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

May 13, 2024

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

RE: Notice of Exempt Modification // Site: PALMER POND CT (ATC: 418914)
53 Gallup Road, Voluntown, CT 06484
N 41.53680555 // W -71.82933333

Dear Ms. Bachman,

Cellco Partnership d/b/a Verizon Wireless currently maintains nine (9) antenna at the 150-ft level on the existing 152 ft Tower, located at 53 Gallup Road, Voluntown , CT. The tower is owned by American Tower. Verizon Wireless proposed modification involves the installation of a new mount modification, swap out (9) antennas and (6) RRH with new antennas and RRH on Verizon Wireless existing antenna platform and mounting assembly.

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

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2). Enclosed to accommodate this filing are construction drawings dated May 13, 2024, by NB&C LLC, a structural analysis dated April 22, 2024, by American Tower Corp., and a structural mount analysis by Colliers Engineering and Design dated March 28, 2024, and Non-Ionizing Electromagnetic Radiation (NIER) Study dated May 7, 2024, by Tower Engineering Professionals.

1. The proposed modifications will not result in an increase in the height of the existing structure.

2. The proposed modifications will not require the extension of the site boundary.

3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.

4. The operation of the new antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard.

5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.

6. The existing structure and its foundation can support the proposed loading, as shown in the attached structural analysis and a structural mount analysis, pursuant to certain conditions defined therein. Design and engineering are fully illustrated within final construction drawings.

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

Sincerely,

Derek Maheux

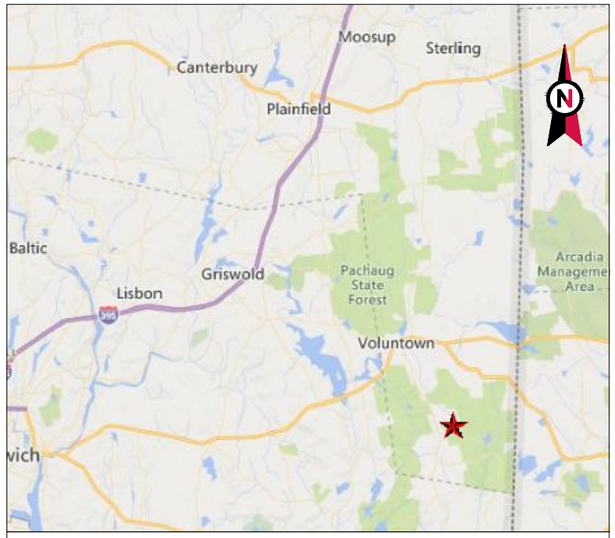
_____

Derek Maheux, Program Manager
c/o Cellco Partnership d/b/a Verizon Wireless
Centerline Communications, LLC
750 West Center Street, Suite 301
West Bridgewater, MA 02379
Mobile: (508) 649 2307
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: Tracey Hanson – First Selectman – Chief Elected Official
John Guszkowski – Zoning Enforcement Officer - as P&Z official
American Tower Corporation - as tower owner
Byron Gallup – as ground owner

EXHIBIT 1



VICINITY MAP

AMERICAN TOWER®

ATC SITE NAME: PALMER POND CT CT
ATC SITE NUMBER: 418914
VERIZON SITE NAME: PALMER POND CT
VERIZON SITE NUMBER: 5000246909
VERIZON FUZE PID: 16272100
SITE ADDRESS: 75 GALLUP ROAD
VOLUNTOWN, CT 06484

LOCATION MAP

VERIZON AMENDMENT DRAWINGS

COMPLIANCE CODE

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. INTERNATIONAL BUILDING CODE (IBC 2021)
2. NATIONAL ELECTRICAL CODE (NFPA 70, NEC 2020 W/ AMND)
3. 2022 CONNECTICUT STATE BUILDING CODE, IMC PORTION (IMC 2021 W/ AMND)
4. 2022 CONNECTICUT STATE BUILDING CODE, IPC PORTION (IPC 2021 W/ AMND)
5. 2022 CONNECTICUT STATE BUILDING CODE, IECC PORTION (IECC 2021 W/ AMND)
6. PART III OF THE 2022 CT STATE FIRE SAFETY CODE (IFC 2021 W/ AMND)
7. 2022 CONNECTICUT STATE BUILDING CODE, IEBC PORTION (IEBC 2021 W/ AMND)
8. 2022 CONNECTICUT STATE BUILDING CODE
9. 2022 CONNECTICUT STATE BUILDING CODE, IRC PORTION (IRC 2021 W/ AMND)
10. CONNECTICUT STATE FUEL GAS CODE (IFGC 2021 W/ AMND)

UTILITY COMPANIES

POWER COMPANY: ITRON
PHONE: (800) 653-5461

TELEPHONE COMPANY: UNKNOWN
PHONE: N/A

811 Know what's below. Call before you dig.

PROJECT SUMMARY

SITE ADDRESS:

75 GALLUP ROAD
VOLUNTOWN, CT 06484
COUNTY: NEW LONDON

REGISTERED COORDINATES:

LATITUDE: 41.53680555
41° 32' 12.5" N
LONGITUDE: -71.82933333
71° 49' 45.6" W
GROUND ELEVATION: 402' AMSL

PROJECT TEAM

TOWER OWNER:

AMERICAN TOWER
10 PRESIDENTIAL WAY
WOBURN, MA 01801

APPLICANT:

VERIZON WIRELESS

ENGINEER:

A.T. ENGINEERING SERVICES LLC
1 FENTON MAIN, STE 300
CARY, NC 27511

PROPERTY OWNER:

BENJAMIN GALLUP
75 GALLUP ROAD
VOLUNTOWN, CT 06484

PROJECT DESCRIPTION

THE PROPOSED PROJECT INCLUDES MODIFYING GROUND BASED AND TOWER MOUNTED EQUIPMENT AS INDICATED PER BELOW:

REMOVE (9) ANTENNA(s), (6) RRH(s), AND (2) OVP(s)

INSTALL MOUNT MODIFICATIONS, (3) SBS MOUNT(s), (9) ANTENNA(s), (6) RRH(s), (3) DIPLEXER(s), AND (2) OVP(s)

EXISTING (2) 1 1/4" HYBRID CABLE(s) TO REMAIN

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).

PROJECT LOCATION DIRECTIONS

FROM DOWNTOWN NEW LONDON START OUT GOING NORTH ON BANK ST TOWARD TILLEY ST. TAKE THE 1ST LEFT ONTO TILLEY ST. MERGE ONTO I-95 N VIA THE RAMP ON THE LEFT TOWARD PROVIDENCE. TAKE THE CT-2 EXIT, EXIT 92, TOWARD CT-49. TURN LEFT ONTO LIBERTY ST. ENTER NEXT ROUNDABOUT AND TAKE THE 1ST EXIT ONTO PROVIDENCE NEW LONDON TURNPIKE. TURN LEFT ONTO PENDLETON HILL RD. TURN LEFT ONTO PENDLETON HILL RD. TURN RIGHT ONTO GALLUP RD. 75 GALLUP RD IS ON THE LEFT.

SHEET INDEX

SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
G-001	TITLE SHEET	0	05/13/24	AP
G-002	GENERAL NOTES	0	05/13/24	AP
V-101	EXISTING SURVEY	0	05/13/24	AP
V-102	GENERAL NOTES	0	05/13/24	AP
C-101	DETAILED SITE PLAN	0	05/13/24	AP
C-201	TOWER ELEVATION	0	05/13/24	AP
C-401	ANTENNA INFORMATION & SCHEDULE	0	05/13/24	AP
C-501	CONSTRUCTION DETAILS	0	05/13/24	AP
E-501	GROUNDING DETAILS	0	05/13/24	AP
R-601	SUPPLEMENTAL			
R-602	SUPPLEMENTAL			
R-603	SUPPLEMENTAL			

CONTRACTOR PMI REQUIREMENTS

PMI ACCESSED AT:	HTTPS://PMI.VZWSMART.COM
SMART TOOL VENDOR PROJECT NUMBER:	10218074
VZW LOCATION CODE (PSLC):	5000246909

***PMI AND REQUIREMENTS ALSO EMBEDDED IN MOUNT ANALYSIS REPORT

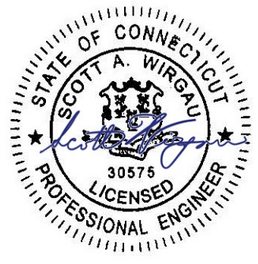
MOUNT MODIFICATION REQUIRED:	YES
VZW APPROVED SMART KIT VENDORS:	REFER TO MOUNT MODIFICATION DRAWINGS PAGES FOR VZW SMART KIT APPROVED VENDORS

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

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	AP	05/13/24

ATC SITE NUMBER:
418914
ATC SITE NAME:
PALMER POND CT CT
VERIZON SITE NAME:
PALMER POND CT
SITE ADDRESS:
75 GALLUP ROAD
VOLUNTOWN, CT 06484

SEAL:



verizon

ATC JOB NO:	14678893_G0
CUSTOMER ID:	PALMER POND CT
CUSTOMER #:	5000246909

TITLE SHEET

SHEET NUMBER:	REVISION:
G-001	0

GENERAL CONSTRUCTION NOTES:

1. OWNER FURNISHED MATERIALS, VERIZON "THE COMPANY" WILL PROVIDE AND THE CONTRACTOR WILL INSTALL
   - A. BTS EQUIPMENT FRAME (PLATFORM) AND ICEBRIDGE SHELTER (GROUND BUILD/CO-LOCATE ONLY)
   - B. AC/TELCO INTERFACE BOX (PPC)
   - C. ICE BRIDGE (CABLE TRAY WITH COVER) (GROUND BUILD/CO-LOCATE ONLY, GC TO FURNISH AND INSTALL FOR ROOFTOP INSTALLATION)
   - D. TOWERS, MONOPOLES
   - E. TOWER LIGHTING
   - F. GENERATORS & LIQUID PROPANE TANK
   - G. ANTENNA STANDARD BRACKETS, FRAMES AND PIPES FOR MOUNTING
   - H. ANTENNAS (INSTALLED BY OTHERS)
   - I. TRANSMISSION LINE
   - J. TRANSMISSION LINE JUMPERS
   - K. TRANSMISSION LINE CONNECTORS WITH WEATHERPROOFING KITS
   - L. TRANSMISSION LINE GROUND KITS
   - M. HANGERS
   - N. HOISTING GRIPS
   - O. BTS EQUIPMENT
2. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL OTHER MATERIALS FOR THE COMPLETE INSTALLATION OF THE SITE INCLUDING, BUT NOT LIMITED TO, SUCH MATERIALS AS FENCING, STRUCTURAL STEEL SUPPORTING SUB-FRAME FOR PLATFORM, ROOFING LABOR AND MATERIALS, GROUNDING RINGS, GROUNDING WIRES, COPPER-CLAD OR XIT CHEMICAL GROUND ROD(S), BUSS BARS, TRANSFORMERS AND DISCONNECT SWITCHES WHERE APPLICABLE, TEMPORARY ELECTRICAL POWER, CONDUIT, LANDSCAPING COMPOUND STONE, CRANES, CORE DRILLING, SLEEPERS AND RUBBER MATTING, REBAR, CONCRETE CAISSONS, PADS AND/OR AUGER MOUNTS, MISCELLANEOUS FASTENERS, CABLE TRAYS, NON-STANDARD ANTENNA FRAMES AND ALL OTHER MATERIAL AND LABOR REQUIRED TO COMPLETE THE JOB ACCORDING TO THE DRAWINGS AND SPECIFICATIONS. IT IS THE POSITION OF VERIZON TO APPLY FOR PERMITTING AND CONTRACTOR RESPONSIBLE FOR PICKUP AND PAYMENT OF REQUIRED PERMITS.
3. ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING ANSI/EIA/TIA-222, AND COMPLY WITH ATC CONSTRUCTION SPECIFICATIONS.
4. CONTRACTOR SHALL CONTACT LOCAL 811 FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS.
6. ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
7. DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
8. DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
9. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
10. CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
11. CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
12. INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE VERIZON REP PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE VERIZON REP PRIOR TO PROCEEDING.
13. EACH CONTRACTOR SHALL COOPERATE WITH THE VERIZON REP, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
14. CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE VERIZON CONSTRUCTION MANAGER.
15. ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT.
16. WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR SHALL NOTIFY THE VERIZON REP AND ENGINEER OF RECORD IMMEDIATELY.
17. CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A COMPLETE AND CURRENT SET OF DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
18. CONTRACTOR SHALL REMOVE ALL RUBBISH AND DEBRIS FROM THE SITE AT THE END OF EACH DAY.
19. CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH AMERICAN TOWER CORPORATION (ATC) AND TAKE PRECAUTIONS TO MINIMIZE IMPACT AND DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
20. CONTRACTOR SHALL FURNISH VERIZON AND AMERICAN TOWER CORPORATION (ATC) WITH A PDF MARKED UP AS-BUILT SET OF DRAWINGS UPON COMPLETION OF WORK.
21. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH VERIZON REP TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED. ALL ITEMS NOT PROVIDED SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL ALL ITEMS PROVIDED.
22. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH VERIZON REP TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY CONTRACTOR. ALL REQUIRED PERMITS NOT OBTAINED BY VERIZON MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR.
23. CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH VERIZON SPECIFICATIONS AND REQUIREMENTS.
24. CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO VERIZON FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
25. ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO VERIZON SPECIFICATIONS, AND AS SHOWN IN THESE PLANS.
26. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
27. CONTRACTOR SHALL NOTIFY VERIZON REP A MINIMUM OF 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING ANY UNDERGROUND UTILITIES, FOUNDATIONS OR SEALING ANY WALL, FLOOR OR ROOF PENETRATIONS FOR ENGINEERING REVIEW AND APPROVAL.
28. WHEN THE PROJECT SCOPE REQUIRES THE USE OF THE SAFETY CLIMB, THE GENERAL CONTRACTOR SHALL ENSURE THE SAFETY CLIMB IS FREE OF OBSTRUCTIONS, NOT RUBBING ON OR TRAPPED BY ANY INSTALLED CUSTOMER EQUIPMENT, IS VISUALLY TAUT, MEETS MANUFACTURER INSTALLATION SPECIFICATIONS, AND IS FIRMLY SECURED AT ALL CABLE GUIDE LOCATIONS UPON PROJECT COMPLETION.
29. COMPLETION OF PROJECT SHALL NOT OBSTRUCT, TRAP, LOOSEN, OR OTHERWISE CAUSE FAILURE TO MEET MANUFACTURER INSTALLATION REQUIREMENTS FOR THE SAFETY CLIMB.
30. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE WITH ALL APPLICABLE OSHA STANDARDS AND RECOMMENDATIONS AND SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE AND PPM AND CONSTRUCTION DEVICES SUCH AS WELDING AND FIRE PREVENTION, TEMPORARY SHORING, SCAFFOLDING, TRENCH BOXES/SLOPING, BARRIERS, ETC.
31. THE CONTRACTOR SHALL PROTECT AT HIS OWN EXPENSE, ALL EXISTING FACILITIES AND SUCH OF HIS NEW WORK LIABLE TO INJURY DURING THE CONSTRUCTION PERIOD. ANY DAMAGE CAUSED BY NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, OR BY THE ELEMENTS DUE TO NEGLECT 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/HYBRID CABLES ARE FURNISHED BY VERIZON UNDER A SEPARATE CONTRACT. THE CONTRACTOR SHALL ASSIST ANTENNA INSTALLATION CONTRACTOR IN TERMS OF COORDINATION AND SITE ACCESS. ERECTION SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PERSONNEL.
   - B. INSTALL ANTENNAS AS INDICATED ON DRAWINGS AND VERIZON SPECIFICATIONS.
   - C. INSTALL GALVANIZED STEEL ANTENNA MOUNTS AS INDICATED ON DRAWINGS.
   - D. INSTALL FURNISHED GALVANIZED STEEL OR ALUMINUM WAVEGUIDE.
   - E. INSTALL COAXIAL/HYBRID CABLES AND TERMINATING BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. WEATHERPROOF ALL CONNECTIONS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL/HYBRID CABLE THREE (3) FEET IN EXCESS OF ENTRY PORT LOCATION UNLESS OTHERWISE STATED.
2. ANTENNA AND COAXIAL/HYBRID CABLE GROUNDING:
   - A. ALL EXTERIOR #6 GREEN GROUND WIRE "DAISY CHAIN" CONNECTIONS ARE TO BE WEATHER SEALED WITH RFS CONNECTORS/SPLICE WEATHERPROOFING KIT #221213 OR EQUAL.
   - B. ALL COAXIAL/HYBRID CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL/HYBRID 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
1 FENTON MAIN
SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112
PEC.0001553

REV.	DESCRIPTION	BY	DATE
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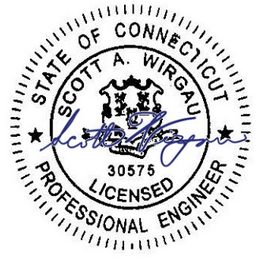
75 GALLUP ROAD
VOLUNTOWN, CT 06484

SEAL:



Digitally Signed: 2024-05-13

verizon

ATC JOB NO:	14678893_G0
CUSTOMER ID:	PALMER POND CT
CUSTOMER #:	5000246909

GENERAL NOTES

SHEET NUMBER:	REVISION:
G-002	0

PROJECT SUMMARY

FIELD SURVEY DATE: 11/14/2016

SITE ADDRESS: 75 GALLUP ROAD VOLUNTOWN CT 06484

PARCEL INFORMATION
OWNER: GALLUP BENJAMIN & BYRON
OWNER ADDRESS: 53 GALLUP RD VOLUNTOWN CT 06384
APN: CT-147-014/004-00/0053

TOTAL AREAS:
PARENT PARCEL: 199.99± ACRES ATC EASEMENT AREA: 10,000 SQ. FT.

GEOGRAPHIC COORDINATES OF TOWER:
LATITUDE: 41°32'12.13" N LONGITUDE: 71°49'45.69" W
VERTICAL DATUM: NAVD 1988 HORIZONTAL DATUM: NAD83
GROUND ELEVATION: 461'

THIS IS TO CERTIFY THAT THE ABOVE INFORMATION IS PROVIDED TO THE FOLLOWING ACCURACY:
± TWENTY (20) FEET IN THE HORIZONTAL
± THREE (3) FEET IN THE VERTICAL

*BEARINGS ARE THE CONNECTICUT STATE PLANE COORDINATE SYSTEM AND ARE BASED ON GPS OBSERVATIONS.

FLOODPLAIN:
PER THE FEMA FLOODPLAIN MAPS, THE SITE IS LOCATED IN AN AREA DESIGNATED AS ZONE X.
COMMUNITY PANEL NO. : 09011C0262G
EFFECTIVE DATE: JULY 18, 2011

BOUNDARY NOTE
THIS SURVEY IS THE RESULT OF AN ACTUAL FIELD SURVEY BASED UPON SUFFICIENT RESEARCH AND FIELD EVIDENCE TO VERIFY THE PARENT PARCEL OF THE SUBJECT PROPERTY. HOWEVER, THIS SURVEYOR HAS RELIED UPON THE DEEDS OF RECORD, AS PROVIDED. THIS SURVEYOR MAKES NO GUARANTEE , EITHER EXPRESSED OR IMPLIED AS TO THE QUALITY OF THE DEED REPORT AND REFERENCE DOCUMENTS PROVIDED AND THE DOCUMENTS PROVED AFFECTING THE LEASE AND IMMEDIATE AREA HAVE BEEN PLOTTED. THE BOUNDARY SHOWN HEREON IS PLOTTED FROM THE RECORD INFORMATION PROVIDED AND DOES NOT CONSTITUTE A BOUNDARY SURVEY OF THE PROPERTY.

ENCROACHMENT NOTE
AT THE TIME OF THE SURVEY, NO VISIBLE ENCROACHMENTS WERE EVIDENT ONTO OR BEYOND THE LEASE OR EASEMENT AREA, OR THE ACCESS AND UTILITY EASEMENT(S). ATC LEASE OR EASEMENT AREA IS CONTAINED ENTIRELY ON THE PARENT PARCEL.

SURVEYOR'S NOTES

1. THERE IS ACCESS TO THE SUBJECT PROPERTY VIA GALLUP ROAD, A PUBLIC RIGHT OF WAY.
2. THE LOCATIONS OF ALL UTILITIES SHOWN ON THE SURVEY ARE FROM VISIBLE SURFACE EVIDENCE ONLY.
3. AT THE TIME OF THIS SURVEY THERE WAS NO OBSERVABLE SURFACE EVIDENCE OF EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS WITHIN RECENT MONTHS.
4. AT THE TIME OF THIS SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF THE SUBJECT PROPERTY BEING USED AS A SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL.
5. AT THE TIME OF THIS SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF ANY RECENT CHANGES IN STREET RIGHT-OF-WAY LINES EITHER COMPLETED OR PROPOSED, AND AVAILABLE FROM THE CONTROLLING JURISDICTION.
6. AT THE TIME OF THIS SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF ANY RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS.
7. ANGLES OR BEARINGS SHOWN HEREON ARE FORMATTED IN DEGREES, MINUTES, AND SECONDS. DISTANCES OR ELEVATIONS SHOWN HEREON ARE IN U.S. SURVEY FEET, UNLESS NOTED OTHERWISE.
8. UNDERGROUND IMPROVEMENTS IF ANY AND NOT VISIBLE AT THE TIME OF THE SURVEY, HAVE NOT BEEN LOCATED IN THE FIELD OR SHOWN HEREON.
9. WETLANDS, IF PRESENT, HAVE NOT BEEN LOCATED OR SHOWN HEREON.
10. NOT ALL IMPROVEMENTS ON THE PARENT PARCEL BEING SURVEYED ARE SHOWN HEREON.
11. REFERENCES:
    A. DEED: BOOK 109, PAGE 332

LEGAL DESCRIPTION

PARENT PARCEL - AS PROVIDED:
PROPERTY LOCATED IN NEW LONDON, CT
TWO CERTAIN TRACTS OR PARCELS OF LAND LOCATED IN THE TOWN OF VOLUNTOWN, COUNTY OF NEW LONDON AND STATE OF CONNECTICUT, TOGETHER WITH THE BUILDINGS AND IMPROVEMENTS THEREON, AND BEING MOREPARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:

FIRST TRACT:
A CERTAIN PARCEL OF LAND LOCATED ON THE EASTERLY SIDE OF CONNECTICUT ROUTE #49, ALSO KNOWN AS PENDLETON HILL ROAD, WHICH TRACT IS MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:
NORTHERLY: BY LAND OF THE STATE OF CONNECTICUT;

EASTERLY: BY LAND OF THE STATE OF CONNECTICUT, LAND NOW OR FORMERLY OF JOHN CARLSON, AND LAND NOW OR FORMERLY OF GEORGE PALMER, IN PART BY EACH;

SOUTHERLY: BY LAND NOW OR FORMERLY OF THE HEIRS OF BIRDSEY G. PALMER, AND BY LAND NOW OR FORMERLY OF HANAR HEIRI, ALSO KNOWN AS HANNAR HEIRI, IN PART BY EACH;

WESTERLY: BY LAND NOW OR FORMERLY OF ELIZABETH AND APO MAKELLA, BY LAND NOW OR FORMERLY OF HANAR HEIRI, ALSO KNOWN AS HANNAR HEIRI, BY STATE OF CONNECTICUT, ROUTE #49, ALSO KNOWN AS PENDLETON HILL ROAD, IN PART BY EACH.

TOGETHER WITH A CERTAIN RIGHT OF WAY MORE PARTICULARLY DESCRIBED IN A DEED DATED APRIL 25, 1938 AND RECORDED IN VOLUME 25 AT PAGE 205 OF THE VOLUNTOWN LAND RECORDS.

SECOND TRACT:
A CERTAIN PARCEL OF LAND LOCATED ON THE WESTERLY SIDE OF CONNECTICUT ROUTE #49, ALSO KNOWN AS PENDLETON HILL ROAD, BEING MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:

NORTHERLY AND WESTERLY: BY LAND OF THE STATE OF CONNECTICUT;

EASTERLY: BY CONNECTICUT HIGHWAY ROUTE #49, ALSO KNOWN AS PENDLETON HILL ROAD;

SOUTHERLY: BY LANDS NOW OR FORMERLY OF TOIVO MATSON.

