

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

May 13, 2024

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

**RE: Notice of Exempt Modification // Site: WOODSTOCK CT RELO (ATC: 418609)
87 West Quasset Road, Woodstock, CT 06281
N 41.92977222 // W -71.98931666**

Dear Ms. Bachman,

Cellco Partnership d/b/a Verizon Wireless currently maintains twelve (12) antenna at the 147-ft level on the existing 150 ft Tower, located at 87 West Quasset Road, Woodstock, CT. The tower is owned by American Tower. Verizon Wireless proposed modification involves the installation of a new mount modification, swap out (3) antennas and (6) RRH with new antennas and RRH 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 Woodstock'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 May 8, 2024, by NB&C LLC, a structural analysis dated April 17, 2024, by American Tower Corp., and a structural mount analysis by Colliers Engineering and Design dated March 21, 2024, and Non-Ionizing Electromagnetic Radiation (NIER) Study dated May 6, 2024, 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

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
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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: Chandler L. Paquette – First Selectman – Chief Elected Official
Dan Malo – Zoning Enforcement Officer - as P&Z official
American Tower Corporation - as tower owner
Quasset Hill Farm LLC – as ground owner

EXHIBIT 1



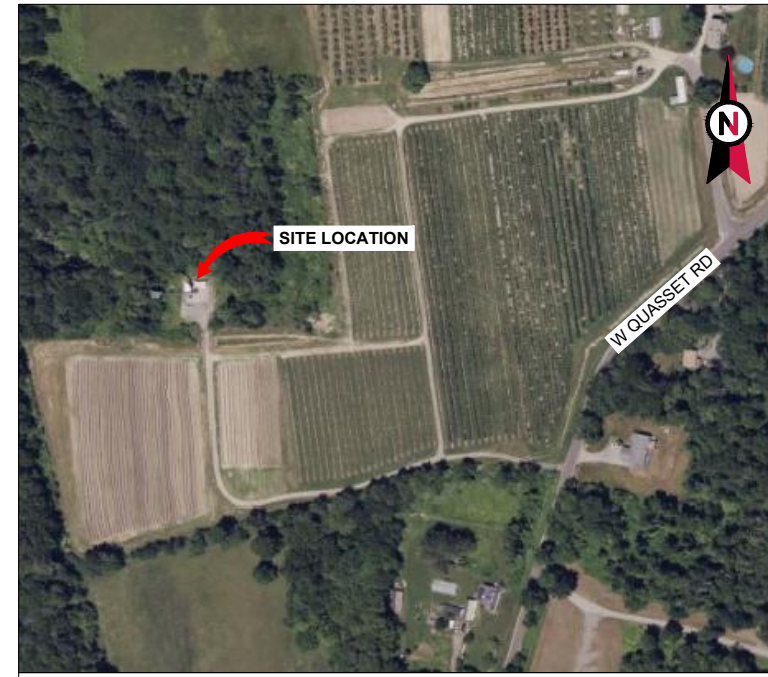


VICINITY MAP



AMERICAN TOWER®

ATC SITE NAME: WOODSTOCK RELO CT
 ATC SITE NUMBER: 418609
 VERIZON SITE NAME: WOODSTOCK CT RELO
 VERIZON SITE NUMBER: 5000245761
 VERIZON FUZE PID: 16272085
 SITE ADDRESS: 87 WEST QUASSET ROAD
 WOODSTOCK, CT 06281



LOCATION MAP

BIRD WATCH SITE:
 PLEASE CONTACT bird.watch@americantower.com OR
 AMERICAN TOWER NOC AT 877-518-6937 FOR ASSISTANCE

VERIZON AMENDMENT DRAWINGS

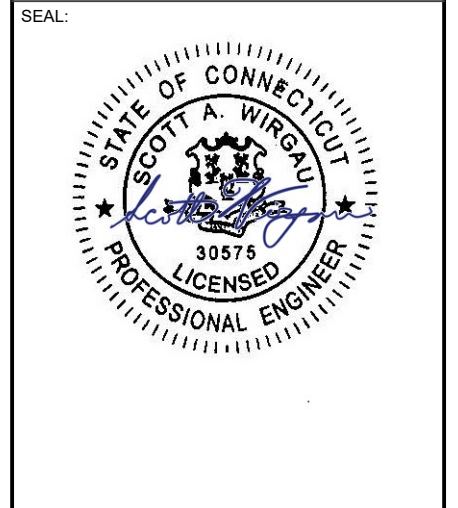
COMPLIANCE CODE	PROJECT SUMMARY	PROJECT DESCRIPTION	SHEET INDEX				
ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNMENT AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES. 2021 IBC NATIONAL ELECTRICAL CODE (NFPA 70, NEC 2020 W/ AMND) 2022 CONNECTICUT STATE BUILDING CODE, IMC PORTION (IMC 2021 W/ AMND) 2022 CONNECTICUT STATE BUILDING CODE, IPC PORTION (IPC 2021 W/ AMND) 2022 CONNECTICUT STATE BUILDING CODE, IECC PORTION (IECC 2021 W/ AMND) PART III OF THE 2022 CT STATE FIRE SAFETY CODE (IFC 2021 W/ AMND) 2022 CONNECTICUT STATE BUILDING CODE, IEBC PORTION (IEBC 2021 W/ AMND) 2022 CONNECTICUT STATE BUILDING CODE 2022 CONNECTICUT STATE BUILDING CODE, IRC PORTION (IRC 2021 W/ AMND) CONNECTICUT STATE FUEL GAS CODE (IFGC 2021 W/ AMND)	<u>SITE ADDRESS:</u> 87 WEST QUASSET ROAD WOODSTOCK, CT 06281 COUNTY: WINDHAM <u>REGISTERED COORDINATES:</u> LATITUDE: 41.92977222 41° 55' 47.18" N LONGITUDE: -71.98931666 71° 59' 21.54" W GROUND ELEVATION: 692' AMSL	THE PROPOSED PROJECT INCLUDES MODIFYING GROUND BASED AND TOWER MOUNTED EQUIPMENT AS INDICATED PER BELOW: REMOVE (3) ANTENNA(S) AND (6) RRH(S) INSTALL MOUNT MODIFICATIONS, (3) ANTENNA(S), (6) RRH(S), AND (1) OVP(S) EXISTING (9) ANTENNA(S), (1) OVP(S), AND (12) 1-5/8" COAX / (2) 1-5/8" 6X12 HYBRID CABLE(S) 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> A.T. ENGINEERING SERVICES LLC 1 FENTON MAIN, STE 300 CARY, NC 27511 <u>PROPERTY OWNER:</u> QUASSET HILL FARM LLC 87 WEST QUASSET ROAD WOODSTOCK, CT 06281	<u>PROJECT NOTES</u> 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 G-002 GENERAL NOTES C-101 DETAILED SITE PLAN C-201 TOWER ELEVATION C-401 ANTENNA INFORMATION & SCHEDULE C-501 CONSTRUCTION DETAILS E-501 GROUNDING DETAILS R-601 SUPPLEMENTAL R-602 SUPPLEMENTAL R-603 SUPPLEMENTAL R-604 SUPPLEMENTAL				
<u>UTILITY COMPANIES</u> POWER COMPANY: UNKNOWN PHONE: N/A TELEPHONE COMPANY: UNKNOWN PHONE: N/A	<u>PROJECT LOCATION DIRECTIONS</u> 184 (E) TO EXIT 69. TAKE RTE 74 (E) TO RTE 44 (E). MAKE A LEFT ONTO RTE 198 (N) AND A RIGHT ONTO RTE 244 (E). MAKE A LEFT ONTO QUASSET RD AND ANOTHER LEFT ONTO WEST QUASSET RD.	<u>CONTRACTOR PMI REQUIREMENTS</u> PMI ACCESSED AT: HTTPS://PMI.VZSMART.COM SMART TOOL VENDOR PROJECT NUMBER: 10226875 VZW LOCATION CODE (PSLC): 5000245761 ***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
 1 FENTON MAIN
 SUITE 300
 CARY, NC 27511
 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	JLR	05/08/24

ATC SITE NUMBER:
 418609
 ATC SITE NAME:
 WOODSTOCK RELO CT
 VERIZON SITE NAME:
 WOODSTOCK CT RELO
 SITE ADDRESS:
 87 WEST QUASSET ROAD
 WOODSTOCK, CT 06281



ATC JOB NO: 14854318_GO
 CUSTOMER ID: WOODSTOCK CT RELO
 CUSTOMER #: 5000245761

TITLE SHEET
 SHEET NUMBER: **G-001**
 REVISION: **0**

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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 ANSIEIA/NTIA-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.



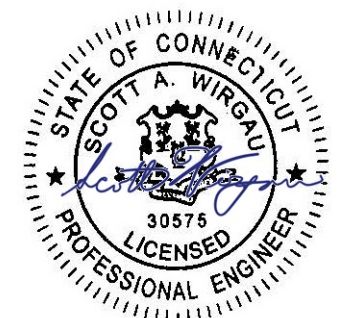
AMERICAN TOWER®
A.T. ENGINEERING SERVICES LLC
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 PEC.0001553

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 VERIZON SITE NAME:
WOODSTOCK CT RELO
 SITE ADDRESS:
 87 WEST QUASSET ROAD
 WOODSTOCK, CT 06281

SEAL:



Digitally Signed: 2024-05-08



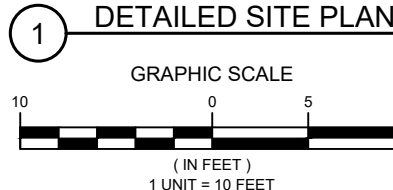
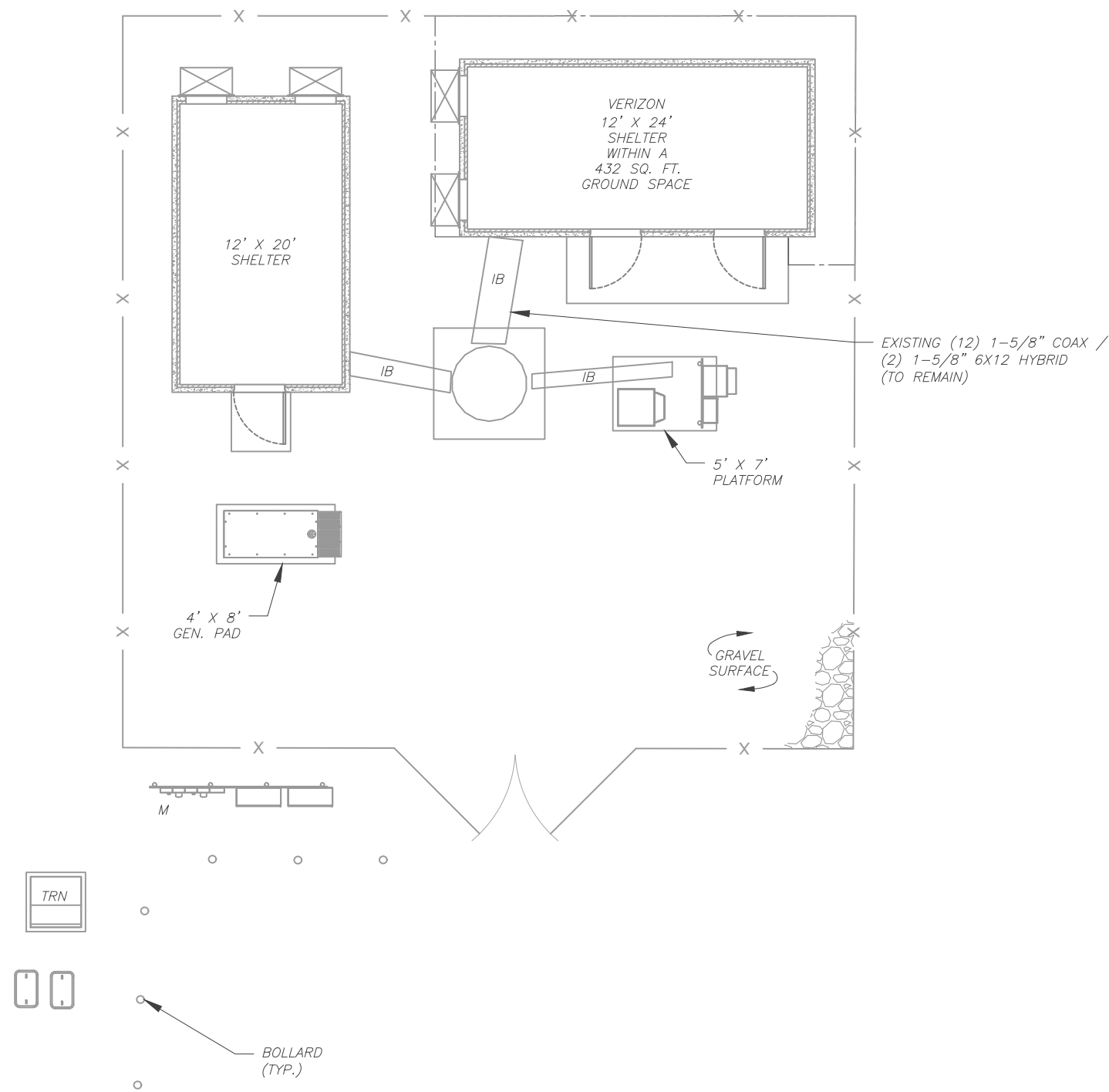
ATC JOB NO:	14854318_G0
CUSTOMER ID:	WOODSTOCK CT RELO
CUSTOMER #:	5000245761

GENERAL NOTES

SHEET NUMBER: G-002	REVISION: 0
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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



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Digitally Signed: 2024-05-08



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 CUSTOMER ID: WOODSTOCK CT RELO
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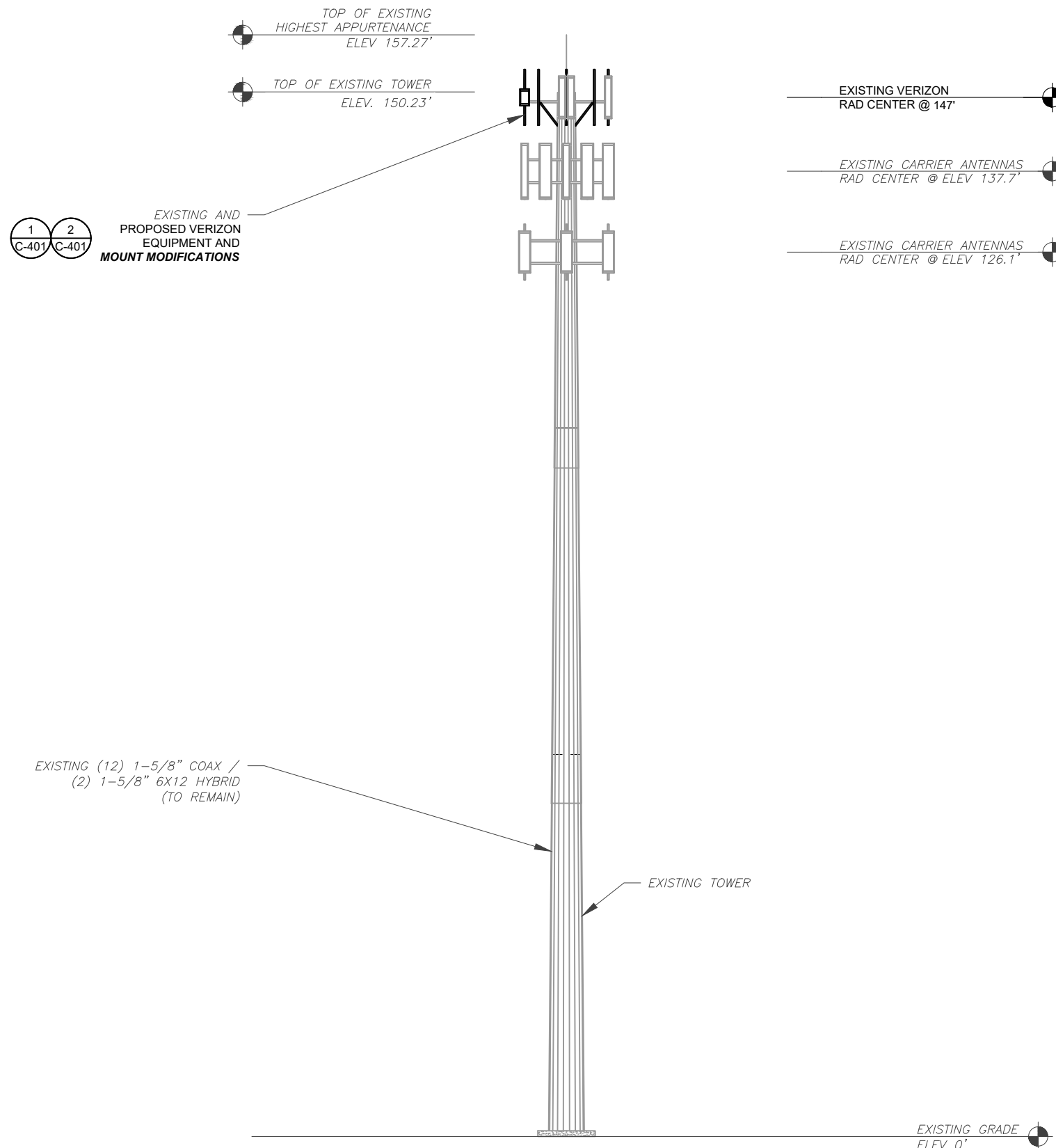
DETAILED SITE PLAN

SHEET NUMBER:
C-101
 REVISION:
0

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FAA REGISTERED HEIGHT: 157' AGL

PER MOUNT ANALYSIS COMPLETED BY COLLIERS ENGINEERING & DESIGN, DATED 03/22/2024, THE EXISTING MOUNT MUST BE MODIFIED TO ADEQUATELY SUPPORT THE PROPOSED LOADING. THE MOUNT MODIFICATION DETAILED AT THE END OF THIS PLAN SET, MUST BE INSTALLED PRIOR TO THE INSTALLATION OF THE PROPOSED ANTENNAS AND OTHER EQUIPMENT.




EXISTING AND PROPOSED VERIZON EQUIPMENT AND MOUNT MODIFICATIONS

EXISTING (12) 1-5/8" COAX / (2) 1-5/8" 6X12 HYBRID (TO REMAIN)

1 TOWER ELEVATION
SCALE: N.T.S.

ALL ELEVATIONS REFLECT ABOVE GROUND LEVEL (A.G.L.)

- 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 ELEVATION DEPICTION MAY NOT REFLECT ALL EQUIPMENT INCLUDED IN STRUCTURAL ANALYSIS. REFER TO STRUCTURAL ANALYSIS FOR FULL TOWER LOADING.

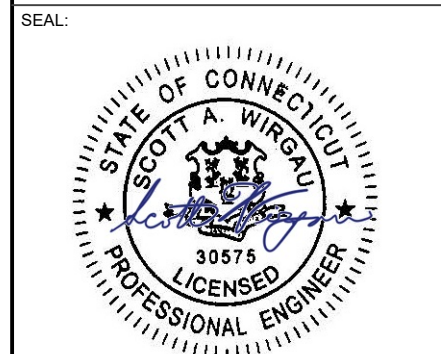


AMERICAN TOWER®
A.T. ENGINEERING SERVICES LLC
1 FENTON MAIN
SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112
PEC.0001553


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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	JLR	05/08/24

ATC SITE NUMBER:
418609
ATC SITE NAME:
WOODSTOCK RELO CT
VERIZON SITE NAME:
WOODSTOCK CT RELO
SITE ADDRESS:
87 WEST QUASSET ROAD
WOODSTOCK, CT 06281



Digitally Signed: 2024-05-08

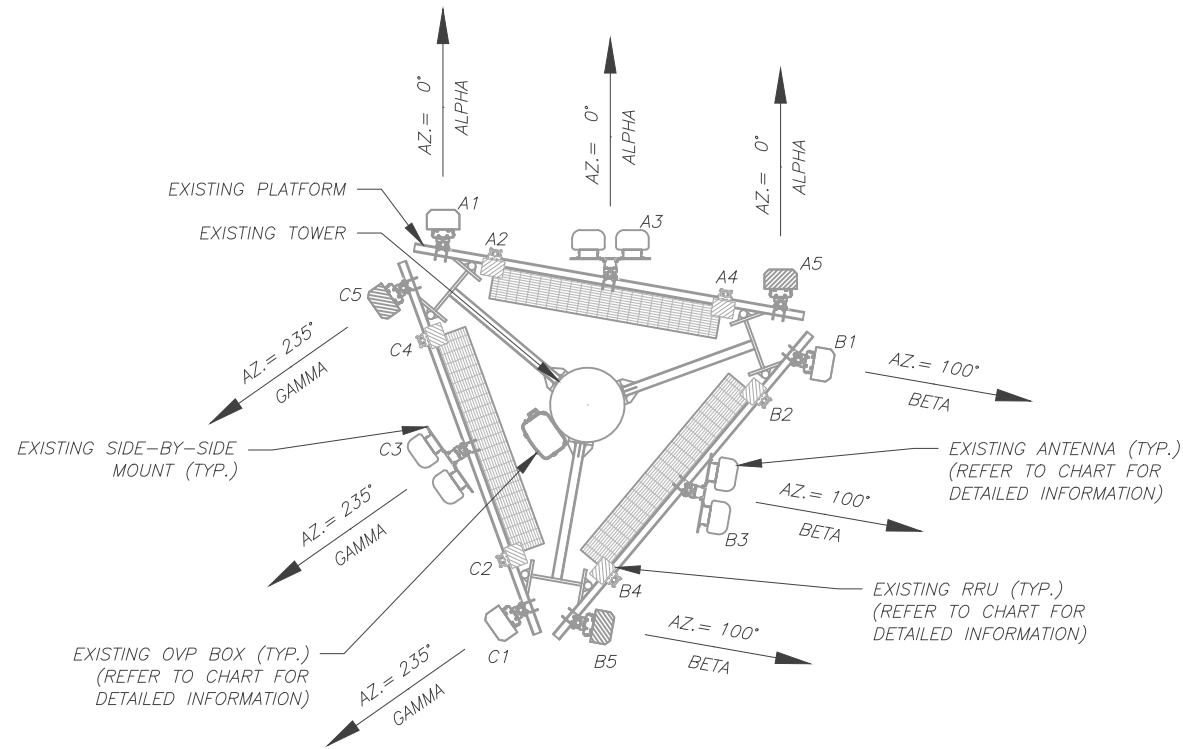


ATC JOB NO: 14854318_GO
CUSTOMER ID: WOODSTOCK CT RELO
CUSTOMER #: 5000245761

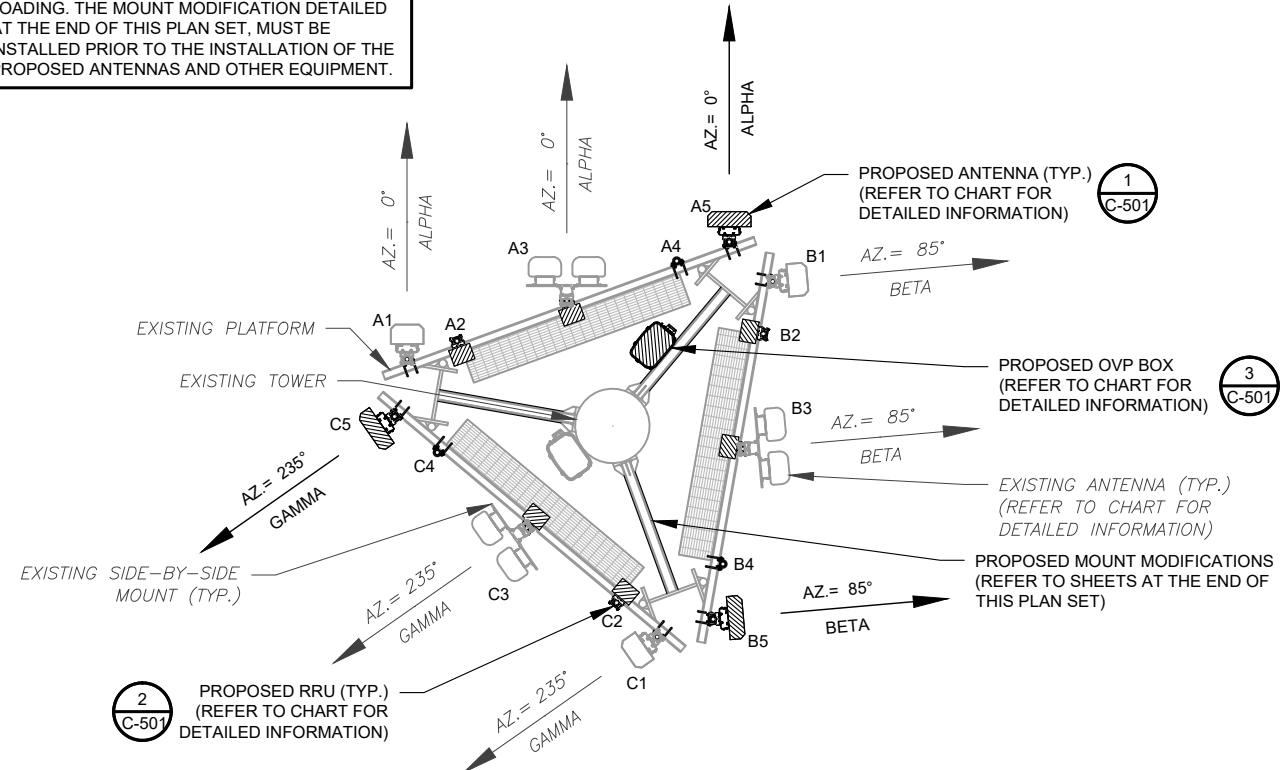
TOWER ELEVATION	
SHEET NUMBER: C-201	REVISION: 0

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PER MOUNT ANALYSIS COMPLETED BY COLLIERS ENGINEERING & DESIGN, DATED 03/22/2024, THE EXISTING MOUNT MUST BE MODIFIED TO ADEQUATELY SUPPORT THE PROPOSED LOADING. THE MOUNT MODIFICATION DETAILED AT THE END OF THIS PLAN SET, MUST BE INSTALLED PRIOR TO THE INSTALLATION OF THE PROPOSED ANTENNAS AND OTHER EQUIPMENT.



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



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

EXISTING ANTENNA SCHEDULE								
LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	147'	0°	A1	LNX-6514DS-A1M	-	RMN	-	-
			A2	-	-	-	UHBA	RMV
			A3	(2) SBNHH-1D65B	700 LTE/850 LTE 5G/1900 LTE/AWS LTE	RMN	-	-
			A4	-	-	-	UHIE	RMV
			A5	LNX-6514DS-A1M	-	RMV	-	-
BETA	147'	100°	B1	LNX-6514DS-A1M	-	RMN	-	-
			B2	-	-	-	UHBA	RMV
			B3	(2) SBNHH-1D65B	700 LTE/850 LTE 5G/1900 LTE/AWS LTE	RMN	-	-
			B4	-	-	-	UHIE	RMV
			B5	LNX-6514DS-A1M	-	RMV	-	-
GAMMA	147'	235°	C1	LNX-6514DS-A1M	-	RMN	-	-
			C2	-	-	-	UHBA	RMV
			C3	(2) SBNHH-1D65B	700 LTE/850 LTE 5G/1900 LTE/AWS LTE	RMN	-	-
			C4	-	-	-	UHIE	RMV
			C5	LNX-6514DS-A1M	-	RMV	-	-

NOTES

- GC TO VERIFY THE FINAL RFDS MATCHES THE FINAL CONSTRUCTION DRAWINGS. GC TO NOTIFY ATC PM OF ANY DISCREPANCY PRIOR TO INSTALLING THE EQUIPMENT.
- GC TO CAP ALL UNUSED PORTS.
- GC TO 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	STATUS
ALPHA	147'	0°	A1	LNX-6514DS-A1M	-	RMN	-	-
			A2	-	-	-	RF4439D-25A	ADD
			A3	(2) SBNHH-1D65B	700 LTE/850 LTE 5G/1900 LTE/AWS LTE	RMN	RF4461D-13A	ADD
			A4	-	-	-	-	-
			A5	MT6413-77AA	L-SUB6 5G	ADD	-	-
BETA	147'	85°	B1	LNX-6514DS-A1M	-	RMN	-	-
			B2	-	-	-	RF4439D-25A	ADD
			B3	(2) SBNHH-1D65B	700 LTE/850 LTE 5G/1900 LTE/AWS LTE	RMN	RF4461D-13A	ADD
			B4	-	-	-	-	-
			B5	MT6413-77AA	L-SUB6 5G	ADD	-	-
GAMMA	147'	235°	C1	LNX-6514DS-A1M	-	RMN	-	-
			C2	-	-	-	RF4439D-25A	ADD
			C3	(2) SBNHH-1D65B	700 LTE/850 LTE 5G/1900 LTE/AWS LTE	RMN	RF4461D-13A	ADD
			C4	-	-	-	-	-
			C5	MT6413-77AA	L-SUB6 5G	ADD	-	-

EXISTING FIBER DISTRIBUTION / OVP BOX		EXISTING CABLING SUMMARY	
MODEL NUMBER	STATUS	CABLE QTY, SIZE, TYPE	STATUS
(1) RRFDC-3315-PF-48	RMN	(12) 1-5/8" COAX / (2) 1-5/8" 6X12 HYBRID	RMN

3 EQUIPMENT SCHEDULES

FINAL FIBER DISTRIBUTION / OVP BOX		FINAL CABLING SUMMARY	
MODEL NUMBER	STATUS	CABLE QTY, SIZE, TYPE	STATUS
(1) RRFDC-3315-PF-48	RMN	(12) 1-5/8" COAX / (2) 1-5/8" 6X12 HYBRID	RMN
(1) RRFDC-3315-PF-48	ADD	-	-

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A.T. ENGINEERING SERVICES LLC
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 SUITE 300
 CARY, NC 27511
 PHONE: (919) 468-0112
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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	JLR	05/08/24
1			
2			
3			

ATC SITE NUMBER:
418609
 ATC SITE NAME:
WOODSTOCK RELO CT
 VERIZON SITE NAME:
WOODSTOCK CT RELO
 SITE ADDRESS:
87 WEST QUASSET ROAD
WOODSTOCK, CT 06281



Digitally Signed: 2024-05-08

verizon

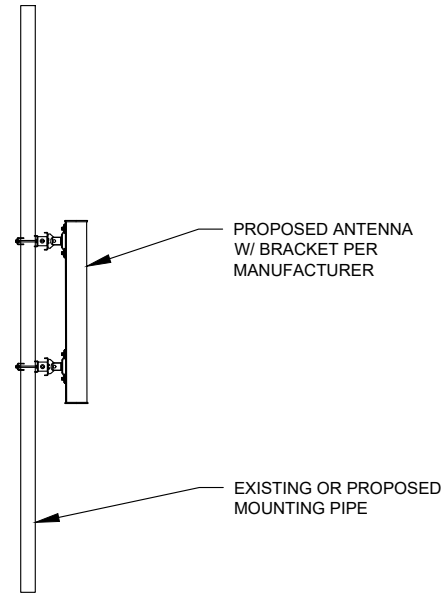
ATC JOB NO: 14854318_G0
 CUSTOMER ID: WOODSTOCK CT RELO
 CUSTOMER #: 5000245761

ANTENNA INFORMATION & SCHEDULE

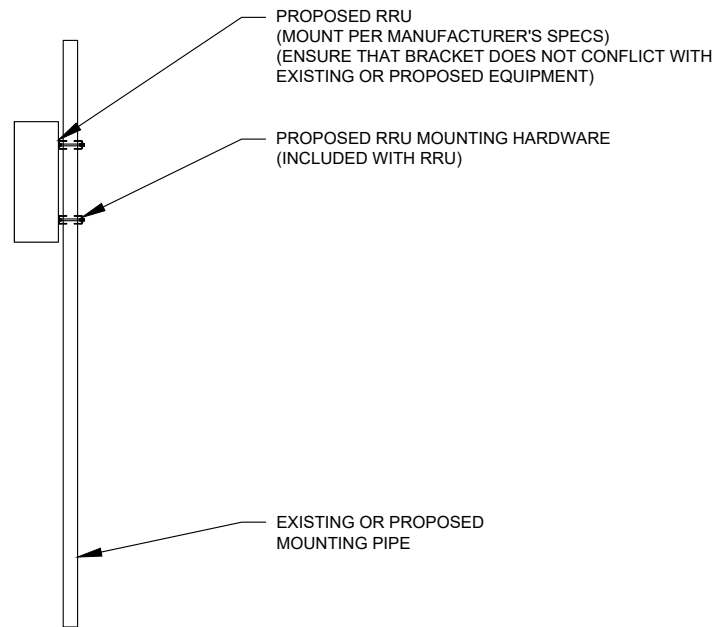
SHEET NUMBER:
C-401
 REVISION:
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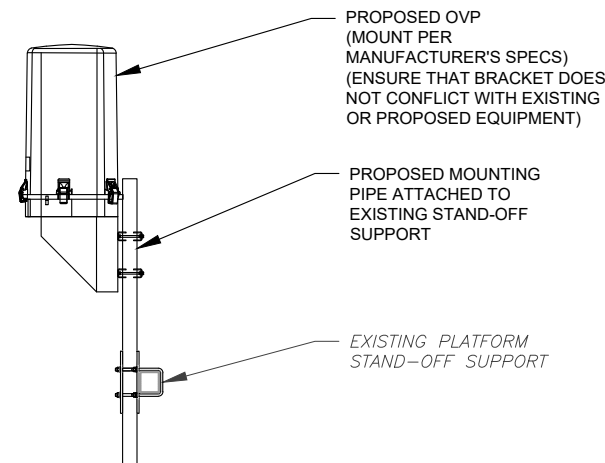
EXISTING/PROPOSED MOUNTS AND/OR MOUNT MODIFICATIONS NOT SHOWN FOR CLARITY. REFER TO ANTENNA PLANS, MOUNT ANALYSES AND/OR MOUNT MODIFICATION DOCUMENTS FOR ADDITIONAL DETAIL.



1 PROPOSED 5G ANTENNA MOUNTING DETAIL - TYPICAL
SCALE: N.T.S.



2 PROPOSED RRU MOUNTING DETAIL - TYPICAL
SCALE: N.T.S.



3 PROPOSED OVP MOUNTING DETAIL - TYPICAL
SCALE: N.T.S.



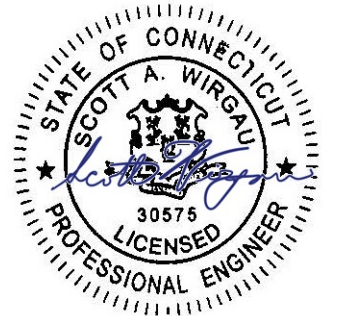
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A.T. ENGINEERING SERVICES LLC
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SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112
PEC.0001553

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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	JLR	05/08/24

ATC SITE NUMBER:
418609
ATC SITE NAME:
WOODSTOCK RELO CT
VERIZON SITE NAME:
WOODSTOCK CT RELO
SITE ADDRESS:
87 WEST QUASSET ROAD
WOODSTOCK, CT 06281

SEAL:



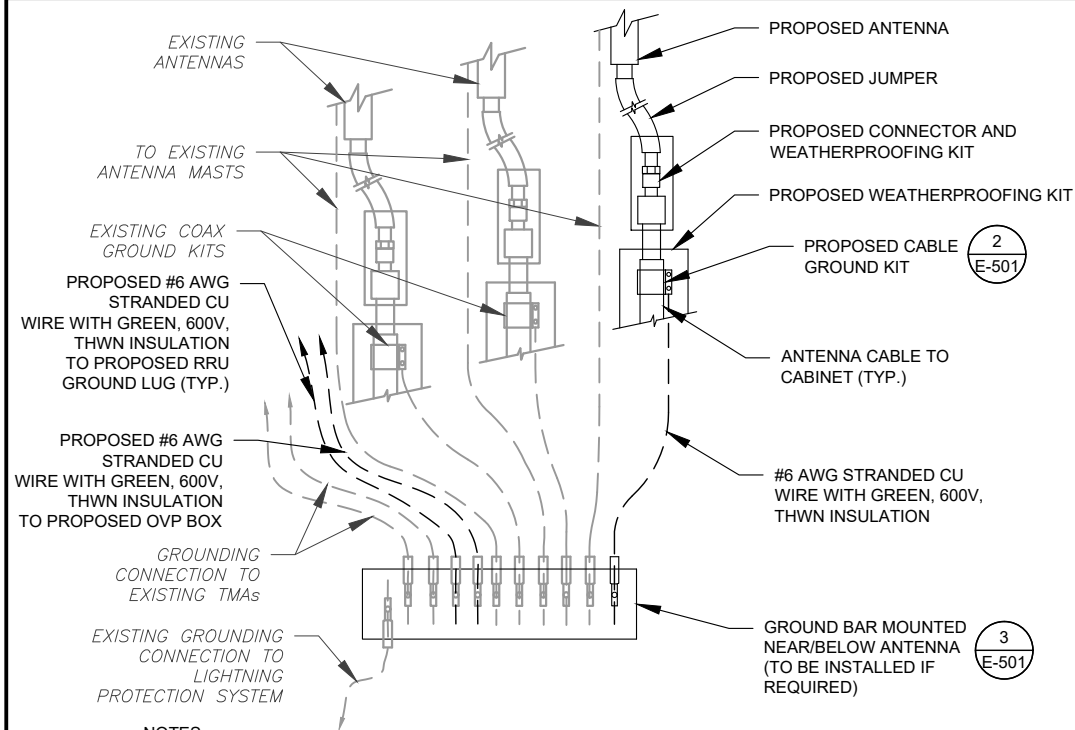
Digitally Signed: 2024-05-08



ATC JOB NO: 14854318_G0
CUSTOMER ID: WOODSTOCK CT RELO
CUSTOMER #: 5000245761

CONSTRUCTION
DETAILS

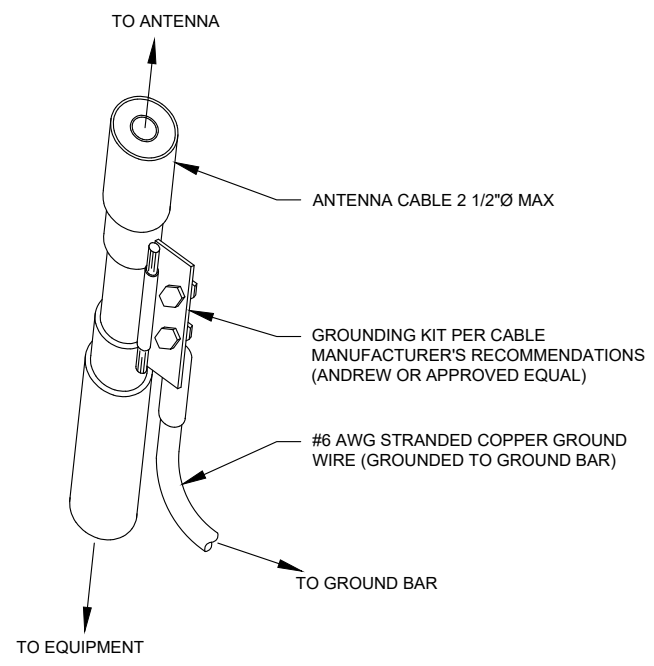
SHEET NUMBER:
C-501
REVISION:
0



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.

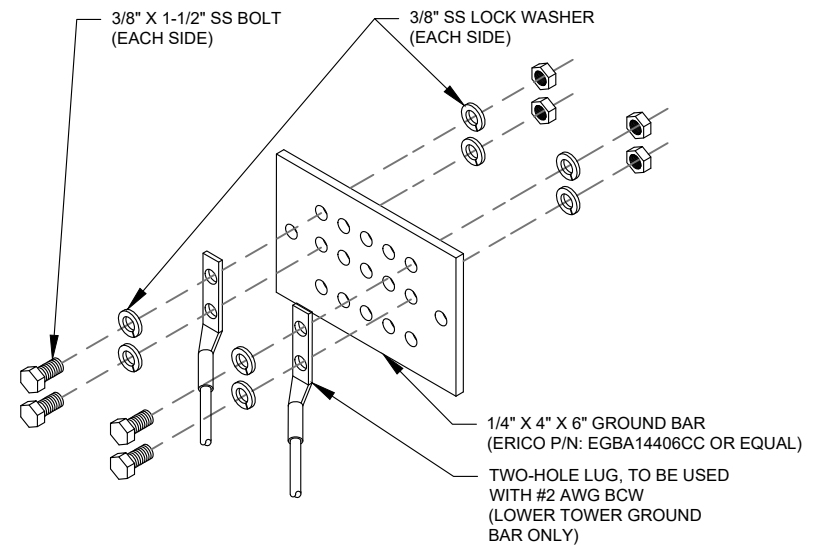
1 TYPICAL ANTENNA GROUNDING DIAGRAM
SCALE: N.T.S.



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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 CARY, NC 27511
 PHONE: (919) 468-0112
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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	JLR	05/08/24

ATC SITE NUMBER:
418609
 ATC SITE NAME:
WOODSTOCK RELO CT
 VERIZON SITE NAME:
WOODSTOCK CT RELO
 SITE ADDRESS:
 87 WEST QUASSET ROAD
 WOODSTOCK, CT 06281

SEAL:

Digitally Signed: 2024-05-08

ATC JOB NO:	14854318_G0
CUSTOMER ID:	WOODSTOCK CT RELO
CUSTOMER #:	5000245761

GROUNDING DETAILS

SHEET NUMBER:	REVISION:
E-501	0

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 Architecture, Landscape Architecture, Surveying, CT P.C
 2000 Midlantic Drive, Suite 100
 Mt. Laurel, NJ 08054
 856.797.0412
 peter.albano@collierseng.com

Mount Post-Modification Analysis Report
 (1) 13.62-Ft Platform

March 21, 2024
 Site ID: 5000245761-VZW / WOODSTOCK CT RELO
 Page | 6

Requirements:

The existing mount will be **SUFFICIENT** for the final loading configuration (attachment 2) **after the modifications detailed in attachment 3 are successfully completed.**

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

Attachments:

1. Contractor Required PMI Report Deliverables
2. Antenna Placement Diagrams
3. Mount Modification Drawings
4. Mount Photos
5. Mount Mapping Report (for reference only)
6. Analysis Calculations

Post-Modification Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10226875
 Colliers Engineering & Design Project #: 21777445 (Rev 1)

March 21, 2024

Site Information

Site ID: 5000245761-VZW / WOODSTOCK CT RELO
 Site Name: WOODSTOCK CT RELO
 Carrier Name: Verizon Wireless
 Address: 87 West Quasset Rd
 Woodstock, Connecticut 06281
 Windham County
 Latitude: 41.929772°
 Longitude: -71.989319°

Structure Information

Tower Type: 149-Ft Monopole
 Mount Type: 13.62-Ft Platform

FUZE ID # 16272085

Analysis Results

Platform: 66.8% Pass w/ Modifications*

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

*****Contractor PMI Requirements:**

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

Report Prepared By: Prasanna Dhakal



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: R-601	REVISION: 0
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MOUNT MODIFICATION DRAWINGS
EXISTING 13.62' PLATFORM

TOWER OWNER: AMERICAN TOWER CORPORATION
TOWER OWNER SITE NUMBER: 418609

CARRIER SITE NAME: WOODSTOCK CT RELO
CARRIER SITE NUMBER: 5000245761
FUZE ID: 16272085

87 WEST QUASSET RD
WOODSTOCK, CT 06281
WINDHAM COUNTY

LATITUDE: 41.929772° N
LONGITUDE: 71.989319° W

DESIGN CRITERIA

WIND LOADS
BASIC WIND SPEED @ SECOND QUANT, V = 105 MPH
STANDARD TIA-222-A HATTEL AND SERVICE PROVIDED BY THE CONTRACTOR SHALL CONFORM TO THE ABOVE REFERENCED CODES.

SEISMIC LOADS
SEISMIC DESIGN CATEGORY B
SHORT PERIOD HORIZONTAL S_v = .103
LONG PERIOD HORIZONTAL S_h = .103

PROJECT INFORMATION

APPLICANT/OWNER: VERIZON WIRELESS
CLIENT REPRESENTATIVE: VERIZON WIRELESS
PROJECT MANAGER: COLLIER ENGINEERING & DESIGN
PETER ALBANO
PHONE: 861.797.9413
EMAIL: PETER.ALBANO@COLLIERENGINEERING.COM

SHEET INDEX

SHEET	DESCRIPTION
ST-1	TITLE SHEET
SCN-1	GENERAL NOTES
SCN-2	CLIMBING FACILITY DETAIL
SCN-3	PROPOSED WIRE ROPE GUIDE ATTACHMENT
SCN-4	CLIMBING FACILITY LOCATION
SCN-5	CLIMBING FACILITY PHOTO

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WOODSTOCK CT RELO
5000245761
87 WEST QUASSET RD
WOODSTOCK, CT 06281
WINDHAM COUNTY

TITLE SHEET
ST-1

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BILL OF MATERIALS						
SECTION 1 - VZWSMART KITS						
QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS)	WEIGHT (LBS)
15		VZWSMART-PB-22800N	1/2" LONG, PPE 2 SCH40 (L3F) 2" X 8 (L3F) THRU		28	420
1		VZWSMART-PLKS	RICKER KIT	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE STRUCTURAL STEEL NOTES ON SHEET SCN-1.	201	201
1		VZWSMART-PLK7	HONORHOLE COLLAR MOUNT ASSEMBLY		100	100

SECTION 2 - OTHER REQUIRED PARTS						
QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS)	WEIGHT (LBS)
15	SITE PRO 1	SQ2CX-4	CROSSOVER PLATE KIT W/ SQUARE BOLTS AND STD. U-BOLTS	OR EOR APPROVED EQUAL, CONTACT COLLERS ENGINEERING & DESIGN FOR APPROVAL OF SUBSTITUTION.	11	170

SECTION 3 - REQUIRED SAFETY CLIMB PARTS						
QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS)	WEIGHT (LBS)
1	PERFECT VISION	HG-891-64	STANDOFF CLAMP BRACKET	OR EOR APPROVED EQUIVALENT	-	-
1	PERFECT VISION	PV-CHK-CG-80	WIRE ROPE GUIDE	OR EOR APPROVED EQUIVALENT	-	-
TOTAL						106

NOTES:

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

VZWSMART KITS - APPROVED VENDORS

CONTACT	PHONE	EMAIL	WEBSITE
SALVADOR ANGLIANO	817.378.7755	SALVADOR.ANGLIANO@CORPSCO.COM	WWW.CORPSCO.COM
DETT MANN	(760) 330-7045 (US), (760) 963-9786 (PH)	DETT@METROFABRICATORS.COM	WWW.METROFABRICATORS.COM

CONTACT	PHONE	EMAIL	WEBSITE
WIRELESS SALES	816.857.4323	WWW.PERFECT-VISION.COM	WWW.PERFECT-VISION.COM
ANGIE WELSH	866.438.8357	ANGIE@SABREINDUSTRIES.COM	WWW.SABREINDUSTRIES.COM

SITE PRO 1

CONTACT	PHONE	EMAIL	WEBSITE
PAULA BOSWELL	816.25.2527	PAULA.BOSWELL@VALPOINT.COM	WWW.STEPRO1.COM

Collier Engineering & Design
www.collierengineering.com
1000 Main Street, Suite 200
Woodstock, CT 06281
Phone: 861.797.9413
Fax: 861.797.9414
Email: info@collierengineering.com

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WOODSTOCK CT RELO
5000245761
87 WEST QUASSET RD
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WINDHAM COUNTY

TITLE SHEET
SBOM-1

GENERAL NOTES

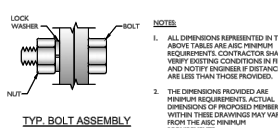
- THESE MODIFICATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE TELECOMMUNICATIONS INDUSTRY STANDARD TIA-222-A HATTEL AND SERVICE PROVIDED BY THE CONTRACTOR SHALL CONFORM TO THE ABOVE REFERENCED CODES.
- CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT DAMAGE TO EXISTING STRUCTURES ANY DAMAGE TO EXISTING STRUCTURES AS A RESULT OF THE CONTRACTOR'S WORK OR FROM DAMAGE DUE TO OTHER CAUSES SHALL BE REPAIRED BY THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE BEGINNING WORK. OBSERVE MATERIALS AND PREPARING OF SHOP DRAWINGS. ANY DISCREPANCIES BETWEEN FIELD CONDITIONS AND THE CONTRACT DOCUMENTS SHALL BE REPORTED TO THE IMMEDIATE ATTENTION OF THE ENGINEER. IF THE CONTRACTOR DISCOVERS ANY EXISTING CONDITIONS THAT ARE NOT REFERENCED ON THESE DRAWINGS, OR ANY CONDITIONS THAT WOULD INTERFERE WITH THE INSTALLATION OF THE MODIFICATION, NOTIFY THE ENGINEER IMMEDIATELY.
- IT IS ASSUMED THAT ANY STRUCTURAL MODIFICATION WORK SPECIFIED ON THESE PLANS WILL BE ACCOMPANIED BY KNOWLEDGEABLE WORKMEN WITH TOWER CONSTRUCTION EXPERIENCE.
- THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION METHODS, PRACTICES, TECHNIQUES, SEQUENCES, AND PROCEDURES.
- ALL CONSTRUCTION METHODS AND METHODS INCLUDING BUT NOT LIMITED TO ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK. CONTRACTOR SHALL VERIFY THAT ALL ANTI-TILT (LATEST EDITION), OSHA, AND GENERAL INDUSTRY STANDARDS. ALL RIGGING PLANS SHALL REFER TO ANTI-TILT (LATEST EDITION) INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS II CONSTRUCTION.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MAINTAINING AND SUPERVISING ALL SAFETY PROGRAMS IN ACCORDANCE WITH APPLICABLE SAFETY CODES.
- WORK SHALL ONLY BE PERFORMED DURING CALM OR DRY DAYS (WINDS LESS THAN 30 MPH). THE STRUCTURE SHOWN ON THE DRAWINGS IS STRUCTURALLY SOUND ONLY IN THE COMPLETED PORTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE STRUCTURE DURING ERECTION. CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT, SHORING, BRACING, AND ANY OTHER STRUCTURAL SYSTEMS AS REQUIRED TO MAINTAIN ALL PORTIONS THAT MAY OCCUR DURING HANDLING AND ERECTION UNTIL THE STRUCTURE IS FULLY COMPLETED. TEMPORARY SUPPORTS, BRACING, AND OTHER STRUCTURAL SYSTEMS REQUIRED DURING CONSTRUCTION SHALL REMAIN THE CONTRACTOR'S PROPERTY AFTER THE USE.
- ALL INSTALLATIONS PERFORMED ON THIS STRUCTURE SHALL BE COMPLETED IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE STANDARD FOR INSTALLATION, ALTERATION AND REPAIR OF ANTENNA SUPPORTING STRUCTURES AND ANTENNA ANTI-TILT.
- CONTRACTOR SHALL SECURE SITE BACK TO EXISTING CONDITION UNDER SUPERVISION OF OWNER. ALL FENCE, STONE, GEOGRAPHIC, GRADING, AND SURROUNDING GRADE SHALL BE REPAIRED AND REFINISHED AS REQUIRED TO ACHIEVE OWNER APPROVAL. POSITIVE DRAINAGE AWAY FROM TOWER SITE SHALL BE MAINTAINED.
- CONNECTIONS BETWEEN ITEMS SUPPORTED BY THE STRUCTURE AND THE STRUCTURE NOT SPECIFICALLY DETAILED IN THE CONTRACT DOCUMENTS ARE THE RESPONSIBILITY OF THE CONTRACTOR. SUCH CONNECTIONS SHALL BE DESIGNED, COORDINATED AND INSPECTED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF THE PROJECT. SUBMIT SIGNED AND SEALED CALCULATIONS DURING SHOP DRAWING REVIEW.
- DO NOT USE THESE DRAWINGS FOR ANY OTHER SITE.
- ALL MATERIAL UTILIZED FOR THIS PROJECT MUST BE NEW AND FREE OF ANY DEFECTS. ANY MATERIAL SUBSTITUTIONS INCLUDING BUT NOT LIMITED TO ALTERNATE SIZE AND/OR STRENGTH, MUST BE APPROVED BY THE OWNER AND ENGINEER IN WRITING.
- THE MOUNT UNDER NO CIRCUMSTANCES SHOULD BE USED AS A TIE OFF POINT.

STRUCTURAL STEEL

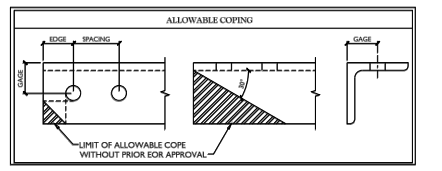
- DESIGN, DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING PUBLICATIONS EXCEPT AS SPECIFICALLY INDICATED BY THE CONTRACT DOCUMENTS:
 - A. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) HANDBOOK OF STEEL CONSTRUCTION (13TH EDITION)
 - B. SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A53 OR A99 BOLTS
 - C. AISC CODE OF STANDARD PRACTICE
- STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING UNLESS OTHERWISE SPECIFIED:
 - CHANNELS: ANGLES, PLATE, ETC. ASTM A36 (GR 36)
 - STEEL PIPE ASTM A53 (GR 36)
 - NUTS ASTM A53
 - LOCK WASHERS LOCKING STRUCTURAL GRADE
- ALL SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE APPROVED IN WRITING BY THE ENGINEER. CONTRACTOR SHALL PROVIDE DOCUMENTATION TO ENGINEER FOR VERIFYING THE SUBSTITUTE IS SUITABLE FOR USE AND MEETS ORIGINAL DESIGN CRITERIA. DIFFERENCES FROM THE ORIGINAL DESIGN, INCLUDING PARTS, DISTANCE, SPACING AND MATERIAL, SHALL BE NOTED. ESTIMATES OF COSTS OF ANY SUBSTITUTION INCLUDING REVISION COSTS AND COSTS TO SUB-CONTRACTORS SHALL BE PROVIDED TO THE ENGINEER. CONTRACTOR SHALL PROVIDE ADDITIONAL DOCUMENTATION AND/OR SPECIFICATIONS TO THE ENGINEER AS REQUESTED.
- PROVIDE STRUCTURAL STEEL SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION:
 - a. SUBMIT SHOP DRAWINGS TO PETER.ALBANO@COLLIERENGINEERING.COM
 - b. PROVIDE COLLIER ENGINEERING & DESIGN PROJECT # AND COLLIER ENGINEERING & DESIGN PROJECT ENGINEER CONTACT # ON THE BODY OF THE EMAIL.
- DRILL NO HOLES IN ANY NEW OR EXISTING STRUCTURAL STEEL MEMBERS OTHER THAN THOSE SHOWN ON STRUCTURAL DRAWINGS WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.
- GAUWAZED ASTM A53 BOLTS SHALL NOT BE USED.
- ALL NEW STEEL SHALL BE NOT BE OVEN GALVANIZED FOR FULL WEATHER PROTECTION. IN ADDITION ALL NEW STEEL SHALL BE PAINTED TO MATCH EXISTING STEEL. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
- ALL BOLT ASSEMBLIES FOR STRUCTURAL MEMBERS REPRESENTED IN THE DRAWING REQUIRE COORDINATION TO BE INSTALLED IN ACCORDANCE WITH TIA-222-A SECTION 4.3.2 REQUIREMENTS.
- WELDING CONNECTIONS ARE NOT FULLY DETAILED ON THESE DRAWINGS. FABRICATOR SHALL DESIGN CONNECTIONS TO MEET LOADS AND RESIST WHERE SHOWN ON DRAWINGS AND AS DETAILED IN SPECIFICATIONS.
- FOR MEMBERS BEING REPLACED, PROVIDE NEW BOLTS AND MATCH EXISTING SIZE AND GRADE. MAINTAIN AISC REQUIREMENTS FOR HENRIKIN BOLT DISTANCE AND SPACING.
- ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT IS AT LEAST FLUSH WITH THE FACE OF THE NUT. IF NOT FLUSH, THE BOLT END IS TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.
- GAUWAZED ASTM A53 BOLTS SHALL NOT BE USED.
- ALL NEW STEEL SHALL BE NOT BE OVEN GALVANIZED FOR FULL WEATHER PROTECTION. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
- ALL EXISTING PAINTED/GALVANIZED SURFACES DAMAGED DURING REPAIR INCLUDING AREA UNDER TYPED/PRINTED PLATES SHALL BE WIRE BRUSHED CLEAN, REPAIRED BY COOL GALVANIZING (ZINC COATS OR EOR APPROVED EQUAL) AND BURNISHED TO MATCH THE EXISTING FINISH (IF APPLICABLE).
- ALL HOLES IN STEEL MEMBERS SHALL BE 1/8" LARGER THAN THE BOLT DIAMETER. STANDARD HOLES SHALL BE USED UNLESS NOTED OTHERWISE.

BOLT SCHEDULE (IN.)				
BOLT DIAMETER	STANDARD HOLE	SHORT SLOT	MIN. EDGE DISTANCE	SPACING
1/2	9/16	9/16 x 1 1/16	7/8	1 1/2
3/4	1 1/16	1 1/16 x 7/8	1 1/8	1 7/8
3/4	1 3/16	1 3/16 x 1	1 1/4	2 1/4
7/8	1 5/16	1 5/16 x 1 1/8	1 1/2	2 5/8
1	1 1/16	1 1/16 x 1 5/16	1 3/4	3

WORKABLE GAGES (IN.)	
LEG	GAGE
4	2 1/2
3 1/2	2
3	1 3/4
2 1/2	1 3/8
2	1 1/8



- NOTE:**
- ALL DIMENSIONS REPRESENTED IN THE ABOVE TABLES ARE AISC HENRIKIN REQUIREMENTS. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ENGINEER IF DISTANCES ARE LESS THAN THOSE PROVIDED.
 - THE DIMENSIONS PROVIDED ARE HENRIKIN REQUIREMENTS. ACTUAL DIMENSIONS OF PROPOSED MEMBERS WITHIN THESE DRAWINGS MAY VARY FROM THE AISC HENRIKIN REQUIREMENTS.
 - SHORT SLOT HOLES SHALL ONLY BE USED WHEN DETPCTED IN THE DRAWINGS.
 - MATCH EXISTING GAGES WHEN MATCHING SCALE UNLESS HENRIKIN EDGE DISTANCES ARE COMPROMISED.



Collier Engineering & Design
www.collierengineering.com
1000 Main Street, Suite 200
Woodstock, CT 06281
Phone: 861.797.9413
Fax: 861.797.9414
Email: info@collierengineering.com

Verizon logo

WOODSTOCK CT RELO
5000245761
87 WEST QUASSET RD
WOODSTOCK, CT 06281
WINDHAM COUNTY

GENERAL NOTES
SCN-1

PROPOSED WIRE ROPE GUIDE ATTACHMENT - PLAN VIEW
SCALE: N.T.S.
NOTE: CONTRACTOR SHALL ENSURE THAT WIRE ROPE GUIDE DOES NOT PUSH THE WIRE ROPE OUTSIDE OF THE VERTICAL PLANE OF THE SAFETY CLIMB. CONTRACTOR WITH PHOTOS OF SAFETY CLIMB AND COLLAR FOR FURTHER DIRECTION IF NEEDED.

ITEM #	QTY	PART NUMBER	DESCRIPTIONS
A	1	HG-891-64	STANDOFF CLAMP BRACKET (PERFECT VISION OR EOR APPROVED EQ.)
B	1	PV-CHK-CG-80	WIRE ROPE GUIDE (PERFECT VISION OR EOR APPROVED EQ.)

CLIMBING FACILITY LOCATION
SCALE: N.T.S.

STRUCTURAL NOTES:

- PER THE MOUNT MAPPING COMPLETED BY RKS DESIGN & ENGINEERING LLC ON 3/28/2021, THE SAFETY CLIMB AND CLIMBING FACILITIES UP TO THE VERIZON MOUNT ELEVATION (145' 9") ARE IN GOOD CONDITION. COLLIER ENGINEERING & DESIGN DOES NOT WARRANT THIS INFORMATION.
- INSTALL SHALL NOT CAUSE HARM TO THE STRUCTURE. CLIMBING FACILITY, SAFETY CLIMB, OR ANY SYSTEM INSTALLED ON THE STRUCTURE. TIMELY NOTICE AND DOCUMENTATION SHALL BE PROVIDED BY CONTRACTORS TO THE EOR (OF STRUCTURAL DESIGN) IF AN OBSTRUCTION WAS REQUIRED TO MEET THE RF SYSTEM DESIGN REQUIREMENTS AND PERFORMANCES.

