

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

September 18, 2023

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

**RE: Notice of Exempt Modification // Site: MIDDLEFIELD CT (ATC: 411260)
484 MERIDEN ROAD, Middlefield, CT 06455
N 41.5355208 // W -72.73210814**

Dear Ms. Bachman,

Cellco Partnership d/b/a Verizon Wireless currently maintains fifteen (15) antenna at the 150-ft level on the existing 150ft Monopole tower, located at 484 Meriden Road, Middlefield, CT. The tower is owned by American Tower. The Council approved Verizon Wireless use of the existing tower in July 2002. Verizon Wireless proposed modification involves the installation of four (4) interference mitigation filters on Verizon Wireless existing antenna platform and mounting assembly.

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

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2). Enclosed to accommodate this filing are construction drawings dated September 6, 2023, by A.T. Engineering Services, LLC, a structural analysis dated August 16, 2023, by American Tower Corp., and a structural mount analysis by Colliers Engineering and Design dated August 3, 2023, and Non-Ionizing Electromagnetic Radiation (NIER) Study dated August 27, 2023, by Tower Engineering Professionals.

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

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

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

Sincerely,

Derek Maheux

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

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

cc: Robert Yamartino – First Selectman – Chief Elected Official
Robin Newton, Town Planner - as P&Z official
American Tower Corporation - as tower owner
Land Management INC – as ground owner

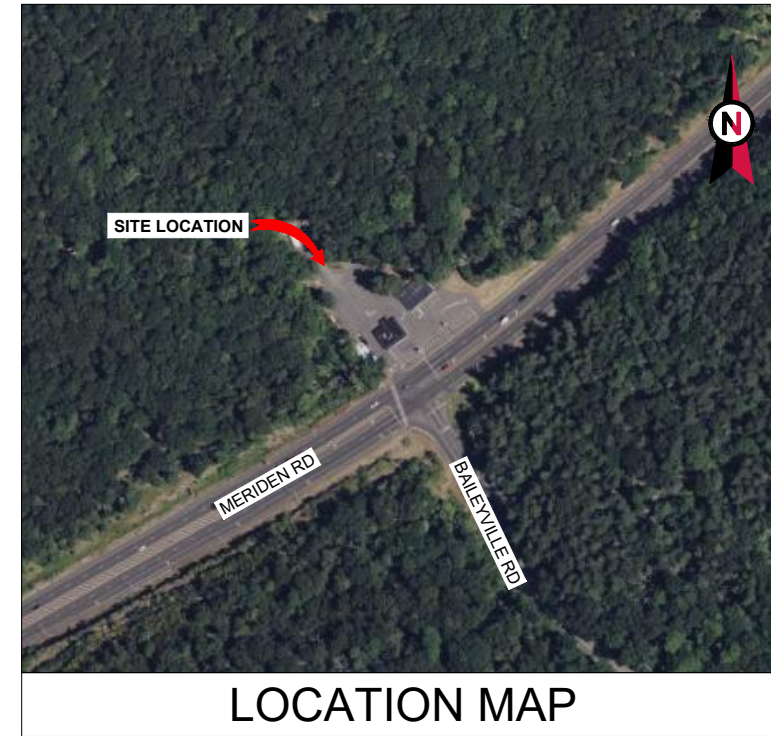
EXHIBIT 1





AMERICAN TOWER®

ATC SITE NAME: MIDDLEFIELD CT
 ATC SITE NUMBER: 411260
 VERIZON SITE NAME: MIDDLEFIELD CT
 VERIZON SITE NUMBER: 5000244948
 VERIZON FUZE PID: 17123783
 SITE ADDRESS: 484 MERIDEN RD.
 MIDDLEFIELD, CT 06455



LOCATION MAP

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

VERIZON AMENDMENT DRAWINGS

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

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

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	JLR	8/29/2023
1	SA DESIGN CRITERIA	JLR	09/06/23

ATC SITE NUMBER:
411260
 ATC SITE NAME:
MIDDLEFIELD CT
 VERIZON SITE NAME:
MIDDLEFIELD CT
 SITE ADDRESS:
484 MERIDEN RD.
MIDDLEFIELD, CT 06455



ATC JOB NO: 14519491_GO
 CUSTOMER ID: MIDDLEFIELD CT
 CUSTOMER #: 5000244948

TITLE SHEET

SHEET NUMBER:
G-001
 REVISION:
1

COMPLIANCE CODE	PROJECT SUMMARY	PROJECT DESCRIPTION	SHEET INDEX				
ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNMENT AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES. 1. 2020 NFPA 70, NATIONAL ELECTRIC CODE (NEC) 2. 2022 CONNECTICUT STATE BUILDING CODE 3. 2021 INTERNATIONAL BUILDING CODE (IBC) DESIGN CRITERIA FROM TOWER STRUCTURAL ANALYSIS: BASIC WIND SPEED: 119 MPH (3-SECOND GUST) BASIC WIND SPEED W/ ICE: 50 MPH (3-SECOND GUST) W/ 1.00" RADIAL ICE CONCURRENT CODE(S): ANSI/TIA-222-H / 2021 IBC / 2022 CONNECTICUT STATE BUILDING CODE EXPOSURE CATEGORY: B RISK CATEGORY: II TOPO FACTOR PROCEDURE: METHOD 1 TOPOGRAPHIC CATEGORY: 1 SPECTRAL RESPONSE: S _s =0.21, S _z =0.06 SITE CLASS: D - STIFF SOIL - DEFAULT INFORMATION TAKEN FROM STRUCTURAL ANALYSIS COMPLETED BY A.T. ENGINEERING SERVICES LLC, DATED 08/17/2023.	<u>SITE ADDRESS:</u> 484 MERIDEN RD. MIDDLEFIELD, CT 06455 COUNTY: MIDDLESEX <u>GEOGRAPHIC COORDINATES:</u> LATITUDE: 41.5355208 LONGITUDE: -72.73210814 GROUND ELEVATION: 429' AMSL	THE PROPOSED PROJECT INCLUDES MODIFYING GROUND BASED AND TOWER MOUNTED EQUIPMENT AS INDICATED PER BELOW: INSTALL MOUNT MODIFICATIONS AND (4) FILTER(S) EXISTING (15) ANTENNA(S), (6) RRR(S), (1) OVP(S), AND (7) 1-5/8" COAX / (2) 2.02" HYBRID CABLE(S) TO REMAIN	SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
	<u>PROJECT TEAM</u> <u>TOWER OWNER:</u> AMERICAN TOWER 10 PRESIDENTIAL WAY WOBURN, MA 01801 <u>ENGINEER:</u> ATC TOWER SERVICES, LLC 3500 REGENCY PKWY STE 100 CARY, NC 27518 <u>PROPERTY OWNER:</u> LAND MANAGEMENT INC 484 MERIDEN RD. MIDDLEFIELD, CT 06455	PROJECT NOTES 1. THE FACILITY IS UNMANNED. 2. A TECHNICIAN WILL VISIT THE SITE APPROXIMATELY ONCE A MONTH FOR ROUTINE INSPECTION AND MAINTENANCE. 3. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT LAND DISTURBANCE OR EFFECT OF STORM WATER DRAINAGE. 4. NO SANITARY SEWER, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED. 5. HANDICAP ACCESS IS NOT REQUIRED. 6. THE PROJECT DEPICTED IN THESE PLANS QUALIFIES AS AN ELIGIBLE FACILITIES REQUEST ENTITLED TO EXPEDITED REVIEW UNDER 47 U.S.C. § 1455(A) AS A MODIFICATION OF AN EXISTING WIRELESS TOWER THAT INVOLVES THE COLLOCATION, REMOVAL, AND/OR REPLACEMENT OF TRANSMISSION EQUIPMENT THAT IS NOT A SUBSTANTIAL CHANGE UNDER CFR § 1.61000 (B)(7).	G-001 TITLE SHEET G-002 GENERAL NOTES C-101 DETAILED SITE PLAN C-201 TOWER ELEVATION C-401 ANTENNA INFORMATION & SCHEDULE C-501 CONSTRUCTION DETAILS E-501 GROUNDING DETAILS R-601 SUPPLEMENTAL				
<u>UTILITY COMPANIES</u> POWER COMPANY: NORTHEAST UTILITIES PHONE: (800) 286-2000 TELEPHONE COMPANY: AT&T PHONE: (884) 221-7261	<u>PROJECT LOCATION DIRECTIONS</u> FROM WALLINGFORD TAKE RT 91 NORTH TO EXIT 16 (E. MAIN ST) TAKE A RIGHT ONTO EAST MAIN STREET FOLLOW TO RT. 66 AT 1ST TRAFFIC LIGHT ON 66 TAKE A LEFT INTO GUIDA'S DAIRY BAR SITE IS IN LEFT CORNER OF REAR PARKING LOT. GATE COMBO IS 2370	CONTRACTOR PMI REQUIREMENTS PMI ACCESSED AT: HTTPS://PMI.VZSMART.COM SMART TOOL VENDOR PROJECT NUMBER: 10208061 VZW LOCATION CODE (PSLC): 5000244948 ***PMI AND REQUIREMENTS ALSO EMBEDDED IN MOUNT ANALYSIS REPORT MOUNT MODIFICATION REQUIRED: YES VZW APPROVED SMART KIT VENDORS: REFER TO MOUNT MODIFICATION DRAWINGS PAGES FOR VZW SMART KIT APPROVED VENDORS					



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GENERAL CONSTRUCTION NOTES:

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

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

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

SPECIAL CONSTRUCTION

ANTENNA INSTALLATION NOTES:

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

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



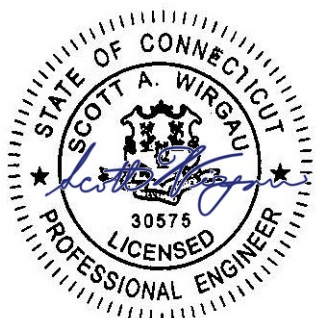
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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	JLR	8/29/2023

ATC SITE NUMBER:
 411260
 ATC SITE NAME:
 MIDDLEFIELD CT
 VERIZON SITE NAME:
 MIDDLEFIELD CT
 SITE ADDRESS:
 484 MERIDEN RD.
 MIDDLEFIELD, CT 06455

SEAL:



Digitally Signed: 2023-09-06



ATC JOB NO:	14519491_G0
CUSTOMER ID:	MIDDLEFIELD CT
CUSTOMER #:	5000244948

GENERAL NOTES

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

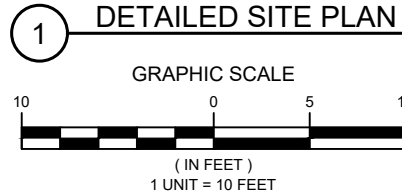
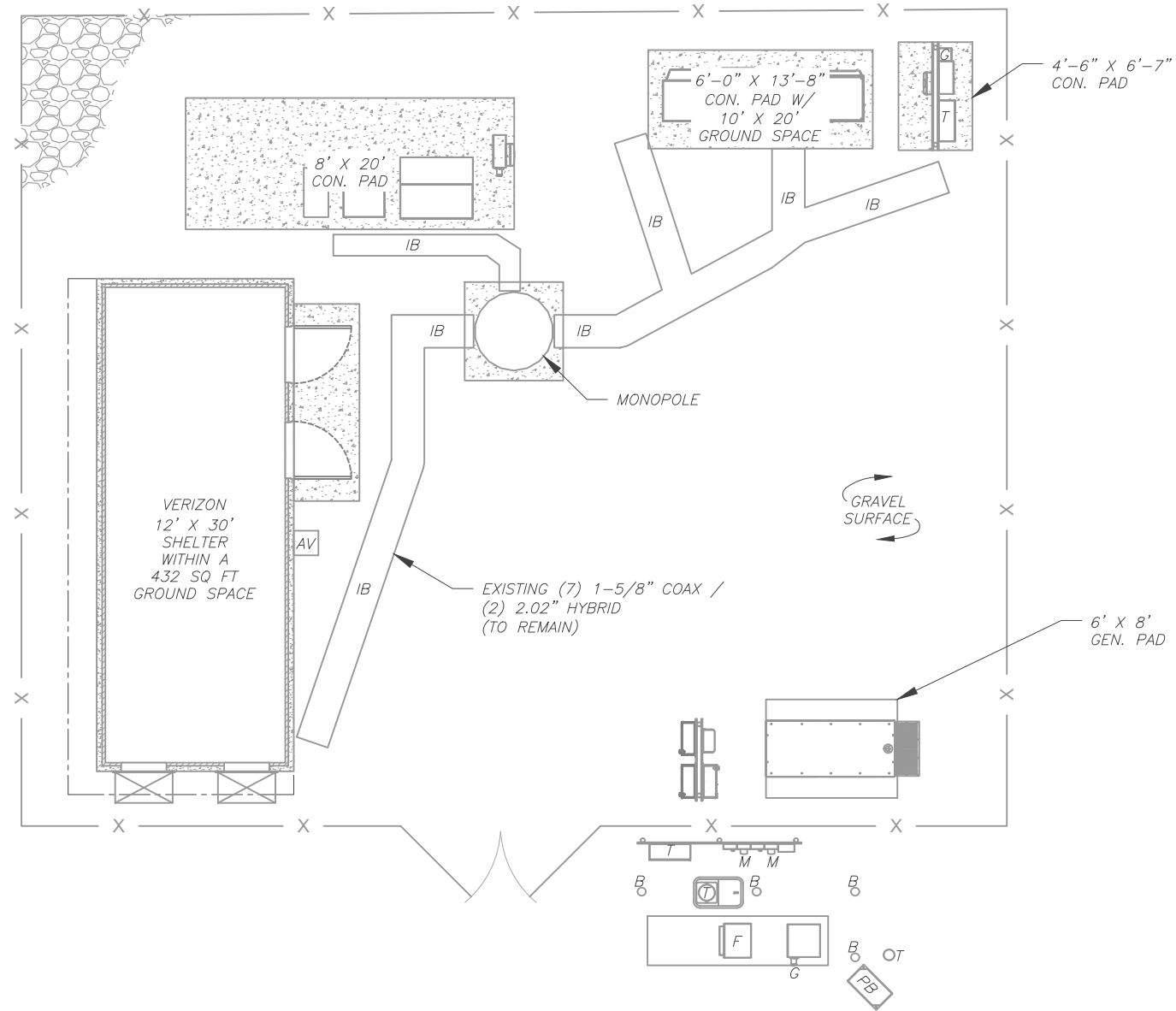
- THIS SITE PLAN REPRESENTS THE BEST PRESENT KNOWLEDGE AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WORK FOR THIS PROJECT.
- ICE BRIDGE, CABLE LADDER, COAX PORT, AND COAX CABLE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

LEGEND

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

PROPOSED CABLE NOTES:

- ESTIMATED LENGTH OF PROPOSED CABLE IS **235'**. ESTIMATED LENGTH OF CABLE WAS PROVIDED BY CUSTOMER OR CALCULATED BY ADDING THE RAD CENTER AND THE DISTANCE FROM THE SHELTER ENTRY PLATE TO THE TOWER (ALONG THE ICE BRIDGE) AND A SAFETY FACTOR MEASUREMENT OF 15% (OF THE TWO PREVIOUS VALUES). CDS DEFER TO GREATEST CABLE LENGTH.
- ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. IF ADEQUATE SPACE EXISTS, ROUTE CABLES THROUGH ENTRY PORT HOLE, UP INSIDE OF MONOPOLE, AND THROUGH EXIT PORT HOLE. IF ROUTING OUTSIDE THE MONOPOLE, ATTACH CABLES USING STAND-OFF ADAPTERS MOUNTED TO TOWER USING STAINLESS STEEL BANDING. ADEQUATELY SECURE CABLES USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER.



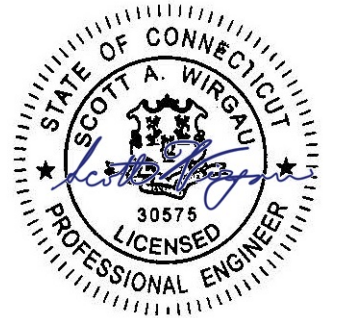
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SEAL:



Digitally Signed: 2023-09-06

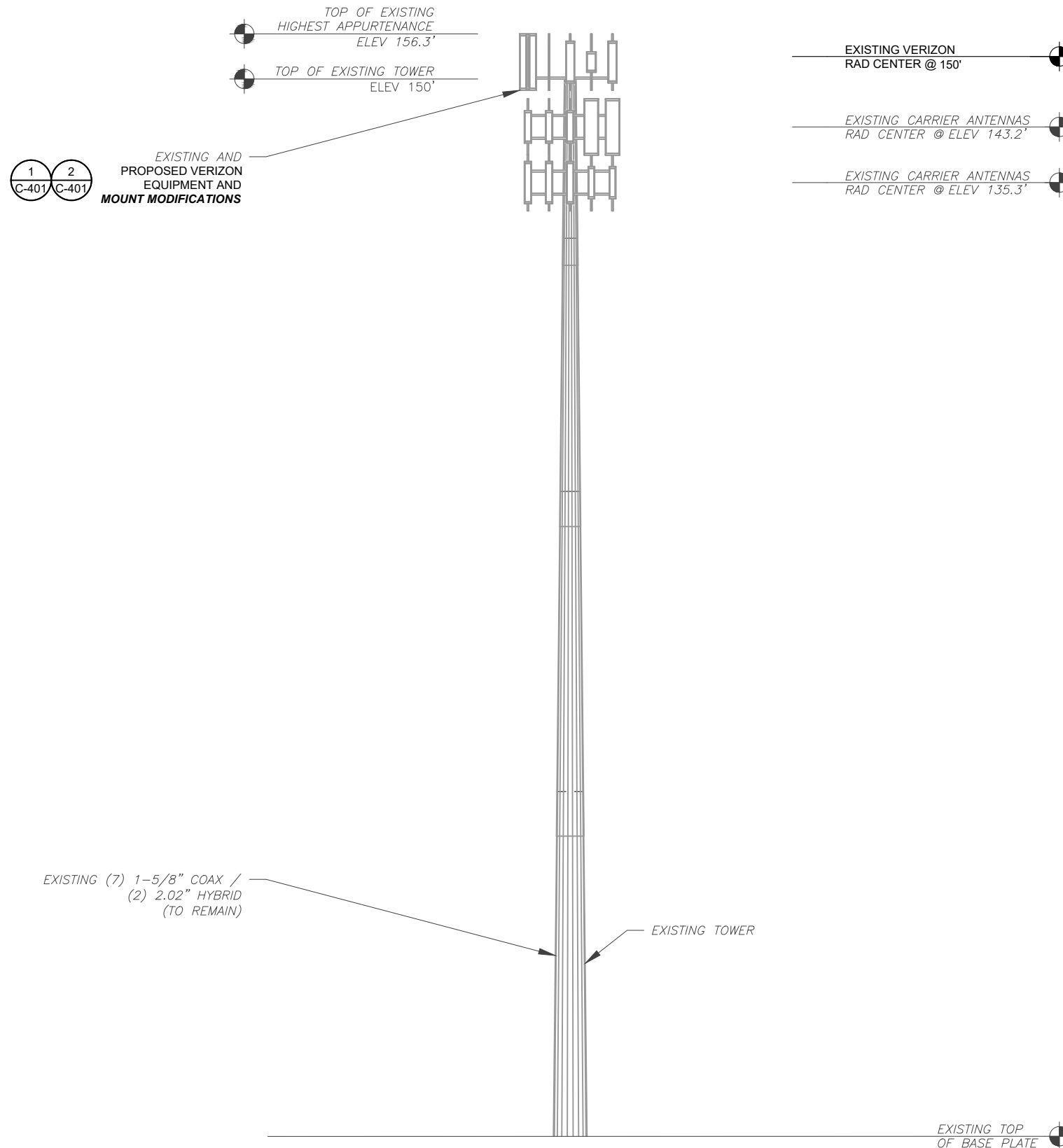
ATC JOB NO:	14519491_G0
CUSTOMER ID:	MIDDLEFIELD CT
CUSTOMER #:	5000244948

DETAILED SITE PLAN

SHEET NUMBER:	REVISION:
C-101	0

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FAA / FCC ANTENNA STRUCTURE
REGISTRATION (ASR) HEIGHT: 157'



1 TOWER ELEVATION
SCALE: N.T.S.

PER MOUNT ANALYSIS COMPLETED BY COLLIERS ENGINEERING & DESIGN, CT PC, DATED 08/03/2023, THE EXISTING MOUNT **MUST BE MODIFIED** TO ADEQUATELY SUPPORT THE PROPOSED LOADING. THE MOUNT MODIFICATION PROPOSED IN THE MOUNT ANALYSIS, INCLUDED AT THE END OF THIS PLAN SET, MUST BE INSTALLED PRIOR TO THE INSTALLATION OF THE PROPOSED ANTENNAS AND OTHER EQUIPMENT.

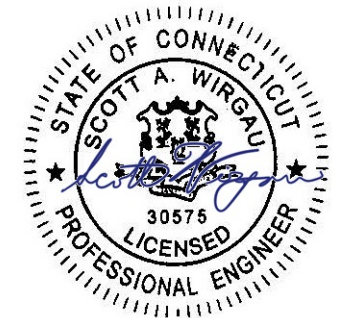
AMERICAN TOWER®
A.T. ENGINEERING SERVICES LLC
3500 REGENCY PARKWAY
SUITE 100
CARY, NC 27518
PHONE: (919) 468-0112
PEC.0001553

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

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	JLR	8/29/2023

ATC SITE NUMBER:
411260
ATC SITE NAME:
MIDDLEFIELD CT
VERIZON SITE NAME:
MIDDLEFIELD CT
SITE ADDRESS:
484 MERIDEN RD.
MIDDLEFIELD, CT 06455

SEAL:



Digitally Signed: 2023-09-06

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



ATC JOB NO:	14519491_GO
CUSTOMER ID:	MIDDLEFIELD CT
CUSTOMER #:	5000244948

TOWER ELEVATION

SHEET NUMBER: C-201	REVISION: 0
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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	JLR	8/29/2023
1			
2			
3			

ATC SITE NUMBER:
411260
 ATC SITE NAME:
MIDDLEFIELD CT
 VERIZON SITE NAME:
MIDDLEFIELD CT
 SITE ADDRESS:
 484 MERIDEN RD.
 MIDDLEFIELD, CT 06455



Digitally Signed: 2023-09-06

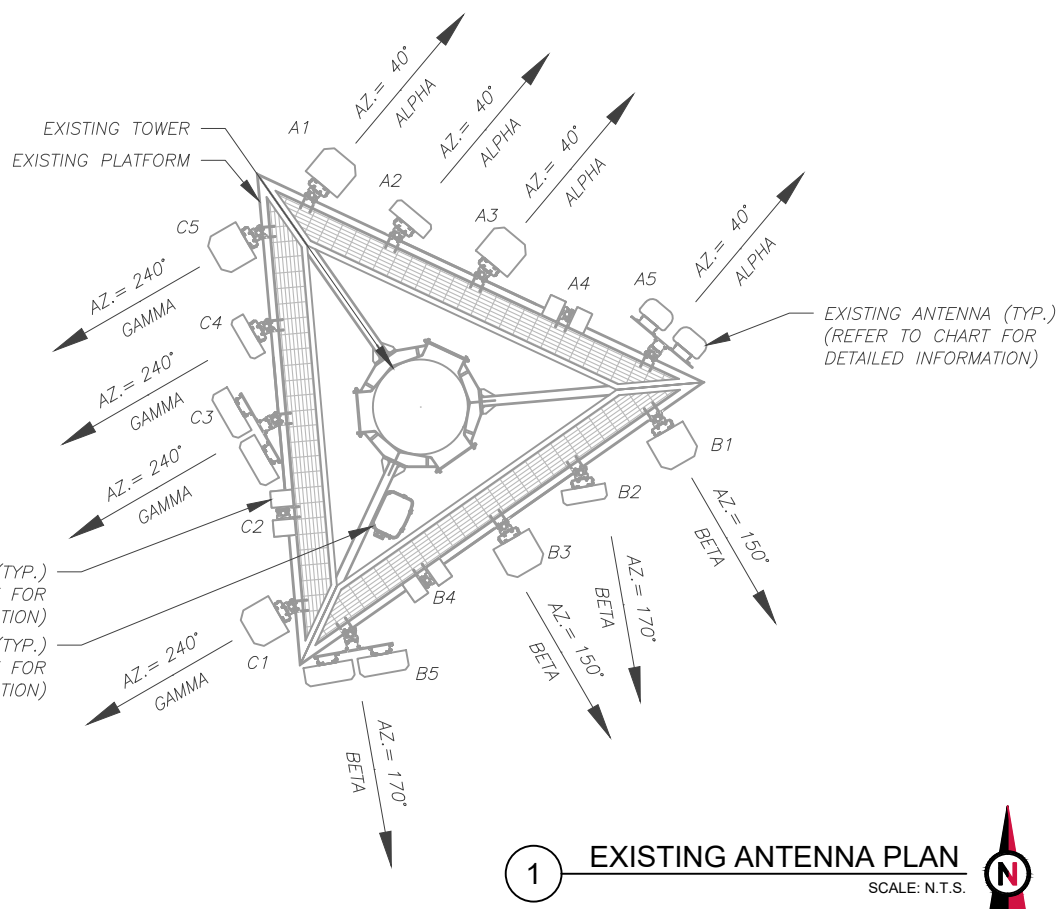


ATC JOB NO: 14519491_G0
 CUSTOMER ID: MIDDLEFIELD CT
 CUSTOMER #: 5000244948

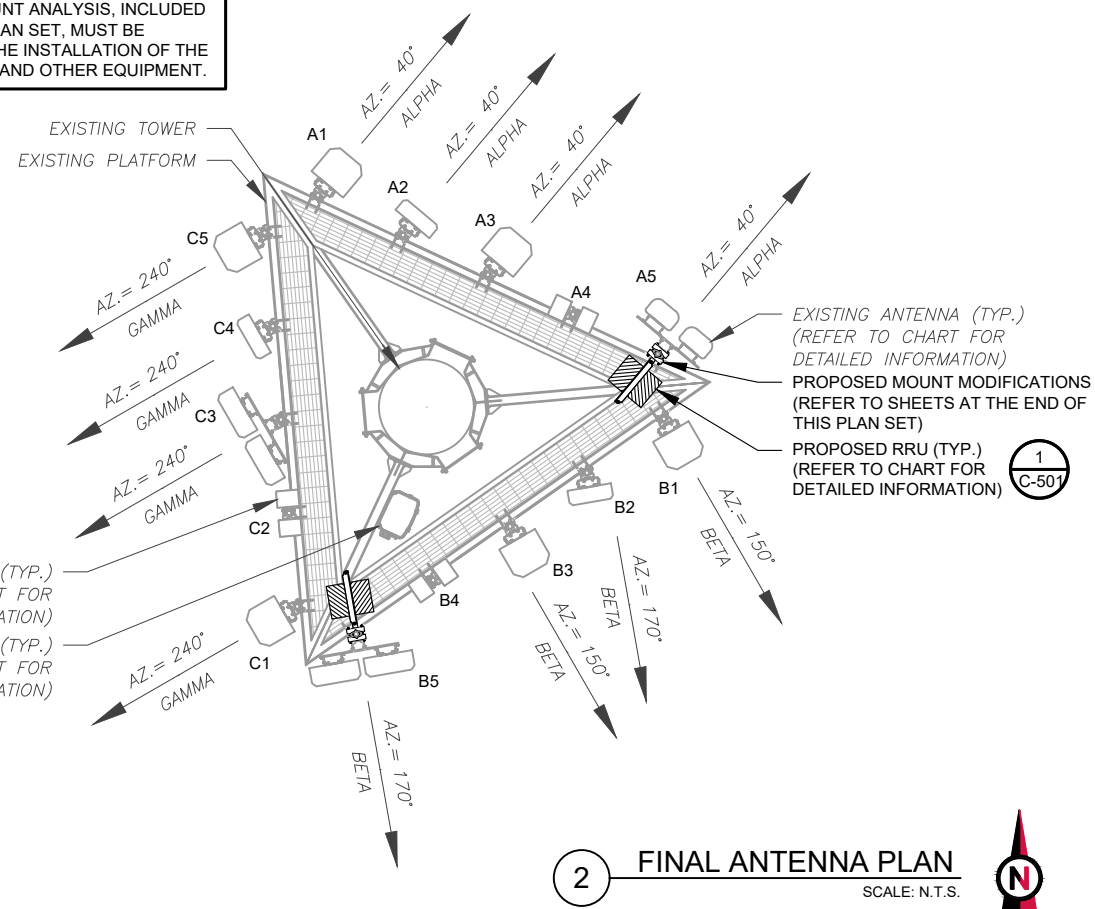
ANTENNA INFORMATION & SCHEDULE

SHEET NUMBER:
C-401
 REVISION:
0

PER MOUNT ANALYSIS COMPLETED BY COLLIERS ENGINEERING & DESIGN, CT PC, DATED 08/03/2023, THE EXISTING MOUNT MUST BE MODIFIED TO ADEQUATELY SUPPORT THE PROPOSED LOADING. THE MOUNT MODIFICATION PROPOSED IN THE MOUNT ANALYSIS, INCLUDED AT THE END OF THIS PLAN SET, MUST BE INSTALLED PRIOR TO THE INSTALLATION OF THE PROPOSED ANTENNAS AND OTHER EQUIPMENT.



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



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

EXISTING ANTENNA SCHEDULE									
LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY		
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS	
ALPHA	150°	40°	A1	LPA-80063/6CF	-	RMN	-	-	
			A2	MT6407-77A	-	RMN	-	-	
			A3	LPA-80063/6CF	-	RMN	-	-	
			A4	-	-	-	B2/B66A RRH-BR049 B5/B13 RRH-BR04C	RMN	
			A5	(2) NHH-65B-R2B	-	RMN	-	-	
BETA	150°	150°	B1	LPA-80063/6CF	-	RMN	-	-	
		170°	B2	MT6407-77A	-	RMN	-	-	
		150°	B3	LPA-80063/6CF	-	RMN	-	-	
		-	B4	-	-	-	B2/B66A RRH-BR049 B5/B13 RRH-BR04C	RMN	
		170°	B5	(2) NHH-45B-R2B	-	RMN	-	-	
GAMMA	150°	240°	C1	LPA-80063/6CF	-	RMN	-	-	
			C2	-	-	-	B2/B66A RRH-BR049 B5/B13 RRH-BR04C	RMN	
			C3	(2) NHH-45B-R2B	-	RMN	-	-	
			C4	MT6407-77A	-	RMN	-	-	
			C5	LPA-80063/6CF	-	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	150°	40°	A1	LPA-80063/6CF	-	RMN	-	-	
			A2	MT6407-77A	-	RMN	-	-	
			A3	LPA-80063/6CF	-	RMN	-	-	
			A4	-	-	-	B2/B66A RRH-BR049 B5/B13 RRH-BR04C	RMN	
			A5	(2) NHH-65B-R2B	-	RMN	(2) KA-6030	ADD	
BETA	150°	150°	B1	LPA-80063/6CF	-	RMN	-	-	
		170°	B2	MT6407-77A	-	RMN	-	-	
		150°	B3	LPA-80063/6CF	-	RMN	-	-	
		-	B4	-	-	-	B2/B66A RRH-BR049 B5/B13 RRH-BR04C	RMN	
		170°	B5	(2) NHH-45B-R2B	-	RMN	(2) KA-6030	ADD	
GAMMA	150°	240°	C1	LPA-80063/6CF	-	RMN	-	-	
			C2	-	-	-	B2/B66A RRH-BR049 B5/B13 RRH-BR04C	RMN	
			C3	(2) NHH-45B-R2B	-	RMN	-	-	
			C4	MT6407-77A	-	RMN	-	-	
			C5	LPA-80063/6CF	-	RMN	-	-	

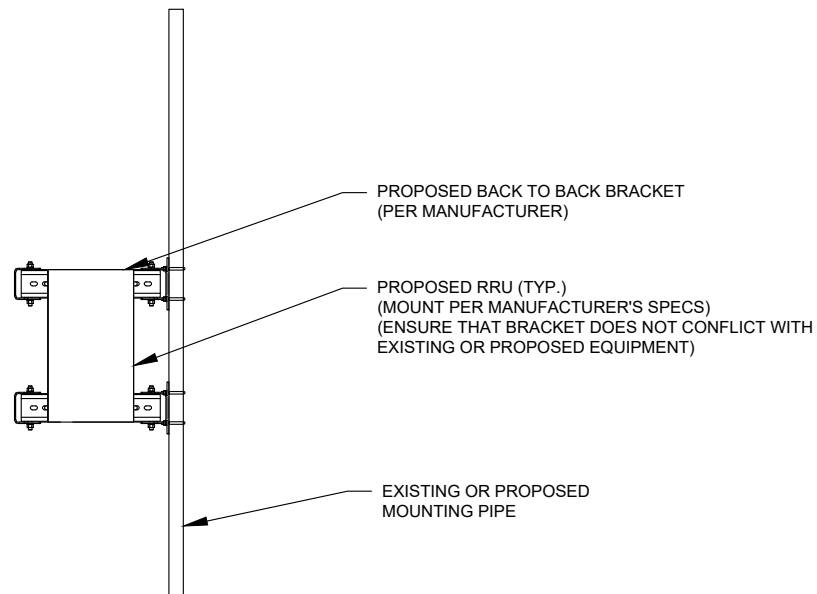
EXISTING FIBER DISTRIBUTION/OVP BOX		EXISTING CABLING SUMMARY	
MODEL NUMBER	STATUS	CABLE QTY, SIZE, TYPE	STATUS
(1) DB-C1-12C-24AB-0Z	RMN	(7) 1-5/8" COAX / (2) 2.02" HYBRID	RMN

3 EQUIPMENT SCHEDULES

FINAL FIBER DISTRIBUTION / OVP BOX		FINAL CABLING SUMMARY	
MODEL NUMBER	STATUS	CABLE QTY, SIZE, TYPE	STATUS
(1) DB-C1-12C-24AB-0Z	RMN	(7) 1-5/8" COAX / (2) 2.02" HYBRID	RMN

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



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



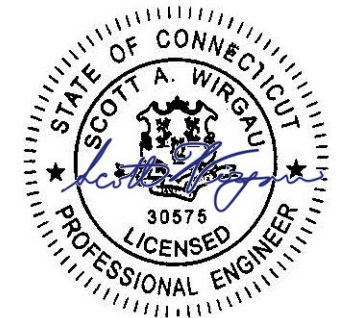
AMERICAN TOWER®
A.T. ENGINEERING SERVICES LLC
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 SUITE 100
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 PHONE: (919) 468-0112
 PEC.0001553

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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	JLR	8/29/2023

ATC SITE NUMBER:
 411260
 ATC SITE NAME:
 MIDDLEFIELD CT
 VERIZON SITE NAME:
 MIDDLEFIELD CT
 SITE ADDRESS:
 484 MERIDEN RD.
 MIDDLEFIELD, CT 06455

SEAL:



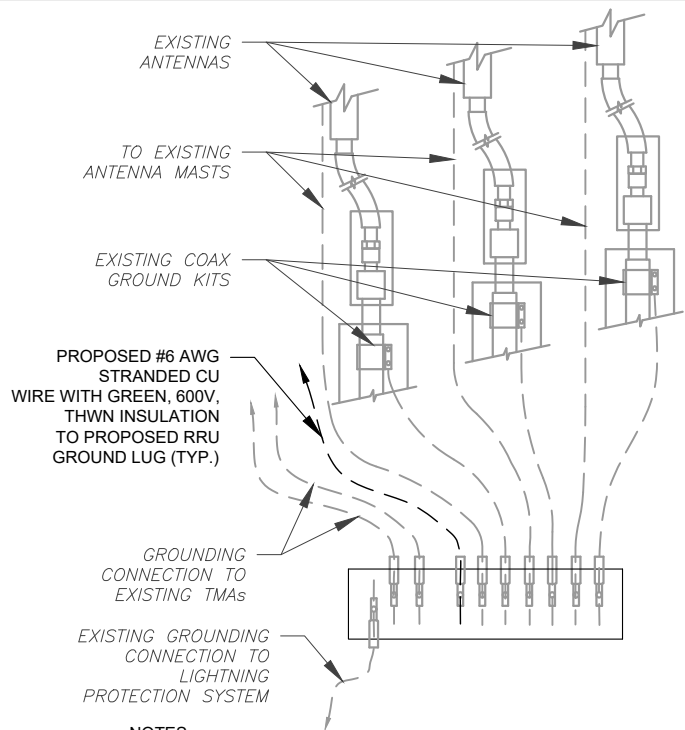
Digitally Signed: 2023-09-06



ATC JOB NO:	14519491_G0
CUSTOMER ID:	MIDDLEFIELD CT
CUSTOMER #:	5000244948

**CONSTRUCTION
 DETAILS**

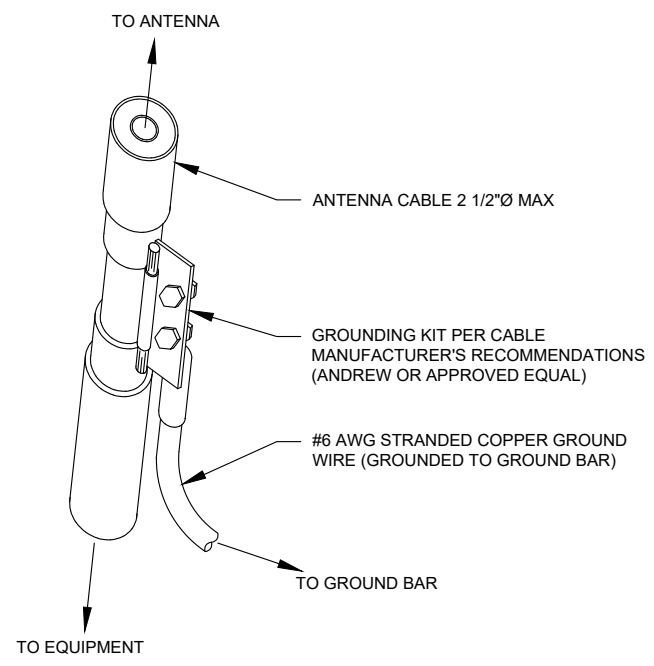
SHEET NUMBER:	REVISION:
C-501	0



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.

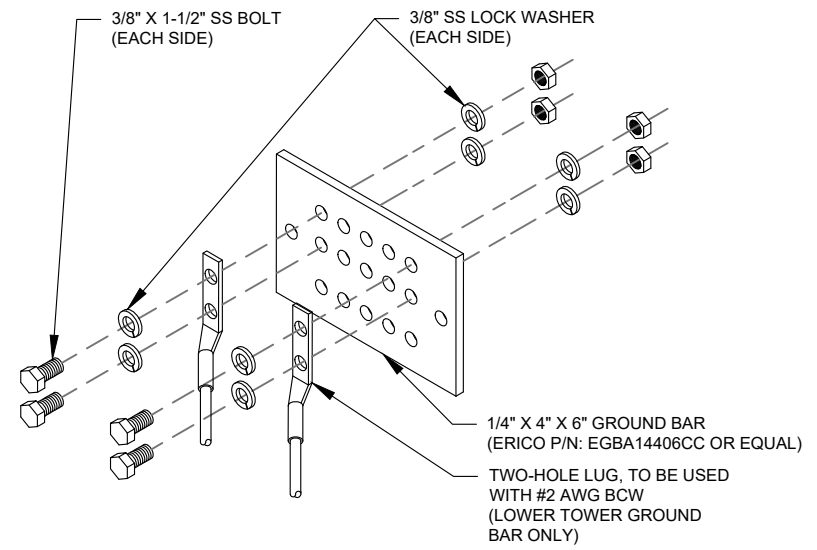
1 TYPICAL ANTENNA GROUNDING DIAGRAM
SCALE: N.T.S.



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
 3500 REGENCY PARKWAY
 SUITE 100
 CARY, NC 27518
 PHONE: (919) 468-0112
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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	JLR	8/29/2023

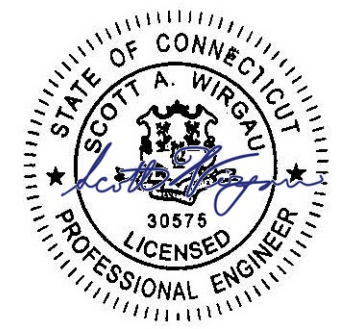
ATC SITE NUMBER:
411260

ATC SITE NAME:
MIDDLEFIELD CT

VERIZON SITE NAME:
MIDDLEFIELD CT

SITE ADDRESS:
484 MERIDEN RD.
MIDDLEFIELD, CT 06455

SEAL:



Digitally Signed: 2023-09-06



ATC JOB NO:	14519491_G0
CUSTOMER ID:	MIDDLEFIELD CT
CUSTOMER #:	5000244948

GROUNDING DETAILS

SHEET NUMBER:	REVISION:
E-501	0

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Colliers Engineering & Design, CT PC
 1055 Washington Blvd
 Stamford, CT 06901
 203.324.0800
 peter.albano@collierseng.com

Mount Structural Analysis Report
 (1) 13.76-Ft Platform

August 3, 2023
 Site ID: 5000244948-VZW / MIDDLEFIELD CT
 Page | 5

Requirements:

The existing mount is **SUFFICIENT** for the final loading configuration shown in attachment 2 and do not require modifications. Additional requirements are noted below.

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

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

Attachments:

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

Antenna Mount Analysis Report and PMI Requirements

Mount ReAnalysis

SMART Tool Project #: 10208061
 Colliers Engineering & Design CT, PC Project #: 23777216
 August 3, 2023

Site Information

Site ID: 5000244948-VZW / MIDDLEFIELD CT
 Site Name: MIDDLEFIELD CT
 Carrier Name: Verizon Wireless
 Address: 484 Meriden Road
 Middlefield, Connecticut 06455
 Middlesex County
 Latitude: 41.535514°
 Longitude: -72.732094°

Structure Information

Tower Type: 152-Ft Monopole
 Mount Type: 13.76-Ft Platform

FUZE ID # 17123783

Analysis Results

Platform: 88.0% Pass*

***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: Dejian Xu



Digitally signed by Derek Hartzell
 Date: 2023.08.03 11:43:52-0700

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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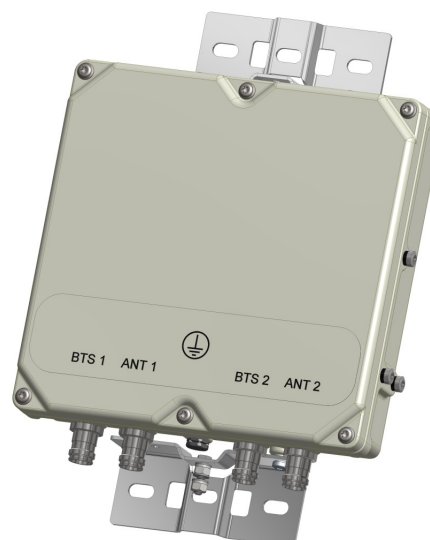
KA-6030

TWIN BANDSTOP 900MHZ INTERFERENCE MITIGATION FILTER

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

FEATURES

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



TECHNICAL SPECIFICATIONS

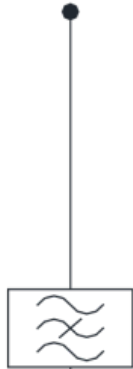
BAND NAME	700 PATH / 850 UPLINK PATH	850 DOWNLINK PATH
Passband	698 - 849MHz	869 - 891.5MHz
Insertion loss	0.1dB typical / 0.3dB maximum	0.5dB typical, 1.45dB maximum
Return loss	24dB typical, 18dB minimum	
Maximum input power (Per Port)	100W average	200W average and 66W per 5MHz
Rejection	53dB minimum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

ORDERING INFORMATION

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

ELECTRICAL BLOCK DIAGRAM

ANT1



BTS1

ANT2



BTS2

MECHANICAL BLOCK DIAGRAM

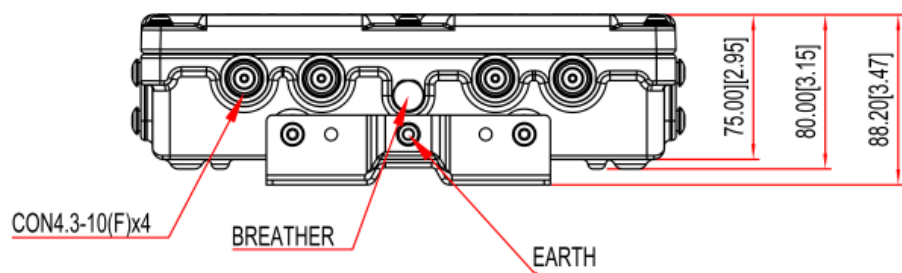
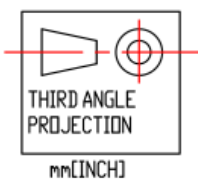
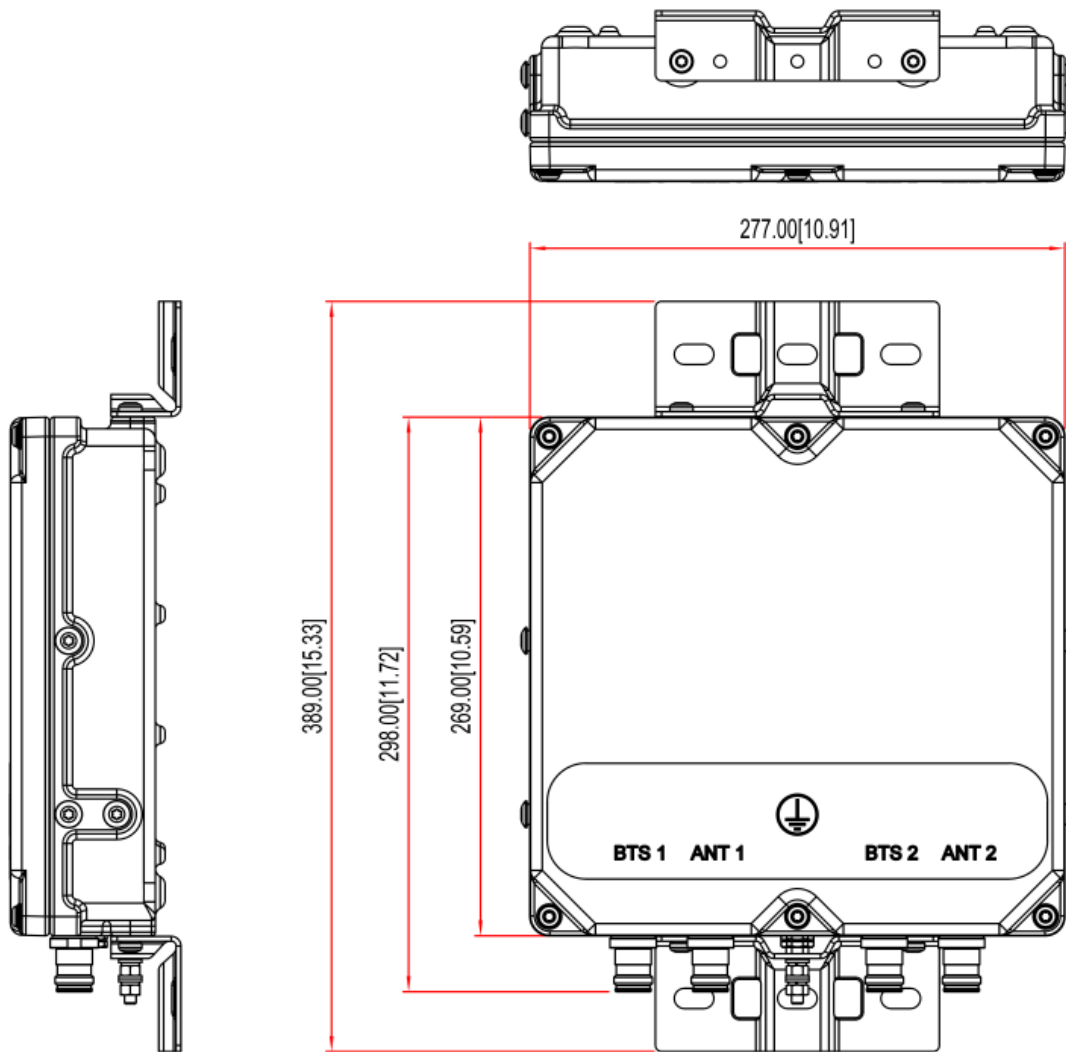


EXHIBIT 2



484 MERIDEN RD & RT 66

Location 484 MERIDEN RD & RT 66

Mblu 4 / 5 / 1

Acct# 00146700

Owner LAND MANAGMENT INC

Assessment \$406,800

PID 1566

Building Count 3

Current Value

Assessment			
Valuation Year	Improvements	Land	Total
2021	\$145,100	\$261,700	\$406,800

Owner of Record

Owner LAND MANAGMENT INC
Co-Owner
Address PO BOX 31
MIDDLEFIELD, CT 06455

Sale Price \$0
Certificate
Book & Page 0066/0682
Sale Date 09/30/1988
Instrument UNKQ

Ownership History

Ownership History					
Owner	Sale Price	Certificate	Book & Page	Instrument	Sale Date
LAND MANAGMENT INC	\$0		0066/0682	UNKQ	09/30/1988

Building Information

Building 1 : Section 1

Year Built: 1958
Living Area: 1,878
Replacement Cost: \$146,898
Building Percent Good: 45
Replacement Cost
Less Depreciation: \$66,100

Building Attributes	
Field	Description
Style:	Restaurant

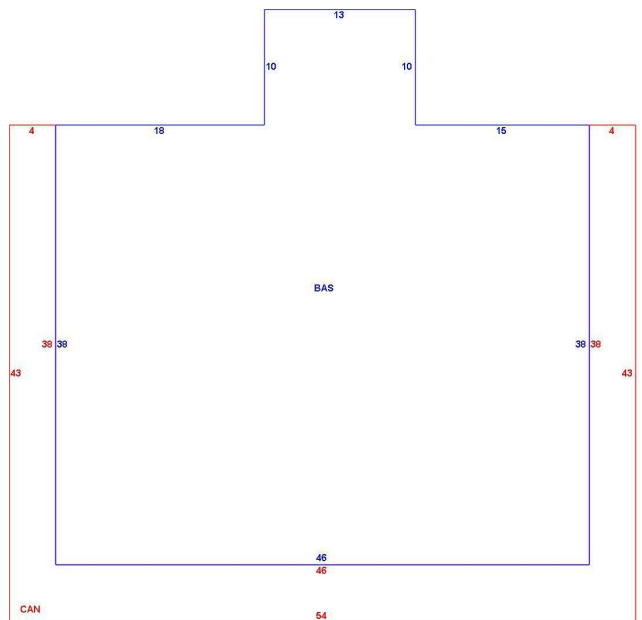
Model	Comm/Ind
Grade	Average
Stories:	1
Occupancy	1.00
Exterior Wall 1	Single Siding
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	Rolled Compos
Interior Wall 1	Plywood Panel
Interior Wall 2	
Interior Floor 1	Concr-Finished
Interior Floor 2	Terrazzo Monol
Heating Fuel	Gas/Oil
Heating Type	Forced Air-Duc
AC Type	Heat Pump
Struct Class	
Bldg Use	REST/CLUBS
Total Rooms	
Total Bedrms	00
Total Baths	0
1st Floor Use:	3260
Heat/AC	HEAT/AC PKGS
Frame Type	WOOD FRAME
Baths/Plumbing	AVERAGE
Ceiling/Wall	CEIL & WALLS
Rooms/Prtns	AVERAGE
Wall Height	9.00
% Comn Wall	

Building Photo



(https://images.vgsi.com/photos/MiddlefieldCTPhotos///0003/IMG_0039_32)

Building Layout



(ParcelSketch.ashx?pid=1566&bid=1566)

Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
BAS	First Floor	1,878	1,878
CAN	Canopy	574	0
		2,452	1,878

Building 2 : Section 1

Year Built: 1969
Living Area: 2,400
Replacement Cost: \$196,112
Building Percent Good: 50
Replacement Cost Less Depreciation: \$98,100

Building Attributes : Bldg 2 of 3	
Field	Description

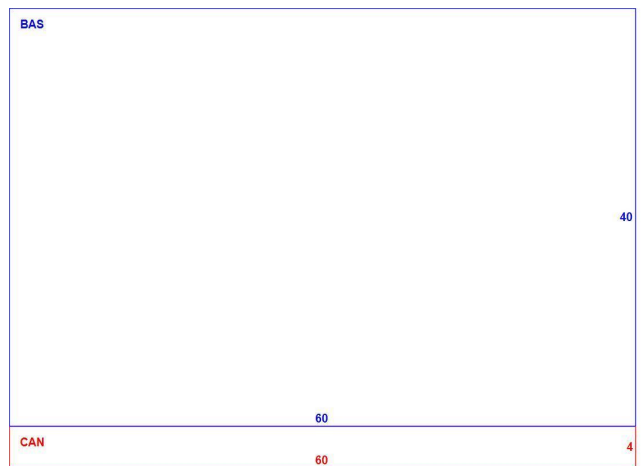
Style:	Store
Model	Ind/Comm
Grade	Average
Stories:	1
Occupancy	2.00
Exterior Wall 1	Concr/Cinder
Exterior Wall 2	Brick
Roof Structure	Flat
Roof Cover	Rolled Compos
Interior Wall 1	Drywall
Interior Wall 2	
Interior Floor 1	Concr-Finished
Interior Floor 2	Carpet
Heating Fuel	Gas/Oil
Heating Type	Forced Air-Duc
AC Type	Central
Struct Class	
Bldg Use	STORE/SHOP
Total Rooms	
Total Bedrms	00
Total Baths	0
1st Floor Use:	3220
Heat/AC	NONE
Frame Type	MASONRY
Baths/Plumbing	AVERAGE
Ceiling/Wall	SUS-CEIL & WL
Rooms/Prtns	AVERAGE
Wall Height	9.00
% Comn Wall	

Building Photo



(https://images.vgsi.com/photos/MiddlefieldCTPhotos///0003/IMG_0040_32)

Building Layout



(ParcelSketch.ashx?pid=1566&bid=2204)

Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
BAS	First Floor	2,400	2,400
CAN	Canopy	240	0
		2,640	2,400

Building 3 : Section 1

Year Built: 1953
Living Area: 984
Replacement Cost: \$110,456
Building Percent Good: 23
Replacement Cost Less Depreciation: \$25,400

Building Attributes : Bldg 3 of 3	
Field	Description
Style:	Bungalow
Model	Residential

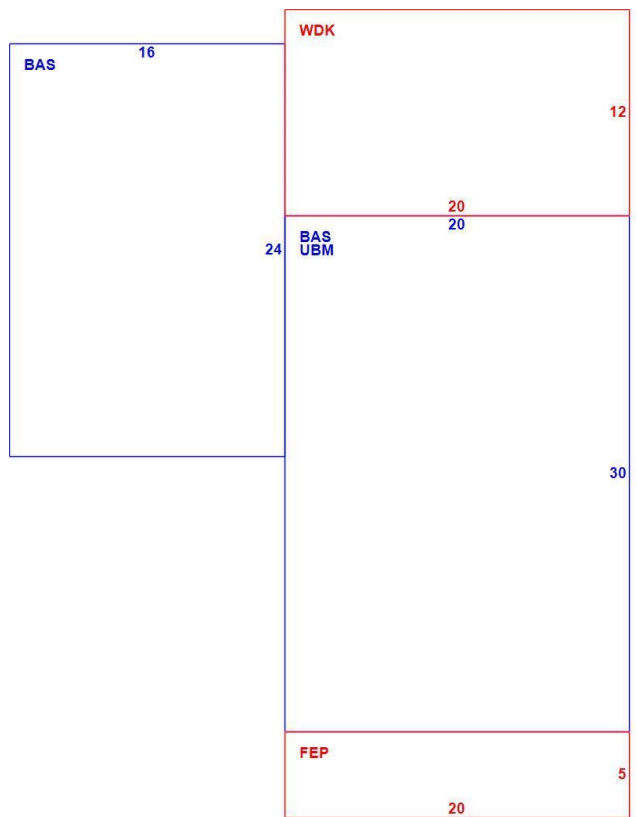
Grade:	Below Average
Stories:	1 Story
Occupancy	1
Exterior Wall 1	Aluminum Sidng
Exterior Wall 2	Pre-Fab Wood
Roof Structure:	Gable
Roof Cover	Asphalt Shingl
Interior Wall 1	Drywall
Interior Wall 2	
Interior Flr 1	Linoleum
Interior Flr 2	Carpet
Heat Fuel	Electric
Heat Type:	Electr Basebrd
AC Type:	None
Total Bedrooms:	2 Bedrooms
Total Bthrms:	1
Total Half Baths:	0
Total Xtra Fixtrs:	
Total Rooms:	5 Rooms
Bath Style:	Average
Kitchen Style:	Average
Num Kitchens	01
Whirlpool	
Num Park	
Fireplaces	
Interior	
Solar Panels:	
Fndtn Cndtn	
Basement	
Inserts:	

Building Photo



(https://images.vgsi.com/photos/MiddlefieldCTPhotos///0003/IMG_0041_32)

Building Layout



(ParcelSketch.ashx?pid=1566&bid=2205)

Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
BAS	First Floor	984	984
FEP	Porch, Enclosed	100	0
UBM	Basement, Unfinished	600	0
WDK	Deck, Wood	240	0
		1,924	984

Extra Features

Extra Features	<u>Legend</u>
No Data for Extra Features	

Land

Land Use

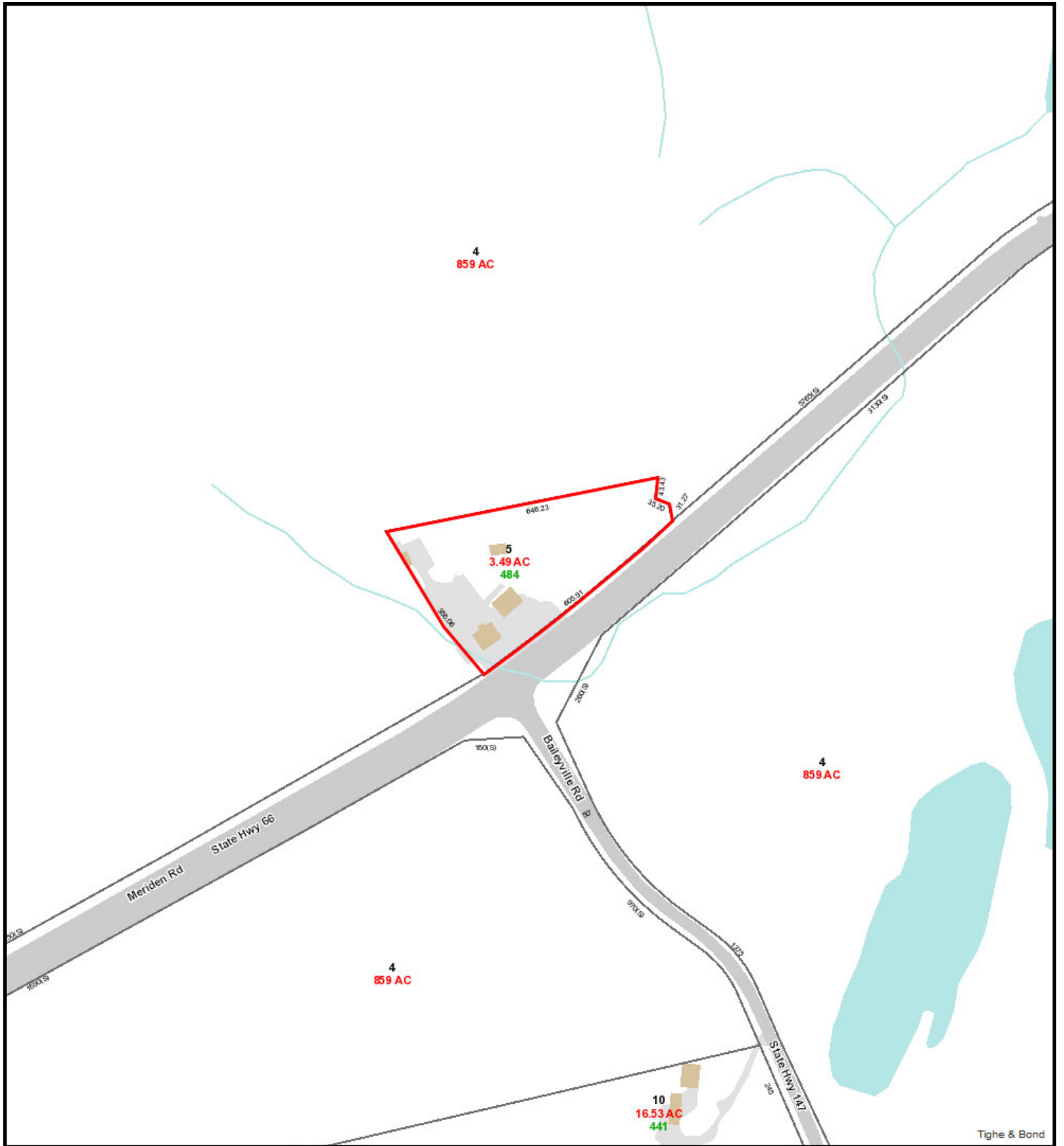
Use Code 3260
Description REST/CLUBS
Zone PC
Neighborhood A
Alt Land Appr Category No

Land Line Valuation

Size (Acres) 3.49
Frontage 605
Depth
Assessed Value \$261,700

Outbuildings

Outbuildings						<u>Legend</u>
Code	Description	Sub Code	Sub Description	Size	Value	Bldg #
PAV1	PAVING-ASPHALT			20000.00 S.F.	\$17,500	1



Tighe & Bond

9/11/2023 11:46:24 AM

Scale: 1"=333'

Scale is approximate

The information depicted on this map is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel-level analyses.



EXHIBIT 3





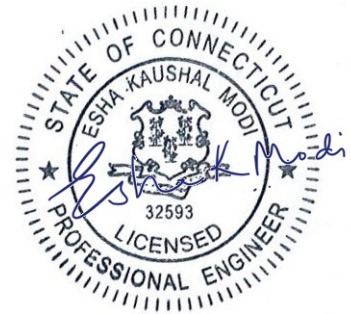
AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure : 150 ft Monopole
ATC Asset Name : MIDDLEFIELD CT
ATC Asset Number : 411260
Engineering Number : 14519491_C3_03
Proposed Carrier : VERIZON WIRELESS
Carrier Site Name : MIDDLEFIELD CT
Carrier Site Number : 5000244948
Site Location : 484 Meriden Rd.
Middlefield, CT 06455-1013
41.5355° N, 72.7321° W
County : Middlesex
Date : August 16, 2023
Max Usage : 85%
Analysis Result : Pass

Created By:

Daniel K. Sheek
Structural Engineer I



COA: PEC.0001553

Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 150 ft Monopole tower to reflect the change in loading by VERIZON WIRELESS.

Supporting Documents

Tower:	EI Project #11121, dated September 17, 2002
Foundation:	EI Project #11121, dated September 19, 2002
Geotechnical:	Clarence Welti Project #Tower at Guidas Drive-In, dated September 12, 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:	119 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 contact American Tower Engineering via email at 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	60.2%	1.2D + 1.0W	Pass
Base Plate @ 0.0 ft	42.2%	Rod	Pass
Mat & Pier	85.3%	Flexure [Steel (Mat)]	Pass

Maximum Reactions

Foundation	Moment (k-ft)	Axial (k)	Shear (k)
Monopole Base	2,574.8	46.2	23.0

**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
155.5	3	Samsung B2/B66A RRH-BR049	-
155.2	3	Samsung B5/B13 RRH-BR04C	-
155.0	-	-	(2) 2.02 (51.2mm) Hybrid
154.6	1	RFS DB-C1-12C-24AB-0Z	-
150.0	1	Low Profile Platform	(6) 1 5/8" Coax
	2	Commscope NHH-65B-R2B	
	3	Samsung MT6407-77A	
	4	Commscope NHH-45B-R2B	
	4	Kaelus KA-6030	
	6	Antel LPA-80063/6CF	
90.0	-	-	(1) 1 5/8" Coax
85.8	1	GPS	-
85.0	1	Stand-Off	-

Other Existing/Reserved Loading

Elev (ft)	Qty	Equipment	Lines	Carrier
140.0	4	Mount Reinforcement	-	-
	3	Commscope VV-65A-R1	(3) 1 5/8" (1.63"-41.3mm) Fiber (1) 1.99" (50.7mm) Hybrid	T-MOBILE
	3	Ericsson 4460 BAND 2/25		
	3	Ericsson AIR 6419 B41		
	3	Ericsson Radio 4449 B71 B85A		
	3	RFS APXVAARR24_43-U-NA20		
138.2	1	Raycap DC6-48-60-18-8F		
138.0	4	T-Arm	-	T-MOBILE
137.2	6	Ericsson RRUS-11 (50 lbs.)	-	AT&T MOBILITY
136.5	6	Powerwave Allgon 7770.00 (27 lbs)	-	AT&T MOBILITY
136.3	6	Powerwave Allgon LGP 21902	-	AT&T MOBILITY
	6	Powerwave Allgon LGP21401		
135.3	3	KMW AM-X-CD-16-65-00T-RET	-	AT&T MOBILITY
130.0	1	Low Profile Platform	-	AT&T MOBILITY
	3	Spinner 756529		

(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.

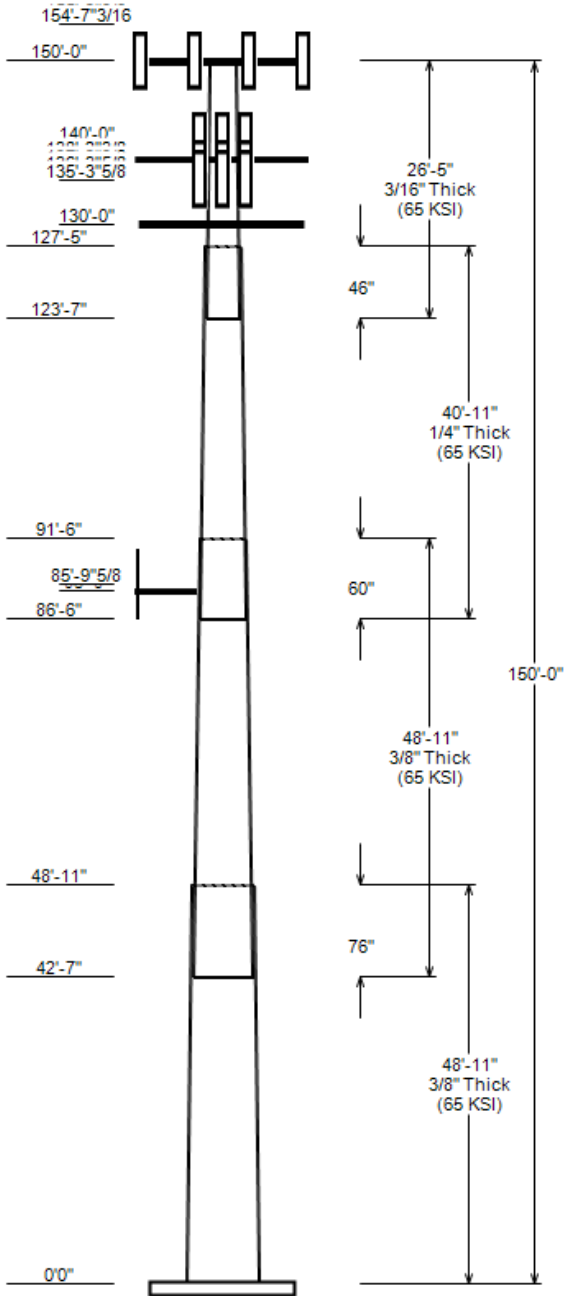
All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. A.T. Engineering Services LLC is not responsible for the conclusions, opinions and recommendations made by others based on the information supplied herein.

