

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: WATERFORD CT (ATC: 411183)
53 Dayton Road, Waterford CT 06385
N 41.37787185 // W -72.13936977**

Dear Ms. Bachman,

Cellco Partnership d/b/a Verizon Wireless currently maintains fifteen (15) antenna at the 132-ft level on the existing 180ft tower, located at 53 Dayton Road, Waterford, CT. The tower is owned by American Tower. Wireless proposed modification involves the installation of two (2) 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 Waterford'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 2, 2023, by American Tower Corp., and a structural mount analysis by Colliers Engineering and Design date July 24, 2023, and Non-Ionizing Electromagnetic Radiation (NIER) Study dated September 6, 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) 649 230
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: Rob Bruel – First Selectman – Chief Elected Official
Jonathan Mullen, Planning Director - as P&Z official
American Tower Corporation - as tower owner
Cohanzie Fire Company No 5 INC – as ground owner

EXHIBIT 1





VICINITY MAP



AMERICAN TOWER®

ATC SITE NAME: WATERFORD CT
 ATC SITE NUMBER: 411183
 VERIZON SITE NAME: WATERFORD CT
 VERIZON SITE NUMBER: 5000121802
 VERIZON FUZE PID: 17123901
 SITE ADDRESS: 53 DAYTON RD.
 WATERFORD, CT 06385



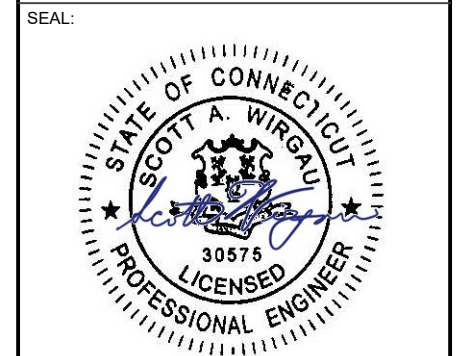
LOCATION MAP

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	8/18/2023
1	UPD COMP CODES	JLR	08/21/23
2	SA DESIGN CRITERIA	JLR	09/06/23

ATC SITE NUMBER:
 411183
 ATC SITE NAME:
 WATERFORD CT
 VERIZON SITE NAME:
 WATERFORD CT
 SITE ADDRESS:
 53 DAYTON RD.
 WATERFORD, CT 06385



VERIZON AMENDMENT DRAWINGS

COMPLIANCE CODE	PROJECT SUMMARY	PROJECT DESCRIPTION	SHEET INDEX				
ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNMENT AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES. 1. 2020 NFPA 70, NATIONAL ELECTRIC CODE (NEC) 2. 2022 CONNECTICUT STATE BUILDING CODE 3. 2021 INTERNATIONAL BUILDING CODE (IBC) DESIGN CRITERIA FROM TOWER STRUCTURAL ANALYSIS: BASIC WIND SPEED: 126 MPH (3-SECOND GUST) BASIC WIND SPEED W/ ICE: 50 MPH (3-SECOND GUST) W/ 1.00" RADIAL ICE CONCURRENT CODE(S): ANSITIA-222-H / 2021 IBC / 2022 CONNECTICUT STATE BUILDING CODE EXPOSURE CATEGORY: B RISK CATEGORY: II TOPO FACTOR PROCEDURE: METHOD 1 TOPOGRAPHIC CATEGORY: 1 SPECTRAL RESPONSE: S _s =0.19, S _z =0.05 SITE CLASS: D - STIFF SOIL - DEFAULT INFORMATION TAKEN FROM STRUCTURAL ANALYSIS COMPLETED BY A.T. ENGINEERING SERVICES LLC, DATED 08/02/2023.	<u>SITE ADDRESS:</u> 53 DAYTON RD. WATERFORD, CT 06385 COUNTY: NEW LONDON <u>GEOGRAPHIC COORDINATES:</u> LATITUDE: 41.37787185 LONGITUDE: -72.13936977 GROUND ELEVATION: 186' AMSL	THE PROPOSED PROJECT INCLUDES MODIFYING GROUND BASED AND TOWER MOUNTED EQUIPMENT AS INDICATED PER BELOW: INSTALL (1) BACK-TO-BACK MOUNTING BRACKET(S) AND (2) FILTER(S) EXISTING (15) ANTENNA(S), (6) RRRH(S), (2) OVP(S), AND (6) 1-5/8" COAX / (2) 1-5/8" HYBRIFLEX 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> COHANZIE VOLUNTEER FIRE SERVICE BENEFIT 53 DAYTON RD. WATERFORD, CT 06385	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 PHONE: (860) 665-6792 TELEPHONE COMPANY: UNKNOWN PHONE: N/A	<u>PROJECT LOCATION DIRECTIONS</u> TAKE I-91 S TOWARDS NEW HAVEN. STAY IN LEFT LANE, GET ON I-95 N TO EXIT 76 (LEFT HAND EXIT I-395 N), I-395 N TO EXIT 77 (RTE 85). TAKE RIGHT AT END OF THE RAMP (RTE 85 S). TAKE LEFT AT TRAFFIC LIGHT (DAYTON). FOLLOW TO FIRE HOUSE (COHANZIE FIRE CO. #5). GO IN PARKING LOT OF FIREHOUSE AND IN THE BACK LEFT THERE IS A CHAIN COMBO 4667. GO IN GATE TO TOWER COMBO 4667 AND UP STAIRS. WE ARE IN THE FIRST DOOR WITH THE CODE PAD 4667. THEN THE ROOM ON LEFT (CT KEY) GENERATOR COMPOUND COMBO IS 9687	<u>CONTRACTOR PMI REQUIREMENTS</u> PMI ACCESSED AT: HTTPS://PMI.VZWSMART.COM SMART TOOL VENDOR PROJECT NUMBER: 10207614 VZW LOCATION CODE (PSLC): 5000121802 ***PMI AND REQUIREMENTS ALSO EMBEDDED IN MOUNT ANALYSIS REPORT MOUNT MODIFICATION REQUIRED: NO VZW APPROVED SMART KIT VENDORS: REFER TO MOUNT MODIFICATION DRAWINGS PAGES FOR VZW SMART KIT APPROVED VENDORS					

verizon

ATC JOB NO:	14519462_GO
CUSTOMER ID:	WATERFORD CT
CUSTOMER #:	5000121802

TITLE SHEET

SHEET NUMBER:
G-001
 REVISION:
1



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GENERAL CONSTRUCTION NOTES:

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

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

SPECIAL CONSTRUCTION

ANTENNA INSTALLATION NOTES:

1. WORK INCLUDED:
 - A. ANTENNA AND COAXIAL 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. CONTRACTOR SHALL PROVIDE FOUR (4) SETS OF SWEEP TESTS USING ANRITZU-PACKARD 8713B RF SCALAR NETWORK ANALYZER. SUBMIT FREQUENCY DOMAIN REFLECTOMETER(FDR) TESTS RESULTS TO THE PROJECT MANAGER. SWEEP TESTS SHALL BE AS PER ATTACHED RFS "MINIMUM FIELD TESTING RECOMMENDED FOR ANTENNA AND HELIAX COAXIAL CABLE SYSTEMS" DATED 10/5/93. TESTING SHALL BE PERFORMED BY AN INDEPENDENT TESTING SERVICE AND BE BOUND AND SUBMITTED WITHIN ONE WEEK OF WORK COMPLETION.
 - F. INSTALL COAXIAL 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 CABLE THREE (3) FEET IN EXCESS OF

ENTRY PORT LOCATION UNLESS OTHERWISE STATED.

G. ANTENNA AND COAXIAL CABLE GROUNDING:

2. ALL EXTERIOR #6 GREEN GROUND WIRE "DAISY CHAIN" CONNECTIONS ARE TO BE WEATHER SEALED WITH RFS CONNECTORS/SPlice WEATHERPROOFING KIT #221213 OR EQUAL.
3. ALL COAXIAL CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL CABLE (NOT WITHIN BENDS)

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



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

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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	JLR	8/18/2023

ATC SITE NUMBER:
 411183
 ATC SITE NAME:
WATERFORD CT
 VERIZON SITE NAME:
WATERFORD CT
 SITE ADDRESS:
 53 DAYTON RD.
 WATERFORD, CT 06385

SEAL:



Digitally Signed: 2023-09-06



ATC JOB NO: 14519462_G0
 CUSTOMER ID: WATERFORD CT
 CUSTOMER #: 5000121802

GENERAL NOTES

SHEET NUMBER:
G-002
 REVISION:
0

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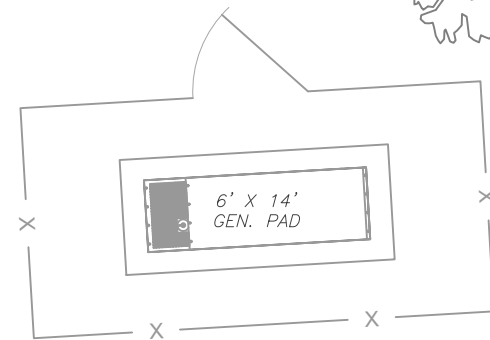
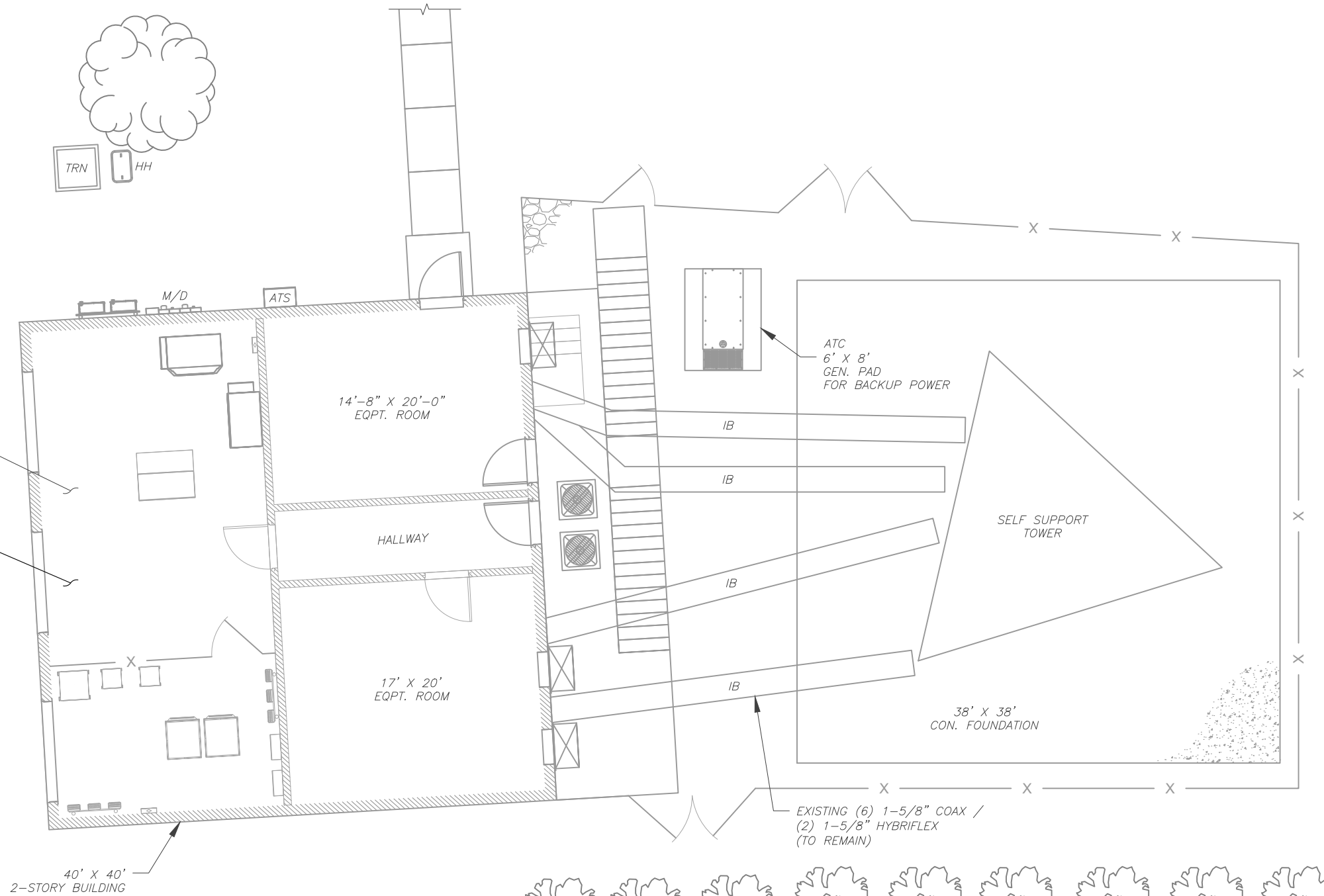
SITE PLAN NOTES:

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

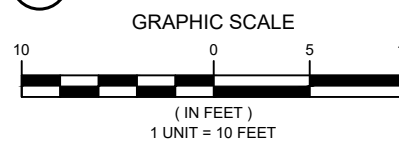
LEGEND	
⊗	GROUNDING TEST WELL
ATS	AUTOMATIC TRANSFER SWITCH
B	BOLLARD
CSC	CELL SITE CABINET
D	DISCONNECT
E	ELECTRICAL
F	FIBER
GEN	GENERATOR
G	GENERATOR RECEPTACLE
HH, V	HAND HOLE, VAULT
IB	ICE BRIDGE
K	KENTROX BOX
LC	LIGHTING CONTROL
M	METER
PB	PULL BOX
PP	POWER POLE
T	TELCO
TRN	TRANSFORMER
—	CHAINLINK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

VERIZON
432 SQ. FT.
GROUND SPACE
INSIDE BUILDING

EQUIPMENT TO BE
REMOVED/INSTALLED PER LATEST
VERIZON RFDS EQUIPMENT
SUMMARY



1 DETAILED SITE PLAN




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

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VERIZON SITE NAME:
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53 DAYTON RD.
WATERFORD, CT 06385



Digitally Signed: 2023-09-06

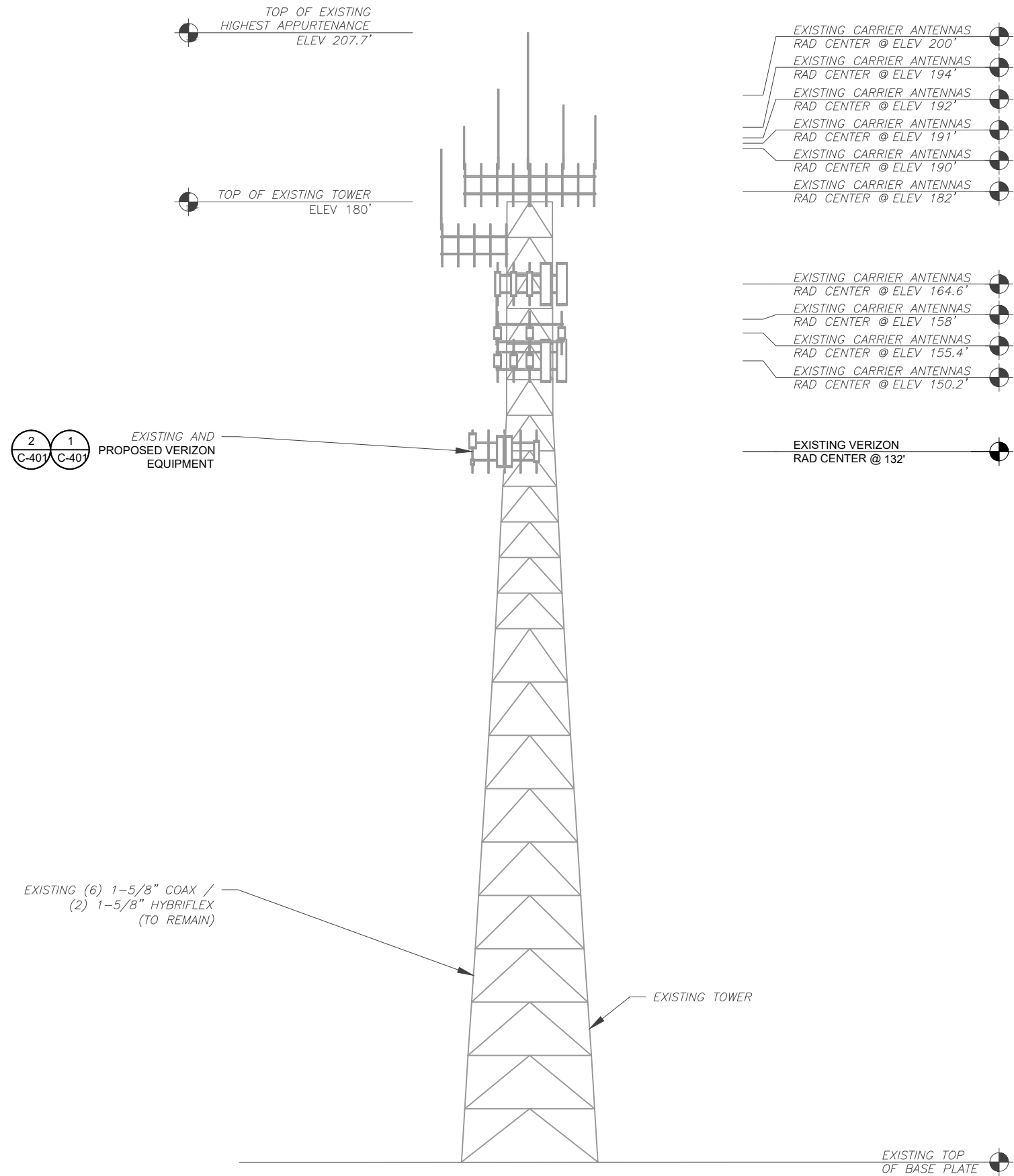


ATC JOB NO:	14519462_G0
CUSTOMER ID:	WATERFORD CT
CUSTOMER #:	5000121802

DETAILED SITE PLAN

SHEET NUMBER:	REVISION:
C-101	0

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PER MOUNT ANALYSIS COMPLETED BY COLLIERS ENGINEERING & DESIGN CT, P.C., DATED 07/24/2023, THE EXISTING MOUNT CAN ADEQUATELY SUPPORT THE PROPOSED LOADING.



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	8/18/2023

ATC SITE NUMBER:
411183
 ATC SITE NAME:
WATERFORD CT
 VERIZON SITE NAME:
WATERFORD CT
 SITE ADDRESS:
 53 DAYTON RD.
 WATERFORD, CT 06385



Digitally Signed: 2023-09-06

	
ATC JOB NO:	14519462_GO
CUSTOMER ID:	WATERFORD CT
CUSTOMER #:	5000121802

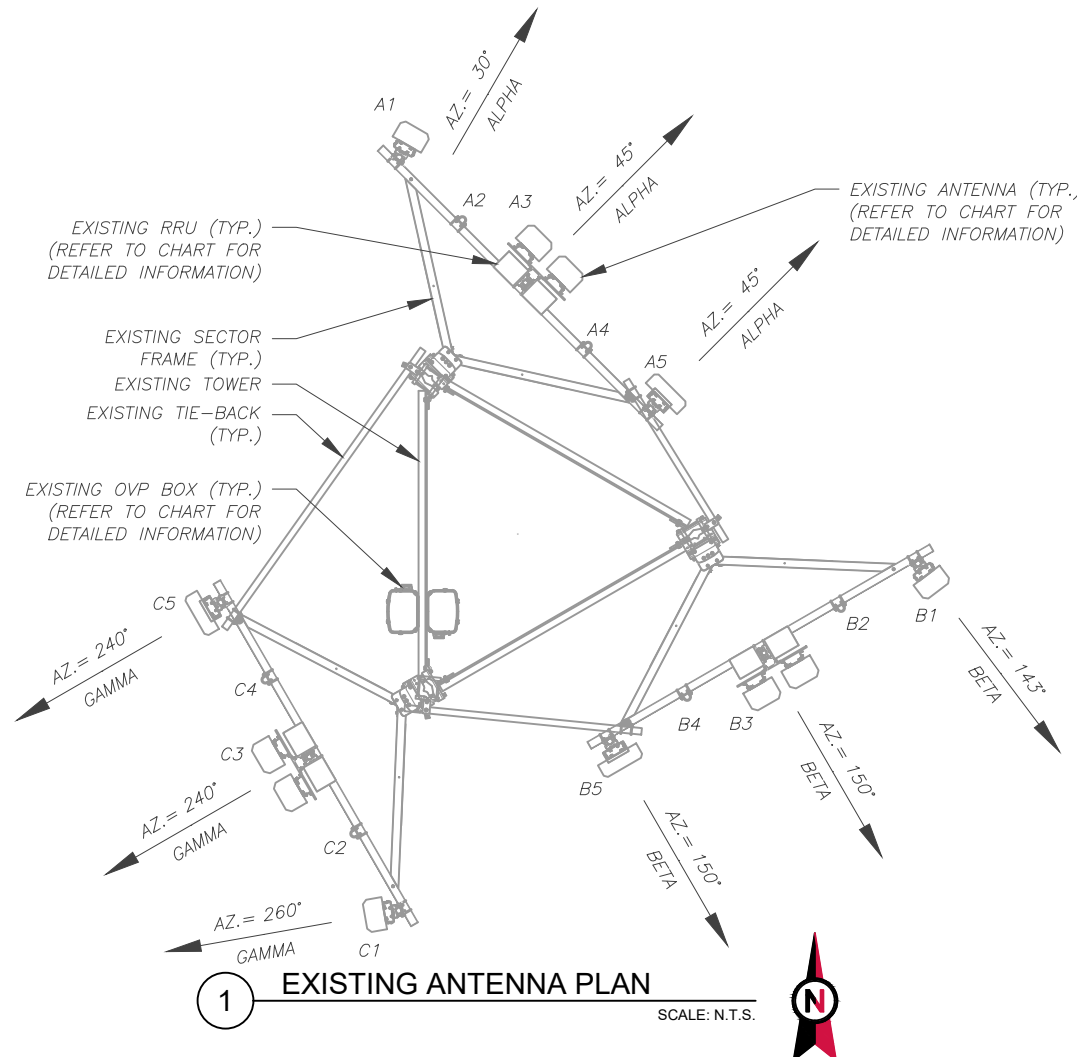
TOWER ELEVATION

SHEET NUMBER: C-201	REVISION: 0
-------------------------------	-----------------------

- 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.

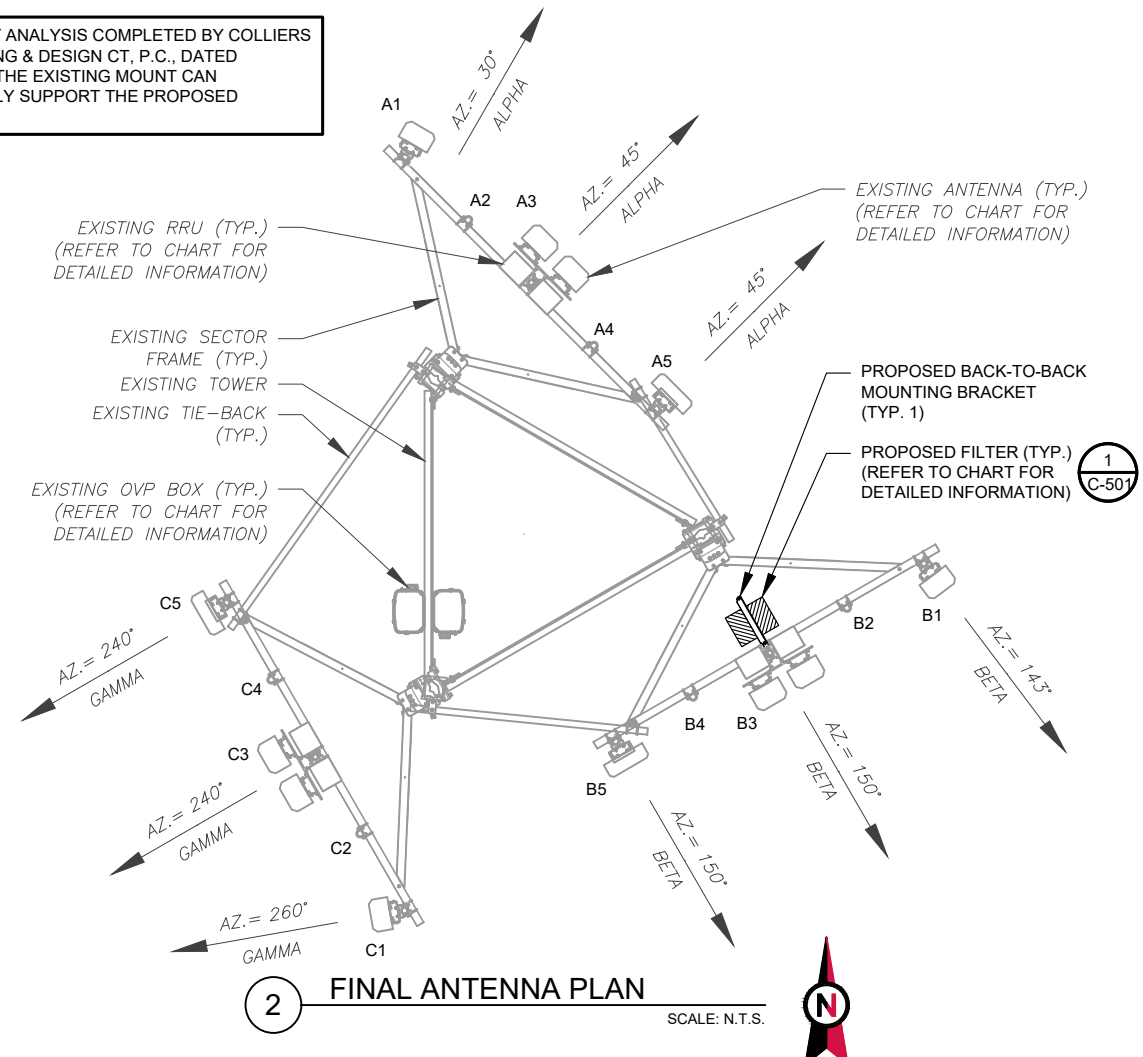
1 TOWER ELEVATION
 SCALE: N.T.S.

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

PER MOUNT ANALYSIS COMPLETED BY COLLIERS ENGINEERING & DESIGN CT, P.C., DATED 07/24/2023, THE EXISTING MOUNT CAN ADEQUATELY SUPPORT THE PROPOSED LOADING.



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

AMERICAN TOWER®
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3500 REGENCY PARKWAY
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CARY, NC 27518
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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	JLR	8/18/2023

ATC SITE NUMBER:
411183
ATC SITE NAME:
WATERFORD CT
VERIZON SITE NAME:
WATERFORD CT
SITE ADDRESS:
53 DAYTON RD.
WATERFORD, CT 06385

SEAL:

Digitally Signed: 2023-09-06

ATC JOB NO: 14519462_G0
CUSTOMER ID: WATERFORD CT
CUSTOMER #: 5000121802

ANTENNA INFORMATION & SCHEDULE

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

EXISTING ANTENNA SCHEDULE									
LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY		
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS	
ALPHA	132'	30°	A1	LNX-6512DS-A1M	-	RMN	-	-	
			A2	-	-	-	-		
		45°	A3	MX06FRO660-02	-	RMN	B2/B66A RRH-BR049	RMN	
			A4	MX06FRO660-02	-	RMN	B5/B13 RRH-BR04C	RMN	
			A5	MT6407-77A	-	RMN	-	-	
BETA	132'	143°	B1	LNX-6512DS-A1M	-	RMN	-	-	
			B2	-	-	-	-		
		150°	B3	MX06FRO660-02	-	RMN	B2/B66A RRH-BR049	RMN	
			B4	MX06FRO660-02	-	RMN	B5/B13 RRH-BR04C	RMN	
			B5	MT6407-77A	-	RMN	-	-	
GAMMA	132'	260°	C1	LNX-6512DS-A1M	-	RMN	-	-	
			C2	-	-	-	-		
		240°	C3	MX06FRO660-02	-	RMN	B2/B66A RRH-BR049	RMN	
			C4	MX06FRO660-02	-	RMN	B5/B13 RRH-BR04C	RMN	
			C5	MT6407-77A	-	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	132'	30°	A1	LNX-6512DS-A1M	-	RMN	-	-	
			A2	-	-	-	-		
		45°	A3	MX06FRO660-02	-	RMN	B2/B66A RRH-BR049	RMN	
			A4	MX06FRO660-02	-	RMN	B5/B13 RRH-BR04C	RMN	
			A5	MT6407-77A	-	RMN	-	-	
BETA	132'	143°	B1	LNX-6512DS-A1M	-	RMN	-	-	
			B2	-	-	-	-		
		150°	B3	MX06FRO660-02	-	RMN	B2/B66A RRH-BR049	RMN	
			B4	MX06FRO660-02	-	RMN	B5/B13 RRH-BR04C	RMN	
			B5	MT6407-77A	-	RMN	-	-	
GAMMA	132'	260°	C1	LNX-6512DS-A1M	-	RMN	-	-	
			C2	-	-	-	-		
		240°	C3	MX06FRO660-02	-	RMN	B2/B66A RRH-BR049	RMN	
			C4	MX06FRO660-02	-	RMN	B5/B13 RRH-BR04C	RMN	
			C5	MT6407-77A	-	RMN	-	-	

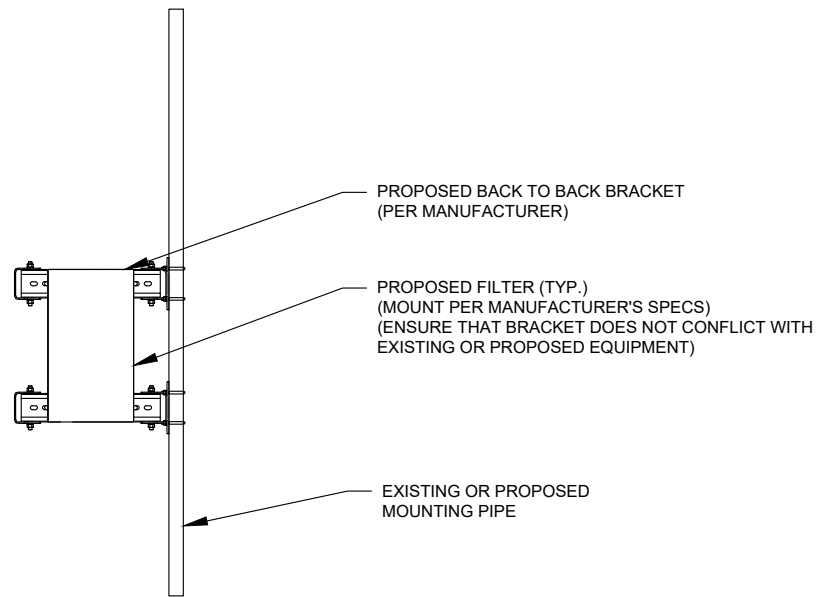
EXISTING FIBER DISTRIBUTION/OVP BOX		EXISTING CABLING SUMMARY	
MODEL NUMBER	STATUS	CABLE QTY, SIZE, TYPE	STATUS
(2) RRFDC-1064-PF-48	RMN	(6) 1-5/8" COAX / (2) 1-5/8" HYBRIFLEX	RMN

3 EQUIPMENT SCHEDULES

FINAL FIBER DISTRIBUTION / OVP BOX		FINAL CABLING SUMMARY	
MODEL NUMBER	STATUS	CABLE QTY, SIZE, TYPE	STATUS
(2) RRFDC-1064-PF-48	RMN	(6) 1-5/8" COAX / (2) 1-5/8" HYBRIFLEX	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 FILTER MOUNTING DETAIL - TYPICAL
SCALE: N.T.S.



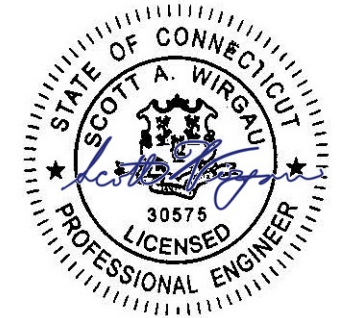
AMERICAN TOWER®
A.T. ENGINEERING SERVICES LLC
 3500 REGENCY PARKWAY
 SUITE 100
 CARY, NC 27518
 PHONE: (919) 468-0112
 PEC.0001553

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0	FOR CONSTRUCTION	JLR	8/18/2023

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 411183
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 VERIZON SITE NAME:
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 SITE ADDRESS:
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 WATERFORD, CT 06385

SEAL:



Digitally Signed: 2023-09-06

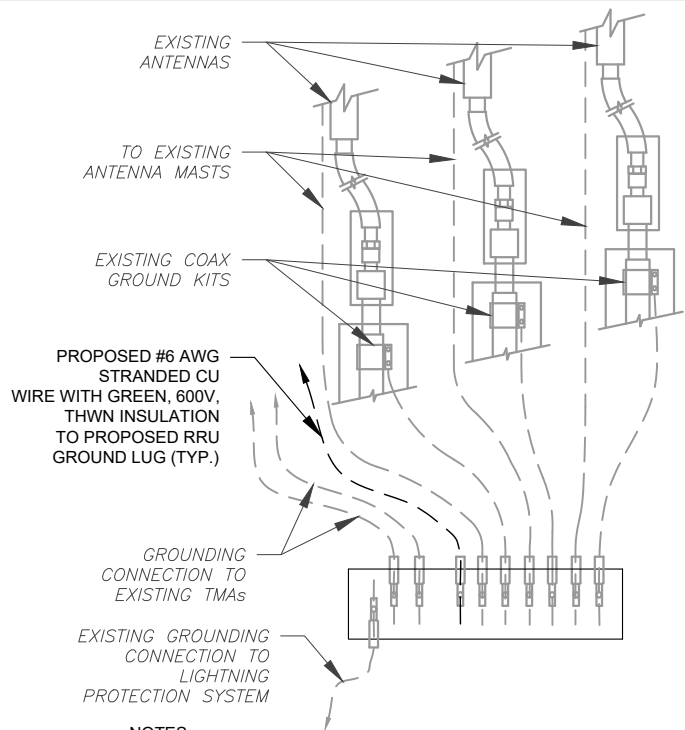


ATC JOB NO:	14519462_G0
CUSTOMER ID:	WATERFORD CT
CUSTOMER #:	5000121802

**CONSTRUCTION
 DETAILS**

SHEET NUMBER:	REVISION:
C-501	0

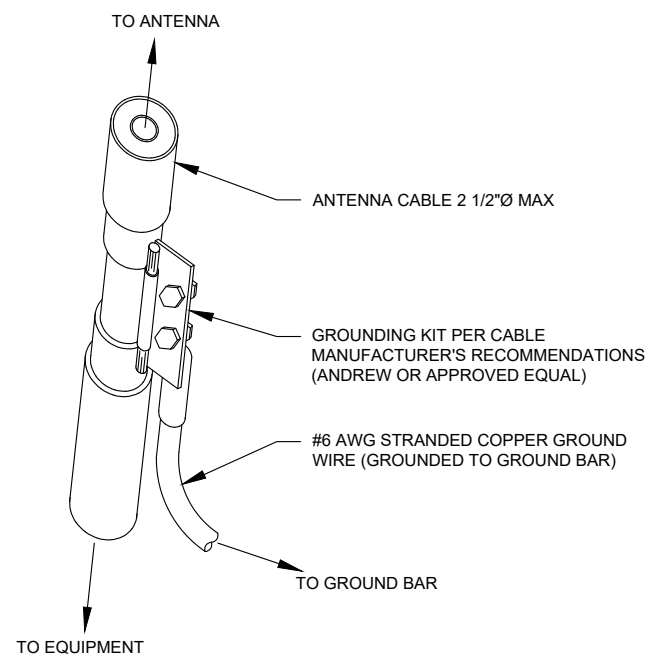
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NOTES:

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

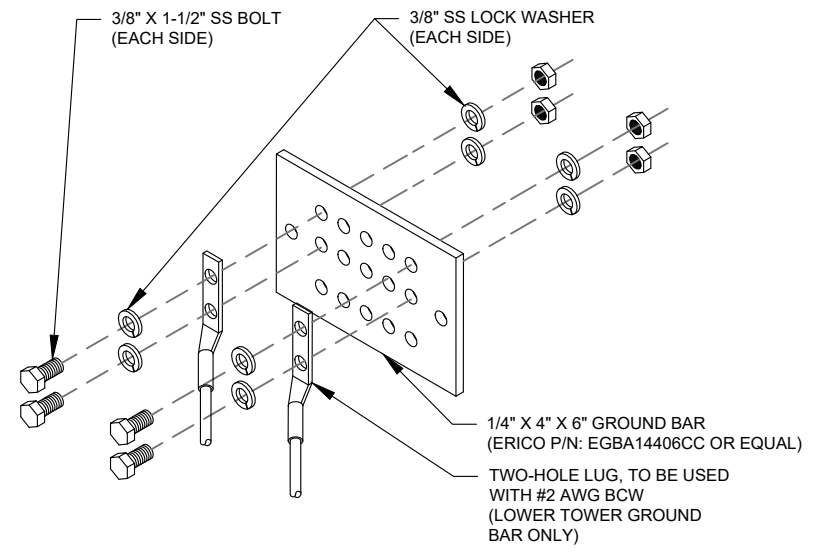
1 TYPICAL ANTENNA GROUNDING DIAGRAM
SCALE: N.T.S.



GROUND KIT NOTES:

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

2 CABLE GROUND KIT CONNECTION DETAIL
SCALE: N.T.S.



GROUND BAR NOTES:

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

3 TOWER GROUND BAR DETAIL
SCALE: N.T.S.



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A.T. ENGINEERING SERVICES LLC
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 SUITE 100
 CARY, NC 27518
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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	JLR	8/18/2023

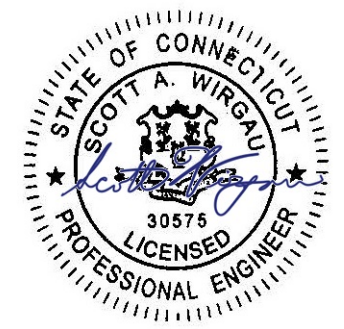
ATC SITE NUMBER:
411183

ATC SITE NAME:
WATERFORD CT

VERIZON SITE NAME:
WATERFORD CT

SITE ADDRESS:
53 DAYTON RD.
WATERFORD, CT 06385

SEAL:



Digitally Signed: 2023-09-06



ATC JOB NO:	14519462_G0
CUSTOMER ID:	WATERFORD CT
CUSTOMER #:	5000121802

GROUNDING DETAILS

SHEET NUMBER:	REVISION:
E-501	0

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

Mount Structural Analysis Report
 (3) 15.00-Ft Sector Frame

July 24, 2023
 Site ID: 5000121802-VZW / WATERFORD CT
 Page | 5

Requirements:

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

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 #: 10207614
 Colliers Engineering & Design CT, P.C. Project #: 23777188

July 24, 2023

Site Information

Site ID: 5000121802-VZW / WATERFORD CT
 Site Name: WATERFORD CT
 Carrier Name: Verizon Wireless
 Address: 53 Dayton Rd.
 Waterford, Connecticut 06385
 New London County
 Latitude: 41.377839°
 Longitude: -72.139347°

Structure Information

Tower Type: 180-Ft Self Support
 Mount Type: 15.00-Ft Sector Frame

FUZE ID # 17123901

Analysis Results

Sector Frame: 59.8% 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: Grant Walters



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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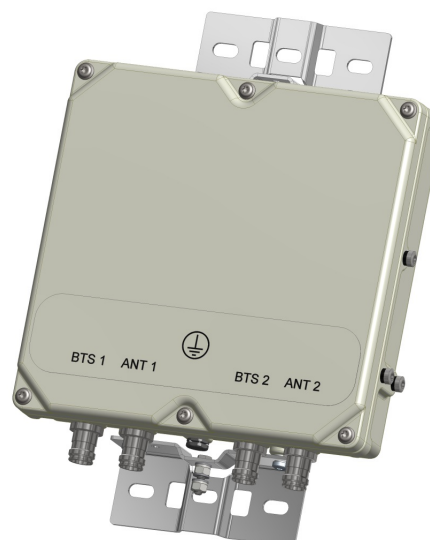
KA-6030

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

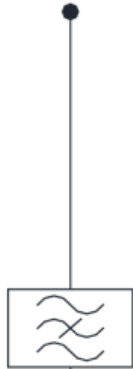
BAND NAME	700 PATH / 850 UPLINK PATH	850 DOWNLINK PATH
Passband	698 - 849MHz	869 - 891.5MHz
Insertion loss	0.1dB typical / 0.3dB maximum	0.5dB typical, 1.45dB maximum
Return loss	24dB typical, 18dB minimum	
Maximum input power (Per Port)	100W average	200W average and 66W per 5MHz
Rejection	53dB minimum @ 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

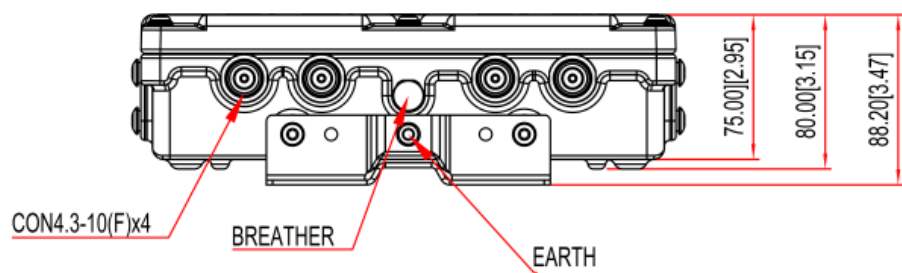
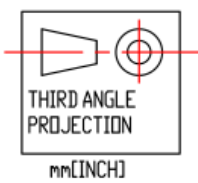
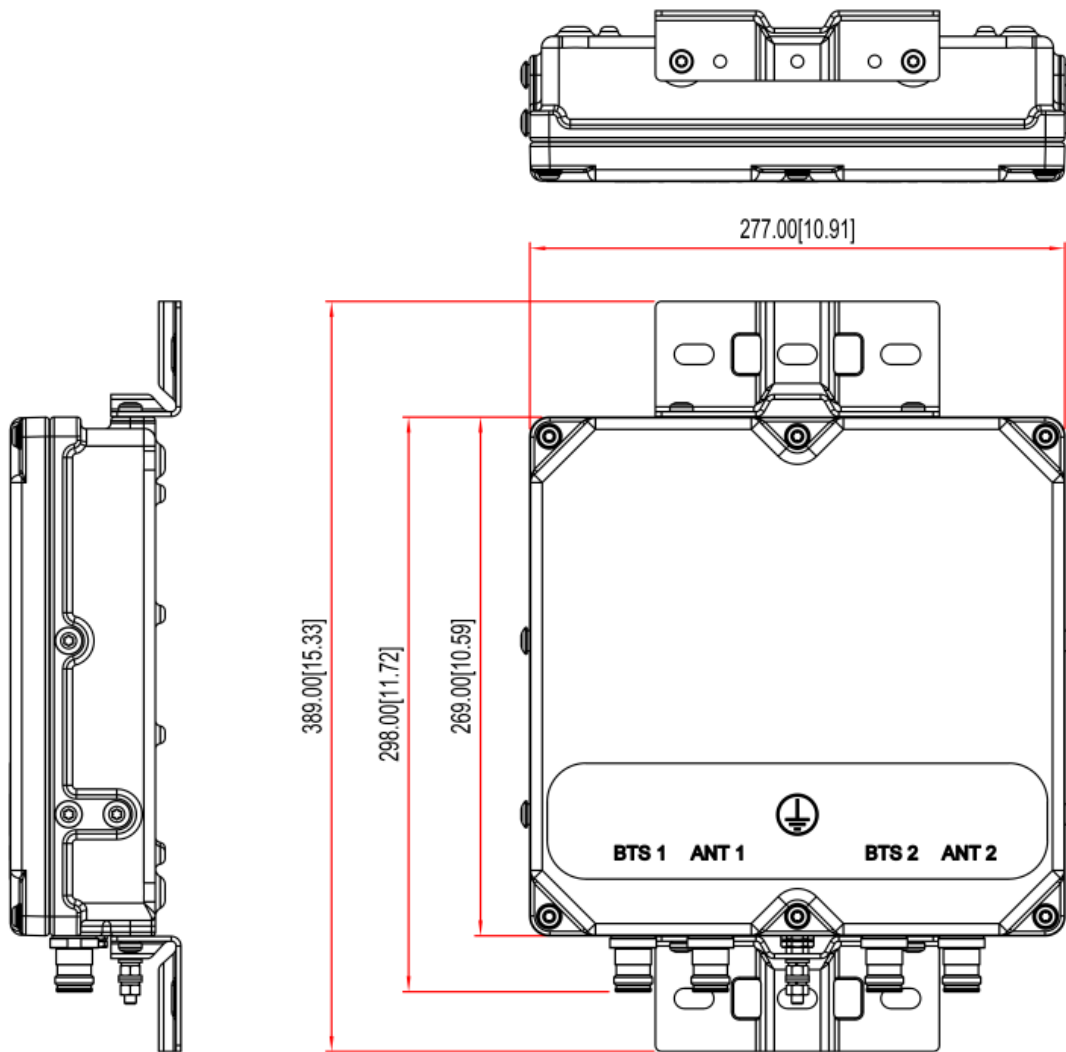


EXHIBIT 2



53 DAYTON ROAD

Location 53 DAYTON ROAD

Mblu 92 / 1844 /

Acct# 00158300

Owner COHANZIE FIRE COMPANY NO 5 INC

Assessment \$1,618,550

Appraisal \$2,312,200

PID 1844

Building Count 2

Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2022	\$1,211,200	\$1,101,000	\$2,312,200

Assessment			
Valuation Year	Improvements	Land	Total
2022	\$847,850	\$770,700	\$1,618,550

Parcel Addresses

Additional Addresses		
Address	City, State Zip	Type
53 DAYTON ROAD		Secondary

Owner of Record

Owner COHANZIE FIRE COMPANY NO 5 INC

Sale Price \$0

Co-Owner

Certificate

Book & Page 0095/0157

Sale Date 11/12/1952

Instrument 00

Ownership History

Ownership History					
Owner	Sale Price	Certificate	Book & Page	Instrument	Sale Date
COHANZIE FIRE COMPANY NO 5 INC	\$0		0095/0157	00	11/12/1952

Building Information

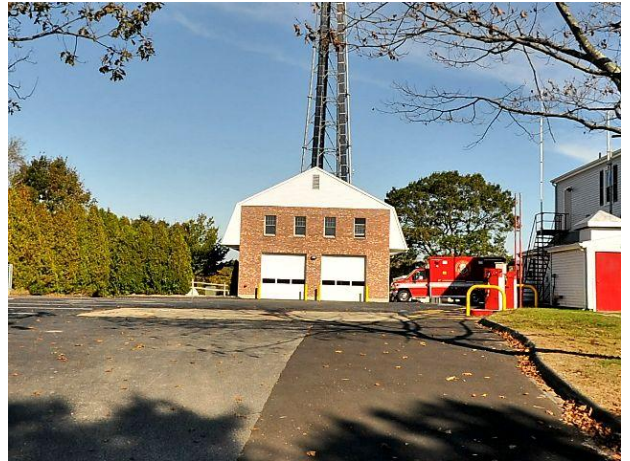
Building 1 : Section 1

Year Built: 1950
Living Area: 8,615
Replacement Cost: \$1,023,566
Building Percent Good: 68

Building Attributes

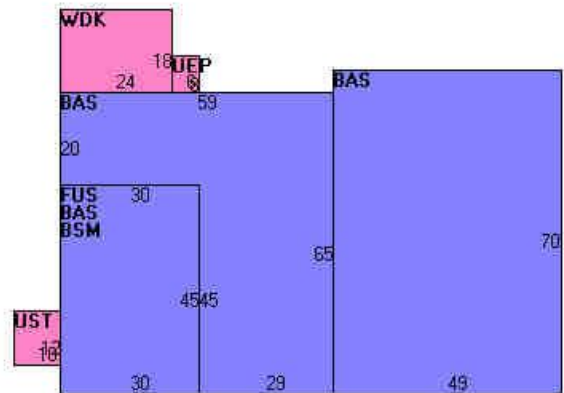
Field	Description
STYLE	Fire Station
MODEL	Comm/Ind
Grade	Above Ave
Stories:	1.00
Occupancy	1.00
Exterior Wall 1	Vinyl Siding
Exterior Wall 2	Brick Veneer
Roof Structure	Gambrel
Roof Cover	Asphalt
Interior Wall 1	Plaster
Interior Wall 2	Drywall
Interior Floor 1	Concrete
Interior Floor 2	Comp Tile
Heating Fuel	Oil
Heating Type	Hot Water
% Central Air	None
Foundation	Poured Conc
Bldg Use	Exempt Comm
Total Rooms	0
Total Bedrms	0
Total Fixtures	22
% Wet Sprinkler	100
% Dry Sprinkler	
1st Floor Use	
Heat/AC	Typical
Frame Type	MASONRY
Baths/Plumbing	AVERAGE
% Finished	60
Class	C
Wall Height	11.00

Building Photo



(<https://images.vgsi.com/photos/WaterfordCTPhotos/\00\00\88\39.JPG>)

Building Layout



(https://images.vgsi.com/photos/WaterfordCTPhotos//Sketches/1844_1844)

Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
BAS	First Floor	7,265	7,265
FUS	Finished Upper Story	1,350	1,350
BSM	Basement	1,350	0
UEP	Unfin. Enclosed Porch	48	0
UST	Unfinished Utility Area	120	0
WDK	Deck	432	0
		10,565	8,615

Building 2 : Section 1

Year Built: 1950
Living Area: 3,360

Replacement Cost: \$469,514

Building Percent Good: 62

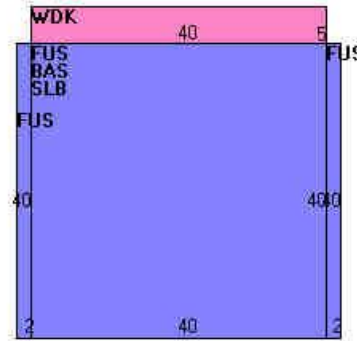
Building Attributes : Bldg 2 of 2	
Field	Description
STYLE	Fire Station
MODEL	Comm/Ind
Grade	Above Ave
Stories:	2.00
Occupancy	1.00
Exterior Wall 1	Vinyl Siding
Exterior Wall 2	Brick Veneer
Roof Structure	Gambrel
Roof Cover	Asphalt
Interior Wall 1	Plaster
Interior Wall 2	Drywall
Interior Floor 1	Concrete
Interior Floor 2	Comp Tile
Heating Fuel	Oil
Heating Type	Forced Hot Air
% Central Air	None
Foundation	Poured Conc
Bldg Use	Exempt Comm
Total Rooms	0
Total Bedrms	0
Total Fixtures	0
% Wet Sprinkler	
% Dry Sprinkler	
1st Floor Use	
Heat/AC	Typical
Frame Type	MASONRY
Baths/Plumbing	LIGHT
% Finished	0
Class	C
Wall Height	11.00

Building Photo



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

Building Layout



(https://images.vgsi.com/photos/WaterfordCTPhotos//Sketches/1844_2007)

Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
FUS	Finished Upper Story	1,760	1,760
BAS	First Floor	1,600	1,600
SLB	Slab	1,600	0
WDK	Deck	200	0
		5,160	3,360

Extra Features

Extra Features				Legend
Code	Description	Size	Value	Bldg #
FBM	Finished Bsmt	475.00 S.F.	\$6,460	1

Land

Land Use

Use Code 920
Description Exempt Comm
Zone R-40
Neighborhood 200
Alt Land Appr Category No

Land Line Valuation

Size (Acres) 9.91
Frontage 0
Depth 0
Assessed Value \$770,700
Appraised Value \$1,101,000

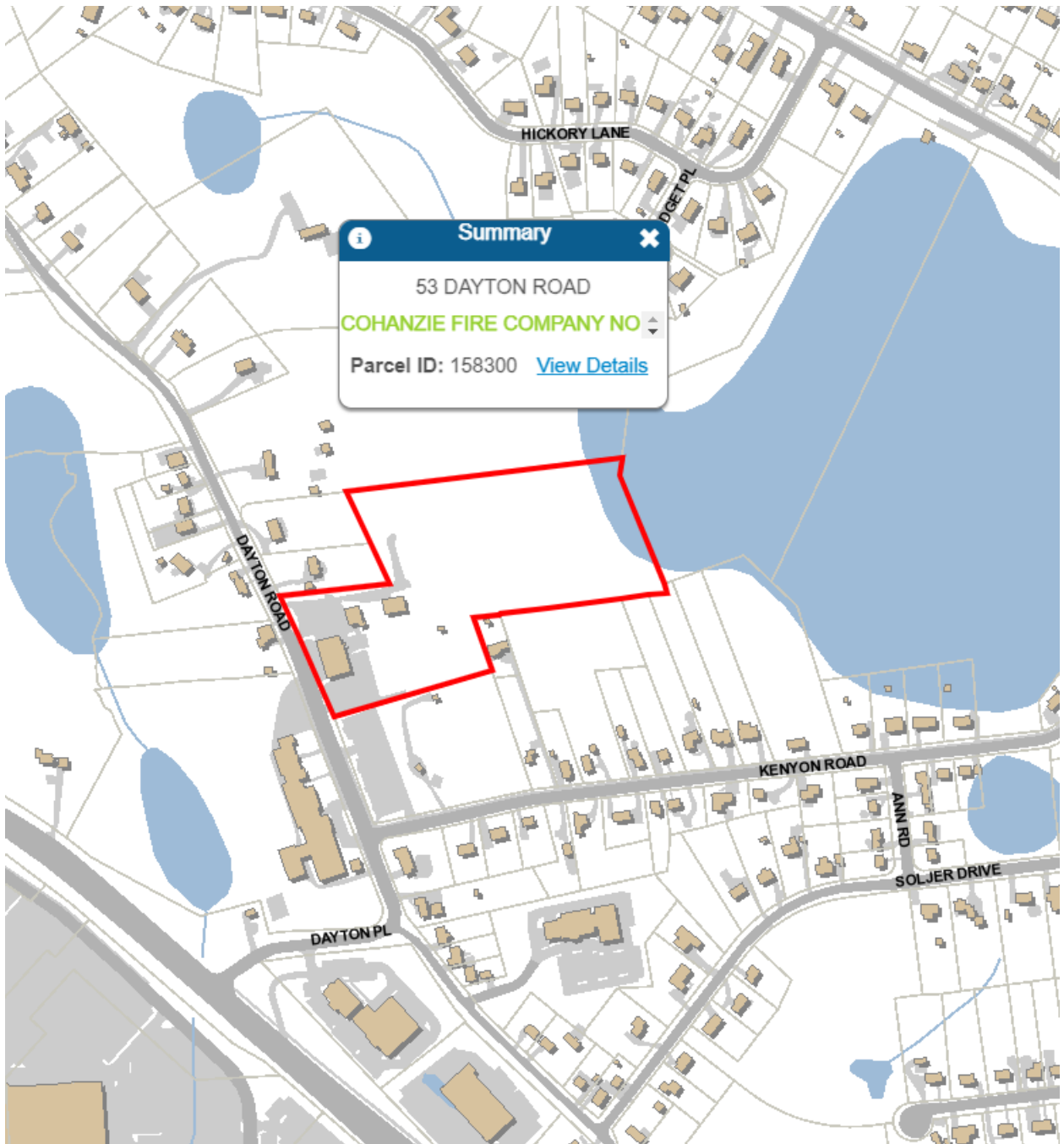
Outbuildings

Outbuildings						<u>Legend</u>
Code	Description	Sub Code	Sub Description	Size	Value	Bldg #
FN1	Fence			928.00 L.F.	\$8,350	2
FGR1	Garage	MS	Masonry	220.00 S.F.	\$3,850	1
LSUM	Lump Sum			120000.00 UNITS	\$90,000	2
PAV1	Paving	AS	Asphalt	39900.00 S.F.	\$74,810	1
SHD1	Shed	FR	Frame	800.00 S.F.	\$6,000	1
FN1	Fence			1408.00 L.F.	\$8,450	1
FOP	Porch			1600.00 S.F.	\$24,000	1
LSUM	Lump Sum			4320.00 UNITS	\$2,160	1

Valuation History

Appraisal			
Valuation Year	Improvements	Land	Total
2022	\$1,211,200	\$1,101,000	\$2,312,200
2021	\$981,150	\$926,590	\$1,907,740

Assessment			
Valuation Year	Improvements	Land	Total
2022	\$847,850	\$770,700	\$1,618,550
2021	\$686,800	\$648,610	\$1,335,410



Summary [Close]

53 DAYTON ROAD

COHANZIE FIRE COMPANY NO [Dropdown]

Parcel ID: 158300 [View Details](#)

HICKORY LANE

DAYTON PL

DAYTON ROAD

DAYTON PL

KENYON ROAD

ANN RD

SOLJER DRIVE

EXHIBIT 3





AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure : 180 ft Self Support Tower
ATC Asset Name : WATERFORD CT
ATC Asset Number : 411183
Engineering Number : 14519462_C3_03
Proposed Carrier : VERIZON WIRELESS
Carrier Site Name : WATERFORD CT
Carrier Site Number : 5000121802
Site Location : 53 Dayton Rd.
Waterford, CT 06385-4274
41.3779° N, 72.1394° W
County : New London
Date : August 2, 2023
Max Usage : 41%
Analysis Result : Pass

Created By:

Taylor Kellner
Structural Engineer I



COA: PEC.0001553

Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 180 ft Self Support tower to reflect the change in loading by VERIZON WIRELESS.