Collier Engineering & Design
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Email: info@collierengineering.com

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WOODSTOCK CT RELO
5000245761
87 WEST QUASSET RD
WOODSTOCK, CT 06281
WINDHAM COUNTY

CLIMBING FACILITY DETAIL
SCF-1

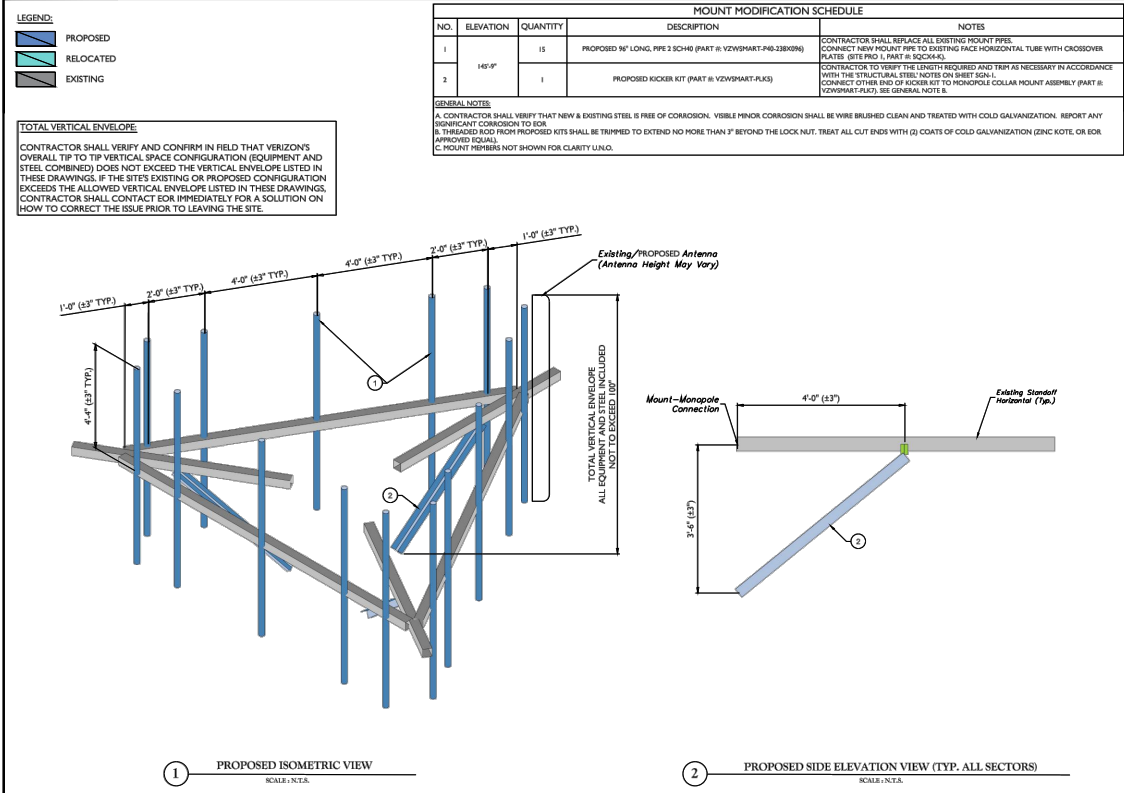
1 MOUNT ANALYSIS

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:
R-602

REVISION:
0

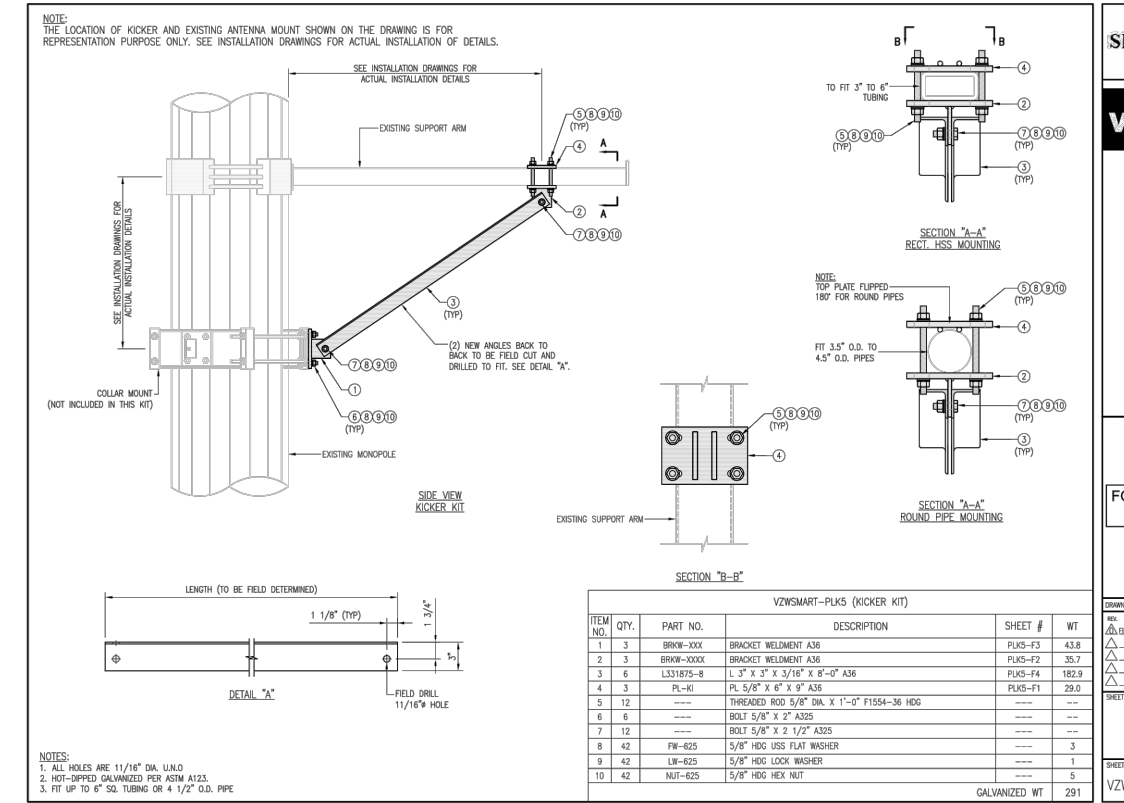


Engineering & Design
 www.verizon.com
 1-800-833-8888

verizon

WOODSTOCK CT RELO
 5000245761
 87 WEST QUASSET RD
 WOODSTOCK, CT 06091
 WINDHAM COUNTY

MODIFICATION DETAILS
 SS-1

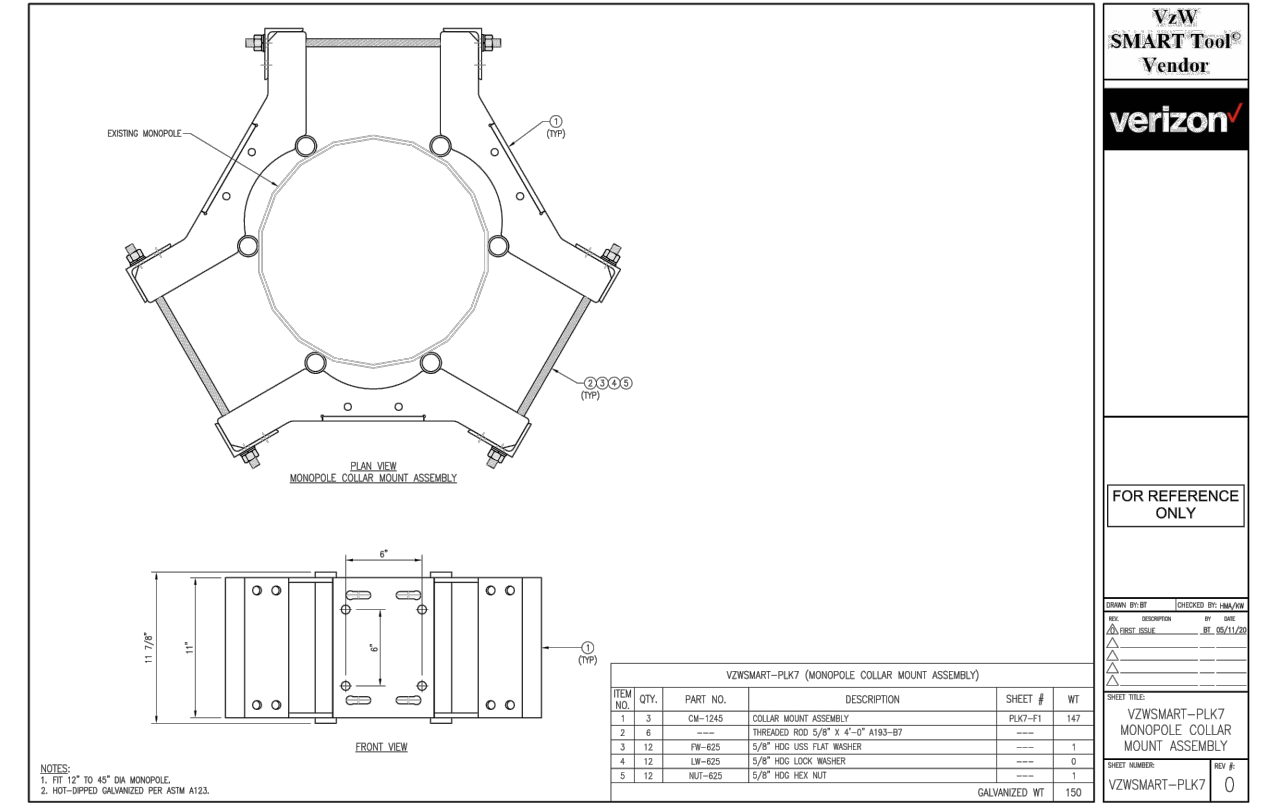


VzW SMART Tool Vendor
verizon

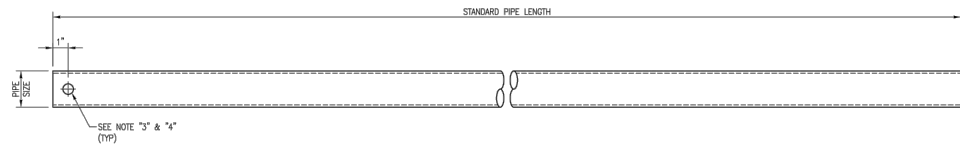
FOR REFERENCE ONLY

WOODSTOCK CT RELO
 5000245761
 87 WEST QUASSET RD
 WOODSTOCK, CT 06091
 WINDHAM COUNTY

MODIFICATION DETAILS
 SS-1



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

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

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

VZW
SMART Tool®
Vendor



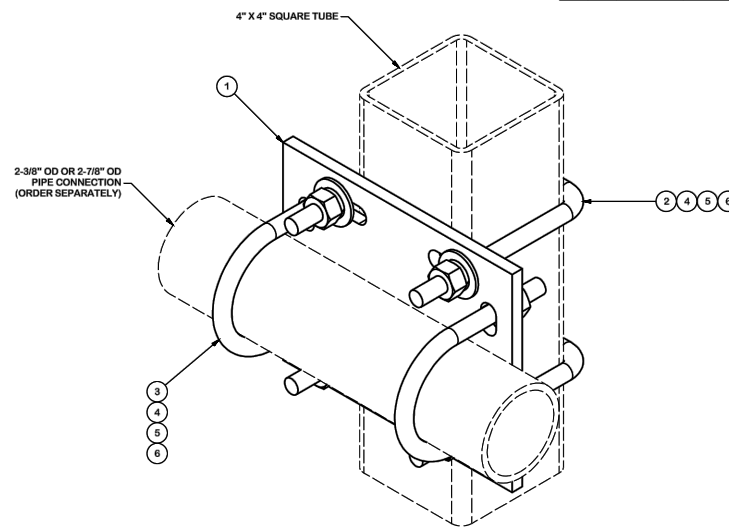
FOR REFERENCE ONLY

DATE	BY	DESCRIPTION

SHEET TITLE:
VZWSMART
STANDARD PIPE

SHEET NUMBER:
VZWSMART-PIPE

REV #:
0



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

FOR REFERENCE ONLY

TOLERANCE NOTES

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

DESCRIPTION			
CROSSOVER PLATE KIT W/ SQUARE U-BOLTS AND STD. U-BOLTS			
OPD NO.	DRAWN BY	ENG. APPROVAL	PART NO.
87	CSL	9/18/2018	SQCX4-K
CLASS	DATE	CHECKED BY	DWG. NO.
02	CUSTOMER	BMC 11/12/2018	SQCX4-K

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

SUPPLEMENTAL

SHEET NUMBER:
R-604

REVISION:
0

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 CONTRUCTION.

EXHIBIT 2



87 WEST QUASSET RD

Location 87 WEST QUASSET RD

Mblu 6393/ 66/ 03/ /

Acct# B0029600

Owner QUASSET HILL FARM LLC

Assessment \$208,090

Appraisal \$436,200

PID 288

Building Count 1

Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2021	\$73,600	\$362,600	\$436,200

Assessment			
Valuation Year	Improvements	Land	Total
2021	\$51,500	\$156,590	\$208,090

Owner of Record

Owner QUASSET HILL FARM LLC
Co-Owner
Address PO BOX 113
WOODSTOCK , CT 06281

Sale Price \$0
Certificate 1
Book & Page 394/ 012
Sale Date 12/30/2003
Instrument

Ownership History

Ownership History					
Owner	Sale Price	Certificate	Book & Page	Instrument	Sale Date
QUASSET HILL FARM LLC	\$0	1	394/ 012		12/30/2003
BISHOP HAROLD R	\$0		63/ 241		05/13/1958

Building Information

Building 1 : Section 1

Year Built:
Living Area: 0
Replacement Cost: \$0
Building Percent Good:
Replacement Cost
Less Depreciation: \$0

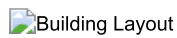
Building Attributes	
Field	Description
Style	Outbuildings
Model	
Grade:	
Stories:	
Living Units	
Exterior Wall 1	
Exterior Wall 2	
Roof Structure:	
Roof Cover	
Interior Wall 1	
Interior Wall 2	
Interior Flr 1	
Interior Flr 2	
Heat Fuel	
Heat Type:	
AC Type:	
Total Bedrooms:	
Total Bthrms:	
Total Half Baths:	
Total Xtra Fixtrs:	
Total Rooms:	
Bath Style:	
Kitchen Style:	
Whirlpool Tubs	
Bsmt. Garages	

Building Photo



(<https://images.vgsi.com/photos/WoodstockCTPhotos//00\00\01\79.JPG>)

Building Layout



(https://images.vgsi.com/photos/WoodstockCTPhotos//Sketches/288_288.j)

Building Sub-Areas (sq ft)	Legend
No Data for Building Sub-Areas	

Building 1 : Section 1

Year Built:

Living Area: 0

Replacement Cost: \$0

Building Percent Good:

Replacement Cost

Less Depreciation: \$0

Building Attributes	
Field	Description
Style	Vacant Land
Model	
Grade:	
Stories:	
Living Units	

Building Photo



(<https://images.vgsi.com/photos/WoodstockCTPhotos//default.jpg>)

Exterior Wall 1	
Exterior Wall 2	
Roof Structure:	
Roof Cover	
Interior Wall 1	
Interior Wall 2	
Interior Flr 1	
Interior Flr 2	
Heat Fuel	
Heat Type:	
AC Type:	
Total Bedrooms:	
Total Bthrms:	
Total Half Baths:	
Total Xtra Fixtrs:	
Total Rooms:	
Bath Style:	
Kitchen Style:	
Whirlpool Tubs	
Bsmt. Garages	

Building Layout

(https://images.vgsi.com/photos/WoodstockCTPhotos/Sketches/288_1003)

Building Sub-Areas (sq ft)	Legend
No Data for Building Sub-Areas	

Extra Features

Extra Features	Legend
No Data for Extra Features	

Land

Land Use

Use Code 610
Description Farm Orchard
Zone
Neighborhood
Alt Land Appr No
Category

Land Line Valuation

Size (Acres) 29.5
Frontage
Depth
Assessed Value \$156,590
Appraised Value \$362,600

Outbuildings

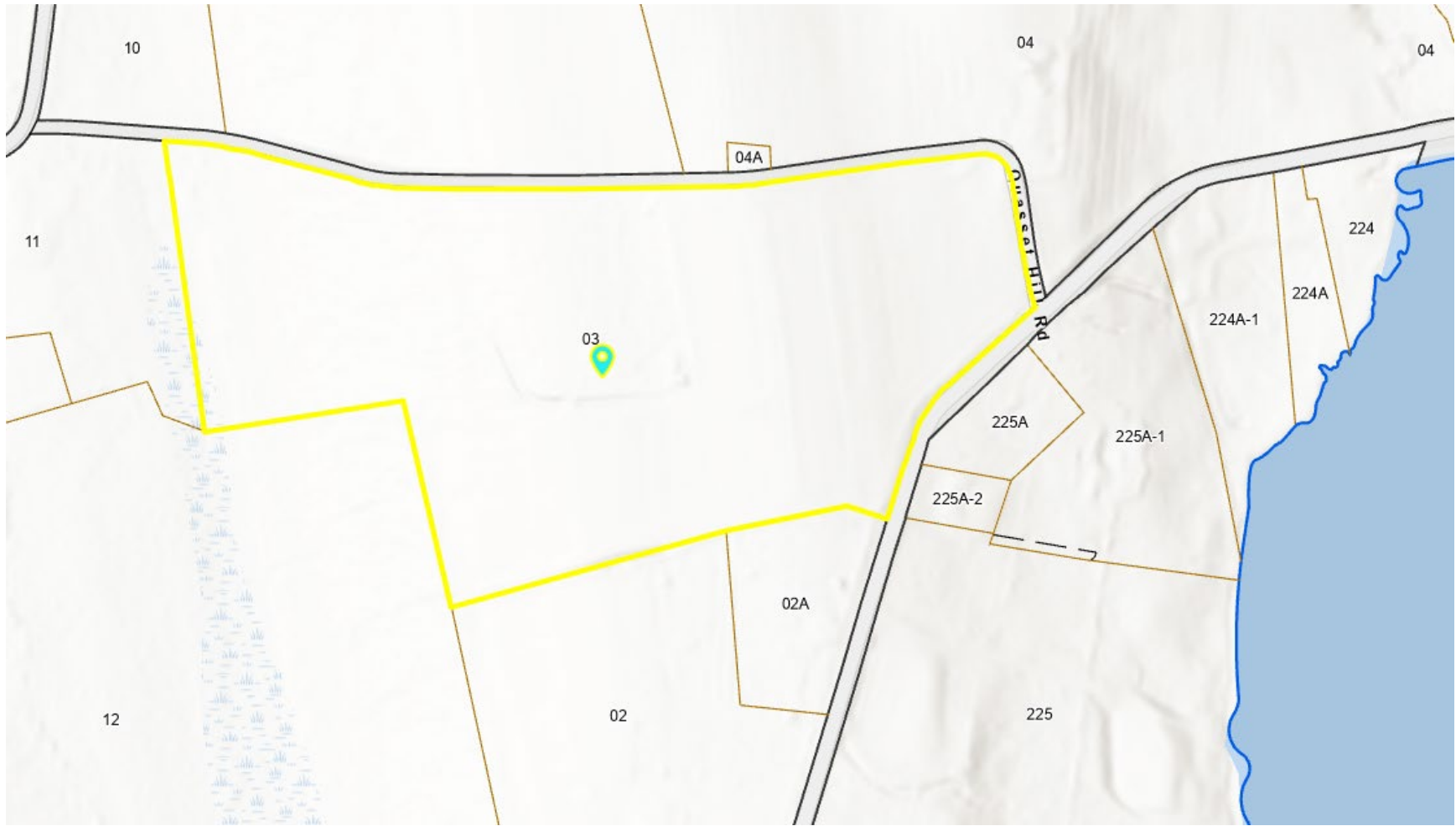
Outbuildings						Legend
Code	Description	Sub Code	Sub Description	Size	Value	Bldg #
FN4	Fence 8'			200 L.F.	\$2,800	1
SHD2	Pre Cast Cell			320 S.F.	\$43,200	1

CAB2	Cabin Good		897 S.F.	\$27,600	1
------	------------	--	----------	----------	---

Valuation History

Appraisal			
Valuation Year	Improvements	Land	Total
2023	\$73,600	\$362,600	\$436,200
2022	\$73,600	\$362,600	\$436,200
2020	\$27,600	\$359,100	\$386,700

Assessment			
Valuation Year	Improvements	Land	Total
2023	\$51,500	\$156,590	\$208,090
2022	\$51,500	\$156,590	\$208,090
2020	\$19,300	\$161,110	\$180,410



87 WEST QUASSET ROAD, Woodstock, CT

EXHIBIT 3

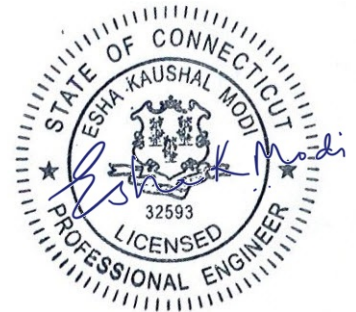




AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure : 149 ft Monopole
ATC Asset Name : Woodstock Relo CT
ATC Asset Number : 418609
Engineering Number : 14854318_C3_03
Proposed Carrier : VERIZON WIRELESS
Carrier Site Name : WOODSTOCK CT RELO
Carrier Site Number : 5000245761
Site Location : 87 West Quasset Road
Woodstock, CT 06281-3225
41.9298° N, 71.9893° W
County : Windham
Date : April 17, 2024
Max Usage : 60%
Analysis Result : Pass



COA: PEC.0001553



Table of Contents

Introduction3

Supporting Documents.....3

Analysis3

Conclusion3

Structure Usages4

Maximum Reactions4

Tower Loading5

Standard Conditions Attached

Calculations..... Attached

Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 149 ft Monopole tower to reflect the change in loading by VERIZON WIRELESS.

Supporting Documents

Tower:	EI Project #16757, dated November 30, 2011
Foundation:	EI Project #16757, dated December 4, 2011
Geotechnical:	DET Project #2011.17, dated November 23, 2011

Analysis

The tower was analyzed using American Tower Corporation's tower analysis software. This program considers an elastic three-dimensional model and second-order effects per ANSI/TIA-222.

Basic Wind Speed:	120 mph (3-second gust)
Basic Wind Speed w/ Ice:	50 mph (3-second gust) w/ 1.00" radial ice concurrent
Code(s):	ANSI/TIA-222-H / 2021 IBC / 2022 Connecticut State Building Code
Exposure Category:	C
Risk Category:	II
Topographic Factor Procedure:	Method 1
Topographic Category:	1
Spectral Response:	$S_s = 0.18, S_i = 0.06$
Site Class:	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 reach out to your American Tower contact. If you do not have an American Tower contact and have an Engineering question, please contact 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	Control	Result
Pole Shaft	51.6%	1.2D + 1.0W	Pass
Serviceability Usage	26.3%	1.0D + 1.0W	Pass
Base Plate @ 0.0 ft	45.8%	Rods	Pass
Mat & Pier	60.3%	Flexure [Steel (Pier)]	Pass

Maximum Reactions

Foundation	Moment (k-ft)	Axial (k)	Shear (k)
Monopole Base	4,194.2	63.2	37.1

**Reactions shown reflect the results from the Load Case with maximum Moment*

Structure base reactions were analyzed using available geotechnical and foundation information.

VERIZON WIRELESS Final Loading

Elev (ft)	Qty	Equipment	Lines
148.0	1	Platform with Handrails	-
	1	Unused Reserve (18876.81 sqin)	
147.0	2	Raycap RRFDC-3315-PF-48	(12) 1 5/8" Coax (2) 1 5/8" Hybriflex
	3	Andrew LNX-6514DS-A1M	
	3	Samsung B2/B66A RRH ORAN (RF 4439d-25A)	
	3	Samsung MT6413-77A	
	3	Samsung RF4461d-13A	
	6	Commscope SBNHH-1D65B (72.9")	

Other Existing/Reserved Loading

Elev (ft)	Qty	Equipment	Lines	Carrier
138.0	1	Low Profile Platform w/ SitePro1 HRK12-3HD Reinforcmenet Kit	(6) 0.39" (10mm) Fiber Trunk (9) 0.78" (19.7mm) 8 AWG 6 (3) 2" conduit (3) 3/8" (0.38"- 9.5mm) RET Control Cable	AT&T MOBILITY
	3	Andrew SBNH-1D6565C (60.8 lbs)		
	3	CCI DMP65R-BU8D		
	3	Commscope NNHH-65C-R4		
	3	Ericsson RRUS 4449 B5, B12		
	3	Ericsson RRUS 4478 B14		
	3	Ericsson RRUS 8843 B2, B66A		
	3	Ericsson Radio 4415 B30		
	3	Raycap DC9-48-60-24-8C-EV		
127.0	1	Raycap RDIDC-9181-PF-48	(1) 1.60" (40.6mm) Hybrid	DISH WIRELESS L.L.C.
	3	Commscope FFVV-65B-R2		
	3	Samsung SFG-ARR3J601DI		
	3	Samsung SFG-ARR3KM01DI		
126.0	1	Platform with Handrails	-	-

(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.

ANALYSIS PARAMETERS

Nominal Wind: 120 mph	Ice Wind: 50 mph w/ 1" ice	Service Wind: 60 mph
Risk Category: II	Exposure: C	S _s : 0.182 S _i : 0.055
Topo Category: 1	Topo Factor: Method 1	Topo Feature:
Structure Height: 149 ft	Base Elevation: 0.00 ft	Structure Type: Taper
Base Diameter: 60.5 in	Base Rotation: 0°	Taper: 0.2130 (in/ft)

POLE SECTION PROPERTIES

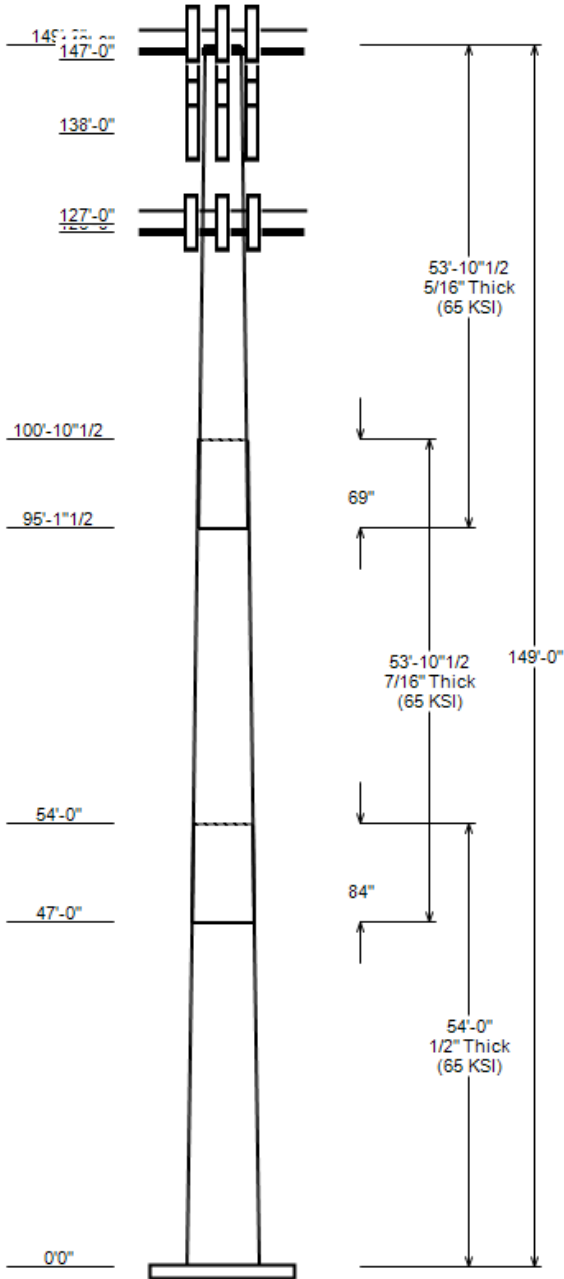
Section	Length (ft)	Flat Diameter (in)		Thick (in)	Joint Type	Joint Length (in)	Pole Shape	Yield Strength (ksi)
		Top	Bottom					
1	54.000	49.01	60.50	0.500		0.000	18 Sides	65
2	53.875	39.91	51.37	0.438	Slip Joint	84.000	18 Sides	65
3	53.875	30.29	41.76	0.312	Slip Joint	69.000	18 Sides	65

DISCRETE APPURTENANCE

Elev (ft)	Description
148.0	(1) Generic Flat Platform with Han
148.0	(1) Unused Reserve (18876.81 sqin)
148.0	(1) VZW Unused Reserve (22199.55 s
147.0	(3) Samsung RF4461d-13A
147.0	(3) Samsung B2/B66A RRH ORAN (RF 4
147.0	(2) Raycap RRFDC-3315-PF-48
147.0	(3) Samsung MT6413-77A
147.0	(3) Andrew LNX-6514DS-A1M
147.0	(6) Commscope SBNHH-1D65B (72.9")
138.0	(3) Ericsson RRUS 8843 B2, B66A
138.0	(3) Ericsson Radio 4415 B30
138.0	(3) Ericsson RRUS 4478 B14
138.0	(3) Ericsson RRUS 4449 B5, B12
138.0	(3) Raycap DC9-48-60-24-8C-EV
138.0	(3) Andrew SBNH-1D6565C (60.8 lbs)
138.0	(3) Commscope NNHH-65C-R4
138.0	(3) CCI DMP65R-BU8D
138.0	(1) Low Profile Platform w/ SiteP
127.0	(1) Raycap RDIDC-9181-PF-48
127.0	(3) Samsung SFG-ARR3KM01DI
127.0	(3) Samsung SFG-ARR3J601DI
127.0	(3) Commscope FFV-65B-R2
126.0	(1) Generic Flat Platform with Han

LINEAR APPURTENANCE

Elev To (ft)	Description
147.0	(2) 1 5/8" Hybriflex
147.0	(12) 1 5/8" Coax
141.0	(4) 2" conduit
141.0	(6) 0.78" (19.7mm) 8 AWG 6
141.0	(3) 0.26" (6.6mm) Cat 5e
138.0	(3) 3/8" (0.38"- 9.5mm) RET Control Cabl
138.0	(3) 2" conduit
138.0	(9) 0.78" (19.7mm) 8 AWG 6
138.0	(6) 0.39" (10mm) Fiber Trunk
127.0	(1) 1.60" (40.6mm) Hybrid



GLOBAL BASE REACTIONS

Load Case	Moment (kip-ft)	Axial (kip)	Shear (kip)
1.2D + 1.0W	4194.21	63.15	37.14
0.9D + 1.0W	4159.94	47.35	37.12
1.2D + 1.0Di + 1.0Wi	1068.23	79.05	9.72
1.2D + 1.0Ev + 1.0Eh	191.41	62.94	1.58
0.9D - 1.0Ev + 1.0Eh	189.55	43.75	1.58
1.0D + 1.0W	933.54	52.66	8.30

ANALYSIS PARAMETERS

Location:	Windham County,CT	Height:	149 ft
Type and Shape:	Taper, 18 Sides	Base Diameter:	60.50 in
Manufacturer:	EEL	Top Diameter:	30.29 in
K_d (non-service):	0.95	Taper:	0.2130 in/ft
K_e:	0.98	Rotation:	0.000°

ICE & WIND PARAMETERS

Risk Category:	II	Design Wind Speed:	120 mph
Exposure Category:	C	Design Wind Speed w/ Ice:	50 mph
Topo Factor Procedure:	Method 1	Design Ice Thickness:	1.00 in
Topographic Category:	1	Service Wind Speed:	60 mph
Crest Height:	0 ft	HMSL:	692.00 ft

SEISMIC PARAMETERS

Analysis Method:	Equivalent Lateral Force Method		
Site Class:	D - Stiff Soil	Period Based on Rayleigh Method (sec):	1.98
T_L (sec):	6	P:	1
S_s:	0.182	S₁:	0.055
F_a:	1.600	F_v:	2.400
S_{ds}:	0.194	S_{d1}:	0.088
		C_s:	0.030
		C_s Max:	0.030
		C_s Min:	0.030

LOAD CASES

1.2D + 1.0W	120 mph Wind with No Ice
0.9D + 1.0W	120 mph Wind with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50 mph Wind with 1" Radial Ice
1.2D + 1.0Ev + 1.0Eh	Seismic
0.9D - 1.0Ev + 1.0Eh	Seismic (Reduced DL)
1.0D + 1.0W	60 mph Wind with No Ice

SHAFT SECTION PROPERTIES

Section	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Joint Len (in)	Weight (lb)	Bottom						Top						
							Dia (in)	Elev (ft)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	Taper (in/ft)
1-18	54.00	0.5000	65		0.00	15,820	60.50	0.000	95.22	43,308.0	19.57	121.00	49.01	54.00	76.98	22,884.	15.52	98.02	0.2128
2-18	53.88	0.4375	65	Slip	84.00	11,507	51.37	47.005	70.73	23,183.1	18.94	117.42	39.91	100.88	54.81	10,787.	14.32	91.22	0.2128
3-18	53.88	0.3125	65	Slip	69.00	6,493	41.76	95.125	41.10	8,919.7	21.80	133.62	30.29	149.00	29.73	3,375.8	15.33	96.93	0.2128
Total Shaft Weight						33,820													

DISCRETE APPURTENANCE PROPERTIES

Attach Elev (ft)	Description	Qty	Ka	Vert Ecc (ft)	No Ice			Ice		
					Weight (lb)	EPAA (sf)	Orientation Factor	Weight (lb)	EPAA (sf)	Orientation Factor
148.00	Generic Flat Platform with Han	1	1.00	0.000	2500.00	42.400	1.00	3684.75	56.387	1.00
148.00	Unused Reserve (18876.81 sqin)	1	0.75	0.000	1452.90	131.089	0.90	2127.93	191.994	0.90
147.00	Samsung B2/B66A RRH ORAN (RF 4	3	0.75	0.000	74.70	1.875	0.50	117.28	2.475	0.50
147.00	Samsung RF4461d-13A	3	0.75	0.000	79.10	1.875	0.50	122.05	2.476	0.50
147.00	Andrew LNX-6514DS-A1M	3	0.75	2.000	38.80	8.173	0.83	156.02	10.051	0.83
147.00	Commscope SBNHH-1D65B (72.9")	6	0.75	2.000	40.60	8.200	0.83	158.11	10.084	0.83
147.00	Raycap RRFDC-3315-PF-48	2	0.75	0.000	26.90	2.512	0.67	79.97	3.206	0.67
147.00	Samsung MT6413-77A	3	0.75	0.000	57.30	3.805	0.61	113.87	4.690	0.61
138.00	Low Profile Platform w/ SiteP	1	1.00	0.000	2000.00	42.400	1.00	2922.04	61.947	1.00
138.00	CCI DMP65R-BU8D	3	0.80	0.000	95.70	17.871	0.63	320.62	20.310	0.63
138.00	Commscope NNHH-65C-R4	3	0.80	0.000	99.20	17.073	0.64	316.43	19.513	0.64
138.00	Raycap DC9-48-60-24-8C-EV	3	0.80	0.000	16.00	4.788	0.67	101.43	5.761	0.67
138.00	Ericsson RRUS 4449 B5, B12	3	0.80	0.000	71.00	1.969	0.50	113.65	2.586	0.50
138.00	Ericsson RRUS 4478 B14	3	0.80	0.000	59.90	1.842	0.50	96.49	2.436	0.50
138.00	Ericsson Radio 4415 B30	3	0.80	0.000	43.00	1.650	0.50	70.89	2.212	0.50
138.00	Ericsson RRUS 8843 B2, B66A	3	0.80	0.000	72.00	1.639	0.50	112.56	2.198	0.50
138.00	Andrew SBNH-1D6565C (60.8 lbs)	3	0.80	1.000	60.80	11.440	0.70	212.64	13.581	0.70
127.00	Samsung SFG-ARR3J601DI	3	0.75	0.000	94.60	2.063	0.67	141.86	2.683	0.67
127.00	Samsung SFG-ARR3KM01DI	3	0.75	0.000	61.30	1.875	0.50	100.73	2.466	0.50
127.00	Raycap RDIDC-9181-PF-48	1	0.75	0.000	21.90	1.867	1.00	59.19	2.458	1.00
127.00	Commscope FFVV-65B-R2	3	0.75	0.000	70.80	12.271	0.64	235.84	14.112	0.64
126.00	Generic Flat Platform with Han	1	1.00	0.000	2500.00	42.400	1.00	3665.77	56.162	1.00
Totals	Row Count: 22	58			11,754.80			20,565.36		

LINEAR APPURTENANCE PROPERTIES

Load Case Azimuth (deg): 0.00

Elev From (ft)	Elev To (ft)	Qty	Description	Diameter (in)	Weight (lb/ft)	Flat	Max/Row	Distance Between Rows(in)	Distance Between Cols(in)	Azimuth (deg)	Distance From Face (in)	Exposed To Wind	Carrier
0.00	147.00	12	1 5/8" Coax	1.98	0.82	N	0	0	0	0	0	N	VERIZON WIRELESS
0.00	147.00	2	1 5/8" Hybriflex	1.98	1.3	N	0	0	0	0	0	N	VERIZON WIRELESS
0.00	141.00	6	0.78" (19.7mm) 8 AWG	0.78	0.59	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	141.00	4	2" conduit	2.38	3.65	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	141.00	3	0.26" (6.6mm) Cat 5e	0.26	0.04	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	138.00	9	0.78" (19.7mm) 8 AWG	0.78	0.59	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	138.00	6	0.39" (10mm) Fiber Tr	0.39	0.06	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	138.00	3	3/8" (0.38"- 9.5mm) R	0.38	0.23	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	138.00	3	2" conduit	2.38	3.65	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	127.00	1	1.60" (40.6mm) Hybrid	1.6	2.34	N	0	0	0	0	0	N	DISH WIRELESS L.L.C.

SEGMENT PROPERTIES

Seg Top Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	F'y (ksi)	S (in ³)	Z (in ³)	Weight (lb)
0.00		0.5000	60.500	95.217	43,308.00	19.57	121.00	78.4	1409.9	0.0	0.0
5.00		0.5000	59.436	93.528	41,044.40	19.20	118.87	78.8	1360.2	0.0	1,605.6
10.00		0.5000	58.372	91.839	38,861.10	18.82	116.74	79.3	1311.3	0.0	1,576.9
15.00		0.5000	57.308	90.151	36,756.70	18.45	114.62	79.7	1263.3	0.0	1,548.2
20.00		0.5000	56.244	88.462	34,729.60	18.07	112.49	80.1	1216.2	0.0	1,519.4

SEGMENT PROPERTIES												
Seg Top Elev (ft)	Description	(Max Length: 5 ft)	Thick (in)	Flat Dia (in)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	Fy (ksi)	S (in ³)	Z (in ³)	Weight (lb)
25.00			0.5000	55.180	86.773	32,778.50	17.70	110.36	80.6	1170.0	0.0	1,490.7
30.00			0.5000	54.115	85.085	30,901.80	17.32	108.23	81	1124.7	0.0	1,462.0
35.00			0.5000	53.051	83.396	29,098.20	16.95	106.10	81.5	1080.3	0.0	1,433.3
40.00			0.5000	51.987	81.707	27,366.10	16.57	103.97	81.9	1036.8	0.0	1,404.5
45.00			0.5000	50.923	80.019	25,704.20	16.19	101.85	82.4	994.2	0.0	1,375.8
47.00	Bot - Section 2		0.5000	50.498	79.343	25,058.80	16.04	101.00	82.5	977.4	0.0	542.3
50.00			0.5000	49.859	78.330	24,111.00	15.82	99.72	82.6	952.5	0.0	1,522.3
54.00	Top - Section 1		0.4375	49.883	68.658	21,207.90	18.34	114.02	79.8	837.4	0.0	1,999.5
55.00			0.4375	49.670	68.363	20,935.20	18.26	113.53	79.9	830.2	0.0	233.1
60.00			0.4375	48.606	66.885	19,606.90	17.83	111.10	80.4	794.5	0.0	1,150.6
65.00			0.4375	47.542	65.408	18,336.00	17.40	108.67	80.9	759.6	0.0	1,125.4
70.00			0.4375	46.478	63.930	17,121.20	16.97	106.23	81.4	725.6	0.0	1,100.3
75.00			0.4375	45.414	62.453	15,961.30	16.54	103.80	81.9	692.3	0.0	1,075.1
80.00			0.4375	44.349	60.975	14,855.00	16.11	101.37	82.5	659.7	0.0	1,050.0
85.00			0.4375	43.285	59.498	13,801.00	15.68	98.94	82.6	628.0	0.0	1,024.9
90.00			0.4375	42.221	58.020	12,798.10	15.25	96.51	82.6	597.0	0.0	999.7
95.00			0.4375	41.157	56.542	11,845.00	14.82	94.07	82.6	566.9	0.0	974.6
95.13	Bot - Section 3		0.4375	41.131	56.505	11,821.80	14.81	94.01	82.6	566.1	0.0	24.0
100.00			0.4375	40.093	55.065	10,940.50	14.40	91.64	82.6	537.5	0.0	1,598.7
100.88	Top - Section 2		0.3125	40.532	39.891	8,152.70	21.11	129.70	76.6	396.2	0.0	282.6
105.00			0.3125	39.654	39.020	7,630.40	20.61	126.89	77.2	379.0	0.0	553.8
110.00			0.3125	38.590	37.965	7,027.90	20.01	123.49	77.9	358.7	0.0	654.9
115.00			0.3125	37.526	36.910	6,457.90	19.41	120.08	78.6	339.0	0.0	637.0
120.00			0.3125	36.462	35.854	5,919.60	18.81	116.68	79.3	319.8	0.0	619.0
125.00			0.3125	35.398	34.799	5,412.10	18.21	113.27	80	301.1	0.0	601.0
126.00			0.3125	35.185	34.588	5,314.20	18.09	112.59	80.1	297.5	0.0	118.1
127.00			0.3125	34.972	34.377	5,217.50	17.97	111.91	80.3	293.8	0.0	117.3
130.00			0.3125	34.334	33.743	4,934.40	17.61	109.87	80.7	283.1	0.0	347.7
135.00			0.3125	33.269	32.688	4,485.80	17.01	106.46	81.4	265.6	0.0	565.1
138.00			0.3125	32.631	32.055	4,230.10	16.65	104.42	81.8	255.3	0.0	330.5
140.00			0.3125	32.205	31.633	4,065.10	16.41	103.06	82.1	248.6	0.0	216.7
145.00			0.3125	31.141	30.577	3,671.70	15.81	99.65	82.6	232.2	0.0	529.2
147.00			0.3125	30.716	30.155	3,521.70	15.57	98.29	82.6	225.8	0.0	206.7
148.00			0.3125	30.503	29.944	3,448.20	15.45	97.61	82.6	222.7	0.0	102.3
149.00			0.3125	30.290	29.733	3,375.80	15.33	96.93	82.6	219.5	0.0	101.5
Total:												33,820.3

CALCULATED FORCES													
Load Case: 1.2D + 1.0W			120 mph Wind with No Ice										21 Iterations
Gust Response Factor:		1.10											
Dead load Factor:		1.20											
Wind Load Factor:		1.00											
Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (ft-kips)	Phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-63.15	-37.14	0.00	-4,194.2	0.00	4,194.21	6,716.78	1,671.05	9,056.15	8,288.22	0	0	0.516
5.00	-60.84	-36.69	0.00	-4,008.5	0.00	4,008.53	6,634.81	1,641.41	8,737.82	8,040.68	0.07	-0.13	0.508
10.00	-58.56	-36.25	0.00	-3,825.1	0.00	3,825.07	6,551.49	1,611.78	8,425.18	7,795.15	0.29	-0.27	0.500
15.00	-56.32	-35.80	0.00	-3,643.8	0.00	3,643.84	6,466.84	1,582.14	8,118.24	7,551.74	0.64	-0.41	0.492
20.00	-54.11	-35.32	0.00	-3,464.9	0.00	3,464.86	6,380.85	1,552.51	7,817.00	7,310.53	1.14	-0.54	0.483
25.00	-51.94	-34.82	0.00	-3,288.3	0.00	3,288.26	6,293.51	1,522.87	7,521.45	7,071.60	1.79	-0.68	0.474
30.00	-49.81	-34.30	0.00	-3,114.2	0.00	3,114.16	6,204.83	1,493.24	7,231.59	6,835.05	2.58	-0.82	0.464
35.00	-47.72	-33.76	0.00	-2,942.7	0.00	2,942.68	6,114.81	1,463.60	6,947.43	6,600.97	3.52	-0.96	0.454
40.00	-45.66	-33.20	0.00	-2,773.9	0.00	2,773.89	6,023.45	1,433.96	6,668.97	6,369.44	4.6	-1.1	0.444
45.00	-43.66	-32.80	0.00	-2,607.9	0.00	2,607.87	5,930.75	1,404.33	6,396.20	6,140.56	5.83	-1.24	0.433
47.00	-42.86	-32.51	0.00	-2,542.3	0.00	2,542.28	5,893.29	1,392.47	6,288.69	6,049.76	6.36	-1.3	0.428
50.00	-40.81	-32.09	0.00	-2,444.7	0.00	2,444.74	5,819.53	1,374.69	6,129.13	5,896.99	7.2	-1.38	0.422
54.00	-38.13	-31.75	0.00	-2,316.4	0.00	2,316.39	4,932.79	1,204.96	5,381.53	5,013.55	8.41	-1.5	0.470
55.00	-37.75	-31.41	0.00	-2,284.6	0.00	2,284.65	4,917.77	1,199.77	5,335.31	4,976.57	8.73	-1.52	0.467
60.00	-36.01	-30.82	0.00	-2,127.6	0.00	2,127.60	4,841.84	1,173.84	5,107.20	4,792.90	10.4	-1.67	0.452
65.00	-34.30	-30.22	0.00	-1,973.5	0.00	1,973.52	4,764.57	1,147.91	4,884.08	4,611.29	12.24	-1.82	0.436
70.00	-32.62	-29.61	0.00	-1,822.4	0.00	1,822.43	4,685.96	1,121.98	4,665.94	4,431.81	14.22	-1.97	0.419

CALCULATED FORCES

75.00	-30.98	-29.01	0.00	-1,674.4	0.00	1,674.36	4,606.01	1,096.04	4,452.78	4,254.57	16.37	-2.12	0.401
80.00	-29.38	-28.40	0.00	-1,529.3	0.00	1,529.32	4,524.71	1,070.11	4,244.60	4,079.64	18.66	-2.26	0.382
85.00	-27.80	-27.79	0.00	-1,387.3	0.00	1,387.32	4,420.37	1,044.18	4,041.41	3,888.03	21.1	-2.4	0.364
90.00	-26.27	-27.18	0.00	-1,248.4	0.00	1,248.36	4,310.59	1,018.25	3,843.20	3,696.36	23.68	-2.53	0.345
95.00	-24.78	-26.84	0.00	-1,112.4	0.00	1,112.45	4,200.82	992.32	3,649.98	3,509.54	26.41	-2.66	0.324
95.13	-24.73	-26.56	0.00	-1,109.1	0.00	1,109.09	4,198.07	991.67	3,645.21	3,504.93	26.48	-2.67	0.323
100.00	-22.50	-26.14	0.00	-979.6	0.00	979.61	4,091.04	966.39	3,461.74	3,327.57	29.26	-2.79	0.301
100.88	-22.10	-25.85	0.00	-956.7	0.00	956.74	2,749.22	700.09	2,543.23	2,275.29	29.78	-2.81	0.430
105.00	-21.15	-25.31	0.00	-850.1	0.00	850.12	2,709.67	684.81	2,433.43	2,193.23	32.25	-2.91	0.397
110.00	-20.04	-24.73	0.00	-723.6	0.00	723.57	2,660.51	666.29	2,303.59	2,094.74	35.38	-3.06	0.354
115.00	-18.95	-24.14	0.00	-599.9	0.00	599.94	2,610.00	647.76	2,177.31	1,997.38	38.65	-3.19	0.309
120.00	-17.89	-23.56	0.00	-479.2	0.00	479.22	2,558.16	629.24	2,054.58	1,901.26	42.06	-3.31	0.260
125.00	-16.87	-23.19	0.00	-361.4	0.00	361.41	2,504.97	610.72	1,935.42	1,806.46	45.58	-3.41	0.208
126.00	-13.80	-20.78	0.00	-338.2	0.00	338.22	2,494.18	607.02	1,912.02	1,787.67	46.3	-3.43	0.196
127.00	-12.83	-19.30	0.00	-317.4	0.00	317.44	2,483.32	603.31	1,888.75	1,768.93	47.02	-3.45	0.186
130.00	-12.25	-18.85	0.00	-259.5	0.00	259.54	2,450.45	592.20	1,819.82	1,713.07	49.2	-3.49	0.158
135.00	-11.30	-18.38	0.00	-165.3	0.00	165.27	2,394.58	573.67	1,707.78	1,621.18	52.9	-3.56	0.108
138.00	-6.90	-11.17	0.00	-109.1	0.00	109.14	2,360.41	562.56	1,642.26	1,566.80	55.14	-3.58	0.073
140.00	-6.59	-10.80	0.00	-86.8	0.00	86.79	2,337.37	555.15	1,599.29	1,530.87	56.64	-3.59	0.060
145.00	-5.88	-10.41	0.00	-32.8	0.00	32.80	2,271.73	536.63	1,494.37	1,437.76	60.42	-3.62	0.026
147.00	-4.54	-7.19	0.00	-7.2	0.00	7.24	2,240.37	529.22	1,453.39	1,398.14	61.93	-3.62	0.007
148.00	-0.12	-0.05	0.00	-0.0	0.00	0.05	2,224.69	525.52	1,433.12	1,378.53	62.69	-3.62	0.000
149.00	0.00	-0.04	0.00	0.0	0.00	0.00	2,209.00	521.81	1,412.99	1,359.07	63.45	-3.62	0.000

CALCULATED FORCES

Load Case: 0.9D + 1.0W

120 mph Wind with No Ice (Reduced DL)

21 Iterations

Gust Response Factor: 1.10
 Dead load Factor: 0.90
 Wind Load Factor: 1.00

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (ft-kips)	Phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-47.35	-37.12	0.00	-4,159.9	0.00	4,159.94	6,716.78	1,671.05	9,056.15	8,288.22	0	0	0.509
5.00	-45.60	-36.64	0.00	-3,974.4	0.00	3,974.35	6,634.81	1,641.41	8,737.82	8,040.68	0.07	-0.13	0.502
10.00	-43.87	-36.16	0.00	-3,791.2	0.00	3,791.17	6,551.49	1,611.78	8,425.18	7,795.15	0.28	-0.27	0.494
15.00	-42.17	-35.67	0.00	-3,610.4	0.00	3,610.38	6,466.84	1,582.14	8,118.24	7,551.74	0.64	-0.4	0.485
20.00	-40.49	-35.17	0.00	-3,432.0	0.00	3,432.01	6,380.85	1,552.51	7,817.00	7,310.53	1.13	-0.54	0.476
25.00	-38.85	-34.64	0.00	-3,256.2	0.00	3,256.16	6,293.51	1,522.87	7,521.45	7,071.60	1.77	-0.68	0.467
30.00	-37.23	-34.10	0.00	-3,083.0	0.00	3,082.95	6,204.83	1,493.24	7,231.59	6,835.05	2.56	-0.81	0.458
35.00	-35.65	-33.53	0.00	-2,912.5	0.00	2,912.47	6,114.81	1,463.60	6,947.43	6,600.97	3.48	-0.95	0.448
40.00	-34.09	-32.96	0.00	-2,744.8	0.00	2,744.80	6,023.45	1,433.96	6,668.97	6,369.44	4.56	-1.09	0.437
45.00	-32.58	-32.54	0.00	-2,580.0	0.00	2,580.00	5,930.75	1,404.33	6,396.20	6,140.56	5.77	-1.23	0.426
47.00	-31.97	-32.25	0.00	-2,514.9	0.00	2,514.91	5,893.29	1,392.47	6,288.69	6,049.76	6.3	-1.29	0.422
50.00	-30.42	-31.82	0.00	-2,418.2	0.00	2,418.16	5,819.53	1,374.69	6,129.13	5,896.99	7.14	-1.37	0.416
54.00	-28.41	-31.48	0.00	-2,290.9	0.00	2,290.89	4,932.79	1,204.96	5,381.53	5,013.55	8.33	-1.48	0.463
55.00	-28.11	-31.13	0.00	-2,259.4	0.00	2,259.41	4,917.77	1,199.77	5,335.31	4,976.57	8.65	-1.51	0.460
60.00	-26.79	-30.53	0.00	-2,103.7	0.00	2,103.74	4,841.84	1,173.84	5,107.20	4,792.90	10.31	-1.66	0.445
65.00	-25.49	-29.92	0.00	-1,951.1	0.00	1,951.11	4,764.57	1,147.91	4,884.08	4,611.29	12.12	-1.8	0.429
70.00	-24.22	-29.31	0.00	-1,801.5	0.00	1,801.53	4,685.96	1,121.98	4,665.94	4,431.81	14.09	-1.95	0.412
75.00	-22.98	-28.69	0.00	-1,655.0	0.00	1,655.00	4,606.01	1,096.04	4,452.78	4,254.57	16.21	-2.09	0.395
80.00	-21.77	-28.08	0.00	-1,511.5	0.00	1,511.54	4,524.71	1,070.11	4,244.60	4,079.64	18.48	-2.23	0.376
85.00	-20.58	-27.47	0.00	-1,371.1	0.00	1,371.13	4,420.37	1,044.18	4,041.41	3,888.03	20.89	-2.37	0.358
90.00	-19.42	-26.86	0.00	-1,233.8	0.00	1,233.78	4,310.59	1,018.25	3,843.20	3,696.36	23.45	-2.51	0.339
95.00	-18.30	-26.52	0.00	-1,099.5	0.00	1,099.47	4,200.82	992.32	3,649.98	3,509.54	26.14	-2.64	0.318
95.13	-18.26	-26.24	0.00	-1,096.2	0.00	1,096.16	4,198.07	991.67	3,645.21	3,504.93	26.21	-2.64	0.318
100.00	-16.58	-25.84	0.00	-968.2	0.00	968.22	4,091.04	966.39	3,461.74	3,327.57	28.97	-2.76	0.296
100.88	-16.28	-25.55	0.00	-945.6	0.00	945.62	2,749.22	700.09	2,543.23	2,275.29	29.48	-2.78	0.423
105.00	-15.56	-25.01	0.00	-840.2	0.00	840.24	2,709.67	684.81	2,433.43	2,193.23	31.93	-2.88	0.390
110.00	-14.72	-24.43	0.00	-715.2	0.00	715.19	2,660.51	666.29	2,303.59	2,094.74	35.02	-3.02	0.348
115.00	-13.90	-23.85	0.00	-593.1	0.00	593.06	2,610.00	647.76	2,177.31	1,997.38	38.26	-3.16	0.304
120.00	-13.10	-23.27	0.00	-473.8	0.00	473.83	2,558.16	629.24	2,054.58	1,901.26	41.63	-3.27	0.256
125.00	-12.34	-22.91	0.00	-357.5	0.00	357.46	2,504.97	610.72	1,935.42	1,806.46	45.12	-3.37	0.204
126.00	-10.06	-20.55	0.00	-334.6	0.00	334.55	2,494.18	607.02	1,912.02	1,787.67	45.83	-3.39	0.192
127.00	-9.36	-19.08	0.00	-314.0	0.00	314.00	2,483.32	603.31	1,888.75	1,768.93	46.54	-3.41	0.182
130.00	-8.92	-18.64	0.00	-256.8	0.00	256.75	2,450.45	592.20	1,819.82	1,713.07	48.7	-3.46	0.155
135.00	-8.21	-18.19	0.00	-163.6	0.00	163.55	2,394.58	573.67	1,707.78	1,621.18	52.35	-3.52	0.105
138.00	-5.02	-11.05	0.00	-108.0	0.00	108.01	2,360.41	562.56	1,642.26	1,566.80	54.57	-3.54	0.071
140.00	-4.78	-10.68	0.00	-85.9	0.00	85.91	2,337.37	555.15	1,599.29	1,530.87	56.06	-3.56	0.059
145.00	-4.26	-10.30	0.00	-32.5	0.00	32.50	2,271.73	536.63	1,494.37	1,437.76	59.79	-3.58	0.025
147.00	-3.30	-7.10	0.00	-7.2	0.00	7.15	2,240.37	529.22	1,453.39	1,398.14	61.29	-3.58	0.007
148.00	-0.09	-0.05	0.00	-0.0	0.00	0.05	2,224.69	525.52	1,433.12	1,378.53	62.04	-3.58	0.000
149.00	0.00	-0.04	0.00	0.0	0.00	0.00	2,209.00	521.81	1,412.99	1,359.07	62.79	-3.58	0.000

CALCULATED FORCES

Load Case: 1.2D + 1.0Di + 1.0Wi													50 mph Wind with 1" Radial Ice		20 Iterations	
Gust Response Factor:		1.10		Ice Dead Load Factor			1.00			Ice Importance Factor			1.00			
Dead load Factor:		1.20														
Wind Load Factor:		1.00														
Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (ft-kips)	Phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio			
0.00	-79.05	-9.72	0.00	-1,068.2	0.00	1,068.23	6,716.78	1,671.05	9,056.15	8,288.22	0	0	0.141			
5.00	-76.53	-9.59	0.00	-1,019.6	0.00	1,019.63	6,634.81	1,641.41	8,737.82	8,040.68	0.02	-0.03	0.138			
10.00	-74.01	-9.47	0.00	-971.7	0.00	971.67	6,551.49	1,611.78	8,425.18	7,795.15	0.07	-0.07	0.136			
15.00	-71.51	-9.34	0.00	-924.4	0.00	924.35	6,466.84	1,582.14	8,118.24	7,551.74	0.16	-0.1	0.133			
20.00	-69.04	-9.20	0.00	-877.7	0.00	877.66	6,380.85	1,552.51	7,817.00	7,310.53	0.29	-0.14	0.131			
25.00	-66.61	-9.06	0.00	-831.7	0.00	831.67	6,293.51	1,522.87	7,521.45	7,071.60	0.45	-0.17	0.128			
30.00	-64.21	-8.90	0.00	-786.4	0.00	786.39	6,204.83	1,493.24	7,231.59	6,835.05	0.66	-0.21	0.125			
35.00	-61.84	-8.75	0.00	-741.9	0.00	741.87	6,114.81	1,463.60	6,947.43	6,600.97	0.89	-0.24	0.123			
40.00	-59.52	-8.59	0.00	-698.1	0.00	698.12	6,023.45	1,433.96	6,668.97	6,369.44	1.17	-0.28	0.120			
45.00	-57.23	-8.47	0.00	-655.2	0.00	655.19	5,930.75	1,404.33	6,396.20	6,140.56	1.48	-0.31	0.116			
47.00	-56.32	-8.39	0.00	-638.2	0.00	638.25	5,893.29	1,392.47	6,288.69	6,049.76	1.61	-0.33	0.115			
50.00	-54.11	-8.26	0.00	-613.1	0.00	613.09	5,819.53	1,374.69	6,129.13	5,896.99	1.83	-0.35	0.113			
54.00	-51.20	-8.17	0.00	-580.0	0.00	580.03	4,932.79	1,204.96	5,381.53	5,013.55	2.13	-0.38	0.126			
55.00	-50.79	-8.07	0.00	-571.9	0.00	571.87	4,917.77	1,199.77	5,335.31	4,976.57	2.21	-0.38	0.125			
60.00	-48.77	-7.89	0.00	-531.5	0.00	531.53	4,841.84	1,173.84	5,107.20	4,792.90	2.63	-0.42	0.121			
65.00	-46.79	-7.72	0.00	-492.1	0.00	492.06	4,764.57	1,147.91	4,884.08	4,611.29	3.1	-0.46	0.117			
70.00	-44.85	-7.54	0.00	-453.5	0.00	453.46	4,685.96	1,121.98	4,665.94	4,431.81	3.6	-0.5	0.112			
75.00	-42.93	-7.37	0.00	-415.7	0.00	415.74	4,606.01	1,096.04	4,452.78	4,254.57	4.14	-0.53	0.107			
80.00	-41.06	-7.19	0.00	-378.9	0.00	378.92	4,524.71	1,070.11	4,244.60	4,079.64	4.71	-0.57	0.102			
85.00	-39.22	-7.01	0.00	-343.0	0.00	342.99	4,420.37	1,044.18	4,041.41	3,888.03	5.33	-0.6	0.097			
90.00	-37.42	-6.83	0.00	-308.0	0.00	307.96	4,310.59	1,018.25	3,843.20	3,696.36	5.98	-0.64	0.092			
95.00	-35.65	-6.72	0.00	-273.8	0.00	273.82	4,200.82	992.32	3,649.98	3,509.54	6.66	-0.67	0.087			
95.13	-35.61	-6.64	0.00	-273.0	0.00	272.98	4,198.07	991.67	3,645.21	3,504.93	6.68	-0.67	0.086			
100.00	-33.11	-6.52	0.00	-240.6	0.00	240.60	4,091.04	966.39	3,461.74	3,327.57	7.38	-0.7	0.080			
100.88	-32.67	-6.43	0.00	-234.9	0.00	234.89	2,749.22	700.09	2,543.23	2,275.29	7.51	-0.7	0.115			
105.00	-31.52	-6.27	0.00	-208.4	0.00	208.36	2,709.67	684.81	2,433.43	2,193.23	8.13	-0.73	0.107			
110.00	-30.15	-6.10	0.00	-177.0	0.00	176.99	2,660.51	666.29	2,303.59	2,094.74	8.91	-0.76	0.096			
115.00	-28.81	-5.93	0.00	-146.5	0.00	146.49	2,610.00	647.76	2,177.31	1,997.38	9.73	-0.8	0.084			
120.00	-27.49	-5.75	0.00	-116.9	0.00	116.86	2,558.16	629.24	2,054.58	1,901.26	10.58	-0.83	0.072			
125.00	-26.21	-5.64	0.00	-88.1	0.00	88.10	2,504.97	610.72	1,935.42	1,806.46	11.46	-0.85	0.059			
126.00	-22.05	-5.06	0.00	-82.5	0.00	82.46	2,494.18	607.02	1,912.02	1,787.67	11.64	-0.86	0.055			
127.00	-20.34	-4.72	0.00	-77.4	0.00	77.40	2,483.32	603.31	1,888.75	1,768.93	11.82	-0.86	0.052			
130.00	-19.60	-4.58	0.00	-63.2	0.00	63.25	2,450.45	592.20	1,819.82	1,713.07	12.36	-0.87	0.045			
135.00	-18.39	-4.44	0.00	-40.3	0.00	40.33	2,394.58	573.67	1,707.78	1,621.18	13.28	-0.89	0.033			
138.00	-10.77	-2.78	0.00	-26.8	0.00	26.80	2,360.41	562.56	1,642.26	1,566.80	13.84	-0.89	0.022			
140.00	-10.34	-2.66	0.00	-21.2	0.00	21.25	2,337.37	555.15	1,599.29	1,530.87	14.22	-0.9	0.018			
145.00	-9.37	-2.54	0.00	-7.9	0.00	7.93	2,271.73	536.63	1,494.37	1,437.76	15.16	-0.9	0.010			
147.00	-6.51	-1.81	0.00	-1.8	0.00	1.83	2,240.37	529.22	1,453.39	1,398.14	15.54	-0.9	0.004			
148.00	-0.17	-0.02	0.00	-0.0	0.00	0.02	2,224.69	525.52	1,433.12	1,378.53	15.73	-0.9	0.000			
149.00	0.00	-0.01	0.00	0.0	0.00	0.00	2,209.00	521.81	1,412.99	1,359.07	15.91	-0.9	0.000			

