T.S.



2 PROPOSED SIDE ELEVATION

SCALE : N.T.S.



3 PROPOSED PLAN VIEW

SCALE : N.T.S.

MODIFICATION NOTES:

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2. CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET S-2.
3. RADIO AND/OR TME POSITIONS SHALL BE ADJUSTED VERTICALLY AS NEEDED IN ORDER TO ACHIEVE INSTALLATION OF HORIZONTAL AS SHOWN. EOR SHALL BE NOTIFIED IF EQUIPMENT NEEDS TO BE RELOCATED TO ANOTHER MOUNT PIPE.
4. CONNECT NEW OVP PIPE TO EXISTING STANDOFF HORIZONTAL WITH CROSSOVER PLATES (PART #: SITE PRO 1 - SQCX4-K, OR EOR APPROVED EQUAL).
5. CONNECT NEW MOUNT PIPE TO EXISTING FACE HORIZONTAL WITH CROSSOVER PLATES (PART #: VZWSMART- MSK2).
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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	21777642A

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
2	11/9/2021	ISSUED FOR CONSTRUCTION	FAC	PMA
1	7/1/2021	ISSUED FOR CONSTRUCTION	CL	DK
0	5/11/2021	ISSUED FOR CONSTRUCTION	FAC	JL

STATE OF CONNECTICUT
PETER MICHAEL ALBANO
No. 35459
LICENSED PROFESSIONAL ENGINEER
COLLIERS ENGINEERING & DESIGN CT, P.C.
11/10/21

SITE NAME:

STERLING CT
468461

7 EXETER DRIVE
STERLING, CT 06377
WINDHAM COUNTY

Colliers Engineering & Design
MADISON
135 New Road
Madison, CT 06443
Phone: 860.395.0055
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING

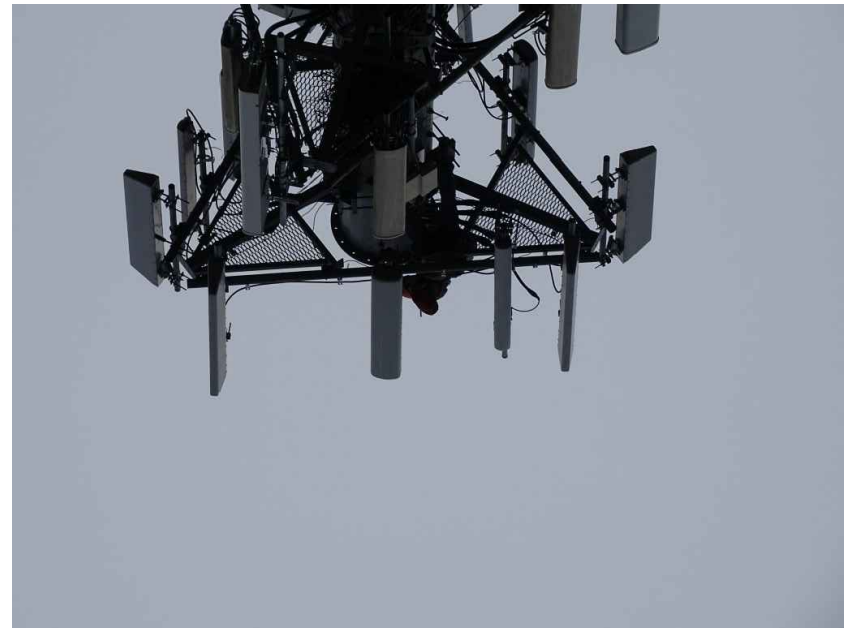
SHEET TITLE :
MODIFICATION DETAILS

SHEET NUMBER :
S-5

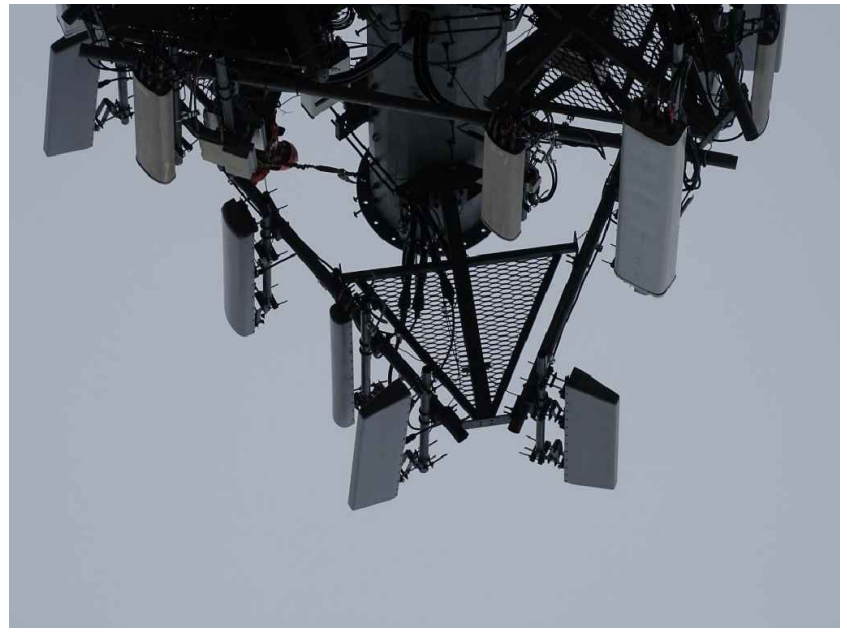
MOUNT PHOTO 3

MOUNT PHOTO 4

MOUNT PHOTO 1



MOUNT PHOTO 2



SHEET NUMBER:
S-6

SHEET TITLE:
MOUNT PHOTOS

MADISON
135 New Road
Madison, CT 06443
Phone: 860.395.0055
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
Colliers Engineering & Design

SITE NAME:
STERLING CT
468461
7 EXETER DRIVE
STERLING, CT 06377
WINDHAM COUNTY

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.