AND BEING THE SAME PROPERTY CONVEYED TO BENJAMIN GALLUP AND BYRON D. GALLUP FROM LUCY GALLUP, ALSO KNOWN AS LUCY G. GALLUP BY QUIT CLAIM DEED DATED JULY 20, 1973 AND RECORDED JULY 26, 1973 IN DEED BOOK 39, PAGE 255; AND FURTHER CONVEYED TO BYRON D. GALLUP FROM ESTATE OF BENJAMIN K. GALLUP BY CERTIFICATE OF DEVISE, DESCENT, OR DISTRIBUTION DATED MARCH 23, 2016 AND RECORDED APRIL 04, 2016 IN DEED BOOK 109, PAGE 332.

TAX PARCEL NOS. 014/003-00/0596 (6402), 014/004-00/0053 (6397), 014/003-01/0596

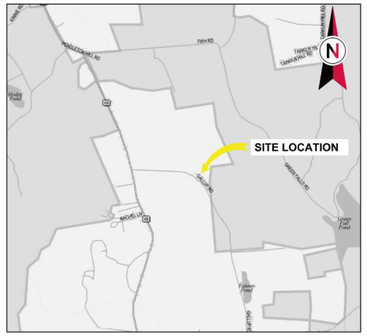
ATC EASEMENT AREA - AS SURVEYED: (NONE PROVIDED)
ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND SITUATE, LYING AND BEING IN THE TOWN OF VOLUNTOWN, COUNTY OF NEW LONDON, STATE OF CONNECTICUT, BEING MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF THE HEREIN DESCRIBED ATC EASEMENT AREA SAID POINT WHOSE STATE PLANE COORDINATE IS 757565.66 NORTH AND 1252065.08 EAST; RUNNING THENCE

NORTH 51°40'22" WEST FOR A DISTANCE OF 100.00 FEET TO A POINT; THENCE
NORTH 38°19'38" EAST FOR A DISTANCE OF 100.00 FEET TO A POINT; THENCE
SOUTH 51°40'22" EAST FOR A DISTANCE OF 100.00 FEET TO A POINT; THENCE
SOUTH 38°19'38" WEST FOR A DISTANCE OF 100.00 FEET TO THE POINT OF BEGINNING.

ACCESS & UTILITY EASEMENT - AS SURVEYED: (NONE PROVIDED)
ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND SITUATE, LYING AND BEING IN THE TOWN OF VOLUNTOWN, COUNTY OF NEW LONDON, STATE OF CONNECTICUT, BEING MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:

BEING A 29 FOOT WIDE ACCESS & UTILITY EASEMENT LEADING FROM THE ATC EASEMENT AREA TO THE NORTHERLY SIDELINE OF GALLUP ROAD (WIDTH VARIES).

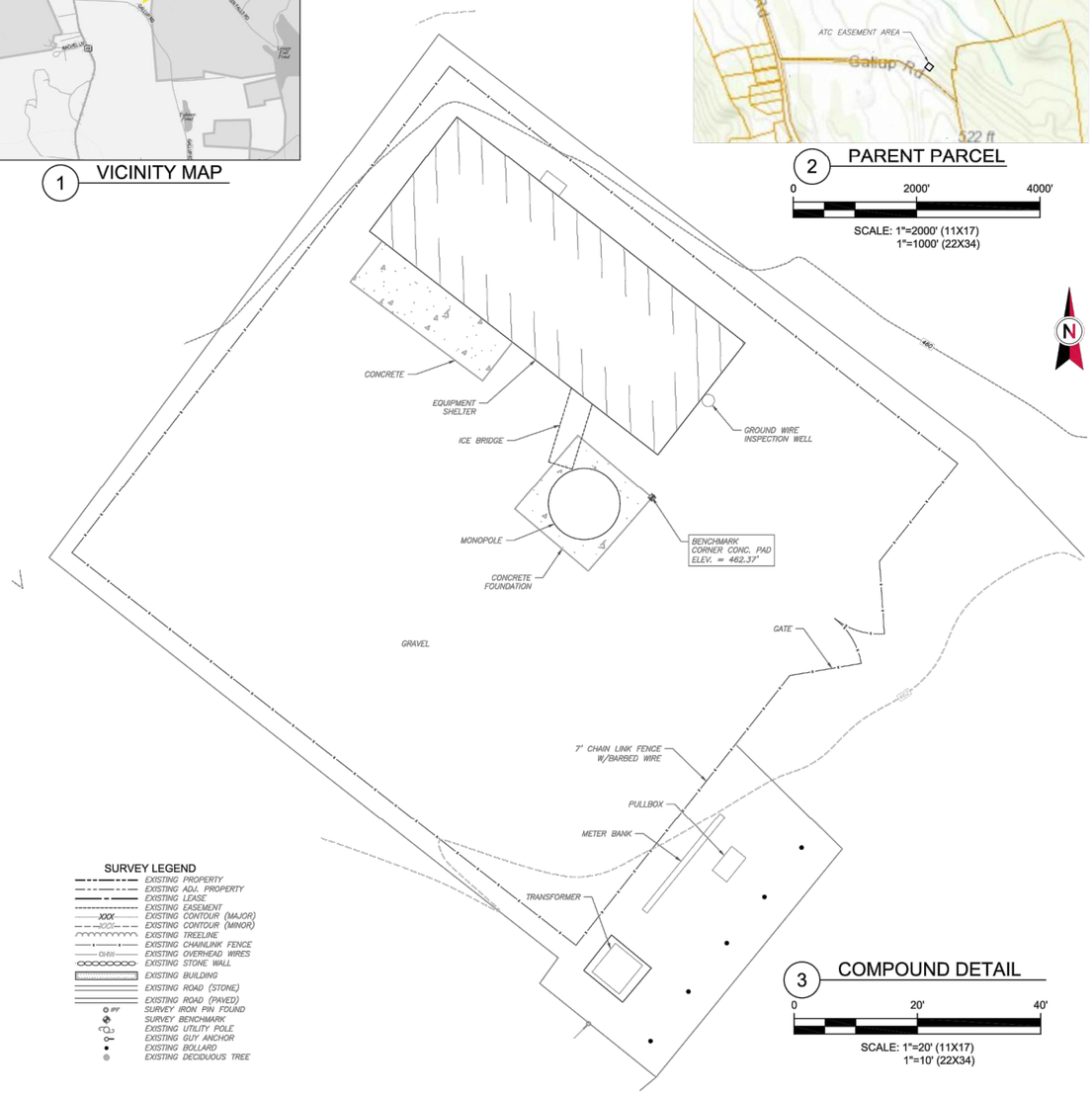


1 VICINITY MAP

2 PARENT PARCEL

0 2000' 4000'

SCALE: 1"=2000' (11X17)
1"=1000' (22X34)



SURVEY LEGEND

- EXISTING PROPERTY
- EXISTING ADJ. PROPERTY
- EXISTING LEASE
- EXISTING EASEMENT
- XXX EXISTING CONTOUR (MAJOR)
- XXX EXISTING CONTOUR (MINOR)
- EXISTING TREELINE
- EXISTING CHAINLINK FENCE
- CHAIN EXISTING OVERHEAD WIRES
- EXISTING STONE WALL
- EXISTING BUILDING
- EXISTING ROAD (STONE)
- EXISTING ROAD (PAVED)
- IPF SURVEY IRON PIN FOUND
- SURVEY BENCHMARK
- EXISTING UTILITY POLE
- EXISTING GUY ANCHOR
- EXISTING BOLLARD
- EXISTING DECIDUOUS TREE

3 COMPOUND DETAIL

0 20' 40'

SCALE: 1"=20' (11X17)
1"=10' (22X34)

AMERICAN TOWER®
ATC TOWER SERVICES, INC
3533 REGENCY PARKWAY
SUITE 133
CARY, NC 27551
PHONE: (919) 468-0145
COA: D-0204

REV.	DESCRIPTION	BY	DATE
0	ISSUED FOR COMMENT	DTS	12/07/16

ATC SITE NUMBER:
418914
ATC SITE NAME:
PALMER POND CT
SITE ADDRESS:
75 GALLUP ROAD
VOLUNTOWN CT 06484

SURVEY LOGO: TECTONIC — Practical Solutions, Exceptional Service
TECTONIC Engineering & Surveying Consultants P.C.
1279 Route 300
Newburgh, NY 12550
Phone: (845) 567-6656
Fax: (845) 567-8703
www.tectonicengineering.com

DRAWN BY:	MT
APPROVED BY:	TF
DATE DRAWN:	11/09/16
ATC JOB NO:	418914

COMPOUND DETAIL & DESCRIPTIONS

SHEET NUMBER:	REVISION:
V-101	0

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

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	AP	05/13/24

ATC SITE NUMBER:
418914
ATC SITE NAME:
PALMER POND CT CT
VERIZON SITE NAME:
PALMER POND CT
SITE ADDRESS:
75 GALLUP ROAD
VOLUNTOWN, CT 06484

SEAL:

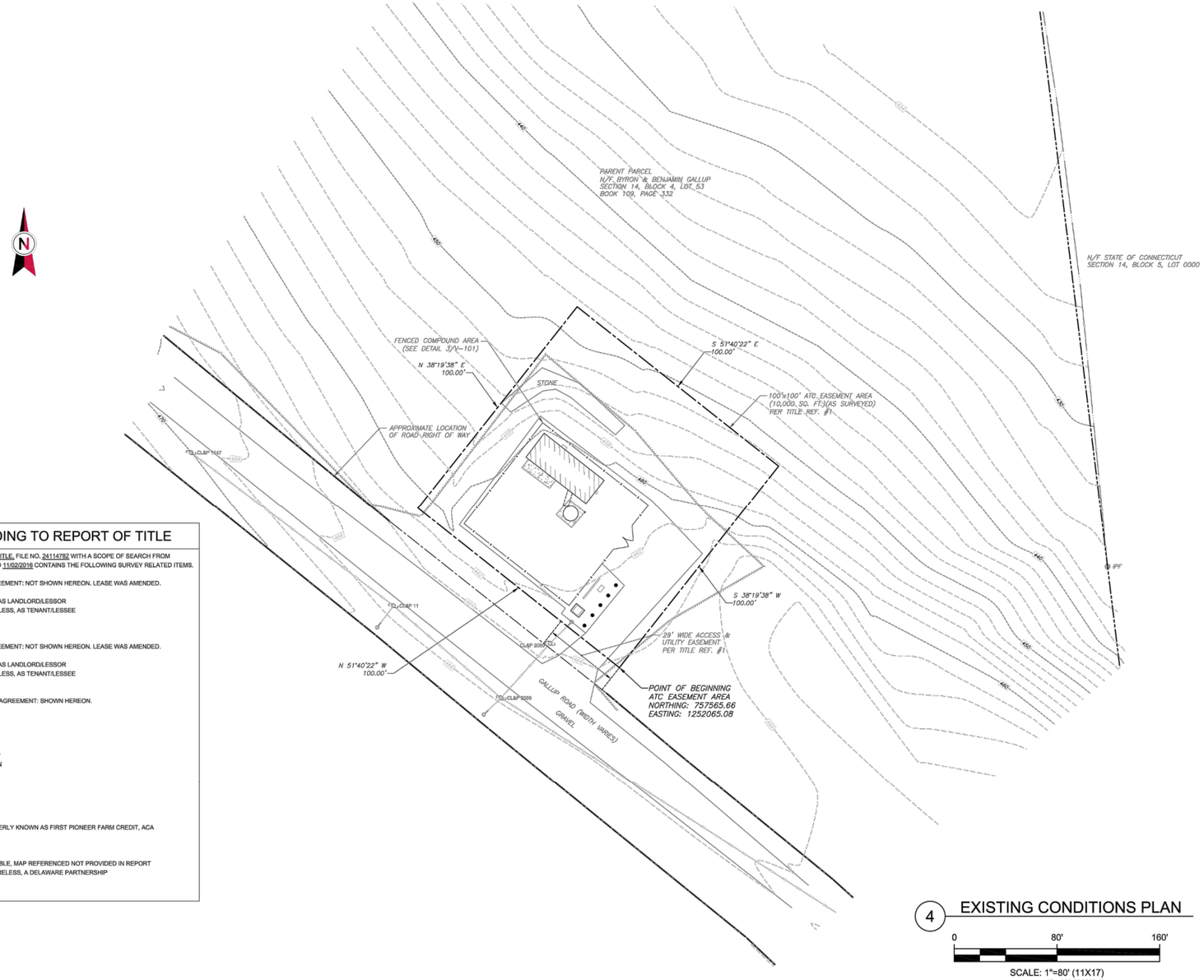
FOR REFERENCE ONLY

verizon

ATC JOB NO:	14678893_G0
CUSTOMER ID:	PALMER POND CT
CUSTOMER #:	5000246909

EXISTING SURVEY

SHEET NUMBER:	REVISION:
V-101	0



4 EXISTING CONDITIONS PLAN

0 80' 160'

SCALE: 1"=80' (11X17)
1"=40' (22X34)

NOTES CORRESPONDING TO REPORT OF TITLE

THE REPORT OF TITLE ISSUED BY FIDELITY NATIONAL TITLE, FILE NO. 24114782 WITH A SCOPE OF SEARCH FROM 07/26/1973 (PARCEL 6402) & 05/06/1938 (PARCEL 6397) TO 11/02/2016 CONTAINS THE FOLLOWING SURVEY RELATED ITEMS.

9. MEMORANDUM OF OPTION AND LAND LEASE AGREEMENT: NOT SHOWN HEREON. LEASE WAS AMENDED.
DATED: 10/25/2010
LANDLORD: BENJAMIN GALLUP AND BYRON D. GALLUP, AS LANDLORD/LESSOR
TENANT: CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS, AS TENANT/LESSEE
RECORDED ON: 11/12/2010
RECORDED IN: DEED BOOK 00100, PAGE 121

10. MEMORANDUM OF OPTION AND LAND LEASE AGREEMENT: NOT SHOWN HEREON. LEASE WAS AMENDED.
DATED: 10/25/2010
LANDLORD: BENJAMIN GALLUP AND BYRON D. GALLUP, AS LANDLORD/LESSOR
TENANT: CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS, AS TENANT/LESSEE
RECORDED ON: 11/12/2010
RECORDED IN: DEED BOOK 00100, PAGE 0135
AMENDED MEMORANDUM OF OPTION AND LAND LEASE AGREEMENT: SHOWN HEREON.
DATED: 04/04/2014
RECORDED ON: 04/23/2014
RECORDED IN: DEED BOOK 106, PAGE 241

11. OPEN - END MORTGAGE: NOT PLOTTABLE
FROM: BENJAMIN K. GALLUP AND BYRON D. GALLUP
IN FAVOR OF: FARM CREDIT EAST, ACA, A CORPORATION
DATED: 11/16/2012
RECORDED ON: 11/19/2012
RECORDED IN: DEED BOOK 00103, PAGE 0390
ORIGINAL $ AMT.: $450,000.00
SUBORDINATION: NOT PLOTTABLE
DATED: 07/24/2014
BY: FARM CREDIT EAST, ACA, A CORPORATION, FORMERLY KNOWN AS FIRST PIONEER FARM CREDIT, ACA
RECORDED ON: 08/08/2014
RECORDED IN: DEED BOOK 106, PAGE 809

12. ELECTRIC DISTRIBUTION EASEMENT: NOT PLOTTABLE, MAP REFERENCED NOT PROVIDED IN REPORT
IN FAVOR OF: CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS, A DELAWARE PARTNERSHIP
RECORDED ON: 08/06/2014
RECORDED IN: DEED BOOK 106, PAGE 805

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ATC TOWER SERVICES, INC
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SUITE 133
CARY, NC 27551
PHONE: (919) 468-0145
COA: D-0204

REV.	DESCRIPTION	BY	DATE
0	ISSUED FOR COMMENT	DTS	12/07/16

ATC SITE NUMBER:
418914
ATC SITE NAME:
PALMER POND CT
SITE ADDRESS:
75 GALLUP ROAD
VOLUNTOWN CT 06484

SURVEY LOGO:	TECTONIC — Practical Solutions, Exceptional Service
	TECTONIC Engineering & Surveying Consultants P.C. 1279 Route 300 Newburgh, NY 12550 Phone: (845) 567-6656 Fax: (845) 567-8703 www.tectonicengineering.com
DRAWN BY:	MT
APPROVED BY:	TF
DATE DRAWN:	11/09/16
ATC JOB NO:	418914

EXISTING CONDITIONS

SHEET NUMBER:	REVISION:
V-102	0

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

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	AP	05/13/24

ATC SITE NUMBER:
418914
ATC SITE NAME:
PALMER POND CT CT
VERIZON SITE NAME:
PALMER POND CT
SITE ADDRESS:
75 GALLUP ROAD
VOLUNTOWN, CT 06484

SEAL:

FOR REFERENCE ONLY

verizon

ATC JOB NO:	14678893_G0
CUSTOMER ID:	PALMER POND CT
CUSTOMER #:	5000246909

GENERAL NOTES

SHEET NUMBER:	REVISION:
V-102	0

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SITE PLAN NOTES:

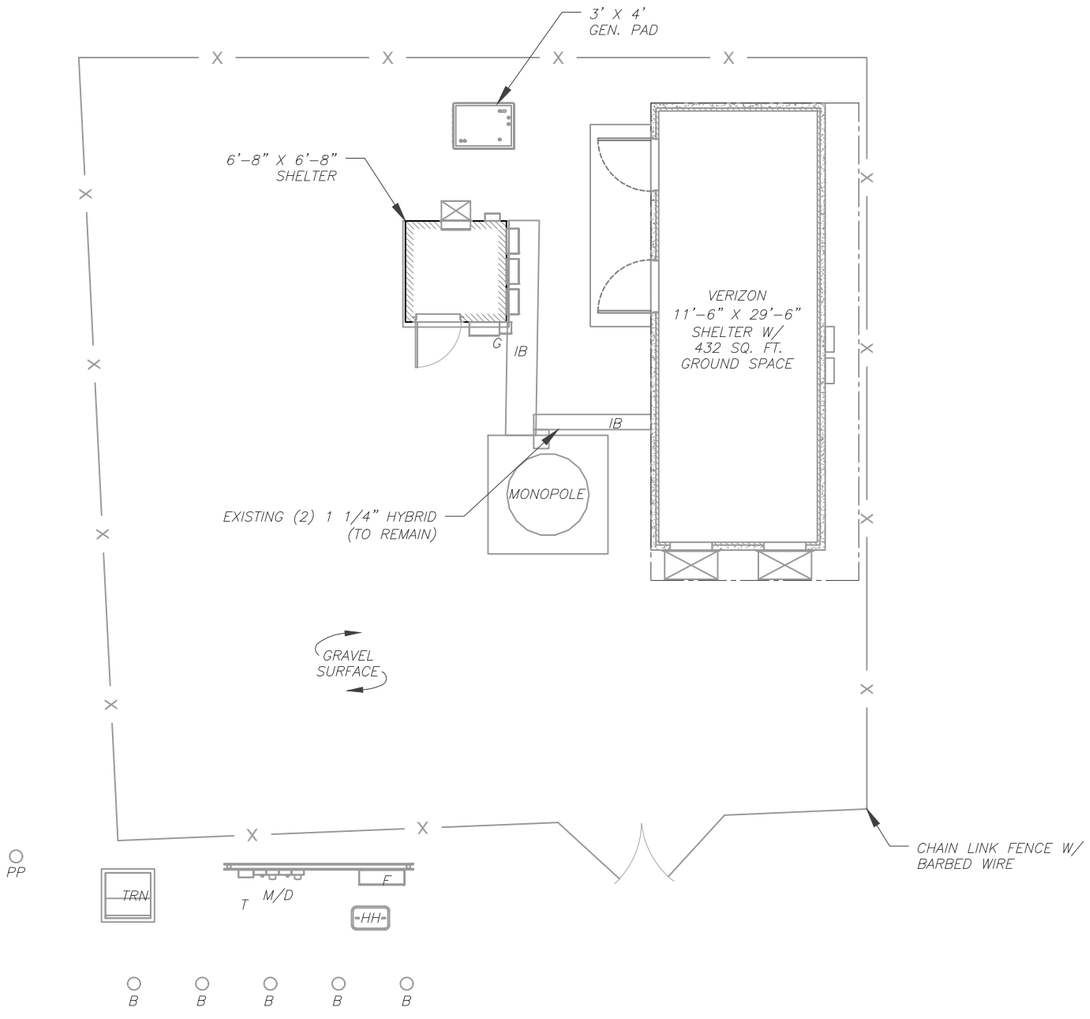
1. THIS SITE PLAN REPRESENTS THE BEST PRESENT KNOWLEDGE AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WORK FOR THIS PROJECT.

2. ICE BRIDGE, CABLE LADDER, COAX PORT, AND COAX CABLE ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL CONFIRM THE EXACT LOCATION OF ALL PROPOSED AND EXISTING EQUIPMENT AND STRUCTURES DEPICTED ON THIS PLAN. BEFORE UTILIZING EXISTING CABLE SUPPORTS, COAX PORTS, INSTALLING NEW PORTS OR ANY OTHER EQUIPMENT, CONTRACTOR SHALL VERIFY ALL ASPECTS OF THE COMPONENTS MEET THE ATC SPECIFICATIONS.

3. NO ELECTRICAL SCOPE IS INCLUDED IN THIS PROJECT.

LEGEND

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



1 DETAILED SITE PLAN

GRAPHIC SCALE

10 0 5 10

(IN FEET)
1 UNIT = 10 FEET

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PHONE: (919) 468-0112
PEC.0001553

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	AP	05/13/24

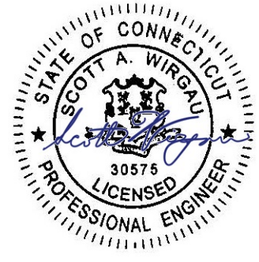
ATC SITE NUMBER:
418914

ATC SITE NAME:
PALMER POND CT CT

VERIZON SITE NAME:
PALMER POND CT

SITE ADDRESS:
75 GALLUP ROAD
VOLUNTOWN, CT 06484

SEAL:



Digitally Signed: 2024-05-13

verizon

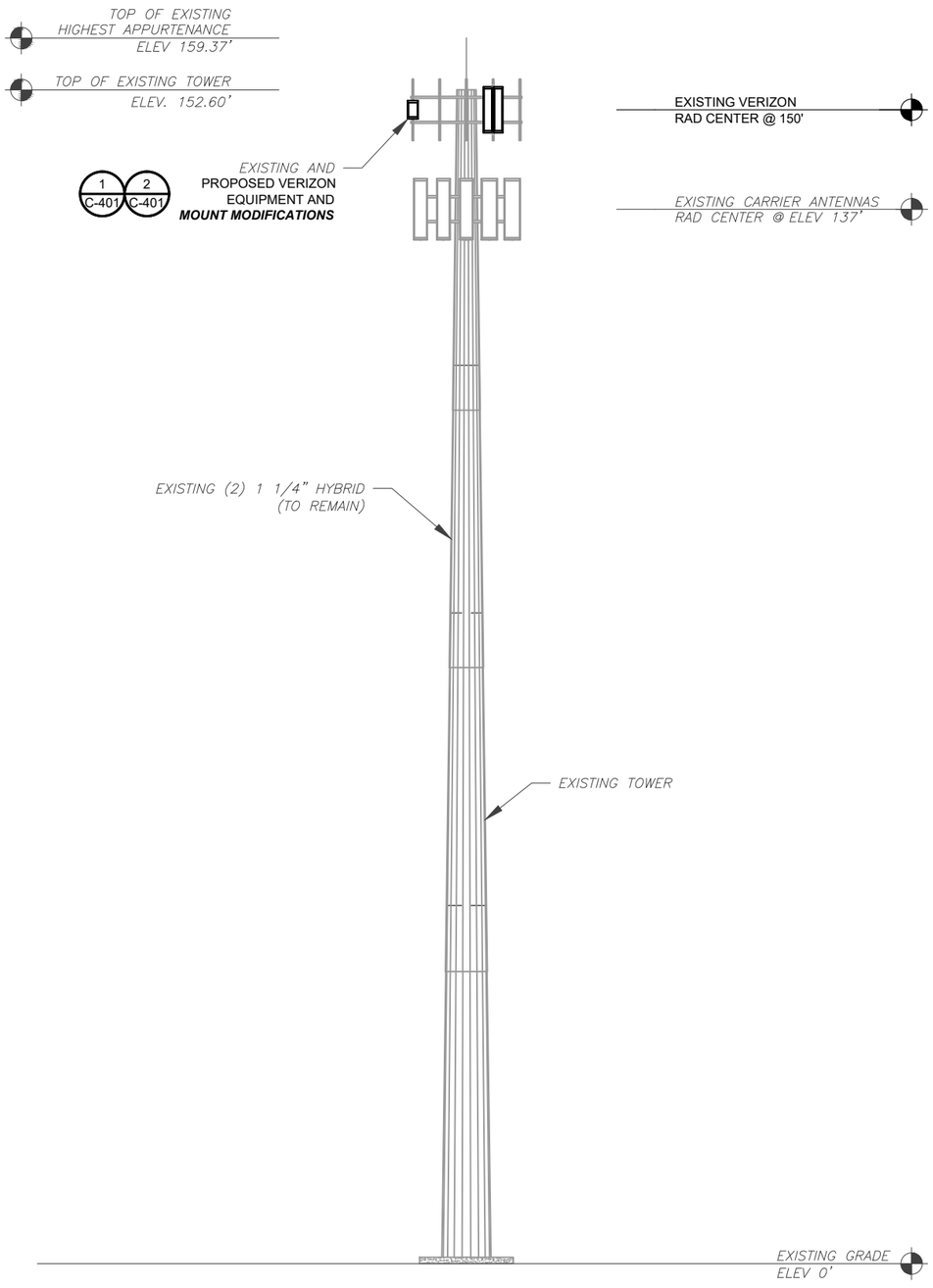
ATC JOB NO:	14678893_G0
CUSTOMER ID:	PALMER POND CT
CUSTOMER #:	5000246909

DETAILED SITE PLAN

SHEET NUMBER:	REVISION:
C-101	0

FAA REGISTERED HEIGHT: 150' AGL

PER MOUNT ANALYSIS COMPLETED BY COLLIERS ENGINEERING & DESIGN, DATED 03/29/24, THE EXISTING MOUNT MUST BE MODIFIED TO ADEQUATELY SUPPORT THE PROPOSED LOADING. THE MOUNT MODIFICATION DETAILED AT THE END OF THIS PLAN SET, MUST BE INSTALLED PRIOR TO THE INSTALLATION OF THE PROPOSED ANTENNAS AND OTHER EQUIPMENT.