ANALYSIS PARAMETERS

Nominal Wind: 119 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: 150 ft	Base Elevation: 0.00 ft	Structure Type: Taper
Base Diameter: 56.5 in	Base Rotation: 0°	Taper: 0.2570 (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	48.917	43.90	56.50	0.375		0.000	18 Sides	65
2	48.917	33.69	46.28	0.375	Slip Joint	76.000	18 Sides	65
3	40.917	24.94	35.48	0.250	Slip Joint	60.000	18 Sides	65
4	26.417	19.50	26.30	0.188	Slip Joint	46.000	18 Sides	65



DISCRETE APPURTENANCE

Elev (ft)	Description
155.5	(3) Samsung B2/B66A RRH-BR049
155.2	(3) Samsung B5/B13 RRH-BR04C
154.6	(1) RFS DB-C1-12C-24AB-0Z
150.0	(4) Kaelus KA-6030
150.0	(3) Samsung MT6407-77A
150.0	(2) Commscope NHH-65B-R2B
150.0	(6) Antel LPA-80063/6CF
150.0	(4) Commscope NHH-45B-R2B
150.0	(1) Generic Flat Low Profile Platf
140.0	(3) Ericsson Radio 4449 B71 B85A
140.0	(3) Ericsson Radio 4449 B71 B85A
140.0	(3) Ericsson 4460 BAND 2/25
140.0	(3) Ericsson AIR 6419 B41
140.0	(3) Commscope VV-65A-R1
140.0	(4) Generic Mount Reinforcement
140.0	(3) RFS APXVAARR24_43-U-NA20
138.2	(1) Raycap DC6-48-60-18-8F
138.0	(4) Generic Round T-Arm
137.2	(6) Ericsson RRUS-11 (50 lbs.)
136.5	(6) Powerwave Allgon 7770.00 (27 I
136.3	(6) Powerwave Allgon LGP 21902
136.3	(6) Powerwave Allgon LGP21401
135.3	(3) KMW AM-X-CD-16-65-00T-RET
130.0	(3) Spinner 756529
130.0	(1) Generic Round Low Profile Plat
85.8	(1) Generic GPS
85.0	(1) Generic Flat Stand-Off

LINEAR APPURTENANCE

Elev To (ft)	Description
155.0	(2) 2.02 (51.2mm) Hybrid
150.0	(6) 1 5/8" Coax
146.0	(3) 1 5/8" (1.63"-41.3mm) Fiber
140.0	(1) 1.99" (50.7mm) Hybrid
140.0	(3) 1 5/8" (1.63"-41.3mm) Fiber
138.0	(1) 3" conduit
136.0	(12) 1 5/8" Hybriflex
136.0	(2) 0.78" (19.7mm) 8 AWG 6
136.0	(1) 0.39" (10mm) Fiber Trunk
90.0	(1) 1 5/8" Coax

GLOBAL BASE REACTIONS

Load Case	Moment (kip-ft)	Axial (kip)	Shear (kip)
1.2D + 1.0W	2574.77	46.16	22.96
0.9D + 1.0W	2544.68	34.61	22.95
1.2D + 1.0Di + 1.0Wi	670.68	62.31	6.13
1.2D + 1.0Ev + 1.0Eh	146.68	46.19	1.16
0.9D - 1.0Ev + 1.0Eh	144.54	31.78	1.16
1.0D + 1.0W	581.58	38.49	5.22

ANALYSIS PARAMETERS

Location:	Middlesex County,CT	Height:	150 ft
Type and Shape:	Taper, 18 Sides	Base Diameter:	56.50 in
Manufacturer:	EEL	Top Diameter:	19.50 in
K_d (non-service):	0.95	Taper:	0.2570 in/ft
K_e:	0.98	Rotation:	0.000°

ICE & WIND PARAMETERS

Risk Category:	II	Design Wind Speed:	119 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:	429.00 ft

SEISMIC PARAMETERS

Analysis Method:	Equivalent Lateral Force Method		
Site Class:	D - Stiff Soil	Period Based on Rayleigh Method (sec):	2.38
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	119 mph Wind with No Ice
0.9D + 1.0W	119 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	48.92	0.3750	65		0.00	9,871	56.50	0.003	66.80	26,581.2	25.15	150.66	43.90	48.92	51.81	12,400.	19.23	117.07	0.2575
2-18	48.92	0.3750	65	Slip	76.00	7,847	46.28	42.583	54.64	14,549.0	20.35	123.42	33.69	91.50	39.65	5,559.2	14.43	89.83	0.2575
3-18	40.92	0.2500	65	Slip	60.00	3,310	35.48	86.503	27.95	4,381.7	23.61	141.90	24.94	127.42	19.59	1,508.9	16.18	99.76	0.2575
4-18	26.42	0.1875	65	Slip	46.00	1,215	26.30	123.583	15.54	1,339.0	23.32	140.28	19.50	150.00	11.49	541.6	16.93	104.00	0.2575
Total Shaft Weight						22,243													

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
155.50	Samsung B2/B66A RRH-BR049	3	0.80	0.000	84.40	1.875	0.50	126.95	2.477	0.50
155.20	Samsung B5/B13 RRH-BR04C	3	0.80	0.000	70.30	1.875	0.50	108.45	2.477	0.50
154.60	RFS DB-C1-12C-24AB-0Z	1	0.80	0.000	32.00	4.056	0.67	116.76	4.966	0.67
150.00	Generic Flat Low Profile Platf	1	1.00	0.000	1875.00	26.100	1.00	2415.11	38.833	1.00
150.00	Commscope NHH-45B-R2B	4	0.80	0.000	73.60	11.400	0.63	225.97	13.259	0.63
150.00	Antel LPA-80063/6CF	6	0.80	0.000	27.00	9.593	0.76	209.50	10.480	0.76
150.00	Commscope NHH-65B-R2B	2	0.80	0.000	43.70	8.079	0.77	159.98	9.937	0.77
150.00	Samsung MT6407-77A	3	0.80	0.000	81.60	4.709	0.61	149.58	5.722	0.61
150.00	Kaelus KA-6030	4	0.80	0.000	17.60	0.963	0.50	33.32	1.399	0.50
140.00	Ericsson Radio 4449 B71 B85A	3	0.80	0.000	75.00	1.650	0.50	114.87	2.213	0.50
140.00	Ericsson Radio 4449 B71 B85A	3	0.80	3.600	75.00	1.650	0.50	114.87	2.213	0.50
140.00	Ericsson 4460 BAND 2/25	3	0.80	0.000	109.00	2.564	0.67	167.60	3.263	0.67
140.00	Ericsson AIR 6419 B41	3	0.80	0.000	68.50	5.600	0.63	148.61	6.650	0.63
140.00	Commscope VV-65A-R1	3	0.80	0.000	23.80	5.928	0.63	101.65	7.333	0.63
140.00	Generic Mount Reinforcement	4	1.00	0.000	200.00	7.500	1.00	328.31	12.464	1.00
140.00	RFS APXVAARR24_43-U-NA20	3	0.80	0.000	127.90	20.243	0.63	388.19	22.702	0.63
138.20	Raycap DC6-48-60-18-8F	1	0.80	0.000	20.00	1.260	1.00	54.88	1.696	1.00
138.00	Generic Round T-Arm	4	0.75	0.000	312.50	9.700	0.67	485.52	15.160	0.67
137.20	Ericsson RRUS-11 (50 lbs.)	6	0.80	0.000	50.00	2.566	0.67	95.12	3.259	0.67
136.50	Powerwave Allgon 7770.00 (27 I	6	0.80	0.000	27.00	5.508	0.65	102.22	6.915	0.65
136.30	Powerwave Allgon LGP21401	6	0.80	0.000	14.10	1.104	0.50	30.60	1.576	0.50
136.30	Powerwave Allgon LGP 21902	6	0.80	0.000	5.50	0.231	0.50	11.05	0.456	0.50
135.30	KMW AM-X-CD-16-65-00T-RET	3	0.80	0.000	48.50	8.024	0.67	155.56	9.868	0.67
130.00	Spinner 756529	3	0.80	0.000	1.50	0.142	0.50	5.07	0.333	0.50
130.00	Generic Round Low Profile Plat	1	1.00	0.000	1875.00	21.700	1.00	2407.80	34.331	1.00
85.80	Generic GPS	1	1.00	0.000	10.00	0.900	1.00	28.48	1.304	1.00
85.00	Generic Flat Stand-Off	1	1.00	0.000	187.50	6.300	1.00	271.34	8.261	1.00
Totals		Row Count: 27	87		9,539.80			17,341.95		

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	155.00	2	2.02 (51.2mm) Hybrid	2.02	3.04	N	0	0	0	0	0	N	VERIZON WIRELESS
0.00	150.00	6	1 5/8" Coax	1.98	0.82	N	6	1	1	270	1	Y	VERIZON WIRELESS
0.00	146.00	3	1 5/8" (1.63"-41.3mm)	1.63	1.61	N	0	0	0	0	0	N	T-MOBILE
0.00	140.00	3	1 5/8" (1.63"-41.3mm)	1.63	1.61	N	0	0	0	0	0	N	T-MOBILE
0.00	140.00	1	1.99" (50.7mm) Hybrid	1.99	1.9	N	0	0	0	0	0	N	T-MOBILE
0.00	138.00	1	3" conduit	3.5	7.58	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	136.00	12	1 5/8" Hybriflex	1.98	1.3	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	136.00	2	0.78" (19.7mm) 8 AWG	0.78	0.59	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	136.00	1	0.39" (10mm) Fiber Tr	0.39	0.06	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	90.00	1	1 5/8" Coax	1.98	0.82	N	0	0	0	0	0	N	VERIZON WIRELESS

SEGMENT PROPERTIES

Seg Top	Description	(Max Length: 5 ft)	Thick	Flat Dia	Area	Ix	W/t	D/t	F'y	S	Z	Weight
---------	-------------	--------------------	-------	----------	------	----	-----	-----	-----	---	---	--------

Elev (ft)		(in)	(in)	(in ²)	(in ⁴)	Ratio	Ratio	(ksi)	(in ³)	(in ³)	(lb)
0.00		0.3750	56.497	66.797	26,581.20	25.15	150.66	71.8	926.7	0.0	0.0
5.00		0.3750	55.210	65.265	24,793.60	24.55	147.23	72.5	884.5	0.0	1,123.4
10.00		0.3750	53.922	63.732	23,088.00	23.94	143.79	73.2	843.3	0.0	1,097.4
15.00		0.3750	52.635	62.200	21,462.50	23.34	140.36	74	803.1	0.0	1,071.3
20.00		0.3750	51.347	60.668	19,915.10	22.73	136.93	74.7	763.9	0.0	1,045.2
25.00		0.3750	50.060	59.136	18,443.90	22.13	133.49	75.4	725.7	0.0	1,019.2
30.00		0.3750	48.773	57.603	17,047.10	21.52	130.06	76.1	688.4	0.0	993.1
35.00		0.3750	47.485	56.071	15,722.60	20.92	126.63	76.8	652.1	0.0	967.0
40.00		0.3750	46.198	54.539	14,468.50	20.31	123.19	77.5	616.9	0.0	941.0
42.58	Bot - Section 2	0.3750	45.533	53.747	13,847.50	20.00	121.42	77.9	599.0	0.0	475.9
45.00		0.3750	44.911	53.007	13,283.00	19.71	119.76	78.2	582.5	0.0	885.2
48.92	Top - Section 1	0.3750	44.652	52.699	13,053.10	19.59	119.07	78.4	575.8	0.0	1,408.8
50.00		0.3750	44.373	52.367	12,807.90	19.45	118.33	78.5	568.5	0.0	193.6
55.00		0.3750	43.086	50.835	11,716.20	18.85	114.90	79.2	535.6	0.0	877.9
60.00		0.3750	41.798	49.302	10,688.40	18.24	111.46	79.9	503.7	0.0	851.9
65.00		0.3750	40.511	47.770	9,722.50	17.64	108.03	80.7	472.7	0.0	825.8
70.00		0.3750	39.224	46.238	8,816.60	17.03	104.60	81.4	442.7	0.0	799.7
75.00		0.3750	37.936	44.706	7,968.80	16.43	101.16	82.1	413.7	0.0	773.7
80.00		0.3750	36.649	43.173	7,177.20	15.82	97.73	82.6	385.7	0.0	747.6
85.00		0.3750	35.361	41.641	6,439.80	15.22	94.30	82.6	358.7	0.0	721.5
85.80		0.3750	35.155	41.396	6,326.80	15.12	93.75	82.6	354.5	0.0	113.0
86.50	Bot - Section 3	0.3750	34.975	41.181	6,228.90	15.03	93.27	82.6	350.8	0.0	98.4
90.00		0.3750	34.074	40.109	5,754.80	14.61	90.86	82.6	332.6	0.0	812.7
91.50	Top - Section 2	0.2500	34.188	26.929	3,918.60	22.70	136.75	74.7	225.8	0.0	341.8
95.00		0.2500	33.287	26.214	3,614.70	22.07	133.15	75.4	213.9	0.0	316.4
100.00		0.2500	31.999	25.192	3,208.40	21.16	128.00	76.5	197.5	0.0	437.3
105.00		0.2500	30.712	24.171	2,833.70	20.25	122.85	77.6	181.7	0.0	419.9
110.00		0.2500	29.425	23.149	2,489.40	19.34	117.70	78.7	166.6	0.0	402.5
115.00		0.2500	28.137	22.128	2,174.20	18.43	112.55	79.7	152.2	0.0	385.2
120.00		0.2500	26.850	21.106	1,886.80	17.53	107.40	80.8	138.4	0.0	367.8
123.58	Bot - Section 4	0.2500	25.927	20.374	1,697.20	16.88	103.71	81.6	128.9	0.0	252.9
125.00		0.2500	25.562	20.085	1,625.90	16.62	102.25	81.9	125.3	0.0	171.9
127.42	Top - Section 3	0.1875	25.315	14.954	1,192.90	22.40	135.01	75.1	92.8	0.0	287.6
130.00		0.1875	24.650	14.558	1,100.60	21.77	131.47	75.8	87.9	0.0	129.7
135.00		0.1875	23.363	13.792	935.90	20.56	124.60	77.2	78.9	0.0	241.2
135.30		0.1875	23.285	13.746	926.50	20.49	124.19	77.3	78.4	0.0	14.1
136.30		0.1875	23.028	13.592	895.90	20.25	122.82	77.6	76.6	0.0	46.5
136.50		0.1875	22.976	13.562	889.80	20.20	122.54	77.6	76.3	0.0	9.2
137.20		0.1875	22.796	13.454	868.90	20.03	121.58	77.8	75.1	0.0	32.2
138.00		0.1875	22.590	13.332	845.40	19.83	120.48	78.1	73.7	0.0	36.5
138.20		0.1875	22.539	13.301	839.50	19.78	120.21	78.1	73.4	0.0	9.1
140.00		0.1875	22.075	13.025	788.40	19.35	117.73	78.6	70.3	0.0	80.6
145.00		0.1875	20.788	12.259	657.30	18.14	110.87	80.1	62.3	0.0	215.1
150.00		0.1875	19.500	11.493	541.60	16.93	104.00	81.5	54.7	0.0	202.1
Total:											22,242.9

CALCULATED FORCES

Load Case: 1.2D + 1.0W 119 mph Wind with No Ice 25 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	-46.16	-22.96	0.00	-2,574.8	0.00	2,574.77	4,317.28	1,172.28	5,942.19	4,991.20	0	0	0.527
5.00	-44.47	-22.62	0.00	-2,460.0	0.00	2,459.97	4,260.07	1,145.39	5,672.73	4,811.32	0.07	-0.13	0.522
10.00	-42.82	-22.28	0.00	-2,346.9	0.00	2,346.88	4,200.89	1,118.50	5,409.52	4,632.34	0.29	-0.27	0.517
15.00	-41.19	-21.95	0.00	-2,235.5	0.00	2,235.48	4,139.75	1,091.61	5,152.56	4,454.41	0.65	-0.41	0.512
20.00	-39.60	-21.62	0.00	-2,125.7	0.00	2,125.73	4,076.64	1,064.72	4,901.86	4,277.68	1.16	-0.56	0.507
25.00	-38.04	-21.30	0.00	-2,017.6	0.00	2,017.60	4,011.57	1,037.83	4,657.40	4,102.31	1.82	-0.71	0.502
30.00	-36.51	-20.98	0.00	-1,911.1	0.00	1,911.09	3,944.54	1,010.94	4,419.20	3,928.46	2.65	-0.86	0.496
35.00	-35.01	-20.66	0.00	-1,806.2	0.00	1,806.17	3,875.54	984.05	4,187.25	3,756.28	3.63	-1.01	0.490
40.00	-33.56	-20.39	0.00	-1,702.9	0.00	1,702.89	3,804.58	957.16	3,961.56	3,585.94	4.77	-1.17	0.484
42.58	-32.82	-20.22	0.00	-1,650.2	0.00	1,650.21	3,767.15	943.26	3,847.39	3,498.70	5.43	-1.26	0.481

CALCULATED FORCES

45.00	-31.58	-19.99	0.00	-1,601.4	0.00	1,601.35	3,731.66	930.26	3,742.11	3,417.59	6.09	-1.34	0.477
48.92	-29.65	-19.78	0.00	-1,523.0	0.00	1,523.05	3,716.78	924.87	3,698.81	3,384.05	7.24	-1.47	0.459
50.00	-29.32	-19.57	0.00	-1,501.6	0.00	1,501.62	3,700.64	919.04	3,652.36	3,347.94	7.58	-1.51	0.457
55.00	-27.94	-19.20	0.00	-1,403.8	0.00	1,403.76	3,624.93	892.15	3,441.78	3,182.68	9.24	-1.67	0.449
60.00	-26.59	-18.83	0.00	-1,307.8	0.00	1,307.76	3,547.26	865.26	3,237.45	3,019.80	11.08	-1.83	0.441
65.00	-25.27	-18.45	0.00	-1,213.6	0.00	1,213.63	3,467.62	838.37	3,039.37	2,859.43	13.09	-2	0.432
70.00	-23.99	-18.08	0.00	-1,121.4	0.00	1,121.37	3,386.02	811.47	2,847.54	2,701.76	15.27	-2.17	0.423
75.00	-22.73	-17.70	0.00	-1,031.0	0.00	1,030.99	3,302.46	784.58	2,661.97	2,546.93	17.64	-2.34	0.412
80.00	-21.51	-17.33	0.00	-942.5	0.00	942.49	3,207.57	757.69	2,482.65	2,388.12	20.19	-2.52	0.402
85.00	-20.13	-16.85	0.00	-855.9	0.00	855.86	3,093.73	730.80	2,309.58	2,220.78	22.92	-2.7	0.392
85.80	-19.93	-16.76	0.00	-842.4	0.00	842.38	3,075.51	726.50	2,282.47	2,194.57	23.38	-2.73	0.391
86.50	-19.76	-16.62	0.00	-830.6	0.00	830.65	3,059.57	722.73	2,258.88	2,171.76	23.78	-2.76	0.389
90.00	-18.57	-16.40	0.00	-772.5	0.00	772.47	2,979.89	703.91	2,142.77	2,059.51	25.85	-2.88	0.382
91.50	-18.06	-16.22	0.00	-747.9	0.00	747.86	1,810.39	472.60	1,448.66	1,264.80	26.76	-2.94	0.602
95.00	-17.44	-15.93	0.00	-691.1	0.00	691.10	1,779.95	460.05	1,372.76	1,210.27	28.96	-3.07	0.582
100.00	-16.59	-15.60	0.00	-611.4	0.00	611.44	1,734.80	442.12	1,267.86	1,133.26	32.32	-3.32	0.550
105.00	-15.76	-15.27	0.00	-533.5	0.00	533.46	1,687.69	424.19	1,167.14	1,057.43	35.93	-3.58	0.515
110.00	-14.95	-14.94	0.00	-457.1	0.00	457.13	1,638.61	406.27	1,070.59	982.94	39.81	-3.83	0.476
115.00	-14.18	-14.61	0.00	-382.4	0.00	382.45	1,587.58	388.34	978.20	909.95	43.95	-4.07	0.431
120.00	-13.43	-14.31	0.00	-309.4	0.00	309.42	1,534.57	370.41	889.98	838.60	48.33	-4.29	0.379
123.58	-12.91	-14.13	0.00	-258.1	0.00	258.14	1,495.38	357.56	829.32	788.57	51.61	-4.45	0.338
125.00	-12.62	-13.99	0.00	-238.1	0.00	238.13	1,479.61	352.49	805.93	769.07	52.94	-4.51	0.320
127.42	-12.13	-13.81	0.00	-204.3	0.00	204.31	1,010.16	262.43	595.61	522.47	55.24	-4.6	0.406
130.00	-9.64	-12.51	0.00	-168.6	0.00	168.64	993.06	255.49	564.50	499.93	57.75	-4.69	0.349
135.00	-9.07	-12.30	0.00	-106.1	0.00	106.10	958.47	242.04	506.65	456.93	62.76	-4.87	0.244
135.30	-8.90	-11.73	0.00	-102.4	0.00	102.41	956.33	241.24	503.28	454.38	63.07	-4.88	0.237
136.30	-8.67	-11.54	0.00	-90.7	0.00	90.68	949.16	238.55	492.13	445.91	64.09	-4.91	0.215
136.50	-8.51	-10.80	0.00	-88.4	0.00	88.37	947.71	238.01	489.91	444.22	64.3	-4.91	0.210
137.20	-8.12	-10.39	0.00	-80.8	0.00	80.81	942.63	236.13	482.19	438.31	65.02	-4.93	0.195
138.00	-6.62	-9.44	0.00	-72.5	0.00	72.50	936.78	233.97	473.45	431.59	65.85	-4.95	0.177
138.20	-6.59	-9.33	0.00	-70.6	0.00	70.61	935.30	233.44	471.27	429.91	66.06	-4.96	0.173
140.00	-4.09	-5.39	0.00	-53.5	0.00	53.53	921.92	228.60	451.93	414.90	67.93	-4.99	0.134
145.00	-3.76	-5.03	0.00	-26.6	0.00	26.60	883.40	215.15	400.34	373.98	73.2	-5.07	0.076
150.00	0.00	-4.68	0.00	-1.4	0.00	1.42	842.93	201.71	351.87	334.35	78.52	-5.1	0.005

CALCULATED FORCES

Load Case: 0.9D + 1.0W 119 mph Wind with No Ice (Reduced DL) 25 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	-34.61	-22.95	0.00	-2,544.7	0.00	2,544.68	4,317.28	1,172.28	5,942.19	4,991.20	0	0	0.518
5.00	-33.34	-22.58	0.00	-2,430.0	0.00	2,429.96	4,260.07	1,145.39	5,672.73	4,811.32	0.07	-0.13	0.513
10.00	-32.08	-22.21	0.00	-2,317.1	0.00	2,317.08	4,200.89	1,118.50	5,409.52	4,632.34	0.28	-0.27	0.508
15.00	-30.85	-21.86	0.00	-2,206.0	0.00	2,206.01	4,139.75	1,091.61	5,152.56	4,454.41	0.64	-0.41	0.503
20.00	-29.64	-21.51	0.00	-2,096.7	0.00	2,096.71	4,076.64	1,064.72	4,901.86	4,277.68	1.15	-0.55	0.498
25.00	-28.46	-21.17	0.00	-1,989.2	0.00	1,989.16	4,011.57	1,037.83	4,657.40	4,102.31	1.8	-0.7	0.492
30.00	-27.30	-20.83	0.00	-1,883.3	0.00	1,883.32	3,944.54	1,010.94	4,419.20	3,928.46	2.61	-0.85	0.487
35.00	-26.17	-20.48	0.00	-1,779.2	0.00	1,779.19	3,875.54	984.05	4,187.25	3,756.28	3.58	-1	0.481
40.00	-25.07	-20.21	0.00	-1,676.8	0.00	1,676.79	3,804.58	957.16	3,961.56	3,585.94	4.71	-1.16	0.475
42.58	-24.51	-20.03	0.00	-1,624.6	0.00	1,624.59	3,767.15	943.26	3,847.39	3,498.70	5.36	-1.24	0.471
45.00	-23.58	-19.79	0.00	-1,576.2	0.00	1,576.20	3,731.66	930.26	3,742.11	3,417.59	6.01	-1.32	0.468
48.92	-22.12	-19.58	0.00	-1,498.7	0.00	1,498.70	3,716.78	924.87	3,698.81	3,384.05	7.14	-1.45	0.449
50.00	-21.87	-19.36	0.00	-1,477.5	0.00	1,477.50	3,700.64	919.04	3,652.36	3,347.94	7.48	-1.48	0.448
55.00	-20.82	-18.97	0.00	-1,380.7	0.00	1,380.72	3,624.93	892.15	3,441.78	3,182.68	9.12	-1.64	0.440
60.00	-19.80	-18.59	0.00	-1,285.8	0.00	1,285.85	3,547.26	865.26	3,237.45	3,019.80	10.93	-1.81	0.432
65.00	-18.80	-18.21	0.00	-1,192.9	0.00	1,192.90	3,467.62	838.37	3,039.37	2,859.43	12.91	-1.97	0.423
70.00	-17.83	-17.82	0.00	-1,101.9	0.00	1,101.87	3,386.02	811.47	2,847.54	2,701.76	15.06	-2.14	0.414
75.00	-16.88	-17.44	0.00	-1,012.8	0.00	1,012.76	3,302.46	784.58	2,661.97	2,546.93	17.39	-2.31	0.403
80.00	-15.96	-17.06	0.00	-925.6	0.00	925.56	3,207.57	757.69	2,482.65	2,388.12	19.9	-2.48	0.393
85.00	-14.92	-16.59	0.00	-840.3	0.00	840.26	3,093.73	730.80	2,309.58	2,220.78	22.59	-2.66	0.384
85.80	-14.77	-16.51	0.00	-827.0	0.00	826.99	3,075.51	726.50	2,282.47	2,194.57	23.04	-2.69	0.382
86.50	-14.64	-16.36	0.00	-815.4	0.00	815.43	3,059.57	722.73	2,258.88	2,171.76	23.44	-2.71	0.381
90.00	-13.74	-16.15	0.00	-758.2	0.00	758.18	2,979.89	703.91	2,142.77	2,059.51	25.47	-2.84	0.373
91.50	-13.36	-15.96	0.00	-734.0	0.00	733.96	1,810.39	472.60	1,448.66	1,264.80	26.37	-2.89	0.589
95.00	-12.89	-15.66	0.00	-678.1	0.00	678.10	1,779.95	460.05	1,372.76	1,210.27	28.54	-3.02	0.569
100.00	-12.24	-15.32	0.00	-599.8	0.00	599.78	1,734.80	442.12	1,267.86	1,133.26	31.84	-3.27	0.538
105.00	-11.60	-14.98	0.00	-523.2	0.00	523.17	1,687.69	424.19	1,167.14	1,057.43	35.4	-3.52	0.503
110.00	-10.99	-14.65	0.00	-448.3	0.00	448.26	1,638.61	406.27	1,070.59	982.94	39.21	-3.76	0.464
115.00	-10.40	-14.32	0.00	-375.0	0.00	375.01	1,587.58	388.34	978.20	909.95	43.28	-4	0.420
120.00	-9.84	-14.02	0.00	-303.4	0.00	303.43	1,534.57	370.41	889.98	838.60	47.59	-4.22	0.370
123.58	-9.45	-13.84	0.00	-253.2	0.00	253.19	1,495.38	357.56	829.32	788.57	50.82	-4.37	0.329
125.00	-9.22	-13.71	0.00	-233.6	0.00	233.58	1,479.61	352.49	805.93	769.07	52.12	-4.43	0.311
127.42	-8.86	-13.53	0.00	-200.4	0.00	200.45	1,010.16	262.43	595.61	522.47	54.39	-4.52	0.395
130.00	-7.00	-12.28	0.00	-165.5	0.00	165.50	993.06	255.49	564.50	499.93	56.85	-4.61	0.340
135.00	-6.57	-12.08	0.00	-104.1	0.00	104.12	958.47	242.04	506.65	456.93	61.78	-4.78	0.237
135.30	-6.46	-11.51	0.00	-100.5	0.00	100.49	956.33	241.24	503.28	454.38	62.08	-4.79	0.230
136.30	-6.29	-11.32	0.00	-89.0	0.00	88.99	949.16	238.55	492.13	445.91	63.09	-4.82	0.208
136.50	-6.19	-10.59	0.00	-86.7	0.00	86.72	947.71	238.01	489.91	444.22	63.29	-4.83	0.204
137.20	-5.90	-10.19	0.00	-79.3	0.00	79.31	942.63	236.13	482.19	438.31	64	-4.85	0.189
138.00	-4.79	-9.27	0.00	-71.2	0.00	71.16	936.78	233.97	473.45	431.59	64.81	-4.87	0.172
138.20	-4.77	-9.16	0.00	-69.3	0.00	69.31	935.30	233.44	471.27	429.91	65.01	-4.87	0.168
140.00	-2.96	-5.28	0.00	-52.5	0.00	52.52	921.92	228.60	451.93	414.90	66.86	-4.91	0.130
145.00	-2.72	-4.94	0.00	-26.1	0.00	26.11	883.40	215.15	400.34	373.98	72.03	-4.98	0.073
150.00	0.00	-4.68	0.00	-1.4	0.00	1.42	842.93	201.71	351.87	334.35	77.26	-5.01	0.005

CALCULATED FORCES

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind with 1" Radial Ice 24 Iterations
 Gust Response Factor: 1.10 Ice Dead Load Factor: 1.00
 Dead Load Factor: 1.20 Ice Importance 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	-62.31	-6.13	0.00	-670.7	0.00	670.68	4,317.28	1,172.28	5,942.19	4,991.20	0	0	0.149
5.00	-60.34	-6.03	0.00	-640.0	0.00	640.05	4,260.07	1,145.39	5,672.73	4,811.32	0.02	-0.04	0.147
10.00	-58.37	-5.93	0.00	-609.9	0.00	609.90	4,200.89	1,118.50	5,409.52	4,632.34	0.07	-0.07	0.146
15.00	-56.42	-5.84	0.00	-580.2	0.00	580.23	4,139.75	1,091.61	5,152.56	4,454.44	0.17	-0.11	0.144
20.00	-54.50	-5.75	0.00	-551.0	0.00	551.03	4,076.64	1,064.72	4,901.86	4,277.68	0.3	-0.15	0.142
25.00	-52.61	-5.66	0.00	-522.3	0.00	522.29	4,011.57	1,037.83	4,657.40	4,102.31	0.47	-0.18	0.140
30.00	-50.75	-5.57	0.00	-494.0	0.00	494.01	3,944.54	1,010.94	4,419.20	3,928.46	0.69	-0.22	0.139
35.00	-48.92	-5.47	0.00	-466.2	0.00	466.18	3,875.54	984.05	4,187.25	3,756.28	0.94	-0.26	0.137
40.00	-47.13	-5.40	0.00	-438.8	0.00	438.83	3,804.58	957.16	3,961.56	3,585.94	1.24	-0.3	0.135
42.58	-46.21	-5.35	0.00	-424.9	0.00	424.89	3,767.15	943.26	3,847.39	3,498.70	1.41	-0.33	0.134
45.00	-44.83	-5.28	0.00	-412.0	0.00	411.97	3,731.66	930.26	3,742.11	3,417.59	1.58	-0.35	0.133
48.92	-42.62	-5.22	0.00	-391.3	0.00	391.30	3,716.78	924.87	3,698.81	3,384.05	1.88	-0.38	0.127
50.00	-42.24	-5.16	0.00	-385.6	0.00	385.64	3,700.64	919.04	3,652.36	3,347.94	1.97	-0.39	0.127
55.00	-40.54	-5.05	0.00	-359.8	0.00	359.85	3,624.93	892.15	3,441.78	3,182.68	2.4	-0.43	0.124
60.00	-38.86	-4.94	0.00	-334.6	0.00	334.60	3,547.26	865.26	3,237.45	3,019.80	2.87	-0.47	0.122
65.00	-37.23	-4.83	0.00	-309.9	0.00	309.90	3,467.62	838.37	3,039.37	2,859.43	3.39	-0.52	0.119
70.00	-35.63	-4.72	0.00	-285.8	0.00	285.75	3,386.02	811.47	2,847.54	2,701.76	3.95	-0.56	0.116
75.00	-34.07	-4.61	0.00	-262.2	0.00	262.16	3,302.46	784.58	2,661.97	2,546.93	4.56	-0.6	0.113
80.00	-32.55	-4.50	0.00	-239.1	0.00	239.12	3,207.57	757.69	2,482.65	2,388.12	5.22	-0.65	0.110
85.00	-30.78	-4.37	0.00	-216.6	0.00	216.64	3,093.73	730.80	2,309.58	2,220.78	5.92	-0.69	0.108
85.80	-30.52	-4.34	0.00	-213.2	0.00	213.15	3,075.51	726.50	2,282.47	2,194.57	6.04	-0.7	0.107
86.50	-30.32	-4.30	0.00	-210.1	0.00	210.11	3,059.57	722.73	2,258.88	2,171.76	6.14	-0.71	0.107
90.00	-28.91	-4.24	0.00	-195.0	0.00	195.05	2,979.89	703.91	2,142.77	2,059.51	6.67	-0.74	0.104
91.50	-28.32	-4.18	0.00	-188.7	0.00	188.70	1,810.39	472.60	1,448.66	1,264.80	6.91	-0.75	0.165
95.00	-27.52	-4.10	0.00	-174.1	0.00	174.06	1,779.95	460.05	1,372.76	1,210.27	7.48	-0.79	0.159
100.00	-26.40	-4.00	0.00	-153.6	0.00	153.57	1,734.80	442.12	1,267.86	1,133.26	8.33	-0.85	0.151
105.00	-25.31	-3.90	0.00	-133.6	0.00	133.58	1,687.69	424.19	1,167.14	1,057.43	9.26	-0.92	0.141
110.00	-24.24	-3.80	0.00	-114.1	0.00	114.09	1,638.61	406.27	1,070.59	982.94	10.25	-0.98	0.131
115.00	-23.21	-3.70	0.00	-95.1	0.00	95.09	1,587.58	388.34	978.20	909.95	11.31	-1.04	0.119
120.00	-22.21	-3.61	0.00	-76.6	0.00	76.59	1,534.57	370.41	889.98	838.60	12.43	-1.09	0.106
123.58	-21.51	-3.56	0.00	-63.6	0.00	63.64	1,495.38	357.56	829.32	788.57	13.26	-1.13	0.095
125.00	-21.14	-3.52	0.00	-58.6	0.00	58.60	1,479.61	352.49	805.93	769.07	13.6	-1.15	0.091
127.42	-20.53	-3.47	0.00	-50.1	0.00	50.09	1,010.16	262.43	595.61	522.47	14.19	-1.17	0.116
130.00	-17.42	-3.10	0.00	-41.1	0.00	41.13	993.06	255.49	564.50	499.93	14.83	-1.19	0.100
135.00	-16.59	-3.04	0.00	-25.6	0.00	25.64	958.47	242.04	506.65	456.93	16.1	-1.23	0.074
135.30	-16.12	-2.90	0.00	-24.7	0.00	24.73	956.33	241.24	503.28	454.38	16.18	-1.24	0.071
136.30	-15.71	-2.85	0.00	-21.8	0.00	21.82	949.16	238.55	492.13	445.91	16.44	-1.24	0.066
136.50	-15.14	-2.68	0.00	-21.2	0.00	21.25	947.71	238.01	489.91	444.22	16.49	-1.24	0.064
137.20	-14.47	-2.58	0.00	-19.4	0.00	19.38	942.63	236.13	482.19	438.31	16.67	-1.25	0.060
138.00	-12.32	-2.30	0.00	-17.3	0.00	17.32	936.78	233.97	473.45	431.59	16.88	-1.25	0.053
138.20	-12.24	-2.27	0.00	-16.9	0.00	16.86	935.30	233.44	471.27	429.91	16.93	-1.26	0.052
140.00	-7.63	-1.29	0.00	-12.7	0.00	12.70	921.92	228.60	451.93	414.90	17.41	-1.26	0.039
145.00	-7.04	-1.19	0.00	-6.3	0.00	6.27	883.40	215.15	400.34	373.98	18.74	-1.28	0.025
150.00	0.00	-1.03	0.00	-0.3	0.00	0.32	842.93	201.71	351.87	334.35	20.09	-1.29	0.001

CALCULATED FORCES

Load Case: 1.0D + 1.0W 60 mph Wind with No Ice 24 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	-38.49	-5.22	0.00	-581.6	0.00	581.58	4,317.28	1,172.28	5,942.19	4,991.20	0	0	0.125
5.00	-37.12	-5.14	0.00	-555.5	0.00	555.48	4,260.07	1,145.39	5,672.73	4,811.32	0.02	-0.03	0.124
10.00	-35.78	-5.06	0.00	-529.8	0.00	529.79	4,200.89	1,118.50	5,409.52	4,632.34	0.06	-0.06	0.123
15.00	-34.47	-4.98	0.00	-504.5	0.00	504.50	4,139.75	1,091.61	5,152.56	4,454.41	0.15	-0.09	0.122
20.00	-33.18	-4.90	0.00	-479.6	0.00	479.61	4,076.64	1,064.72	4,901.86	4,277.68	0.26	-0.13	0.120
25.00	-31.92	-4.83	0.00	-455.1	0.00	455.10	4,011.57	1,037.83	4,657.40	4,102.31	0.41	-0.16	0.119
30.00	-30.69	-4.75	0.00	-431.0	0.00	430.98	3,944.54	1,010.94	4,419.20	3,928.46	0.6	-0.19	0.118
35.00	-29.48	-4.67	0.00	-407.2	0.00	407.23	3,875.54	984.05	4,187.25	3,756.28	0.82	-0.23	0.116
40.00	-28.30	-4.61	0.00	-383.9	0.00	383.87	3,804.58	957.16	3,961.56	3,585.94	1.08	-0.26	0.115
42.58	-27.70	-4.57	0.00	-372.0	0.00	371.96	3,767.15	943.26	3,847.39	3,498.70	1.23	-0.28	0.114
45.00	-26.70	-4.52	0.00	-360.9	0.00	360.92	3,731.66	930.26	3,742.11	3,417.59	1.37	-0.3	0.113
48.92	-25.10	-4.47	0.00	-343.2	0.00	343.22	3,716.78	924.87	3,698.81	3,384.05	1.63	-0.33	0.108
50.00	-24.85	-4.42	0.00	-338.4	0.00	338.38	3,700.64	919.04	3,652.36	3,347.94	1.71	-0.34	0.108
55.00	-23.73	-4.33	0.00	-316.3	0.00	316.28	3,624.93	892.15	3,441.78	3,182.68	2.09	-0.38	0.106
60.00	-22.64	-4.25	0.00	-294.6	0.00	294.61	3,547.26	865.26	3,237.45	3,019.80	2.5	-0.41	0.104
65.00	-21.57	-4.16	0.00	-273.4	0.00	273.37	3,467.62	838.37	3,039.37	2,859.43	2.95	-0.45	0.102
70.00	-20.53	-4.08	0.00	-252.6	0.00	252.56	3,386.02	811.47	2,847.54	2,701.76	3.45	-0.49	0.100
75.00	-19.52	-3.99	0.00	-232.2	0.00	232.18	3,302.46	784.58	2,661.97	2,546.93	3.98	-0.53	0.097
80.00	-18.53	-3.90	0.00	-212.2	0.00	212.23	3,207.57	757.69	2,482.65	2,388.12	4.55	-0.57	0.095
85.00	-17.38	-3.80	0.00	-192.7	0.00	192.71	3,093.73	730.80	2,309.58	2,220.78	5.17	-0.61	0.092
85.80	-17.22	-3.78	0.00	-189.7	0.00	189.68	3,075.51	726.50	2,282.47	2,194.57	5.27	-0.62	0.092
86.50	-17.09	-3.74	0.00	-187.0	0.00	187.03	3,059.57	722.73	2,258.88	2,171.76	5.36	-0.62	0.092
90.00	-16.11	-3.70	0.00	-173.9	0.00	173.93	2,979.89	703.91	2,142.77	2,059.51	5.83	-0.65	0.090
91.50	-15.69	-3.65	0.00	-168.4	0.00	168.38	1,810.39	472.60	1,448.66	1,264.80	6.04	-0.66	0.142
95.00	-15.21	-3.59	0.00	-155.6	0.00	155.59	1,779.95	460.05	1,372.76	1,210.27	6.53	-0.69	0.137
100.00	-14.54	-3.51	0.00	-137.6	0.00	137.65	1,734.80	442.12	1,267.86	1,133.26	7.29	-0.75	0.130
105.00	-13.88	-3.44	0.00	-120.1	0.00	120.09	1,687.69	424.19	1,167.14	1,057.43	8.1	-0.81	0.122
110.00	-13.24	-3.36	0.00	-102.9	0.00	102.92	1,638.61	406.27	1,070.59	982.94	8.98	-0.86	0.113
115.00	-12.62	-3.29	0.00	-86.1	0.00	86.11	1,587.58	388.34	978.20	909.95	9.91	-0.92	0.103
120.00	-12.01	-3.22	0.00	-69.7	0.00	69.68	1,534.57	370.41	889.98	838.60	10.9	-0.97	0.091
123.58	-11.59	-3.18	0.00	-58.2	0.00	58.15	1,495.38	357.56	829.32	788.57	11.64	-1	0.082
125.00	-11.35	-3.15	0.00	-53.6	0.00	53.64	1,479.61	352.49	805.93	769.07	11.94	-1.02	0.078
127.42	-10.95	-3.11	0.00	-46.0	0.00	46.03	1,010.16	262.43	595.61	522.47	12.46	-1.04	0.099
130.00	-8.82	-2.82	0.00	-38.0	0.00	38.01	993.06	255.49	564.50	499.93	13.03	-1.06	0.085
135.00	-8.35	-2.77	0.00	-23.9	0.00	23.91	958.47	242.04	506.65	456.93	14.16	-1.1	0.061
135.30	-8.18	-2.64	0.00	-23.1	0.00	23.08	956.33	241.24	503.28	454.38	14.22	-1.1	0.059
136.30	-7.97	-2.60	0.00	-20.4	0.00	20.44	949.16	238.55	492.13	445.91	14.46	-1.11	0.054
136.50	-7.80	-2.43	0.00	-19.9	0.00	19.92	947.71	238.01	489.91	444.22	14.5	-1.11	0.053
137.20	-7.45	-2.34	0.00	-18.2	0.00	18.21	942.63	236.13	482.19	438.31	14.67	-1.11	0.050
138.00	-6.14	-2.13	0.00	-16.3	0.00	16.34	936.78	233.97	473.45	431.59	14.85	-1.12	0.045
138.20	-6.11	-2.10	0.00	-15.9	0.00	15.92	935.30	233.44	471.27	429.91	14.9	-1.12	0.044
140.00	-3.76	-1.21	0.00	-12.1	0.00	12.06	921.92	228.60	451.93	414.90	15.32	-1.13	0.033
145.00	-3.47	-1.13	0.00	-6.0	0.00	6.00	883.40	215.15	400.34	373.98	16.51	-1.14	0.020
150.00	0.00	-1.06	0.00	-0.3	0.00	0.32	842.93	201.71	351.87	334.35	17.71	-1.15	0.001

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):	2.380
Redundancy Factor (ρ):	1.000
Seismic Force Distribution Exponent (k):	1.940
Total Unfactored Dead Load:	38.490 k
Seismic Base Shear (E):	1.150 k

SEISMIC FORCES

Segment	Seismic	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
43		147.5	262	4,244	0.017	19	326
42		142.5	294	4,460	0.018	20	366
41		139.1	121	1,753	0.007	8	151
40		138.1	14	194	0.001	1	17
39		137.6	61	858	0.003	4	75
38		136.85	53	747	0.003	3	66
37		136.4	15	213	0.001	1	19
36		135.8	88	1,221	0.005	6	110
35		135.15	28	385	0.002	2	35
34		132.5	476	6,266	0.025	29	592
33		128.7084	251	3,123	0.012	14	312
32		126.2084	401	4,804	0.019	22	499
31		124.2917	238	2,772	0.011	13	297
30		121.7917	421	4,708	0.019	22	524
29		117.5	603	6,282	0.025	29	750
28		112.5	620	5,940	0.024	27	771
27		107.5	637	5,591	0.022	26	793
26		102.5	655	5,236	0.021	24	815
25		97.5	672	4,878	0.019	22	836
24		93.25	481	3,200	0.013	15	598
23		90.75	412	2,603	0.010	12	513
22		88.25	980	5,860	0.023	27	1,219
21		86.15	132	752	0.003	3	164
20		85.4	151	849	0.003	4	188
19		82.5	961	5,040	0.020	23	1,195
18		77.5	987	4,585	0.018	21	1,227
17		72.5	1,013	4,135	0.016	19	1,260
16		67.5	1,039	3,692	0.015	17	1,292
15		62.5	1,065	3,259	0.013	15	1,325
14		57.5	1,091	2,840	0.011	13	1,357
13		52.5	1,117	2,437	0.010	11	1,390
12		49.4584	245	477	0.002	2	305
11		46.9584	1,596	2,805	0.011	13	1,986
10		43.7917	1,001	1,536	0.006	7	1,245
9		41.2917	599	821	0.003	4	746
8		37.5	1,180	1,340	0.005	6	1,468
7		32.5	1,206	1,037	0.004	5	1,500
6		27.5	1,232	766	0.003	4	1,533

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)
5	22.5	1,258	530	0.002	2	1,565
4	17.5	1,284	332	0.001	2	1,598
3	12.5	1,310	176	0.001	1	1,630
2	7.5	1,336	67	0.000	0	1,663
1	2.5	1,362	8	0.000	0	1,695
Samsung B2/B66A RRH-BR049	150	253	4,240	0.017	19	315
Samsung B5/B13 RRH-BR04C	150	211	3,531	0.014	16	262
RFS DB-C1-12C-24AB-0Z	150	32	536	0.002	2	40
Kaelus KA-6030	150	70	1,179	0.005	5	88
Samsung MT6407-77A	150	245	4,099	0.016	19	305
Commscope NHH-65B-R2B	150	87	1,463	0.006	7	109
Antel LPA-80063/6CF	150	162	2,713	0.011	12	202
Commscope NHH-45B-R2B	150	294	4,930	0.020	23	366
Generic Flat Low Profile Platform	150	1,875	31,396	0.124	143	2,333
Ericsson Radio 4449 B71 B85A	140	225	3,295	0.013	15	280
Ericsson Radio 4449 B71 B85A	140	225	3,295	0.013	15	280
Ericsson 4460 BAND 2/25	140	327	4,789	0.019	22	407
Ericsson AIR 6419 B41	140	206	3,010	0.012	14	256
Commscope VV-65A-R1	140	71	1,046	0.004	5	89
Generic Mount Reinforcement	140	800	11,717	0.046	54	995
RFS APXVAARR24_43-U-NA20	140	384	5,620	0.022	26	477
Raycap DC6-48-60-18-8F	138.2	20	286	0.001	1	25
Generic Round T-Arm	138	1,250	17,803	0.070	81	1,555
Ericsson RRUS-11 (50 lbs.)	137.2	300	4,225	0.017	19	373
Powerwave Allgon 7770.00 (27 lbs)	136.5	162	2,259	0.009	10	202
Powerwave Allgon LGP 21902	136.3	33	459	0.002	2	41
Powerwave Allgon LGP21401	136.3	85	1,176	0.005	5	105
KMW AM-X-CD-16-65-00T-RET	135.3	146	1,994	0.008	9	181
Spinner 756529	130	4	57	0.000	0	6
Generic Round Low Profile Platform	130	1,875	23,782	0.094	109	2,333
Generic GPS	85.8	10	57	0.000	0	12
Generic Flat Stand-Off	85	188	1,042	0.004	5	233
Totals:		38,490	252,820	1.000	1,155	47,888

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)
43	147.5	262	4,244	0.017	19	224
42	142.5	294	4,460	0.018	20	252
41	139.1	121	1,753	0.007	8	104
40	138.1	14	194	0.001	1	12
39	137.6	61	858	0.003	4	52
38	136.85	53	747	0.003	3	46
37	136.4	15	213	0.001	1	13
36	135.8	88	1,221	0.005	6	76
35	135.15	28	385	0.002	2	24
34	132.5	476	6,266	0.025	29	407
33	128.7084	251	3,123	0.012	14	215
32	126.2084	401	4,804	0.019	22	343
31	124.2917	238	2,772	0.011	13	204
30	121.7917	421	4,708	0.019	22	361
29	117.5	603	6,282	0.025	29	516
28	112.5	620	5,940	0.024	27	531
27	107.5	637	5,591	0.022	26	546
26	102.5	655	5,236	0.021	24	560
25	97.5	672	4,878	0.019	22	575
24	93.25	481	3,200	0.013	15	412
23	90.75	412	2,603	0.010	12	353
22	88.25	980	5,860	0.023	27	839
21	86.15	132	752	0.003	3	113

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)
20	85.4	151	849	0.003	4	129
19	82.5	961	5,040	0.020	23	822
18	77.5	987	4,585	0.018	21	844
17	72.5	1,013	4,135	0.016	19	867
16	67.5	1,039	3,692	0.015	17	889
15	62.5	1,065	3,259	0.013	15	911
14	57.5	1,091	2,840	0.011	13	934
13	52.5	1,117	2,437	0.010	11	956
12	49.4584	245	477	0.002	2	210
11	46.9584	1,596	2,805	0.011	13	1,366
10	43.7917	1,001	1,536	0.006	7	856
9	41.2917	599	821	0.003	4	513
8	37.5	1,180	1,340	0.005	6	1,010
7	32.5	1,206	1,037	0.004	5	1,032
6	27.5	1,232	766	0.003	4	1,054
5	22.5	1,258	530	0.002	2	1,077
4	17.5	1,284	332	0.001	2	1,099
3	12.5	1,310	176	0.001	1	1,121
2	7.5	1,336	67	0.000	0	1,144
1	2.5	1,362	8	0.000	0	1,166
Samsung B2/B66A RRH-BR049	150	253	4,240	0.017	19	217
Samsung B5/B13 RRH-BR04C	150	211	3,531	0.014	16	180
RFS DB-C1-12C-24AB-0Z	150	32	536	0.002	2	27
Kaelus KA-6030	150	70	1,179	0.005	5	60
Samsung MT6407-77A	150	245	4,099	0.016	19	210
Commscope NHH-65B-R2B	150	87	1,463	0.006	7	75
Antel LPA-80063/6CF	150	162	2,713	0.011	12	139
Commscope NHH-45B-R2B	150	294	4,930	0.020	23	252
Generic Flat Low Profile Platform	150	1,875	31,396	0.124	143	1,605
Ericsson Radio 4449 B71 B85A	140	225	3,295	0.013	15	193
Ericsson Radio 4449 B71 B85A	140	225	3,295	0.013	15	193
Ericsson 4460 BAND 2/25	140	327	4,789	0.019	22	280
Ericsson AIR 6419 B41	140	206	3,010	0.012	14	176
Commscope VV-65A-R1	140	71	1,046	0.004	5	61
Generic Mount Reinforcement	140	800	11,717	0.046	54	685
RFS APXVAARR24_43-U-NA20	140	384	5,620	0.022	26	328
Raycap DC6-48-60-18-8F	138.2	20	286	0.001	1	17
Generic Round T-Arm	138	1,250	17,803	0.070	81	1,070
Ericsson RRUS-11 (50 lbs.)	137.2	300	4,225	0.017	19	257
Powerwave Allgon 7770.00 (27 lbs)	136.5	162	2,259	0.009	10	139
Powerwave Allgon LGP 21902	136.3	33	459	0.002	2	28
Powerwave Allgon LGP21401	136.3	85	1,176	0.005	5	72
KMW AM-X-CD-16-65-00T-RET	135.3	146	1,994	0.008	9	125
Spinner 756529	130	4	57	0.000	0	4
Generic Round Low Profile Platform	130	1,875	23,782	0.094	109	1,605
Generic GPS	85.8	10	57	0.000	0	9
Generic Flat Stand-Off	85	188	1,042	0.004	5	160
Totals:		38,490	252,820	1.000	1,155	32,941

1.2D + 1.0Ev + 1.0Eh

Seismic

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	-46.19	-1.16	0.00	-146.68	0.00	146.68	4,317.28	1,172.28	5,942	4,991.20	0.00	0.00	0.04
5.00	-44.53	-1.16	0.00	-140.90	0.00	140.90	4,260.07	1,145.39	5,673	4,811.32	0.00	-0.01	0.04
10.00	-42.90	-1.17	0.00	-135.09	0.00	135.09	4,200.89	1,118.50	5,410	4,632.34	0.02	-0.02	0.04
15.00	-41.30	-1.17	0.00	-129.26	0.00	129.26	4,139.75	1,091.61	5,153	4,454.41	0.04	-0.02	0.04
20.00	-39.74	-1.17	0.00	-123.40	0.00	123.40	4,076.64	1,064.72	4,902	4,277.68	0.07	-0.03	0.04
25.00	-38.20	-1.17	0.00	-117.53	0.00	117.53	4,011.57	1,037.83	4,657	4,102.31	0.10	-0.04	0.04

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
70.00	-16.73	-1.07	0.00	-64.37	0.00	64.37	3,386.02	811.47	2,848	2,701.76	0.87	-0.12	0.03
75.00	-15.89	-1.05	0.00	-59.01	0.00	59.01	3,302.46	784.58	2,662	2,546.93	1.01	-0.13	0.03
80.00	-15.07	-1.03	0.00	-53.75	0.00	53.75	3,207.57	757.69	2,483	2,388.12	1.15	-0.14	0.03
85.00	-14.78	-1.02	0.00	-48.61	0.00	48.61	3,093.73	730.80	2,310	2,220.78	1.31	-0.15	0.03
85.80	-14.66	-1.02	0.00	-47.79	0.00	47.79	3,075.51	726.50	2,282	2,194.57	1.34	-0.16	0.03
86.50	-13.82	-0.99	0.00	-47.08	0.00	47.08	3,059.57	722.73	2,259	2,171.76	1.36	-0.16	0.03
90.00	-13.46	-0.98	0.00	-43.62	0.00	43.62	2,979.89	703.91	2,143	2,059.51	1.48	-0.16	0.03
91.50	-13.05	-0.96	0.00	-42.15	0.00	42.15	1,810.39	472.60	1,449	1,264.80	1.53	-0.17	0.04
95.00	-12.48	-0.94	0.00	-38.78	0.00	38.78	1,779.95	460.05	1,373	1,210.27	1.66	-0.18	0.04
100.00	-11.92	-0.92	0.00	-34.07	0.00	34.07	1,734.80	442.12	1,268	1,133.26	1.85	-0.19	0.04
105.00	-11.37	-0.89	0.00	-29.47	0.00	29.47	1,687.69	424.19	1,167	1,057.43	2.05	-0.20	0.04
110.00	-10.84	-0.87	0.00	-25.00	0.00	25.00	1,638.61	406.27	1,071	982.94	2.27	-0.22	0.03
115.00	-10.32	-0.84	0.00	-20.66	0.00	20.66	1,587.58	388.34	978	909.95	2.51	-0.23	0.03
120.00	-9.96	-0.82	0.00	-16.46	0.00	16.46	1,534.57	370.41	890	838.60	2.76	-0.24	0.03
123.58	-9.76	-0.81	0.00	-13.53	0.00	13.53	1,495.38	357.56	829	788.57	2.94	-0.25	0.02
125.00	-9.42	-0.78	0.00	-12.39	0.00	12.39	1,479.61	352.49	806	769.07	3.02	-0.25	0.02
127.42	-9.20	-0.77	0.00	-10.50	0.00	10.50	1,010.16	262.43	596	522.47	3.15	-0.26	0.03
130.00	-7.19	-0.62	0.00	-8.51	0.00	8.51	993.06	255.49	564	499.93	3.29	-0.26	0.02
135.00	-7.16	-0.62	0.00	-5.40	0.00	5.40	958.47	242.04	507	456.93	3.57	-0.27	0.02
135.30	-6.96	-0.61	0.00	-5.21	0.00	5.21	956.33	241.24	503	454.38	3.59	-0.27	0.02
136.30	-6.85	-0.60	0.00	-4.61	0.00	4.61	949.16	238.55	492	445.91	3.64	-0.27	0.02
136.50	-6.66	-0.58	0.00	-4.49	0.00	4.49	947.71	238.01	490	444.22	3.66	-0.27	0.02
137.20	-6.36	-0.56	0.00	-4.08	0.00	4.08	942.63	236.13	482	438.31	3.70	-0.28	0.02
138.00	-5.27	-0.47	0.00	-3.63	0.00	3.63	936.78	233.97	473	431.59	3.74	-0.28	0.01
138.20	-5.15	-0.46	0.00	-3.54	0.00	3.54	935.30	233.44	471	429.91	3.75	-0.28	0.01
140.00	-2.99	-0.28	0.00	-2.71	0.00	2.71	921.92	228.60	452	414.90	3.86	-0.28	0.01
145.00	-2.76	-0.26	0.00	-1.30	0.00	1.30	883.40	215.15	400	373.98	4.15	-0.28	0.01
150.00	0.00	-0.25	0.00	0.00	0.00	0.00	842.93	201.71	352	334.35	4.45	-0.28	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	22.96	0.00	46.16	0.00	0.00	2574.77	91.50	0.6
0.9D + 1.0W	22.95	0.00	34.61	0.00	0.00	2544.68	91.50	0.59
1.2D + 1.0Di + 1.0Wi	6.13	0.00	62.31	0.00	0.00	670.68	91.50	0.16
1.2D + 1.0Ev + 1.0Eh	1.17	0.00	46.19	0.00	0.00	146.68	91.50	0.04
0.9D - 1.0Ev + 1.0Eh	1.17	0.00	31.78	0.00	0.00	144.54	91.50	0.04
1.0D + 1.0W	5.22	0.00	38.49	0.00	0.00	581.58	91.50	0.14

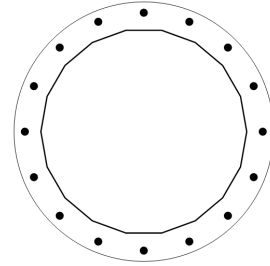
BASE PLATE ANALYSIS @ 0 FT

APPLIED REACTIONS

Moment (k-ft)	Axial (k)	Shear (k)
2574.77	46.16	22.96

PLATE PARAMETERS (ID# 16932)

Width:	72	in
Shape:	Round	
Thickness:	2	in
Grade:	A572-60	
Yield Strength:	60	ksi
Tensile Strength:	75	ksi
Rod Detail Type:	d	
Clear Distance	5.5	in
Base Weld Size:	0.125	in
Orientation Offset:	-	°
Analysis Type:	Plastic	
Neutral Axis:	45	°



ANCHOR ROD PARAMETERS

Class	Arrangement	Quantity	Diameter (in)	Circle (in)	Grade	F _y (ksi)	F _u (ksi)	Spacing (in)	Offset (°)
Original [ID#17330]	Radial	16	2.25	66	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	56.4966"ø x 0.375" (18 Sides)	65.7815	-	-	25901.57	-
Bolt Group	Original (16) 2.25"ø	3.9761	3.2477	0.8393	26101.41	4.5

REACTION DISTRIBUTION

Component	ID	Moment M _u (k-ft)	Axial Load P _u (k)	Shear V _u (k)	Moment Factor
Pole	56.4966"ø x 0.375" (18 Sides)	2574.8	46.16	22.96	1.000
Bolt Group	Original (16) 2.25"ø	2574.8	-	22.96	1.000

BASE PLATE BEND LINE ANALYSIS @ 0 FT

POLE PROPERTIES

Flat-to-Flat Diameter:	56.62	in	Flat Width:	9.984	in
Point-to-Point Diameter:	57.50	in	Flat Radians:	0.349	rad
Orientation Offset:	-	°			

PLATE PROPERTIES

Neutral Axis:	45	°
Bend Line Limits:	1.741 to 2.972	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	40.112	0.00	40.112	643.8	2166.0	29.7%
Corners	38.850	0.00	38.850	488.5	2097.9	23.3%
Circumferential	53.448	0.00	53.448	1045.4	2886.2	36.2%

PLASTIC ANCHOR ROD ANALYSIS

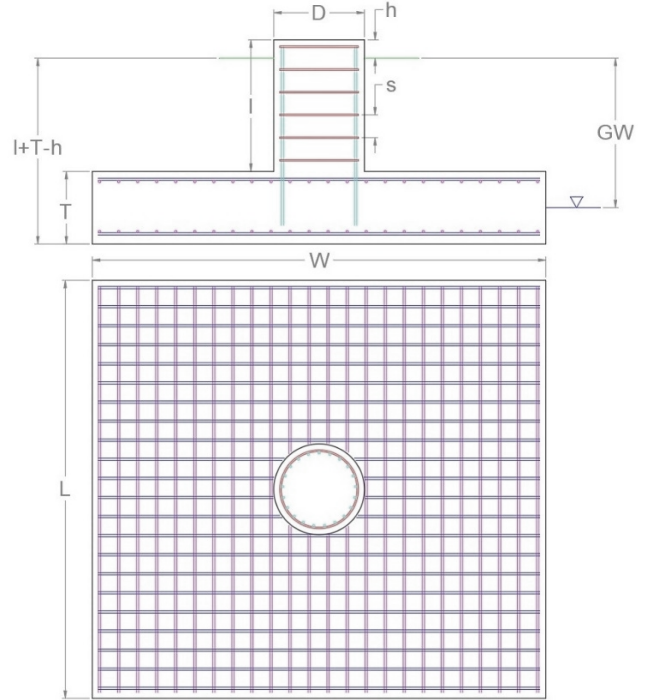
Class	Group Quantity	Rod Diameter (in)	Applied Axial Load P _u (k)	Applied Shear Load V _u (k)	Compressive Capacity ΦP _n (k)	Plastic Result
Original	16	2.25	102.8	2.3	243.6	42.2%

APPLIED GLOBAL REACTIONS

Moment (k-ft)	Axial (k)	Shear (k)
2,574.77	46.16	22.96

FOUNDATION PARAMETERS

Mat Length:	L	27	ft
Mat Width:	W	27	ft
Mat Thickness:	T	2.5	ft
Base Depth:	L+T-h	4.5	ft
Pier Shape:		Round	
Pier Diameter:	D	7	ft
Pier Height above Grade:	h	1	ft
Concrete Compressive Strength:		4,000	psi
Mat Top Rebar:		(12) #8 bars [60 ksi]	
Mat Bottom Rebar:		(22) #8 bars [60 ksi]	
Pier Vertical Rebar:		(40) #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		ft
Soil Unit Weight:		160	pcf
Ultimate Skin Friction:		0	psf
Ultimate Bearing Pressure:		24,000	psf
Bearing Pressure Type:		Gross	
Coefficient of Shear Friction:		0.3	

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, $M_{u,Design} / \Phi_m M_n$
2,701.05	6,957.79	38.8% ✔

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, $P_{u,net} / \Phi_b P_n$
1,145.00	18,000.00	Diagonal to Pad Edge	6.4% ✔

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, $V_u / \Phi_s V_n$
22.96	0.00	520.0	35.10	150.10	15.0% ✔

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, $V_u / \Phi_c V_n$
85.88	799.17	Parallel to Pad Edge	10.7%

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, $v_u / \Phi_c v_n$
42.7	189.7	22.5%

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, $0.6 M_{ut} / \Phi M_{sc,f}$
14.50	1.00	0.00	13,646.8	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, $M_u / \Phi M_n$
938.20	1,099.80	Parallel to Pad Edge	85.3%

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, $M_u / \Phi M_n$
1,030.80	2,001.99	Parallel to Pad Edge	51.5%

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
76.00	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, $M_u / \Phi_u M_n$
2,643.65	5,285.62	0.006	50.0%

PIER REINFORCING COMPRESSION ANALYSIS

Design Compression, P_u (k)	Nominal Compressive Capacity, $\Phi_p P_n$ (k)	Pier Rebar Compressive Usage, $P_u / \Phi_p P_n$
46.16	9,766.63	0.5%

PIER REINFORCING SHEAR ANALYSIS

Design Shear, V_u (k)	Nominal Shear Capacity, $\Phi_v V_n$ (k)	Pier Rebar Shear Usage, $V_u / \Phi_v V_n$
22.96	729.53	3.1%

EXHIBIT 4





Colliers Engineering & Design, CT PC
1055 Washington Blvd
Stamford, CT 06901
203.324.0800
peter.albano@collierseng.com

Antenna Mount Analysis Report and PMI Requirements

Mount ReAnalysis

SMART Tool Project #: 10208061
Colliers Engineering & Design CT, PC Project #: 23777216
August 3, 2023

Site Information

Site ID: 5000244948-VZW / MIDDLEFIELD CT
Site Name: MIDDLEFIELD CT
Carrier Name: Verizon Wireless
Address: 484 Meriden Road
Middlefield, Connecticut 06455
Middlesex County
Latitude: 41.535514°
Longitude: -72.732094°

Structure Information

Tower Type: 152-Ft Monopole
Mount Type: 13.76-Ft Platform

FUZE ID # 17123783

Analysis Results

Platform: 88.0% Pass*

***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: Dejian Xu

Executive Summary:

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

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

Sources of Information:

Document Type	Remarks
Radio Frequency Sheet (RFDS)	Verizon RFDS, Site ID: 324353, Dated February 9, 2021
Mount Mapping Report	RKS Design & Engineering LLC, Site #: ATC: 411260, Dated March 26, 2021
Previous Mount Analysis Report	Maser Consulting Connecticut, Project #: 21777435A (Rev 1), Dated August 23, 2021
Antenna Mount Post-Modification Inspection Report	Maser Consulting Connecticut, Project #: 21777435A, Dated June 6, 2022
Filter Add Scope	Provided by Verizon Wireless

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H 2022 Connecticut State Building Code (CSBC), Effective October 1, 2022
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT} : 120 mph Ice Wind Speed (3-sec. Gust): 50 mph Design Ice Thickness: 1.00 in Risk Category: II Exposure Category: C Topographic Category: 1 Topographic Feature Considered: N/A Topographic Method: N/A Ground Elevation Factor, K_e : 0.985
Seismic Parameters:	S_s : 0.209 g S_1 : 0.055 g
Maintenance Parameters:	Wind Speed (3-sec. Gust): 30 mph Maintenance Live Load, L_v : 250 lbs. Maintenance Live Load, L_m : 500 lbs.
Analysis Software:	RISA-3D (V17)

Final Loading Configuration:

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
151.67	152.83	3	Samsung	MT6407-77A	Retained
		6	Amphenol Antel	LPA-80063-6CF-EDIN-2	
		4	Commscope	NHH-45B-R2B	
		2	Commscope	NHH-65B-R2B	
		1	RFS	DB-C1-12C-24AB-0Z	
		3	Samsung	B2/B66A RRH-BR049	
		3	Samsung	B5/B13 RRH-BR04C	
		4	KAelus	KA-6030	Added

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

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

Standard Conditions:

1. All engineering services are performed on the basis that the information provided to Colliers Engineering & Design, CT PC and used in this analysis is current and correct. The existing equipment loading has been applied at locations determined from the supplied documentation. Any deviation from the loading locations specified in this report shall be communicated to Colliers Engineering & Design, CT PC to verify deviation will not adversely impact the analysis.
2. Mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer’s specifications.

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

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

3. For mount analyses completed from other data sources (including new replacement mounts) and not specifically mapped in accordance with the NSTD-446 Standard, the mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer’s specifications.
4. All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected member unless otherwise specified in this report.

5. The mount was checked up to, and including, the bolts that fasten it to the mount collar/attachment and threaded rod connections in collar members if applicable. Local deformation and interaction between the mount collar/attachment and the supporting tower structure are outside the scope of this analysis.
6. All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. Colliers Engineering & Design, CT PC is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.
7. Structural Steel Grades have been assumed as follows, if applicable, unless otherwise noted in this analysis:
 - o Channel, Solid Round, Angle, Plate ASTM A36 (Gr. 36)
 - o HSS (Rectangular) ASTM 500 (Gr. B-46)
 - o Pipe ASTM A53 (Gr. B-35)
 - o Threaded Rod F1554 (Gr. 36)
 - o Bolts ASTM A325

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

Analysis Results:

Component	Utilization %	Pass/Fail
Standoff Horizontal	29.8 %	Pass
Face Horizontal	26.2 %	Pass
Mount Pipe	83.9 %	Pass
Kicker	14.4 %	Pass
Connection	88.0 %	Pass

Structure Rating – (Controlling Utilization of all Components)	88.0%
---	--------------

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	18.4	18.4	41.7	41.7
0.5	23.2	23.2	56.4	56.4
1	27.5	27.5	70.5	70.5

Notes:

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

Requirements:

The existing mount is **SUFFICIENT** for the final loading configuration shown in attachment 2 and do not require modifications. Additional requirements are noted below.

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

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

Attachments:

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

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

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

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

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

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

MDG #: 5000244948

SMART Project #: 10208061

Fuze Project ID: 17123783

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

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

Base Requirements:

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

Photo Requirements:

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

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

Antenna & equipment placement and Geometry Confirmation:

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

OR

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

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

Issue:

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

Response:

Special Instruction Confirmation:

- The contractor has read and acknowledges the above special instructions.
- All hardware listed in the Special Instructions above (if applicable) has been properly installed, and the existing hardware was inspected.
- The material utilized was as specified in the SMART Tool engineering vendor Special Instructions above (if applicable) and included in the material certification folder is a packing list or invoice for these materials.