COLLIERS ENGINEERING & DESIGN CT, P.C.
PETER MICHAEL ALBANO
No. 34459
LICENSED PROFESSIONAL ENGINEER
STATE OF CONNECTICUT
11/10/21

verizon

Doing Business as MASER CONSULTING

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
.	.	.	.	.
2	11/9/2021	ISSUED FOR CONSTRUCTION	FAC	PMA
1	7/1/2021	ISSUED FOR CONSTRUCTION	CL	DK
0	5/11/2021	ISSUED FOR CONSTRUCTION	FAC	JL

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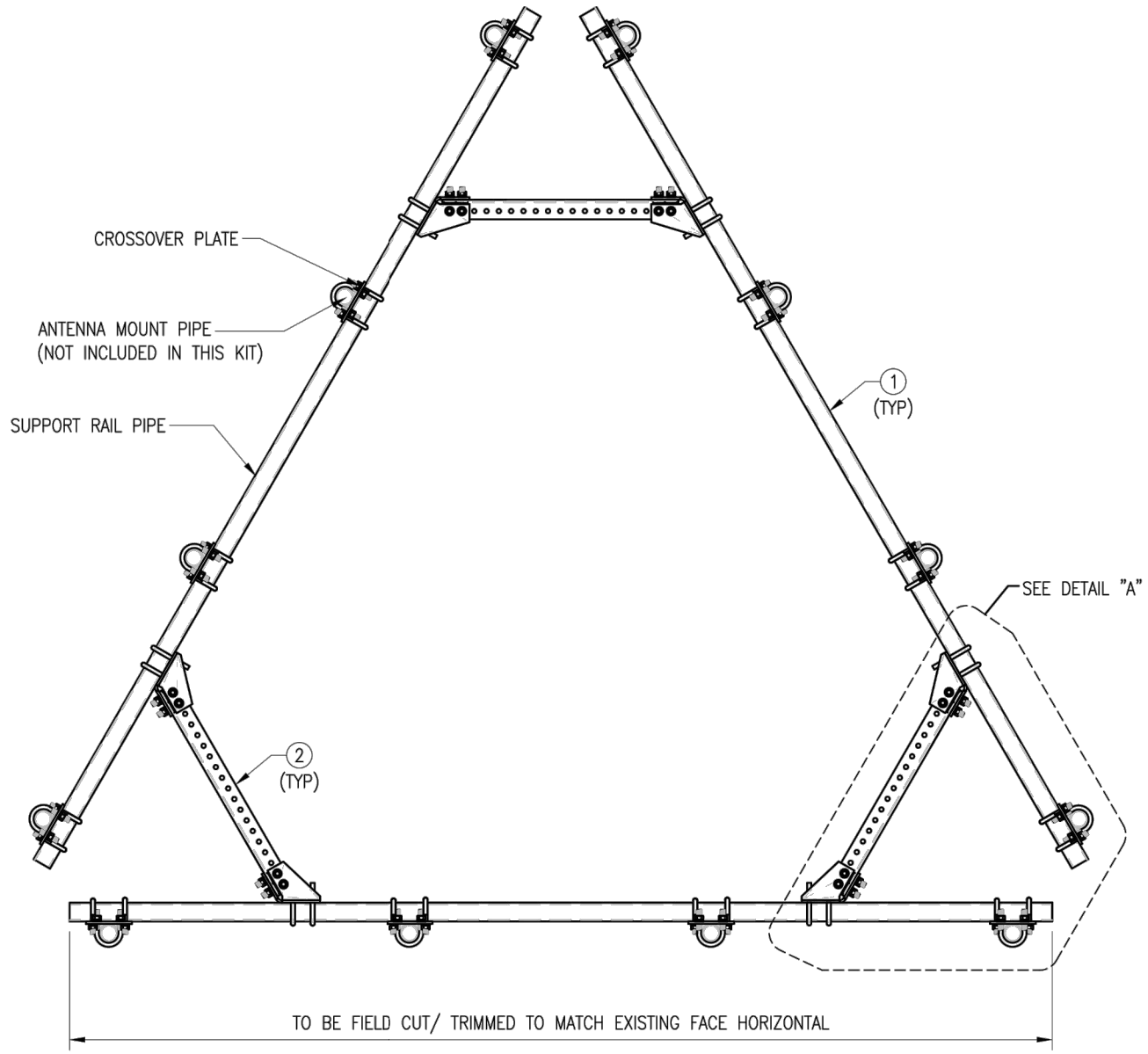
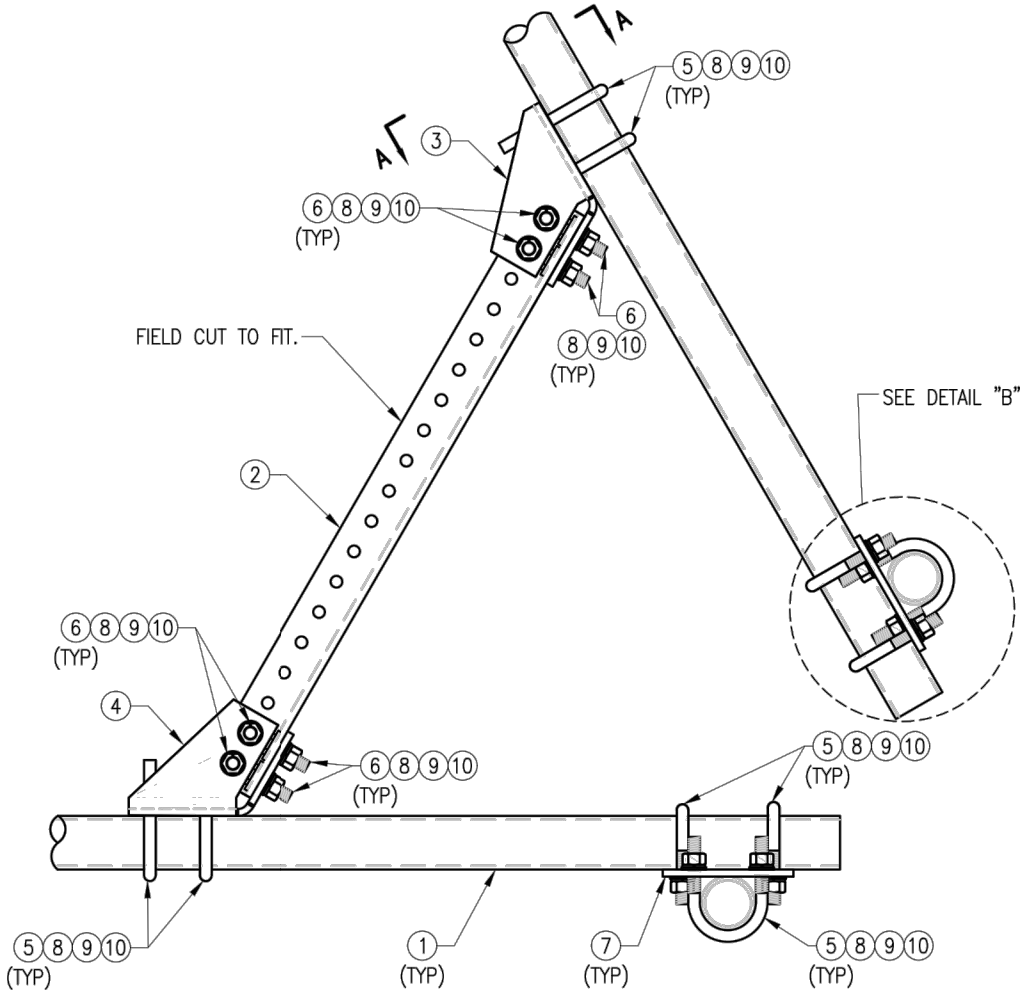
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT:
WWW.CALL811.COM