Supporting Documents

Tower:	Rohn Drawing #A982166, dated August 20, 1998
Foundation:	Rohn Drawing #A982167-1, dated August 20, 1998
Geotechnical:	Clarence Welti Site Name Cohenzie Fire Station; Waterford, CT, dated March 24, 1997

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:	126 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:	$S_s = 0.19$, $S_1 = 0.05$
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	Location	Result
Leg	38.0%	Member X	Section 6	Pass
Diagonal	41.0%	Member X	Section 1	Pass
Horizontal	37.0%	Bolt Bear	Section 7	Pass
Bolt	32.4%	-	Section 1	Pass
Foundation	30.7%	Down	Base	Pass
Foundation	31.4%	Moment	Base	Pass
Foundation	29.3%	Shear	Base	Pass
Foundation	30.8%	Uplift	Base	Pass

Maximum Reactions

Foundation	Moment (k-ft)	Axial (k)	Uplift (k)	Shear (k)
Self Support Base (Global)	6,139.9	77.4	-	56.1
Self Support Base (Local)	-	303.3	257.9	34.7

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

Foundation usages were calculated by comparing the maximum reactions from this analysis to the reactions from the original design drawings, factored by 1.35 per ANSI/TIA-222-H, Section 15.6.2

VERIZON WIRELESS Final Loading

Elev (ft)	Qty	Equipment	Lines
132.0	1	VZW Unused Reserve (16199.35 sqin)	(6) 1 5/8" Coax (2) 1 5/8" Hybriflex (1) Waveguide
	2	Kaelus KA-6030	
	2	Raycap RRFDC-1064-PF-48	
	3	Andrew LNX-6512DS-A1M	
	3	Sector Frame	
	3	Samsung B2/B66A RRH-BR049	
	3	Samsung B5/B13 RRH-BR04C	
	3	Samsung CBRS 64T64R MMU	
	3	Samsung MT6407-77A	
	3	Samsung Outdoor CBRS 20W RRH	
	6	JMA Wireless MX06FRO660-02	

Other Existing/Reserved Loading

Elev (ft)	Qty	Equipment	Lines	Carrier
188.7	2	16' Omni	-	TOWN OF WATERFORD POLICE DEPARTMENT
185.2	1	11' Omni	-	TOWN OF WATERFORD POLICE DEPARTMENT
184.9	1	10' Omni	-	TOWN OF WATERFORD POLICE DEPARTMENT
183.1	1	8' Omni	-	TOWN OF WATERFORD POLICE DEPARTMENT
180.0	1	Sector Frame	-	TOWN OF WATERFORD POLICE DEPT
	2	Side Arm		
179.3	1	dbSpectra ATS4TMA4-4	-	TOWN OF WATERFORD POLICE DEPARTMENT
171.8	3	15' Omni	-	TOWN OF WATERFORD POLICE DEPARTMENT
166.0	3	Ericsson AIR 21, 1.3M, B2A B4P (91.5 lbs)	(5) 1 1/4" Hybriflex Cable (12) 1 5/8" Coax (1) 1 5/8" Hybriflex	T-MOBILE
	3	Ericsson AIR32 B66Aa/B2a		
	3	Ericsson Air6449 B41		
	3	Ericsson RRUS 4415 B25		
	3	Ericsson Radio 4449 B71 B85A		
	3	RFS APXVAARR24_43-U-NA20		
	3	Sector Frame		
164.7	3	RFS ATMAA1412D-1A20	-	T-MOBILE
159.0	3	Ericsson AIR 6419 B77G	(3) 1 5/8" Coax	AT&T MOBILITY
157.0	1	Raycap DC9-48-60-24-8C-EV	(3) 0.41" (10.3mm) Fiber (4) 0.78" (19.7mm) 8 AWG 6 (2) 0.96" (24.3mm) Cable (3) 1 5/8" Coax (2) 2" conduit	AT&T MOBILITY
	2	Raycap DC6-48-60-18-8F (23.5" Height)		
	3	CCI DMP65R-BU8D		
	3	Ericsson RRUS 32 B2		
	3	Ericsson RRUS 32 B30		
	3	Ericsson RRUS 4426 B66		
	3	Ericsson RRUS 4449 B5, B12		
	3	Light Sector Frame		



Elev (ft)	Qty	Equipment	Lines	Carrier
152.9	3	Quintel QD8616-7	-	AT&T MOBILITY
151.9	1	10' Omni	-	TOWN OF WATERFORD POLICE DEPARTMENT
151.8	3	Ericsson RRUS 4478 B14	-	AT&T MOBILITY
151.7	3	Ericsson RRUS E2 B29	-	AT&T MOBILITY
151.0	1	Side Arm	(1) 0.92" (23.4mm) Cable	AT&T MOBILITY
150.2	3	Ericsson AIR 6449 B77D/ C-Band	-	AT&T MOBILITY
144.0	1	Commscope RDIDC-9181-PF-48	(1) 1.60" (40.6mm) Hybrid	DISH WIRELESS L.L.C.
	3	Fujitsu TA08025-B604		
	3	Fujitsu TA08025-B605		
	3	Light Sector Frame		
	3	JMA Wireless MX08FRO665-21		

(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.

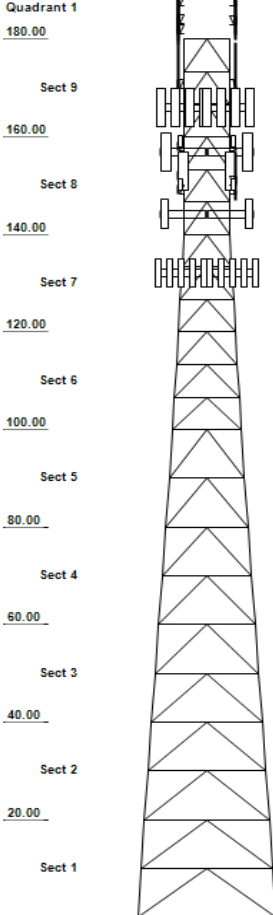
ANALYSIS PARAMETERS

Nominal Wind: 126 mph	Ice Wind: 50 mph w/ 1" ice	Service Wind: 60 mph
Risk Category: II	Exposure: B	S_s: 0.194 S_i: 0.053
Topo Category: 1	Topo Factor: Method 1	Topo Feature:
Structure Height: 180 ft	Base Elevation: 0 ft	Shape: Triangle
Base Width: 25.55 ft	Top Width: 8.5 ft	

TOWER SECTION PROPERTIES

Section	Leg Members	Diagonal Members	Horizontal Members
1-2	PX 50 ksi 12" DIA PIP	PST 50 ksi 3-1/2" DIA PIPE	PST 50 ksi 3" DIA PIPE
3-4	PX 50 ksi 10" DIA PIP	PX 50 ksi 3" DIA PIPE	PST 50 ksi 2-1/2" DIA PIPE
5	PSP 50 ksi 8.75" OD x	PX 50 ksi 3" DIA PIPE	PX 50 ksi 2" DIA PIPE
6	PX 50 ksi 6" DIA PIPE	PST 50 ksi 2-1/2" DIA PIPE	PST 50 ksi 2" DIA PIPE
7	PSP 50 ksi ROHN 5 EH	PST 50 ksi 2-1/2" DIA PIPE	PST 50 ksi 1-1/2" DIA PIPE
8	PST 50 ksi 4" DIA PIP	PST 50 ksi 2-1/2" DIA PIPE	PST 50 ksi 2" DIA PIPE
9	PST 50 ksi 3" DIA PIP	PST 50 ksi 2" DIA PIPE	PST 50 ksi 1-1/2" DIA PIPE

Tower Elevation View



SECONDARY BRACING MEMBERS

DISCRETE APPURTENANCE		LINEAR APPURTENANCE	
Elev (ft)	Description	Elev To (ft)	Description
188.7	(2) Generic 16' Omni	187.0	(8) 7/8" Coax
185.2	(1) Generic 11' Omni	180.0	(1) Waveguide
184.9	(1) Generic 10' Omni	166.0	(12) 1 5/8" Coax
183.1	(1) Generic 8' Omni	166.0	(5) 1 1/4" Hybriflex Cable
180.0	(2) Round Side Arm	166.0	(1) Waveguide
180.0	(1) Round Sector Frame	166.0	(1) 1 5/8" Hybriflex
179.3	(1) dbSpectra ATS4TMA4-4	159.0	(3) 1 5/8" Coax
171.8	(3) Generic 15' Omni	157.0	(4) 0.78" (19.7mm) 8 AWG 6
166.0	(3) RFS APXVAARR24_43-U-NA20	157.0	(3) 1 5/8" Coax
166.0	(3) Ericsson AIR32 B66Aa/B2a	157.0	(3) 0.41" (10.3mm) Fiber
166.0	(3) Ericsson Air6449 B41	157.0	(2) 2" conduit
166.0	(3) Ericsson AIR 21, 1.3M, B2A B4P	157.0	(2) 0.96" (24.3mm) Cable
166.0	(3) Ericsson RRUS 4415 B25	157.0	(1) Waveguide
166.0	(3) Ericsson Radio 4449 B71 B85A	152.0	(1) 1 5/8" Coax
166.0	(3) Round Sector Frame	151.0	(1) 0.92" (23.4mm) Cable
164.7	(3) RFS ATMAA1412D-1A20	144.0	(1) Waveguide
159.0	(3) Ericsson AIR 6419 B77G	144.0	(1) 1.60" (40.6mm) Hybrid
157.0	(3) CCI DMP65R-BU8D	132.0	(6) 1 5/8" Coax
157.0	(3) Generic Flat Light Sector Fram	132.0	(2) 1 5/8" Hybriflex
157.0	(3) Ericsson RRUS 32 B30	132.0	(1) Waveguide
157.0	(3) Ericsson RRUS 32 B2		
157.0	(3) Ericsson RRUS 4426 B66		
157.0	(3) Ericsson RRUS 4449 B5, B12		
157.0	(2) Raycap DC6-48-60-18-8F (23.5"		
157.0	(1) Raycap DC9-48-60-24-8C-EV		
152.9	(3) Quintel QD8616-7		
151.9	(1) Generic 10' Omni		
151.8	(3) Ericsson RRUS 4478 B14		
151.7	(3) Ericsson RRUS E2 B29		
151.0	(1) Generic Round Side Arm		
150.2	(3) Ericsson AIR 6449 B77D/ C-Band		
144.0	(3) Generic Flat Light Sector Fram		
144.0	(3) Fujitsu TA08025-B604		
144.0	(3) Fujitsu TA08025-B605		
144.0	(3) JMA Wireless MX08FRO665-21		
144.0	(1) CommScope RDIDC-9181-PF-48		
132.0	(6) JMA Wireless MX06FRO660-02		
132.0	(3) Andrew LNX-6512DS-A1M		
132.0	(3) Samsung Outdoor CBRS 20W RRH		
132.0	(3) Samsung MT6407-77A		
132.0	(3) Generic Round Sector Frame		
132.0	(3) Samsung B5/B13 RRH-BR04C		
132.0	(3) Samsung CBRS 64T64R MMU		
132.0	(3) Samsung B2/B66A RRH-BR049		
132.0	(2) Raycap RRFDC-1064-PF-48		
132.0	(2) Kaelus KA-6030		
132.0	(1) VZW Unused Reserve (16199.35 s		

GLOBAL BASE REACTIONS

	DL+WL	DL+WL+IL
Moment (k-ft):	6139.94	1935.14
Axial (k):	77.35	142.47
Shear (k):	56.13	18.26

INDIVIDUAL BASE REACTIONS

Comp (k):	303.27
Uplift (k):	257.94
Shear (k):	34.73

ASSET: 411183, WATERFORD CT
CUSTOMER: VERIZON WIRELESS

CODE: ANSI/TIA-222-H
PROJECT: 14519462_C3_03

ANALYSIS PARAMETERS

Location:	New London County, CT	Height:	180 ft
Type and Shape:	Self Support, Triangle	Base Elevation:	0.00 ft
Manufacturer:	Rohn	Bottom Face Width:	25.55 ft
Kd:	0.85	Top Face Width:	8.50 ft
Ke:	0.99	Anchor Bolt Detail Type:	c

ICE & WIND PARAMETERS

Exposure Category:	B	Design Wind Speed Without Ice:	126 mph
Risk Category:	II	Design Wind Speed with Ice:	50 mph
Topographic Factor Procedure:	Method 1	Operational Windspeed:	60 mph
Topographic Category:	Flat	Design Ice Thickness:	1.00 in
Crest Height:	0 ft	HMSL:	186 ft

SEISMIC PARAMETERS

Analysis Method:	Equivalent Lateral Force Method		
Site Class:	D - Stiff Soil	Period Based on Rayleigh Method (sec):	0.65
T_L (sec):	6	P:	1.3
S_s:	0.194	S₁:	0.053
F_a:	1.600	F_v:	2.400
S_{ds}:	0.207	S_{d1}:	0.085
		C_s:	0.043
		C_{s, Max}:	0.043
		C_{s, Min}:	0.030

LOAD CASES

1.2D + 1.0W Normal	1.2D + 1.0W Normal - 126 mph Wind with No Ice
1.2D + 1.0W 60°	1.2D + 1.0W 60° - 126 mph Wind with No Ice
1.2D + 1.0W 90°	1.2D + 1.0W 90° - 126 mph Wind with No Ice
0.9D + 1.0W Normal	0.9D + 1.0W Normal - 126 mph Wind with No Ice (Reduced DL)
0.9D + 1.0W 60°	0.9D + 1.0W 60° - 126 mph Wind with No Ice (Reduced DL)
0.9D + 1.0W 90°	0.9D + 1.0W 90° - 126 mph Wind with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi Normal	1.2D + 1.0Di + 1.0Wi Normal - 50 mph Wind with 1" Radial Ice
1.2D + 1.0Di + 1.0Wi 60°	1.2D + 1.0Di + 1.0Wi 60° - 50 mph Wind with 1" Radial Ice
1.2D + 1.0Di + 1.0Wi 90°	1.2D + 1.0Di + 1.0Wi 90° - 50 mph Wind with 1" Radial Ice
1.2D + 1.0Ev + 1.0Eh Normal	1.2D + 1.0Ev + 1.0Eh Normal - Seismic
1.2D + 1.0Ev + 1.0Eh 60°	1.2D + 1.0Ev + 1.0Eh 60° - Seismic
1.2D + 1.0Ev + 1.0Eh 90°	1.2D + 1.0Ev + 1.0Eh 90° - Seismic
0.9D - 1.0Ev + 1.0Eh Normal	0.9D - 1.0Ev + 1.0Eh Normal - Seismic (Reduced DL)
0.9D - 1.0Ev + 1.0Eh 60°	0.9D - 1.0Ev + 1.0Eh 60° - Seismic (Reduced DL)
0.9D - 1.0Ev + 1.0Eh 90°	0.9D - 1.0Ev + 1.0Eh 90° - Seismic (Reduced DL)
1.0D + 1.0W Service Normal	1.0D + 1.0W Service Normal - 60 mph Wind with No Ice
1.0D + 1.0W Service 60°	1.0D + 1.0W Service 60° - 60 mph Wind with No Ice
1.0D + 1.0W Service 90°	1.0D + 1.0W Service 90° - 60 mph Wind with No Ice

TOWER LOADING – DISCRETE APPURTENANCE

Discrete Appurtenance Properties for LC: 1.2D + 1.0W

Elev (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K _a	Orient. Factor	Vert. Ecc. (ft)	M _u (lb-ft)	Q _z (psf)	F _a (WL) (lb)	P _a (DL) (lb)
188.7	Generic 16' Omni	2	55	4.8	16.0	3.0	3.0	0.90	1.00	0.0	0.00	40.66	299	132
185.2	Generic 11' Omni	1	40	3.3	11.0	3.0	3.0	0.90	1.00	0.0	0.00	40.44	102	48
184.9	Generic 10' Omni	1	25	3.0	10.0	3.0	3.0	0.90	1.00	0.0	0.00	40.42	93	30
183.1	Generic 8' Omni	1	25	2.4	8.0	3.0	3.0	0.90	1.00	0.0	0.00	40.31	74	30
180.0	Round Side Arm	2	150	5.2	0.0	0.0	0.0	0.90	0.90	0.0	0.00	40.11	287	360
180.0	Round Sector Frame	1	300	14.4	0.0	0.0	0.0	1.00	1.00	0.0	0.00	40.11	491	360
179.3	dbSpectra ATS4TMA4-4	1	50	2.3	2.6	13.3	11.5	0.90	1.00	0.0	0.00	40.07	71	60
171.8	Generic 15' Omni	3	40	4.5	15.0	3.0	3.0	1.00	1.00	0.0	0.00	39.58	454	144
166.0	Ericsson Radio 4449 B71 B85A	3	75	1.6	1.3	13.2	10.5	0.80	0.50	0.0	0.00	39.19	66	270
166.0	Ericsson RRUS 4415 B25	3	46	1.8	1.4	13.4	5.9	0.80	0.50	0.0	0.00	39.19	74	166
166.0	Ericsson Air6449 B41	3	104	5.7	2.8	20.6	8.6	0.80	0.63	0.0	0.00	39.19	286	374
166.0	Ericsson AIR 21, 1.3M, B2A B4P	3	92	6.0	4.7	12.0	7.8	0.80	0.70	0.0	0.00	39.19	338	329
166.0	Ericsson AIR32 B66Aa/B2a	3	132	6.5	4.7	12.9	8.7	0.80	0.71	0.0	0.00	39.19	370	476
166.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.00	39.19	810	1080
166.0	RFS APXVAARR24_43-U-NA20	3	128	20.2	8.0	24.0	8.7	0.80	0.63	0.0	0.00	39.19	1020	460
164.7	RFS ATMAA1412D-1A20	3	13	1.0	1.0	10.0	4.0	0.80	0.50	0.0	0.00	39.11	40	47
159.0	Ericsson AIR 6419 B77G	3	66	3.8	2.4	16.1	7.9	0.80	0.65	0.0	0.00	38.71	195	238
157.0	Raycap DC6-48-60-18-8F (23.5"	2	20	1.3	2.0	9.7	9.7	0.80	0.50	0.0	0.00	38.58	33	48
157.0	Ericsson RRUS 4426 B66	3	48	1.6	1.3	13.2	5.8	0.80	0.50	0.0	0.00	38.58	65	174
157.0	Ericsson RRUS 4449 B5, B12	3	71	2.0	1.5	13.2	9.4	0.80	0.50	0.0	0.00	38.58	77	256
157.0	Ericsson RRUS 32 B30	3	60	2.7	2.3	12.1	7.0	0.80	0.67	0.0	0.00	38.58	145	216
157.0	Ericsson RRUS 32 B2	3	53	2.7	2.3	12.1	7.0	0.80	0.67	2.0	290.29	38.71	145	191
157.0	Raycap DC9-48-60-24-8C-EV	1	16	4.8	2.6	18.3	10.2	0.80	0.50	0.0	0.00	38.58	63	19
157.0	CCI DMP65R-BU8D	3	96	17.9	8.0	20.7	7.7	0.80	0.63	0.0	0.00	38.58	886	345
157.0	Generic Flat Light Sector Fram	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.00	38.58	990	1440
152.9	Quintel QD8616-7	3	150	18.8	8.0	22.0	9.6	0.80	0.65	0.0	0.00	38.28	955	540
151.9	Generic 10' Omni	1	25	3.0	10.0	3.0	3.0	1.00	1.00	0.0	0.00	38.21	97	30
151.8	Ericsson RRUS 4478 B14	3	59	2.0	1.5	13.4	8.3	0.80	0.67	0.0	0.00	38.21	106	214
151.7	Ericsson RRUS E2 B29	3	60	3.1	1.7	18.5	7.5	0.80	0.62	0.0	0.00	38.20	152	216
151.0	Generic Round Side Arm	1	188	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.00	38.15	169	225
150.2	Ericsson AIR 6449 B77D/ C-Band	3	82	4.0	2.5	15.9	10.6	0.80	0.70	0.0	0.00	38.09	219	294
144.0	Commscope RDIDC-9181-PF-48	1	22	1.9	1.3	14.0	8.0	0.80	1.00	0.0	0.00	37.63	48	26
144.0	Fujitsu TA08025-B604	3	64	2.0	1.3	15.0	7.9	0.80	0.50	0.0	0.00	37.63	75	230
144.0	Fujitsu TA08025-B605	3	75	2.0	1.3	15.0	9.1	0.80	0.50	0.0	0.00	37.63	75	270
144.0	JMA Wireless MX08FRO665-21	3	65	12.5	6.0	20.0	8.0	0.80	0.64	0.0	0.00	37.63	614	232
144.0	Generic Flat Light Sector Frame	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.00	37.63	966	1440
132.0	Samsung Outdoor CBRS 20W RRH	3	19	0.9	1.0	8.5	4.1	0.80	0.50	0.0	0.00	36.71	32	67
132.0	Kaelus KA-6030	2	18	1.0	0.9	10.9	3.2	0.80	0.50	0.0	0.00	36.71	24	42
132.0	Raycap RRFDC-1064-PF-48	2	14	1.2	1.1	10.2	8.2	0.80	0.50	0.0	0.00	36.71	29	34
132.0	Samsung B5/B13 RRH-BR04C	3	70	1.9	1.3	15.0	8.1	0.80	0.50	0.0	0.00	36.71	70	253
132.0	Samsung B2/B66A RRH-BR049	3	84	1.9	1.3	15.0	10.0	0.80	0.50	0.0	0.00	36.71	70	304
132.0	Samsung CBRS 64T64R MMU	3	75	4.5	2.4	18.8	4.8	0.80	0.58	0.0	0.00	36.71	195	270
132.0	Samsung MT6407-77A	3	82	4.7	2.9	16.1	5.5	0.80	0.61	0.0	0.00	36.71	215	294
132.0	Andrew LNX-6512DS-A1M	3	30	5.1	4.0	11.9	7.1	0.80	0.69	0.0	0.00	36.71	263	109
132.0	JMA Wireless MX06FRO660-02	6	46	9.9	5.9	15.4	10.7	0.80	0.71	0.0	0.00	36.71	1050	331
132.0	Generic Round Sector Frame	3	700	14.4	0.0	0.0	0.0	0.75	0.67	0.0	0.00	36.71	677	2520
132.0	VZW Unused Reserve (16199.35 s	1	1081	112.5	0.0	0.0	0.0	0.80	0.90	0.0	0.00	36.71	2527	1297
Totals		119	13,775	857.2									16,102	16,530

Discrete Appurtenance Properties for LC: 0.9D + 1.0W

Elev (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K _a	Orient. Factor	Vert. Ecc. (ft)	M _u (lb-ft)	Q _z (psf)	F _a (WL) (lb)	P _a (DL) (lb)
188.7	Generic 16' Omni	2	55	4.8	16.0	3.0	3.0	0.90	1.00	0.0	0.00	40.66	299	99
185.2	Generic 11' Omni	1	40	3.3	11.0	3.0	3.0	0.90	1.00	0.0	0.00	40.44	102	36
184.9	Generic 10' Omni	1	25	3.0	10.0	3.0	3.0	0.90	1.00	0.0	0.00	40.42	93	22
183.1	Generic 8' Omni	1	25	2.4	8.0	3.0	3.0	0.90	1.00	0.0	0.00	40.31	74	22
180.0	Round Side Arm	2	150	5.2	0.0	0.0	0.0	0.90	0.90	0.0	0.00	40.11	287	270
180.0	Round Sector Frame	1	300	14.4	0.0	0.0	0.0	1.00	1.00	0.0	0.00	40.11	491	270
179.3	dbSpectra ATS4TMA4-4	1	50	2.3	2.6	13.3	11.5	0.90	1.00	0.0	0.00	40.07	71	45
171.8	Generic 15' Omni	3	40	4.5	15.0	3.0	3.0	1.00	1.00	0.0	0.00	39.58	454	108
166.0	Ericsson Radio 4449 B71 B85A	3	75	1.6	1.3	13.2	10.5	0.80	0.50	0.0	0.00	39.19	66	202
166.0	Ericsson RRUS 4415 B25	3	46	1.8	1.4	13.4	5.9	0.80	0.50	0.0	0.00	39.19	74	124
166.0	Ericsson Air6449 B41	3	104	5.7	2.8	20.6	8.6	0.80	0.63	0.0	0.00	39.19	286	281
166.0	Ericsson AIR 21, 1.3M, B2A B4P	3	92	6.0	4.7	12.0	7.8	0.80	0.70	0.0	0.00	39.19	338	247
166.0	Ericsson AIR32 B66Aa/B2a	3	132	6.5	4.7	12.9	8.7	0.80	0.71	0.0	0.00	39.19	370	357
166.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.00	39.19	810	810
166.0	RFS APXVAARR24_43-U-NA20	3	128	20.2	8.0	24.0	8.7	0.80	0.63	0.0	0.00	39.19	1020	345
164.7	RFS ATMAA1412D-1A20	3	13	1.0	1.0	10.0	4.0	0.80	0.50	0.0	0.00	39.11	40	35
159.0	Ericsson AIR 6419 B77G	3	66	3.8	2.4	16.1	7.9	0.80	0.65	0.0	0.00	38.71	195	178
157.0	Raycap DC6-48-60-18-8F (23.5"	2	20	1.3	2.0	9.7	9.7	0.80	0.50	0.0	0.00	38.58	33	36
157.0	Ericsson RRUS 4426 B66	3	48	1.6	1.3	13.2	5.8	0.80	0.50	0.0	0.00	38.58	65	131
157.0	Ericsson RRUS 4449 B5, B12	3	71	2.0	1.5	13.2	9.4	0.80	0.50	0.0	0.00	38.58	77	192
157.0	Ericsson RRUS 32 B30	3	60	2.7	2.3	12.1	7.0	0.80	0.67	0.0	0.00	38.58	145	162
157.0	Ericsson RRUS 32 B2	3	53	2.7	2.3	12.1	7.0	0.80	0.67	2.0	290.29	38.71	145	143
157.0	Raycap DC9-48-60-24-8C-EV	1	16	4.8	2.6	18.3	10.2	0.80	0.50	0.0	0.00	38.58	63	14

Elev (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K _a	Orient. Factor	Vert. Ecc. (ft)	M _u (lb-ft)	Q _z (psf)	F _a (WL) (lb)	P _a (DL) (lb)
157.0	CCI DMP65R-BU8D	3	96	17.9	8.0	20.7	7.7	0.80	0.63	0.0	0.00	38.58	886	258
157.0	Generic Flat Light Sector Fram	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.00	38.58	990	1080
152.9	Quintel QD8616-7	3	150	18.8	8.0	22.0	9.6	0.80	0.65	0.0	0.00	38.28	955	405
151.9	Generic 10' Omni	1	25	3.0	10.0	3.0	3.0	1.00	1.00	0.0	0.00	38.21	97	22
151.8	Ericsson RRUS 4478 B14	3	59	2.0	1.5	13.4	8.3	0.80	0.67	0.0	0.00	38.21	106	160
151.7	Ericsson RRUS E2 B29	3	60	3.1	1.7	18.5	7.5	0.80	0.62	0.0	0.00	38.20	152	162
151.0	Generic Round Side Arm	1	188	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.00	38.15	169	169
150.2	Ericsson AIR 6449 B77D/ C-Band	3	82	4.0	2.5	15.9	10.6	0.80	0.70	0.0	0.00	38.09	219	220
144.0	Commscope RDIDC-9181-PF-48	1	22	1.9	1.3	14.0	8.0	0.80	1.00	0.0	0.00	37.63	48	20
144.0	Fujitsu TA08025-B604	3	64	2.0	1.3	15.0	7.9	0.80	0.50	0.0	0.00	37.63	75	173
144.0	Fujitsu TA08025-B605	3	75	2.0	1.3	15.0	9.1	0.80	0.50	0.0	0.00	37.63	75	202
144.0	JMA Wireless MX08FRO665-21	3	65	12.5	6.0	20.0	8.0	0.80	0.64	0.0	0.00	37.63	614	174
144.0	Generic Flat Light Sector Fram	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.00	37.63	966	1080
132.0	Samsung Outdoor CBRS 20W RRH	3	19	0.9	1.0	8.5	4.1	0.80	0.50	0.0	0.00	36.71	32	50
132.0	Kaelus KA-6030	2	18	1.0	0.9	10.9	3.2	0.80	0.50	0.0	0.00	36.71	24	32
132.0	Raycap RRFDC-1064-PF-48	2	14	1.2	1.1	10.2	8.2	0.80	0.50	0.0	0.00	36.71	29	25
132.0	Samsung B5/B13 RRH-BR04C	3	70	1.9	1.3	15.0	8.1	0.80	0.50	0.0	0.00	36.71	70	190
132.0	Samsung B2/B66A RRH-BR049	3	84	1.9	1.3	15.0	10.0	0.80	0.50	0.0	0.00	36.71	70	228
132.0	Samsung CBRS 64T64R MMU	3	75	4.5	2.4	18.8	4.8	0.80	0.58	0.0	0.00	36.71	195	202
132.0	Samsung MT6407-77A	3	82	4.7	2.9	16.1	5.5	0.80	0.61	0.0	0.00	36.71	215	220
132.0	Andrew LNX-6512DS-A1M	3	30	5.1	4.0	11.9	7.1	0.80	0.69	0.0	0.00	36.71	263	82
132.0	JMA Wireless MX06FRO660-02	6	46	9.9	5.9	15.4	10.7	0.80	0.71	0.0	0.00	36.71	1050	248
132.0	Generic Round Sector Frame	3	700	14.4	0.0	0.0	0.0	0.75	0.67	0.0	0.00	36.71	677	1890
132.0	VZW Unused Reserve (16199.35 s	1	1081	112.5	0.0	0.0	0.0	0.80	0.90	0.0	0.00	36.71	2527	972
Totals		119	13,775	857.2									16,102	12,397

Discrete Appurtenance Properties for LC: 1.2D + 1.0Di + 1.0Wi

Elev (ft)	Description	Qty	Ice Wt (lb)	Ice EPA (sf)	Length (ft)	Width (in)	Depth (in)	K _a	Orient. Factor	Vert. Ecc. (ft)	M _u (lb-ft)	Q _z (psf)	F _a (WL) (lb)	P _a (DL) (lb)
188.7	Generic 16' Omni	2	137	8.6	16.0	3.0	3.0	0.90	1.00	0.0	0.00	6.40	85	295
185.2	Generic 11' Omni	1	96	6.0	11.0	3.0	3.0	0.90	1.00	0.0	0.00	6.37	29	104
184.9	Generic 10' Omni	1	76	5.4	10.0	3.0	3.0	0.90	1.00	0.0	0.00	6.36	26	81
183.1	Generic 8' Omni	1	66	4.3	8.0	3.0	3.0	0.90	1.00	0.0	0.00	6.35	21	71
180.0	Round Side Arm	2	199	7.0	0.0	0.0	0.0	0.90	0.90	0.0	0.00	6.32	61	459
180.0	Round Sector Frame	1	549	25.6	0.0	0.0	0.0	1.00	1.00	0.0	0.00	6.32	137	609
179.3	dbSpectra ATS4TMAA-4	1	109	2.9	2.6	13.3	11.5	0.90	1.00	0.0	0.00	6.31	14	119
171.8	Generic 15' Omni	3	117	8.1	15.0	3.0	3.0	1.00	1.00	0.0	0.00	6.23	129	374
166.0	Ericsson Radio 4449 B71 B85A	3	116	2.2	1.3	13.2	10.5	0.80	0.50	0.0	0.00	6.17	14	392
166.0	Ericsson RRUS 4415 B25	3	79	2.4	1.4	13.4	5.9	0.80	0.50	0.0	0.00	6.17	15	265
166.0	Ericsson Air6449 B41	3	196	6.8	2.8	20.6	8.6	0.80	0.63	0.0	0.00	6.17	54	651
166.0	Ericsson AIR 21, 1.3M, B2A B4P	3	190	7.5	4.7	12.0	7.8	0.80	0.70	0.0	0.00	6.17	66	625
166.0	Ericsson AIR32 B66Aa/B2a	3	240	8.0	4.7	12.9	8.7	0.80	0.71	0.0	0.00	6.17	71	800
166.0	Round Sector Frame	3	549	25.6	0.0	0.0	0.0	0.75	0.75	0.0	0.00	6.17	227	1826
166.0	RFS APXVAARR24_43-U-NA20	3	393	22.8	8.0	24.0	8.7	0.80	0.63	0.0	0.00	6.17	180	1257
164.7	RFS ATMAA1412D-1A20	3	31	1.5	1.0	10.0	4.0	0.80	0.50	0.0	0.00	6.16	9	101
159.0	Ericsson AIR 6419 B77G	3	131	4.7	2.4	16.1	7.9	0.80	0.65	0.0	0.00	6.10	38	432
157.0	Raycap DC6-48-60-18-8F (23.5"	2	55	1.7	2.0	9.7	9.7	0.80	0.50	0.0	0.00	6.07	7	118
157.0	Ericsson RRUS 4426 B66	3	78	2.2	1.3	13.2	5.8	0.80	0.50	0.0	0.00	6.07	14	264
157.0	Ericsson RRUS 4449 B5, B12	3	114	2.6	1.5	13.2	9.4	0.80	0.50	0.0	0.00	6.07	16	385
157.0	Ericsson RRUS 32 B30	3	109	3.5	2.3	12.1	7.0	0.80	0.67	0.0	0.00	6.07	29	363
157.0	Ericsson RRUS 32 B2	3	102	3.5	2.3	12.1	7.0	0.80	0.67	2.0	58.73	6.10	29	338
157.0	Raycap DC9-48-60-24-8C-EV	1	102	5.8	2.6	18.3	10.2	0.80	0.50	0.0	0.00	6.07	12	105
157.0	CCI DMP65R-BU8D	3	323	20.3	8.0	20.7	7.7	0.80	0.63	0.0	0.00	6.07	159	1026
157.0	Generic Flat Light Sector Fram	3	601	28.0	0.0	0.0	0.0	0.75	0.75	0.0	0.00	6.07	244	2043
152.9	Quintel QD8616-7	3	404	21.3	8.0	22.0	9.6	0.80	0.65	0.0	0.00	6.03	170	1303
151.9	Generic 10' Omni	1	76	5.4	10.0	3.0	3.0	1.00	1.00	0.0	0.00	6.02	28	81
151.8	Ericsson RRUS 4478 B14	3	100	2.7	1.5	13.4	8.3	0.80	0.67	0.0	0.00	6.02	22	337
151.7	Ericsson RRUS E2 B29	3	114	3.9	1.7	18.5	7.5	0.80	0.62	0.0	0.00	6.02	30	378
151.0	Generic Round Side Arm	1	249	7.0	0.0	0.0	0.0	1.00	1.00	0.0	0.00	6.01	36	286
150.2	Ericsson AIR 6449 B77D/ C-Band	3	159	4.9	2.5	15.9	10.6	0.80	0.70	0.0	0.00	6.00	42	527
144.0	Commscope RDIDC-9181-PF-48	1	60	2.5	1.3	14.0	8.0	0.80	1.00	0.0	0.00	5.93	10	64
144.0	Fujitsu TA08025-B604	3	103	2.6	1.3	15.0	7.9	0.80	0.50	0.0	0.00	5.93	16	347
144.0	Fujitsu TA08025-B605	3	117	2.6	1.3	15.0	9.1	0.80	0.50	0.0	0.00	5.93	16	396
144.0	JMA Wireless MX08FRO665-21	3	236	14.4	6.0	20.0	8.0	0.80	0.64	0.0	0.00	5.93	111	747
144.0	Generic Flat Light Sector Fram	3	601	28.0	0.0	0.0	0.0	0.75	0.75	0.0	0.00	5.93	238	2043
132.0	Samsung Outdoor CBRS 20W RRH	3	34	1.3	1.0	8.5	4.1	0.80	0.50	0.0	0.00	5.78	7	114
132.0	Kaelus KA-6030	2	33	1.4	0.9	10.9	3.2	0.80	0.50	0.0	0.00	5.78	5	73
132.0	Raycap RRFDC-1064-PF-48	2	41	1.6	1.1	10.2	8.2	0.80	0.50	0.0	0.00	5.78	6	88
132.0	Samsung B5/B13 RRH-BR04C	3	108	2.5	1.3	15.0	8.1	0.80	0.50	0.0	0.00	5.78	15	366
132.0	Samsung B2/B66A RRH-BR049	3	126	2.5	1.3	15.0	10.0	0.80	0.50	0.0	0.00	5.78	15	430
132.0	Samsung CBRS 64T64R MMU	3	136	5.4	2.4	18.8	4.8	0.80	0.58	0.0	0.00	5.78	37	454
132.0	Samsung MT6407-77A	3	149	5.7	2.9	16.1	5.5	0.80	0.61	0.0	0.00	5.78	41	495
132.0	Andrew LNX-6512DS-A1M	3	110	6.3	4.0	11.9	7.1	0.80	0.69	0.0	0.00	5.78	52	348
132.0	JMA Wireless MX06FRO660-02	6	204	11.7	5.9	15.4	10.7	0.80	0.71	0.0	0.00	5.78	196	1279
132.0	Generic Round Sector Frame	3	1342	25.3	0.0	0.0	0.0	0.75	0.67	0.0	0.00	5.78	187	4447
132.0	VZW Unused Reserve (16199.35 s	1	1576	164.1	0.0	0.0	0.0	0.80	0.90	0.0	0.00	5.78	581	1792
Totals		119	26,746	1176.7									3546	29,501

ASSET: 411183, WATERFORD CT

CODE: ANSI/TIA-222-H

CUSTOMER: VERIZON WIRELESS

PROJECT: 14519462_C3_03

Elev (ft)	Description	Qty	Ice Wt (lb)	Ice EPA (sf)	Length (ft)	Width (in)	Depth (in)	K _a	Orient. Factor	Vert. Ecc. (ft)	M _u (lb-ft)	Q _z (psf)	F _a (WL) (lb)	P _a (DL) (lb)
Discrete Appurtenance Properties for LC: 1.0D + 1.0W Service														
Elev (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K _a	Orient. Factor	Vert. Ecc. (ft)	M _u (lb-ft)	Q _z (psf)	F _a (WL) (lb)	P _a (DL) (lb)
188.7	Generic 16' Omni	2	55	4.8	16.0	3.0	3.0	0.90	1.00	0.0	0.00	9.22	68	110
185.2	Generic 11' Omni	1	40	3.3	11.0	3.0	3.0	0.90	1.00	0.0	0.00	9.17	23	40
184.9	Generic 10' Omni	1	25	3.0	10.0	3.0	3.0	0.90	1.00	0.0	0.00	9.17	21	25
183.1	Generic 8' Omni	1	25	2.4	8.0	3.0	3.0	0.90	1.00	0.0	0.00	9.14	17	25
180.0	Round Side Arm	2	150	5.2	0.0	0.0	0.0	0.90	0.90	0.0	0.00	9.10	65	300
180.0	Round Sector Frame	1	300	14.4	0.0	0.0	0.0	1.00	1.00	0.0	0.00	9.10	111	300
179.3	dbSpectra ATS4TMA4-4	1	50	2.3	2.6	13.3	11.5	0.90	1.00	0.0	0.00	9.09	16	50
171.8	Generic 15' Omni	3	40	4.5	15.0	3.0	3.0	1.00	1.00	0.0	0.00	8.98	103	120
166.0	Ericsson Radio 4449 B71 B85A	3	75	1.6	1.3	13.2	10.5	0.80	0.50	0.0	0.00	8.89	15	225
166.0	Ericsson RRUS 4415 B25	3	46	1.8	1.4	13.4	5.9	0.80	0.50	0.0	0.00	8.89	17	138
166.0	Ericsson Air6449 B41	3	104	5.7	2.8	20.6	8.6	0.80	0.63	0.0	0.00	8.89	65	312
166.0	Ericsson AIR 21, 1.3M, B2A B4P	3	92	6.0	4.7	12.0	7.8	0.80	0.70	0.0	0.00	8.89	77	274
166.0	Ericsson AIR32 B66Aa/B2a	3	132	6.5	4.7	12.9	8.7	0.80	0.71	0.0	0.00	8.89	84	397
166.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.00	8.89	184	900
166.0	RFS APXVAARR24_43-U-NA20	3	128	20.2	8.0	24.0	8.7	0.80	0.63	0.0	0.00	8.89	231	384
164.7	RFS ATMAA1412D-1A20	3	13	1.0	1.0	10.0	4.0	0.80	0.50	0.0	0.00	8.87	9	39
159.0	Ericsson AIR 6419 B77G	3	66	3.8	2.4	16.1	7.9	0.80	0.65	0.0	0.00	8.78	44	198
157.0	Raycap DC6-48-60-18-8F (23.5"	2	20	1.3	2.0	9.7	9.7	0.80	0.50	0.0	0.00	8.75	7	40
157.0	Ericsson RRUS 4426 B66	3	48	1.6	1.3	13.2	5.8	0.80	0.50	0.0	0.00	8.75	15	145
157.0	Ericsson RRUS 4449 B5, B12	3	71	2.0	1.5	13.2	9.4	0.80	0.50	0.0	0.00	8.75	18	213
157.0	Ericsson RRUS 32 B30	3	60	2.7	2.3	12.1	7.0	0.80	0.67	0.0	0.00	8.75	33	180
157.0	Ericsson RRUS 32 B2	3	53	2.7	2.3	12.1	7.0	0.80	0.67	2.0	65.83	8.78	33	159
157.0	Raycap DC9-48-60-24-8C-EV	1	16	4.8	2.6	18.3	10.2	0.80	0.50	0.0	0.00	8.75	14	16
157.0	CCI DMP65R-BU8D	3	96	17.9	8.0	20.7	7.7	0.80	0.63	0.0	0.00	8.75	201	287
157.0	Generic Flat Light Sector Fram	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.00	8.75	225	1200
152.9	Quintel QD8616-7	3	150	18.8	8.0	22.0	9.6	0.80	0.65	0.0	0.00	8.68	217	450
151.9	Generic 10' Omni	1	25	3.0	10.0	3.0	3.0	1.00	1.00	0.0	0.00	8.66	22	25
151.8	Ericsson RRUS 4478 B14	3	59	2.0	1.5	13.4	8.3	0.80	0.67	0.0	0.00	8.66	24	178
151.7	Ericsson RRUS E2 B29	3	60	3.1	1.7	18.5	7.5	0.80	0.62	0.0	0.00	8.66	34	180
151.0	Generic Round Side Arm	1	188	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.00	8.65	38	188
150.2	Ericsson AIR 6449 B77D/ C-Band	3	82	4.0	2.5	15.9	10.6	0.80	0.70	0.0	0.00	8.64	50	245
144.0	Commscope RD1DC-9181-PF-48	1	22	1.9	1.3	14.0	8.0	0.80	1.00	0.0	0.00	8.53	11	22
144.0	Fujitsu TA08025-B604	3	64	2.0	1.3	15.0	7.9	0.80	0.50	0.0	0.00	8.53	17	192
144.0	Fujitsu TA08025-B605	3	75	2.0	1.3	15.0	9.1	0.80	0.50	0.0	0.00	8.53	17	225
144.0	JMA Wireless MX08FRO665-21	3	65	12.5	6.0	20.0	8.0	0.80	0.64	0.0	0.00	8.53	139	194
144.0	Generic Flat Light Sector Fram	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.00	8.53	219	1200
132.0	Samsung Outdoor CBRS 20W RRH	3	19	0.9	1.0	8.5	4.1	0.80	0.50	0.0	0.00	8.32	7	56
132.0	Kaelus KA-6030	2	18	1.0	0.9	10.9	3.2	0.80	0.50	0.0	0.00	8.32	5	35
132.0	Raycap RRFDC-1064-PF-48	2	14	1.2	1.1	10.2	8.2	0.80	0.50	0.0	0.00	8.32	7	28
132.0	Samsung B5/B13 RRH-BR04C	3	70	1.9	1.3	15.0	8.1	0.80	0.50	0.0	0.00	8.32	16	211
132.0	Samsung B2/B66A RRH-BR049	3	84	1.9	1.3	15.0	10.0	0.80	0.50	0.0	0.00	8.32	16	253
132.0	Samsung CBRS 64T64R MMU	3	75	4.5	2.4	18.8	4.8	0.80	0.58	0.0	0.00	8.32	44	225
132.0	Samsung MT6407-77A	3	82	4.7	2.9	16.1	5.5	0.80	0.61	0.0	0.00	8.32	49	245
132.0	Andrew LNX-6512DS-A1M	3	30	5.1	4.0	11.9	7.1	0.80	0.69	0.0	0.00	8.32	60	91
132.0	JMA Wireless MX06FRO660-02	6	46	9.9	5.9	15.4	10.7	0.80	0.71	0.0	0.00	8.32	238	276
132.0	Generic Round Sector Frame	3	700	14.4	0.0	0.0	0.0	0.75	0.67	0.0	0.00	8.32	154	2100
132.0	VZW Unused Reserve (16199.35 s	1	1081	112.5	0.0	0.0	0.0	0.80	0.90	0.0	0.00	8.32	573	1080
Totals		119	13,775	857.2									3,651	13,775

ASSET: 411183, WATERFORD CT
 CUSTOMER: VERIZON WIRELESS

CODE: ANSI/TIA-222-H
 PROJECT: 14519462_C3_03

TOWER LOADING – LINEAR APPURTENANCE

Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Description	Qty	Width (in)	Weight (lb/ft)	% In Wind	Spread On Faces	Bundling	Cluster Dia (in)	Out of Zone	Spacing (in)	Orient. Factor	K _a Override
30.0	180.0	Waveguide	1	2.00	6.00	100	2	Individual	0.00	N	1.00	1.00	0.00
30.0	166.0	1 1/4" Hybriflex Cable	5	1.54	1.00	100	2	Individual	0.00	N	1.00	1.00	0.00
30.0	166.0	1 5/8" Hybriflex	1	1.98	1.30	100	2	Individual	0.00	N	1.00	1.00	0.00
30.0	159.0	1 5/8" Coax	3	1.98	0.82	100	1	Individual	0.00	N	1.00	1.00	0.00
30.0	157.0	1 5/8" Coax	3	1.98	0.82	100	1	Individual	0.00	N	1.00	1.00	0.00
30.0	157.0	Waveguide	1	2.00	6.00	100	1	Individual	0.00	N	1.00	1.00	0.00
30.0	157.0	0.78" (19.7mm) 8 AWG 6	4	0.78	0.59	100	1	Individual	0.00	N	1.00	1.00	0.00
30.0	157.0	2" conduit	2	2.38	3.65	100	1	Individual	0.00	N	1.00	1.00	0.00
30.0	157.0	0.41" (10.3mm) Fiber	3	0.41	0.09	100	1	Individual	0.00	N	1.00	1.00	0.00
30.0	157.0	0.96" (24.3mm) Cable	2	0.96	0.88	100	1	Individual	0.00	N	1.00	1.00	0.00
30.0	151.0	0.92" (23.4mm) Cable	1	0.92	0.89	100	1	Individual	0.00	N	1.00	1.00	0.00
0.0	187.0	7/8" Coax	8	1.09	0.33	100	2	Individual	0.00	N	1.00	1.00	0.00
0.0	166.0	1 5/8" Coax	12	1.98	0.82	100	2	Individual	0.00	N	1.00	1.00	0.00
0.0	166.0	Waveguide	1	2.00	6.00	100	2	Individual	0.00	N	1.00	1.00	0.00
0.0	152.0	1 5/8" Coax	1	1.98	0.82	100	2	Individual	0.00	N	1.00	1.00	0.00
0.0	144.0	Waveguide	1	2.00	6.00	100	Lin App	Individual	0.00	N	1.00	1.00	0.00
0.0	144.0	1.60" (40.6mm) Hybrid	1	1.60	2.34	100	3	Individual	0.00	N	1.00	1.00	0.00
0.0	132.0	1 5/8" Hybriflex	2	1.98	1.30	100	2	Individual	0.00	N	1.00	1.00	0.00
0.0	132.0	Waveguide	1	2.00	6.00	100	2	Individual	0.00	N	1.00	1.00	0.00
0.0	132.0	1 5/8" Coax	6	1.98	0.82	100	2	Individual	0.00	N	1.00	1.00	0.00

SECTION FORCES

1.2D + 1.0W Normal
126 mph Wind with No Ice

Gust Response Factor (Gh): 0.85
Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)	
9	170	39.46	0.000	24.587	0.00	0.139	2.81	1.00	1.00	0.0	14.23	40.03	0.00	1915	0	1343	929	2272	
8	150	38.08	0.000	30.715	0.00	0.170	2.70	1.00	1.00	0.0	17.45	47.07	0.00	3551	0	1523	2890	4413	
7	130	36.55	0.000	33.974	0.00	0.167	2.71	1.00	1.00	0.0	18.55	50.28	0.00	4674	0	1562	3520	5082	
6	110	34.85	0.000	40.808	0.00	0.165	2.72	1.00	1.00	0.0	21.49	58.37	0.00	5715	0	1729	3628	5357	
5	90	32.90	0.000	48.001	0.00	0.162	2.73	1.00	1.00	0.0	23.70	64.62	0.00	7592	0	1807	3426	5233	
4	70	30.62	0.000	57.726	0.00	0.165	2.72	1.00	1.00	0.0	28.45	77.29	0.00	8746	0	2012	3189	5201	
3	50	27.82	0.000	59.898	0.00	0.150	2.77	1.00	1.00	0.0	29.38	81.48	0.00	9032	0	1927	2896	4823	
2	30	24.04	0.000	73.239	0.00	0.160	2.73	1.00	1.00	0.0	36.48	99.71	0.00	9841	0	2038	2010	4048	
1	10	24.02	0.000	76.031	0.00	0.150	2.77	1.00	1.00	0.0	37.23	103.23	0.00	9751	0	2108	1517	3624	
														Totals	60,818	0			40,053

1.2D + 1.0W 60°
126 mph Wind with No Ice

Gust Response Factor (Gh): 0.85
Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)	
9	170	39.46	0.000	24.587	0.00	0.139	2.81	0.80	1.00	0.0	14.23	40.03	0.00	1915	0	1343	929	2272	
8	150	38.08	0.000	30.715	0.00	0.170	2.70	0.80	1.00	0.0	17.45	47.07	0.00	3551	0	1523	2890	4413	
7	130	36.55	0.000	33.974	0.00	0.167	2.71	0.80	1.00	0.0	18.55	50.28	0.00	4674	0	1562	3520	5082	
6	110	34.85	0.000	40.808	0.00	0.165	2.72	0.80	1.00	0.0	21.49	58.37	0.00	5715	0	1729	3628	5357	
5	90	32.90	0.000	48.001	0.00	0.162	2.73	0.80	1.00	0.0	23.70	64.62	0.00	7592	0	1807	3426	5233	
4	70	30.62	0.000	57.726	0.00	0.165	2.72	0.80	1.00	0.0	28.45	77.29	0.00	8746	0	2012	3189	5201	
3	50	27.82	0.000	59.898	0.00	0.150	2.77	0.80	1.00	0.0	29.38	81.48	0.00	9032	0	1927	2896	4823	
2	30	24.04	0.000	73.239	0.00	0.160	2.73	0.80	1.00	0.0	36.48	99.71	0.00	9841	0	2038	2010	4048	
1	10	24.02	0.000	76.031	0.00	0.150	2.77	0.80	1.00	0.0	37.43	103.78	0.00	9751	0	2119	1517	3636	
														Totals	60,818	0			40,064

1.2D + 1.0W 90°
126 mph Wind with No Ice

Gust Response Factor (Gh): 0.85
Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)	
9	170	39.46	0.000	24.587	0.00	0.139	2.81	0.85	1.00	0.0	14.23	40.03	0.00	1915	0	1343	929	2272	
8	150	38.08	0.000	30.715	0.00	0.170	2.70	0.85	1.00	0.0	17.45	47.07	0.00	3551	0	1523	2890	4413	
7	130	36.55	0.000	33.974	0.00	0.167	2.71	0.85	1.00	0.0	18.55	50.28	0.00	4674	0	1562	3520	5082	
6	110	34.85	0.000	40.808	0.00	0.165	2.72	0.85	1.00	0.0	21.49	58.37	0.00	5715	0	1729	3628	5357	
5	90	32.90	0.000	48.001	0.00	0.162	2.73	0.85	1.00	0.0	23.70	64.62	0.00	7592	0	1807	3426	5233	
4	70	30.62	0.000	57.726	0.00	0.165	2.72	0.85	1.00	0.0	28.45	77.29	0.00	8746	0	2012	3189	5201	
3	50	27.82	0.000	59.898	0.00	0.150	2.77	0.85	1.00	0.0	29.38	81.48	0.00	9032	0	1927	2896	4823	
2	30	24.04	0.000	73.239	0.00	0.160	2.73	0.85	1.00	0.0	36.48	99.71	0.00	9841	0	2038	2010	4048	
1	10	24.02	0.000	76.031	0.00	0.150	2.77	0.85	1.00	0.0	37.43	103.78	0.00	9751	0	2119	1517	3636	
														Totals	60,818	0			40,064

0.9D + 1.0W Normal
126 mph Wind with No Ice (Reduced DL)

Gust Response Factor (Gh): 0.85
Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)	
9	170	39.46	0.000	24.587	0.00	0.139	2.81	1.00	1.00	0.0	14.23	40.03	0.00	1436	0	1343	929	2272	
8	150	38.08	0.000	30.715	0.00	0.170	2.70	1.00	1.00	0.0	17.45	47.07	0.00	2663	0	1523	2890	4413	
7	130	36.55	0.000	33.974	0.00	0.167	2.71	1.00	1.00	0.0	18.55	50.28	0.00	3506	0	1562	3520	5082	
6	110	34.85	0.000	40.808	0.00	0.165	2.72	1.00	1.00	0.0	21.49	58.37	0.00	4286	0	1729	3628	5357	
5	90	32.90	0.000	48.001	0.00	0.162	2.73	1.00	1.00	0.0	23.70	64.62	0.00	5694	0	1807	3426	5233	
4	70	30.62	0.000	57.726	0.00	0.165	2.72	1.00	1.00	0.0	28.45	77.29	0.00	6560	0	2012	3189	5201	
3	50	27.82	0.000	59.898	0.00	0.150	2.77	1.00	1.00	0.0	29.38	81.48	0.00	6774	0	1927	2896	4823	
2	30	24.04	0.000	73.239	0.00	0.160	2.73	1.00	1.00	0.0	36.48	99.71	0.00	7381	0	2038	2010	4048	
1	10	24.02	0.000	76.031	0.00	0.150	2.77	1.00	1.00	0.0	37.43	103.78	0.00	7313	0	2119	1517	3636	
														Totals	45,613	0			40,064

0.9D + 1.0W 60°
126 mph Wind with No Ice (Reduced DL)

Gust Response Factor (Gh): 0.85
Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)	
9	170	39.46	0.000	24.587	0.00	0.139	2.81	0.80	1.00	0.0	14.23	40.03	0.00	1436	0	1343	929	2272	
8	150	38.08	0.000	30.715	0.00	0.170	2.70	0.80	1.00	0.0	17.45	47.07	0.00	2663	0	1523	2890	4413	
7	130	36.55	0.000	33.974	0.00	0.167	2.71	0.80	1.00	0.0	18.55	50.28	0.00	3506	0	1562	3520	5082	
6	110	34.85	0.000	40.808	0.00	0.165	2.72	0.80	1.00	0.0	21.49	58.37	0.00	4286	0	1729	3628	5357	
5	90	32.90	0.000	48.001	0.00	0.162	2.73	0.80	1.00	0.0	23.70	64.62	0.00	5694	0	1807	3426	5233	
4	70	30.62	0.000	57.726	0.00	0.165	2.72	0.80	1.00	0.0	28.45	77.29	0.00	6560	0	2012	3189	5201	
3	50	27.82	0.000	59.898	0.00	0.150	2.77	0.80	1.00	0.0	29.38	81.48	0.00	6774	0	1927	2896	4823	
2	30	24.04	0.000	73.239	0.00	0.160	2.73	0.80	1.00	0.0	36.48	99.71	0.00	7381	0	2038	2010	4048	
1	10	24.02	0.000	76.031	0.00	0.150	2.77	0.80	1.00	0.0	37.43	103.78	0.00	7313	0	2119	1517	3636	
														Totals	45,613	0			40,064

SECTION FORCES

0.9D + 1.0W 90°

Gust Response Factor (Gh): 0.85

126 mph Wind with No Ice (Reduced DL)

Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)	
9	170	39.46	0.000	24.587	0.00	0.139	2.81	0.85	1.00	0.0	14.23	40.03	0.00	1436	0	1343	929	2272	
8	150	38.08	0.000	30.715	0.00	0.170	2.70	0.85	1.00	0.0	17.45	47.07	0.00	2663	0	1523	2890	4413	
7	130	36.55	0.000	33.974	0.00	0.167	2.71	0.85	1.00	0.0	18.55	50.28	0.00	3506	0	1562	3520	5082	
6	110	34.85	0.000	40.808	0.00	0.165	2.72	0.85	1.00	0.0	21.49	58.37	0.00	4286	0	1729	3628	5357	
5	90	32.90	0.000	48.001	0.00	0.162	2.73	0.85	1.00	0.0	23.70	64.62	0.00	5694	0	1807	3426	5233	
4	70	30.62	0.000	57.726	0.00	0.165	2.72	0.85	1.00	0.0	28.45	77.29	0.00	6560	0	2012	3189	5201	
3	50	27.82	0.000	59.898	0.00	0.150	2.77	0.85	1.00	0.0	29.38	81.48	0.00	6774	0	1927	2896	4823	
2	30	24.04	0.000	73.239	0.00	0.160	2.73	0.85	1.00	0.0	36.48	99.71	0.00	7381	0	2038	2010	4048	
1	10	24.02	0.000	76.031	0.00	0.150	2.77	0.85	1.00	0.0	37.43	103.78	0.00	7313	0	2119	1517	3636	
														Totals	45,613	0			40,064

1.2D + 1.0Di + 1.0Wi Normal

Gust Response Factor (Gh): 0.85

50 mph Wind with 1" Radial Ice

Wind Importance Factor (Iw): 1.00

Ice Importance Factor: 1.00

Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)	
9	170	6.21	0.000	46.800	22.21	0.259	2.41	1.00	1.00	1.2	27.80	67.02	22.21	4671	2757	354	454	808	
8	150	6.00	0.000	52.733	22.02	0.286	2.33	1.00	1.00	1.2	31.86	74.31	22.02	8934	5383	379	1314	1693	
7	130	5.76	0.000	56.593	22.62	0.273	2.37	1.00	1.00	1.1	33.95	80.48	22.62	10876	6202	394	1585	1978	
6	110	5.49	0.000	64.973	24.17	0.259	2.41	1.00	1.00	1.1	38.79	93.51	24.17	12463	6748	436	1631	2067	
5	90	5.18	0.000	69.497	21.50	0.232	2.49	1.00	1.00	1.1	40.97	102.14	21.50	14228	6636	450	1571	2021	
4	70	4.82	0.000	80.160	22.43	0.227	2.51	1.00	1.00	1.1	47.20	118.42	22.43	15576	6830	485	1450	1935	
3	50	4.38	0.000	83.074	23.18	0.206	2.58	1.00	1.00	1.0	48.56	125.17	23.18	15741	6708	466	1323	1790	
2	30	3.79	0.000	96.755	23.52	0.210	2.56	1.00	1.00	1.0	56.77	145.43	23.52	15921	6080	468	874	1342	
1	10	3.78	0.000	98.447	22.42	0.193	2.62	1.00	1.00	0.9	57.43	150.52	22.42	14564	4813	484	619	1103	
														Totals	112,974	52,156			14,736

1.2D + 1.0Di + 1.0Wi 60°

Gust Response Factor (Gh): 0.85

50 mph Wind with 1" Radial Ice

Wind Importance Factor (Iw): 1.00

Ice Importance Factor: 1.00

Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)	
9	170	6.21	0.000	46.800	22.21	0.259	2.41	0.80	1.00	1.2	27.80	67.02	22.21	4671	2757	354	454	808	
8	150	6.00	0.000	52.733	22.02	0.286	2.33	0.80	1.00	1.2	31.86	74.31	22.02	8934	5383	379	1314	1693	
7	130	5.76	0.000	56.593	22.62	0.273	2.37	0.80	1.00	1.1	33.95	80.48	22.62	10876	6202	394	1585	1978	
6	110	5.49	0.000	64.973	24.17	0.259	2.41	0.80	1.00	1.1	38.79	93.51	24.17	12463	6748	436	1631	2067	
5	90	5.18	0.000	69.497	21.50	0.232	2.49	0.80	1.00	1.1	40.97	102.14	21.50	14228	6636	450	1571	2021	
4	70	4.82	0.000	80.160	22.43	0.227	2.51	0.80	1.00	1.1	47.20	118.42	22.43	15576	6830	485	1450	1935	
3	50	4.38	0.000	83.074	23.18	0.206	2.58	0.80	1.00	1.0	48.56	125.17	23.18	15741	6708	466	1323	1790	
2	30	3.79	0.000	96.755	23.52	0.210	2.56	0.80	1.00	1.0	56.77	145.43	23.52	15921	6080	468	874	1342	
1	10	3.78	0.000	98.447	22.42	0.193	2.62	0.80	1.00	0.9	57.43	150.52	22.42	14564	4813	484	619	1103	
														Totals	112,974	52,156			14,736

1.2D + 1.0Di + 1.0Wi 90°

Gust Response Factor (Gh): 0.85

50 mph Wind with 1" Radial Ice

Wind Importance Factor (Iw): 1.00

Ice Importance Factor: 1.00

Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)	
9	170	6.21	0.000	46.800	22.21	0.259	2.41	0.85	1.00	1.2	27.80	67.02	22.21	4671	2757	354	454	808	
8	150	6.00	0.000	52.733	22.02	0.286	2.33	0.85	1.00	1.2	31.86	74.31	22.02	8934	5383	379	1314	1693	
7	130	5.76	0.000	56.593	22.62	0.273	2.37	0.85	1.00	1.1	33.95	80.48	22.62	10876	6202	394	1585	1978	
6	110	5.49	0.000	64.973	24.17	0.259	2.41	0.85	1.00	1.1	38.79	93.51	24.17	12463	6748	436	1631	2067	
5	90	5.18	0.000	69.497	21.50	0.232	2.49	0.85	1.00	1.1	40.97	102.14	21.50	14228	6636	450	1571	2021	
4	70	4.82	0.000	80.160	22.43	0.227	2.51	0.85	1.00	1.1	47.20	118.42	22.43	15576	6830	485	1450	1935	
3	50	4.38	0.000	83.074	23.18	0.206	2.58	0.85	1.00	1.0	48.56	125.17	23.18	15741	6708	466	1323	1790	
2	30	3.79	0.000	96.755	23.52	0.210	2.56	0.85	1.00	1.0	56.77	145.43	23.52	15921	6080	468	874	1342	
1	10	3.78	0.000	98.447	22.42	0.193	2.62	0.85	1.00	0.9	57.43	150.52	22.42	14564	4813	484	619	1103	
														Totals	112,974	52,156			14,736