OR

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

Comments:

--

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

Yes No

Contractor certifies no new damage created during the current installation:

Yes No

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

Safety Climb in Good Condition Safety Climb Damaged

Certifying Individual:

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

Se tor: A

8/3/2023

Str t re Type: Mo opole

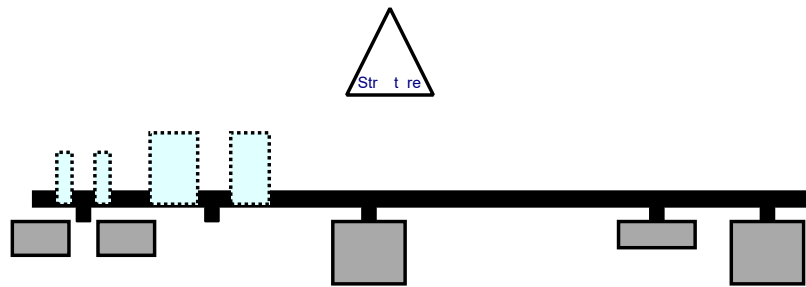
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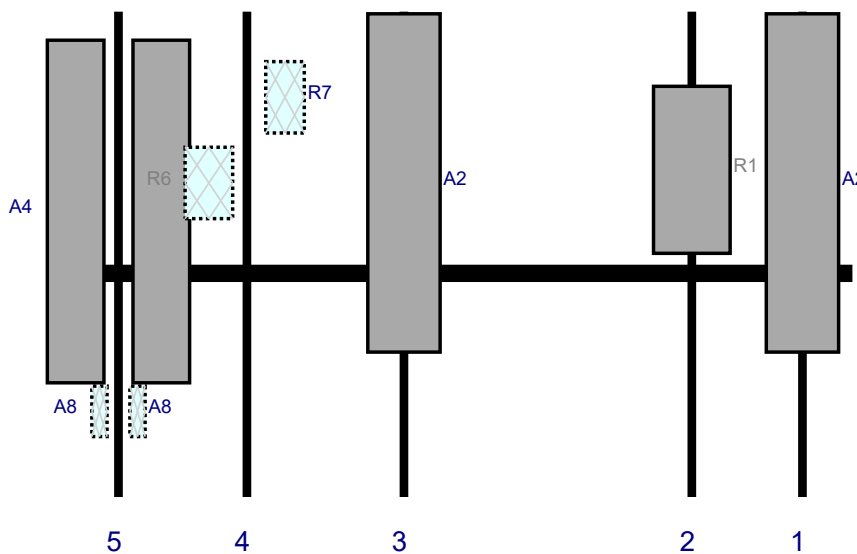
Mo t Elev: 151.67

P ge: 1

Plan View



Front View - Looking at Structure



Re #	Model	Height (i)	Width (i)	H Dist Fr L.	Pipe #	Pipe Pos V	A t Pos	C. A t Fr T.	A t H O	St t s	V lid tio
A2	LPA-80063-6CF-EDIN-2	71.1	15.2	154.586	1		Fro t	36	0	Ret i ed	05/20/2022
R1	MT6407-77A	35.1	16.1	131.336	2		Fro t	33.24	0	Ret i ed	05/20/2022
A2	LPA-80063-6CF-EDIN-2	71.1	15.2	70.8361	3		Fro t	36	0	Ret i ed	05/20/2022
R6	B2/B66A RRH-BR049 (RFV01U-D1A)	15	10	37.8361	4		Behi d	36	-8	Ret i ed	05/20/2022
R7	B5/B13 RRH-BR04C (RFV01U-D2A)	15	8.1	37.8361	4		Behi d	18	8	Ret i ed	05/20/2022
A4	NHH-65B-R2B	72	11.9	10.8361	5		Fro t	42	-9	Ret i ed	05/20/2022
A4	NHH-65B-R2B	72	11.9	10.8361	5		Fro t	42	9	Ret i ed	05/20/2022
A8	KA-6030	10.6	3.2	10.8361	5		Behi d	84	-4	Added	
A8	KA-6030	10.6	3.2	10.8361	5		Behi d	84	4	Added	
OVP	DB-C1-12C-24AB-0Z	29.5	16.5			Me er				Ret i ed	05/20/2022

Se tor: B

8/3/2023

Str t re Type: Mo opole

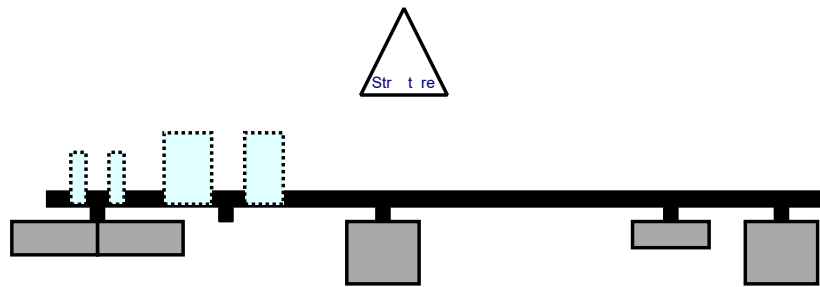
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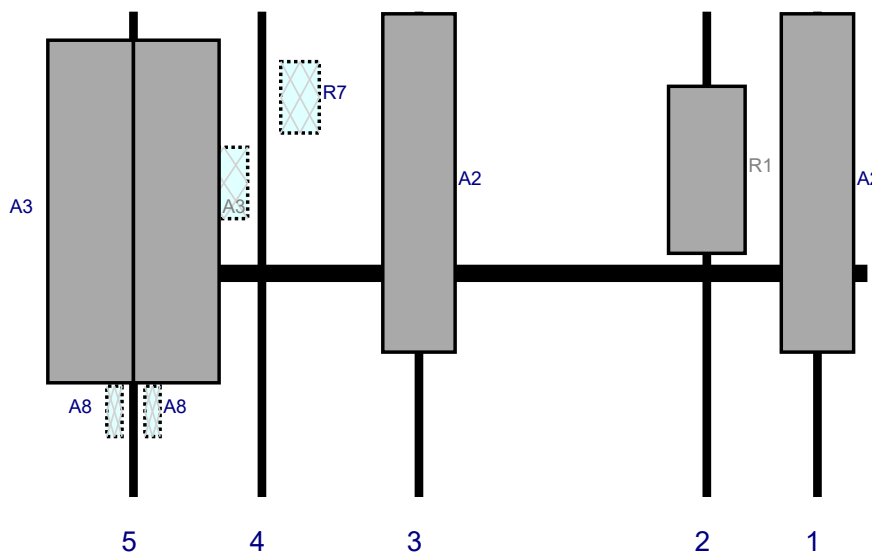
Mo t Elev: 151.67

P ge: 2

Plan View

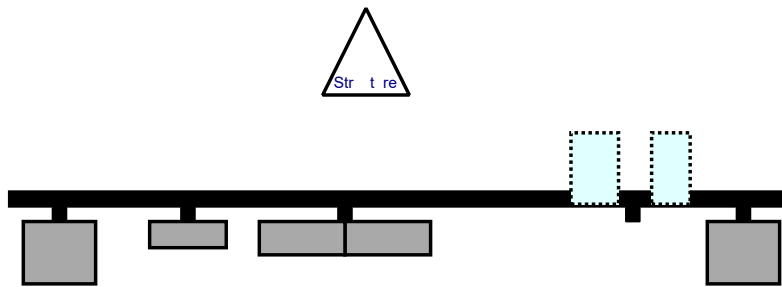


Front View - Looking at Structure

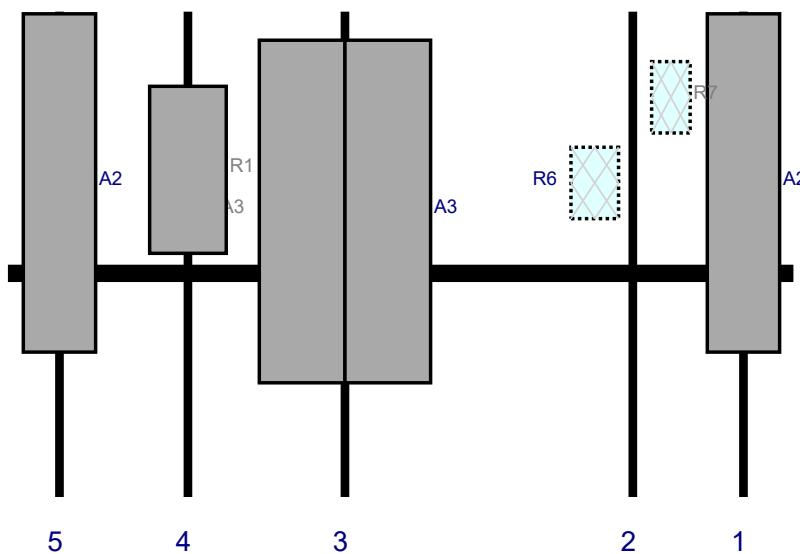


Re #	Model	Height (i)	Width (i)	H Dist Fr L.	Pipe #	Pipe Pos V	A t Pos	C. A t Fr T.	A t H O	St t s	V lid tio
A2	LPA-80063-6CF-EDIN-2	71.1	15.2	154.586	1		Fro t	36	0	Ret i ed	05/20/2022
R1	MT6407-77A	35.1	16.1	131.336	2		Fro t	33.24	0	Ret i ed	05/20/2022
A2	LPA-80063-6CF-EDIN-2	71.1	15.2	70.8361	3		Fro t	36	0	Ret i ed	05/20/2022
R6	B2/B66A RRH-BR049 (RFV01U-D1A)	15	10	37.8361	4		Behi d	36	-8	Ret i ed	05/20/2022
R7	B5/B13 RRH-BR04C (RFV01U-D2A)	15	8.1	37.8361	4		Behi d	18	8	Ret i ed	05/20/2022
A3	NHH-45B-R2B	72	18	10.8361	5		Fro t	42	-9	Ret i ed	05/20/2022
A3	NHH-45B-R2B	72	18	10.8361	5		Fro t	42	9	Ret i ed	05/20/2022
A8	KA-6030	10.6	3.2	10.8361	5		Behi d	84	-4	Added	
A8	KA-6030	10.6	3.2	10.8361	5		Behi d	84	4	Added	

Plan View



Front View - Looking at Structure




Re #	Model	Height (i)	Width (i)	H Dist Fr L.	Pipe #	Pipe Pos V	A t Pos	C. A t Fr T.	A t H O	St t s	V lid tio
A2	LPA-80063-6CF-EDIN-2	71.1	15.2	154.586	1		Fro t	36	0	Ret i ed	05/20/2022
R6	B2/B66A RRH-BR049 (RFV01U-D1A)	15	10	131.336	2		Behi d	36	-8	Ret i ed	05/20/2022
R7	B5/B13 RRH-BR04C (RFV01U-D2A)	15	8.1	131.336	2		Behi d	18	8	Ret i ed	05/20/2022
A3	NHH-45B-R2B	72	18	70.8361	3		Fro t	42	-9	Ret i ed	05/20/2022
A3	NHH-45B-R2B	72	18	70.8361	3		Fro t	42	9	Ret i ed	05/20/2022
R1	MT6407-77A	35.1	16.1	37.8361	4		Fro t	33.24	0	Ret i ed	05/20/2022
A2	LPA-80063-6CF-EDIN-2	71.1	15.2	10.8361	5		Fro t	36	0	Ret i ed	05/20/2022



May 20, 2022 at 2:49:48 PM
484 Meriden Rd
Middlefield CT 06455
United States



	Antenna Mount Mapping Form (PATENT PENDING)			FCC #
				UNKNOWN
Tower Owner:	ATC	Mapping Date:	3/26/2021	
Site Name:	ATC:MIDDLEFIELD CT,VZW:MIDDLEFIELD CT	Tower Type:	Monopole	
Site Number or ID:	ATC:411260, VZW:16244155	Tower Height (Ft.):	150.5	
Mapping Contractor:	RKS Design & Engineering LLC	Mount Elevation (Ft.):	150.5	

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

Mount Pipe Configuration and Geometries [Unit = Inches]							
Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."
A1	Pipe 2.375"Ø X 0.16" X 102" Long	55.75	10.50	C1	Pipe 2.375"Ø X 0.16" X 102" Long	55.75	10.50
A2	Pipe 2.375"Ø X 0.16" X 102" Long	56.00	33.75	C2	Pipe 2.375"Ø X 0.16" X 102" Long	56.00	33.75
A3	Pipe 2.375"Ø X 0.16" X 84" Long	51.50	94.25	C3	Pipe 2.375"Ø X 0.16" X 84" Long	51.50	94.25
A4	Pipe 2.375"Ø X 0.16" X 102" Long	49.25	127.25	C4	Pipe 2.375"Ø X 0.16" X 102" Long	49.25	127.25
A5	Pipe 2.375"Ø X 0.16" X 102" Long	55.50	154.25	C5	Pipe 2.375"Ø X 0.16" X 102" Long	55.50	154.25
A6				C6			
B1	Pipe 2.375"Ø X 0.16" X 102" Long	55.75	10.50	D1			
B2	Pipe 2.375"Ø X 0.16" X 102" Long	56.00	33.75	D2			
B3	Pipe 2.375"Ø X 0.16" X 84" Long	51.50	94.25	D3			
B4	Pipe 2.375"Ø X 0.16" X 102" Long	49.25	127.25	D4			
B5	Pipe 2.375"Ø X 0.16" X 102" Long	55.50	154.25	D5			
B6				D6			

Distance between bottom rail and mount CL elevation (dim d). Unit is inches. See 'Mount Elev Ref' tab for details. :

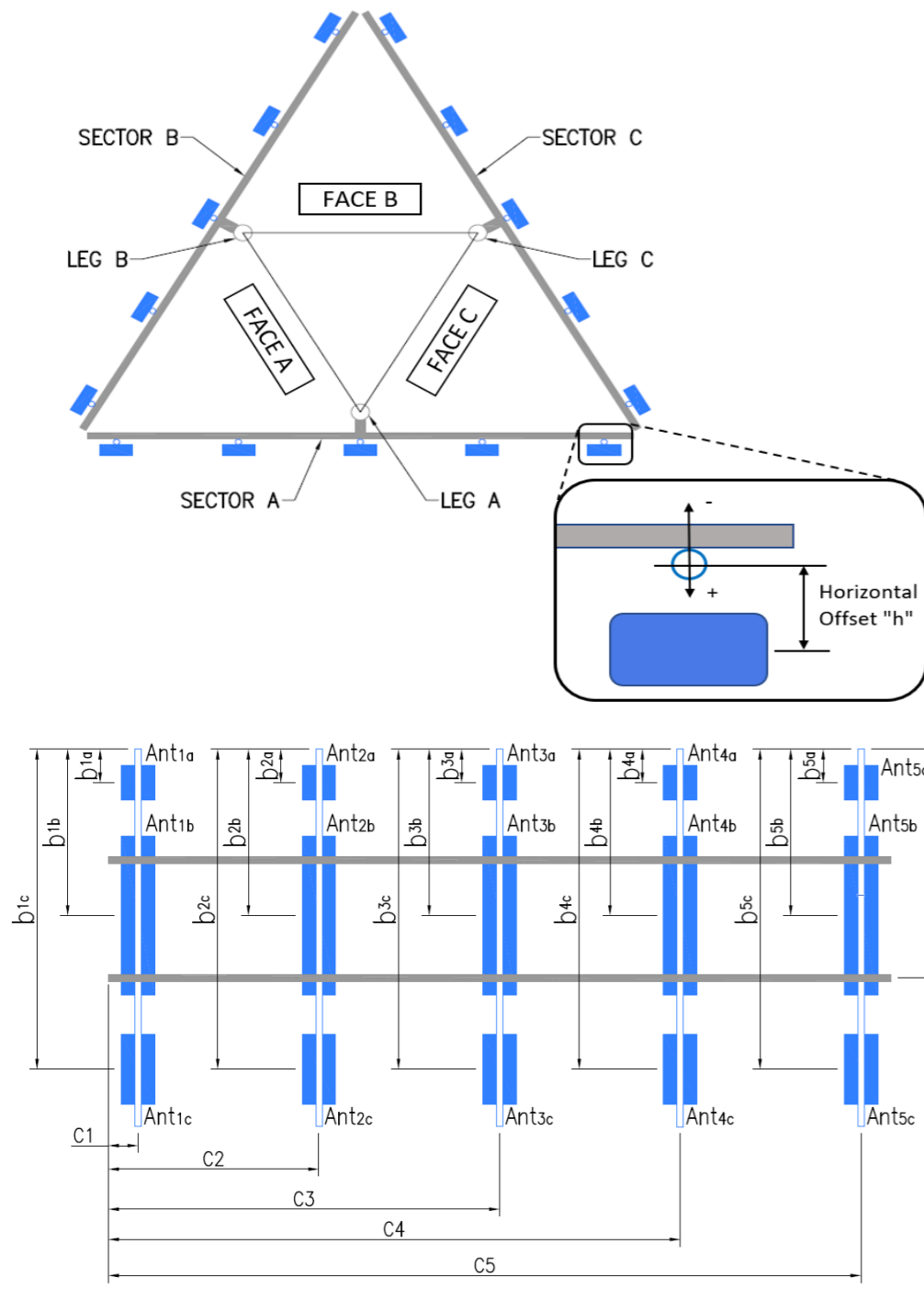
Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) :

Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) : 6

Please enter additional information or comments below.

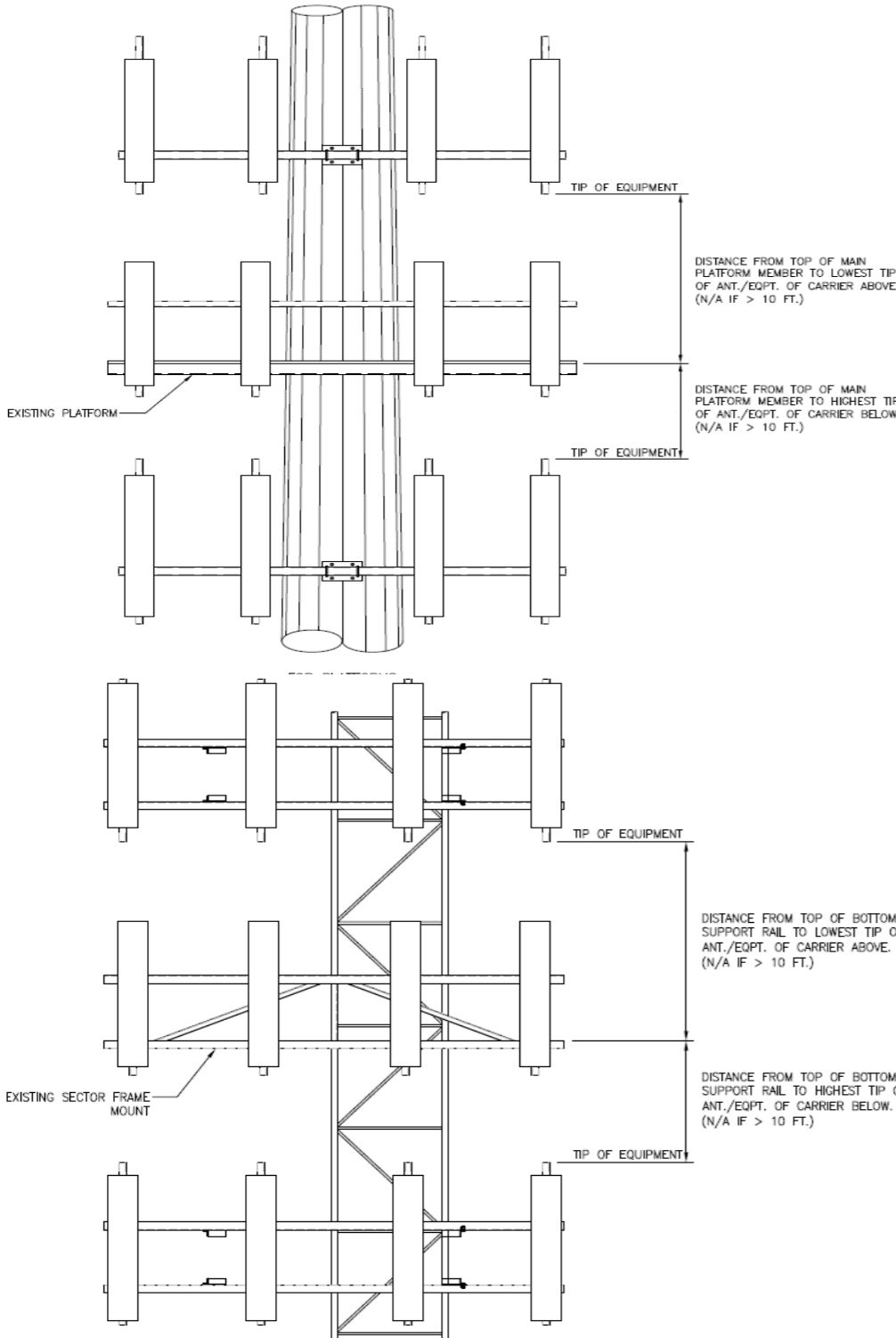
Tower Face Width at Mount Elev. (ft.): Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.): 20.625

Ants. Items	Enter antenna model. If not labeled, enter "Unknown".						Mounting Locations [Units are inches and degrees]			Photos of antennas
	Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Vertical Distances "b _{1a} , b _{2a} , b _{3a} , b _{1b} ..." (Inches)	Horiz. Offset "h" (Use "-" if Ant. is behind)	Antenna Azimuth (Degrees)	
Sector A										
Ant _{1a}										
Ant _{1b}	LPA-80063-6CF-EDIN	15.20	13.10	71.10		152.063	37.00	13.50	0.00	32,180
Ant _{1c}										
Ant _{2a}	RFV01U-D1A	15.00	10.00	15.00		153.958	14.50			32,180
Ant _{2b}										
Ant _{2c}	RFV01U-D2A	15.00	8.10	15.00		153.042	25.50			32,180
Ant _{3a}										
Ant _{3b}	(2)NHH-65B-R2B	11.90	7.10	72.00		152.25	30.50	11.50	45.00	32,181
Ant _{3c}										
Ant _{4a}										
Ant _{4b}										
Ant _{4c}										
Ant _{5a}										
Ant _{5b}	LPA-80063-6CF-EDIN	15.20	13.10	71.10		151.917	38.50	14.50	45.00	32,183
Ant _{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										



Antenna Layout (Looking Out From Tower)

Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector				Sector B										
Sector A:	0.00	Deg	Leg A:		Deg	Ant _{1a}												
Sector B:	120.00	Deg	Leg B:		Deg	Ant _{1b}	LPA-80063-6CF-EDIN-	15.20	13.10	71.10		152.063	37.00	13.50	45.00	41,186		
Sector C:	240.00	Deg	Leg C:		Deg	Ant _{1c}												
Sector D:		Deg	Leg D:		Deg	Ant _{2a}	RFV01U-D1A	15.00	10.00	15.00		153.958	14.50			41,186		
Climbing Facility Information						Ant _{2b}												
Location:	120.00	Deg	N/A				Ant _{2c}	RFV01U-D2A	15.00	8.10	15.00		153.042	25.50			41,186	
Climbing Facility	Corrosion Type:		N/A				Ant _{3a}											
	Access:		Climbing path was unobstructed.				Ant _{3b}	(2)NHH-45B-R2B	18.00	7.00	72.00		152.208	31.00	11.50	180.00	41,188	
	Condition:		Good condition.				Ant _{3c}											
						Ant _{4a}												
						Ant _{4b}												
						Ant _{4c}												
						Ant _{5a}												
						Ant _{5b}	LPA-80063-6CF-EDIN-	15.20	13.10	71.10		151.917	38.50	14.50	120.00	41,188		
						Ant _{5c}												
						Ant on Standoff	RRFDC-6627-PF-48	16.50	12.60	29.70			37.00				126	
						Ant on Standoff												
						Ant on Tower												
						Ant on Tower												
														Sector C				
						Ant _{1a}												
						Ant _{1b}	LPA-80063-6CF-EDIN-	15.20	13.10	71.10		152.063	37.00	13.50	240.00	51,192		
						Ant _{1c}												
						Ant _{2a}	RFV01U-D1A	15.00	10.00	15.00		153.958	14.50			51,192		
						Ant _{2b}												
						Ant _{2c}	RFV01U-D2A	15.00	8.10	15.00		153.042	25.50			51,192		
						Ant _{3a}												
						Ant _{3b}	(2)NHH-45B-R2B	18.00	7.00	72.00		152.208	31.00	11.50	240.00	51,193		
						Ant _{3c}												
						Ant _{4a}												
						Ant _{4b}												
						Ant _{4c}												
						Ant _{5a}												
						Ant _{5b}	LPA-80063-6CF-EDIN-	15.20	13.10	71.10		151.917	38.50	14.50	240.00	51,195		
						Ant _{5c}												
						Ant on Standoff												
						Ant on Standoff												
						Ant on Tower												
						Ant on Tower												
														Sector D				
						Ant _{1a}												
						Ant _{1b}												
						Ant _{1c}												
						Ant _{2a}												
						Ant _{2b}												
						Ant _{2c}												
						Ant _{3a}												
						Ant _{3b}												
						Ant _{3c}												
						Ant _{4a}												
						Ant _{4b}												
						Ant _{4c}												
						Ant _{5a}												
						Ant _{5b}												
						Ant _{5c}												
						Ant on Standoff												
						Ant on Standoff												
						Ant on Tower												
						Ant on Tower												



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

1	COAX TOTAL(7): (6)FH 1-5/8 , (1) 1.9"Ø HYBRID	152
2		
3		
4		
5		
6		
7		
8		

Mapping Notes

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

Standard Conditions

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



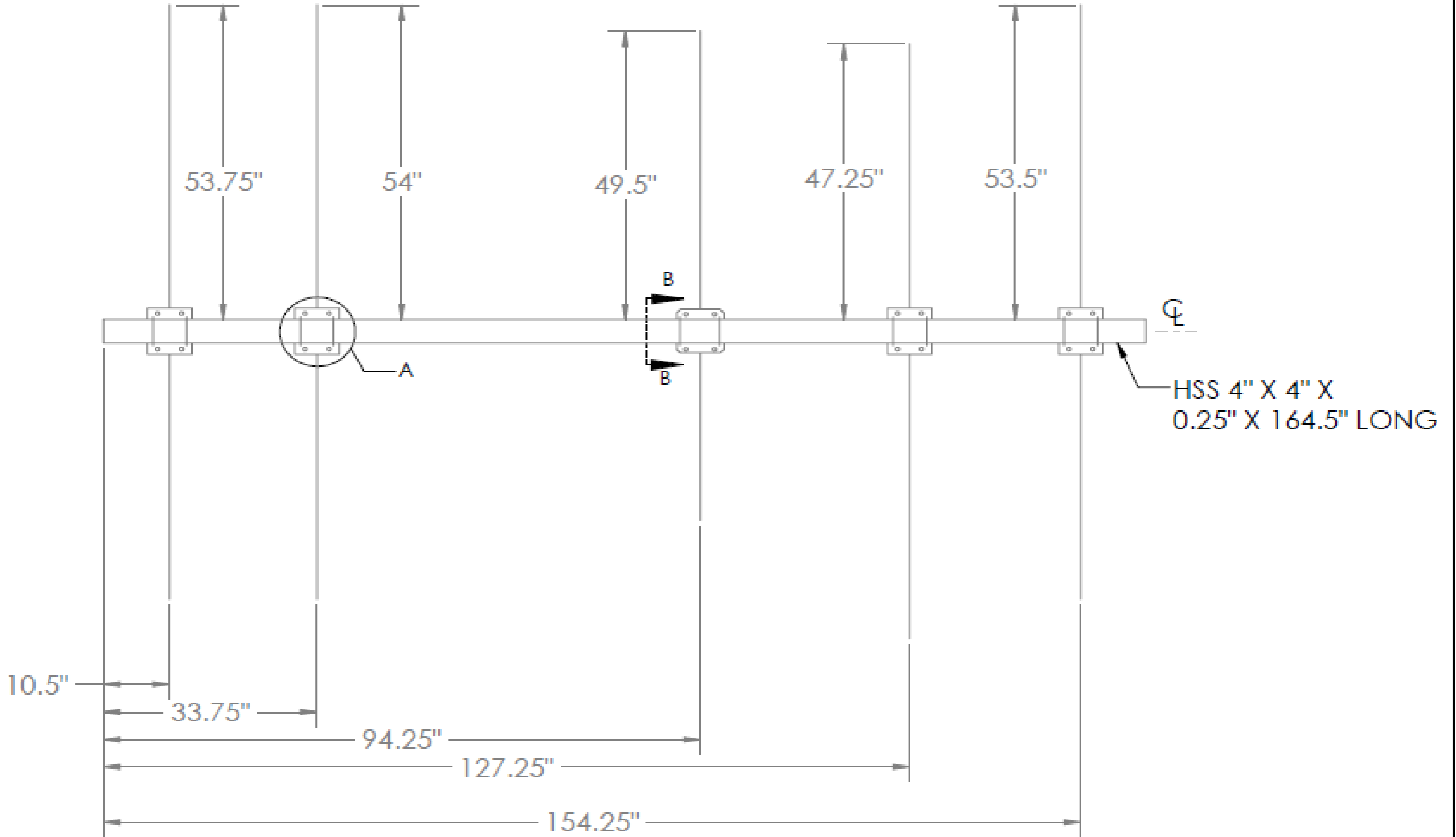
Antenna Mount Mapping Form (PATENT PENDING)

FCC #
UNKNOWN

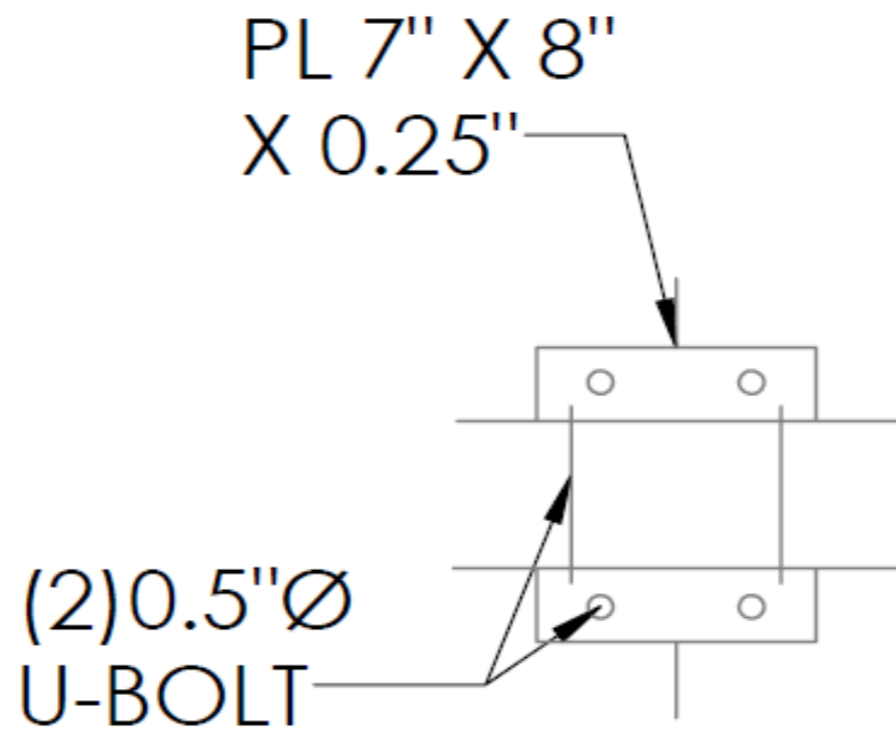
Tower Owner:	ATC	Mapping Date:	3/26/2021
Site Name:	ATC:MIDDLEFIELD CT,VZW:MIDDLEFIELD CT	Tower Type:	Monopole
Site Number or ID:	ATC:411260, VZW:16244155	Tower Height (Ft.):	150.5
Mapping Contractor:	RKS Design & Engineering LLC	Mount Elevation (Ft.):	150.5

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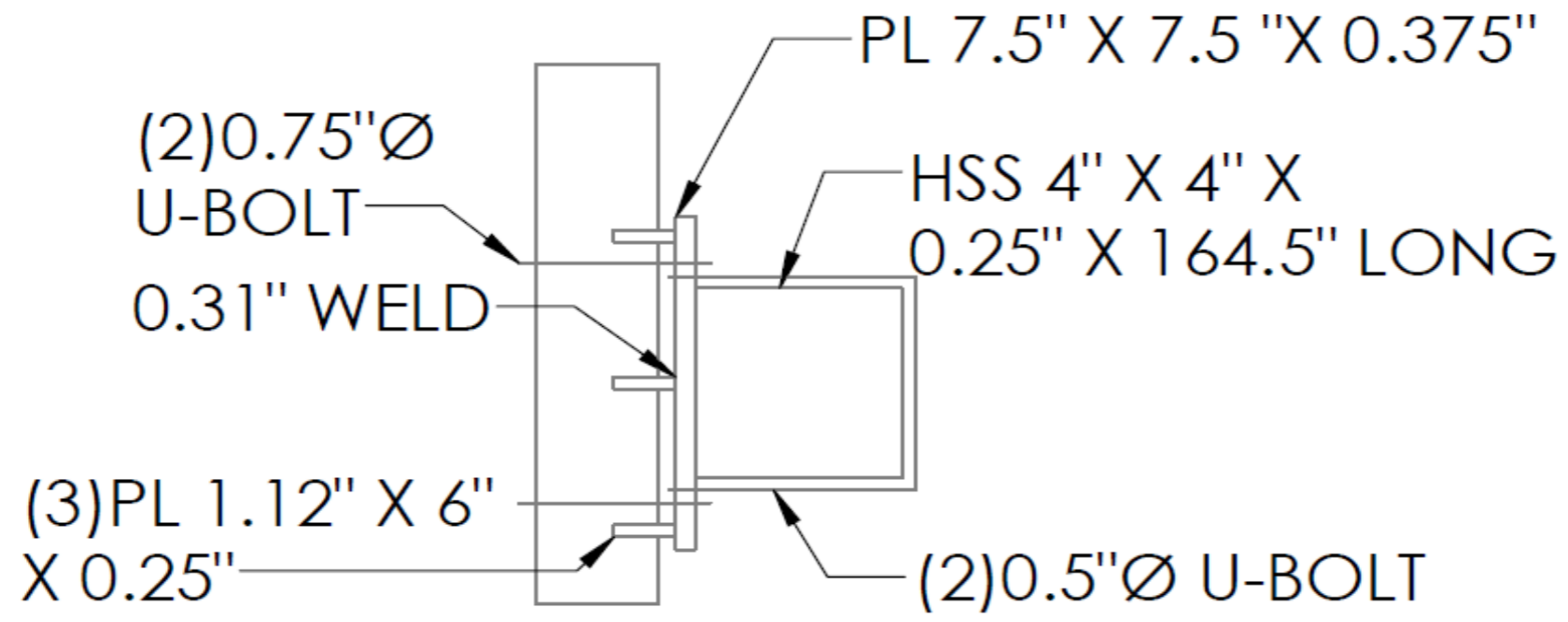
Please Insert Sketches of the Antenna Mount



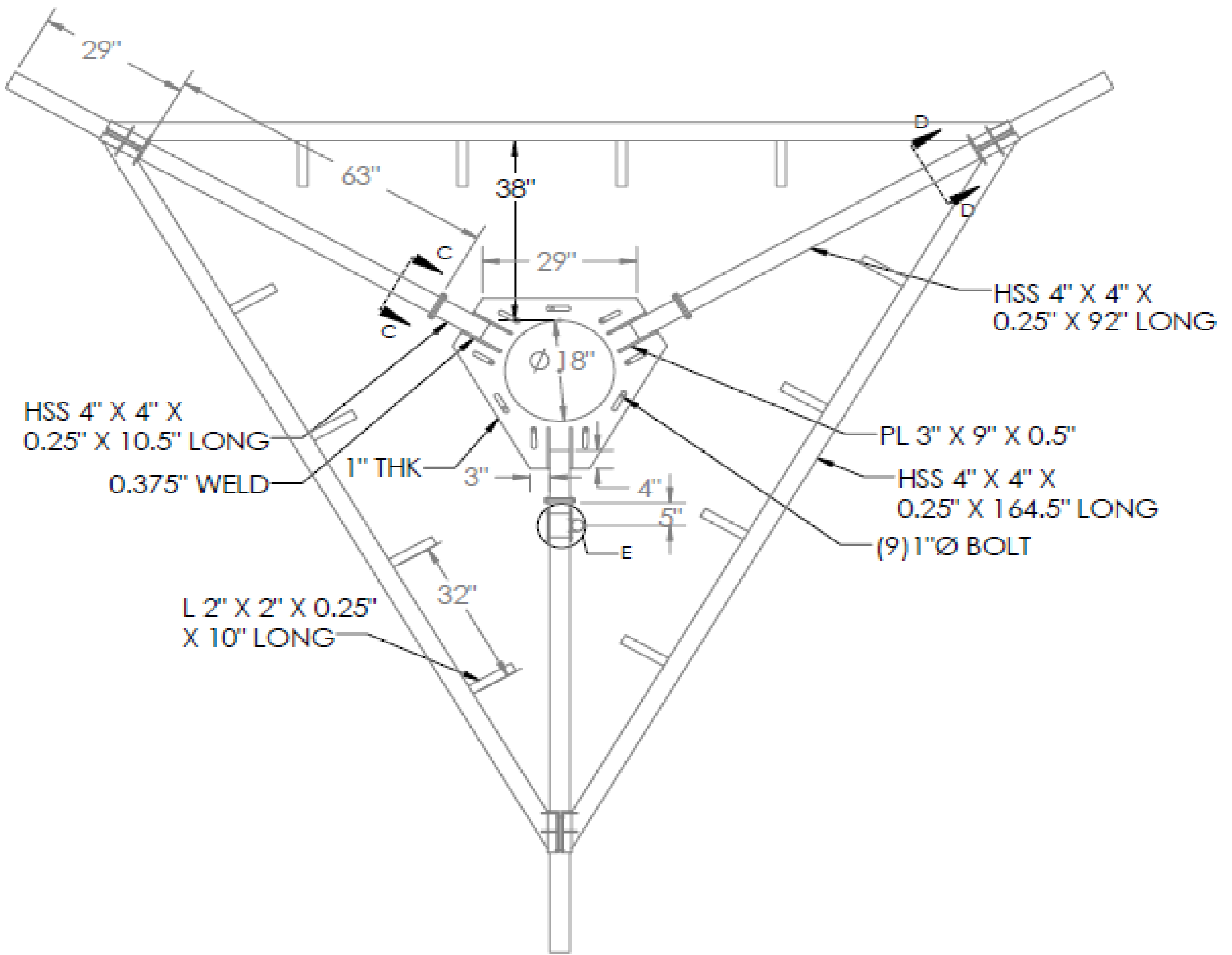
SECTOR A, B & C



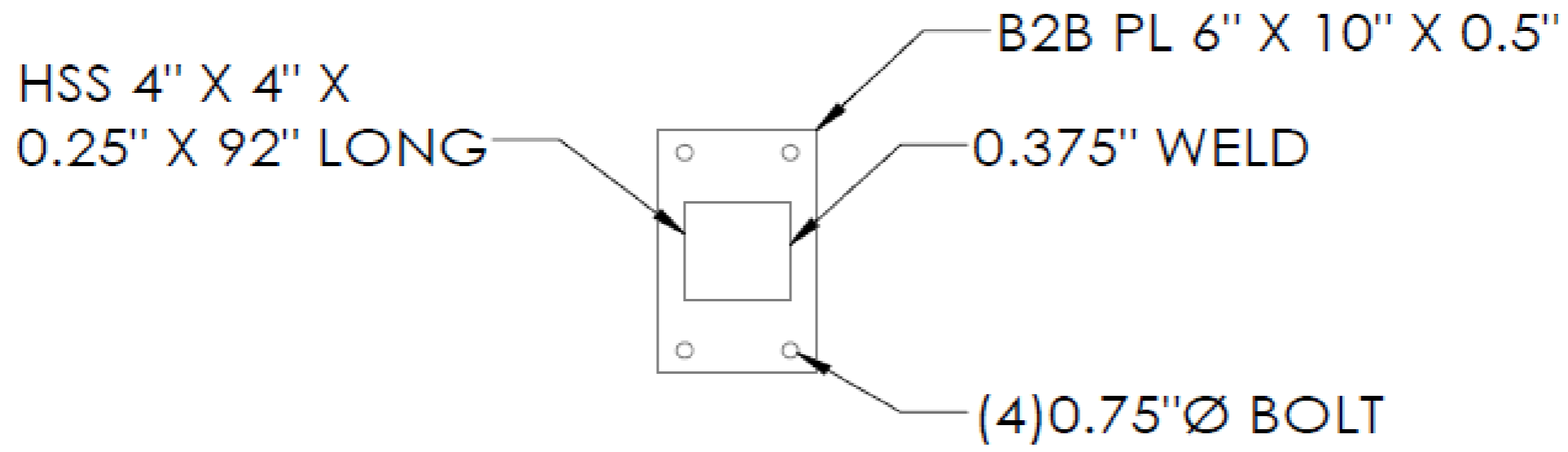
DETAIL A



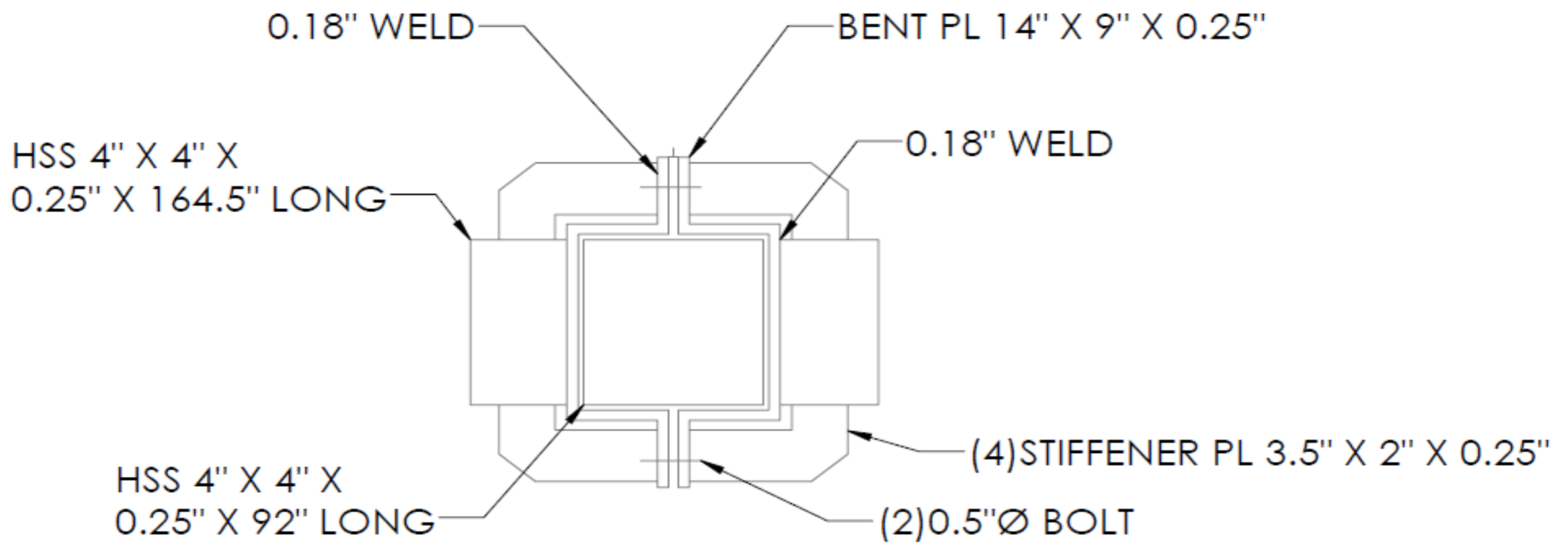
SECTION B-B



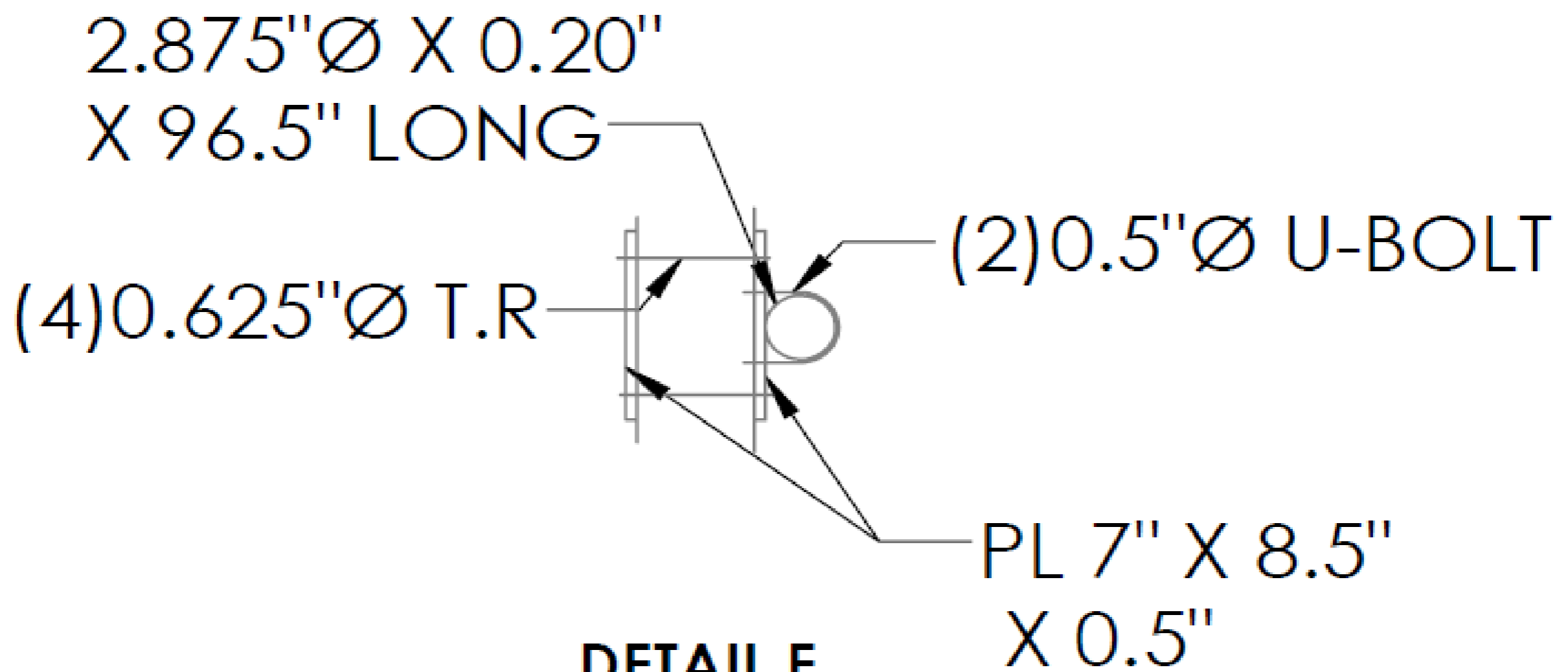
MOUNT VIEW



SECTION C-C

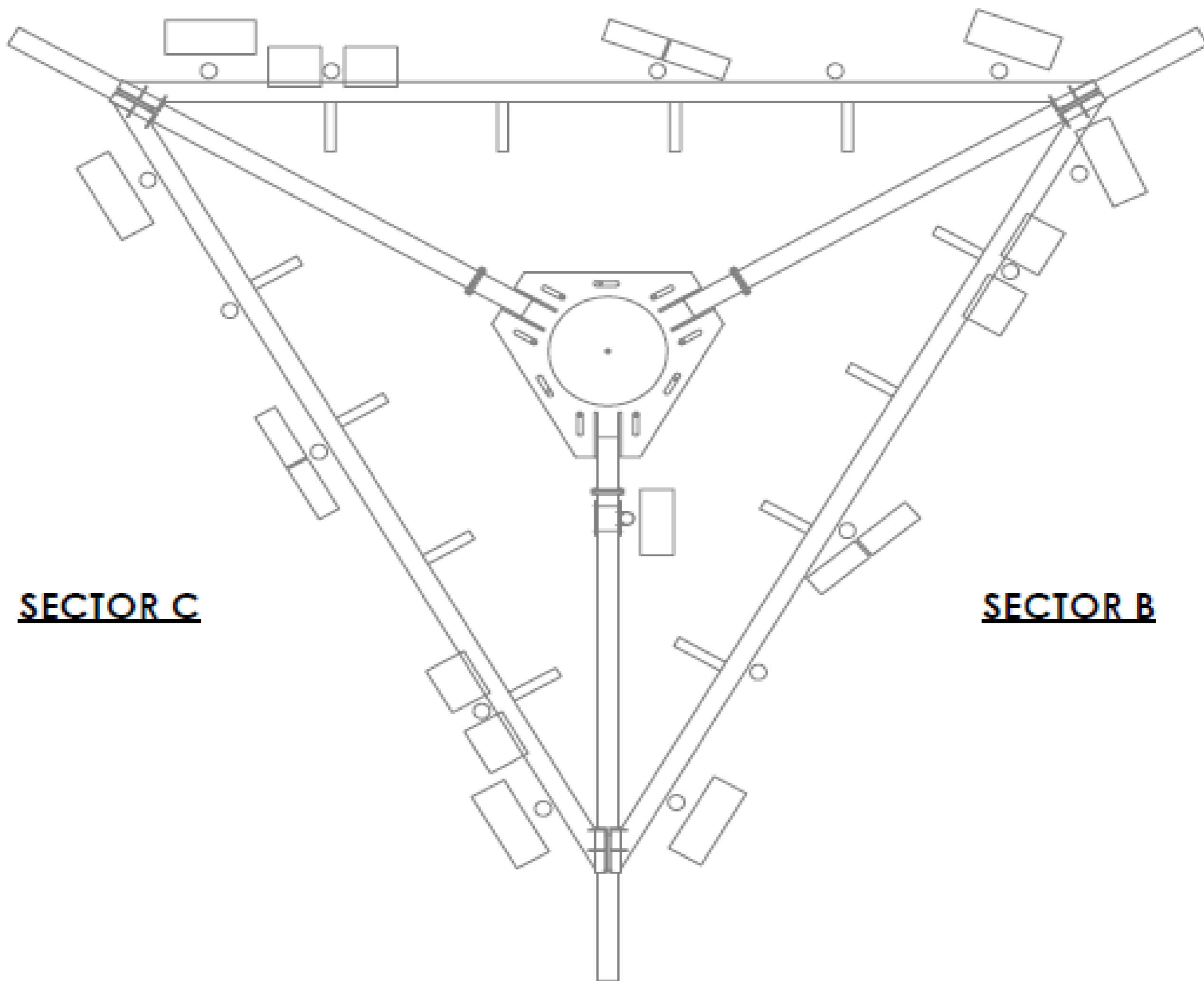


SECTION D-D



DETAIL E

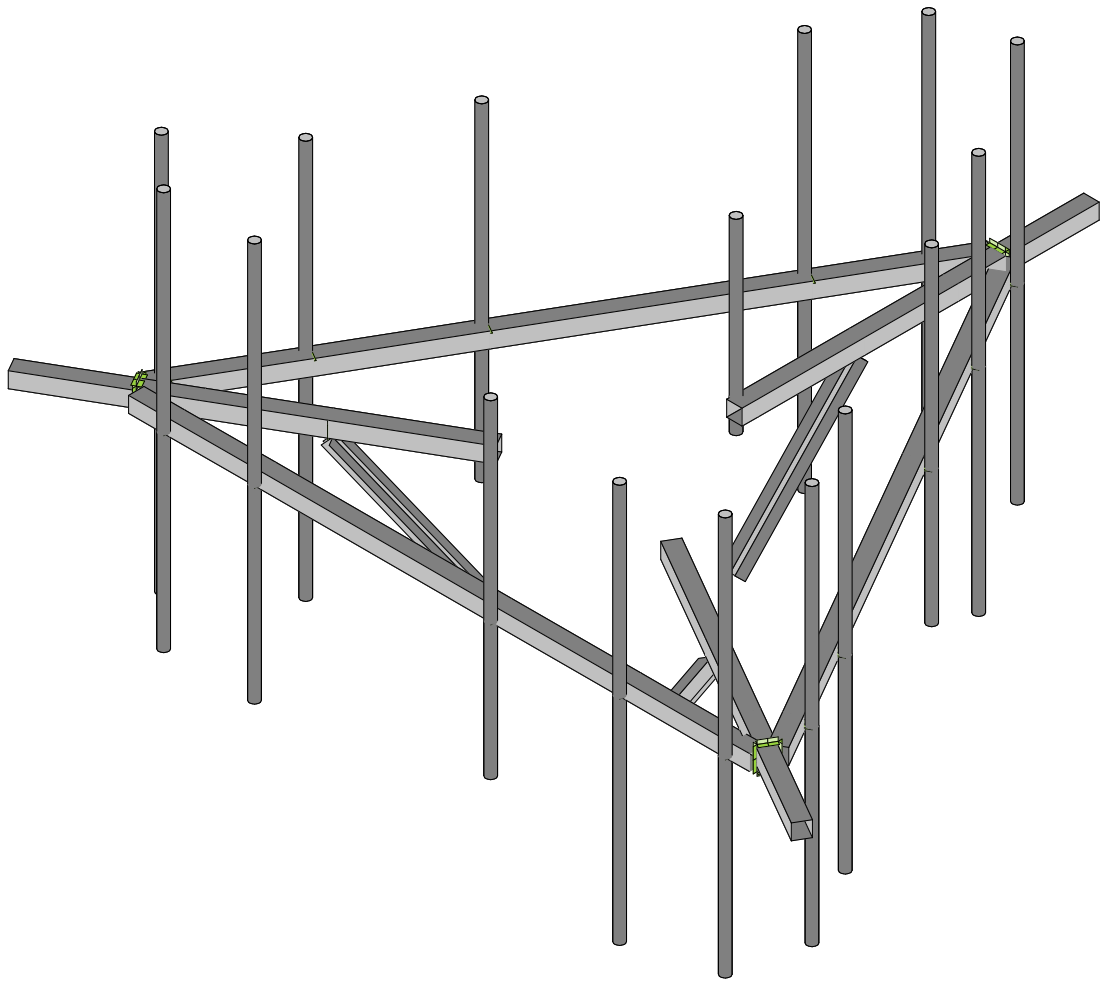
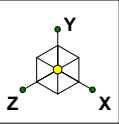
SECTOR A



SECTOR C

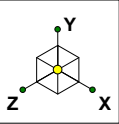
SECTOR B

ANTENNA PLAN VIEW

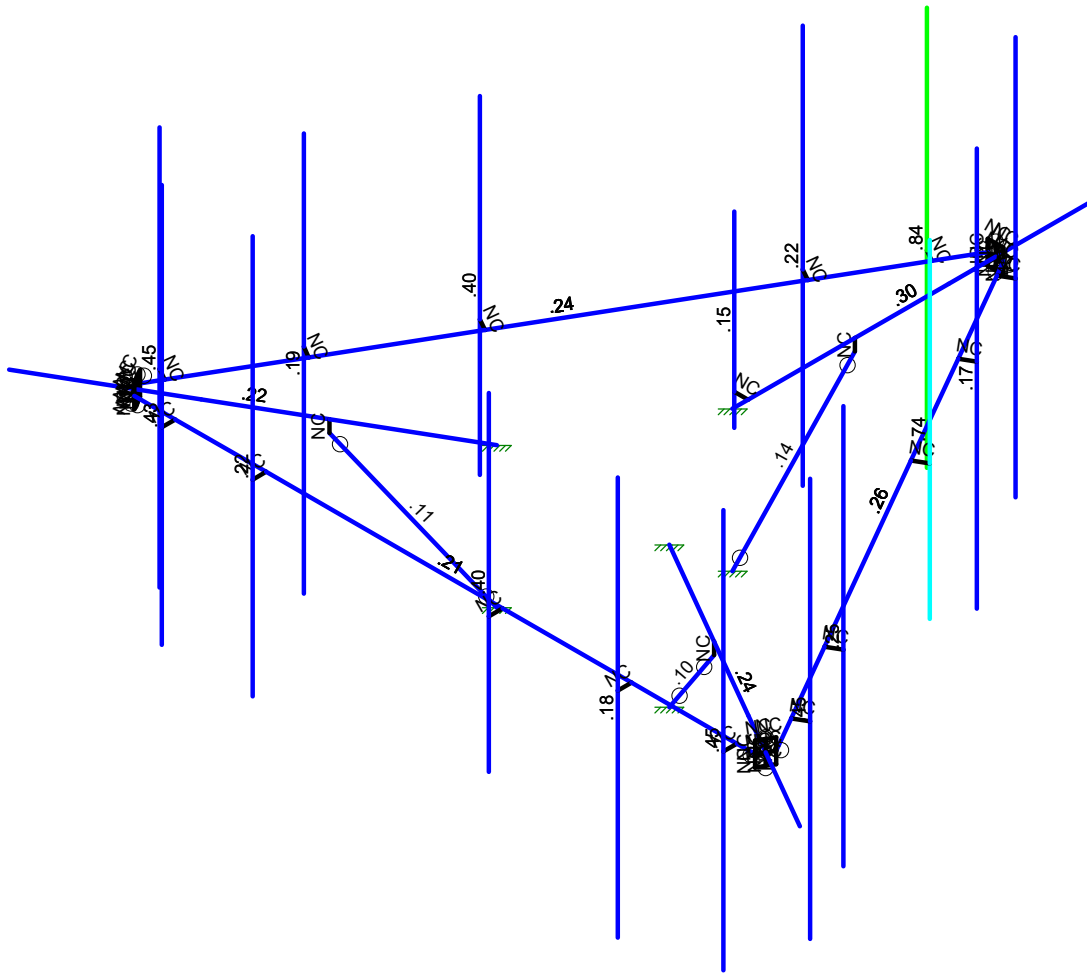


Envelope Only Solution

Colliers Engineering & De...		SK - 1
	5000244948-VZW_MT_LO_H	Aug 3, 2023 at 9:24 AM
		5000244948-VZW_MT_LO_H.r3d

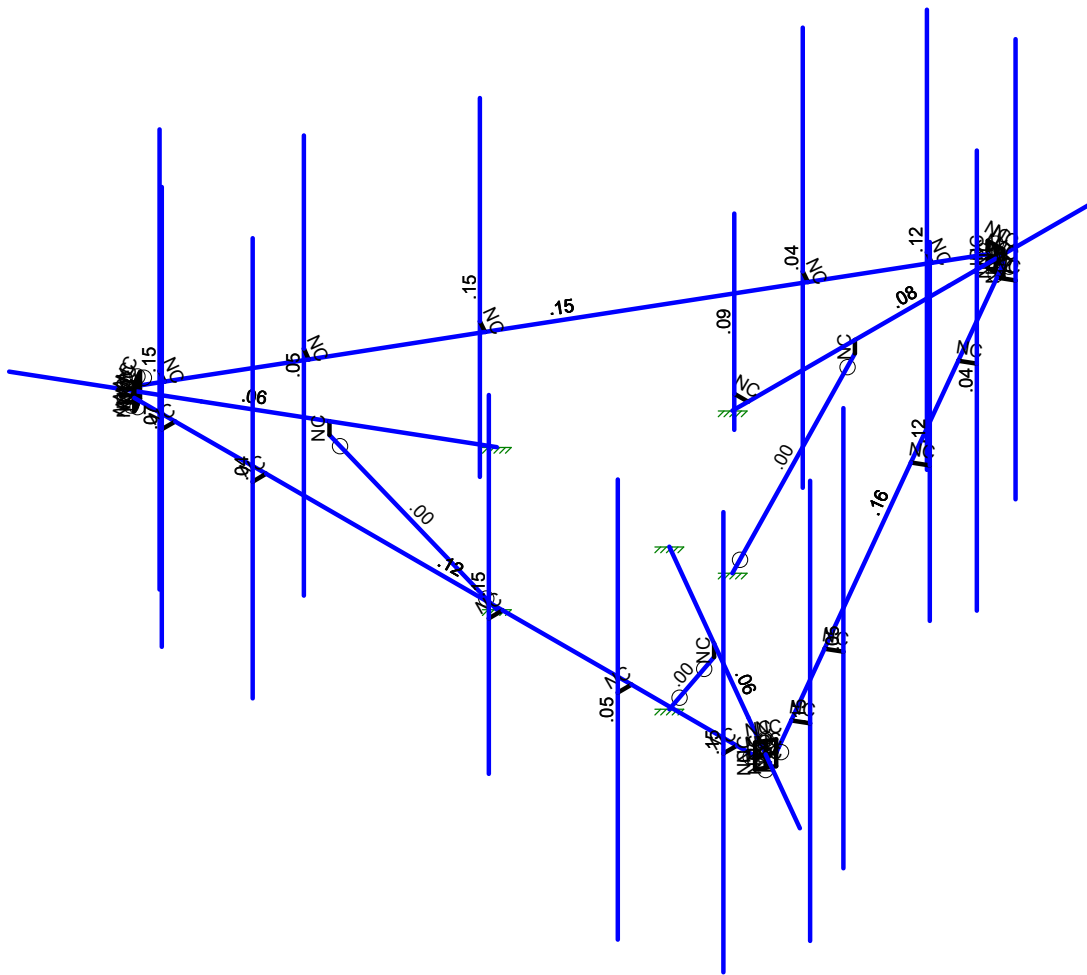
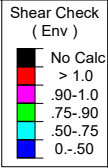
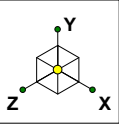


Code Check (Env)	
Black	No Calc
Red	> 1.0
Pink	.90-1.0
Green	.75-.90
Cyan	.50-.75
Blue	0-.50



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

Colliers Engineering & De...		SK - 2
	5000244948-VZW_MT_LO_H	Aug 3, 2023 at 9:24 AM
		5000244948-VZW_MT_LO_H.r3d



Member Shear Checks Displayed (Enveloped)
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5000244948-VZW_MT_LO_H

SK - 3

Aug 3, 2023 at 9:24 AM

5000244948-VZW_MT_LO_H.r3d



Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distribut...	Area(M...	Surface...
1	Antenna D	None					141			
2	Antenna Di	None					141			
3	Antenna Wo (0 Deg)	None					141			
4	Antenna Wo (30 Deg)	None					141			
5	Antenna Wo (60 Deg)	None					141			
6	Antenna Wo (90 Deg)	None					141			
7	Antenna Wo (120 Deg)	None					141			
8	Antenna Wo (150 Deg)	None					141			
9	Antenna Wo (180 Deg)	None					141			
10	Antenna Wo (210 Deg)	None					141			
11	Antenna Wo (240 Deg)	None					141			
12	Antenna Wo (270 Deg)	None					141			
13	Antenna Wo (300 Deg)	None					141			
14	Antenna Wo (330 Deg)	None					141			
15	Antenna Wi (0 Deg)	None					141			
16	Antenna Wi (30 Deg)	None					141			
17	Antenna Wi (60 Deg)	None					141			
18	Antenna Wi (90 Deg)	None					141			
19	Antenna Wi (120 Deg)	None					141			
20	Antenna Wi (150 Deg)	None					141			
21	Antenna Wi (180 Deg)	None					141			
22	Antenna Wi (210 Deg)	None					141			
23	Antenna Wi (240 Deg)	None					141			
24	Antenna Wi (270 Deg)	None					141			
25	Antenna Wi (300 Deg)	None					141			
26	Antenna Wi (330 Deg)	None					141			
27	Antenna Wm (0 Deg)	None					141			
28	Antenna Wm (30 Deg)	None					141			
29	Antenna Wm (60 Deg)	None					141			
30	Antenna Wm (90 Deg)	None					141			
31	Antenna Wm (120 Deg)	None					141			
32	Antenna Wm (150 Deg)	None					141			
33	Antenna Wm (180 Deg)	None					141			
34	Antenna Wm (210 Deg)	None					141			
35	Antenna Wm (240 Deg)	None					141			
36	Antenna Wm (270 Deg)	None					141			
37	Antenna Wm (300 Deg)	None					141			
38	Antenna Wm (330 Deg)	None					141			
39	Structure D	None		-1					3	
40	Structure Di	None						25	3	
41	Structure Wo (0 Deg)	None						50		
42	Structure Wo (30 Deg)	None						50		
43	Structure Wo (60 Deg)	None						50		
44	Structure Wo (90 Deg)	None						50		
45	Structure Wo (120 Deg)	None						50		
46	Structure Wo (150 Deg)	None						50		
47	Structure Wo (180 Deg)	None						50		
48	Structure Wo (210 Deg)	None						50		
49	Structure Wo (240 Deg)	None						50		
50	Structure Wo (270 Deg)	None						50		
51	Structure Wo (300 Deg)	None						50		
52	Structure Wo (330 Deg)	None						50		
53	Structure Wi (0 Deg)	None						50		
54	Structure Wi (30 Deg)	None						50		
55	Structure Wi (60 Deg)	None						50		
56	Structure Wi (90 Deg)	None						50		



Basic Load Cases (Continued)

BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distribut...	Area(M...	Surface...
57 Structure Wi (120 Deg)	None						50		
58 Structure Wi (150 Deg)	None						50		
59 Structure Wi (180 Deg)	None						50		
60 Structure Wi (210 Deg)	None						50		
61 Structure Wi (240 Deg)	None						50		
62 Structure Wi (270 Deg)	None						50		
63 Structure Wi (300 Deg)	None						50		
64 Structure Wi (330 Deg)	None						50		
65 Structure Wm (0 Deg)	None						50		
66 Structure Wm (30 Deg)	None						50		
67 Structure Wm (60 Deg)	None						50		
68 Structure Wm (90 Deg)	None						50		
69 Structure Wm (120 Deg)	None						50		
70 Structure Wm (150 Deg)	None						50		
71 Structure Wm (180 Deg)	None						50		
72 Structure Wm (210 Deg)	None						50		
73 Structure Wm (240 Deg)	None						50		
74 Structure Wm (270 Deg)	None						50		
75 Structure Wm (300 Deg)	None						50		
76 Structure Wm (330 Deg)	None						50		
77 Lm1	None					1			
78 Lm2	None					1			
79 Lv1	None					1			
80 Lv2	None					1			
81 Antenna Ev	None					141			
82 Antenna Eh (0 Deg)	None					94			
83 Antenna Eh (90 Deg)	None					94			
84 Structure Ev	ELY							3	
85 Structure Eh (0 Deg)	ELZ			-03				3	
86 Structure Eh (90 Deg)	ELX	.03						3	
87 BLC 39 Transient Area Loads	None						24		
88 BLC 40 Transient Area Loads	None						24		
89 BLC 84 Transient Area Loads	None								
90 BLC 85 Transient Area Loads	None						24		
91 BLC 86 Transient Area Loads	None						24		

Load Combinations

Description	S...	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
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 (0 Deg)	Yes	Y			1	1.2	39	1.2	2	1	40	1	15	1	53	1					
14 1.2D + 1.0Di + 1.0Wi (30 Deg)	Yes	Y			1	1.2	39	1.2	2	1	40	1	16	1	54	1					
15 1.2D + 1.0Di + 1.0Wi (60 Deg)	Yes	Y			1	1.2	39	1.2	2	1	40	1	17	1	55	1					
16 1.2D + 1.0Di + 1.0Wi (90 Deg)	Yes	Y			1	1.2	39	1.2	2	1	40	1	18	1	56	1					
17 1.2D + 1.0Di + 1.0Wi (120 Deg)	Yes	Y			1	1.2	39	1.2	2	1	40	1	19	1	57	1					



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name : 5000244948-VZW_MT_LO_H

Aug 3, 2023
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Load Combinations (Continued)

Description	S...	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	
75	0.9D - 1.0Ev + 1.0Eh (330 Deg)	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.866	83	-.5	E...	.866	E...	-.5				

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N3	0	0	-2.125	0	
2	N27	0	0	-9.739583	0	
3	CP	0	0	0	0	
4	N5	0	0	-7.739583	0	
5	N6	0.166667	0	-7.739583	0	
6	N7	-0.166667	0	-7.739583	0	
7	N8	0	.25	-7.739583	0	
8	N9	0.166667	.25	-7.739583	0	
9	N10	-0.166667	.25	-7.739583	0	
10	N11	0	-.25	-7.739583	0	
11	N12	0.166667	-.25	-7.739583	0	
12	N13	-0.166667	-.25	-7.739583	0	
13	N14	-1.840304	0	1.0625	0	
14	N15	-8.434727	0	4.869792	0	
15	N17	-6.702676	0	3.869792	0	
16	N18	-6.786009	0	3.725454	0	
17	N19	-6.619342	0	4.014129	0	
18	N20	-6.702676	.25	3.869792	0	
19	N21	-6.786009	.25	3.725454	0	
20	N22	-6.619342	.25	4.014129	0	
21	N23	-6.702676	-.25	3.869792	0	
22	N24	-6.786009	-.25	3.725454	0	
23	N25	-6.619342	-.25	4.014129	0	
24	N26	1.840304	0	1.0625	0	
25	N27A	8.434727	0	4.869792	0	
26	N29	6.702676	0	3.869792	0	
27	N30	6.619342	0	4.014129	0	
28	N31	6.786009	0	3.725454	0	
29	N32	6.702676	.25	3.869792	0	
30	N33	6.619342	.25	4.014129	0	
31	N34	6.786009	.25	3.725454	0	
32	N35	6.702676	-.25	3.869792	0	
33	N36	6.619342	-.25	4.014129	0	
34	N37	6.786009	-.25	3.725454	0	
35	N41	-5.744324	0	4.014129	0	
36	N44	-5.744324	0	4.305796	0	
37	N48	-5.744324	4.479167	4.305796	0	
38	N52	-5.744324	-4.020833	4.305796	0	
39	N90	-0.291667	0	-2.458333	0	
40	N91	-0.	0	-2.458333	0	
41	N92	-0.291667	3.333333	-2.458333	0	
42	N93	-0.291667	-0.666667	-2.458333	0	
43	N43	-3.806824	0	4.014129	0	
44	N44A	-3.806824	0	4.305796	0	
45	N45	-3.806824	4.5	4.305796	0	
46	N46	-3.806824	-4	4.305796	0	
47	N47	1.234842	0	4.014129	0	
48	N48A	1.234842	0	4.305796	0	
49	N49	1.234842	4.125	4.305796	0	
50	N50	1.234842	-2.875	4.305796	0	
51	N51	3.984842	0	4.014129	0	



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name : 5000244948-VZW_MT_LO_H

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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
52	N52A	3.984842	0	4.305796	0	
53	N53	3.984842	3.9375	4.305796	0	
54	N54	3.984842	-4.5625	4.305796	0	
55	N55	6.234842	0	4.014129	0	
56	N56	6.234842	0	4.305796	0	
57	N57	6.234842	4.458333	4.305796	0	
58	N58	6.234842	-4.041667	4.305796	0	
59	N59	6.3485	0	2.967666	0	
60	N60	6.601091	0	2.821833	0	
61	N61	6.601091	4.479167	2.821833	0	
62	N62	6.601091	-4.020833	2.821833	0	
63	N63	5.37975	0	1.289742	0	
64	N64	5.632341	0	1.143909	0	
65	N65	5.632341	4.5	1.143909	0	
66	N66	5.632341	-4	1.143909	0	
67	N67	2.858917	0	-3.07647	0	
68	N68	3.111507	0	-3.222303	0	
69	N69	3.111507	4.125	-3.222303	0	
70	N70	3.111507	-2.875	-3.222303	0	
71	N71	1.483917	0	-5.458039	0	
72	N72	1.736507	0	-5.603873	0	
73	N73	1.736507	3.9375	-5.603873	0	
74	N74	1.736507	-4.5625	-5.603873	0	
75	N75	0.358917	0	-7.406597	0	
76	N76	0.611507	0	-7.55243	0	
77	N77	0.611507	4.458333	-7.55243	0	
78	N78	0.611507	-4.041667	-7.55243	0	
79	N79	-0.604176	0	-6.981795	0	
80	N80	-0.856767	0	-7.127629	0	
81	N81	-0.856767	4.479167	-7.127629	0	
82	N82	-0.856767	-4.020833	-7.127629	0	
83	N83	-1.572926	0	-5.303871	0	
84	N84	-1.825517	0	-5.449704	0	
85	N85	-1.825517	4.5	-5.449704	0	
86	N86	-1.825517	-4	-5.449704	0	
87	N87	-4.093759	0	-0.93766	0	
88	N88	-4.34635	0	-1.083493	0	
89	N89	-4.34635	4.125	-1.083493	0	
90	N90A	-4.34635	-2.875	-1.083493	0	
91	N91A	-5.468759	0	1.44391	0	
92	N92A	-5.72135	0	1.298077	0	
93	N93A	-5.72135	3.9375	1.298077	0	
94	N94	-5.72135	-4.5625	1.298077	0	
95	N95	-6.593759	0	3.392467	0	
96	N96	-6.84635	0	3.246634	0	
97	N97	-6.84635	4.458333	3.246634	0	
98	N98	-6.84635	-4.041667	3.246634	0	
99	N99	-5.744324	0	3.680796	0	
100	N100	6.234842	0	3.680796	0	
101	N101	0	0	-6.739583	0	
102	N102	-5.83665	0	3.369792	0	
103	N103	5.83665	0	3.369792	0	
104	N104	0	0	-4.739583	0	
105	N105	0	-0.25	-4.739583	0	
106	N106	0	-3	-2.125	0	
107	N107	-4.1046	0	2.369792	0	
108	N108	-4.1046	-0.25	2.369792	0	



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name : 5000244948-VZW_MT_LO_H

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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
109	N109	-1.840304	-3	1.0625	0	
110	N110	4.1046	0	2.369792	0	
111	N111	4.1046	-25	2.369792	0	
112	N112	1.840304	-3	1.0625	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design ...	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Face Horizontal	HSS4X4X4	Beam	SquareT...	A500 Gr.B Rect	Typical	3.37	7.8	7.8	12.8
2	Standoff Horizontal	HSS4X4X4	Beam	SquareT...	A500 Gr.B Rect	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	MOD Kicker	LL3x3x3x3	Column	Double ...	A36 Gr.36	Typical	2.18	4.09	1.9	.027

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (... Density[k...	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	M4	N3	N27			Standoff Horiz...	Beam	SquareTube	A500 Gr.B...	Typical
2	M2	N7	N5			RIGID	None	None	RIGID	Typical
3	M3	N6	N5			RIGID	None	None	RIGID	Typical
4	M4A	N10	N8			RIGID	None	None	RIGID	Typical
5	M5	N9	N8			RIGID	None	None	RIGID	Typical
6	M6	N13	N11			RIGID	None	None	RIGID	Typical
7	M7	N12	N11			RIGID	None	None	RIGID	Typical
8	M8	N8	N5			RIGID	None	None	RIGID	Typical
9	M9	N11	N5			RIGID	None	None	RIGID	Typical
10	M10	N7	N10			RIGID	None	None	RIGID	Typical
11	M11	N6	N9			RIGID	None	None	RIGID	Typical
12	M12	N7	N13			RIGID	None	None	RIGID	Typical
13	M13	N6	N12			RIGID	None	None	RIGID	Typical
14	M14	N14	N15			Standoff Horiz...	Beam	SquareTube	A500 Gr.B...	Typical
15	M15	N19	N17			RIGID	None	None	RIGID	Typical
16	M16	N18	N17			RIGID	None	None	RIGID	Typical
17	M17	N22	N20			RIGID	None	None	RIGID	Typical
18	M18	N21	N20			RIGID	None	None	RIGID	Typical
19	M19	N25	N23			RIGID	None	None	RIGID	Typical
20	M20	N24	N23			RIGID	None	None	RIGID	Typical
21	M21	N20	N17			RIGID	None	None	RIGID	Typical
22	M22	N23	N17			RIGID	None	None	RIGID	Typical
23	M23	N19	N22			RIGID	None	None	RIGID	Typical
24	M24	N18	N21			RIGID	None	None	RIGID	Typical
25	M25	N19	N25			RIGID	None	None	RIGID	Typical
26	M26	N18	N24			RIGID	None	None	RIGID	Typical
27	M27	N26	N27A			Standoff Horiz...	Beam	SquareTube	A500 Gr.B...	Typical



Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
28	M28	N31	N29			RIGID	None	None	RIGID	Typical
29	M29	N30	N29			RIGID	None	None	RIGID	Typical
30	M30	N34	N32			RIGID	None	None	RIGID	Typical
31	M31	N33	N32			RIGID	None	None	RIGID	Typical
32	M32	N37	N35			RIGID	None	None	RIGID	Typical
33	M33	N36	N35			RIGID	None	None	RIGID	Typical
34	M34	N32	N29			RIGID	None	None	RIGID	Typical
35	M35	N35	N29			RIGID	None	None	RIGID	Typical
36	M36	N31	N34			RIGID	None	None	RIGID	Typical
37	M37	N30	N33			RIGID	None	None	RIGID	Typical
38	M38	N31	N37			RIGID	None	None	RIGID	Typical
39	M39	N30	N36			RIGID	None	None	RIGID	Typical
40	M40	N18	N7			Face Horizontal	Beam	SquareTube	A500 Gr.B...	Typical
41	M41	N6	N31			Face Horizontal	Beam	SquareTube	A500 Gr.B...	Typical
42	M42	N19	N30			Face Horizontal	Beam	SquareTube	A500 Gr.B...	Typical
43	M46	N41	N44			RIGID	None	None	RIGID	Typical
44	MP5A	N48	N52			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
45	OVP	N92	N93			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
46	M68	N91	N90			RIGID	None	None	RIGID	Typical
47	M47	N43	N44A			RIGID	None	None	RIGID	Typical
48	MP4A	N45	N46			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
49	M49	N47	N48A			RIGID	None	None	RIGID	Typical
50	MP3A	N49	N50			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
51	M51	N51	N52A			RIGID	None	None	RIGID	Typical
52	MP2A	N53	N54			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
53	M53	N55	N56			RIGID	None	None	RIGID	Typical
54	MP1A	N57	N58			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
55	M55	N59	N60			RIGID	None	None	RIGID	Typical
56	MP5C	N61	N62			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
57	M57	N63	N64			RIGID	None	None	RIGID	Typical
58	MP4C	N65	N66			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
59	M59	N67	N68			RIGID	None	None	RIGID	Typical
60	MP3C	N69	N70			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
61	M61	N71	N72			RIGID	None	None	RIGID	Typical
62	MP2C	N73	N74			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
63	M63	N75	N76			RIGID	None	None	RIGID	Typical
64	MP1C	N77	N78			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
65	M65	N79	N80			RIGID	None	None	RIGID	Typical
66	MP5B	N81	N82			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
67	M67	N83	N84			RIGID	None	None	RIGID	Typical
68	MP4B	N85	N86			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
69	M69	N87	N88			RIGID	None	None	RIGID	Typical
70	MP3B	N89	N90A			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
71	M71	N91A	N92A			RIGID	None	None	RIGID	Typical
72	MP2B	N93A	N94			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
73	M73	N95	N96			RIGID	None	None	RIGID	Typical
74	MP1B	N97	N98			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
75	M75	N105	N106			MOD Kicker	Column	Double Angle (...)	A36 Gr.36	Typical
76	M76	N104	N105			RIGID	None	None	RIGID	Typical
77	M77	N108	N109			MOD Kicker	Column	Double Angle (...)	A36 Gr.36	Typical
78	M78	N107	N108			RIGID	None	None	RIGID	Typical
79	M79	N111	N112			MOD Kicker	Column	Double Angle (...)	A36 Gr.36	Typical
80	M80	N110	N111			RIGID	None	None	RIGID	Typical



Hot Rolled Steel Design Parameters

	Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp top[ft]	Lcomp bot[ft]	L-torqu...	Kyy	Kzz	Cb	Function
1	M4	Standoff Ho...	7.615			Lbyy						Lateral
2	M14	Standoff Ho...	7.615			Lbyy						Lateral
3	M27	Standoff Ho...	7.615			Lbyy						Lateral
4	M40	Face Horizo...	13.239			Lbyy						Lateral
5	M41	Face Horizo...	13.239			Lbyy						Lateral
6	M42	Face Horizo...	13.239			Lbyy						Lateral
7	MP5A	Mount Pipe	8.5									Lateral
8	OVP	Mount Pipe	4									Lateral
9	MP4A	Mount Pipe	8.5									Lateral
10	MP3A	Mount Pipe	7									Lateral
11	MP2A	Mount Pipe	8.5									Lateral
12	MP1A	Mount Pipe	8.5									Lateral
13	MP5C	Mount Pipe	8.5									Lateral
14	MP4C	Mount Pipe	8.5									Lateral
15	MP3C	Mount Pipe	7									Lateral
16	MP2C	Mount Pipe	8.5									Lateral
17	MP1C	Mount Pipe	8.5									Lateral
18	MP5B	Mount Pipe	8.5									Lateral
19	MP4B	Mount Pipe	8.5									Lateral
20	MP3B	Mount Pipe	7									Lateral
21	MP2B	Mount Pipe	8.5									Lateral
22	MP1B	Mount Pipe	8.5									Lateral
23	M75	MOD Kicker	3.795									Lateral
24	M77	MOD Kicker	3.795									Lateral
25	M79	MOD Kicker	3.795									Lateral

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	Y	-43.55	1.77
2	MP2A	My	-.022	1.77
3	MP2A	Mz	-.019	1.77
4	MP2A	Y	-43.55	3.77
5	MP2A	My	-.022	3.77
6	MP2A	Mz	-.019	3.77
7	MP2B	Y	-43.55	1.77
8	MP2B	My	.025	1.77
9	MP2B	Mz	-.015	1.77
10	MP2B	Y	-43.55	3.77
11	MP2B	My	.025	3.77
12	MP2B	Mz	-.015	3.77
13	MP4C	Y	-43.55	1.77
14	MP4C	My	.015	1.77
15	MP4C	Mz	.025	1.77
16	MP4C	Y	-43.55	3.77
17	MP4C	My	.015	3.77
18	MP4C	Mz	.025	3.77
19	MP1A	Y	-13.5	1
20	MP1A	My	-.012	1
21	MP1A	Mz	-.01	1
22	MP1A	Y	-13.5	5
23	MP1A	My	-.012	5
24	MP1A	Mz	-.01	5
25	MP1B	Y	-13.5	1
26	MP1B	My	.013	1



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name : 5000244948-VZW_MT_LO_H

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
27	MP1B	Mz	-.008	1
28	MP1B	Y	-13.5	5
29	MP1B	My	.013	5
30	MP1B	Mz	-.008	5
31	MP1C	Y	-13.5	1
32	MP1C	My	.008	1
33	MP1C	Mz	.013	1
34	MP1C	Y	-13.5	5
35	MP1C	My	.008	5
36	MP1C	Mz	.013	5
37	MP3A	Y	-13.5	1
38	MP3A	My	-.012	1
39	MP3A	Mz	-.01	1
40	MP3A	Y	-13.5	5
41	MP3A	My	-.012	5
42	MP3A	Mz	-.01	5
43	MP3B	Y	-13.5	1
44	MP3B	My	.013	1
45	MP3B	Mz	-.008	1
46	MP3B	Y	-13.5	5
47	MP3B	My	.013	5
48	MP3B	Mz	-.008	5
49	MP5C	Y	-13.5	1
50	MP5C	My	.008	1
51	MP5C	Mz	.013	1
52	MP5C	Y	-13.5	5
53	MP5C	My	.008	5
54	MP5C	Mz	.013	5
55	MP3C	Y	-61.5	1.5
56	MP3C	My	-.019	1.5
57	MP3C	Mz	.059	1.5
58	MP3C	Y	-61.5	5.5
59	MP3C	My	-.019	5.5
60	MP3C	Mz	.059	5.5
61	MP3C	Y	-61.5	1.5
62	MP3C	My	.06	1.5
63	MP3C	Mz	.012	1.5
64	MP3C	Y	-61.5	5.5
65	MP3C	My	.06	5.5
66	MP3C	Mz	.012	5.5
67	MP5B	Y	-61.5	1.5
68	MP5B	My	.059	1.5
69	MP5B	Mz	.019	1.5
70	MP5B	Y	-61.5	5.5
71	MP5B	My	.059	5.5
72	MP5B	Mz	.019	5.5
73	MP5B	Y	-61.5	1.5
74	MP5B	My	.012	1.5
75	MP5B	Mz	-.06	1.5
76	MP5B	Y	-61.5	5.5
77	MP5B	My	.012	5.5
78	MP5B	Mz	-.06	5.5
79	MP5A	Y	-21.85	1.5
80	MP5A	My	-.000625	1.5
81	MP5A	Mz	-.022	1.5
82	MP5A	Y	-21.85	5.5
83	MP5A	My	-.000625	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
84	MP5A	Mz	-.022	5.5
85	MP5A	Y	-21.85	1.5
86	MP5A	My	-.022	1.5
87	MP5A	Mz	.003	1.5
88	MP5A	Y	-21.85	5.5
89	MP5A	My	-.022	5.5
90	MP5A	Mz	.003	5.5
91	OVP	Y	-32	2
92	OVP	My	0	2
93	OVP	Mz	.021	2
94	MP2C	Y	-42.2	2.5
95	MP2C	My	-.024	2.5
96	MP2C	Mz	.014	2.5
97	MP2C	Y	-42.2	3.5
98	MP2C	My	-.024	3.5
99	MP2C	Mz	.014	3.5
100	MP4A	Y	-42.2	2.5
101	MP4A	My	.018	2.5
102	MP4A	Mz	-.022	2.5
103	MP4A	Y	-42.2	3.5
104	MP4A	My	.018	3.5
105	MP4A	Mz	-.022	3.5
106	MP4B	Y	-42.2	2.5
107	MP4B	My	.014	2.5
108	MP4B	Mz	.024	2.5
109	MP4B	Y	-42.2	3.5
110	MP4B	My	.014	3.5
111	MP4B	Mz	.024	3.5
112	MP2C	Y	-35.15	1
113	MP2C	My	.02	1
114	MP2C	Mz	-.012	1
115	MP2C	Y	-35.15	2
116	MP2C	My	.02	2
117	MP2C	Mz	-.012	2
118	MP4A	Y	-35.15	1
119	MP4A	My	-.015	1
120	MP4A	Mz	.018	1
121	MP4A	Y	-35.15	2
122	MP4A	My	-.015	2
123	MP4A	Mz	.018	2
124	MP4B	Y	-35.15	1
125	MP4B	My	-.012	1
126	MP4B	Mz	-.02	1
127	MP4B	Y	-35.15	2
128	MP4B	My	-.012	2
129	MP4B	Mz	-.02	2
130	MP5A	Y	-17.6	7
131	MP5A	My	.006	7
132	MP5A	Mz	-.003	7
133	MP5B	Y	-17.6	7
134	MP5B	My	.000393	7
135	MP5B	Mz	.007	7
136	MP5A	Y	-17.6	7
137	MP5A	My	-.002	7
138	MP5A	Mz	.006	7
139	MP5B	Y	-17.6	7
140	MP5B	My	-.005	7



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
141	MP5B	Mz	-.004	7

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	Y	-35.984	1.77
2	MP2A	My	-.018	1.77
3	MP2A	Mz	-.015	1.77
4	MP2A	Y	-35.984	3.77
5	MP2A	My	-.018	3.77
6	MP2A	Mz	-.015	3.77
7	MP2B	Y	-35.984	1.77
8	MP2B	My	.021	1.77
9	MP2B	Mz	-.012	1.77
10	MP2B	Y	-35.984	3.77
11	MP2B	My	.021	3.77
12	MP2B	Mz	-.012	3.77
13	MP4C	Y	-35.984	1.77
14	MP4C	My	.012	1.77
15	MP4C	Mz	.021	1.77
16	MP4C	Y	-35.984	3.77
17	MP4C	Mv	.012	3.77
18	MP4C	Mz	.021	3.77
19	MP1A	Y	-90.44	1
20	MP1A	My	-.078	1
21	MP1A	Mz	-.065	1
22	MP1A	Y	-90.44	5
23	MP1A	My	-.078	5
24	MP1A	Mz	-.065	5
25	MP1B	Y	-90.44	1
26	MP1B	My	.088	1
27	MP1B	Mz	-.051	1
28	MP1B	Y	-90.44	5
29	MP1B	My	.088	5
30	MP1B	Mz	-.051	5
31	MP1C	Y	-90.44	1
32	MP1C	My	.051	1
33	MP1C	Mz	.088	1
34	MP1C	Y	-90.44	5
35	MP1C	My	.051	5
36	MP1C	Mz	.088	5
37	MP3A	Y	-90.44	1
38	MP3A	My	-.078	1
39	MP3A	Mz	-.065	1
40	MP3A	Y	-90.44	5
41	MP3A	My	-.078	5
42	MP3A	Mz	-.065	5
43	MP3B	Y	-90.44	1
44	MP3B	My	.088	1
45	MP3B	Mz	-.051	1
46	MP3B	Y	-90.44	5
47	MP3B	Mv	.088	5
48	MP3B	Mz	-.051	5
49	MP5C	Y	-90.44	1
50	MP5C	My	.051	1
51	MP5C	Mz	.088	1
52	MP5C	Y	-90.44	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
53	MP5C	My	.051	5
54	MP5C	Mz	.088	5
55	MP3C	Y	-79.507	1.5
56	MP3C	My	-.025	1.5
57	MP3C	Mz	.076	1.5
58	MP3C	Y	-79.507	5.5
59	MP3C	My	-.025	5.5
60	MP3C	Mz	.076	5.5
61	MP3C	Y	-79.507	1.5
62	MP3C	My	.078	1.5
63	MP3C	Mz	.016	1.5
64	MP3C	Y	-79.507	5.5
65	MP3C	My	.078	5.5
66	MP3C	Mz	.016	5.5
67	MP5B	Y	-79.507	1.5
68	MP5B	My	.076	1.5
69	MP5B	Mz	.025	1.5
70	MP5B	Y	-79.507	5.5
71	MP5B	My	.076	5.5
72	MP5B	Mz	.025	5.5
73	MP5B	Y	-79.507	1.5
74	MP5B	My	.016	1.5
75	MP5B	Mz	-.078	1.5
76	MP5B	Y	-79.507	5.5
77	MP5B	My	.016	5.5
78	MP5B	Mz	-.078	5.5
79	MP5A	Y	-61.219	1.5
80	MP5A	My	-.002	1.5
81	MP5A	Mz	-.061	1.5
82	MP5A	Y	-61.219	5.5
83	MP5A	My	-.002	5.5
84	MP5A	Mz	-.061	5.5
85	MP5A	Y	-61.219	1.5
86	MP5A	My	-.061	1.5
87	MP5A	Mz	.009	1.5
88	MP5A	Y	-61.219	5.5
89	MP5A	My	-.061	5.5
90	MP5A	Mz	.009	5.5
91	OVP	Y	-88.812	2
92	OVP	My	0	2
93	OVP	Mz	.059	2
94	MP2C	Y	-22.687	2.5
95	MP2C	My	-.013	2.5
96	MP2C	Mz	.008	2.5
97	MP2C	Y	-22.687	3.5
98	MP2C	My	-.013	3.5
99	MP2C	Mz	.008	3.5
100	MP4A	Y	-22.687	2.5
101	MP4A	My	.01	2.5
102	MP4A	Mz	-.012	2.5
103	MP4A	Y	-22.687	3.5
104	MP4A	My	.01	3.5
105	MP4A	Mz	-.012	3.5
106	MP4B	Y	-22.687	2.5
107	MP4B	My	.008	2.5
108	MP4B	Mz	.013	2.5
109	MP4B	Y	-22.687	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
110	MP4B	My	.008	3.5
111	MP4B	Mz	.013	3.5
112	MP2C	Y	-20.404	1
113	MP2C	My	.012	1
114	MP2C	Mz	-.007	1
115	MP2C	Y	-20.404	2
116	MP2C	My	.012	2
117	MP2C	Mz	-.007	2
118	MP4A	Y	-20.404	1
119	MP4A	My	-.009	1
120	MP4A	Mz	.01	1
121	MP4A	Y	-20.404	2
122	MP4A	My	-.009	2
123	MP4A	Mz	.01	2
124	MP4B	Y	-20.404	1
125	MP4B	My	-.007	1
126	MP4B	Mz	-.012	1
127	MP4B	Y	-20.404	2
128	MP4B	My	-.007	2
129	MP4B	Mz	-.012	2
130	MP5A	Y	6.6	7
131	MP5A	My	-.002	7
132	MP5A	Mz	.000978	7
133	MP5B	Y	6.6	7
134	MP5B	My	-.000147	7
135	MP5B	Mz	-.002	7
136	MP5A	Y	6.6	7
137	MP5A	My	.000571	7
138	MP5A	Mz	-.002	7
139	MP5B	Y	6.6	7
140	MP5B	My	.002	7
141	MP5B	Mz	.001	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	0	1.77
2	MP2A	Z	-61.277	1.77
3	MP2A	Mx	.026	1.77
4	MP2A	X	0	3.77
5	MP2A	Z	-61.277	3.77
6	MP2A	Mx	.026	3.77
7	MP2B	X	0	1.77
8	MP2B	Z	-70.268	1.77
9	MP2B	Mx	.023	1.77
10	MP2B	X	0	3.77
11	MP2B	Z	-70.268	3.77
12	MP2B	Mx	.023	3.77
13	MP4C	X	0	1.77
14	MP4C	Z	-42.718	1.77
15	MP4C	Mx	-.025	1.77
16	MP4C	X	0	3.77
17	MP4C	Z	-42.718	3.77
18	MP4C	Mx	-.025	3.77
19	MP1A	X	0	1
20	MP1A	Z	-199.003	1
21	MP1A	Mx	.144	1



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 Designer :
 Job Number :
 Model Name : 5000244948-VZW_MT_LO_H

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
22	MP1A	X	0	5
23	MP1A	Z	-199.003	5
24	MP1A	Mx	.144	5
25	MP1B	X	0	1
26	MP1B	Z	-203.05	1
27	MP1B	Mx	.114	1
28	MP1B	X	0	5
29	MP1B	Z	-203.05	5
30	MP1B	Mx	.114	5
31	MP1C	X	0	1
32	MP1C	Z	-190.651	1
33	MP1C	Mx	-.186	1
34	MP1C	X	0	5
35	MP1C	Z	-190.651	5
36	MP1C	Mx	-.186	5
37	MP3A	X	0	1
38	MP3A	Z	-199.003	1
39	MP3A	Mx	.144	1
40	MP3A	X	0	5
41	MP3A	Z	-199.003	5
42	MP3A	Mx	.144	5
43	MP3B	X	0	1
44	MP3B	Z	-203.05	1
45	MP3B	Mx	.114	1
46	MP3B	X	0	5
47	MP3B	Z	-203.05	5
48	MP3B	Mx	.114	5
49	MP5C	X	0	1
50	MP5C	Z	-190.651	1
51	MP5C	Mx	-.186	1
52	MP5C	X	0	5
53	MP5C	Z	-190.651	5
54	MP5C	Mx	-.186	5
55	MP3C	X	0	1.5
56	MP3C	Z	-93.423	1.5
57	MP3C	Mx	-.089	1.5
58	MP3C	X	0	5.5
59	MP3C	Z	-93.423	5.5
60	MP3C	Mx	-.089	5.5
61	MP3C	X	0	1.5
62	MP3C	Z	-93.423	1.5
63	MP3C	Mx	-.019	1.5
64	MP3C	X	0	5.5
65	MP3C	Z	-93.423	5.5
66	MP3C	Mx	-.019	5.5
67	MP5B	X	0	1.5
68	MP5B	Z	-185.077	1.5
69	MP5B	Mx	-.059	1.5
70	MP5B	X	0	5.5
71	MP5B	Z	-185.077	5.5
72	MP5B	Mx	-.059	5.5
73	MP5B	X	0	1.5
74	MP5B	Z	-185.077	1.5
75	MP5B	Mx	.182	1.5
76	MP5B	X	0	5.5
77	MP5B	Z	-185.077	5.5
78	MP5B	Mx	.182	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
79	MP5A	X	0	1.5
80	MP5A	Z	-88.956	1.5
81	MP5A	Mx	.089	1.5
82	MP5A	X	0	5.5
83	MP5A	Z	-88.956	5.5
84	MP5A	Mx	.089	5.5
85	MP5A	X	0	1.5
86	MP5A	Z	-88.956	1.5
87	MP5A	Mx	-.013	1.5
88	MP5A	X	0	5.5
89	MP5A	Z	-88.956	5.5
90	MP5A	Mx	-.013	5.5
91	OVP	X	0	2
92	OVP	Z	-174.089	2
93	OVP	Mx	-.116	2
94	MP2C	X	0	2.5
95	MP2C	Z	-25.031	2.5
96	MP2C	Mx	-.008	2.5
97	MP2C	X	0	3.5
98	MP2C	Z	-25.031	3.5
99	MP2C	Mx	-.008	3.5
100	MP4A	X	0	2.5
101	MP4A	Z	-28.714	2.5
102	MP4A	Mx	.015	2.5
103	MP4A	X	0	3.5
104	MP4A	Z	-28.714	3.5
105	MP4A	Mx	.015	3.5
106	MP4B	X	0	2.5
107	MP4B	Z	-30.498	2.5
108	MP4B	Mx	-.018	2.5
109	MP4B	X	0	3.5
110	MP4B	Z	-30.498	3.5
111	MP4B	Mx	-.018	3.5
112	MP2C	X	0	1
113	MP2C	Z	-21.975	1
114	MP2C	Mx	.007	1
115	MP2C	X	0	2
116	MP2C	Z	-21.975	2
117	MP2C	Mx	.007	2
118	MP4A	X	0	1
119	MP4A	Z	-27.03	1
120	MP4A	Mx	-.014	1
121	MP4A	X	0	2
122	MP4A	Z	-27.03	2
123	MP4A	Mx	-.014	2
124	MP4B	X	0	1
125	MP4B	Z	-29.479	1
126	MP4B	Mx	.017	1
127	MP4B	X	0	2
128	MP4B	Z	-29.479	2
129	MP4B	Mx	.017	2
130	MP5A	X	0	7
131	MP5A	Z	-41.214	7
132	MP5A	Mx	.006	7
133	MP5B	X	0	7
134	MP5B	Z	-41.194	7
135	MP5B	Mx	-.015	7



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
136	MP5A	X	0	7
137	MP5A	Z	-41.214	7
138	MP5A	Mx	-.015	7
139	MP5B	X	0	7
140	MP5B	Z	-41.194	7
141	MP5B	Mx	.008	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	41.191	1.77
2	MP2A	Z	-71.344	1.77
3	MP2A	Mx	.01	1.77
4	MP2A	X	41.191	3.77
5	MP2A	Z	-71.344	3.77
6	MP2A	Mx	.01	3.77
7	MP2B	X	21.359	1.77
8	MP2B	Z	-36.995	1.77
9	MP2B	Mx	.025	1.77
10	MP2B	X	21.359	3.77
11	MP2B	Z	-36.995	3.77
12	MP2B	Mx	.025	3.77
13	MP4C	X	35.134	1.77
14	MP4C	Z	-60.854	1.77
15	MP4C	Mx	-.023	1.77
16	MP4C	X	35.134	3.77
17	MP4C	Z	-60.854	3.77
18	MP4C	Mx	-.023	3.77
19	MP1A	X	104.251	1
20	MP1A	Z	-180.568	1
21	MP1A	Mx	.041	1
22	MP1A	X	104.251	5
23	MP1A	Z	-180.568	5
24	MP1A	Mx	.041	5
25	MP1B	X	95.325	1
26	MP1B	Z	-165.108	1
27	MP1B	Mx	.186	1
28	MP1B	X	95.325	5
29	MP1B	Z	-165.108	5
30	MP1B	Mx	.186	5
31	MP1C	X	101.525	1
32	MP1C	Z	-175.846	1
33	MP1C	Mx	-.114	1
34	MP1C	X	101.525	5
35	MP1C	Z	-175.846	5
36	MP1C	Mx	-.114	5
37	MP3A	X	104.251	1
38	MP3A	Z	-180.568	1
39	MP3A	Mx	.041	1
40	MP3A	X	104.251	5
41	MP3A	Z	-180.568	5
42	MP3A	Mx	.041	5
43	MP3B	X	95.325	1
44	MP3B	Z	-165.108	1
45	MP3B	Mx	.186	1
46	MP3B	X	95.325	5
47	MP3B	Z	-165.108	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
48	MP3B	Mx	.186	5
49	MP5C	X	101.525	1
50	MP5C	Z	-175.846	1
51	MP5C	Mx	-.114	1
52	MP5C	X	101.525	5
53	MP5C	Z	-175.846	5
54	MP5C	Mx	-.114	5
55	MP3C	X	92.538	1.5
56	MP3C	Z	-160.281	1.5
57	MP3C	Mx	-.182	1.5
58	MP3C	X	92.538	5.5
59	MP3C	Z	-160.281	5.5
60	MP3C	Mx	-.182	5.5
61	MP3C	X	92.538	1.5
62	MP3C	Z	-160.281	1.5
63	MP3C	Mx	.059	1.5
64	MP3C	X	92.538	5.5
65	MP3C	Z	-160.281	5.5
66	MP3C	Mx	.059	5.5
67	MP5B	X	46.711	1.5
68	MP5B	Z	-80.906	1.5
69	MP5B	Mx	.019	1.5
70	MP5B	X	46.711	5.5
71	MP5B	Z	-80.906	5.5
72	MP5B	Mx	.019	5.5
73	MP5B	X	46.711	1.5
74	MP5B	Z	-80.906	1.5
75	MP5B	Mx	.089	1.5
76	MP5B	X	46.711	5.5
77	MP5B	Z	-80.906	5.5
78	MP5B	Mx	.089	5.5
79	MP5A	X	57.206	1.5
80	MP5A	Z	-99.084	1.5
81	MP5A	Mx	.098	1.5
82	MP5A	X	57.206	5.5
83	MP5A	Z	-99.084	5.5
84	MP5A	Mx	.098	5.5
85	MP5A	X	57.206	1.5
86	MP5A	Z	-99.084	1.5
87	MP5A	Mx	-.071	1.5
88	MP5A	X	57.206	5.5
89	MP5A	Z	-99.084	5.5
90	MP5A	Mx	-.071	5.5
91	OVP	X	81.886	2
92	OVP	Z	-141.83	2
93	OVP	Mx	-.095	2
94	MP2C	X	15.249	2.5
95	MP2C	Z	-26.412	2.5
96	MP2C	Mx	-.018	2.5
97	MP2C	X	15.249	3.5
98	MP2C	Z	-26.412	3.5
99	MP2C	Mx	-.018	3.5
100	MP4A	X	16.451	2.5
101	MP4A	Z	-28.494	2.5
102	MP4A	Mx	.022	2.5
103	MP4A	X	16.451	3.5
104	MP4A	Z	-28.494	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
105	MP4A	Mx	.022	3.5
106	MP4B	X	12.515	2.5
107	MP4B	Z	-21.677	2.5
108	MP4B	Mx	-.008	2.5
109	MP4B	X	12.515	3.5
110	MP4B	Z	-21.677	3.5
111	MP4B	Mx	-.008	3.5
112	MP2C	X	14.74	1
113	MP2C	Z	-25.53	1
114	MP2C	Mx	.017	1
115	MP2C	X	14.74	2
116	MP2C	Z	-25.53	2
117	MP2C	Mx	.017	2
118	MP4A	X	16.389	1
119	MP4A	Z	-28.387	1
120	MP4A	Mx	-.022	1
121	MP4A	X	16.389	2
122	MP4A	Z	-28.387	2
123	MP4A	Mx	-.022	2
124	MP4B	X	10.988	1
125	MP4B	Z	-19.031	1
126	MP4B	Mx	.007	1
127	MP4B	X	10.988	2
128	MP4B	Z	-19.031	2
129	MP4B	Mx	.007	2
130	MP5A	X	20.584	7
131	MP5A	Z	-35.652	7
132	MP5A	Mx	.012	7
133	MP5B	X	20.627	7
134	MP5B	Z	-35.728	7
135	MP5B	Mx	-.013	7
136	MP5A	X	20.584	7
137	MP5A	Z	-35.652	7
138	MP5A	Mx	-.015	7
139	MP5B	X	20.627	7
140	MP5B	Z	-35.728	7
141	MP5B	Mx	.000921	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	67.201	1.77
2	MP2A	Z	-38.799	1.77
3	MP2A	Mx	-.018	1.77
4	MP2A	X	67.201	3.77
5	MP2A	Z	-38.799	3.77
6	MP2A	Mx	-.018	3.77
7	MP2B	X	25.066	1.77
8	MP2B	Z	-14.472	1.77
9	MP2B	Mx	.019	1.77
10	MP2B	X	25.066	3.77
11	MP2B	Z	-14.472	3.77
12	MP2B	Mx	.019	3.77
13	MP4C	X	72.783	1.77
14	MP4C	Z	-42.021	1.77
15	MP4C	Mx	0	1.77
16	MP4C	X	72.783	3.77



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
17	MP4C	Z	-42.021	3.77
18	MP4C	Mx	0	3.77
19	MP1A	X	178.703	1
20	MP1A	Z	-103.174	1
21	MP1A	Mx	-.079	1
22	MP1A	X	178.703	5
23	MP1A	Z	-103.174	5
24	MP1A	Mx	-.079	5
25	MP1B	X	159.739	1
26	MP1B	Z	-92.225	1
27	MP1B	Mx	.208	1
28	MP1B	X	159.739	5
29	MP1B	Z	-92.225	5
30	MP1B	Mx	.208	5
31	MP1C	X	181.215	1
32	MP1C	Z	-104.625	1
33	MP1C	Mx	0	1
34	MP1C	X	181.215	5
35	MP1C	Z	-104.625	5
36	MP1C	Mx	0	5
37	MP3A	X	178.703	1
38	MP3A	Z	-103.174	1
39	MP3A	Mx	-.079	1
40	MP3A	X	178.703	5
41	MP3A	Z	-103.174	5
42	MP3A	Mx	-.079	5
43	MP3B	X	159.739	1
44	MP3B	Z	-92.225	1
45	MP3B	Mx	.208	1
46	MP3B	X	159.739	5
47	MP3B	Z	-92.225	5
48	MP3B	Mx	.208	5
49	MP5C	X	181.215	1
50	MP5C	Z	-104.625	1
51	MP5C	Mx	0	1
52	MP5C	X	181.215	5
53	MP5C	Z	-104.625	5
54	MP5C	Mx	0	5
55	MP3C	X	199.968	1.5
56	MP3C	Z	-115.452	1.5
57	MP3C	Mx	-.173	1.5
58	MP3C	X	199.968	5.5
59	MP3C	Z	-115.452	5.5
60	MP3C	Mx	-.173	5.5
61	MP3C	X	199.968	1.5
62	MP3C	Z	-115.452	1.5
63	MP3C	Mx	.173	1.5
64	MP3C	X	199.968	5.5
65	MP3C	Z	-115.452	5.5
66	MP3C	Mx	.173	5.5
67	MP5B	X	41.219	1.5
68	MP5B	Z	-23.798	1.5
69	MP5B	Mx	.032	1.5
70	MP5B	X	41.219	5.5
71	MP5B	Z	-23.798	5.5
72	MP5B	Mx	.032	5.5
73	MP5B	X	41.219	1.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
74	MP5B	Z	-23.798	1.5
75	MP5B	Mx	.032	1.5
76	MP5B	X	41.219	5.5
77	MP5B	Z	-23.798	5.5
78	MP5B	Mx	.032	5.5
79	MP5A	X	94.087	1.5
80	MP5A	Z	-54.321	1.5
81	MP5A	Mx	.052	1.5
82	MP5A	X	94.087	5.5
83	MP5A	Z	-54.321	5.5
84	MP5A	Mx	.052	5.5
85	MP5A	X	94.087	1.5
86	MP5A	Z	-54.321	1.5
87	MP5A	Mx	-.101	1.5
88	MP5A	X	94.087	5.5
89	MP5A	Z	-54.321	5.5
90	MP5A	Mx	-.101	5.5
91	OVP	X	123.959	2
92	OVP	Z	-71.568	2
93	OVP	Mx	-.048	2
94	MP2C	X	28.779	2.5
95	MP2C	Z	-16.616	2.5
96	MP2C	Mx	-.022	2.5
97	MP2C	X	28.779	3.5
98	MP2C	Z	-16.616	3.5
99	MP2C	Mx	-.022	3.5
100	MP4A	X	27.671	2.5
101	MP4A	Z	-15.976	2.5
102	MP4A	Mx	.02	2.5
103	MP4A	X	27.671	3.5
104	MP4A	Z	-15.976	3.5
105	MP4A	Mx	.02	3.5
106	MP4B	X	19.31	2.5
107	MP4B	Z	-11.149	2.5
108	MP4B	Mx	0	2.5
109	MP4B	X	19.31	3.5
110	MP4B	Z	-11.149	3.5
111	MP4B	Mx	0	3.5
112	MP2C	X	28.779	1
113	MP2C	Z	-16.616	1
114	MP2C	Mx	.022	1
115	MP2C	X	28.779	2
116	MP2C	Z	-16.616	2
117	MP2C	Mx	.022	2
118	MP4A	X	27.259	1
119	MP4A	Z	-15.738	1
120	MP4A	Mx	-.02	1
121	MP4A	X	27.259	2
122	MP4A	Z	-15.738	2
123	MP4A	Mx	-.02	2
124	MP4B	X	15.782	1
125	MP4B	Z	-9.112	1
126	MP4B	Mx	0	1
127	MP4B	X	15.782	2
128	MP4B	Z	-9.112	2
129	MP4B	Mx	0	2
130	MP5A	X	35.661	7



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
131	MP5A	Z	-20.589	7
132	MP5A	Mx	.015	7
133	MP5B	X	35.754	7
134	MP5B	Z	-20.643	7
135	MP5B	Mx	-.007	7
136	MP5A	X	35.661	7
137	MP5A	Z	-20.589	7
138	MP5A	Mx	-.011	7
139	MP5B	X	35.754	7
140	MP5B	Z	-20.643	7
141	MP5B	Mx	-.007	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	51.709	1.77
2	MP2A	Z	0	1.77
3	MP2A	Mx	-.026	1.77
4	MP2A	X	51.709	3.77
5	MP2A	Z	0	3.77
6	MP2A	Mx	-.026	3.77
7	MP2B	X	42.718	1.77
8	MP2B	Z	0	1.77
9	MP2B	Mx	.025	1.77
10	MP2B	X	42.718	3.77
11	MP2B	Z	0	3.77
12	MP2B	Mx	.025	3.77
13	MP4C	X	70.268	1.77
14	MP4C	Z	0	1.77
15	MP4C	Mx	.023	1.77
16	MP4C	X	70.268	3.77
17	MP4C	Z	0	3.77
18	MP4C	Mx	.023	3.77
19	MP1A	X	194.697	1
20	MP1A	Z	0	1
21	MP1A	Mx	-.168	1
22	MP1A	X	194.697	5
23	MP1A	Z	0	5
24	MP1A	Mx	-.168	5
25	MP1B	X	190.651	1
26	MP1B	Z	0	1
27	MP1B	Mx	.186	1
28	MP1B	X	190.651	5
29	MP1B	Z	0	5
30	MP1B	Mx	.186	5
31	MP1C	X	203.05	1
32	MP1C	Z	0	1
33	MP1C	Mx	.114	1
34	MP1C	X	203.05	5
35	MP1C	Z	0	5
36	MP1C	Mx	.114	5
37	MP3A	X	194.697	1
38	MP3A	Z	0	1
39	MP3A	Mx	-.168	1
40	MP3A	X	194.697	5
41	MP3A	Z	0	5
42	MP3A	Mx	-.168	5



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name : 5000244948-VZW_MT_LO_H

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
43	MP3B	X	190.651	1
44	MP3B	Z	0	1
45	MP3B	Mx	.186	1
46	MP3B	X	190.651	5
47	MP3B	Z	0	5
48	MP3B	Mx	.186	5
49	MP5C	X	203.05	1
50	MP5C	Z	0	1
51	MP5C	Mx	.114	1
52	MP5C	X	203.05	5
53	MP5C	Z	0	5
54	MP5C	Mx	.114	5
55	MP3C	X	185.077	1.5
56	MP3C	Z	0	1.5
57	MP3C	Mx	-.059	1.5
58	MP3C	X	185.077	5.5
59	MP3C	Z	0	5.5
60	MP3C	Mx	-.059	5.5
61	MP3C	X	185.077	1.5
62	MP3C	Z	0	1.5
63	MP3C	Mx	.182	1.5
64	MP3C	X	185.077	5.5
65	MP3C	Z	0	5.5
66	MP3C	Mx	.182	5.5
67	MP5B	X	93.423	1.5
68	MP5B	Z	0	1.5
69	MP5B	Mx	.089	1.5
70	MP5B	X	93.423	5.5
71	MP5B	Z	0	5.5
72	MP5B	Mx	.089	5.5
73	MP5B	X	93.423	1.5
74	MP5B	Z	0	1.5
75	MP5B	Mx	.019	1.5
76	MP5B	X	93.423	5.5
77	MP5B	Z	0	5.5
78	MP5B	Mx	.019	5.5
79	MP5A	X	77.415	1.5
80	MP5A	Z	0	1.5
81	MP5A	Mx	-.002	1.5
82	MP5A	X	77.415	5.5
83	MP5A	Z	0	5.5
84	MP5A	Mx	-.002	5.5
85	MP5A	X	77.415	1.5
86	MP5A	Z	0	1.5
87	MP5A	Mx	-.077	1.5
88	MP5A	X	77.415	5.5
89	MP5A	Z	0	5.5
90	MP5A	Mx	-.077	5.5
91	OVP	X	132.818	2
92	OVP	Z	0	2
93	OVP	Mx	0	2
94	MP2C	X	30.498	2.5
95	MP2C	Z	0	2.5
96	MP2C	Mx	-.018	2.5
97	MP2C	X	30.498	3.5
98	MP2C	Z	0	3.5
99	MP2C	Mx	-.018	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
100	MP4A	X	26.815	2.5
101	MP4A	Z	0	2.5
102	MP4A	Mx	.011	2.5
103	MP4A	X	26.815	3.5
104	MP4A	Z	0	3.5
105	MP4A	Mx	.011	3.5
106	MP4B	X	25.031	2.5
107	MP4B	Z	0	2.5
108	MP4B	Mx	.008	2.5
109	MP4B	X	25.031	3.5
110	MP4B	Z	0	3.5
111	MP4B	Mx	.008	3.5
112	MP2C	X	29.479	1
113	MP2C	Z	0	1
114	MP2C	Mx	.017	1
115	MP2C	X	29.479	2
116	MP2C	Z	0	2
117	MP2C	Mx	.017	2
118	MP4A	X	24.424	1
119	MP4A	Z	0	1
120	MP4A	Mx	-.01	1
121	MP4A	X	24.424	2
122	MP4A	Z	0	2
123	MP4A	Mx	-.01	2
124	MP4B	X	21.975	1
125	MP4B	Z	0	1
126	MP4B	Mx	-.007	1
127	MP4B	X	21.975	2
128	MP4B	Z	0	2
129	MP4B	Mx	-.007	2
130	MP5A	X	41.235	7
131	MP5A	Z	0	7
132	MP5A	Mx	.014	7
133	MP5B	X	41.255	7
134	MP5B	Z	0	7
135	MP5B	Mx	.000921	7
136	MP5A	X	41.235	7
137	MP5A	Z	0	7
138	MP5A	Mx	-.004	7
139	MP5B	X	41.255	7
140	MP5B	Z	0	7
141	MP5B	Mx	-.013	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	26.505	1.77
2	MP2A	Z	15.302	1.77
3	MP2A	Mx	-.02	1.77
4	MP2A	X	26.505	3.77
5	MP2A	Z	15.302	3.77
6	MP2A	Mx	-.02	3.77
7	MP2B	X	60.854	1.77
8	MP2B	Z	35.134	1.77
9	MP2B	Mx	.023	1.77
10	MP2B	X	60.854	3.77
11	MP2B	Z	35.134	3.77



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
12	MP2B	Mx	.023	3.77
13	MP4C	X	36.995	1.77
14	MP4C	Z	21.359	1.77
15	MP4C	Mx	.025	1.77
16	MP4C	X	36.995	3.77
17	MP4C	Z	21.359	3.77
18	MP4C	Mx	.025	3.77
19	MP1A	X	160.387	1
20	MP1A	Z	92.599	1
21	MP1A	Mx	-.205	1
22	MP1A	X	160.387	5
23	MP1A	Z	92.599	5
24	MP1A	Mx	-.205	5
25	MP1B	X	175.846	1
26	MP1B	Z	101.525	1
27	MP1B	Mx	.114	1
28	MP1B	X	175.846	5
29	MP1B	Z	101.525	5
30	MP1B	Mx	.114	5
31	MP1C	X	165.108	1
32	MP1C	Z	95.325	1
33	MP1C	Mx	.186	1
34	MP1C	X	165.108	5
35	MP1C	Z	95.325	5
36	MP1C	Mx	.186	5
37	MP3A	X	160.387	1
38	MP3A	Z	92.599	1
39	MP3A	Mx	-.205	1
40	MP3A	X	160.387	5
41	MP3A	Z	92.599	5
42	MP3A	Mx	-.205	5
43	MP3B	X	175.846	1
44	MP3B	Z	101.525	1
45	MP3B	Mx	.114	1
46	MP3B	X	175.846	5
47	MP3B	Z	101.525	5
48	MP3B	Mx	.114	5
49	MP5C	X	165.108	1
50	MP5C	Z	95.325	1
51	MP5C	Mx	.186	1
52	MP5C	X	165.108	5
53	MP5C	Z	95.325	5
54	MP5C	Mx	.186	5
55	MP3C	X	80.906	1.5
56	MP3C	Z	46.711	1.5
57	MP3C	Mx	.019	1.5
58	MP3C	X	80.906	5.5
59	MP3C	Z	46.711	5.5
60	MP3C	Mx	.019	5.5
61	MP3C	X	80.906	1.5
62	MP3C	Z	46.711	1.5
63	MP3C	Mx	.089	1.5
64	MP3C	X	80.906	5.5
65	MP3C	Z	46.711	5.5
66	MP3C	Mx	.089	5.5
67	MP5B	X	160.281	1.5
68	MP5B	Z	92.538	1.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
69	MP5B	Mx	.182	1.5
70	MP5B	X	160.281	5.5
71	MP5B	Z	92.538	5.5
72	MP5B	Mx	.182	5.5
73	MP5B	X	160.281	1.5
74	MP5B	Z	92.538	1.5
75	MP5B	Mx	-.059	1.5
76	MP5B	X	160.281	5.5
77	MP5B	Z	92.538	5.5
78	MP5B	Mx	-.059	5.5
79	MP5A	X	44.997	1.5
80	MP5A	Z	25.979	1.5
81	MP5A	Mx	-.027	1.5
82	MP5A	X	44.997	5.5
83	MP5A	Z	25.979	5.5
84	MP5A	Mx	-.027	5.5
85	MP5A	X	44.997	1.5
86	MP5A	Z	25.979	1.5
87	MP5A	Mx	-.041	1.5
88	MP5A	X	44.997	5.5
89	MP5A	Z	25.979	5.5
90	MP5A	Mx	-.041	5.5
91	OVP	X	123.959	2
92	OVP	Z	71.568	2
93	OVP	Mx	.048	2
94	MP2C	X	21.677	2.5
95	MP2C	Z	12.515	2.5
96	MP2C	Mx	-.008	2.5
97	MP2C	X	21.677	3.5
98	MP2C	Z	12.515	3.5
99	MP2C	Mx	-.008	3.5
100	MP4A	X	19.595	2.5
101	MP4A	Z	11.313	2.5
102	MP4A	Mx	.003	2.5
103	MP4A	X	19.595	3.5
104	MP4A	Z	11.313	3.5
105	MP4A	Mx	.003	3.5
106	MP4B	X	26.412	2.5
107	MP4B	Z	15.249	2.5
108	MP4B	Mx	.018	2.5
109	MP4B	X	26.412	3.5
110	MP4B	Z	15.249	3.5
111	MP4B	Mx	.018	3.5
112	MP2C	X	19.031	1
113	MP2C	Z	10.988	1
114	MP2C	Mx	.007	1
115	MP2C	X	19.031	2
116	MP2C	Z	10.988	2
117	MP2C	Mx	.007	2
118	MP4A	X	16.174	1
119	MP4A	Z	9.338	1
120	MP4A	Mx	-.002	1
121	MP4A	X	16.174	2
122	MP4A	Z	9.338	2
123	MP4A	Mx	-.002	2
124	MP4B	X	25.53	1
125	MP4B	Z	14.74	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
126	MP4B	Mx	-.017	1
127	MP4B	X	25.53	2
128	MP4B	Z	14.74	2
129	MP4B	Mx	-.017	2
130	MP5A	X	35.751	7
131	MP5A	Z	20.641	7
132	MP5A	Mx	.009	7
133	MP5B	X	35.675	7
134	MP5B	Z	20.597	7
135	MP5B	Mx	.008	7
136	MP5A	X	35.751	7
137	MP5A	Z	20.641	7
138	MP5A	Mx	.004	7
139	MP5B	X	35.675	7
140	MP5B	Z	20.597	7
141	MP5B	Mx	-.015	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	17.694	1.77
2	MP2A	Z	30.648	1.77
3	MP2A	Mx	-.022	1.77
4	MP2A	X	17.694	3.77
5	MP2A	Z	30.648	3.77
6	MP2A	Mx	-.022	3.77
7	MP2B	X	42.021	1.77
8	MP2B	Z	72.783	1.77
9	MP2B	Mx	0	1.77
10	MP2B	X	42.021	3.77
11	MP2B	Z	72.783	3.77
12	MP2B	Mx	0	3.77
13	MP4C	X	14.472	1.77
14	MP4C	Z	25.066	1.77
15	MP4C	Mx	.019	1.77
16	MP4C	X	14.472	3.77
17	MP4C	Z	25.066	3.77
18	MP4C	Mx	.019	3.77
19	MP1A	X	93.676	1
20	MP1A	Z	162.251	1
21	MP1A	Mx	-.198	1
22	MP1A	X	93.676	5
23	MP1A	Z	162.251	5
24	MP1A	Mx	-.198	5
25	MP1B	X	104.625	1
26	MP1B	Z	181.215	1
27	MP1B	Mx	0	1
28	MP1B	X	104.625	5
29	MP1B	Z	181.215	5
30	MP1B	Mx	0	5
31	MP1C	X	92.225	1
32	MP1C	Z	159.739	1
33	MP1C	Mx	.208	1
34	MP1C	X	92.225	5
35	MP1C	Z	159.739	5
36	MP1C	Mx	.208	5
37	MP3A	X	93.676	1



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name : 5000244948-VZW_MT_LO_H

Aug 3, 2023
 9:24 AM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
38	MP3A	Z	162.251	1
39	MP3A	Mx	-.198	1
40	MP3A	X	93.676	5
41	MP3A	Z	162.251	5
42	MP3A	Mx	-.198	5
43	MP3B	X	104.625	1
44	MP3B	Z	181.215	1
45	MP3B	Mx	0	1
46	MP3B	X	104.625	5
47	MP3B	Z	181.215	5
48	MP3B	Mx	0	5
49	MP5C	X	92.225	1
50	MP5C	Z	159.739	1
51	MP5C	Mx	.208	1
52	MP5C	X	92.225	5
53	MP5C	Z	159.739	5
54	MP5C	Mx	.208	5
55	MP3C	X	23.798	1.5
56	MP3C	Z	41.219	1.5
57	MP3C	Mx	.032	1.5
58	MP3C	X	23.798	5.5
59	MP3C	Z	41.219	5.5
60	MP3C	Mx	.032	5.5
61	MP3C	X	23.798	1.5
62	MP3C	Z	41.219	1.5
63	MP3C	Mx	.032	1.5
64	MP3C	X	23.798	5.5
65	MP3C	Z	41.219	5.5
66	MP3C	Mx	.032	5.5
67	MP5B	X	115.452	1.5
68	MP5B	Z	199.968	1.5
69	MP5B	Mx	.173	1.5
70	MP5B	X	115.452	5.5
71	MP5B	Z	199.968	5.5
72	MP5B	Mx	.173	5.5
73	MP5B	X	115.452	1.5
74	MP5B	Z	199.968	1.5
75	MP5B	Mx	-.173	1.5
76	MP5B	X	115.452	5.5
77	MP5B	Z	199.968	5.5
78	MP5B	Mx	-.173	5.5
79	MP5A	X	28.864	1.5
80	MP5A	Z	49.995	1.5
81	MP5A	Mx	-.051	1.5
82	MP5A	X	28.864	5.5
83	MP5A	Z	49.995	5.5
84	MP5A	Mx	-.051	5.5
85	MP5A	X	28.864	1.5
86	MP5A	Z	49.995	1.5
87	MP5A	Mx	-.021	1.5
88	MP5A	X	28.864	5.5
89	MP5A	Z	49.995	5.5
90	MP5A	Mx	-.021	5.5
91	OVP	X	81.886	2
92	OVP	Z	141.83	2
93	OVP	Mx	.095	2
94	MP2C	X	11.149	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
95	MP2C	Z	19.31	2.5
96	MP2C	Mx	0	2.5
97	MP2C	X	11.149	3.5
98	MP2C	Z	19.31	3.5
99	MP2C	Mx	0	3.5
100	MP4A	X	11.788	2.5
101	MP4A	Z	20.418	2.5
102	MP4A	Mx	-.005	2.5
103	MP4A	X	11.788	3.5
104	MP4A	Z	20.418	3.5
105	MP4A	Mx	-.005	3.5
106	MP4B	X	16.616	2.5
107	MP4B	Z	28.779	2.5
108	MP4B	Mx	.022	2.5
109	MP4B	X	16.616	3.5
110	MP4B	Z	28.779	3.5
111	MP4B	Mx	.022	3.5
112	MP2C	X	9.112	1
113	MP2C	Z	15.782	1
114	MP2C	Mx	0	1
115	MP2C	X	9.112	2
116	MP2C	Z	15.782	2
117	MP2C	Mx	0	2
118	MP4A	X	9.99	1
119	MP4A	Z	17.302	1
120	MP4A	Mx	.005	1
121	MP4A	X	9.99	2
122	MP4A	Z	17.302	2
123	MP4A	Mx	.005	2
124	MP4B	X	16.616	1
125	MP4B	Z	28.779	1
126	MP4B	Mx	-.022	1
127	MP4B	X	16.616	2
128	MP4B	Z	28.779	2
129	MP4B	Mx	-.022	2
130	MP5A	X	20.636	7
131	MP5A	Z	35.742	7
132	MP5A	Mx	.002	7
133	MP5B	X	20.582	7
134	MP5B	Z	35.649	7
135	MP5B	Mx	.014	7
136	MP5A	X	20.636	7
137	MP5A	Z	35.742	7
138	MP5A	Mx	.011	7
139	MP5B	X	20.582	7
140	MP5B	Z	35.649	7
141	MP5B	Mx	-.014	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	0	1.77
2	MP2A	Z	61.277	1.77
3	MP2A	Mx	-.026	1.77
4	MP2A	X	0	3.77
5	MP2A	Z	61.277	3.77
6	MP2A	Mx	-.026	3.77



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
7	MP2B	X	0	1.77
8	MP2B	Z	70.268	1.77
9	MP2B	Mx	-.023	1.77
10	MP2B	X	0	3.77
11	MP2B	Z	70.268	3.77
12	MP2B	Mx	-.023	3.77
13	MP4C	X	0	1.77
14	MP4C	Z	42.718	1.77
15	MP4C	Mx	.025	1.77
16	MP4C	X	0	3.77
17	MP4C	Z	42.718	3.77
18	MP4C	Mx	.025	3.77
19	MP1A	X	0	1
20	MP1A	Z	199.003	1
21	MP1A	Mx	-.144	1
22	MP1A	X	0	5
23	MP1A	Z	199.003	5
24	MP1A	Mx	-.144	5
25	MP1B	X	0	1
26	MP1B	Z	203.05	1
27	MP1B	Mx	-.114	1
28	MP1B	X	0	5
29	MP1B	Z	203.05	5
30	MP1B	Mx	-.114	5
31	MP1C	X	0	1
32	MP1C	Z	190.651	1
33	MP1C	Mx	.186	1
34	MP1C	X	0	5
35	MP1C	Z	190.651	5
36	MP1C	Mx	.186	5
37	MP3A	X	0	1
38	MP3A	Z	199.003	1
39	MP3A	Mx	-.144	1
40	MP3A	X	0	5
41	MP3A	Z	199.003	5
42	MP3A	Mx	-.144	5
43	MP3B	X	0	1
44	MP3B	Z	203.05	1
45	MP3B	Mx	-.114	1
46	MP3B	X	0	5
47	MP3B	Z	203.05	5
48	MP3B	Mx	-.114	5
49	MP5C	X	0	1
50	MP5C	Z	190.651	1
51	MP5C	Mx	.186	1
52	MP5C	X	0	5
53	MP5C	Z	190.651	5
54	MP5C	Mx	.186	5
55	MP3C	X	0	1.5
56	MP3C	Z	93.423	1.5
57	MP3C	Mx	.089	1.5
58	MP3C	X	0	5.5
59	MP3C	Z	93.423	5.5
60	MP3C	Mx	.089	5.5
61	MP3C	X	0	1.5
62	MP3C	Z	93.423	1.5
63	MP3C	Mx	.019	1.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
64	MP3C	X	0	5.5
65	MP3C	Z	93.423	5.5
66	MP3C	Mx	.019	5.5
67	MP5B	X	0	1.5
68	MP5B	Z	185.077	1.5
69	MP5B	Mx	.059	1.5
70	MP5B	X	0	5.5
71	MP5B	Z	185.077	5.5
72	MP5B	Mx	.059	5.5
73	MP5B	X	0	1.5
74	MP5B	Z	185.077	1.5
75	MP5B	Mx	-.182	1.5
76	MP5B	X	0	5.5
77	MP5B	Z	185.077	5.5
78	MP5B	Mx	-.182	5.5
79	MP5A	X	0	1.5
80	MP5A	Z	88.956	1.5
81	MP5A	Mx	-.089	1.5
82	MP5A	X	0	5.5
83	MP5A	Z	88.956	5.5
84	MP5A	Mx	-.089	5.5
85	MP5A	X	0	1.5
86	MP5A	Z	88.956	1.5
87	MP5A	Mx	.013	1.5
88	MP5A	X	0	5.5
89	MP5A	Z	88.956	5.5
90	MP5A	Mx	.013	5.5
91	OVP	X	0	2
92	OVP	Z	174.089	2
93	OVP	Mx	.116	2
94	MP2C	X	0	2.5
95	MP2C	Z	25.031	2.5
96	MP2C	Mx	.008	2.5
97	MP2C	X	0	3.5
98	MP2C	Z	25.031	3.5
99	MP2C	Mx	.008	3.5
100	MP4A	X	0	2.5
101	MP4A	Z	28.714	2.5
102	MP4A	Mx	-.015	2.5
103	MP4A	X	0	3.5
104	MP4A	Z	28.714	3.5
105	MP4A	Mx	-.015	3.5
106	MP4B	X	0	2.5
107	MP4B	Z	30.498	2.5
108	MP4B	Mx	.018	2.5
109	MP4B	X	0	3.5
110	MP4B	Z	30.498	3.5
111	MP4B	Mx	.018	3.5
112	MP2C	X	0	1
113	MP2C	Z	21.975	1
114	MP2C	Mx	-.007	1
115	MP2C	X	0	2
116	MP2C	Z	21.975	2
117	MP2C	Mx	-.007	2
118	MP4A	X	0	1
119	MP4A	Z	27.03	1
120	MP4A	Mx	.014	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
121	MP4A	X	0	2
122	MP4A	Z	27.03	2
123	MP4A	Mx	.014	2
124	MP4B	X	0	1
125	MP4B	Z	29.479	1
126	MP4B	Mx	-.017	1
127	MP4B	X	0	2
128	MP4B	Z	29.479	2
129	MP4B	Mx	-.017	2
130	MP5A	X	0	7
131	MP5A	Z	41.214	7
132	MP5A	Mx	-.006	7
133	MP5B	X	0	7
134	MP5B	Z	41.194	7
135	MP5B	Mx	.015	7
136	MP5A	X	0	7
137	MP5A	Z	41.214	7
138	MP5A	Mx	.015	7
139	MP5B	X	0	7
140	MP5B	Z	41.194	7
141	MP5B	Mx	-.008	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-41.191	1.77
2	MP2A	Z	71.344	1.77
3	MP2A	Mx	-.01	1.77
4	MP2A	X	-41.191	3.77
5	MP2A	Z	71.344	3.77
6	MP2A	Mx	-.01	3.77
7	MP2B	X	-21.359	1.77
8	MP2B	Z	36.995	1.77
9	MP2B	Mx	-.025	1.77
10	MP2B	X	-21.359	3.77
11	MP2B	Z	36.995	3.77
12	MP2B	Mx	-.025	3.77
13	MP4C	X	-35.134	1.77
14	MP4C	Z	60.854	1.77
15	MP4C	Mx	.023	1.77
16	MP4C	X	-35.134	3.77
17	MP4C	Z	60.854	3.77
18	MP4C	Mx	.023	3.77
19	MP1A	X	-104.251	1
20	MP1A	Z	180.568	1
21	MP1A	Mx	-.041	1
22	MP1A	X	-104.251	5
23	MP1A	Z	180.568	5
24	MP1A	Mx	-.041	5
25	MP1B	X	-95.325	1
26	MP1B	Z	165.108	1
27	MP1B	Mx	-.186	1
28	MP1B	X	-95.325	5
29	MP1B	Z	165.108	5
30	MP1B	Mx	-.186	5
31	MP1C	X	-101.525	1
32	MP1C	Z	175.846	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
33	MP1C	Mx	.114	1
34	MP1C	X	-101.525	5
35	MP1C	Z	175.846	5
36	MP1C	Mx	.114	5
37	MP3A	X	-104.251	1
38	MP3A	Z	180.568	1
39	MP3A	Mx	-.041	1
40	MP3A	X	-104.251	5
41	MP3A	Z	180.568	5
42	MP3A	Mx	-.041	5
43	MP3B	X	-95.325	1
44	MP3B	Z	165.108	1
45	MP3B	Mx	-.186	1
46	MP3B	X	-95.325	5
47	MP3B	Z	165.108	5
48	MP3B	Mx	-.186	5
49	MP5C	X	-101.525	1
50	MP5C	Z	175.846	1
51	MP5C	Mx	.114	1
52	MP5C	X	-101.525	5
53	MP5C	Z	175.846	5
54	MP5C	Mx	.114	5
55	MP3C	X	-92.538	1.5
56	MP3C	Z	160.281	1.5
57	MP3C	Mx	.182	1.5
58	MP3C	X	-92.538	5.5
59	MP3C	Z	160.281	5.5
60	MP3C	Mx	.182	5.5
61	MP3C	X	-92.538	1.5
62	MP3C	Z	160.281	1.5
63	MP3C	Mx	-.059	1.5
64	MP3C	X	-92.538	5.5
65	MP3C	Z	160.281	5.5
66	MP3C	Mx	-.059	5.5
67	MP5B	X	-46.711	1.5
68	MP5B	Z	80.906	1.5
69	MP5B	Mx	-.019	1.5
70	MP5B	X	-46.711	5.5
71	MP5B	Z	80.906	5.5
72	MP5B	Mx	-.019	5.5
73	MP5B	X	-46.711	1.5
74	MP5B	Z	80.906	1.5
75	MP5B	Mx	-.089	1.5
76	MP5B	X	-46.711	5.5
77	MP5B	Z	80.906	5.5
78	MP5B	Mx	-.089	5.5
79	MP5A	X	-57.206	1.5
80	MP5A	Z	99.084	1.5
81	MP5A	Mx	-.098	1.5
82	MP5A	X	-57.206	5.5
83	MP5A	Z	99.084	5.5
84	MP5A	Mx	-.098	5.5
85	MP5A	X	-57.206	1.5
86	MP5A	Z	99.084	1.5
87	MP5A	Mx	.071	1.5
88	MP5A	X	-57.206	5.5
89	MP5A	Z	99.084	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
90	MP5A	Mx	.071	5.5
91	OVP	X	-81.886	2
92	OVP	Z	141.83	2
93	OVP	Mx	.095	2
94	MP2C	X	-15.249	2.5
95	MP2C	Z	26.412	2.5
96	MP2C	Mx	.018	2.5
97	MP2C	X	-15.249	3.5
98	MP2C	Z	26.412	3.5
99	MP2C	Mx	.018	3.5
100	MP4A	X	-16.451	2.5
101	MP4A	Z	28.494	2.5
102	MP4A	Mx	-.022	2.5
103	MP4A	X	-16.451	3.5
104	MP4A	Z	28.494	3.5
105	MP4A	Mx	-.022	3.5
106	MP4B	X	-12.515	2.5
107	MP4B	Z	21.677	2.5
108	MP4B	Mx	.008	2.5
109	MP4B	X	-12.515	3.5
110	MP4B	Z	21.677	3.5
111	MP4B	Mx	.008	3.5
112	MP2C	X	-14.74	1
113	MP2C	Z	25.53	1
114	MP2C	Mx	-.017	1
115	MP2C	X	-14.74	2
116	MP2C	Z	25.53	2
117	MP2C	Mx	-.017	2
118	MP4A	X	-16.389	1
119	MP4A	Z	28.387	1
120	MP4A	Mx	.022	1
121	MP4A	X	-16.389	2
122	MP4A	Z	28.387	2
123	MP4A	Mx	.022	2
124	MP4B	X	-10.988	1
125	MP4B	Z	19.031	1
126	MP4B	Mx	-.007	1
127	MP4B	X	-10.988	2
128	MP4B	Z	19.031	2
129	MP4B	Mx	-.007	2
130	MP5A	X	-20.584	7
131	MP5A	Z	35.652	7
132	MP5A	Mx	-.012	7
133	MP5B	X	-20.627	7
134	MP5B	Z	35.728	7
135	MP5B	Mx	.013	7
136	MP5A	X	-20.584	7
137	MP5A	Z	35.652	7
138	MP5A	Mx	.015	7
139	MP5B	X	-20.627	7
140	MP5B	Z	35.728	7
141	MP5B	Mx	-.000921	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-67.201	1.77



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
2	MP2A	Z	38.799	1.77
3	MP2A	Mx	.018	1.77
4	MP2A	X	-67.201	3.77
5	MP2A	Z	38.799	3.77
6	MP2A	Mx	.018	3.77
7	MP2B	X	-25.066	1.77
8	MP2B	Z	14.472	1.77
9	MP2B	Mx	-.019	1.77
10	MP2B	X	-25.066	3.77
11	MP2B	Z	14.472	3.77
12	MP2B	Mx	-.019	3.77
13	MP4C	X	-72.783	1.77
14	MP4C	Z	42.021	1.77
15	MP4C	Mx	0	1.77
16	MP4C	X	-72.783	3.77
17	MP4C	Z	42.021	3.77
18	MP4C	Mx	0	3.77
19	MP1A	X	-178.703	1
20	MP1A	Z	103.174	1
21	MP1A	Mx	.079	1
22	MP1A	X	-178.703	5
23	MP1A	Z	103.174	5
24	MP1A	Mx	.079	5
25	MP1B	X	-159.739	1
26	MP1B	Z	92.225	1
27	MP1B	Mx	-.208	1
28	MP1B	X	-159.739	5
29	MP1B	Z	92.225	5
30	MP1B	Mx	-.208	5
31	MP1C	X	-181.215	1
32	MP1C	Z	104.625	1
33	MP1C	Mx	0	1
34	MP1C	X	-181.215	5
35	MP1C	Z	104.625	5
36	MP1C	Mx	0	5
37	MP3A	X	-178.703	1
38	MP3A	Z	103.174	1
39	MP3A	Mx	.079	1
40	MP3A	X	-178.703	5
41	MP3A	Z	103.174	5
42	MP3A	Mx	.079	5
43	MP3B	X	-159.739	1
44	MP3B	Z	92.225	1
45	MP3B	Mx	-.208	1
46	MP3B	X	-159.739	5
47	MP3B	Z	92.225	5
48	MP3B	Mx	-.208	5
49	MP5C	X	-181.215	1
50	MP5C	Z	104.625	1
51	MP5C	Mx	0	1
52	MP5C	X	-181.215	5
53	MP5C	Z	104.625	5
54	MP5C	Mx	0	5
55	MP3C	X	-199.968	1.5
56	MP3C	Z	115.452	1.5
57	MP3C	Mx	.173	1.5
58	MP3C	X	-199.968	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
59	MP3C	Z	115.452	5.5
60	MP3C	Mx	.173	5.5
61	MP3C	X	-199.968	1.5
62	MP3C	Z	115.452	1.5
63	MP3C	Mx	-.173	1.5
64	MP3C	X	-199.968	5.5
65	MP3C	Z	115.452	5.5
66	MP3C	Mx	-.173	5.5
67	MP5B	X	-41.219	1.5
68	MP5B	Z	23.798	1.5
69	MP5B	Mx	-.032	1.5
70	MP5B	X	-41.219	5.5
71	MP5B	Z	23.798	5.5
72	MP5B	Mx	-.032	5.5
73	MP5B	X	-41.219	1.5
74	MP5B	Z	23.798	1.5
75	MP5B	Mx	-.032	1.5
76	MP5B	X	-41.219	5.5
77	MP5B	Z	23.798	5.5
78	MP5B	Mx	-.032	5.5
79	MP5A	X	-94.087	1.5
80	MP5A	Z	54.321	1.5
81	MP5A	Mx	-.052	1.5
82	MP5A	X	-94.087	5.5
83	MP5A	Z	54.321	5.5
84	MP5A	Mx	-.052	5.5
85	MP5A	X	-94.087	1.5
86	MP5A	Z	54.321	1.5
87	MP5A	Mx	.101	1.5
88	MP5A	X	-94.087	5.5
89	MP5A	Z	54.321	5.5
90	MP5A	Mx	.101	5.5
91	OVP	X	-123.959	2
92	OVP	Z	71.568	2
93	OVP	Mx	.048	2
94	MP2C	X	-28.779	2.5
95	MP2C	Z	16.616	2.5
96	MP2C	Mx	.022	2.5
97	MP2C	X	-28.779	3.5
98	MP2C	Z	16.616	3.5
99	MP2C	Mx	.022	3.5
100	MP4A	X	-27.671	2.5
101	MP4A	Z	15.976	2.5
102	MP4A	Mx	-.02	2.5
103	MP4A	X	-27.671	3.5
104	MP4A	Z	15.976	3.5
105	MP4A	Mx	-.02	3.5
106	MP4B	X	-19.31	2.5
107	MP4B	Z	11.149	2.5
108	MP4B	Mx	0	2.5
109	MP4B	X	-19.31	3.5
110	MP4B	Z	11.149	3.5
111	MP4B	Mx	0	3.5
112	MP2C	X	-28.779	1
113	MP2C	Z	16.616	1
114	MP2C	Mx	-.022	1
115	MP2C	X	-28.779	2



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
116	MP2C	Z	16.616	2
117	MP2C	Mx	-.022	2
118	MP4A	X	-27.259	1
119	MP4A	Z	15.738	1
120	MP4A	Mx	.02	1
121	MP4A	X	-27.259	2
122	MP4A	Z	15.738	2
123	MP4A	Mx	.02	2
124	MP4B	X	-15.782	1
125	MP4B	Z	9.112	1
126	MP4B	Mx	0	1
127	MP4B	X	-15.782	2
128	MP4B	Z	9.112	2
129	MP4B	Mx	0	2
130	MP5A	X	-35.661	7
131	MP5A	Z	20.589	7
132	MP5A	Mx	-.015	7
133	MP5B	X	-35.754	7
134	MP5B	Z	20.643	7
135	MP5B	Mx	.007	7
136	MP5A	X	-35.661	7
137	MP5A	Z	20.589	7
138	MP5A	Mx	.011	7
139	MP5B	X	-35.754	7
140	MP5B	Z	20.643	7
141	MP5B	Mx	.007	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-51.709	1.77
2	MP2A	Z	0	1.77
3	MP2A	Mx	.026	1.77
4	MP2A	X	-51.709	3.77
5	MP2A	Z	0	3.77
6	MP2A	Mx	.026	3.77
7	MP2B	X	-42.718	1.77
8	MP2B	Z	0	1.77
9	MP2B	Mx	-.025	1.77
10	MP2B	X	-42.718	3.77
11	MP2B	Z	0	3.77
12	MP2B	Mx	-.025	3.77
13	MP4C	X	-70.268	1.77
14	MP4C	Z	0	1.77
15	MP4C	Mx	-.023	1.77
16	MP4C	X	-70.268	3.77
17	MP4C	Z	0	3.77
18	MP4C	Mx	-.023	3.77
19	MP1A	X	-194.697	1
20	MP1A	Z	0	1
21	MP1A	Mx	.168	1
22	MP1A	X	-194.697	5
23	MP1A	Z	0	5
24	MP1A	Mx	.168	5
25	MP1B	X	-190.651	1
26	MP1B	Z	0	1
27	MP1B	Mx	-.186	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
28	MP1B	X	-190.651	5
29	MP1B	Z	0	5
30	MP1B	Mx	-.186	5
31	MP1C	X	-203.05	1
32	MP1C	Z	0	1
33	MP1C	Mx	-.114	1
34	MP1C	X	-203.05	5
35	MP1C	Z	0	5
36	MP1C	Mx	-.114	5
37	MP3A	X	-194.697	1
38	MP3A	Z	0	1
39	MP3A	Mx	.168	1
40	MP3A	X	-194.697	5
41	MP3A	Z	0	5
42	MP3A	Mx	.168	5
43	MP3B	X	-190.651	1
44	MP3B	Z	0	1
45	MP3B	Mx	-.186	1
46	MP3B	X	-190.651	5
47	MP3B	Z	0	5
48	MP3B	Mx	-.186	5
49	MP5C	X	-203.05	1
50	MP5C	Z	0	1
51	MP5C	Mx	-.114	1
52	MP5C	X	-203.05	5
53	MP5C	Z	0	5
54	MP5C	Mx	-.114	5
55	MP3C	X	-185.077	1.5
56	MP3C	Z	0	1.5
57	MP3C	Mx	.059	1.5
58	MP3C	X	-185.077	5.5
59	MP3C	Z	0	5.5
60	MP3C	Mx	.059	5.5
61	MP3C	X	-185.077	1.5
62	MP3C	Z	0	1.5
63	MP3C	Mx	-.182	1.5
64	MP3C	X	-185.077	5.5
65	MP3C	Z	0	5.5
66	MP3C	Mx	-.182	5.5
67	MP5B	X	-93.423	1.5
68	MP5B	Z	0	1.5
69	MP5B	Mx	-.089	1.5
70	MP5B	X	-93.423	5.5
71	MP5B	Z	0	5.5
72	MP5B	Mx	-.089	5.5
73	MP5B	X	-93.423	1.5
74	MP5B	Z	0	1.5
75	MP5B	Mx	-.019	1.5
76	MP5B	X	-93.423	5.5
77	MP5B	Z	0	5.5
78	MP5B	Mx	-.019	5.5
79	MP5A	X	-77.415	1.5
80	MP5A	Z	0	1.5
81	MP5A	Mx	.002	1.5
82	MP5A	X	-77.415	5.5
83	MP5A	Z	0	5.5
84	MP5A	Mx	.002	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
85	MP5A	X	-77.415	1.5
86	MP5A	Z	0	1.5
87	MP5A	Mx	.077	1.5
88	MP5A	X	-77.415	5.5
89	MP5A	Z	0	5.5
90	MP5A	Mx	.077	5.5
91	OVP	X	-132.818	2
92	OVP	Z	0	2
93	OVP	Mx	0	2
94	MP2C	X	-30.498	2.5
95	MP2C	Z	0	2.5
96	MP2C	Mx	.018	2.5
97	MP2C	X	-30.498	3.5
98	MP2C	Z	0	3.5
99	MP2C	Mx	.018	3.5
100	MP4A	X	-26.815	2.5
101	MP4A	Z	0	2.5
102	MP4A	Mx	-.011	2.5
103	MP4A	X	-26.815	3.5
104	MP4A	Z	0	3.5
105	MP4A	Mx	-.011	3.5
106	MP4B	X	-25.031	2.5
107	MP4B	Z	0	2.5
108	MP4B	Mx	-.008	2.5
109	MP4B	X	-25.031	3.5
110	MP4B	Z	0	3.5
111	MP4B	Mx	-.008	3.5
112	MP2C	X	-29.479	1
113	MP2C	Z	0	1
114	MP2C	Mx	-.017	1
115	MP2C	X	-29.479	2
116	MP2C	Z	0	2
117	MP2C	Mx	-.017	2
118	MP4A	X	-24.424	1
119	MP4A	Z	0	1
120	MP4A	Mx	.01	1
121	MP4A	X	-24.424	2
122	MP4A	Z	0	2
123	MP4A	Mx	.01	2
124	MP4B	X	-21.975	1
125	MP4B	Z	0	1
126	MP4B	Mx	.007	1
127	MP4B	X	-21.975	2
128	MP4B	Z	0	2
129	MP4B	Mx	.007	2
130	MP5A	X	-41.235	7
131	MP5A	Z	0	7
132	MP5A	Mx	-.014	7
133	MP5B	X	-41.255	7
134	MP5B	Z	0	7
135	MP5B	Mx	-.000921	7
136	MP5A	X	-41.235	7
137	MP5A	Z	0	7
138	MP5A	Mx	.004	7
139	MP5B	X	-41.255	7
140	MP5B	Z	0	7
141	MP5B	Mx	.013	7