CALCULATED FORCES

Load Case: 1.0D + 1.0W

60 mph Wind with No Ice

20 Iterations

Gust Response Factor: 1.10
 Dead load Factor: 1.00
 Wind Load Factor: 1.00

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (ft-kips)	Phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-52.66	-8.30	0.00	-933.5	0.00	933.54	6,716.78	1,671.05	9,056.15	8,288.22	0	0	0.120
5.00	-50.80	-8.20	0.00	-892.0	0.00	892.02	6,634.81	1,641.41	8,737.82	8,040.68	0.02	-0.03	0.119
10.00	-48.97	-8.09	0.00	-851.0	0.00	851.03	6,551.49	1,611.78	8,425.18	7,795.15	0.06	-0.06	0.117
15.00	-47.16	-7.99	0.00	-810.6	0.00	810.56	6,466.84	1,582.14	8,118.24	7,551.74	0.14	-0.09	0.115
20.00	-45.39	-7.88	0.00	-770.6	0.00	770.62	6,380.85	1,552.51	7,817.00	7,310.53	0.25	-0.12	0.113
25.00	-43.64	-7.76	0.00	-731.2	0.00	731.23	6,293.51	1,522.87	7,521.45	7,071.60	0.4	-0.15	0.110
30.00	-41.92	-7.64	0.00	-692.4	0.00	692.42	6,204.83	1,493.24	7,231.59	6,835.05	0.57	-0.18	0.108
35.00	-40.24	-7.52	0.00	-654.2	0.00	654.21	6,114.81	1,463.60	6,947.43	6,600.97	0.78	-0.21	0.106
40.00	-38.58	-7.39	0.00	-616.6	0.00	616.62	6,023.45	1,433.96	6,668.97	6,369.44	1.02	-0.24	0.103
45.00	-36.95	-7.30	0.00	-579.7	0.00	579.66	5,930.75	1,404.33	6,396.20	6,140.56	1.3	-0.28	0.101
47.00	-36.30	-7.23	0.00	-565.1	0.00	565.06	5,893.29	1,392.47	6,288.69	6,049.76	1.41	-0.29	0.100
50.00	-34.63	-7.14	0.00	-543.4	0.00	543.36	5,819.53	1,374.69	6,129.13	5,896.99	1.6	-0.31	0.098
54.00	-32.42	-7.06	0.00	-514.8	0.00	514.81	4,932.79	1,204.96	5,381.53	5,013.55	1.87	-0.33	0.109
55.00	-32.14	-6.99	0.00	-507.7	0.00	507.74	4,917.77	1,199.77	5,335.31	4,976.57	1.94	-0.34	0.109
60.00	-30.73	-6.85	0.00	-472.8	0.00	472.81	4,841.84	1,173.84	5,107.20	4,792.90	2.31	-0.37	0.105
65.00	-29.35	-6.72	0.00	-438.6	0.00	438.55	4,764.57	1,147.91	4,884.08	4,611.29	2.72	-0.41	0.101
70.00	-28.00	-6.58	0.00	-405.0	0.00	404.97	4,685.96	1,121.98	4,665.94	4,431.81	3.16	-0.44	0.097
75.00	-26.67	-6.45	0.00	-372.1	0.00	372.06	4,606.01	1,096.04	4,452.78	4,254.57	3.64	-0.47	0.093
80.00	-25.37	-6.31	0.00	-339.8	0.00	339.83	4,524.71	1,070.11	4,244.60	4,079.64	4.15	-0.5	0.089
85.00	-24.09	-6.17	0.00	-308.3	0.00	308.29	4,420.37	1,044.18	4,041.41	3,888.03	4.69	-0.53	0.085
90.00	-22.83	-6.04	0.00	-277.4	0.00	277.42	4,310.59	1,018.25	3,843.20	3,696.36	5.27	-0.56	0.080
95.00	-21.61	-5.96	0.00	-247.2	0.00	247.24	4,200.82	992.32	3,649.98	3,509.54	5.87	-0.59	0.076
95.13	-21.58	-5.90	0.00	-246.5	0.00	246.49	4,198.07	991.67	3,645.21	3,504.93	5.89	-0.59	0.076
100.00	-19.73	-5.81	0.00	-217.7	0.00	217.73	4,091.04	966.39	3,461.74	3,327.57	6.51	-0.62	0.070
100.88	-19.40	-5.74	0.00	-212.6	0.00	212.65	2,749.22	700.09	2,543.23	2,275.29	6.62	-0.63	0.101
105.00	-18.64	-5.62	0.00	-189.0	0.00	188.96	2,709.67	684.81	2,433.43	2,193.23	7.17	-0.65	0.093
110.00	-17.73	-5.49	0.00	-160.8	0.00	160.85	2,660.51	666.29	2,303.59	2,094.74	7.87	-0.68	0.084
115.00	-16.84	-5.36	0.00	-133.4	0.00	133.38	2,610.00	647.76	2,177.31	1,997.38	8.6	-0.71	0.073
120.00	-15.97	-5.24	0.00	-106.6	0.00	106.56	2,558.16	629.24	2,054.58	1,901.26	9.35	-0.74	0.062
125.00	-15.12	-5.15	0.00	-80.4	0.00	80.39	2,504.97	610.72	1,935.42	1,806.46	10.14	-0.76	0.051
126.00	-12.46	-4.62	0.00	-75.2	0.00	75.23	2,494.18	607.02	1,912.02	1,787.67	10.3	-0.76	0.047
127.00	-11.59	-4.29	0.00	-70.6	0.00	70.61	2,483.32	603.31	1,888.75	1,768.93	10.46	-0.77	0.045
130.00	-11.10	-4.19	0.00	-57.7	0.00	57.74	2,450.45	592.20	1,819.82	1,713.07	10.94	-0.78	0.038
135.00	-10.29	-4.09	0.00	-36.8	0.00	36.77	2,394.58	573.67	1,707.78	1,621.18	11.76	-0.79	0.027
138.00	-6.29	-2.48	0.00	-24.3	0.00	24.28	2,360.41	562.56	1,642.26	1,566.80	12.26	-0.8	0.018
140.00	-6.01	-2.40	0.00	-19.3	0.00	19.32	2,337.37	555.15	1,599.29	1,530.87	12.6	-0.8	0.015
145.00	-5.40	-2.32	0.00	-7.3	0.00	7.30	2,271.73	536.63	1,494.37	1,437.76	13.44	-0.8	0.007
147.00	-4.13	-1.60	0.00	-1.6	0.00	1.61	2,240.37	529.22	1,453.39	1,398.14	13.77	-0.8	0.003
148.00	-0.10	-0.01	0.00	-0.0	0.00	0.01	2,224.69	525.52	1,433.12	1,378.53	13.94	-0.8	0.000
149.00	0.00	-0.01	0.00	0.0	0.00	0.00	2,209.00	521.81	1,412.99	1,359.07	14.11	-0.8	0.000

EQUIVALENT LATERAL FORCES METHOD ANALYSIS

(Based on ASCE7-16 Chapters 11, 12 and 15)

Spectral Response Acceleration for Short Period (S_s):	0.182
Spectral Response Acceleration at 1.0 Second Period (S_1):	0.055
Long-Period Transition Period (T_L – Seconds):	6
Importance Factor (I_e):	1.000
Site Coefficient F_a :	1.600
Site Coefficient F_v :	2.400
Response Modification Coefficient (R):	1.500
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.194
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.088
Seismic Response Coefficient (C_s):	0.030
Upper Limit C_s :	0.030
Lower Limit C_s :	0.030
Period based on Rayleigh Method (sec):	1.980
Redundancy Factor (p):	1.000
Seismic Force Distribution Exponent (k):	1.740
Total Unfactored Dead Load:	52.660 k
Seismic Base Shear (E):	1.580 k

SEISMIC FORCES

Segment	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
39	148.5	102	603	0.005	7	126
38	147.5	102	600	0.005	7	127
37	146	232	1,335	0.010	16	287
36	142.5	610	3,369	0.026	41	755
35	139	278	1,472	0.011	18	345
34	136.5	474	2,433	0.019	30	588
33	132.5	805	3,921	0.030	48	997
32	128.5	492	2,270	0.018	28	609
31	126.5	168	753	0.006	9	208
30	125.5	168	746	0.006	9	209
29	122.5	853	3,623	0.028	44	1,056
28	117.5	871	3,441	0.027	42	1,079
27	112.5	889	3,257	0.025	40	1,101
26	107.5	907	3,070	0.024	37	1,123
25	102.9375	762	2,391	0.018	29	943
24	100.4375	327	983	0.008	12	405
23	97.5625	1,844	5,276	0.041	64	2,285
22	95.0625	30	83	0.001	1	38
21	92.5	1,226	3,198	0.025	39	1,519
20	87.5	1,251	2,963	0.023	36	1,550
19	82.5	1,277	2,729	0.021	33	1,581
18	77.5	1,302	2,496	0.019	30	1,613
17	72.5	1,327	2,266	0.018	28	1,644
16	67.5	1,352	2,040	0.016	25	1,675
15	62.5	1,377	1,817	0.014	22	1,706
14	57.5	1,402	1,601	0.012	20	1,737
13	54.5	283	295	0.002	4	351
12	52	2,201	2,110	0.016	26	2,727
11	48.5	1,673	1,421	0.011	17	2,073
10	46	643	498	0.004	6	797
9	42.5	1,628	1,099	0.008	13	2,016
8	37.5	1,656	900	0.007	11	2,052
7	32.5	1,685	714	0.006	9	2,087
6	27.5	1,714	543	0.004	7	2,123
5	22.5	1,742	390	0.003	5	2,159
4	17.5	1,771	256	0.002	3	2,194
3	12.5	1,800	145	0.001	2	2,230
2	7.5	1,829	61	0.000	1	2,265

SEISMIC FORCES

1.2D + 1.0Ev + 1.0Eh

Seismic

Segment	Height Above Base (ft)	Weight (lb)	W _z (lb-ft)	C _{vx}	Horizontal Force (lb)	Vertical Force (lb)
1	2.5	1,857	9	0.000	0	2,301
Generic Flat Platform with Handrails	148	2,500	14,754	0.114	180	3,097
Generic Flat Platform with Handrails	126	2,500	11,155	0.086	136	3,097
Unused Reserve (18876.81 sqin)	148	1,453	8,575	0.066	105	1,800
Samsung RF4461d-13A	147	237	1,384	0.011	17	294
Samsung B2/B66A RRH ORAN (RF 4439d-25A)	147	224	1,307	0.010	16	278
Raycap RRFDC-3315-PF-48	147	54	314	0.002	4	67
Samsung MT6413-77A	147	172	1,003	0.008	12	213
Andrew LNX-6514DS-A1M	147	116	679	0.005	8	144
Commscope SBNHH-1D65B (72.9")	147	244	1,421	0.011	17	302
Ericsson RRUS 8843 B2, B66A	138	216	1,129	0.009	14	268
Ericsson Radio 4415 B30	138	129	674	0.005	8	160
Ericsson RRUS 4478 B14	138	180	939	0.007	11	223
Ericsson RRUS 4449 B5, B12	138	213	1,113	0.009	14	264
Raycap DC9-48-60-24-8C-EV	138	48	251	0.002	3	59
Andrew SBNH-1D6565C (60.8 lbs)	138	182	953	0.007	12	226
Commscope NNHH-65C-R4	138	298	1,555	0.012	19	369
CCI DMP65R-BU8D	138	287	1,500	0.012	18	356
Low Profile Platform w/ SitePro1 HRK12-3HD Reinforcemet Kit	138	2,000	10,453	0.081	128	2,478
Raycap RDIDC-9181-PF-48	127	22	99	0.001	1	27
Samsung SFG-ARR3KM01DI	127	184	832	0.006	10	228
Samsung SFG-ARR3J601DI	127	284	1,284	0.010	16	352
Commscope FFVV-65B-R2	127	212	961	0.007	12	263
Totals:		52,664	129,515	1.000	1,580	65,242

SEISMIC FORCES

0.9D - 1.0Ev + 1.0Eh

Seismic (Reduced DL)

Segment	Height Above Base (ft)	Weight (lb)	W _z (lb-ft)	C _{vx}	Horizontal Force (lb)	Vertical Force (lb)
39	148.5	102	603	0.005	7	87
38	147.5	102	600	0.005	7	88
37	146	232	1,335	0.010	16	199
36	142.5	610	3,369	0.026	41	525
35	139	278	1,472	0.011	18	240
34	136.5	474	2,433	0.019	30	409
33	132.5	805	3,921	0.030	48	693
32	128.5	492	2,270	0.018	28	423
31	126.5	168	753	0.006	9	144
30	125.5	168	746	0.006	9	145
29	122.5	853	3,623	0.028	44	734
28	117.5	871	3,441	0.027	42	750
27	112.5	889	3,257	0.025	40	765
26	107.5	907	3,070	0.024	37	781
25	102.9375	762	2,391	0.018	29	656
24	100.4375	327	983	0.008	12	281
23	97.5625	1,844	5,276	0.041	64	1,588
22	95.0625	30	83	0.001	1	26
21	92.5	1,226	3,198	0.025	39	1,056
20	87.5	1,251	2,963	0.023	36	1,078
19	82.5	1,277	2,729	0.021	33	1,099
18	77.5	1,302	2,496	0.019	30	1,121
17	72.5	1,327	2,266	0.018	28	1,143
16	67.5	1,352	2,040	0.016	25	1,164
15	62.5	1,377	1,817	0.014	22	1,186
14	57.5	1,402	1,601	0.012	20	1,208
13	54.5	283	295	0.002	4	244
12	52	2,201	2,110	0.016	26	1,895
11	48.5	1,673	1,421	0.011	17	1,441
10	46	643	498	0.004	6	554
9	42.5	1,628	1,099	0.008	13	1,402

SEISMIC FORCES

0.9D - 1.0Ev + 1.0Eh

Seismic (Reduced DL)

Segment	Height Above Base (ft)	Weight (lb)	W _z (lb-ft)	C _{vx}	Horizontal Force (lb)	Vertical Force (lb)
8	37.5	1,656	900	0.007	11	1,426
7	32.5	1,685	714	0.006	9	1,451
6	27.5	1,714	543	0.004	7	1,476
5	22.5	1,742	390	0.003	5	1,501
4	17.5	1,771	256	0.002	3	1,525
3	12.5	1,800	145	0.001	2	1,550
2	7.5	1,829	61	0.000	1	1,575
1	2.5	1,857	9	0.000	0	1,600
Generic Flat Platform with Handrails	148	2,500	14,754	0.114	180	2,153
Generic Flat Platform with Handrails	126	2,500	11,155	0.086	136	2,153
Unused Reserve (18876.81 sqin)	148	1,453	8,575	0.066	105	1,251
Samsung RF4461d-13A	147	237	1,384	0.011	17	204
Samsung B2/B66A RRH ORAN (RF 4439d-25A)	147	224	1,307	0.010	16	193
Raycap RRFDC-3315-PF-48	147	54	314	0.002	4	46
Samsung MT6413-77A	147	172	1,003	0.008	12	148
Andrew LNX-6514DS-A1M	147	116	679	0.005	8	100
Commscope SBNHH-1D65B (72.9")	147	244	1,421	0.011	17	210
Ericsson RRUS 8843 B2, B66A	138	216	1,129	0.009	14	186
Ericsson Radio 4415 B30	138	129	674	0.005	8	111
Ericsson RRUS 4478 B14	138	180	939	0.007	11	155
Ericsson RRUS 4449 B5, B12	138	213	1,113	0.009	14	183
Raycap DC9-48-60-24-8C-EV	138	48	251	0.002	3	41
Andrew SBNH-1D6565C (60.8 lbs)	138	182	953	0.007	12	157
Commscope NNHH-65C-R4	138	298	1,555	0.012	19	256
CCI DMP65R-BU8D	138	287	1,500	0.012	18	247
Low Profile Platform w/ SitePro1 HRK12-3HD Reinforcemet Kit	138	2,000	10,453	0.081	128	1,722
Raycap RDIDC-9181-PF-48	127	22	99	0.001	1	19
Samsung SFG-ARR3KM01DI	127	184	832	0.006	10	158
Samsung SFG-ARR3J601DI	127	284	1,284	0.010	16	244
Commscope FFV-65B-R2	127	212	961	0.007	12	183
Totals:		52,664	129,515	1.000	1,580	45,353

1.2D + 1.0Ev + 1.0Eh

Seismic

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu Mx (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (kips)	Phi Mn (kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-62.94	-1.58	0.00	-191.41	0.00	191.41	6,716.78	1,671.05	9,056	8,288.22	0.00	0.00	0.03
5.00	-60.68	-1.59	0.00	-183.49	0.00	183.49	6,634.81	1,641.41	8,738	8,040.68	0.00	-0.01	0.03
10.00	-58.45	-1.59	0.00	-175.55	0.00	175.55	6,551.49	1,611.78	8,425	7,795.15	0.01	-0.01	0.03
15.00	-56.25	-1.59	0.00	-167.59	0.00	167.59	6,466.84	1,582.14	8,118	7,551.74	0.03	-0.02	0.03
20.00	-54.09	-1.60	0.00	-159.62	0.00	159.62	6,380.85	1,552.51	7,817	7,310.53	0.05	-0.02	0.03
25.00	-51.97	-1.59	0.00	-151.64	0.00	151.64	6,293.51	1,522.87	7,521	7,071.60	0.08	-0.03	0.03
30.00	-49.88	-1.59	0.00	-143.67	0.00	143.67	6,204.83	1,493.24	7,232	6,835.05	0.12	-0.04	0.03
35.00	-47.83	-1.58	0.00	-135.73	0.00	135.73	6,114.81	1,463.60	6,947	6,600.97	0.16	-0.04	0.03
40.00	-45.81	-1.57	0.00	-127.82	0.00	127.82	6,023.45	1,433.96	6,669	6,369.44	0.21	-0.05	0.03
45.00	-45.02	-1.57	0.00	-119.96	0.00	119.96	5,930.75	1,404.33	6,396	6,140.56	0.27	-0.06	0.03
47.00	-42.94	-1.55	0.00	-116.82	0.00	116.82	5,893.29	1,392.47	6,289	6,049.76	0.29	-0.06	0.03
50.00	-40.22	-1.53	0.00	-112.17	0.00	112.17	5,819.53	1,374.69	6,129	5,896.99	0.33	-0.06	0.03
54.00	-39.87	-1.52	0.00	-106.06	0.00	106.06	4,932.79	1,204.96	5,382	5,013.55	0.39	-0.07	0.03
55.00	-38.13	-1.51	0.00	-104.54	0.00	104.54	4,917.77	1,199.77	5,335	4,976.57	0.40	-0.07	0.03
60.00	-36.42	-1.49	0.00	-97.01	0.00	97.01	4,841.84	1,173.84	5,107	4,792.90	0.48	-0.08	0.03
65.00	-34.75	-1.46	0.00	-89.58	0.00	89.58	4,764.57	1,147.91	4,884	4,611.29	0.56	-0.08	0.03
70.00	-33.10	-1.44	0.00	-82.27	0.00	82.27	4,685.96	1,121.98	4,666	4,431.81	0.65	-0.09	0.03
75.00	-31.49	-1.41	0.00	-75.09	0.00	75.09	4,606.01	1,096.04	4,453	4,254.57	0.75	-0.10	0.02
80.00	-29.91	-1.37	0.00	-68.06	0.00	68.06	4,524.71	1,070.11	4,245	4,079.64	0.86	-0.10	0.02
85.00	-28.36	-1.34	0.00	-61.19	0.00	61.19	4,420.37	1,044.18	4,041	3,888.03	0.97	-0.11	0.02
90.00	-26.84	-1.30	0.00	-54.50	0.00	54.50	4,310.59	1,018.25	3,843	3,696.36	1.09	-0.12	0.02
95.00	-26.80	-1.30	0.00	-48.01	0.00	48.01	4,200.82	992.32	3,650	3,509.54	1.21	-0.12	0.02
95.13	-24.52	-1.23	0.00	-47.84	0.00	47.84	4,198.07	991.67	3,645	3,504.93	1.21	-0.12	0.02

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (fr-kips)	Mu Mx (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (kips)	Phi Mn (kips)	Total Deflect (in)	Rotation (deg)	Ratio
100.00	-24.11	-1.22	0.00	-41.84	0.00	41.84	4,091.04	966.39	3,462	3,327.57	1.34	-0.13	0.02
100.88	-23.17	-1.19	0.00	-40.78	0.00	40.78	2,749.22	700.09	2,543	2,275.29	1.36	-0.13	0.03
105.00	-22.05	-1.15	0.00	-35.87	0.00	35.87	2,709.67	684.81	2,433	2,193.23	1.48	-0.13	0.02
110.00	-20.94	-1.11	0.00	-30.12	0.00	30.12	2,660.51	666.29	2,304	2,094.74	1.62	-0.14	0.02
115.00	-19.87	-1.07	0.00	-24.56	0.00	24.56	2,610.00	647.76	2,177	1,997.38	1.76	-0.14	0.02
120.00	-18.81	-1.02	0.00	-19.22	0.00	19.22	2,558.16	629.24	2,055	1,901.26	1.92	-0.15	0.02
125.00	-18.60	-1.01	0.00	-14.11	0.00	14.11	2,504.97	610.72	1,935	1,806.46	2.07	-0.15	0.02
126.00	-15.30	-0.86	0.00	-13.09	0.00	13.09	2,494.18	607.02	1,912	1,787.67	2.11	-0.15	0.01
127.00	-13.82	-0.79	0.00	-12.23	0.00	12.23	2,483.32	603.31	1,889	1,768.93	2.14	-0.15	0.01
130.00	-12.82	-0.74	0.00	-9.86	0.00	9.86	2,450.45	592.20	1,820	1,713.07	2.24	-0.16	0.01
135.00	-12.23	-0.71	0.00	-6.16	0.00	6.16	2,394.58	573.67	1,708	1,621.18	2.40	-0.16	0.01
138.00	-7.49	-0.45	0.00	-4.04	0.00	4.04	2,360.41	562.56	1,642	1,566.80	2.50	-0.16	0.01
140.00	-6.73	-0.41	0.00	-3.13	0.00	3.13	2,337.37	555.15	1,599	1,530.87	2.57	-0.16	0.01
145.00	-6.45	-0.39	0.00	-1.09	0.00	1.09	2,271.73	536.63	1,494	1,437.76	2.73	-0.16	0.00
147.00	-5.02	-0.31	0.00	-0.31	0.00	0.31	2,240.37	529.22	1,453	1,398.14	2.80	-0.16	0.00
148.00	0.00	0.00	0.00	0.00	0.00	0.00	2,224.69	525.52	1,433	1,378.53	2.83	-0.16	0.00
149.00	0.00	0.00	0.00	0.00	0.00	0.00	2,209.00	521.81	1,413	1,359.07	2.87	-0.16	0.00

0.9D - 1.0Ev + 1.0Eh Seismic (Reduced DL)

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (fr-kips)	Mu Mx (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (kips)	Phi Mn (kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-43.75	-1.58	0.00	-189.55	0.00	189.55	6,716.78	1,671.05	9,056	8,288.22	0.00	0.00	0.03
5.00	-42.18	-1.59	0.00	-181.64	0.00	181.64	6,634.81	1,641.41	8,738	8,040.68	0.00	-0.01	0.03
10.00	-40.63	-1.59	0.00	-173.71	0.00	173.71	6,551.49	1,611.78	8,425	7,795.15	0.01	-0.01	0.03
15.00	-39.10	-1.59	0.00	-165.78	0.00	165.78	6,466.84	1,582.14	8,118	7,551.74	0.03	-0.02	0.03
20.00	-37.60	-1.59	0.00	-157.84	0.00	157.84	6,380.85	1,552.51	7,817	7,310.53	0.05	-0.02	0.03
25.00	-36.13	-1.58	0.00	-149.90	0.00	149.90	6,293.51	1,522.87	7,521	7,071.60	0.08	-0.03	0.03
30.00	-34.67	-1.58	0.00	-141.98	0.00	141.98	6,204.83	1,493.24	7,232	6,835.05	0.12	-0.04	0.03
35.00	-33.25	-1.57	0.00	-134.09	0.00	134.09	6,114.81	1,463.60	6,947	6,600.97	0.16	-0.04	0.03
40.00	-31.85	-1.56	0.00	-126.25	0.00	126.25	6,023.45	1,433.96	6,669	6,369.44	0.21	-0.05	0.03
45.00	-31.29	-1.55	0.00	-118.45	0.00	118.45	5,930.75	1,404.33	6,396	6,140.56	0.26	-0.06	0.03
47.00	-29.85	-1.54	0.00	-115.34	0.00	115.34	5,893.29	1,392.47	6,289	6,049.76	0.29	-0.06	0.02
50.00	-27.96	-1.51	0.00	-110.73	0.00	110.73	5,819.53	1,374.69	6,129	5,896.99	0.33	-0.06	0.02
54.00	-27.71	-1.51	0.00	-104.69	0.00	104.69	4,932.79	1,204.96	5,382	5,013.55	0.38	-0.07	0.03
55.00	-26.50	-1.49	0.00	-103.18	0.00	103.18	4,917.77	1,199.77	5,335	4,976.57	0.40	-0.07	0.03
60.00	-25.32	-1.47	0.00	-95.72	0.00	95.72	4,841.84	1,173.84	5,107	4,792.90	0.47	-0.08	0.03
65.00	-24.15	-1.45	0.00	-88.38	0.00	88.38	4,764.57	1,147.91	4,884	4,611.29	0.56	-0.08	0.02
70.00	-23.01	-1.42	0.00	-81.15	0.00	81.15	4,685.96	1,121.98	4,666	4,431.81	0.65	-0.09	0.02
75.00	-21.89	-1.39	0.00	-74.05	0.00	74.05	4,606.01	1,096.04	4,453	4,254.57	0.74	-0.10	0.02
80.00	-20.79	-1.36	0.00	-67.10	0.00	67.10	4,524.71	1,070.11	4,245	4,079.64	0.85	-0.10	0.02
85.00	-19.71	-1.32	0.00	-60.32	0.00	60.32	4,420.37	1,044.18	4,041	3,888.03	0.96	-0.11	0.02
90.00	-18.66	-1.28	0.00	-53.72	0.00	53.72	4,310.59	1,018.25	3,843	3,696.36	1.07	-0.11	0.02
95.00	-18.63	-1.28	0.00	-47.31	0.00	47.31	4,200.82	992.32	3,650	3,509.54	1.20	-0.12	0.02
95.13	-17.04	-1.21	0.00	-47.15	0.00	47.15	4,198.07	991.67	3,645	3,504.93	1.20	-0.12	0.02
100.00	-16.76	-1.20	0.00	-41.23	0.00	41.23	4,091.04	966.39	3,462	3,327.57	1.32	-0.12	0.02
100.88	-16.11	-1.17	0.00	-40.18	0.00	40.18	2,749.22	700.09	2,543	2,275.29	1.35	-0.13	0.02
105.00	-15.32	-1.13	0.00	-35.35	0.00	35.35	2,709.67	684.81	2,433	2,193.23	1.46	-0.13	0.02
110.00	-14.56	-1.09	0.00	-29.67	0.00	29.67	2,660.51	666.29	2,304	2,094.74	1.60	-0.14	0.02
115.00	-13.81	-1.05	0.00	-24.20	0.00	24.20	2,610.00	647.76	2,177	1,997.38	1.74	-0.14	0.02
120.00	-13.07	-1.01	0.00	-18.93	0.00	18.93	2,558.16	629.24	2,055	1,901.26	1.89	-0.15	0.02
125.00	-12.93	-1.00	0.00	-13.90	0.00	13.90	2,504.97	610.72	1,935	1,806.46	2.05	-0.15	0.01
126.00	-10.63	-0.85	0.00	-12.90	0.00	12.90	2,494.18	607.02	1,912	1,787.67	2.08	-0.15	0.01
127.00	-9.60	-0.78	0.00	-12.05	0.00	12.05	2,483.32	603.31	1,889	1,768.93	2.11	-0.15	0.01
130.00	-8.91	-0.73	0.00	-9.72	0.00	9.72	2,450.45	592.20	1,820	1,713.07	2.21	-0.15	0.01
135.00	-8.50	-0.70	0.00	-6.07	0.00	6.07	2,394.58	573.67	1,708	1,621.18	2.37	-0.16	0.01
138.00	-5.20	-0.45	0.00	-3.98	0.00	3.98	2,360.41	562.56	1,642	1,566.80	2.47	-0.16	0.01
140.00	-4.68	-0.40	0.00	-3.09	0.00	3.09	2,337.37	555.15	1,599	1,530.87	2.53	-0.16	0.00
145.00	-4.48	-0.39	0.00	-1.07	0.00	1.07	2,271.73	536.63	1,494	1,437.76	2.70	-0.16	0.00

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (fr-kips)	Mu Mx (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (kips)	Phi Mn (kips)	Total Deflect (in)	Rotation (deg)	Ratio
147.00	-3.49	-0.30	0.00	-0.30	0.00	0.30	2,240.37	529.22	1,453	1,398.14	2.76	-0.16	0.00
148.00	0.00	0.00	0.00	0.00	0.00	0.00	2,224.69	525.52	1,433	1,378.53	2.80	-0.16	0.00
149.00	0.00	0.00	0.00	0.00	0.00	0.00	2,209.00	521.81	1,413	1,359.07	2.83	-0.16	0.00

ANALYSIS SUMMARY

Load Case	Base Reactions						Max Usage	
	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Elev (ft)	Interaction Ratio
1.2D + 1.0W	37.14	0.00	63.15	0.00	0.00	4194.21	0.00	0.52
0.9D + 1.0W	37.12	0.00	47.35	0.00	0.00	4159.94	0.00	0.51
1.2D + 1.0Di + 1.0Wi	9.72	0.00	79.05	0.00	0.00	1068.23	0.00	0.14
1.2D + 1.0Ev + 1.0Eh	1.60	0.00	62.94	0.00	0.00	191.41	0.00	0.03
0.9D - 1.0Ev + 1.0Eh	1.59	0.00	43.75	0.00	0.00	189.55	0.00	0.03
1.0D + 1.0W	8.30	0.00	52.66	0.00	0.00	933.54	0.00	0.12

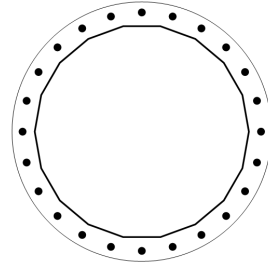
BASE PLATE ANALYSIS @ 0 FT

APPLIED REACTIONS

Moment (k-ft)	Axial (k)	Shear (k)
4194.21	63.15	37.14

PLATE PARAMETERS (ID# 7115)

Width:	74	in
Shape:	Round	
Thickness:	2.75	in
Grade:	A572-50	
Yield Strength:	50	ksi
Tensile Strength:	65	ksi
Rod Detail Type:	d	
Clear Distance	3	in
Base Weld Size:	0.125	in
Orientation Offset:	-	°
Analysis Type:	Plastic	
Neutral Axis:	120	°



ANCHOR ROD PARAMETERS

Class	Arrangement	Quantity	Diameter (in)	Circle (in)	Grade	F _y (ksi)	F _u (ksi)	Spacing (in)	Offset (°)
Original [ID#10384]	Radial	24	2.25	68	A615-75	75	100	-	-

COMPONENT PROPERTIES

Component	ID	Gross Area (in ²)	Net Area (in ²)	Individual Inertia (in ⁴)	Moment of Inertia (in ⁴)	Threads/in
Pole	60.5"ø x 0.5" (18 Sides)	93.7700	-	-	42204.35	-
Bolt Group	Original (24) 2.25"ø	3.9761	3.2477	0.8393	41660.95	4.5

REACTION DISTRIBUTION

Component	ID	Moment M _u (k-ft)	Axial Load P _u (k)	Shear V _u (k)	Moment Factor
Pole	60.5"ø x 0.5" (18 Sides)	4194.2	63.15	37.14	1.000
Bolt Group	Original (24) 2.25"ø	4194.2	-	37.14	1.000

BASE PLATE BEND LINE ANALYSIS @ 0 FT

POLE PROPERTIES

Flat-to-Flat Diameter:	60.62	in
Point-to-Point Diameter:	61.56	in
Orientation Offset:	-	°

Flat Width:	10.690	in
Flat Radians:	0.349	rad

PLATE PROPERTIES

Neutral Axis:	120	°
Bend Line Limits:	3.266 to 4.064	rad

Bend Line	Chord Length (in)	Additional Length (in)	Section Modulus (in ³)	Applied Moment M _u (k-in)	Moment Capacity ΦM _n (k-in)	Flexure Result M _u /ΦM _n
Flats	37.698	0.00	71.273	630.0	3207.3	19.6% <input checked="" type="checkbox"/>
Corners	36.151	0.00	68.347	450.4	3075.6	14.6% <input checked="" type="checkbox"/>
Circumferential	39.839	0.00	75.320	732.3	3389.4	21.6% <input checked="" type="checkbox"/>

PLASTIC ANCHOR ROD ANALYSIS

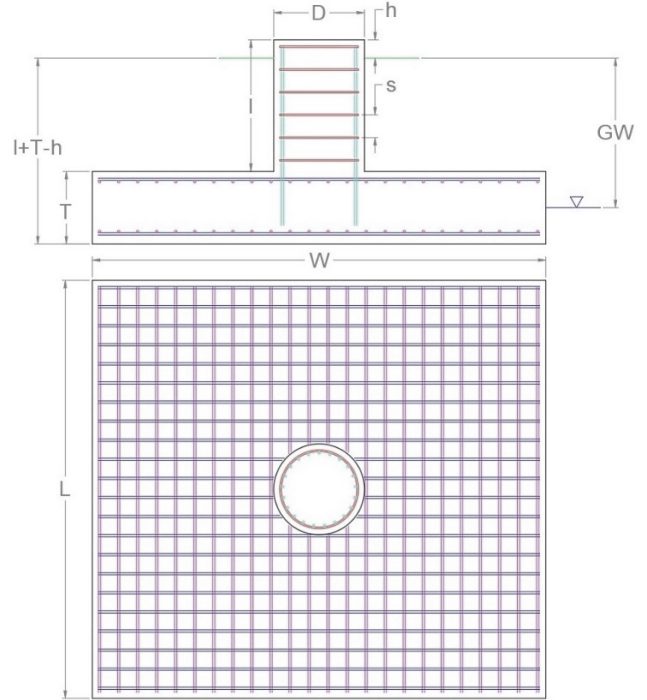
Class	Group Quantity	Rod Diameter (in)	Applied Axial Load P _u (k)	Applied Shear Load V _u (k)	Compressive Capacity ΦP _n (k)	Interaction Result
Original	24	2.25	106.7	2.4	243.6	45.8% <input checked="" type="checkbox"/>

APPLIED GLOBAL REACTIONS

Moment (k-ft)	Axial (k)	Shear (k)
4,194.21	63.15	37.14

FOUNDATION PARAMETERS

Mat Length:	L	30	ft
Mat Width:	W	30	ft
Mat Thickness:	T	3	ft
Base Depth:	L+T-h	6	ft
Pier Shape:		Round	
Pier Diameter:	D	7.5	ft
Pier Height above Grade:	h	1	ft
Concrete Compressive Strength:		4,000	psi
Mat Top Rebar:		(24) #11 bars [60 ksi]	
Mat Bottom Rebar:		(36) #11 bars [60 ksi]	
Pier Vertical Rebar:		(40) #9 bars [60 ksi]	
Pier Rebar Ties:	s	#4 bars @ 6.0" c/c [60 ksi]	
Rebar Clear Cover:		3.0	in
Tower Eccentricity:	ecc	0	ft
Tower Leg Count		1	



SOIL PARAMETERS

Water Table Depth [BGL]:	GW	4	ft
Soil Unit Weight:		125	pcf
Ultimate Skin Friction:			psf
Ultimate Bearing Pressure:		12,000	psf
Bearing Pressure Type:		Gross	
Coefficient of Shear Friction:		0.2	

SOIL STRENGTH ANALYSIS

Soil Strength Reduction Factor, Φ_s	Uplift Strength Reduction Factor, Φ_s	Asset Dead Load Factor	Dead Load Factor
0.75	0.75	0.9	1.2

SOIL OVERTURNING ANALYSIS

Design Moment, $M_{u,Design}$ (k-ft)	Nominal Overturning Capacity, $\Phi_m M_n$ (k-ft)	Soil Overturning Usage, $M_{u,Design} / \Phi_m M_n$
4,454.19	9,819.69	45.4% ✔

SOIL BEARING ANALYSIS

Net Bearing Pressure, $P_{u,Net}$ (psf)	Nominal Bearing Capacity, $\Phi_b P_n$ (k-ft)	Bearing Pressure Controlling Load Direction	Soil Bearing Usage, $P_{u,net} / \Phi_b P_n$
1,330.00	9,000.00	Diagonal to Pad Edge	14.8% ✔

SOIL SLIDING SHEAR ANALYSIS

Applied Shear Force, V_u (k)	Friction Resistance (k)	Passive Pressure (psf)	Passive Pressure Resistance (k)	Nominal Shear Capacity, $\Phi_s V_n$ (k)	Soil Sliding Shear Usage, $V_u / \Phi_s V_n$
37.14	0.00	531.3	47.82	139.77	27.0% ✔

MAT REINFORCING STEEL STRENGTH ANALYSIS

Steel Elastic Modulus, E (ksi)	Strength Bending/Tension Reduction Factor, Φ_b	Strength Shear Reduction Factor, Φ_v	Strength Compression Reduction Factor, Φ_c
29,000	0.9	0.75	0.65

MAT REINFORCING ONE WAY SHEAR ANALYSIS

One Way Design Shear, V_u (k)	Nominal One Way Shear Capacity, $\Phi_c V_n$ (k)	One Way Shear Controlling Load Direction	Mat One Way Shear Usage, $V_u / \Phi_c V_n$
155.01	1,067.68	Diagonal to Pad Edge	14.5%

MAT REINFORCING PUNCHING SHEAR ANALYSIS

Punching Shear Design Stress, v_u (psi)	Nominal Punching Shear Capacity, $\Phi_c v_n$ (psi)	Mat Punching Shear Usage, $v_u / \Phi_c v_n$
46.3	189.7	24.4%

MAT REINFORCING MOMENT TRANSFER ANALYSIS

Moment Transfer Effective Flexural Width, w_f (in)	Neutral Axis Depth (in)	Pier Moment at Joint, M_{ut} (k-in)	Nominal Moment Transfer Capacity, $\Phi M_{sc,f}$ (k-in)	Mat Moment Transfer Usage, $0.6 M_{ut} / \Phi M_{sc,f}$
16.50	2.87	0.00	52,803.2	0.0%

MAT REINFORCING FLEXURE ANALYSIS – UPPER STEEL

Factored Moment, M_u (k-ft)	Nominal Flexural Capacity, ΦM_n (k-ft)	Flexural Steel Controlling Load Direction	Mat Upper Rebar Flexure Usage, $M_u / \Phi M_n$
1,329.29	5,196.77	Parallel to Pad Edge	25.6%

MAT REINFORCING FLEXURE ANALYSIS – LOWER STEEL

Factored Moment, M_u (k-ft)	Nominal Flexural Capacity, ΦM_n (k-ft)	Flexural Steel Controlling Load Direction	Mat Lower Rebar Flexure Usage, $M_u / \Phi M_n$
2,116.80	7,696.59	Parallel to Pad Edge	27.5%

PIER REINFORCING STEEL STRENGTH ANALYSIS

Rebar Cage Diameter (in)	Steel Elastic Modulus, E (ksi)	Strength Bending/Tension Reduction Factor, Φ_b	Strength Shear Reduction Factor, Φ_v	Strength Compression Reduction Factor, Φ_c
81.88	29,000	0.9	0.75	0.65

PIER REINFORCING MOMENT ANALYSIS

Design Moment, M_u (k-ft)	Nominal Moment Capacity, $\Phi_u M_n$ (k-ft)	Bending Reinforcement Ratio	Pier Rebar Flexure Usage, $M_u / \Phi_u M_n$
4,342.77	7,207.87	0.006	60.3%

PIER REINFORCING COMPRESSION ANALYSIS

Design Compression, P_u (k)	Nominal Compressive Capacity, $\Phi_p P_n$ (k)	Pier Rebar Compressive Usage, $P_u / \Phi_p P_n$
63.15	11,208.01	0.6%

PIER REINFORCING SHEAR ANALYSIS

Design Shear, V_u (k)	Nominal Shear Capacity, $\Phi_v V_n$ (k)	Pier Rebar Shear Usage, $V_u / \Phi_v V_n$
37.14	822.52	4.5%

EXHIBIT 4



Colliers Engineering & Design,
Architecture, Landscape Architecture, Surveying, CT P.C
2000 Midlantic Drive, Suite 100
Mt. Laurel, NJ 08054
856.797.0412
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Post-Modification Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10226875
Colliers Engineering & Design Project #: 21777445 (Rev 1)

March 21, 2024

Site Information

Site ID: 5000245761-VZW / WOODSTOCK CT RELO
Site Name: WOODSTOCK CT RELO
Carrier Name: Verizon Wireless
Address: 87 West Quasset Rd
Woodstock, Connecticut 06281
Windham County
Latitude: 41.929772°
Longitude: -71.989319°

Structure Information

Tower Type: 149-Ft Monopole
Mount Type: 13.62-Ft Platform

FUZE ID # 16272085

Analysis Results

Platform: 66.8% **Pass w/ Modifications***

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

***Contractor PMI Requirements:

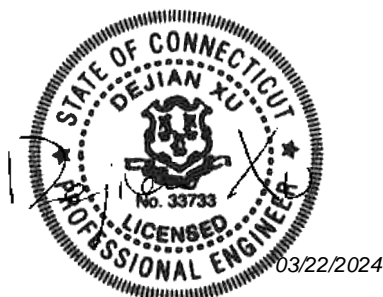
Included at the end of this MA report

Available & Submitted via portal at <https://pmi.vzwsmart.com>

For additional questions and support, please reach out to:

pmisupport@colliersengineering.com

Report Prepared By: Prasanna Dhakal



Executive Summary:

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

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

Sources of Information:

Document Type	Remarks
<i>Radio Frequency Data Sheet (RFDS)</i>	<i>Verizon RFDS, Site ID: 1069426, dated July 25, 2023</i>
<i>Mount Mapping Report</i>	<i>RKS Design & Engineering LLC, Site ID: ATC: 418609, dated March 28, 2021</i>
<i>Previous Mount Analysis</i>	<i>Colliers Engineering & Design, Project #: 21777445 (Rev 1), dated March 4, 2024</i>
<i>Mount Modification Drawings</i>	<i>Colliers Engineering & Design, Project #: 21777445 (Rev 1), dated March 21, 2024</i>

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: C Topographic Category: 1 Topographic Feature Considered: N/A Topographic Method: N/A Ground Elevation Factor, K_e : 0.977
Seismic Parameters:	S_s : 0.182 g S_1 : 0.055 g
Maintenance Parameters:	Wind Speed (3-sec. Gust): 30 mph Maintenance Load, L_v : 250 lbs. Maintenance 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:

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
145.75	147.00	3	Commscope	LNX-6514DS-A1M	Retained
		6	Andrew	SBNHH-1D65B	
		1	Raycap	RRFDC-6627-PF-48*	
		3	Samsung	MT6413-77A	Added
		3	Samsung	RF4439d-25A	
		3	Samsung	RF4461d-13A	

* Equipment is flush mounted directly to the Monopole. It is not mounted on platform mount and is not included in this mount analysis.

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

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

Standard Conditions:

1. All engineering services are performed on the basis that the information provided to Colliers Engineering & Design 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 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 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
8. Any mount modifications listed under Sources of Information are assumed to have been installed per the design specifications.

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

Analysis Results:

Component	Utilization %	Pass/Fail
<i>Face Horizontal</i>	<i>18.0%</i>	<i>Pass</i>
<i>Standoff Horizontal</i>	<i>20.2%</i>	<i>Pass</i>
<i>Mod Mount Pipe</i>	<i>50.5%</i>	<i>Pass</i>
<i>Mod Kicker</i>	<i>7.3%</i>	<i>Pass</i>
<i>Mount Connection</i>	<i>66.8%</i>	<i>Pass</i>
Structure Rating – (Controlling Utilization of all Components)		66.8%

Mount Connection Envelope Reactions:

Connection Description	Elev. AGL (Ft)	Node Label	Envelope Wind Reactions				Envelope Wind + Ice Reactions			
			Axial (Lbs)	Lateral (Lbs)	Moment (K-Ft)	Torsion (K-Ft)	Axial (Lbs)	Lateral (Lbs)	Moment (K-Ft)	Torsion (K-Ft)
Sector C Standoff	145.8	N2	128	3737	0.156	1.528	64	2353	0.126	0.424
Sector B Standoff	145.8	N4	114	3814	0.143	1.477	55	2408	0.117	0.425
Sector A Standoff	145.8	N3	123	3518	0.155	1.450	58	2357	0.121	0.417
Sector C Reinforcement	142.3	N146	1441	1711	0.000	0.000	2198	2636	0.000	0.000
Sector A Reinforcement	142.3	N147	1407	1669	0.000	0.000	2226	2670	0.000	0.000
Sector B Reinforcement	142.3	N148	1465	1741	0.000	0.000	2236	2683	0.000	0.000

Notes:

- Axial loads act along the axis of the tower
- Lateral reactions act perpendicular to the tower
- Moment loads introduce bending moment to the tower
- Torsion loads introduce twisting moment to the tower
- Batch solutions by individual load cases are included at the end of this document

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	19.9	19.9	44.2	44.2
0.5	25.1	25.1	59.6	59.6
1	29.5	29.5	74.1	74.1

Notes:

- (EPA)a values listed above may be used in the absence of more precise information
- (EPA)a values in the table above include 3 sectors.
- Ka factors included in (EPA)a calculations

Requirements:

The existing mount will be **SUFFICIENT** for the final loading configuration (attachment 2) **after the modifications detailed in attachment 3 are successfully completed.**

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

Attachments:

1. **Contractor Required PMI Report Deliverables**
2. Antenna Placement Diagrams
3. Mount Modification Drawings
4. Mount Photos
5. Mount Mapping Report (for reference only)
6. Analysis Calculations

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Mount Modification

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

For additional questions and support, please reach out to pmisupport@colliersengineering.com

MDG #: 5000245761

SMART Project #: 10226875

Fuze Project ID: 16272085

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

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

Base Requirements:

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

Photo Requirements:

- Photos taken at ground level
 - Photo of Gate Signs showing the tower owner, site name, and number.
 - Overall tower structure after installation of the modifications.
 - Photos of the mount after installation of the modifications; if the mounts are at different rad elevations, pictures must be provided for all elevations that the modifications were installed
- Photos taken at Mount Elevation
 - Photos showing the safety climb wire rope above and below the mount prior to modification.
 - Photos showing the climbing facility and safety climb if present.

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

Material Certification:

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

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

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

OR

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

Antenna & Equipment Placement and Geometry Confirmation:

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

OR

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

Comments:

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

Yes No

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

Issue:

Response:

Special Instruction Confirmation:

The contractor has read and acknowledges the above special instructions.

Comments:

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

Yes No

Contractor certifies no new damage created during the current installation:

Yes No

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

Safety Climb in Good Condition Safety Climb Damaged

Comments:

--

Contractor to provide measurement from top of the highest equipment/steel to the bottom of the lowest equipment/steel by documenting it using the most appropriate illustration below along with supporting photos:

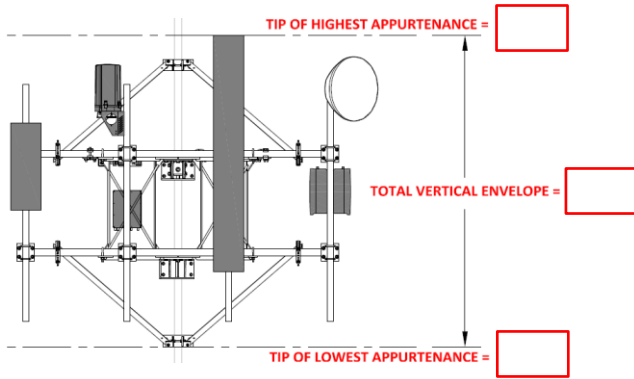


Illustration #1

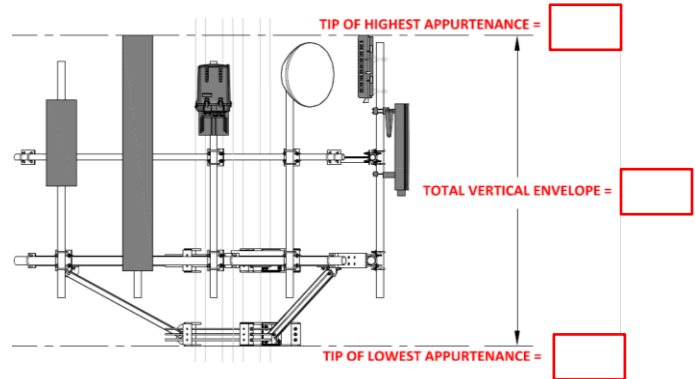
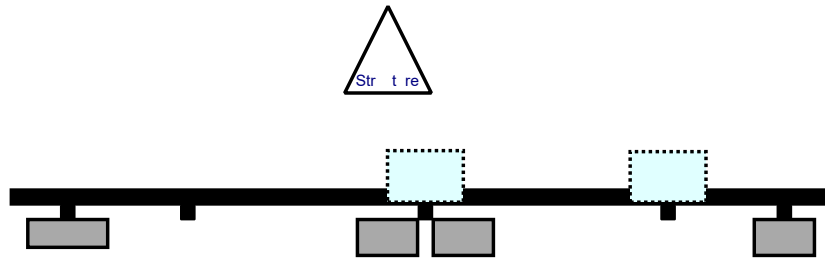


Illustration #2

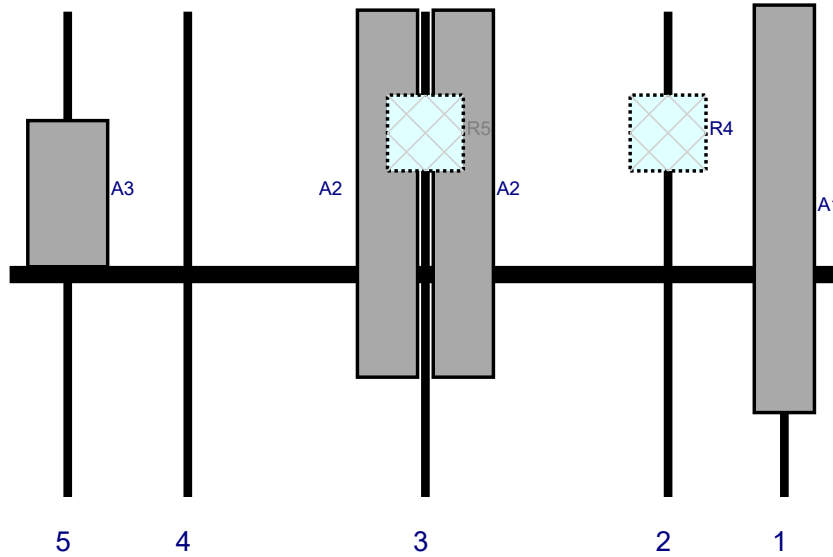
Certifying Individual:

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

Plan View

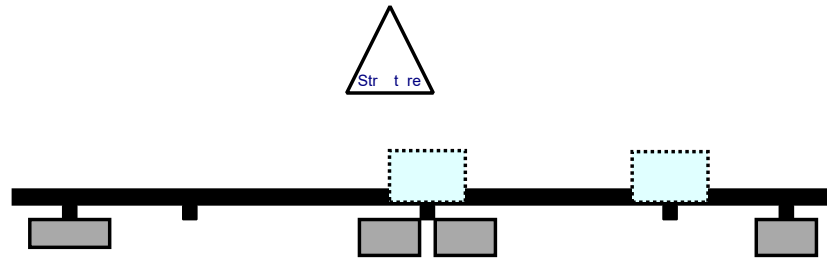


Front View - Looking at Structure

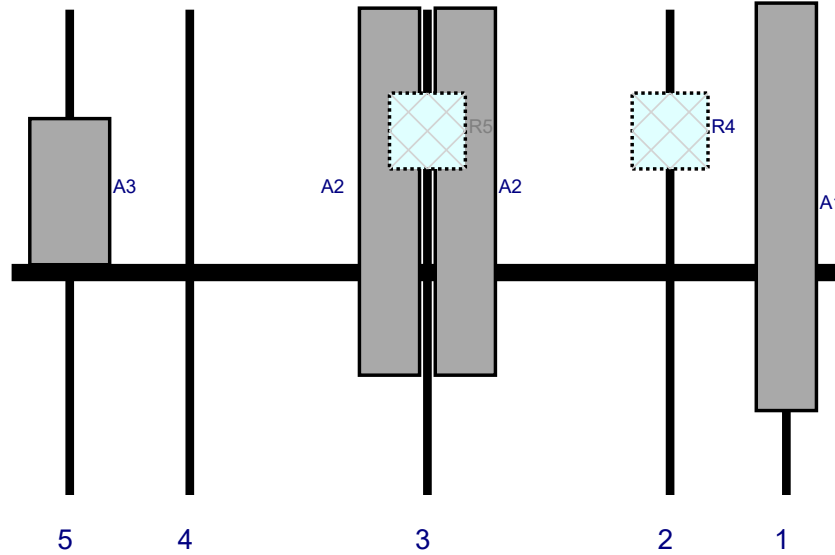


Re #	Model	Height (i)	Width (i)	H Dist Fr L.	Pipe #	Pipe Pos V	A t Pos	C. A t Fr T.	A t H O	St t s	V lid tio
A1	LNx-6514DS-A1M	80.6	11.9	153.25	1		Fro t	39	0	Ret i ed	03/28/2021
R4	RF4439d-25A	15	15	130.25	2		Behi d	24	0	Added	
A2	SBNHH-1D65B	72.6	11.9	82.25	3		Fro t	36	7.5	Ret i ed	03/28/2021
A2	SBNHH-1D65B	72.6	11.9	82.25	3		Fro t	36	-7.5	Ret i ed	03/28/2021
R5	RF4461d-13A	15	15	82.25	3		Behi d	24	0	Added	
A3	MT6413-77A	28.9	15.8	11.5	5		Fro t	36	0	Added	

Plan View

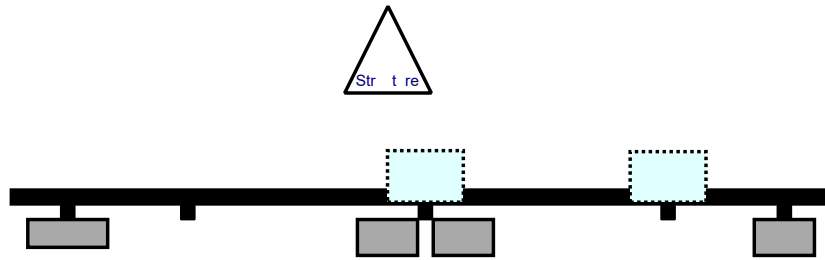


Front View - Looking at Structure

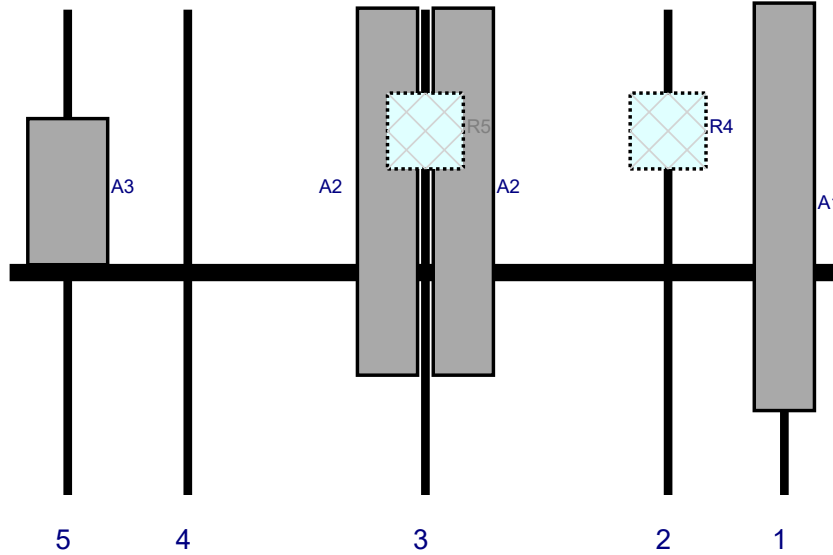


Re #	Model	Height (i)	Width (i)	H Dist Fr L.	Pipe #	Pipe Pos V	A t Pos	C. A t Fr T.	A t H O	St t s	V lid tio
A1	LNx-6514DS-A1M	80.6	11.9	153.25	1		Fro t	39	0	Ret i ed	03/28/2021
R4	RF4439d-25A	15	15	130.25	2		Behi d	24	0	Added	
A2	SBNHH-1D65B	72.6	11.9	82.25	3		Fro t	36	7.5	Ret i ed	03/28/2021
A2	SBNHH-1D65B	72.6	11.9	82.25	3		Fro t	36	-7.5	Ret i ed	03/28/2021
R5	RF4461d-13A	15	15	82.25	3		Behi d	24	0	Added	
A3	MT6413-77A	28.9	15.8	11.5	5		Fro t	36	0	Added	

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
A1	LNx-6514DS-A1M	80.6	11.9	153.25	1		Fro t	39	0	Ret i ed	03/28/2021
R4	RF4439d-25A	15	15	130.25	2		Behi d	24	0	Added	
A2	SBNHH-1D65B	72.6	11.9	82.25	3		Fro t	36	7.5	Ret i ed	03/28/2021
A2	SBNHH-1D65B	72.6	11.9	82.25	3		Fro t	36	-7.5	Ret i ed	03/28/2021
R5	RF4461d-13A	15	15	82.25	3		Behi d	24	0	Added	
A3	MT6413-77A	28.9	15.8	11.5	5		Fro t	36	0	Added	



MOUNT MODIFICATION DRAWINGS
EXISTING 13.62' PLATFORM

TOWER OWNER: AMERICAN TOWER CORPORATION
TOWER OWNER SITE NUMBER: 418609

CARRIER SITE NAME: WOODSTOCK CT RELO
CARRIER SITE NUMBER: 5000245761
FUZE ID: 16272085

87 WEST QUASSET RD
WOODSTOCK, CT 06281
WINDHAM COUNTY

LATITUDE: 41.929772° N
LONGITUDE: 71.989319° W



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SCALE: AS SHOWN JOB NUMBER: 21777445

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
0	06/15/21	ISSUED FOR CONSTRUCTION	FAC	PMA
1	03/21/24	ISSUED FOR CONSTRUCTION	PD	DX

COLLIERS ENGINEERING & DESIGN CT, P.C.
C.T. JPC-0000131

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

SITE NAME:
WOODSTOCK CT RELO
5000245761
87 WEST QUASSET RD
WOODSTOCK, CT 06281
WINDHAM COUNTY

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

SHEET TITLE:
TITLE SHEET

SHEET NUMBER:
ST-1

DESIGN CRITERIA
WIND LOADS BASIC WIND SPEED (3 SECOND GUST), V = 120 MPH EXPOSURE CATEGORY C TOPOGRAPHIC CATEGORY: I TOPOGRAPHIC CONSIDERED: N/A TOPOGRAPHIC METHOD: N/A MEAN BASE ELEVATION (AMSL) = 692.08'
ICE LOADS ICE WIND SPEED (3 SECOND GUST), V = 50 MPH ICE THICKNESS = 1.00 IN
SEISMIC LOADS SEISMIC DESIGN CATEGORY B SHORT TERM MCER GROUND MOTION, S _s = .182 LONG TERM MCER GROUND MOTION, S _l = .055

PROJECT INFORMATION
APPLICANT/LESSEE COMPANY: VERIZON WIRELESS CLIENT REPRESENTATIVE COMPANY: VERIZON WIRELESS PROJECT MANAGER COMPANY: COLLIERS ENGINEERING & DESIGN CONTACT: PETER ALBANO PHONE: 856.797.0412 E-MAIL: PETER.ALBANO@COLLIERSENG.COM
CONTRACTOR PMI REQUIREMENTS PMI LOCATION: HTTPS://PMI.VZWSMART.COM SMART TOOL PROJECT #: 10226875 VZW MDG #: 5000245761 ANALYSIS DATE: 3/21/2024 PMI REQUIREMENTS EMBEDDED WITHIN MOUNT MODIFICATION REPORT

SHEET INDEX
SHEET DESCRIPTION
ST-1 TITLE SHEET
SBOM-1 BILL OF MATERIALS
SGN-1 GENERAL NOTES
SCF-1 CLIMBING FACILITY DETAIL
SS-1 MODIFICATION DETAILS
SS-2 MOUNT PHOTOS
SPECIFICATION SHEETS

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BILL OF MATERIALS

SECTION 1 - VZWSMART KITS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
15	VZWSMART	VZWSMART-P40-238X096	96" LONG, PIPE 2 SCH40 (2.375"OD X 0.154" THK)		29	435
1		VZWSMART-PLK5	KICKER KIT	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET SGN-1.	291	291
1		VZWSMART-PLK7	MONOPOLE COLLAR MOUNT ASSEMBLY		150	150

SECTION 2 - OTHER REQUIRED PARTS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
15	SITE PRO 1	SQCX4-K	CROSSOVER PLATE KIT W/ SQUARE U-BOLTS AND STD. U-BOLTS	OR EOR APPROVED EQUAL, CONTACT COLLIERS ENGINEERING & DESIGN FOR APPROVAL OF SUBSTITUTION.	11	170

SECTION 3 - REQUIRED SAFETY CLIMB PARTS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
1	PERFECT VISION	H42-0501-06	STANDOFF CLAMP BRACKET	OR EOR APPROVED EQUIVALENT	-	-
1	PERFECT VISION	PV-CMX-CG-BO	WIRE ROPE GUIDE	OR EOR APPROVED EQUIVALENT	-	-
TOTAL:						1046

NOTES:

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

VZWSMART KITS - APPROVED VENDORS

COMMSCOPE	
CONTACT	SALVADOR ANGUIANO
PHONE	(817) 304-7492
EMAIL	SALVADOR.ANGUIANO@COMMSCOPE.COM
WEBSITE	WWW.COMMSCOPE.COM
METROSITE FABRICATORS, LLC	
CONTACT	KENT RAMEY
PHONE	(706) 335-7045 (O), (706) 982-9788 (M)
EMAIL	KENT@METROSITELLC.COM
WEBSITE	METROSITEFABRICATORS.COM

PERFECTVISION	
CONTACT	WIRELESS SALES
PHONE	(844) 887-6723
EMAIL	WWW.PERFECT-VISION.COM
WEBSITE	WIRELESSSALES@PERFECT-VISION.COM
SABRE INDUSTRIES, INC.	
CONTACT	ANGIE WELCH
PHONE	(866) 428-6937
EMAIL	AKWELCH@SABREINDUSTRIES.COM
WEBSITE	WWW.SABRESITESOLUTIONS.COM

SITE PRO 1	
CONTACT	PAULA BOSWELL
PHONE	(972) 236-9843
EMAIL	PAULA.BOSWELL@VALMONT.COM
WEBSITE	WWW.SITEPRO1.COM



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SCALE: AS SHOWN	JOB NUMBER: 21777445		
0 06/15/21	ISSUED FOR CONSTRUCTION	FAC	PMA
1 03/21/24	ISSUED FOR CONSTRUCTION	PD	DX
REV	DATE	DESCRIPTION	DRAWN BY / CHECKED BY

COLLIERS ENGINEERING & DESIGN CT, P.C.
 C.T. JPC-0000131

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SITE NAME:

WOODSTOCK CT RELO
 5000245761
 87 WEST QUASSET RD
 WOODSTOCK, CT 06281
 WINDHAM COUNTY

Engineering & Design
 MT. LAUREL
 2000 Midland Drive, Suite 100
 Mt. Laurel, NJ 08054
 Phone: 856.797.0412
COLLIERS ENGINEERING & DESIGN, INC. DOING BUSINESS AS MASER CONSULTING

SHEET TITLE: **BILL OF MATERIALS**

SHEET NUMBER: **SBOM-1**

GENERAL NOTES

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

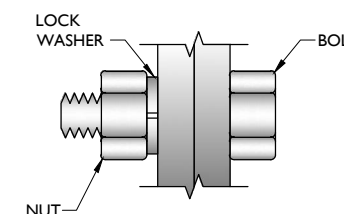
STRUCTURAL STEEL

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

CHANNELS, ANGLES, PLATES, ETC.	ASTM A36 (GR 36)
STEEL PIPE	ASTM A53 (GR 35)
BOLTS	ASTM A325
NUTS	ASTM A563
LOCK WASHERS	LOCKING STRUCTURAL GRADE
- ALL SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE APPROVED IN WRITING BY THE ENGINEER. CONTRACTOR SHALL PROVIDE DOCUMENTATION TO ENGINEER FOR VERIFYING THE SUBSTITUTE IS SUITABLE FOR USE AND MEETS ORIGINAL DESIGN CRITERIA. DIFFERENCES FROM THE ORIGINAL DESIGN, INCLUDING MAINTENANCE, REPAIR AND REPLACEMENT, SHALL BE NOTED. ESTIMATES OF COSTS/CREDITS ASSOCIATED WITH THE SUBSTITUTION (INCLUDING RE-DESIGN COSTS AND COSTS TO SUB-CONTRACTORS) SHALL BE PROVIDED TO THE ENGINEER. CONTRACTOR SHALL PROVIDE ADDITIONAL DOCUMENTATION AND/OR SPECIFICATIONS TO THE ENGINEER AS REQUESTED.
- PROVIDE STRUCTURAL STEEL SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
 - SUBMIT SHOP DRAWINGS TO
PETER.ALBANO@COLLIERSENG.COM
 - PROVIDE COLLIERS ENGINEERING & DESIGN PROJECT # AND COLLIERS ENGINEERING & DESIGN PROJECT ENGINEER CONTACT IN THE BODY OF THE EMAIL.
- DRILL NO HOLES IN ANY NEW OR EXISTING STRUCTURAL STEEL MEMBERS OTHER THAN THOSE SHOWN ON STRUCTURAL DRAWINGS WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.
- GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
- ALL NEW STEEL SHALL BE HOT BE DIPPED GALVANIZED FOR FULL WEATHER PROTECTION. IN ADDITION ALL NEW STEEL SHALL BE PAINTED TO MATCH EXISTING STEEL. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
- ALL BOLT ASSEMBLIES FOR STRUCTURAL MEMBERS REPRESENTED IN THIS DRAWING REQUIRE LOCKING DEVICES TO BE INSTALLED IN ACCORDANCE WITH TIA-222-H SECTION 4.9.2 REQUIREMENTS.
- WHERE CONNECTIONS ARE NOT FULLY DETAILED ON THESE DRAWINGS, FABRICATOR SHALL DESIGN CONNECTIONS TO RESIST LOADS AND FORCES WHERE SHOWN ON DRAWINGS AND AS OUTLINED IN SPECIFICATIONS.
- FOR MEMBERS BEING REPLACED, PROVIDE NEW BOLTS AND MATCH EXISTING SIZE AND GRADE. MAINTAIN AISC REQUIREMENTS FOR MINIMUM BOLT DISTANCE AND SPACING.
- ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT IS AT LEAST FLUSH WITH THE FACE OF THE NUT. IT IS NOT PERMITTED FOR THE BOLT END TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.
- GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
- ALL NEW STEEL SHALL BE HOT BE DIPPED GALVANIZED FOR FULL WEATHER PROTECTION. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
- ALL EXISTING PAINTED/GALVANIZED SURFACES DAMAGED DURING REHAB INCLUDING AREAS UNDER STIFFENER PLATES SHALL BE WIRE BRUSHED CLEAN, REPAIRED BY COLD GALVANIZING (ZINC COTE, OR EOR APPROVED EQUAL), AND REPAINTED TO MATCH THE EXISTING FINISH (IF APPLICABLE).
- ALL HOLES IN STEEL MEMBERS SHALL BE SIZED 1/16" LARGER THAN THE BOLT DIAMETER. STANDARD HOLES SHALL BE USED UNLESS NOTED OTHERWISE.

