

Derek Maheux Program Manager  
c/o Cellco Partnership d/b/a Verizon Wireless  
Centerline Communications, LLC  
750 West Center Street, Suite 301  
West Bridgewater, MA 02379  
Mobile: (508)649-3407  
[Dmaheux@clinellc.com](mailto:Dmaheux@clinellc.com)

September 18, 2023

Melanie A. Bachman  
Acting Executive Director  
Connecticut Siting Council  
10 Franklin Square  
New Britain, CT 06051

**RE: Notice of Exempt Modification // Site: BETHANY CT (ATC: 88008)  
9 Meyers Road, Bethany, CT 06524  
N 41.40475833 // W -72.99998333**

Dear Ms. Bachman,

Cellco Partnership d/b/a Verizon Wireless currently maintains eighteen (18) antenna at the 180-ft level on the existing 340ft Tower, located at 9 Meyers Road, Bethany, CT. The tower is owned by American Tower. Verizon Wireless proposed modification involves the installation of four (4) interference mitigation filters on Verizon Wireless existing antenna platform and mounting assembly.

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

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2). Enclosed to accommodate this filing are construction drawings dated September 7, 2023, by A.T Engineering Services, LLC, a structural analysis dated August 22, 2023, by American Tower Corp., and a structural mount analysis by Colliers Engineering and Design dated August 2, 2023, and Non-Ionizing Electromagnetic Radiation (NIER) Study dated August 28, 2023, by Tower Engineering Professionals.

1. The proposed modifications will not result in an increase in the height of the existing structure.
2. The proposed modifications will not require the extension of the site boundary.

3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
4. The operation of the new antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard.
5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
6. The existing structure and its foundation can support the proposed loading, as shown in the attached structural analysis and a structural mount analysis, pursuant to certain conditions defined therein. Design and engineering are fully illustrated within final construction drawings.

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

Sincerely,

*Derek Maheux*

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Derek Maheux, Program Manager  
c/o Cellco Partnership d/b/a Verizon Wireless  
Centerline Communications, LLC  
750 West Center Street, Suite 301  
West Bridgewater, MA 02379  
Mobile: (508) 649 2307  
[Dmaheux@clinellc.com](mailto:Dmaheux@clinellc.com)

Attachments: Exhibit 1 – Construction Drawings  
Exhibit 2 – Property Card and GIS  
Exhibit 3 – Structural Analysis  
Exhibit 4 – Mount Analysis  
Exhibit 5 – RF Emissions Analysis Report Evaluation  
Exhibit 6 – Available Original Tower Approval Records  
Exhibit 7 – Notice Deliver Confirmations

cc: Paula Cofrancesco – First Selectman – Chief Elected Official  
Kimberly McClure Brinton, Chair Planning & Zoning Commission - as P&Z official  
American Tower Corporation - as tower owner  
American Tower Corporation – as ground owner

# EXHIBIT 1





VICINITY MAP



**AMERICAN TOWER®**

ATC SITE NAME: BETHANY CT  
 ATC SITE NUMBER: 88008  
 VERIZON SITE NAME: BETHANY CT  
 VERIZON SITE NUMBER: 5000382257  
 SITE ADDRESS: 9 MEYERS ROAD  
 BETHANY, CT 06524



LOCATION MAP

**BIRD WATCH SITE:**  
 PLEASE CONTACT [bird.watch@americantower.com](mailto:bird.watch@americantower.com) OR  
 AMERICAN TOWER NOC AT 877-518-6937 FOR ASSISTANCE

**VERIZON AMENDMENT DRAWINGS**

COMPLIANCE CODE	PROJECT SUMMARY	PROJECT DESCRIPTION	SHEET INDEX				
ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNMENT AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.  1. 2020 NFPA 70, NATIONAL ELECTRIC CODE (NEC) 2. 2022 CONNECTICUT STATE BUILDING CODE 3. 2021 INTERNATIONAL BUILDING CODE (IBC)  <u>DESIGN CRITERIA FROM TOWER STRUCTURAL ANALYSIS:</u> BASIC WIND SPEED: 119 MPH (3-SECOND GUST) BASIC WIND SPEED W/ ICE: 50 MPH (3-SECOND GUST) W/ 1.00" RADIAL ICE CONCURRENT CODE(S): ANSITIA-222-H / 2021 IBC / 2022 CONNECTICUT STATE BUILDING CODE  EXPOSURE CATEGORY: B RISK CATEGORY: II TOPO FACTOR PROCEDURE: METHOD 1 TOPOGRAPHIC CATEGORY: 1 FEATURE: FLAT SPECTRAL RESPONSE: S <sub>g</sub> =0.20, S <sub>r</sub> =0.05 SITE CLASS: D - STIFF SOIL - DEFAULT  INFORMATION TAKEN FROM STRUCTURAL ANALYSIS COMPLETED BY ATC, DATED 09/07/23.	<u>SITE ADDRESS:</u> 9 MEYERS ROAD BETHANY, CT 06524 COUNTY: NEW HAVEN  <u>GEOGRAPHIC COORDINATES:</u> LATITUDE: 41.40475833 LONGITUDE: -72.99998333 GROUND ELEVATION: 620' AMSL	THE PROPOSED PROJECT INCLUDES MODIFYING GROUND BASED AND TOWER MOUNTED EQUIPMENT AS INDICATED PER BELOW:  INSTALL MOUNT MODIFICATIONS AND (4) FILTER(S)  EXISTING (18) ANTENNA(S), (6) RRR(S), (1) OVP(S), (12) 1-5/8" COAX CABLES AND (2) 1-5/8" HYBRID CABLES TO REMAIN	SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
	<u>PROJECT TEAM</u>  <u>TOWER OWNER:</u> AMERICAN TOWER 10 PRESIDENTIAL WAY WOBURN, MA 01801  <u>ENGINEER:</u> ATC TOWER SERVICES, LLC 3500 REGENCY PKWY STE 100 CARY, NC 27518  <u>PROPERTY OWNER:</u> AMERICAN TOWER 116 HUNTINGTON AVE BOSTON, MA 02116	PROJECT NOTES  1. THE FACILITY IS UNMANNED. 2. A TECHNICIAN WILL VISIT THE SITE APPROXIMATELY ONCE A MONTH FOR ROUTINE INSPECTION AND MAINTENANCE. 3. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT LAND DISTURBANCE OR EFFECT OF STORM WATER DRAINAGE. 4. NO SANITARY SEWER, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED. 5. HANDICAP ACCESS IS NOT REQUIRED. 6. THE PROJECT DEPICTED IN THESE PLANS QUALIFIES AS AN ELIGIBLE FACILITIES REQUEST ENTITLED TO EXPEDITED REVIEW UNDER 47 U.S.C. § 1455(A) AS A MODIFICATION OF AN EXISTING WIRELESS TOWER THAT INVOLVES THE COLLOCATION, REMOVAL, AND/OR REPLACEMENT OF TRANSMISSION EQUIPMENT THAT IS NOT A SUBSTANTIAL CHANGE UNDER CFR § 1.61000 (B)(7).	G-001	TITLE SHEET	1	09/07/23	AP
<u>UTILITY COMPANIES</u>  POWER COMPANY: UNITED ILLUMINATING PHONE: (800) 722-5584  TELEPHONE COMPANY: FRONTIER COMMUNICATIONS PHONE: (800) 376-6843	<u>APPLICANT:</u> VERIZON WIRELESS	<u>PROJECT LOCATION DIRECTIONS</u>  FROM NEW HAVEN, CT TAKE RT 34 WEST TO RT 63 NORTH. FOLLOW RT 63 NORTH TO OLD AMITY ROAD. FORK RIGHT ONTO OLD AMITY ROAD AND FOLLOW UP THE HILL TO THE FORK. FORK RIGHT AGAIN TO DEAD END STREET. ACCESS ROAD ENTRANCE WILL BE ON THE LEFT.	<b>CONTRACTOR PMI REQUIREMENTS</b>  PMI ACCESSED AT: <a href="https://pmi.vzsmart.com">HTTPS://PMI.VZSMART.COM</a> SMART TOOL VENDOR PROJECT NUMBER: 10208048 VZW LOCATION CODE (PSLC): 5000382257 ***PMI AND REQUIREMENTS ALSO EMBEDDED IN MOUNT ANALYSIS REPORT  MOUNT MODIFICATION REQUIRED: YES VZW APPROVED SMART KIT VENDORS: REFER TO MOUNT MODIFICATION DRAWINGS PAGES FOR VZW SMART KIT APPROVED VENDORS				

**AMERICAN TOWER®**  
 A.T. ENGINEERING SERVICES LLC  
 3500 REGENCY PARKWAY  
 SUITE 100  
 CARY, NC 27518  
 PHONE: (919) 468-0112  
 PEC.0001553

THE USE AND PUBLICATION OF THESE DRAWINGS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY ARE PREPARED. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO AMERICAN TOWER OR THE SPECIFIED CARRIER IS STRICTLY PROHIBITED. NEITHER THE ARCHITECT NOR THE ENGINEER WILL BE PROVIDING ON-SITE CONSTRUCTION REVIEW OF THIS PROJECT. CONTRACTOR(S) MUST VERIFY ALL DIMENSIONS AND ADVISE AMERICAN TOWER OR THE SPECIFIED CARRIER OF ANY DISCREPANCIES. ANY PRIOR ISSUANCE OF THIS DRAWING IS SUPERSEDED BY THE LATEST VERSION.

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	KPF	08/29/23
1	UPDATE COMPLIANCE CODES	AP	09/07/23

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 ATC SITE NAME:  
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 VERIZON SITE NAME:  
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 SITE ADDRESS:  
 9 MEYERS ROAD  
 BETHANY, CT 06524



ATC JOB NO: 14523185\_GO  
 CUSTOMER ID: BETHANY CT  
 CUSTOMER #: 5000382257

**TITLE SHEET**

SHEET NUMBER:  
**G-001**  
 REVISION:  
**1**

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**GENERAL CONSTRUCTION NOTES:**

1. OWNER FURNISHED MATERIALS, VERIZON "THE COMPANY" WILL PROVIDE AND THE CONTRACTOR WILL INSTALL
  - A. BTS EQUIPMENT FRAME (PLATFORM) AND ICEBRIDGE SHELTER (GROUND BUILD/CO-LOCATE ONLY)
  - B. AC/TELCO INTERFACE BOX (PPC)
  - C. ICE BRIDGE (CABLE TRAY WITH COVER) (GROUND BUILD/CO-LOCATE ONLY, GC TO FURNISH AND INSTALL FOR ROOFTOP INSTALLATION)
  - D. TOWERS, MONOPOLES
  - E. TOWER LIGHTING
  - F. GENERATORS & LIQUID PROPANE TANK
  - G. ANTENNA STANDARD BRACKETS, FRAMES AND PIPES FOR MOUNTING
  - H. ANTENNAS (INSTALLED BY OTHERS)
  - I. TRANSMISSION LINE
  - J. TRANSMISSION LINE JUMPERS
  - K. TRANSMISSION LINE CONNECTORS WITH WEATHERPROOFING KITS
  - L. TRANSMISSION LINE GROUND KITS
  - M. HANGERS
  - N. HOISTING GRIPS
  - O. BTS EQUIPMENT
2. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL OTHER MATERIALS FOR THE COMPLETE INSTALLATION OF THE SITE INCLUDING, BUT NOT LIMITED TO, SUCH MATERIALS AS FENCING, STRUCTURAL STEEL SUPPORTING SUB-FRAME FOR PLATFORM, ROOFING LABOR AND MATERIALS, GROUNDING RINGS, GROUNDING WIRES, COPPER-CLAD OR XIT CHEMICAL GROUND ROD(S), BUSS BARS, TRANSFORMERS AND DISCONNECT SWITCHES WHERE APPLICABLE, TEMPORARY ELECTRICAL POWER, CONDUIT, LANDSCAPING COMPOUND STONE, CRANES, CORE DRILLING, SLEEPERS AND RUBBER MATTING, REBAR, CONCRETE CAISSONS, PADS AND/OR AUGER MOUNTS, MISCELLANEOUS FASTENERS, CABLE TRAYS, NON-STANDARD ANTENNA FRAMES AND ALL OTHER MATERIAL AND LABOR REQUIRED TO COMPLETE THE JOB ACCORDING TO THE DRAWINGS AND SPECIFICATIONS. IT IS THE POSITION OF VERIZON TO APPLY FOR PERMITTING AND CONTRACTOR RESPONSIBLE FOR PICKUP AND PAYMENT OF REQUIRED PERMITS.
3. ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING ANSII/EIA/TIA-222, AND COMPLY WITH ATC CONSTRUCTION SPECIFICATIONS.
4. CONTRACTOR SHALL CONTACT LOCAL 811 FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS.
6. ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
7. DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
8. DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
9. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
10. CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
11. CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
12. INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE VERIZON REP PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE VERIZON REP PRIOR TO PROCEEDING.
13. EACH CONTRACTOR SHALL COOPERATE WITH THE VERIZON REP, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
14. CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE VERIZON CONSTRUCTION MANAGER.
15. ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT.
16. WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR SHALL NOTIFY THE VERIZON REP AND ENGINEER OF RECORD IMMEDIATELY.
17. CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A COMPLETE AND CURRENT SET OF DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
18. CONTRACTOR SHALL REMOVE ALL RUBBISH AND DEBRIS FROM THE SITE AT THE END OF EACH DAY.
19. CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH AMERICAN TOWER CORPORATION (ATC) AND TAKE PRECAUTIONS TO MINIMIZE IMPACT AND DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
20. CONTRACTOR SHALL FURNISH VERIZON AND AMERICAN TOWER CORPORATION (ATC) WITH A PDF MARKED UP AS-BUILT SET OF DRAWINGS UPON COMPLETION OF WORK.
21. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH VERIZON REP TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED. ALL ITEMS NOT PROVIDED SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL ALL ITEMS PROVIDED.

22. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH VERIZON REP TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY CONTRACTOR. ALL REQUIRED PERMITS NOT OBTAINED BY VERIZON MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR.
23. CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH VERIZON SPECIFICATIONS AND REQUIREMENTS.
24. CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO VERIZON FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
25. ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO VERIZON SPECIFICATIONS, AND AS SHOWN IN THESE PLANS.
26. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
27. CONTRACTOR SHALL NOTIFY VERIZON REP A MINIMUM OF 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING ANY UNDERGROUND UTILITIES, FOUNDATIONS OR SEALING ANY WALL, FLOOR OR ROOF PENETRATIONS FOR ENGINEERING REVIEW AND APPROVAL.
28. WHEN THE PROJECT SCOPE REQUIRES THE USE OF THE SAFETY CLIMB, THE GENERAL CONTRACTOR SHALL ENSURE THE SAFETY CLIMB IS FREE OF OBSTRUCTIONS, NOT RUBBING ON OR TRAPPED BY ANY INSTALLED CUSTOMER EQUIPMENT, IS VISUALLY TAUT, MEETS MANUFACTURER INSTALLATION SPECIFICATIONS, AND IS FIRMLY SECURED AT ALL CABLE GUIDE LOCATIONS UPON PROJECT COMPLETION.
29. COMPLETION OF PROJECT SHALL NOT OBSTRUCT, TRAP, LOOSEN, OR OTHERWISE CAUSE FAILURE TO MEET MANUFACTURER INSTALLATION REQUIREMENTS FOR THE SAFETY CLIMB.
30. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE WITH ALL APPLICABLE OSHA STANDARDS AND RECOMMENDATIONS AND SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE AND CONSTRUCTION DEVICES SUCH AS WELDING AND FIRE PREVENTION, TEMPORARY SHORING, SCAFFOLDING, TRENCH BOXES/SLOPING, BARRIERS, ETC.
31. THE CONTRACTOR SHALL PROTECT AT HIS OWN EXPENSE, ALL EXISTING FACILITIES AND SUCH OF HIS NEW WORK LIABLE TO INJURY DURING THE CONSTRUCTION PERIOD. ANY DAMAGE CAUSED BY NEGLIGENCE ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, OR BY THE ELEMENTS DUE TO NEGLIGENCE ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, EITHER TO THE EXISTING WORK, OR TO HIS WORK OR THE WORK OF ANY OTHER CONTRACTOR, SHALL BE REPAIRED AT HIS EXPENSE TO THE OWNER'S SATISFACTION.
32. ALL WORK SHALL BE INSTALLED IN A FIRST CLASS, NEAT AND WORKMANLIKE MANNER BY MECHANICS SKILLED IN THE TRADE INVOLVED. THE QUALITY OF WORKMANSHIP SHALL BE SUBJECT TO THE APPROVAL OF THE VERIZON REP. ANY WORK FOUND BY THE VERIZON REP TO BE OF INFERIOR QUALITY AND/OR WORKMANSHIP SHALL BE REPLACED AND/OR REWORKED AT CONTRACTOR EXPENSE UNTIL APPROVAL IS OBTAINED.
33. IN ORDER TO ESTABLISH STANDARDS OF QUALITY AND PERFORMANCE, ALL TYPES OF MATERIALS LISTED HEREINAFTER BY MANUFACTURER'S NAMES AND/OR MANUFACTURER'S CATALOG NUMBER SHALL BE PROVIDED BY THESE MANUFACTURERS AS SPECIFIED.
34. VERIZON FURNISHED EQUIPMENT SHALL BE PICKED-UP AT THE VERIZON WAREHOUSE, NO LATER THAN 48HR AFTER BEING NOTIFIED INSURED, STORED, UNCRATE, PROTECTED AND INSTALLED BY THE CONTRACTOR WITH ALL APPURTENANCES REQUIRED TO PLACE THE EQUIPMENT IN OPERATION, READY FOR USE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE EQUIPMENT AFTER PICKING IT UP.
35. VERIZON OR HIS ARCHITECT/ENGINEER RESERVES THE RIGHT TO REJECT ANY EQUIPMENT OR MATERIALS WHICH, IN HIS OWN OPINION ARE NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS, EITHER BEFORE OR AFTER INSTALLATION AND THE EQUIPMENT SHALL BE REPLACED WITH EQUIPMENT CONFORMING TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS BY THE CONTRACTOR AT NO COST TO VERIZON OR THEIR ARCHITECT/ENGINEER.

- B. ALL COAXIAL/HYBRID CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL/HYBRID CABLE (NOT WITHIN BENDS)

**SPECIAL CONSTRUCTION**

**ANTENNA INSTALLATION NOTES:**

1. WORK INCLUDED:
  - A. ANTENNA AND COAXIAL/HYBRID CABLES ARE FURNISHED BY VERIZON UNDER A SEPARATE CONTRACT. THE CONTRACTOR SHALL ASSIST ANTENNA INSTALLATION CONTRACTOR IN TERMS OF COORDINATION AND SITE ACCESS. ERECTION SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PERSONNEL.
  - B. INSTALL ANTENNAS AS INDICATED ON DRAWINGS AND VERIZON SPECIFICATIONS.
  - C. INSTALL GALVANIZED STEEL ANTENNA MOUNTS AS INDICATED ON DRAWINGS.
  - D. INSTALL FURNISHED GALVANIZED STEEL OR ALUMINUM WAVEGUIDE.
  - E. INSTALL COAXIAL/HYBRID CABLES AND TERMINATING BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. WEATHERPROOF ALL CONNECTIONS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL/HYBRID CABLE THREE (3) FEET IN EXCESS OF ENTRY PORT LOCATION UNLESS OTHERWISE STATED.
2. ANTENNA AND COAXIAL/HYBRID CABLE GROUNDING:
  - A. ALL EXTERIOR #6 GREEN GROUND WIRE "DAISY CHAIN" CONNECTIONS ARE TO BE WEATHER SEALED WITH RFS CONNECTORS/SPLICE WEATHERPROOFING KIT #221213 OR EQUAL.

ALL DISCREPANCIES FROM WHAT IS SHOWN ON THESE CONSTRUCTION DRAWINGS SHALL BE COMMUNICATED TO ATC ENGINEERING IMMEDIATELY FOR CORRECTION OR RE-DESIGN. FAILURE TO COMMUNICATE DIRECTLY WITH ATC ENGINEERING OR ANY CHANGES FROM THE DESIGN CONDUCTED WITHOUT PRIOR APPROVAL FROM ATC ENGINEERING SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR.



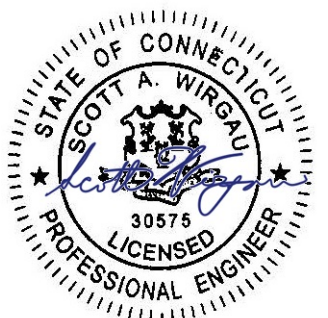
**AMERICAN TOWER®**  
**A.T. ENGINEERING SERVICES LLC**  
 3500 REGENCY PARKWAY  
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 PEC.0001553

THE USE AND PUBLICATION OF THESE DRAWINGS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY ARE PREPARED. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO AMERICAN TOWER OR THE SPECIFIED CARRIER IS STRICTLY PROHIBITED. NEITHER THE ARCHITECT NOR THE ENGINEER WILL BE PROVIDING ON-SITE CONSTRUCTION REVIEW OF THIS PROJECT. CONTRACTOR(S) MUST VERIFY ALL DIMENSIONS AND ADVISE AMERICAN TOWER OR THE SPECIFIED CARRIER OF ANY DISCREPANCIES. ANY PRIOR ISSUANCE OF THIS DRAWING IS SUPERSEDED BY THE LATEST VERSION.

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 SITE ADDRESS:  
 9 MEYERS ROAD  
 BETHANY, CT 06524

SEAL:



Digitally Signed: 2023-09-11



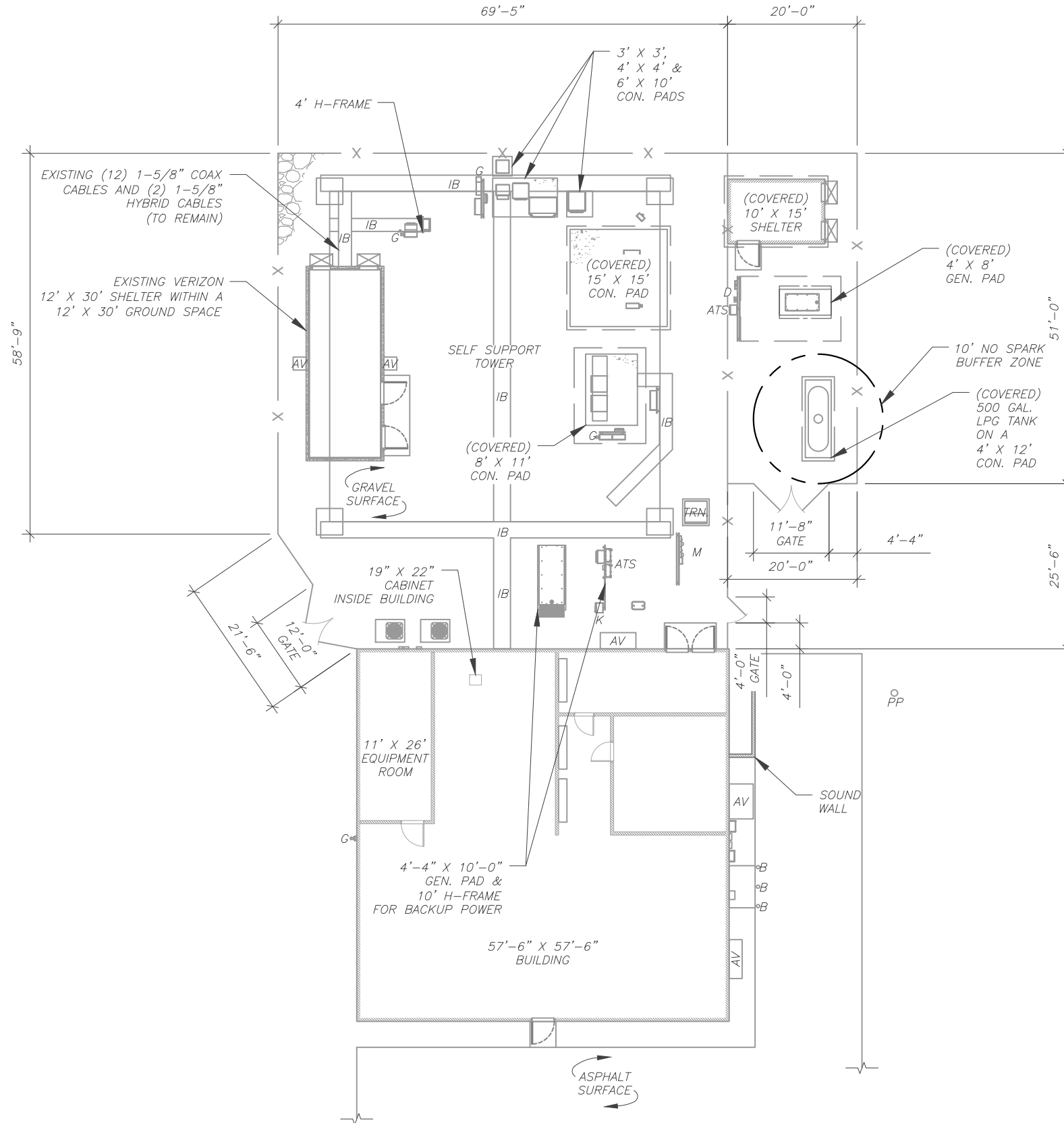
ATC JOB NO:	14523185_G0
CUSTOMER ID:	BETHANY CT
CUSTOMER #:	5000382257

**GENERAL NOTES**

SHEET NUMBER:  
**G-002**  
 REVISION:  
**0**

**SITE PLAN NOTES:**

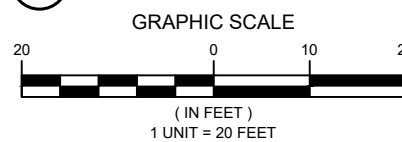
- THIS SITE PLAN REPRESENTS THE BEST PRESENT KNOWLEDGE AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WORK FOR THIS PROJECT.
- ICE BRIDGE, CABLE LADDER, COAX PORT, AND COAX CABLE ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL CONFIRM THE EXACT LOCATION OF ALL PROPOSED AND EXISTING EQUIPMENT AND STRUCTURES DEPICTED ON THIS PLAN. BEFORE UTILIZING EXISTING CABLE SUPPORTS, COAX PORTS, INSTALLING NEW PORTS OR ANY OTHER EQUIPMENT, CONTRACTOR SHALL VERIFY ALL ASPECTS OF THE COMPONENTS MEET THE ATC SPECIFICATIONS.
- NO ELECTRICAL SCOPE IS INCLUDED IN THIS PROJECT.



**LEGEND**

- ⊗ GROUNDING TEST WELL
- ATS AUTOMATIC TRANSFER SWITCH
- B BOLLARD
- CSC CELL SITE CABINET
- D DISCONNECT
- E ELECTRICAL
- F FIBER
- GEN GENERATOR
- G GENERATOR RECEPTACLE
- HH, V HAND HOLE, VAULT
- IB ICE BRIDGE
- K KENTROX BOX
- LC LIGHTING CONTROL
- M METER
- PB PULL BOX
- PP POWER POLE
- T TELCO
- TRN TRANSFORMER
- CHAINLINK FENCE

**1 DETAILED SITE PLAN**



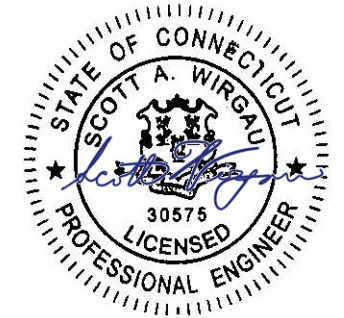
**AMERICAN TOWER®**  
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 BETHANY, CT 06524

SEAL:



Digitally Signed: 2023-09-11

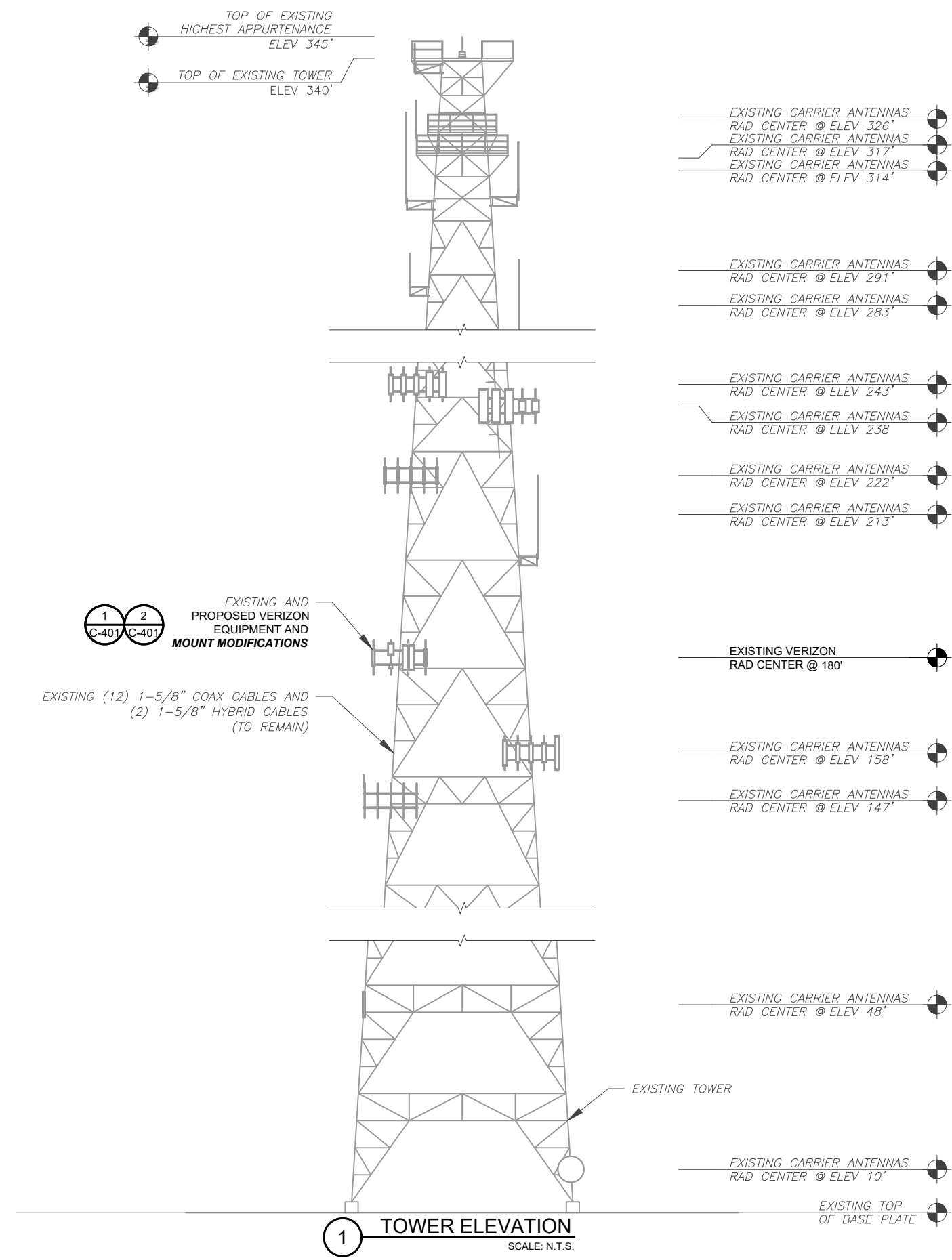


ATC JOB NO: 14523185\_G0  
 CUSTOMER ID: BETHANY CT  
 CUSTOMER #: 5000382257

**DETAILED SITE PLAN**

SHEET NUMBER:  
**C-101**  
 REVISION:  
**0**

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PER MOUNT ANALYSIS COMPLETED BY COLLIERS ENGINEERING & DESIGN CT, P.C., DATED 08/02/23, THE EXISTING MOUNT **MUST BE MODIFIED** TO ADEQUATELY SUPPORT THE PROPOSED LOADING. THE MOUNT MODIFICATION PROPOSED IN THE MOUNT ANALYSIS, INCLUDED AT THE END OF THIS PLAN SET, MUST BE INSTALLED PRIOR TO THE INSTALLATION OF THE PROPOSED ANTENNAS AND OTHER EQUIPMENT.

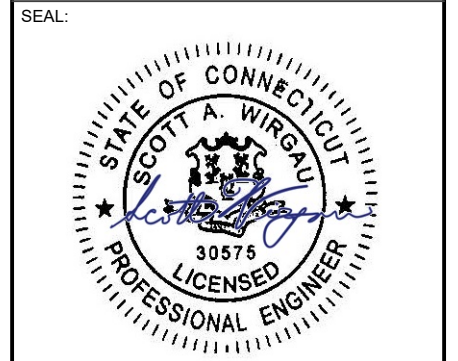


**AMERICAN TOWER®**  
**A.T. ENGINEERING SERVICES LLC**  
 3500 REGENCY PARKWAY  
 SUITE 100  
 CARY, NC 27518  
 PHONE: (919) 468-0112  
 PEC.0001553


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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	KPF	08/29/23

ATC SITE NUMBER:  
**88008**  
 ATC SITE NAME:  
**BETHANY CT**  
 VERIZON SITE NAME:  
**BETHANY CT**  
 SITE ADDRESS:  
 9 MEYERS ROAD  
 BETHANY, CT 06524



Digitally Signed: 2023-09-11



ATC JOB NO:	14523185_GO
CUSTOMER ID:	BETHANY CT
CUSTOMER #:	5000382257

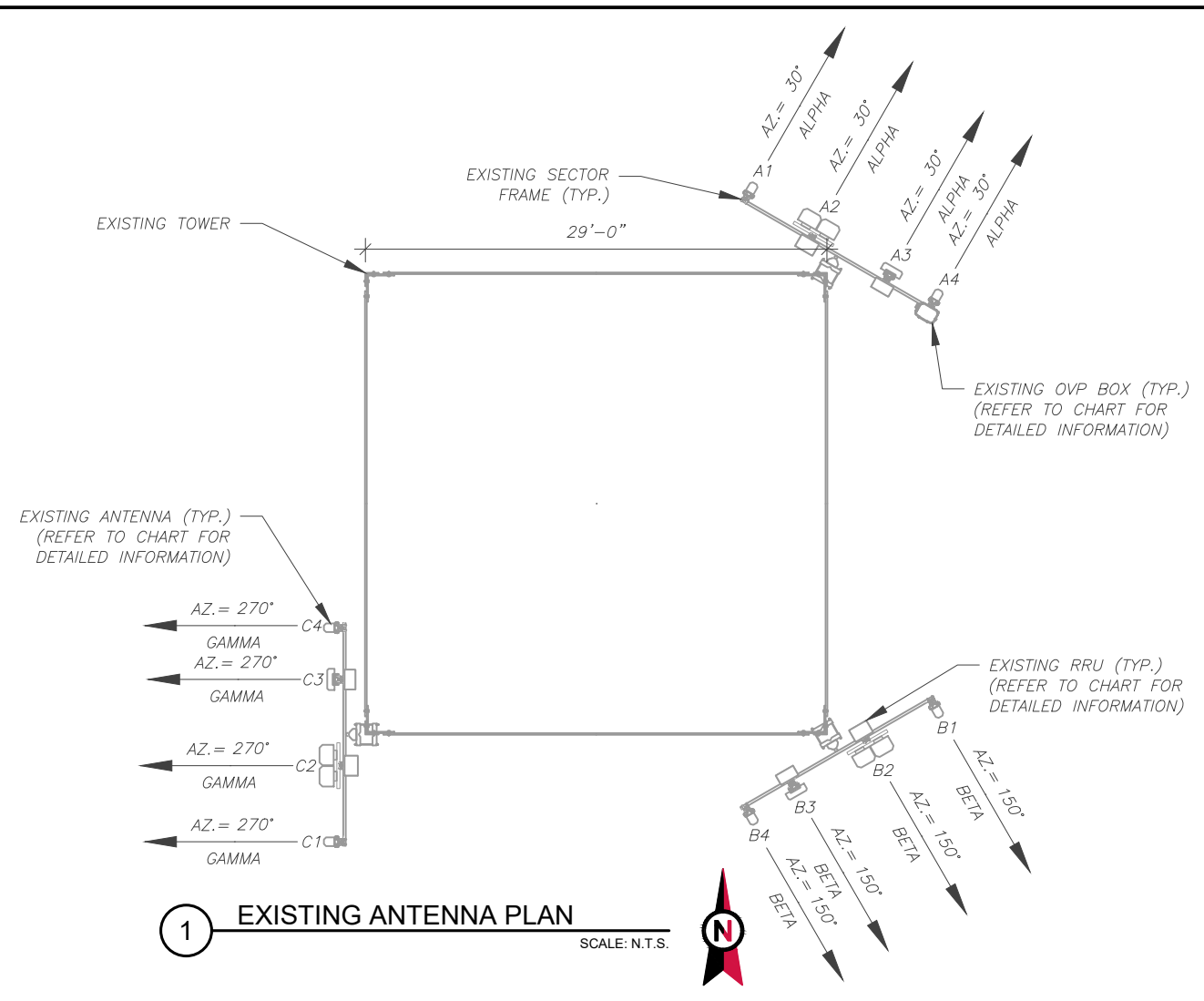
**TOWER ELEVATION**

SHEET NUMBER: <b>C-201</b>	REVISION: <b>0</b>
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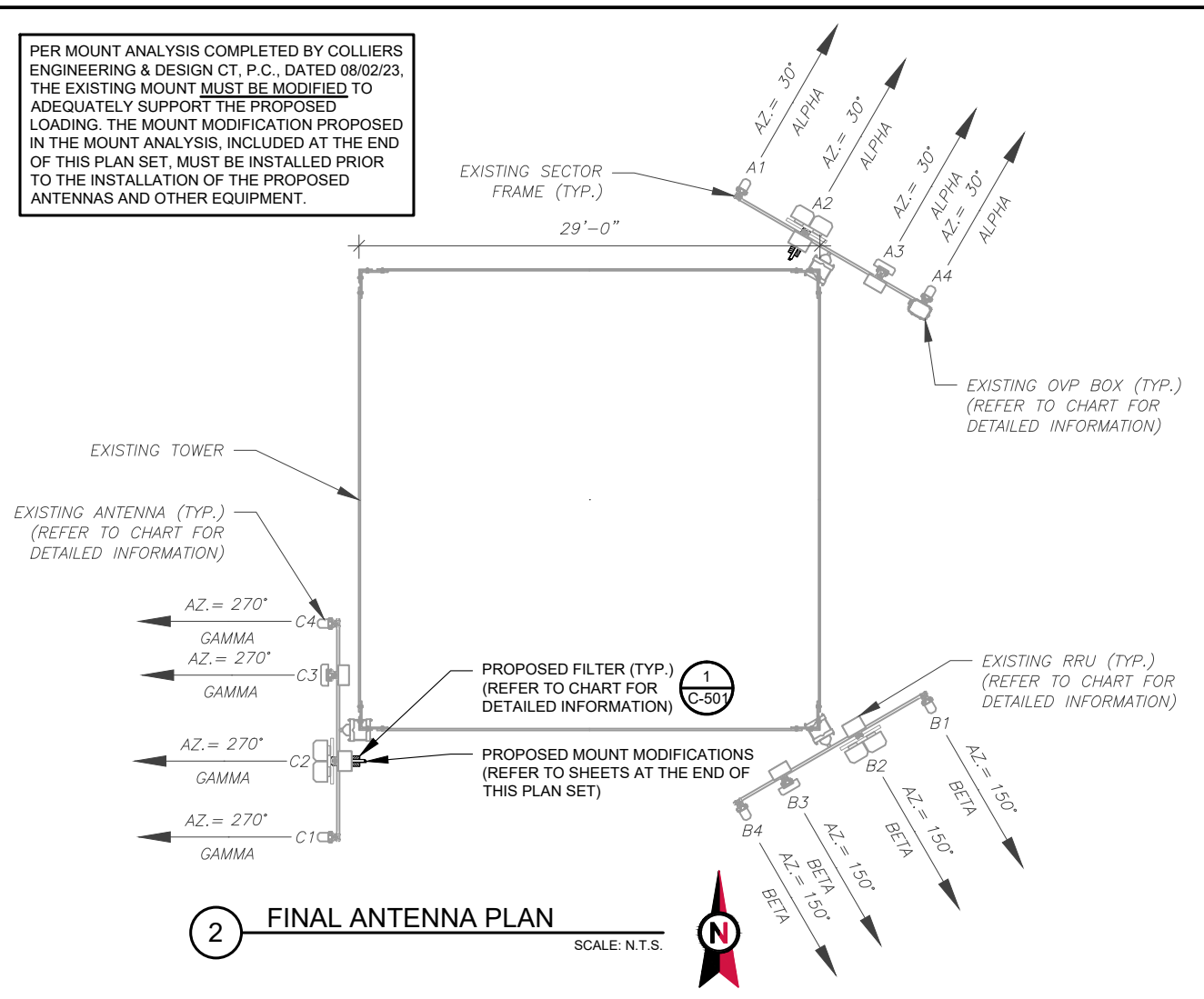
- TOWER NOTE:**
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM WITH THE PROJECT MANAGER THAT THEY HAVE THE MOST RECENT VERSION OF THE STRUCTURAL ANALYSIS BEFORE COMMENCING WORK. EXISTING AND PROPOSED TOWER APPURTENANCES, MOUNTS, AND ANTENNAS ARE SHOWN BASED ON THE STRUCTURAL ANALYSIS. WHERE APPLICABLE, ALL NEW ANTENNAS, EQUIPMENT, MOUNTS, CABLING, ETC. SHALL BE PAINTED/SOCKED TO MATCH EXISTING EQUIPMENT IN ACCORDANCE WITH FAA, JURISDICTION, AND/OR OTHER LOCAL REQUIREMENTS.
  - TOWER ELEVATIONS ARE MEASURED FROM TOP OF BASE PLATE TO MATCH STRUCTURAL ANALYSIS. ELEVATIONS DO NOT REFLECT TRUE ABOVE GROUND LEVEL (A.G.L.)
  - TOWER ELEVATION DEPICTION MAY NOT REFLECT ALL EQUIPMENT INCLUDED IN STRUCTURAL ANALYSIS. REFER TO STRUCTURAL ANALYSIS FOR FULL TOWER LOADING.

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1 EXISTING ANTENNA PLAN  
SCALE: N.T.S.



2 FINAL ANTENNA PLAN  
SCALE: N.T.S.

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EXISTING ANTENNA SCHEDULE							
LOCATION		ANTENNA SUMMARY				NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT
ALPHA	180'	30°	A1	DB844H90E-XY	CDMA 850	RMN	-
			A2	(2) MX06FRO660-03	L700,L850,L1900, LAWS	RMN	B2/B66A RRHBR049
			A3	MT6407-77A	5G L-SUB6	RMN	B5/B13 RRHBR04C
			A4	RT4401-48A W/ INTEGRATED ANTENNA	LTE CBRS	RMN	-
BETA	180'	150°	B1	DB844H90E-XY	CDMA 850	RMN	-
			B2	(2) MX06FRO660-03	L700,L850,L1900, LAWS	RMN	B2/B66A RRHBR049
			B3	MT6407-77A	5G L-SUB6	RMN	B5/B13 RRHBR04C
			B4	RT4401-48A W/ INTEGRATED ANTENNA	LTE CBRS	RMN	-
GAMMA	180'	270°	C1	DB844H90E-XY	CDMA 850	RMN	-
			C2	(2) MX06FRO660-03	L700,L850,L1900, LAWS	RMN	B2/B66A RRHBR049
			C3	MT6407-77A	5G L-SUB6	RMN	B5/B13 RRHBR04C
			C4	RT4401-48A W/ INTEGRATED ANTENNA	LTE CBRS	RMN	-

NOTES

- CONFIRM WITH VERIZON REP FOR APPLICABLE UPDATES/REVISIONS AND MOST RECENT RFDS FOR NSN CONFIGURATION (CONFIG). GC TO CAP ALL UNUSED PORTS.
- CONFIRM SPACING OF PROPOSED EQUIP DOES NOT CAUSE TOWER CONFLICTS NOR IMPEDE TOWER CLIMBING PEGS.