1 TOWER ELEVATION
SCALE: N.T.S.

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

TOWER NOTE:

1. 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.
2. 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.
3. TOWER ELEVATION DEPICTION MAY NOT REFLECT ALL EQUIPMENT INCLUDED IN STRUCTURAL ANALYSIS. REFER TO STRUCTURAL ANALYSIS FOR FULL TOWER LOADING.

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

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	AP	05/13/24

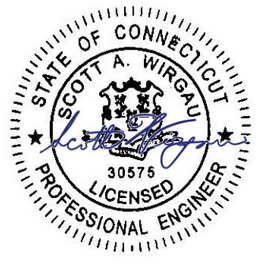
ATC SITE NUMBER:
418914

ATC SITE NAME:
PALMER POND CT CT

VERIZON SITE NAME:
PALMER POND CT

SITE ADDRESS:
75 GALLUP ROAD
VOLUNTOWN, CT 06484

SEAL:



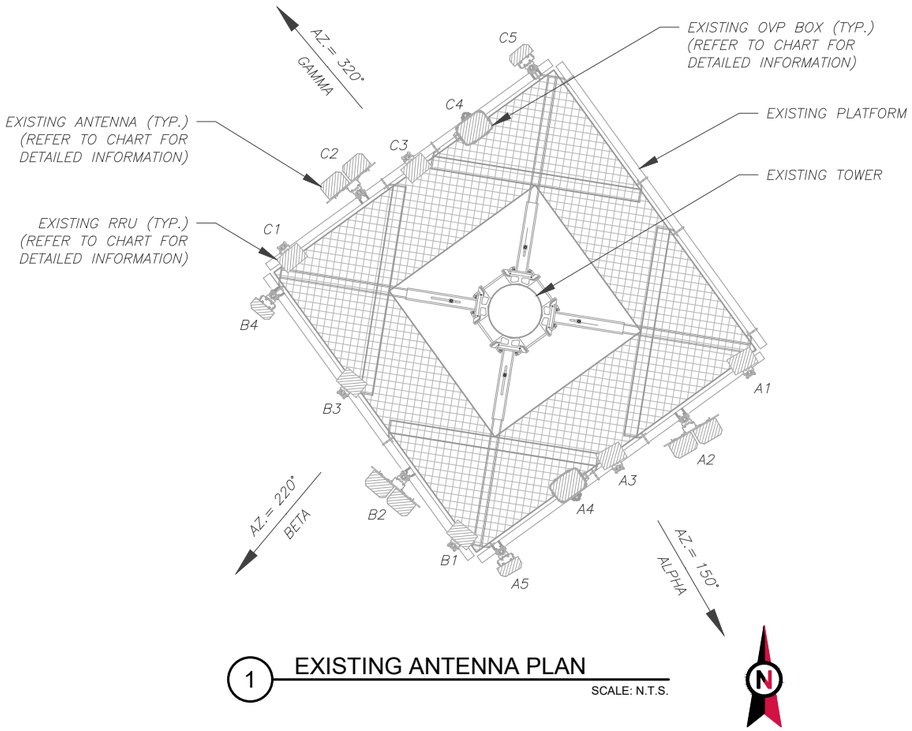
Digitally Signed: 2024-05-13

verizon

ATC JOB NO:	14678893_G0
CUSTOMER ID:	PALMER POND CT
CUSTOMER #:	5000246909

TOWER ELEVATION

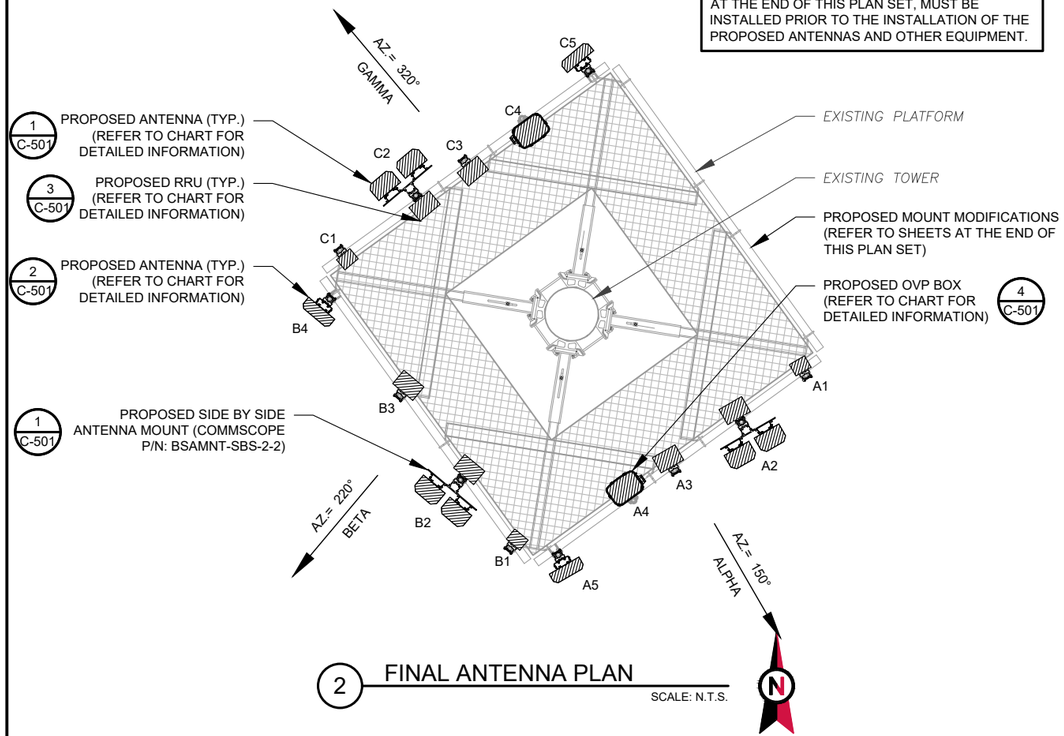
SHEET NUMBER:	REVISION:
C-201	0



1 EXISTING ANTENNA PLAN

SCALE: N.T.S.

PER MOUNT ANALYSIS COMPLETED BY COLLIERS ENGINEERING & DESIGN, DATED 03/29/24, THE EXISTING MOUNT MUST BE MODIFIED TO ADEQUATELY SUPPORT THE PROPOSED LOADING. THE MOUNT MODIFICATION DETAILED AT THE END OF THIS PLAN SET, MUST BE INSTALLED PRIOR TO THE INSTALLATION OF THE PROPOSED ANTENNAS AND OTHER EQUIPMENT.



2 FINAL ANTENNA PLAN

SCALE: N.T.S.

EXISTING ANTENNA SCHEDULE

LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	150'	150°	A1	–	–	–	B66A RRH4x45–4R	RMV
			A2	(2) SBNHH–1D65B	L700/LAWS	RMV	–	–
			A3	–	–	–	RRH2x60 700	RMV
			A4	–	–	–	–	–
			A5	BXA–70063–6CF–EDIN–X	–	RMV	–	–
BETA	150'	220°	B1	–	–	–	B66A RRH4x45–4R	RMV
			B2	(2) SBNHH–1D65B	L700/LAWS	RMV	–	–
			B3	–	–	–	RRH2x60 700	RMV
			B4	BXA–70063–6CF–EDIN–X	–	RMV	–	–
GAMMA	150'	320°	C1	–	–	–	B66A RRH4x45–4R	RMV
			C2	(2) SBNHH–1D65B	L700/LAWS	RMV	–	–
			C3	–	–	–	RRH2x60 700	RMV
			C4	–	–	–	–	–
			C5	BXA–70063–6CF–EDIN–X	–	RMV	–	–

NOTES

1. GC TO VERIFY THE FINAL RFDS MATCHES THE FINAL CONSTRUCTION DRAWINGS. GC TO NOTIFY ATC PM OF ANY DISCREPANCY PRIOR TO INSTALLING THE EQUIPMENT.
2. GC TO CAP ALL UNUSED PORTS.
3. GC TO CONFIRM SPACING OF PROPOSED EQUIP DOES NOT CAUSE TOWER CONFLICTS NOR IMPEDE TOWER CLIMBING PEGS.

STATUS ABBREVIATIONS

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

CABLE LENGTHS FOR JUMPERS

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

FINAL ANTENNA SCHEDULE

LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	150'	150°	A1	-	-	-	CBC78T-DS-43-2X	ADD
			A2	(2) JAHH-65B-R3B	L700/L850/L1900/LAWS/ 5G 850	ADD	RF 4439D-25A	ADD
			A3	-	-	-	RF4461D-13A	ADD
			A4	-	-	-	-	-
			A5	MT6413-77A	5G CBAND	ADD	-	-
BETA	150'	220°	B1	-	-	-	CBC78T-DS-43-2X	ADD
			B2	(2) JAHH-65B-R3B	L700/L850/L1900/LAWS/ 5G 850	ADD	RF 4439D-25A	ADD
			B3	-	-	-	RF4461D-13A	ADD
			B4	MT6413-77A	5G CBAND	ADD	-	-
GAMMA	150'	320°	C1	-	-	-	CBC78T-DS-43-2X	ADD
			C2	(2) JAHH-65B-R3B	L700/L850/L1900/LAWS/ 5G 850	ADD	RF 4439D-25A	ADD
			C3	-	-	-	RF4461D-13A	ADD
			C4	-	-	-	-	-
			C5	MT6413-77A	5G CBAND	ADD	-	-

EXISTING FIBER DISTRIBUTION / OVP BOX		EXISTING CABLING SUMMARY	
MODEL NUMBER	STATUS	CABLE QTY, SIZE, TYPE	STATUS
(2) DB–T1–6Z–12AB–0Z	RMV	(2) 1 1/4" HYBRID	RMN
–	–	–	–

FINAL FIBER DISTRIBUTION / OVP BOX		FINAL CABLING SUMMARY	
MODEL NUMBER	STATUS	CABLE QTY, SIZE, TYPE	STATUS
(2) RVZDC-3315-PF-48	ADD	(2) 1 1/4" HYBRID	RMN
-	-	-	-

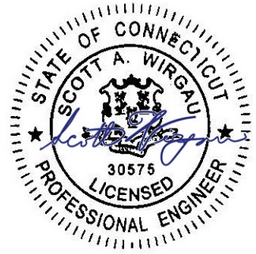
3 EQUIPMENT SCHEDULES

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

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	AP	05/13/24

ATC SITE NUMBER:
418914
ATC SITE NAME:
PALMER POND CT CT
VERIZON SITE NAME:
PALMER POND CT
SITE ADDRESS:
75 GALLUP ROAD
VOLUNTOWN, CT 06484

SEAL:



Digitally Signed: 2024-05-13

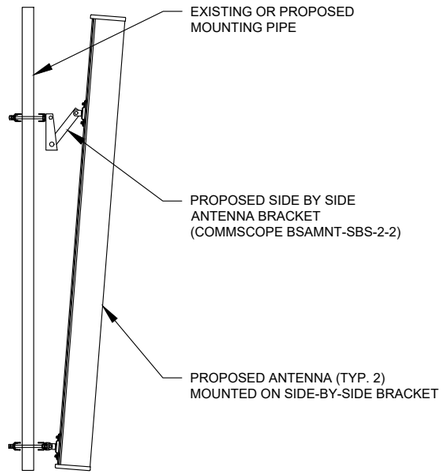
verizon

ATC JOB NO:	14678893_G0
CUSTOMER ID:	PALMER POND CT
CUSTOMER #:	5000246909

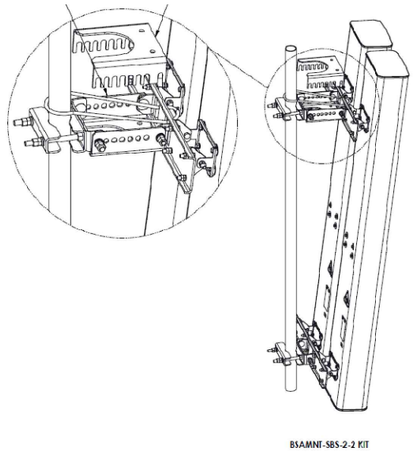
ANTENNA INFORMATION & SCHEDULE

SHEET NUMBER:	REVISION:
C-401	0

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



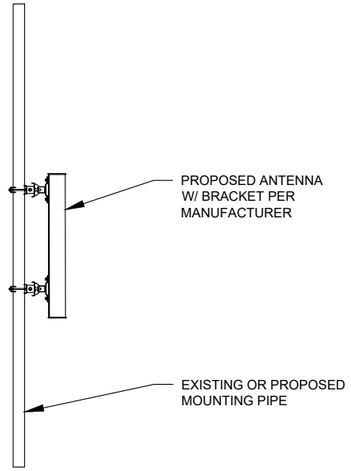
PROFILE VIEW



ISOMETRIC VIEW (BY MANUFACTURER)

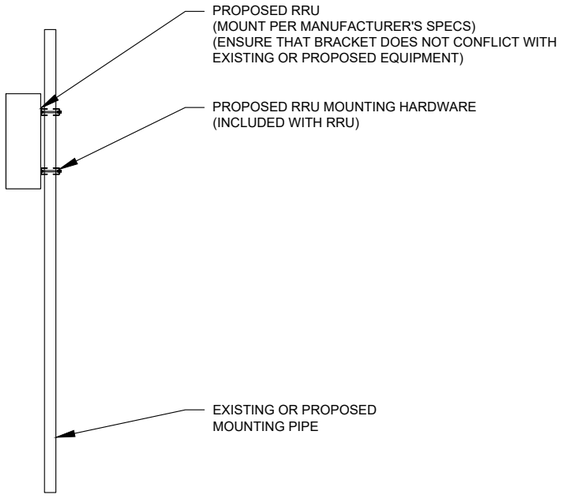
1 PROPOSED ANTENNA MOUNTING DETAIL - TYPICAL

SCALE: N.T.S.



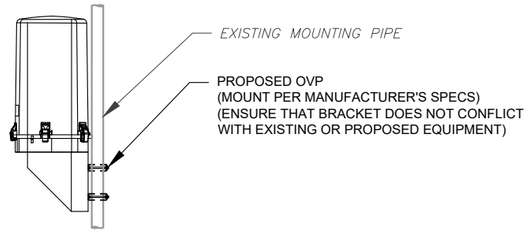
2 PROPOSED 5G ANTENNA MOUNTING DETAIL - TYPICAL

SCALE: N.T.S.



3 PROPOSED RRU MOUNTING DETAIL - TYPICAL

SCALE: N.T.S.



4 PROPOSED OVP MOUNTING DETAIL - TYPICAL

SCALE: N.T.S.

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

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	AP	05/13/24

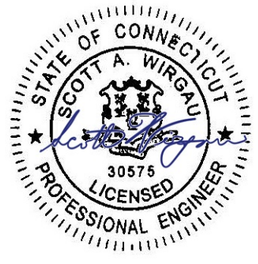
ATC SITE NUMBER:
418914

ATC SITE NAME:
PALMER POND CT CT

VERIZON SITE NAME:
PALMER POND CT

SITE ADDRESS:
75 GALLUP ROAD
VOLUNTOWN, CT 06484

SEAL:



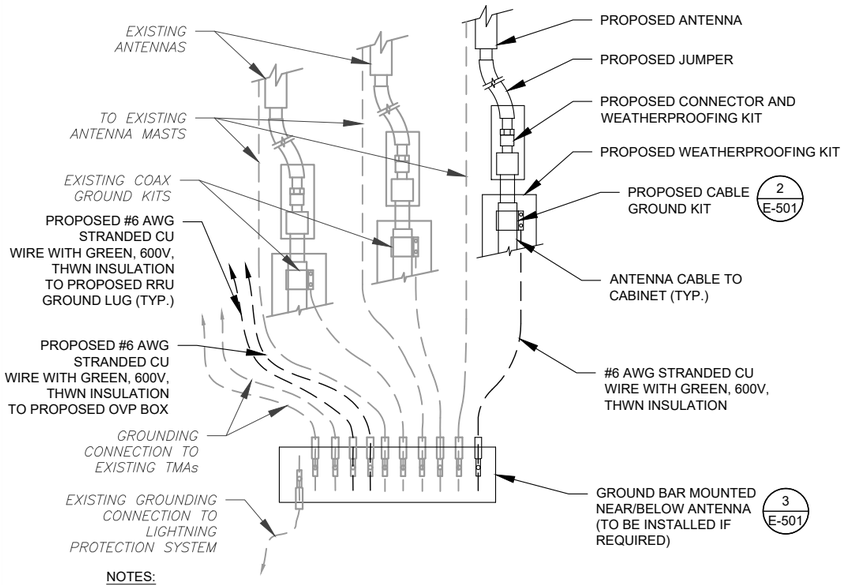
Digitally Signed: 2024-05-13

verizon

ATC JOB NO:	14678893_G0
CUSTOMER ID:	PALMER POND CT
CUSTOMER #:	5000246909

CONSTRUCTION DETAILS

SHEET NUMBER:	REVISION:
C-501	0

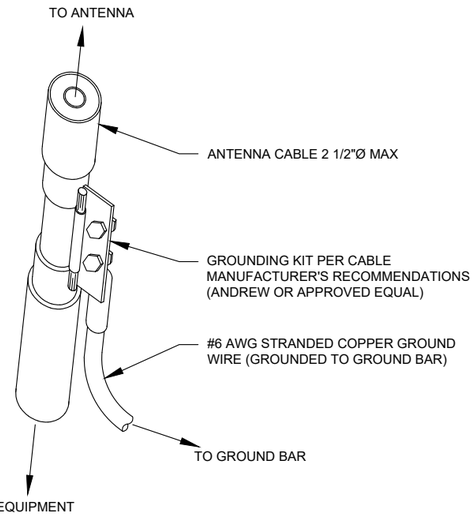


NOTES:

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

1 TYPICAL ANTENNA GROUNDING DIAGRAM

SCALE: N.T.S.

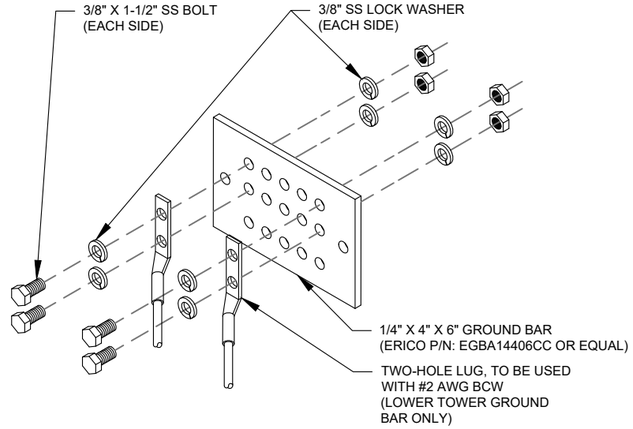


GROUND KIT NOTES:

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

2 CABLE GROUND KIT CONNECTION DETAIL

SCALE: N.T.S.



GROUND BAR NOTES:

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

3 TOWER GROUND BAR DETAIL

SCALE: N.T.S.