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

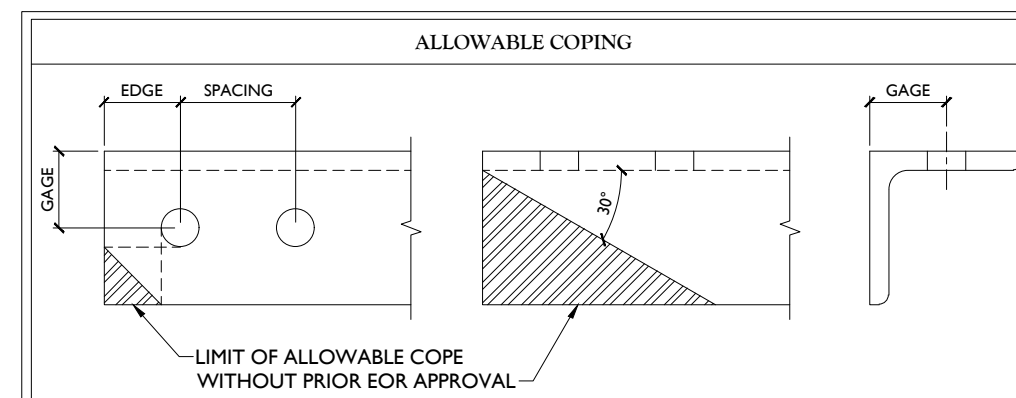
WORKABLE GAGES (IN.)	
LEG	GAGE
4	2 1/2
3 1/2	2
3	1 3/4
2 1/2	1 3/8
2	1 1/8



TYP. BOLT ASSEMBLY

NOTES:

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



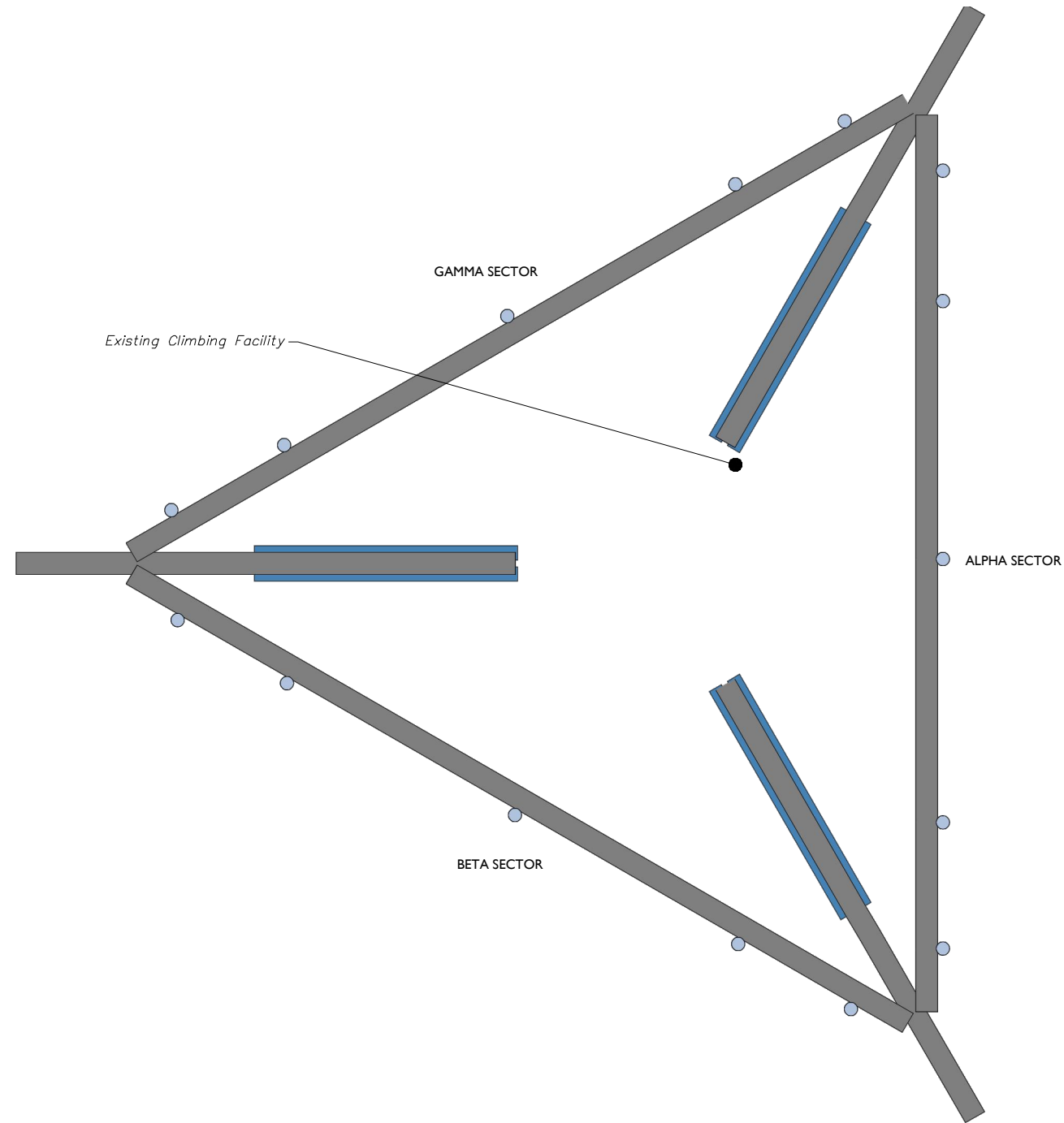
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SCALE: AS SHOWN	JOB NUMBER: 21777445			
0	06/15/21	ISSUED FOR CONSTRUCTION	FAC	PMA
1	03/21/24	ISSUED FOR CONSTRUCTION	PD	DX
REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY

SITE NAME:

WOODSTOCK CT RELO
5000245761
87 WEST QUASSET RD
WOODSTOCK, CT 06281
WINDHAM COUNTY

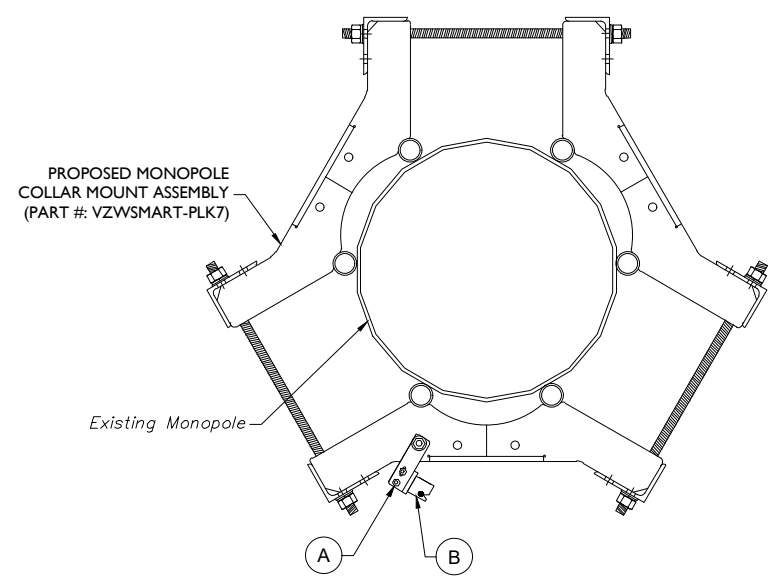
GENERAL NOTES



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

STRUCTURAL NOTES:

- PER THE MOUNT MAPPING COMPLETED BY RKS DESIGN & ENGINEERING LLC ON 3/28/2021, THE SAFETY CLIMB AND CLIMBING FACILITIES UP TO THE VERIZON MOUNT ELEVATION (145'-9") ARE IN GOOD CONDITION. COLLIERS ENGINEERING & DESIGN DOES NOT WARRANT THIS INFORMATION.
- INSTALL SHALL NOT CAUSE HARM TO THE STRUCTURE, CLIMBING FACILITY, SAFETY CLIMB, OR ANY SYSTEM INSTALLED ON THE STRUCTURE. TIMELY NOTICE AND DOCUMENTATION SHALL BE PROVIDED BY CONTRACTORS TO THE EOR (OF STRUCTURAL DESIGN) IF AN OBSTRUCTION WAS REQUIRED TO MEET THE RF SYSTEM DESIGN REQUIREMENTS AND PERFORMANCES.



ITEM #	QTY	PART NUMBER	DESCRIPTIONS
A	1	H42-0501-06	STANDOFF CLAMP BRACKET (PERFECT VISION OR EOR APPROVED EQ.)
B	1	PV-CMX-CG-BO	WIRE ROPE GUIDE (PERFECT VISION OR EOR APPROVED EQ.)

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

NOTE: CONTRACTOR SHALL ENSURE THAT WIRE ROPE GUIDE DOES NOT PUSH THE WIRE ROPE OUTSIDE OF THE VERTICAL PLANE OF THE SAFETY CLIMB. CONTRACT EOR WITH PHOTOS OF SAFETY CLIMB AND COLLAR FOR FURTHER DIRECTION IF NEEDED.



CLIMBING FACILITY PHOTO

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REV	DATE	DESCRIPTION	DRAWN BY / CHECKED BY
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COLLIERS ENGINEERING & DESIGN CT, P.C.
C.T. JPC.0000131

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

SITE NAME:
WOODSTOCK CT RELO
5000245761
87 WEST QUASSET RD
WOODSTOCK, CT 06281
WINDHAM COUNTY

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

SHEET TITLE:
CLIMBING FACILITY DETAIL

SHEET NUMBER:
SCF-1

LEGEND:

- PROPOSED
- RELOCATED
- EXISTING

TOTAL VERTICAL ENVELOPE:

CONTRACTOR SHALL VERIFY AND CONFIRM IN FIELD THAT VERIZON'S OVERALL TIP TO TIP VERTICAL SPACE CONFIGURATION (EQUIPMENT AND STEEL COMBINED) DOES NOT EXCEED THE VERTICAL ENVELOPE LISTED IN THESE DRAWINGS. IF THE SITE'S EXISTING OR PROPOSED CONFIGURATION EXCEEDS THE ALLOWED VERTICAL ENVELOPE LISTED IN THESE DRAWINGS, CONTRACTOR SHALL CONTACT EOR IMMEDIATELY FOR A SOLUTION ON HOW TO CORRECT THE ISSUE PRIOR TO LEAVING THE SITE.

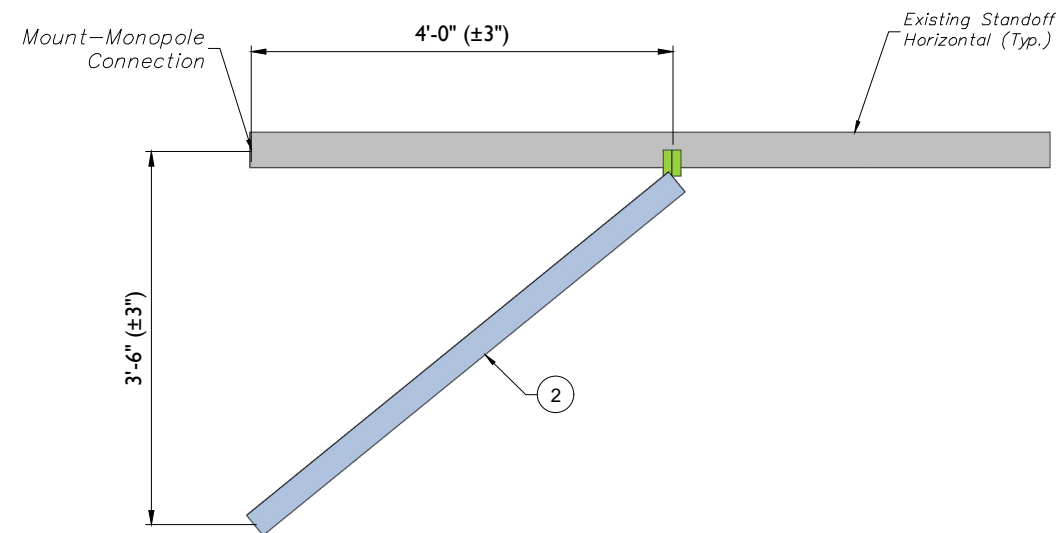
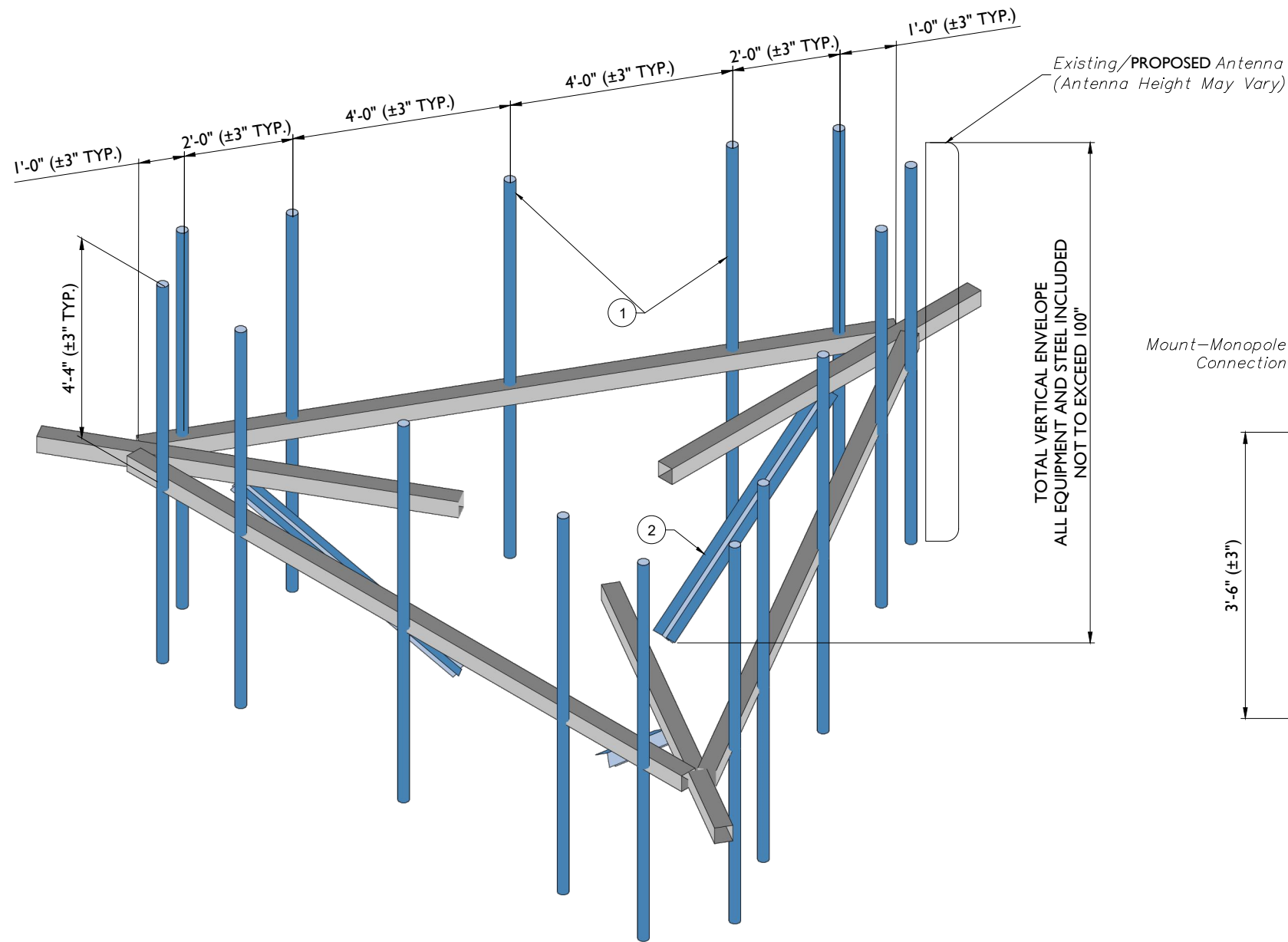
MOUNT MODIFICATION SCHEDULE				
NO.	ELEVATION	QUANTITY	DESCRIPTION	NOTES
1	145'-9"	15	PROPOSED 96" LONG, PIPE 2 SCH40 (PART #: VZWSMART-P40-238X096)	CONTRACTOR SHALL REPLACE ALL EXISTING MOUNT PIPES. CONNECT NEW MOUNT PIPE TO EXISTING FACE HORIZONTAL TUBE WITH CROSSOVER PLATES (SITE PRO I, PART #: SQCX4-K).
2		1	PROPOSED KICKER KIT (PART #: VZWSMART-PLK5)	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET SGN-1. CONNECT OTHER END OF KICKER KIT TO MONOPOLE COLLAR MOUNT ASSEMBLY (PART #: VZWSMART-PLK7). SEE GENERAL NOTE B.

GENERAL NOTES:

A. CONTRACTOR SHALL VERIFY THAT NEW & EXISTING STEEL IS FREE OF CORROSION. VISIBLE MINOR CORROSION SHALL BE WIRE BRUSHED CLEAN AND TREATED WITH COLD GALVANIZATION. REPORT ANY SIGNIFICANT CORROSION TO EOR.

B. THREADED ROD FROM PROPOSED KITS SHALL BE TRIMMED TO EXTEND NO MORE THAN 3" BEYOND THE LOCK NUT. TREAT ALL CUT ENDS WITH (2) COATS OF COLD GALVANIZATION (ZINC KOTE, OR EOR APPROVED EQUAL).

C. MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.



1 PROPOSED ISOMETRIC VIEW
SCALE : N.T.S.

2 PROPOSED SIDE ELEVATION VIEW (TYP. ALL SECTORS)
SCALE : N.T.S.

SCALE: AS SHOWN	JOB NUMBER: 21777445
0 06/15/21 ISSUED FOR CONSTRUCTION	FAC PMA
1 03/21/24 ISSUED FOR CONSTRUCTION	PD DX
REV DATE DESCRIPTION	DRAWN BY CHECKED BY

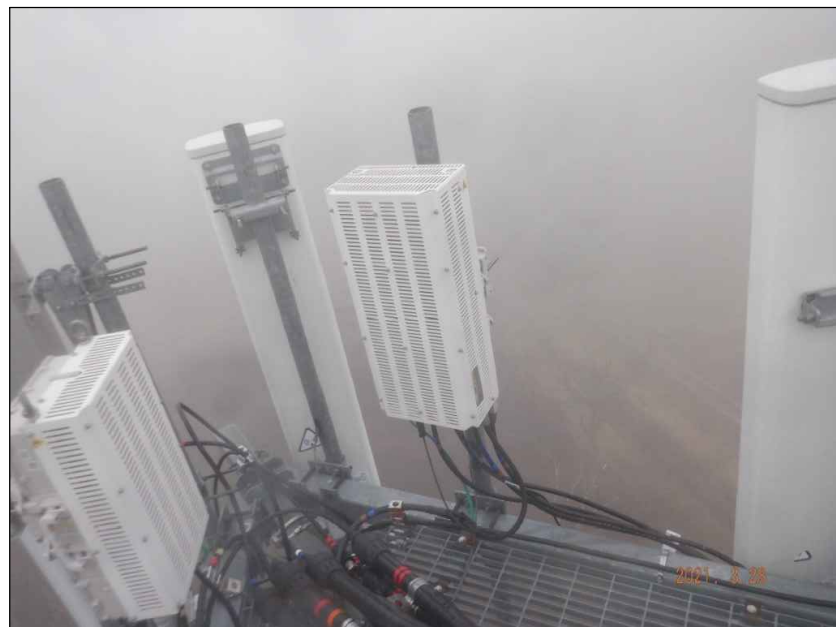
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5000245761
87 WEST QUASSET RD
WOODSTOCK, CT 06281
WINDHAM COUNTY



MOUNT PHOTO 1



MOUNT PHOTO 2



MOUNT PHOTO 3



MOUNT PHOTO 4



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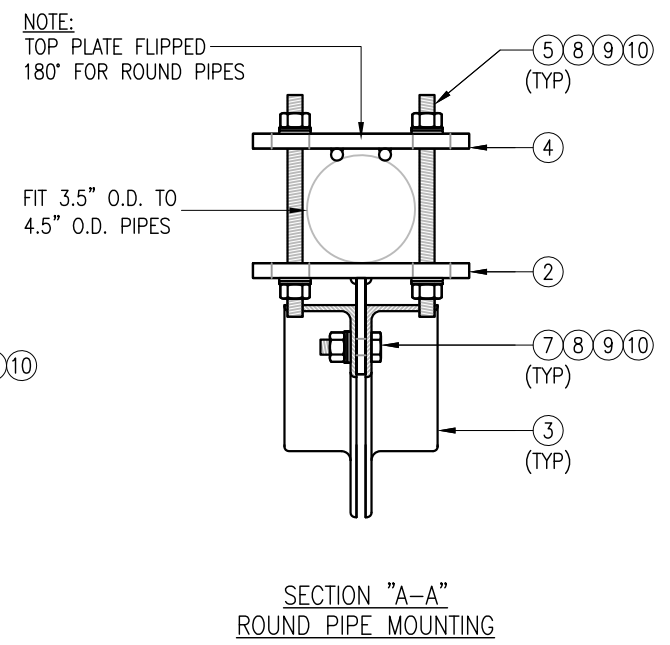
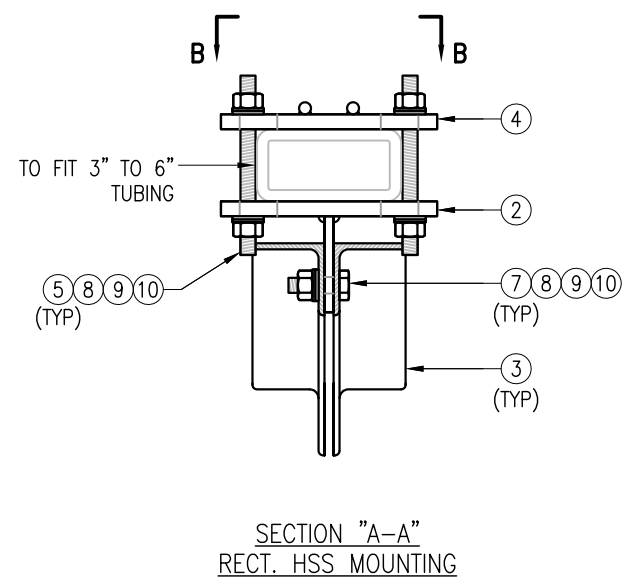
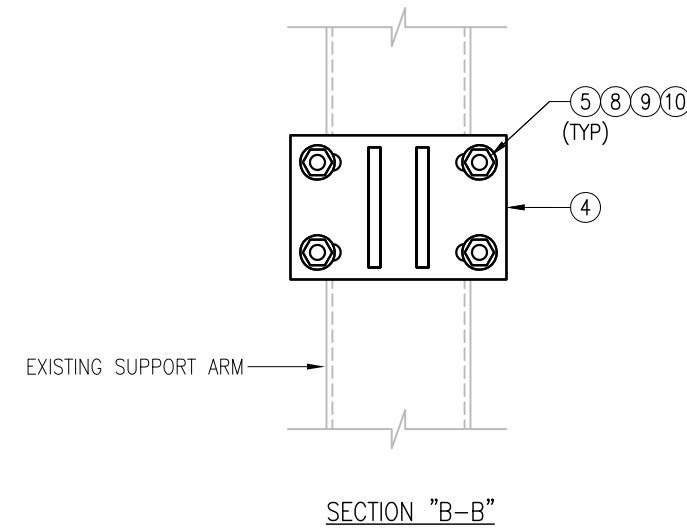
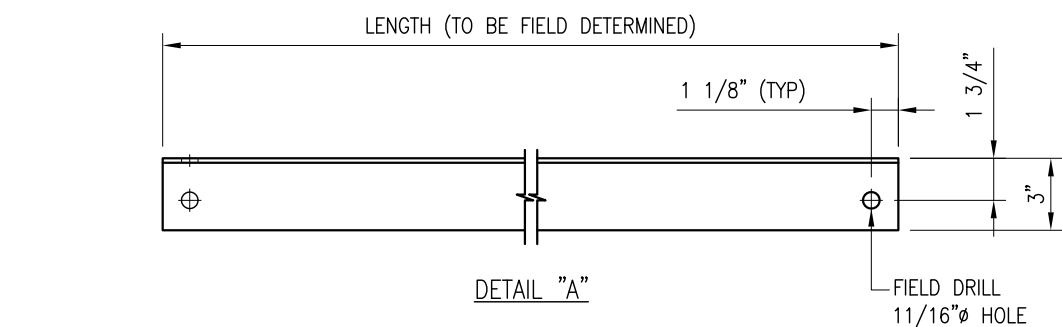
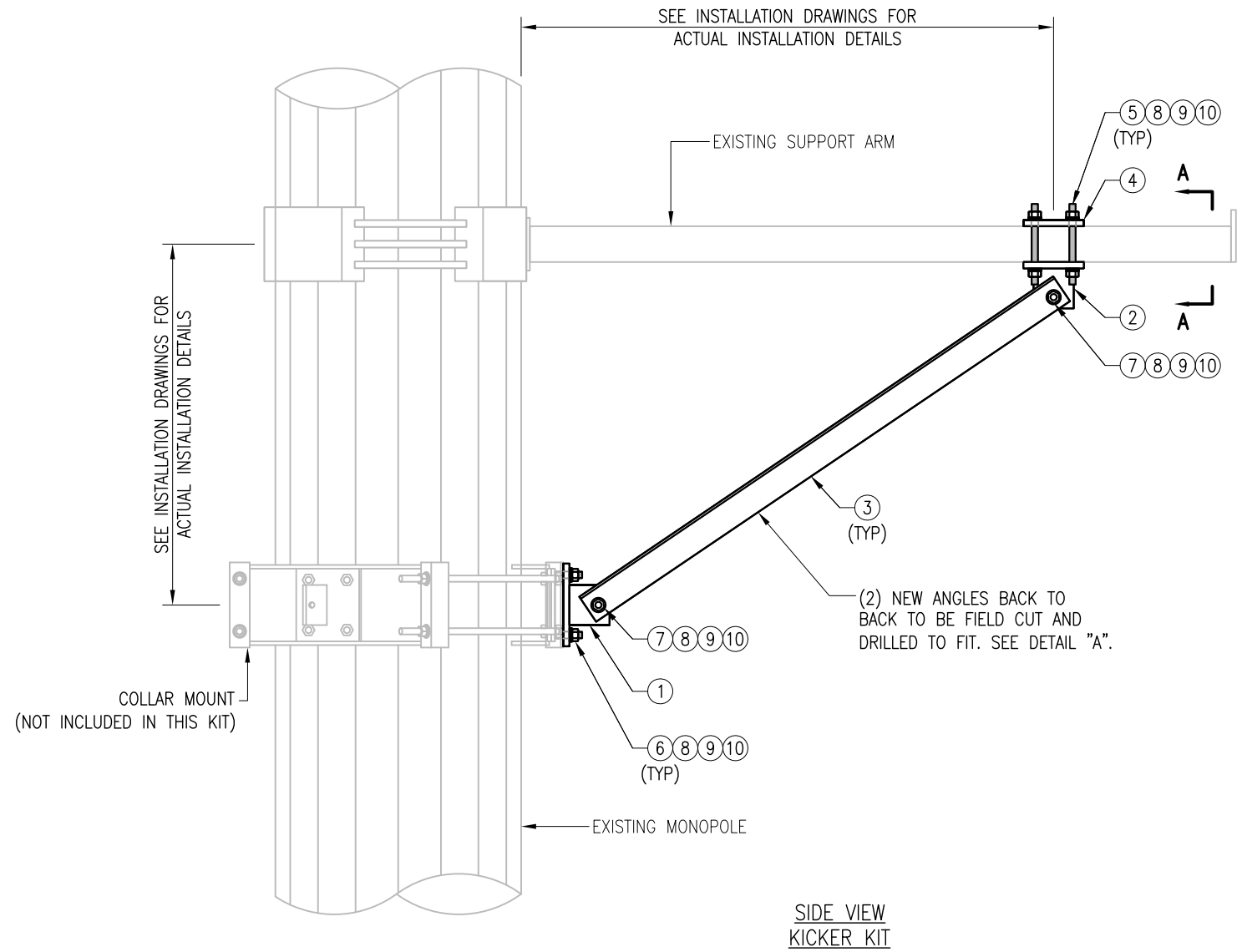
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 WOODSTOCK, CT 06281
 WINDHAM COUNTY

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

SHEET TITLE:
MOUNT PHOTOS

SHEET NUMBER:
SS-2

NOTE:
THE LOCATION OF KICKER AND EXISTING ANTENNA MOUNT SHOWN ON THE DRAWING IS FOR REPRESENTATION PURPOSE ONLY. SEE INSTALLATION DRAWINGS FOR ACTUAL INSTALLATION OF DETAILS.



VZSMART-PLK5 (KICKER KIT)					
ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	3	BRKW-XXX	BRACKET WELDMENT A36	PLK5-F3	43.8
2	3	BRKW-XXXX	BRACKET WELDMENT A36	PLK5-F2	35.7
3	6	L331875-8	L 3" X 3" X 3/16" X 8'-0" A36	PLK5-F4	182.9
4	3	PL-KI	PL 5/8" X 6" X 9" A36	PLK5-F1	29.0
5	12	---	THREADED ROD 5/8" DIA. X 1'-0" F1554-36 HDG	---	---
6	6	---	BOLT 5/8" X 2" A325	---	---
7	12	---	BOLT 5/8" X 2 1/2" A325	---	---
8	42	FW-625	5/8" HDG USS FLAT WASHER	---	3
9	42	LW-625	5/8" HDG LOCK WASHER	---	1
10	42	NUT-625	5/8" HDG HEX NUT	---	5
GALVANIZED WT					291

NOTES:
1. ALL HOLES ARE 11/16" DIA. U.N.O
2. HOT-DIPPED GALVANIZED PER ASTM A123.
3. FIT UP TO 6" SQ. TUBING OR 4 1/2" O.D. PIPE

VzW
SMART Tool[®]
Vendor



FOR REFERENCE ONLY

DRAWN BY: MN CHECKED BY: HMA/KW

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

SHEET TITLE:
**VZSMART-PLK5
KICKER KIT**

SHEET NUMBER: VZSMART-PLK5
REV #: 0



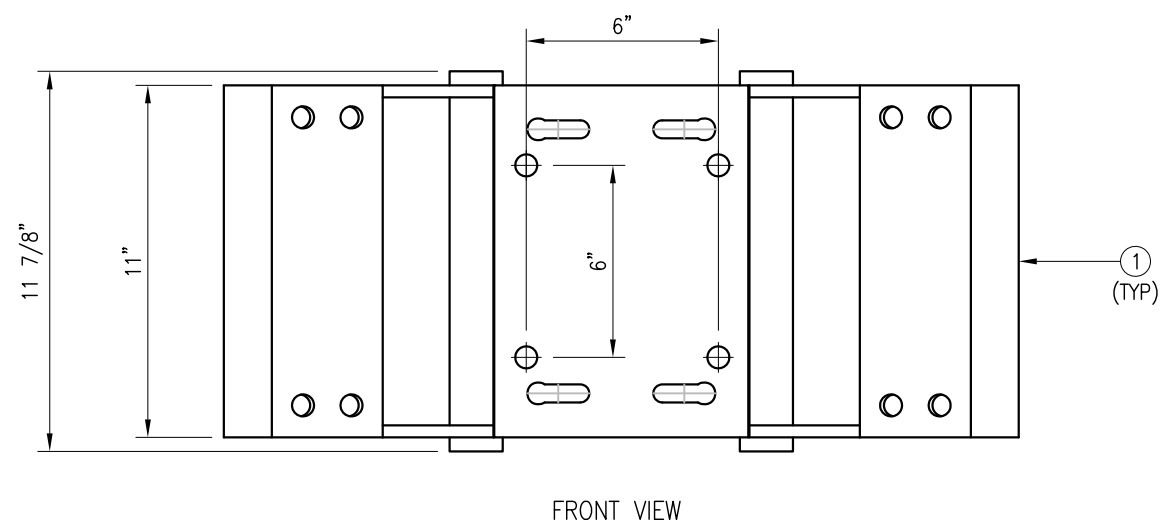
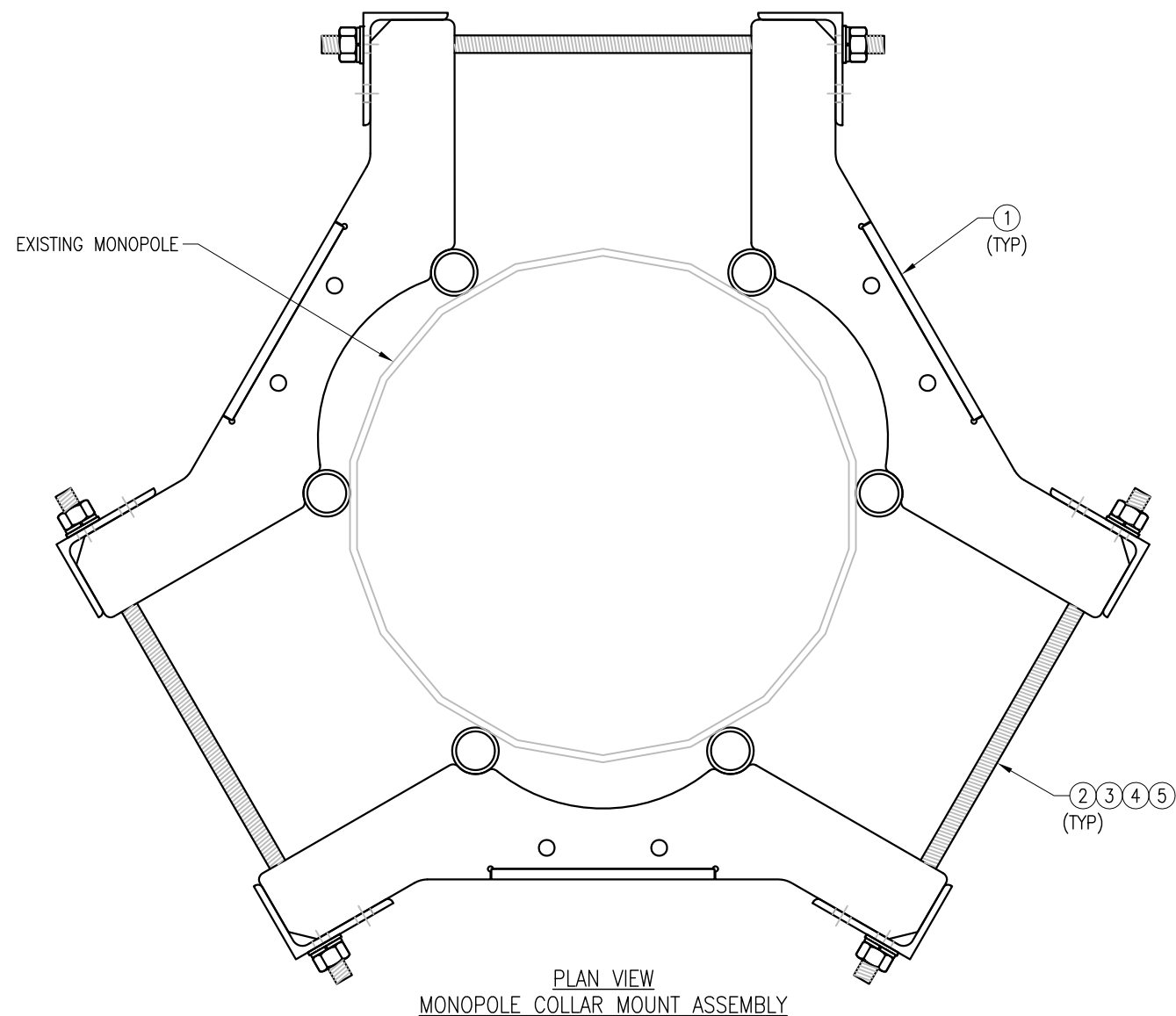
FOR REFERENCE
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DRAWN BY: BT CHECKED BY: HMA/KW

REV.	DESCRIPTION	BY	DATE
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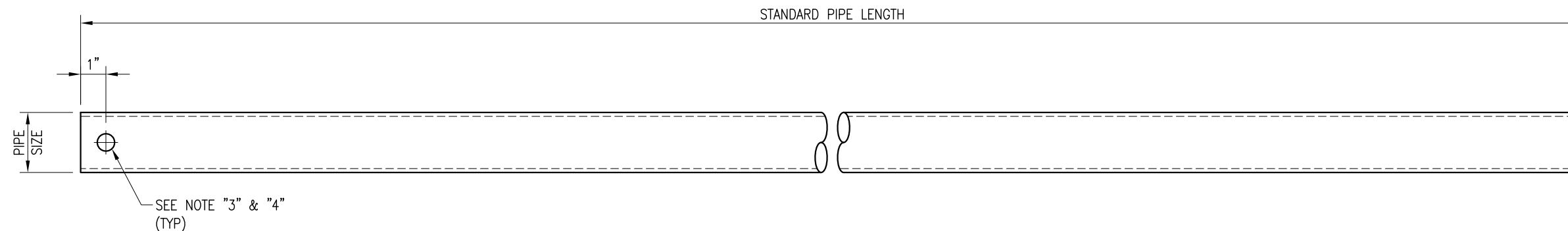
SHEET TITLE:
 VZSMART-PLK7
 MONOPOLE COLLAR
 MOUNT ASSEMBLY

SHEET NUMBER: VZSMART-PLK7 REV #: 0



NOTES:
 1. FIT 12" TO 45" DIA MONOPOLE.
 2. HOT-DIPPED GALVANIZED PER ASTM A123.

VZSMART-PLK7 (MONOPOLE COLLAR MOUNT ASSEMBLY)					
ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	3	CM-1245	COLLAR MOUNT ASSEMBLY	PLK7-F1	147
2	6	---	THREADED ROD 5/8" X 4'-0" A193-B7	---	---
3	12	FW-625	5/8" HDG USS FLAT WASHER	---	1
4	12	LW-625	5/8" HDG LOCK WASHER	---	0
5	12	NUT-625	5/8" HDG HEX NUT	---	1
GALVANIZED WT					150



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

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

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

FOR REFERENCE
 ONLY

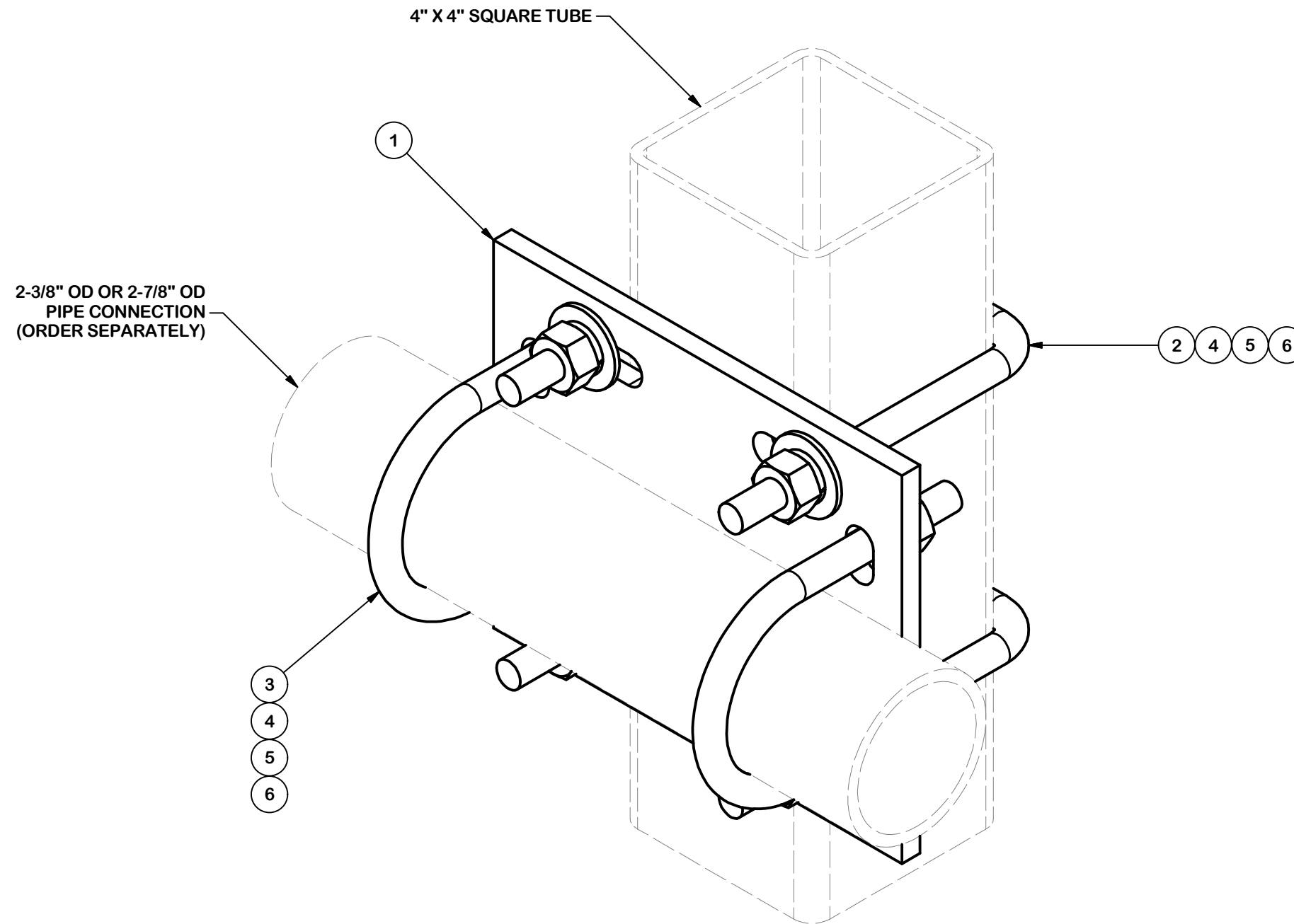
DRAWN BY: BT CHECKED BY: HMA/KW

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

SHEET TITLE:
 VZWSMART
 STANDARD PIPE

SHEET NUMBER: VZWSMART-PIPE REV #: 0

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



FOR REFERENCE ONLY

TOLERANCE NOTES

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

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

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

CPD NO.	DRAWN BY	ENG. APPROVAL
	CSL 9/18/2018	3RD PARTY
CLASS	DRAWING USAGE	CHECKED BY
87	CUSTOMER	BMC 11/12/2018

SITE PRO 1
 A valmont COMPANY

Engineering Support Team:
 1-888-753-7446

Locations:
 New York, NY
 Atlanta, GA
 Los Angeles, CA
 Plymouth, IN
 Salem, OR
 Dallas, TX

PART NO.	SQCX4-K
DWG. NO.	SQCX4-K





Antenna Mount Mapping Form (PATENT PENDING)

FCC #
UNKNOWN

Tower Owner:	ATC	Mapping Date:	3/28/2021
Site Name:	ATC : WOODSTOCK RELO CT, VZW : WOODSTOCK CT RELO	Tower Type:	Monopole
Site Number or ID:	ATC : 418609	Tower Height (Ft.):	149.3
Mapping Contractor:	RKS DESIGN AND ENGINEERING LLC	Mount Elevation (Ft.):	146.6

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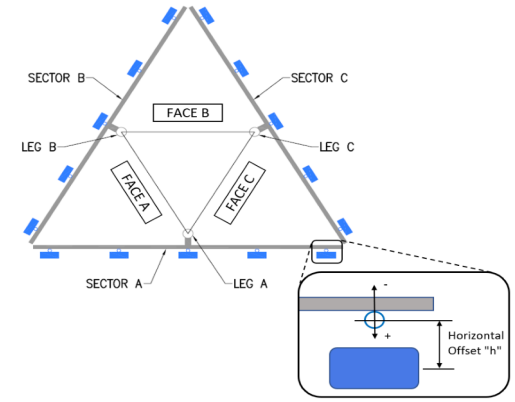
Please insert the sketches of the antenna mount from the "Sketches" tab with dimensions and members here.

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	PIPE 2.375" Ø X 0.15" X 102" LON	52.25	11.50	C1	PIPE 2.375" Ø X 0.15" X 102" LONG	52.25	11.50
A2	PIPE 2.375" Ø X 0.15" X 102" LON	52.25	34.50	C2	PIPE 2.375" Ø X 0.15" X 102" LONG	52.25	34.50
A3	PIPE 2.375" Ø X 0.15" X 102" LON	52.00	82.50	C3	PIPE 2.375" Ø X 0.15" X 102" LONG	52.00	82.50
A4	PIPE 2.375" Ø X 0.15" X 102" LON	52.00	129.50	C4	PIPE 2.375" Ø X 0.15" X 102" LONG	52.00	129.50
A5	PIPE 2.375" Ø X 0.15" X 102" LON	52.00	153.25	C5	PIPE 2.375" Ø X 0.15" X 102" LONG	52.00	153.25
A6				C6			
B1	PIPE 2.375" Ø X 0.15" X 102" LON	52.25	11.50	D1			
B2	PIPE 2.375" Ø X 0.15" X 102" LON	52.25	34.50	D2			
B3	PIPE 2.375" Ø X 0.15" X 102" LON	52.00	82.50	D3			
B4	PIPE 2.375" Ø X 0.15" X 102" LON	52.00	129.50	D4			
B5	PIPE 2.375" Ø X 0.15" X 102" LON	52.00	153.25	D5			
B6				D6			

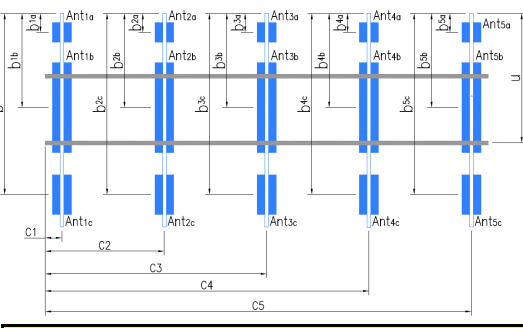
Distance between bottom rail and mount CL elevation (dim d). Unit is inches. See 'Mount Elev Ref' tab for details. :
 Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) :
 Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) : 5.3

Please enter additional information or comments below.

Tower Face Width at Mount Elev. (ft.):	Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.): 30.87
----------------------------------------	-------------------------------------------------------------------

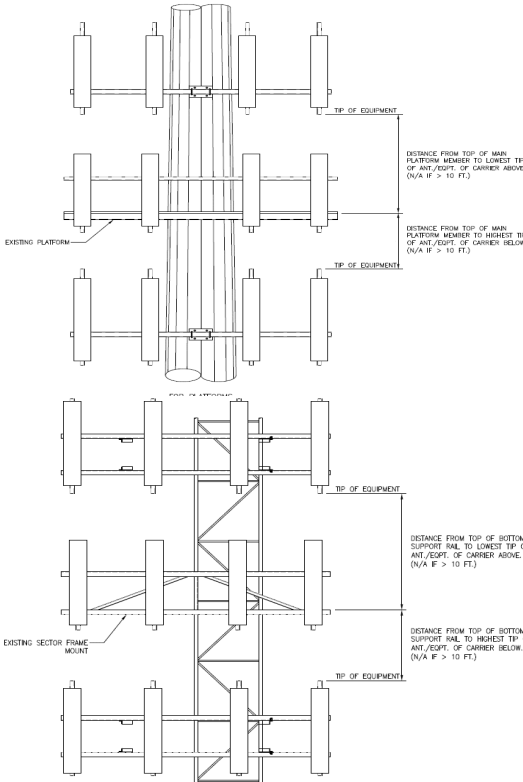


Ants. Items	Enter antenna model. If not labeled, enter "Unknown".					Mounting Locations [Units are inches and degrees]			Photos of antennas	
	Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Vertical Distances "b _{1a} , b _{2a} , b _{3a} , b _{1b} ,..." (Inches)	Horiz. Offset "h" (Use "-" if Ant. is behind)	Antenna Azimuth (Degrees)	Photo Numbers
Sector A										
Ant _{1a}										
Ant _{1b}	LNX-6514DS-A1M	11.90	7.10	72.70		147.913	36.50	8.50	340.00	8
Ant _{1c}										
Ant _{2a}	B66A RRH 4X45 UHIE	11.80	7.20	25.80		149.6	16.25	-6.50		158
Ant _{2b}										
Ant _{2c}										
Ant _{3a}										
Ant _{3b}	(2)SBNHH-1D65B	11.90	7.10	72.00		147.892	36.50	9.50	340.00	8
Ant _{3c}										
Ant _{4a}	B13 RRH4X30	11.80	7.50	20.90		148.808	25.50	-6.75		160
Ant _{4b}										
Ant _{4c}										
Ant _{5a}										
Ant _{5b}	LPA-80063-6CF-EDIN	15.20	13.10	71.10		147.892	36.50	13.50	340.00	8
Ant _{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										



Antenna Layout (Looking Out From Tower)

Mount Azimuth (Degree) for Each Sector		Tower Leg Azimuth (Degree) for Each Sector		Sector B																
Sector A:	10.00	Deg	Leg A:		Deg	Ant _{1a}														
Sector B:	130.00	Deg	Leg B:		Deg	Ant _{1b}	LNX-6514DS-A1M	11.90	7.10	72.70		147.913	36.50	8.50	90.00					
Sector C:	250.00	Deg	Leg C:		Deg	Ant _{1c}														
Sector D:		Deg	Leg D:		Deg	Ant _{2a}	B66A RRH 4X45 UHIE	11.80	7.20	25.80		149.6	16.25	-6.50					161	
Climbing Facility Information						Ant _{2b}														
Location:	310.00	Deg		N/A		Ant _{2c}														
Climbing Facility	Corrosion Type:			N/A		Ant _{3a}														
	Access:			Climbing path was unobstructed.		Ant _{3b}	(2)SBNHH-1D65B	11.90	7.10	72.00		147.892	36.50	9.50	90.00				17	
	Condition:			Good condition.		Ant _{3c}														
						Ant _{4a}	B13 RRH4X30	11.80	7.50	20.90		148.808	25.50	-6.75					163	
						Ant _{4b}														
						Ant _{4c}														
						Ant _{5a}														
						Ant _{5b}	LPA-80063-6CF-EDIN	15.20	13.10	71.10		147.892	36.50	13.50	90.00					17
						Ant _{5c}														
						Ant on Standoff														
						Ant on Standoff														
						Ant on Tower														
						Ant on Tower														
						Sector C														
						Ant _{1a}														
						Ant _{1b}	LNX-6514DS-A1M	11.90	7.10	72.70		147.913	36.50	8.50	230.00					26
						Ant _{1c}														
						Ant _{2a}	B66A RRH 4X45 UHIE	11.80	7.20	25.80		149.6	16.25	-6.50					164	
						Ant _{2b}														
						Ant _{2c}														
						Ant _{3a}														
						Ant _{3b}	(2)SBNHH-1D65B	11.90	7.10	72.00		147.892	36.50	9.50	230.00					26
						Ant _{3c}														
						Ant _{4a}	B13 RRH4X30	11.80	7.50	20.90		148.808	25.50	-6.75					166	
						Ant _{4b}														
						Ant _{4c}														
						Ant _{5a}														
						Ant _{5b}	LPA-80063-6CF-EDIN	15.20	13.10	71.10		147.892	36.50	13.50	230.00					26
						Ant _{5c}														
						Ant on Standoff														
						Ant on Standoff														
						Ant on Tower	RRFDC-6627-PF-48	16.50	12.60	29.50			40.00						164	
						Ant on Tower														
						Sector D														
						Ant _{1a}														
						Ant _{1b}														
						Ant _{1c}														
						Ant _{2a}														
						Ant _{2b}														
						Ant _{2c}														
						Ant _{3a}														
						Ant _{3b}														
						Ant _{3c}														
						Ant _{4a}														
						Ant _{4b}														
						Ant _{4c}														
						Ant _{5a}														
						Ant _{5b}														
						Ant _{5c}														
						Ant on Standoff														
						Ant on Standoff														
						Ant on Tower														
						Ant on Tower														



Observed Safety and Structural Issues During the Mount Mapping		
Issue #	Description of Issue	Photo #

1	COAX TOTAL (16): (6) FH 1-5/8 HYBRID, (2) 1.5" Ø HYBRID, (8) FH 1-5/8 CUT	
2		
3		
4		
5		
6		
7		
8		

Mapping Notes

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

Standard Conditions

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



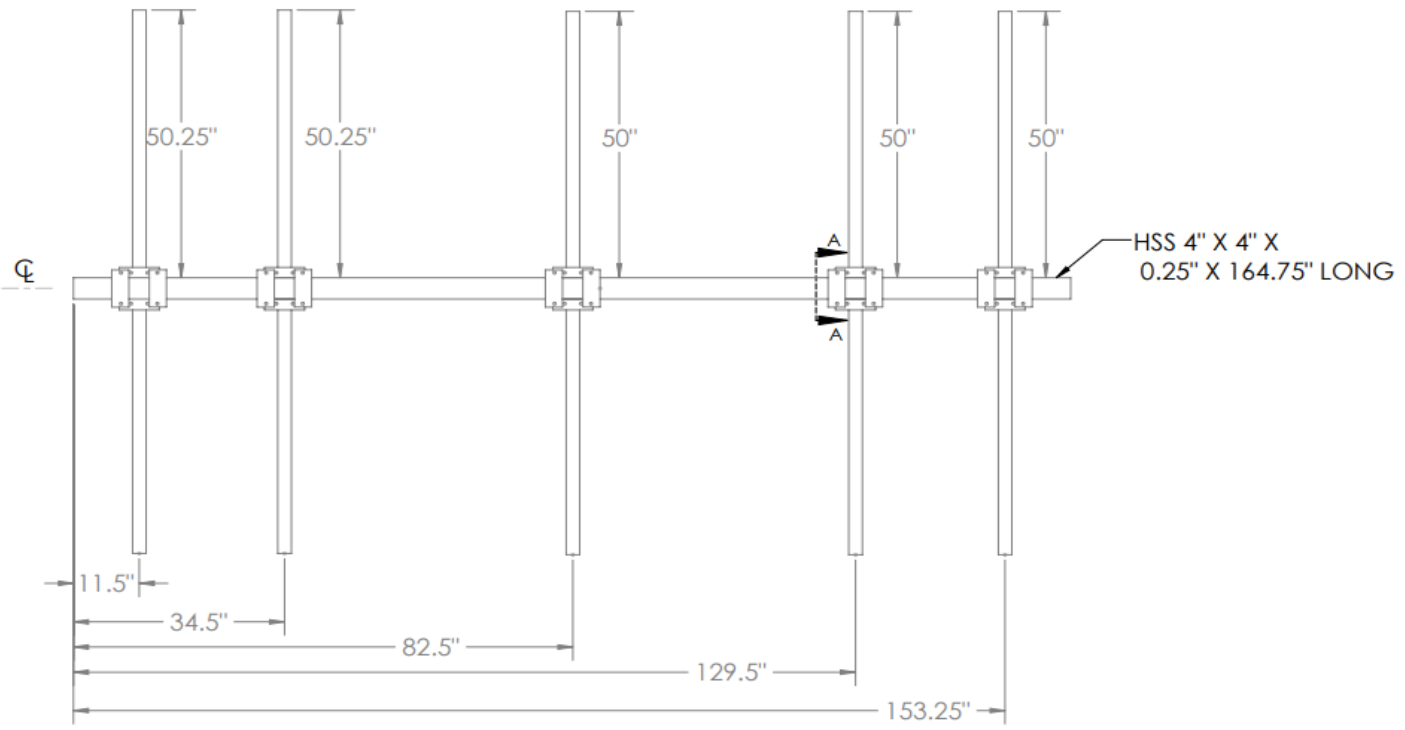
Antenna Mount Mapping Form (PATENT PENDING)

FCC #
UNKNOWN

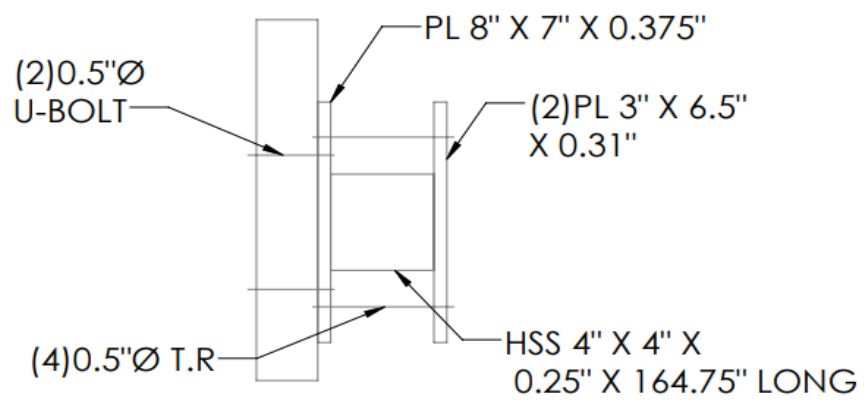
Tower Owner:	ATC	Mapping Date:	3/28/2021
Site Name:	ATC : WOODSTOCK RELO CT, VZW : WOODSTOCK CT RELO	Tower Type:	Monopole
Site Number or ID:	ATC : 418609	Tower Height (Ft.):	149.3
Mapping Contractor:	RKS DESIGN AND ENGINEERING LLC	Mount Elevation (Ft.):	146.6

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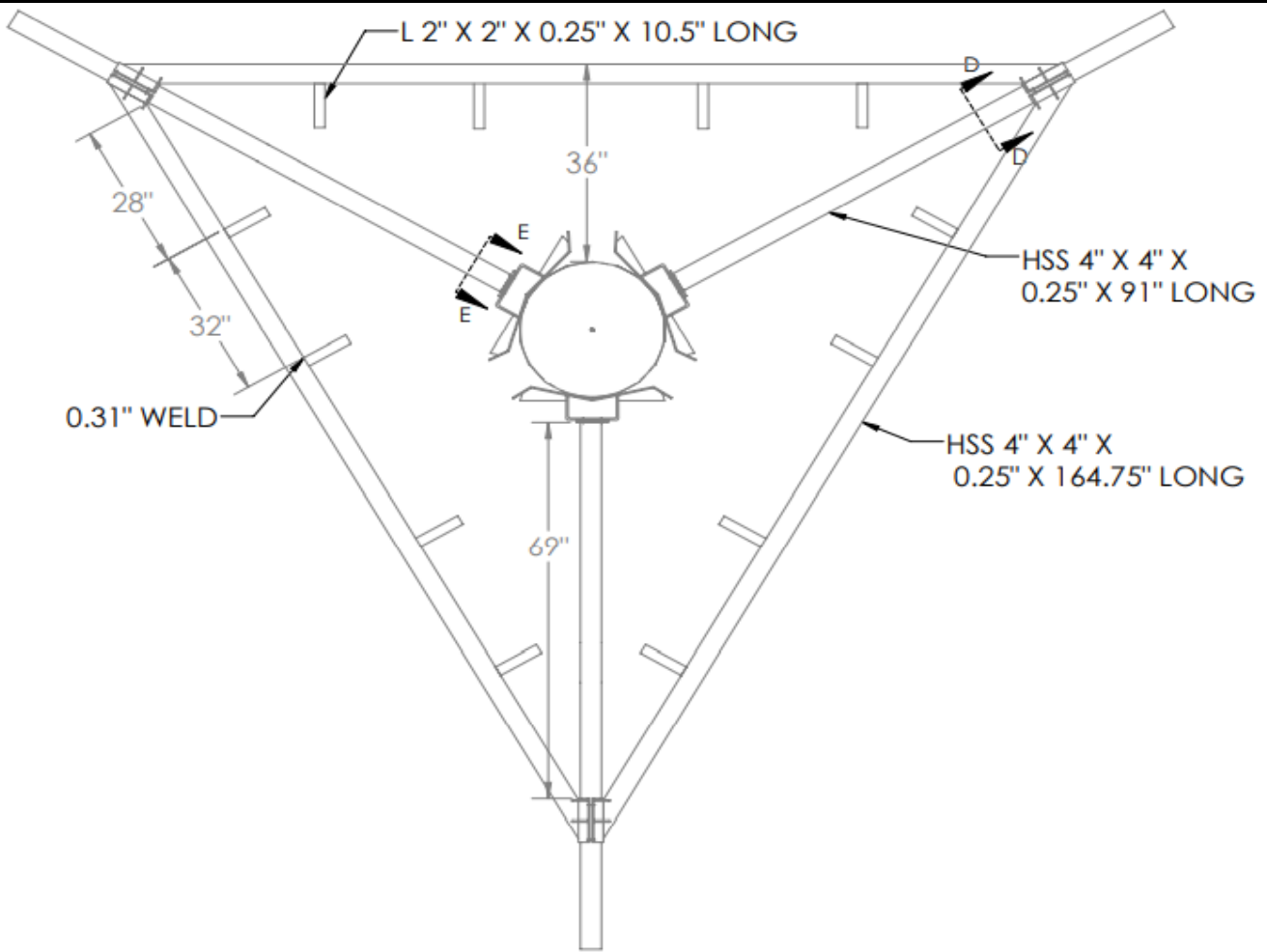
Please Insert Sketches of the Antenna Mount