STATUS ABBREVIATIONS

RMV: TO BE REMOVED  
RMN: TO REMAIN  
REL: TO BE RELOCATED  
ADD: TO BE ADDED

CABLE LENGTHS FOR JUMPERS

JUNCTION BOX TO RRU: 15'  
RRU TO ANTENNA: 10'

FINAL ANTENNA SCHEDULE							
LOCATION		ANTENNA SUMMARY				NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT
ALPHA	180'	30°	A1	DB844H90E-XY	CDMA 850	RMN	-
			A2	(2) MX06FRO660-03	L700,L850,L1900, LAWS	RMN	B2/B66A RRHBR049 (2) KA-6030
			A3	MT6407-77A	5G L-SUB6	RMN	B5/B13 RRHBR04C
			A4	RT4401-48A W/ INTEGRATED ANTENNA	LTE CBRS	RMN	-
BETA	180'	150°	B1	DB844H90E-XY	CDMA 850	RMN	-
			B2	(2) MX06FRO660-03	L700,L850,L1900, LAWS	RMN	B2/B66A RRHBR049
			B3	MT6407-77A	5G L-SUB6	RMN	B5/B13 RRHBR04C
			B4	RT4401-48A W/ INTEGRATED ANTENNA	LTE CBRS	RMN	-
GAMMA	180'	270°	C1	DB844H90E-XY	CDMA 850	RMN	-
			C2	(2) MX06FRO660-03	L700,L850,L1900, LAWS	RMN	B2/B66A RRHBR049 (2) KA-6030
			C3	MT6407-77A	5G L-SUB6	RMN	B5/B13 RRHBR04C
			C4	RT4401-48A W/ INTEGRATED ANTENNA	LTE CBRS	RMN	-

EXISTING FIBER DISTRIBUTION/OVP BOX		EXISTING CABLING SUMMARY	
MODEL NUMBER	STATUS	CABLE QTY, SIZE, TYPE	STATUS
(1) RCMDC-6627-PF-48	RMN	(12) 1-5/8" COAX CABLES AND (2) 1-5/8" HYBRID CABLES	RMN

3 EQUIPMENT SCHEDULES

FINAL FIBER DISTRIBUTION / OVP BOX		FINAL CABLING SUMMARY	
MODEL NUMBER	STATUS	CABLE QTY, SIZE, TYPE	STATUS
(1) RCMDC-6627-PF-48	RMN	(12) 1-5/8" COAX CABLES AND (2) 1-5/8" HYBRID CABLES	RMN

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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	KPF	08/29/23

ATC SITE NUMBER:  
**88008**

ATC SITE NAME:  
**BETHANY CT**

VERIZON SITE NAME:  
**BETHANY CT**

SITE ADDRESS:  
9 MEYERS ROAD  
BETHANY, CT 06524

SEAL:

Digitally Signed: 2023-09-11

ATC JOB NO: 14523185\_GO  
CUSTOMER ID: BETHANY\_CT  
CUSTOMER #: 5000382257

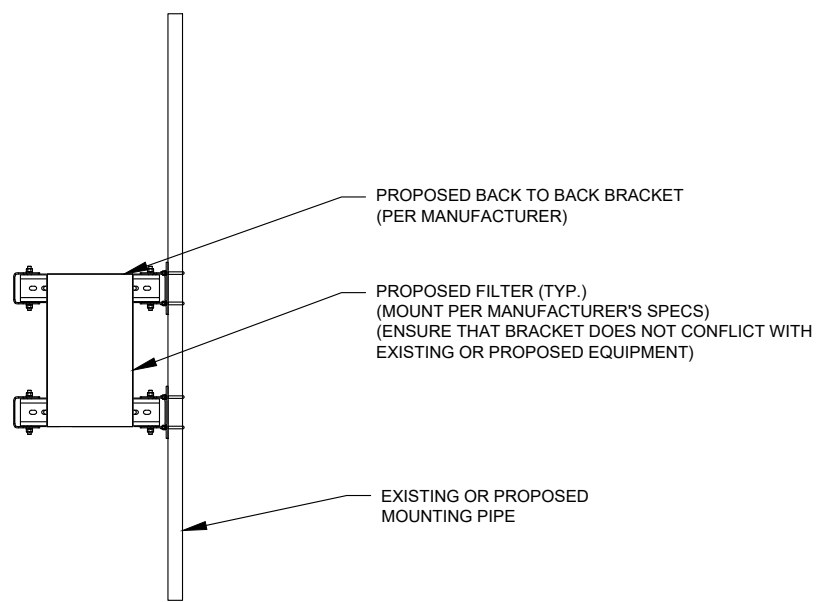
**ANTENNA INFORMATION & SCHEDULE**

SHEET NUMBER: **C-401**  
REVISION: **0**

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EXISTING/PROPOSED MOUNTS AND/OR MOUNT MODIFICATIONS NOT SHOWN FOR CLARITY. REFER TO ANTENNA PLANS, MOUNT ANALYSES AND/OR MOUNT MODIFICATION DOCUMENTS FOR ADDITIONAL DETAIL.



1 PROPOSED FILTER MOUNTING DETAIL - TYPICAL  
SCALE: N.T.S.



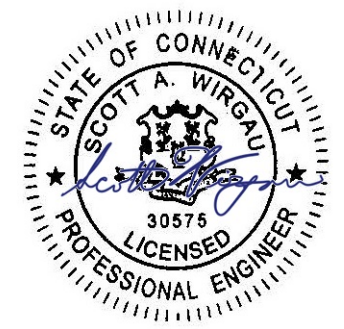
**AMERICAN TOWER®**  
**A.T. ENGINEERING SERVICES LLC**  
 3500 REGENCY PARKWAY  
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 CARY, NC 27518  
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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	KPF	08/29/23

ATC SITE NUMBER:  
**88008**  
 ATC SITE NAME:  
**BETHANY CT**  
 VERIZON SITE NAME:  
**BETHANY CT**  
 SITE ADDRESS:  
 9 MEYERS ROAD  
 BETHANY, CT 06524

SEAL:



Digitally Signed: 2023-09-11

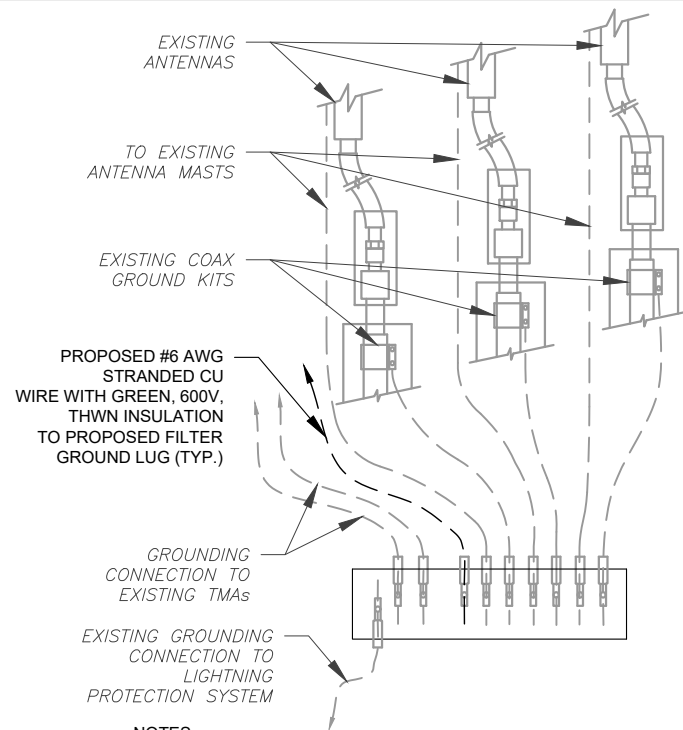


ATC JOB NO: 14523185\_G0  
 CUSTOMER ID: BETHANY CT  
 CUSTOMER #: 5000382257

**CONSTRUCTION  
 DETAILS**

SHEET NUMBER: **C-501**      REVISION: **0**

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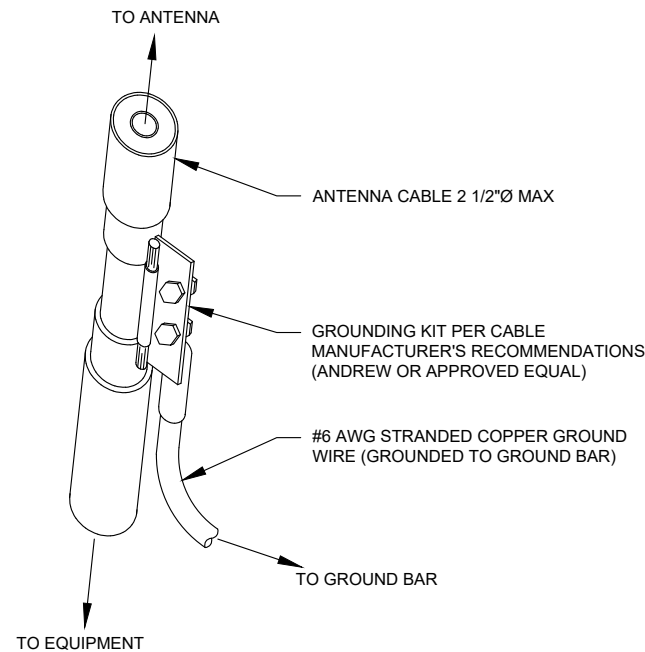


**NOTES:**

1. THIS DETAIL IS INTENDED TO SHOW THE GENERAL GROUNDING REQUIREMENTS. SLIGHT ADJUSTMENTS MAY BE REQUIRED BASED ON EXISTING SITE CONDITIONS. THE CONTRACTOR SHALL MAKE FIELD ADJUSTMENTS AS NEEDED AND INFORM THE CONSTRUCTION MANAGER OF ANY CONFLICTS.
2. SITE GROUNDING SHALL COMPLY WITH VERIZON GROUNDING STANDARDS, LATEST EDITION, AND COMPLY WITH VERIZON GROUNDING CHECKLIST, LATEST VERSION. WHEN NATIONAL AND LOCAL GROUNDING CODES ARE MORE STRINGENT THEY SHALL GOVERN.

**1** TYPICAL ANTENNA GROUNDING DIAGRAM

SCALE: N.T.S.

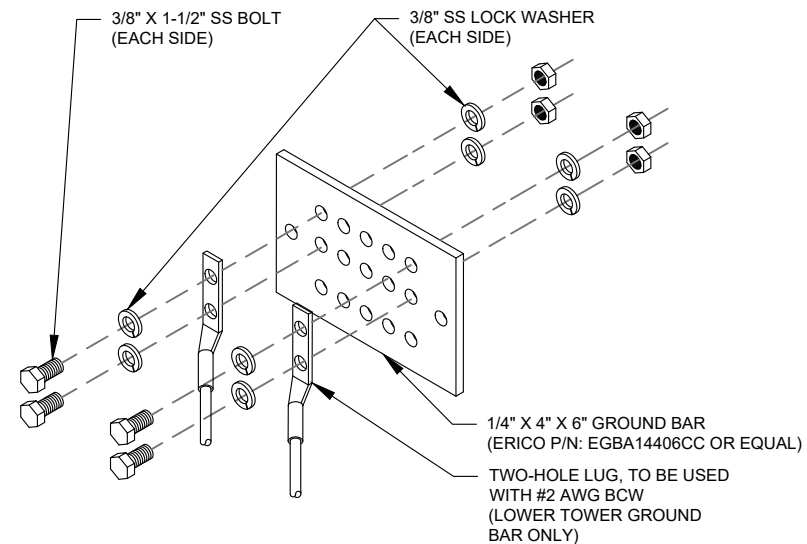


**GROUND KIT NOTES:**

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
2. CONTRACTOR SHALL PROVIDE WEATHERPROOFING KIT (ANDREW PART NUMBER 221213) AND INSTALL/TAPE PER MANUFACTURER'S SPECIFICATIONS.

**2** CABLE GROUND KIT CONNECTION DETAIL

SCALE: N.T.S.



**GROUND BAR NOTES:**

1. GROUND BAR KITS COME WITH ALL HARDWARE, NUTS, BOLTS, WASHERS, ETC. EXCEPT THE STRUCTURAL MOUNTING MEMBER(S).
2. GROUND BAR TO BE BONDED DIRECTLY TO TOWER.

**3** TOWER GROUND BAR DETAIL

SCALE: N.T.S.



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 3500 REGENCY PARKWAY  
 SUITE 100  
 CARY, NC 27518  
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 PEC.0001553

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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	KPF	08/29/23

ATC SITE NUMBER:  
88008

ATC SITE NAME:  
BETHANY CT

VERIZON SITE NAME:  
BETHANY CT

SITE ADDRESS:  
9 MEYERS ROAD  
BETHANY, CT 06524

SEAL:



Digitally Signed: 2023-09-11



ATC JOB NO: 14523185\_G0  
 CUSTOMER ID: BETHANY CT  
 CUSTOMER #: 5000382257

**GROUNDING DETAILS**

SHEET NUMBER:  
**E-501**

REVISION:  
**0**

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Colliers Engineering & Design CT, P.C.  
 1055 Washington Boulevard  
 Stamford, CT 06901  
 203.324.0800  
 peter.albano@collierseng.com

Mount Structural Analysis Report  
 (3) 14.00-Ft Sector Frame

August 2, 2023  
 Site ID: 5000382257-VZW / BETHANY CT  
 Page | 5

**Requirements:**

The existing mount(s) will be **SUFFICIENT** for the final loading configuration shown in attachment 2 **upon the completion of the requirements listed below.**

Contractor shall install the proposed filter units on new Site Pro 1 Dual Swivel Mount Kit (Part #: RRUDSM or EOR approved equivalent) in the location shown in the placement diagrams.

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 Post Installation Inspection (PMI) Report Deliverables
2. Antenna Placement Diagrams
3. Mount Photos
4. Mount Mapping Report (for reference only)
5. Analysis Calculations

**Antenna Mount Analysis Report with Hardware Upgrades and PMI Requirements**

Mount ReAnalysis

SMART Tool Project #: 10208048  
 Colliers Engineering & Design CT, P.C. Project #: 23777203  
 August 2, 2023

**Site Information**

Site ID: 5000382257-VZW / BETHANY CT  
 Site Name: BETHANY CT  
 Carrier Name: Verizon Wireless  
 Address: 93 Old Amity Rd.  
 Bethany, Connecticut 06524  
 New Haven County  
 Latitude: 41.404758°  
 Longitude: -72.999983°

**Structure Information**

Tower Type: 300-Ft Self Support  
 Mount Type: 14.00-Ft T-Frame

FUZE ID # 17136781

**Analysis Results**

T-Frame: **84.2% Pass w/ Hardware Upgrades\***

**\* 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](mailto:pmisupport@colliersengineering.com)

Report Prepared By: Ismaias Recinos



NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT. PLEASE REFERENCE THE MOUNT ANALYSIS REPORT FOR COMPLETE MOUNT ANALYSIS CALCULATIONS AND DETAILS. SUPPLEMENTAL PAGES INCLUDED IN THE CONSTRUCTION DRAWINGS ARE FOR REFERENCE ONLY. GENERAL CONTRACTOR IS TO VERIFY THEY HAVE THE MOST RECENT MOUNT ANALYSIS PRIOR TO CONSTRUCTION.

SUPPLEMENTAL

SHEET NUMBER: <b>R-601</b>	REVISION: <b>0</b>
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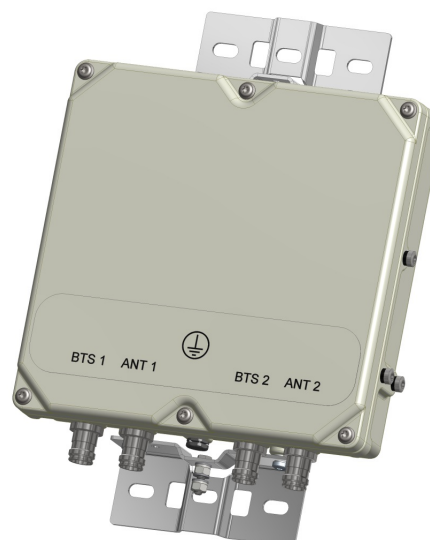
# KA-6030

## TWIN BANDSTOP 900MHZ INTERFERENCE MITIGATION FILTER

The KA-6030 is ideal for co-located 700, 850 and 900 networks. Utilising a 2.6MHz guardband the KA-6030 provides rejection of the 900 UL band while passing 700/850 UL and DL bands. Capable of being used in an outdoor environment the KA-6030 contains two identical bandstop filters, suitable for 2x2 MIMO configuration, offering excellent insertion loss, group delay and rejection.

### FEATURES

- Passes full 700 and 850 bands
- Low insertion loss
- Rejection of 900MHz uplink
- DC/AISG pass
- Twin unit
- Dual twin mounting available



### TECHNICAL SPECIFICATIONS

BAND NAME	700 PATH / 850 UPLINK PATH	850 DOWNLINK PATH
Passband	698 - 849MHz	869 - 891.5MHz
Insertion loss	0.1dB typical / 0.3dB maximum	0.5dB typical, 1.45dB maximum
Return loss	24dB typical, 18dB minimum	
Maximum input power (Per Port)	100W average	200W average and 66W per 5MHz
Rejection	53dB minimum @ 894.1 - 896.5MHz	
<b>ELECTRICAL</b>		
Impedance	50Ohms	
Intermodulation products	-160dBc maximum in UL Band (assuming 20MHz Signal), with 2 x 43dBm carriers -153dBc maximum with 2 x 43dBm	
<b>DC / AISG</b>		
Passband	0 - 13MHz	
Insertion loss	0.3dB maximum	
Return loss	15dB minimum	
Input voltage range	± 33V	
DC current rating	2A continuous, 4A peak	
Compliance	3GPP TS 25.461	
<b>ENVIRONMENTAL</b>		
For further details of environmental compliance, please contact Kaelus.		
Temperature range	-20°C to +60°C   -4°F to +140°F	
Ingress protection	IP67	
Altitude	2600m   8530ft	
Lightning protection	RF port: ±5kA maximum (8/20us), IEC 61000-4-5 – Unit must be terminated with some lightning protection circuits.	
MTBF	>1,000,000 hours	
Compliance	ETSI EN 300 019 class 4.1H, RoHS, NEBS GR-487-CORE	
<b>MECHANICAL</b>		
Dimensions H x D x W	269 x 277 x 80mm   10.60 x 10.90 x 3.15in (Excluding brackets and connectors)	
Weight	8.0 kg   17.6 lbs (no bracket)	
Finish	Powder coated, light grey (RAL7035)	
Connectors	RF: 4.3-10 (F) x 4	
Mounting	Optional pole/wall bracket supplied with two metal clamps 45-178mm diameter poles or custom bracket. See ordering information.	

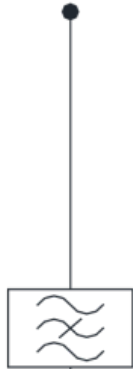


## ORDERING INFORMATION

PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS
KA-6030-2032	TWIN, 2 in / 2 out	DC/AISG PASS	4.3-10 (F)

ELECTRICAL BLOCK DIAGRAM

ANT1



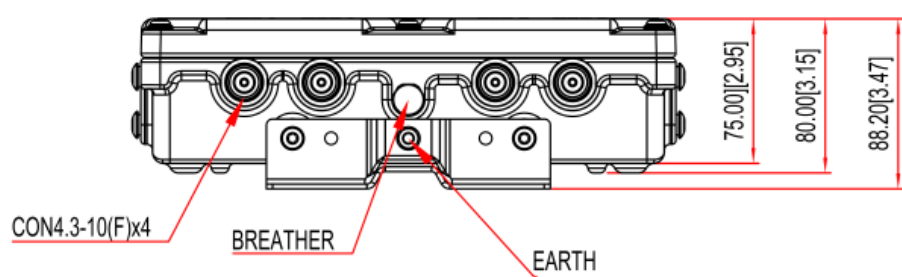
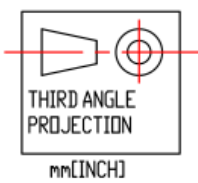
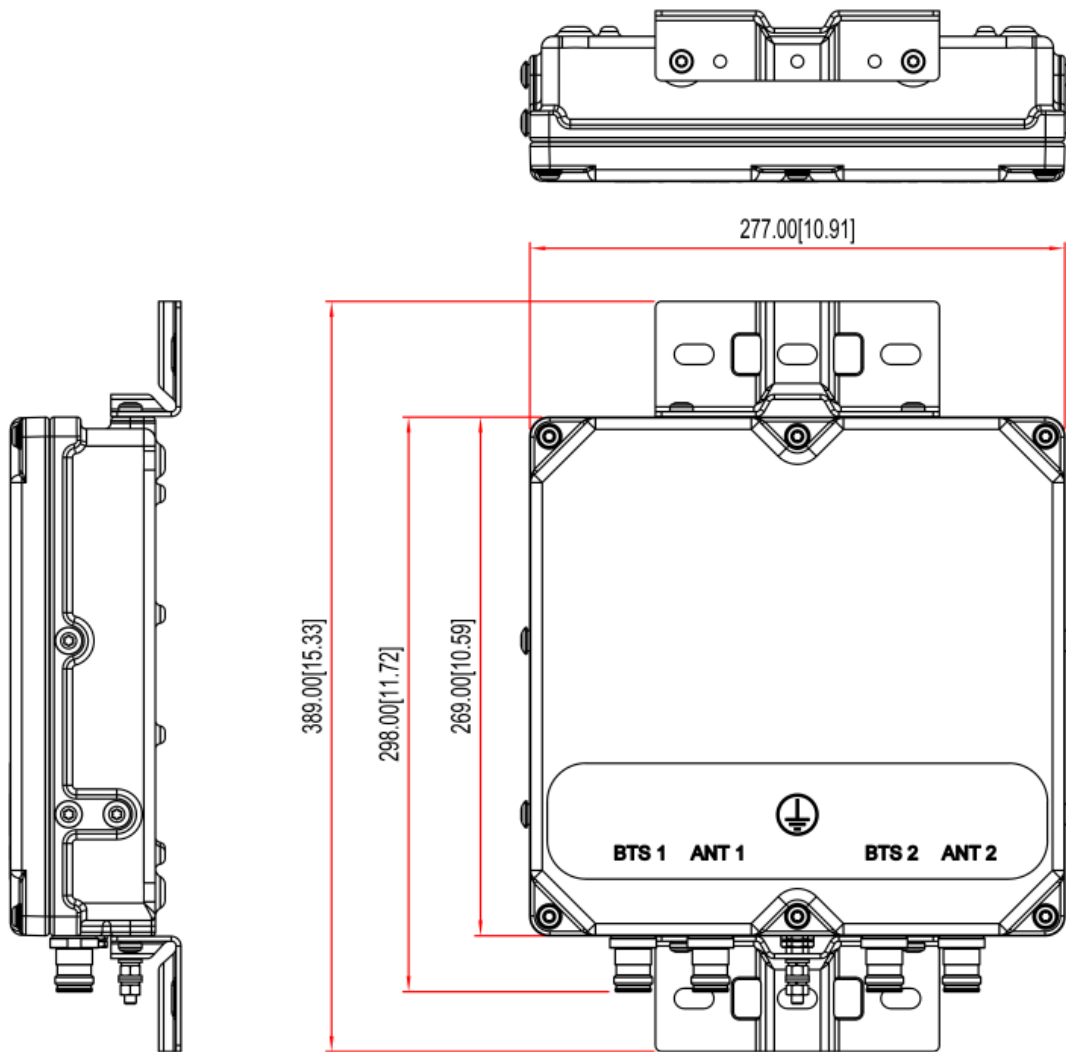
BTS1

ANT2



BTS2

MECHANICAL BLOCK DIAGRAM



# EXHIBIT 2





The Assessor's office is responsible for the maintenance of records on the ownership of properties. Assessments are computed at 70% of the estimated market value of real property at the time of the last revaluation which was 2018.



Information on the Property Records for the Municipality of Bethany was last updated on 9/11/2023.



### Parcel Information

Location:	9 MEYERS RD	Property Use:	Industrial	Primary Use:	Light Industrial
Unique ID:	00002800	Map Block Lot:	118/51C	Acres:	9.2000
490 Acres:	0.00	Zone:	B&I	Volume / Page:	0000/0000
Developers Map / Lot:		Census:			

### Value Information

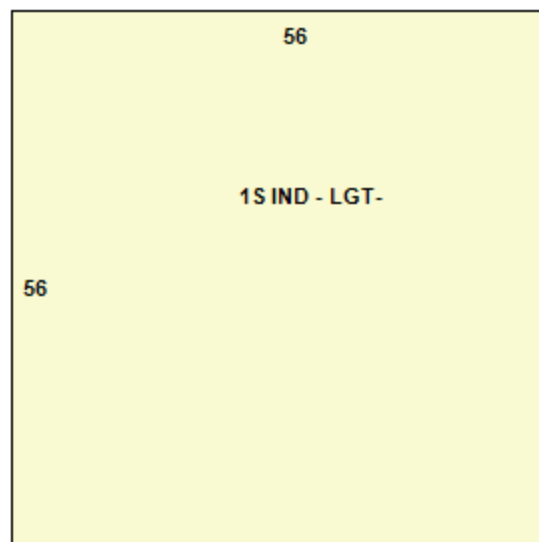
	Appraised Value	Assessed Value
Land	479,000	335,300
Buildings	112,419	78,690
Detached Outbuildings	14,237	9,970
Total	605,656	423,960

# Owner's Information

## Owner's Data

AMERICAN TOWERS  
RE: SITE # 88008 STE 205  
P O BOX 723597  
ATLANTA, GA 31139

## Building 1



Category:	Industrial	Use:	Light Industrial	Stories:	1.00
Above Grade:	3,136	Below Grade:	0	Below Grade Finish:	0

Construction:	Average	Year Built:	1967	Heating:	FHA
Fuel:	Oil	Cooling Percent:	0%	Siding:	Pre-Cast Concrete
Roof Material:		Beds/Units:	0		

### Special Features

### Attached Components

### Detached Outbuildings

Type:	Year Built:	Length:	Width:	Area:
Fencing	1967			216
Paving	1967			1,100
Building Utility	1967			360

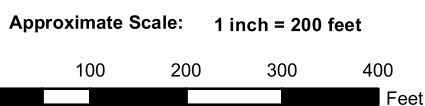
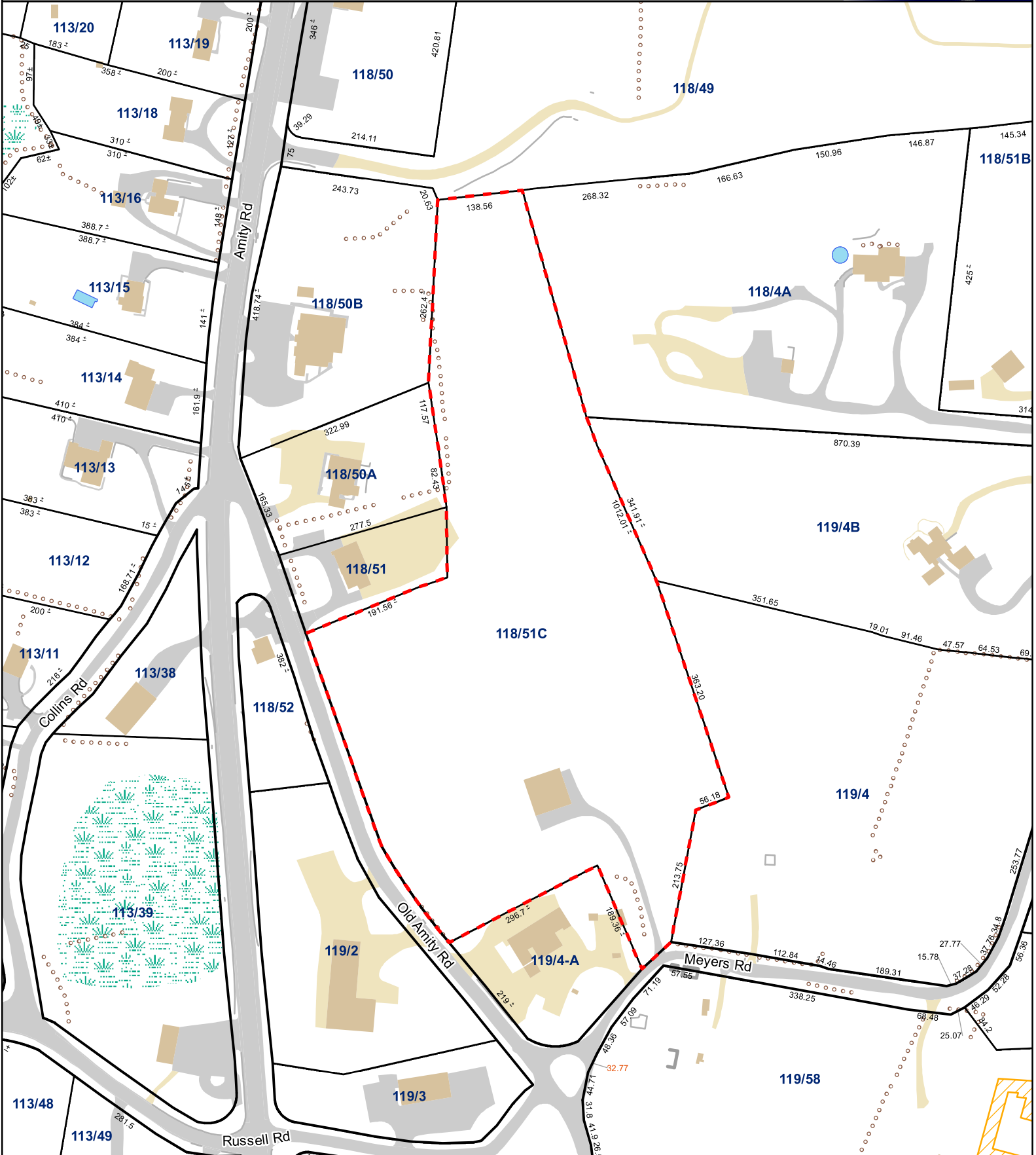
### Owner History - Sales

Owner Name	Volume	Page	Sale Date	Deed Type	Sale Price
AMERICAN TOWERS INC	0124	0716	02/16/2000		\$6,222,480
AMERICAN TEL & TEL CO	0043	0554	08/10/1966		\$0

Information Published With Permission From The Assessor

# Town of Bethany, Connecticut Assessment Parcel Map

Parcel: 00002800  
Address: 9 MEYERS RD



Map Produced: Oct 2022

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

# EXHIBIT 3





**AMERICAN TOWER®**  
CORPORATION

## Structural Analysis Report

**Structure** : 340 ft Self Support Tower  
**ATC Asset Name** : BETHANY CT  
**ATC Asset Number** : 88008  
**Engineering Number** : 14523185\_C3\_03  
**Proposed Carrier** : VERIZON WIRELESS  
**Carrier Site Name** : BETHANY CT  
**Carrier Site Number** : 5000382257  
**Site Location** : 9 Meyers Road  
Bethany, CT 06524-3400  
41.4048° N, 73° W  
**County** : New Haven  
**Date** : August 22, 2023  
**Max Usage** : 64%  
**Analysis Result** : Pass

Created By:

Daniel K. Sheek  
Structural Engineer I



**COA: PEC.0001553**

## Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 340 ft Self Support tower to reflect the change in loading by VERIZON WIRELESS.

## Supporting Documents

<b>Tower:</b>	CSEI Analysis ATC Engineering #73115244, dated November 18, 2002
<b>Foundation:</b>	Mapping by ETS Project #120302.01, dated June 18, 2012
<b>Geotechnical:</b>	Geotel Report #E12-221, dated June 5, 2012
<b>Modification:</b>	ATC Job #OAA712592_C6_13, dated August 13, 2018

## Analysis

The tower was analyzed using Power Line Systems, Inc. tower analysis software. This program considers an elastic three-dimensional model and second-order effects per ANSI/TIA-222.

<b>Basic Wind Speed:</b>	119 mph (3-second gust)
<b>Basic Wind Speed w/ Ice:</b>	50 mph (3-second gust) w/ 1.00" radial ice concurrent
<b>Code(s):</b>	ANSI/TIA-222-H / 2021 IBC / 2022 Connecticut State Building Code
<b>Exposure Category:</b>	B
<b>Risk Category:</b>	II
<b>Topographic Factor Procedure:</b>	Method 3
<b>Topographic Category:</b>	1
<b>Feature:</b>	Flat
<b>Crest Height (H):</b>	0 ft
<b>Spectral Response:</b>	$S_s = 0.20$ , $S_i = 0.05$
<b>Site Class:</b>	D - Stiff Soil - Default

## Conclusion

Based on the analysis results, the structure meets the requirements per the applicable codes listed above. The tower and foundation can support the equipment as described in this report.

If you have any questions or require additional information, please contact American Tower Engineering via email at [Engineering@americantower.com](mailto:Engineering@americantower.com). Please include the American Tower asset name, asset number, and engineering number in the subject line for any questions.



### Structure Usages

Structural Component	Usage	Result
Legs	46%	Pass
Diagonals	64%	Pass
Truss Diagonals	60%	Pass
Horizontals	57%	Pass
Truss Horizontals	49%	Pass
Legs	46%	Pass
Foundation	49%	Pass

### Maximum Reactions

Foundation	Moment (k-ft)	Axial (k)	Uplift (k)	Shear (k)
Base (Local)	-	342.4	210.7	51.5

*\*Reactions shown are maximum overall and not limited by Load Case*

**VERIZON WIRELESS Final Loading**

Elev (ft)	Qty	Equipment	Lines
180.0	1	Raycap RCMD-6627-PF-48	(12) 1 5/8" Coax (2) 1 5/8" Hybriflex
	3	Samsung B2/B66A RRH-BR049	
	3	Samsung B5/B13 RRH-BR04C	
	3	Samsung MT6407-77A	
	3	Samsung Outdoor CBRS 20W RRH –Clip-on Antenna	
	3	Samsung RT4401-48A	
	4	Kaelus KA-6030	
	6	Andrew DB844H90E-XY	
	6	JMA Wireless MX06FRO660-03	

**Other Existing/Reserved Loading**

Elev (ft)	Qty	Equipment	Lines	Carrier
344.0	1	Rohde & Schwarz ADD090	(2) 7/8" Coax	US DEPT OF HOMELAND SECURITY
326.0	1	Kathrein Scala 750 10074	(1) 1 5/8" Coax	LIGADO NETWORKS LLC
320.0	1	Sinclair SC281-L	(1) 7/8" Coax	US DEPT OF HOMELAND SECURITY
315.0	1	Sinclair SC381-HL (160")	(1) 7/8" Coax	US DEPT OF HOMELAND SECURITY
291.0	2	8' Omni	-	UNKNOWN
285.0	1	Sinclair SC281-L	(1) 7/8" Coax	US DEPT OF HOMELAND SECURITY
266.0	1	8' Omni	-	UNKNOWN
253.0	12	Decibel DB844H90E-XY	(12) 1 5/8" Coax	SPRINT NEXTEL
243.0	3	Alcatel-Lucent TD-RRH8x20-25 w/ Solar Shield	(1) 1" (25.4mm) Hybrid	SPRINT NEXTEL
	3	Commscope NNVV-65B-R4		
	3	RFS APXVTM14-ALU-I20		
238.0	6	Alcatel-Lucent 800 MHz 2X50W RRH w/ Filter	(3) 1 1/4" Hybriflex Cable	SPRINT NEXTEL
236.0	3	Alcatel-Lucent 1900 MHz 4X45 RRH	-	SPRINT NEXTEL
222.0	3	Ericsson 4460 BAND 2/25	(3) 1 1/4" (1.25"- 31.8mm) Fiber (3) 1.99" (50.7mm) Hybrid	T-MOBILE
	3	Ericsson AIR 6419 B41		
	3	Ericsson Radio 4449 B71 B85A		
	3	RFS APXVAARR24_43-U-NA20		
213.0	1	Andrew DB616E-BC	(1) 1 1/4" Coax	US DEPT OF HOMELAND SECURITY
158.0	1	KMW AM-X-CD-16-65-00T-RET	(1) 0.39" (10mm) Fiber Trunk (2) 0.78" (19.7mm) 8 AWG 6 (6) 1 5/8" Coax (1) 3" conduit	AT&T MOBILITY
	1	Raycap FC12-PC6-10E		
	2	Andrew SBNH-1D6565C (60.8 lbs)		
	3	Ericsson RRUS 11 (Band 12)		
	3	Powerwave Allgon 7770.00		
	3	Powerwave Allgon LGP21901		
	3	Raycap DC2-48-60-0-9E		
6	Powerwave Allgon LGP21401			
147.0	1	5" x 3" x 2" Cavity Filter	(1) 1/2" Coax	SIGFOX S.A.
	1	Low Noise Amplifier		
	1	Procom CXL 900-3LW		
140.0	1	Commscope RDIDC-9181-PF-48	(1) 1.60" (40.6mm) Hybrid	DISH WIRELESS L.L.C.
	3	Fujitsu TA08025-B604		
	3	Fujitsu TA08025-B605		



Elev (ft)	Qty	Equipment	Lines	Carrier
	3	JMA Wireless MX08FRO665-21		
100.0	3	RFS APXV18-206517S-C	(6) 1 5/8" Coax	METRO PCS INC
48.0	1	PCTEL GPS-TMG-HR-26N	(1) 1/2" Coax	SPRINT NEXTEL

*(If table breaks across pages, please see previous page for data in merged cells)*

## **Standard Conditions**

All engineering services performed by A.T. Engineering Services LLC are prepared on the basis that the information used is current and correct. This information may consist of, but is not limited to the following:

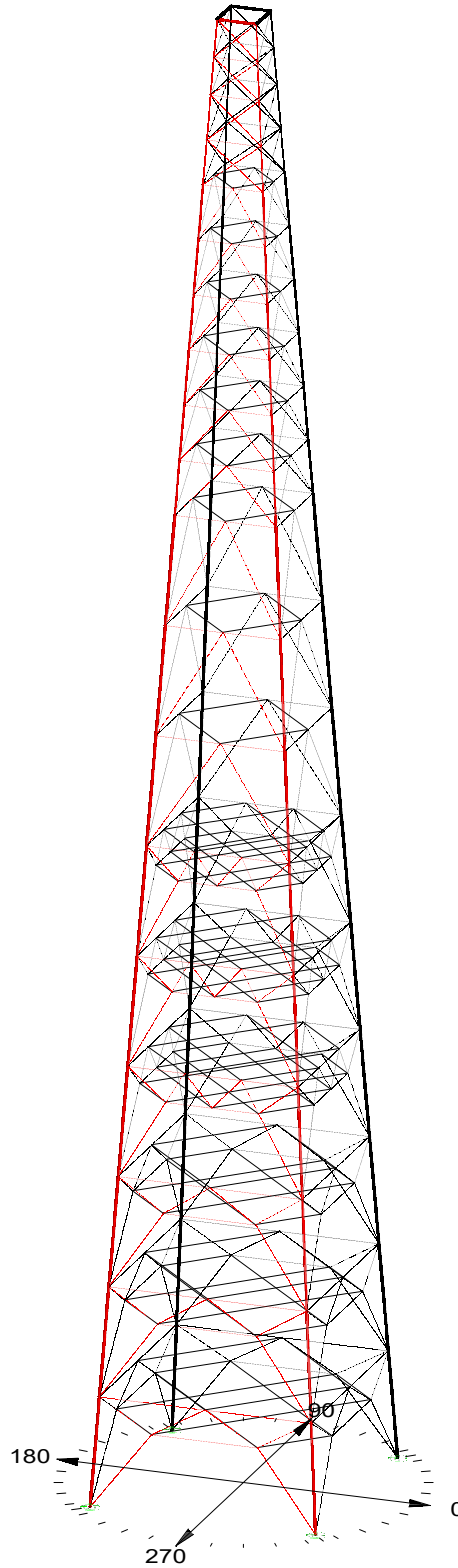
- Information supplied by the client regarding antenna, mounts, and feed line loading
- Information from drawings, design and analysis documents, and field notes in the possession of A.T. Engineering Services LLC

It is the responsibility of the client to ensure that the information provided to A.T. Engineering Services LLC and used in the performance of our engineering services is correct and complete.

All assets of American Tower Corporation, its affiliates, and subsidiaries (collectively "American Tower") are inspected at regular intervals. Based upon these inspections and in the absence of information to the contrary, American Tower assumes that all structures were constructed in accordance with the drawings and specifications.

Unless explicitly agreed by both the client and A.T. Engineering Services LLC, all services will be performed in accordance with the current revision of ANSI/TIA-222.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. A.T. Engineering Services LLC is not responsible for the conclusions, opinions and recommendations made by others based on the information supplied herein.



Project Name : 88008 - Bethany CT  
 Project Notes : Dish Wireless - 13709244 c3 03  
 Project File : X:\A-B\Bethany CT, CT (88008)\14523185 VERIZON WIRELESS\14523185\_03\_CUST\_STR\88008- 14209185.TOW  
 Date run : 11:06:52 AM Tuesday, August 22, 2023  
 by : Tower Version 16.73  
 Licensed to : American Tower Corp.

Successfully performed nonlinear analysis

The model has 0 warnings.

Member check option: ANSI/TIA 222-C-1  
 Connection rupture check: Not Checked  
 Crossing diagonal check: Fixed  
 Included angle check: None  
 Climbing load check: None  
 Redundant members checked with: Actual Force  
 Loads from file: X:\A-B\Bethany CT, CT (88008)\14523185 VERIZON WIRELESS\14523185\_03\_CUST\_STR\88008- 14209185.eia

\*\*\* Analysis Results:

Maximum element usage is 64.13% for Angle "D 12X" in load case "W -90"

**Foundation Design Forces For All Load Cases:**

Note: Loads are factored.