1.0D + 1.0W Service Normal

Gust Response Factor (Gh): 0.85

60 mph Wind with No Ice

Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)	
9	170	8.95	0.000	24.587	0.00	0.139	2.81	1.00	1.00	0.0	14.23	40.03	0.00	1596	0	304	211	515	
8	150	8.63	0.000	30.715	0.00	0.170	2.70	1.00	1.00	0.0	17.98	48.50	0.00	2959	0	356	655	1011	
7	130	8.29	0.000	33.974	0.00	0.167	2.71	1.00	1.00	0.0	19.84	53.75	0.00	3895	0	379	798	1177	
6	110	7.90	0.000	40.808	0.00	0.165	2.72	1.00	1.00	0.0	23.85	64.77	0.00	4762	0	435	823	1258	
5	90	7.46	0.000	48.001	0.00	0.162	2.73	1.00	1.00	0.0	27.65	75.41	0.00	6326	0	478	777	1255	
4	70	6.94	0.000	57.726	0.00	0.165	2.72	1.00	1.00	0.0	32.34	87.87	0.00	7289	0	519	723	1242	
3	50	6.31	0.000	59.898	0.00	0.150	2.77	1.00	1.00	0.0	33.91	94.05	0.00	7527	0	504	657	1161	
2	30	5.45	0.000	73.239	0.00	0.160	2.73	1.00	1.00	0.0	40.38	110.37	0.00	8201	0	511	456	967	
1	10	5.45	0.000	76.031	0.00	0.150	2.77	1.00	1.00	0.0	39.75	110.23	0.00	8126	0	510	344	854	
														Totals	50,682	0			9,440

SECTION FORCES

1.0D + 1.0W Service 60°
 60 mph Wind with No Ice

Gust Response Factor (Gh): 0.85
 Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q _z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)	
9	170	8.95	0.000	24.587	0.00	0.139	2.81	0.80	1.00	0.0	14.23	40.03	0.00	1596	0	304	211	515	
8	150	8.63	0.000	30.715	0.00	0.170	2.70	0.80	1.00	0.0	17.98	48.50	0.00	2959	0	356	655	1011	
7	130	8.29	0.000	33.974	0.00	0.167	2.71	0.80	1.00	0.0	19.84	53.75	0.00	3895	0	379	798	1177	
6	110	7.90	0.000	40.808	0.00	0.165	2.72	0.80	1.00	0.0	23.85	64.77	0.00	4762	0	435	823	1258	
5	90	7.46	0.000	48.001	0.00	0.162	2.73	0.80	1.00	0.0	27.65	75.41	0.00	6326	0	478	777	1255	
4	70	6.94	0.000	57.726	0.00	0.165	2.72	0.80	1.00	0.0	32.34	87.87	0.00	7289	0	519	723	1242	
3	50	6.31	0.000	59.898	0.00	0.150	2.77	0.80	1.00	0.0	33.91	94.05	0.00	7527	0	504	657	1161	
2	30	5.45	0.000	73.239	0.00	0.160	2.73	0.80	1.00	0.0	40.38	110.37	0.00	8201	0	511	456	967	
1	10	5.45	0.000	76.031	0.00	0.150	2.77	0.80	1.00	0.0	39.75	110.23	0.00	8126	0	510	344	854	
														Totals	50,682	0			9,440

1.0D + 1.0W Service 90°
 60 mph Wind with No Ice

Gust Response Factor (Gh): 0.85
 Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q _z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)	
9	170	8.95	0.000	24.587	0.00	0.139	2.81	0.85	1.00	0.0	14.23	40.03	0.00	1596	0	304	211	515	
8	150	8.63	0.000	30.715	0.00	0.170	2.70	0.85	1.00	0.0	17.98	48.50	0.00	2959	0	356	655	1011	
7	130	8.29	0.000	33.974	0.00	0.167	2.71	0.85	1.00	0.0	19.84	53.75	0.00	3895	0	379	798	1177	
6	110	7.90	0.000	40.808	0.00	0.165	2.72	0.85	1.00	0.0	23.85	64.77	0.00	4762	0	435	823	1258	
5	90	7.46	0.000	48.001	0.00	0.162	2.73	0.85	1.00	0.0	27.65	75.41	0.00	6326	0	478	777	1255	
4	70	6.94	0.000	57.726	0.00	0.165	2.72	0.85	1.00	0.0	32.34	87.87	0.00	7289	0	519	723	1242	
3	50	6.31	0.000	59.898	0.00	0.150	2.77	0.85	1.00	0.0	33.91	94.05	0.00	7527	0	504	657	1161	
2	30	5.45	0.000	73.239	0.00	0.160	2.73	0.85	1.00	0.0	40.38	110.37	0.00	8201	0	511	456	967	
1	10	5.45	0.000	76.031	0.00	0.150	2.77	0.85	1.00	0.0	39.75	110.23	0.00	8126	0	510	344	854	
														Totals	50,682	0			9,440

ASSET: 411183, WATERFORD CT
 CUSTOMER: VERIZON WIRELESS

CODE: ANSI/TIA-222-H
 PROJECT: 14519462_C3_03

EQUIVALENT LATERAL FORCE METHOD

Spectral Response Acceleration for Short Period (S_s):	0.19
Spectral Response Acceleration at 1.0 Second Period (S_1):	0.05
Long-Period Transition Period (T_L - Seconds):	6
Importance Factor (I_e):	1.00
Site Coefficient F_a :	1.60
Site Coefficient F_v :	2.40
Response Modification Coefficient (R):	3.00
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.21
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.08
Seismic Response Coefficient (C_s):	0.04
Upper Limit C_s :	0.04
Lower Limit C_s :	0.03
Period based on Rayleigh Method (sec):	0.65
Redundancy Factor (p):	1.30
Seismic Force Distribution Exponent (k):	1.08
Total Unfactored Dead Load:	64.46 k
Seismic Base Shear (E):	3.62 k

SEISMIC FORCES

0.9D - 1.0Ev + 1.0Eh

Section/Appurtenance	Height Above Base (ft)	Weight (lb)	W_2 (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
9	170.00	1,596	402,325	0.050	182	1,370
8	150.00	2,959	652,124	0.081	295	2,541
7	130.00	3,895	735,735	0.092	333	3,344
6	110.00	4,762	751,463	0.094	340	4,089
5	90.00	6,326	804,276	0.100	364	5,432
4	70.00	7,289	706,926	0.088	320	6,258
3	50.00	7,527	508,162	0.064	230	6,463
2	30.00	8,201	319,423	0.040	145	7,041
1	10.00	8,126	96,968	0.012	44	6,977
Generic 16' Omni	180.00	110	29,497	0.004	13	94
Generic 11' Omni	180.00	40	10,726	0.001	5	34
Generic 10' Omni	180.00	25	6,704	0.001	3	21
Generic 8' Omni	180.00	25	6,704	0.001	3	21
Round Side Arm	180.00	300	80,445	0.010	36	258
Round Sector Frame	180.00	300	80,445	0.010	36	258
dbSpectra ATS4TMA4-4	179.30	50	13,351	0.002	6	43
Generic 15' Omni	171.80	120	30,603	0.004	14	103
Ericsson Radio 4449 B71 B85A	166.00	225	55,297	0.007	25	193
Ericsson RRUS 4415 B25	166.00	138	33,915	0.004	15	118
Ericsson Air6449 B41	166.00	312	76,678	0.010	35	268
Ericsson AIR 21, 1.3M, B2A B4P (91.5 lbs)	166.00	274	67,462	0.008	31	236
Ericsson AIR32 B66Aa/B2a	166.00	397	97,470	0.012	44	341
Round Sector Frame	166.00	900	221,187	0.028	100	773
RFS APXVAARR24_43-U-NA20	166.00	384	94,299	0.012	43	329
RFS ATMAA1412D-1A20	164.70	39	9,504	0.001	4	33
Ericsson AIR 6419 B77G	159.00	198	46,526	0.006	21	170
Raycap DC6-48-60-18-8F (23.5" Height)	157.00	40	9,258	0.001	4	34
Ericsson RRUS 4426 B66	157.00	145	33,606	0.004	15	125
Ericsson RRUS 4449 B5, B12	157.00	213	49,298	0.006	22	183
Ericsson RRUS 32 B30	157.00	180	41,660	0.005	19	155
Ericsson RRUS 32 B2	157.00	159	36,800	0.005	17	137
Raycap DC9-48-60-24-8C-EV	157.00	16	3,703	0.000	2	14
CCI DMP65R-BU8D	157.00	287	66,448	0.008	30	247
Generic Flat Light Sector Frame	157.00	1,200	277,735	0.035	126	1,030
Quintel QD8616-7	152.90	450	101,225	0.013	46	386
Generic 10' Omni	151.90	25	5,584	0.001	3	21
Ericsson RRUS 4478 B14	151.80	178	39,775	0.005	18	153
Ericsson RRUS E2 B29	151.70	180	40,148	0.005	18	155
Generic Round Side Arm	151.00	188	41,613	0.005	19	161
Ericsson AIR 6449 B77D/ C-Band	150.20	245	54,020	0.007	24	210
Commscope RDIDC-9181-PF-48	144.00	22	4,618	0.001	2	19
Fujitsu TA08025-B604	144.00	192	40,425	0.005	18	165

ASSET: 411183, WATERFORD CT

CODE: ANSI/TIA-222-H

CUSTOMER: VERIZON WIRELESS

PROJECT: 14519462_C3_03

Fujitsu TA08025-B605	144.00	225	47,448	0.006	21	193
JMA Wireless MX08FRO665-21	144.00	194	40,805	0.005	18	166
Generic Flat Light Sector Frame	144.00	1,200	253,054	0.032	115	1,030
Samsung Outdoor CBRS 20W RRH	132.00	56	10,715	0.001	5	48
Kaelus KA-6030	132.00	35	6,759	0.001	3	30
Raycap RRFDC-1064-PF-48	132.00	28	5,377	0.001	2	24
Samsung B5/B13 RRH-BR04C	132.00	211	40,497	0.005	18	181
Samsung B2/B66A RRH-BR049	132.00	253	48,619	0.006	22	217
Samsung CBRS 64T64R MMU	132.00	225	43,204	0.005	20	193
Samsung MT6407-77A	132.00	245	47,006	0.006	21	210
Andrew LNX-6512DS-A1M	132.00	91	17,397	0.002	8	78
JMA Wireless MX06FRO660-02	132.00	276	52,997	0.007	24	237
Generic Round Sector Frame	132.00	2,100	403,238	0.050	182	1,803
VZW Unused Reserve (16199.35 sqin)	132.00	1,080	207,476	0.026	94	928
Totals		64,457	8,008,719	1.000	3,624	55,343

1.2D + 1.0Ev + 1.0Eh

Section/Appurtenance	Height Above Base (ft)	Weight (lb)	W _z (lb-ft)	Cvx	Horizontal Force (lb)	Vertical Force (lb)
9	170.00	1,596	402,325	0.050	182	1,981
8	150.00	2,959	652,124	0.081	295	3,674
7	130.00	3,895	735,735	0.092	333	4,835
6	110.00	4,762	751,463	0.094	340	5,912
5	90.00	6,326	804,276	0.100	364	7,854
4	70.00	7,289	706,926	0.088	320	9,048
3	50.00	7,527	508,162	0.064	230	9,344
2	30.00	8,201	319,423	0.040	145	10,181
1	10.00	8,126	96,968	0.012	44	10,087
Generic 16' Omni	180.00	110	29,497	0.004	13	137
Generic 11' Omni	180.00	40	10,726	0.001	5	50
Generic 10' Omni	180.00	25	6,704	0.001	3	31
Generic 8' Omni	180.00	25	6,704	0.001	3	31
Round Side Arm	180.00	300	80,445	0.010	36	372
Round Sector Frame	180.00	300	80,445	0.010	36	372
dbSpectra ATS4TMA4-4	179.30	50	13,351	0.002	6	62
Generic 15' Omni	171.80	120	30,603	0.004	14	149
Ericsson Radio 4449 B71 B85A	166.00	225	55,297	0.007	25	279
Ericsson RRUS 4415 B25	166.00	138	33,915	0.004	15	171
Ericsson Air6449 B41	166.00	312	76,678	0.010	35	387
Ericsson AIR 21, 1.3M, B2A B4P (91.5 lbs)	166.00	274	67,462	0.008	31	341
Ericsson AIR32 B66Aa/B2a	166.00	397	97,470	0.012	44	492
Round Sector Frame	166.00	900	221,187	0.028	100	1,117
RFS APXVAARR24_43-U-NA20	166.00	384	94,299	0.012	43	476
RFS ATMAA1412D-1A20	164.70	39	9,504	0.001	4	48
Ericsson AIR 6419 B77G	159.00	198	46,526	0.006	21	246
Raycap DC6-48-60-18-8F (23.5" Height)	157.00	40	9,258	0.001	4	50
Ericsson RRUS 4426 B66	157.00	145	33,606	0.004	15	180
Ericsson RRUS 4449 B5, B12	157.00	213	49,298	0.006	22	264
Ericsson RRUS 32 B30	157.00	180	41,660	0.005	19	223
Ericsson RRUS 32 B2	157.00	159	36,800	0.005	17	197
Raycap DC9-48-60-24-8C-EV	157.00	16	3,703	0.000	2	20
CCI DMP65R-BU8D	157.00	287	66,448	0.008	30	356
Generic Flat Light Sector Frame	157.00	1,200	277,735	0.035	126	1,490
Quintel QD8616-7	152.90	450	101,225	0.013	46	559
Generic 10' Omni	151.90	25	5,584	0.001	3	31
Ericsson RRUS 4478 B14	151.80	178	39,775	0.005	18	221
Ericsson RRUS E2 B29	151.70	180	40,148	0.005	18	223
Generic Round Side Arm	151.00	188	41,613	0.005	19	233
Ericsson AIR 6449 B77D/ C-Band	150.20	245	54,020	0.007	24	304
Commscope RDIDC-9181-PF-48	144.00	22	4,618	0.001	2	27
Fujitsu TA08025-B604	144.00	192	40,425	0.005	18	238
Fujitsu TA08025-B605	144.00	225	47,448	0.006	21	279
JMA Wireless MX08FRO665-21	144.00	194	40,805	0.005	18	240
Generic Flat Light Sector Frame	144.00	1,200	253,054	0.032	115	1,490
Samsung Outdoor CBRS 20W RRH	132.00	56	10,715	0.001	5	69
Kaelus KA-6030	132.00	35	6,759	0.001	3	44
Raycap RRFDC-1064-PF-48	132.00	28	5,377	0.001	2	35
Samsung B5/B13 RRH-BR04C	132.00	211	40,497	0.005	18	262
Samsung B2/B66A RRH-BR049	132.00	253	48,619	0.006	22	314
Samsung CBRS 64T64R MMU	132.00	225	43,204	0.005	20	279
Samsung MT6407-77A	132.00	245	47,006	0.006	21	304
Andrew LNX-6512DS-A1M	132.00	91	17,397	0.002	8	112
JMA Wireless MX06FRO660-02	132.00	276	52,997	0.007	24	343
Generic Round Sector Frame	132.00	2,100	403,238	0.050	182	2,607
VZW Unused Reserve (16199.35 sqin)	132.00	1,080	207,476	0.026	94	1,341
Totals		64,457	8,008,719	1.000	3,624	80,016

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FORCE/STRESS SUMMARY

Section 1 – 0.0' to 20.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing %			F _y (ksi)	Φ _c P _n (kip)	Shear		# Bolt	# Hole	Use %	Controls	
				X	Y	Z			Φ _{R_{nv}} (kip)	Bear Φ _{R_n} (kip)					
L PX - 12" DIA PIPE	-291.15	1.2D + 1.0W N	10.024	100	100	100	27.78	27.78	816.60	0.00	0.00	0	0	35	Member X
H PST - 3" DIA PIPE	-8.01	1.2D + 1.0W 90°	12.173	100	100	100	125.92	125.92	31.77	0.00	40.44	2	0	25	Member X
D PST - 3-1/2" DIA PIPE	-12.50	1.2D + 1.0W 90°	15.757	100	100	100	141.11	141.11	30.41	0.00	63.46	3	0	41	Member X

Member Tension	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	Φ _c P _n (kip)	Shear		Bear		Blk Shear		# Bolt	# Hole	Use %	Controls
						Φ _{R_{nv}} (kip)	Φ _{R_n} (kip)	Φ _t P _n (kip)	Φ _t P _n (kip)						
L PX - 12" DIA PIPE	242.07	1.2D + 1.0W 60°	50.0	65	864.00	0.00	0.00					0	0	28	Member
H PST - 3" DIA PIPE	9.50	1.2D + 1.0W 90°	50.0	65	100.35	0.00	32.43	0.00				2	0	29	Bolt Bear
D PST - 3-1/2" DIA PIPE	11.61	0.9D + 1.0W 90°	50.0	65	120.60	0.00	55.09	0.00				3	0	21	Bolt Bear

Max Splice Forces	Pu (kip)	Load Case	Φ _{R_{nt}} (kip)	Use %	Num Bolts	Bolt Type
Bot Tension	259.92	0.9D + 1.0W 60°	1362.92	9	24	1" A354-BC
Bot Compression	304.28	1.2D + 1.0W N	1584.63	32	0	

Section 2 – 20.0' to 40.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing %			F _y (ksi)	Φ _c P _n (kip)	Shear		# Bolt	# Hole	Use %	Controls	
				X	Y	Z			Φ _{R_{nv}} (kip)	Bear Φ _{R_n} (kip)					
L PX - 12" DIA PIPE	-263.26	1.2D + 1.0W N	10.032	100	100	100	27.80	27.80	816.53	0.00	0.00	0	0	32	Member X
H PST - 3" DIA PIPE	-7.36	1.2D + 1.0W 90°	10.883	100	100	100	112.58	112.58	39.72	0.00	40.44	2	0	18	Member X
D PST - 3-1/2" DIA PIPE	-11.23	1.2D + 1.0W 90°	15.298	100	100	100	137.00	137.00	32.26	0.00	63.46	3	0	34	Member X

Member Tension	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	Φ _c P _n (kip)	Shear		Bear		Blk Shear		# Bolt	# Hole	Use %	Controls
						Φ _{R_{nv}} (kip)	Φ _{R_n} (kip)	Φ _t P _n (kip)	Φ _t P _n (kip)						
L PX - 12" DIA PIPE	224.95	0.9D + 1.0W 60°	50.0	65	864.00	0.00	0.00					0	0	26	Member
H PST - 3" DIA PIPE	8.01	1.2D + 1.0W 90°	50.0	65	100.35	0.00	32.43	0.00				2	0	24	Bolt Bear
D PST - 3-1/2" DIA PIPE	9.97	1.2D + 1.0W 90°	50.0	65	120.60	0.00	55.09	0.00				3	0	18	Bolt Bear

Max Splice Forces	Pu (kip)	Load Case	Φ _{R_{nt}} (kip)	Use %	Num Bolts	Bolt Type
Bot Tension	234.80	0.9D + 1.0W 60°	872.27	27	16	1 A325

Section 3 – 40.0' to 60.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing %			F _y (ksi)	Φ _c P _n (kip)	Shear		# Bolt	# Hole	Use %	Controls	
				X	Y	Z			Φ _{R_{nv}} (kip)	Bear Φ _{R_n} (kip)					
L PX - 10" DIA PIPE	-233.19	1.2D + 1.0W N	10.026	100	100	100	33.14	33.14	668.58	0.00	0.00	0	0	34	Member X
H PST - 2-1/2" DIA PIPE	-7.86	0.9D + 1.0W 90°	9.57	100	100	100	121.27	121.27	26.18	0.00	38.00	2	0	30	Member X
D PX - 3" DIA PIPE	-12.34	1.2D + 1.0W 90°	14.285	100	100	100	150.37	150.37	30.17	0.00	84.24	3	0	40	Member X

Member Tension	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	Φ _c P _n (kip)	Shear		Bear		Blk Shear		# Bolt	# Hole	Use %	Controls
						Φ _{R_{nv}} (kip)	Φ _{R_n} (kip)	Φ _t P _n (kip)	Φ _t P _n (kip)						
L PX - 10" DIA PIPE	196.13	1.2D + 1.0W 60°	50.0	65	724.50	0.00	0.00					0	0	27	Member
H PST - 2-1/2" DIA PIPE	8.25	1.2D + 1.0W 90°	50.0	65	76.68	0.00	30.48	0.00				2	0	27	Bolt Bear
D PX - 3" DIA PIPE	11.26	1.2D + 1.0W 90°	50.0	65	135.90	0.00	73.12	0.00				3	0	15	Bolt Bear

Max Splice Forces	Pu (kip)	Load Case	Φ _{R_{nt}} (kip)	Use %	Num Bolts	Bolt Type
Bot Tension	213.01	0.9D + 1.0W 60°	872.27	24	16	1 A325

Section 4 – 60.0' to 80.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing %			F _y (ksi)	Φ _c P _n (kip)	Shear		# Bolt	# Hole	Use %	Controls	
				X	Y	Z			Φ _{R_{nv}} (kip)	Bear Φ _{R_n} (kip)					
L PX - 10" DIA PIPE	-200.40	1.2D + 1.0W N	10.028	100	100	100	33.15	33.15	668.56	0.00	0.00	0	0	29	Member X
H PST - 2-1/2" DIA PIPE	-7.08	1.2D + 1.0W 90°	8.298	100	100	100	105.14	105.14	34.17	0.00	38.00	2	0	20	Member X
D PX - 3" DIA PIPE	-12.06	1.2D + 1.0W 90°	13.422	100	100	100	141.29	141.29	34.18	0.00	84.24	3	0	35	Member X

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Member Tension	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	Φ _c P _n (kip)	Shear ΦR _{nv} (kip)	Bear ΦR _n (kip)	Blk Shear Φ _t P _n (kip)	# Bolt	# Hole	Use %	Controls
L PX - 10" DIA PIPE	169.33	1.2D + 1.0W 60°	50.0	65	724.50	0.00	0.00		0	0	23	Member
H PST - 2-1/2" DIA PIPE	7.46	1.2D + 1.0W 90°	50.0	65	76.68	0.00	30.48	0.00	2	0	24	Bolt Bear
D PX - 3" DIA PIPE	11.08	1.2D + 1.0W 90°	50.0	65	135.90	0.00	73.12	0.00	3	0	15	Bolt Bear
Max Splice Forces	Pu (kip)	Load Case	ΦR _{nt} (kip)	Use %	Num Bolts	Bolt Type						
Bot Tension	186.01	0.9D + 1.0W 60°	654.20	28	12	1 A325						

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Section 5 – 80.0' to 100.0'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing %			F _y (ksi)	Φ _c P _n (kip)	Shear		Bear ΦR _n (kip)	# Bolt	# Hole	Use %	Controls
				X	Y	Z			ΦR _{nv} (kip)	ΦR _n (kip)					
L PSP - 8.75" OD x 0.5"	-165.27	1.2D + 1.0W N	10.025	100	100	100	41.17	41.17	515.18	0.00	0.00	0	0	32	Member X
H PX - 2" DIA PIPE	-6.88	1.2D + 1.0W 90°	7.035	100	100	100	110.21	110.21	27.40	0.00	40.81	2	0	25	Member X
D PX - 3" DIA PIPE	-12.64	1.2D + 1.0W 90°	12.596	100	100	100	132.59	132.59	38.81	0.00	84.24	3	0	32	Member X

Member Tension	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	Φ _c P _n (kip)	Shear		Blk Shear		# Bolt	# Hole	Use %	Controls
						ΦR _{nv} (kip)	ΦR _n (kip)	Φ _t P _n (kip)	Φ _t P _n (kip)				
L PSP - 8.75" OD x 0.5"	142.86	0.9D + 1.0W 60°	50.0	65	583.16	0.00	0.00			0	0	24	Member
H PX - 2" DIA PIPE	7.11	1.2D + 1.0W 90°	50.0	65	66.60	0.00	32.73	0.00	0.00	2	0	21	Bolt Bear
D PX - 3" DIA PIPE	11.83	1.2D + 1.0W 90°	50.0	65	135.90	0.00	73.12	0.00	0.00	3	0	16	Bolt Bear

Max Splice Forces	Pu (kip)	Load Case	ΦR _{nt} (kip)	Use %	Num Bolts	Bolt Type
Bot Tension	158.00	0.9D + 1.0W 60°	654.20	24	12	1 A325

Section 6 – 100.0' to 120.0'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing %			F _y (ksi)	Φ _c P _n (kip)	Shear		Bear ΦR _n (kip)	# Bolt	# Hole	Use %	Controls
				X	Y	Z			ΦR _{nv} (kip)	ΦR _n (kip)					
L PX - 6" DIA PIPE	-131.87	1.2D + 1.0W N	6.679	100	100	100	36.51	36.51	342.89	0.00	0.00	0	0	38	Member X
H PST - 2" DIA PIPE	-6.95	1.2D + 1.0W 90°	6.072	100	100	100	92.58	92.58	25.73	0.00	24.02	2	0	27	Member X
D PST - 2-1/2" DIA PIPE	-10.78	1.2D + 1.0W 90°	9.258	100	100	100	117.31	117.31	27.97	0.00	47.50	3	0	38	Member X

Member Tension	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	Φ _c P _n (kip)	Shear		Blk Shear		# Bolt	# Hole	Use %	Controls
						ΦR _{nv} (kip)	ΦR _n (kip)	Φ _t P _n (kip)	Φ _t P _n (kip)				
L PX - 6" DIA PIPE	110.94	1.2D + 1.0W 60°	50.0	65	378.00	0.00	0.00			0	0	29	Member
H PST - 2" DIA PIPE	7.10	1.2D + 1.0W 90°	50.0	65	48.15	0.00	19.22	0.00	0.00	2	0	36	Bolt Bear
D PST - 2-1/2" DIA PIPE	10.72	0.9D + 1.0W 90°	50.0	65	76.68	0.00	41.17	0.00	0.00	3	0	26	Bolt Bear

Max Splice Forces	Pu (kip)	Load Case	ΦR _{nt} (kip)	Use %	Num Bolts	Bolt Type
Bot Tension	125.26	0.9D + 1.0W 60°	436.14	29	8	1 A325

Section 7 – 120.0' to 140.0'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing %			F _y (ksi)	Φ _c P _n (kip)	Shear		Bear ΦR _n (kip)	# Bolt	# Hole	Use %	Controls
				X	Y	Z			ΦR _{nv} (kip)	ΦR _n (kip)					
L PSP - ROHN 5 EH	-86.67	1.2D + 1.0W N	6.679	100	100	100	43.56	43.56	239.34	0.00	0.00	0	0	36	Member X
H PST - 1-1/2" DIA PIPE	-6.67	1.2D + 1.0W 90°	5.03	100	100	100	96.89	96.89	18.10	0.00	22.62	2	0	36	Member X
D PST - 2-1/2" DIA PIPE	-11.33	1.2D + 1.0W 90°	8.566	100	100	100	108.54	108.54	32.40	0.00	47.50	3	0	34	Member X

Member Tension	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	Φ _c P _n (kip)	Shear		Blk Shear		# Bolt	# Hole	Use %	Controls
						ΦR _{nv} (kip)	ΦR _n (kip)	Φ _t P _n (kip)	Φ _t P _n (kip)				
L PSP - ROHN 5 EH	69.44	1.2D + 1.0W 60°	50.0	65	274.95	0.00	0.00			0	0	25	Member
H PST - 1-1/2" DIA PIPE	6.78	1.2D + 1.0W 90°	50.0	65	35.96	0.00	18.10	0.00	0.00	2	0	37	Bolt Bear
D PST - 2-1/2" DIA PIPE	11.24	1.2D + 1.0W 90°	50.0	65	76.68	0.00	41.17	0.00	0.00	3	0	27	Bolt Bear

Max Splice Forces	Pu (kip)	Load Case	ΦR _{nt} (kip)	Use %	Num Bolts	Bolt Type
Bot Tension	85.51	0.9D + 1.0W 60°	327.10	26	6	1 A325

Section 8 – 140.0' to 160.0'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing %			F _y (ksi)	Φ _c P _n (kip)	Shear		Bear ΦR _n (kip)	# Bolt	# Hole	Use %	Controls
				X	Y	Z			ΦR _{nv} (kip)	ΦR _n (kip)					
L PST - 4" DIA PIPE	-39.53	1.2D + 1.0W N	6.667	100	100	100	52.98	52.98	116.18	0.00	0.00	0	0	34	Member X
H PST - 2" DIA PIPE	-5.55	1.2D + 1.0W 90°	4.325	100	100	100	65.95	65.95	35.03	0.00	24.02	2	0	15	Member X
D PST - 2-1/2" DIA PIPE	-10.84	1.2D + 1.0W 90°	7.955	100	100	100	100.80	100.80	36.48	0.00	47.50	3	0	29	Member X

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Member Tension	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	Φ _c P _n (kip)	Shear ΦR _{nv} (kip)	Bear ΦR _n (kip)	Blk Shear Φ _t P _n (kip)	# Bolt	# Hole	Use %	Controls
L PST - 4" DIA PIPE	30.23	0.9D + 1.0W 60°	50.0	65	142.65	0.00	0.00		0	0	21	Member
H PST - 2" DIA PIPE	5.65	1.2D + 1.0W 90°	50.0	65	48.15	0.00	19.22	0.00	2	0	29	Bolt Bear
D PST - 2-1/2" DIA PIPE	10.60	1.2D + 1.0W 90°	50.0	65	76.68	0.00	41.17	0.00	3	0	25	Bolt Bear
Max Splice Forces	Pu (kip)	Load Case	ΦR_{nt} (kip)	Use %	Num Bolts	Bolt Type						
Bot Tension	45.12	0.9D + 1.0W 60°	218.07	21	4	1 A325						

Section 9 – 160.0' to 180.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing %			F _y (ksi)	Φ _c P _n (kip)	Shear ΦR _{nv} (kip)	Bear ΦR _n (kip)	# Bolt	# Hole	Use %	Controls	
				X	Y	Z									
L PST - 3" DIA PIPE	-6.99	1.2D + 1.0W N	6.667	100	100	100	68.97	68.97	70.87	0.00	0.00	0	0	9	Member X
H PST - 1-1/2" DIA PIPE	-2.25	1.2D + 1.0W N	4.28	100	100	100	82.44	82.44	21.87	0.00	22.62	2	0	10	Member X
D PST - 2" DIA PIPE	-4.45	1.2D + 1.0W 90°	7.931	100	100	100	120.92	120.92	16.53	0.00	36.04	3	0	26	Member X
Member Tension	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	Φ _c P _n (kip)	Shear ΦR _{nv} (kip)	Bear ΦR _n (kip)	Blk Shear Φ _t P _n (kip)	# Bolt	# Hole	Use %	Controls			
L PST - 3" DIA PIPE	3.06	1.2D + 1.0W 60°	50.0	65	100.35	0.00	0.00		0	0	3	Member			
H PST - 1-1/2" DIA PIPE	2.30	1.2D + 1.0W 60°	50.0	65	35.96	0.00	18.10	0.00	2	0	12	Bolt Bear			
D PST - 2" DIA PIPE	4.32	1.2D + 1.0W 90°	50.0	65	48.15	0.00	31.23	0.00	3	0	13	Bolt Bear			
Max Splice Forces	Pu (kip)	Load Case	ΦR_{nt} (kip)	Use %	Num Bolts	Bolt Type									
Bot Tension	8.96	0.9D + 1.0W 60°	166.22	5	4	0.875" A325									

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DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	133.33	0.0849	-0.0036	0.0813	0.0813
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	146.67	0.1046	-0.0034	0.0909	0.0909
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	153.33	0.1154	-0.0033	0.0945	0.0946
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	160.00	0.1264	-0.0033	0.0952	0.0952
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	166.67	0.1378	-0.0032	0.0974	0.0974
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	173.33	0.1489	-0.0032	0.0956	0.0956
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	180.00	0.1601	-0.0031	0.0961	0.0961
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	133.33	0.0849	0.0031	0.0811	0.0811
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	146.67	0.1046	0.0029	0.0907	0.0908
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	153.33	0.1154	0.0029	0.0944	0.0944
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	160.00	0.1264	0.0029	0.0958	0.0958
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	166.67	0.1378	0.0028	0.0972	0.0972
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	173.33	0.1489	0.0027	0.0957	0.0957
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	180.00	0.1601	0.0027	0.0960	0.096
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	133.33	0.0849	0.0030	0.0813	0.0814
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	146.67	0.1046	0.0028	0.0912	0.0912
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	153.33	0.1154	0.0028	0.0940	0.094
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	160.00	0.1265	0.0027	0.0976	0.0977
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	166.67	0.1378	0.0027	0.0968	0.0968
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	173.33	0.149	0.0026	0.0959	0.0959
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	180.00	0.1601	0.0026	0.0960	0.0961
0.9D - 1.0Ev + 1.0Eh 90° Seismic (Reduced DL)	133.33	0.0278	-0.0014	0.0279	0.0279
0.9D - 1.0Ev + 1.0Eh 90° Seismic (Reduced DL)	146.67	0.0346	-0.0014	0.0315	0.0316
0.9D - 1.0Ev + 1.0Eh 90° Seismic (Reduced DL)	153.33	0.0383	-0.0014	0.0328	0.0328
0.9D - 1.0Ev + 1.0Eh 90° Seismic (Reduced DL)	160.00	0.0422	-0.0013	0.0335	0.0335
0.9D - 1.0Ev + 1.0Eh 90° Seismic (Reduced DL)	166.67	0.0461	-0.0013	0.0343	0.0343
0.9D - 1.0Ev + 1.0Eh 90° Seismic (Reduced DL)	173.33	0.0501	-0.0012	0.0339	0.0339
0.9D - 1.0Ev + 1.0Eh 90° Seismic (Reduced DL)	180.00	0.054	-0.0012	0.0337	0.0338
0.9D - 1.0Ev + 1.0Eh 60° Seismic (Reduced DL)	133.33	0.0278	0.0012	0.0279	0.0279
0.9D - 1.0Ev + 1.0Eh 60° Seismic (Reduced DL)	146.67	0.0346	0.0012	0.0313	0.0314
0.9D - 1.0Ev + 1.0Eh 60° Seismic (Reduced DL)	153.33	0.0383	0.0012	0.0328	0.0328
0.9D - 1.0Ev + 1.0Eh 60° Seismic (Reduced DL)	160.00	0.0422	0.0012	0.0335	0.0335
0.9D - 1.0Ev + 1.0Eh 60° Seismic (Reduced DL)	166.67	0.0461	0.0011	0.0343	0.0343
0.9D - 1.0Ev + 1.0Eh 60° Seismic (Reduced DL)	173.33	0.0501	0.0011	0.0339	0.0339
0.9D - 1.0Ev + 1.0Eh 60° Seismic (Reduced DL)	180.00	0.054	0.0011	0.0338	0.0338
0.9D - 1.0Ev + 1.0Eh Normal Seismic (Reduced DL)	133.33	0.0278	0.0012	0.0279	0.0279
0.9D - 1.0Ev + 1.0Eh Normal Seismic (Reduced DL)	146.67	0.0346	0.0012	0.0316	0.0316
0.9D - 1.0Ev + 1.0Eh Normal Seismic (Reduced DL)	153.33	0.0383	0.0012	0.0328	0.0328
0.9D - 1.0Ev + 1.0Eh Normal Seismic (Reduced DL)	160.00	0.0422	0.0012	0.0335	0.0335
0.9D - 1.0Ev + 1.0Eh Normal Seismic (Reduced DL)	166.67	0.0461	0.0011	0.0343	0.0343
0.9D - 1.0Ev + 1.0Eh Normal Seismic (Reduced DL)	173.33	0.0501	0.0011	0.0339	0.0339
0.9D - 1.0Ev + 1.0Eh Normal Seismic (Reduced DL)	180.00	0.054	0.0011	0.0337	0.0337
1.2D + 1.0Ev + 1.0Eh 90° Seismic	133.33	0.0278	-0.0014	0.0280	0.028
1.2D + 1.0Ev + 1.0Eh 90° Seismic	146.67	0.0347	-0.0014	0.0317	0.0317
1.2D + 1.0Ev + 1.0Eh 90° Seismic	153.33	0.0384	-0.0014	0.0329	0.0329
1.2D + 1.0Ev + 1.0Eh 90° Seismic	160.00	0.0422	-0.0013	0.0336	0.0336
1.2D + 1.0Ev + 1.0Eh 90° Seismic	166.67	0.0462	-0.0013	0.0344	0.0344
1.2D + 1.0Ev + 1.0Eh 90° Seismic	173.33	0.0502	-0.0012	0.0340	0.034
1.2D + 1.0Ev + 1.0Eh 90° Seismic	180.00	0.0541	-0.0012	0.0339	0.0339
1.2D + 1.0Ev + 1.0Eh 60° Seismic	133.33	0.0278	0.0012	0.0281	0.0281
1.2D + 1.0Ev + 1.0Eh 60° Seismic	146.67	0.0347	0.0012	0.0314	0.0315
1.2D + 1.0Ev + 1.0Eh 60° Seismic	153.33	0.0384	0.0012	0.0329	0.0329
1.2D + 1.0Ev + 1.0Eh 60° Seismic	160.00	0.0422	0.0012	0.0336	0.0336
1.2D + 1.0Ev + 1.0Eh 60° Seismic	166.67	0.0462	0.0011	0.0343	0.0343
1.2D + 1.0Ev + 1.0Eh 60° Seismic	173.33	0.0502	0.0011	0.0340	0.034
1.2D + 1.0Ev + 1.0Eh 60° Seismic	180.00	0.0541	0.0011	0.0339	0.0339
1.2D + 1.0Ev + 1.0Eh Normal Seismic	133.33	0.0278	0.0012	0.0280	0.028
1.2D + 1.0Ev + 1.0Eh Normal Seismic	146.67	0.0347	0.0012	0.0318	0.0318
1.2D + 1.0Ev + 1.0Eh Normal Seismic	153.33	0.0384	0.0012	0.0328	0.0329

ASSET: 411183, WATERFORD CT
 CUSTOMER: VERIZON WIRELESS

CODE: ANSI/TIA-222-H
 PROJECT: 14519462_C3_03

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
1.2D + 1.0Ev + 1.0Eh Normal Seismic	160.00	0.0422	0.0012	0.0335	0.0335
1.2D + 1.0Ev + 1.0Eh Normal Seismic	166.67	0.0462	0.0011	0.0344	0.0344
1.2D + 1.0Ev + 1.0Eh Normal Seismic	173.33	0.0502	0.0011	0.0340	0.034
1.2D + 1.0Ev + 1.0Eh Normal Seismic	180.00	0.0541	0.0011	0.0338	0.0338
1.2D + 1.0Di + 1.0Wi 90° 50 mph Wind with 1" Radial Ice	133.33	0.1142	-0.0050	0.1054	0.1054
1.2D + 1.0Di + 1.0Wi 90° 50 mph Wind with 1" Radial Ice	146.67	0.1397	-0.0048	0.1171	0.1171
1.2D + 1.0Di + 1.0Wi 90° 50 mph Wind with 1" Radial Ice	153.33	0.1535	-0.0048	0.1213	0.1214
1.2D + 1.0Di + 1.0Wi 90° 50 mph Wind with 1" Radial Ice	160.00	0.1677	-0.0048	0.1225	0.1226
1.2D + 1.0Di + 1.0Wi 90° 50 mph Wind with 1" Radial Ice	166.67	0.1823	-0.0047	0.1252	0.1252
1.2D + 1.0Di + 1.0Wi 90° 50 mph Wind with 1" Radial Ice	173.33	0.1967	-0.0047	0.1235	0.1235
1.2D + 1.0Di + 1.0Wi 90° 50 mph Wind with 1" Radial Ice	180.00	0.211	-0.0046	0.1237	0.1238
1.2D + 1.0Di + 1.0Wi 60° 50 mph Wind with 1" Radial Ice	133.33	0.1143	0.0043	0.1054	0.1054
1.2D + 1.0Di + 1.0Wi 60° 50 mph Wind with 1" Radial Ice	146.67	0.1398	0.0042	0.1167	0.1167
1.2D + 1.0Di + 1.0Wi 60° 50 mph Wind with 1" Radial Ice	153.33	0.1536	0.0042	0.1212	0.1212
1.2D + 1.0Di + 1.0Wi 60° 50 mph Wind with 1" Radial Ice	160.00	0.1679	0.0041	0.1230	0.1231
1.2D + 1.0Di + 1.0Wi 60° 50 mph Wind with 1" Radial Ice	166.67	0.1824	0.0041	0.1250	0.125
1.2D + 1.0Di + 1.0Wi 60° 50 mph Wind with 1" Radial Ice	173.33	0.1968	0.0040	0.1236	0.1236
1.2D + 1.0Di + 1.0Wi 60° 50 mph Wind with 1" Radial Ice	180.00	0.2112	0.0040	0.1236	0.1236
1.2D + 1.0Di + 1.0Wi Normal 50 mph Wind with 1" Radial Ice	133.33	0.114	0.0043	0.1054	0.1055
1.2D + 1.0Di + 1.0Wi Normal 50 mph Wind with 1" Radial Ice	146.67	0.1394	0.0041	0.1174	0.1174
1.2D + 1.0Di + 1.0Wi Normal 50 mph Wind with 1" Radial Ice	153.33	0.1532	0.0041	0.1208	0.1209
1.2D + 1.0Di + 1.0Wi Normal 50 mph Wind with 1" Radial Ice	160.00	0.1675	0.0040	0.1247	0.1248
1.2D + 1.0Di + 1.0Wi Normal 50 mph Wind with 1" Radial Ice	166.67	0.182	0.0040	0.1247	0.1247
1.2D + 1.0Di + 1.0Wi Normal 50 mph Wind with 1" Radial Ice	173.33	0.1964	0.0039	0.1236	0.1236
1.2D + 1.0Di + 1.0Wi Normal 50 mph Wind with 1" Radial Ice	180.00	0.2108	0.0039	0.1237	0.1237
0.9D + 1.0W 90° 126 mph Wind with No Ice (Reduced DL)	133.33	0.3708	-0.0159	0.3571	0.3574
0.9D + 1.0W 90° 126 mph Wind with No Ice (Reduced DL)	146.67	0.4574	-0.0153	0.3993	0.3993
0.9D + 1.0W 90° 126 mph Wind with No Ice (Reduced DL)	153.33	0.5048	-0.0154	0.4160	0.4163
0.9D + 1.0W 90° 126 mph Wind with No Ice (Reduced DL)	160.00	0.5536	-0.0154	0.4191	0.4193
0.9D + 1.0W 90° 126 mph Wind with No Ice (Reduced DL)	166.67	0.6035	-0.0153	0.4288	0.4288
0.9D + 1.0W 90° 126 mph Wind with No Ice (Reduced DL)	173.33	0.6526	-0.0152	0.4210	0.421
0.9D + 1.0W 90° 126 mph Wind with No Ice (Reduced DL)	180.00	0.7017	-0.0151	0.4232	0.4235
0.9D + 1.0W 60° 126 mph Wind with No Ice (Reduced DL)	133.33	0.3706	0.0140	0.3565	0.3567
0.9D + 1.0W 60° 126 mph Wind with No Ice (Reduced DL)	146.67	0.4574	0.0137	0.3994	0.3994
0.9D + 1.0W 60° 126 mph Wind with No Ice (Reduced DL)	153.33	0.5048	0.0138	0.4153	0.4155
0.9D + 1.0W 60° 126 mph Wind with No Ice (Reduced DL)	160.00	0.5536	0.0140	0.4217	0.4219
0.9D + 1.0W 60° 126 mph Wind with No Ice (Reduced DL)	166.67	0.6034	0.0139	0.4283	0.4283
0.9D + 1.0W 60° 126 mph Wind with No Ice (Reduced DL)	173.33	0.6527	0.0138	0.4215	0.4215
0.9D + 1.0W 60° 126 mph Wind with No Ice (Reduced DL)	180.00	0.7018	0.0137	0.4228	0.423
0.9D + 1.0W Normal 126 mph Wind with No Ice (Reduced DL)	133.33	0.3708	0.0136	0.3568	0.3571
0.9D + 1.0W Normal 126 mph Wind with No Ice (Reduced DL)	146.67	0.4575	-0.0130	0.4005	0.4005
0.9D + 1.0W Normal 126 mph Wind with No Ice (Reduced DL)	153.33	0.5049	-0.0129	0.4135	0.4137
0.9D + 1.0W Normal 126 mph Wind with No Ice (Reduced DL)	160.00	0.5538	-0.0128	0.4299	0.4301
0.9D + 1.0W Normal 126 mph Wind with No Ice (Reduced DL)	166.67	0.6037	0.0126	0.4265	0.4265
0.9D + 1.0W Normal 126 mph Wind with No Ice (Reduced DL)	173.33	0.6529	0.0125	0.4223	0.4223
0.9D + 1.0W Normal 126 mph Wind with No Ice (Reduced DL)	180.00	0.702	0.0125	0.4229	0.423
1.2D + 1.0W 90° 126 mph Wind with No Ice	133.33	0.3712	-0.0159	0.3575	0.3579
1.2D + 1.0W 90° 126 mph Wind with No Ice	146.67	0.4579	-0.0153	0.3999	0.3999
1.2D + 1.0W 90° 126 mph Wind with No Ice	153.33	0.5054	-0.0154	0.4166	0.4169
1.2D + 1.0W 90° 126 mph Wind with No Ice	160.00	0.5542	-0.0154	0.4196	0.4199
1.2D + 1.0W 90° 126 mph Wind with No Ice	166.67	0.6042	-0.0153	0.4293	0.4294
1.2D + 1.0W 90° 126 mph Wind with No Ice	173.33	0.6533	-0.0152	0.4215	0.4216
1.2D + 1.0W 90° 126 mph Wind with No Ice	180.00	0.7025	-0.0151	0.4238	0.4241
1.2D + 1.0W 60° 126 mph Wind with No Ice	133.33	0.371	0.0140	0.3569	0.3571
1.2D + 1.0W 60° 126 mph Wind with No Ice	146.67	0.4578	0.0137	0.3998	0.3998
1.2D + 1.0W 60° 126 mph Wind with No Ice	153.33	0.5053	0.0139	0.4158	0.416
1.2D + 1.0W 60° 126 mph Wind with No Ice	160.00	0.5542	0.0140	0.4222	0.4225
1.2D + 1.0W 60° 126 mph Wind with No Ice	166.67	0.6041	0.0139	0.4289	0.4289
1.2D + 1.0W 60° 126 mph Wind with No Ice	173.33	0.6534	0.0138	0.4221	0.4221

ASSET: 411183, WATERFORD CT

CODE: ANSI/TIA-222-H

CUSTOMER: VERIZON WIRELESS

PROJECT: 14519462_C3_03

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
1.2D + 1.0W 60° 126 mph Wind with No Ice	180.00	0.7026	0.0138	0.4234	0.4236
1.2D + 1.0W Normal 126 mph Wind with No Ice	133.33	0.3711	-0.0137	0.3573	0.3576
1.2D + 1.0W Normal 126 mph Wind with No Ice	146.67	0.458	-0.0130	0.4011	0.4011
1.2D + 1.0W Normal 126 mph Wind with No Ice	153.33	0.5055	-0.0129	0.4141	0.4143
1.2D + 1.0W Normal 126 mph Wind with No Ice	160.00	0.5544	-0.0128	0.4304	0.4306
1.2D + 1.0W Normal 126 mph Wind with No Ice	166.67	0.6044	0.0126	0.4271	0.4271
1.2D + 1.0W Normal 126 mph Wind with No Ice	173.33	0.6536	-0.0126	0.4228	0.4228
1.2D + 1.0W Normal 126 mph Wind with No Ice	180.00	0.7028	0.0125	0.4234	0.4236

DETAILED REACTIONS

Load Case	Radius (ft)	Elevation (ft)	Azimuth (deg)	Node	*(-) Uplift and (+) Down		
					FX* (kip)	FY* (kip)	FZ* (kip)
1.2D + 1.0W Normal	14.75	0.00	0	1	0.00	303.27	-34.73
	14.75	0.00	120	1a	9.73	-112.96	-10.70
	14.75	0.00	240	1b	-9.73	-112.96	-10.70
1.2D + 1.0W 60°	14.75	0.00	0	1	-4.30	164.53	-18.63
	14.75	0.00	120	1a	-18.28	164.51	5.59
	14.75	0.00	240	1b	-26.04	-251.70	-15.03
1.2D + 1.0W 90°	14.75	0.00	0	1	-5.03	25.79	-2.46
	14.75	0.00	120	1a	-27.58	266.08	13.08
	14.75	0.00	240	1b	-23.54	-214.51	-10.63
0.9D + 1.0W Normal	14.75	0.00	0	1	0.00	296.63	-34.12
	14.75	0.00	120	1a	10.25	-119.31	-11.01
	14.75	0.00	240	1b	-10.25	-119.31	-11.01
0.9D + 1.0W 60°	14.75	0.00	0	1	-4.30	157.99	-18.01
	14.75	0.00	120	1a	-17.75	157.97	5.28
	14.75	0.00	240	1b	-26.57	-257.94	-15.34
0.9D + 1.0W 90°	14.75	0.00	0	1	-5.03	19.34	-1.84
	14.75	0.00	120	1a	-27.04	259.46	12.77
	14.75	0.00	240	1b	-24.07	-220.79	-10.93
1.2D + 1.0Di + 1.0Wi Normal	14.75	0.00	0	1	0.00	134.95	-13.60
	14.75	0.00	120	1a	1.12	3.77	-2.33
	14.75	0.00	240	1b	-1.12	3.76	-2.33
1.2D + 1.0Di + 1.0Wi 60°	14.75	0.00	0	1	-1.45	91.22	-8.36
	14.75	0.00	120	1a	-7.96	91.22	2.92
	14.75	0.00	240	1b	-6.40	-39.96	-3.70
1.2D + 1.0Di + 1.0Wi 90°	14.75	0.00	0	1	-1.68	47.50	-3.11
	14.75	0.00	120	1a	-10.98	123.23	5.37
	14.75	0.00	240	1b	-5.60	-28.25	-2.26
1.2D + 1.0Ev + 1.0Eh Normal	14.75	0.00	0	1	0.00	46.00	-4.65
	14.75	0.00	120	1a	-1.39	16.00	0.54
	14.75	0.00	240	1b	1.39	16.00	0.54
1.2D + 1.0Ev + 1.0Eh 60°	14.75	0.00	0	1	-0.23	36.00	-3.59
	14.75	0.00	120	1a	-3.23	36.00	1.60
	14.75	0.00	240	1b	0.36	6.00	0.21
1.2D + 1.0Ev + 1.0Eh 90°	14.75	0.00	0	1	-0.27	26.00	-2.53
	14.75	0.00	120	1a	-3.85	43.32	2.07
	14.75	0.00	240	1b	0.54	8.68	0.46
0.9D - 1.0Ev + 1.0Eh Normal	14.75	0.00	0	1	0.00	37.96	-3.87
	14.75	0.00	120	1a	-0.72	7.99	0.15
	14.75	0.00	240	1b	0.72	7.99	0.15
0.9D - 1.0Ev + 1.0Eh 60°	14.75	0.00	0	1	-0.23	27.97	-2.81
	14.75	0.00	120	1a	-2.55	27.97	1.21
	14.75	0.00	240	1b	-0.32	-2.00	-0.18
0.9D - 1.0Ev + 1.0Eh 90°	14.75	0.00	0	1	-0.27	17.98	-1.75
	14.75	0.00	120	1a	-3.18	35.28	1.68
	14.75	0.00	240	1b	-0.14	0.68	0.07
1.0D + 1.0W Service Normal	14.75	0.00	0	1	0.00	85.35	-9.55
	14.75	0.00	120	1a	0.98	-10.44	-1.75
	14.75	0.00	240	1b	-0.98	-10.45	-1.75
1.0D + 1.0W Service 60°	14.75	0.00	0	1	-1.02	53.42	-5.80
	14.75	0.00	120	1a	-5.53	53.41	2.02
	14.75	0.00	240	1b	-4.75	-42.37	-2.74
1.0D + 1.0W Service 90°	14.75	0.00	0	1	-1.18	21.49	-2.04
	14.75	0.00	120	1a	-7.70	76.79	3.77
	14.75	0.00	240	1b	-4.17	-33.82	-1.72

ASSET: 411183, WATERFORD CT
CUSTOMER: VERIZON WIRELESS

CODE: ANSI/TIA-222-H
PROJECT: 14519462_C3_03

MAXIMUM REACTIONS SUMMARY

	<u>Individual</u>		<u>Global (DL+WL+IL)</u>		<u>Global (DL+WL)</u>
Max Uplift:	257.94 (kip)	Moment Ice:	1935.14 (kip-ft)	Moment:	6139.94 (kip-ft)
Max Down:	303.27 (kip)	Total Down Ice:	142.47 (kip)	Total Down:	77.35 (kip)
Max Shear:	34.73 (kip)	Total Shear Ice:	18.26 (kip)	Total Shear:	56.13 (kip)
1.2D + 1.0W Normal					

EXHIBIT 4





Colliers Engineering & Design CT, P.C.
1055 Washington Blvd
Stamford, CT 06901
203.324.0800
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Antenna Mount Analysis Report and PMI Requirements

Mount ReAnalysis

SMART Tool Project #: 10207614
Colliers Engineering & Design CT, P.C. Project #: 23777188

July 24, 2023

Site Information

Site ID: 5000121802-VZW / WATERFORD CT
Site Name: WATERFORD CT
Carrier Name: Verizon Wireless
Address: 53 Dayton Rd.
Waterford, Connecticut 06385
New London County
Latitude: 41.377839°
Longitude: -72.139347°

Structure Information

Tower Type: 180-Ft Self Support
Mount Type: 15.00-Ft Sector Frame

FUZE ID # 17123901

Analysis Results

Sector Frame: 59.8% 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: Grant Walters

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
<i>Radio Frequency Data Sheet (RFDS)</i>	<i>Verizon RFDS, Site ID: 325077, Dated June 9, 2021</i>
<i>Mount Mapping Report</i>	<i>RKS Design & Engineering, LLC, Site ID: ATC: 411183 Dated October 25, 2021</i>
<i>Previous Mount Analysis</i>	<i>Maser Consulting Connecticut, Project #: 21777545 Dated November 3, 2021</i>
<i>Previous Post Modification Inspection</i>	<i>Maser Consulting Connecticut, Project #: 21777545 Dated January 25, 2023</i>
<i>Filter Add Scope</i>	<i>Provided by Verizon Wireless</i>

Analysis Criteria:

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

Wind Parameters: Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT} : 130 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 : 0.992

Seismic Parameters: S_s : 0.194 g
 S_1 : 0.053 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 mounts:

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
133.80	136.30	3	Samsung	MT6407-77A	Retained
	134.80	3	Andrew	LNx-6512DS-A1M	
		6	JMA Wireless	MX06FRO660-03	
		3	Samsung	B2/B66A RRH-BR049	
		3	Samsung	B5/B13 RRH-BR04C	
		2	Raycap	RRFDC-3315-PF-48*	
		2	KAelus	KA-6030	Added
	132.80	3	Samsung	XXDWMM-12.5-65-8T-CBRS	Retained

* Equipment is flush mounted directly to the Monopole. They are not mounted on sector frame mounts and are not included in this mount analysis.

