

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

February 22, 2024

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

**RE: Notice of Exempt Modification // Site: SALEM CT (ATC: 411184)
399 West Road, Salem, CT 06420
N 41.487836 // W -72.313214**

Dear Ms. Bachman,

Cellco Partnership d/b/a Verizon Wireless currently maintains fifteen (15) antenna at the 181-ft level on the existing 179ft Tower, located at 399 West Road, Salem, CT. The tower is owned by American Tower. Verizon Wireless proposed modification involves the removal of (3) antenna and (6) RRH and the installation of three (3) side by side mounts, six (6) antenna, and six (6) RRH on an existing Verizon Wireless 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 the 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 February 14, 2024, by A.T Engineering Services, LLC, a structural analysis dated January 10, 2024, by American Tower Corp., and a structural mount analysis by Colliers Engineering and Design dated December 19, 2023, and Non-Ionizing Electromagnetic Radiation (NIER) Study dated January 28, 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

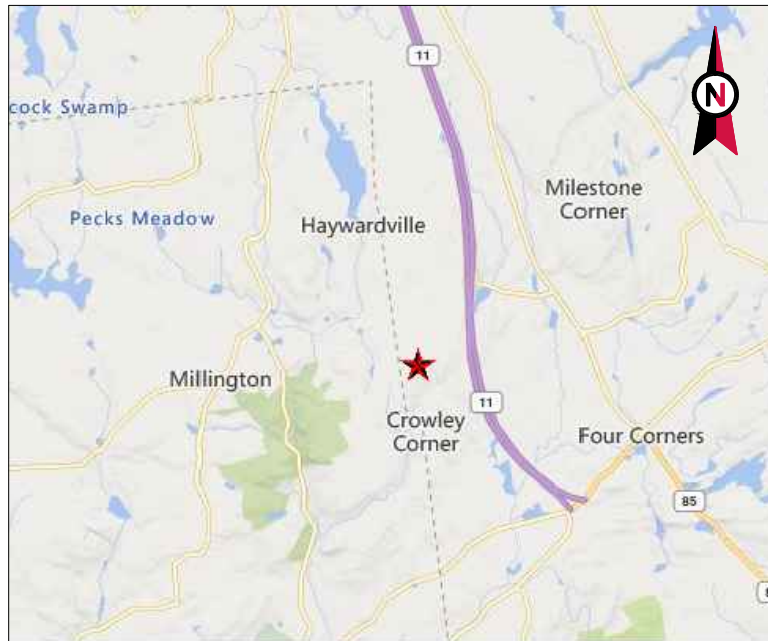
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Attachments: Exhibit 1 – Construction Drawings
Exhibit 2 – Property Card and GIS
Exhibit 3 – Structural Analysis
Exhibit 4 – Mount Analysis
Exhibit 5 – RF Emissions Analysis Report Evaluation
Exhibit 6 – Available Original Tower Approval Records
Exhibit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

cc: Ed Chmielewski – First Selectman – Chief Elected Official
Nicole Haggerty – Planner - as P&Z official
American Tower Corporation - as tower owner
Jason Clark – as ground owner

EXHIBIT 1





VICINITY MAP



AMERICAN TOWER®

ATC SITE NAME: SALEM CT SQA
 ATC SITE NUMBER: 411184
 VERIZON SITE NAME: SALEM CT
 VERIZON SITE NUMBER: 5000246846
 VERIZON FUZE PID: 16272075
 SITE ADDRESS: 399 WEST ROAD
 SALEM, CT 06420



LOCATION MAP

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	AP	2/14/2024

ATC SITE NUMBER:
 411184
 ATC SITE NAME:
 SALEM CT SQA
 VERIZON SITE NAME:
 SALEM CT
 SITE ADDRESS:
 399 WEST ROAD
 SALEM, CT 06420



VERIZON AMENDMENT DRAWINGS

COMPLIANCE CODE	PROJECT SUMMARY	PROJECT DESCRIPTION	SHEET INDEX				
<p>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.</p> <p>1. 2020 NFPA 70, NATIONAL ELECTRIC CODE (NEC) 2. 2022 CONNECTICUT STATE BUILDING CODE 3. 2021 INTERNATIONAL BUILDING CODE (IBC)</p> <p>DESIGN CRITERIA FROM TOWER STRUCTURAL ANALYSIS: BASIC WIND SPEED: 123 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</p> <p>EXPOSURE CATEGORY: B RISK CATEGORY: II TOPO FACTOR PROCEDURE: METHOD 1 TOPOGRAPHIC CATEGORY: 1 SPECTRAL RESPONSE: S_s=0.21, S_r=0.06 SITE CLASS: D - STIFF SOIL - DEFAULT</p> <p>INFORMATION TAKEN FROM STRUCTURAL ANALYSIS COMPLETED BY ATC, DATED 01/11/24.</p>	<p><u>SITE ADDRESS:</u> 399 WEST ROAD SALEM, CT 06420 COUNTY: NEW LONDON</p> <p><u>GEOGRAPHIC COORDINATES:</u> LATITUDE: 41° 29' 16.217" N LONGITUDE: 72° 18' 47.523" W GROUND ELEVATION: 564' AMSL</p>	<p>THE PROPOSED PROJECT INCLUDES MODIFYING GROUND BASED AND TOWER MOUNTED EQUIPMENT AS INDICATED PER BELOW:</p> <p>REMOVE (3) ANTENNA(S) AND (6) RRH(S)</p> <p>INSTALL MOUNT MODIFICATIONS, (3) SIDE-BY-SIDE MOUNT(S), (6) ANTENNA(S), AND (6) RRH(S)</p> <p>EXISTING (12) ANTENNA(S), (2) OVP(S), AND (12) 1 5/8" COAX AND (2) 1 5/8" HYBRID CABLE(S) TO REMAIN</p>	SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
	<p><u>PROJECT TEAM</u></p> <p><u>TOWER OWNER:</u> AMERICAN TOWER 10 PRESIDENTIAL WAY WOBURN, MA 01801</p> <p><u>APPLICANT:</u> VERIZON WIRELESS</p> <p><u>ENGINEER:</u> A.T. ENGINEERING SERVICES LLC 1 FENTON MAIN, STE 300 CARY, NC 27511</p> <p><u>PROPERTY OWNER:</u> JASEN A CLARK 399 WEST ROAD SALEM, CT 06420</p>	<p>PROJECT NOTES</p> <p>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).</p>	G-001	TITLE SHEET	0	2/14/2024	AP
<p><u>UTILITY COMPANIES</u></p> <p>POWER COMPANY: NORTHEAST UTILITY SERVICE PHONE: (888) 783-6617</p> <p>TELEPHONE COMPANY: UNKNOWN PHONE: N/A</p>	<p><u>PROJECT LOCATION DIRECTIONS</u></p> <p>HEAD SOUTHWEST ON I-395 STAKE EXIT 77 FOR CT-85 TOWARD WATERFORD/CHESTERFIELDTURN RIGHT ONTO CT-85 NAT THE TRAFFIC CIRCLE, CONTINUE STRAIGHT TO STAY ON CT-85 NTURN LEFT ONTO WITCH MEADOW RDTURN LEFT ONTO WEST RD</p>	R-601	SUPPLEMENTAL				
<p>811 Know what's below. Call before you dig.</p>	<p><u>CONTRACTOR PMI REQUIREMENTS</u></p> <p>PMI ACCESSED AT: HTTPS://PMI.VZWSMART.COM</p> <p>SMART TOOL VENDOR PROJECT NUMBER: 10215779</p> <p>VZW LOCATION CODE (PSLC): 5000246846</p> <p>***PMI AND REQUIREMENTS ALSO EMBEDDED IN MOUNT ANALYSIS REPORT</p> <p>MOUNT MODIFICATION REQUIRED: YES</p> <p>VZW APPROVED SMART KIT VENDORS: REFER TO MOUNT MODIFICATION DRAWINGS PAGES FOR VZW SMART KIT APPROVED VENDORS</p>	C-101	DETAILED SITE PLAN	0	2/14/2024	AP	
		C-201	TOWER ELEVATION	0	2/14/2024	AP	
		C-401	ANTENNA INFORMATION & SCHEDULE	0	2/14/2024	AP	
		C-501	CONSTRUCTION DETAILS	0	2/14/2024	AP	
		E-501	GROUNDING DETAILS	0	2/14/2024	AP	
		R-602	SUPPLEMENTAL				
		R-603	SUPPLEMENTAL				

verizon

ATC JOB NO: 14528084_GO
 CUSTOMER ID: SALEM CT
 CUSTOMER #: 5000246846

TITLE SHEET

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

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 ANSI/EIA/TIA-222, AND COMPLY WITH ATC CONSTRUCTION SPECIFICATIONS.
4. CONTRACTOR SHALL CONTACT LOCAL 811 FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS.
6. ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
7. DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
8. DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
9. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
10. CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
11. CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
12. INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE VERIZON REP PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE VERIZON REP PRIOR TO PROCEEDING.
13. EACH CONTRACTOR SHALL COOPERATE WITH THE VERIZON REP, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
14. CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE VERIZON CONSTRUCTION MANAGER.
15. ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT.
16. WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR SHALL NOTIFY THE VERIZON REP AND ENGINEER OF RECORD IMMEDIATELY.
17. CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A COMPLETE AND CURRENT SET OF DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
18. CONTRACTOR SHALL REMOVE ALL RUBBISH AND DEBRIS FROM THE SITE AT THE END OF EACH DAY.
19. CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH AMERICAN TOWER CORPORATION (ATC) AND TAKE PRECAUTIONS TO MINIMIZE IMPACT AND DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
20. CONTRACTOR SHALL FURNISH VERIZON AND AMERICAN TOWER CORPORATION (ATC) WITH A PDF MARKED UP AS-BUILT SET OF DRAWINGS UPON COMPLETION OF WORK.
21. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH VERIZON REP TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED. ALL ITEMS NOT PROVIDED SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL ALL ITEMS PROVIDED.

22. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH VERIZON REP TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY CONTRACTOR. ALL REQUIRED PERMITS NOT OBTAINED BY VERIZON MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR.
23. CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH VERIZON SPECIFICATIONS AND REQUIREMENTS.
24. CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO VERIZON FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
25. ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO VERIZON SPECIFICATIONS, AND AS SHOWN IN THESE PLANS.
26. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
27. CONTRACTOR SHALL NOTIFY VERIZON REP A MINIMUM OF 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING ANY UNDERGROUND UTILITIES, FOUNDATIONS OR SEALING ANY WALL, FLOOR OR ROOF PENETRATIONS FOR ENGINEERING REVIEW AND APPROVAL.
28. WHEN THE PROJECT SCOPE REQUIRES THE USE OF THE SAFETY CLIMB, THE GENERAL CONTRACTOR SHALL ENSURE THE SAFETY CLIMB IS FREE OF OBSTRUCTIONS, NOT RUBBING ON OR TRAPPED BY ANY INSTALLED CUSTOMER EQUIPMENT, IS VISUALLY TAUT, MEETS MANUFACTURER INSTALLATION SPECIFICATIONS, AND IS FIRMLY SECURED AT ALL CABLE GUIDE LOCATIONS UPON PROJECT COMPLETION.
29. COMPLETION OF PROJECT SHALL NOT OBSTRUCT, TRAP, LOOSEN, OR OTHERWISE CAUSE FAILURE TO MEET MANUFACTURER INSTALLATION REQUIREMENTS FOR THE SAFETY CLIMB.
30. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE WITH ALL APPLICABLE OSHA STANDARDS AND RECOMMENDATIONS AND SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE AND PPM 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.



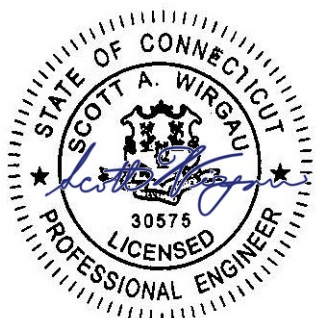
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SALEM CT
 SITE ADDRESS:
 399 WEST ROAD
 SALEM, CT 06420

SEAL:



Digitally Signed: 2024-02-14



ATC JOB NO:	14528084_GO
CUSTOMER ID:	SALEM CT
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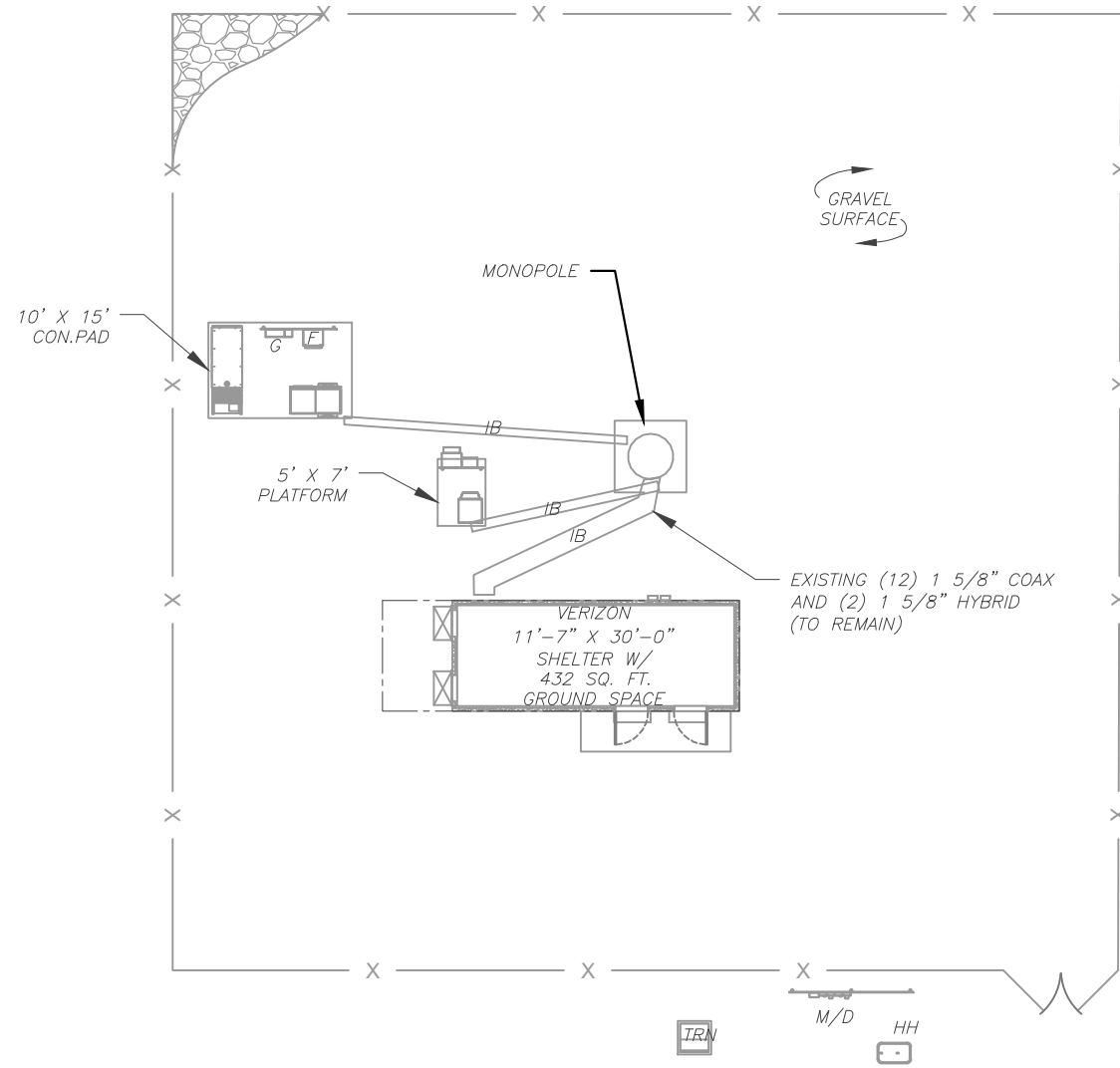
GENERAL NOTES

SHEET NUMBER: G-002	REVISION: 0
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SITE PLAN NOTES:

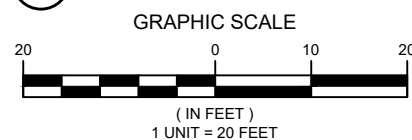
1. THIS SITE PLAN REPRESENTS THE BEST PRESENT KNOWLEDGE AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WORK FOR THIS PROJECT.
2. ICE BRIDGE, CABLE LADDER, COAX PORT, AND COAX CABLE 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.
3. NO ELECTRICAL SCOPE IS INCLUDED IN THIS PROJECT.



LEGEND

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

1 DETAILED SITE PLAN



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

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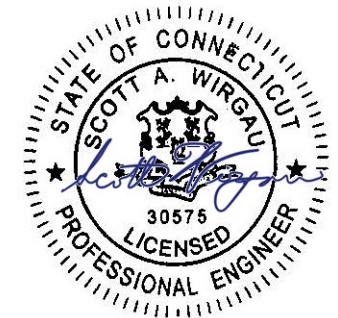
VERIZON SITE NAME:

SALEM CT

SITE ADDRESS:

399 WEST ROAD
 SALEM, CT 06420

SEAL:



Digitally Signed: 2024-02-14



ATC JOB NO:	14528084_G0
CUSTOMER ID:	SALEM CT
CUSTOMER #:	5000246846

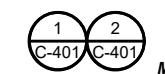
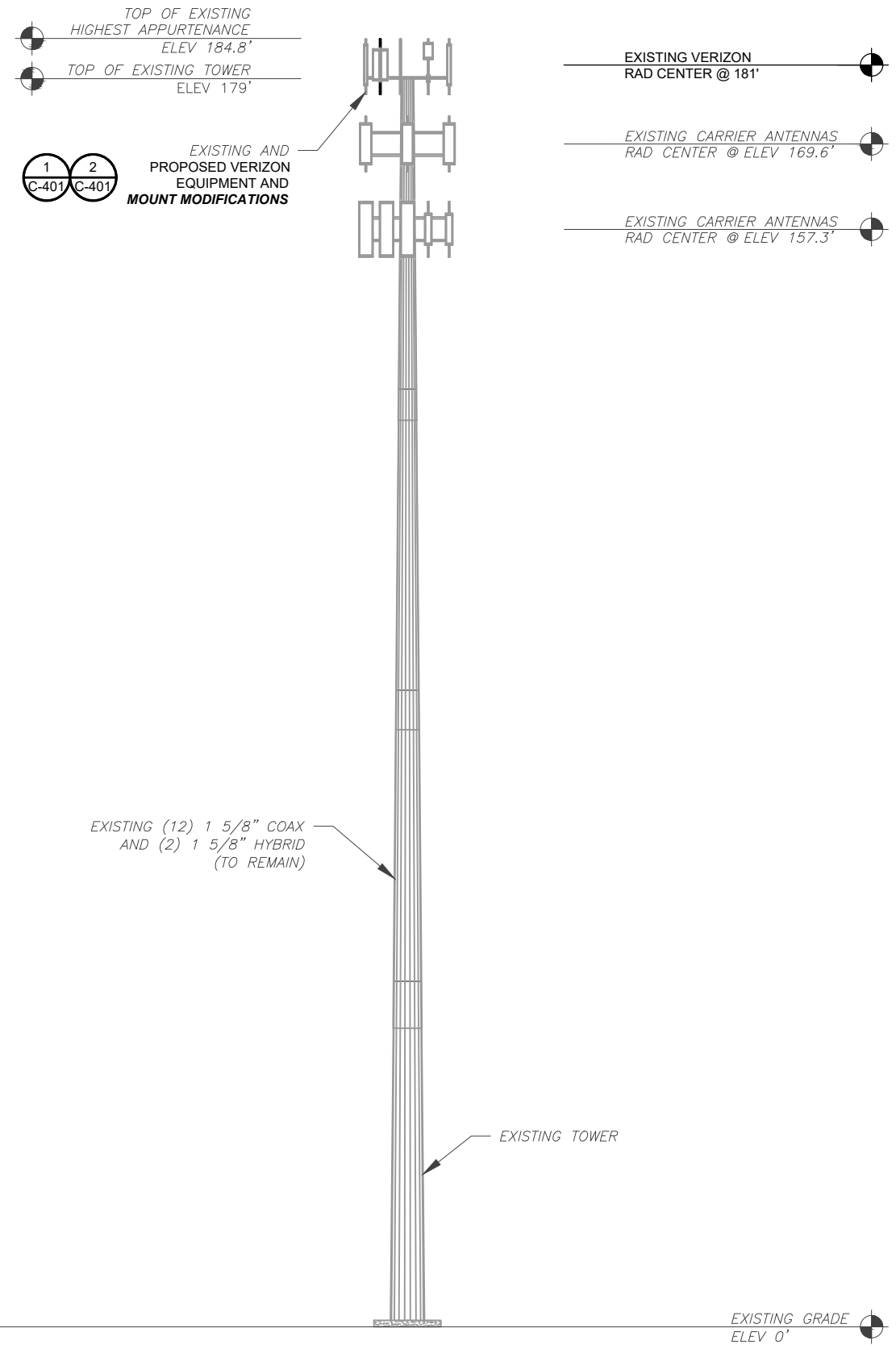
DETAILED SITE PLAN

SHEET NUMBER:

C-101

REVISION:

0



EXISTING AND PROPOSED VERIZON EQUIPMENT AND MOUNT MODIFICATIONS

PER MOUNT ANALYSIS COMPLETED BY COLLIERS ENGINEERING & DESIGN, DATED 12/19/23, 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.



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	AP	2/14/2024

ATC SITE NUMBER:
411184
 ATC SITE NAME:
SALEM CT SQA
 VERIZON SITE NAME:
SALEM CT
 SITE ADDRESS:
 399 WEST ROAD
 SALEM, CT 06420




Digitally Signed: 2024-02-14

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.

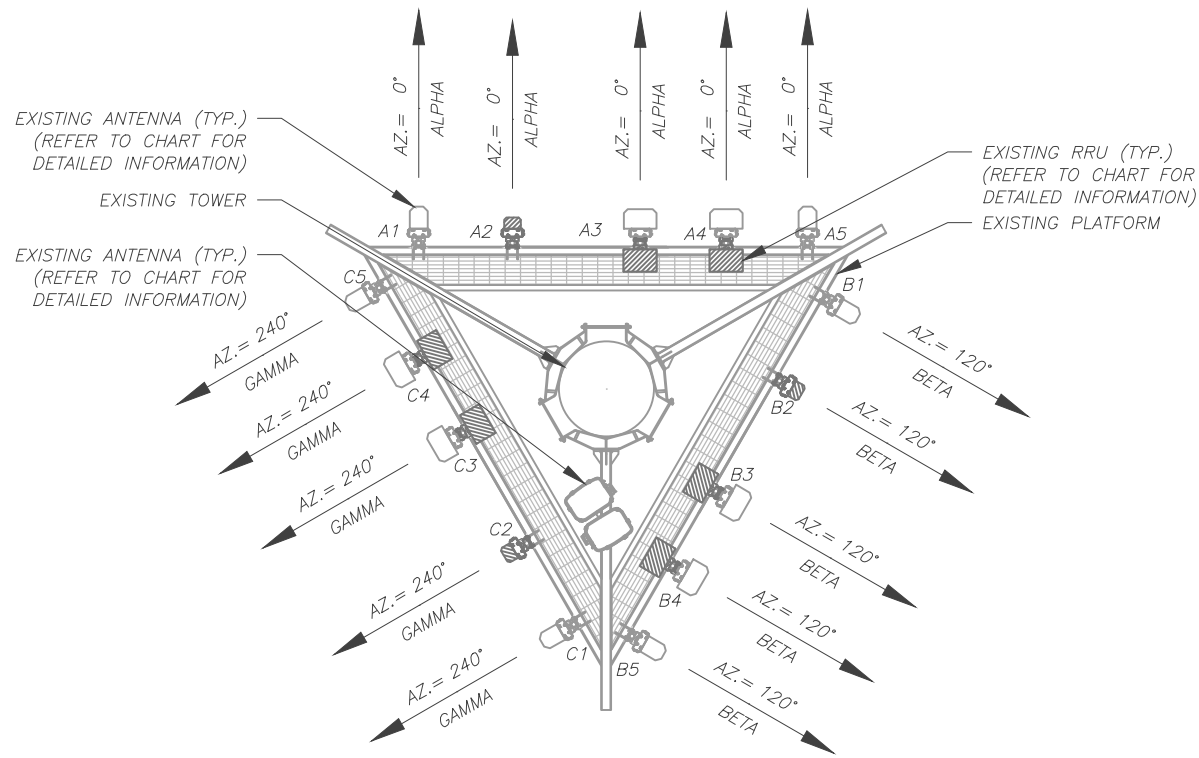
1 TOWER ELEVATION
 SCALE: N.T.S.



ATC JOB NO:	14528084_GO
CUSTOMER ID:	SALEM CT
CUSTOMER #:	5000246846

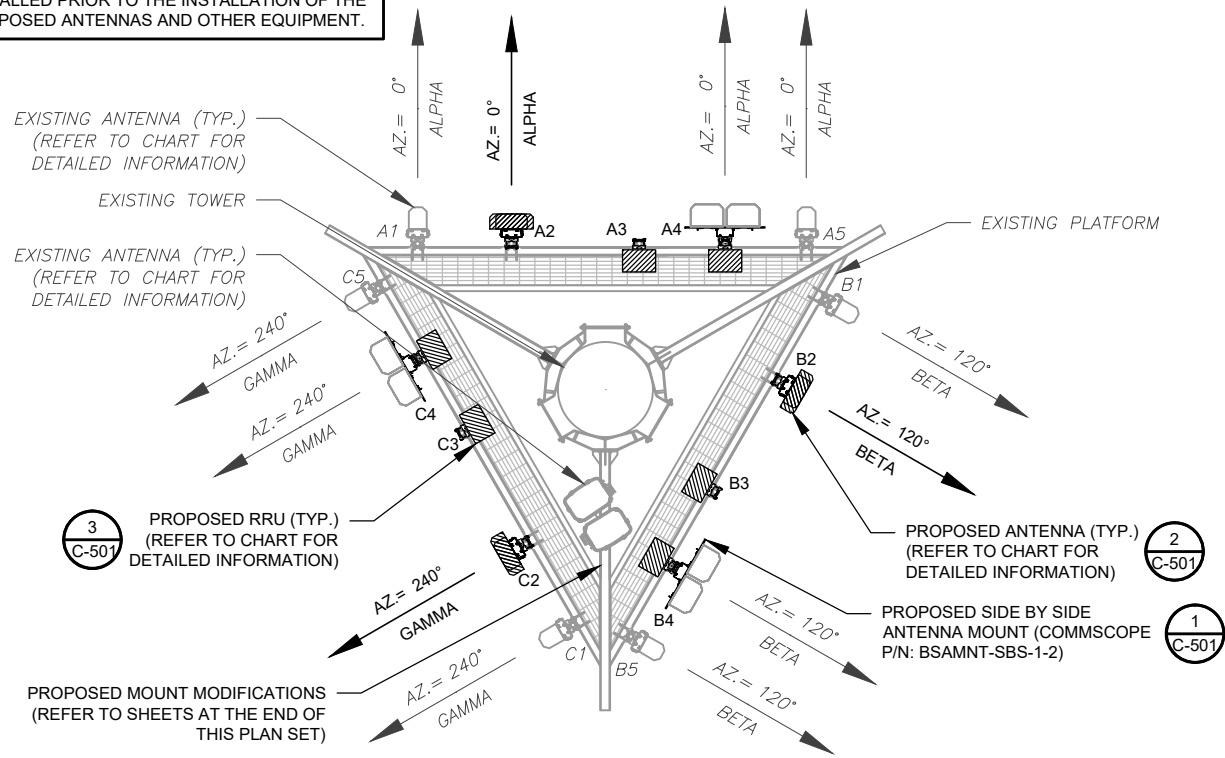
TOWER ELEVATION	
SHEET NUMBER: C-201	REVISION: 0

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

PER MOUNT ANALYSIS COMPLETED BY COLLIER'S ENGINEERING & DESIGN, DATED 12/19/23, 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.



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	181'	0°	A1	DB846H80E-SX	-	RMN	-	-
			A2	BXA-171063-12CF-EDIN	-	RMV	-	-
			A3	SBNHH-1D65A	LTE 700/LTE,5G 850/LTE 1900/LTE AWG	REL	UHBA B13 RRH 4X30	RMV
			A4	SBNHH-1D65A	LTE 700/LTE,5G 850/LTE 1900/LTE AWG	REL	UHIE B66A RRH 4X45	RMV
			A5	DB846H80E-SX	-	RMN	-	-
BETA	181'	120°	B1	DB846H80E-SX	-	RMN	-	-
			B2	BXA-171063-12CF-EDIN	-	RMV	-	-
			B3	SBNHH-1D65A	LTE 700/LTE,5G 850/LTE 1900/LTE AWG	REL	UHBA B13 RRH 4X30	RMV
			B4	SBNHH-1D65A	LTE 700/LTE,5G 850/LTE 1900/LTE AWG	REL	UHIE B66A RRH 4X45	RMV
			B5	DB846H80E-SX	-	RMN	-	-
GAMMA	181'	240°	C1	DB846H80E-SX	-	RMN	-	-
			C2	BXA-171063-12CF-EDIN	-	RMV	-	-
			C3	SBNHH-1D65A	LTE 700/LTE,5G 850/LTE 1900/LTE AWG	REL	UHBA B13 RRH 4X30	RMV
			C4	SBNHH-1D65A	LTE 700/LTE,5G 850/LTE 1900/LTE AWG	REL	UHIE B66A RRH 4X45	RMV
			C5	DB846H80E-SX	-	RMN	-	-

NOTES

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

STATUS ABBREVIATIONS

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

CABLE LENGTHS FOR JUMPERS

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

FINAL ANTENNA SCHEDULE								
LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	181'	0°	A1	DB846H80E-SX	-	RMN	-	-
			A2	MT6413-77A	5G L-SUB6	ADD	-	-
			A3	XXDWMM-12.5-65-8T	LTE CBRS	ADD	-	-
			A4	(2) SBNHH-1D65A	LTE 700/LTE,5G 850/LTE 1900/LTE AWG	REL	RF4461D-13A	ADD
			A5	DB846H80E-SX	-	RMN	-	-
BETA	181'	120°	B1	DB846H80E-SX	-	RMN	-	-
			B2	MT6413-77A	5G L-SUB6	ADD	-	-
			B3	XXDWMM-12.5-65-8T	LTE CBRS	ADD	-	-
			B4	(2) SBNHH-1D65A	LTE 700/LTE,5G 850/LTE 1900/LTE AWG	REL	RF4461D-13A	ADD
			B5	DB846H80E-SX	-	RMN	-	-
GAMMA	181'	240°	C1	DB846H80E-SX	-	RMN	-	-
			C2	MT6413-77A	5G L-SUB6	ADD	-	-
			C3	XXDWMM-12.5-65-8T	LTE CBRS	ADD	-	-
			C4	(2) SBNHH-1D65A	LTE 700/LTE,5G 850/LTE 1900/LTE AWG	REL	RF4461D-13A	ADD
			C5	DB846H80E-SX	-	RMN	-	-

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

3 EQUIPMENT SCHEDULES

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

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PHONE: (919) 468-0112
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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	AP	2/14/2024
1			
2			
3			

ATC SITE NUMBER:
41184
ATC SITE NAME:
SALEM CT SQA
VERIZON SITE NAME:
SALEM CT
SITE ADDRESS:
399 WEST ROAD
SALEM, CT 06420



Digitally Signed: 2024-02-14

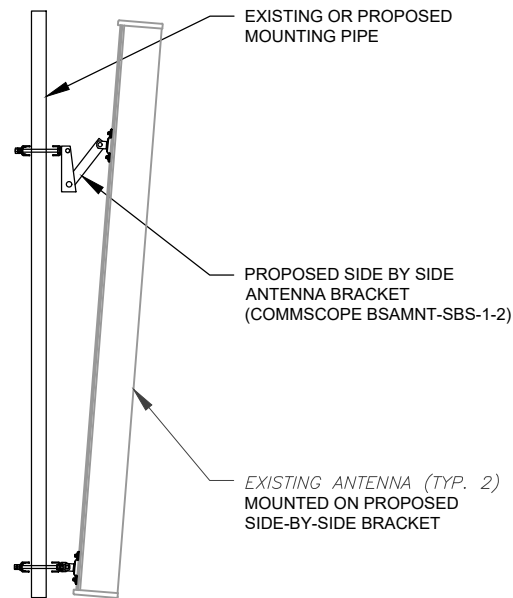
ATC JOB NO: 14528084_GO
CUSTOMER ID: SALEM CT
CUSTOMER #: 5000246846

ANTENNA INFORMATION & SCHEDULE

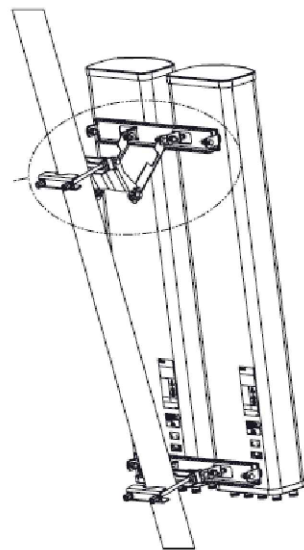
SHEET NUMBER:
C-401
REVISION:
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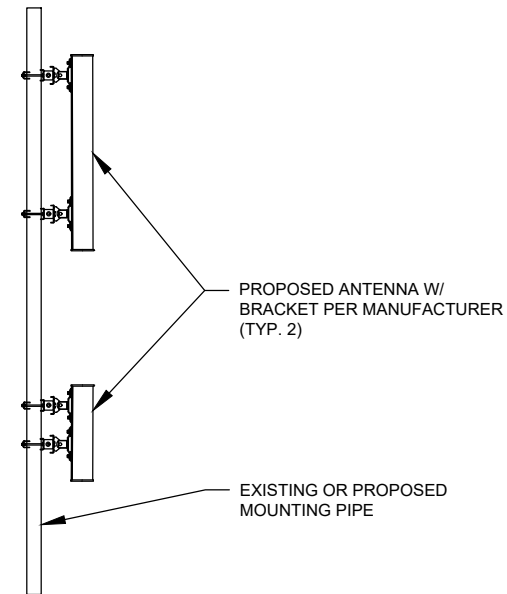
EXISTING/PROPOSED MOUNTS AND/OR MOUNT MODIFICATIONS NOT SHOWN FOR CLARITY. REFER TO ANTENNA PLANS, MOUNT ANALYSES AND/OR MOUNT MODIFICATION DOCUMENTS FOR ADDITIONAL DETAIL.



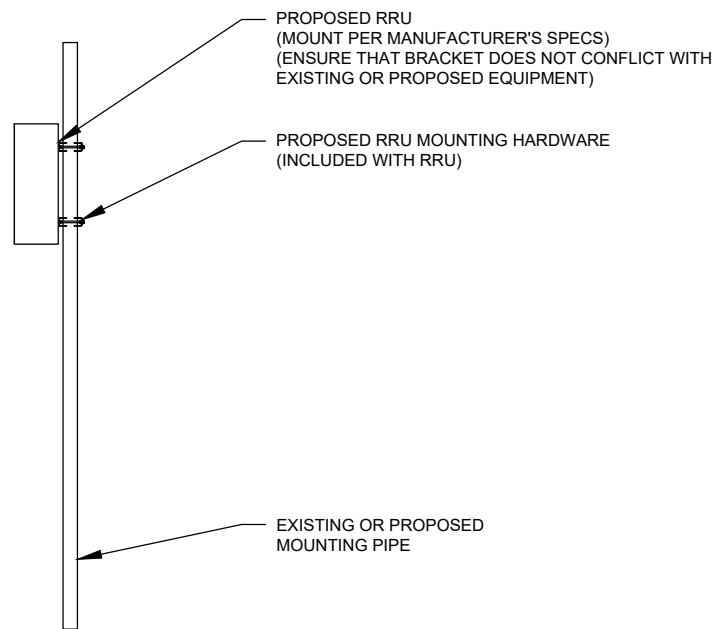
PROFILE VIEW



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



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



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



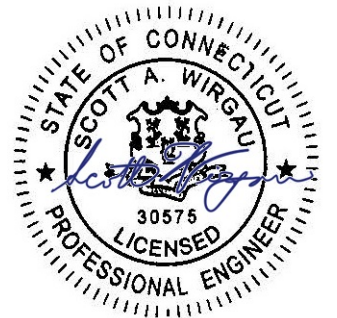
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SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112
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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	AP	2/14/2024

ATC SITE NUMBER:
411184
ATC SITE NAME:
SALEM CT SQA
VERIZON SITE NAME:
SALEM CT
SITE ADDRESS:
399 WEST ROAD
SALEM, CT 06420

SEAL:



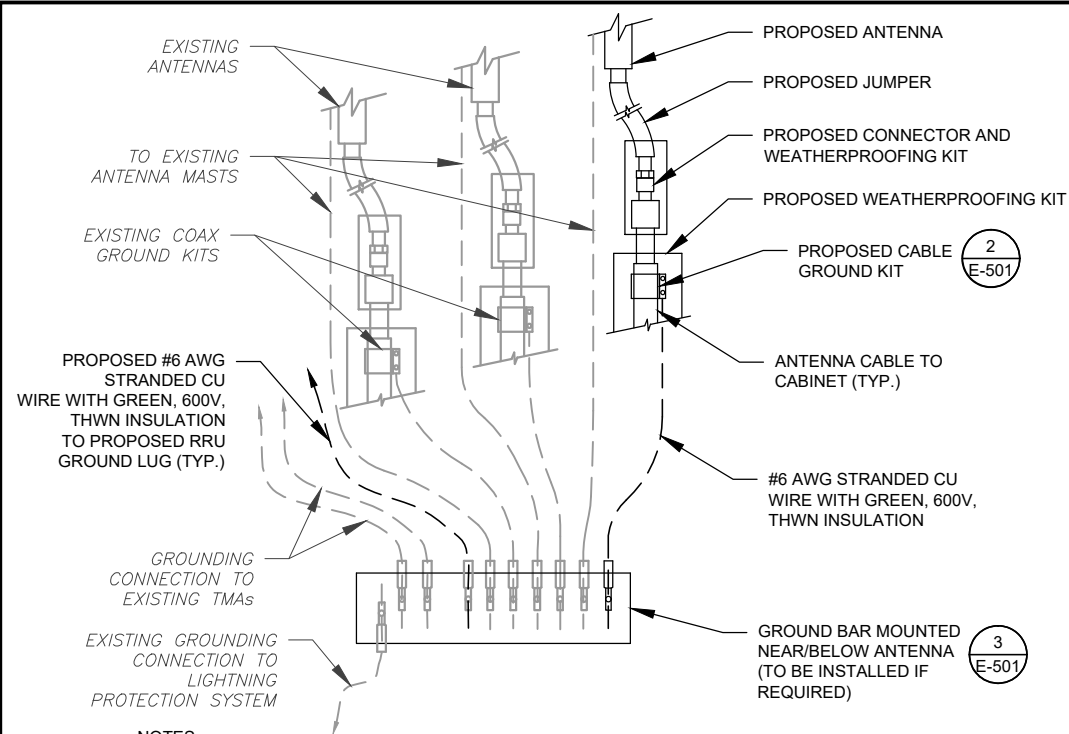
Digitally Signed: 2024-02-14



ATC JOB NO: 14528084_G0
CUSTOMER ID: SALEM CT
CUSTOMER #: 5000246846

CONSTRUCTION
DETAILS

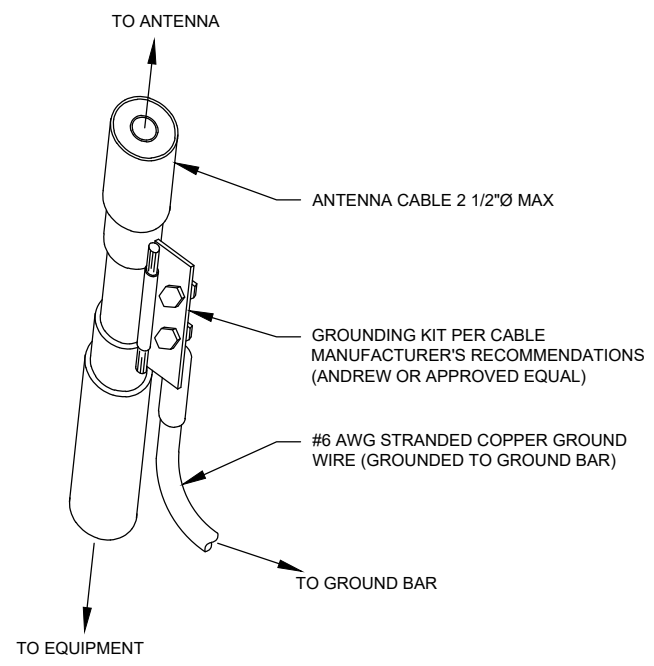
SHEET NUMBER: C-501
REVISION: 0



NOTES:

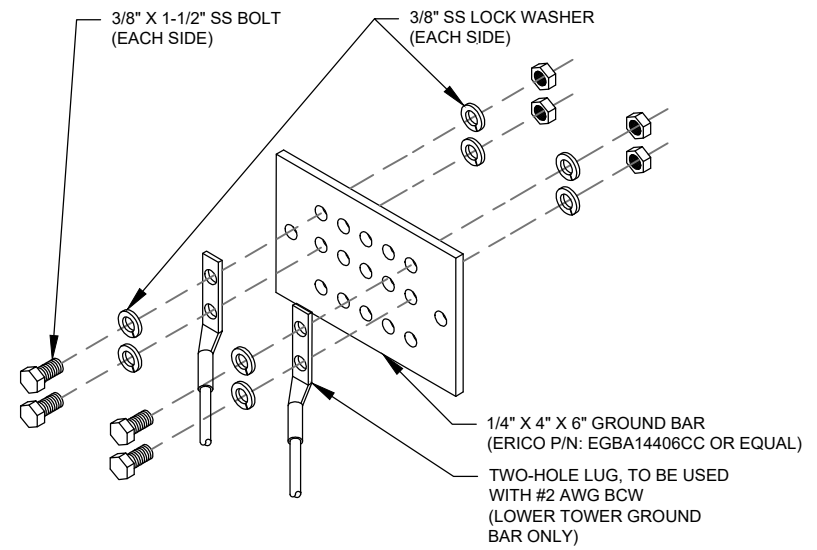
1. THIS DETAIL IS INTENDED TO SHOW THE GENERAL GROUNDING REQUIREMENTS. SLIGHT ADJUSTMENTS MAY BE REQUIRED BASED ON EXISTING SITE CONDITIONS. THE CONTRACTOR SHALL MAKE FIELD ADJUSTMENTS AS NEEDED AND INFORM THE CONSTRUCTION MANAGER OF ANY CONFLICTS.
2. SITE GROUNDING SHALL COMPLY WITH VERIZON GROUNDING 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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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	AP	2/14/2024

ATC SITE NUMBER:
411184
 ATC SITE NAME:
SALEM CT SQA
 VERIZON SITE NAME:
SALEM CT
 SITE ADDRESS:
 399 WEST ROAD
 SALEM, CT 06420



Digitally Signed: 2024-02-14

ATC JOB NO: 14528084_GO
 CUSTOMER ID: SALEM CT
 CUSTOMER #: 5000246846

GROUNDING DETAILS

SHEET NUMBER: E-501	REVISION: 0
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Colliers Engineering & Design, Architecture,
Landscape Architecture, Surveying, CT P.C.
1055 Washington Boulevard
Stamford, CT 06901
203.324.0800
peter.albano@collierseng.com

Mount Post-Modification Analysis Report
(1) 13.71-Ft Platform

December 19, 2023
Site ID: 5000246846-VZW / SALEM CT
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 #: 10215779
Colliers Engineering & Design Project #: 21777345A (Rev. 3)

December 19, 2023

Site Information

Site ID: 5000246846-VZW / SALEM CT
Site Name: SALEM CT
Carrier Name: Verizon Wireless
Address: 399 West Rd
Salem, Connecticut 06420
New London County
Latitude: 41.487836°
Longitude: -72.313214°

Structure Information

Tower Type: 178-Ft Monopole
Mount Type: 13.71-Ft Platform

FUZE ID # 16272075

Analysis Results

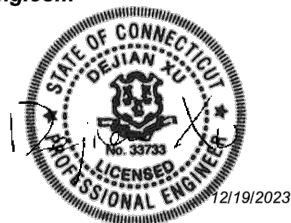
Platform: 66.2% **Pass w/ Modifications***

***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: Selene Chen



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 13.71' PLATFORM

TOWER OWNER: AMERICAN TOWER CORPORATION
TOWER OWNER SITE NUMBER: 411184

CARRIER SITE NAME: SALEM CT
CARRIER SITE NUMBER: 5000246846
FUZE ID: 16272075

399 WEST RD
SALEM, CT 06420
NEW LONDON COUNTY

LATITUDE: 41.48783600° N
LONGITUDE: 72.31321400° W

DESIGN CRITERIA table with columns for WIND LOADS, ICE LOADS, and SEISMIC LOADS.

PROJECT INFORMATION table with columns for APPLICANT/LESSEE, CLIENT REPRESENTATIVE, PROJECT MANAGER, and CONTRACTOR PMI REQUIREMENTS.

SHEET INDEX table with columns for SHEET, DESCRIPTION, and SPECIFICATION SHEETS.

Colliers Engineering & Design logo and professional engineer seal for Peter Alban.

BILL OF MATERIALS table with columns for QUANTITY, MANUFACTURER, PART NUMBER, DESCRIPTION, NOTES, UNIT WEIGHT (LBS), and WEIGHT (LBS). Includes sections for VZWSMART KITS, OTHER REQUIRED PARTS, and REQUIRED SAFETY CLIMB PARTS.

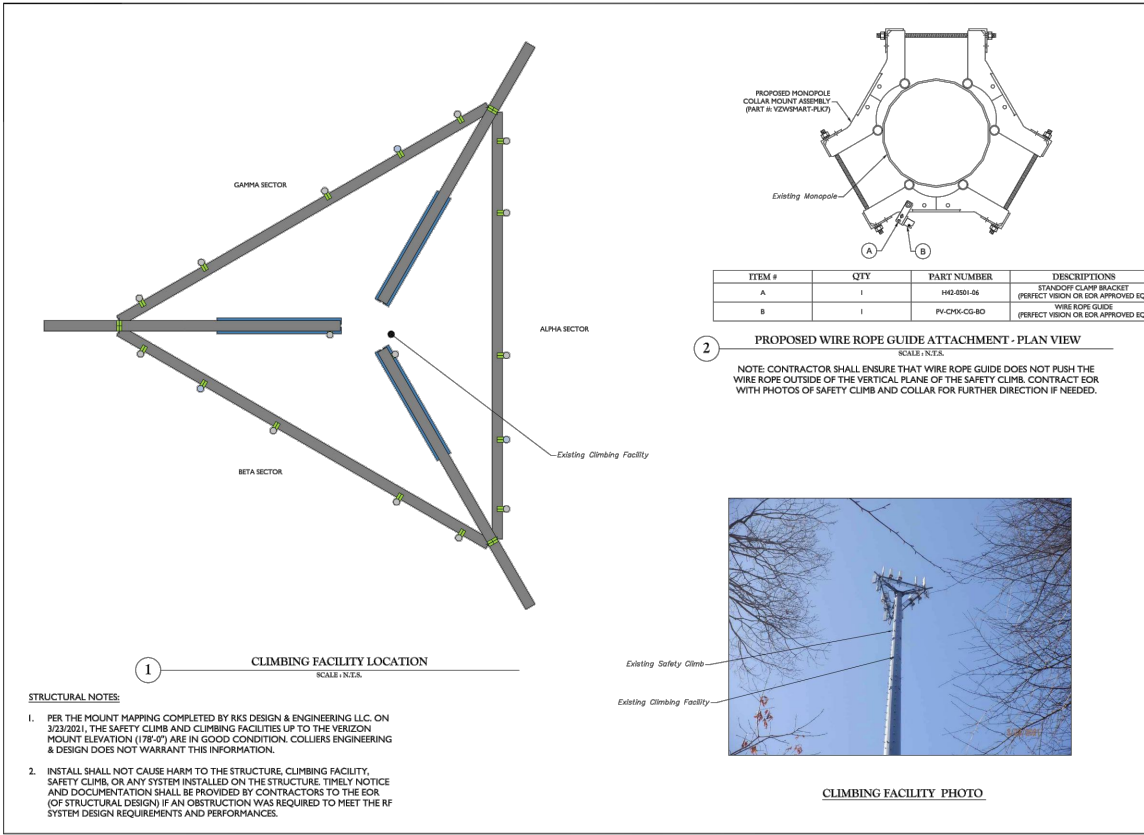
Colliers Engineering & Design logo and professional engineer seal for Peter Alban.

- GENERAL NOTES: THESE MODIFICATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE TELECOMMUNICATIONS INDUSTRY STANDARD TIA-222-B...


- STRUCTURAL STEEL: DESIGN, DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING PUBLICATIONS EXCEPT AS SPECIFICALLY INDICATED IN THE CONTRACT DOCUMENTS...

BOLT SCHEDULE (IN) and WORKABLE GAGES (IN) tables. Includes diagrams for TYP. BOLT ASSEMBLY and ALLOWABLE COPING.

Colliers Engineering & Design logo and professional engineer seal for Peter Alban.

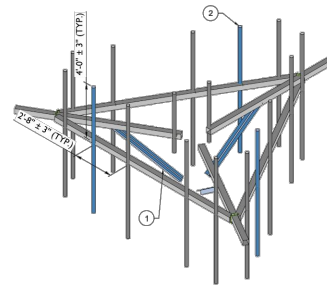


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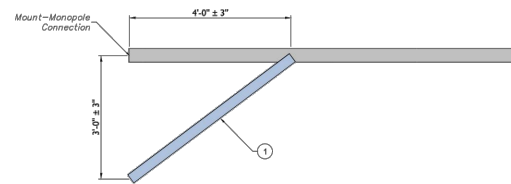
LEGEND:
 PROPOSED
 RELOCATED
 EXISTING

MOUNT MODIFICATION SCHEDULE				
NO.	ELEVATION	QUANTITY	DESCRIPTION	NOTES
1	176'-0"	1	PROPOSED KICKER KIT (PART #: VZVWPMAT-PLK5)	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE STRUCTURAL STEEL TOLERANCE SHEET SIGN. CONNECT OTHER END OF KICKER KIT TO MONOPOLE COLLAR MOUNT ASSEMBLY (PART #: VZVWPMAT-PLK5). SEE GENERAL NOTE E.
2		2	PROPOSED 1/2" LONG PIPE 1 1/2 SCH40	CONNECT NEW MOUNT PIPE TO EXISTING HORIZONTAL WITH CROSSOVER PLATES (PART #: VZVWPMAT-MR6A).

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 BOK.
 B. THROUGH BODY 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.G.



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



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

Colliers Engineering & Design
www.colliersengineering.com

verizon

811 PROJECT NUMBER: 2024-0001
PROJECT NAME: SALEM CT 5000246846
DATE: 03/22/2024

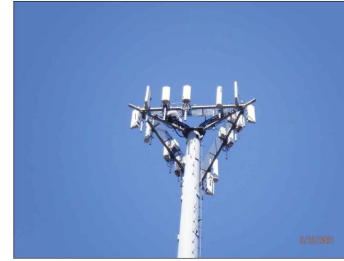
STATE OF CONNECTICUT
LICENSED PROFESSIONAL ENGINEER
12/19/2023

SITE NAME:
SALEM CT
5000246846
399 WEST RD
SALEM, CT 06420
NEW LONDON COUNTY

MODIFICATION DETAILS
SS-1



MOUNT PHOTO 1



MOUNT PHOTO 2



MOUNT PHOTO 3



MOUNT PHOTO 4

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verizon

811 PROJECT NUMBER: 2024-0001
PROJECT NAME: SALEM CT 5000246846
DATE: 03/22/2024

STATE OF CONNECTICUT
LICENSED PROFESSIONAL ENGINEER
12/19/2023

SITE NAME:
SALEM CT
5000246846
399 WEST RD
SALEM, CT 06420
NEW LONDON COUNTY

MOUNT PHOTOS
SS-2

1 MOUNT MODIFICATIONS

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SUPPLEMENTAL

SHEET NUMBER:
R-603

REVISION:
0

EXHIBIT 2



Details

Property

Address 399 WEST RD
ID 121-07-011-000
Account 204
Map Parcel ID 121 - 7-011-000

Ownership

Name 1 CLARK JASON ARTHUR
Address 251 OLD COLCHESTER RD,
<Null>
QUAKER HILL, CT 06375
Last Sale \$0 on 2017-12-26
Book / Page 0250/0127

Valuation

Total \$408,900
Building \$0
Land \$408,900

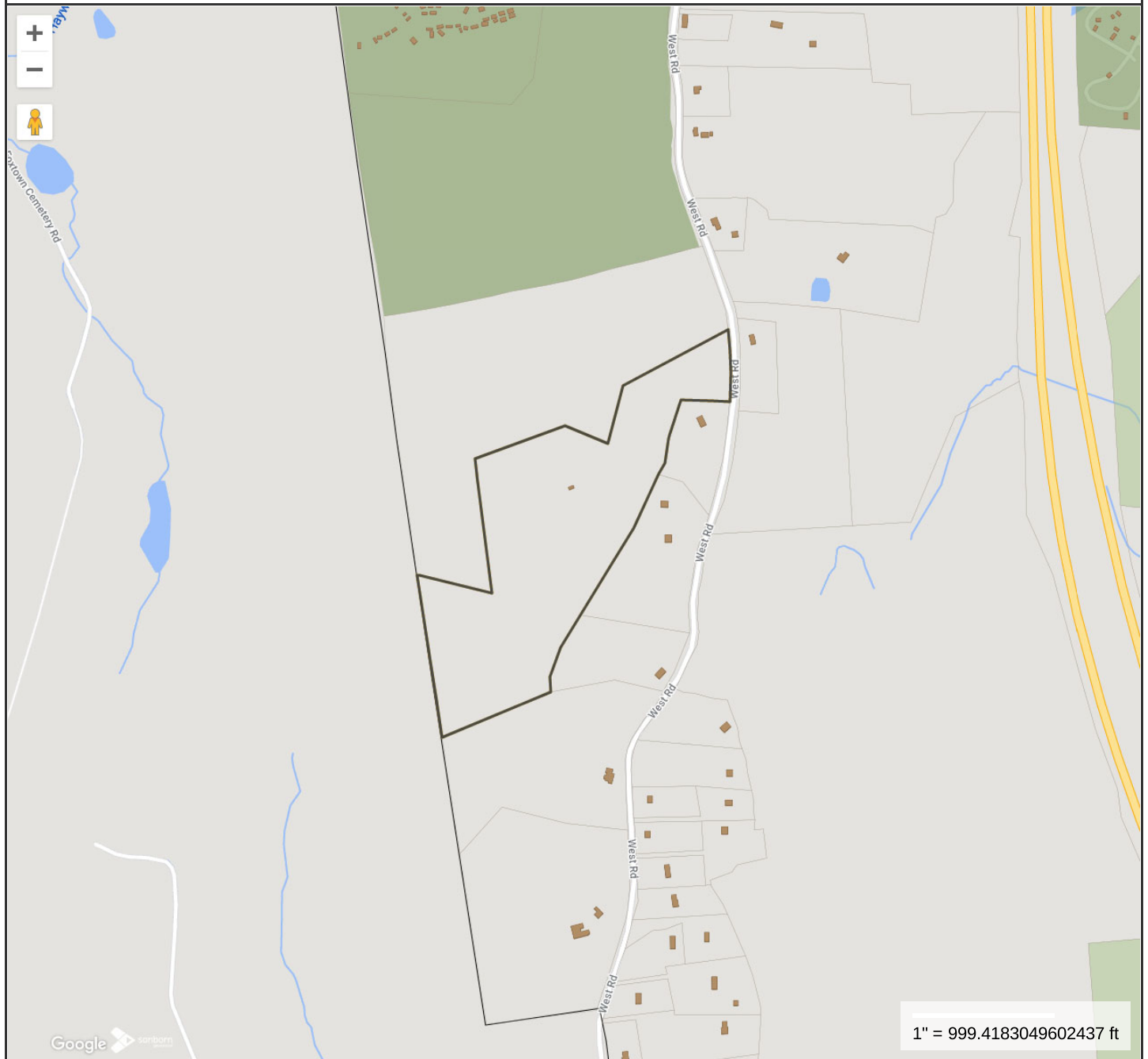
Land

Area 40.00 ac
Zone RUA
State Class 4331
Land Use Code 4331
Land Description Cell Tower

Details

Actual Year 0
Built
Effective 0
Year Built
Property <https://gis.vgsi.com/salemct/Parcel.aspx?Pid=195>
Card

GSI



Property Information

Property ID 121-07-011-000
Location 399 WEST RD
Owner CLARK JASON ARTHUR



**MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT**

SCCOG makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 05/31/2017
Data updated 09/21/2023

Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.

EXHIBIT 3

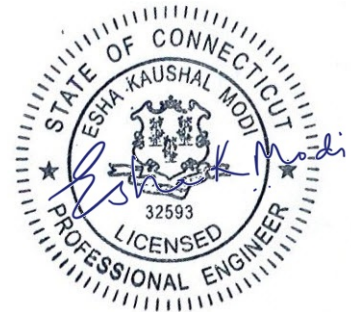




AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure : 178 ft Monopole
ATC Asset Name : SALEM CT SQA
ATC Asset Number : 411184
Engineering Number : 14528084_C3_03
Proposed Carrier : VERIZON WIRELESS
Carrier Site Name : Salem CT
Carrier Site Number : 5000246846
Site Location : 399 West Road
SALEM, CT 06420-3507
41.4878° N, 72.3132° W
County : New London
Date : January 10, 2024
Max Usage : 65%
Analysis Result : Pass



COA: PEC.0001553



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Structure Usages	4
Maximum Reactions	4
Tower Loading	5
Standard Conditions	Attached
Calculations	Attached

Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 178 ft Monopole tower to reflect the change in loading by VERIZON WIRELESS.

Supporting Documents

Tower:	EI Project #11200, dated October 9, 2002
Foundation:	EI Project #11200, dated November 14, 2002
Geotechnical:	Clarence Welti Associates, dated November 1, 2002

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:	123 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:	B
Risk Category:	II
Topographic Factor Procedure:	Method 1
Topographic Category:	1
Spectral Response:	$S_s = 0.21$, $S_1 = 0.06$
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	65.7%	1.2D + 1.0W	Pass
Serviceability Usage	42.6%	1.0D + 1.0W	Pass
Base Plate @ 0.0 ft	53.9%	Rods	Pass
Mat & Pier	59.4%	Flexure [Steel (Pier)]	Pass

Maximum Reactions

Foundation	Moment (k-ft)	Axial (k)	Shear (k)
Monopole Base	4,084.4	58.7	30.2

**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
182.9	2	Raycap RxxDC-3315-PF-48	-
181.8	3	Alcatel-Lucent B66A RRH4x45-4R w/ Solar Shield	-
	6	56" x 12" Panel	
181.6	3	Alcatel-Lucent B25 RRH4x30-4R	-
181.0	2	Raycap RRFDC-3315-PF-48	(12) 1 5/8" Coax (2) 1 5/8" Hybriflex
	3	Samsung MT6407-77A	
	3	Samsung MT6413-77A	
	3	Samsung RF4439d-25A	
	3	Samsung RF4461d-13A	
	3	Samsung XXDWMM-12.5-65-8T-CBRS	
	6	Andrew DB846H80E-SX	
6	Andrew SBNHH-1D65A		
180.3	6	70" x 8" Panel	-
180.1	3	76" x 8" Panel	-
180.0	1	Unused Reserve (5317.2900 sqin)	-

Other Existing/Reserved Loading

Elev (ft)	Qty	Equipment	Lines	Carrier
177.0	1	Low Profile Platform	-	VERIZON
171.7	3	Fujitsu TA08025-B604	-	DISH WIRELESS L.L.C.
	3	Fujitsu TA08025-B605		
167.0	1	Platform with Handrails	-	-
	1	Commscope RDIDC-9181-PF-48	(1) 1.60" (40.6mm) Hybrid	DISH WIRELESS L.L.C.
	3	JMA Wireless MX08FRO665-21		
157.0	1	RFS SC2-W100BD	(3) 1.99" (50.7mm) Hybrid (1) 1/2" Coax	T-MOBILE
	3	Commscope VV-65A-R1B		
	3	Ericsson 4460 BAND 2/25		
	3	Ericsson 4480 BAND 71		
	3	Ericsson AIR 6419 B41		
	3	RFS APXVAALL24 43-U-NA20		
	1	Circular 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.

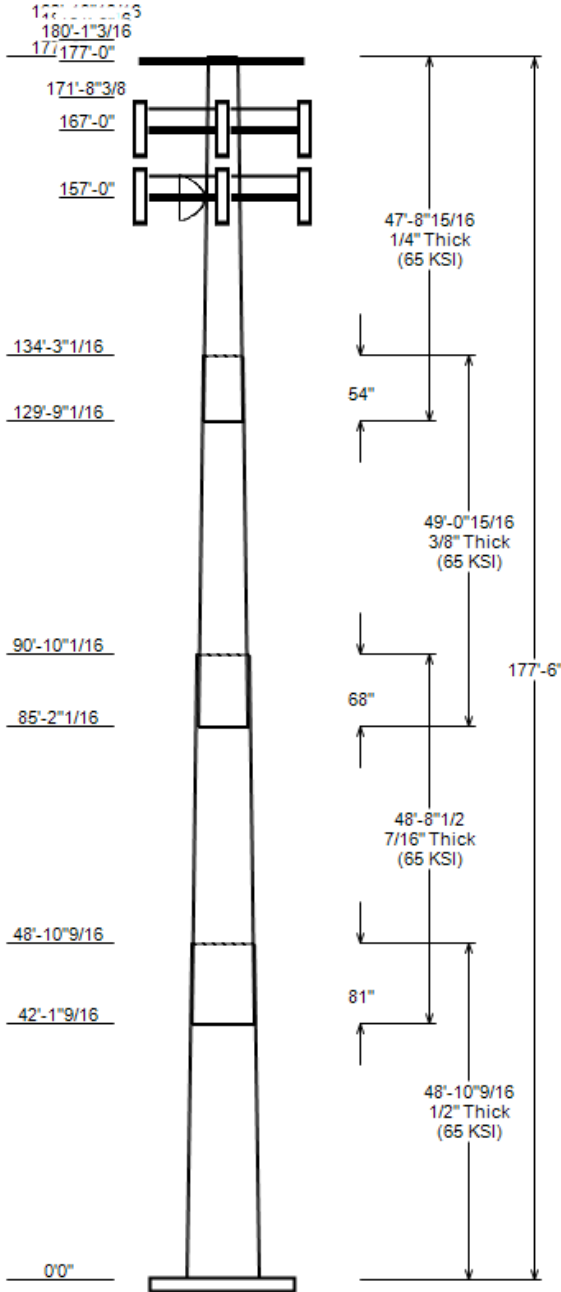
All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. A.T. Engineering Services LLC is not responsible for the conclusions, opinions and recommendations made by others based on the information supplied herein.