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

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	AP	05/13/24

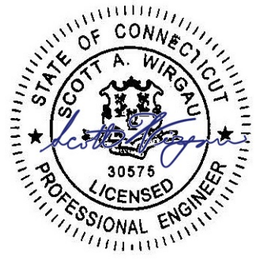
ATC SITE NUMBER:
418914

ATC SITE NAME:
PALMER POND CT CT

VERIZON SITE NAME:
PALMER POND CT

SITE ADDRESS:
75 GALLUP ROAD
VOLUNTOWN, CT 06484

SEAL:



Digitally Signed: 2024-05-13

verizon

ATC JOB NO:	14678893_G0
CUSTOMER ID:	PALMER POND CT
CUSTOMER #:	5000246909

GROUNDING DETAILS

SHEET NUMBER:	REVISION:
E-501	0

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

Post-Modification Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10218074
Colliers Engineering & Design Project #: 21777472A (Rev 1)

March 28, 2024

Site Information

Site ID:	*5000246909-VZW / PALMER POND CT*
Site Name:	*PALMER POND CT*
Carrier Name:	*Verizon Wireless*
Address:	*53 Gallup Rd* *Voluntown, Connecticut 06384* *New London County*
Latitude:	*41.536785°*
Longitude:	*-71.829229°*

Structure Information

Tower Type:	*Monopole*
Mount Type:	*13.42-Ft Platform*

FUZE ID # 16272100

Analysis Results

Platform: **87.2% Pass w/ Modifications***

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

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

Report Prepared By: David Anuka

Requirements:

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

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

Attachments:

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

1 MOUNT ANALYSIS

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

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-601	0

verizon

MOUNT MODIFICATION DRAWINGS
EXISTING 13.42' PLATFORM

TOWER OWNER: AMERICAN TOWER CORPORATION
TOWER OWNER SITE NUMBER: 418914

CARRIER SITE NAME: PALMER POND CT
CARRIER SITE NUMBER: 5000246909
FUZE ID: 16272100

53 GALLUP RD
VOLUNTOWN, CT 06384
NEW LONDON COUNTY

LATITUDE: 41.536785° N
LONGITUDE: 71.829229° W

DESIGN CRITERIA

WIND LOADS

BASIC WIND SPEED (3 SECOND GUST), V = 130 MPH
EXPOSURE CATEGORY C
TOPOGRAPHIC CATEGORY: 1
TOPOGRAPHY CONSIDERED: NO
MEAN BASE ELEVATION (AMSL) = 452.73'

ICE LOADS

ICE WIND SPEED (3 SECOND GUST), V = 50 MPH
ICE THICKNESS = 1.00 IN

SEISMIC LOADS

SEISMIC DESIGN CATEGORY B
SHORT TERM MCER GROUND MOTION, S_S = .188
LONG TERM MCER GROUND MOTION, S_1 = .053

PROJECT INFORMATION

APPLICANT/LESSEE

COMPANY: VERIZON WIRELESS

CLIENT REPRESENTATIVE

COMPANY: VERIZON WIRELESS

PROJECT MANAGER

COMPANY: COLLIERS ENGINEERING & DESIGN
CONTACT: PETER ALBANO
PHONE: 856.797.0412
E-MAIL: PETER.ALBANO@COLLIERSENG.COM

CONTRACTOR PMI REQUIREMENTS

PMI LOCATION: HTTPS://PMI.VZWSMART.COM
SMART TOOL PROJECT #: 10218074
VZW MDG #: 5000246909
ANALYSIS DATE: 3/28/2024

PMI REQUIREMENTS EMBEDDED WITHIN MOUNT MODIFICATION REPORT

SHEET INDEX

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

Colliers Engineering & Design
www.colliersengineering.com
Doing Business as MASER

verizon

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
811 Know what's below. Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

SCALE: AS SHOWN — JOB NUMBER: 21777472

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
-	-	-	-	-
-	-	-	-	-
1	3/28/2024	ISSUED FOR CONSTRUCTION	DA	DK
0	8/26/2021	ISSUED FOR CONSTRUCTION	SA	DK

STATE OF CONNECTICUT DEJIAN XU No. 33733 LICENSED PROFESSIONAL ENGINEER 03/29/2024
COLLIERS ENGINEERING & DESIGN CT, P.C. C.T. JPC.0000131

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

SITE NAME:
PALMER POND CT
5000246909
53 GALLUP RD
VOLUNTOWN, CT 06384
NEW LONDON COUNTY

MT. LAUREL
2000 Midlantic Drive, Suite 100
Mt. Laurel, NJ 08054
Phone: 856.797.0412

SHEET TITLE: TITLE SHEET
SHEET NUMBER: ST-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

BILL OF MATERIALS

SECTION 1 - VZWSMART KITS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
1	VZWSMART	VZWSMART-PLK7Q	4-SIDED COLLAR MOUNT ASSEMBLY		192	192
1	VZWSMART	VZWSMART-PLK5Q	4-SIDED KICKER KIT	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET SGN-1.	398	398
8	VZWSMART	VZWSMART-P40-238X096	96" LONG, PIPE 2 SCH40 (2.375"OD X 0.154" THK)		29	232

SECTION 2 - OTHER REQUIRED PARTS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
8	SITE PRO 1	SQCX4-K	CROSSOVER PLATTE KIT W/ SQUARE U-BOLTS AND STD. UBOLTS		11	88

SECTION 3 - REQUIRED SAFETY CLIMB PARTS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
1	PERFECT VISON	H42-0501-06	STANDOFF CLAMP BRACKET	OR EOR APPROVED EQUIVALENT	-	-
1	PERFECT VISION	PV-CMX-CG-BO	WIRE ROPE GUIDE	OR EOR APPROVED EQUIVALENT	-	-
					TOTAL:	910

NOTES:

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

VZWSMART KITS - APPROVED VENDORS

COMMSCOPE	
CONTACT	SALVADOR ANGUIANO
PHONE	(817) 304-7492
EMAIL	SALVADOR.ANGUIANO@COMMSCOPE.COM
WEBSITE	WWW.COMMSCOPE.COM

PERFECTVISION	
CONTACT	WIRELESS SALES
PHONE	(844) 887-6723
EMAIL	WWW.PERFECT-VISION.COM
WEBSITE	WIRELESSSALES@PERFECT-VISION.COM

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

METROSITE FABRICATORS, LLC	
CONTACT	KENT RAMEY
PHONE	(706) 335-7045 (O), (706) 982-9788 (M)
EMAIL	KENT@METROSITELLC.COM
WEBSITE	METROSITEFABRICATORS.COM

SABRE INDUSTRIES, INC.	
CONTACT	ANGIE WELCH
PHONE	(866) 428-6937
EMAIL	AKWELCH@SABREINDUSTRIES.COM
WEBSITE	WWW.SABRESITESOLUTIONS.COM

SHEET TITLE: BILL OF MATERIALS
SHEET NUMBER: SBOM-1

GENERAL NOTES

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

STRUCTURAL STEEL

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

CHANNELS, ANGLES, PLATES, ETC.	ASTM A36 (GR 36)
STEEL PIPE	ASTM A53 (GR 35)
BOLTS	ASTM A325
NUTS	ASTM A563
LOCK WASHERS	LOCKING STRUCTURAL GRADE

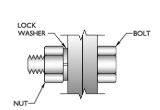
3. ALL SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE APPROVED IN WRITING BY THE ENGINEER. CONTRACTOR SHALL PROVIDE DOCUMENTATION TO ENGINEER FOR VERIFYING THE SUBSTITUTE IS SUITABLE FOR USE AND MEETS ORIGINAL DESIGN CRITERIA. DIFFERENCES FROM THE ORIGINAL DESIGN, INCLUDING MAINTENANCE, REPAIR AND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

BOLT SCHEDULE (IN.)

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

WORKABLE GAGES (IN.)

LEG	GAGE
4	2 1/2
3 1/2	2
3	1 3/4
2 1/2	1 3/8
2	1 1/8

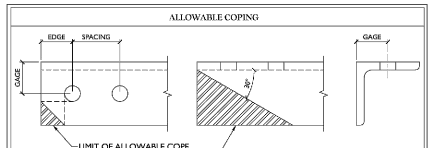


TYP. BOLT ASSEMBLY

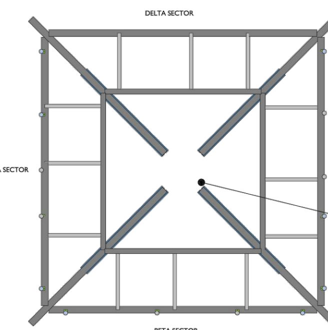
NOTES:

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

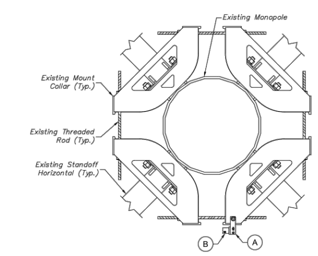
ALLOWABLE COPING



SHEET TITLE: GENERAL NOTES
SHEET NUMBER: SGN-1



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



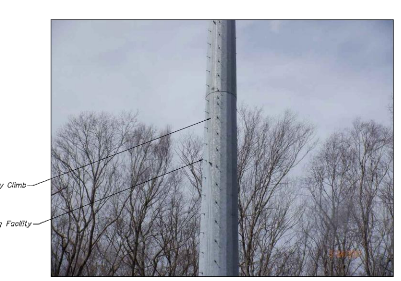
ITEM #	QTY	PART NUMBER	DESCRIPTIONS
A	1	H42-0501-06	STANDOFF CLAMP BRACKET (PERFECT VISION OR EOR APPROVED EQ.)
B	1	PVCMX-CG-BO	WIRE ROPE GUIDE (PERFECT VISION OR EOR APPROVED EQ.)

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

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

STRUCTURAL NOTES:

1. PER THE MOUNT MAPPING COMPLETED BY RKS DESIGN & ENGINEERING, LLC ON 3/24/2021, THE SAFETY CLIMB AND CLIMBING FACILITIES UP TO THE VERIZON MOUNT ELEVATION (150'-0") ARE IN GOOD CONDITION. COLLIERS ENGINEERING & DESIGN DOES NOT WARRANT THIS INFORMATION.
2. INSTALL SHALL NOT CAUSE HARM TO THE STRUCTURE, CLIMBING FACILITY, SAFETY CLIMB, OR ANY SYSTEM INSTALLED ON THE STRUCTURE. TIMELY NOTICE AND DOCUMENTATION SHALL BE PROVIDED BY CONTRACTORS TO THE EOR (OF STRUCTURAL DESIGN) IF AN OBSTRUCTION WAS REQUIRED TO MEET THE RF SYSTEM DESIGN REQUIREMENTS AND PERFORMANCES.



CLIMBING FACILITY PHOTO

SHEET TITLE: CLIMBING FACILITY DETAIL
SHEET NUMBER: SCF-1

1 MOUNT MODIFICATIONS

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 VERYIFY THEY HAVE THE MOST RECENT MOUNT ANALYSIS PRIOR TO CONTRUCTION.

SUPPLEMENTAL

SHEET NUMBER: R-602
REVISION: 0

LEGEND:

- PROPOSED
- RELOCATED
- EXISTING

TOTAL VERTICAL ENVELOPE:

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

MOUNT MODIFICATION SCHEDULE

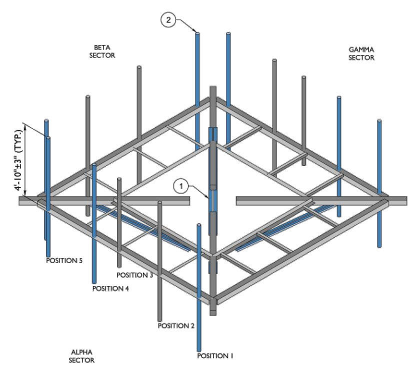
NO.	ELEVATION	QUANTITY	DESCRIPTION	NOTES
1	150'-0"	1	PROPOSED 4-SIDED KICKER KIT (PART #: VZWSMART-PLK5Q)	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET SGN-1. CONNECT OTHER END OF KICKER KIT TO MONOPOLE COLLAR MOUNT ASSEMBLY (PART #: VZWSMART-PLK7Q). SEE GENERAL NOTE B.
2		8	PROPOSED 96" LONG, PIPE 2 SCH40 (PART #: VZWSMART-P40-238X096)	CONNECT NEW MOUNT PIPE TO EXISTING HORIZONTAL WITH CROSSOVER PLATES (PART # SITE PRO 1 SQCX4-K). MOUNT PIPES 1,2 & 5 IN ALPHA & GAMMA SECTOR, MOUNT PIPES 1 & 4 IN BETA SECTOR.

GENERAL NOTES:

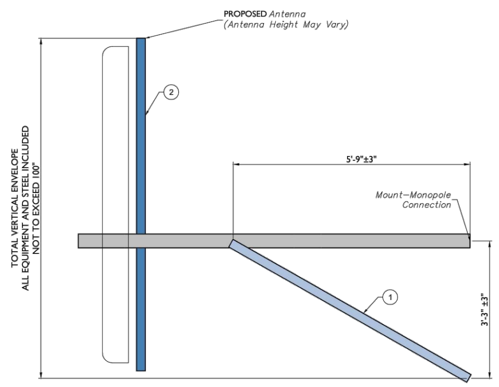
A. CONTRACTOR SHALL VERIFY THAT NEW & EXISTING STEEL IS FREE OF CORROSION. VISIBLE MINOR CORROSION SHALL BE WIRE BRUSHED CLEAN AND TREATED WITH COLD GALVANIZATION. REPORT ANY SIGNIFICANT CORROSION TO EOR

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

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



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



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

Colliers Engineering & Design
www.colliersengineering.com

Doing Business as MASER

verizon

STATE OF CONNECTICUT DEJIAN XU No. 33733 LICENSED PROFESSIONAL ENGINEER 03/29/2024
COLLIERS ENGINEERING & DESIGN CT, P.C.
C.T. JPC.0000131

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

SITE NAME:
PALMER POND CT
5000246909
53 GALLUP RD
VOLUNTOWN, CT 06384
NEW LONDON COUNTY

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

SHEET TITLE: MODIFICATION DETAILS
SHEET NUMBER: SS-1

MOUNT PHOTO 1

MOUNT PHOTO 2

MOUNT PHOTO 3

MOUNT PHOTO 4

Colliers Engineering & Design
www.colliersengineering.com

Doing Business as MASER

verizon

SITE NAME:
PALMER POND CT
5000246909
53 GALLUP RD
VOLUNTOWN, CT 06384
NEW LONDON COUNTY

SHEET TITLE: MOUNT PHOTOS
SHEET NUMBER: SS-2

1 MOUNT MODIFICATIONS

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 VERYIFY THEY HAVE THE MOST RECENT MOUNT ANALYSIS PRIOR TO CONTRUCTION.

SUPPLEMENTAL

SHEET NUMBER: R-603

REVISION: 0

EXHIBIT 2

The Assessor's office is responsible for the maintenance of records on the ownership of properties. Assessments are computed at 70% of the estimated market value of real property at the time of the last revaluation which was 2020.

Voluntown Town Hall

115 Main Street, Voluntown CT

Information on the Property Records for the Municipality of Voluntown was last updated on 5/13/2024.

Parcel Information

Location:	53 GALLUP RD	Property Use:	Residential	Primary Use:	Residential
Unique ID:	RP-01523	Map Block Lot:	014 004-00 0053	Acres:	200.0000
490 Acres:	198.16	Zone:	RD	Volume / Page:	0111/0285
Developers Map / Lot:		Census:	7081		

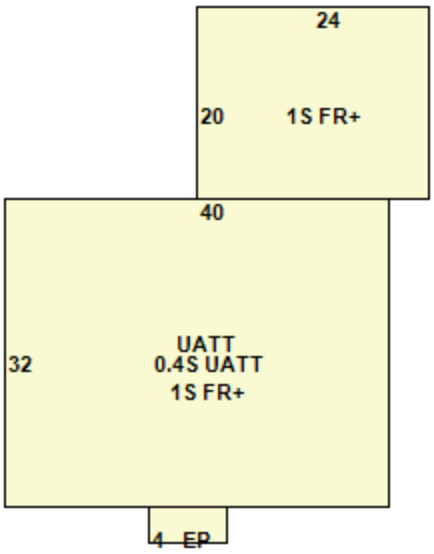
Value Information

	Appraised Value	Assessed Value
Land	590,030	100,930
Buildings	165,120	115,580
Detached Outbuildings	82,230	57,560
Total	837,380	274,070

Owner's Information

Owner's Data
GALLUP BYRON 150 GALLUP RD VOLUNTOWN, CT 06384

Building 1



Building Use:	Single Family	Style:	Colonial	Living Area:	1,760
Stories:	2.00	Construction:	Wood Frame	Year Built:	1750
Total Rooms:	10	Bedrooms:	2	Full Baths:	1

Half Baths:	1	Fireplaces:	0	Heating:	Hot Water
Fuel:	Oil	Cooling Percent:	0	Basement Area:	1,760
Basement Finished Area:	0	Basement Garages:	0	Roof Material:	Asphalt
Siding:	Vinyl Siding	Units:			

Special Features

Fireplace	1
Generator	1

Attached Components

Type:	Year Built:	Area:
Unfinished Attic	1750	1,280
Unfinished Attic	1750	1,280
Enclosed Porch	1750	32

Detached Outbuildings

Type:	Year Built:	Length:	Width:	Area:
1 Story Barn	1960	24.00	90.00	2,160
Pole Barn	1960	32.00	66.00	2,112
Pole Barn	0000	0.00	0.00	1,700
Pole Barn	1960	32.00	32.00	1,024
Milk House	1960	0.00	0.00	1,700
Frame Garage	1960	18.00	36.00	648
Frame Shed	2000	10.00	8.00	80
Frame Shed	1960	12.00	12.00	144

Type:	Year Built:	Length:	Width:	Area:
Lean To Shed	1960	24.00	240.00	5,760

Owner History - Sales

Owner Name	Volume	Page	Sale Date	Deed Type	Sale Price
GALLUP BYRON	0111	0285	04/17/2017		$367,000
GALLUP BYRON	0109	0332	04/04/2016		$0
GALLUP BENJAMIN & BYRON	0025	0195			$0

Building Permits

Permit Number	Permit Type	Date Opened	Reason
ELEC-23-12	Electrical	04/10/2023	WIRE A/C CONDENSER
HVAC-23-6	Air Conditioning	04/10/2023	MITSUBISHI MINI SPLIT - 1 OUTDOOR CONDENSER, 2 INDOOR WALL UNITS
HVAC-23-1	Fuel Tank	02/14/2023	EMERGENCY INSTALL OT 275V UPRIGHT OIL TANK PACKAGE
HVAC-22-4	Boiler	06/09/2022	INSTALL WEIL-MCLAIN WTGO3 BOILER PACKAGE WITH BECKETT BURNER
4450	Generator	09/22/2020	INSTALL A 20KW PROPANE STAND BY GENERATOR AT REAR OF HOUSE
4322	Electrical	01/08/2020	ELECTRICAL REPAIRS AND 200 AMP OVERHEAD SERVICE DUE TO FIRE DAMAGE
4315	Repair	01/02/2020	REPAIR FIRE DAMAGE, SIDING, INSULATION AND ELECTRICAL
3991	Perrmit	10/17/2017	MAKE REPAIRS TO CELL TOWER
3471	Commercial	05/13/2014	POUR SLAD 12X30 PREFAB BLDG PROPANE BACK UP GEN 12 ANTENNA'S
3134	Electrical	05/18/2011	CHANGE METER SOCKET
3069	Roof	10/27/2010	NEW ROOF
2830	Unknown	08/18/2008	REPARING BARN

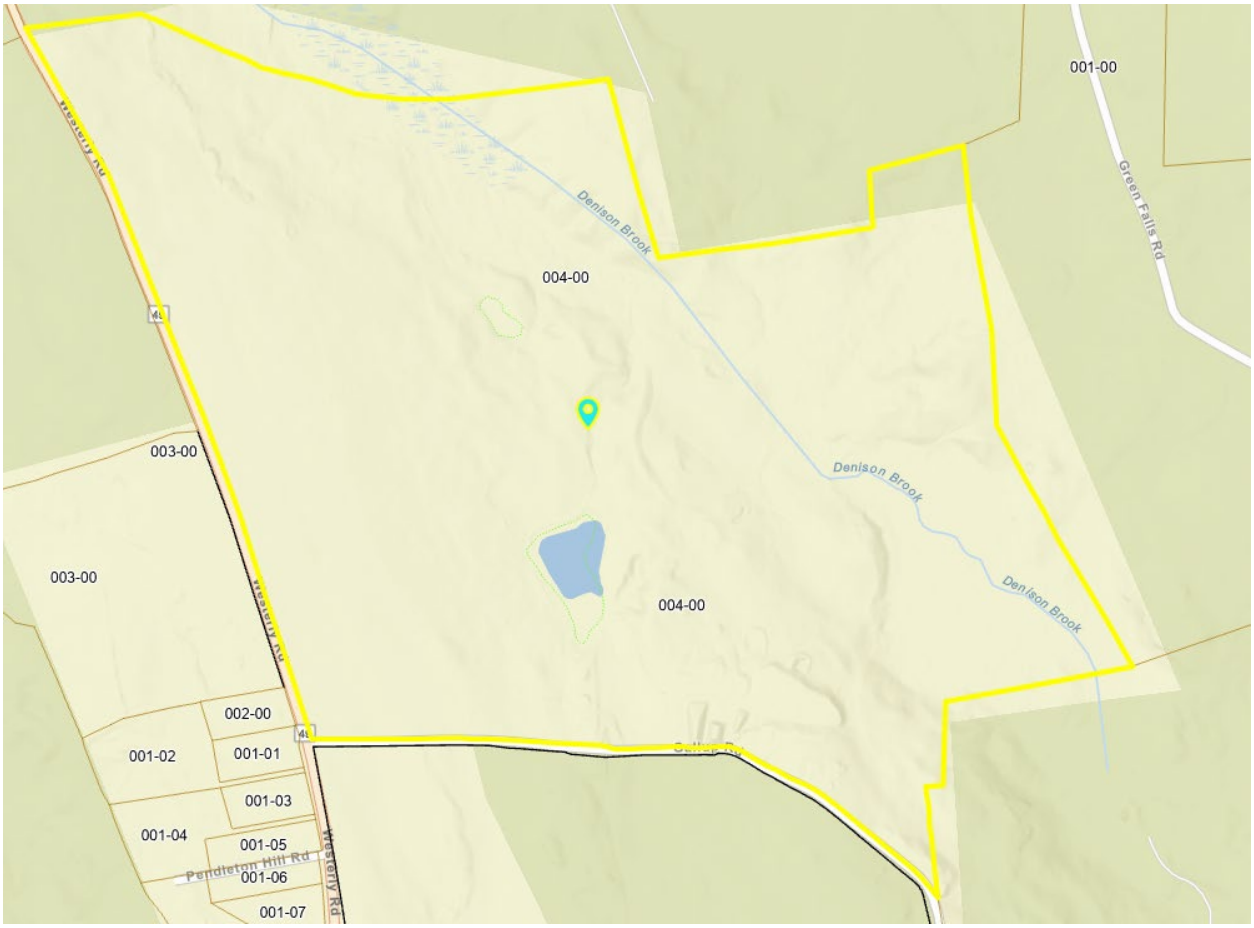

001-00
Green Falls Rd
Denison Brook
004-00
003-00
Denison Brook
Denison Brook
003-00
004-00
002-00
001-02
001-01
001-03
001-04
001-05
Pendleton Hill Rd
001-06
001-07

EXHIBIT 3

AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure	:	151 ft Monopole
ATC Asset Name	:	PALMER POND CT CT
ATC Asset Number	:	418914
Engineering Number	:	14678893_C3_04
Proposed Carrier	:	VERIZON WIRELESS
Carrier Site Name	:	PALMER POND CT
Carrier Site Number	:	5000246909
Site Location	:	75 Gallup Road Voluntown, CT 06484 41.5367° N, 71.8294° W
County	:	New London
Date	:	April 22, 2024
Max Usage	:	26%
Analysis Result	:	Pass

COA: PEC.0001553

Table of Contents

Introduction 3

Supporting Documents 3

Analysis 3

Conclusion 3

Structure Usages 4

Maximum Reactions 4

Tower Loading 5

Standard Conditions ..... Attached

Calculations ..... Attached

Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 151 ft Monopole tower to reflect the change in loading by VERIZON WIRELESS.

Supporting Documents

Tower:	EEI Job #17125 Rev. 1, dated February 27, 2014
Foundation:	EEI Job #17125 Rev. 1, dated February 19, 2014
Geotechnical:	DET Job #2013.13, dated November 29, 2013

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:	C
Risk Category:	II
Topographic Factor Procedure:	Method 1
Topographic Category:	1
Spectral Response:	Ss = 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 reach out to your American Tower contact. If you do not have an American Tower contact and have an Engineering question, please contact **Engineering@americantower.com** Please include the American Tower asset name, asset number, and engineering number in the subject line for any questions.

Structure Usages

Structural Component	Usage	Control	Result
Pole Shaft	26.5%	1.2D + 1.0W	Pass
Serviceability Usage	10.7%	1.0D + 1.0W	Pass
Base Plate @ 0.0 ft	24.0%	Rods	Pass
Mat & Pier	24.8%	Flexure [Steel (Pier)]	Pass

Maximum Reactions

Foundation	Moment (k-ft)	Axial (k)	Shear (k)
Monopole Base	4,175.5	81.7	39.6

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

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

VERIZON WIRELESS Final Loading

Elev (ft)	Qty	Equipment	Lines
153.0	1	Unused Reserve (20516.94 sqin)	-
151.0	-	-	(2) 1 1/4" Hybriflex Cable
150.0	2	Raycap RVZDC-3315-PF-48	(2) 1 1/4" Hybriflex Cable
	3	Commscope CBC78T-DS-43-2X	
	3	Samsung B2/B66A RRH ORAN (RF 4439d-25A)	
	3	Samsung MT6413-77A	
	3	Samsung RF4461d-13A	
	6	Commscope JAHH-65B-R3B	
149.0	1	Square Platform with Handrails	-
148.0	4	Mount Reinforcement	-

Install proposed lines inside the pole shaft.

Other Existing/Reserved Loading

Elev (ft)	Qty	Equipment	Lines	Carrier
137.0	1	Raycap DC9-48-60-24-8C-EV (Enclosure)	(1) 0.39" (10mm) Fiber Trunk (3) 0.92" (23.4mm) Cable (2) 2 1/2" conduit	AT&T MOBILITY
	3	CCI DMP65R-BU8D		
	3	CCI TPA65R-BU8A		
	3	Ericsson RRUS 4449 B5, B12		
	3	Ericsson RRUS 4478 B14		
	3	Ericsson Radio 8843 - B2 + B66A		
	3	Light Sector Frame		

(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.