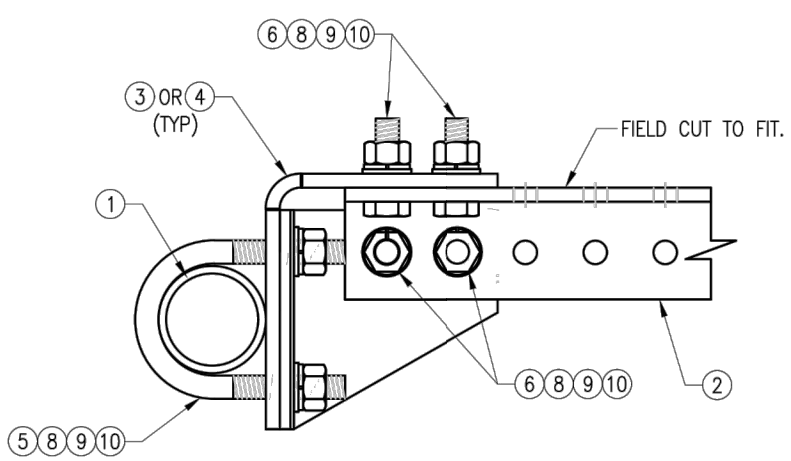
SCALE: AS SHOWN
JOB NUMBER: 21777642A



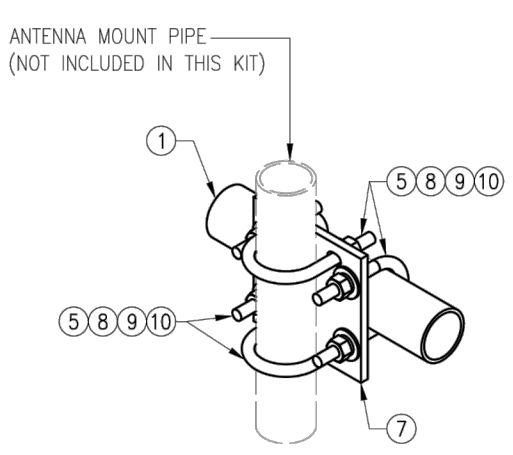
PLAN VIEW



DETAIL "A"



SECTION "A–A"



DETAIL "B"

NOTES:
1. HOT–DIPPED GALVANIZED PER ASTM A123.

VZW SMART–PLK1 (SUPPORT RAIL KIT)

ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	3	PST2875–12.5	2.5" PST (2.875" O.D. X 0.203" THK.) X 12'–6" A53 GR–B	PLK1–F1	292
2	3	L33375–3	L 3" X 3" X 3/8" X 3'–0" A36	PLK1–F1	66
3	3	CBP–L	CORNER BENT PLATE BRACKET	PLK1–F2	28
4	3	CBP–R	CORNER BENT PLATE BRACKET	PLK1–F2	28
5	60	MS02–625–300–500	RU–BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)	RBC–1	82
6	24	---	BOLT 5/8" X 2" A325	---	9
7	12	PL375–857	PL 3/8" X 8 1/2" X 7'–0" A36	PLK1–F3	77
8	144	FW–625	5/8" HDG USS FLAT WASHER	---	12
9	144	LW–625	5/8" HDG LOCK WASHER	---	3
10	144	NUT–625	5/8" HDG HEX NUT	---	17
				GALVANIZED WT	504