Load Case	Foundation Description	Foundation Force (kips)	Foundation Force (kips)	Axial Force (kips)	Shear Force (kips)	Bending Moment (ft-k)	Foundation Usage %
W 0	OP	254.61	40.25	3.89	0.00	0.00	0.00
W 0	OX	248.23	39.20	3.60	0.00	0.00	0.00
W 0	OXY	24.14	25.58	4.26	0.00	0.00	0.00
W 0	OY	-123.11	26.38	4.49	0.00	0.00	0.00
W 180	OP	-119.40	26.24	4.56	0.00	0.00	0.00
W 180	OX	-120.16	25.53	4.35	0.00	0.00	0.00
W 180	OXY	254.25	29.14	3.69	0.00	0.00	0.00
W 180	OY	250.90	40.09	3.95	0.00	0.00	0.00
W 45	OP	342.42	51.53	3.28	0.00	0.00	0.00
W 45	OX	62.03	18.93	4.32	0.00	0.00	0.00
W 45	OXY	-210.74	37.64	4.62	0.00	0.00	0.00
W 45	OY	61.88	18.86	4.30	0.00	0.00	0.00
W -45	OP	67.59	20.25	4.60	0.00	0.00	0.00
W -45	OX	336.86	51.07	3.33	0.00	0.00	0.00
W -45	OXY	60.03	18.13	4.11	0.00	0.00	0.00
W -45	OY	-208.90	37.76	4.69	0.00	0.00	0.00
W 90	OP	254.73	40.28	3.90	0.00	0.00	0.00
W 90	OX	-123.09	26.41	4.50	0.00	0.00	0.00
W 90	OXY	-124.02	25.54	4.25	0.00	0.00	0.00
W 90	OY	247.97	39.16	3.60	0.00	0.00	0.00
W -90	OP	-119.52	26.28	4.56	0.00	0.00	0.00
W -90	OX	251.16	40.13	3.96	0.00	0.00	0.00
W -90	OXY	244.13	39.11	3.68	0.00	0.00	0.00
W -90	OY	20.19	25.50	4.34	0.00	0.00	0.00
W 0 Ice	OP	157.06	20.76	1.74	0.00	0.00	0.00
W 0 Ice	OX	151.98	20.25	1.63	0.00	0.00	0.00
W 0 Ice	OXY	33.22	3.39	3.22	0.00	0.00	0.00
W 0 Ice	OY	37.32	3.50	3.30	0.00	0.00	0.00
W 180 Ice	OP	41.88	3.84	3.36	0.00	0.00	0.00
W 180 Ice	OX	38.15	3.69	3.32	0.00	0.00	0.00
W 180 Ice	OXY	147.06	20.10	1.59	0.00	0.00	0.00
W 180 Ice	OY	152.50	20.48	1.74	0.00	0.00	0.00
W 45 Ice	OP	185.42	25.10	1.07	0.00	0.00	0.00
W 45 Ice	OX	94.58	11.47	2.61	0.00	0.00	0.00
W 45 Ice	OXY	5.16	4.06	3.52	0.00	0.00	0.00
W 45 Ice	OY	94.42	11.45	2.61	0.00	0.00	0.00
W -45 Ice	OP	99.46	12.04	2.70	0.00	0.00	0.00
W -45 Ice	OX	107.55	24.74	3.04	0.00	0.00	0.00
W -45 Ice	OXY	90.13	11.35	2.54	0.00	0.00	0.00
W -45 Ice	OY	9.46	3.94	3.61	0.00	0.00	0.00
W 90 Ice	OP	157.08	20.76	1.74	0.00	0.00	0.00
W 90 Ice	OX	37.45	3.51	3.30	0.00	0.00	0.00
W 90 Ice	OXY	33.25	3.39	3.22	0.00	0.00	0.00
W 90 Ice	OY	151.80	20.24	1.63	0.00	0.00	0.00
W -90 Ice	OP	41.85	3.84	3.36	0.00	0.00	0.00
W -90 Ice	OX	152.68	20.49	1.74	0.00	0.00	0.00
W -90 Ice	OXY	147.03	20.10	1.59	0.00	0.00	0.00
W -90 Ice	OY	38.02	3.68	3.32	0.00	0.00	0.00

**Summary of Joint Support Reactions For All Load Cases:**

Load Case	Joint Label	Long. Force (kips)	Tran. Force (kips)	Vert. Force (kips)	Shear Force (kips)	Tran. Moment (ft-k)	Long. Moment (ft-k)	Bending Moment (ft-k)	Vert. Moment (ft-k)	Found. Usage %
W 0	OP	-36.34	17.32	254.61	0.86	-3.79	3.89	-2.26	0.00	0.00
W 0	OX	-34.80	18.04	-248.23	39.20	0.57	-3.56	3.60	2.25	0.00
W 0	OXY	-24.09	-8.60	124.14	25.58	0.47	-4.23	4.26	2.07	0.00
W 0	OY	-25.13	7.88	123.11	26.38	-0.33	-4.48	4.49	-2.05	0.00
W 180	OP	25.13	7.54	119.40	26.24	-0.32	4.55	4.56	2.06	0.00
W 180	OX	24.13	-8.35	120.16	25.53	0.48	4.32	4.35	-2.08	0.00
W 180	OXY	34.84	17.83	-244.25	39.14	0.55	3.65	3.69	-2.27	0.00
W 180	OY	36.30	17.03	-250.90	40.09	-0.86	3.86	3.95	2.27	0.00
W 45	OP	-36.41	-36.46	-342.42	51.53	2.33	-2.31	3.28	0.00	0.00
W 45	OX	-17.33	-7.63	-62.03	18.93	3.50	-2.53	4.32	3.10	0.00
W 45	OXY	-26.64	-26.59	210.74	37.64	3.26	3.27	4.62	-0.00	0.00
W 45	OY	-7.58	-17.27	-61.88	18.86	2.52	-3.48	4.30	-3.10	0.00
W -45	OP	-18.55	8.13	-67.59	20.25	-3.72	-2.70	4.60	-3.10	0.00
W -45	OX	-35.24	36.96	-336.86	51.07	-2.55	-2.14	3.33	-0.01	0.00
W -45	OXY	-6.87	16.78	-60.03	18.13	-2.45	3.00	4.11	3.11	0.00
W -45	OY	-27.30	26.09	208.90	37.76	-3.19	-3.44	4.69	0.02	0.00
W 90	OP	-17.29	-36.39	-254.73	40.28	3.80	0.87	3.90	2.26	0.00
W 90	OX	7.89	-123.09	26.41	4.49	4.23	4.50	2.05	0.00	0.00
W 90	OXY	-8.62	-24.04	124.02	25.54	4.23	-0.47	4.25	-2.07	0.00
W 90	OY	18.06	-34.75	-247.97	39.16	3.55	-0.56	3.60	-2.25	0.00
W -90	OP	7.52	25.18	119.52	26.28	-4.55	0.31	4.56	-2.06	0.00
W -90	OX	-17.86	36.35	-251.16	40.13	-3.86	0.87	3.96	2.27	0.00
W -90	OXY	17.86	34.79	-244.13	39.11	-3.64	-0.54	3.68	2.27	0.00
W -90	OY	-8.38	24.08	120.19	25.50	-4.31	-0.48	4.34	2.08	0.00
W 0 Ice	OP	11.86	-17.06	-157.06	20.76	-1.69	0.41	1.74	0.63	0.00
W 0 Ice	OX	-16.32	12.00	-151.98	20.25	1.56	0.48	1.63	0.61	0.00
W 0 Ice	OXY	-1.92	2.79	-33.22	3.39	1.62	-2.78	3.22	0.61	0.00
W 0 Ice	OY	-1.92	-2.93	-37.32	3.50	-1.68	-2.85	3.30	-0.60	0.00
W 180 Ice	OP	1.87	-3.35	-41.88	3.84	-1.66	3.36	3.36	0.61	0.00
W 180 Ice	OX	1.97	3.12	-18.15	3.69	1.63	2.89	3.32	-0.63	0.00
W 180 Ice	OXY	16.37	11.67	-147.06	20.10	1.55	-0.37	1.59	-0.63	0.00
W 180 Ice	OY	16.98	11.44	-152.50	20.48	-2.71	0.33	1.74	0.63	0.00
W 45 Ice	OP	-17.74	-17.76	-185.42	25.10	-0.76	0.76	1.07	0.00	0.00
W 45 Ice	OX	-10.79	3.88	-94.58	11.47	2.48	0.80	2.61	0.89	0.00
W 45 Ice	OXY	-2.88	-2.87	-5.16	4.06	2.49	-2.49	3.52	-0.00	0.00
W 45 Ice	OY	3.88	-10.78	-94.42	11.45	-0.80	-2.88	2.61	0.89	0.00
W -45 Ice	OP	-11.42	-3.80	-99.46	12.04	-2.60	0.74	2.70	-0.90	0.00
W -45 Ice	OX	-17.11	17.84	-180.55	24.72	0.64	0.82	1.04	-0.01	0.00
W -45 Ice	OXY	3.79	10.70	-90.13	11.35	0.73	-4.23	2.54	0.91	0.00
W -45 Ice	OY	-2.78	2.79	-9.46	3.94	-2.56	-2.54	3.61	0.02	0.00
W 90 Ice	OP	-11.85	-17.05	-157.08	20.76	-0.41	1.69	1.74	0.63	0.00
W 90 Ice	OX	-2.94	3.30	-37.45	3.51	2.95	1.68	3.30	0.60	0.00
W 90 Ice	OXY	2.79	-1.92	-33.25	3.39	2.78	-1.62	3.22	-0.61	0.00
W 90 Ice	OY	12.00	-16.30	-151.80	20.24	-0.48	-1.55	1.63	-0.61	0.00
W -90 Ice	OP	-3.35	1.87	-41.85	3.84	-2.93	1.66	3.36	-0.61	0.00
W -90 Ice	OX	-11.44	17.00	-152.68	20.49	0.33	3.71	1.74	-0.64	0.00
W -90 Ice	OXY	11.69	16.35	-147.03	20.10	0.38	-1.54	1.59	0.63	0.00
W -90 Ice	OY	3.11	1.97	-38.02	3.68	-2.89	-1.63	3.32	0.63	0.00

**Summary of Joint Support Reactions For All Load Cases in Direction of Leg:**

Load Case	Support	Joint	Leg Force	In Residual Shear	Residual Shear	Residual Shear	Residual Shear	Total	Total	Total
			Dir.	Perpendicular	Horizontal	Horizontal	Horizontal	Force	Force	Force
				(kips)	(kips)	(kips)	(kips)	(kips)	(kips)	(kips)
W 0	OP	1P	L	20.161	20.193	1.141	-36.34	17.32	-254.61	
W 0	OX	1X	L	250.575	19.119	19.167	19.032	-2.268	-34.80	18.04
W 0	OXY	1XY	L	-125.709	16.180	16.215	16.199	0.718	-24.09	-8.60
W 0	OY	1Y	L	-124.713	17.321	17.356	17.355	-0.061	-25.18	7.88
W 180	OP	1P	L	-120.887	-17.515	-17.550	-17.550	0.041	25.13	7.54
W 180	OX	1X	L	-121.736	16.472	16.508	16.493	0.714	24.13	-8.35
W 180	OXY	1XY	L	246.602	19.415	19.463	-19.325	-2.316	34.84	17.83
W 180	OY	1Y	L	250.902	20.341	20.386	-20.357	-1.090	36.30	-17.03
W 45	OP	1P	L	345.653	20.683	20.766	20.766	14.711	-36.41	-36.46
W 45	OX	1X	L	62.391	17.692	17.692	13.389	11.566	-17.33	-7.63
W 45	OXY	1XY	L	-213.260	18.632	18.707	13.251	13.205	-26.64	-26.59
W 45	OY	1Y	L	-24.747	-17.515	-17.621	-17.621	0.342	-7.58	-17.27
W -45	OP	1P	L	67.977	18.905	18.905	14.254	-12.420	-18.55	8.13
W -45	OX	1X	L	340.076	20.741	20.824	13.840	-15.560	-35.24	36.96
W -45	OXY	1XY	L	-125.884	-16.796	-16.796	-16.796	0.041	25.13	7.54
W -45	OY	1Y	L	-211.436	18.931	19.007	14.032	-12.822	-27.30	26.09
W 90	OP	1P	L	257.103	20.189	20.234	1.104	20.204	-17.29	-36.39
W 90	OX	1X	L	-124.591	-17.365	-17.400	-17.400	-0.033	-24.09	-8.60
W 90	OXY	1XY	L	-125.591	16.146	16.161	0.744	16.164	-8.62	-24.04
W 90	OY	1Y	L	250.313	19.089	19.137	-2.305	18.998	18.06	-34.75

W-90	OP	IP	L	IP	-121.105	17.550	17.585	0.068	-17.585	7.52	25.18	119.52
W-90	OX	IX	L	IX	246.484	19.376	19.424	-2.353	-19.281	17.86	34.79	-244.13
W-90	OX	IX	L	IX	-121.763	16.429	16.465	0.743	-16.448	-8.38	24.08	120.19
W-90	OX	IX	L	IX	158.256	7.281	7.303	7.055	1.887	-17.03	-11.86	-157.06
W-90	OX	IX	L	IX	186.166	4.574	4.602	6.662	0.691	1.87	-3.35	-41.88
W-90	OX	IX	L	IX	33.143	4.086	4.091	4.034	-0.683	-1.92	2.79	-33.22
W-90	OX	IX	L	IX	37.236	4.319	4.325	4.289	0.556	-1.92	-2.93	-37.32
W-90	OX	IX	L	IX	186.166	8.410	8.464	4.521	4.521	1.74	-1.74	-185.42
W-90	OX	IX	L	IX	38.069	4.446	4.453	-4.398	-0.694	1.97	3.12	-38.15
W-90	OX	IX	L	IX	186.239	7.378	7.402	-7.025	-2.333	16.37	11.67	-147.06
W-90	OX	IX	L	IX	153.688	7.479	7.501	-7.294	1.752	16.98	-11.44	-152.50
W-90	OX	IX	L	IX	186.166	8.410	8.464	4.521	4.521	1.74	-1.74	-185.42
W-90	OX	IX	L	IX	5.234	4.773	4.784	-3.394	-2.75	7.79	-9.46	
W-90	OX	IX	L	IX	4.776	4.510	4.529	3.205	3.200	-2.88	-2.87	-5.16
W-90	OX	IX	L	IX	94.972	5.222	5.224	2.115	4.777	3.88	-10.78	-94.42
W-90	OX	IX	L	IX	100.021	5.687	5.690	5.102	-2.518	-11.42	-3.80	-99.46
W-90	OX	IX	L	IX	182.032	8.475	8.509	5.645	-6.367	-17.11	17.84	-180.55
W-90	OX	IX	L	IX	90.681	5.332	5.335	1.936	-4.971	3.79	10.70	-90.13
W-90	OX	IX	L	IX	121.214	4.773	4.783	-3.383	-3.394	-2.75	7.79	-9.46
W-90	OX	IX	L	IX	158.281	7.291	7.313	1.874	7.069	-11.85	-17.05	-157.08
W-90	OX	IX	L	IX	37.366	4.331	4.338	0.559	4.302	-2.94	-1.92	-37.45
W-90	OX	IX	L	IX	33.168	4.084	4.089	0.682	4.032	2.79	-1.92	-33.25
W-90	OX	IX	L	IX	152.985	7.038	7.061	-2.353	6.657	12.00	-16.30	-151.80
W-90	OX	IX	L	IX	41.780	4.577	4.583	0.692	-4.531	-3.35	1.87	-41.85
W-90	OX	IX	L	IX	153.688	7.481	7.503	1.742	-7.298	-11.44	17.00	-152.68
W-90	OX	IX	L	IX	186.166	7.369	7.389	-3.383	-7.015	11.63	16.35	-147.03
W-90	OX	IX	L	IX	37.938	4.434	4.440	-0.690	-4.386	3.11	1.97	-38.02

Overturning Moment Summary For All Load Cases:

Load Case	Transverse Moment (ft-k)	Longitudinal Moment (ft-k)	Torsional Moment (ft-k)	Resultant Moment (ft-k)	Transverse Force (kips)	Longitudinal Force (kips)	Vertical Force (kips)
W 0	192.147	-19457.411	105.519	19458.360	-0.000	120.398	255.586
W 180	192.298	19058.331	-105.605	19059.301	-0.000	-120.398	255.586
W 45	14345.061	-14352.866	-5.272	20292.283	87.955	87.955	53.586
W -45	-13960.896	-14352.866	154.588	20022.772	-87.955	-87.955	255.586
W 90	19449.929	-199.655	-112.981	19450.953	120.398	-0.000	255.586
W -90	-19065.842	199.655	113.068	19066.898	-120.398	0.000	255.586
W 0 Ice	237.982	-6186.655	25.326	6191.230	-0.000	37.191	379.585
W 180 Ice	238.018	5694.545	-25.330	5699.517	-0.000	-37.191	379.585
W 45 Ice	4671.973	-4680.030	-1.129	6612.867	27.527	27.527	379.585
W -45 Ice	-4419.939	-4680.030	36.862	6288.660	-27.527	-27.527	379.585
W 90 Ice	6178.599	-246.042	-26.923	6183.496	37.191	-0.000	379.585
W -90 Ice	-5702.608	-246.079	26.927	5707.915	-37.191	-0.000	379.585

EIA Sections Information:

Section Label	Top (ft)	Bottom (ft)	Joint Count	Member Count	Top Width (ft)	Bottom Width (ft)	Gross Area (ft²)	Net Area (ft²)	Factor	Load Factor	Dead Load (kips)
328.9-337.5	337.500	328.917	8	20	9.00	10.09	81.93	1.1220	1.1220	1.146	1.146
320.3-328.9	328.917	320.334	8	16	11.18	12.47	120.24	1.1970	1.1970	1.236	1.236
310.2-320.3	320.334	310.167	8	16	11.18	12.47	120.24	1.1970	1.1970	1.185	1.185
300.0-310.2	310.167	300.000	12	24	12.47	13.76	133.38	1.1540	1.1540	1.185	1.185
287.5-300.0	300.000	287.500	16	32	15.75	17.21	161.10	1.2042	1.2042	1.242	1.242
275.0-287.5	287.500	275.000	16	24	15.35	16.94	151.83	1.2080	1.2080	1.249	1.249
262.5-275.0	275.000	262.500	16	24	16.94	18.53	221.69	1.2140	1.2140	1.257	1.257
250.0-262.5	262.500	250.000	16	24	18.53	20.12	241.54	1.2200	1.2200	1.264	1.264
237.5-250.0	250.000	237.500	16	24	20.12	21.71	261.39	1.2260	1.2260	1.271	1.271
225.0-237.5	237.500	225.000	16	24	21.71	23.29	281.24	1.2320	1.2320	1.278	1.278
200.0-225.0	225.000	200.000	16	24	23.29	26.47	322.04	1.2640	1.2640	1.316	1.316
175.0-200.0	200.000	175.000	16	24	26.47	30.65	373.89	1.2728	1.2728	1.328	1.328
150.0-175.0	175.000	150.000	20	32	29.65	32.82	780.85	1.2750	1.2750	1.330	1.330
125.0-150.0	150.000	125.000	36	76	32.82	36.00	860.26	1.2300	1.2300	1.276	1.276
100.0-125.0	125.000	100.000	36	76	36.00	39.17	939.67	1.2250	1.2250	1.270	1.270
75.0-100.0	100.000	75.000	32	68	39.17	42.35	1098.48	1.3380	1.3380	1.430	1.430
50.0-75.0	75.000	50.000	24	52	42.35	45.53	1098.48	1.3380	1.3380	1.430	1.430
25.0-50.0	50.000	25.000	24	52	45.53	48.70	1177.89	1.3250	1.3250	1.396	1.396
0.000-25.00	25.000	0.000	20	40	48.70	51.88	1257.30	1.3210	1.3210	1.385	1.385

Printed capacities do not include the strength factor entered for each load case. The Group Summary report on the member load case that resulted in maximum usage which may not necessarily be the same as that which produces maximum force.

Group Summary (Compression Portion):

Group Label	Group Desc.	Angle Type	Angle Size	Steel Strength (ksi)	Max Usage (%)	Max Control (%)	Comp. In Member (%)	Comp. Force (kips)	Comp. Load Case	L/r Capacity (kips)	Comp. Shear Capacity (kips)	Comp. Bearing Capacity (kips)	RLX	RLY	RLE	L/r	RL/r	Length Member (ft)	Curve No.	No. of Bolts	Comp.
Leg S1	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	46.48	Comp 46.48	L 1P	-300.889	W 45	647.310	0.000	0.000	0.281	0.281	0.281	54.29	54.29	25.101	1	0	
Leg S2	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	45.10	Comp 45.10	L 2P	-268.316	W 45	594.930	0.000	0.000	0.281	0.281	0.281	54.29	54.29	25.101	1	0	
Leg S3	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	43.44	Comp 43.44	L 3P	-236.684	W 45	544.890	0.000	0.000	0.281	0.281	0.281	54.29	54.29	25.101	1	0	
Leg S4	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	35.45	Comp 35.45	L 4P	-194.415	W 45	494.883	0.000	0.000	0.281	0.281	0.281	54.29	54.29	25.101	1	0	
Leg S5	L 8" x 8" x 1"	SAE	8X8X1	36.0	33.45	Comp 33.45	L 5P	-164.030	W 45	490.433	0.000	0.000	0.281	0.281	0.281	54.29	54.29	25.101	1	0	
Leg S6	L 8" x 8" x 1"	SAE	8X8X1	36.0	26.83	Comp 26.83	L 6P	-131.591	W 45	490.433	0.000	0.000	0.281	0.281	0.281	54.29	54.29	25.101	1	0	
Leg S7	L 8" x 8" x 0.75"	SAE	8X8X0.75	36.0	29.58	Comp 29.58	L 7P	-122.857	W 45	415.258	0.000	0.000	0.333	0.333	0.333	63.54	63.54	25.101	1	0	
Leg S8	L 8" x 8" x 0.75"	SAE	8X8X0.75	36.0	27.11	Comp 27.11	L 8P	-97.407	W 45	359.355	0.000	0.000	0.333	0.333	0.333	63.54	63.54	25.101	1	0	
Leg S9	L 8" x 8" x 0.75"	SAE	8X8X0.75	36.0	20.73	Comp 20.73	L 9P	-74.496	W 45	359.355	0.000	0.000	0.333	0.333	0.333	63.54	63.54	25.101	1	0	
Leg S10	L 6" x 6" x 0.875"	SAE	6X6X0.88	36.0	20.52	Comp 20.52	L 10P	-62.587	W 45	303.972	0.000	0.000	0.500	0.500	0.500	64.36	64.36	12.550	1	0	
Leg S11	L 6" x 6" x 0.75"	SAE	6X6X0.75	36.0	19.53	Comp 19.53	L 11P	-51.683	W 45	264.572	0.000	0.000	0.500	0.500	0.500	64.36	64.36	12.550	1	0	
Leg S12	L 6" x 6" x 0.75"	SAE	6X6X0.75	36.0	16.75	Comp 16.75	L 12P	-44.325	W 45	264.572	0.000	0.000	0.500	0.500	0.500	64.36	64.36	12.550	1	0	
Leg S13	L 6" x 6" x 0.5625"	SAE	6X6X0.56	36.0	18.24	Comp 18.24	L 13P	-36.878	W 45	202.137	0.000	0.000	0.500	0.500	0.500	63.82	63.82	12.550	1	0	
Leg S14	L 6" x 6" x 0.4375"	SAE	6X6X0.44	36.0	13.74	Comp 13.74	L 14P	-29.452	W 45	202.137	0.000	0.000	0.500	0.500	0.500	63.82	63.82	12.550	1	0	
Leg S15	L 6" x 6" x 0.4375"	SAE	6X6X0.44	36.0	13.74	Comp 13.74	L 15P	-21.877	W 45	159.214	0.000	0.000	0.500	0.500	0.500	63.28	63.28	12.550	1	0	
Leg S16	L 5" x 5" x 0.4375"	SAE	5X5X0.44	36.0	16.20	Comp 16.20	L 16P	-21.455	W 45	132.414	0.000	0.000	0.500	0.500	0.500	62.12	62.12	10.208	1	0	
Leg S17	L 5" x 5" x 0.375"	SAE	5X5X0.38	36.0	11.34	Comp 11.34	L 17P	-15.016	W 45	132.414	0.000	0.000	0.500	0.500	0.500	62.12	62.12	10.208	1	0	
Leg S18	L 5" x 5" x 0.3125"	SAE	5X5X0.31	36.0	6.82	Comp 6.82	L 18P	-8.334	W 45	96.703	0.000	0.000	0.500	0.500	0.500	52.02	52.02	8.618	1	0	
Leg S19	L 5" x 5" x 0.25"	SAE	5X5X0.25	36.0	5.04	Comp 5.04	L 19P	-4.789	W 45	96.703	0.000	0.000	0.500	0.500	0.500	52.02	52.02	8.618	1	0	
Diag S1	B/B L3"x3"x0.375"	DAS	4X3X0.38	36.0	38.74	Comp 38.74	D 2X	-36.027	W -90	92.986	0.000	0.000	0.333	0.333	0.333	118.88	118.88	22.664	1	0	
Diag S2	B/B L3"x3"x0.375"	DAS	4X3X0.38	36.0	34.56	Comp 34.56	D 3X	-34.992	W -90	84.948	0.000	0.000	0.333	0.333	0.333	117.61	117.61	22.191	1	0	
Diag S3	B/B L3"x3"x0.25"	DAS	4X3X0.25	36.0	51.30	Comp 51.30	D 4X	-34.013	W -90	66.301	0.000	0.000	0.333	0.333	0.33						



LH 3	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	4.86	Tens	0.00	LH 6X	0.000	0.002	0.000	0.000	100.000	100.000	100.000	33745.91	20799.93	21.176	6	0	
LH 4	B/B L3"x3"x0.375"	DAE	3X3X0.38	36.0	38.47	Comp	38.47	LH 7X	-19.750	W -45	51.338	0.000	0.000	0.940	1.880	0.940	170.76	150.97	10.648	6	0
LH 5	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	49.25	Comp	49.25	LH 9X	-18.101	W -90	36.752	0.000	0.000	0.940	1.880	0.940	152.80	140.17	9.821	6	0
LH 6	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	37.73	Comp	37.73	LH 11X	-15.612	W -90	41.375	0.000	0.000	0.940	1.880	0.940	139.93	132.25	8.993	6	0
DUM 1	Dummy Bracing Member	DUM	0.1X0.1X1	36.0	0.00	0.00	BR 13X1	-0.726	W 45	0.324	0.000	0.000	0.000	1.000	1.000	2.52	2.52	20.963	1	0	

Group Summary (Tension Portion):

Group Label	Group Desc. Angle Type	Size	Steel	Max Usage	Max Tension	Tension	Tension	Force Control	Section Load Capacity	Net Tension	Tension Connect.	Tension Connect.	Tension Connect.	Tension Length	No. Of Bolts	No. Of Holes	Hole Diameter	
			(ksi)	%	(kips)	(kips)	(kips)		(kips)	(kips)	(kips)	(kips)	(kips)	(ft)			(in)	
Leg S1	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	46.48	Comp	32.72	L 1X1	177.375	W 45	542.051	0.000	0.000	0.000	25.101	0	0.000	0
Leg S2	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	45.10	Comp	29.43	L 2X1	159.510	W 45	542.051	0.000	0.000	0.000	25.101	0	0.000	0
Leg S3	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	43.44	Comp	25.69	L 3X1	139.248	W 45	542.051	0.000	0.000	0.000	25.101	0	0.000	0
Leg S4	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	35.55	Comp	21.28	L 4X1	115.331	W 45	542.051	0.000	0.000	0.000	25.101	0	0.000	0
Leg S5	L 8" x 8" x 1"	SAE	8X8X1	36.0	33.45	Comp	19.75	L 5X1	96.006	W 45	485.999	0.000	0.000	0.000	25.101	0	0.000	0
Leg S6	L 8" x 8" x 1"	SAE	8X8X1	36.0	26.83	Comp	16.04	L 6X1	77.933	W 45	485.999	0.000	0.000	0.000	25.101	0	0.000	0
Leg S7	L 8" x 8" x 0.875"	SAE	8X8X0.88	36.0	29.58	Comp	17.65	L 7X1	75.637	W 45	428.651	0.000	0.000	0.000	25.101	0	0.000	0
Leg S8	L 8" x 8" x 0.75"	SAE	8X8X0.75	36.0	27.11	Comp	16.01	L 8X1	59.360	W 45	370.655	0.000	0.000	0.000	25.101	0	0.000	0
Leg S9	L 8" x 8" x 0.75"	SAE	8X8X0.75	36.0	20.73	Comp	11.65	L 9X1	43.195	W 45	370.655	0.000	0.000	0.000	25.101	0	0.000	0
Leg S10	L 6" x 6" x 0.875"	SAE	6X6X0.88	36.0	20.52	Comp	11.54	L 10X1	36.365	W 45	315.252	0.000	0.000	0.000	12.550	0	0.000	0
Leg S11	L 6" x 6" x 0.75"	SAE	6X6X0.75	36.0	19.53	Comp	11.15	L 11X1	30.485	W -45	273.456	0.000	0.000	0.000	12.550	0	0.000	0
Leg S12	L 6" x 6" x 0.75"	SAE	6X6X0.75	36.0	16.75	Comp	9.24	L 12X1	25.255	W -45	273.456	0.000	0.000	0.000	12.550	0	0.000	0
Leg S13	L 6" x 6" x 0.5625"	SAE	6X6X0.56	36.0	18.24	Comp	9.47	L 13X1	19.723	W -45	208.332	0.000	0.000	0.000	12.550	0	0.000	0
Leg S14	L 6" x 6" x 0.5625"	SAE	6X6X0.56	36.0	14.57	Comp	6.89	L 14X1	14.358	W -45	208.332	0.000	0.000	0.000	12.550	0	0.000	0
Leg S15	L 6" x 6" x 0.4375"	SAE	6X6X0.44	36.0	13.74	Comp	5.53	L 15X1	9.071	W -45	163.944	0.000	0.000	0.000	12.550	0	0.000	0
Leg S16	L 5" x 5" x 0.4375"	SAE	5X5X0.44	36.0	16.20	Comp	3.42	L 16X1	4.626	W -45	135.432	0.000	0.000	0.000	10.208	0	0.000	0
Leg S17	L 5" x 5" x 0.4375"	SAE	5X5X0.44	36.0	11.34	Comp	0.54	L 17X1	0.729	W -45	135.432	0.000	0.000	0.000	10.208	0	0.000	0
Leg S18	L 5" x 5" x 0.3125"	SAE	5X5X0.31	36.0	8.62	Comp	0.00	L 18X1	0.000	0.000	98.172	0.000	0.000	0.000	8.618	0	0.000	0
Leg S19	L 5" x 5" x 0.3125"	SAE	5X5X0.31	36.0	5.04	Comp	0.00	L 19X1	0.000	0.000	98.172	0.000	0.000	0.000	8.618	0	0.000	0
Diag S1	B/B L3"x3"x0.375"	DAE	3X3X0.38	36.0	38.74	Comp	18.55	D 1P	29.877	W -90	161.028	0.000	0.000	0.000	22.464	0	0.000	0
Diag S2	B/B L3"x3"x0.25"	DAS	4X3X0.25	36.0	54.56	Comp	27.16	D 4P	29.749	W -90	109.512	0.000	0.000	0.000	22.191	0	0.000	0
Diag S3	B/B L3"x3"x0.25"	DAS	4X3X0.25	36.0	51.30	Comp	27.04	D 6P	29.614	W -90	109.512	0.000	0.000	0.000	21.737	0	0.000	0
Diag S4	B/B L3"x3"x0.25"	DAS	4X3X0.25	36.0	44.81	Comp	20.16	D 8P	30.165	W -90	101.412	0.000	0.000	0.000	20.858	0	0.000	0
Diag S5	B/B L3"x3"x0.25"	DAS	3.5X3X0.25	36.0	42.79	Comp	29.57	D 10P	29.985	W -90	101.412	0.000	0.000	0.000	20.484	0	0.000	0
Diag S6	B/B L2.5"x2.5"x0.25"	DAS	3.5X2.5X0.25	36.0	64.13	Comp	29.74	D 12P	27.748	W -90	93.312	0.000	0.000	0.000	20.133	0	0.000	0
Diag S7	B/B L2.5"x2.5"x0.25"	DAS	3.5X2.5X0.25	36.0	42.75	Comp	13.85	D 13P	18.943	W -90	139.728	0.000	0.000	0.000	20.947	0	0.000	0
Diag S8	B/B L2.5"x2.5"x0.25"	DAS	3X2.5X0.25	36.0	55.92	Comp	18.83	D 16P	16.044	W 180	85.212	0.000	0.000	0.000	29.107	0	0.000	0
Diag S9	B/B L2.5"x2.5"x0.25"	DAS	3X2.5X0.25	36.0	50.97	Comp	18.47	D 17P	15.738	W -90	85.212	0.000	0.000	0.000	28.332	0	0.000	0
Diag S10	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	37.94	Comp	10.57	D 19P	8.148	W -90	77.112	0.000	0.000	0.000	17.103	0	0.000	0
Diag S11	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	27.56	Comp	7.93	D 21P	6.116	W -90	77.112	0.000	0.000	0.000	16.573	0	0.000	0
Diag S12	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	23.39	Comp	7.13	D 23P	5.498	W -90	77.112	0.000	0.000	0.000	16.064	0	0.000	0
Diag S13	B/B L2.5"x2.5"x0.25"	DAL	2.5X2X0.25	36.0	36.72	Comp	8.16	D 25P	5.632	W -90	69.012	0.000	0.000	0.000	15.579	0	0.000	0
Diag S14	B/B L2.5"x2.5"x0.25"	DAL	2.5X2X0.25	36.0	31.80	Comp	7.45	D 27P	5.144	W -90	69.012	0.000	0.000	0.000	15.120	0	0.000	0
Diag S15	B/B L2.5"x2.5"x0.25"	DAL	2.5X2X0.25	36.0	28.56	Comp	7.04	D 30P	4.855	W 180	69.012	0.000	0.000	0.000	14.690	0	0.000	0
Diag S16	L 3.5" x 3.5" x 0.25"	SAE	3.5X3.5X0.25	36.0	11.37	Tens	1.37	D 31P	6.227	W 180	54.756	0.000	0.000	0.000	16.610	0	0.000	0
Diag S17	L 3.5" x 3.5" x 0.25"	SAE	3.5X3.5X0.25	36.0	8.72	Tens	8.72	D 33P	4.775	W 180	54.756	0.000	0.000	0.000	15.610	0	0.000	0
Diag S18	L 3" x 3" x 0.25"	SAE	3X3X0.25	36.0	7.01	Tens	7.01	D 35P	3.271	W 180	46.656	0.000	0.000	0.000	13.678	0	0.000	0
Diag S19	L 3" x 3" x 0.25"	SAE	3X3X0.25	36.0	6.13	Tens	6.13	D 37P	2.859	W 180	46.656	0.000	0.000	0.000	12.848	0	0.000	0
Horiz 1	B/B L4"x3"x0.25"	DAL	4X3X0.25	36.0	65.11	Comp	29.95	H 1X	32.799	W -90	109.512	0.000	0.000	0.000	24.352	0	0.000	0
Horiz 2	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	36.0	56.92	Comp	32.87	H 3X	30.674	W -90	93.312	0.000	0.000	0.000	22.764	0	0.000	0
Horiz 3	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	50.92	Comp	34.18	H 5X	29.126	W -90	85.212	0.000	0.000	0.000	21.176	0	0.000	0
Horiz 4	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	36.0	51.60	Comp	32.23	H 7X	30.076	W -90	93.312	0.000	0.000	0.000	13.058	0	0.000	0
Horiz 5	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	36.0	48.06	Comp	29.51	H 9X	27.532	W -90	93.312	0.000	0.000	0.000	12.000	0	0.000	0
Horiz 6	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	46.99	Comp	26.86	H 11P	22.890	W 90	85.212	0.000	0.000	0.000	10.941	0	0.000	0
Horiz 7	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	35.24	Comp	12.04	H 14P	10.261	W 0	85.212	0.000	0.000	0.000	14.823	0	0.000	0
Horiz 8	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	23.51	Comp	9.46	H 15P	8.064	W 90	85.212	0.000	0.000	0.000	13.235	0	0.000	0
Horiz 9	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	26.45	Comp	9.72	H 17P	7.495	W 90	77.112	0.000	0.000	0.000	11.647	0	0.000	0
Horiz 10	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	18.53	Comp	7.28	H 19X	5.611	W -90	77.112	0.000	0.000	0.000	10.853	0	0.000	0
Horiz 11	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	11.74	Comp	5.48	H 21X	4.228	W -90	77.112	0.000	0.000	0.000	10.059	0	0.000	0
Horiz 12	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	9.24	Comp	4.75	H 23P	3.662	W 90	77.112	0.000	0.000	0.000	9.264	0	0.000	0
Horiz 13	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	8.98	Comp	5.05	H 25P	3.891	W 90	77.112	0.000	0.000	0.000	8.470	0	0.000	0
Horiz 14	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	6.70	Comp	4.19	H 28P	3.233	W 0	77.112	0.000	0.000	0.000	7.676	0	0.000	0
Horiz 15	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	9.10	Comp	0.45	H 29X1	0.345	W -90	77.112	0.000	0.000	0.000	6.882	0	0.000	0
Horiz 16	L 3" x 2.5" x 0.25"	SAU	3X2.5X0.25	36.0	23.08	Comp	0.00	H 32X	0.000	0.000	42.444	0.000	0.000	0.000	12.473	0	0.000	0
Horiz 17	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	6.79	Comp	0.00	H 34X	0.000	0.000	85.212	0.000	0.000	0.000	11.181	0	0.000	0
Horiz 18	L 3" x 2.5" x 0.25"	SAU	3X2.5X0.25	36.0	13.23	Comp	0.00	H 36X	0.000	0.000	42.444	0.000	0.000	0.000	10.090	0	0.000	0
Horiz 19	CBX11.5	CHN	CBX11.5	36.0	9.97	Comp												

Site #: 88008  
Name: Bethany CT, CT

Engineer: Daniel Sheek  
Date: 08/22/23

Windspeed: No Ice: 119 mph Ice: 50 mph  
Carrier: Verizon Wireless

Taper: -0.127052  
FW @ Base: 51.88 ft

Taper Change: 337.5 ft  
FW @ Top: 9 ft

Joint Label	Symmetry Code	X Coord. (ft)	Y Coord. (ft)	Z Coord. (ft)	X Disp. Rest.	Y Disp. Rest.	Z Disp. Rest.	X Rot. Rest.	Y Rot. Rest.	Z Rot. Rest.	Drop Sub-Brace (Y or Blank)	Spreadsheet Version Last Updated: 11/12/2014							
												# Vert	Drop (ft)	Height (ft)	Type	Count	Z-Elev. (ft)	FW (ft)	# Sub-Brace
0	XY-Symmetry	25.94	25.94	0	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed		3	7.030	25	1	1	0	51.88	3
1	XY-Symmetry	24.35185185	24.35185185	25	Free	Free	Free	Free	Free	Free		3	7.030	25	1	2	25	48.7037037	3
2	XY-Symmetry	22.7637037	22.7637037	50	Free	Free	Free	Free	Free	Free		3	7.030	25	1	3	50	45.52740741	3
3	XY-Symmetry	21.17555556	21.17555556	75	Free	Free	Free	Free	Free	Free			7.030	25	2	4	75	42.35111111	3
4	XY-Symmetry	19.58740741	19.58740741	100	Free	Free	Free	Free	Free	Free			7.030	25	2	5	100	39.17481481	3
5	XY-Symmetry	17.99925926	17.99925926	125	Free	Free	Free	Free	Free	Free			7.03	25	2	6	125	35.99851852	3
6	XY-Symmetry	16.41111111	16.41111111	150	Free	Free	Free	Free	Free	Free				25	A	7	150	32.82222222	2
7	XY-Symmetry	14.82296296	14.82296296	175	Free	Free	Free	Free	Free	Free				25	A	8	175	29.64592593	2
8	XY-Symmetry	13.23481481	13.23481481	200	Free	Free	Free	Free	Free	Free				25	A	9	200	26.46962963	2
9	XY-Symmetry	11.64666667	11.64666667	225	Free	Free	Free	Free	Free	Free				12.5	A	10	225	23.29333333	1
10	XY-Symmetry	10.85259259	10.85259259	237.5	Free	Free	Free	Free	Free	Free				12.5	A	11	237.5	21.70518519	1
11	XY-Symmetry	10.05851852	10.05851852	250	Free	Free	Free	Free	Free	Free				12.5	A	12	250	20.11703704	1
12	XY-Symmetry	9.264444444	9.264444444	262.5	Free	Free	Free	Free	Free	Free				12.5	A	13	262.5	18.52888889	1
13	XY-Symmetry	8.47037037	8.47037037	275	Free	Free	Free	Free	Free	Free				12.5	A	14	275	16.94074074	1
14	XY-Symmetry	7.676296296	7.676296296	287.5	Free	Free	Free	Free	Free	Free				12.5	A	15	287.5	15.35259259	1
15	XY-Symmetry	6.882222222	6.882222222	300	Free	Free	Free	Free	Free	Free				10.167	X	16	300	13.76444444	1
16	XY-Symmetry	6.236354133	6.236354133	310.167	Free	Free	Free	Free	Free	Free		1	10.167	X	17	310.167	12.47270827	1	
17	XY-Symmetry	5.590486044	5.590486044	320.334	Free	Free	Free	Free	Free	Free				8.583	X	18	320.334	11.18097209	1
18	XY-Symmetry	5.045243022	5.045243022	328.917	Free	Free	Free	Free	Free	Free				8.583	X	19	328.917	10.09048604	1
19	XY-Symmetry	4.5	4.5	337.5	Free	Free	Free	Free	Free	Free						20	337.5	9	
A1	Y-Symmetry	24.35185185	0	25	Free	Free	Free	Free	Free	Free									
A2	X-Symmetry	0	24.35185185	25	Free	Free	Free	Free	Free	Free									
A3	Y-Symmetry	22.7637037	0	50	Free	Free	Free	Free	Free	Free									
A4	X-Symmetry	0	22.7637037	50	Free	Free	Free	Free	Free	Free									
A5	Y-Symmetry	21.17555556	0	75	Free	Free	Free	Free	Free	Free									
A6	X-Symmetry	0	21.17555556	75	Free	Free	Free	Free	Free	Free									
A7	XY-Symmetry	19.58740741	6.529135802	100	Free	Free	Free	Free	Free	Free									
A8	XY-Symmetry	6.529135802	19.58740741	100	Free	Free	Free	Free	Free	Free									
A9	XY-Symmetry	17.99925926	5.999753086	125	Free	Free	Free	Free	Free	Free									
A10	XY-Symmetry	5.999753086	17.99925926	125	Free	Free	Free	Free	Free	Free									
A11	XY-Symmetry	16.41111111	5.47037037	150	Free	Free	Free	Free	Free	Free									
A12	XY-Symmetry	5.47037037	16.41111111	150	Free	Free	Free	Free	Free	Free									
A13	Y-Symmetry	14.82296296	0	175	Free	Free	Free	Free	Free	Free									
A14	X-Symmetry	0	14.82296296	175	Free	Free	Free	Free	Free	Free									
A15	Y-Symmetry	13.23481481	0	200	Free	Free	Free	Free	Free	Free									
A16	X-Symmetry	0	13.23481481	200	Free	Free	Free	Free	Free	Free									
A17	Y-Symmetry	11.64666667	0	225	Free	Free	Free	Free	Free	Free									
A18	X-Symmetry	0	11.64666667	225	Free	Free	Free	Free	Free	Free									
A19	Y-Symmetry	10.85259259	0	237.5	Free	Free	Free	Free	Free	Free									
A20	X-Symmetry	0	10.85259259	237.5	Free	Free	Free	Free	Free	Free									
A21	Y-Symmetry	10.05851852	0	250	Free	Free	Free	Free	Free	Free									
A22	X-Symmetry	0	10.05851852	250	Free	Free	Free	Free	Free	Free									
A23	Y-Symmetry	9.264444444	0	262.5	Free	Free	Free	Free	Free	Free									
A24	X-Symmetry	0	9.264444444	262.5	Free	Free	Free	Free	Free	Free									
A25	Y-Symmetry	8.47037037	0	275	Free	Free	Free	Free	Free	Free									
A26	X-Symmetry	0	8.47037037	275	Free	Free	Free	Free	Free	Free									
A27	Y-Symmetry	7.676296296	0	287.5	Free	Free	Free	Free	Free	Free									
A28	X-Symmetry	0	7.676296296	287.5	Free	Free	Free	Free	Free	Free									
A29	Y-Symmetry	6.882222222	0	300	Free	Free	Free	Free	Free	Free									
A30	X-Symmetry	0	6.882222222	300	Free	Free	Free	Free	Free	Free									
H1	XY-Symmetry	24.79843911	12.17592593	17.97	Free	Free	Free	Free	Free	Free									
H2	XY-Symmetry	12.17592593	24.79843911	17.97	Free	Free	Free	Free	Free	Free									
H5	XY-Symmetry	23.21029096	11.38185185	42.97	Free	Free	Free	Free	Free	Free									
H6	XY-Symmetry	11.38185185	23.21029096	42.97	Free	Free	Free	Free	Free	Free									
H9	XY-Symmetry	21.62214281	10.58777778	67.97	Free	Free	Free	Free	Free	Free									
H10	XY-Symmetry	10.58777778	21.62214281	67.97	Free	Free	Free	Free	Free	Free									
H13	XY-Symmetry	20.03399467	10.64770904	92.97	Free	Free	Free	Free	Free	Free									
H14	XY-Symmetry	10.64770904	20.03399467	92.97	Free	Free	Free	Free	Free	Free									
H15	Y-Symmetry	20.03399467	0	92.97	Free	Free	Free	Free	Free	Free									
H16	X-Symmetry	0	20.03399467	92.97	Free	Free	Free	Free	Free	Free									
H17	XY-Symmetry	18.44584652	9.820601481	117.97	Free	Free	Free	Free	Free	Free									
H18	XY-Symmetry	9.820601481	18.44584652	117.97	Free	Free	Free	Free	Free	Free									
H19	Y-Symmetry	18.44584652	0	117.97	Free	Free	Free	Free	Free	Free									
H20	X-Symmetry	0	18.44584652	117.97	Free	Free	Free	Free	Free	Free									
H21	XY-Symmetry	16.85769837	8.993493926	142.97	Free	Free	Free	Free	Free	Free									
H22	XY-Symmetry	8.993493926	16.85769837	142.97	Free	Free	Free	Free	Free	Free									
H23	Y-Symmetry	16.85769837	0	142.97	Free	Free	Free	Free	Free	Free									
H24	X-Symmetry	0	16.85769837	142.97	Free	Free	Free	Free	Free	Free									

NOTES  
Types:  
1: Built up Horiz. w/ A  
2: Built up Horiz. w/ M  
A: Typical A brace  
X: Typical X brace  
Drop: Use only for types 1 & 2  
# Sections: 19

**Legs**

Site No.:	88008
Engineer:	Daniel.Sheek
Date:	08/22/2023
Carrier:	Verizon Wireless

When inputting thickness values, include all decimal places.

Tower Section #	Section Elevations (ft)	Type of Shape <sup>[1]</sup>	Diameter or Length (in)	Thickness <sup>[2]</sup> (in)	F <sub>y</sub> (ksi)
1	0.000-25.00	L	8	1.125	36
2	25.00-50.00	L	8	1.125	36
3	50.00-75.00	L	8	1.125	36
4	75.00-100.0	L	8	1.125	36
5	100.0-125.0	L	8	1	36
6	125.0-150.0	L	8	1	36
7	150.0-175.0	L	8	0.875	36
8	175.0-200.0	L	8	0.75	36
9	200.0-225.0	L	8	0.75	36
10	225.0-237.5	L	6	0.875	36
11	237.5-250.0	L	6	0.75	36
12	250.0-262.5	L	6	0.75	36
13	262.5-275.0	L	6	0.5625	36
14	275.0-287.5	L	6	0.5625	36
15	287.5-300.0	L	6	0.4375	36
16	300.0-310.2	L	5	0.4375	36
17	310.2-320.3	L	5	0.4375	36
18	320.3-328.9	L	5	0.3125	36
19	328.9-337.5	L	5	0.3125	36

**Notes:**

<sup>[1]</sup> Type of Leg Shape: **R** = Round or **P** = Bent Plate or **S** = Schifferized Angle. **L** = Even Leg

<sup>[2]</sup> For Solid Round Leg Shapes Thickness Equals Zero.

<sup>[3]</sup> Adjust for Bent Plate Leg Shapes.

**Diagonals**

Site No.:	88008
Engineer:	Daniel.Sheek
Date:	08/22/2023
Carrier:	Verizon Wireless

When inputting thickness values, include all decimal places.

