STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL
Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@ct.gov
Web Site: portal.ct.gov/csc

VIA ELECTRONIC MAIL

August 22, 2022

Katie Adams
SR Site Acquisition Specialist
Network Building + Consulting
100 Apollo Drive, Suite 303
Chelmsford, MA 01824
kadams@nbcllc.com

RE: **EM-VER-131-220708** – Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 250 Meriden-Waterbury Turnpike, Southington, Connecticut.

Dear Ms. Adams:

The Connecticut Siting Council (Council) is in receipt of your correspondence of August 19, 2022 submitted in response to the Council's August 5, 2022 notification of an incomplete request for exempt modification with regard to the above-referenced matter.

The submission renders the request for exempt modification complete and the Council will process the request in accordance with the Federal Communications Commission 60-day timeframe.

Thank you for your attention and cooperation.

Sincerely,

Melanie A. Bachman
Executive Director

MAB/MP/emr

From: Katie Adams <kadams@nbcllc.com>
Sent: Friday, August 19, 2022 11:09 AM
To: Robidoux, Evan <Evan.Robidoux@ct.gov>
Cc: CSC-DL Siting Council <Siting.Council@ct.gov>
Subject: RE: Council Incomplete Letter for EM-VER-131-220708 (250 Meriden-Waterbury Turnpike, Southington)

Good morning Evan,

Please see the attached stamped mount analysis. Please let me know if there is anything else needed for this site. You will receive the hard copy via fedex next week.

Thank you!

Katie Adams
SR Site Acquisition Specialist

NETWORK BUILDING + CONSULTING
100 Apollo Drive | Suite 303 | Chelmsford, MA | 01824
M 781-392-7547

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

Post-Modification Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10145336
Maser Consulting Connecticut Project #: 20777028A

April 29, 2022

Site Information	*Site ID:*	*468179-VZW / SOUTHINGTON_I691_CT - A*
	Site Name:	*SOUTHINGTON_I691_CT - A*
	Carrier Name:	*Verizon Wireless*
	Address:	*250 Meriden Waterbury Tpk* *Southington, Connecticut 06489* *Hartford County*
	Latitude:	*41.556831°*
	Longitude:	*-72.853017°*
Structure Information	*Tower Type:*	*120-Ft Self Support*
	Mount Type:	*5.00-Ft T-Arm*

FUZE ID # 16092616

Analysis Results

T-Arm: **38.3% Pass w/ Modifications***

***Antennas and equipment to be installed in compliance with PMI Requirements of this mount analysis.**

******Contractor PMI Requirements*:**
Included at the end of this MA report
Available & Submitted via portal at https://pmi.vzwsmart.com
For additional questions and support, please reach out to:
pmisupport@colliersengineering.com

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: 5008563, Dated March 28, 2022*
Mount Mapping Report	*Onsight Services LLC, Site ID: 468179, Dated April 10, 2022*
Previous Mount Analysis	*Maser Consulting Connecticut, Project #: 20777028A, Dated April 15, 2022*
Mount Modification Drawings	*Maser Consulting Connecticut, Project #: 20777028A, Dated April 29, 2022*

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H	
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT}:	118 mph
	Ice Wind Speed (3-sec. Gust):	50 mph
	Design Ice Thickness:	1.00 in
	Risk Category:	II
	Exposure Category:	B
	Topographic Category:	1
	Topographic Feature Considered:	N/A
	Topographic Method:	N/A
	Ground Elevation Factor, K_e:	0.988
Seismic Parameters:	S_S:	0.20 g
	S_1:	0.06 g
Maintenance Parameters:	Wind Speed (3-sec. Gust):	30 mph
	Maintenance Live Load, Lv:	250 lbs.
	Maintenance Live Load, Lm:	500 lbs.
Analysis Software:	RISA-3D (V17)	

Final Loading Configuration:

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
58.00	60.00	3	Commscope	NHH-65B-R2B	Added
		3	Commscope	NHHSS-65B-R2BT4	
		3	Samsung	MT6407-77A	
		3	Samsung	RF4440d-13A	
		3	Samsung	RF4439d-25A	
		3	Samsung	CBRS RRH - RT4401-48A	
		2	Raycap	RVZDC-6627-PF-48	

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

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

Standard Conditions:

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

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

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

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

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

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

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

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

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

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

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

Analysis Results:

Component	Utilization %	Pass/Fail
MOD Tieback	1.3%	Pass
MOD Support Rail	17.8%	Pass
Antenna Mount	25.1%	Pass
Standoff Vertical	11.3%	Pass
Face Horizontal	38.3%	Pass
Mount Connection	11.3%	Pass

Structure Rating – ***(Controlling Utilization of all Components)***	**38.3%**

Mount Steel (EPA)a per ANSI/TIA-222-H Section 2.6.11.2:

Ice Thickness (In)	Mount Pipes Excluded		Mount Pipes Included	
	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)
0	6.5	5.3	9.9	8.7
0.5	8.7	7.3	13.6	12.2
1	10.9	9.2	17.2	15.5

Notes:
- (EPA)a values listed above may be used in the absence of more precise information
- (EPA)a values in the table above include 1 sector(s).
- Ka factors included in (EPA)a calculations

Requirements:

The existing mounts will be **SUFFICIENT** for the final loading configuration (attachment 2) after the modifications detailed in attachment 3 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. **Contractor Required PMI Report Deliverables**
2. Antenna Placement Diagrams
3. Mount Modification Drawings
4. Mount Photos
5. Mount Mapping Report (for reference only)
6. Analysis Calculations

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Mount Modification

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

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PSLC #: 468179 SMART Project #: 10145336 Fuze Project ID: 16092616

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

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

Base Requirements:

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

Photo Requirements:

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

- *Photos taken at Mount Elevation*
  - Photos showing the safety climb wire rope above and below the mount prior to modification.
  - Photos showing the climbing facility and safety climb if present.

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

Material Certification:

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

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

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

OR

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

Antenna & Equipment Placement and Geometry Confirmation:

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

OR

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

Comments:

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

☐ Yes ☐ No

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

Issue:

Contractor shall inspect climbing facilities and safety climb and ensure they are in good condition. Contractor shall install safety climb wire rope guides in locations where wire rope is rubbing against the mount or mount-to-tower connection steel. Wire brush clean any observed corrosion and protect with two (2) coats of cold galvanization (Zinga or Zinc Kote). Contractor shall provide photos of wire rope guide installation as part of PMI documents. Contact EOR if additional guidance is required. Contractor shall install R5 Reinforcement kit on all mount to tower connections. Contractor to install proposed OVP directly to the existing pipe mast, similar to the existing OVP connection, 30” from the top of the pipe.

Response:

Special Instruction Confirmation:

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

Comments:

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

☐ Yes ☐ No

Contractor certifies no new damage created during the current installation:

☐ Yes ☐ No

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

☐ Safety Climb in Good Condition ☐ Safety Climb Damaged

Comments:

Certifying Individual:

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

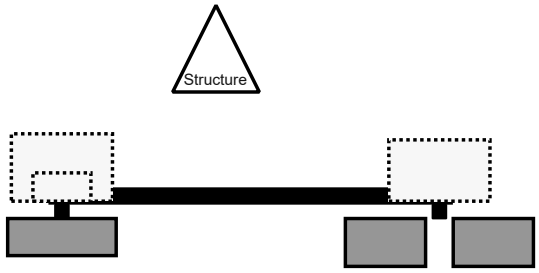
Structure: 468179-VZW - SOUTHINGTON_I691_CT - A

Sector: **A** 4/21/2022

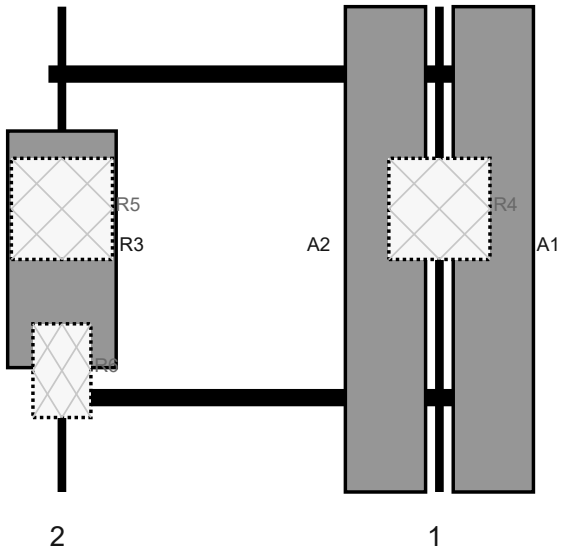
Structure Type: Self Support 10145336

Mount Elev: 58.00 Page: 1

Plan View

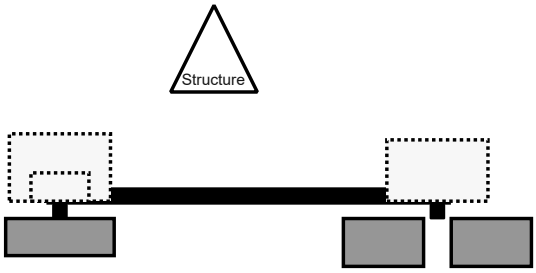


Front View - Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A1	NHH-65B-R2B	72	11.9	58	1	a	Front	36	8	Added	
A2	NHHSS-65B-R2BT4	72	11.9	58	1	a	Front	36	-8	Added	
R4	RF4440d-13A	15	15	58	1	a	Behind	30	0	Added	
R3	MT6407-77A	35.1	16.1	2	2	a	Front	36	0	Added	
R5	RF4439d-25A	15	15	2	2	a	Behind	30	0	Added	
R6	CBRS RRH - RT4401-48A	13.9	8.6	2	2	a	Behind	54	0	Added	
OVP	RVZDC-6627-PF-48	29.5	16.5		Member					Added	

Plan View



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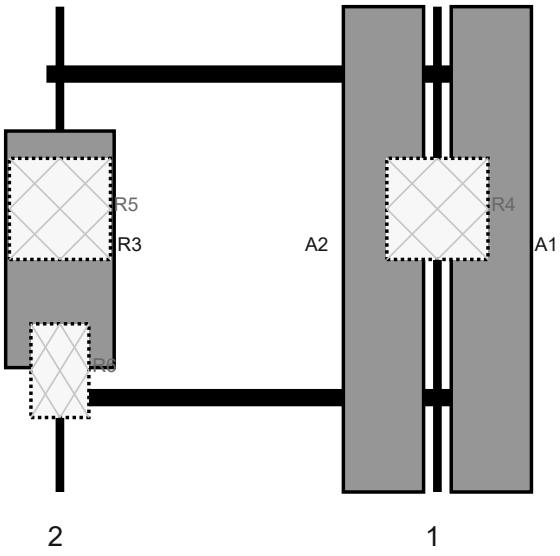

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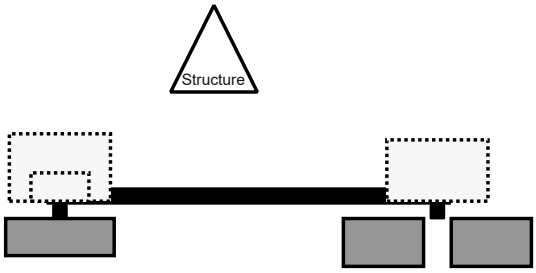
Plan View



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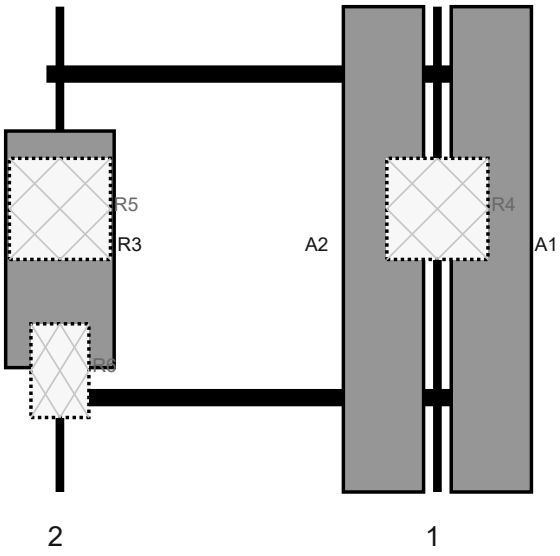

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R6	CBRS RRH - RT4401-48A	13.9	8.6	2	2	a	Behind	54	0	Added	

verizon

MOUNT MODIFICATION DRAWINGS
EXISTING 5.00' T-ARM

TOWER OWNER: CROWN CASTLE
TOWER OWNER SITE NUMBER: 841298

CARRIER SITE NAME: SOUTHINGTON_I691_CT - A
CARRIER SITE NUMBER: 468179
FUZE ID: 16092616

250 MERIDEN WATERBURY TPK
SOUTHINGTON, CT 06489
HARTFORD COUNTY

LATITUDE: 41.556831° N
LONGITUDE: 72.853017° W

DESIGN CRITERIA

WIND LOADS

BASIC WIND SPEED (3 SECOND GUST), V = 118 MPH
EXPOSURE CATEGORY B
TOPOGRAPHIC CATEGORY 1
MEAN BASE ELEVATION (AMSL) = 343.35'

ICE LOADS

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

SEISMIC LOADS

SEISMIC DESIGN CATEGORY B
SHORT TERM MCER GROUND MOTION, S_s = .200
LONG TERM MCER GROUND MOTION, S_1 = .055

PROJECT INFORMATION

APPLICANT/LESSEE

COMPANY: VERIZON WIRELESS

CLIENT REPRESENTATIVE

COMPANY: VERIZON WIRELESS

PROJECT MANAGER

COMPANY: COLLIERS ENGINEERING & DESIGN
CONTACT: PETER ALBANO
PHONE: 856.797.0412
E-MAIL: PETER.ALBANO@COLLIERSENGINEERING.COM

CONTRACTOR PMI REQUIREMENTS

PMI LOCATION: HTTPS://PMI.VZWSMART.COM
SMART TOOL PROJECT #: 10145336
VZW LOCATION CODE (PSLC): 468179
ANALYSIS DATE: 4/29/2022

PMI REQUIREMENTS EMBEDDED WITHIN MOUNT MODIFICATION REPORT

SHEET INDEX

Colliers Engineering & Design
www.colliersengineering.com

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

SCALE	JOB NUMBER
AS SHOWN	22777028A

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
0	4/29/2022	ISSUED FOR CONSTRUCTION	DM	DH

COLLIERS ENGINEERING & DESIGN CT, P.C.
C.T. C.O.A. #PC-0000131

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:
SOUTHINGTON_I691_CT - A
468179
250 MERIDEN WATERBURY TPK
SOUTHINGTON, CT 06489
HARTFORD COUNTY

STAMFORD
1055 Washington Boulevard
Stamford, CT 06901
Phone: 203.324.0800
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MAGNIR ENGINEERING

SHEET TITLE: TITLE SHEET

SHEET NUMBER: ST-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

BILL OF MATERIALS

SECTION 1 - VZWSMART KITS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
6	VZWSMART	VZWSMART-SFK1	TIE BACK ASSEMBLY	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET SGN-1.	84	504
6		VZWSMART-MSK1	CROSSOVER PLATE		14	84

SECTION 2 - OTHER REQUIRED PARTS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
3	-	-	60" LONG, P2 1/2 STD PIPE	GALVANIZED	29	87
3	SITE PRO 1	RS-REINF	RS UNIVERSAL PIPE MOUNT REINFORCEMENT KIT	OR EOR APPROVED EQUAL, CONTACT MASER CONSULTING FOR APPROVAL OF SUBSTITUTION.	34	102
					TOTAL:	777

NOTES:

1. THE MANUFACTURERS LISTED ARE THE APPROVED VENDORS FOR THE VZW MOUNT KITS. EACH MANUFACTURER WILL BE AWARE OF WHICH KITS HAVE BEEN THROUGH THE VZW APPROVAL PROCESS AND THEY ARE IN TURN APPROVED TO SELL. PLEASE NOTE THAT THE MATERIAL UTILIZED ON THE MOUNT MODIFICATIONS WILL BE REVIEWED AS A PART OF THE DESKTOP PMI COMPLETED BY THE SMART TOOL VENDOR. IT WILL BE REQUIRED THAT THE VZW KITS SPECIFIED ARE UTILIZED IN THE MODIFICATIONS.
2. ALL MATERIALS REQUIRED FOR THE DESIGNED MODIFICATIONS BUT NOT LISTED IN THIS SHEET ARE ASSUMED TO BE PROVIDED BY THE CONTRACTOR.

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

VZWSMART KITS - APPROVED VENDORS

NEWAVE

CONTACT	NEWAVE SALES TEAM
PHONE	(971) 239-4762
EMAIL	SALES@NEWAVETC.COM
WEBSITE	WWW.NEWAVETC.COM

BETTER METAL, LLC

CONTACT	DAVID STANSBERRY
PHONE	(615) 535-0990 (O), (615) 631-2520 (M)
EMAIL	DLS@BETTERMETAL.COM
WEBSITE	WWW.BETTERMETAL.COM

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COLLIERS ENGINEERING & DESIGN CT, P.C.
C.T. C.O.A. #PC-0000131

SITE NAME:
SOUTHINGTON_1691_CT - A
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STAMFORD
1055 Washington Boulevard
Stamford, CT 06901
Phone: 203.324.0800
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING

SHEET TITLE
BILL OF MATERIALS

SHEET NUMBER
SBOM-1

PROJECT NOTES

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

GENERAL NOTES

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

STRUCTURAL STEEL

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

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

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

WELDING NOTES

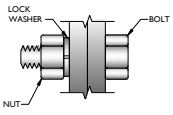
1. ALL WELDING SHALL BE DONE IN ACCORDANCE WITH AWS D1.0 (LATEST EDITION). THIS SHALL INCLUDE A CERTIFIED WELD INSPECTION (CWI) FOR ACCEPTANCE OR REJECTION OF ALL WELDING OPERATIONS, PRE DURING, AND POST INSTALLATION, USING THE ACCEPTANCE CRITERIA OF AWS D1.1.
2. CONTRACTOR IS RESPONSIBLE FOR COMMISSIONING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

BOLT SCHEDULE (IN.)

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

WORKABLE GAGES (IN.)