VzW SMART Tool© Vendor

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DRAWN BY: H.R | CHECKED BY: HMA

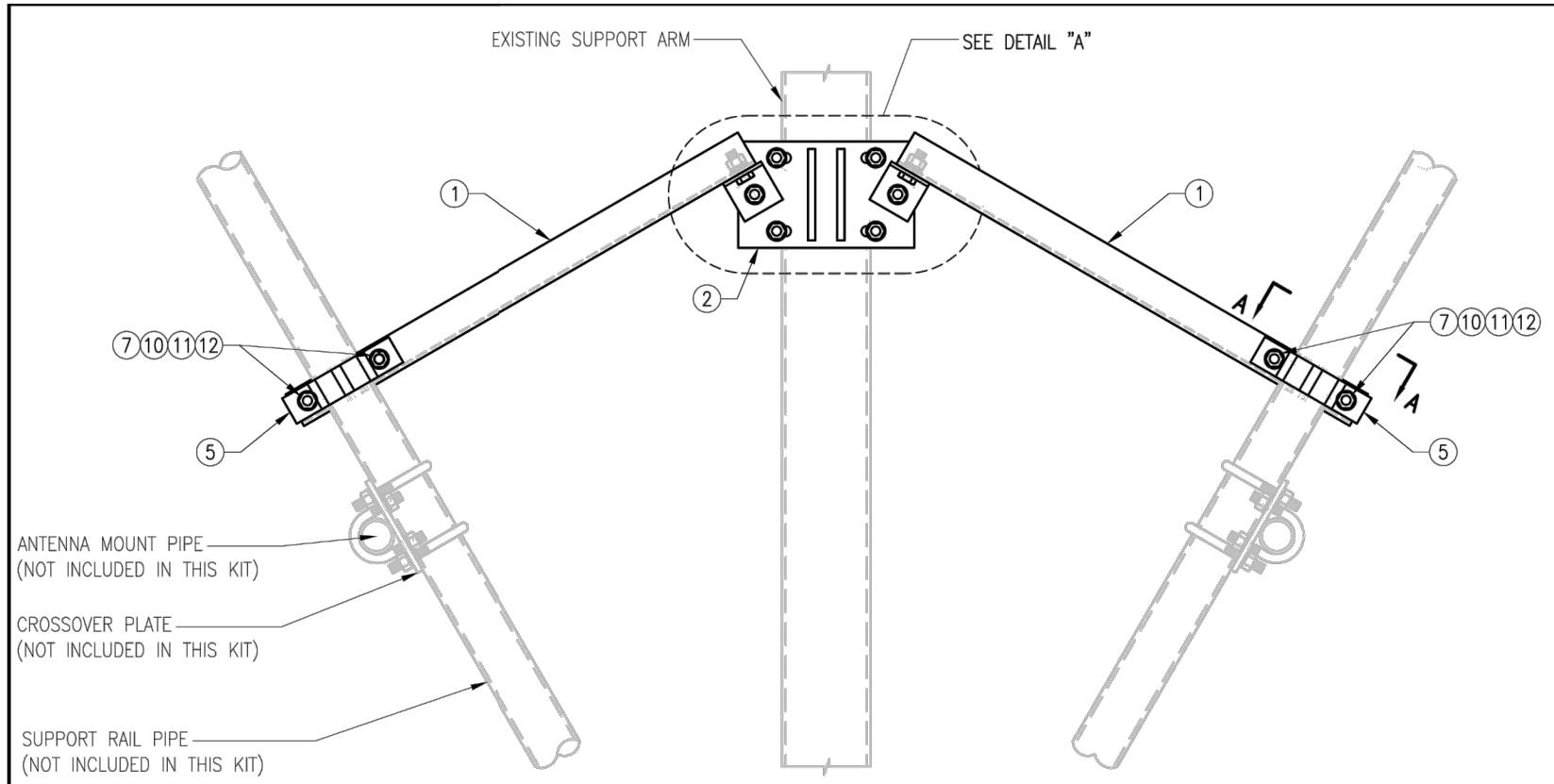
REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	H.R	05/08/20

SHEET TITLE:

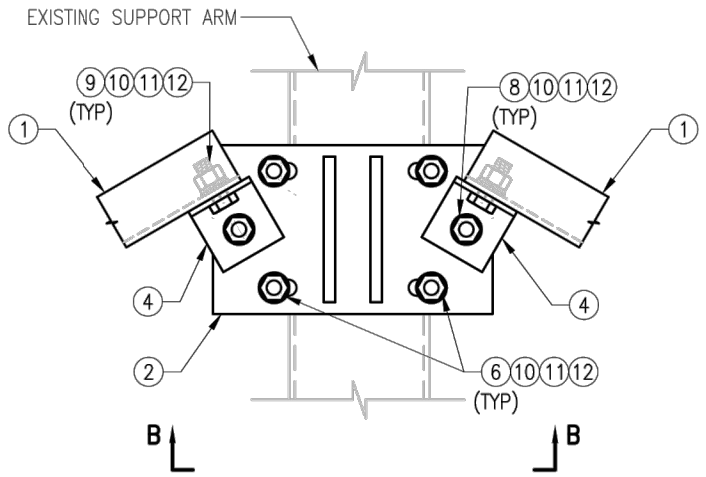
VZWSMART–PLK1
SUPPORT RAIL KIT

SHEET NUMBER: VZWSMART–PLK1

REV #: 0



PLAN VIEW



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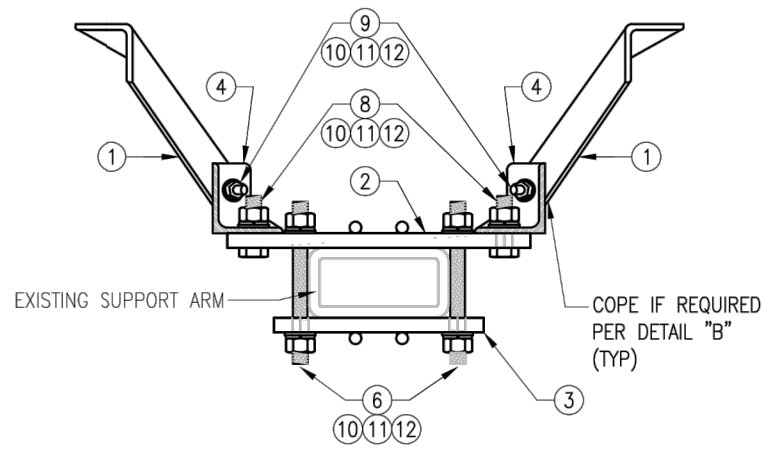

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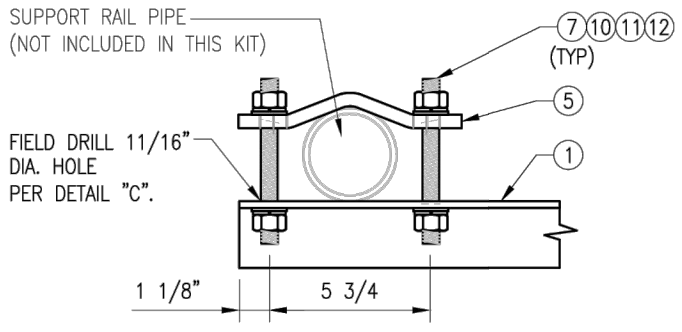
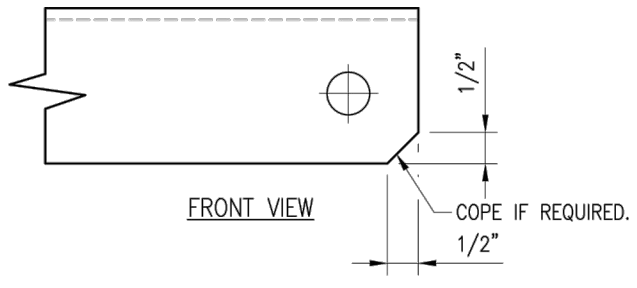
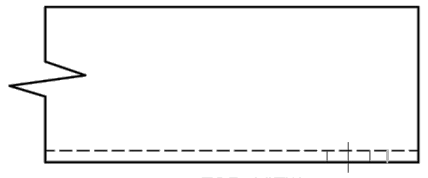


SECTION "A–A"

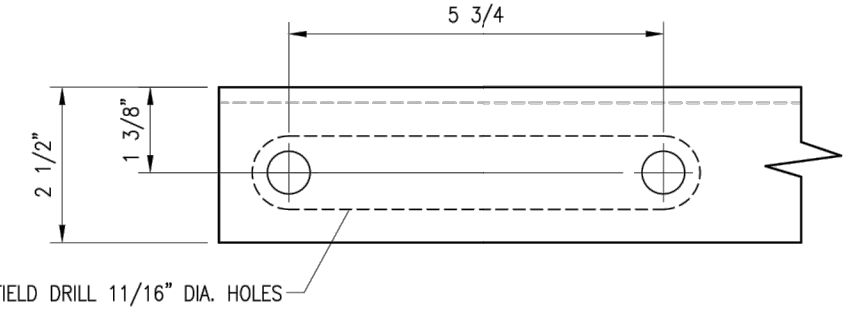


FRONT VIEW



TOP VIEW

DETAIL "B"



DETAIL "C"

NOTES:
1. HOT–DIPPED GALVANIZED PER ASTM A123.

VZWSMART–PLK8 (SUPPORT BRACING KIT)

ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	2	L252525–8	L 2 1/2" X 2 1/2" X 1/4" X 8'–0" A36	PLK8–F3	67
2	1	PL625–72512	PL 5/8" X 0–7 1/4" X 1'–0" A36	PLK8–F1	16.25
3	1	PL625–7259	PL 5/8" X 0–7 1/4" X 0'–9" A36	PLK8–F2	12.36
4	2	AL–333	L 3" X 3" X 1/4" X 3" A36	PLK8–F3	2.5
5	2	VCP	PL 1/2" X 2" X 8 5/8" A36 BENT PLATE	PLK8–F4	4.8
6	4	---	THREADED ROD 5/8" DIA. X 1'–6" F1554–36 HDG	---	--
7	4	---	THREADED ROD 5/8" DIA. X 10" F1554–36 HDG	---	--
8	2	---	BOLT 5/8" X 2 1/4" A325	---	--
9	2	---	BOLT 5/8" X 1 3/4" A325	---	--
10	20	FW–625	5/8" HDG USS FLAT WASHER	---	2
11	20	LW–625	5/8" HDG LOCK WASHER	---	0
12	20	NUT–625	5/8" HDG HEX NUT	---	2
				GALVANIZED WT	107

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DRAWN BY: H.R. | CHECKED BY: HMA