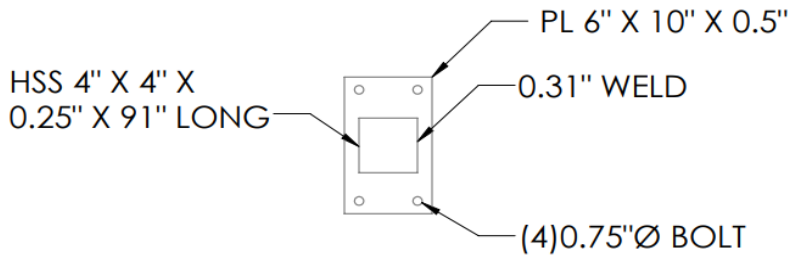
SECTOR A,B,C



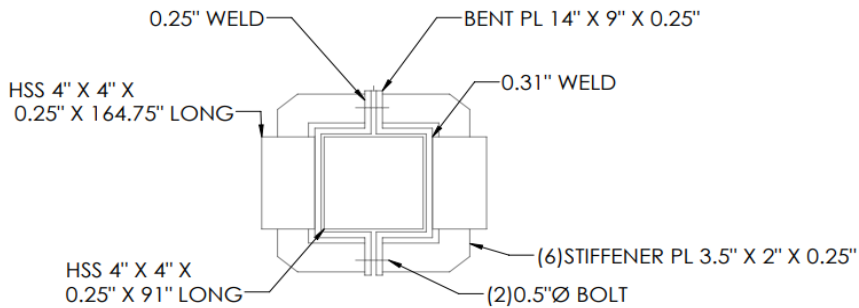
SECTION A-A



MOUNT VIEW

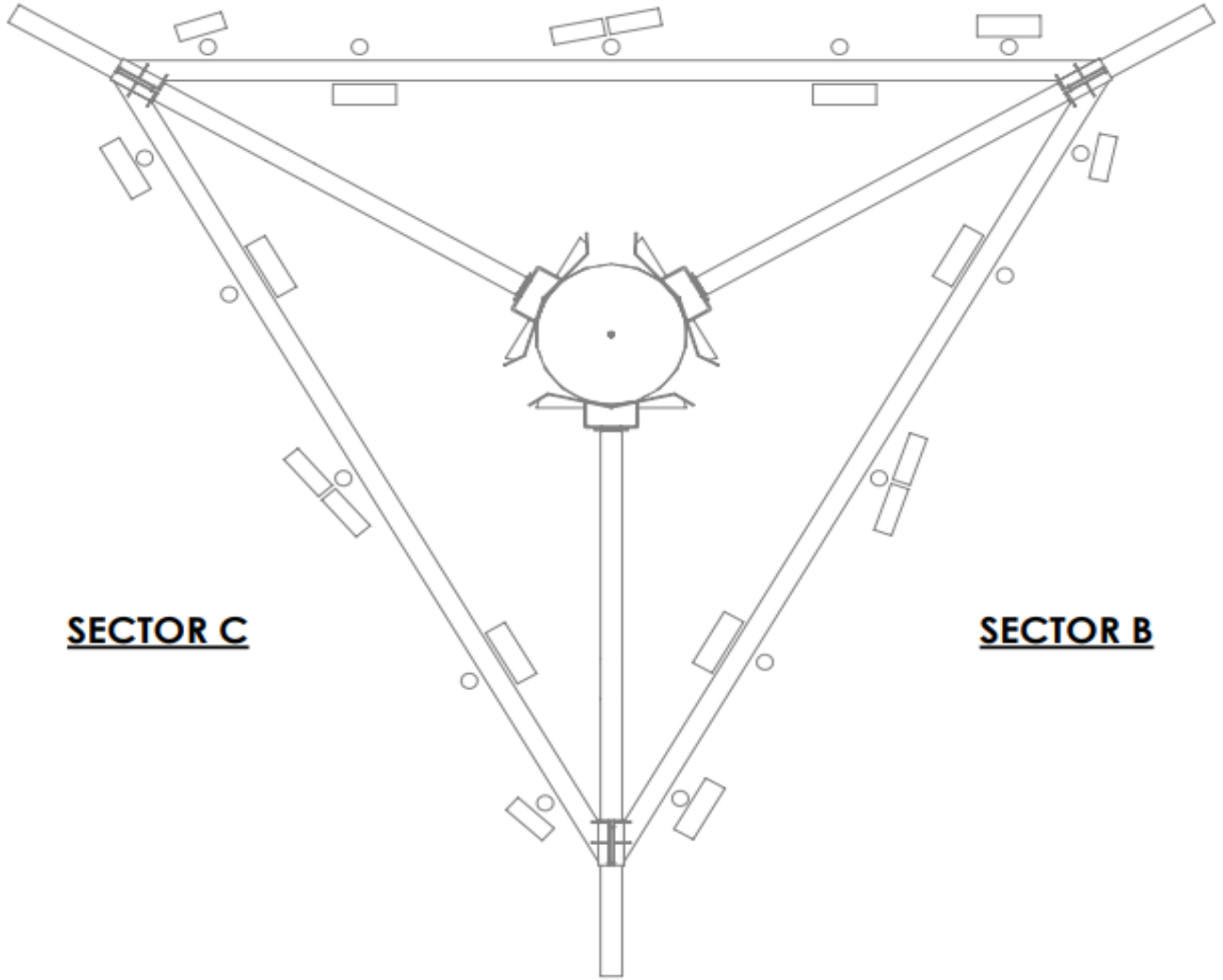


SECTION E-E



SECTION D-D

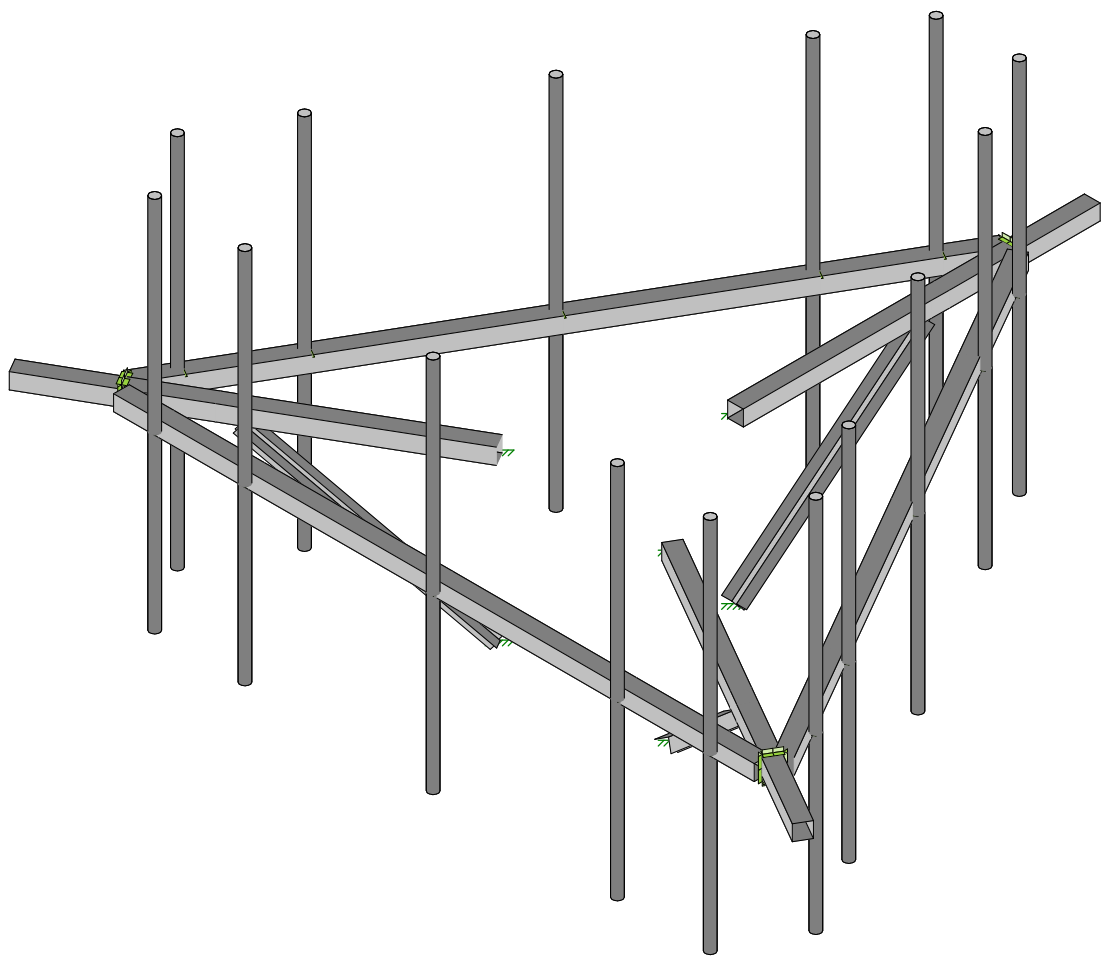
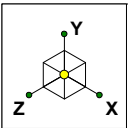
SECTOR A



SECTOR C

SECTOR B

ANTENNA PLAN VIEW



Envelope Only Solution

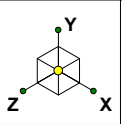
Colliers Engineering & De...
Project # 21777445

Antenna Mount Analysis

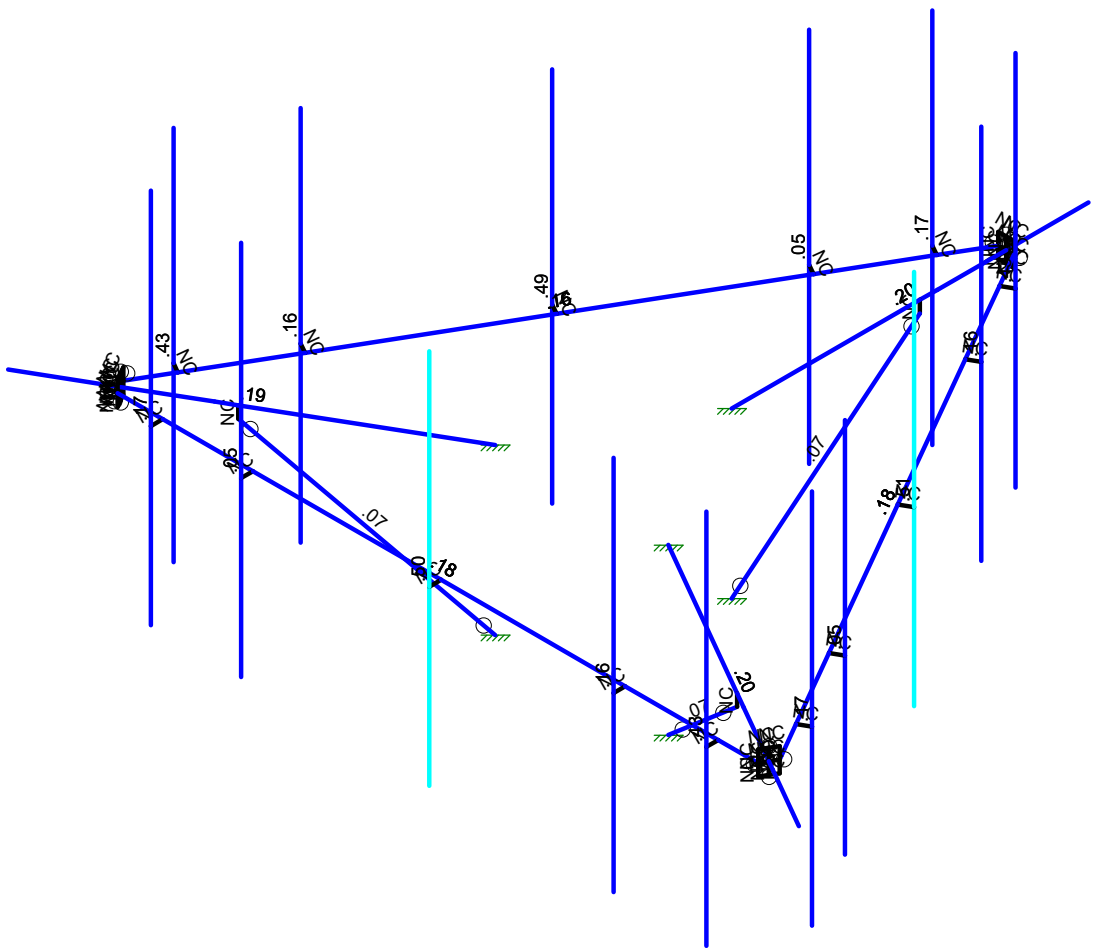
SK - 1

Mar 21, 2024 at 11:54 AM

5000245761-VZW_MT_LO_H.r3d

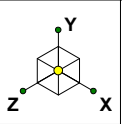


Code Check (Env)	
Black	No Calc
Red	> 1.0
Pink	.90-1.0
Green	.75-.90
Cyan	.50-.75
Blue	0.-.50



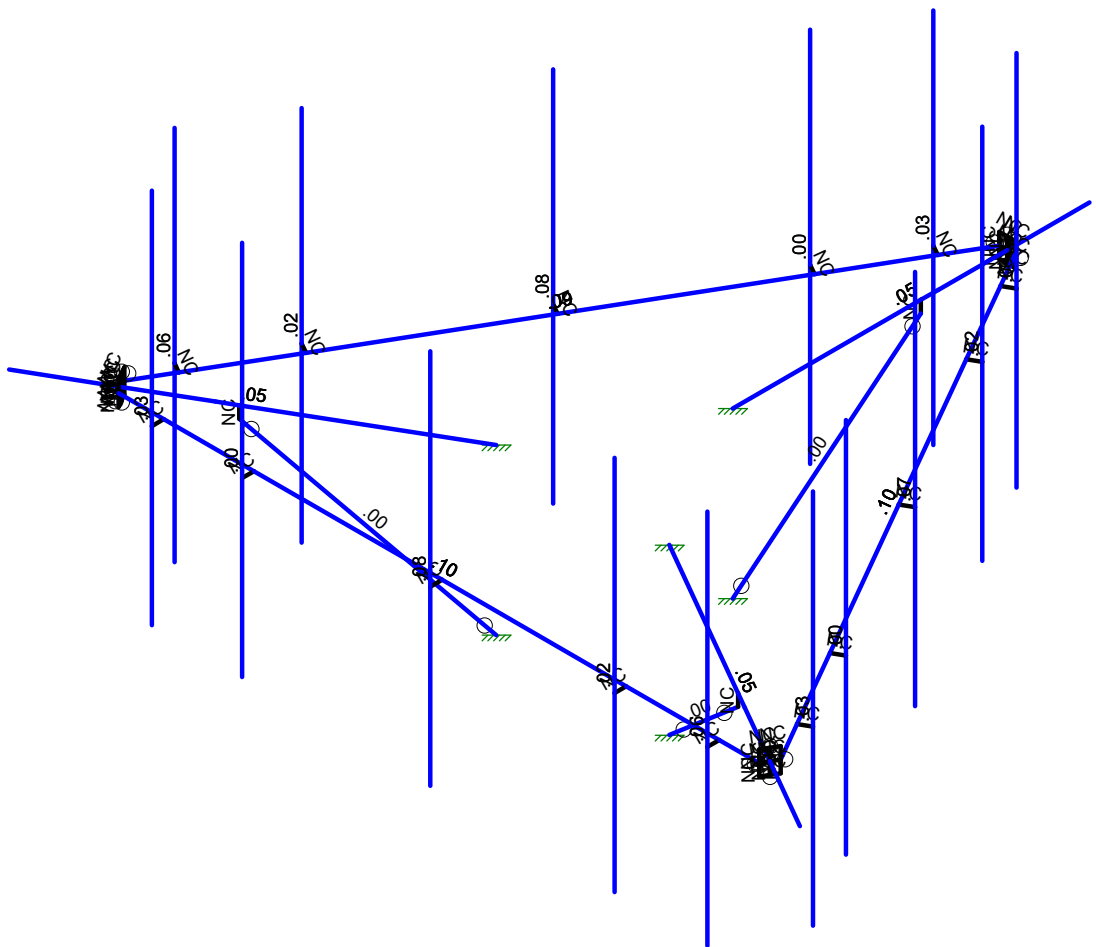
Member Code Checks Displayed (Enveloped)
Envelope Only Solution

Colliers Engineering & De...	Antenna Mount Analysis	SK - 2
		Mar 21, 2024 at 11:54 AM
Project # 21777445		5000245761-VZW_MT_LO_H.r3d



Shear Check
(Env)

No Calc
> 1.0
.90-1.0
.75-.90
.50-.75
0- .50



Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

Colliers Engineering & De...	Antenna Mount Analysis	SK - 3
		Mar 21, 2024 at 11:54 AM
Project # 21777445		5000245761-VZW_MT_LO_H.r3d

Basic Load Cases

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

Basic Load Cases (Continued)

	BLC Description	Category	X Gr...	Y Gr...	Z Gr...	Joint	Point	Distributed	Area(Member)	Surfa...
62	Structure Wi (270 Deg)	None						48		
63	Structure Wi (300 Deg)	None						48		
64	Structure Wi (330 Deg)	None						48		
65	Structure Wm (0 Deg)	None						48		
66	Structure Wm (30 Deg)	None						48		
67	Structure Wm (60 Deg)	None						48		
68	Structure Wm (90 Deg)	None						48		
69	Structure Wm (120 Deg)	None						48		
70	Structure Wm (150 Deg)	None						48		
71	Structure Wm (180 Deg)	None						48		
72	Structure Wm (210 Deg)	None						48		
73	Structure Wm (240 Deg)	None						48		
74	Structure Wm (270 Deg)	None						48		
75	Structure Wm (300 Deg)	None						48		
76	Structure Wm (330 Deg)	None						48		
77	Lm1	None					1			
78	Lm2	None					1			
79	Lv1	None					1			
80	Lv2	None					1			
81	Antenna Ev	None					90			
82	Antenna Eh (0 Deg)	None					60			
83	Antenna Eh (90 Deg)	None					60			
84	Structure Ev	ELY		-.0388					3	
85	Structure Eh (0 Deg)	ELZ			-.0971				3	
86	Structure Eh (90 Deg)	ELX	.0971						3	
87	BLC 39 Transient Area Loads	None						15		
88	BLC 40 Transient Area Loads	None						15		
89	BLC 84 Transient Area Loads	None						33		
90	BLC 85 Transient Area Loads	None						33		
91	BLC 86 Transient Area Loads	None						33		

Load Combinations

	Description	S...	PDe...	SR...	BLC Fa...	BLC Fa...	BLC Fac...	B...	FactorB...	B...	B...	B...	BLC Fa...	B...	B...	B...	B...	B...
1	1.2D+1.0Wo (0 Deg)	Y...	Y		1	1.2	39	1.2	3	1	41	1						
2	1.2D+1.0Wo (30 Deg)	Y...	Y		1	1.2	39	1.2	4	1	42	1						
3	1.2D+1.0Wo (60 Deg)	Y...	Y		1	1.2	39	1.2	5	1	43	1						
4	1.2D+1.0Wo (90 Deg)	Y...	Y		1	1.2	39	1.2	6	1	44	1						
5	1.2D+1.0Wo (120 Deg)	Y...	Y		1	1.2	39	1.2	7	1	45	1						
6	1.2D+1.0Wo (150 Deg)	Y...	Y		1	1.2	39	1.2	8	1	46	1						
7	1.2D+1.0Wo (180 Deg)	Y...	Y		1	1.2	39	1.2	9	1	47	1						
8	1.2D+1.0Wo (210 Deg)	Y...	Y		1	1.2	39	1.2	10	1	48	1						
9	1.2D+1.0Wo (240 Deg)	Y...	Y		1	1.2	39	1.2	11	1	49	1						
10	1.2D+1.0Wo (270 Deg)	Y...	Y		1	1.2	39	1.2	12	1	50	1						
11	1.2D+1.0Wo (300 Deg)	Y...	Y		1	1.2	39	1.2	13	1	51	1						
12	1.2D+1.0Wo (330 Deg)	Y...	Y		1	1.2	39	1.2	14	1	52	1						
13	1.2D + 1.0Di + 1.0Wi (0 De...	Y...	Y		1	1.2	39	1.2	2	1	40	1	15	1	53	1		
14	1.2D + 1.0Di + 1.0Wi (30 D...	Y...	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1		
15	1.2D + 1.0Di + 1.0Wi (60 D...	Y...	Y		1	1.2	39	1.2	2	1	40	1	17	1	55	1		
16	1.2D + 1.0Di + 1.0Wi (90 D...	Y...	Y		1	1.2	39	1.2	2	1	40	1	18	1	56	1		
17	1.2D + 1.0Di + 1.0Wi (120 ...	Y...	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1		
18	1.2D + 1.0Di + 1.0Wi (150 ...	Y...	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1		
19	1.2D + 1.0Di + 1.0Wi (180 ...	Y...	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1		
20	1.2D + 1.0Di + 1.0Wi (210 ...	Y...	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1		
21	1.2D + 1.0Di + 1.0Wi (240 ...	Y...	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1		
22	1.2D + 1.0Di + 1.0Wi (270 ...	Y...	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1		
23	1.2D + 1.0Di + 1.0Wi (300 ...	Y...	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1		
24	1.2D + 1.0Di + 1.0Wi (330 ...	Y...	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1		
25	1.2D + 1.5Lm1 + 1.0Wm (...	Y...	Y		1	1.2	39	1.2	77	1.5	27	1	65	1				
26	1.2D + 1.5Lm1 + 1.0Wm (...	Y...	Y		1	1.2	39	1.2	77	1.5	28	1	66	1				
27	1.2D + 1.5Lm1 + 1.0Wm (...	Y...	Y		1	1.2	39	1.2	77	1.5	29	1	67	1				

Load Combinations (Continued)

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

Hot Rolled Steel Section Sets

Label	Shape	Type	Design List	Material	Desig... A [in2]	Iyy [i...	Izz [i...	J [in4]	
1	Face Horizontal	Beam	SquareTube	A500 Gr.B Rect	Typical	3.37	7.8	7.8	12.8
2	Standoff Horizontal	Beam	SquareTube	A500 Gr.B Rect	Typical	3.37	7.8	7.8	12.8
3	Mod Mount Pipe	Column	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25
4	Mod Kicker	Column	Double Angle ...	A36 Gr.36	Typical	2.18	4.09	1.9	.0272

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/...	Density[k/ft^3]	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A992	29000	11154	.3	.65	.49	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	.3	.65	.527	42	1.4	58	1.3
5	A500 Gr.B Rect	29000	11154	.3	.65	.527	46	1.4	58	1.3
6	A53 Gr.B	29000	11154	.3	.65	.49	35	1.6	60	1.2
7	A1085	29000	11154	.3	.65	.49	50	1.4	65	1.3
8	Q235	29000	11154	.3	.65	.49	35	1.5	58	1.2

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Ru...
1	M1	N18	N27			Face Horizontal	Beam	SquareTube	A500 Gr...	Typical
2	M2	N8	N17			Face Horizontal	Beam	SquareTube	A500 Gr...	Typical
3	M3	N28	N7			Face Horizontal	Beam	SquareTube	A500 Gr...	Typical
4	M4	N2	N5			Standoff Horizontal	Beam	SquareTube	A500 Gr...	Typical
5	M5	N3	N25			Standoff Horizontal	Beam	SquareTube	A500 Gr...	Typical
6	M6	N4	N15			Standoff Horizontal	Beam	SquareTube	A500 Gr...	Typical
7	MP1A	N52	N57			Mod Mount Pipe	Column	Pipe	A53 Gr.B	Typical
8	MP2A	N51	N56			Mod Mount Pipe	Column	Pipe	A53 Gr.B	Typical
9	MP3A	N50	N55			Mod Mount Pipe	Column	Pipe	A53 Gr.B	Typical
10	MP4A	N49	N54			Mod Mount Pipe	Column	Pipe	A53 Gr.B	Typical
11	MP5A	N48	N53			Mod Mount Pipe	Column	Pipe	A53 Gr.B	Typical
12	MP1B	N92	N97			Mod Mount Pipe	Column	Pipe	A53 Gr.B	Typical
13	MP2B	N91	N96			Mod Mount Pipe	Column	Pipe	A53 Gr.B	Typical
14	MP3B	N90	N95			Mod Mount Pipe	Column	Pipe	A53 Gr.B	Typical
15	MP4B	N89	N94			Mod Mount Pipe	Column	Pipe	A53 Gr.B	Typical
16	MP5B	N88	N93			Mod Mount Pipe	Column	Pipe	A53 Gr.B	Typical
17	MP1C	N72	N77			Mod Mount Pipe	Column	Pipe	A53 Gr.B	Typical
18	MP2C	N71	N76			Mod Mount Pipe	Column	Pipe	A53 Gr.B	Typical
19	MP3C	N70	N75			Mod Mount Pipe	Column	Pipe	A53 Gr.B	Typical
20	MP4C	N69	N74			Mod Mount Pipe	Column	Pipe	A53 Gr.B	Typical
21	MP5C	N68	N73			Mod Mount Pipe	Column	Pipe	A53 Gr.B	Typical
22	M22	N8	N6			RIGID	None	None	RIGID	Typical
23	M23	N7	N6			RIGID	None	None	RIGID	Typical
24	M24	N11	N9			RIGID	None	None	RIGID	Typical
25	M25	N10	N9			RIGID	None	None	RIGID	Typical
26	M26	N14	N12			RIGID	None	None	RIGID	Typical
27	M27	N13	N12			RIGID	None	None	RIGID	Typical
28	M28	N9	N6			RIGID	None	None	RIGID	Typical
29	M29	N12	N6			RIGID	None	None	RIGID	Typical
30	M30	N8	N11			RIGID	None	None	RIGID	Typical
31	M31	N7	N10			RIGID	None	None	RIGID	Typical
32	M32	N8	N14			RIGID	None	None	RIGID	Typical
33	M33	N7	N13			RIGID	None	None	RIGID	Typical
34	M34	N18	N16			RIGID	None	None	RIGID	Typical
35	M35	N17	N16			RIGID	None	None	RIGID	Typical
36	M36	N21	N19			RIGID	None	None	RIGID	Typical
37	M37	N20	N19			RIGID	None	None	RIGID	Typical
38	M38	N24	N22			RIGID	None	None	RIGID	Typical
39	M39	N23	N22			RIGID	None	None	RIGID	Typical
40	M40	N19	N16			RIGID	None	None	RIGID	Typical
41	M41	N22	N16			RIGID	None	None	RIGID	Typical
42	M42	N18	N21			RIGID	None	None	RIGID	Typical
43	M43	N17	N20			RIGID	None	None	RIGID	Typical
44	M44	N18	N24			RIGID	None	None	RIGID	Typical
45	M45	N17	N23			RIGID	None	None	RIGID	Typical
46	M46	N28	N26			RIGID	None	None	RIGID	Typical
47	M47	N27	N26			RIGID	None	None	RIGID	Typical
48	M48	N31	N29			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Ru...
49	M49	N30	N29			RIGID	None	None	RIGID	Typical
50	M50	N34	N32			RIGID	None	None	RIGID	Typical
51	M51	N33	N32			RIGID	None	None	RIGID	Typical
52	M52	N29	N26			RIGID	None	None	RIGID	Typical
53	M53	N32	N26			RIGID	None	None	RIGID	Typical
54	M54	N28	N31			RIGID	None	None	RIGID	Typical
55	M55	N27	N30			RIGID	None	None	RIGID	Typical
56	M56	N28	N34			RIGID	None	None	RIGID	Typical
57	M57	N27	N33			RIGID	None	None	RIGID	Typical
58	M58	N42	N47			RIGID	None	None	RIGID	Typical
59	M59	N41	N46			RIGID	None	None	RIGID	Typical
60	M60	N40	N45			RIGID	None	None	RIGID	Typical
61	M61	N39	N44			RIGID	None	None	RIGID	Typical
62	M62	N38	N43			RIGID	None	None	RIGID	Typical
63	M63	N62	N67			RIGID	None	None	RIGID	Typical
64	M64	N61	N66			RIGID	None	None	RIGID	Typical
65	M65	N60	N65			RIGID	None	None	RIGID	Typical
66	M66	N59	N64			RIGID	None	None	RIGID	Typical
67	M67	N58	N63			RIGID	None	None	RIGID	Typical
68	M68	N82	N87			RIGID	None	None	RIGID	Typical
69	M69	N81	N86			RIGID	None	None	RIGID	Typical
70	M70	N80	N85			RIGID	None	None	RIGID	Typical
71	M71	N79	N84			RIGID	None	None	RIGID	Typical
72	M72	N78	N83			RIGID	None	None	RIGID	Typical
73	M100	N150	N153			RIGID	None	None	RIGID	Typical
74	M101	N151	N154			RIGID	None	None	RIGID	Typical
75	M102	N149	N152			RIGID	None	None	RIGID	Typical
76	M103	N153	N148			Mod Kicker	Column	Double Angl..	A36 Gr.36	Typical
77	M104	N152	N146			Mod Kicker	Column	Double Angl..	A36 Gr.36	Typical
78	M105	N154	N147			Mod Kicker	Column	Double Angl..	A36 Gr.36	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Ratio Opti...	Analysis ...	Inactive	Seismi...
1	M1						Yes				None
2	M2						Yes				None
3	M3						Yes				None
4	M4						Yes				None
5	M5						Yes				None
6	M6						Yes				None
7	MP1A						Yes	** NA **			None
8	MP2A						Yes	** NA **			None
9	MP3A						Yes	** NA **			None
10	MP4A						Yes	** NA **			None
11	MP5A						Yes	** NA **			None
12	MP1B						Yes	** NA **			None
13	MP2B						Yes	** NA **			None
14	MP3B						Yes	** NA **			None
15	MP4B						Yes	** NA **			None
16	MP5B						Yes	** NA **			None
17	MP1C						Yes	** NA **			None
18	MP2C						Yes	** NA **			None
19	MP3C						Yes	** NA **			None
20	MP4C						Yes	** NA **			None
21	MP5C						Yes	** NA **			None
22	M22		BenPIN				Yes	** NA **			None
23	M23		BenPIN				Yes	** NA **			None
24	M24						Yes	** NA **			None
25	M25						Yes	** NA **			None
26	M26						Yes	** NA **			None
27	M27						Yes	** NA **			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Ratio Opti...	Analysis ...	Inactive	Seismi...
28	M28		BenPIN				Yes	** NA **			None
29	M29		BenPIN				Yes	** NA **			None
30	M30						Yes	** NA **			None
31	M31						Yes	** NA **			None
32	M32						Yes	** NA **			None
33	M33						Yes	** NA **			None
34	M34		BenPIN				Yes	** NA **			None
35	M35		BenPIN				Yes	** NA **			None
36	M36						Yes	** NA **			None
37	M37						Yes	** NA **			None
38	M38						Yes	** NA **			None
39	M39						Yes	** NA **			None
40	M40		BenPIN				Yes	** NA **			None
41	M41		BenPIN				Yes	** NA **			None
42	M42						Yes	** NA **			None
43	M43						Yes	** NA **			None
44	M44						Yes	** NA **			None
45	M45						Yes	** NA **			None
46	M46		BenPIN				Yes	** NA **			None
47	M47		BenPIN				Yes	** NA **			None
48	M48						Yes	** NA **			None
49	M49						Yes	** NA **			None
50	M50						Yes	** NA **			None
51	M51						Yes	** NA **			None
52	M52		BenPIN				Yes	** NA **			None
53	M53		BenPIN				Yes	** NA **			None
54	M54						Yes	** NA **			None
55	M55						Yes	** NA **			None
56	M56						Yes	** NA **			None
57	M57						Yes	** NA **			None
58	M58						Yes	** NA **			None
59	M59						Yes	** NA **			None
60	M60						Yes	** NA **			None
61	M61						Yes	** NA **			None
62	M62						Yes	** NA **			None
63	M63						Yes	** NA **			None
64	M64						Yes	** NA **			None
65	M65						Yes	** NA **			None
66	M66						Yes	** NA **			None
67	M67						Yes	** NA **			None
68	M68						Yes	** NA **			None
69	M69						Yes	** NA **			None
70	M70						Yes	** NA **			None
71	M71						Yes	** NA **			None
72	M72						Yes	** NA **			None
73	M100						Yes	** NA **			None
74	M101						Yes	** NA **			None
75	M102						Yes	** NA **			None
76	M103	BenPIN	BenPIN				Yes	** NA **			None
77	M104	BenPIN	BenPIN				Yes	** NA **			None
78	M105	BenPIN	BenPIN				Yes	** NA **			None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP1A	Y	-22.95	.75
2	MP1A	My	-.0108	.75
3	MP1A	Mz	.0039	.75
4	MP1A	Y	-22.95	5.75
5	MP1A	My	-.0108	5.75
6	MP1A	Mz	.0039	5.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
7	MP1B	Y	-22.95	.75
8	MP1B	My	-.0049	.75
9	MP1B	Mz	-.0104	.75
10	MP1B	Y	-22.95	5.75
11	MP1B	My	-.0049	5.75
12	MP1B	Mz	-.0104	5.75
13	MP1C	Y	-22.95	.75
14	MP1C	My	.0094	.75
15	MP1C	Mz	.0066	.75
16	MP1C	Y	-22.95	5.75
17	MP1C	My	.0094	5.75
18	MP1C	Mz	.0066	5.75
19	MP3A	Y	-20	1.5
20	MP3A	My	-.0083	1.5
21	MP3A	Mz	.0163	1.5
22	MP3A	Y	-20	4.5
23	MP3A	My	-.0083	4.5
24	MP3A	Mz	.0163	4.5
25	MP3B	Y	-20	1.5
26	MP3B	My	-.017	1.5
27	MP3B	Mz	-.0068	1.5
28	MP3B	Y	-20	4.5
29	MP3B	My	-.017	4.5
30	MP3B	Mz	-.0068	4.5
31	MP3C	Y	-20	1.5
32	MP3C	My	.0181	1.5
33	MP3C	Mz	-.0026	1.5
34	MP3C	Y	-20	4.5
35	MP3C	My	.0181	4.5
36	MP3C	Mz	-.0026	4.5
37	MP3A	Y	-20	1.5
38	MP3A	My	-.0168	1.5
39	MP3A	Mz	-.0072	1.5
40	MP3A	Y	-20	4.5
41	MP3A	My	-.0168	4.5
42	MP3A	Mz	-.0072	4.5
43	MP3B	Y	-20	1.5
44	MP3B	My	.0057	1.5
45	MP3B	Mz	-.0174	1.5
46	MP3B	Y	-20	4.5
47	MP3B	My	.0057	4.5
48	MP3B	Mz	-.0174	4.5
49	MP3C	Y	-20	1.5
50	MP3C	My	.0038	1.5
51	MP3C	Mz	.0179	1.5
52	MP3C	Y	-20	4.5
53	MP3C	My	.0038	4.5
54	MP3C	Mz	.0179	4.5
55	MP5A	Y	-28.65	2
56	MP5A	My	-.0135	2
57	MP5A	Mz	.0049	2
58	MP5A	Y	-28.65	4
59	MP5A	My	-.0135	4
60	MP5A	Mz	.0049	4
61	MP5B	Y	-28.65	2
62	MP5B	My	-.0061	2
63	MP5B	Mz	-.013	2
64	MP5B	Y	-28.65	4
65	MP5B	My	-.0061	4
66	MP5B	Mz	-.013	4
67	MP5C	Y	-28.65	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
68	MP5C	My	.0117	2
69	MP5C	Mz	.0082	2
70	MP5C	Y	-28.65	4
71	MP5C	Mv	.0117	4
72	MP5C	Mz	.0082	4
73	MP2A	Y	-74.7	2
74	MP2A	My	.0374	2
75	MP2A	Mz	0	2
76	MP2B	Y	-74.7	2
77	MP2B	My	-.0187	2
78	MP2B	Mz	.0323	2
79	MP2C	Y	-74.7	2
80	MP2C	My	-.0187	2
81	MP2C	Mz	-.0323	2
82	MP3A	Y	-79.1	2
83	MP3A	My	.0396	2
84	MP3A	Mz	0	2
85	MP3B	Y	-79.1	2
86	MP3B	My	-.0198	2
87	MP3B	Mz	.0343	2
88	MP3C	Y	-79.1	2
89	MP3C	My	-.0198	2
90	MP3C	Mz	-.0343	2