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

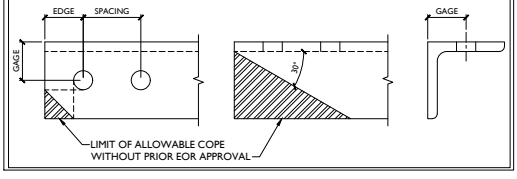


TYP. BOLT ASSEMBLY

NOTES:

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

ALLOWABLE COPING



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REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
0	4/19/2022	ISSUED FOR CONSTRUCTION	DAC	DH

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C.T. C.O.A. #PC-0000131

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468179
250 MERIDEN WATERBURY TPK
SOUTHINGTON, CT 06489
HARTFORD COUNTY

STAMFORD
1055 Washington Boulevard
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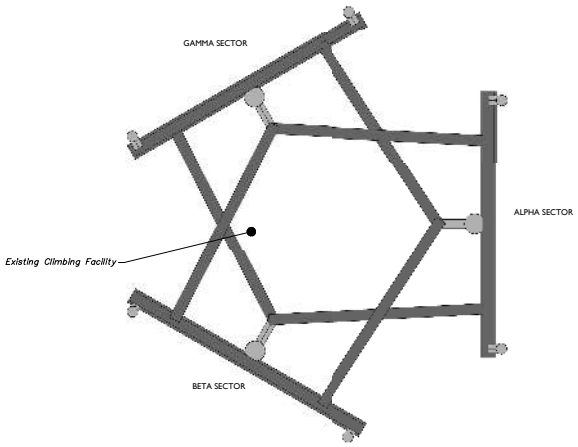
SHEET TITLE
GENERAL NOTES

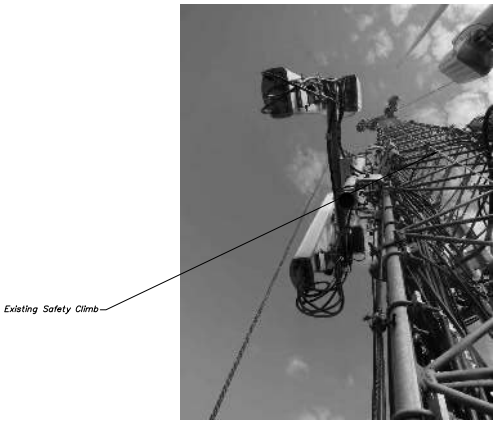
SHEET NUMBER
SGN-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



1 CLIMBING FACILITY LOCATION

SCALE : N.T.S.



CLIMBING FACILITY PHOTO

STRUCTURAL NOTES:

1. PER THE MOUNT MAPPING COMPLETED BY ONSIGHT SERVICES LLC. ON 4/10/2022, THE SAFETY CLIMB AND CLIMBING FACILITIES UP TO THE VERIZON MOUNT ELEVATION (58'-0") ARE IN GOOD CONDITION. COLLIERS ENGINEERING & DESIGN 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.

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SCALE	JOB NUMBER
AS SHOWN	22770728A

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SHEET TITLE
CLIMBING FACILITY DETAIL

SHEET NUMBER
SCF-1

LEGEND:

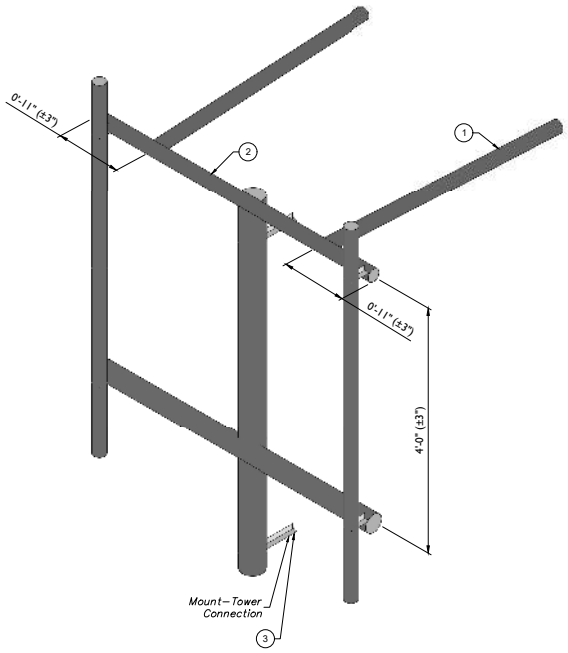
- PROPOSED
- RELOCATED
- EXISTING

MOUNT MODIFICATION SCHEDULE

NO.	ELEVATION	QUANTITY	DESCRIPTION	NOTES
1	58'-0"	6	PROPOSED TIEBACK ASSEMBLY (PART #: VZWSMART-SFK1)	CONNECT OTHER END TO ADJACENT TOWER LEG. PROPOSED TIE-BACK SHALL EXTEND NO MORE THAN 12" BEYOND THE TOWER LEG. CONTRACTOR SHALL TRIM AS REQUIRED AND PROTECT CUT END WITH TWO COATS OF ZINGA OR ZINC COTE.
2		3	60" LONG, P2 1/2 STD PIPE	CONNECT NEW HORIZONTAL TO ALL EXISTING VERTICAL MOUNT PIPES WITH CROSSOVER PLATES (PART #: VZWSMART-MSK1). RADIO AND/OR TME POSITIONS SHALL BE ADJUSTED VERTICALLY AS NEEDED IN ORDER TO ACHIEVE INSTALLATION OF HORIZONTAL AS SHOWN. EOR SHALL BE NOTIFIED IF EQUIPMENT NEEDS TO BE RELOCATED TO ANOTHER MOUNT PIPE.
3		3	R5 UNIVERSAL PIPE MOUNT REINFORCEMENT KIT	CONTRACTOR SHALL INSTALL R5 REINFORCEMENT KIT ON ALL MOUNT TO TOWER CONNECTIONS

NOTES.

MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.
THREADED ROD FROM PROPOSED KITS SHALL BE TRIMMED TO EXTEND NO MORE THAN 3" BEYOND THE LOCK NUT. TREAT ALL CUT ENDS WITH (2) COATS OF COLD GALVANIZATION (ZINGA OR ZINC KOTE).



1 PROPOSED ISOMETRIC VIEW (TYP. ALL SECTORS)

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SHEET TITLE
MODIFICATION DETAILS

SHEET NUMBER
SS-1

MOUNT PHOTO 1

MOUNT PHOTO 2

MOUNT PHOTO 3

MOUNT PHOTO 4

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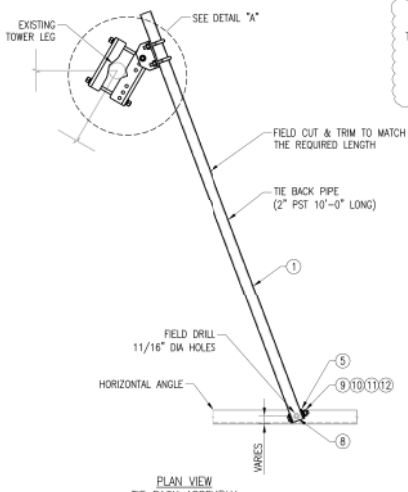
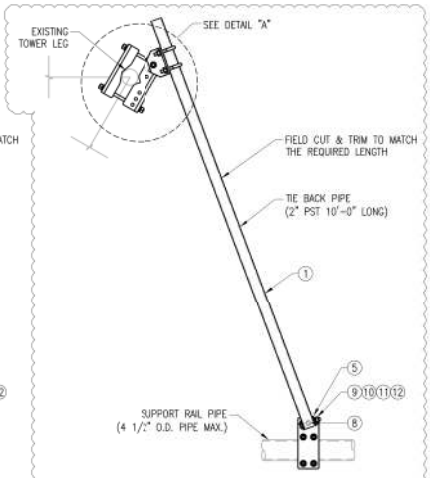
SHEET TITLE:
MOUNT PHOTOS

SHEET NUMBER:
SS-2

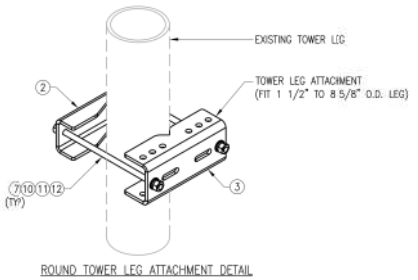


PLAN VIEW
TIE BACK ASSEMBLY

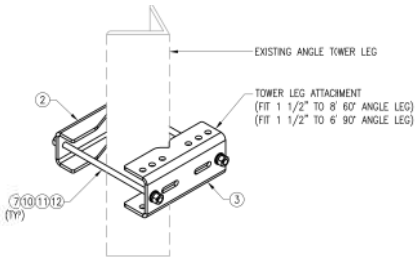


PLAN VIEW
TIE BACK ASSEMBLY WITH ADAPTER FOR PIPE

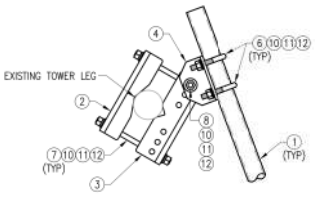
1



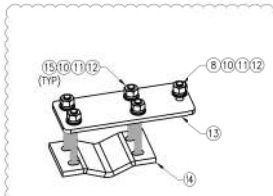
ROUND TOWER LEG ATTACHMENT DETAIL



ANGLE TOWER LEG ATTACHMENT DETAIL



DETAIL "A"



ADAPTER FOR PIPE CONNECTION

1

VZWSMART-SFK1 (TIE BACK ASSEMBLY)

ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	1	PST2375-10	2" PST (2.175" O.D. X 0.154" THK) X 10'-0" A53 GR-B 35KSI	SFK1-F1	38
2	1	BP825-12	PL 3/8" X 8 1/4" X 1'-0" A36 BENT PLATE	SFK1-F2	11
3	1	BP11125-12	PL 3/8" X 11 1/8" X 1'-0" A36 BENT PLATE	SFK1-F3	14
4	1	BP6-9375	PL 3/8" X 6" X 9 3/8" A36 BENT PLATE	SFK1-F4	6
5	1	BP2-875	PL 1/4" X 2" X 8 3/4" A36 BENT PLATE	SFK1-F4	1
6	2	MS02-625-300-500	RU-BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)	SBC-1	2
7	2	---	THREADED ROD 5/8" DIA. X 1'-6" F1554-36 HDG	---	0
8	2	---	BOLT 5/8" X 2" A325	---	0
9	1	---	BOLT 5/8" X 4 1/4" A325	---	0
10	15	FW-625	5/8" HDG .JSS FLAT WASHER	---	1
11	15	LW-625	5/8" HDG .OCK WASHER	---	0
12	15	NUT-625	5/8" HDG .EX NUT	---	2
13	1	PL375-4511	PL 3/8" X 4 1/2" X 11" A36	SFK1-F1	4
14	1	V-CLAMP	PL 1/2" X 4 1/4" X 8 5/8" A36 BEND PLATE	SFK1-F5	5
15	4	---	BOLT 5/8" X 6" FULL THREAD SAE GR 5	---	0
			GALVANIZED WT		84

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

VzW SMART Tool© Vendor

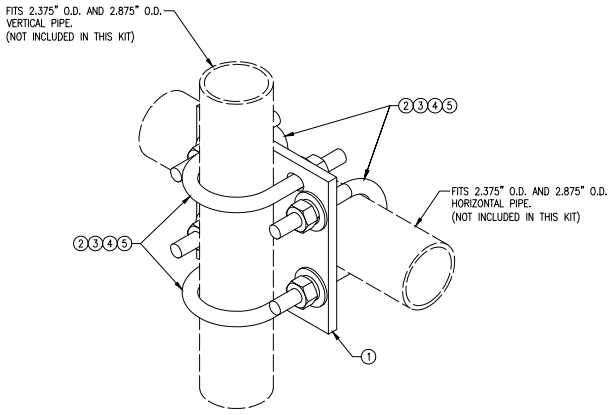
verizon

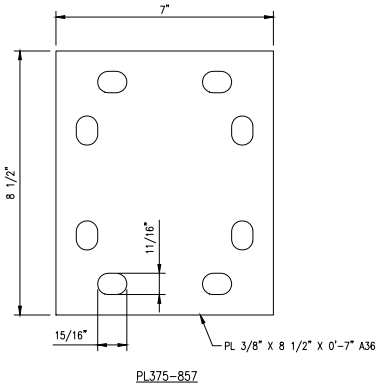
DRAWN BY: BT | CHECKED BY: HMA/KW

REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	BT	05/08/20
1	REVISED	BT	04/10/21

SHEET TITLE:
VZWSMART-SFK1
TIE BACK ASSEMBLY

SHEET NUMBER: VZWSMART-SFK1 | REV #: 1





PL375-857

VZWSMART-MSK1 (CROSSOVER PLATE)					
ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	1	PL375-857	PL 3/8" X 8 1/2" X 0'-7" A36	MSK1-F1	6
2	4	MS02-625-300-500	RU-BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)	RBC-1	5
3	8	FW-625	5/8" HDG USS FLAT WASHER	---	1
4	8	LW-625	5/8" HDG LOCK WASHER	---	0
5	8	NUT-625	5/8" HDG HEX NUT	---	1
				GALVANIZED WT	14

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

VzW
SMART Tool©
Vendor

verizon

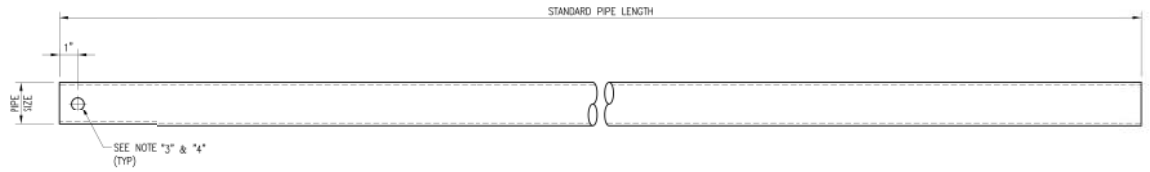
DRAWN BY: H.R	CHECKED BY: HMA

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

SHEET TITLE:

VZWSMART-MSK1
CROSSOVER PLATE

SHEET NUMBER:	REV #:
VZWSMART-MSK1	0



VZWSMART Standard Pipe		
VZWSMART Number	Size	Length
P40-238X048	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	48"
P40-238X072	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	72"
P40-238X096	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	96"
P40-238X120	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	120"
P40-238X126	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	126"
P40-238X150	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	150"
P40-238X174	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	174"
P40-278X048	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	48"
P40-278X072	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	72"
P40-278X096	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	96"
P40-278X120	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	120"
P40-278X126	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	126"
P40-278X150	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	150"
P40-278X174	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	174"
P40-312X048	PIPE 3 SCH40 (3.5" OD x 0.216" THK)	48"
P40-312X072	PIPE 3 SCH40 (3.5" OD x 0.216" THK)	72"
P40-312X126	PIPE 3 SCH40 (3.5" OD x 0.216" THK)	126"
P40-312X150	PIPE 3 SCH40 (3.5" OD x 0.216" THK)	150"
P40-312X174	PIPE 3 SCH40 (3.5" OD x 0.216" THK)	174"

NOTE:
APPROVED SMART KIT VENDORS ARE ALLOWED TO SUBSTITUTE AT THEIR DISCRETION PIPES LISTED ON THIS PAGE FOR CUSTOM LENGTH COMPONENTS OF MATCHING SIZE. SUBSTITUTIONS SHALL MEET THE ORIGINAL STRUCTURAL INTENT.

NOTES:
1. ALL PIPE GRADE A53-B OR BETTER.
2. HOT-DIPPED GALVANIZED PER ASTM A123.
3. ALL HOLES ARE 11/16" DIA. U.N.O
4. HOLES MAY OR MAY NOT BE PRESENT, DIPEND UPON MANUFACTURE DISCRETION.
5. ALL FIELD CUT AND DRILLED SURFACES SHALL BE REPAIRED WITH A MINIMUM OF TWO COATS OF ZINGA OR ZINC COTE PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.

VzW SMART Tool© Vendor

verizon

DRAWN BY: BT | CHECKED BY: HMA/KW

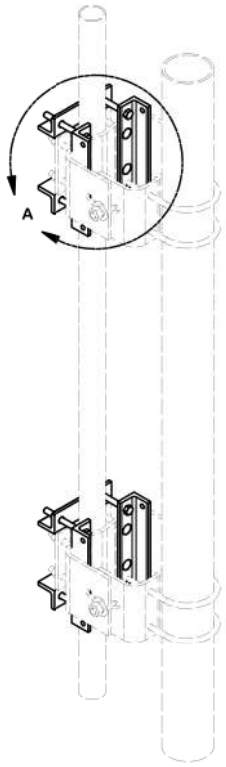
REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	BT	08/04/21

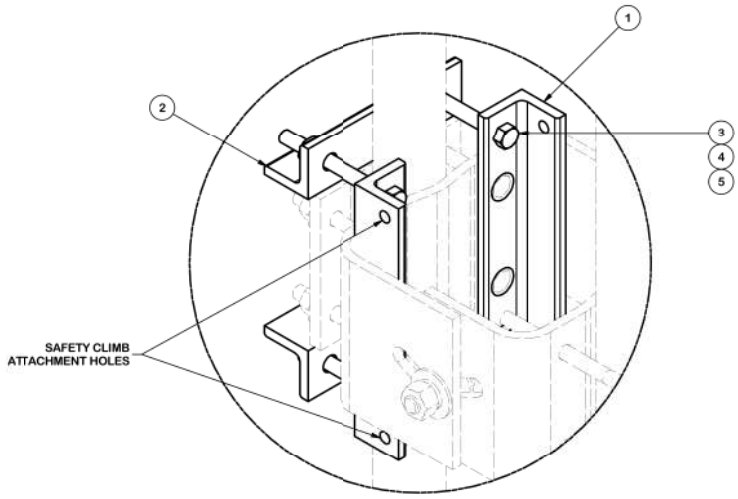
SHEET TITLE:
VZWSMART STANDARD PIPE

SHEET NUMBER: VZWSMART-PIPE | REV #: 0

PARTS LIST

ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	4	X-R5-FRA1	REINFORCEMENT ANGLE	10 in	3.84	15.36
2	4	X-R5-RFA2	REINFORCEMENT ANGLE	7 1/8 in	2.86	11.45
3	8	G1208	1/2" x 8" HDG HEX BOLT GR5 FULL THREAD	8 in	0.49	3.94
3	8	G1205	1/2" x 5" HDG HEX BOLT GR5 FULL THREAD	5 in	0.33	2.61
4	8	G12LW	1/2" HDG LOCKWASHER		0.01	0.11
5	8	G12NUT	1/2" HDG HEAVY 2H HEXNUT		0.07	0.57
					TOTAL WT. #	34.04





DETAIL A

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: R5 UNIVERSAL PIPE MOUNT REINFORCEMENT KIT

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.
	JFS 4/22/2020	5/6/2020	R5-REINF

CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.
81	02	CUSTOMER	BMC 5/6/2020	R5-REINF

V4.1 Updated on 12-17-2021

Antenna Mount Mapping Form (PATENT PENDING)

Colliers Engineering & Design

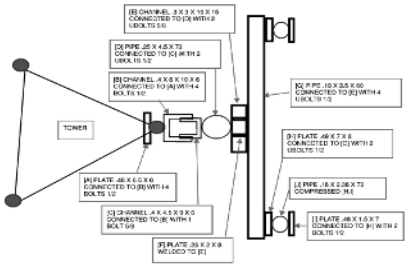
FCC #

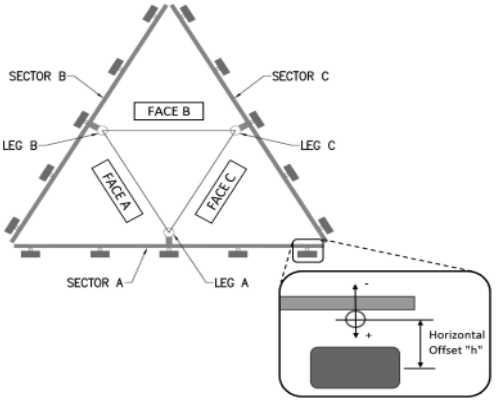
Tower Owner:	CROWN CASTLE	**Mapping Date:**	4/10/2022
Site Name:	SOUTHINGTON_I691_CT-A	**Tower Type:**	SELF SUPPORT
Site Number or ID:	468179	**Tower Height (Ft.):**	120
Mapping Contractor:	Onsight Services LLC	**Mount Elevation (Ft.):**	57.5

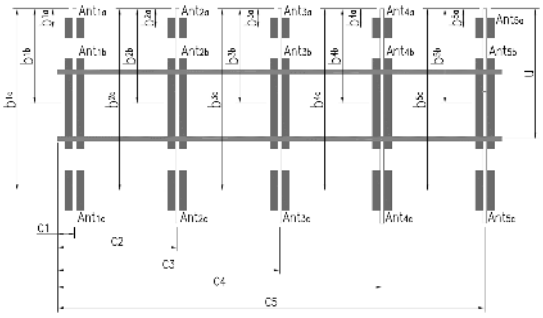
Site Number:

All measurements / offsets given in inches

TOP VIEW







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	.18 X 2.38 OD X 72	58.00	2.00	C1	.18 X 2.38 OD X 72	58.00	2.00
A2	.18 X 2.38 OD X 72	58.00	58.00	C2	.18 X 2.38 OD X 72	58.00	58.00
A3				C3			
A4				C4			
A5				C5			
A6				C6			
B1	.18 X 2.38 OD X 72	58.00	2.00	D1			
B2	.18 X 2.38 OD X 72	58.00	58.00	D2			
B3				D3			
B4				D4			
B5				D5			
B6				D6			

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.) :

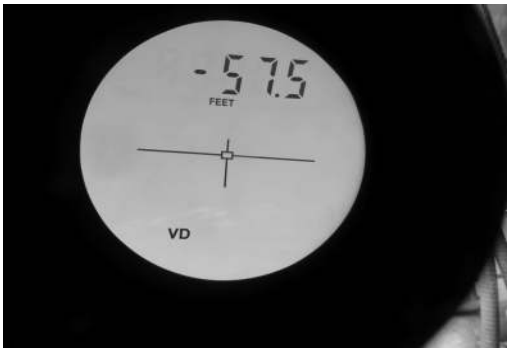
Please enter additional infomation or comments below.