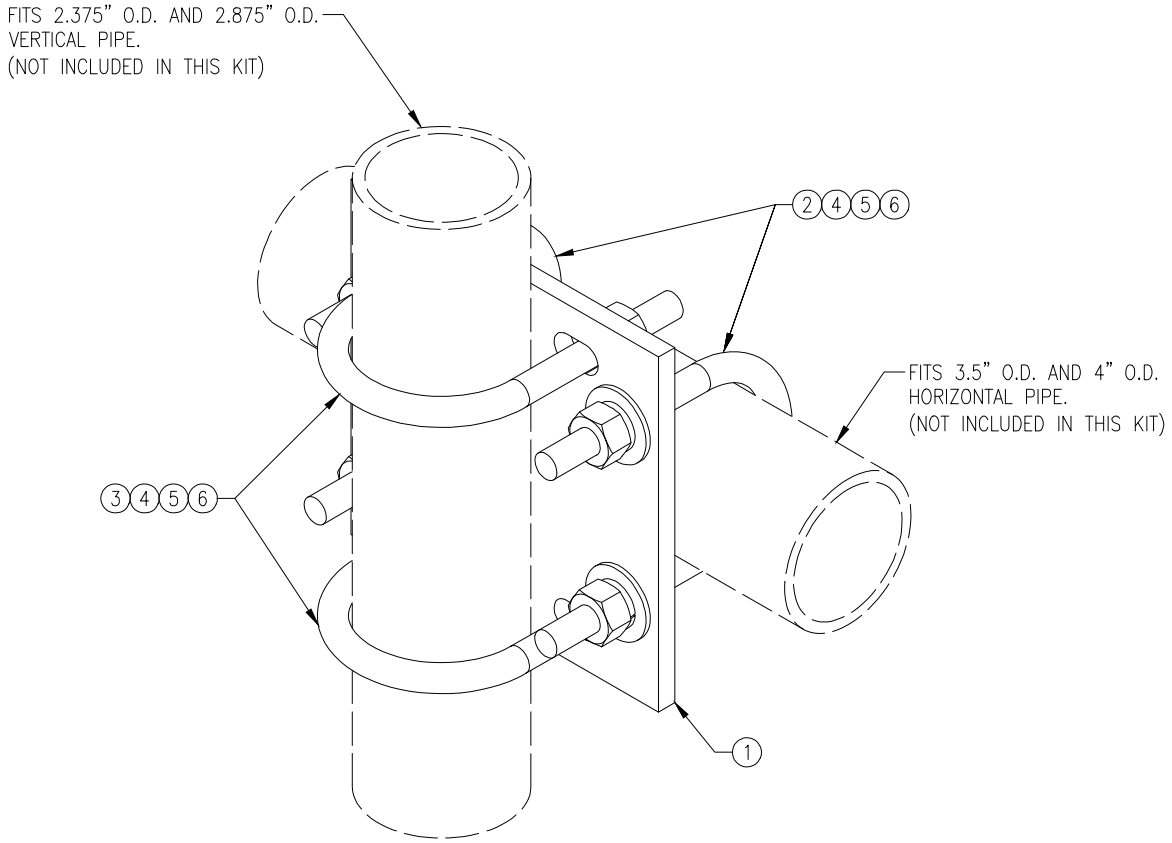
REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	H.R.	05/08/20

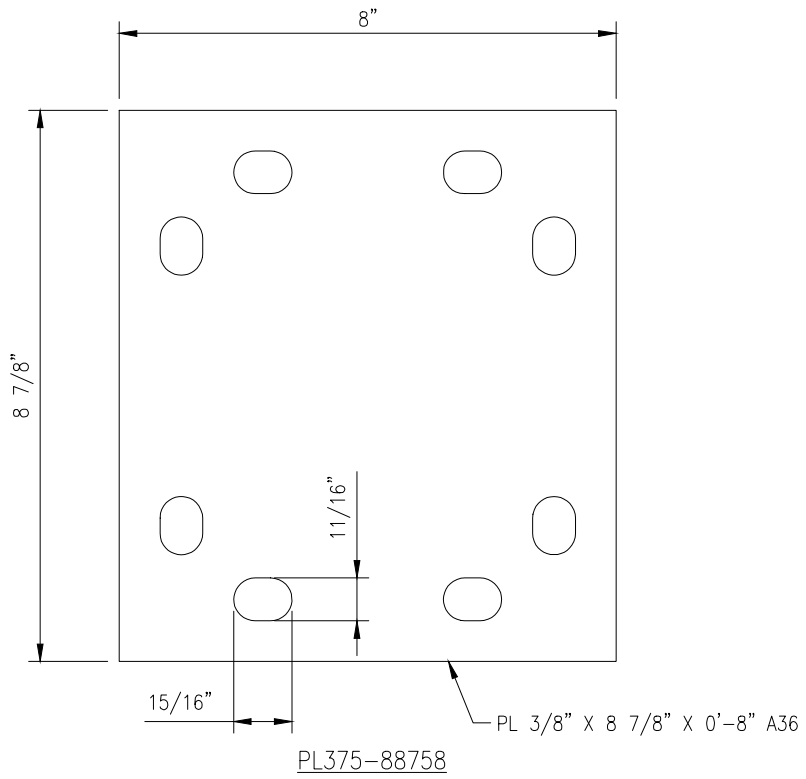
SHEET TITLE:

VZWSMART–PLK8
SUPPORT BRACING KIT

SHEET NUMBER: VZWSMART–PLK8

REV #: 0





PL375-88758

NOTES:
1. HOT-DIPPED GALVANIZED PER ASTM A123.