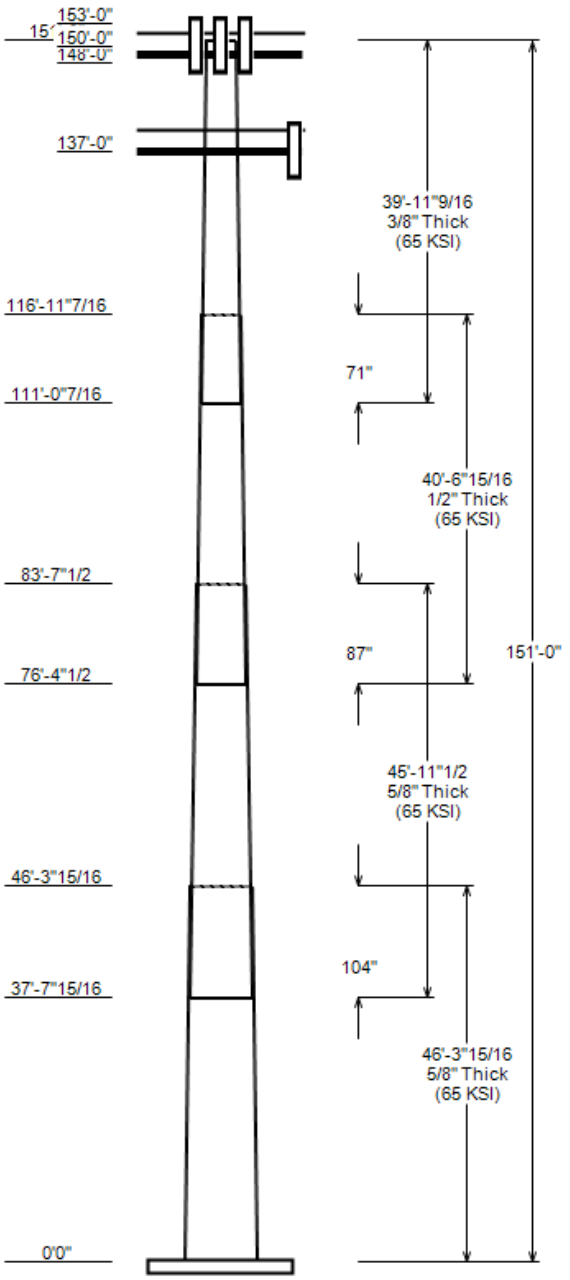
All assets of American Tower Corporation, its affiliates, and subsidiaries (collectively "American Tower") are inspected at regular intervals. Based upon these inspections and in the absence of information to the contrary, American Tower assumes that all structures were constructed in accordance with 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:**	C	**S_s:** 0.187	**S_1:** 0.053
Topo Category:	1	**Topo Factor:**	Method 1	**Topo Feature:**	
Structure Height:	151 ft	**Base Elevation:**	0.00 ft	**Structure Type:**	Taper
Base Diameter:	76 in	**Base Rotation:**	0°	**Taper:**	0.3250 (in/ft)



POLE SECTION PROPERTIES

Section	Length (ft)	Flat Diameter (in) Top	Flat Diameter (in) Bottom	Thick (in)	Joint Type	Joint Length (in)	Pole Shape	Yield Strength (ksi)
1	46.330	60.94	76.00	0.625		0.000	18 Sides	65
2	45.960	50.06	65.00	0.625	Slip Joint	104.000	18 Sides	65
3	40.580	40.22	53.42	0.500	Slip Joint	87.000	18 Sides	65
4	39.963	29.90	42.89	0.375	Slip Joint	71.000	18 Sides	65

DISCRETE APPURTENANCE

Elev (ft)	Description
153.0	(1) Unused Reserve (20318.22 sqin)
153.0	(1) Unused Reserve (20516.94 sqin)
150.0	(3) Commscope CBC78T-DS-43-2X
150.0	(3) Samsung RF4461d-13A
150.0	(3) Samsung B2/B66A RRH ORAN (RF 4
150.0	(2) Raycap RVZDC-3315-PF-48
150.0	(3) Samsung MT6413-77A
150.0	(6) Commscope JAHH-65B-R3B
149.0	(1) Generic Square Platform with H
148.0	(4) Generic Mount Reinforcement
137.0	(3) Ericsson Radio 8843 - B2 + B66
137.0	(3) Ericsson RRUS 4478 B14
137.0	(3) Ericsson RRUS 4449 B5, B12
137.0	(1) Raycap DC9-48-60-24-8C-EV (Enc
137.0	(3) CCI DMP65R-BU8D
137.0	(3) Generic Flat Light Sector Fram
137.0	(3) CCI TPA65R-BU8A

LINEAR APPURTENANCE

Elev To (ft)	Description
151.0	(2) 1 1/4" Hybriflex Cable
150.0	(2) 1 1/4" Hybriflex Cable
137.0	(2) 2 1/2" conduit
137.0	(3) 0.92" (23.4mm) Cable
137.0	(1) 0.39" (10mm) Fiber Trunk

GLOBAL BASE REACTIONS

Load Case	Moment (kip-ft)	Axial (kip)	Shear (kip)
1.2D + 1.0W	4175.48	81.75	39.58
0.9D + 1.0W	4158.69	61.31	39.57
1.2D + 1.0Di + 1.0Wi	1050.78	99.79	10.09
1.2D + 1.0Ev + 1.0Eh	309.89	81.25	2.76
0.9D - 1.0Ev + 1.0Eh	308.43	56.36	2.76
1.0D + 1.0W	844.91	68.14	8.03

ANALYSIS PARAMETERS

Location:	New London County,CT	**Height:**	151 ft
Type and Shape:	Taper, 18 Sides	**Base Diameter:**	76.00 in
Manufacturer:	EEI	**Top Diameter:**	29.90 in
K_d (non-service):	0.95	**Taper:**	0.3250 in/ft
K_e:	0.99	**Rotation:**	0.000º

ICE & WIND PARAMETERS

Risk Category:	II	**Design Wind Speed:**	126 mph
Exposure Category:	C	**Design Wind Speed w/ Ice:**	50 mph
Topo Factor Procedure:	Method 1	**Design Ice Thickness:**	1.00 in
Topographic Category:	1	**Service Wind Speed:**	60 mph
Crest Height:	0 ft	**HMSL:**	402.00 ft

SEISMIC PARAMETERS

Analysis Method:	Equivalent Lateral Force Method				
Site Class:	D - Stiff Soil		**Period Based on Rayleigh Method (sec):**		1.40
T_L (sec):	6	**P:**	1	**$C_{s:}$**	0.040
$S_{s:}$	0.187	**$S_{1:}$**	0.053	**C_s Max:**	0.040
$F_{a:}$	1.600	**$F_{v:}$**	2.400	**C_s Min:**	0.030
$S_{ds:}$	0.199	**$S_{d1:}$**	0.085		

LOAD CASES

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

SHAFT SECTION PROPERTIES

Section	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Joint Len (in)	Weight (lb)	Bottom Dia (in)	Bottom Elev (ft)	Bottom Area (in²)	Bottom Ix (in⁴)	Bottom W/t Ratio	Bottom D/t Ratio	Top Dia (in)	Top Elev (ft)	Top Area (in²)	Top Ix (in⁴)	Top W/t Ratio	Top D/t Ratio	Taper (in/ft)
1-18	46.33	0.6250	65		0.00	21,216	76.00	0.000	149.52	107,326.	20.03	121.60	60.94	46.33	119.64	54,978.	15.78	97.50	0.3252
2-18	45.96	0.6250	65	Slip	104.00	17,654	65.00	37.660	127.71	66,870.9	16.93	104.00	50.06	83.62	98.06	30,274.	12.71	80.09	0.3252
3-18	40.58	0.5000	65	Slip	87.00	10,150	53.42	76.370	83.97	29,707.6	17.43	106.83	40.22	116.95	63.03	12,564.	12.77	80.44	0.3252
4-18	39.96	0.3750	65	Slip	71.00	5,830	42.89	111.037	50.61	11,559.3	18.76	114.38	29.90	151.00	35.14	3,870.0	12.65	79.73	0.3252
			Total Shaft Weight			**54,850**													

DISCRETE APPURTENANCE PROPERTIES

Attach Elev (ft)	Description	Qty	Ka	Vert Ecc (ft)	No Ice Weight (lb)	No Ice EPAa (sf)	No Ice Orientation Factor	Ice Weight (lb)	Ice EPAa (sf)	Ice Orientation Factor
153.00	Unused Reserve (20516.94 sqin)	1	0.75	0.000	1398.20	142.479	0.90	2049.13	208.809	0.90
150.00	Samsung B2/B66A RRH ORAN (RF 4	3	0.75	0.000	74.70	1.875	0.50	117.38	2.476	0.50
150.00	Samsung MT6413-77A	3	0.75	0.000	57.30	3.805	0.61	114.00	4.692	0.61
150.00	Commscope JAHH-65B-R3B	6	0.75	0.000	60.60	9.113	0.69	195.70	10.966	0.69
150.00	Samsung RF4461d-13A	3	0.75	0.000	79.10	1.875	0.50	122.16	2.478	0.50
150.00	Raycap RVZDC-3315-PF-48	2	0.75	0.000	21.40	2.512	0.67	74.60	3.207	0.67
150.00	Commscope CBC78T-DS-43-2X	3	0.75	0.000	20.70	0.552	0.50	35.45	0.891	0.50
149.00	Generic Square Platform with H	1	1.00	0.000	3790.00	49.300	1.00	6750.26	106.143	1.00
148.00	Generic Mount Reinforcement	4	0.75	0.000	200.00	4.980	0.67	328.98	8.293	0.67
137.00	CCI DMP65R-BU8D	3	0.80	0.000	95.70	17.871	0.63	320.54	20.309	0.63
137.00	Generic Flat Light Sector Fram	3	0.75	0.000	800.00	17.900	0.75	1537.36	27.882	0.75
137.00	Ericsson Radio 8843 - B2 + B66	3	0.80	0.000	71.90	1.650	0.50	112.66	2.210	0.50
137.00	Ericsson RRUS 4478 B14	3	0.80	0.000	59.90	1.842	0.50	96.48	2.435	0.50
137.00	Raycap DC9-48-60-24-8C-EV (Enc	1	0.80	0.000	18.50	2.676	1.00	73.92	3.430	1.00
137.00	Ericsson RRUS 4449 B5, B12	3	0.80	0.000	71.00	1.969	0.50	113.63	2.586	0.50
137.00	CCI TPA65R-BU8A	3	0.80	0.000	108.00	21.356	0.61	369.45	23.816	0.61
Totals	**Row Count: 16**	**45**			**10,728.00**			**20,329.96**		

LINEAR APPURTENANCE PROPERTIES

Load Case Azimuth (deg): 0.00

Elev From (ft)	Elev To (ft)	Qty	Description	Diameter (in)	Weight (lb/ft)	Flat	Max/ Row	Distance Between Rows(in)	Distance Between Cols(in)	Azimuth (deg)	Distance From Face (in)	Exposed To Wind	Carrier
0.00	151.00	2	1 1/4" Hybriflex Cabl	1.54	1	N	0	0	0	0	0	N	VERIZON WIRELESS
0.00	150.00	2	1 1/4" Hybriflex Cabl	1.54	1	N	0	0	0	0	0	N	VERIZON WIRELESS
0.00	137.00	3	0.92" (23.4mm) Cable	0.92	0.89	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	137.00	2	2 1/2" conduit	2.88	5.79	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	137.00	1	0.39" (10mm) Fiber Tr	0.39	0.06	N	0	0	0	0	0	N	AT&T MOBILITY

SEGMENT PROPERTIES

Seg Top Elev (ft)	Description *(Max Length: 5 ft)*	Thick (in)	Flat Dia (in)	Area (in²)	Ix (in⁴)	W/t Ratio	D/t Ratio	F'y (ksi)	S (in³)	Z (in³)	Weight (lb)
0.00		0.6250	76.000	149.520	107,326.40	20.03	121.60	77.8	2781.5	0.0	0.0
5.00		0.6250	74.374	146.295	100,529.90	19.57	119.00	78.4	2662.3	0.0	2,516.5
10.00		0.6250	72.748	143.069	94,026.70	19.11	116.40	78.9	2545.7	0.0	2,461.6
15.00		0.6250	71.122	139.844	87,810.10	18.65	113.80	79.5	2431.8	0.0	2,406.7
20.00		0.6250	69.497	136.619	81,873.80	18.20	111.19	80	2320.4	0.0	2,351.9
25.00		0.6250	67.871	133.394	76,211.20	17.74	108.59	80.5	2211.7	0.0	2,297.0
30.00		0.6250	66.245	130.169	70,815.90	17.28	105.99	81.1	2105.5	0.0	2,242.1
35.00		0.6250	64.619	126.944	65,681.50	16.82	103.39	81.6	2002.0	0.0	2,187.2
37.66	Bot - Section 2	0.6250	63.753	125.226	63,050.80	16.58	102.00	81.9	1947.9	0.0	1,142.7
40.00		0.6250	62.993	123.718	60,801.50	16.36	100.79	82.2	1901.1	0.0	1,999.1
45.00		0.6250	61.367	120.493	56,169.30	15.90	98.19	82.6	1802.8	0.0	4,197.2
46.33	Top - Section 1	0.6250	62.185	122.115	58,467.90	16.13	99.50	82.4	1851.9	0.0	1,098.0
50.00		0.6250	60.992	119.748	55,133.10	15.80	97.59	82.6	1780.4	0.0	1,510.2
55.00		0.6250	59.366	116.523	50,797.30	15.34	94.99	82.6	1685.3	0.0	2,009.9
60.00		0.6250	57.740	113.297	46,695.00	14.88	92.38	82.6	1592.9	0.0	1,955.1

SEGMENT PROPERTIES

Seg Top Elev (ft)	Description	(Max Length: 5 ft)	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	F'y (ksi)	S (in^3)	Z (in^3)	Weight (lb)
65.00			0.6250	56.114	110.072	42,819.70	14.42	89.78	82.6	1503.0	0.0	1,900.2
70.00			0.6250	54.488	106.847	39,165.00	13.96	87.18	82.6	1415.7	0.0	1,845.3
75.00			0.6250	52.862	103.622	35,724.40	13.50	84.58	82.6	1331.1	0.0	1,790.4
76.37	Bot - Section 3		0.6250	52.416	102.736	34,816.00	13.38	83.87	82.6	1308.3	0.0	482.2
80.00			0.6250	51.236	100.397	32,491.50	13.04	81.98	82.6	1249.0	0.0	2,278.2
83.62	Top - Section 2		0.5000	51.058	80.233	25,911.30	16.60	102.12	81.9	999.6	0.0	2,224.2
85.00			0.5000	50.611	79.523	25,229.10	16.44	101.22	82.1	981.8	0.0	374.2
90.00			0.5000	48.985	76.942	22,852.20	15.86	97.97	82.6	918.9	0.0	1,331.0
95.00			0.5000	47.359	74.362	20,629.50	15.29	94.72	82.6	858.0	0.0	1,287.1
100.00			0.5000	45.733	71.782	18,555.80	14.72	91.47	82.6	799.2	0.0	1,243.2
105.00			0.5000	44.107	69.202	16,626.00	14.14	88.21	82.6	742.4	0.0	1,199.3
110.00			0.5000	42.481	66.622	14,834.80	13.57	84.96	82.6	687.8	0.0	1,155.4
111.04	Bot - Section 4		0.5000	42.144	66.087	14,480.30	13.45	84.29	82.6	676.7	0.0	234.1
115.00			0.5000	40.855	64.042	13,177.10	13.00	81.71	82.6	635.3	0.0	1,549.6
116.95	Top - Section 3		0.3750	40.970	48.317	10,060.10	17.85	109.25	80.4	483.6	0.0	746.0
120.00			0.3750	39.980	47.138	9,341.40	17.39	106.61	80.9	460.2	0.0	494.8
125.00			0.3750	38.354	45.203	8,237.50	16.62	102.28	81.8	423.0	0.0	785.5
130.00			0.3750	36.728	43.267	7,224.30	15.86	97.94	82.6	387.4	0.0	752.6
135.00			0.3750	35.102	41.332	6,297.70	15.09	93.61	82.6	353.4	0.0	719.7
137.00			0.3750	34.452	40.558	5,950.40	14.79	91.87	82.6	340.2	0.0	278.7
140.00			0.3750	33.476	39.397	5,453.90	14.33	89.27	82.6	320.9	0.0	408.1
145.00			0.3750	31.850	37.462	4,689.10	13.57	84.93	82.6	290.0	0.0	653.8
148.00			0.3750	30.875	36.301	4,266.50	13.11	82.33	82.6	272.2	0.0	376.5
149.00			0.3750	30.550	35.914	4,131.50	12.95	81.47	82.6	266.4	0.0	122.9
150.00			0.3750	30.225	35.527	3,999.30	12.80	80.60	82.6	260.6	0.0	121.5
151.00			0.3750	29.899	35.140	3,870.00	12.65	79.73	82.6	254.9	0.0	120.2
											Total:	**54,849.9**

CALCULATED FORCES

Load Case: 1.2D + 1.0W — 126 mph Wind with No Ice — 18 Iterations

Gust Response Factor: 1.10
Dead load Factor: 1.20
Wind Load Factor: 1.00

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (ft-kips)	Phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-81.75	-39.58	0.00	-4,175.5	0.00	4,175.48	10,474.88	2,624.07	17,865.09	16,238.40	0	0	0.265
5.00	-78.58	-38.84	0.00	-3,977.6	0.00	3,977.59	10,319.96	2,567.47	17,102.79	15,650.33	0.03	-0.05	0.262
10.00	-75.48	-38.10	0.00	-3,783.4	0.00	3,783.42	10,161.92	2,510.87	16,357.11	15,068.06	0.12	-0.11	0.259
15.00	-72.45	-37.37	0.00	-3,592.9	0.00	3,592.90	10,000.74	2,454.27	15,628.06	14,491.91	0.26	-0.16	0.255
20.00	-69.49	-36.62	0.00	-3,406.0	0.00	3,406.03	9,836.43	2,397.67	14,915.62	13,922.20	0.46	-0.22	0.252
25.00	-66.59	-35.85	0.00	-3,222.9	0.00	3,222.91	9,668.99	2,341.06	14,219.80	13,359.24	0.73	-0.28	0.248
30.00	-63.75	-35.06	0.00	-3,043.7	0.00	3,043.66	9,498.42	2,284.46	13,540.60	12,803.34	1.05	-0.34	0.245
35.00	-61.00	-34.44	0.00	-2,868.4	0.00	2,868.36	9,324.72	2,227.86	12,878.02	12,254.84	1.44	-0.4	0.241
37.66	-59.55	-34.04	0.00	-2,776.6	0.00	2,776.63	9,230.91	2,197.71	12,531.87	11,965.79	1.67	-0.43	0.239
40.00	-57.08	-33.43	0.00	-2,697.1	0.00	2,697.09	9,147.88	2,171.26	12,232.07	11,714.04	1.89	-0.46	0.237
45.00	-51.92	-32.87	0.00	-2,530.0	0.00	2,529.96	8,952.05	2,114.66	11,602.73	11,161.47	2.4	-0.52	0.233
46.33	-50.56	-32.45	0.00	-2,486.2	0.00	2,486.25	9,058.80	2,143.12	11,917.10	11,448.13	2.55	-0.54	0.223
50.00	-48.64	-31.73	0.00	-2,367.2	0.00	2,367.15	8,896.66	2,101.57	11,459.61	11,023.08	2.98	-0.58	0.220
55.00	-46.10	-30.90	0.00	-2,208.5	0.00	2,208.49	8,657.04	2,044.97	10,850.73	10,434.35	3.62	-0.64	0.217
60.00	-43.62	-30.07	0.00	-2,054.0	0.00	2,054.01	8,417.43	1,988.37	10,258.48	9,861.77	4.33	-0.7	0.214
65.00	-41.21	-29.24	0.00	-1,903.7	0.00	1,903.68	8,177.82	1,931.77	9,682.84	9,305.35	5.09	-0.76	0.210
70.00	-38.87	-28.42	0.00	-1,757.5	0.00	1,757.48	7,938.20	1,875.17	9,123.83	8,765.09	5.92	-0.82	0.206
75.00	-36.60	-27.89	0.00	-1,615.4	0.00	1,615.37	7,698.59	1,818.56	8,581.43	8,240.99	6.82	-0.88	0.201
76.37	-35.98	-27.49	0.00	-1,577.1	0.00	1,577.06	7,632.78	1,803.02	8,435.36	8,099.87	7.07	-0.9	0.200
80.00	-33.15	-26.88	0.00	-1,477.4	0.00	1,477.36	7,458.98	1,761.96	8,055.65	7,733.05	7.78	-0.95	0.196
83.62	-30.40	-26.45	0.00	-1,380.0	0.00	1,379.95	5,912.64	1,408.09	6,430.50	6,138.36	8.51	-0.99	0.230
85.00	-29.91	-25.96	0.00	-1,343.5	0.00	1,343.54	5,873.58	1,395.62	6,317.15	6,043.29	8.8	-1.01	0.228
90.00	-28.18	-25.18	0.00	-1,213.8	0.00	1,213.75	5,716.44	1,350.34	5,913.94	5,688.89	9.9	-1.08	0.219
95.00	-26.51	-24.41	0.00	-1,087.9	0.00	1,087.86	5,524.75	1,305.06	5,524.02	5,311.88	11.07	-1.15	0.210
100.00	-24.90	-23.66	0.00	-965.8	0.00	965.79	5,333.06	1,259.78	5,147.40	4,947.78	12.32	-1.22	0.200
105.00	-23.34	-22.93	0.00	-847.5	0.00	847.48	5,141.37	1,214.50	4,784.07	4,596.62	13.64	-1.29	0.189

CALCULATED FORCES

110.00	-21.84	-22.48	0.00	-732.8	0.00	732.85	4,949.68	1,169.21	4,434.04	4,258.38	15.03	-1.36	0.177
111.04	-21.53	-22.13	0.00	-709.6	0.00	709.55	4,909.93	1,159.83	4,363.14	4,189.87	15.33	-1.38	0.174
115.00	-19.58	-21.67	0.00	-621.9	0.00	621.86	4,757.98	1,123.93	4,097.31	3,933.06	16.49	-1.43	0.163
116.95	-18.64	-21.32	0.00	-579.5	0.00	579.52	3,496.26	847.96	3,109.32	2,916.35	17.08	-1.45	0.205
120.00	-17.97	-20.77	0.00	-514.6	0.00	514.58	3,434.18	827.27	2,959.43	2,794.02	18.02	-1.49	0.190
125.00	-16.91	-20.11	0.00	-410.7	0.00	410.71	3,329.78	793.31	2,721.47	2,596.82	19.62	-1.56	0.164
130.00	-15.90	-19.46	0.00	-310.2	0.00	310.17	3,214.56	759.34	2,493.48	2,398.59	21.29	-1.62	0.135
135.00	-14.93	-19.01	0.00	-212.9	0.00	212.87	3,070.79	725.38	2,275.47	2,187.80	23.02	-1.67	0.103
137.00	-10.35	-13.07	0.00	-174.9	0.00	174.86	3,013.28	711.80	2,191.05	2,106.19	23.72	-1.69	0.087
140.00	-9.86	-12.60	0.00	-135.6	0.00	135.64	2,927.02	691.42	2,067.42	1,986.69	24.8	-1.71	0.072
145.00	-9.06	-12.12	0.00	-72.6	0.00	72.65	2,783.25	657.46	1,869.35	1,795.28	26.61	-1.74	0.044
148.00	-7.66	-11.28	0.00	-36.3	0.00	36.29	2,696.99	637.08	1,755.29	1,685.09	27.71	-1.75	0.025
149.00	-3.05	-8.19	0.00	-25.0	0.00	25.01	2,668.24	630.29	1,718.07	1,649.14	28.07	-1.75	0.016
150.00	-1.65	-5.68	0.00	-16.8	0.00	16.82	2,639.48	623.50	1,681.25	1,613.57	28.44	-1.75	0.011
151.00	0.00	-5.63	0.00	-11.1	0.00	11.14	2,610.73	616.71	1,644.83	1,578.39	28.81	-1.76	0.007