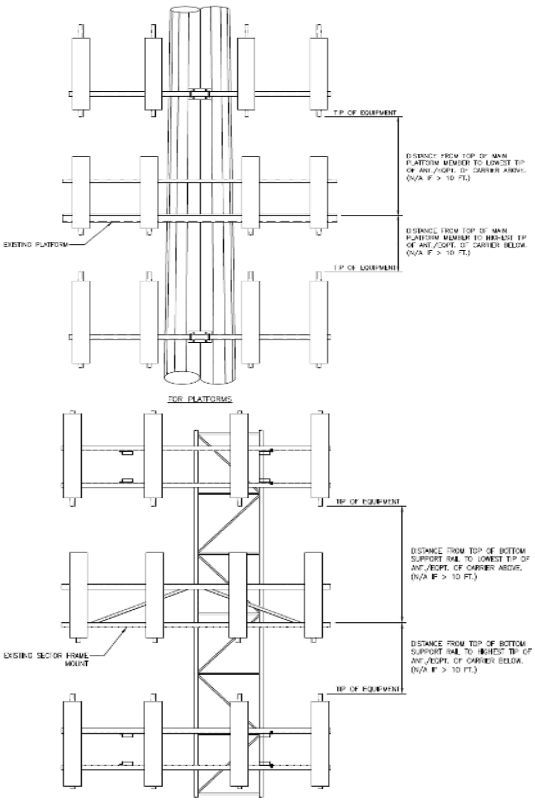
Tower Face Width at Mount Elev. (ft.):	3.6	Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):	1.73

	Enter antenna model. If not labeled, enter "Unknown".						Mounting Locations [Units are inches and degrees]			Photos of antennas
Ants. Items	Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Vertical Distances"b_{1a}, b_{2a}, b_{3a}, b_{1b}...." (Inches)	Horiz. Offset "h" (Use "-" if Ant. is behind)	Antenna Azimuth (Degrees)	Photo Numbers
Sector A										
Ant_{1a}	SBNHH-1D65B					59.3	36.00	9.00		132
Ant_{1b}	B13RRH4X30					59.7	31.00	8.00		132
Ant_{1c}										
Ant_{2a}	SBNHH-1D65B					59.3	36.00	9.00		132
Ant_{2b}	B66A RRH 4X45					59.5	34.00	7.00		146
Ant_{2c}										
Ant_{3a}										
Ant_{3b}										
Ant_{3c}										
Ant_{4a}										
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff	RRFDC-3315-PF-48					59.7	20.00	9.00		175
Ant on Standoff	RRFDC-3315-PF-48					59.7	20.00	9.00		175
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:	350.00	Deg
Sector B:	120.00	Deg	Leg B:	110.00	Deg
Sector C:	240.00	Deg	Leg C:	230.00	Deg
Sector D:		Deg	Leg D:		Deg

Climbing Facility Information		
Location:	170.00 Deg	Outside Face B
Climbing Facility	Corrosion Type:	Good condition.
	Access:	Climbing path was unobstructed.
	Condition:	Good condition.





Sector B										
Ant_{1a}	SBNHH-1D65B					59.3	36.00	9.00		132
Ant_{1b}	B13RRH4X30					59.7	31.00	8.00		132
Ant_{1c}										
Ant_{2a}	SBNHH-1D65B					59.3	36.00	9.00		132
Ant_{2b}	B66A RRH 4X45					59.5	34.00	7.00		146
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										
Sector C										
Ant_{1a}	SBNHH-1D65B					59.3	36.00	9.00		132
Ant_{1b}	B13RRH4X30					59.7	31.00	8.00		132
Ant_{1c}										
Ant_{2a}	SBNHH-1D65B					59.3	36.00	9.00		132
Ant_{2b}	B66A RRH 4X45					59.5	34.00	7.00		146
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										
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.

V4.1 Updated on 12-17-2021

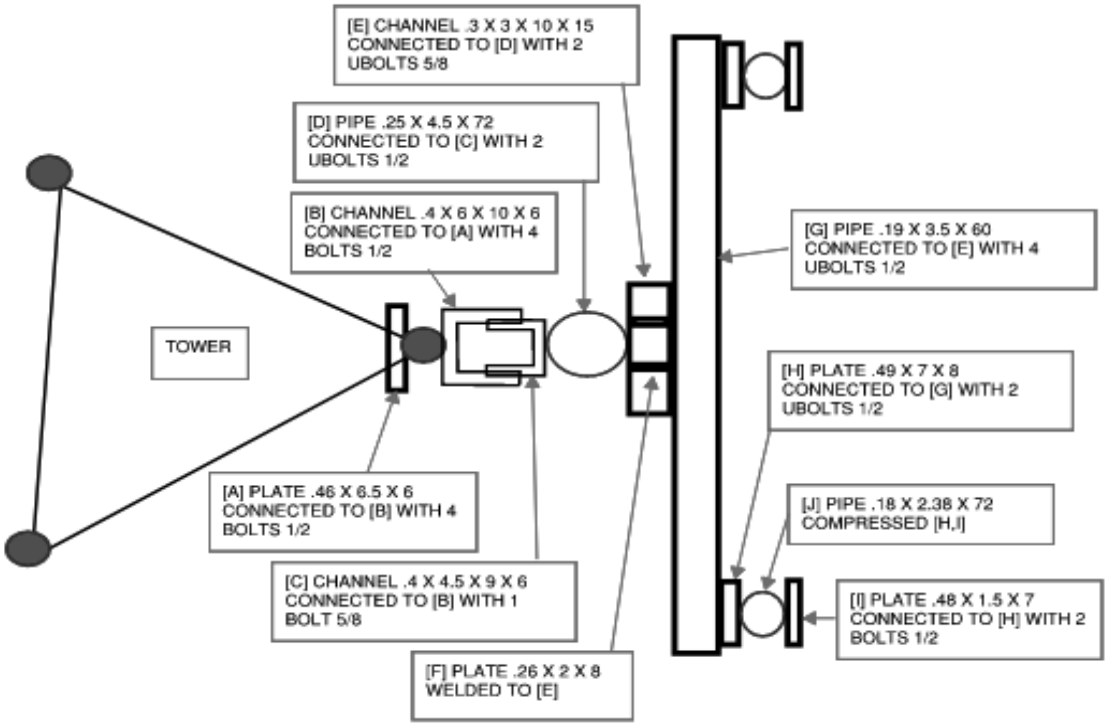
SMART Tool© Vendor	Antenna Mount Mapping Form (PATENT PENDING)		FCC #
	Tower Owner: CROWN CASTLE	**Mapping Date:**	4/10/2022
	Site Name: SOUTHINGTON_I691_CT-A	**Tower Type:**	SELF SUPPORT
	Site Number or ID: 468179	**Tower Height (Ft.):**	120
	Mapping Contractor: Onsight Services LLC	**Mount Elevation (Ft.):**	57.5

Please Insert Sketches of the Antenna Mount

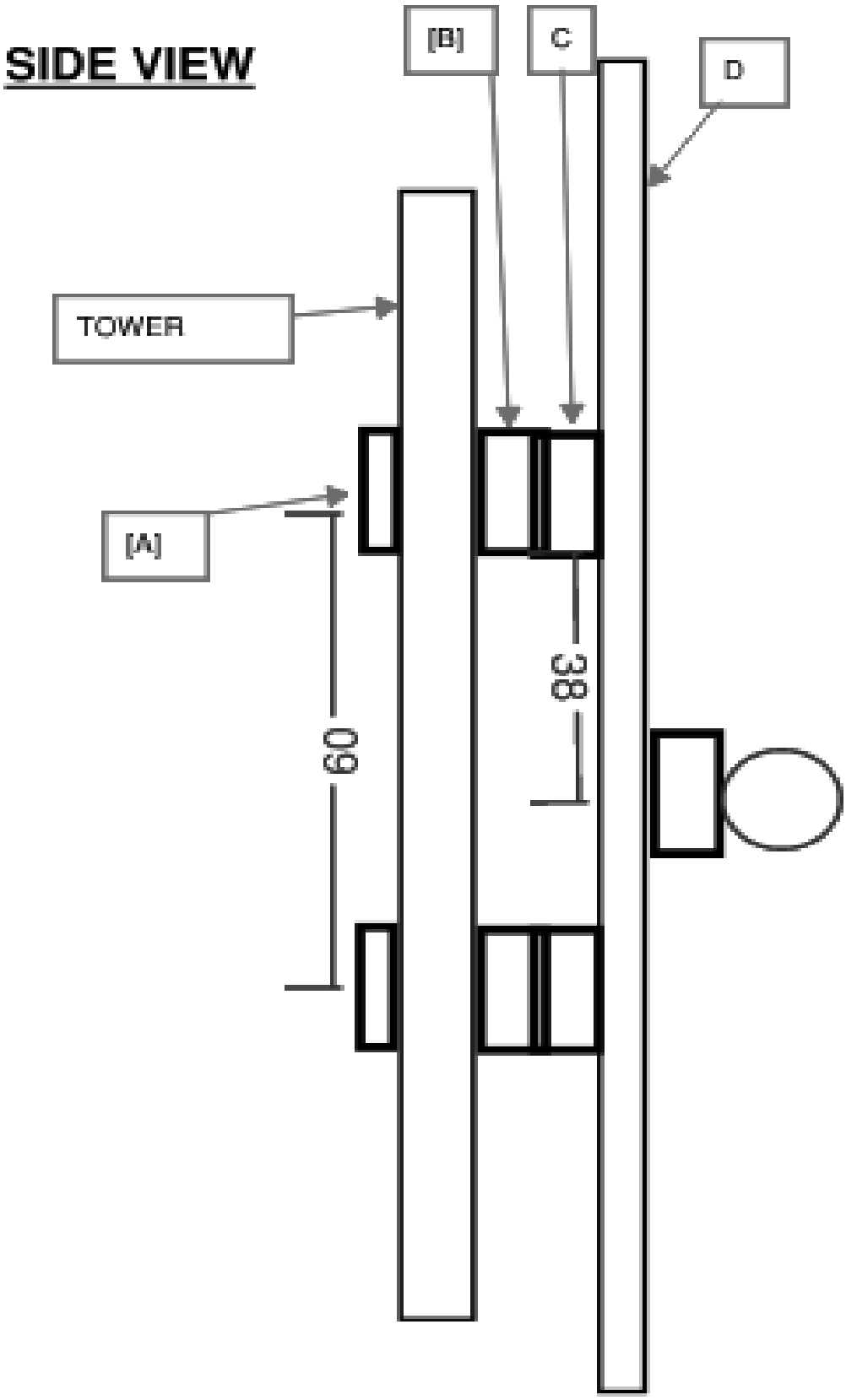
Site Number:

All measurements / offsets given in inches

TOP VIEW

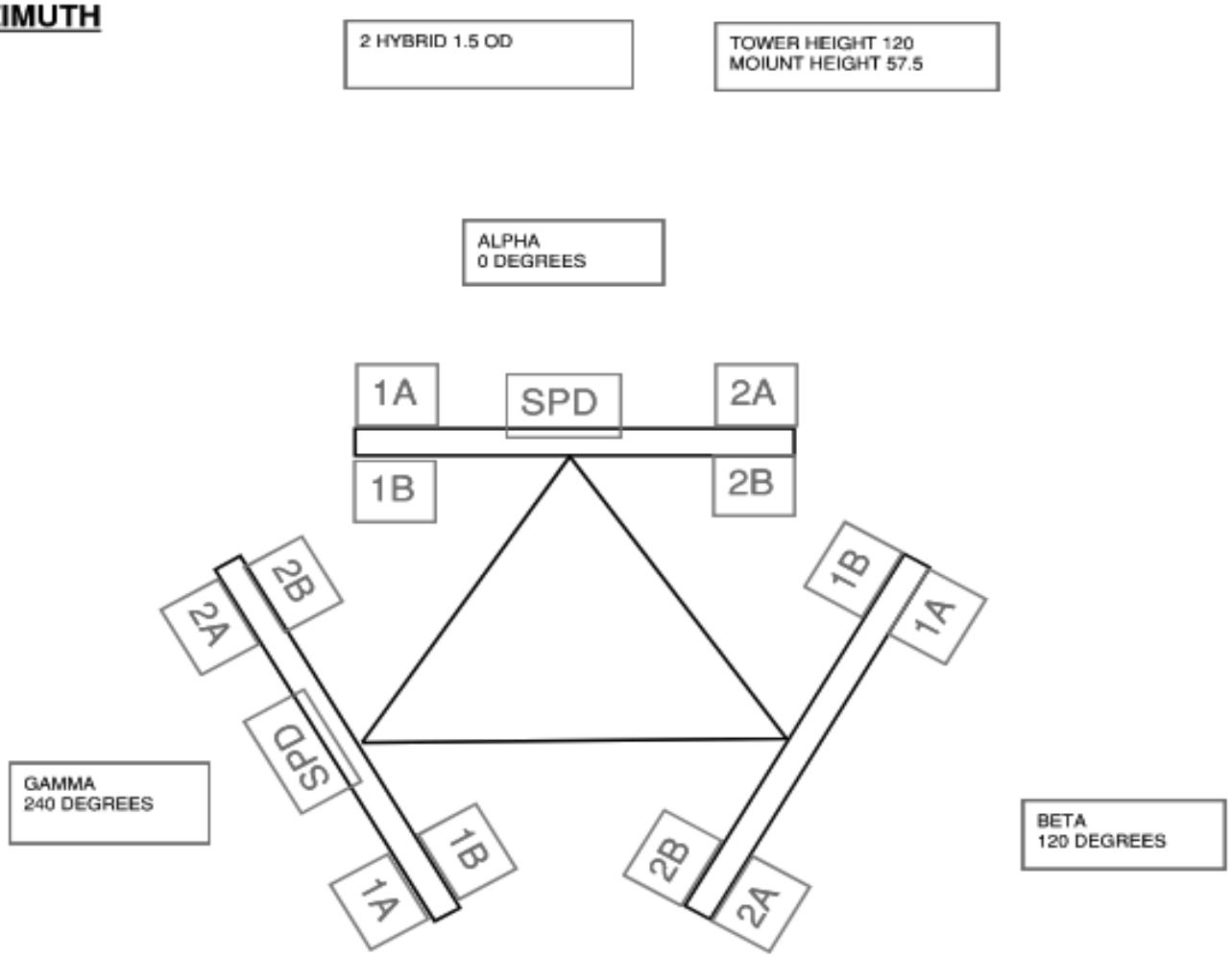


Please Insert Sketches of the Antenna Mount, cont'd



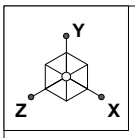
Please Insert Sketches of the Antenna Mount, cont'd