Tower Section #	Section Elevations (ft)	Type of Shape <sup>[1]</sup>	Diameter <sup>[2]</sup> (in)	Web Length <sup>[3]</sup> (in)	Flange Length <sup>[3]</sup> (in)	Thickness (in)	F <sub>y</sub> (ksi)	Is Diag. Tension Only? (Y/N)
1	0.000-25.00	2L		3	4	0.375	36	
2	25.00-50.00	2L		3	4	0.25	36	
3	50.00-75.00	2L		3	4	0.25	36	
4	75.00-100.0	2L		3	3.5	0.25	36	
5	100.0-125.0	2L		3	3.5	0.25	36	
6	125.0-150.0	2L		2.5	3.5	0.25	36	
7	150.0-175.0	2L		3	3	0.375	36	
8	175.0-200.0	2L		2.5	3	0.25	36	
9	200.0-225.0	2L		2.5	3	0.25	36	
10	225.0-237.5	2L		2.5	2.5	0.25	36	
11	237.5-250.0	2L		2.5	2.5	0.25	36	
12	250.0-262.5	2L		2.5	2.5	0.25	36	
13	262.5-275.0	2L		2.5	2	0.25	36	
14	275.0-287.5	2L		2.5	2	0.25	36	
15	287.5-300.0	2L		2.5	2	0.25	36	
16	300.0-310.2	L		3.5	3.5	0.25	36	Y
17	310.2-320.3	L		3.5	3.5	0.25	36	Y
18	320.3-328.9	L		3	3	0.25	36	Y
19	328.9-337.5	L		3	3	0.25	36	Y

**Notes:**

- <sup>[1]</sup> Type of Diagonal Shape: **R** = Round, **L** = Single-Angle or **2L** = Double-Angle.
- <sup>[2]</sup> Applies to Pipes and Solid Round Shapes only. For Solid Round Shapes Thickness Equals Zero.
- <sup>[3]</sup> Applies to Single-Angle and Double-Angle Shapes only.
- <sup>[4]</sup> Applies to Double-Angle Shapes only.
- <sup>[5]</sup> Applies to Single-Angle Shapes only.

**Horizontals**

<b>Site No.:</b>	88008
<b>Engineer:</b>	Daniel.Sheek
<b>Date:</b>	08/22/2023
<b>Carrier:</b>	Verizon Wireless

When inputting thickness values, include all decimal places.

Tower Section #	Section Elevations (ft)	Type of Shape <sup>[1]</sup>	Diameter <sup>[2]</sup> (in)	Web Length <sup>[3]</sup> (in)	Flange Length <sup>[3]</sup> (in)	Thickness (in)	F <sub>y</sub> (ksi)	B/B Spacing (in.)
1	0.000-25.00	2L		4	3	0.25	36	
2	25.00-50.00	2L		3.5	2.5	0.25	36	
3	50.00-75.00	2L		3	2.5	0.25	36	
4	75.00-100.0	2L		3.5	2.5	0.25	36	
5	100.0-125.0	2L		3.5	2.5	0.25	36	
6	125.0-150.0	2L		3	2.5	0.25	36	
7	150.0-175.0	2L		3	2.5	0.25	36	
8	175.0-200.0	2L		3	2.5	0.25	36	
9	200.0-225.0	2L		2.5	2.5	0.25	36	
10	225.0-237.5	2L		2.5	2.5	0.25	36	
11	237.5-250.0	2L		2.5	2.5	0.25	36	
12	250.0-262.5	2L		2.5	2.5	0.25	36	
13	262.5-275.0	2L		2.5	2.5	0.25	36	
14	275.0-287.5	2L		2.5	2.5	0.25	36	
15	287.5-300.0	2L		2.5	2.5	0.25	36	
16	300.0-310.2	L		3	2.5	0.25	36	
17	310.2-320.3	2L		3	2.5	0.25	36	
18	320.3-328.9	L		3	2.5	0.25	36	
19	328.9-337.5	C		8	11.5		36	

**Notes:**

<sup>[1]</sup> Type of Horizontal Shape: **R** = Round, **L** = Single-Angle, **2L** = Double-Angle, **C** = Channel, **W** = W Shape

<sup>[2]</sup> Applies to Pipes and Solid Round Shapes only. For Solid Round Shapes Thickness Equals Zero.

<sup>[3]</sup> Applies to Single-Angle and Double-Angle Shapes only.

<sup>[4]</sup> Applies to Double-Angle Shapes only.

<sup>[5]</sup> Applies to Single-Angle Shapes only.

## Built-up Diagonals

Site No.:	88008
Engineer:	Daniel.Sheek
Date:	08/22/2023
Carrier:	Verizon Wireless

When inputting thickness values, include all decimal places.

Input diags. from left to center & from base section upward.

Tower Built-up Diag. #	Section Elevations (ft)	Type of Shape <sup>[1]</sup>	Diameter <sup>[2]</sup> (in)	Web Length <sup>[3]</sup> (in)	Flange Length <sup>[3]</sup> (in)	Thickness (in)	F <sub>y</sub> (ksi)
1	0.000-25.00	2L		3	2.5	0.3125	36
2	0.000-25.00	2L		4	3	0.3125	36
3	25.00-50.00	2L		3	2	0.25	36
4	25.00-50.00	2L		4	3	0.25	36
5	50.00-75.00	2L		2.5	2.5	0.375	36
6	50.00-75.00	2L		3.5	3	0.25	36
7	75.00-100.0	2L		3	3	0.25	36
8	75.00-100.0	2L		2.5	2	0.25	36
9	75.00-100.0	2L		3	2	0.25	36
10	100.0-125.0	2L		2.5	2	0.25	36
11	100.0-125.0	2L		2.5	2	0.25	36
12	100.0-125.0	2L		3	3	0.25	36
13	125.0-150.0	2L		2.5	2	0.25	36
14	125.0-150.0	2L		2.5	2	0.25	36
15	125.0-150.0	2L		2.5	2	0.25	36

### Notes:

<sup>[1]</sup> Type of Diagonal Shape: **R** = Round, **L** = Single-Angle or **2L** = Double-Angle.

<sup>[2]</sup> Applies to Pipes and Solid Round Shapes only. For Solid Round Shapes Thickness Equals Zero.

<sup>[3]</sup> Applies to Single-Angle and Double-Angle Shapes only.

<sup>[4]</sup> Applies to Double-Angle Shapes only.

<sup>[5]</sup> Applies to Single-Angle Shapes only.

**Built-up Horizontals**

Site No.:	88008
Engineer:	Daniel.Sheek
Date:	08/22/2023
Carrier:	Verizon Wireless

When inputting thickness values, include all decimal places.

Tower Section #	Section Elevations (ft)	Type of Shape <sup>[1]</sup>	Diameter <sup>[2]</sup> (in)	Web Length <sup>[3]</sup> (in)	Flange Length <sup>[3]</sup> (in)	Thickness (in)	F <sub>y</sub> (ksi)	Is Horiz. Tension Only? (Y/N)
1	0.000-25.00	2L		2.5	3	0.25	36	Y
2	25.00-50.00	2L		2.5	3	0.25	36	Y
3	50.00-75.00	2L		2.5	3	0.25	36	Y
4	75.00-100.0	2L		3	3	0.375	36	
5	100.0-125.0	2L		2.5	3	0.25	36	
6	125.0-150.0	2L		2.5	3	0.25	36	

**Notes:**

- <sup>[1]</sup> Type of Horizontal Shape: R = Round, L = Single-Angle or 2L = Double-Angle.
- <sup>[2]</sup> Applies to Pipes and Solid Round Shapes only. For Solid Round Shapes Thickness Equals Zero.
- <sup>[3]</sup> Applies to Single-Angle and Double-Angle Shapes only.
- <sup>[4]</sup> Applies to Double-Angle Shapes only.
- <sup>[5]</sup> Applies to Single-Angle Shapes only.



Site No.:	88008
Engineer:	Daniel Sheek
Date:	08/22/13
Carrier:	Verizon Wireless

Tia Code:	TIA-222-H
Exposure:	B
Topo Cat:	1
Ke	0.977806
$\alpha$	7 K <sub>z,max</sub> 2.01
Z <sub>e</sub>	1200 K <sub>z,max</sub> 0.7
K <sub>e</sub>	0.9 K <sub>e</sub>

Site No.:	88008
Engineer:	Daniel Sheek
Date:	08/22/13
Carrier:	Verizon Wireless

Description	From (ft)	To (ft)	Quantity	Shape	Width or Diameter** (in)	Perimeter (in)	Unit Weight (lb/ft)	In Face Zone? (Yes/No)	Include in Wind Load (Yes/No)
1 Climbing Ladder	0	337.5	1	Flat	2.000	8.0	6	No	Yes
2 US Dept	0	337.5	2	Round	1.090	3.4	0.33	Yes	Yes
3 US Dept	0	337.5	1	Round	0.630	2.0	0.15	Yes	Yes
4 Ligado	0	319	1	Round	1.980	6.2	0.82	Yes	Yes
5 US Dept	0	310	2	Round	1.090	3.4	0.33	Yes	Yes
6 US Dept	0	275	1	Round	1.090	3.4	0.33	Yes	Yes
7 Sprint	0	240	4	Round	1.540	4.8	1	No	Yes
8 TMO	0	220	3	Round	1.990	6.3	1.9	Yes	Yes
9 TMO	0	220	3	Round	1.250	3.9	1.05	Yes	Yes
10 US Dept	0	194	1	Round	1.550	4.9	0.63	Yes	Yes
11 Verizon	0	180	1	Flat	8.190	43.7	9.84	Yes	Yes
12 ATT	0	165	6	Round	1.980	6.2	0.82	Yes	Yes
13 ATT	0	165	1	Round	0.390	1.2	0.17	Yes	Yes
14 ATT	0	165	2	Round	0.780	2.5	0.59	Yes	Yes
15 ATT	0	165	1	Round	3.500	11.0	7.58	Yes	Yes
16 Metro	0	100	6	Round	1.980	6.2	0.82	Yes	Yes
17 Sprint	0	48	1	Round	0.630	2.0	0.15	No	Yes
18 Coax Cage	12.5	32.5	2	Flat	12.000	48.0	25	Yes	Yes
19 Coax Cage	12.5	32.5	2	Flat	12.000	48.0	25	Yes	Yes
20 Waive Guide	0	180	1	Flat	2.000	8.0	2	Yes	Yes
21 Waive Guide	0	165	1	Flat	2.000	8.0	2	Yes	Yes
22 Waive Guide	0	100	1	Flat	2.000	8.0	2	Yes	Yes
23 Sigfox	0	147	1	Flat	0.630	2.5	0.15	No	Yes
24 Sprint	0	204.8	1	Flat	1.980	25.8	4.92	No	Yes
25 Verizon	0	180	1	Round	1.980	10.2	1.64	Yes	Yes
26 Dish	0	140	1	Round	2.000	5.0	2.34	No	Yes
27 US Dept	0	213	1	Round	2.000	4.9	0.63	Yes	Yes
28 Sprint Nextel	0	253	12	Round	2.000	6.2	0.82	No	Yes

Description	From (ft)	To (ft)	Quantity	Face # (1-4, A-D)	Coax Width (in)	Coax Shape (Block / Flat / Ind)	% Exposed	Spacing (in)	Shape (Round/Flat)	Block Width (# coax)	Block Depth (# coax)	Perimeter (in)	Unit Weight (lb/ft)	In Face Zone? (Yes/No)	Include in Wind Load (Yes/No)
Climbing Ladder	0	337.5	1	B	2.00	Flat	100		Flat	1	1	8.0	6	No	Yes
US Dept	0	337.5	2	2	1.09	Ind	100		Round	2	1	3.4	0.33	Yes	Yes
US Dept	0	337.5	1	2	0.63	Ind	100		Round	1	1	2.0	0.15	Yes	Yes
Ligado	0	319	1	4	1.98	Ind	100		Round	1	1	6.2	0.82	Yes	Yes
US Dept	0	310	2	2	1.09	Ind	100		Round	2	1	3.4	0.33	Yes	Yes
Sprint	0	240	4	B	1.54	Ind	100		Round	4	1	4.8	1	No	Yes
TMO	0	220	3	1	1.99	Ind	100		Round	3	1	6.3	1.9	Yes	Yes
TMO	0	220	3	1	1.25	Ind	100		Round	3	1	3.9	1.05	Yes	Yes
US Dept	0	194	1	4	1.55	Ind	100		Round	1	1	4.9	0.63	Yes	Yes
Verizon	0	180	12	4	1.98	Block	50	1	Flat	6	2	43.7	9.84	Yes	Yes
ATT	0	165	6	2	1.98	Ind	100		Round	6	1	6.2	0.82	Yes	Yes
ATT	0	165	1	2	0.39	Ind	100		Round	1	1	1.2	0.17	Yes	Yes
ATT	0	165	2	2	0.78	Ind	100		Round	2	1	2.5	0.59	Yes	Yes
Metro	0	100	6	1	1.98	Ind	100		Round	6	1	6.2	0.82	Yes	Yes
Sprint	0	48	1	B	0.63	Ind	100		Round	1	1	2.0	0.15	No	Yes
Coax Cage	12.5	32.5	2	1	12.00	Flat	100		Flat	2	1	48.0	25	Yes	Yes
Coax Cage	12.5	32.5	2	3	12.00	Flat	100		Flat	2	1	48.0	25	Yes	Yes
Waive Guide	0	180	1	4	2.00	Flat	100		Flat	1	1	8.0	2	Yes	Yes
Waive Guide	0	165	1	2	2.00	Flat	100		Flat	1	1	8.0	2	Yes	Yes
Waive Guide	0	100	1	1	2.00	Flat	100		Flat	1	1	8.0	2	Yes	Yes
Sigfox	0	147	1	C	0.63	Flat	100		Flat	1	1	2.5	0.15	No	Yes
Sprint	0	204.8	6	B	1.98	Block	50	1	Flat	3	2	35.8	4.92	No	Yes
Verizon	0	180	2	4	1.98	Ind	0		Round	1	1	10.2	1.64	No	Yes
Dish	0	140	1	B	1.60	Ind	100		Round	1	1	5.0	2.34	No	Yes
US Dept	0	213	1	4	1.55	Ind	100		Round	1	1	4.9	0.63	Yes	Yes
Sprint Nextel	0	253	12	B	1.98	Ind	100		Round	12	1	6.2	0.82	No	Yes

\*\*Note: Actual block width multiplied by 0.75 (1/4 block area factor) divided by 2.0 ft

Fac

Task: Determine Point Loads	
Tower Height:	337.5 ft
Wind Speed:	119 mph/Vult
Ice Wind Speed:	50
Ice Density:	56
Tower Type:	S

Ice Thick	1 in
Topographic Category (1-4)	1
Exposure Category (B-D)	8
Risk Category (1-4)	2
Height of Crest (H) if Topo Cat. >1	0 ft
Load Factor: Wind	1
Load Factor: Dead	1.2

Roof/Slope Up Factor (Ks)	1
Ground Elevation (AMS)	620 ft
Topographic Factor Procedure	Method 1

Site No.	
Engineer	
Date	
Carrier	

No.	Carrier	Elevation (ft)	Quantity	# of Azimuths	Proposed?	Manufacturer	Model	Height (ft)	Width (ft)	Depth (ft)	Weight (lb/ft)	Flat/Round (F/R)	Reduction	C <sub>d</sub> A <sub>e</sub> (ft <sup>2</sup> )	Weight (lb)	Ka	
1	US Dept	338	1	1				0.001	0.001	0.001	0.001	F	0.001	20.76	0.09	1	
2	US Dept	338	1	1		Rohde & Schwarz	AD090	0.001	0.001	0.001	0.001	F	0.001	70.00	6.00	1	
3	Ligado	319	1	1			Platform	0.001	0.001	0.001	0.001	F	0.001	1.73	0.02	1	
4	Ligado	319	1	1		Kathrein Scala	750 10074	0.001	0.001	0.001	0.001	F	0.001	5.20	0.15	1	
5	US Dept	310	1	1			Side Arm	0.001	0.001	0.001	0.001	F	0.001	6.00	0.05	1	
6	US Dept	310	1	1		Sinclair	SC381-HL (1607)	0.001	0.001	0.001	0.001	F	0.001	10.46	0.08	1	
7	US Dept	310	1	1			SC281-L	0.001	0.001	0.001	0.001	F	0.001	14.90	0.30	1	
8	Unknown	287	1	1			Sector Frame	0.001	0.001	0.001	0.001	F	0.001	2.40	0.03	1	
9	US Dept	275	1	1		Generic	8' Omni	0.001	0.001	0.001	0.001	F	0.001	10.46	0.08	1	
10	US Dept	275	1	1		Sinclair	SC281-L	0.001	0.001	0.001	0.001	F	0.001	14.90	0.30	1	
11	US Dept	275	1	1			Sector Frame	0.001	0.001	0.001	0.001	F	0.001	2.40	0.03	1	
12	Unknown	262	1	1			8' Omni	48	6.5	8	14	F	0.730	0.00	0.00	1	
13	Sprint	253	12	3		Decibel	DB844H90E-XY	231	3.5	3.5	51	F	1.000	5.20	0.15	1	
14	US Dept	222	3	3	Proposed	Ericsson	Radio 4449 871,885A	15	13.2	10.5	75	F	0.500	0.00	0.00	1	
15	T-MOBILE	222	3	3	Proposed	Ericsson	4460 BAND 2/25	19.6	15.7	12.1	109	F	0.670	0.00	0.00	1	
16	T-MOBILE	222	1	1	Proposed	Ericsson	AIR 6419 B41	36.3	20.9	9	83.3	F	0.630	0.00	0.00	1	
17	T-MOBILE	222	3	3		RFS	APXVAARR24_43-U-NAZ0	95.9	24	8.7	127.9	F	0.750	17.90	0.30	0.75	
18	ATT	165	3	3		Powerwave Alligon	PV-SFA-B Sector Frames	4	6	3	5.5	F	0.500	0.00	0.00	1	
19	ATT	165	1	1			LG221901	10.3	10.3	6.2	16	F	0.500	0.00	0.00	1	
20	ATT	165	6	1		Powerwave Alligon	LG221401	14.4	9.2	2.6	14.1	F	0.500	0.00	0.00	1	
21	ATT	165	1	1			Raycap	FC12-PC6-10E	15.5	16.3	6.6	25	F	0.500	0.00	0.00	1
22	ATT	165	3	3		Ericsson	RRUS 11 (Band 12)	17.8	17.3	7.2	50	F	0.500	0.00	0.00	1	
23	ATT	165	3	3		Powerwave Alligon	7770	55	11	5	35	F	0.650	0.00	0.00	1	
24	ATT	165	1	1		KMW	AM-X-CD-16-65-00T-RET	72	11.8	5.9	48.5	F	0.670	0.00	0.00	1	
25	ATT	165	2	2		Andrew	SBNH-1D0265C (60.8 lbs)	96.4	11.9	7.1	60.8	F	0.700	0.00	0.00	1	
26	Metro	100	3	3		RFS	APXV18-2065175-C	72	6.8	3.2	26.4	F	0.680	14.40	0.30	0.75	
27	Metro	100	1	1		PCTEL	GPS-TMG-HR-26N	5	3.2	3.2	0.6	F	1.000	0.00	0.00	1	
28	Sprint	48	1	1			Access Platform	0.001	0.001	0.001	0.001	F	0.001	30.00	5.00	1	
29	-	287.5	1	1			Rest Platform	0.001	0.001	0.001	0.001	F	1.000	15.00	0.50	1	
30	-	237	1	1			Catwalk	0.001	0.001	0.001	0.001	F	1.000	10.00	0.50	1	
31	-	200	1	1			Rest Platform	0.001	0.001	0.001	0.001	F	1.000	10.00	0.50	1	
32	-	150	1	1			Rest Platform	0.001	0.001	0.001	0.001	F	1.000	10.00	0.50	1	
33	-	125	1	1			Catwalk	0.001	0.001	0.001	0.001	F	1.000	70.00	8.00	1	
34	SIGFOX S.A.	147	1	1		Procom	CKL 900-3LW	27.6	0.6	0.6	1.5	R	1.000	0.00	0.00	1	
35	SIGFOX S.A.	147	1	1		Generic	5" x 3" x 2" Cavity Filter	5.3	3.2	1.9	1.5	F	1.000	0.00	0.00	1	
36	SIGFOX S.A.	147	1	1		Generic	Low Noise Amplifier	5	4	2	2	F	1.000	0.00	0.00	1	
37	SIGFOX S.A.	147	1	1			Side Arm	72	11.8	7	57	F	0.680	6.30	0.15	1	
38	Sprint	240	3	3		Alcatel-Lucent	1900 MHz A445 RRH	25.1	11.1	10.7	60	F	0.500	0.00	0.00	1	
39	Sprint	240	3	3			TD-RRH420-25	19	13	12.2	64	F	0.500	8.00	0.20	1	
40	Sprint	240	3	3		RFS	APXV18-2065175-C	56.3	12.6	6.3	56.2	F	0.650	12.27	0.08	1	
41	Sprint	240	3	3		Commscope	NNV-65B-84	5	3.2	3.2	0.6	F	1.000	0.00	0.00	1	
42	VERIZON WIRELESS	180	3	3		Samsung	Outdoor CBS 20W RRH - Clip-on Antenna	12.3	8.7	1.4	4.4	F	0.500	17.60	0.40	0.75	
43	VERIZON WIRELESS	180	3	3		Samsung	RT4401-48A	13.9	8.6	4.2	18.6	F	0.500	9.87	0.06	0.8	
44	VERIZON WIRELESS	180	6	3		JMA Wireless	MN08FR060-03	15	15	8.1	70.3	F	0.600	4.71	0.08	0.8	
45	VERIZON WIRELESS	180	3	3		Samsung	85/813 RRH-RR04C	15	15	10	84.4	F	0.630	0.96	0.02	0.75	
46	VERIZON WIRELESS	180	6	3		Andrew	BZ/866A RRH-RR049	48	6.5	8	14	F	0.670	0.00	0.00	0.8	
47	VERIZON WIRELESS	180	1	1		Raycap	RCMCD-6627-PF-48	29.5	16.5	12.6	32	F	0.670	0.00	0.00	0.8	
48	VERIZON WIRELESS	140	1	1		Commscope	RDIC-9181-PF-48	16	14	8	21.9	F	1.000	1.96	0.06	0.8	
49	DISH WIRELESS	140	3	3		Fujitsu	TAD8025-B604	15.7	15	9.1	75	F	0.500	12.49	0.06	0.8	
50	DISH WIRELESS	140	1	1		JMA Wireless	MX08FR065-21	0.001	0.001	0.001	0.001	F	0.001	17.60	0.40	0.75	

No.	Elevation (ft)	C <sub>d</sub> A <sub>e</sub> (ft <sup>2</sup> )	C <sub>d</sub> A <sub>e</sub> (Ice) (ft <sup>2</sup> )	Force (lb)	Force (Ice) (lb)	Weight (lb)	Weight (Ice) (lb)	60 Azl Mult.	Force mean	F (Ice) mean	Height Flag	Sum of Forces (No 1)
1	338	0.00	0.00	0.000	0.000	0.000	0.000	1.00	0.00	0.00	0.000010	744.0967354
2	338	20.76	0.00	744.097	177.341	108	140	409.25	97.54	1.00	1.5029586	3253.093435
3	338	0.00	0.00	0.000	0.000	0	0	1.00	0.00	0.00	0.000020	
4	319	70.00	94.50	597.971	2508.997	7200	9360	1.00	1379.95	328.88	1.5029586	6099.49672
5	319	0.00	0.00	0.000	0.000	0	0	1.00	0.00	0.00	1.5031348	244.3185389
6	310	0.00	8.10	0.000	0.000	0	0	1.00	0.00	0.00	1.5031358	209.806061
7	310	10.46	14.12	365.766	87.173	96	125	1.00	201.17	47.95	1.5031358	575.5749428
8	287	0.00	0.00	0.000	0.000	0	0	1.00	0.00	0.00	1.5032258	1096.599648
9	287	4.80	6.48	164.190	30.132	72	94	1.00	90.30	21.52	1.5032258	164.1903502
10	275	10.46	14.12	353.458	84.240	96	125	1.00	194.40	46.33	1.5034853	353.4583974
11	275	0.00	0.00	0.000	0.000	0	0	1.00	0.00	0.00	1.5034863	
12	275	14.90	20.12	353.458	124.176	360	468	1.00	276.92	66.00	1.5034863	856.9507609
13	262	0.00	0.00	0.000	0.000	0	0	1.00	0.00	0.00	1.5036374	
14	262	2.40	3.24	79.985	19.663	36	47	1.00	43.99	10.48	1.5038168	79.9850261
15	253	32.70	42.58	1079.099	248.054	202	325	1.00	593.50	136.43	1.5039526	1079.09874
16	253	0.00	0.00	0.000	0.000	0	0	1.00	0.00	0.00	1.5039526	
17	213	11.23	17.80	352.739	98.705	61	283	1.00	194.01	54.29	1.5039536	
18	213	5.20	7.02	163.346	38.930	180	234	1.00	89.34	21.41	1.5046948	516.0850421
19	222	1.98	3.01	62.937	16.917	270	364	1.00	34.62	9.90	1.5046958	
20	222	0.00	0.00	0.000	0.000	1	2	1.00	0.00	0.00	1.5049495	62.93705179
21	222	4.12	5.88	131.069	33.540	392	532	1.00	72.09	18.45	1.5045055	
22	222	0.00	0.00	0.000	0.000	1	2	1.00	0.00	0.00	1.5045045	194.005428
23	222	0.00	0.00	0.000	0.000	300	468	1.00	167.12	39.79	1.5045045	497.8602134
24	222	30.61	37.42	972.879	209.972	460	932	1.00	535.08	115.48	1.5045045	2190.849909
25	222	30.21	40.78	720.110	171.624	1080	1404	1.00	396.06	94.39	1.5045045	77.9869824
26	165	0.00	0.00	0.000	0.000	0	0	1.00	0.00	0.00	1.5060616	
27	165	1.06	1.77	30.981	9.100	58	89	1.00	17.04	5.00	1.5060616	139.9583615
28	165	0.00	0.00	0.000	0.000	1	2	1.00	0.00	0.00	1.5060616	
29	165	0.00	0.00	0.000	0.000	102	144	1.00	42.62	12.15	1.5060616	229.8848239
30	165	0.00	0.00	0.000	0.000	1	2	1.00	0.00	0.00	1.5060616	
31	165	0.84	1.25	24.993	6.421	30	78	1.00	13.33	3.53	1.5060616	
32	165	0.00	0.00	0.000	0.000	1	2	1.00	0.00	0.00	1.5060616	
33	165	3.08	4.46	89.926	22.985	180	267	1.00	49.46	12.44	1.5060616	480.8296765
34	165	0.00	0.00	0.000	0.000	1	2	1.00	0.00	0.00	1.5060616	
35	165	8.59	11.24	250.945	57.940	126	256	1.00	138.02	31.87	1.5060616	229.8848239
36	165	0.00	0.00	0.000	0.000	1						

**Site Name:** Bethany CT  
**Site Number:** 88008  
**Tower Type:** SST  
**Design Loads (Factored) - Analysis per TIA-222-H Standards**

## Mat & Pier Foundation Analysis

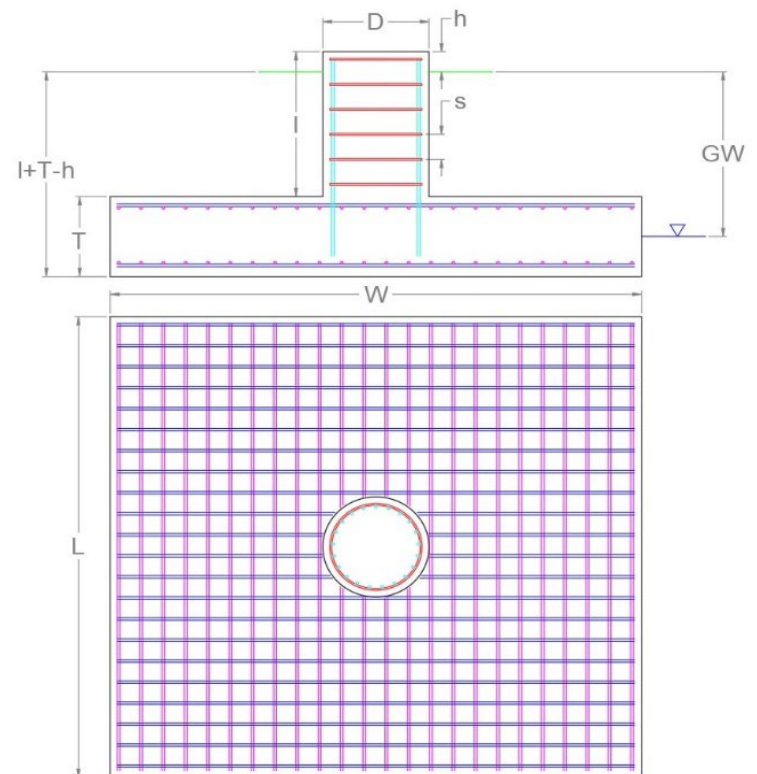
Foundation Analysis Parameters		
Design / Analysis / Mapping:	Mapping	-
Compression/Leg:	342.4	k
Uplift/Leg:	210.7	k
Shear/Leg:	51.5	k
Global Moment:		k-ft
Global Axial:		k
Depth to Base of Foundation (l + t - h):	9.25	ft
Diameter of Pier (d):	4.08	ft
Length of Pier (l):	7.25	ft
Height of Pier above Ground (h):	0.5	ft
Pier Shape:	Square	
If Square: Pier Taper:	Pyramidal	
Pier Width at Base:	7.583	ft
Width of Pad (W):	21.583	ft
Length of Pad (L):	21.583	ft
Thickness of Pad (t):	2.5	ft
Tower Leg Center to Center:	51.88	ft
Number of Connection to Tower:	1	-
Tower Center from Mat Center:	0	ft
<hr/>		
Depth Below Ground Surface to Water Table:	99	ft
Unit Weight of Soil Above Water Table:	131	pcf
Angle of Uplift:	15	°
Coefficient of Shear Friction:	0.3	-
Ultimate Compressive Bearing Pressure:	48,200	psf
Bearing Pressure Type:	Net	-
Ultimate Passive Pressure on Pad Face:	1,048	psf
Ultimate Skin Friction:	0	psf
Soil Type:	Rock	-
$\Phi_{\text{Soil and Concrete Weight}}$ :	1.2	-
$\Phi_{\text{Soil}}$ :	0.75	-

Overturning Moment Usage		
Design OTM:	502.4	k-ft
OTM Resistance:	5487.3	k-ft
$M_u / \Phi_s M_n$ :	9.2%	Pass

Soil Bearing Pressure Usage		
Applied Bearing Pressure:	1168.1	psf
Factored Nominal Bearing Pressure:	36150.0	psf
$P_u / \Phi_s P_n$ :	3.2%	Pass
Load Direction Controlling Design Bearing Pressure:	<i>Parallel to Pad Edge</i>	

Sliding Factor of Safety		
Ultimate Friction Resistance:	151.0	k
Ultimate Passive Pressure Resistance:	56.5	k
Total Factored Sliding Resistance:	155.7	k
$V_u / \Phi_s V_n$ :	33.1%	Pass

Uplift and Pullout Usage		
Applied Uplift Force:	210.7	k
Ultimate Skin Friction Resistance:	0.0	k
Factored Uplift Capacity per Leg ( $\Phi_s T_n$ ):	432.2	k
$T_u / \Phi_s T_n$ :	49%	Pass



Site Number  
 Site Name  
 TIA Revision  
 Date

Bethany CT, CT  
 88008  
 ANSI/TIA-222-H  
 8/22/2023

## SST Anchor Rod Interaction Check

Reactions & Layout			
Uplift	$T_u$	210.7	k
Axial	$P_u$	342.4	k
Shear	$V_u$	51.5	k
Rod Quantity	$n$	6	
Rod Diameter	$d$	2 1/4	in
Rod Grade		A36	
Rod $F_y$	$F_y$	36	ksi
Rod $F_u$	$F_u$	58	ksi
Clear Distance		0	in
Grouted? (Type c)		No	

Rod Properties			
Threads per Inch	$n^b$	4.5	
Net Area	$A_n$	3.25	in <sup>2</sup>
Gross Area	$A_g$	3.98	in <sup>2</sup>

Tension			
Tension Reduction Factor	$\Phi_t$	0.75	
Nominal Tensile Strength	$R_{nt}$	188.37	k

[ANSI/TIA-222-H, 4.9.6.5]

Shear			
Shear Reduction Factor	$\Phi_v$	0.75	
Nominal Shear Strength	$R_{nv}$	115.31	k
Compression Reduction Factor	$\Phi_c$	0.90	
Nominal Shear Yielding Strength	$R_{nvc}$	64.41	k

[ANSI/TIA-222-H, 4.9.6.3]

Flexure			
Flexure Reduction Factor	$\Phi_f$	0.90	
Plastic Section Modulus	$Z$	1.90	in <sup>3</sup>
Nominal Flexural Strength	$M_n$	68.34	k-in

[ANSI/TIA-222-H, 4.7.1]

Compression			
Radius of Gyration	$r$	0.56	ksi
Effective Yield Strss	$F_y'$	36.00	ksi
$\lambda_c$		-0.03	k-in
Critical Compression Stress	$F_{cr}$	35.99	k
Nominal Compression Yielding Strength	$R_{nc}$	143.14	k
Nominal Buckling Strength	$R_{nb}$	143.09	k
Anchor Rod Projection to Nut	$l_{ar}$	-2.16	in

[ANSI/TIA-222-H, 4.5.4.2]

Tensile Interaction Result	7.2%	Pass
Compressive Interaction Result	46.5%	Pass

# EXHIBIT 4







Colliers Engineering & Design CT, P.C.  
1055 Washington Boulevard  
Stamford, CT 06901  
203.324.0800  
peter.albano@collierseng.com

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## Antenna Mount Analysis Report with Hardware Upgrades and PMI Requirements

Mount ReAnalysis

SMART Tool Project #: 10208048  
Colliers Engineering & Design CT, P.C. Project #: 23777203  
August 2, 2023

### Site Information

Site ID: 5000382257-VZW / BETHANY CT  
Site Name: BETHANY CT  
Carrier Name: Verizon Wireless  
Address: 93 Old Amity Rd.  
Bethany, Connecticut 06524  
New Haven County  
Latitude: 41.404758°  
Longitude: -72.999983°

### Structure Information

Tower Type: 300-Ft Self Support  
Mount Type: 14.00-Ft T-Frame

FUZE ID # 17136781

### Analysis Results

T-Frame: 84.2% **Pass w/ Hardware Upgrades\***

**\* 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](mailto:pmisupport@colliersengineering.com)**

Report Prepared By: Ismaias Recinos

**Executive Summary:**

The objective of this report is to determine the capacity of the antenna support mount at the subject facility for the final wireless telecommunications configuration, per the applicable codes and standards. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

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: 323439, dated March 18, 2021 Filter Add Scope Provided by Verizon Wireless
Mount Mapping	Hudson Design Group, LLC Site ID: 469372, dated May 5, 2021
Previous Mount Analysis	Maser Consulting Project #: 21777876A, dated July 13, 2021

**Analysis Criteria:**

Codes and Standards: ANSI/TIA-222-H  
 2022 Connecticut State Building Code (CSBC), Effective October 1, 2022

Wind Parameters: Basic Wind Speed (Ultimate 3-sec. Gust),  $V_{ULT}$ : 120 mph  
 Ice Wind Speed (3-sec. Gust): 50 mph  
 Design Ice Thickness: 1.00 in  
 Risk Category: II  
 Exposure Category: B  
 Topographic Feature Considered: N/A  
 Topographic Method: N/A  
 Ground Elevation Factor,  $K_e$ : 0.978

Seismic Parameters:  $S_s$ : 0.199  
 $S_1$ : 0.054

Maintenance Parameters: Wind Speed (3-sec. Gust): 30 mph  
 Maintenance Live Load,  $L_v$ : 250 lbs.  
 Maintenance Live Load,  $L_m$ : 500 lbs.

Analysis Software: RISA-3D (V17)



**Final Loading Configuration:**

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
179.50	181.50	3	Samsung	MT6407-77A	Retained
	180.00	6	JMA Wireless	MX06FRO660-03	
		4	Kaelus	KA-6030	Added
		3	Samsung	B2/B66A RRH-BR049	Retained
		3	Samsung	B5/B13 RRH-BR04C	
		1	Raycap	RVZDC-6627-PF-48	
	6	Andrew	DB844H90-XY		
	178.00	3	Samsung	XXDWMM-12.5-65-8T-CBRS	

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

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

**Standard Conditions:**

1. All engineering services are performed on the basis that the information provided to Colliers Engineering & Design CT, P.C. 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 Colliers Engineering & Design CT, P.C. 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. Colliers Engineering & Design CT, P.C. is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.
7. Structural Steel Grades have been assumed as follows, if applicable, unless otherwise noted in this analysis:
  - o Channel, Solid Round, Angle, Plate      ASTM A36 (Gr. 36)
  - o HSS (Rectangular)                              ASTM 500 (Gr. B-46)
  - o Pipe    ASTM A53 (Gr. B-35)
  - o Threaded Rod                                      F1554 (Gr. 36)
  - o Bolts    ASTM A325

**Discrepancies between in-field conditions and the assumptions listed above may render this analysis invalid unless explicitly approved by Colliers Engineering & Design CT, P.C..**

**Analysis Results:**

Component	Utilization %	Pass/Fail
Face Horizontals	84.2 %	Pass
Mast Pipe	9.0 %	Pass
Antenna Pipe	46.1 %	Pass
Dual Antenna Pipe	22.8 %	Pass
Tie Back	1.2 %	Pass
Plate	51.6 %	Pass
Connection	16.4%	Pass

<b>Structure Rating – (Controlling Utilization of all Components)</b>	<b>84.2%</b>
---	--------------

\* Results valid after hardware upgrades noted in the PMI Requirements are installed.

**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	11.4	2.4	18.0	9.0
0.5	16.3	3.5	25.6	12.8
1	20.9	4.3	32.8	16.2

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 mount(s) will be **SUFFICIENT** for the final loading configuration shown in attachment 2 **upon the completion of the requirements listed below.**

Contractor shall install the proposed filter units on new Site Pro 1 Dual Swivel Mount Kit (Part #: RRUDSM or EOR approved equivalent) in the location shown in the placement diagrams.

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 Post Installation Inspection (PMI) Report Deliverables**
2. Antenna Placement Diagrams
3. Mount Photos
4. Mount Mapping Report (for reference only)
5. Analysis Calculations

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

## Documents & Photos Required from Contractor – **Passing Mount Analysis**

Passing Mount Analysis requires a PMI due to a modification in loading.

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

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

---

PSLC #: 5000382257

SMART Project #: 10208048

Fuze Project ID: 17136781

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

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

### **Base Requirements:**

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

### **Photo Requirements:**

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

- These photos shall also certify that the placement and geometry of the equipment on the mount is as depicted in the antenna placement diagram in this form.
- Photos that show the model number of each antenna and piece of equipment installed per sector.

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

- The contractor shall certify that the antenna & equipment placement and geometry is in accordance with the sketch and table as included in the mount analysis and noted below.
  - The contractor certifies that the photos support and the equipment on the mount is as depicted on the sketch and table included in this form and with the mount analysis provided.

OR

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

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

**Issue:**

Contractor shall install the proposed filter units on new Site Pro 1 Dual Swivel Mount Kit (Part #: RRUDSM or EOR approved equivalent) in the location shown in the placement diagrams.

**Response:**

**Special Instruction Confirmation:**

- The contractor has read and acknowledges the above special instructions.
- All hardware listed in the Special Instructions above (if applicable) has been properly installed, and the existing hardware was inspected.
- The material utilized was as specified in the SMART Tool engineering vendor Special Instructions above (if applicable) 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.