ANALYSIS PARAMETERS

Nominal Wind: 123 mph	Ice Wind: 50 mph w/ 1" ice	Service Wind: 60 mph
Risk Category: II	Exposure: B	S _z : 0.207 S _d : 0.055
Topo Category: 1	Topo Factor: Method 1	Topo Feature:
Structure Height: 177.5 ft	Base Elevation: 0.00 ft	Structure Type: Taper
Base Diameter: 58 in	Base Rotation: 0°	Taper: 0.2200 (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	48.880	47.23	58.00	0.500		0.000	18 Sides	65
2	48.710	38.85	49.59	0.438	Slip Joint	81.000	18 Sides	65
3	49.080	30.03	40.85	0.375	Slip Joint	68.000	18 Sides	65
4	47.747	21.00	31.52	0.250	Slip Joint	54.000	18 Sides	65



DISCRETE APPURTENANCE

Elev (ft)	Description
182.9	(2) Raycap RxxDC-3315-PF-48
181.8	(3) Alcatel-Lucent B66A RRH4x45-4R
181.8	(6) Generic 56" x 12" Panel
181.6	(3) Alcatel-Lucent B25 RRH4x30-4R
181.0	(3) Samsung XXDWM-12.5-65-8T-CBRS
181.0	(3) Samsung RF4461d-13A
181.0	(3) Samsung RF4439d-25A
181.0	(2) Raycap RRFDC-3315-PF-48
181.0	(3) Samsung MT6413-77A
181.0	(3) Samsung MT6407-77A
181.0	(6) Andrew DB846H80E-SX
181.0	(6) Andrew SBNHH-1D65A
180.3	(6) Generic 70" x 8" Panel
180.1	(3) Generic 76" x 8" Panel
180.0	(1) Unused Reserve (5317.2900 sqin)
180.0	(1) VZW Unused Reserve (6561.54 sq)
177.0	(1) Flat Low Profile Platform
171.7	(3) Fujitsu TA08025-B604
171.7	(3) Fujitsu TA08025-B605
167.0	(1) Commscope RDIDC-9181-PF-48
167.0	(3) JMA Wireless MX08FRO665-21
167.0	(1) Generic Flat Platform with Han
157.0	(3) Ericsson 4460 BAND 2/25
157.0	(3) Ericsson 4480 BAND 71
157.0	(1) RFS SC2-W100BD
157.0	(3) Ericsson AIR 6419 B41
157.0	(3) Commscope VV-65A-R1B
157.0	(3) RFS APXVAALL24 43-U-NA20
157.0	(1) Generic Circular Platform with

LINEAR APPURTENANCE

Elev To (ft)	Description
181.0	(2) 1 5/8" Hybriflex
181.0	(12) 1 5/8" Coax
167.0	(1) 1.60" (40.6mm) Hybrid
157.0	(1) 1/2" Coax
157.0	(3) 1.99" (50.7mm) Hybrid

DISH SERVICEABILITY

Load Case	Elevation (ft)	Deflection (in)	Rotation (°)
1.0D + 1.0W	157.00	20.853	1.420

GLOBAL BASE REACTIONS

Load Case	Moment (kip-ft)	Axial (kip)	Shear (kip)
1.2D + 1.0W	4084.39	58.69	30.25
0.9D + 1.0W	4024.71	44.01	30.23
1.2D + 1.0Di + 1.0Wi	1036.27	75.56	7.78
1.2D + 1.0Ev + 1.0Eh	224.65	58.85	1.47
0.9D - 1.0Ev + 1.0Eh	220.37	40.48	1.47
1.0D + 1.0W	862.63	48.94	6.44

ANALYSIS PARAMETERS

Location:	New London County,CT	Height:	177.5 ft
Type and Shape:	Taper, 18 Sides	Base Diameter:	58.00 in
Manufacturer:	Undetermined	Top Diameter:	21.00 in
K_d (non-service):	0.95	Taper:	0.2200 in/ft
K_e:	0.98	Rotation:	0.000°

ICE & WIND PARAMETERS

Risk Category:	II	Design Wind Speed:	123 mph
Exposure Category:	B	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:	564.00 ft

SEISMIC PARAMETERS

Analysis Method:	Equivalent Lateral Force Method		
Site Class:	D - Stiff Soil	Period Based on Rayleigh Method (sec):	2.87
T_L (sec):	6	P:	1
S_s:	0.207	S₁:	0.055
F_a:	1.600	F_v:	2.400
S_{ds}:	0.221	S_{d1}:	0.088
		C_s:	0.030
		C_s Max:	0.030
		C_s Min:	0.030

LOAD CASES

1.2D + 1.0W	123 mph Wind with No Ice
0.9D + 1.0W	123 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	48.88	0.5000	65		0.00	13,755	58.00	0.000	91.25	38,116.9	18.69	116.00	47.23	48.88	74.15	20,454.	14.89	94.45	0.2204
2-18	48.71	0.4375	65	Slip	81.00	10,077	49.59	42.130	68.25	20,831.7	18.22	113.35	38.85	90.84	53.34	9,945.1	13.90	88.80	0.2204
3-18	49.08	0.3750	65	Slip	68.00	6,970	40.85	85.170	48.17	9,971.8	17.45	108.94	30.03	134.25	35.30	3,922.8	12.36	80.09	0.2204
4-18	47.75	0.2500	65	Slip	54.00	3,353	31.52	129.753	24.82	3,066.7	20.47	126.10	21.00	177.50	16.46	895.7	13.05	84.00	0.2204
Total Shaft Weight						34,155													

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
182.90	Raycap RxxDC-3315-PF-48	2	0.80	0.000	21.40	2.512	0.67	75.51	3.219	0.67
181.80	Alcatel-Lucent B66A RRH4x45-4R	3	0.80	0.000	56.80	2.537	0.67	104.40	3.298	0.67
181.80	Generic 56" x 12" Panel	6	0.80	0.000	40.00	6.049	0.66	128.57	7.517	0.66
181.60	Alcatel-Lucent B25 RRH4x30-4R	3	0.80	0.000	51.00	2.140	0.67	92.32	2.819	0.67
181.00	Samsung RF4439d-25A	3	0.80	0.000	74.70	2.500	0.67	129.00	3.211	0.67
181.00	Samsung RF4461d-13A	3	0.75	0.000	79.10	1.875	0.50	122.90	2.488	0.50
181.00	Samsung XXDWMM-12.5-65-8T-CBRS	3	0.75	0.000	23.10	1.539	0.50	51.28	2.104	0.50
181.00	Raycap RRFDC-3315-PF-48	2	0.80	0.000	26.90	2.512	0.67	81.01	3.219	0.67
181.00	Samsung MT6407-77A	3	0.80	0.000	81.60	4.709	0.61	150.84	5.741	0.61
181.00	Andrew DB846H80E-SX	6	0.80	0.000	16.00	5.867	0.73	116.16	5.804	0.73
181.00	Andrew SBNHH-1D65A	6	0.80	0.000	40.90	5.883	0.69	132.97	7.333	0.69
181.00	Samsung MT6413-77A	3	0.75	0.000	57.30	3.805	0.61	114.98	4.707	0.61
180.30	Generic 70" x 8" Panel	6	0.80	0.000	40.00	5.670	0.68	113.24	7.261	0.68
180.10	Generic 76" x 8" Panel	3	0.80	0.000	40.00	6.260	0.68	119.22	7.972	0.68
180.00	Unused Reserve (5317.2900 sqin)	1	0.75	0.000	191.20	36.926	0.90	281.68	54.400	0.90
177.00	Flat Low Profile Platform	1	1.00	0.000	1500.00	26.100	1.00	1939.79	39.060	1.00
171.70	Fujitsu TA08025-B604	3	0.75	0.000	63.90	1.962	0.50	103.37	2.585	0.50
171.70	Fujitsu TA08025-B605	3	0.75	0.000	75.00	1.962	0.50	117.40	2.585	0.50
167.00	Commscope RDIDC-9181-PF-48	1	0.75	0.000	21.90	1.867	1.00	60.30	2.474	1.00
167.00	JMA Wireless MX08FRO665-21	3	0.75	0.000	64.50	12.489	0.64	237.95	14.385	0.64
167.00	Generic Flat Platform with Han	1	1.00	0.000	2500.00	42.400	1.00	3698.84	56.553	1.00
157.00	Ericsson 4460 BAND 2/25	3	0.75	0.000	109.00	2.564	0.67	168.28	3.271	0.67
157.00	Ericsson 4480 BAND 71	3	0.75	0.000	81.00	2.878	0.67	132.05	3.631	0.67
157.00	RFS SC2-W100BD	1	1.00	0.000	20.00	4.796	1.00	82.16	5.661	1.00
157.00	Ericsson AIR 6419 B41	3	0.75	0.000	68.50	5.600	0.63	149.54	6.662	0.63
157.00	Commscope VV-65A-R1B	3	0.75	0.000	24.70	5.887	0.63	103.09	7.306	0.63
157.00	Generic Circular Platform with	1	1.00	0.000	2900.00	33.900	1.00	4349.78	77.298	1.00
157.00	RFS APXVAALL24 43-U-NA20	3	0.75	0.000	122.80	20.243	0.63	384.03	22.730	0.63
Totals	Row Count: 28	82			11,270.10			20,513.18		

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	181.00	12	1 1/8" Coax	1.98	0.82	N	0	0	0	0	0	N	VERIZON WIRELESS
0.00	181.00	2	1 1/8" Hybriflex	1.98	1.3	N	0	0	0	0	0	N	VERIZON WIRELESS
0.00	167.00	1	1.60" (40.6mm) Hybrid	1.6	2.34	N	0	0	0	0	0	N	DISH WIRELESS L.L.C.
0.00	157.00	3	1.99" (50.7mm) Hybrid	1.99	1.9	N	0	0	0	0	0	N	T-MOBILE
0.00	157.00	1	1/2" Coax	0.63	0.15	N	0	0	0	0	0	N	T-MOBILE

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	58.000	91.249	38,116.90	18.69	116.00	79.4	1294.4	0.0	0.0
5.00		0.5000	56.898	89.500	35,966.90	18.30	113.80	79.9	1245.1	0.0	1,537.6
10.00		0.5000	55.796	87.751	33,899.30	17.91	111.59	80.3	1196.7	0.0	1,507.9

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)
15.00			0.5000	54.694	86.002	31,912.50	17.52	109.39	80.8	1149.2	0.0	1,478.1
20.00			0.5000	53.592	84.253	30,004.90	17.14	107.18	81.2	1102.7	0.0	1,448.4
25.00			0.5000	52.490	82.504	28,174.80	16.75	104.98	81.7	1057.2	0.0	1,418.6
30.00			0.5000	51.387	80.755	26,420.80	16.36	102.77	82.2	1012.7	0.0	1,388.8
35.00			0.5000	50.285	79.006	24,741.00	15.97	100.57	82.6	969.1	0.0	1,359.1
40.00			0.5000	49.183	77.257	23,134.10	15.58	98.37	82.6	926.4	0.0	1,329.3
42.13	Bot - Section 2		0.5000	48.714	76.512	22,471.20	15.42	97.43	82.6	908.6	0.0	557.3
45.00			0.5000	48.081	75.508	21,598.20	15.19	96.16	82.6	884.8	0.0	1,404.6
48.88	Top - Section 1		0.4375	48.101	66.184	18,996.60	17.62	109.94	80.7	777.9	0.0	1,869.6
50.00			0.4375	47.854	65.841	18,703.00	17.52	109.38	80.8	769.8	0.0	251.6
55.00			0.4375	46.752	64.311	17,428.90	17.08	106.86	81.3	734.3	0.0	1,107.2
60.00			0.4375	45.650	62.781	16,214.10	16.64	104.34	81.8	699.6	0.0	1,081.2
65.00			0.4375	44.548	61.250	15,057.00	16.19	101.82	82.4	665.7	0.0	1,055.1
70.00			0.4375	43.446	59.720	13,956.40	15.75	99.30	82.6	632.7	0.0	1,029.1
75.00			0.4375	42.344	58.190	12,910.70	15.30	96.79	82.6	600.5	0.0	1,003.1
80.00			0.4375	41.241	56.659	11,918.70	14.86	94.27	82.6	569.2	0.0	977.0
85.00			0.4375	40.139	55.129	10,978.80	14.41	91.75	82.6	538.7	0.0	951.0
85.17	Bot - Section 3		0.4375	40.101	55.076	10,947.10	14.40	91.66	82.6	537.7	0.0	32.5
90.00			0.4375	39.037	53.599	10,089.60	13.97	89.23	82.6	509.1	0.0	1,673.3
90.84	Top - Section 2		0.3750	39.602	46.688	9,076.80	16.86	105.61	81.6	451.4	0.0	286.6
95.00			0.3750	38.685	45.597	8,455.00	16.43	103.16	82.1	430.5	0.0	653.2
100.00			0.3750	37.583	44.285	7,746.10	15.91	100.22	82.6	406.0	0.0	764.6
105.00			0.3750	36.481	42.973	7,078.00	15.39	97.28	82.6	382.1	0.0	742.3
110.00			0.3750	35.379	41.662	6,449.40	14.87	94.34	82.6	359.1	0.0	720.0
115.00			0.3750	34.277	40.350	5,859.20	14.35	91.40	82.6	336.7	0.0	697.7
120.00			0.3750	33.175	39.038	5,306.20	13.84	88.47	82.6	315.0	0.0	675.4
125.00			0.3750	32.073	37.727	4,789.10	13.32	85.53	82.6	294.1	0.0	653.0
129.75	Bot - Section 4		0.3750	31.025	36.480	4,329.70	12.82	82.73	82.6	274.9	0.0	600.1
130.00			0.3750	30.970	36.415	4,306.70	12.80	82.59	82.6	273.9	0.0	51.4
134.25	Top - Section 3		0.2500	30.533	24.029	2,784.00	19.77	122.13	78.1	179.6	0.0	872.1
135.00			0.2500	30.368	23.898	2,738.90	19.66	121.47	78.3	177.6	0.0	60.9
140.00			0.2500	29.266	23.024	2,449.10	18.88	117.06	79.2	164.8	0.0	399.2
145.00			0.2500	28.164	22.149	2,180.50	18.10	112.66	80.1	152.5	0.0	384.3
150.00			0.2500	27.062	21.275	1,932.30	17.32	108.25	81	140.6	0.0	369.4
155.00			0.2500	25.960	20.400	1,703.70	16.55	103.84	81.9	129.3	0.0	354.5
157.00			0.2500	25.519	20.050	1,617.50	16.24	102.08	82.3	124.8	0.0	137.6
160.00			0.2500	24.858	19.526	1,493.80	15.77	99.43	82.6	118.4	0.0	202.0
165.00			0.2500	23.756	18.651	1,302.00	14.99	95.02	82.6	107.9	0.0	324.8
167.00			0.2500	23.315	18.301	1,230.10	14.68	93.26	82.6	103.9	0.0	125.7
170.00			0.2500	22.654	17.777	1,127.30	14.21	90.61	82.6	98.0	0.0	184.1
171.70			0.2500	22.279	17.479	1,071.70	13.95	89.12	82.6	94.7	0.0	102.0
175.00			0.2500	21.552	16.902	969.00	13.44	86.21	82.6	88.6	0.0	193.0
177.00			0.2500	21.111	16.552	910.10	13.13	84.44	82.6	84.9	0.0	113.8
177.50			0.2500	21.000	16.465	895.70	13.05	84.00	82.6	84.0	0.0	28.1
Total:												34,156.2

CALCULATED FORCES													
Load Case: 1.2D + 1.0W			123 mph Wind with No Ice										26 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	-58.69	-30.25	0.00	-4,084.4	0.00	4,084.39	6,522.07	1,601.42	8,317.28	7,709.86	0	0	0.539
5.00	-56.64	-29.91	0.00	-3,933.2	0.00	3,933.15	6,433.88	1,570.73	8,001.55	7,458.58	0.08	-0.15	0.536
10.00	-54.63	-29.57	0.00	-3,783.6	0.00	3,783.61	6,344.25	1,540.03	7,691.92	7,209.69	0.32	-0.3	0.534
15.00	-52.66	-29.23	0.00	-3,635.8	0.00	3,635.77	6,253.19	1,509.34	7,388.40	6,963.30	0.72	-0.46	0.531
20.00	-50.72	-28.90	0.00	-3,489.6	0.00	3,489.61	6,160.69	1,478.65	7,090.99	6,719.50	1.28	-0.62	0.528
25.00	-48.82	-28.56	0.00	-3,345.1	0.00	3,345.13	6,066.74	1,447.95	6,799.69	6,478.40	2.02	-0.78	0.525
30.00	-46.95	-28.23	0.00	-3,202.3	0.00	3,202.30	5,971.36	1,417.26	6,514.50	6,240.08	2.92	-0.94	0.521
35.00	-45.13	-27.88	0.00	-3,061.2	0.00	3,061.16	5,869.78	1,386.56	6,235.42	5,999.80	4	-1.11	0.518

CALCULATED FORCES

40.00	-43.35	-27.61	0.00	-2,921.8	0.00	2,921.76	5,739.84	1,355.87	5,962.45	5,735.81	5.26	-1.28	0.517
42.13	-42.60	-27.43	0.00	-2,862.9	0.00	2,862.94	5,684.49	1,342.79	5,848.02	5,625.16	5.85	-1.36	0.517
45.00	-40.79	-27.15	0.00	-2,784.2	0.00	2,784.22	5,609.90	1,325.17	5,695.59	5,477.76	6.7	-1.46	0.516
48.88	-38.42	-26.92	0.00	-2,678.9	0.00	2,678.86	4,805.33	1,161.53	5,000.69	4,706.45	7.94	-1.6	0.578
50.00	-38.04	-26.70	0.00	-2,648.7	0.00	2,648.72	4,787.38	1,155.52	4,949.03	4,664.36	8.32	-1.64	0.576
55.00	-36.51	-26.30	0.00	-2,515.2	0.00	2,515.24	4,706.35	1,128.66	4,721.67	4,477.85	10.15	-1.84	0.570
60.00	-35.02	-25.90	0.00	-2,383.7	0.00	2,383.74	4,623.87	1,101.80	4,499.66	4,293.72	12.18	-2.04	0.563
65.00	-33.55	-25.49	0.00	-2,254.2	0.00	2,254.25	4,539.96	1,074.94	4,283.00	4,112.05	14.43	-2.24	0.556
70.00	-32.12	-25.08	0.00	-2,126.8	0.00	2,126.80	4,436.90	1,048.09	4,071.68	3,917.30	16.89	-2.45	0.551
75.00	-30.73	-24.66	0.00	-2,001.4	0.00	2,001.41	4,323.20	1,021.23	3,865.71	3,718.13	19.57	-2.66	0.546
80.00	-29.36	-24.24	0.00	-1,878.1	0.00	1,878.10	4,209.50	994.37	3,665.08	3,524.15	22.47	-2.87	0.540
85.00	-28.07	-23.99	0.00	-1,756.9	0.00	1,756.90	4,095.80	967.51	3,469.80	3,335.36	25.59	-3.09	0.534
85.17	-27.99	-23.81	0.00	-1,752.7	0.00	1,752.74	4,091.86	966.58	3,463.13	3,328.91	25.71	-3.1	0.534
90.00	-25.83	-23.48	0.00	-1,637.8	0.00	1,637.83	3,982.11	940.66	3,279.87	3,151.78	28.95	-3.31	0.527
90.84	-25.43	-23.28	0.00	-1,618.1	0.00	1,618.11	3,427.64	819.38	2,903.29	2,761.87	29.54	-3.35	0.594
95.00	-24.49	-22.89	0.00	-1,521.3	0.00	1,521.28	3,368.33	800.23	2,769.16	2,650.03	32.54	-3.54	0.582
100.00	-23.38	-22.48	0.00	-1,406.8	0.00	1,406.81	3,290.17	777.21	2,612.15	2,513.35	36.37	-3.78	0.568
105.00	-22.30	-22.06	0.00	-1,294.4	0.00	1,294.44	3,192.72	754.18	2,459.72	2,365.94	40.46	-4.03	0.555
110.00	-21.26	-21.64	0.00	-1,184.2	0.00	1,184.16	3,095.26	731.16	2,311.87	2,222.99	44.82	-4.28	0.540
115.00	-20.24	-21.22	0.00	-1,076.0	0.00	1,075.97	2,997.81	708.14	2,168.61	2,084.50	49.43	-4.53	0.524
120.00	-19.25	-20.81	0.00	-969.8	0.00	969.85	2,900.35	685.12	2,029.93	1,950.45	54.3	-4.78	0.505
125.00	-18.30	-20.41	0.00	-865.8	0.00	865.81	2,802.90	662.10	1,895.83	1,820.86	59.44	-5.02	0.483
129.75	-17.44	-20.16	0.00	-768.8	0.00	768.82	2,710.25	640.22	1,772.59	1,701.80	64.55	-5.26	0.459
130.00	-17.35	-20.01	0.00	-763.8	0.00	763.85	2,705.44	639.08	1,766.31	1,695.73	64.82	-5.27	0.458
134.25	-16.18	-19.73	0.00	-678.8	0.00	678.75	1,689.95	421.70	1,153.47	1,052.58	69.6	-5.47	0.657
135.00	-16.05	-19.55	0.00	-664.0	0.00	664.02	1,683.70	419.41	1,140.96	1,042.94	70.46	-5.51	0.648
140.00	-15.39	-19.18	0.00	-566.3	0.00	566.29	1,641.04	404.06	1,059.00	979.01	76.39	-5.83	0.590
145.00	-14.75	-18.82	0.00	-470.4	0.00	470.37	1,596.93	388.72	980.09	916.20	82.65	-6.13	0.525
150.00	-14.14	-18.46	0.00	-376.3	0.00	376.28	1,551.39	373.37	904.24	854.62	89.2	-6.4	0.452
155.00	-13.57	-18.18	0.00	-284.0	0.00	283.99	1,504.40	358.02	831.44	794.36	96.03	-6.65	0.369
157.00	-8.90	-13.35	0.00	-247.6	0.00	247.63	1,485.21	351.88	803.17	770.64	98.83	-6.74	0.329
160.00	-8.61	-13.07	0.00	-207.6	0.00	207.57	1,450.65	342.67	761.69	732.82	103.09	-6.86	0.291
165.00	-8.14	-12.79	0.00	-142.2	0.00	142.23	1,385.68	327.33	695.00	668.34	110.35	-7.02	0.220
167.00	-5.07	-9.43	0.00	-116.6	0.00	116.64	1,359.70	321.19	669.18	643.37	113.3	-7.08	0.186
170.00	-4.82	-9.25	0.00	-88.3	0.00	88.34	1,320.71	311.98	631.37	606.82	117.76	-7.15	0.150
171.70	-4.21	-8.82	0.00	-72.6	0.00	72.61	1,298.62	306.76	610.43	586.58	120.3	-7.18	0.128
175.00	-3.95	-8.63	0.00	-43.5	0.00	43.50	1,255.74	296.63	570.79	548.27	125.28	-7.24	0.083
177.00	-2.16	-7.11	0.00	-26.2	0.00	26.25	1,229.76	290.49	547.41	525.69	128.3	-7.26	0.052
177.50	0.00	-6.78	0.00	-22.7	0.00	22.69	1,223.26	288.96	541.65	520.11	129.06	-7.26	0.044

CALCULATED FORCES

Load Case: 0.9D + 1.0W													123 mph Wind with No Ice (Reduced DL)		26 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	-44.01	-30.23	0.00	-4,024.7	0.00	4,024.71	6,522.07	1,601.42	8,317.28	7,709.86	0	0	0.529		
5.00	-42.46	-29.85	0.00	-3,873.6	0.00	3,873.57	6,433.88	1,570.73	8,001.55	7,458.58	0.08	-0.15	0.526		
10.00	-40.93	-29.47	0.00	-3,724.3	0.00	3,724.32	6,344.25	1,540.03	7,691.92	7,209.69	0.31	-0.3	0.523		
15.00	-39.43	-29.10	0.00	-3,577.0	0.00	3,576.96	6,253.19	1,509.34	7,388.40	6,963.60	0.71	-0.45	0.520		
20.00	-37.96	-28.73	0.00	-3,431.4	0.00	3,431.45	6,160.69	1,478.65	7,090.99	6,719.50	1.26	-0.61	0.517		
25.00	-36.52	-28.37	0.00	-3,287.8	0.00	3,287.78	6,066.74	1,447.95	6,799.69	6,478.40	1.98	-0.77	0.514		
30.00	-35.10	-28.01	0.00	-3,145.9	0.00	3,145.93	5,971.36	1,417.26	6,514.50	6,240.08	2.87	-0.93	0.510		
35.00	-33.71	-27.63	0.00	-3,005.9	0.00	3,005.90	5,869.78	1,386.56	6,235.42	5,999.80	3.94	-1.09	0.507		
40.00	-32.37	-27.35	0.00	-2,867.8	0.00	2,867.75	5,739.84	1,355.87	5,962.45	5,735.81	5.17	-1.26	0.506		
42.13	-31.80	-27.15	0.00	-2,809.5	0.00	2,809.51	5,684.49	1,342.79	5,848.02	5,625.16	5.75	-1.34	0.505		
45.00	-30.43	-26.86	0.00	-2,731.6	0.00	2,731.58	5,609.90	1,325.17	5,695.59	5,477.76	6.59	-1.44	0.505		
48.88	-28.64	-26.62	0.00	-2,627.4	0.00	2,627.36	4,805.33	1,161.53	5,000.69	4,706.45	7.81	-1.58	0.565		
50.00	-28.35	-26.38	0.00	-2,597.5	0.00	2,597.54	4,787.38	1,155.52	4,949.03	4,664.36	8.19	-1.62	0.563		
55.00	-27.19	-25.97	0.00	-2,465.6	0.00	2,465.62	4,706.35	1,128.66	4,721.67	4,477.85	9.98	-1.81	0.557		
60.00	-26.05	-25.55	0.00	-2,335.8	0.00	2,335.78	4,623.87	1,101.80	4,499.66	4,293.72	11.98	-2	0.550		
65.00	-24.94	-25.12	0.00	-2,208.0	0.00	2,208.05	4,539.96	1,074.94	4,283.00	4,112.05	14.19	-2.2	0.543		
70.00	-23.85	-24.69	0.00	-2,082.5	0.00	2,082.46	4,436.90	1,048.09	4,071.68	3,917.30	16.6	-2.41	0.538		
75.00	-22.79	-24.26	0.00	-1,959.0	0.00	1,959.02	4,323.20	1,021.23	3,865.71	3,718.13	19.23	-2.61	0.533		
80.00	-21.75	-23.82	0.00	-1,837.7	0.00	1,837.74	4,209.50	994.37	3,665.08	3,524.15	22.08	-2.82	0.527		
85.00	-20.77	-23.57	0.00	-1,718.6	0.00	1,718.63	4,095.80	967.51	3,469.80	3,335.36	25.15	-3.03	0.521		
85.17	-20.71	-23.38	0.00	-1,714.6	0.00	1,714.55	4,091.86	966.58	3,463.13	3,328.91	25.26	-3.04	0.521		
90.00	-19.08	-23.06	0.00	-1,601.7	0.00	1,601.72	3,982.11	940.66	3,279.87	3,151.78	28.44	-3.25	0.514		
90.84	-18.78	-22.85	0.00	-1,582.4	0.00	1,582.35	3,427.64	819.38	2,903.29	2,761.87	29.01	-3.29	0.579		
95.00	-18.05	-22.46	0.00	-1,487.3	0.00	1,487.29	3,368.33	800.23	2,769.16	2,650.03	31.96	-3.47	0.567		
100.00	-17.21	-22.03	0.00	-1,375.0	0.00	1,375.00	3,290.17	777.21	2,612.15	2,513.35	35.72	-3.71	0.553		
105.00	-16.39	-21.60	0.00	-1,264.8	0.00	1,264.85	3,192.72	754.18	2,459.72	2,365.94	39.73	-3.95	0.541		
110.00	-15.59	-21.18	0.00	-1,156.8	0.00	1,156.85	3,095.26	731.16	2,311.87	2,222.99	44	-4.2	0.526		
115.00	-14.82	-20.75	0.00	-1,051.0	0.00	1,050.98	2,997.81	708.14	2,168.61	2,084.50	48.52	-4.44	0.510		
120.00	-14.07	-20.34	0.00	-947.2	0.00	947.21	2,900.35	685.12	2,029.93	1,950.45	53.3	-4.68	0.491		
125.00	-13.34	-19.93	0.00	-845.5	0.00	845.53	2,802.90	662.10	1,895.83	1,820.86	58.32	-4.92	0.470		
129.75	-12.69	-19.70	0.00	-750.8	0.00	750.79	2,710.25	640.22	1,772.59	1,701.80	63.33	-5.15	0.447		
130.00	-12.62	-19.53	0.00	-745.9	0.00	745.93	2,705.44	639.08	1,766.31	1,695.73	63.6	-5.16	0.445		
134.25	-11.74	-19.28	0.00	-662.8	0.00	662.84	1,689.95	421.70	1,153.47	1,052.58	68.28	-5.36	0.639		
135.00	-11.64	-19.08	0.00	-648.4	0.00	648.45	1,683.70	419.41	1,140.96	1,042.94	69.12	-5.39	0.631		
140.00	-11.12	-18.71	0.00	-553.0	0.00	553.05	1,641.04	404.06	1,059.00	979.01	74.93	-5.71	0.574		
145.00	-10.64	-18.34	0.00	-459.5	0.00	459.51	1,596.93	388.72	980.09	916.20	81.06	-6	0.510		
150.00	-10.17	-17.97	0.00	-367.8	0.00	367.81	1,551.39	373.37	904.24	854.62	87.48	-6.27	0.439		
155.00	-9.74	-17.70	0.00	-278.0	0.00	277.95	1,504.40	358.02	831.44	794.36	94.16	-6.51	0.359		
157.00	-6.35	-13.03	0.00	-242.5	0.00	242.54	1,485.21	351.88	803.17	770.64	96.9	-6.59	0.320		
160.00	-6.13	-12.75	0.00	-203.4	0.00	203.45	1,450.65	342.67	761.69	732.82	101.08	-6.71	0.283		
165.00	-5.78	-12.48	0.00	-139.7	0.00	139.72	1,385.68	327.33	695.00	668.34	108.18	-6.88	0.215		
167.00	-3.56	-9.23	0.00	-114.8	0.00	114.75	1,359.70	321.19	669.18	643.37	111.07	-6.93	0.182		
170.00	-3.37	-9.06	0.00	-87.1	0.00	87.06	1,320.71	311.98	631.37	606.82	115.44	-7	0.147		
171.70	-2.93	-8.65	0.00	-71.7	0.00	71.66	1,298.62	306.76	610.43	586.58	117.93	-7.03	0.125		
175.00	-2.73	-8.46	0.00	-43.1	0.00	43.12	1,255.74	296.63	570.79	548.27	122.8	-7.09	0.082		
177.00	-1.42	-7.01	0.00	-26.2	0.00	26.20	1,229.76	290.49	547.41	525.69	125.77	-7.11	0.052		
177.50	0.00	-6.78	0.00	-22.7	0.00	22.69	1,223.26	288.96	541.65	520.11	126.51	-7.11	0.044		

CALCULATED FORCES

Load Case: 1.2D + 1.0Di + 1.0Wi													50 mph Wind with 1" Radial Ice		25 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	-75.56	-7.78	0.00	-1,036.3	0.00	1,036.27	6,522.07	1,601.42	8,317.28	7,709.86	0	0	0.146			
5.00	-73.30	-7.69	0.00	-997.4	0.00	997.38	6,433.88	1,570.73	8,001.55	7,458.58	0.02	-0.04	0.145			
10.00	-71.06	-7.60	0.00	-958.9	0.00	958.94	6,344.25	1,540.03	7,691.92	7,209.69	0.08	-0.08	0.144			
15.00	-68.84	-7.51	0.00	-920.9	0.00	920.93	6,253.19	1,509.34	7,388.40	6,963.30	0.18	-0.12	0.143			
20.00	-66.65	-7.43	0.00	-883.4	0.00	883.37	6,160.69	1,478.65	7,090.99	6,719.50	0.33	-0.16	0.142			
25.00	-64.50	-7.34	0.00	-846.2	0.00	846.23	6,066.74	1,447.95	6,799.69	6,478.40	0.51	-0.2	0.141			
30.00	-62.38	-7.25	0.00	-809.5	0.00	809.54	5,971.36	1,417.26	6,514.50	6,240.08	0.74	-0.24	0.140			
35.00	-60.30	-7.16	0.00	-773.3	0.00	773.28	5,869.78	1,386.56	6,235.42	5,999.80	1.01	-0.28	0.139			
40.00	-58.26	-7.09	0.00	-737.5	0.00	737.47	5,739.84	1,355.87	5,962.45	5,735.81	1.33	-0.33	0.139			
42.13	-57.40	-7.04	0.00	-722.4	0.00	722.37	5,684.49	1,342.79	5,848.02	5,625.16	1.48	-0.34	0.139			
45.00	-55.46	-6.97	0.00	-702.2	0.00	702.16	5,609.90	1,325.17	5,695.59	5,477.76	1.7	-0.37	0.138			
48.88	-52.87	-6.91	0.00	-675.1	0.00	675.13	4,805.33	1,161.53	5,000.69	4,706.45	2.01	-0.41	0.154			
50.00	-52.46	-6.85	0.00	-667.4	0.00	667.39	4,787.38	1,155.52	4,949.03	4,664.36	2.11	-0.42	0.154			
55.00	-50.69	-6.74	0.00	-633.2	0.00	633.16	4,706.35	1,128.66	4,721.67	4,477.85	2.57	-0.47	0.152			
60.00	-48.96	-6.64	0.00	-599.4	0.00	599.44	4,623.87	1,101.80	4,499.66	4,293.72	3.08	-0.52	0.150			
65.00	-47.26	-6.53	0.00	-566.3	0.00	566.27	4,539.96	1,074.94	4,283.00	4,112.05	3.65	-0.57	0.148			
70.00	-45.60	-6.42	0.00	-533.6	0.00	533.64	4,436.90	1,048.09	4,071.68	3,917.30	4.27	-0.62	0.147			
75.00	-43.97	-6.30	0.00	-501.6	0.00	501.56	4,323.20	1,021.23	3,865.71	3,718.13	4.95	-0.67	0.145			
80.00	-42.38	-6.19	0.00	-470.0	0.00	470.04	4,209.50	994.37	3,665.08	3,524.15	5.68	-0.72	0.143			
85.00	-40.83	-6.12	0.00	-439.1	0.00	439.09	4,095.80	967.51	3,469.80	3,335.36	6.47	-0.78	0.142			
85.17	-40.78	-6.07	0.00	-438.0	0.00	438.03	4,091.86	966.58	3,463.13	3,328.91	6.5	-0.78	0.142			
90.00	-38.37	-5.98	0.00	-408.7	0.00	408.72	3,982.11	940.66	3,279.87	3,151.78	7.31	-0.83	0.139			
90.84	-37.96	-5.93	0.00	-403.7	0.00	403.69	3,427.64	819.38	2,903.29	2,761.87	7.46	-0.84	0.157			
95.00	-36.84	-5.83	0.00	-379.0	0.00	379.02	3,368.33	800.23	2,769.16	2,650.03	8.22	-0.89	0.154			
100.00	-35.52	-5.71	0.00	-349.9	0.00	349.89	3,290.17	777.21	2,612.15	2,513.35	9.18	-0.95	0.150			
105.00	-34.24	-5.60	0.00	-321.3	0.00	321.33	3,192.72	754.18	2,459.72	2,365.94	10.21	-1.01	0.147			
110.00	-32.99	-5.48	0.00	-293.3	0.00	293.33	3,095.26	731.16	2,311.87	2,222.99	11.31	-1.08	0.143			
115.00	-31.78	-5.37	0.00	-265.9	0.00	265.91	2,997.81	708.14	2,168.61	2,084.50	12.47	-1.14	0.138			
120.00	-30.60	-5.26	0.00	-239.1	0.00	239.06	2,900.35	685.12	2,029.93	1,950.45	13.69	-1.2	0.133			
125.00	-29.45	-5.14	0.00	-212.8	0.00	212.78	2,802.90	662.10	1,895.83	1,820.86	14.98	-1.26	0.127			
129.75	-28.39	-5.08	0.00	-188.3	0.00	188.32	2,710.25	640.22	1,772.59	1,701.80	16.26	-1.32	0.121			
130.00	-28.31	-5.03	0.00	-187.1	0.00	187.07	2,705.44	639.08	1,766.31	1,695.73	16.33	-1.32	0.121			
134.25	-26.97	-4.96	0.00	-165.7	0.00	165.66	1,689.95	421.70	1,153.47	1,052.58	17.53	-1.37	0.173			
135.00	-26.84	-4.91	0.00	-162.0	0.00	161.96	1,683.70	419.41	1,140.96	1,042.94	17.74	-1.38	0.171			
140.00	-26.01	-4.81	0.00	-137.4	0.00	137.41	1,641.04	404.06	1,059.00	979.01	19.22	-1.45	0.156			
145.00	-25.21	-4.71	0.00	-113.4	0.00	113.37	1,596.93	388.72	980.09	916.20	20.79	-1.53	0.140			
150.00	-24.44	-4.60	0.00	-89.8	0.00	89.84	1,551.39	373.37	904.24	854.62	22.42	-1.59	0.121			
155.00	-23.69	-4.52	0.00	-66.8	0.00	66.82	1,504.40	358.02	831.44	794.36	24.13	-1.65	0.100			
157.00	-16.03	-3.19	0.00	-57.8	0.00	57.77	1,485.21	351.88	803.17	770.64	24.82	-1.67	0.086			
160.00	-15.62	-3.10	0.00	-48.2	0.00	48.21	1,450.65	342.67	761.69	732.82	25.88	-1.7	0.077			
165.00	-14.96	-3.02	0.00	-32.7	0.00	32.71	1,385.68	327.33	695.00	668.34	27.68	-1.74	0.060			
167.00	-10.08	-2.23	0.00	-26.7	0.00	26.67	1,359.70	321.19	669.18	643.37	28.41	-1.75	0.049			
170.00	-9.71	-2.18	0.00	-20.0	0.00	19.98	1,320.71	311.98	631.37	606.82	29.52	-1.77	0.040			
171.70	-8.81	-2.06	0.00	-16.3	0.00	16.28	1,298.62	306.76	610.43	586.58	30.15	-1.78	0.035			
175.00	-8.42	-2.00	0.00	-9.5	0.00	9.49	1,255.74	296.63	570.79	548.27	31.38	-1.79	0.024			
177.00	-6.05	-1.60	0.00	-5.5	0.00	5.49	1,229.76	290.49	547.41	525.69	32.13	-1.79	0.015			
177.50	0.00	-1.41	0.00	-4.7	0.00	4.69	1,223.26	288.96	541.65	520.11	32.32	-1.79	0.009			

CALCULATED FORCES

Load Case: 1.0D + 1.0W

60 mph Wind with No Ice

25 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	-48.94	-6.44	0.00	-862.6	0.00	862.63	6,522.07	1,601.42	8,317.28	7,709.86	0	0	0.119
5.00	-47.30	-6.36	0.00	-830.4	0.00	830.45	6,433.88	1,570.73	8,001.55	7,458.58	0.02	-0.03	0.119
10.00	-45.68	-6.28	0.00	-798.6	0.00	798.65	6,344.25	1,540.03	7,691.92	7,209.69	0.07	-0.06	0.118
15.00	-44.10	-6.20	0.00	-767.2	0.00	767.25	6,253.19	1,509.34	7,388.40	6,963.30	0.15	-0.1	0.117
20.00	-42.54	-6.13	0.00	-736.2	0.00	736.22	6,160.69	1,478.65	7,090.99	6,719.50	0.27	-0.13	0.116
25.00	-41.02	-6.05	0.00	-705.6	0.00	705.58	6,066.74	1,447.95	6,799.69	6,478.40	0.43	-0.16	0.116
30.00	-39.52	-5.98	0.00	-675.3	0.00	675.31	5,971.36	1,417.26	6,514.50	6,240.08	0.62	-0.2	0.115
35.00	-38.06	-5.90	0.00	-645.4	0.00	645.41	5,869.78	1,386.56	6,235.42	5,999.80	0.84	-0.23	0.114
40.00	-36.62	-5.84	0.00	-615.9	0.00	615.91	5,739.84	1,355.87	5,962.45	5,735.81	1.11	-0.27	0.114
42.13	-36.02	-5.80	0.00	-603.5	0.00	603.46	5,684.49	1,342.79	5,848.02	5,625.16	1.23	-0.29	0.114
45.00	-34.55	-5.74	0.00	-586.8	0.00	586.81	5,609.90	1,325.17	5,695.59	5,477.76	1.41	-0.31	0.113
48.88	-32.60	-5.69	0.00	-564.5	0.00	564.53	4,805.33	1,161.53	5,000.69	4,706.45	1.68	-0.34	0.127
50.00	-32.33	-5.64	0.00	-558.2	0.00	558.16	4,787.38	1,155.52	4,949.03	4,664.36	1.76	-0.35	0.126
55.00	-31.11	-5.55	0.00	-530.0	0.00	529.95	4,706.35	1,128.66	4,721.67	4,477.85	2.14	-0.39	0.125
60.00	-29.92	-5.47	0.00	-502.2	0.00	502.18	4,623.87	1,101.80	4,499.66	4,293.72	2.57	-0.43	0.123
65.00	-28.76	-5.38	0.00	-474.8	0.00	474.84	4,539.96	1,074.94	4,283.00	4,112.05	3.04	-0.47	0.122
70.00	-27.63	-5.29	0.00	-448.0	0.00	447.95	4,436.90	1,048.09	4,071.68	3,917.30	3.56	-0.52	0.121
75.00	-26.52	-5.20	0.00	-421.5	0.00	421.51	4,323.20	1,021.23	3,865.71	3,718.13	4.13	-0.56	0.120
80.00	-25.44	-5.11	0.00	-395.5	0.00	395.52	4,209.50	994.37	3,665.08	3,524.15	4.74	-0.61	0.118
85.00	-24.38	-5.05	0.00	-370.0	0.00	369.98	4,095.80	967.51	3,469.80	3,335.36	5.4	-0.65	0.117
85.17	-24.34	-5.01	0.00	-369.1	0.00	369.11	4,091.86	966.58	3,463.13	3,328.91	5.42	-0.65	0.117
90.00	-22.57	-4.95	0.00	-344.9	0.00	344.90	3,982.11	940.66	3,279.87	3,151.78	6.11	-0.7	0.115
90.84	-22.26	-4.90	0.00	-340.8	0.00	340.75	3,427.64	819.38	2,903.29	2,761.87	6.23	-0.71	0.130
95.00	-21.52	-4.82	0.00	-320.4	0.00	320.35	3,368.33	800.23	2,769.16	2,650.03	6.86	-0.75	0.127
100.00	-20.65	-4.73	0.00	-296.2	0.00	296.24	3,290.17	777.21	2,612.15	2,513.35	7.67	-0.8	0.124
105.00	-19.80	-4.64	0.00	-272.6	0.00	272.59	3,192.72	754.18	2,459.72	2,365.94	8.54	-0.85	0.121
110.00	-18.98	-4.55	0.00	-249.4	0.00	249.38	3,095.26	731.16	2,311.87	2,222.99	9.45	-0.9	0.118
115.00	-18.17	-4.47	0.00	-226.6	0.00	226.61	2,997.81	708.14	2,168.61	2,084.50	10.43	-0.95	0.115
120.00	-17.39	-4.38	0.00	-204.3	0.00	204.28	2,900.35	685.12	2,029.93	1,950.45	11.45	-1.01	0.111
125.00	-16.63	-4.29	0.00	-182.4	0.00	182.40	2,802.90	662.10	1,895.83	1,820.86	12.54	-1.06	0.106
129.75	-15.93	-4.24	0.00	-162.0	0.00	161.99	2,710.25	640.22	1,772.59	1,701.80	13.62	-1.11	0.101
130.00	-15.88	-4.21	0.00	-161.0	0.00	160.95	2,705.44	639.08	1,766.31	1,695.73	13.67	-1.11	0.101
134.25	-14.92	-4.15	0.00	-143.0	0.00	143.04	1,689.95	421.70	1,153.47	1,052.58	14.68	-1.15	0.145
135.00	-14.84	-4.11	0.00	-139.9	0.00	139.94	1,683.70	419.41	1,140.96	1,042.94	14.86	-1.16	0.143
140.00	-14.33	-4.04	0.00	-119.4	0.00	119.37	1,641.04	404.06	1,059.00	979.01	16.12	-1.23	0.131
145.00	-13.84	-3.96	0.00	-99.2	0.00	99.19	1,596.93	388.72	980.09	916.20	17.44	-1.29	0.117
150.00	-13.37	-3.88	0.00	-79.4	0.00	79.39	1,551.39	373.37	904.24	854.62	18.82	-1.35	0.102
155.00	-12.91	-3.83	0.00	-60.0	0.00	59.97	1,504.40	358.02	831.44	794.36	20.26	-1.4	0.084
157.00	-8.62	-2.81	0.00	-52.3	0.00	52.32	1,485.21	351.88	803.17	770.64	20.85	-1.42	0.074
160.00	-8.37	-2.75	0.00	-43.9	0.00	43.88	1,450.65	342.67	761.69	732.82	21.75	-1.44	0.066
165.00	-7.97	-2.70	0.00	-30.1	0.00	30.10	1,385.68	327.33	695.00	668.34	23.29	-1.48	0.051
167.00	-5.12	-1.99	0.00	-24.7	0.00	24.71	1,359.70	321.19	669.18	643.37	23.91	-1.49	0.042
170.00	-4.90	-1.96	0.00	-18.7	0.00	18.73	1,320.71	311.98	631.37	606.82	24.85	-1.51	0.035
171.70	-4.36	-1.87	0.00	-15.4	0.00	15.40	1,298.62	306.76	610.43	586.58	25.39	-1.51	0.030
175.00	-4.13	-1.83	0.00	-9.2	0.00	9.24	1,255.74	296.63	570.79	548.27	26.44	-1.53	0.020
177.00	-2.49	-1.51	0.00	-5.6	0.00	5.59	1,229.76	290.49	547.41	525.69	27.08	-1.53	0.013
177.50	0.00	-1.44	0.00	-4.8	0.00	4.83	1,223.26	288.96	541.65	520.11	27.24	-1.53	0.009

EQUIVALENT LATERAL FORCES METHOD ANALYSIS

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

Spectral Response Acceleration for Short Period (S_s):	0.207
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}):	0.221
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):	2.870
Redundancy Factor (ρ):	1.000
Seismic Force Distribution Exponent (k):	2.000
Total Unfactored Dead Load:	48.940 k
Seismic Base Shear (E):	1.470 k

SEISMIC FORCES

Segment	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
46	177.25	34	1,078	0.002	3	43
45	176	139	4,297	0.008	11	173
44	173.35	234	7,034	0.012	18	291
43	170.85	123	3,594	0.006	9	153
42	168.5	221	6,288	0.011	16	276
41	166	155	4,279	0.008	11	193
40	162.5	399	10,527	0.019	27	496
39	158.5	246	6,189	0.011	16	306
38	156	179	4,354	0.008	11	223
37	152.5	458	10,644	0.019	28	569
36	147.5	473	10,281	0.018	27	588
35	142.5	487	9,898	0.018	26	606
34	137.5	502	9,497	0.017	25	625
33	134.6267	76	1,383	0.002	4	95
32	132.1267	960	16,757	0.030	43	1,194
31	129.8767	56	953	0.002	2	70
30	127.3767	698	11,328	0.020	29	869
29	122.5	756	11,347	0.020	29	941
28	117.5	779	10,748	0.019	28	969
27	112.5	801	10,135	0.018	26	996
26	107.5	823	9,512	0.017	25	1,024
25	102.5	845	8,883	0.016	23	1,052
24	97.5	868	8,249	0.014	21	1,080
23	92.92	739	6,381	0.011	17	919
22	90.42	304	2,485	0.004	6	378
21	87.5867	1,773	13,600	0.024	35	2,206
20	85.0867	36	261	0.000	1	45
19	82.5	1,054	7,175	0.013	19	1,312
18	77.5	1,080	6,488	0.011	17	1,344
17	72.5	1,106	5,814	0.010	15	1,376
16	67.5	1,132	5,159	0.009	13	1,409
15	62.5	1,158	4,525	0.008	12	1,441
14	57.5	1,184	3,916	0.007	10	1,473
13	52.5	1,210	3,336	0.006	9	1,506
12	49.44	275	671	0.001	2	342
11	46.94	1,950	4,296	0.008	11	2,426
10	43.565	1,464	2,778	0.005	7	1,821
9	41.065	601	1,014	0.002	3	748

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)
8	37.5	1,432	2,014	0.004	5	1,782
7	32.5	1,462	1,544	0.003	4	1,819
6	27.5	1,492	1,128	0.002	3	1,856
5	22.5	1,522	770	0.001	2	1,893
4	17.5	1,552	475	0.001	1	1,930
3	12.5	1,581	247	0.000	1	1,967
2	7.5	1,611	91	0.000	0	2,004
1	2.5	1,641	10	0.000	0	2,041
Raycap RxxDC-3315-PF-48	177.5	43	1,348	0.002	3	53
Alcatel-Lucent B66A RRH4x45-4R w/ Solar Shield	177.5	170	5,369	0.010	14	212
Generic 56" x 12" Panel	177.5	240	7,562	0.013	20	299
Alcatel-Lucent B25 RRH4x30-4R	177.5	153	4,820	0.008	12	190
Samsung XXDWMM-12.5-65-8T-CBRS	177.5	69	2,183	0.004	6	86
Samsung RF4461d-13A	177.5	237	7,476	0.013	19	295
Samsung RF4439d-25A	177.5	224	7,061	0.012	18	279
Raycap RRFDC-3315-PF-48	177.5	54	1,695	0.003	4	67
Samsung MT6413-77A	177.5	172	5,416	0.010	14	214
Samsung MT6407-77A	177.5	245	7,713	0.014	20	305
Andrew DB846H80E-SX	177.5	96	3,025	0.005	8	119
Andrew SBNHH-1D65A	177.5	245	7,732	0.014	20	305
Generic 70" x 8" Panel	177.5	240	7,562	0.013	20	299
Generic 76" x 8" Panel	177.5	120	3,781	0.007	10	149
Unused Reserve (5317.2900 sqin)	177.5	191	6,024	0.011	16	238
Flat Low Profile Platform	177	1,500	46,994	0.083	122	1,866
Fujitsu TA08025-B605	171.7	225	6,633	0.012	17	280
Fujitsu TA08025-B604	171.7	192	5,651	0.010	15	239
Commscope RDIDC-9181-PF-48	167	22	611	0.001	2	27
JMA Wireless MX08FRO665-21	167	194	5,397	0.010	14	241
Generic Flat Platform with Handrails	167	2,500	69,722	0.123	180	3,110
Ericsson 4460 BAND 2/25	157	327	8,060	0.014	21	407
Ericsson 4480 BAND 71	157	243	5,990	0.011	16	302
RFS SC2-W100BD	157	20	493	0.001	1	25
Ericsson AIR 6419 B41	157	206	5,065	0.009	13	256
Commscope VV-65A-R1B	157	74	1,826	0.003	5	92
RFS APXVAALL24 43-U-NA20	157	368	9,081	0.016	24	458
Generic Circular Platform with Handrails	157	2,900	71,482	0.126	185	3,608
Totals:		48,944	567,205	1.000	1,468	60,894

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)
46	177.25	34	1,078	0.002	3	29
45	176	139	4,297	0.008	11	119
44	173.35	234	7,034	0.012	18	200
43	170.85	123	3,594	0.006	9	105
42	168.5	221	6,288	0.011	16	190
41	166	155	4,279	0.008	11	133
40	162.5	399	10,527	0.019	27	341
39	158.5	246	6,189	0.011	16	211
38	156	179	4,354	0.008	11	153
37	152.5	458	10,644	0.019	28	392
36	147.5	473	10,281	0.018	27	404
35	142.5	487	9,898	0.018	26	417
34	137.5	502	9,497	0.017	25	430
33	134.6267	76	1,383	0.002	4	65
32	132.1267	960	16,757	0.030	43	821
31	129.8767	56	953	0.002	2	48
30	127.3767	698	11,328	0.020	29	598
29	122.5	756	11,347	0.020	29	647
28	117.5	779	10,748	0.019	28	666

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)
27	112.5	801	10,135	0.018	26	685
26	107.5	823	9,512	0.017	25	704
25	102.5	845	8,883	0.016	23	724
24	97.5	868	8,249	0.014	21	743
23	92.92	739	6,381	0.011	17	632
22	90.42	304	2,485	0.004	6	260
21	87.5867	1,773	13,600	0.024	35	1,517
20	85.0867	36	261	0.000	1	31
19	82.5	1,054	7,175	0.013	19	902
18	77.5	1,080	6,488	0.011	17	924
17	72.5	1,106	5,814	0.010	15	947
16	67.5	1,132	5,159	0.009	13	969
15	62.5	1,158	4,525	0.008	12	991
14	57.5	1,184	3,916	0.007	10	1,014
13	52.5	1,210	3,336	0.006	9	1,036
12	49.44	275	671	0.001	2	235
11	46.94	1,950	4,296	0.008	11	1,669
10	43.565	1,464	2,778	0.005	7	1,253
9	41.065	601	1,014	0.002	3	515
8	37.5	1,432	2,014	0.004	5	1,226
7	32.5	1,462	1,544	0.003	4	1,251
6	27.5	1,492	1,128	0.002	3	1,277
5	22.5	1,522	770	0.001	2	1,302
4	17.5	1,552	475	0.001	1	1,328
3	12.5	1,581	247	0.000	1	1,353
2	7.5	1,611	91	0.000	0	1,379
1	2.5	1,641	10	0.000	0	1,404
Raycap RxxDC-3315-PF-48	177.5	43	1,348	0.002	3	37
Alcatel-Lucent B66A RRH4x45-4R w/ Solar Shield	177.5	170	5,369	0.010	14	146
Generic 56" x 12" Panel	177.5	240	7,562	0.013	20	205
Alcatel-Lucent B25 RRH4x30-4R	177.5	153	4,820	0.008	12	131
Samsung XDXWMM-12.5-65-8T-CBRS	177.5	69	2,183	0.004	6	59
Samsung RF4461d-13A	177.5	237	7,476	0.013	19	203
Samsung RF4439d-25A	177.5	224	7,061	0.012	18	192
Raycap RRFDC-3315-PF-48	177.5	54	1,695	0.003	4	46
Samsung MT6413-77A	177.5	172	5,416	0.010	14	147
Samsung MT6407-77A	177.5	245	7,713	0.014	20	210
Andrew DB846H80E-SX	177.5	96	3,025	0.005	8	82
Andrew SBNHH-1D65A	177.5	245	7,732	0.014	20	210
Generic 70" x 8" Panel	177.5	240	7,562	0.013	20	205
Generic 76" x 8" Panel	177.5	120	3,781	0.007	10	103
Unused Reserve (5317.2900 sqin)	177.5	191	6,024	0.011	16	164
Flat Low Profile Platform	177	1,500	46,994	0.083	122	1,284
Fujitsu TA08025-B605	171.7	225	6,633	0.012	17	193
Fujitsu TA08025-B604	171.7	192	5,651	0.010	15	164
Commscope RDIDC-9181-PF-48	167	22	611	0.001	2	19
JMA Wireless MX08FRO665-21	167	194	5,397	0.010	14	166
Generic Flat Platform with Handrails	167	2,500	69,722	0.123	180	2,140
Ericsson 4460 BAND 2/25	157	327	8,060	0.014	21	280
Ericsson 4480 BAND 71	157	243	5,990	0.011	16	208
RFS SC2-W100BD	157	20	493	0.001	1	17
Ericsson AIR 6419 B41	157	206	5,065	0.009	13	176
Commscope VV-65A-R1B	157	74	1,826	0.003	5	63
RFS APXVAALL24 43-U-NA20	157	368	9,081	0.016	24	315
Generic Circular Platform with Handrails	157	2,900	71,482	0.126	185	2,482
Totals:		48,944	567,205	1.000	1,468	41,888

1.2D + 1.0Ev + 1.0Eh

Seismic

CALCULATED FORCES

Seg Elev	Pu	Vu	Tu	Mu	Mu	Resultant	Phi	Phi	Phi	Phi	Total	Rotation	Ratio
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CALCULATED FORCES

(ft)	FY (-) (kips)	FX (-) (kips)	MY (ft-kips)	MZ (fr-kips)	Mx (ft-kips)	Moment (ft-kips)	Pn (kips)	Vn (kips)	Tn (kips)	Mn (kips)	Deflect (in)	(deg)	
0.00	-58.85	-1.47	0.00	-224.65	0.00	224.65	6,522.07	1,601.42	8,317	7,709.86	0.00	0.00	0.04
5.00	-56.85	-1.48	0.00	-217.29	0.00	217.29	6,433.88	1,570.73	8,002	7,458.58	0.00	-0.01	0.04
10.00	-54.88	-1.49	0.00	-209.90	0.00	209.90	6,344.25	1,540.03	7,692	7,209.69	0.02	-0.02	0.04
15.00	-52.95	-1.49	0.00	-202.46	0.00	202.46	6,253.19	1,509.34	7,388	6,963.30	0.04	-0.03	0.04
20.00	-51.06	-1.50	0.00	-195.00	0.00	195.00	6,160.69	1,478.65	7,091	6,719.50	0.07	-0.03	0.04
25.00	-49.20	-1.50	0.00	-187.51	0.00	187.51	6,066.74	1,447.95	6,800	6,478.40	0.11	-0.04	0.04
30.00	-47.38	-1.50	0.00	-180.00	0.00	180.00	5,971.36	1,417.26	6,514	6,240.08	0.16	-0.05	0.04
35.00	-45.60	-1.50	0.00	-172.48	0.00	172.48	5,869.78	1,386.56	6,235	5,999.80	0.22	-0.06	0.04
40.00	-44.85	-1.51	0.00	-164.95	0.00	164.95	5,739.84	1,355.87	5,962	5,735.81	0.29	-0.07	0.04
42.13	-43.03	-1.50	0.00	-161.74	0.00	161.74	5,684.49	1,342.79	5,848	5,625.16	0.33	-0.08	0.04
45.00	-40.60	-1.49	0.00	-157.44	0.00	157.44	5,609.90	1,325.17	5,696	5,477.76	0.37	-0.08	0.04
48.88	-40.26	-1.49	0.00	-151.65	0.00	151.65	4,805.33	1,161.53	5,001	4,706.45	0.44	-0.09	0.04
50.00	-38.75	-1.49	0.00	-149.98	0.00	149.98	4,787.38	1,155.52	4,949	4,664.36	0.46	-0.09	0.04
55.00	-37.28	-1.48	0.00	-142.55	0.00	142.55	4,706.35	1,128.66	4,722	4,477.85	0.57	-0.10	0.04
60.00	-35.84	-1.47	0.00	-135.14	0.00	135.14	4,623.87	1,101.80	4,500	4,293.72	0.68	-0.11	0.04
65.00	-34.43	-1.46	0.00	-127.78	0.00	127.78	4,539.96	1,074.94	4,283	4,112.05	0.81	-0.13	0.04
70.00	-33.05	-1.45	0.00	-120.46	0.00	120.46	4,436.90	1,048.09	4,072	3,917.30	0.94	-0.14	0.04
75.00	-31.71	-1.44	0.00	-113.19	0.00	113.19	4,323.20	1,021.23	3,866	3,718.13	1.10	-0.15	0.04
80.00	-30.40	-1.42	0.00	-106.00	0.00	106.00	4,209.50	994.37	3,665	3,524.15	1.26	-0.16	0.04
85.00	-30.35	-1.43	0.00	-98.88	0.00	98.88	4,095.80	967.51	3,470	3,335.36	1.43	-0.17	0.04
85.17	-28.15	-1.39	0.00	-98.63	0.00	98.63	4,091.86	966.58	3,463	3,328.91	1.44	-0.17	0.04
90.00	-27.77	-1.38	0.00	-91.93	0.00	91.93	3,982.11	940.66	3,280	3,151.78	1.62	-0.19	0.04
90.84	-26.85	-1.37	0.00	-90.77	0.00	90.77	3,427.64	819.38	2,903	2,761.87	1.66	-0.19	0.04
95.00	-25.77	-1.35	0.00	-85.09	0.00	85.09	3,368.33	800.23	2,769	2,650.03	1.83	-0.20	0.04
100.00	-24.72	-1.33	0.00	-78.35	0.00	78.35	3,290.17	777.21	2,612	2,513.35	2.04	-0.21	0.04
105.00	-23.69	-1.30	0.00	-71.72	0.00	71.72	3,192.72	754.18	2,460	2,365.94	2.27	-0.23	0.04
110.00	-22.70	-1.28	0.00	-65.21	0.00	65.21	3,095.26	731.16	2,312	2,222.99	2.52	-0.24	0.04
115.00	-21.73	-1.25	0.00	-58.81	0.00	58.81	2,997.81	708.14	2,169	2,084.50	2.78	-0.25	0.04
120.00	-20.79	-1.22	0.00	-52.55	0.00	52.55	2,900.35	685.12	2,030	1,950.45	3.05	-0.27	0.03
125.00	-19.92	-1.19	0.00	-46.44	0.00	46.44	2,802.90	662.10	1,896	1,820.86	3.34	-0.28	0.03
129.75	-19.85	-1.19	0.00	-40.76	0.00	40.76	2,710.25	640.22	1,773	1,701.80	3.62	-0.29	0.03
130.00	-18.65	-1.15	0.00	-40.47	0.00	40.47	2,705.44	639.08	1,766	1,695.73	3.64	-0.29	0.03
134.25	-18.56	-1.14	0.00	-35.60	0.00	35.60	1,689.95	421.70	1,153	1,052.58	3.90	-0.30	0.05
135.00	-17.93	-1.12	0.00	-34.74	0.00	34.74	1,683.70	419.41	1,141	1,042.94	3.95	-0.31	0.04
140.00	-17.33	-1.09	0.00	-29.15	0.00	29.15	1,641.04	404.06	1,059	979.01	4.28	-0.32	0.04
145.00	-16.74	-1.07	0.00	-23.68	0.00	23.68	1,596.93	388.72	980	916.20	4.63	-0.34	0.04
150.00	-16.17	-1.04	0.00	-18.33	0.00	18.33	1,551.39	373.37	904	854.62	4.99	-0.35	0.03
155.00	-15.95	-1.03	0.00	-13.12	0.00	13.12	1,504.40	358.02	831	794.36	5.36	-0.36	0.03
157.00	-10.49	-0.72	0.00	-11.06	0.00	11.06	1,485.21	351.88	803	770.64	5.52	-0.37	0.02
160.00	-10.00	-0.69	0.00	-8.91	0.00	8.91	1,450.65	342.67	762	732.82	5.75	-0.37	0.02
165.00	-9.80	-0.68	0.00	-5.47	0.00	5.47	1,385.68	327.33	695	668.34	6.15	-0.38	0.02
167.00	-6.15	-0.44	0.00	-4.12	0.00	4.12	1,359.70	321.19	669	643.37	6.30	-0.38	0.01
170.00	-6.00	-0.43	0.00	-2.80	0.00	2.80	1,320.71	311.98	631	606.82	6.55	-0.38	0.01
171.70	-5.19	-0.37	0.00	-2.07	0.00	2.07	1,298.62	306.76	610	586.58	6.68	-0.39	0.01
175.00	-5.02	-0.36	0.00	-0.84	0.00	0.84	1,255.74	296.63	571	548.27	6.95	-0.39	0.01
177.00	-3.11	-0.22	0.00	-0.11	0.00	0.11	1,229.76	290.49	547	525.69	7.11	-0.39	0.00
177.50	0.00	-0.20	0.00	0.00	0.00	0.00	1,223.26	288.96	542	520.11	7.15	-0.39	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	-40.48	-1.47	0.00	-220.37	0.00	220.37	6,522.07	1,601.42	8,317	7,709.86	0.00	0.00	0.04
5.00	-39.10	-1.47	0.00	-213.03	0.00	213.03	6,433.88	1,570.73	8,002	7,458.58	0.00	-0.01	0.04
10.00	-37.75	-1.48	0.00	-205.65	0.00	205.65	6,344.25	1,540.03	7,692	7,209.69	0.02	-0.02	0.03
15.00	-36.42	-1.48	0.00	-198.26	0.00	198.26	6,253.19	1,509.34	7,388	6,963.30	0.04	-0.02	0.03
20.00	-35.12	-1.49	0.00	-190.84	0.00	190.84	6,160.69	1,478.65	7,091	6,719.50	0.07	-0.03	0.03
25.00	-33.84	-1.49	0.00	-183.41	0.00	183.41	6,066.74	1,447.95	6,800	6,478.40	0.11	-0.04	0.03
30.00	-32.59	-1.49	0.00	-175.97	0.00	175.97	5,971.36	1,417.26	6,514	6,240.08	0.16	-0.05	0.03
35.00	-31.37	-1.49	0.00	-168.54	0.00	168.54	5,869.78	1,386.56	6,235	5,999.80	0.22	-0.06	0.03