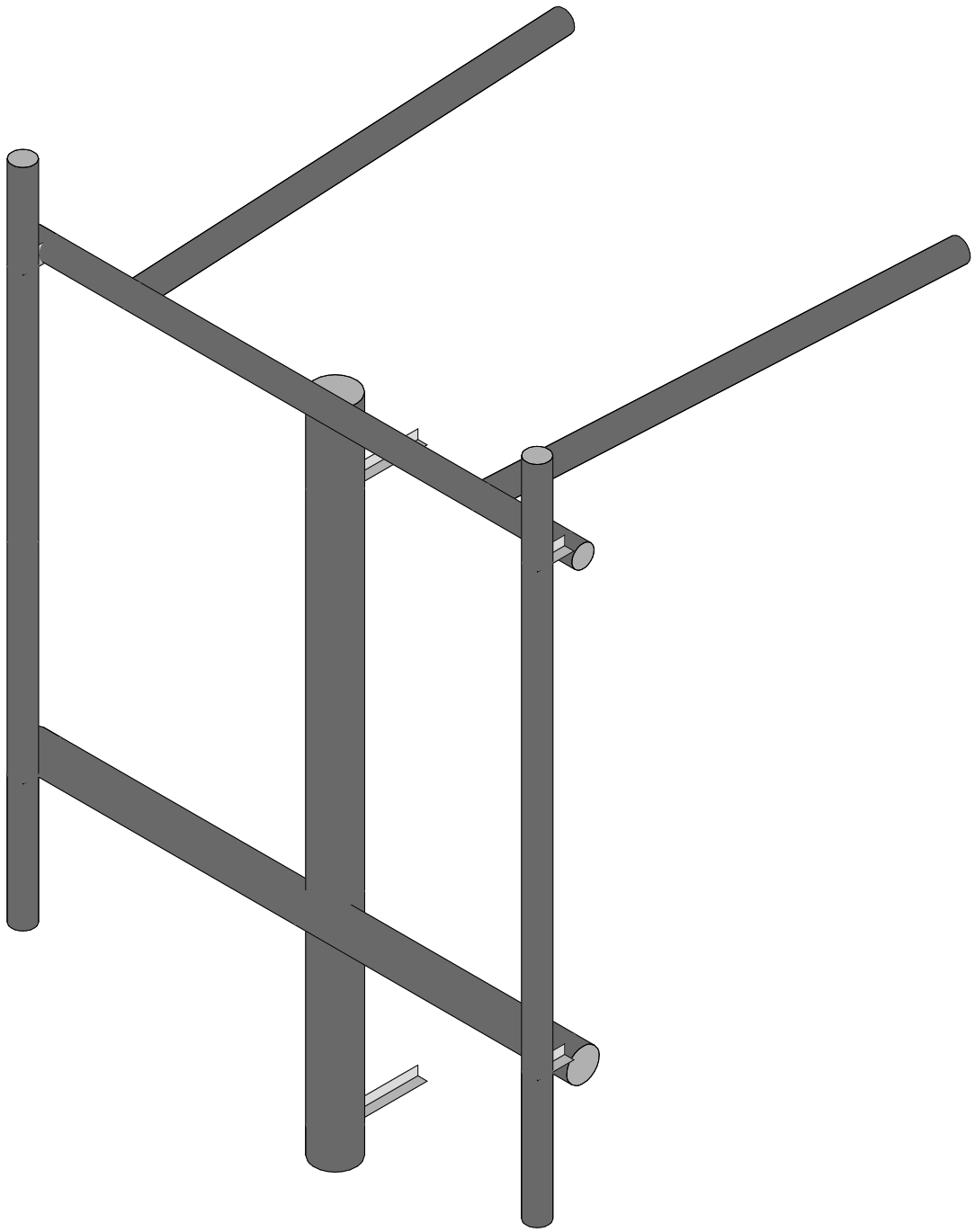
AZIMUTH



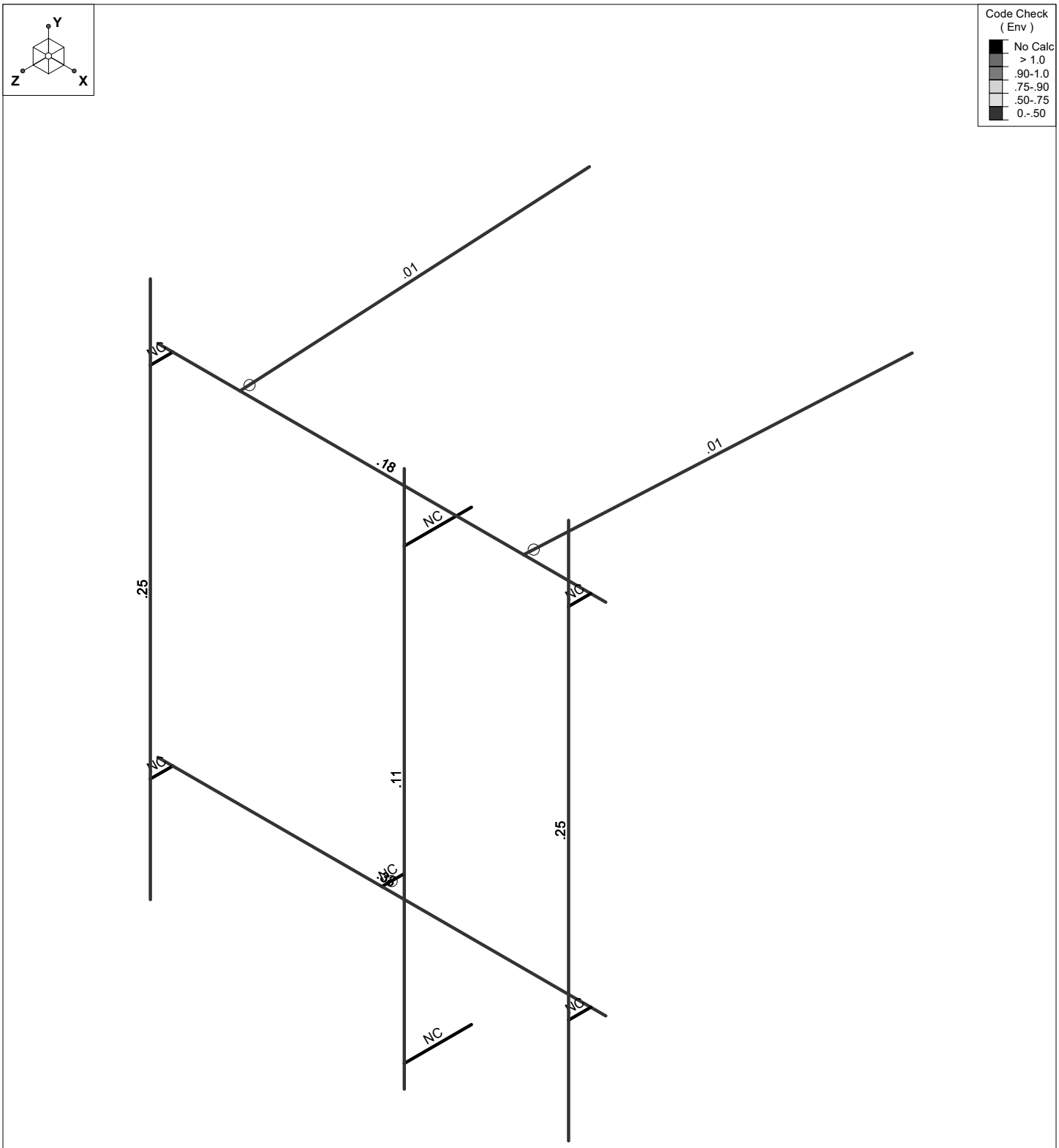
Please Insert Sketches of the Antenna Mount, cont'd

Please Insert Sketches of the Antenna Mount, cont'd



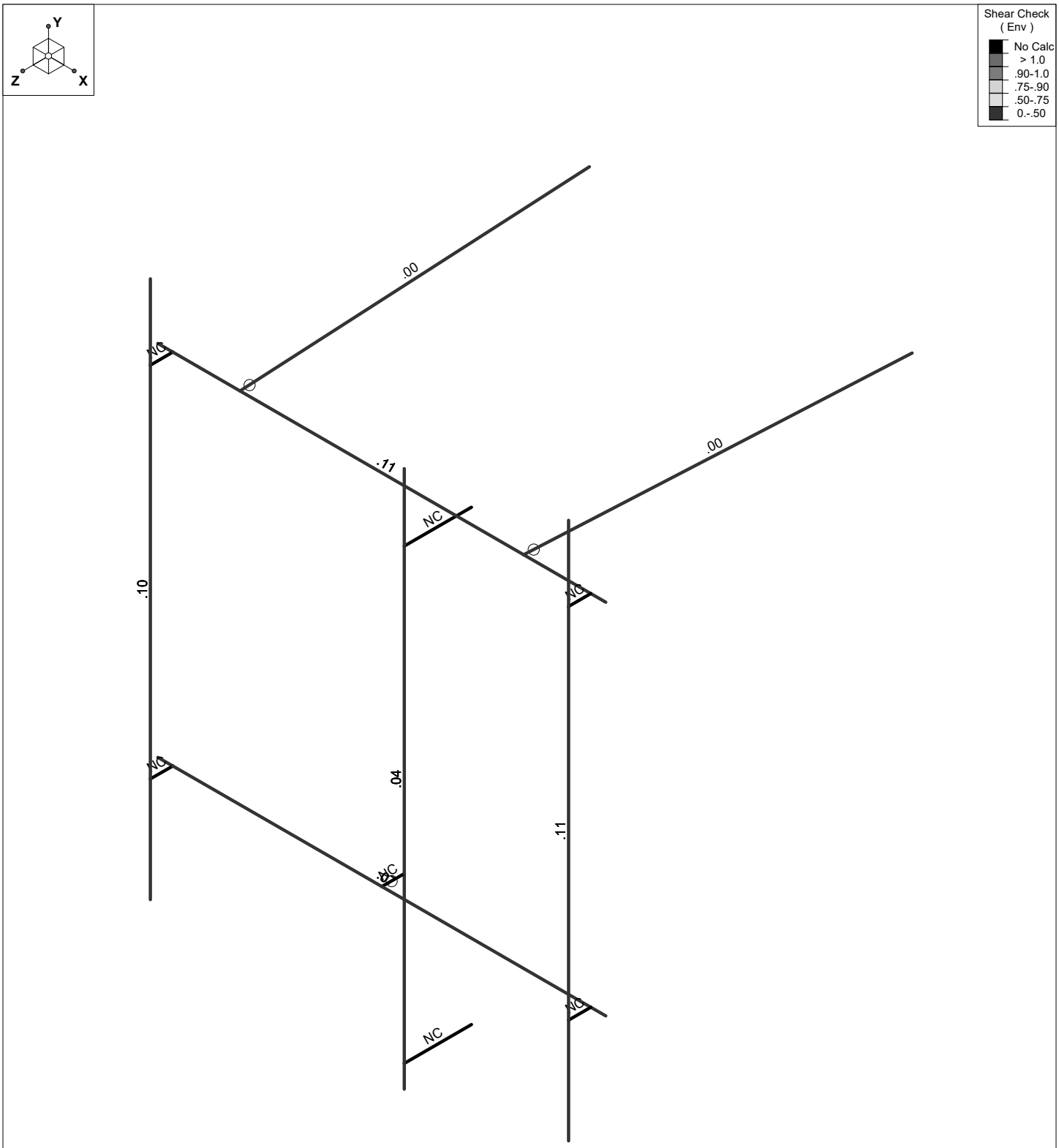


Maser Consulting	Mount Analysis	SK - 1
		Apr 21, 2022 at 9:45 AM
		468179-VZW_MT_LOT_A_H.r3d



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

Maser Consulting	Mount Analysis	SK - 2
		Apr 21, 2022 at 9:45 AM
		468179-VZW_MT_LOT_A_H.r3d



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

Maser Consulting	Mount Analysis	SK - 3
		Apr 21, 2022 at 9:45 AM
		468179-VZW_MT_LOT_A_H.r3d

Basic Load Cases

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

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
57	Structure Wi (120 De...	None						16		
58	Structure Wi (150 De...	None						16		
59	Structure Wi (180 De...	None						16		
60	Structure Wi (210 De...	None						16		
61	Structure Wi (240 De...	None						16		
62	Structure Wi (270 De...	None						16		
63	Structure Wi (300 De...	None						16		
64	Structure Wi (330 De...	None						16		
65	Structure Wm (0 Deg)	None						16		
66	Structure Wm (30 De...	None						16		
67	Structure Wm (60 De...	None						16		
68	Structure Wm (90 De...	None						16		
69	Structure Wm (120 D...	None						16		
70	Structure Wm (150 D...	None						16		
71	Structure Wm (180 D...	None						16		
72	Structure Wm (210 D...	None						16		
73	Structure Wm (240 D...	None						16		
74	Structure Wm (270 D...	None						16		
75	Structure Wm (300 D...	None						16		
76	Structure Wm (330 D...	None						16		
77	Lm1	None					1			
78	Lm2	None					1			
79	Lv1	None					1			
80	Lv2	None					1			
81	Antenna Ev	None					30			
82	Antenna Eh (0 Deg)	None					20			
83	Antenna Eh (90 Deg)	None					20			
84	Structure Ev	ELY		-.043						
85	Structure Eh (0 Deg)	ELZ			-.107					
86	Structure Eh (90 Deg)	ELX	.107							

Load Combinations

	Description	So...	P...	S...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...
1	1.2D+1.0Wo (0 ...	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								

Load Combinations (Continued)

	Description	So...	P...	S...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...
23	1.2D + 1.0Di + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1								
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	1.2D + 1.0Ev + 1..	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	1	83		ELZ	1	ELX					
53	1.2D + 1.0Ev + 1..	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.866	83	.5	ELZ	.866	ELX	.5				
54	1.2D + 1.0Ev + 1..	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.5	83	.866	ELZ	.5	ELX	.866				
55	1.2D + 1.0Ev + 1..	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82		83	1	ELZ		ELX	1				
56	1.2D + 1.0Ev + 1..	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.5	83	.866	ELZ	-.5	ELX	.866				
57	1.2D + 1.0Ev + 1..	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.866	83	.5	ELZ	-.866	ELX	.5				
58	1.2D + 1.0Ev + 1..	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-1	83		ELZ	-1	ELX					
59	1.2D + 1.0Ev + 1..	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.866	83	-.5	ELZ	-.866	ELX	-.5				
60	1.2D + 1.0Ev + 1..	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.5	83	-.866	ELZ	-.5	ELX	-.866				
61	1.2D + 1.0Ev + 1..	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82		83	-1	ELZ		ELX	-1				
62	1.2D + 1.0Ev + 1..	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.5	83	-.866	ELZ	.5	ELX	-.866				
63	1.2D + 1.0Ev + 1..	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.866	83	-.5	ELZ	.866	ELX	-.5				
64	0.9D - 1.0Ev + 1....	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	1	83		ELZ	1	ELX					
65	0.9D - 1.0Ev + 1....	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.866	83	.5	ELZ	.866	ELX	.5				
66	0.9D - 1.0Ev + 1....	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.5	83	.866	ELZ	.5	ELX	.866				
67	0.9D - 1.0Ev + 1....	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82		83	1	ELZ		ELX	1				
68	0.9D - 1.0Ev + 1....	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.5	83	.866	ELZ	-.5	ELX	.866				
69	0.9D - 1.0Ev + 1....	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.866	83	.5	ELZ	-.866	ELX	.5				
70	0.9D - 1.0Ev + 1....	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-1	83		ELZ	-1	ELX					
71	0.9D - 1.0Ev + 1....	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.866	83	-.5	ELZ	-.866	ELX	-.5				
72	0.9D - 1.0Ev + 1....	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.5	83	-.866	ELZ	-.5	ELX	-.866				
73	0.9D - 1.0Ev + 1....	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82		83	-1	ELZ		ELX	-1				
74	0.9D - 1.0Ev + 1....	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.5	83	-.866	ELZ	.5	ELX	-.866				
75	0.9D - 1.0Ev + 1....	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.866	83	-.5	ELZ	.866	ELX	-.5				

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	0	3.166667	3.625	0	
2	N2	0	-1.833333	3.625	0	
3	N3	0	0	4.625	0	
4	N9	2.5	0	4.625	0	
5	N9A	-2.333333	0	4.625	0	
6	N10	-2.5	0	4.625	0	
7	N10A	2.333333	0	4.625	0	
8	N13	2.333333	0	4.875	0	
9	N15	0	3.166667	4.375	0	
10	MCL	-2.333333	0	4.875	0	
11	N16	2.333333	-1.166667	4.875	0	
12	N16A	0	-1.833333	4.375	0	
13	N17	-2.333333	-1.166667	4.875	0	
14	N18	2.333333	4.833333	4.875	0	
15	N19	-2.333333	4.833333	4.875	0	
16	N24	0	0	4.375	0	
17	N25	0	3.916667	4.375	0	
18	N26	0	-2.083333	4.375	0	
19	ACL	-2.333333	1.833333	4.875	0	
20	N20	2.333333	4	4.875	0	
21	N21	-2.333333	4	4.875	0	
22	N22	2.333333	4	4.625	0	
23	N23	-2.333333	4	4.625	0	
24	N24A	-2.5	4	4.625	0	
25	N25A	2.5	4	4.625	0	
26	N29	-1.8	4	0.507309	0	
27	N31	1.8	4	0.507309	0	
28	N33	-1.583333	4	4.625	0	
29	N33A	1.583333	4	4.625	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Antenna Mount	PIPE_2.0	Column	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
2	Face Horizontal	PIPE_3.0	Beam	Pipe	A53 Gr. B	Typical	2.07	2.85	2.85	5.69
3	Standoff Vertical	PIPE_4.0	Beam	Pipe	A53 Gr. B	Typical	2.96	6.82	6.82	13.6
4	Face Horizontal Support	PIPE_2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
5	Tieback	PIPE_2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25

Hot Rolled Steel Properties

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

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N10A	N13			RIGID	None	None	RIGID	Typical
2	M2	N9A	MCL			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
3	M3	N10	N9			Face Horizontal	Beam	Pipe	A53 Gr. B	Typical
4	M7	N2	N16A			RIGID	None	None	RIGID	Typical
5	M8B	N1	N15			RIGID	None	None	RIGID	Typical
6	OVP	N25	N26			Standoff Vertical	Beam	Pipe	A53 Gr. B	Typical
7	M16	N24	N3			RIGID	None	None	RIGID	Typical
8	MP1A	N18	N16			Antenna Mount	Column	Pipe	A53 Gr. B	Typical
9	MP2A	N19	N17			Antenna Mount	Column	Pipe	A53 Gr. B	Typical
10	M10	N23	N21			RIGID	None	None	RIGID	Typical
11	M11	N22	N20			RIGID	None	None	RIGID	Typical
12	M12	N24A	N25A			Face Horizont...	Beam	Pipe	A53 Gr. B	Typical
13	M14	N33	N29			Tieback	Beam	Pipe	A53 Gr. B	Typical
14	M15	N20	N31			Tieback	Beam	Pipe	A53 Gr. B	Typical
15	M16A	N33A	N31			Tieback	Beam	Pipe	A53 Gr. B	Typical

Hot Rolled Steel Design Parameters

	Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp top[ft]	Lcomp bot[ft]	L-torqu...	Kyy	Kzz	Cb	Function
1	M3	Face Horizo...	5									Lateral
2	OVP	Standoff Ve...	6									Lateral
3	MP1A	Antenna Mo...	6									Lateral
4	MP2A	Antenna Mo...	6									Lateral
5	M12	Face Horizo...	5			Lbyy						Lateral
6	M14	Tieback	4.123			Lbyy						Lateral
7	M15	Tieback	4.4			Lbyy						Lateral
8	M16A	Tieback	4.123			Lbyy						Lateral

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Y	-21.85	1
2	MP1A	My	-.011	1
3	MP1A	Mz	.015	1
4	MP1A	Y	-21.85	5
5	MP1A	My	-.011	5
6	MP1A	Mz	.015	5
7	MP1A	Y	-32.3	1
8	MP1A	My	-.016	1
9	MP1A	Mz	-.022	1
10	MP1A	Y	-32.3	5
11	MP1A	My	-.016	5
12	MP1A	Mz	-.022	5
13	MP2A	Y	-43.55	2
14	MP2A	My	-.022	2
15	MP2A	Mz	0	2
16	MP2A	Y	-43.55	4
17	MP2A	My	-.022	4
18	MP2A	Mz	0	4
19	MP1A	Y	-70.3	2.5
20	MP1A	My	-.035	2.5
21	MP1A	Mz	0	2.5
22	MP2A	Y	-74.7	2.5
23	MP2A	My	-.037	2.5
24	MP2A	Mz	0	2.5
25	MP2A	Y	-18.7	4.5
26	MP2A	My	-.009	4.5
27	MP2A	Mz	0	4.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
28	OVP	Y	-32	2.5
29	OVP	My	0	2.5
30	OVP	Mz	0	2.5