CALCULATED FORCES

Load Case: 0.9D + 1.0W — 126 mph Wind with No Ice (Reduced DL) — 18 Iterations

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

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (ft-kips)	Phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-61.31	-39.57	0.00	-4,158.7	0.00	4,158.69	10,474.88	2,624.07	17,865.09	16,238.40	0	0	0.262
5.00	-58.92	-38.81	0.00	-3,960.8	0.00	3,960.85	10,319.96	2,567.47	17,102.79	15,650.33	0.03	-0.05	0.259
10.00	-56.59	-38.06	0.00	-3,766.8	0.00	3,766.82	10,161.92	2,510.87	16,357.11	15,068.06	0.12	-0.11	0.256
15.00	-54.31	-37.31	0.00	-3,576.5	0.00	3,576.53	10,000.74	2,454.27	15,628.06	14,491.91	0.26	-0.16	0.252
20.00	-52.07	-36.55	0.00	-3,390.0	0.00	3,389.97	9,836.43	2,397.67	14,915.62	13,922.20	0.46	-0.22	0.249
25.00	-49.89	-35.76	0.00	-3,207.2	0.00	3,207.24	9,668.99	2,341.06	14,219.80	13,359.24	0.72	-0.28	0.245
30.00	-47.76	-34.96	0.00	-3,028.4	0.00	3,028.44	9,498.42	2,284.46	13,540.60	12,803.34	1.05	-0.34	0.242
35.00	-45.69	-34.33	0.00	-2,853.7	0.00	2,853.66	9,324.72	2,227.86	12,878.02	12,254.84	1.43	-0.4	0.238
37.66	-44.60	-33.92	0.00	-2,762.2	0.00	2,762.22	9,230.91	2,197.71	12,531.87	11,965.79	1.66	-0.43	0.236
40.00	-42.74	-33.30	0.00	-2,683.0	0.00	2,682.97	9,147.88	2,171.26	12,232.07	11,714.04	1.88	-0.46	0.234
45.00	-38.86	-32.75	0.00	-2,516.5	0.00	2,516.46	8,952.05	2,114.66	11,602.73	11,161.47	2.39	-0.52	0.230
46.33	-37.84	-32.33	0.00	-2,472.9	0.00	2,472.90	9,058.80	2,143.12	11,917.10	11,448.13	2.54	-0.53	0.220
50.00	-36.40	-31.60	0.00	-2,354.3	0.00	2,354.27	8,896.66	2,101.57	11,459.61	11,023.08	2.96	-0.58	0.218
55.00	-34.49	-30.76	0.00	-2,196.3	0.00	2,196.27	8,657.04	2,044.97	10,850.73	10,434.35	3.6	-0.64	0.215
60.00	-32.62	-29.92	0.00	-2,042.5	0.00	2,042.48	8,417.43	1,988.37	10,258.48	9,861.77	4.31	-0.7	0.211
65.00	-30.81	-29.09	0.00	-1,892.9	0.00	1,892.87	8,177.82	1,931.77	9,682.84	9,305.35	5.07	-0.76	0.207
70.00	-29.05	-28.27	0.00	-1,747.4	0.00	1,747.40	7,938.20	1,875.17	9,123.83	8,765.09	5.9	-0.82	0.203
75.00	-27.34	-27.75	0.00	-1,606.0	0.00	1,606.03	7,698.59	1,818.56	8,581.43	8,240.99	6.79	-0.88	0.199
76.37	-26.88	-27.34	0.00	-1,567.9	0.00	1,567.93	7,632.78	1,803.02	8,435.36	8,099.87	7.04	-0.9	0.197
80.00	-24.76	-26.74	0.00	-1,468.8	0.00	1,468.76	7,458.98	1,761.96	8,055.65	7,733.05	7.74	-0.94	0.193
83.62	-22.69	-26.31	0.00	-1,371.9	0.00	1,371.88	5,912.64	1,408.09	6,430.50	6,138.36	8.47	-0.99	0.228
85.00	-22.32	-25.82	0.00	-1,335.6	0.00	1,335.65	5,873.58	1,395.62	6,317.15	6,043.29	8.76	-1	0.225
90.00	-21.02	-25.04	0.00	-1,206.6	0.00	1,206.57	5,716.44	1,350.34	5,913.94	5,688.89	9.85	-1.08	0.216
95.00	-19.76	-24.27	0.00	-1,081.4	0.00	1,081.39	5,524.75	1,305.06	5,524.02	5,311.88	11.02	-1.15	0.208
100.00	-18.55	-23.52	0.00	-960.0	0.00	960.03	5,333.06	1,259.78	5,147.40	4,947.78	12.26	-1.22	0.198
105.00	-17.38	-22.79	0.00	-842.4	0.00	842.43	5,141.37	1,214.50	4,784.07	4,596.62	13.57	-1.29	0.187
110.00	-16.25	-22.34	0.00	-728.5	0.00	728.50	4,949.68	1,169.21	4,434.04	4,258.38	14.95	-1.35	0.175
111.04	-16.02	-21.99	0.00	-705.3	0.00	705.34	4,909.93	1,159.83	4,363.14	4,189.87	15.25	-1.37	0.172
115.00	-14.55	-21.55	0.00	-618.2	0.00	618.19	4,757.98	1,123.93	4,097.31	3,933.06	16.41	-1.42	0.161
116.95	-13.85	-21.19	0.00	-576.1	0.00	576.10	3,496.26	847.96	3,109.32	2,916.35	16.99	-1.44	0.202
120.00	-13.35	-20.65	0.00	-511.5	0.00	511.54	3,434.18	827.27	2,959.43	2,794.02	17.93	-1.48	0.188
125.00	-12.55	-19.98	0.00	-408.3	0.00	408.30	3,329.78	793.31	2,721.47	2,596.82	19.52	-1.55	0.162
130.00	-11.79	-19.34	0.00	-308.4	0.00	308.38	3,214.56	759.34	2,493.48	2,398.59	21.18	-1.61	0.133
135.00	-11.06	-18.89	0.00	-211.7	0.00	211.69	3,070.79	725.38	2,275.47	2,187.80	22.9	-1.67	0.101
137.00	-7.67	-12.99	0.00	-173.9	0.00	173.90	3,013.28	711.80	2,191.05	2,106.19	23.6	-1.68	0.085
140.00	-7.30	-12.52	0.00	-134.9	0.00	134.92	2,927.02	691.42	2,067.42	1,986.69	24.67	-1.7	0.071
145.00	-6.71	-12.05	0.00	-72.3	0.00	72.33	2,783.25	657.46	1,869.35	1,795.28	26.47	-1.73	0.043
148.00	-5.66	-11.22	0.00	-36.2	0.00	36.19	2,696.99	637.08	1,755.29	1,685.09	27.56	-1.74	0.024
149.00	-2.23	-8.16	0.00	-25.0	0.00	24.97	2,668.24	630.29	1,718.07	1,649.14	27.93	-1.74	0.016
150.00	-1.20	-5.66	0.00	-16.8	0.00	16.81	2,639.48	623.50	1,681.25	1,613.57	28.29	-1.75	0.011
151.00	0.00	-5.63	0.00	-11.1	0.00	11.14	2,610.73	616.71	1,644.83	1,578.39	28.66	-1.75	0.007

CALCULATED FORCES

Load Case: 1.2D + 1.0Di + 1.0Wi — 50 mph Wind with 1" Radial Ice — 17 Iterations

Gust Response Factor: 1.10
Dead load Factor: 1.20
Wind Load Factor: 1.00
Ice Dead Load Factor 1.00
Ice Importance Factor 1.00

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (ft-kips)	Phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-99.79	-10.09	0.00	-1,050.8	0.00	1,050.78	10,474.88	2,624.07	17,865.09	16,238.40	0	0	0.074
5.00	-96.30	-9.90	0.00	-1,000.3	0.00	1,000.32	10,319.96	2,567.47	17,102.79	15,650.33	0.01	-0.01	0.073
10.00	-92.83	-9.71	0.00	-950.8	0.00	950.83	10,161.92	2,510.87	16,357.11	15,068.06	0.03	-0.03	0.072
15.00	-89.42	-9.52	0.00	-902.3	0.00	902.29	10,000.74	2,454.27	15,628.06	14,491.91	0.07	-0.04	0.071
20.00	-86.07	-9.32	0.00	-854.7	0.00	854.70	9,836.43	2,397.67	14,915.62	13,922.20	0.12	-0.06	0.070
25.00	-82.79	-9.12	0.00	-808.1	0.00	808.10	9,668.99	2,341.06	14,219.80	13,359.24	0.18	-0.07	0.069
30.00	-79.58	-8.91	0.00	-762.5	0.00	762.51	9,498.42	2,284.46	13,540.60	12,803.34	0.26	-0.08	0.068
35.00	-76.43	-8.75	0.00	-718.0	0.00	717.96	9,324.72	2,227.86	12,878.02	12,254.84	0.36	-0.1	0.067
37.66	-74.78	-8.64	0.00	-694.7	0.00	694.67	9,230.91	2,197.71	12,531.87	11,965.79	0.42	-0.11	0.066
40.00	-72.13	-8.48	0.00	-674.5	0.00	674.48	9,147.88	2,171.26	12,232.07	11,714.04	0.47	-0.11	0.065
45.00	-66.58	-8.33	0.00	-632.1	0.00	632.09	8,952.05	2,114.66	11,602.73	11,161.47	0.6	-0.13	0.064
46.33	-65.12	-8.22	0.00	-621.0	0.00	621.01	9,058.80	2,143.12	11,917.10	11,448.13	0.64	-0.13	0.061
50.00	-62.93	-8.03	0.00	-590.8	0.00	590.83	8,896.66	2,101.57	11,459.61	11,023.08	0.75	-0.15	0.061
55.00	-60.01	-7.81	0.00	-550.7	0.00	550.68	8,657.04	2,044.97	10,850.73	10,434.35	0.91	-0.16	0.060
60.00	-57.16	-7.59	0.00	-511.6	0.00	511.63	8,417.43	1,988.37	10,258.48	9,861.77	1.09	-0.18	0.059
65.00	-54.39	-7.37	0.00	-473.7	0.00	473.69	8,177.82	1,931.77	9,682.84	9,305.35	1.28	-0.19	0.058
70.00	-51.69	-7.15	0.00	-436.8	0.00	436.85	7,938.20	1,875.17	9,123.83	8,765.09	1.49	-0.21	0.056
75.00	-49.07	-7.01	0.00	-401.1	0.00	401.09	7,698.59	1,818.56	8,581.43	8,240.99	1.71	-0.22	0.055
76.37	-48.36	-6.90	0.00	-391.5	0.00	391.47	7,632.78	1,803.02	8,435.36	8,099.87	1.77	-0.23	0.055
80.00	-45.28	-6.74	0.00	-366.4	0.00	366.44	7,458.98	1,761.96	8,055.65	7,733.05	1.95	-0.24	0.053
83.62	-42.27	-6.62	0.00	-342.0	0.00	342.02	5,912.64	1,408.09	6,430.50	6,138.36	2.13	-0.25	0.063
85.00	-41.69	-6.49	0.00	-332.9	0.00	332.90	5,873.58	1,395.62	6,317.15	6,043.29	2.21	-0.25	0.062
90.00	-39.64	-6.28	0.00	-300.4	0.00	300.44	5,716.44	1,350.34	5,913.94	5,688.89	2.48	-0.27	0.060
95.00	-37.65	-6.08	0.00	-269.0	0.00	269.02	5,524.75	1,305.06	5,524.02	5,311.88	2.77	-0.29	0.057
100.00	-35.72	-5.88	0.00	-238.6	0.00	238.63	5,333.06	1,259.78	5,147.40	4,947.78	3.08	-0.31	0.055
105.00	-33.85	-5.68	0.00	-209.2	0.00	209.25	5,141.37	1,214.50	4,784.07	4,596.62	3.41	-0.32	0.052
110.00	-32.05	-5.55	0.00	-180.9	0.00	180.87	4,949.68	1,169.21	4,434.04	4,258.38	3.76	-0.34	0.049
111.04	-31.68	-5.46	0.00	-175.1	0.00	175.11	4,909.93	1,159.83	4,363.14	4,189.87	3.83	-0.34	0.048
115.00	-29.49	-5.34	0.00	-153.5	0.00	153.47	4,757.98	1,123.93	4,097.31	3,933.06	4.12	-0.36	0.045
116.95	-28.44	-5.24	0.00	-143.0	0.00	143.04	3,496.26	847.96	3,109.32	2,916.35	4.27	-0.36	0.057
120.00	-27.60	-5.09	0.00	-127.1	0.00	127.07	3,434.18	827.27	2,959.43	2,794.02	4.5	-0.37	0.054
125.00	-26.26	-4.91	0.00	-101.6	0.00	101.60	3,329.78	793.31	2,721.47	2,596.82	4.9	-0.39	0.047
130.00	-24.98	-4.74	0.00	-77.0	0.00	77.04	3,214.56	759.34	2,493.48	2,398.59	5.32	-0.4	0.040
135.00	-23.75	-4.61	0.00	-53.4	0.00	53.37	3,070.79	725.38	2,275.47	2,187.80	5.75	-0.42	0.032
137.00	-15.71	-3.36	0.00	-44.1	0.00	44.14	3,013.28	711.80	2,191.05	2,106.19	5.92	-0.42	0.026
140.00	-15.05	-3.23	0.00	-34.0	0.00	34.05	2,927.02	691.42	2,067.42	1,986.69	6.19	-0.43	0.022
145.00	-14.01	-3.10	0.00	-17.9	0.00	17.89	2,783.25	657.46	1,869.35	1,795.28	6.64	-0.43	0.015
148.00	-12.04	-2.87	0.00	-8.6	0.00	8.59	2,696.99	637.08	1,755.29	1,685.09	6.91	-0.44	0.010
149.00	-4.98	-1.83	0.00	-5.7	0.00	5.72	2,668.24	630.29	1,718.07	1,649.14	7.01	-0.44	0.005
150.00	-2.37	-1.32	0.00	-3.9	0.00	3.89	2,639.48	623.50	1,681.25	1,613.57	7.1	-0.44	0.003
151.00	0.00	-1.30	0.00	-2.6	0.00	2.57	2,610.73	616.71	1,644.83	1,578.39	7.19	-0.44	0.002

CALCULATED FORCES

Load Case: 1.0D + 1.0W — 60 mph Wind with No Ice — 17 Iterations

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

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (ft-kips)	Phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-68.14	-8.03	0.00	-844.9	0.00	844.91	10,474.88	2,624.07	17,865.09	16,238.40	0	0	0.059
5.00	-65.53	-7.87	0.00	-804.8	0.00	804.77	10,319.96	2,567.47	17,102.79	15,650.33	0.01	-0.01	0.058
10.00	-62.98	-7.72	0.00	-765.4	0.00	765.40	10,161.92	2,510.87	16,357.11	15,068.06	0.02	-0.02	0.057
15.00	-60.48	-7.57	0.00	-726.8	0.00	726.78	10,000.74	2,454.27	15,628.06	14,491.91	0.05	-0.03	0.056
20.00	-58.03	-7.42	0.00	-688.9	0.00	688.91	9,836.43	2,397.67	14,915.62	13,922.20	0.09	-0.04	0.055
25.00	-55.64	-7.26	0.00	-651.8	0.00	651.81	9,668.99	2,341.06	14,219.80	13,359.24	0.15	-0.06	0.055
30.00	-53.31	-7.10	0.00	-615.5	0.00	615.51	9,498.42	2,284.46	13,540.60	12,803.34	0.21	-0.07	0.054
35.00	-51.03	-6.97	0.00	-580.0	0.00	580.01	9,324.72	2,227.86	12,878.02	12,254.84	0.29	-0.08	0.053
37.66	-49.83	-6.89	0.00	-561.4	0.00	561.44	9,230.91	2,197.71	12,531.87	11,965.79	0.34	-0.09	0.052
40.00	-47.79	-6.76	0.00	-545.3	0.00	545.34	9,147.88	2,171.26	12,232.07	11,714.04	0.38	-0.09	0.052
45.00	-43.50	-6.65	0.00	-511.5	0.00	511.52	8,952.05	2,114.66	11,602.73	11,161.47	0.49	-0.11	0.051
46.33	-42.38	-6.57	0.00	-502.7	0.00	502.67	9,058.80	2,143.12	11,917.10	11,448.13	0.52	-0.11	0.049
50.00	-40.80	-6.42	0.00	-478.6	0.00	478.57	8,896.66	2,101.57	11,459.61	11,023.08	0.6	-0.12	0.048
55.00	-38.70	-6.25	0.00	-446.5	0.00	446.48	8,657.04	2,044.97	10,850.73	10,434.35	0.73	-0.13	0.047
60.00	-36.65	-6.08	0.00	-415.2	0.00	415.23	8,417.43	1,988.37	10,258.48	9,861.77	0.87	-0.14	0.046
65.00	-34.66	-5.91	0.00	-384.8	0.00	384.83	8,177.82	1,931.77	9,682.84	9,305.35	1.03	-0.15	0.046
70.00	-32.72	-5.75	0.00	-355.3	0.00	355.26	7,938.20	1,875.17	9,123.83	8,765.09	1.2	-0.17	0.045
75.00	-30.84	-5.64	0.00	-326.5	0.00	326.53	7,698.59	1,818.56	8,581.43	8,240.99	1.38	-0.18	0.044
76.37	-30.33	-5.56	0.00	-318.8	0.00	318.79	7,632.78	1,803.02	8,435.36	8,099.87	1.43	-0.18	0.043
80.00	-27.99	-5.43	0.00	-298.6	0.00	298.63	7,458.98	1,761.96	8,055.65	7,733.05	1.57	-0.19	0.042
83.62	-25.70	-5.35	0.00	-278.9	0.00	278.94	5,912.64	1,408.09	6,430.50	6,138.36	1.72	-0.2	0.050
85.00	-25.30	-5.25	0.00	-271.6	0.00	271.57	5,873.58	1,395.62	6,317.15	6,043.29	1.78	-0.2	0.049
90.00	-23.87	-5.09	0.00	-245.3	0.00	245.34	5,716.44	1,350.34	5,913.94	5,688.89	2	-0.22	0.047
95.00	-22.49	-4.93	0.00	-219.9	0.00	219.89	5,524.75	1,305.06	5,524.02	5,311.88	2.24	-0.23	0.045
100.00	-21.16	-4.78	0.00	-195.2	0.00	195.22	5,333.06	1,259.78	5,147.40	4,947.78	2.49	-0.25	0.043
105.00	-19.87	-4.63	0.00	-171.3	0.00	171.30	5,141.37	1,214.50	4,784.07	4,596.62	2.76	-0.26	0.041
110.00	-18.62	-4.54	0.00	-148.1	0.00	148.14	4,949.68	1,169.21	4,434.04	4,258.38	3.04	-0.28	0.039
111.04	-18.37	-4.47	0.00	-143.4	0.00	143.43	4,909.93	1,159.83	4,363.14	4,189.87	3.1	-0.28	0.038
115.00	-16.74	-4.38	0.00	-125.7	0.00	125.71	4,757.98	1,123.93	4,097.31	3,933.06	3.33	-0.29	0.035
116.95	-15.96	-4.31	0.00	-117.2	0.00	117.15	3,496.26	847.96	3,109.32	2,916.35	3.45	-0.29	0.045
120.00	-15.41	-4.20	0.00	-104.0	0.00	104.02	3,434.18	827.27	2,959.43	2,794.02	3.64	-0.3	0.042
125.00	-14.53	-4.06	0.00	-83.0	0.00	83.03	3,329.78	793.31	2,721.47	2,596.82	3.97	-0.32	0.036
130.00	-13.69	-3.93	0.00	-62.7	0.00	62.71	3,214.56	759.34	2,493.48	2,398.59	4.31	-0.33	0.030
135.00	-12.88	-3.84	0.00	-43.0	0.00	43.04	3,070.79	725.38	2,275.47	2,187.80	4.65	-0.34	0.024
137.00	-8.93	-2.64	0.00	-35.4	0.00	35.36	3,013.28	711.80	2,191.05	2,106.19	4.8	-0.34	0.020
140.00	-8.51	-2.55	0.00	-27.4	0.00	27.43	2,927.02	691.42	2,067.42	1,986.69	5.01	-0.35	0.017
145.00	-7.84	-2.45	0.00	-14.7	0.00	14.70	2,783.25	657.46	1,869.35	1,795.28	5.38	-0.35	0.011
148.00	-6.65	-2.28	0.00	-7.4	0.00	7.35	2,696.99	637.08	1,755.29	1,685.09	5.6	-0.35	0.007
149.00	-2.74	-1.66	0.00	-5.1	0.00	5.07	2,668.24	630.29	1,718.07	1,649.14	5.68	-0.35	0.004
150.00	-1.51	-1.15	0.00	-3.4	0.00	3.41	2,639.48	623.50	1,681.25	1,613.57	5.75	-0.35	0.003
151.00	0.00	-1.14	0.00	-2.3	0.00	2.26	2,610.73	616.71	1,644.83	1,578.39	5.83	-0.35	0.001

EQUIVALENT LATERAL FORCES METHOD ANALYSIS

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

Spectral Response Acceleration for Short Period (S_S):	0.187
Spectral Response Acceleration at 1.0 Second Period (S_1):	0.053
Long-Period Transition Period (T_L – Seconds):	6
Importance Factor (I_e):	1.000
Site Coefficient F_a:	1.600
Site Coefficient F_v:	2.400
Response Modification Coefficient (R):	1.500
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.199
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.085
Seismic Response Coefficient (C_s):	0.040
Upper Limit C_S:	0.040
Lower Limit C_S:	0.030
Period based on Rayleigh Method (sec):	1.400
Redundancy Factor (p):	1.000
Seismic Force Distribution Exponent (k):	1.450
Total Unfactored Dead Load:	68.140 k
Seismic Base Shear (E):	2.760 k

SEISMIC FORCES

1.2D + 1.0Ev + 1.0Eh **Seismic**

Segment	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
40	150.5	122	174	0.004	12	152
39	149.5	126	177	0.004	13	156
38	148.5	127	177	0.005	13	157
37	146.5	389	533	0.014	38	482
36	142.5	674	887	0.023	63	835
35	138.5	420	531	0.014	38	521
34	136	315	388	0.010	27	391
33	132.5	811	961	0.025	68	1,006
32	127.5	844	946	0.024	67	1,047
31	122.5	877	928	0.024	66	1,087
30	118.4767	551	555	0.014	39	683
29	115.9767	782	764	0.020	54	969
28	113.0183	1,622	1,527	0.039	108	2,011
27	110.5183	253	231	0.006	16	314
26	107.5	1,247	1,092	0.028	77	1,546
25	102.5	1,291	1,055	0.027	75	1,601
24	97.5	1,335	1,014	0.026	72	1,655
23	92.5	1,379	971	0.025	69	1,709
22	87.5	1,423	924	0.024	65	1,764
21	84.3117	399	246	0.006	17	495
20	81.8117	2,291	1,350	0.035	96	2,840
19	78.1867	2,345	1,294	0.033	92	2,907
18	75.6867	507	267	0.007	19	629
17	72.5	1,882	931	0.024	66	2,333
16	67.5	1,937	864	0.022	61	2,402
15	62.5	1,992	795	0.020	56	2,470
14	57.5	2,047	724	0.019	51	2,538
13	52.5	2,101	652	0.017	46	2,606
12	48.165	1,577	432	0.011	31	1,956
11	45.665	1,122	284	0.007	20	1,392
10	42.5	4,289	979	0.025	69	5,318
9	38.8317	2,042	409	0.010	29	2,532
8	36.3317	1,191	217	0.006	15	1,477
7	32.5	2,279	353	0.009	25	2,825
6	27.5	2,334	284	0.007	20	2,893
5	22.5	2,389	217	0.006	15	2,962
4	17.5	2,443	154	0.004	11	3,030
3	12.5	2,498	97	0.002	7	3,098