**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

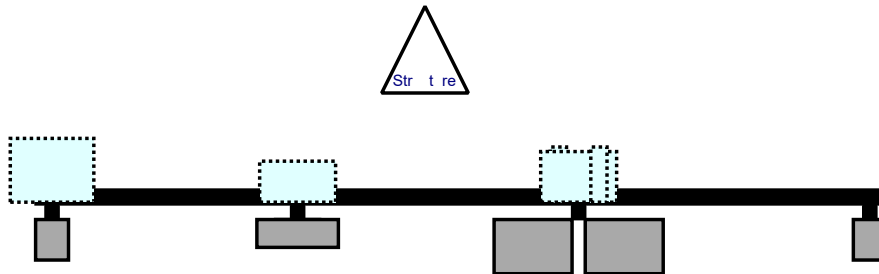
**Contractor to certify the condition of the safety climb and verify no damage when leaving the site:**

Safety Climb in Good Condition       Safety Climb Damaged

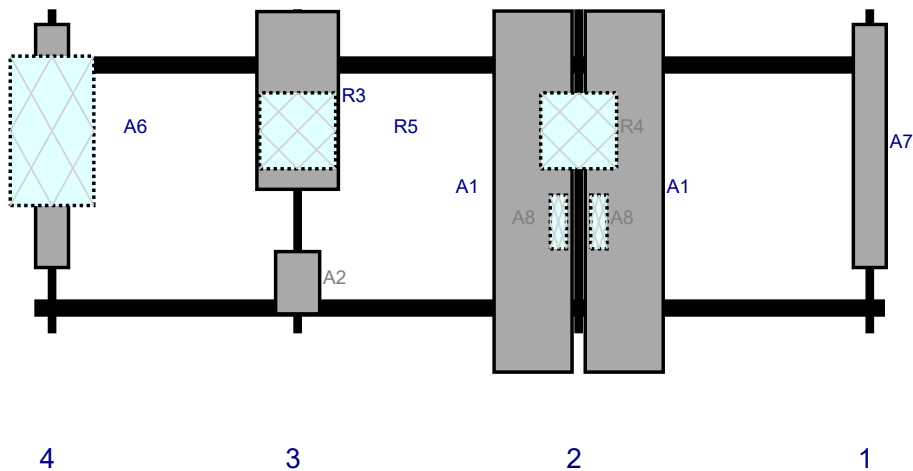
**Certifying Individual:**

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

Plan View



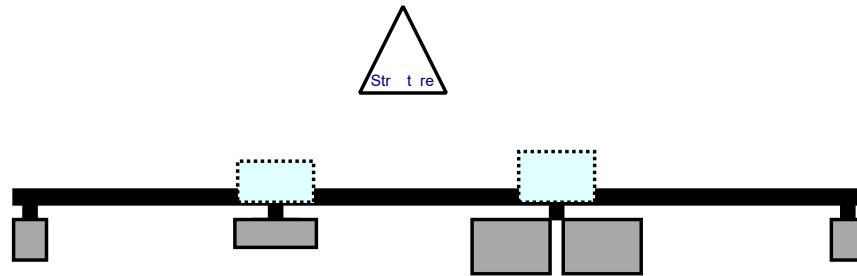
Front View - Looking at Structure



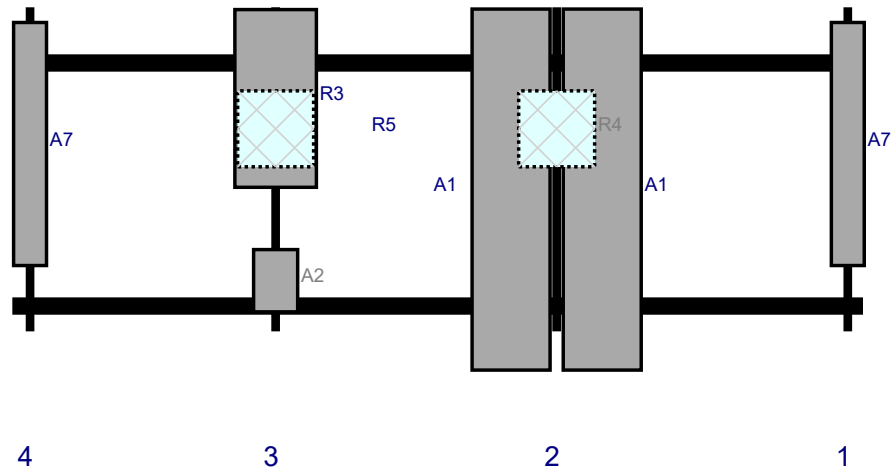
Re #	Model	Height (i)	Width (i)	H Dist Fr L.	Pipe #	Pipe Pos V	A t Pos	C. A t Fr T.	A t H O	St t s	V lid tio
A7	DB844H90- Y	48	6.5	165	1		Fro t	27	0	Ret i ed	
A1	M 06FRO660-03	71.3	15.4	107.5	2		Fro t	36	9	Ret i ed	
A1	M 06FRO660-03	71.3	15.4	107.5	2		Fro t	36	-9	Ret i ed	
R4	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	107.5	2		Behi d	24	0	Ret i ed	
A8	KA-6030	10.6	3.2	107.5	2		Behi d	42	4	Added	
A8	KA-6030	10.6	3.2	107.5	2		Behi d	42	-4	Added	
A2	DWMM-12.5-65	12.3	8.7	52	3		Fro t	54	0	Ret i ed	
R3	MT6407-77A	35.1	16.1	52	3		Fro t	18	0	Ret i ed	
R5	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	52	3		Behi d	24	0	Ret i ed	
A7	DB844H90- Y	48	6.5	3.5	4		Fro t	27	0	Ret i ed	
A6	RVZDC-6627-PF-48	29.5	16.5	3.5	4		Behi d	24	0	Ret i ed	



Plan View

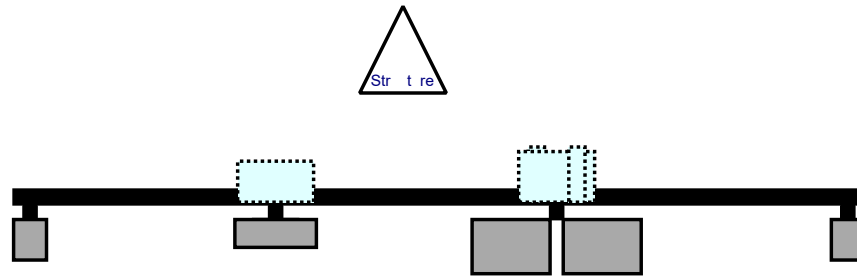


Front View - Looking at Structure

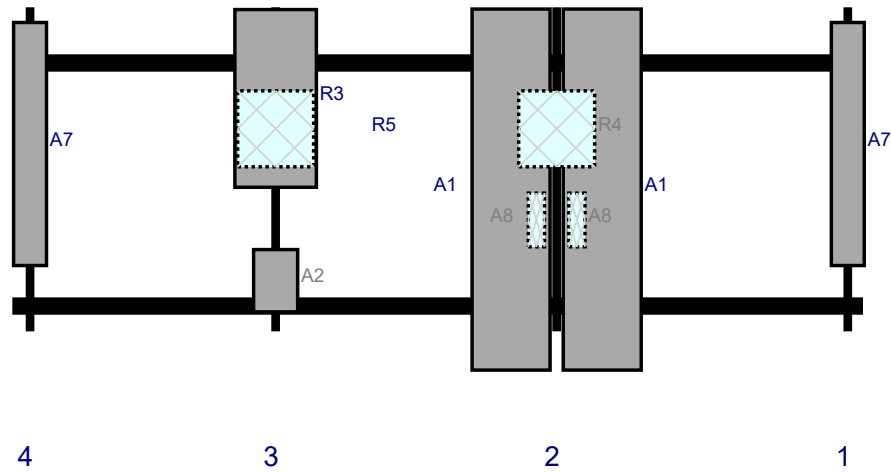


Re #	Model	Height (i)	Width (i)	H Dist Fr L.	Pipe #	Pipe Pos V	A t Pos	C. A t Fr T.	A t H O	St t s	V lid tio
A7	DB844H90- Y	48	6.5	165	1		Fro t	27	0	Ret i ed	
A1	M 06FRO660-03	71.3	15.4	107.5	2		Fro t	36	9	Ret i ed	
A1	M 06FRO660-03	71.3	15.4	107.5	2		Fro t	36	-9	Ret i ed	
R4	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	107.5	2		Behi d	24	0	Ret i ed	
A2	DWMM-12.5-65	12.3	8.7	52	3		Fro t	54	0	Ret i ed	
R3	MT6407-77A	35.1	16.1	52	3		Fro t	18	0	Ret i ed	
R5	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	52	3		Behi d	24	0	Ret i ed	
A7	DB844H90- Y	48	6.5	3.5	4		Fro t	27	0	Ret i ed	

Plan View




Front View - Looking at Structure



Re #	Model	Height (i)	Width (i)	H Dist Fr L.	Pipe #	Pipe Pos V	A t Pos	C. A t Fr T.	A t H O	St t s	V lid tio
A7	DB844H90- Y	48	6.5	165	1		Fro t	27	0	Ret i ed	
A1	M 06FRO660-03	71.3	15.4	107.5	2		Fro t	36	9	Ret i ed	
A1	M 06FRO660-03	71.3	15.4	107.5	2		Fro t	36	-9	Ret i ed	
R4	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	107.5	2		Behi d	24	0	Ret i ed	
A8	KA-6030	10.6	3.2	107.5	2		Behi d	42	4	Added	
A8	KA-6030	10.6	3.2	107.5	2		Behi d	42	-4	Added	
A2	DWMM-12.5-65	12.3	8.7	52	3		Fro t	54	0	Ret i ed	
R3	MT6407-77A	35.1	16.1	52	3		Fro t	18	0	Ret i ed	
R5	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	52	3		Behi d	24	0	Ret i ed	
A7	DB844H90- Y	48	6.5	3.5	4		Fro t	27	0	Ret i ed	



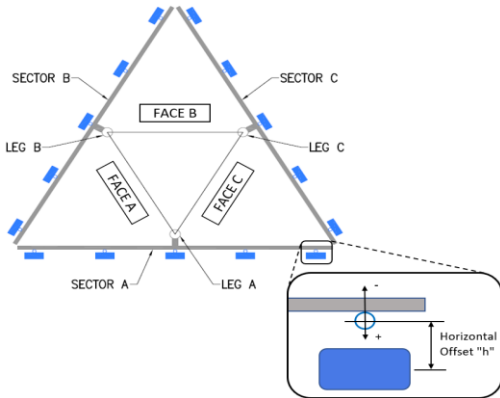
	<b>Antenna Mount Mapping Form (PATENT PENDING)</b>			FCC #
				105492
Tower Owner:	AMERICAN TOWER CO	Mapping Date:	5/5/2021	
Site Name:	BETHANY CT	Tower Type:	Self Support	
Site Number or ID:	469372	Tower Height (Ft.):	300	
Mapping Contractor:	HUDSON DESIGN GROUP LLC	Mount Elevation (Ft.):	184	

This antenna mapping form is the property of TES and under **PATENT PENDING**. The formation contained herein is considered confidential in nature and is to be used only for the specific customer it was intended for. Reproduction, transmission, publication, modification or disclosure by any method is prohibited except by express written permission of TES. All means and methods are the responsibility of the contractor and the work shall be compliant with ANSI/ASSE A 10.48, OSHA, FCC, FAA and other safety requirements that may apply. TES is not warranting the usability of the safety climb as it must be assessed prior to each use in compliance with OSHA requirements.

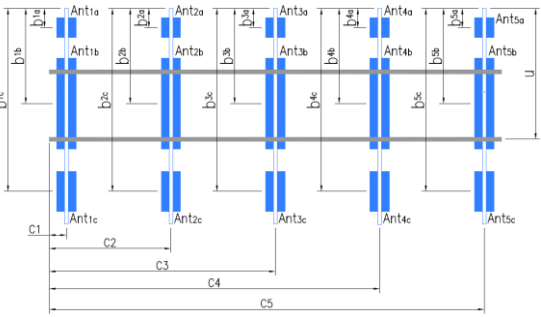
Please insert the sketches of the antenna mount from the "Sketches" tab with dimensions and members here.

Mount Pipe Configuration and Geometries [Unit = Inches]							
Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "U"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "U"	Horizontal Offset "C1, C2, C3, etc."
A1	2" STD. PIPE X 64" LONG	59.00	3.00	C1	2" STD. PIPE X 64" LONG	59.00	3.00
A2	2" STD. PIPE X 64" LONG	59.00	60.50	C2	2" STD. PIPE X 64" LONG	59.00	60.50
A3	2" STD. PIPE X 64" LONG	59.00	125.50	C3	2" STD. PIPE X 64" LONG	59.00	125.50
A4	2" STD. PIPE X 64" LONG	59.00	164.50	C4	2" STD. PIPE X 64" LONG	59.00	164.50
A5				C5			
A6				C6			
B1	2" STD. PIPE X 64" LONG	59.00	3.00	D1			
B2	2" STD. PIPE X 64" LONG	59.00	60.50	D2			
B3	2" STD. PIPE X 64" LONG	59.00	125.50	D3			
B4	2" STD. PIPE X 64" LONG	59.00	164.50	D4			
B5				D5			
B6				D6			

Distance between bottom rail and mount CL elevation (dim d). Unit is inches. See 'Mount Elev Ref' tab for details. :		24.00
Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) :		
Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) :		
Please enter additional information or comments below.		
SST TOWER 4 LEGS		
LEG SIZE= ANGLE 8" X 8" X 3/4" THICK.		
Tower Face Width at Mount Elev. (ft.):	28	Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):
		8
For T-Arms/Platforms on monopoles, report the weld size from the main standoff to the plate bolting into the collar mount.		



Ants. Items	Enter antenna model. If not labeled, enter "Unknown".						Mounting Locations [Units are inches and degrees]			Photos of antennas
	Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Vertical Distances "b <sub>1a</sub> , b <sub>2a</sub> , b <sub>3a</sub> , b <sub>1b</sub> ,..." (Inches)	Horiz. Offset "h" (Use "-" if Ant. is behind)	Antenna Azimuth (Degrees)	
<b>Sector A</b>										
Ant <sub>1a</sub>										
Ant <sub>1b</sub>	UNKNOWN	7.00	8.00	48.00		184.917	24.00	8.50	20.00	7,65
Ant <sub>1c</sub>										
Ant <sub>2a</sub>										
Ant <sub>2b</sub>	UNKNOWN	6.00	4.00	53.00		184.667	27.00	7.00	20.00	8,66
Ant <sub>2c</sub>										
Ant <sub>3a</sub>										
Ant <sub>3b</sub>	UNKNOWN	12.00	5.00	72.00		184.083	34.00	14.00	20.00	9,67
Ant <sub>3c</sub>										
Ant <sub>4a</sub>										
Ant <sub>4b</sub>	UNKNOWN	7.00	8.00	48.00		184.917	24.00	8.50	20.00	10,67
Ant <sub>4c</sub>										
Ant <sub>5a</sub>										
Ant <sub>5b</sub>										
Ant <sub>5c</sub>										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										



**Antenna Layout (Looking Out From Tower)**



**Observed Safety and Structural Issues During the Mount Mapping**

Issue #	Description of Issue	Photo #
1		
2		
3		
4		
5		
6		
7		
8		

**Observed Obstructions to Tower Lighting System**

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

**Mapping Notes**

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

**Standard Conditions**

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





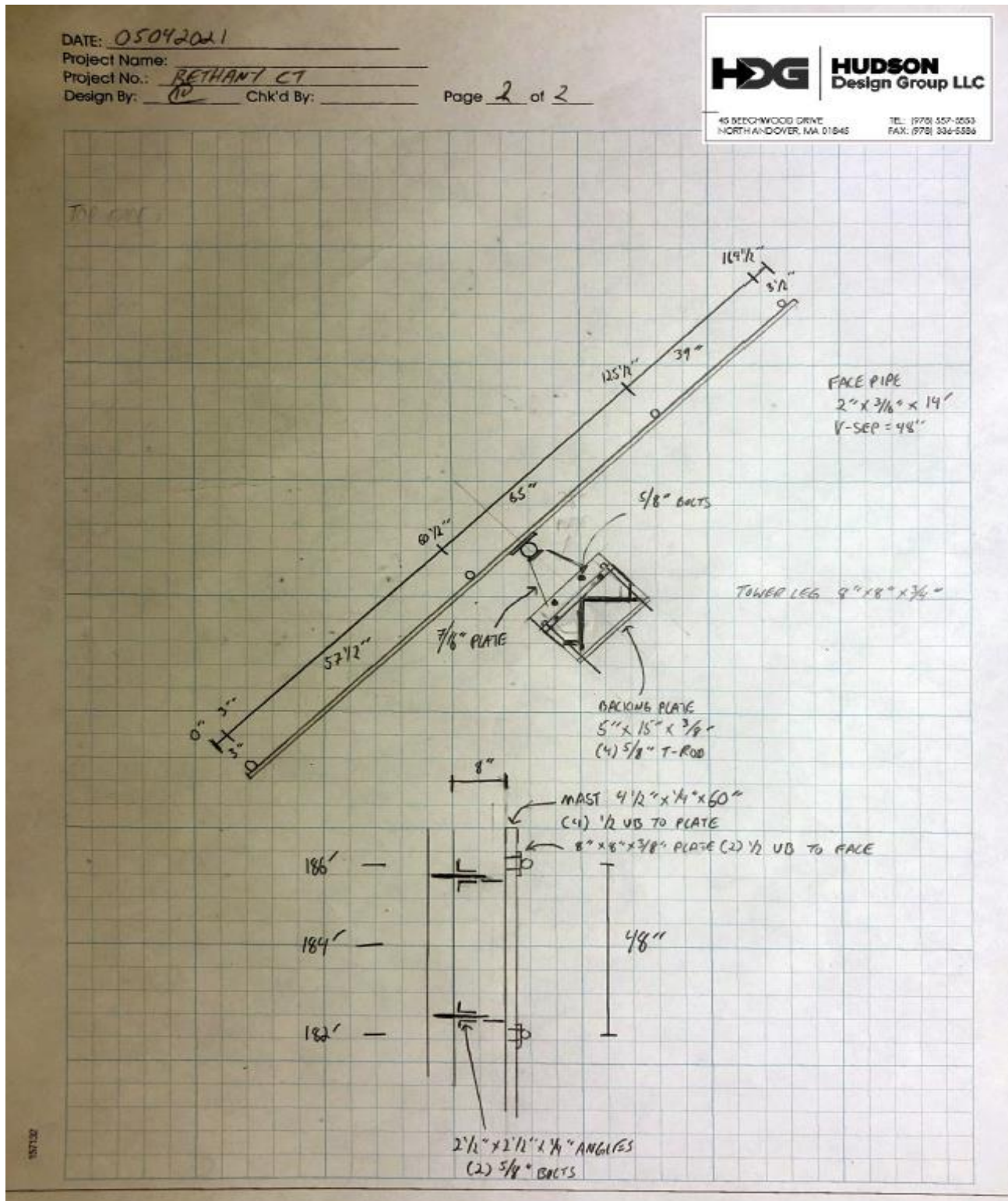
### Antenna Mount Mapping Form (PATENT PENDING)

FCC #  
105492

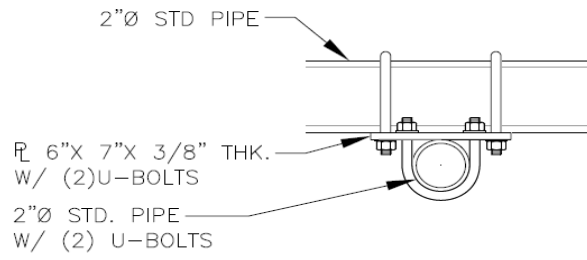
Tower Owner:	AMERICAN TOWER CO	Mapping Date:	5/5/2021
Site Name:	BETHANY CT	Tower Type:	Self Support
Site Number or ID:	469372	Tower Height (FL):	300
Mapping Contractor:	HUDSON DESIGN GROUP LLC	Mount Elevation (FL):	184

This antenna mapping form is the property of TES and under PATENT PENDING. The formation contained herein is considered confidential in nature and is to be used only for the specific customer it was intended for. Reproduction, transmission, publication, modification or disclosure by any method is prohibited except by express written permission of TES. All means and methods are the responsibility of the contractor and the work shall be compliant with ANSI/ASSE A 10.48, OSHA, FCC, FAA and other safety requirements that may apply. TES is not warranting the usability of the safety climb as it must be assessed prior to each use in compliance with OSHA requirements.

Please Insert Sketches of the Antenna Mount



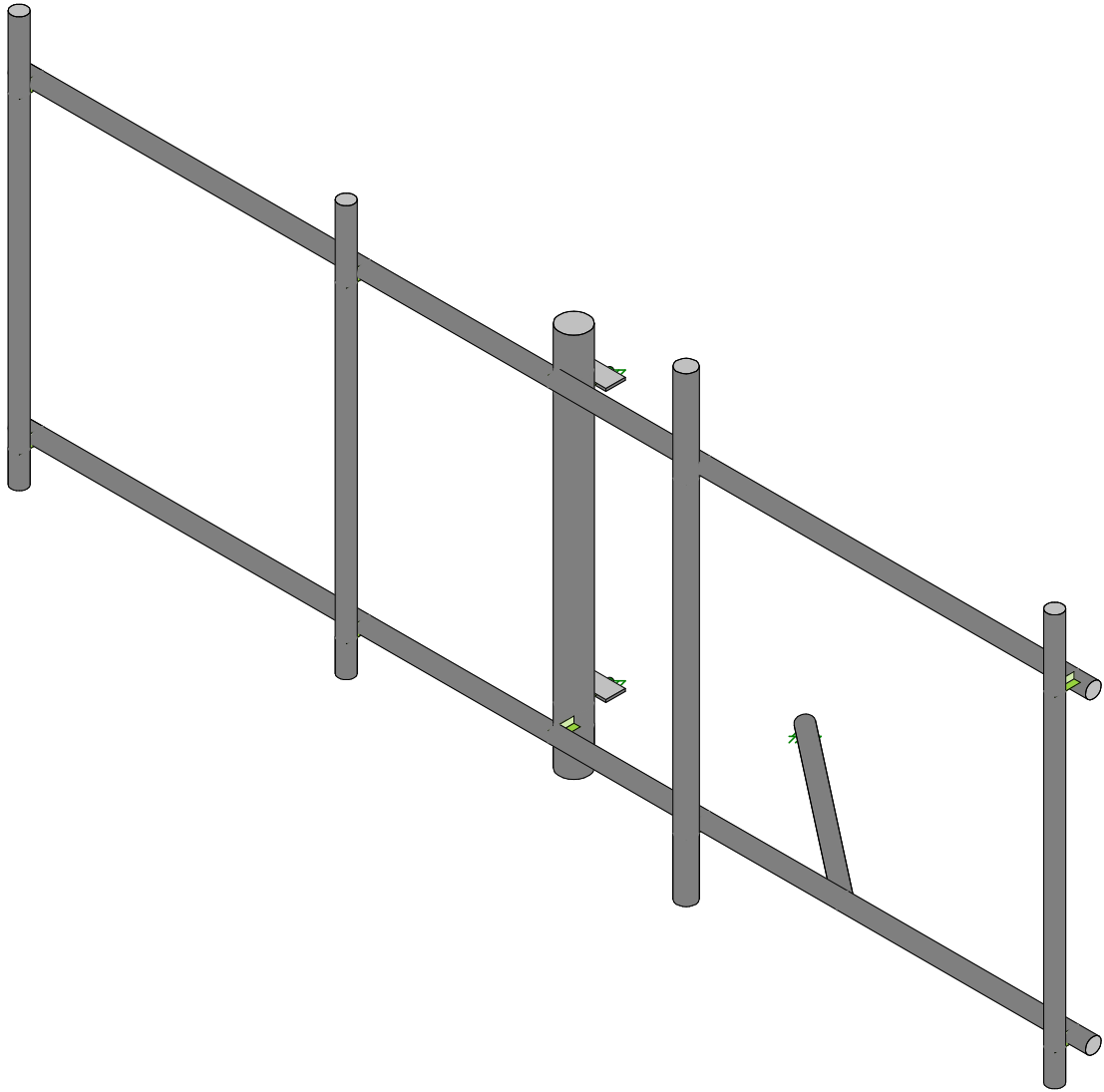
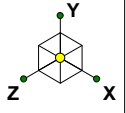




ANTENNA PIPE MAST MOUNT CONNECTION

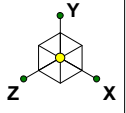




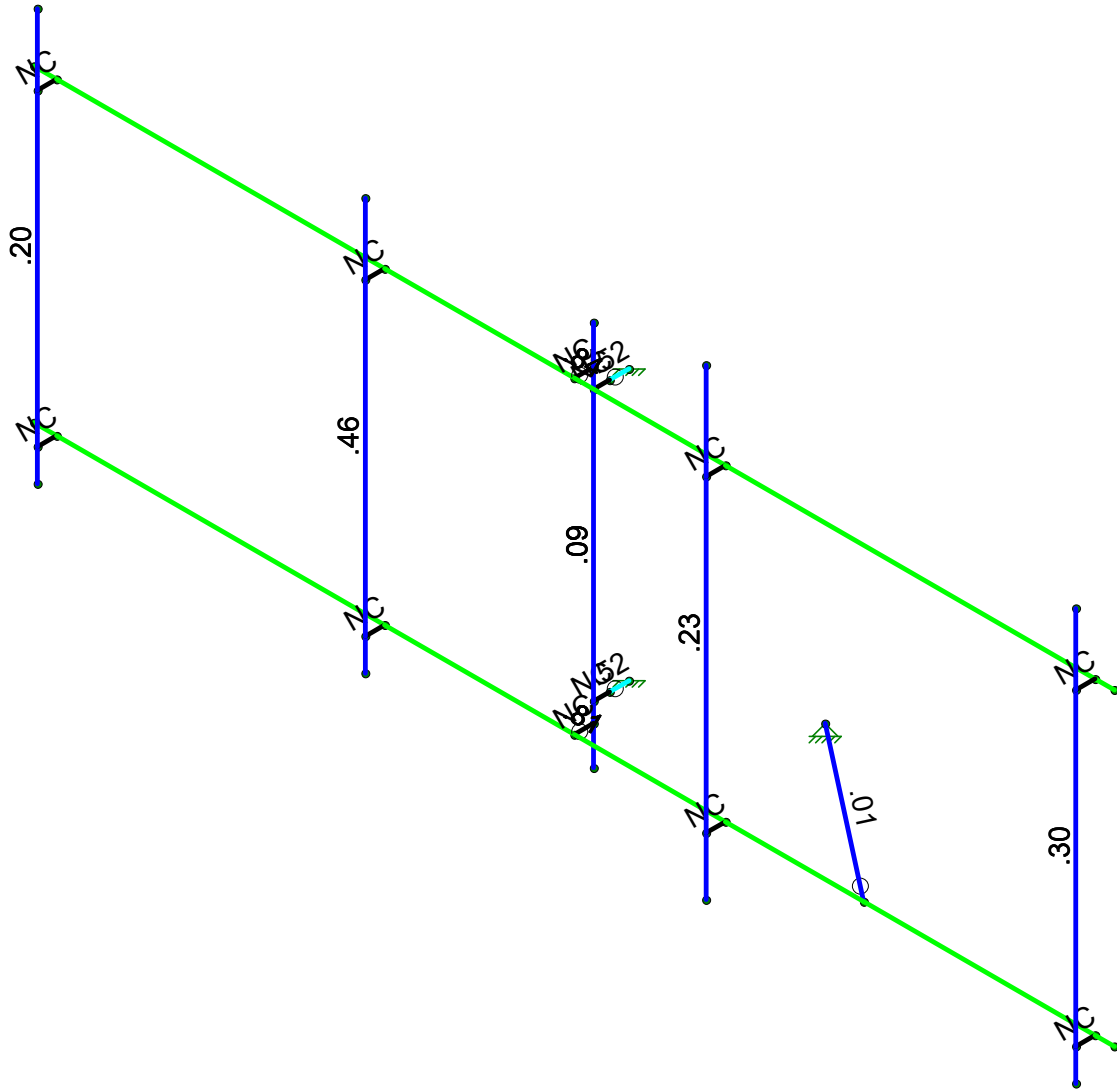


Envelope Only Solution

Colliers Engineering & De...	5000382257-VZW_MT_LOT_SectorA_H	
ILR		Aug 2, 2023 at 9:34 AM
Project No. 10208048		5000382257-VZW_MT_LOT_A_H....

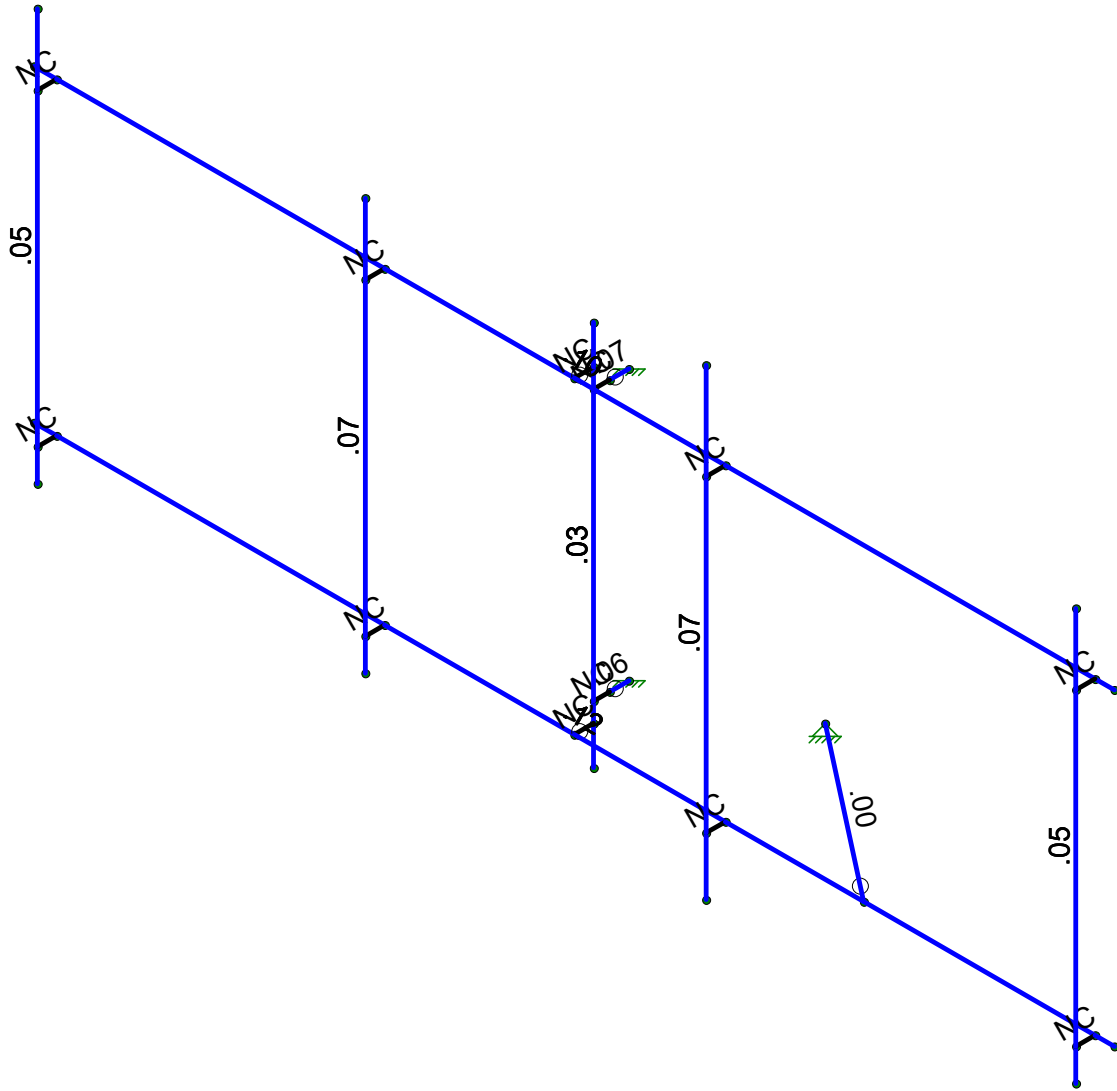
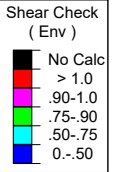
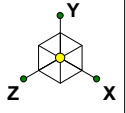


Code Check ( Env )	
Black	No Calc
Red	> 1.0
Magenta	.90-1.0
Green	.75-.90
Cyan	.50-.75
Blue	0.-.50



Member Code Checks Displayed (Enveloped)  
Envelope Only Solution

Colliers Engineering & De...	5000382257-VZW_MT_LOT_SectorA_H	
ILR		Aug 2, 2023 at 9:34 AM
Project No. 10208048		5000382257-VZW_MT_LOT_A_H....



Member Shear Checks Displayed (Enveloped)  
Envelope Only Solution

Colliers Engineering & De...	5000382257-VZW_MT_LOT_SectorA_H	Aug 2, 2023 at 9:34 AM
ILR		5000382257-VZW_MT_LOT_A_H....
Project No. 10208048		



**Basic Load Cases**

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







**Load Combinations (Continued)**

	Description	Sol.	PD	SR	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.
23	1.2D + 1.0..	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1
24	1.2D + 1.0..	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1
25	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1		
26	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1		
27	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1		
28	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1		
29	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1		
30	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1		
31	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1		
32	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1		
33	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1		
34	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1		
35	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1		
36	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1		
37	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1		
38	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1		
39	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1		
40	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1		
41	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1		
42	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1		
43	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1		
44	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1		
45	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1		
46	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1		
47	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1		
48	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	38	1	76	1		
49	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	79	1.5						
50	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	80	1.5						
51	1.4D	Yes	Y		1	1.4	39	1.4								
52	1.2D + 1.0..	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	1	83	ELZ 1 ELX
53	1.2D + 1.0..	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.866	83	.5 ELZ .866 ELX .5
54	1.2D + 1.0..	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.5	83	.866 ELZ .5 ELX .866
55	1.2D + 1.0..	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82		83	1 ELZ ELX 1
56	1.2D + 1.0..	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.5	83	.866 ELZ -.5 ELX .866
57	1.2D + 1.0..	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.866	83	.5 ELZ -.866 ELX .5
58	1.2D + 1.0..	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-1	83	ELZ -1 ELX
59	1.2D + 1.0..	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.866	83	-.5 ELZ -.866 ELX -.5
60	1.2D + 1.0..	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.5	83	-.866 ELZ -.5 ELX -.866
61	1.2D + 1.0..	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82		83	-1 ELZ ELX -1
62	1.2D + 1.0..	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.5	83	-.866 ELZ .5 ELX -.866
63	1.2D + 1.0..	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.866	83	-.5 ELZ .866 ELX -.5
64	0.9D - 1.0..	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	1	83	ELZ 1 ELX
65	0.9D - 1.0..	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.866	83	.5 ELZ .866 ELX .5
66	0.9D - 1.0..	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.5	83	.866 ELZ .5 ELX .866
67	0.9D - 1.0..	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82		83	1 ELZ ELX 1
68	0.9D - 1.0..	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.5	83	.866 ELZ -.5 ELX .866
69	0.9D - 1.0..	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.866	83	.5 ELZ -.866 ELX .5
70	0.9D - 1.0..	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-1	83	ELZ -1 ELX
71	0.9D - 1.0..	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.866	83	-.5 ELZ -.866 ELX -.5
72	0.9D - 1.0..	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.5	83	-.866 ELZ -.5 ELX -.866
73	0.9D - 1.0..	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82		83	-1 ELZ ELX -1
74	0.9D - 1.0..	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.5	83	-.866 ELZ .5 ELX -.866
75	0.9D - 1.0..	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.866	83	-.5 ELZ .866 ELX -.5





**Hot Rolled Steel Properties**

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

**Member Primary Data**

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N2	N1			Face Horizont...	Column	Pipe	A53 Gr. B	Typical
2	M2	N4	N3			Face Horizont...	Column	Pipe	A53 Gr. B	Typical
3	M3	N5	N7			RIGID	None	None	RIGID	Typical
4	M4	N6	N8			RIGID	None	None	RIGID	Typical
5	M5	N9	N10			Mast Pipe	Column	Pipe	A53 Gr. B	Typical
6	M6	N11	N41			RIGID	None	None	RIGID	Typical
7	M7	N12	N42			RIGID	None	None	RIGID	Typical
8	M8	N17	N23A			RIGID	None	None	RIGID	Typical
9	M9	N18	N24A			RIGID	None	None	RIGID	Typical
10	M10	N20	N26			RIGID	None	None	RIGID	Typical
11	M11	N19	N25			RIGID	None	None	RIGID	Typical
12	M12	N21	N27			RIGID	None	None	RIGID	Typical
13	M13	N22	N28			RIGID	None	None	RIGID	Typical
14	M14	N24	N30			RIGID	None	None	RIGID	Typical
15	M15	N23	N29			RIGID	None	None	RIGID	Typical
16	MP4A	N34	N38			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
17	MP3A	N33	N37			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
18	MP2A	N32	N36			Dual Antenna ...	Column	Pipe	A53 Gr. B	Typical
19	MP1A	N31	N35			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
20	M20	N39	N40			Tie Back	Column	Pipe	A53 Gr. B	Typical
21	M21	N41	N13		90	Plate	Column	RECT	A36 Gr.36	Typical
22	M22	N42	N14		90	Plate	Column	RECT	A36 Gr.36	Typical

**Member Advanced Data**

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M1						Yes	** NA **			None
2	M2						Yes	** NA **			None
3	M3		OOOOOO				Yes	** NA **			None
4	M4		OOOOOO				Yes	** NA **			None
5	M5						Yes	** NA **			None
6	M6						Yes	** NA **			None
7	M7						Yes	** NA **			None
8	M8						Yes	** NA **			None
9	M9						Yes	** NA **			None
10	M10						Yes	** NA **			None
11	M11						Yes	** NA **			None
12	M12						Yes	** NA **			None
13	M13						Yes	** NA **			None
14	M14						Yes	** NA **			None
15	M15						Yes	** NA **			None
16	MP4A						Yes	** NA **			None
17	MP3A						Yes	** NA **			None
18	MP2A						Yes	** NA **			None
19	MP1A						Yes	** NA **			None



**Member Advanced Data (Continued)**

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat..	Analysis ...	Inactive	Seismic..
20	M20	BenPIN					Yes	** NA **			None
21	M21		OOOOOO				Yes	** NA **			None
22	M22		OOOOOO				Yes	** NA **			None

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	Y	-8.8	3
2	MP2A	My	.009	3
3	MP2A	Mz	.003	3
4	MP2A	Y	-8.8	4
5	MP2A	My	.009	4
6	MP2A	Mz	.003	4
7	MP2A	Y	-8.8	3
8	MP2A	My	.009	3
9	MP2A	Mz	-.003	3
10	MP2A	Y	-8.8	4
11	MP2A	My	.009	4
12	MP2A	Mz	-.003	4
13	MP2A	Y	-23	1
14	MP2A	My	-.011	1
15	MP2A	Mz	.017	1
16	MP2A	Y	-23	5
17	MP2A	My	-.011	5
18	MP2A	Mz	.017	5
19	MP2A	Y	-23	1
20	MP2A	My	-.011	1
21	MP2A	Mz	-.017	1
22	MP2A	Y	-23	5
23	MP2A	My	-.011	5
24	MP2A	Mz	-.017	5
25	MP3A	Y	-4.4	4.5
26	MP3A	My	-.002	4.5
27	MP3A	Mz	0	4.5
28	MP3A	Y	-43.55	.5
29	MP3A	My	-.022	.5
30	MP3A	Mz	0	.5
31	MP3A	Y	-43.55	2.5
32	MP3A	My	-.022	2.5
33	MP3A	Mz	0	2.5
34	MP2A	Y	-84.4	2
35	MP2A	My	.042	2
36	MP2A	Mz	0	2
37	MP3A	Y	-70.3	2
38	MP3A	My	.035	2
39	MP3A	Mz	0	2
40	MP4A	Y	-32	2
41	MP4A	My	.016	2
42	MP4A	Mz	0	2
43	MP1A	Y	-7	.5
44	MP1A	My	-.004	.5
45	MP1A	Mz	0	.5
46	MP1A	Y	-7	4
47	MP1A	My	-.004	4
48	MP1A	Mz	0	4
49	MP4A	Y	-7	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
50	MP4A	My	-.004	.5
51	MP4A	Mz	0	.5
52	MP4A	Y	-7	4
53	MP4A	My	-.004	4
54	MP4A	Mz	0	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	Y	-8.954	3
2	MP2A	My	.009	3
3	MP2A	Mz	.003	3
4	MP2A	Y	-8.954	4
5	MP2A	My	.009	4
6	MP2A	Mz	.003	4
7	MP2A	Y	-8.954	3
8	MP2A	My	.009	3
9	MP2A	Mz	-.003	3
10	MP2A	Y	-8.954	4
11	MP2A	My	.009	4
12	MP2A	Mz	-.003	4
13	MP2A	Y	-84.834	1
14	MP2A	My	-.042	1
15	MP2A	Mz	.064	1
16	MP2A	Y	-84.834	5
17	MP2A	My	-.042	5
18	MP2A	Mz	.064	5
19	MP2A	Y	-84.834	1
20	MP2A	My	-.042	1
21	MP2A	Mz	-.064	1
22	MP2A	Y	-84.834	5
23	MP2A	My	-.042	5
24	MP2A	Mz	-.064	5
25	MP3A	Y	-13.899	4.5
26	MP3A	My	-.007	4.5
27	MP3A	Mz	0	4.5
28	MP3A	Y	-36.667	.5
29	MP3A	My	-.018	.5
30	MP3A	Mz	0	.5
31	MP3A	Y	-36.667	2.5
32	MP3A	My	-.018	2.5
33	MP3A	Mz	0	2.5
34	MP2A	Y	-46.248	2
35	MP2A	My	.023	2
36	MP2A	Mz	0	2
37	MP3A	Y	-41.6	2
38	MP3A	My	.021	2
39	MP3A	Mz	0	2
40	MP4A	Y	-90.468	2
41	MP4A	My	.045	2
42	MP4A	Mz	0	2
43	MP1A	Y	-33.292	.5
44	MP1A	My	-.017	.5
45	MP1A	Mz	0	.5
46	MP1A	Y	-33.292	4
47	MP1A	My	-.017	4
48	MP1A	Mz	0	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
49	MP4A	Y	-33.292	.5
50	MP4A	My	-.017	.5
51	MP4A	Mz	0	.5
52	MP4A	Y	-33.292	4
53	MP4A	My	-.017	4
54	MP4A	Mz	0	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	0	3
2	MP2A	Z	-17.28	3
3	MP2A	Mx	-.006	3
4	MP2A	X	0	4
5	MP2A	Z	-17.28	4
6	MP2A	Mx	-.006	4
7	MP2A	X	0	3
8	MP2A	Z	-17.28	3
9	MP2A	Mx	.006	3
10	MP2A	X	0	4
11	MP2A	Z	-17.28	4
12	MP2A	Mx	.006	4
13	MP2A	X	0	1
14	MP2A	Z	-85.141	1
15	MP2A	Mx	-.064	1
16	MP2A	X	0	5
17	MP2A	Z	-85.141	5
18	MP2A	Mx	-.064	5
19	MP2A	X	0	1
20	MP2A	Z	-85.141	1
21	MP2A	Mx	.064	1
22	MP2A	X	0	5
23	MP2A	Z	-85.141	5
24	MP2A	Mx	.064	5
25	MP3A	X	0	4.5
26	MP3A	Z	-32.041	4.5
27	MP3A	Mx	0	4.5
28	MP3A	X	0	.5
29	MP3A	Z	-70.561	.5
30	MP3A	Mx	0	.5
31	MP3A	X	0	2.5
32	MP3A	Z	-70.561	2.5
33	MP3A	Mx	0	2.5
34	MP2A	X	0	2
35	MP2A	Z	-55.801	2
36	MP2A	Mx	0	2
37	MP3A	X	0	2
38	MP3A	Z	-55.801	2
39	MP3A	Mx	0	2
40	MP4A	X	0	2
41	MP4A	Z	-114.122	2
42	MP4A	Mx	0	2
43	MP1A	X	0	.5
44	MP1A	Z	-54.901	.5
45	MP1A	Mx	0	.5
46	MP1A	X	0	4
47	MP1A	Z	-54.901	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
48	MP1A	Mx	0	4
49	MP4A	X	0	.5
50	MP4A	Z	-54.901	.5
51	MP4A	Mx	0	.5
52	MP4A	X	0	4
53	MP4A	Z	-54.901	4
54	MP4A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	8.647	3
2	MP2A	Z	-14.976	3
3	MP2A	Mx	.004	3
4	MP2A	X	8.647	4
5	MP2A	Z	-14.976	4
6	MP2A	Mx	.004	4
7	MP2A	X	8.647	3
8	MP2A	Z	-14.976	3
9	MP2A	Mx	.014	3
10	MP2A	X	8.647	4
11	MP2A	Z	-14.976	4
12	MP2A	Mx	.014	4
13	MP2A	X	39.893	1
14	MP2A	Z	-69.097	1
15	MP2A	Mx	-.072	1
16	MP2A	X	39.893	5
17	MP2A	Z	-69.097	5
18	MP2A	Mx	-.072	5
19	MP2A	X	39.893	1
20	MP2A	Z	-69.097	1
21	MP2A	Mx	.032	1
22	MP2A	X	39.893	5
23	MP2A	Z	-69.097	5
24	MP2A	Mx	.032	5
25	MP3A	X	12.801	4.5
26	MP3A	Z	-22.171	4.5
27	MP3A	Mx	-.006	4.5
28	MP3A	X	29.498	.5
29	MP3A	Z	-51.092	.5
30	MP3A	Mx	-.015	.5
31	MP3A	X	29.498	2.5
32	MP3A	Z	-51.092	2.5
33	MP3A	Mx	-.015	2.5
34	MP2A	X	25.605	2
35	MP2A	Z	-44.35	2
36	MP2A	Mx	.013	2
37	MP3A	X	24.75	2
38	MP3A	Z	-42.869	2
39	MP3A	Mx	.012	2
40	MP4A	X	53.641	2
41	MP4A	Z	-92.909	2
42	MP4A	Mx	.027	2
43	MP1A	X	28.721	.5
44	MP1A	Z	-49.747	.5
45	MP1A	Mx	-.014	.5
46	MP1A	X	28.721	4





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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
47	MP1A	Z	-49.747	4
48	MP1A	Mx	-.014	4
49	MP4A	X	28.721	.5
50	MP4A	Z	-49.747	.5
51	MP4A	Mx	-.014	.5
52	MP4A	X	28.721	4
53	MP4A	Z	-49.747	4
54	MP4A	Mx	-.014	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	14.998	3
2	MP2A	Z	-8.659	3
3	MP2A	Mx	.012	3
4	MP2A	X	14.998	4
5	MP2A	Z	-8.659	4
6	MP2A	Mx	.012	4
7	MP2A	X	14.998	3
8	MP2A	Z	-8.659	3
9	MP2A	Mx	.018	3
10	MP2A	X	14.998	4
11	MP2A	Z	-8.659	4
12	MP2A	Mx	.018	4
13	MP2A	X	59.822	1
14	MP2A	Z	-34.538	1
15	MP2A	Mx	-.056	1
16	MP2A	X	59.822	5
17	MP2A	Z	-34.538	5
18	MP2A	Mx	-.056	5
19	MP2A	X	59.822	1
20	MP2A	Z	-34.538	1
21	MP2A	Mx	-.004	1
22	MP2A	X	59.822	5
23	MP2A	Z	-34.538	5
24	MP2A	Mx	-.004	5
25	MP3A	X	11.018	4.5
26	MP3A	Z	-6.361	4.5
27	MP3A	Mx	-.006	4.5
28	MP3A	X	31.061	.5
29	MP3A	Z	-17.933	.5
30	MP3A	Mx	-.016	.5
31	MP3A	X	31.061	2.5
32	MP3A	Z	-17.933	2.5
33	MP3A	Mx	-.016	2.5
34	MP2A	X	36.4	2
35	MP2A	Z	-21.015	2
36	MP2A	Mx	.018	2
37	MP3A	X	31.957	2
38	MP3A	Z	-18.45	2
39	MP3A	Mx	.016	2
40	MP4A	X	81.061	2
41	MP4A	Z	-46.801	2
42	MP4A	Mx	.041	2
43	MP1A	X	54.149	.5
44	MP1A	Z	-31.263	.5
45	MP1A	Mx	-.027	.5





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
46	MP1A	X	54.149	4
47	MP1A	Z	-31.263	4
48	MP1A	Mx	-.027	4
49	MP4A	X	54.149	.5
50	MP4A	Z	-31.263	.5
51	MP4A	Mx	-.027	.5
52	MP4A	X	54.149	4
53	MP4A	Z	-31.263	4
54	MP4A	Mx	-.027	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	17.331	3
2	MP2A	Z	0	3
3	MP2A	Mx	.017	3
4	MP2A	X	17.331	4
5	MP2A	Z	0	4
6	MP2A	Mx	.017	4
7	MP2A	X	17.331	3
8	MP2A	Z	0	3
9	MP2A	Mx	.017	3
10	MP2A	X	17.331	4
11	MP2A	Z	0	4
12	MP2A	Mx	.017	4
13	MP2A	X	63.721	1
14	MP2A	Z	0	1
15	MP2A	Mx	-.032	1
16	MP2A	X	63.721	5
17	MP2A	Z	0	5
18	MP2A	Mx	-.032	5
19	MP2A	X	63.721	1
20	MP2A	Z	0	1
21	MP2A	Mx	-.032	1
22	MP2A	X	63.721	5
23	MP2A	Z	0	5
24	MP2A	Mx	-.032	5
25	MP3A	X	6.283	4.5
26	MP3A	Z	0	4.5
27	MP3A	Mx	-.003	4.5
28	MP3A	X	24.3	.5
29	MP3A	Z	0	.5
30	MP3A	Mx	-.012	.5
31	MP3A	X	24.3	2.5
32	MP3A	Z	0	2.5
33	MP3A	Mx	-.012	2.5
34	MP2A	X	37.441	2
35	MP2A	Z	0	2
36	MP2A	Mx	.019	2
37	MP3A	X	30.601	2
38	MP3A	Z	0	2
39	MP3A	Mx	.015	2
40	MP4A	X	86.761	2
41	MP4A	Z	0	2
42	MP4A	Mx	.043	2
43	MP1A	X	65.068	.5
44	MP1A	Z	0	.5