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
40.00	-30.85	-1.49	0.00	-161.10	0.00	161.10	5,739.84	1,355.87	5,962	5,735.81	0.29	-0.07	0.03
42.13	-29.60	-1.48	0.00	-157.94	0.00	157.94	5,684.49	1,342.79	5,848	5,625.16	0.32	-0.07	0.03
45.00	-27.93	-1.47	0.00	-153.69	0.00	153.69	5,609.90	1,325.17	5,696	5,477.76	0.36	-0.08	0.03
48.88	-27.69	-1.47	0.00	-147.98	0.00	147.98	4,805.33	1,161.53	5,001	4,706.45	0.43	-0.09	0.04
50.00	-26.66	-1.46	0.00	-146.34	0.00	146.34	4,787.38	1,155.52	4,949	4,664.36	0.45	-0.09	0.04
55.00	-25.64	-1.46	0.00	-139.02	0.00	139.02	4,706.35	1,128.66	4,722	4,477.85	0.55	-0.10	0.04
60.00	-24.65	-1.45	0.00	-131.73	0.00	131.73	4,623.87	1,101.80	4,500	4,293.72	0.67	-0.11	0.04
65.00	-23.68	-1.44	0.00	-124.50	0.00	124.50	4,539.96	1,074.94	4,283	4,112.05	0.79	-0.12	0.04
70.00	-22.74	-1.42	0.00	-117.31	0.00	117.31	4,436.90	1,048.09	4,072	3,917.30	0.92	-0.13	0.04
75.00	-21.81	-1.41	0.00	-110.19	0.00	110.19	4,323.20	1,021.23	3,866	3,718.13	1.07	-0.15	0.04
80.00	-20.91	-1.39	0.00	-103.14	0.00	103.14	4,209.50	994.37	3,665	3,524.15	1.23	-0.16	0.03
85.00	-20.88	-1.39	0.00	-96.17	0.00	96.17	4,095.80	967.51	3,470	3,335.36	1.40	-0.17	0.03
85.17	-19.36	-1.36	0.00	-95.93	0.00	95.93	4,091.86	966.58	3,463	3,328.91	1.41	-0.17	0.03
90.00	-19.10	-1.35	0.00	-89.37	0.00	89.37	3,982.11	940.66	3,280	3,151.78	1.59	-0.18	0.03
90.84	-18.47	-1.34	0.00	-88.24	0.00	88.24	3,427.64	819.38	2,903	2,761.87	1.62	-0.18	0.04
95.00	-17.72	-1.32	0.00	-82.68	0.00	82.68	3,368.33	800.23	2,769	2,650.03	1.78	-0.19	0.04
100.00	-17.00	-1.29	0.00	-76.10	0.00	76.10	3,290.17	777.21	2,612	2,513.35	1.99	-0.21	0.04
105.00	-16.30	-1.27	0.00	-69.63	0.00	69.63	3,192.72	754.18	2,460	2,365.94	2.22	-0.22	0.04
110.00	-15.61	-1.25	0.00	-63.28	0.00	63.28	3,095.26	731.16	2,312	2,222.99	2.46	-0.23	0.03
115.00	-14.94	-1.22	0.00	-57.05	0.00	57.05	2,997.81	708.14	2,169	2,084.50	2.71	-0.25	0.03
120.00	-14.30	-1.19	0.00	-50.96	0.00	50.96	2,900.35	685.12	2,030	1,950.45	2.98	-0.26	0.03
125.00	-13.70	-1.16	0.00	-45.01	0.00	45.01	2,802.90	662.10	1,896	1,820.86	3.26	-0.27	0.03
129.75	-13.65	-1.16	0.00	-39.50	0.00	39.50	2,710.25	640.22	1,773	1,701.80	3.54	-0.29	0.03
130.00	-12.83	-1.11	0.00	-39.21	0.00	39.21	2,705.44	639.08	1,766	1,695.73	3.55	-0.29	0.03
134.25	-12.76	-1.11	0.00	-34.48	0.00	34.48	1,689.95	421.70	1,153	1,052.58	3.81	-0.30	0.04
135.00	-12.33	-1.09	0.00	-33.65	0.00	33.65	1,683.70	419.41	1,141	1,042.94	3.86	-0.30	0.04
140.00	-11.92	-1.06	0.00	-28.22	0.00	28.22	1,641.04	404.06	1,059	979.01	4.18	-0.31	0.04
145.00	-11.51	-1.04	0.00	-22.92	0.00	22.92	1,596.93	388.72	980	916.20	4.51	-0.33	0.03
150.00	-11.12	-1.01	0.00	-17.74	0.00	17.74	1,551.39	373.37	904	854.62	4.87	-0.34	0.03
155.00	-10.97	-1.00	0.00	-12.70	0.00	12.70	1,504.40	358.02	831	794.36	5.23	-0.35	0.02
157.00	-7.22	-0.69	0.00	-10.71	0.00	10.71	1,485.21	351.88	803	770.64	5.38	-0.36	0.02
160.00	-6.88	-0.67	0.00	-8.63	0.00	8.63	1,450.65	342.67	762	732.82	5.61	-0.36	0.02
165.00	-6.74	-0.65	0.00	-5.30	0.00	5.30	1,385.68	327.33	695	668.34	5.99	-0.37	0.01
167.00	-4.23	-0.43	0.00	-3.99	0.00	3.99	1,359.70	321.19	669	643.37	6.15	-0.37	0.01
170.00	-4.13	-0.42	0.00	-2.71	0.00	2.71	1,320.71	311.98	631	606.82	6.38	-0.37	0.01
171.70	-3.57	-0.36	0.00	-2.01	0.00	2.01	1,298.62	306.76	610	586.58	6.51	-0.37	0.01
175.00	-3.45	-0.35	0.00	-0.81	0.00	0.81	1,255.74	296.63	571	548.27	6.77	-0.38	0.00
177.00	-2.14	-0.22	0.00	-0.11	0.00	0.11	1,229.76	290.49	547	525.69	6.93	-0.38	0.00
177.50	0.00	-0.20	0.00	0.00	0.00	0.00	1,223.26	288.96	542	520.11	6.97	-0.38	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	30.25	0.00	58.69	0.00	0.00	4084.39	134.25	0.66
0.9D + 1.0W	30.23	0.00	44.01	0.00	0.00	4024.71	134.25	0.64
1.2D + 1.0Di + 1.0Wi	7.78	0.00	75.56	0.00	0.00	1036.27	134.25	0.17
1.2D + 1.0Ev + 1.0Eh	1.51	0.00	58.85	0.00	0.00	224.65	134.25	0.04
0.9D - 1.0Ev + 1.0Eh	1.49	0.00	40.48	0.00	0.00	220.37	134.25	0.04
1.0D + 1.0W	6.44	0.00	48.94	0.00	0.00	862.63	134.25	0.14

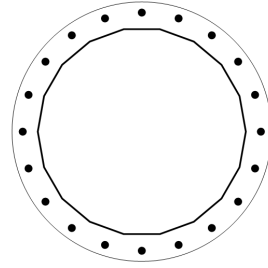
BASE PLATE ANALYSIS @ 0 FT

APPLIED REACTIONS

Moment (k-ft)	Axial (k)	Shear (k)
4084.39	58.69	30.25

PLATE PARAMETERS (ID# 537)

Width:	73	in
Shape:	Round	
Thickness:	2.25	in
Grade:	A572-60	
Yield Strength:	60	ksi
Tensile Strength:	75	ksi
Rod Detail Type:	d	
Clear Distance	3.25	in
Base Weld Size:	0.125	in
Orientation Offset:	-	°
Analysis Type:	Plastic	
Neutral Axis:	252	°



ANCHOR ROD PARAMETERS

Class	Arrangement	Quantity	Diameter (in)	Circle (in)	Grade	F _y (ksi)	F _u (ksi)	Spacing (in)	Offset (°)
Original [ID#8001]	Radial	20	2.25	67	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	58"Ø x 0.5" (18 Sides)	89.8629	-	-	37146.19	-
Bolt Group	Original (20) 2.25"Ø	3.9761	3.2477	0.8393	33663.99	4.5

REACTION DISTRIBUTION

Component	ID	Moment M _u (k-ft)	Axial Load P _u (k)	Shear V _u (k)	Moment Factor
Pole	58"Ø x 0.5" (18 Sides)	4084.4	58.69	30.25	1.000
Bolt Group	Original (20) 2.25"Ø	4084.4	-	30.25	1.000

BASE PLATE BEND LINE ANALYSIS @ 0 FT

POLE PROPERTIES

Flat-to-Flat Diameter:	58.12	in
Point-to-Point Diameter:	59.02	in
Orientation Offset:	-	°

Flat Width:	10.249	in
Flat Radians:	0.349	rad

PLATE PROPERTIES

Neutral Axis:	252	°
Bend Line Limits:	5.497 to 0.158	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	39.702	0.00	50.248	942.5	2713.4	34.7%
Corners	38.356	0.00	48.545	740.5	2621.4	28.2%
Circumferential	45.233	0.00	57.248	1205.8	3091.4	39.0%

PLASTIC ANCHOR ROD ANALYSIS

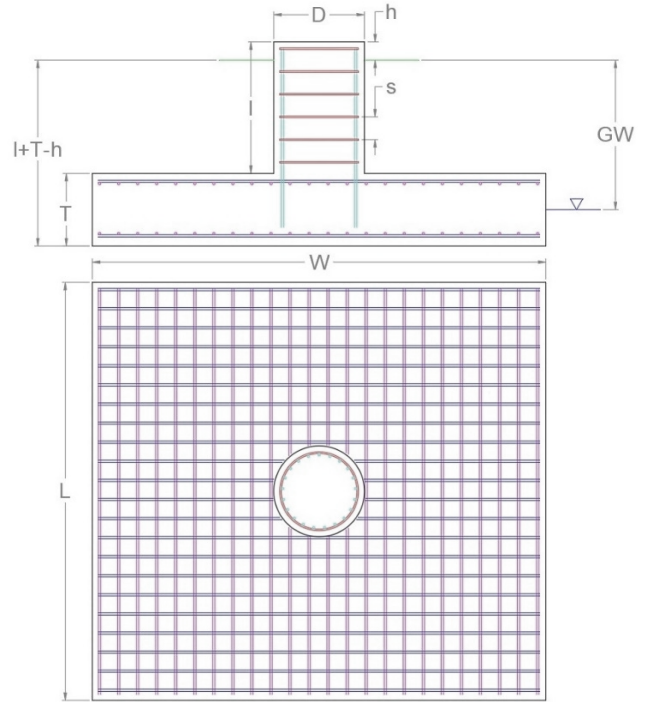
Class	Group Quantity	Rod Diameter (in)	Applied Axial Load P _u (k)	Applied Shear Load V _u (k)	Compressive Capacity ΦP _n (k)	Interaction Result
Original	20	2.25	126.4	2.4	243.6	53.9%

APPLIED GLOBAL REACTIONS

Moment (k-ft)	Axial (k)	Shear (k)
4,084.39	58.69	30.25

FOUNDATION PARAMETERS

Mat Length:	L	26	ft
Mat Width:	W	26	ft
Mat Thickness:	T	3	ft
Base Depth:	L+T-h	7	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:		(22) #8 bars [60 ksi]	
Mat Bottom Rebar:		(44) #8 bars [60 ksi]	
Pier Vertical Rebar:		(50) #8 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	17	ft
Soil Unit Weight:		125	pcf
Ultimate Skin Friction:			psf
Ultimate Bearing Pressure:		12,000	psf
Bearing Pressure Type:		Net	
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, $M_{u,Design} / \Phi_m M_n$
4,326.39	8,701.56	49.7% ✔

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, $P_{u,net} / \Phi_b P_n$
1,978.00	9,656.00	Diagonal to Pad Edge	20.5% ✔

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, $V_u / \Phi_s V_n$
30.25	0.00	687.5	53.62	145.54	21.0% ✔

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, $V_u / \Phi_c V_n$
158.04	871.98	Diagonal to Pad Edge	18.1%

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, $v_u / \Phi_c v_n$
44.7	189.7	23.6%

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	2.03	0.00	38,345.8	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, $M_u / \Phi M_n$
1,056.70	2,470.04	Parallel to Pad Edge	42.8%

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, $M_u / \Phi M_n$
1,584.90	4,874.74	Parallel to Pad Edge	32.5%

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
82.00	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, $M_u / \Phi_u M_n$
4,235.64	7,126.25	0.006	59.4%

PIER REINFORCING COMPRESSION ANALYSIS

Design Compression, P_u (k)	Nominal Compressive Capacity, $\Phi_p P_n$ (k)	Pier Rebar Compressive Usage, $P_u / \Phi_p P_n$
58.69	11,202.34	0.5%

PIER REINFORCING SHEAR ANALYSIS

Design Shear, V_u (k)	Nominal Shear Capacity, $\Phi_v V_n$ (k)	Pier Rebar Shear Usage, $V_u / \Phi_v V_n$
30.25	822.31	3.7%

EXHIBIT 4



Colliers Engineering & Design, Architecture,
Landscape Architecture, Surveying, CT P.C.
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Stamford, CT 06901
203.324.0800
peter.albano@collierseng.com

Post-Modification Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10215779
Colliers Engineering & Design Project #: 21777345A (Rev. 3)

December 19, 2023

Site Information

Site ID: 5000246846-VZW / SALEM CT
Site Name: SALEM CT
Carrier Name: Verizon Wireless
Address: 399 West Rd
Salem, Connecticut 06420
New London County
Latitude: 41.487836°
Longitude: -72.313214°

Structure Information

Tower Type: 178-Ft Monopole
Mount Type: 13.71-Ft Platform

FUZE ID # 16272075

Analysis Results

Platform: 66.2% Pass w/ Modifications*

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

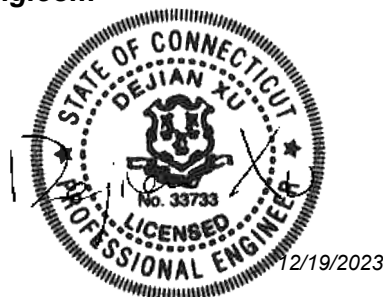
***Contractor PMI Requirements:

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: Selene Chen



Executive Summary:

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

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

Sources of Information:

Document Type	Remarks
Radio Frequency Data Sheet (RFDS)	Verizon RFDS Site ID: 675032, dated July 31, 2023
Mount Mapping Report	RKS Design & Engineering, LLC., Site ID: ATC:411184, dated March 23, 2021
Previous Mount Analysis Report	Colliers Engineering & Design, Project #: 21777345 (Rev.2), dated November 29, 2023
Mount Modification Drawings	Colliers Engineering & Design, Project #: 21777345 (Rev.2), dated December 19, 2023

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} : 125 mph Ice Wind Speed (3-sec. Gust): 50 mph Design Ice Thickness: 1.00 in Risk Category: II Exposure Category: B Topographic Category: 1 Topographic Feature Considered: N/A Topographic Method: N/A Ground Elevation Factor, K_e : 0.980
Seismic Parameters:	S_s : 0.205 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 (V20)

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
178.00	180.80	3	Samsung	MT6413-77A	Added
	180.00	3	Samsung	RF4439d-25A	
		3	Samsung	RF4461d-13A	
	180.00	6	Andrew	SBNHH-1D65A	Retained
		2	Raycap	RRFDC-3315-PF-48	
	179.00	6	Decibel	DB846H80E-SX	Added
	178.00	3	Samsung	RF4423-48B w/ Clip-On Antenna	

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>	19.7 %	<i>Pass</i>
<i>Mount Pipe</i>	26.7 %	<i>Pass</i>
<i>Mount Pipe 2</i>	29.4 %	<i>Pass</i>
<i>Standoff Horizontal</i>	24.0 %	<i>Pass</i>
<i>Mod Kicker</i>	12.3 %	<i>Pass</i>
<i>Connection Check</i>	66.2 %	<i>Pass</i>
Structure Rating – (Controlling Utilization of all Components)		66.2%

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	178	N1	622	5028	0.671	1.740	967	3675	1.130	0.395
Sector B Standoff	178	N13	566	5237	0.644	1.822	717	3729	1.065	0.414
Sector A Standoff	178	N24	637	4993	0.703	1.734	1003	3664	1.149	0.393
Sector C Bottom Reinforcement	175	N104 A	2129	2782	0.000	0.000	3437	4510	0.000	0.000
Sector B Bottom Reinforcement	175	N106 A	2150	2809	0.000	0.000	3444	4521	0.000	0.000
Sector A Bottom Reinforcement	175	N108	2128	2779	0.000	0.000	3436	4509	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	21.9	21.9	47.5	47.5
0.5	27.8	27.8	63.7	63.7
1	33.1	33.1	79.2	79.2

Notes:

- (EPA)a values listed above may be used in the absence of more precise information
- (EPA)a values in the table above include 3 sector(s).
- 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 #: 5000246846

SMART Project #: 10215779

Fuze Project ID: 16272075

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

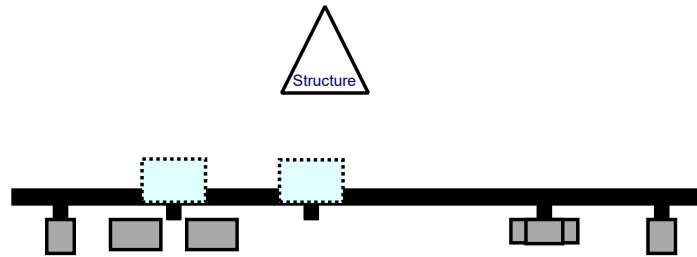
Comments:

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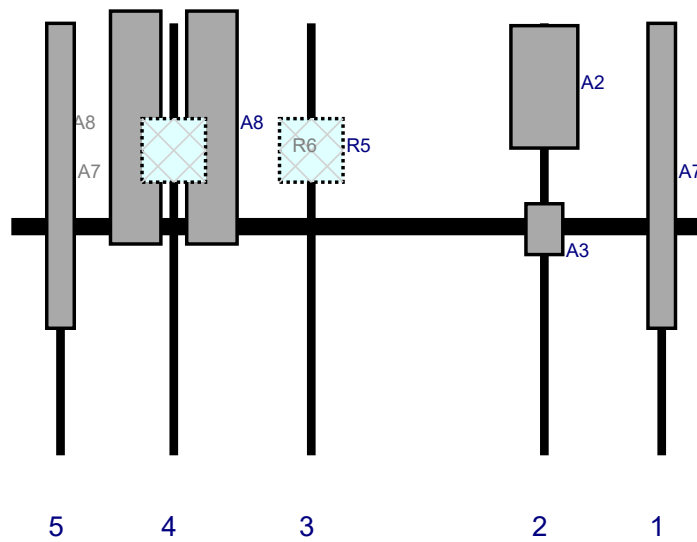
Certifying Individual:

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

Plan View

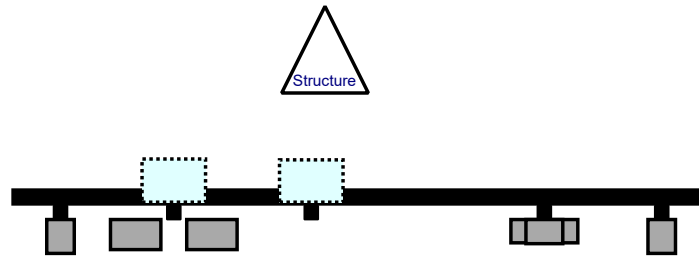


Front View - Looking at Structure

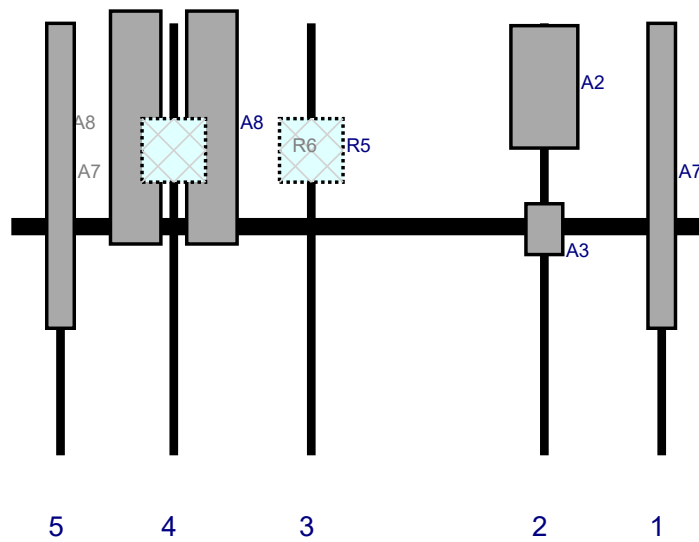


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A7	DB846H80E-SX	72	6.5	153.575	1	a	Front	36	0	Retained	03/23/2021
A2	MT6413-77A	28.9	15.8	125.861	2	a	Front	15	0	Added	
A3	RF4423-48B w/ Clip-On Antenna	12	8.7	125.861	2	a	Front	48.6	0	Added	
R5	RF4439d-25A	15	15	70.8247	3	a	Behind	30	0	Added	
A8	SBNHH-1D65A	55	11.9	38.3615	4	a	Front	24.6	9	Retained	03/23/2021
A8	SBNHH-1D65A	55	11.9	38.3615	4	b	Front	24.6	-9	Retained	03/23/2021
R6	RF4461d-13A	15	15	38.3615	4	a	Behind	30	0	Added	
A7	DB846H80E-SX	72	6.5	11.6115	5	a	Front	36	0	Retained	03/23/2021
DC	RRFDC-3315-PF-48	29.5	16.5			Member				Retained	03/23/2021

Plan View

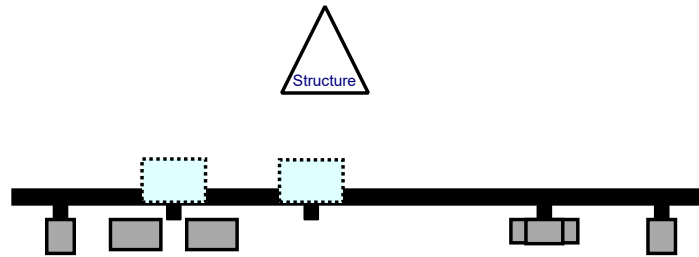


Front View - Looking at Structure

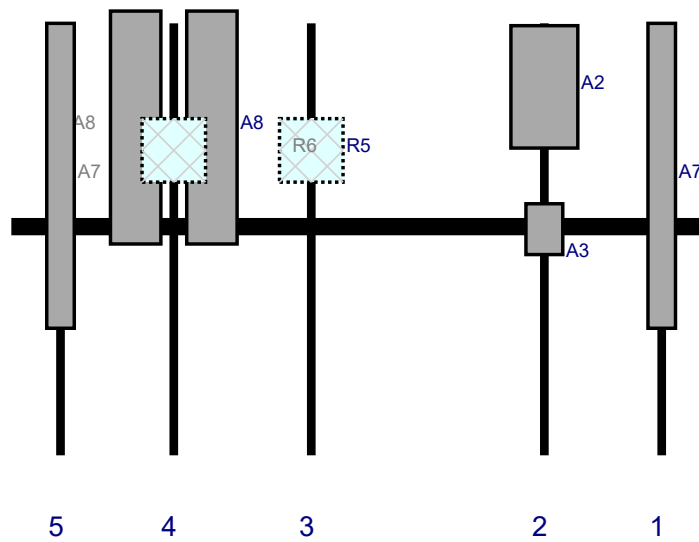


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Plan View



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R6	RF4461d-13A	15	15	38.3615	4	a	Behind	30	0	Added	
A7	DB846H80E-SX	72	6.5	11.6115	5	a	Front	36	0	Retained	03/23/2021





MOUNT MODIFICATION DRAWINGS EXISTING 13.71' PLATFORM

TOWER OWNER: AMERICAN TOWER CORPORATION
TOWER OWNER SITE NUMBER: 411184

CARRIER SITE NAME: SALEM CT
CARRIER SITE NUMBER: 5000246846
FUZE ID: 16272075

399 WEST RD
SALEM, CT 06420
NEW LONDON COUNTY

LATITUDE: 41.48783600° N
LONGITUDE: 72.31321400° W



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SCALE: AS SHOWN JOB NUMBER: 21777345

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
2	12/19/23	ISSUED FOR CONSTRUCTION	SC	DX
1	09/28/21	ISSUED FOR CONSTRUCTION	ZDB	DX
0	08/27/21	ISSUED FOR CONSTRUCTION	SA	DX

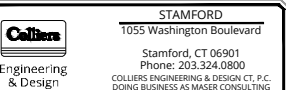
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5000246846

399 WEST RD
SALEM, CT 06420
NEW LONDON COUNTY



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

TITLE SHEET

ST-1

DESIGN CRITERIA
WIND LOADS BASIC WIND SPEED (3 SECOND GUST), V = 125 MPH EXPOSURE CATEGORY B TOPOGRAPHIC CATEGORY: I TOPOGRAPHIC CONSIDERED: N/A TOPOGRAPHIC METHOD: N/A MEAN BASE ELEVATION (AMSL) = 566.07'
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 = .205 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 #: 10215779 VZW MDG #: 5000246846 ANALYSIS DATE: 12/19/2023 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.)
1	VZWSMART	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
3		VZWSMART-MSK6	BACK TO BACK CROSSOVER PLATE			34

SECTION 2 - OTHER REQUIRED PARTS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
3	-	-	108" LONG, PIPE 2 1/2 SCH40	GALVANIZED	52	156

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:						699

*FOR ACTUAL INSTALL WEIGHT PLEASE CHECK THE MA REPORT

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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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.

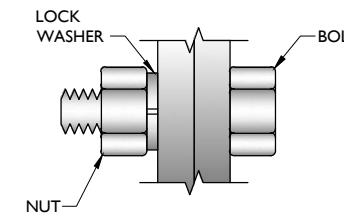
STRUCTURAL STEEL

- 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

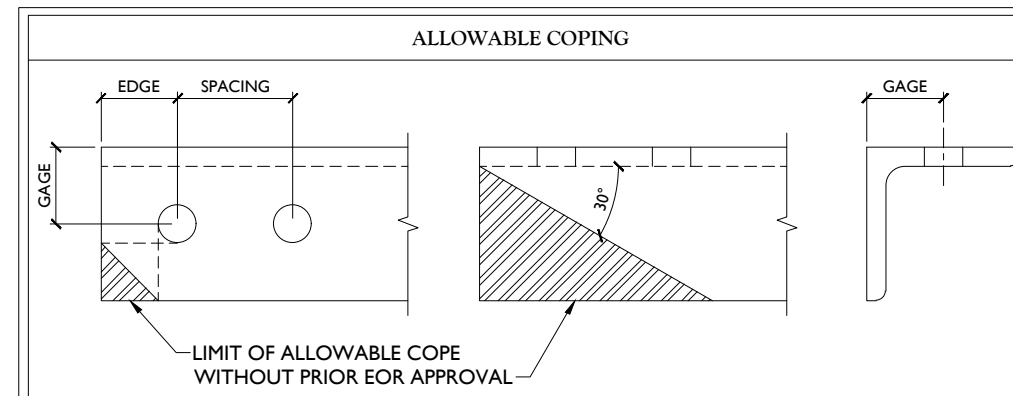
WORKABLE GAGES (IN.)	
LEG	GAGE
4	2 1/2
3 1/2	2
3	1 3/4
2 1/2	1 3/8
2	1 1/8



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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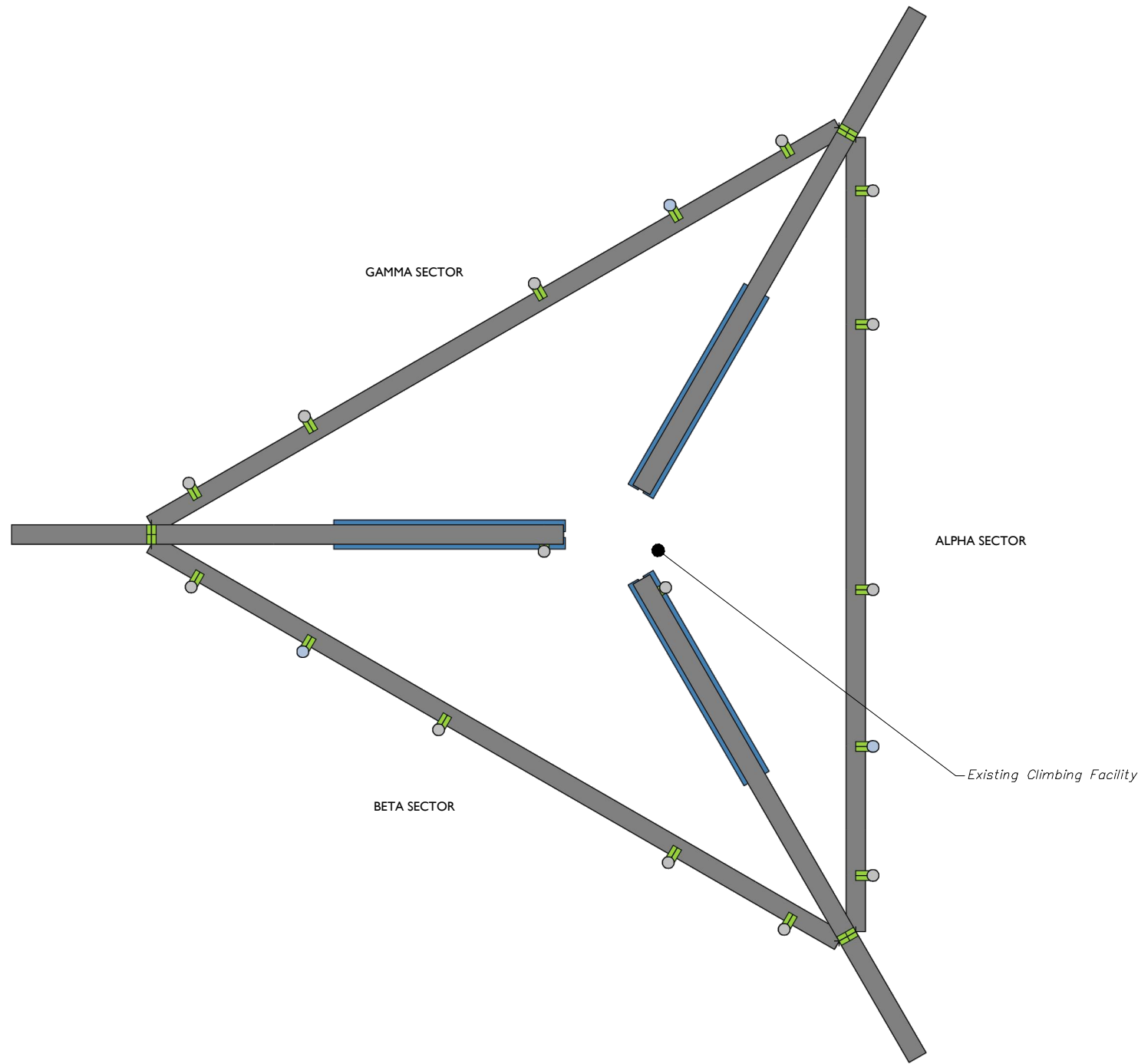
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1	09/28/21	ISSUED FOR CONSTRUCTION	ZDB	DX
0	08/27/21	ISSUED FOR CONSTRUCTION	SA	DX
REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY

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SITE NAME:
SALEM CT
5000246846
399 WEST RD
SALEM, CT 06420
NEW LONDON COUNTY

GENERAL NOTES

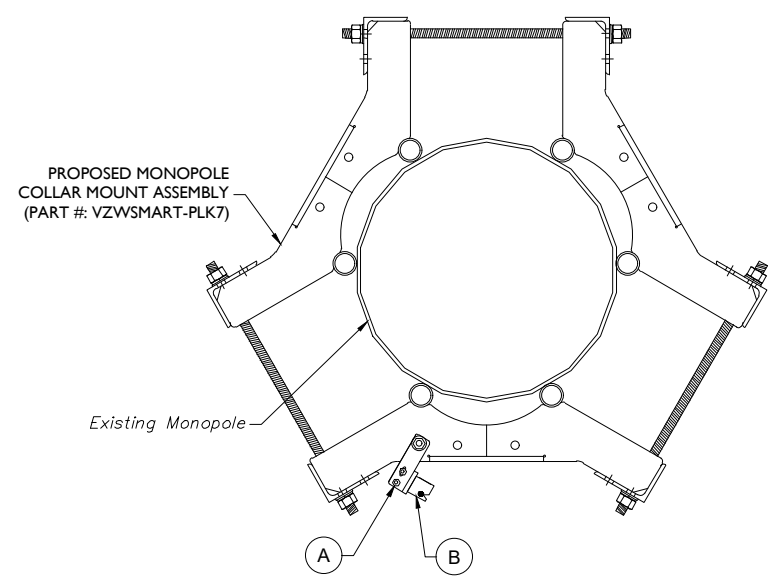
SHEET NUMBER: **SGN-I**



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

STRUCTURAL NOTES:

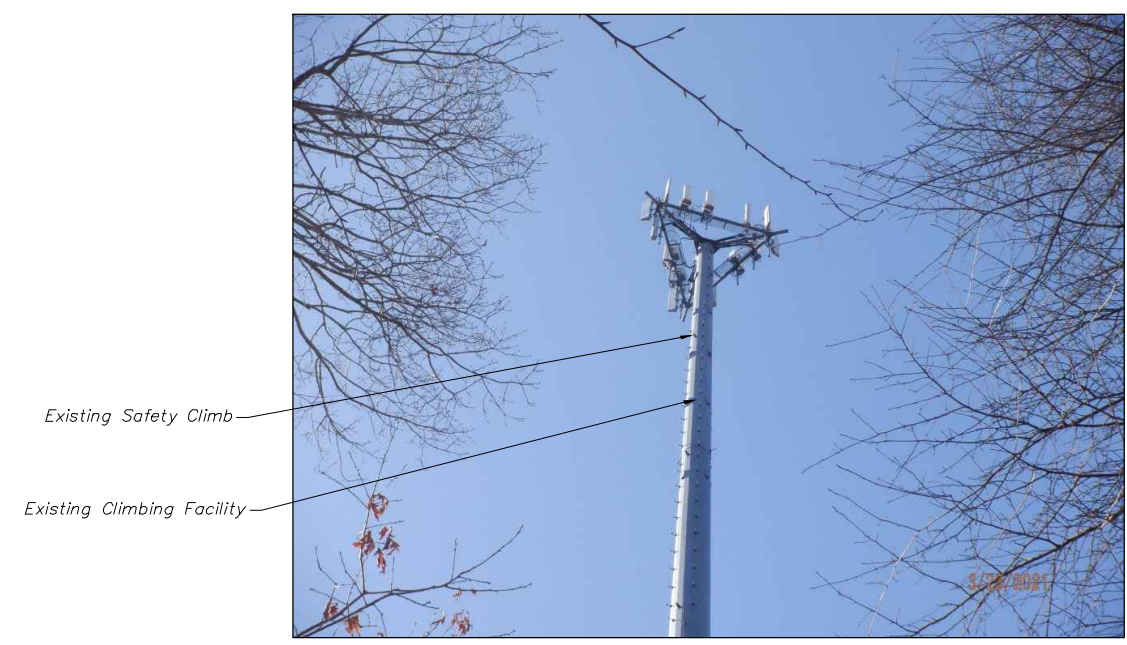
- PER THE MOUNT MAPPING COMPLETED BY RKS DESIGN & ENGINEERING LLC. ON 3/23/2021, THE SAFETY CLIMB AND CLIMBING FACILITIES UP TO THE VERIZON MOUNT ELEVATION (178'-0") ARE IN GOOD CONDITION. COLLIERS ENGINEERING & DESIGN DOES NOT WARRANT THIS INFORMATION.
- INSTALL SHALL NOT CAUSE HARM TO THE STRUCTURE, 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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FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
2	12/19/23	ISSUED FOR CONSTRUCTION	SC	DX
1	09/28/21	ISSUED FOR CONSTRUCTION	ZDB	DX
0	08/27/21	ISSUED FOR CONSTRUCTION	SA	DX

SCALE: AS SHOWN JOB NUMBER: 21777345
COLLIERS ENGINEERING & DESIGN CT, P.C.
C.T. JPC.0000131

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SITE NAME:
SALEM CT
5000246846
399 WEST RD
SALEM, CT 06420
NEW LONDON COUNTY

Colliers Engineering & Design
STAMFORD
1055 Washington Boulevard
Stamford, CT 06901
Phone: 203.324.0800
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING

SHEET TITLE:
CLIMBING FACILITY DETAIL

SHEET NUMBER:
SCF-1

LEGEND:

- PROPOSED
- RELOCATED
- EXISTING

MOUNT MODIFICATION SCHEDULE

NO.	ELEVATION	QUANTITY	DESCRIPTION	NOTES
1	178'-0"	1	PROPOSED KICKER KIT (PART #: VZWSMART-PLK5)	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET SGN-1. CONNECT OTHER END OF KICKER KIT TO MONOPOLE COLLAR MOUNT ASSEMBLY (PART #: VZWSMART-PLK7). SEE GENERAL NOTE B.
2		3	PROPOSED 108" LONG, PIPE 2 1/2 SCH40	CONNECT NEW MOUNT PIPE TO EXISTING HORIZONTAL WITH CROSSOVER PLATES (PART #: VZWSMART-MSK6).

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.



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SCALE: AS SHOWN JOB NUMBER: 21777345

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
2	12/19/23	ISSUED FOR CONSTRUCTION	SC	DX
1	09/28/21	ISSUED FOR CONSTRUCTION	ZDB	DX
0	08/27/21	ISSUED FOR CONSTRUCTION	SA	DX

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C.T. JPC.0000131

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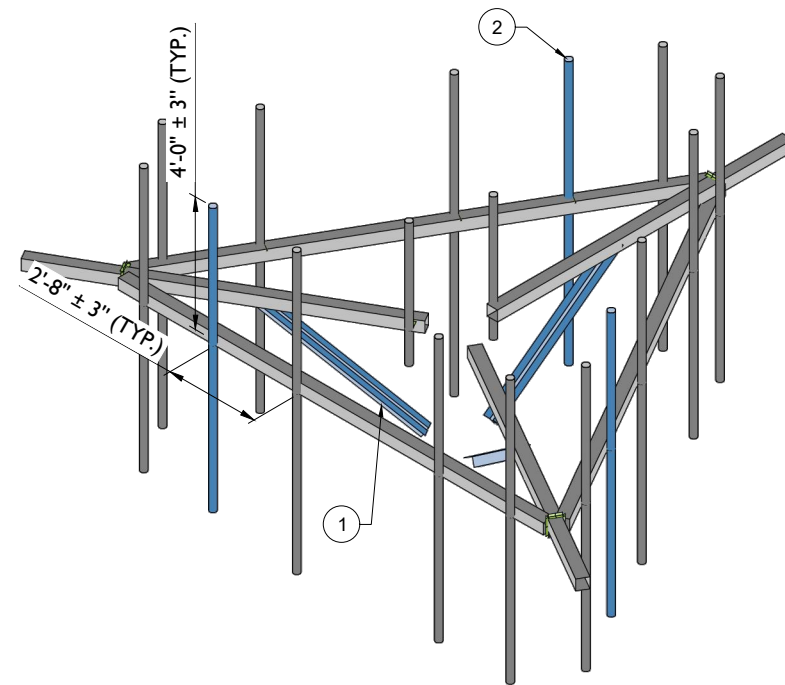
SITE NAME:

SALEM CT
5000246846
399 WEST RD
SALEM, CT 06420
NEW LONDON COUNTY

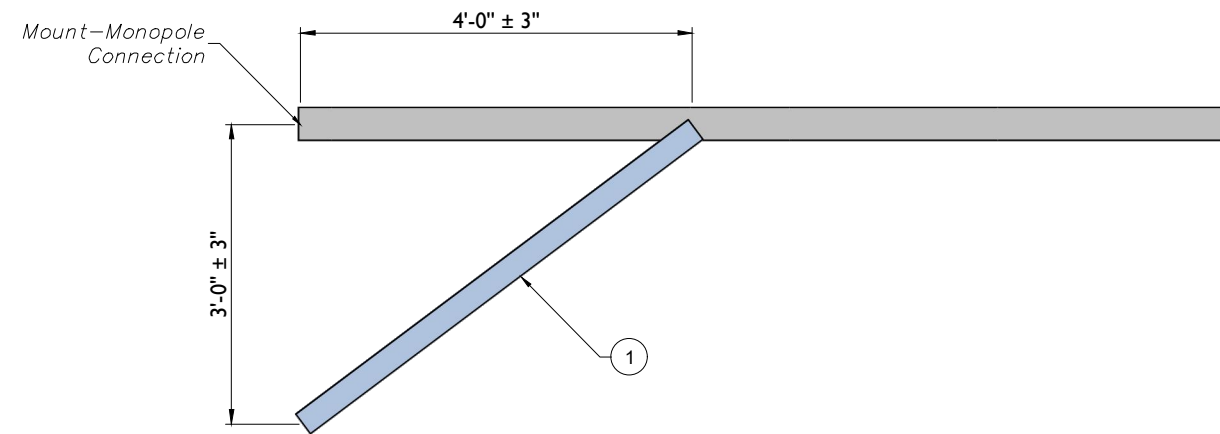
STAMFORD
1055 Washington Boulevard
Stamford, CT 06901
Phone: 203.324.0800
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING

SHEET TITLE:
MODIFICATION DETAILS

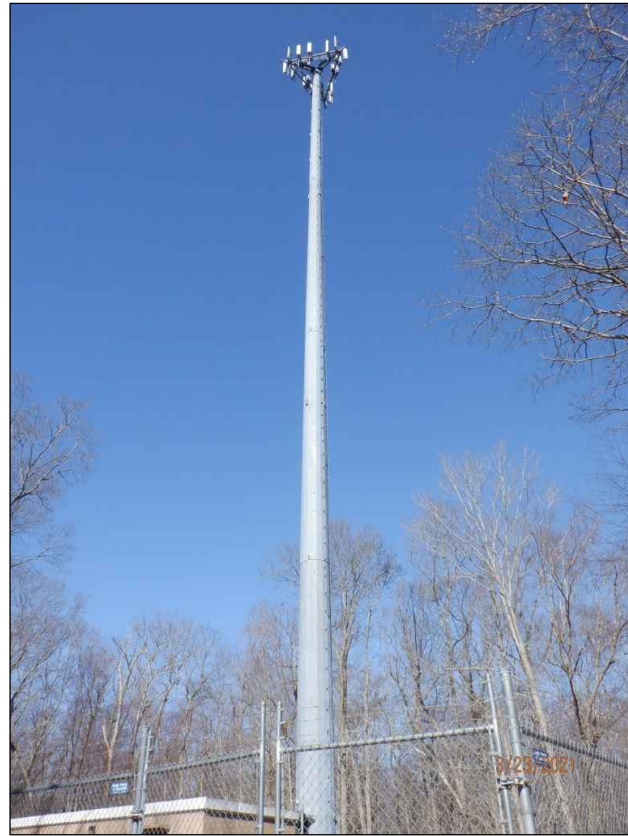
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SS-1



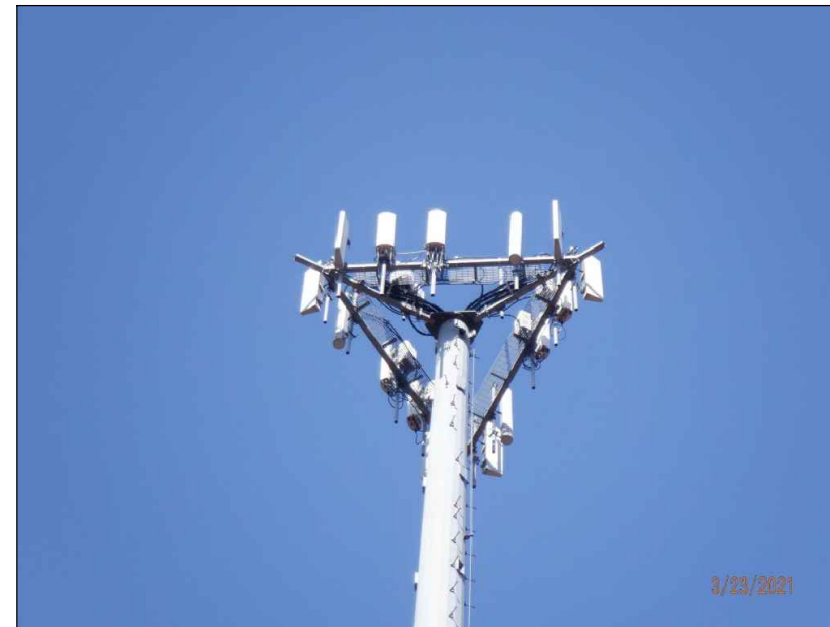
1 PROPOSED ISOMETRIC VIEW
SCALE : N.T.S.



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



MOUNT PHOTO 1



MOUNT PHOTO 2



MOUNT PHOTO 3



MOUNT PHOTO 4



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SCALE: AS SHOWN JOB NUMBER: 21777345

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
2	12/19/23	ISSUED FOR CONSTRUCTION	SC	DX
1	09/28/21	ISSUED FOR CONSTRUCTION	ZDB	DX
0	08/27/21	ISSUED FOR CONSTRUCTION	SA	DX

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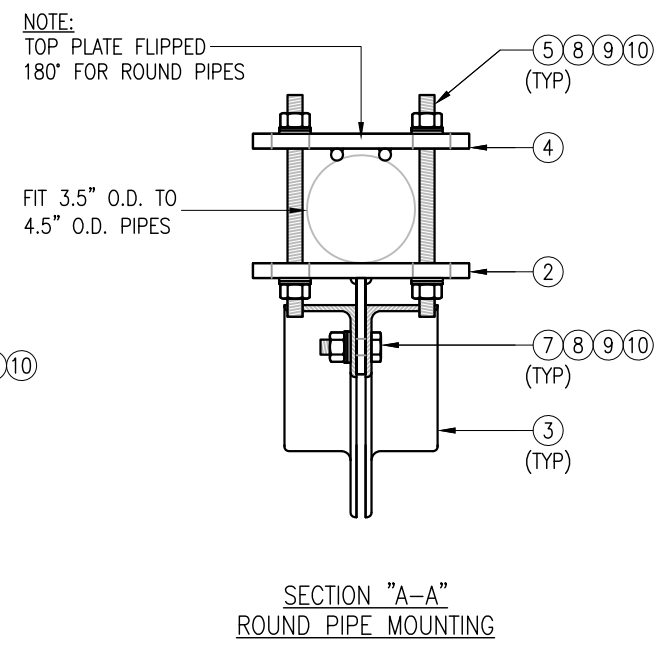
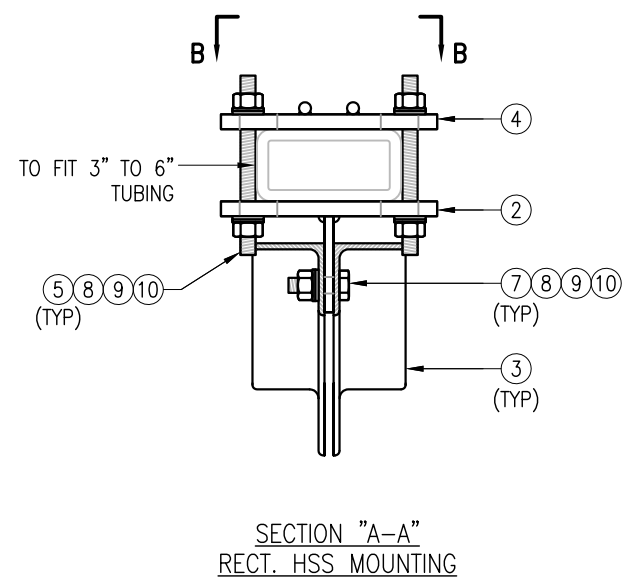
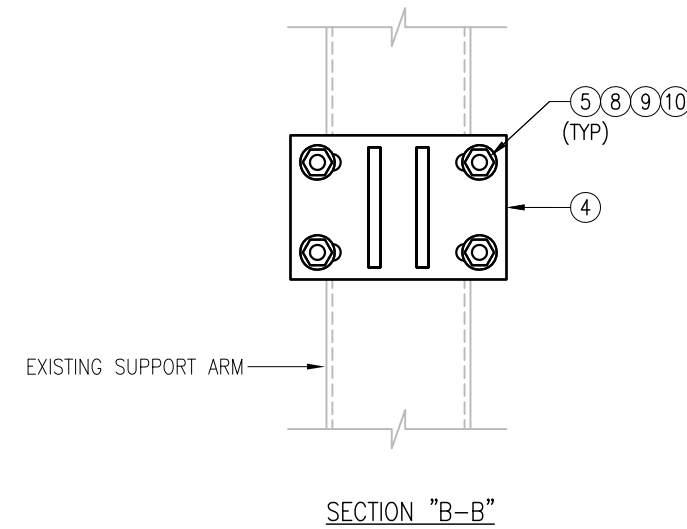
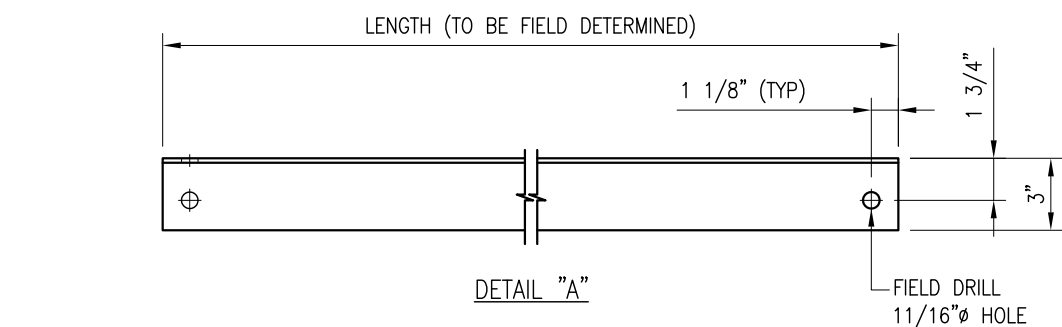
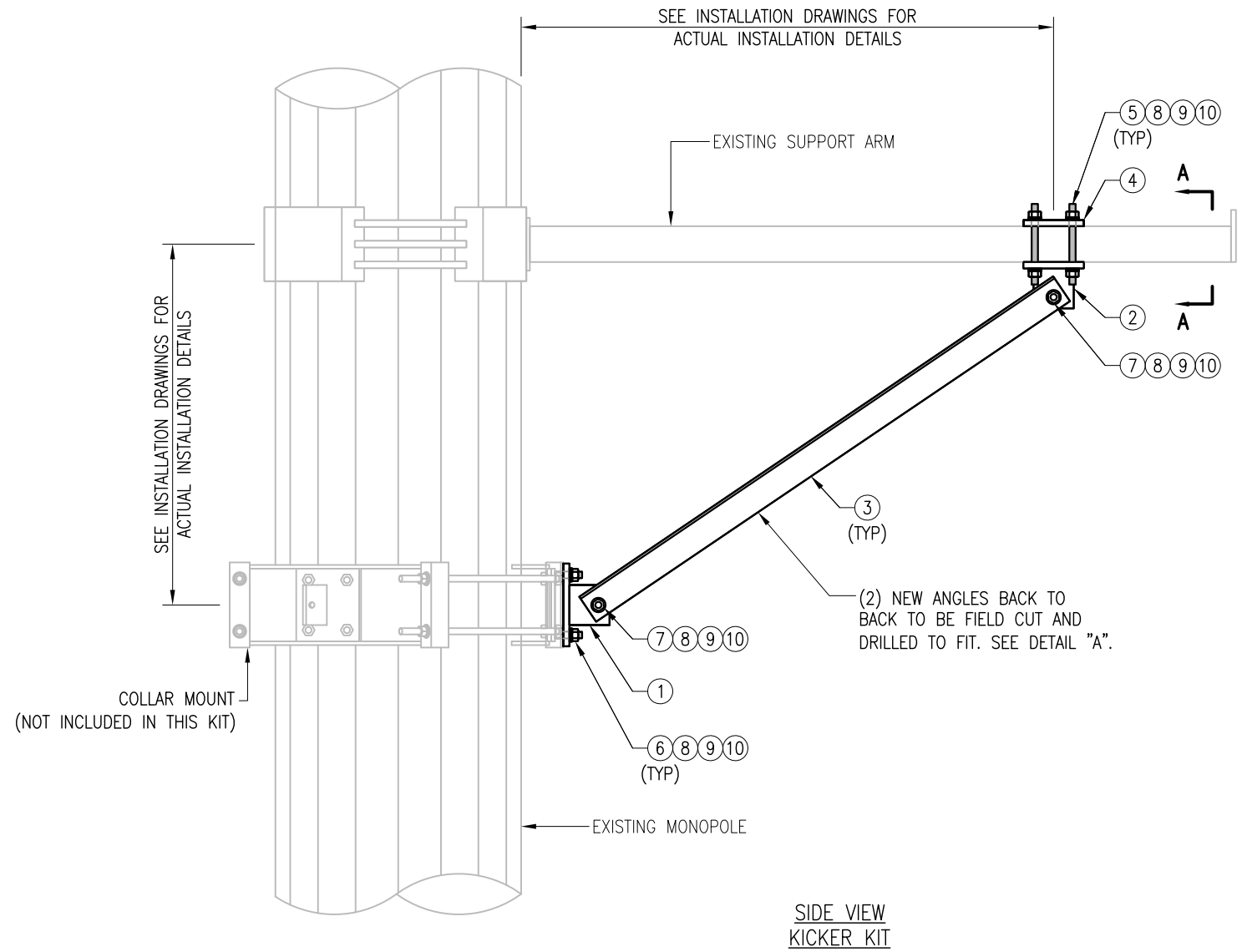
SITE NAME:
 SALEM CT
 5000246846
 399 WEST RD
 SALEM, CT 06420
 NEW LONDON COUNTY

Colliers Engineering & Design
 STAMFORD
 1055 Washington Boulevard
 Stamford, CT 06901
 Phone: 203.324.0800
 COLLIERS ENGINEERING & DESIGN CT, P.C.
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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



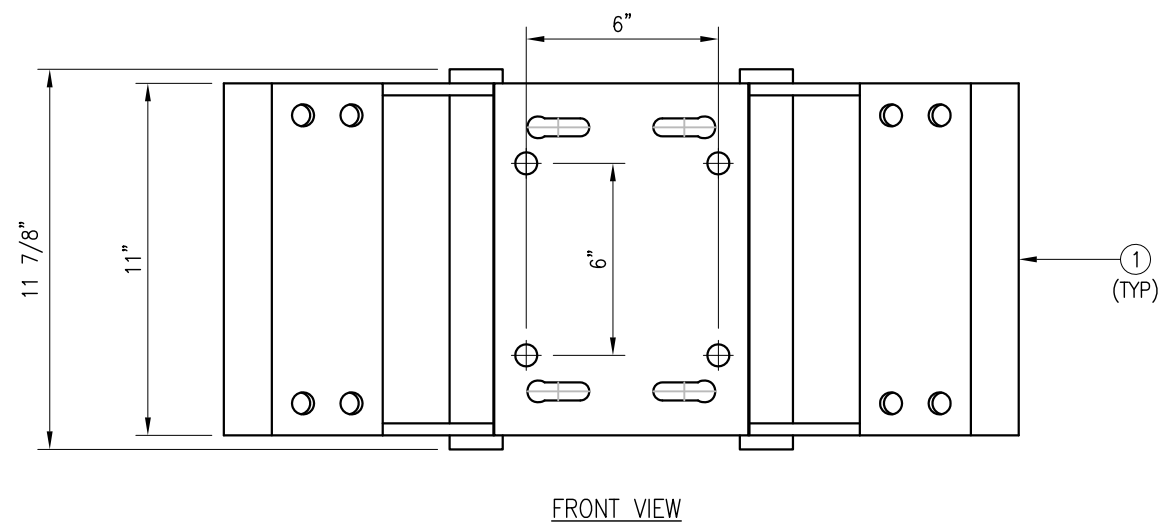
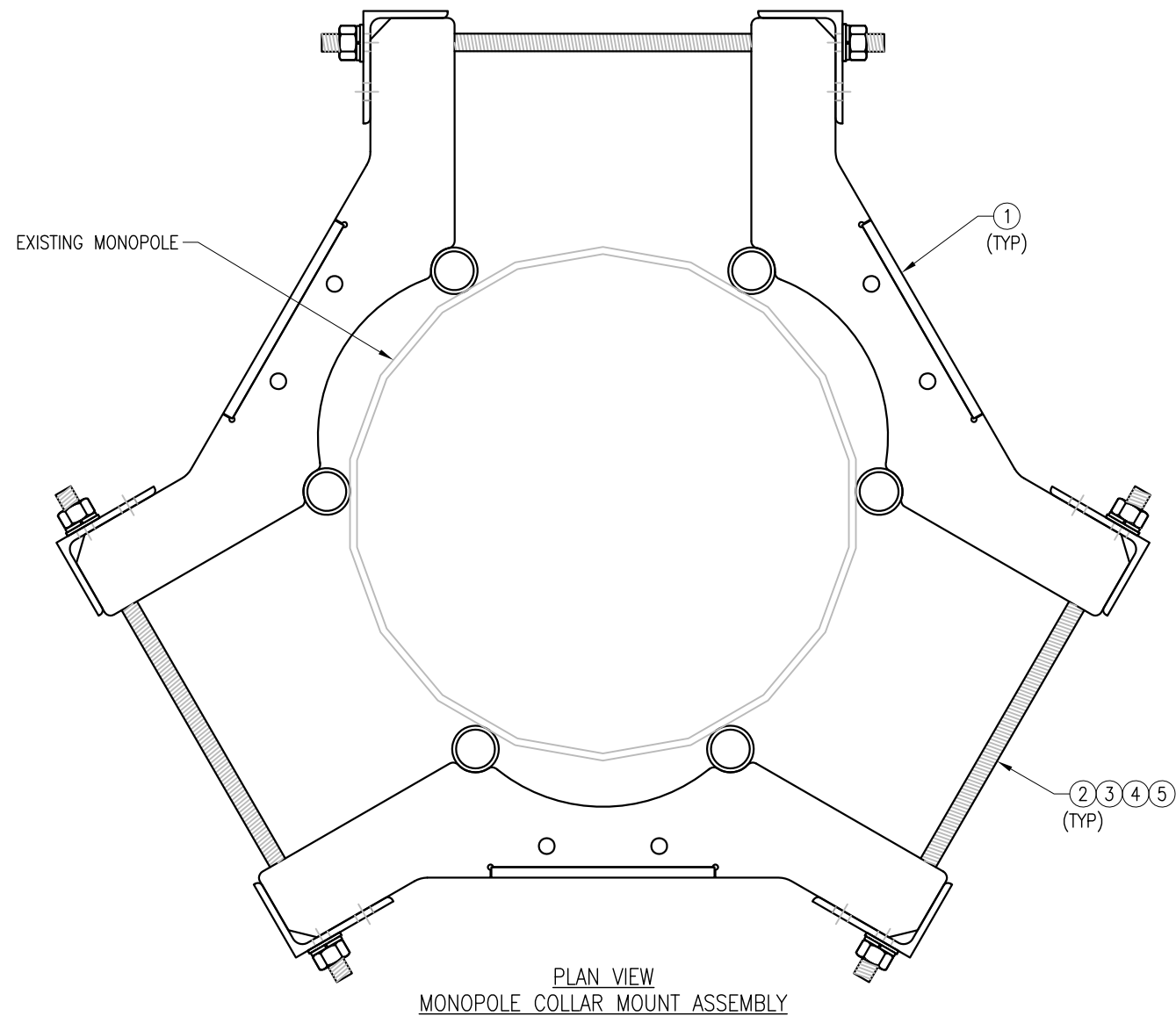
FOR REFERENCE ONLY

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**



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

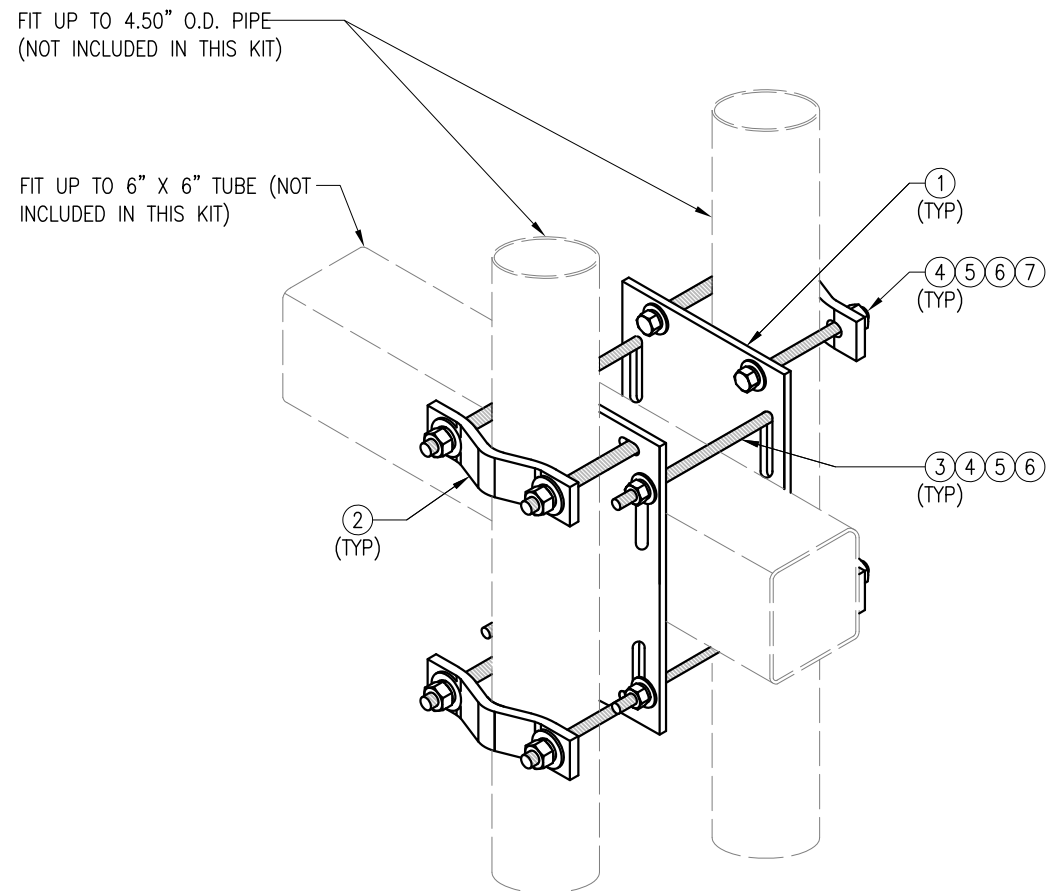
FOR REFERENCE ONLY

DRAWN BY: BT CHECKED BY: HMA/KW

REV.	DESCRIPTION	BY	DATE
△	FIRST ISSUE	BT	05/11/20
△			
△			
△			

SHEET TITLE:
 VZSMART-PLK7
 MONOPOLE COLLAR
 MOUNT ASSEMBLY

SHEET NUMBER: VZSMART-PLK7 REV #: 0



ISOMETRIC VIEW
 BACK TO BACK CROSSOVER

FOR REFERENCE
 ONLY

DRAWN BY: SK CHECKED BY: BT/KW

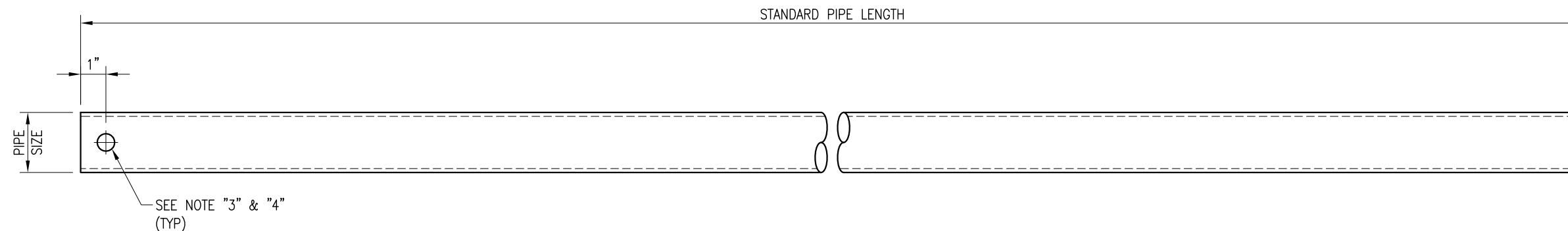
REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	SK	05/08/20
△			
△			
△			
△			