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-26.505	1.77
2	MP2A	Z	-15.302	1.77
3	MP2A	Mx	.02	1.77
4	MP2A	X	-26.505	3.77
5	MP2A	Z	-15.302	3.77
6	MP2A	Mx	.02	3.77
7	MP2B	X	-60.854	1.77
8	MP2B	Z	-35.134	1.77
9	MP2B	Mx	-.023	1.77
10	MP2B	X	-60.854	3.77
11	MP2B	Z	-35.134	3.77
12	MP2B	Mx	-.023	3.77
13	MP4C	X	-36.995	1.77
14	MP4C	Z	-21.359	1.77
15	MP4C	Mx	-.025	1.77
16	MP4C	X	-36.995	3.77
17	MP4C	Z	-21.359	3.77
18	MP4C	Mx	-.025	3.77
19	MP1A	X	-160.387	1
20	MP1A	Z	-92.599	1
21	MP1A	Mx	.205	1
22	MP1A	X	-160.387	5
23	MP1A	Z	-92.599	5
24	MP1A	Mx	.205	5
25	MP1B	X	-175.846	1
26	MP1B	Z	-101.525	1
27	MP1B	Mx	-.114	1
28	MP1B	X	-175.846	5
29	MP1B	Z	-101.525	5
30	MP1B	Mx	-.114	5
31	MP1C	X	-165.108	1
32	MP1C	Z	-95.325	1
33	MP1C	Mx	-.186	1
34	MP1C	X	-165.108	5
35	MP1C	Z	-95.325	5
36	MP1C	Mx	-.186	5
37	MP3A	X	-160.387	1
38	MP3A	Z	-92.599	1
39	MP3A	Mx	.205	1
40	MP3A	X	-160.387	5
41	MP3A	Z	-92.599	5
42	MP3A	Mx	.205	5
43	MP3B	X	-175.846	1
44	MP3B	Z	-101.525	1
45	MP3B	Mx	-.114	1
46	MP3B	X	-175.846	5
47	MP3B	Z	-101.525	5
48	MP3B	Mx	-.114	5
49	MP5C	X	-165.108	1
50	MP5C	Z	-95.325	1
51	MP5C	Mx	-.186	1
52	MP5C	X	-165.108	5
53	MP5C	Z	-95.325	5
54	MP5C	Mx	-.186	5
55	MP3C	X	-80.906	1.5
56	MP3C	Z	-46.711	1.5
57	MP3C	Mx	-.019	1.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP3C	X	-80.906	5.5
59	MP3C	Z	-46.711	5.5
60	MP3C	Mx	-.019	5.5
61	MP3C	X	-80.906	1.5
62	MP3C	Z	-46.711	1.5
63	MP3C	Mx	-.089	1.5
64	MP3C	X	-80.906	5.5
65	MP3C	Z	-46.711	5.5
66	MP3C	Mx	-.089	5.5
67	MP5B	X	-160.281	1.5
68	MP5B	Z	-92.538	1.5
69	MP5B	Mx	-.182	1.5
70	MP5B	X	-160.281	5.5
71	MP5B	Z	-92.538	5.5
72	MP5B	Mx	-.182	5.5
73	MP5B	X	-160.281	1.5
74	MP5B	Z	-92.538	1.5
75	MP5B	Mx	.059	1.5
76	MP5B	X	-160.281	5.5
77	MP5B	Z	-92.538	5.5
78	MP5B	Mx	.059	5.5
79	MP5A	X	-44.997	1.5
80	MP5A	Z	-25.979	1.5
81	MP5A	Mx	.027	1.5
82	MP5A	X	-44.997	5.5
83	MP5A	Z	-25.979	5.5
84	MP5A	Mx	.027	5.5
85	MP5A	X	-44.997	1.5
86	MP5A	Z	-25.979	1.5
87	MP5A	Mx	.041	1.5
88	MP5A	X	-44.997	5.5
89	MP5A	Z	-25.979	5.5
90	MP5A	Mx	.041	5.5
91	OVP	X	-123.959	2
92	OVP	Z	-71.568	2
93	OVP	Mx	-.048	2
94	MP2C	X	-21.677	2.5
95	MP2C	Z	-12.515	2.5
96	MP2C	Mx	.008	2.5
97	MP2C	X	-21.677	3.5
98	MP2C	Z	-12.515	3.5
99	MP2C	Mx	.008	3.5
100	MP4A	X	-19.595	2.5
101	MP4A	Z	-11.313	2.5
102	MP4A	Mx	-.003	2.5
103	MP4A	X	-19.595	3.5
104	MP4A	Z	-11.313	3.5
105	MP4A	Mx	-.003	3.5
106	MP4B	X	-26.412	2.5
107	MP4B	Z	-15.249	2.5
108	MP4B	Mx	-.018	2.5
109	MP4B	X	-26.412	3.5
110	MP4B	Z	-15.249	3.5
111	MP4B	Mx	-.018	3.5
112	MP2C	X	-19.031	1
113	MP2C	Z	-10.988	1
114	MP2C	Mx	-.007	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
115	MP2C	X	-19.031	2
116	MP2C	Z	-10.988	2
117	MP2C	Mx	-.007	2
118	MP4A	X	-16.174	1
119	MP4A	Z	-9.338	1
120	MP4A	Mx	.002	1
121	MP4A	X	-16.174	2
122	MP4A	Z	-9.338	2
123	MP4A	Mx	.002	2
124	MP4B	X	-25.53	1
125	MP4B	Z	-14.74	1
126	MP4B	Mx	.017	1
127	MP4B	X	-25.53	2
128	MP4B	Z	-14.74	2
129	MP4B	Mx	.017	2
130	MP5A	X	-35.751	7
131	MP5A	Z	-20.641	7
132	MP5A	Mx	-.009	7
133	MP5B	X	-35.675	7
134	MP5B	Z	-20.597	7
135	MP5B	Mx	-.008	7
136	MP5A	X	-35.751	7
137	MP5A	Z	-20.641	7
138	MP5A	Mx	-.004	7
139	MP5B	X	-35.675	7
140	MP5B	Z	-20.597	7
141	MP5B	Mx	.015	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-17.694	1.77
2	MP2A	Z	-30.648	1.77
3	MP2A	Mx	.022	1.77
4	MP2A	X	-17.694	3.77
5	MP2A	Z	-30.648	3.77
6	MP2A	Mx	.022	3.77
7	MP2B	X	-42.021	1.77
8	MP2B	Z	-72.783	1.77
9	MP2B	Mx	0	1.77
10	MP2B	X	-42.021	3.77
11	MP2B	Z	-72.783	3.77
12	MP2B	Mx	0	3.77
13	MP4C	X	-14.472	1.77
14	MP4C	Z	-25.066	1.77
15	MP4C	Mx	-.019	1.77
16	MP4C	X	-14.472	3.77
17	MP4C	Z	-25.066	3.77
18	MP4C	Mx	-.019	3.77
19	MP1A	X	-93.676	1
20	MP1A	Z	-162.251	1
21	MP1A	Mx	.198	1
22	MP1A	X	-93.676	5
23	MP1A	Z	-162.251	5
24	MP1A	Mx	.198	5
25	MP1B	X	-104.625	1
26	MP1B	Z	-181.215	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
27	MP1B	Mx	0	1
28	MP1B	X	-104.625	5
29	MP1B	Z	-181.215	5
30	MP1B	Mx	0	5
31	MP1C	X	-92.225	1
32	MP1C	Z	-159.739	1
33	MP1C	Mx	-.208	1
34	MP1C	X	-92.225	5
35	MP1C	Z	-159.739	5
36	MP1C	Mx	-.208	5
37	MP3A	X	-93.676	1
38	MP3A	Z	-162.251	1
39	MP3A	Mx	.198	1
40	MP3A	X	-93.676	5
41	MP3A	Z	-162.251	5
42	MP3A	Mx	.198	5
43	MP3B	X	-104.625	1
44	MP3B	Z	-181.215	1
45	MP3B	Mx	0	1
46	MP3B	X	-104.625	5
47	MP3B	Z	-181.215	5
48	MP3B	Mx	0	5
49	MP5C	X	-92.225	1
50	MP5C	Z	-159.739	1
51	MP5C	Mx	-.208	1
52	MP5C	X	-92.225	5
53	MP5C	Z	-159.739	5
54	MP5C	Mx	-.208	5
55	MP3C	X	-23.798	1.5
56	MP3C	Z	-41.219	1.5
57	MP3C	Mx	-.032	1.5
58	MP3C	X	-23.798	5.5
59	MP3C	Z	-41.219	5.5
60	MP3C	Mx	-.032	5.5
61	MP3C	X	-23.798	1.5
62	MP3C	Z	-41.219	1.5
63	MP3C	Mx	-.032	1.5
64	MP3C	X	-23.798	5.5
65	MP3C	Z	-41.219	5.5
66	MP3C	Mx	-.032	5.5
67	MP5B	X	-115.452	1.5
68	MP5B	Z	-199.968	1.5
69	MP5B	Mx	-.173	1.5
70	MP5B	X	-115.452	5.5
71	MP5B	Z	-199.968	5.5
72	MP5B	Mx	-.173	5.5
73	MP5B	X	-115.452	1.5
74	MP5B	Z	-199.968	1.5
75	MP5B	Mx	.173	1.5
76	MP5B	X	-115.452	5.5
77	MP5B	Z	-199.968	5.5
78	MP5B	Mx	.173	5.5
79	MP5A	X	-28.864	1.5
80	MP5A	Z	-49.995	1.5
81	MP5A	Mx	.051	1.5
82	MP5A	X	-28.864	5.5
83	MP5A	Z	-49.995	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
84	MP5A	Mx	.051	5.5
85	MP5A	X	-28.864	1.5
86	MP5A	Z	-49.995	1.5
87	MP5A	Mx	.021	1.5
88	MP5A	X	-28.864	5.5
89	MP5A	Z	-49.995	5.5
90	MP5A	Mx	.021	5.5
91	OVP	X	-81.886	2
92	OVP	Z	-141.83	2
93	OVP	Mx	-.095	2
94	MP2C	X	-11.149	2.5
95	MP2C	Z	-19.31	2.5
96	MP2C	Mx	0	2.5
97	MP2C	X	-11.149	3.5
98	MP2C	Z	-19.31	3.5
99	MP2C	Mx	0	3.5
100	MP4A	X	-11.788	2.5
101	MP4A	Z	-20.418	2.5
102	MP4A	Mx	.005	2.5
103	MP4A	X	-11.788	3.5
104	MP4A	Z	-20.418	3.5
105	MP4A	Mx	.005	3.5
106	MP4B	X	-16.616	2.5
107	MP4B	Z	-28.779	2.5
108	MP4B	Mx	-.022	2.5
109	MP4B	X	-16.616	3.5
110	MP4B	Z	-28.779	3.5
111	MP4B	Mx	-.022	3.5
112	MP2C	X	-9.112	1
113	MP2C	Z	-15.782	1
114	MP2C	Mx	0	1
115	MP2C	X	-9.112	2
116	MP2C	Z	-15.782	2
117	MP2C	Mx	0	2
118	MP4A	X	-9.99	1
119	MP4A	Z	-17.302	1
120	MP4A	Mx	-.005	1
121	MP4A	X	-9.99	2
122	MP4A	Z	-17.302	2
123	MP4A	Mx	-.005	2
124	MP4B	X	-16.616	1
125	MP4B	Z	-28.779	1
126	MP4B	Mx	.022	1
127	MP4B	X	-16.616	2
128	MP4B	Z	-28.779	2
129	MP4B	Mx	.022	2
130	MP5A	X	-20.636	7
131	MP5A	Z	-35.742	7
132	MP5A	Mx	-.002	7
133	MP5B	X	-20.582	7
134	MP5B	Z	-35.649	7
135	MP5B	Mx	-.014	7
136	MP5A	X	-20.636	7
137	MP5A	Z	-35.742	7
138	MP5A	Mx	-.011	7
139	MP5B	X	-20.582	7
140	MP5B	Z	-35.649	7



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
141	MP5B	Mx	.014	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	0	1.77
2	MP2A	Z	-15.095	1.77
3	MP2A	Mx	.006	1.77
4	MP2A	X	0	3.77
5	MP2A	Z	-15.095	3.77
6	MP2A	Mx	.006	3.77
7	MP2B	X	0	1.77
8	MP2B	Z	-16.947	1.77
9	MP2B	Mx	.006	1.77
10	MP2B	X	0	3.77
11	MP2B	Z	-16.947	3.77
12	MP2B	Mx	.006	3.77
13	MP4C	X	0	1.77
14	MP4C	Z	-11.272	1.77
15	MP4C	Mx	-.007	1.77
16	MP4C	X	0	3.77
17	MP4C	Z	-11.272	3.77
18	MP4C	Mx	-.007	3.77
19	MP1A	X	0	1
20	MP1A	Z	-37.762	1
21	MP1A	Mx	.027	1
22	MP1A	X	0	5
23	MP1A	Z	-37.762	5
24	MP1A	Mx	.027	5
25	MP1B	X	0	1
26	MP1B	Z	-38.47	1
27	MP1B	Mx	.022	1
28	MP1B	X	0	5
29	MP1B	Z	-38.47	5
30	MP1B	Mx	.022	5
31	MP1C	X	0	1
32	MP1C	Z	-36.301	1
33	MP1C	Mx	-.035	1
34	MP1C	X	0	5
35	MP1C	Z	-36.301	5
36	MP1C	Mx	-.035	5
37	MP3A	X	0	1
38	MP3A	Z	-37.762	1
39	MP3A	Mx	.027	1
40	MP3A	X	0	5
41	MP3A	Z	-37.762	5
42	MP3A	Mx	.027	5
43	MP3B	X	0	1
44	MP3B	Z	-38.47	1
45	MP3B	Mx	.022	1
46	MP3B	X	0	5
47	MP3B	Z	-38.47	5
48	MP3B	Mx	.022	5
49	MP5C	X	0	1
50	MP5C	Z	-36.301	1
51	MP5C	Mx	-.035	1
52	MP5C	X	0	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
53	MP5C	Z	-36.301	5
54	MP5C	Mx	-.035	5
55	MP3C	X	0	1.5
56	MP3C	Z	-28.5	1.5
57	MP3C	Mx	-.027	1.5
58	MP3C	X	0	5.5
59	MP3C	Z	-28.5	5.5
60	MP3C	Mx	-.027	5.5
61	MP3C	X	0	1.5
62	MP3C	Z	-28.5	1.5
63	MP3C	Mx	-.006	1.5
64	MP3C	X	0	5.5
65	MP3C	Z	-28.5	5.5
66	MP3C	Mx	-.006	5.5
67	MP5B	X	0	1.5
68	MP5B	Z	-40.137	1.5
69	MP5B	Mx	-.013	1.5
70	MP5B	X	0	5.5
71	MP5B	Z	-40.137	5.5
72	MP5B	Mx	-.013	5.5
73	MP5B	X	0	1.5
74	MP5B	Z	-40.137	1.5
75	MP5B	Mx	.039	1.5
76	MP5B	X	0	5.5
77	MP5B	Z	-40.137	5.5
78	MP5B	Mx	.039	5.5
79	MP5A	X	0	1.5
80	MP5A	Z	-28.95	1.5
81	MP5A	Mx	.029	1.5
82	MP5A	X	0	5.5
83	MP5A	Z	-28.95	5.5
84	MP5A	Mx	.029	5.5
85	MP5A	X	0	1.5
86	MP5A	Z	-28.95	1.5
87	MP5A	Mx	-.004	1.5
88	MP5A	X	0	5.5
89	MP5A	Z	-28.95	5.5
90	MP5A	Mx	-.004	5.5
91	OVP	X	0	2
92	OVP	Z	-34.27	2
93	OVP	Mx	-.023	2
94	MP2C	X	0	2.5
95	MP2C	Z	-6.439	2.5
96	MP2C	Mx	-.002	2.5
97	MP2C	X	0	3.5
98	MP2C	Z	-6.439	3.5
99	MP2C	Mx	-.002	3.5
100	MP4A	X	0	2.5
101	MP4A	Z	-7.293	2.5
102	MP4A	Mx	.004	2.5
103	MP4A	X	0	3.5
104	MP4A	Z	-7.293	3.5
105	MP4A	Mx	.004	3.5
106	MP4B	X	0	2.5
107	MP4B	Z	-7.707	2.5
108	MP4B	Mx	-.004	2.5
109	MP4B	X	0	3.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
110	MP4B	Z	-7.707	3.5
111	MP4B	Mx	-.004	3.5
112	MP2C	X	0	1
113	MP2C	Z	-5.716	1
114	MP2C	Mx	.002	1
115	MP2C	X	0	2
116	MP2C	Z	-5.716	2
117	MP2C	Mx	.002	2
118	MP4A	X	0	1
119	MP4A	Z	-6.895	1
120	MP4A	Mx	-.004	1
121	MP4A	X	0	2
122	MP4A	Z	-6.895	2
123	MP4A	Mx	-.004	2
124	MP4B	X	0	1
125	MP4B	Z	-7.466	1
126	MP4B	Mx	.004	1
127	MP4B	X	0	2
128	MP4B	Z	-7.466	2
129	MP4B	Mx	.004	2
130	MP5A	X	0	7
131	MP5A	Z	-5.824	7
132	MP5A	Mx	.000863	7
133	MP5B	X	0	7
134	MP5B	Z	-4.892	7
135	MP5B	Mx	-.002	7
136	MP5A	X	0	7
137	MP5A	Z	-5.824	7
138	MP5A	Mx	-.002	7
139	MP5B	X	0	7
140	MP5B	Z	-4.892	7
141	MP5B	Mx	.001	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	9.721	1.77
2	MP2A	Z	-16.838	1.77
3	MP2A	Mx	.002	1.77
4	MP2A	X	9.721	3.77
5	MP2A	Z	-16.838	3.77
6	MP2A	Mx	.002	3.77
7	MP2B	X	5.636	1.77
8	MP2B	Z	-9.762	1.77
9	MP2B	Mx	.007	1.77
10	MP2B	X	5.636	3.77
11	MP2B	Z	-9.762	3.77
12	MP2B	Mx	.007	3.77
13	MP4C	X	8.474	1.77
14	MP4C	Z	-14.677	1.77
15	MP4C	Mx	-.006	1.77
16	MP4C	X	8.474	3.77
17	MP4C	Z	-14.677	3.77
18	MP4C	Mx	-.006	3.77
19	MP1A	X	19.712	1
20	MP1A	Z	-34.142	1
21	MP1A	Mx	.008	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
22	MP1A	X	19.712	5
23	MP1A	Z	-34.142	5
24	MP1A	Mx	.008	5
25	MP1B	X	18.15	1
26	MP1B	Z	-31.437	1
27	MP1B	Mx	.035	1
28	MP1B	X	18.15	5
29	MP1B	Z	-31.437	5
30	MP1B	Mx	.035	5
31	MP1C	X	19.235	1
32	MP1C	Z	-33.316	1
33	MP1C	Mx	-.022	1
34	MP1C	X	19.235	5
35	MP1C	Z	-33.316	5
36	MP1C	Mx	-.022	5
37	MP3A	X	19.712	1
38	MP3A	Z	-34.142	1
39	MP3A	Mx	.008	1
40	MP3A	X	19.712	5
41	MP3A	Z	-34.142	5
42	MP3A	Mx	.008	5
43	MP3B	X	18.15	1
44	MP3B	Z	-31.437	1
45	MP3B	Mx	.035	1
46	MP3B	X	18.15	5
47	MP3B	Z	-31.437	5
48	MP3B	Mx	.035	5
49	MP5C	X	19.235	1
50	MP5C	Z	-33.316	1
51	MP5C	Mx	-.022	1
52	MP5C	X	19.235	5
53	MP5C	Z	-33.316	5
54	MP5C	Mx	-.022	5
55	MP3C	X	20.068	1.5
56	MP3C	Z	-34.759	1.5
57	MP3C	Mx	-.039	1.5
58	MP3C	X	20.068	5.5
59	MP3C	Z	-34.759	5.5
60	MP3C	Mx	-.039	5.5
61	MP3C	X	20.068	1.5
62	MP3C	Z	-34.759	1.5
63	MP3C	Mx	.013	1.5
64	MP3C	X	20.068	5.5
65	MP3C	Z	-34.759	5.5
66	MP3C	Mx	.013	5.5
67	MP5B	X	14.25	1.5
68	MP5B	Z	-24.682	1.5
69	MP5B	Mx	.006	1.5
70	MP5B	X	14.25	5.5
71	MP5B	Z	-24.682	5.5
72	MP5B	Mx	.006	5.5
73	MP5B	X	14.25	1.5
74	MP5B	Z	-24.682	1.5
75	MP5B	Mx	.027	1.5
76	MP5B	X	14.25	5.5
77	MP5B	Z	-24.682	5.5
78	MP5B	Mx	.027	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
79	MP5A	X	16.448	1.5
80	MP5A	Z	-28.488	1.5
81	MP5A	Mx	.028	1.5
82	MP5A	X	16.448	5.5
83	MP5A	Z	-28.488	5.5
84	MP5A	Mx	.028	5.5
85	MP5A	X	16.448	1.5
86	MP5A	Z	-28.488	1.5
87	MP5A	Mx	-.02	1.5
88	MP5A	X	16.448	5.5
89	MP5A	Z	-28.488	5.5
90	MP5A	Mx	-.02	5.5
91	OVP	X	16.202	2
92	OVP	Z	-28.062	2
93	OVP	Mx	-.019	2
94	MP2C	X	3.854	2.5
95	MP2C	Z	-6.675	2.5
96	MP2C	Mx	-.004	2.5
97	MP2C	X	3.854	3.5
98	MP2C	Z	-6.675	3.5
99	MP2C	Mx	-.004	3.5
100	MP4A	X	4.133	2.5
101	MP4A	Z	-7.158	2.5
102	MP4A	Mx	.005	2.5
103	MP4A	X	4.133	3.5
104	MP4A	Z	-7.158	3.5
105	MP4A	Mx	.005	3.5
106	MP4B	X	3.219	2.5
107	MP4B	Z	-5.576	2.5
108	MP4B	Mx	-.002	2.5
109	MP4B	X	3.219	3.5
110	MP4B	Z	-5.576	3.5
111	MP4B	Mx	-.002	3.5
112	MP2C	X	3.733	1
113	MP2C	Z	-6.466	1
114	MP2C	Mx	.004	1
115	MP2C	X	3.733	2
116	MP2C	Z	-6.466	2
117	MP2C	Mx	.004	2
118	MP4A	X	4.118	1
119	MP4A	Z	-7.133	1
120	MP4A	Mx	-.005	1
121	MP4A	X	4.118	2
122	MP4A	Z	-7.133	2
123	MP4A	Mx	-.005	2
124	MP4B	X	2.858	1
125	MP4B	Z	-4.95	1
126	MP4B	Mx	.002	1
127	MP4B	X	2.858	2
128	MP4B	Z	-4.95	2
129	MP4B	Mx	.002	2
130	MP5A	X	1.818	7
131	MP5A	Z	-3.149	7
132	MP5A	Mx	.001	7
133	MP5B	X	3.874	7
134	MP5B	Z	-6.71	7
135	MP5B	Mx	-.002	7



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
136	MP5A	X	1.818	7
137	MP5A	Z	-3.149	7
138	MP5A	Mx	-.001	7
139	MP5B	X	3.874	7
140	MP5B	Z	-6.71	7
141	MP5B	Mx	.000173	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	15.984	1.77
2	MP2A	Z	-9.228	1.77
3	MP2A	Mx	-.004	1.77
4	MP2A	X	15.984	3.77
5	MP2A	Z	-9.228	3.77
6	MP2A	Mx	-.004	3.77
7	MP2B	X	7.304	1.77
8	MP2B	Z	-4.217	1.77
9	MP2B	Mx	.006	1.77
10	MP2B	X	7.304	3.77
11	MP2B	Z	-4.217	3.77
12	MP2B	Mx	.006	3.77
13	MP4C	X	17.134	1.77
14	MP4C	Z	-9.892	1.77
15	MP4C	Mx	0	1.77
16	MP4C	X	17.134	3.77
17	MP4C	Z	-9.892	3.77
18	MP4C	Mx	0	3.77
19	MP1A	X	33.816	1
20	MP1A	Z	-19.523	1
21	MP1A	Mx	-.015	1
22	MP1A	X	33.816	5
23	MP1A	Z	-19.523	5
24	MP1A	Mx	-.015	5
25	MP1B	X	30.498	1
26	MP1B	Z	-17.608	1
27	MP1B	Mx	.04	1
28	MP1B	X	30.498	5
29	MP1B	Z	-17.608	5
30	MP1B	Mx	.04	5
31	MP1C	X	34.255	1
32	MP1C	Z	-19.777	1
33	MP1C	Mx	0	1
34	MP1C	X	34.255	5
35	MP1C	Z	-19.777	5
36	MP1C	Mx	0	5
37	MP3A	X	33.816	1
38	MP3A	Z	-19.523	1
39	MP3A	Mx	-.015	1
40	MP3A	X	33.816	5
41	MP3A	Z	-19.523	5
42	MP3A	Mx	-.015	5
43	MP3B	X	30.498	1
44	MP3B	Z	-17.608	1
45	MP3B	Mx	.04	1
46	MP3B	X	30.498	5
47	MP3B	Z	-17.608	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
48	MP3B	Mx	.04	5
49	MP5C	X	34.255	1
50	MP5C	Z	-19.777	1
51	MP5C	Mx	0	1
52	MP5C	X	34.255	5
53	MP5C	Z	-19.777	5
54	MP5C	Mx	0	5
55	MP3C	X	39.798	1.5
56	MP3C	Z	-22.978	1.5
57	MP3C	Mx	-.034	1.5
58	MP3C	X	39.798	5.5
59	MP3C	Z	-22.978	5.5
60	MP3C	Mx	-.034	5.5
61	MP3C	X	39.798	1.5
62	MP3C	Z	-22.978	1.5
63	MP3C	Mx	.034	1.5
64	MP3C	X	39.798	5.5
65	MP3C	Z	-22.978	5.5
66	MP3C	Mx	.034	5.5
67	MP5B	X	19.643	1.5
68	MP5B	Z	-11.341	1.5
69	MP5B	Mx	.015	1.5
70	MP5B	X	19.643	5.5
71	MP5B	Z	-11.341	5.5
72	MP5B	Mx	.015	5.5
73	MP5B	X	19.643	1.5
74	MP5B	Z	-11.341	1.5
75	MP5B	Mx	.015	1.5
76	MP5B	X	19.643	5.5
77	MP5B	Z	-11.341	5.5
78	MP5B	Mx	.015	5.5
79	MP5A	X	27.714	1.5
80	MP5A	Z	-16	1.5
81	MP5A	Mx	.015	1.5
82	MP5A	X	27.714	5.5
83	MP5A	Z	-16	5.5
84	MP5A	Mx	.015	5.5
85	MP5A	X	27.714	1.5
86	MP5A	Z	-16	1.5
87	MP5A	Mx	-.03	1.5
88	MP5A	X	27.714	5.5
89	MP5A	Z	-16	5.5
90	MP5A	Mx	-.03	5.5
91	OVP	X	24.829	2
92	OVP	Z	-14.335	2
93	OVP	Mx	-.01	2
94	MP2C	X	7.224	2.5
95	MP2C	Z	-4.171	2.5
96	MP2C	Mx	-.006	2.5
97	MP2C	X	7.224	3.5
98	MP2C	Z	-4.171	3.5
99	MP2C	Mx	-.006	3.5
100	MP4A	X	6.967	2.5
101	MP4A	Z	-4.022	2.5
102	MP4A	Mx	.005	2.5
103	MP4A	X	6.967	3.5
104	MP4A	Z	-4.022	3.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
105	MP4A	Mx	.005	3.5
106	MP4B	X	5.027	2.5
107	MP4B	Z	-2.902	2.5
108	MP4B	Mx	0	2.5
109	MP4B	X	5.027	3.5
110	MP4B	Z	-2.902	3.5
111	MP4B	Mx	0	3.5
112	MP2C	X	7.224	1
113	MP2C	Z	-4.171	1
114	MP2C	Mx	.006	1
115	MP2C	X	7.224	2
116	MP2C	Z	-4.171	2
117	MP2C	Mx	.006	2
118	MP4A	X	6.869	1
119	MP4A	Z	-3.966	1
120	MP4A	Mx	-.005	1
121	MP4A	X	6.869	2
122	MP4A	Z	-3.966	2
123	MP4A	Mx	-.005	2
124	MP4B	X	4.192	1
125	MP4B	Z	-2.42	1
126	MP4B	Mx	0	1
127	MP4B	X	4.192	2
128	MP4B	Z	-2.42	2
129	MP4B	Mx	0	2
130	MP5A	X	3.579	7
131	MP5A	Z	-2.066	7
132	MP5A	Mx	.002	7
133	MP5B	X	7.947	7
134	MP5B	Z	-4.588	7
135	MP5B	Mx	-.002	7
136	MP5A	X	3.579	7
137	MP5A	Z	-2.066	7
138	MP5A	Mx	-.001	7
139	MP5B	X	7.947	7
140	MP5B	Z	-4.588	7
141	MP5B	Mx	-.002	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	13.124	1.77
2	MP2A	Z	0	1.77
3	MP2A	Mx	-.007	1.77
4	MP2A	X	13.124	3.77
5	MP2A	Z	0	3.77
6	MP2A	Mx	-.007	3.77
7	MP2B	X	11.272	1.77
8	MP2B	Z	0	1.77
9	MP2B	Mx	.007	1.77
10	MP2B	X	11.272	3.77
11	MP2B	Z	0	3.77
12	MP2B	Mx	.007	3.77
13	MP4C	X	16.947	1.77
14	MP4C	Z	0	1.77
15	MP4C	Mx	.006	1.77
16	MP4C	X	16.947	3.77



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
17	MP4C	Z	0	3.77
18	MP4C	Mx	.006	3.77
19	MP1A	X	37.009	1
20	MP1A	Z	0	1
21	MP1A	Mx	-.032	1
22	MP1A	X	37.009	5
23	MP1A	Z	0	5
24	MP1A	Mx	-.032	5
25	MP1B	X	36.301	1
26	MP1B	Z	0	1
27	MP1B	Mx	.035	1
28	MP1B	X	36.301	5
29	MP1B	Z	0	5
30	MP1B	Mx	.035	5
31	MP1C	X	38.47	1
32	MP1C	Z	0	1
33	MP1C	Mx	.022	1
34	MP1C	X	38.47	5
35	MP1C	Z	0	5
36	MP1C	Mx	.022	5
37	MP3A	X	37.009	1
38	MP3A	Z	0	1
39	MP3A	Mx	-.032	1
40	MP3A	X	37.009	5
41	MP3A	Z	0	5
42	MP3A	Mx	-.032	5
43	MP3B	X	36.301	1
44	MP3B	Z	0	1
45	MP3B	Mx	.035	1
46	MP3B	X	36.301	5
47	MP3B	Z	0	5
48	MP3B	Mx	.035	5
49	MP5C	X	38.47	1
50	MP5C	Z	0	1
51	MP5C	Mx	.022	1
52	MP5C	X	38.47	5
53	MP5C	Z	0	5
54	MP5C	Mx	.022	5
55	MP3C	X	40.137	1.5
56	MP3C	Z	0	1.5
57	MP3C	Mx	-.013	1.5
58	MP3C	X	40.137	5.5
59	MP3C	Z	0	5.5
60	MP3C	Mx	-.013	5.5
61	MP3C	X	40.137	1.5
62	MP3C	Z	0	1.5
63	MP3C	Mx	.039	1.5
64	MP3C	X	40.137	5.5
65	MP3C	Z	0	5.5
66	MP3C	Mx	.039	5.5
67	MP5B	X	28.5	1.5
68	MP5B	Z	0	1.5
69	MP5B	Mx	.027	1.5
70	MP5B	X	28.5	5.5
71	MP5B	Z	0	5.5
72	MP5B	Mx	.027	5.5
73	MP5B	X	28.5	1.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
74	MP5B	Z	0	1.5
75	MP5B	Mx	.006	1.5
76	MP5B	X	28.5	5.5
77	MP5B	Z	0	5.5
78	MP5B	Mx	.006	5.5
79	MP5A	X	27.162	1.5
80	MP5A	Z	0	1.5
81	MP5A	Mx	-.000777	1.5
82	MP5A	X	27.162	5.5
83	MP5A	Z	0	5.5
84	MP5A	Mx	-.000777	5.5
85	MP5A	X	27.162	1.5
86	MP5A	Z	0	1.5
87	MP5A	Mx	-.027	1.5
88	MP5A	X	27.162	5.5
89	MP5A	Z	0	5.5
90	MP5A	Mx	-.027	5.5
91	OVP	X	26.804	2
92	OVP	Z	0	2
93	OVP	Mx	0	2
94	MP2C	X	7.707	2.5
95	MP2C	Z	0	2.5
96	MP2C	Mx	-.004	2.5
97	MP2C	X	7.707	3.5
98	MP2C	Z	0	3.5
99	MP2C	Mx	-.004	3.5
100	MP4A	X	6.853	2.5
101	MP4A	Z	0	2.5
102	MP4A	Mx	.003	2.5
103	MP4A	X	6.853	3.5
104	MP4A	Z	0	3.5
105	MP4A	Mx	.003	3.5
106	MP4B	X	6.439	2.5
107	MP4B	Z	0	2.5
108	MP4B	Mx	.002	2.5
109	MP4B	X	6.439	3.5
110	MP4B	Z	0	3.5
111	MP4B	Mx	.002	3.5
112	MP2C	X	7.466	1
113	MP2C	Z	0	1
114	MP2C	Mx	.004	1
115	MP2C	X	7.466	2
116	MP2C	Z	0	2
117	MP2C	Mx	.004	2
118	MP4A	X	6.287	1
119	MP4A	Z	0	1
120	MP4A	Mx	-.003	1
121	MP4A	X	6.287	2
122	MP4A	Z	0	2
123	MP4A	Mx	-.003	2
124	MP4B	X	5.716	1
125	MP4B	Z	0	1
126	MP4B	Mx	-.002	1
127	MP4B	X	5.716	2
128	MP4B	Z	0	2
129	MP4B	Mx	-.002	2
130	MP5A	X	6.816	7



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
131	MP5A	Z	0	7
132	MP5A	Mx	.002	7
133	MP5B	X	7.748	7
134	MP5B	Z	0	7
135	MP5B	Mx	.000173	7
136	MP5A	X	6.816	7
137	MP5A	Z	0	7
138	MP5A	Mx	-.00059	7
139	MP5B	X	7.748	7
140	MP5B	Z	0	7
141	MP5B	Mx	-.002	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	7.601	1.77
2	MP2A	Z	4.388	1.77
3	MP2A	Mx	-.006	1.77
4	MP2A	X	7.601	3.77
5	MP2A	Z	4.388	3.77
6	MP2A	Mx	-.006	3.77
7	MP2B	X	14.677	1.77
8	MP2B	Z	8.474	1.77
9	MP2B	Mx	.006	1.77
10	MP2B	X	14.677	3.77
11	MP2B	Z	8.474	3.77
12	MP2B	Mx	.006	3.77
13	MP4C	X	9.762	1.77
14	MP4C	Z	5.636	1.77
15	MP4C	Mx	.007	1.77
16	MP4C	X	9.762	3.77
17	MP4C	Z	5.636	3.77
18	MP4C	Mx	.007	3.77
19	MP1A	X	30.611	1
20	MP1A	Z	17.674	1
21	MP1A	Mx	-.039	1
22	MP1A	X	30.611	5
23	MP1A	Z	17.674	5
24	MP1A	Mx	-.039	5
25	MP1B	X	33.316	1
26	MP1B	Z	19.235	1
27	MP1B	Mx	.022	1
28	MP1B	X	33.316	5
29	MP1B	Z	19.235	5
30	MP1B	Mx	.022	5
31	MP1C	X	31.437	1
32	MP1C	Z	18.15	1
33	MP1C	Mx	.035	1
34	MP1C	X	31.437	5
35	MP1C	Z	18.15	5
36	MP1C	Mx	.035	5
37	MP3A	X	30.611	1
38	MP3A	Z	17.674	1
39	MP3A	Mx	-.039	1
40	MP3A	X	30.611	5
41	MP3A	Z	17.674	5
42	MP3A	Mx	-.039	5



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name : 5000244948-VZW_MT_LO_H

Aug 3, 2023
 9:24 AM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
43	MP3B	X	33.316	1
44	MP3B	Z	19.235	1
45	MP3B	Mx	.022	1
46	MP3B	X	33.316	5
47	MP3B	Z	19.235	5
48	MP3B	Mx	.022	5
49	MP5C	X	31.437	1
50	MP5C	Z	18.15	1
51	MP5C	Mx	.035	1
52	MP5C	X	31.437	5
53	MP5C	Z	18.15	5
54	MP5C	Mx	.035	5
55	MP3C	X	24.682	1.5
56	MP3C	Z	14.25	1.5
57	MP3C	Mx	.006	1.5
58	MP3C	X	24.682	5.5
59	MP3C	Z	14.25	5.5
60	MP3C	Mx	.006	5.5
61	MP3C	X	24.682	1.5
62	MP3C	Z	14.25	1.5
63	MP3C	Mx	.027	1.5
64	MP3C	X	24.682	5.5
65	MP3C	Z	14.25	5.5
66	MP3C	Mx	.027	5.5
67	MP5B	X	34.759	1.5
68	MP5B	Z	20.068	1.5
69	MP5B	Mx	.039	1.5
70	MP5B	X	34.759	5.5
71	MP5B	Z	20.068	5.5
72	MP5B	Mx	.039	5.5
73	MP5B	X	34.759	1.5
74	MP5B	Z	20.068	1.5
75	MP5B	Mx	-.013	1.5
76	MP5B	X	34.759	5.5
77	MP5B	Z	20.068	5.5
78	MP5B	Mx	-.013	5.5
79	MP5A	X	20.107	1.5
80	MP5A	Z	11.609	1.5
81	MP5A	Mx	-.012	1.5
82	MP5A	X	20.107	5.5
83	MP5A	Z	11.609	5.5
84	MP5A	Mx	-.012	5.5
85	MP5A	X	20.107	1.5
86	MP5A	Z	11.609	1.5
87	MP5A	Mx	-.018	1.5
88	MP5A	X	20.107	5.5
89	MP5A	Z	11.609	5.5
90	MP5A	Mx	-.018	5.5
91	OVP	X	24.829	2
92	OVP	Z	14.335	2
93	OVP	Mx	.01	2
94	MP2C	X	5.576	2.5
95	MP2C	Z	3.219	2.5
96	MP2C	Mx	-.002	2.5
97	MP2C	X	5.576	3.5
98	MP2C	Z	3.219	3.5
99	MP2C	Mx	-.002	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
100	MP4A	X	5.093	2.5
101	MP4A	Z	2.941	2.5
102	MP4A	Mx	.000681	2.5
103	MP4A	X	5.093	3.5
104	MP4A	Z	2.941	3.5
105	MP4A	Mx	.000681	3.5
106	MP4B	X	6.675	2.5
107	MP4B	Z	3.854	2.5
108	MP4B	Mx	.004	2.5
109	MP4B	X	6.675	3.5
110	MP4B	Z	3.854	3.5
111	MP4B	Mx	.004	3.5
112	MP2C	X	4.95	1
113	MP2C	Z	2.858	1
114	MP2C	Mx	.002	1
115	MP2C	X	4.95	2
116	MP2C	Z	2.858	2
117	MP2C	Mx	.002	2
118	MP4A	X	4.283	1
119	MP4A	Z	2.473	1
120	MP4A	Mx	-.000572	1
121	MP4A	X	4.283	2
122	MP4A	Z	2.473	2
123	MP4A	Mx	-.000572	2
124	MP4B	X	6.466	1
125	MP4B	Z	3.733	1
126	MP4B	Mx	-.004	1
127	MP4B	X	6.466	2
128	MP4B	Z	3.733	2
129	MP4B	Mx	-.004	2
130	MP5A	X	7.798	7
131	MP5A	Z	4.502	7
132	MP5A	Mx	.002	7
133	MP5B	X	4.237	7
134	MP5B	Z	2.446	7
135	MP5B	Mx	.001	7
136	MP5A	X	7.798	7
137	MP5A	Z	4.502	7
138	MP5A	Mx	.000957	7
139	MP5B	X	4.237	7
140	MP5B	Z	2.446	7
141	MP5B	Mx	-.002	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	4.881	1.77
2	MP2A	Z	8.454	1.77
3	MP2A	Mx	-.006	1.77
4	MP2A	X	4.881	3.77
5	MP2A	Z	8.454	3.77
6	MP2A	Mx	-.006	3.77
7	MP2B	X	9.892	1.77
8	MP2B	Z	17.134	1.77
9	MP2B	Mx	0	1.77
10	MP2B	X	9.892	3.77
11	MP2B	Z	17.134	3.77



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
12	MP2B	Mx	0	3.77
13	MP4C	X	4.217	1.77
14	MP4C	Z	7.304	1.77
15	MP4C	Mx	.006	1.77
16	MP4C	X	4.217	3.77
17	MP4C	Z	7.304	3.77
18	MP4C	Mx	.006	3.77
19	MP1A	X	17.862	1
20	MP1A	Z	30.938	1
21	MP1A	Mx	-.038	1
22	MP1A	X	17.862	5
23	MP1A	Z	30.938	5
24	MP1A	Mx	-.038	5
25	MP1B	X	19.777	1
26	MP1B	Z	34.255	1
27	MP1B	Mx	0	1
28	MP1B	X	19.777	5
29	MP1B	Z	34.255	5
30	MP1B	Mx	0	5
31	MP1C	X	17.608	1
32	MP1C	Z	30.498	1
33	MP1C	Mx	.04	1
34	MP1C	X	17.608	5
35	MP1C	Z	30.498	5
36	MP1C	Mx	.04	5
37	MP3A	X	17.862	1
38	MP3A	Z	30.938	1
39	MP3A	Mx	-.038	1
40	MP3A	X	17.862	5
41	MP3A	Z	30.938	5
42	MP3A	Mx	-.038	5
43	MP3B	X	19.777	1
44	MP3B	Z	34.255	1
45	MP3B	Mx	0	1
46	MP3B	X	19.777	5
47	MP3B	Z	34.255	5
48	MP3B	Mx	0	5
49	MP5C	X	17.608	1
50	MP5C	Z	30.498	1
51	MP5C	Mx	.04	1
52	MP5C	X	17.608	5
53	MP5C	Z	30.498	5
54	MP5C	Mx	.04	5
55	MP3C	X	11.341	1.5
56	MP3C	Z	19.643	1.5
57	MP3C	Mx	.015	1.5
58	MP3C	X	11.341	5.5
59	MP3C	Z	19.643	5.5
60	MP3C	Mx	.015	5.5
61	MP3C	X	11.341	1.5
62	MP3C	Z	19.643	1.5
63	MP3C	Mx	.015	1.5
64	MP3C	X	11.341	5.5
65	MP3C	Z	19.643	5.5
66	MP3C	Mx	.015	5.5
67	MP5B	X	22.978	1.5
68	MP5B	Z	39.798	1.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
69	MP5B	Mx	.034	1.5
70	MP5B	X	22.978	5.5
71	MP5B	Z	39.798	5.5
72	MP5B	Mx	.034	5.5
73	MP5B	X	22.978	1.5
74	MP5B	Z	39.798	1.5
75	MP5B	Mx	-.034	1.5
76	MP5B	X	22.978	5.5
77	MP5B	Z	39.798	5.5
78	MP5B	Mx	-.034	5.5
79	MP5A	X	12.056	1.5
80	MP5A	Z	20.881	1.5
81	MP5A	Mx	-.021	1.5
82	MP5A	X	12.056	5.5
83	MP5A	Z	20.881	5.5
84	MP5A	Mx	-.021	5.5
85	MP5A	X	12.056	1.5
86	MP5A	Z	20.881	1.5
87	MP5A	Mx	-.009	1.5
88	MP5A	X	12.056	5.5
89	MP5A	Z	20.881	5.5
90	MP5A	Mx	-.009	5.5
91	OVP	X	16.202	2
92	OVP	Z	28.062	2
93	OVP	Mx	.019	2
94	MP2C	X	2.902	2.5
95	MP2C	Z	5.027	2.5
96	MP2C	Mx	0	2.5
97	MP2C	X	2.902	3.5
98	MP2C	Z	5.027	3.5
99	MP2C	Mx	0	3.5
100	MP4A	X	3.051	2.5
101	MP4A	Z	5.284	2.5
102	MP4A	Mx	-.001	2.5
103	MP4A	X	3.051	3.5
104	MP4A	Z	5.284	3.5
105	MP4A	Mx	-.001	3.5
106	MP4B	X	4.171	2.5
107	MP4B	Z	7.224	2.5
108	MP4B	Mx	.006	2.5
109	MP4B	X	4.171	3.5
110	MP4B	Z	7.224	3.5
111	MP4B	Mx	.006	3.5
112	MP2C	X	2.42	1
113	MP2C	Z	4.192	1
114	MP2C	Mx	0	1
115	MP2C	X	2.42	2
116	MP2C	Z	4.192	2
117	MP2C	Mx	0	2
118	MP4A	X	2.625	1
119	MP4A	Z	4.547	1
120	MP4A	Mx	.001	1
121	MP4A	X	2.625	2
122	MP4A	Z	4.547	2
123	MP4A	Mx	.001	2
124	MP4B	X	4.171	1
125	MP4B	Z	7.224	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
126	MP4B	Mx	-.006	1
127	MP4B	X	4.171	2
128	MP4B	Z	7.224	2
129	MP4B	Mx	-.006	2
130	MP5A	X	4.254	7
131	MP5A	Z	7.368	7
132	MP5A	Mx	.000363	7
133	MP5B	X	1.732	7
134	MP5B	Z	3	7
135	MP5B	Mx	.001	7
136	MP5A	X	4.254	7
137	MP5A	Z	7.368	7
138	MP5A	Mx	.002	7
139	MP5B	X	1.732	7
140	MP5B	Z	3	7
141	MP5B	Mx	-.001	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	0	1.77
2	MP2A	Z	15.095	1.77
3	MP2A	Mx	-.006	1.77
4	MP2A	X	0	3.77
5	MP2A	Z	15.095	3.77
6	MP2A	Mx	-.006	3.77
7	MP2B	X	0	1.77
8	MP2B	Z	16.947	1.77
9	MP2B	Mx	-.006	1.77
10	MP2B	X	0	3.77
11	MP2B	Z	16.947	3.77
12	MP2B	Mx	-.006	3.77
13	MP4C	X	0	1.77
14	MP4C	Z	11.272	1.77
15	MP4C	Mx	.007	1.77
16	MP4C	X	0	3.77
17	MP4C	Z	11.272	3.77
18	MP4C	Mx	.007	3.77
19	MP1A	X	0	1
20	MP1A	Z	37.762	1
21	MP1A	Mx	-.027	1
22	MP1A	X	0	5
23	MP1A	Z	37.762	5
24	MP1A	Mx	-.027	5
25	MP1B	X	0	1
26	MP1B	Z	38.47	1
27	MP1B	Mx	-.022	1
28	MP1B	X	0	5
29	MP1B	Z	38.47	5
30	MP1B	Mx	-.022	5
31	MP1C	X	0	1
32	MP1C	Z	36.301	1
33	MP1C	Mx	.035	1
34	MP1C	X	0	5
35	MP1C	Z	36.301	5
36	MP1C	Mx	.035	5
37	MP3A	X	0	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
38	MP3A	Z	37.762	1
39	MP3A	Mx	-.027	1
40	MP3A	X	0	5
41	MP3A	Z	37.762	5
42	MP3A	Mx	-.027	5
43	MP3B	X	0	1
44	MP3B	Z	38.47	1
45	MP3B	Mx	-.022	1
46	MP3B	X	0	5
47	MP3B	Z	38.47	5
48	MP3B	Mx	-.022	5
49	MP5C	X	0	1
50	MP5C	Z	36.301	1
51	MP5C	Mx	.035	1
52	MP5C	X	0	5
53	MP5C	Z	36.301	5
54	MP5C	Mx	.035	5
55	MP3C	X	0	1.5
56	MP3C	Z	28.5	1.5
57	MP3C	Mx	.027	1.5
58	MP3C	X	0	5.5
59	MP3C	Z	28.5	5.5
60	MP3C	Mx	.027	5.5
61	MP3C	X	0	1.5
62	MP3C	Z	28.5	1.5
63	MP3C	Mx	.006	1.5
64	MP3C	X	0	5.5
65	MP3C	Z	28.5	5.5
66	MP3C	Mx	.006	5.5
67	MP5B	X	0	1.5
68	MP5B	Z	40.137	1.5
69	MP5B	Mx	.013	1.5
70	MP5B	X	0	5.5
71	MP5B	Z	40.137	5.5
72	MP5B	Mx	.013	5.5
73	MP5B	X	0	1.5
74	MP5B	Z	40.137	1.5
75	MP5B	Mx	-.039	1.5
76	MP5B	X	0	5.5
77	MP5B	Z	40.137	5.5
78	MP5B	Mx	-.039	5.5
79	MP5A	X	0	1.5
80	MP5A	Z	28.95	1.5
81	MP5A	Mx	-.029	1.5
82	MP5A	X	0	5.5
83	MP5A	Z	28.95	5.5
84	MP5A	Mx	-.029	5.5
85	MP5A	X	0	1.5
86	MP5A	Z	28.95	1.5
87	MP5A	Mx	.004	1.5
88	MP5A	X	0	5.5
89	MP5A	Z	28.95	5.5
90	MP5A	Mx	.004	5.5
91	OVP	X	0	2
92	OVP	Z	34.27	2
93	OVP	Mx	.023	2
94	MP2C	X	0	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
95	MP2C	Z	6.439	2.5
96	MP2C	Mx	.002	2.5
97	MP2C	X	0	3.5
98	MP2C	Z	6.439	3.5
99	MP2C	Mx	.002	3.5
100	MP4A	X	0	2.5
101	MP4A	Z	7.293	2.5
102	MP4A	Mx	-.004	2.5
103	MP4A	X	0	3.5
104	MP4A	Z	7.293	3.5
105	MP4A	Mx	-.004	3.5
106	MP4B	X	0	2.5
107	MP4B	Z	7.707	2.5
108	MP4B	Mx	.004	2.5
109	MP4B	X	0	3.5
110	MP4B	Z	7.707	3.5
111	MP4B	Mx	.004	3.5
112	MP2C	X	0	1
113	MP2C	Z	5.716	1
114	MP2C	Mx	-.002	1
115	MP2C	X	0	2
116	MP2C	Z	5.716	2
117	MP2C	Mx	-.002	2
118	MP4A	X	0	1
119	MP4A	Z	6.895	1
120	MP4A	Mx	.004	1
121	MP4A	X	0	2
122	MP4A	Z	6.895	2
123	MP4A	Mx	.004	2
124	MP4B	X	0	1
125	MP4B	Z	7.466	1
126	MP4B	Mx	-.004	1
127	MP4B	X	0	2
128	MP4B	Z	7.466	2
129	MP4B	Mx	-.004	2
130	MP5A	X	0	7
131	MP5A	Z	5.824	7
132	MP5A	Mx	-.000863	7
133	MP5B	X	0	7
134	MP5B	Z	4.892	7
135	MP5B	Mx	.002	7
136	MP5A	X	0	7
137	MP5A	Z	5.824	7
138	MP5A	Mx	.002	7
139	MP5B	X	0	7
140	MP5B	Z	4.892	7
141	MP5B	Mx	-.001	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-9.721	1.77
2	MP2A	Z	16.838	1.77
3	MP2A	Mx	-.002	1.77
4	MP2A	X	-9.721	3.77
5	MP2A	Z	16.838	3.77
6	MP2A	Mx	-.002	3.77



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
7	MP2B	X	-5.636	1.77
8	MP2B	Z	9.762	1.77
9	MP2B	Mx	-.007	1.77
10	MP2B	X	-5.636	3.77
11	MP2B	Z	9.762	3.77
12	MP2B	Mx	-.007	3.77
13	MP4C	X	-8.474	1.77
14	MP4C	Z	14.677	1.77
15	MP4C	Mx	.006	1.77
16	MP4C	X	-8.474	3.77
17	MP4C	Z	14.677	3.77
18	MP4C	Mx	.006	3.77
19	MP1A	X	-19.712	1
20	MP1A	Z	34.142	1
21	MP1A	Mx	-.008	1
22	MP1A	X	-19.712	5
23	MP1A	Z	34.142	5
24	MP1A	Mx	-.008	5
25	MP1B	X	-18.15	1
26	MP1B	Z	31.437	1
27	MP1B	Mx	-.035	1
28	MP1B	X	-18.15	5
29	MP1B	Z	31.437	5
30	MP1B	Mx	-.035	5
31	MP1C	X	-19.235	1
32	MP1C	Z	33.316	1
33	MP1C	Mx	.022	1
34	MP1C	X	-19.235	5
35	MP1C	Z	33.316	5
36	MP1C	Mx	.022	5
37	MP3A	X	-19.712	1
38	MP3A	Z	34.142	1
39	MP3A	Mx	-.008	1
40	MP3A	X	-19.712	5
41	MP3A	Z	34.142	5
42	MP3A	Mx	-.008	5
43	MP3B	X	-18.15	1
44	MP3B	Z	31.437	1
45	MP3B	Mx	-.035	1
46	MP3B	X	-18.15	5
47	MP3B	Z	31.437	5
48	MP3B	Mx	-.035	5
49	MP5C	X	-19.235	1
50	MP5C	Z	33.316	1
51	MP5C	Mx	.022	1
52	MP5C	X	-19.235	5
53	MP5C	Z	33.316	5
54	MP5C	Mx	.022	5
55	MP3C	X	-20.068	1.5
56	MP3C	Z	34.759	1.5
57	MP3C	Mx	.039	1.5
58	MP3C	X	-20.068	5.5
59	MP3C	Z	34.759	5.5
60	MP3C	Mx	.039	5.5
61	MP3C	X	-20.068	1.5
62	MP3C	Z	34.759	1.5
63	MP3C	Mx	-.013	1.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
64	MP3C	X	-20.068	5.5
65	MP3C	Z	34.759	5.5
66	MP3C	Mx	-.013	5.5
67	MP5B	X	-14.25	1.5
68	MP5B	Z	24.682	1.5
69	MP5B	Mx	-.006	1.5
70	MP5B	X	-14.25	5.5
71	MP5B	Z	24.682	5.5
72	MP5B	Mx	-.006	5.5
73	MP5B	X	-14.25	1.5
74	MP5B	Z	24.682	1.5
75	MP5B	Mx	-.027	1.5
76	MP5B	X	-14.25	5.5
77	MP5B	Z	24.682	5.5
78	MP5B	Mx	-.027	5.5
79	MP5A	X	-16.448	1.5
80	MP5A	Z	28.488	1.5
81	MP5A	Mx	-.028	1.5
82	MP5A	X	-16.448	5.5
83	MP5A	Z	28.488	5.5
84	MP5A	Mx	-.028	5.5
85	MP5A	X	-16.448	1.5
86	MP5A	Z	28.488	1.5
87	MP5A	Mx	.02	1.5
88	MP5A	X	-16.448	5.5
89	MP5A	Z	28.488	5.5
90	MP5A	Mx	.02	5.5
91	OVP	X	-16.202	2
92	OVP	Z	28.062	2
93	OVP	Mx	.019	2
94	MP2C	X	-3.854	2.5
95	MP2C	Z	6.675	2.5
96	MP2C	Mx	.004	2.5
97	MP2C	X	-3.854	3.5
98	MP2C	Z	6.675	3.5
99	MP2C	Mx	.004	3.5
100	MP4A	X	-4.133	2.5
101	MP4A	Z	7.158	2.5
102	MP4A	Mx	-.005	2.5
103	MP4A	X	-4.133	3.5
104	MP4A	Z	7.158	3.5
105	MP4A	Mx	-.005	3.5
106	MP4B	X	-3.219	2.5
107	MP4B	Z	5.576	2.5
108	MP4B	Mx	.002	2.5
109	MP4B	X	-3.219	3.5
110	MP4B	Z	5.576	3.5
111	MP4B	Mx	.002	3.5
112	MP2C	X	-3.733	1
113	MP2C	Z	6.466	1
114	MP2C	Mx	-.004	1
115	MP2C	X	-3.733	2
116	MP2C	Z	6.466	2
117	MP2C	Mx	-.004	2
118	MP4A	X	-4.118	1
119	MP4A	Z	7.133	1
120	MP4A	Mx	.005	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
121	MP4A	X	-4.118	2
122	MP4A	Z	7.133	2
123	MP4A	Mx	.005	2
124	MP4B	X	-2.858	1
125	MP4B	Z	4.95	1
126	MP4B	Mx	-.002	1
127	MP4B	X	-2.858	2
128	MP4B	Z	4.95	2
129	MP4B	Mx	-.002	2
130	MP5A	X	-1.818	7
131	MP5A	Z	3.149	7
132	MP5A	Mx	-.001	7
133	MP5B	X	-3.874	7
134	MP5B	Z	6.71	7
135	MP5B	Mx	.002	7
136	MP5A	X	-1.818	7
137	MP5A	Z	3.149	7
138	MP5A	Mx	.001	7
139	MP5B	X	-3.874	7
140	MP5B	Z	6.71	7
141	MP5B	Mx	-.000173	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-15.984	1.77
2	MP2A	Z	9.228	1.77
3	MP2A	Mx	.004	1.77
4	MP2A	X	-15.984	3.77
5	MP2A	Z	9.228	3.77
6	MP2A	Mx	.004	3.77
7	MP2B	X	-7.304	1.77
8	MP2B	Z	4.217	1.77
9	MP2B	Mx	-.006	1.77
10	MP2B	X	-7.304	3.77
11	MP2B	Z	4.217	3.77
12	MP2B	Mx	-.006	3.77
13	MP4C	X	-17.134	1.77
14	MP4C	Z	9.892	1.77
15	MP4C	Mx	0	1.77
16	MP4C	X	-17.134	3.77
17	MP4C	Z	9.892	3.77
18	MP4C	Mx	0	3.77
19	MP1A	X	-33.816	1
20	MP1A	Z	19.523	1
21	MP1A	Mx	.015	1
22	MP1A	X	-33.816	5
23	MP1A	Z	19.523	5
24	MP1A	Mx	.015	5
25	MP1B	X	-30.498	1
26	MP1B	Z	17.608	1
27	MP1B	Mx	-.04	1
28	MP1B	X	-30.498	5
29	MP1B	Z	17.608	5
30	MP1B	Mx	-.04	5
31	MP1C	X	-34.255	1
32	MP1C	Z	19.777	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
33	MP1C	Mx	0	1
34	MP1C	X	-34.255	5
35	MP1C	Z	19.777	5
36	MP1C	Mx	0	5
37	MP3A	X	-33.816	1
38	MP3A	Z	19.523	1
39	MP3A	Mx	.015	1
40	MP3A	X	-33.816	5
41	MP3A	Z	19.523	5
42	MP3A	Mx	.015	5
43	MP3B	X	-30.498	1
44	MP3B	Z	17.608	1
45	MP3B	Mx	-.04	1
46	MP3B	X	-30.498	5
47	MP3B	Z	17.608	5
48	MP3B	Mx	-.04	5
49	MP5C	X	-34.255	1
50	MP5C	Z	19.777	1
51	MP5C	Mx	0	1
52	MP5C	X	-34.255	5
53	MP5C	Z	19.777	5
54	MP5C	Mx	0	5
55	MP3C	X	-39.798	1.5
56	MP3C	Z	22.978	1.5
57	MP3C	Mx	.034	1.5
58	MP3C	X	-39.798	5.5
59	MP3C	Z	22.978	5.5
60	MP3C	Mx	.034	5.5
61	MP3C	X	-39.798	1.5
62	MP3C	Z	22.978	1.5
63	MP3C	Mx	-.034	1.5
64	MP3C	X	-39.798	5.5
65	MP3C	Z	22.978	5.5
66	MP3C	Mx	-.034	5.5
67	MP5B	X	-19.643	1.5
68	MP5B	Z	11.341	1.5
69	MP5B	Mx	-.015	1.5
70	MP5B	X	-19.643	5.5
71	MP5B	Z	11.341	5.5
72	MP5B	Mx	-.015	5.5
73	MP5B	X	-19.643	1.5
74	MP5B	Z	11.341	1.5
75	MP5B	Mx	-.015	1.5
76	MP5B	X	-19.643	5.5
77	MP5B	Z	11.341	5.5
78	MP5B	Mx	-.015	5.5
79	MP5A	X	-27.714	1.5
80	MP5A	Z	16	1.5
81	MP5A	Mx	-.015	1.5
82	MP5A	X	-27.714	5.5
83	MP5A	Z	16	5.5
84	MP5A	Mx	-.015	5.5
85	MP5A	X	-27.714	1.5
86	MP5A	Z	16	1.5
87	MP5A	Mx	.03	1.5
88	MP5A	X	-27.714	5.5
89	MP5A	Z	16	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
90	MP5A	Mx	.03	5.5
91	OVP	X	-24.829	2
92	OVP	Z	14.335	2
93	OVP	Mx	.01	2
94	MP2C	X	-7.224	2.5
95	MP2C	Z	4.171	2.5
96	MP2C	Mx	.006	2.5
97	MP2C	X	-7.224	3.5
98	MP2C	Z	4.171	3.5
99	MP2C	Mx	.006	3.5
100	MP4A	X	-6.967	2.5
101	MP4A	Z	4.022	2.5
102	MP4A	Mx	-.005	2.5
103	MP4A	X	-6.967	3.5
104	MP4A	Z	4.022	3.5
105	MP4A	Mx	-.005	3.5
106	MP4B	X	-5.027	2.5
107	MP4B	Z	2.902	2.5
108	MP4B	Mx	0	2.5
109	MP4B	X	-5.027	3.5
110	MP4B	Z	2.902	3.5
111	MP4B	Mx	0	3.5
112	MP2C	X	-7.224	1
113	MP2C	Z	4.171	1
114	MP2C	Mx	-.006	1
115	MP2C	X	-7.224	2
116	MP2C	Z	4.171	2
117	MP2C	Mx	-.006	2
118	MP4A	X	-6.869	1
119	MP4A	Z	3.966	1
120	MP4A	Mx	.005	1
121	MP4A	X	-6.869	2
122	MP4A	Z	3.966	2
123	MP4A	Mx	.005	2
124	MP4B	X	-4.192	1
125	MP4B	Z	2.42	1
126	MP4B	Mx	0	1
127	MP4B	X	-4.192	2
128	MP4B	Z	2.42	2
129	MP4B	Mx	0	2
130	MP5A	X	-3.579	7
131	MP5A	Z	2.066	7
132	MP5A	Mx	-.002	7
133	MP5B	X	-7.947	7
134	MP5B	Z	4.588	7
135	MP5B	Mx	.002	7
136	MP5A	X	-3.579	7
137	MP5A	Z	2.066	7
138	MP5A	Mx	.001	7
139	MP5B	X	-7.947	7
140	MP5B	Z	4.588	7
141	MP5B	Mx	.002	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-13.124	1.77



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
2	MP2A	Z	0	1.77
3	MP2A	Mx	.007	1.77
4	MP2A	X	-13.124	3.77
5	MP2A	Z	0	3.77
6	MP2A	Mx	.007	3.77
7	MP2B	X	-11.272	1.77
8	MP2B	Z	0	1.77
9	MP2B	Mx	-.007	1.77
10	MP2B	X	-11.272	3.77
11	MP2B	Z	0	3.77
12	MP2B	Mx	-.007	3.77
13	MP4C	X	-16.947	1.77
14	MP4C	Z	0	1.77
15	MP4C	Mx	-.006	1.77
16	MP4C	X	-16.947	3.77
17	MP4C	Z	0	3.77
18	MP4C	Mx	-.006	3.77
19	MP1A	X	-37.009	1
20	MP1A	Z	0	1
21	MP1A	Mx	.032	1
22	MP1A	X	-37.009	5
23	MP1A	Z	0	5
24	MP1A	Mx	.032	5
25	MP1B	X	-36.301	1
26	MP1B	Z	0	1
27	MP1B	Mx	-.035	1
28	MP1B	X	-36.301	5
29	MP1B	Z	0	5
30	MP1B	Mx	-.035	5
31	MP1C	X	-38.47	1
32	MP1C	Z	0	1
33	MP1C	Mx	-.022	1
34	MP1C	X	-38.47	5
35	MP1C	Z	0	5
36	MP1C	Mx	-.022	5
37	MP3A	X	-37.009	1
38	MP3A	Z	0	1
39	MP3A	Mx	.032	1
40	MP3A	X	-37.009	5
41	MP3A	Z	0	5
42	MP3A	Mx	.032	5
43	MP3B	X	-36.301	1
44	MP3B	Z	0	1
45	MP3B	Mx	-.035	1
46	MP3B	X	-36.301	5
47	MP3B	Z	0	5
48	MP3B	Mx	-.035	5
49	MP5C	X	-38.47	1
50	MP5C	Z	0	1
51	MP5C	Mx	-.022	1
52	MP5C	X	-38.47	5
53	MP5C	Z	0	5
54	MP5C	Mx	-.022	5
55	MP3C	X	-40.137	1.5
56	MP3C	Z	0	1.5
57	MP3C	Mx	.013	1.5
58	MP3C	X	-40.137	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
59	MP3C	Z	0	5.5
60	MP3C	Mx	.013	5.5
61	MP3C	X	-40.137	1.5
62	MP3C	Z	0	1.5
63	MP3C	Mx	-.039	1.5
64	MP3C	X	-40.137	5.5
65	MP3C	Z	0	5.5
66	MP3C	Mx	-.039	5.5
67	MP5B	X	-28.5	1.5
68	MP5B	Z	0	1.5
69	MP5B	Mx	-.027	1.5
70	MP5B	X	-28.5	5.5
71	MP5B	Z	0	5.5
72	MP5B	Mx	-.027	5.5
73	MP5B	X	-28.5	1.5
74	MP5B	Z	0	1.5
75	MP5B	Mx	-.006	1.5
76	MP5B	X	-28.5	5.5
77	MP5B	Z	0	5.5
78	MP5B	Mx	-.006	5.5
79	MP5A	X	-27.162	1.5
80	MP5A	Z	0	1.5
81	MP5A	Mx	.000777	1.5
82	MP5A	X	-27.162	5.5
83	MP5A	Z	0	5.5
84	MP5A	Mx	.000777	5.5
85	MP5A	X	-27.162	1.5
86	MP5A	Z	0	1.5
87	MP5A	Mx	.027	1.5
88	MP5A	X	-27.162	5.5
89	MP5A	Z	0	5.5
90	MP5A	Mx	.027	5.5
91	OVP	X	-26.804	2
92	OVP	Z	0	2
93	OVP	Mx	0	2
94	MP2C	X	-7.707	2.5
95	MP2C	Z	0	2.5
96	MP2C	Mx	.004	2.5
97	MP2C	X	-7.707	3.5
98	MP2C	Z	0	3.5
99	MP2C	Mx	.004	3.5
100	MP4A	X	-6.853	2.5
101	MP4A	Z	0	2.5
102	MP4A	Mx	-.003	2.5
103	MP4A	X	-6.853	3.5
104	MP4A	Z	0	3.5
105	MP4A	Mx	-.003	3.5
106	MP4B	X	-6.439	2.5
107	MP4B	Z	0	2.5
108	MP4B	Mx	-.002	2.5
109	MP4B	X	-6.439	3.5
110	MP4B	Z	0	3.5
111	MP4B	Mx	-.002	3.5
112	MP2C	X	-7.466	1
113	MP2C	Z	0	1
114	MP2C	Mx	-.004	1
115	MP2C	X	-7.466	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
116	MP2C	Z	0	2
117	MP2C	Mx	-.004	2
118	MP4A	X	-6.287	1
119	MP4A	Z	0	1
120	MP4A	Mx	.003	1
121	MP4A	X	-6.287	2
122	MP4A	Z	0	2
123	MP4A	Mx	.003	2
124	MP4B	X	-5.716	1
125	MP4B	Z	0	1
126	MP4B	Mx	.002	1
127	MP4B	X	-5.716	2
128	MP4B	Z	0	2
129	MP4B	Mx	.002	2
130	MP5A	X	-6.816	7
131	MP5A	Z	0	7
132	MP5A	Mx	-.002	7
133	MP5B	X	-7.748	7
134	MP5B	Z	0	7
135	MP5B	Mx	-.000173	7
136	MP5A	X	-6.816	7
137	MP5A	Z	0	7
138	MP5A	Mx	.00059	7
139	MP5B	X	-7.748	7
140	MP5B	Z	0	7
141	MP5B	Mx	.002	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-7.601	1.77
2	MP2A	Z	-4.388	1.77
3	MP2A	Mx	.006	1.77
4	MP2A	X	-7.601	3.77
5	MP2A	Z	-4.388	3.77
6	MP2A	Mx	.006	3.77
7	MP2B	X	-14.677	1.77
8	MP2B	Z	-8.474	1.77
9	MP2B	Mx	-.006	1.77
10	MP2B	X	-14.677	3.77
11	MP2B	Z	-8.474	3.77
12	MP2B	Mx	-.006	3.77
13	MP4C	X	-9.762	1.77
14	MP4C	Z	-5.636	1.77
15	MP4C	Mx	-.007	1.77
16	MP4C	X	-9.762	3.77
17	MP4C	Z	-5.636	3.77
18	MP4C	Mx	-.007	3.77
19	MP1A	X	-30.611	1
20	MP1A	Z	-17.674	1
21	MP1A	Mx	.039	1
22	MP1A	X	-30.611	5
23	MP1A	Z	-17.674	5
24	MP1A	Mx	.039	5
25	MP1B	X	-33.316	1
26	MP1B	Z	-19.235	1
27	MP1B	Mx	-.022	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
28	MP1B	X	-33.316	5
29	MP1B	Z	-19.235	5
30	MP1B	Mx	-.022	5
31	MP1C	X	-31.437	1
32	MP1C	Z	-18.15	1
33	MP1C	Mx	-.035	1
34	MP1C	X	-31.437	5
35	MP1C	Z	-18.15	5
36	MP1C	Mx	-.035	5
37	MP3A	X	-30.611	1
38	MP3A	Z	-17.674	1
39	MP3A	Mx	.039	1
40	MP3A	X	-30.611	5
41	MP3A	Z	-17.674	5
42	MP3A	Mx	.039	5
43	MP3B	X	-33.316	1
44	MP3B	Z	-19.235	1
45	MP3B	Mx	-.022	1
46	MP3B	X	-33.316	5
47	MP3B	Z	-19.235	5
48	MP3B	Mx	-.022	5
49	MP5C	X	-31.437	1
50	MP5C	Z	-18.15	1
51	MP5C	Mx	-.035	1
52	MP5C	X	-31.437	5
53	MP5C	Z	-18.15	5
54	MP5C	Mx	-.035	5
55	MP3C	X	-24.682	1.5
56	MP3C	Z	-14.25	1.5
57	MP3C	Mx	-.006	1.5
58	MP3C	X	-24.682	5.5
59	MP3C	Z	-14.25	5.5
60	MP3C	Mx	-.006	5.5
61	MP3C	X	-24.682	1.5
62	MP3C	Z	-14.25	1.5
63	MP3C	Mx	-.027	1.5
64	MP3C	X	-24.682	5.5
65	MP3C	Z	-14.25	5.5
66	MP3C	Mx	-.027	5.5
67	MP5B	X	-34.759	1.5
68	MP5B	Z	-20.068	1.5
69	MP5B	Mx	-.039	1.5
70	MP5B	X	-34.759	5.5
71	MP5B	Z	-20.068	5.5
72	MP5B	Mx	-.039	5.5
73	MP5B	X	-34.759	1.5
74	MP5B	Z	-20.068	1.5
75	MP5B	Mx	.013	1.5
76	MP5B	X	-34.759	5.5
77	MP5B	Z	-20.068	5.5
78	MP5B	Mx	.013	5.5
79	MP5A	X	-20.107	1.5
80	MP5A	Z	-11.609	1.5
81	MP5A	Mx	.012	1.5
82	MP5A	X	-20.107	5.5
83	MP5A	Z	-11.609	5.5
84	MP5A	Mx	.012	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
85	MP5A	X	-20.107	1.5
86	MP5A	Z	-11.609	1.5
87	MP5A	Mx	.018	1.5
88	MP5A	X	-20.107	5.5
89	MP5A	Z	-11.609	5.5
90	MP5A	Mx	.018	5.5
91	OVP	X	-24.829	2
92	OVP	Z	-14.335	2
93	OVP	Mx	-.01	2
94	MP2C	X	-5.576	2.5
95	MP2C	Z	-3.219	2.5
96	MP2C	Mx	.002	2.5
97	MP2C	X	-5.576	3.5
98	MP2C	Z	-3.219	3.5
99	MP2C	Mx	.002	3.5
100	MP4A	X	-5.093	2.5
101	MP4A	Z	-2.941	2.5
102	MP4A	Mx	-.000681	2.5
103	MP4A	X	-5.093	3.5
104	MP4A	Z	-2.941	3.5
105	MP4A	Mx	-.000681	3.5
106	MP4B	X	-6.675	2.5
107	MP4B	Z	-3.854	2.5
108	MP4B	Mx	-.004	2.5
109	MP4B	X	-6.675	3.5
110	MP4B	Z	-3.854	3.5
111	MP4B	Mx	-.004	3.5
112	MP2C	X	-4.95	1
113	MP2C	Z	-2.858	1
114	MP2C	Mx	-.002	1
115	MP2C	X	-4.95	2
116	MP2C	Z	-2.858	2
117	MP2C	Mx	-.002	2
118	MP4A	X	-4.283	1
119	MP4A	Z	-2.473	1
120	MP4A	Mx	.000572	1
121	MP4A	X	-4.283	2
122	MP4A	Z	-2.473	2
123	MP4A	Mx	.000572	2
124	MP4B	X	-6.466	1
125	MP4B	Z	-3.733	1
126	MP4B	Mx	.004	1
127	MP4B	X	-6.466	2
128	MP4B	Z	-3.733	2
129	MP4B	Mx	.004	2
130	MP5A	X	-7.798	7
131	MP5A	Z	-4.502	7
132	MP5A	Mx	-.002	7
133	MP5B	X	-4.237	7
134	MP5B	Z	-2.446	7
135	MP5B	Mx	-.001	7
136	MP5A	X	-7.798	7
137	MP5A	Z	-4.502	7
138	MP5A	Mx	-.000957	7
139	MP5B	X	-4.237	7
140	MP5B	Z	-2.446	7
141	MP5B	Mx	.002	7