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

	Member Label	Direction	Magnitude[ lb.k-ft]	Location[ft.%]
45	MP1A	Mx	-.033	.5
46	MP1A	X	65.068	4
47	MP1A	Z	0	4
48	MP1A	Mx	-.033	4
49	MP4A	X	65.068	.5
50	MP4A	Z	0	.5
51	MP4A	Mx	-.033	.5
52	MP4A	X	65.068	4
53	MP4A	Z	0	4
54	MP4A	Mx	-.033	4

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

	Member Label	Direction	Magnitude[ lb.k-ft]	Location[ft.%]
1	MP2A	X	14.998	3
2	MP2A	Z	8.659	3
3	MP2A	Mx	.018	3
4	MP2A	X	14.998	4
5	MP2A	Z	8.659	4
6	MP2A	Mx	.018	4
7	MP2A	X	14.998	3
8	MP2A	Z	8.659	3
9	MP2A	Mx	.012	3
10	MP2A	X	14.998	4
11	MP2A	Z	8.659	4
12	MP2A	Mx	.012	4
13	MP2A	X	59.822	1
14	MP2A	Z	34.538	1
15	MP2A	Mx	-.004	1
16	MP2A	X	59.822	5
17	MP2A	Z	34.538	5
18	MP2A	Mx	-.004	5
19	MP2A	X	59.822	1
20	MP2A	Z	34.538	1
21	MP2A	Mx	-.056	1
22	MP2A	X	59.822	5
23	MP2A	Z	34.538	5
24	MP2A	Mx	-.056	5
25	MP3A	X	11.018	4.5
26	MP3A	Z	6.361	4.5
27	MP3A	Mx	-.006	4.5
28	MP3A	X	31.061	.5
29	MP3A	Z	17.933	.5
30	MP3A	Mx	-.016	.5
31	MP3A	X	31.061	2.5
32	MP3A	Z	17.933	2.5
33	MP3A	Mx	-.016	2.5
34	MP2A	X	36.4	2
35	MP2A	Z	21.015	2
36	MP2A	Mx	.018	2
37	MP3A	X	31.957	2
38	MP3A	Z	18.45	2
39	MP3A	Mx	.016	2
40	MP4A	X	81.061	2
41	MP4A	Z	46.801	2
42	MP4A	Mx	.041	2
43	MP1A	X	54.149	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
44	MP1A	Z	31.263	.5
45	MP1A	Mx	-.027	.5
46	MP1A	X	54.149	4
47	MP1A	Z	31.263	4
48	MP1A	Mx	-.027	4
49	MP4A	X	54.149	.5
50	MP4A	Z	31.263	.5
51	MP4A	Mx	-.027	.5
52	MP4A	X	54.149	4
53	MP4A	Z	31.263	4
54	MP4A	Mx	-.027	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	8.647	3
2	MP2A	Z	14.976	3
3	MP2A	Mx	.014	3
4	MP2A	X	8.647	4
5	MP2A	Z	14.976	4
6	MP2A	Mx	.014	4
7	MP2A	X	8.647	3
8	MP2A	Z	14.976	3
9	MP2A	Mx	.004	3
10	MP2A	X	8.647	4
11	MP2A	Z	14.976	4
12	MP2A	Mx	.004	4
13	MP2A	X	39.893	1
14	MP2A	Z	69.097	1
15	MP2A	Mx	.032	1
16	MP2A	X	39.893	5
17	MP2A	Z	69.097	5
18	MP2A	Mx	.032	5
19	MP2A	X	39.893	1
20	MP2A	Z	69.097	1
21	MP2A	Mx	-.072	1
22	MP2A	X	39.893	5
23	MP2A	Z	69.097	5
24	MP2A	Mx	-.072	5
25	MP3A	X	12.801	4.5
26	MP3A	Z	22.171	4.5
27	MP3A	Mx	-.006	4.5
28	MP3A	X	29.498	.5
29	MP3A	Z	51.092	.5
30	MP3A	Mx	-.015	.5
31	MP3A	X	29.498	2.5
32	MP3A	Z	51.092	2.5
33	MP3A	Mx	-.015	2.5
34	MP2A	X	25.605	2
35	MP2A	Z	44.35	2
36	MP2A	Mx	.013	2
37	MP3A	X	24.75	2
38	MP3A	Z	42.869	2
39	MP3A	Mx	.012	2
40	MP4A	X	53.641	2
41	MP4A	Z	92.909	2
42	MP4A	Mx	.027	2



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
43	MP1A	X	28.721	.5
44	MP1A	Z	49.747	.5
45	MP1A	Mx	-.014	.5
46	MP1A	X	28.721	4
47	MP1A	Z	49.747	4
48	MP1A	Mx	-.014	4
49	MP4A	X	28.721	.5
50	MP4A	Z	49.747	.5
51	MP4A	Mx	-.014	.5
52	MP4A	X	28.721	4
53	MP4A	Z	49.747	4
54	MP4A	Mx	-.014	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	0	3
2	MP2A	Z	17.28	3
3	MP2A	Mx	.006	3
4	MP2A	X	0	4
5	MP2A	Z	17.28	4
6	MP2A	Mx	.006	4
7	MP2A	X	0	3
8	MP2A	Z	17.28	3
9	MP2A	Mx	-.006	3
10	MP2A	X	0	4
11	MP2A	Z	17.28	4
12	MP2A	Mx	-.006	4
13	MP2A	X	0	1
14	MP2A	Z	85.141	1
15	MP2A	Mx	.064	1
16	MP2A	X	0	5
17	MP2A	Z	85.141	5
18	MP2A	Mx	.064	5
19	MP2A	X	0	1
20	MP2A	Z	85.141	1
21	MP2A	Mx	-.064	1
22	MP2A	X	0	5
23	MP2A	Z	85.141	5
24	MP2A	Mx	-.064	5
25	MP3A	X	0	4.5
26	MP3A	Z	32.041	4.5
27	MP3A	Mx	0	4.5
28	MP3A	X	0	.5
29	MP3A	Z	70.561	.5
30	MP3A	Mx	0	.5
31	MP3A	X	0	2.5
32	MP3A	Z	70.561	2.5
33	MP3A	Mx	0	2.5
34	MP2A	X	0	2
35	MP2A	Z	55.801	2
36	MP2A	Mx	0	2
37	MP3A	X	0	2
38	MP3A	Z	55.801	2
39	MP3A	Mx	0	2
40	MP4A	X	0	2
41	MP4A	Z	114.122	2



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
42	MP4A	Mx	0	2
43	MP1A	X	0	.5
44	MP1A	Z	54.901	.5
45	MP1A	Mx	0	.5
46	MP1A	X	0	4
47	MP1A	Z	54.901	4
48	MP1A	Mx	0	4
49	MP4A	X	0	.5
50	MP4A	Z	54.901	.5
51	MP4A	Mx	0	.5
52	MP4A	X	0	4
53	MP4A	Z	54.901	4
54	MP4A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-8.647	3
2	MP2A	Z	14.976	3
3	MP2A	Mx	-.004	3
4	MP2A	X	-8.647	4
5	MP2A	Z	14.976	4
6	MP2A	Mx	-.004	4
7	MP2A	X	-8.647	3
8	MP2A	Z	14.976	3
9	MP2A	Mx	-.014	3
10	MP2A	X	-8.647	4
11	MP2A	Z	14.976	4
12	MP2A	Mx	-.014	4
13	MP2A	X	-39.893	1
14	MP2A	Z	69.097	1
15	MP2A	Mx	.072	1
16	MP2A	X	-39.893	5
17	MP2A	Z	69.097	5
18	MP2A	Mx	.072	5
19	MP2A	X	-39.893	1
20	MP2A	Z	69.097	1
21	MP2A	Mx	-.032	1
22	MP2A	X	-39.893	5
23	MP2A	Z	69.097	5
24	MP2A	Mx	-.032	5
25	MP3A	X	-12.801	4.5
26	MP3A	Z	22.171	4.5
27	MP3A	Mx	.006	4.5
28	MP3A	X	-29.498	.5
29	MP3A	Z	51.092	.5
30	MP3A	Mx	.015	.5
31	MP3A	X	-29.498	2.5
32	MP3A	Z	51.092	2.5
33	MP3A	Mx	.015	2.5
34	MP2A	X	-25.605	2
35	MP2A	Z	44.35	2
36	MP2A	Mx	-.013	2
37	MP3A	X	-24.75	2
38	MP3A	Z	42.869	2
39	MP3A	Mx	-.012	2
40	MP4A	X	-53.641	2



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
41	MP4A	Z	92.909	2
42	MP4A	Mx	-.027	2
43	MP1A	X	-28.721	.5
44	MP1A	Z	49.747	.5
45	MP1A	Mx	.014	.5
46	MP1A	X	-28.721	4
47	MP1A	Z	49.747	4
48	MP1A	Mx	.014	4
49	MP4A	X	-28.721	.5
50	MP4A	Z	49.747	.5
51	MP4A	Mx	.014	.5
52	MP4A	X	-28.721	4
53	MP4A	Z	49.747	4
54	MP4A	Mx	.014	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-14.998	3
2	MP2A	Z	8.659	3
3	MP2A	Mx	-.012	3
4	MP2A	X	-14.998	4
5	MP2A	Z	8.659	4
6	MP2A	Mx	-.012	4
7	MP2A	X	-14.998	3
8	MP2A	Z	8.659	3
9	MP2A	Mx	-.018	3
10	MP2A	X	-14.998	4
11	MP2A	Z	8.659	4
12	MP2A	Mx	-.018	4
13	MP2A	X	-59.822	1
14	MP2A	Z	34.538	1
15	MP2A	Mx	.056	1
16	MP2A	X	-59.822	5
17	MP2A	Z	34.538	5
18	MP2A	Mx	.056	5
19	MP2A	X	-59.822	1
20	MP2A	Z	34.538	1
21	MP2A	Mx	.004	1
22	MP2A	X	-59.822	5
23	MP2A	Z	34.538	5
24	MP2A	Mx	.004	5
25	MP3A	X	-11.018	4.5
26	MP3A	Z	6.361	4.5
27	MP3A	Mx	.006	4.5
28	MP3A	X	-31.061	.5
29	MP3A	Z	17.933	.5
30	MP3A	Mx	.016	.5
31	MP3A	X	-31.061	2.5
32	MP3A	Z	17.933	2.5
33	MP3A	Mx	.016	2.5
34	MP2A	X	-36.4	2
35	MP2A	Z	21.015	2
36	MP2A	Mx	-.018	2
37	MP3A	X	-31.957	2
38	MP3A	Z	18.45	2
39	MP3A	Mx	-.016	2



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
40	MP4A	X	-81.061	2
41	MP4A	Z	46.801	2
42	MP4A	Mx	-.041	2
43	MP1A	X	-54.149	.5
44	MP1A	Z	31.263	.5
45	MP1A	Mx	.027	.5
46	MP1A	X	-54.149	4
47	MP1A	Z	31.263	4
48	MP1A	Mx	.027	4
49	MP4A	X	-54.149	.5
50	MP4A	Z	31.263	.5
51	MP4A	Mx	.027	.5
52	MP4A	X	-54.149	4
53	MP4A	Z	31.263	4
54	MP4A	Mx	.027	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-17.331	3
2	MP2A	Z	0	3
3	MP2A	Mx	-.017	3
4	MP2A	X	-17.331	4
5	MP2A	Z	0	4
6	MP2A	Mx	-.017	4
7	MP2A	X	-17.331	3
8	MP2A	Z	0	3
9	MP2A	Mx	-.017	3
10	MP2A	X	-17.331	4
11	MP2A	Z	0	4
12	MP2A	Mx	-.017	4
13	MP2A	X	-63.721	1
14	MP2A	Z	0	1
15	MP2A	Mx	.032	1
16	MP2A	X	-63.721	5
17	MP2A	Z	0	5
18	MP2A	Mx	.032	5
19	MP2A	X	-63.721	1
20	MP2A	Z	0	1
21	MP2A	Mx	.032	1
22	MP2A	X	-63.721	5
23	MP2A	Z	0	5
24	MP2A	Mx	.032	5
25	MP3A	X	-6.283	4.5
26	MP3A	Z	0	4.5
27	MP3A	Mx	.003	4.5
28	MP3A	X	-24.3	.5
29	MP3A	Z	0	.5
30	MP3A	Mx	.012	.5
31	MP3A	X	-24.3	2.5
32	MP3A	Z	0	2.5
33	MP3A	Mx	.012	2.5
34	MP2A	X	-37.441	2
35	MP2A	Z	0	2
36	MP2A	Mx	-.019	2
37	MP3A	X	-30.601	2
38	MP3A	Z	0	2



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
39	MP3A	Mx	-.015	2
40	MP4A	X	-86.761	2
41	MP4A	Z	0	2
42	MP4A	Mx	-.043	2
43	MP1A	X	-65.068	.5
44	MP1A	Z	0	.5
45	MP1A	Mx	.033	.5
46	MP1A	X	-65.068	4
47	MP1A	Z	0	4
48	MP1A	Mx	.033	4
49	MP4A	X	-65.068	.5
50	MP4A	Z	0	.5
51	MP4A	Mx	.033	.5
52	MP4A	X	-65.068	4
53	MP4A	Z	0	4
54	MP4A	Mx	.033	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP2A	X	-14.998	3
2	MP2A	Z	-8.659	3
3	MP2A	Mx	-.018	3
4	MP2A	X	-14.998	4
5	MP2A	Z	-8.659	4
6	MP2A	Mx	-.018	4
7	MP2A	X	-14.998	3
8	MP2A	Z	-8.659	3
9	MP2A	Mx	-.012	3
10	MP2A	X	-14.998	4
11	MP2A	Z	-8.659	4
12	MP2A	Mx	-.012	4
13	MP2A	X	-59.822	1
14	MP2A	Z	-34.538	1
15	MP2A	Mx	.004	1
16	MP2A	X	-59.822	5
17	MP2A	Z	-34.538	5
18	MP2A	Mx	.004	5
19	MP2A	X	-59.822	1
20	MP2A	Z	-34.538	1
21	MP2A	Mx	.056	1
22	MP2A	X	-59.822	5
23	MP2A	Z	-34.538	5
24	MP2A	Mx	.056	5
25	MP3A	X	-11.018	4.5
26	MP3A	Z	-6.361	4.5
27	MP3A	Mx	.006	4.5
28	MP3A	X	-31.061	.5
29	MP3A	Z	-17.933	.5
30	MP3A	Mx	.016	.5
31	MP3A	X	-31.061	2.5
32	MP3A	Z	-17.933	2.5
33	MP3A	Mx	.016	2.5
34	MP2A	X	-36.4	2
35	MP2A	Z	-21.015	2
36	MP2A	Mx	-.018	2
37	MP3A	X	-31.957	2





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
38	MP3A	Z	-18.45	2
39	MP3A	Mx	-.016	2
40	MP4A	X	-81.061	2
41	MP4A	Z	-46.801	2
42	MP4A	Mx	-.041	2
43	MP1A	X	-54.149	.5
44	MP1A	Z	-31.263	.5
45	MP1A	Mx	.027	.5
46	MP1A	X	-54.149	4
47	MP1A	Z	-31.263	4
48	MP1A	Mx	.027	4
49	MP4A	X	-54.149	.5
50	MP4A	Z	-31.263	.5
51	MP4A	Mx	.027	.5
52	MP4A	X	-54.149	4
53	MP4A	Z	-31.263	4
54	MP4A	Mx	.027	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-8.647	3
2	MP2A	Z	-14.976	3
3	MP2A	Mx	-.014	3
4	MP2A	X	-8.647	4
5	MP2A	Z	-14.976	4
6	MP2A	Mx	-.014	4
7	MP2A	X	-8.647	3
8	MP2A	Z	-14.976	3
9	MP2A	Mx	-.004	3
10	MP2A	X	-8.647	4
11	MP2A	Z	-14.976	4
12	MP2A	Mx	-.004	4
13	MP2A	X	-39.893	1
14	MP2A	Z	-69.097	1
15	MP2A	Mx	-.032	1
16	MP2A	X	-39.893	5
17	MP2A	Z	-69.097	5
18	MP2A	Mx	-.032	5
19	MP2A	X	-39.893	1
20	MP2A	Z	-69.097	1
21	MP2A	Mx	.072	1
22	MP2A	X	-39.893	5
23	MP2A	Z	-69.097	5
24	MP2A	Mx	.072	5
25	MP3A	X	-12.801	4.5
26	MP3A	Z	-22.171	4.5
27	MP3A	Mx	.006	4.5
28	MP3A	X	-29.498	.5
29	MP3A	Z	-51.092	.5
30	MP3A	Mx	.015	.5
31	MP3A	X	-29.498	2.5
32	MP3A	Z	-51.092	2.5
33	MP3A	Mx	.015	2.5
34	MP2A	X	-25.605	2
35	MP2A	Z	-44.35	2
36	MP2A	Mx	-.013	2



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
37	MP3A	X	-24.75	2
38	MP3A	Z	-42.869	2
39	MP3A	Mx	-.012	2
40	MP4A	X	-53.641	2
41	MP4A	Z	-92.909	2
42	MP4A	Mx	-.027	2
43	MP1A	X	-28.721	.5
44	MP1A	Z	-49.747	.5
45	MP1A	Mx	.014	.5
46	MP1A	X	-28.721	4
47	MP1A	Z	-49.747	4
48	MP1A	Mx	.014	4
49	MP4A	X	-28.721	.5
50	MP4A	Z	-49.747	.5
51	MP4A	Mx	.014	.5
52	MP4A	X	-28.721	4
53	MP4A	Z	-49.747	4
54	MP4A	Mx	.014	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	0	3
2	MP2A	Z	-1.465	3
3	MP2A	Mx	-.000488	3
4	MP2A	X	0	4
5	MP2A	Z	-1.465	4
6	MP2A	Mx	-.000488	4
7	MP2A	X	0	3
8	MP2A	Z	-1.465	3
9	MP2A	Mx	.000488	3
10	MP2A	X	0	4
11	MP2A	Z	-1.465	4
12	MP2A	Mx	.000488	4
13	MP2A	X	0	1
14	MP2A	Z	-33.711	1
15	MP2A	Mx	-.025	1
16	MP2A	X	0	5
17	MP2A	Z	-33.711	5
18	MP2A	Mx	-.025	5
19	MP2A	X	0	1
20	MP2A	Z	-33.711	1
21	MP2A	Mx	.025	1
22	MP2A	X	0	5
23	MP2A	Z	-33.711	5
24	MP2A	Mx	.025	5
25	MP3A	X	0	4.5
26	MP3A	Z	-7.256	4.5
27	MP3A	Mx	0	4.5
28	MP3A	X	0	.5
29	MP3A	Z	-16.645	.5
30	MP3A	Mx	0	.5
31	MP3A	X	0	2.5
32	MP3A	Z	-16.645	2.5
33	MP3A	Mx	0	2.5
34	MP2A	X	0	2
35	MP2A	Z	-14.049	2



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
36	MP2A	Mx	0	2
37	MP3A	X	0	2
38	MP3A	Z	-14.049	2
39	MP3A	Mx	0	2
40	MP4A	X	0	2
41	MP4A	Z	-28.834	2
42	MP4A	Mx	0	2
43	MP1A	X	0	.5
44	MP1A	Z	-11.335	.5
45	MP1A	Mx	0	.5
46	MP1A	X	0	4
47	MP1A	Z	-11.335	4
48	MP1A	Mx	0	4
49	MP4A	X	0	.5
50	MP4A	Z	-11.335	.5
51	MP4A	Mx	0	.5
52	MP4A	X	0	4
53	MP4A	Z	-11.335	4
54	MP4A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	1.033	3
2	MP2A	Z	-1.789	3
3	MP2A	Mx	.000437	3
4	MP2A	X	1.033	4
5	MP2A	Z	-1.789	4
6	MP2A	Mx	.000437	4
7	MP2A	X	1.033	3
8	MP2A	Z	-1.789	3
9	MP2A	Mx	.002	3
10	MP2A	X	1.033	4
11	MP2A	Z	-1.789	4
12	MP2A	Mx	.002	4
13	MP2A	X	15.831	1
14	MP2A	Z	-27.42	1
15	MP2A	Mx	-.028	1
16	MP2A	X	15.831	5
17	MP2A	Z	-27.42	5
18	MP2A	Mx	-.028	5
19	MP2A	X	15.831	1
20	MP2A	Z	-27.42	1
21	MP2A	Mx	.013	1
22	MP2A	X	15.831	5
23	MP2A	Z	-27.42	5
24	MP2A	Mx	.013	5
25	MP3A	X	2.99	4.5
26	MP3A	Z	-5.178	4.5
27	MP3A	Mx	-.001	4.5
28	MP3A	X	7.13	.5
29	MP3A	Z	-12.349	.5
30	MP3A	Mx	-.004	.5
31	MP3A	X	7.13	2.5
32	MP3A	Z	-12.349	2.5
33	MP3A	Mx	-.004	2.5
34	MP2A	X	6.491	2



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
35	MP2A	Z	-11.243	2
36	MP2A	Mx	.003	2
37	MP3A	X	6.289	2
38	MP3A	Z	-10.892	2
39	MP3A	Mx	.003	2
40	MP4A	X	13.633	2
41	MP4A	Z	-23.612	2
42	MP4A	Mx	.007	2
43	MP1A	X	5.892	.5
44	MP1A	Z	-10.205	.5
45	MP1A	Mx	-.003	.5
46	MP1A	X	5.892	4
47	MP1A	Z	-10.205	4
48	MP1A	Mx	-.003	4
49	MP4A	X	5.892	.5
50	MP4A	Z	-10.205	.5
51	MP4A	Mx	-.003	.5
52	MP4A	X	5.892	4
53	MP4A	Z	-10.205	4
54	MP4A	Mx	-.003	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	2.83	3
2	MP2A	Z	-1.634	3
3	MP2A	Mx	.002	3
4	MP2A	X	2.83	4
5	MP2A	Z	-1.634	4
6	MP2A	Mx	.002	4
7	MP2A	X	2.83	3
8	MP2A	Z	-1.634	3
9	MP2A	Mx	.003	3
10	MP2A	X	2.83	4
11	MP2A	Z	-1.634	4
12	MP2A	Mx	.003	4
13	MP2A	X	23.871	1
14	MP2A	Z	-13.782	1
15	MP2A	Mx	-.022	1
16	MP2A	X	23.871	5
17	MP2A	Z	-13.782	5
18	MP2A	Mx	-.022	5
19	MP2A	X	23.871	1
20	MP2A	Z	-13.782	1
21	MP2A	Mx	-.002	1
22	MP2A	X	23.871	5
23	MP2A	Z	-13.782	5
24	MP2A	Mx	-.002	5
25	MP3A	X	2.968	4.5
26	MP3A	Z	-1.714	4.5
27	MP3A	Mx	-.001	4.5
28	MP3A	X	8.219	.5
29	MP3A	Z	-4.745	.5
30	MP3A	Mx	-.004	.5
31	MP3A	X	8.219	2.5
32	MP3A	Z	-4.745	2.5
33	MP3A	Mx	-.004	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
34	MP2A	X	9.396	2
35	MP2A	Z	-5.425	2
36	MP2A	Mx	.005	2
37	MP3A	X	8.343	2
38	MP3A	Z	-4.817	2
39	MP3A	Mx	.004	2
40	MP4A	X	20.896	2
41	MP4A	Z	-12.064	2
42	MP4A	Mx	.01	2
43	MP1A	X	10.983	.5
44	MP1A	Z	-6.341	.5
45	MP1A	Mx	-.005	.5
46	MP1A	X	10.983	4
47	MP1A	Z	-6.341	4
48	MP1A	Mx	-.005	4
49	MP4A	X	10.983	.5
50	MP4A	Z	-6.341	.5
51	MP4A	Mx	-.005	.5
52	MP4A	X	10.983	4
53	MP4A	Z	-6.341	4
54	MP4A	Mx	-.005	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	3.868	3
2	MP2A	Z	0	3
3	MP2A	Mx	.004	3
4	MP2A	X	3.868	4
5	MP2A	Z	0	4
6	MP2A	Mx	.004	4
7	MP2A	X	3.868	3
8	MP2A	Z	0	3
9	MP2A	Mx	.004	3
10	MP2A	X	3.868	4
11	MP2A	Z	0	4
12	MP2A	Mx	.004	4
13	MP2A	X	25.515	1
14	MP2A	Z	0	1
15	MP2A	Mx	-.013	1
16	MP2A	X	25.515	5
17	MP2A	Z	0	5
18	MP2A	Mx	-.013	5
19	MP2A	X	25.515	1
20	MP2A	Z	0	1
21	MP2A	Mx	-.013	1
22	MP2A	X	25.515	5
23	MP2A	Z	0	5
24	MP2A	Mx	-.013	5
25	MP3A	X	2.151	4.5
26	MP3A	Z	0	4.5
27	MP3A	Mx	-.001	4.5
28	MP3A	X	7.106	.5
29	MP3A	Z	0	.5
30	MP3A	Mx	-.004	.5
31	MP3A	X	7.106	2.5
32	MP3A	Z	0	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
33	MP3A	Mx	-.004	2.5
34	MP2A	X	9.783	2
35	MP2A	Z	0	2
36	MP2A	Mx	.005	2
37	MP3A	X	8.161	2
38	MP3A	Z	0	2
39	MP3A	Mx	.004	2
40	MP4A	X	22.561	2
41	MP4A	Z	0	2
42	MP4A	Mx	.011	2
43	MP1A	X	13.131	.5
44	MP1A	Z	0	.5
45	MP1A	Mx	-.007	.5
46	MP1A	X	13.131	4
47	MP1A	Z	0	4
48	MP1A	Mx	-.007	4
49	MP4A	X	13.131	.5
50	MP4A	Z	0	.5
51	MP4A	Mx	-.007	.5
52	MP4A	X	13.131	4
53	MP4A	Z	0	4
54	MP4A	Mx	-.007	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	2.83	3
2	MP2A	Z	1.634	3
3	MP2A	Mx	.003	3
4	MP2A	X	2.83	4
5	MP2A	Z	1.634	4
6	MP2A	Mx	.003	4
7	MP2A	X	2.83	3
8	MP2A	Z	1.634	3
9	MP2A	Mx	.002	3
10	MP2A	X	2.83	4
11	MP2A	Z	1.634	4
12	MP2A	Mx	.002	4
13	MP2A	X	23.871	1
14	MP2A	Z	13.782	1
15	MP2A	Mx	-.002	1
16	MP2A	X	23.871	5
17	MP2A	Z	13.782	5
18	MP2A	Mx	-.002	5
19	MP2A	X	23.871	1
20	MP2A	Z	13.782	1
21	MP2A	Mx	-.022	1
22	MP2A	X	23.871	5
23	MP2A	Z	13.782	5
24	MP2A	Mx	-.022	5
25	MP3A	X	2.968	4.5
26	MP3A	Z	1.714	4.5
27	MP3A	Mx	-.001	4.5
28	MP3A	X	8.219	.5
29	MP3A	Z	4.745	.5
30	MP3A	Mx	-.004	.5
31	MP3A	X	8.219	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
32	MP3A	Z	4.745	2.5
33	MP3A	Mx	-.004	2.5
34	MP2A	X	9.396	2
35	MP2A	Z	5.425	2
36	MP2A	Mx	.005	2
37	MP3A	X	8.343	2
38	MP3A	Z	4.817	2
39	MP3A	Mx	.004	2
40	MP4A	X	20.896	2
41	MP4A	Z	12.064	2
42	MP4A	Mx	.01	2
43	MP1A	X	10.983	.5
44	MP1A	Z	6.341	.5
45	MP1A	Mx	-.005	.5
46	MP1A	X	10.983	4
47	MP1A	Z	6.341	4
48	MP1A	Mx	-.005	4
49	MP4A	X	10.983	.5
50	MP4A	Z	6.341	.5
51	MP4A	Mx	-.005	.5
52	MP4A	X	10.983	4
53	MP4A	Z	6.341	4
54	MP4A	Mx	-.005	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	1.033	3
2	MP2A	Z	1.789	3
3	MP2A	Mx	.002	3
4	MP2A	X	1.033	4
5	MP2A	Z	1.789	4
6	MP2A	Mx	.002	4
7	MP2A	X	1.033	3
8	MP2A	Z	1.789	3
9	MP2A	Mx	.000437	3
10	MP2A	X	1.033	4
11	MP2A	Z	1.789	4
12	MP2A	Mx	.000437	4
13	MP2A	X	15.831	1
14	MP2A	Z	27.42	1
15	MP2A	Mx	.013	1
16	MP2A	X	15.831	5
17	MP2A	Z	27.42	5
18	MP2A	Mx	.013	5
19	MP2A	X	15.831	1
20	MP2A	Z	27.42	1
21	MP2A	Mx	-.028	1
22	MP2A	X	15.831	5
23	MP2A	Z	27.42	5
24	MP2A	Mx	-.028	5
25	MP3A	X	2.99	4.5
26	MP3A	Z	5.178	4.5
27	MP3A	Mx	-.001	4.5
28	MP3A	X	7.13	.5
29	MP3A	Z	12.349	.5
30	MP3A	Mx	-.004	.5







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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
30	MP3A	Mx	0	.5
31	MP3A	X	0	2.5
32	MP3A	Z	16.645	2.5
33	MP3A	Mx	0	2.5
34	MP2A	X	0	2
35	MP2A	Z	14.049	2
36	MP2A	Mx	0	2
37	MP3A	X	0	2
38	MP3A	Z	14.049	2
39	MP3A	Mx	0	2
40	MP4A	X	0	2
41	MP4A	Z	28.834	2
42	MP4A	Mx	0	2
43	MP1A	X	0	.5
44	MP1A	Z	11.335	.5
45	MP1A	Mx	0	.5
46	MP1A	X	0	4
47	MP1A	Z	11.335	4
48	MP1A	Mx	0	4
49	MP4A	X	0	.5
50	MP4A	Z	11.335	.5
51	MP4A	Mx	0	.5
52	MP4A	X	0	4
53	MP4A	Z	11.335	4
54	MP4A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-1.033	3
2	MP2A	Z	1.789	3
3	MP2A	Mx	-.000437	3
4	MP2A	X	-1.033	4
5	MP2A	Z	1.789	4
6	MP2A	Mx	-.000437	4
7	MP2A	X	-1.033	3
8	MP2A	Z	1.789	3
9	MP2A	Mx	-.002	3
10	MP2A	X	-1.033	4
11	MP2A	Z	1.789	4
12	MP2A	Mx	-.002	4
13	MP2A	X	-15.831	1
14	MP2A	Z	27.42	1
15	MP2A	Mx	.028	1
16	MP2A	X	-15.831	5
17	MP2A	Z	27.42	5
18	MP2A	Mx	.028	5
19	MP2A	X	-15.831	1
20	MP2A	Z	27.42	1
21	MP2A	Mx	-.013	1
22	MP2A	X	-15.831	5
23	MP2A	Z	27.42	5
24	MP2A	Mx	-.013	5
25	MP3A	X	-2.99	4.5
26	MP3A	Z	5.178	4.5
27	MP3A	Mx	.001	4.5
28	MP3A	X	-7.13	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
29	MP3A	Z	12.349	.5
30	MP3A	Mx	.004	.5
31	MP3A	X	-7.13	2.5
32	MP3A	Z	12.349	2.5
33	MP3A	Mx	.004	2.5
34	MP2A	X	-6.491	2
35	MP2A	Z	11.243	2
36	MP2A	Mx	-.003	2
37	MP3A	X	-6.289	2
38	MP3A	Z	10.892	2
39	MP3A	Mx	-.003	2
40	MP4A	X	-13.633	2
41	MP4A	Z	23.612	2
42	MP4A	Mx	-.007	2
43	MP1A	X	-5.892	.5
44	MP1A	Z	10.205	.5
45	MP1A	Mx	.003	.5
46	MP1A	X	-5.892	4
47	MP1A	Z	10.205	4
48	MP1A	Mx	.003	4
49	MP4A	X	-5.892	.5
50	MP4A	Z	10.205	.5
51	MP4A	Mx	.003	.5
52	MP4A	X	-5.892	4
53	MP4A	Z	10.205	4
54	MP4A	Mx	.003	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-2.83	3
2	MP2A	Z	1.634	3
3	MP2A	Mx	-.002	3
4	MP2A	X	-2.83	4
5	MP2A	Z	1.634	4
6	MP2A	Mx	-.002	4
7	MP2A	X	-2.83	3
8	MP2A	Z	1.634	3
9	MP2A	Mx	-.003	3
10	MP2A	X	-2.83	4
11	MP2A	Z	1.634	4
12	MP2A	Mx	-.003	4
13	MP2A	X	-23.871	1
14	MP2A	Z	13.782	1
15	MP2A	Mx	.022	1
16	MP2A	X	-23.871	5
17	MP2A	Z	13.782	5
18	MP2A	Mx	.022	5
19	MP2A	X	-23.871	1
20	MP2A	Z	13.782	1
21	MP2A	Mx	.002	1
22	MP2A	X	-23.871	5
23	MP2A	Z	13.782	5
24	MP2A	Mx	.002	5
25	MP3A	X	-2.968	4.5
26	MP3A	Z	1.714	4.5
27	MP3A	Mx	.001	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
28	MP3A	X	-8.219	.5
29	MP3A	Z	4.745	.5
30	MP3A	Mx	.004	.5
31	MP3A	X	-8.219	2.5
32	MP3A	Z	4.745	2.5
33	MP3A	Mx	.004	2.5
34	MP2A	X	-9.396	2
35	MP2A	Z	5.425	2
36	MP2A	Mx	-.005	2
37	MP3A	X	-8.343	2
38	MP3A	Z	4.817	2
39	MP3A	Mx	-.004	2
40	MP4A	X	-20.896	2
41	MP4A	Z	12.064	2
42	MP4A	Mx	-.01	2
43	MP1A	X	-10.983	.5
44	MP1A	Z	6.341	.5
45	MP1A	Mx	.005	.5
46	MP1A	X	-10.983	4
47	MP1A	Z	6.341	4
48	MP1A	Mx	.005	4
49	MP4A	X	-10.983	.5
50	MP4A	Z	6.341	.5
51	MP4A	Mx	.005	.5
52	MP4A	X	-10.983	4
53	MP4A	Z	6.341	4
54	MP4A	Mx	.005	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-3.868	3
2	MP2A	Z	0	3
3	MP2A	Mx	-.004	3
4	MP2A	X	-3.868	4
5	MP2A	Z	0	4
6	MP2A	Mx	-.004	4
7	MP2A	X	-3.868	3
8	MP2A	Z	0	3
9	MP2A	Mx	-.004	3
10	MP2A	X	-3.868	4
11	MP2A	Z	0	4
12	MP2A	Mx	-.004	4
13	MP2A	X	-25.515	1
14	MP2A	Z	0	1
15	MP2A	Mx	.013	1
16	MP2A	X	-25.515	5
17	MP2A	Z	0	5
18	MP2A	Mx	.013	5
19	MP2A	X	-25.515	1
20	MP2A	Z	0	1
21	MP2A	Mx	.013	1
22	MP2A	X	-25.515	5
23	MP2A	Z	0	5
24	MP2A	Mx	.013	5
25	MP3A	X	-2.151	4.5
26	MP3A	Z	0	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
27	MP3A	Mx	.001	4.5
28	MP3A	X	-7.106	.5
29	MP3A	Z	0	.5
30	MP3A	Mx	.004	.5
31	MP3A	X	-7.106	2.5
32	MP3A	Z	0	2.5
33	MP3A	Mx	.004	2.5
34	MP2A	X	-9.783	2
35	MP2A	Z	0	2
36	MP2A	Mx	-.005	2
37	MP3A	X	-8.161	2
38	MP3A	Z	0	2
39	MP3A	Mx	-.004	2
40	MP4A	X	-22.561	2
41	MP4A	Z	0	2
42	MP4A	Mx	-.011	2
43	MP1A	X	-13.131	.5
44	MP1A	Z	0	.5
45	MP1A	Mx	.007	.5
46	MP1A	X	-13.131	4
47	MP1A	Z	0	4
48	MP1A	Mx	.007	4
49	MP4A	X	-13.131	.5
50	MP4A	Z	0	.5
51	MP4A	Mx	.007	.5
52	MP4A	X	-13.131	4
53	MP4A	Z	0	4
54	MP4A	Mx	.007	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-2.83	3
2	MP2A	Z	-1.634	3
3	MP2A	Mx	-.003	3
4	MP2A	X	-2.83	4
5	MP2A	Z	-1.634	4
6	MP2A	Mx	-.003	4
7	MP2A	X	-2.83	3
8	MP2A	Z	-1.634	3
9	MP2A	Mx	-.002	3
10	MP2A	X	-2.83	4
11	MP2A	Z	-1.634	4
12	MP2A	Mx	-.002	4
13	MP2A	X	-23.871	1
14	MP2A	Z	-13.782	1
15	MP2A	Mx	.002	1
16	MP2A	X	-23.871	5
17	MP2A	Z	-13.782	5
18	MP2A	Mx	.002	5
19	MP2A	X	-23.871	1
20	MP2A	Z	-13.782	1
21	MP2A	Mx	.022	1
22	MP2A	X	-23.871	5
23	MP2A	Z	-13.782	5
24	MP2A	Mx	.022	5
25	MP3A	X	-2.968	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
26	MP3A	Z	-1.714	4.5
27	MP3A	Mx	.001	4.5
28	MP3A	X	-8.219	.5
29	MP3A	Z	-4.745	.5
30	MP3A	Mx	.004	.5
31	MP3A	X	-8.219	2.5
32	MP3A	Z	-4.745	2.5
33	MP3A	Mx	.004	2.5
34	MP2A	X	-9.396	2
35	MP2A	Z	-5.425	2
36	MP2A	Mx	-.005	2
37	MP3A	X	-8.343	2
38	MP3A	Z	-4.817	2
39	MP3A	Mx	-.004	2
40	MP4A	X	-20.896	2
41	MP4A	Z	-12.064	2
42	MP4A	Mx	-.01	2
43	MP1A	X	-10.983	.5
44	MP1A	Z	-6.341	.5
45	MP1A	Mx	.005	.5
46	MP1A	X	-10.983	4
47	MP1A	Z	-6.341	4
48	MP1A	Mx	.005	4
49	MP4A	X	-10.983	.5
50	MP4A	Z	-6.341	.5
51	MP4A	Mx	.005	.5
52	MP4A	X	-10.983	4
53	MP4A	Z	-6.341	4
54	MP4A	Mx	.005	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-1.033	3
2	MP2A	Z	-1.789	3
3	MP2A	Mx	-.002	3
4	MP2A	X	-1.033	4
5	MP2A	Z	-1.789	4
6	MP2A	Mx	-.002	4
7	MP2A	X	-1.033	3
8	MP2A	Z	-1.789	3
9	MP2A	Mx	-.000437	3
10	MP2A	X	-1.033	4
11	MP2A	Z	-1.789	4
12	MP2A	Mx	-.000437	4
13	MP2A	X	-15.831	1
14	MP2A	Z	-27.42	1
15	MP2A	Mx	-.013	1
16	MP2A	X	-15.831	5
17	MP2A	Z	-27.42	5
18	MP2A	Mx	-.013	5
19	MP2A	X	-15.831	1
20	MP2A	Z	-27.42	1
21	MP2A	Mx	.028	1
22	MP2A	X	-15.831	5
23	MP2A	Z	-27.42	5
24	MP2A	Mx	.028	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
25	MP3A	X	-2.99	4.5
26	MP3A	Z	-5.178	4.5
27	MP3A	Mx	.001	4.5
28	MP3A	X	-7.13	.5
29	MP3A	Z	-12.349	.5
30	MP3A	Mx	.004	.5
31	MP3A	X	-7.13	2.5
32	MP3A	Z	-12.349	2.5
33	MP3A	Mx	.004	2.5
34	MP2A	X	-6.491	2
35	MP2A	Z	-11.243	2
36	MP2A	Mx	-.003	2
37	MP3A	X	-6.289	2
38	MP3A	Z	-10.892	2
39	MP3A	Mx	-.003	2
40	MP4A	X	-13.633	2
41	MP4A	Z	-23.612	2
42	MP4A	Mx	-.007	2
43	MP1A	X	-5.892	.5
44	MP1A	Z	-10.205	.5
45	MP1A	Mx	.003	.5
46	MP1A	X	-5.892	4
47	MP1A	Z	-10.205	4
48	MP1A	Mx	.003	4
49	MP4A	X	-5.892	.5
50	MP4A	Z	-10.205	.5
51	MP4A	Mx	.003	.5
52	MP4A	X	-5.892	4
53	MP4A	Z	-10.205	4
54	MP4A	Mx	.003	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	0	3
2	MP2A	Z	-1.08	3
3	MP2A	Mx	-.00036	3
4	MP2A	X	0	4
5	MP2A	Z	-1.08	4
6	MP2A	Mx	-.00036	4
7	MP2A	X	0	3
8	MP2A	Z	-1.08	3
9	MP2A	Mx	.00036	3
10	MP2A	X	0	4
11	MP2A	Z	-1.08	4
12	MP2A	Mx	.00036	4
13	MP2A	X	0	1
14	MP2A	Z	-5.321	1
15	MP2A	Mx	-.004	1
16	MP2A	X	0	5
17	MP2A	Z	-5.321	5
18	MP2A	Mx	-.004	5
19	MP2A	X	0	1
20	MP2A	Z	-5.321	1
21	MP2A	Mx	.004	1
22	MP2A	X	0	5
23	MP2A	Z	-5.321	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
24	MP2A	Mx	.004	5
25	MP3A	X	0	4.5
26	MP3A	Z	-2.003	4.5
27	MP3A	Mx	0	4.5
28	MP3A	X	0	.5
29	MP3A	Z	-4.41	.5
30	MP3A	Mx	0	.5
31	MP3A	X	0	2.5
32	MP3A	Z	-4.41	2.5
33	MP3A	Mx	0	2.5
34	MP2A	X	0	2
35	MP2A	Z	-3.488	2
36	MP2A	Mx	0	2
37	MP3A	X	0	2
38	MP3A	Z	-3.488	2
39	MP3A	Mx	0	2
40	MP4A	X	0	2
41	MP4A	Z	-7.133	2
42	MP4A	Mx	0	2
43	MP1A	X	0	.5
44	MP1A	Z	-3.431	.5
45	MP1A	Mx	0	.5
46	MP1A	X	0	4
47	MP1A	Z	-3.431	4
48	MP1A	Mx	0	4
49	MP4A	X	0	.5
50	MP4A	Z	-3.431	.5
51	MP4A	Mx	0	.5
52	MP4A	X	0	4
53	MP4A	Z	-3.431	4
54	MP4A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	.54	3
2	MP2A	Z	-.936	3
3	MP2A	Mx	.000228	3
4	MP2A	X	.54	4
5	MP2A	Z	-.936	4
6	MP2A	Mx	.000228	4
7	MP2A	X	.54	3
8	MP2A	Z	-.936	3
9	MP2A	Mx	.000852	3
10	MP2A	X	.54	4
11	MP2A	Z	-.936	4
12	MP2A	Mx	.000852	4
13	MP2A	X	2.493	1
14	MP2A	Z	-4.319	1
15	MP2A	Mx	-.004	1
16	MP2A	X	2.493	5
17	MP2A	Z	-4.319	5
18	MP2A	Mx	-.004	5
19	MP2A	X	2.493	1
20	MP2A	Z	-4.319	1
21	MP2A	Mx	.002	1
22	MP2A	X	2.493	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
23	MP2A	Z	-4.319	5
24	MP2A	Mx	.002	5
25	MP3A	X	.8	4.5
26	MP3A	Z	-1.386	4.5
27	MP3A	Mx	-.0004	4.5
28	MP3A	X	1.844	.5
29	MP3A	Z	-3.193	.5
30	MP3A	Mx	-.000922	.5
31	MP3A	X	1.844	2.5
32	MP3A	Z	-3.193	2.5
33	MP3A	Mx	-.000922	2.5
34	MP2A	X	1.6	2
35	MP2A	Z	-2.772	2
36	MP2A	Mx	.0008	2
37	MP3A	X	1.547	2
38	MP3A	Z	-2.679	2
39	MP3A	Mx	.000774	2
40	MP4A	X	3.353	2
41	MP4A	Z	-5.807	2
42	MP4A	Mx	.002	2
43	MP1A	X	1.795	.5
44	MP1A	Z	-3.109	.5
45	MP1A	Mx	-.000898	.5
46	MP1A	X	1.795	4
47	MP1A	Z	-3.109	4
48	MP1A	Mx	-.000898	4
49	MP4A	X	1.795	.5
50	MP4A	Z	-3.109	.5
51	MP4A	Mx	-.000898	.5
52	MP4A	X	1.795	4
53	MP4A	Z	-3.109	4
54	MP4A	Mx	-.000898	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	.937	3
2	MP2A	Z	-.541	3
3	MP2A	Mx	.000757	3
4	MP2A	X	.937	4
5	MP2A	Z	-.541	4
6	MP2A	Mx	.000757	4
7	MP2A	X	.937	3
8	MP2A	Z	-.541	3
9	MP2A	Mx	.001	3
10	MP2A	X	.937	4
11	MP2A	Z	-.541	4
12	MP2A	Mx	.001	4
13	MP2A	X	3.739	1
14	MP2A	Z	-2.159	1
15	MP2A	Mx	-.003	1
16	MP2A	X	3.739	5
17	MP2A	Z	-2.159	5
18	MP2A	Mx	-.003	5
19	MP2A	X	3.739	1
20	MP2A	Z	-2.159	1
21	MP2A	Mx	-.00025	1