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

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

Standard Conditions:

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

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

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

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

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

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

Analysis Results:

Component	Utilization %	Pass/Fail
Face Horizontal	24.2 %	Pass
Antenna Pipe	34.3 %	Pass
Standoff Horizontal	37.8 %	Pass
Standoff Bar	52.5 %	Pass
Standoff Vertical	45.4 %	Pass
Standoff Diagonal	25.5 %	Pass
Standoff Tab	59.8 %	Pass
Mount Angle	29.2 %	Pass
Tie Back	5.3 %	Pass
Mount Connection	28.6 %	Pass

Structure Rating – (Controlling Utilization of all Components)	59.8%
---	--------------

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	24.5	12.7	32.1	20.4
0.5	35.4	18.9	46.3	29.8
1	44.0	24.1	58.1	38.2

Notes:

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

Requirements:

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

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 #: 5000121802

SMART Project #: 10207614

Fuze Project ID: 17123901

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:

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

7/19/2023

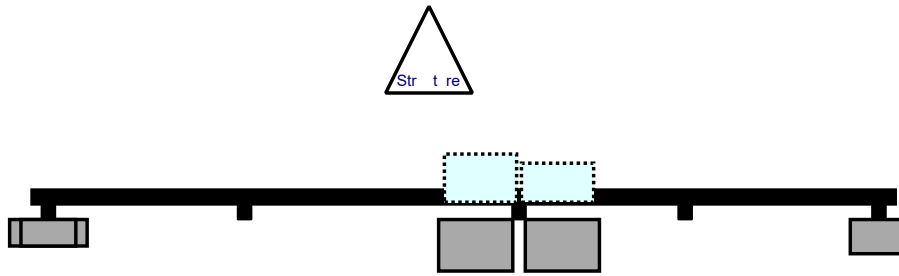
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10207614

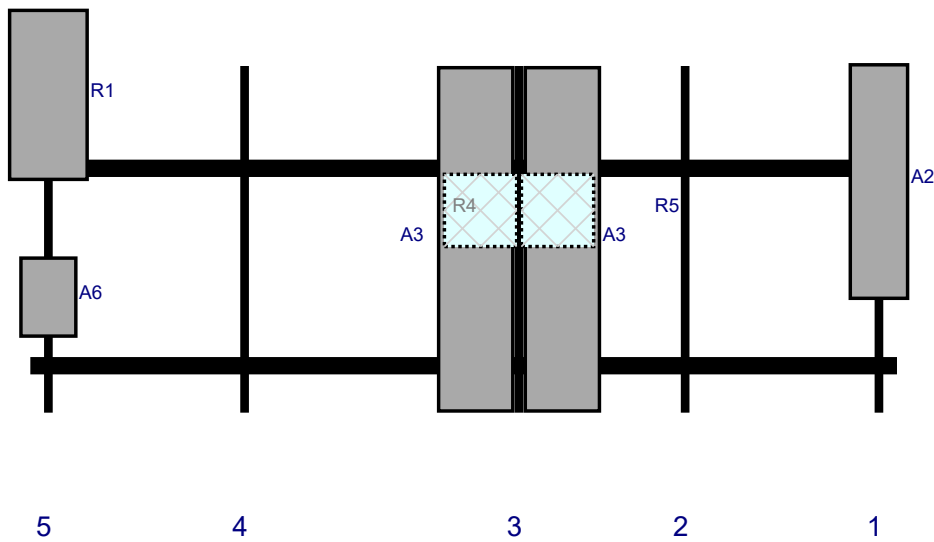
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P ge: 1

Plan View

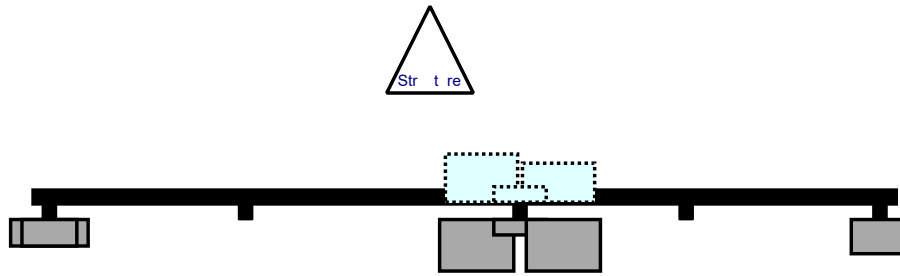


Front View - Looking at Structure

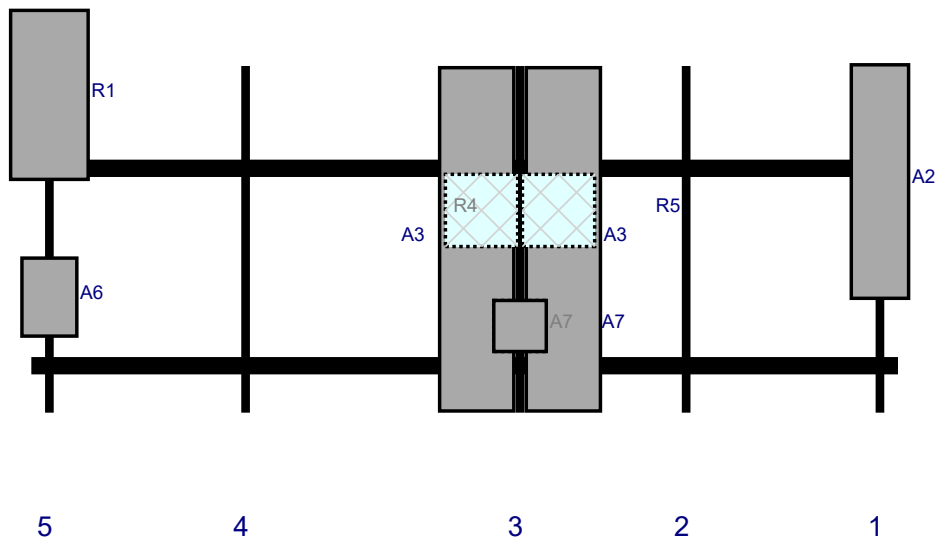


Re #	Model	Height (i)	Width (i)	H Dist Fr L.	Pipe #	Pipe Pos V	A t Pos	C. A t Fr T.	A t H O	St t s	V lid tio
A2	LNX-6512DS-A1M	48.5	11.9	176.25	1		Fro t	24	0	Ret i ed	01/20/2023
A3	MX06FRO660-03	71.3	15.4	101.5	3		Fro t	36	9	Ret i ed	01/20/2023
A3	MX06FRO660-03	71.3	15.4	101.5	3		Fro t	36	-9	Ret i ed	01/20/2023
R4	B2/B66A RRH-BR049	15	15	101.5	3		Behi d	30	-8	Ret i ed	01/20/2023
R5	B5/B13 RRH-BR04C	15	15	101.5	3		Behi d	30	8	Ret i ed	01/20/2023
A6	XXDWMM-12.5-65-8T-CBRS	16.2	11.4	3.75	5		Fro t	48	0	Ret i ed	01/20/2023
R1	MT6407-77A	35.1	16.1	3.75	5		Fro t	6	0	Ret i ed	01/20/2023

Plan View

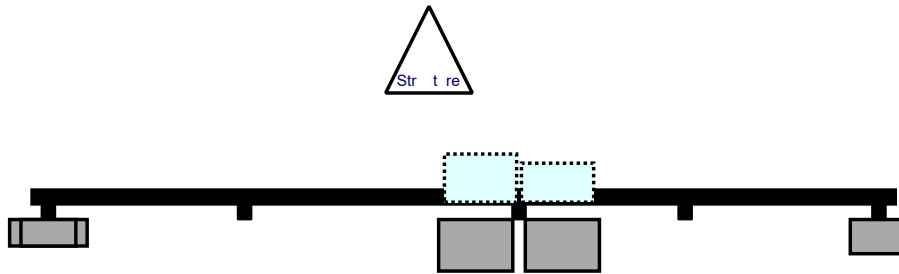


Front View - Looking at Structure

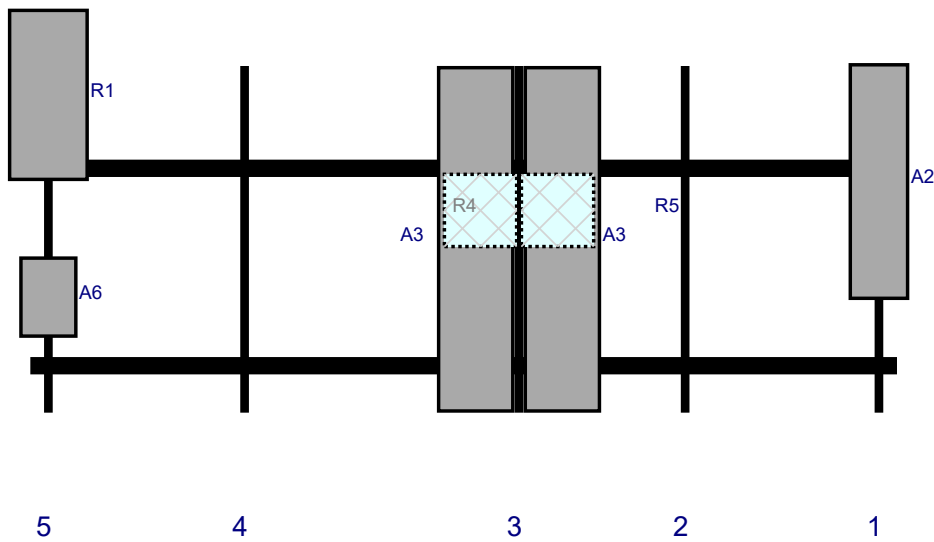


Re #	Model	Height (i)	Width (i)	H Dist Fr L.	Pipe #	Pipe Pos V	A t Pos	C. A t Fr T.	A t H O	St t s	V lid tio
A2	LNX-6512DS-A1M	48.5	11.9	176.25	1		Fro t	24	0	Ret i ed	01/20/2023
A3	MX06FRO660-03	71.3	15.4	101.5	3		Fro t	36	9	Ret i ed	01/20/2023
A3	MX06FRO660-03	71.3	15.4	101.5	3		Fro t	36	-9	Ret i ed	01/20/2023
R4	B2/B66A RRH-BR049	15	15	101.5	3		Behi d	30	-8	Ret i ed	01/20/2023
R5	B5/B13 RRH-BR04C	15	15	101.5	3		Behi d	30	8	Ret i ed	01/20/2023
A7	KA-6030	10.6	10.9	101.5	3		Behi d	54	0	Added	
A7	KA-6030	10.6	10.9	101.5	3		Fro t	54	0	Added	
A6	XXDWMM-12.5-65-8T-CBRS	16.2	11.4	3.75	5		Fro t	48	0	Ret i ed	01/20/2023
R1	MT6407-77A	35.1	16.1	3.75	5		Fro t	6	0	Ret i ed	01/20/2023

Plan View



Front View - Looking at Str t re



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	LNX-6512DS-A1M	48.5	11.9	176.25	1		Fro t	24	0	Ret i ed	01/20/2023
A3	MX06FRO660-03	71.3	15.4	101.5	3		Fro t	36	9	Ret i ed	01/20/2023
A3	MX06FRO660-03	71.3	15.4	101.5	3		Fro t	36	-9	Ret i ed	01/20/2023
R4	B2/B66A RRH-BR049	15	15	101.5	3		Behi d	30	-8	Ret i ed	01/20/2023
R5	B5/B13 RRH-BR04C	15	15	101.5	3		Behi d	30	8	Ret i ed	01/20/2023
A6	XXDWMM-12.5-65-8T-CBRS	16.2	11.4	3.75	5		Fro t	48	0	Ret i ed	01/20/2023
R1	MT6407-77A	35.1	16.1	3.75	5		Fro t	6	0	Ret i ed	01/20/2023





Antenna Mount Mapping Form (PATENT PENDING)

FCC #
UNKNOWN

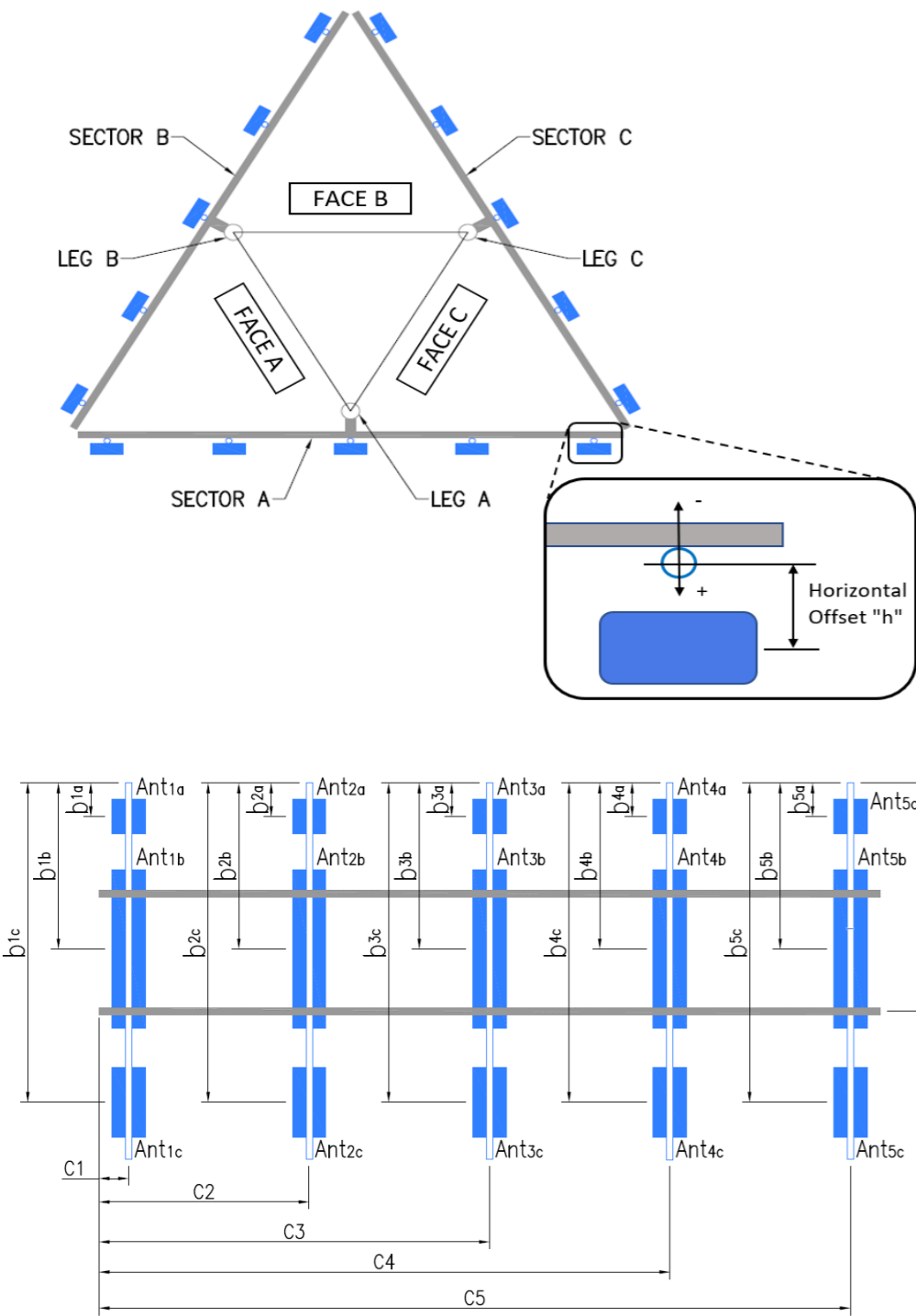
Tower Owner:	AMERICAN TOWER CORPORATION	Mapping Date:	10/25/2021
Site Name:	ATC:WATERFORD CT	Tower Type:	Self Support
Site Number or ID:	ATC:411183	Tower Height (Ft.):	UNKNOWN
Mapping Contractor:	RKS Design & Engineering, LLC	Mount Elevation (Ft.):	130.65

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

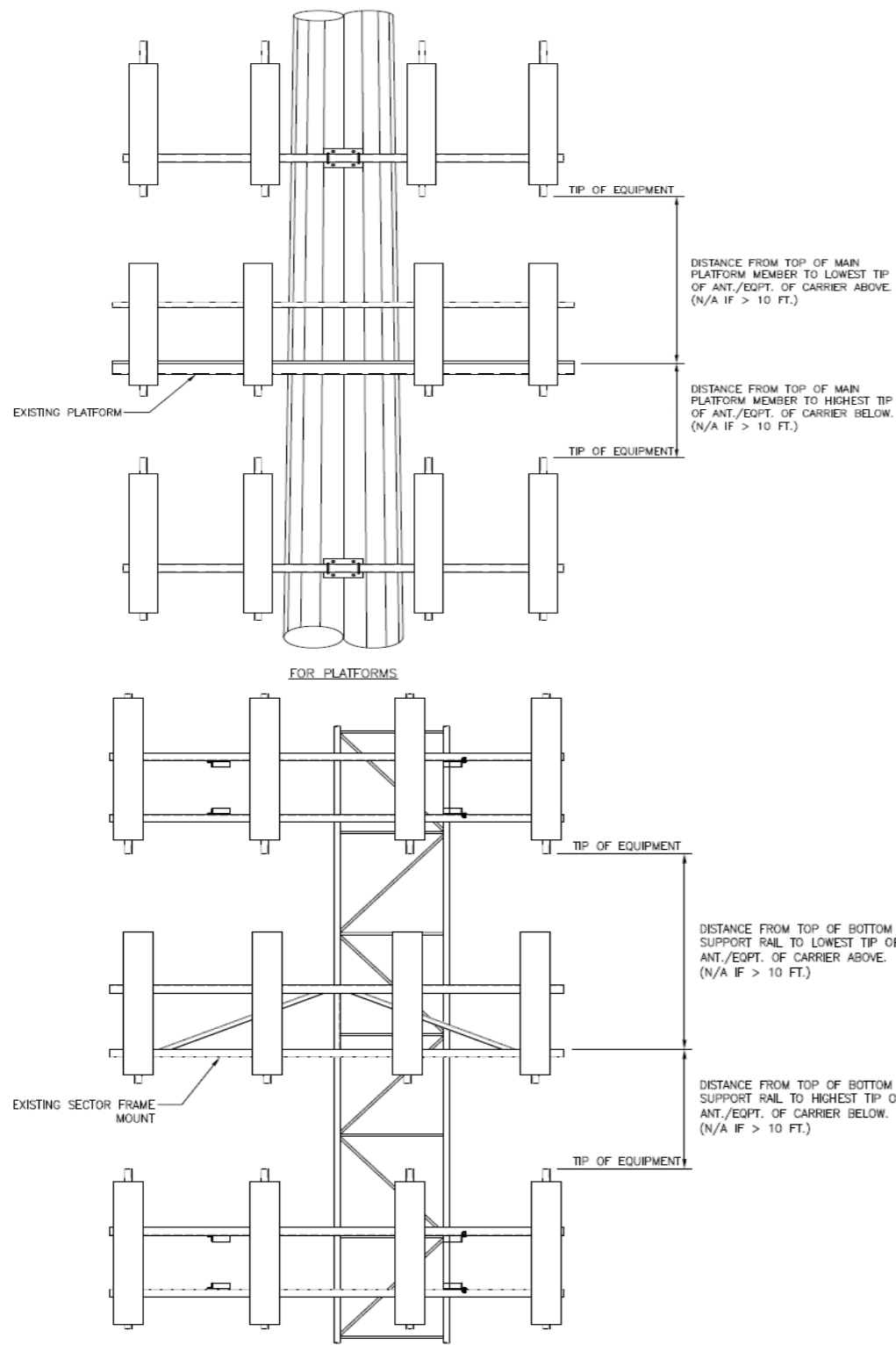
Mount Pipe Configuration and Geometries [Unit = Inches]							
Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."
A1	PIPE 2.375"Øx0.16"x60" LONG	55.50	3.75	C1	PIPE 2.375"Øx0.16"x60" LONG	55.50	3.75
A2	PIPE 2.375"Øx0.16"x72" LONG	64.00	44.00	C2	PIPE 2.375"Øx0.16"x72" LONG	64.00	44.00
A3	PIPE 2.375"Øx0.16"x72" LONG	62.25	78.50	C3	PIPE 2.375"Øx0.16"x72" LONG	62.25	78.50
A4	PIPE 2.375"Øx0.16"x58.75" LONG	55.00	135.50	C4	PIPE 2.375"Øx0.16"x58.75" LONG	55.00	135.50
A5	PIPE 2.375"Øx0.16"x60" LONG	55.25	176.25	C5	PIPE 2.375"Øx0.16"x60" LONG	55.25	176.25
A6				C6			
B1	PIPE 2.375"Øx0.16"x60" LONG	55.50	3.75	D1			
B2	PIPE 2.375"Øx0.16"x72" LONG	64.00	44.00	D2			
B3	PIPE 2.375"Øx0.16"x72" LONG	62.25	78.50	D3			
B4	PIPE 2.375"Øx0.16"x58.75" LONG	55.00	135.50	D4			
B5	PIPE 2.375"Øx0.16"x60" LONG	55.25	176.25	D5			
B6				D6			
Distance between bottom rail and mount CL elevation (dim d). Unit is inches. See 'Mount Elev Ref' tab for details. :							19.00
Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) :							
Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) :							
Please enter additional information or comments below.							
Tower Face Width at Mount Elev. (ft.):		9.5		Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):		5.5	
For T-Arms/Platforms on monopoles, report the weld size from the main standoff to the plate bolting into the collar mount.							

Ants. Items	Enter antenna model. If not labeled, enter "Unknown".						Mounting Locations [Units are inches and degrees]			Photos of antennas
	Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Vertical Distances "b _{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}	LNX-6512DS-A1M	11.90	7.10	48.50		131.671	24.25	10.50	40.00	139
Ant _{1c}										
Ant _{2a}										
Ant _{2b}										
Ant _{2c}										
Ant _{3a}	RFV01U-D2A	15.00	8.10	15.00		131.15	37.25	12.00		141
Ant _{3b}	(2)MX06FRO660-03	15.40	10.70	71.30		131.296	35.50	11.50	40.00	141
Ant _{3c}	RFV01U-D1A	15.00	10.00	15.00		131.15	37.25	12.00		141
Ant _{4a}										
Ant _{4b}										
Ant _{4c}										
Ant _{5a}	RT4401-48A	8.60	4.20	13.90		131.213	29.50	14.00		140
Ant _{5b}										
Ant _{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower	(2)RRFDC-3315-PF-48	15.73	10.25	25.66						326
Ant on Tower										
Sector B										
Ant _{1a}										
Ant _{1b}	LNX-6512DS-A1M	11.90	7.10	48.50		131.671	24.25	10.50	160.00	143
Ant _{1c}										
Ant _{2a}										
Ant _{2b}										
Ant _{2c}										
Ant _{3a}	RFV01U-D2A	15.00	8.10	15.00		131.15	37.25	12.00		144
Ant _{3b}	(2)MX06FRO660-03	15.40	10.70	71.30		131.296	35.50	11.50	170.00	144
Ant _{3c}	RFV01U-D1A	15.00	10.00	15.00		131.15	37.25	12.00		144
Ant _{4a}										
Ant _{4b}										
Ant _{4c}										
Ant _{5a}	RT4401-48A	8.60	4.20	13.90		131.213	29.50	14.00		145
Ant _{5b}										
Ant _{5c}										

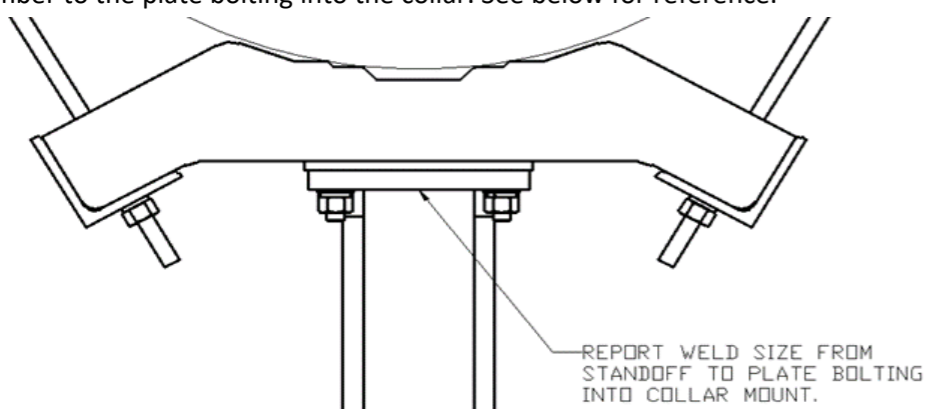


Antenna Layout (Looking Out From Tower)			
Mount Azimuth (Degree) for Each Sector		Tower Leg Azimuth (Degree) for Each Sector	
Sector A:	40.00 Deg	Leg A:	10.00 Deg
Sector B:	160.00 Deg	Leg B:	130.00 Deg
Sector C:	280.00 Deg	Leg C:	250.00 Deg
Sector D:		Leg D:	
Climbing Facility Information			
Location:	10.00 Deg	On Leg A	
Climbing Facility	Corrosion Type:	N/A	
	Access:	Climbing path was unobstructed.	
	Condition:	Good condition.	

Please insert a photo of the mount centerline measurement here.



For T-Arms/Platforms on monopoles, record the weld size from the main standoff member to the plate bolting into the collar. See below for reference.



Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										
Sector C										
Ant _{1a}										
Ant _{1b}	LNX-6512DS-A1M	11.90	7.10	48.50		131.671	24.25	10.50	260.00	147
Ant _{1c}										
Ant _{2a}										
Ant _{2b}										
Ant _{2c}										
Ant _{3a}	RFV01U-D2A	15.00	8.10	15.00		131.15	37.25	12.00		147
Ant _{3b}	(2)MX06FRO660-03	15.40	10.70	71.30		131.296	35.50	11.50	260.00	147
Ant _{3c}	RFV01U-D1A	15.00	10.00	15.00		131.15	37.25	12.00		147
Ant _{4a}										
Ant _{4b}										
Ant _{4c}										
Ant _{5a}	RT4401-48A	8.60	4.20	13.90		131.213	29.50	14.00		148
Ant _{5b}										
Ant _{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										
Sector D										
Ant _{1a}										
Ant _{1b}										
Ant _{1c}										
Ant _{2a}										
Ant _{2b}										
Ant _{2c}										
Ant _{3a}										
Ant _{3b}										
Ant _{3c}										
Ant _{4a}										
Ant _{4b}										
Ant _{4c}										
Ant _{5a}										
Ant _{5b}										
Ant _{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

Observed Safety and Structural Issues During the Mount Mapping

Issue #	Description of Issue	Photo #
1	COAX TOTAL (8): (6) FH 1-5/8, (2) 1.50"Ø HYBRID	
2	SECTOR B & SECTOR C ARE UNABLE TO MEASURE	
3		
4		
5		
6		
7		
8		

Observed Obstructions to Tower Lighting System

If the tower lighting system is being obstructed by the carrier's equipment (for example: a light nested by the antennas), please provide photos and fill in the information below.				Photo #
Description of Obstruction:				
Type of Light:	Photo #	Additional Comments:		

Lighting Technology:		Photo #	
Elevation (AGL) at base of light (Ft.):		Photo #	
Is a service loop available?		Photo #	
Is beacon installed on an extension?		Photo #	

Mapping Notes

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

Standard Conditions

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



Antenna Mount Mapping Form (PATENT PENDING)

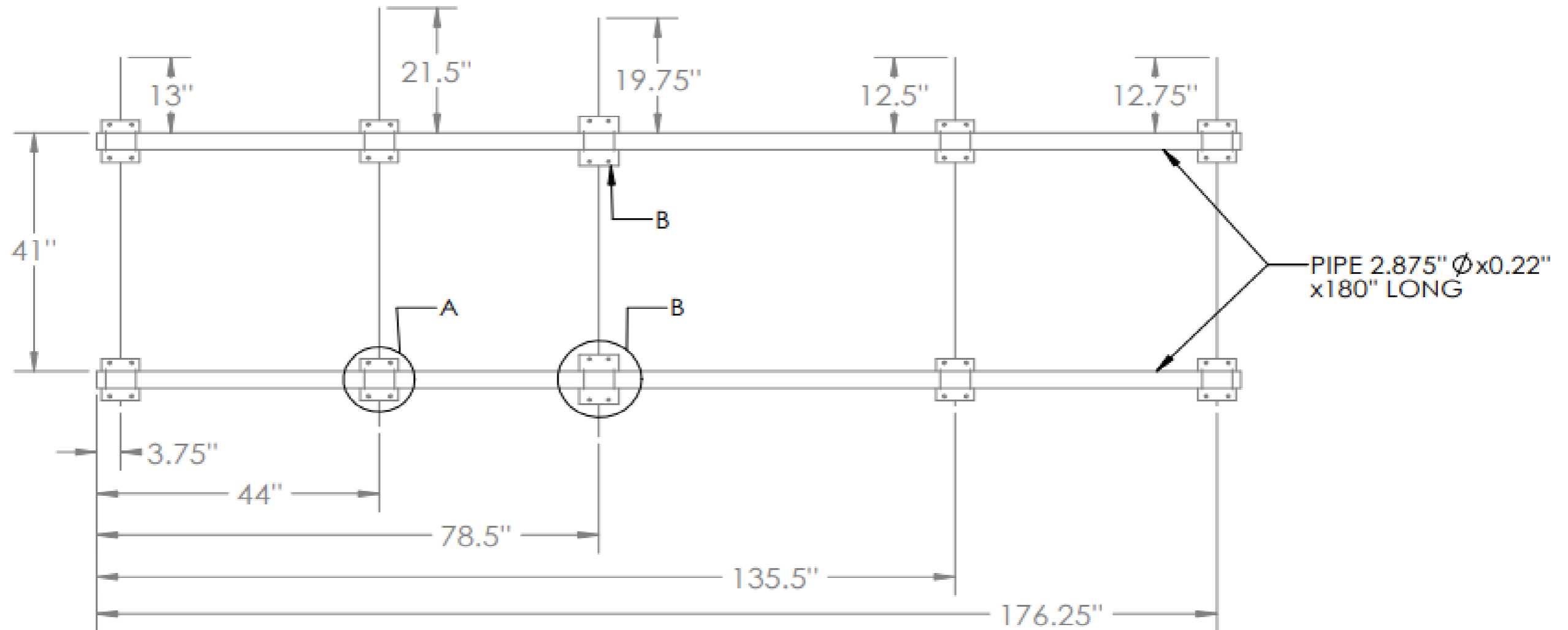
FCC #

UNKNOWN

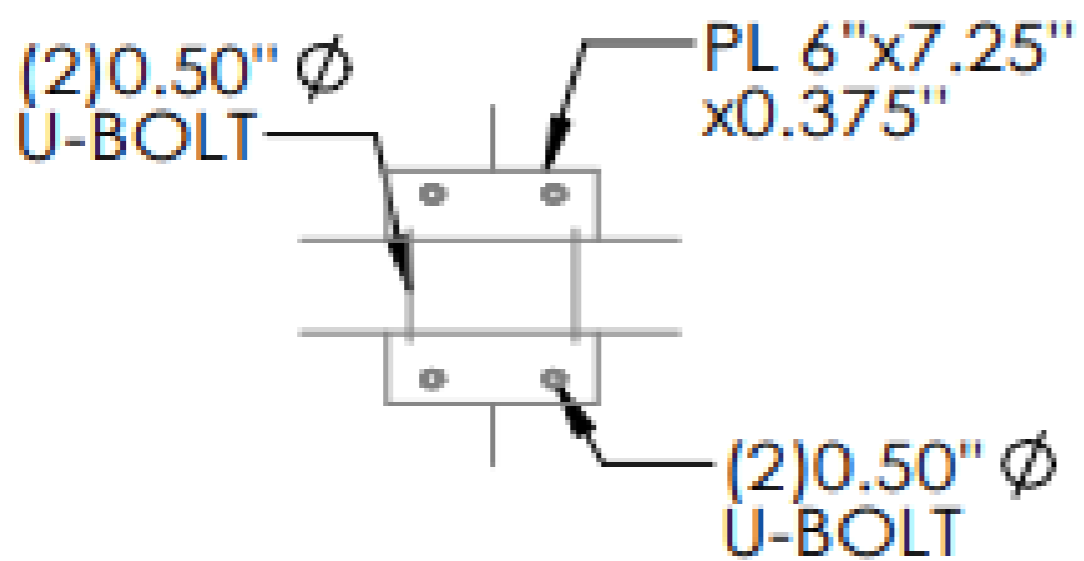
Tower Owner:	AMERICAN TOWER CORPORATION	Mapping Date:	10/25/2021
Site Name:	ATC:WATERFORD CT	Tower Type:	Self Support
Site Number or ID:	ATC:411183	Tower Height (Ft.):	UNKNOWN
Mapping Contractor:	RKS Design & Engineering, LLC	Mount Elevation (Ft.):	130.65

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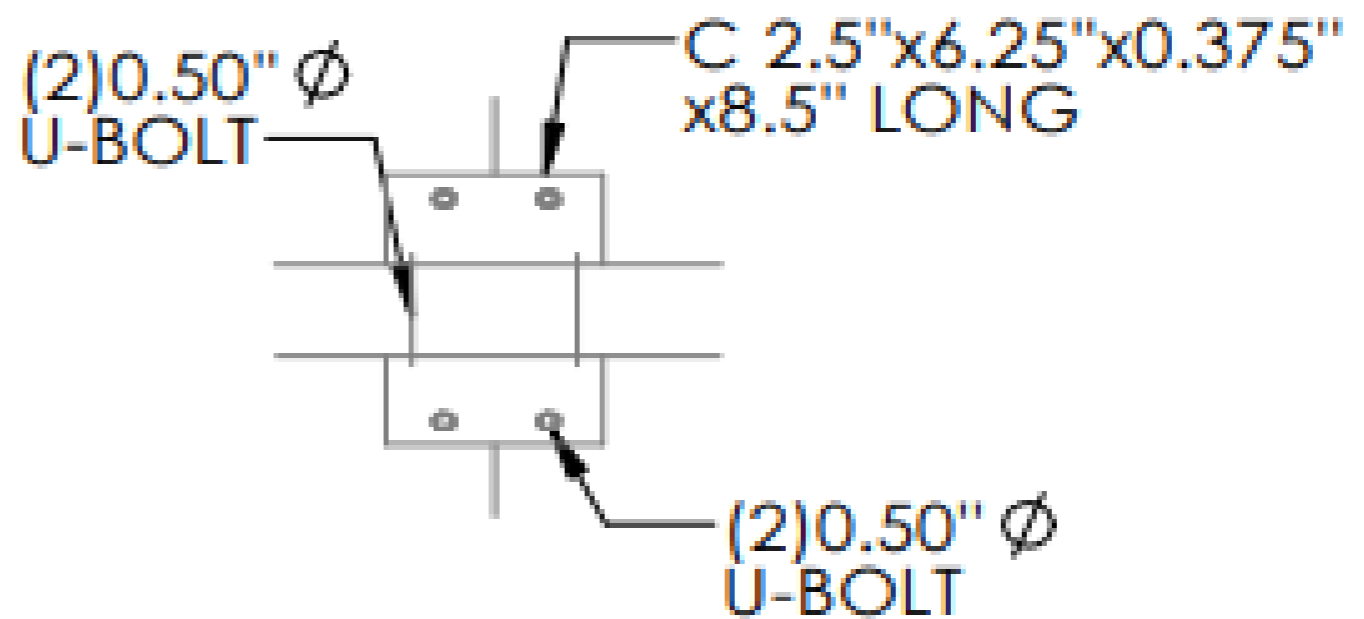
Please Insert Sketches of the Antenna Mount



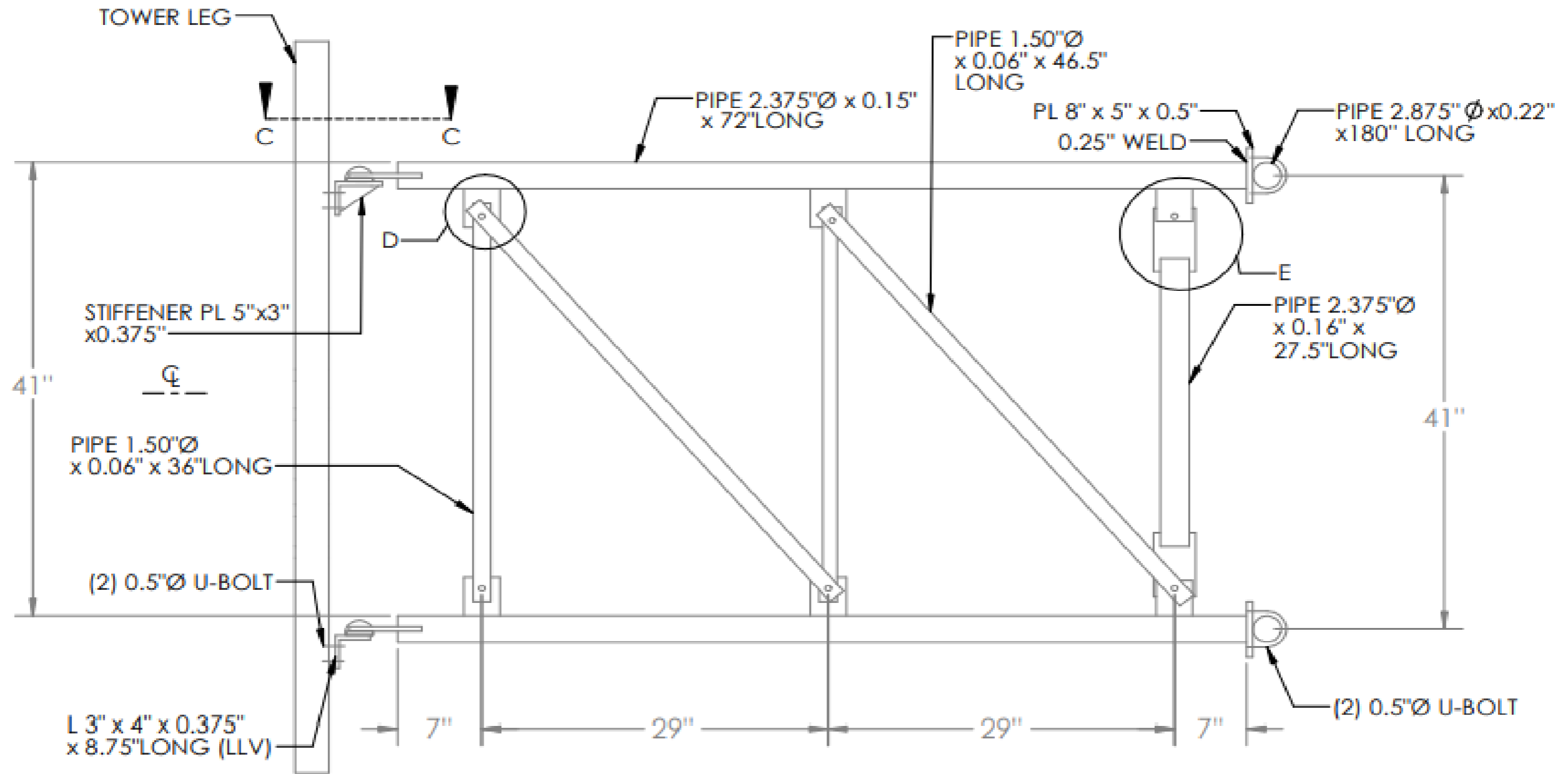
SECTOR VIEW A, B & C



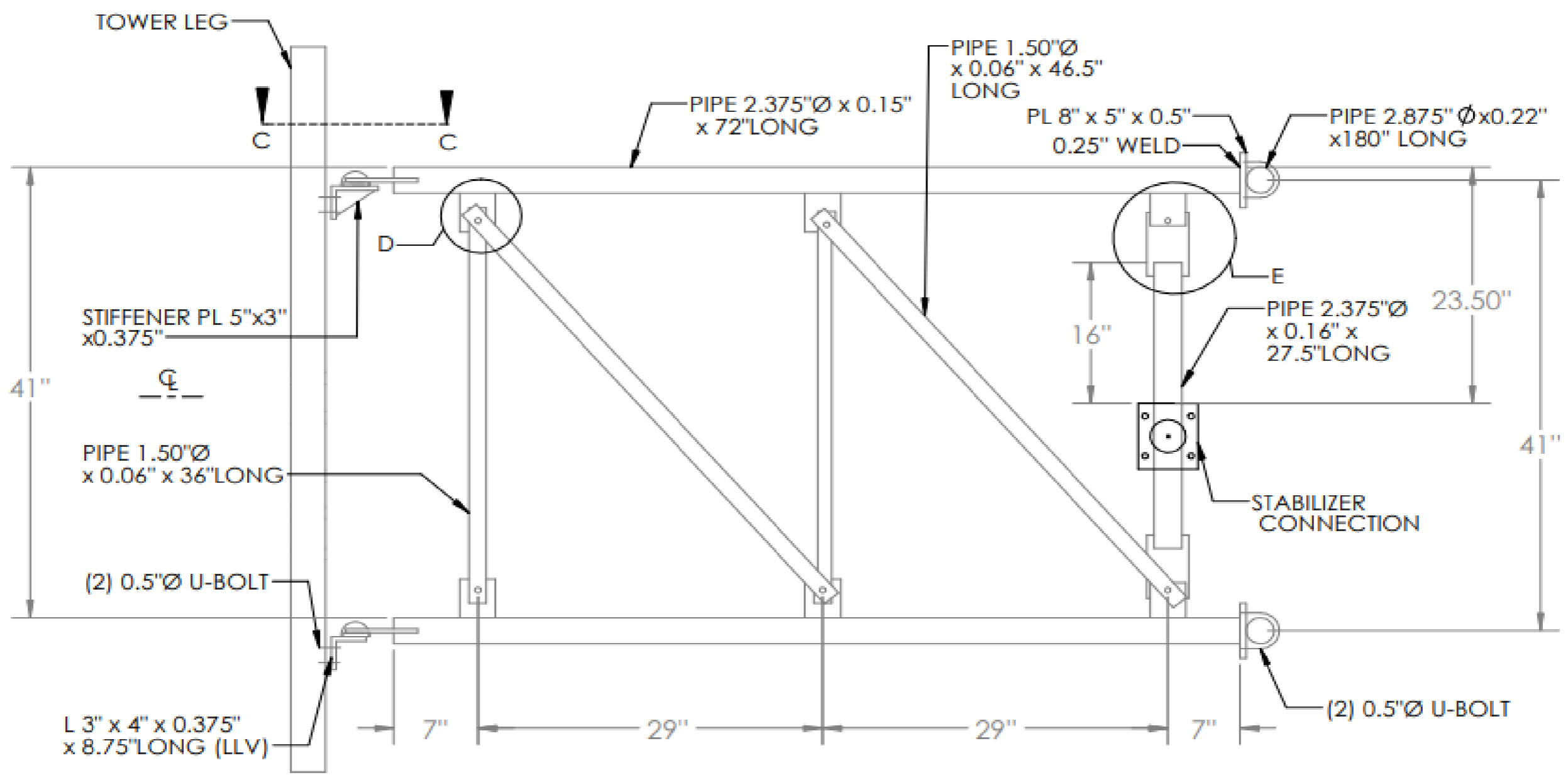
DETAIL A



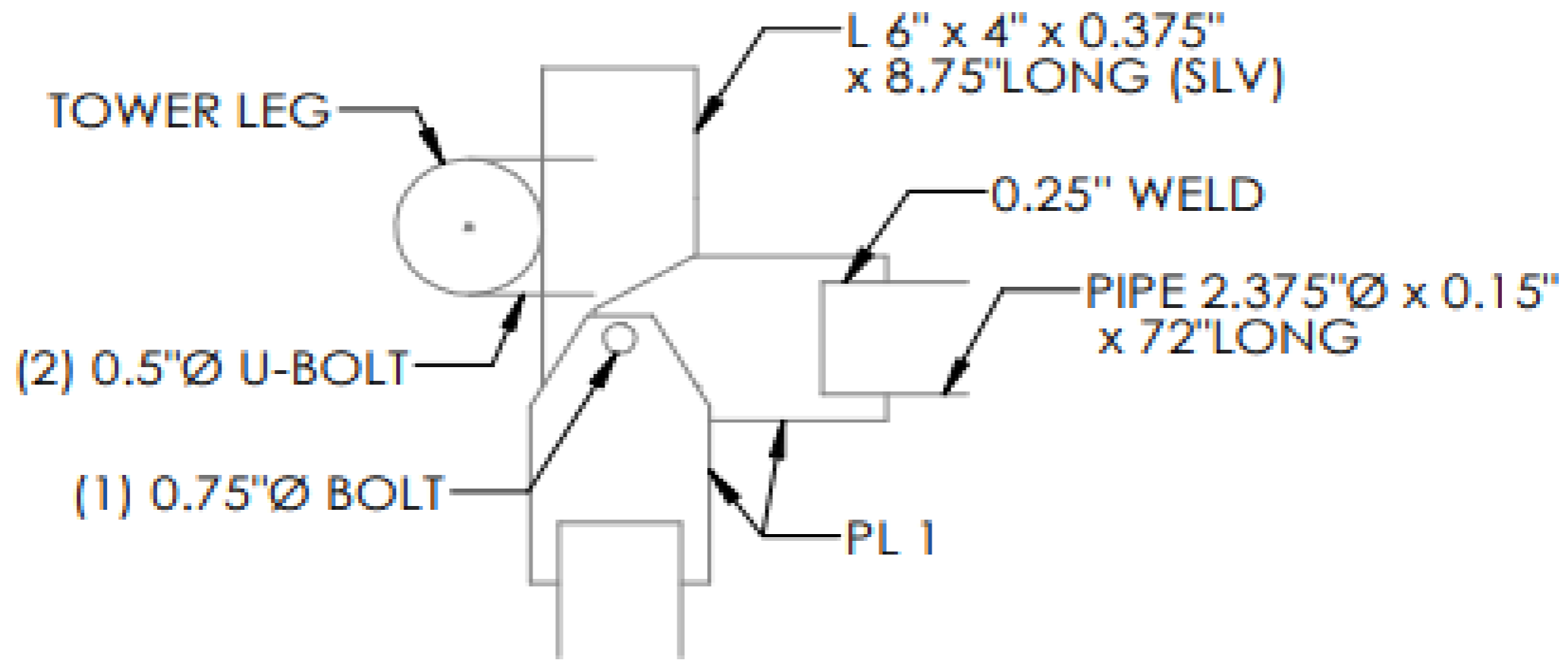
DETAIL B



MOUNT STAND-OFF-1



MOUNT STAND-OFF-2



SECTION C-C

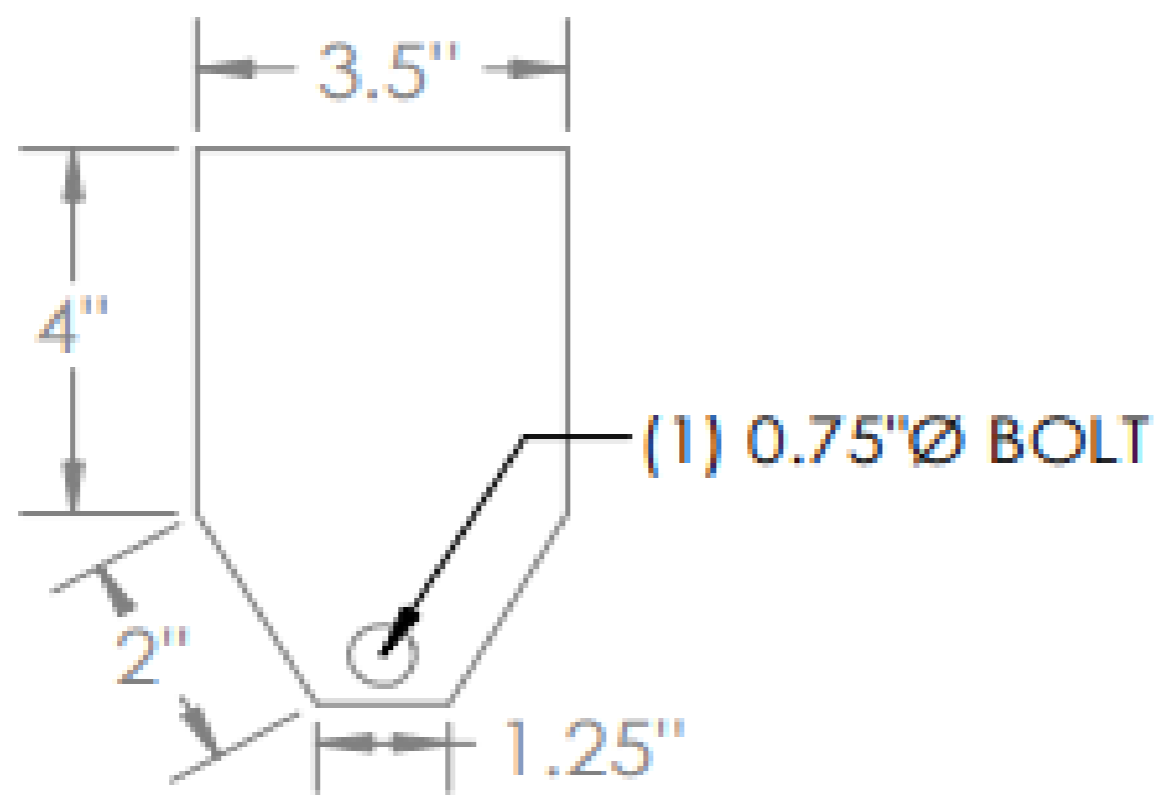
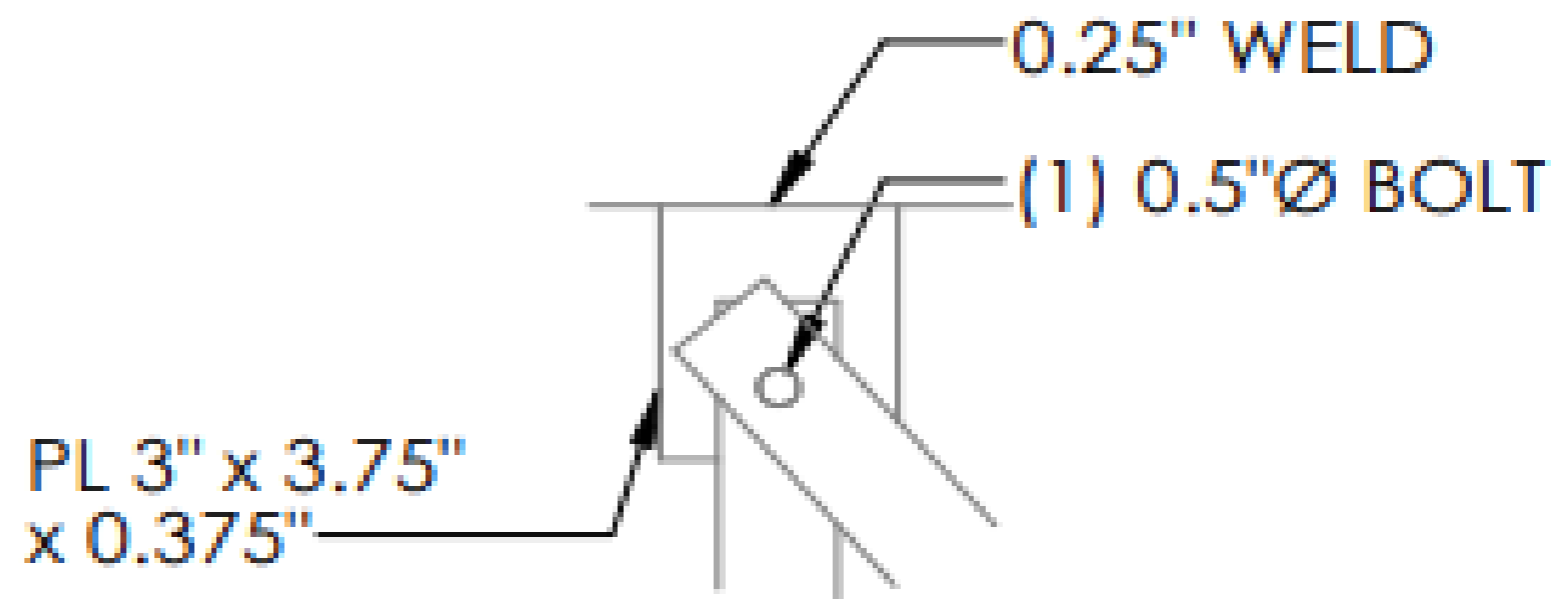
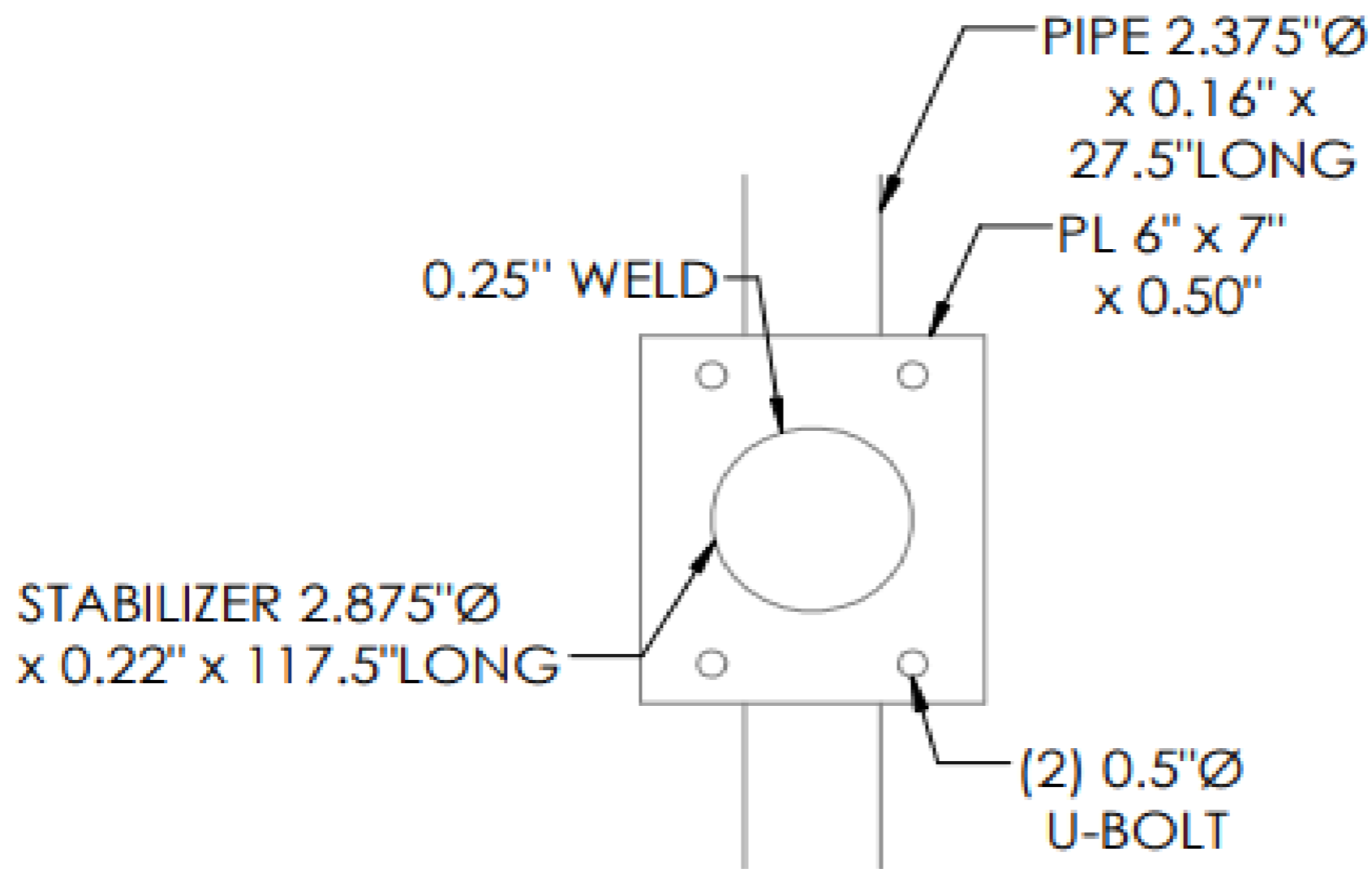
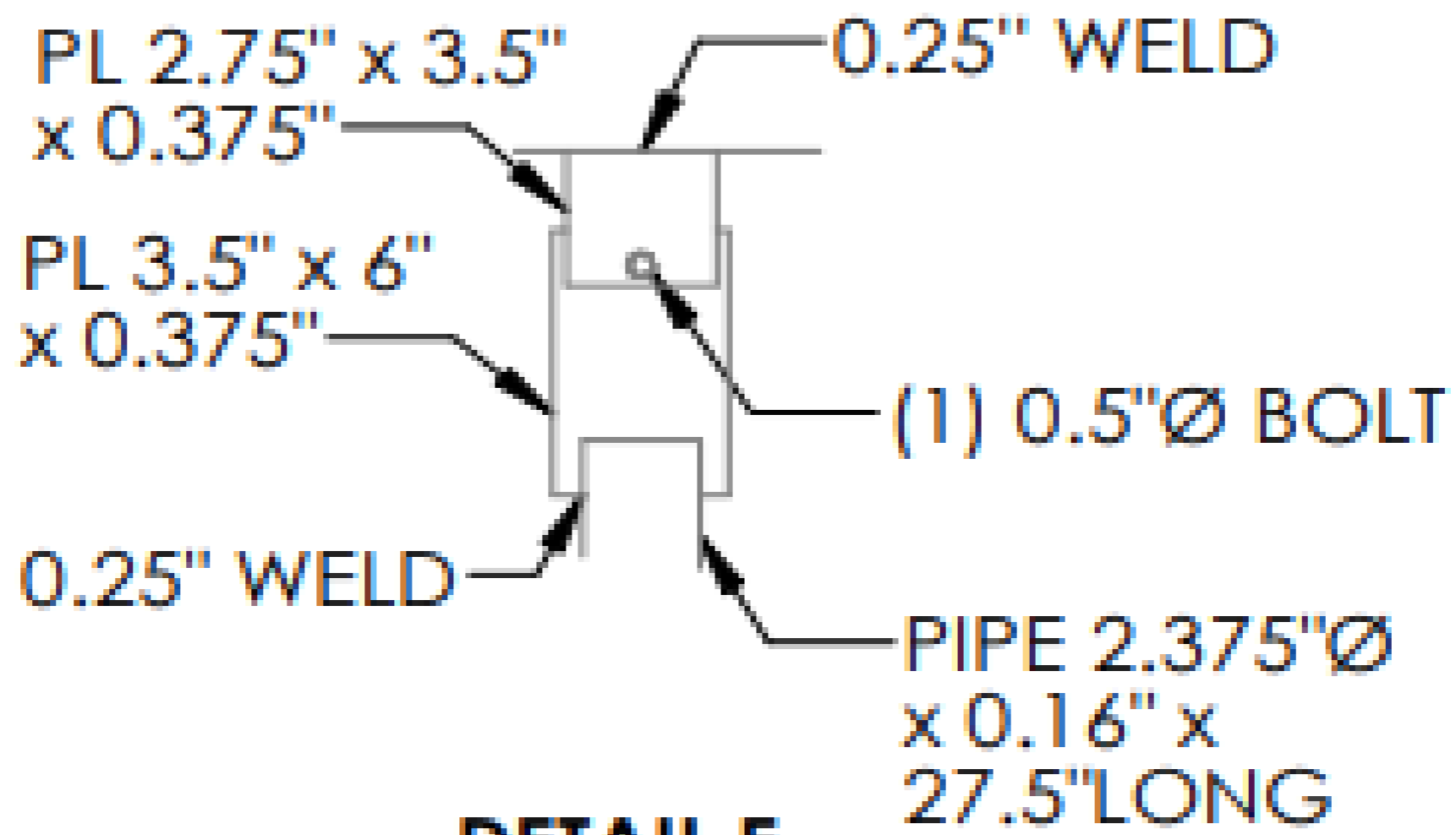


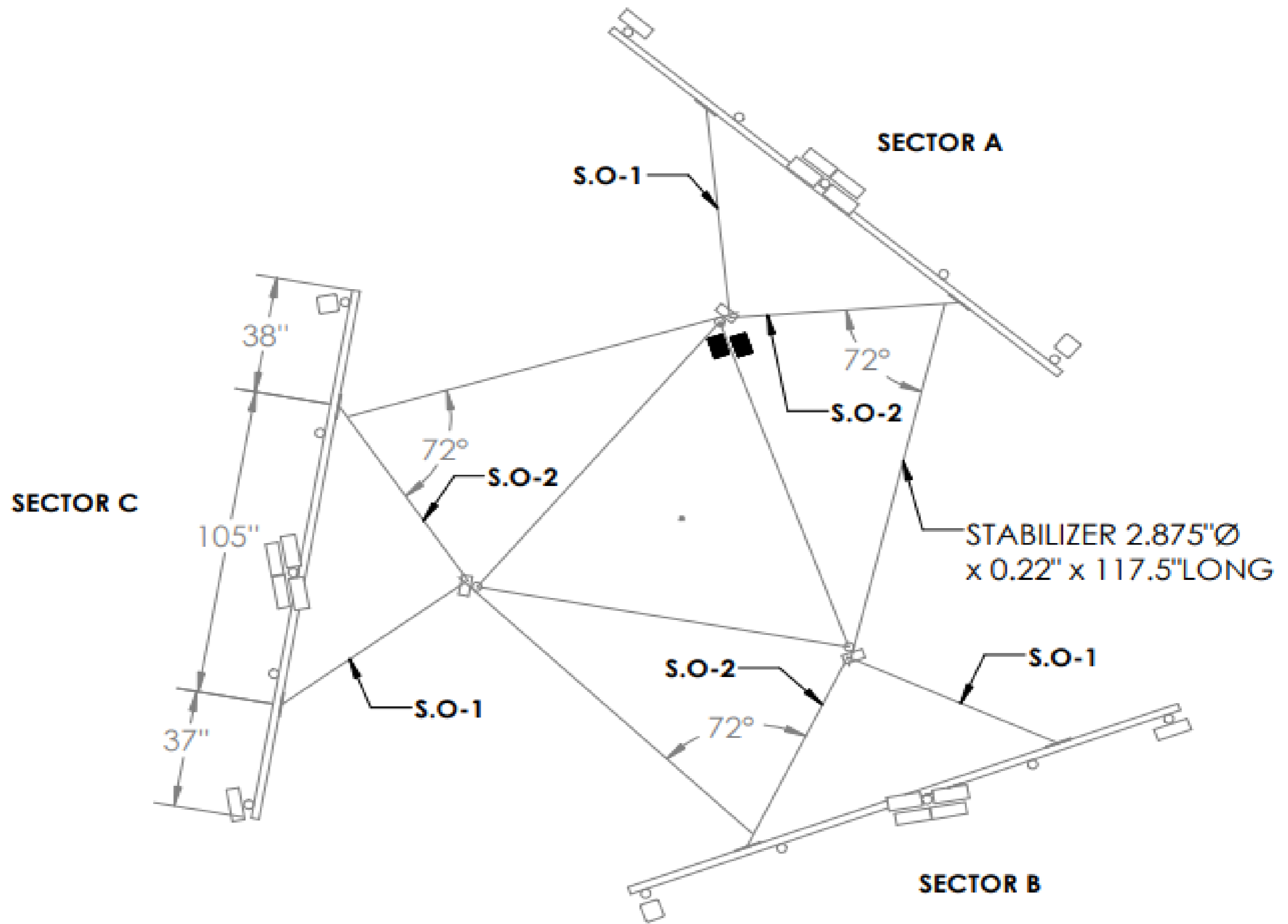
PLATE 1 (0.375" THK)