SHEET TITLE:
 VZSMART-MSK6
 BACK TO BACK
 CROSSOVER

SHEET NUMBER: VZSMART-MSK6
 REV #: 0

VZSMART-MSK6 (VZSMART-MSK6 - BACK TO BACK CROSSOVER)						
ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT	
1	2	PL375-8512	PL 3/8" X 8 1/2" X 1'-0" A36	MSK6-F2	20.7	
2	4	VCP	PL 1/2" X 2" X 8 5/8" A36 BENT PLATE	MSK6-F1	9.6	
3	4	---	THREADED ROD 5/8" DIA. X 10" F1554-36 HDG	---	---	
4	16	NUT-625	5/8" HDG HEX NUT	---	2	
5	16	FW-625	5/8" HDG USS FLAT WASHER	---	1	
6	16	LW-625	5/8" HDG LOCK WASHER	---	0	
7	8	---	BOLT 5/8" X 6" SAE GRADE 5 ALL THREAD	---	1	
					GALVANIZED WT	34

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



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:

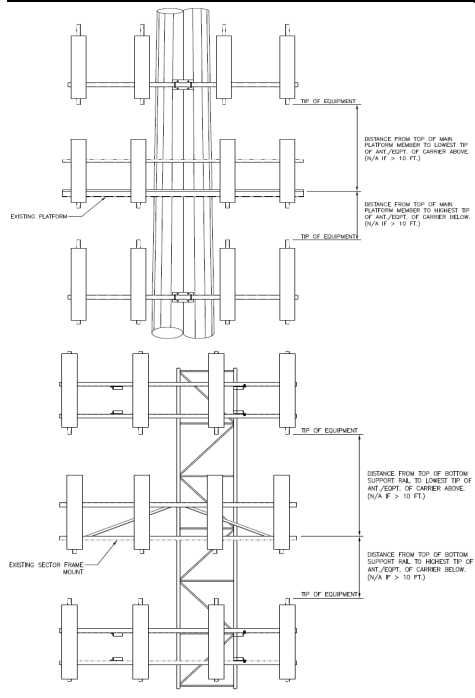
VZWSMART
 STANDARD PIPE

SHEET NUMBER: REV #:

VZWSMART-PIPE

0

Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector				Sector B											
Sector A:	20.00	Deg	Leg A:		Deg	Ant _{1a}													
Sector B:	140.00	Deg	Leg B:		Deg	Ant _{1b}	LPA-80080-6CF-EDIN	5.50	13.90	70.87		178.479	36.25	14.25	140.00	24,188			
Sector C:	260.00	Deg	Leg C:		Deg	Ant _{1c}													
Sector D:		Deg	Leg D:		Deg	Ant _{2a}													
Climbing Facility Information						Ant _{2b}	LPA-171063-12CF-ED	7.90	8.00	73.90		178.271	38.75	9.50	140.00	24,188			
Location:	80.00	Deg	N/A		Deg	Ant _{2c}													
Climbing Facility	Corrosion Type:		N/A			Ant _{3a}	B66a RRH4x45	11.80	7.20	25.80		179.729	22.75	-7.50					24,189
	Access:		Climbing path was unobstructed.			Ant _{3b}	UNKNOWN PANEL	12.00	7.50	55.50		180.063	18.75	8.25	140.00	24,189			
	Condition:		Good condition.			Ant _{3c}													
						Ant _{4a}	B13 RRH4x30	12.00	9.00	21.60		179.771	20.75	-7.50					24,189
						Ant _{4b}	UNKNOWN PANEL	12.00	7.50	55.50		180.021	17.75	8.25	140.00	24,189			
						Ant _{4c}													
						Ant _{5a}													
						Ant _{5b}	LPA-80080-6CF-EDIN	5.50	13.90	70.87		178.479	36.25	14.25	140.00	24,189			
						Ant _{5c}													
						Ant on Standoff	RRFDC-3315-PF-48	15.70	10.20	25.60			38.00						143
						Ant on Standoff	RRFDC-3315-PF-48	15.70	10.20	25.60			38.00						145
						Ant on Tower													
						Ant on Tower													
						Sector C													
						Ant _{1a}													
						Ant _{1b}	LPA-80080-6CF-EDIN	5.50	13.90	70.87		178.479	36.25	14.25	260.00	33,191			
						Ant _{1c}													
						Ant _{2a}													
						Ant _{2b}	LPA-171063-12CF-ED	7.90	8.00	73.90		178.271	38.75	9.50	260.00	33,191			
						Ant _{2c}													
						Ant _{3a}	B66a RRH4x45	11.80	7.20	25.80		179.729	22.75	-7.50					33,192
						Ant _{3b}	UNKNOWN PANEL	12.00	7.50	55.50		180.063	18.75	8.25	260.00	33,192			
						Ant _{3c}													
						Ant _{4a}	B13 RRH4x30	12.00	9.00	21.60		179.771	20.75	-7.50					33,192
						Ant _{4b}	UNKNOWN PANEL	12.00	7.50	55.50		180.021	17.75	8.25	260.00	33,192			
						Ant _{4c}													
						Ant _{5a}													
						Ant _{5b}	LPA-80080-6CF-EDIN	5.50	13.90	70.87		178.479	36.25	14.25	260.00	33,192			
						Ant _{5c}													
						Ant on Standoff													
						Ant on Standoff													
						Ant on Tower													
						Ant on Tower													
						Sector D													
						Ant _{1a}													
						Ant _{1b}													
						Ant _{1c}													
						Ant _{2a}													
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						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 (18): (2) 1.5"Ø, (9) FH 1-5/8, (7) FH 1-5/8 CUT	
2		
3		
4		
5		
6		
7		
8		

Mapping Notes	
<p>1. Please report any visible structural or safety issues observed on the antenna mounts (Damaged members, loose connections, tilting mounts, safety climb issues, etc.)</p> <p>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.</p> <p>3. Please create all required detail sketches of the mounts and insert them into the "Sketches" tab.</p> <p>4. Please measure and enter the bolt sizes and types under the Members Box in the spreadsheet of the mount type.</p> <p>5. Take and label the photos of the tower, mounts, connections, antennas and all measurements. Minimum 50 photos are required.</p> <p>6. Please measure and report the size and length of all existing antenna mounting pipes.</p> <p>7. Please measure and report the antenna information for all sectors.</p> <p>8. Don't delete or rearrange any sheet or contents of any sheet from this mapping form.</p>	

Standard Conditions	
<p>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.</p>	



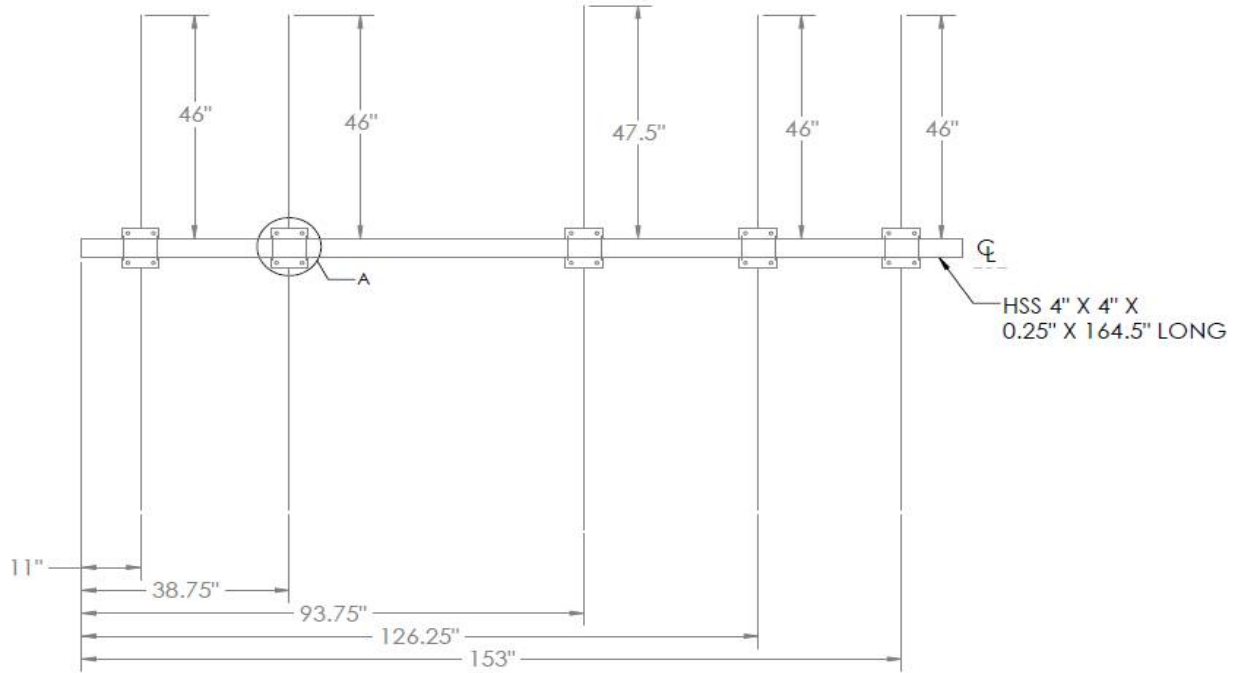
Antenna Mount Mapping Form (PATENT PENDING)

FCC #
UNKNOWN

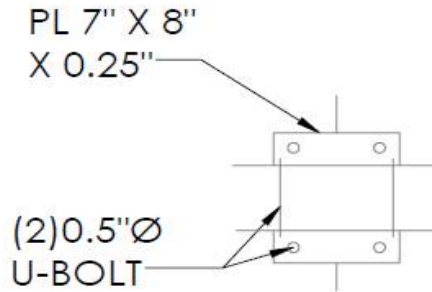
Tower Owner:	ATC	Mapping Date:	3/23/2021
Site Name:	ATC:SALEM CT SQA,VZW:SALEM CT	Tower Type:	Monopole
Site Number or ID:	ATC:411184	Tower Height (Ft.):	177.5
Mapping Contractor:	RKS Design & Engineering LLC	Mount Elevation (Ft.):	177.5

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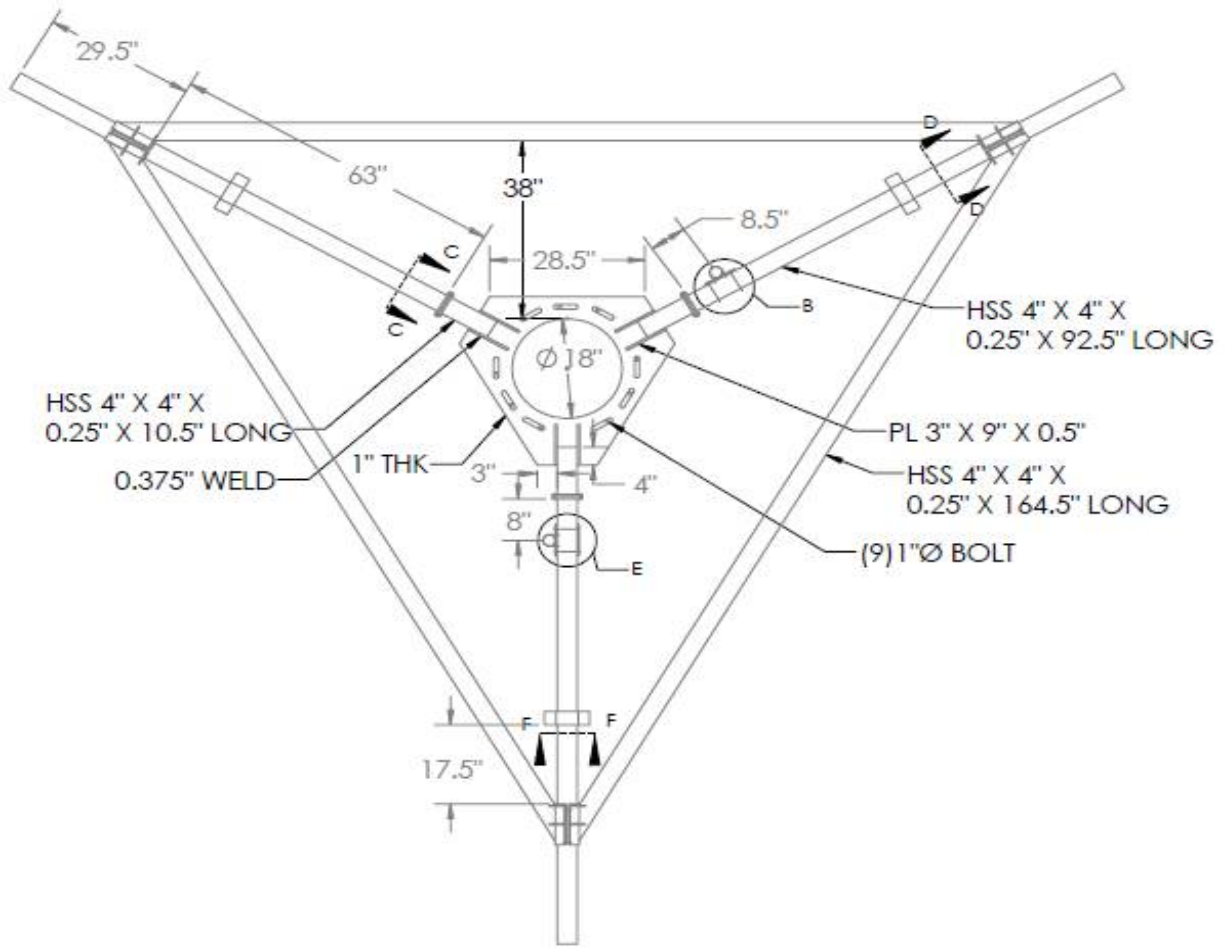
Please Insert Sketches of the Antenna Mount



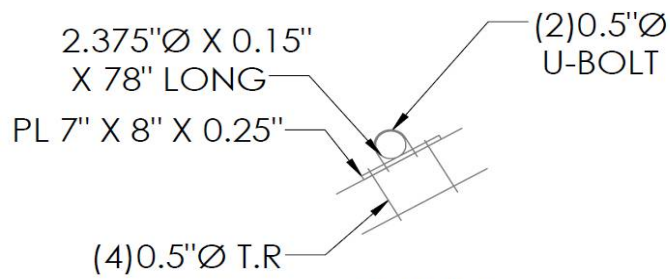
SECTOR A, B & C



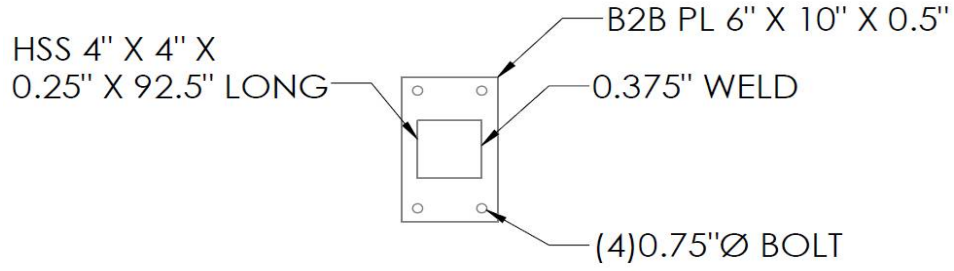
DETAIL A



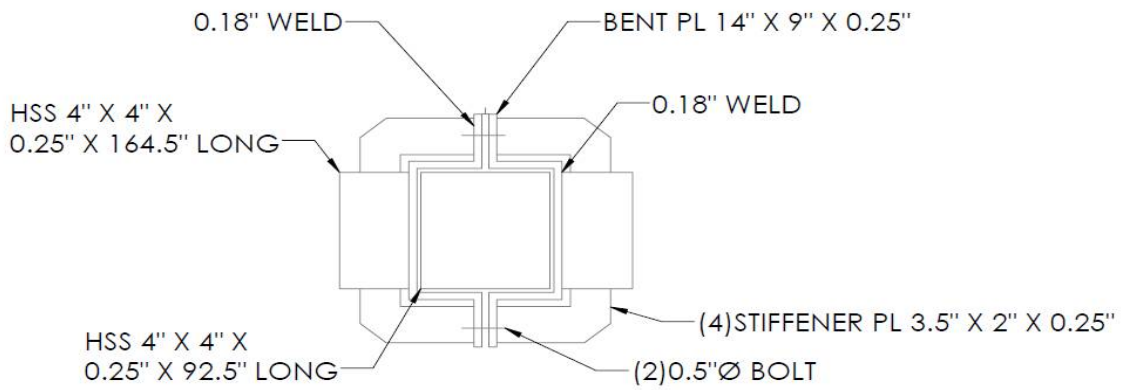
MOUNT VIEW



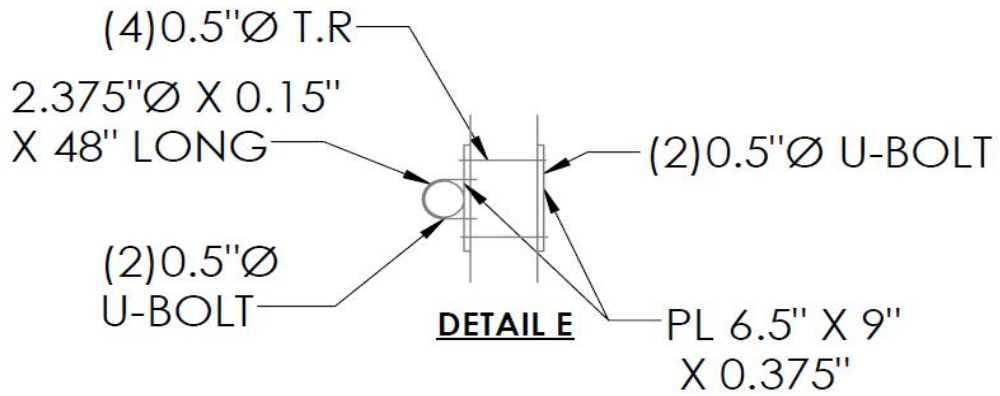
DETAIL B

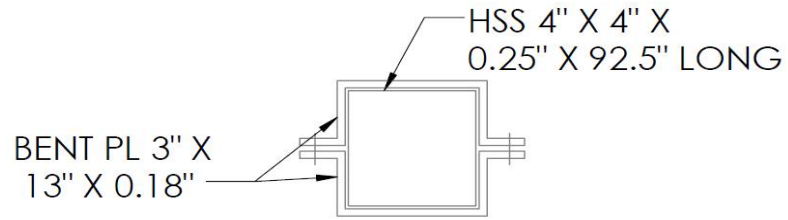


SECTION C-C

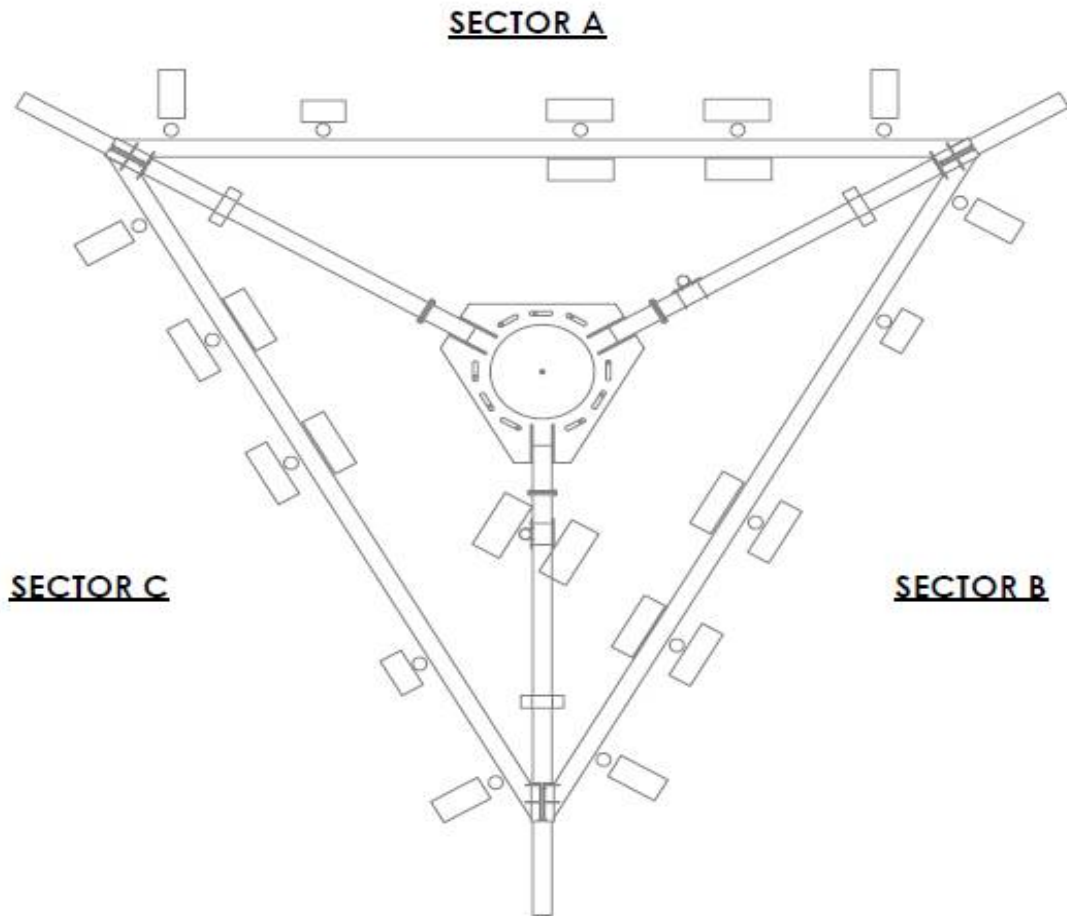


SECTION D-D

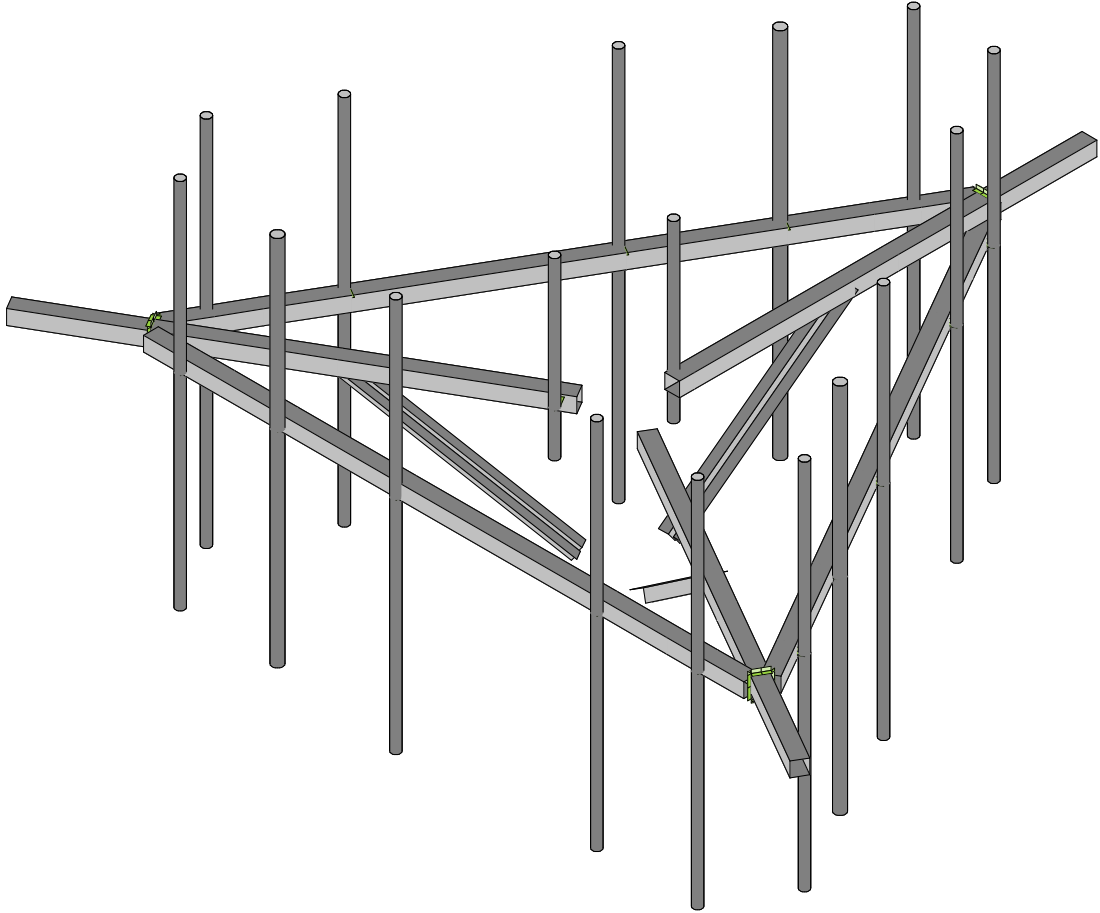
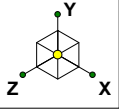




SECTION F-F



ANTENNA PLAN VIEW



Envelope Only Solution

Colliers Engineering & De...

DAB

Project No. 10214357

5000246846-VZW_MT_LO_H

SK - 1

Dec 14, 2023 at 4:09 PM

5000246846-VZW_MT_LO_H.r3d



Basic Load Cases (Continued)

BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me... Surface(...
57 Structure Wi (120 Deg)	None						52
58 Structure Wi (150 Deg)	None						52
59 Structure Wi (180 Deg)	None						52
60 Structure Wi (210 Deg)	None						52
61 Structure Wi (240 Deg)	None						52
62 Structure Wi (270 Deg)	None						52
63 Structure Wi (300 Deg)	None						52
64 Structure Wi (330 Deg)	None						52
65 Structure Wm (0 Deg)	None						52
66 Structure Wm (30 Deg)	None						52
67 Structure Wm (60 Deg)	None						52
68 Structure Wm (90 Deg)	None						52
69 Structure Wm (120 Deg)	None						52
70 Structure Wm (150 Deg)	None						52
71 Structure Wm (180 Deg)	None						52
72 Structure Wm (210 Deg)	None						52
73 Structure Wm (240 Deg)	None						52
74 Structure Wm (270 Deg)	None						52
75 Structure Wm (300 Deg)	None						52
76 Structure Wm (330 Deg)	None						52
77 Lm1	None					1	
78 Lm2	None					1	
79 Lv1	None					1	
80 Lv2	None					1	
81 Antenna Ev	None					132	
82 Antenna Eh (0 Deg)	None					88	
83 Antenna Eh (90 Deg)	None					88	
84 Structure Ev	ELY		-044				3
85 Structure Eh (0 Deg)	ELZ			-109			3
86 Structure Eh (90 Deg)	ELX	.109					3
87 BLC 39 Transient Area L...	None						3
88 BLC 40 Transient Area L...	None						3
89 BLC 84 Transient Area L...	None						54
90 BLC 85 Transient Area L...	None						54
91 BLC 86 Transient Area L...	None						54

Load Combinations

Description	So...	P...	S...	BLCFac...	BLCFac...	BLCFac...	BLCFac...	BLCFac...	BLCFac...	BLCFac...	BLCFac...	BLCFac...	BLCFac...
1 1.2D+1.0Wo (0 Deg)	Yes	Y		1	1.2	39	1.2	3	1	41	1		
2 1.2D+1.0Wo (30 Deg)	Yes	Y		1	1.2	39	1.2	4	1	42	1		
3 1.2D+1.0Wo (60 Deg)	Yes	Y		1	1.2	39	1.2	5	1	43	1		
4 1.2D+1.0Wo (90 Deg)	Yes	Y		1	1.2	39	1.2	6	1	44	1		
5 1.2D+1.0Wo (120 Deg)	Yes	Y		1	1.2	39	1.2	7	1	45	1		
6 1.2D+1.0Wo (150 Deg)	Yes	Y		1	1.2	39	1.2	8	1	46	1		
7 1.2D+1.0Wo (180 Deg)	Yes	Y		1	1.2	39	1.2	9	1	47	1		
8 1.2D+1.0Wo (210 Deg)	Yes	Y		1	1.2	39	1.2	10	1	48	1		
9 1.2D+1.0Wo (240 Deg)	Yes	Y		1	1.2	39	1.2	11	1	49	1		
10 1.2D+1.0Wo (270 Deg)	Yes	Y		1	1.2	39	1.2	12	1	50	1		
11 1.2D+1.0Wo (300 Deg)	Yes	Y		1	1.2	39	1.2	13	1	51	1		
12 1.2D+1.0Wo (330 Deg)	Yes	Y		1	1.2	39	1.2	14	1	52	1		
13 1.2D + 1.0Di + 1.0Wi (...)	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1
14 1.2D + 1.0Di + 1.0Wi (...)	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1
15 1.2D + 1.0Di + 1.0Wi (...)	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1
16 1.2D + 1.0Di + 1.0Wi (...)	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1
17 1.2D + 1.0Di + 1.0Wi (...)	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1



Load Combinations (Continued)

	Description	So...	P...	S...	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..
18	1.2D + 1.0Di + 1.0Wi (...)	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1
19	1.2D + 1.0Di + 1.0Wi (...)	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1
20	1.2D + 1.0Di + 1.0Wi (...)	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1
21	1.2D + 1.0Di + 1.0Wi (...)	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1
22	1.2D + 1.0Di + 1.0Wi (...)	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1
23	1.2D + 1.0Di + 1.0Wi (...)	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1
24	1.2D + 1.0Di + 1.0Wi (...)	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1
25	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1		
26	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1		
27	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1		
28	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1		
29	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1		
30	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1		
31	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1		
32	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1		
33	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1		
34	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1		
35	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1		
36	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1		
37	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1		
38	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1		
39	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1		
40	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1		
41	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1		
42	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1		
43	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1		
44	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1		
45	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1		
46	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1		
47	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1		
48	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	38	1	76	1		
49	1.2D + 1.5Lv1	Yes	Y		1	1.2	39	1.2	79	1.5						
50	1.2D + 1.5Lv2	Yes	Y		1	1.2	39	1.2	80	1.5						
51	1.4D	Yes	Y		1	1.4	39	1.4								
52	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	1	83	ELZ 1 ELX
53	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.866	83	.5 ELZ .866 ELX .5
54	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.5	83	.866 ELZ .5 ELX .866
55	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82		83	1 ELZ ELX 1
56	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.5	83	.866 ELZ -.5 ELX .866
57	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.866	83	.5 ELZ -.866 ELX .5
58	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-1	83	ELZ -1 ELX
59	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.866	83	-.5 ELZ -.866 ELX -.5
60	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.5	83	-.866 ELZ -.5 ELX -.866
61	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82		83	-1 ELZ ELX -1
62	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.5	83	-.866 ELZ .5 ELX .866
63	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.866	83	-.5 ELZ .866 ELX -.5
64	0.9D - 1.0Ev + 1.0Eh (...)	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	1	83	ELZ 1 ELX
65	0.9D - 1.0Ev + 1.0Eh (...)	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.866	83	.5 ELZ .866 ELX .5
66	0.9D - 1.0Ev + 1.0Eh (...)	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.5	83	.866 ELZ .5 ELX .866
67	0.9D - 1.0Ev + 1.0Eh (...)	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82		83	1 ELZ ELX 1
68	0.9D - 1.0Ev + 1.0Eh (...)	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.5	83	.866 ELZ -.5 ELX .866
69	0.9D - 1.0Ev + 1.0Eh (...)	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.866	83	.5 ELZ -.866 ELX .5
70	0.9D - 1.0Ev + 1.0Eh (...)	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-1	83	ELZ -1 ELX
71	0.9D - 1.0Ev + 1.0Eh (...)	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.866	83	-.5 ELZ -.866 ELX -.5
72	0.9D - 1.0Ev + 1.0Eh (...)	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.5	83	-.866 ELZ -.5 ELX .866
73	0.9D - 1.0Ev + 1.0Eh (...)	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82		83	-1 ELZ ELX -1
74	0.9D - 1.0Ev + 1.0Eh (...)	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.5	83	-.866 ELZ .5 ELX -.866



Load Combinations (Continued)

Description	So...	P...	S...	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..				
75 0.9D - 1.0Ev + 1.0Eh (...)	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.866	83	-5	ELZ	.866	ELX	-5

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	-0.	0	-0.895833	0	
2	N2	-0.	0	-10.43275	0	
3	N3	0	0	0	0	
4	N4	-0.	0	-8.016083	0	
5	N5	0.166667	0	-8.016083	0	
6	N6	-0.166667	0	-8.016083	0	
7	N7	-0.	.25	-8.016083	0	
8	N8	0.166667	.25	-8.016083	0	
9	N9	-0.166667	.25	-8.016083	0	
10	N10	-0.	-.25	-8.016083	0	
11	N11	0.166667	-.25	-8.016083	0	
12	N12	-0.166667	-.25	-8.016083	0	
13	N13	-0.775814	0	0.447917	0	
14	N14	-9.035027	0	5.216375	0	
15	N15	-6.942132	0	4.008042	0	
16	N16	-7.025465	0	3.863704	0	
17	N17	-6.858798	0	4.152379	0	
18	N18	-6.942132	.25	4.008042	0	
19	N19	-7.025465	.25	3.863704	0	
20	N20	-6.858798	.25	4.152379	0	
21	N21	-6.942132	-.25	4.008042	0	
22	N22	-7.025465	-.25	3.863704	0	
23	N23	-6.858798	-.25	4.152379	0	
24	N24	0.775814	0	0.447917	0	
25	N25	9.035027	0	5.216375	0	
26	N26	6.942132	0	4.008042	0	
27	N27	6.858798	0	4.152379	0	
28	N28	7.025465	0	3.863704	0	
29	N29	6.942132	.25	4.008042	0	
30	N30	6.858798	.25	4.152379	0	
31	N31	7.025465	.25	3.863704	0	
32	N32	6.942132	-.25	4.008042	0	
33	N33	6.858798	-.25	4.152379	0	
34	N34	7.025465	-.25	3.863704	0	
35	N35	-5.891176	0	4.152379	0	
36	N36	-3.662009	0	4.152379	0	
37	N37	5.939092	0	4.152379	0	
38	N38	3.629634	0	4.152379	0	
39	N39	-5.891176	0	4.451629	0	
40	N40	-3.662009	0	4.451629	0	
41	N41	5.939092	0	4.451629	0	
42	N42	3.629634	0	4.451629	0	
43	N43	-5.891176	3.833333	4.451629	0	
44	N44	-3.662009	3.833333	4.451629	0	
45	N45	5.939092	3.833333	4.451629	0	
46	N46	3.629634	3.833333	4.451629	0	
47	N47	-5.891176	-4.666667	4.451629	0	
48	N48	-3.662009	-4.666667	4.451629	0	
49	N49	5.939092	-4.666667	4.451629	0	
50	N50	3.629634	-4.666667	4.451629	0	
51	N51	-0.918656	0	0.867174	0	



Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
109	N109	-5.105941	0	2.947917	0	
110	N110	5.105941	0	2.947917	0	
111	N111	-0.	0	-5.895833	0	
112	N112	5.105941	0	4.152377	0	
113	N113	-5.105941	0	4.152377	0	
114	N114	1.043093	0	-6.498063	0	
115	N115	6.149034	0	2.345687	0	
116	N116	-6.149034	0	2.345687	0	
117	N117	-1.043093	0	-6.498063	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design R...	A [in ²]	I _{yy} [in ⁴]	I _{zz} [in ⁴]	J [in ⁴]
1	Face Horizontal	HSS4X4X4	Beam	SquareTube	A500 Gr.B ...	Typical	3.37	7.8	7.8	12.8
2	Standoff Horizontal	HSS4X4X4	Beam	SquareTube	A500 Gr.B ...	Typical	3.37	7.8	7.8	12.8
3	Mount Pipe	PIPE 2.0	Column	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25
4	Mount Pipe 2	PIPE 2.5	Column	Pipe	A53 Gr.B	Typical	1.61	1.45	1.45	2.89
5	Mod Kicker	LL3x3x3x6	Beam	Double Angle (3/...	A36 Gr.36	Typical	2.18	4.97	1.9	.027

Hot Rolled Steel Properties

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

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M2	N6	N4			RIGID	None	None	RIGID	Typical
2	M3	N5	N4			RIGID	None	None	RIGID	Typical
3	M4A	N9	N7			RIGID	None	None	RIGID	Typical
4	M5	N8	N7			RIGID	None	None	RIGID	Typical
5	M6	N12	N10			RIGID	None	None	RIGID	Typical
6	M7	N11	N10			RIGID	None	None	RIGID	Typical
7	M8	N7	N4			RIGID	None	None	RIGID	Typical
8	M9	N10	N4			RIGID	None	None	RIGID	Typical
9	M10	N6	N9			RIGID	None	None	RIGID	Typical
10	M11	N5	N8			RIGID	None	None	RIGID	Typical
11	M12	N6	N12			RIGID	None	None	RIGID	Typical
12	M13	N5	N11			RIGID	None	None	RIGID	Typical
13	M15	N17	N15			RIGID	None	None	RIGID	Typical
14	M16	N16	N15			RIGID	None	None	RIGID	Typical
15	M17	N20	N18			RIGID	None	None	RIGID	Typical
16	M18	N19	N18			RIGID	None	None	RIGID	Typical
17	M19	N23	N21			RIGID	None	None	RIGID	Typical
18	M20	N22	N21			RIGID	None	None	RIGID	Typical
19	M21	N18	N15			RIGID	None	None	RIGID	Typical
20	M22	N21	N15			RIGID	None	None	RIGID	Typical
21	M23	N17	N20			RIGID	None	None	RIGID	Typical



Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
22	M24	N16	N19			RIGID	None	None	RIGID	Typical
23	M25	N17	N23			RIGID	None	None	RIGID	Typical
24	M26	N16	N22			RIGID	None	None	RIGID	Typical
25	M28	N28	N26			RIGID	None	None	RIGID	Typical
26	M29	N27	N26			RIGID	None	None	RIGID	Typical
27	M30	N31	N29			RIGID	None	None	RIGID	Typical
28	M31	N30	N29			RIGID	None	None	RIGID	Typical
29	M32	N34	N32			RIGID	None	None	RIGID	Typical
30	M33	N33	N32			RIGID	None	None	RIGID	Typical
31	M34	N29	N26			RIGID	None	None	RIGID	Typical
32	M35	N32	N26			RIGID	None	None	RIGID	Typical
33	M36	N28	N31			RIGID	None	None	RIGID	Typical
34	M37	N27	N30			RIGID	None	None	RIGID	Typical
35	M38	N28	N34			RIGID	None	None	RIGID	Typical
36	M39	N27	N33			RIGID	None	None	RIGID	Typical
37	M40	N16	N6			Face Horizontal	Beam	SquareTube	A500 Gr.B...	Typical
38	M41	N5	N28			Face Horizontal	Beam	SquareTube	A500 Gr.B...	Typical
39	M42	N17	N27			Face Horizontal	Beam	SquareTube	A500 Gr.B...	Typical
40	M43	N35	N39			RIGID	None	None	RIGID	Typical
41	M44	N36	N40			RIGID	None	None	RIGID	Typical
42	M45	N38	N42			RIGID	None	None	RIGID	Typical
43	M46	N37	N41			RIGID	None	None	RIGID	Typical
44	MP5A	N43	N47			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
45	MP4A	N44	N48			Mount Pipe 2	Column	Pipe	A53 Gr.B	Typical
46	MP2A	N46	N50			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
47	MP1A	N45	N49			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
48	DC	N53	N54			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
49	M68	N52	N51			RIGID	None	None	RIGID	Typical
50	M69	N55	N56			RIGID	None	None	RIGID	Typical
51	MP3A	N57	N58			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
52	M55	N59	N63			RIGID	None	None	RIGID	Typical
53	M56	N60	N64			RIGID	None	None	RIGID	Typical
54	M57	N62	N66			RIGID	None	None	RIGID	Typical
55	M58	N61	N65			RIGID	None	None	RIGID	Typical
56	MP5C	N67	N71			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
57	MP4C	N68	N72			Mount Pipe 2	Column	Pipe	A53 Gr.B	Typical
58	MP2C	N70	N74			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
59	MP1C	N69	N73			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
60	M63	N75	N76			RIGID	None	None	RIGID	Typical
61	MP3C	N77	N78			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
62	M65	N79	N83			RIGID	None	None	RIGID	Typical
63	M66	N80	N84			RIGID	None	None	RIGID	Typical
64	M67	N82	N86			RIGID	None	None	RIGID	Typical
65	M68A	N81	N85			RIGID	None	None	RIGID	Typical
66	MP5B	N87	N91			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
67	MP4B	N88	N92			Mount Pipe 2	Column	Pipe	A53 Gr.B	Typical
68	MP2B	N90	N94			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
69	MP1B	N89	N93			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
70	M73	N95	N96			RIGID	None	None	RIGID	Typical
71	MP3B	N97	N98			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
72	M79	N104	N103			RIGID	None	None	RIGID	Typical
73	M78A	N13	N14			Standoff Horiz...	Beam	SquareTube	A500 Gr.B...	Typical
74	M75	N24	N25			Standoff Horiz...	Beam	SquareTube	A500 Gr.B...	Typical
75	M76	N1	N2			Standoff Horiz...	Beam	SquareTube	A500 Gr.B...	Typical
76	M76A	N105	N106			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
77	M77	N103A	N104A			Mod Kicker	Beam	Double Angle (...)	A36 Gr.36	Typical
78	M78	N105A	N106A			Mod Kicker	Beam	Double Angle (...)	A36 Gr.36	Typical



Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
79	M79A	N107	N108			Mod Kicker	Beam	Double Angle (...)	A36 Gr.36	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M2		BenPIN				Yes	** NA **			None
2	M3		BenPIN				Yes	** NA **			None
3	M4A						Yes	** NA **			None
4	M5						Yes	** NA **			None
5	M6						Yes	** NA **			None
6	M7						Yes	** NA **			None
7	M8		BenPIN				Yes	** NA **			None
8	M9		BenPIN				Yes	** NA **			None
9	M10						Yes	** NA **			None
10	M11						Yes	** NA **			None
11	M12						Yes	** NA **			None
12	M13						Yes	** NA **			None
13	M15		BenPIN				Yes	** NA **			None
14	M16		BenPIN				Yes	** NA **			None
15	M17						Yes	** NA **			None
16	M18						Yes	** NA **			None
17	M19						Yes	** NA **			None
18	M20						Yes	** NA **			None
19	M21		BenPIN				Yes	** NA **			None
20	M22		BenPIN				Yes	** NA **			None
21	M23						Yes	** NA **			None
22	M24						Yes	** NA **			None
23	M25						Yes	** NA **			None
24	M26						Yes	** NA **			None
25	M28		BenPIN				Yes	** NA **			None
26	M29		BenPIN				Yes	** NA **			None
27	M30						Yes	** NA **			None
28	M31						Yes	** NA **			None
29	M32						Yes	** NA **			None
30	M33						Yes	** NA **			None
31	M34		BenPIN				Yes	** NA **			None
32	M35		BenPIN				Yes	** NA **			None
33	M36						Yes	** NA **			None
34	M37						Yes	** NA **			None
35	M38						Yes	** NA **			None
36	M39						Yes	** NA **			None
37	M40						Yes	** NA **			None
38	M41						Yes	** NA **			None
39	M42						Yes	** NA **			None
40	M43						Yes	** NA **			None
41	M44						Yes	** NA **			None
42	M45						Yes	** NA **			None
43	M46						Yes	** NA **			None
44	MP5A						Yes	** NA **			None
45	MP4A						Yes	** NA **			None
46	MP2A						Yes	** NA **			None
47	MP1A						Yes	** NA **			None
48	DC						Yes	** NA **			None
49	M68						Yes	** NA **			None
50	M69						Yes	** NA **			None
51	MP3A						Yes	** NA **			None



Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
52	M55						Yes	** NA **			None
53	M56						Yes	** NA **			None
54	M57						Yes	** NA **			None
55	M58						Yes	** NA **			None
56	MP5C						Yes	** NA **			None
57	MP4C						Yes	** NA **			None
58	MP2C						Yes	** NA **			None
59	MP1C						Yes	** NA **			None
60	M63						Yes	** NA **			None
61	MP3C						Yes	** NA **			None
62	M65						Yes	** NA **			None
63	M66						Yes	** NA **			None
64	M67						Yes	** NA **			None
65	M68A						Yes	** NA **			None
66	MP5B						Yes	** NA **			None
67	MP4B						Yes	** NA **			None
68	MP2B						Yes	** NA **			None
69	MP1B						Yes	** NA **			None
70	M73						Yes	** NA **			None
71	MP3B						Yes	** NA **			None
72	M79						Yes	** NA **			None
73	M78A						Yes				None
74	M75						Yes				None
75	M76						Yes				None
76	M76A						Yes	** NA **			None
77	M77	BenPIN	BenPIN				Yes	Default			None
78	M78	BenPIN	BenPIN				Yes	Default			None
79	M79A	BenPIN	BenPIN				Yes	Default			None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	Y	-28.65	.25
2	MP2A	My	-.014	.25
3	MP2A	Mz	0	.25
4	MP2A	Y	-28.65	2.25
5	MP2A	My	-.014	2.25
6	MP2A	Mz	0	2.25
7	MP2B	Y	-28.65	.25
8	MP2B	My	.007	.25
9	MP2B	Mz	-.012	.25
10	MP2B	Y	-28.65	2.25
11	MP2B	My	.007	2.25
12	MP2B	Mz	-.012	2.25
13	MP2C	Y	-28.65	.25
14	MP2C	My	.007	.25
15	MP2C	Mz	.012	.25
16	MP2C	Y	-28.65	2.25
17	MP2C	My	.007	2.25
18	MP2C	Mz	.012	2.25
19	MP2A	Y	-11	3.55
20	MP2A	My	-.005	3.55
21	MP2A	Mz	0	3.55
22	MP2A	Y	-11	4.55
23	MP2A	My	-.005	4.55
24	MP2A	Mz	0	4.55



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
25	MP2B	Y	-11	3.55
26	MP2B	My	.003	3.55
27	MP2B	Mz	-.005	3.55
28	MP2B	Y	-11	4.55
29	MP2B	My	.003	4.55
30	MP2B	Mz	-.005	4.55
31	MP2C	Y	-11	3.55
32	MP2C	My	.003	3.55
33	MP2C	Mz	.005	3.55
34	MP2C	Y	-11	4.55
35	MP2C	My	.003	4.55
36	MP2C	Mz	.005	4.55
37	DC	Y	-32	1.25
38	DC	My	.003	1.25
39	DC	Mz	.008	1.25
40	MP3A	Y	-74.7	2.5
41	MP3A	My	.037	2.5
42	MP3A	Mz	0	2.5
43	MP3B	Y	-74.7	2.5
44	MP3B	My	-.019	2.5
45	MP3B	Mz	.032	2.5
46	MP3C	Y	-74.7	2.5
47	MP3C	My	-.019	2.5
48	MP3C	Mz	-.032	2.5
49	MP4A	Y	-79.1	2.5
50	MP4A	My	.04	2.5
51	MP4A	Mz	0	2.5
52	MP4B	Y	-79.1	2.5
53	MP4B	My	-.02	2.5
54	MP4B	Mz	.034	2.5
55	MP4C	Y	-79.1	2.5
56	MP4C	My	-.02	2.5
57	MP4C	Mz	-.034	2.5
58	MP1A	Y	-8	.5
59	MP1A	My	-.004	.5
60	MP1A	Mz	0	.5
61	MP1A	Y	-8	5.5
62	MP1A	My	-.004	5.5
63	MP1A	Mz	0	5.5
64	MP1B	Y	-8	.5
65	MP1B	My	.002	.5
66	MP1B	Mz	-.003	.5
67	MP1B	Y	-8	5.5
68	MP1B	My	.002	5.5
69	MP1B	Mz	-.003	5.5
70	MP1C	Y	-8	.5
71	MP1C	My	.002	.5
72	MP1C	Mz	.003	.5
73	MP1C	Y	-8	5.5
74	MP1C	My	.002	5.5
75	MP1C	Mz	.003	5.5
76	MP5A	Y	-8	.5
77	MP5A	My	-.004	.5
78	MP5A	Mz	0	.5
79	MP5A	Y	-8	5.5
80	MP5A	My	-.004	5.5
81	MP5A	Mz	0	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
82	MP5B	Y	-8	.5
83	MP5B	My	.002	.5
84	MP5B	Mz	-.003	.5
85	MP5B	Y	-8	5.5
86	MP5B	My	.002	5.5
87	MP5B	Mz	-.003	5.5
88	MP5C	Y	-8	.5
89	MP5C	My	.002	.5
90	MP5C	Mz	.003	.5
91	MP5C	Y	-8	5.5
92	MP5C	My	.002	5.5
93	MP5C	Mz	.003	5.5
94	MP4A	Y	-16.75	.15
95	MP4A	My	-.008	.15
96	MP4A	Mz	.013	.15
97	MP4A	Y	-16.75	3.95
98	MP4A	My	-.008	3.95
99	MP4A	Mz	.013	3.95
100	MP4B	Y	-16.75	.15
101	MP4B	My	-.007	.15
102	MP4B	Mz	-.014	.15
103	MP4B	Y	-16.75	3.95
104	MP4B	My	-.007	3.95
105	MP4B	Mz	-.014	3.95
106	MP4C	Y	-16.75	.15
107	MP4C	My	.015	.15
108	MP4C	Mz	.000972	.15
109	MP4C	Y	-16.75	3.95
110	MP4C	My	.015	3.95
111	MP4C	Mz	.000972	3.95
112	MP4A	Y	-16.75	.15
113	MP4A	My	-.008	.15
114	MP4A	Mz	-.013	.15
115	MP4A	Y	-16.75	3.95
116	MP4A	My	-.008	3.95
117	MP4A	Mz	-.013	3.95
118	MP4B	Y	-16.75	.15
119	MP4B	My	.015	.15
120	MP4B	Mz	-.000972	.15
121	MP4B	Y	-16.75	3.95
122	MP4B	My	.015	3.95
123	MP4B	Mz	-.000972	3.95
124	MP4C	Y	-16.75	.15
125	MP4C	My	-.007	.15
126	MP4C	Mz	.014	.15
127	MP4C	Y	-16.75	3.95
128	MP4C	My	-.007	3.95
129	MP4C	Mz	.014	3.95
130	DC	Y	-32	1.5
131	DC	My	-.003	1.5
132	DC	Mz	-.008	1.5

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	Y	-30.636	.25
2	MP2A	My	-.015	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
3	MP2A	Mz	0	.25
4	MP2A	Y	-30.636	2.25
5	MP2A	My	-.015	2.25
6	MP2A	Mz	0	2.25
7	MP2B	Y	-30.636	.25
8	MP2B	My	.008	.25
9	MP2B	Mz	-.013	.25
10	MP2B	Y	-30.636	2.25
11	MP2B	My	.008	2.25
12	MP2B	Mz	-.013	2.25
13	MP2C	Y	-30.636	.25
14	MP2C	My	.008	.25
15	MP2C	Mz	.013	.25
16	MP2C	Y	-30.636	2.25
17	MP2C	My	.008	2.25
18	MP2C	Mz	.013	2.25
19	MP2A	Y	-10.525	3.55
20	MP2A	My	-.005	3.55
21	MP2A	Mz	0	3.55
22	MP2A	Y	-10.525	4.55
23	MP2A	My	-.005	4.55
24	MP2A	Mz	0	4.55
25	MP2B	Y	-10.525	3.55
26	MP2B	My	.003	3.55
27	MP2B	Mz	-.005	3.55
28	MP2B	Y	-10.525	4.55
29	MP2B	My	.003	4.55
30	MP2B	Mz	-.005	4.55
31	MP2C	Y	-10.525	3.55
32	MP2C	My	.003	3.55
33	MP2C	Mz	.005	3.55
34	MP2C	Y	-10.525	4.55
35	MP2C	My	.003	4.55
36	MP2C	Mz	.005	4.55
37	DC	Y	-90.385	1.25
38	DC	My	.008	1.25
39	DC	Mz	.021	1.25
40	MP3A	Y	-46.204	2.5
41	MP3A	My	.023	2.5
42	MP3A	Mz	0	2.5
43	MP3B	Y	-46.204	2.5
44	MP3B	My	-.012	2.5
45	MP3B	Mz	.02	2.5
46	MP3C	Y	-46.204	2.5
47	MP3C	My	-.012	2.5
48	MP3C	Mz	-.02	2.5
49	MP4A	Y	-46.693	2.5
50	MP4A	My	.023	2.5
51	MP4A	Mz	0	2.5
52	MP4B	Y	-46.693	2.5
53	MP4B	My	-.012	2.5
54	MP4B	Mz	.02	2.5
55	MP4C	Y	-46.693	2.5
56	MP4C	My	-.012	2.5
57	MP4C	Mz	-.02	2.5
58	MP1A	Y	-48.319	.5
59	MP1A	My	-.024	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
60	MP1A	Mz	0	.5
61	MP1A	Y	-48.319	5.5
62	MP1A	My	-.024	5.5
63	MP1A	Mz	0	5.5
64	MP1B	Y	-48.319	.5
65	MP1B	My	.012	.5
66	MP1B	Mz	-.021	.5
67	MP1B	Y	-48.319	5.5
68	MP1B	My	.012	5.5
69	MP1B	Mz	-.021	5.5
70	MP1C	Y	-48.319	.5
71	MP1C	My	.012	.5
72	MP1C	Mz	.021	.5
73	MP1C	Y	-48.319	5.5
74	MP1C	My	.012	5.5
75	MP1C	Mz	.021	5.5
76	MP5A	Y	-48.319	.5
77	MP5A	My	-.024	.5
78	MP5A	Mz	0	.5
79	MP5A	Y	-48.319	5.5
80	MP5A	My	-.024	5.5
81	MP5A	Mz	0	5.5
82	MP5B	Y	-48.319	.5
83	MP5B	My	.012	.5
84	MP5B	Mz	-.021	.5
85	MP5B	Y	-48.319	5.5
86	MP5B	My	.012	5.5
87	MP5B	Mz	-.021	5.5
88	MP5C	Y	-48.319	.5
89	MP5C	My	.012	.5
90	MP5C	Mz	.021	.5
91	MP5C	Y	-48.319	5.5
92	MP5C	My	.012	5.5
93	MP5C	Mz	.021	5.5
94	MP4A	Y	-48.712	.15
95	MP4A	My	-.024	.15
96	MP4A	Mz	.037	.15
97	MP4A	Y	-48.712	3.95
98	MP4A	My	-.024	3.95
99	MP4A	Mz	.037	3.95
100	MP4B	Y	-48.712	.15
101	MP4B	My	-.019	.15
102	MP4B	Mz	-.039	.15
103	MP4B	Y	-48.712	3.95
104	MP4B	My	-.019	3.95
105	MP4B	Mz	-.039	3.95
106	MP4C	Y	-48.712	.15
107	MP4C	My	.044	.15
108	MP4C	Mz	.003	.15
109	MP4C	Y	-48.712	3.95
110	MP4C	My	.044	3.95
111	MP4C	Mz	.003	3.95
112	MP4A	Y	-48.712	.15
113	MP4A	My	-.024	.15
114	MP4A	Mz	-.037	.15
115	MP4A	Y	-48.712	3.95
116	MP4A	My	-.024	3.95



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
117	MP4A	Mz	-.037	3.95
118	MP4B	Y	-48.712	.15
119	MP4B	My	.044	.15
120	MP4B	Mz	-.003	.15
121	MP4B	Y	-48.712	3.95
122	MP4B	My	.044	3.95
123	MP4B	Mz	-.003	3.95
124	MP4C	Y	-48.712	.15
125	MP4C	My	-.019	.15
126	MP4C	Mz	.039	.15
127	MP4C	Y	-48.712	3.95
128	MP4C	My	-.019	3.95
129	MP4C	Mz	.039	3.95
130	DC	Y	-90.385	1.5
131	DC	My	-.008	1.5
132	DC	Mz	-.021	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	0	.25
2	MP2A	Z	-73.985	.25
3	MP2A	Mx	0	.25
4	MP2A	X	0	2.25
5	MP2A	Z	-73.985	2.25
6	MP2A	Mx	0	2.25
7	MP2B	X	0	.25
8	MP2B	Z	-39.868	.25
9	MP2B	Mx	.017	.25
10	MP2B	X	0	2.25
11	MP2B	Z	-39.868	2.25
12	MP2B	Mx	.017	2.25
13	MP2C	X	0	.25
14	MP2C	Z	-39.868	.25
15	MP2C	Mx	-.017	.25
16	MP2C	X	0	2.25
17	MP2C	Z	-39.868	2.25
18	MP2C	Mx	-.017	2.25
19	MP2A	X	0	3.55
20	MP2A	Z	-16.983	3.55
21	MP2A	Mx	0	3.55
22	MP2A	X	0	4.55
23	MP2A	Z	-16.983	4.55
24	MP2A	Mx	0	4.55
25	MP2B	X	0	3.55
26	MP2B	Z	-12.591	3.55
27	MP2B	Mx	.005	3.55
28	MP2B	X	0	4.55
29	MP2B	Z	-12.591	4.55
30	MP2B	Mx	.005	4.55
31	MP2C	X	0	3.55
32	MP2C	Z	-12.591	3.55
33	MP2C	Mx	-.005	3.55
34	MP2C	X	0	4.55
35	MP2C	Z	-12.591	4.55
36	MP2C	Mx	-.005	4.55
37	DC	X	0	1.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
38	DC	Z	-120.293	1.25
39	DC	Mx	-.028	1.25
40	MP3A	X	0	2.5
41	MP3A	Z	-60.515	2.5
42	MP3A	Mx	0	2.5
43	MP3B	X	0	2.5
44	MP3B	Z	-45.582	2.5
45	MP3B	Mx	-.02	2.5
46	MP3C	X	0	2.5
47	MP3C	Z	-45.582	2.5
48	MP3C	Mx	.02	2.5
49	MP4A	X	0	2.5
50	MP4A	Z	-73.009	2.5
51	MP4A	Mx	0	2.5
52	MP4B	X	0	2.5
53	MP4B	Z	-55.586	2.5
54	MP4B	Mx	-.024	2.5
55	MP4C	X	0	2.5
56	MP4C	Z	-55.586	2.5
57	MP4C	Mx	.024	2.5
58	MP1A	X	0	.5
59	MP1A	Z	-97.801	.5
60	MP1A	Mx	0	.5
61	MP1A	X	0	5.5
62	MP1A	Z	-97.801	5.5
63	MP1A	Mx	0	5.5
64	MP1B	X	0	.5
65	MP1B	Z	-110.343	.5
66	MP1B	Mx	.048	.5
67	MP1B	X	0	5.5
68	MP1B	Z	-110.343	5.5
69	MP1B	Mx	.048	5.5
70	MP1C	X	0	.5
71	MP1C	Z	-110.343	.5
72	MP1C	Mx	-.048	.5
73	MP1C	X	0	5.5
74	MP1C	Z	-110.343	5.5
75	MP1C	Mx	-.048	5.5
76	MP5A	X	0	.5
77	MP5A	Z	-97.801	.5
78	MP5A	Mx	0	.5
79	MP5A	X	0	5.5
80	MP5A	Z	-97.801	5.5
81	MP5A	Mx	0	5.5
82	MP5B	X	0	.5
83	MP5B	Z	-110.343	.5
84	MP5B	Mx	.048	.5
85	MP5B	X	0	5.5
86	MP5B	Z	-110.343	5.5
87	MP5B	Mx	.048	5.5
88	MP5C	X	0	.5
89	MP5C	Z	-110.343	.5
90	MP5C	Mx	-.048	.5
91	MP5C	X	0	5.5
92	MP5C	Z	-110.343	5.5
93	MP5C	Mx	-.048	5.5
94	MP4A	X	0	.15



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
95	MP4A	Z	-114.784	.15
96	MP4A	Mx	-.086	.15
97	MP4A	X	0	3.95
98	MP4A	Z	-114.784	3.95
99	MP4A	Mx	-.086	3.95
100	MP4B	X	0	.15
101	MP4B	Z	-85.268	.15
102	MP4B	Mx	.069	.15
103	MP4B	X	0	3.95
104	MP4B	Z	-85.268	3.95
105	MP4B	Mx	.069	3.95
106	MP4C	X	0	.15
107	MP4C	Z	-85.268	.15
108	MP4C	Mx	-.005	.15
109	MP4C	X	0	3.95
110	MP4C	Z	-85.268	3.95
111	MP4C	Mx	-.005	3.95
112	MP4A	X	0	.15
113	MP4A	Z	-114.784	.15
114	MP4A	Mx	.086	.15
115	MP4A	X	0	3.95
116	MP4A	Z	-114.784	3.95
117	MP4A	Mx	.086	3.95
118	MP4B	X	0	.15
119	MP4B	Z	-85.268	.15
120	MP4B	Mx	.005	.15
121	MP4B	X	0	3.95
122	MP4B	Z	-85.268	3.95
123	MP4B	Mx	.005	3.95
124	MP4C	X	0	.15
125	MP4C	Z	-85.268	.15
126	MP4C	Mx	-.069	.15
127	MP4C	X	0	3.95
128	MP4C	Z	-85.268	3.95
129	MP4C	Mx	-.069	3.95
130	DC	X	0	1.5
131	DC	Z	-120.293	1.5
132	DC	Mx	.028	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	31.306	.25
2	MP2A	Z	-54.224	.25
3	MP2A	Mx	-.016	.25
4	MP2A	X	31.306	2.25
5	MP2A	Z	-54.224	2.25
6	MP2A	Mx	-.016	2.25
7	MP2B	X	14.248	.25
8	MP2B	Z	-24.678	.25
9	MP2B	Mx	.014	.25
10	MP2B	X	14.248	2.25
11	MP2B	Z	-24.678	2.25
12	MP2B	Mx	.014	2.25
13	MP2C	X	31.306	.25
14	MP2C	Z	-54.224	.25
15	MP2C	Mx	-.016	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
16	MP2C	X	31.306	2.25
17	MP2C	Z	-54.224	2.25
18	MP2C	Mx	-.016	2.25
19	MP2A	X	7.76	3.55
20	MP2A	Z	-13.44	3.55
21	MP2A	Mx	-.004	3.55
22	MP2A	X	7.76	4.55
23	MP2A	Z	-13.44	4.55
24	MP2A	Mx	-.004	4.55
25	MP2B	X	5.564	3.55
26	MP2B	Z	-9.636	3.55
27	MP2B	Mx	.006	3.55
28	MP2B	X	5.564	4.55
29	MP2B	Z	-9.636	4.55
30	MP2B	Mx	.006	4.55
31	MP2C	X	7.76	3.55
32	MP2C	Z	-13.44	3.55
33	MP2C	Mx	-.004	3.55
34	MP2C	X	7.76	4.55
35	MP2C	Z	-13.44	4.55
36	MP2C	Mx	-.004	4.55
37	DC	X	53.176	1.25
38	DC	Z	-92.103	1.25
39	DC	Mx	-.017	1.25
40	MP3A	X	27.769	2.5
41	MP3A	Z	-48.097	2.5
42	MP3A	Mx	.014	2.5
43	MP3B	X	20.302	2.5
44	MP3B	Z	-35.164	2.5
45	MP3B	Mx	-.02	2.5
46	MP3C	X	27.769	2.5
47	MP3C	Z	-48.097	2.5
48	MP3C	Mx	.014	2.5
49	MP4A	X	33.601	2.5
50	MP4A	Z	-58.198	2.5
51	MP4A	Mx	.017	2.5
52	MP4B	X	24.889	2.5
53	MP4B	Z	-43.11	2.5
54	MP4B	Mx	-.025	2.5
55	MP4C	X	33.601	2.5
56	MP4C	Z	-58.198	2.5
57	MP4C	Mx	.017	2.5
58	MP1A	X	50.991	.5
59	MP1A	Z	-88.318	.5
60	MP1A	Mx	-.025	.5
61	MP1A	X	50.991	5.5
62	MP1A	Z	-88.318	5.5
63	MP1A	Mx	-.025	5.5
64	MP1B	X	57.262	.5
65	MP1B	Z	-99.18	.5
66	MP1B	Mx	.057	.5
67	MP1B	X	57.262	5.5
68	MP1B	Z	-99.18	5.5
69	MP1B	Mx	.057	5.5
70	MP1C	X	50.991	.5
71	MP1C	Z	-88.318	.5
72	MP1C	Mx	-.025	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
73	MP1C	X	50.991	5.5
74	MP1C	Z	-88.318	5.5
75	MP1C	Mx	-.025	5.5
76	MP5A	X	50.991	.5
77	MP5A	Z	-88.318	.5
78	MP5A	Mx	-.025	.5
79	MP5A	X	50.991	5.5
80	MP5A	Z	-88.318	5.5
81	MP5A	Mx	-.025	5.5
82	MP5B	X	57.262	.5
83	MP5B	Z	-99.18	.5
84	MP5B	Mx	.057	.5
85	MP5B	X	57.262	5.5
86	MP5B	Z	-99.18	5.5
87	MP5B	Mx	.057	5.5
88	MP5C	X	50.991	.5
89	MP5C	Z	-88.318	.5
90	MP5C	Mx	-.025	.5
91	MP5C	X	50.991	5.5
92	MP5C	Z	-88.318	5.5
93	MP5C	Mx	-.025	5.5
94	MP4A	X	52.473	.15
95	MP4A	Z	-90.885	.15
96	MP4A	Mx	-.094	.15
97	MP4A	X	52.473	3.95
98	MP4A	Z	-90.885	3.95
99	MP4A	Mx	-.094	3.95
100	MP4B	X	37.715	.15
101	MP4B	Z	-65.324	.15
102	MP4B	Mx	.038	.15
103	MP4B	X	37.715	3.95
104	MP4B	Z	-65.324	3.95
105	MP4B	Mx	.038	3.95
106	MP4C	X	52.473	.15
107	MP4C	Z	-90.885	.15
108	MP4C	Mx	.042	.15
109	MP4C	X	52.473	3.95
110	MP4C	Z	-90.885	3.95
111	MP4C	Mx	.042	3.95
112	MP4A	X	52.473	.15
113	MP4A	Z	-90.885	.15
114	MP4A	Mx	.042	.15
115	MP4A	X	52.473	3.95
116	MP4A	Z	-90.885	3.95
117	MP4A	Mx	.042	3.95
118	MP4B	X	37.715	.15
119	MP4B	Z	-65.324	.15
120	MP4B	Mx	.038	.15
121	MP4B	X	37.715	3.95
122	MP4B	Z	-65.324	3.95
123	MP4B	Mx	.038	3.95
124	MP4C	X	52.473	.15
125	MP4C	Z	-90.885	.15
126	MP4C	Mx	-.094	.15
127	MP4C	X	52.473	3.95
128	MP4C	Z	-90.885	3.95
129	MP4C	Mx	-.094	3.95