SEISMIC FORCES

1.2D + 1.0Ev + 1.0Eh **Seismic**

Segment	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
2	7.5	2,553	47	0.001	3	3,166
1	2.5	2,608	10	0.000	1	3,234
Unused Reserve (20516.94 sqin)	151	1,398	2,002	0.051	142	1,734
Commscope CBC78T-DS-43-2X	150	62	88	0.002	6	77
Samsung B2/B66A RRH ORAN (RF 4439d-25A)	150	224	318	0.008	22	278
Samsung RF4461d-13A	150	237	337	0.009	24	294
Raycap RVZDC-3315-PF-48	150	43	61	0.002	4	53
Samsung MT6413-77A	150	172	244	0.006	17	213
Commscope JAHH-65B-R3B	150	364	516	0.013	36	451
Generic Square Platform with Handrails	149	3,790	5,324	0.137	377	4,699
Generic Mount Reinforcement	148	800	1,113	0.029	79	992
Ericsson Radio 8843 - B2 + B66A	137	216	268	0.007	19	267
Ericsson RRUS 4478 B14	137	180	224	0.006	16	223
Ericsson RRUS 4449 B5, B12	137	213	265	0.007	19	264
Raycap DC9-48-60-24-8C-EV (Enclosure)	137	18	23	0.001	2	23
CCI DMP65R-BU8D	137	287	357	0.009	25	356
Generic Flat Light Sector Frame	137	2,400	2,985	0.077	211	2,976
CCI TPA65R-BU8A	137	324	403	0.010	29	402
	Totals:	**68,141**	**38,969**	**1.000**	**2,758**	**84,487**

SEISMIC FORCES

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

Segment	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
40	150.5	122	174	0.004	12	105
39	149.5	126	177	0.004	13	108
38	148.5	127	177	0.005	13	109
37	146.5	389	533	0.014	38	334
36	142.5	674	887	0.023	63	580
35	138.5	420	531	0.014	38	361
34	136	315	388	0.010	27	271
33	132.5	811	961	0.025	68	698
32	127.5	844	946	0.024	67	726
31	122.5	877	928	0.024	66	754
30	118.4767	551	555	0.014	39	474
29	115.9767	782	764	0.020	54	672
28	113.0183	1,622	1,527	0.039	108	1,395
27	110.5183	253	231	0.006	16	218
26	107.5	1,247	1,092	0.028	77	1,073
25	102.5	1,291	1,055	0.027	75	1,110
24	97.5	1,335	1,014	0.026	72	1,148
23	92.5	1,379	971	0.025	69	1,186
22	87.5	1,423	924	0.024	65	1,224
21	84.3117	399	246	0.006	17	344
20	81.8117	2,291	1,350	0.035	96	1,970
19	78.1867	2,345	1,294	0.033	92	2,017
18	75.6867	507	267	0.007	19	436
17	72.5	1,882	931	0.024	66	1,619
16	67.5	1,937	864	0.022	61	1,666
15	62.5	1,992	795	0.020	56	1,713
14	57.5	2,047	724	0.019	51	1,760
13	52.5	2,101	652	0.017	46	1,808
12	48.165	1,577	432	0.011	31	1,357
11	45.665	1,122	284	0.007	20	965
10	42.5	4,289	979	0.025	69	3,689
9	38.8317	2,042	409	0.010	29	1,756
8	36.3317	1,191	217	0.006	15	1,025
7	32.5	2,279	353	0.009	25	1,960
6	27.5	2,334	284	0.007	20	2,007
5	22.5	2,389	217	0.006	15	2,054
4	17.5	2,443	154	0.004	11	2,102

SEISMIC FORCES

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

Segment	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
3	12.5	2,498	97	0.002	7	2,149
2	7.5	2,553	47	0.001	3	2,196
1	2.5	2,608	10	0.000	1	2,243
Unused Reserve (20516.94 sqin)	151	1,398	2,002	0.051	142	1,203
Commscope CBC78T-DS-43-2X	150	62	88	0.002	6	53
Samsung B2/B66A RRH ORAN (RF 4439d-25A)	150	224	318	0.008	22	193
Samsung RF4461d-13A	150	237	337	0.009	24	204
Raycap RVZDC-3315-PF-48	150	43	61	0.002	4	37
Samsung MT6413-77A	150	172	244	0.006	17	148
Commscope JAHH-65B-R3B	150	364	516	0.013	36	313
Generic Square Platform with Handrails	149	3,790	5,324	0.137	377	3,260
Generic Mount Reinforcement	148	800	1,113	0.029	79	688
Ericsson Radio 8843 - B2 + B66A	137	216	268	0.007	19	186
Ericsson RRUS 4478 B14	137	180	224	0.006	16	155
Ericsson RRUS 4449 B5, B12	137	213	265	0.007	19	183
Raycap DC9-48-60-24-8C-EV (Enclosure)	137	18	23	0.001	2	16
CCI DMP65R-BU8D	137	287	357	0.009	25	247
Generic Flat Light Sector Frame	137	2,400	2,985	0.077	211	2,064
CCI TPA65R-BU8A	137	324	403	0.010	29	279
	Totals:	**68,141**	**38,969**	**1.000**	**2,758**	**58,608**

1.2D + 1.0Ev + 1.0Eh **Seismic**

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (fr-kips)	Mu Mx (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (kips)	Phi Mn (kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-81.25	-2.76	0.00	-309.89	0.00	309.89	10,474.88	2,624.07	17,865	16,238.40	0.00	0.00	0.03
5.00	-78.09	-2.76	0.00	-296.10	0.00	296.10	10,319.96	2,567.47	17,103	15,650.33	0.00	0.00	0.03
10.00	-74.99	-2.76	0.00	-282.29	0.00	282.29	10,161.92	2,510.87	16,357	15,068.06	0.01	-0.01	0.03
15.00	-71.96	-2.75	0.00	-268.50	0.00	268.50	10,000.74	2,454.27	15,628	14,491.91	0.02	-0.01	0.03
20.00	-69.00	-2.74	0.00	-254.73	0.00	254.73	9,836.43	2,397.67	14,916	13,922.20	0.03	-0.02	0.03
25.00	-66.10	-2.73	0.00	-241.02	0.00	241.02	9,668.99	2,341.06	14,220	13,359.24	0.05	-0.02	0.03
30.00	-63.28	-2.70	0.00	-227.39	0.00	227.39	9,498.42	2,284.46	13,541	12,803.34	0.08	-0.03	0.02
35.00	-61.80	-2.69	0.00	-213.87	0.00	213.87	9,324.72	2,227.86	12,878	12,254.84	0.11	-0.03	0.02
37.66	-59.27	-2.66	0.00	-206.70	0.00	206.70	9,230.91	2,197.71	12,532	11,965.79	0.12	-0.03	0.02
40.00	-53.95	-2.60	0.00	-200.47	0.00	200.47	9,147.88	2,171.26	12,232	11,714.04	0.14	-0.03	0.02
45.00	-52.56	-2.58	0.00	-187.49	0.00	187.49	8,952.05	2,114.66	11,603	11,161.47	0.18	-0.04	0.02
46.33	-50.60	-2.55	0.00	-184.07	0.00	184.07	9,058.80	2,143.12	11,917	11,448.13	0.19	-0.04	0.02
50.00	-48.00	-2.50	0.00	-174.72	0.00	174.72	8,896.66	2,101.57	11,460	11,023.08	0.22	-0.04	0.02
55.00	-45.46	-2.45	0.00	-162.21	0.00	162.21	8,657.04	2,044.97	10,851	10,434.35	0.27	-0.05	0.02
60.00	-42.99	-2.40	0.00	-149.95	0.00	149.95	8,417.43	1,988.37	10,258	9,861.77	0.32	-0.05	0.02
65.00	-40.59	-2.34	0.00	-137.96	0.00	137.96	8,177.82	1,931.77	9,683	9,305.35	0.38	-0.06	0.02
70.00	-38.26	-2.27	0.00	-126.27	0.00	126.27	7,938.20	1,875.17	9,124	8,765.09	0.44	-0.06	0.02
75.00	-37.63	-2.25	0.00	-114.91	0.00	114.91	7,698.59	1,818.56	8,581	8,240.99	0.51	-0.07	0.02
76.37	-34.72	-2.16	0.00	-111.82	0.00	111.82	7,632.78	1,803.02	8,435	8,099.87	0.53	-0.07	0.02
80.00	-31.88	-2.06	0.00	-103.98	0.00	103.98	7,458.98	1,761.96	8,056	7,733.05	0.58	-0.07	0.02
83.62	-31.38	-2.05	0.00	-96.51	0.00	96.51	5,912.64	1,408.09	6,430	6,138.36	0.63	-0.07	0.02
85.00	-29.62	-1.98	0.00	-93.69	0.00	93.69	5,873.58	1,395.62	6,317	6,043.29	0.65	-0.07	0.02
90.00	-27.91	-1.91	0.00	-83.79	0.00	83.79	5,716.44	1,350.34	5,914	5,688.89	0.73	-0.08	0.02
95.00	-26.26	-1.84	0.00	-74.23	0.00	74.23	5,524.75	1,305.06	5,524	5,311.88	0.82	-0.08	0.02
100.00	-24.66	-1.77	0.00	-65.03	0.00	65.03	5,333.06	1,259.78	5,147	4,947.78	0.91	-0.09	0.02
105.00	-23.11	-1.69	0.00	-56.20	0.00	56.20	5,141.37	1,214.50	4,784	4,596.62	1.01	-0.09	0.02
110.00	-22.80	-1.67	0.00	-47.77	0.00	47.77	4,949.68	1,169.21	4,434	4,258.38	1.11	-0.10	0.02
111.04	-20.78	-1.56	0.00	-46.03	0.00	46.03	4,909.93	1,159.83	4,363	4,189.87	1.13	-0.10	0.02
115.00	-19.82	-1.51	0.00	-39.85	0.00	39.85	4,757.98	1,123.93	4,097	3,933.06	1.21	-0.10	0.01
116.95	-19.13	-1.47	0.00	-36.91	0.00	36.91	3,496.26	847.96	3,109	2,916.35	1.25	-0.10	0.02
120.00	-18.04	-1.40	0.00	-32.44	0.00	32.44	3,434.18	827.27	2,959	2,794.02	1.32	-0.11	0.02
125.00	-17.00	-1.33	0.00	-25.44	0.00	25.44	3,329.78	793.31	2,721	2,596.82	1.43	-0.11	0.02
130.00	-15.99	-1.26	0.00	-18.78	0.00	18.78	3,214.56	759.34	2,493	2,398.59	1.55	-0.11	0.01
135.00	-15.60	-1.24	0.00	-12.47	0.00	12.47	3,070.79	725.38	2,275	2,187.80	1.67	-0.12	0.01

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (fr-kips)	Mu Mx (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (kips)	Phi Mn (kips)	Total Deflect (in)	Rotation (deg)	Ratio
137.00	-10.57	-0.87	0.00	-10.00	0.00	10.00	3,013.28	711.80	2,191	2,106.19	1.72	-0.12	0.01
140.00	-9.74	-0.80	0.00	-7.40	0.00	7.40	2,927.02	691.42	2,067	1,986.69	1.80	-0.12	0.01
145.00	-9.25	-0.76	0.00	-3.38	0.00	3.38	2,783.25	657.46	1,869	1,795.28	1.92	-0.12	0.01
148.00	-8.10	-0.67	0.00	-1.09	0.00	1.09	2,696.99	637.08	1,755	1,685.09	2.00	-0.12	0.00
149.00	-3.25	-0.27	0.00	-0.42	0.00	0.42	2,668.24	630.29	1,718	1,649.14	2.03	-0.12	0.00
150.00	-1.73	-0.15	0.00	-0.15	0.00	0.15	2,639.48	623.50	1,681	1,613.57	2.05	-0.12	0.00
151.00	0.00	-0.14	0.00	0.00	0.00	0.00	2,610.73	616.71	1,645	1,578.39	2.08	-0.12	0.00

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

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (fr-kips)	Mu Mx (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (kips)	Phi Mn (kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-56.36	-2.76	0.00	-308.43	0.00	308.43	10,474.88	2,624.07	17,865	16,238.40	0.00	0.00	0.02
5.00	-54.17	-2.76	0.00	-294.64	0.00	294.64	10,319.96	2,567.47	17,103	15,650.33	0.00	0.00	0.02
10.00	-52.02	-2.76	0.00	-280.85	0.00	280.85	10,161.92	2,510.87	16,357	15,068.06	0.01	-0.01	0.02
15.00	-49.92	-2.75	0.00	-267.07	0.00	267.07	10,000.74	2,454.27	15,628	14,491.91	0.02	-0.01	0.02
20.00	-47.86	-2.74	0.00	-253.34	0.00	253.34	9,836.43	2,397.67	14,916	13,922.20	0.03	-0.02	0.02
25.00	-45.86	-2.72	0.00	-239.66	0.00	239.66	9,668.99	2,341.06	14,220	13,359.24	0.05	-0.02	0.02
30.00	-43.90	-2.70	0.00	-226.07	0.00	226.07	9,498.42	2,284.46	13,541	12,803.34	0.08	-0.03	0.02
35.00	-42.87	-2.68	0.00	-212.59	0.00	212.59	9,324.72	2,227.86	12,878	12,254.84	0.11	-0.03	0.02
37.66	-41.11	-2.65	0.00	-205.45	0.00	205.45	9,230.91	2,197.71	12,532	11,965.79	0.12	-0.03	0.02
40.00	-37.43	-2.58	0.00	-199.25	0.00	199.25	9,147.88	2,171.26	12,232	11,714.04	0.14	-0.03	0.02
45.00	-36.46	-2.57	0.00	-186.33	0.00	186.33	8,952.05	2,114.66	11,603	11,161.47	0.18	-0.04	0.02
46.33	-35.10	-2.54	0.00	-182.91	0.00	182.91	9,058.80	2,143.12	11,917	11,448.13	0.19	-0.04	0.02
50.00	-33.30	-2.49	0.00	-173.61	0.00	173.61	8,896.66	2,101.57	11,460	11,023.08	0.22	-0.04	0.02
55.00	-31.54	-2.44	0.00	-161.16	0.00	161.16	8,657.04	2,044.97	10,851	10,434.35	0.27	-0.05	0.02
60.00	-29.82	-2.38	0.00	-148.95	0.00	148.95	8,417.43	1,988.37	10,258	9,861.77	0.32	-0.05	0.02
65.00	-28.16	-2.32	0.00	-137.03	0.00	137.03	8,177.82	1,931.77	9,683	9,305.35	0.38	-0.06	0.02
70.00	-26.54	-2.26	0.00	-125.41	0.00	125.41	7,938.20	1,875.17	9,124	8,765.09	0.44	-0.06	0.02
75.00	-26.10	-2.24	0.00	-114.12	0.00	114.12	7,698.59	1,818.56	8,581	8,240.99	0.50	-0.06	0.02
76.37	-24.08	-2.15	0.00	-111.04	0.00	111.04	7,632.78	1,803.02	8,435	8,099.87	0.52	-0.07	0.02
80.00	-22.11	-2.05	0.00	-103.25	0.00	103.25	7,458.98	1,761.96	8,056	7,733.05	0.57	-0.07	0.02
83.62	-21.77	-2.03	0.00	-95.82	0.00	95.82	5,912.64	1,408.09	6,430	6,138.36	0.63	-0.07	0.02
85.00	-20.55	-1.97	0.00	-93.02	0.00	93.02	5,873.58	1,395.62	6,317	6,043.29	0.65	-0.07	0.02
90.00	-19.36	-1.90	0.00	-83.18	0.00	83.18	5,716.44	1,350.34	5,914	5,688.89	0.73	-0.08	0.02
95.00	-18.21	-1.83	0.00	-73.68	0.00	73.68	5,524.75	1,305.06	5,524	5,311.88	0.81	-0.08	0.02
100.00	-17.10	-1.75	0.00	-64.54	0.00	64.54	5,333.06	1,259.78	5,147	4,947.78	0.90	-0.09	0.02
105.00	-16.03	-1.68	0.00	-55.78	0.00	55.78	5,141.37	1,214.50	4,784	4,596.62	1.00	-0.09	0.02
110.00	-15.81	-1.66	0.00	-47.40	0.00	47.40	4,949.68	1,169.21	4,434	4,258.38	1.10	-0.10	0.01
111.04	-14.42	-1.55	0.00	-45.68	0.00	45.68	4,909.93	1,159.83	4,363	4,189.87	1.12	-0.10	0.01
115.00	-13.74	-1.49	0.00	-39.54	0.00	39.54	4,757.98	1,123.93	4,097	3,933.06	1.20	-0.10	0.01
116.95	-13.27	-1.46	0.00	-36.62	0.00	36.62	3,496.26	847.96	3,109	2,916.35	1.25	-0.10	0.02
120.00	-12.52	-1.39	0.00	-32.19	0.00	32.19	3,434.18	827.27	2,959	2,794.02	1.31	-0.11	0.02
125.00	-11.79	-1.32	0.00	-25.24	0.00	25.24	3,329.78	793.31	2,721	2,596.82	1.43	-0.11	0.01
130.00	-11.09	-1.25	0.00	-18.63	0.00	18.63	3,214.56	759.34	2,493	2,398.59	1.54	-0.11	0.01
135.00	-10.82	-1.23	0.00	-12.37	0.00	12.37	3,070.79	725.38	2,275	2,187.80	1.66	-0.12	0.01
137.00	-7.33	-0.86	0.00	-9.92	0.00	9.92	3,013.28	711.80	2,191	2,106.19	1.71	-0.12	0.01
140.00	-6.75	-0.80	0.00	-7.34	0.00	7.34	2,927.02	691.42	2,067	1,986.69	1.79	-0.12	0.01
145.00	-6.42	-0.76	0.00	-3.35	0.00	3.35	2,783.25	657.46	1,869	1,795.28	1.91	-0.12	0.00
148.00	-5.62	-0.67	0.00	-1.08	0.00	1.08	2,696.99	637.08	1,755	1,685.09	1.99	-0.12	0.00
149.00	-2.25	-0.27	0.00	-0.41	0.00	0.41	2,668.24	630.29	1,718	1,649.14	2.01	-0.12	0.00
150.00	-1.20	-0.14	0.00	-0.14	0.00	0.14	2,639.48	623.50	1,681	1,613.57	2.04	-0.12	0.00
151.00	0.00	-0.14	0.00	0.00	0.00	0.00	2,610.73	616.71	1,645	1,578.39	2.06	-0.12	0.00

ANALYSIS SUMMARY

	Base Reactions						Max Usage	
Load Case	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Elev (ft)	Interaction Ratio
1.2D + 1.0W	39.58	0.00	81.75	0.00	0.00	4175.48	0.00	0.27
0.9D + 1.0W	39.57	0.00	61.31	0.00	0.00	4158.69	0.00	0.26
1.2D + 1.0Di + 1.0Wi	10.09	0.00	99.79	0.00	0.00	1050.78	0.00	0.07
1.2D + 1.0Ev + 1.0Eh	2.76	0.00	81.25	0.00	0.00	309.89	0.00	0.03
0.9D - 1.0Ev + 1.0Eh	2.76	0.00	56.36	0.00	0.00	308.43	0.00	0.02
1.0D + 1.0W	8.03	0.00	68.14	0.00	0.00	844.91	0.00	0.06

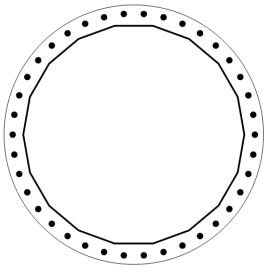
BASE PLATE ANALYSIS @ 0 FT

APPLIED REACTIONS

Moment (k-ft)	Axial (k)	Shear (k)
4175.48	81.75	39.58

PLATE PARAMETERS (ID# 28915)

Width:	90	in
Shape:	Round	
Thickness:	4	in
Grade:	A572-50	
Yield Strength:	50	ksi
Tensile Strength:	65	ksi
Rod Detail Type:	d	
Clear Distance	3	in
Base Weld Size:	0.125	in
Orientation Offset:	-	°
Analysis Type:	Plastic	
Neutral Axis:	90	°



ANCHOR ROD PARAMETERS

Class	Arrangement	Quantity	Diameter (in)	Circle (in)	Grade	F_y (ksi)	F_u (ksi)	Spacing (in)	Offset (°)
Original [ID#29684]	Radial	38	2.25	84	A615-75	75	100	-	-

COMPONENT PROPERTIES

Component	ID	Gross Area (in^2)	Net Area (in^2)	Individual Inertia (in^4)	Moment of Inertia (in^4)	Threads/in
Pole	76"ø x 0.625" (18 Sides)	147.2482	-	-	104591.09	-
Bolt Group	Original (38) 2.25"ø	3.9761	3.2477	0.8393	102184.64	4.5

REACTION DISTRIBUTION

Component	ID	Moment M_u (k-ft)	Axial Load P_u (k)	Shear V_u (k)	Moment Factor
Pole	76"ø x 0.625" (18 Sides)	4175.5	81.75	39.58	1.000
Bolt Group	Original (38) 2.25"ø	4175.5	-	39.58	1.000

BASE PLATE BEND LINE ANALYSIS @ 0 FT

POLE PROPERTIES

Flat-to-Flat Diameter:	76.12	in	Flat Width:	13.423	in	Neutral Axis:	90	°
Point-to-Point Diameter:	77.30	in	Flat Radians:	0.349	rad	Bend Line Limits:	2.751 to 3.532	rad
Orientation Offset:	-	°						

PLATE PROPERTIES

Bend Line	Chord Length (in)	Additional Length (in)	Section Modulus (in^3)	Applied Moment M_u (k-in)	Moment Capacity ΦM_n (k-in)	Flexure Result $M_u/\Phi M_n$	
Flats	42.918	0.00	171.674	502.6	7725.3	6.5%	✓
Corners	40.765	0.00	163.062	332.4	7337.8	4.5%	✓
Circumferential	46.132	0.00	184.527	664.2	8303.7	8.0%	✓

PLASTIC ANCHOR ROD ANALYSIS

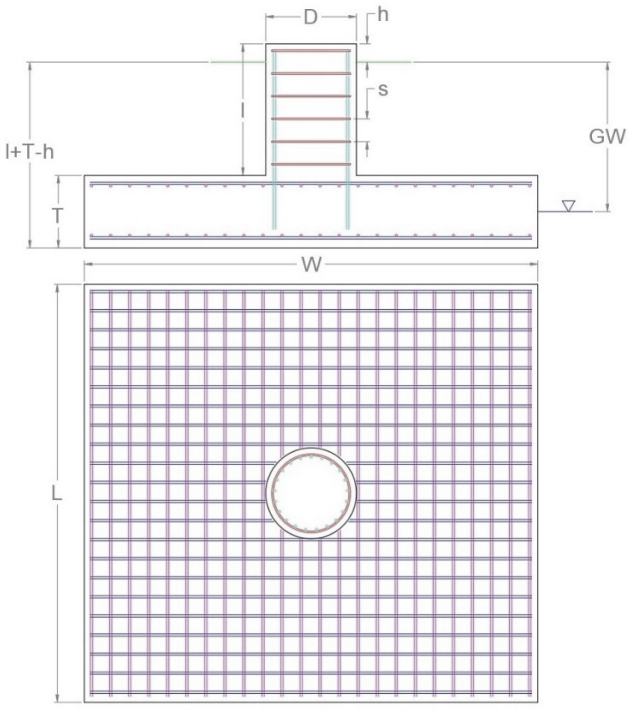
Class	Group Quantity	Rod Diameter (in)	Applied Axial Load P_u (k)	Applied Shear Load V_u (k)	Compressive Capacity ΦP_n (k)	Interaction Result	
Original	38	2.25	55.1	1.6	243.6	24.0%	✓

APPLIED GLOBAL REACTIONS

Moment (k-ft)	Axial (k)	Shear (k)
4,175.48	81.75	39.58

FOUNDATION PARAMETERS

Mat Length:	L	36	ft
Mat Width:	W	36	ft
Mat Thickness:	T	4	ft
Base Depth:	L+T-h	7	ft
Pier Shape:		Square	
Pier Width:	D	10	ft
Pier Height above Grade:	h	1	ft
Concrete Compressive Strength:		4,000	psi
Mat Top Rebar:		(44) #9 bars [60 ksi]	
Mat Bottom Rebar:		(80) #9 bars [60 ksi]	
Pier Vertical Rebar:		(73) #9 bars [60 ksi]	
Pier Rebar Ties:	s	#4 bars @ 6.0" c/c [60 ksi]	
Rebar Clear Cover:		3.0	in
Tower Eccentricity:	ecc	0	ft
Tower Leg Count		1	