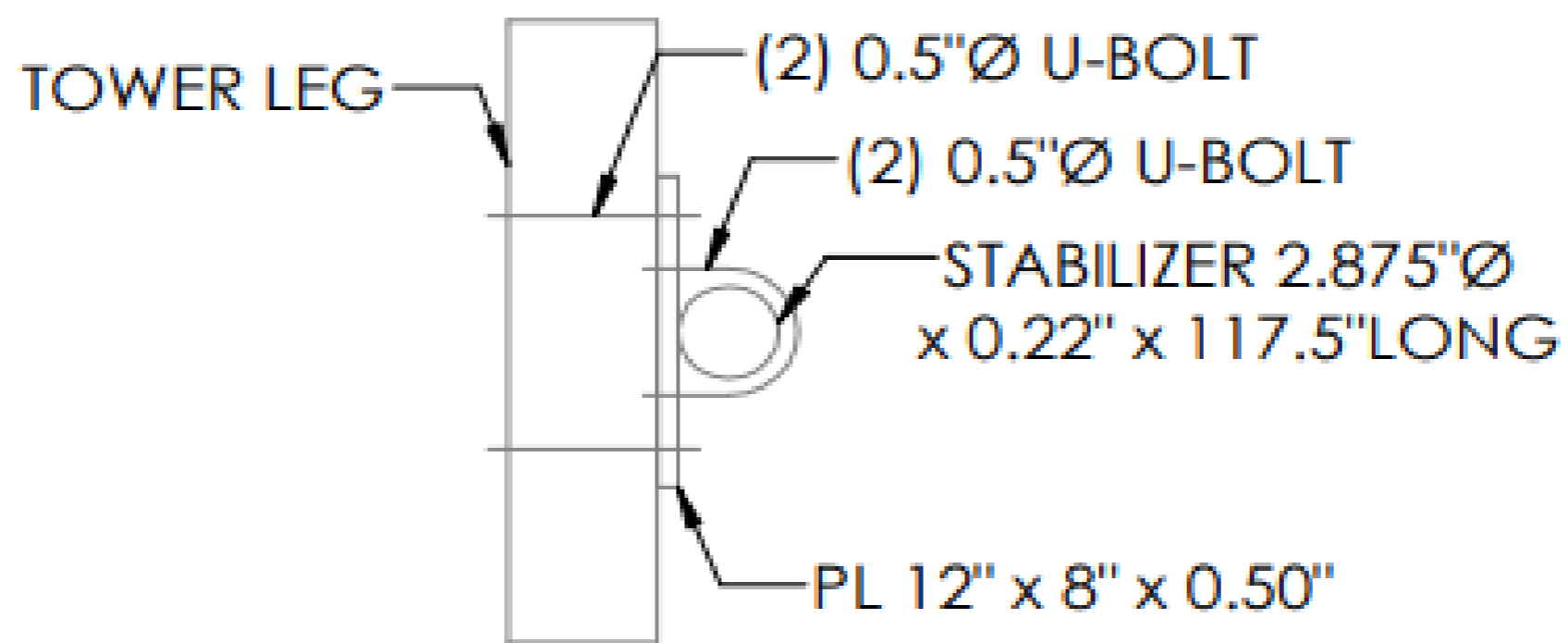
DETAIL D



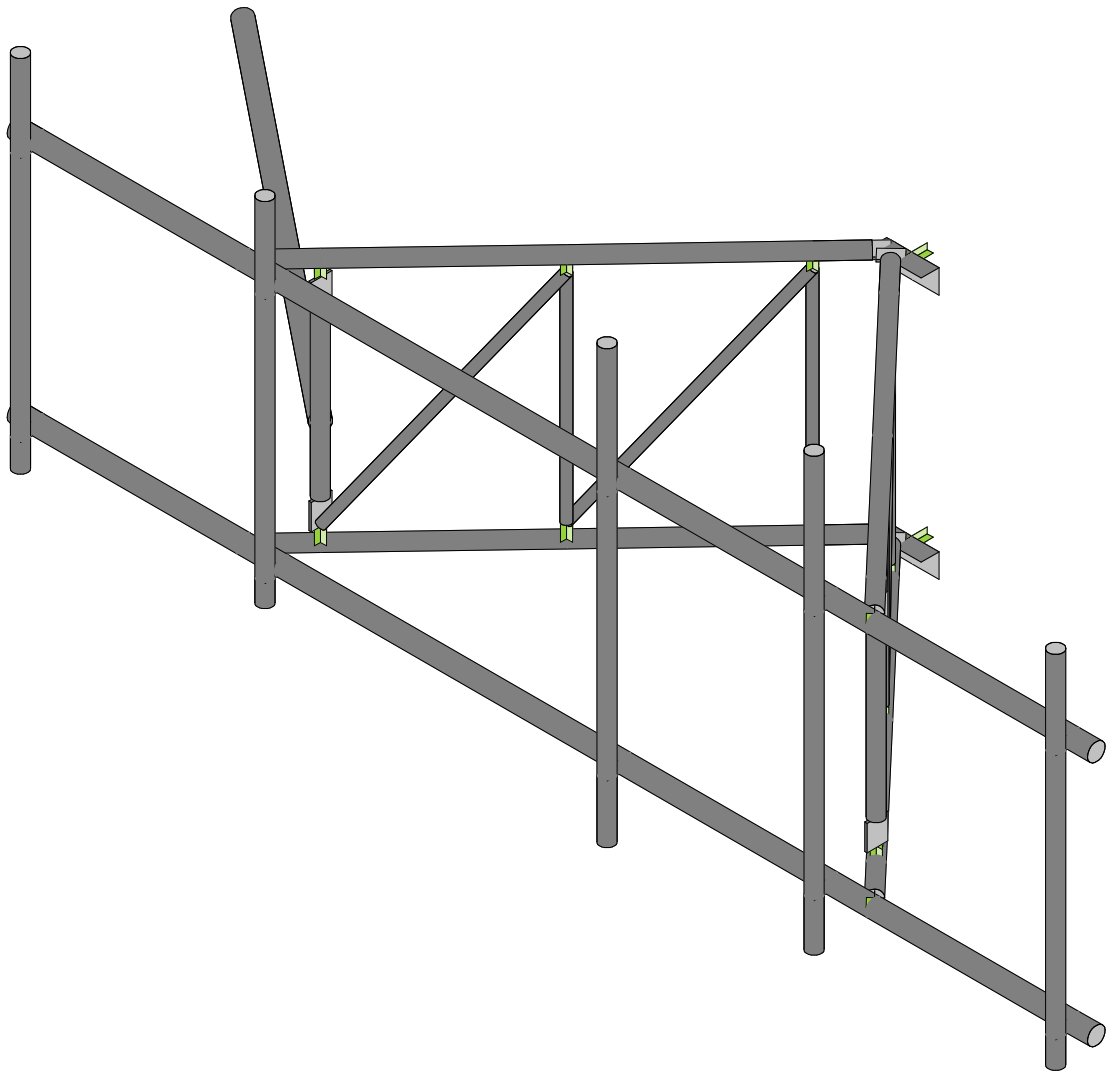
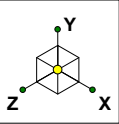
**STABILIZER CONNECTION
ON MOUNT BRACING**

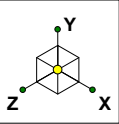


ANTENNA PLAN VIEW



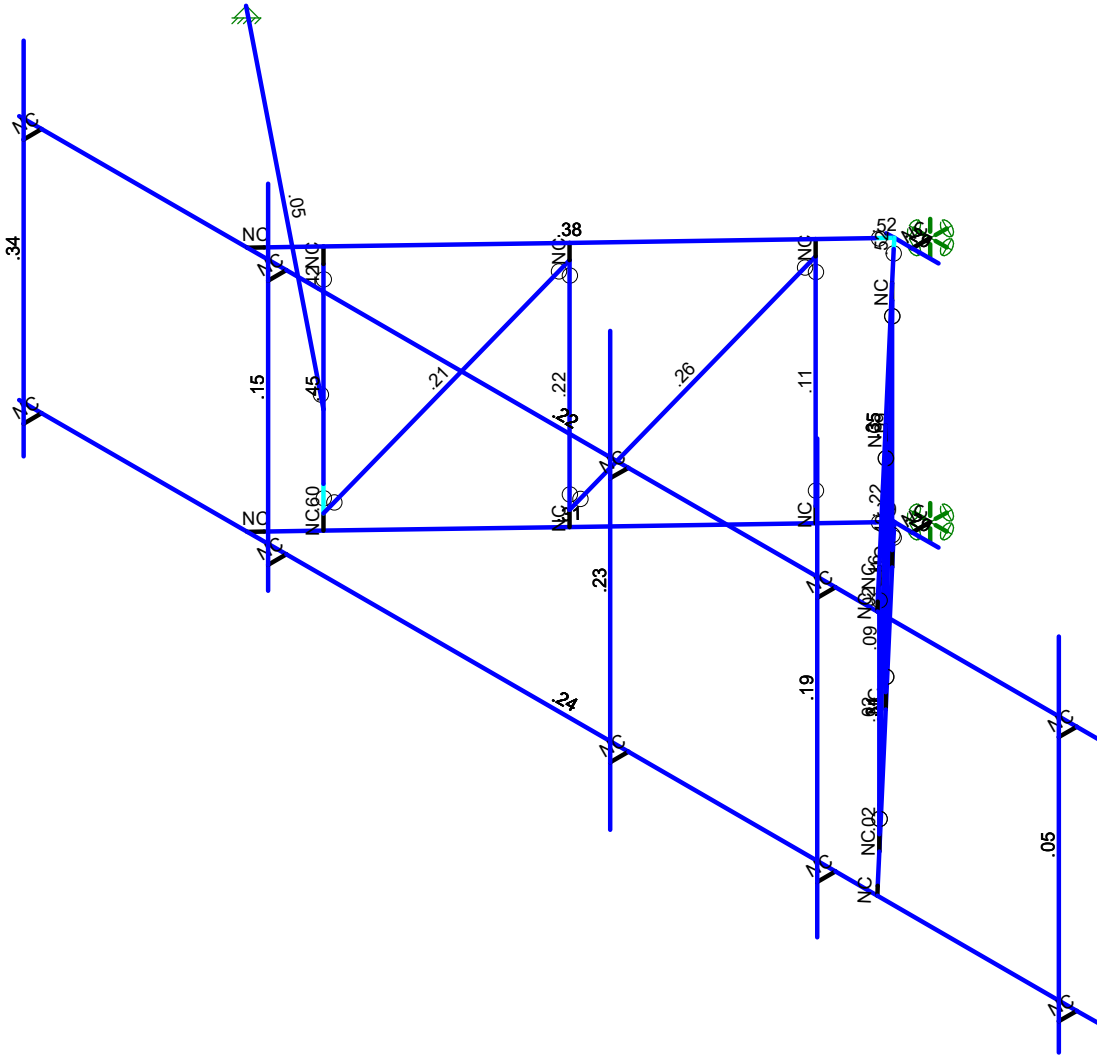
STABILIZER CONNECTION
ON TOWER LEG





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)
Results for LC 1, 1.2D+1.0Wo (0 Deg)

Colliers Engineering & De...		SK - 2
		July 19, 2023 at 3:51 PM
		5000121802-VZW_MT_LOT_B_H....



Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	DistributedArea(Me... Surface(...	
1	Antenna D	None					42		
2	Antenna Di	None					42		
3	Antenna Wo (0 Deg)	None					42		
4	Antenna Wo (30 Deg)	None					42		
5	Antenna Wo (60 Deg)	None					42		
6	Antenna Wo (90 Deg)	None					42		
7	Antenna Wo (120 Deg)	None					42		
8	Antenna Wo (150 Deg)	None					42		
9	Antenna Wo (180 Deg)	None					42		
10	Antenna Wo (210 Deg)	None					42		
11	Antenna Wo (240 Deg)	None					42		
12	Antenna Wo (270 Deg)	None					42		
13	Antenna Wo (300 Deg)	None					42		
14	Antenna Wo (330 Deg)	None					42		
15	Antenna Wi (0 Deg)	None					42		
16	Antenna Wi (30 Deg)	None					42		
17	Antenna Wi (60 Deg)	None					42		
18	Antenna Wi (90 Deg)	None					42		
19	Antenna Wi (120 Deg)	None					42		
20	Antenna Wi (150 Deg)	None					42		
21	Antenna Wi (180 Deg)	None					42		
22	Antenna Wi (210 Deg)	None					42		
23	Antenna Wi (240 Deg)	None					42		
24	Antenna Wi (270 Deg)	None					42		
25	Antenna Wi (300 Deg)	None					42		
26	Antenna Wi (330 Deg)	None					42		
27	Antenna Wm (0 Deg)	None					42		
28	Antenna Wm (30 Deg)	None					42		
29	Antenna Wm (60 Deg)	None					42		
30	Antenna Wm (90 Deg)	None					42		
31	Antenna Wm (120 Deg)	None					42		
32	Antenna Wm (150 Deg)	None					42		
33	Antenna Wm (180 Deg)	None					42		
34	Antenna Wm (210 Deg)	None					42		
35	Antenna Wm (240 Deg)	None					42		
36	Antenna Wm (270 Deg)	None					42		
37	Antenna Wm (300 Deg)	None					42		
38	Antenna Wm (330 Deg)	None					42		
39	Structure D	None		-1					
40	Structure Di	None						32	
41	Structure Wo (0 Deg)	None						64	
42	Structure Wo (30 Deg)	None						64	
43	Structure Wo (60 Deg)	None						64	
44	Structure Wo (90 Deg)	None						64	
45	Structure Wo (120 Deg)	None						64	
46	Structure Wo (150 Deg)	None						64	
47	Structure Wo (180 Deg)	None						64	
48	Structure Wo (210 Deg)	None						64	
49	Structure Wo (240 Deg)	None						64	
50	Structure Wo (270 Deg)	None						64	
51	Structure Wo (300 Deg)	None						64	
52	Structure Wo (330 Deg)	None						64	
53	Structure Wi (0 Deg)	None						64	
54	Structure Wi (30 Deg)	None						64	
55	Structure Wi (60 Deg)	None						64	
56	Structure Wi (90 Deg)	None						64	

Basic Load Cases (Continued)

BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	DistributedArea(Me... Surface(...
57 Structure Wi (120 Deg)	None						64
58 Structure Wi (150 Deg)	None						64
59 Structure Wi (180 Deg)	None						64
60 Structure Wi (210 Deg)	None						64
61 Structure Wi (240 Deg)	None						64
62 Structure Wi (270 Deg)	None						64
63 Structure Wi (300 Deg)	None						64
64 Structure Wi (330 Deg)	None						64
65 Structure Wm (0 Deg)	None						64
66 Structure Wm (30 Deg)	None						64
67 Structure Wm (60 Deg)	None						64
68 Structure Wm (90 Deg)	None						64
69 Structure Wm (120 Deg)	None						64
70 Structure Wm (150 Deg)	None						64
71 Structure Wm (180 Deg)	None						64
72 Structure Wm (210 Deg)	None						64
73 Structure Wm (240 Deg)	None						64
74 Structure Wm (270 Deg)	None						64
75 Structure Wm (300 Deg)	None						64
76 Structure Wm (330 Deg)	None						64
77 Lm1	None					1	
78 Lm2	None					1	
79 Lv1	None					1	
80 Lv2	None					1	
81 Antenna Ev	None					42	
82 Antenna Eh (0 Deg)	None					28	
83 Antenna Eh (90 Deg)	None					28	
84 Structure Ev	ELY		-041				
85 Structure Eh (0 Deg)	ELZ			-103			
86 Structure Eh (90 Deg)	ELX	.103					

Load Combinations

Description	Solve	PDelta	S...	B...	Fa...	B...	Fa...	B...	Fa...	BLCFa...	BLC 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 D...	Yes	Y		1	1.2	39	1.2	4	1	42	1								
3 1.2D+1.0Wo (60 D...	Yes	Y		1	1.2	39	1.2	5	1	43	1								
4 1.2D+1.0Wo (90 D...	Yes	Y		1	1.2	39	1.2	6	1	44	1								
5 1.2D+1.0Wo (120 ...	Yes	Y		1	1.2	39	1.2	7	1	45	1								
6 1.2D+1.0Wo (150 ...	Yes	Y		1	1.2	39	1.2	8	1	46	1								
7 1.2D+1.0Wo (180 ...	Yes	Y		1	1.2	39	1.2	9	1	47	1								
8 1.2D+1.0Wo (210 ...	Yes	Y		1	1.2	39	1.2	10	1	48	1								
9 1.2D+1.0Wo (240 ...	Yes	Y		1	1.2	39	1.2	11	1	49	1								
10 1.2D+1.0Wo (270 ...	Yes	Y		1	1.2	39	1.2	12	1	50	1								
11 1.2D+1.0Wo (300 ...	Yes	Y		1	1.2	39	1.2	13	1	51	1								
12 1.2D+1.0Wo (330 ...	Yes	Y		1	1.2	39	1.2	14	1	52	1								
13 1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1	53	1				
14 1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1				
15 1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1	55	1				
16 1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1	56	1				
17 1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1				
18 1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1				
19 1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1				
20 1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1				
21 1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1				
22 1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1				

Load Combinations (Continued)

	Description	Solve	PDelta	S...	B...	Fa...	B...	Fa...	B...	Fa...	BLCFa...	BLCFa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
23	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1						
24	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1						
25	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1								
26	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1								
27	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1								
28	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1								
29	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1								
30	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1								
31	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1								
32	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1								
33	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1								
34	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1								
35	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1								
36	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1								
37	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1								
38	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1								
39	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1								
40	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1								
41	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1								
42	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1								
43	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1								
44	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1								
45	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1								
46	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1								
47	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1								
48	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	38	1	76	1								
49	1.2D + 1.5Lv1	Yes	Y		1	1.2	39	1.2	79	1.5												
50	1.2D + 1.5Lv2	Yes	Y		1	1.2	39	1.2	80	1.5												
51	1.4D	Yes	Y		1	1.4	39	1.4														
52	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	1	83		E...	1	E...			
53	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.866	83	.5	E...	.866	E...	.5		
54	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.5	83	.866	E...	.5	E...	.866		
55	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82		83	1	E...		E...	1		
56	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.5	83	.866	E...	-.5	E...	.866		
57	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.8...	83	.5	E...	-.8...	E...	.5		
58	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-1	83		E...	-1	E...			
59	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.8...	83	-.5	E...	-.8...	E...	-.5		
60	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.5	83	-.8...	E...	-.5	E...	-.8...		
61	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82		83	-1	E...		E...	-1		
62	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.5	83	-.8...	E...	.5	E...	-.8...		
63	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.866	83	-.5	E...	.866	E...	-.5		
64	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	1	83		E...	1	E...			
65	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.866	83	.5	E...	.866	E...	.5		
66	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.5	83	.866	E...	.5	E...	.866		
67	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82		83	1	E...		E...	1		
68	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.5	83	.866	E...	-.5	E...	.866		
69	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.8...	83	.5	E...	-.8...	E...	.5		
70	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-1	83		E...	-1	E...			
71	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.8...	83	-.5	E...	-.8...	E...	-.5		
72	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.5	83	-.8...	E...	-.5	E...	-.8...		
73	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82		83	-1	E...		E...	-1		
74	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.5	83	-.8...	E...	.5	E...	-.8...		
75	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.866	83	-.5	E...	.866	E...	-.5		



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name :

July 19, 2023
 3:51 PM
 Checked By: _____

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N73	9	-0.458333	4.583333	0	
2	N74	24	-0.458333	4.583333	0	
3	N77	9	-3.875	4.583333	0	
4	N78	24	-3.875	4.583333	0	
5	N119	23.6875	-0.458333	4.583333	0	
6	N120	23.6875	-3.875	4.583333	0	
7	N121	23.6875	-0.458333	4.833333	0	
8	N122	23.6875	-3.875	4.833333	0	
9	N123	23.6875	.75	4.833333	0	
10	N124	23.6875	-4.25	4.833333	0	
11	N51	20.916667	-0.458333	4.583333	0	
12	N52	20.916667	-3.875	4.583333	0	
13	N53	12.166667	-0.458333	4.583333	0	
14	N54	12.166667	-3.875	4.583333	0	
15	N55	12.281392	-0.458333	4.462438	0	
16	N56	16.41152	-0.458333	0.110191	0	
17	N57	16.541667	-0.458333	-0.026955	0	
18	N59	12.281392	-3.875	4.462438	0	
19	N60	16.41152	-3.875	0.110191	0	
20	N61	16.541667	-3.875	-0.026955	0	
21	N61A	12.682933	-0.458333	4.039303	0	
22	N62	12.682933	-3.875	4.039303	0	
23	N64	12.682933	-1.020833	4.039303	0	
24	N65	12.682933	-3.3125	4.039303	0	
25	N65A	14.346456	-0.666667	2.286314	0	
26	N66	14.346456	-3.666667	2.286314	0	
27	N67	14.346456	-0.458333	2.286314	0	
28	N68	14.346456	-3.875	2.286314	0	
29	N69	16.00998	-0.666667	0.533326	0	
30	N70	16.00998	-3.666667	0.533326	0	
31	N71	16.00998	-0.458333	0.533326	0	
32	N72	16.00998	-3.875	0.533326	0	
33	N73A	12.682933	-0.666667	4.039303	0	
34	N74A	12.682933	-3.666667	4.039303	0	
35	N77A	20.801941	-0.458333	4.462438	0	
36	N78A	16.671813	-0.458333	0.110191	0	
37	N80	20.801941	-3.875	4.462438	0	
38	N81	16.671813	-3.875	0.110191	0	
39	N83	20.400401	-0.458333	4.039303	0	
40	N84	20.400401	-3.875	4.039303	0	
41	N85	20.400401	-1.020833	4.039303	0	
42	N86	20.400401	-3.3125	4.039303	0	
43	N87	18.736877	-0.666667	2.286314	0	
44	N88	18.736877	-3.666667	2.286314	0	
45	N89	18.736877	-0.458333	2.286314	0	
46	N90	18.736877	-3.875	2.286314	0	
47	N91	17.073354	-0.666667	0.533326	0	
48	N92	17.073354	-3.666667	0.533326	0	
49	N93	17.073354	-0.458333	0.533326	0	
50	N94	17.073354	-3.875	0.533326	0	
51	N95	20.400401	-0.666667	4.039303	0	
52	N96	20.400401	-3.666667	4.039303	0	
53	N93A	17.15625	-0.458333	-0.026955	0	
54	N94A	16.427083	-0.458333	-0.026955	0	
55	N95A	16.791667	-0.458333	-0.026955	0	
56	N96A	16.791667	-0.458333	-0.276955	0	



Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
57	N57A	17.15625	-3.875	-0.026955	0	
58	N58	16.427083	-3.875	-0.026955	0	
59	N59A	16.791667	-3.875	-0.026955	0	
60	N60A	16.791667	-3.875	-0.276955	0	
61	N61B	12.682933	-2.416667	4.039303	0	
62	N62A	7.291667	-2.416667	-0.276955	0	
63	N63	20.333333	-0.458333	4.583333	0	
64	N64A	20.333333	-3.875	4.583333	0	
65	N65B	20.333333	-0.458333	4.833333	0	
66	N66A	20.333333	-3.875	4.833333	0	
67	N67A	20.333333	1.458333	4.833333	0	
68	N68A	20.333333	-4.541667	4.833333	0	
69	N69A	17.458333	-0.458333	4.583333	0	
70	N70A	17.458333	-3.875	4.583333	0	
71	N71A	17.458333	-0.458333	4.833333	0	
72	N72A	17.458333	-3.875	4.833333	0	
73	N73B	17.458333	1.3125	4.833333	0	
74	N74B	17.458333	-4.6875	4.833333	0	
75	N75	12.708333	-0.458333	4.583333	0	
76	N76	12.708333	-3.875	4.583333	0	
77	N77B	12.708333	-0.458333	4.833333	0	
78	N78B	12.708333	-3.875	4.833333	0	
79	N79	12.708333	0.708333	4.833333	0	
80	N80A	12.708333	-4.1875	4.833333	0	
81	N81A	9.3125	-0.458333	4.583333	0	
82	N82	9.3125	-3.875	4.583333	0	
83	N83A	9.3125	-0.458333	4.833333	0	
84	N84A	9.3125	-3.875	4.833333	0	
85	N85A	9.3125	0.729167	4.833333	0	
86	N86A	9.3125	-4.270833	4.833333	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Antenna Pipe	PIPE 2.0	Column	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
2	Standoff Horizontal	PIPE 2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
3	Standoff Vertical	PIPE 2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
4	Standoff Diagonal	HSS1.5X0.06	Beam	Pipe	A53 Gr. B	Typical	.271	.07	.07	.141
5	Face Horizontal	PIPE 2.5	Beam	Pipe	A53 Gr. B	Typical	1.61	1.45	1.45	2.89
6	Tie Back	PIPE 2.5	Beam	Pipe	A53 Gr. B	Typical	1.61	1.45	1.45	2.89
7	Standoff Bar	PL3/8x3.5	Beam	RECT	A36 Gr.36	Typical	1.313	.015	1.34	.057
8	Mount Angle	L4X3X6	Beam	Single Angle	A36 Gr.36	Typical	2.49	1.89	3.94	.123
9	Standoff Tab	PL3/8x3.5	Beam	RECT	A36 Gr.36	Typical	1.313	.015	1.34	.057

Hot Rolled Steel Properties

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

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M51	N73	N74			Face Horizontal	Beam	Pipe	A53 Gr. B	Typical
2	M54	N77	N78			Face Horizontal	Beam	Pipe	A53 Gr. B	Typical
3	M87	N119	N121			RIGID	None	None	RIGID	Typical
4	M88	N120	N122			RIGID	None	None	RIGID	Typical
5	MP1A	N124	N123			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
6	M38	N53	N55			RIGID	None	None	RIGID	Typical
7	M39	N55	N56			Standoff Horizontal	Beam	Pipe	A53 Gr. B	Typical
8	M40	N56	N57		90	Standoff Bar	Beam	RECT	A36 Gr.36	Typical
9	M41	N54	N59			RIGID	None	None	RIGID	Typical
10	M42	N60	N61		90	Standoff Bar	Beam	RECT	A36 Gr.36	Typical
11	M43	N59	N60			Standoff Horizontal	Beam	Pipe	A53 Gr. B	Typical
12	M44	N65	N64			Standoff Vertical	Beam	Pipe	A53 Gr. B	Typical
13	M45	N66	N65A			Standoff Diagonal	Beam	Pipe	A53 Gr. B	Typical
14	M46	N65A	N67			RIGID	None	None	RIGID	Typical
15	M47	N66	N68			RIGID	None	None	RIGID	Typical
16	M48	N70	N69			Standoff Diagonal	Beam	Pipe	A53 Gr. B	Typical
17	M49	N69	N71			RIGID	None	None	RIGID	Typical
18	M50	N70	N72			RIGID	None	None	RIGID	Typical
19	M51A	N73A	N61A			RIGID	None	None	RIGID	Typical
20	M52	N74A	N62			RIGID	None	None	RIGID	Typical
21	M53	N64	N73A		90	Standoff Tab	Beam	RECT	A36 Gr.36	Typical
22	M54A	N65	N74A		90	Standoff Tab	Beam	RECT	A36 Gr.36	Typical
23	M55	N74A	N65A			Standoff Diagonal	Beam	Pipe	A53 Gr. B	Typical
24	M56	N66	N69			Standoff Diagonal	Beam	Pipe	A53 Gr. B	Typical
25	M57	N51	N77A			RIGID	None	None	RIGID	Typical
26	M58	N77A	N78A			Standoff Horizontal	Beam	Pipe	A53 Gr. B	Typical
27	M59	N78A	N57		90	Standoff Bar	Beam	RECT	A36 Gr.36	Typical
28	M60	N52	N80			RIGID	None	None	RIGID	Typical
29	M61	N81	N61		90	Standoff Bar	Beam	RECT	A36 Gr.36	Typical
30	M62	N80	N81			Standoff Horizontal	Beam	Pipe	A53 Gr. B	Typical
31	M63	N86	N85			Standoff Vertical	Beam	Pipe	A53 Gr. B	Typical
32	M64	N88	N87			Standoff Diagonal	Beam	Pipe	A53 Gr. B	Typical
33	M65	N87	N89			RIGID	None	None	RIGID	Typical
34	M66	N88	N90			RIGID	None	None	RIGID	Typical
35	M67	N92	N91			Standoff Diagonal	Beam	Pipe	A53 Gr. B	Typical
36	M68	N91	N93			RIGID	None	None	RIGID	Typical
37	M69	N92	N94			RIGID	None	None	RIGID	Typical
38	M70	N95	N83			RIGID	None	None	RIGID	Typical
39	M71	N96	N84			RIGID	None	None	RIGID	Typical
40	M72	N85	N95		90	Standoff Tab	Beam	RECT	A36 Gr.36	Typical
41	M73	N86	N96		90	Standoff Tab	Beam	RECT	A36 Gr.36	Typical
42	M74	N96	N87			Standoff Diagonal	Beam	Pipe	A53 Gr. B	Typical
43	M75	N88	N91			Standoff Diagonal	Beam	Pipe	A53 Gr. B	Typical
44	M76	N93A	N94A		180	Mount Angle	Beam	Single Angle	A36 Gr.36	Typical
45	M77	N95A	N96A			RIGID	None	None	RIGID	Typical
46	M46A	N57A	N58		180	Mount Angle	Beam	Single Angle	A36 Gr.36	Typical
47	M47A	N59A	N60A			RIGID	None	None	RIGID	Typical
48	M48A	N61B	N62A			Tie Back	Beam	Pipe	A53 Gr. B	Typical
49	M49A	N63	N65B			RIGID	None	None	RIGID	Typical
50	M50A	N64A	N66A			RIGID	None	None	RIGID	Typical
51	MP2A	N68A	N67A			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
52	M52A	N69A	N71A			RIGID	None	None	RIGID	Typical
53	M53A	N70A	N72A			RIGID	None	None	RIGID	Typical
54	MP3A	N74B	N73B			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
55	M55A	N75	N77B			RIGID	None	None	RIGID	Typical
56	M56A	N76	N78B			RIGID	None	None	RIGID	Typical



Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
57	MP4A	N80A	N79			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
58	M58A	N81A	N83A			RIGID	None	None	RIGID	Typical
59	M59A	N82	N84A			RIGID	None	None	RIGID	Typical
60	MP5A	N86A	N85A			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rati...A...	Inactive	Seismic ...
1	M51						Yes	Default		None
2	M54						Yes			None
3	M87						Yes	** NA **		None
4	M88						Yes	** NA **		None
5	MP1A						Yes	** NA **		None
6	M38						Yes	** NA **		None
7	M39						Yes			None
8	M40		OOOOOO				Yes	Default		None
9	M41						Yes	** NA **		None
10	M42		OOOOOO				Yes	Default		None
11	M43						Yes			None
12	M44						Yes			None
13	M45	BenPIN	BenPIN				Yes	Default		None
14	M46						Yes	** NA **		None
15	M47						Yes	** NA **		None
16	M48	BenPIN	BenPIN				Yes	Default		None
17	M49						Yes	** NA **		None
18	M50						Yes	** NA **		None
19	M51A						Yes	** NA **		None
20	M52						Yes	** NA **		None
21	M53		BenPIN				Yes	Default		None
22	M54A		BenPIN				Yes	Default		None
23	M55	BenPIN	BenPIN				Yes	Default		None
24	M56	BenPIN	BenPIN				Yes	Default		None
25	M57						Yes	** NA **		None
26	M58						Yes			None
27	M59		OOOOOO				Yes	Default		None
28	M60						Yes	** NA **		None
29	M61		OOOOOO				Yes	Default		None
30	M62						Yes			None
31	M63						Yes			None
32	M64	BenPIN	BenPIN				Yes	Default		None
33	M65						Yes	** NA **		None
34	M66						Yes	** NA **		None
35	M67	BenPIN	BenPIN				Yes	Default		None
36	M68						Yes	** NA **		None
37	M69						Yes	** NA **		None
38	M70						Yes	** NA **		None
39	M71						Yes	** NA **		None
40	M72		BenPIN				Yes	Default		None
41	M73		BenPIN				Yes	Default		None
42	M74	BenPIN	BenPIN				Yes	Default		None
43	M75	BenPIN	BenPIN				Yes	Default		None
44	M76						Yes			None
45	M77						Yes	** NA **		None
46	M46A						Yes			None
47	M47A						Yes	** NA **		None
48	M48A	OOOOXO					Yes	Default		None



Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rati...A...	Inactive	Seismic ...
49	M49A						Yes	** NA **		None
50	M50A						Yes	** NA **		None
51	MP2A						Yes	** NA **		None
52	M52A						Yes	** NA **		None
53	M53A						Yes	** NA **		None
54	MP3A						Yes	** NA **		None
55	M55A						Yes	** NA **		None
56	M56A						Yes	** NA **		None
57	MP4A						Yes	** NA **		None
58	M58A						Yes	** NA **		None
59	M59A						Yes	** NA **		None
60	MP5A						Yes	** NA **		None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP5A	Y	-43.55	.25
2	MP5A	My	-.022	.25
3	MP5A	Mz	-.003	.25
4	MP5A	Y	-43.55	.75
5	MP5A	My	-.022	.75
6	MP5A	Mz	-.003	.75
7	MP1A	Y	-13.9	.5
8	MP1A	My	-.007	.5
9	MP1A	Mz	0	.5
10	MP1A	Y	-13.9	3.5
11	MP1A	My	-.007	3.5
12	MP1A	Mz	0	3.5
13	MP3A	Y	-23	.25
14	MP3A	My	-.014	.25
15	MP3A	Mz	.016	.25
16	MP3A	Y	-23	5.75
17	MP3A	My	-.014	5.75
18	MP3A	Mz	.016	5.75
19	MP3A	Y	-23	.25
20	MP3A	My	-.009	.25
21	MP3A	Mz	-.019	.25
22	MP3A	Y	-23	5.75
23	MP3A	My	-.009	5.75
24	MP3A	Mz	-.019	5.75
25	MP3A	Y	-84.4	2.5
26	MP3A	My	.042	2.5
27	MP3A	Mz	-.056	2.5
28	MP3A	Y	-70.3	2.5
29	MP3A	My	.035	2.5
30	MP3A	Mz	.047	2.5
31	MP5A	Y	-11.55	3.75
32	MP5A	My	-.006	3.75
33	MP5A	Mz	-.000704	3.75
34	MP5A	Y	-11.55	4.25
35	MP5A	My	-.006	4.25
36	MP5A	Mz	-.000704	4.25
37	MP3A	Y	-17.6	4.5
38	MP3A	My	.015	4.5
39	MP3A	Mz	.002	4.5
40	MP3A	Y	-17.6	4.5



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
41	MP3A	My	-.015	4.5
42	MP3A	Mz	-.002	4.5

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP5A	Y	-35.485	.25
2	MP5A	My	-.018	.25
3	MP5A	Mz	-.002	.25
4	MP5A	Y	-35.485	.75
5	MP5A	My	-.018	.75
6	MP5A	Mz	-.002	.75
7	MP1A	Y	-42.15	.5
8	MP1A	My	-.021	.5
9	MP1A	Mz	0	.5
10	MP1A	Y	-42.15	3.5
11	MP1A	My	-.021	3.5
12	MP1A	Mz	0	3.5
13	MP3A	Y	-82.175	.25
14	MP3A	My	-.048	.25
15	MP3A	Mz	.056	.25
16	MP3A	Y	-82.175	5.75
17	MP3A	My	-.048	5.75
18	MP3A	Mz	.056	5.75
19	MP3A	Y	-82.175	.25
20	MP3A	My	-.033	.25
21	MP3A	Mz	-.066	.25
22	MP3A	Y	-82.175	5.75
23	MP3A	My	-.033	5.75
24	MP3A	Mz	-.066	5.75
25	MP3A	Y	-44.735	2.5
26	MP3A	My	.022	2.5
27	MP3A	Mz	-.03	2.5
28	MP3A	Y	-40.23	2.5
29	MP3A	My	.02	2.5
30	MP3A	Mz	.027	2.5
31	MP5A	Y	-14.876	3.75
32	MP5A	My	-.007	3.75
33	MP5A	Mz	-.000906	3.75
34	MP5A	Y	-14.876	4.25
35	MP5A	My	-.007	4.25
36	MP5A	Mz	-.000906	4.25
37	MP3A	Y	6.6	4.5
38	MP3A	My	-.005	4.5
39	MP3A	Mz	-.00067	4.5
40	MP3A	Y	6.6	4.5
41	MP3A	My	.005	4.5
42	MP3A	Mz	.00067	4.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP5A	X	0	.25
2	MP5A	Z	-95.869	.25
3	MP5A	Mx	.006	.25
4	MP5A	X	0	.75
5	MP5A	Z	-95.869	.75
6	MP5A	Mx	.006	.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
7	MP1A	X	0	.5
8	MP1A	Z	-125.707	.5
9	MP1A	Mx	0	.5
10	MP1A	X	0	3.5
11	MP1A	Z	-125.707	3.5
12	MP1A	Mx	0	3.5
13	MP3A	X	0	.25
14	MP3A	Z	-116.38	.25
15	MP3A	Mx	-.08	.25
16	MP3A	X	0	5.75
17	MP3A	Z	-116.38	5.75
18	MP3A	Mx	-.08	5.75
19	MP3A	X	0	.25
20	MP3A	Z	-116.38	.25
21	MP3A	Mx	.094	.25
22	MP3A	X	0	5.75
23	MP3A	Z	-116.38	5.75
24	MP3A	Mx	.094	5.75
25	MP3A	X	0	2.5
26	MP3A	Z	-76.56	2.5
27	MP3A	Mx	.051	2.5
28	MP3A	X	0	2.5
29	MP3A	Z	-76.56	2.5
30	MP3A	Mx	-.051	2.5
31	MP5A	X	0	3.75
32	MP5A	Z	-37.745	3.75
33	MP5A	Mx	.002	3.75
34	MP5A	X	0	4.25
35	MP5A	Z	-37.745	4.25
36	MP5A	Mx	.002	4.25
37	MP3A	X	0	4.5
38	MP3A	Z	-46.927	4.5
39	MP3A	Mx	-.005	4.5
40	MP3A	X	0	4.5
41	MP3A	Z	-46.927	4.5
42	MP3A	Mx	.005	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP5A	X	43.561	.25
2	MP5A	Z	-75.449	.25
3	MP5A	Mx	-.017	.25
4	MP5A	X	43.561	.75
5	MP5A	Z	-75.449	.75
6	MP5A	Mx	-.017	.75
7	MP1A	X	57.42	.5
8	MP1A	Z	-99.454	.5
9	MP1A	Mx	-.029	.5
10	MP1A	X	57.42	3.5
11	MP1A	Z	-99.454	3.5
12	MP1A	Mx	-.029	3.5
13	MP3A	X	56.165	.25
14	MP3A	Z	-97.28	.25
15	MP3A	Mx	-.099	.25
16	MP3A	X	56.165	5.75
17	MP3A	Z	-97.28	5.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
18	MP3A	Mx	-.099	5.75
19	MP3A	X	56.165	.25
20	MP3A	Z	-97.28	.25
21	MP3A	Mx	.056	.25
22	MP3A	X	56.165	5.75
23	MP3A	Z	-97.28	5.75
24	MP3A	Mx	.056	5.75
25	MP3A	X	35.131	2.5
26	MP3A	Z	-60.849	2.5
27	MP3A	Mx	.058	2.5
28	MP3A	X	33.958	2.5
29	MP3A	Z	-58.817	2.5
30	MP3A	Mx	-.022	2.5
31	MP5A	X	17.536	3.75
32	MP5A	Z	-30.374	3.75
33	MP5A	Mx	-.007	3.75
34	MP5A	X	17.536	4.25
35	MP5A	Z	-30.374	4.25
36	MP5A	Mx	-.007	4.25
37	MP3A	X	21.187	4.5
38	MP3A	Z	-36.697	4.5
39	MP3A	Mx	.014	4.5
40	MP3A	X	21.187	4.5
41	MP3A	Z	-36.697	4.5
42	MP3A	Mx	-.014	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP5A	X	48.782	.25
2	MP5A	Z	-28.164	.25
3	MP5A	Mx	-.022	.25
4	MP5A	X	48.782	.75
5	MP5A	Z	-28.164	.75
6	MP5A	Mx	-.022	.75
7	MP1A	X	80.631	.5
8	MP1A	Z	-46.553	.5
9	MP1A	Mx	-.04	.5
10	MP1A	X	80.631	3.5
11	MP1A	Z	-46.553	3.5
12	MP1A	Mx	-.04	3.5
13	MP3A	X	84.932	.25
14	MP3A	Z	-49.036	.25
15	MP3A	Mx	-.083	.25
16	MP3A	X	84.932	5.75
17	MP3A	Z	-49.036	5.75
18	MP3A	Mx	-.083	5.75
19	MP3A	X	84.932	.25
20	MP3A	Z	-49.036	.25
21	MP3A	Mx	.005	.25
22	MP3A	X	84.932	5.75
23	MP3A	Z	-49.036	5.75
24	MP3A	Mx	.005	5.75
25	MP3A	X	49.941	2.5
26	MP3A	Z	-28.834	2.5
27	MP3A	Mx	.044	2.5
28	MP3A	X	43.846	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
29	MP3A	Z	-25.314	2.5
30	MP3A	Mx	.005	2.5
31	MP5A	X	22.226	3.75
32	MP5A	Z	-12.832	3.75
33	MP5A	Mx	-.01	3.75
34	MP5A	X	22.226	4.25
35	MP5A	Z	-12.832	4.25
36	MP5A	Mx	-.01	4.25
37	MP3A	X	22.817	4.5
38	MP3A	Z	-13.174	4.5
39	MP3A	Mx	.018	4.5
40	MP3A	X	22.817	4.5
41	MP3A	Z	-13.174	4.5
42	MP3A	Mx	-.018	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP5A	X	34.283	.25
2	MP5A	Z	0	.25
3	MP5A	Mx	-.017	.25
4	MP5A	X	34.283	.75
5	MP5A	Z	0	.75
6	MP5A	Mx	-.017	.75
7	MP1A	X	82.238	.5
8	MP1A	Z	0	.5
9	MP1A	Mx	-.041	.5
10	MP1A	X	82.238	3.5
11	MP1A	Z	0	3.5
12	MP1A	Mx	-.041	3.5
13	MP3A	X	87.863	.25
14	MP3A	Z	0	.25
15	MP3A	Mx	-.052	.25
16	MP3A	X	87.863	5.75
17	MP3A	Z	0	5.75
18	MP3A	Mx	-.052	5.75
19	MP3A	X	87.863	.25
20	MP3A	Z	0	.25
21	MP3A	Mx	-.036	.25
22	MP3A	X	87.863	5.75
23	MP3A	Z	0	5.75
24	MP3A	Mx	-.036	5.75
25	MP3A	X	51.369	2.5
26	MP3A	Z	0	2.5
27	MP3A	Mx	.026	2.5
28	MP3A	X	41.985	2.5
29	MP3A	Z	0	2.5
30	MP3A	Mx	.021	2.5
31	MP5A	X	18.928	3.75
32	MP5A	Z	0	3.75
33	MP5A	Mx	-.009	3.75
34	MP5A	X	18.928	4.25
35	MP5A	Z	0	4.25
36	MP5A	Mx	-.009	4.25
37	MP3A	X	14.873	4.5
38	MP3A	Z	0	4.5
39	MP3A	Mx	.012	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
40	MP3A	X	14.873	4.5
41	MP3A	Z	0	4.5
42	MP3A	Mx	-.012	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP5A	X	37.266	.25
2	MP5A	Z	21.515	.25
3	MP5A	Mx	-.02	.25
4	MP5A	X	37.266	.75
5	MP5A	Z	21.515	.75
6	MP5A	Mx	-.02	.75
7	MP1A	X	80.631	.5
8	MP1A	Z	46.553	.5
9	MP1A	Mx	-.04	.5
10	MP1A	X	80.631	3.5
11	MP1A	Z	46.553	3.5
12	MP1A	Mx	-.04	3.5
13	MP3A	X	79.6	.25
14	MP3A	Z	45.957	.25
15	MP3A	Mx	-.015	.25
16	MP3A	X	79.6	5.75
17	MP3A	Z	45.957	5.75
18	MP3A	Mx	-.015	5.75
19	MP3A	X	79.6	.25
20	MP3A	Z	45.957	.25
21	MP3A	Mx	-.069	.25
22	MP3A	X	79.6	5.75
23	MP3A	Z	45.957	5.75
24	MP3A	Mx	-.069	5.75
25	MP3A	X	49.941	2.5
26	MP3A	Z	28.834	2.5
27	MP3A	Mx	.006	2.5
28	MP3A	X	43.846	2.5
29	MP3A	Z	25.314	2.5
30	MP3A	Mx	.039	2.5
31	MP5A	X	18.707	3.75
32	MP5A	Z	10.8	3.75
33	MP5A	Mx	-.01	3.75
34	MP5A	X	18.707	4.25
35	MP5A	Z	10.8	4.25
36	MP5A	Mx	-.01	4.25
37	MP3A	X	16.823	4.5
38	MP3A	Z	9.713	4.5
39	MP3A	Mx	.015	4.5
40	MP3A	X	16.823	4.5
41	MP3A	Z	9.713	4.5
42	MP3A	Mx	-.015	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP5A	X	36.912	.25
2	MP5A	Z	63.933	.25
3	MP5A	Mx	-.022	.25
4	MP5A	X	36.912	.75
5	MP5A	Z	63.933	.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
6	MP5A	Mx	-.022	.75
7	MP1A	X	57.42	.5
8	MP1A	Z	99.454	.5
9	MP1A	Mx	-.029	.5
10	MP1A	X	57.42	3.5
11	MP1A	Z	99.454	3.5
12	MP1A	Mx	-.029	3.5
13	MP3A	X	53.086	.25
14	MP3A	Z	91.948	.25
15	MP3A	Mx	.032	.25
16	MP3A	X	53.086	5.75
17	MP3A	Z	91.948	5.75
18	MP3A	Mx	.032	5.75
19	MP3A	X	53.086	.25
20	MP3A	Z	91.948	.25
21	MP3A	Mx	-.096	.25
22	MP3A	X	53.086	5.75
23	MP3A	Z	91.948	5.75
24	MP3A	Mx	-.096	5.75
25	MP3A	X	35.131	2.5
26	MP3A	Z	60.849	2.5
27	MP3A	Mx	-.023	2.5
28	MP3A	X	33.958	2.5
29	MP3A	Z	58.817	2.5
30	MP3A	Mx	.056	2.5
31	MP5A	X	15.505	3.75
32	MP5A	Z	26.855	3.75
33	MP5A	Mx	-.009	3.75
34	MP5A	X	15.505	4.25
35	MP5A	Z	26.855	4.25
36	MP5A	Mx	-.009	4.25
37	MP3A	X	17.726	4.5
38	MP3A	Z	30.703	4.5
39	MP3A	Mx	.018	4.5
40	MP3A	X	17.726	4.5
41	MP3A	Z	30.703	4.5
42	MP3A	Mx	-.018	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP5A	X	0	.25
2	MP5A	Z	95.869	.25
3	MP5A	Mx	-.006	.25
4	MP5A	X	0	.75
5	MP5A	Z	95.869	.75
6	MP5A	Mx	-.006	.75
7	MP1A	X	0	.5
8	MP1A	Z	125.707	.5
9	MP1A	Mx	0	.5
10	MP1A	X	0	3.5
11	MP1A	Z	125.707	3.5
12	MP1A	Mx	0	3.5
13	MP3A	X	0	.25
14	MP3A	Z	116.38	.25
15	MP3A	Mx	.08	.25
16	MP3A	X	0	5.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
17	MP3A	Z	116.38	5.75
18	MP3A	Mx	.08	5.75
19	MP3A	X	0	.25
20	MP3A	Z	116.38	.25
21	MP3A	Mx	-.094	.25
22	MP3A	X	0	5.75
23	MP3A	Z	116.38	5.75
24	MP3A	Mx	-.094	5.75
25	MP3A	X	0	2.5
26	MP3A	Z	76.56	2.5
27	MP3A	Mx	-.051	2.5
28	MP3A	X	0	2.5
29	MP3A	Z	76.56	2.5
30	MP3A	Mx	.051	2.5
31	MP5A	X	0	3.75
32	MP5A	Z	37.745	3.75
33	MP5A	Mx	-.002	3.75
34	MP5A	X	0	4.25
35	MP5A	Z	37.745	4.25
36	MP5A	Mx	-.002	4.25
37	MP3A	X	0	4.5
38	MP3A	Z	46.927	4.5
39	MP3A	Mx	.005	4.5
40	MP3A	X	0	4.5
41	MP3A	Z	46.927	4.5
42	MP3A	Mx	-.005	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP5A	X	-43.561	.25
2	MP5A	Z	75.449	.25
3	MP5A	Mx	.017	.25
4	MP5A	X	-43.561	.75
5	MP5A	Z	75.449	.75
6	MP5A	Mx	.017	.75
7	MP1A	X	-57.42	.5
8	MP1A	Z	99.454	.5
9	MP1A	Mx	.029	.5
10	MP1A	X	-57.42	3.5
11	MP1A	Z	99.454	3.5
12	MP1A	Mx	.029	3.5
13	MP3A	X	-56.165	.25
14	MP3A	Z	97.28	.25
15	MP3A	Mx	.099	.25
16	MP3A	X	-56.165	5.75
17	MP3A	Z	97.28	5.75
18	MP3A	Mx	.099	5.75
19	MP3A	X	-56.165	.25
20	MP3A	Z	97.28	.25
21	MP3A	Mx	-.056	.25
22	MP3A	X	-56.165	5.75
23	MP3A	Z	97.28	5.75
24	MP3A	Mx	-.056	5.75
25	MP3A	X	-35.131	2.5
26	MP3A	Z	60.849	2.5
27	MP3A	Mx	-.058	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
28	MP3A	X	-33.958	2.5
29	MP3A	Z	58.817	2.5
30	MP3A	Mx	.022	2.5
31	MP5A	X	-17.536	3.75
32	MP5A	Z	30.374	3.75
33	MP5A	Mx	.007	3.75
34	MP5A	X	-17.536	4.25
35	MP5A	Z	30.374	4.25
36	MP5A	Mx	.007	4.25
37	MP3A	X	-21.187	4.5
38	MP3A	Z	36.697	4.5
39	MP3A	Mx	-.014	4.5
40	MP3A	X	-21.187	4.5
41	MP3A	Z	36.697	4.5
42	MP3A	Mx	.014	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP5A	X	-48.782	.25
2	MP5A	Z	28.164	.25
3	MP5A	Mx	.022	.25
4	MP5A	X	-48.782	.75
5	MP5A	Z	28.164	.75
6	MP5A	Mx	.022	.75
7	MP1A	X	-80.631	.5
8	MP1A	Z	46.553	.5
9	MP1A	Mx	.04	.5
10	MP1A	X	-80.631	3.5
11	MP1A	Z	46.553	3.5
12	MP1A	Mx	.04	3.5
13	MP3A	X	-84.932	.25
14	MP3A	Z	49.036	.25
15	MP3A	Mx	.083	.25
16	MP3A	X	-84.932	5.75
17	MP3A	Z	49.036	5.75
18	MP3A	Mx	.083	5.75
19	MP3A	X	-84.932	.25
20	MP3A	Z	49.036	.25
21	MP3A	Mx	-.005	.25
22	MP3A	X	-84.932	5.75
23	MP3A	Z	49.036	5.75
24	MP3A	Mx	-.005	5.75
25	MP3A	X	-49.941	2.5
26	MP3A	Z	28.834	2.5
27	MP3A	Mx	-.044	2.5
28	MP3A	X	-43.846	2.5
29	MP3A	Z	25.314	2.5
30	MP3A	Mx	-.005	2.5
31	MP5A	X	-22.226	3.75
32	MP5A	Z	12.832	3.75
33	MP5A	Mx	.01	3.75
34	MP5A	X	-22.226	4.25
35	MP5A	Z	12.832	4.25
36	MP5A	Mx	.01	4.25
37	MP3A	X	-22.817	4.5
38	MP3A	Z	13.174	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
39	MP3A	Mx	-.018	4.5
40	MP3A	X	-22.817	4.5
41	MP3A	Z	13.174	4.5
42	MP3A	Mx	.018	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP5A	X	-34.283	.25
2	MP5A	Z	0	.25
3	MP5A	Mx	.017	.25
4	MP5A	X	-34.283	.75
5	MP5A	Z	0	.75
6	MP5A	Mx	.017	.75
7	MP1A	X	-82.238	.5
8	MP1A	Z	0	.5
9	MP1A	Mx	.041	.5
10	MP1A	X	-82.238	3.5
11	MP1A	Z	0	3.5
12	MP1A	Mx	.041	3.5
13	MP3A	X	-87.863	.25
14	MP3A	Z	0	.25
15	MP3A	Mx	.052	.25
16	MP3A	X	-87.863	5.75
17	MP3A	Z	0	5.75
18	MP3A	Mx	.052	5.75
19	MP3A	X	-87.863	.25
20	MP3A	Z	0	.25
21	MP3A	Mx	.036	.25
22	MP3A	X	-87.863	5.75
23	MP3A	Z	0	5.75
24	MP3A	Mx	.036	5.75
25	MP3A	X	-51.369	2.5
26	MP3A	Z	0	2.5
27	MP3A	Mx	-.026	2.5
28	MP3A	X	-41.985	2.5
29	MP3A	Z	0	2.5
30	MP3A	Mx	-.021	2.5
31	MP5A	X	-18.928	3.75
32	MP5A	Z	0	3.75
33	MP5A	Mx	.009	3.75
34	MP5A	X	-18.928	4.25
35	MP5A	Z	0	4.25
36	MP5A	Mx	.009	4.25
37	MP3A	X	-14.873	4.5
38	MP3A	Z	0	4.5
39	MP3A	Mx	-.012	4.5
40	MP3A	X	-14.873	4.5
41	MP3A	Z	0	4.5
42	MP3A	Mx	.012	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP5A	X	-37.266	.25
2	MP5A	Z	-21.515	.25
3	MP5A	Mx	.02	.25
4	MP5A	X	-37.266	.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
5	MP5A	Z	-21.515	.75
6	MP5A	Mx	.02	.75
7	MP1A	X	-80.631	.5
8	MP1A	Z	-46.553	.5
9	MP1A	Mx	.04	.5
10	MP1A	X	-80.631	3.5
11	MP1A	Z	-46.553	3.5
12	MP1A	Mx	.04	3.5
13	MP3A	X	-79.6	.25
14	MP3A	Z	-45.957	.25
15	MP3A	Mx	.015	.25
16	MP3A	X	-79.6	5.75
17	MP3A	Z	-45.957	5.75
18	MP3A	Mx	.015	5.75
19	MP3A	X	-79.6	.25
20	MP3A	Z	-45.957	.25
21	MP3A	Mx	.069	.25
22	MP3A	X	-79.6	5.75
23	MP3A	Z	-45.957	5.75
24	MP3A	Mx	.069	5.75
25	MP3A	X	-49.941	2.5
26	MP3A	Z	-28.834	2.5
27	MP3A	Mx	-.006	2.5
28	MP3A	X	-43.846	2.5
29	MP3A	Z	-25.314	2.5
30	MP3A	Mx	-.039	2.5
31	MP5A	X	-18.707	3.75
32	MP5A	Z	-10.8	3.75
33	MP5A	Mx	.01	3.75
34	MP5A	X	-18.707	4.25
35	MP5A	Z	-10.8	4.25
36	MP5A	Mx	.01	4.25
37	MP3A	X	-16.823	4.5
38	MP3A	Z	-9.713	4.5
39	MP3A	Mx	-.015	4.5
40	MP3A	X	-16.823	4.5
41	MP3A	Z	-9.713	4.5
42	MP3A	Mx	.015	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP5A	X	-36.912	.25
2	MP5A	Z	-63.933	.25
3	MP5A	Mx	.022	.25
4	MP5A	X	-36.912	.75
5	MP5A	Z	-63.933	.75
6	MP5A	Mx	.022	.75
7	MP1A	X	-57.42	.5
8	MP1A	Z	-99.454	.5
9	MP1A	Mx	.029	.5
10	MP1A	X	-57.42	3.5
11	MP1A	Z	-99.454	3.5
12	MP1A	Mx	.029	3.5
13	MP3A	X	-53.086	.25
14	MP3A	Z	-91.948	.25
15	MP3A	Mx	-.032	.25