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
130	DC	X	53.176	1.5
131	DC	Z	-92.103	1.5
132	DC	Mx	.017	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	34.526	.25
2	MP2A	Z	-19.934	.25
3	MP2A	Mx	-.017	.25
4	MP2A	X	34.526	2.25
5	MP2A	Z	-19.934	2.25
6	MP2A	Mx	-.017	2.25
7	MP2B	X	34.526	.25
8	MP2B	Z	-19.934	.25
9	MP2B	Mx	.017	.25
10	MP2B	X	34.526	2.25
11	MP2B	Z	-19.934	2.25
12	MP2B	Mx	.017	2.25
13	MP2C	X	64.073	.25
14	MP2C	Z	-36.992	.25
15	MP2C	Mx	0	.25
16	MP2C	X	64.073	2.25
17	MP2C	Z	-36.992	2.25
18	MP2C	Mx	0	2.25
19	MP2A	X	10.904	3.55
20	MP2A	Z	-6.296	3.55
21	MP2A	Mx	-.005	3.55
22	MP2A	X	10.904	4.55
23	MP2A	Z	-6.296	4.55
24	MP2A	Mx	-.005	4.55
25	MP2B	X	10.904	3.55
26	MP2B	Z	-6.296	3.55
27	MP2B	Mx	.005	3.55
28	MP2B	X	10.904	4.55
29	MP2B	Z	-6.296	4.55
30	MP2B	Mx	.005	4.55
31	MP2C	X	14.708	3.55
32	MP2C	Z	-8.492	3.55
33	MP2C	Mx	0	3.55
34	MP2C	X	14.708	4.55
35	MP2C	Z	-8.492	4.55
36	MP2C	Mx	0	4.55
37	DC	X	82.261	1.25
38	DC	Z	-47.493	1.25
39	DC	Mx	-.004	1.25
40	MP3A	X	39.475	2.5
41	MP3A	Z	-22.791	2.5
42	MP3A	Mx	.02	2.5
43	MP3B	X	39.475	2.5
44	MP3B	Z	-22.791	2.5
45	MP3B	Mx	-.02	2.5
46	MP3C	X	52.408	2.5
47	MP3C	Z	-30.258	2.5
48	MP3C	Mx	0	2.5
49	MP4A	X	48.139	2.5
50	MP4A	Z	-27.793	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
51	MP4A	Mx	.024	2.5
52	MP4B	X	48.139	2.5
53	MP4B	Z	-27.793	2.5
54	MP4B	Mx	-.024	2.5
55	MP4C	X	63.228	2.5
56	MP4C	Z	-36.504	2.5
57	MP4C	Mx	0	2.5
58	MP1A	X	95.56	.5
59	MP1A	Z	-55.171	.5
60	MP1A	Mx	-.048	.5
61	MP1A	X	95.56	5.5
62	MP1A	Z	-55.171	5.5
63	MP1A	Mx	-.048	5.5
64	MP1B	X	95.56	.5
65	MP1B	Z	-55.171	.5
66	MP1B	Mx	.048	.5
67	MP1B	X	95.56	5.5
68	MP1B	Z	-55.171	5.5
69	MP1B	Mx	.048	5.5
70	MP1C	X	84.698	.5
71	MP1C	Z	-48.9	.5
72	MP1C	Mx	0	.5
73	MP1C	X	84.698	5.5
74	MP1C	Z	-48.9	5.5
75	MP1C	Mx	0	5.5
76	MP5A	X	95.56	.5
77	MP5A	Z	-55.171	.5
78	MP5A	Mx	-.048	.5
79	MP5A	X	95.56	5.5
80	MP5A	Z	-55.171	5.5
81	MP5A	Mx	-.048	5.5
82	MP5B	X	95.56	.5
83	MP5B	Z	-55.171	.5
84	MP5B	Mx	.048	.5
85	MP5B	X	95.56	5.5
86	MP5B	Z	-55.171	5.5
87	MP5B	Mx	.048	5.5
88	MP5C	X	84.698	.5
89	MP5C	Z	-48.9	.5
90	MP5C	Mx	0	.5
91	MP5C	X	84.698	5.5
92	MP5C	Z	-48.9	5.5
93	MP5C	Mx	0	5.5
94	MP4A	X	73.844	.15
95	MP4A	Z	-42.634	.15
96	MP4A	Mx	-.069	.15
97	MP4A	X	73.844	3.95
98	MP4A	Z	-42.634	3.95
99	MP4A	Mx	-.069	3.95
100	MP4B	X	73.844	.15
101	MP4B	Z	-42.634	.15
102	MP4B	Mx	.005	.15
103	MP4B	X	73.844	3.95
104	MP4B	Z	-42.634	3.95
105	MP4B	Mx	.005	3.95
106	MP4C	X	99.406	.15
107	MP4C	Z	-57.392	.15



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
108	MP4C	Mx	.086	.15
109	MP4C	X	99.406	3.95
110	MP4C	Z	-57.392	3.95
111	MP4C	Mx	.086	3.95
112	MP4A	X	73.844	.15
113	MP4A	Z	-42.634	.15
114	MP4A	Mx	-.005	.15
115	MP4A	X	73.844	3.95
116	MP4A	Z	-42.634	3.95
117	MP4A	Mx	-.005	3.95
118	MP4B	X	73.844	.15
119	MP4B	Z	-42.634	.15
120	MP4B	Mx	.069	.15
121	MP4B	X	73.844	3.95
122	MP4B	Z	-42.634	3.95
123	MP4B	Mx	.069	3.95
124	MP4C	X	99.406	.15
125	MP4C	Z	-57.392	.15
126	MP4C	Mx	-.086	.15
127	MP4C	X	99.406	3.95
128	MP4C	Z	-57.392	3.95
129	MP4C	Mx	-.086	3.95
130	DC	X	82.261	1.5
131	DC	Z	-47.493	1.5
132	DC	Mx	.004	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	28.495	.25
2	MP2A	Z	0	.25
3	MP2A	Mx	-.014	.25
4	MP2A	X	28.495	2.25
5	MP2A	Z	0	2.25
6	MP2A	Mx	-.014	2.25
7	MP2B	X	62.612	.25
8	MP2B	Z	0	.25
9	MP2B	Mx	.016	.25
10	MP2B	X	62.612	2.25
11	MP2B	Z	0	2.25
12	MP2B	Mx	.016	2.25
13	MP2C	X	62.612	.25
14	MP2C	Z	0	.25
15	MP2C	Mx	.016	.25
16	MP2C	X	62.612	2.25
17	MP2C	Z	0	2.25
18	MP2C	Mx	.016	2.25
19	MP2A	X	11.127	3.55
20	MP2A	Z	0	3.55
21	MP2A	Mx	-.006	3.55
22	MP2A	X	11.127	4.55
23	MP2A	Z	0	4.55
24	MP2A	Mx	-.006	4.55
25	MP2B	X	15.519	3.55
26	MP2B	Z	0	3.55
27	MP2B	Mx	.004	3.55
28	MP2B	X	15.519	4.55



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
29	MP2B	Z	0	4.55
30	MP2B	Mx	.004	4.55
31	MP2C	X	15.519	3.55
32	MP2C	Z	0	3.55
33	MP2C	Mx	.004	3.55
34	MP2C	X	15.519	4.55
35	MP2C	Z	0	4.55
36	MP2C	Mx	.004	4.55
37	DC	X	97.563	1.25
38	DC	Z	0	1.25
39	DC	Mx	.008	1.25
40	MP3A	X	40.604	2.5
41	MP3A	Z	0	2.5
42	MP3A	Mx	.02	2.5
43	MP3B	X	55.537	2.5
44	MP3B	Z	0	2.5
45	MP3B	Mx	-.014	2.5
46	MP3C	X	55.537	2.5
47	MP3C	Z	0	2.5
48	MP3C	Mx	-.014	2.5
49	MP4A	X	49.779	2.5
50	MP4A	Z	0	2.5
51	MP4A	Mx	.025	2.5
52	MP4B	X	67.201	2.5
53	MP4B	Z	0	2.5
54	MP4B	Mx	-.017	2.5
55	MP4C	X	67.201	2.5
56	MP4C	Z	0	2.5
57	MP4C	Mx	-.017	2.5
58	MP1A	X	114.524	.5
59	MP1A	Z	0	.5
60	MP1A	Mx	-.057	.5
61	MP1A	X	114.524	5.5
62	MP1A	Z	0	5.5
63	MP1A	Mx	-.057	5.5
64	MP1B	X	101.981	.5
65	MP1B	Z	0	.5
66	MP1B	Mx	.025	.5
67	MP1B	X	101.981	5.5
68	MP1B	Z	0	5.5
69	MP1B	Mx	.025	5.5
70	MP1C	X	101.981	.5
71	MP1C	Z	0	.5
72	MP1C	Mx	.025	.5
73	MP1C	X	101.981	5.5
74	MP1C	Z	0	5.5
75	MP1C	Mx	.025	5.5
76	MP5A	X	114.524	.5
77	MP5A	Z	0	.5
78	MP5A	Mx	-.057	.5
79	MP5A	X	114.524	5.5
80	MP5A	Z	0	5.5
81	MP5A	Mx	-.057	5.5
82	MP5B	X	101.981	.5
83	MP5B	Z	0	.5
84	MP5B	Mx	.025	.5
85	MP5B	X	101.981	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
86	MP5B	Z	0	5.5
87	MP5B	Mx	.025	5.5
88	MP5C	X	101.981	.5
89	MP5C	Z	0	.5
90	MP5C	Mx	.025	.5
91	MP5C	X	101.981	5.5
92	MP5C	Z	0	5.5
93	MP5C	Mx	.025	5.5
94	MP4A	X	75.43	.15
95	MP4A	Z	0	.15
96	MP4A	Mx	-.038	.15
97	MP4A	X	75.43	3.95
98	MP4A	Z	0	3.95
99	MP4A	Mx	-.038	3.95
100	MP4B	X	104.945	.15
101	MP4B	Z	0	.15
102	MP4B	Mx	-.042	.15
103	MP4B	X	104.945	3.95
104	MP4B	Z	0	3.95
105	MP4B	Mx	-.042	3.95
106	MP4C	X	104.945	.15
107	MP4C	Z	0	.15
108	MP4C	Mx	.094	.15
109	MP4C	X	104.945	3.95
110	MP4C	Z	0	3.95
111	MP4C	Mx	.094	3.95
112	MP4A	X	75.43	.15
113	MP4A	Z	0	.15
114	MP4A	Mx	-.038	.15
115	MP4A	X	75.43	3.95
116	MP4A	Z	0	3.95
117	MP4A	Mx	-.038	3.95
118	MP4B	X	104.945	.15
119	MP4B	Z	0	.15
120	MP4B	Mx	.094	.15
121	MP4B	X	104.945	3.95
122	MP4B	Z	0	3.95
123	MP4B	Mx	.094	3.95
124	MP4C	X	104.945	.15
125	MP4C	Z	0	.15
126	MP4C	Mx	-.042	.15
127	MP4C	X	104.945	3.95
128	MP4C	Z	0	3.95
129	MP4C	Mx	-.042	3.95
130	DC	X	97.563	1.5
131	DC	Z	0	1.5
132	DC	Mx	-.008	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	34.526	.25
2	MP2A	Z	19.934	.25
3	MP2A	Mx	-.017	.25
4	MP2A	X	34.526	2.25
5	MP2A	Z	19.934	2.25
6	MP2A	Mx	-.017	2.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
7	MP2B	X	64.073	.25
8	MP2B	Z	36.992	.25
9	MP2B	Mx	0	.25
10	MP2B	X	64.073	2.25
11	MP2B	Z	36.992	2.25
12	MP2B	Mx	0	2.25
13	MP2C	X	34.526	.25
14	MP2C	Z	19.934	.25
15	MP2C	Mx	.017	.25
16	MP2C	X	34.526	2.25
17	MP2C	Z	19.934	2.25
18	MP2C	Mx	.017	2.25
19	MP2A	X	10.904	3.55
20	MP2A	Z	6.296	3.55
21	MP2A	Mx	-.005	3.55
22	MP2A	X	10.904	4.55
23	MP2A	Z	6.296	4.55
24	MP2A	Mx	-.005	4.55
25	MP2B	X	14.708	3.55
26	MP2B	Z	8.492	3.55
27	MP2B	Mx	0	3.55
28	MP2B	X	14.708	4.55
29	MP2B	Z	8.492	4.55
30	MP2B	Mx	0	4.55
31	MP2C	X	10.904	3.55
32	MP2C	Z	6.296	3.55
33	MP2C	Mx	.005	3.55
34	MP2C	X	10.904	4.55
35	MP2C	Z	6.296	4.55
36	MP2C	Mx	.005	4.55
37	DC	X	96.565	1.25
38	DC	Z	55.752	1.25
39	DC	Mx	.021	1.25
40	MP3A	X	39.475	2.5
41	MP3A	Z	22.791	2.5
42	MP3A	Mx	.02	2.5
43	MP3B	X	52.408	2.5
44	MP3B	Z	30.258	2.5
45	MP3B	Mx	0	2.5
46	MP3C	X	39.475	2.5
47	MP3C	Z	22.791	2.5
48	MP3C	Mx	-.02	2.5
49	MP4A	X	48.139	2.5
50	MP4A	Z	27.793	2.5
51	MP4A	Mx	.024	2.5
52	MP4B	X	63.228	2.5
53	MP4B	Z	36.504	2.5
54	MP4B	Mx	0	2.5
55	MP4C	X	48.139	2.5
56	MP4C	Z	27.793	2.5
57	MP4C	Mx	-.024	2.5
58	MP1A	X	95.56	.5
59	MP1A	Z	55.171	.5
60	MP1A	Mx	-.048	.5
61	MP1A	X	95.56	5.5
62	MP1A	Z	55.171	5.5
63	MP1A	Mx	-.048	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
64	MP1B	X	84.698	.5
65	MP1B	Z	48.9	.5
66	MP1B	Mx	0	.5
67	MP1B	X	84.698	5.5
68	MP1B	Z	48.9	5.5
69	MP1B	Mx	0	5.5
70	MP1C	X	95.56	.5
71	MP1C	Z	55.171	.5
72	MP1C	Mx	.048	.5
73	MP1C	X	95.56	5.5
74	MP1C	Z	55.171	5.5
75	MP1C	Mx	.048	5.5
76	MP5A	X	95.56	.5
77	MP5A	Z	55.171	.5
78	MP5A	Mx	-.048	.5
79	MP5A	X	95.56	5.5
80	MP5A	Z	55.171	5.5
81	MP5A	Mx	-.048	5.5
82	MP5B	X	84.698	.5
83	MP5B	Z	48.9	.5
84	MP5B	Mx	0	.5
85	MP5B	X	84.698	5.5
86	MP5B	Z	48.9	5.5
87	MP5B	Mx	0	5.5
88	MP5C	X	95.56	.5
89	MP5C	Z	55.171	.5
90	MP5C	Mx	.048	.5
91	MP5C	X	95.56	5.5
92	MP5C	Z	55.171	5.5
93	MP5C	Mx	.048	5.5
94	MP4A	X	73.844	.15
95	MP4A	Z	42.634	.15
96	MP4A	Mx	-.005	.15
97	MP4A	X	73.844	3.95
98	MP4A	Z	42.634	3.95
99	MP4A	Mx	-.005	3.95
100	MP4B	X	99.406	.15
101	MP4B	Z	57.392	.15
102	MP4B	Mx	-.086	.15
103	MP4B	X	99.406	3.95
104	MP4B	Z	57.392	3.95
105	MP4B	Mx	-.086	3.95
106	MP4C	X	73.844	.15
107	MP4C	Z	42.634	.15
108	MP4C	Mx	.069	.15
109	MP4C	X	73.844	3.95
110	MP4C	Z	42.634	3.95
111	MP4C	Mx	.069	3.95
112	MP4A	X	73.844	.15
113	MP4A	Z	42.634	.15
114	MP4A	Mx	-.069	.15
115	MP4A	X	73.844	3.95
116	MP4A	Z	42.634	3.95
117	MP4A	Mx	-.069	3.95
118	MP4B	X	99.406	.15
119	MP4B	Z	57.392	.15
120	MP4B	Mx	.086	.15



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
121	MP4B	X	99.406	3.95
122	MP4B	Z	57.392	3.95
123	MP4B	Mx	.086	3.95
124	MP4C	X	73.844	.15
125	MP4C	Z	42.634	.15
126	MP4C	Mx	.005	.15
127	MP4C	X	73.844	3.95
128	MP4C	Z	42.634	3.95
129	MP4C	Mx	.005	3.95
130	DC	X	96.565	1.5
131	DC	Z	55.752	1.5
132	DC	Mx	-.021	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	31.306	.25
2	MP2A	Z	54.224	.25
3	MP2A	Mx	-.016	.25
4	MP2A	X	31.306	2.25
5	MP2A	Z	54.224	2.25
6	MP2A	Mx	-.016	2.25
7	MP2B	X	31.306	.25
8	MP2B	Z	54.224	.25
9	MP2B	Mx	-.016	.25
10	MP2B	X	31.306	2.25
11	MP2B	Z	54.224	2.25
12	MP2B	Mx	-.016	2.25
13	MP2C	X	14.248	.25
14	MP2C	Z	24.678	.25
15	MP2C	Mx	.014	.25
16	MP2C	X	14.248	2.25
17	MP2C	Z	24.678	2.25
18	MP2C	Mx	.014	2.25
19	MP2A	X	7.76	3.55
20	MP2A	Z	13.44	3.55
21	MP2A	Mx	-.004	3.55
22	MP2A	X	7.76	4.55
23	MP2A	Z	13.44	4.55
24	MP2A	Mx	-.004	4.55
25	MP2B	X	7.76	3.55
26	MP2B	Z	13.44	3.55
27	MP2B	Mx	-.004	3.55
28	MP2B	X	7.76	4.55
29	MP2B	Z	13.44	4.55
30	MP2B	Mx	-.004	4.55
31	MP2C	X	5.564	3.55
32	MP2C	Z	9.636	3.55
33	MP2C	Mx	.006	3.55
34	MP2C	X	5.564	4.55
35	MP2C	Z	9.636	4.55
36	MP2C	Mx	.006	4.55
37	DC	X	61.434	1.25
38	DC	Z	106.408	1.25
39	DC	Mx	.03	1.25
40	MP3A	X	27.769	2.5
41	MP3A	Z	48.097	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
42	MP3A	Mx	.014	2.5
43	MP3B	X	27.769	2.5
44	MP3B	Z	48.097	2.5
45	MP3B	Mx	.014	2.5
46	MP3C	X	20.302	2.5
47	MP3C	Z	35.164	2.5
48	MP3C	Mx	-.02	2.5
49	MP4A	X	33.601	2.5
50	MP4A	Z	58.198	2.5
51	MP4A	Mx	.017	2.5
52	MP4B	X	33.601	2.5
53	MP4B	Z	58.198	2.5
54	MP4B	Mx	.017	2.5
55	MP4C	X	24.889	2.5
56	MP4C	Z	43.11	2.5
57	MP4C	Mx	-.025	2.5
58	MP1A	X	50.991	.5
59	MP1A	Z	88.318	.5
60	MP1A	Mx	-.025	.5
61	MP1A	X	50.991	5.5
62	MP1A	Z	88.318	5.5
63	MP1A	Mx	-.025	5.5
64	MP1B	X	50.991	.5
65	MP1B	Z	88.318	.5
66	MP1B	Mx	-.025	.5
67	MP1B	X	50.991	5.5
68	MP1B	Z	88.318	5.5
69	MP1B	Mx	-.025	5.5
70	MP1C	X	57.262	.5
71	MP1C	Z	99.18	.5
72	MP1C	Mx	.057	.5
73	MP1C	X	57.262	5.5
74	MP1C	Z	99.18	5.5
75	MP1C	Mx	.057	5.5
76	MP5A	X	50.991	.5
77	MP5A	Z	88.318	.5
78	MP5A	Mx	-.025	.5
79	MP5A	X	50.991	5.5
80	MP5A	Z	88.318	5.5
81	MP5A	Mx	-.025	5.5
82	MP5B	X	50.991	.5
83	MP5B	Z	88.318	.5
84	MP5B	Mx	-.025	.5
85	MP5B	X	50.991	5.5
86	MP5B	Z	88.318	5.5
87	MP5B	Mx	-.025	5.5
88	MP5C	X	57.262	.5
89	MP5C	Z	99.18	.5
90	MP5C	Mx	.057	.5
91	MP5C	X	57.262	5.5
92	MP5C	Z	99.18	5.5
93	MP5C	Mx	.057	5.5
94	MP4A	X	52.473	.15
95	MP4A	Z	90.885	.15
96	MP4A	Mx	.042	.15
97	MP4A	X	52.473	3.95
98	MP4A	Z	90.885	3.95



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
99	MP4A	Mx	.042	3.95
100	MP4B	X	52.473	.15
101	MP4B	Z	90.885	.15
102	MP4B	Mx	-.094	.15
103	MP4B	X	52.473	3.95
104	MP4B	Z	90.885	3.95
105	MP4B	Mx	-.094	3.95
106	MP4C	X	37.715	.15
107	MP4C	Z	65.324	.15
108	MP4C	Mx	.038	.15
109	MP4C	X	37.715	3.95
110	MP4C	Z	65.324	3.95
111	MP4C	Mx	.038	3.95
112	MP4A	X	52.473	.15
113	MP4A	Z	90.885	.15
114	MP4A	Mx	-.094	.15
115	MP4A	X	52.473	3.95
116	MP4A	Z	90.885	3.95
117	MP4A	Mx	-.094	3.95
118	MP4B	X	52.473	.15
119	MP4B	Z	90.885	.15
120	MP4B	Mx	.042	.15
121	MP4B	X	52.473	3.95
122	MP4B	Z	90.885	3.95
123	MP4B	Mx	.042	3.95
124	MP4C	X	37.715	.15
125	MP4C	Z	65.324	.15
126	MP4C	Mx	.038	.15
127	MP4C	X	37.715	3.95
128	MP4C	Z	65.324	3.95
129	MP4C	Mx	.038	3.95
130	DC	X	61.434	1.5
131	DC	Z	106.408	1.5
132	DC	Mx	-.03	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	0	.25
2	MP2A	Z	73.985	.25
3	MP2A	Mx	0	.25
4	MP2A	X	0	2.25
5	MP2A	Z	73.985	2.25
6	MP2A	Mx	0	2.25
7	MP2B	X	0	.25
8	MP2B	Z	39.868	.25
9	MP2B	Mx	-.017	.25
10	MP2B	X	0	2.25
11	MP2B	Z	39.868	2.25
12	MP2B	Mx	-.017	2.25
13	MP2C	X	0	.25
14	MP2C	Z	39.868	.25
15	MP2C	Mx	.017	.25
16	MP2C	X	0	2.25
17	MP2C	Z	39.868	2.25
18	MP2C	Mx	.017	2.25
19	MP2A	X	0	3.55



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
77	MP5A	Z	97.801	.5
78	MP5A	Mx	0	.5
79	MP5A	X	0	5.5
80	MP5A	Z	97.801	5.5
81	MP5A	Mx	0	5.5
82	MP5B	X	0	.5
83	MP5B	Z	110.343	.5
84	MP5B	Mx	-.048	.5
85	MP5B	X	0	5.5
86	MP5B	Z	110.343	5.5
87	MP5B	Mx	-.048	5.5
88	MP5C	X	0	.5
89	MP5C	Z	110.343	.5
90	MP5C	Mx	.048	.5
91	MP5C	X	0	5.5
92	MP5C	Z	110.343	5.5
93	MP5C	Mx	.048	5.5
94	MP4A	X	0	.15
95	MP4A	Z	114.784	.15
96	MP4A	Mx	.086	.15
97	MP4A	X	0	3.95
98	MP4A	Z	114.784	3.95
99	MP4A	Mx	.086	3.95
100	MP4B	X	0	.15
101	MP4B	Z	85.268	.15
102	MP4B	Mx	-.069	.15
103	MP4B	X	0	3.95
104	MP4B	Z	85.268	3.95
105	MP4B	Mx	-.069	3.95
106	MP4C	X	0	.15
107	MP4C	Z	85.268	.15
108	MP4C	Mx	.005	.15
109	MP4C	X	0	3.95
110	MP4C	Z	85.268	3.95
111	MP4C	Mx	.005	3.95
112	MP4A	X	0	.15
113	MP4A	Z	114.784	.15
114	MP4A	Mx	-.086	.15
115	MP4A	X	0	3.95
116	MP4A	Z	114.784	3.95
117	MP4A	Mx	-.086	3.95
118	MP4B	X	0	.15
119	MP4B	Z	85.268	.15
120	MP4B	Mx	-.005	.15
121	MP4B	X	0	3.95
122	MP4B	Z	85.268	3.95
123	MP4B	Mx	-.005	3.95
124	MP4C	X	0	.15
125	MP4C	Z	85.268	.15
126	MP4C	Mx	.069	.15
127	MP4C	X	0	3.95
128	MP4C	Z	85.268	3.95
129	MP4C	Mx	.069	3.95
130	DC	X	0	1.5
131	DC	Z	120.293	1.5
132	DC	Mx	-.028	1.5



Company : Colliers Engineering & Design
 Designer : DAB
 Job Number : Project No. 10214357
 Model Name : 5000246846-VZW_MT_LO_H

Dec 14, 2023
 4:09 PM
 Checked By: DX

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	-31.306	.25
2	MP2A	Z	54.224	.25
3	MP2A	Mx	.016	.25
4	MP2A	X	-31.306	2.25
5	MP2A	Z	54.224	2.25
6	MP2A	Mx	.016	2.25
7	MP2B	X	-14.248	.25
8	MP2B	Z	24.678	.25
9	MP2B	Mx	-.014	.25
10	MP2B	X	-14.248	2.25
11	MP2B	Z	24.678	2.25
12	MP2B	Mx	-.014	2.25
13	MP2C	X	-31.306	.25
14	MP2C	Z	54.224	.25
15	MP2C	Mx	.016	.25
16	MP2C	X	-31.306	2.25
17	MP2C	Z	54.224	2.25
18	MP2C	Mx	.016	2.25
19	MP2A	X	-7.76	3.55
20	MP2A	Z	13.44	3.55
21	MP2A	Mx	.004	3.55
22	MP2A	X	-7.76	4.55
23	MP2A	Z	13.44	4.55
24	MP2A	Mx	.004	4.55
25	MP2B	X	-5.564	3.55
26	MP2B	Z	9.636	3.55
27	MP2B	Mx	-.006	3.55
28	MP2B	X	-5.564	4.55
29	MP2B	Z	9.636	4.55
30	MP2B	Mx	-.006	4.55
31	MP2C	X	-7.76	3.55
32	MP2C	Z	13.44	3.55
33	MP2C	Mx	.004	3.55
34	MP2C	X	-7.76	4.55
35	MP2C	Z	13.44	4.55
36	MP2C	Mx	.004	4.55
37	DC	X	-53.176	1.25
38	DC	Z	92.103	1.25
39	DC	Mx	.017	1.25
40	MP3A	X	-27.769	2.5
41	MP3A	Z	48.097	2.5
42	MP3A	Mx	-.014	2.5
43	MP3B	X	-20.302	2.5
44	MP3B	Z	35.164	2.5
45	MP3B	Mx	.02	2.5
46	MP3C	X	-27.769	2.5
47	MP3C	Z	48.097	2.5
48	MP3C	Mx	-.014	2.5
49	MP4A	X	-33.601	2.5
50	MP4A	Z	58.198	2.5
51	MP4A	Mx	-.017	2.5
52	MP4B	X	-24.889	2.5
53	MP4B	Z	43.11	2.5
54	MP4B	Mx	.025	2.5
55	MP4C	X	-33.601	2.5
56	MP4C	Z	58.198	2.5
57	MP4C	Mx	-.017	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP1A	X	-50.991	.5
59	MP1A	Z	88.318	.5
60	MP1A	Mx	.025	.5
61	MP1A	X	-50.991	5.5
62	MP1A	Z	88.318	5.5
63	MP1A	Mx	.025	5.5
64	MP1B	X	-57.262	.5
65	MP1B	Z	99.18	.5
66	MP1B	Mx	-.057	.5
67	MP1B	X	-57.262	5.5
68	MP1B	Z	99.18	5.5
69	MP1B	Mx	-.057	5.5
70	MP1C	X	-50.991	.5
71	MP1C	Z	88.318	.5
72	MP1C	Mx	.025	.5
73	MP1C	X	-50.991	5.5
74	MP1C	Z	88.318	5.5
75	MP1C	Mx	.025	5.5
76	MP5A	X	-50.991	.5
77	MP5A	Z	88.318	.5
78	MP5A	Mx	.025	.5
79	MP5A	X	-50.991	5.5
80	MP5A	Z	88.318	5.5
81	MP5A	Mx	.025	5.5
82	MP5B	X	-57.262	.5
83	MP5B	Z	99.18	.5
84	MP5B	Mx	-.057	.5
85	MP5B	X	-57.262	5.5
86	MP5B	Z	99.18	5.5
87	MP5B	Mx	-.057	5.5
88	MP5C	X	-50.991	.5
89	MP5C	Z	88.318	.5
90	MP5C	Mx	.025	.5
91	MP5C	X	-50.991	5.5
92	MP5C	Z	88.318	5.5
93	MP5C	Mx	.025	5.5
94	MP4A	X	-52.473	.15
95	MP4A	Z	90.885	.15
96	MP4A	Mx	.094	.15
97	MP4A	X	-52.473	3.95
98	MP4A	Z	90.885	3.95
99	MP4A	Mx	.094	3.95
100	MP4B	X	-37.715	.15
101	MP4B	Z	65.324	.15
102	MP4B	Mx	-.038	.15
103	MP4B	X	-37.715	3.95
104	MP4B	Z	65.324	3.95
105	MP4B	Mx	-.038	3.95
106	MP4C	X	-52.473	.15
107	MP4C	Z	90.885	.15
108	MP4C	Mx	-.042	.15
109	MP4C	X	-52.473	3.95
110	MP4C	Z	90.885	3.95
111	MP4C	Mx	-.042	3.95
112	MP4A	X	-52.473	.15
113	MP4A	Z	90.885	.15
114	MP4A	Mx	-.042	.15



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
115	MP4A	X	-52.473	3.95
116	MP4A	Z	90.885	3.95
117	MP4A	Mx	-.042	3.95
118	MP4B	X	-37.715	.15
119	MP4B	Z	65.324	.15
120	MP4B	Mx	-.038	.15
121	MP4B	X	-37.715	3.95
122	MP4B	Z	65.324	3.95
123	MP4B	Mx	-.038	3.95
124	MP4C	X	-52.473	.15
125	MP4C	Z	90.885	.15
126	MP4C	Mx	.094	.15
127	MP4C	X	-52.473	3.95
128	MP4C	Z	90.885	3.95
129	MP4C	Mx	.094	3.95
130	DC	X	-53.176	1.5
131	DC	Z	92.103	1.5
132	DC	Mx	-.017	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-34.526	.25
2	MP2A	Z	19.934	.25
3	MP2A	Mx	.017	.25
4	MP2A	X	-34.526	2.25
5	MP2A	Z	19.934	2.25
6	MP2A	Mx	.017	2.25
7	MP2B	X	-34.526	.25
8	MP2B	Z	19.934	.25
9	MP2B	Mx	-.017	.25
10	MP2B	X	-34.526	2.25
11	MP2B	Z	19.934	2.25
12	MP2B	Mx	-.017	2.25
13	MP2C	X	-64.073	.25
14	MP2C	Z	36.992	.25
15	MP2C	Mx	0	.25
16	MP2C	X	-64.073	2.25
17	MP2C	Z	36.992	2.25
18	MP2C	Mx	0	2.25
19	MP2A	X	-10.904	3.55
20	MP2A	Z	6.296	3.55
21	MP2A	Mx	.005	3.55
22	MP2A	X	-10.904	4.55
23	MP2A	Z	6.296	4.55
24	MP2A	Mx	.005	4.55
25	MP2B	X	-10.904	3.55
26	MP2B	Z	6.296	3.55
27	MP2B	Mx	-.005	3.55
28	MP2B	X	-10.904	4.55
29	MP2B	Z	6.296	4.55
30	MP2B	Mx	-.005	4.55
31	MP2C	X	-14.708	3.55
32	MP2C	Z	8.492	3.55
33	MP2C	Mx	0	3.55
34	MP2C	X	-14.708	4.55
35	MP2C	Z	8.492	4.55



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
36	MP2C	Mx	0	4.55
37	DC	X	-82.261	1.25
38	DC	Z	47.493	1.25
39	DC	Mx	.004	1.25
40	MP3A	X	-39.475	2.5
41	MP3A	Z	22.791	2.5
42	MP3A	Mx	-.02	2.5
43	MP3B	X	-39.475	2.5
44	MP3B	Z	22.791	2.5
45	MP3B	Mx	.02	2.5
46	MP3C	X	-52.408	2.5
47	MP3C	Z	30.258	2.5
48	MP3C	Mx	0	2.5
49	MP4A	X	-48.139	2.5
50	MP4A	Z	27.793	2.5
51	MP4A	Mx	-.024	2.5
52	MP4B	X	-48.139	2.5
53	MP4B	Z	27.793	2.5
54	MP4B	Mx	.024	2.5
55	MP4C	X	-63.228	2.5
56	MP4C	Z	36.504	2.5
57	MP4C	Mx	0	2.5
58	MP1A	X	-95.56	.5
59	MP1A	Z	55.171	.5
60	MP1A	Mx	.048	.5
61	MP1A	X	-95.56	5.5
62	MP1A	Z	55.171	5.5
63	MP1A	Mx	.048	5.5
64	MP1B	X	-95.56	.5
65	MP1B	Z	55.171	.5
66	MP1B	Mx	-.048	.5
67	MP1B	X	-95.56	5.5
68	MP1B	Z	55.171	5.5
69	MP1B	Mx	-.048	5.5
70	MP1C	X	-84.698	.5
71	MP1C	Z	48.9	.5
72	MP1C	Mx	0	.5
73	MP1C	X	-84.698	5.5
74	MP1C	Z	48.9	5.5
75	MP1C	Mx	0	5.5
76	MP5A	X	-95.56	.5
77	MP5A	Z	55.171	.5
78	MP5A	Mx	.048	.5
79	MP5A	X	-95.56	5.5
80	MP5A	Z	55.171	5.5
81	MP5A	Mx	.048	5.5
82	MP5B	X	-95.56	.5
83	MP5B	Z	55.171	.5
84	MP5B	Mx	-.048	.5
85	MP5B	X	-95.56	5.5
86	MP5B	Z	55.171	5.5
87	MP5B	Mx	-.048	5.5
88	MP5C	X	-84.698	.5
89	MP5C	Z	48.9	.5
90	MP5C	Mx	0	.5
91	MP5C	X	-84.698	5.5
92	MP5C	Z	48.9	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
14	MP2C	Z	0	.25
15	MP2C	Mx	-.016	.25
16	MP2C	X	-62.612	2.25
17	MP2C	Z	0	2.25
18	MP2C	Mx	-.016	2.25
19	MP2A	X	-11.127	3.55
20	MP2A	Z	0	3.55
21	MP2A	Mx	.006	3.55
22	MP2A	X	-11.127	4.55
23	MP2A	Z	0	4.55
24	MP2A	Mx	.006	4.55
25	MP2B	X	-15.519	3.55
26	MP2B	Z	0	3.55
27	MP2B	Mx	-.004	3.55
28	MP2B	X	-15.519	4.55
29	MP2B	Z	0	4.55
30	MP2B	Mx	-.004	4.55
31	MP2C	X	-15.519	3.55
32	MP2C	Z	0	3.55
33	MP2C	Mx	-.004	3.55
34	MP2C	X	-15.519	4.55
35	MP2C	Z	0	4.55
36	MP2C	Mx	-.004	4.55
37	DC	X	-97.563	1.25
38	DC	Z	0	1.25
39	DC	Mx	-.008	1.25
40	MP3A	X	-40.604	2.5
41	MP3A	Z	0	2.5
42	MP3A	Mx	-.02	2.5
43	MP3B	X	-55.537	2.5
44	MP3B	Z	0	2.5
45	MP3B	Mx	.014	2.5
46	MP3C	X	-55.537	2.5
47	MP3C	Z	0	2.5
48	MP3C	Mx	.014	2.5
49	MP4A	X	-49.779	2.5
50	MP4A	Z	0	2.5
51	MP4A	Mx	-.025	2.5
52	MP4B	X	-67.201	2.5
53	MP4B	Z	0	2.5
54	MP4B	Mx	.017	2.5
55	MP4C	X	-67.201	2.5
56	MP4C	Z	0	2.5
57	MP4C	Mx	.017	2.5
58	MP1A	X	-114.524	.5
59	MP1A	Z	0	.5
60	MP1A	Mx	.057	.5
61	MP1A	X	-114.524	5.5
62	MP1A	Z	0	5.5
63	MP1A	Mx	.057	5.5
64	MP1B	X	-101.981	.5
65	MP1B	Z	0	.5
66	MP1B	Mx	-.025	.5
67	MP1B	X	-101.981	5.5
68	MP1B	Z	0	5.5
69	MP1B	Mx	-.025	5.5
70	MP1C	X	-101.981	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
71	MP1C	Z	0	.5
72	MP1C	Mx	-.025	.5
73	MP1C	X	-101.981	5.5
74	MP1C	Z	0	5.5
75	MP1C	Mx	-.025	5.5
76	MP5A	X	-114.524	.5
77	MP5A	Z	0	.5
78	MP5A	Mx	.057	.5
79	MP5A	X	-114.524	5.5
80	MP5A	Z	0	5.5
81	MP5A	Mx	.057	5.5
82	MP5B	X	-101.981	.5
83	MP5B	Z	0	.5
84	MP5B	Mx	-.025	.5
85	MP5B	X	-101.981	5.5
86	MP5B	Z	0	5.5
87	MP5B	Mx	-.025	5.5
88	MP5C	X	-101.981	.5
89	MP5C	Z	0	.5
90	MP5C	Mx	-.025	.5
91	MP5C	X	-101.981	5.5
92	MP5C	Z	0	5.5
93	MP5C	Mx	-.025	5.5
94	MP4A	X	-75.43	.15
95	MP4A	Z	0	.15
96	MP4A	Mx	.038	.15
97	MP4A	X	-75.43	3.95
98	MP4A	Z	0	3.95
99	MP4A	Mx	.038	3.95
100	MP4B	X	-104.945	.15
101	MP4B	Z	0	.15
102	MP4B	Mx	.042	.15
103	MP4B	X	-104.945	3.95
104	MP4B	Z	0	3.95
105	MP4B	Mx	.042	3.95
106	MP4C	X	-104.945	.15
107	MP4C	Z	0	.15
108	MP4C	Mx	-.094	.15
109	MP4C	X	-104.945	3.95
110	MP4C	Z	0	3.95
111	MP4C	Mx	-.094	3.95
112	MP4A	X	-75.43	.15
113	MP4A	Z	0	.15
114	MP4A	Mx	.038	.15
115	MP4A	X	-75.43	3.95
116	MP4A	Z	0	3.95
117	MP4A	Mx	.038	3.95
118	MP4B	X	-104.945	.15
119	MP4B	Z	0	.15
120	MP4B	Mx	-.094	.15
121	MP4B	X	-104.945	3.95
122	MP4B	Z	0	3.95
123	MP4B	Mx	-.094	3.95
124	MP4C	X	-104.945	.15
125	MP4C	Z	0	.15
126	MP4C	Mx	.042	.15
127	MP4C	X	-104.945	3.95



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
49	MP4A	X	-48.139	2.5
50	MP4A	Z	-27.793	2.5
51	MP4A	Mx	-.024	2.5
52	MP4B	X	-63.228	2.5
53	MP4B	Z	-36.504	2.5
54	MP4B	Mx	0	2.5
55	MP4C	X	-48.139	2.5
56	MP4C	Z	-27.793	2.5
57	MP4C	Mx	.024	2.5
58	MP1A	X	-95.56	.5
59	MP1A	Z	-55.171	.5
60	MP1A	Mx	.048	.5
61	MP1A	X	-95.56	5.5
62	MP1A	Z	-55.171	5.5
63	MP1A	Mx	.048	5.5
64	MP1B	X	-84.698	.5
65	MP1B	Z	-48.9	.5
66	MP1B	Mx	0	.5
67	MP1B	X	-84.698	5.5
68	MP1B	Z	-48.9	5.5
69	MP1B	Mx	0	5.5
70	MP1C	X	-95.56	.5
71	MP1C	Z	-55.171	.5
72	MP1C	Mx	-.048	.5
73	MP1C	X	-95.56	5.5
74	MP1C	Z	-55.171	5.5
75	MP1C	Mx	-.048	5.5
76	MP5A	X	-95.56	.5
77	MP5A	Z	-55.171	.5
78	MP5A	Mx	.048	.5
79	MP5A	X	-95.56	5.5
80	MP5A	Z	-55.171	5.5
81	MP5A	Mx	.048	5.5
82	MP5B	X	-84.698	.5
83	MP5B	Z	-48.9	.5
84	MP5B	Mx	0	.5
85	MP5B	X	-84.698	5.5
86	MP5B	Z	-48.9	5.5
87	MP5B	Mx	0	5.5
88	MP5C	X	-95.56	.5
89	MP5C	Z	-55.171	.5
90	MP5C	Mx	-.048	.5
91	MP5C	X	-95.56	5.5
92	MP5C	Z	-55.171	5.5
93	MP5C	Mx	-.048	5.5
94	MP4A	X	-73.844	.15
95	MP4A	Z	-42.634	.15
96	MP4A	Mx	.005	.15
97	MP4A	X	-73.844	3.95
98	MP4A	Z	-42.634	3.95
99	MP4A	Mx	.005	3.95
100	MP4B	X	-99.406	.15
101	MP4B	Z	-57.392	.15
102	MP4B	Mx	.086	.15
103	MP4B	X	-99.406	3.95
104	MP4B	Z	-57.392	3.95
105	MP4B	Mx	.086	3.95



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
106	MP4C	X	-73.844	.15
107	MP4C	Z	-42.634	.15
108	MP4C	Mx	-.069	.15
109	MP4C	X	-73.844	3.95
110	MP4C	Z	-42.634	3.95
111	MP4C	Mx	-.069	3.95
112	MP4A	X	-73.844	.15
113	MP4A	Z	-42.634	.15
114	MP4A	Mx	.069	.15
115	MP4A	X	-73.844	3.95
116	MP4A	Z	-42.634	3.95
117	MP4A	Mx	.069	3.95
118	MP4B	X	-99.406	.15
119	MP4B	Z	-57.392	.15
120	MP4B	Mx	-.086	.15
121	MP4B	X	-99.406	3.95
122	MP4B	Z	-57.392	3.95
123	MP4B	Mx	-.086	3.95
124	MP4C	X	-73.844	.15
125	MP4C	Z	-42.634	.15
126	MP4C	Mx	-.005	.15
127	MP4C	X	-73.844	3.95
128	MP4C	Z	-42.634	3.95
129	MP4C	Mx	-.005	3.95
130	DC	X	-96.565	1.5
131	DC	Z	-55.752	1.5
132	DC	Mx	.021	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-31.306	.25
2	MP2A	Z	-54.224	.25
3	MP2A	Mx	.016	.25
4	MP2A	X	-31.306	2.25
5	MP2A	Z	-54.224	2.25
6	MP2A	Mx	.016	2.25
7	MP2B	X	-31.306	.25
8	MP2B	Z	-54.224	.25
9	MP2B	Mx	.016	.25
10	MP2B	X	-31.306	2.25
11	MP2B	Z	-54.224	2.25
12	MP2B	Mx	.016	2.25
13	MP2C	X	-14.248	.25
14	MP2C	Z	-24.678	.25
15	MP2C	Mx	-.014	.25
16	MP2C	X	-14.248	2.25
17	MP2C	Z	-24.678	2.25
18	MP2C	Mx	-.014	2.25
19	MP2A	X	-7.76	3.55
20	MP2A	Z	-13.44	3.55
21	MP2A	Mx	.004	3.55
22	MP2A	X	-7.76	4.55
23	MP2A	Z	-13.44	4.55
24	MP2A	Mx	.004	4.55
25	MP2B	X	-7.76	3.55
26	MP2B	Z	-13.44	3.55



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
27	MP2B	Mx	.004	3.55
28	MP2B	X	-7.76	4.55
29	MP2B	Z	-13.44	4.55
30	MP2B	Mx	.004	4.55
31	MP2C	X	-5.564	3.55
32	MP2C	Z	-9.636	3.55
33	MP2C	Mx	-.006	3.55
34	MP2C	X	-5.564	4.55
35	MP2C	Z	-9.636	4.55
36	MP2C	Mx	-.006	4.55
37	DC	X	-61.434	1.25
38	DC	Z	-106.408	1.25
39	DC	Mx	-.03	1.25
40	MP3A	X	-27.769	2.5
41	MP3A	Z	-48.097	2.5
42	MP3A	Mx	-.014	2.5
43	MP3B	X	-27.769	2.5
44	MP3B	Z	-48.097	2.5
45	MP3B	Mx	-.014	2.5
46	MP3C	X	-20.302	2.5
47	MP3C	Z	-35.164	2.5
48	MP3C	Mx	.02	2.5
49	MP4A	X	-33.601	2.5
50	MP4A	Z	-58.198	2.5
51	MP4A	Mx	-.017	2.5
52	MP4B	X	-33.601	2.5
53	MP4B	Z	-58.198	2.5
54	MP4B	Mx	-.017	2.5
55	MP4C	X	-24.889	2.5
56	MP4C	Z	-43.11	2.5
57	MP4C	Mx	.025	2.5
58	MP1A	X	-50.991	.5
59	MP1A	Z	-88.318	.5
60	MP1A	Mx	.025	.5
61	MP1A	X	-50.991	5.5
62	MP1A	Z	-88.318	5.5
63	MP1A	Mx	.025	5.5
64	MP1B	X	-50.991	.5
65	MP1B	Z	-88.318	.5
66	MP1B	Mx	.025	.5
67	MP1B	X	-50.991	5.5
68	MP1B	Z	-88.318	5.5
69	MP1B	Mx	.025	5.5
70	MP1C	X	-57.262	.5
71	MP1C	Z	-99.18	.5
72	MP1C	Mx	-.057	.5
73	MP1C	X	-57.262	5.5
74	MP1C	Z	-99.18	5.5
75	MP1C	Mx	-.057	5.5
76	MP5A	X	-50.991	.5
77	MP5A	Z	-88.318	.5
78	MP5A	Mx	.025	.5
79	MP5A	X	-50.991	5.5
80	MP5A	Z	-88.318	5.5
81	MP5A	Mx	.025	5.5
82	MP5B	X	-50.991	.5
83	MP5B	Z	-88.318	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
84	MP5B	Mx	.025	.5
85	MP5B	X	-50.991	5.5
86	MP5B	Z	-88.318	5.5
87	MP5B	Mx	.025	5.5
88	MP5C	X	-57.262	.5
89	MP5C	Z	-99.18	.5
90	MP5C	Mx	-.057	.5
91	MP5C	X	-57.262	5.5
92	MP5C	Z	-99.18	5.5
93	MP5C	Mx	-.057	5.5
94	MP4A	X	-52.473	.15
95	MP4A	Z	-90.885	.15
96	MP4A	Mx	-.042	.15
97	MP4A	X	-52.473	3.95
98	MP4A	Z	-90.885	3.95
99	MP4A	Mx	-.042	3.95
100	MP4B	X	-52.473	.15
101	MP4B	Z	-90.885	.15
102	MP4B	Mx	.094	.15
103	MP4B	X	-52.473	3.95
104	MP4B	Z	-90.885	3.95
105	MP4B	Mx	.094	3.95
106	MP4C	X	-37.715	.15
107	MP4C	Z	-65.324	.15
108	MP4C	Mx	-.038	.15
109	MP4C	X	-37.715	3.95
110	MP4C	Z	-65.324	3.95
111	MP4C	Mx	-.038	3.95
112	MP4A	X	-52.473	.15
113	MP4A	Z	-90.885	.15
114	MP4A	Mx	.094	.15
115	MP4A	X	-52.473	3.95
116	MP4A	Z	-90.885	3.95
117	MP4A	Mx	.094	3.95
118	MP4B	X	-52.473	.15
119	MP4B	Z	-90.885	.15
120	MP4B	Mx	-.042	.15
121	MP4B	X	-52.473	3.95
122	MP4B	Z	-90.885	3.95
123	MP4B	Mx	-.042	3.95
124	MP4C	X	-37.715	.15
125	MP4C	Z	-65.324	.15
126	MP4C	Mx	-.038	.15
127	MP4C	X	-37.715	3.95
128	MP4C	Z	-65.324	3.95
129	MP4C	Mx	-.038	3.95
130	DC	X	-61.434	1.5
131	DC	Z	-106.408	1.5
132	DC	Mx	.03	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	0	.25
2	MP2A	Z	-13.577	.25
3	MP2A	Mx	0	.25
4	MP2A	X	0	2.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
5	MP2A	Z	-13.577	2.25
6	MP2A	Mx	0	2.25
7	MP2B	X	0	.25
8	MP2B	Z	-7.704	.25
9	MP2B	Mx	.003	.25
10	MP2B	X	0	2.25
11	MP2B	Z	-7.704	2.25
12	MP2B	Mx	.003	2.25
13	MP2C	X	0	.25
14	MP2C	Z	-7.704	.25
15	MP2C	Mx	-.003	.25
16	MP2C	X	0	2.25
17	MP2C	Z	-7.704	2.25
18	MP2C	Mx	-.003	2.25
19	MP2A	X	0	3.55
20	MP2A	Z	-3.546	3.55
21	MP2A	Mx	0	3.55
22	MP2A	X	0	4.55
23	MP2A	Z	-3.546	4.55
24	MP2A	Mx	0	4.55
25	MP2B	X	0	3.55
26	MP2B	Z	-2.763	3.55
27	MP2B	Mx	.001	3.55
28	MP2B	X	0	4.55
29	MP2B	Z	-2.763	4.55
30	MP2B	Mx	.001	4.55
31	MP2C	X	0	3.55
32	MP2C	Z	-2.763	3.55
33	MP2C	Mx	-.001	3.55
34	MP2C	X	0	4.55
35	MP2C	Z	-2.763	4.55
36	MP2C	Mx	-.001	4.55
37	DC	X	0	1.25
38	DC	Z	-28.082	1.25
39	DC	Mx	-.007	1.25
40	MP3A	X	0	2.5
41	MP3A	Z	-14.039	2.5
42	MP3A	Mx	0	2.5
43	MP3B	X	0	2.5
44	MP3B	Z	-10.841	2.5
45	MP3B	Mx	-.005	2.5
46	MP3C	X	0	2.5
47	MP3C	Z	-10.841	2.5
48	MP3C	Mx	.005	2.5
49	MP4A	X	0	2.5
50	MP4A	Z	-14.039	2.5
51	MP4A	Mx	0	2.5
52	MP4B	X	0	2.5
53	MP4B	Z	-10.969	2.5
54	MP4B	Mx	-.005	2.5
55	MP4C	X	0	2.5
56	MP4C	Z	-10.969	2.5
57	MP4C	Mx	.005	2.5
58	MP1A	X	0	.5
59	MP1A	Z	-18.13	.5
60	MP1A	Mx	0	.5
61	MP1A	X	0	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
119	MP4B	Z	-15.713	.15
120	MP4B	Mx	.000912	.15
121	MP4B	X	0	3.95
122	MP4B	Z	-15.713	3.95
123	MP4B	Mx	.000912	3.95
124	MP4C	X	0	.15
125	MP4C	Z	-15.713	.15
126	MP4C	Mx	-.013	.15
127	MP4C	X	0	3.95
128	MP4C	Z	-15.713	3.95
129	MP4C	Mx	-.013	3.95
130	DC	X	0	1.5
131	DC	Z	-28.082	1.5
132	DC	Mx	.007	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	5.81	.25
2	MP2A	Z	-10.062	.25
3	MP2A	Mx	-.003	.25
4	MP2A	X	5.81	2.25
5	MP2A	Z	-10.062	2.25
6	MP2A	Mx	-.003	2.25
7	MP2B	X	2.873	.25
8	MP2B	Z	-4.976	.25
9	MP2B	Mx	.003	.25
10	MP2B	X	2.873	2.25
11	MP2B	Z	-4.976	2.25
12	MP2B	Mx	.003	2.25
13	MP2C	X	5.81	.25
14	MP2C	Z	-10.062	.25
15	MP2C	Mx	-.003	.25
16	MP2C	X	5.81	2.25
17	MP2C	Z	-10.062	2.25
18	MP2C	Mx	-.003	2.25
19	MP2A	X	1.643	3.55
20	MP2A	Z	-2.845	3.55
21	MP2A	Mx	-.000822	3.55
22	MP2A	X	1.643	4.55
23	MP2A	Z	-2.845	4.55
24	MP2A	Mx	-.000822	4.55
25	MP2B	X	1.251	3.55
26	MP2B	Z	-2.166	3.55
27	MP2B	Mx	.001	3.55
28	MP2B	X	1.251	4.55
29	MP2B	Z	-2.166	4.55
30	MP2B	Mx	.001	4.55
31	MP2C	X	1.643	3.55
32	MP2C	Z	-2.845	3.55
33	MP2C	Mx	-.000821	3.55
34	MP2C	X	1.643	4.55
35	MP2C	Z	-2.845	4.55
36	MP2C	Mx	-.000821	4.55
37	DC	X	12.568	1.25
38	DC	Z	-21.768	1.25
39	DC	Mx	-.004	1.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
40	MP3A	X	6.487	2.5
41	MP3A	Z	-11.235	2.5
42	MP3A	Mx	.003	2.5
43	MP3B	X	4.888	2.5
44	MP3B	Z	-8.466	2.5
45	MP3B	Mx	-.005	2.5
46	MP3C	X	6.487	2.5
47	MP3C	Z	-11.235	2.5
48	MP3C	Mx	.003	2.5
49	MP4A	X	6.508	2.5
50	MP4A	Z	-11.272	2.5
51	MP4A	Mx	.003	2.5
52	MP4B	X	4.973	2.5
53	MP4B	Z	-8.614	2.5
54	MP4B	Mx	-.005	2.5
55	MP4C	X	6.508	2.5
56	MP4C	Z	-11.272	2.5
57	MP4C	Mx	.003	2.5
58	MP1A	X	9.419	.5
59	MP1A	Z	-16.314	.5
60	MP1A	Mx	-.005	.5
61	MP1A	X	9.419	5.5
62	MP1A	Z	-16.314	5.5
63	MP1A	Mx	-.005	5.5
64	MP1B	X	10.481	.5
65	MP1B	Z	-18.154	.5
66	MP1B	Mx	.01	.5
67	MP1B	X	10.481	5.5
68	MP1B	Z	-18.154	5.5
69	MP1B	Mx	.01	5.5
70	MP1C	X	9.419	.5
71	MP1C	Z	-16.314	.5
72	MP1C	Mx	-.005	.5
73	MP1C	X	9.419	5.5
74	MP1C	Z	-16.314	5.5
75	MP1C	Mx	-.005	5.5
76	MP5A	X	9.419	.5
77	MP5A	Z	-16.314	.5
78	MP5A	Mx	-.005	.5
79	MP5A	X	9.419	5.5
80	MP5A	Z	-16.314	5.5
81	MP5A	Mx	-.005	5.5
82	MP5B	X	10.481	.5
83	MP5B	Z	-18.154	.5
84	MP5B	Mx	.01	.5
85	MP5B	X	10.481	5.5
86	MP5B	Z	-18.154	5.5
87	MP5B	Mx	.01	5.5
88	MP5C	X	9.419	.5
89	MP5C	Z	-16.314	.5
90	MP5C	Mx	-.005	.5
91	MP5C	X	9.419	5.5
92	MP5C	Z	-16.314	5.5
93	MP5C	Mx	-.005	5.5
94	MP4A	X	9.487	.15
95	MP4A	Z	-16.432	.15
96	MP4A	Mx	-.017	.15



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
18	MP2C	Mx	0	2.25
19	MP2A	X	2.393	3.55
20	MP2A	Z	-1.381	3.55
21	MP2A	Mx	-.001	3.55
22	MP2A	X	2.393	4.55
23	MP2A	Z	-1.381	4.55
24	MP2A	Mx	-.001	4.55
25	MP2B	X	2.393	3.55
26	MP2B	Z	-1.381	3.55
27	MP2B	Mx	.001	3.55
28	MP2B	X	2.393	4.55
29	MP2B	Z	-1.381	4.55
30	MP2B	Mx	.001	4.55
31	MP2C	X	3.071	3.55
32	MP2C	Z	-1.773	3.55
33	MP2C	Mx	0	3.55
34	MP2C	X	3.071	4.55
35	MP2C	Z	-1.773	4.55
36	MP2C	Mx	0	4.55
37	DC	X	19.689	1.25
38	DC	Z	-11.367	1.25
39	DC	Mx	-.000987	1.25
40	MP3A	X	9.389	2.5
41	MP3A	Z	-5.421	2.5
42	MP3A	Mx	.005	2.5
43	MP3B	X	9.389	2.5
44	MP3B	Z	-5.421	2.5
45	MP3B	Mx	-.005	2.5
46	MP3C	X	12.158	2.5
47	MP3C	Z	-7.02	2.5
48	MP3C	Mx	0	2.5
49	MP4A	X	9.5	2.5
50	MP4A	Z	-5.485	2.5
51	MP4A	Mx	.005	2.5
52	MP4B	X	9.5	2.5
53	MP4B	Z	-5.485	2.5
54	MP4B	Mx	-.005	2.5
55	MP4C	X	12.158	2.5
56	MP4C	Z	-7.02	2.5
57	MP4C	Mx	0	2.5
58	MP1A	X	17.541	.5
59	MP1A	Z	-10.127	.5
60	MP1A	Mx	-.009	.5
61	MP1A	X	17.541	5.5
62	MP1A	Z	-10.127	5.5
63	MP1A	Mx	-.009	5.5
64	MP1B	X	17.541	.5
65	MP1B	Z	-10.127	.5
66	MP1B	Mx	.009	.5
67	MP1B	X	17.541	5.5
68	MP1B	Z	-10.127	5.5
69	MP1B	Mx	.009	5.5
70	MP1C	X	15.701	.5
71	MP1C	Z	-9.065	.5
72	MP1C	Mx	0	.5
73	MP1C	X	15.701	5.5
74	MP1C	Z	-9.065	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
75	MP1C	Mx	0	5.5
76	MP5A	X	17.541	.5
77	MP5A	Z	-10.127	.5
78	MP5A	Mx	-.009	.5
79	MP5A	X	17.541	5.5
80	MP5A	Z	-10.127	5.5
81	MP5A	Mx	-.009	5.5
82	MP5B	X	17.541	.5
83	MP5B	Z	-10.127	.5
84	MP5B	Mx	.009	.5
85	MP5B	X	17.541	5.5
86	MP5B	Z	-10.127	5.5
87	MP5B	Mx	.009	5.5
88	MP5C	X	15.701	.5
89	MP5C	Z	-9.065	.5
90	MP5C	Mx	0	.5
91	MP5C	X	15.701	5.5
92	MP5C	Z	-9.065	5.5
93	MP5C	Mx	0	5.5
94	MP4A	X	13.608	.15
95	MP4A	Z	-7.857	.15
96	MP4A	Mx	-.013	.15
97	MP4A	X	13.608	3.95
98	MP4A	Z	-7.857	3.95
99	MP4A	Mx	-.013	3.95
100	MP4B	X	13.608	.15
101	MP4B	Z	-7.857	.15
102	MP4B	Mx	.000912	.15
103	MP4B	X	13.608	3.95
104	MP4B	Z	-7.857	3.95
105	MP4B	Mx	.000912	3.95
106	MP4C	X	17.844	.15
107	MP4C	Z	-10.302	.15
108	MP4C	Mx	.015	.15
109	MP4C	X	17.844	3.95
110	MP4C	Z	-10.302	3.95
111	MP4C	Mx	.015	3.95
112	MP4A	X	13.608	.15
113	MP4A	Z	-7.857	.15
114	MP4A	Mx	-.000911	.15
115	MP4A	X	13.608	3.95
116	MP4A	Z	-7.857	3.95
117	MP4A	Mx	-.000911	3.95
118	MP4B	X	13.608	.15
119	MP4B	Z	-7.857	.15
120	MP4B	Mx	.013	.15
121	MP4B	X	13.608	3.95
122	MP4B	Z	-7.857	3.95
123	MP4B	Mx	.013	3.95
124	MP4C	X	17.844	.15
125	MP4C	Z	-10.302	.15
126	MP4C	Mx	-.015	.15
127	MP4C	X	17.844	3.95
128	MP4C	Z	-10.302	3.95
129	MP4C	Mx	-.015	3.95
130	DC	X	19.689	1.5
131	DC	Z	-11.367	1.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
132	DC	Mx	.000987	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	5.746	.25
2	MP2A	Z	0	.25
3	MP2A	Mx	-.003	.25
4	MP2A	X	5.746	2.25
5	MP2A	Z	0	2.25
6	MP2A	Mx	-.003	2.25
7	MP2B	X	11.619	.25
8	MP2B	Z	0	.25
9	MP2B	Mx	.003	.25
10	MP2B	X	11.619	2.25
11	MP2B	Z	0	2.25
12	MP2B	Mx	.003	2.25
13	MP2C	X	11.619	.25
14	MP2C	Z	0	.25
15	MP2C	Mx	.003	.25
16	MP2C	X	11.619	2.25
17	MP2C	Z	0	2.25
18	MP2C	Mx	.003	2.25
19	MP2A	X	2.502	3.55
20	MP2A	Z	0	3.55
21	MP2A	Mx	-.001	3.55
22	MP2A	X	2.502	4.55
23	MP2A	Z	0	4.55
24	MP2A	Mx	-.001	4.55
25	MP2B	X	3.285	3.55
26	MP2B	Z	0	3.55
27	MP2B	Mx	.000821	3.55
28	MP2B	X	3.285	4.55
29	MP2B	Z	0	4.55
30	MP2B	Mx	.000821	4.55
31	MP2C	X	3.285	3.55
32	MP2C	Z	0	3.55
33	MP2C	Mx	.000821	3.55
34	MP2C	X	3.285	4.55
35	MP2C	Z	0	4.55
36	MP2C	Mx	.000821	4.55
37	DC	X	23.279	1.25
38	DC	Z	0	1.25
39	DC	Mx	.002	1.25
40	MP3A	X	9.776	2.5
41	MP3A	Z	0	2.5
42	MP3A	Mx	.005	2.5
43	MP3B	X	12.973	2.5
44	MP3B	Z	0	2.5
45	MP3B	Mx	-.003	2.5
46	MP3C	X	12.973	2.5
47	MP3C	Z	0	2.5
48	MP3C	Mx	-.003	2.5
49	MP4A	X	9.946	2.5
50	MP4A	Z	0	2.5
51	MP4A	Mx	.005	2.5
52	MP4B	X	13.016	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
53	MP4B	Z	0	2.5
54	MP4B	Mx	-.003	2.5
55	MP4C	X	13.016	2.5
56	MP4C	Z	0	2.5
57	MP4C	Mx	-.003	2.5
58	MP1A	X	20.963	.5
59	MP1A	Z	0	.5
60	MP1A	Mx	-.01	.5
61	MP1A	X	20.963	5.5
62	MP1A	Z	0	5.5
63	MP1A	Mx	-.01	5.5
64	MP1B	X	18.838	.5
65	MP1B	Z	0	.5
66	MP1B	Mx	.005	.5
67	MP1B	X	18.838	5.5
68	MP1B	Z	0	5.5
69	MP1B	Mx	.005	5.5
70	MP1C	X	18.838	.5
71	MP1C	Z	0	.5
72	MP1C	Mx	.005	.5
73	MP1C	X	18.838	5.5
74	MP1C	Z	0	5.5
75	MP1C	Mx	.005	5.5
76	MP5A	X	20.963	.5
77	MP5A	Z	0	.5
78	MP5A	Mx	-.01	.5
79	MP5A	X	20.963	5.5
80	MP5A	Z	0	5.5
81	MP5A	Mx	-.01	5.5
82	MP5B	X	18.838	.5
83	MP5B	Z	0	.5
84	MP5B	Mx	.005	.5
85	MP5B	X	18.838	5.5
86	MP5B	Z	0	5.5
87	MP5B	Mx	.005	5.5
88	MP5C	X	18.838	.5
89	MP5C	Z	0	.5
90	MP5C	Mx	.005	.5
91	MP5C	X	18.838	5.5
92	MP5C	Z	0	5.5
93	MP5C	Mx	.005	5.5
94	MP4A	X	14.083	.15
95	MP4A	Z	0	.15
96	MP4A	Mx	-.007	.15
97	MP4A	X	14.083	3.95
98	MP4A	Z	0	3.95
99	MP4A	Mx	-.007	3.95
100	MP4B	X	18.974	.15
101	MP4B	Z	0	.15
102	MP4B	Mx	-.008	.15
103	MP4B	X	18.974	3.95
104	MP4B	Z	0	3.95
105	MP4B	Mx	-.008	3.95
106	MP4C	X	18.974	.15
107	MP4C	Z	0	.15
108	MP4C	Mx	.017	.15
109	MP4C	X	18.974	3.95