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1A	Y	-67.7466	.75
2	MP1A	My	-.0318	.75
3	MP1A	Mz	.0116	.75
4	MP1A	Y	-67.7466	5.75
5	MP1A	Mv	-.0318	5.75
6	MP1A	Mz	.0116	5.75
7	MP1B	Y	-67.7466	.75
8	MP1B	My	-.0143	.75
9	MP1B	Mz	-.0307	.75
10	MP1B	Y	-67.7466	5.75
11	MP1B	Mv	-.0143	5.75
12	MP1B	Mz	-.0307	5.75
13	MP1C	Y	-67.7466	.75
14	MP1C	My	.0277	.75
15	MP1C	Mz	.0194	.75
16	MP1C	Y	-67.7466	5.75
17	MP1C	Mv	.0277	5.75
18	MP1C	Mz	.0194	5.75
19	MP3A	Y	-61.4779	1.5
20	MP3A	My	-.0254	1.5
21	MP3A	Mz	.0501	1.5
22	MP3A	Y	-61.4779	4.5
23	MP3A	Mv	-.0254	4.5
24	MP3A	Mz	.0501	4.5
25	MP3B	Y	-61.4779	1.5
26	MP3B	My	-.0521	1.5
27	MP3B	Mz	-.0209	1.5
28	MP3B	Y	-61.4779	4.5
29	MP3B	My	-.0521	4.5
30	MP3B	Mz	-.0209	4.5
31	MP3C	Y	-61.4779	1.5
32	MP3C	My	.0556	1.5
33	MP3C	Mz	-.008	1.5
34	MP3C	Y	-61.4779	4.5
35	MP3C	My	.0556	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
36	MP3C	Mz	-.008	4.5
37	MP3A	Y	-61.4779	1.5
38	MP3A	My	-.0517	1.5
39	MP3A	Mz	-.0221	1.5
40	MP3A	Y	-61.4779	4.5
41	MP3A	My	-.0517	4.5
42	MP3A	Mz	-.0221	4.5
43	MP3B	Y	-61.4779	1.5
44	MP3B	My	.0175	1.5
45	MP3B	Mz	-.0534	1.5
46	MP3B	Y	-61.4779	4.5
47	MP3B	My	.0175	4.5
48	MP3B	Mz	-.0534	4.5
49	MP3C	Y	-61.4779	1.5
50	MP3C	My	.0115	1.5
51	MP3C	Mz	.055	1.5
52	MP3C	Y	-61.4779	4.5
53	MP3C	My	.0115	4.5
54	MP3C	Mz	.055	4.5
55	MP5A	Y	-29.9849	2
56	MP5A	My	-.0141	2
57	MP5A	Mz	.0051	2
58	MP5A	Y	-29.9849	4
59	MP5A	My	-.0141	4
60	MP5A	Mz	.0051	4
61	MP5B	Y	-29.9849	2
62	MP5B	My	-.0063	2
63	MP5B	Mz	-.0136	2
64	MP5B	Y	-29.9849	4
65	MP5B	My	-.0063	4
66	MP5B	Mz	-.0136	4
67	MP5C	Y	-29.9849	2
68	MP5C	My	.0123	2
69	MP5C	Mz	.0086	2
70	MP5C	Y	-29.9849	4
71	MP5C	My	.0123	4
72	MP5C	Mz	.0086	4
73	MP2A	Y	-45.17	2
74	MP2A	My	.0226	2
75	MP2A	Mz	0	2
76	MP2B	Y	-45.17	2
77	MP2B	My	-.0113	2
78	MP2B	Mz	.0196	2
79	MP2C	Y	-45.17	2
80	MP2C	My	-.0113	2
81	MP2C	Mz	-.0196	2
82	MP3A	Y	-45.6486	2
83	MP3A	My	.0228	2
84	MP3A	Mz	0	2
85	MP3B	Y	-45.6486	2
86	MP3B	My	-.0114	2
87	MP3B	Mz	.0198	2
88	MP3C	Y	-45.6486	2
89	MP3C	My	-.0114	2
90	MP3C	Mz	-.0198	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP1A	X	0	.75
2	MP1A	Z	-187.512	.75
3	MP1A	Mx	-.0321	.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
4	MP1A	X	0	5.75
5	MP1A	Z	-187.512	5.75
6	MP1A	Mx	-.0321	5.75
7	MP1B	X	0	.75
8	MP1B	Z	-141.492	.75
9	MP1B	Mx	.0641	.75
10	MP1B	X	0	5.75
11	MP1B	Z	-141.492	5.75
12	MP1B	Mx	.0641	5.75
13	MP1C	X	0	.75
14	MP1C	Z	-173.661	.75
15	MP1C	Mx	-.0498	.75
16	MP1C	X	0	5.75
17	MP1C	Z	-173.661	5.75
18	MP1C	Mx	-.0498	5.75
19	MP3A	X	0	1.5
20	MP3A	Z	-108.734	1.5
21	MP3A	Mx	-.0887	1.5
22	MP3A	X	0	4.5
23	MP3A	Z	-108.734	4.5
24	MP3A	Mx	-.0887	4.5
25	MP3B	X	0	1.5
26	MP3B	Z	-61.968	1.5
27	MP3B	Mx	.0211	1.5
28	MP3B	X	0	4.5
29	MP3B	Z	-61.968	4.5
30	MP3B	Mx	.0211	4.5
31	MP3C	X	0	1.5
32	MP3C	Z	-94.659	1.5
33	MP3C	Mx	.0123	1.5
34	MP3C	X	0	4.5
35	MP3C	Z	-94.659	4.5
36	MP3C	Mx	.0123	4.5
37	MP3A	X	0	1.5
38	MP3A	Z	-108.734	1.5
39	MP3A	Mx	.0391	1.5
40	MP3A	X	0	4.5
41	MP3A	Z	-108.734	4.5
42	MP3A	Mx	.0391	4.5
43	MP3B	X	0	1.5
44	MP3B	Z	-61.968	1.5
45	MP3B	Mx	.0538	1.5
46	MP3B	X	0	4.5
47	MP3B	Z	-61.968	4.5
48	MP3B	Mx	.0538	4.5
49	MP3C	X	0	1.5
50	MP3C	Z	-94.659	1.5
51	MP3C	Mx	-.0847	1.5
52	MP3C	X	0	4.5
53	MP3C	Z	-94.659	4.5
54	MP3C	Mx	-.0847	4.5
55	MP5A	X	0	2
56	MP5A	Z	-61.743	2
57	MP5A	Mx	-.0106	2
58	MP5A	X	0	4
59	MP5A	Z	-61.743	4
60	MP5A	Mx	-.0106	4
61	MP5B	X	0	2
62	MP5B	Z	-31.211	2
63	MP5B	Mx	.0141	2
64	MP5B	X	0	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft, %]
65	MP5B	Z	-31.211	4
66	MP5B	Mx	.0141	4
67	MP5C	X	0	2
68	MP5C	Z	-52.554	2
69	MP5C	Mx	-.0151	2
70	MP5C	X	0	4
71	MP5C	Z	-52.554	4
72	MP5C	Mx	-.0151	4
73	MP2A	X	0	2
74	MP2A	Z	-65.427	2
75	MP2A	Mx	0	2
76	MP2B	X	0	2
77	MP2B	Z	-49.281	2
78	MP2B	Mx	-.0213	2
79	MP2C	X	0	2
80	MP2C	Z	-49.281	2
81	MP2C	Mx	.0213	2
82	MP3A	X	0	2
83	MP3A	Z	-78.935	2
84	MP3A	Mx	0	2
85	MP3B	X	0	2
86	MP3B	Z	-60.098	2
87	MP3B	Mx	-.026	2
88	MP3C	X	0	2
89	MP3C	Z	-60.098	2
90	MP3C	Mx	.026	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft, %]
1	MP1A	X	78.408	.75
2	MP1A	Z	-135.807	.75
3	MP1A	Mx	-.0601	.75
4	MP1A	X	78.408	5.75
5	MP1A	Z	-135.807	5.75
6	MP1A	Mx	-.0601	5.75
7	MP1B	X	86.831	.75
8	MP1B	Z	-150.395	.75
9	MP1B	Mx	.0498	.75
10	MP1B	X	86.831	5.75
11	MP1B	Z	-150.395	5.75
12	MP1B	Mx	.0498	5.75
13	MP1C	X	97.329	.75
14	MP1C	Z	-168.579	.75
15	MP1C	Mx	-.0085	.75
16	MP1C	X	97.329	5.75
17	MP1C	Z	-168.579	5.75
18	MP1C	Mx	-.0085	5.75
19	MP3A	X	38.77	1.5
20	MP3A	Z	-67.152	1.5
21	MP3A	Mx	-.0708	1.5
22	MP3A	X	38.77	4.5
23	MP3A	Z	-67.152	4.5
24	MP3A	Mx	-.0708	4.5
25	MP3B	X	47.329	1.5
26	MP3B	Z	-81.977	1.5
27	MP3B	Mx	-.0123	1.5
28	MP3B	X	47.329	4.5
29	MP3B	Z	-81.977	4.5
30	MP3B	Mx	-.0123	4.5
31	MP3C	X	57.998	1.5
32	MP3C	Z	-100.456	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
33	MP3C	Mx	.0655	1.5
34	MP3C	X	57.998	4.5
35	MP3C	Z	-100.456	4.5
36	MP3C	Mx	.0655	4.5
37	MP3A	X	38.77	1.5
38	MP3A	Z	-67.152	1.5
39	MP3A	Mx	-.0084	1.5
40	MP3A	X	38.77	4.5
41	MP3A	Z	-67.152	4.5
42	MP3A	Mx	-.0084	4.5
43	MP3B	X	47.329	1.5
44	MP3B	Z	-81.977	1.5
45	MP3B	Mx	.0847	1.5
46	MP3B	X	47.329	4.5
47	MP3B	Z	-81.977	4.5
48	MP3B	Mx	.0847	4.5
49	MP3C	X	57.998	1.5
50	MP3C	Z	-100.456	1.5
51	MP3C	Mx	-.079	1.5
52	MP3C	X	57.998	4.5
53	MP3C	Z	-100.456	4.5
54	MP3C	Mx	-.079	4.5
55	MP5A	X	20.689	2
56	MP5A	Z	-35.834	2
57	MP5A	Mx	-.0158	2
58	MP5A	X	20.689	4
59	MP5A	Z	-35.834	4
60	MP5A	Mx	-.0158	4
61	MP5B	X	26.277	2
62	MP5B	Z	-45.513	2
63	MP5B	Mx	.0151	2
64	MP5B	X	26.277	4
65	MP5B	Z	-45.513	4
66	MP5B	Mx	.0151	4
67	MP5C	X	33.242	2
68	MP5C	Z	-57.577	2
69	MP5C	Mx	-.0029	2
70	MP5C	X	33.242	4
71	MP5C	Z	-57.577	4
72	MP5C	Mx	-.0029	4
73	MP2A	X	30.023	2
74	MP2A	Z	-52.001	2
75	MP2A	Mx	.015	2
76	MP2B	X	21.95	2
77	MP2B	Z	-38.018	2
78	MP2B	Mx	-.022	2
79	MP2C	X	30.023	2
80	MP2C	Z	-52.001	2
81	MP2C	Mx	.015	2
82	MP3A	X	36.328	2
83	MP3A	Z	-62.922	2
84	MP3A	Mx	.0182	2
85	MP3B	X	26.909	2
86	MP3B	Z	-46.609	2
87	MP3B	Mx	-.0269	2
88	MP3C	X	36.328	2
89	MP3C	Z	-62.922	2
90	MP3C	Mx	.0182	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
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Member Point Loads (BLC 5 : Antenna Wo (60 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP1A	X	114.137	.75
2	MP1A	Z	-65.897	.75
3	MP1A	Mx	-.0649	.75
4	MP1A	X	114.137	5.75
5	MP1A	Z	-65.897	5.75
6	MP1A	Mx	-.0649	5.75
7	MP1B	X	168.579	.75
8	MP1B	Z	-97.329	.75
9	MP1B	Mx	.0085	.75
10	MP1B	X	168.579	5.75
11	MP1B	Z	-97.329	5.75
12	MP1B	Mx	.0085	5.75
13	MP1C	X	158.903	.75
14	MP1C	Z	-91.743	.75
15	MP1C	Mx	.0388	.75
16	MP1C	X	158.903	5.75
17	MP1C	Z	-91.743	5.75
18	MP1C	Mx	.0388	5.75
19	MP3A	X	45.13	1.5
20	MP3A	Z	-26.056	1.5
21	MP3A	Mx	-.0399	1.5
22	MP3A	X	45.13	4.5
23	MP3A	Z	-26.056	4.5
24	MP3A	Mx	-.0399	4.5
25	MP3B	X	100.456	1.5
26	MP3B	Z	-57.998	1.5
27	MP3B	Mx	-.0655	1.5
28	MP3B	X	100.456	4.5
29	MP3B	Z	-57.998	4.5
30	MP3B	Mx	-.0655	4.5
31	MP3C	X	90.623	1.5
32	MP3C	Z	-52.321	1.5
33	MP3C	Mx	.0888	1.5
34	MP3C	X	90.623	4.5
35	MP3C	Z	-52.321	4.5
36	MP3C	Mx	.0888	4.5
37	MP3A	X	45.13	1.5
38	MP3A	Z	-26.056	1.5
39	MP3A	Mx	-.0286	1.5
40	MP3A	X	45.13	4.5
41	MP3A	Z	-26.056	4.5
42	MP3A	Mx	-.0286	4.5
43	MP3B	X	100.456	1.5
44	MP3B	Z	-57.998	1.5
45	MP3B	Mx	.079	1.5
46	MP3B	X	100.456	4.5
47	MP3B	Z	-57.998	4.5
48	MP3B	Mx	.079	4.5
49	MP3C	X	90.623	1.5
50	MP3C	Z	-52.321	1.5
51	MP3C	Mx	-.0298	1.5
52	MP3C	X	90.623	4.5
53	MP3C	Z	-52.321	4.5
54	MP3C	Mx	-.0298	4.5
55	MP5A	X	21.457	2
56	MP5A	Z	-12.388	2
57	MP5A	Mx	-.0122	2
58	MP5A	X	21.457	4
59	MP5A	Z	-12.388	4
60	MP5A	Mx	-.0122	4
61	MP5B	X	57.577	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
62	MP5B	Z	-33.242	2
63	MP5B	Mx	.0029	2
64	MP5B	X	57.577	4
65	MP5B	Z	-33.242	4
66	MP5B	Mx	.0029	4
67	MP5C	X	51.158	2
68	MP5C	Z	-29.536	2
69	MP5C	Mx	.0125	2
70	MP5C	X	51.158	4
71	MP5C	Z	-29.536	4
72	MP5C	Mx	.0125	4
73	MP2A	X	42.679	2
74	MP2A	Z	-24.641	2
75	MP2A	Mx	.0213	2
76	MP2B	X	42.679	2
77	MP2B	Z	-24.641	2
78	MP2B	Mx	-.0213	2
79	MP2C	X	56.661	2
80	MP2C	Z	-32.714	2
81	MP2C	Mx	0	2
82	MP3A	X	52.046	2
83	MP3A	Z	-30.049	2
84	MP3A	Mx	.026	2
85	MP3B	X	52.046	2
86	MP3B	Z	-30.049	2
87	MP3B	Mx	-.026	2
88	MP3C	X	68.359	2
89	MP3C	Z	-39.467	2
90	MP3C	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP1A	X	137.466	.75
2	MP1A	Z	0	.75
3	MP1A	Mx	-.0646	.75
4	MP1A	X	137.466	5.75
5	MP1A	Z	0	5.75
6	MP1A	Mx	-.0646	5.75
7	MP1B	X	183.486	.75
8	MP1B	Z	0	.75
9	MP1B	Mx	-.0388	.75
10	MP1B	X	183.486	5.75
11	MP1B	Z	0	5.75
12	MP1B	Mx	-.0388	5.75
13	MP1C	X	151.317	.75
14	MP1C	Z	0	.75
15	MP1C	Mx	.062	.75
16	MP1C	X	151.317	5.75
17	MP1C	Z	0	5.75
18	MP1C	Mx	.062	5.75
19	MP3A	X	57.876	1.5
20	MP3A	Z	0	1.5
21	MP3A	Mx	-.0239	1.5
22	MP3A	X	57.876	4.5
23	MP3A	Z	0	4.5
24	MP3A	Mx	-.0239	4.5
25	MP3B	X	104.643	1.5
26	MP3B	Z	0	1.5
27	MP3B	Mx	-.0888	1.5
28	MP3B	X	104.643	4.5
29	MP3B	Z	0	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
30	MP3B	Mx	-0.888	4.5
31	MP3C	X	71.952	1.5
32	MP3C	Z	0	1.5
33	MP3C	Mx	.0651	1.5
34	MP3C	X	71.952	4.5
35	MP3C	Z	0	4.5
36	MP3C	Mx	.0651	4.5
37	MP3A	X	57.876	1.5
38	MP3A	Z	0	1.5
39	MP3A	Mx	-.0486	1.5
40	MP3A	X	57.876	4.5
41	MP3A	Z	0	4.5
42	MP3A	Mx	-.0486	4.5
43	MP3B	X	104.643	1.5
44	MP3B	Z	0	1.5
45	MP3B	Mx	.0298	1.5
46	MP3B	X	104.643	4.5
47	MP3B	Z	0	4.5
48	MP3B	Mx	.0298	4.5
49	MP3C	X	71.952	1.5
50	MP3C	Z	0	1.5
51	MP3C	Mx	.0135	1.5
52	MP3C	X	71.952	4.5
53	MP3C	Z	0	4.5
54	MP3C	Mx	.0135	4.5
55	MP5A	X	28.54	2
56	MP5A	Z	0	2
57	MP5A	Mx	-.0134	2
58	MP5A	X	28.54	4
59	MP5A	Z	0	4
60	MP5A	Mx	-.0134	4
61	MP5B	X	59.072	2
62	MP5B	Z	0	2
63	MP5B	Mx	-.0125	2
64	MP5B	X	59.072	4
65	MP5B	Z	0	4
66	MP5B	Mx	-.0125	4
67	MP5C	X	37.729	2
68	MP5C	Z	0	2
69	MP5C	Mx	.0155	2
70	MP5C	X	37.729	4
71	MP5C	Z	0	4
72	MP5C	Mx	.0155	4
73	MP2A	X	43.899	2
74	MP2A	Z	0	2
75	MP2A	Mx	.022	2
76	MP2B	X	60.045	2
77	MP2B	Z	0	2
78	MP2B	Mx	-.015	2
79	MP2C	X	60.045	2
80	MP2C	Z	0	2
81	MP2C	Mx	-.015	2
82	MP3A	X	53.819	2
83	MP3A	Z	0	2
84	MP3A	Mx	.0269	2
85	MP3B	X	72.656	2
86	MP3B	Z	0	2
87	MP3B	Mx	-.0182	2
88	MP3C	X	72.656	2
89	MP3C	Z	0	2
90	MP3C	Mx	-.0182	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP1A	X	145.632	.75
2	MP1A	Z	84.081	.75
3	MP1A	Mx	-.054	.75
4	MP1A	X	145.632	5.75
5	MP1A	Z	84.081	5.75
6	MP1A	Mx	-.054	5.75
7	MP1B	X	131.044	.75
8	MP1B	Z	75.659	.75
9	MP1B	Mx	-.062	.75
10	MP1B	X	131.044	5.75
11	MP1B	Z	75.659	5.75
12	MP1B	Mx	-.062	5.75
13	MP1C	X	112.861	.75
14	MP1C	Z	65.16	.75
15	MP1C	Mx	.0649	.75
16	MP1C	X	112.861	5.75
17	MP1C	Z	65.16	5.75
18	MP1C	Mx	.0649	5.75
19	MP3A	X	77.136	1.5
20	MP3A	Z	44.535	1.5
21	MP3A	Mx	.0045	1.5
22	MP3A	X	77.136	4.5
23	MP3A	Z	44.535	4.5
24	MP3A	Mx	.0045	4.5
25	MP3B	X	62.312	1.5
26	MP3B	Z	35.976	1.5
27	MP3B	Mx	-.0651	1.5
28	MP3B	X	62.312	4.5
29	MP3B	Z	35.976	4.5
30	MP3B	Mx	-.0651	4.5
31	MP3C	X	43.833	1.5
32	MP3C	Z	25.307	1.5
33	MP3C	Mx	.0364	1.5
34	MP3C	X	43.833	4.5
35	MP3C	Z	25.307	4.5
36	MP3C	Mx	.0364	4.5
37	MP3A	X	77.136	1.5
38	MP3A	Z	44.535	1.5
39	MP3A	Mx	-.0808	1.5
40	MP3A	X	77.136	4.5
41	MP3A	Z	44.535	4.5
42	MP3A	Mx	-.0808	4.5
43	MP3B	X	62.312	1.5
44	MP3B	Z	35.976	1.5
45	MP3B	Mx	-.0135	1.5
46	MP3B	X	62.312	4.5
47	MP3B	Z	35.976	4.5
48	MP3B	Mx	-.0135	4.5
49	MP3C	X	43.833	1.5
50	MP3C	Z	25.307	1.5
51	MP3C	Mx	.0309	1.5
52	MP3C	X	43.833	4.5
53	MP3C	Z	25.307	4.5
54	MP3C	Mx	.0309	4.5
55	MP5A	X	42.353	2
56	MP5A	Z	24.452	2
57	MP5A	Mx	-.0157	2
58	MP5A	X	42.353	4
59	MP5A	Z	24.452	4
60	MP5A	Mx	-.0157	4
61	MP5B	X	32.674	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
62	MP5B	Z	18.865	2
63	MP5B	Mx	-.0155	2
64	MP5B	X	32.674	4
65	MP5B	Z	18.865	4
66	MP5B	Mx	-.0155	4
67	MP5C	X	20.61	2
68	MP5C	Z	11.899	2
69	MP5C	Mx	.0119	2
70	MP5C	X	20.61	4
71	MP5C	Z	11.899	4
72	MP5C	Mx	.0119	4
73	MP2A	X	42.679	2
74	MP2A	Z	24.641	2
75	MP2A	Mx	.0213	2
76	MP2B	X	56.661	2
77	MP2B	Z	32.714	2
78	MP2B	Mx	0	2
79	MP2C	X	42.679	2
80	MP2C	Z	24.641	2
81	MP2C	Mx	-.0213	2
82	MP3A	X	52.046	2
83	MP3A	Z	30.049	2
84	MP3A	Mx	.026	2
85	MP3B	X	68.359	2
86	MP3B	Z	39.467	2
87	MP3B	Mx	0	2
88	MP3C	X	52.046	2
89	MP3C	Z	30.049	2
90	MP3C	Mx	-.026	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP1A	X	96.592	.75
2	MP1A	Z	167.302	.75
3	MP1A	Mx	-.0168	.75
4	MP1A	X	96.592	5.75
5	MP1A	Z	167.302	5.75
6	MP1A	Mx	-.0168	5.75
7	MP1B	X	65.16	.75
8	MP1B	Z	112.861	.75
9	MP1B	Mx	-.0649	.75
10	MP1B	X	65.16	5.75
11	MP1B	Z	112.861	5.75
12	MP1B	Mx	-.0649	5.75
13	MP1C	X	70.746	.75
14	MP1C	Z	122.536	.75
15	MP1C	Mx	.0641	.75
16	MP1C	X	70.746	5.75
17	MP1C	Z	122.536	5.75
18	MP1C	Mx	.0641	5.75
19	MP3A	X	57.249	1.5
20	MP3A	Z	99.159	1.5
21	MP3A	Mx	.0572	1.5
22	MP3A	X	57.249	4.5
23	MP3A	Z	99.159	4.5
24	MP3A	Mx	.0572	4.5
25	MP3B	X	25.307	1.5
26	MP3B	Z	43.833	1.5
27	MP3B	Mx	-.0364	1.5
28	MP3B	X	25.307	4.5
29	MP3B	Z	43.833	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
30	MP3B	Mx	-.0364	4.5
31	MP3C	X	30.984	1.5
32	MP3C	Z	53.666	1.5
33	MP3C	Mx	.0211	1.5
34	MP3C	X	30.984	4.5
35	MP3C	Z	53.666	4.5
36	MP3C	Mx	.0211	4.5
37	MP3A	X	57.249	1.5
38	MP3A	Z	99.159	1.5
39	MP3A	Mx	-.0837	1.5
40	MP3A	X	57.249	4.5
41	MP3A	Z	99.159	4.5
42	MP3A	Mx	-.0837	4.5
43	MP3B	X	25.307	1.5
44	MP3B	Z	43.833	1.5
45	MP3B	Mx	-.0309	1.5
46	MP3B	X	25.307	4.5
47	MP3B	Z	43.833	4.5
48	MP3B	Mx	-.0309	4.5
49	MP3C	X	30.984	1.5
50	MP3C	Z	53.666	1.5
51	MP3C	Mx	.0538	1.5
52	MP3C	X	30.984	4.5
53	MP3C	Z	53.666	4.5
54	MP3C	Mx	.0538	4.5
55	MP5A	X	32.753	2
56	MP5A	Z	56.73	2
57	MP5A	Mx	-.0057	2
58	MP5A	X	32.753	4
59	MP5A	Z	56.73	4
60	MP5A	Mx	-.0057	4
61	MP5B	X	11.899	2
62	MP5B	Z	20.61	2
63	MP5B	Mx	-.0119	2
64	MP5B	X	11.899	4
65	MP5B	Z	20.61	4
66	MP5B	Mx	-.0119	4
67	MP5C	X	15.605	2
68	MP5C	Z	27.029	2
69	MP5C	Mx	.0141	2
70	MP5C	X	15.605	4
71	MP5C	Z	27.029	4
72	MP5C	Mx	.0141	4
73	MP2A	X	30.023	2
74	MP2A	Z	52.001	2
75	MP2A	Mx	.015	2
76	MP2B	X	30.023	2
77	MP2B	Z	52.001	2
78	MP2B	Mx	.015	2
79	MP2C	X	21.95	2
80	MP2C	Z	38.018	2
81	MP2C	Mx	-.022	2
82	MP3A	X	36.328	2
83	MP3A	Z	62.922	2
84	MP3A	Mx	.0182	2
85	MP3B	X	36.328	2
86	MP3B	Z	62.922	2
87	MP3B	Mx	.0182	2
88	MP3C	X	26.909	2
89	MP3C	Z	46.609	2
90	MP3C	Mx	-.0269	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP1A	X	0	.75
2	MP1A	Z	187.512	.75
3	MP1A	Mx	.0321	.75
4	MP1A	X	0	5.75
5	MP1A	Z	187.512	5.75
6	MP1A	Mx	.0321	5.75
7	MP1B	X	0	.75
8	MP1B	Z	141.492	.75
9	MP1B	Mx	-.0641	.75
10	MP1B	X	0	5.75
11	MP1B	Z	141.492	5.75
12	MP1B	Mx	-.0641	5.75
13	MP1C	X	0	.75
14	MP1C	Z	173.661	.75
15	MP1C	Mx	.0498	.75
16	MP1C	X	0	5.75
17	MP1C	Z	173.661	5.75
18	MP1C	Mx	.0498	5.75
19	MP3A	X	0	1.5
20	MP3A	Z	108.734	1.5
21	MP3A	Mx	.0887	1.5
22	MP3A	X	0	4.5
23	MP3A	Z	108.734	4.5
24	MP3A	Mx	.0887	4.5
25	MP3B	X	0	1.5
26	MP3B	Z	61.968	1.5
27	MP3B	Mx	-.0211	1.5
28	MP3B	X	0	4.5
29	MP3B	Z	61.968	4.5
30	MP3B	Mx	-.0211	4.5
31	MP3C	X	0	1.5
32	MP3C	Z	94.659	1.5
33	MP3C	Mx	-.0123	1.5
34	MP3C	X	0	4.5
35	MP3C	Z	94.659	4.5
36	MP3C	Mx	-.0123	4.5
37	MP3A	X	0	1.5
38	MP3A	Z	108.734	1.5
39	MP3A	Mx	-.0391	1.5
40	MP3A	X	0	4.5
41	MP3A	Z	108.734	4.5
42	MP3A	Mx	-.0391	4.5
43	MP3B	X	0	1.5
44	MP3B	Z	61.968	1.5
45	MP3B	Mx	-.0538	1.5
46	MP3B	X	0	4.5
47	MP3B	Z	61.968	4.5
48	MP3B	Mx	-.0538	4.5
49	MP3C	X	0	1.5
50	MP3C	Z	94.659	1.5
51	MP3C	Mx	.0847	1.5
52	MP3C	X	0	4.5
53	MP3C	Z	94.659	4.5
54	MP3C	Mx	.0847	4.5
55	MP5A	X	0	2
56	MP5A	Z	61.743	2
57	MP5A	Mx	.0106	2
58	MP5A	X	0	4
59	MP5A	Z	61.743	4
60	MP5A	Mx	.0106	4
61	MP5B	X	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
62	MP5B	Z	31.211	2
63	MP5B	Mx	-.0141	2
64	MP5B	X	0	4
65	MP5B	Z	31.211	4
66	MP5B	Mx	-.0141	4
67	MP5C	X	0	2
68	MP5C	Z	52.554	2
69	MP5C	Mx	.0151	2
70	MP5C	X	0	4
71	MP5C	Z	52.554	4
72	MP5C	Mx	.0151	4
73	MP2A	X	0	2
74	MP2A	Z	65.427	2
75	MP2A	Mx	0	2
76	MP2B	X	0	2
77	MP2B	Z	49.281	2
78	MP2B	Mx	.0213	2
79	MP2C	X	0	2
80	MP2C	Z	49.281	2
81	MP2C	Mx	-.0213	2
82	MP3A	X	0	2
83	MP3A	Z	78.935	2
84	MP3A	Mx	0	2
85	MP3B	X	0	2
86	MP3B	Z	60.098	2
87	MP3B	Mx	.026	2
88	MP3C	X	0	2
89	MP3C	Z	60.098	2
90	MP3C	Mx	-.026	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP1A	X	-78.408	.75
2	MP1A	Z	135.807	.75
3	MP1A	Mx	.0601	.75
4	MP1A	X	-78.408	5.75
5	MP1A	Z	135.807	5.75
6	MP1A	Mx	.0601	5.75
7	MP1B	X	-86.831	.75
8	MP1B	Z	150.395	.75
9	MP1B	Mx	-.0498	.75
10	MP1B	X	-86.831	5.75
11	MP1B	Z	150.395	5.75
12	MP1B	Mx	-.0498	5.75
13	MP1C	X	-97.329	.75
14	MP1C	Z	168.579	.75
15	MP1C	Mx	.0085	.75
16	MP1C	X	-97.329	5.75
17	MP1C	Z	168.579	5.75
18	MP1C	Mx	.0085	5.75
19	MP3A	X	-38.77	1.5
20	MP3A	Z	67.152	1.5
21	MP3A	Mx	.0708	1.5
22	MP3A	X	-38.77	4.5
23	MP3A	Z	67.152	4.5
24	MP3A	Mx	.0708	4.5
25	MP3B	X	-47.329	1.5
26	MP3B	Z	81.977	1.5
27	MP3B	Mx	.0123	1.5
28	MP3B	X	-47.329	4.5
29	MP3B	Z	81.977	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
30	MP3B	Mx	.0123	4.5
31	MP3C	X	-57.998	1.5
32	MP3C	Z	100.456	1.5
33	MP3C	Mx	-.0655	1.5
34	MP3C	X	-57.998	4.5
35	MP3C	Z	100.456	4.5
36	MP3C	Mx	-.0655	4.5
37	MP3A	X	-38.77	1.5
38	MP3A	Z	67.152	1.5
39	MP3A	Mx	.0084	1.5
40	MP3A	X	-38.77	4.5
41	MP3A	Z	67.152	4.5
42	MP3A	Mx	.0084	4.5
43	MP3B	X	-47.329	1.5
44	MP3B	Z	81.977	1.5
45	MP3B	Mx	-.0847	1.5
46	MP3B	X	-47.329	4.5
47	MP3B	Z	81.977	4.5
48	MP3B	Mx	-.0847	4.5
49	MP3C	X	-57.998	1.5
50	MP3C	Z	100.456	1.5
51	MP3C	Mx	.079	1.5
52	MP3C	X	-57.998	4.5
53	MP3C	Z	100.456	4.5
54	MP3C	Mx	.079	4.5
55	MP5A	X	-20.689	2
56	MP5A	Z	35.834	2
57	MP5A	Mx	.0158	2
58	MP5A	X	-20.689	4
59	MP5A	Z	35.834	4
60	MP5A	Mx	.0158	4
61	MP5B	X	-26.277	2
62	MP5B	Z	45.513	2
63	MP5B	Mx	-.0151	2
64	MP5B	X	-26.277	4
65	MP5B	Z	45.513	4
66	MP5B	Mx	-.0151	4
67	MP5C	X	-33.242	2
68	MP5C	Z	57.577	2
69	MP5C	Mx	.0029	2
70	MP5C	X	-33.242	4
71	MP5C	Z	57.577	4
72	MP5C	Mx	.0029	4
73	MP2A	X	-30.023	2
74	MP2A	Z	52.001	2
75	MP2A	Mx	-.015	2
76	MP2B	X	-21.95	2
77	MP2B	Z	38.018	2
78	MP2B	Mx	.022	2
79	MP2C	X	-30.023	2
80	MP2C	Z	52.001	2
81	MP2C	Mx	-.015	2
82	MP3A	X	-36.328	2
83	MP3A	Z	62.922	2
84	MP3A	Mx	-.0182	2
85	MP3B	X	-26.909	2
86	MP3B	Z	46.609	2
87	MP3B	Mx	.0269	2
88	MP3C	X	-36.328	2
89	MP3C	Z	62.922	2
90	MP3C	Mx	-.0182	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP1A	X	-114.137	.75
2	MP1A	Z	65.897	.75
3	MP1A	Mx	.0649	.75
4	MP1A	X	-114.137	5.75
5	MP1A	Z	65.897	5.75
6	MP1A	Mx	.0649	5.75
7	MP1B	X	-168.579	.75
8	MP1B	Z	97.329	.75
9	MP1B	Mx	-.0085	.75
10	MP1B	X	-168.579	5.75
11	MP1B	Z	97.329	5.75
12	MP1B	Mx	-.0085	5.75
13	MP1C	X	-158.903	.75
14	MP1C	Z	91.743	.75
15	MP1C	Mx	-.0388	.75
16	MP1C	X	-158.903	5.75
17	MP1C	Z	91.743	5.75
18	MP1C	Mx	-.0388	5.75
19	MP3A	X	-45.13	1.5
20	MP3A	Z	26.056	1.5
21	MP3A	Mx	.0399	1.5
22	MP3A	X	-45.13	4.5
23	MP3A	Z	26.056	4.5
24	MP3A	Mx	.0399	4.5
25	MP3B	X	-100.456	1.5
26	MP3B	Z	57.998	1.5
27	MP3B	Mx	.0655	1.5
28	MP3B	X	-100.456	4.5
29	MP3B	Z	57.998	4.5
30	MP3B	Mx	.0655	4.5
31	MP3C	X	-90.623	1.5
32	MP3C	Z	52.321	1.5
33	MP3C	Mx	-.0888	1.5
34	MP3C	X	-90.623	4.5
35	MP3C	Z	52.321	4.5
36	MP3C	Mx	-.0888	4.5
37	MP3A	X	-45.13	1.5
38	MP3A	Z	26.056	1.5
39	MP3A	Mx	.0286	1.5
40	MP3A	X	-45.13	4.5
41	MP3A	Z	26.056	4.5
42	MP3A	Mx	.0286	4.5
43	MP3B	X	-100.456	1.5
44	MP3B	Z	57.998	1.5
45	MP3B	Mx	-.079	1.5
46	MP3B	X	-100.456	4.5
47	MP3B	Z	57.998	4.5
48	MP3B	Mx	-.079	4.5
49	MP3C	X	-90.623	1.5
50	MP3C	Z	52.321	1.5
51	MP3C	Mx	.0298	1.5
52	MP3C	X	-90.623	4.5
53	MP3C	Z	52.321	4.5
54	MP3C	Mx	.0298	4.5
55	MP5A	X	-21.457	2
56	MP5A	Z	12.388	2
57	MP5A	Mx	.0122	2
58	MP5A	X	-21.457	4
59	MP5A	Z	12.388	4
60	MP5A	Mx	.0122	4
61	MP5B	X	-57.577	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
62	MP5B	Z	33.242	2
63	MP5B	Mx	-.0029	2
64	MP5B	X	-57.577	4
65	MP5B	Z	33.242	4
66	MP5B	Mx	-.0029	4
67	MP5C	X	-51.158	2
68	MP5C	Z	29.536	2
69	MP5C	Mx	-.0125	2
70	MP5C	X	-51.158	4
71	MP5C	Z	29.536	4
72	MP5C	Mx	-.0125	4
73	MP2A	X	-42.679	2
74	MP2A	Z	24.641	2
75	MP2A	Mx	-.0213	2
76	MP2B	X	-42.679	2
77	MP2B	Z	24.641	2
78	MP2B	Mx	.0213	2
79	MP2C	X	-56.661	2
80	MP2C	Z	32.714	2
81	MP2C	Mx	0	2
82	MP3A	X	-52.046	2
83	MP3A	Z	30.049	2
84	MP3A	Mx	-.026	2
85	MP3B	X	-52.046	2
86	MP3B	Z	30.049	2
87	MP3B	Mx	.026	2
88	MP3C	X	-68.359	2
89	MP3C	Z	39.467	2
90	MP3C	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP1A	X	-137.466	.75
2	MP1A	Z	0	.75
3	MP1A	Mx	.0646	.75
4	MP1A	X	-137.466	5.75
5	MP1A	Z	0	5.75
6	MP1A	Mx	.0646	5.75
7	MP1B	X	-183.486	.75
8	MP1B	Z	0	.75
9	MP1B	Mx	.0388	.75
10	MP1B	X	-183.486	5.75
11	MP1B	Z	0	5.75
12	MP1B	Mx	.0388	5.75
13	MP1C	X	-151.317	.75
14	MP1C	Z	0	.75
15	MP1C	Mx	-.062	.75
16	MP1C	X	-151.317	5.75
17	MP1C	Z	0	5.75
18	MP1C	Mx	-.062	5.75
19	MP3A	X	-57.876	1.5
20	MP3A	Z	0	1.5
21	MP3A	Mx	.0239	1.5
22	MP3A	X	-57.876	4.5
23	MP3A	Z	0	4.5
24	MP3A	Mx	.0239	4.5
25	MP3B	X	-104.643	1.5
26	MP3B	Z	0	1.5
27	MP3B	Mx	.0888	1.5
28	MP3B	X	-104.643	4.5
29	MP3B	Z	0	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
30	MP3B	Mx	.0888	4.5
31	MP3C	X	-71.952	1.5
32	MP3C	Z	0	1.5
33	MP3C	Mx	-.0651	1.5
34	MP3C	X	-71.952	4.5
35	MP3C	Z	0	4.5
36	MP3C	Mx	-.0651	4.5
37	MP3A	X	-57.876	1.5
38	MP3A	Z	0	1.5
39	MP3A	Mx	.0486	1.5
40	MP3A	X	-57.876	4.5
41	MP3A	Z	0	4.5
42	MP3A	Mx	.0486	4.5
43	MP3B	X	-104.643	1.5
44	MP3B	Z	0	1.5
45	MP3B	Mx	-.0298	1.5
46	MP3B	X	-104.643	4.5
47	MP3B	Z	0	4.5
48	MP3B	Mx	-.0298	4.5
49	MP3C	X	-71.952	1.5
50	MP3C	Z	0	1.5
51	MP3C	Mx	-.0135	1.5
52	MP3C	X	-71.952	4.5
53	MP3C	Z	0	4.5
54	MP3C	Mx	-.0135	4.5
55	MP5A	X	-28.54	2
56	MP5A	Z	0	2
57	MP5A	Mx	.0134	2
58	MP5A	X	-28.54	4
59	MP5A	Z	0	4
60	MP5A	Mx	.0134	4
61	MP5B	X	-59.072	2
62	MP5B	Z	0	2
63	MP5B	Mx	.0125	2
64	MP5B	X	-59.072	4
65	MP5B	Z	0	4
66	MP5B	Mx	.0125	4
67	MP5C	X	-37.729	2
68	MP5C	Z	0	2
69	MP5C	Mx	-.0155	2
70	MP5C	X	-37.729	4
71	MP5C	Z	0	4
72	MP5C	Mx	-.0155	4
73	MP2A	X	-43.899	2
74	MP2A	Z	0	2
75	MP2A	Mx	-.022	2
76	MP2B	X	-60.045	2
77	MP2B	Z	0	2
78	MP2B	Mx	.015	2
79	MP2C	X	-60.045	2
80	MP2C	Z	0	2
81	MP2C	Mx	.015	2
82	MP3A	X	-53.819	2
83	MP3A	Z	0	2
84	MP3A	Mx	-.0269	2
85	MP3B	X	-72.656	2
86	MP3B	Z	0	2
87	MP3B	Mx	.0182	2
88	MP3C	X	-72.656	2
89	MP3C	Z	0	2
90	MP3C	Mx	.0182	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP1A	X	-145.632	.75
2	MP1A	Z	-84.081	.75
3	MP1A	Mx	.054	.75
4	MP1A	X	-145.632	5.75
5	MP1A	Z	-84.081	5.75
6	MP1A	Mx	.054	5.75
7	MP1B	X	-131.044	.75
8	MP1B	Z	-75.659	.75
9	MP1B	Mx	.062	.75
10	MP1B	X	-131.044	5.75
11	MP1B	Z	-75.659	5.75
12	MP1B	Mx	.062	5.75
13	MP1C	X	-112.861	.75
14	MP1C	Z	-65.16	.75
15	MP1C	Mx	-.0649	.75
16	MP1C	X	-112.861	5.75
17	MP1C	Z	-65.16	5.75
18	MP1C	Mx	-.0649	5.75
19	MP3A	X	-77.136	1.5
20	MP3A	Z	-44.535	1.5
21	MP3A	Mx	-.0045	1.5
22	MP3A	X	-77.136	4.5
23	MP3A	Z	-44.535	4.5
24	MP3A	Mx	-.0045	4.5
25	MP3B	X	-62.312	1.5
26	MP3B	Z	-35.976	1.5
27	MP3B	Mx	.0651	1.5
28	MP3B	X	-62.312	4.5
29	MP3B	Z	-35.976	4.5
30	MP3B	Mx	.0651	4.5
31	MP3C	X	-43.833	1.5
32	MP3C	Z	-25.307	1.5
33	MP3C	Mx	-.0364	1.5
34	MP3C	X	-43.833	4.5
35	MP3C	Z	-25.307	4.5
36	MP3C	Mx	-.0364	4.5
37	MP3A	X	-77.136	1.5
38	MP3A	Z	-44.535	1.5
39	MP3A	Mx	.0808	1.5
40	MP3A	X	-77.136	4.5
41	MP3A	Z	-44.535	4.5
42	MP3A	Mx	.0808	4.5
43	MP3B	X	-62.312	1.5
44	MP3B	Z	-35.976	1.5
45	MP3B	Mx	.0135	1.5
46	MP3B	X	-62.312	4.5
47	MP3B	Z	-35.976	4.5
48	MP3B	Mx	.0135	4.5
49	MP3C	X	-43.833	1.5
50	MP3C	Z	-25.307	1.5
51	MP3C	Mx	-.0309	1.5
52	MP3C	X	-43.833	4.5
53	MP3C	Z	-25.307	4.5
54	MP3C	Mx	-.0309	4.5
55	MP5A	X	-42.353	2
56	MP5A	Z	-24.452	2
57	MP5A	Mx	.0157	2
58	MP5A	X	-42.353	4
59	MP5A	Z	-24.452	4
60	MP5A	Mx	.0157	4
61	MP5B	X	-32.674	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
62	MP5B	Z	-18.865	2
63	MP5B	Mx	.0155	2
64	MP5B	X	-32.674	4
65	MP5B	Z	-18.865	4
66	MP5B	Mx	.0155	4
67	MP5C	X	-20.61	2
68	MP5C	Z	-11.899	2
69	MP5C	Mx	-.0119	2
70	MP5C	X	-20.61	4
71	MP5C	Z	-11.899	4
72	MP5C	Mx	-.0119	4
73	MP2A	X	-42.679	2
74	MP2A	Z	-24.641	2
75	MP2A	Mx	-.0213	2
76	MP2B	X	-56.661	2
77	MP2B	Z	-32.714	2
78	MP2B	Mx	0	2
79	MP2C	X	-42.679	2
80	MP2C	Z	-24.641	2
81	MP2C	Mx	.0213	2
82	MP3A	X	-52.046	2
83	MP3A	Z	-30.049	2
84	MP3A	Mx	-.026	2
85	MP3B	X	-68.359	2
86	MP3B	Z	-39.467	2
87	MP3B	Mx	0	2
88	MP3C	X	-52.046	2
89	MP3C	Z	-30.049	2
90	MP3C	Mx	.026	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP1A	X	-96.592	.75
2	MP1A	Z	-167.302	.75
3	MP1A	Mx	.0168	.75
4	MP1A	X	-96.592	5.75
5	MP1A	Z	-167.302	5.75
6	MP1A	Mx	.0168	5.75
7	MP1B	X	-65.16	.75
8	MP1B	Z	-112.861	.75
9	MP1B	Mx	.0649	.75
10	MP1B	X	-65.16	5.75
11	MP1B	Z	-112.861	5.75
12	MP1B	Mx	.0649	5.75
13	MP1C	X	-70.746	.75
14	MP1C	Z	-122.536	.75
15	MP1C	Mx	-.0641	.75
16	MP1C	X	-70.746	5.75
17	MP1C	Z	-122.536	5.75
18	MP1C	Mx	-.0641	5.75
19	MP3A	X	-57.249	1.5
20	MP3A	Z	-99.159	1.5
21	MP3A	Mx	-.0572	1.5
22	MP3A	X	-57.249	4.5
23	MP3A	Z	-99.159	4.5
24	MP3A	Mx	-.0572	4.5
25	MP3B	X	-25.307	1.5
26	MP3B	Z	-43.833	1.5
27	MP3B	Mx	.0364	1.5
28	MP3B	X	-25.307	4.5
29	MP3B	Z	-43.833	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
30	MP3B	Mx	.0364	4.5
31	MP3C	X	-30.984	1.5
32	MP3C	Z	-53.666	1.5
33	MP3C	Mx	-.0211	1.5
34	MP3C	X	-30.984	4.5
35	MP3C	Z	-53.666	4.5
36	MP3C	Mx	-.0211	4.5
37	MP3A	X	-57.249	1.5
38	MP3A	Z	-99.159	1.5
39	MP3A	Mx	.0837	1.5
40	MP3A	X	-57.249	4.5
41	MP3A	Z	-99.159	4.5
42	MP3A	Mx	.0837	4.5
43	MP3B	X	-25.307	1.5
44	MP3B	Z	-43.833	1.5
45	MP3B	Mx	.0309	1.5
46	MP3B	X	-25.307	4.5
47	MP3B	Z	-43.833	4.5
48	MP3B	Mx	.0309	4.5
49	MP3C	X	-30.984	1.5
50	MP3C	Z	-53.666	1.5
51	MP3C	Mx	-.0538	1.5
52	MP3C	X	-30.984	4.5
53	MP3C	Z	-53.666	4.5
54	MP3C	Mx	-.0538	4.5
55	MP5A	X	-32.753	2
56	MP5A	Z	-56.73	2
57	MP5A	Mx	.0057	2
58	MP5A	X	-32.753	4
59	MP5A	Z	-56.73	4
60	MP5A	Mx	.0057	4
61	MP5B	X	-11.899	2
62	MP5B	Z	-20.61	2
63	MP5B	Mx	.0119	2
64	MP5B	X	-11.899	4
65	MP5B	Z	-20.61	4
66	MP5B	Mx	.0119	4
67	MP5C	X	-15.605	2
68	MP5C	Z	-27.029	2
69	MP5C	Mx	-.0141	2
70	MP5C	X	-15.605	4
71	MP5C	Z	-27.029	4
72	MP5C	Mx	-.0141	4
73	MP2A	X	-30.023	2
74	MP2A	Z	-52.001	2
75	MP2A	Mx	-.015	2
76	MP2B	X	-30.023	2
77	MP2B	Z	-52.001	2
78	MP2B	Mx	-.015	2
79	MP2C	X	-21.95	2
80	MP2C	Z	-38.018	2
81	MP2C	Mx	.022	2
82	MP3A	X	-36.328	2
83	MP3A	Z	-62.922	2
84	MP3A	Mx	-.0182	2
85	MP3B	X	-36.328	2
86	MP3B	Z	-62.922	2
87	MP3B	Mx	-.0182	2
88	MP3C	X	-26.909	2
89	MP3C	Z	-46.609	2
90	MP3C	Mx	.0269	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP1A	X	0	.75
2	MP1A	Z	-35.955	.75
3	MP1A	Mx	-.0061	.75
4	MP1A	X	0	5.75
5	MP1A	Z	-35.955	5.75
6	MP1A	Mx	-.0061	5.75
7	MP1B	X	0	.75
8	MP1B	Z	-27.834	.75
9	MP1B	Mx	.0126	.75
10	MP1B	X	0	5.75
11	MP1B	Z	-27.834	5.75
12	MP1B	Mx	.0126	5.75
13	MP1C	X	0	.75
14	MP1C	Z	-33.511	.75
15	MP1C	Mx	-.0096	.75
16	MP1C	X	0	5.75
17	MP1C	Z	-33.511	5.75
18	MP1C	Mx	-.0096	5.75
19	MP3A	X	0	1.5
20	MP3A	Z	-31.851	1.5
21	MP3A	Mx	-.026	1.5
22	MP3A	X	0	4.5
23	MP3A	Z	-31.851	4.5
24	MP3A	Mx	-.026	4.5
25	MP3B	X	0	1.5
26	MP3B	Z	-24.63	1.5
27	MP3B	Mx	.0084	1.5
28	MP3B	X	0	4.5
29	MP3B	Z	-24.63	4.5
30	MP3B	Mx	.0084	4.5
31	MP3C	X	0	1.5
32	MP3C	Z	-29.678	1.5
33	MP3C	Mx	.0038	1.5
34	MP3C	X	0	4.5
35	MP3C	Z	-29.678	4.5
36	MP3C	Mx	.0038	4.5
37	MP3A	X	0	1.5
38	MP3A	Z	-31.851	1.5
39	MP3A	Mx	.0114	1.5
40	MP3A	X	0	4.5
41	MP3A	Z	-31.851	4.5
42	MP3A	Mx	.0114	4.5
43	MP3B	X	0	1.5
44	MP3B	Z	-24.63	1.5
45	MP3B	Mx	.0214	1.5
46	MP3B	X	0	4.5
47	MP3B	Z	-24.63	4.5
48	MP3B	Mx	.0214	4.5
49	MP3C	X	0	1.5
50	MP3C	Z	-29.678	1.5
51	MP3C	Mx	-.0265	1.5
52	MP3C	X	0	4.5
53	MP3C	Z	-29.678	4.5
54	MP3C	Mx	-.0265	4.5
55	MP5A	X	0	2
56	MP5A	Z	-14.841	2
57	MP5A	Mx	-.0025	2
58	MP5A	X	0	4
59	MP5A	Z	-14.841	4
60	MP5A	Mx	-.0025	4
61	MP5B	X	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
62	MP5B	Z	-8.366	2
63	MP5B	Mx	.0038	2
64	MP5B	X	0	4
65	MP5B	Z	-8.366	4
66	MP5B	Mx	.0038	4
67	MP5C	X	0	2
68	MP5C	Z	-12.892	2
69	MP5C	Mx	-.0037	2
70	MP5C	X	0	4
71	MP5C	Z	-12.892	4
72	MP5C	Mx	-.0037	4
73	MP2A	X	0	2
74	MP2A	Z	-16.412	2
75	MP2A	Mx	0	2
76	MP2B	X	0	2
77	MP2B	Z	-12.667	2
78	MP2B	Mx	-.0055	2
79	MP2C	X	0	2
80	MP2C	Z	-12.667	2
81	MP2C	Mx	.0055	2
82	MP3A	X	0	2
83	MP3A	Z	-16.412	2
84	MP3A	Mx	0	2
85	MP3B	X	0	2
86	MP3B	Z	-12.817	2
87	MP3B	Mx	-.0056	2
88	MP3C	X	0	2
89	MP3C	Z	-12.817	2
90	MP3C	Mx	.0056	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP1A	X	15.269	.75
2	MP1A	Z	-26.447	.75
3	MP1A	Mx	-.0117	.75
4	MP1A	X	15.269	5.75
5	MP1A	Z	-26.447	5.75
6	MP1A	Mx	-.0117	5.75
7	MP1B	X	16.755	.75
8	MP1B	Z	-29.021	.75
9	MP1B	Mx	.0096	.75
10	MP1B	X	16.755	5.75
11	MP1B	Z	-29.021	5.75
12	MP1B	Mx	.0096	5.75
13	MP1C	X	18.608	.75
14	MP1C	Z	-32.23	.75
15	MP1C	Mx	-.0016	.75
16	MP1C	X	18.608	5.75
17	MP1C	Z	-32.23	5.75
18	MP1C	Mx	-.0016	5.75
19	MP3A	X	13.518	1.5
20	MP3A	Z	-23.413	1.5
21	MP3A	Mx	-.0247	1.5
22	MP3A	X	13.518	4.5
23	MP3A	Z	-23.413	4.5
24	MP3A	Mx	-.0247	4.5
25	MP3B	X	14.839	1.5
26	MP3B	Z	-25.702	1.5
27	MP3B	Mx	-.0038	1.5
28	MP3B	X	14.839	4.5
29	MP3B	Z	-25.702	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
30	MP3B	Mx	-0.038	4.5
31	MP3C	X	16.486	1.5
32	MP3C	Z	-28.555	1.5
33	MP3C	Mx	.0186	1.5
34	MP3C	X	16.486	4.5
35	MP3C	Z	-28.555	4.5
36	MP3C	Mx	.0186	4.5
37	MP3A	X	13.518	1.5
38	MP3A	Z	-23.413	1.5
39	MP3A	Mx	-0.029	1.5
40	MP3A	X	13.518	4.5
41	MP3A	Z	-23.413	4.5
42	MP3A	Mx	-0.029	4.5
43	MP3B	X	14.839	1.5
44	MP3B	Z	-25.702	1.5
45	MP3B	Mx	.0265	1.5
46	MP3B	X	14.839	4.5
47	MP3B	Z	-25.702	4.5
48	MP3B	Mx	.0265	4.5
49	MP3C	X	16.486	1.5
50	MP3C	Z	-28.555	1.5
51	MP3C	Mx	-0.0224	1.5
52	MP3C	X	16.486	4.5
53	MP3C	Z	-28.555	4.5
54	MP3C	Mx	-0.0224	4.5
55	MP5A	X	5.261	2
56	MP5A	Z	-9.113	2
57	MP5A	Mx	-.004	2
58	MP5A	X	5.261	4
59	MP5A	Z	-9.113	4
60	MP5A	Mx	-.004	4
61	MP5B	X	6.446	2
62	MP5B	Z	-11.165	2
63	MP5B	Mx	.0037	2
64	MP5B	X	6.446	4
65	MP5B	Z	-11.165	4
66	MP5B	Mx	.0037	4
67	MP5C	X	7.923	2
68	MP5C	Z	-13.723	2
69	MP5C	Mx	-0.000691	2
70	MP5C	X	7.923	4
71	MP5C	Z	-13.723	4
72	MP5C	Mx	-0.000691	4
73	MP2A	X	7.582	2
74	MP2A	Z	-13.132	2
75	MP2A	Mx	.0038	2
76	MP2B	X	5.709	2
77	MP2B	Z	-9.889	2
78	MP2B	Mx	-0.0057	2
79	MP2C	X	7.582	2
80	MP2C	Z	-13.132	2
81	MP2C	Mx	.0038	2
82	MP3A	X	7.607	2
83	MP3A	Z	-13.175	2
84	MP3A	Mx	.0038	2
85	MP3B	X	5.809	2
86	MP3B	Z	-10.062	2
87	MP3B	Mx	-0.0058	2
88	MP3C	X	7.607	2
89	MP3C	Z	-13.175	2
90	MP3C	Mx	.0038	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP1A	X	22.623	.75
2	MP1A	Z	-13.061	.75
3	MP1A	Mx	-.0129	.75
4	MP1A	X	22.623	5.75
5	MP1A	Z	-13.061	5.75
6	MP1A	Mx	-.0129	5.75
7	MP1B	X	32.23	.75
8	MP1B	Z	-18.608	.75
9	MP1B	Mx	.0016	.75
10	MP1B	X	32.23	5.75
11	MP1B	Z	-18.608	5.75
12	MP1B	Mx	.0016	5.75
13	MP1C	X	30.522	.75
14	MP1C	Z	-17.622	.75
15	MP1C	Mx	.0074	.75
16	MP1C	X	30.522	5.75
17	MP1C	Z	-17.622	5.75
18	MP1C	Mx	.0074	5.75
19	MP3A	X	20.013	1.5
20	MP3A	Z	-11.554	1.5
21	MP3A	Mx	-.0177	1.5
22	MP3A	X	20.013	4.5
23	MP3A	Z	-11.554	4.5
24	MP3A	Mx	-.0177	4.5
25	MP3B	X	28.555	1.5
26	MP3B	Z	-16.486	1.5
27	MP3B	Mx	-.0186	1.5
28	MP3B	X	28.555	4.5
29	MP3B	Z	-16.486	4.5
30	MP3B	Mx	-.0186	4.5
31	MP3C	X	27.037	1.5
32	MP3C	Z	-15.61	1.5
33	MP3C	Mx	.0265	1.5
34	MP3C	X	27.037	4.5
35	MP3C	Z	-15.61	4.5
36	MP3C	Mx	.0265	4.5
37	MP3A	X	20.013	1.5
38	MP3A	Z	-11.554	1.5
39	MP3A	Mx	-.0127	1.5
40	MP3A	X	20.013	4.5
41	MP3A	Z	-11.554	4.5
42	MP3A	Mx	-.0127	4.5
43	MP3B	X	28.555	1.5
44	MP3B	Z	-16.486	1.5
45	MP3B	Mx	.0224	1.5
46	MP3B	X	28.555	4.5
47	MP3B	Z	-16.486	4.5
48	MP3B	Mx	.0224	4.5
49	MP3C	X	27.037	1.5
50	MP3C	Z	-15.61	1.5
51	MP3C	Mx	-.0089	1.5
52	MP3C	X	27.037	4.5
53	MP3C	Z	-15.61	4.5
54	MP3C	Mx	-.0089	4.5
55	MP5A	X	6.064	2
56	MP5A	Z	-3.501	2
57	MP5A	Mx	-.0034	2
58	MP5A	X	6.064	4
59	MP5A	Z	-3.501	4
60	MP5A	Mx	-.0034	4
61	MP5B	X	13.723	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
62	MP5B	Z	-7.923	2
63	MP5B	Mx	.000691	2
64	MP5B	X	13.723	4
65	MP5B	Z	-7.923	4
66	MP5B	Mx	.000691	4
67	MP5C	X	12.362	2
68	MP5C	Z	-7.137	2
69	MP5C	Mx	.003	2
70	MP5C	X	12.362	4
71	MP5C	Z	-7.137	4
72	MP5C	Mx	.003	4
73	MP2A	X	10.97	2
74	MP2A	Z	-6.333	2
75	MP2A	Mx	.0055	2
76	MP2B	X	10.97	2
77	MP2B	Z	-6.333	2
78	MP2B	Mx	-.0055	2
79	MP2C	X	14.213	2
80	MP2C	Z	-8.206	2
81	MP2C	Mx	0	2
82	MP3A	X	11.1	2
83	MP3A	Z	-6.408	2
84	MP3A	Mx	.0056	2
85	MP3B	X	11.1	2
86	MP3B	Z	-6.408	2
87	MP3B	Mx	-.0056	2
88	MP3C	X	14.213	2
89	MP3C	Z	-8.206	2
90	MP3C	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP1A	X	27.123	.75
2	MP1A	Z	0	.75
3	MP1A	Mx	-.0127	.75
4	MP1A	X	27.123	5.75
5	MP1A	Z	0	5.75
6	MP1A	Mx	-.0127	5.75
7	MP1B	X	35.244	.75
8	MP1B	Z	0	.75
9	MP1B	Mx	-.0074	.75
10	MP1B	X	35.244	5.75
11	MP1B	Z	0	5.75
12	MP1B	Mx	-.0074	5.75
13	MP1C	X	29.568	.75
14	MP1C	Z	0	.75
15	MP1C	Mx	.0121	.75
16	MP1C	X	29.568	5.75
17	MP1C	Z	0	5.75
18	MP1C	Mx	.0121	5.75
19	MP3A	X	23.999	1.5
20	MP3A	Z	0	1.5
21	MP3A	Mx	-.0099	1.5
22	MP3A	X	23.999	4.5
23	MP3A	Z	0	4.5
24	MP3A	Mx	-.0099	4.5
25	MP3B	X	31.22	1.5
26	MP3B	Z	0	1.5
27	MP3B	Mx	-.0265	1.5
28	MP3B	X	31.22	4.5
29	MP3B	Z	0	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
30	MP3B	Mx	-.0265	4.5
31	MP3C	X	26.172	1.5
32	MP3C	Z	0	1.5
33	MP3C	Mx	.0237	1.5
34	MP3C	X	26.172	4.5
35	MP3C	Z	0	4.5
36	MP3C	Mx	.0237	4.5
37	MP3A	X	23.999	1.5
38	MP3A	Z	0	1.5
39	MP3A	Mx	-.0202	1.5
40	MP3A	X	23.999	4.5
41	MP3A	Z	0	4.5
42	MP3A	Mx	-.0202	4.5
43	MP3B	X	31.22	1.5
44	MP3B	Z	0	1.5
45	MP3B	Mx	.0089	1.5
46	MP3B	X	31.22	4.5
47	MP3B	Z	0	4.5
48	MP3B	Mx	.0089	4.5
49	MP3C	X	26.172	1.5
50	MP3C	Z	0	1.5
51	MP3C	Mx	.0049	1.5
52	MP3C	X	26.172	4.5
53	MP3C	Z	0	4.5
54	MP3C	Mx	.0049	4.5
55	MP5A	X	7.8	2
56	MP5A	Z	0	2
57	MP5A	Mx	-.0037	2
58	MP5A	X	7.8	4
59	MP5A	Z	0	4
60	MP5A	Mx	-.0037	4
61	MP5B	X	14.275	2
62	MP5B	Z	0	2
63	MP5B	Mx	-.003	2
64	MP5B	X	14.275	4
65	MP5B	Z	0	4
66	MP5B	Mx	-.003	4
67	MP5C	X	9.749	2
68	MP5C	Z	0	2
69	MP5C	Mx	.004	2
70	MP5C	X	9.749	4
71	MP5C	Z	0	4
72	MP5C	Mx	.004	4
73	MP2A	X	11.419	2
74	MP2A	Z	0	2
75	MP2A	Mx	.0057	2
76	MP2B	X	15.164	2
77	MP2B	Z	0	2
78	MP2B	Mx	-.0038	2
79	MP2C	X	15.164	2
80	MP2C	Z	0	2
81	MP2C	Mx	-.0038	2
82	MP3A	X	11.618	2
83	MP3A	Z	0	2
84	MP3A	Mx	.0058	2
85	MP3B	X	15.214	2
86	MP3B	Z	0	2
87	MP3B	Mx	-.0038	2
88	MP3C	X	15.214	2
89	MP3C	Z	0	2
90	MP3C	Mx	-.0038	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP1A	X	28.18	.75
2	MP1A	Z	16.27	.75
3	MP1A	Mx	-.0105	.75
4	MP1A	X	28.18	5.75
5	MP1A	Z	16.27	5.75
6	MP1A	Mx	-.0105	5.75
7	MP1B	X	25.606	.75
8	MP1B	Z	14.784	.75
9	MP1B	Mx	-.0121	.75
10	MP1B	X	25.606	5.75
11	MP1B	Z	14.784	5.75
12	MP1B	Mx	-.0121	5.75
13	MP1C	X	22.397	.75
14	MP1C	Z	12.931	.75
15	MP1C	Mx	.0129	.75
16	MP1C	X	22.397	5.75
17	MP1C	Z	12.931	5.75
18	MP1C	Mx	.0129	5.75
19	MP3A	X	24.955	1.5
20	MP3A	Z	14.408	1.5
21	MP3A	Mx	.0014	1.5
22	MP3A	X	24.955	4.5
23	MP3A	Z	14.408	4.5
24	MP3A	Mx	.0014	4.5
25	MP3B	X	22.666	1.5
26	MP3B	Z	13.086	1.5
27	MP3B	Mx	-.0237	1.5
28	MP3B	X	22.666	4.5
29	MP3B	Z	13.086	4.5
30	MP3B	Mx	-.0237	4.5
31	MP3C	X	19.812	1.5
32	MP3C	Z	11.439	1.5
33	MP3C	Mx	.0164	1.5
34	MP3C	X	19.812	4.5
35	MP3C	Z	11.439	4.5
36	MP3C	Mx	.0164	4.5
37	MP3A	X	24.955	1.5
38	MP3A	Z	14.408	1.5
39	MP3A	Mx	-.0261	1.5
40	MP3A	X	24.955	4.5
41	MP3A	Z	14.408	4.5
42	MP3A	Mx	-.0261	4.5
43	MP3B	X	22.666	1.5
44	MP3B	Z	13.086	1.5
45	MP3B	Mx	-.0049	1.5
46	MP3B	X	22.666	4.5
47	MP3B	Z	13.086	4.5
48	MP3B	Mx	-.0049	4.5
49	MP3C	X	19.812	1.5
50	MP3C	Z	11.439	1.5
51	MP3C	Mx	.0139	1.5
52	MP3C	X	19.812	4.5
53	MP3C	Z	11.439	4.5
54	MP3C	Mx	.0139	4.5
55	MP5A	X	10.495	2
56	MP5A	Z	6.059	2
57	MP5A	Mx	-.0039	2
58	MP5A	X	10.495	4
59	MP5A	Z	6.059	4
60	MP5A	Mx	-.0039	4
61	MP5B	X	8.442	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
62	MP5B	Z	4.874	2
63	MP5B	Mx	-.004	2
64	MP5B	X	8.442	4
65	MP5B	Z	4.874	4
66	MP5B	Mx	-.004	4
67	MP5C	X	5.884	2
68	MP5C	Z	3.397	2
69	MP5C	Mx	.0034	2
70	MP5C	X	5.884	4
71	MP5C	Z	3.397	4
72	MP5C	Mx	.0034	4
73	MP2A	X	10.97	2
74	MP2A	Z	6.333	2
75	MP2A	Mx	.0055	2
76	MP2B	X	14.213	2
77	MP2B	Z	8.206	2
78	MP2B	Mx	0	2
79	MP2C	X	10.97	2
80	MP2C	Z	6.333	2
81	MP2C	Mx	-.0055	2
82	MP3A	X	11.1	2
83	MP3A	Z	6.408	2
84	MP3A	Mx	.0056	2
85	MP3B	X	14.213	2
86	MP3B	Z	8.206	2
87	MP3B	Mx	0	2
88	MP3C	X	11.1	2
89	MP3C	Z	6.408	2
90	MP3C	Mx	-.0056	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP1A	X	18.478	.75
2	MP1A	Z	32.005	.75
3	MP1A	Mx	-.0032	.75
4	MP1A	X	18.478	5.75
5	MP1A	Z	32.005	5.75
6	MP1A	Mx	-.0032	5.75
7	MP1B	X	12.931	.75
8	MP1B	Z	22.397	.75
9	MP1B	Mx	-.0129	.75
10	MP1B	X	12.931	5.75
11	MP1B	Z	22.397	5.75
12	MP1B	Mx	-.0129	5.75
13	MP1C	X	13.917	.75
14	MP1C	Z	24.105	.75
15	MP1C	Mx	.0126	.75
16	MP1C	X	13.917	5.75
17	MP1C	Z	24.105	5.75
18	MP1C	Mx	.0126	5.75
19	MP3A	X	16.371	1.5
20	MP3A	Z	28.355	1.5
21	MP3A	Mx	.0164	1.5
22	MP3A	X	16.371	4.5
23	MP3A	Z	28.355	4.5
24	MP3A	Mx	.0164	4.5
25	MP3B	X	11.439	1.5
26	MP3B	Z	19.812	1.5
27	MP3B	Mx	-.0164	1.5
28	MP3B	X	11.439	4.5
29	MP3B	Z	19.812	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
30	MP3B	Mx	-.0164	4.5
31	MP3C	X	12.315	1.5
32	MP3C	Z	21.331	1.5
33	MP3C	Mx	.0084	1.5
34	MP3C	X	12.315	4.5
35	MP3C	Z	21.331	4.5
36	MP3C	Mx	.0084	4.5
37	MP3A	X	16.371	1.5
38	MP3A	Z	28.355	1.5
39	MP3A	Mx	-.0239	1.5
40	MP3A	X	16.371	4.5
41	MP3A	Z	28.355	4.5
42	MP3A	Mx	-.0239	4.5
43	MP3B	X	11.439	1.5
44	MP3B	Z	19.812	1.5
45	MP3B	Mx	-.0139	1.5
46	MP3B	X	11.439	4.5
47	MP3B	Z	19.812	4.5
48	MP3B	Mx	-.0139	4.5
49	MP3C	X	12.315	1.5
50	MP3C	Z	21.331	1.5
51	MP3C	Mx	.0214	1.5
52	MP3C	X	12.315	4.5
53	MP3C	Z	21.331	4.5
54	MP3C	Mx	.0214	4.5
55	MP5A	X	7.82	2
56	MP5A	Z	13.544	2
57	MP5A	Mx	-.0014	2
58	MP5A	X	7.82	4
59	MP5A	Z	13.544	4
60	MP5A	Mx	-.0014	4
61	MP5B	X	3.397	2
62	MP5B	Z	5.884	2
63	MP5B	Mx	-.0034	2
64	MP5B	X	3.397	4
65	MP5B	Z	5.884	4
66	MP5B	Mx	-.0034	4
67	MP5C	X	4.183	2
68	MP5C	Z	7.245	2
69	MP5C	Mx	.0038	2
70	MP5C	X	4.183	4
71	MP5C	Z	7.245	4
72	MP5C	Mx	.0038	4
73	MP2A	X	7.582	2
74	MP2A	Z	13.132	2
75	MP2A	Mx	.0038	2
76	MP2B	X	7.582	2
77	MP2B	Z	13.132	2
78	MP2B	Mx	.0038	2
79	MP2C	X	5.709	2
80	MP2C	Z	9.889	2
81	MP2C	Mx	-.0057	2
82	MP3A	X	7.607	2
83	MP3A	Z	13.175	2
84	MP3A	Mx	.0038	2
85	MP3B	X	7.607	2
86	MP3B	Z	13.175	2
87	MP3B	Mx	.0038	2
88	MP3C	X	5.809	2
89	MP3C	Z	10.062	2
90	MP3C	Mx	-.0058	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP1A	X	0	.75
2	MP1A	Z	35.955	.75
3	MP1A	Mx	.0061	.75
4	MP1A	X	0	5.75
5	MP1A	Z	35.955	5.75
6	MP1A	Mx	.0061	5.75
7	MP1B	X	0	.75
8	MP1B	Z	27.834	.75
9	MP1B	Mx	-.0126	.75
10	MP1B	X	0	5.75
11	MP1B	Z	27.834	5.75
12	MP1B	Mx	-.0126	5.75
13	MP1C	X	0	.75
14	MP1C	Z	33.511	.75
15	MP1C	Mx	.0096	.75
16	MP1C	X	0	5.75
17	MP1C	Z	33.511	5.75
18	MP1C	Mx	.0096	5.75
19	MP3A	X	0	1.5
20	MP3A	Z	31.851	1.5
21	MP3A	Mx	.026	1.5
22	MP3A	X	0	4.5
23	MP3A	Z	31.851	4.5
24	MP3A	Mx	.026	4.5
25	MP3B	X	0	1.5
26	MP3B	Z	24.63	1.5
27	MP3B	Mx	-.0084	1.5
28	MP3B	X	0	4.5
29	MP3B	Z	24.63	4.5
30	MP3B	Mx	-.0084	4.5
31	MP3C	X	0	1.5
32	MP3C	Z	29.678	1.5
33	MP3C	Mx	-.0038	1.5
34	MP3C	X	0	4.5
35	MP3C	Z	29.678	4.5
36	MP3C	Mx	-.0038	4.5
37	MP3A	X	0	1.5
38	MP3A	Z	31.851	1.5
39	MP3A	Mx	-.0114	1.5
40	MP3A	X	0	4.5
41	MP3A	Z	31.851	4.5
42	MP3A	Mx	-.0114	4.5
43	MP3B	X	0	1.5
44	MP3B	Z	24.63	1.5
45	MP3B	Mx	-.0214	1.5
46	MP3B	X	0	4.5
47	MP3B	Z	24.63	4.5
48	MP3B	Mx	-.0214	4.5
49	MP3C	X	0	1.5
50	MP3C	Z	29.678	1.5
51	MP3C	Mx	.0265	1.5
52	MP3C	X	0	4.5
53	MP3C	Z	29.678	4.5
54	MP3C	Mx	.0265	4.5
55	MP5A	X	0	2
56	MP5A	Z	14.841	2
57	MP5A	Mx	.0025	2
58	MP5A	X	0	4
59	MP5A	Z	14.841	4
60	MP5A	Mx	.0025	4
61	MP5B	X	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
62	MP5B	Z	8.366	2
63	MP5B	Mx	-.0038	2
64	MP5B	X	0	4
65	MP5B	Z	8.366	4
66	MP5B	Mx	-.0038	4
67	MP5C	X	0	2
68	MP5C	Z	12.892	2
69	MP5C	Mx	.0037	2
70	MP5C	X	0	4
71	MP5C	Z	12.892	4
72	MP5C	Mx	.0037	4
73	MP2A	X	0	2
74	MP2A	Z	16.412	2
75	MP2A	Mx	0	2
76	MP2B	X	0	2
77	MP2B	Z	12.667	2
78	MP2B	Mx	.0055	2
79	MP2C	X	0	2
80	MP2C	Z	12.667	2
81	MP2C	Mx	-.0055	2
82	MP3A	X	0	2
83	MP3A	Z	16.412	2
84	MP3A	Mx	0	2
85	MP3B	X	0	2
86	MP3B	Z	12.817	2
87	MP3B	Mx	.0056	2
88	MP3C	X	0	2
89	MP3C	Z	12.817	2
90	MP3C	Mx	-.0056	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP1A	X	-15.269	.75
2	MP1A	Z	26.447	.75
3	MP1A	Mx	.0117	.75
4	MP1A	X	-15.269	5.75
5	MP1A	Z	26.447	5.75
6	MP1A	Mx	.0117	5.75
7	MP1B	X	-16.755	.75
8	MP1B	Z	29.021	.75
9	MP1B	Mx	-.0096	.75
10	MP1B	X	-16.755	5.75
11	MP1B	Z	29.021	5.75
12	MP1B	Mx	-.0096	5.75
13	MP1C	X	-18.608	.75
14	MP1C	Z	32.23	.75
15	MP1C	Mx	.0016	.75
16	MP1C	X	-18.608	5.75
17	MP1C	Z	32.23	5.75
18	MP1C	Mx	.0016	5.75
19	MP3A	X	-13.518	1.5
20	MP3A	Z	23.413	1.5
21	MP3A	Mx	.0247	1.5
22	MP3A	X	-13.518	4.5
23	MP3A	Z	23.413	4.5
24	MP3A	Mx	.0247	4.5
25	MP3B	X	-14.839	1.5
26	MP3B	Z	25.702	1.5
27	MP3B	Mx	.0038	1.5
28	MP3B	X	-14.839	4.5
29	MP3B	Z	25.702	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
30	MP3B	Mx	.0038	4.5
31	MP3C	X	-16.486	1.5
32	MP3C	Z	28.555	1.5
33	MP3C	Mx	-.0186	1.5
34	MP3C	X	-16.486	4.5
35	MP3C	Z	28.555	4.5
36	MP3C	Mx	-.0186	4.5
37	MP3A	X	-13.518	1.5
38	MP3A	Z	23.413	1.5
39	MP3A	Mx	.0029	1.5
40	MP3A	X	-13.518	4.5
41	MP3A	Z	23.413	4.5
42	MP3A	Mx	.0029	4.5
43	MP3B	X	-14.839	1.5
44	MP3B	Z	25.702	1.5
45	MP3B	Mx	-.0265	1.5
46	MP3B	X	-14.839	4.5
47	MP3B	Z	25.702	4.5
48	MP3B	Mx	-.0265	4.5
49	MP3C	X	-16.486	1.5
50	MP3C	Z	28.555	1.5
51	MP3C	Mx	.0224	1.5
52	MP3C	X	-16.486	4.5
53	MP3C	Z	28.555	4.5
54	MP3C	Mx	.0224	4.5
55	MP5A	X	-5.261	2
56	MP5A	Z	9.113	2
57	MP5A	Mx	.004	2
58	MP5A	X	-5.261	4
59	MP5A	Z	9.113	4
60	MP5A	Mx	.004	4
61	MP5B	X	-6.446	2
62	MP5B	Z	11.165	2
63	MP5B	Mx	-.0037	2
64	MP5B	X	-6.446	4
65	MP5B	Z	11.165	4
66	MP5B	Mx	-.0037	4
67	MP5C	X	-7.923	2
68	MP5C	Z	13.723	2
69	MP5C	Mx	.000691	2
70	MP5C	X	-7.923	4
71	MP5C	Z	13.723	4
72	MP5C	Mx	.000691	4
73	MP2A	X	-7.582	2
74	MP2A	Z	13.132	2
75	MP2A	Mx	-.0038	2
76	MP2B	X	-5.709	2
77	MP2B	Z	9.889	2
78	MP2B	Mx	.0057	2
79	MP2C	X	-7.582	2
80	MP2C	Z	13.132	2
81	MP2C	Mx	-.0038	2
82	MP3A	X	-7.607	2
83	MP3A	Z	13.175	2
84	MP3A	Mx	-.0038	2
85	MP3B	X	-5.809	2
86	MP3B	Z	10.062	2
87	MP3B	Mx	.0058	2
88	MP3C	X	-7.607	2
89	MP3C	Z	13.175	2
90	MP3C	Mx	-.0038	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP1A	X	-22.623	.75
2	MP1A	Z	13.061	.75
3	MP1A	Mx	.0129	.75
4	MP1A	X	-22.623	5.75
5	MP1A	Z	13.061	5.75
6	MP1A	Mx	.0129	5.75
7	MP1B	X	-32.23	.75
8	MP1B	Z	18.608	.75
9	MP1B	Mx	-.0016	.75
10	MP1B	X	-32.23	5.75
11	MP1B	Z	18.608	5.75
12	MP1B	Mx	-.0016	5.75
13	MP1C	X	-30.522	.75
14	MP1C	Z	17.622	.75
15	MP1C	Mx	-.0074	.75
16	MP1C	X	-30.522	5.75
17	MP1C	Z	17.622	5.75
18	MP1C	Mx	-.0074	5.75
19	MP3A	X	-20.013	1.5
20	MP3A	Z	11.554	1.5
21	MP3A	Mx	.0177	1.5
22	MP3A	X	-20.013	4.5
23	MP3A	Z	11.554	4.5
24	MP3A	Mx	.0177	4.5
25	MP3B	X	-28.555	1.5
26	MP3B	Z	16.486	1.5
27	MP3B	Mx	.0186	1.5
28	MP3B	X	-28.555	4.5
29	MP3B	Z	16.486	4.5
30	MP3B	Mx	.0186	4.5
31	MP3C	X	-27.037	1.5
32	MP3C	Z	15.61	1.5
33	MP3C	Mx	-.0265	1.5
34	MP3C	X	-27.037	4.5
35	MP3C	Z	15.61	4.5
36	MP3C	Mx	-.0265	4.5
37	MP3A	X	-20.013	1.5
38	MP3A	Z	11.554	1.5
39	MP3A	Mx	.0127	1.5
40	MP3A	X	-20.013	4.5
41	MP3A	Z	11.554	4.5
42	MP3A	Mx	.0127	4.5
43	MP3B	X	-28.555	1.5
44	MP3B	Z	16.486	1.5
45	MP3B	Mx	-.0224	1.5
46	MP3B	X	-28.555	4.5
47	MP3B	Z	16.486	4.5
48	MP3B	Mx	-.0224	4.5
49	MP3C	X	-27.037	1.5
50	MP3C	Z	15.61	1.5
51	MP3C	Mx	.0089	1.5
52	MP3C	X	-27.037	4.5
53	MP3C	Z	15.61	4.5
54	MP3C	Mx	.0089	4.5
55	MP5A	X	-6.064	2
56	MP5A	Z	3.501	2
57	MP5A	Mx	.0034	2
58	MP5A	X	-6.064	4
59	MP5A	Z	3.501	4
60	MP5A	Mx	.0034	4
61	MP5B	X	-13.723	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
62	MP5B	Z	7.923	2
63	MP5B	Mx	-.000691	2
64	MP5B	X	-13.723	4
65	MP5B	Z	7.923	4
66	MP5B	Mx	-.000691	4
67	MP5C	X	-12.362	2
68	MP5C	Z	7.137	2
69	MP5C	Mx	-.003	2
70	MP5C	X	-12.362	4
71	MP5C	Z	7.137	4
72	MP5C	Mx	-.003	4
73	MP2A	X	-10.97	2
74	MP2A	Z	6.333	2
75	MP2A	Mx	-.0055	2
76	MP2B	X	-10.97	2
77	MP2B	Z	6.333	2
78	MP2B	Mx	.0055	2
79	MP2C	X	-14.213	2
80	MP2C	Z	8.206	2
81	MP2C	Mx	0	2
82	MP3A	X	-11.1	2
83	MP3A	Z	6.408	2
84	MP3A	Mx	-.0056	2
85	MP3B	X	-11.1	2
86	MP3B	Z	6.408	2
87	MP3B	Mx	.0056	2
88	MP3C	X	-14.213	2
89	MP3C	Z	8.206	2
90	MP3C	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP1A	X	-27.123	.75
2	MP1A	Z	0	.75
3	MP1A	Mx	.0127	.75
4	MP1A	X	-27.123	5.75
5	MP1A	Z	0	5.75
6	MP1A	Mx	.0127	5.75
7	MP1B	X	-35.244	.75
8	MP1B	Z	0	.75
9	MP1B	Mx	.0074	.75
10	MP1B	X	-35.244	5.75
11	MP1B	Z	0	5.75
12	MP1B	Mx	.0074	5.75
13	MP1C	X	-29.568	.75
14	MP1C	Z	0	.75
15	MP1C	Mx	-.0121	.75
16	MP1C	X	-29.568	5.75
17	MP1C	Z	0	5.75
18	MP1C	Mx	-.0121	5.75
19	MP3A	X	-23.999	1.5
20	MP3A	Z	0	1.5
21	MP3A	Mx	.0099	1.5
22	MP3A	X	-23.999	4.5
23	MP3A	Z	0	4.5
24	MP3A	Mx	.0099	4.5
25	MP3B	X	-31.22	1.5
26	MP3B	Z	0	1.5
27	MP3B	Mx	.0265	1.5
28	MP3B	X	-31.22	4.5
29	MP3B	Z	0	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
30	MP3B	Mx	.0265	4.5
31	MP3C	X	-26.172	1.5
32	MP3C	Z	0	1.5
33	MP3C	Mx	-.0237	1.5
34	MP3C	X	-26.172	4.5
35	MP3C	Z	0	4.5
36	MP3C	Mx	-.0237	4.5
37	MP3A	X	-23.999	1.5
38	MP3A	Z	0	1.5
39	MP3A	Mx	.0202	1.5
40	MP3A	X	-23.999	4.5
41	MP3A	Z	0	4.5
42	MP3A	Mx	.0202	4.5
43	MP3B	X	-31.22	1.5
44	MP3B	Z	0	1.5
45	MP3B	Mx	-.0089	1.5
46	MP3B	X	-31.22	4.5
47	MP3B	Z	0	4.5
48	MP3B	Mx	-.0089	4.5
49	MP3C	X	-26.172	1.5
50	MP3C	Z	0	1.5
51	MP3C	Mx	-.0049	1.5
52	MP3C	X	-26.172	4.5
53	MP3C	Z	0	4.5
54	MP3C	Mx	-.0049	4.5
55	MP5A	X	-7.8	2
56	MP5A	Z	0	2
57	MP5A	Mx	.0037	2
58	MP5A	X	-7.8	4
59	MP5A	Z	0	4
60	MP5A	Mx	.0037	4
61	MP5B	X	-14.275	2
62	MP5B	Z	0	2
63	MP5B	Mx	.003	2
64	MP5B	X	-14.275	4
65	MP5B	Z	0	4
66	MP5B	Mx	.003	4
67	MP5C	X	-9.749	2
68	MP5C	Z	0	2
69	MP5C	Mx	-.004	2
70	MP5C	X	-9.749	4
71	MP5C	Z	0	4
72	MP5C	Mx	-.004	4
73	MP2A	X	-11.419	2
74	MP2A	Z	0	2
75	MP2A	Mx	-.0057	2
76	MP2B	X	-15.164	2
77	MP2B	Z	0	2
78	MP2B	Mx	.0038	2
79	MP2C	X	-15.164	2
80	MP2C	Z	0	2
81	MP2C	Mx	.0038	2
82	MP3A	X	-11.618	2
83	MP3A	Z	0	2
84	MP3A	Mx	-.0058	2
85	MP3B	X	-15.214	2
86	MP3B	Z	0	2
87	MP3B	Mx	.0038	2
88	MP3C	X	-15.214	2
89	MP3C	Z	0	2
90	MP3C	Mx	.0038	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP1A	X	-28.18	.75
2	MP1A	Z	-16.27	.75
3	MP1A	Mx	.0105	.75
4	MP1A	X	-28.18	5.75
5	MP1A	Z	-16.27	5.75
6	MP1A	Mx	.0105	5.75
7	MP1B	X	-25.606	.75
8	MP1B	Z	-14.784	.75
9	MP1B	Mx	.0121	.75
10	MP1B	X	-25.606	5.75
11	MP1B	Z	-14.784	5.75
12	MP1B	Mx	.0121	5.75
13	MP1C	X	-22.397	.75
14	MP1C	Z	-12.931	.75
15	MP1C	Mx	-.0129	.75
16	MP1C	X	-22.397	5.75
17	MP1C	Z	-12.931	5.75
18	MP1C	Mx	-.0129	5.75
19	MP3A	X	-24.955	1.5
20	MP3A	Z	-14.408	1.5
21	MP3A	Mx	-.0014	1.5
22	MP3A	X	-24.955	4.5
23	MP3A	Z	-14.408	4.5
24	MP3A	Mx	-.0014	4.5
25	MP3B	X	-22.666	1.5
26	MP3B	Z	-13.086	1.5
27	MP3B	Mx	.0237	1.5
28	MP3B	X	-22.666	4.5
29	MP3B	Z	-13.086	4.5
30	MP3B	Mx	.0237	4.5
31	MP3C	X	-19.812	1.5
32	MP3C	Z	-11.439	1.5
33	MP3C	Mx	-.0164	1.5
34	MP3C	X	-19.812	4.5
35	MP3C	Z	-11.439	4.5
36	MP3C	Mx	-.0164	4.5
37	MP3A	X	-24.955	1.5
38	MP3A	Z	-14.408	1.5
39	MP3A	Mx	.0261	1.5
40	MP3A	X	-24.955	4.5
41	MP3A	Z	-14.408	4.5
42	MP3A	Mx	.0261	4.5
43	MP3B	X	-22.666	1.5
44	MP3B	Z	-13.086	1.5
45	MP3B	Mx	.0049	1.5
46	MP3B	X	-22.666	4.5
47	MP3B	Z	-13.086	4.5
48	MP3B	Mx	.0049	4.5
49	MP3C	X	-19.812	1.5
50	MP3C	Z	-11.439	1.5
51	MP3C	Mx	-.0139	1.5
52	MP3C	X	-19.812	4.5
53	MP3C	Z	-11.439	4.5
54	MP3C	Mx	-.0139	4.5
55	MP5A	X	-10.495	2
56	MP5A	Z	-6.059	2
57	MP5A	Mx	.0039	2
58	MP5A	X	-10.495	4
59	MP5A	Z	-6.059	4
60	MP5A	Mx	.0039	4
61	MP5B	X	-8.442	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
62	MP5B	Z	-4.874	2
63	MP5B	Mx	.004	2
64	MP5B	X	-8.442	4
65	MP5B	Z	-4.874	4
66	MP5B	Mx	.004	4
67	MP5C	X	-5.884	2
68	MP5C	Z	-3.397	2
69	MP5C	Mx	-.0034	2
70	MP5C	X	-5.884	4
71	MP5C	Z	-3.397	4
72	MP5C	Mx	-.0034	4
73	MP2A	X	-10.97	2
74	MP2A	Z	-6.333	2
75	MP2A	Mx	-.0055	2
76	MP2B	X	-14.213	2
77	MP2B	Z	-8.206	2
78	MP2B	Mx	0	2
79	MP2C	X	-10.97	2
80	MP2C	Z	-6.333	2
81	MP2C	Mx	.0055	2
82	MP3A	X	-11.1	2
83	MP3A	Z	-6.408	2
84	MP3A	Mx	-.0056	2
85	MP3B	X	-14.213	2
86	MP3B	Z	-8.206	2
87	MP3B	Mx	0	2
88	MP3C	X	-11.1	2
89	MP3C	Z	-6.408	2
90	MP3C	Mx	.0056	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP1A	X	-18.478	.75
2	MP1A	Z	-32.005	.75
3	MP1A	Mx	.0032	.75
4	MP1A	X	-18.478	5.75
5	MP1A	Z	-32.005	5.75
6	MP1A	Mx	.0032	5.75
7	MP1B	X	-12.931	.75
8	MP1B	Z	-22.397	.75
9	MP1B	Mx	.0129	.75
10	MP1B	X	-12.931	5.75
11	MP1B	Z	-22.397	5.75
12	MP1B	Mx	.0129	5.75
13	MP1C	X	-13.917	.75
14	MP1C	Z	-24.105	.75
15	MP1C	Mx	-.0126	.75
16	MP1C	X	-13.917	5.75
17	MP1C	Z	-24.105	5.75
18	MP1C	Mx	-.0126	5.75
19	MP3A	X	-16.371	1.5
20	MP3A	Z	-28.355	1.5
21	MP3A	Mx	-.0164	1.5
22	MP3A	X	-16.371	4.5
23	MP3A	Z	-28.355	4.5
24	MP3A	Mx	-.0164	4.5
25	MP3B	X	-11.439	1.5
26	MP3B	Z	-19.812	1.5
27	MP3B	Mx	.0164	1.5
28	MP3B	X	-11.439	4.5
29	MP3B	Z	-19.812	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
30	MP3B	Mx	.0164	4.5
31	MP3C	X	-12.315	1.5
32	MP3C	Z	-21.331	1.5
33	MP3C	Mx	-.0084	1.5
34	MP3C	X	-12.315	4.5
35	MP3C	Z	-21.331	4.5
36	MP3C	Mx	-.0084	4.5
37	MP3A	X	-16.371	1.5
38	MP3A	Z	-28.355	1.5
39	MP3A	Mx	.0239	1.5
40	MP3A	X	-16.371	4.5
41	MP3A	Z	-28.355	4.5
42	MP3A	Mx	.0239	4.5
43	MP3B	X	-11.439	1.5
44	MP3B	Z	-19.812	1.5
45	MP3B	Mx	.0139	1.5
46	MP3B	X	-11.439	4.5
47	MP3B	Z	-19.812	4.5
48	MP3B	Mx	.0139	4.5
49	MP3C	X	-12.315	1.5
50	MP3C	Z	-21.331	1.5
51	MP3C	Mx	-.0214	1.5
52	MP3C	X	-12.315	4.5
53	MP3C	Z	-21.331	4.5
54	MP3C	Mx	-.0214	4.5
55	MP5A	X	-7.82	2
56	MP5A	Z	-13.544	2
57	MP5A	Mx	.0014	2
58	MP5A	X	-7.82	4
59	MP5A	Z	-13.544	4
60	MP5A	Mx	.0014	4
61	MP5B	X	-3.397	2
62	MP5B	Z	-5.884	2
63	MP5B	Mx	.0034	2
64	MP5B	X	-3.397	4
65	MP5B	Z	-5.884	4
66	MP5B	Mx	.0034	4
67	MP5C	X	-4.183	2
68	MP5C	Z	-7.245	2
69	MP5C	Mx	-.0038	2
70	MP5C	X	-4.183	4
71	MP5C	Z	-7.245	4
72	MP5C	Mx	-.0038	4
73	MP2A	X	-7.582	2
74	MP2A	Z	-13.132	2
75	MP2A	Mx	-.0038	2
76	MP2B	X	-7.582	2
77	MP2B	Z	-13.132	2
78	MP2B	Mx	-.0038	2
79	MP2C	X	-5.709	2
80	MP2C	Z	-9.889	2
81	MP2C	Mx	.0057	2
82	MP3A	X	-7.607	2
83	MP3A	Z	-13.175	2
84	MP3A	Mx	-.0038	2
85	MP3B	X	-7.607	2
86	MP3B	Z	-13.175	2
87	MP3B	Mx	-.0038	2
88	MP3C	X	-5.809	2
89	MP3C	Z	-10.062	2
90	MP3C	Mx	.0058	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP1A	X	0	.75
2	MP1A	Z	-11.719	.75
3	MP1A	Mx	-.002	.75
4	MP1A	X	0	5.75
5	MP1A	Z	-11.719	5.75
6	MP1A	Mx	-.002	5.75
7	MP1B	X	0	.75
8	MP1B	Z	-8.843	.75
9	MP1B	Mx	.004	.75
10	MP1B	X	0	5.75
11	MP1B	Z	-8.843	5.75
12	MP1B	Mx	.004	5.75
13	MP1C	X	0	.75
14	MP1C	Z	-10.854	.75
15	MP1C	Mx	-.0031	.75
16	MP1C	X	0	5.75
17	MP1C	Z	-10.854	5.75
18	MP1C	Mx	-.0031	5.75
19	MP3A	X	0	1.5
20	MP3A	Z	-6.796	1.5
21	MP3A	Mx	-.0055	1.5
22	MP3A	X	0	4.5
23	MP3A	Z	-6.796	4.5
24	MP3A	Mx	-.0055	4.5
25	MP3B	X	0	1.5
26	MP3B	Z	-3.873	1.5
27	MP3B	Mx	.0013	1.5
28	MP3B	X	0	4.5
29	MP3B	Z	-3.873	4.5
30	MP3B	Mx	.0013	4.5
31	MP3C	X	0	1.5
32	MP3C	Z	-5.916	1.5
33	MP3C	Mx	.000767	1.5
34	MP3C	X	0	4.5
35	MP3C	Z	-5.916	4.5
36	MP3C	Mx	.000767	4.5
37	MP3A	X	0	1.5
38	MP3A	Z	-6.796	1.5
39	MP3A	Mx	.0024	1.5
40	MP3A	X	0	4.5
41	MP3A	Z	-6.796	4.5
42	MP3A	Mx	.0024	4.5
43	MP3B	X	0	1.5
44	MP3B	Z	-3.873	1.5
45	MP3B	Mx	.0034	1.5
46	MP3B	X	0	4.5
47	MP3B	Z	-3.873	4.5
48	MP3B	Mx	.0034	4.5
49	MP3C	X	0	1.5
50	MP3C	Z	-5.916	1.5
51	MP3C	Mx	-.0053	1.5
52	MP3C	X	0	4.5
53	MP3C	Z	-5.916	4.5
54	MP3C	Mx	-.0053	4.5
55	MP5A	X	0	2
56	MP5A	Z	-3.859	2
57	MP5A	Mx	-.00066	2
58	MP5A	X	0	4
59	MP5A	Z	-3.859	4
60	MP5A	Mx	-.00066	4
61	MP5B	X	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
62	MP5B	Z	-1.951	2
63	MP5B	Mx	.000884	2
64	MP5B	X	0	4
65	MP5B	Z	-1.951	4
66	MP5B	Mx	.000884	4
67	MP5C	X	0	2
68	MP5C	Z	-3.285	2
69	MP5C	Mx	-.000942	2
70	MP5C	X	0	4
71	MP5C	Z	-3.285	4
72	MP5C	Mx	-.000942	4
73	MP2A	X	0	2
74	MP2A	Z	-4.089	2
75	MP2A	Mx	0	2
76	MP2B	X	0	2
77	MP2B	Z	-3.08	2
78	MP2B	Mx	-.0013	2
79	MP2C	X	0	2
80	MP2C	Z	-3.08	2
81	MP2C	Mx	.0013	2
82	MP3A	X	0	2
83	MP3A	Z	-4.933	2
84	MP3A	Mx	0	2
85	MP3B	X	0	2
86	MP3B	Z	-3.756	2
87	MP3B	Mx	-.0016	2
88	MP3C	X	0	2
89	MP3C	Z	-3.756	2
90	MP3C	Mx	.0016	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP1A	X	4.901	.75
2	MP1A	Z	-8.488	.75
3	MP1A	Mx	-.0038	.75
4	MP1A	X	4.901	5.75
5	MP1A	Z	-8.488	5.75
6	MP1A	Mx	-.0038	5.75
7	MP1B	X	5.427	.75
8	MP1B	Z	-9.4	.75
9	MP1B	Mx	.0031	.75
10	MP1B	X	5.427	5.75
11	MP1B	Z	-9.4	5.75
12	MP1B	Mx	.0031	5.75
13	MP1C	X	6.083	.75
14	MP1C	Z	-10.536	.75
15	MP1C	Mx	-.00053	.75
16	MP1C	X	6.083	5.75
17	MP1C	Z	-10.536	5.75
18	MP1C	Mx	-.00053	5.75
19	MP3A	X	2.423	1.5
20	MP3A	Z	-4.197	1.5
21	MP3A	Mx	-.0044	1.5
22	MP3A	X	2.423	4.5
23	MP3A	Z	-4.197	4.5
24	MP3A	Mx	-.0044	4.5
25	MP3B	X	2.958	1.5
26	MP3B	Z	-5.124	1.5
27	MP3B	Mx	-.000766	1.5
28	MP3B	X	2.958	4.5
29	MP3B	Z	-5.124	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
30	MP3B	Mx	-.000766	4.5
31	MP3C	X	3.625	1.5
32	MP3C	Z	-6.278	1.5
33	MP3C	Mx	.0041	1.5
34	MP3C	X	3.625	4.5
35	MP3C	Z	-6.278	4.5
36	MP3C	Mx	.0041	4.5
37	MP3A	X	2.423	1.5
38	MP3A	Z	-4.197	1.5
39	MP3A	Mx	-.000528	1.5
40	MP3A	X	2.423	4.5
41	MP3A	Z	-4.197	4.5
42	MP3A	Mx	-.000528	4.5
43	MP3B	X	2.958	1.5
44	MP3B	Z	-5.124	1.5
45	MP3B	Mx	.0053	1.5
46	MP3B	X	2.958	4.5
47	MP3B	Z	-5.124	4.5
48	MP3B	Mx	.0053	4.5
49	MP3C	X	3.625	1.5
50	MP3C	Z	-6.278	1.5
51	MP3C	Mx	-.0049	1.5
52	MP3C	X	3.625	4.5
53	MP3C	Z	-6.278	4.5
54	MP3C	Mx	-.0049	4.5
55	MP5A	X	1.293	2
56	MP5A	Z	-2.24	2
57	MP5A	Mx	-.000991	2
58	MP5A	X	1.293	4
59	MP5A	Z	-2.24	4
60	MP5A	Mx	-.000991	4
61	MP5B	X	1.642	2
62	MP5B	Z	-2.845	2
63	MP5B	Mx	.000942	2
64	MP5B	X	1.642	4
65	MP5B	Z	-2.845	4
66	MP5B	Mx	.000942	4
67	MP5C	X	2.078	2
68	MP5C	Z	-3.599	2
69	MP5C	Mx	-.000181	2
70	MP5C	X	2.078	4
71	MP5C	Z	-3.599	4
72	MP5C	Mx	-.000181	4
73	MP2A	X	1.876	2
74	MP2A	Z	-3.25	2
75	MP2A	Mx	.000938	2
76	MP2B	X	1.372	2
77	MP2B	Z	-2.376	2
78	MP2B	Mx	-.0014	2
79	MP2C	X	1.876	2
80	MP2C	Z	-3.25	2
81	MP2C	Mx	.000938	2
82	MP3A	X	2.27	2
83	MP3A	Z	-3.933	2
84	MP3A	Mx	.0011	2
85	MP3B	X	1.682	2
86	MP3B	Z	-2.913	2
87	MP3B	Mx	-.0017	2
88	MP3C	X	2.27	2
89	MP3C	Z	-3.933	2
90	MP3C	Mx	.0011	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP1A	X	7.134	.75
2	MP1A	Z	-4.119	.75
3	MP1A	Mx	-.0041	.75
4	MP1A	X	7.134	5.75
5	MP1A	Z	-4.119	5.75
6	MP1A	Mx	-.0041	5.75
7	MP1B	X	10.536	.75
8	MP1B	Z	-6.083	.75
9	MP1B	Mx	.00053	.75
10	MP1B	X	10.536	5.75
11	MP1B	Z	-6.083	5.75
12	MP1B	Mx	.00053	5.75
13	MP1C	X	9.931	.75
14	MP1C	Z	-5.734	.75
15	MP1C	Mx	.0024	.75
16	MP1C	X	9.931	5.75
17	MP1C	Z	-5.734	5.75
18	MP1C	Mx	.0024	5.75
19	MP3A	X	2.821	1.5
20	MP3A	Z	-1.628	1.5
21	MP3A	Mx	-.0025	1.5
22	MP3A	X	2.821	4.5
23	MP3A	Z	-1.628	4.5
24	MP3A	Mx	-.0025	4.5
25	MP3B	X	6.278	1.5
26	MP3B	Z	-3.625	1.5
27	MP3B	Mx	-.0041	1.5
28	MP3B	X	6.278	4.5
29	MP3B	Z	-3.625	4.5
30	MP3B	Mx	-.0041	4.5
31	MP3C	X	5.664	1.5
32	MP3C	Z	-3.27	1.5
33	MP3C	Mx	.0055	1.5
34	MP3C	X	5.664	4.5
35	MP3C	Z	-3.27	4.5
36	MP3C	Mx	.0055	4.5
37	MP3A	X	2.821	1.5
38	MP3A	Z	-1.628	1.5
39	MP3A	Mx	-.0018	1.5
40	MP3A	X	2.821	4.5
41	MP3A	Z	-1.628	4.5
42	MP3A	Mx	-.0018	4.5
43	MP3B	X	6.278	1.5
44	MP3B	Z	-3.625	1.5
45	MP3B	Mx	.0049	1.5
46	MP3B	X	6.278	4.5
47	MP3B	Z	-3.625	4.5
48	MP3B	Mx	.0049	4.5
49	MP3C	X	5.664	1.5
50	MP3C	Z	-3.27	1.5
51	MP3C	Mx	-.0019	1.5
52	MP3C	X	5.664	4.5
53	MP3C	Z	-3.27	4.5
54	MP3C	Mx	-.0019	4.5
55	MP5A	X	1.341	2
56	MP5A	Z	-.774	2
57	MP5A	Mx	-.000762	2
58	MP5A	X	1.341	4
59	MP5A	Z	-.774	4
60	MP5A	Mx	-.000762	4
61	MP5B	X	3.599	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
62	MP5B	Z	-2.078	2
63	MP5B	Mx	.000181	2
64	MP5B	X	3.599	4
65	MP5B	Z	-2.078	4
66	MP5B	Mx	.000181	4
67	MP5C	X	3.197	2
68	MP5C	Z	-1.846	2
69	MP5C	Mx	.00078	2
70	MP5C	X	3.197	4
71	MP5C	Z	-1.846	4
72	MP5C	Mx	.00078	4
73	MP2A	X	2.667	2
74	MP2A	Z	-1.54	2
75	MP2A	Mx	.0013	2
76	MP2B	X	2.667	2
77	MP2B	Z	-1.54	2
78	MP2B	Mx	-.0013	2
79	MP2C	X	3.541	2
80	MP2C	Z	-2.045	2
81	MP2C	Mx	0	2
82	MP3A	X	3.253	2
83	MP3A	Z	-1.878	2
84	MP3A	Mx	.0016	2
85	MP3B	X	3.253	2
86	MP3B	Z	-1.878	2
87	MP3B	Mx	-.0016	2
88	MP3C	X	4.272	2
89	MP3C	Z	-2.467	2
90	MP3C	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP1A	X	8.592	.75
2	MP1A	Z	0	.75
3	MP1A	Mx	-.004	.75
4	MP1A	X	8.592	5.75
5	MP1A	Z	0	5.75
6	MP1A	Mx	-.004	5.75
7	MP1B	X	11.468	.75
8	MP1B	Z	0	.75
9	MP1B	Mx	-.0024	.75
10	MP1B	X	11.468	5.75
11	MP1B	Z	0	5.75
12	MP1B	Mx	-.0024	5.75
13	MP1C	X	9.457	.75
14	MP1C	Z	0	.75
15	MP1C	Mx	.0039	.75
16	MP1C	X	9.457	5.75
17	MP1C	Z	0	5.75
18	MP1C	Mx	.0039	5.75
19	MP3A	X	3.617	1.5
20	MP3A	Z	0	1.5
21	MP3A	Mx	-.0015	1.5
22	MP3A	X	3.617	4.5
23	MP3A	Z	0	4.5
24	MP3A	Mx	-.0015	4.5
25	MP3B	X	6.54	1.5
26	MP3B	Z	0	1.5
27	MP3B	Mx	-.0055	1.5
28	MP3B	X	6.54	4.5
29	MP3B	Z	0	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
30	MP3B	Mx	-0.0055	4.5
31	MP3C	X	4.497	1.5
32	MP3C	Z	0	1.5
33	MP3C	Mx	.0041	1.5
34	MP3C	X	4.497	4.5
35	MP3C	Z	0	4.5
36	MP3C	Mx	.0041	4.5
37	MP3A	X	3.617	1.5
38	MP3A	Z	0	1.5
39	MP3A	Mx	-.003	1.5
40	MP3A	X	3.617	4.5
41	MP3A	Z	0	4.5
42	MP3A	Mx	-.003	4.5
43	MP3B	X	6.54	1.5
44	MP3B	Z	0	1.5
45	MP3B	Mx	.0019	1.5
46	MP3B	X	6.54	4.5
47	MP3B	Z	0	4.5
48	MP3B	Mx	.0019	4.5
49	MP3C	X	4.497	1.5
50	MP3C	Z	0	1.5
51	MP3C	Mx	.000844	1.5
52	MP3C	X	4.497	4.5
53	MP3C	Z	0	4.5
54	MP3C	Mx	.000844	4.5
55	MP5A	X	1.784	2
56	MP5A	Z	0	2
57	MP5A	Mx	-.000838	2
58	MP5A	X	1.784	4
59	MP5A	Z	0	4
60	MP5A	Mx	-.000838	4
61	MP5B	X	3.692	2
62	MP5B	Z	0	2
63	MP5B	Mx	-.00078	2
64	MP5B	X	3.692	4
65	MP5B	Z	0	4
66	MP5B	Mx	-.00078	4
67	MP5C	X	2.358	2
68	MP5C	Z	0	2
69	MP5C	Mx	.000966	2
70	MP5C	X	2.358	4
71	MP5C	Z	0	4
72	MP5C	Mx	.000966	4
73	MP2A	X	2.744	2
74	MP2A	Z	0	2
75	MP2A	Mx	.0014	2
76	MP2B	X	3.753	2
77	MP2B	Z	0	2
78	MP2B	Mx	-.000938	2
79	MP2C	X	3.753	2
80	MP2C	Z	0	2
81	MP2C	Mx	-.000938	2
82	MP3A	X	3.364	2
83	MP3A	Z	0	2
84	MP3A	Mx	.0017	2
85	MP3B	X	4.541	2
86	MP3B	Z	0	2
87	MP3B	Mx	-.0011	2
88	MP3C	X	4.541	2
89	MP3C	Z	0	2
90	MP3C	Mx	-.0011	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP1A	X	9.102	.75
2	MP1A	Z	5.255	.75
3	MP1A	Mx	-.0034	.75
4	MP1A	X	9.102	5.75
5	MP1A	Z	5.255	5.75
6	MP1A	Mx	-.0034	5.75
7	MP1B	X	8.19	.75
8	MP1B	Z	4.729	.75
9	MP1B	Mx	-.0039	.75
10	MP1B	X	8.19	5.75
11	MP1B	Z	4.729	5.75
12	MP1B	Mx	-.0039	5.75
13	MP1C	X	7.054	.75
14	MP1C	Z	4.073	.75
15	MP1C	Mx	.0041	.75
16	MP1C	X	7.054	5.75
17	MP1C	Z	4.073	5.75
18	MP1C	Mx	.0041	5.75
19	MP3A	X	4.821	1.5
20	MP3A	Z	2.783	1.5
21	MP3A	Mx	.000279	1.5
22	MP3A	X	4.821	4.5
23	MP3A	Z	2.783	4.5
24	MP3A	Mx	.000279	4.5
25	MP3B	X	3.895	1.5
26	MP3B	Z	2.248	1.5
27	MP3B	Mx	-.0041	1.5
28	MP3B	X	3.895	4.5
29	MP3B	Z	2.248	4.5
30	MP3B	Mx	-.0041	4.5
31	MP3C	X	2.74	1.5
32	MP3C	Z	1.582	1.5
33	MP3C	Mx	.0023	1.5
34	MP3C	X	2.74	4.5
35	MP3C	Z	1.582	4.5
36	MP3C	Mx	.0023	4.5
37	MP3A	X	4.821	1.5
38	MP3A	Z	2.783	1.5
39	MP3A	Mx	-.0051	1.5
40	MP3A	X	4.821	4.5
41	MP3A	Z	2.783	4.5
42	MP3A	Mx	-.0051	4.5
43	MP3B	X	3.895	1.5
44	MP3B	Z	2.248	1.5
45	MP3B	Mx	-.000843	1.5
46	MP3B	X	3.895	4.5
47	MP3B	Z	2.248	4.5
48	MP3B	Mx	-.000843	4.5
49	MP3C	X	2.74	1.5
50	MP3C	Z	1.582	1.5
51	MP3C	Mx	.0019	1.5
52	MP3C	X	2.74	4.5
53	MP3C	Z	1.582	4.5
54	MP3C	Mx	.0019	4.5
55	MP5A	X	2.647	2
56	MP5A	Z	1.528	2
57	MP5A	Mx	-.000982	2
58	MP5A	X	2.647	4
59	MP5A	Z	1.528	4
60	MP5A	Mx	-.000982	4
61	MP5B	X	2.042	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
62	MP5B	Z	1.179	2
63	MP5B	Mx	-.000966	2
64	MP5B	X	2.042	4
65	MP5B	Z	1.179	4
66	MP5B	Mx	-.000966	4
67	MP5C	X	1.288	2
68	MP5C	Z	.744	2
69	MP5C	Mx	.000741	2
70	MP5C	X	1.288	4
71	MP5C	Z	.744	4
72	MP5C	Mx	.000741	4
73	MP2A	X	2.667	2
74	MP2A	Z	1.54	2
75	MP2A	Mx	.0013	2
76	MP2B	X	3.541	2
77	MP2B	Z	2.045	2
78	MP2B	Mx	0	2
79	MP2C	X	2.667	2
80	MP2C	Z	1.54	2
81	MP2C	Mx	-.0013	2
82	MP3A	X	3.253	2
83	MP3A	Z	1.878	2
84	MP3A	Mx	.0016	2
85	MP3B	X	4.272	2
86	MP3B	Z	2.467	2
87	MP3B	Mx	0	2
88	MP3C	X	3.253	2
89	MP3C	Z	1.878	2
90	MP3C	Mx	-.0016	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP1A	X	6.037	.75
2	MP1A	Z	10.456	.75
3	MP1A	Mx	-.001	.75
4	MP1A	X	6.037	5.75
5	MP1A	Z	10.456	5.75
6	MP1A	Mx	-.001	5.75
7	MP1B	X	4.073	.75
8	MP1B	Z	7.054	.75
9	MP1B	Mx	-.0041	.75
10	MP1B	X	4.073	5.75
11	MP1B	Z	7.054	5.75
12	MP1B	Mx	-.0041	5.75
13	MP1C	X	4.422	.75
14	MP1C	Z	7.659	.75
15	MP1C	Mx	.004	.75
16	MP1C	X	4.422	5.75
17	MP1C	Z	7.659	5.75
18	MP1C	Mx	.004	5.75
19	MP3A	X	3.578	1.5
20	MP3A	Z	6.197	1.5
21	MP3A	Mx	.0036	1.5
22	MP3A	X	3.578	4.5
23	MP3A	Z	6.197	4.5
24	MP3A	Mx	.0036	4.5
25	MP3B	X	1.582	1.5
26	MP3B	Z	2.74	1.5
27	MP3B	Mx	-.0023	1.5
28	MP3B	X	1.582	4.5
29	MP3B	Z	2.74	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
30	MP3B	Mx	-0.023	4.5
31	MP3C	X	1.936	1.5
32	MP3C	Z	3.354	1.5
33	MP3C	Mx	.0013	1.5
34	MP3C	X	1.936	4.5
35	MP3C	Z	3.354	4.5
36	MP3C	Mx	.0013	4.5
37	MP3A	X	3.578	1.5
38	MP3A	Z	6.197	1.5
39	MP3A	Mx	-0.0052	1.5
40	MP3A	X	3.578	4.5
41	MP3A	Z	6.197	4.5
42	MP3A	Mx	-0.0052	4.5
43	MP3B	X	1.582	1.5
44	MP3B	Z	2.74	1.5
45	MP3B	Mx	-0.0019	1.5
46	MP3B	X	1.582	4.5
47	MP3B	Z	2.74	4.5
48	MP3B	Mx	-0.0019	4.5
49	MP3C	X	1.936	1.5
50	MP3C	Z	3.354	1.5
51	MP3C	Mx	.0034	1.5
52	MP3C	X	1.936	4.5
53	MP3C	Z	3.354	4.5
54	MP3C	Mx	.0034	4.5
55	MP5A	X	2.047	2
56	MP5A	Z	3.546	2
57	MP5A	Mx	-0.000355	2
58	MP5A	X	2.047	4
59	MP5A	Z	3.546	4
60	MP5A	Mx	-0.000355	4
61	MP5B	X	.744	2
62	MP5B	Z	1.288	2
63	MP5B	Mx	-0.000741	2
64	MP5B	X	.744	4
65	MP5B	Z	1.288	4
66	MP5B	Mx	-0.000741	4
67	MP5C	X	.975	2
68	MP5C	Z	1.689	2
69	MP5C	Mx	.000884	2
70	MP5C	X	.975	4
71	MP5C	Z	1.689	4
72	MP5C	Mx	.000884	4
73	MP2A	X	1.876	2
74	MP2A	Z	3.25	2
75	MP2A	Mx	.000938	2
76	MP2B	X	1.876	2
77	MP2B	Z	3.25	2
78	MP2B	Mx	.000938	2
79	MP2C	X	1.372	2
80	MP2C	Z	2.376	2
81	MP2C	Mx	-0.0014	2
82	MP3A	X	2.27	2
83	MP3A	Z	3.933	2
84	MP3A	Mx	.0011	2
85	MP3B	X	2.27	2
86	MP3B	Z	3.933	2
87	MP3B	Mx	.0011	2
88	MP3C	X	1.682	2
89	MP3C	Z	2.913	2
90	MP3C	Mx	-0.0017	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP1A	X	0	.75
2	MP1A	Z	11.719	.75
3	MP1A	Mx	.002	.75
4	MP1A	X	0	5.75
5	MP1A	Z	11.719	5.75
6	MP1A	Mx	.002	5.75
7	MP1B	X	0	.75
8	MP1B	Z	8.843	.75
9	MP1B	Mx	-.004	.75
10	MP1B	X	0	5.75
11	MP1B	Z	8.843	5.75
12	MP1B	Mx	-.004	5.75
13	MP1C	X	0	.75
14	MP1C	Z	10.854	.75
15	MP1C	Mx	.0031	.75
16	MP1C	X	0	5.75
17	MP1C	Z	10.854	5.75
18	MP1C	Mx	.0031	5.75
19	MP3A	X	0	1.5
20	MP3A	Z	6.796	1.5
21	MP3A	Mx	.0055	1.5
22	MP3A	X	0	4.5
23	MP3A	Z	6.796	4.5
24	MP3A	Mx	.0055	4.5
25	MP3B	X	0	1.5
26	MP3B	Z	3.873	1.5
27	MP3B	Mx	-.0013	1.5
28	MP3B	X	0	4.5
29	MP3B	Z	3.873	4.5
30	MP3B	Mx	-.0013	4.5
31	MP3C	X	0	1.5
32	MP3C	Z	5.916	1.5
33	MP3C	Mx	-.000767	1.5
34	MP3C	X	0	4.5
35	MP3C	Z	5.916	4.5
36	MP3C	Mx	-.000767	4.5
37	MP3A	X	0	1.5
38	MP3A	Z	6.796	1.5
39	MP3A	Mx	-.0024	1.5
40	MP3A	X	0	4.5
41	MP3A	Z	6.796	4.5
42	MP3A	Mx	-.0024	4.5
43	MP3B	X	0	1.5
44	MP3B	Z	3.873	1.5
45	MP3B	Mx	-.0034	1.5
46	MP3B	X	0	4.5
47	MP3B	Z	3.873	4.5
48	MP3B	Mx	-.0034	4.5
49	MP3C	X	0	1.5
50	MP3C	Z	5.916	1.5
51	MP3C	Mx	.0053	1.5
52	MP3C	X	0	4.5
53	MP3C	Z	5.916	4.5
54	MP3C	Mx	.0053	4.5
55	MP5A	X	0	2
56	MP5A	Z	3.859	2
57	MP5A	Mx	.00066	2
58	MP5A	X	0	4
59	MP5A	Z	3.859	4
60	MP5A	Mx	.00066	4
61	MP5B	X	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
62	MP5B	Z	1.951	2
63	MP5B	Mx	-.000884	2
64	MP5B	X	0	4
65	MP5B	Z	1.951	4
66	MP5B	Mx	-.000884	4
67	MP5C	X	0	2
68	MP5C	Z	3.285	2
69	MP5C	Mx	.000942	2
70	MP5C	X	0	4
71	MP5C	Z	3.285	4
72	MP5C	Mx	.000942	4
73	MP2A	X	0	2
74	MP2A	Z	4.089	2
75	MP2A	Mx	0	2
76	MP2B	X	0	2
77	MP2B	Z	3.08	2
78	MP2B	Mx	.0013	2
79	MP2C	X	0	2
80	MP2C	Z	3.08	2
81	MP2C	Mx	-.0013	2
82	MP3A	X	0	2
83	MP3A	Z	4.933	2
84	MP3A	Mx	0	2
85	MP3B	X	0	2
86	MP3B	Z	3.756	2
87	MP3B	Mx	.0016	2
88	MP3C	X	0	2
89	MP3C	Z	3.756	2
90	MP3C	Mx	-.0016	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP1A	X	-4.901	.75
2	MP1A	Z	8.488	.75
3	MP1A	Mx	.0038	.75
4	MP1A	X	-4.901	5.75
5	MP1A	Z	8.488	5.75
6	MP1A	Mx	.0038	5.75
7	MP1B	X	-5.427	.75
8	MP1B	Z	9.4	.75
9	MP1B	Mx	-.0031	.75
10	MP1B	X	-5.427	5.75
11	MP1B	Z	9.4	5.75
12	MP1B	Mx	-.0031	5.75
13	MP1C	X	-6.083	.75
14	MP1C	Z	10.536	.75
15	MP1C	Mx	.00053	.75
16	MP1C	X	-6.083	5.75
17	MP1C	Z	10.536	5.75
18	MP1C	Mx	.00053	5.75
19	MP3A	X	-2.423	1.5
20	MP3A	Z	4.197	1.5
21	MP3A	Mx	.0044	1.5
22	MP3A	X	-2.423	4.5
23	MP3A	Z	4.197	4.5
24	MP3A	Mx	.0044	4.5
25	MP3B	X	-2.958	1.5
26	MP3B	Z	5.124	1.5
27	MP3B	Mx	.000766	1.5
28	MP3B	X	-2.958	4.5
29	MP3B	Z	5.124	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
30	MP3B	Mx	.000766	4.5
31	MP3C	X	-3.625	1.5
32	MP3C	Z	6.278	1.5
33	MP3C	Mx	-.0041	1.5
34	MP3C	X	-3.625	4.5
35	MP3C	Z	6.278	4.5
36	MP3C	Mx	-.0041	4.5
37	MP3A	X	-2.423	1.5
38	MP3A	Z	4.197	1.5
39	MP3A	Mx	.000528	1.5
40	MP3A	X	-2.423	4.5
41	MP3A	Z	4.197	4.5
42	MP3A	Mx	.000528	4.5
43	MP3B	X	-2.958	1.5
44	MP3B	Z	5.124	1.5
45	MP3B	Mx	-.0053	1.5
46	MP3B	X	-2.958	4.5
47	MP3B	Z	5.124	4.5
48	MP3B	Mx	-.0053	4.5
49	MP3C	X	-3.625	1.5
50	MP3C	Z	6.278	1.5
51	MP3C	Mx	.0049	1.5
52	MP3C	X	-3.625	4.5
53	MP3C	Z	6.278	4.5
54	MP3C	Mx	.0049	4.5
55	MP5A	X	-1.293	2
56	MP5A	Z	2.24	2
57	MP5A	Mx	.000991	2
58	MP5A	X	-1.293	4
59	MP5A	Z	2.24	4
60	MP5A	Mx	.000991	4
61	MP5B	X	-1.642	2
62	MP5B	Z	2.845	2
63	MP5B	Mx	-.000942	2
64	MP5B	X	-1.642	4
65	MP5B	Z	2.845	4
66	MP5B	Mx	-.000942	4
67	MP5C	X	-2.078	2
68	MP5C	Z	3.599	2
69	MP5C	Mx	.000181	2
70	MP5C	X	-2.078	4
71	MP5C	Z	3.599	4
72	MP5C	Mx	.000181	4
73	MP2A	X	-1.876	2
74	MP2A	Z	3.25	2
75	MP2A	Mx	-.000938	2
76	MP2B	X	-1.372	2
77	MP2B	Z	2.376	2
78	MP2B	Mx	.0014	2
79	MP2C	X	-1.876	2
80	MP2C	Z	3.25	2
81	MP2C	Mx	-.000938	2
82	MP3A	X	-2.27	2
83	MP3A	Z	3.933	2
84	MP3A	Mx	-.0011	2
85	MP3B	X	-1.682	2
86	MP3B	Z	2.913	2
87	MP3B	Mx	.0017	2
88	MP3C	X	-2.27	2
89	MP3C	Z	3.933	2
90	MP3C	Mx	-.0011	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP1A	X	-7.134	.75
2	MP1A	Z	4.119	.75
3	MP1A	Mx	.0041	.75
4	MP1A	X	-7.134	5.75
5	MP1A	Z	4.119	5.75
6	MP1A	Mx	.0041	5.75
7	MP1B	X	-10.536	.75
8	MP1B	Z	6.083	.75
9	MP1B	Mx	-.00053	.75
10	MP1B	X	-10.536	5.75
11	MP1B	Z	6.083	5.75
12	MP1B	Mx	-.00053	5.75
13	MP1C	X	-9.931	.75
14	MP1C	Z	5.734	.75
15	MP1C	Mx	-.0024	.75
16	MP1C	X	-9.931	5.75
17	MP1C	Z	5.734	5.75
18	MP1C	Mx	-.0024	5.75
19	MP3A	X	-2.821	1.5
20	MP3A	Z	1.628	1.5
21	MP3A	Mx	.0025	1.5
22	MP3A	X	-2.821	4.5
23	MP3A	Z	1.628	4.5
24	MP3A	Mx	.0025	4.5
25	MP3B	X	-6.278	1.5
26	MP3B	Z	3.625	1.5
27	MP3B	Mx	.0041	1.5
28	MP3B	X	-6.278	4.5
29	MP3B	Z	3.625	4.5
30	MP3B	Mx	.0041	4.5
31	MP3C	X	-5.664	1.5
32	MP3C	Z	3.27	1.5
33	MP3C	Mx	-.0055	1.5
34	MP3C	X	-5.664	4.5
35	MP3C	Z	3.27	4.5
36	MP3C	Mx	-.0055	4.5
37	MP3A	X	-2.821	1.5
38	MP3A	Z	1.628	1.5
39	MP3A	Mx	.0018	1.5
40	MP3A	X	-2.821	4.5
41	MP3A	Z	1.628	4.5
42	MP3A	Mx	.0018	4.5
43	MP3B	X	-6.278	1.5
44	MP3B	Z	3.625	1.5
45	MP3B	Mx	-.0049	1.5
46	MP3B	X	-6.278	4.5
47	MP3B	Z	3.625	4.5
48	MP3B	Mx	-.0049	4.5
49	MP3C	X	-5.664	1.5
50	MP3C	Z	3.27	1.5
51	MP3C	Mx	.0019	1.5
52	MP3C	X	-5.664	4.5
53	MP3C	Z	3.27	4.5
54	MP3C	Mx	.0019	4.5
55	MP5A	X	-1.341	2
56	MP5A	Z	.774	2
57	MP5A	Mx	.000762	2
58	MP5A	X	-1.341	4
59	MP5A	Z	.774	4
60	MP5A	Mx	.000762	4
61	MP5B	X	-3.599	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
62	MP5B	Z	2.078	2
63	MP5B	Mx	-.000181	2
64	MP5B	X	-3.599	4
65	MP5B	Z	2.078	4
66	MP5B	Mx	-.000181	4
67	MP5C	X	-3.197	2
68	MP5C	Z	1.846	2
69	MP5C	Mx	-.00078	2
70	MP5C	X	-3.197	4
71	MP5C	Z	1.846	4
72	MP5C	Mx	-.00078	4
73	MP2A	X	-2.667	2
74	MP2A	Z	1.54	2
75	MP2A	Mx	-.0013	2
76	MP2B	X	-2.667	2
77	MP2B	Z	1.54	2
78	MP2B	Mx	.0013	2
79	MP2C	X	-3.541	2
80	MP2C	Z	2.045	2
81	MP2C	Mx	0	2
82	MP3A	X	-3.253	2
83	MP3A	Z	1.878	2
84	MP3A	Mx	-.0016	2
85	MP3B	X	-3.253	2
86	MP3B	Z	1.878	2
87	MP3B	Mx	.0016	2
88	MP3C	X	-4.272	2
89	MP3C	Z	2.467	2
90	MP3C	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP1A	X	-8.592	.75
2	MP1A	Z	0	.75
3	MP1A	Mx	.004	.75
4	MP1A	X	-8.592	5.75
5	MP1A	Z	0	5.75
6	MP1A	Mx	.004	5.75
7	MP1B	X	-11.468	.75
8	MP1B	Z	0	.75
9	MP1B	Mx	.0024	.75
10	MP1B	X	-11.468	5.75
11	MP1B	Z	0	5.75
12	MP1B	Mx	.0024	5.75
13	MP1C	X	-9.457	.75
14	MP1C	Z	0	.75
15	MP1C	Mx	-.0039	.75
16	MP1C	X	-9.457	5.75
17	MP1C	Z	0	5.75
18	MP1C	Mx	-.0039	5.75
19	MP3A	X	-3.617	1.5
20	MP3A	Z	0	1.5
21	MP3A	Mx	.0015	1.5
22	MP3A	X	-3.617	4.5
23	MP3A	Z	0	4.5
24	MP3A	Mx	.0015	4.5
25	MP3B	X	-6.54	1.5
26	MP3B	Z	0	1.5
27	MP3B	Mx	.0055	1.5
28	MP3B	X	-6.54	4.5
29	MP3B	Z	0	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
30	MP3B	Mx	.0055	4.5
31	MP3C	X	-4.497	1.5
32	MP3C	Z	0	1.5
33	MP3C	Mx	-.0041	1.5
34	MP3C	X	-4.497	4.5
35	MP3C	Z	0	4.5
36	MP3C	Mx	-.0041	4.5
37	MP3A	X	-3.617	1.5
38	MP3A	Z	0	1.5
39	MP3A	Mx	.003	1.5
40	MP3A	X	-3.617	4.5
41	MP3A	Z	0	4.5
42	MP3A	Mx	.003	4.5
43	MP3B	X	-6.54	1.5
44	MP3B	Z	0	1.5
45	MP3B	Mx	-.0019	1.5
46	MP3B	X	-6.54	4.5
47	MP3B	Z	0	4.5
48	MP3B	Mx	-.0019	4.5
49	MP3C	X	-4.497	1.5
50	MP3C	Z	0	1.5
51	MP3C	Mx	-.000844	1.5
52	MP3C	X	-4.497	4.5
53	MP3C	Z	0	4.5
54	MP3C	Mx	-.000844	4.5
55	MP5A	X	-1.784	2
56	MP5A	Z	0	2
57	MP5A	Mx	.000838	2
58	MP5A	X	-1.784	4
59	MP5A	Z	0	4
60	MP5A	Mx	.000838	4
61	MP5B	X	-3.692	2
62	MP5B	Z	0	2
63	MP5B	Mx	.00078	2
64	MP5B	X	-3.692	4
65	MP5B	Z	0	4
66	MP5B	Mx	.00078	4
67	MP5C	X	-2.358	2
68	MP5C	Z	0	2
69	MP5C	Mx	-.000966	2
70	MP5C	X	-2.358	4
71	MP5C	Z	0	4
72	MP5C	Mx	-.000966	4
73	MP2A	X	-2.744	2
74	MP2A	Z	0	2
75	MP2A	Mx	-.0014	2
76	MP2B	X	-3.753	2
77	MP2B	Z	0	2
78	MP2B	Mx	.000938	2
79	MP2C	X	-3.753	2
80	MP2C	Z	0	2
81	MP2C	Mx	.000938	2
82	MP3A	X	-3.364	2
83	MP3A	Z	0	2
84	MP3A	Mx	-.0017	2
85	MP3B	X	-4.541	2
86	MP3B	Z	0	2
87	MP3B	Mx	.0011	2
88	MP3C	X	-4.541	2
89	MP3C	Z	0	2
90	MP3C	Mx	.0011	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP1A	X	-9.102	.75
2	MP1A	Z	-5.255	.75
3	MP1A	Mx	.0034	.75
4	MP1A	X	-9.102	5.75
5	MP1A	Z	-5.255	5.75
6	MP1A	Mx	.0034	5.75
7	MP1B	X	-8.19	.75
8	MP1B	Z	-4.729	.75
9	MP1B	Mx	.0039	.75
10	MP1B	X	-8.19	5.75
11	MP1B	Z	-4.729	5.75
12	MP1B	Mx	.0039	5.75
13	MP1C	X	-7.054	.75
14	MP1C	Z	-4.073	.75
15	MP1C	Mx	-.0041	.75
16	MP1C	X	-7.054	5.75
17	MP1C	Z	-4.073	5.75
18	MP1C	Mx	-.0041	5.75
19	MP3A	X	-4.821	1.5
20	MP3A	Z	-2.783	1.5
21	MP3A	Mx	-.000279	1.5
22	MP3A	X	-4.821	4.5
23	MP3A	Z	-2.783	4.5
24	MP3A	Mx	-.000279	4.5
25	MP3B	X	-3.895	1.5
26	MP3B	Z	-2.248	1.5
27	MP3B	Mx	.0041	1.5
28	MP3B	X	-3.895	4.5
29	MP3B	Z	-2.248	4.5
30	MP3B	Mx	.0041	4.5
31	MP3C	X	-2.74	1.5
32	MP3C	Z	-1.582	1.5
33	MP3C	Mx	-.0023	1.5
34	MP3C	X	-2.74	4.5
35	MP3C	Z	-1.582	4.5
36	MP3C	Mx	-.0023	4.5
37	MP3A	X	-4.821	1.5
38	MP3A	Z	-2.783	1.5
39	MP3A	Mx	.0051	1.5
40	MP3A	X	-4.821	4.5
41	MP3A	Z	-2.783	4.5
42	MP3A	Mx	.0051	4.5
43	MP3B	X	-3.895	1.5
44	MP3B	Z	-2.248	1.5
45	MP3B	Mx	.000843	1.5
46	MP3B	X	-3.895	4.5
47	MP3B	Z	-2.248	4.5
48	MP3B	Mx	.000843	4.5
49	MP3C	X	-2.74	1.5
50	MP3C	Z	-1.582	1.5
51	MP3C	Mx	-.0019	1.5
52	MP3C	X	-2.74	4.5
53	MP3C	Z	-1.582	4.5
54	MP3C	Mx	-.0019	4.5
55	MP5A	X	-2.647	2
56	MP5A	Z	-1.528	2
57	MP5A	Mx	.000982	2
58	MP5A	X	-2.647	4
59	MP5A	Z	-1.528	4
60	MP5A	Mx	.000982	4
61	MP5B	X	-2.042	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
62	MP5B	Z	-1.179	2
63	MP5B	Mx	.000966	2
64	MP5B	X	-2.042	4
65	MP5B	Z	-1.179	4
66	MP5B	Mx	.000966	4
67	MP5C	X	-1.288	2
68	MP5C	Z	-.744	2
69	MP5C	Mx	-.000741	2
70	MP5C	X	-1.288	4
71	MP5C	Z	-.744	4
72	MP5C	Mx	-.000741	4
73	MP2A	X	-2.667	2
74	MP2A	Z	-1.54	2
75	MP2A	Mx	-.0013	2
76	MP2B	X	-3.541	2
77	MP2B	Z	-2.045	2
78	MP2B	Mx	0	2
79	MP2C	X	-2.667	2
80	MP2C	Z	-1.54	2
81	MP2C	Mx	.0013	2
82	MP3A	X	-3.253	2
83	MP3A	Z	-1.878	2
84	MP3A	Mx	-.0016	2
85	MP3B	X	-4.272	2
86	MP3B	Z	-2.467	2
87	MP3B	Mx	0	2
88	MP3C	X	-3.253	2
89	MP3C	Z	-1.878	2
90	MP3C	Mx	.0016	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP1A	X	-6.037	.75
2	MP1A	Z	-10.456	.75
3	MP1A	Mx	.001	.75
4	MP1A	X	-6.037	5.75
5	MP1A	Z	-10.456	5.75
6	MP1A	Mx	.001	5.75
7	MP1B	X	-4.073	.75
8	MP1B	Z	-7.054	.75
9	MP1B	Mx	.0041	.75
10	MP1B	X	-4.073	5.75
11	MP1B	Z	-7.054	5.75
12	MP1B	Mx	.0041	5.75
13	MP1C	X	-4.422	.75
14	MP1C	Z	-7.659	.75
15	MP1C	Mx	-.004	.75
16	MP1C	X	-4.422	5.75
17	MP1C	Z	-7.659	5.75
18	MP1C	Mx	-.004	5.75
19	MP3A	X	-3.578	1.5
20	MP3A	Z	-6.197	1.5
21	MP3A	Mx	-.0036	1.5
22	MP3A	X	-3.578	4.5
23	MP3A	Z	-6.197	4.5
24	MP3A	Mx	-.0036	4.5
25	MP3B	X	-1.582	1.5
26	MP3B	Z	-2.74	1.5
27	MP3B	Mx	.0023	1.5
28	MP3B	X	-1.582	4.5
29	MP3B	Z	-2.74	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
30	MP3B	Mx	.0023	4.5
31	MP3C	X	-1.936	1.5
32	MP3C	Z	-3.354	1.5
33	MP3C	Mx	-.0013	1.5
34	MP3C	X	-1.936	4.5
35	MP3C	Z	-3.354	4.5
36	MP3C	Mx	-.0013	4.5
37	MP3A	X	-3.578	1.5
38	MP3A	Z	-6.197	1.5
39	MP3A	Mx	.0052	1.5
40	MP3A	X	-3.578	4.5
41	MP3A	Z	-6.197	4.5
42	MP3A	Mx	.0052	4.5
43	MP3B	X	-1.582	1.5
44	MP3B	Z	-2.74	1.5
45	MP3B	Mx	.0019	1.5
46	MP3B	X	-1.582	4.5
47	MP3B	Z	-2.74	4.5
48	MP3B	Mx	.0019	4.5
49	MP3C	X	-1.936	1.5
50	MP3C	Z	-3.354	1.5
51	MP3C	Mx	-.0034	1.5
52	MP3C	X	-1.936	4.5
53	MP3C	Z	-3.354	4.5
54	MP3C	Mx	-.0034	4.5
55	MP5A	X	-2.047	2
56	MP5A	Z	-3.546	2
57	MP5A	Mx	.000355	2
58	MP5A	X	-2.047	4
59	MP5A	Z	-3.546	4
60	MP5A	Mx	.000355	4
61	MP5B	X	-.744	2
62	MP5B	Z	-1.288	2
63	MP5B	Mx	.000741	2
64	MP5B	X	-.744	4
65	MP5B	Z	-1.288	4
66	MP5B	Mx	.000741	4
67	MP5C	X	-.975	2
68	MP5C	Z	-1.689	2
69	MP5C	Mx	-.000884	2
70	MP5C	X	-.975	4
71	MP5C	Z	-1.689	4
72	MP5C	Mx	-.000884	4
73	MP2A	X	-1.876	2
74	MP2A	Z	-3.25	2
75	MP2A	Mx	-.000938	2
76	MP2B	X	-1.876	2
77	MP2B	Z	-3.25	2
78	MP2B	Mx	-.000938	2
79	MP2C	X	-1.372	2
80	MP2C	Z	-2.376	2
81	MP2C	Mx	.0014	2
82	MP3A	X	-2.27	2
83	MP3A	Z	-3.933	2
84	MP3A	Mx	-.0011	2
85	MP3B	X	-2.27	2
86	MP3B	Z	-3.933	2
87	MP3B	Mx	-.0011	2
88	MP3C	X	-1.682	2
89	MP3C	Z	-2.913	2
90	MP3C	Mx	.0017	2