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
16	MP3A	X	-53.086	5.75
17	MP3A	Z	-91.948	5.75
18	MP3A	Mx	-.032	5.75
19	MP3A	X	-53.086	.25
20	MP3A	Z	-91.948	.25
21	MP3A	Mx	.096	.25
22	MP3A	X	-53.086	5.75
23	MP3A	Z	-91.948	5.75
24	MP3A	Mx	.096	5.75
25	MP3A	X	-35.131	2.5
26	MP3A	Z	-60.849	2.5
27	MP3A	Mx	.023	2.5
28	MP3A	X	-33.958	2.5
29	MP3A	Z	-58.817	2.5
30	MP3A	Mx	-.056	2.5
31	MP5A	X	-15.505	3.75
32	MP5A	Z	-26.855	3.75
33	MP5A	Mx	.009	3.75
34	MP5A	X	-15.505	4.25
35	MP5A	Z	-26.855	4.25
36	MP5A	Mx	.009	4.25
37	MP3A	X	-17.726	4.5
38	MP3A	Z	-30.703	4.5
39	MP3A	Mx	-.018	4.5
40	MP3A	X	-17.726	4.5
41	MP3A	Z	-30.703	4.5
42	MP3A	Mx	.018	4.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP5A	X	0	.25
2	MP5A	Z	-19.225	.25
3	MP5A	Mx	.001	.25
4	MP5A	X	0	.75
5	MP5A	Z	-19.225	.75
6	MP5A	Mx	.001	.75
7	MP1A	X	0	.5
8	MP1A	Z	-20.922	.5
9	MP1A	Mx	0	.5
10	MP1A	X	0	3.5
11	MP1A	Z	-20.922	3.5
12	MP1A	Mx	0	3.5
13	MP3A	X	0	.25
14	MP3A	Z	-39.167	.25
15	MP3A	Mx	-.027	.25
16	MP3A	X	0	5.75
17	MP3A	Z	-39.167	5.75
18	MP3A	Mx	-.027	5.75
19	MP3A	X	0	.25
20	MP3A	Z	-39.167	.25
21	MP3A	Mx	.032	.25
22	MP3A	X	0	5.75
23	MP3A	Z	-39.167	5.75
24	MP3A	Mx	.032	5.75
25	MP3A	X	0	2.5
26	MP3A	Z	-16.34	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
27	MP3A	Mx	.011	2.5
28	MP3A	X	0	2.5
29	MP3A	Z	-16.34	2.5
30	MP3A	Mx	-.011	2.5
31	MP5A	X	0	3.75
32	MP5A	Z	-6.797	3.75
33	MP5A	Mx	.000414	3.75
34	MP5A	X	0	4.25
35	MP5A	Z	-6.797	4.25
36	MP5A	Mx	.000414	4.25
37	MP3A	X	0	4.5
38	MP3A	Z	-8.897	4.5
39	MP3A	Mx	-.000904	4.5
40	MP3A	X	0	4.5
41	MP3A	Z	-8.897	4.5
42	MP3A	Mx	.000904	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP5A	X	8.845	.25
2	MP5A	Z	-15.321	.25
3	MP5A	Mx	-.003	.25
4	MP5A	X	8.845	.75
5	MP5A	Z	-15.321	.75
6	MP5A	Mx	-.003	.75
7	MP1A	X	9.62	.5
8	MP1A	Z	-16.662	.5
9	MP1A	Mx	-.005	.5
10	MP1A	X	9.62	3.5
11	MP1A	Z	-16.662	3.5
12	MP1A	Mx	-.005	3.5
13	MP3A	X	18.924	.25
14	MP3A	Z	-32.777	.25
15	MP3A	Mx	-.034	.25
16	MP3A	X	18.924	5.75
17	MP3A	Z	-32.777	5.75
18	MP3A	Mx	-.034	5.75
19	MP3A	X	18.924	.25
20	MP3A	Z	-32.777	.25
21	MP3A	Mx	.019	.25
22	MP3A	X	18.924	5.75
23	MP3A	Z	-32.777	5.75
24	MP3A	Mx	.019	5.75
25	MP3A	X	7.548	2.5
26	MP3A	Z	-13.073	2.5
27	MP3A	Mx	.012	2.5
28	MP3A	X	7.312	2.5
29	MP3A	Z	-12.664	2.5
30	MP3A	Mx	-.005	2.5
31	MP5A	X	3.182	3.75
32	MP5A	Z	-5.511	3.75
33	MP5A	Mx	-.001	3.75
34	MP5A	X	3.182	4.25
35	MP5A	Z	-5.511	4.25
36	MP5A	Mx	-.001	4.25
37	MP3A	X	4.063	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
38	MP3A	Z	-7.037	4.5
39	MP3A	Mx	.003	4.5
40	MP3A	X	4.063	4.5
41	MP3A	Z	-7.037	4.5
42	MP3A	Mx	-.003	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP5A	X	10.643	.25
2	MP5A	Z	-6.145	.25
3	MP5A	Mx	-.005	.25
4	MP5A	X	10.643	.75
5	MP5A	Z	-6.145	.75
6	MP5A	Mx	-.005	.75
7	MP1A	X	13.75	.5
8	MP1A	Z	-7.938	.5
9	MP1A	Mx	-.007	.5
10	MP1A	X	13.75	3.5
11	MP1A	Z	-7.938	3.5
12	MP1A	Mx	-.007	3.5
13	MP3A	X	28.755	.25
14	MP3A	Z	-16.602	.25
15	MP3A	Mx	-.028	.25
16	MP3A	X	28.755	5.75
17	MP3A	Z	-16.602	5.75
18	MP3A	Mx	-.028	5.75
19	MP3A	X	28.755	.25
20	MP3A	Z	-16.602	.25
21	MP3A	Mx	.002	.25
22	MP3A	X	28.755	5.75
23	MP3A	Z	-16.602	5.75
24	MP3A	Mx	.002	5.75
25	MP3A	X	10.919	2.5
26	MP3A	Z	-6.304	2.5
27	MP3A	Mx	.01	2.5
28	MP3A	X	9.691	2.5
29	MP3A	Z	-5.595	2.5
30	MP3A	Mx	.001	2.5
31	MP5A	X	4.187	3.75
32	MP5A	Z	-2.417	3.75
33	MP5A	Mx	-.002	3.75
34	MP5A	X	4.187	4.25
35	MP5A	Z	-2.417	4.25
36	MP5A	Mx	-.002	4.25
37	MP3A	X	4.684	4.5
38	MP3A	Z	-2.704	4.5
39	MP3A	Mx	.004	4.5
40	MP3A	X	4.684	4.5
41	MP3A	Z	-2.704	4.5
42	MP3A	Mx	-.004	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP5A	X	8.423	.25
2	MP5A	Z	0	.25
3	MP5A	Mx	-.004	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
4	MP5A	X	8.423	.75
5	MP5A	Z	0	.75
6	MP5A	Mx	-.004	.75
7	MP1A	X	14.195	.5
8	MP1A	Z	0	.5
9	MP1A	Mx	-.007	.5
10	MP1A	X	14.195	3.5
11	MP1A	Z	0	3.5
12	MP1A	Mx	-.007	3.5
13	MP3A	X	29.878	.25
14	MP3A	Z	0	.25
15	MP3A	Mx	-.018	.25
16	MP3A	X	29.878	5.75
17	MP3A	Z	0	5.75
18	MP3A	Mx	-.018	5.75
19	MP3A	X	29.878	.25
20	MP3A	Z	0	.25
21	MP3A	Mx	-.012	.25
22	MP3A	X	29.878	5.75
23	MP3A	Z	0	5.75
24	MP3A	Mx	-.012	5.75
25	MP3A	X	11.364	2.5
26	MP3A	Z	0	2.5
27	MP3A	Mx	.006	2.5
28	MP3A	X	9.474	2.5
29	MP3A	Z	0	2.5
30	MP3A	Mx	.005	2.5
31	MP5A	X	3.74	3.75
32	MP5A	Z	0	3.75
33	MP5A	Mx	-.002	3.75
34	MP5A	X	3.74	4.25
35	MP5A	Z	0	4.25
36	MP5A	Mx	-.002	4.25
37	MP3A	X	3.464	4.5
38	MP3A	Z	0	4.5
39	MP3A	Mx	.003	4.5
40	MP3A	X	3.464	4.5
41	MP3A	Z	0	4.5
42	MP3A	Mx	-.003	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP5A	X	8.623	.25
2	MP5A	Z	4.979	.25
3	MP5A	Mx	-.005	.25
4	MP5A	X	8.623	.75
5	MP5A	Z	4.979	.75
6	MP5A	Mx	-.005	.75
7	MP1A	X	13.75	.5
8	MP1A	Z	7.938	.5
9	MP1A	Mx	-.007	.5
10	MP1A	X	13.75	3.5
11	MP1A	Z	7.938	3.5
12	MP1A	Mx	-.007	3.5
13	MP3A	X	27.018	.25
14	MP3A	Z	15.599	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
15	MP3A	Mx	-.005	.25
16	MP3A	X	27.018	5.75
17	MP3A	Z	15.599	5.75
18	MP3A	Mx	-.005	5.75
19	MP3A	X	27.018	.25
20	MP3A	Z	15.599	.25
21	MP3A	Mx	-.024	.25
22	MP3A	X	27.018	5.75
23	MP3A	Z	15.599	5.75
24	MP3A	Mx	-.024	5.75
25	MP3A	X	10.919	2.5
26	MP3A	Z	6.304	2.5
27	MP3A	Mx	.001	2.5
28	MP3A	X	9.691	2.5
29	MP3A	Z	5.595	2.5
30	MP3A	Mx	.009	2.5
31	MP5A	X	3.615	3.75
32	MP5A	Z	2.087	3.75
33	MP5A	Mx	-.002	3.75
34	MP5A	X	3.615	4.25
35	MP5A	Z	2.087	4.25
36	MP5A	Mx	-.002	4.25
37	MP3A	X	3.668	4.5
38	MP3A	Z	2.118	4.5
39	MP3A	Mx	.003	4.5
40	MP3A	X	3.668	4.5
41	MP3A	Z	2.118	4.5
42	MP3A	Mx	-.003	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP5A	X	7.679	.25
2	MP5A	Z	13.301	.25
3	MP5A	Mx	-.005	.25
4	MP5A	X	7.679	.75
5	MP5A	Z	13.301	.75
6	MP5A	Mx	-.005	.75
7	MP1A	X	9.62	.5
8	MP1A	Z	16.662	.5
9	MP1A	Mx	-.005	.5
10	MP1A	X	9.62	3.5
11	MP1A	Z	16.662	3.5
12	MP1A	Mx	-.005	3.5
13	MP3A	X	17.921	.25
14	MP3A	Z	31.04	.25
15	MP3A	Mx	.011	.25
16	MP3A	X	17.921	5.75
17	MP3A	Z	31.04	5.75
18	MP3A	Mx	.011	5.75
19	MP3A	X	17.921	.25
20	MP3A	Z	31.04	.25
21	MP3A	Mx	-.032	.25
22	MP3A	X	17.921	5.75
23	MP3A	Z	31.04	5.75
24	MP3A	Mx	-.032	5.75
25	MP3A	X	7.548	2.5



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
26	MP3A	Z	13.073	2.5
27	MP3A	Mx	-0.05	2.5
28	MP3A	X	7.312	2.5
29	MP3A	Z	12.664	2.5
30	MP3A	Mx	.012	2.5
31	MP5A	X	2.851	3.75
32	MP5A	Z	4.939	3.75
33	MP5A	Mx	-.002	3.75
34	MP5A	X	2.851	4.25
35	MP5A	Z	4.939	4.25
36	MP5A	Mx	-.002	4.25
37	MP3A	X	3.476	4.5
38	MP3A	Z	6.021	4.5
39	MP3A	Mx	.003	4.5
40	MP3A	X	3.476	4.5
41	MP3A	Z	6.021	4.5
42	MP3A	Mx	-.003	4.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP5A	X	0	.25
2	MP5A	Z	19.225	.25
3	MP5A	Mx	-.001	.25
4	MP5A	X	0	.75
5	MP5A	Z	19.225	.75
6	MP5A	Mx	-.001	.75
7	MP1A	X	0	.5
8	MP1A	Z	20.922	.5
9	MP1A	Mx	0	.5
10	MP1A	X	0	3.5
11	MP1A	Z	20.922	3.5
12	MP1A	Mx	0	3.5
13	MP3A	X	0	.25
14	MP3A	Z	39.167	.25
15	MP3A	Mx	.027	.25
16	MP3A	X	0	5.75
17	MP3A	Z	39.167	5.75
18	MP3A	Mx	.027	5.75
19	MP3A	X	0	.25
20	MP3A	Z	39.167	.25
21	MP3A	Mx	-.032	.25
22	MP3A	X	0	5.75
23	MP3A	Z	39.167	5.75
24	MP3A	Mx	-.032	5.75
25	MP3A	X	0	2.5
26	MP3A	Z	16.34	2.5
27	MP3A	Mx	-.011	2.5
28	MP3A	X	0	2.5
29	MP3A	Z	16.34	2.5
30	MP3A	Mx	.011	2.5
31	MP5A	X	0	3.75
32	MP5A	Z	6.797	3.75
33	MP5A	Mx	-.000414	3.75
34	MP5A	X	0	4.25
35	MP5A	Z	6.797	4.25
36	MP5A	Mx	-.000414	4.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
37	MP3A	X	0	4.5
38	MP3A	Z	8.897	4.5
39	MP3A	Mx	.000904	4.5
40	MP3A	X	0	4.5
41	MP3A	Z	8.897	4.5
42	MP3A	Mx	-.000904	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP5A	X	-8.845	.25
2	MP5A	Z	15.321	.25
3	MP5A	Mx	.003	.25
4	MP5A	X	-8.845	.75
5	MP5A	Z	15.321	.75
6	MP5A	Mx	.003	.75
7	MP1A	X	-9.62	.5
8	MP1A	Z	16.662	.5
9	MP1A	Mx	.005	.5
10	MP1A	X	-9.62	3.5
11	MP1A	Z	16.662	3.5
12	MP1A	Mx	.005	3.5
13	MP3A	X	-18.924	.25
14	MP3A	Z	32.777	.25
15	MP3A	Mx	.034	.25
16	MP3A	X	-18.924	5.75
17	MP3A	Z	32.777	5.75
18	MP3A	Mx	.034	5.75
19	MP3A	X	-18.924	.25
20	MP3A	Z	32.777	.25
21	MP3A	Mx	-.019	.25
22	MP3A	X	-18.924	5.75
23	MP3A	Z	32.777	5.75
24	MP3A	Mx	-.019	5.75
25	MP3A	X	-7.548	2.5
26	MP3A	Z	13.073	2.5
27	MP3A	Mx	-.012	2.5
28	MP3A	X	-7.312	2.5
29	MP3A	Z	12.664	2.5
30	MP3A	Mx	.005	2.5
31	MP5A	X	-3.182	3.75
32	MP5A	Z	5.511	3.75
33	MP5A	Mx	.001	3.75
34	MP5A	X	-3.182	4.25
35	MP5A	Z	5.511	4.25
36	MP5A	Mx	.001	4.25
37	MP3A	X	-4.063	4.5
38	MP3A	Z	7.037	4.5
39	MP3A	Mx	-.003	4.5
40	MP3A	X	-4.063	4.5
41	MP3A	Z	7.037	4.5
42	MP3A	Mx	.003	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP5A	X	-10.643	.25
2	MP5A	Z	6.145	.25

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
3	MP5A	Mx	.005	.25
4	MP5A	X	-10.643	.75
5	MP5A	Z	6.145	.75
6	MP5A	Mx	.005	.75
7	MP1A	X	-13.75	.5
8	MP1A	Z	7.938	.5
9	MP1A	Mx	.007	.5
10	MP1A	X	-13.75	3.5
11	MP1A	Z	7.938	3.5
12	MP1A	Mx	.007	3.5
13	MP3A	X	-28.755	.25
14	MP3A	Z	16.602	.25
15	MP3A	Mx	.028	.25
16	MP3A	X	-28.755	5.75
17	MP3A	Z	16.602	5.75
18	MP3A	Mx	.028	5.75
19	MP3A	X	-28.755	.25
20	MP3A	Z	16.602	.25
21	MP3A	Mx	-.002	.25
22	MP3A	X	-28.755	5.75
23	MP3A	Z	16.602	5.75
24	MP3A	Mx	-.002	5.75
25	MP3A	X	-10.919	2.5
26	MP3A	Z	6.304	2.5
27	MP3A	Mx	-.01	2.5
28	MP3A	X	-9.691	2.5
29	MP3A	Z	5.595	2.5
30	MP3A	Mx	-.001	2.5
31	MP5A	X	-4.187	3.75
32	MP5A	Z	2.417	3.75
33	MP5A	Mx	.002	3.75
34	MP5A	X	-4.187	4.25
35	MP5A	Z	2.417	4.25
36	MP5A	Mx	.002	4.25
37	MP3A	X	-4.684	4.5
38	MP3A	Z	2.704	4.5
39	MP3A	Mx	-.004	4.5
40	MP3A	X	-4.684	4.5
41	MP3A	Z	2.704	4.5
42	MP3A	Mx	.004	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP5A	X	-8.423	.25
2	MP5A	Z	0	.25
3	MP5A	Mx	.004	.25
4	MP5A	X	-8.423	.75
5	MP5A	Z	0	.75
6	MP5A	Mx	.004	.75
7	MP1A	X	-14.195	.5
8	MP1A	Z	0	.5
9	MP1A	Mx	.007	.5
10	MP1A	X	-14.195	3.5
11	MP1A	Z	0	3.5
12	MP1A	Mx	.007	3.5
13	MP3A	X	-29.878	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
14	MP3A	Z	0	.25
15	MP3A	Mx	.018	.25
16	MP3A	X	-29.878	5.75
17	MP3A	Z	0	5.75
18	MP3A	Mx	.018	5.75
19	MP3A	X	-29.878	.25
20	MP3A	Z	0	.25
21	MP3A	Mx	.012	.25
22	MP3A	X	-29.878	5.75
23	MP3A	Z	0	5.75
24	MP3A	Mx	.012	5.75
25	MP3A	X	-11.364	2.5
26	MP3A	Z	0	2.5
27	MP3A	Mx	-.006	2.5
28	MP3A	X	-9.474	2.5
29	MP3A	Z	0	2.5
30	MP3A	Mx	-.005	2.5
31	MP5A	X	-3.74	3.75
32	MP5A	Z	0	3.75
33	MP5A	Mx	.002	3.75
34	MP5A	X	-3.74	4.25
35	MP5A	Z	0	4.25
36	MP5A	Mx	.002	4.25
37	MP3A	X	-3.464	4.5
38	MP3A	Z	0	4.5
39	MP3A	Mx	-.003	4.5
40	MP3A	X	-3.464	4.5
41	MP3A	Z	0	4.5
42	MP3A	Mx	.003	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP5A	X	-8.623	.25
2	MP5A	Z	-4.979	.25
3	MP5A	Mx	.005	.25
4	MP5A	X	-8.623	.75
5	MP5A	Z	-4.979	.75
6	MP5A	Mx	.005	.75
7	MP1A	X	-13.75	.5
8	MP1A	Z	-7.938	.5
9	MP1A	Mx	.007	.5
10	MP1A	X	-13.75	3.5
11	MP1A	Z	-7.938	3.5
12	MP1A	Mx	.007	3.5
13	MP3A	X	-27.018	.25
14	MP3A	Z	-15.599	.25
15	MP3A	Mx	.005	.25
16	MP3A	X	-27.018	5.75
17	MP3A	Z	-15.599	5.75
18	MP3A	Mx	.005	5.75
19	MP3A	X	-27.018	.25
20	MP3A	Z	-15.599	.25
21	MP3A	Mx	.024	.25
22	MP3A	X	-27.018	5.75
23	MP3A	Z	-15.599	5.75
24	MP3A	Mx	.024	5.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
25	MP3A	X	-10.919	2.5
26	MP3A	Z	-6.304	2.5
27	MP3A	Mx	-.001	2.5
28	MP3A	X	-9.691	2.5
29	MP3A	Z	-5.595	2.5
30	MP3A	Mx	-.009	2.5
31	MP5A	X	-3.615	3.75
32	MP5A	Z	-2.087	3.75
33	MP5A	Mx	.002	3.75
34	MP5A	X	-3.615	4.25
35	MP5A	Z	-2.087	4.25
36	MP5A	Mx	.002	4.25
37	MP3A	X	-3.668	4.5
38	MP3A	Z	-2.118	4.5
39	MP3A	Mx	-.003	4.5
40	MP3A	X	-3.668	4.5
41	MP3A	Z	-2.118	4.5
42	MP3A	Mx	.003	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP5A	X	-7.679	.25
2	MP5A	Z	-13.301	.25
3	MP5A	Mx	.005	.25
4	MP5A	X	-7.679	.75
5	MP5A	Z	-13.301	.75
6	MP5A	Mx	.005	.75
7	MP1A	X	-9.62	.5
8	MP1A	Z	-16.662	.5
9	MP1A	Mx	.005	.5
10	MP1A	X	-9.62	3.5
11	MP1A	Z	-16.662	3.5
12	MP1A	Mx	.005	3.5
13	MP3A	X	-17.921	.25
14	MP3A	Z	-31.04	.25
15	MP3A	Mx	-.011	.25
16	MP3A	X	-17.921	5.75
17	MP3A	Z	-31.04	5.75
18	MP3A	Mx	-.011	5.75
19	MP3A	X	-17.921	.25
20	MP3A	Z	-31.04	.25
21	MP3A	Mx	.032	.25
22	MP3A	X	-17.921	5.75
23	MP3A	Z	-31.04	5.75
24	MP3A	Mx	.032	5.75
25	MP3A	X	-7.548	2.5
26	MP3A	Z	-13.073	2.5
27	MP3A	Mx	.005	2.5
28	MP3A	X	-7.312	2.5
29	MP3A	Z	-12.664	2.5
30	MP3A	Mx	-.012	2.5
31	MP5A	X	-2.851	3.75
32	MP5A	Z	-4.939	3.75
33	MP5A	Mx	.002	3.75
34	MP5A	X	-2.851	4.25
35	MP5A	Z	-4.939	4.25



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
36	MP5A	Mx	.002	4.25
37	MP3A	X	-3.476	4.5
38	MP3A	Z	-6.021	4.5
39	MP3A	Mx	-.003	4.5
40	MP3A	X	-3.476	4.5
41	MP3A	Z	-6.021	4.5
42	MP3A	Mx	.003	4.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP5A	X	0	.25
2	MP5A	Z	-5.105	.25
3	MP5A	Mx	.000311	.25
4	MP5A	X	0	.75
5	MP5A	Z	-5.105	.75
6	MP5A	Mx	.000311	.75
7	MP1A	X	0	.5
8	MP1A	Z	-6.694	.5
9	MP1A	Mx	0	.5
10	MP1A	X	0	3.5
11	MP1A	Z	-6.694	3.5
12	MP1A	Mx	0	3.5
13	MP3A	X	0	.25
14	MP3A	Z	-6.198	.25
15	MP3A	Mx	-.004	.25
16	MP3A	X	0	5.75
17	MP3A	Z	-6.198	5.75
18	MP3A	Mx	-.004	5.75
19	MP3A	X	0	.25
20	MP3A	Z	-6.198	.25
21	MP3A	Mx	.005	.25
22	MP3A	X	0	5.75
23	MP3A	Z	-6.198	5.75
24	MP3A	Mx	.005	5.75
25	MP3A	X	0	2.5
26	MP3A	Z	-4.077	2.5
27	MP3A	Mx	.003	2.5
28	MP3A	X	0	2.5
29	MP3A	Z	-4.077	2.5
30	MP3A	Mx	-.003	2.5
31	MP5A	X	0	3.75
32	MP5A	Z	-2.01	3.75
33	MP5A	Mx	.000122	3.75
34	MP5A	X	0	4.25
35	MP5A	Z	-2.01	4.25
36	MP5A	Mx	.000122	4.25
37	MP3A	X	0	4.5
38	MP3A	Z	-2.499	4.5
39	MP3A	Mx	-.000254	4.5
40	MP3A	X	0	4.5
41	MP3A	Z	-2.499	4.5
42	MP3A	Mx	.000254	4.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP5A	X	2.32	.25



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
2	MP5A	Z	-4.018	.25
3	MP5A	Mx	-.000907	.25
4	MP5A	X	2.32	.75
5	MP5A	Z	-4.018	.75
6	MP5A	Mx	-.000907	.75
7	MP1A	X	3.058	.5
8	MP1A	Z	-5.296	.5
9	MP1A	Mx	-.002	.5
10	MP1A	X	3.058	3.5
11	MP1A	Z	-5.296	3.5
12	MP1A	Mx	-.002	3.5
13	MP3A	X	2.991	.25
14	MP3A	Z	-5.181	.25
15	MP3A	Mx	-.005	.25
16	MP3A	X	2.991	5.75
17	MP3A	Z	-5.181	5.75
18	MP3A	Mx	-.005	5.75
19	MP3A	X	2.991	.25
20	MP3A	Z	-5.181	.25
21	MP3A	Mx	.003	.25
22	MP3A	X	2.991	5.75
23	MP3A	Z	-5.181	5.75
24	MP3A	Mx	.003	5.75
25	MP3A	X	1.871	2.5
26	MP3A	Z	-3.24	2.5
27	MP3A	Mx	.003	2.5
28	MP3A	X	1.808	2.5
29	MP3A	Z	-3.132	2.5
30	MP3A	Mx	-.001	2.5
31	MP5A	X	.934	3.75
32	MP5A	Z	-1.618	3.75
33	MP5A	Mx	-.000365	3.75
34	MP5A	X	.934	4.25
35	MP5A	Z	-1.618	4.25
36	MP5A	Mx	-.000365	4.25
37	MP3A	X	1.128	4.5
38	MP3A	Z	-1.954	4.5
39	MP3A	Mx	.000735	4.5
40	MP3A	X	1.128	4.5
41	MP3A	Z	-1.954	4.5
42	MP3A	Mx	-.000735	4.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	MP5A	X	2.598	.25
2	MP5A	Z	-1.5	.25
3	MP5A	Mx	-.001	.25
4	MP5A	X	2.598	.75
5	MP5A	Z	-1.5	.75
6	MP5A	Mx	-.001	.75
7	MP1A	X	4.294	.5
8	MP1A	Z	-2.479	.5
9	MP1A	Mx	-.002	.5
10	MP1A	X	4.294	3.5
11	MP1A	Z	-2.479	3.5
12	MP1A	Mx	-.002	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
13	MP3A	X	4.523	.25
14	MP3A	Z	-2.611	.25
15	MP3A	Mx	-.004	.25
16	MP3A	X	4.523	5.75
17	MP3A	Z	-2.611	5.75
18	MP3A	Mx	-.004	5.75
19	MP3A	X	4.523	.25
20	MP3A	Z	-2.611	.25
21	MP3A	Mx	.000272	.25
22	MP3A	X	4.523	5.75
23	MP3A	Z	-2.611	5.75
24	MP3A	Mx	.000272	5.75
25	MP3A	X	2.66	2.5
26	MP3A	Z	-1.536	2.5
27	MP3A	Mx	.002	2.5
28	MP3A	X	2.335	2.5
29	MP3A	Z	-1.348	2.5
30	MP3A	Mx	.000269	2.5
31	MP5A	X	1.184	3.75
32	MP5A	Z	-.683	3.75
33	MP5A	Mx	-.000546	3.75
34	MP5A	X	1.184	4.25
35	MP5A	Z	-.683	4.25
36	MP5A	Mx	-.000546	4.25
37	MP3A	X	1.215	4.5
38	MP3A	Z	-.702	4.5
39	MP3A	Mx	.000934	4.5
40	MP3A	X	1.215	4.5
41	MP3A	Z	-.702	4.5
42	MP3A	Mx	-.000934	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP5A	X	1.826	.25
2	MP5A	Z	0	.25
3	MP5A	Mx	-.000906	.25
4	MP5A	X	1.826	.75
5	MP5A	Z	0	.75
6	MP5A	Mx	-.000906	.75
7	MP1A	X	4.38	.5
8	MP1A	Z	0	.5
9	MP1A	Mx	-.002	.5
10	MP1A	X	4.38	3.5
11	MP1A	Z	0	3.5
12	MP1A	Mx	-.002	3.5
13	MP3A	X	4.679	.25
14	MP3A	Z	0	.25
15	MP3A	Mx	-.003	.25
16	MP3A	X	4.679	5.75
17	MP3A	Z	0	5.75
18	MP3A	Mx	-.003	5.75
19	MP3A	X	4.679	.25
20	MP3A	Z	0	.25
21	MP3A	Mx	-.002	.25
22	MP3A	X	4.679	5.75
23	MP3A	Z	0	5.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
24	MP3A	Mx	-.002	5.75
25	MP3A	X	2.736	2.5
26	MP3A	Z	0	2.5
27	MP3A	Mx	.001	2.5
28	MP3A	X	2.236	2.5
29	MP3A	Z	0	2.5
30	MP3A	Mx	.001	2.5
31	MP5A	X	1.008	3.75
32	MP5A	Z	0	3.75
33	MP5A	Mx	-.0005	3.75
34	MP5A	X	1.008	4.25
35	MP5A	Z	0	4.25
36	MP5A	Mx	-.0005	4.25
37	MP3A	X	.792	4.5
38	MP3A	Z	0	4.5
39	MP3A	Mx	.000655	4.5
40	MP3A	X	.792	4.5
41	MP3A	Z	0	4.5
42	MP3A	Mx	-.000655	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP5A	X	1.985	.25
2	MP5A	Z	1.146	.25
3	MP5A	Mx	-.001	.25
4	MP5A	X	1.985	.75
5	MP5A	Z	1.146	.75
6	MP5A	Mx	-.001	.75
7	MP1A	X	4.294	.5
8	MP1A	Z	2.479	.5
9	MP1A	Mx	-.002	.5
10	MP1A	X	4.294	3.5
11	MP1A	Z	2.479	3.5
12	MP1A	Mx	-.002	3.5
13	MP3A	X	4.239	.25
14	MP3A	Z	2.447	.25
15	MP3A	Mx	-.000819	.25
16	MP3A	X	4.239	5.75
17	MP3A	Z	2.447	5.75
18	MP3A	Mx	-.000819	5.75
19	MP3A	X	4.239	.25
20	MP3A	Z	2.447	.25
21	MP3A	Mx	-.004	.25
22	MP3A	X	4.239	5.75
23	MP3A	Z	2.447	5.75
24	MP3A	Mx	-.004	5.75
25	MP3A	X	2.66	2.5
26	MP3A	Z	1.536	2.5
27	MP3A	Mx	.000306	2.5
28	MP3A	X	2.335	2.5
29	MP3A	Z	1.348	2.5
30	MP3A	Mx	.002	2.5
31	MP5A	X	.996	3.75
32	MP5A	Z	.575	3.75
33	MP5A	Mx	-.000529	3.75
34	MP5A	X	.996	4.25



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
35	MP5A	Z	.575	4.25
36	MP5A	Mx	-.000529	4.25
37	MP3A	X	.896	4.5
38	MP3A	Z	.517	4.5
39	MP3A	Mx	.000794	4.5
40	MP3A	X	.896	4.5
41	MP3A	Z	.517	4.5
42	MP3A	Mx	-.000794	4.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP5A	X	1.966	.25
2	MP5A	Z	3.405	.25
3	MP5A	Mx	-.001	.25
4	MP5A	X	1.966	.75
5	MP5A	Z	3.405	.75
6	MP5A	Mx	-.001	.75
7	MP1A	X	3.058	.5
8	MP1A	Z	5.296	.5
9	MP1A	Mx	-.002	.5
10	MP1A	X	3.058	3.5
11	MP1A	Z	5.296	3.5
12	MP1A	Mx	-.002	3.5
13	MP3A	X	2.827	.25
14	MP3A	Z	4.897	.25
15	MP3A	Mx	.002	.25
16	MP3A	X	2.827	5.75
17	MP3A	Z	4.897	5.75
18	MP3A	Mx	.002	5.75
19	MP3A	X	2.827	.25
20	MP3A	Z	4.897	.25
21	MP3A	Mx	-.005	.25
22	MP3A	X	2.827	5.75
23	MP3A	Z	4.897	5.75
24	MP3A	Mx	-.005	5.75
25	MP3A	X	1.871	2.5
26	MP3A	Z	3.24	2.5
27	MP3A	Mx	-.001	2.5
28	MP3A	X	1.808	2.5
29	MP3A	Z	3.132	2.5
30	MP3A	Mx	.003	2.5
31	MP5A	X	.826	3.75
32	MP5A	Z	1.43	3.75
33	MP5A	Mx	-.000497	3.75
34	MP5A	X	.826	4.25
35	MP5A	Z	1.43	4.25
36	MP5A	Mx	-.000497	4.25
37	MP3A	X	.944	4.5
38	MP3A	Z	1.635	4.5
39	MP3A	Mx	.000947	4.5
40	MP3A	X	.944	4.5
41	MP3A	Z	1.635	4.5
42	MP3A	Mx	-.000947	4.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
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Member Point Loads (BLC 33 : Antenna Wm (180 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP5A	X	0	.25
2	MP5A	Z	5.105	.25
3	MP5A	Mx	-.000311	.25
4	MP5A	X	0	.75
5	MP5A	Z	5.105	.75
6	MP5A	Mx	-.000311	.75
7	MP1A	X	0	.5
8	MP1A	Z	6.694	.5
9	MP1A	Mx	0	.5
10	MP1A	X	0	3.5
11	MP1A	Z	6.694	3.5
12	MP1A	Mx	0	3.5
13	MP3A	X	0	.25
14	MP3A	Z	6.198	.25
15	MP3A	Mx	.004	.25
16	MP3A	X	0	5.75
17	MP3A	Z	6.198	5.75
18	MP3A	Mx	.004	5.75
19	MP3A	X	0	.25
20	MP3A	Z	6.198	.25
21	MP3A	Mx	-.005	.25
22	MP3A	X	0	5.75
23	MP3A	Z	6.198	5.75
24	MP3A	Mx	-.005	5.75
25	MP3A	X	0	2.5
26	MP3A	Z	4.077	2.5
27	MP3A	Mx	-.003	2.5
28	MP3A	X	0	2.5
29	MP3A	Z	4.077	2.5
30	MP3A	Mx	.003	2.5
31	MP5A	X	0	3.75
32	MP5A	Z	2.01	3.75
33	MP5A	Mx	-.000122	3.75
34	MP5A	X	0	4.25
35	MP5A	Z	2.01	4.25
36	MP5A	Mx	-.000122	4.25
37	MP3A	X	0	4.5
38	MP3A	Z	2.499	4.5
39	MP3A	Mx	.000254	4.5
40	MP3A	X	0	4.5
41	MP3A	Z	2.499	4.5
42	MP3A	Mx	-.000254	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP5A	X	-2.32	.25
2	MP5A	Z	4.018	.25
3	MP5A	Mx	.000907	.25
4	MP5A	X	-2.32	.75
5	MP5A	Z	4.018	.75
6	MP5A	Mx	.000907	.75
7	MP1A	X	-3.058	.5
8	MP1A	Z	5.296	.5
9	MP1A	Mx	.002	.5
10	MP1A	X	-3.058	3.5
11	MP1A	Z	5.296	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
12	MP1A	Mx	.002	3.5
13	MP3A	X	-2.991	.25
14	MP3A	Z	5.181	.25
15	MP3A	Mx	.005	.25
16	MP3A	X	-2.991	5.75
17	MP3A	Z	5.181	5.75
18	MP3A	Mx	.005	5.75
19	MP3A	X	-2.991	.25
20	MP3A	Z	5.181	.25
21	MP3A	Mx	-.003	.25
22	MP3A	X	-2.991	5.75
23	MP3A	Z	5.181	5.75
24	MP3A	Mx	-.003	5.75
25	MP3A	X	-1.871	2.5
26	MP3A	Z	3.24	2.5
27	MP3A	Mx	-.003	2.5
28	MP3A	X	-1.808	2.5
29	MP3A	Z	3.132	2.5
30	MP3A	Mx	.001	2.5
31	MP5A	X	-.934	3.75
32	MP5A	Z	1.618	3.75
33	MP5A	Mx	.000365	3.75
34	MP5A	X	-.934	4.25
35	MP5A	Z	1.618	4.25
36	MP5A	Mx	.000365	4.25
37	MP3A	X	-1.128	4.5
38	MP3A	Z	1.954	4.5
39	MP3A	Mx	-.000735	4.5
40	MP3A	X	-1.128	4.5
41	MP3A	Z	1.954	4.5
42	MP3A	Mx	.000735	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP5A	X	-2.598	.25
2	MP5A	Z	1.5	.25
3	MP5A	Mx	.001	.25
4	MP5A	X	-2.598	.75
5	MP5A	Z	1.5	.75
6	MP5A	Mx	.001	.75
7	MP1A	X	-4.294	.5
8	MP1A	Z	2.479	.5
9	MP1A	Mx	.002	.5
10	MP1A	X	-4.294	3.5
11	MP1A	Z	2.479	3.5
12	MP1A	Mx	.002	3.5
13	MP3A	X	-4.523	.25
14	MP3A	Z	2.611	.25
15	MP3A	Mx	.004	.25
16	MP3A	X	-4.523	5.75
17	MP3A	Z	2.611	5.75
18	MP3A	Mx	.004	5.75
19	MP3A	X	-4.523	.25
20	MP3A	Z	2.611	.25
21	MP3A	Mx	-.000272	.25
22	MP3A	X	-4.523	5.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
23	MP3A	Z	2.611	5.75
24	MP3A	Mx	-.000272	5.75
25	MP3A	X	-2.66	2.5
26	MP3A	Z	1.536	2.5
27	MP3A	Mx	-.002	2.5
28	MP3A	X	-2.335	2.5
29	MP3A	Z	1.348	2.5
30	MP3A	Mx	-.000269	2.5
31	MP5A	X	-1.184	3.75
32	MP5A	Z	.683	3.75
33	MP5A	Mx	.000546	3.75
34	MP5A	X	-1.184	4.25
35	MP5A	Z	.683	4.25
36	MP5A	Mx	.000546	4.25
37	MP3A	X	-1.215	4.5
38	MP3A	Z	.702	4.5
39	MP3A	Mx	-.000934	4.5
40	MP3A	X	-1.215	4.5
41	MP3A	Z	.702	4.5
42	MP3A	Mx	.000934	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP5A	X	-1.826	.25
2	MP5A	Z	0	.25
3	MP5A	Mx	.000906	.25
4	MP5A	X	-1.826	.75
5	MP5A	Z	0	.75
6	MP5A	Mx	.000906	.75
7	MP1A	X	-4.38	.5
8	MP1A	Z	0	.5
9	MP1A	Mx	.002	.5
10	MP1A	X	-4.38	3.5
11	MP1A	Z	0	3.5
12	MP1A	Mx	.002	3.5
13	MP3A	X	-4.679	.25
14	MP3A	Z	0	.25
15	MP3A	Mx	.003	.25
16	MP3A	X	-4.679	5.75
17	MP3A	Z	0	5.75
18	MP3A	Mx	.003	5.75
19	MP3A	X	-4.679	.25
20	MP3A	Z	0	.25
21	MP3A	Mx	.002	.25
22	MP3A	X	-4.679	5.75
23	MP3A	Z	0	5.75
24	MP3A	Mx	.002	5.75
25	MP3A	X	-2.736	2.5
26	MP3A	Z	0	2.5
27	MP3A	Mx	-.001	2.5
28	MP3A	X	-2.236	2.5
29	MP3A	Z	0	2.5
30	MP3A	Mx	-.001	2.5
31	MP5A	X	-1.008	3.75
32	MP5A	Z	0	3.75
33	MP5A	Mx	.0005	3.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
34	MP5A	X	-1.008	4.25
35	MP5A	Z	0	4.25
36	MP5A	Mx	.0005	4.25
37	MP3A	X	-.792	4.5
38	MP3A	Z	0	4.5
39	MP3A	Mx	-.000655	4.5
40	MP3A	X	-.792	4.5
41	MP3A	Z	0	4.5
42	MP3A	Mx	.000655	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP5A	X	-1.985	.25
2	MP5A	Z	-1.146	.25
3	MP5A	Mx	.001	.25
4	MP5A	X	-1.985	.75
5	MP5A	Z	-1.146	.75
6	MP5A	Mx	.001	.75
7	MP1A	X	-4.294	.5
8	MP1A	Z	-2.479	.5
9	MP1A	Mx	.002	.5
10	MP1A	X	-4.294	3.5
11	MP1A	Z	-2.479	3.5
12	MP1A	Mx	.002	3.5
13	MP3A	X	-4.239	.25
14	MP3A	Z	-2.447	.25
15	MP3A	Mx	.000819	.25
16	MP3A	X	-4.239	5.75
17	MP3A	Z	-2.447	5.75
18	MP3A	Mx	.000819	5.75
19	MP3A	X	-4.239	.25
20	MP3A	Z	-2.447	.25
21	MP3A	Mx	.004	.25
22	MP3A	X	-4.239	5.75
23	MP3A	Z	-2.447	5.75
24	MP3A	Mx	.004	5.75
25	MP3A	X	-2.66	2.5
26	MP3A	Z	-1.536	2.5
27	MP3A	Mx	-.000306	2.5
28	MP3A	X	-2.335	2.5
29	MP3A	Z	-1.348	2.5
30	MP3A	Mx	-.002	2.5
31	MP5A	X	-.996	3.75
32	MP5A	Z	-.575	3.75
33	MP5A	Mx	.000529	3.75
34	MP5A	X	-.996	4.25
35	MP5A	Z	-.575	4.25
36	MP5A	Mx	.000529	4.25
37	MP3A	X	-.896	4.5
38	MP3A	Z	-.517	4.5
39	MP3A	Mx	-.000794	4.5
40	MP3A	X	-.896	4.5
41	MP3A	Z	-.517	4.5
42	MP3A	Mx	.000794	4.5



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP5A	X	-1.966	.25
2	MP5A	Z	-3.405	.25
3	MP5A	Mx	.001	.25
4	MP5A	X	-1.966	.75
5	MP5A	Z	-3.405	.75
6	MP5A	Mx	.001	.75
7	MP1A	X	-3.058	.5
8	MP1A	Z	-5.296	.5
9	MP1A	Mx	.002	.5
10	MP1A	X	-3.058	3.5
11	MP1A	Z	-5.296	3.5
12	MP1A	Mx	.002	3.5
13	MP3A	X	-2.827	.25
14	MP3A	Z	-4.897	.25
15	MP3A	Mx	-.002	.25
16	MP3A	X	-2.827	5.75
17	MP3A	Z	-4.897	5.75
18	MP3A	Mx	-.002	5.75
19	MP3A	X	-2.827	.25
20	MP3A	Z	-4.897	.25
21	MP3A	Mx	.005	.25
22	MP3A	X	-2.827	5.75
23	MP3A	Z	-4.897	5.75
24	MP3A	Mx	.005	5.75
25	MP3A	X	-1.871	2.5
26	MP3A	Z	-3.24	2.5
27	MP3A	Mx	.001	2.5
28	MP3A	X	-1.808	2.5
29	MP3A	Z	-3.132	2.5
30	MP3A	Mx	-.003	2.5
31	MP5A	X	-.826	3.75
32	MP5A	Z	-1.43	3.75
33	MP5A	Mx	.000497	3.75
34	MP5A	X	-.826	4.25
35	MP5A	Z	-1.43	4.25
36	MP5A	Mx	.000497	4.25
37	MP3A	X	-.944	4.5
38	MP3A	Z	-1.635	4.5
39	MP3A	Mx	-.000947	4.5
40	MP3A	X	-.944	4.5
41	MP3A	Z	-1.635	4.5
42	MP3A	Mx	.000947	4.5

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M53A	Y	-500	0

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M59A	Y	-500	0

Member Point Loads (BLC 79 : Lv1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M54	Y	-250	0



Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	M54	Y	-250	%50

Member Point Loads (BLC 81 : Antenna Ev)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP5A	Y	-1.802	.25
2	MP5A	My	-.000894	.25
3	MP5A	Mz	-.00011	.25
4	MP5A	Y	-1.802	.75
5	MP5A	My	-.000894	.75
6	MP5A	Mz	-.00011	.75
7	MP1A	Y	-.575	.5
8	MP1A	My	-.000288	.5
9	MP1A	Mz	0	.5
10	MP1A	Y	-.575	3.5
11	MP1A	My	-.000288	3.5
12	MP1A	Mz	0	3.5
13	MP3A	Y	-.952	.25
14	MP3A	My	-.000559	.25
15	MP3A	Mz	.000651	.25
16	MP3A	Y	-.952	5.75
17	MP3A	My	-.000559	5.75
18	MP3A	Mz	.000651	5.75
19	MP3A	Y	-.952	.25
20	MP3A	My	-.000385	.25
21	MP3A	Mz	-.000767	.25
22	MP3A	Y	-.952	5.75
23	MP3A	My	-.000385	5.75
24	MP3A	Mz	-.000767	5.75
25	MP3A	Y	-3.493	2.5
26	MP3A	My	.002	2.5
27	MP3A	Mz	-.002	2.5
28	MP3A	Y	-2.909	2.5
29	MP3A	My	.001	2.5
30	MP3A	Mz	.002	2.5
31	MP5A	Y	-.478	3.75
32	MP5A	My	-.000237	3.75
33	MP5A	Mz	-2.9e-5	3.75
34	MP5A	Y	-.478	4.25
35	MP5A	My	-.000237	4.25
36	MP5A	Mz	-2.9e-5	4.25
37	MP3A	Y	-.728	4.5
38	MP3A	My	.000602	4.5
39	MP3A	Mz	7.4e-5	4.5
40	MP3A	Y	-.728	4.5
41	MP3A	My	-.000602	4.5
42	MP3A	Mz	-7.4e-5	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP5A	Z	-4.506	.25
2	MP5A	Mx	.000275	.25
3	MP5A	Z	-4.506	.75
4	MP5A	Mx	.000275	.75
5	MP1A	Z	-1.438	.5
6	MP1A	Mx	0	.5
7	MP1A	Z	-1.438	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
8	MP1A	Mx	0	3.5
9	MP3A	Z	-2.38	.25
10	MP3A	Mx	-.002	.25
11	MP3A	Z	-2.38	5.75
12	MP3A	Mx	-.002	5.75
13	MP3A	Z	-2.38	.25
14	MP3A	Mx	.002	.25
15	MP3A	Z	-2.38	5.75
16	MP3A	Mx	.002	5.75
17	MP3A	Z	-8.733	2.5
18	MP3A	Mx	.006	2.5
19	MP3A	Z	-7.274	2.5
20	MP3A	Mx	-.005	2.5
21	MP5A	Z	-1.195	3.75
22	MP5A	Mx	7.3e-5	3.75
23	MP5A	Z	-1.195	4.25
24	MP5A	Mx	7.3e-5	4.25
25	MP3A	Z	-1.821	4.5
26	MP3A	Mx	-.000185	4.5
27	MP3A	Z	-1.821	4.5
28	MP3A	Mx	.000185	4.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP5A	X	4.506	.25
2	MP5A	Mx	-.002	.25
3	MP5A	X	4.506	.75
4	MP5A	Mx	-.002	.75
5	MP1A	X	1.438	.5
6	MP1A	Mx	-.000719	.5
7	MP1A	X	1.438	3.5
8	MP1A	Mx	-.000719	3.5
9	MP3A	X	2.38	.25
10	MP3A	Mx	-.001	.25
11	MP3A	X	2.38	5.75
12	MP3A	Mx	-.001	5.75
13	MP3A	X	2.38	.25
14	MP3A	Mx	-.000963	.25
15	MP3A	X	2.38	5.75
16	MP3A	Mx	-.000963	5.75
17	MP3A	X	8.733	2.5
18	MP3A	Mx	.004	2.5
19	MP3A	X	7.274	2.5
20	MP3A	Mx	.004	2.5
21	MP5A	X	1.195	3.75
22	MP5A	Mx	-.000593	3.75
23	MP5A	X	1.195	4.25
24	MP5A	Mx	-.000593	4.25
25	MP3A	X	1.821	4.5
26	MP3A	Mx	.002	4.5
27	MP3A	X	1.821	4.5
28	MP3A	Mx	-.002	4.5

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	Y	-5.657	-5.657	0	%100
2	M54	Y	-5.657	-5.657	0	%100
3	MP1A	Y	-4.954	-4.954	0	%100
4	M39	Y	-4.954	-4.954	0	%100
5	M40	Y	-6.563	-6.563	0	%100
6	M42	Y	-6.563	-6.563	0	%100
7	M43	Y	-4.954	-4.954	0	%100
8	M44	Y	-4.954	-4.954	0	%100
9	M45	Y	-3.949	-3.949	0	%100
10	M48	Y	-3.949	-3.949	0	%100
11	M53	Y	-6.563	-6.563	0	%100
12	M54A	Y	-6.563	-6.563	0	%100
13	M55	Y	-3.949	-3.949	0	%100
14	M56	Y	-3.949	-3.949	0	%100
15	M58	Y	-4.954	-4.954	0	%100
16	M59	Y	-6.563	-6.563	0	%100
17	M61	Y	-6.563	-6.563	0	%100
18	M62	Y	-4.954	-4.954	0	%100
19	M63	Y	-4.954	-4.954	0	%100
20	M64	Y	-3.949	-3.949	0	%100
21	M67	Y	-3.949	-3.949	0	%100
22	M72	Y	-6.563	-6.563	0	%100
23	M73	Y	-6.563	-6.563	0	%100
24	M74	Y	-3.949	-3.949	0	%100
25	M75	Y	-3.949	-3.949	0	%100
26	M76	Y	-8.643	-8.643	0	%100
27	M46A	Y	-8.643	-8.643	0	%100
28	M48A	Y	-5.657	-5.657	0	%100
29	MP2A	Y	-4.954	-4.954	0	%100
30	MP3A	Y	-4.954	-4.954	0	%100
31	MP4A	Y	-4.954	-4.954	0	%100
32	MP5A	Y	-4.954	-4.954	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	0	0	0	%100
2	M51	Z	-14.201	-14.201	0	%100
3	M54	X	0	0	0	%100
4	M54	Z	-14.201	-14.201	0	%100
5	MP1A	X	0	0	0	%100
6	MP1A	Z	-11.731	-11.731	0	%100
7	M39	X	0	0	0	%100
8	M39	Z	-5.559	-5.559	0	%100
9	M40	X	0	0	0	%100
10	M40	Z	-0.878	-0.878	0	%100
11	M42	X	0	0	0	%100
12	M42	Z	-0.878	-0.878	0	%100
13	M43	X	0	0	0	%100
14	M43	Z	-5.559	-5.559	0	%100
15	M44	X	0	0	0	%100
16	M44	Z	-8.815	-8.815	0	%100
17	M45	X	0	0	0	%100
18	M45	Z	-7.696	-7.696	0	%100
19	M48	X	0	0	0	%100
20	M48	Z	-7.696	-7.696	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
21	M53	X	0	0	0	%100
22	M53	Z	-1.852	-1.852	0	%100
23	M54A	X	0	0	0	%100
24	M54A	Z	-1.852	-1.852	0	%100
25	M55	X	0	0	0	%100
26	M55	Z	-6.502	-6.502	0	%100
27	M56	X	0	0	0	%100
28	M56	Z	-6.502	-6.502	0	%100
29	M58	X	0	0	0	%100
30	M58	Z	-5.559	-5.559	0	%100
31	M59	X	0	0	0	%100
32	M59	Z	-.878	-.878	0	%100
33	M61	X	0	0	0	%100
34	M61	Z	-.878	-.878	0	%100
35	M62	X	0	0	0	%100
36	M62	Z	-5.559	-5.559	0	%100
37	M63	X	0	0	0	%100
38	M63	Z	-8.815	-8.815	0	%100
39	M64	X	0	0	0	%100
40	M64	Z	-7.696	-7.696	0	%100
41	M67	X	0	0	0	%100
42	M67	Z	-7.696	-7.696	0	%100
43	M72	X	0	0	0	%100
44	M72	Z	-1.852	-1.852	0	%100
45	M73	X	0	0	0	%100
46	M73	Z	-1.852	-1.852	0	%100
47	M74	X	0	0	0	%100
48	M74	Z	-6.502	-6.502	0	%100
49	M75	X	0	0	0	%100
50	M75	Z	-6.502	-6.502	0	%100
51	M76	X	0	0	0	%100
52	M76	Z	-19.757	-19.757	0	%100
53	M46A	X	0	0	0	%100
54	M46A	Z	-19.757	-19.757	0	%100
55	M48A	X	0	0	0	%100
56	M48A	Z	-8.654	-8.654	0	%100
57	MP2A	X	0	0	0	%100
58	MP2A	Z	-11.731	-11.731	0	%100
59	MP3A	X	0	0	0	%100
60	MP3A	Z	-11.731	-11.731	0	%100
61	MP4A	X	0	0	0	%100
62	MP4A	Z	-11.674	-11.674	0	%100
63	MP5A	X	0	0	0	%100
64	MP5A	Z	-11.731	-11.731	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	5.325	5.325	0	%100
2	M51	Z	-9.224	-9.224	0	%100
3	M54	X	5.325	5.325	0	%100
4	M54	Z	-9.224	-9.224	0	%100
5	MP1A	X	5.866	5.866	0	%100
6	MP1A	Z	-10.159	-10.159	0	%100
7	M39	X	.32	.32	0	%100
8	M39	Z	-.554	-.554	0	%100
9	M40	X	.05	.05	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
10	M40	Z	-0.87	-0.87	0 %100
11	M42	X	.05	.05	0 %100
12	M42	Z	-.087	-.087	0 %100
13	M43	X	.32	.32	0 %100
14	M43	Z	-.554	-.554	0 %100
15	M44	X	4.408	4.408	0 %100
16	M44	Z	-7.634	-7.634	0 %100
17	M45	X	3.848	3.848	0 %100
18	M45	Z	-6.665	-6.665	0 %100
19	M48	X	3.848	3.848	0 %100
20	M48	Z	-6.665	-6.665	0 %100
21	M53	X	3.476	3.476	0 %100
22	M53	Z	-6.02	-6.02	0 %100
23	M54A	X	3.476	3.476	0 %100
24	M54A	Z	-6.02	-6.02	0 %100
25	M55	X	2.574	2.574	0 %100
26	M55	Z	-4.459	-4.459	0 %100
27	M56	X	2.574	2.574	0 %100
28	M56	Z	-4.459	-4.459	0 %100
29	M58	X	5.392	5.392	0 %100
30	M58	Z	-9.34	-9.34	0 %100
31	M59	X	.851	.851	0 %100
32	M59	Z	-1.475	-1.475	0 %100
33	M61	X	.851	.851	0 %100
34	M61	Z	-1.475	-1.475	0 %100
35	M62	X	5.392	5.392	0 %100
36	M62	Z	-9.34	-9.34	0 %100
37	M63	X	4.408	4.408	0 %100
38	M63	Z	-7.634	-7.634	0 %100
39	M64	X	3.848	3.848	0 %100
40	M64	Z	-6.665	-6.665	0 %100
41	M67	X	3.848	3.848	0 %100
42	M67	Z	-6.665	-6.665	0 %100
43	M72	X	3.476	3.476	0 %100
44	M72	Z	-6.02	-6.02	0 %100
45	M73	X	3.476	3.476	0 %100
46	M73	Z	-6.02	-6.02	0 %100
47	M74	X	3.97	3.97	0 %100
48	M74	Z	-6.875	-6.875	0 %100
49	M75	X	3.97	3.97	0 %100
50	M75	Z	-6.875	-6.875	0 %100
51	M76	X	7.409	7.409	0 %100
52	M76	Z	-12.833	-12.833	0 %100
53	M46A	X	7.409	7.409	0 %100
54	M46A	Z	-12.833	-12.833	0 %100
55	M48A	X	6.939	6.939	0 %100
56	M48A	Z	-12.018	-12.018	0 %100
57	MP2A	X	5.866	5.866	0 %100
58	MP2A	Z	-10.159	-10.159	0 %100
59	MP3A	X	5.866	5.866	0 %100
60	MP3A	Z	-10.159	-10.159	0 %100
61	MP4A	X	5.837	5.837	0 %100
62	MP4A	Z	-10.11	-10.11	0 %100
63	MP5A	X	5.866	5.866	0 %100
64	MP5A	Z	-10.159	-10.159	0 %100



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name :