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-4.881	1.77
2	MP2A	Z	-8.454	1.77
3	MP2A	Mx	.006	1.77
4	MP2A	X	-4.881	3.77
5	MP2A	Z	-8.454	3.77
6	MP2A	Mx	.006	3.77
7	MP2B	X	-9.892	1.77
8	MP2B	Z	-17.134	1.77
9	MP2B	Mx	0	1.77
10	MP2B	X	-9.892	3.77
11	MP2B	Z	-17.134	3.77
12	MP2B	Mx	0	3.77
13	MP4C	X	-4.217	1.77
14	MP4C	Z	-7.304	1.77
15	MP4C	Mx	-.006	1.77
16	MP4C	X	-4.217	3.77
17	MP4C	Z	-7.304	3.77
18	MP4C	Mx	-.006	3.77
19	MP1A	X	-17.862	1
20	MP1A	Z	-30.938	1
21	MP1A	Mx	.038	1
22	MP1A	X	-17.862	5
23	MP1A	Z	-30.938	5
24	MP1A	Mx	.038	5
25	MP1B	X	-19.777	1
26	MP1B	Z	-34.255	1
27	MP1B	Mx	0	1
28	MP1B	X	-19.777	5
29	MP1B	Z	-34.255	5
30	MP1B	Mx	0	5
31	MP1C	X	-17.608	1
32	MP1C	Z	-30.498	1
33	MP1C	Mx	-.04	1
34	MP1C	X	-17.608	5
35	MP1C	Z	-30.498	5
36	MP1C	Mx	-.04	5
37	MP3A	X	-17.862	1
38	MP3A	Z	-30.938	1
39	MP3A	Mx	.038	1
40	MP3A	X	-17.862	5
41	MP3A	Z	-30.938	5
42	MP3A	Mx	.038	5
43	MP3B	X	-19.777	1
44	MP3B	Z	-34.255	1
45	MP3B	Mx	0	1
46	MP3B	X	-19.777	5
47	MP3B	Z	-34.255	5
48	MP3B	Mx	0	5
49	MP5C	X	-17.608	1
50	MP5C	Z	-30.498	1
51	MP5C	Mx	-.04	1
52	MP5C	X	-17.608	5
53	MP5C	Z	-30.498	5
54	MP5C	Mx	-.04	5
55	MP3C	X	-11.341	1.5
56	MP3C	Z	-19.643	1.5
57	MP3C	Mx	-.015	1.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP3C	X	-11.341	5.5
59	MP3C	Z	-19.643	5.5
60	MP3C	Mx	-.015	5.5
61	MP3C	X	-11.341	1.5
62	MP3C	Z	-19.643	1.5
63	MP3C	Mx	-.015	1.5
64	MP3C	X	-11.341	5.5
65	MP3C	Z	-19.643	5.5
66	MP3C	Mx	-.015	5.5
67	MP5B	X	-22.978	1.5
68	MP5B	Z	-39.798	1.5
69	MP5B	Mx	-.034	1.5
70	MP5B	X	-22.978	5.5
71	MP5B	Z	-39.798	5.5
72	MP5B	Mx	-.034	5.5
73	MP5B	X	-22.978	1.5
74	MP5B	Z	-39.798	1.5
75	MP5B	Mx	.034	1.5
76	MP5B	X	-22.978	5.5
77	MP5B	Z	-39.798	5.5
78	MP5B	Mx	.034	5.5
79	MP5A	X	-12.056	1.5
80	MP5A	Z	-20.881	1.5
81	MP5A	Mx	.021	1.5
82	MP5A	X	-12.056	5.5
83	MP5A	Z	-20.881	5.5
84	MP5A	Mx	.021	5.5
85	MP5A	X	-12.056	1.5
86	MP5A	Z	-20.881	1.5
87	MP5A	Mx	.009	1.5
88	MP5A	X	-12.056	5.5
89	MP5A	Z	-20.881	5.5
90	MP5A	Mx	.009	5.5
91	OVP	X	-16.202	2
92	OVP	Z	-28.062	2
93	OVP	Mx	-.019	2
94	MP2C	X	-2.902	2.5
95	MP2C	Z	-5.027	2.5
96	MP2C	Mx	0	2.5
97	MP2C	X	-2.902	3.5
98	MP2C	Z	-5.027	3.5
99	MP2C	Mx	0	3.5
100	MP4A	X	-3.051	2.5
101	MP4A	Z	-5.284	2.5
102	MP4A	Mx	.001	2.5
103	MP4A	X	-3.051	3.5
104	MP4A	Z	-5.284	3.5
105	MP4A	Mx	.001	3.5
106	MP4B	X	-4.171	2.5
107	MP4B	Z	-7.224	2.5
108	MP4B	Mx	-.006	2.5
109	MP4B	X	-4.171	3.5
110	MP4B	Z	-7.224	3.5
111	MP4B	Mx	-.006	3.5
112	MP2C	X	-2.42	1
113	MP2C	Z	-4.192	1
114	MP2C	Mx	0	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
115	MP2C	X	-2.42	2
116	MP2C	Z	-4.192	2
117	MP2C	Mx	0	2
118	MP4A	X	-2.625	1
119	MP4A	Z	-4.547	1
120	MP4A	Mx	-.001	1
121	MP4A	X	-2.625	2
122	MP4A	Z	-4.547	2
123	MP4A	Mx	-.001	2
124	MP4B	X	-4.171	1
125	MP4B	Z	-7.224	1
126	MP4B	Mx	.006	1
127	MP4B	X	-4.171	2
128	MP4B	Z	-7.224	2
129	MP4B	Mx	.006	2
130	MP5A	X	-4.254	7
131	MP5A	Z	-7.368	7
132	MP5A	Mx	-.000363	7
133	MP5B	X	-1.732	7
134	MP5B	Z	-3	7
135	MP5B	Mx	-.001	7
136	MP5A	X	-4.254	7
137	MP5A	Z	-7.368	7
138	MP5A	Mx	-.002	7
139	MP5B	X	-1.732	7
140	MP5B	Z	-3	7
141	MP5B	Mx	.001	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	0	1.77
2	MP2A	Z	-3.83	1.77
3	MP2A	Mx	.002	1.77
4	MP2A	X	0	3.77
5	MP2A	Z	-3.83	3.77
6	MP2A	Mx	.002	3.77
7	MP2B	X	0	1.77
8	MP2B	Z	-4.392	1.77
9	MP2B	Mx	.001	1.77
10	MP2B	X	0	3.77
11	MP2B	Z	-4.392	3.77
12	MP2B	Mx	.001	3.77
13	MP4C	X	0	1.77
14	MP4C	Z	-2.67	1.77
15	MP4C	Mx	-.002	1.77
16	MP4C	X	0	3.77
17	MP4C	Z	-2.67	3.77
18	MP4C	Mx	-.002	3.77
19	MP1A	X	0	1
20	MP1A	Z	-12.438	1
21	MP1A	Mx	.009	1
22	MP1A	X	0	5
23	MP1A	Z	-12.438	5
24	MP1A	Mx	.009	5
25	MP1B	X	0	1
26	MP1B	Z	-12.691	1



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name : 5000244948-VZW_MT_LO_H

Aug 3, 2023
 9:24 AM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
27	MP1B	Mx	.007	1
28	MP1B	X	0	5
29	MP1B	Z	-12.691	5
30	MP1B	Mx	.007	5
31	MP1C	X	0	1
32	MP1C	Z	-11.916	1
33	MP1C	Mx	-.012	1
34	MP1C	X	0	5
35	MP1C	Z	-11.916	5
36	MP1C	Mx	-.012	5
37	MP3A	X	0	1
38	MP3A	Z	-12.438	1
39	MP3A	Mx	.009	1
40	MP3A	X	0	5
41	MP3A	Z	-12.438	5
42	MP3A	Mx	.009	5
43	MP3B	X	0	1
44	MP3B	Z	-12.691	1
45	MP3B	Mx	.007	1
46	MP3B	X	0	5
47	MP3B	Z	-12.691	5
48	MP3B	Mx	.007	5
49	MP5C	X	0	1
50	MP5C	Z	-11.916	1
51	MP5C	Mx	-.012	1
52	MP5C	X	0	5
53	MP5C	Z	-11.916	5
54	MP5C	Mx	-.012	5
55	MP3C	X	0	1.5
56	MP3C	Z	-5.839	1.5
57	MP3C	Mx	-.006	1.5
58	MP3C	X	0	5.5
59	MP3C	Z	-5.839	5.5
60	MP3C	Mx	-.006	5.5
61	MP3C	X	0	1.5
62	MP3C	Z	-5.839	1.5
63	MP3C	Mx	-.001	1.5
64	MP3C	X	0	5.5
65	MP3C	Z	-5.839	5.5
66	MP3C	Mx	-.001	5.5
67	MP5B	X	0	1.5
68	MP5B	Z	-11.567	1.5
69	MP5B	Mx	-.004	1.5
70	MP5B	X	0	5.5
71	MP5B	Z	-11.567	5.5
72	MP5B	Mx	-.004	5.5
73	MP5B	X	0	1.5
74	MP5B	Z	-11.567	1.5
75	MP5B	Mx	.011	1.5
76	MP5B	X	0	5.5
77	MP5B	Z	-11.567	5.5
78	MP5B	Mx	.011	5.5
79	MP5A	X	0	1.5
80	MP5A	Z	-5.56	1.5
81	MP5A	Mx	.006	1.5
82	MP5A	X	0	5.5
83	MP5A	Z	-5.56	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
84	MP5A	Mx	.006	5.5
85	MP5A	X	0	1.5
86	MP5A	Z	-5.56	1.5
87	MP5A	Mx	-.000812	1.5
88	MP5A	X	0	5.5
89	MP5A	Z	-5.56	5.5
90	MP5A	Mx	-.000812	5.5
91	OVP	X	0	2
92	OVP	Z	-10.881	2
93	OVP	Mx	-.007	2
94	MP2C	X	0	2.5
95	MP2C	Z	-1.564	2.5
96	MP2C	Mx	-.000521	2.5
97	MP2C	X	0	3.5
98	MP2C	Z	-1.564	3.5
99	MP2C	Mx	-.000521	3.5
100	MP4A	X	0	2.5
101	MP4A	Z	-1.795	2.5
102	MP4A	Mx	.000917	2.5
103	MP4A	X	0	3.5
104	MP4A	Z	-1.795	3.5
105	MP4A	Mx	.000917	3.5
106	MP4B	X	0	2.5
107	MP4B	Z	-1.906	2.5
108	MP4B	Mx	-.001	2.5
109	MP4B	X	0	3.5
110	MP4B	Z	-1.906	3.5
111	MP4B	Mx	-.001	3.5
112	MP2C	X	0	1
113	MP2C	Z	-1.373	1
114	MP2C	Mx	.000458	1
115	MP2C	X	0	2
116	MP2C	Z	-1.373	2
117	MP2C	Mx	.000458	2
118	MP4A	X	0	1
119	MP4A	Z	-1.689	1
120	MP4A	Mx	-.000863	1
121	MP4A	X	0	2
122	MP4A	Z	-1.689	2
123	MP4A	Mx	-.000863	2
124	MP4B	X	0	1
125	MP4B	Z	-1.842	1
126	MP4B	Mx	.001	1
127	MP4B	X	0	2
128	MP4B	Z	-1.842	2
129	MP4B	Mx	.001	2
130	MP5A	X	0	7
131	MP5A	Z	-2.576	7
132	MP5A	Mx	.000382	7
133	MP5B	X	0	7
134	MP5B	Z	-2.575	7
135	MP5B	Mx	-.000958	7
136	MP5A	X	0	7
137	MP5A	Z	-2.576	7
138	MP5A	Mx	-.000934	7
139	MP5B	X	0	7
140	MP5B	Z	-2.575	7



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
141	MP5B	Mx	.000529	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	2.574	1.77
2	MP2A	Z	-4.459	1.77
3	MP2A	Mx	.000596	1.77
4	MP2A	X	2.574	3.77
5	MP2A	Z	-4.459	3.77
6	MP2A	Mx	.000596	3.77
7	MP2B	X	1.335	1.77
8	MP2B	Z	-2.312	1.77
9	MP2B	Mx	.002	1.77
10	MP2B	X	1.335	3.77
11	MP2B	Z	-2.312	3.77
12	MP2B	Mx	.002	3.77
13	MP4C	X	2.196	1.77
14	MP4C	Z	-3.803	1.77
15	MP4C	Mx	-.001	1.77
16	MP4C	X	2.196	3.77
17	MP4C	Z	-3.803	3.77
18	MP4C	Mx	-.001	3.77
19	MP1A	X	6.516	1
20	MP1A	Z	-11.285	1
21	MP1A	Mx	.003	1
22	MP1A	X	6.516	5
23	MP1A	Z	-11.285	5
24	MP1A	Mx	.003	5
25	MP1B	X	5.958	1
26	MP1B	Z	-10.319	1
27	MP1B	Mx	.012	1
28	MP1B	X	5.958	5
29	MP1B	Z	-10.319	5
30	MP1B	Mx	.012	5
31	MP1C	X	6.345	1
32	MP1C	Z	-10.99	1
33	MP1C	Mx	-.007	1
34	MP1C	X	6.345	5
35	MP1C	Z	-10.99	5
36	MP1C	Mx	-.007	5
37	MP3A	X	6.516	1
38	MP3A	Z	-11.285	1
39	MP3A	Mx	.003	1
40	MP3A	X	6.516	5
41	MP3A	Z	-11.285	5
42	MP3A	Mx	.003	5
43	MP3B	X	5.958	1
44	MP3B	Z	-10.319	1
45	MP3B	Mx	.012	1
46	MP3B	X	5.958	5
47	MP3B	Z	-10.319	5
48	MP3B	Mx	.012	5
49	MP5C	X	6.345	1
50	MP5C	Z	-10.99	1
51	MP5C	Mx	-.007	1
52	MP5C	X	6.345	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
53	MP5C	Z	-10.99	5
54	MP5C	Mx	-.007	5
55	MP3C	X	5.784	1.5
56	MP3C	Z	-10.018	1.5
57	MP3C	Mx	-.011	1.5
58	MP3C	X	5.784	5.5
59	MP3C	Z	-10.018	5.5
60	MP3C	Mx	-.011	5.5
61	MP3C	X	5.784	1.5
62	MP3C	Z	-10.018	1.5
63	MP3C	Mx	.004	1.5
64	MP3C	X	5.784	5.5
65	MP3C	Z	-10.018	5.5
66	MP3C	Mx	.004	5.5
67	MP5B	X	2.919	1.5
68	MP5B	Z	-5.057	1.5
69	MP5B	Mx	.001	1.5
70	MP5B	X	2.919	5.5
71	MP5B	Z	-5.057	5.5
72	MP5B	Mx	.001	5.5
73	MP5B	X	2.919	1.5
74	MP5B	Z	-5.057	1.5
75	MP5B	Mx	.006	1.5
76	MP5B	X	2.919	5.5
77	MP5B	Z	-5.057	5.5
78	MP5B	Mx	.006	5.5
79	MP5A	X	3.575	1.5
80	MP5A	Z	-6.193	1.5
81	MP5A	Mx	.006	1.5
82	MP5A	X	3.575	5.5
83	MP5A	Z	-6.193	5.5
84	MP5A	Mx	.006	5.5
85	MP5A	X	3.575	1.5
86	MP5A	Z	-6.193	1.5
87	MP5A	Mx	-.004	1.5
88	MP5A	X	3.575	5.5
89	MP5A	Z	-6.193	5.5
90	MP5A	Mx	-.004	5.5
91	OVP	X	5.118	2
92	OVP	Z	-8.864	2
93	OVP	Mx	-.006	2
94	MP2C	X	.953	2.5
95	MP2C	Z	-1.651	2.5
96	MP2C	Mx	-.001	2.5
97	MP2C	X	.953	3.5
98	MP2C	Z	-1.651	3.5
99	MP2C	Mx	-.001	3.5
100	MP4A	X	1.028	2.5
101	MP4A	Z	-1.781	2.5
102	MP4A	Mx	.001	2.5
103	MP4A	X	1.028	3.5
104	MP4A	Z	-1.781	3.5
105	MP4A	Mx	.001	3.5
106	MP4B	X	.782	2.5
107	MP4B	Z	-1.355	2.5
108	MP4B	Mx	-.000522	2.5
109	MP4B	X	.782	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
110	MP4B	Z	-1.355	3.5
111	MP4B	Mx	-0.000522	3.5
112	MP2C	X	.921	1
113	MP2C	Z	-1.596	1
114	MP2C	Mx	.001	1
115	MP2C	X	.921	2
116	MP2C	Z	-1.596	2
117	MP2C	Mx	.001	2
118	MP4A	X	1.024	1
119	MP4A	Z	-1.774	1
120	MP4A	Mx	-.001	1
121	MP4A	X	1.024	2
122	MP4A	Z	-1.774	2
123	MP4A	Mx	-.001	2
124	MP4B	X	.687	1
125	MP4B	Z	-1.189	1
126	MP4B	Mx	.000457	1
127	MP4B	X	.687	2
128	MP4B	Z	-1.189	2
129	MP4B	Mx	.000457	2
130	MP5A	X	1.286	7
131	MP5A	Z	-2.228	7
132	MP5A	Mx	.00077	7
133	MP5B	X	1.289	7
134	MP5B	Z	-2.233	7
135	MP5B	Mx	-.000802	7
136	MP5A	X	1.286	7
137	MP5A	Z	-2.228	7
138	MP5A	Mx	-.000919	7
139	MP5B	X	1.289	7
140	MP5B	Z	-2.233	7
141	MP5B	Mx	5.8e-5	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	4.2	1.77
2	MP2A	Z	-2.425	1.77
3	MP2A	Mx	-.001	1.77
4	MP2A	X	4.2	3.77
5	MP2A	Z	-2.425	3.77
6	MP2A	Mx	-.001	3.77
7	MP2B	X	1.567	1.77
8	MP2B	Z	-.904	1.77
9	MP2B	Mx	.001	1.77
10	MP2B	X	1.567	3.77
11	MP2B	Z	-.904	3.77
12	MP2B	Mx	.001	3.77
13	MP4C	X	4.549	1.77
14	MP4C	Z	-2.626	1.77
15	MP4C	Mx	0	1.77
16	MP4C	X	4.549	3.77
17	MP4C	Z	-2.626	3.77
18	MP4C	Mx	0	3.77
19	MP1A	X	11.169	1
20	MP1A	Z	-6.448	1
21	MP1A	Mx	-.005	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
22	MP1A	X	11.169	5
23	MP1A	Z	-6.448	5
24	MP1A	Mx	-.005	5
25	MP1B	X	9.984	1
26	MP1B	Z	-5.764	1
27	MP1B	Mx	.013	1
28	MP1B	X	9.984	5
29	MP1B	Z	-5.764	5
30	MP1B	Mx	.013	5
31	MP1C	X	11.326	1
32	MP1C	Z	-6.539	1
33	MP1C	Mx	0	1
34	MP1C	X	11.326	5
35	MP1C	Z	-6.539	5
36	MP1C	Mx	0	5
37	MP3A	X	11.169	1
38	MP3A	Z	-6.448	1
39	MP3A	Mx	-.005	1
40	MP3A	X	11.169	5
41	MP3A	Z	-6.448	5
42	MP3A	Mx	-.005	5
43	MP3B	X	9.984	1
44	MP3B	Z	-5.764	1
45	MP3B	Mx	.013	1
46	MP3B	X	9.984	5
47	MP3B	Z	-5.764	5
48	MP3B	Mx	.013	5
49	MP5C	X	11.326	1
50	MP5C	Z	-6.539	1
51	MP5C	Mx	0	1
52	MP5C	X	11.326	5
53	MP5C	Z	-6.539	5
54	MP5C	Mx	0	5
55	MP3C	X	12.498	1.5
56	MP3C	Z	-7.216	1.5
57	MP3C	Mx	-.011	1.5
58	MP3C	X	12.498	5.5
59	MP3C	Z	-7.216	5.5
60	MP3C	Mx	-.011	5.5
61	MP3C	X	12.498	1.5
62	MP3C	Z	-7.216	1.5
63	MP3C	Mx	.011	1.5
64	MP3C	X	12.498	5.5
65	MP3C	Z	-7.216	5.5
66	MP3C	Mx	.011	5.5
67	MP5B	X	2.576	1.5
68	MP5B	Z	-1.487	1.5
69	MP5B	Mx	.002	1.5
70	MP5B	X	2.576	5.5
71	MP5B	Z	-1.487	5.5
72	MP5B	Mx	.002	5.5
73	MP5B	X	2.576	1.5
74	MP5B	Z	-1.487	1.5
75	MP5B	Mx	.002	1.5
76	MP5B	X	2.576	5.5
77	MP5B	Z	-1.487	5.5
78	MP5B	Mx	.002	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
79	MP5A	X	5.88	1.5
80	MP5A	Z	-3.395	1.5
81	MP5A	Mx	.003	1.5
82	MP5A	X	5.88	5.5
83	MP5A	Z	-3.395	5.5
84	MP5A	Mx	.003	5.5
85	MP5A	X	5.88	1.5
86	MP5A	Z	-3.395	1.5
87	MP5A	Mx	-.006	1.5
88	MP5A	X	5.88	5.5
89	MP5A	Z	-3.395	5.5
90	MP5A	Mx	-.006	5.5
91	OVP	X	7.747	2
92	OVP	Z	-4.473	2
93	OVP	Mx	-.003	2
94	MP2C	X	1.799	2.5
95	MP2C	Z	-1.038	2.5
96	MP2C	Mx	-.001	2.5
97	MP2C	X	1.799	3.5
98	MP2C	Z	-1.038	3.5
99	MP2C	Mx	-.001	3.5
100	MP4A	X	1.729	2.5
101	MP4A	Z	-.999	2.5
102	MP4A	Mx	.001	2.5
103	MP4A	X	1.729	3.5
104	MP4A	Z	-.999	3.5
105	MP4A	Mx	.001	3.5
106	MP4B	X	1.207	2.5
107	MP4B	Z	-.697	2.5
108	MP4B	Mx	0	2.5
109	MP4B	X	1.207	3.5
110	MP4B	Z	-.697	3.5
111	MP4B	Mx	0	3.5
112	MP2C	X	1.799	1
113	MP2C	Z	-1.038	1
114	MP2C	Mx	.001	1
115	MP2C	X	1.799	2
116	MP2C	Z	-1.038	2
117	MP2C	Mx	.001	2
118	MP4A	X	1.704	1
119	MP4A	Z	-.984	1
120	MP4A	Mx	-.001	1
121	MP4A	X	1.704	2
122	MP4A	Z	-.984	2
123	MP4A	Mx	-.001	2
124	MP4B	X	.986	1
125	MP4B	Z	-.569	1
126	MP4B	Mx	0	1
127	MP4B	X	.986	2
128	MP4B	Z	-.569	2
129	MP4B	Mx	0	2
130	MP5A	X	2.229	7
131	MP5A	Z	-1.287	7
132	MP5A	Mx	.000953	7
133	MP5B	X	2.235	7
134	MP5B	Z	-1.29	7
135	MP5B	Mx	-.00043	7



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
136	MP5A	X	2.229	7
137	MP5A	Z	-1.287	7
138	MP5A	Mx	-.00066	7
139	MP5B	X	2.235	7
140	MP5B	Z	-1.29	7
141	MP5B	Mx	-.00043	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	3.232	1.77
2	MP2A	Z	0	1.77
3	MP2A	Mx	-.002	1.77
4	MP2A	X	3.232	3.77
5	MP2A	Z	0	3.77
6	MP2A	Mx	-.002	3.77
7	MP2B	X	2.67	1.77
8	MP2B	Z	0	1.77
9	MP2B	Mx	.002	1.77
10	MP2B	X	2.67	3.77
11	MP2B	Z	0	3.77
12	MP2B	Mx	.002	3.77
13	MP4C	X	4.392	1.77
14	MP4C	Z	0	1.77
15	MP4C	Mx	.001	1.77
16	MP4C	X	4.392	3.77
17	MP4C	Z	0	3.77
18	MP4C	Mx	.001	3.77
19	MP1A	X	12.169	1
20	MP1A	Z	0	1
21	MP1A	Mx	-.01	1
22	MP1A	X	12.169	5
23	MP1A	Z	0	5
24	MP1A	Mx	-.01	5
25	MP1B	X	11.916	1
26	MP1B	Z	0	1
27	MP1B	Mx	.012	1
28	MP1B	X	11.916	5
29	MP1B	Z	0	5
30	MP1B	Mx	.012	5
31	MP1C	X	12.691	1
32	MP1C	Z	0	1
33	MP1C	Mx	.007	1
34	MP1C	X	12.691	5
35	MP1C	Z	0	5
36	MP1C	Mx	.007	5
37	MP3A	X	12.169	1
38	MP3A	Z	0	1
39	MP3A	Mx	-.01	1
40	MP3A	X	12.169	5
41	MP3A	Z	0	5
42	MP3A	Mx	-.01	5
43	MP3B	X	11.916	1
44	MP3B	Z	0	1
45	MP3B	Mx	.012	1
46	MP3B	X	11.916	5
47	MP3B	Z	0	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
48	MP3B	Mx	.012	5
49	MP5C	X	12.691	1
50	MP5C	Z	0	1
51	MP5C	Mx	.007	1
52	MP5C	X	12.691	5
53	MP5C	Z	0	5
54	MP5C	Mx	.007	5
55	MP3C	X	11.567	1.5
56	MP3C	Z	0	1.5
57	MP3C	Mx	-.004	1.5
58	MP3C	X	11.567	5.5
59	MP3C	Z	0	5.5
60	MP3C	Mx	-.004	5.5
61	MP3C	X	11.567	1.5
62	MP3C	Z	0	1.5
63	MP3C	Mx	.011	1.5
64	MP3C	X	11.567	5.5
65	MP3C	Z	0	5.5
66	MP3C	Mx	.011	5.5
67	MP5B	X	5.839	1.5
68	MP5B	Z	0	1.5
69	MP5B	Mx	.006	1.5
70	MP5B	X	5.839	5.5
71	MP5B	Z	0	5.5
72	MP5B	Mx	.006	5.5
73	MP5B	X	5.839	1.5
74	MP5B	Z	0	1.5
75	MP5B	Mx	.001	1.5
76	MP5B	X	5.839	5.5
77	MP5B	Z	0	5.5
78	MP5B	Mx	.001	5.5
79	MP5A	X	4.838	1.5
80	MP5A	Z	0	1.5
81	MP5A	Mx	-.000138	1.5
82	MP5A	X	4.838	5.5
83	MP5A	Z	0	5.5
84	MP5A	Mx	-.000138	5.5
85	MP5A	X	4.838	1.5
86	MP5A	Z	0	1.5
87	MP5A	Mx	-.005	1.5
88	MP5A	X	4.838	5.5
89	MP5A	Z	0	5.5
90	MP5A	Mx	-.005	5.5
91	OVP	X	8.301	2
92	OVP	Z	0	2
93	OVP	Mx	0	2
94	MP2C	X	1.906	2.5
95	MP2C	Z	0	2.5
96	MP2C	Mx	-.001	2.5
97	MP2C	X	1.906	3.5
98	MP2C	Z	0	3.5
99	MP2C	Mx	-.001	3.5
100	MP4A	X	1.676	2.5
101	MP4A	Z	0	2.5
102	MP4A	Mx	.000718	2.5
103	MP4A	X	1.676	3.5
104	MP4A	Z	0	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
105	MP4A	Mx	.000718	3.5
106	MP4B	X	1.564	2.5
107	MP4B	Z	0	2.5
108	MP4B	Mx	.000521	2.5
109	MP4B	X	1.564	3.5
110	MP4B	Z	0	3.5
111	MP4B	Mx	.000521	3.5
112	MP2C	X	1.842	1
113	MP2C	Z	0	1
114	MP2C	Mx	.001	1
115	MP2C	X	1.842	2
116	MP2C	Z	0	2
117	MP2C	Mx	.001	2
118	MP4A	X	1.527	1
119	MP4A	Z	0	1
120	MP4A	Mx	-.000654	1
121	MP4A	X	1.527	2
122	MP4A	Z	0	2
123	MP4A	Mx	-.000654	2
124	MP4B	X	1.373	1
125	MP4B	Z	0	1
126	MP4B	Mx	-.000458	1
127	MP4B	X	1.373	2
128	MP4B	Z	0	2
129	MP4B	Mx	-.000458	2
130	MP5A	X	2.577	7
131	MP5A	Z	0	7
132	MP5A	Mx	.000881	7
133	MP5B	X	2.578	7
134	MP5B	Z	0	7
135	MP5B	Mx	5.8e-5	7
136	MP5A	X	2.577	7
137	MP5A	Z	0	7
138	MP5A	Mx	-.000223	7
139	MP5B	X	2.578	7
140	MP5B	Z	0	7
141	MP5B	Mx	-.000802	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	1.657	1.77
2	MP2A	Z	.956	1.77
3	MP2A	Mx	-.001	1.77
4	MP2A	X	1.657	3.77
5	MP2A	Z	.956	3.77
6	MP2A	Mx	-.001	3.77
7	MP2B	X	3.803	1.77
8	MP2B	Z	2.196	1.77
9	MP2B	Mx	.001	1.77
10	MP2B	X	3.803	3.77
11	MP2B	Z	2.196	3.77
12	MP2B	Mx	.001	3.77
13	MP4C	X	2.312	1.77
14	MP4C	Z	1.335	1.77
15	MP4C	Mx	.002	1.77
16	MP4C	X	2.312	3.77



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
17	MP4C	Z	1.335	3.77
18	MP4C	Mx	.002	3.77
19	MP1A	X	10.024	1
20	MP1A	Z	5.787	1
21	MP1A	Mx	-.013	1
22	MP1A	X	10.024	5
23	MP1A	Z	5.787	5
24	MP1A	Mx	-.013	5
25	MP1B	X	10.99	1
26	MP1B	Z	6.345	1
27	MP1B	Mx	.007	1
28	MP1B	X	10.99	5
29	MP1B	Z	6.345	5
30	MP1B	Mx	.007	5
31	MP1C	X	10.319	1
32	MP1C	Z	5.958	1
33	MP1C	Mx	.012	1
34	MP1C	X	10.319	5
35	MP1C	Z	5.958	5
36	MP1C	Mx	.012	5
37	MP3A	X	10.024	1
38	MP3A	Z	5.787	1
39	MP3A	Mx	-.013	1
40	MP3A	X	10.024	5
41	MP3A	Z	5.787	5
42	MP3A	Mx	-.013	5
43	MP3B	X	10.99	1
44	MP3B	Z	6.345	1
45	MP3B	Mx	.007	1
46	MP3B	X	10.99	5
47	MP3B	Z	6.345	5
48	MP3B	Mx	.007	5
49	MP5C	X	10.319	1
50	MP5C	Z	5.958	1
51	MP5C	Mx	.012	1
52	MP5C	X	10.319	5
53	MP5C	Z	5.958	5
54	MP5C	Mx	.012	5
55	MP3C	X	5.057	1.5
56	MP3C	Z	2.919	1.5
57	MP3C	Mx	.001	1.5
58	MP3C	X	5.057	5.5
59	MP3C	Z	2.919	5.5
60	MP3C	Mx	.001	5.5
61	MP3C	X	5.057	1.5
62	MP3C	Z	2.919	1.5
63	MP3C	Mx	.006	1.5
64	MP3C	X	5.057	5.5
65	MP3C	Z	2.919	5.5
66	MP3C	Mx	.006	5.5
67	MP5B	X	10.018	1.5
68	MP5B	Z	5.784	1.5
69	MP5B	Mx	.011	1.5
70	MP5B	X	10.018	5.5
71	MP5B	Z	5.784	5.5
72	MP5B	Mx	.011	5.5
73	MP5B	X	10.018	1.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
74	MP5B	Z	5.784	1.5
75	MP5B	Mx	-.004	1.5
76	MP5B	X	10.018	5.5
77	MP5B	Z	5.784	5.5
78	MP5B	Mx	-.004	5.5
79	MP5A	X	2.812	1.5
80	MP5A	Z	1.624	1.5
81	MP5A	Mx	-.002	1.5
82	MP5A	X	2.812	5.5
83	MP5A	Z	1.624	5.5
84	MP5A	Mx	-.002	5.5
85	MP5A	X	2.812	1.5
86	MP5A	Z	1.624	1.5
87	MP5A	Mx	-.003	1.5
88	MP5A	X	2.812	5.5
89	MP5A	Z	1.624	5.5
90	MP5A	Mx	-.003	5.5
91	OVP	X	7.747	2
92	OVP	Z	4.473	2
93	OVP	Mx	.003	2
94	MP2C	X	1.355	2.5
95	MP2C	Z	.782	2.5
96	MP2C	Mx	-.000522	2.5
97	MP2C	X	1.355	3.5
98	MP2C	Z	.782	3.5
99	MP2C	Mx	-.000522	3.5
100	MP4A	X	1.225	2.5
101	MP4A	Z	.707	2.5
102	MP4A	Mx	.000164	2.5
103	MP4A	X	1.225	3.5
104	MP4A	Z	.707	3.5
105	MP4A	Mx	.000164	3.5
106	MP4B	X	1.651	2.5
107	MP4B	Z	.953	2.5
108	MP4B	Mx	.001	2.5
109	MP4B	X	1.651	3.5
110	MP4B	Z	.953	3.5
111	MP4B	Mx	.001	3.5
112	MP2C	X	1.189	1
113	MP2C	Z	.687	1
114	MP2C	Mx	.000457	1
115	MP2C	X	1.189	2
116	MP2C	Z	.687	2
117	MP2C	Mx	.000457	2
118	MP4A	X	1.011	1
119	MP4A	Z	.584	1
120	MP4A	Mx	-.000135	1
121	MP4A	X	1.011	2
122	MP4A	Z	.584	2
123	MP4A	Mx	-.000135	2
124	MP4B	X	1.596	1
125	MP4B	Z	.921	1
126	MP4B	Mx	-.001	1
127	MP4B	X	1.596	2
128	MP4B	Z	.921	2
129	MP4B	Mx	-.001	2
130	MP5A	X	2.234	7



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
131	MP5A	Z	1.29	7
132	MP5A	Mx	.000573	7
133	MP5B	X	2.23	7
134	MP5B	Z	1.287	7
135	MP5B	Mx	.000529	7
136	MP5A	X	2.234	7
137	MP5A	Z	1.29	7
138	MP5A	Mx	.000274	7
139	MP5B	X	2.23	7
140	MP5B	Z	1.287	7
141	MP5B	Mx	-.000958	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	1.106	1.77
2	MP2A	Z	1.915	1.77
3	MP2A	Mx	-.001	1.77
4	MP2A	X	1.106	3.77
5	MP2A	Z	1.915	3.77
6	MP2A	Mx	-.001	3.77
7	MP2B	X	2.626	1.77
8	MP2B	Z	4.549	1.77
9	MP2B	Mx	0	1.77
10	MP2B	X	2.626	3.77
11	MP2B	Z	4.549	3.77
12	MP2B	Mx	0	3.77
13	MP4C	X	.904	1.77
14	MP4C	Z	1.567	1.77
15	MP4C	Mx	.001	1.77
16	MP4C	X	.904	3.77
17	MP4C	Z	1.567	3.77
18	MP4C	Mx	.001	3.77
19	MP1A	X	5.855	1
20	MP1A	Z	10.141	1
21	MP1A	Mx	-.012	1
22	MP1A	X	5.855	5
23	MP1A	Z	10.141	5
24	MP1A	Mx	-.012	5
25	MP1B	X	6.539	1
26	MP1B	Z	11.326	1
27	MP1B	Mx	0	1
28	MP1B	X	6.539	5
29	MP1B	Z	11.326	5
30	MP1B	Mx	0	5
31	MP1C	X	5.764	1
32	MP1C	Z	9.984	1
33	MP1C	Mx	.013	1
34	MP1C	X	5.764	5
35	MP1C	Z	9.984	5
36	MP1C	Mx	.013	5
37	MP3A	X	5.855	1
38	MP3A	Z	10.141	1
39	MP3A	Mx	-.012	1
40	MP3A	X	5.855	5
41	MP3A	Z	10.141	5
42	MP3A	Mx	-.012	5



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name : 5000244948-VZW_MT_LO_H

Aug 3, 2023
 9:24 AM
 Checked By: _____

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
43	MP3B	X	6.539	1
44	MP3B	Z	11.326	1
45	MP3B	Mx	0	1
46	MP3B	X	6.539	5
47	MP3B	Z	11.326	5
48	MP3B	Mx	0	5
49	MP5C	X	5.764	1
50	MP5C	Z	9.984	1
51	MP5C	Mx	.013	1
52	MP5C	X	5.764	5
53	MP5C	Z	9.984	5
54	MP5C	Mx	.013	5
55	MP3C	X	1.487	1.5
56	MP3C	Z	2.576	1.5
57	MP3C	Mx	.002	1.5
58	MP3C	X	1.487	5.5
59	MP3C	Z	2.576	5.5
60	MP3C	Mx	.002	5.5
61	MP3C	X	1.487	1.5
62	MP3C	Z	2.576	1.5
63	MP3C	Mx	.002	1.5
64	MP3C	X	1.487	5.5
65	MP3C	Z	2.576	5.5
66	MP3C	Mx	.002	5.5
67	MP5B	X	7.216	1.5
68	MP5B	Z	12.498	1.5
69	MP5B	Mx	.011	1.5
70	MP5B	X	7.216	5.5
71	MP5B	Z	12.498	5.5
72	MP5B	Mx	.011	5.5
73	MP5B	X	7.216	1.5
74	MP5B	Z	12.498	1.5
75	MP5B	Mx	-.011	1.5
76	MP5B	X	7.216	5.5
77	MP5B	Z	12.498	5.5
78	MP5B	Mx	-.011	5.5
79	MP5A	X	1.804	1.5
80	MP5A	Z	3.125	1.5
81	MP5A	Mx	-.003	1.5
82	MP5A	X	1.804	5.5
83	MP5A	Z	3.125	5.5
84	MP5A	Mx	-.003	5.5
85	MP5A	X	1.804	1.5
86	MP5A	Z	3.125	1.5
87	MP5A	Mx	-.001	1.5
88	MP5A	X	1.804	5.5
89	MP5A	Z	3.125	5.5
90	MP5A	Mx	-.001	5.5
91	OVP	X	5.118	2
92	OVP	Z	8.864	2
93	OVP	Mx	.006	2
94	MP2C	X	.697	2.5
95	MP2C	Z	1.207	2.5
96	MP2C	Mx	0	2.5
97	MP2C	X	.697	3.5
98	MP2C	Z	1.207	3.5
99	MP2C	Mx	0	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
100	MP4A	X	.737	2.5
101	MP4A	Z	1.276	2.5
102	MP4A	Mx	-.000336	2.5
103	MP4A	X	.737	3.5
104	MP4A	Z	1.276	3.5
105	MP4A	Mx	-.000336	3.5
106	MP4B	X	1.038	2.5
107	MP4B	Z	1.799	2.5
108	MP4B	Mx	.001	2.5
109	MP4B	X	1.038	3.5
110	MP4B	Z	1.799	3.5
111	MP4B	Mx	.001	3.5
112	MP2C	X	.569	1
113	MP2C	Z	.986	1
114	MP2C	Mx	0	1
115	MP2C	X	.569	2
116	MP2C	Z	.986	2
117	MP2C	Mx	0	2
118	MP4A	X	.624	1
119	MP4A	Z	1.081	1
120	MP4A	Mx	.000285	1
121	MP4A	X	.624	2
122	MP4A	Z	1.081	2
123	MP4A	Mx	.000285	2
124	MP4B	X	1.038	1
125	MP4B	Z	1.799	1
126	MP4B	Mx	-.001	1
127	MP4B	X	1.038	2
128	MP4B	Z	1.799	2
129	MP4B	Mx	-.001	2
130	MP5A	X	1.29	7
131	MP5A	Z	2.234	7
132	MP5A	Mx	.00011	7
133	MP5B	X	1.286	7
134	MP5B	Z	2.228	7
135	MP5B	Mx	.000858	7
136	MP5A	X	1.29	7
137	MP5A	Z	2.234	7
138	MP5A	Mx	.000698	7
139	MP5B	X	1.286	7
140	MP5B	Z	2.228	7
141	MP5B	Mx	-.000857	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	0	1.77
2	MP2A	Z	3.83	1.77
3	MP2A	Mx	-.002	1.77
4	MP2A	X	0	3.77
5	MP2A	Z	3.83	3.77
6	MP2A	Mx	-.002	3.77
7	MP2B	X	0	1.77
8	MP2B	Z	4.392	1.77
9	MP2B	Mx	-.001	1.77
10	MP2B	X	0	3.77
11	MP2B	Z	4.392	3.77



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
12	MP2B	Mx	-.001	3.77
13	MP4C	X	0	1.77
14	MP4C	Z	2.67	1.77
15	MP4C	Mx	.002	1.77
16	MP4C	X	0	3.77
17	MP4C	Z	2.67	3.77
18	MP4C	Mx	.002	3.77
19	MP1A	X	0	1
20	MP1A	Z	12.438	1
21	MP1A	Mx	-.009	1
22	MP1A	X	0	5
23	MP1A	Z	12.438	5
24	MP1A	Mx	-.009	5
25	MP1B	X	0	1
26	MP1B	Z	12.691	1
27	MP1B	Mx	-.007	1
28	MP1B	X	0	5
29	MP1B	Z	12.691	5
30	MP1B	Mx	-.007	5
31	MP1C	X	0	1
32	MP1C	Z	11.916	1
33	MP1C	Mx	.012	1
34	MP1C	X	0	5
35	MP1C	Z	11.916	5
36	MP1C	Mx	.012	5
37	MP3A	X	0	1
38	MP3A	Z	12.438	1
39	MP3A	Mx	-.009	1
40	MP3A	X	0	5
41	MP3A	Z	12.438	5
42	MP3A	Mx	-.009	5
43	MP3B	X	0	1
44	MP3B	Z	12.691	1
45	MP3B	Mx	-.007	1
46	MP3B	X	0	5
47	MP3B	Z	12.691	5
48	MP3B	Mx	-.007	5
49	MP5C	X	0	1
50	MP5C	Z	11.916	1
51	MP5C	Mx	.012	1
52	MP5C	X	0	5
53	MP5C	Z	11.916	5
54	MP5C	Mx	.012	5
55	MP3C	X	0	1.5
56	MP3C	Z	5.839	1.5
57	MP3C	Mx	.006	1.5
58	MP3C	X	0	5.5
59	MP3C	Z	5.839	5.5
60	MP3C	Mx	.006	5.5
61	MP3C	X	0	1.5
62	MP3C	Z	5.839	1.5
63	MP3C	Mx	.001	1.5
64	MP3C	X	0	5.5
65	MP3C	Z	5.839	5.5
66	MP3C	Mx	.001	5.5
67	MP5B	X	0	1.5
68	MP5B	Z	11.567	1.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
69	MP5B	Mx	.004	1.5
70	MP5B	X	0	5.5
71	MP5B	Z	11.567	5.5
72	MP5B	Mx	.004	5.5
73	MP5B	X	0	1.5
74	MP5B	Z	11.567	1.5
75	MP5B	Mx	-.011	1.5
76	MP5B	X	0	5.5
77	MP5B	Z	11.567	5.5
78	MP5B	Mx	-.011	5.5
79	MP5A	X	0	1.5
80	MP5A	Z	5.56	1.5
81	MP5A	Mx	-.006	1.5
82	MP5A	X	0	5.5
83	MP5A	Z	5.56	5.5
84	MP5A	Mx	-.006	5.5
85	MP5A	X	0	1.5
86	MP5A	Z	5.56	1.5
87	MP5A	Mx	.000812	1.5
88	MP5A	X	0	5.5
89	MP5A	Z	5.56	5.5
90	MP5A	Mx	.000812	5.5
91	OVP	X	0	2
92	OVP	Z	10.881	2
93	OVP	Mx	.007	2
94	MP2C	X	0	2.5
95	MP2C	Z	1.564	2.5
96	MP2C	Mx	.000521	2.5
97	MP2C	X	0	3.5
98	MP2C	Z	1.564	3.5
99	MP2C	Mx	.000521	3.5
100	MP4A	X	0	2.5
101	MP4A	Z	1.795	2.5
102	MP4A	Mx	-.000917	2.5
103	MP4A	X	0	3.5
104	MP4A	Z	1.795	3.5
105	MP4A	Mx	-.000917	3.5
106	MP4B	X	0	2.5
107	MP4B	Z	1.906	2.5
108	MP4B	Mx	.001	2.5
109	MP4B	X	0	3.5
110	MP4B	Z	1.906	3.5
111	MP4B	Mx	.001	3.5
112	MP2C	X	0	1
113	MP2C	Z	1.373	1
114	MP2C	Mx	-.000458	1
115	MP2C	X	0	2
116	MP2C	Z	1.373	2
117	MP2C	Mx	-.000458	2
118	MP4A	X	0	1
119	MP4A	Z	1.689	1
120	MP4A	Mx	.000863	1
121	MP4A	X	0	2
122	MP4A	Z	1.689	2
123	MP4A	Mx	.000863	2
124	MP4B	X	0	1
125	MP4B	Z	1.842	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
126	MP4B	Mx	-.001	1
127	MP4B	X	0	2
128	MP4B	Z	1.842	2
129	MP4B	Mx	-.001	2
130	MP5A	X	0	7
131	MP5A	Z	2.576	7
132	MP5A	Mx	-.000382	7
133	MP5B	X	0	7
134	MP5B	Z	2.575	7
135	MP5B	Mx	.000958	7
136	MP5A	X	0	7
137	MP5A	Z	2.576	7
138	MP5A	Mx	.000934	7
139	MP5B	X	0	7
140	MP5B	Z	2.575	7
141	MP5B	Mx	-.000529	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-2.574	1.77
2	MP2A	Z	4.459	1.77
3	MP2A	Mx	-.000596	1.77
4	MP2A	X	-2.574	3.77
5	MP2A	Z	4.459	3.77
6	MP2A	Mx	-.000596	3.77
7	MP2B	X	-1.335	1.77
8	MP2B	Z	2.312	1.77
9	MP2B	Mx	-.002	1.77
10	MP2B	X	-1.335	3.77
11	MP2B	Z	2.312	3.77
12	MP2B	Mx	-.002	3.77
13	MP4C	X	-2.196	1.77
14	MP4C	Z	3.803	1.77
15	MP4C	Mx	.001	1.77
16	MP4C	X	-2.196	3.77
17	MP4C	Z	3.803	3.77
18	MP4C	Mx	.001	3.77
19	MP1A	X	-6.516	1
20	MP1A	Z	11.285	1
21	MP1A	Mx	-.003	1
22	MP1A	X	-6.516	5
23	MP1A	Z	11.285	5
24	MP1A	Mx	-.003	5
25	MP1B	X	-5.958	1
26	MP1B	Z	10.319	1
27	MP1B	Mx	-.012	1
28	MP1B	X	-5.958	5
29	MP1B	Z	10.319	5
30	MP1B	Mx	-.012	5
31	MP1C	X	-6.345	1
32	MP1C	Z	10.99	1
33	MP1C	Mx	.007	1
34	MP1C	X	-6.345	5
35	MP1C	Z	10.99	5
36	MP1C	Mx	.007	5
37	MP3A	X	-6.516	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
38	MP3A	Z	11.285	1
39	MP3A	Mx	-.003	1
40	MP3A	X	-6.516	5
41	MP3A	Z	11.285	5
42	MP3A	Mx	-.003	5
43	MP3B	X	-5.958	1
44	MP3B	Z	10.319	1
45	MP3B	Mx	-.012	1
46	MP3B	X	-5.958	5
47	MP3B	Z	10.319	5
48	MP3B	Mx	-.012	5
49	MP5C	X	-6.345	1
50	MP5C	Z	10.99	1
51	MP5C	Mx	.007	1
52	MP5C	X	-6.345	5
53	MP5C	Z	10.99	5
54	MP5C	Mx	.007	5
55	MP3C	X	-5.784	1.5
56	MP3C	Z	10.018	1.5
57	MP3C	Mx	.011	1.5
58	MP3C	X	-5.784	5.5
59	MP3C	Z	10.018	5.5
60	MP3C	Mx	.011	5.5
61	MP3C	X	-5.784	1.5
62	MP3C	Z	10.018	1.5
63	MP3C	Mx	-.004	1.5
64	MP3C	X	-5.784	5.5
65	MP3C	Z	10.018	5.5
66	MP3C	Mx	-.004	5.5
67	MP5B	X	-2.919	1.5
68	MP5B	Z	5.057	1.5
69	MP5B	Mx	-.001	1.5
70	MP5B	X	-2.919	5.5
71	MP5B	Z	5.057	5.5
72	MP5B	Mx	-.001	5.5
73	MP5B	X	-2.919	1.5
74	MP5B	Z	5.057	1.5
75	MP5B	Mx	-.006	1.5
76	MP5B	X	-2.919	5.5
77	MP5B	Z	5.057	5.5
78	MP5B	Mx	-.006	5.5
79	MP5A	X	-3.575	1.5
80	MP5A	Z	6.193	1.5
81	MP5A	Mx	-.006	1.5
82	MP5A	X	-3.575	5.5
83	MP5A	Z	6.193	5.5
84	MP5A	Mx	-.006	5.5
85	MP5A	X	-3.575	1.5
86	MP5A	Z	6.193	1.5
87	MP5A	Mx	.004	1.5
88	MP5A	X	-3.575	5.5
89	MP5A	Z	6.193	5.5
90	MP5A	Mx	.004	5.5
91	OVP	X	-5.118	2
92	OVP	Z	8.864	2
93	OVP	Mx	.006	2
94	MP2C	X	-.953	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
95	MP2C	Z	1.651	2.5
96	MP2C	Mx	.001	2.5
97	MP2C	X	-.953	3.5
98	MP2C	Z	1.651	3.5
99	MP2C	Mx	.001	3.5
100	MP4A	X	-1.028	2.5
101	MP4A	Z	1.781	2.5
102	MP4A	Mx	-.001	2.5
103	MP4A	X	-1.028	3.5
104	MP4A	Z	1.781	3.5
105	MP4A	Mx	-.001	3.5
106	MP4B	X	-.782	2.5
107	MP4B	Z	1.355	2.5
108	MP4B	Mx	.000522	2.5
109	MP4B	X	-.782	3.5
110	MP4B	Z	1.355	3.5
111	MP4B	Mx	.000522	3.5
112	MP2C	X	-.921	1
113	MP2C	Z	1.596	1
114	MP2C	Mx	-.001	1
115	MP2C	X	-.921	2
116	MP2C	Z	1.596	2
117	MP2C	Mx	-.001	2
118	MP4A	X	-1.024	1
119	MP4A	Z	1.774	1
120	MP4A	Mx	.001	1
121	MP4A	X	-1.024	2
122	MP4A	Z	1.774	2
123	MP4A	Mx	.001	2
124	MP4B	X	-.687	1
125	MP4B	Z	1.189	1
126	MP4B	Mx	-.000457	1
127	MP4B	X	-.687	2
128	MP4B	Z	1.189	2
129	MP4B	Mx	-.000457	2
130	MP5A	X	-1.286	7
131	MP5A	Z	2.228	7
132	MP5A	Mx	-.00077	7
133	MP5B	X	-1.289	7
134	MP5B	Z	2.233	7
135	MP5B	Mx	.000802	7
136	MP5A	X	-1.286	7
137	MP5A	Z	2.228	7
138	MP5A	Mx	.000919	7
139	MP5B	X	-1.289	7
140	MP5B	Z	2.233	7
141	MP5B	Mx	-5.8e-5	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-4.2	1.77
2	MP2A	Z	2.425	1.77
3	MP2A	Mx	.001	1.77
4	MP2A	X	-4.2	3.77
5	MP2A	Z	2.425	3.77
6	MP2A	Mx	.001	3.77



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
7	MP2B	X	-1.567	1.77
8	MP2B	Z	.904	1.77
9	MP2B	Mx	-.001	1.77
10	MP2B	X	-1.567	3.77
11	MP2B	Z	.904	3.77
12	MP2B	Mx	-.001	3.77
13	MP4C	X	-4.549	1.77
14	MP4C	Z	2.626	1.77
15	MP4C	Mx	0	1.77
16	MP4C	X	-4.549	3.77
17	MP4C	Z	2.626	3.77
18	MP4C	Mx	0	3.77
19	MP1A	X	-11.169	1
20	MP1A	Z	6.448	1
21	MP1A	Mx	.005	1
22	MP1A	X	-11.169	5
23	MP1A	Z	6.448	5
24	MP1A	Mx	.005	5
25	MP1B	X	-9.984	1
26	MP1B	Z	5.764	1
27	MP1B	Mx	-.013	1
28	MP1B	X	-9.984	5
29	MP1B	Z	5.764	5
30	MP1B	Mx	-.013	5
31	MP1C	X	-11.326	1
32	MP1C	Z	6.539	1
33	MP1C	Mx	0	1
34	MP1C	X	-11.326	5
35	MP1C	Z	6.539	5
36	MP1C	Mx	0	5
37	MP3A	X	-11.169	1
38	MP3A	Z	6.448	1
39	MP3A	Mx	.005	1
40	MP3A	X	-11.169	5
41	MP3A	Z	6.448	5
42	MP3A	Mx	.005	5
43	MP3B	X	-9.984	1
44	MP3B	Z	5.764	1
45	MP3B	Mx	-.013	1
46	MP3B	X	-9.984	5
47	MP3B	Z	5.764	5
48	MP3B	Mx	-.013	5
49	MP5C	X	-11.326	1
50	MP5C	Z	6.539	1
51	MP5C	Mx	0	1
52	MP5C	X	-11.326	5
53	MP5C	Z	6.539	5
54	MP5C	Mx	0	5
55	MP3C	X	-12.498	1.5
56	MP3C	Z	7.216	1.5
57	MP3C	Mx	.011	1.5
58	MP3C	X	-12.498	5.5
59	MP3C	Z	7.216	5.5
60	MP3C	Mx	.011	5.5
61	MP3C	X	-12.498	1.5
62	MP3C	Z	7.216	1.5
63	MP3C	Mx	-.011	1.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
64	MP3C	X	-12.498	5.5
65	MP3C	Z	7.216	5.5
66	MP3C	Mx	-.011	5.5
67	MP5B	X	-2.576	1.5
68	MP5B	Z	1.487	1.5
69	MP5B	Mx	-.002	1.5
70	MP5B	X	-2.576	5.5
71	MP5B	Z	1.487	5.5
72	MP5B	Mx	-.002	5.5
73	MP5B	X	-2.576	1.5
74	MP5B	Z	1.487	1.5
75	MP5B	Mx	-.002	1.5
76	MP5B	X	-2.576	5.5
77	MP5B	Z	1.487	5.5
78	MP5B	Mx	-.002	5.5
79	MP5A	X	-5.88	1.5
80	MP5A	Z	3.395	1.5
81	MP5A	Mx	-.003	1.5
82	MP5A	X	-5.88	5.5
83	MP5A	Z	3.395	5.5
84	MP5A	Mx	-.003	5.5
85	MP5A	X	-5.88	1.5
86	MP5A	Z	3.395	1.5
87	MP5A	Mx	.006	1.5
88	MP5A	X	-5.88	5.5
89	MP5A	Z	3.395	5.5
90	MP5A	Mx	.006	5.5
91	OVP	X	-7.747	2
92	OVP	Z	4.473	2
93	OVP	Mx	.003	2
94	MP2C	X	-1.799	2.5
95	MP2C	Z	1.038	2.5
96	MP2C	Mx	.001	2.5
97	MP2C	X	-1.799	3.5
98	MP2C	Z	1.038	3.5
99	MP2C	Mx	.001	3.5
100	MP4A	X	-1.729	2.5
101	MP4A	Z	.999	2.5
102	MP4A	Mx	-.001	2.5
103	MP4A	X	-1.729	3.5
104	MP4A	Z	.999	3.5
105	MP4A	Mx	-.001	3.5
106	MP4B	X	-1.207	2.5
107	MP4B	Z	.697	2.5
108	MP4B	Mx	0	2.5
109	MP4B	X	-1.207	3.5
110	MP4B	Z	.697	3.5
111	MP4B	Mx	0	3.5
112	MP2C	X	-1.799	1
113	MP2C	Z	1.038	1
114	MP2C	Mx	-.001	1
115	MP2C	X	-1.799	2
116	MP2C	Z	1.038	2
117	MP2C	Mx	-.001	2
118	MP4A	X	-1.704	1
119	MP4A	Z	.984	1
120	MP4A	Mx	.001	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
121	MP4A	X	-1.704	2
122	MP4A	Z	.984	2
123	MP4A	Mx	.001	2
124	MP4B	X	-.986	1
125	MP4B	Z	.569	1
126	MP4B	Mx	0	1
127	MP4B	X	-.986	2
128	MP4B	Z	.569	2
129	MP4B	Mx	0	2
130	MP5A	X	-2.229	7
131	MP5A	Z	1.287	7
132	MP5A	Mx	-.000953	7
133	MP5B	X	-2.235	7
134	MP5B	Z	1.29	7
135	MP5B	Mx	.00043	7
136	MP5A	X	-2.229	7
137	MP5A	Z	1.287	7
138	MP5A	Mx	.00066	7
139	MP5B	X	-2.235	7
140	MP5B	Z	1.29	7
141	MP5B	Mx	.00043	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-3.232	1.77
2	MP2A	Z	0	1.77
3	MP2A	Mx	.002	1.77
4	MP2A	X	-3.232	3.77
5	MP2A	Z	0	3.77
6	MP2A	Mx	.002	3.77
7	MP2B	X	-2.67	1.77
8	MP2B	Z	0	1.77
9	MP2B	Mx	-.002	1.77
10	MP2B	X	-2.67	3.77
11	MP2B	Z	0	3.77
12	MP2B	Mx	-.002	3.77
13	MP4C	X	-4.392	1.77
14	MP4C	Z	0	1.77
15	MP4C	Mx	-.001	1.77
16	MP4C	X	-4.392	3.77
17	MP4C	Z	0	3.77
18	MP4C	Mx	-.001	3.77
19	MP1A	X	-12.169	1
20	MP1A	Z	0	1
21	MP1A	Mx	.01	1
22	MP1A	X	-12.169	5
23	MP1A	Z	0	5
24	MP1A	Mx	.01	5
25	MP1B	X	-11.916	1
26	MP1B	Z	0	1
27	MP1B	Mx	-.012	1
28	MP1B	X	-11.916	5
29	MP1B	Z	0	5
30	MP1B	Mx	-.012	5
31	MP1C	X	-12.691	1
32	MP1C	Z	0	1



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name : 5000244948-VZW_MT_LO_H

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
33	MP1C	Mx	-.007	1
34	MP1C	X	-12.691	5
35	MP1C	Z	0	5
36	MP1C	Mx	-.007	5
37	MP3A	X	-12.169	1
38	MP3A	Z	0	1
39	MP3A	Mx	.01	1
40	MP3A	X	-12.169	5
41	MP3A	Z	0	5
42	MP3A	Mx	.01	5
43	MP3B	X	-11.916	1
44	MP3B	Z	0	1
45	MP3B	Mx	-.012	1
46	MP3B	X	-11.916	5
47	MP3B	Z	0	5
48	MP3B	Mx	-.012	5
49	MP5C	X	-12.691	1
50	MP5C	Z	0	1
51	MP5C	Mx	-.007	1
52	MP5C	X	-12.691	5
53	MP5C	Z	0	5
54	MP5C	Mx	-.007	5
55	MP3C	X	-11.567	1.5
56	MP3C	Z	0	1.5
57	MP3C	Mx	.004	1.5
58	MP3C	X	-11.567	5.5
59	MP3C	Z	0	5.5
60	MP3C	Mx	.004	5.5
61	MP3C	X	-11.567	1.5
62	MP3C	Z	0	1.5
63	MP3C	Mx	-.011	1.5
64	MP3C	X	-11.567	5.5
65	MP3C	Z	0	5.5
66	MP3C	Mx	-.011	5.5
67	MP5B	X	-5.839	1.5
68	MP5B	Z	0	1.5
69	MP5B	Mx	-.006	1.5
70	MP5B	X	-5.839	5.5
71	MP5B	Z	0	5.5
72	MP5B	Mx	-.006	5.5
73	MP5B	X	-5.839	1.5
74	MP5B	Z	0	1.5
75	MP5B	Mx	-.001	1.5
76	MP5B	X	-5.839	5.5
77	MP5B	Z	0	5.5
78	MP5B	Mx	-.001	5.5
79	MP5A	X	-4.838	1.5
80	MP5A	Z	0	1.5
81	MP5A	Mx	.000138	1.5
82	MP5A	X	-4.838	5.5
83	MP5A	Z	0	5.5
84	MP5A	Mx	.000138	5.5
85	MP5A	X	-4.838	1.5
86	MP5A	Z	0	1.5
87	MP5A	Mx	.005	1.5
88	MP5A	X	-4.838	5.5
89	MP5A	Z	0	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
90	MP5A	Mx	.005	5.5
91	OVP	X	-8.301	2
92	OVP	Z	0	2
93	OVP	Mx	0	2
94	MP2C	X	-1.906	2.5
95	MP2C	Z	0	2.5
96	MP2C	Mx	.001	2.5
97	MP2C	X	-1.906	3.5
98	MP2C	Z	0	3.5
99	MP2C	Mx	.001	3.5
100	MP4A	X	-1.676	2.5
101	MP4A	Z	0	2.5
102	MP4A	Mx	-.000718	2.5
103	MP4A	X	-1.676	3.5
104	MP4A	Z	0	3.5
105	MP4A	Mx	-.000718	3.5
106	MP4B	X	-1.564	2.5
107	MP4B	Z	0	2.5
108	MP4B	Mx	-.000521	2.5
109	MP4B	X	-1.564	3.5
110	MP4B	Z	0	3.5
111	MP4B	Mx	-.000521	3.5
112	MP2C	X	-1.842	1
113	MP2C	Z	0	1
114	MP2C	Mx	-.001	1
115	MP2C	X	-1.842	2
116	MP2C	Z	0	2
117	MP2C	Mx	-.001	2
118	MP4A	X	-1.527	1
119	MP4A	Z	0	1
120	MP4A	Mx	.000654	1
121	MP4A	X	-1.527	2
122	MP4A	Z	0	2
123	MP4A	Mx	.000654	2
124	MP4B	X	-1.373	1
125	MP4B	Z	0	1
126	MP4B	Mx	.000458	1
127	MP4B	X	-1.373	2
128	MP4B	Z	0	2
129	MP4B	Mx	.000458	2
130	MP5A	X	-2.577	7
131	MP5A	Z	0	7
132	MP5A	Mx	-.000881	7
133	MP5B	X	-2.578	7
134	MP5B	Z	0	7
135	MP5B	Mx	-5.8e-5	7
136	MP5A	X	-2.577	7
137	MP5A	Z	0	7
138	MP5A	Mx	.000223	7
139	MP5B	X	-2.578	7
140	MP5B	Z	0	7
141	MP5B	Mx	.000802	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-1.657	1.77



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
2	MP2A	Z	-.956	1.77
3	MP2A	Mx	.001	1.77
4	MP2A	X	-1.657	3.77
5	MP2A	Z	-.956	3.77
6	MP2A	Mx	.001	3.77
7	MP2B	X	-3.803	1.77
8	MP2B	Z	-2.196	1.77
9	MP2B	Mx	-.001	1.77
10	MP2B	X	-3.803	3.77
11	MP2B	Z	-2.196	3.77
12	MP2B	Mx	-.001	3.77
13	MP4C	X	-2.312	1.77
14	MP4C	Z	-1.335	1.77
15	MP4C	Mx	-.002	1.77
16	MP4C	X	-2.312	3.77
17	MP4C	Z	-1.335	3.77
18	MP4C	Mx	-.002	3.77
19	MP1A	X	-10.024	1
20	MP1A	Z	-5.787	1
21	MP1A	Mx	.013	1
22	MP1A	X	-10.024	5
23	MP1A	Z	-5.787	5
24	MP1A	Mx	.013	5
25	MP1B	X	-10.99	1
26	MP1B	Z	-6.345	1
27	MP1B	Mx	-.007	1
28	MP1B	X	-10.99	5
29	MP1B	Z	-6.345	5
30	MP1B	Mx	-.007	5
31	MP1C	X	-10.319	1
32	MP1C	Z	-5.958	1
33	MP1C	Mx	-.012	1
34	MP1C	X	-10.319	5
35	MP1C	Z	-5.958	5
36	MP1C	Mx	-.012	5
37	MP3A	X	-10.024	1
38	MP3A	Z	-5.787	1
39	MP3A	Mx	.013	1
40	MP3A	X	-10.024	5
41	MP3A	Z	-5.787	5
42	MP3A	Mx	.013	5
43	MP3B	X	-10.99	1
44	MP3B	Z	-6.345	1
45	MP3B	Mx	-.007	1
46	MP3B	X	-10.99	5
47	MP3B	Z	-6.345	5
48	MP3B	Mx	-.007	5
49	MP5C	X	-10.319	1
50	MP5C	Z	-5.958	1
51	MP5C	Mx	-.012	1
52	MP5C	X	-10.319	5
53	MP5C	Z	-5.958	5
54	MP5C	Mx	-.012	5
55	MP3C	X	-5.057	1.5
56	MP3C	Z	-2.919	1.5
57	MP3C	Mx	-.001	1.5
58	MP3C	X	-5.057	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
59	MP3C	Z	-2.919	5.5
60	MP3C	Mx	-.001	5.5
61	MP3C	X	-5.057	1.5
62	MP3C	Z	-2.919	1.5
63	MP3C	Mx	-.006	1.5
64	MP3C	X	-5.057	5.5
65	MP3C	Z	-2.919	5.5
66	MP3C	Mx	-.006	5.5
67	MP5B	X	-10.018	1.5
68	MP5B	Z	-5.784	1.5
69	MP5B	Mx	-.011	1.5
70	MP5B	X	-10.018	5.5
71	MP5B	Z	-5.784	5.5
72	MP5B	Mx	-.011	5.5
73	MP5B	X	-10.018	1.5
74	MP5B	Z	-5.784	1.5
75	MP5B	Mx	.004	1.5
76	MP5B	X	-10.018	5.5
77	MP5B	Z	-5.784	5.5
78	MP5B	Mx	.004	5.5
79	MP5A	X	-2.812	1.5
80	MP5A	Z	-1.624	1.5
81	MP5A	Mx	.002	1.5
82	MP5A	X	-2.812	5.5
83	MP5A	Z	-1.624	5.5
84	MP5A	Mx	.002	5.5
85	MP5A	X	-2.812	1.5
86	MP5A	Z	-1.624	1.5
87	MP5A	Mx	.003	1.5
88	MP5A	X	-2.812	5.5
89	MP5A	Z	-1.624	5.5
90	MP5A	Mx	.003	5.5
91	OVP	X	-7.747	2
92	OVP	Z	-4.473	2
93	OVP	Mx	-.003	2
94	MP2C	X	-1.355	2.5
95	MP2C	Z	-.782	2.5
96	MP2C	Mx	.000522	2.5
97	MP2C	X	-1.355	3.5
98	MP2C	Z	-.782	3.5
99	MP2C	Mx	.000522	3.5
100	MP4A	X	-1.225	2.5
101	MP4A	Z	-.707	2.5
102	MP4A	Mx	-.000164	2.5
103	MP4A	X	-1.225	3.5
104	MP4A	Z	-.707	3.5
105	MP4A	Mx	-.000164	3.5
106	MP4B	X	-1.651	2.5
107	MP4B	Z	-.953	2.5
108	MP4B	Mx	-.001	2.5
109	MP4B	X	-1.651	3.5
110	MP4B	Z	-.953	3.5
111	MP4B	Mx	-.001	3.5
112	MP2C	X	-1.189	1
113	MP2C	Z	-.687	1
114	MP2C	Mx	-.000457	1
115	MP2C	X	-1.189	2