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
110	MP4C	Z	0	3.95
111	MP4C	Mx	.017	3.95
112	MP4A	X	14.083	.15
113	MP4A	Z	0	.15
114	MP4A	Mx	-.007	.15
115	MP4A	X	14.083	3.95
116	MP4A	Z	0	3.95
117	MP4A	Mx	-.007	3.95
118	MP4B	X	18.974	.15
119	MP4B	Z	0	.15
120	MP4B	Mx	.017	.15
121	MP4B	X	18.974	3.95
122	MP4B	Z	0	3.95
123	MP4B	Mx	.017	3.95
124	MP4C	X	18.974	.15
125	MP4C	Z	0	.15
126	MP4C	Mx	-.008	.15
127	MP4C	X	18.974	3.95
128	MP4C	Z	0	3.95
129	MP4C	Mx	-.008	3.95
130	DC	X	23.279	1.5
131	DC	Z	0	1.5
132	DC	Mx	-.002	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	6.672	.25
2	MP2A	Z	3.852	.25
3	MP2A	Mx	-.003	.25
4	MP2A	X	6.672	2.25
5	MP2A	Z	3.852	2.25
6	MP2A	Mx	-.003	2.25
7	MP2B	X	11.758	.25
8	MP2B	Z	6.788	.25
9	MP2B	Mx	0	.25
10	MP2B	X	11.758	2.25
11	MP2B	Z	6.788	2.25
12	MP2B	Mx	0	2.25
13	MP2C	X	6.672	.25
14	MP2C	Z	3.852	.25
15	MP2C	Mx	.003	.25
16	MP2C	X	6.672	2.25
17	MP2C	Z	3.852	2.25
18	MP2C	Mx	.003	2.25
19	MP2A	X	2.393	3.55
20	MP2A	Z	1.381	3.55
21	MP2A	Mx	-.001	3.55
22	MP2A	X	2.393	4.55
23	MP2A	Z	1.381	4.55
24	MP2A	Mx	-.001	4.55
25	MP2B	X	3.071	3.55
26	MP2B	Z	1.773	3.55
27	MP2B	Mx	0	3.55
28	MP2B	X	3.071	4.55
29	MP2B	Z	1.773	4.55
30	MP2B	Mx	0	4.55



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
31	MP2C	X	2.393	3.55
32	MP2C	Z	1.381	3.55
33	MP2C	Mx	.001	3.55
34	MP2C	X	2.393	4.55
35	MP2C	Z	1.381	4.55
36	MP2C	Mx	.001	4.55
37	DC	X	22.711	1.25
38	DC	Z	13.112	1.25
39	DC	Mx	.005	1.25
40	MP3A	X	9.389	2.5
41	MP3A	Z	5.421	2.5
42	MP3A	Mx	.005	2.5
43	MP3B	X	12.158	2.5
44	MP3B	Z	7.02	2.5
45	MP3B	Mx	0	2.5
46	MP3C	X	9.389	2.5
47	MP3C	Z	5.421	2.5
48	MP3C	Mx	-.005	2.5
49	MP4A	X	9.5	2.5
50	MP4A	Z	5.485	2.5
51	MP4A	Mx	.005	2.5
52	MP4B	X	12.158	2.5
53	MP4B	Z	7.02	2.5
54	MP4B	Mx	0	2.5
55	MP4C	X	9.5	2.5
56	MP4C	Z	5.485	2.5
57	MP4C	Mx	-.005	2.5
58	MP1A	X	17.541	.5
59	MP1A	Z	10.127	.5
60	MP1A	Mx	-.009	.5
61	MP1A	X	17.541	5.5
62	MP1A	Z	10.127	5.5
63	MP1A	Mx	-.009	5.5
64	MP1B	X	15.701	.5
65	MP1B	Z	9.065	.5
66	MP1B	Mx	0	.5
67	MP1B	X	15.701	5.5
68	MP1B	Z	9.065	5.5
69	MP1B	Mx	0	5.5
70	MP1C	X	17.541	.5
71	MP1C	Z	10.127	.5
72	MP1C	Mx	.009	.5
73	MP1C	X	17.541	5.5
74	MP1C	Z	10.127	5.5
75	MP1C	Mx	.009	5.5
76	MP5A	X	17.541	.5
77	MP5A	Z	10.127	.5
78	MP5A	Mx	-.009	.5
79	MP5A	X	17.541	5.5
80	MP5A	Z	10.127	5.5
81	MP5A	Mx	-.009	5.5
82	MP5B	X	15.701	.5
83	MP5B	Z	9.065	.5
84	MP5B	Mx	0	.5
85	MP5B	X	15.701	5.5
86	MP5B	Z	9.065	5.5
87	MP5B	Mx	0	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
88	MP5C	X	17.541	.5
89	MP5C	Z	10.127	.5
90	MP5C	Mx	.009	.5
91	MP5C	X	17.541	5.5
92	MP5C	Z	10.127	5.5
93	MP5C	Mx	.009	5.5
94	MP4A	X	13.608	.15
95	MP4A	Z	7.857	.15
96	MP4A	Mx	-.000911	.15
97	MP4A	X	13.608	3.95
98	MP4A	Z	7.857	3.95
99	MP4A	Mx	-.000911	3.95
100	MP4B	X	17.844	.15
101	MP4B	Z	10.302	.15
102	MP4B	Mx	-.015	.15
103	MP4B	X	17.844	3.95
104	MP4B	Z	10.302	3.95
105	MP4B	Mx	-.015	3.95
106	MP4C	X	13.608	.15
107	MP4C	Z	7.857	.15
108	MP4C	Mx	.013	.15
109	MP4C	X	13.608	3.95
110	MP4C	Z	7.857	3.95
111	MP4C	Mx	.013	3.95
112	MP4A	X	13.608	.15
113	MP4A	Z	7.857	.15
114	MP4A	Mx	-.013	.15
115	MP4A	X	13.608	3.95
116	MP4A	Z	7.857	3.95
117	MP4A	Mx	-.013	3.95
118	MP4B	X	17.844	.15
119	MP4B	Z	10.302	.15
120	MP4B	Mx	.015	.15
121	MP4B	X	17.844	3.95
122	MP4B	Z	10.302	3.95
123	MP4B	Mx	.015	3.95
124	MP4C	X	13.608	.15
125	MP4C	Z	7.857	.15
126	MP4C	Mx	.000912	.15
127	MP4C	X	13.608	3.95
128	MP4C	Z	7.857	3.95
129	MP4C	Mx	.000912	3.95
130	DC	X	22.711	1.5
131	DC	Z	13.112	1.5
132	DC	Mx	-.005	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	5.81	.25
2	MP2A	Z	10.062	.25
3	MP2A	Mx	-.003	.25
4	MP2A	X	5.81	2.25
5	MP2A	Z	10.062	2.25
6	MP2A	Mx	-.003	2.25
7	MP2B	X	5.81	.25
8	MP2B	Z	10.062	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
9	MP2B	Mx	-.003	.25
10	MP2B	X	5.81	2.25
11	MP2B	Z	10.062	2.25
12	MP2B	Mx	-.003	2.25
13	MP2C	X	2.873	.25
14	MP2C	Z	4.976	.25
15	MP2C	Mx	.003	.25
16	MP2C	X	2.873	2.25
17	MP2C	Z	4.976	2.25
18	MP2C	Mx	.003	2.25
19	MP2A	X	1.643	3.55
20	MP2A	Z	2.845	3.55
21	MP2A	Mx	-.000822	3.55
22	MP2A	X	1.643	4.55
23	MP2A	Z	2.845	4.55
24	MP2A	Mx	-.000822	4.55
25	MP2B	X	1.643	3.55
26	MP2B	Z	2.845	3.55
27	MP2B	Mx	-.000821	3.55
28	MP2B	X	1.643	4.55
29	MP2B	Z	2.845	4.55
30	MP2B	Mx	-.000821	4.55
31	MP2C	X	1.251	3.55
32	MP2C	Z	2.166	3.55
33	MP2C	Mx	.001	3.55
34	MP2C	X	1.251	4.55
35	MP2C	Z	2.166	4.55
36	MP2C	Mx	.001	4.55
37	DC	X	14.313	1.25
38	DC	Z	24.791	1.25
39	DC	Mx	.007	1.25
40	MP3A	X	6.487	2.5
41	MP3A	Z	11.235	2.5
42	MP3A	Mx	.003	2.5
43	MP3B	X	6.487	2.5
44	MP3B	Z	11.235	2.5
45	MP3B	Mx	.003	2.5
46	MP3C	X	4.888	2.5
47	MP3C	Z	8.466	2.5
48	MP3C	Mx	-.005	2.5
49	MP4A	X	6.508	2.5
50	MP4A	Z	11.272	2.5
51	MP4A	Mx	.003	2.5
52	MP4B	X	6.508	2.5
53	MP4B	Z	11.272	2.5
54	MP4B	Mx	.003	2.5
55	MP4C	X	4.973	2.5
56	MP4C	Z	8.614	2.5
57	MP4C	Mx	-.005	2.5
58	MP1A	X	9.419	.5
59	MP1A	Z	16.314	.5
60	MP1A	Mx	-.005	.5
61	MP1A	X	9.419	5.5
62	MP1A	Z	16.314	5.5
63	MP1A	Mx	-.005	5.5
64	MP1B	X	9.419	.5
65	MP1B	Z	16.314	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
66	MP1B	Mx	-0.005	.5
67	MP1B	X	9.419	5.5
68	MP1B	Z	16.314	5.5
69	MP1B	Mx	-0.005	5.5
70	MP1C	X	10.481	.5
71	MP1C	Z	18.154	.5
72	MP1C	Mx	.01	.5
73	MP1C	X	10.481	5.5
74	MP1C	Z	18.154	5.5
75	MP1C	Mx	.01	5.5
76	MP5A	X	9.419	.5
77	MP5A	Z	16.314	.5
78	MP5A	Mx	-0.005	.5
79	MP5A	X	9.419	5.5
80	MP5A	Z	16.314	5.5
81	MP5A	Mx	-0.005	5.5
82	MP5B	X	9.419	.5
83	MP5B	Z	16.314	.5
84	MP5B	Mx	-0.005	.5
85	MP5B	X	9.419	5.5
86	MP5B	Z	16.314	5.5
87	MP5B	Mx	-0.005	5.5
88	MP5C	X	10.481	.5
89	MP5C	Z	18.154	.5
90	MP5C	Mx	.01	.5
91	MP5C	X	10.481	5.5
92	MP5C	Z	18.154	5.5
93	MP5C	Mx	.01	5.5
94	MP4A	X	9.487	.15
95	MP4A	Z	16.432	.15
96	MP4A	Mx	.008	.15
97	MP4A	X	9.487	3.95
98	MP4A	Z	16.432	3.95
99	MP4A	Mx	.008	3.95
100	MP4B	X	9.487	.15
101	MP4B	Z	16.432	.15
102	MP4B	Mx	-.017	.15
103	MP4B	X	9.487	3.95
104	MP4B	Z	16.432	3.95
105	MP4B	Mx	-.017	3.95
106	MP4C	X	7.041	.15
107	MP4C	Z	12.196	.15
108	MP4C	Mx	.007	.15
109	MP4C	X	7.041	3.95
110	MP4C	Z	12.196	3.95
111	MP4C	Mx	.007	3.95
112	MP4A	X	9.487	.15
113	MP4A	Z	16.432	.15
114	MP4A	Mx	-.017	.15
115	MP4A	X	9.487	3.95
116	MP4A	Z	16.432	3.95
117	MP4A	Mx	-.017	3.95
118	MP4B	X	9.487	.15
119	MP4B	Z	16.432	.15
120	MP4B	Mx	.008	.15
121	MP4B	X	9.487	3.95
122	MP4B	Z	16.432	3.95



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
44	MP3B	Z	10.841	2.5
45	MP3B	Mx	.005	2.5
46	MP3C	X	0	2.5
47	MP3C	Z	10.841	2.5
48	MP3C	Mx	-.005	2.5
49	MP4A	X	0	2.5
50	MP4A	Z	14.039	2.5
51	MP4A	Mx	0	2.5
52	MP4B	X	0	2.5
53	MP4B	Z	10.969	2.5
54	MP4B	Mx	.005	2.5
55	MP4C	X	0	2.5
56	MP4C	Z	10.969	2.5
57	MP4C	Mx	-.005	2.5
58	MP1A	X	0	.5
59	MP1A	Z	18.13	.5
60	MP1A	Mx	0	.5
61	MP1A	X	0	5.5
62	MP1A	Z	18.13	5.5
63	MP1A	Mx	0	5.5
64	MP1B	X	0	.5
65	MP1B	Z	20.254	.5
66	MP1B	Mx	-.009	.5
67	MP1B	X	0	5.5
68	MP1B	Z	20.254	5.5
69	MP1B	Mx	-.009	5.5
70	MP1C	X	0	.5
71	MP1C	Z	20.254	.5
72	MP1C	Mx	.009	.5
73	MP1C	X	0	5.5
74	MP1C	Z	20.254	5.5
75	MP1C	Mx	.009	5.5
76	MP5A	X	0	.5
77	MP5A	Z	18.13	.5
78	MP5A	Mx	0	.5
79	MP5A	X	0	5.5
80	MP5A	Z	18.13	5.5
81	MP5A	Mx	0	5.5
82	MP5B	X	0	.5
83	MP5B	Z	20.254	.5
84	MP5B	Mx	-.009	.5
85	MP5B	X	0	5.5
86	MP5B	Z	20.254	5.5
87	MP5B	Mx	-.009	5.5
88	MP5C	X	0	.5
89	MP5C	Z	20.254	.5
90	MP5C	Mx	.009	.5
91	MP5C	X	0	5.5
92	MP5C	Z	20.254	5.5
93	MP5C	Mx	.009	5.5
94	MP4A	X	0	.15
95	MP4A	Z	20.605	.15
96	MP4A	Mx	.015	.15
97	MP4A	X	0	3.95
98	MP4A	Z	20.605	3.95
99	MP4A	Mx	.015	3.95
100	MP4B	X	0	.15



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
101	MP4B	Z	15.713	.15
102	MP4B	Mx	-.013	.15
103	MP4B	X	0	3.95
104	MP4B	Z	15.713	3.95
105	MP4B	Mx	-.013	3.95
106	MP4C	X	0	.15
107	MP4C	Z	15.713	.15
108	MP4C	Mx	.000912	.15
109	MP4C	X	0	3.95
110	MP4C	Z	15.713	3.95
111	MP4C	Mx	.000912	3.95
112	MP4A	X	0	.15
113	MP4A	Z	20.605	.15
114	MP4A	Mx	-.015	.15
115	MP4A	X	0	3.95
116	MP4A	Z	20.605	3.95
117	MP4A	Mx	-.015	3.95
118	MP4B	X	0	.15
119	MP4B	Z	15.713	.15
120	MP4B	Mx	-.000912	.15
121	MP4B	X	0	3.95
122	MP4B	Z	15.713	3.95
123	MP4B	Mx	-.000912	3.95
124	MP4C	X	0	.15
125	MP4C	Z	15.713	.15
126	MP4C	Mx	.013	.15
127	MP4C	X	0	3.95
128	MP4C	Z	15.713	3.95
129	MP4C	Mx	.013	3.95
130	DC	X	0	1.5
131	DC	Z	28.082	1.5
132	DC	Mx	-.007	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	-5.81	.25
2	MP2A	Z	10.062	.25
3	MP2A	Mx	.003	.25
4	MP2A	X	-5.81	2.25
5	MP2A	Z	10.062	2.25
6	MP2A	Mx	.003	2.25
7	MP2B	X	-2.873	.25
8	MP2B	Z	4.976	.25
9	MP2B	Mx	-.003	.25
10	MP2B	X	-2.873	2.25
11	MP2B	Z	4.976	2.25
12	MP2B	Mx	-.003	2.25
13	MP2C	X	-5.81	.25
14	MP2C	Z	10.062	.25
15	MP2C	Mx	.003	.25
16	MP2C	X	-5.81	2.25
17	MP2C	Z	10.062	2.25
18	MP2C	Mx	.003	2.25
19	MP2A	X	-1.643	3.55
20	MP2A	Z	2.845	3.55
21	MP2A	Mx	.000822	3.55



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
22	MP2A	X	-1.643	4.55
23	MP2A	Z	2.845	4.55
24	MP2A	Mx	.000822	4.55
25	MP2B	X	-1.251	3.55
26	MP2B	Z	2.166	3.55
27	MP2B	Mx	-.001	3.55
28	MP2B	X	-1.251	4.55
29	MP2B	Z	2.166	4.55
30	MP2B	Mx	-.001	4.55
31	MP2C	X	-1.643	3.55
32	MP2C	Z	2.845	3.55
33	MP2C	Mx	.000821	3.55
34	MP2C	X	-1.643	4.55
35	MP2C	Z	2.845	4.55
36	MP2C	Mx	.000821	4.55
37	DC	X	-12.568	1.25
38	DC	Z	21.768	1.25
39	DC	Mx	.004	1.25
40	MP3A	X	-6.487	2.5
41	MP3A	Z	11.235	2.5
42	MP3A	Mx	-.003	2.5
43	MP3B	X	-4.888	2.5
44	MP3B	Z	8.466	2.5
45	MP3B	Mx	.005	2.5
46	MP3C	X	-6.487	2.5
47	MP3C	Z	11.235	2.5
48	MP3C	Mx	-.003	2.5
49	MP4A	X	-6.508	2.5
50	MP4A	Z	11.272	2.5
51	MP4A	Mx	-.003	2.5
52	MP4B	X	-4.973	2.5
53	MP4B	Z	8.614	2.5
54	MP4B	Mx	.005	2.5
55	MP4C	X	-6.508	2.5
56	MP4C	Z	11.272	2.5
57	MP4C	Mx	-.003	2.5
58	MP1A	X	-9.419	.5
59	MP1A	Z	16.314	.5
60	MP1A	Mx	.005	.5
61	MP1A	X	-9.419	5.5
62	MP1A	Z	16.314	5.5
63	MP1A	Mx	.005	5.5
64	MP1B	X	-10.481	.5
65	MP1B	Z	18.154	.5
66	MP1B	Mx	-.01	.5
67	MP1B	X	-10.481	5.5
68	MP1B	Z	18.154	5.5
69	MP1B	Mx	-.01	5.5
70	MP1C	X	-9.419	.5
71	MP1C	Z	16.314	.5
72	MP1C	Mx	.005	.5
73	MP1C	X	-9.419	5.5
74	MP1C	Z	16.314	5.5
75	MP1C	Mx	.005	5.5
76	MP5A	X	-9.419	.5
77	MP5A	Z	16.314	.5
78	MP5A	Mx	.005	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
79	MP5A	X	-9.419	5.5
80	MP5A	Z	16.314	5.5
81	MP5A	Mx	.005	5.5
82	MP5B	X	-10.481	.5
83	MP5B	Z	18.154	.5
84	MP5B	Mx	-.01	.5
85	MP5B	X	-10.481	5.5
86	MP5B	Z	18.154	5.5
87	MP5B	Mx	-.01	5.5
88	MP5C	X	-9.419	.5
89	MP5C	Z	16.314	.5
90	MP5C	Mx	.005	.5
91	MP5C	X	-9.419	5.5
92	MP5C	Z	16.314	5.5
93	MP5C	Mx	.005	5.5
94	MP4A	X	-9.487	.15
95	MP4A	Z	16.432	.15
96	MP4A	Mx	.017	.15
97	MP4A	X	-9.487	3.95
98	MP4A	Z	16.432	3.95
99	MP4A	Mx	.017	3.95
100	MP4B	X	-7.041	.15
101	MP4B	Z	12.196	.15
102	MP4B	Mx	-.007	.15
103	MP4B	X	-7.041	3.95
104	MP4B	Z	12.196	3.95
105	MP4B	Mx	-.007	3.95
106	MP4C	X	-9.487	.15
107	MP4C	Z	16.432	.15
108	MP4C	Mx	-.008	.15
109	MP4C	X	-9.487	3.95
110	MP4C	Z	16.432	3.95
111	MP4C	Mx	-.008	3.95
112	MP4A	X	-9.487	.15
113	MP4A	Z	16.432	.15
114	MP4A	Mx	-.008	.15
115	MP4A	X	-9.487	3.95
116	MP4A	Z	16.432	3.95
117	MP4A	Mx	-.008	3.95
118	MP4B	X	-7.041	.15
119	MP4B	Z	12.196	.15
120	MP4B	Mx	-.007	.15
121	MP4B	X	-7.041	3.95
122	MP4B	Z	12.196	3.95
123	MP4B	Mx	-.007	3.95
124	MP4C	X	-9.487	.15
125	MP4C	Z	16.432	.15
126	MP4C	Mx	.017	.15
127	MP4C	X	-9.487	3.95
128	MP4C	Z	16.432	3.95
129	MP4C	Mx	.017	3.95
130	DC	X	-12.568	1.5
131	DC	Z	21.768	1.5
132	DC	Mx	-.004	1.5

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



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	-6.672	.25
2	MP2A	Z	3.852	.25
3	MP2A	Mx	.003	.25
4	MP2A	X	-6.672	2.25
5	MP2A	Z	3.852	2.25
6	MP2A	Mx	.003	2.25
7	MP2B	X	-6.672	.25
8	MP2B	Z	3.852	.25
9	MP2B	Mx	-.003	.25
10	MP2B	X	-6.672	2.25
11	MP2B	Z	3.852	2.25
12	MP2B	Mx	-.003	2.25
13	MP2C	X	-11.758	.25
14	MP2C	Z	6.788	.25
15	MP2C	Mx	0	.25
16	MP2C	X	-11.758	2.25
17	MP2C	Z	6.788	2.25
18	MP2C	Mx	0	2.25
19	MP2A	X	-2.393	3.55
20	MP2A	Z	1.381	3.55
21	MP2A	Mx	.001	3.55
22	MP2A	X	-2.393	4.55
23	MP2A	Z	1.381	4.55
24	MP2A	Mx	.001	4.55
25	MP2B	X	-2.393	3.55
26	MP2B	Z	1.381	3.55
27	MP2B	Mx	-.001	3.55
28	MP2B	X	-2.393	4.55
29	MP2B	Z	1.381	4.55
30	MP2B	Mx	-.001	4.55
31	MP2C	X	-3.071	3.55
32	MP2C	Z	1.773	3.55
33	MP2C	Mx	0	3.55
34	MP2C	X	-3.071	4.55
35	MP2C	Z	1.773	4.55
36	MP2C	Mx	0	4.55
37	DC	X	-19.689	1.25
38	DC	Z	11.367	1.25
39	DC	Mx	.000987	1.25
40	MP3A	X	-9.389	2.5
41	MP3A	Z	5.421	2.5
42	MP3A	Mx	-.005	2.5
43	MP3B	X	-9.389	2.5
44	MP3B	Z	5.421	2.5
45	MP3B	Mx	.005	2.5
46	MP3C	X	-12.158	2.5
47	MP3C	Z	7.02	2.5
48	MP3C	Mx	0	2.5
49	MP4A	X	-9.5	2.5
50	MP4A	Z	5.485	2.5
51	MP4A	Mx	-.005	2.5
52	MP4B	X	-9.5	2.5
53	MP4B	Z	5.485	2.5
54	MP4B	Mx	.005	2.5
55	MP4C	X	-12.158	2.5
56	MP4C	Z	7.02	2.5
57	MP4C	Mx	0	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
58	MP1A	X	-17.541	.5
59	MP1A	Z	10.127	.5
60	MP1A	Mx	.009	.5
61	MP1A	X	-17.541	5.5
62	MP1A	Z	10.127	5.5
63	MP1A	Mx	.009	5.5
64	MP1B	X	-17.541	.5
65	MP1B	Z	10.127	.5
66	MP1B	Mx	-.009	.5
67	MP1B	X	-17.541	5.5
68	MP1B	Z	10.127	5.5
69	MP1B	Mx	-.009	5.5
70	MP1C	X	-15.701	.5
71	MP1C	Z	9.065	.5
72	MP1C	Mx	0	.5
73	MP1C	X	-15.701	5.5
74	MP1C	Z	9.065	5.5
75	MP1C	Mx	0	5.5
76	MP5A	X	-17.541	.5
77	MP5A	Z	10.127	.5
78	MP5A	Mx	.009	.5
79	MP5A	X	-17.541	5.5
80	MP5A	Z	10.127	5.5
81	MP5A	Mx	.009	5.5
82	MP5B	X	-17.541	.5
83	MP5B	Z	10.127	.5
84	MP5B	Mx	-.009	.5
85	MP5B	X	-17.541	5.5
86	MP5B	Z	10.127	5.5
87	MP5B	Mx	-.009	5.5
88	MP5C	X	-15.701	.5
89	MP5C	Z	9.065	.5
90	MP5C	Mx	0	.5
91	MP5C	X	-15.701	5.5
92	MP5C	Z	9.065	5.5
93	MP5C	Mx	0	5.5
94	MP4A	X	-13.608	.15
95	MP4A	Z	7.857	.15
96	MP4A	Mx	.013	.15
97	MP4A	X	-13.608	3.95
98	MP4A	Z	7.857	3.95
99	MP4A	Mx	.013	3.95
100	MP4B	X	-13.608	.15
101	MP4B	Z	7.857	.15
102	MP4B	Mx	-.000912	.15
103	MP4B	X	-13.608	3.95
104	MP4B	Z	7.857	3.95
105	MP4B	Mx	-.000912	3.95
106	MP4C	X	-17.844	.15
107	MP4C	Z	10.302	.15
108	MP4C	Mx	-.015	.15
109	MP4C	X	-17.844	3.95
110	MP4C	Z	10.302	3.95
111	MP4C	Mx	-.015	3.95
112	MP4A	X	-13.608	.15
113	MP4A	Z	7.857	.15
114	MP4A	Mx	.000911	.15



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
115	MP4A	X	-13.608	3.95
116	MP4A	Z	7.857	3.95
117	MP4A	Mx	.000911	3.95
118	MP4B	X	-13.608	.15
119	MP4B	Z	7.857	.15
120	MP4B	Mx	-.013	.15
121	MP4B	X	-13.608	3.95
122	MP4B	Z	7.857	3.95
123	MP4B	Mx	-.013	3.95
124	MP4C	X	-17.844	.15
125	MP4C	Z	10.302	.15
126	MP4C	Mx	.015	.15
127	MP4C	X	-17.844	3.95
128	MP4C	Z	10.302	3.95
129	MP4C	Mx	.015	3.95
130	DC	X	-19.689	1.5
131	DC	Z	11.367	1.5
132	DC	Mx	-.000987	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-5.746	.25
2	MP2A	Z	0	.25
3	MP2A	Mx	.003	.25
4	MP2A	X	-5.746	2.25
5	MP2A	Z	0	2.25
6	MP2A	Mx	.003	2.25
7	MP2B	X	-11.619	.25
8	MP2B	Z	0	.25
9	MP2B	Mx	-.003	.25
10	MP2B	X	-11.619	2.25
11	MP2B	Z	0	2.25
12	MP2B	Mx	-.003	2.25
13	MP2C	X	-11.619	.25
14	MP2C	Z	0	.25
15	MP2C	Mx	-.003	.25
16	MP2C	X	-11.619	2.25
17	MP2C	Z	0	2.25
18	MP2C	Mx	-.003	2.25
19	MP2A	X	-2.502	3.55
20	MP2A	Z	0	3.55
21	MP2A	Mx	.001	3.55
22	MP2A	X	-2.502	4.55
23	MP2A	Z	0	4.55
24	MP2A	Mx	.001	4.55
25	MP2B	X	-3.285	3.55
26	MP2B	Z	0	3.55
27	MP2B	Mx	-.000821	3.55
28	MP2B	X	-3.285	4.55
29	MP2B	Z	0	4.55
30	MP2B	Mx	-.000821	4.55
31	MP2C	X	-3.285	3.55
32	MP2C	Z	0	3.55
33	MP2C	Mx	-.000821	3.55
34	MP2C	X	-3.285	4.55
35	MP2C	Z	0	4.55



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
36	MP2C	Mx	-.000821	4.55
37	DC	X	-23.279	1.25
38	DC	Z	0	1.25
39	DC	Mx	-.002	1.25
40	MP3A	X	-9.776	2.5
41	MP3A	Z	0	2.5
42	MP3A	Mx	-.005	2.5
43	MP3B	X	-12.973	2.5
44	MP3B	Z	0	2.5
45	MP3B	Mx	.003	2.5
46	MP3C	X	-12.973	2.5
47	MP3C	Z	0	2.5
48	MP3C	Mx	.003	2.5
49	MP4A	X	-9.946	2.5
50	MP4A	Z	0	2.5
51	MP4A	Mx	-.005	2.5
52	MP4B	X	-13.016	2.5
53	MP4B	Z	0	2.5
54	MP4B	Mx	.003	2.5
55	MP4C	X	-13.016	2.5
56	MP4C	Z	0	2.5
57	MP4C	Mx	.003	2.5
58	MP1A	X	-20.963	.5
59	MP1A	Z	0	.5
60	MP1A	Mx	.01	.5
61	MP1A	X	-20.963	5.5
62	MP1A	Z	0	5.5
63	MP1A	Mx	.01	5.5
64	MP1B	X	-18.838	.5
65	MP1B	Z	0	.5
66	MP1B	Mx	-.005	.5
67	MP1B	X	-18.838	5.5
68	MP1B	Z	0	5.5
69	MP1B	Mx	-.005	5.5
70	MP1C	X	-18.838	.5
71	MP1C	Z	0	.5
72	MP1C	Mx	-.005	.5
73	MP1C	X	-18.838	5.5
74	MP1C	Z	0	5.5
75	MP1C	Mx	-.005	5.5
76	MP5A	X	-20.963	.5
77	MP5A	Z	0	.5
78	MP5A	Mx	.01	.5
79	MP5A	X	-20.963	5.5
80	MP5A	Z	0	5.5
81	MP5A	Mx	.01	5.5
82	MP5B	X	-18.838	.5
83	MP5B	Z	0	.5
84	MP5B	Mx	-.005	.5
85	MP5B	X	-18.838	5.5
86	MP5B	Z	0	5.5
87	MP5B	Mx	-.005	5.5
88	MP5C	X	-18.838	.5
89	MP5C	Z	0	.5
90	MP5C	Mx	-.005	.5
91	MP5C	X	-18.838	5.5
92	MP5C	Z	0	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
93	MP5C	Mx	-.005	5.5
94	MP4A	X	-14.083	.15
95	MP4A	Z	0	.15
96	MP4A	Mx	.007	.15
97	MP4A	X	-14.083	3.95
98	MP4A	Z	0	3.95
99	MP4A	Mx	.007	3.95
100	MP4B	X	-18.974	.15
101	MP4B	Z	0	.15
102	MP4B	Mx	.008	.15
103	MP4B	X	-18.974	3.95
104	MP4B	Z	0	3.95
105	MP4B	Mx	.008	3.95
106	MP4C	X	-18.974	.15
107	MP4C	Z	0	.15
108	MP4C	Mx	-.017	.15
109	MP4C	X	-18.974	3.95
110	MP4C	Z	0	3.95
111	MP4C	Mx	-.017	3.95
112	MP4A	X	-14.083	.15
113	MP4A	Z	0	.15
114	MP4A	Mx	.007	.15
115	MP4A	X	-14.083	3.95
116	MP4A	Z	0	3.95
117	MP4A	Mx	.007	3.95
118	MP4B	X	-18.974	.15
119	MP4B	Z	0	.15
120	MP4B	Mx	-.017	.15
121	MP4B	X	-18.974	3.95
122	MP4B	Z	0	3.95
123	MP4B	Mx	-.017	3.95
124	MP4C	X	-18.974	.15
125	MP4C	Z	0	.15
126	MP4C	Mx	.008	.15
127	MP4C	X	-18.974	3.95
128	MP4C	Z	0	3.95
129	MP4C	Mx	.008	3.95
130	DC	X	-23.279	1.5
131	DC	Z	0	1.5
132	DC	Mx	.002	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-6.672	.25
2	MP2A	Z	-3.852	.25
3	MP2A	Mx	.003	.25
4	MP2A	X	-6.672	2.25
5	MP2A	Z	-3.852	2.25
6	MP2A	Mx	.003	2.25
7	MP2B	X	-11.758	.25
8	MP2B	Z	-6.788	.25
9	MP2B	Mx	0	.25
10	MP2B	X	-11.758	2.25
11	MP2B	Z	-6.788	2.25
12	MP2B	Mx	0	2.25
13	MP2C	X	-6.672	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
14	MP2C	Z	-3.852	.25
15	MP2C	Mx	-.003	.25
16	MP2C	X	-6.672	2.25
17	MP2C	Z	-3.852	2.25
18	MP2C	Mx	-.003	2.25
19	MP2A	X	-2.393	3.55
20	MP2A	Z	-1.381	3.55
21	MP2A	Mx	.001	3.55
22	MP2A	X	-2.393	4.55
23	MP2A	Z	-1.381	4.55
24	MP2A	Mx	.001	4.55
25	MP2B	X	-3.071	3.55
26	MP2B	Z	-1.773	3.55
27	MP2B	Mx	0	3.55
28	MP2B	X	-3.071	4.55
29	MP2B	Z	-1.773	4.55
30	MP2B	Mx	0	4.55
31	MP2C	X	-2.393	3.55
32	MP2C	Z	-1.381	3.55
33	MP2C	Mx	-.001	3.55
34	MP2C	X	-2.393	4.55
35	MP2C	Z	-1.381	4.55
36	MP2C	Mx	-.001	4.55
37	DC	X	-22.711	1.25
38	DC	Z	-13.112	1.25
39	DC	Mx	-.005	1.25
40	MP3A	X	-9.389	2.5
41	MP3A	Z	-5.421	2.5
42	MP3A	Mx	-.005	2.5
43	MP3B	X	-12.158	2.5
44	MP3B	Z	-7.02	2.5
45	MP3B	Mx	0	2.5
46	MP3C	X	-9.389	2.5
47	MP3C	Z	-5.421	2.5
48	MP3C	Mx	.005	2.5
49	MP4A	X	-9.5	2.5
50	MP4A	Z	-5.485	2.5
51	MP4A	Mx	-.005	2.5
52	MP4B	X	-12.158	2.5
53	MP4B	Z	-7.02	2.5
54	MP4B	Mx	0	2.5
55	MP4C	X	-9.5	2.5
56	MP4C	Z	-5.485	2.5
57	MP4C	Mx	.005	2.5
58	MP1A	X	-17.541	.5
59	MP1A	Z	-10.127	.5
60	MP1A	Mx	.009	.5
61	MP1A	X	-17.541	5.5
62	MP1A	Z	-10.127	5.5
63	MP1A	Mx	.009	5.5
64	MP1B	X	-15.701	.5
65	MP1B	Z	-9.065	.5
66	MP1B	Mx	0	.5
67	MP1B	X	-15.701	5.5
68	MP1B	Z	-9.065	5.5
69	MP1B	Mx	0	5.5
70	MP1C	X	-17.541	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
71	MP1C	Z	-10.127	.5
72	MP1C	Mx	-.009	.5
73	MP1C	X	-17.541	5.5
74	MP1C	Z	-10.127	5.5
75	MP1C	Mx	-.009	5.5
76	MP5A	X	-17.541	.5
77	MP5A	Z	-10.127	.5
78	MP5A	Mx	.009	.5
79	MP5A	X	-17.541	5.5
80	MP5A	Z	-10.127	5.5
81	MP5A	Mx	.009	5.5
82	MP5B	X	-15.701	.5
83	MP5B	Z	-9.065	.5
84	MP5B	Mx	0	.5
85	MP5B	X	-15.701	5.5
86	MP5B	Z	-9.065	5.5
87	MP5B	Mx	0	5.5
88	MP5C	X	-17.541	.5
89	MP5C	Z	-10.127	.5
90	MP5C	Mx	-.009	.5
91	MP5C	X	-17.541	5.5
92	MP5C	Z	-10.127	5.5
93	MP5C	Mx	-.009	5.5
94	MP4A	X	-13.608	.15
95	MP4A	Z	-7.857	.15
96	MP4A	Mx	.000911	.15
97	MP4A	X	-13.608	3.95
98	MP4A	Z	-7.857	3.95
99	MP4A	Mx	.000911	3.95
100	MP4B	X	-17.844	.15
101	MP4B	Z	-10.302	.15
102	MP4B	Mx	.015	.15
103	MP4B	X	-17.844	3.95
104	MP4B	Z	-10.302	3.95
105	MP4B	Mx	.015	3.95
106	MP4C	X	-13.608	.15
107	MP4C	Z	-7.857	.15
108	MP4C	Mx	-.013	.15
109	MP4C	X	-13.608	3.95
110	MP4C	Z	-7.857	3.95
111	MP4C	Mx	-.013	3.95
112	MP4A	X	-13.608	.15
113	MP4A	Z	-7.857	.15
114	MP4A	Mx	.013	.15
115	MP4A	X	-13.608	3.95
116	MP4A	Z	-7.857	3.95
117	MP4A	Mx	.013	3.95
118	MP4B	X	-17.844	.15
119	MP4B	Z	-10.302	.15
120	MP4B	Mx	-.015	.15
121	MP4B	X	-17.844	3.95
122	MP4B	Z	-10.302	3.95
123	MP4B	Mx	-.015	3.95
124	MP4C	X	-13.608	.15
125	MP4C	Z	-7.857	.15
126	MP4C	Mx	-.000912	.15
127	MP4C	X	-13.608	3.95



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
128	MP4C	Z	-7.857	3.95
129	MP4C	Mx	-.000912	3.95
130	DC	X	-22.711	1.5
131	DC	Z	-13.112	1.5
132	DC	Mx	.005	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-5.81	.25
2	MP2A	Z	-10.062	.25
3	MP2A	Mx	.003	.25
4	MP2A	X	-5.81	2.25
5	MP2A	Z	-10.062	2.25
6	MP2A	Mx	.003	2.25
7	MP2B	X	-5.81	.25
8	MP2B	Z	-10.062	.25
9	MP2B	Mx	.003	.25
10	MP2B	X	-5.81	2.25
11	MP2B	Z	-10.062	2.25
12	MP2B	Mx	.003	2.25
13	MP2C	X	-2.873	.25
14	MP2C	Z	-4.976	.25
15	MP2C	Mx	-.003	.25
16	MP2C	X	-2.873	2.25
17	MP2C	Z	-4.976	2.25
18	MP2C	Mx	-.003	2.25
19	MP2A	X	-1.643	3.55
20	MP2A	Z	-2.845	3.55
21	MP2A	Mx	.000822	3.55
22	MP2A	X	-1.643	4.55
23	MP2A	Z	-2.845	4.55
24	MP2A	Mx	.000822	4.55
25	MP2B	X	-1.643	3.55
26	MP2B	Z	-2.845	3.55
27	MP2B	Mx	.000821	3.55
28	MP2B	X	-1.643	4.55
29	MP2B	Z	-2.845	4.55
30	MP2B	Mx	.000821	4.55
31	MP2C	X	-1.251	3.55
32	MP2C	Z	-2.166	3.55
33	MP2C	Mx	-.001	3.55
34	MP2C	X	-1.251	4.55
35	MP2C	Z	-2.166	4.55
36	MP2C	Mx	-.001	4.55
37	DC	X	-14.313	1.25
38	DC	Z	-24.791	1.25
39	DC	Mx	-.007	1.25
40	MP3A	X	-6.487	2.5
41	MP3A	Z	-11.235	2.5
42	MP3A	Mx	-.003	2.5
43	MP3B	X	-6.487	2.5
44	MP3B	Z	-11.235	2.5
45	MP3B	Mx	-.003	2.5
46	MP3C	X	-4.888	2.5
47	MP3C	Z	-8.466	2.5
48	MP3C	Mx	.005	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
49	MP4A	X	-6.508	2.5
50	MP4A	Z	-11.272	2.5
51	MP4A	Mx	-.003	2.5
52	MP4B	X	-6.508	2.5
53	MP4B	Z	-11.272	2.5
54	MP4B	Mx	-.003	2.5
55	MP4C	X	-4.973	2.5
56	MP4C	Z	-8.614	2.5
57	MP4C	Mx	.005	2.5
58	MP1A	X	-9.419	.5
59	MP1A	Z	-16.314	.5
60	MP1A	Mx	.005	.5
61	MP1A	X	-9.419	5.5
62	MP1A	Z	-16.314	5.5
63	MP1A	Mx	.005	5.5
64	MP1B	X	-9.419	.5
65	MP1B	Z	-16.314	.5
66	MP1B	Mx	.005	.5
67	MP1B	X	-9.419	5.5
68	MP1B	Z	-16.314	5.5
69	MP1B	Mx	.005	5.5
70	MP1C	X	-10.481	.5
71	MP1C	Z	-18.154	.5
72	MP1C	Mx	-.01	.5
73	MP1C	X	-10.481	5.5
74	MP1C	Z	-18.154	5.5
75	MP1C	Mx	-.01	5.5
76	MP5A	X	-9.419	.5
77	MP5A	Z	-16.314	.5
78	MP5A	Mx	.005	.5
79	MP5A	X	-9.419	5.5
80	MP5A	Z	-16.314	5.5
81	MP5A	Mx	.005	5.5
82	MP5B	X	-9.419	.5
83	MP5B	Z	-16.314	.5
84	MP5B	Mx	.005	.5
85	MP5B	X	-9.419	5.5
86	MP5B	Z	-16.314	5.5
87	MP5B	Mx	.005	5.5
88	MP5C	X	-10.481	.5
89	MP5C	Z	-18.154	.5
90	MP5C	Mx	-.01	.5
91	MP5C	X	-10.481	5.5
92	MP5C	Z	-18.154	5.5
93	MP5C	Mx	-.01	5.5
94	MP4A	X	-9.487	.15
95	MP4A	Z	-16.432	.15
96	MP4A	Mx	-.008	.15
97	MP4A	X	-9.487	3.95
98	MP4A	Z	-16.432	3.95
99	MP4A	Mx	-.008	3.95
100	MP4B	X	-9.487	.15
101	MP4B	Z	-16.432	.15
102	MP4B	Mx	.017	.15
103	MP4B	X	-9.487	3.95
104	MP4B	Z	-16.432	3.95
105	MP4B	Mx	.017	3.95



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
106	MP4C	X	-7.041	.15
107	MP4C	Z	-12.196	.15
108	MP4C	Mx	-.007	.15
109	MP4C	X	-7.041	3.95
110	MP4C	Z	-12.196	3.95
111	MP4C	Mx	-.007	3.95
112	MP4A	X	-9.487	.15
113	MP4A	Z	-16.432	.15
114	MP4A	Mx	.017	.15
115	MP4A	X	-9.487	3.95
116	MP4A	Z	-16.432	3.95
117	MP4A	Mx	.017	3.95
118	MP4B	X	-9.487	.15
119	MP4B	Z	-16.432	.15
120	MP4B	Mx	-.008	.15
121	MP4B	X	-9.487	3.95
122	MP4B	Z	-16.432	3.95
123	MP4B	Mx	-.008	3.95
124	MP4C	X	-7.041	.15
125	MP4C	Z	-12.196	.15
126	MP4C	Mx	-.007	.15
127	MP4C	X	-7.041	3.95
128	MP4C	Z	-12.196	3.95
129	MP4C	Mx	-.007	3.95
130	DC	X	-14.313	1.5
131	DC	Z	-24.791	1.5
132	DC	Mx	.007	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	0	.25
2	MP2A	Z	-4.262	.25
3	MP2A	Mx	0	.25
4	MP2A	X	0	2.25
5	MP2A	Z	-4.262	2.25
6	MP2A	Mx	0	2.25
7	MP2B	X	0	.25
8	MP2B	Z	-2.296	.25
9	MP2B	Mx	.000994	.25
10	MP2B	X	0	2.25
11	MP2B	Z	-2.296	2.25
12	MP2B	Mx	.000994	2.25
13	MP2C	X	0	.25
14	MP2C	Z	-2.296	.25
15	MP2C	Mx	-.000994	.25
16	MP2C	X	0	2.25
17	MP2C	Z	-2.296	2.25
18	MP2C	Mx	-.000994	2.25
19	MP2A	X	0	3.55
20	MP2A	Z	-.978	3.55
21	MP2A	Mx	0	3.55
22	MP2A	X	0	4.55
23	MP2A	Z	-.978	4.55
24	MP2A	Mx	0	4.55
25	MP2B	X	0	3.55
26	MP2B	Z	-.725	3.55

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
84	MP5B	Mx	.003	.5
85	MP5B	X	0	5.5
86	MP5B	Z	-6.356	5.5
87	MP5B	Mx	.003	5.5
88	MP5C	X	0	.5
89	MP5C	Z	-6.356	.5
90	MP5C	Mx	-.003	.5
91	MP5C	X	0	5.5
92	MP5C	Z	-6.356	5.5
93	MP5C	Mx	-.003	5.5
94	MP4A	X	0	.15
95	MP4A	Z	-6.612	.15
96	MP4A	Mx	-.005	.15
97	MP4A	X	0	3.95
98	MP4A	Z	-6.612	3.95
99	MP4A	Mx	-.005	3.95
100	MP4B	X	0	.15
101	MP4B	Z	-4.911	.15
102	MP4B	Mx	.004	.15
103	MP4B	X	0	3.95
104	MP4B	Z	-4.911	3.95
105	MP4B	Mx	.004	3.95
106	MP4C	X	0	.15
107	MP4C	Z	-4.911	.15
108	MP4C	Mx	-.000285	.15
109	MP4C	X	0	3.95
110	MP4C	Z	-4.911	3.95
111	MP4C	Mx	-.000285	3.95
112	MP4A	X	0	.15
113	MP4A	Z	-6.612	.15
114	MP4A	Mx	.005	.15
115	MP4A	X	0	3.95
116	MP4A	Z	-6.612	3.95
117	MP4A	Mx	.005	3.95
118	MP4B	X	0	.15
119	MP4B	Z	-4.911	.15
120	MP4B	Mx	.000285	.15
121	MP4B	X	0	3.95
122	MP4B	Z	-4.911	3.95
123	MP4B	Mx	.000285	3.95
124	MP4C	X	0	.15
125	MP4C	Z	-4.911	.15
126	MP4C	Mx	-.004	.15
127	MP4C	X	0	3.95
128	MP4C	Z	-4.911	3.95
129	MP4C	Mx	-.004	3.95
130	DC	X	0	1.5
131	DC	Z	-6.929	1.5
132	DC	Mx	.002	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	1.803	.25
2	MP2A	Z	-3.123	.25
3	MP2A	Mx	-.000902	.25
4	MP2A	X	1.803	2.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
5	MP2A	Z	-3.123	2.25
6	MP2A	Mx	-.000902	2.25
7	MP2B	X	.821	.25
8	MP2B	Z	-1.421	.25
9	MP2B	Mx	.000821	.25
10	MP2B	X	.821	2.25
11	MP2B	Z	-1.421	2.25
12	MP2B	Mx	.000821	2.25
13	MP2C	X	1.803	.25
14	MP2C	Z	-3.123	.25
15	MP2C	Mx	-.000902	.25
16	MP2C	X	1.803	2.25
17	MP2C	Z	-3.123	2.25
18	MP2C	Mx	-.000902	2.25
19	MP2A	X	.447	3.55
20	MP2A	Z	-.774	3.55
21	MP2A	Mx	-.000223	3.55
22	MP2A	X	.447	4.55
23	MP2A	Z	-.774	4.55
24	MP2A	Mx	-.000223	4.55
25	MP2B	X	.32	3.55
26	MP2B	Z	-.555	3.55
27	MP2B	Mx	.00032	3.55
28	MP2B	X	.32	4.55
29	MP2B	Z	-.555	4.55
30	MP2B	Mx	.00032	4.55
31	MP2C	X	.447	3.55
32	MP2C	Z	-.774	3.55
33	MP2C	Mx	-.000223	3.55
34	MP2C	X	.447	4.55
35	MP2C	Z	-.774	4.55
36	MP2C	Mx	-.000223	4.55
37	DC	X	3.063	1.25
38	DC	Z	-5.305	1.25
39	DC	Mx	-.000984	1.25
40	MP3A	X	1.599	2.5
41	MP3A	Z	-2.77	2.5
42	MP3A	Mx	.0008	2.5
43	MP3B	X	1.169	2.5
44	MP3B	Z	-2.025	2.5
45	MP3B	Mx	-.001	2.5
46	MP3C	X	1.599	2.5
47	MP3C	Z	-2.77	2.5
48	MP3C	Mx	.0008	2.5
49	MP4A	X	1.935	2.5
50	MP4A	Z	-3.352	2.5
51	MP4A	Mx	.000967	2.5
52	MP4B	X	1.434	2.5
53	MP4B	Z	-2.483	2.5
54	MP4B	Mx	-.001	2.5
55	MP4C	X	1.935	2.5
56	MP4C	Z	-3.352	2.5
57	MP4C	Mx	.000968	2.5
58	MP1A	X	2.937	.5
59	MP1A	Z	-5.087	.5
60	MP1A	Mx	-.001	.5
61	MP1A	X	2.937	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
119	MP4B	Z	-3.763	.15
120	MP4B	Mx	.002	.15
121	MP4B	X	2.172	3.95
122	MP4B	Z	-3.763	3.95
123	MP4B	Mx	.002	3.95
124	MP4C	X	3.022	.15
125	MP4C	Z	-5.235	.15
126	MP4C	Mx	-.005	.15
127	MP4C	X	3.022	3.95
128	MP4C	Z	-5.235	3.95
129	MP4C	Mx	-.005	3.95
130	DC	X	3.063	1.5
131	DC	Z	-5.305	1.5
132	DC	Mx	.000984	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	1.989	.25
2	MP2A	Z	-1.148	.25
3	MP2A	Mx	-.000995	.25
4	MP2A	X	1.989	2.25
5	MP2A	Z	-1.148	2.25
6	MP2A	Mx	-.000995	2.25
7	MP2B	X	1.989	.25
8	MP2B	Z	-1.148	.25
9	MP2B	Mx	.000994	.25
10	MP2B	X	1.989	2.25
11	MP2B	Z	-1.148	2.25
12	MP2B	Mx	.000994	2.25
13	MP2C	X	3.691	.25
14	MP2C	Z	-2.131	.25
15	MP2C	Mx	0	.25
16	MP2C	X	3.691	2.25
17	MP2C	Z	-2.131	2.25
18	MP2C	Mx	0	2.25
19	MP2A	X	.628	3.55
20	MP2A	Z	-.363	3.55
21	MP2A	Mx	-.000314	3.55
22	MP2A	X	.628	4.55
23	MP2A	Z	-.363	4.55
24	MP2A	Mx	-.000314	4.55
25	MP2B	X	.628	3.55
26	MP2B	Z	-.363	3.55
27	MP2B	Mx	.000314	3.55
28	MP2B	X	.628	4.55
29	MP2B	Z	-.363	4.55
30	MP2B	Mx	.000314	4.55
31	MP2C	X	.847	3.55
32	MP2C	Z	-.489	3.55
33	MP2C	Mx	0	3.55
34	MP2C	X	.847	4.55
35	MP2C	Z	-.489	4.55
36	MP2C	Mx	0	4.55
37	DC	X	4.738	1.25
38	DC	Z	-2.736	1.25
39	DC	Mx	-.000238	1.25



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]	
75	MP1C	Mx	.001	5.5
76	MP5A	X	6.597	.5
77	MP5A	Z	0	.5
78	MP5A	Mx	-.003	.5
79	MP5A	X	6.597	5.5
80	MP5A	Z	0	5.5
81	MP5A	Mx	-.003	5.5
82	MP5B	X	5.874	.5
83	MP5B	Z	0	.5
84	MP5B	Mx	.001	.5
85	MP5B	X	5.874	5.5
86	MP5B	Z	0	5.5
87	MP5B	Mx	.001	5.5
88	MP5C	X	5.874	.5
89	MP5C	Z	0	.5
90	MP5C	Mx	.001	.5
91	MP5C	X	5.874	5.5
92	MP5C	Z	0	5.5
93	MP5C	Mx	.001	5.5
94	MP4A	X	4.345	.15
95	MP4A	Z	0	.15
96	MP4A	Mx	-.002	.15
97	MP4A	X	4.345	3.95
98	MP4A	Z	0	3.95
99	MP4A	Mx	-.002	3.95
100	MP4B	X	6.045	.15
101	MP4B	Z	0	.15
102	MP4B	Mx	-.002	.15
103	MP4B	X	6.045	3.95
104	MP4B	Z	0	3.95
105	MP4B	Mx	-.002	3.95
106	MP4C	X	6.045	.15
107	MP4C	Z	0	.15
108	MP4C	Mx	.005	.15
109	MP4C	X	6.045	3.95
110	MP4C	Z	0	3.95
111	MP4C	Mx	.005	3.95
112	MP4A	X	4.345	.15
113	MP4A	Z	0	.15
114	MP4A	Mx	-.002	.15
115	MP4A	X	4.345	3.95
116	MP4A	Z	0	3.95
117	MP4A	Mx	-.002	3.95
118	MP4B	X	6.045	.15
119	MP4B	Z	0	.15
120	MP4B	Mx	.005	.15
121	MP4B	X	6.045	3.95
122	MP4B	Z	0	3.95
123	MP4B	Mx	.005	3.95
124	MP4C	X	6.045	.15
125	MP4C	Z	0	.15
126	MP4C	Mx	-.002	.15
127	MP4C	X	6.045	3.95
128	MP4C	Z	0	3.95
129	MP4C	Mx	-.002	3.95
130	DC	X	5.62	1.5
131	DC	Z	0	1.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
132	DC	Mx	-.000481	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	1.989	.25
2	MP2A	Z	1.148	.25
3	MP2A	Mx	-.000995	.25
4	MP2A	X	1.989	2.25
5	MP2A	Z	1.148	2.25
6	MP2A	Mx	-.000995	2.25
7	MP2B	X	3.691	.25
8	MP2B	Z	2.131	.25
9	MP2B	Mx	0	.25
10	MP2B	X	3.691	2.25
11	MP2B	Z	2.131	2.25
12	MP2B	Mx	0	2.25
13	MP2C	X	1.989	.25
14	MP2C	Z	1.148	.25
15	MP2C	Mx	.000994	.25
16	MP2C	X	1.989	2.25
17	MP2C	Z	1.148	2.25
18	MP2C	Mx	.000994	2.25
19	MP2A	X	.628	3.55
20	MP2A	Z	.363	3.55
21	MP2A	Mx	-.000314	3.55
22	MP2A	X	.628	4.55
23	MP2A	Z	.363	4.55
24	MP2A	Mx	-.000314	4.55
25	MP2B	X	.847	3.55
26	MP2B	Z	.489	3.55
27	MP2B	Mx	0	3.55
28	MP2B	X	.847	4.55
29	MP2B	Z	.489	4.55
30	MP2B	Mx	0	4.55
31	MP2C	X	.628	3.55
32	MP2C	Z	.363	3.55
33	MP2C	Mx	.000314	3.55
34	MP2C	X	.628	4.55
35	MP2C	Z	.363	4.55
36	MP2C	Mx	.000314	4.55
37	DC	X	5.562	1.25
38	DC	Z	3.211	1.25
39	DC	Mx	.001	1.25
40	MP3A	X	2.274	2.5
41	MP3A	Z	1.313	2.5
42	MP3A	Mx	.001	2.5
43	MP3B	X	3.019	2.5
44	MP3B	Z	1.743	2.5
45	MP3B	Mx	0	2.5
46	MP3C	X	2.274	2.5
47	MP3C	Z	1.313	2.5
48	MP3C	Mx	-.001	2.5
49	MP4A	X	2.773	2.5
50	MP4A	Z	1.601	2.5
51	MP4A	Mx	.001	2.5
52	MP4B	X	3.642	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
53	MP4B	Z	2.103	2.5
54	MP4B	Mx	0	2.5
55	MP4C	X	2.773	2.5
56	MP4C	Z	1.601	2.5
57	MP4C	Mx	-.001	2.5
58	MP1A	X	5.504	.5
59	MP1A	Z	3.178	.5
60	MP1A	Mx	-.003	.5
61	MP1A	X	5.504	5.5
62	MP1A	Z	3.178	5.5
63	MP1A	Mx	-.003	5.5
64	MP1B	X	4.879	.5
65	MP1B	Z	2.817	.5
66	MP1B	Mx	0	.5
67	MP1B	X	4.879	5.5
68	MP1B	Z	2.817	5.5
69	MP1B	Mx	0	5.5
70	MP1C	X	5.504	.5
71	MP1C	Z	3.178	.5
72	MP1C	Mx	.003	.5
73	MP1C	X	5.504	5.5
74	MP1C	Z	3.178	5.5
75	MP1C	Mx	.003	5.5
76	MP5A	X	5.504	.5
77	MP5A	Z	3.178	.5
78	MP5A	Mx	-.003	.5
79	MP5A	X	5.504	5.5
80	MP5A	Z	3.178	5.5
81	MP5A	Mx	-.003	5.5
82	MP5B	X	4.879	.5
83	MP5B	Z	2.817	.5
84	MP5B	Mx	0	.5
85	MP5B	X	4.879	5.5
86	MP5B	Z	2.817	5.5
87	MP5B	Mx	0	5.5
88	MP5C	X	5.504	.5
89	MP5C	Z	3.178	.5
90	MP5C	Mx	.003	.5
91	MP5C	X	5.504	5.5
92	MP5C	Z	3.178	5.5
93	MP5C	Mx	.003	5.5
94	MP4A	X	4.253	.15
95	MP4A	Z	2.456	.15
96	MP4A	Mx	-.000285	.15
97	MP4A	X	4.253	3.95
98	MP4A	Z	2.456	3.95
99	MP4A	Mx	-.000285	3.95
100	MP4B	X	5.726	.15
101	MP4B	Z	3.306	.15
102	MP4B	Mx	-.005	.15
103	MP4B	X	5.726	3.95
104	MP4B	Z	3.306	3.95
105	MP4B	Mx	-.005	3.95
106	MP4C	X	4.253	.15
107	MP4C	Z	2.456	.15
108	MP4C	Mx	.004	.15
109	MP4C	X	4.253	3.95



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
110	MP4C	Z	2.456	3.95
111	MP4C	Mx	.004	3.95
112	MP4A	X	4.253	.15
113	MP4A	Z	2.456	.15
114	MP4A	Mx	-.004	.15
115	MP4A	X	4.253	3.95
116	MP4A	Z	2.456	3.95
117	MP4A	Mx	-.004	3.95
118	MP4B	X	5.726	.15
119	MP4B	Z	3.306	.15
120	MP4B	Mx	.005	.15
121	MP4B	X	5.726	3.95
122	MP4B	Z	3.306	3.95
123	MP4B	Mx	.005	3.95
124	MP4C	X	4.253	.15
125	MP4C	Z	2.456	.15
126	MP4C	Mx	.000285	.15
127	MP4C	X	4.253	3.95
128	MP4C	Z	2.456	3.95
129	MP4C	Mx	.000285	3.95
130	DC	X	5.562	1.5
131	DC	Z	3.211	1.5
132	DC	Mx	-.001	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	1.803	.25
2	MP2A	Z	3.123	.25
3	MP2A	Mx	-.000902	.25
4	MP2A	X	1.803	2.25
5	MP2A	Z	3.123	2.25
6	MP2A	Mx	-.000902	2.25
7	MP2B	X	1.803	.25
8	MP2B	Z	3.123	.25
9	MP2B	Mx	-.000902	.25
10	MP2B	X	1.803	2.25
11	MP2B	Z	3.123	2.25
12	MP2B	Mx	-.000902	2.25
13	MP2C	X	.821	.25
14	MP2C	Z	1.421	.25
15	MP2C	Mx	.000821	.25
16	MP2C	X	.821	2.25
17	MP2C	Z	1.421	2.25
18	MP2C	Mx	.000821	2.25
19	MP2A	X	.447	3.55
20	MP2A	Z	.774	3.55
21	MP2A	Mx	-.000223	3.55
22	MP2A	X	.447	4.55
23	MP2A	Z	.774	4.55
24	MP2A	Mx	-.000223	4.55
25	MP2B	X	.447	3.55
26	MP2B	Z	.774	3.55
27	MP2B	Mx	-.000223	3.55
28	MP2B	X	.447	4.55
29	MP2B	Z	.774	4.55
30	MP2B	Mx	-.000223	4.55