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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
21	MP2A	Mx	-.002	1
22	MP2A	X	3.983	5
23	MP2A	Z	0	5
24	MP2A	Mx	-.002	5
25	MP3A	X	.393	4.5
26	MP3A	Z	0	4.5
27	MP3A	Mx	-.000196	4.5
28	MP3A	X	1.519	.5
29	MP3A	Z	0	.5
30	MP3A	Mx	-.000759	.5
31	MP3A	X	1.519	2.5
32	MP3A	Z	0	2.5
33	MP3A	Mx	-.000759	2.5
34	MP2A	X	2.34	2
35	MP2A	Z	0	2
36	MP2A	Mx	.001	2
37	MP3A	X	1.913	2
38	MP3A	Z	0	2
39	MP3A	Mx	.000956	2
40	MP4A	X	5.423	2
41	MP4A	Z	0	2
42	MP4A	Mx	.003	2
43	MP1A	X	4.067	.5
44	MP1A	Z	0	.5
45	MP1A	Mx	-.002	.5
46	MP1A	X	4.067	4
47	MP1A	Z	0	4
48	MP1A	Mx	-.002	4
49	MP4A	X	4.067	.5
50	MP4A	Z	0	.5
51	MP4A	Mx	-.002	.5
52	MP4A	X	4.067	4
53	MP4A	Z	0	4
54	MP4A	Mx	-.002	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	.937	3
2	MP2A	Z	.541	3
3	MP2A	Mx	.001	3
4	MP2A	X	.937	4
5	MP2A	Z	.541	4
6	MP2A	Mx	.001	4
7	MP2A	X	.937	3
8	MP2A	Z	.541	3
9	MP2A	Mx	.000757	3
10	MP2A	X	.937	4
11	MP2A	Z	.541	4
12	MP2A	Mx	.000757	4
13	MP2A	X	3.739	1
14	MP2A	Z	2.159	1
15	MP2A	Mx	-.00025	1
16	MP2A	X	3.739	5
17	MP2A	Z	2.159	5
18	MP2A	Mx	-.00025	5
19	MP2A	X	3.739	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
20	MP2A	Z	2.159	1
21	MP2A	Mx	-.003	1
22	MP2A	X	3.739	5
23	MP2A	Z	2.159	5
24	MP2A	Mx	-.003	5
25	MP3A	X	.689	4.5
26	MP3A	Z	.398	4.5
27	MP3A	Mx	-.000344	4.5
28	MP3A	X	1.941	.5
29	MP3A	Z	1.121	.5
30	MP3A	Mx	-.000971	.5
31	MP3A	X	1.941	2.5
32	MP3A	Z	1.121	2.5
33	MP3A	Mx	-.000971	2.5
34	MP2A	X	2.275	2
35	MP2A	Z	1.313	2
36	MP2A	Mx	.001	2
37	MP3A	X	1.997	2
38	MP3A	Z	1.153	2
39	MP3A	Mx	.000998	2
40	MP4A	X	5.066	2
41	MP4A	Z	2.925	2
42	MP4A	Mx	.003	2
43	MP1A	X	3.384	.5
44	MP1A	Z	1.954	.5
45	MP1A	Mx	-.002	.5
46	MP1A	X	3.384	4
47	MP1A	Z	1.954	4
48	MP1A	Mx	-.002	4
49	MP4A	X	3.384	.5
50	MP4A	Z	1.954	.5
51	MP4A	Mx	-.002	.5
52	MP4A	X	3.384	4
53	MP4A	Z	1.954	4
54	MP4A	Mx	-.002	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	.54	3
2	MP2A	Z	.936	3
3	MP2A	Mx	.000852	3
4	MP2A	X	.54	4
5	MP2A	Z	.936	4
6	MP2A	Mx	.000852	4
7	MP2A	X	.54	3
8	MP2A	Z	.936	3
9	MP2A	Mx	.000228	3
10	MP2A	X	.54	4
11	MP2A	Z	.936	4
12	MP2A	Mx	.000228	4
13	MP2A	X	2.493	1
14	MP2A	Z	4.319	1
15	MP2A	Mx	.002	1
16	MP2A	X	2.493	5
17	MP2A	Z	4.319	5
18	MP2A	Mx	.002	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
19	MP2A	X	2.493	1
20	MP2A	Z	4.319	1
21	MP2A	Mx	-.004	1
22	MP2A	X	2.493	5
23	MP2A	Z	4.319	5
24	MP2A	Mx	-.004	5
25	MP3A	X	.8	4.5
26	MP3A	Z	1.386	4.5
27	MP3A	Mx	-.0004	4.5
28	MP3A	X	1.844	.5
29	MP3A	Z	3.193	.5
30	MP3A	Mx	-.000922	.5
31	MP3A	X	1.844	2.5
32	MP3A	Z	3.193	2.5
33	MP3A	Mx	-.000922	2.5
34	MP2A	X	1.6	2
35	MP2A	Z	2.772	2
36	MP2A	Mx	.0008	2
37	MP3A	X	1.547	2
38	MP3A	Z	2.679	2
39	MP3A	Mx	.000774	2
40	MP4A	X	3.353	2
41	MP4A	Z	5.807	2
42	MP4A	Mx	.002	2
43	MP1A	X	1.795	.5
44	MP1A	Z	3.109	.5
45	MP1A	Mx	-.000898	.5
46	MP1A	X	1.795	4
47	MP1A	Z	3.109	4
48	MP1A	Mx	-.000898	4
49	MP4A	X	1.795	.5
50	MP4A	Z	3.109	.5
51	MP4A	Mx	-.000898	.5
52	MP4A	X	1.795	4
53	MP4A	Z	3.109	4
54	MP4A	Mx	-.000898	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	0	3
2	MP2A	Z	1.08	3
3	MP2A	Mx	.00036	3
4	MP2A	X	0	4
5	MP2A	Z	1.08	4
6	MP2A	Mx	.00036	4
7	MP2A	X	0	3
8	MP2A	Z	1.08	3
9	MP2A	Mx	-.00036	3
10	MP2A	X	0	4
11	MP2A	Z	1.08	4
12	MP2A	Mx	-.00036	4
13	MP2A	X	0	1
14	MP2A	Z	5.321	1
15	MP2A	Mx	.004	1
16	MP2A	X	0	5
17	MP2A	Z	5.321	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
18	MP2A	Mx	.004	5
19	MP2A	X	0	1
20	MP2A	Z	5.321	1
21	MP2A	Mx	-.004	1
22	MP2A	X	0	5
23	MP2A	Z	5.321	5
24	MP2A	Mx	-.004	5
25	MP3A	X	0	4.5
26	MP3A	Z	2.003	4.5
27	MP3A	Mx	0	4.5
28	MP3A	X	0	.5
29	MP3A	Z	4.41	.5
30	MP3A	Mx	0	.5
31	MP3A	X	0	2.5
32	MP3A	Z	4.41	2.5
33	MP3A	Mx	0	2.5
34	MP2A	X	0	2
35	MP2A	Z	3.488	2
36	MP2A	Mx	0	2
37	MP3A	X	0	2
38	MP3A	Z	3.488	2
39	MP3A	Mx	0	2
40	MP4A	X	0	2
41	MP4A	Z	7.133	2
42	MP4A	Mx	0	2
43	MP1A	X	0	.5
44	MP1A	Z	3.431	.5
45	MP1A	Mx	0	.5
46	MP1A	X	0	4
47	MP1A	Z	3.431	4
48	MP1A	Mx	0	4
49	MP4A	X	0	.5
50	MP4A	Z	3.431	.5
51	MP4A	Mx	0	.5
52	MP4A	X	0	4
53	MP4A	Z	3.431	4
54	MP4A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-.54	3
2	MP2A	Z	.936	3
3	MP2A	Mx	-.000228	3
4	MP2A	X	-.54	4
5	MP2A	Z	.936	4
6	MP2A	Mx	-.000228	4
7	MP2A	X	-.54	3
8	MP2A	Z	.936	3
9	MP2A	Mx	-.000852	3
10	MP2A	X	-.54	4
11	MP2A	Z	.936	4
12	MP2A	Mx	-.000852	4
13	MP2A	X	-2.493	1
14	MP2A	Z	4.319	1
15	MP2A	Mx	.004	1
16	MP2A	X	-2.493	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
17	MP2A	Z	4.319	5
18	MP2A	Mx	.004	5
19	MP2A	X	-2.493	1
20	MP2A	Z	4.319	1
21	MP2A	Mx	-.002	1
22	MP2A	X	-2.493	5
23	MP2A	Z	4.319	5
24	MP2A	Mx	-.002	5
25	MP3A	X	-.8	4.5
26	MP3A	Z	1.386	4.5
27	MP3A	Mx	.0004	4.5
28	MP3A	X	-1.844	.5
29	MP3A	Z	3.193	.5
30	MP3A	Mx	.000922	.5
31	MP3A	X	-1.844	2.5
32	MP3A	Z	3.193	2.5
33	MP3A	Mx	.000922	2.5
34	MP2A	X	-1.6	2
35	MP2A	Z	2.772	2
36	MP2A	Mx	-.0008	2
37	MP3A	X	-1.547	2
38	MP3A	Z	2.679	2
39	MP3A	Mx	-.000774	2
40	MP4A	X	-3.353	2
41	MP4A	Z	5.807	2
42	MP4A	Mx	-.002	2
43	MP1A	X	-1.795	.5
44	MP1A	Z	3.109	.5
45	MP1A	Mx	.000898	.5
46	MP1A	X	-1.795	4
47	MP1A	Z	3.109	4
48	MP1A	Mx	.000898	4
49	MP4A	X	-1.795	.5
50	MP4A	Z	3.109	.5
51	MP4A	Mx	.000898	.5
52	MP4A	X	-1.795	4
53	MP4A	Z	3.109	4
54	MP4A	Mx	.000898	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP2A	X	-.937	3
2	MP2A	Z	.541	3
3	MP2A	Mx	-.000757	3
4	MP2A	X	-.937	4
5	MP2A	Z	.541	4
6	MP2A	Mx	-.000757	4
7	MP2A	X	-.937	3
8	MP2A	Z	.541	3
9	MP2A	Mx	-.001	3
10	MP2A	X	-.937	4
11	MP2A	Z	.541	4
12	MP2A	Mx	-.001	4
13	MP2A	X	-3.739	1
14	MP2A	Z	2.159	1
15	MP2A	Mx	.003	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
16	MP2A	X	-3.739	5
17	MP2A	Z	2.159	5
18	MP2A	Mx	.003	5
19	MP2A	X	-3.739	1
20	MP2A	Z	2.159	1
21	MP2A	Mx	.00025	1
22	MP2A	X	-3.739	5
23	MP2A	Z	2.159	5
24	MP2A	Mx	.00025	5
25	MP3A	X	-.689	4.5
26	MP3A	Z	.398	4.5
27	MP3A	Mx	.000344	4.5
28	MP3A	X	-1.941	.5
29	MP3A	Z	1.121	.5
30	MP3A	Mx	.000971	.5
31	MP3A	X	-1.941	2.5
32	MP3A	Z	1.121	2.5
33	MP3A	Mx	.000971	2.5
34	MP2A	X	-2.275	2
35	MP2A	Z	1.313	2
36	MP2A	Mx	-.001	2
37	MP3A	X	-1.997	2
38	MP3A	Z	1.153	2
39	MP3A	Mx	-.000998	2
40	MP4A	X	-5.066	2
41	MP4A	Z	2.925	2
42	MP4A	Mx	-.003	2
43	MP1A	X	-3.384	.5
44	MP1A	Z	1.954	.5
45	MP1A	Mx	.002	.5
46	MP1A	X	-3.384	4
47	MP1A	Z	1.954	4
48	MP1A	Mx	.002	4
49	MP4A	X	-3.384	.5
50	MP4A	Z	1.954	.5
51	MP4A	Mx	.002	.5
52	MP4A	X	-3.384	4
53	MP4A	Z	1.954	4
54	MP4A	Mx	.002	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-1.083	3
2	MP2A	Z	0	3
3	MP2A	Mx	-.001	3
4	MP2A	X	-1.083	4
5	MP2A	Z	0	4
6	MP2A	Mx	-.001	4
7	MP2A	X	-1.083	3
8	MP2A	Z	0	3
9	MP2A	Mx	-.001	3
10	MP2A	X	-1.083	4
11	MP2A	Z	0	4
12	MP2A	Mx	-.001	4
13	MP2A	X	-3.983	1
14	MP2A	Z	0	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
15	MP2A	Mx	.002	1
16	MP2A	X	-3.983	5
17	MP2A	Z	0	5
18	MP2A	Mx	.002	5
19	MP2A	X	-3.983	1
20	MP2A	Z	0	1
21	MP2A	Mx	.002	1
22	MP2A	X	-3.983	5
23	MP2A	Z	0	5
24	MP2A	Mx	.002	5
25	MP3A	X	-.393	4.5
26	MP3A	Z	0	4.5
27	MP3A	Mx	.000196	4.5
28	MP3A	X	-1.519	.5
29	MP3A	Z	0	.5
30	MP3A	Mx	.000759	.5
31	MP3A	X	-1.519	2.5
32	MP3A	Z	0	2.5
33	MP3A	Mx	.000759	2.5
34	MP2A	X	-2.34	2
35	MP2A	Z	0	2
36	MP2A	Mx	-.001	2
37	MP3A	X	-1.913	2
38	MP3A	Z	0	2
39	MP3A	Mx	-.000956	2
40	MP4A	X	-5.423	2
41	MP4A	Z	0	2
42	MP4A	Mx	-.003	2
43	MP1A	X	-4.067	.5
44	MP1A	Z	0	.5
45	MP1A	Mx	.002	.5
46	MP1A	X	-4.067	4
47	MP1A	Z	0	4
48	MP1A	Mx	.002	4
49	MP4A	X	-4.067	.5
50	MP4A	Z	0	.5
51	MP4A	Mx	.002	.5
52	MP4A	X	-4.067	4
53	MP4A	Z	0	4
54	MP4A	Mx	.002	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-.937	3
2	MP2A	Z	-.541	3
3	MP2A	Mx	-.001	3
4	MP2A	X	-.937	4
5	MP2A	Z	-.541	4
6	MP2A	Mx	-.001	4
7	MP2A	X	-.937	3
8	MP2A	Z	-.541	3
9	MP2A	Mx	-.000757	3
10	MP2A	X	-.937	4
11	MP2A	Z	-.541	4
12	MP2A	Mx	-.000757	4
13	MP2A	X	-3.739	1







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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
13	MP2A	X	-2.493	1
14	MP2A	Z	-4.319	1
15	MP2A	Mx	-.002	1
16	MP2A	X	-2.493	5
17	MP2A	Z	-4.319	5
18	MP2A	Mx	-.002	5
19	MP2A	X	-2.493	1
20	MP2A	Z	-4.319	1
21	MP2A	Mx	.004	1
22	MP2A	X	-2.493	5
23	MP2A	Z	-4.319	5
24	MP2A	Mx	.004	5
25	MP3A	X	-.8	4.5
26	MP3A	Z	-1.386	4.5
27	MP3A	Mx	.0004	4.5
28	MP3A	X	-1.844	.5
29	MP3A	Z	-3.193	.5
30	MP3A	Mx	.000922	.5
31	MP3A	X	-1.844	2.5
32	MP3A	Z	-3.193	2.5
33	MP3A	Mx	.000922	2.5
34	MP2A	X	-1.6	2
35	MP2A	Z	-2.772	2
36	MP2A	Mx	-.0008	2
37	MP3A	X	-1.547	2
38	MP3A	Z	-2.679	2
39	MP3A	Mx	-.000774	2
40	MP4A	X	-3.353	2
41	MP4A	Z	-5.807	2
42	MP4A	Mx	-.002	2
43	MP1A	X	-1.795	.5
44	MP1A	Z	-3.109	.5
45	MP1A	Mx	.000898	.5
46	MP1A	X	-1.795	4
47	MP1A	Z	-3.109	4
48	MP1A	Mx	.000898	4
49	MP4A	X	-1.795	.5
50	MP4A	Z	-3.109	.5
51	MP4A	Mx	.000898	.5
52	MP4A	X	-1.795	4
53	MP4A	Z	-3.109	4
54	MP4A	Mx	.000898	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	M2	Y	-500	%64

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	M2	Y	-500	%25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	M2	Y	-250	%50



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M2	Y	-250	%100

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	Y	0	3
2	MP2A	My	0	3
3	MP2A	Mz	0	3
4	MP2A	Y	0	4
5	MP2A	My	0	4
6	MP2A	Mz	0	4
7	MP2A	Y	0	3
8	MP2A	My	0	3
9	MP2A	Mz	0	3
10	MP2A	Y	0	4
11	MP2A	My	0	4
12	MP2A	Mz	0	4
13	MP2A	Y	0	1
14	MP2A	My	0	1
15	MP2A	Mz	0	1
16	MP2A	Y	0	5
17	MP2A	My	0	5
18	MP2A	Mz	0	5
19	MP2A	Y	0	1
20	MP2A	My	0	1
21	MP2A	Mz	0	1
22	MP2A	Y	0	5
23	MP2A	My	0	5
24	MP2A	Mz	0	5
25	MP3A	Y	0	4.5
26	MP3A	My	0	4.5
27	MP3A	Mz	0	4.5
28	MP3A	Y	0	.5
29	MP3A	My	0	.5
30	MP3A	Mz	0	.5
31	MP3A	Y	0	2.5
32	MP3A	My	0	2.5
33	MP3A	Mz	0	2.5
34	MP2A	Y	0	2
35	MP2A	My	0	2
36	MP2A	Mz	0	2
37	MP3A	Y	0	2
38	MP3A	My	0	2
39	MP3A	Mz	0	2
40	MP4A	Y	0	2
41	MP4A	My	0	2
42	MP4A	Mz	0	2
43	MP1A	Y	0	.5
44	MP1A	My	0	.5
45	MP1A	Mz	0	.5
46	MP1A	Y	0	4
47	MP1A	My	0	4
48	MP1A	Mz	0	4
49	MP4A	Y	0	.5
50	MP4A	My	0	.5
51	MP4A	Mz	0	.5
52	MP4A	Y	0	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
53	MP4A	My	0	4
54	MP4A	Mz	0	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	Z	-.264	3
2	MP2A	Mx	-8.8e-5	3
3	MP2A	Z	-.264	4
4	MP2A	Mx	-8.8e-5	4
5	MP2A	Z	-.264	3
6	MP2A	Mx	8.8e-5	3
7	MP2A	Z	-.264	4
8	MP2A	Mx	8.8e-5	4
9	MP2A	Z	-.69	1
10	MP2A	Mx	-.000518	1
11	MP2A	Z	-.69	5
12	MP2A	Mx	-.000518	5
13	MP2A	Z	-.69	1
14	MP2A	Mx	.000518	1
15	MP2A	Z	-.69	5
16	MP2A	Mx	.000518	5
17	MP3A	Z	-.132	4.5
18	MP3A	Mx	0	4.5
19	MP3A	Z	-1.306	.5
20	MP3A	Mx	0	.5
21	MP3A	Z	-1.306	2.5
22	MP3A	Mx	0	2.5
23	MP2A	Z	-2.532	2
24	MP2A	Mx	0	2
25	MP3A	Z	-2.109	2
26	MP3A	Mx	0	2
27	MP4A	Z	-.96	2
28	MP4A	Mx	0	2
29	MP1A	Z	-.21	.5
30	MP1A	Mx	0	.5
31	MP1A	Z	-.21	4
32	MP1A	Mx	0	4
33	MP4A	Z	-.21	.5
34	MP4A	Mx	0	.5
35	MP4A	Z	-.21	4
36	MP4A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	.264	3
2	MP2A	Mx	.000264	3
3	MP2A	X	.264	4
4	MP2A	Mx	.000264	4
5	MP2A	X	.264	3
6	MP2A	Mx	.000264	3
7	MP2A	X	.264	4
8	MP2A	Mx	.000264	4
9	MP2A	X	.69	1
10	MP2A	Mx	-.000345	1
11	MP2A	X	.69	5
12	MP2A	Mx	-.000345	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
13	MP2A	X	.69	1
14	MP2A	Mx	-.000345	1
15	MP2A	X	.69	5
16	MP2A	Mx	-.000345	5
17	MP3A	X	.132	4.5
18	MP3A	Mx	-6.6e-5	4.5
19	MP3A	X	1.306	.5
20	MP3A	Mx	-.000653	.5
21	MP3A	X	1.306	2.5
22	MP3A	Mx	-.000653	2.5
23	MP2A	X	2.532	2
24	MP2A	Mx	.001	2
25	MP3A	X	2.109	2
26	MP3A	Mx	.001	2
27	MP4A	X	.96	2
28	MP4A	Mx	.00048	2
29	MP1A	X	.21	.5
30	MP1A	Mx	-.000105	.5
31	MP1A	X	.21	4
32	MP1A	Mx	-.000105	4
33	MP4A	X	.21	.5
34	MP4A	Mx	-.000105	.5
35	MP4A	X	.21	4
36	MP4A	Mx	-.000105	4

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

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
1	M1	Y	-5.151	-5.151	0	%100
2	M2	Y	-5.151	-5.151	0	%100
3	M5	Y	-8.227	-8.227	0	%100
4	MP4A	Y	-5.151	-5.151	0	%100
5	MP3A	Y	-5.151	-5.151	0	%100
6	MP2A	Y	-5.875	-5.875	0	%100
7	MP1A	Y	-5.151	-5.151	0	%100
8	M20	Y	-5.151	-5.151	0	%100
9	M21	Y	-8.971	-8.971	0	%100
10	M22	Y	-8.971	-8.971	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	-8.55	-8.55	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-8.55	-8.55	0	%100
5	M5	X	0	0	0	%100
6	M5	Z	-11.041	-11.041	0	%100
7	MP4A	X	0	0	0	%100
8	MP4A	Z	-8.55	-8.55	0	%100
9	MP3A	X	0	0	0	%100
10	MP3A	Z	-8.55	-8.55	0	%100
11	MP2A	X	0	0	0	%100
12	MP2A	Z	-10.35	-10.35	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	-8.55	-8.55	0	%100
15	M20	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.%]
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M5	X	11.041	11.041	0	%100
6	M5	Z	0	0	0	%100
7	MP4A	X	8.55	8.55	0	%100
8	MP4A	Z	0	0	0	%100
9	MP3A	X	8.55	8.55	0	%100
10	MP3A	Z	0	0	0	%100
11	MP2A	X	10.35	10.35	0	%100
12	MP2A	Z	0	0	0	%100
13	MP1A	X	8.55	8.55	0	%100
14	MP1A	Z	0	0	0	%100
15	M20	X	2.59	2.59	0	%100
16	M20	Z	0	0	0	%100
17	M21	X	1.35	1.35	0	%100
18	M21	Z	0	0	0	%100
19	M22	X	1.35	1.35	0	%100
20	M22	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	1.851	1.851	0	%100
2	M1	Z	1.069	1.069	0	%100
3	M2	X	1.851	1.851	0	%100
4	M2	Z	1.069	1.069	0	%100
5	M5	X	9.562	9.562	0	%100
6	M5	Z	5.52	5.52	0	%100
7	MP4A	X	7.405	7.405	0	%100
8	MP4A	Z	4.275	4.275	0	%100
9	MP3A	X	7.405	7.405	0	%100
10	MP3A	Z	4.275	4.275	0	%100
11	MP2A	X	8.964	8.964	0	%100
12	MP2A	Z	5.175	5.175	0	%100
13	MP1A	X	7.405	7.405	0	%100
14	MP1A	Z	4.275	4.275	0	%100
15	M20	X	.112	.112	0	%100
16	M20	Z	.065	.065	0	%100
17	M21	X	.877	.877	0	%100
18	M21	Z	.506	.506	0	%100
19	M22	X	.877	.877	0	%100
20	M22	Z	.506	.506	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	3.206	3.206	0	%100
2	M1	Z	5.553	5.553	0	%100
3	M2	X	3.206	3.206	0	%100
4	M2	Z	5.553	5.553	0	%100
5	M5	X	5.52	5.52	0	%100
6	M5	Z	9.562	9.562	0	%100
7	MP4A	X	4.275	4.275	0	%100
8	MP4A	Z	7.405	7.405	0	%100
9	MP3A	X	4.275	4.275	0	%100
10	MP3A	Z	7.405	7.405	0	%100
11	MP2A	X	5.175	5.175	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
12	MP2A	Z	8.964	8.964	0	%100
13	MP1A	X	4.275	4.275	0	%100
14	MP1A	Z	7.405	7.405	0	%100
15	M20	X	.487	.487	0	%100
16	M20	Z	.844	.844	0	%100
17	M21	X	.169	.169	0	%100
18	M21	Z	.292	.292	0	%100
19	M22	X	.169	.169	0	%100
20	M22	Z	.292	.292	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	8.55	8.55	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	8.55	8.55	0	%100
5	M5	X	0	0	0	%100
6	M5	Z	11.041	11.041	0	%100
7	MP4A	X	0	0	0	%100
8	MP4A	Z	8.55	8.55	0	%100
9	MP3A	X	0	0	0	%100
10	MP3A	Z	8.55	8.55	0	%100
11	MP2A	X	0	0	0	%100
12	MP2A	Z	10.35	10.35	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	8.55	8.55	0	%100
15	M20	X	0	0	0	%100
16	M20	Z	4.282	4.282	0	%100
17	M21	X	0	0	0	%100
18	M21	Z	0	0	0	%100
19	M22	X	0	0	0	%100
20	M22	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	-3.206	-3.206	0	%100
2	M1	Z	5.553	5.553	0	%100
3	M2	X	-3.206	-3.206	0	%100
4	M2	Z	5.553	5.553	0	%100
5	M5	X	-5.52	-5.52	0	%100
6	M5	Z	9.562	9.562	0	%100
7	MP4A	X	-4.275	-4.275	0	%100
8	MP4A	Z	7.405	7.405	0	%100
9	MP3A	X	-4.275	-4.275	0	%100
10	MP3A	Z	7.405	7.405	0	%100
11	MP2A	X	-5.175	-5.175	0	%100
12	MP2A	Z	8.964	8.964	0	%100
13	MP1A	X	-4.275	-4.275	0	%100
14	MP1A	Z	7.405	7.405	0	%100
15	M20	X	-3.372	-3.372	0	%100
16	M20	Z	5.84	5.84	0	%100
17	M21	X	-.169	-.169	0	%100
18	M21	Z	.292	.292	0	%100
19	M22	X	-.169	-.169	0	%100
20	M22	Z	.292	.292	0	%100





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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-1.851	-1.851	0	%100
2	M1	Z	1.069	1.069	0	%100
3	M2	X	-1.851	-1.851	0	%100
4	M2	Z	1.069	1.069	0	%100
5	M5	X	-9.562	-9.562	0	%100
6	M5	Z	5.52	5.52	0	%100
7	MP4A	X	-7.405	-7.405	0	%100
8	MP4A	Z	4.275	4.275	0	%100
9	MP3A	X	-7.405	-7.405	0	%100
10	MP3A	Z	4.275	4.275	0	%100
11	MP2A	X	-8.964	-8.964	0	%100
12	MP2A	Z	5.175	5.175	0	%100
13	MP1A	X	-7.405	-7.405	0	%100
14	MP1A	Z	4.275	4.275	0	%100
15	M20	X	-5.107	-5.107	0	%100
16	M20	Z	2.949	2.949	0	%100
17	M21	X	-.877	-.877	0	%100
18	M21	Z	.506	.506	0	%100
19	M22	X	-.877	-.877	0	%100
20	M22	Z	.506	.506	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M5	X	-11.041	-11.041	0	%100
6	M5	Z	0	0	0	%100
7	MP4A	X	-8.55	-8.55	0	%100
8	MP4A	Z	0	0	0	%100
9	MP3A	X	-8.55	-8.55	0	%100
10	MP3A	Z	0	0	0	%100
11	MP2A	X	-10.35	-10.35	0	%100
12	MP2A	Z	0	0	0	%100
13	MP1A	X	-8.55	-8.55	0	%100
14	MP1A	Z	0	0	0	%100
15	M20	X	-2.59	-2.59	0	%100
16	M20	Z	0	0	0	%100
17	M21	X	-1.35	-1.35	0	%100
18	M21	Z	0	0	0	%100
19	M22	X	-1.35	-1.35	0	%100
20	M22	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-1.851	-1.851	0	%100
2	M1	Z	-1.069	-1.069	0	%100
3	M2	X	-1.851	-1.851	0	%100
4	M2	Z	-1.069	-1.069	0	%100
5	M5	X	-9.562	-9.562	0	%100
6	M5	Z	-5.52	-5.52	0	%100
7	MP4A	X	-7.405	-7.405	0	%100
8	MP4A	Z	-4.275	-4.275	0	%100
9	MP3A	X	-7.405	-7.405	0	%100
10	MP3A	Z	-4.275	-4.275	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
11	MP2A	X	-8.964	-8.964	0	%100
12	MP2A	Z	-5.175	-5.175	0	%100
13	MP1A	X	-7.405	-7.405	0	%100
14	MP1A	Z	-4.275	-4.275	0	%100
15	M20	X	-.112	-.112	0	%100
16	M20	Z	-.065	-.065	0	%100
17	M21	X	-.877	-.877	0	%100
18	M21	Z	-.506	-.506	0	%100
19	M22	X	-.877	-.877	0	%100
20	M22	Z	-.506	-.506	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
1	M1	X	-3.206	-3.206	0	%100
2	M1	Z	-5.553	-5.553	0	%100
3	M2	X	-3.206	-3.206	0	%100
4	M2	Z	-5.553	-5.553	0	%100
5	M5	X	-5.52	-5.52	0	%100
6	M5	Z	-9.562	-9.562	0	%100
7	MP4A	X	-4.275	-4.275	0	%100
8	MP4A	Z	-7.405	-7.405	0	%100
9	MP3A	X	-4.275	-4.275	0	%100
10	MP3A	Z	-7.405	-7.405	0	%100
11	MP2A	X	-5.175	-5.175	0	%100
12	MP2A	Z	-8.964	-8.964	0	%100
13	MP1A	X	-4.275	-4.275	0	%100
14	MP1A	Z	-7.405	-7.405	0	%100
15	M20	X	-.487	-.487	0	%100
16	M20	Z	-.844	-.844	0	%100
17	M21	X	-.169	-.169	0	%100
18	M21	Z	-.292	-.292	0	%100
19	M22	X	-.169	-.169	0	%100
20	M22	Z	-.292	-.292	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
1	M1	X	0	0	0	%100
2	M1	Z	-2.965	-2.965	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-2.965	-2.965	0	%100
5	M5	X	0	0	0	%100
6	M5	Z	-3.686	-3.686	0	%100
7	MP4A	X	0	0	0	%100
8	MP4A	Z	-2.965	-2.965	0	%100
9	MP3A	X	0	0	0	%100
10	MP3A	Z	-2.965	-2.965	0	%100
11	MP2A	X	0	0	0	%100
12	MP2A	Z	-3.278	-3.278	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	-2.965	-2.965	0	%100
15	M20	X	0	0	0	%100
16	M20	Z	-1.486	-1.486	0	%100
17	M21	X	0	0	0	%100
18	M21	Z	0	0	0	%100
19	M22	X	0	0	0	%100
20	M22	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	1.112	1.112	0	%100
2	M1	Z	-1.926	-1.926	0	%100
3	M2	X	1.112	1.112	0	%100
4	M2	Z	-1.926	-1.926	0	%100
5	M5	X	1.843	1.843	0	%100
6	M5	Z	-3.192	-3.192	0	%100
7	MP4A	X	1.483	1.483	0	%100
8	MP4A	Z	-2.568	-2.568	0	%100
9	MP3A	X	1.483	1.483	0	%100
10	MP3A	Z	-2.568	-2.568	0	%100
11	MP2A	X	1.639	1.639	0	%100
12	MP2A	Z	-2.839	-2.839	0	%100
13	MP1A	X	1.483	1.483	0	%100
14	MP1A	Z	-2.568	-2.568	0	%100
15	M20	X	1.17	1.17	0	%100
16	M20	Z	-2.026	-2.026	0	%100
17	M21	X	.137	.137	0	%100
18	M21	Z	-.238	-.238	0	%100
19	M22	X	.137	.137	0	%100
20	M22	Z	-.238	-.238	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	.642	.642	0	%100
2	M1	Z	-.371	-.371	0	%100
3	M2	X	.642	.642	0	%100
4	M2	Z	-.371	-.371	0	%100
5	M5	X	3.192	3.192	0	%100
6	M5	Z	-1.843	-1.843	0	%100
7	MP4A	X	2.568	2.568	0	%100
8	MP4A	Z	-1.483	-1.483	0	%100
9	MP3A	X	2.568	2.568	0	%100
10	MP3A	Z	-1.483	-1.483	0	%100
11	MP2A	X	2.839	2.839	0	%100
12	MP2A	Z	-1.639	-1.639	0	%100
13	MP1A	X	2.568	2.568	0	%100
14	MP1A	Z	-1.483	-1.483	0	%100
15	M20	X	1.772	1.772	0	%100
16	M20	Z	-1.023	-1.023	0	%100
17	M21	X	.713	.713	0	%100
18	M21	Z	-.412	-.412	0	%100
19	M22	X	.713	.713	0	%100
20	M22	Z	-.412	-.412	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M5	X	3.686	3.686	0	%100
6	M5	Z	0	0	0	%100
7	MP4A	X	2.965	2.965	0	%100
8	MP4A	Z	0	0	0	%100
9	MP3A	X	2.965	2.965	0	%100
10	MP3A	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
11	MP2A	X	3.278	3.278	0	%100
12	MP2A	Z	0	0	0	%100
13	MP1A	X	2.965	2.965	0	%100
14	MP1A	Z	0	0	0	%100
15	M20	X	.899	.899	0	%100
16	M20	Z	0	0	0	%100
17	M21	X	1.098	1.098	0	%100
18	M21	Z	0	0	0	%100
19	M22	X	1.098	1.098	0	%100
20	M22	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	.642	.642	0	%100
2	M1	Z	.371	.371	0	%100
3	M2	X	.642	.642	0	%100
4	M2	Z	.371	.371	0	%100
5	M5	X	3.192	3.192	0	%100
6	M5	Z	1.843	1.843	0	%100
7	MP4A	X	2.568	2.568	0	%100
8	MP4A	Z	1.483	1.483	0	%100
9	MP3A	X	2.568	2.568	0	%100
10	MP3A	Z	1.483	1.483	0	%100
11	MP2A	X	2.839	2.839	0	%100
12	MP2A	Z	1.639	1.639	0	%100
13	MP1A	X	2.568	2.568	0	%100
14	MP1A	Z	1.483	1.483	0	%100
15	M20	X	.039	.039	0	%100
16	M20	Z	.022	.022	0	%100
17	M21	X	.713	.713	0	%100
18	M21	Z	.412	.412	0	%100
19	M22	X	.713	.713	0	%100
20	M22	Z	.412	.412	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	1.112	1.112	0	%100
2	M1	Z	1.926	1.926	0	%100
3	M2	X	1.112	1.112	0	%100
4	M2	Z	1.926	1.926	0	%100
5	M5	X	1.843	1.843	0	%100
6	M5	Z	3.192	3.192	0	%100
7	MP4A	X	1.483	1.483	0	%100
8	MP4A	Z	2.568	2.568	0	%100
9	MP3A	X	1.483	1.483	0	%100
10	MP3A	Z	2.568	2.568	0	%100
11	MP2A	X	1.639	1.639	0	%100
12	MP2A	Z	2.839	2.839	0	%100
13	MP1A	X	1.483	1.483	0	%100
14	MP1A	Z	2.568	2.568	0	%100
15	M20	X	.169	.169	0	%100
16	M20	Z	.293	.293	0	%100
17	M21	X	.137	.137	0	%100
18	M21	Z	.238	.238	0	%100
19	M22	X	.137	.137	0	%100
20	M22	Z	.238	.238	0	%100





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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
11	MP2A	X	-2.839	-2.839	0	%100
12	MP2A	Z	1.639	1.639	0	%100
13	MP1A	X	-2.568	-2.568	0	%100
14	MP1A	Z	1.483	1.483	0	%100
15	M20	X	-1.772	-1.772	0	%100
16	M20	Z	1.023	1.023	0	%100
17	M21	X	-.713	-.713	0	%100
18	M21	Z	.412	.412	0	%100
19	M22	X	-.713	-.713	0	%100
20	M22	Z	.412	.412	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M5	X	-3.686	-3.686	0	%100
6	M5	Z	0	0	0	%100
7	MP4A	X	-2.965	-2.965	0	%100
8	MP4A	Z	0	0	0	%100
9	MP3A	X	-2.965	-2.965	0	%100
10	MP3A	Z	0	0	0	%100
11	MP2A	X	-3.278	-3.278	0	%100
12	MP2A	Z	0	0	0	%100
13	MP1A	X	-2.965	-2.965	0	%100
14	MP1A	Z	0	0	0	%100
15	M20	X	-.899	-.899	0	%100
16	M20	Z	0	0	0	%100
17	M21	X	-1.098	-1.098	0	%100
18	M21	Z	0	0	0	%100
19	M22	X	-1.098	-1.098	0	%100
20	M22	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	-.642	-.642	0	%100
2	M1	Z	-.371	-.371	0	%100
3	M2	X	-.642	-.642	0	%100
4	M2	Z	-.371	-.371	0	%100
5	M5	X	-3.192	-3.192	0	%100
6	M5	Z	-1.843	-1.843	0	%100
7	MP4A	X	-2.568	-2.568	0	%100
8	MP4A	Z	-1.483	-1.483	0	%100
9	MP3A	X	-2.568	-2.568	0	%100
10	MP3A	Z	-1.483	-1.483	0	%100
11	MP2A	X	-2.839	-2.839	0	%100
12	MP2A	Z	-1.639	-1.639	0	%100
13	MP1A	X	-2.568	-2.568	0	%100
14	MP1A	Z	-1.483	-1.483	0	%100
15	M20	X	-.039	-.039	0	%100
16	M20	Z	-.022	-.022	0	%100
17	M21	X	-.713	-.713	0	%100
18	M21	Z	-.412	-.412	0	%100
19	M22	X	-.713	-.713	0	%100
20	M22	Z	-.412	-.412	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft.%,]	End Location[ft.%,]
1	M1	X	-1.112	-1.112	0	%100
2	M1	Z	-1.926	-1.926	0	%100
3	M2	X	-1.112	-1.112	0	%100
4	M2	Z	-1.926	-1.926	0	%100
5	M5	X	-1.843	-1.843	0	%100
6	M5	Z	-3.192	-3.192	0	%100
7	MP4A	X	-1.483	-1.483	0	%100
8	MP4A	Z	-2.568	-2.568	0	%100
9	MP3A	X	-1.483	-1.483	0	%100
10	MP3A	Z	-2.568	-2.568	0	%100
11	MP2A	X	-1.639	-1.639	0	%100
12	MP2A	Z	-2.839	-2.839	0	%100
13	MP1A	X	-1.483	-1.483	0	%100
14	MP1A	Z	-2.568	-2.568	0	%100
15	M20	X	-.169	-.169	0	%100
16	M20	Z	-.293	-.293	0	%100
17	M21	X	-.137	-.137	0	%100
18	M21	Z	-.238	-.238	0	%100
19	M22	X	-.137	-.137	0	%100
20	M22	Z	-.238	-.238	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft.%,]	End Location[ft.%,]
1	M1	X	0	0	0	%100
2	M1	Z	-.534	-.534	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-.534	-.534	0	%100
5	M5	X	0	0	0	%100
6	M5	Z	-.69	-.69	0	%100
7	MP4A	X	0	0	0	%100
8	MP4A	Z	-.534	-.534	0	%100
9	MP3A	X	0	0	0	%100
10	MP3A	Z	-.534	-.534	0	%100
11	MP2A	X	0	0	0	%100
12	MP2A	Z	-.647	-.647	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	-.534	-.534	0	%100
15	M20	X	0	0	0	%100
16	M20	Z	-.268	-.268	0	%100
17	M21	X	0	0	0	%100
18	M21	Z	0	0	0	%100
19	M22	X	0	0	0	%100
20	M22	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft.%,]	End Location[ft.%,]
1	M1	X	.2	.2	0	%100
2	M1	Z	-.347	-.347	0	%100
3	M2	X	.2	.2	0	%100
4	M2	Z	-.347	-.347	0	%100
5	M5	X	.345	.345	0	%100
6	M5	Z	-.598	-.598	0	%100
7	MP4A	X	.267	.267	0	%100
8	MP4A	Z	-.463	-.463	0	%100
9	MP3A	X	.267	.267	0	%100
10	MP3A	Z	-.463	-.463	0	%100









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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	.116	.116	0	%100
2	M1	Z	.067	.067	0	%100
3	M2	X	.116	.116	0	%100
4	M2	Z	.067	.067	0	%100
5	M5	X	.598	.598	0	%100
6	M5	Z	.345	.345	0	%100
7	MP4A	X	.463	.463	0	%100
8	MP4A	Z	.267	.267	0	%100
9	MP3A	X	.463	.463	0	%100
10	MP3A	Z	.267	.267	0	%100
11	MP2A	X	.56	.56	0	%100
12	MP2A	Z	.323	.323	0	%100
13	MP1A	X	.463	.463	0	%100
14	MP1A	Z	.267	.267	0	%100
15	M20	X	.007	.007	0	%100
16	M20	Z	.004	.004	0	%100
17	M21	X	.055	.055	0	%100
18	M21	Z	.032	.032	0	%100
19	M22	X	.055	.055	0	%100
20	M22	Z	.032	.032	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	.2	.2	0	%100
2	M1	Z	.347	.347	0	%100
3	M2	X	.2	.2	0	%100
4	M2	Z	.347	.347	0	%100
5	M5	X	.345	.345	0	%100
6	M5	Z	.598	.598	0	%100
7	MP4A	X	.267	.267	0	%100
8	MP4A	Z	.463	.463	0	%100
9	MP3A	X	.267	.267	0	%100
10	MP3A	Z	.463	.463	0	%100
11	MP2A	X	.323	.323	0	%100
12	MP2A	Z	.56	.56	0	%100
13	MP1A	X	.267	.267	0	%100
14	MP1A	Z	.463	.463	0	%100
15	M20	X	.03	.03	0	%100
16	M20	Z	.053	.053	0	%100
17	M21	X	.011	.011	0	%100
18	M21	Z	.018	.018	0	%100
19	M22	X	.011	.011	0	%100
20	M22	Z	.018	.018	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	.534	.534	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	.534	.534	0	%100
5	M5	X	0	0	0	%100
6	M5	Z	.69	.69	0	%100
7	MP4A	X	0	0	0	%100
8	MP4A	Z	.534	.534	0	%100
9	MP3A	X	0	0	0	%100
10	MP3A	Z	.534	.534	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
11	MP2A	X	0	0	0	%100
12	MP2A	Z	.647	.647	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	.534	.534	0	%100
15	M20	X	0	0	0	%100
16	M20	Z	.268	.268	0	%100
17	M21	X	0	0	0	%100
18	M21	Z	0	0	0	%100
19	M22	X	0	0	0	%100
20	M22	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	-.2	-.2	0	%100
2	M1	Z	.347	.347	0	%100
3	M2	X	-.2	-.2	0	%100
4	M2	Z	.347	.347	0	%100
5	M5	X	-.345	-.345	0	%100
6	M5	Z	.598	.598	0	%100
7	MP4A	X	-.267	-.267	0	%100
8	MP4A	Z	.463	.463	0	%100
9	MP3A	X	-.267	-.267	0	%100
10	MP3A	Z	.463	.463	0	%100
11	MP2A	X	-.323	-.323	0	%100
12	MP2A	Z	.56	.56	0	%100
13	MP1A	X	-.267	-.267	0	%100
14	MP1A	Z	.463	.463	0	%100
15	M20	X	-.211	-.211	0	%100
16	M20	Z	.365	.365	0	%100
17	M21	X	-.011	-.011	0	%100
18	M21	Z	.018	.018	0	%100
19	M22	X	-.011	-.011	0	%100
20	M22	Z	.018	.018	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	-.116	-.116	0	%100
2	M1	Z	.067	.067	0	%100
3	M2	X	-.116	-.116	0	%100
4	M2	Z	.067	.067	0	%100
5	M5	X	-.598	-.598	0	%100
6	M5	Z	.345	.345	0	%100
7	MP4A	X	-.463	-.463	0	%100
8	MP4A	Z	.267	.267	0	%100
9	MP3A	X	-.463	-.463	0	%100
10	MP3A	Z	.267	.267	0	%100
11	MP2A	X	-.56	-.56	0	%100
12	MP2A	Z	.323	.323	0	%100
13	MP1A	X	-.463	-.463	0	%100
14	MP1A	Z	.267	.267	0	%100
15	M20	X	-.319	-.319	0	%100
16	M20	Z	.184	.184	0	%100
17	M21	X	-.055	-.055	0	%100
18	M21	Z	.032	.032	0	%100
19	M22	X	-.055	-.055	0	%100
20	M22	Z	.032	.032	0	%100