VZWSMART-MSK2 (CROSSOVER PLATE)

ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	1	PL375-88758	PL 3/8" X 8 3/4" X 0'-8" A36	MSK2-F1	8
2	2	MS02-625-4125-600	RU-BOLT 5/8" X 4 1/8" I.W. X 6" I.L. A36 (OR EQUIV.)	RBC-1	3
3	2	MS02-625-300-500	RU-BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)	RBC-1	3
4	8	FW-625	5/8" HDG USS FLAT WASHER	---	1
5	8	LW-625	5/8" HDG LOCK WASHER	---	0
6	8	NUT-625	5/8" HDG HEX NUT	---	1
				GALVANIZED WT	15

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DRAWN BY: H.R | CHECKED BY: HMA

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	H.R	05/08/20

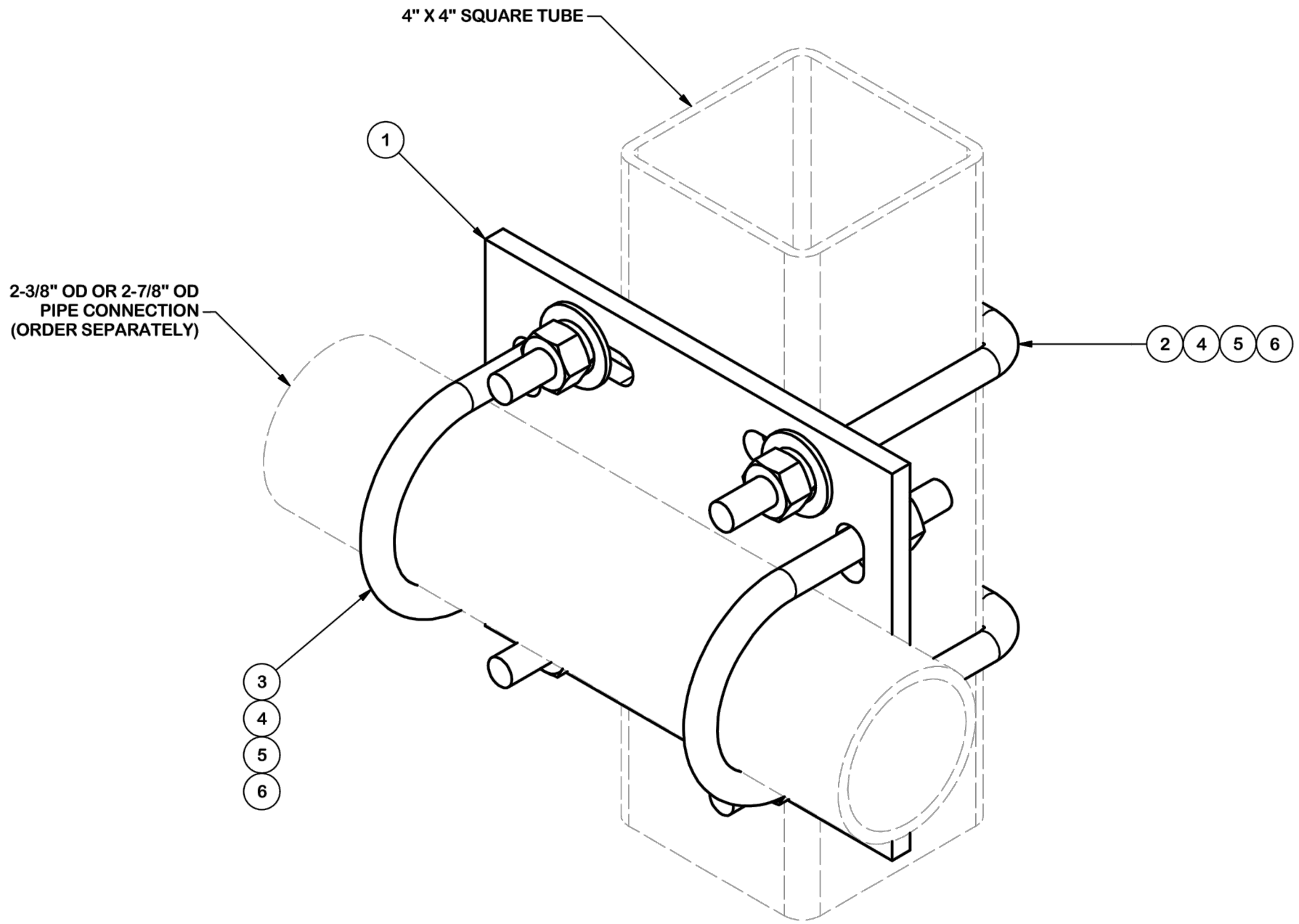
SHEET TITLE:

VZWSMART-MSK2
CROSSOVER PLATE

SHEET NUMBER: VZWSMART-MSK2

REV #: 0

ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	1	SCX4	CROSSOVER PLATE	8 1/2 in	6.02	6.02
2	2	X-SUB1418	SQUARE U-BOLT 0.5" DIA. X 4.125" IW X 6" IL X 3" TR		0.98	1.95
3	2	X-UB1212	1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.)		0.60	1.19
3	2	X-UB1300	1/2" X 3" X 5" X 2" U-BOLT (HDG.)		0.67	1.34
4	8	G12FW	1/2" HDG USS FLATWASHER	3/32 in	0.03	0.27
5	8	G12LW	1/2" HDG LOCKWASHER	1/8 in	0.01	0.11
6	8	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	0.57
					TOTAL WT. #	11.35



TOLERANCE NOTES

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

DESCRIPTION
CROSSOVER PLATE KIT
W/ SQUARE U-BOLTS AND STD. U-BOLTS

SITE PRO 1
A valmont COMPANY
Engineering Support Team: 1-888-753-7446
Locations:
New York, NY
Atlanta, GA
Los Angeles, CA
Plymouth, IN
Salem, OR
Dallas, TX