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
88	MP5C	X	3.298	.5
89	MP5C	Z	5.713	.5
90	MP5C	Mx	.003	.5
91	MP5C	X	3.298	5.5
92	MP5C	Z	5.713	5.5
93	MP5C	Mx	.003	5.5
94	MP4A	X	3.022	.15
95	MP4A	Z	5.235	.15
96	MP4A	Mx	.002	.15
97	MP4A	X	3.022	3.95
98	MP4A	Z	5.235	3.95
99	MP4A	Mx	.002	3.95
100	MP4B	X	3.022	.15
101	MP4B	Z	5.235	.15
102	MP4B	Mx	-.005	.15
103	MP4B	X	3.022	3.95
104	MP4B	Z	5.235	3.95
105	MP4B	Mx	-.005	3.95
106	MP4C	X	2.172	.15
107	MP4C	Z	3.763	.15
108	MP4C	Mx	.002	.15
109	MP4C	X	2.172	3.95
110	MP4C	Z	3.763	3.95
111	MP4C	Mx	.002	3.95
112	MP4A	X	3.022	.15
113	MP4A	Z	5.235	.15
114	MP4A	Mx	-.005	.15
115	MP4A	X	3.022	3.95
116	MP4A	Z	5.235	3.95
117	MP4A	Mx	-.005	3.95
118	MP4B	X	3.022	.15
119	MP4B	Z	5.235	.15
120	MP4B	Mx	.002	.15
121	MP4B	X	3.022	3.95
122	MP4B	Z	5.235	3.95
123	MP4B	Mx	.002	3.95
124	MP4C	X	2.172	.15
125	MP4C	Z	3.763	.15
126	MP4C	Mx	.002	.15
127	MP4C	X	2.172	3.95
128	MP4C	Z	3.763	3.95
129	MP4C	Mx	.002	3.95
130	DC	X	3.539	1.5
131	DC	Z	6.129	1.5
132	DC	Mx	-.002	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	0	.25
2	MP2A	Z	4.262	.25
3	MP2A	Mx	0	.25
4	MP2A	X	0	2.25
5	MP2A	Z	4.262	2.25
6	MP2A	Mx	0	2.25
7	MP2B	X	0	.25
8	MP2B	Z	2.296	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
9	MP2B	Mx	-.000994	.25
10	MP2B	X	0	2.25
11	MP2B	Z	2.296	2.25
12	MP2B	Mx	-.000994	2.25
13	MP2C	X	0	.25
14	MP2C	Z	2.296	.25
15	MP2C	Mx	.000994	.25
16	MP2C	X	0	2.25
17	MP2C	Z	2.296	2.25
18	MP2C	Mx	.000994	2.25
19	MP2A	X	0	3.55
20	MP2A	Z	.978	3.55
21	MP2A	Mx	0	3.55
22	MP2A	X	0	4.55
23	MP2A	Z	.978	4.55
24	MP2A	Mx	0	4.55
25	MP2B	X	0	3.55
26	MP2B	Z	.725	3.55
27	MP2B	Mx	-.000314	3.55
28	MP2B	X	0	4.55
29	MP2B	Z	.725	4.55
30	MP2B	Mx	-.000314	4.55
31	MP2C	X	0	3.55
32	MP2C	Z	.725	3.55
33	MP2C	Mx	.000314	3.55
34	MP2C	X	0	4.55
35	MP2C	Z	.725	4.55
36	MP2C	Mx	.000314	4.55
37	DC	X	0	1.25
38	DC	Z	6.929	1.25
39	DC	Mx	.002	1.25
40	MP3A	X	0	2.5
41	MP3A	Z	3.486	2.5
42	MP3A	Mx	0	2.5
43	MP3B	X	0	2.5
44	MP3B	Z	2.626	2.5
45	MP3B	Mx	.001	2.5
46	MP3C	X	0	2.5
47	MP3C	Z	2.626	2.5
48	MP3C	Mx	-.001	2.5
49	MP4A	X	0	2.5
50	MP4A	Z	4.205	2.5
51	MP4A	Mx	0	2.5
52	MP4B	X	0	2.5
53	MP4B	Z	3.202	2.5
54	MP4B	Mx	.001	2.5
55	MP4C	X	0	2.5
56	MP4C	Z	3.202	2.5
57	MP4C	Mx	-.001	2.5
58	MP1A	X	0	.5
59	MP1A	Z	5.633	.5
60	MP1A	Mx	0	.5
61	MP1A	X	0	5.5
62	MP1A	Z	5.633	5.5
63	MP1A	Mx	0	5.5
64	MP1B	X	0	.5
65	MP1B	Z	6.356	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
66	MP1B	Mx	-.003	.5
67	MP1B	X	0	5.5
68	MP1B	Z	6.356	5.5
69	MP1B	Mx	-.003	5.5
70	MP1C	X	0	.5
71	MP1C	Z	6.356	.5
72	MP1C	Mx	.003	.5
73	MP1C	X	0	5.5
74	MP1C	Z	6.356	5.5
75	MP1C	Mx	.003	5.5
76	MP5A	X	0	.5
77	MP5A	Z	5.633	.5
78	MP5A	Mx	0	.5
79	MP5A	X	0	5.5
80	MP5A	Z	5.633	5.5
81	MP5A	Mx	0	5.5
82	MP5B	X	0	.5
83	MP5B	Z	6.356	.5
84	MP5B	Mx	-.003	.5
85	MP5B	X	0	5.5
86	MP5B	Z	6.356	5.5
87	MP5B	Mx	-.003	5.5
88	MP5C	X	0	.5
89	MP5C	Z	6.356	.5
90	MP5C	Mx	.003	.5
91	MP5C	X	0	5.5
92	MP5C	Z	6.356	5.5
93	MP5C	Mx	.003	5.5
94	MP4A	X	0	.15
95	MP4A	Z	6.612	.15
96	MP4A	Mx	.005	.15
97	MP4A	X	0	3.95
98	MP4A	Z	6.612	3.95
99	MP4A	Mx	.005	3.95
100	MP4B	X	0	.15
101	MP4B	Z	4.911	.15
102	MP4B	Mx	-.004	.15
103	MP4B	X	0	3.95
104	MP4B	Z	4.911	3.95
105	MP4B	Mx	-.004	3.95
106	MP4C	X	0	.15
107	MP4C	Z	4.911	.15
108	MP4C	Mx	.000285	.15
109	MP4C	X	0	3.95
110	MP4C	Z	4.911	3.95
111	MP4C	Mx	.000285	3.95
112	MP4A	X	0	.15
113	MP4A	Z	6.612	.15
114	MP4A	Mx	-.005	.15
115	MP4A	X	0	3.95
116	MP4A	Z	6.612	3.95
117	MP4A	Mx	-.005	3.95
118	MP4B	X	0	.15
119	MP4B	Z	4.911	.15
120	MP4B	Mx	-.000285	.15
121	MP4B	X	0	3.95
122	MP4B	Z	4.911	3.95



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
123	MP4B	Mx	-0.00285	3.95
124	MP4C	X	0	.15
125	MP4C	Z	4.911	.15
126	MP4C	Mx	.004	.15
127	MP4C	X	0	3.95
128	MP4C	Z	4.911	3.95
129	MP4C	Mx	.004	3.95
130	DC	X	0	1.5
131	DC	Z	6.929	1.5
132	DC	Mx	-0.002	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	-1.803	.25
2	MP2A	Z	3.123	.25
3	MP2A	Mx	.000902	.25
4	MP2A	X	-1.803	2.25
5	MP2A	Z	3.123	2.25
6	MP2A	Mx	.000902	2.25
7	MP2B	X	-.821	.25
8	MP2B	Z	1.421	.25
9	MP2B	Mx	-.000821	.25
10	MP2B	X	-.821	2.25
11	MP2B	Z	1.421	2.25
12	MP2B	Mx	-.000821	2.25
13	MP2C	X	-1.803	.25
14	MP2C	Z	3.123	.25
15	MP2C	Mx	.000902	.25
16	MP2C	X	-1.803	2.25
17	MP2C	Z	3.123	2.25
18	MP2C	Mx	.000902	2.25
19	MP2A	X	-.447	3.55
20	MP2A	Z	.774	3.55
21	MP2A	Mx	.000223	3.55
22	MP2A	X	-.447	4.55
23	MP2A	Z	.774	4.55
24	MP2A	Mx	.000223	4.55
25	MP2B	X	-.32	3.55
26	MP2B	Z	.555	3.55
27	MP2B	Mx	-.00032	3.55
28	MP2B	X	-.32	4.55
29	MP2B	Z	.555	4.55
30	MP2B	Mx	-.00032	4.55
31	MP2C	X	-.447	3.55
32	MP2C	Z	.774	3.55
33	MP2C	Mx	.000223	3.55
34	MP2C	X	-.447	4.55
35	MP2C	Z	.774	4.55
36	MP2C	Mx	.000223	4.55
37	DC	X	-3.063	1.25
38	DC	Z	5.305	1.25
39	DC	Mx	.000984	1.25
40	MP3A	X	-1.599	2.5
41	MP3A	Z	2.77	2.5
42	MP3A	Mx	-.0008	2.5
43	MP3B	X	-1.169	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
44	MP3B	Z	2.025	2.5
45	MP3B	Mx	.001	2.5
46	MP3C	X	-1.599	2.5
47	MP3C	Z	2.77	2.5
48	MP3C	Mx	-.0008	2.5
49	MP4A	X	-1.935	2.5
50	MP4A	Z	3.352	2.5
51	MP4A	Mx	-.000967	2.5
52	MP4B	X	-1.434	2.5
53	MP4B	Z	2.483	2.5
54	MP4B	Mx	.001	2.5
55	MP4C	X	-1.935	2.5
56	MP4C	Z	3.352	2.5
57	MP4C	Mx	-.000968	2.5
58	MP1A	X	-2.937	.5
59	MP1A	Z	5.087	.5
60	MP1A	Mx	.001	.5
61	MP1A	X	-2.937	5.5
62	MP1A	Z	5.087	5.5
63	MP1A	Mx	.001	5.5
64	MP1B	X	-3.298	.5
65	MP1B	Z	5.713	.5
66	MP1B	Mx	-.003	.5
67	MP1B	X	-3.298	5.5
68	MP1B	Z	5.713	5.5
69	MP1B	Mx	-.003	5.5
70	MP1C	X	-2.937	.5
71	MP1C	Z	5.087	.5
72	MP1C	Mx	.001	.5
73	MP1C	X	-2.937	5.5
74	MP1C	Z	5.087	5.5
75	MP1C	Mx	.001	5.5
76	MP5A	X	-2.937	.5
77	MP5A	Z	5.087	.5
78	MP5A	Mx	.001	.5
79	MP5A	X	-2.937	5.5
80	MP5A	Z	5.087	5.5
81	MP5A	Mx	.001	5.5
82	MP5B	X	-3.298	.5
83	MP5B	Z	5.713	.5
84	MP5B	Mx	-.003	.5
85	MP5B	X	-3.298	5.5
86	MP5B	Z	5.713	5.5
87	MP5B	Mx	-.003	5.5
88	MP5C	X	-2.937	.5
89	MP5C	Z	5.087	.5
90	MP5C	Mx	.001	.5
91	MP5C	X	-2.937	5.5
92	MP5C	Z	5.087	5.5
93	MP5C	Mx	.001	5.5
94	MP4A	X	-3.022	.15
95	MP4A	Z	5.235	.15
96	MP4A	Mx	.005	.15
97	MP4A	X	-3.022	3.95
98	MP4A	Z	5.235	3.95
99	MP4A	Mx	.005	3.95
100	MP4B	X	-2.172	.15



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
22	MP2A	X	- .628	4.55
23	MP2A	Z	.363	4.55
24	MP2A	Mx	.000314	4.55
25	MP2B	X	- .628	3.55
26	MP2B	Z	.363	3.55
27	MP2B	Mx	- .000314	3.55
28	MP2B	X	- .628	4.55
29	MP2B	Z	.363	4.55
30	MP2B	Mx	- .000314	4.55
31	MP2C	X	- .847	3.55
32	MP2C	Z	.489	3.55
33	MP2C	Mx	0	3.55
34	MP2C	X	- .847	4.55
35	MP2C	Z	.489	4.55
36	MP2C	Mx	0	4.55
37	DC	X	-4.738	1.25
38	DC	Z	2.736	1.25
39	DC	Mx	.000238	1.25
40	MP3A	X	-2.274	2.5
41	MP3A	Z	1.313	2.5
42	MP3A	Mx	- .001	2.5
43	MP3B	X	-2.274	2.5
44	MP3B	Z	1.313	2.5
45	MP3B	Mx	.001	2.5
46	MP3C	X	-3.019	2.5
47	MP3C	Z	1.743	2.5
48	MP3C	Mx	0	2.5
49	MP4A	X	-2.773	2.5
50	MP4A	Z	1.601	2.5
51	MP4A	Mx	- .001	2.5
52	MP4B	X	-2.773	2.5
53	MP4B	Z	1.601	2.5
54	MP4B	Mx	.001	2.5
55	MP4C	X	-3.642	2.5
56	MP4C	Z	2.103	2.5
57	MP4C	Mx	0	2.5
58	MP1A	X	-5.504	.5
59	MP1A	Z	3.178	.5
60	MP1A	Mx	.003	.5
61	MP1A	X	-5.504	5.5
62	MP1A	Z	3.178	5.5
63	MP1A	Mx	.003	5.5
64	MP1B	X	-5.504	.5
65	MP1B	Z	3.178	.5
66	MP1B	Mx	- .003	.5
67	MP1B	X	-5.504	5.5
68	MP1B	Z	3.178	5.5
69	MP1B	Mx	- .003	5.5
70	MP1C	X	-4.879	.5
71	MP1C	Z	2.817	.5
72	MP1C	Mx	0	.5
73	MP1C	X	-4.879	5.5
74	MP1C	Z	2.817	5.5
75	MP1C	Mx	0	5.5
76	MP5A	X	-5.504	.5
77	MP5A	Z	3.178	.5
78	MP5A	Mx	.003	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
79	MP5A	X	-5.504	5.5
80	MP5A	Z	3.178	5.5
81	MP5A	Mx	.003	5.5
82	MP5B	X	-5.504	.5
83	MP5B	Z	3.178	.5
84	MP5B	Mx	-.003	.5
85	MP5B	X	-5.504	5.5
86	MP5B	Z	3.178	5.5
87	MP5B	Mx	-.003	5.5
88	MP5C	X	-4.879	.5
89	MP5C	Z	2.817	.5
90	MP5C	Mx	0	.5
91	MP5C	X	-4.879	5.5
92	MP5C	Z	2.817	5.5
93	MP5C	Mx	0	5.5
94	MP4A	X	-4.253	.15
95	MP4A	Z	2.456	.15
96	MP4A	Mx	.004	.15
97	MP4A	X	-4.253	3.95
98	MP4A	Z	2.456	3.95
99	MP4A	Mx	.004	3.95
100	MP4B	X	-4.253	.15
101	MP4B	Z	2.456	.15
102	MP4B	Mx	-.000285	.15
103	MP4B	X	-4.253	3.95
104	MP4B	Z	2.456	3.95
105	MP4B	Mx	-.000285	3.95
106	MP4C	X	-5.726	.15
107	MP4C	Z	3.306	.15
108	MP4C	Mx	-.005	.15
109	MP4C	X	-5.726	3.95
110	MP4C	Z	3.306	3.95
111	MP4C	Mx	-.005	3.95
112	MP4A	X	-4.253	.15
113	MP4A	Z	2.456	.15
114	MP4A	Mx	.000285	.15
115	MP4A	X	-4.253	3.95
116	MP4A	Z	2.456	3.95
117	MP4A	Mx	.000285	3.95
118	MP4B	X	-4.253	.15
119	MP4B	Z	2.456	.15
120	MP4B	Mx	-.004	.15
121	MP4B	X	-4.253	3.95
122	MP4B	Z	2.456	3.95
123	MP4B	Mx	-.004	3.95
124	MP4C	X	-5.726	.15
125	MP4C	Z	3.306	.15
126	MP4C	Mx	.005	.15
127	MP4C	X	-5.726	3.95
128	MP4C	Z	3.306	3.95
129	MP4C	Mx	.005	3.95
130	DC	X	-4.738	1.5
131	DC	Z	2.736	1.5
132	DC	Mx	-.000238	1.5

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



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP1A	X	-6.597	.5
59	MP1A	Z	0	.5
60	MP1A	Mx	.003	.5
61	MP1A	X	-6.597	5.5
62	MP1A	Z	0	5.5
63	MP1A	Mx	.003	5.5
64	MP1B	X	-5.874	.5
65	MP1B	Z	0	.5
66	MP1B	Mx	-.001	.5
67	MP1B	X	-5.874	5.5
68	MP1B	Z	0	5.5
69	MP1B	Mx	-.001	5.5
70	MP1C	X	-5.874	.5
71	MP1C	Z	0	.5
72	MP1C	Mx	-.001	.5
73	MP1C	X	-5.874	5.5
74	MP1C	Z	0	5.5
75	MP1C	Mx	-.001	5.5
76	MP5A	X	-6.597	.5
77	MP5A	Z	0	.5
78	MP5A	Mx	.003	.5
79	MP5A	X	-6.597	5.5
80	MP5A	Z	0	5.5
81	MP5A	Mx	.003	5.5
82	MP5B	X	-5.874	.5
83	MP5B	Z	0	.5
84	MP5B	Mx	-.001	.5
85	MP5B	X	-5.874	5.5
86	MP5B	Z	0	5.5
87	MP5B	Mx	-.001	5.5
88	MP5C	X	-5.874	.5
89	MP5C	Z	0	.5
90	MP5C	Mx	-.001	.5
91	MP5C	X	-5.874	5.5
92	MP5C	Z	0	5.5
93	MP5C	Mx	-.001	5.5
94	MP4A	X	-4.345	.15
95	MP4A	Z	0	.15
96	MP4A	Mx	.002	.15
97	MP4A	X	-4.345	3.95
98	MP4A	Z	0	3.95
99	MP4A	Mx	.002	3.95
100	MP4B	X	-6.045	.15
101	MP4B	Z	0	.15
102	MP4B	Mx	.002	.15
103	MP4B	X	-6.045	3.95
104	MP4B	Z	0	3.95
105	MP4B	Mx	.002	3.95
106	MP4C	X	-6.045	.15
107	MP4C	Z	0	.15
108	MP4C	Mx	-.005	.15
109	MP4C	X	-6.045	3.95
110	MP4C	Z	0	3.95
111	MP4C	Mx	-.005	3.95
112	MP4A	X	-4.345	.15
113	MP4A	Z	0	.15
114	MP4A	Mx	.002	.15



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
115	MP4A	X	-4.345	3.95
116	MP4A	Z	0	3.95
117	MP4A	Mx	.002	3.95
118	MP4B	X	-6.045	.15
119	MP4B	Z	0	.15
120	MP4B	Mx	-.005	.15
121	MP4B	X	-6.045	3.95
122	MP4B	Z	0	3.95
123	MP4B	Mx	-.005	3.95
124	MP4C	X	-6.045	.15
125	MP4C	Z	0	.15
126	MP4C	Mx	.002	.15
127	MP4C	X	-6.045	3.95
128	MP4C	Z	0	3.95
129	MP4C	Mx	.002	3.95
130	DC	X	-5.62	1.5
131	DC	Z	0	1.5
132	DC	Mx	.000481	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-1.989	.25
2	MP2A	Z	-1.148	.25
3	MP2A	Mx	.000995	.25
4	MP2A	X	-1.989	2.25
5	MP2A	Z	-1.148	2.25
6	MP2A	Mx	.000995	2.25
7	MP2B	X	-3.691	.25
8	MP2B	Z	-2.131	.25
9	MP2B	Mx	0	.25
10	MP2B	X	-3.691	2.25
11	MP2B	Z	-2.131	2.25
12	MP2B	Mx	0	2.25
13	MP2C	X	-1.989	.25
14	MP2C	Z	-1.148	.25
15	MP2C	Mx	-.000994	.25
16	MP2C	X	-1.989	2.25
17	MP2C	Z	-1.148	2.25
18	MP2C	Mx	-.000994	2.25
19	MP2A	X	-.628	3.55
20	MP2A	Z	-.363	3.55
21	MP2A	Mx	.000314	3.55
22	MP2A	X	-.628	4.55
23	MP2A	Z	-.363	4.55
24	MP2A	Mx	.000314	4.55
25	MP2B	X	-.847	3.55
26	MP2B	Z	-.489	3.55
27	MP2B	Mx	0	3.55
28	MP2B	X	-.847	4.55
29	MP2B	Z	-.489	4.55
30	MP2B	Mx	0	4.55
31	MP2C	X	-.628	3.55
32	MP2C	Z	-.363	3.55
33	MP2C	Mx	-.000314	3.55
34	MP2C	X	-.628	4.55
35	MP2C	Z	-.363	4.55



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
36	MP2C	Mx	-0.00314	4.55
37	DC	X	-5.562	1.25
38	DC	Z	-3.211	1.25
39	DC	Mx	-.001	1.25
40	MP3A	X	-2.274	2.5
41	MP3A	Z	-1.313	2.5
42	MP3A	Mx	-.001	2.5
43	MP3B	X	-3.019	2.5
44	MP3B	Z	-1.743	2.5
45	MP3B	Mx	0	2.5
46	MP3C	X	-2.274	2.5
47	MP3C	Z	-1.313	2.5
48	MP3C	Mx	.001	2.5
49	MP4A	X	-2.773	2.5
50	MP4A	Z	-1.601	2.5
51	MP4A	Mx	-.001	2.5
52	MP4B	X	-3.642	2.5
53	MP4B	Z	-2.103	2.5
54	MP4B	Mx	0	2.5
55	MP4C	X	-2.773	2.5
56	MP4C	Z	-1.601	2.5
57	MP4C	Mx	.001	2.5
58	MP1A	X	-5.504	.5
59	MP1A	Z	-3.178	.5
60	MP1A	Mx	.003	.5
61	MP1A	X	-5.504	5.5
62	MP1A	Z	-3.178	5.5
63	MP1A	Mx	.003	5.5
64	MP1B	X	-4.879	.5
65	MP1B	Z	-2.817	.5
66	MP1B	Mx	0	.5
67	MP1B	X	-4.879	5.5
68	MP1B	Z	-2.817	5.5
69	MP1B	Mx	0	5.5
70	MP1C	X	-5.504	.5
71	MP1C	Z	-3.178	.5
72	MP1C	Mx	-.003	.5
73	MP1C	X	-5.504	5.5
74	MP1C	Z	-3.178	5.5
75	MP1C	Mx	-.003	5.5
76	MP5A	X	-5.504	.5
77	MP5A	Z	-3.178	.5
78	MP5A	Mx	.003	.5
79	MP5A	X	-5.504	5.5
80	MP5A	Z	-3.178	5.5
81	MP5A	Mx	.003	5.5
82	MP5B	X	-4.879	.5
83	MP5B	Z	-2.817	.5
84	MP5B	Mx	0	.5
85	MP5B	X	-4.879	5.5
86	MP5B	Z	-2.817	5.5
87	MP5B	Mx	0	5.5
88	MP5C	X	-5.504	.5
89	MP5C	Z	-3.178	.5
90	MP5C	Mx	-.003	.5
91	MP5C	X	-5.504	5.5
92	MP5C	Z	-3.178	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
14	MP2C	Z	-1.421	.25
15	MP2C	Mx	-.000821	.25
16	MP2C	X	-.821	2.25
17	MP2C	Z	-1.421	2.25
18	MP2C	Mx	-.000821	2.25
19	MP2A	X	-.447	3.55
20	MP2A	Z	-.774	3.55
21	MP2A	Mx	.000223	3.55
22	MP2A	X	-.447	4.55
23	MP2A	Z	-.774	4.55
24	MP2A	Mx	.000223	4.55
25	MP2B	X	-.447	3.55
26	MP2B	Z	-.774	3.55
27	MP2B	Mx	.000223	3.55
28	MP2B	X	-.447	4.55
29	MP2B	Z	-.774	4.55
30	MP2B	Mx	.000223	4.55
31	MP2C	X	-.32	3.55
32	MP2C	Z	-.555	3.55
33	MP2C	Mx	-.00032	3.55
34	MP2C	X	-.32	4.55
35	MP2C	Z	-.555	4.55
36	MP2C	Mx	-.00032	4.55
37	DC	X	-3.539	1.25
38	DC	Z	-6.129	1.25
39	DC	Mx	-.002	1.25
40	MP3A	X	-1.599	2.5
41	MP3A	Z	-2.77	2.5
42	MP3A	Mx	-.0008	2.5
43	MP3B	X	-1.599	2.5
44	MP3B	Z	-2.77	2.5
45	MP3B	Mx	-.0008	2.5
46	MP3C	X	-1.169	2.5
47	MP3C	Z	-2.025	2.5
48	MP3C	Mx	.001	2.5
49	MP4A	X	-1.935	2.5
50	MP4A	Z	-3.352	2.5
51	MP4A	Mx	-.000967	2.5
52	MP4B	X	-1.935	2.5
53	MP4B	Z	-3.352	2.5
54	MP4B	Mx	-.000968	2.5
55	MP4C	X	-1.434	2.5
56	MP4C	Z	-2.483	2.5
57	MP4C	Mx	.001	2.5
58	MP1A	X	-2.937	.5
59	MP1A	Z	-5.087	.5
60	MP1A	Mx	.001	.5
61	MP1A	X	-2.937	5.5
62	MP1A	Z	-5.087	5.5
63	MP1A	Mx	.001	5.5
64	MP1B	X	-2.937	.5
65	MP1B	Z	-5.087	.5
66	MP1B	Mx	.001	.5
67	MP1B	X	-2.937	5.5
68	MP1B	Z	-5.087	5.5
69	MP1B	Mx	.001	5.5
70	MP1C	X	-3.298	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
71	MP1C	Z	-5.713	.5
72	MP1C	Mx	-.003	.5
73	MP1C	X	-3.298	5.5
74	MP1C	Z	-5.713	5.5
75	MP1C	Mx	-.003	5.5
76	MP5A	X	-2.937	.5
77	MP5A	Z	-5.087	.5
78	MP5A	Mx	.001	.5
79	MP5A	X	-2.937	5.5
80	MP5A	Z	-5.087	5.5
81	MP5A	Mx	.001	5.5
82	MP5B	X	-2.937	.5
83	MP5B	Z	-5.087	.5
84	MP5B	Mx	.001	.5
85	MP5B	X	-2.937	5.5
86	MP5B	Z	-5.087	5.5
87	MP5B	Mx	.001	5.5
88	MP5C	X	-3.298	.5
89	MP5C	Z	-5.713	.5
90	MP5C	Mx	-.003	.5
91	MP5C	X	-3.298	5.5
92	MP5C	Z	-5.713	5.5
93	MP5C	Mx	-.003	5.5
94	MP4A	X	-3.022	.15
95	MP4A	Z	-5.235	.15
96	MP4A	Mx	-.002	.15
97	MP4A	X	-3.022	3.95
98	MP4A	Z	-5.235	3.95
99	MP4A	Mx	-.002	3.95
100	MP4B	X	-3.022	.15
101	MP4B	Z	-5.235	.15
102	MP4B	Mx	.005	.15
103	MP4B	X	-3.022	3.95
104	MP4B	Z	-5.235	3.95
105	MP4B	Mx	.005	3.95
106	MP4C	X	-2.172	.15
107	MP4C	Z	-3.763	.15
108	MP4C	Mx	-.002	.15
109	MP4C	X	-2.172	3.95
110	MP4C	Z	-3.763	3.95
111	MP4C	Mx	-.002	3.95
112	MP4A	X	-3.022	.15
113	MP4A	Z	-5.235	.15
114	MP4A	Mx	.005	.15
115	MP4A	X	-3.022	3.95
116	MP4A	Z	-5.235	3.95
117	MP4A	Mx	.005	3.95
118	MP4B	X	-3.022	.15
119	MP4B	Z	-5.235	.15
120	MP4B	Mx	-.002	.15
121	MP4B	X	-3.022	3.95
122	MP4B	Z	-5.235	3.95
123	MP4B	Mx	-.002	3.95
124	MP4C	X	-2.172	.15
125	MP4C	Z	-3.763	.15
126	MP4C	Mx	-.002	.15
127	MP4C	X	-2.172	3.95



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
128	MP4C	Z	-3.763	3.95
129	MP4C	Mx	-.002	3.95
130	DC	X	-3.539	1.5
131	DC	Z	-6.129	1.5
132	DC	Mx	.002	1.5

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M45	Y	-500	0

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M69	Y	-500	0

Member Point Loads (BLC 79 : Lv1)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M42	Y	-250	%50

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M42	Y	-250	0

Member Point Loads (BLC 81 : Antenna Ev)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	Y	-1.253	.25
2	MP2A	My	-.000626	.25
3	MP2A	Mz	0	.25
4	MP2A	Y	-1.253	2.25
5	MP2A	My	-.000626	2.25
6	MP2A	Mz	0	2.25
7	MP2B	Y	-1.253	.25
8	MP2B	My	.000313	.25
9	MP2B	Mz	-.000543	.25
10	MP2B	Y	-1.253	2.25
11	MP2B	My	.000313	2.25
12	MP2B	Mz	-.000543	2.25
13	MP2C	Y	-1.253	.25
14	MP2C	My	.000313	.25
15	MP2C	Mz	.000543	.25
16	MP2C	Y	-1.253	2.25
17	MP2C	My	.000313	2.25
18	MP2C	Mz	.000543	2.25
19	MP2A	Y	-.481	3.55
20	MP2A	My	-.000241	3.55
21	MP2A	Mz	0	3.55
22	MP2A	Y	-.481	4.55
23	MP2A	My	-.000241	4.55
24	MP2A	Mz	0	4.55
25	MP2B	Y	-.481	3.55
26	MP2B	My	.00012	3.55
27	MP2B	Mz	-.000208	3.55
28	MP2B	Y	-.481	4.55
29	MP2B	My	.00012	4.55
30	MP2B	Mz	-.000208	4.55



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
31	MP2C	Y	-.481	3.55
32	MP2C	My	.00012	3.55
33	MP2C	Mz	.000208	3.55
34	MP2C	Y	-.481	4.55
35	MP2C	My	.00012	4.55
36	MP2C	Mz	.000208	4.55
37	DC	Y	-1.399	1.25
38	DC	My	.00012	1.25
39	DC	Mz	.000329	1.25
40	MP3A	Y	-3.267	2.5
41	MP3A	My	.002	2.5
42	MP3A	Mz	0	2.5
43	MP3B	Y	-3.267	2.5
44	MP3B	My	-.000817	2.5
45	MP3B	Mz	.001	2.5
46	MP3C	Y	-3.267	2.5
47	MP3C	My	-.000817	2.5
48	MP3C	Mz	-.001	2.5
49	MP4A	Y	-3.459	2.5
50	MP4A	My	.002	2.5
51	MP4A	Mz	0	2.5
52	MP4B	Y	-3.459	2.5
53	MP4B	My	-.000865	2.5
54	MP4B	Mz	.001	2.5
55	MP4C	Y	-3.459	2.5
56	MP4C	My	-.000865	2.5
57	MP4C	Mz	-.001	2.5
58	MP1A	Y	-.35	.5
59	MP1A	My	-.000175	.5
60	MP1A	Mz	0	.5
61	MP1A	Y	-.35	5.5
62	MP1A	My	-.000175	5.5
63	MP1A	Mz	0	5.5
64	MP1B	Y	-.35	.5
65	MP1B	My	8.7e-5	.5
66	MP1B	Mz	-.000151	.5
67	MP1B	Y	-.35	5.5
68	MP1B	My	8.7e-5	5.5
69	MP1B	Mz	-.000151	5.5
70	MP1C	Y	-.35	.5
71	MP1C	My	8.7e-5	.5
72	MP1C	Mz	.000151	.5
73	MP1C	Y	-.35	5.5
74	MP1C	My	8.7e-5	5.5
75	MP1C	Mz	.000151	5.5
76	MP5A	Y	-.35	.5
77	MP5A	My	-.000175	.5
78	MP5A	Mz	0	.5
79	MP5A	Y	-.35	5.5
80	MP5A	My	-.000175	5.5
81	MP5A	Mz	0	5.5
82	MP5B	Y	-.35	.5
83	MP5B	My	8.7e-5	.5
84	MP5B	Mz	-.000151	.5
85	MP5B	Y	-.35	5.5
86	MP5B	My	8.7e-5	5.5
87	MP5B	Mz	-.000151	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
88	MP5C	Y	-.35	.5
89	MP5C	My	8.7e-5	.5
90	MP5C	Mz	.000151	.5
91	MP5C	Y	-.35	5.5
92	MP5C	My	8.7e-5	5.5
93	MP5C	Mz	.000151	5.5
94	MP4A	Y	-.733	.15
95	MP4A	My	-.000366	.15
96	MP4A	Mz	.000549	.15
97	MP4A	Y	-.733	3.95
98	MP4A	My	-.000366	3.95
99	MP4A	Mz	.000549	3.95
100	MP4B	Y	-.733	.15
101	MP4B	My	-.000293	.15
102	MP4B	Mz	-.000592	.15
103	MP4B	Y	-.733	3.95
104	MP4B	My	-.000293	3.95
105	MP4B	Mz	-.000592	3.95
106	MP4C	Y	-.733	.15
107	MP4C	My	.000659	.15
108	MP4C	Mz	4.2e-5	.15
109	MP4C	Y	-.733	3.95
110	MP4C	My	.000659	3.95
111	MP4C	Mz	4.2e-5	3.95
112	MP4A	Y	-.733	.15
113	MP4A	My	-.000366	.15
114	MP4A	Mz	-.000549	.15
115	MP4A	Y	-.733	3.95
116	MP4A	My	-.000366	3.95
117	MP4A	Mz	-.000549	3.95
118	MP4B	Y	-.733	.15
119	MP4B	My	.000659	.15
120	MP4B	Mz	-4.2e-5	.15
121	MP4B	Y	-.733	3.95
122	MP4B	My	.000659	3.95
123	MP4B	Mz	-4.2e-5	3.95
124	MP4C	Y	-.733	.15
125	MP4C	My	-.000293	.15
126	MP4C	Mz	.000592	.15
127	MP4C	Y	-.733	3.95
128	MP4C	My	-.000293	3.95
129	MP4C	Mz	.000592	3.95
130	DC	Y	-1.399	1.5
131	DC	My	-.00012	1.5
132	DC	Mz	-.000329	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	Z	-3.132	.25
2	MP2A	Mx	0	.25
3	MP2A	Z	-3.132	2.25
4	MP2A	Mx	0	2.25
5	MP2B	Z	-3.132	.25
6	MP2B	Mx	.001	.25
7	MP2B	Z	-3.132	2.25
8	MP2B	Mx	.001	2.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
9	MP2C	Z	-3.132	.25
10	MP2C	Mx	-.001	.25
11	MP2C	Z	-3.132	2.25
12	MP2C	Mx	-.001	2.25
13	MP2A	Z	-1.203	3.55
14	MP2A	Mx	0	3.55
15	MP2A	Z	-1.203	4.55
16	MP2A	Mx	0	4.55
17	MP2B	Z	-1.203	3.55
18	MP2B	Mx	.000521	3.55
19	MP2B	Z	-1.203	4.55
20	MP2B	Mx	.000521	4.55
21	MP2C	Z	-1.203	3.55
22	MP2C	Mx	-.000521	3.55
23	MP2C	Z	-1.203	4.55
24	MP2C	Mx	-.000521	4.55
25	DC	Z	-3.499	1.25
26	DC	Mx	-.000822	1.25
27	MP3A	Z	-8.167	2.5
28	MP3A	Mx	0	2.5
29	MP3B	Z	-8.167	2.5
30	MP3B	Mx	-.004	2.5
31	MP3C	Z	-8.167	2.5
32	MP3C	Mx	.004	2.5
33	MP4A	Z	-8.648	2.5
34	MP4A	Mx	0	2.5
35	MP4B	Z	-8.648	2.5
36	MP4B	Mx	-.004	2.5
37	MP4C	Z	-8.648	2.5
38	MP4C	Mx	.004	2.5
39	MP1A	Z	-.875	.5
40	MP1A	Mx	0	.5
41	MP1A	Z	-.875	5.5
42	MP1A	Mx	0	5.5
43	MP1B	Z	-.875	.5
44	MP1B	Mx	.000379	.5
45	MP1B	Z	-.875	5.5
46	MP1B	Mx	.000379	5.5
47	MP1C	Z	-.875	.5
48	MP1C	Mx	-.000379	.5
49	MP1C	Z	-.875	5.5
50	MP1C	Mx	-.000379	5.5
51	MP5A	Z	-.875	.5
52	MP5A	Mx	0	.5
53	MP5A	Z	-.875	5.5
54	MP5A	Mx	0	5.5
55	MP5B	Z	-.875	.5
56	MP5B	Mx	.000379	.5
57	MP5B	Z	-.875	5.5
58	MP5B	Mx	.000379	5.5
59	MP5C	Z	-.875	.5
60	MP5C	Mx	-.000379	.5
61	MP5C	Z	-.875	5.5
62	MP5C	Mx	-.000379	5.5
63	MP4A	Z	-1.831	.15
64	MP4A	Mx	-.001	.15
65	MP4A	Z	-1.831	3.95



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
31	MP3C	X	8.167	2.5
32	MP3C	Mx	-.002	2.5
33	MP4A	X	8.648	2.5
34	MP4A	Mx	.004	2.5
35	MP4B	X	8.648	2.5
36	MP4B	Mx	-.002	2.5
37	MP4C	X	8.648	2.5
38	MP4C	Mx	-.002	2.5
39	MP1A	X	.875	.5
40	MP1A	Mx	-.000437	.5
41	MP1A	X	.875	5.5
42	MP1A	Mx	-.000437	5.5
43	MP1B	X	.875	.5
44	MP1B	Mx	.000219	.5
45	MP1B	X	.875	5.5
46	MP1B	Mx	.000219	5.5
47	MP1C	X	.875	.5
48	MP1C	Mx	.000219	.5
49	MP1C	X	.875	5.5
50	MP1C	Mx	.000219	5.5
51	MP5A	X	.875	.5
52	MP5A	Mx	-.000437	.5
53	MP5A	X	.875	5.5
54	MP5A	Mx	-.000437	5.5
55	MP5B	X	.875	.5
56	MP5B	Mx	.000219	.5
57	MP5B	X	.875	5.5
58	MP5B	Mx	.000219	5.5
59	MP5C	X	.875	.5
60	MP5C	Mx	.000219	.5
61	MP5C	X	.875	5.5
62	MP5C	Mx	.000219	5.5
63	MP4A	X	1.831	.15
64	MP4A	Mx	-.000916	.15
65	MP4A	X	1.831	3.95
66	MP4A	Mx	-.000916	3.95
67	MP4B	X	1.831	.15
68	MP4B	Mx	-.000732	.15
69	MP4B	X	1.831	3.95
70	MP4B	Mx	-.000732	3.95
71	MP4C	X	1.831	.15
72	MP4C	Mx	.002	.15
73	MP4C	X	1.831	3.95
74	MP4C	Mx	.002	3.95
75	MP4A	X	1.831	.15
76	MP4A	Mx	-.000916	.15
77	MP4A	X	1.831	3.95
78	MP4A	Mx	-.000916	3.95
79	MP4B	X	1.831	.15
80	MP4B	Mx	.002	.15
81	MP4B	X	1.831	3.95
82	MP4B	Mx	.002	3.95
83	MP4C	X	1.831	.15
84	MP4C	Mx	-.000732	.15
85	MP4C	X	1.831	3.95
86	MP4C	Mx	-.000732	3.95
87	DC	X	3.499	1.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
88	DC	Mx	-0.00299	1.5