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	3.075	3.075	0	%100
2	M51	Z	-1.775	-1.775	0	%100
3	M54	X	3.075	3.075	0	%100
4	M54	Z	-1.775	-1.775	0	%100
5	MP1A	X	10.159	10.159	0	%100
6	MP1A	Z	-5.866	-5.866	0	%100
7	M39	X	.82	.82	0	%100
8	M39	Z	-.473	-.473	0	%100
9	M40	X	.129	.129	0	%100
10	M40	Z	-.075	-.075	0	%100
11	M42	X	.129	.129	0	%100
12	M42	Z	-.075	-.075	0	%100
13	M43	X	.82	.82	0	%100
14	M43	Z	-.473	-.473	0	%100
15	M44	X	7.634	7.634	0	%100
16	M44	Z	-4.408	-4.408	0	%100
17	M45	X	6.665	6.665	0	%100
18	M45	Z	-3.848	-3.848	0	%100
19	M48	X	6.665	6.665	0	%100
20	M48	Z	-3.848	-3.848	0	%100
21	M53	X	14.853	14.853	0	%100
22	M53	Z	-8.575	-8.575	0	%100
23	M54A	X	14.853	14.853	0	%100
24	M54A	Z	-8.575	-8.575	0	%100
25	M55	X	4.532	4.532	0	%100
26	M55	Z	-2.616	-2.616	0	%100
27	M56	X	4.532	4.532	0	%100
28	M56	Z	-2.616	-2.616	0	%100
29	M58	X	9.606	9.606	0	%100
30	M58	Z	-5.546	-5.546	0	%100
31	M59	X	1.517	1.517	0	%100
32	M59	Z	-.876	-.876	0	%100
33	M61	X	1.517	1.517	0	%100
34	M61	Z	-.876	-.876	0	%100
35	M62	X	9.606	9.606	0	%100
36	M62	Z	-5.546	-5.546	0	%100
37	M63	X	7.634	7.634	0	%100
38	M63	Z	-4.408	-4.408	0	%100
39	M64	X	6.665	6.665	0	%100
40	M64	Z	-3.848	-3.848	0	%100
41	M67	X	6.665	6.665	0	%100
42	M67	Z	-3.848	-3.848	0	%100
43	M72	X	14.853	14.853	0	%100
44	M72	Z	-8.575	-8.575	0	%100
45	M73	X	14.853	14.853	0	%100
46	M73	Z	-8.575	-8.575	0	%100
47	M74	X	6.949	6.949	0	%100
48	M74	Z	-4.012	-4.012	0	%100
49	M75	X	6.949	6.949	0	%100
50	M75	Z	-4.012	-4.012	0	%100
51	M76	X	4.278	4.278	0	%100
52	M76	Z	-2.47	-2.47	0	%100
53	M46A	X	4.278	4.278	0	%100
54	M46A	Z	-2.47	-2.47	0	%100
55	M48A	X	10.673	10.673	0	%100
56	M48A	Z	-6.162	-6.162	0	%100
57	MP2A	X	10.159	10.159	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
58	MP2A	Z	-5.866	-5.866	0	%100
59	MP3A	X	10.159	10.159	0	%100
60	MP3A	Z	-5.866	-5.866	0	%100
61	MP4A	X	10.11	10.11	0	%100
62	MP4A	Z	-5.837	-5.837	0	%100
63	MP5A	X	10.159	10.159	0	%100
64	MP5A	Z	-5.866	-5.866	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	0	0	0	%100
2	M51	Z	0	0	0	%100
3	M54	X	0	0	0	%100
4	M54	Z	0	0	0	%100
5	MP1A	X	11.731	11.731	0	%100
6	MP1A	Z	0	0	0	%100
7	M39	X	6.172	6.172	0	%100
8	M39	Z	0	0	0	%100
9	M40	X	.975	.975	0	%100
10	M40	Z	0	0	0	%100
11	M42	X	.975	.975	0	%100
12	M42	Z	0	0	0	%100
13	M43	X	6.172	6.172	0	%100
14	M43	Z	0	0	0	%100
15	M44	X	8.815	8.815	0	%100
16	M44	Z	0	0	0	%100
17	M45	X	7.696	7.696	0	%100
18	M45	Z	0	0	0	%100
19	M48	X	7.696	7.696	0	%100
20	M48	Z	0	0	0	%100
21	M53	X	22.25	22.25	0	%100
22	M53	Z	0	0	0	%100
23	M54A	X	22.25	22.25	0	%100
24	M54A	Z	0	0	0	%100
25	M55	X	6.67	6.67	0	%100
26	M55	Z	0	0	0	%100
27	M56	X	6.67	6.67	0	%100
28	M56	Z	0	0	0	%100
29	M58	X	6.172	6.172	0	%100
30	M58	Z	0	0	0	%100
31	M59	X	.975	.975	0	%100
32	M59	Z	0	0	0	%100
33	M61	X	.975	.975	0	%100
34	M61	Z	0	0	0	%100
35	M62	X	6.172	6.172	0	%100
36	M62	Z	0	0	0	%100
37	M63	X	8.815	8.815	0	%100
38	M63	Z	0	0	0	%100
39	M64	X	7.696	7.696	0	%100
40	M64	Z	0	0	0	%100
41	M67	X	7.696	7.696	0	%100
42	M67	Z	0	0	0	%100
43	M72	X	22.25	22.25	0	%100
44	M72	Z	0	0	0	%100
45	M73	X	22.25	22.25	0	%100
46	M73	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
47	M74	X	6.67	6.67	0	%100
48	M74	Z	0	0	0	%100
49	M75	X	6.67	6.67	0	%100
50	M75	Z	0	0	0	%100
51	M76	X	0	0	0	%100
52	M76	Z	0	0	0	%100
53	M46A	X	0	0	0	%100
54	M46A	Z	0	0	0	%100
55	M48A	X	5.547	5.547	0	%100
56	M48A	Z	0	0	0	%100
57	MP2A	X	11.731	11.731	0	%100
58	MP2A	Z	0	0	0	%100
59	MP3A	X	11.731	11.731	0	%100
60	MP3A	Z	0	0	0	%100
61	MP4A	X	11.674	11.674	0	%100
62	MP4A	Z	0	0	0	%100
63	MP5A	X	11.731	11.731	0	%100
64	MP5A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	3.075	3.075	0	%100
2	M51	Z	1.775	1.775	0	%100
3	M54	X	3.075	3.075	0	%100
4	M54	Z	1.775	1.775	0	%100
5	MP1A	X	10.159	10.159	0	%100
6	MP1A	Z	5.866	5.866	0	%100
7	M39	X	9.606	9.606	0	%100
8	M39	Z	5.546	5.546	0	%100
9	M40	X	1.517	1.517	0	%100
10	M40	Z	.876	.876	0	%100
11	M42	X	1.517	1.517	0	%100
12	M42	Z	.876	.876	0	%100
13	M43	X	9.606	9.606	0	%100
14	M43	Z	5.546	5.546	0	%100
15	M44	X	7.634	7.634	0	%100
16	M44	Z	4.408	4.408	0	%100
17	M45	X	6.665	6.665	0	%100
18	M45	Z	3.848	3.848	0	%100
19	M48	X	6.665	6.665	0	%100
20	M48	Z	3.848	3.848	0	%100
21	M53	X	14.853	14.853	0	%100
22	M53	Z	8.575	8.575	0	%100
23	M54A	X	14.853	14.853	0	%100
24	M54A	Z	8.575	8.575	0	%100
25	M55	X	6.949	6.949	0	%100
26	M55	Z	4.012	4.012	0	%100
27	M56	X	6.949	6.949	0	%100
28	M56	Z	4.012	4.012	0	%100
29	M58	X	.82	.82	0	%100
30	M58	Z	.473	.473	0	%100
31	M59	X	.129	.129	0	%100
32	M59	Z	.075	.075	0	%100
33	M61	X	.129	.129	0	%100
34	M61	Z	.075	.075	0	%100
35	M62	X	.82	.82	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
36	M62	Z	.473	.473	0	%100
37	M63	X	7.634	7.634	0	%100
38	M63	Z	4.408	4.408	0	%100
39	M64	X	6.665	6.665	0	%100
40	M64	Z	3.848	3.848	0	%100
41	M67	X	6.665	6.665	0	%100
42	M67	Z	3.848	3.848	0	%100
43	M72	X	14.853	14.853	0	%100
44	M72	Z	8.575	8.575	0	%100
45	M73	X	14.853	14.853	0	%100
46	M73	Z	8.575	8.575	0	%100
47	M74	X	4.532	4.532	0	%100
48	M74	Z	2.616	2.616	0	%100
49	M75	X	4.532	4.532	0	%100
50	M75	Z	2.616	2.616	0	%100
51	M76	X	4.278	4.278	0	%100
52	M76	Z	2.47	2.47	0	%100
53	M46A	X	4.278	4.278	0	%100
54	M46A	Z	2.47	2.47	0	%100
55	M48A	X	.28	.28	0	%100
56	M48A	Z	.162	.162	0	%100
57	MP2A	X	10.159	10.159	0	%100
58	MP2A	Z	5.866	5.866	0	%100
59	MP3A	X	10.159	10.159	0	%100
60	MP3A	Z	5.866	5.866	0	%100
61	MP4A	X	10.11	10.11	0	%100
62	MP4A	Z	5.837	5.837	0	%100
63	MP5A	X	10.159	10.159	0	%100
64	MP5A	Z	5.866	5.866	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M51	X	5.325	5.325	0	%100
2	M51	Z	9.224	9.224	0	%100
3	M54	X	5.325	5.325	0	%100
4	M54	Z	9.224	9.224	0	%100
5	MP1A	X	5.866	5.866	0	%100
6	MP1A	Z	10.159	10.159	0	%100
7	M39	X	5.392	5.392	0	%100
8	M39	Z	9.34	9.34	0	%100
9	M40	X	.851	.851	0	%100
10	M40	Z	1.475	1.475	0	%100
11	M42	X	.851	.851	0	%100
12	M42	Z	1.475	1.475	0	%100
13	M43	X	5.392	5.392	0	%100
14	M43	Z	9.34	9.34	0	%100
15	M44	X	4.408	4.408	0	%100
16	M44	Z	7.634	7.634	0	%100
17	M45	X	3.848	3.848	0	%100
18	M45	Z	6.665	6.665	0	%100
19	M48	X	3.848	3.848	0	%100
20	M48	Z	6.665	6.665	0	%100
21	M53	X	3.476	3.476	0	%100
22	M53	Z	6.02	6.02	0	%100
23	M54A	X	3.476	3.476	0	%100
24	M54A	Z	6.02	6.02	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
25	M55	X	3.97	3.97	0	%100
26	M55	Z	6.875	6.875	0	%100
27	M56	X	3.97	3.97	0	%100
28	M56	Z	6.875	6.875	0	%100
29	M58	X	.32	.32	0	%100
30	M58	Z	.554	.554	0	%100
31	M59	X	.05	.05	0	%100
32	M59	Z	.087	.087	0	%100
33	M61	X	.05	.05	0	%100
34	M61	Z	.087	.087	0	%100
35	M62	X	.32	.32	0	%100
36	M62	Z	.554	.554	0	%100
37	M63	X	4.408	4.408	0	%100
38	M63	Z	7.634	7.634	0	%100
39	M64	X	3.848	3.848	0	%100
40	M64	Z	6.665	6.665	0	%100
41	M67	X	3.848	3.848	0	%100
42	M67	Z	6.665	6.665	0	%100
43	M72	X	3.476	3.476	0	%100
44	M72	Z	6.02	6.02	0	%100
45	M73	X	3.476	3.476	0	%100
46	M73	Z	6.02	6.02	0	%100
47	M74	X	2.574	2.574	0	%100
48	M74	Z	4.459	4.459	0	%100
49	M75	X	2.574	2.574	0	%100
50	M75	Z	4.459	4.459	0	%100
51	M76	X	7.409	7.409	0	%100
52	M76	Z	12.833	12.833	0	%100
53	M46A	X	7.409	7.409	0	%100
54	M46A	Z	12.833	12.833	0	%100
55	M48A	X	.939	.939	0	%100
56	M48A	Z	1.626	1.626	0	%100
57	MP2A	X	5.866	5.866	0	%100
58	MP2A	Z	10.159	10.159	0	%100
59	MP3A	X	5.866	5.866	0	%100
60	MP3A	Z	10.159	10.159	0	%100
61	MP4A	X	5.837	5.837	0	%100
62	MP4A	Z	10.11	10.11	0	%100
63	MP5A	X	5.866	5.866	0	%100
64	MP5A	Z	10.159	10.159	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	0	0	0	%100
2	M51	Z	14.201	14.201	0	%100
3	M54	X	0	0	0	%100
4	M54	Z	14.201	14.201	0	%100
5	MP1A	X	0	0	0	%100
6	MP1A	Z	11.731	11.731	0	%100
7	M39	X	0	0	0	%100
8	M39	Z	5.559	5.559	0	%100
9	M40	X	0	0	0	%100
10	M40	Z	.878	.878	0	%100
11	M42	X	0	0	0	%100
12	M42	Z	.878	.878	0	%100
13	M43	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
14	M43	Z	5.559	5.559	0	%100
15	M44	X	0	0	0	%100
16	M44	Z	8.815	8.815	0	%100
17	M45	X	0	0	0	%100
18	M45	Z	7.696	7.696	0	%100
19	M48	X	0	0	0	%100
20	M48	Z	7.696	7.696	0	%100
21	M53	X	0	0	0	%100
22	M53	Z	1.852	1.852	0	%100
23	M54A	X	0	0	0	%100
24	M54A	Z	1.852	1.852	0	%100
25	M55	X	0	0	0	%100
26	M55	Z	6.502	6.502	0	%100
27	M56	X	0	0	0	%100
28	M56	Z	6.502	6.502	0	%100
29	M58	X	0	0	0	%100
30	M58	Z	5.559	5.559	0	%100
31	M59	X	0	0	0	%100
32	M59	Z	.878	.878	0	%100
33	M61	X	0	0	0	%100
34	M61	Z	.878	.878	0	%100
35	M62	X	0	0	0	%100
36	M62	Z	5.559	5.559	0	%100
37	M63	X	0	0	0	%100
38	M63	Z	8.815	8.815	0	%100
39	M64	X	0	0	0	%100
40	M64	Z	7.696	7.696	0	%100
41	M67	X	0	0	0	%100
42	M67	Z	7.696	7.696	0	%100
43	M72	X	0	0	0	%100
44	M72	Z	1.852	1.852	0	%100
45	M73	X	0	0	0	%100
46	M73	Z	1.852	1.852	0	%100
47	M74	X	0	0	0	%100
48	M74	Z	6.502	6.502	0	%100
49	M75	X	0	0	0	%100
50	M75	Z	6.502	6.502	0	%100
51	M76	X	0	0	0	%100
52	M76	Z	19.757	19.757	0	%100
53	M46A	X	0	0	0	%100
54	M46A	Z	19.757	19.757	0	%100
55	M48A	X	0	0	0	%100
56	M48A	Z	8.654	8.654	0	%100
57	MP2A	X	0	0	0	%100
58	MP2A	Z	11.731	11.731	0	%100
59	MP3A	X	0	0	0	%100
60	MP3A	Z	11.731	11.731	0	%100
61	MP4A	X	0	0	0	%100
62	MP4A	Z	11.674	11.674	0	%100
63	MP5A	X	0	0	0	%100
64	MP5A	Z	11.731	11.731	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	-5.325	-5.325	0	%100
2	M51	Z	9.224	9.224	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
3	M54	X	-5.325	-5.325	0 %100
4	M54	Z	9.224	9.224	0 %100
5	MP1A	X	-5.866	-5.866	0 %100
6	MP1A	Z	10.159	10.159	0 %100
7	M39	X	-.32	-.32	0 %100
8	M39	Z	.554	.554	0 %100
9	M40	X	-.05	-.05	0 %100
10	M40	Z	.087	.087	0 %100
11	M42	X	-.05	-.05	0 %100
12	M42	Z	.087	.087	0 %100
13	M43	X	-.32	-.32	0 %100
14	M43	Z	.554	.554	0 %100
15	M44	X	-4.408	-4.408	0 %100
16	M44	Z	7.634	7.634	0 %100
17	M45	X	-3.848	-3.848	0 %100
18	M45	Z	6.665	6.665	0 %100
19	M48	X	-3.848	-3.848	0 %100
20	M48	Z	6.665	6.665	0 %100
21	M53	X	-3.476	-3.476	0 %100
22	M53	Z	6.02	6.02	0 %100
23	M54A	X	-3.476	-3.476	0 %100
24	M54A	Z	6.02	6.02	0 %100
25	M55	X	-2.574	-2.574	0 %100
26	M55	Z	4.459	4.459	0 %100
27	M56	X	-2.574	-2.574	0 %100
28	M56	Z	4.459	4.459	0 %100
29	M58	X	-5.392	-5.392	0 %100
30	M58	Z	9.34	9.34	0 %100
31	M59	X	-.851	-.851	0 %100
32	M59	Z	1.475	1.475	0 %100
33	M61	X	-.851	-.851	0 %100
34	M61	Z	1.475	1.475	0 %100
35	M62	X	-5.392	-5.392	0 %100
36	M62	Z	9.34	9.34	0 %100
37	M63	X	-4.408	-4.408	0 %100
38	M63	Z	7.634	7.634	0 %100
39	M64	X	-3.848	-3.848	0 %100
40	M64	Z	6.665	6.665	0 %100
41	M67	X	-3.848	-3.848	0 %100
42	M67	Z	6.665	6.665	0 %100
43	M72	X	-3.476	-3.476	0 %100
44	M72	Z	6.02	6.02	0 %100
45	M73	X	-3.476	-3.476	0 %100
46	M73	Z	6.02	6.02	0 %100
47	M74	X	-3.97	-3.97	0 %100
48	M74	Z	6.875	6.875	0 %100
49	M75	X	-3.97	-3.97	0 %100
50	M75	Z	6.875	6.875	0 %100
51	M76	X	-7.409	-7.409	0 %100
52	M76	Z	12.833	12.833	0 %100
53	M46A	X	-7.409	-7.409	0 %100
54	M46A	Z	12.833	12.833	0 %100
55	M48A	X	-6.939	-6.939	0 %100
56	M48A	Z	12.018	12.018	0 %100
57	MP2A	X	-5.866	-5.866	0 %100
58	MP2A	Z	10.159	10.159	0 %100
59	MP3A	X	-5.866	-5.866	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
60	MP3A	Z	10.159	10.159	0	%100
61	MP4A	X	-5.837	-5.837	0	%100
62	MP4A	Z	10.11	10.11	0	%100
63	MP5A	X	-5.866	-5.866	0	%100
64	MP5A	Z	10.159	10.159	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	-3.075	-3.075	0	%100
2	M51	Z	1.775	1.775	0	%100
3	M54	X	-3.075	-3.075	0	%100
4	M54	Z	1.775	1.775	0	%100
5	MP1A	X	-10.159	-10.159	0	%100
6	MP1A	Z	5.866	5.866	0	%100
7	M39	X	-.82	-.82	0	%100
8	M39	Z	.473	.473	0	%100
9	M40	X	-.129	-.129	0	%100
10	M40	Z	.075	.075	0	%100
11	M42	X	-.129	-.129	0	%100
12	M42	Z	.075	.075	0	%100
13	M43	X	-.82	-.82	0	%100
14	M43	Z	.473	.473	0	%100
15	M44	X	-7.634	-7.634	0	%100
16	M44	Z	4.408	4.408	0	%100
17	M45	X	-6.665	-6.665	0	%100
18	M45	Z	3.848	3.848	0	%100
19	M48	X	-6.665	-6.665	0	%100
20	M48	Z	3.848	3.848	0	%100
21	M53	X	-14.853	-14.853	0	%100
22	M53	Z	8.575	8.575	0	%100
23	M54A	X	-14.853	-14.853	0	%100
24	M54A	Z	8.575	8.575	0	%100
25	M55	X	-4.532	-4.532	0	%100
26	M55	Z	2.616	2.616	0	%100
27	M56	X	-4.532	-4.532	0	%100
28	M56	Z	2.616	2.616	0	%100
29	M58	X	-9.606	-9.606	0	%100
30	M58	Z	5.546	5.546	0	%100
31	M59	X	-1.517	-1.517	0	%100
32	M59	Z	.876	.876	0	%100
33	M61	X	-1.517	-1.517	0	%100
34	M61	Z	.876	.876	0	%100
35	M62	X	-9.606	-9.606	0	%100
36	M62	Z	5.546	5.546	0	%100
37	M63	X	-7.634	-7.634	0	%100
38	M63	Z	4.408	4.408	0	%100
39	M64	X	-6.665	-6.665	0	%100
40	M64	Z	3.848	3.848	0	%100
41	M67	X	-6.665	-6.665	0	%100
42	M67	Z	3.848	3.848	0	%100
43	M72	X	-14.853	-14.853	0	%100
44	M72	Z	8.575	8.575	0	%100
45	M73	X	-14.853	-14.853	0	%100
46	M73	Z	8.575	8.575	0	%100
47	M74	X	-6.949	-6.949	0	%100
48	M74	Z	4.012	4.012	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
49	M75	X	-6.949	-6.949	0	%100
50	M75	Z	4.012	4.012	0	%100
51	M76	X	-4.278	-4.278	0	%100
52	M76	Z	2.47	2.47	0	%100
53	M46A	X	-4.278	-4.278	0	%100
54	M46A	Z	2.47	2.47	0	%100
55	M48A	X	-10.673	-10.673	0	%100
56	M48A	Z	6.162	6.162	0	%100
57	MP2A	X	-10.159	-10.159	0	%100
58	MP2A	Z	5.866	5.866	0	%100
59	MP3A	X	-10.159	-10.159	0	%100
60	MP3A	Z	5.866	5.866	0	%100
61	MP4A	X	-10.11	-10.11	0	%100
62	MP4A	Z	5.837	5.837	0	%100
63	MP5A	X	-10.159	-10.159	0	%100
64	MP5A	Z	5.866	5.866	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	0	0	0	%100
2	M51	Z	0	0	0	%100
3	M54	X	0	0	0	%100
4	M54	Z	0	0	0	%100
5	MP1A	X	-11.731	-11.731	0	%100
6	MP1A	Z	0	0	0	%100
7	M39	X	-6.172	-6.172	0	%100
8	M39	Z	0	0	0	%100
9	M40	X	-.975	-.975	0	%100
10	M40	Z	0	0	0	%100
11	M42	X	-.975	-.975	0	%100
12	M42	Z	0	0	0	%100
13	M43	X	-6.172	-6.172	0	%100
14	M43	Z	0	0	0	%100
15	M44	X	-8.815	-8.815	0	%100
16	M44	Z	0	0	0	%100
17	M45	X	-7.696	-7.696	0	%100
18	M45	Z	0	0	0	%100
19	M48	X	-7.696	-7.696	0	%100
20	M48	Z	0	0	0	%100
21	M53	X	-22.25	-22.25	0	%100
22	M53	Z	0	0	0	%100
23	M54A	X	-22.25	-22.25	0	%100
24	M54A	Z	0	0	0	%100
25	M55	X	-6.67	-6.67	0	%100
26	M55	Z	0	0	0	%100
27	M56	X	-6.67	-6.67	0	%100
28	M56	Z	0	0	0	%100
29	M58	X	-6.172	-6.172	0	%100
30	M58	Z	0	0	0	%100
31	M59	X	-.975	-.975	0	%100
32	M59	Z	0	0	0	%100
33	M61	X	-.975	-.975	0	%100
34	M61	Z	0	0	0	%100
35	M62	X	-6.172	-6.172	0	%100
36	M62	Z	0	0	0	%100
37	M63	X	-8.815	-8.815	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
38	M63	Z	0	0	0	%100
39	M64	X	-7.696	-7.696	0	%100
40	M64	Z	0	0	0	%100
41	M67	X	-7.696	-7.696	0	%100
42	M67	Z	0	0	0	%100
43	M72	X	-22.25	-22.25	0	%100
44	M72	Z	0	0	0	%100
45	M73	X	-22.25	-22.25	0	%100
46	M73	Z	0	0	0	%100
47	M74	X	-6.67	-6.67	0	%100
48	M74	Z	0	0	0	%100
49	M75	X	-6.67	-6.67	0	%100
50	M75	Z	0	0	0	%100
51	M76	X	0	0	0	%100
52	M76	Z	0	0	0	%100
53	M46A	X	0	0	0	%100
54	M46A	Z	0	0	0	%100
55	M48A	X	-5.547	-5.547	0	%100
56	M48A	Z	0	0	0	%100
57	MP2A	X	-11.731	-11.731	0	%100
58	MP2A	Z	0	0	0	%100
59	MP3A	X	-11.731	-11.731	0	%100
60	MP3A	Z	0	0	0	%100
61	MP4A	X	-11.674	-11.674	0	%100
62	MP4A	Z	0	0	0	%100
63	MP5A	X	-11.731	-11.731	0	%100
64	MP5A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	-3.075	-3.075	0	%100
2	M51	Z	-1.775	-1.775	0	%100
3	M54	X	-3.075	-3.075	0	%100
4	M54	Z	-1.775	-1.775	0	%100
5	MP1A	X	-10.159	-10.159	0	%100
6	MP1A	Z	-5.866	-5.866	0	%100
7	M39	X	-9.606	-9.606	0	%100
8	M39	Z	-5.546	-5.546	0	%100
9	M40	X	-1.517	-1.517	0	%100
10	M40	Z	-.876	-.876	0	%100
11	M42	X	-1.517	-1.517	0	%100
12	M42	Z	-.876	-.876	0	%100
13	M43	X	-9.606	-9.606	0	%100
14	M43	Z	-5.546	-5.546	0	%100
15	M44	X	-7.634	-7.634	0	%100
16	M44	Z	-4.408	-4.408	0	%100
17	M45	X	-6.665	-6.665	0	%100
18	M45	Z	-3.848	-3.848	0	%100
19	M48	X	-6.665	-6.665	0	%100
20	M48	Z	-3.848	-3.848	0	%100
21	M53	X	-14.853	-14.853	0	%100
22	M53	Z	-8.575	-8.575	0	%100
23	M54A	X	-14.853	-14.853	0	%100
24	M54A	Z	-8.575	-8.575	0	%100
25	M55	X	-6.949	-6.949	0	%100
26	M55	Z	-4.012	-4.012	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
27	M56	X	-6.949	-6.949	0	%100
28	M56	Z	-4.012	-4.012	0	%100
29	M58	X	-.82	-.82	0	%100
30	M58	Z	-.473	-.473	0	%100
31	M59	X	-.129	-.129	0	%100
32	M59	Z	-.075	-.075	0	%100
33	M61	X	-.129	-.129	0	%100
34	M61	Z	-.075	-.075	0	%100
35	M62	X	-.82	-.82	0	%100
36	M62	Z	-.473	-.473	0	%100
37	M63	X	-7.634	-7.634	0	%100
38	M63	Z	-4.408	-4.408	0	%100
39	M64	X	-6.665	-6.665	0	%100
40	M64	Z	-3.848	-3.848	0	%100
41	M67	X	-6.665	-6.665	0	%100
42	M67	Z	-3.848	-3.848	0	%100
43	M72	X	-14.853	-14.853	0	%100
44	M72	Z	-8.575	-8.575	0	%100
45	M73	X	-14.853	-14.853	0	%100
46	M73	Z	-8.575	-8.575	0	%100
47	M74	X	-4.532	-4.532	0	%100
48	M74	Z	-2.616	-2.616	0	%100
49	M75	X	-4.532	-4.532	0	%100
50	M75	Z	-2.616	-2.616	0	%100
51	M76	X	-4.278	-4.278	0	%100
52	M76	Z	-2.47	-2.47	0	%100
53	M46A	X	-4.278	-4.278	0	%100
54	M46A	Z	-2.47	-2.47	0	%100
55	M48A	X	-.28	-.28	0	%100
56	M48A	Z	-.162	-.162	0	%100
57	MP2A	X	-10.159	-10.159	0	%100
58	MP2A	Z	-5.866	-5.866	0	%100
59	MP3A	X	-10.159	-10.159	0	%100
60	MP3A	Z	-5.866	-5.866	0	%100
61	MP4A	X	-10.11	-10.11	0	%100
62	MP4A	Z	-5.837	-5.837	0	%100
63	MP5A	X	-10.159	-10.159	0	%100
64	MP5A	Z	-5.866	-5.866	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	-5.325	-5.325	0	%100
2	M51	Z	-9.224	-9.224	0	%100
3	M54	X	-5.325	-5.325	0	%100
4	M54	Z	-9.224	-9.224	0	%100
5	MP1A	X	-5.866	-5.866	0	%100
6	MP1A	Z	-10.159	-10.159	0	%100
7	M39	X	-5.392	-5.392	0	%100
8	M39	Z	-9.34	-9.34	0	%100
9	M40	X	-.851	-.851	0	%100
10	M40	Z	-1.475	-1.475	0	%100
11	M42	X	-.851	-.851	0	%100
12	M42	Z	-1.475	-1.475	0	%100
13	M43	X	-5.392	-5.392	0	%100
14	M43	Z	-9.34	-9.34	0	%100
15	M44	X	-4.408	-4.408	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
16	M44	Z	-7.634	-7.634	0	%100
17	M45	X	-3.848	-3.848	0	%100
18	M45	Z	-6.665	-6.665	0	%100
19	M48	X	-3.848	-3.848	0	%100
20	M48	Z	-6.665	-6.665	0	%100
21	M53	X	-3.476	-3.476	0	%100
22	M53	Z	-6.02	-6.02	0	%100
23	M54A	X	-3.476	-3.476	0	%100
24	M54A	Z	-6.02	-6.02	0	%100
25	M55	X	-3.97	-3.97	0	%100
26	M55	Z	-6.875	-6.875	0	%100
27	M56	X	-3.97	-3.97	0	%100
28	M56	Z	-6.875	-6.875	0	%100
29	M58	X	-.32	-.32	0	%100
30	M58	Z	-.554	-.554	0	%100
31	M59	X	-.05	-.05	0	%100
32	M59	Z	-.087	-.087	0	%100
33	M61	X	-.05	-.05	0	%100
34	M61	Z	-.087	-.087	0	%100
35	M62	X	-.32	-.32	0	%100
36	M62	Z	-.554	-.554	0	%100
37	M63	X	-4.408	-4.408	0	%100
38	M63	Z	-7.634	-7.634	0	%100
39	M64	X	-3.848	-3.848	0	%100
40	M64	Z	-6.665	-6.665	0	%100
41	M67	X	-3.848	-3.848	0	%100
42	M67	Z	-6.665	-6.665	0	%100
43	M72	X	-3.476	-3.476	0	%100
44	M72	Z	-6.02	-6.02	0	%100
45	M73	X	-3.476	-3.476	0	%100
46	M73	Z	-6.02	-6.02	0	%100
47	M74	X	-2.574	-2.574	0	%100
48	M74	Z	-4.459	-4.459	0	%100
49	M75	X	-2.574	-2.574	0	%100
50	M75	Z	-4.459	-4.459	0	%100
51	M76	X	-7.409	-7.409	0	%100
52	M76	Z	-12.833	-12.833	0	%100
53	M46A	X	-7.409	-7.409	0	%100
54	M46A	Z	-12.833	-12.833	0	%100
55	M48A	X	-.939	-.939	0	%100
56	M48A	Z	-1.626	-1.626	0	%100
57	MP2A	X	-5.866	-5.866	0	%100
58	MP2A	Z	-10.159	-10.159	0	%100
59	MP3A	X	-5.866	-5.866	0	%100
60	MP3A	Z	-10.159	-10.159	0	%100
61	MP4A	X	-5.837	-5.837	0	%100
62	MP4A	Z	-10.11	-10.11	0	%100
63	MP5A	X	-5.866	-5.866	0	%100
64	MP5A	Z	-10.159	-10.159	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	0	0	0	%100
2	M51	Z	-3.782	-3.782	0	%100
3	M54	X	0	0	0	%100
4	M54	Z	-3.782	-3.782	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
5	MP1A	X	0	0	%100
6	MP1A	Z	-3.416	-3.416	%100
7	M39	X	0	0	%100
8	M39	Z	-1.619	-1.619	%100
9	M40	X	0	0	%100
10	M40	Z	-.594	-.594	%100
11	M42	X	0	0	%100
12	M42	Z	-.594	-.594	%100
13	M43	X	0	0	%100
14	M43	Z	-1.619	-1.619	%100
15	M44	X	0	0	%100
16	M44	Z	-2.579	-2.579	%100
17	M45	X	0	0	%100
18	M45	Z	-2.528	-2.528	%100
19	M48	X	0	0	%100
20	M48	Z	-2.528	-2.528	%100
21	M53	X	0	0	%100
22	M53	Z	-1.255	-1.255	%100
23	M54A	X	0	0	%100
24	M54A	Z	-1.255	-1.255	%100
25	M55	X	0	0	%100
26	M55	Z	-2.174	-2.174	%100
27	M56	X	0	0	%100
28	M56	Z	-2.174	-2.174	%100
29	M58	X	0	0	%100
30	M58	Z	-1.619	-1.619	%100
31	M59	X	0	0	%100
32	M59	Z	-.594	-.594	%100
33	M61	X	0	0	%100
34	M61	Z	-.594	-.594	%100
35	M62	X	0	0	%100
36	M62	Z	-1.619	-1.619	%100
37	M63	X	0	0	%100
38	M63	Z	-2.579	-2.579	%100
39	M64	X	0	0	%100
40	M64	Z	-2.528	-2.528	%100
41	M67	X	0	0	%100
42	M67	Z	-2.528	-2.528	%100
43	M72	X	0	0	%100
44	M72	Z	-1.255	-1.255	%100
45	M73	X	0	0	%100
46	M73	Z	-1.255	-1.255	%100
47	M74	X	0	0	%100
48	M74	Z	-2.174	-2.174	%100
49	M75	X	0	0	%100
50	M75	Z	-2.174	-2.174	%100
51	M76	X	0	0	%100
52	M76	Z	-3.944	-3.944	%100
53	M46A	X	0	0	%100
54	M46A	Z	-3.944	-3.944	%100
55	M48A	X	0	0	%100
56	M48A	Z	-2.305	-2.305	%100
57	MP2A	X	0	0	%100
58	MP2A	Z	-3.416	-3.416	%100
59	MP3A	X	0	0	%100
60	MP3A	Z	-3.416	-3.416	%100
61	MP4A	X	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
62	MP4A	Z	-3.408	-3.408	0	%100
63	MP5A	X	0	0	0	%100
64	MP5A	Z	-3.416	-3.416	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	1.418	1.418	0	%100
2	M51	Z	-2.456	-2.456	0	%100
3	M54	X	1.418	1.418	0	%100
4	M54	Z	-2.456	-2.456	0	%100
5	MP1A	X	1.708	1.708	0	%100
6	MP1A	Z	-2.959	-2.959	0	%100
7	M39	X	.093	.093	0	%100
8	M39	Z	-.161	-.161	0	%100
9	M40	X	.034	.034	0	%100
10	M40	Z	-.059	-.059	0	%100
11	M42	X	.034	.034	0	%100
12	M42	Z	-.059	-.059	0	%100
13	M43	X	.093	.093	0	%100
14	M43	Z	-.161	-.161	0	%100
15	M44	X	1.289	1.289	0	%100
16	M44	Z	-2.233	-2.233	0	%100
17	M45	X	1.264	1.264	0	%100
18	M45	Z	-2.19	-2.19	0	%100
19	M48	X	1.264	1.264	0	%100
20	M48	Z	-2.19	-2.19	0	%100
21	M53	X	1.004	1.004	0	%100
22	M53	Z	-1.74	-1.74	0	%100
23	M54A	X	1.004	1.004	0	%100
24	M54A	Z	-1.74	-1.74	0	%100
25	M55	X	.861	.861	0	%100
26	M55	Z	-1.491	-1.491	0	%100
27	M56	X	.861	.861	0	%100
28	M56	Z	-1.491	-1.491	0	%100
29	M58	X	1.57	1.57	0	%100
30	M58	Z	-2.72	-2.72	0	%100
31	M59	X	.577	.577	0	%100
32	M59	Z	-.999	-.999	0	%100
33	M61	X	.577	.577	0	%100
34	M61	Z	-.999	-.999	0	%100
35	M62	X	1.57	1.57	0	%100
36	M62	Z	-2.72	-2.72	0	%100
37	M63	X	1.289	1.289	0	%100
38	M63	Z	-2.233	-2.233	0	%100
39	M64	X	1.264	1.264	0	%100
40	M64	Z	-2.19	-2.19	0	%100
41	M67	X	1.264	1.264	0	%100
42	M67	Z	-2.19	-2.19	0	%100
43	M72	X	1.004	1.004	0	%100
44	M72	Z	-1.74	-1.74	0	%100
45	M73	X	1.004	1.004	0	%100
46	M73	Z	-1.74	-1.74	0	%100
47	M74	X	1.327	1.327	0	%100
48	M74	Z	-2.299	-2.299	0	%100
49	M75	X	1.327	1.327	0	%100
50	M75	Z	-2.299	-2.299	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
51	M76	X	1.479	1.479	0	%100
52	M76	Z	-2.562	-2.562	0	%100
53	M46A	X	1.479	1.479	0	%100
54	M46A	Z	-2.562	-2.562	0	%100
55	M48A	X	1.848	1.848	0	%100
56	M48A	Z	-3.2	-3.2	0	%100
57	MP2A	X	1.708	1.708	0	%100
58	MP2A	Z	-2.959	-2.959	0	%100
59	MP3A	X	1.708	1.708	0	%100
60	MP3A	Z	-2.959	-2.959	0	%100
61	MP4A	X	1.704	1.704	0	%100
62	MP4A	Z	-2.951	-2.951	0	%100
63	MP5A	X	1.708	1.708	0	%100
64	MP5A	Z	-2.959	-2.959	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	.819	.819	0	%100
2	M51	Z	-.473	-.473	0	%100
3	M54	X	.819	.819	0	%100
4	M54	Z	-.473	-.473	0	%100
5	MP1A	X	2.959	2.959	0	%100
6	MP1A	Z	-1.708	-1.708	0	%100
7	M39	X	.239	.239	0	%100
8	M39	Z	-.138	-.138	0	%100
9	M40	X	.088	.088	0	%100
10	M40	Z	-.051	-.051	0	%100
11	M42	X	.088	.088	0	%100
12	M42	Z	-.051	-.051	0	%100
13	M43	X	.239	.239	0	%100
14	M43	Z	-.138	-.138	0	%100
15	M44	X	2.233	2.233	0	%100
16	M44	Z	-1.289	-1.289	0	%100
17	M45	X	2.19	2.19	0	%100
18	M45	Z	-1.264	-1.264	0	%100
19	M48	X	2.19	2.19	0	%100
20	M48	Z	-1.264	-1.264	0	%100
21	M53	X	3.046	3.046	0	%100
22	M53	Z	-1.759	-1.759	0	%100
23	M54A	X	3.046	3.046	0	%100
24	M54A	Z	-1.759	-1.759	0	%100
25	M55	X	1.515	1.515	0	%100
26	M55	Z	-.875	-.875	0	%100
27	M56	X	1.515	1.515	0	%100
28	M56	Z	-.875	-.875	0	%100
29	M58	X	2.797	2.797	0	%100
30	M58	Z	-1.615	-1.615	0	%100
31	M59	X	1.027	1.027	0	%100
32	M59	Z	-.593	-.593	0	%100
33	M61	X	1.027	1.027	0	%100
34	M61	Z	-.593	-.593	0	%100
35	M62	X	2.797	2.797	0	%100
36	M62	Z	-1.615	-1.615	0	%100
37	M63	X	2.233	2.233	0	%100
38	M63	Z	-1.289	-1.289	0	%100
39	M64	X	2.19	2.19	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
40	M64	Z	-1.264	-1.264	0	%100
41	M67	X	2.19	2.19	0	%100
42	M67	Z	-1.264	-1.264	0	%100
43	M72	X	3.046	3.046	0	%100
44	M72	Z	-1.759	-1.759	0	%100
45	M73	X	3.046	3.046	0	%100
46	M73	Z	-1.759	-1.759	0	%100
47	M74	X	2.323	2.323	0	%100
48	M74	Z	-1.341	-1.341	0	%100
49	M75	X	2.323	2.323	0	%100
50	M75	Z	-1.341	-1.341	0	%100
51	M76	X	.854	.854	0	%100
52	M76	Z	-.493	-.493	0	%100
53	M46A	X	.854	.854	0	%100
54	M46A	Z	-.493	-.493	0	%100
55	M48A	X	2.842	2.842	0	%100
56	M48A	Z	-1.641	-1.641	0	%100
57	MP2A	X	2.959	2.959	0	%100
58	MP2A	Z	-1.708	-1.708	0	%100
59	MP3A	X	2.959	2.959	0	%100
60	MP3A	Z	-1.708	-1.708	0	%100
61	MP4A	X	2.951	2.951	0	%100
62	MP4A	Z	-1.704	-1.704	0	%100
63	MP5A	X	2.959	2.959	0	%100
64	MP5A	Z	-1.708	-1.708	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	0	0	0	%100
2	M51	Z	0	0	0	%100
3	M54	X	0	0	0	%100
4	M54	Z	0	0	0	%100
5	MP1A	X	3.416	3.416	0	%100
6	MP1A	Z	0	0	0	%100
7	M39	X	1.798	1.798	0	%100
8	M39	Z	0	0	0	%100
9	M40	X	.66	.66	0	%100
10	M40	Z	0	0	0	%100
11	M42	X	.66	.66	0	%100
12	M42	Z	0	0	0	%100
13	M43	X	1.798	1.798	0	%100
14	M43	Z	0	0	0	%100
15	M44	X	2.579	2.579	0	%100
16	M44	Z	0	0	0	%100
17	M45	X	2.528	2.528	0	%100
18	M45	Z	0	0	0	%100
19	M48	X	2.528	2.528	0	%100
20	M48	Z	0	0	0	%100
21	M53	X	4.272	4.272	0	%100
22	M53	Z	0	0	0	%100
23	M54A	X	4.272	4.272	0	%100
24	M54A	Z	0	0	0	%100
25	M55	X	2.23	2.23	0	%100
26	M55	Z	0	0	0	%100
27	M56	X	2.23	2.23	0	%100
28	M56	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
29	M58	X	1.798	1.798	0	%100
30	M58	Z	0	0	0	%100
31	M59	X	.66	.66	0	%100
32	M59	Z	0	0	0	%100
33	M61	X	.66	.66	0	%100
34	M61	Z	0	0	0	%100
35	M62	X	1.798	1.798	0	%100
36	M62	Z	0	0	0	%100
37	M63	X	2.579	2.579	0	%100
38	M63	Z	0	0	0	%100
39	M64	X	2.528	2.528	0	%100
40	M64	Z	0	0	0	%100
41	M67	X	2.528	2.528	0	%100
42	M67	Z	0	0	0	%100
43	M72	X	4.272	4.272	0	%100
44	M72	Z	0	0	0	%100
45	M73	X	4.272	4.272	0	%100
46	M73	Z	0	0	0	%100
47	M74	X	2.23	2.23	0	%100
48	M74	Z	0	0	0	%100
49	M75	X	2.23	2.23	0	%100
50	M75	Z	0	0	0	%100
51	M76	X	0	0	0	%100
52	M76	Z	0	0	0	%100
53	M46A	X	0	0	0	%100
54	M46A	Z	0	0	0	%100
55	M48A	X	1.477	1.477	0	%100
56	M48A	Z	0	0	0	%100
57	MP2A	X	3.416	3.416	0	%100
58	MP2A	Z	0	0	0	%100
59	MP3A	X	3.416	3.416	0	%100
60	MP3A	Z	0	0	0	%100
61	MP4A	X	3.408	3.408	0	%100
62	MP4A	Z	0	0	0	%100
63	MP5A	X	3.416	3.416	0	%100
64	MP5A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	.819	.819	0	%100
2	M51	Z	.473	.473	0	%100
3	M54	X	.819	.819	0	%100
4	M54	Z	.473	.473	0	%100
5	MP1A	X	2.959	2.959	0	%100
6	MP1A	Z	1.708	1.708	0	%100
7	M39	X	2.797	2.797	0	%100
8	M39	Z	1.615	1.615	0	%100
9	M40	X	1.027	1.027	0	%100
10	M40	Z	.593	.593	0	%100
11	M42	X	1.027	1.027	0	%100
12	M42	Z	.593	.593	0	%100
13	M43	X	2.797	2.797	0	%100
14	M43	Z	1.615	1.615	0	%100
15	M44	X	2.233	2.233	0	%100
16	M44	Z	1.289	1.289	0	%100
17	M45	X	2.19	2.19	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
18	M45	Z	1.264	1.264	0	%100
19	M48	X	2.19	2.19	0	%100
20	M48	Z	1.264	1.264	0	%100
21	M53	X	3.046	3.046	0	%100
22	M53	Z	1.759	1.759	0	%100
23	M54A	X	3.046	3.046	0	%100
24	M54A	Z	1.759	1.759	0	%100
25	M55	X	2.323	2.323	0	%100
26	M55	Z	1.341	1.341	0	%100
27	M56	X	2.323	2.323	0	%100
28	M56	Z	1.341	1.341	0	%100
29	M58	X	.239	.239	0	%100
30	M58	Z	.138	.138	0	%100
31	M59	X	.088	.088	0	%100
32	M59	Z	.051	.051	0	%100
33	M61	X	.088	.088	0	%100
34	M61	Z	.051	.051	0	%100
35	M62	X	.239	.239	0	%100
36	M62	Z	.138	.138	0	%100
37	M63	X	2.233	2.233	0	%100
38	M63	Z	1.289	1.289	0	%100
39	M64	X	2.19	2.19	0	%100
40	M64	Z	1.264	1.264	0	%100
41	M67	X	2.19	2.19	0	%100
42	M67	Z	1.264	1.264	0	%100
43	M72	X	3.046	3.046	0	%100
44	M72	Z	1.759	1.759	0	%100
45	M73	X	3.046	3.046	0	%100
46	M73	Z	1.759	1.759	0	%100
47	M74	X	1.515	1.515	0	%100
48	M74	Z	.875	.875	0	%100
49	M75	X	1.515	1.515	0	%100
50	M75	Z	.875	.875	0	%100
51	M76	X	.854	.854	0	%100
52	M76	Z	.493	.493	0	%100
53	M46A	X	.854	.854	0	%100
54	M46A	Z	.493	.493	0	%100
55	M48A	X	.075	.075	0	%100
56	M48A	Z	.043	.043	0	%100
57	MP2A	X	2.959	2.959	0	%100
58	MP2A	Z	1.708	1.708	0	%100
59	MP3A	X	2.959	2.959	0	%100
60	MP3A	Z	1.708	1.708	0	%100
61	MP4A	X	2.951	2.951	0	%100
62	MP4A	Z	1.704	1.704	0	%100
63	MP5A	X	2.959	2.959	0	%100
64	MP5A	Z	1.708	1.708	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	1.418	1.418	0	%100
2	M51	Z	2.456	2.456	0	%100
3	M54	X	1.418	1.418	0	%100
4	M54	Z	2.456	2.456	0	%100
5	MP1A	X	1.708	1.708	0	%100
6	MP1A	Z	2.959	2.959	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
7	M39	X	1.57	1.57	0	%100
8	M39	Z	2.72	2.72	0	%100
9	M40	X	.577	.577	0	%100
10	M40	Z	.999	.999	0	%100
11	M42	X	.577	.577	0	%100
12	M42	Z	.999	.999	0	%100
13	M43	X	1.57	1.57	0	%100
14	M43	Z	2.72	2.72	0	%100
15	M44	X	1.289	1.289	0	%100
16	M44	Z	2.233	2.233	0	%100
17	M45	X	1.264	1.264	0	%100
18	M45	Z	2.19	2.19	0	%100
19	M48	X	1.264	1.264	0	%100
20	M48	Z	2.19	2.19	0	%100
21	M53	X	1.004	1.004	0	%100
22	M53	Z	1.74	1.74	0	%100
23	M54A	X	1.004	1.004	0	%100
24	M54A	Z	1.74	1.74	0	%100
25	M55	X	1.327	1.327	0	%100
26	M55	Z	2.299	2.299	0	%100
27	M56	X	1.327	1.327	0	%100
28	M56	Z	2.299	2.299	0	%100
29	M58	X	.093	.093	0	%100
30	M58	Z	.161	.161	0	%100
31	M59	X	.034	.034	0	%100
32	M59	Z	.059	.059	0	%100
33	M61	X	.034	.034	0	%100
34	M61	Z	.059	.059	0	%100
35	M62	X	.093	.093	0	%100
36	M62	Z	.161	.161	0	%100
37	M63	X	1.289	1.289	0	%100
38	M63	Z	2.233	2.233	0	%100
39	M64	X	1.264	1.264	0	%100
40	M64	Z	2.19	2.19	0	%100
41	M67	X	1.264	1.264	0	%100
42	M67	Z	2.19	2.19	0	%100
43	M72	X	1.004	1.004	0	%100
44	M72	Z	1.74	1.74	0	%100
45	M73	X	1.004	1.004	0	%100
46	M73	Z	1.74	1.74	0	%100
47	M74	X	.861	.861	0	%100
48	M74	Z	1.491	1.491	0	%100
49	M75	X	.861	.861	0	%100
50	M75	Z	1.491	1.491	0	%100
51	M76	X	1.479	1.479	0	%100
52	M76	Z	2.562	2.562	0	%100
53	M46A	X	1.479	1.479	0	%100
54	M46A	Z	2.562	2.562	0	%100
55	M48A	X	.25	.25	0	%100
56	M48A	Z	.433	.433	0	%100
57	MP2A	X	1.708	1.708	0	%100
58	MP2A	Z	2.959	2.959	0	%100
59	MP3A	X	1.708	1.708	0	%100
60	MP3A	Z	2.959	2.959	0	%100
61	MP4A	X	1.704	1.704	0	%100
62	MP4A	Z	2.951	2.951	0	%100
63	MP5A	X	1.708	1.708	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
64	MP5A	Z	2.959	2.959	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	0	0	0	%100
2	M51	Z	3.782	3.782	0	%100
3	M54	X	0	0	0	%100
4	M54	Z	3.782	3.782	0	%100
5	MP1A	X	0	0	0	%100
6	MP1A	Z	3.416	3.416	0	%100
7	M39	X	0	0	0	%100
8	M39	Z	1.619	1.619	0	%100
9	M40	X	0	0	0	%100
10	M40	Z	.594	.594	0	%100
11	M42	X	0	0	0	%100
12	M42	Z	.594	.594	0	%100
13	M43	X	0	0	0	%100
14	M43	Z	1.619	1.619	0	%100
15	M44	X	0	0	0	%100
16	M44	Z	2.579	2.579	0	%100
17	M45	X	0	0	0	%100
18	M45	Z	2.528	2.528	0	%100
19	M48	X	0	0	0	%100
20	M48	Z	2.528	2.528	0	%100
21	M53	X	0	0	0	%100
22	M53	Z	1.255	1.255	0	%100
23	M54A	X	0	0	0	%100
24	M54A	Z	1.255	1.255	0	%100
25	M55	X	0	0	0	%100
26	M55	Z	2.174	2.174	0	%100
27	M56	X	0	0	0	%100
28	M56	Z	2.174	2.174	0	%100
29	M58	X	0	0	0	%100
30	M58	Z	1.619	1.619	0	%100
31	M59	X	0	0	0	%100
32	M59	Z	.594	.594	0	%100
33	M61	X	0	0	0	%100
34	M61	Z	.594	.594	0	%100
35	M62	X	0	0	0	%100
36	M62	Z	1.619	1.619	0	%100
37	M63	X	0	0	0	%100
38	M63	Z	2.579	2.579	0	%100
39	M64	X	0	0	0	%100
40	M64	Z	2.528	2.528	0	%100
41	M67	X	0	0	0	%100
42	M67	Z	2.528	2.528	0	%100
43	M72	X	0	0	0	%100
44	M72	Z	1.255	1.255	0	%100
45	M73	X	0	0	0	%100
46	M73	Z	1.255	1.255	0	%100
47	M74	X	0	0	0	%100
48	M74	Z	2.174	2.174	0	%100
49	M75	X	0	0	0	%100
50	M75	Z	2.174	2.174	0	%100
51	M76	X	0	0	0	%100
52	M76	Z	3.944	3.944	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
53	M46A	X	0	0	0	%100
54	M46A	Z	3.944	3.944	0	%100
55	M48A	X	0	0	0	%100
56	M48A	Z	2.305	2.305	0	%100
57	MP2A	X	0	0	0	%100
58	MP2A	Z	3.416	3.416	0	%100
59	MP3A	X	0	0	0	%100
60	MP3A	Z	3.416	3.416	0	%100
61	MP4A	X	0	0	0	%100
62	MP4A	Z	3.408	3.408	0	%100
63	MP5A	X	0	0	0	%100
64	MP5A	Z	3.416	3.416	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	-1.418	-1.418	0	%100
2	M51	Z	2.456	2.456	0	%100
3	M54	X	-1.418	-1.418	0	%100
4	M54	Z	2.456	2.456	0	%100
5	MP1A	X	-1.708	-1.708	0	%100
6	MP1A	Z	2.959	2.959	0	%100
7	M39	X	-.093	-.093	0	%100
8	M39	Z	.161	.161	0	%100
9	M40	X	-.034	-.034	0	%100
10	M40	Z	.059	.059	0	%100
11	M42	X	-.034	-.034	0	%100
12	M42	Z	.059	.059	0	%100
13	M43	X	-.093	-.093	0	%100
14	M43	Z	.161	.161	0	%100
15	M44	X	-1.289	-1.289	0	%100
16	M44	Z	2.233	2.233	0	%100
17	M45	X	-1.264	-1.264	0	%100
18	M45	Z	2.19	2.19	0	%100
19	M48	X	-1.264	-1.264	0	%100
20	M48	Z	2.19	2.19	0	%100
21	M53	X	-1.004	-1.004	0	%100
22	M53	Z	1.74	1.74	0	%100
23	M54A	X	-1.004	-1.004	0	%100
24	M54A	Z	1.74	1.74	0	%100
25	M55	X	-.861	-.861	0	%100
26	M55	Z	1.491	1.491	0	%100
27	M56	X	-.861	-.861	0	%100
28	M56	Z	1.491	1.491	0	%100
29	M58	X	-1.57	-1.57	0	%100
30	M58	Z	2.72	2.72	0	%100
31	M59	X	-.577	-.577	0	%100
32	M59	Z	.999	.999	0	%100
33	M61	X	-.577	-.577	0	%100
34	M61	Z	.999	.999	0	%100
35	M62	X	-1.57	-1.57	0	%100
36	M62	Z	2.72	2.72	0	%100
37	M63	X	-1.289	-1.289	0	%100
38	M63	Z	2.233	2.233	0	%100
39	M64	X	-1.264	-1.264	0	%100
40	M64	Z	2.19	2.19	0	%100
41	M67	X	-1.264	-1.264	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
42	M67	Z	2.19	2.19	0	%100
43	M72	X	-1.004	-1.004	0	%100
44	M72	Z	1.74	1.74	0	%100
45	M73	X	-1.004	-1.004	0	%100
46	M73	Z	1.74	1.74	0	%100
47	M74	X	-1.327	-1.327	0	%100
48	M74	Z	2.299	2.299	0	%100
49	M75	X	-1.327	-1.327	0	%100
50	M75	Z	2.299	2.299	0	%100
51	M76	X	-1.479	-1.479	0	%100
52	M76	Z	2.562	2.562	0	%100
53	M46A	X	-1.479	-1.479	0	%100
54	M46A	Z	2.562	2.562	0	%100
55	M48A	X	-1.848	-1.848	0	%100
56	M48A	Z	3.2	3.2	0	%100
57	MP2A	X	-1.708	-1.708	0	%100
58	MP2A	Z	2.959	2.959	0	%100
59	MP3A	X	-1.708	-1.708	0	%100
60	MP3A	Z	2.959	2.959	0	%100
61	MP4A	X	-1.704	-1.704	0	%100
62	MP4A	Z	2.951	2.951	0	%100
63	MP5A	X	-1.708	-1.708	0	%100
64	MP5A	Z	2.959	2.959	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	-.819	-.819	0	%100
2	M51	Z	.473	.473	0	%100
3	M54	X	-.819	-.819	0	%100
4	M54	Z	.473	.473	0	%100
5	MP1A	X	-2.959	-2.959	0	%100
6	MP1A	Z	1.708	1.708	0	%100
7	M39	X	-.239	-.239	0	%100
8	M39	Z	.138	.138	0	%100
9	M40	X	-.088	-.088	0	%100
10	M40	Z	.051	.051	0	%100
11	M42	X	-.088	-.088	0	%100
12	M42	Z	.051	.051	0	%100
13	M43	X	-.239	-.239	0	%100
14	M43	Z	.138	.138	0	%100
15	M44	X	-2.233	-2.233	0	%100
16	M44	Z	1.289	1.289	0	%100
17	M45	X	-2.19	-2.19	0	%100
18	M45	Z	1.264	1.264	0	%100
19	M48	X	-2.19	-2.19	0	%100
20	M48	Z	1.264	1.264	0	%100
21	M53	X	-3.046	-3.046	0	%100
22	M53	Z	1.759	1.759	0	%100
23	M54A	X	-3.046	-3.046	0	%100
24	M54A	Z	1.759	1.759	0	%100
25	M55	X	-1.515	-1.515	0	%100
26	M55	Z	.875	.875	0	%100
27	M56	X	-1.515	-1.515	0	%100
28	M56	Z	.875	.875	0	%100
29	M58	X	-2.797	-2.797	0	%100
30	M58	Z	1.615	1.615	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
31	M59	X	-1.027	-1.027	0	%100
32	M59	Z	.593	.593	0	%100
33	M61	X	-1.027	-1.027	0	%100
34	M61	Z	.593	.593	0	%100
35	M62	X	-2.797	-2.797	0	%100
36	M62	Z	1.615	1.615	0	%100
37	M63	X	-2.233	-2.233	0	%100
38	M63	Z	1.289	1.289	0	%100
39	M64	X	-2.19	-2.19	0	%100
40	M64	Z	1.264	1.264	0	%100
41	M67	X	-2.19	-2.19	0	%100
42	M67	Z	1.264	1.264	0	%100
43	M72	X	-3.046	-3.046	0	%100
44	M72	Z	1.759	1.759	0	%100
45	M73	X	-3.046	-3.046	0	%100
46	M73	Z	1.759	1.759	0	%100
47	M74	X	-2.323	-2.323	0	%100
48	M74	Z	1.341	1.341	0	%100
49	M75	X	-2.323	-2.323	0	%100
50	M75	Z	1.341	1.341	0	%100
51	M76	X	-.854	-.854	0	%100
52	M76	Z	.493	.493	0	%100
53	M46A	X	-.854	-.854	0	%100
54	M46A	Z	.493	.493	0	%100
55	M48A	X	-2.842	-2.842	0	%100
56	M48A	Z	1.641	1.641	0	%100
57	MP2A	X	-2.959	-2.959	0	%100
58	MP2A	Z	1.708	1.708	0	%100
59	MP3A	X	-2.959	-2.959	0	%100
60	MP3A	Z	1.708	1.708	0	%100
61	MP4A	X	-2.951	-2.951	0	%100
62	MP4A	Z	1.704	1.704	0	%100
63	MP5A	X	-2.959	-2.959	0	%100
64	MP5A	Z	1.708	1.708	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	0	0	0	%100
2	M51	Z	0	0	0	%100
3	M54	X	0	0	0	%100
4	M54	Z	0	0	0	%100
5	MP1A	X	-3.416	-3.416	0	%100
6	MP1A	Z	0	0	0	%100
7	M39	X	-1.798	-1.798	0	%100
8	M39	Z	0	0	0	%100
9	M40	X	-.66	-.66	0	%100
10	M40	Z	0	0	0	%100
11	M42	X	-.66	-.66	0	%100
12	M42	Z	0	0	0	%100
13	M43	X	-1.798	-1.798	0	%100
14	M43	Z	0	0	0	%100
15	M44	X	-2.579	-2.579	0	%100
16	M44	Z	0	0	0	%100
17	M45	X	-2.528	-2.528	0	%100
18	M45	Z	0	0	0	%100
19	M48	X	-2.528	-2.528	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
20	M48	Z	0	0	0	%100
21	M53	X	-4.272	-4.272	0	%100
22	M53	Z	0	0	0	%100
23	M54A	X	-4.272	-4.272	0	%100
24	M54A	Z	0	0	0	%100
25	M55	X	-2.23	-2.23	0	%100
26	M55	Z	0	0	0	%100
27	M56	X	-2.23	-2.23	0	%100
28	M56	Z	0	0	0	%100
29	M58	X	-1.798	-1.798	0	%100
30	M58	Z	0	0	0	%100
31	M59	X	-0.66	-0.66	0	%100
32	M59	Z	0	0	0	%100
33	M61	X	-0.66	-0.66	0	%100
34	M61	Z	0	0	0	%100
35	M62	X	-1.798	-1.798	0	%100
36	M62	Z	0	0	0	%100
37	M63	X	-2.579	-2.579	0	%100
38	M63	Z	0	0	0	%100
39	M64	X	-2.528	-2.528	0	%100
40	M64	Z	0	0	0	%100
41	M67	X	-2.528	-2.528	0	%100
42	M67	Z	0	0	0	%100
43	M72	X	-4.272	-4.272	0	%100
44	M72	Z	0	0	0	%100
45	M73	X	-4.272	-4.272	0	%100
46	M73	Z	0	0	0	%100
47	M74	X	-2.23	-2.23	0	%100
48	M74	Z	0	0	0	%100
49	M75	X	-2.23	-2.23	0	%100
50	M75	Z	0	0	0	%100
51	M76	X	0	0	0	%100
52	M76	Z	0	0	0	%100
53	M46A	X	0	0	0	%100
54	M46A	Z	0	0	0	%100
55	M48A	X	-1.477	-1.477	0	%100
56	M48A	Z	0	0	0	%100
57	MP2A	X	-3.416	-3.416	0	%100
58	MP2A	Z	0	0	0	%100
59	MP3A	X	-3.416	-3.416	0	%100
60	MP3A	Z	0	0	0	%100
61	MP4A	X	-3.408	-3.408	0	%100
62	MP4A	Z	0	0	0	%100
63	MP5A	X	-3.416	-3.416	0	%100
64	MP5A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	-0.819	-0.819	0	%100
2	M51	Z	-0.473	-0.473	0	%100
3	M54	X	-0.819	-0.819	0	%100
4	M54	Z	-0.473	-0.473	0	%100
5	MP1A	X	-2.959	-2.959	0	%100
6	MP1A	Z	-1.708	-1.708	0	%100
7	M39	X	-2.797	-2.797	0	%100
8	M39	Z	-1.615	-1.615	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
9	M40	X	-1.027	-1.027	0	%100
10	M40	Z	-.593	-.593	0	%100
11	M42	X	-1.027	-1.027	0	%100
12	M42	Z	-.593	-.593	0	%100
13	M43	X	-2.797	-2.797	0	%100
14	M43	Z	-1.615	-1.615	0	%100
15	M44	X	-2.233	-2.233	0	%100
16	M44	Z	-1.289	-1.289	0	%100
17	M45	X	-2.19	-2.19	0	%100
18	M45	Z	-1.264	-1.264	0	%100
19	M48	X	-2.19	-2.19	0	%100
20	M48	Z	-1.264	-1.264	0	%100
21	M53	X	-3.046	-3.046	0	%100
22	M53	Z	-1.759	-1.759	0	%100
23	M54A	X	-3.046	-3.046	0	%100
24	M54A	Z	-1.759	-1.759	0	%100
25	M55	X	-2.323	-2.323	0	%100
26	M55	Z	-1.341	-1.341	0	%100
27	M56	X	-2.323	-2.323	0	%100
28	M56	Z	-1.341	-1.341	0	%100
29	M58	X	-.239	-.239	0	%100
30	M58	Z	-.138	-.138	0	%100
31	M59	X	-.088	-.088	0	%100
32	M59	Z	-.051	-.051	0	%100
33	M61	X	-.088	-.088	0	%100
34	M61	Z	-.051	-.051	0	%100
35	M62	X	-.239	-.239	0	%100
36	M62	Z	-.138	-.138	0	%100
37	M63	X	-2.233	-2.233	0	%100
38	M63	Z	-1.289	-1.289	0	%100
39	M64	X	-2.19	-2.19	0	%100
40	M64	Z	-1.264	-1.264	0	%100
41	M67	X	-2.19	-2.19	0	%100
42	M67	Z	-1.264	-1.264	0	%100
43	M72	X	-3.046	-3.046	0	%100
44	M72	Z	-1.759	-1.759	0	%100
45	M73	X	-3.046	-3.046	0	%100
46	M73	Z	-1.759	-1.759	0	%100
47	M74	X	-1.515	-1.515	0	%100
48	M74	Z	-.875	-.875	0	%100
49	M75	X	-1.515	-1.515	0	%100
50	M75	Z	-.875	-.875	0	%100
51	M76	X	-.854	-.854	0	%100
52	M76	Z	-.493	-.493	0	%100
53	M46A	X	-.854	-.854	0	%100
54	M46A	Z	-.493	-.493	0	%100
55	M48A	X	-.075	-.075	0	%100
56	M48A	Z	-.043	-.043	0	%100
57	MP2A	X	-2.959	-2.959	0	%100
58	MP2A	Z	-1.708	-1.708	0	%100
59	MP3A	X	-2.959	-2.959	0	%100
60	MP3A	Z	-1.708	-1.708	0	%100
61	MP4A	X	-2.951	-2.951	0	%100
62	MP4A	Z	-1.704	-1.704	0	%100
63	MP5A	X	-2.959	-2.959	0	%100
64	MP5A	Z	-1.708	-1.708	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	-1.418	-1.418	0	%100
2	M51	Z	-2.456	-2.456	0	%100
3	M54	X	-1.418	-1.418	0	%100
4	M54	Z	-2.456	-2.456	0	%100
5	MP1A	X	-1.708	-1.708	0	%100
6	MP1A	Z	-2.959	-2.959	0	%100
7	M39	X	-1.57	-1.57	0	%100
8	M39	Z	-2.72	-2.72	0	%100
9	M40	X	-.577	-.577	0	%100
10	M40	Z	-.999	-.999	0	%100
11	M42	X	-.577	-.577	0	%100
12	M42	Z	-.999	-.999	0	%100
13	M43	X	-1.57	-1.57	0	%100
14	M43	Z	-2.72	-2.72	0	%100
15	M44	X	-1.289	-1.289	0	%100
16	M44	Z	-2.233	-2.233	0	%100
17	M45	X	-1.264	-1.264	0	%100
18	M45	Z	-2.19	-2.19	0	%100
19	M48	X	-1.264	-1.264	0	%100
20	M48	Z	-2.19	-2.19	0	%100
21	M53	X	-1.004	-1.004	0	%100
22	M53	Z	-1.74	-1.74	0	%100
23	M54A	X	-1.004	-1.004	0	%100
24	M54A	Z	-1.74	-1.74	0	%100
25	M55	X	-1.327	-1.327	0	%100
26	M55	Z	-2.299	-2.299	0	%100
27	M56	X	-1.327	-1.327	0	%100
28	M56	Z	-2.299	-2.299	0	%100
29	M58	X	-.093	-.093	0	%100
30	M58	Z	-.161	-.161	0	%100
31	M59	X	-.034	-.034	0	%100
32	M59	Z	-.059	-.059	0	%100
33	M61	X	-.034	-.034	0	%100
34	M61	Z	-.059	-.059	0	%100
35	M62	X	-.093	-.093	0	%100
36	M62	Z	-.161	-.161	0	%100
37	M63	X	-1.289	-1.289	0	%100
38	M63	Z	-2.233	-2.233	0	%100
39	M64	X	-1.264	-1.264	0	%100
40	M64	Z	-2.19	-2.19	0	%100
41	M67	X	-1.264	-1.264	0	%100
42	M67	Z	-2.19	-2.19	0	%100
43	M72	X	-1.004	-1.004	0	%100
44	M72	Z	-1.74	-1.74	0	%100
45	M73	X	-1.004	-1.004	0	%100
46	M73	Z	-1.74	-1.74	0	%100
47	M74	X	-.861	-.861	0	%100
48	M74	Z	-1.491	-1.491	0	%100
49	M75	X	-.861	-.861	0	%100
50	M75	Z	-1.491	-1.491	0	%100
51	M76	X	-1.479	-1.479	0	%100
52	M76	Z	-2.562	-2.562	0	%100
53	M46A	X	-1.479	-1.479	0	%100
54	M46A	Z	-2.562	-2.562	0	%100
55	M48A	X	-.25	-.25	0	%100
56	M48A	Z	-.433	-.433	0	%100
57	MP2A	X	-1.708	-1.708	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
58	MP2A	Z	-2.959	-2.959	0	%100
59	MP3A	X	-1.708	-1.708	0	%100
60	MP3A	Z	-2.959	-2.959	0	%100
61	MP4A	X	-1.704	-1.704	0	%100
62	MP4A	Z	-2.951	-2.951	0	%100
63	MP5A	X	-1.708	-1.708	0	%100
64	MP5A	Z	-2.959	-2.959	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	0	0	0	%100
2	M51	Z	-.756	-.756	0	%100
3	M54	X	0	0	0	%100
4	M54	Z	-.756	-.756	0	%100
5	MP1A	X	0	0	0	%100
6	MP1A	Z	-.625	-.625	0	%100
7	M39	X	0	0	0	%100
8	M39	Z	-.296	-.296	0	%100
9	M40	X	0	0	0	%100
10	M40	Z	-.047	-.047	0	%100
11	M42	X	0	0	0	%100
12	M42	Z	-.047	-.047	0	%100
13	M43	X	0	0	0	%100
14	M43	Z	-.296	-.296	0	%100
15	M44	X	0	0	0	%100
16	M44	Z	-.469	-.469	0	%100
17	M45	X	0	0	0	%100
18	M45	Z	-.41	-.41	0	%100
19	M48	X	0	0	0	%100
20	M48	Z	-.41	-.41	0	%100
21	M53	X	0	0	0	%100
22	M53	Z	-.099	-.099	0	%100
23	M54A	X	0	0	0	%100
24	M54A	Z	-.099	-.099	0	%100
25	M55	X	0	0	0	%100
26	M55	Z	-.346	-.346	0	%100
27	M56	X	0	0	0	%100
28	M56	Z	-.346	-.346	0	%100
29	M58	X	0	0	0	%100
30	M58	Z	-.296	-.296	0	%100
31	M59	X	0	0	0	%100
32	M59	Z	-.047	-.047	0	%100
33	M61	X	0	0	0	%100
34	M61	Z	-.047	-.047	0	%100
35	M62	X	0	0	0	%100
36	M62	Z	-.296	-.296	0	%100
37	M63	X	0	0	0	%100
38	M63	Z	-.469	-.469	0	%100
39	M64	X	0	0	0	%100
40	M64	Z	-.41	-.41	0	%100
41	M67	X	0	0	0	%100
42	M67	Z	-.41	-.41	0	%100
43	M72	X	0	0	0	%100
44	M72	Z	-.099	-.099	0	%100
45	M73	X	0	0	0	%100
46	M73	Z	-.099	-.099	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
47	M74	X	0	0	0	%100
48	M74	Z	-.346	-.346	0	%100
49	M75	X	0	0	0	%100
50	M75	Z	-.346	-.346	0	%100
51	M76	X	0	0	0	%100
52	M76	Z	-1.052	-1.052	0	%100
53	M46A	X	0	0	0	%100
54	M46A	Z	-1.052	-1.052	0	%100
55	M48A	X	0	0	0	%100
56	M48A	Z	-.461	-.461	0	%100
57	MP2A	X	0	0	0	%100
58	MP2A	Z	-.625	-.625	0	%100
59	MP3A	X	0	0	0	%100
60	MP3A	Z	-.625	-.625	0	%100
61	MP4A	X	0	0	0	%100
62	MP4A	Z	-.622	-.622	0	%100
63	MP5A	X	0	0	0	%100
64	MP5A	Z	-.625	-.625	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	.284	.284	0	%100
2	M51	Z	-.491	-.491	0	%100
3	M54	X	.284	.284	0	%100
4	M54	Z	-.491	-.491	0	%100
5	MP1A	X	.312	.312	0	%100
6	MP1A	Z	-.541	-.541	0	%100
7	M39	X	.017	.017	0	%100
8	M39	Z	-.029	-.029	0	%100
9	M40	X	.003	.003	0	%100
10	M40	Z	-.005	-.005	0	%100
11	M42	X	.003	.003	0	%100
12	M42	Z	-.005	-.005	0	%100
13	M43	X	.017	.017	0	%100
14	M43	Z	-.029	-.029	0	%100
15	M44	X	.235	.235	0	%100
16	M44	Z	-.407	-.407	0	%100
17	M45	X	.205	.205	0	%100
18	M45	Z	-.355	-.355	0	%100
19	M48	X	.205	.205	0	%100
20	M48	Z	-.355	-.355	0	%100
21	M53	X	.185	.185	0	%100
22	M53	Z	-.321	-.321	0	%100
23	M54A	X	.185	.185	0	%100
24	M54A	Z	-.321	-.321	0	%100
25	M55	X	.137	.137	0	%100
26	M55	Z	-.237	-.237	0	%100
27	M56	X	.137	.137	0	%100
28	M56	Z	-.237	-.237	0	%100
29	M58	X	.287	.287	0	%100
30	M58	Z	-.497	-.497	0	%100
31	M59	X	.045	.045	0	%100
32	M59	Z	-.079	-.079	0	%100
33	M61	X	.045	.045	0	%100
34	M61	Z	-.079	-.079	0	%100
35	M62	X	.287	.287	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
36	M62	Z	-.497	-.497	0	%100
37	M63	X	.235	.235	0	%100
38	M63	Z	-.407	-.407	0	%100
39	M64	X	.205	.205	0	%100
40	M64	Z	-.355	-.355	0	%100
41	M67	X	.205	.205	0	%100
42	M67	Z	-.355	-.355	0	%100
43	M72	X	.185	.185	0	%100
44	M72	Z	-.321	-.321	0	%100
45	M73	X	.185	.185	0	%100
46	M73	Z	-.321	-.321	0	%100
47	M74	X	.211	.211	0	%100
48	M74	Z	-.366	-.366	0	%100
49	M75	X	.211	.211	0	%100
50	M75	Z	-.366	-.366	0	%100
51	M76	X	.395	.395	0	%100
52	M76	Z	-.683	-.683	0	%100
53	M46A	X	.395	.395	0	%100
54	M46A	Z	-.683	-.683	0	%100
55	M48A	X	.37	.37	0	%100
56	M48A	Z	-.64	-.64	0	%100
57	MP2A	X	.312	.312	0	%100
58	MP2A	Z	-.541	-.541	0	%100
59	MP3A	X	.312	.312	0	%100
60	MP3A	Z	-.541	-.541	0	%100
61	MP4A	X	.311	.311	0	%100
62	MP4A	Z	-.538	-.538	0	%100
63	MP5A	X	.312	.312	0	%100
64	MP5A	Z	-.541	-.541	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M51	X	.164	.164	0	%100
2	M51	Z	-.095	-.095	0	%100
3	M54	X	.164	.164	0	%100
4	M54	Z	-.095	-.095	0	%100
5	MP1A	X	.541	.541	0	%100
6	MP1A	Z	-.312	-.312	0	%100
7	M39	X	.044	.044	0	%100
8	M39	Z	-.025	-.025	0	%100
9	M40	X	.007	.007	0	%100
10	M40	Z	-.004	-.004	0	%100
11	M42	X	.007	.007	0	%100
12	M42	Z	-.004	-.004	0	%100
13	M43	X	.044	.044	0	%100
14	M43	Z	-.025	-.025	0	%100
15	M44	X	.407	.407	0	%100
16	M44	Z	-.235	-.235	0	%100
17	M45	X	.355	.355	0	%100
18	M45	Z	-.205	-.205	0	%100
19	M48	X	.355	.355	0	%100
20	M48	Z	-.205	-.205	0	%100
21	M53	X	.791	.791	0	%100
22	M53	Z	-.457	-.457	0	%100
23	M54A	X	.791	.791	0	%100
24	M54A	Z	-.457	-.457	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
25	M55	X	.241	.241	0	%100
26	M55	Z	-.139	-.139	0	%100
27	M56	X	.241	.241	0	%100
28	M56	Z	-.139	-.139	0	%100
29	M58	X	.512	.512	0	%100
30	M58	Z	-.295	-.295	0	%100
31	M59	X	.081	.081	0	%100
32	M59	Z	-.047	-.047	0	%100
33	M61	X	.081	.081	0	%100
34	M61	Z	-.047	-.047	0	%100
35	M62	X	.512	.512	0	%100
36	M62	Z	-.295	-.295	0	%100
37	M63	X	.407	.407	0	%100
38	M63	Z	-.235	-.235	0	%100
39	M64	X	.355	.355	0	%100
40	M64	Z	-.205	-.205	0	%100
41	M67	X	.355	.355	0	%100
42	M67	Z	-.205	-.205	0	%100
43	M72	X	.791	.791	0	%100
44	M72	Z	-.457	-.457	0	%100
45	M73	X	.791	.791	0	%100
46	M73	Z	-.457	-.457	0	%100
47	M74	X	.37	.37	0	%100
48	M74	Z	-.214	-.214	0	%100
49	M75	X	.37	.37	0	%100
50	M75	Z	-.214	-.214	0	%100
51	M76	X	.228	.228	0	%100
52	M76	Z	-.132	-.132	0	%100
53	M46A	X	.228	.228	0	%100
54	M46A	Z	-.132	-.132	0	%100
55	M48A	X	.568	.568	0	%100
56	M48A	Z	-.328	-.328	0	%100
57	MP2A	X	.541	.541	0	%100
58	MP2A	Z	-.312	-.312	0	%100
59	MP3A	X	.541	.541	0	%100
60	MP3A	Z	-.312	-.312	0	%100
61	MP4A	X	.538	.538	0	%100
62	MP4A	Z	-.311	-.311	0	%100
63	MP5A	X	.541	.541	0	%100
64	MP5A	Z	-.312	-.312	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	0	0	0	%100
2	M51	Z	0	0	0	%100
3	M54	X	0	0	0	%100
4	M54	Z	0	0	0	%100
5	MP1A	X	.625	.625	0	%100
6	MP1A	Z	0	0	0	%100
7	M39	X	.329	.329	0	%100
8	M39	Z	0	0	0	%100
9	M40	X	.052	.052	0	%100
10	M40	Z	0	0	0	%100
11	M42	X	.052	.052	0	%100
12	M42	Z	0	0	0	%100
13	M43	X	.329	.329	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
14	M43	Z	0	0	0	%100
15	M44	X	.469	.469	0	%100
16	M44	Z	0	0	0	%100
17	M45	X	.41	.41	0	%100
18	M45	Z	0	0	0	%100
19	M48	X	.41	.41	0	%100
20	M48	Z	0	0	0	%100
21	M53	X	1.185	1.185	0	%100
22	M53	Z	0	0	0	%100
23	M54A	X	1.185	1.185	0	%100
24	M54A	Z	0	0	0	%100
25	M55	X	.355	.355	0	%100
26	M55	Z	0	0	0	%100
27	M56	X	.355	.355	0	%100
28	M56	Z	0	0	0	%100
29	M58	X	.329	.329	0	%100
30	M58	Z	0	0	0	%100
31	M59	X	.052	.052	0	%100
32	M59	Z	0	0	0	%100
33	M61	X	.052	.052	0	%100
34	M61	Z	0	0	0	%100
35	M62	X	.329	.329	0	%100
36	M62	Z	0	0	0	%100
37	M63	X	.469	.469	0	%100
38	M63	Z	0	0	0	%100
39	M64	X	.41	.41	0	%100
40	M64	Z	0	0	0	%100
41	M67	X	.41	.41	0	%100
42	M67	Z	0	0	0	%100
43	M72	X	1.185	1.185	0	%100
44	M72	Z	0	0	0	%100
45	M73	X	1.185	1.185	0	%100
46	M73	Z	0	0	0	%100
47	M74	X	.355	.355	0	%100
48	M74	Z	0	0	0	%100
49	M75	X	.355	.355	0	%100
50	M75	Z	0	0	0	%100
51	M76	X	0	0	0	%100
52	M76	Z	0	0	0	%100
53	M46A	X	0	0	0	%100
54	M46A	Z	0	0	0	%100
55	M48A	X	.295	.295	0	%100
56	M48A	Z	0	0	0	%100
57	MP2A	X	.625	.625	0	%100
58	MP2A	Z	0	0	0	%100
59	MP3A	X	.625	.625	0	%100
60	MP3A	Z	0	0	0	%100
61	MP4A	X	.622	.622	0	%100
62	MP4A	Z	0	0	0	%100
63	MP5A	X	.625	.625	0	%100
64	MP5A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	.164	.164	0	%100
2	M51	Z	.095	.095	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
3	M54	X	.164	.164	0	%100
4	M54	Z	.095	.095	0	%100
5	MP1A	X	.541	.541	0	%100
6	MP1A	Z	.312	.312	0	%100
7	M39	X	.512	.512	0	%100
8	M39	Z	.295	.295	0	%100
9	M40	X	.081	.081	0	%100
10	M40	Z	.047	.047	0	%100
11	M42	X	.081	.081	0	%100
12	M42	Z	.047	.047	0	%100
13	M43	X	.512	.512	0	%100
14	M43	Z	.295	.295	0	%100
15	M44	X	.407	.407	0	%100
16	M44	Z	.235	.235	0	%100
17	M45	X	.355	.355	0	%100
18	M45	Z	.205	.205	0	%100
19	M48	X	.355	.355	0	%100
20	M48	Z	.205	.205	0	%100
21	M53	X	.791	.791	0	%100
22	M53	Z	.457	.457	0	%100
23	M54A	X	.791	.791	0	%100
24	M54A	Z	.457	.457	0	%100
25	M55	X	.37	.37	0	%100
26	M55	Z	.214	.214	0	%100
27	M56	X	.37	.37	0	%100
28	M56	Z	.214	.214	0	%100
29	M58	X	.044	.044	0	%100
30	M58	Z	.025	.025	0	%100
31	M59	X	.007	.007	0	%100
32	M59	Z	.004	.004	0	%100
33	M61	X	.007	.007	0	%100
34	M61	Z	.004	.004	0	%100
35	M62	X	.044	.044	0	%100
36	M62	Z	.025	.025	0	%100
37	M63	X	.407	.407	0	%100
38	M63	Z	.235	.235	0	%100
39	M64	X	.355	.355	0	%100
40	M64	Z	.205	.205	0	%100
41	M67	X	.355	.355	0	%100
42	M67	Z	.205	.205	0	%100
43	M72	X	.791	.791	0	%100
44	M72	Z	.457	.457	0	%100
45	M73	X	.791	.791	0	%100
46	M73	Z	.457	.457	0	%100
47	M74	X	.241	.241	0	%100
48	M74	Z	.139	.139	0	%100
49	M75	X	.241	.241	0	%100
50	M75	Z	.139	.139	0	%100
51	M76	X	.228	.228	0	%100
52	M76	Z	.132	.132	0	%100
53	M46A	X	.228	.228	0	%100
54	M46A	Z	.132	.132	0	%100
55	M48A	X	.015	.015	0	%100
56	M48A	Z	.009	.009	0	%100
57	MP2A	X	.541	.541	0	%100
58	MP2A	Z	.312	.312	0	%100
59	MP3A	X	.541	.541	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
60	MP3A	Z	.312	.312	0	%100
61	MP4A	X	.538	.538	0	%100
62	MP4A	Z	.311	.311	0	%100
63	MP5A	X	.541	.541	0	%100
64	MP5A	Z	.312	.312	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	.284	.284	0	%100
2	M51	Z	.491	.491	0	%100
3	M54	X	.284	.284	0	%100
4	M54	Z	.491	.491	0	%100
5	MP1A	X	.312	.312	0	%100
6	MP1A	Z	.541	.541	0	%100
7	M39	X	.287	.287	0	%100
8	M39	Z	.497	.497	0	%100
9	M40	X	.045	.045	0	%100
10	M40	Z	.079	.079	0	%100
11	M42	X	.045	.045	0	%100
12	M42	Z	.079	.079	0	%100
13	M43	X	.287	.287	0	%100
14	M43	Z	.497	.497	0	%100
15	M44	X	.235	.235	0	%100
16	M44	Z	.407	.407	0	%100
17	M45	X	.205	.205	0	%100
18	M45	Z	.355	.355	0	%100
19	M48	X	.205	.205	0	%100
20	M48	Z	.355	.355	0	%100
21	M53	X	.185	.185	0	%100
22	M53	Z	.321	.321	0	%100
23	M54A	X	.185	.185	0	%100
24	M54A	Z	.321	.321	0	%100
25	M55	X	.211	.211	0	%100
26	M55	Z	.366	.366	0	%100
27	M56	X	.211	.211	0	%100
28	M56	Z	.366	.366	0	%100
29	M58	X	.017	.017	0	%100
30	M58	Z	.029	.029	0	%100
31	M59	X	.003	.003	0	%100
32	M59	Z	.005	.005	0	%100
33	M61	X	.003	.003	0	%100
34	M61	Z	.005	.005	0	%100
35	M62	X	.017	.017	0	%100
36	M62	Z	.029	.029	0	%100
37	M63	X	.235	.235	0	%100
38	M63	Z	.407	.407	0	%100
39	M64	X	.205	.205	0	%100
40	M64	Z	.355	.355	0	%100
41	M67	X	.205	.205	0	%100
42	M67	Z	.355	.355	0	%100
43	M72	X	.185	.185	0	%100
44	M72	Z	.321	.321	0	%100
45	M73	X	.185	.185	0	%100
46	M73	Z	.321	.321	0	%100
47	M74	X	.137	.137	0	%100
48	M74	Z	.237	.237	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
49	M75	X	.137	.137	0	%100
50	M75	Z	.237	.237	0	%100
51	M76	X	.395	.395	0	%100
52	M76	Z	.683	.683	0	%100
53	M46A	X	.395	.395	0	%100
54	M46A	Z	.683	.683	0	%100
55	M48A	X	.05	.05	0	%100
56	M48A	Z	.087	.087	0	%100
57	MP2A	X	.312	.312	0	%100
58	MP2A	Z	.541	.541	0	%100
59	MP3A	X	.312	.312	0	%100
60	MP3A	Z	.541	.541	0	%100
61	MP4A	X	.311	.311	0	%100
62	MP4A	Z	.538	.538	0	%100
63	MP5A	X	.312	.312	0	%100
64	MP5A	Z	.541	.541	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	0	0	0	%100
2	M51	Z	.756	.756	0	%100
3	M54	X	0	0	0	%100
4	M54	Z	.756	.756	0	%100
5	MP1A	X	0	0	0	%100
6	MP1A	Z	.625	.625	0	%100
7	M39	X	0	0	0	%100
8	M39	Z	.296	.296	0	%100
9	M40	X	0	0	0	%100
10	M40	Z	.047	.047	0	%100
11	M42	X	0	0	0	%100
12	M42	Z	.047	.047	0	%100
13	M43	X	0	0	0	%100
14	M43	Z	.296	.296	0	%100
15	M44	X	0	0	0	%100
16	M44	Z	.469	.469	0	%100
17	M45	X	0	0	0	%100
18	M45	Z	.41	.41	0	%100
19	M48	X	0	0	0	%100
20	M48	Z	.41	.41	0	%100
21	M53	X	0	0	0	%100
22	M53	Z	.099	.099	0	%100
23	M54A	X	0	0	0	%100
24	M54A	Z	.099	.099	0	%100
25	M55	X	0	0	0	%100
26	M55	Z	.346	.346	0	%100
27	M56	X	0	0	0	%100
28	M56	Z	.346	.346	0	%100
29	M58	X	0	0	0	%100
30	M58	Z	.296	.296	0	%100
31	M59	X	0	0	0	%100
32	M59	Z	.047	.047	0	%100
33	M61	X	0	0	0	%100
34	M61	Z	.047	.047	0	%100
35	M62	X	0	0	0	%100
36	M62	Z	.296	.296	0	%100
37	M63	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
38	M63	Z	.469	.469	0	%100
39	M64	X	0	0	0	%100
40	M64	Z	.41	.41	0	%100
41	M67	X	0	0	0	%100
42	M67	Z	.41	.41	0	%100
43	M72	X	0	0	0	%100
44	M72	Z	.099	.099	0	%100
45	M73	X	0	0	0	%100
46	M73	Z	.099	.099	0	%100
47	M74	X	0	0	0	%100
48	M74	Z	.346	.346	0	%100
49	M75	X	0	0	0	%100
50	M75	Z	.346	.346	0	%100
51	M76	X	0	0	0	%100
52	M76	Z	1.052	1.052	0	%100
53	M46A	X	0	0	0	%100
54	M46A	Z	1.052	1.052	0	%100
55	M48A	X	0	0	0	%100
56	M48A	Z	.461	.461	0	%100
57	MP2A	X	0	0	0	%100
58	MP2A	Z	.625	.625	0	%100
59	MP3A	X	0	0	0	%100
60	MP3A	Z	.625	.625	0	%100
61	MP4A	X	0	0	0	%100
62	MP4A	Z	.622	.622	0	%100
63	MP5A	X	0	0	0	%100
64	MP5A	Z	.625	.625	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	-.284	-.284	0	%100
2	M51	Z	.491	.491	0	%100
3	M54	X	-.284	-.284	0	%100
4	M54	Z	.491	.491	0	%100
5	MP1A	X	-.312	-.312	0	%100
6	MP1A	Z	.541	.541	0	%100
7	M39	X	-.017	-.017	0	%100
8	M39	Z	.029	.029	0	%100
9	M40	X	-.003	-.003	0	%100
10	M40	Z	.005	.005	0	%100
11	M42	X	-.003	-.003	0	%100
12	M42	Z	.005	.005	0	%100
13	M43	X	-.017	-.017	0	%100
14	M43	Z	.029	.029	0	%100
15	M44	X	-.235	-.235	0	%100
16	M44	Z	.407	.407	0	%100
17	M45	X	-.205	-.205	0	%100
18	M45	Z	.355	.355	0	%100
19	M48	X	-.205	-.205	0	%100
20	M48	Z	.355	.355	0	%100
21	M53	X	-.185	-.185	0	%100
22	M53	Z	.321	.321	0	%100
23	M54A	X	-.185	-.185	0	%100
24	M54A	Z	.321	.321	0	%100
25	M55	X	-.137	-.137	0	%100
26	M55	Z	.237	.237	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
27	M56	X	-.137	-.137	0	%100
28	M56	Z	.237	.237	0	%100
29	M58	X	-.287	-.287	0	%100
30	M58	Z	.497	.497	0	%100
31	M59	X	-.045	-.045	0	%100
32	M59	Z	.079	.079	0	%100
33	M61	X	-.045	-.045	0	%100
34	M61	Z	.079	.079	0	%100
35	M62	X	-.287	-.287	0	%100
36	M62	Z	.497	.497	0	%100
37	M63	X	-.235	-.235	0	%100
38	M63	Z	.407	.407	0	%100
39	M64	X	-.205	-.205	0	%100
40	M64	Z	.355	.355	0	%100
41	M67	X	-.205	-.205	0	%100
42	M67	Z	.355	.355	0	%100
43	M72	X	-.185	-.185	0	%100
44	M72	Z	.321	.321	0	%100
45	M73	X	-.185	-.185	0	%100
46	M73	Z	.321	.321	0	%100
47	M74	X	-.211	-.211	0	%100
48	M74	Z	.366	.366	0	%100
49	M75	X	-.211	-.211	0	%100
50	M75	Z	.366	.366	0	%100
51	M76	X	-.395	-.395	0	%100
52	M76	Z	.683	.683	0	%100
53	M46A	X	-.395	-.395	0	%100
54	M46A	Z	.683	.683	0	%100
55	M48A	X	-.37	-.37	0	%100
56	M48A	Z	.64	.64	0	%100
57	MP2A	X	-.312	-.312	0	%100
58	MP2A	Z	.541	.541	0	%100
59	MP3A	X	-.312	-.312	0	%100
60	MP3A	Z	.541	.541	0	%100
61	MP4A	X	-.311	-.311	0	%100
62	MP4A	Z	.538	.538	0	%100
63	MP5A	X	-.312	-.312	0	%100
64	MP5A	Z	.541	.541	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	-.164	-.164	0	%100
2	M51	Z	.095	.095	0	%100
3	M54	X	-.164	-.164	0	%100
4	M54	Z	.095	.095	0	%100
5	MP1A	X	-.541	-.541	0	%100
6	MP1A	Z	.312	.312	0	%100
7	M39	X	-.044	-.044	0	%100
8	M39	Z	.025	.025	0	%100
9	M40	X	-.007	-.007	0	%100
10	M40	Z	.004	.004	0	%100
11	M42	X	-.007	-.007	0	%100
12	M42	Z	.004	.004	0	%100
13	M43	X	-.044	-.044	0	%100
14	M43	Z	.025	.025	0	%100
15	M44	X	-.407	-.407	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
16	M44	Z	.235	.235	0	%100
17	M45	X	-.355	-.355	0	%100
18	M45	Z	.205	.205	0	%100
19	M48	X	-.355	-.355	0	%100
20	M48	Z	.205	.205	0	%100
21	M53	X	-.791	-.791	0	%100
22	M53	Z	.457	.457	0	%100
23	M54A	X	-.791	-.791	0	%100
24	M54A	Z	.457	.457	0	%100
25	M55	X	-.241	-.241	0	%100
26	M55	Z	.139	.139	0	%100
27	M56	X	-.241	-.241	0	%100
28	M56	Z	.139	.139	0	%100
29	M58	X	-.512	-.512	0	%100
30	M58	Z	.295	.295	0	%100
31	M59	X	-.081	-.081	0	%100
32	M59	Z	.047	.047	0	%100
33	M61	X	-.081	-.081	0	%100
34	M61	Z	.047	.047	0	%100
35	M62	X	-.512	-.512	0	%100
36	M62	Z	.295	.295	0	%100
37	M63	X	-.407	-.407	0	%100
38	M63	Z	.235	.235	0	%100
39	M64	X	-.355	-.355	0	%100
40	M64	Z	.205	.205	0	%100
41	M67	X	-.355	-.355	0	%100
42	M67	Z	.205	.205	0	%100
43	M72	X	-.791	-.791	0	%100
44	M72	Z	.457	.457	0	%100
45	M73	X	-.791	-.791	0	%100
46	M73	Z	.457	.457	0	%100
47	M74	X	-.37	-.37	0	%100
48	M74	Z	.214	.214	0	%100
49	M75	X	-.37	-.37	0	%100
50	M75	Z	.214	.214	0	%100
51	M76	X	-.228	-.228	0	%100
52	M76	Z	.132	.132	0	%100
53	M46A	X	-.228	-.228	0	%100
54	M46A	Z	.132	.132	0	%100
55	M48A	X	-.568	-.568	0	%100
56	M48A	Z	.328	.328	0	%100
57	MP2A	X	-.541	-.541	0	%100
58	MP2A	Z	.312	.312	0	%100
59	MP3A	X	-.541	-.541	0	%100
60	MP3A	Z	.312	.312	0	%100
61	MP4A	X	-.538	-.538	0	%100
62	MP4A	Z	.311	.311	0	%100
63	MP5A	X	-.541	-.541	0	%100
64	MP5A	Z	.312	.312	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M51	X	0	0	0	%100
2	M51	Z	0	0	0	%100
3	M54	X	0	0	0	%100
4	M54	Z	0	0	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
5	MP1A	X	-.625	-.625	0 %100
6	MP1A	Z	0	0	0 %100
7	M39	X	-.329	-.329	0 %100
8	M39	Z	0	0	0 %100
9	M40	X	-.052	-.052	0 %100
10	M40	Z	0	0	0 %100
11	M42	X	-.052	-.052	0 %100
12	M42	Z	0	0	0 %100
13	M43	X	-.329	-.329	0 %100
14	M43	Z	0	0	0 %100
15	M44	X	-.469	-.469	0 %100
16	M44	Z	0	0	0 %100
17	M45	X	-.41	-.41	0 %100
18	M45	Z	0	0	0 %100
19	M48	X	-.41	-.41	0 %100
20	M48	Z	0	0	0 %100
21	M53	X	-1.185	-1.185	0 %100
22	M53	Z	0	0	0 %100
23	M54A	X	-1.185	-1.185	0 %100
24	M54A	Z	0	0	0 %100
25	M55	X	-.355	-.355	0 %100
26	M55	Z	0	0	0 %100
27	M56	X	-.355	-.355	0 %100
28	M56	Z	0	0	0 %100
29	M58	X	-.329	-.329	0 %100
30	M58	Z	0	0	0 %100
31	M59	X	-.052	-.052	0 %100
32	M59	Z	0	0	0 %100
33	M61	X	-.052	-.052	0 %100
34	M61	Z	0	0	0 %100
35	M62	X	-.329	-.329	0 %100
36	M62	Z	0	0	0 %100
37	M63	X	-.469	-.469	0 %100
38	M63	Z	0	0	0 %100
39	M64	X	-.41	-.41	0 %100
40	M64	Z	0	0	0 %100
41	M67	X	-.41	-.41	0 %100
42	M67	Z	0	0	0 %100
43	M72	X	-1.185	-1.185	0 %100
44	M72	Z	0	0	0 %100
45	M73	X	-1.185	-1.185	0 %100
46	M73	Z	0	0	0 %100
47	M74	X	-.355	-.355	0 %100
48	M74	Z	0	0	0 %100
49	M75	X	-.355	-.355	0 %100
50	M75	Z	0	0	0 %100
51	M76	X	0	0	0 %100
52	M76	Z	0	0	0 %100
53	M46A	X	0	0	0 %100
54	M46A	Z	0	0	0 %100
55	M48A	X	-.295	-.295	0 %100
56	M48A	Z	0	0	0 %100
57	MP2A	X	-.625	-.625	0 %100
58	MP2A	Z	0	0	0 %100
59	MP3A	X	-.625	-.625	0 %100
60	MP3A	Z	0	0	0 %100
61	MP4A	X	-.622	-.622	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
62	MP4A	Z	0	0	0	%100
63	MP5A	X	-.625	-.625	0	%100
64	MP5A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	-.164	-.164	0	%100
2	M51	Z	-.095	-.095	0	%100
3	M54	X	-.164	-.164	0	%100
4	M54	Z	-.095	-.095	0	%100
5	MP1A	X	-.541	-.541	0	%100
6	MP1A	Z	-.312	-.312	0	%100
7	M39	X	-.512	-.512	0	%100
8	M39	Z	-.295	-.295	0	%100
9	M40	X	-.081	-.081	0	%100
10	M40	Z	-.047	-.047	0	%100
11	M42	X	-.081	-.081	0	%100
12	M42	Z	-.047	-.047	0	%100
13	M43	X	-.512	-.512	0	%100
14	M43	Z	-.295	-.295	0	%100
15	M44	X	-.407	-.407	0	%100
16	M44	Z	-.235	-.235	0	%100
17	M45	X	-.355	-.355	0	%100
18	M45	Z	-.205	-.205	0	%100
19	M48	X	-.355	-.355	0	%100
20	M48	Z	-.205	-.205	0	%100
21	M53	X	-.791	-.791	0	%100
22	M53	Z	-.457	-.457	0	%100
23	M54A	X	-.791	-.791	0	%100
24	M54A	Z	-.457	-.457	0	%100
25	M55	X	-.37	-.37	0	%100
26	M55	Z	-.214	-.214	0	%100
27	M56	X	-.37	-.37	0	%100
28	M56	Z	-.214	-.214	0	%100
29	M58	X	-.044	-.044	0	%100
30	M58	Z	-.025	-.025	0	%100
31	M59	X	-.007	-.007	0	%100
32	M59	Z	-.004	-.004	0	%100
33	M61	X	-.007	-.007	0	%100
34	M61	Z	-.004	-.004	0	%100
35	M62	X	-.044	-.044	0	%100
36	M62	Z	-.025	-.025	0	%100
37	M63	X	-.407	-.407	0	%100
38	M63	Z	-.235	-.235	0	%100
39	M64	X	-.355	-.355	0	%100
40	M64	Z	-.205	-.205	0	%100
41	M67	X	-.355	-.355	0	%100
42	M67	Z	-.205	-.205	0	%100
43	M72	X	-.791	-.791	0	%100
44	M72	Z	-.457	-.457	0	%100
45	M73	X	-.791	-.791	0	%100
46	M73	Z	-.457	-.457	0	%100
47	M74	X	-.241	-.241	0	%100
48	M74	Z	-.139	-.139	0	%100
49	M75	X	-.241	-.241	0	%100
50	M75	Z	-.139	-.139	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
51	M76	X	-.228	-.228	0	%100
52	M76	Z	-.132	-.132	0	%100
53	M46A	X	-.228	-.228	0	%100
54	M46A	Z	-.132	-.132	0	%100
55	M48A	X	-.015	-.015	0	%100
56	M48A	Z	-.009	-.009	0	%100
57	MP2A	X	-.541	-.541	0	%100
58	MP2A	Z	-.312	-.312	0	%100
59	MP3A	X	-.541	-.541	0	%100
60	MP3A	Z	-.312	-.312	0	%100
61	MP4A	X	-.538	-.538	0	%100
62	MP4A	Z	-.311	-.311	0	%100
63	MP5A	X	-.541	-.541	0	%100
64	MP5A	Z	-.312	-.312	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M51	X	-.284	-.284	0	%100
2	M51	Z	-.491	-.491	0	%100
3	M54	X	-.284	-.284	0	%100
4	M54	Z	-.491	-.491	0	%100
5	MP1A	X	-.312	-.312	0	%100
6	MP1A	Z	-.541	-.541	0	%100
7	M39	X	-.287	-.287	0	%100
8	M39	Z	-.497	-.497	0	%100
9	M40	X	-.045	-.045	0	%100
10	M40	Z	-.079	-.079	0	%100
11	M42	X	-.045	-.045	0	%100
12	M42	Z	-.079	-.079	0	%100
13	M43	X	-.287	-.287	0	%100
14	M43	Z	-.497	-.497	0	%100
15	M44	X	-.235	-.235	0	%100
16	M44	Z	-.407	-.407	0	%100
17	M45	X	-.205	-.205	0	%100
18	M45	Z	-.355	-.355	0	%100
19	M48	X	-.205	-.205	0	%100
20	M48	Z	-.355	-.355	0	%100
21	M53	X	-.185	-.185	0	%100
22	M53	Z	-.321	-.321	0	%100
23	M54A	X	-.185	-.185	0	%100
24	M54A	Z	-.321	-.321	0	%100
25	M55	X	-.211	-.211	0	%100
26	M55	Z	-.366	-.366	0	%100
27	M56	X	-.211	-.211	0	%100
28	M56	Z	-.366	-.366	0	%100
29	M58	X	-.017	-.017	0	%100
30	M58	Z	-.029	-.029	0	%100
31	M59	X	-.003	-.003	0	%100
32	M59	Z	-.005	-.005	0	%100
33	M61	X	-.003	-.003	0	%100
34	M61	Z	-.005	-.005	0	%100
35	M62	X	-.017	-.017	0	%100
36	M62	Z	-.029	-.029	0	%100
37	M63	X	-.235	-.235	0	%100
38	M63	Z	-.407	-.407	0	%100
39	M64	X	-.205	-.205	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
40	M64	Z	-.355	-.355	0 %100
41	M67	X	-.205	-.205	0 %100
42	M67	Z	-.355	-.355	0 %100
43	M72	X	-.185	-.185	0 %100
44	M72	Z	-.321	-.321	0 %100
45	M73	X	-.185	-.185	0 %100
46	M73	Z	-.321	-.321	0 %100
47	M74	X	-.137	-.137	0 %100
48	M74	Z	-.237	-.237	0 %100
49	M75	X	-.137	-.137	0 %100
50	M75	Z	-.237	-.237	0 %100
51	M76	X	-.395	-.395	0 %100
52	M76	Z	-.683	-.683	0 %100
53	M46A	X	-.395	-.395	0 %100
54	M46A	Z	-.683	-.683	0 %100
55	M48A	X	-.05	-.05	0 %100
56	M48A	Z	-.087	-.087	0 %100
57	MP2A	X	-.312	-.312	0 %100
58	MP2A	Z	-.541	-.541	0 %100
59	MP3A	X	-.312	-.312	0 %100
60	MP3A	Z	-.541	-.541	0 %100
61	MP4A	X	-.311	-.311	0 %100
62	MP4A	Z	-.538	-.538	0 %100
63	MP5A	X	-.312	-.312	0 %100
64	MP5A	Z	-.541	-.541	0 %100