CPD NO.		DRAWN BY	ENG. APPROVAL	PART NO.	PAGE
		CSL 9/18/2018	3RD PARTY	SQCX4-K	1 OF 1
CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.	
87	02	CUSTOMER	BMC 11/12/2018	SQCX4-K	

ATTACHMENT 5


Summary
5 EXETER DR
STERLING TOWN OF
Parcel ID: 03842-017-IP16
View Details
IP16
8.31 AC
5
EXETER DRIVE
30AA
54.36 AC
IP15
7.2 AC
29
IP14
19.85 AC
10
IP5
2.82 AC
IP13
INDUSTRIAL
AC
60m
200ft
317.14
134.4
131.5
149.3
133.2
164.5
334.5
235.4
341.3
439.5
411.43
237.61
274.54
474.44
200.12
252.97
527.21
24.47
9.87
75.71
110.17
31.55
191.92
185.97
179.96
177.84
601.64
271.64
210.00
345.04
286.92
389.67
910.91
521.24
554.79
697.51
59.40
197.25
197.5

tyler clt division

RESIDENTIAL PROPERTY RECORD CARD 2016

TOWN OF STERLING

Situs : 5 EXETER DR | **Map ID: 00045300** | **Class: Municipal** | Card: 1 of 1 | Printed: March 9, 2016

CURRENT OWNER

STERLING TOWN OF

PO BOX 157
ONECO CT 06373

GENERAL INFORMATION

Living Units	
Neighborhood	200
Alternate Id	03842-017-IP16
Vol / Pg	40/15
District	
Zoning	
Class	200

Property Notes

7 EXETER DRIVE=CELL TOWER
ADDRESS ASSIGNED TO TOWER
146/21 - LEASE AMENDMENT

Land Information

Type		Size	Influence Factors	Influence %	Value
Primary	AC	2.0000			40,000
Excess	AC	6.3100			15,780

Total Acres: 8.31
Spot: Location:

Assessment Information

	Assessed	Appraised	Cost	Income	
Land	39,050	55,780	55,780	0	55,780
Building	27,890	39,840	39,840	0	39,840
Total	66,930	95,620	95,620	0	95,620

Manual Override Reason
Base Date of Value 10-01-2012
Value Flag COST APPROACH **Effective Date of Value** 10-01-2016
Gross Building:

Entrance Information

Date	ID	Entry Code	Source
08/24/12	JS	Data Mailer/Field Check	Owner

Permit Information

Date Issued	Number	Price	Purpose		% Complet
07/09/15	15-59	15,000	CFX	Bell Atlantic/Verizon Wireless Rep	
10/15/12	12-78	25,000	CAL	At&T Site Modification	100
12/15/08	08-90	6,800	COB	Wire (?) Equipment Shelter	100
05/27/08	08-38	125,000	COB	Cell Tower (2 Permits) Cingular To	100

Sales/Ownership History

Transfer Date	Price	Type	Validity	Deed Reference	Deed Type	Grantee

tyler clt division

RESIDENTIAL PROPERTY RECORD CARD 2016

TOWN OF STERLING

Situs : 5 EXETER DR	Parcel Id: 00045300	Class: Municipal	Card: 1 of 1	Printed: March 9, 2016

Dwelling Information

Style		Year Built	
Story height		Eff Year Built	
Attic		Year Remodeled	
Exterior Walls		Amenities	
Masonry Trim	x		
Color		In-law Apt	No

Basement

Basement		# Car Bsmt Gar	
FBLA Size	x	FBLA Type	
Rec Rm Size	x	Rec Rm Type	

Heating & Cooling

Heat Type		Stacks	
Fuel Type		Openings	
System Type		Pre-Fab	

Fireplaces

Room Detail

Bedrooms		Full Baths	
Family Rooms		Half Baths	
Kitchens		Extra Fixtures	
Total Rooms			
Kitchen Type		Bath Type	
Kitchen Remod		Bath Remod	

Adjustments

Int vs Ext		Unfinished Area	
Cathedral Ceiling	x	Unheated Area	

Grade & Depreciation

Grade	C	Market Adj	
Condition		Functional	
CDU	AVERAGE	Economic	
Cost & Design	0	% Good Ovr	
% Complete			

Dwelling Computations

Base Price		% Good	
Plumbing		% Good Override	
Basement		Functional	
Heating		Economic	
Attic		% Complete	
Other Features	0	C&D Factor	
		Adj Factor	
Subtotal		Additions	
Ground Floor Area			
Total Living Area		Dwelling Value	

Building Notes

Outbuilding Data

Type	Size 1	Size 2	Area	Qty	Yr Blt	Grade	Condition	Value
Br/St Shed	16 x	12	192	1	2008	C	A	39,840

Condominium / Mobile Home Information

Complex Name			
Condo Model			
Unit Number			
Unit Level		Unit Location	
Unit Parking		Unit View	
Model (MH)		Model Make (MH)	

Addition Details

Line #	Low	1st	2nd	3rd	Value

ATTACHMENT 6

UNITED STATES POSTAL SERVICE®

STERLING

Certificate of Mailing — Firm

Name and Address of Sender	TOTAL NO. of Pieces Listed by Sender	TOTAL NO. of Pieces Received at Post Office™	Affix Stamp Here ***Postmark with Date of Receipt.***
Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103		2	neopost 12/08/2021 US POSTAGE $002.99 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.	Lincoln Cooper, First Selectman Town of Sterling P.O. Box 157 Oneco, CT 06373-0157				
2.	Melissa Gil, Zoning Enforcement Officer Town of Sterling P.O. Box 157 Oneco, CT 06373-0157				
3.					
4.					
5.					
6.					

DEC 08 2021 USPS