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Y	-55.068	1
2	MP1A	My	-.028	1
3	MP1A	Mz	.037	1
4	MP1A	Y	-55.068	5
5	MP1A	My	-.028	5
6	MP1A	Mz	.037	5
7	MP1A	Y	-55.068	1
8	MP1A	My	-.028	1
9	MP1A	Mz	-.037	1
10	MP1A	Y	-55.068	5
11	MP1A	My	-.028	5
12	MP1A	Mz	-.037	5
13	MP2A	Y	-32.343	2
14	MP2A	My	-.016	2
15	MP2A	Mz	0	2
16	MP2A	Y	-32.343	4
17	MP2A	My	-.016	4
18	MP2A	Mz	0	4
19	MP1A	Y	-38.767	2.5
20	MP1A	My	-.019	2.5
21	MP1A	Mz	0	2.5
22	MP2A	Y	-40.721	2.5
23	MP2A	My	-.02	2.5
24	MP2A	Mz	0	2.5
25	MP2A	Y	-17.881	4.5
26	MP2A	My	-.009	4.5
27	MP2A	Mz	0	4.5
28	OVP	Y	-79.964	2.5
29	OVP	My	0	2.5
30	OVP	Mz	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	1
2	MP1A	Z	-69.121	1
3	MP1A	Mx	-.046	1
4	MP1A	X	0	5
5	MP1A	Z	-69.121	5
6	MP1A	Mx	-.046	5
7	MP1A	X	0	1
8	MP1A	Z	-102.472	1
9	MP1A	Mx	.068	1
10	MP1A	X	0	5
11	MP1A	Z	-102.472	5
12	MP1A	Mx	.068	5
13	MP2A	X	0	2
14	MP2A	Z	-49.899	2
15	MP2A	Mx	0	2
16	MP2A	X	0	4
17	MP2A	Z	-49.899	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP2A	Mx	0	4
19	MP1A	X	0	2.5
20	MP1A	Z	-47.608	2.5
21	MP1A	Mx	0	2.5
22	MP2A	X	0	2.5
23	MP2A	Z	-47.608	2.5
24	MP2A	Mx	0	2.5
25	MP2A	X	0	4.5
26	MP2A	Z	-18.33	4.5
27	MP2A	Mx	0	4.5
28	OVP	X	0	2.5
29	OVP	Z	-80.121	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	29.628	1
2	MP1A	Z	-51.317	1
3	MP1A	Mx	-.049	1
4	MP1A	X	29.628	5
5	MP1A	Z	-51.317	5
6	MP1A	Mx	-.049	5
7	MP1A	X	46.926	1
8	MP1A	Z	-81.279	1
9	MP1A	Mx	.031	1
10	MP1A	X	46.926	5
11	MP1A	Z	-81.279	5
12	MP1A	Mx	.031	5
13	MP2A	X	20.86	2
14	MP2A	Z	-36.131	2
15	MP2A	Mx	-.01	2
16	MP2A	X	20.86	4
17	MP2A	Z	-36.131	4
18	MP2A	Mx	-.01	4
19	MP1A	X	21.473	2.5
20	MP1A	Z	-37.192	2.5
21	MP1A	Mx	-.011	2.5
22	MP2A	X	21.831	2.5
23	MP2A	Z	-37.812	2.5
24	MP2A	Mx	-.011	2.5
25	MP2A	X	7.956	4.5
26	MP2A	Z	-13.78	4.5
27	MP2A	Mx	-.004	4.5
28	OVP	X	39.221	2.5
29	OVP	Z	-67.932	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	34.23	1
2	MP1A	Z	-19.762	1
3	MP1A	Mx	-.03	1
4	MP1A	X	34.23	5
5	MP1A	Z	-19.762	5
6	MP1A	Mx	-.03	5
7	MP1A	X	66.351	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
8	MP1A	Z	-38.308	1
9	MP1A	Mx	-.008	1
10	MP1A	X	66.351	5
11	MP1A	Z	-38.308	5
12	MP1A	Mx	-.008	5
13	MP2A	X	21.965	2
14	MP2A	Z	-12.682	2
15	MP2A	Mx	-.011	2
16	MP2A	X	21.965	4
17	MP2A	Z	-12.682	4
18	MP2A	Mx	-.011	4
19	MP1A	X	29.117	2.5
20	MP1A	Z	-16.811	2.5
21	MP1A	Mx	-.015	2.5
22	MP2A	X	30.977	2.5
23	MP2A	Z	-17.885	2.5
24	MP2A	Mx	-.015	2.5
25	MP2A	X	9.591	4.5
26	MP2A	Z	-5.537	4.5
27	MP2A	Mx	-.005	4.5
28	OVP	X	60.059	2.5
29	OVP	Z	-34.675	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	29.66	1
2	MP1A	Z	0	1
3	MP1A	Mx	-.015	1
4	MP1A	X	29.66	5
5	MP1A	Z	0	5
6	MP1A	Mx	-.015	5
7	MP1A	X	67.996	1
8	MP1A	Z	0	1
9	MP1A	Mx	-.034	1
10	MP1A	X	67.996	5
11	MP1A	Z	0	5
12	MP1A	Mx	-.034	5
13	MP2A	X	17.185	2
14	MP2A	Z	0	2
15	MP2A	Mx	-.009	2
16	MP2A	X	17.185	4
17	MP2A	Z	0	4
18	MP2A	Mx	-.009	4
19	MP1A	X	28.959	2.5
20	MP1A	Z	0	2.5
21	MP1A	Mx	-.014	2.5
22	MP2A	X	31.824	2.5
23	MP2A	Z	0	2.5
24	MP2A	Mx	-.016	2.5
25	MP2A	X	8.656	4.5
26	MP2A	Z	0	4.5
27	MP2A	Mx	-.004	4.5
28	OVP	X	61.939	2.5
29	OVP	Z	0	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	34.23	1
2	MP1A	Z	19.762	1
3	MP1A	Mx	-.004	1
4	MP1A	X	34.23	5
5	MP1A	Z	19.762	5
6	MP1A	Mx	-.004	5
7	MP1A	X	66.351	1
8	MP1A	Z	38.308	1
9	MP1A	Mx	-.059	1
10	MP1A	X	66.351	5
11	MP1A	Z	38.308	5
12	MP1A	Mx	-.059	5
13	MP2A	X	21.965	2
14	MP2A	Z	12.682	2
15	MP2A	Mx	-.011	2
16	MP2A	X	21.965	4
17	MP2A	Z	12.682	4
18	MP2A	Mx	-.011	4
19	MP1A	X	29.117	2.5
20	MP1A	Z	16.811	2.5
21	MP1A	Mx	-.015	2.5
22	MP2A	X	30.977	2.5
23	MP2A	Z	17.885	2.5
24	MP2A	Mx	-.015	2.5
25	MP2A	X	9.591	4.5
26	MP2A	Z	5.537	4.5
27	MP2A	Mx	-.005	4.5
28	OVP	X	55.096	2.5
29	OVP	Z	31.81	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	29.628	1
2	MP1A	Z	51.317	1
3	MP1A	Mx	.019	1
4	MP1A	X	29.628	5
5	MP1A	Z	51.317	5
6	MP1A	Mx	.019	5
7	MP1A	X	46.926	1
8	MP1A	Z	81.279	1
9	MP1A	Mx	-.078	1
10	MP1A	X	46.926	5
11	MP1A	Z	81.279	5
12	MP1A	Mx	-.078	5
13	MP2A	X	20.86	2
14	MP2A	Z	36.131	2
15	MP2A	Mx	-.01	2
16	MP2A	X	20.86	4
17	MP2A	Z	36.131	4
18	MP2A	Mx	-.01	4
19	MP1A	X	21.473	2.5
20	MP1A	Z	37.192	2.5
21	MP1A	Mx	-.011	2.5
22	MP2A	X	21.831	2.5
23	MP2A	Z	37.812	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
24	MP2A	Mx	-.011	2.5
25	MP2A	X	7.956	4.5
26	MP2A	Z	13.78	4.5
27	MP2A	Mx	-.004	4.5
28	OVP	X	36.355	2.5
29	OVP	Z	62.969	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	1
2	MP1A	Z	69.121	1
3	MP1A	Mx	.046	1
4	MP1A	X	0	5
5	MP1A	Z	69.121	5
6	MP1A	Mx	.046	5
7	MP1A	X	0	1
8	MP1A	Z	102.472	1
9	MP1A	Mx	-.068	1
10	MP1A	X	0	5
11	MP1A	Z	102.472	5
12	MP1A	Mx	-.068	5
13	MP2A	X	0	2
14	MP2A	Z	49.899	2
15	MP2A	Mx	0	2
16	MP2A	X	0	4
17	MP2A	Z	49.899	4
18	MP2A	Mx	0	4
19	MP1A	X	0	2.5
20	MP1A	Z	47.608	2.5
21	MP1A	Mx	0	2.5
22	MP2A	X	0	2.5
23	MP2A	Z	47.608	2.5
24	MP2A	Mx	0	2.5
25	MP2A	X	0	4.5
26	MP2A	Z	18.33	4.5
27	MP2A	Mx	0	4.5
28	OVP	X	0	2.5
29	OVP	Z	80.121	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-29.628	1
2	MP1A	Z	51.317	1
3	MP1A	Mx	.049	1
4	MP1A	X	-29.628	5
5	MP1A	Z	51.317	5
6	MP1A	Mx	.049	5
7	MP1A	X	-46.926	1
8	MP1A	Z	81.279	1
9	MP1A	Mx	-.031	1
10	MP1A	X	-46.926	5
11	MP1A	Z	81.279	5
12	MP1A	Mx	-.031	5
13	MP2A	X	-20.86	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
14	MP2A	Z	36.131	2
15	MP2A	Mx	.01	2
16	MP2A	X	-20.86	4
17	MP2A	Z	36.131	4
18	MP2A	Mx	.01	4
19	MP1A	X	-21.473	2.5
20	MP1A	Z	37.192	2.5
21	MP1A	Mx	.011	2.5
22	MP2A	X	-21.831	2.5
23	MP2A	Z	37.812	2.5
24	MP2A	Mx	.011	2.5
25	MP2A	X	-7.956	4.5
26	MP2A	Z	13.78	4.5
27	MP2A	Mx	.004	4.5
28	OVP	X	-39.221	2.5
29	OVP	Z	67.932	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-34.23	1
2	MP1A	Z	19.762	1
3	MP1A	Mx	.03	1
4	MP1A	X	-34.23	5
5	MP1A	Z	19.762	5
6	MP1A	Mx	.03	5
7	MP1A	X	-66.351	1
8	MP1A	Z	38.308	1
9	MP1A	Mx	.008	1
10	MP1A	X	-66.351	5
11	MP1A	Z	38.308	5
12	MP1A	Mx	.008	5
13	MP2A	X	-21.965	2
14	MP2A	Z	12.682	2
15	MP2A	Mx	.011	2
16	MP2A	X	-21.965	4
17	MP2A	Z	12.682	4
18	MP2A	Mx	.011	4
19	MP1A	X	-29.117	2.5
20	MP1A	Z	16.811	2.5
21	MP1A	Mx	.015	2.5
22	MP2A	X	-30.977	2.5
23	MP2A	Z	17.885	2.5
24	MP2A	Mx	.015	2.5
25	MP2A	X	-9.591	4.5
26	MP2A	Z	5.537	4.5
27	MP2A	Mx	.005	4.5
28	OVP	X	-60.059	2.5
29	OVP	Z	34.675	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-29.66	1
2	MP1A	Z	0	1
3	MP1A	Mx	.015	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
4	MP1A	X	-29.66	5
5	MP1A	Z	0	5
6	MP1A	Mx	.015	5
7	MP1A	X	-67.996	1
8	MP1A	Z	0	1
9	MP1A	Mx	.034	1
10	MP1A	X	-67.996	5
11	MP1A	Z	0	5
12	MP1A	Mx	.034	5
13	MP2A	X	-17.185	2
14	MP2A	Z	0	2
15	MP2A	Mx	.009	2
16	MP2A	X	-17.185	4
17	MP2A	Z	0	4
18	MP2A	Mx	.009	4
19	MP1A	X	-28.959	2.5
20	MP1A	Z	0	2.5
21	MP1A	Mx	.014	2.5
22	MP2A	X	-31.824	2.5
23	MP2A	Z	0	2.5
24	MP2A	Mx	.016	2.5
25	MP2A	X	-8.656	4.5
26	MP2A	Z	0	4.5
27	MP2A	Mx	.004	4.5
28	OVP	X	-61.939	2.5
29	OVP	Z	0	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-34.23	1
2	MP1A	Z	-19.762	1
3	MP1A	Mx	.004	1
4	MP1A	X	-34.23	5
5	MP1A	Z	-19.762	5
6	MP1A	Mx	.004	5
7	MP1A	X	-66.351	1
8	MP1A	Z	-38.308	1
9	MP1A	Mx	.059	1
10	MP1A	X	-66.351	5
11	MP1A	Z	-38.308	5
12	MP1A	Mx	.059	5
13	MP2A	X	-21.965	2
14	MP2A	Z	-12.682	2
15	MP2A	Mx	.011	2
16	MP2A	X	-21.965	4
17	MP2A	Z	-12.682	4
18	MP2A	Mx	.011	4
19	MP1A	X	-29.117	2.5
20	MP1A	Z	-16.811	2.5
21	MP1A	Mx	.015	2.5
22	MP2A	X	-30.977	2.5
23	MP2A	Z	-17.885	2.5
24	MP2A	Mx	.015	2.5
25	MP2A	X	-9.591	4.5
26	MP2A	Z	-5.537	4.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
27	MP2A	Mx	.005	4.5
28	OVP	X	-55.096	2.5
29	OVP	Z	-31.81	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-29.628	1
2	MP1A	Z	-51.317	1
3	MP1A	Mx	-.019	1
4	MP1A	X	-29.628	5
5	MP1A	Z	-51.317	5
6	MP1A	Mx	-.019	5
7	MP1A	X	-46.926	1
8	MP1A	Z	-81.279	1
9	MP1A	Mx	.078	1
10	MP1A	X	-46.926	5
11	MP1A	Z	-81.279	5
12	MP1A	Mx	.078	5
13	MP2A	X	-20.86	2
14	MP2A	Z	-36.131	2
15	MP2A	Mx	.01	2
16	MP2A	X	-20.86	4
17	MP2A	Z	-36.131	4
18	MP2A	Mx	.01	4
19	MP1A	X	-21.473	2.5
20	MP1A	Z	-37.192	2.5
21	MP1A	Mx	.011	2.5
22	MP2A	X	-21.831	2.5
23	MP2A	Z	-37.812	2.5
24	MP2A	Mx	.011	2.5
25	MP2A	X	-7.956	4.5
26	MP2A	Z	-13.78	4.5
27	MP2A	Mx	.004	4.5
28	OVP	X	-36.355	2.5
29	OVP	Z	-62.969	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	1
2	MP1A	Z	-20.205	1
3	MP1A	Mx	-.013	1
4	MP1A	X	0	5
5	MP1A	Z	-20.205	5
6	MP1A	Mx	-.013	5
7	MP1A	X	0	1
8	MP1A	Z	-20.205	1
9	MP1A	Mx	.013	1
10	MP1A	X	0	5
11	MP1A	Z	-20.205	5
12	MP1A	Mx	.013	5
13	MP2A	X	0	2
14	MP2A	Z	-12.017	2
15	MP2A	Mx	0	2
16	MP2A	X	0	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP2A	Z	-12.017	4
18	MP2A	Mx	0	4
19	MP1A	X	0	2.5
20	MP1A	Z	-10.081	2.5
21	MP1A	Mx	0	2.5
22	MP2A	X	0	2.5
23	MP2A	Z	-10.081	2.5
24	MP2A	Mx	0	2.5
25	MP2A	X	0	4.5
26	MP2A	Z	-5.711	4.5
27	MP2A	Mx	0	4.5
28	OVP	X	0	2.5
29	OVP	Z	-20.666	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	9.313	1
2	MP1A	Z	-16.13	1
3	MP1A	Mx	-.015	1
4	MP1A	X	9.313	5
5	MP1A	Z	-16.13	5
6	MP1A	Mx	-.015	5
7	MP1A	X	9.313	1
8	MP1A	Z	-16.13	1
9	MP1A	Mx	.006	1
10	MP1A	X	9.313	5
11	MP1A	Z	-16.13	5
12	MP1A	Mx	.006	5
13	MP2A	X	5.141	2
14	MP2A	Z	-8.905	2
15	MP2A	Mx	-.003	2
16	MP2A	X	5.141	4
17	MP2A	Z	-8.905	4
18	MP2A	Mx	-.003	4
19	MP1A	X	4.584	2.5
20	MP1A	Z	-7.94	2.5
21	MP1A	Mx	-.002	2.5
22	MP2A	X	4.654	2.5
23	MP2A	Z	-8.061	2.5
24	MP2A	Mx	-.002	2.5
25	MP2A	X	2.539	4.5
26	MP2A	Z	-4.397	4.5
27	MP2A	Mx	-.001	4.5
28	OVP	X	10.135	2.5
29	OVP	Z	-17.554	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	13.394	1
2	MP1A	Z	-7.733	1
3	MP1A	Mx	-.012	1
4	MP1A	X	13.394	5
5	MP1A	Z	-7.733	5
6	MP1A	Mx	-.012	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
7	MP1A	X	13.394	1
8	MP1A	Z	-7.733	1
9	MP1A	Mx	-.002	1
10	MP1A	X	13.394	5
11	MP1A	Z	-7.733	5
12	MP1A	Mx	-.002	5
13	MP2A	X	5.903	2
14	MP2A	Z	-3.408	2
15	MP2A	Mx	-.003	2
16	MP2A	X	5.903	4
17	MP2A	Z	-3.408	4
18	MP2A	Mx	-.003	4
19	MP1A	X	6.36	2.5
20	MP1A	Z	-3.672	2.5
21	MP1A	Mx	-.003	2.5
22	MP2A	X	6.722	2.5
23	MP2A	Z	-3.881	2.5
24	MP2A	Mx	-.003	2.5
25	MP2A	X	3.301	4.5
26	MP2A	Z	-1.906	4.5
27	MP2A	Mx	-.002	4.5
28	OVP	X	15.696	2.5
29	OVP	Z	-9.062	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	13.886	1
2	MP1A	Z	0	1
3	MP1A	Mx	-.007	1
4	MP1A	X	13.886	5
5	MP1A	Z	0	5
6	MP1A	Mx	-.007	5
7	MP1A	X	13.886	1
8	MP1A	Z	0	1
9	MP1A	Mx	-.007	1
10	MP1A	X	13.886	5
11	MP1A	Z	0	5
12	MP1A	Mx	-.007	5
13	MP2A	X	5.082	2
14	MP2A	Z	0	2
15	MP2A	Mx	-.003	2
16	MP2A	X	5.082	4
17	MP2A	Z	0	4
18	MP2A	Mx	-.003	4
19	MP1A	X	6.432	2.5
20	MP1A	Z	0	2.5
21	MP1A	Mx	-.003	2.5
22	MP2A	X	6.989	2.5
23	MP2A	Z	0	2.5
24	MP2A	Mx	-.003	2.5
25	MP2A	X	3.178	4.5
26	MP2A	Z	0	4.5
27	MP2A	Mx	-.002	4.5
28	OVP	X	16.375	2.5
29	OVP	Z	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	13.394	1
2	MP1A	Z	7.733	1
3	MP1A	Mx	-.002	1
4	MP1A	X	13.394	5
5	MP1A	Z	7.733	5
6	MP1A	Mx	-.002	5
7	MP1A	X	13.394	1
8	MP1A	Z	7.733	1
9	MP1A	Mx	-.012	1
10	MP1A	X	13.394	5
11	MP1A	Z	7.733	5
12	MP1A	Mx	-.012	5
13	MP2A	X	5.903	2
14	MP2A	Z	3.408	2
15	MP2A	Mx	-.003	2
16	MP2A	X	5.903	4
17	MP2A	Z	3.408	4
18	MP2A	Mx	-.003	4
19	MP1A	X	6.36	2.5
20	MP1A	Z	3.672	2.5
21	MP1A	Mx	-.003	2.5
22	MP2A	X	6.722	2.5
23	MP2A	Z	3.881	2.5
24	MP2A	Mx	-.003	2.5
25	MP2A	X	3.301	4.5
26	MP2A	Z	1.906	4.5
27	MP2A	Mx	-.002	4.5
28	OVP	X	14.525	2.5
29	OVP	Z	8.386	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	9.313	1
2	MP1A	Z	16.13	1
3	MP1A	Mx	.006	1
4	MP1A	X	9.313	5
5	MP1A	Z	16.13	5
6	MP1A	Mx	.006	5
7	MP1A	X	9.313	1
8	MP1A	Z	16.13	1
9	MP1A	Mx	-.015	1
10	MP1A	X	9.313	5
11	MP1A	Z	16.13	5
12	MP1A	Mx	-.015	5
13	MP2A	X	5.141	2
14	MP2A	Z	8.905	2