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft, %]
1	M59	Y	-500	0

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft, %]
1	M60	Y	-500	0

Member Point Loads (BLC 79 : Lv1)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft, %]
1	M1	Y	-250	%100

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft, %]
1	M1	Y	-250	%50

Member Point Loads (BLC 81 : Antenna Ev)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft, %]
1	MP1A	Y	-.8911	.75
2	MP1A	My	-.000419	.75
3	MP1A	Mz	.000152	.75
4	MP1A	Y	-.8911	5.75
5	MP1A	My	-.000419	5.75
6	MP1A	Mz	.000152	5.75
7	MP1B	Y	-.8911	.75
8	MP1B	My	-.000188	.75
9	MP1B	Mz	-.000404	.75
10	MP1B	Y	-.8911	5.75
11	MP1B	My	-.000188	5.75
12	MP1B	Mz	-.000404	5.75
13	MP1C	Y	-.8911	.75
14	MP1C	My	.000365	.75
15	MP1C	Mz	.000256	.75
16	MP1C	Y	-.8911	5.75
17	MP1C	My	.000365	5.75
18	MP1C	Mz	.000256	5.75
19	MP3A	Y	-.7765	1.5
20	MP3A	My	-.00032	1.5
21	MP3A	Mz	.000633	1.5
22	MP3A	Y	-.7765	4.5
23	MP3A	My	-.00032	4.5
24	MP3A	Mz	.000633	4.5
25	MP3B	Y	-.7765	1.5
26	MP3B	My	-.000659	1.5
27	MP3B	Mz	-.000264	1.5
28	MP3B	Y	-.7765	4.5
29	MP3B	My	-.000659	4.5
30	MP3B	Mz	-.000264	4.5
31	MP3C	Y	-.7765	1.5
32	MP3C	My	.000702	1.5
33	MP3C	Mz	-.000101	1.5
34	MP3C	Y	-.7765	4.5
35	MP3C	My	.000702	4.5
36	MP3C	Mz	-.000101	4.5
37	MP3A	Y	-.7765	1.5
38	MP3A	My	-.000652	1.5
39	MP3A	Mz	-.000279	1.5
40	MP3A	Y	-.7765	4.5
41	MP3A	My	-.000652	4.5
42	MP3A	Mz	-.000279	4.5
43	MP3B	Y	-.7765	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
44	MP3B	My	.000221	1.5
45	MP3B	Mz	-.000674	1.5
46	MP3B	Y	-.7765	4.5
47	MP3B	Mv	.000221	4.5
48	MP3B	Mz	-.000674	4.5
49	MP3C	Y	-.7765	1.5
50	MP3C	My	.000146	1.5
51	MP3C	Mz	.000694	1.5
52	MP3C	Y	-.7765	4.5
53	MP3C	My	.000146	4.5
54	MP3C	Mz	.000694	4.5
55	MP5A	Y	-1.1124	2
56	MP5A	My	-.000523	2
57	MP5A	Mz	.00019	2
58	MP5A	Y	-1.1124	4
59	MP5A	My	-.000523	4
60	MP5A	Mz	.00019	4
61	MP5B	Y	-1.1124	2
62	MP5B	My	-.000235	2
63	MP5B	Mz	-.000504	2
64	MP5B	Y	-1.1124	4
65	MP5B	My	-.000235	4
66	MP5B	Mz	-.000504	4
67	MP5C	Y	-1.1124	2
68	MP5C	My	.000456	2
69	MP5C	Mz	.000319	2
70	MP5C	Y	-1.1124	4
71	MP5C	Mv	.000456	4
72	MP5C	Mz	.000319	4
73	MP2A	Y	-2.9004	2
74	MP2A	My	.0014	2
75	MP2A	Mz	0	2
76	MP2B	Y	-2.9004	2
77	MP2B	Mv	-.000725	2
78	MP2B	Mz	.0013	2
79	MP2C	Y	-2.9004	2
80	MP2C	My	-.000725	2
81	MP2C	Mz	-.0013	2
82	MP3A	Y	-3.0712	2
83	MP3A	My	.0015	2
84	MP3A	Mz	0	2
85	MP3B	Y	-3.0712	2
86	MP3B	My	-.000768	2
87	MP3B	Mz	.0013	2
88	MP3C	Y	-3.0712	2
89	MP3C	My	-.000768	2
90	MP3C	Mz	-.0013	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP1A	Z	-2.2277	.75
2	MP1A	Mx	-.000381	.75
3	MP1A	Z	-2.2277	5.75
4	MP1A	Mx	-.000381	5.75
5	MP1B	Z	-2.2277	.75
6	MP1B	Mx	.001	.75
7	MP1B	Z	-2.2277	5.75
8	MP1B	Mx	.001	5.75
9	MP1C	Z	-2.2277	.75
10	MP1C	Mx	-.000639	.75
11	MP1C	Z	-2.2277	5.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
12	MP1C	Mx	-.000639	5.75
13	MP3A	Z	-1.9413	1.5
14	MP3A	Mx	-.0016	1.5
15	MP3A	Z	-1.9413	4.5
16	MP3A	Mx	-.0016	4.5
17	MP3B	Z	-1.9413	1.5
18	MP3B	Mx	.00066	1.5
19	MP3B	Z	-1.9413	4.5
20	MP3B	Mx	.00066	4.5
21	MP3C	Z	-1.9413	1.5
22	MP3C	Mx	.000252	1.5
23	MP3C	Z	-1.9413	4.5
24	MP3C	Mx	.000252	4.5
25	MP3A	Z	-1.9413	1.5
26	MP3A	Mx	.000698	1.5
27	MP3A	Z	-1.9413	4.5
28	MP3A	Mx	.000698	4.5
29	MP3B	Z	-1.9413	1.5
30	MP3B	Mx	.0017	1.5
31	MP3B	Z	-1.9413	4.5
32	MP3B	Mx	.0017	4.5
33	MP3C	Z	-1.9413	1.5
34	MP3C	Mx	-.0017	1.5
35	MP3C	Z	-1.9413	4.5
36	MP3C	Mx	-.0017	4.5
37	MP5A	Z	-2.781	2
38	MP5A	Mx	-.000476	2
39	MP5A	Z	-2.781	4
40	MP5A	Mx	-.000476	4
41	MP5B	Z	-2.781	2
42	MP5B	Mx	.0013	2
43	MP5B	Z	-2.781	4
44	MP5B	Mx	.0013	4
45	MP5C	Z	-2.781	2
46	MP5C	Mx	-.000798	2
47	MP5C	Z	-2.781	4
48	MP5C	Mx	-.000798	4
49	MP2A	Z	-7.2509	2
50	MP2A	Mx	0	2
51	MP2B	Z	-7.2509	2
52	MP2B	Mx	-.0031	2
53	MP2C	Z	-7.2509	2
54	MP2C	Mx	.0031	2
55	MP3A	Z	-7.678	2
56	MP3A	Mx	0	2
57	MP3B	Z	-7.678	2
58	MP3B	Mx	-.0033	2
59	MP3C	Z	-7.678	2
60	MP3C	Mx	.0033	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP1A	X	2.2277	.75
2	MP1A	Mx	-.001	.75
3	MP1A	X	2.2277	5.75
4	MP1A	Mx	-.001	5.75
5	MP1B	X	2.2277	.75
6	MP1B	Mx	-.000471	.75
7	MP1B	X	2.2277	5.75
8	MP1B	Mx	-.000471	5.75
9	MP1C	X	2.2277	.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
10	MP1C	Mx	.000912	.75
11	MP1C	X	2.2277	5.75
12	MP1C	Mx	.000912	5.75
13	MP3A	X	1.9413	1.5
14	MP3A	Mx	-.000801	1.5
15	MP3A	X	1.9413	4.5
16	MP3A	Mx	-.000801	4.5
17	MP3B	X	1.9413	1.5
18	MP3B	Mx	-.0016	1.5
19	MP3B	X	1.9413	4.5
20	MP3B	Mx	-.0016	4.5
21	MP3C	X	1.9413	1.5
22	MP3C	Mx	.0018	1.5
23	MP3C	X	1.9413	4.5
24	MP3C	Mx	.0018	4.5
25	MP3A	X	1.9413	1.5
26	MP3A	Mx	-.0016	1.5
27	MP3A	X	1.9413	4.5
28	MP3A	Mx	-.0016	4.5
29	MP3B	X	1.9413	1.5
30	MP3B	Mx	.000553	1.5
31	MP3B	X	1.9413	4.5
32	MP3B	Mx	.000553	4.5
33	MP3C	X	1.9413	1.5
34	MP3C	Mx	.000364	1.5
35	MP3C	X	1.9413	4.5
36	MP3C	Mx	.000364	4.5
37	MP5A	X	2.781	2
38	MP5A	Mx	-.0013	2
39	MP5A	X	2.781	4
40	MP5A	Mx	-.0013	4
41	MP5B	X	2.781	2
42	MP5B	Mx	-.000588	2
43	MP5B	X	2.781	4
44	MP5B	Mx	-.000588	4
45	MP5C	X	2.781	2
46	MP5C	Mx	.0011	2
47	MP5C	X	2.781	4
48	MP5C	Mx	.0011	4
49	MP2A	X	7.2509	2
50	MP2A	Mx	.0036	2
51	MP2B	X	7.2509	2
52	MP2B	Mx	-.0018	2
53	MP2C	X	7.2509	2
54	MP2C	Mx	-.0018	2
55	MP3A	X	7.678	2
56	MP3A	Mx	.0038	2
57	MP3B	X	7.678	2
58	MP3B	Mx	-.0019	2
59	MP3C	X	7.678	2
60	MP3C	Mx	-.0019	2

Member Area Loads (BLC 39 : Structure D)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N35	N36	N16	N26	Y	A-B	-.009
2	N35	N37	N6	N26	Y	A-B	-.009
3	N37	N36	N16	N6	Y	A-B	-.009

Member Area Loads (BLC 40 : Structure Di)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
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Member Area Loads (BLC 40 : Structure Di) (Continued)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N35	N36	N16	N26	Y	A-B	-.013
2	N35	N37	N6	N26	Y	A-B	-.013
3	N37	N36	N16	N6	Y	A-B	-.013

Member Area Loads (BLC 84 : Structure Ev)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N35	N36	N16	N26	Y	Two Way	-.000202
2	N35	N37	N6	N26	Y	Two Way	-.000202
3	N37	N36	N16	N6	Y	Two Way	-.000202

Member Area Loads (BLC 85 : Structure Eh (0 Deg))

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N35	N36	N16	N26	Z	Two Way	-.000505
2	N35	N37	N6	N26	Z	Two Way	-.000505
3	N37	N36	N16	N6	Z	Two Way	-.000505

Member Area Loads (BLC 86 : Structure Eh (90 Deg))

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N35	N36	N16	N26	X	Two Way	.000505
2	N35	N37	N6	N26	X	Two Way	.000505
3	N37	N36	N16	N6	X	Two Way	.000505

Envelope Joint Reactions

Joint	X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	...	MZ [k-ft]	LC		
1	N2	...	662.25	10	127.775	8	3736.934	1	.156	8	1.527	4	.013	10
2	...	...	-661.952	4	-51.141	2	-2287.384	7	-.014	2	-1.528	10	-.013	4
3	N4	...	3293.751	9	137.155	40	1180.941	3	0	10	1.475	12	.009	10
4	...	...	-2013.752	3	-44.264	10	-1922.75	9	-.11	40	-1.477	6	-.192	40
5	N3	...	1770.079	11	138.186	48	1121.122	12	.041	49	1.449	8	.193	48
6	...	...	-3051.791	5	-89.165	49	-1859.415	6	-.112	48	-1.45	2	-.071	49
7	N146	...	49.093	10	2198.237	13	-656.744	7	0	75	0	4	0	10
8	...	...	-49.121	4	528.729	7	-2636.233	13	0	1	0	10	0	4
9	N147	...	2312.704	17	2225.996	17	1335.09	17	0	4	0	4	0	4
10	...	...	631.396	11	587.577	11	364.749	11	0	10	0	10	0	10
11	N148	...	-568.936	3	2236.144	21	1341.577	21	0	6	0	12	0	12
12	...	...	-2323.388	21	528.795	3	328.224	3	0	12	0	6	0	6
13	Totals:	...	4505.484	10	6422.552	16	4730.181	1						
14	...	...	-4505.484	4	2220.348	72	-4730.181	7						

Joint Reactions

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
1	1	N2	1.729	-32.907	3736.934	.014	-.139	0
2	1	N4	-498.297	85.735	740.165	-.067	.642	-.096
3	1	N3	499.238	91.243	975.178	-.07	-1.323	.102
4	1	N146	-.382	1440.705	-1711.004	0	0	0
5	1	N147	775.973	750.547	493.447	0	0	0
6	1	N148	-778.27	752.979	495.459	0	0	0
7	1	Totals:	-.009	3088.302	4730.181			
8	1	COG (ft):	X: 0	Y: .66	Z: 0			
9	2	N2	-255.069	-51.141	3574.538	-.014	.364	-.005
10	2	N4	-1652.126	97.703	1108.578	-.063	.121	-.099
11	2	N3	-931.158	26.018	220.389	-.039	-1.45	.041
12	2	N146	-19.041	1423.382	-1690.745	0	0	0
13	2	N147	1026.088	1008.616	649.237	0	0	0
14	2	N148	-616.843	583.724	378.299	0	0	0
15	2	Totals:	-2448.15	3088.302	4240.296			
16	2	COG (ft):	X: 0	Y: .66	Z: 0			