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
116	MP2C	Z	-.687	2
117	MP2C	Mx	-.000457	2
118	MP4A	X	-1.011	1
119	MP4A	Z	-.584	1
120	MP4A	Mx	.000135	1
121	MP4A	X	-1.011	2
122	MP4A	Z	-.584	2
123	MP4A	Mx	.000135	2
124	MP4B	X	-1.596	1
125	MP4B	Z	-.921	1
126	MP4B	Mx	.001	1
127	MP4B	X	-1.596	2
128	MP4B	Z	-.921	2
129	MP4B	Mx	.001	2
130	MP5A	X	-2.234	7
131	MP5A	Z	-1.29	7
132	MP5A	Mx	-.000573	7
133	MP5B	X	-2.23	7
134	MP5B	Z	-1.287	7
135	MP5B	Mx	-.000529	7
136	MP5A	X	-2.234	7
137	MP5A	Z	-1.29	7
138	MP5A	Mx	-.000274	7
139	MP5B	X	-2.23	7
140	MP5B	Z	-1.287	7
141	MP5B	Mx	.000958	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-1.106	1.77
2	MP2A	Z	-1.915	1.77
3	MP2A	Mx	.001	1.77
4	MP2A	X	-1.106	3.77
5	MP2A	Z	-1.915	3.77
6	MP2A	Mx	.001	3.77
7	MP2B	X	-2.626	1.77
8	MP2B	Z	-4.549	1.77
9	MP2B	Mx	0	1.77
10	MP2B	X	-2.626	3.77
11	MP2B	Z	-4.549	3.77
12	MP2B	Mx	0	3.77
13	MP4C	X	-.904	1.77
14	MP4C	Z	-1.567	1.77
15	MP4C	Mx	-.001	1.77
16	MP4C	X	-.904	3.77
17	MP4C	Z	-1.567	3.77
18	MP4C	Mx	-.001	3.77
19	MP1A	X	-5.855	1
20	MP1A	Z	-10.141	1
21	MP1A	Mx	.012	1
22	MP1A	X	-5.855	5
23	MP1A	Z	-10.141	5
24	MP1A	Mx	.012	5
25	MP1B	X	-6.539	1
26	MP1B	Z	-11.326	1
27	MP1B	Mx	0	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
28	MP1B	X	-6.539	5
29	MP1B	Z	-11.326	5
30	MP1B	Mx	0	5
31	MP1C	X	-5.764	1
32	MP1C	Z	-9.984	1
33	MP1C	Mx	-.013	1
34	MP1C	X	-5.764	5
35	MP1C	Z	-9.984	5
36	MP1C	Mx	-.013	5
37	MP3A	X	-5.855	1
38	MP3A	Z	-10.141	1
39	MP3A	Mx	.012	1
40	MP3A	X	-5.855	5
41	MP3A	Z	-10.141	5
42	MP3A	Mx	.012	5
43	MP3B	X	-6.539	1
44	MP3B	Z	-11.326	1
45	MP3B	Mx	0	1
46	MP3B	X	-6.539	5
47	MP3B	Z	-11.326	5
48	MP3B	Mx	0	5
49	MP5C	X	-5.764	1
50	MP5C	Z	-9.984	1
51	MP5C	Mx	-.013	1
52	MP5C	X	-5.764	5
53	MP5C	Z	-9.984	5
54	MP5C	Mx	-.013	5
55	MP3C	X	-1.487	1.5
56	MP3C	Z	-2.576	1.5
57	MP3C	Mx	-.002	1.5
58	MP3C	X	-1.487	5.5
59	MP3C	Z	-2.576	5.5
60	MP3C	Mx	-.002	5.5
61	MP3C	X	-1.487	1.5
62	MP3C	Z	-2.576	1.5
63	MP3C	Mx	-.002	1.5
64	MP3C	X	-1.487	5.5
65	MP3C	Z	-2.576	5.5
66	MP3C	Mx	-.002	5.5
67	MP5B	X	-7.216	1.5
68	MP5B	Z	-12.498	1.5
69	MP5B	Mx	-.011	1.5
70	MP5B	X	-7.216	5.5
71	MP5B	Z	-12.498	5.5
72	MP5B	Mx	-.011	5.5
73	MP5B	X	-7.216	1.5
74	MP5B	Z	-12.498	1.5
75	MP5B	Mx	.011	1.5
76	MP5B	X	-7.216	5.5
77	MP5B	Z	-12.498	5.5
78	MP5B	Mx	.011	5.5
79	MP5A	X	-1.804	1.5
80	MP5A	Z	-3.125	1.5
81	MP5A	Mx	.003	1.5
82	MP5A	X	-1.804	5.5
83	MP5A	Z	-3.125	5.5
84	MP5A	Mx	.003	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
85	MP5A	X	-1.804	1.5
86	MP5A	Z	-3.125	1.5
87	MP5A	Mx	.001	1.5
88	MP5A	X	-1.804	5.5
89	MP5A	Z	-3.125	5.5
90	MP5A	Mx	.001	5.5
91	OVP	X	-5.118	2
92	OVP	Z	-8.864	2
93	OVP	Mx	-.006	2
94	MP2C	X	-.697	2.5
95	MP2C	Z	-1.207	2.5
96	MP2C	Mx	0	2.5
97	MP2C	X	-.697	3.5
98	MP2C	Z	-1.207	3.5
99	MP2C	Mx	0	3.5
100	MP4A	X	-.737	2.5
101	MP4A	Z	-1.276	2.5
102	MP4A	Mx	.000336	2.5
103	MP4A	X	-.737	3.5
104	MP4A	Z	-1.276	3.5
105	MP4A	Mx	.000336	3.5
106	MP4B	X	-1.038	2.5
107	MP4B	Z	-1.799	2.5
108	MP4B	Mx	-.001	2.5
109	MP4B	X	-1.038	3.5
110	MP4B	Z	-1.799	3.5
111	MP4B	Mx	-.001	3.5
112	MP2C	X	-.569	1
113	MP2C	Z	-.986	1
114	MP2C	Mx	0	1
115	MP2C	X	-.569	2
116	MP2C	Z	-.986	2
117	MP2C	Mx	0	2
118	MP4A	X	-.624	1
119	MP4A	Z	-1.081	1
120	MP4A	Mx	-.000285	1
121	MP4A	X	-.624	2
122	MP4A	Z	-1.081	2
123	MP4A	Mx	-.000285	2
124	MP4B	X	-1.038	1
125	MP4B	Z	-1.799	1
126	MP4B	Mx	.001	1
127	MP4B	X	-1.038	2
128	MP4B	Z	-1.799	2
129	MP4B	Mx	.001	2
130	MP5A	X	-1.29	7
131	MP5A	Z	-2.234	7
132	MP5A	Mx	-.00011	7
133	MP5B	X	-1.286	7
134	MP5B	Z	-2.228	7
135	MP5B	Mx	-.000858	7
136	MP5A	X	-1.29	7
137	MP5A	Z	-2.234	7
138	MP5A	Mx	-.000698	7
139	MP5B	X	-1.286	7
140	MP5B	Z	-2.228	7
141	MP5B	Mx	.000857	7



Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M47	Y	-500	0

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M46	Y	-500	0

Member Point Loads (BLC 79 : Lv1)

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

Member Point Loads (BLC 80 : Lv2)

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

Member Point Loads (BLC 81 : Antenna Ev)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	Y	0	1.77
2	MP2A	My	0	1.77
3	MP2A	Mz	0	1.77
4	MP2A	Y	0	3.77
5	MP2A	My	0	3.77
6	MP2A	Mz	0	3.77
7	MP2B	Y	0	1.77
8	MP2B	My	0	1.77
9	MP2B	Mz	0	1.77
10	MP2B	Y	0	3.77
11	MP2B	My	0	3.77
12	MP2B	Mz	0	3.77
13	MP4C	Y	0	1.77
14	MP4C	My	0	1.77
15	MP4C	Mz	0	1.77
16	MP4C	Y	0	3.77
17	MP4C	My	0	3.77
18	MP4C	Mz	0	3.77
19	MP1A	Y	0	1
20	MP1A	My	0	1
21	MP1A	Mz	0	1
22	MP1A	Y	0	5
23	MP1A	My	0	5
24	MP1A	Mz	0	5
25	MP1B	Y	0	1
26	MP1B	My	0	1
27	MP1B	Mz	0	1
28	MP1B	Y	0	5
29	MP1B	My	0	5
30	MP1B	Mz	0	5
31	MP1C	Y	0	1
32	MP1C	My	0	1
33	MP1C	Mz	0	1
34	MP1C	Y	0	5
35	MP1C	My	0	5
36	MP1C	Mz	0	5
37	MP3A	Y	0	1
38	MP3A	My	0	1
39	MP3A	Mz	0	1



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name : 5000244948-VZW_MT_LO_H

Aug 3, 2023
 9:24 AM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
40	MP3A	Y	0	5
41	MP3A	My	0	5
42	MP3A	Mz	0	5
43	MP3B	Y	0	1
44	MP3B	My	0	1
45	MP3B	Mz	0	1
46	MP3B	Y	0	5
47	MP3B	My	0	5
48	MP3B	Mz	0	5
49	MP5C	Y	0	1
50	MP5C	My	0	1
51	MP5C	Mz	0	1
52	MP5C	Y	0	5
53	MP5C	My	0	5
54	MP5C	Mz	0	5
55	MP3C	Y	0	1.5
56	MP3C	My	0	1.5
57	MP3C	Mz	0	1.5
58	MP3C	Y	0	5.5
59	MP3C	My	0	5.5
60	MP3C	Mz	0	5.5
61	MP3C	Y	0	1.5
62	MP3C	My	0	1.5
63	MP3C	Mz	0	1.5
64	MP3C	Y	0	5.5
65	MP3C	My	0	5.5
66	MP3C	Mz	0	5.5
67	MP5B	Y	0	1.5
68	MP5B	My	0	1.5
69	MP5B	Mz	0	1.5
70	MP5B	Y	0	5.5
71	MP5B	My	0	5.5
72	MP5B	Mz	0	5.5
73	MP5B	Y	0	1.5
74	MP5B	My	0	1.5
75	MP5B	Mz	0	1.5
76	MP5B	Y	0	5.5
77	MP5B	My	0	5.5
78	MP5B	Mz	0	5.5
79	MP5A	Y	0	1.5
80	MP5A	My	0	1.5
81	MP5A	Mz	0	1.5
82	MP5A	Y	0	5.5
83	MP5A	My	0	5.5
84	MP5A	Mz	0	5.5
85	MP5A	Y	0	1.5
86	MP5A	My	0	1.5
87	MP5A	Mz	0	1.5
88	MP5A	Y	0	5.5
89	MP5A	My	0	5.5
90	MP5A	Mz	0	5.5
91	OVP	Y	0	2
92	OVP	My	0	2
93	OVP	Mz	0	2
94	MP2C	Y	0	2.5
95	MP2C	My	0	2.5
96	MP2C	Mz	0	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
97	MP2C	Y	0	3.5
98	MP2C	My	0	3.5
99	MP2C	Mz	0	3.5
100	MP4A	Y	0	2.5
101	MP4A	My	0	2.5
102	MP4A	Mz	0	2.5
103	MP4A	Y	0	3.5
104	MP4A	My	0	3.5
105	MP4A	Mz	0	3.5
106	MP4B	Y	0	2.5
107	MP4B	My	0	2.5
108	MP4B	Mz	0	2.5
109	MP4B	Y	0	3.5
110	MP4B	My	0	3.5
111	MP4B	Mz	0	3.5
112	MP2C	Y	0	1
113	MP2C	My	0	1
114	MP2C	Mz	0	1
115	MP2C	Y	0	2
116	MP2C	My	0	2
117	MP2C	Mz	0	2
118	MP4A	Y	0	1
119	MP4A	My	0	1
120	MP4A	Mz	0	1
121	MP4A	Y	0	2
122	MP4A	My	0	2
123	MP4A	Mz	0	2
124	MP4B	Y	0	1
125	MP4B	My	0	1
126	MP4B	Mz	0	1
127	MP4B	Y	0	2
128	MP4B	My	0	2
129	MP4B	Mz	0	2
130	MP5A	Y	0	7
131	MP5A	My	0	7
132	MP5A	Mz	0	7
133	MP5B	Y	0	7
134	MP5B	My	0	7
135	MP5B	Mz	0	7
136	MP5A	Y	0	7
137	MP5A	My	0	7
138	MP5A	Mz	0	7
139	MP5B	Y	0	7
140	MP5B	My	0	7
141	MP5B	Mz	0	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	Z	-1.306	1.77
2	MP2A	Mx	.00056	1.77
3	MP2A	Z	-1.306	3.77
4	MP2A	Mx	.00056	3.77
5	MP2B	Z	-1.306	1.77
6	MP2B	Mx	.000436	1.77
7	MP2B	Z	-1.306	3.77
8	MP2B	Mx	.000436	3.77



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
9	MP4C	Z	-1.306	1.77
10	MP4C	Mx	-.000754	1.77
11	MP4C	Z	-1.306	3.77
12	MP4C	Mx	-.000754	3.77
13	MP1A	Z	-.405	1
14	MP1A	Mx	.000293	1
15	MP1A	Z	-.405	5
16	MP1A	Mx	.000293	5
17	MP1B	Z	-.405	1
18	MP1B	Mx	.000228	1
19	MP1B	Z	-.405	5
20	MP1B	Mx	.000228	5
21	MP1C	Z	-.405	1
22	MP1C	Mx	-.000395	1
23	MP1C	Z	-.405	5
24	MP1C	Mx	-.000395	5
25	MP3A	Z	-.405	1
26	MP3A	Mx	.000293	1
27	MP3A	Z	-.405	5
28	MP3A	Mx	.000293	5
29	MP3B	Z	-.405	1
30	MP3B	Mx	.000228	1
31	MP3B	Z	-.405	5
32	MP3B	Mx	.000228	5
33	MP5C	Z	-.405	1
34	MP5C	Mx	-.000395	1
35	MP5C	Z	-.405	5
36	MP5C	Mx	-.000395	5
37	MP3C	Z	-1.845	1.5
38	MP3C	Mx	-.002	1.5
39	MP3C	Z	-1.845	5.5
40	MP3C	Mx	-.002	5.5
41	MP3C	Z	-1.845	1.5
42	MP3C	Mx	-.000373	1.5
43	MP3C	Z	-1.845	5.5
44	MP3C	Mx	-.000373	5.5
45	MP5B	Z	-1.845	1.5
46	MP5B	Mx	-.000583	1.5
47	MP5B	Z	-1.845	5.5
48	MP5B	Mx	-.000583	5.5
49	MP5B	Z	-1.845	1.5
50	MP5B	Mx	.002	1.5
51	MP5B	Z	-1.845	5.5
52	MP5B	Mx	.002	5.5
53	MP5A	Z	-.655	1.5
54	MP5A	Mx	.000658	1.5
55	MP5A	Z	-.655	5.5
56	MP5A	Mx	.000658	5.5
57	MP5A	Z	-.655	1.5
58	MP5A	Mx	-9.6e-5	1.5
59	MP5A	Z	-.655	5.5
60	MP5A	Mx	-9.6e-5	5.5
61	OVP	Z	-.96	2
62	OVP	Mx	-.00064	2
63	MP2C	Z	-1.266	2.5
64	MP2C	Mx	-.000422	2.5
65	MP2C	Z	-1.266	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
66	MP2C	Mx	-0.00422	3.5
67	MP4A	Z	-1.266	2.5
68	MP4A	Mx	.000647	2.5
69	MP4A	Z	-1.266	3.5
70	MP4A	Mx	.000647	3.5
71	MP4B	Z	-1.266	2.5
72	MP4B	Mx	-0.00731	2.5
73	MP4B	Z	-1.266	3.5
74	MP4B	Mx	-0.00731	3.5
75	MP2C	Z	-1.054	1
76	MP2C	Mx	.000352	1
77	MP2C	Z	-1.054	2
78	MP2C	Mx	.000352	2
79	MP4A	Z	-1.054	1
80	MP4A	Mx	-0.00539	1
81	MP4A	Z	-1.054	2
82	MP4A	Mx	-0.00539	2
83	MP4B	Z	-1.054	1
84	MP4B	Mx	.000609	1
85	MP4B	Z	-1.054	2
86	MP4B	Mx	.000609	2
87	MP5A	Z	-.528	7
88	MP5A	Mx	7.8e-5	7
89	MP5B	Z	-.528	7
90	MP5B	Mx	-0.00196	7
91	MP5A	Z	-.528	7
92	MP5A	Mx	-0.00191	7
93	MP5B	Z	-.528	7
94	MP5B	Mx	.000108	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	1.306	1.77
2	MP2A	Mx	-0.00667	1.77
3	MP2A	X	1.306	3.77
4	MP2A	Mx	-0.00667	3.77
5	MP2B	X	1.306	1.77
6	MP2B	Mx	.000754	1.77
7	MP2B	X	1.306	3.77
8	MP2B	Mx	.000754	3.77
9	MP4C	X	1.306	1.77
10	MP4C	Mx	.000436	1.77
11	MP4C	X	1.306	3.77
12	MP4C	Mx	.000436	3.77
13	MP1A	X	.405	1
14	MP1A	Mx	-0.00349	1
15	MP1A	X	.405	5
16	MP1A	Mx	-0.00349	5
17	MP1B	X	.405	1
18	MP1B	Mx	.000395	1
19	MP1B	X	.405	5
20	MP1B	Mx	.000395	5
21	MP1C	X	.405	1
22	MP1C	Mx	.000228	1
23	MP1C	X	.405	5
24	MP1C	Mx	.000228	5



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name : 5000244948-VZW_MT_LO_H

Aug 3, 2023
 9:24 AM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
25	MP3A	X	.405	1
26	MP3A	Mx	-.000349	1
27	MP3A	X	.405	5
28	MP3A	Mx	-.000349	5
29	MP3B	X	.405	1
30	MP3B	Mx	.000395	1
31	MP3B	X	.405	5
32	MP3B	Mx	.000395	5
33	MP5C	X	.405	1
34	MP5C	Mx	.000228	1
35	MP5C	X	.405	5
36	MP5C	Mx	.000228	5
37	MP3C	X	1.845	1.5
38	MP3C	Mx	-.000583	1.5
39	MP3C	X	1.845	5.5
40	MP3C	Mx	-.000583	5.5
41	MP3C	X	1.845	1.5
42	MP3C	Mx	.002	1.5
43	MP3C	X	1.845	5.5
44	MP3C	Mx	.002	5.5
45	MP5B	X	1.845	1.5
46	MP5B	Mx	.002	1.5
47	MP5B	X	1.845	5.5
48	MP5B	Mx	.002	5.5
49	MP5B	X	1.845	1.5
50	MP5B	Mx	.000373	1.5
51	MP5B	X	1.845	5.5
52	MP5B	Mx	.000373	5.5
53	MP5A	X	.655	1.5
54	MP5A	Mx	-1.9e-5	1.5
55	MP5A	X	.655	5.5
56	MP5A	Mx	-1.9e-5	5.5
57	MP5A	X	.655	1.5
58	MP5A	Mx	-.000651	1.5
59	MP5A	X	.655	5.5
60	MP5A	Mx	-.000651	5.5
61	OVP	X	.96	2
62	OVP	Mx	0	2
63	MP2C	X	1.266	2.5
64	MP2C	Mx	-.000731	2.5
65	MP2C	X	1.266	3.5
66	MP2C	Mx	-.000731	3.5
67	MP4A	X	1.266	2.5
68	MP4A	Mx	.000543	2.5
69	MP4A	X	1.266	3.5
70	MP4A	Mx	.000543	3.5
71	MP4B	X	1.266	2.5
72	MP4B	Mx	.000422	2.5
73	MP4B	X	1.266	3.5
74	MP4B	Mx	.000422	3.5
75	MP2C	X	1.054	1
76	MP2C	Mx	.000609	1
77	MP2C	X	1.054	2
78	MP2C	Mx	.000609	2
79	MP4A	X	1.054	1
80	MP4A	Mx	-.000452	1
81	MP4A	X	1.054	2



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
82	MP4A	Mx	-0.00452	2
83	MP4B	X	1.054	1
84	MP4B	Mx	-0.00352	1
85	MP4B	X	1.054	2
86	MP4B	Mx	-0.00352	2
87	MP5A	X	.528	7
88	MP5A	Mx	.000181	7
89	MP5B	X	.528	7
90	MP5B	Mx	1.2e-5	7
91	MP5A	X	.528	7
92	MP5A	Mx	-4.6e-5	7
93	MP5B	X	.528	7
94	MP5B	Mx	-0.00164	7

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....]	End Location[ft.%]
1	M4	Y	-9.707	-9.707	0	%100
2	M14	Y	-9.707	-9.707	0	%100
3	M27	Y	-9.707	-9.707	0	%100
4	M40	Y	-9.707	-9.707	0	%100
5	M41	Y	-9.707	-9.707	0	%100
6	M42	Y	-9.707	-9.707	0	%100
7	MP5A	Y	-5.037	-5.037	0	%100
8	OVP	Y	-5.037	-5.037	0	%100
9	MP4A	Y	-5.037	-5.037	0	%100
10	MP3A	Y	-5.037	-5.037	0	%100
11	MP2A	Y	-5.037	-5.037	0	%100
12	MP1A	Y	-5.037	-5.037	0	%100
13	MP5C	Y	-5.037	-5.037	0	%100
14	MP4C	Y	-5.037	-5.037	0	%100
15	MP3C	Y	-5.037	-5.037	0	%100
16	MP2C	Y	-5.037	-5.037	0	%100
17	MP1C	Y	-5.037	-5.037	0	%100
18	MP5B	Y	-5.037	-5.037	0	%100
19	MP4B	Y	-5.037	-5.037	0	%100
20	MP3B	Y	-5.037	-5.037	0	%100
21	MP2B	Y	-5.037	-5.037	0	%100
22	MP1B	Y	-5.037	-5.037	0	%100
23	M75	Y	-10.729	-10.729	0	%100
24	M77	Y	-10.729	-10.729	0	%100
25	M79	Y	-10.729	-10.729	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....]	End Location[ft.%]
1	M4	X	0	0	0	%100
2	M4	Z	0	0	0	%100
3	M14	X	0	0	0	%100
4	M14	Z	-12.95	-12.95	0	%100
5	M27	X	0	0	0	%100
6	M27	Z	-12.95	-12.95	0	%100
7	M40	X	0	0	0	%100
8	M40	Z	-4.467	-4.467	0	%100
9	M41	X	0	0	0	%100
10	M41	Z	-4.467	-4.467	0	%100
11	M42	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft.%]
12	M42	Z	-17.866	-17.866	0	%100
13	MP5A	X	0	0	0	%100
14	MP5A	Z	-10.184	-10.184	0	%100
15	OVP	X	0	0	0	%100
16	OVP	Z	-9.281	-9.281	0	%100
17	MP4A	X	0	0	0	%100
18	MP4A	Z	-10.184	-10.184	0	%100
19	MP3A	X	0	0	0	%100
20	MP3A	Z	-10.184	-10.184	0	%100
21	MP2A	X	0	0	0	%100
22	MP2A	Z	-10.184	-10.184	0	%100
23	MP1A	X	0	0	0	%100
24	MP1A	Z	-10.184	-10.184	0	%100
25	MP5C	X	0	0	0	%100
26	MP5C	Z	-10.184	-10.184	0	%100
27	MP4C	X	0	0	0	%100
28	MP4C	Z	-10.184	-10.184	0	%100
29	MP3C	X	0	0	0	%100
30	MP3C	Z	-10.184	-10.184	0	%100
31	MP2C	X	0	0	0	%100
32	MP2C	Z	-10.184	-10.184	0	%100
33	MP1C	X	0	0	0	%100
34	MP1C	Z	-10.184	-10.184	0	%100
35	MP5B	X	0	0	0	%100
36	MP5B	Z	-10.184	-10.184	0	%100
37	MP4B	X	0	0	0	%100
38	MP4B	Z	-10.184	-10.184	0	%100
39	MP3B	X	0	0	0	%100
40	MP3B	Z	-10.184	-10.184	0	%100
41	MP2B	X	0	0	0	%100
42	MP2B	Z	-10.184	-10.184	0	%100
43	MP1B	X	0	0	0	%100
44	MP1B	Z	-10.184	-10.184	0	%100
45	M75	X	0	0	0	%100
46	M75	Z	-16.807	-16.807	0	%100
47	M77	X	0	0	0	%100
48	M77	Z	-17.649	-17.649	0	%100
49	M79	X	0	0	0	%100
50	M79	Z	-17.649	-17.649	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft.%]
1	M4	X	2.158	2.158	0	%100
2	M4	Z	-3.738	-3.738	0	%100
3	M14	X	2.158	2.158	0	%100
4	M14	Z	-3.738	-3.738	0	%100
5	M27	X	8.633	8.633	0	%100
6	M27	Z	-14.954	-14.954	0	%100
7	M40	X	0	0	0	%100
8	M40	Z	0	0	0	%100
9	M41	X	6.7	6.7	0	%100
10	M41	Z	-11.604	-11.604	0	%100
11	M42	X	6.7	6.7	0	%100
12	M42	Z	-11.604	-11.604	0	%100
13	MP5A	X	5.092	5.092	0	%100
14	MP5A	Z	-8.819	-8.819	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,....	End Location[ft,.%]
15	OVP	X	4.64	4.64	0	%100
16	OVP	Z	-8.037	-8.037	0	%100
17	MP4A	X	5.092	5.092	0	%100
18	MP4A	Z	-8.819	-8.819	0	%100
19	MP3A	X	5.092	5.092	0	%100
20	MP3A	Z	-8.819	-8.819	0	%100
21	MP2A	X	5.092	5.092	0	%100
22	MP2A	Z	-8.819	-8.819	0	%100
23	MP1A	X	5.092	5.092	0	%100
24	MP1A	Z	-8.819	-8.819	0	%100
25	MP5C	X	5.092	5.092	0	%100
26	MP5C	Z	-8.819	-8.819	0	%100
27	MP4C	X	5.092	5.092	0	%100
28	MP4C	Z	-8.819	-8.819	0	%100
29	MP3C	X	5.092	5.092	0	%100
30	MP3C	Z	-8.819	-8.819	0	%100
31	MP2C	X	5.092	5.092	0	%100
32	MP2C	Z	-8.819	-8.819	0	%100
33	MP1C	X	5.092	5.092	0	%100
34	MP1C	Z	-8.819	-8.819	0	%100
35	MP5B	X	5.092	5.092	0	%100
36	MP5B	Z	-8.819	-8.819	0	%100
37	MP4B	X	5.092	5.092	0	%100
38	MP4B	Z	-8.819	-8.819	0	%100
39	MP3B	X	5.092	5.092	0	%100
40	MP3B	Z	-8.819	-8.819	0	%100
41	MP2B	X	5.092	5.092	0	%100
42	MP2B	Z	-8.819	-8.819	0	%100
43	MP1B	X	5.092	5.092	0	%100
44	MP1B	Z	-8.819	-8.819	0	%100
45	M75	X	8.544	8.544	0	%100
46	M75	Z	-14.798	-14.798	0	%100
47	M77	X	8.544	8.544	0	%100
48	M77	Z	-14.798	-14.798	0	%100
49	M79	X	8.965	8.965	0	%100
50	M79	Z	-15.528	-15.528	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,....	End Location[ft,.%]
1	M4	X	11.215	11.215	0	%100
2	M4	Z	-6.475	-6.475	0	%100
3	M14	X	0	0	0	%100
4	M14	Z	0	0	0	%100
5	M27	X	11.215	11.215	0	%100
6	M27	Z	-6.475	-6.475	0	%100
7	M40	X	3.868	3.868	0	%100
8	M40	Z	-2.233	-2.233	0	%100
9	M41	X	15.473	15.473	0	%100
10	M41	Z	-8.933	-8.933	0	%100
11	M42	X	3.868	3.868	0	%100
12	M42	Z	-2.233	-2.233	0	%100
13	MP5A	X	8.819	8.819	0	%100
14	MP5A	Z	-5.092	-5.092	0	%100
15	OVP	X	8.037	8.037	0	%100
16	OVP	Z	-4.64	-4.64	0	%100
17	MP4A	X	8.819	8.819	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,...	End Location[ft, %]
18	MP4A	Z	-5.092	-5.092	0	%100
19	MP3A	X	8.819	8.819	0	%100
20	MP3A	Z	-5.092	-5.092	0	%100
21	MP2A	X	8.819	8.819	0	%100
22	MP2A	Z	-5.092	-5.092	0	%100
23	MP1A	X	8.819	8.819	0	%100
24	MP1A	Z	-5.092	-5.092	0	%100
25	MP5C	X	8.819	8.819	0	%100
26	MP5C	Z	-5.092	-5.092	0	%100
27	MP4C	X	8.819	8.819	0	%100
28	MP4C	Z	-5.092	-5.092	0	%100
29	MP3C	X	8.819	8.819	0	%100
30	MP3C	Z	-5.092	-5.092	0	%100
31	MP2C	X	8.819	8.819	0	%100
32	MP2C	Z	-5.092	-5.092	0	%100
33	MP1C	X	8.819	8.819	0	%100
34	MP1C	Z	-5.092	-5.092	0	%100
35	MP5B	X	8.819	8.819	0	%100
36	MP5B	Z	-5.092	-5.092	0	%100
37	MP4B	X	8.819	8.819	0	%100
38	MP4B	Z	-5.092	-5.092	0	%100
39	MP3B	X	8.819	8.819	0	%100
40	MP3B	Z	-5.092	-5.092	0	%100
41	MP2B	X	8.819	8.819	0	%100
42	MP2B	Z	-5.092	-5.092	0	%100
43	MP1B	X	8.819	8.819	0	%100
44	MP1B	Z	-5.092	-5.092	0	%100
45	M75	X	15.285	15.285	0	%100
46	M75	Z	-8.825	-8.825	0	%100
47	M77	X	14.555	14.555	0	%100
48	M77	Z	-8.404	-8.404	0	%100
49	M79	X	15.285	15.285	0	%100
50	M79	Z	-8.825	-8.825	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,...	End Location[ft, %]
1	M4	X	17.267	17.267	0	%100
2	M4	Z	0	0	0	%100
3	M14	X	4.317	4.317	0	%100
4	M14	Z	0	0	0	%100
5	M27	X	4.317	4.317	0	%100
6	M27	Z	0	0	0	%100
7	M40	X	13.4	13.4	0	%100
8	M40	Z	0	0	0	%100
9	M41	X	13.4	13.4	0	%100
10	M41	Z	0	0	0	%100
11	M42	X	0	0	0	%100
12	M42	Z	0	0	0	%100
13	MP5A	X	10.184	10.184	0	%100
14	MP5A	Z	0	0	0	%100
15	OVP	X	9.281	9.281	0	%100
16	OVP	Z	0	0	0	%100
17	MP4A	X	10.184	10.184	0	%100
18	MP4A	Z	0	0	0	%100
19	MP3A	X	10.184	10.184	0	%100
20	MP3A	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft,...	End Location[ft, %]
21	MP2A	X	10.184	10.184	0	%100
22	MP2A	Z	0	0	0	%100
23	MP1A	X	10.184	10.184	0	%100
24	MP1A	Z	0	0	0	%100
25	MP5C	X	10.184	10.184	0	%100
26	MP5C	Z	0	0	0	%100
27	MP4C	X	10.184	10.184	0	%100
28	MP4C	Z	0	0	0	%100
29	MP3C	X	10.184	10.184	0	%100
30	MP3C	Z	0	0	0	%100
31	MP2C	X	10.184	10.184	0	%100
32	MP2C	Z	0	0	0	%100
33	MP1C	X	10.184	10.184	0	%100
34	MP1C	Z	0	0	0	%100
35	MP5B	X	10.184	10.184	0	%100
36	MP5B	Z	0	0	0	%100
37	MP4B	X	10.184	10.184	0	%100
38	MP4B	Z	0	0	0	%100
39	MP3B	X	10.184	10.184	0	%100
40	MP3B	Z	0	0	0	%100
41	MP2B	X	10.184	10.184	0	%100
42	MP2B	Z	0	0	0	%100
43	MP1B	X	10.184	10.184	0	%100
44	MP1B	Z	0	0	0	%100
45	M75	X	17.93	17.93	0	%100
46	M75	Z	0	0	0	%100
47	M77	X	17.088	17.088	0	%100
48	M77	Z	0	0	0	%100
49	M79	X	17.088	17.088	0	%100
50	M79	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft,...	End Location[ft, %]
1	M4	X	11.215	11.215	0	%100
2	M4	Z	6.475	6.475	0	%100
3	M14	X	11.215	11.215	0	%100
4	M14	Z	6.475	6.475	0	%100
5	M27	X	0	0	0	%100
6	M27	Z	0	0	0	%100
7	M40	X	15.473	15.473	0	%100
8	M40	Z	8.933	8.933	0	%100
9	M41	X	3.868	3.868	0	%100
10	M41	Z	2.233	2.233	0	%100
11	M42	X	3.868	3.868	0	%100
12	M42	Z	2.233	2.233	0	%100
13	MP5A	X	8.819	8.819	0	%100
14	MP5A	Z	5.092	5.092	0	%100
15	OVP	X	8.037	8.037	0	%100
16	OVP	Z	4.64	4.64	0	%100
17	MP4A	X	8.819	8.819	0	%100
18	MP4A	Z	5.092	5.092	0	%100
19	MP3A	X	8.819	8.819	0	%100
20	MP3A	Z	5.092	5.092	0	%100
21	MP2A	X	8.819	8.819	0	%100
22	MP2A	Z	5.092	5.092	0	%100
23	MP1A	X	8.819	8.819	0	%100



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name : 5000244948-VZW_MT_LO_H

Aug 3, 2023
 9:24 AM
 Checked By: _____

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft, %]
24	MP1A	Z	5.092	5.092	0	%100
25	MP5C	X	8.819	8.819	0	%100
26	MP5C	Z	5.092	5.092	0	%100
27	MP4C	X	8.819	8.819	0	%100
28	MP4C	Z	5.092	5.092	0	%100
29	MP3C	X	8.819	8.819	0	%100
30	MP3C	Z	5.092	5.092	0	%100
31	MP2C	X	8.819	8.819	0	%100
32	MP2C	Z	5.092	5.092	0	%100
33	MP1C	X	8.819	8.819	0	%100
34	MP1C	Z	5.092	5.092	0	%100
35	MP5B	X	8.819	8.819	0	%100
36	MP5B	Z	5.092	5.092	0	%100
37	MP4B	X	8.819	8.819	0	%100
38	MP4B	Z	5.092	5.092	0	%100
39	MP3B	X	8.819	8.819	0	%100
40	MP3B	Z	5.092	5.092	0	%100
41	MP2B	X	8.819	8.819	0	%100
42	MP2B	Z	5.092	5.092	0	%100
43	MP1B	X	8.819	8.819	0	%100
44	MP1B	Z	5.092	5.092	0	%100
45	M75	X	15.285	15.285	0	%100
46	M75	Z	8.825	8.825	0	%100
47	M77	X	15.285	15.285	0	%100
48	M77	Z	8.825	8.825	0	%100
49	M79	X	14.555	14.555	0	%100
50	M79	Z	8.404	8.404	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft, %]
1	M4	X	2.158	2.158	0	%100
2	M4	Z	3.738	3.738	0	%100
3	M14	X	8.633	8.633	0	%100
4	M14	Z	14.954	14.954	0	%100
5	M27	X	2.158	2.158	0	%100
6	M27	Z	3.738	3.738	0	%100
7	M40	X	6.7	6.7	0	%100
8	M40	Z	11.604	11.604	0	%100
9	M41	X	0	0	0	%100
10	M41	Z	0	0	0	%100
11	M42	X	6.7	6.7	0	%100
12	M42	Z	11.604	11.604	0	%100
13	MP5A	X	5.092	5.092	0	%100
14	MP5A	Z	8.819	8.819	0	%100
15	OVP	X	4.64	4.64	0	%100
16	OVP	Z	8.037	8.037	0	%100
17	MP4A	X	5.092	5.092	0	%100
18	MP4A	Z	8.819	8.819	0	%100
19	MP3A	X	5.092	5.092	0	%100
20	MP3A	Z	8.819	8.819	0	%100
21	MP2A	X	5.092	5.092	0	%100
22	MP2A	Z	8.819	8.819	0	%100
23	MP1A	X	5.092	5.092	0	%100
24	MP1A	Z	8.819	8.819	0	%100
25	MP5C	X	5.092	5.092	0	%100
26	MP5C	Z	8.819	8.819	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft.%]
27	MP4C	X	5.092	5.092	0	%100
28	MP4C	Z	8.819	8.819	0	%100
29	MP3C	X	5.092	5.092	0	%100
30	MP3C	Z	8.819	8.819	0	%100
31	MP2C	X	5.092	5.092	0	%100
32	MP2C	Z	8.819	8.819	0	%100
33	MP1C	X	5.092	5.092	0	%100
34	MP1C	Z	8.819	8.819	0	%100
35	MP5B	X	5.092	5.092	0	%100
36	MP5B	Z	8.819	8.819	0	%100
37	MP4B	X	5.092	5.092	0	%100
38	MP4B	Z	8.819	8.819	0	%100
39	MP3B	X	5.092	5.092	0	%100
40	MP3B	Z	8.819	8.819	0	%100
41	MP2B	X	5.092	5.092	0	%100
42	MP2B	Z	8.819	8.819	0	%100
43	MP1B	X	5.092	5.092	0	%100
44	MP1B	Z	8.819	8.819	0	%100
45	M75	X	8.544	8.544	0	%100
46	M75	Z	14.798	14.798	0	%100
47	M77	X	8.965	8.965	0	%100
48	M77	Z	15.528	15.528	0	%100
49	M79	X	8.544	8.544	0	%100
50	M79	Z	14.798	14.798	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft.%]
1	M4	X	0	0	0	%100
2	M4	Z	0	0	0	%100
3	M14	X	0	0	0	%100
4	M14	Z	12.95	12.95	0	%100
5	M27	X	0	0	0	%100
6	M27	Z	12.95	12.95	0	%100
7	M40	X	0	0	0	%100
8	M40	Z	4.467	4.467	0	%100
9	M41	X	0	0	0	%100
10	M41	Z	4.467	4.467	0	%100
11	M42	X	0	0	0	%100
12	M42	Z	17.866	17.866	0	%100
13	MP5A	X	0	0	0	%100
14	MP5A	Z	10.184	10.184	0	%100
15	OVP	X	0	0	0	%100
16	OVP	Z	9.281	9.281	0	%100
17	MP4A	X	0	0	0	%100
18	MP4A	Z	10.184	10.184	0	%100
19	MP3A	X	0	0	0	%100
20	MP3A	Z	10.184	10.184	0	%100
21	MP2A	X	0	0	0	%100
22	MP2A	Z	10.184	10.184	0	%100
23	MP1A	X	0	0	0	%100
24	MP1A	Z	10.184	10.184	0	%100
25	MP5C	X	0	0	0	%100
26	MP5C	Z	10.184	10.184	0	%100
27	MP4C	X	0	0	0	%100
28	MP4C	Z	10.184	10.184	0	%100
29	MP3C	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,....	End Location[ft,%]
30	MP3C	Z	10.184	10.184	0	%100
31	MP2C	X	0	0	0	%100
32	MP2C	Z	10.184	10.184	0	%100
33	MP1C	X	0	0	0	%100
34	MP1C	Z	10.184	10.184	0	%100
35	MP5B	X	0	0	0	%100
36	MP5B	Z	10.184	10.184	0	%100
37	MP4B	X	0	0	0	%100
38	MP4B	Z	10.184	10.184	0	%100
39	MP3B	X	0	0	0	%100
40	MP3B	Z	10.184	10.184	0	%100
41	MP2B	X	0	0	0	%100
42	MP2B	Z	10.184	10.184	0	%100
43	MP1B	X	0	0	0	%100
44	MP1B	Z	10.184	10.184	0	%100
45	M75	X	0	0	0	%100
46	M75	Z	16.807	16.807	0	%100
47	M77	X	0	0	0	%100
48	M77	Z	17.649	17.649	0	%100
49	M79	X	0	0	0	%100
50	M79	Z	17.649	17.649	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,....	End Location[ft,%]
1	M4	X	-2.158	-2.158	0	%100
2	M4	Z	3.738	3.738	0	%100
3	M14	X	-2.158	-2.158	0	%100
4	M14	Z	3.738	3.738	0	%100
5	M27	X	-8.633	-8.633	0	%100
6	M27	Z	14.954	14.954	0	%100
7	M40	X	0	0	0	%100
8	M40	Z	0	0	0	%100
9	M41	X	-6.7	-6.7	0	%100
10	M41	Z	11.604	11.604	0	%100
11	M42	X	-6.7	-6.7	0	%100
12	M42	Z	11.604	11.604	0	%100
13	MP5A	X	-5.092	-5.092	0	%100
14	MP5A	Z	8.819	8.819	0	%100
15	OVP	X	-4.64	-4.64	0	%100
16	OVP	Z	8.037	8.037	0	%100
17	MP4A	X	-5.092	-5.092	0	%100
18	MP4A	Z	8.819	8.819	0	%100
19	MP3A	X	-5.092	-5.092	0	%100
20	MP3A	Z	8.819	8.819	0	%100
21	MP2A	X	-5.092	-5.092	0	%100
22	MP2A	Z	8.819	8.819	0	%100
23	MP1A	X	-5.092	-5.092	0	%100
24	MP1A	Z	8.819	8.819	0	%100
25	MP5C	X	-5.092	-5.092	0	%100
26	MP5C	Z	8.819	8.819	0	%100
27	MP4C	X	-5.092	-5.092	0	%100
28	MP4C	Z	8.819	8.819	0	%100
29	MP3C	X	-5.092	-5.092	0	%100
30	MP3C	Z	8.819	8.819	0	%100
31	MP2C	X	-5.092	-5.092	0	%100
32	MP2C	Z	8.819	8.819	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft.%,]
33	MP1C	X	-5.092	-5.092	0	%100
34	MP1C	Z	8.819	8.819	0	%100
35	MP5B	X	-5.092	-5.092	0	%100
36	MP5B	Z	8.819	8.819	0	%100
37	MP4B	X	-5.092	-5.092	0	%100
38	MP4B	Z	8.819	8.819	0	%100
39	MP3B	X	-5.092	-5.092	0	%100
40	MP3B	Z	8.819	8.819	0	%100
41	MP2B	X	-5.092	-5.092	0	%100
42	MP2B	Z	8.819	8.819	0	%100
43	MP1B	X	-5.092	-5.092	0	%100
44	MP1B	Z	8.819	8.819	0	%100
45	M75	X	-8.544	-8.544	0	%100
46	M75	Z	14.798	14.798	0	%100
47	M77	X	-8.544	-8.544	0	%100
48	M77	Z	14.798	14.798	0	%100
49	M79	X	-8.965	-8.965	0	%100
50	M79	Z	15.528	15.528	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft.%,]
1	M4	X	-11.215	-11.215	0	%100
2	M4	Z	6.475	6.475	0	%100
3	M14	X	0	0	0	%100
4	M14	Z	0	0	0	%100
5	M27	X	-11.215	-11.215	0	%100
6	M27	Z	6.475	6.475	0	%100
7	M40	X	-3.868	-3.868	0	%100
8	M40	Z	2.233	2.233	0	%100
9	M41	X	-15.473	-15.473	0	%100
10	M41	Z	8.933	8.933	0	%100
11	M42	X	-3.868	-3.868	0	%100
12	M42	Z	2.233	2.233	0	%100
13	MP5A	X	-8.819	-8.819	0	%100
14	MP5A	Z	5.092	5.092	0	%100
15	OVP	X	-8.037	-8.037	0	%100
16	OVP	Z	4.64	4.64	0	%100
17	MP4A	X	-8.819	-8.819	0	%100
18	MP4A	Z	5.092	5.092	0	%100
19	MP3A	X	-8.819	-8.819	0	%100
20	MP3A	Z	5.092	5.092	0	%100
21	MP2A	X	-8.819	-8.819	0	%100
22	MP2A	Z	5.092	5.092	0	%100
23	MP1A	X	-8.819	-8.819	0	%100
24	MP1A	Z	5.092	5.092	0	%100
25	MP5C	X	-8.819	-8.819	0	%100
26	MP5C	Z	5.092	5.092	0	%100
27	MP4C	X	-8.819	-8.819	0	%100
28	MP4C	Z	5.092	5.092	0	%100
29	MP3C	X	-8.819	-8.819	0	%100
30	MP3C	Z	5.092	5.092	0	%100
31	MP2C	X	-8.819	-8.819	0	%100
32	MP2C	Z	5.092	5.092	0	%100
33	MP1C	X	-8.819	-8.819	0	%100
34	MP1C	Z	5.092	5.092	0	%100
35	MP5B	X	-8.819	-8.819	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft,...]	End Location[ft, %]
36	MP5B	Z	5.092	5.092	0	%100
37	MP4B	X	-8.819	-8.819	0	%100
38	MP4B	Z	5.092	5.092	0	%100
39	MP3B	X	-8.819	-8.819	0	%100
40	MP3B	Z	5.092	5.092	0	%100
41	MP2B	X	-8.819	-8.819	0	%100
42	MP2B	Z	5.092	5.092	0	%100
43	MP1B	X	-8.819	-8.819	0	%100
44	MP1B	Z	5.092	5.092	0	%100
45	M75	X	-15.285	-15.285	0	%100
46	M75	Z	8.825	8.825	0	%100
47	M77	X	-14.555	-14.555	0	%100
48	M77	Z	8.404	8.404	0	%100
49	M79	X	-15.285	-15.285	0	%100
50	M79	Z	8.825	8.825	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft,...]	End Location[ft, %]
1	M4	X	-17.267	-17.267	0	%100
2	M4	Z	0	0	0	%100
3	M14	X	-4.317	-4.317	0	%100
4	M14	Z	0	0	0	%100
5	M27	X	-4.317	-4.317	0	%100
6	M27	Z	0	0	0	%100
7	M40	X	-13.4	-13.4	0	%100
8	M40	Z	0	0	0	%100
9	M41	X	-13.4	-13.4	0	%100
10	M41	Z	0	0	0	%100
11	M42	X	0	0	0	%100
12	M42	Z	0	0	0	%100
13	MP5A	X	-10.184	-10.184	0	%100
14	MP5A	Z	0	0	0	%100
15	OVP	X	-9.281	-9.281	0	%100
16	OVP	Z	0	0	0	%100
17	MP4A	X	-10.184	-10.184	0	%100
18	MP4A	Z	0	0	0	%100
19	MP3A	X	-10.184	-10.184	0	%100
20	MP3A	Z	0	0	0	%100
21	MP2A	X	-10.184	-10.184	0	%100
22	MP2A	Z	0	0	0	%100
23	MP1A	X	-10.184	-10.184	0	%100
24	MP1A	Z	0	0	0	%100
25	MP5C	X	-10.184	-10.184	0	%100
26	MP5C	Z	0	0	0	%100
27	MP4C	X	-10.184	-10.184	0	%100
28	MP4C	Z	0	0	0	%100
29	MP3C	X	-10.184	-10.184	0	%100
30	MP3C	Z	0	0	0	%100
31	MP2C	X	-10.184	-10.184	0	%100
32	MP2C	Z	0	0	0	%100
33	MP1C	X	-10.184	-10.184	0	%100
34	MP1C	Z	0	0	0	%100
35	MP5B	X	-10.184	-10.184	0	%100
36	MP5B	Z	0	0	0	%100
37	MP4B	X	-10.184	-10.184	0	%100
38	MP4B	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft, %]
39	MP3B	X	-10.184	-10.184	0	%100
40	MP3B	Z	0	0	0	%100
41	MP2B	X	-10.184	-10.184	0	%100
42	MP2B	Z	0	0	0	%100
43	MP1B	X	-10.184	-10.184	0	%100
44	MP1B	Z	0	0	0	%100
45	M75	X	-17.93	-17.93	0	%100
46	M75	Z	0	0	0	%100
47	M77	X	-17.088	-17.088	0	%100
48	M77	Z	0	0	0	%100
49	M79	X	-17.088	-17.088	0	%100
50	M79	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft, %]
1	M4	X	-11.215	-11.215	0	%100
2	M4	Z	-6.475	-6.475	0	%100
3	M14	X	-11.215	-11.215	0	%100
4	M14	Z	-6.475	-6.475	0	%100
5	M27	X	0	0	0	%100
6	M27	Z	0	0	0	%100
7	M40	X	-15.473	-15.473	0	%100
8	M40	Z	-8.933	-8.933	0	%100
9	M41	X	-3.868	-3.868	0	%100
10	M41	Z	-2.233	-2.233	0	%100
11	M42	X	-3.868	-3.868	0	%100
12	M42	Z	-2.233	-2.233	0	%100
13	MP5A	X	-8.819	-8.819	0	%100
14	MP5A	Z	-5.092	-5.092	0	%100
15	OVP	X	-8.037	-8.037	0	%100
16	OVP	Z	-4.64	-4.64	0	%100
17	MP4A	X	-8.819	-8.819	0	%100
18	MP4A	Z	-5.092	-5.092	0	%100
19	MP3A	X	-8.819	-8.819	0	%100
20	MP3A	Z	-5.092	-5.092	0	%100
21	MP2A	X	-8.819	-8.819	0	%100
22	MP2A	Z	-5.092	-5.092	0	%100
23	MP1A	X	-8.819	-8.819	0	%100
24	MP1A	Z	-5.092	-5.092	0	%100
25	MP5C	X	-8.819	-8.819	0	%100
26	MP5C	Z	-5.092	-5.092	0	%100
27	MP4C	X	-8.819	-8.819	0	%100
28	MP4C	Z	-5.092	-5.092	0	%100
29	MP3C	X	-8.819	-8.819	0	%100
30	MP3C	Z	-5.092	-5.092	0	%100
31	MP2C	X	-8.819	-8.819	0	%100
32	MP2C	Z	-5.092	-5.092	0	%100
33	MP1C	X	-8.819	-8.819	0	%100
34	MP1C	Z	-5.092	-5.092	0	%100
35	MP5B	X	-8.819	-8.819	0	%100
36	MP5B	Z	-5.092	-5.092	0	%100
37	MP4B	X	-8.819	-8.819	0	%100
38	MP4B	Z	-5.092	-5.092	0	%100
39	MP3B	X	-8.819	-8.819	0	%100
40	MP3B	Z	-5.092	-5.092	0	%100
41	MP2B	X	-8.819	-8.819	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft.%]
42	MP2B	Z	-5.092	-5.092	0	%100
43	MP1B	X	-8.819	-8.819	0	%100
44	MP1B	Z	-5.092	-5.092	0	%100
45	M75	X	-15.285	-15.285	0	%100
46	M75	Z	-8.825	-8.825	0	%100
47	M77	X	-15.285	-15.285	0	%100
48	M77	Z	-8.825	-8.825	0	%100
49	M79	X	-14.555	-14.555	0	%100
50	M79	Z	-8.404	-8.404	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft.%]
1	M4	X	-2.158	-2.158	0	%100
2	M4	Z	-3.738	-3.738	0	%100
3	M14	X	-8.633	-8.633	0	%100
4	M14	Z	-14.954	-14.954	0	%100
5	M27	X	-2.158	-2.158	0	%100
6	M27	Z	-3.738	-3.738	0	%100
7	M40	X	-6.7	-6.7	0	%100
8	M40	Z	-11.604	-11.604	0	%100
9	M41	X	0	0	0	%100
10	M41	Z	0	0	0	%100
11	M42	X	-6.7	-6.7	0	%100
12	M42	Z	-11.604	-11.604	0	%100
13	MP5A	X	-5.092	-5.092	0	%100
14	MP5A	Z	-8.819	-8.819	0	%100
15	OVP	X	-4.64	-4.64	0	%100
16	OVP	Z	-8.037	-8.037	0	%100
17	MP4A	X	-5.092	-5.092	0	%100
18	MP4A	Z	-8.819	-8.819	0	%100
19	MP3A	X	-5.092	-5.092	0	%100
20	MP3A	Z	-8.819	-8.819	0	%100
21	MP2A	X	-5.092	-5.092	0	%100
22	MP2A	Z	-8.819	-8.819	0	%100
23	MP1A	X	-5.092	-5.092	0	%100
24	MP1A	Z	-8.819	-8.819	0	%100
25	MP5C	X	-5.092	-5.092	0	%100
26	MP5C	Z	-8.819	-8.819	0	%100
27	MP4C	X	-5.092	-5.092	0	%100
28	MP4C	Z	-8.819	-8.819	0	%100
29	MP3C	X	-5.092	-5.092	0	%100
30	MP3C	Z	-8.819	-8.819	0	%100
31	MP2C	X	-5.092	-5.092	0	%100
32	MP2C	Z	-8.819	-8.819	0	%100
33	MP1C	X	-5.092	-5.092	0	%100
34	MP1C	Z	-8.819	-8.819	0	%100
35	MP5B	X	-5.092	-5.092	0	%100
36	MP5B	Z	-8.819	-8.819	0	%100
37	MP4B	X	-5.092	-5.092	0	%100
38	MP4B	Z	-8.819	-8.819	0	%100
39	MP3B	X	-5.092	-5.092	0	%100
40	MP3B	Z	-8.819	-8.819	0	%100
41	MP2B	X	-5.092	-5.092	0	%100
42	MP2B	Z	-8.819	-8.819	0	%100
43	MP1B	X	-5.092	-5.092	0	%100
44	MP1B	Z	-8.819	-8.819	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,....]	End Location[ft,.%]
45	M75	X	-8.544	-8.544	0	%100
46	M75	Z	-14.798	-14.798	0	%100
47	M77	X	-8.965	-8.965	0	%100
48	M77	Z	-15.528	-15.528	0	%100
49	M79	X	-8.544	-8.544	0	%100
50	M79	Z	-14.798	-14.798	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,....]	End Location[ft,.%]
1	M4	X	0	0	0	%100
2	M4	Z	0	0	0	%100
3	M14	X	0	0	0	%100
4	M14	Z	-3.549	-3.549	0	%100
5	M27	X	0	0	0	%100
6	M27	Z	-3.549	-3.549	0	%100
7	M40	X	0	0	0	%100
8	M40	Z	-1.209	-1.209	0	%100
9	M41	X	0	0	0	%100
10	M41	Z	-1.209	-1.209	0	%100
11	M42	X	0	0	0	%100
12	M42	Z	-4.836	-4.836	0	%100
13	MP5A	X	0	0	0	%100
14	MP5A	Z	-3.502	-3.502	0	%100
15	OVP	X	0	0	0	%100
16	OVP	Z	-3.204	-3.204	0	%100
17	MP4A	X	0	0	0	%100
18	MP4A	Z	-3.502	-3.502	0	%100
19	MP3A	X	0	0	0	%100
20	MP3A	Z	-3.502	-3.502	0	%100
21	MP2A	X	0	0	0	%100
22	MP2A	Z	-3.502	-3.502	0	%100
23	MP1A	X	0	0	0	%100
24	MP1A	Z	-3.502	-3.502	0	%100
25	MP5C	X	0	0	0	%100
26	MP5C	Z	-3.502	-3.502	0	%100
27	MP4C	X	0	0	0	%100
28	MP4C	Z	-3.502	-3.502	0	%100
29	MP3C	X	0	0	0	%100
30	MP3C	Z	-3.502	-3.502	0	%100
31	MP2C	X	0	0	0	%100
32	MP2C	Z	-3.502	-3.502	0	%100
33	MP1C	X	0	0	0	%100
34	MP1C	Z	-3.502	-3.502	0	%100
35	MP5B	X	0	0	0	%100
36	MP5B	Z	-3.502	-3.502	0	%100
37	MP4B	X	0	0	0	%100
38	MP4B	Z	-3.502	-3.502	0	%100
39	MP3B	X	0	0	0	%100
40	MP3B	Z	-3.502	-3.502	0	%100
41	MP2B	X	0	0	0	%100
42	MP2B	Z	-3.502	-3.502	0	%100
43	MP1B	X	0	0	0	%100
44	MP1B	Z	-3.502	-3.502	0	%100
45	M75	X	0	0	0	%100
46	M75	Z	-3.737	-3.737	0	%100
47	M77	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,...]	End Location[ft,%]
48	M77	Z	-4.438	-4.438	0	%100
49	M79	X	0	0	0	%100
50	M79	Z	-4.438	-4.438	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,...]	End Location[ft,%]
1	M4	X	.591	.591	0	%100
2	M4	Z	-1.024	-1.024	0	%100
3	M14	X	.591	.591	0	%100
4	M14	Z	-1.024	-1.024	0	%100
5	M27	X	2.366	2.366	0	%100
6	M27	Z	-4.098	-4.098	0	%100
7	M40	X	0	0	0	%100
8	M40	Z	0	0	0	%100
9	M41	X	1.813	1.813	0	%100
10	M41	Z	-3.141	-3.141	0	%100
11	M42	X	1.813	1.813	0	%100
12	M42	Z	-3.141	-3.141	0	%100
13	MP5A	X	1.751	1.751	0	%100
14	MP5A	Z	-3.033	-3.033	0	%100
15	OVP	X	1.602	1.602	0	%100
16	OVP	Z	-2.775	-2.775	0	%100
17	MP4A	X	1.751	1.751	0	%100
18	MP4A	Z	-3.033	-3.033	0	%100
19	MP3A	X	1.751	1.751	0	%100
20	MP3A	Z	-3.033	-3.033	0	%100
21	MP2A	X	1.751	1.751	0	%100
22	MP2A	Z	-3.033	-3.033	0	%100
23	MP1A	X	1.751	1.751	0	%100
24	MP1A	Z	-3.033	-3.033	0	%100
25	MP5C	X	1.751	1.751	0	%100
26	MP5C	Z	-3.033	-3.033	0	%100
27	MP4C	X	1.751	1.751	0	%100
28	MP4C	Z	-3.033	-3.033	0	%100
29	MP3C	X	1.751	1.751	0	%100
30	MP3C	Z	-3.033	-3.033	0	%100
31	MP2C	X	1.751	1.751	0	%100
32	MP2C	Z	-3.033	-3.033	0	%100
33	MP1C	X	1.751	1.751	0	%100
34	MP1C	Z	-3.033	-3.033	0	%100
35	MP5B	X	1.751	1.751	0	%100
36	MP5B	Z	-3.033	-3.033	0	%100
37	MP4B	X	1.751	1.751	0	%100
38	MP4B	Z	-3.033	-3.033	0	%100
39	MP3B	X	1.751	1.751	0	%100
40	MP3B	Z	-3.033	-3.033	0	%100
41	MP2B	X	1.751	1.751	0	%100
42	MP2B	Z	-3.033	-3.033	0	%100
43	MP1B	X	1.751	1.751	0	%100
44	MP1B	Z	-3.033	-3.033	0	%100
45	M75	X	1.985	1.985	0	%100
46	M75	Z	-3.439	-3.439	0	%100
47	M77	X	1.985	1.985	0	%100
48	M77	Z	-3.439	-3.439	0	%100
49	M79	X	2.336	2.336	0	%100
50	M79	Z	-4.046	-4.046	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft,...	End Location[ft, %]
1	M4	X	3.073	3.073	0	%100
2	M4	Z	-1.774	-1.774	0	%100
3	M14	X	0	0	0	%100
4	M14	Z	0	0	0	%100
5	M27	X	3.073	3.073	0	%100
6	M27	Z	-1.774	-1.774	0	%100
7	M40	X	1.047	1.047	0	%100
8	M40	Z	-604	-604	0	%100
9	M41	X	4.188	4.188	0	%100
10	M41	Z	-2.418	-2.418	0	%100
11	M42	X	1.047	1.047	0	%100
12	M42	Z	-604	-604	0	%100
13	MP5A	X	3.033	3.033	0	%100
14	MP5A	Z	-1.751	-1.751	0	%100
15	OVP	X	2.775	2.775	0	%100
16	OVP	Z	-1.602	-1.602	0	%100
17	MP4A	X	3.033	3.033	0	%100
18	MP4A	Z	-1.751	-1.751	0	%100
19	MP3A	X	3.033	3.033	0	%100
20	MP3A	Z	-1.751	-1.751	0	%100
21	MP2A	X	3.033	3.033	0	%100
22	MP2A	Z	-1.751	-1.751	0	%100
23	MP1A	X	3.033	3.033	0	%100
24	MP1A	Z	-1.751	-1.751	0	%100
25	MP5C	X	3.033	3.033	0	%100
26	MP5C	Z	-1.751	-1.751	0	%100
27	MP4C	X	3.033	3.033	0	%100
28	MP4C	Z	-1.751	-1.751	0	%100
29	MP3C	X	3.033	3.033	0	%100
30	MP3C	Z	-1.751	-1.751	0	%100
31	MP2C	X	3.033	3.033	0	%100
32	MP2C	Z	-1.751	-1.751	0	%100
33	MP1C	X	3.033	3.033	0	%100
34	MP1C	Z	-1.751	-1.751	0	%100
35	MP5B	X	3.033	3.033	0	%100
36	MP5B	Z	-1.751	-1.751	0	%100
37	MP4B	X	3.033	3.033	0	%100
38	MP4B	Z	-1.751	-1.751	0	%100
39	MP3B	X	3.033	3.033	0	%100
40	MP3B	Z	-1.751	-1.751	0	%100
41	MP2B	X	3.033	3.033	0	%100
42	MP2B	Z	-1.751	-1.751	0	%100
43	MP1B	X	3.033	3.033	0	%100
44	MP1B	Z	-1.751	-1.751	0	%100
45	M75	X	3.843	3.843	0	%100
46	M75	Z	-2.219	-2.219	0	%100
47	M77	X	3.236	3.236	0	%100
48	M77	Z	-1.868	-1.868	0	%100
49	M79	X	3.843	3.843	0	%100
50	M79	Z	-2.219	-2.219	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft,...	End Location[ft, %]
1	M4	X	4.732	4.732	0	%100
2	M4	Z	0	0	0	%100
3	M14	X	1.183	1.183	0	%100



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name : 5000244948-VZW_MT_LO_H

Aug 3, 2023
 9:24 AM
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Member Distributed Loads (BLC 56 : Structure Wi (90 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,...	End Location[ft,%]
4	M14	Z	0	0	0	%100
5	M27	X	1.183	1.183	0	%100
6	M27	Z	0	0	0	%100
7	M40	X	3.627	3.627	0	%100
8	M40	Z	0	0	0	%100
9	M41	X	3.627	3.627	0	%100
10	M41	Z	0	0	0	%100
11	M42	X	0	0	0	%100
12	M42	Z	0	0	0	%100
13	MP5A	X	3.502	3.502	0	%100
14	MP5A	Z	0	0	0	%100
15	OVP	X	3.204	3.204	0	%100
16	OVP	Z	0	0	0	%100
17	MP4A	X	3.502	3.502	0	%100
18	MP4A	Z	0	0	0	%100
19	MP3A	X	3.502	3.502	0	%100
20	MP3A	Z	0	0	0	%100
21	MP2A	X	3.502	3.502	0	%100
22	MP2A	Z	0	0	0	%100
23	MP1A	X	3.502	3.502	0	%100
24	MP1A	Z	0	0	0	%100
25	MP5C	X	3.502	3.502	0	%100
26	MP5C	Z	0	0	0	%100
27	MP4C	X	3.502	3.502	0	%100
28	MP4C	Z	0	0	0	%100
29	MP3C	X	3.502	3.502	0	%100
30	MP3C	Z	0	0	0	%100
31	MP2C	X	3.502	3.502	0	%100
32	MP2C	Z	0	0	0	%100
33	MP1C	X	3.502	3.502	0	%100
34	MP1C	Z	0	0	0	%100
35	MP5B	X	3.502	3.502	0	%100
36	MP5B	Z	0	0	0	%100
37	MP4B	X	3.502	3.502	0	%100
38	MP4B	Z	0	0	0	%100
39	MP3B	X	3.502	3.502	0	%100
40	MP3B	Z	0	0	0	%100
41	MP2B	X	3.502	3.502	0	%100
42	MP2B	Z	0	0	0	%100
43	MP1B	X	3.502	3.502	0	%100
44	MP1B	Z	0	0	0	%100
45	M75	X	4.672	4.672	0	%100
46	M75	Z	0	0	0	%100
47	M77	X	3.971	3.971	0	%100
48	M77	Z	0	0	0	%100
49	M79	X	3.971	3.971	0	%100
50	M79	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,...	End Location[ft,%]
1	M4	X	3.073	3.073	0	%100
2	M4	Z	1.774	1.774	0	%100
3	M14	X	3.073	3.073	0	%100
4	M14	Z	1.774	1.774	0	%100
5	M27	X	0	0	0	%100
6	M27	Z	0	0	0	%100



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name : 5000244948-VZW_MT_LO_H

Aug 3, 2023
 9:24 AM
 Checked By: _____

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft.%,]
7	M40	X	4.188	4.188	0	%100
8	M40	Z	2.418	2.418	0	%100
9	M41	X	1.047	1.047	0	%100
10	M41	Z	.604	.604	0	%100
11	M42	X	1.047	1.047	0	%100
12	M42	Z	.604	.604	0	%100
13	MP5A	X	3.033	3.033	0	%100
14	MP5A	Z	1.751	1.751	0	%100
15	OVP	X	2.775	2.775	0	%100
16	OVP	Z	1.602	1.602	0	%100
17	MP4A	X	3.033	3.033	0	%100
18	MP4A	Z	1.751	1.751	0	%100
19	MP3A	X	3.033	3.033	0	%100
20	MP3A	Z	1.751	1.751	0	%100
21	MP2A	X	3.033	3.033	0	%100
22	MP2A	Z	1.751	1.751	0	%100
23	MP1A	X	3.033	3.033	0	%100
24	MP1A	Z	1.751	1.751	0	%100
25	MP5C	X	3.033	3.033	0	%100
26	MP5C	Z	1.751	1.751	0	%100
27	MP4C	X	3.033	3.033	0	%100
28	MP4C	Z	1.751	1.751	0	%100
29	MP3C	X	3.033	3.033	0	%100
30	MP3C	Z	1.751	1.751	0	%100
31	MP2C	X	3.033	3.033	0	%100
32	MP2C	Z	1.751	1.751	0	%100
33	MP1C	X	3.033	3.033	0	%100
34	MP1C	Z	1.751	1.751	0	%100
35	MP5B	X	3.033	3.033	0	%100
36	MP5B	Z	1.751	1.751	0	%100
37	MP4B	X	3.033	3.033	0	%100
38	MP4B	Z	1.751	1.751	0	%100
39	MP3B	X	3.033	3.033	0	%100
40	MP3B	Z	1.751	1.751	0	%100
41	MP2B	X	3.033	3.033	0	%100
42	MP2B	Z	1.751	1.751	0	%100
43	MP1B	X	3.033	3.033	0	%100
44	MP1B	Z	1.751	1.751	0	%100
45	M75	X	3.843	3.843	0	%100
46	M75	Z	2.219	2.219	0	%100
47	M77	X	3.843	3.843	0	%100
48	M77	Z	2.219	2.219	0	%100
49	M79	X	3.236	3.236	0	%100
50	M79	Z	1.868	1.868	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft.%,]
1	M4	X	.591	.591	0	%100
2	M4	Z	1.024	1.024	0	%100
3	M14	X	2.366	2.366	0	%100
4	M14	Z	4.098	4.098	0	%100
5	M27	X	.591	.591	0	%100
6	M27	Z	1.024	1.024	0	%100
7	M40	X	1.813	1.813	0	%100
8	M40	Z	3.141	3.141	0	%100
9	M41	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft,....	End Location[ft, %]
10	M41	Z	0	0	0	%100
11	M42	X	1.813	1.813	0	%100
12	M42	Z	3.141	3.141	0	%100
13	MP5A	X	1.751	1.751	0	%100
14	MP5A	Z	3.033	3.033	0	%100
15	OVP	X	1.602	1.602	0	%100
16	OVP	Z	2.775	2.775	0	%100
17	MP4A	X	1.751	1.751	0	%100
18	MP4A	Z	3.033	3.033	0	%100
19	MP3A	X	1.751	1.751	0	%100
20	MP3A	Z	3.033	3.033	0	%100
21	MP2A	X	1.751	1.751	0	%100
22	MP2A	Z	3.033	3.033	0	%100
23	MP1A	X	1.751	1.751	0	%100
24	MP1A	Z	3.033	3.033	0	%100
25	MP5C	X	1.751	1.751	0	%100
26	MP5C	Z	3.033	3.033	0	%100
27	MP4C	X	1.751	1.751	0	%100
28	MP4C	Z	3.033	3.033	0	%100
29	MP3C	X	1.751	1.751	0	%100
30	MP3C	Z	3.033	3.033	0	%100
31	MP2C	X	1.751	1.751	0	%100
32	MP2C	Z	3.033	3.033	0	%100
33	MP1C	X	1.751	1.751	0	%100
34	MP1C	Z	3.033	3.033	0	%100
35	MP5B	X	1.751	1.751	0	%100
36	MP5B	Z	3.033	3.033	0	%100
37	MP4B	X	1.751	1.751	0	%100
38	MP4B	Z	3.033	3.033	0	%100
39	MP3B	X	1.751	1.751	0	%100
40	MP3B	Z	3.033	3.033	0	%100
41	MP2B	X	1.751	1.751	0	%100
42	MP2B	Z	3.033	3.033	0	%100
43	MP1B	X	1.751	1.751	0	%100
44	MP1B	Z	3.033	3.033	0	%100
45	M75	X	1.985	1.985	0	%100
46	M75	Z	3.439	3.439	0	%100
47	M77	X	2.336	2.336	0	%100
48	M77	Z	4.046	4.046	0	%100
49	M79	X	1.985	1.985	0	%100
50	M79	Z	3.439	3.439	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft,....	End Location[ft, %]
1	M4	X	0	0	0	%100
2	M4	Z	0	0	0	%100
3	M14	X	0	0	0	%100
4	M14	Z	3.549	3.549	0	%100
5	M27	X	0	0	0	%100
6	M27	Z	3.549	3.549	0	%100
7	M40	X	0	0	0	%100
8	M40	Z	1.209	1.209	0	%100
9	M41	X	0	0	0	%100
10	M41	Z	1.209	1.209	0	%100
11	M42	X	0	0	0	%100
12	M42	Z	4.836	4.836	0	%100



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name : 5000244948-VZW_MT_LO_H