15	MP2A	Mx	-.003	2
16	MP2A	X	5.141	4
17	MP2A	Z	8.905	4
18	MP2A	Mx	-.003	4
19	MP1A	X	4.584	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
20	MP1A	Z	7.94	2.5
21	MP1A	Mx	-.002	2.5
22	MP2A	X	4.654	2.5
23	MP2A	Z	8.061	2.5
24	MP2A	Mx	-.002	2.5
25	MP2A	X	2.539	4.5
26	MP2A	Z	4.397	4.5
27	MP2A	Mx	-.001	4.5
28	OVP	X	9.459	2.5
29	OVP	Z	16.383	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	1
2	MP1A	Z	20.205	1
3	MP1A	Mx	.013	1
4	MP1A	X	0	5
5	MP1A	Z	20.205	5
6	MP1A	Mx	.013	5
7	MP1A	X	0	1
8	MP1A	Z	20.205	1
9	MP1A	Mx	-.013	1
10	MP1A	X	0	5
11	MP1A	Z	20.205	5
12	MP1A	Mx	-.013	5
13	MP2A	X	0	2
14	MP2A	Z	12.017	2
15	MP2A	Mx	0	2
16	MP2A	X	0	4
17	MP2A	Z	12.017	4
18	MP2A	Mx	0	4
19	MP1A	X	0	2.5
20	MP1A	Z	10.081	2.5
21	MP1A	Mx	0	2.5
22	MP2A	X	0	2.5
23	MP2A	Z	10.081	2.5
24	MP2A	Mx	0	2.5
25	MP2A	X	0	4.5
26	MP2A	Z	5.711	4.5
27	MP2A	Mx	0	4.5
28	OVP	X	0	2.5
29	OVP	Z	20.666	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-9.313	1
2	MP1A	Z	16.13	1
3	MP1A	Mx	.015	1
4	MP1A	X	-9.313	5
5	MP1A	Z	16.13	5
6	MP1A	Mx	.015	5
7	MP1A	X	-9.313	1
8	MP1A	Z	16.13	1
9	MP1A	Mx	-.006	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
10	MP1A	X	-9.313	5
11	MP1A	Z	16.13	5
12	MP1A	Mx	-.006	5
13	MP2A	X	-5.141	2
14	MP2A	Z	8.905	2
15	MP2A	Mx	.003	2
16	MP2A	X	-5.141	4
17	MP2A	Z	8.905	4
18	MP2A	Mx	.003	4
19	MP1A	X	-4.584	2.5
20	MP1A	Z	7.94	2.5
21	MP1A	Mx	.002	2.5
22	MP2A	X	-4.654	2.5
23	MP2A	Z	8.061	2.5
24	MP2A	Mx	.002	2.5
25	MP2A	X	-2.539	4.5
26	MP2A	Z	4.397	4.5
27	MP2A	Mx	.001	4.5
28	OVP	X	-10.135	2.5
29	OVP	Z	17.554	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-13.394	1
2	MP1A	Z	7.733	1
3	MP1A	Mx	.012	1
4	MP1A	X	-13.394	5
5	MP1A	Z	7.733	5
6	MP1A	Mx	.012	5
7	MP1A	X	-13.394	1
8	MP1A	Z	7.733	1
9	MP1A	Mx	.002	1
10	MP1A	X	-13.394	5
11	MP1A	Z	7.733	5
12	MP1A	Mx	.002	5
13	MP2A	X	-5.903	2
14	MP2A	Z	3.408	2
15	MP2A	Mx	.003	2
16	MP2A	X	-5.903	4
17	MP2A	Z	3.408	4
18	MP2A	Mx	.003	4
19	MP1A	X	-6.36	2.5
20	MP1A	Z	3.672	2.5
21	MP1A	Mx	.003	2.5
22	MP2A	X	-6.722	2.5
23	MP2A	Z	3.881	2.5
24	MP2A	Mx	.003	2.5
25	MP2A	X	-3.301	4.5
26	MP2A	Z	1.906	4.5
27	MP2A	Mx	.002	4.5
28	OVP	X	-15.696	2.5
29	OVP	Z	9.062	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-13.886	1
2	MP1A	Z	0	1
3	MP1A	Mx	.007	1
4	MP1A	X	-13.886	5
5	MP1A	Z	0	5
6	MP1A	Mx	.007	5
7	MP1A	X	-13.886	1
8	MP1A	Z	0	1
9	MP1A	Mx	.007	1
10	MP1A	X	-13.886	5
11	MP1A	Z	0	5
12	MP1A	Mx	.007	5
13	MP2A	X	-5.082	2
14	MP2A	Z	0	2
15	MP2A	Mx	.003	2
16	MP2A	X	-5.082	4
17	MP2A	Z	0	4
18	MP2A	Mx	.003	4
19	MP1A	X	-6.432	2.5
20	MP1A	Z	0	2.5
21	MP1A	Mx	.003	2.5
22	MP2A	X	-6.989	2.5
23	MP2A	Z	0	2.5
24	MP2A	Mx	.003	2.5
25	MP2A	X	-3.178	4.5
26	MP2A	Z	0	4.5
27	MP2A	Mx	.002	4.5
28	OVP	X	-16.375	2.5
29	OVP	Z	0	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-13.394	1
2	MP1A	Z	-7.733	1
3	MP1A	Mx	.002	1
4	MP1A	X	-13.394	5
5	MP1A	Z	-7.733	5
6	MP1A	Mx	.002	5
7	MP1A	X	-13.394	1
8	MP1A	Z	-7.733	1
9	MP1A	Mx	.012	1
10	MP1A	X	-13.394	5
11	MP1A	Z	-7.733	5
12	MP1A	Mx	.012	5
13	MP2A	X	-5.903	2
14	MP2A	Z	-3.408	2
15	MP2A	Mx	.003	2
16	MP2A	X	-5.903	4
17	MP2A	Z	-3.408	4
18	MP2A	Mx	.003	4
19	MP1A	X	-6.36	2.5
20	MP1A	Z	-3.672	2.5
21	MP1A	Mx	.003	2.5
22	MP2A	X	-6.722	2.5
23	MP2A	Z	-3.881	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
24	MP2A	Mx	.003	2.5
25	MP2A	X	-3.301	4.5
26	MP2A	Z	-1.906	4.5
27	MP2A	Mx	.002	4.5
28	OVP	X	-14.525	2.5
29	OVP	Z	-8.386	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-9.313	1
2	MP1A	Z	-16.13	1
3	MP1A	Mx	-.006	1
4	MP1A	X	-9.313	5
5	MP1A	Z	-16.13	5
6	MP1A	Mx	-.006	5
7	MP1A	X	-9.313	1
8	MP1A	Z	-16.13	1
9	MP1A	Mx	.015	1
10	MP1A	X	-9.313	5
11	MP1A	Z	-16.13	5
12	MP1A	Mx	.015	5
13	MP2A	X	-5.141	2
14	MP2A	Z	-8.905	2
15	MP2A	Mx	.003	2
16	MP2A	X	-5.141	4
17	MP2A	Z	-8.905	4
18	MP2A	Mx	.003	4
19	MP1A	X	-4.584	2.5
20	MP1A	Z	-7.94	2.5
21	MP1A	Mx	.002	2.5
22	MP2A	X	-4.654	2.5
23	MP2A	Z	-8.061	2.5
24	MP2A	Mx	.002	2.5
25	MP2A	X	-2.539	4.5
26	MP2A	Z	-4.397	4.5
27	MP2A	Mx	.001	4.5
28	OVP	X	-9.459	2.5
29	OVP	Z	-16.383	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	1
2	MP1A	Z	-4.468	1
3	MP1A	Mx	-.003	1
4	MP1A	X	0	5
5	MP1A	Z	-4.468	5
6	MP1A	Mx	-.003	5
7	MP1A	X	0	1
8	MP1A	Z	-6.623	1
9	MP1A	Mx	.004	1
10	MP1A	X	0	5
11	MP1A	Z	-6.623	5
12	MP1A	Mx	.004	5
13	MP2A	X	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
14	MP2A	Z	-3.225	2
15	MP2A	Mx	0	2
16	MP2A	X	0	4
17	MP2A	Z	-3.225	4
18	MP2A	Mx	0	4
19	MP1A	X	0	2.5
20	MP1A	Z	-3.077	2.5
21	MP1A	Mx	0	2.5
22	MP2A	X	0	2.5
23	MP2A	Z	-3.077	2.5
24	MP2A	Mx	0	2.5
25	MP2A	X	0	4.5
26	MP2A	Z	-1.185	4.5
27	MP2A	Mx	0	4.5
28	OVP	X	0	2.5
29	OVP	Z	-5.179	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	1.915	1
2	MP1A	Z	-3.317	1
3	MP1A	Mx	-.003	1
4	MP1A	X	1.915	5
5	MP1A	Z	-3.317	5
6	MP1A	Mx	-.003	5
7	MP1A	X	3.033	1
8	MP1A	Z	-5.254	1
9	MP1A	Mx	.002	1
10	MP1A	X	3.033	5
11	MP1A	Z	-5.254	5
12	MP1A	Mx	.002	5
13	MP2A	X	1.348	2
14	MP2A	Z	-2.335	2
15	MP2A	Mx	-.000674	2
16	MP2A	X	1.348	4
17	MP2A	Z	-2.335	4
18	MP2A	Mx	-.000674	4
19	MP1A	X	1.388	2.5
20	MP1A	Z	-2.404	2.5
21	MP1A	Mx	-.000694	2.5
22	MP2A	X	1.411	2.5
23	MP2A	Z	-2.444	2.5
24	MP2A	Mx	-.000706	2.5
25	MP2A	X	.514	4.5
26	MP2A	Z	-.891	4.5
27	MP2A	Mx	-.000257	4.5
28	OVP	X	2.535	2.5
29	OVP	Z	-4.391	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	2.212	1
2	MP1A	Z	-1.277	1
3	MP1A	Mx	-.002	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
4	MP1A	X	2.212	5
5	MP1A	Z	-1.277	5
6	MP1A	Mx	-.002	5
7	MP1A	X	4.289	1
8	MP1A	Z	-2.476	1
9	MP1A	Mx	-.000494	1
10	MP1A	X	4.289	5
11	MP1A	Z	-2.476	5
12	MP1A	Mx	-.000494	5
13	MP2A	X	1.42	2
14	MP2A	Z	-.82	2
15	MP2A	Mx	-.00071	2
16	MP2A	X	1.42	4
17	MP2A	Z	-.82	4
18	MP2A	Mx	-.00071	4
19	MP1A	X	1.882	2.5
20	MP1A	Z	-1.087	2.5
21	MP1A	Mx	-.000941	2.5
22	MP2A	X	2.002	2.5
23	MP2A	Z	-1.156	2.5
24	MP2A	Mx	-.001	2.5
25	MP2A	X	.62	4.5
26	MP2A	Z	-.358	4.5
27	MP2A	Mx	-.00031	4.5
28	OVP	X	3.882	2.5
29	OVP	Z	-2.241	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	1.917	1
2	MP1A	Z	0	1
3	MP1A	Mx	-.000958	1
4	MP1A	X	1.917	5
5	MP1A	Z	0	5
6	MP1A	Mx	-.000958	5
7	MP1A	X	4.395	1
8	MP1A	Z	0	1
9	MP1A	Mx	-.002	1
10	MP1A	X	4.395	5
11	MP1A	Z	0	5
12	MP1A	Mx	-.002	5
13	MP2A	X	1.111	2
14	MP2A	Z	0	2
15	MP2A	Mx	-.000556	2
16	MP2A	X	1.111	4
17	MP2A	Z	0	4
18	MP2A	Mx	-.000556	4
19	MP1A	X	1.872	2.5
20	MP1A	Z	0	2.5
21	MP1A	Mx	-.000936	2.5
22	MP2A	X	2.057	2.5
23	MP2A	Z	0	2.5
24	MP2A	Mx	-.001	2.5
25	MP2A	X	.559	4.5
26	MP2A	Z	0	4.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
27	MP2A	Mx	-.00028	4.5
28	OVP	X	4.004	2.5
29	OVP	Z	0	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	2.212	1
2	MP1A	Z	1.277	1
3	MP1A	Mx	-.000255	1
4	MP1A	X	2.212	5
5	MP1A	Z	1.277	5
6	MP1A	Mx	-.000255	5
7	MP1A	X	4.289	1
8	MP1A	Z	2.476	1
9	MP1A	Mx	-.004	1
10	MP1A	X	4.289	5
11	MP1A	Z	2.476	5
12	MP1A	Mx	-.004	5
13	MP2A	X	1.42	2
14	MP2A	Z	.82	2
15	MP2A	Mx	-.00071	2
16	MP2A	X	1.42	4
17	MP2A	Z	.82	4
18	MP2A	Mx	-.00071	4
19	MP1A	X	1.882	2.5
20	MP1A	Z	1.087	2.5
21	MP1A	Mx	-.000941	2.5
22	MP2A	X	2.002	2.5
23	MP2A	Z	1.156	2.5
24	MP2A	Mx	-.001	2.5
25	MP2A	X	.62	4.5
26	MP2A	Z	.358	4.5
27	MP2A	Mx	-.00031	4.5
28	OVP	X	3.561	2.5
29	OVP	Z	2.056	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	1.915	1
2	MP1A	Z	3.317	1
3	MP1A	Mx	.001	1
4	MP1A	X	1.915	5
5	MP1A	Z	3.317	5
6	MP1A	Mx	.001	5
7	MP1A	X	3.033	1
8	MP1A	Z	5.254	1
9	MP1A	Mx	-.005	1
10	MP1A	X	3.033	5
11	MP1A	Z	5.254	5
12	MP1A	Mx	-.005	5
13	MP2A	X	1.348	2
14	MP2A	Z	2.335	2
15	MP2A	Mx	-.000674	2
16	MP2A	X	1.348	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP2A	Z	2.335	4
18	MP2A	Mx	-.000674	4
19	MP1A	X	1.388	2.5
20	MP1A	Z	2.404	2.5
21	MP1A	Mx	-.000694	2.5
22	MP2A	X	1.411	2.5
23	MP2A	Z	2.444	2.5
24	MP2A	Mx	-.000706	2.5
25	MP2A	X	.514	4.5
26	MP2A	Z	.891	4.5
27	MP2A	Mx	-.000257	4.5
28	OVP	X	2.35	2.5
29	OVP	Z	4.07	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	1
2	MP1A	Z	4.468	1
3	MP1A	Mx	.003	1
4	MP1A	X	0	5
5	MP1A	Z	4.468	5
6	MP1A	Mx	.003	5
7	MP1A	X	0	1
8	MP1A	Z	6.623	1
9	MP1A	Mx	-.004	1
10	MP1A	X	0	5
11	MP1A	Z	6.623	5
12	MP1A	Mx	-.004	5
13	MP2A	X	0	2
14	MP2A	Z	3.225	2
15	MP2A	Mx	0	2
16	MP2A	X	0	4
17	MP2A	Z	3.225	4
18	MP2A	Mx	0	4
19	MP1A	X	0	2.5
20	MP1A	Z	3.077	2.5
21	MP1A	Mx	0	2.5
22	MP2A	X	0	2.5
23	MP2A	Z	3.077	2.5
24	MP2A	Mx	0	2.5
25	MP2A	X	0	4.5
26	MP2A	Z	1.185	4.5
27	MP2A	Mx	0	4.5
28	OVP	X	0	2.5
29	OVP	Z	5.179	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-1.915	1
2	MP1A	Z	3.317	1
3	MP1A	Mx	.003	1
4	MP1A	X	-1.915	5
5	MP1A	Z	3.317	5
6	MP1A	Mx	.003	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
7	MP1A	X	-3.033	1
8	MP1A	Z	5.254	1
9	MP1A	Mx	-.002	1
10	MP1A	X	-3.033	5
11	MP1A	Z	5.254	5
12	MP1A	Mx	-.002	5
13	MP2A	X	-1.348	2
14	MP2A	Z	2.335	2
15	MP2A	Mx	.000674	2
16	MP2A	X	-1.348	4
17	MP2A	Z	2.335	4
18	MP2A	Mx	.000674	4
19	MP1A	X	-1.388	2.5
20	MP1A	Z	2.404	2.5
21	MP1A	Mx	.000694	2.5
22	MP2A	X	-1.411	2.5
23	MP2A	Z	2.444	2.5
24	MP2A	Mx	.000706	2.5
25	MP2A	X	-.514	4.5
26	MP2A	Z	.891	4.5
27	MP2A	Mx	.000257	4.5
28	OVP	X	-2.535	2.5
29	OVP	Z	4.391	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-2.212	1
2	MP1A	Z	1.277	1
3	MP1A	Mx	.002	1
4	MP1A	X	-2.212	5
5	MP1A	Z	1.277	5
6	MP1A	Mx	.002	5
7	MP1A	X	-4.289	1
8	MP1A	Z	2.476	1
9	MP1A	Mx	.000494	1
10	MP1A	X	-4.289	5
11	MP1A	Z	2.476	5
12	MP1A	Mx	.000494	5
13	MP2A	X	-1.42	2
14	MP2A	Z	.82	2
15	MP2A	Mx	.00071	2
16	MP2A	X	-1.42	4
17	MP2A	Z	.82	4
18	MP2A	Mx	.00071	4
19	MP1A	X	-1.882	2.5
20	MP1A	Z	1.087	2.5
21	MP1A	Mx	.000941	2.5
22	MP2A	X	-2.002	2.5
23	MP2A	Z	1.156	2.5
24	MP2A	Mx	.001	2.5
25	MP2A	X	-.62	4.5
26	MP2A	Z	.358	4.5
27	MP2A	Mx	.00031	4.5
28	OVP	X	-3.882	2.5
29	OVP	Z	2.241	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-1.917	1
2	MP1A	Z	0	1
3	MP1A	Mx	.000958	1
4	MP1A	X	-1.917	5
5	MP1A	Z	0	5
6	MP1A	Mx	.000958	5
7	MP1A	X	-4.395	1
8	MP1A	Z	0	1
9	MP1A	Mx	.002	1
10	MP1A	X	-4.395	5
11	MP1A	Z	0	5
12	MP1A	Mx	.002	5
13	MP2A	X	-1.111	2
14	MP2A	Z	0	2
15	MP2A	Mx	.000556	2
16	MP2A	X	-1.111	4
17	MP2A	Z	0	4
18	MP2A	Mx	.000556	4
19	MP1A	X	-1.872	2.5
20	MP1A	Z	0	2.5
21	MP1A	Mx	.000936	2.5
22	MP2A	X	-2.057	2.5
23	MP2A	Z	0	2.5
24	MP2A	Mx	.001	2.5
25	MP2A	X	-.559	4.5
26	MP2A	Z	0	4.5
27	MP2A	Mx	.00028	4.5
28	OVP	X	-4.004	2.5
29	OVP	Z	0	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-2.212	1
2	MP1A	Z	-1.277	1
3	MP1A	Mx	.000255	1
4	MP1A	X	-2.212	5
5	MP1A	Z	-1.277	5
6	MP1A	Mx	.000255	5
7	MP1A	X	-4.289	1
8	MP1A	Z	-2.476	1
9	MP1A	Mx	.004	1
10	MP1A	X	-4.289	5
11	MP1A	Z	-2.476	5
12	MP1A	Mx	.004	5
13	MP2A	X	-1.42	2
14	MP2A	Z	-.82	2
15	MP2A	Mx	.00071	2
16	MP2A	X	-1.42	4
17	MP2A	Z	-.82	4
18	MP2A	Mx	.00071	4
19	MP1A	X	-1.882	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
20	MP1A	Z	-1.087	2.5
21	MP1A	Mx	.000941	2.5
22	MP2A	X	-2.002	2.5
23	MP2A	Z	-1.156	2.5
24	MP2A	Mx	.001	2.5
25	MP2A	X	-.62	4.5
26	MP2A	Z	-.358	4.5
27	MP2A	Mx	.00031	4.5
28	OVP	X	-3.561	2.5
29	OVP	Z	-2.056	2.5
30	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-1.915	1
2	MP1A	Z	-3.317	1
3	MP1A	Mx	-.001	1
4	MP1A	X	-1.915	5
5	MP1A	Z	-3.317	5
6	MP1A	Mx	-.001	5
7	MP1A	X	-3.033	1
8	MP1A	Z	-5.254	1
9	MP1A	Mx	.005	1
10	MP1A	X	-3.033	5
11	MP1A	Z	-5.254	5
12	MP1A	Mx	.005	5
13	MP2A	X	-1.348	2
14	MP2A	Z	-2.335	2
15	MP2A	Mx	.000674	2
16	MP2A	X	-1.348	4
17	MP2A	Z	-2.335	4
18	MP2A	Mx	.000674	4
19	MP1A	X	-1.388	2.5
20	MP1A	Z	-2.404	2.5
21	MP1A	Mx	.000694	2.5
22	MP2A	X	-1.411	2.5
23	MP2A	Z	-2.444	2.5
24	MP2A	Mx	.000706	2.5
25	MP2A	X	-.514	4.5
26	MP2A	Z	-.891	4.5
27	MP2A	Mx	.000257	4.5
28	OVP	X	-2.35	2.5
29	OVP	Z	-4.07	2.5
30	OVP	Mx	0	2.5