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft.%]	End Location[ft.%]
1	M40	Y	-9.891	-9.891	0	%100
2	M41	Y	-9.891	-9.891	0	%100
3	M42	Y	-9.891	-9.891	0	%100
4	MP5A	Y	-5.146	-5.146	0	%100
5	MP4A	Y	-5.869	-5.869	0	%100
6	MP2A	Y	-5.146	-5.146	0	%100
7	MP1A	Y	-5.146	-5.146	0	%100
8	DC	Y	-5.146	-5.146	0	%100
9	MP3A	Y	-5.146	-5.146	0	%100
10	MP5C	Y	-5.146	-5.146	0	%100
11	MP4C	Y	-5.869	-5.869	0	%100
12	MP2C	Y	-5.146	-5.146	0	%100
13	MP1C	Y	-5.146	-5.146	0	%100
14	MP3C	Y	-5.146	-5.146	0	%100
15	MP5B	Y	-5.146	-5.146	0	%100
16	MP4B	Y	-5.869	-5.869	0	%100
17	MP2B	Y	-5.146	-5.146	0	%100
18	MP1B	Y	-5.146	-5.146	0	%100
19	MP3B	Y	-5.146	-5.146	0	%100
20	M78A	Y	-9.891	-9.891	0	%100
21	M75	Y	-9.891	-9.891	0	%100
22	M76	Y	-9.891	-9.891	0	%100
23	M76A	Y	-5.146	-5.146	0	%100
24	M77	Y	-11.472	-11.472	0	%100
25	M78	Y	-11.472	-11.472	0	%100
26	M79A	Y	-11.472	-11.472	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft.%]	End Location[ft.%]
1	M40	X	0	0	0	%100
2	M40	Z	-4.067	-4.067	0	%100
3	M41	X	0	0	0	%100
4	M41	Z	-4.067	-4.067	0	%100
5	M42	X	0	0	0	%100
6	M42	Z	-16.268	-16.268	0	%100
7	MP5A	X	0	0	0	%100
8	MP5A	Z	-9.273	-9.273	0	%100
9	MP4A	X	0	0	0	%100
10	MP4A	Z	-11.225	-11.225	0	%100
11	MP2A	X	0	0	0	%100
12	MP2A	Z	-9.273	-9.273	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	-9.273	-9.273	0	%100
15	DC	X	0	0	0	%100
16	DC	Z	-8.45	-8.45	0	%100
17	MP3A	X	0	0	0	%100
18	MP3A	Z	-9.273	-9.273	0	%100
19	MP5C	X	0	0	0	%100
20	MP5C	Z	-9.273	-9.273	0	%100
21	MP4C	X	0	0	0	%100
22	MP4C	Z	-11.225	-11.225	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
24	MP2C	Z	-8.03	-8.03	0	%100
25	MP1C	X	4.636	4.636	0	%100
26	MP1C	Z	-8.03	-8.03	0	%100
27	MP3C	X	4.636	4.636	0	%100
28	MP3C	Z	-8.03	-8.03	0	%100
29	MP5B	X	4.636	4.636	0	%100
30	MP5B	Z	-8.03	-8.03	0	%100
31	MP4B	X	5.612	5.612	0	%100
32	MP4B	Z	-9.721	-9.721	0	%100
33	MP2B	X	4.636	4.636	0	%100
34	MP2B	Z	-8.03	-8.03	0	%100
35	MP1B	X	4.636	4.636	0	%100
36	MP1B	Z	-8.03	-8.03	0	%100
37	MP3B	X	4.636	4.636	0	%100
38	MP3B	Z	-8.03	-8.03	0	%100
39	M78A	X	2.033	2.033	0	%100
40	M78A	Z	-3.522	-3.522	0	%100
41	M75	X	8.134	8.134	0	%100
42	M75	Z	-14.088	-14.088	0	%100
43	M76	X	2.033	2.033	0	%100
44	M76	Z	-3.522	-3.522	0	%100
45	M76A	X	4.225	4.225	0	%100
46	M76A	Z	-7.318	-7.318	0	%100
47	M77	X	6.574	6.574	0	%100
48	M77	Z	-11.387	-11.387	0	%100
49	M78	X	6.574	6.574	0	%100
50	M78	Z	-11.387	-11.387	0	%100
51	M79A	X	8.947	8.947	0	%100
52	M79A	Z	-15.497	-15.497	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M40	X	3.522	3.522	0	%100
2	M40	Z	-2.033	-2.033	0	%100
3	M41	X	14.088	14.088	0	%100
4	M41	Z	-8.134	-8.134	0	%100
5	M42	X	3.522	3.522	0	%100
6	M42	Z	-2.033	-2.033	0	%100
7	MP5A	X	8.03	8.03	0	%100
8	MP5A	Z	-4.636	-4.636	0	%100
9	MP4A	X	9.721	9.721	0	%100
10	MP4A	Z	-5.612	-5.612	0	%100
11	MP2A	X	8.03	8.03	0	%100
12	MP2A	Z	-4.636	-4.636	0	%100
13	MP1A	X	8.03	8.03	0	%100
14	MP1A	Z	-4.636	-4.636	0	%100
15	DC	X	7.318	7.318	0	%100
16	DC	Z	-4.225	-4.225	0	%100
17	MP3A	X	8.03	8.03	0	%100
18	MP3A	Z	-4.636	-4.636	0	%100
19	MP5C	X	8.03	8.03	0	%100
20	MP5C	Z	-4.636	-4.636	0	%100
21	MP4C	X	9.721	9.721	0	%100
22	MP4C	Z	-5.612	-5.612	0	%100
23	MP2C	X	8.03	8.03	0	%100
24	MP2C	Z	-4.636	-4.636	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
25	MP1C	X	8.03	8.03	0	%100
26	MP1C	Z	-4.636	-4.636	0	%100
27	MP3C	X	8.03	8.03	0	%100
28	MP3C	Z	-4.636	-4.636	0	%100
29	MP5B	X	8.03	8.03	0	%100
30	MP5B	Z	-4.636	-4.636	0	%100
31	MP4B	X	9.721	9.721	0	%100
32	MP4B	Z	-5.612	-5.612	0	%100
33	MP2B	X	8.03	8.03	0	%100
34	MP2B	Z	-4.636	-4.636	0	%100
35	MP1B	X	8.03	8.03	0	%100
36	MP1B	Z	-4.636	-4.636	0	%100
37	MP3B	X	8.03	8.03	0	%100
38	MP3B	Z	-4.636	-4.636	0	%100
39	M78A	X	0	0	0	%100
40	M78A	Z	0	0	0	%100
41	M75	X	10.566	10.566	0	%100
42	M75	Z	-6.1	-6.1	0	%100
43	M76	X	10.566	10.566	0	%100
44	M76	Z	-6.1	-6.1	0	%100
45	M76A	X	7.318	7.318	0	%100
46	M76A	Z	-4.225	-4.225	0	%100
47	M77	X	14.127	14.127	0	%100
48	M77	Z	-8.156	-8.156	0	%100
49	M78	X	10.017	10.017	0	%100
50	M78	Z	-5.783	-5.783	0	%100
51	M79A	X	14.127	14.127	0	%100
52	M79A	Z	-8.156	-8.156	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M40	X	12.201	12.201	0	%100
2	M40	Z	0	0	0	%100
3	M41	X	12.201	12.201	0	%100
4	M41	Z	0	0	0	%100
5	M42	X	0	0	0	%100
6	M42	Z	0	0	0	%100
7	MP5A	X	9.273	9.273	0	%100
8	MP5A	Z	0	0	0	%100
9	MP4A	X	11.225	11.225	0	%100
10	MP4A	Z	0	0	0	%100
11	MP2A	X	9.273	9.273	0	%100
12	MP2A	Z	0	0	0	%100
13	MP1A	X	9.273	9.273	0	%100
14	MP1A	Z	0	0	0	%100
15	DC	X	8.45	8.45	0	%100
16	DC	Z	0	0	0	%100
17	MP3A	X	9.273	9.273	0	%100
18	MP3A	Z	0	0	0	%100
19	MP5C	X	9.273	9.273	0	%100
20	MP5C	Z	0	0	0	%100
21	MP4C	X	11.225	11.225	0	%100
22	MP4C	Z	0	0	0	%100
23	MP2C	X	9.273	9.273	0	%100
24	MP2C	Z	0	0	0	%100
25	MP1C	X	9.273	9.273	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
29	MP5B	X	0	0	0	%100
30	MP5B	Z	9.273	9.273	0	%100
31	MP4B	X	0	0	0	%100
32	MP4B	Z	11.225	11.225	0	%100
33	MP2B	X	0	0	0	%100
34	MP2B	Z	9.273	9.273	0	%100
35	MP1B	X	0	0	0	%100
36	MP1B	Z	9.273	9.273	0	%100
37	MP3B	X	0	0	0	%100
38	MP3B	Z	9.273	9.273	0	%100
39	M78A	X	0	0	0	%100
40	M78A	Z	12.201	12.201	0	%100
41	M75	X	0	0	0	%100
42	M75	Z	12.201	12.201	0	%100
43	M76	X	0	0	0	%100
44	M76	Z	0	0	0	%100
45	M76A	X	0	0	0	%100
46	M76A	Z	8.45	8.45	0	%100
47	M77	X	0	0	0	%100
48	M77	Z	11.566	11.566	0	%100
49	M78	X	0	0	0	%100
50	M78	Z	16.312	16.312	0	%100
51	M79A	X	0	0	0	%100
52	M79A	Z	16.312	16.312	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M40	X	0	0	0	%100
2	M40	Z	0	0	0	%100
3	M41	X	-6.1	-6.1	0	%100
4	M41	Z	10.566	10.566	0	%100
5	M42	X	-6.1	-6.1	0	%100
6	M42	Z	10.566	10.566	0	%100
7	MP5A	X	-4.636	-4.636	0	%100
8	MP5A	Z	8.03	8.03	0	%100
9	MP4A	X	-5.612	-5.612	0	%100
10	MP4A	Z	9.721	9.721	0	%100
11	MP2A	X	-4.636	-4.636	0	%100
12	MP2A	Z	8.03	8.03	0	%100
13	MP1A	X	-4.636	-4.636	0	%100
14	MP1A	Z	8.03	8.03	0	%100
15	DC	X	-4.225	-4.225	0	%100
16	DC	Z	7.318	7.318	0	%100
17	MP3A	X	-4.636	-4.636	0	%100
18	MP3A	Z	8.03	8.03	0	%100
19	MP5C	X	-4.636	-4.636	0	%100
20	MP5C	Z	8.03	8.03	0	%100
21	MP4C	X	-5.612	-5.612	0	%100
22	MP4C	Z	9.721	9.721	0	%100
23	MP2C	X	-4.636	-4.636	0	%100
24	MP2C	Z	8.03	8.03	0	%100
25	MP1C	X	-4.636	-4.636	0	%100
26	MP1C	Z	8.03	8.03	0	%100
27	MP3C	X	-4.636	-4.636	0	%100
28	MP3C	Z	8.03	8.03	0	%100
29	MP5B	X	-4.636	-4.636	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
32	MP4B	Z	0	0	0	%100
33	MP2B	X	-9.273	-9.273	0	%100
34	MP2B	Z	0	0	0	%100
35	MP1B	X	-9.273	-9.273	0	%100
36	MP1B	Z	0	0	0	%100
37	MP3B	X	-9.273	-9.273	0	%100
38	MP3B	Z	0	0	0	%100
39	M78A	X	-4.067	-4.067	0	%100
40	M78A	Z	0	0	0	%100
41	M75	X	-4.067	-4.067	0	%100
42	M75	Z	0	0	0	%100
43	M76	X	-16.268	-16.268	0	%100
44	M76	Z	0	0	0	%100
45	M76A	X	-8.45	-8.45	0	%100
46	M76A	Z	0	0	0	%100
47	M77	X	-17.894	-17.894	0	%100
48	M77	Z	0	0	0	%100
49	M78	X	-13.148	-13.148	0	%100
50	M78	Z	0	0	0	%100
51	M79A	X	-13.148	-13.148	0	%100
52	M79A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M40	X	-14.088	-14.088	0	%100
2	M40	Z	-8.134	-8.134	0	%100
3	M41	X	-3.522	-3.522	0	%100
4	M41	Z	-2.033	-2.033	0	%100
5	M42	X	-3.522	-3.522	0	%100
6	M42	Z	-2.033	-2.033	0	%100
7	MP5A	X	-8.03	-8.03	0	%100
8	MP5A	Z	-4.636	-4.636	0	%100
9	MP4A	X	-9.721	-9.721	0	%100
10	MP4A	Z	-5.612	-5.612	0	%100
11	MP2A	X	-8.03	-8.03	0	%100
12	MP2A	Z	-4.636	-4.636	0	%100
13	MP1A	X	-8.03	-8.03	0	%100
14	MP1A	Z	-4.636	-4.636	0	%100
15	DC	X	-7.318	-7.318	0	%100
16	DC	Z	-4.225	-4.225	0	%100
17	MP3A	X	-8.03	-8.03	0	%100
18	MP3A	Z	-4.636	-4.636	0	%100
19	MP5C	X	-8.03	-8.03	0	%100
20	MP5C	Z	-4.636	-4.636	0	%100
21	MP4C	X	-9.721	-9.721	0	%100
22	MP4C	Z	-5.612	-5.612	0	%100
23	MP2C	X	-8.03	-8.03	0	%100
24	MP2C	Z	-4.636	-4.636	0	%100
25	MP1C	X	-8.03	-8.03	0	%100
26	MP1C	Z	-4.636	-4.636	0	%100
27	MP3C	X	-8.03	-8.03	0	%100
28	MP3C	Z	-4.636	-4.636	0	%100
29	MP5B	X	-8.03	-8.03	0	%100
30	MP5B	Z	-4.636	-4.636	0	%100
31	MP4B	X	-9.721	-9.721	0	%100
32	MP4B	Z	-5.612	-5.612	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
35	MP1B	X	0	0	0	%100
36	MP1B	Z	-2.962	-2.962	0	%100
37	MP3B	X	0	0	0	%100
38	MP3B	Z	-2.962	-2.962	0	%100
39	M78A	X	0	0	0	%100
40	M78A	Z	-3.061	-3.061	0	%100
41	M75	X	0	0	0	%100
42	M75	Z	-3.061	-3.061	0	%100
43	M76	X	0	0	0	%100
44	M76	Z	0	0	0	%100
45	M76A	X	0	0	0	%100
46	M76A	Z	-2.701	-2.701	0	%100
47	M77	X	0	0	0	%100
48	M77	Z	-2.383	-2.383	0	%100
49	M78	X	0	0	0	%100
50	M78	Z	-3.852	-3.852	0	%100
51	M79A	X	0	0	0	%100
52	M79A	Z	-3.852	-3.852	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M40	X	0	0	0	%100
2	M40	Z	0	0	0	%100
3	M41	X	1.531	1.531	0	%100
4	M41	Z	-2.651	-2.651	0	%100
5	M42	X	1.531	1.531	0	%100
6	M42	Z	-2.651	-2.651	0	%100
7	MP5A	X	1.481	1.481	0	%100
8	MP5A	Z	-2.565	-2.565	0	%100
9	MP4A	X	1.637	1.637	0	%100
10	MP4A	Z	-2.836	-2.836	0	%100
11	MP2A	X	1.481	1.481	0	%100
12	MP2A	Z	-2.565	-2.565	0	%100
13	MP1A	X	1.481	1.481	0	%100
14	MP1A	Z	-2.565	-2.565	0	%100
15	DC	X	1.351	1.351	0	%100
16	DC	Z	-2.339	-2.339	0	%100
17	MP3A	X	1.481	1.481	0	%100
18	MP3A	Z	-2.565	-2.565	0	%100
19	MP5C	X	1.481	1.481	0	%100
20	MP5C	Z	-2.565	-2.565	0	%100
21	MP4C	X	1.637	1.637	0	%100
22	MP4C	Z	-2.836	-2.836	0	%100
23	MP2C	X	1.481	1.481	0	%100
24	MP2C	Z	-2.565	-2.565	0	%100
25	MP1C	X	1.481	1.481	0	%100
26	MP1C	Z	-2.565	-2.565	0	%100
27	MP3C	X	1.481	1.481	0	%100
28	MP3C	Z	-2.565	-2.565	0	%100
29	MP5B	X	1.481	1.481	0	%100
30	MP5B	Z	-2.565	-2.565	0	%100
31	MP4B	X	1.637	1.637	0	%100
32	MP4B	Z	-2.836	-2.836	0	%100
33	MP2B	X	1.481	1.481	0	%100
34	MP2B	Z	-2.565	-2.565	0	%100
35	MP1B	X	1.481	1.481	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
36	MP1B	Z	-2.565	-2.565	0	%100
37	MP3B	X	1.481	1.481	0	%100
38	MP3B	Z	-2.565	-2.565	0	%100
39	M78A	X	.51	.51	0	%100
40	M78A	Z	-.884	-.884	0	%100
41	M75	X	2.041	2.041	0	%100
42	M75	Z	-3.535	-3.535	0	%100
43	M76	X	.51	.51	0	%100
44	M76	Z	-.884	-.884	0	%100
45	M76A	X	1.351	1.351	0	%100
46	M76A	Z	-2.339	-2.339	0	%100
47	M77	X	1.436	1.436	0	%100
48	M77	Z	-2.488	-2.488	0	%100
49	M78	X	1.436	1.436	0	%100
50	M78	Z	-2.488	-2.488	0	%100
51	M79A	X	2.171	2.171	0	%100
52	M79A	Z	-3.76	-3.76	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M40	X	.884	.884	0	%100
2	M40	Z	-.51	-.51	0	%100
3	M41	X	3.535	3.535	0	%100
4	M41	Z	-2.041	-2.041	0	%100
5	M42	X	.884	.884	0	%100
6	M42	Z	-.51	-.51	0	%100
7	MP5A	X	2.565	2.565	0	%100
8	MP5A	Z	-1.481	-1.481	0	%100
9	MP4A	X	2.836	2.836	0	%100
10	MP4A	Z	-1.637	-1.637	0	%100
11	MP2A	X	2.565	2.565	0	%100
12	MP2A	Z	-1.481	-1.481	0	%100
13	MP1A	X	2.565	2.565	0	%100
14	MP1A	Z	-1.481	-1.481	0	%100
15	DC	X	2.339	2.339	0	%100
16	DC	Z	-1.351	-1.351	0	%100
17	MP3A	X	2.565	2.565	0	%100
18	MP3A	Z	-1.481	-1.481	0	%100
19	MP5C	X	2.565	2.565	0	%100
20	MP5C	Z	-1.481	-1.481	0	%100
21	MP4C	X	2.836	2.836	0	%100
22	MP4C	Z	-1.637	-1.637	0	%100
23	MP2C	X	2.565	2.565	0	%100
24	MP2C	Z	-1.481	-1.481	0	%100
25	MP1C	X	2.565	2.565	0	%100
26	MP1C	Z	-1.481	-1.481	0	%100
27	MP3C	X	2.565	2.565	0	%100
28	MP3C	Z	-1.481	-1.481	0	%100
29	MP5B	X	2.565	2.565	0	%100
30	MP5B	Z	-1.481	-1.481	0	%100
31	MP4B	X	2.836	2.836	0	%100
32	MP4B	Z	-1.637	-1.637	0	%100
33	MP2B	X	2.565	2.565	0	%100
34	MP2B	Z	-1.481	-1.481	0	%100
35	MP1B	X	2.565	2.565	0	%100
36	MP1B	Z	-1.481	-1.481	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
37	MP3B	X	2.565	2.565	0	%100
38	MP3B	Z	-1.481	-1.481	0	%100
39	M78A	X	0	0	0	%100
40	M78A	Z	0	0	0	%100
41	M75	X	2.651	2.651	0	%100
42	M75	Z	-1.531	-1.531	0	%100
43	M76	X	2.651	2.651	0	%100
44	M76	Z	-1.531	-1.531	0	%100
45	M76A	X	2.339	2.339	0	%100
46	M76A	Z	-1.351	-1.351	0	%100
47	M77	X	3.336	3.336	0	%100
48	M77	Z	-1.926	-1.926	0	%100
49	M78	X	2.064	2.064	0	%100
50	M78	Z	-1.191	-1.191	0	%100
51	M79A	X	3.336	3.336	0	%100
52	M79A	Z	-1.926	-1.926	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M40	X	3.061	3.061	0	%100
2	M40	Z	0	0	0	%100
3	M41	X	3.061	3.061	0	%100
4	M41	Z	0	0	0	%100
5	M42	X	0	0	0	%100
6	M42	Z	0	0	0	%100
7	MP5A	X	2.962	2.962	0	%100
8	MP5A	Z	0	0	0	%100
9	MP4A	X	3.275	3.275	0	%100
10	MP4A	Z	0	0	0	%100
11	MP2A	X	2.962	2.962	0	%100
12	MP2A	Z	0	0	0	%100
13	MP1A	X	2.962	2.962	0	%100
14	MP1A	Z	0	0	0	%100
15	DC	X	2.701	2.701	0	%100
16	DC	Z	0	0	0	%100
17	MP3A	X	2.962	2.962	0	%100
18	MP3A	Z	0	0	0	%100
19	MP5C	X	2.962	2.962	0	%100
20	MP5C	Z	0	0	0	%100
21	MP4C	X	3.275	3.275	0	%100
22	MP4C	Z	0	0	0	%100
23	MP2C	X	2.962	2.962	0	%100
24	MP2C	Z	0	0	0	%100
25	MP1C	X	2.962	2.962	0	%100
26	MP1C	Z	0	0	0	%100
27	MP3C	X	2.962	2.962	0	%100
28	MP3C	Z	0	0	0	%100
29	MP5B	X	2.962	2.962	0	%100
30	MP5B	Z	0	0	0	%100
31	MP4B	X	3.275	3.275	0	%100
32	MP4B	Z	0	0	0	%100
33	MP2B	X	2.962	2.962	0	%100
34	MP2B	Z	0	0	0	%100
35	MP1B	X	2.962	2.962	0	%100
36	MP1B	Z	0	0	0	%100
37	MP3B	X	2.962	2.962	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
38	MP3B	Z	0	0	0	%100
39	M78A	X	1.02	1.02	0	%100
40	M78A	Z	0	0	0	%100
41	M75	X	1.02	1.02	0	%100
42	M75	Z	0	0	0	%100
43	M76	X	4.081	4.081	0	%100
44	M76	Z	0	0	0	%100
45	M76A	X	2.701	2.701	0	%100
46	M76A	Z	0	0	0	%100
47	M77	X	4.342	4.342	0	%100
48	M77	Z	0	0	0	%100
49	M78	X	2.873	2.873	0	%100
50	M78	Z	0	0	0	%100
51	M79A	X	2.873	2.873	0	%100
52	M79A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M40	X	3.535	3.535	0	%100
2	M40	Z	2.041	2.041	0	%100
3	M41	X	.884	.884	0	%100
4	M41	Z	.51	.51	0	%100
5	M42	X	.884	.884	0	%100
6	M42	Z	.51	.51	0	%100
7	MP5A	X	2.565	2.565	0	%100
8	MP5A	Z	1.481	1.481	0	%100
9	MP4A	X	2.836	2.836	0	%100
10	MP4A	Z	1.637	1.637	0	%100
11	MP2A	X	2.565	2.565	0	%100
12	MP2A	Z	1.481	1.481	0	%100
13	MP1A	X	2.565	2.565	0	%100
14	MP1A	Z	1.481	1.481	0	%100
15	DC	X	2.339	2.339	0	%100
16	DC	Z	1.351	1.351	0	%100
17	MP3A	X	2.565	2.565	0	%100
18	MP3A	Z	1.481	1.481	0	%100
19	MP5C	X	2.565	2.565	0	%100
20	MP5C	Z	1.481	1.481	0	%100
21	MP4C	X	2.836	2.836	0	%100
22	MP4C	Z	1.637	1.637	0	%100
23	MP2C	X	2.565	2.565	0	%100
24	MP2C	Z	1.481	1.481	0	%100
25	MP1C	X	2.565	2.565	0	%100
26	MP1C	Z	1.481	1.481	0	%100
27	MP3C	X	2.565	2.565	0	%100
28	MP3C	Z	1.481	1.481	0	%100
29	MP5B	X	2.565	2.565	0	%100
30	MP5B	Z	1.481	1.481	0	%100
31	MP4B	X	2.836	2.836	0	%100
32	MP4B	Z	1.637	1.637	0	%100
33	MP2B	X	2.565	2.565	0	%100
34	MP2B	Z	1.481	1.481	0	%100
35	MP1B	X	2.565	2.565	0	%100
36	MP1B	Z	1.481	1.481	0	%100
37	MP3B	X	2.565	2.565	0	%100
38	MP3B	Z	1.481	1.481	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
40	M78A	Z	3.535	3.535	0	%100
41	M75	X	.51	.51	0	%100
42	M75	Z	.884	.884	0	%100
43	M76	X	.51	.51	0	%100
44	M76	Z	.884	.884	0	%100
45	M76A	X	1.351	1.351	0	%100
46	M76A	Z	2.339	2.339	0	%100
47	M77	X	1.436	1.436	0	%100
48	M77	Z	2.488	2.488	0	%100
49	M78	X	2.171	2.171	0	%100
50	M78	Z	3.76	3.76	0	%100
51	M79A	X	1.436	1.436	0	%100
52	M79A	Z	2.488	2.488	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M40	X	0	0	0	%100
2	M40	Z	1.02	1.02	0	%100
3	M41	X	0	0	0	%100
4	M41	Z	1.02	1.02	0	%100
5	M42	X	0	0	0	%100
6	M42	Z	4.081	4.081	0	%100
7	MP5A	X	0	0	0	%100
8	MP5A	Z	2.962	2.962	0	%100
9	MP4A	X	0	0	0	%100
10	MP4A	Z	3.275	3.275	0	%100
11	MP2A	X	0	0	0	%100
12	MP2A	Z	2.962	2.962	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	2.962	2.962	0	%100
15	DC	X	0	0	0	%100
16	DC	Z	2.701	2.701	0	%100
17	MP3A	X	0	0	0	%100
18	MP3A	Z	2.962	2.962	0	%100
19	MP5C	X	0	0	0	%100
20	MP5C	Z	2.962	2.962	0	%100
21	MP4C	X	0	0	0	%100
22	MP4C	Z	3.275	3.275	0	%100
23	MP2C	X	0	0	0	%100
24	MP2C	Z	2.962	2.962	0	%100
25	MP1C	X	0	0	0	%100
26	MP1C	Z	2.962	2.962	0	%100
27	MP3C	X	0	0	0	%100
28	MP3C	Z	2.962	2.962	0	%100
29	MP5B	X	0	0	0	%100
30	MP5B	Z	2.962	2.962	0	%100
31	MP4B	X	0	0	0	%100
32	MP4B	Z	3.275	3.275	0	%100
33	MP2B	X	0	0	0	%100
34	MP2B	Z	2.962	2.962	0	%100
35	MP1B	X	0	0	0	%100
36	MP1B	Z	2.962	2.962	0	%100
37	MP3B	X	0	0	0	%100
38	MP3B	Z	2.962	2.962	0	%100
39	M78A	X	0	0	0	%100
40	M78A	Z	3.061	3.061	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
41	M75	X	0	0	0	%100
42	M75	Z	3.061	3.061	0	%100
43	M76	X	0	0	0	%100
44	M76	Z	0	0	0	%100
45	M76A	X	0	0	0	%100
46	M76A	Z	2.701	2.701	0	%100
47	M77	X	0	0	0	%100
48	M77	Z	2.383	2.383	0	%100
49	M78	X	0	0	0	%100
50	M78	Z	3.852	3.852	0	%100
51	M79A	X	0	0	0	%100
52	M79A	Z	3.852	3.852	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M40	X	0	0	0	%100
2	M40	Z	0	0	0	%100
3	M41	X	-1.531	-1.531	0	%100
4	M41	Z	2.651	2.651	0	%100
5	M42	X	-1.531	-1.531	0	%100
6	M42	Z	2.651	2.651	0	%100
7	MP5A	X	-1.481	-1.481	0	%100
8	MP5A	Z	2.565	2.565	0	%100
9	MP4A	X	-1.637	-1.637	0	%100
10	MP4A	Z	2.836	2.836	0	%100
11	MP2A	X	-1.481	-1.481	0	%100
12	MP2A	Z	2.565	2.565	0	%100
13	MP1A	X	-1.481	-1.481	0	%100
14	MP1A	Z	2.565	2.565	0	%100
15	DC	X	-1.351	-1.351	0	%100
16	DC	Z	2.339	2.339	0	%100
17	MP3A	X	-1.481	-1.481	0	%100
18	MP3A	Z	2.565	2.565	0	%100
19	MP5C	X	-1.481	-1.481	0	%100
20	MP5C	Z	2.565	2.565	0	%100
21	MP4C	X	-1.637	-1.637	0	%100
22	MP4C	Z	2.836	2.836	0	%100
23	MP2C	X	-1.481	-1.481	0	%100
24	MP2C	Z	2.565	2.565	0	%100
25	MP1C	X	-1.481	-1.481	0	%100
26	MP1C	Z	2.565	2.565	0	%100
27	MP3C	X	-1.481	-1.481	0	%100
28	MP3C	Z	2.565	2.565	0	%100
29	MP5B	X	-1.481	-1.481	0	%100
30	MP5B	Z	2.565	2.565	0	%100
31	MP4B	X	-1.637	-1.637	0	%100
32	MP4B	Z	2.836	2.836	0	%100
33	MP2B	X	-1.481	-1.481	0	%100
34	MP2B	Z	2.565	2.565	0	%100
35	MP1B	X	-1.481	-1.481	0	%100
36	MP1B	Z	2.565	2.565	0	%100
37	MP3B	X	-1.481	-1.481	0	%100
38	MP3B	Z	2.565	2.565	0	%100
39	M78A	X	-.51	-.51	0	%100
40	M78A	Z	.884	.884	0	%100
41	M75	X	-2.041	-2.041	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
42	M75	Z	3.535	3.535	0	%100
43	M76	X	-.51	-.51	0	%100
44	M76	Z	.884	.884	0	%100
45	M76A	X	-1.351	-1.351	0	%100
46	M76A	Z	2.339	2.339	0	%100
47	M77	X	-1.436	-1.436	0	%100
48	M77	Z	2.488	2.488	0	%100
49	M78	X	-1.436	-1.436	0	%100
50	M78	Z	2.488	2.488	0	%100
51	M79A	X	-2.171	-2.171	0	%100
52	M79A	Z	3.76	3.76	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M40	X	-.884	-.884	0	%100
2	M40	Z	.51	.51	0	%100
3	M41	X	-3.535	-3.535	0	%100
4	M41	Z	2.041	2.041	0	%100
5	M42	X	-.884	-.884	0	%100
6	M42	Z	.51	.51	0	%100
7	MP5A	X	-2.565	-2.565	0	%100
8	MP5A	Z	1.481	1.481	0	%100
9	MP4A	X	-2.836	-2.836	0	%100
10	MP4A	Z	1.637	1.637	0	%100
11	MP2A	X	-2.565	-2.565	0	%100
12	MP2A	Z	1.481	1.481	0	%100
13	MP1A	X	-2.565	-2.565	0	%100
14	MP1A	Z	1.481	1.481	0	%100
15	DC	X	-2.339	-2.339	0	%100
16	DC	Z	1.351	1.351	0	%100
17	MP3A	X	-2.565	-2.565	0	%100
18	MP3A	Z	1.481	1.481	0	%100
19	MP5C	X	-2.565	-2.565	0	%100
20	MP5C	Z	1.481	1.481	0	%100
21	MP4C	X	-2.836	-2.836	0	%100
22	MP4C	Z	1.637	1.637	0	%100
23	MP2C	X	-2.565	-2.565	0	%100
24	MP2C	Z	1.481	1.481	0	%100
25	MP1C	X	-2.565	-2.565	0	%100
26	MP1C	Z	1.481	1.481	0	%100
27	MP3C	X	-2.565	-2.565	0	%100
28	MP3C	Z	1.481	1.481	0	%100
29	MP5B	X	-2.565	-2.565	0	%100
30	MP5B	Z	1.481	1.481	0	%100
31	MP4B	X	-2.836	-2.836	0	%100
32	MP4B	Z	1.637	1.637	0	%100
33	MP2B	X	-2.565	-2.565	0	%100
34	MP2B	Z	1.481	1.481	0	%100
35	MP1B	X	-2.565	-2.565	0	%100
36	MP1B	Z	1.481	1.481	0	%100
37	MP3B	X	-2.565	-2.565	0	%100
38	MP3B	Z	1.481	1.481	0	%100
39	M78A	X	0	0	0	%100
40	M78A	Z	0	0	0	%100
41	M75	X	-2.651	-2.651	0	%100
42	M75	Z	1.531	1.531	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
44	M76	Z	0	0	0	%100
45	M76A	X	-2.701	-2.701	0	%100
46	M76A	Z	0	0	0	%100
47	M77	X	-4.342	-4.342	0	%100
48	M77	Z	0	0	0	%100
49	M78	X	-2.873	-2.873	0	%100
50	M78	Z	0	0	0	%100
51	M79A	X	-2.873	-2.873	0	%100
52	M79A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M40	X	-3.535	-3.535	0	%100
2	M40	Z	-2.041	-2.041	0	%100
3	M41	X	-0.884	-0.884	0	%100
4	M41	Z	-0.51	-0.51	0	%100
5	M42	X	-0.884	-0.884	0	%100
6	M42	Z	-0.51	-0.51	0	%100
7	MP5A	X	-2.565	-2.565	0	%100
8	MP5A	Z	-1.481	-1.481	0	%100
9	MP4A	X	-2.836	-2.836	0	%100
10	MP4A	Z	-1.637	-1.637	0	%100
11	MP2A	X	-2.565	-2.565	0	%100
12	MP2A	Z	-1.481	-1.481	0	%100
13	MP1A	X	-2.565	-2.565	0	%100
14	MP1A	Z	-1.481	-1.481	0	%100
15	DC	X	-2.339	-2.339	0	%100
16	DC	Z	-1.351	-1.351	0	%100
17	MP3A	X	-2.565	-2.565	0	%100
18	MP3A	Z	-1.481	-1.481	0	%100
19	MP5C	X	-2.565	-2.565	0	%100
20	MP5C	Z	-1.481	-1.481	0	%100
21	MP4C	X	-2.836	-2.836	0	%100
22	MP4C	Z	-1.637	-1.637	0	%100
23	MP2C	X	-2.565	-2.565	0	%100
24	MP2C	Z	-1.481	-1.481	0	%100
25	MP1C	X	-2.565	-2.565	0	%100
26	MP1C	Z	-1.481	-1.481	0	%100
27	MP3C	X	-2.565	-2.565	0	%100
28	MP3C	Z	-1.481	-1.481	0	%100
29	MP5B	X	-2.565	-2.565	0	%100
30	MP5B	Z	-1.481	-1.481	0	%100
31	MP4B	X	-2.836	-2.836	0	%100
32	MP4B	Z	-1.637	-1.637	0	%100
33	MP2B	X	-2.565	-2.565	0	%100
34	MP2B	Z	-1.481	-1.481	0	%100
35	MP1B	X	-2.565	-2.565	0	%100
36	MP1B	Z	-1.481	-1.481	0	%100
37	MP3B	X	-2.565	-2.565	0	%100
38	MP3B	Z	-1.481	-1.481	0	%100
39	M78A	X	-2.651	-2.651	0	%100
40	M78A	Z	-1.531	-1.531	0	%100
41	M75	X	0	0	0	%100
42	M75	Z	0	0	0	%100
43	M76	X	-2.651	-2.651	0	%100
44	M76	Z	-1.531	-1.531	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
45	M76A	X	-2.339	-2.339	0	%100
46	M76A	Z	-1.351	-1.351	0	%100
47	M77	X	-3.336	-3.336	0	%100
48	M77	Z	-1.926	-1.926	0	%100
49	M78	X	-3.336	-3.336	0	%100
50	M78	Z	-1.926	-1.926	0	%100
51	M79A	X	-2.064	-2.064	0	%100
52	M79A	Z	-1.191	-1.191	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M40	X	-1.531	-1.531	0	%100
2	M40	Z	-2.651	-2.651	0	%100
3	M41	X	0	0	0	%100
4	M41	Z	0	0	0	%100
5	M42	X	-1.531	-1.531	0	%100
6	M42	Z	-2.651	-2.651	0	%100
7	MP5A	X	-1.481	-1.481	0	%100
8	MP5A	Z	-2.565	-2.565	0	%100
9	MP4A	X	-1.637	-1.637	0	%100
10	MP4A	Z	-2.836	-2.836	0	%100
11	MP2A	X	-1.481	-1.481	0	%100
12	MP2A	Z	-2.565	-2.565	0	%100
13	MP1A	X	-1.481	-1.481	0	%100
14	MP1A	Z	-2.565	-2.565	0	%100
15	DC	X	-1.351	-1.351	0	%100
16	DC	Z	-2.339	-2.339	0	%100
17	MP3A	X	-1.481	-1.481	0	%100
18	MP3A	Z	-2.565	-2.565	0	%100
19	MP5C	X	-1.481	-1.481	0	%100
20	MP5C	Z	-2.565	-2.565	0	%100
21	MP4C	X	-1.637	-1.637	0	%100
22	MP4C	Z	-2.836	-2.836	0	%100
23	MP2C	X	-1.481	-1.481	0	%100
24	MP2C	Z	-2.565	-2.565	0	%100
25	MP1C	X	-1.481	-1.481	0	%100
26	MP1C	Z	-2.565	-2.565	0	%100
27	MP3C	X	-1.481	-1.481	0	%100
28	MP3C	Z	-2.565	-2.565	0	%100
29	MP5B	X	-1.481	-1.481	0	%100
30	MP5B	Z	-2.565	-2.565	0	%100
31	MP4B	X	-1.637	-1.637	0	%100
32	MP4B	Z	-2.836	-2.836	0	%100
33	MP2B	X	-1.481	-1.481	0	%100
34	MP2B	Z	-2.565	-2.565	0	%100
35	MP1B	X	-1.481	-1.481	0	%100
36	MP1B	Z	-2.565	-2.565	0	%100
37	MP3B	X	-1.481	-1.481	0	%100
38	MP3B	Z	-2.565	-2.565	0	%100
39	M78A	X	-2.041	-2.041	0	%100
40	M78A	Z	-3.535	-3.535	0	%100
41	M75	X	-.51	-.51	0	%100
42	M75	Z	-.884	-.884	0	%100
43	M76	X	-.51	-.51	0	%100
44	M76	Z	-.884	-.884	0	%100
45	M76A	X	-1.351	-1.351	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
46	M76A	Z	-2.339	-2.339	0	%100
47	M77	X	-1.436	-1.436	0	%100
48	M77	Z	-2.488	-2.488	0	%100
49	M78	X	-2.171	-2.171	0	%100
50	M78	Z	-3.76	-3.76	0	%100
51	M79A	X	-1.436	-1.436	0	%100
52	M79A	Z	-2.488	-2.488	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M40	X	0	0	0	%100
2	M40	Z	-.234	-.234	0	%100
3	M41	X	0	0	0	%100
4	M41	Z	-.234	-.234	0	%100
5	M42	X	0	0	0	%100
6	M42	Z	-.937	-.937	0	%100
7	MP5A	X	0	0	0	%100
8	MP5A	Z	-.534	-.534	0	%100
9	MP4A	X	0	0	0	%100
10	MP4A	Z	-.647	-.647	0	%100
11	MP2A	X	0	0	0	%100
12	MP2A	Z	-.534	-.534	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	-.534	-.534	0	%100
15	DC	X	0	0	0	%100
16	DC	Z	-.487	-.487	0	%100
17	MP3A	X	0	0	0	%100
18	MP3A	Z	-.534	-.534	0	%100
19	MP5C	X	0	0	0	%100
20	MP5C	Z	-.534	-.534	0	%100
21	MP4C	X	0	0	0	%100
22	MP4C	Z	-.647	-.647	0	%100
23	MP2C	X	0	0	0	%100
24	MP2C	Z	-.534	-.534	0	%100
25	MP1C	X	0	0	0	%100
26	MP1C	Z	-.534	-.534	0	%100
27	MP3C	X	0	0	0	%100
28	MP3C	Z	-.534	-.534	0	%100
29	MP5B	X	0	0	0	%100
30	MP5B	Z	-.534	-.534	0	%100
31	MP4B	X	0	0	0	%100
32	MP4B	Z	-.647	-.647	0	%100
33	MP2B	X	0	0	0	%100
34	MP2B	Z	-.534	-.534	0	%100
35	MP1B	X	0	0	0	%100
36	MP1B	Z	-.534	-.534	0	%100
37	MP3B	X	0	0	0	%100
38	MP3B	Z	-.534	-.534	0	%100
39	M78A	X	0	0	0	%100
40	M78A	Z	-.703	-.703	0	%100
41	M75	X	0	0	0	%100
42	M75	Z	-.703	-.703	0	%100
43	M76	X	0	0	0	%100
44	M76	Z	0	0	0	%100
45	M76A	X	0	0	0	%100
46	M76A	Z	-.487	-.487	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
47	M77	X	0	0	0	%100
48	M77	Z	-.666	-.666	0	%100
49	M78	X	0	0	0	%100
50	M78	Z	-.94	-.94	0	%100
51	M79A	X	0	0	0	%100
52	M79A	Z	-.94	-.94	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M40	X	0	0	0	%100
2	M40	Z	0	0	0	%100
3	M41	X	.351	.351	0	%100
4	M41	Z	-.609	-.609	0	%100
5	M42	X	.351	.351	0	%100
6	M42	Z	-.609	-.609	0	%100
7	MP5A	X	.267	.267	0	%100
8	MP5A	Z	-.463	-.463	0	%100
9	MP4A	X	.323	.323	0	%100
10	MP4A	Z	-.56	-.56	0	%100
11	MP2A	X	.267	.267	0	%100
12	MP2A	Z	-.463	-.463	0	%100
13	MP1A	X	.267	.267	0	%100
14	MP1A	Z	-.463	-.463	0	%100
15	DC	X	.243	.243	0	%100
16	DC	Z	-.422	-.422	0	%100
17	MP3A	X	.267	.267	0	%100
18	MP3A	Z	-.463	-.463	0	%100
19	MP5C	X	.267	.267	0	%100
20	MP5C	Z	-.463	-.463	0	%100
21	MP4C	X	.323	.323	0	%100
22	MP4C	Z	-.56	-.56	0	%100
23	MP2C	X	.267	.267	0	%100
24	MP2C	Z	-.463	-.463	0	%100
25	MP1C	X	.267	.267	0	%100
26	MP1C	Z	-.463	-.463	0	%100
27	MP3C	X	.267	.267	0	%100
28	MP3C	Z	-.463	-.463	0	%100
29	MP5B	X	.267	.267	0	%100
30	MP5B	Z	-.463	-.463	0	%100
31	MP4B	X	.323	.323	0	%100
32	MP4B	Z	-.56	-.56	0	%100
33	MP2B	X	.267	.267	0	%100
34	MP2B	Z	-.463	-.463	0	%100
35	MP1B	X	.267	.267	0	%100
36	MP1B	Z	-.463	-.463	0	%100
37	MP3B	X	.267	.267	0	%100
38	MP3B	Z	-.463	-.463	0	%100
39	M78A	X	.117	.117	0	%100
40	M78A	Z	-.203	-.203	0	%100
41	M75	X	.469	.469	0	%100
42	M75	Z	-.811	-.811	0	%100
43	M76	X	.117	.117	0	%100
44	M76	Z	-.203	-.203	0	%100
45	M76A	X	.243	.243	0	%100
46	M76A	Z	-.422	-.422	0	%100
47	M77	X	.379	.379	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
48	M77	Z	-.656	-.656	0	%100
49	M78	X	.379	.379	0	%100
50	M78	Z	-.656	-.656	0	%100
51	M79A	X	.515	.515	0	%100
52	M79A	Z	-.893	-.893	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M40	X	.203	.203	0	%100
2	M40	Z	-.117	-.117	0	%100
3	M41	X	.811	.811	0	%100
4	M41	Z	-.469	-.469	0	%100
5	M42	X	.203	.203	0	%100
6	M42	Z	-.117	-.117	0	%100
7	MP5A	X	.463	.463	0	%100
8	MP5A	Z	-.267	-.267	0	%100
9	MP4A	X	.56	.56	0	%100
10	MP4A	Z	-.323	-.323	0	%100
11	MP2A	X	.463	.463	0	%100
12	MP2A	Z	-.267	-.267	0	%100
13	MP1A	X	.463	.463	0	%100
14	MP1A	Z	-.267	-.267	0	%100
15	DC	X	.422	.422	0	%100
16	DC	Z	-.243	-.243	0	%100
17	MP3A	X	.463	.463	0	%100
18	MP3A	Z	-.267	-.267	0	%100
19	MP5C	X	.463	.463	0	%100
20	MP5C	Z	-.267	-.267	0	%100
21	MP4C	X	.56	.56	0	%100
22	MP4C	Z	-.323	-.323	0	%100
23	MP2C	X	.463	.463	0	%100
24	MP2C	Z	-.267	-.267	0	%100
25	MP1C	X	.463	.463	0	%100
26	MP1C	Z	-.267	-.267	0	%100
27	MP3C	X	.463	.463	0	%100
28	MP3C	Z	-.267	-.267	0	%100
29	MP5B	X	.463	.463	0	%100
30	MP5B	Z	-.267	-.267	0	%100
31	MP4B	X	.56	.56	0	%100
32	MP4B	Z	-.323	-.323	0	%100
33	MP2B	X	.463	.463	0	%100
34	MP2B	Z	-.267	-.267	0	%100
35	MP1B	X	.463	.463	0	%100
36	MP1B	Z	-.267	-.267	0	%100
37	MP3B	X	.463	.463	0	%100
38	MP3B	Z	-.267	-.267	0	%100
39	M78A	X	0	0	0	%100
40	M78A	Z	0	0	0	%100
41	M75	X	.609	.609	0	%100
42	M75	Z	-.351	-.351	0	%100
43	M76	X	.609	.609	0	%100
44	M76	Z	-.351	-.351	0	%100
45	M76A	X	.422	.422	0	%100
46	M76A	Z	-.243	-.243	0	%100
47	M77	X	.814	.814	0	%100
48	M77	Z	-.47	-.47	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
49	M78	X	.577	.577	0	%100
50	M78	Z	-.333	-.333	0	%100
51	M79A	X	.814	.814	0	%100
52	M79A	Z	-.47	-.47	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M40	X	.703	.703	0	%100
2	M40	Z	0	0	0	%100
3	M41	X	.703	.703	0	%100
4	M41	Z	0	0	0	%100
5	M42	X	0	0	0	%100
6	M42	Z	0	0	0	%100
7	MP5A	X	.534	.534	0	%100
8	MP5A	Z	0	0	0	%100
9	MP4A	X	.647	.647	0	%100
10	MP4A	Z	0	0	0	%100
11	MP2A	X	.534	.534	0	%100
12	MP2A	Z	0	0	0	%100
13	MP1A	X	.534	.534	0	%100
14	MP1A	Z	0	0	0	%100
15	DC	X	.487	.487	0	%100
16	DC	Z	0	0	0	%100
17	MP3A	X	.534	.534	0	%100
18	MP3A	Z	0	0	0	%100
19	MP5C	X	.534	.534	0	%100
20	MP5C	Z	0	0	0	%100
21	MP4C	X	.647	.647	0	%100
22	MP4C	Z	0	0	0	%100
23	MP2C	X	.534	.534	0	%100
24	MP2C	Z	0	0	0	%100
25	MP1C	X	.534	.534	0	%100
26	MP1C	Z	0	0	0	%100
27	MP3C	X	.534	.534	0	%100
28	MP3C	Z	0	0	0	%100
29	MP5B	X	.534	.534	0	%100
30	MP5B	Z	0	0	0	%100
31	MP4B	X	.647	.647	0	%100
32	MP4B	Z	0	0	0	%100
33	MP2B	X	.534	.534	0	%100
34	MP2B	Z	0	0	0	%100
35	MP1B	X	.534	.534	0	%100
36	MP1B	Z	0	0	0	%100
37	MP3B	X	.534	.534	0	%100
38	MP3B	Z	0	0	0	%100
39	M78A	X	.234	.234	0	%100
40	M78A	Z	0	0	0	%100
41	M75	X	.234	.234	0	%100
42	M75	Z	0	0	0	%100
43	M76	X	.937	.937	0	%100
44	M76	Z	0	0	0	%100
45	M76A	X	.487	.487	0	%100
46	M76A	Z	0	0	0	%100
47	M77	X	1.031	1.031	0	%100
48	M77	Z	0	0	0	%100
49	M78	X	.757	.757	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
50	M78	Z	0	0	0	%100
51	M79A	X	.757	.757	0	%100
52	M79A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M40	X	.811	.811	0	%100
2	M40	Z	.469	.469	0	%100
3	M41	X	.203	.203	0	%100
4	M41	Z	.117	.117	0	%100
5	M42	X	.203	.203	0	%100
6	M42	Z	.117	.117	0	%100
7	MP5A	X	.463	.463	0	%100
8	MP5A	Z	.267	.267	0	%100
9	MP4A	X	.56	.56	0	%100
10	MP4A	Z	.323	.323	0	%100
11	MP2A	X	.463	.463	0	%100
12	MP2A	Z	.267	.267	0	%100
13	MP1A	X	.463	.463	0	%100
14	MP1A	Z	.267	.267	0	%100
15	DC	X	.422	.422	0	%100
16	DC	Z	.243	.243	0	%100
17	MP3A	X	.463	.463	0	%100
18	MP3A	Z	.267	.267	0	%100
19	MP5C	X	.463	.463	0	%100
20	MP5C	Z	.267	.267	0	%100
21	MP4C	X	.56	.56	0	%100
22	MP4C	Z	.323	.323	0	%100
23	MP2C	X	.463	.463	0	%100
24	MP2C	Z	.267	.267	0	%100
25	MP1C	X	.463	.463	0	%100
26	MP1C	Z	.267	.267	0	%100
27	MP3C	X	.463	.463	0	%100
28	MP3C	Z	.267	.267	0	%100
29	MP5B	X	.463	.463	0	%100
30	MP5B	Z	.267	.267	0	%100
31	MP4B	X	.56	.56	0	%100
32	MP4B	Z	.323	.323	0	%100
33	MP2B	X	.463	.463	0	%100
34	MP2B	Z	.267	.267	0	%100
35	MP1B	X	.463	.463	0	%100
36	MP1B	Z	.267	.267	0	%100
37	MP3B	X	.463	.463	0	%100
38	MP3B	Z	.267	.267	0	%100
39	M78A	X	.609	.609	0	%100
40	M78A	Z	.351	.351	0	%100
41	M75	X	0	0	0	%100
42	M75	Z	0	0	0	%100
43	M76	X	.609	.609	0	%100
44	M76	Z	.351	.351	0	%100
45	M76A	X	.422	.422	0	%100
46	M76A	Z	.243	.243	0	%100
47	M77	X	.814	.814	0	%100
48	M77	Z	.47	.47	0	%100
49	M78	X	.814	.814	0	%100
50	M78	Z	.47	.47	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
52	M79A	Z	.656	.656	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M40	X	0	0	0	%100
2	M40	Z	.234	.234	0	%100
3	M41	X	0	0	0	%100
4	M41	Z	.234	.234	0	%100
5	M42	X	0	0	0	%100
6	M42	Z	.937	.937	0	%100
7	MP5A	X	0	0	0	%100
8	MP5A	Z	.534	.534	0	%100
9	MP4A	X	0	0	0	%100
10	MP4A	Z	.647	.647	0	%100
11	MP2A	X	0	0	0	%100
12	MP2A	Z	.534	.534	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	.534	.534	0	%100
15	DC	X	0	0	0	%100
16	DC	Z	.487	.487	0	%100
17	MP3A	X	0	0	0	%100
18	MP3A	Z	.534	.534	0	%100
19	MP5C	X	0	0	0	%100
20	MP5C	Z	.534	.534	0	%100
21	MP4C	X	0	0	0	%100
22	MP4C	Z	.647	.647	0	%100
23	MP2C	X	0	0	0	%100
24	MP2C	Z	.534	.534	0	%100
25	MP1C	X	0	0	0	%100
26	MP1C	Z	.534	.534	0	%100
27	MP3C	X	0	0	0	%100
28	MP3C	Z	.534	.534	0	%100
29	MP5B	X	0	0	0	%100
30	MP5B	Z	.534	.534	0	%100
31	MP4B	X	0	0	0	%100
32	MP4B	Z	.647	.647	0	%100
33	MP2B	X	0	0	0	%100
34	MP2B	Z	.534	.534	0	%100
35	MP1B	X	0	0	0	%100
36	MP1B	Z	.534	.534	0	%100
37	MP3B	X	0	0	0	%100
38	MP3B	Z	.534	.534	0	%100
39	M78A	X	0	0	0	%100
40	M78A	Z	.703	.703	0	%100
41	M75	X	0	0	0	%100
42	M75	Z	.703	.703	0	%100
43	M76	X	0	0	0	%100
44	M76	Z	0	0	0	%100
45	M76A	X	0	0	0	%100
46	M76A	Z	.487	.487	0	%100
47	M77	X	0	0	0	%100
48	M77	Z	.666	.666	0	%100
49	M78	X	0	0	0	%100
50	M78	Z	.94	.94	0	%100
51	M79A	X	0	0	0	%100
52	M79A	Z	.94	.94	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M78A	Y	-71.483	-71.483	5	7.409
2	M76	Y	-71.483	-71.483	5	7.409
3	M75	Y	-71.483	-71.483	5	7.409

Member Distributed Loads (BLC 89 : BLC 84 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M40	Y	-.137	-.137	1.753	2.391
2	M40	Y	-.137	-.205	2.391	3.029
3	M40	Y	-.205	-.273	3.029	3.668
4	M40	Y	-.273	-.273	3.668	4.306
5	M40	Y	-.273	-.273	4.306	4.944
6	M40	Y	-.273	-.273	4.944	5.582
7	M40	Y	-.273	-.273	5.582	6.221
8	M40	Y	-.273	-.273	6.221	6.859
9	M40	Y	-.273	-.137	6.859	7.497
10	M40	Y	-.137	-.137	7.497	8.135
11	M40	Y	-.137	-.273	8.135	8.774
12	M40	Y	-.273	-.273	8.774	9.412
13	M40	Y	-.273	-.273	9.412	10.05
14	M40	Y	-.273	-.205	10.05	10.688
15	M40	Y	-.205	-.137	10.688	11.326
16	M40	Y	-.137	-.137	11.326	11.965
17	M73	Y	-.583	-.583	0	.299
18	M78A	Y	-.316	-.316	4.045	5.151
19	M76	Y	-.316	-.316	4.045	5.151
20	M41	Y	-.137	-.137	1.753	2.391
21	M41	Y	-.137	-.205	2.391	3.029
22	M41	Y	-.205	-.273	3.029	3.668
23	M41	Y	-.273	-.273	3.668	4.306
24	M41	Y	-.273	-.273	4.306	4.944
25	M41	Y	-.273	-.273	4.944	5.582
26	M41	Y	-.273	-.273	5.582	6.221
27	M41	Y	-.273	-.273	6.221	6.859
28	M41	Y	-.273	-.137	6.859	7.497
29	M41	Y	-.137	-.137	7.497	8.135
30	M41	Y	-.137	-.273	8.135	8.774
31	M41	Y	-.273	-.273	8.774	9.412
32	M41	Y	-.273	-.273	9.412	10.05
33	M41	Y	-.273	-.205	10.05	10.688
34	M41	Y	-.205	-.137	10.688	11.326
35	M41	Y	-.137	-.137	11.326	11.965
36	M63	Y	-.583	-.583	0	.299
37	M75	Y	-.316	-.316	4.045	5.151
38	M42	Y	-.137	-.137	1.753	2.391
39	M42	Y	-.137	-.205	2.391	3.029
40	M42	Y	-.205	-.273	3.029	3.668
41	M42	Y	-.273	-.273	3.668	4.306
42	M42	Y	-.273	-.273	4.306	4.944
43	M42	Y	-.273	-.137	4.944	5.582
44	M42	Y	-.137	-.137	5.582	6.221
45	M42	Y	-.137	-.273	6.221	6.859
46	M42	Y	-.273	-.273	6.859	7.497
47	M42	Y	-.273	-.273	7.497	8.135
48	M42	Y	-.273	-.273	8.135	8.774
49	M42	Y	-.273	-.273	8.774	9.412
50	M42	Y	-.273	-.273	9.412	10.05



Member Distributed Loads (BLC 89 : BLC 84 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
51	M42	Y	-.273	-.205	10.05	10.688
52	M42	Y	-.205	-.137	10.688	11.326
53	M42	Y	-.137	-.137	11.326	11.965
54	M69	Y	-.583	-.583	0	.299

Member Distributed Loads (BLC 90 : BLC 85 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M40	Z	-.343	-.343	1.753	2.391
2	M40	Z	-.343	-.514	2.391	3.029
3	M40	Z	-.514	-.685	3.029	3.668
4	M40	Z	-.685	-.685	3.668	4.306
5	M40	Z	-.685	-.685	4.306	4.944
6	M40	Z	-.685	-.685	4.944	5.582
7	M40	Z	-.685	-.685	5.582	6.221
8	M40	Z	-.685	-.685	6.221	6.859
9	M40	Z	-.685	-.343	6.859	7.497
10	M40	Z	-.343	-.343	7.497	8.135
11	M40	Z	-.343	-.685	8.135	8.774
12	M40	Z	-.685	-.685	8.774	9.412
13	M40	Z	-.685	-.685	9.412	10.05
14	M40	Z	-.685	-.514	10.05	10.688
15	M40	Z	-.514	-.343	10.688	11.326
16	M40	Z	-.343	-.343	11.326	11.965
17	M73	Z	-1.462	-1.462	0	.299
18	M78A	Z	-.791	-.791	4.045	5.151
19	M76	Z	-.791	-.791	4.045	5.151
20	M41	Z	-.343	-.343	1.753	2.391
21	M41	Z	-.343	-.514	2.391	3.029
22	M41	Z	-.514	-.685	3.029	3.668
23	M41	Z	-.685	-.685	3.668	4.306
24	M41	Z	-.685	-.685	4.306	4.944
25	M41	Z	-.685	-.685	4.944	5.582
26	M41	Z	-.685	-.685	5.582	6.221
27	M41	Z	-.685	-.685	6.221	6.859
28	M41	Z	-.685	-.343	6.859	7.497
29	M41	Z	-.343	-.343	7.497	8.135
30	M41	Z	-.343	-.685	8.135	8.774
31	M41	Z	-.685	-.685	8.774	9.412
32	M41	Z	-.685	-.685	9.412	10.05
33	M41	Z	-.685	-.514	10.05	10.688
34	M41	Z	-.514	-.343	10.688	11.326
35	M41	Z	-.343	-.343	11.326	11.965
36	M63	Z	-1.462	-1.462	0	.299
37	M75	Z	-.791	-.791	4.045	5.151
38	M42	Z	-.343	-.343	1.753	2.391
39	M42	Z	-.343	-.514	2.391	3.029
40	M42	Z	-.514	-.685	3.029	3.668
41	M42	Z	-.685	-.685	3.668	4.306
42	M42	Z	-.685	-.685	4.306	4.944
43	M42	Z	-.685	-.343	4.944	5.582
44	M42	Z	-.343	-.343	5.582	6.221
45	M42	Z	-.343	-.685	6.221	6.859
46	M42	Z	-.685	-.685	6.859	7.497
47	M42	Z	-.685	-.685	7.497	8.135
48	M42	Z	-.685	-.685	8.135	8.774
49	M42	Z	-.685	-.685	8.774	9.412



Member Distributed Loads (BLC 90 : BLC 85 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
50	M42	Z	-.685	-.685	9.412	10.05
51	M42	Z	-.685	-.514	10.05	10.688
52	M42	Z	-.514	-.343	10.688	11.326
53	M42	Z	-.343	-.343	11.326	11.965
54	M69	Z	-1.462	-1.462	0	.299

Member Distributed Loads (BLC 91 : BLC 86 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M40	X	.343	.343	1.753	2.391
2	M40	X	.343	.514	2.391	3.029
3	M40	X	.514	.685	3.029	3.668
4	M40	X	.685	.685	3.668	4.306
5	M40	X	.685	.685	4.306	4.944
6	M40	X	.685	.685	4.944	5.582
7	M40	X	.685	.685	5.582	6.221
8	M40	X	.685	.685	6.221	6.859
9	M40	X	.685	.343	6.859	7.497
10	M40	X	.343	.343	7.497	8.135
11	M40	X	.343	.685	8.135	8.774
12	M40	X	.685	.685	8.774	9.412
13	M40	X	.685	.685	9.412	10.05
14	M40	X	.685	.514	10.05	10.688
15	M40	X	.514	.343	10.688	11.326
16	M40	X	.343	.343	11.326	11.965
17	M73	X	1.462	1.462	0	.299
18	M78A	X	.791	.791	4.045	5.151
19	M76	X	.791	.791	4.045	5.151
20	M41	X	.343	.343	1.753	2.391
21	M41	X	.343	.514	2.391	3.029
22	M41	X	.514	.685	3.029	3.668
23	M41	X	.685	.685	3.668	4.306
24	M41	X	.685	.685	4.306	4.944
25	M41	X	.685	.685	4.944	5.582
26	M41	X	.685	.685	5.582	6.221
27	M41	X	.685	.685	6.221	6.859
28	M41	X	.685	.343	6.859	7.497
29	M41	X	.343	.343	7.497	8.135
30	M41	X	.343	.685	8.135	8.774
31	M41	X	.685	.685	8.774	9.412
32	M41	X	.685	.685	9.412	10.05
33	M41	X	.685	.514	10.05	10.688
34	M41	X	.514	.343	10.688	11.326
35	M41	X	.343	.343	11.326	11.965
36	M63	X	1.462	1.462	0	.299
37	M75	X	.791	.791	4.045	5.151
38	M42	X	.343	.343	1.753	2.391
39	M42	X	.343	.514	2.391	3.029
40	M42	X	.514	.685	3.029	3.668
41	M42	X	.685	.685	3.668	4.306
42	M42	X	.685	.685	4.306	4.944
43	M42	X	.685	.343	4.944	5.582
44	M42	X	.343	.343	5.582	6.221
45	M42	X	.343	.685	6.221	6.859
46	M42	X	.685	.685	6.859	7.497
47	M42	X	.685	.685	7.497	8.135
48	M42	X	.685	.685	8.135	8.774



Company : Colliers Engineering & Design
 Designer : DAB
 Job Number : Project No. 10214357
 Model Name : 5000246846-VZW_MT_LO_H

Dec 14, 2023
 4:09 PM
 Checked By: DX

Envelope Joint Reactions (Continued)

Joint	X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
14	min -5439.854	4	2481.413	64	-5485.373	7						

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

Member	Shape	Code Check	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	phi*Pnc [...]	phi*Pnt [lb]	phi*Mn y...	phi*Mn z...	Cb	Eqn	
1	M40	HSS4X4X4	.196	13.718	5	.098	13.718	z	11	63476.737	139518	16.181	16.181	3...	H1-1b
2	M41	HSS4X4X4	.197	13.718	9	.098	13.718	z	3	63476.737	139518	16.181	16.181	3...	H1-1b
3	M42	HSS4X4X4	.197	0	1	.098	0	z	7	63476.737	139518	16.181	16.181	3...	H1-1b
4	MP5A	PIPE 2.0	.239	3.807	4	.051	3.896	4	13511.278	32130	1.872	1.872	2...	H1-1b	
5	MP4A	PIPE 2.5	.294	3.807	1	.038	3.896	5	28077.395	50715	3.596	3.596	1...	H1-1b	
6	MP2A	PIPE 2.0	.267	3.807	7	.039	3.807	8	13511.278	32130	1.872	1.872	2...	H1-1b	
7	MP1A	PIPE 2.0	.239	3.807	4	.051	3.896	4	13511.278	32130	1.872	1.872	2...	H1-1b	
8	DC	PIPE 2.0	.236	3	6	.032	1.5	6	26521.424	32130	1.872	1.872	1...	H1-1b	
9	MP3A	PIPE 2.0	.114	3.938	1	.020	3.938	5	12143.947	32130	1.872	1.872	2...	H1-1b	
10	MP5C	PIPE 2.0	.239	3.807	12	.051	3.896	12	13511.278	32130	1.872	1.872	2...	H1-1b	
11	MP4C	PIPE 2.5	.294	3.807	9	.038	3.896	1	28077.395	50715	3.596	3.596	2...	H1-1b	
12	MP2C	PIPE 2.0	.267	3.807	3	.039	3.807	4	13511.278	32130	1.872	1.872	2...	H1-1b	
13	MP1C	PIPE 2.0	.239	3.807	12	.051	3.896	12	13511.278	32130	1.872	1.872	2...	H1-1b	
14	MP3C	PIPE 2.0	.114	3.938	9	.020	3.938	1	12143.947	32130	1.872	1.872	2...	H1-1b	
15	MP5B	PIPE 2.0	.239	3.807	8	.051	3.896	8	13511.278	32130	1.872	1.872	2...	H1-1b	
16	MP4B	PIPE 2.5	.294	3.807	5	.038	3.896	9	28077.395	50715	3.596	3.596	2...	H1-1b	
17	MP2B	PIPE 2.0	.267	3.807	11	.039	3.807	12	13511.278	32130	1.872	1.872	2...	H1-1b	
18	MP1B	PIPE 2.0	.239	3.807	8	.051	3.896	8	13511.278	32130	1.872	1.872	2...	H1-1b	
19	MP3B	PIPE 2.0	.114	3.938	5	.020	3.938	9	12143.947	32130	1.872	1.872	2...	H1-1b	
20	M78A	HSS4X4X4	.239	7.053	24	.058	4.073	y	21	95349.334	139518	16.181	16.181	2...	H1-1b
21	M75	HSS4X4X4	.240	7.053	20	.058	4.073	y	17	95349.334	139518	16.181	16.181	2...	H1-1b
22	M76	HSS4X4X4	.239	7.053	16	.058	4.073	y	13	95349.334	139518	16.181	16.181	2...	H1-1b
23	M76A	PIPE 2.0	.021	3	7	.003	3	9	26521.424	32130	1.872	1.872	1	H1-1b	
24	M77	LL3x3x3x6	.122	5	13	.004	5	z	4	46390.788	70632	6.362	3.751	1	H1-1b*
25	M78	LL3x3x3x6	.123	5	21	.004	5	z	12	46390.788	70632	6.362	3.751	1	H1-1b*
26	M79A	LL3x3x3x6	.122	5	17	.004	0	z	8	46390.788	70632	6.362	3.751	1	H1-1b*

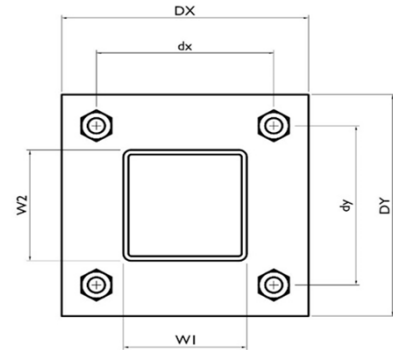
I. Mount-to-Tower Connection Check

Custom Orientation Required

Tower Connection Bolt Checks

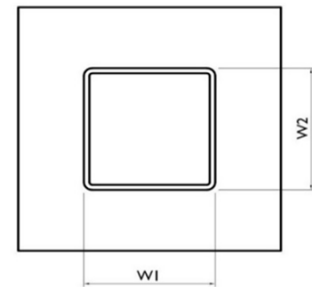
Bolt Orientation

Bolt Quantity per Reaction:	4
d_x (in) (Delta X of typ. bolt config. sketch):	4
d_y (in) (Delta Y of typ. bolt config. sketch):	8
Bolt Type:	A325N
Bolt Diameter (in):	0.75
Required Tensile Strength / bolt (kips):	3.4
Required Shear Strength / bolt (kips):	0.5
Tensile Capacity / bolt (kips):	29.8
Shear Capacity / bolt (kips):	17.9
Bolt Overall Utilization:	11.4%



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
W1 (in):	4
W2 (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):	5.04
Bolt Eccentricity, e (in):	1.98
M_u (kip-in):	6.76
$\Phi * M_n$ (kip-in):	10.21
Plate Bending Utilization:	66.2%



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
0.94
6.96
13.5%

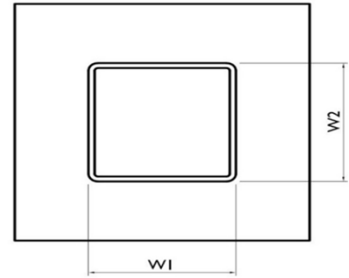
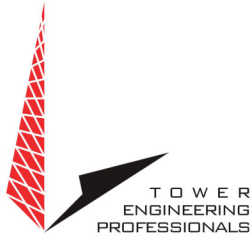


EXHIBIT 5





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Raleigh, North Carolina 27603
(612)965-8225
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Non-Ionizing Electromagnetic Radiation (NIER) Study

Site Number:

411184

Site Name:

Salem CT SQA

Location:

Salem Connecticut

Tenants:

T-Mobile, Dish Wireless, & Verizon Wireless

Prepared For:

American Tower, Inc.
Woburn, Massachusetts

January 28th, 2024

68984 P-418320

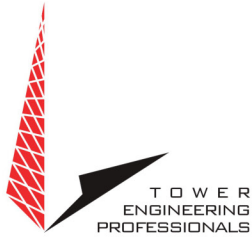
Prepared By:

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

Approved By:



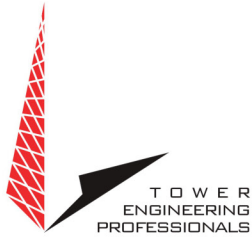
01/30/2024



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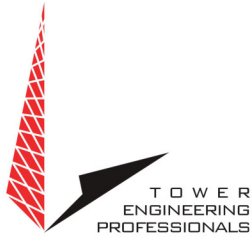
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Disclaimer Notice

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Non-Ionizing Electromagnetic Radiation (NIER) Study

411184 Salem CT SQA
Salem 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.

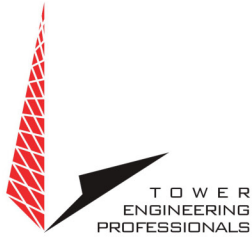
SITE AND FACILITY CONSIDERATIONS

Site 411184 Salem CT SQA is located at 399 West Rd., in Salem, Connecticut at coordinates 41.487838, -72.313201. The support structure is a 179' monopole. An aerial view of the tower can be found in Appendix 1, Site Photos. The tenants are T-Mobile (T-Mobile) 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 411184 Salem CT SQA.RF NIER Study 01/04/24.
- FCC databases.
- Carrier standard configurations.
- Empirical data collected by TEP.

SITE MITIGATION & CONTROL

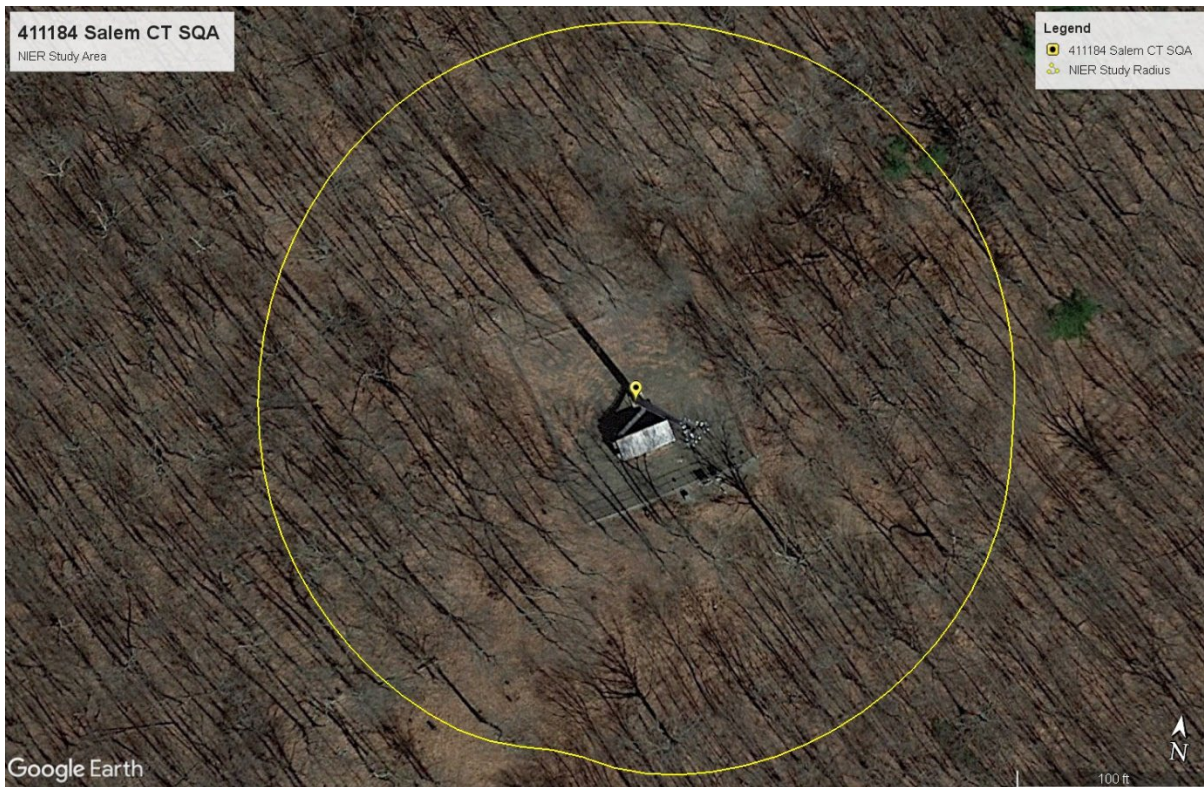
In order to comply with FCC, tenant, & ATC requirements, TEP recommends the placement of signage at the base of the tower and all compound access points to alert workers of potential exposure to RF fields while working on or near the antennae.

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

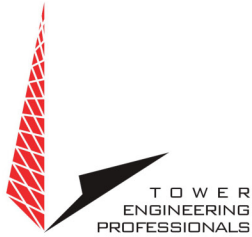
COMPLIANCE DETERMINATION

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

APPENDIX 1 Site Photos

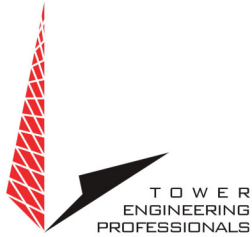


Aerial View of Site



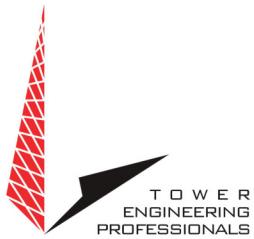
Appendix 2.1 Antenna Inventory

411184 Salem CT SQA							
Antenna Inventory							
Antenna #	Carrier	Antenna Manufacturer	Antenna Model	Frequency Band (MHz)	Azimuth (°)	Effective Radiated Power (W)	Radiation Center (ft)
1	Verizon	Samsung	XXDWMM	3700-3900	000	7345	180.8
2	Verizon	Samsung	XXDWMM	3700-3900	120	7345	180.8
3	Verizon	Samsung	XXDWMM	3700-3900	240	7345	180.8
4	Verizon	Samsung	MT6413-77A	3700-3900	000	18286	180.8
5	Verizon	Samsung	MT6413-77A	3700-3900	120	18286	180.8
6	Verizon	Samsung	MT6413-77A	3700-3900	240	18286	180.8
7	Verizon	Andrew	DB846H80E-SX	700/800/1900/2100	000	59385	180.0
8	Verizon	Andrew	DB846H80E-SX	700/800/1900/2100	120	59385	180.0
9	Verizon	Andrew	DB846H80E-SX	700/800/1900/2100	240	59385	180.0
10	Verizon	Andrew	DB846H80E-SX	700/800/1900/2100	000	59385	180.0
11	Verizon	Andrew	DB846H80E-SX	700/800/1900/2100	120	59385	180.0
12	Verizon	Andrew	DB846H80E-SX	700/800/1900/2100	240	59385	180.0
13	Verizon	Andrew	SBNHH-1D65B	700/800/1900/2100	000	59385	180.0
14	Verizon	Andrew	SBNHH-1D65B	700/800/1900/2100	120	59385	180.0
15	Verizon	Andrew	SBNHH-1D65B	700/800/1900/2100	240	59385	180.0
16	Verizon	Andrew	SBNHH-1D65B	700/800/1900/2100	000	59385	180.0
17	Verizon	Andrew	SBNHH-1D65B	700/800/1900/2100	120	59385	180.0
18	Verizon	Andrew	SBNHH-1D65B	700/800/1900/2100	240	59385	180.0
19	Dish	JMA	MX08FRO665-21	600/1900/2000/2100	000	40000	167.0
20	Dish	JMA	MX08FRO665-21	600/1900/2000/2100	120	40000	167.0
21	Dish	JMA	MX08FRO665-21	600/1900/2000/2100	240	40000	167.0
22	T-Mobile	RFS	SC2-W100BD	11000	340	20184	157.0
23	T-Mobile	Ericsson	Air6419 B41	2500	170	14356	142.0
24	T-Mobile	Ericsson	Air6419 B41	2500	240	14356	142.0
25	T-Mobile	Ericsson	Air6419 B41	2500	340	14356	142.0
26	T-Mobile	JMA	APXVAARR24	700/2100	170	12222	142.0

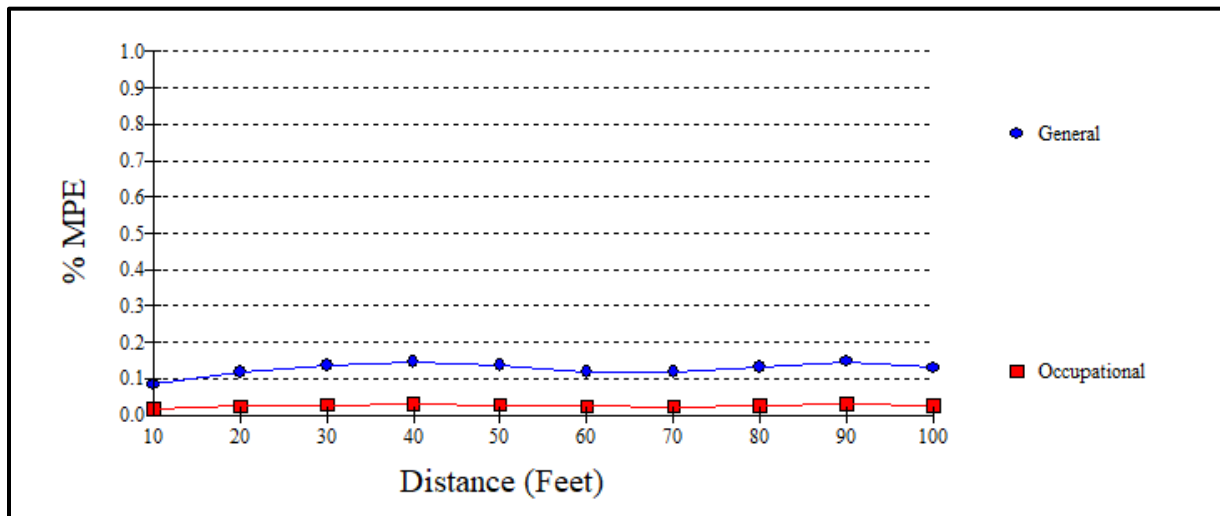


Appendix 2.1 Antenna Inventory

411184 Salem CT SQA							
Antenna Inventory							
Antenna #	Carrier	Antenna Manufacturer	Antenna Model	Frequency Band (MHz)	Azmiuth (°)	Effective Radiated Power (W)	Radiation Center (ft)
13	Verizon	Andrew	SBNHH-1D65B	700/800/1900/2100	000	59385	180.0
14	Verizon	Andrew	SBNHH-1D65B	700/800/1900/2100	120	59385	180.0
15	Verizon	Andrew	SBNHH-1D65B	700/800/1900/2100	240	59385	180.0
16	Verizon	Andrew	SBNHH-1D65B	700/800/1900/2100	000	59385	180.0
17	Verizon	Andrew	SBNHH-1D65B	700/800/1900/2100	120	59385	180.0
18	Verizon	Andrew	SBNHH-1D65B	700/800/1900/2100	240	59385	180.0
19	Dish	JMA	MX08FRO665-21	600/1900/2000/2100	000	40000	167.0
20	Dish	JMA	MX08FRO665-21	600/1900/2000/2100	120	40000	167.0
21	Dish	JMA	MX08FRO665-21	600/1900/2000/2100	240	40000	167.0
22	T-Mobile	RFS	SC2-W100BD	11000	340	20184	157.0
23	T-Mobile	Ericsson	Air6419 B41	2500	170	14356	142.0
24	T-Mobile	Ericsson	Air6419 B41	2500	240	14356	142.0
25	T-Mobile	Ericsson	Air6419 B41	2500	340	14356	142.0
26	T-Mobile	JMA	APXVAARR24	700/2100	170	12222	142.0
27	T-Mobile	JMA	APXVAARR24	700/2100	240	12222	142.0
28	T-Mobile	JMA	APXVAARR24	700/2100	340	12222	142.0
29	T-Mobile	Commscope	VV-65A-R1B	1900/2100	170	25027	118.0
30	T-Mobile	Commscope	VV-65A-R1B	1900/2100	240	25027	118.0
31	T-Mobile	Commscope	VV-65A-R1B	1900/2100	340	25027	118.0

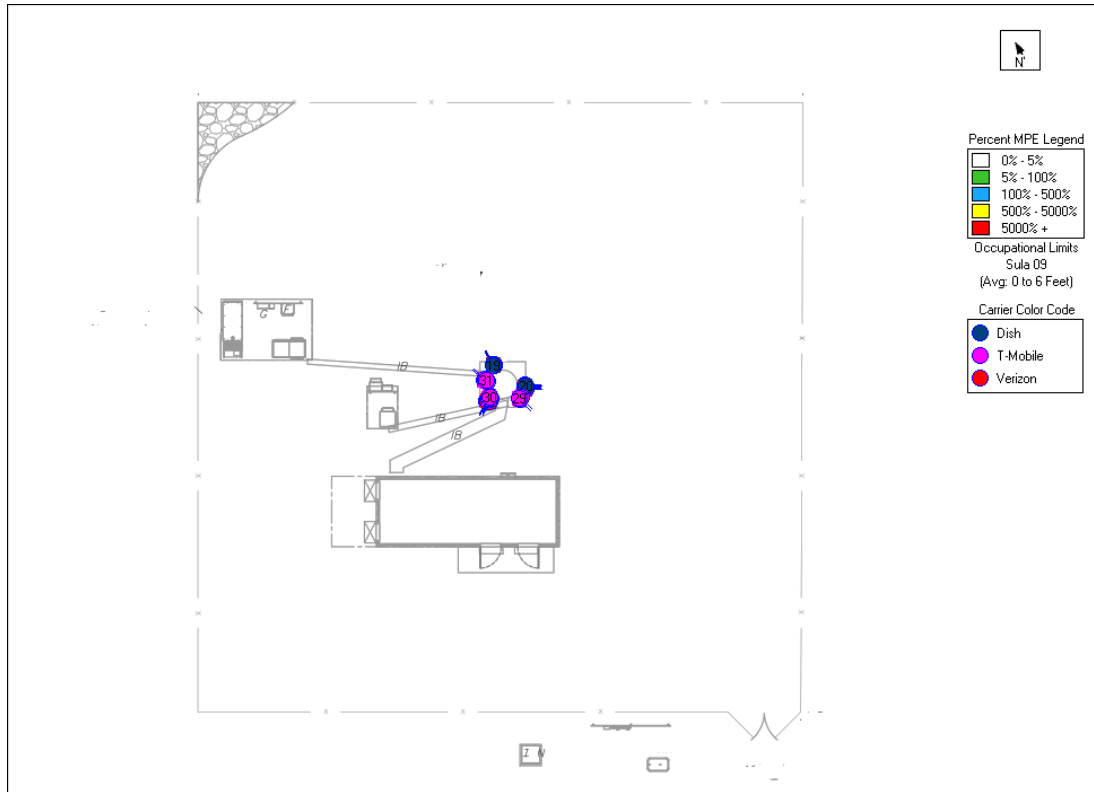


Appendix 3.1 MPE Limit Study



Maximum Power Density (@40'):	0.0009 mW/cm ²
General Population MPE (@40'):	0.1463%
Occupational MPE (@40'):	0.0293%

Appendix 3.2 MPE Limit Study





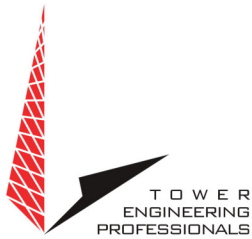
Appendix 4 Information Pertaining to MPE Studies

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

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

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

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



MPE limits are defined in terms of power density (units of milliwatts per centimeter squared: 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.

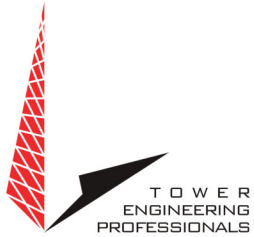
General population/uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore,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

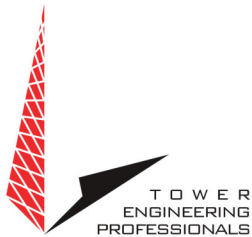


The FCC's limits for exposure at different frequencies are shown in the following Tables.

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:

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

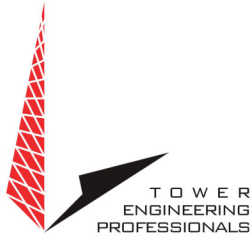
Where:

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

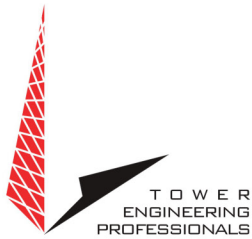
θ_{BW} = Beam width of antenna in degrees (3 dB half-power point)

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



Connecticut Siting Council ^(/CSC)

[CT.gov Home](#) [\(/\)](#) [Connecticut Siting Council](#) [\(/CSC\)](#) Salem Docket No. 198 Decision

[Decisions \(/CSC/Decisions/Decisions\)](#) >

[Meetings and Minutes \(/CSC/Common-Elements/v4-template/Council-Activity\)](#) >

[Pending Matters \(/CSC/1_Applications-and-Other-Pending-Matters/Pending-Matters\)](#) >

[About Us \(/CSC/Common-Elements/Common-Elements/Connecticut-Siting-Council---Description\)](#) >

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Search Connecticut Siting Council



DOCKET NO. 198 - Crown Atlantic Company LLC and Cellco Partnership d/b/a Verizon Wireless application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a cellular telecommunications facility at one of two locations in the Town of Salem.

} Connecticut
} Siting
} Council
} July 25, 2001

Decision and Order

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, operation, and maintenance of a telecommunications facility at the proposed prime site in Salem, Connecticut, 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 Crown Atlantic Company LLC and Cellco Partnership d/b/a Verizon Wireless for the construction, maintenance and operation of a cellular telecommunications facility at the proposed prime site located at 399 West Road, Salem, Connecticut. We deny certification of the proposed alternate site located at 329 West Road, Salem, Connecticut.

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

1. The tower shall be constructed as a monopole, no taller than necessary to provide the proposed telecommunications services, sufficient to accommodate the antennas of other entities, both public and private, but such tower shall not exceed a height of 180 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 submitted to and approved by the Council prior to the commencement of facility construction and shall include: a final site plan(s) for site development to include the location and specifications for the tower, tower foundation, antennas, equipment building, security fence, access road, utility line, and landscaping plan. The D&M Plan shall also include construction plans to be submitted prior to construction for site clearing, water drainage, and erosion and sedimentation control consistent with the Connecticut Guidelines for Soil Erosion and Sediment Control, as amended.
3. The Certificate Holder shall, prior to the commencement of operation, provide the Council worst-case modeling of 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 provide a recalculated report of electromagnetic radio frequency power density 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. If the facility does not initially provide, or permanently ceases to provide cellular services following completion of construction, 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.
7. Any antenna that becomes obsolete and ceases to function shall be removed within 60 days after such antennas become obsolete and ceases to function.

8. Unless otherwise approved by the Council, this Decision and Order shall be void if all construction authorized herein is not completed within three years of the effective date of this Decision and Order or within three years after all appeals to this Decision and Order have been resolved.

Pursuant to General Statutes § 16-50p, we hereby direct 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 Hartford Courant, and the New London Day.

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

Crown Atlantic Company LLC
and Cellco Partnership d/b/a
Verizon Wireless

Its Representative

James Valeriani, Program Manager
Crown Atlantic Company LLC
500 West Cummings Park
Suite 6500
Woburn, MA 01801
Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597

Intervenor

Town of Salem

Its Representative

Honorable James D. Fogarty
First Selectman
Salem Town Hall
270 Hartford Road
Salem, CT 06420-3809

Intervenor

Peter F. Sielman
369 West Road
Salem, CT 06420

EXHIBIT 7





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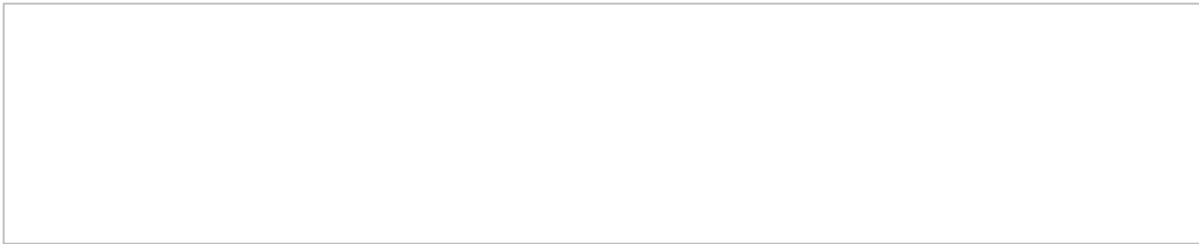


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