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

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
11	MP2A	X	-.323	-.323	0 %100
12	MP2A	Z	-.56	-.56	0 %100
13	MP1A	X	-.267	-.267	0 %100
14	MP1A	Z	-.463	-.463	0 %100
15	M20	X	-.03	-.03	0 %100
16	M20	Z	-.053	-.053	0 %100
17	M21	X	-.011	-.011	0 %100
18	M21	Z	-.018	-.018	0 %100
19	M22	X	-.011	-.011	0 %100
20	M22	Z	-.018	-.018	0 %100

**Member Area Loads**

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

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

Member	Shape	Code C...	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	phi*Pnc [lb]	phi*Pnt [lb]	phi*Mn y...	phi*Mn z...	Cb	Eqn
1	M1	PIPE 2.0	.842	7	7	.098	7	6	5018.672	32130	1.872	1.872	1...	H1-1b
2	M2	PIPE 2.0	.811	7	1	.116	7	6	5018.672	32130	1.872	1.872	1...	H1-1b
3	M5	PIPE 4.0	.090	.781	44	.032	.729	7	86073.938	93240	10.631	10.631	1...	H1-1b
4	MP4A	PIPE 2.0	.197	.944	22	.049	.944	12	22845.314	32130	1.872	1.872	1...	H1-1b
5	MP3A	PIPE 2.0	.461	4.889	41	.066	.944	48	22845.314	32130	1.872	1.872	1.9	H1-1b
6	MP2A	PIPE 2.5	.228	1.25	50	.071	1.25	4	37773.818	50715	3.596	3.596	1...	H1-1b
7	MP1A	PIPE 2.0	.296	4.889	50	.047	.944	50	22845.314	32130	1.872	1.872	1...	H1-1b
8	M20	PIPE 2.0	.012	0	6	.001	0	20	29147.606	32130	1.872	1.872	1...	H1-1b*
9	M21	PL3/8x5	.516	0	18	.063	.25	y 40	58342.848	60750	.475	6.328	1.3	H1-1b
10	M22	PL3/8x5	.515	0	24	.070	.25	y 46	58342.848	60750	.475	6.328	1...	H1-1b

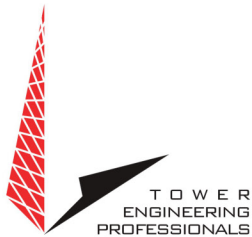
**Envelope Joint Reactions**

Joint	X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC		
1	N14	max	838.343	46	968.435	13	738.083	1	0	75	.333	46	.006	28
2		min	-692.34	50	304.811	70	-1131.488	7	0	1	-.274	4	-.013	46
3	N13	max	693.923	50	963.711	19	905.654	1	0	75	.274	10	.006	34
4		min	-839.874	41	303.895	64	-503.364	7	0	1	-.334	40	-.01	40
5	N40	max	267.775	5	13.695	21	207.627	5	0	75	0	75	0	75
6		min	-237.644	11	4.447	68	-185.439	11	0	1	0	1	0	1
7	Totals:	max	1056.333	10	1915.007	24	1534.454	1						
8		min	-1056.333	4	614.192	70	-1534.443	7						



# EXHIBIT 5





# Non-Ionizing Electromagnetic Radiation (NIER) Study

*Site Number:*

88088

*Site Name:*

Bethany CT

*Location:*

Bethany, Connecticut

*Tenants:*

Department of Homeland Security, AT&T Mobility, Dish Wireless,  
T-Mobile, & Verizon Wireless

*Prepared For:*

American Tower, Inc.  
Woburn, Massachusetts

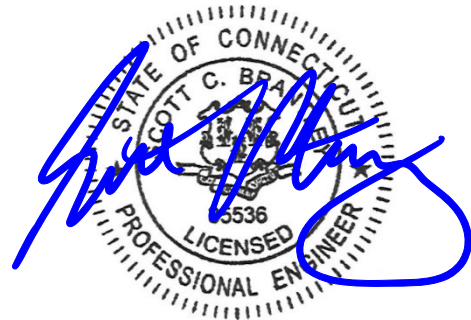
August 28<sup>th</sup>, 2023

25609 P-405150

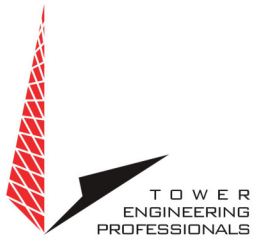
Prepared By:

Adam Carlson MS, CBRE, CPI  
Program Manager RF Design & Service  
Tower Engineering Professionals

Approved By:



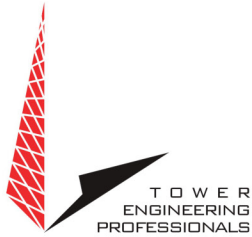
08/31/23



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TOWER ENGINEERING PROFESSIONALS

RALIEGH, NORTH CAROLINA



## Non-Ionizing Electromagnetic Radiation (NIER) Study

88008 Bethany CT  
Bethany, Connecticut

### INTRODUCTION

Tower Engineering Professionals RF Design & Services Division (TEP-RF) of Raleigh, North Carolina, has been retained by American Tower, Inc. (ATC), of Woburn, Massachusetts to evaluate the RF emissions compared to the Maximum Permissible Exposure (MPE) limit for facilities at this location. This evaluation uses compliance standards as outlined in Federal Communications Commission (FCC) document OET-65.

### SITE AND FACILITY CONSIDERATIONS

Site 88008 Bethany CT 6 is located at 9 Meyers Rd., in Bethany, Connecticut at coordinates 41.404758, -72.999983. The support structure is a 340' self-support. An aerial view of the tower can be found in Appendix 1, Site Photos. The tenants are The Department of Homeland Security (Homeland), AT&T Mobility (AT&T), Dish Wireless (Dish), T-Mobile (T-Mobile), & Verizon Wireless (VZW). A table listing all antennae and effective radiated power (ERP) levels that were used in this study may be found in Appendix 2, Antenna Inventory.

### POWER DENSITY CALCULATIONS

Power densities were calculated based on FCC MPE limits for both General Population/Uncontrolled and Occupational/Controlled environments.

For the purpose of this study, a radius of 120' from the base of the tower with a height of 6' above ground level was used, beyond 120' the MPE levels become *di minimus*. This study utilized FCC recognized and accepted software programs using the maximum ERP levels for the antenna models provided by ATC. Diagrams depicting the predicted spatial average power density level at any specific location may be found in Appendix 3, MPE Limit Study. A discussion regarding the FCC limits may be found in Appendix 4, Information Pertaining to MPE Studies. Study methodology describing Non-ionizing Radiation Prediction Models used in this study may be found in Appendix 5, MPE Standards Methodology.



All data used in this study was collected from one or more of the following sources:

- ATC furnished data and does not include other unidentified communication facilities.
- Load List at 88008 BETHANY CT.RF NIER Study 8/15/23.
- FCC databases.
- Carrier standard configurations.
- Empirical data collected by TEP.

### SITE MITIGATION & CONTROL

In order to comply with FCC, tenant, & ATC requirements, TEP recommends the placement of signage at the base of the tower and all compound access points to alert workers of potential exposure to RF fields while working on or near the antennae.

TEP recommends that all personnel working on this tower be trained in RF safety procedures and carry a personal RF monitor at all times.

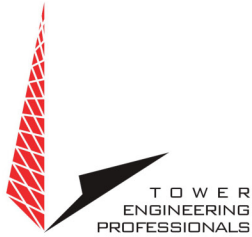
### COMPLIANCE DETERMINATION

This installation **IS** in compliance with current FCC MPE limits as described in FCC OET-65.

## APPENDIX 1 Site Photos

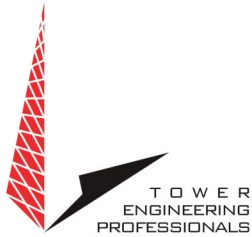


Aerial View of Site



## Appendix 2.1 Antenna Inventory

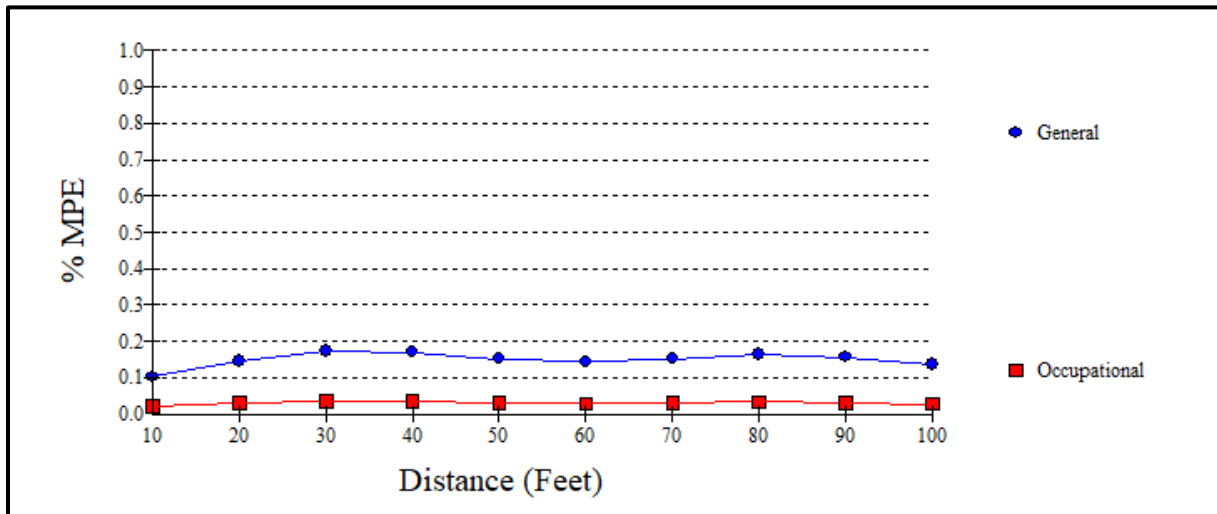
88008 Bethany CT							
Antenna Inventory							
Antenna #	Carrier	Antenna Manufacturer	Antenna Model	Frequency Band (MHz)	Azimuth (°)	Effective Radiated Power (W)	Radiation Center (ft)
1	Homeland	Rohde & Schwarz	ADD090	100	225	212	344
2	Homeland	Scala	750 10074	100	001	554	326
3	Homeland	Sinclair	SC281-L	100	000	1581	320
4	Homeland	Sinclair	SC381-HL	400	000	1990	315
5	Homeland	Generic	Generic	400	000	1990	291
6	Homeland	Generic	Generic	400	000	1990	291
7	Homeland	Sinclair	SC281-L	100	000	1581	285
8	Homeland	Sinclair	SC281-L	100	000	1581	285
9	Homeland	Generic	Generic	400	000	1990	266
10	T-Mobile	Ericsson	Air 6419	2500/2600	030	24400	222
11	T-Mobile	Ericsson	Air 6419	2500/2600	150	24400	222
12	T-Mobile	Ericsson	Air 6419	2500/2600	270	24400	222
13	T-Mobile	RFS	APXVAALL24	600/1900/2100	030	23200	222
14	T-Mobile	RFS	APXVAALL24	600/1900/2100	150	23200	222
15	T-Mobile	RFS	APXVAALL24	600/1900/2100	270	23200	222
16	Homeland	Andrew	DB616E-BC	100	000	1774	213
17	Homeland	Andrew	DB616E-BC	100	000	1774	204
18	Verizon	Andrew	DB844H90E-XY	800	030	7449	180
19	Verizon	Andrew	DB844H90E-XY	800	150	7449	180
20	Verizon	Andrew	DB844H90E-XY	800	270	7449	180
21	Verizon	Andrew	DB844H90E-XY	800	030	7449	180
22	Verizon	Andrew	DB844H90E-XY	800	150	7449	180
23	Verizon	Andrew	DB844H90E-XY	800	270	7449	180
24	Verizon	JMA	MX06FRO660-03	700/800/1900/2100	030	19522	180
25	Verizon	JMA	MX06FRO660-03	700/800/1900/2100	150	19522	180
26	Verizon	JMA	MX06FRO660-03	700/800/1900/2100	270	19522	180



## Appendix 2.2    Antenna Inventory

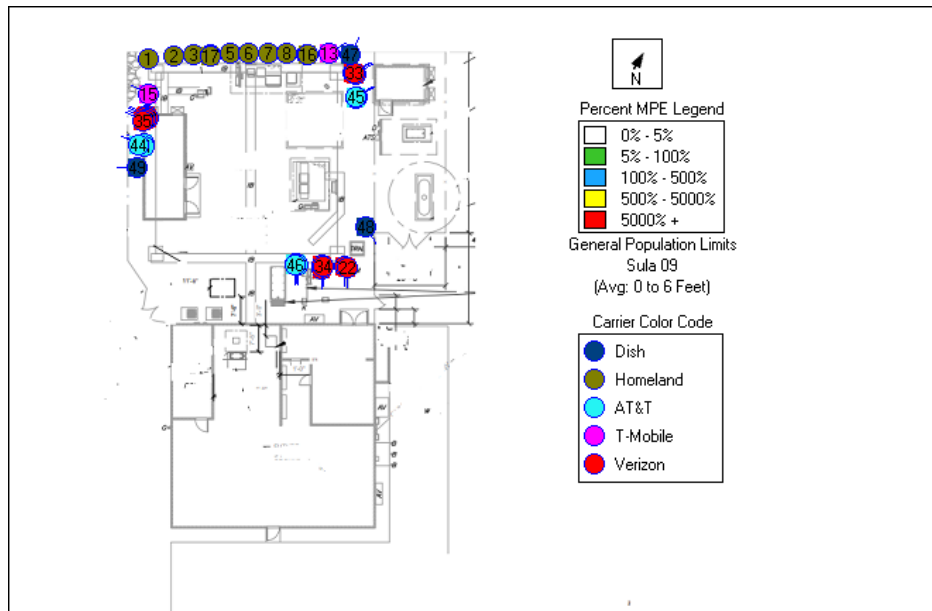
88008 Bethany CT							
Antenna Inventory							
Antenna #	Carrier	Antenna Manufacturer	Antenna Model	Frequency Band (MHz)	Azimuth (°)	Effective Radiated Power (W)	Radiation Center (ft)
27	Verizon	JMA	MX06FRO660-03	700/800/1900/2100	030	19522	180
28	Verizon	JMA	MX06FRO660-03	700/800/1900/2100	150	19522	180
29	Verizon	JMA	MX06FRO660-03	700/800/1900/2100	270	19522	180
30	Verizon	Samsung	MT6407	3700/3800/3900	030	18286	180
31	Verizon	Samsung	MT6407	3700/3800/3900	150	18286	180
32	Verizon	Samsung	MT6407	3700/3800/3900	270	18286	180
33	Verizon	Samsung	Generic	3500/3600/3700	30	193	180
34	Verizon	Samsung	Generic	3500/3600/3700	150	193	180
35	Verizon	Samsung	Generic	3500/3600/3700	270	193	180
36	AT&T	KMW	AM-X-CD	700/800/2100	070	48332	165
37	AT&T	Powerwave	7770	800	070	18373	165
38	AT&T	Powerwave	7770	800	150	18373	165
39	AT&T	Powerwave	7770	800	270	18373	165
40	AT&T	Andrew	SBNH-1D6565C	700/800/2100	150	37788	165
41	AT&T	Andrew	SBNH-1D6565C	700/800/2100	270	37788	165
42	AT&T	Andrew	SBNH-1D6565C	700/800/2100	150	37788	165
43	AT&T	Andrew	SBNH-1D6565C	700/800/2100	270	37788	165
44	Dish	Powerwave	7770	800	070	18373	165
45	Dish	Powerwave	7770	800	150	18373	165
46	Dish	Powerwave	7770	800	270	18373	165
47	Dish	JMA	MX08FRO665-21	600/1900/2000/2100	000	48332	140
48	Dish	JMA	MX08FRO665-21	600/1900/2000/2100	120	48332	140
49	Dish	JMA	MX08FRO665-21	600/1900/2000/2100	240	48332	140

## Appendix 3.1 MPE Limit Study



Maximum Power Density (@80'):	0.0011 mW/cm <sup>2</sup>
General Population MPE (@80'):	0.1819%
Occupational MPE (@80'):	0.0364%

## Appendix 3.2 MPE Limit Study







## Appendix 4 Information Pertaining to MPE Studies

In 1985, the FCC first adopted guidelines to be used for evaluating human exposure to RF emissions. The FCC revised and updated these guidelines on August 1, 1996, as a result of a rule-making proceeding initiated in 1993. The new guidelines incorporate limits for Maximum Permissible Exposure (MPE) in terms of electric and magnetic field strength and power density for transmitters operating at frequencies between 300 kHz and 100 GHz.

The FCC's MPE limits are based on exposure limits recommended by the National Council on Radiation Protection and Measurements (NCRP), and, over a wide range of frequencies, the exposure limits were developed by the Institute of Electrical and Electronics Engineers, Inc., (IEEE) and adopted by the American National Standards Institute (ANSI) to replace the 1982 ANSI guidelines. Limits for localized absorption are based on recommendations of both ANSI/IEEE and NCRP.

The FCC's limits, and the NCRP and ANSI/IEEE limits on which they are based, are derived from exposure criteria quantified in terms of specific absorption rate (SAR). The basis for these limits is a whole-body averaged SAR threshold level of 4 watts per kilogram (4 W/kg), as averaged over the entire mass of the body, above which expert organizations have determined that potentially hazardous exposures may occur. The MPE limits are derived by incorporating safety factors that lead, in some cases, to limits that are more conservative than the limits originally adopted by the FCC in 1985. Where more conservative limits exist, they do not arise from a fundamental change in the RF safety criteria for whole-body averaged SAR, but from a precautionary desire to protect subgroups of the general population who, potentially, may be more at risk.

The FCC exposure limits are also based on data showing that the human body absorbs RF energy at some frequencies more efficiently than at others. The most restrictive limits occur in the frequency range of 30-300 MHz where whole-body absorption of RF energy by human beings is most efficient. At other frequencies, whole-body absorption is less efficient, and consequently, the MPE limits are less restrictive.



MPE limits are defined in terms of power density (units of milliwatts per centimeter squared:  $\text{mW}/\text{cm}^2$ ), electric field strength (units of volts per meter:  $\text{V}/\text{m}$ ) and magnetic field strength (units of amperes per meter:  $\text{A}/\text{m}$ ). The far-field of a transmitting antenna is where the electric field vector (E), the magnetic field vector (H), and the direction of propagation can be considered to be all mutually orthogonal ("plane-wave" conditions).

**Occupational/controlled exposure** limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

**General population/uncontrolled exposure** limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment-related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area. Additional details can be found in FCC OET 65.



## Appendix 5 MPE Standards Methodology

This study predicts RF field strength and power density levels that emanate from communications system antennae. It considers all transmitter power levels (less filter and line losses) delivered to each active transmitting antenna at the communications site. Calculations are performed to determine power density and MPE levels for each antenna as well as composite levels from all antennas. The calculated levels are based on where a human (Observer) would be standing at various locations at the site. The point of interest where the MPE level is predicted is based on the height of the Observer.

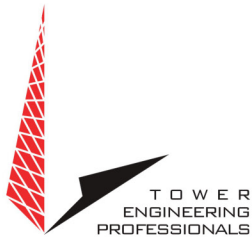
Compliance with the FCC limits on RF emissions are determined by spatially averaging a person's exposure over the projected area of an adult human body, that is approximately six-feet or two-meters, as defined in the ANSI/IEEE C95.1 standard. The MPE limits are specified as time-averaged exposure limits. This means that exposure is averaged over an identifiable time interval. It is 30 minutes for the general population/uncontrolled RF environment and 6 minutes for the occupational/controlled RF environment. However, in the case of the general public, time averaging should not be applied because the general public is typically not aware of RF exposure, and they do not have control of their exposure time. Therefore, it should be assumed that any RF exposure to the general public will be continuous.

The FCC's limits for exposure at different frequencies are shown in the following Tables.

Limits for Occupational/Controlled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3 - 3.0	614	1.63	100*	6
3.0 - 30	1842/f	4.89/f	900/F <sup>2</sup>	6
30 - 300	61.4	0.163	1.0	6
300 - 1500	--	--	f/300	6
1500 - 100,000	--	--	5	6

f = frequency

\* = Plane-wave equivalent power density



Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3 - 1.34	614	1.63	100*	30
1.34 - 30	824/f	2.19/f	180/f <sup>2</sup>	30
30 -300	27.5	0.073	0.2	30
300 -1500	--	--	f/1500	30
1500 -100,000	--	--	1.0	30

f = frequency

\* = Plane-wave equivalent power density

General population/uncontrolled exposures apply in situations in which the general public may be exposed or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

It is important to understand that these limits apply cumulatively to all sources of RF emissions affecting a given area. For example, if several different communications system antennas occupy a shared facility such as a tower or rooftop, then the total exposure from all systems at the facility must be within compliance of the FCC guidelines.



The field strength emanating from an antenna can be estimated based on the characteristics of an antenna radiating in free space. There are basically two field areas associated with a radiating antenna. When close to the antenna, the region is known as the Near Field. Within this region, the characteristics of the RF fields are very complex, and the wave front is extremely curved. As you move further from the antenna, the wave front has less curvature and becomes planar. The wave front still has a curvature, but it appears to occupy a flat plane in space (plane-wave radiation). This region is known as the Far Field.

Two models are utilized to predict Near and Far field power densities. They are based on the formulae in FCC OET 65.

### **Cylindrical Model (Near Field Predictions)**

Spatially averaged plane-wave equivalent power densities parallel to the antenna may be estimated by dividing the antenna input power by the surface area of an imaginary cylinder surrounding the length of the radiating antenna. While the actual power density will vary along the height of the antenna, the average value along its length will closely follow the relation given by the following equation:

$$S = P \div 2\pi RL$$

Where:

S = Power Density

P = Total Power into antenna

R = Distance from the antenna

L = Antenna aperture length



For directional-type antennas, power densities can be estimated by dividing the input power by that portion of a cylindrical surface area corresponding to the angular beam width of the antenna. For example, for the case of a 120-degree azimuthal beam width, the surface area should correspond to 1/3 that of a full cylinder. This would increase the power density near the antenna by a factor of three over that for a purely omni-directional antenna. Mathematically, this can be represented by the following formula:

$$S = (180 / \theta_{BW}) P \div \pi RL$$

Where:

S = Power Density

$\theta_{BW}$  = Beam width of antenna in degrees (3 dB half-power point)

P = Total Power into antenna

R = Distance from the antenna

L = Antenna aperture length

If the antenna is a 360-degree omni-directional antenna, this formula would be equivalent to the previous formula.



## Spherical Model (Far Field Predictions)

Spatially averaged plane-wave power densities in the Far Field of an antenna may be estimated by considering the additional factors of antenna gain and reflective waves that would contribute to exposure.

The radiation pattern of an antenna has developed in the Far Field region and the power gain needs to be considered in exposure predictions. Also, if the vertical radiation pattern of the antenna is considered, the exposure predictions would most likely be reduced significantly at ground level, resulting in a more realistic estimate of the actual exposure levels.

Additionally, to model a truly "worst case" prediction of exposure levels at or near a surface, such as at ground-level or on a rooftop, reflection off the surface of antenna radiation power can be assumed, resulting in a potential four-fold increase in power density.

These additional factors are considered, and the Far Field prediction model is determined by the following equation:

$$S = EIRP \times Rc \div 4\pi R^2$$

Where:

S = Power Density

EIRP = Effective Radiated Power from antenna

Rc = Reflection Coefficient (2.56)

R = Distance from the antenna

The EIRP includes the antenna gain. If the antenna pattern is considered, the antenna gain is relative based on the horizontal and vertical pattern gain values at that particular location in space, on a rooftop or on the ground. However, it is recommended that the antenna radiation pattern characteristics not be considered to provide a conservative "worst case" prediction. This is the equation is utilized for the Far Field exposure predictions herein.



# EXHIBIT 6





RE: Tower Modification Permit Application  
ATC Site Number: 88008  
ATC Site Name: Bethany CT  
State: CT

To Whom It May Concern:

This letter serves as ATC approval for East Coast Communications to submit application for tower modification permitting for Sprint Nextel modification design OAA712592\_C6\_13 dated 8/13/18. ATC will review and sign the document if ATC signature is required to complete the application.

Please contact me with any questions or concerns.

Thank you,

**Ian Culbert**  
*Associate Construction Manager - East*  
**American Tower Corporation**  
10 Presidential Way  
Woburn, MA 01801  
781-926-7805 (Office)  
603-401-9127 (Mobile)  
[Ian.Culbert@americantower.com](mailto:Ian.Culbert@americantower.com)

After Recordation, Return To:

Sullivan & Worcester LLP  
One Post Office Square  
Boston, Massachusetts 02109  
Attn: Sander Ash, Esq.

Transfer Tax Due: \$ 6,906.95 VOL. 124 PAGE 716

STATE OF GEORGIA

COUNTY OF FULTON

CONNECTICUT  
QUITCLAIM DEED

Site: Bethany GLC: CT1340

THIS INDENTURE is made this 14<sup>th</sup> day of January, 2000 between AT&T Corp., a New York corporation, formerly known as American Telephone and Telegraph Company ("Grantor"), and AMERICAN TOWERS, INC., a Delaware corporation, having as its address c/o American Tower Corporation, 116 Huntington Avenue, Boston, MA 02116 (hereinafter referred to as "Grantee")(the words "Grantor" and "Grantee" to include their respective heirs, successors, legal representatives and assigns where the context permits or requires).

WITNESSETH:

GRANTOR, for and in consideration of the sum of TEN AND NO/100 DOLLARS (\$10.00) and other valuable consideration in hand paid at and before the sealing and delivery of these presents, the receipt, adequacy and sufficiency whereof are hereby acknowledged, does by these presents remise, release and forever quit-claim unto Grantee all of Grantor's right, title and interest in and to:

ALL THE TRACT(S) OR PARCEL(S) OF LAND being more particularly described on Exhibit "A" attached hereto and by this reference made a part hereof (hereinafter referred to as the "Property").



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TO HAVE AND TO HOLD said Property unto Grantee, so that neither Grantor nor any entity or entities claiming under Grantor shall at any time, by any means or ways, have, claim, or demand any right, title, or interest in or to the Property or its appurtenances, or any rights thereof;

GRANTOR RESERVES UNTO ITSELF, and excepts from the above conveyance, the easements, rights and privileges hereinafter set forth:

(a) By its acceptance of this Deed, Grantee acknowledges and agrees Grantor has and hereby does reserve an exclusive, perpetual easement and right-of-way (the "Reserved Easement") for the benefit of Grantor, its Affiliates<sup>1</sup> and its and their respective transferees, successors and assigns, for the purpose of installing, operating, maintaining, repairing, removing and replacing underground telecommunication cables and conduits of Grantor, its Affiliates and its and their respective transferees, successors and assigns, together with manholes, markers and surface testing terminals and any regeneration huts or other above-surface improvements existing upon, over and under the Property as of the date first above written (collectively, the "Easement Area Equipment"), in such locations (the "Easement Area") where (i) the Easement Area Equipment is currently located and with respect to subsurface installations, as is marked by utility installation markers, and (ii) should there be no existing Easement Area Equipment installed on the date hereof, Easement Area Equipment may be installed within an Easement Area, the location of which Grantee may hereafter approve, which approval shall not be unreasonably withheld, conditioned or delayed (taking into account Grantee's then current use of the burdened Property and the reasonable future use thereof). By its acceptance of this Deed, the Grantee acknowledges its intent to find at least one location for the Reserved Easement. Such Easement Area shall be a minimum of sixteen and one-half (16½) feet in width and a maximum of thirty (30) feet in width. Should the Easement Area Equipment now installed (or that initially installed in the future) not encumber the maximum Easement Area, additional Easement Area Equipment may be constructed or installed within such Easement Area and, with respect to any underground cabling, conduits, wires, lines or similar improvements, such additional Easement Area Equipment shall be installed in a line parallel to and equidistant from the first cable laid; provided sufficient area is available for the installation of the additional Easement Area Equipment in the reasonable discretion of Grantee, taking into account Grantee's then current use of the burdened Property and the reasonable future use thereof. Grantor shall install, maintain and replace, as appropriate, surface markers indicating the location of the Easement Area Equipment.

(b) Grantor further reserves the following rights and powers incidental to the Easement Area and the "Temporary Easement Area" (as hereinafter defined):

<sup>1</sup> Affiliates. Shall mean, with respect to any person or entity, any other person or entity that directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, such first person or entity. As used in this definition, "control" (including, with correlative meanings, "controlled by" and "under common control with") shall mean possession, directly or indirectly, of the power to direct or cause the direction of management or policies (whether through ownership of securities or partnership or other ownership interests, by contract or otherwise).







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purpose of this subparagraph (e) referred to as a "Beneficiary" or collectively, if applicable, the "Beneficiaries;" and each Beneficiary by its exercising of any right reserved to it hereunder shall have agreed to be bound by the following), and each of which shall be effective only from and after the date hereof:

- (i) Except to the extent caused by or resulting from the negligence or willful misconduct of Grantee, from and after the date hereof, the Beneficiaries shall defend, indemnify and hold harmless Grantee, its officers, directors, employees, partners, tenants, invitees, licensees and contractors from all costs, damages, expenses (including, without limitation, reasonable attorneys' fees and disbursements), foreseen or unforeseen, arising (directly or indirectly) after the date hereof from or in connection with the exercise by any Beneficiary of any right reserved unto the Beneficiaries in this reservation, including, but not limited to, the installation, maintenance, operation, removal, replacement or presence, in each case after the date hereof, of the Easement Area Equipment and other property at the Property, any work or thing done or condition created by Beneficiary after the date hereof at the Property, and any and all costs (including attorneys' fees) of enforcing the terms of subparagraphs (a) through (e) hereof.
- (ii) Except in the case of emergency when notice reasonable under the circumstances shall be given and except in the case of normal patrols of the Easement Area for the purpose of observing the presence of surface markers or erosion for which no notice is required, Beneficiary shall give reasonable prior written notice before entering upon the Property. Such notice(s) shall set forth in reasonable detail any and all work and actions to be undertaken in connection with such entry.
- (iii) Beneficiary shall not suffer or permit any lien to be filed, or shall promptly bond over such lien, against the Property relating to, or arising out of, work performed or materials supplied by or for Beneficiary after the date hereof.
- (iv) All work performed by Beneficiary relating to the Easement shall be reasonably coordinated with Grantee and with other work being performed at the Property (taking into account any emergency conditions which may exist). Beneficiary shall promptly repair any damage to the Property occasioned by its exercise of any of its rights related to the Reserved Easement or the Temporary Easement.
- (v) Beneficiary shall secure all necessary licenses, permits and other governmental approvals before performing any work at the Property and shall, from and after the date hereof, comply with all applicable laws governing its use of the Easement Area, and shall carry, if required by applicable law, and cause each of its contractors and subcontractors to carry, workers' compensation insurance in statutory amounts.
- (vi) The agreements, easements, covenants, conditions, undertakings, restrictions,

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rights, privileges made, granted or assumed, or reserved, as the case may be, by Grantee, the Beneficiaries or Grantor, as the case may be, are made not only personally for the benefit of the other parties hereto but also shall run with the land and constitute an equitable servitude on the portion of the land owned by such party appurtenant to the Property, the Easement Area, or the Temporary Easement Area, as the case may be. Any transferee of all or any portion of the Property or all or any portion of the Easement Area or Temporary Easement Area shall be deemed automatically by acceptance of the same, to have assumed all obligations herein set forth and to have agreed with the party then burdened by the rights herein created and reserved to execute any and all instruments and to do any and all things reasonably required to carry out the intention of the agreements herein set forth, and the transferor shall, upon completion of such transfer involving all of its interest in the Easement Area or the Temporary Easement Area and upon the giving of written notice of such transfer to the other, be relieved of all further liability with respect to the Property, Easement Area and/or the Temporary Easement Area transferred, except liability with respect to matters that may have arisen from and after the date hereof and prior to the date of said transfer. The written notice of transfer shall include the name and address of the transferee.

- (vii) If the consolidated net worth of the Beneficiaries who are obligated under the indemnity contained in this subparagraph (e) is at any time less than \$100,000,000.00, as determined by generally accepted accounting principles consistently applied, the within reservations shall terminate unless at all times thereafter the Beneficiaries maintain for the benefit of Grantee evidence of insurance reasonably satisfactory to Grantee. In such case, the Beneficiaries shall maintain and deliver from time to time as reasonably requested by Grantee evidence of such insurance reasonably satisfactory to Grantee so long as such party is a Beneficiary of the Easement. By acceptance of this Deed, the Grantee acknowledges that evidence of commercial general liability insurance in the minimum amount of \$2,500,000 (as such amount shall be reasonably adjusted from time to time to account for inflation) shall be a reasonable amount of commercial general liability insurance acceptable to Grantee. Unless the stock of Beneficiary or, if Beneficiary is a subsidiary of the Grantor, the stock of its parent company shall then be publicly traded, Beneficiary shall provide evidence of its net worth to Grantee from time to time upon Grantee's request.



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EXHIBIT "A"

SITE NAME: BETHANY, CT  
GLC: CT1340  
LINE NO: A198  
Page 1 of 2

11 that certain piece or parcel of land, with all the improvements thereon, situated in the Town of Bethany, in the County of New Haven and State of Connecticut, containing 9.212 acres, or 401,277 square feet, and bounded and described as follows:

Commencing at a point on the east side of Old Amity Road, said point being approximately 300 feet north of Meyers Road;

thence running north 35 degrees, 29 minutes, 45 seconds west 83.73 feet along Old Amity Road;

thence running north 27 degrees, 02 minutes, 49 seconds west 46.95 feet along Old Amity Road;

thence running north 18 degrees, 52 minutes, 39 seconds west 379.83 feet along Old Amity Road;

thence running north 68 degrees, 13 minutes, 57 seconds east 191.55 feet along land belonging now or formerly to Phillip Chamberlain and Marjorie A. Chamberlain;

thence running north 66 degrees, 20 minutes, 58 seconds east 27.25 feet along land belonging now or formerly to Phillip Chamberlain and Marjorie A. Chamberlain;

thence running north 25 degrees, 08 minutes, 22 seconds east 68.00 feet along land belonging now or formerly to Phillip Chamberlain and Marjorie A. Chamberlain;

thence running north 6 degrees, 28 minutes, 02 seconds west 71.23 feet along land belonging now or formerly to Phillip Chamberlain and Marjorie A. Chamberlain;

thence running north 4 degrees, 27 minutes, 27 seconds west 82.43 feet along land belonging now or formerly to Konstantine Kosciuk and Margarita Kosciuk;



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SITE NAME: BETHANY, CT  
GLC: CT1340  
LINE NO: A198  
Page 2 of 2

thence running north 5 degrees, 30 minutes, 43  
seconds west 196.24 feet along land belonging now or  
formerly to Walter H. Braun;  
thence running north 3 degrees, 09 minutes, 24  
seconds west 86.82 feet along land belonging now or  
formerly to Walter H. Braun;  
thence running north 0 degrees, 42 minutes, 15  
seconds west 86.75 feet along land belonging now or  
formerly to Walter H. Braun;  
thence running north 85 degrees, 01 minutes, 45  
seconds east 136.63 feet along land belonging now or  
formerly to the Estate of William Beletzky;  
thence running south 19 degrees, 15 minutes, 14  
seconds east 1,012.01 feet;  
thence running south 67 degrees, 51 minutes, 46  
seconds west 56.18 feet;  
thence running south 9 degrees, 50 minutes, 00 seconds  
west 213.75 feet;  
thence running south 59 degrees, 04 minutes, 46  
seconds west 51.05 feet along the easterly line of  
Meyers Road, so-called;  
thence running north 19 degrees, 15 minutes, 14  
seconds west 189.36 feet;  
thence running south 67 degrees, 51 minutes, 46  
seconds west 296.70 feet to the point and place of  
beginning.

Being the same parcel as conveyed to American Telephone and Telegraph Company by  
Elsie M. Halter by Warranty Deed dated August 10, 1966 and recorded August 19, 1966  
in Volume 43, Page 554 of the Town of Bethany Land Records.

CT1340 - Deed  
AT&T Corp./QCD/CT

\$ 6202.48 STATE CONVEYANCE TAX COLLECTED

\$ 684.47 CONVEYANCE TAX RECEIVED

*Joan Simpson*  
ASSY TOWN CLERK BETHANY

VOL. 124 PAGE 723

IN WITNESS WHEREOF, Grantor has signed and sealed this deed, the day and year first above written.

Witnessed by:

Virginia N. Goss  
Virginia N. Goss

Mary K. Fields  
Mary K. Fields

GRANTOR:

AT&T Corp., a New York corporation,  
formerly known as American Telephone and  
Telegraph Company

By: Richard S. Adler

Name: Richard S. Adler,  
Manager, Network Services Infrastructure  
Program Management (ANS Real Estate)

State of Georgia

County of Fulton

Personally appeared, Richard S. Adler, as aforesaid, signer of the foregoing instrument and acknowledged the same to be his/her free act and deed as such Manager, Network Services Infrastructure Program Management (ANS Real Estate) of AT&T Corp., and the free act and deed of said corporation, before me.

Maurice Mario

Notary Public

Print Name: MAURICE, MARIO

My Commission Expires: 01/01/2003

(NOTARIAL SEAL)

Grantees' Address:

c/o American Tower Corporation

116 Huntington Avenue

Boston, MA 02116



RECEIVED FOR RECORD Feb. 16, 2000  
AT 1:19 P.M. AND RECORDED BY  
Jean C. Simpson, TOWN CLERK



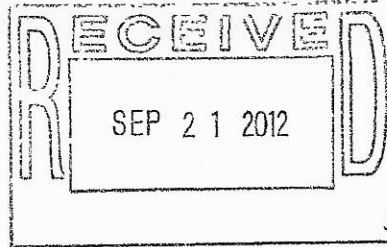
U.S. Department of  
Homeland Security

United States  
Coast Guard



Commanding Officer  
Civil Engineering Unit Miami

15608 SW 117<sup>th</sup> Ave  
Miami, FL 33177  
Staff Symbol: (c)  
Phone: (305) 278-6770  
Fax (305) 278-6703  
Email: Benjamin.L.Davis@uscg.mil



11100

September 14, 2012

Robert Walsh, Building Official  
Bethany Town Hall  
40 Peck Road  
Bethany, CT 06524-3338

Dear Mr. Walsh:

This letter is confirmation that the United States, acting by and through the U.S. Coast Guard (USCG), has a lease for the RFF Bethany tower site located at 93 Old Amity Road, Bethany, CT 06524-3429 is currently used by the USCG has an antenna tower site for the National Distress and Response System, also known as "Rescue 21". The Lessor is American Tower, Inc..

The premise leased by the Federal Government includes the existing tower and a surface area sufficient for supporting equipment. A shelter, generator and fuel tank are also part of the surface area of the existing tower compound. In addition, the USCG has antennas and cables and utility connections on the tower. The above improvements and equipment are for the exclusive use of the Federal Government.

The USCG will soon begin the installation of a VSAT satellite antenna on the existing surface area in order to transmit and receive private internet protocol data services. The USCG will not need to climb the tower as the VSAT satellite antenna will be installed on the Ice Bridge as detailed on the attached site plan.

The "Rescue 21" contractor (Verizon Satellite Solutions Group), will be authorized to commence construction and equipment installation, make the necessary utility connections, and otherwise prepare the site for operation. Per 40 USC 3312, federal agencies and their contractors are not required to obtain permits or to pay permitting or inspections fees.

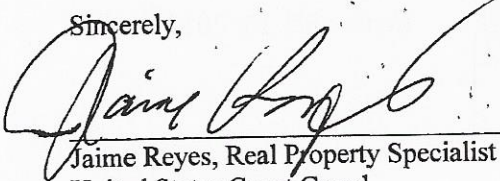
Verizon Satellite Solutions Group is authorized to reproduce copies of this letter and distribute as needed to confirm to state and/or local authorities that this project will constitute a Federal construction or alteration project on federally leased real property.

If you would like further consultation about the project or would like to review the construction drawings or require an inspection of the facilities during construction or alteration, please don't hesitate to contact the U.S Coast Guard. Attached is the site plan for your perusal.

11100

For any questions, please contact James Middleton, Contractor at 202-475-3285 or [James.E.Middleton@uscg.mil](mailto:James.E.Middleton@uscg.mil), and/or Jaime Reyes, Real Property Specialist at 305-278-6716 or [Jaime.Reyes4@uscg.mil](mailto:Jaime.Reyes4@uscg.mil).

Sincerely,



Jaime Reyes, Real Property Specialist  
United States Coast Guard

Enclosures

1.) Site Plan

# EXHIBIT 7



**From:** [UPS](#)  
**To:** [Barbara Kassabian](#)  
**Subject:** UPS Delivery Notification, Tracking Number 1Z9Y45030339814651  
**Date:** Wednesday, September 20, 2023 10:42:33 AM

---



**Hello, your package has been delivered.**

**Delivery Date:** Wednesday, 09/20/2023

**Delivery Time:** 10:41 AM

**Signed by:** TC

## CENTERLINE SITE ACQUISITION

<b>Tracking Number:</b>	<a href="#">1Z9Y45030339814651</a>
<b>Ship To:</b>	SELECTMAN'S OFFICE FIRST SELECTMAN 40 PECK ROAD BETHANY, CT 065243322 US
<b>Number of Packages:</b>	1
<b>UPS Service:</b>	UPS Ground
<b>Package Weight:</b>	1.0 LBS
<b>Reference Number:</b>	14523185

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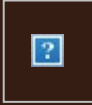


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**From:** [UPS](#)  
**To:** [Barbara Kassabian](#)  
**Subject:** UPS Delivery Notification, Tracking Number 1Z9Y45030314319948  
**Date:** Tuesday, September 19, 2023 1:11:07 PM

---



**Hello, your package has been delivered.**

**Delivery Date:** Tuesday, 09/19/2023

**Delivery Time:** 1:09 PM

**Signed by:** TC

## CENTERLINE SITE ACQUISITION

<b>Tracking Number:</b>	<a href="#">1Z9Y45030314319948</a>
<b>Ship To:</b>	PLANNING & ZONING COMMISSION 40 PECK ROAD BETHANY, CT 065243322 US
<b>Number of Packages:</b>	1
<b>UPS Service:</b>	UPS Ground
<b>Package Weight:</b>	1.0 LBS
<b>Reference Number:</b>	14523185

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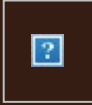
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**From:** [UPS](#)  
**To:** [Barbara Kassabian](#)  
**Subject:** UPS Delivery Notification, Tracking Number 1Z9Y45030338879263  
**Date:** Tuesday, September 19, 2023 9:50:11 AM

---



**Hello, your package has been delivered.**

**Delivery Date:** Tuesday, 09/19/2023

**Delivery Time:** 9:49 AM

**Signed by:** LONG

## CENTERLINE SITE ACQUISITION

<b>Tracking Number:</b>	<a href="#">1Z9Y45030338879263</a>
<b>Ship To:</b>	AMERICAN TOWER 10 PRESIDENTIAL WAY WOBURN, MA 018011053 US
<b>Number of Packages:</b>	1
<b>UPS Service:</b>	UPS Ground
<b>Package Weight:</b>	1.0 LBS
<b>Reference Number:</b>	14523185

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