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,...	End Location[ft, %]
13	MP5A	X	0	0	0	%100
14	MP5A	Z	3.502	3.502	0	%100
15	OVP	X	0	0	0	%100
16	OVP	Z	3.204	3.204	0	%100
17	MP4A	X	0	0	0	%100
18	MP4A	Z	3.502	3.502	0	%100
19	MP3A	X	0	0	0	%100
20	MP3A	Z	3.502	3.502	0	%100
21	MP2A	X	0	0	0	%100
22	MP2A	Z	3.502	3.502	0	%100
23	MP1A	X	0	0	0	%100
24	MP1A	Z	3.502	3.502	0	%100
25	MP5C	X	0	0	0	%100
26	MP5C	Z	3.502	3.502	0	%100
27	MP4C	X	0	0	0	%100
28	MP4C	Z	3.502	3.502	0	%100
29	MP3C	X	0	0	0	%100
30	MP3C	Z	3.502	3.502	0	%100
31	MP2C	X	0	0	0	%100
32	MP2C	Z	3.502	3.502	0	%100
33	MP1C	X	0	0	0	%100
34	MP1C	Z	3.502	3.502	0	%100
35	MP5B	X	0	0	0	%100
36	MP5B	Z	3.502	3.502	0	%100
37	MP4B	X	0	0	0	%100
38	MP4B	Z	3.502	3.502	0	%100
39	MP3B	X	0	0	0	%100
40	MP3B	Z	3.502	3.502	0	%100
41	MP2B	X	0	0	0	%100
42	MP2B	Z	3.502	3.502	0	%100
43	MP1B	X	0	0	0	%100
44	MP1B	Z	3.502	3.502	0	%100
45	M75	X	0	0	0	%100
46	M75	Z	3.737	3.737	0	%100
47	M77	X	0	0	0	%100
48	M77	Z	4.438	4.438	0	%100
49	M79	X	0	0	0	%100
50	M79	Z	4.438	4.438	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,...	End Location[ft, %]
1	M4	X	-0.591	-0.591	0	%100
2	M4	Z	1.024	1.024	0	%100
3	M14	X	-0.591	-0.591	0	%100
4	M14	Z	1.024	1.024	0	%100
5	M27	X	-2.366	-2.366	0	%100
6	M27	Z	4.098	4.098	0	%100
7	M40	X	0	0	0	%100
8	M40	Z	0	0	0	%100
9	M41	X	-1.813	-1.813	0	%100
10	M41	Z	3.141	3.141	0	%100
11	M42	X	-1.813	-1.813	0	%100
12	M42	Z	3.141	3.141	0	%100
13	MP5A	X	-1.751	-1.751	0	%100
14	MP5A	Z	3.033	3.033	0	%100
15	OVP	X	-1.602	-1.602	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft,...	End Location[ft, %]
16	OVP	Z	2.775	2.775	0 %100
17	MP4A	X	-1.751	-1.751	0 %100
18	MP4A	Z	3.033	3.033	0 %100
19	MP3A	X	-1.751	-1.751	0 %100
20	MP3A	Z	3.033	3.033	0 %100
21	MP2A	X	-1.751	-1.751	0 %100
22	MP2A	Z	3.033	3.033	0 %100
23	MP1A	X	-1.751	-1.751	0 %100
24	MP1A	Z	3.033	3.033	0 %100
25	MP5C	X	-1.751	-1.751	0 %100
26	MP5C	Z	3.033	3.033	0 %100
27	MP4C	X	-1.751	-1.751	0 %100
28	MP4C	Z	3.033	3.033	0 %100
29	MP3C	X	-1.751	-1.751	0 %100
30	MP3C	Z	3.033	3.033	0 %100
31	MP2C	X	-1.751	-1.751	0 %100
32	MP2C	Z	3.033	3.033	0 %100
33	MP1C	X	-1.751	-1.751	0 %100
34	MP1C	Z	3.033	3.033	0 %100
35	MP5B	X	-1.751	-1.751	0 %100
36	MP5B	Z	3.033	3.033	0 %100
37	MP4B	X	-1.751	-1.751	0 %100
38	MP4B	Z	3.033	3.033	0 %100
39	MP3B	X	-1.751	-1.751	0 %100
40	MP3B	Z	3.033	3.033	0 %100
41	MP2B	X	-1.751	-1.751	0 %100
42	MP2B	Z	3.033	3.033	0 %100
43	MP1B	X	-1.751	-1.751	0 %100
44	MP1B	Z	3.033	3.033	0 %100
45	M75	X	-1.985	-1.985	0 %100
46	M75	Z	3.439	3.439	0 %100
47	M77	X	-1.985	-1.985	0 %100
48	M77	Z	3.439	3.439	0 %100
49	M79	X	-2.336	-2.336	0 %100
50	M79	Z	4.046	4.046	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft,...	End Location[ft, %]
1	M4	X	-3.073	-3.073	0 %100
2	M4	Z	1.774	1.774	0 %100
3	M14	X	0	0	0 %100
4	M14	Z	0	0	0 %100
5	M27	X	-3.073	-3.073	0 %100
6	M27	Z	1.774	1.774	0 %100
7	M40	X	-1.047	-1.047	0 %100
8	M40	Z	.604	.604	0 %100
9	M41	X	-4.188	-4.188	0 %100
10	M41	Z	2.418	2.418	0 %100
11	M42	X	-1.047	-1.047	0 %100
12	M42	Z	.604	.604	0 %100
13	MP5A	X	-3.033	-3.033	0 %100
14	MP5A	Z	1.751	1.751	0 %100
15	OVP	X	-2.775	-2.775	0 %100
16	OVP	Z	1.602	1.602	0 %100
17	MP4A	X	-3.033	-3.033	0 %100
18	MP4A	Z	1.751	1.751	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft, %]
19	MP3A	X	-3.033	-3.033	0	%100
20	MP3A	Z	1.751	1.751	0	%100
21	MP2A	X	-3.033	-3.033	0	%100
22	MP2A	Z	1.751	1.751	0	%100
23	MP1A	X	-3.033	-3.033	0	%100
24	MP1A	Z	1.751	1.751	0	%100
25	MP5C	X	-3.033	-3.033	0	%100
26	MP5C	Z	1.751	1.751	0	%100
27	MP4C	X	-3.033	-3.033	0	%100
28	MP4C	Z	1.751	1.751	0	%100
29	MP3C	X	-3.033	-3.033	0	%100
30	MP3C	Z	1.751	1.751	0	%100
31	MP2C	X	-3.033	-3.033	0	%100
32	MP2C	Z	1.751	1.751	0	%100
33	MP1C	X	-3.033	-3.033	0	%100
34	MP1C	Z	1.751	1.751	0	%100
35	MP5B	X	-3.033	-3.033	0	%100
36	MP5B	Z	1.751	1.751	0	%100
37	MP4B	X	-3.033	-3.033	0	%100
38	MP4B	Z	1.751	1.751	0	%100
39	MP3B	X	-3.033	-3.033	0	%100
40	MP3B	Z	1.751	1.751	0	%100
41	MP2B	X	-3.033	-3.033	0	%100
42	MP2B	Z	1.751	1.751	0	%100
43	MP1B	X	-3.033	-3.033	0	%100
44	MP1B	Z	1.751	1.751	0	%100
45	M75	X	-3.843	-3.843	0	%100
46	M75	Z	2.219	2.219	0	%100
47	M77	X	-3.236	-3.236	0	%100
48	M77	Z	1.868	1.868	0	%100
49	M79	X	-3.843	-3.843	0	%100
50	M79	Z	2.219	2.219	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft, %]
1	M4	X	-4.732	-4.732	0	%100
2	M4	Z	0	0	0	%100
3	M14	X	-1.183	-1.183	0	%100
4	M14	Z	0	0	0	%100
5	M27	X	-1.183	-1.183	0	%100
6	M27	Z	0	0	0	%100
7	M40	X	-3.627	-3.627	0	%100
8	M40	Z	0	0	0	%100
9	M41	X	-3.627	-3.627	0	%100
10	M41	Z	0	0	0	%100
11	M42	X	0	0	0	%100
12	M42	Z	0	0	0	%100
13	MP5A	X	-3.502	-3.502	0	%100
14	MP5A	Z	0	0	0	%100
15	OVP	X	-3.204	-3.204	0	%100
16	OVP	Z	0	0	0	%100
17	MP4A	X	-3.502	-3.502	0	%100
18	MP4A	Z	0	0	0	%100
19	MP3A	X	-3.502	-3.502	0	%100
20	MP3A	Z	0	0	0	%100
21	MP2A	X	-3.502	-3.502	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft.%]
22	MP2A	Z	0	0	0	%100
23	MP1A	X	-3.502	-3.502	0	%100
24	MP1A	Z	0	0	0	%100
25	MP5C	X	-3.502	-3.502	0	%100
26	MP5C	Z	0	0	0	%100
27	MP4C	X	-3.502	-3.502	0	%100
28	MP4C	Z	0	0	0	%100
29	MP3C	X	-3.502	-3.502	0	%100
30	MP3C	Z	0	0	0	%100
31	MP2C	X	-3.502	-3.502	0	%100
32	MP2C	Z	0	0	0	%100
33	MP1C	X	-3.502	-3.502	0	%100
34	MP1C	Z	0	0	0	%100
35	MP5B	X	-3.502	-3.502	0	%100
36	MP5B	Z	0	0	0	%100
37	MP4B	X	-3.502	-3.502	0	%100
38	MP4B	Z	0	0	0	%100
39	MP3B	X	-3.502	-3.502	0	%100
40	MP3B	Z	0	0	0	%100
41	MP2B	X	-3.502	-3.502	0	%100
42	MP2B	Z	0	0	0	%100
43	MP1B	X	-3.502	-3.502	0	%100
44	MP1B	Z	0	0	0	%100
45	M75	X	-4.672	-4.672	0	%100
46	M75	Z	0	0	0	%100
47	M77	X	-3.971	-3.971	0	%100
48	M77	Z	0	0	0	%100
49	M79	X	-3.971	-3.971	0	%100
50	M79	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft.%]
1	M4	X	-3.073	-3.073	0	%100
2	M4	Z	-1.774	-1.774	0	%100
3	M14	X	-3.073	-3.073	0	%100
4	M14	Z	-1.774	-1.774	0	%100
5	M27	X	0	0	0	%100
6	M27	Z	0	0	0	%100
7	M40	X	-4.188	-4.188	0	%100
8	M40	Z	-2.418	-2.418	0	%100
9	M41	X	-1.047	-1.047	0	%100
10	M41	Z	-604	-604	0	%100
11	M42	X	-1.047	-1.047	0	%100
12	M42	Z	-604	-604	0	%100
13	MP5A	X	-3.033	-3.033	0	%100
14	MP5A	Z	-1.751	-1.751	0	%100
15	OVP	X	-2.775	-2.775	0	%100
16	OVP	Z	-1.602	-1.602	0	%100
17	MP4A	X	-3.033	-3.033	0	%100
18	MP4A	Z	-1.751	-1.751	0	%100
19	MP3A	X	-3.033	-3.033	0	%100
20	MP3A	Z	-1.751	-1.751	0	%100
21	MP2A	X	-3.033	-3.033	0	%100
22	MP2A	Z	-1.751	-1.751	0	%100
23	MP1A	X	-3.033	-3.033	0	%100
24	MP1A	Z	-1.751	-1.751	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,....	End Location[ft,.%]
25	MP5C	X	-3.033	-3.033	0	%100
26	MP5C	Z	-1.751	-1.751	0	%100
27	MP4C	X	-3.033	-3.033	0	%100
28	MP4C	Z	-1.751	-1.751	0	%100
29	MP3C	X	-3.033	-3.033	0	%100
30	MP3C	Z	-1.751	-1.751	0	%100
31	MP2C	X	-3.033	-3.033	0	%100
32	MP2C	Z	-1.751	-1.751	0	%100
33	MP1C	X	-3.033	-3.033	0	%100
34	MP1C	Z	-1.751	-1.751	0	%100
35	MP5B	X	-3.033	-3.033	0	%100
36	MP5B	Z	-1.751	-1.751	0	%100
37	MP4B	X	-3.033	-3.033	0	%100
38	MP4B	Z	-1.751	-1.751	0	%100
39	MP3B	X	-3.033	-3.033	0	%100
40	MP3B	Z	-1.751	-1.751	0	%100
41	MP2B	X	-3.033	-3.033	0	%100
42	MP2B	Z	-1.751	-1.751	0	%100
43	MP1B	X	-3.033	-3.033	0	%100
44	MP1B	Z	-1.751	-1.751	0	%100
45	M75	X	-3.843	-3.843	0	%100
46	M75	Z	-2.219	-2.219	0	%100
47	M77	X	-3.843	-3.843	0	%100
48	M77	Z	-2.219	-2.219	0	%100
49	M79	X	-3.236	-3.236	0	%100
50	M79	Z	-1.868	-1.868	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,....	End Location[ft,.%]
1	M4	X	-0.591	-0.591	0	%100
2	M4	Z	-1.024	-1.024	0	%100
3	M14	X	-2.366	-2.366	0	%100
4	M14	Z	-4.098	-4.098	0	%100
5	M27	X	-0.591	-0.591	0	%100
6	M27	Z	-1.024	-1.024	0	%100
7	M40	X	-1.813	-1.813	0	%100
8	M40	Z	-3.141	-3.141	0	%100
9	M41	X	0	0	0	%100
10	M41	Z	0	0	0	%100
11	M42	X	-1.813	-1.813	0	%100
12	M42	Z	-3.141	-3.141	0	%100
13	MP5A	X	-1.751	-1.751	0	%100
14	MP5A	Z	-3.033	-3.033	0	%100
15	OVP	X	-1.602	-1.602	0	%100
16	OVP	Z	-2.775	-2.775	0	%100
17	MP4A	X	-1.751	-1.751	0	%100
18	MP4A	Z	-3.033	-3.033	0	%100
19	MP3A	X	-1.751	-1.751	0	%100
20	MP3A	Z	-3.033	-3.033	0	%100
21	MP2A	X	-1.751	-1.751	0	%100
22	MP2A	Z	-3.033	-3.033	0	%100
23	MP1A	X	-1.751	-1.751	0	%100
24	MP1A	Z	-3.033	-3.033	0	%100
25	MP5C	X	-1.751	-1.751	0	%100
26	MP5C	Z	-3.033	-3.033	0	%100
27	MP4C	X	-1.751	-1.751	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft, %]
28	MP4C	Z	-3.033	-3.033	0	%100
29	MP3C	X	-1.751	-1.751	0	%100
30	MP3C	Z	-3.033	-3.033	0	%100
31	MP2C	X	-1.751	-1.751	0	%100
32	MP2C	Z	-3.033	-3.033	0	%100
33	MP1C	X	-1.751	-1.751	0	%100
34	MP1C	Z	-3.033	-3.033	0	%100
35	MP5B	X	-1.751	-1.751	0	%100
36	MP5B	Z	-3.033	-3.033	0	%100
37	MP4B	X	-1.751	-1.751	0	%100
38	MP4B	Z	-3.033	-3.033	0	%100
39	MP3B	X	-1.751	-1.751	0	%100
40	MP3B	Z	-3.033	-3.033	0	%100
41	MP2B	X	-1.751	-1.751	0	%100
42	MP2B	Z	-3.033	-3.033	0	%100
43	MP1B	X	-1.751	-1.751	0	%100
44	MP1B	Z	-3.033	-3.033	0	%100
45	M75	X	-1.985	-1.985	0	%100
46	M75	Z	-3.439	-3.439	0	%100
47	M77	X	-2.336	-2.336	0	%100
48	M77	Z	-4.046	-4.046	0	%100
49	M79	X	-1.985	-1.985	0	%100
50	M79	Z	-3.439	-3.439	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft, %]
1	M4	X	0	0	0	%100
2	M4	Z	0	0	0	%100
3	M14	X	0	0	0	%100
4	M14	Z	-809	-809	0	%100
5	M27	X	0	0	0	%100
6	M27	Z	-809	-809	0	%100
7	M40	X	0	0	0	%100
8	M40	Z	-279	-279	0	%100
9	M41	X	0	0	0	%100
10	M41	Z	-279	-279	0	%100
11	M42	X	0	0	0	%100
12	M42	Z	-1.117	-1.117	0	%100
13	MP5A	X	0	0	0	%100
14	MP5A	Z	-636	-636	0	%100
15	OVP	X	0	0	0	%100
16	OVP	Z	-.58	-.58	0	%100
17	MP4A	X	0	0	0	%100
18	MP4A	Z	-636	-636	0	%100
19	MP3A	X	0	0	0	%100
20	MP3A	Z	-636	-636	0	%100
21	MP2A	X	0	0	0	%100
22	MP2A	Z	-636	-636	0	%100
23	MP1A	X	0	0	0	%100
24	MP1A	Z	-636	-636	0	%100
25	MP5C	X	0	0	0	%100
26	MP5C	Z	-636	-636	0	%100
27	MP4C	X	0	0	0	%100
28	MP4C	Z	-636	-636	0	%100
29	MP3C	X	0	0	0	%100
30	MP3C	Z	-636	-636	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft,...	End Location[ft, %]
31	MP2C	X	0	0	0	%100
32	MP2C	Z	- .636	- .636	0	%100
33	MP1C	X	0	0	0	%100
34	MP1C	Z	- .636	- .636	0	%100
35	MP5B	X	0	0	0	%100
36	MP5B	Z	- .636	- .636	0	%100
37	MP4B	X	0	0	0	%100
38	MP4B	Z	- .636	- .636	0	%100
39	MP3B	X	0	0	0	%100
40	MP3B	Z	- .636	- .636	0	%100
41	MP2B	X	0	0	0	%100
42	MP2B	Z	- .636	- .636	0	%100
43	MP1B	X	0	0	0	%100
44	MP1B	Z	- .636	- .636	0	%100
45	M75	X	0	0	0	%100
46	M75	Z	-1.05	-1.05	0	%100
47	M77	X	0	0	0	%100
48	M77	Z	-1.103	-1.103	0	%100
49	M79	X	0	0	0	%100
50	M79	Z	-1.103	-1.103	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft,...	End Location[ft, %]
1	M4	X	.135	.135	0	%100
2	M4	Z	- .234	- .234	0	%100
3	M14	X	.135	.135	0	%100
4	M14	Z	- .234	- .234	0	%100
5	M27	X	.54	.54	0	%100
6	M27	Z	- .935	- .935	0	%100
7	M40	X	0	0	0	%100
8	M40	Z	0	0	0	%100
9	M41	X	.419	.419	0	%100
10	M41	Z	- .725	- .725	0	%100
11	M42	X	.419	.419	0	%100
12	M42	Z	- .725	- .725	0	%100
13	MP5A	X	.318	.318	0	%100
14	MP5A	Z	- .551	- .551	0	%100
15	OVP	X	.29	.29	0	%100
16	OVP	Z	- .502	- .502	0	%100
17	MP4A	X	.318	.318	0	%100
18	MP4A	Z	- .551	- .551	0	%100
19	MP3A	X	.318	.318	0	%100
20	MP3A	Z	- .551	- .551	0	%100
21	MP2A	X	.318	.318	0	%100
22	MP2A	Z	- .551	- .551	0	%100
23	MP1A	X	.318	.318	0	%100
24	MP1A	Z	- .551	- .551	0	%100
25	MP5C	X	.318	.318	0	%100
26	MP5C	Z	- .551	- .551	0	%100
27	MP4C	X	.318	.318	0	%100
28	MP4C	Z	- .551	- .551	0	%100
29	MP3C	X	.318	.318	0	%100
30	MP3C	Z	- .551	- .551	0	%100
31	MP2C	X	.318	.318	0	%100
32	MP2C	Z	- .551	- .551	0	%100
33	MP1C	X	.318	.318	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,...	End Location[ft, %]
34	MP1C	Z	-.551	-.551	0	%100
35	MP5B	X	.318	.318	0	%100
36	MP5B	Z	-.551	-.551	0	%100
37	MP4B	X	.318	.318	0	%100
38	MP4B	Z	-.551	-.551	0	%100
39	MP3B	X	.318	.318	0	%100
40	MP3B	Z	-.551	-.551	0	%100
41	MP2B	X	.318	.318	0	%100
42	MP2B	Z	-.551	-.551	0	%100
43	MP1B	X	.318	.318	0	%100
44	MP1B	Z	-.551	-.551	0	%100
45	M75	X	.534	.534	0	%100
46	M75	Z	-.925	-.925	0	%100
47	M77	X	.534	.534	0	%100
48	M77	Z	-.925	-.925	0	%100
49	M79	X	.56	.56	0	%100
50	M79	Z	-.97	-.97	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,...	End Location[ft, %]
1	M4	X	.701	.701	0	%100
2	M4	Z	-.405	-.405	0	%100
3	M14	X	0	0	0	%100
4	M14	Z	0	0	0	%100
5	M27	X	.701	.701	0	%100
6	M27	Z	-.405	-.405	0	%100
7	M40	X	.242	.242	0	%100
8	M40	Z	-.14	-.14	0	%100
9	M41	X	.967	.967	0	%100
10	M41	Z	-.558	-.558	0	%100
11	M42	X	.242	.242	0	%100
12	M42	Z	-.14	-.14	0	%100
13	MP5A	X	.551	.551	0	%100
14	MP5A	Z	-.318	-.318	0	%100
15	OVP	X	.502	.502	0	%100
16	OVP	Z	-.29	-.29	0	%100
17	MP4A	X	.551	.551	0	%100
18	MP4A	Z	-.318	-.318	0	%100
19	MP3A	X	.551	.551	0	%100
20	MP3A	Z	-.318	-.318	0	%100
21	MP2A	X	.551	.551	0	%100
22	MP2A	Z	-.318	-.318	0	%100
23	MP1A	X	.551	.551	0	%100
24	MP1A	Z	-.318	-.318	0	%100
25	MP5C	X	.551	.551	0	%100
26	MP5C	Z	-.318	-.318	0	%100
27	MP4C	X	.551	.551	0	%100
28	MP4C	Z	-.318	-.318	0	%100
29	MP3C	X	.551	.551	0	%100
30	MP3C	Z	-.318	-.318	0	%100
31	MP2C	X	.551	.551	0	%100
32	MP2C	Z	-.318	-.318	0	%100
33	MP1C	X	.551	.551	0	%100
34	MP1C	Z	-.318	-.318	0	%100
35	MP5B	X	.551	.551	0	%100
36	MP5B	Z	-.318	-.318	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft.%]
37	MP4B	X	.551	.551	0	%100
38	MP4B	Z	-.318	-.318	0	%100
39	MP3B	X	.551	.551	0	%100
40	MP3B	Z	-.318	-.318	0	%100
41	MP2B	X	.551	.551	0	%100
42	MP2B	Z	-.318	-.318	0	%100
43	MP1B	X	.551	.551	0	%100
44	MP1B	Z	-.318	-.318	0	%100
45	M75	X	.955	.955	0	%100
46	M75	Z	-.552	-.552	0	%100
47	M77	X	.91	.91	0	%100
48	M77	Z	-.525	-.525	0	%100
49	M79	X	.955	.955	0	%100
50	M79	Z	-.552	-.552	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft.%]
1	M4	X	1.079	1.079	0	%100
2	M4	Z	0	0	0	%100
3	M14	X	.27	.27	0	%100
4	M14	Z	0	0	0	%100
5	M27	X	.27	.27	0	%100
6	M27	Z	0	0	0	%100
7	M40	X	.837	.837	0	%100
8	M40	Z	0	0	0	%100
9	M41	X	.837	.837	0	%100
10	M41	Z	0	0	0	%100
11	M42	X	0	0	0	%100
12	M42	Z	0	0	0	%100
13	MP5A	X	.636	.636	0	%100
14	MP5A	Z	0	0	0	%100
15	OVP	X	.58	.58	0	%100
16	OVP	Z	0	0	0	%100
17	MP4A	X	.636	.636	0	%100
18	MP4A	Z	0	0	0	%100
19	MP3A	X	.636	.636	0	%100
20	MP3A	Z	0	0	0	%100
21	MP2A	X	.636	.636	0	%100
22	MP2A	Z	0	0	0	%100
23	MP1A	X	.636	.636	0	%100
24	MP1A	Z	0	0	0	%100
25	MP5C	X	.636	.636	0	%100
26	MP5C	Z	0	0	0	%100
27	MP4C	X	.636	.636	0	%100
28	MP4C	Z	0	0	0	%100
29	MP3C	X	.636	.636	0	%100
30	MP3C	Z	0	0	0	%100
31	MP2C	X	.636	.636	0	%100
32	MP2C	Z	0	0	0	%100
33	MP1C	X	.636	.636	0	%100
34	MP1C	Z	0	0	0	%100
35	MP5B	X	.636	.636	0	%100
36	MP5B	Z	0	0	0	%100
37	MP4B	X	.636	.636	0	%100
38	MP4B	Z	0	0	0	%100
39	MP3B	X	.636	.636	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....]	End Location[ft.%]
40	MP3B	Z	0	0	0	%100
41	MP2B	X	.636	.636	0	%100
42	MP2B	Z	0	0	0	%100
43	MP1B	X	.636	.636	0	%100
44	MP1B	Z	0	0	0	%100
45	M75	X	1.121	1.121	0	%100
46	M75	Z	0	0	0	%100
47	M77	X	1.068	1.068	0	%100
48	M77	Z	0	0	0	%100
49	M79	X	1.068	1.068	0	%100
50	M79	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....]	End Location[ft.%]
1	M4	X	.701	.701	0	%100
2	M4	Z	.405	.405	0	%100
3	M14	X	.701	.701	0	%100
4	M14	Z	.405	.405	0	%100
5	M27	X	0	0	0	%100
6	M27	Z	0	0	0	%100
7	M40	X	.967	.967	0	%100
8	M40	Z	.558	.558	0	%100
9	M41	X	.242	.242	0	%100
10	M41	Z	.14	.14	0	%100
11	M42	X	.242	.242	0	%100
12	M42	Z	.14	.14	0	%100
13	MP5A	X	.551	.551	0	%100
14	MP5A	Z	.318	.318	0	%100
15	OVP	X	.502	.502	0	%100
16	OVP	Z	.29	.29	0	%100
17	MP4A	X	.551	.551	0	%100
18	MP4A	Z	.318	.318	0	%100
19	MP3A	X	.551	.551	0	%100
20	MP3A	Z	.318	.318	0	%100
21	MP2A	X	.551	.551	0	%100
22	MP2A	Z	.318	.318	0	%100
23	MP1A	X	.551	.551	0	%100
24	MP1A	Z	.318	.318	0	%100
25	MP5C	X	.551	.551	0	%100
26	MP5C	Z	.318	.318	0	%100
27	MP4C	X	.551	.551	0	%100
28	MP4C	Z	.318	.318	0	%100
29	MP3C	X	.551	.551	0	%100
30	MP3C	Z	.318	.318	0	%100
31	MP2C	X	.551	.551	0	%100
32	MP2C	Z	.318	.318	0	%100
33	MP1C	X	.551	.551	0	%100
34	MP1C	Z	.318	.318	0	%100
35	MP5B	X	.551	.551	0	%100
36	MP5B	Z	.318	.318	0	%100
37	MP4B	X	.551	.551	0	%100
38	MP4B	Z	.318	.318	0	%100
39	MP3B	X	.551	.551	0	%100
40	MP3B	Z	.318	.318	0	%100
41	MP2B	X	.551	.551	0	%100
42	MP2B	Z	.318	.318	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft, %]
43	MP1B	X	.551	.551	0	%100
44	MP1B	Z	.318	.318	0	%100
45	M75	X	.955	.955	0	%100
46	M75	Z	.552	.552	0	%100
47	M77	X	.955	.955	0	%100
48	M77	Z	.552	.552	0	%100
49	M79	X	.91	.91	0	%100
50	M79	Z	.525	.525	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft, %]
1	M4	X	.135	.135	0	%100
2	M4	Z	.234	.234	0	%100
3	M14	X	.54	.54	0	%100
4	M14	Z	.935	.935	0	%100
5	M27	X	.135	.135	0	%100
6	M27	Z	.234	.234	0	%100
7	M40	X	.419	.419	0	%100
8	M40	Z	.725	.725	0	%100
9	M41	X	0	0	0	%100
10	M41	Z	0	0	0	%100
11	M42	X	.419	.419	0	%100
12	M42	Z	.725	.725	0	%100
13	MP5A	X	.318	.318	0	%100
14	MP5A	Z	.551	.551	0	%100
15	OVP	X	.29	.29	0	%100
16	OVP	Z	.502	.502	0	%100
17	MP4A	X	.318	.318	0	%100
18	MP4A	Z	.551	.551	0	%100
19	MP3A	X	.318	.318	0	%100
20	MP3A	Z	.551	.551	0	%100
21	MP2A	X	.318	.318	0	%100
22	MP2A	Z	.551	.551	0	%100
23	MP1A	X	.318	.318	0	%100
24	MP1A	Z	.551	.551	0	%100
25	MP5C	X	.318	.318	0	%100
26	MP5C	Z	.551	.551	0	%100
27	MP4C	X	.318	.318	0	%100
28	MP4C	Z	.551	.551	0	%100
29	MP3C	X	.318	.318	0	%100
30	MP3C	Z	.551	.551	0	%100
31	MP2C	X	.318	.318	0	%100
32	MP2C	Z	.551	.551	0	%100
33	MP1C	X	.318	.318	0	%100
34	MP1C	Z	.551	.551	0	%100
35	MP5B	X	.318	.318	0	%100
36	MP5B	Z	.551	.551	0	%100
37	MP4B	X	.318	.318	0	%100
38	MP4B	Z	.551	.551	0	%100
39	MP3B	X	.318	.318	0	%100
40	MP3B	Z	.551	.551	0	%100
41	MP2B	X	.318	.318	0	%100
42	MP2B	Z	.551	.551	0	%100
43	MP1B	X	.318	.318	0	%100
44	MP1B	Z	.551	.551	0	%100
45	M75	X	.534	.534	0	%100



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name : 5000244948-VZW_MT_LO_H

Aug 3, 2023
 9:24 AM
 Checked By: _____

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft,...]	End Location[ft,%]
46	M75	Z	.925	.925	0	%100
47	M77	X	.56	.56	0	%100
48	M77	Z	.97	.97	0	%100
49	M79	X	.534	.534	0	%100
50	M79	Z	.925	.925	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft,...]	End Location[ft,%]
1	M4	X	0	0	0	%100
2	M4	Z	0	0	0	%100
3	M14	X	0	0	0	%100
4	M14	Z	.809	.809	0	%100
5	M27	X	0	0	0	%100
6	M27	Z	.809	.809	0	%100
7	M40	X	0	0	0	%100
8	M40	Z	.279	.279	0	%100
9	M41	X	0	0	0	%100
10	M41	Z	.279	.279	0	%100
11	M42	X	0	0	0	%100
12	M42	Z	1.117	1.117	0	%100
13	MP5A	X	0	0	0	%100
14	MP5A	Z	.636	.636	0	%100
15	OVP	X	0	0	0	%100
16	OVP	Z	.58	.58	0	%100
17	MP4A	X	0	0	0	%100
18	MP4A	Z	.636	.636	0	%100
19	MP3A	X	0	0	0	%100
20	MP3A	Z	.636	.636	0	%100
21	MP2A	X	0	0	0	%100
22	MP2A	Z	.636	.636	0	%100
23	MP1A	X	0	0	0	%100
24	MP1A	Z	.636	.636	0	%100
25	MP5C	X	0	0	0	%100
26	MP5C	Z	.636	.636	0	%100
27	MP4C	X	0	0	0	%100
28	MP4C	Z	.636	.636	0	%100
29	MP3C	X	0	0	0	%100
30	MP3C	Z	.636	.636	0	%100
31	MP2C	X	0	0	0	%100
32	MP2C	Z	.636	.636	0	%100
33	MP1C	X	0	0	0	%100
34	MP1C	Z	.636	.636	0	%100
35	MP5B	X	0	0	0	%100
36	MP5B	Z	.636	.636	0	%100
37	MP4B	X	0	0	0	%100
38	MP4B	Z	.636	.636	0	%100
39	MP3B	X	0	0	0	%100
40	MP3B	Z	.636	.636	0	%100
41	MP2B	X	0	0	0	%100
42	MP2B	Z	.636	.636	0	%100
43	MP1B	X	0	0	0	%100
44	MP1B	Z	.636	.636	0	%100
45	M75	X	0	0	0	%100
46	M75	Z	1.05	1.05	0	%100
47	M77	X	0	0	0	%100
48	M77	Z	1.103	1.103	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....]	End Location[ft.%]
49	M79	X	0	0	0	%100
50	M79	Z	1.103	1.103	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....]	End Location[ft.%]
1	M4	X	-.135	-.135	0	%100
2	M4	Z	.234	.234	0	%100
3	M14	X	-.135	-.135	0	%100
4	M14	Z	.234	.234	0	%100
5	M27	X	-.54	-.54	0	%100
6	M27	Z	.935	.935	0	%100
7	M40	X	0	0	0	%100
8	M40	Z	0	0	0	%100
9	M41	X	-.419	-.419	0	%100
10	M41	Z	.725	.725	0	%100
11	M42	X	-.419	-.419	0	%100
12	M42	Z	.725	.725	0	%100
13	MP5A	X	-.318	-.318	0	%100
14	MP5A	Z	.551	.551	0	%100
15	OVP	X	-.29	-.29	0	%100
16	OVP	Z	.502	.502	0	%100
17	MP4A	X	-.318	-.318	0	%100
18	MP4A	Z	.551	.551	0	%100
19	MP3A	X	-.318	-.318	0	%100
20	MP3A	Z	.551	.551	0	%100
21	MP2A	X	-.318	-.318	0	%100
22	MP2A	Z	.551	.551	0	%100
23	MP1A	X	-.318	-.318	0	%100
24	MP1A	Z	.551	.551	0	%100
25	MP5C	X	-.318	-.318	0	%100
26	MP5C	Z	.551	.551	0	%100
27	MP4C	X	-.318	-.318	0	%100
28	MP4C	Z	.551	.551	0	%100
29	MP3C	X	-.318	-.318	0	%100
30	MP3C	Z	.551	.551	0	%100
31	MP2C	X	-.318	-.318	0	%100
32	MP2C	Z	.551	.551	0	%100
33	MP1C	X	-.318	-.318	0	%100
34	MP1C	Z	.551	.551	0	%100
35	MP5B	X	-.318	-.318	0	%100
36	MP5B	Z	.551	.551	0	%100
37	MP4B	X	-.318	-.318	0	%100
38	MP4B	Z	.551	.551	0	%100
39	MP3B	X	-.318	-.318	0	%100
40	MP3B	Z	.551	.551	0	%100
41	MP2B	X	-.318	-.318	0	%100
42	MP2B	Z	.551	.551	0	%100
43	MP1B	X	-.318	-.318	0	%100
44	MP1B	Z	.551	.551	0	%100
45	M75	X	-.534	-.534	0	%100
46	M75	Z	.925	.925	0	%100
47	M77	X	-.534	-.534	0	%100
48	M77	Z	.925	.925	0	%100
49	M79	X	-.56	-.56	0	%100
50	M79	Z	.97	.97	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft,...	End Location[ft, %]
1	M4	X	-.701	-.701	0	%100
2	M4	Z	.405	.405	0	%100
3	M14	X	0	0	0	%100
4	M14	Z	0	0	0	%100
5	M27	X	-.701	-.701	0	%100
6	M27	Z	.405	.405	0	%100
7	M40	X	-.242	-.242	0	%100
8	M40	Z	.14	.14	0	%100
9	M41	X	-.967	-.967	0	%100
10	M41	Z	.558	.558	0	%100
11	M42	X	-.242	-.242	0	%100
12	M42	Z	.14	.14	0	%100
13	MP5A	X	-.551	-.551	0	%100
14	MP5A	Z	.318	.318	0	%100
15	OVP	X	-.502	-.502	0	%100
16	OVP	Z	.29	.29	0	%100
17	MP4A	X	-.551	-.551	0	%100
18	MP4A	Z	.318	.318	0	%100
19	MP3A	X	-.551	-.551	0	%100
20	MP3A	Z	.318	.318	0	%100
21	MP2A	X	-.551	-.551	0	%100
22	MP2A	Z	.318	.318	0	%100
23	MP1A	X	-.551	-.551	0	%100
24	MP1A	Z	.318	.318	0	%100
25	MP5C	X	-.551	-.551	0	%100
26	MP5C	Z	.318	.318	0	%100
27	MP4C	X	-.551	-.551	0	%100
28	MP4C	Z	.318	.318	0	%100
29	MP3C	X	-.551	-.551	0	%100
30	MP3C	Z	.318	.318	0	%100
31	MP2C	X	-.551	-.551	0	%100
32	MP2C	Z	.318	.318	0	%100
33	MP1C	X	-.551	-.551	0	%100
34	MP1C	Z	.318	.318	0	%100
35	MP5B	X	-.551	-.551	0	%100
36	MP5B	Z	.318	.318	0	%100
37	MP4B	X	-.551	-.551	0	%100
38	MP4B	Z	.318	.318	0	%100
39	MP3B	X	-.551	-.551	0	%100
40	MP3B	Z	.318	.318	0	%100
41	MP2B	X	-.551	-.551	0	%100
42	MP2B	Z	.318	.318	0	%100
43	MP1B	X	-.551	-.551	0	%100
44	MP1B	Z	.318	.318	0	%100
45	M75	X	-.955	-.955	0	%100
46	M75	Z	.552	.552	0	%100
47	M77	X	-.91	-.91	0	%100
48	M77	Z	.525	.525	0	%100
49	M79	X	-.955	-.955	0	%100
50	M79	Z	.552	.552	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft,...	End Location[ft, %]
1	M4	X	-1.079	-1.079	0	%100
2	M4	Z	0	0	0	%100
3	M14	X	-.27	-.27	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,...	End Location[ft,%]
4	M14	Z	0	0	0	%100
5	M27	X	-.27	-.27	0	%100
6	M27	Z	0	0	0	%100
7	M40	X	-.837	-.837	0	%100
8	M40	Z	0	0	0	%100
9	M41	X	-.837	-.837	0	%100
10	M41	Z	0	0	0	%100
11	M42	X	0	0	0	%100
12	M42	Z	0	0	0	%100
13	MP5A	X	-.636	-.636	0	%100
14	MP5A	Z	0	0	0	%100
15	OVP	X	-.58	-.58	0	%100
16	OVP	Z	0	0	0	%100
17	MP4A	X	-.636	-.636	0	%100
18	MP4A	Z	0	0	0	%100
19	MP3A	X	-.636	-.636	0	%100
20	MP3A	Z	0	0	0	%100
21	MP2A	X	-.636	-.636	0	%100
22	MP2A	Z	0	0	0	%100
23	MP1A	X	-.636	-.636	0	%100
24	MP1A	Z	0	0	0	%100
25	MP5C	X	-.636	-.636	0	%100
26	MP5C	Z	0	0	0	%100
27	MP4C	X	-.636	-.636	0	%100
28	MP4C	Z	0	0	0	%100
29	MP3C	X	-.636	-.636	0	%100
30	MP3C	Z	0	0	0	%100
31	MP2C	X	-.636	-.636	0	%100
32	MP2C	Z	0	0	0	%100
33	MP1C	X	-.636	-.636	0	%100
34	MP1C	Z	0	0	0	%100
35	MP5B	X	-.636	-.636	0	%100
36	MP5B	Z	0	0	0	%100
37	MP4B	X	-.636	-.636	0	%100
38	MP4B	Z	0	0	0	%100
39	MP3B	X	-.636	-.636	0	%100
40	MP3B	Z	0	0	0	%100
41	MP2B	X	-.636	-.636	0	%100
42	MP2B	Z	0	0	0	%100
43	MP1B	X	-.636	-.636	0	%100
44	MP1B	Z	0	0	0	%100
45	M75	X	-1.121	-1.121	0	%100
46	M75	Z	0	0	0	%100
47	M77	X	-1.068	-1.068	0	%100
48	M77	Z	0	0	0	%100
49	M79	X	-1.068	-1.068	0	%100
50	M79	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,...	End Location[ft,%]
1	M4	X	-.701	-.701	0	%100
2	M4	Z	-.405	-.405	0	%100
3	M14	X	-.701	-.701	0	%100
4	M14	Z	-.405	-.405	0	%100
5	M27	X	0	0	0	%100
6	M27	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft.%]
7	M40	X	-.967	-.967	0	%100
8	M40	Z	-.558	-.558	0	%100
9	M41	X	-.242	-.242	0	%100
10	M41	Z	-.14	-.14	0	%100
11	M42	X	-.242	-.242	0	%100
12	M42	Z	-.14	-.14	0	%100
13	MP5A	X	-.551	-.551	0	%100
14	MP5A	Z	-.318	-.318	0	%100
15	OVP	X	-.502	-.502	0	%100
16	OVP	Z	-.29	-.29	0	%100
17	MP4A	X	-.551	-.551	0	%100
18	MP4A	Z	-.318	-.318	0	%100
19	MP3A	X	-.551	-.551	0	%100
20	MP3A	Z	-.318	-.318	0	%100
21	MP2A	X	-.551	-.551	0	%100
22	MP2A	Z	-.318	-.318	0	%100
23	MP1A	X	-.551	-.551	0	%100
24	MP1A	Z	-.318	-.318	0	%100
25	MP5C	X	-.551	-.551	0	%100
26	MP5C	Z	-.318	-.318	0	%100
27	MP4C	X	-.551	-.551	0	%100
28	MP4C	Z	-.318	-.318	0	%100
29	MP3C	X	-.551	-.551	0	%100
30	MP3C	Z	-.318	-.318	0	%100
31	MP2C	X	-.551	-.551	0	%100
32	MP2C	Z	-.318	-.318	0	%100
33	MP1C	X	-.551	-.551	0	%100
34	MP1C	Z	-.318	-.318	0	%100
35	MP5B	X	-.551	-.551	0	%100
36	MP5B	Z	-.318	-.318	0	%100
37	MP4B	X	-.551	-.551	0	%100
38	MP4B	Z	-.318	-.318	0	%100
39	MP3B	X	-.551	-.551	0	%100
40	MP3B	Z	-.318	-.318	0	%100
41	MP2B	X	-.551	-.551	0	%100
42	MP2B	Z	-.318	-.318	0	%100
43	MP1B	X	-.551	-.551	0	%100
44	MP1B	Z	-.318	-.318	0	%100
45	M75	X	-.955	-.955	0	%100
46	M75	Z	-.552	-.552	0	%100
47	M77	X	-.955	-.955	0	%100
48	M77	Z	-.552	-.552	0	%100
49	M79	X	-.91	-.91	0	%100
50	M79	Z	-.525	-.525	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft.%]
1	M4	X	-.135	-.135	0	%100
2	M4	Z	-.234	-.234	0	%100
3	M14	X	-.54	-.54	0	%100
4	M14	Z	-.935	-.935	0	%100
5	M27	X	-.135	-.135	0	%100
6	M27	Z	-.234	-.234	0	%100
7	M40	X	-.419	-.419	0	%100
8	M40	Z	-.725	-.725	0	%100
9	M41	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft,....	End Location[ft, %]
10	M41	Z	0	0	0	%100
11	M42	X	-419	-419	0	%100
12	M42	Z	-725	-725	0	%100
13	MP5A	X	-318	-318	0	%100
14	MP5A	Z	-551	-551	0	%100
15	OVP	X	-.29	-.29	0	%100
16	OVP	Z	-502	-502	0	%100
17	MP4A	X	-318	-318	0	%100
18	MP4A	Z	-551	-551	0	%100
19	MP3A	X	-318	-318	0	%100
20	MP3A	Z	-551	-551	0	%100
21	MP2A	X	-318	-318	0	%100
22	MP2A	Z	-551	-551	0	%100
23	MP1A	X	-318	-318	0	%100
24	MP1A	Z	-551	-551	0	%100
25	MP5C	X	-318	-318	0	%100
26	MP5C	Z	-551	-551	0	%100
27	MP4C	X	-318	-318	0	%100
28	MP4C	Z	-551	-551	0	%100
29	MP3C	X	-318	-318	0	%100
30	MP3C	Z	-551	-551	0	%100
31	MP2C	X	-318	-318	0	%100
32	MP2C	Z	-551	-551	0	%100
33	MP1C	X	-318	-318	0	%100
34	MP1C	Z	-551	-551	0	%100
35	MP5B	X	-318	-318	0	%100
36	MP5B	Z	-551	-551	0	%100
37	MP4B	X	-318	-318	0	%100
38	MP4B	Z	-551	-551	0	%100
39	MP3B	X	-318	-318	0	%100
40	MP3B	Z	-551	-551	0	%100
41	MP2B	X	-318	-318	0	%100
42	MP2B	Z	-551	-551	0	%100
43	MP1B	X	-318	-318	0	%100
44	MP1B	Z	-551	-551	0	%100
45	M75	X	-.534	-.534	0	%100
46	M75	Z	-.925	-.925	0	%100
47	M77	X	-.56	-.56	0	%100
48	M77	Z	-.97	-.97	0	%100
49	M79	X	-.534	-.534	0	%100
50	M79	Z	-.925	-.925	0	%100

Member Distributed Loads (BLC 87 : BLC 39 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft,....	End Location[ft, %]
1	M14	Y	-1.935	-1.935	4.118	4.675
2	M27	Y	-1.879	-1.879	4.085	4.903
3	M42	Y	-.629	-2.572	0	2.206
4	M42	Y	-2.572	-3.544	2.206	4.413
5	M42	Y	-3.544	-3.544	4.413	6.619
6	M42	Y	-3.544	-3.544	6.619	8.826
7	M42	Y	-3.544	-2.719	8.826	11.032
8	M42	Y	-2.719	-1.069	11.032	13.239
9	M4	Y	-1.935	-1.935	4.118	4.675
10	M14	Y	-1.879	-1.879	4.085	4.903
11	M40	Y	-1.069	-2.719	0	2.206
12	M40	Y	-2.719	-3.544	2.206	4.413



Member Distributed Loads (BLC 87 : BLC 39 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft.%]
13	M40	Y	-3.544	-3.544	4.413	6.619
14	M40	Y	-3.544	-3.544	6.619	8.826
15	M40	Y	-3.544	-2.572	8.826	11.032
16	M40	Y	-2.572	-.629	11.032	13.239
17	M4	Y	-1.879	-1.879	4.085	4.903
18	M27	Y	-1.935	-1.935	4.118	4.675
19	M41	Y	-1.069	-2.719	0	2.206
20	M41	Y	-2.719	-3.544	2.206	4.413
21	M41	Y	-3.544	-3.544	4.413	6.619
22	M41	Y	-3.544	-3.544	6.619	8.826
23	M41	Y	-3.544	-2.572	8.826	11.032
24	M41	Y	-2.572	-.629	11.032	13.239

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft.%]
1	M4	Y	-3.65	-3.65	4.085	4.903
2	M27	Y	-3.758	-3.758	4.118	4.675
3	M41	Y	-2.077	-5.283	0	2.206
4	M41	Y	-5.283	-6.885	2.206	4.413
5	M41	Y	-6.885	-6.885	4.413	6.619
6	M41	Y	-6.885	-6.885	6.619	8.826
7	M41	Y	-6.885	-4.997	8.826	11.032
8	M41	Y	-4.997	-1.222	11.032	13.239
9	M4	Y	-3.758	-3.758	4.117	4.675
10	M14	Y	-3.65	-3.65	4.085	4.903
11	M40	Y	-2.077	-5.283	0	2.206
12	M40	Y	-5.283	-6.885	2.206	4.413
13	M40	Y	-6.885	-6.885	4.413	6.619
14	M40	Y	-6.885	-6.885	6.619	8.826
15	M40	Y	-6.885	-4.997	8.826	11.032
16	M40	Y	-4.997	-1.222	11.032	13.239
17	M14	Y	-3.758	-3.758	4.117	4.675
18	M27	Y	-3.65	-3.65	4.085	4.903
19	M42	Y	-1.222	-4.997	0	2.206
20	M42	Y	-4.997	-6.885	2.206	4.413
21	M42	Y	-6.885	-6.885	4.413	6.619
22	M42	Y	-6.885	-6.885	6.619	8.826
23	M42	Y	-6.885	-5.283	8.826	11.032
24	M42	Y	-5.283	-2.077	11.032	13.239

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft....	End Location[ft.%]
1	M14	Z	-.058	-.058	4.118	4.675
2	M27	Z	-.056	-.056	4.085	4.903
3	M42	Z	-.019	-.077	0	2.206
4	M42	Z	-.077	-.106	2.206	4.413
5	M42	Z	-.106	-.106	4.413	6.619
6	M42	Z	-.106	-.106	6.619	8.826
7	M42	Z	-.106	-.082	8.826	11.032
8	M42	Z	-.082	-.032	11.032	13.239
9	M4	Z	-.058	-.058	4.118	4.675
10	M14	Z	-.056	-.056	4.085	4.903
11	M40	Z	-.032	-.082	0	2.206
12	M40	Z	-.082	-.106	2.206	4.413
13	M40	Z	-.106	-.106	4.413	6.619
14	M40	Z	-.106	-.106	6.619	8.826



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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft,....	End Location[ft.%]
15	M40	Z	-.106	-.077	8.826	11.032
16	M40	Z	-.077	-.019	11.032	13.239
17	M4	Z	-.056	-.056	4.085	4.903
18	M27	Z	-.058	-.058	4.118	4.675
19	M41	Z	-.032	-.082	0	2.206
20	M41	Z	-.082	-.106	2.206	4.413
21	M41	Z	-.106	-.106	4.413	6.619
22	M41	Z	-.106	-.106	6.619	8.826
23	M41	Z	-.106	-.077	8.826	11.032
24	M41	Z	-.077	-.019	11.032	13.239

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

	Member Label	Direction	Start Magnitude[lb/ft.F,ksf]	End Magnitude[lb/ft.F,ksf]	Start Location[ft,....	End Location[ft.%]
1	M14	X	.058	.058	4.118	4.675
2	M27	X	.056	.056	4.085	4.903
3	M42	X	.019	.077	0	2.206
4	M42	X	.077	.106	2.206	4.413
5	M42	X	.106	.106	4.413	6.619
6	M42	X	.106	.106	6.619	8.826
7	M42	X	.106	.082	8.826	11.032
8	M42	X	.082	.032	11.032	13.239
9	M4	X	.058	.058	4.118	4.675
10	M14	X	.056	.056	4.085	4.903
11	M40	X	.032	.082	0	2.206
12	M40	X	.082	.106	2.206	4.413
13	M40	X	.106	.106	4.413	6.619
14	M40	X	.106	.106	6.619	8.826
15	M40	X	.106	.077	8.826	11.032
16	M40	X	.077	.019	11.032	13.239
17	M4	X	.056	.056	4.085	4.903
18	M27	X	.058	.058	4.118	4.675
19	M41	X	.032	.082	0	2.206
20	M41	X	.082	.106	2.206	4.413
21	M41	X	.106	.106	4.413	6.619
22	M41	X	.106	.106	6.619	8.826
23	M41	X	.106	.077	8.826	11.032
24	M41	X	.077	.019	11.032	13.239

Member Area Loads (BLC 39 : Structure D)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N103	N55	N41	N102	Y	Two Way	-.005
2	N101	N79	N95	N102	Y	Two Way	-.005
3	N75	N101	N103	N59	Y	Two Way	-.005

Member Area Loads (BLC 40 : Structure Di)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N75	N101	N103	N59	Y	Two Way	-.01
2	N79	N101	N102	N95	Y	Two Way	-.01
3	N41	N102	N103	N55	Y	Two Way	-.01

Member Area Loads (BLC 84 : Structure Ev)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N103	N55	N41	N102	Y	Two Way	0
2	N101	N79	N95	N102	Y	Two Way	0



Member Area Loads (BLC 84 : Structure Ev) (Continued)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
3	N75	N101	N103	N59	Y	Two Way	0

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

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N103	N55	N41	N102	Z	Two Way	-0.00156
2	N101	N79	N95	N102	Z	Two Way	-0.00156
3	N75	N101	N103	N59	Z	Two Way	-0.00156

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

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N103	N55	N41	N102	X	Two Way	.000156
2	N101	N79	N95	N102	X	Two Way	.000156
3	N75	N101	N103	N59	X	Two Way	.000156

Envelope Joint Reactions

Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC	
1	N3	max	1105.9	10	-285.226	7	6771.857	1	-.472	6	2.262	4	.228	4
2		min	-1106.79	4	-1725.236	13	-3159.275	7	-1.337	24	-2.261	10	-.208	10
3	N14	max	4856.93	9	-111.688	3	1684.533	3	.528	21	1.461	12	.915	21
4		min	-3066.324	3	-1392.705	21	-2714.567	9	.059	3	-1.455	6	.102	3
5	N26	max	2884.465	11	20.57	11	1931.588	11	.464	17	1.741	8	-.004	11
6		min	-4415.828	5	-1234.498	17	-2822.862	5	.003	11	-1.749	2	-.804	17
7	N106	max	30.664	10	5036.152	13	-1290.483	7	0	75	0	4	0	10
8		min	-30.581	4	1340.777	7	-4745.539	13	0	1	0	10	0	4
9	N109	max	-509.195	3	3802.337	21	1786.37	21	0	7	0	1	0	1
10		min	-3093.844	21	601.871	3	294.096	3	0	1	0	7	0	7
11	N112	max	2893.699	17	3559.358	17	1671.085	17	0	8	0	8	0	8
12		min	397.313	11	465.732	11	229.043	11	0	2	0	2	0	2
13	Totals:	max	6760.282	10	7685.188	16	6892.942	1						
14		min	-6760.283	4	2686.446	70	-6892.942	7						

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

Member	Shape	Code Check	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	phi*Pn...	phi*Pnt...	phi*Mn...	phi*Mn...	Cb	Eqn
1	M4	HSS4X4X4	.298	2.618	24	.079	2.618	y	13	10945...	139518	16.181	16.181	2...H1-1b
2	M14	HSS4X4X4	.225	2.618	22	.059	2.618	y	21	10945...	139518	16.181	16.181	2...H1-1b
3	M27	HSS4X4X4	.240	5.552	2	.057	2.618	y	17	10945...	139518	16.181	16.181	3...H1-1b
4	M40	HSS4X4X4	.237	13.239	5	.145	13.239	z	12	67000...	139518	16.181	16.181	2...H1-1b
5	M41	HSS4X4X4	.262	0	9	.160	0	z	3	67000...	139518	16.181	16.181	3...H1-1b
6	M42	HSS4X4X4	.213	13.239	5	.119	13.239	z	7	67000...	139518	16.181	16.181	2...H1-1b
7	MP5A	PIPE 2.0	.433	4.427	8	.072	4.516		7	13511...	32130	1.872	1.872	1...H1-1b
8	OVP	PIPE 2.0	.153	3.333	7	.091	3.333		7	26521...	32130	1.872	1.872	1...H1-1b
9	MP4A	PIPE 2.0	.217	4.427	2	.035	2.479		8	13511...	32130	1.872	1.872	1...H1-1b
10	MP3A	PIPE 2.0	.400	4.083	8	.147	4.083		11	17855...	32130	1.872	1.872	1...H1-1b
11	MP2A	PIPE 2.0	.183	3.896	8	.048	3.896		7	13511...	32130	1.872	1.872	2...H1-1b
12	MP1A	PIPE 2.0	.447	4.427	8	.147	4.427		11	13511...	32130	1.872	1.872	1...H1-1b
13	MP5C	PIPE 2.0	.448	4.427	3	.149	4.427		12	13511...	32130	1.872	1.872	1...H1-1b
14	MP4C	PIPE 2.0	.246	4.427	3	.048	4.427		2	13511...	32130	1.872	1.872	1...H1-1b
15	MP3C	PIPE 2.0	.745	4.083	3	.117	4.083		4	17855...	32130	1.872	1.872	2...H1-1b
16	MP2C	PIPE 2.0	.168	3.896	3	.036	2.391		3	13511...	32130	1.872	1.872	2...H1-1b
17	MP1C	PIPE 2.0	.448	4.427	3	.149	4.427		12	13511...	32130	1.872	1.872	1...H1-1b
18	MP5B	PIPE 2.0	.839	4.427	12	.121	4.516		11	13511...	32130	1.872	1.872	1...H1-1b
19	MP4B	PIPE 2.0	.218	4.427	12	.036	2.479		12	13511...	32130	1.872	1.872	1...H1-1b
20	MP3B	PIPE 2.0	.401	4.083	12	.148	4.083		9	17855...	32130	1.872	1.872	1...H1-1b



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name : 5000244948-VZW_MT_LO_H

Aug 3, 2023
 9:24 AM
 Checked By: _____

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

Member	Shape	Code Check	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	phi*Pn...	phi*Pnt...	phi*Mn...	phi*Mn...	Cb	Eqn	
21	MP2B	PIPE 2.0	.185	3.896	12	.047	3.896		11	13511...	32130	1.872	1.872	2...	H1-1b
22	MP1B	PIPE 2.0	.448	4.427	12	.149	4.427		9	13511...	32130	1.872	1.872	1...	H1-1b
23	M75	LL3x3x3x3	.144	3.795	13	.004	3.795	z	10	48017...	70632	5.543	3.751	1	H1-1b*
24	M77	LL3x3x3x3	.109	3.795	21	.003	0	z	12	48017...	70632	5.543	3.751	1	H1-1b*
25	M79	LL3x3x3x3	.102	3.795	17	.004	0	z	2	48017...	70632	5.543	3.751	1	H1-1b*

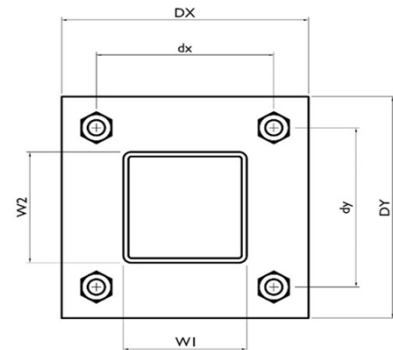
I. Mount-to-Tower Connection Check

Custom Orientation Required

Tower Connection Bolt Checks

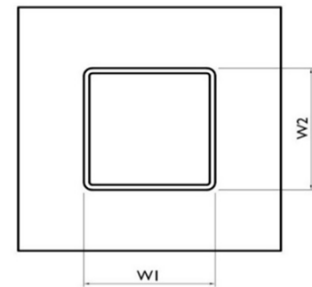
Bolt Orientation

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):	4.5
Required Shear Strength / bolt (kips):	0.5
Tensile Capacity / bolt (kips):	29.8
Shear Capacity / bolt (kips):	17.9
Bolt Overall Utilization:	15.2%



Tower Connection Baseplate Checks

Connecting Standoff Member Shape:	Rect Tube
Weld Stiffener Configuration:	No Stiffeners
Plate Width, D_x (in):	6
Plate Height, D_y (in):	10
W_1 (in):	4
W_2 (in):	4
Member Thickness (in):	0.25
Stiffener location a_1 (in):	
Stiffener location b_1 (in):	
Stiffener location a_2 (in):	
Stiffener location b_2 (in):	
F_y (ksi, plate):	36
Plate Thickness (in):	0.5
Length of Yield Line, L_y (in):	5.04
Bolt Eccentricity, e (in):	1.98
M_u (kip-in):	8.99
$\Phi * M_n$ (kip-in):	10.21
Plate Bending Utilization:	88.0%



Tower Connection Weld Checks

Weld Shape:
 Weld Stiffener Configuration:
 Stiffener Notch Length, n (in):
 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
0
6
4
4
16.00
21.33
21.33
85.33
2.25
2.25
1.20
8.35
14.4%

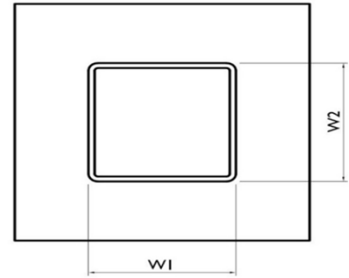


EXHIBIT 5





Non-Ionizing Electromagnetic Radiation (NIER) Study

Site Number:

411260

Site Name:

Middlefield CT

Location:

Middlefield, Connecticut

Tenants:

AT&T Mobility, T-Mobile, & Verizon Wireless

Prepared For:

American Tower, Inc.
Woburn, Massachusetts

August 27th, 2023

69023 P-405125

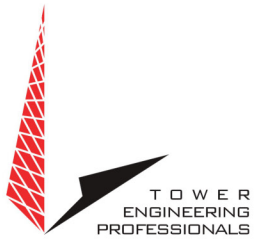
Prepared By:

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

Approved By:



08/31/23



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TOWER ENGINEERING PROFESSIONALS

RALIEGH, NORTH CAROLINA



Non-Ionizing Electromagnetic Radiation (NIER) Study

411260 Middlefield CT
Middlefield, 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.

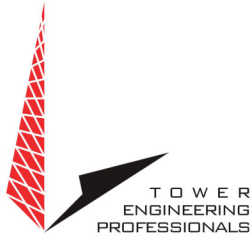
SITE AND FACILITY CONSIDERATIONS

Site 411260 Middlefield CT is located at 15 Minor Ln., in Middlefield, Connecticut at coordinates 41.535521, -72.732108. The support structure is a 152' monopole. An aerial view of the tower can be found in Appendix 1, Site Photos. The tenants are AT&T Mobility (AT&T), T-Mobile (T-Mobile), & Verizon Wireless (VZW). A table listing all antennae and effective radiated power (ERP) levels that were used in this study may be found in Appendix 2, Antenna Inventory.

POWER DENSITY CALCULATIONS

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

For the purpose of this study, a radius of 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.



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 411260 MIDDLEFIELD CT.RF NIER Study 8/14/23.
- FCC databases.
- Carrier standard configurations.
- Empirical data collected by TEP.

SITE MITIGATION & CONTROL

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

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

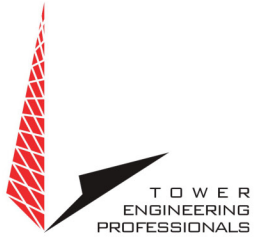
COMPLIANCE DETERMINATION

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

APPENDIX 1 Site Photos

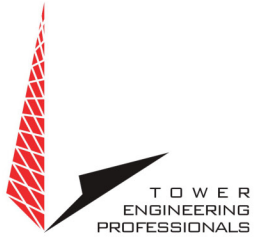


Aerial View of Site



Appendix 2.1 Antenna Inventory

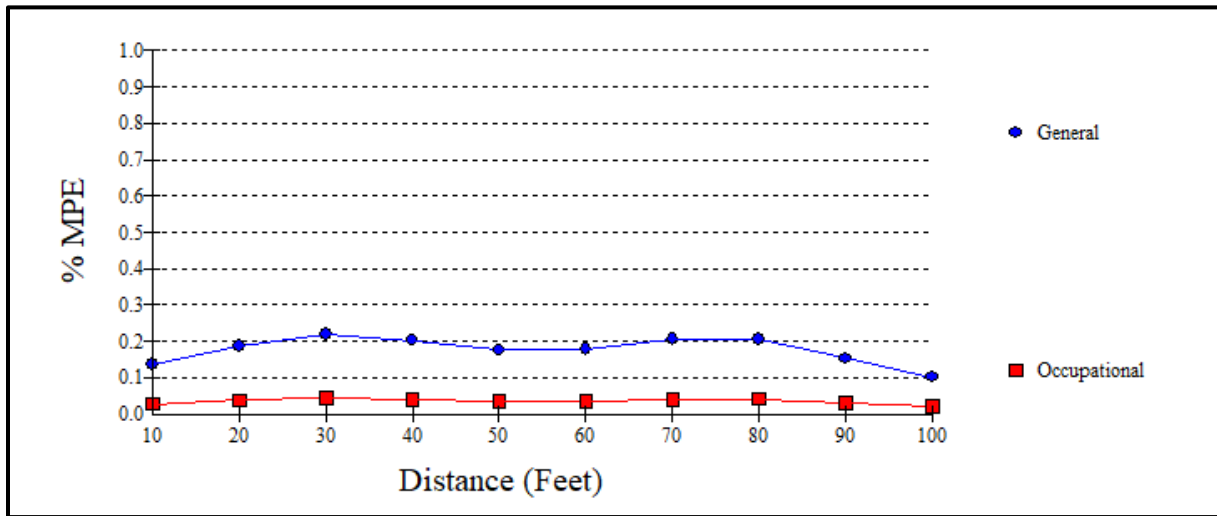
411260 Middlefield CT							
Antenna Inventory							
Antenna #	Carrier	Antenna Manufacturer	Antenna Model	Frequency Band (MHz)	Azmiuth (°)	Effective Radiated Power (W)	Radiation Center (ft)
1	Verizon	Commscope	NHH-45B-R2B	700/1900/2100	170	48332	150
2	Verizon	Commscope	NHH-45B-R2B	700/1900/2100	240	48332	150
3	Verizon	Commscope	NHH-45B-R2B	700/1900/2100	170	48332	150
4	Verizon	Commscope	NHH-45B-R2B	700/1900/2100	240	35085	150
5	Verizon	Commscope	NHH-65B-R2B	700/800/1900/2100	040	35085	150
6	Verizon	Commscope	NHH-65B-R2B	700/800/1900/2100	040	35085	150
7	Verizon	Samsung	MT6407-77A	3700/3800/3900	040	1219	150
8	Verizon	Samsung	MT6407-77A	3700/3800/3900	170	1219	150
9	Verizon	Samsung	MT6407-77A	3700/3800/3900	240	1219	150
10	Verizon	Antel	LPA-80063/6CF	800	040	17179	150
11	Verizon	Antel	LPA-80063/6CF	800	150	17179	150
12	Verizon	Antel	LPA-80063/6CF	800	240	17179	150
13	Verizon	Antel	LPA-80063/6CF	800	040	17179	150
14	Verizon	Antel	LPA-80063/6CF	800	150	17179	150
15	Verizon	Antel	LPA-80063/6CF	800	240	17179	150
16	T-Mobile	Commscope	VV-65-A-R1	1900/2100	060	25027	140
17	T-Mobile	Commscope	VV-65-A-R1	1900/2100	150	25027	140
18	T-Mobile	Commscope	VV-65-A-R1	1900/2100	230	25027	140



Appendix 2.2 Antenna Inventory

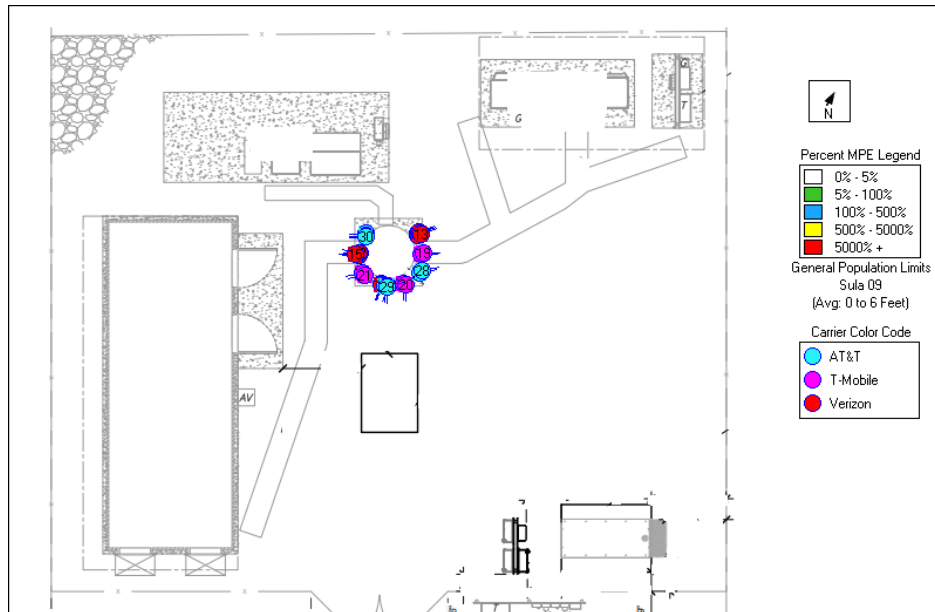
411260 Middlefield CT							
Antenna Inventory							
Antenna #	Carrier	Antenna Manufacturer	Antenna Model	Frequency Band (MHz)	Azimuth (°)	Effective Radiated Power (W)	Radiation Center (ft)
19	T-Mobile	Ericsson	Air 6419	2500/2600	060	20210	140
20	T-Mobile	Ericsson	Air 6419	2500/2600	150	20210	140
21	T-Mobile	Ericsson	Air 6419	2500/2600	230	20210	140
22	T-Mobile	RFS	APXVAARR24	600/700	060	10543	140
23	T-Mobile	RFS	APXVAARR24	600/700	150	10543	140
24	T-Mobile	RFS	APXVAARR24	600/700	230	10543	140
25	AT&T	Powerwave	7770	600/700/1800/1900	270	24400	130
26	AT&T	Powerwave	7770	600/700/1800/1900	028	24400	130
27	AT&T	Powerwave	7770	600/700/1800/1900	144	24400	130
28	AT&T	Powerwave	7770	600/700/1800/1900	244	24400	130
29	AT&T	Powerwave	7770	600/700/1800/1900	028	24400	130
30	AT&T	Powerwave	7770	600/700/1800/1900	144	24400	130
31	AT&T	KMW	AM-X-CD	600/700/1800/1900	244	49383	130
32	AT&T	KMW	AM-X-CD	600/700/1800/1900	028	49383	130
33	AT&T	KMW	AM-X-CD	600/700/1800/1900	144	49383	130

Appendix 3.1 MPE Limit Study



Maximum Power Density (@30'):	0.0014 mW/cm ²
General Population MPE (@30'):	0.2186%
Occupational MPE (@30'):	0.0437%

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.

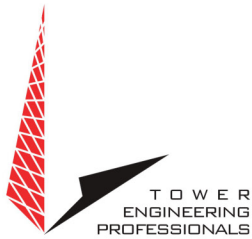
The FCC exposure limits are also based on data showing that the human body absorbs RF energy at some frequencies more efficiently than at others. The most restrictive limits occur in the frequency range of 30-300 MHz where whole-body absorption of RF energy by human beings is most efficient. At other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

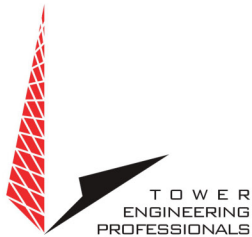
Compliance with the FCC limits on RF emissions are determined by spatially averaging a person's exposure over the projected area of an adult human body, that is approximately six-feet or two-meters, as defined in the ANSI/IEEE C95.1 standard. The MPE limits are specified as time-averaged exposure limits. 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.

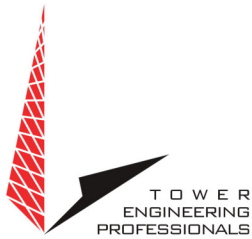
Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3 - 1.34	614	1.63	100*	30
1.34 - 30	824/f	2.19/f	180/F ²	30
30 -300	27.5	0.073	0.2	30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



DOCKET NO. 223 - Cellco Partnership d/b/a Verizon Wireless } Connecticut
application for a Certificate of Environmental Compatibility and } Siting
Public Need for the construction, maintenance and operation of a } Council
cellular telecommunications facility at 484 Meriden Road, }
Middlefield, Connecticut. }
} July 11, 2002

Decision and Order

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, operation, and maintenance of a telecommunications facility including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate either alone or cumulatively with other effects when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by General Statutes § 16-50k, be issued to Crown Atlantic Company LLC and Cellco Partnership d/b/a Verizon Wireless (Cellco) for the construction, maintenance and operation of a wireless telecommunications facility at the proposed site located at 484 Meriden Road in Middlefield, 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 Cellco, AT&T Wireless LLC, and other entities, both public and private, but such tower shall not exceed a height of 150 feet above ground level.
2. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. The D&M Plan shall be 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 wireless 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 the facility authorized herein is not operational within one year of the effective date of this Decision and Order or within one year 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 Middletown Press.

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

Robert Stanford

Crown Atlantic Company LLC

703 Hebron Avenue

Glastonbury, CT 06033

Kenneth C. Baldwin, Esq.

Joey Lee Miranda, Esq.

Robinson & Cole LLP

280 Trumbull Street

Hartford, CT 06103-3597

Intervenor

AT&T Wireless

Its Representative

Christopher B. Fisher

Cuddy & Feder & Worby

90 Maple Avenue

White Plains, NY 10601

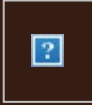
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EXHIBIT 7



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Ship To:	FIRST SELECTMAN 339 JACKSON HILL ROAD MIDDLEFIELD, CT 064551290 US
Number of Packages:	1
UPS Service:	UPS Ground
Package Weight:	1.0 LBS
Reference Number:	14519491

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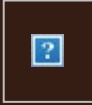
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Delivery Time: 1:09 PM

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Ship To:	CONSULTING TOWN PLANNER 405 MAIN ST COMMUNITY CENTER BLDG MIDDLEFIELD, CT 064551268 US
Number of Packages:	1
UPS Service:	UPS Ground
Package Weight:	1.0 LBS
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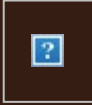
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Number of Packages:	1
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Package Weight:	1.0 LBS
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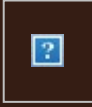
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Delivery Time: 3:01 PM

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UPS Service:	UPS Ground
Package Weight:	1.0 LBS
Reference Number:	14519491

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