Member Area Loads

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

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

Member	Shape	Code Check	L...	LC	Shear C...	Loc.....	phi*P...	phi*P...	phi*M...	phi*M.....	Eqn
1	M76	L4X3X6	.292	.6...	19	.168	.365 z	1979876..	80676	2.686	7.063 ... H2-1
2	M46A	L4X3X6	.290	.6...	14	.166	.365 z	1379876..	80676	2.686	7.063 ... H2-1
3	M43	PIPE_2.0	.305	5...	37	.155	.562	320866..	32130	1.872	1.872 ... H1-1b
4	M42	PL3/8x3.5	.394	0	48	.132	.189 y	3941552..	42525	.332	3.101 ... H1-1b
5	M40	PL3/8x3.5	.525	0	43	.127	0 y	4441552..	42525	.332	3.101 ... H1-1b
6	M39	PIPE_2.0	.378	5...	44	.109	.562	920866..	32130	1.872	1.872 ... H1-1b
7	M54	PIPE_2.5	.242	3...	44	.100	11....	2910110..	50715	3.596	3.596 ... H1-1b
8	M61	PL3/8x3.5	.419	0	14	.093	0 y	4441552..	42525	.332	3.101 ... H1-1b
9	M51	PIPE_2.5	.221	1...	7	.086	11....	1310110..	50715	3.596	3.596 ... H1-1b
10	M59	PL3/8x3.5	.523	0	19	.083	.189 y	4441552..	42525	.332	3.101 ... H1-1b
11	M58	PIPE_2.0	.350	5...	19	.078	6	1620866..	32130	1.872	1.872 ... H1-1b
12	MP3A	PIPE_2.0	.226	4...	7	.076	4.25	520866..	32130	1.872	1.872 ... H1-1b
13	M48	HSS1.5...	.110	0	45	.073	0	166622...	8550....	.327	.327 ... H1-1...
14	M67	HSS1.5...	.088	0	15	.073	0	156622...	8550....	.327	.327 ... H1-1...
15	M44	PIPE_2.0	.454	.8...	9	.072	.883	930169..	32130	1.872	1.872 ... H1-1b
16	M62	PIPE_2.0	.310	5...	14	.064	.562	2820866..	32130	1.872	1.872 ... H1-1b
17	M73	PL3/8x3.5	.018	0	4	.053	.354 y	1339210..	42525	.332	3.068 1 H1-1b
18	M72	PL3/8x3.5	.018	0	4	.053	.354 y	1339210..	42525	.332	3.068 1 H1-1b
19	M54A	PL3/8x3.5	.598	0	9	.050	0 y	1739210..	42525	.332	3.101 ... H1-1b
20	M53	PL3/8x3.5	.419	0	3	.050	0 y	1739210..	42525	.332	3.101 ... H1-1b
21	MP5A	PIPE_2.0	.343	3...	42	.047	.417	4223808..	32130	1.872	1.872 ... H1-1b
22	MP1A	PIPE_2.0	.052	.5...	20	.046	.417	323808..	32130	1.872	1.872 ... H1-1b

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

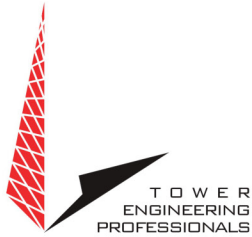
Member	Shape	Code Check	L...	LC	Shear C...	Loc.....	phi*P...	phi*P...	phi*M...	phi*M...	Eqn
23	MP4A	PIPE_2.0	.148	3...	.041	3.7...	4324104...	32130	1.872	1.872	... H1-1b
24	MP2A	PIPE_2.0	.186	.6...	.034	.688	2520866...	32130	1.872	1.872	... H1-1b
25	M64	HSS1.5...	.160	0	.034	0	196622...	8550...	.327	.327	... H1-1...
26	M45	HSS1.5...	.218	1...	.033	3	216622...	8550...	.327	.327	... H1-1a
27	M56	HSS1.5...	.255	1...	.027	3.8...	65610...	8550...	.327	.327	... H1-1a
28	M55	HSS1.5...	.207	1...	.025	0	155610...	8550...	.327	.327	... H1-1a
29	M74	HSS1.5...	.091	1...	.022	3.8...	205610...	8550...	.327	.327	... H1-1b
30	M75	HSS1.5...	.224	1...	.021	3.8...	75610...	8550...	.327	.327	... H1-1a
31	M63	PIPE_2.0	.015	0	.008	2.2...	1330169...	32130	1.872	1.872	... H1-1...
32	M48A	PIPE_2.5	.053	0	.004	0	834326...	50715	3.596	3.596	... H1-1b

Envelope Joint Reactions

Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC	
1	N96A	max	1646.018	46	1328.792	18	6.031	1	-0.113	73	0	75	-0.108	66
2		min	-346.888	4	431.658	70	-3152.933	19	-0.35	15	0	1	-0.331	20
3	N60A	max	68.754	35	880.465	24	3117.936	14	-0.079	67	0	75	-0.073	64
4		min	-1628.614	41	294.459	68	107.583	8	-0.239	21	0	1	-0.215	22
5	N62A	max	944.449	9	49.885	42	704.926	9	0	75	0	75	0	75
6		min	-944.705	3	13.639	74	-705.943	3	0	1	0	1	0	1
7	Totals:	max	1577.776	9	2238.705	15	2430.598	1						
8		min	-1577.775	3	740.166	73	-2430.595	7						

EXHIBIT 5





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Non-Ionizing Electromagnetic Radiation (NIER) Study

Site Number:

411183

Site Name:

Waterford CT

Location:

Waterford, Connecticut

Tenants:

AT&T Mobility, T-Mobile, Dish Wireless, Town of Waterford P.D.
& Verizon Wireless

Prepared For:

American Tower, Inc.
Woburn, Massachusetts

September 6th, 2023

68981 P-405611

Prepared By:

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

Approved By:



09/12/2023

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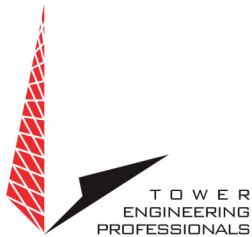
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Non-Ionizing Electromagnetic Radiation (NIER) Study

411183 Waterford CT
Waterford, 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.

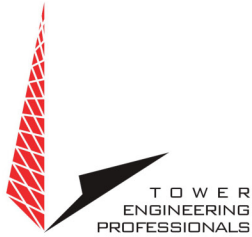
SITE AND FACILITY CONSIDERATIONS

Site 411183 Waterford CT is located at 53 Dayton Rd., in Waterford, Connecticut at coordinates 41.377860, -72.139336. The support structure is a 183' self-support tower. 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) Dish Wireless (Dish), Town of Waterford P.D. (WPD), & 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 150' from the base of the tower with a height of 6' above ground level was used, beyond 150' the MPE levels become *di minimus*. This study utilized FCC recognized and accepted software programs using the maximum ERP levels for the antenna models provided by ATC. Diagrams depicting the predicted spatial average power density level at any specific location may be found in Appendix 3, MPE Limit Study. A discussion regarding the FCC limits may be found in Appendix 4, Information Pertaining to MPE Studies. Study methodology describing Non-ionizing Radiation Prediction Models used in this study may be found in Appendix 5, MPE Standards Methodology.



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

- ATC furnished data and does not include other unidentified communication facilities.
- Load List at 411183 WATERFORD CT.RF NIER Study 8/21/23.
- 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.

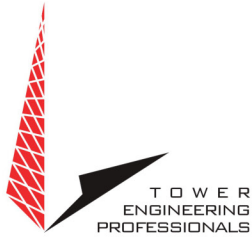
COMPLIANCE DETERMINATION

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

APPENDIX 1 Site Photos



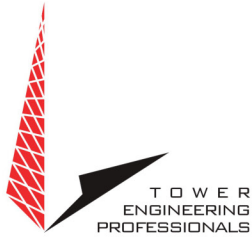
Aerial View of Site



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Appendix 2.1 Antenna Inventory

411183 Waterford CT							
Antenna Inventory							
Antenna #	Carrier	Antenna Manufacturer	Antenna Model	Frequency Band (MHz)	Azimuth (°)	Effective Radiated Power (W)	Radiation Center (ft)
1	WPD	Generic	16' Omni	Unknown	036	4413	192
2	WPD	Generic	16' Omni	Unknown	014	4413	188.8
3	WPD	Generic	15' Omni	Unknown	178	3419	186.2
4	WPD	Generic	15' Omni	Unknown	233	3419	186.2
5	WPD	Generic	11' Omni	Unknown	011	2870	185.3
6	WPD	Generic	10' Omni	Unknown	058	2240	185.1
7	WPD	Generic	8' Omni	Unknown	113	783	183.3
8	WPD	Generic	15' Omni	Unknown	256	3419	171.9
9	T-Mobile	Ericsson	Air 21	1900	030	779	166
10	T-Mobile	Ericsson	Air 21	1900	150	779	166
11	T-Mobile	Ericsson	Air 21	1900	270	779	166
12	T-Mobile	Ericsson	Air 6449	2500/2600	030	30476	166
13	T-Mobile	Ericsson	Air 6449	2500/2600	150	30476	166
14	T-Mobile	Ericsson	Air 6449	2500/2600	270	30476	166
15	T-Mobile	RFS	APXVAARR24	600/1900	030	19499	166
16	T-Mobile	RFS	APXVAARR24	600/1900	150	19499	166
17	T-Mobile	RFS	APXVAARR24	600/1900	270	19499	166
18	T-Mobile	Ericsson	Air 32	1900/2100	030	14356	166
19	T-Mobile	Ericsson	Air 32	1900/2100	150	14356	166
20	T-Mobile	Ericsson	Air 32	1900/2100	270	14356	166
21	AT&T	Ericsson	Air 6449	3700/3800/3900	030	71640	159
22	AT&T	Ericsson	Air 6449	3700/3800/3900	150	71640	159
23	AT&T	Ericsson	Air 6449	3700/3800/3900	270	71640	159
24	AT&T	Quintel	QD8616-7	1800	030	11114	157
25	AT&T	Quintel	QD8616-7	1800	150	11114	157
26	AT&T	Quintel	QD8616-7	1800	270	11114	157

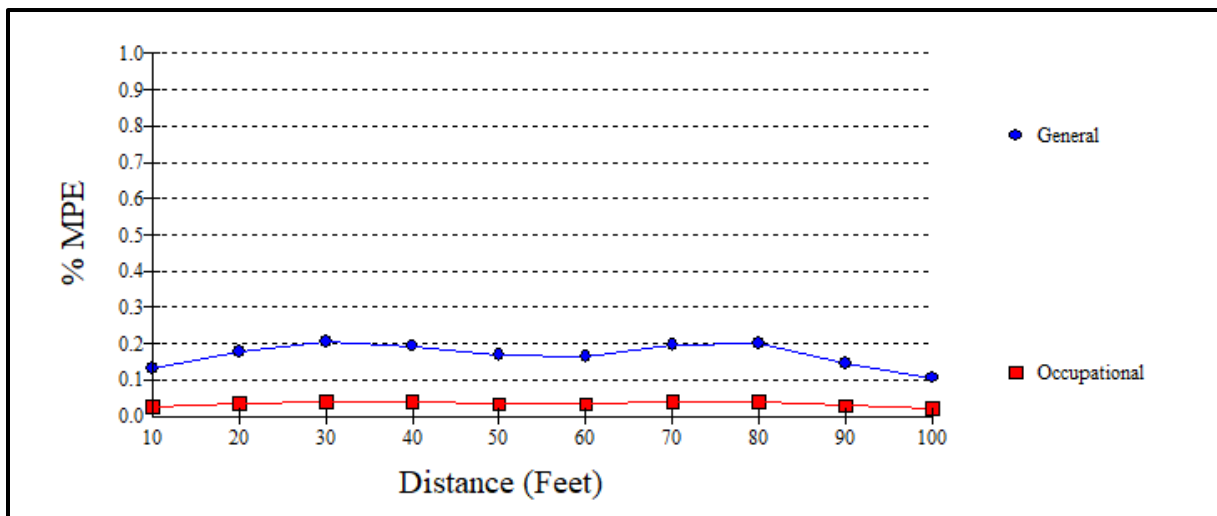


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Appendix 2.2 Antenna Inventory

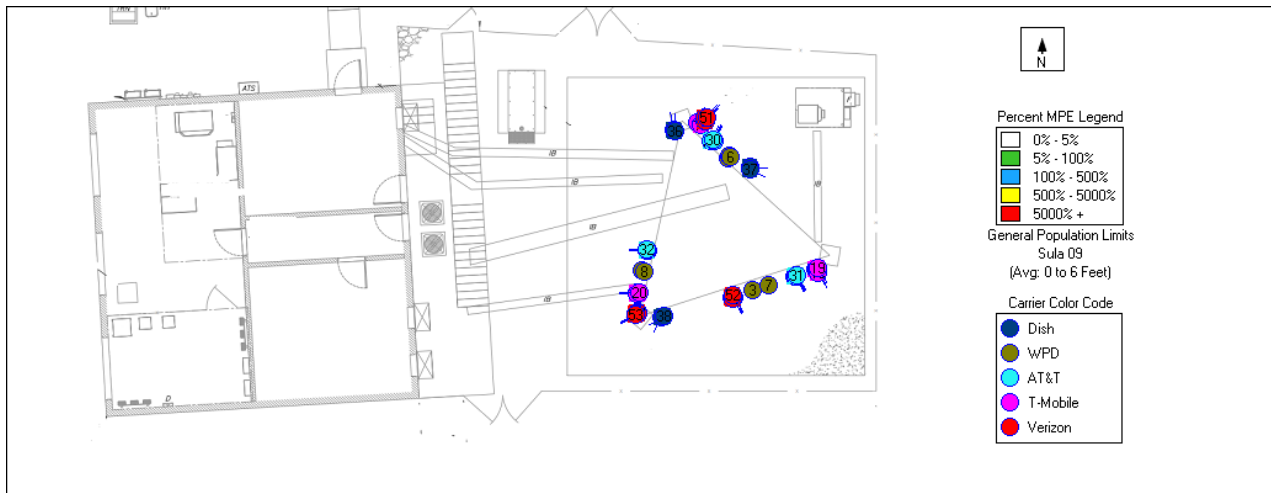
411183 Waterford CT							
Antenna Inventory							
Antenna #	Carrier	Antenna Manufacturer	Antenna Model	Frequency Band (MHz)	Azimuth (°)	Effective Radiated Power (W)	Radiation Center (ft)
27	AT&T	CCI	DMP65R-BU8D	1700	030	13247	157
28	AT&T	CCI	DMP65R-BU8D	1700	150	13247	157
29	AT&T	CCI	DMP65R-BU8D	1700	270	13247	157
30	AT&T	Ericsson	Air 6449	3700/3800/3900	030	71640	155
31	AT&T	Ericsson	Air 6449	3700/3800/3900	150	71640	155
32	AT&T	Ericsson	Air 6449	3700/3800/3900	270	71640	155
33	Dish	JMA	MX08FRO665-21	600/700/1900/2000/2100	350	58556	145.9
34	Dish	JMA	MX08FRO665-21	600/700/1900/2000/2100	207	58556	145.9
35	Dish	JMA	MX08FRO665-21	600/700/1900/2000/2100	93	58556	145.9
36	Dish	JMA	MX08FRO665-21	600/700/1900/2000/2100	000	58556	144
37	Dish	JMA	MX08FRO665-21	600/700/1900/2000/2100	120	58556	144
38	Dish	JMA	MX08FRO665-21	600/700/1900/2000/2100	240	58556	144
39	Verizon	JMA	MX06FRO665	700/800/1900/2100	045	34359	132
40	Verizon	JMA	MX06FRO665	700/800/1900/2100	150	34359	132
41	Verizon	JMA	MX06FRO665	700/800/1900/2100	240	34359	132
42	Verizon	JMA	MX06FRO665	700/800/1900/2100	045	34359	132
43	Verizon	JMA	MX06FRO665	700/800/1900/2100	150	34359	132
44	Verizon	JMA	MX06FRO665	700/800/1900/2100	240	34359	132
45	Verizon	Samsung	MT6407	3700/3800/3900	045	18700	132
46	Verizon	Samsung	MT6407	3700/3800/3900	150	18700	132
47	Verizon	Samsung	MT6407	3700/3800/3900	240	18700	132
48	Verizon	Samsung	CBRS 64T64R	3500/3600/3700	045	243	132
49	Verizon	Samsung	CBRS 64T64R	3500/3600/3700	150	243	132
50	Verizon	Samsung	CBRS 64T64R	3500/3600/3700	045	243	132
51	Verizon	Andrew	LNX-6512DS-A1M	800	030	18971	132
52	Verizon	Andrew	LNX-6512DS-A1M	800	143	18971	132
53	Verizon	Andrew	LNX-6512DS-A1M	800	260	18971	132

Appendix 3.1 MPE Limit Study



Maximum Power Density (@30'):	0.0013 mW/cm ²
General Population MPE (@30'):	0.2037%
Occupational MPE (@30'):	0.0407%

Appendix 3.2 MPE Limit Study





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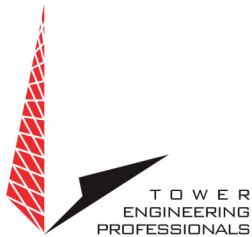
Appendix 4 Information Pertaining to MPE Studies

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

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

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

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



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

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

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

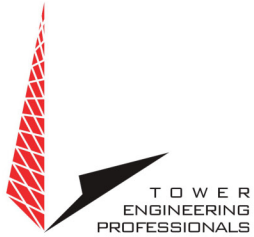


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Appendix 5 MPE Standards Methodology

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.



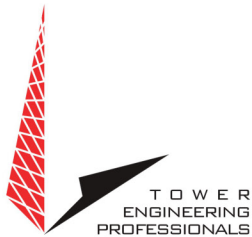
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The FCC's limits for exposure at different frequencies are shown in the following Tables.

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.



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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:

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

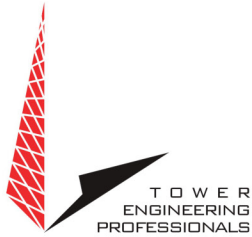
Where:

S = Power Density

P = Total Power into antenna

R = Distance from the antenna

L = Antenna aperture length



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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

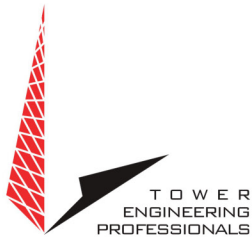
θ_{BW} = Beam width of antenna in degrees (3 dB half-power point)

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.



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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



302

BUILDING DEPARTMENT
TOWN OF WATERFORD, CONNECTICUT

BUILDING PERMIT

Permit #15308
Date issued: 11/20/98
Zoning Permit #98-325

Est. Cost \$389,336.00
Permit Fee \$0.00
C of O Fee \$0.00

PERMISSION IS HEREBY GRANTED FOR THE FOLLOWING:

Description:
tower foundation and building

Property Address: 53 Dayton Road

Owner: Cohanzie Fire Department
Address: 53 Dayton Road
Waterford, CT 06385

Telephone: 860-444-1910

Leassee:

Contractor: Standard Builders
Address: 52 Holmes Road
Newington, CT 06111-1708

License #: 00900085
Telephone: 860-947-43

NOTE: The recipient of this permit accepts this permit on the condition that he, as owner, or as representing the owner, agrees to comply with all building and zoning ordinances of the Town of Waterford and the State Statues of the State of Connecticut. regarding the use, occupancy, and type of building to be constructed and agrees that this building is to be located the proper distances from all other zones and is located in a zone in which the building and its use is allowed.


Building Official

Todor

BUILDING DEPARTMENT
TOWN OF WATERFORD, CONNECTICUT

BUILDING PERMIT

Permit # 15309
Date Issued: 11/20/98
Zoning Permit # - 0

Est. Cost \$0.00
Permit Fee \$0.00
C of O Fee \$0.00

PERMISSION IS HEREBY GRANTED FOR THE FOLLOWING:

Description:
Radio tower

Property Address: 53 Dayton Road

Owner: Cohanzie Fire Department
Address: 53 Dayton Road
Waterford, CT 06385

Telephone: 860-444-1910

Leassee:

Contractor: Standard Builders
Address: 52 Holmes Road
Newington, CT 06111

License #: 00900085
Telephone: 860-594-7143

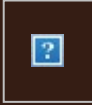
NOTE: The recipient of this permit accepts this permit on the condition that he, as owner, or as representing the owner, agrees to comply with all building and zoning ordinances of the Town of Waterford and the State Statues of the State of Connecticut regarding the use, occupancy, and type of building to be constructed and agrees that this building is to be located the proper distances from all other zones and is located in a zone in which the building and its use is allowed.

[Signature]
Building Official

EXHIBIT 7



From: [UPS](#)
To: [Barbara Kassabian](#)
Subject: UPS Delivery Notification, Tracking Number 1Z9Y45030301298978
Date: Tuesday, September 19, 2023 9:50:08 AM



Hello, your package has been delivered.

Delivery Date: Tuesday, 09/19/2023

Delivery Time: 9:49 AM

Signed by: LONG

CENTERLINE SITE ACQUISITION

Tracking Number:	1Z9Y45030301298978
Ship To:	AMERICAN TOWER 10 PRESIDENTIAL WAY WOBURN, MA 018011053 US
Number of Packages:	1
UPS Service:	UPS Ground
Package Weight:	1.0 LBS
Reference Number:	14519462

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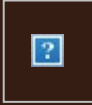
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From: [UPS](#)
To: [Barbara Kassabian](#)
Subject: UPS Delivery Notification, Tracking Number 1Z9Y45030322097315
Date: Tuesday, September 19, 2023 10:10:13 AM



Hello, your package has been delivered.

Delivery Date: Tuesday, 09/19/2023

Delivery Time: 10:08 AM

Signed by: DAWN

CENTERLINE SITE ACQUISITION

Tracking Number:	1Z9Y45030322097315
Ship To:	JONATHAN MULLEN 15 ROPE FERRY ROAD WATERFORD TOWN HALL WATERFORD, CT 063852806 US
Number of Packages:	1
UPS Service:	UPS Ground
Package Weight:	1.0 LBS
Reference Number:	14519462

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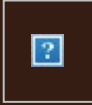
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From: [UPS](#)
To: [Barbara Kassabian](#)
Subject: UPS Delivery Notification, Tracking Number 1Z9Y45030300503961
Date: Tuesday, September 19, 2023 3:21:48 PM



Hello, your package has been delivered.

Delivery Date: Tuesday, 09/19/2023

Delivery Time: 3:21 PM

Signed by: FLAnNGISN



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CENTERLINE SITE ACQUISITION

Tracking Number:	1Z9Y45030300503961
Ship To:	COHANZIE FIRE COMPANY NO 5 INC 53 DAYTON ROAD WATERFORD, CT 063854207 US
Number of Packages:	1
UPS Service:	UPS Ground
Package Weight:	1.0 LBS
Reference Number:	14519462

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