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-500	0

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M2	Y	-500	0

Member Point Loads (BLC 79 : Lv1)

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

Member Point Loads (BLC 79 : Lv1) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M3	Y	-250	%50

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M3	Y	-250	%100

Member Point Loads (BLC 81 : Antenna Ev)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Y	-.932	1
2	MP1A	My	-.000466	1
3	MP1A	Mz	.000622	1
4	MP1A	Y	-.932	5
5	MP1A	My	-.000466	5
6	MP1A	Mz	.000622	5
7	MP1A	Y	-1.378	1
8	MP1A	My	-.000689	1
9	MP1A	Mz	-.000919	1
10	MP1A	Y	-1.378	5
11	MP1A	My	-.000689	5
12	MP1A	Mz	-.000919	5
13	MP2A	Y	-1.858	2
14	MP2A	My	-.000929	2
15	MP2A	Mz	0	2
16	MP2A	Y	-1.858	4
17	MP2A	My	-.000929	4
18	MP2A	Mz	0	4
19	MP1A	Y	-2.999	2.5
20	MP1A	My	-.002	2.5
21	MP1A	Mz	0	2.5
22	MP2A	Y	-3.187	2.5
23	MP2A	My	-.002	2.5
24	MP2A	Mz	0	2.5
25	MP2A	Y	-.798	4.5
26	MP2A	My	-.000399	4.5
27	MP2A	Mz	0	4.5
28	OVP	Y	-1.365	2.5
29	OVP	My	0	2.5
30	OVP	Mz	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Z	-2.331	1
2	MP1A	Mx	-.002	1
3	MP1A	Z	-2.331	5
4	MP1A	Mx	-.002	5
5	MP1A	Z	-3.445	1
6	MP1A	Mx	.002	1
7	MP1A	Z	-3.445	5
8	MP1A	Mx	.002	5
9	MP2A	Z	-4.645	2
10	MP2A	Mx	0	2
11	MP2A	Z	-4.645	4
12	MP2A	Mx	0	4
13	MP1A	Z	-7.499	2.5
14	MP1A	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
15	MP2A	Z	-7.968	2.5
16	MP2A	Mx	0	2.5
17	MP2A	Z	-1.995	4.5
18	MP2A	Mx	0	4.5
19	OVP	Z	-3.413	2.5
20	OVP	Mx	0	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	2.331	1
2	MP1A	Mx	-.001	1
3	MP1A	X	2.331	5
4	MP1A	Mx	-.001	5
5	MP1A	X	3.445	1
6	MP1A	Mx	-.002	1
7	MP1A	X	3.445	5
8	MP1A	Mx	-.002	5
9	MP2A	X	4.645	2
10	MP2A	Mx	-.002	2
11	MP2A	X	4.645	4
12	MP2A	Mx	-.002	4
13	MP1A	X	7.499	2.5
14	MP1A	Mx	-.004	2.5
15	MP2A	X	7.968	2.5
16	MP2A	Mx	-.004	2.5
17	MP2A	X	1.995	4.5
18	MP2A	Mx	-.000997	4.5
19	OVP	X	3.413	2.5
20	OVP	Mx	0	2.5