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
17	3	N2	-637.369	-14.637	2414.118	.021	1.473	-.01
18	3	N4	-2013.752	112.033	1180.941	-.066	.241	-.114
19	3	N3	-2143.128	-11.39	-839.08	-.021	-.476	.016
20	3	N146	-38.583	1232.116	-1465.222	0	0	0
21	3	N147	1258.773	1241.386	773.001	0	0	0
22	3	N148	-568.936	528.795	328.224	0	0	0
23	3	Totals:	-4142.994	3088.303	2391.982			
24	3	COG (ft):	X: 0	Y: .66	Z: 0			
25	4	N2	-661.952	46.964	762.97	.084	1.527	-.013
26	4	N4	-1701.421	114.214	748.725	-.067	-.188	-.126
27	4	N3	-2820.076	-18.313	-1523.753	-.018	.034	.021
28	4	N146	-49.121	975.438	-1172.407	0	0	0
29	4	N147	1389.019	1362	824.506	0	0	0
30	4	N148	-661.934	608	359.971	0	0	0
31	4	Totals:	-4505.484	3088.303	.012			
32	4	COG (ft):	X: 0	Y: .66	Z: 0			
33	5	N2	-316.865	75.247	-664.008	.104	.465	-.01
34	5	N4	-939.317	76.036	-85.047	-.044	-1.241	-.096
35	5	N3	-3051.791	-36.006	-1750.867	-.003	-.178	.005
36	5	N146	-40.055	777.999	-952.529	0	0	0
37	5	N147	1445.652	1406.624	834.127	0	0	0
38	5	N148	-855.668	788.402	448.603	0	0	0
39	5	Totals:	-3758.044	3088.302	-2169.722			
40	5	COG (ft):	X: 0	Y: .66	Z: 0			
41	6	N2	-72.148	82.545	-1679.589	.1	-.06	-.005
42	6	N4	280.427	18.679	-905.437	-.011	-1.477	-.045
43	6	N3	-2768.103	-52.108	-1859.415	.013	.25	-.013
44	6	N146	-19.321	635.053	-786.53	0	0	0
45	6	N147	1436.319	1388.186	807.033	0	0	0
46	6	N148	-1083.064	1015.946	568.59	0	0	0
47	6	Totals:	-2225.89	3088.301	-3855.348			
48	6	COG (ft):	X: 0	Y: .66	Z: 0			
49	7	N2	-.272	108.989	-2287.384	.128	.138	0
50	7	N4	1774.843	-15.287	-1479.61	0	-.645	-.021
51	7	N3	-1776.51	-19.326	-1716.491	.002	1.324	.018
52	7	N146	.136	528.729	-656.744	0	0	0
53	7	N147	1300.649	1243.681	706.122	0	0	0
54	7	N148	-1298.836	1241.516	703.927	0	0	0
55	7	Totals:	.009	3088.301	-4730.181			
56	7	COG (ft):	X: 0	Y: .66	Z: 0			
57	8	N2	254.078	127.775	-2127.795	.156	-.363	.005
58	8	N4	2931.548	-27.756	-1848.181	-.005	-.125	-.017
59	8	N3	-348.116	45.972	-958.539	-.03	1.449	.078
60	8	N146	19.104	545.761	-676.629	0	0	0
61	8	N147	1051.468	986.239	550.208	0	0	0
62	8	N148	-1459.931	1410.309	820.641	0	0	0
63	8	Totals:	2448.151	3088.3	-4240.296			
64	8	COG (ft):	X: 0	Y: .66	Z: 0			
65	9	N2	633.767	91.654	-966.335	.123	-1.474	.01
66	9	N4	3293.751	-42.269	-1922.75	-.001	-.243	-.002
67	9	N3	865.362	83.038	103.408	-.048	.472	.103
68	9	N146	39.225	738.046	-903.349	0	0	0
69	9	N147	818.192	752.886	426.083	0	0	0
70	9	N148	-1507.302	1464.944	870.961	0	0	0
71	9	Totals:	4142.995	3088.3	-2391.982			
72	9	COG (ft):	X: 0	Y: .66	Z: 0			
73	10	N2	662.25	29.763	685.278	.06	-1.528	.013
74	10	N4	2980.306	-44.264	-1487.026	0	.189	.009
75	10	N3	1540.791	89.234	784.969	-.05	-.037	.097
76	10	N146	49.093	995.465	-1197.049	0	0	0
77	10	N147	687.709	632.138	374.739	0	0	0

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
78	10	N148	-1414.664	1385.965	839.077	0	0	0
79	10	Totals:	4505.484	3088.299	-.012			
80	10	COG (ft):	X: 0	Y: .66	Z: 0			
81	11	N2	318.303	.866	2109.931	.038	-.468	.01
82	11	N4	2220.681	-6.134	-651.578	-.024	1.24	-.021
83	11	N3	1770.079	106.542	1012.686	-.065	.177	.112
84	11	N146	39.995	1192.721	-1416.722	0	0	0
85	11	N147	631.396	587.577	364.749	0	0	0
86	11	N148	-1222.41	1206.728	750.657	0	0	0
87	11	Totals:	3758.044	3088.3	2169.722			
88	11	COG (ft):	X: 0	Y: .66	Z: 0			
89	12	N2	72.134	-6.697	3127.601	.041	.057	.005
90	12	N4	999.447	51.516	165.813	-.056	1.475	-.072
91	12	N3	1489.7	123.299	1121.122	-.082	-.25	.132
92	12	N146	19.522	1335.184	-1582.169	0	0	0
93	12	N147	640.117	605.549	391.727	0	0	0
94	12	N148	-995.029	979.451	631.255	0	0	0
95	12	Totals:	2225.89	3088.301	3855.349			
96	12	COG (ft):	X: 0	Y: .66	Z: 0			
97	13	N2	-.921	26.349	2353.252	.096	-.021	0
98	13	N4	1048.598	48.418	-460.726	-.058	.226	-.095
99	13	N3	-1047.086	51.019	-419.035	-.06	-.342	.098
100	13	N146	-.094	2198.237	-2636.233	0	0	0
101	13	N147	2130.761	2048.965	1241.341	0	0	0
102	13	N148	-2131.26	2049.564	1241.95	0	0	0
103	13	Totals:	0	6422.552	1320.547			
104	13	COG (ft):	X: 0	Y: .658	Z: 0			
105	14	N2	-67.898	23.519	2287.713	.091	.095	-.001
106	14	N4	734.925	52.279	-371.609	-.057	.05	-.097
107	14	N3	-1443.466	37.08	-614.424	-.054	-.417	.086
108	14	N146	-4.492	2189.803	-2625.692	0	0	0
109	14	N147	2194.575	2114.878	1281.373	0	0	0
110	14	N148	-2088.1	2004.993	1210.825	0	0	0
111	14	Totals:	-674.456	6422.552	1168.184			
112	14	COG (ft):	X: 0	Y: .658	Z: 0			
113	15	N2	-166.334	31.595	1976.355	.098	.364	-.003
114	15	N4	626.624	55.254	-361.244	-.058	.034	-.1
115	15	N3	-1784.404	27.901	-894.043	-.049	-.201	.08
116	15	N146	-9.568	2141.313	-2567.929	0	0	0
117	15	N147	2256.417	2176.501	1314.266	0	0	0
118	15	N148	-2074.311	1989.988	1197.456	0	0	0
119	15	Totals:	-1151.575	6422.552	664.861			
120	15	COG (ft):	X: 0	Y: .658	Z: 0			
121	16	N2	-188.868	45.092	1529.627	.111	.424	-.003
122	16	N4	700.808	55.143	-476.005	-.057	-.074	-.102
123	16	N3	-1980.793	24.99	-1097.306	-.048	-.031	.081
124	16	N146	-12.398	2075.484	-2492.749	0	0	0
125	16	N147	2296.08	2212.753	1330.967	0	0	0
126	16	N148	-2097.021	2009.09	1205.469	0	0	0
127	16	Totals:	-1282.192	6422.552	.002			
128	16	COG (ft):	X: 0	Y: .658	Z: 0			
129	17	N2	-111.219	52.686	1121.195	.116	.191	-.003
130	17	N4	911.549	46.983	-704.535	-.052	-.336	-.096
131	17	N3	-2041.521	21.427	-1177.056	-.045	-.032	.078
132	17	N146	-9.999	2019.966	-2430.264	0	0	0
133	17	N147	2312.704	2225.996	1335.09	0	0	0
134	17	N148	-2147.368	2055.494	1228.649	0	0	0
135	17	Totals:	-1085.854	6422.552	-626.921			
136	17	COG (ft):	X: 0	Y: .658	Z: 0			
137	18	N2	-35.032	55.662	833.607	.116	.019	-.001
138	18	N4	1254.063	34.373	-941.891	-.046	-.425	-.086

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
139	18	N3	-1948.024	19.133	-1197.848	-.042	.076	.075
140	18	N146	-4.621	1979.901	-2382.872	0	0	0
141	18	N147	2305.483	2217.279	1325.82	0	0	0
142	18	N148	-2208.382	2116.203	1260.717	0	0	0
143	18	Totals:	-636.514	6422.552	-1102.467			
144	18	COG (ft):	X: 0	Y: .658	Z: 0			
145	19	N2	.986	60.941	689.74	.122	.021	0
146	19	N4	1662.84	25.664	-1105.045	-.043	-.226	-.08
147	19	N3	-1664.031	26.417	-1146.617	-.044	.343	.081
148	19	N146	.083	1955.995	-2353.287	0	0	0
149	19	N147	2266.634	2176.893	1297.537	0	0	0
150	19	N148	-2266.511	2176.641	1297.125	0	0	0
151	19	Totals:	.002	6422.551	-1320.547			
152	19	COG (ft):	X: 0	Y: .658	Z: 0			
153	20	N2	67.816	63.801	755.097	.126	-.095	.001
154	20	N4	1976.697	21.772	-1194.141	-.044	-.051	-.078
155	20	N3	-1267.805	40.362	-951.022	-.05	.417	.093
156	20	N146	4.495	1964.427	-2363.824	0	0	0
157	20	N147	2202.885	2111.026	1257.501	0	0	0
158	20	N148	-2309.632	2221.163	1328.205	0	0	0
159	20	Totals:	674.456	6422.551	-1168.184			
160	20	COG (ft):	X: 0	Y: .658	Z: 0			
161	21	N2	166.088	55.751	1066.463	.12	-.364	.003
162	21	N4	2085.094	18.785	-1204.597	-.044	-.035	-.075
163	21	N3	-926.83	49.523	-671.204	-.054	.201	.099
164	21	N146	9.606	2012.988	-2421.672	0	0	0
165	21	N147	2141.005	2049.361	1224.573	0	0	0
166	21	N148	-2323.388	2236.144	1341.577	0	0	0
167	21	Totals:	1151.576	6422.551	-664.86			
168	21	COG (ft):	X: 0	Y: .658	Z: 0			
169	22	N2	188.884	42.242	1513.232	.107	-.424	.003
170	22	N4	2010.832	18.909	-1089.617	-.044	.074	-.074
171	22	N3	-730.515	52.392	-468.14	-.056	.031	.099
172	22	N146	12.397	2078.869	-2496.913	0	0	0
173	22	N147	2101.3	2013.077	1207.872	0	0	0
174	22	N148	-2300.706	2217.063	1333.562	0	0	0
175	22	Totals:	1282.193	6422.551	-.002			
176	22	COG (ft):	X: 0	Y: .658	Z: 0			
177	23	N2	111.366	34.616	1921.539	.101	-.191	.003
178	23	N4	1800.2	27.076	-860.957	-.049	.336	-.079
179	23	N3	-669.926	55.932	-388.417	-.058	.032	.101
180	23	N146	9.987	2134.363	-2559.37	0	0	0
181	23	N147	2084.681	1999.827	1203.727	0	0	0
182	23	N148	-2250.455	2170.738	1310.401	0	0	0
183	23	Totals:	1085.854	6422.551	626.921			
184	23	COG (ft):	X: 0	Y: .658	Z: 0			
185	24	N2	35.065	31.621	2209.259	.101	-.019	.001
186	24	N4	1457.589	39.702	-623.826	-.055	.424	-.089
187	24	N3	-763.2	58.261	-367.638	-.062	-.075	.104
188	24	N146	4.63	2174.379	-2606.704	0	0	0
189	24	N147	2091.884	2008.533	1212.999	0	0	0
190	24	N148	-2189.453	2110.057	1278.378	0	0	0
191	24	Totals:	636.514	6422.552	1102.468			
192	24	COG (ft):	X: 0	Y: .658	Z: 0			
193	25	N2	-.7	31.666	710.12	.061	-.006	0
194	25	N4	592.042	81.725	-314.667	-.068	.036	-.117
195	25	N3	-1186.078	35.093	-642.01	-.048	-.082	.082
196	25	N146	-.012	940.556	-1127.321	0	0	0
197	25	N147	1738.321	1653.543	1006.391	0	0	0
198	25	N148	-1143.571	1095.717	663.123	0	0	0
199	25	Totals:	.001	3838.299	295.636			

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
200	25	COG (ft):	X: .778	Y: .531	Z: .806			
201	26	N2	-16.672	30.506	700.055	.059	.026	0
202	26	N4	519.853	82.495	-291.639	-.068	.004	-.117
203	26	N3	-1275.402	31.024	-689.263	-.046	-.09	.079
204	26	N146	-1.189	939.482	-1126.066	0	0	0
205	26	N147	1753.904	1669.629	1016.113	0	0	0
206	26	N148	-1133.501	1085.162	655.822	0	0	0
207	26	Totals:	-153.007	3838.299	265.022			
208	26	COG (ft):	X: .778	Y: .531	Z: .806			
209	27	N2	-40.475	32.781	627.478	.061	.095	0
210	27	N4	497.225	83.424	-287.042	-.068	.011	-.118
211	27	N3	-1351.166	28.726	-755.583	-.045	-.029	.077
212	27	N146	-2.433	927.478	-1111.912	0	0	0
213	27	N147	1768.419	1684.171	1023.888	0	0	0
214	27	N148	-1130.504	1081.719	652.67	0	0	0
215	27	Totals:	-258.933	3838.299	149.499			
216	27	COG (ft):	X: .778	Y: .531	Z: .806			
217	28	N2	-42.126	36.65	524.241	.065	.098	0
218	28	N4	516.764	83.586	-314.147	-.068	-.016	-.119
219	28	N3	-1393.406	28.36	-798.283	-.045	.003	.078
220	28	N146	-3.072	911.386	-1093.551	0	0	0
221	28	N147	1776.526	1691.68	1027.097	0	0	0
222	28	N148	-1136.277	1086.636	654.644	0	0	0
223	28	Totals:	-281.591	3838.299	0			
224	28	COG (ft):	X: .778	Y: .531	Z: .806			
225	29	N2	-20.605	38.449	435.103	.066	.032	0
226	29	N4	564.318	81.223	-366.304	-.067	-.081	-.117
227	29	N3	-1407.8	27.311	-812.455	-.044	-.01	.077
228	29	N146	-2.499	899.029	-1079.787	0	0	0
229	29	N147	1780.027	1694.428	1027.663	0	0	0
230	29	N148	-1148.319	1097.859	660.174	0	0	0
231	29	Totals:	-234.878	3838.299	-135.607			
232	29	COG (ft):	X: .778	Y: .531	Z: .806			
233	30	N2	-5.272	38.926	371.552	.066	0	0
234	30	N4	640.581	77.645	-417.485	-.065	-.096	-.114
235	30	N3	-1390.15	26.318	-819.233	-.043	.017	.076
236	30	N146	-1.209	890.09	-1069.406	0	0	0
237	30	N147	1779.438	1693.273	1025.971	0	0	0
238	30	N148	-1162.503	1112.047	667.642	0	0	0
239	30	Totals:	-139.115	3838.299	-240.96			
240	30	COG (ft):	X: .778	Y: .531	Z: .806			
241	31	N2	-.822	40.583	333.508	.068	.012	0
242	31	N4	734.055	75.524	-453.358	-.064	-.044	-.112
243	31	N3	-1328.204	28.356	-810.259	-.044	.084	.077
244	31	N146	.018	883.455	-1061.306	0	0	0
245	31	N147	1770.943	1684.242	1019.692	0	0	0
246	31	N148	-1175.987	1126.139	676.088	0	0	0
247	31	Totals:	.002	3838.299	-295.635			
248	31	COG (ft):	X: .778	Y: .531	Z: .806			
249	32	N2	15.14	41.745	343.562	.07	-.02	0
250	32	N4	806.255	74.751	-476.387	-.064	-.012	-.112
251	32	N3	-1238.888	32.425	-762.993	-.046	.092	.081
252	32	N146	1.196	884.528	-1062.559	0	0	0
253	32	N147	1755.364	1668.159	1009.969	0	0	0
254	32	N148	-1186.056	1136.691	683.387	0	0	0
255	32	Totals:	153.01	3838.299	-265.021			
256	32	COG (ft):	X: .778	Y: .531	Z: .806			
257	33	N2	38.933	39.471	416.143	.067	-.089	0
258	33	N4	828.885	73.822	-480.992	-.064	-.019	-.111
259	33	N3	-1163.119	34.722	-696.664	-.047	.031	.083
260	33	N146	2.442	896.536	-1076.718	0	0	0

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
261	33	N147	1740.847	1653.614	1002.193	0	0	0
262	33	N148	-1189.051	1140.134	686.54	0	0	0
263	33	Totals:	258.937	3838.299	-149.499			
264	33	COG (ft):	X: .778	Y: .531	Z: .806			
265	34	N2	40.599	35.601	519.382	.064	-.093	0
266	34	N4	809.341	73.66	-453.873	-.064	.008	-.11
267	34	N3	-1120.885	35.086	-653.976	-.047	-.001	.082
268	34	N146	3.079	912.631	-1095.083	0	0	0
269	34	N147	1732.74	1646.104	998.984	0	0	0
270	34	N148	-1183.279	1135.217	684.566	0	0	0
271	34	Totals:	281.595	3838.299	0			
272	34	COG (ft):	X: .778	Y: .531	Z: .806			
273	35	N2	19.083	33.8	608.51	.062	-.026	0
274	35	N4	761.797	76.023	-401.71	-.066	.074	-.112
275	35	N3	-1106.5	36.132	-639.801	-.048	.012	.083
276	35	N146	2.505	924.987	-1108.846	0	0	0
277	35	N147	1729.239	1643.357	998.417	0	0	0
278	35	N148	-1171.243	1123.999	679.037	0	0	0
279	35	Totals:	234.881	3838.299	135.607			
280	35	COG (ft):	X: .778	Y: .531	Z: .806			
281	36	N2	3.744	33.322	672.07	.062	.007	0
282	36	N4	685.528	79.602	-350.541	-.068	.088	-.115
283	36	N3	-1124.137	37.129	-633.024	-.049	-.015	.084
284	36	N146	1.216	933.924	-1119.225	0	0	0
285	36	N147	1729.826	1644.51	1000.108	0	0	0
286	36	N148	-1157.059	1109.812	671.571	0	0	0
287	36	Totals:	139.119	3838.299	240.96			
288	36	COG (ft):	X: .778	Y: .531	Z: .806			
289	37	N2	.051	37.037	701.688	.067	-.009	0
290	37	N4	835.789	135.222	-454.892	-.11	.038	-.19
291	37	N3	-844.967	136.141	-445.467	-.111	-.08	.191
292	37	N146	-.015	913.204	-1093.654	0	0	0
293	37	N147	1374.873	1312.618	796.583	0	0	0
294	37	N148	-1365.729	1304.073	791.379	0	0	0
295	37	Totals:	.002	3838.295	295.636			
296	37	COG (ft):	X: .013	Y: .531	Z: .806			
297	38	N2	-15.921	35.885	691.62	.065	.023	0
298	38	N4	763.604	136.001	-431.873	-.11	.005	-.19
299	38	N3	-934.277	132.068	-492.715	-.109	-.088	.187
300	38	N146	-1.192	912.125	-1092.394	0	0	0
301	38	N147	1390.441	1328.692	806.299	0	0	0
302	38	N148	-1355.661	1293.523	784.085	0	0	0
303	38	Totals:	-153.006	3838.295	265.022			
304	38	COG (ft):	X: .013	Y: .531	Z: .806			
305	39	N2	-39.724	38.167	619.036	.068	.092	0
306	39	N4	740.964	136.959	-427.263	-.11	.013	-.191
307	39	N3	-1010.043	129.778	-559.01	-.108	-.027	.186
308	39	N146	-2.438	900.109	-1078.224	0	0	0
309	39	N147	1404.954	1343.222	814.045	0	0	0
310	39	N148	-1352.645	1290.06	780.915	0	0	0
311	39	Totals:	-258.933	3838.295	149.499			
312	39	COG (ft):	X: .013	Y: .531	Z: .806			
313	40	N2	-41.375	42.041	515.788	.071	.096	0
314	40	N4	760.488	137.155	-454.364	-.11	-.014	-.192
315	40	N3	-1052.272	129.431	-601.695	-.108	.004	.186
316	40	N146	-3.078	884	-1059.842	0	0	0
317	40	N147	1413.042	1350.712	817.234	0	0	0
318	40	N148	-1358.396	1294.958	782.88	0	0	0
319	40	Totals:	-281.591	3838.295	.001			
320	40	COG (ft):	X: .013	Y: .531	Z: .806			
321	41	N2	-19.855	43.84	426.64	.073	.029	0

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
322	41	N4	808.031	134.814	-506.535	-.109	-.08	-.19
323	41	N3	-1066.644	128.4	-615.87	-.107	-.009	.185
324	41	N146	-2.503	871.628	-1046.061	0	0	0
325	41	N147	1416.516	1353.44	817.799	0	0	0
326	41	N148	-1370.423	1306.173	788.42	0	0	0
327	41	Totals:	-234.877	3838.295	-135.607			
328	41	COG (ft):	X: .013	Y: .531	Z: .806			
329	42	N2	-4.522	44.316	363.084	.073	-.004	0
330	42	N4	884.283	131.252	-557.713	-.107	-.095	-.187
331	42	N3	-1048.994	127.418	-622.643	-.106	.018	.184
332	42	N146	-1.212	862.682	-1035.67	0	0	0
333	42	N147	1415.923	1352.278	816.099	0	0	0
334	42	N148	-1384.594	1320.349	795.884	0	0	0
335	42	Totals:	-139.115	3838.295	-240.959			
336	42	COG (ft):	X: .013	Y: .531	Z: .806			
337	43	N2	-.07	45.968	325.04	.074	.009	0
338	43	N4	977.743	129.142	-593.562	-.106	-.043	-.185
339	43	N3	-987.072	129.466	-613.655	-.107	.085	.186
340	43	N146	.014	856.045	-1027.567	0	0	0
341	43	N147	1407.451	1343.256	809.804	0	0	0
342	43	N148	-1398.062	1334.419	804.306	0	0	0
343	43	Totals:	.003	3838.295	-295.635			
344	43	COG (ft):	X: .013	Y: .531	Z: .806			
345	44	N2	15.892	47.122	335.097	.076	-.023	0
346	44	N4	1049.939	128.361	-616.582	-.107	-.01	-.185
347	44	N3	-897.77	133.539	-566.395	-.109	.093	.19
348	44	N146	1.193	857.122	-1028.826	0	0	0
349	44	N147	1391.886	1327.185	800.087	0	0	0
350	44	N148	-1408.129	1344.966	811.598	0	0	0
351	44	Totals:	153.011	3838.295	-265.021			
352	44	COG (ft):	X: .013	Y: .531	Z: .806			
353	45	N2	39.684	44.841	407.685	.074	-.092	0
354	45	N4	1072.582	127.402	-621.201	-.106	-.017	-.184
355	45	N3	-821.999	135.828	-500.09	-.11	.032	.191
356	45	N146	2.441	869.142	-1043.001	0	0	0
357	45	N147	1377.372	1312.653	792.34	0	0	0
358	45	N148	-1411.142	1348.429	814.769	0	0	0
359	45	Totals:	258.937	3838.295	-149.498			
360	45	COG (ft):	X: .013	Y: .531	Z: .806			
361	46	N2	41.351	40.967	510.934	.07	-.095	0
362	46	N4	1053.053	127.206	-594.086	-.106	.009	-.183
363	46	N3	-779.775	136.173	-457.417	-.11	0	.191
364	46	N146	3.078	885.255	-1061.386	0	0	0
365	46	N147	1369.282	1305.163	789.151	0	0	0
366	46	N148	-1405.393	1343.532	812.803	0	0	0
367	46	Totals:	281.595	3838.295	0			
368	46	COG (ft):	X: .013	Y: .531	Z: .806			
369	47	N2	19.835	39.165	600.073	.069	-.029	0
370	47	N4	1005.519	129.547	-541.908	-.108	.075	-.185
371	47	N3	-765.413	137.202	-443.24	-.111	.013	.192
372	47	N146	2.502	897.625	-1075.167	0	0	0
373	47	N147	1365.809	1302.435	788.585	0	0	0
374	47	N148	-1393.372	1332.321	807.264	0	0	0
375	47	Totals:	234.882	3838.295	135.607			
376	47	COG (ft):	X: .013	Y: .531	Z: .806			
377	48	N2	4.496	38.688	663.638	.069	.004	0
378	48	N4	929.262	133.111	-490.742	-.11	.09	-.188
379	48	N3	-783.05	138.186	-436.468	-.112	-.013	.193
380	48	N146	1.212	906.57	-1085.555	0	0	0
381	48	N147	1366.4	1303.595	790.284	0	0	0
382	48	N148	-1379.201	1318.146	799.803	0	0	0

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
383	48	Totals:	139.119	3838.295	240.96			
384	48	COG (ft):	X: .013	Y: .531	Z: .806			
385	49	N2	-.712	31.364	631.368	.061	.003	0
386	49	N4	570.42	29.665	-330.19	-.03	-.003	-.051
387	49	N3	-1123.865	-89.165	-648.899	.041	0	-.071
388	49	N146	.003	975.488	-1172.458	0	0	0
389	49	N147	1593.587	1517.896	920.058	0	0	0
390	49	N148	-1039.433	998.055	600.121	0	0	0
391	49	Totals:	0	3463.303	0			
392	49	COG (ft):	X: .737	Y: .589	Z: .446			
393	50	N2	0	39.233	619.008	.07	0	0
394	50	N4	776.003	82.999	-448.382	-.071	-.001	-.122
395	50	N3	-775.85	83.635	-448.295	-.071	.001	.123
396	50	N146	0	935.446	-1123.171	0	0	0
397	50	N147	1213.083	1160.921	700.376	0	0	0
398	50	N148	-1213.235	1161.064	700.464	0	0	0
399	50	Totals:	.001	3463.298	0			
400	50	COG (ft):	X: 0	Y: .589	Z: .446			
401	51	N2	0	43.103	845.458	.081	0	0
402	51	N4	747.339	39.385	-431.499	-.038	0	-.067
403	51	N3	-747.193	40.128	-431.415	-.039	0	.067
404	51	N146	0	1150.68	-1383.415	0	0	0
405	51	N147	1213.116	1164.792	700.393	0	0	0
406	51	N148	-1213.263	1164.93	700.478	0	0	0
407	51	Totals:	0	3603.018	0			
408	51	COG (ft):	X: 0	Y: .66	Z: 0			
409	52	N2	-.563	35.783	899.676	.071	.001	0
410	52	N4	606.17	37.156	-321.962	-.035	.047	-.06
411	52	N3	-605.476	37.815	-320.895	-.036	-.048	.061
412	52	N146	0	1036.73	-1245.084	0	0	0
413	52	N147	1060.231	1018.286	613.942	0	0	0
414	52	N148	-1060.362	1018.41	614.019	0	0	0
415	52	Totals:	0	3184.18	239.696			
416	52	COG (ft):	X: 0	Y: .661	Z: 0			
417	53	N2	-14.534	36.201	879.439	.071	.028	0
418	53	N4	552.084	38.293	-303.143	-.036	.026	-.061
419	53	N3	-673.55	36.261	-355.959	-.035	-.055	.06
420	53	N146	-.909	1033.967	-1241.931	0	0	0
421	53	N147	1070.297	1028.595	620.034	0	0	0
422	53	N148	-1053.235	1010.862	609.137	0	0	0
423	53	Totals:	-119.847	3184.18	207.576			
424	53	COG (ft):	X: 0	Y: .661	Z: 0			
425	54	N2	-24.609	37.339	823.595	.072	.047	0
426	54	N4	526.893	38.71	-305.189	-.036	-.002	-.062
427	54	N3	-737.931	34.708	-397.716	-.035	-.048	.059
428	54	N146	-1.575	1026.421	-1233.32	0	0	0
429	54	N147	1080.605	1038.902	625.703	0	0	0
430	54	N148	-1050.959	1008.1	606.774	0	0	0
431	54	Totals:	-207.576	3184.18	119.847			
432	54	COG (ft):	X: 0	Y: .661	Z: 0			
433	55	N2	-28.089	38.893	747.101	.073	.053	0
434	55	N4	537.342	38.295	-327.554	-.035	-.03	-.062
435	55	N3	-781.38	33.57	-434.985	-.034	-.027	.059
436	55	N146	-1.819	1016.113	-1221.557	0	0	0
437	55	N147	1088.394	1046.447	629.432	0	0	0
438	55	N148	-1054.143	1010.862	607.563	0	0	0
439	55	Totals:	-239.695	3184.18	0			
440	55	COG (ft):	X: 0	Y: .661	Z: 0			
441	56	N2	-24.041	40.447	670.455	.074	.046	0
442	56	N4	580.64	37.158	-364.25	-.035	-.049	-.061
443	56	N3	-792.24	33.154	-457.775	-.034	0	.058

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
444	56	N146	-1.576	1005.803	-1209.793	0	0	0
445	56	N147	1091.576	1049.208	630.221	0	0	0
446	56	N148	-1061.935	1018.41	611.293	0	0	0
447	56	Totals:	-207.576	3184.18	-119.848			
448	56	COG (ft):	X: 0	Y: .661	Z: 0			
449	57	N2	-13.554	41.584	614.199	.075	.026	0
450	57	N4	645.174	35.604	-405.44	-.034	-.055	-.06
451	57	N3	-767.612	33.57	-459.978	-.034	.028	.059
452	57	N146	-.911	998.257	-1201.181	0	0	0
453	57	N147	1089.301	1046.446	627.859	0	0	0
454	57	N148	-1072.245	1028.718	616.964	0	0	0
455	57	Totals:	-119.848	3184.18	-207.576			
456	57	COG (ft):	X: 0	Y: .661	Z: 0			
457	58	N2	.563	42	593.395	.075	-.001	0
458	58	N4	713.665	34.05	-440.091	-.034	-.047	-.059
459	58	N3	-714.092	34.708	-441.005	-.034	.048	.06
460	58	N146	0	995.494	-1198.028	0	0	0
461	58	N147	1082.176	1038.901	622.979	0	0	0
462	58	N148	-1082.312	1039.027	623.056	0	0	0
463	58	Totals:	0	3184.179	-239.695			
464	58	COG (ft):	X: 0	Y: .661	Z: 0			
465	59	N2	14.529	41.583	613.63	.075	-.028	0
466	59	N4	767.755	32.912	-458.911	-.033	-.026	-.058
467	59	N3	-646.02	36.262	-405.935	-.035	.055	.061
468	59	N146	.909	998.258	-1201.182	0	0	0
469	59	N147	1072.111	1028.593	616.886	0	0	0
470	59	N148	-1089.436	1046.573	627.936	0	0	0
471	59	Totals:	119.848	3184.179	-207.576			
472	59	COG (ft):	X: 0	Y: .661	Z: 0			
473	60	N2	24.603	40.445	669.47	.074	-.047	0
474	60	N4	792.949	32.494	-456.861	-.033	.002	-.058
475	60	N3	-581.644	37.815	-364.175	-.035	.048	.062
476	60	N146	1.576	1005.805	-1209.795	0	0	0
477	60	N147	1061.803	1018.285	611.216	0	0	0
478	60	N148	-1091.712	1049.334	630.298	0	0	0
479	60	Totals:	207.576	3184.179	-119.847			
480	60	COG (ft):	X: 0	Y: .661	Z: 0			
481	61	N2	28.089	38.891	745.963	.073	-.053	0
482	61	N4	782.502	32.91	-434.49	-.034	.029	-.058
483	61	N3	-538.198	38.952	-326.907	-.036	.028	.062
484	61	N146	1.819	1016.115	-1221.56	0	0	0
485	61	N147	1054.012	1010.738	607.486	0	0	0
486	61	N148	-1088.529	1046.573	629.509	0	0	0
487	61	Totals:	239.695	3184.179	0			
488	61	COG (ft):	X: 0	Y: .661	Z: 0			
489	62	N2	24.046	37.337	822.61	.072	-.046	0
490	62	N4	739.2	34.048	-397.792	-.034	.049	-.058
491	62	N3	-527.336	39.368	-304.123	-.036	0	.062
492	62	N146	1.576	1026.424	-1233.323	0	0	0
493	62	N147	1050.829	1007.976	606.697	0	0	0
494	62	N148	-1080.738	1039.027	625.779	0	0	0
495	62	Totals:	207.576	3184.179	119.848			
496	62	COG (ft):	X: 0	Y: .661	Z: 0			
497	63	N2	13.56	36.199	878.87	.071	-.026	0
498	63	N4	674.662	35.602	-356.608	-.035	.055	-.059
499	63	N3	-551.959	38.952	-301.923	-.036	-.028	.062
500	63	N146	.91	1033.968	-1241.933	0	0	0
501	63	N147	1053.104	1010.739	609.06	0	0	0
502	63	N148	-1070.429	1028.719	620.11	0	0	0
503	63	Totals:	119.848	3184.179	207.576			
504	63	COG (ft):	X: 0	Y: .661	Z: 0			

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
505	64	N2	-563	22.727	674.694	.047	.001	0
506	64	N4	407.267	25.119	-207.121	-.024	.047	-.041
507	64	N3	-406.61	25.577	-206.076	-.024	-.048	.042
508	64	N146	0	730.441	-876.943	0	0	0
509	64	N147	737.359	708.198	427.543	0	0	0
510	64	N148	-737.453	708.287	427.598	0	0	0
511	64	Totals:	0	2220.348	239.695			
512	64	COG (ft):	X: 0	Y: .659	Z: 0			
513	65	N2	-14.534	23.146	654.46	.047	.028	0
514	65	N4	353.19	26.259	-188.306	-.024	.026	-.042
515	65	N3	-474.674	24.018	-241.134	-.024	-.055	.041
516	65	N146	-.914	727.679	-873.792	0	0	0
517	65	N147	747.418	718.502	433.633	0	0	0
518	65	N148	-730.334	700.743	422.716	0	0	0
519	65	Totals:	-119.847	2220.348	207.576			
520	65	COG (ft):	X: 0	Y: .659	Z: 0			
521	66	N2	-24.607	24.288	598.626	.048	.047	0
522	66	N4	328.003	26.677	-190.353	-.024	-.002	-.042
523	66	N3	-539.045	22.46	-282.885	-.023	-.048	.04
524	66	N146	-1.584	720.137	-865.186	0	0	0
525	66	N147	757.72	728.804	439.298	0	0	0
526	66	N148	-728.063	697.982	420.349	0	0	0
527	66	Totals:	-207.576	2220.348	119.847			
528	66	COG (ft):	X: 0	Y: .659	Z: 0			
529	67	N2	-28.087	25.847	522.143	.049	.053	0
530	67	N4	338.45	26.26	-212.716	-.024	-.03	-.042
531	67	N3	-582.486	21.319	-320.15	-.023	-.028	.039
532	67	N146	-1.83	709.834	-853.431	0	0	0
533	67	N147	765.507	736.345	443.02	0	0	0
534	67	N148	-731.248	700.743	421.132	0	0	0
535	67	Totals:	-239.695	2220.348	0			
536	67	COG (ft):	X: 0	Y: .659	Z: 0			
537	68	N2	-24.039	27.405	445.51	.05	.046	0
538	68	N4	381.74	25.119	-249.407	-.023	-.049	-.041
539	68	N3	-593.344	20.902	-342.936	-.022	0	.039
540	68	N146	-1.586	699.53	-841.674	0	0	0
541	68	N147	768.69	739.104	443.803	0	0	0
542	68	N148	-739.038	708.288	424.856	0	0	0
543	68	Totals:	-207.576	2220.348	-119.848			
544	68	COG (ft):	X: 0	Y: .659	Z: 0			
545	69	N2	-13.553	28.545	389.263	.051	.026	0
546	69	N4	446.264	23.561	-290.59	-.023	-.055	-.04
547	69	N3	-568.719	21.32	-345.14	-.022	.028	.039
548	69	N146	-.916	691.987	-833.068	0	0	0
549	69	N147	766.419	736.343	441.437	0	0	0
550	69	N148	-749.342	718.591	430.522	0	0	0
551	69	Totals:	-119.848	2220.348	-207.576			
552	69	COG (ft):	X: 0	Y: .659	Z: 0			
553	70	N2	.563	28.962	368.462	.052	-.001	0
554	70	N4	514.744	22.002	-325.236	-.022	-.047	-.039
555	70	N3	-515.207	22.461	-326.17	-.023	.048	.04
556	70	N146	0	689.226	-829.917	0	0	0
557	70	N147	759.301	728.802	436.555	0	0	0
558	70	N148	-759.4	728.895	436.611	0	0	0
559	70	Totals:	0	2220.348	-239.695			
560	70	COG (ft):	X: 0	Y: .659	Z: 0			
561	71	N2	14.528	28.544	388.694	.051	-.028	0
562	71	N4	568.825	20.86	-344.052	-.022	-.026	-.039
563	71	N3	-447.146	24.02	-291.106	-.023	.055	.041
564	71	N146	.915	691.989	-833.069	0	0	0
565	71	N147	749.243	718.499	430.465	0	0	0

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
566	71	N148	-766.518	736.436	441.493	0	0	0
567	71	Totals:	119.848	2220.348	-207.576			
568	71	COG (ft):	X: 0	Y: .659	Z: 0			
569	72	N2	24.602	27.403	444.525	.05	-.047	0
570	72	N4	594.016	20.442	-342.001	-.022	.002	-.038
571	72	N3	-382.78	25.578	-249.352	-.024	.048	.042
572	72	N146	1.585	699.532	-841.677	0	0	0
573	72	N147	738.941	708.196	424.799	0	0	0
574	72	N148	-768.788	739.196	443.858	0	0	0
575	72	Totals:	207.576	2220.348	-119.847			
576	72	COG (ft):	X: 0	Y: .659	Z: 0			
577	73	N2	28.087	25.844	521.006	.049	-.053	0
578	73	N4	583.57	20.86	-319.633	-.022	.029	-.038
579	73	N3	-339.341	26.718	-212.089	-.024	.028	.043
580	73	N146	1.83	709.837	-853.434	0	0	0
581	73	N147	731.152	700.653	421.076	0	0	0
582	73	N148	-765.604	736.436	443.075	0	0	0
583	73	Totals:	239.695	2220.348	0			
584	73	COG (ft):	X: 0	Y: .659	Z: 0			
585	74	N2	24.045	24.285	597.641	.048	-.046	0
586	74	N4	540.276	22.001	-282.94	-.023	.049	-.039
587	74	N3	-328.482	27.135	-189.308	-.025	0	.043
588	74	N146	1.585	720.14	-865.19	0	0	0
589	74	N147	727.968	697.893	420.293	0	0	0
590	74	N148	-757.816	728.893	439.352	0	0	0
591	74	Totals:	207.576	2220.348	119.848			
592	74	COG (ft):	X: 0	Y: .659	Z: 0			
593	75	N2	13.559	23.144	653.892	.047	-.026	0
594	75	N4	475.749	23.56	-241.762	-.024	.055	-.04
595	75	N3	-353.102	26.717	-187.108	-.025	-.028	.042
596	75	N146	.915	727.681	-873.794	0	0	0
597	75	N147	730.239	700.654	422.66	0	0	0
598	75	N148	-747.513	718.591	433.688	0	0	0
599	75	Totals:	119.848	2220.348	207.576			
600	75	COG (ft):	X: 0	Y: .659	Z: 0			

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

Member	Shape	Code Check	Lo...	LC	Shear Check	Lo.....	LC	phi*Pnc...	phi*Pnt ...	phi*Mn y...	phi*Mn...	Cb	Eqn	
1	M1	HSS4X4...	.180	13..	1	.101	13..z	7	64207....	139518	16.181	16.181	2.928	H1-...
2	M2	HSS4X4...	.159	13..	5	.094	13..z	10	64207....	139518	16.181	16.181	2.965	H1-...
3	M3	HSS4X4...	.179	13..	9	.100	13..z	2	64207....	139518	16.181	16.181	2.947	H1-...
4	M4	HSS4X4...	.202	5....	3	.053	4....y	13	109675...	139518	16.181	16.181	2.063	H1-...
5	M5	HSS4X4...	.199	5....	8	.053	4....y	17	109675...	139518	16.181	16.181	2.295	H1-...
6	M6	HSS4X4...	.193	5....	12	.054	4....y	21	109675...	139518	16.181	16.181	2.316	H1-...
7	MP1A	PIPE_2.0	.430	4....	6	.058	4....	10	14916....	32130	1.872	1.872	1.735	H1-...
8	MP2A	PIPE_2.0	.161	4....	1	.022	4....	9	14916....	32130	1.872	1.872	1	H1-...
9	MP3A	PIPE_2.0	.501	4....	12	.076	4....	2	14916....	32130	1.872	1.872	1.941	H1-...
10	MP4A	PIPE_2.0	.051	4....	1	.005	4....	1	14916....	32130	1.872	1.872	1	H1-...
11	MP5A	PIPE_2.0	.165	4....	6	.034	4....	5	14916....	32130	1.872	1.872	2.041	H1-...
12	MP1B	PIPE_2.0	.432	4....	9	.058	4....	1	14916....	32130	1.872	1.872	1.732	H1-...
13	MP2B	PIPE_2.0	.161	4....	5	.022	4....	1	14916....	32130	1.872	1.872	1.9	H1-...
14	MP3B	PIPE_2.0	.489	4....	9	.080	4....	4	14916....	32130	1.872	1.872	1.894	H1-...
15	MP4B	PIPE_2.0	.051	4....	10	.005	4....	10	14916....	32130	1.872	1.872	1.739	H1-...
16	MP5B	PIPE_2.0	.167	4....	9	.034	4....	8	14916....	32130	1.872	1.872	2.042	H1-...
17	MP1C	PIPE_2.0	.432	4....	2	.058	4....	6	14916....	32130	1.872	1.872	1.731	H1-...
18	MP2C	PIPE_2.0	.161	4....	9	.022	4....	5	14916....	32130	1.872	1.872	1.9	H1-...
19	MP3C	PIPE_2.0	.505	4....	8	.074	4....	10	14916....	32130	1.872	1.872	1.928	H1-...
20	MP4C	PIPE_2.0	.051	4....	2	.005	4....	2	14916....	32130	1.872	1.872	1.738	H1-...
21	MP5C	PIPE_2.0	.167	4....	2	.034	4....	1	14916....	32130	1.872	1.872	2.042	H1-...
22	M103	LL3x3x3x3	.073	5....	21	.003	0 z	6	47611....	70632	5.543	3.751	1	H1-...

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

	Member	Shape	Code Check	Lo...	LC	Shear Check	Lo.....	LC	phi*Pnc...	phi*Pnt ...	phi*Mn y...	phi*Mn...	Cb	Eqn
23	M104	LL3x3x3x3	.072	5....	13	.003	0 z	10	47611....	70632	5.543	3.751	1	H1-...
24	M105	LL3x3x3x3	.073	5....	17	.003	0 z	2	47611....	70632	5.543	3.751	1	H1-...

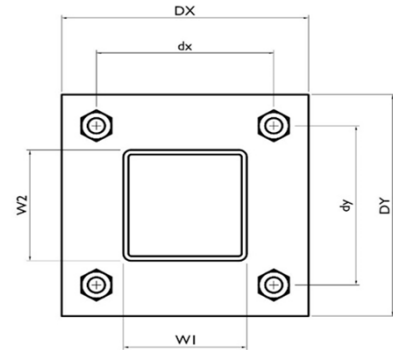
I. Mount-to-Tower Connection Check

Custom Orientation Required

Tower Connection Bolt Checks

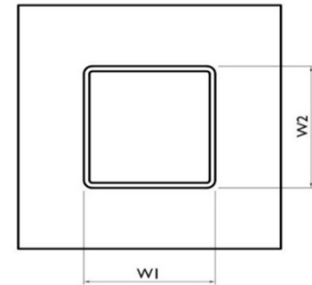
Bolt Orientation

Bolt Quantity per Reaction:	4
d_x (in) (Delta X of typ. bolt config. sketch) :	3
d_y (in) (Delta Y of typ. bolt config. sketch) :	8
Bolt Type:	A325N
Bolt Diameter (in):	0.75
Required Tensile Strength / bolt (kips):	3.6
Required Shear Strength / bolt (kips):	0.2
Tensile Capacity / bolt (kips):	29.8
Shear Capacity / bolt (kips):	17.9
Bolt Overall Utilization:	12.0%



Tower Connection Baseplate Checks

Connecting Standoff Member Shape:	Rect Tube
Weld Stiffener Configuration:	No Stiffeners
Plate Width, D_x (in):	6
Plate Height, D_y (in):	10
W_1 (in):	4
W_2 (in):	4
Member Thickness (in):	0.25
Stiffener location a_1 (in):	
Stiffener location b_1 (in):	
Stiffener location a_2 (in):	
Stiffener location b_2 (in):	
F_y (ksi, plate):	36
Plate Thickness (in):	0.5
Length of Yield Line, L_y (in):	4.90
Bolt Eccentricity, e (in):	1.86
M_u (kip-in):	6.63
$\Phi * M_n$ (kip-in):	9.92
Plate Bending Utilization:	66.8%



Tower Connection Weld Checks

Weld Shape:
 Weld Stiffener Configuration:
 Weld Size (1/16 in):
 W1 (in):
 W2 (in):
 Weld Total Length (in):
 Z_x (in³/in):
 Z_y (in³/in):
 J_p (in⁴/in):
 c_x (in)
 c_y (in)
 Required combined strength (kip/in):
 Weld Capacity (kip/in):
 Weld Utilization:

Yes
Rectangle
None
5
4
4
16.00
21.33
21.33
85.33
2.25
2.25
0.67
6.96
9.6%

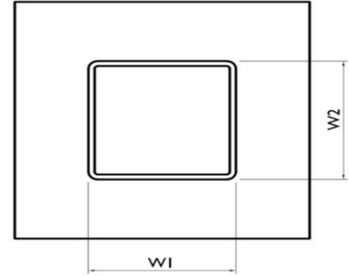
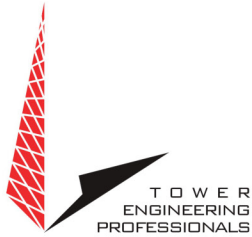


EXHIBIT 5





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Non-Ionizing Electromagnetic Radiation (NIER) Study

Site Number:

418609

Site Name:

Woodstock Relo CT

Location:

Woodstock, Connecticut

Tenants:

AT&T Mobility, Dish Wireless, & Verizon Wireless

Prepared For:

American Tower, Inc.
Woburn, Massachusetts

May 6th, 2024

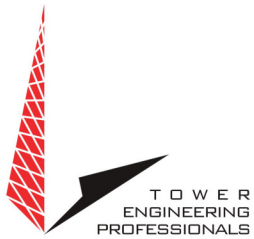
181650 P-429002

Prepared By:

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

Approved By:

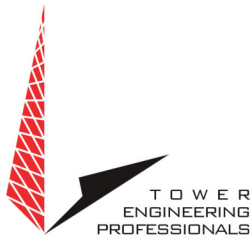
A circular professional engineer seal for the State of Connecticut, featuring the text "STATE OF CONNECTICUT", "SCOTT C. BRANTLEY", "35536", and "LICENSED PROFESSIONAL ENGINEER". A blue ink signature is written over the seal, and the date "05/08/24" is written in blue ink to the right of the seal.



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SITE MITIGATION & CONTROL	5
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APPENDIX 3.2 MPE LIMIT STUDY.....	9
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APPENDIX 5 MPE STANDARDS METHODOLOGY.....	12



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Non-Ionizing Electromagnetic Radiation (NIER) Study

418609 Woodstock Relo CT
Woodstock, 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.

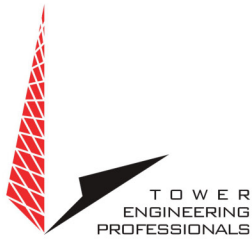
SITE AND FACILITY CONSIDERATIONS

Site 418609 Woodstock Relo CT is located at 87 West Quasset Rd., in Woodstock, Connecticut at coordinates 41.929781, -71.989326. The support structure is a 150' monopole. An aerial view of the tower can be found in Appendix 1, Site Photos. The tenants are AT&T Mobility (AT&T), Dish Wireless (Dish), & 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 100' from the base of the tower with a height of 6' above ground level was used, beyond 100' 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.



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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 418609 Woodstock Relo CT.RF NIER Study 4/15/24.
- 418609_14854318_RFDS
- 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.

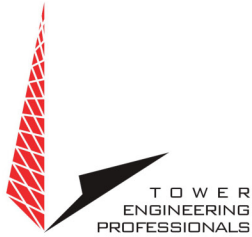
COMPLIANCE DETERMINATION

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

APPENDIX 1 Site Photos



Aerial View of Site

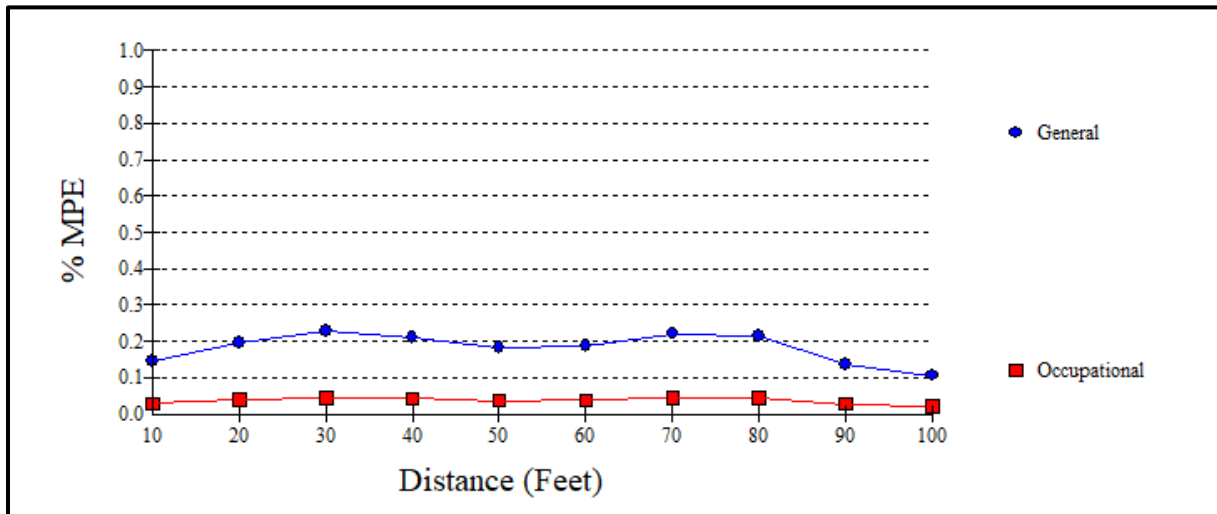


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Appendix 2 Antenna Inventory

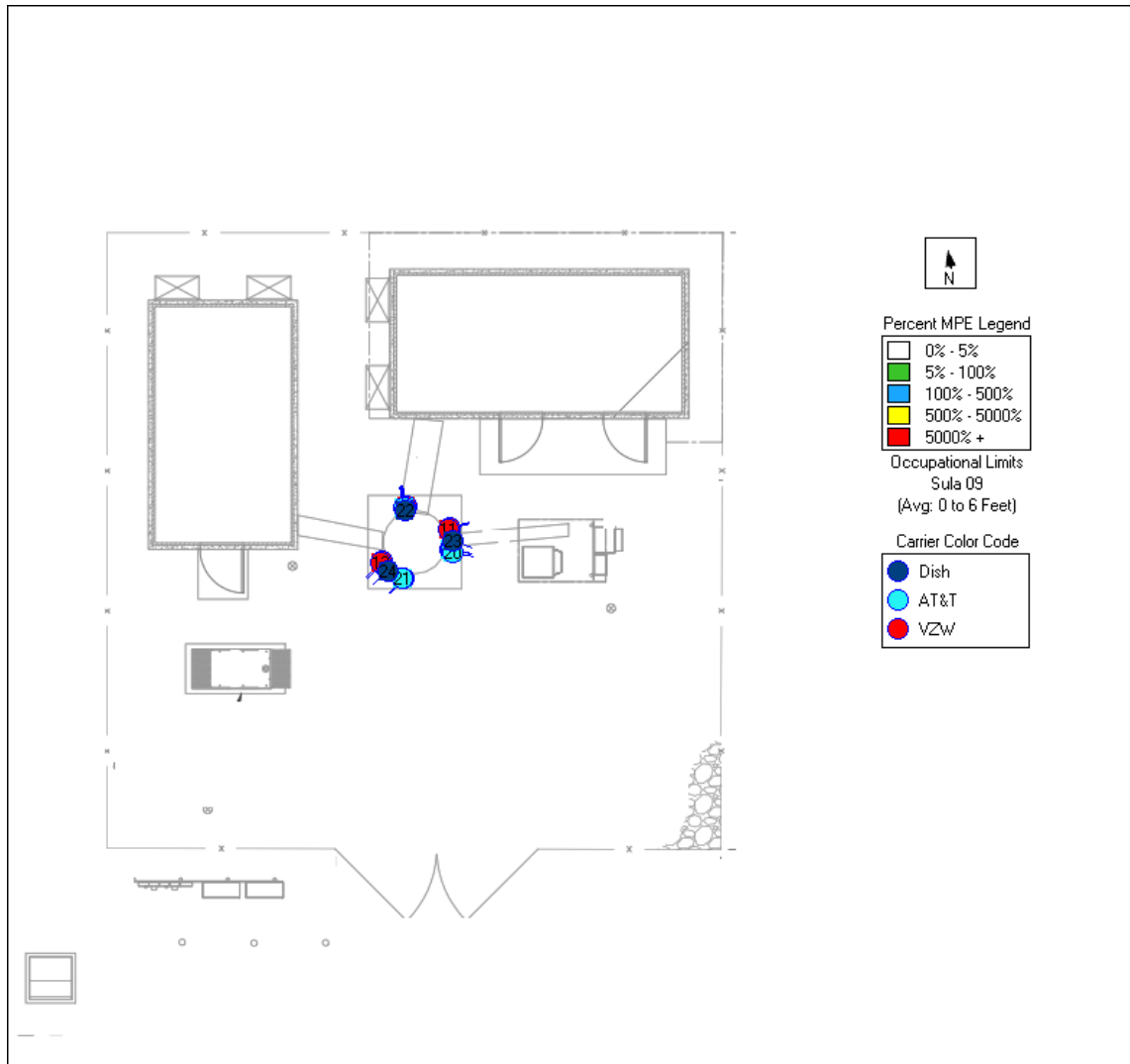
418609 Woodstock Relo CT							
Antenna Inventory							
Antenna #	Carrier	Antenna Manufacturer	Antenna Model	Frequency Band (MHz)	Azimuth (°)	Effective Radiated Power (W)	Radiation Center (ft)
1	VZW	Samsung	MT6407-77A	3700	000	18286	147.0
2	VZW	Samsung	MT6407-77A	3700	085	18286	147.0
3	VZW	Samsung	MT6407-77A	3700	235	18286	147.0
4	VZW	Andrew	LNX-6514DS-A1M	800	000	11669	147.0
5	VZW	Andrew	LNX-6514DS-A1M	800	085	11669	147.0
6	VZW	Andrew	LNX-6514DS-A1M	800	235	11669	147.0
7	VZW	Commscope	SBNHH 1D65-B	1900	000	11039	147.0
8	VZW	Commscope	SBNHH 1D65-B	1900	085	11039	147.0
9	VZW	Commscope	SBNHH 1D65-B	1900	235	11039	147.0
10	VZW	Commscope	SBNHH 1D65-B	1900	000	11039	147.0
11	VZW	Commscope	SBNHH 1D65-B	1900	085	11039	147.0
12	VZW	Commscope	SBNHH 1D65-B	1900	235	11039	147.0
13	AT&T	Andrew	SBNH-1D6565C	800	000	49561	138.0
14	AT&T	Andrew	SBNH-1D6565C	800	110	49561	138.0
15	AT&T	Andrew	SBNH-1D6565C	800	230	49561	138.0
16	AT&T	CCI	DMP65R-BU8D	1900	000	19229	138.0
17	AT&T	CCI	DMP65R-BU8D	1900	110	19229	138.0
18	AT&T	CCI	DMP65R-BU8D	1900	230	19229	138.0
19	AT&T	Commscope	NNHH-65C-R4	1900	000	19229	138.0
20	AT&T	Commscope	NNHH-65C-R4	1900	110	19229	138.0
21	AT&T	Commscope	NNHH-65C-R4	1900	230	19229	138.0
22	Dish	JMA	MX08FRO665-21	600/1900/2100	000	48332	127.0
23	Dish	JMA	MX08FRO665-21	600/1900/2100	120	48332	127.0
24	Dish	JMA	MX08FRO665-21	600/1900/2100	240	48332	127.0

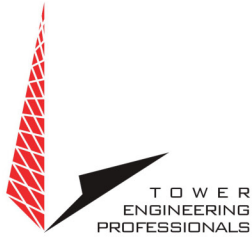
Appendix 3.1 MPE Limit Study



Maximum Power Density (@30'):	0.0015 mW/cm ²
General Population MPE (@30'):	0.2258%
Occupational MPE (@30'):	0.458%

Appendix 3.2 MPE Limit Study





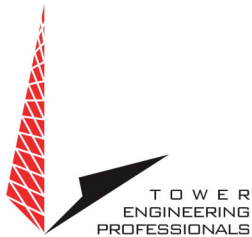
Appendix 4 Information Pertaining to MPE Studies

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.



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MPE limits are defined in terms of power density (units of milliwatts per centimeter squared: mW/cm^2), electric field strength (units of volts per meter: V/m) and magnetic field strength (units of amperes per meter: A/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.

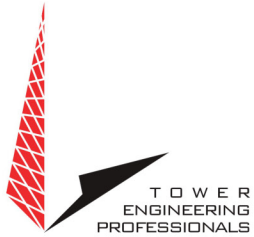
General population/uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore,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

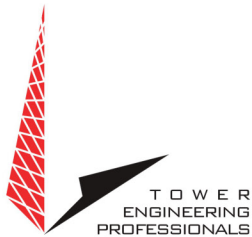


The FCC's limits for exposure at different frequencies are shown in the following Tables.

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 ²)	Averaging Time |E|², |H|² or S (minutes)
0.3 - 3.0	614	1.63	100*	6
3.0 - 30	1842/f	4.89/f	900/F ²	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 ²)	Averaging Time |E|², |H|² or S (minutes)
0.3 - 1.34	614	1.63	100*	30
1.34 - 30	824/f	2.19/f	180/F ²	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:

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

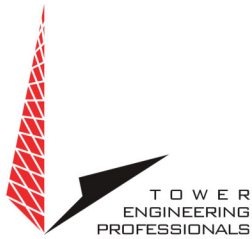
Where:

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

θ_{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



DOCKET NO. 415 - Cellco Partnership d/b/a Verizon Wireless } Connecticut
application for a Certificate of Environmental Compatibility and }
Public Need for the construction, maintenance and operation of a } Siting
telecommunications facility located at 87 West Quasset Road, } Council
Woodstock, Connecticut. }

November 17, 2011

Decision and Order

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, maintenance, and operation of a telecommunications facility, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate, either alone or cumulatively with other effects, when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application, and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by General Statutes § 16-50k, be issued to Cellco Partnership d/b/a Verizon Wireless, hereinafter referred to as the Certificate Holder, for a telecommunications facility located at 87 West Quasset Road in Woodstock Connecticut. The Council denies certification of the proposed ATC replacement tower on the same parcel.

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

1. The tower shall be constructed as a monopole, no taller than necessary to provide the proposed telecommunications services, sufficient to accommodate the antennas of the Certificate Holder and other entities, both public and private, but such tower shall not exceed a height of 150 feet above ground level. The height at the top of the Certificate Holder's antennas shall not exceed 150 feet above ground level.
2. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. The D&M Plan shall be served on the Town of Woodstock for comment, and all parties and intervenors as listed in the service list, and submitted to and approved by the Council prior to the commencement of facility construction and shall include:
 - a) a final site plan(s) of site development to include specifications for the tower, tower foundation, antennas, equipment compound, radio equipment, access road, utility line, and landscaping; and,
 - b) construction plans for site clearing, grading, landscaping, water drainage, and erosion and sedimentation controls consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended.
3. Prior to the commencement of operation, the Certificate Holder shall provide the Council worst-case modeling of the electromagnetic radio frequency power density of all proposed entities' antennas at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin No. 65, August 1997. The Certificate Holder shall ensure a recalculated report of the electromagnetic radio frequency power density be submitted to the Council if and when circumstances in operation cause a change in power density above the levels calculated and provided pursuant to this Decision and Order.

4. Upon the establishment of any new State or federal radio frequency standards applicable to frequencies of this facility, the facility granted herein shall be brought into compliance with such standards.
5. The Certificate Holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.
6. The Certificate Holder shall provide reasonable space on the tower for no compensation for any Town of Woodstock public safety services (police, fire and medical services), provided such use can be accommodated and is compatible with the structural integrity of the tower.
7. Unless otherwise approved by the Council, if the facility authorized herein is not fully constructed with at least one fully operational wireless telecommunications carrier providing wireless service within eighteen months from the date of the mailing of the Council's Findings of Fact, Opinion, and Decision and Order (collectively called "Final Decision"), this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made. The time between the filing and resolution of any appeals of the Council's Final Decision shall not be counted in calculating this deadline. Authority to monitor and modify this schedule, as necessary, is delegated to the Executive Director. The Certificate Holder shall provide written notice to the Executive Director of any schedule changes as soon as is practicable.
8. Any request for extension of the time period referred to in Condition 7 shall be filed with the Council not later than 60 days prior to the expiration date of this Certificate and shall be served on all parties and intervenors, as listed in the service list, and the Town of Woodstock. Any proposed modifications to this Decision and Order shall likewise be so served.
9. If the facility ceases to provide wireless services for a period of one year, this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made.
10. Any nonfunctioning antenna, and associated antenna mounting equipment, on this facility shall be removed within 60 days of the date the antenna ceased to function.
11. In accordance with Section 16-50j-77 of the Regulations of Connecticut State Agencies, the Certificate Holder shall provide the Council with written notice two weeks prior to the commencement of site construction activities. In addition, the Certificate Holder shall provide the Council with written notice of the completion of site construction, and the commencement of site operation.
12. The Certificate Holder shall remit timely payments associated with annual assessments and invoices submitted by the Council for expenses attributable to the facility under Conn. Gen. Stat. §16-50v.
13. This Certificate may be transferred in accordance with Conn. Gen. Stat. §16-50k(b), provided both the Certificate Holder/transferor and the transferee are current with payments to the Council for their respective annual assessments and invoices under Conn. Gen. Stat. §16-50v. In addition, both the Certificate Holder/transferor and the transferee shall provide the Council a written agreement as to the entity responsible for any quarterly assessment charges under Conn. Gen. Stat. §16-50v(b)(2) that may be associated with this facility.

14. The Certificate Holder shall maintain the facility and associated equipment, including but not limited to, the tower, tower foundation, antennas, equipment compound, radio equipment, access road, utility line and landscaping in a reasonable physical and operational condition that is consistent with this Decision and Order and a Development and Management Plan to be approved by the Council.
15. If the Certificate Holder is a wholly-owned subsidiary of a corporation or other entity and is sold/transferred to another corporation or other entity, the Council shall be notified of such sale and/or transfer and of any change in contact information for the individual or representative responsible for management and operations of the Certificate Holder within 30 days of the sale and/or transfer.

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

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

The parties and intervenors to this proceeding are:

Applicant

Cellco Partnership d/b/a Verizon Wireless

Its Representative

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

Sandy Carter, Regulatory Manager
Verizon Wireless
99 East River Drive
East Hartford, CT 06108

Intervenor

American Tower Corporation

Its Representative

Brandon Ruotolo, Esq.
Zoning Attorney
American Tower Corporation
10 Presidential Way
Woburn, MA 01801

EXHIBIT 7





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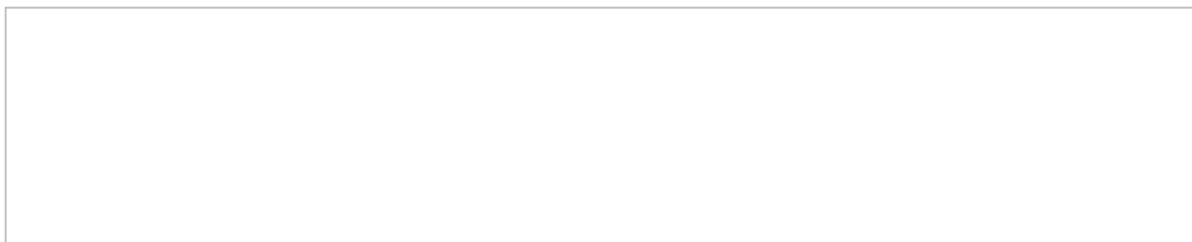


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