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	Y	-5.892	-5.892	0	%100
2	OVP	Y	-7.184	-7.184	0	%100
3	MP1A	Y	-4.438	-4.438	0	%100
4	MP2A	Y	-4.438	-4.438	0	%100
5	M12	Y	-4.438	-4.438	0	%100
6	M14	Y	-4.438	-4.438	0	%100
7	M15	Y	-4.438	-4.438	0	%100
8	M16A	Y	-4.438	-4.438	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	0	0	0	%100
2	M3	Z	-7.614	-7.614	0	%100
3	OVP	X	0	0	0	%100
4	OVP	Z	-9.286	-9.286	0	%100
5	MP1A	X	0	0	0	%100
6	MP1A	Z	-6.046	-6.046	0	%100
7	MP2A	X	0	0	0	%100
8	MP2A	Z	-6.046	-6.046	0	%100
9	M12	X	0	0	0	%100
10	M12	Z	-6.046	-6.046	0	%100
11	M14	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
12	M14	Z	-.015	-.015	0	%100
13	M15	X	0	0	0	%100
14	M15	Z	-.084	-.084	0	%100
15	M16A	X	0	0	0	%100
16	M16A	Z	-.015	-.015	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	2.855	2.855	0	%100
2	M3	Z	-4.945	-4.945	0	%100
3	OVP	X	4.643	4.643	0	%100
4	OVP	Z	-8.042	-8.042	0	%100
5	MP1A	X	3.023	3.023	0	%100
6	MP1A	Z	-5.236	-5.236	0	%100
7	MP2A	X	3.023	3.023	0	%100
8	MP2A	Z	-5.236	-5.236	0	%100
9	M12	X	2.267	2.267	0	%100
10	M12	Z	-3.927	-3.927	0	%100
11	M14	X	.828	.828	0	%100
12	M14	Z	-1.434	-1.434	0	%100
13	M15	X	1.037	1.037	0	%100
14	M15	Z	-1.796	-1.796	0	%100
15	M16A	X	.575	.575	0	%100
16	M16A	Z	-.995	-.995	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	1.648	1.648	0	%100
2	M3	Z	-.952	-.952	0	%100
3	OVP	X	8.042	8.042	0	%100
4	OVP	Z	-4.643	-4.643	0	%100
5	MP1A	X	5.236	5.236	0	%100
6	MP1A	Z	-3.023	-3.023	0	%100
7	MP2A	X	5.236	5.236	0	%100
8	MP2A	Z	-3.023	-3.023	0	%100
9	M12	X	1.309	1.309	0	%100
10	M12	Z	-.756	-.756	0	%100
11	M14	X	3.837	3.837	0	%100
12	M14	Z	-2.215	-2.215	0	%100
13	M15	X	4.207	4.207	0	%100
14	M15	Z	-2.429	-2.429	0	%100
15	M16A	X	3.398	3.398	0	%100
16	M16A	Z	-1.962	-1.962	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	0	0	0	%100
2	M3	Z	0	0	0	%100
3	OVP	X	9.286	9.286	0	%100
4	OVP	Z	0	0	0	%100
5	MP1A	X	6.046	6.046	0	%100
6	MP1A	Z	0	0	0	%100
7	MP2A	X	6.046	6.046	0	%100
8	MP2A	Z	0	0	0	%100
9	M12	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
10	M12	Z	0	0	0	%100
11	M14	X	5.565	5.565	0	%100
12	M14	Z	0	0	0	%100
13	M15	X	5.652	5.652	0	%100
14	M15	Z	0	0	0	%100
15	M16A	X	5.565	5.565	0	%100
16	M16A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	1.648	1.648	0	%100
2	M3	Z	.952	.952	0	%100
3	OVP	X	8.042	8.042	0	%100
4	OVP	Z	4.643	4.643	0	%100
5	MP1A	X	5.236	5.236	0	%100
6	MP1A	Z	3.023	3.023	0	%100
7	MP2A	X	5.236	5.236	0	%100
8	MP2A	Z	3.023	3.023	0	%100
9	M12	X	1.309	1.309	0	%100
10	M12	Z	.756	.756	0	%100
11	M14	X	3.398	3.398	0	%100
12	M14	Z	1.962	1.962	0	%100
13	M15	X	3.172	3.172	0	%100
14	M15	Z	1.831	1.831	0	%100
15	M16A	X	3.837	3.837	0	%100
16	M16A	Z	2.215	2.215	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	2.855	2.855	0	%100
2	M3	Z	4.945	4.945	0	%100
3	OVP	X	4.643	4.643	0	%100
4	OVP	Z	8.042	8.042	0	%100
5	MP1A	X	3.023	3.023	0	%100
6	MP1A	Z	5.236	5.236	0	%100
7	MP2A	X	3.023	3.023	0	%100
8	MP2A	Z	5.236	5.236	0	%100
9	M12	X	2.267	2.267	0	%100
10	M12	Z	3.927	3.927	0	%100
11	M14	X	.575	.575	0	%100
12	M14	Z	.995	.995	0	%100
13	M15	X	.439	.439	0	%100
14	M15	Z	.761	.761	0	%100
15	M16A	X	.828	.828	0	%100
16	M16A	Z	1.434	1.434	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	0	0	0	%100
2	M3	Z	7.614	7.614	0	%100
3	OVP	X	0	0	0	%100
4	OVP	Z	9.286	9.286	0	%100
5	MP1A	X	0	0	0	%100
6	MP1A	Z	6.046	6.046	0	%100
7	MP2A	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
8	MP2A	Z	6.046	6.046	0	%100
9	M12	X	0	0	0	%100
10	M12	Z	6.046	6.046	0	%100
11	M14	X	0	0	0	%100
12	M14	Z	.015	.015	0	%100
13	M15	X	0	0	0	%100
14	M15	Z	.084	.084	0	%100
15	M16A	X	0	0	0	%100
16	M16A	Z	.015	.015	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	-2.855	-2.855	0	%100
2	M3	Z	4.945	4.945	0	%100
3	OVP	X	-4.643	-4.643	0	%100
4	OVP	Z	8.042	8.042	0	%100
5	MP1A	X	-3.023	-3.023	0	%100
6	MP1A	Z	5.236	5.236	0	%100
7	MP2A	X	-3.023	-3.023	0	%100
8	MP2A	Z	5.236	5.236	0	%100
9	M12	X	-2.267	-2.267	0	%100
10	M12	Z	3.927	3.927	0	%100
11	M14	X	-.828	-.828	0	%100
12	M14	Z	1.434	1.434	0	%100
13	M15	X	-1.037	-1.037	0	%100
14	M15	Z	1.796	1.796	0	%100
15	M16A	X	-.575	-.575	0	%100
16	M16A	Z	.995	.995	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	-1.648	-1.648	0	%100
2	M3	Z	.952	.952	0	%100
3	OVP	X	-8.042	-8.042	0	%100
4	OVP	Z	4.643	4.643	0	%100
5	MP1A	X	-5.236	-5.236	0	%100
6	MP1A	Z	3.023	3.023	0	%100
7	MP2A	X	-5.236	-5.236	0	%100
8	MP2A	Z	3.023	3.023	0	%100
9	M12	X	-1.309	-1.309	0	%100
10	M12	Z	.756	.756	0	%100
11	M14	X	-3.837	-3.837	0	%100
12	M14	Z	2.215	2.215	0	%100
13	M15	X	-4.207	-4.207	0	%100
14	M15	Z	2.429	2.429	0	%100
15	M16A	X	-3.398	-3.398	0	%100
16	M16A	Z	1.962	1.962	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	0	0	0	%100
2	M3	Z	0	0	0	%100
3	OVP	X	-9.286	-9.286	0	%100
4	OVP	Z	0	0	0	%100
5	MP1A	X	-6.046	-6.046	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
6	MP1A	Z	0	0	0	%100
7	MP2A	X	-6.046	-6.046	0	%100
8	MP2A	Z	0	0	0	%100
9	M12	X	0	0	0	%100
10	M12	Z	0	0	0	%100
11	M14	X	-5.565	-5.565	0	%100
12	M14	Z	0	0	0	%100
13	M15	X	-5.652	-5.652	0	%100
14	M15	Z	0	0	0	%100
15	M16A	X	-5.565	-5.565	0	%100
16	M16A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	-1.648	-1.648	0	%100
2	M3	Z	-.952	-.952	0	%100
3	OVP	X	-8.042	-8.042	0	%100
4	OVP	Z	-4.643	-4.643	0	%100
5	MP1A	X	-5.236	-5.236	0	%100
6	MP1A	Z	-3.023	-3.023	0	%100
7	MP2A	X	-5.236	-5.236	0	%100
8	MP2A	Z	-3.023	-3.023	0	%100
9	M12	X	-1.309	-1.309	0	%100
10	M12	Z	-.756	-.756	0	%100
11	M14	X	-3.398	-3.398	0	%100
12	M14	Z	-1.962	-1.962	0	%100
13	M15	X	-3.172	-3.172	0	%100
14	M15	Z	-1.831	-1.831	0	%100
15	M16A	X	-3.837	-3.837	0	%100
16	M16A	Z	-2.215	-2.215	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	-2.855	-2.855	0	%100
2	M3	Z	-4.945	-4.945	0	%100
3	OVP	X	-4.643	-4.643	0	%100
4	OVP	Z	-8.042	-8.042	0	%100
5	MP1A	X	-3.023	-3.023	0	%100
6	MP1A	Z	-5.236	-5.236	0	%100
7	MP2A	X	-3.023	-3.023	0	%100
8	MP2A	Z	-5.236	-5.236	0	%100
9	M12	X	-2.267	-2.267	0	%100
10	M12	Z	-3.927	-3.927	0	%100
11	M14	X	-.575	-.575	0	%100
12	M14	Z	-.995	-.995	0	%100
13	M15	X	-.439	-.439	0	%100
14	M15	Z	-.761	-.761	0	%100
15	M16A	X	-.828	-.828	0	%100
16	M16A	Z	-1.434	-1.434	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	0	0	0	%100
2	M3	Z	-2.334	-2.334	0	%100
3	OVP	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
4	OVP	Z	-2.681	-2.681	0	%100
5	MP1A	X	0	0	0	%100
6	MP1A	Z	-2.053	-2.053	0	%100
7	MP2A	X	0	0	0	%100
8	MP2A	Z	-2.053	-2.053	0	%100
9	M12	X	0	0	0	%100
10	M12	Z	-2.053	-2.053	0	%100
11	M14	X	0	0	0	%100
12	M14	Z	-.005	-.005	0	%100
13	M15	X	0	0	0	%100
14	M15	Z	-.029	-.029	0	%100
15	M16A	X	0	0	0	%100
16	M16A	Z	-.005	-.005	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	.875	.875	0	%100
2	M3	Z	-1.516	-1.516	0	%100
3	OVP	X	1.341	1.341	0	%100
4	OVP	Z	-2.322	-2.322	0	%100
5	MP1A	X	1.026	1.026	0	%100
6	MP1A	Z	-1.778	-1.778	0	%100
7	MP2A	X	1.026	1.026	0	%100
8	MP2A	Z	-1.778	-1.778	0	%100
9	M12	X	.77	.77	0	%100
10	M12	Z	-1.333	-1.333	0	%100
11	M14	X	.288	.288	0	%100
12	M14	Z	-.499	-.499	0	%100
13	M15	X	.361	.361	0	%100
14	M15	Z	-.625	-.625	0	%100
15	M16A	X	.2	.2	0	%100
16	M16A	Z	-.346	-.346	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	.505	.505	0	%100
2	M3	Z	-.292	-.292	0	%100
3	OVP	X	2.322	2.322	0	%100
4	OVP	Z	-1.341	-1.341	0	%100
5	MP1A	X	1.778	1.778	0	%100
6	MP1A	Z	-1.026	-1.026	0	%100
7	MP2A	X	1.778	1.778	0	%100
8	MP2A	Z	-1.026	-1.026	0	%100
9	M12	X	.444	.444	0	%100
10	M12	Z	-.257	-.257	0	%100
11	M14	X	1.334	1.334	0	%100
12	M14	Z	-.77	-.77	0	%100
13	M15	X	1.464	1.464	0	%100
14	M15	Z	-.845	-.845	0	%100
15	M16A	X	1.181	1.181	0	%100
16	M16A	Z	-.682	-.682	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
2	M3	Z	0	0	0	%100
3	OVP	X	2.681	2.681	0	%100
4	OVP	Z	0	0	0	%100
5	MP1A	X	2.053	2.053	0	%100
6	MP1A	Z	0	0	0	%100
7	MP2A	X	2.053	2.053	0	%100
8	MP2A	Z	0	0	0	%100
9	M12	X	0	0	0	%100
10	M12	Z	0	0	0	%100
11	M14	X	1.935	1.935	0	%100
12	M14	Z	0	0	0	%100
13	M15	X	1.967	1.967	0	%100
14	M15	Z	0	0	0	%100
15	M16A	X	1.935	1.935	0	%100
16	M16A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	.505	.505	0	%100
2	M3	Z	.292	.292	0	%100
3	OVP	X	2.322	2.322	0	%100
4	OVP	Z	1.341	1.341	0	%100
5	MP1A	X	1.778	1.778	0	%100
6	MP1A	Z	1.026	1.026	0	%100
7	MP2A	X	1.778	1.778	0	%100
8	MP2A	Z	1.026	1.026	0	%100
9	M12	X	.444	.444	0	%100
10	M12	Z	.257	.257	0	%100
11	M14	X	1.181	1.181	0	%100
12	M14	Z	.682	.682	0	%100
13	M15	X	1.104	1.104	0	%100
14	M15	Z	.637	.637	0	%100
15	M16A	X	1.334	1.334	0	%100
16	M16A	Z	.77	.77	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	.875	.875	0	%100
2	M3	Z	1.516	1.516	0	%100
3	OVP	X	1.341	1.341	0	%100
4	OVP	Z	2.322	2.322	0	%100
5	MP1A	X	1.026	1.026	0	%100
6	MP1A	Z	1.778	1.778	0	%100
7	MP2A	X	1.026	1.026	0	%100
8	MP2A	Z	1.778	1.778	0	%100
9	M12	X	.77	.77	0	%100
10	M12	Z	1.333	1.333	0	%100
11	M14	X	.2	.2	0	%100
12	M14	Z	.346	.346	0	%100
13	M15	X	.153	.153	0	%100
14	M15	Z	.265	.265	0	%100
15	M16A	X	.288	.288	0	%100
16	M16A	Z	.499	.499	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	0	0	0	%100
2	M3	Z	2.334	2.334	0	%100
3	OVP	X	0	0	0	%100
4	OVP	Z	2.681	2.681	0	%100
5	MP1A	X	0	0	0	%100
6	MP1A	Z	2.053	2.053	0	%100
7	MP2A	X	0	0	0	%100
8	MP2A	Z	2.053	2.053	0	%100
9	M12	X	0	0	0	%100
10	M12	Z	2.053	2.053	0	%100
11	M14	X	0	0	0	%100
12	M14	Z	.005	.005	0	%100
13	M15	X	0	0	0	%100
14	M15	Z	.029	.029	0	%100
15	M16A	X	0	0	0	%100
16	M16A	Z	.005	.005	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	-.875	-.875	0	%100
2	M3	Z	1.516	1.516	0	%100
3	OVP	X	-1.341	-1.341	0	%100
4	OVP	Z	2.322	2.322	0	%100
5	MP1A	X	-1.026	-1.026	0	%100
6	MP1A	Z	1.778	1.778	0	%100
7	MP2A	X	-1.026	-1.026	0	%100
8	MP2A	Z	1.778	1.778	0	%100
9	M12	X	-.77	-.77	0	%100
10	M12	Z	1.333	1.333	0	%100
11	M14	X	-.288	-.288	0	%100
12	M14	Z	.499	.499	0	%100
13	M15	X	-.361	-.361	0	%100
14	M15	Z	.625	.625	0	%100
15	M16A	X	-.2	-.2	0	%100
16	M16A	Z	.346	.346	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	-.505	-.505	0	%100
2	M3	Z	.292	.292	0	%100
3	OVP	X	-2.322	-2.322	0	%100
4	OVP	Z	1.341	1.341	0	%100
5	MP1A	X	-1.778	-1.778	0	%100
6	MP1A	Z	1.026	1.026	0	%100
7	MP2A	X	-1.778	-1.778	0	%100
8	MP2A	Z	1.026	1.026	0	%100
9	M12	X	-.444	-.444	0	%100
10	M12	Z	.257	.257	0	%100
11	M14	X	-1.334	-1.334	0	%100
12	M14	Z	.77	.77	0	%100
13	M15	X	-1.464	-1.464	0	%100
14	M15	Z	.845	.845	0	%100
15	M16A	X	-1.181	-1.181	0	%100
16	M16A	Z	.682	.682	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	0	0	0	%100
2	M3	Z	0	0	0	%100
3	OVP	X	-2.681	-2.681	0	%100
4	OVP	Z	0	0	0	%100
5	MP1A	X	-2.053	-2.053	0	%100
6	MP1A	Z	0	0	0	%100
7	MP2A	X	-2.053	-2.053	0	%100
8	MP2A	Z	0	0	0	%100
9	M12	X	0	0	0	%100
10	M12	Z	0	0	0	%100
11	M14	X	-1.935	-1.935	0	%100
12	M14	Z	0	0	0	%100
13	M15	X	-1.967	-1.967	0	%100
14	M15	Z	0	0	0	%100
15	M16A	X	-1.935	-1.935	0	%100
16	M16A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	-.505	-.505	0	%100
2	M3	Z	-.292	-.292	0	%100
3	OVP	X	-2.322	-2.322	0	%100
4	OVP	Z	-1.341	-1.341	0	%100
5	MP1A	X	-1.778	-1.778	0	%100
6	MP1A	Z	-1.026	-1.026	0	%100
7	MP2A	X	-1.778	-1.778	0	%100
8	MP2A	Z	-1.026	-1.026	0	%100
9	M12	X	-.444	-.444	0	%100
10	M12	Z	-.257	-.257	0	%100
11	M14	X	-1.181	-1.181	0	%100
12	M14	Z	-.682	-.682	0	%100
13	M15	X	-1.104	-1.104	0	%100
14	M15	Z	-.637	-.637	0	%100
15	M16A	X	-1.334	-1.334	0	%100
16	M16A	Z	-.77	-.77	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	-.875	-.875	0	%100
2	M3	Z	-1.516	-1.516	0	%100
3	OVP	X	-1.341	-1.341	0	%100
4	OVP	Z	-2.322	-2.322	0	%100
5	MP1A	X	-1.026	-1.026	0	%100
6	MP1A	Z	-1.778	-1.778	0	%100
7	MP2A	X	-1.026	-1.026	0	%100
8	MP2A	Z	-1.778	-1.778	0	%100
9	M12	X	-.77	-.77	0	%100
10	M12	Z	-1.333	-1.333	0	%100
11	M14	X	-.2	-.2	0	%100
12	M14	Z	-.346	-.346	0	%100
13	M15	X	-.153	-.153	0	%100
14	M15	Z	-.265	-.265	0	%100
15	M16A	X	-.288	-.288	0	%100
16	M16A	Z	-.499	-.499	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	0	0	0	%100
2	M3	Z	-.492	-.492	0	%100
3	OVP	X	0	0	0	%100
4	OVP	Z	-.6	-.6	0	%100
5	MP1A	X	0	0	0	%100
6	MP1A	Z	-.391	-.391	0	%100
7	MP2A	X	0	0	0	%100
8	MP2A	Z	-.391	-.391	0	%100
9	M12	X	0	0	0	%100
10	M12	Z	-.391	-.391	0	%100
11	M14	X	0	0	0	%100
12	M14	Z	-.000996	-.000996	0	%100
13	M15	X	0	0	0	%100
14	M15	Z	-.005	-.005	0	%100
15	M16A	X	0	0	0	%100
16	M16A	Z	-.000996	-.000996	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	.185	.185	0	%100
2	M3	Z	-.32	-.32	0	%100
3	OVP	X	.3	.3	0	%100
4	OVP	Z	-.52	-.52	0	%100
5	MP1A	X	.195	.195	0	%100
6	MP1A	Z	-.338	-.338	0	%100
7	MP2A	X	.195	.195	0	%100
8	MP2A	Z	-.338	-.338	0	%100
9	M12	X	.147	.147	0	%100
10	M12	Z	-.254	-.254	0	%100
11	M14	X	.054	.054	0	%100
12	M14	Z	-.093	-.093	0	%100
13	M15	X	.067	.067	0	%100
14	M15	Z	-.116	-.116	0	%100
15	M16A	X	.037	.037	0	%100
16	M16A	Z	-.064	-.064	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	.107	.107	0	%100
2	M3	Z	-.062	-.062	0	%100
3	OVP	X	.52	.52	0	%100
4	OVP	Z	-.3	-.3	0	%100
5	MP1A	X	.338	.338	0	%100
6	MP1A	Z	-.195	-.195	0	%100
7	MP2A	X	.338	.338	0	%100
8	MP2A	Z	-.195	-.195	0	%100
9	M12	X	.085	.085	0	%100
10	M12	Z	-.049	-.049	0	%100
11	M14	X	.248	.248	0	%100
12	M14	Z	-.143	-.143	0	%100
13	M15	X	.272	.272	0	%100
14	M15	Z	-.157	-.157	0	%100
15	M16A	X	.22	.22	0	%100
16	M16A	Z	-.127	-.127	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	0	0	0	%100
2	M3	Z	0	0	0	%100
3	OVP	X	.6	.6	0	%100
4	OVP	Z	0	0	0	%100
5	MP1A	X	.391	.391	0	%100
6	MP1A	Z	0	0	0	%100
7	MP2A	X	.391	.391	0	%100
8	MP2A	Z	0	0	0	%100
9	M12	X	0	0	0	%100
10	M12	Z	0	0	0	%100
11	M14	X	.36	.36	0	%100
12	M14	Z	0	0	0	%100
13	M15	X	.365	.365	0	%100
14	M15	Z	0	0	0	%100
15	M16A	X	.36	.36	0	%100
16	M16A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	.107	.107	0	%100
2	M3	Z	.062	.062	0	%100
3	OVP	X	.52	.52	0	%100
4	OVP	Z	.3	.3	0	%100
5	MP1A	X	.338	.338	0	%100
6	MP1A	Z	.195	.195	0	%100
7	MP2A	X	.338	.338	0	%100
8	MP2A	Z	.195	.195	0	%100
9	M12	X	.085	.085	0	%100
10	M12	Z	.049	.049	0	%100
11	M14	X	.22	.22	0	%100
12	M14	Z	.127	.127	0	%100
13	M15	X	.205	.205	0	%100
14	M15	Z	.118	.118	0	%100
15	M16A	X	.248	.248	0	%100
16	M16A	Z	.143	.143	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	.185	.185	0	%100
2	M3	Z	.32	.32	0	%100
3	OVP	X	.3	.3	0	%100
4	OVP	Z	.52	.52	0	%100
5	MP1A	X	.195	.195	0	%100
6	MP1A	Z	.338	.338	0	%100
7	MP2A	X	.195	.195	0	%100
8	MP2A	Z	.338	.338	0	%100
9	M12	X	.147	.147	0	%100
10	M12	Z	.254	.254	0	%100
11	M14	X	.037	.037	0	%100
12	M14	Z	.064	.064	0	%100
13	M15	X	.028	.028	0	%100
14	M15	Z	.049	.049	0	%100
15	M16A	X	.054	.054	0	%100
16	M16A	Z	.093	.093	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	0	0	0	%100
2	M3	Z	.492	.492	0	%100
3	OVP	X	0	0	0	%100
4	OVP	Z	.6	.6	0	%100
5	MP1A	X	0	0	0	%100
6	MP1A	Z	.391	.391	0	%100
7	MP2A	X	0	0	0	%100
8	MP2A	Z	.391	.391	0	%100
9	M12	X	0	0	0	%100
10	M12	Z	.391	.391	0	%100
11	M14	X	0	0	0	%100
12	M14	Z	.000996	.000996	0	%100
13	M15	X	0	0	0	%100
14	M15	Z	.005	.005	0	%100
15	M16A	X	0	0	0	%100
16	M16A	Z	.000996	.000996	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	-.185	-.185	0	%100
2	M3	Z	.32	.32	0	%100
3	OVP	X	-.3	-.3	0	%100
4	OVP	Z	.52	.52	0	%100
5	MP1A	X	-.195	-.195	0	%100
6	MP1A	Z	.338	.338	0	%100
7	MP2A	X	-.195	-.195	0	%100
8	MP2A	Z	.338	.338	0	%100
9	M12	X	-.147	-.147	0	%100
10	M12	Z	.254	.254	0	%100
11	M14	X	-.054	-.054	0	%100
12	M14	Z	.093	.093	0	%100
13	M15	X	-.067	-.067	0	%100
14	M15	Z	.116	.116	0	%100
15	M16A	X	-.037	-.037	0	%100
16	M16A	Z	.064	.064	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	-.107	-.107	0	%100
2	M3	Z	.062	.062	0	%100
3	OVP	X	-.52	-.52	0	%100
4	OVP	Z	.3	.3	0	%100
5	MP1A	X	-.338	-.338	0	%100
6	MP1A	Z	.195	.195	0	%100
7	MP2A	X	-.338	-.338	0	%100
8	MP2A	Z	.195	.195	0	%100
9	M12	X	-.085	-.085	0	%100
10	M12	Z	.049	.049	0	%100
11	M14	X	-.248	-.248	0	%100
12	M14	Z	.143	.143	0	%100
13	M15	X	-.272	-.272	0	%100
14	M15	Z	.157	.157	0	%100
15	M16A	X	-.22	-.22	0	%100
16	M16A	Z	.127	.127	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	0	0	0	%100
2	M3	Z	0	0	0	%100
3	OVP	X	-.6	-.6	0	%100
4	OVP	Z	0	0	0	%100
5	MP1A	X	-.391	-.391	0	%100
6	MP1A	Z	0	0	0	%100
7	MP2A	X	-.391	-.391	0	%100
8	MP2A	Z	0	0	0	%100
9	M12	X	0	0	0	%100
10	M12	Z	0	0	0	%100
11	M14	X	-.36	-.36	0	%100
12	M14	Z	0	0	0	%100
13	M15	X	-.365	-.365	0	%100
14	M15	Z	0	0	0	%100
15	M16A	X	-.36	-.36	0	%100
16	M16A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	-.107	-.107	0	%100
2	M3	Z	-.062	-.062	0	%100
3	OVP	X	-.52	-.52	0	%100
4	OVP	Z	-.3	-.3	0	%100
5	MP1A	X	-.338	-.338	0	%100
6	MP1A	Z	-.195	-.195	0	%100
7	MP2A	X	-.338	-.338	0	%100
8	MP2A	Z	-.195	-.195	0	%100
9	M12	X	-.085	-.085	0	%100
10	M12	Z	-.049	-.049	0	%100
11	M14	X	-.22	-.22	0	%100
12	M14	Z	-.127	-.127	0	%100
13	M15	X	-.205	-.205	0	%100
14	M15	Z	-.118	-.118	0	%100
15	M16A	X	-.248	-.248	0	%100
16	M16A	Z	-.143	-.143	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	X	-.185	-.185	0	%100
2	M3	Z	-.32	-.32	0	%100
3	OVP	X	-.3	-.3	0	%100
4	OVP	Z	-.52	-.52	0	%100
5	MP1A	X	-.195	-.195	0	%100
6	MP1A	Z	-.338	-.338	0	%100
7	MP2A	X	-.195	-.195	0	%100
8	MP2A	Z	-.338	-.338	0	%100
9	M12	X	-.147	-.147	0	%100
10	M12	Z	-.254	-.254	0	%100
11	M14	X	-.037	-.037	0	%100
12	M14	Z	-.064	-.064	0	%100
13	M15	X	-.028	-.028	0	%100
14	M15	Z	-.049	-.049	0	%100
15	M16A	X	-.054	-.054	0	%100
16	M16A	Z	-.093	-.093	0	%100

Member Area Loads

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

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N1	max	377.621	47	544.979	26	189.921	1	.041	7	0	75	0	75
2		min	-368.582	29	192.886	70	-214.321	7	-.445	13	0	1	0	1
3	N2	max	355.693	33	877.043	26	403.676	1	.09	1	0	75	0	75
4		min	-364.656	39	287.239	70	-211.311	7	-.603	43	0	1	0	1
5	N29	max	19.937	10	17.879	16	192.411	11	0	75	0	75	0	75
6		min	-26.769	4	6.135	74	-275.3	5	0	1	0	1	0	1
7	N31	max	29.061	9	17.995	20	371.886	2	0	75	0	75	0	75
8		min	-20.85	3	6.135	66	-454.354	8	0	1	0	1	0	1
9	Totals:	max	535.236	10	1439.258	45	833.363	1						
10		min	-535.235	4	492.435	67	-833.364	7						

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

	Member	Shape	Code Che...	Loc[ft]	LC	Shear...	Loc[ft]	Dir	LC	phi*Pn...	phi*Pnt...	phi*Mn...	phi*Mn...	Cb	Eqn
1	M3	PIPE_3.0	.383	2.5	47	.074	2.5		9	57037....	65205	5.749	5.749	1...	H1-1b
2	OVP	PIPE_4.0	.113	3.875	47	.043	.75		47	83097....	93240	10.631	10.631	1...	H1-1b
3	MP1A	PIPE_2.0	.251	4.813	9	.106	.875		3	20866....	32130	1.872	1.872	1...	H1-1b
4	MP2A	PIPE_2.0	.247	4.813	3	.096	1.938		9	20866....	32130	1.872	1.872	1...	H1-1b
5	M12	PIPE_2.0	.178	4.063	8	.110	4.115		9	23808....	32130	1.872	1.872	1...	H1-1b
6	M14	PIPE_2.0	.012	2.062	16	.002	0		22	26204....	32130	1.872	1.872	1...	H1-1b
7	M16A	PIPE_2.0	.014	4.123	2	.002	0		22	26204....	32130	1.872	1.872	1...	H1-1b*

VzW SMART Tool© Vendor

Client:	Verizon Wireless	Date:	4/21/2022
Site Name:	SOUTHINGTON_I691_CT - A		
PSLC #:	468179		
Fuze ID #:	16092616	Page:	1

Version 1.0

I. Mount-to-Tower Connection Check

Custom Orientation Required	No
Tower Connection Bolt Checks	Yes
Bolt Orientation	Parallel
Bolt Quantity per Reaction:	4
d_x (in) *(Delta X of typ. bolt config. sketch)*:	5
d_y (in) *(Delta Y of typ. bolt config. sketch)*:	5
Bolt Type:	F1554 Gr.36
Bolt Diameter (in):	0.5
Required Tensile Strength / bolt (kips):	0.7
Required Shear Strength / bolt (kips):	0.2
Tensile Capacity / bolt (kips):	6.4
Shear Capacity / bolt (kips):	3.8
Bolt Overall Utilization:	**11.3%**
Tower Connection Baseplate Checks	No