SOIL PARAMETERS

Water Table Depth [BGL]:	GW		ft
Soil Unit Weight:		125	pcf
Ultimate Skin Friction:		0	psf
Ultimate Bearing Pressure:		12,000	psf
Bearing Pressure Type:		Net	
Coefficient of Shear Friction:		0.45	

SOIL STRENGTH ANALYSIS

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

SOIL OVERTURNING ANALYSIS

Design Moment, $M_{u,Design}$ (k-ft)	Nominal Overturning Capacity, $\Phi_m M_n$ (k-ft)	Soil Overturning Usage, $M_{u,Design} / \Phi_m M_n$	
4,492.12	22,884.92	**19.6%**	✓

SOIL BEARING ANALYSIS

Net Bearing Pressure, $P_{u,Net}$ (psf)	Nominal Bearing Capacity, $\Phi_b P_n$ (k-ft)	Bearing Pressure Controlling Load Direction	Soil Bearing Usage, $P_{u,net} / \Phi_b P_n$	
1,166.00	9,656.00	Parallel to Pad Edge	**12.1%**	✓

SOIL SLIDING SHEAR ANALYSIS

Applied Shear Force, V_u (k)	Friction Resistance (k)	Passive Pressure (psf)	Passive Pressure Resistance (k)	Nominal Shear Capacity, $\Phi_s V_n$ (k)	Soil Sliding Shear Usage, $V_u / \Phi_s V_n$	
39.58	0.00	625.0	90.00	524.55	**8.0%**	✓

MAT REINFORCING STEEL STRENGTH ANALYSIS

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

MAT REINFORCING ONE WAY SHEAR ANALYSIS

One Way Design Shear, V_u (k)	Nominal One Way Shear Capacity, $\Phi_c V_n$ (k)	One Way Shear Controlling Load Direction	Mat One Way Shear Usage, $V_u / \Phi_c V_n$	
74.16	1,678.22	Diagonal to Pad Edge	**4.4%**	✓

MAT REINFORCING PUNCHING SHEAR ANALYSIS

Punching Shear Design Stress, v_u (psi)	Nominal Punching Shear Capacity, $\Phi_c v_n$ (psi)	Mat Punching Shear Usage, $v_u / \Phi_c v_n$	
18.1	189.7	**9.5%**	✓

MAT REINFORCING MOMENT TRANSFER ANALYSIS

Moment Transfer Effective Flexural Width, w_f (in)	Neutral Axis Depth (in)	Pier Moment at Joint, M_{ut} (k-in)	Nominal Moment Transfer Capacity, $\Phi M_{sc,f}$ (k-in)	Mat Moment Transfer Usage, $0.6\ M_{ut} / \Phi M_{sc,f}$	
22.00	3.34	0.00	114,677.1	**0.0%**	✓

MAT REINFORCING FLEXURE ANALYSIS – UPPER STEEL

Factored Moment, M_u (k-ft)	Nominal Flexural Capacity, ΦM_n (k-ft)	Flexural Steel Controlling Load Direction	Mat Upper Rebar Flexure Usage, $M_u / \Phi M_n$	
2,037.33	8,536.00	Parallel to Pad Edge	**23.9%**	✓

MAT REINFORCING FLEXURE ANALYSIS – LOWER STEEL

Factored Moment, M_u (k-ft)	Nominal Flexural Capacity, ΦM_n (k-ft)	Flexural Steel Controlling Load Direction	Mat Lower Rebar Flexure Usage, $M_u / \Phi M_n$	
1,905.00	15,295.00	Parallel to Pad Edge	**12.5%**	✓

PIER REINFORCING STEEL STRENGTH ANALYSIS

Rebar Cage Diameter (in)	Steel Elastic Modulus, E (ksi)	Strength Bending/Tension Reduction Factor, Φ_b	Strength Shear Reduction Factor, Φ_v	Strength Compression Reduction Factor, Φ_c
111.88	29,000	0.9	0.75	0.65

PIER REINFORCING MOMENT ANALYSIS

Design Moment, M_u (k-ft)	Nominal Moment Capacity, $\Phi_b M_n$ (k-ft)	Bending Reinforcement Ratio	Pier Rebar Flexure Usage, $M_u/\Phi_b M_n$	
4,333.80	17,466.99	0.005	**24.8%**	✓

PIER REINFORCING COMPRESSION ANALYSIS

Design Compression, P_u (k)	Nominal Compressive Capacity, $\Phi_p P_n$ (k)	Pier Rebar Compressive Usage, $P_u / \Phi_p P_n$	
81.75	25,361.34	**0.3%**	✓

PIER REINFORCING SHEAR ANALYSIS

Design Shear, V_u (k)	Nominal Shear Capacity, $\Phi_v V_n$ (k)	Pier Rebar Shear Usage, $V_u / \Phi_v V_n$	
39.58	1,657.98	**2.4%**	✓

EXHIBIT 4

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

Post-Modification Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10218074
Colliers Engineering & Design Project #: 21777472A (Rev 1)

March 28, 2024

Site Information	*Site ID:*	*5000246909-VZW / PALMER POND CT*
	Site Name:	*PALMER POND CT*
	Carrier Name:	*Verizon Wireless*
	Address:	*53 Gallup Rd* *Voluntown, Connecticut 06384* *New London County*
	Latitude:	*41.536785°*
	Longitude:	*-71.829229°*
Structure Information	*Tower Type:*	*Monopole*
	Mount Type:	*13.42-Ft Platform*

FUZE ID # 16272100

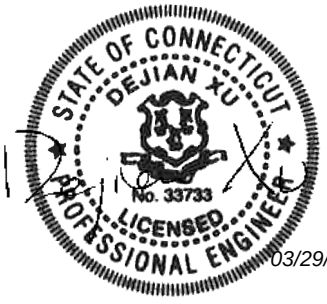
Analysis Results

Platform: **87.2% Pass w/ Modifications***

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

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

Report Prepared By: David Anuka



03/29/2024

Executive Summary:

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

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

Sources of Information:

Document Type	Remarks
Radio Frequency Data Sheet (RFDS)	*Verizon RFDS Site ID: 1817234, dated December 13, 2023*
Mount Mapping Report	*RKS Design & Engineering, LLC., Site ID: ATC:418914, VZW:469050, dated March 24, 2021*
Previous Mount Analysis	*Colliers Engineering & Design, Project #: 21777472A (Rev 1), dated December 26, 2023*
Mount Modification Drawings	*Colliers Engineering & Design, Project #: 21777472A (Rev 1), dated March 28, 2024*

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H 2022 Connecticut State Building Code (CSBC), Effective October 1, 2022	
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT}:	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:	0.984
Seismic Parameters:	S_S:	0.188 g
	S_1:	0.053 g
Maintenance Parameters:	Wind Speed (3-sec. Gust):	30 mph
	Maintenance Load, Lv:	250 lbs.
	Maintenance Load, Lm:	500 lbs.
Analysis Software:	RISA-3D (V17)	

Final Loading Configuration:

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
150.00	150.00	6	Commscope	JAHH-65B-R3B	Added
		3	Commscope	CBC78T-DS-43-2X	
		3	Samsung	MT6413-77A	
		3	Samsung	RF4461d-13A	
		3	Samsung	RF4439d-25A	
		2	Raycap	RRFDC-3315-PF-48	Retained

Any proposed antennas not currently installed should be mounted such that the centerline of the antennas does not exceed 6 inches vertically from the center of the antenna mount(s).

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

8. Any mount modifications listed under Sources of Information are assumed to have been installed per the design specifications.

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

Analysis Results:

Component	Utilization %	Pass/Fail
Face Horizontal	16.5 %	Pass
Standoff Horizontal	18.7 %	Pass
Grating Support	30.6 %	Pass
Mount Frame	53.2 %	Pass
Antenna Pipe	87.2 %	Pass
Proposed Kicker	17.6 %	Pass
Connection Check	80.5 %	Pass

Structure Rating – *(Controlling Utilization of all Components)*	**87.2%**

Mount Connection Envelope Reactions:

Connection Description	Elev. AGL (Ft)	Node Label	Envelope Wind Reactions				Envelope Wind + Ice Reactions			
			Axial (Lbs)	Lateral (Lbs)	Moment (K-Ft)	Torsion (K-Ft)	Axial (Lbs)	Lateral (Lbs)	Moment (K-Ft)	Torsion (K-Ft)
Sector B Standoff	150	N43	166	5302	0.263	1.645	133	3455	0.217	0.351
Sector D Standoff	150	N37	98	3796	0.218	1.304	33	1711	0.375	0.283
Sector C Standoff	150	N40	113	5037	0.198	1.755	99	3280	0.238	0.381
Sector A Standoff	150	N34	77	4018	0.210	1.234	29	1992	0.380	0.273
Sector B Reinforcement	141.75	N177A	1290	2189	0.000	0.000	2183	3740	0.000	0.000
Sector D Reinforcement	141.75	N178A	1240	2100	0.000	0.000	2039	3486	0.000	0.000
Sector C Standoff	141.75	N179A	1695	2901	0.000	0.000	2872	4954	0.000	0.000
Sector A Standoff	141.75	N180A	1749	2996	0.000	0.000	2961	5111	0.000	0.000

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

Mount Steel (EPA)a per ANSI/TIA-222-H Section 2.6.11.2:

Ice Thickness (In)	Mount Pipes Excluded		Mount Pipes Included	
	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)
0	53.7	53.7	76.0	76.0
0.5	68.8	68.8	100.1	100.1
1	82.5	82.5	122.8	122.8

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

Requirements:

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

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

Attachments:

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

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Mount Modification

Electronic pdf version of this can be downloaded at https://pmi.vzwsmart.com
For additional questions and support, please reach out to pmisupport@colliersengineering.com

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MDG #: 5000246909 SMART Project #: 10218074 Fuze Project ID: 16272100

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

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

Base Requirements:

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

Photo Requirements:

- *Photos taken at ground level*
  - Photo of Gate Signs showing the tower owner, site name, and number.
  - Overall tower structure after installation of the modifications.
  - Photos of the mount after installation of the modifications; if the mounts are at different rad elevations, pictures must be provided for all elevations that the modifications were installed

- *Photos taken at Mount Elevation*
  - Photos showing the safety climb wire rope above and below the mount prior to modification.
  - Photos showing the climbing facility and safety climb if present.

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

Material Certification:

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

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

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

OR

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

Antenna & Equipment Placement and Geometry Confirmation:

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

OR

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

Comments:

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

☐ Yes ☐ No

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

Issue:

Response:

Special Instruction Confirmation:

☐ The contractor has read and acknowledges the above special instructions.

Comments:

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

☐ Yes ☐ No

Contractor certifies no new damage created during the current installation:

☐ Yes ☐ No

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

☐ Safety Climb in Good Condition ☐ Safety Climb Damaged

Comments:

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

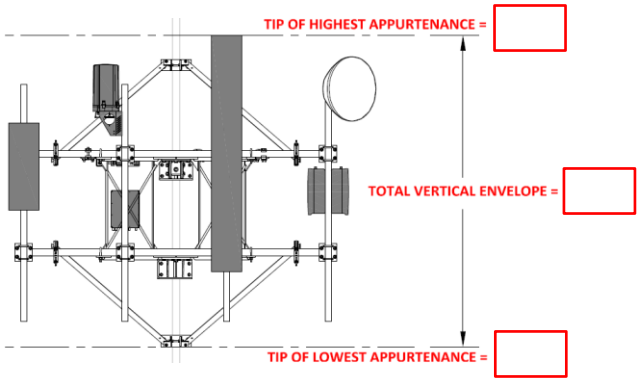

Illustration #1

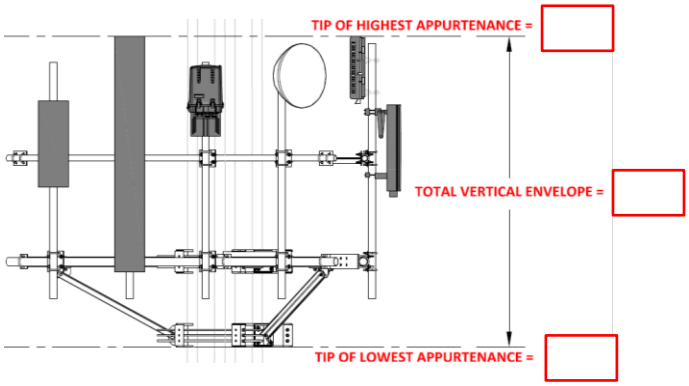

Illustration #2

Certifying Individual:

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

Structure: 0002 6 0 -VZW - PALMER POND CT

Se tor: **A** 3/25/2024

Str t re Type: Mo opole 10218074

Mo t Elev: 150.00 P ge: 1

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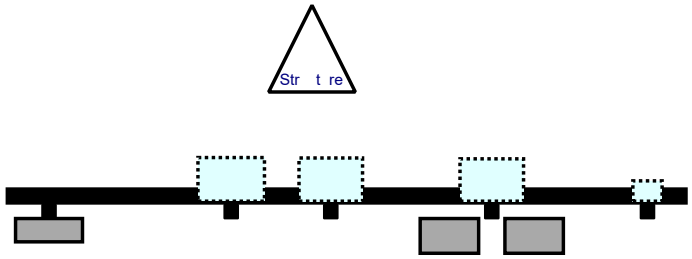
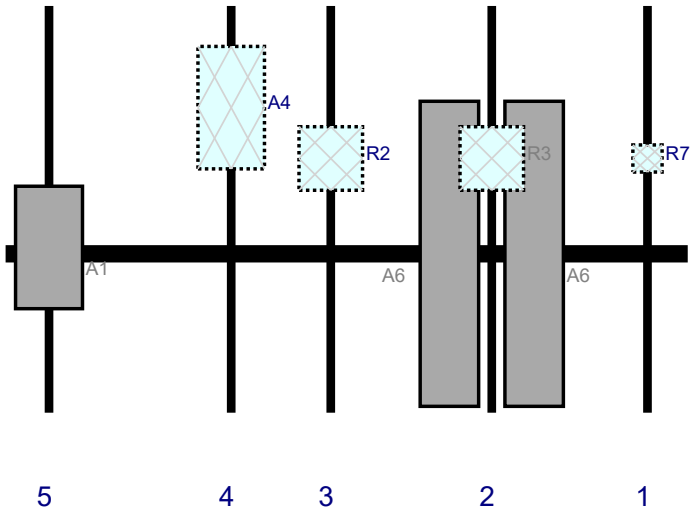
Plan View

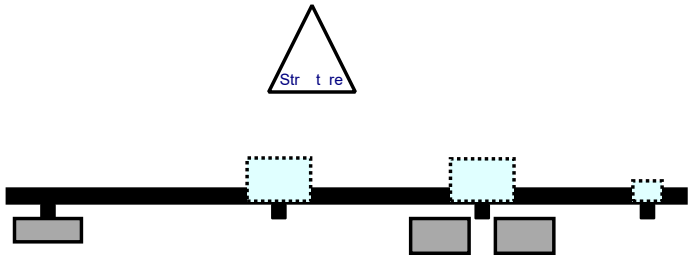


Front View - Loo i g t Str t re

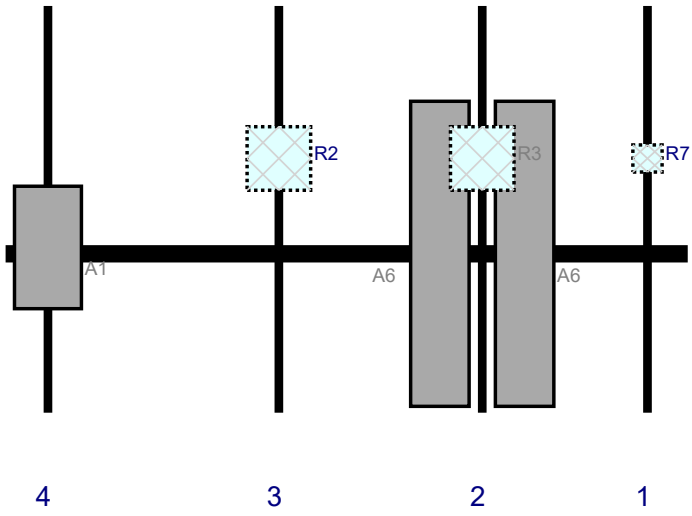


Re #	Model	Height (i)	Width (i)	H Dist Fr L.	Pipe #	Pipe Pos V	A t Pos	C. A t Fr T.	A t H O	St t s	V lid tio
R7	CBC78T-DS-43-2X	6.4	6.9	151.5	1		Behi d	36	0	Added	
A6	JAHH-65B-R3B	72	13.8	114.75	2		Fro t	58.5	10	Added	
A6	JAHH-65B-R3B	72	13.8	114.75	2		Fro t	58.5	-10	Added	
R3	RF4439d-25A	15	15	114.75	2		Behi d	36	0	Added	
R2	RF4461d-13A	15	15	76.75	3		Behi d	36	0	Added	
A4	RRFDC-3315-PF-48	28.9	15.7	53.25	4		Behi d	24	0	Ret i ed	03/24/2021
A1	MT6413-77A	28.9	15.8	10.25	5		Fro t	57	0	Added	

Plan View

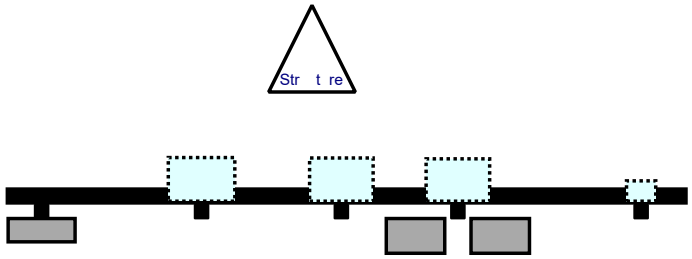


Front View - Loo i g t Str t re

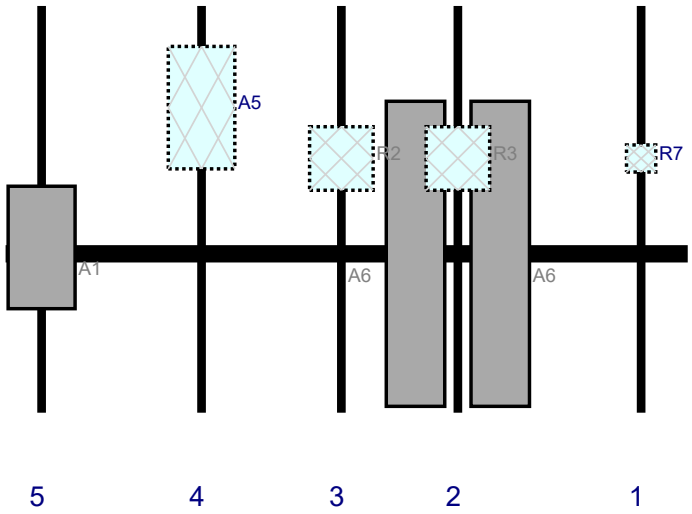


Re #	Model	Height (i)	Width (i)	H Dist Fr L.	Pipe #	Pipe Pos V	A t Pos	C. A t Fr T.	A t H O	St t s	V lid tio
R7	CBC78T-DS-43-2X	6.4	6.9	151.5	1		Behi d	36	0	Added	
A6	JAHH-65B-R3B	72	13.8	112.5	2		Fro t	58.5	10	Added	
A6	JAHH-65B-R3B	72	13.8	112.5	2		Fro t	58.5	-10	Added	
R3	RF4439d-25A	15	15	112.5	2		Behi d	36	0	Added	
R2	RF4461d-13A	15	15	64.5	3		Behi d	36	0	Added	
A1	MT6413-77A	28.9	15.8	10	4		Fro t	57	0	Added	

Plan View



Front View - Loo i g t Str t re



5 4 3 2 1

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
R7	CBC78T-DS-43-2X	6.4	6.9	150	1		Behi d	36	0	Added	
A6	JAHH-65B-R3B	72	13.8	106.75	2		Fro t	58.5	10	Added	
A6	JAHH-65B-R3B	72	13.8	106.75	2		Fro t	58.5	-10	Added	
R3	RF4439d-25A	15	15	106.75	2		Behi d	36	0	Added	
R2	RF4461d-13A	15	15	79.25	3		Behi d	36	0	Added	
A5	RRFDC-3315-PF-48	28.9	15.7	46.25	4		Behi d	24	0	Ret i ed	03/24/2021
A1	MT6413-77A	28.9	15.8	8.5	5		Fro t	57	0	Added	

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MOUNT MODIFICATION DRAWINGS
EXISTING 13.42' PLATFORM

TOWER OWNER: AMERICAN TOWER CORPORATION
TOWER OWNER SITE NUMBER: 418914

CARRIER SITE NAME: PALMER POND CT
CARRIER SITE NUMBER: 5000246909
FUZE ID: 16272100

53 GALLUP RD
VOLUNTOWN, CT 06384
NEW LONDON COUNTY

LATITUDE: 41.536785° N
LONGITUDE: 71.829229° W

DESIGN CRITERIA

WIND LOADS

BASIC WIND SPEED (3 SECOND GUST), V = 130 MPH
EXPOSURE CATEGORY C
TOPOGRAPHIC CATEGORY: 1
TOPOGRAPHY CONSIDERED: NO
MEAN BASE ELEVATION (AMSL) = 452.73'

ICE LOADS

ICE WIND SPEED (3 SECOND GUST), V = 50 MPH
ICE THICKNESS = 1.00 IN

SEISMIC LOADS

SEISMIC DESIGN CATEGORY B
SHORT TERM MCER GROUND MOTION, S_S = .188
LONG TERM MCER GROUND MOTION, S_1 = .053

PROJECT INFORMATION

APPLICANT/LESSEE

COMPANY: VERIZON WIRELESS

CLIENT REPRESENTATIVE

COMPANY: VERIZON WIRELESS

PROJECT MANAGER

COMPANY: COLLIERS ENGINEERING & DESIGN
CONTACT: PETER ALBANO
PHONE: 856.797.0412
E-MAIL: PETER.ALBANO@COLLIERSENG.COM

CONTRACTOR PMI REQUIREMENTS

PMI LOCATION: HTTPS://PMI.VZWSMART.COM
SMART TOOL PROJECT #: 10218074
VZW MDG #: 5000246909
ANALYSIS DATE: 3/28/2024

PMI REQUIREMENTS EMBEDDED WITHIN MOUNT MODIFICATION REPORT

SHEET INDEX

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

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1	3/28/2024	ISSUED FOR CONSTRUCTION	DA	DX
0	8/26/2021	ISSUED FOR CONSTRUCTION	SA	DX

COLLIERS ENGINEERING & DESIGN CT, P.C.
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SITE NAME:

PALMER POND CT
5000246909

53 GALLUP RD
VOLUNTOWN, CT 06384
NEW LONDON COUNTY

Colliers Engineering & Design

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

SHEET TITLE : TITLE SHEET

SHEET NUMBER : ST-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

BILL OF MATERIALS

SECTION 1 - VZWSMART KITS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
1	VZWSMART	VZWSMART-PLK7Q	4-SIDED COLLAR MOUNT ASSEMBLY		192	192
1		VZWSMART-PLK5Q	4-SIDED KICKER KIT	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET SGN-1.	398	398
8		VZWSMART-P40-238X096	96" LONG, PIPE 2 SCH40 (2.375"OD X 0.154" THK)		29	232

SECTION 2 - OTHER REQUIRED PARTS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
8	SITE PRO 1	SQCX4-K	CROSSOVER PLATTE KIT W/ SQUARE U-BOLTS AND STD. UBOLTS		11	88

SECTION 3 - REQUIRED SAFETY CLIMB PARTS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
1	PERFECT VISON	H42-0501-06	STANDOFF CLAMP BRACKET	OR EOR APPROVED EQUIVALENT	-	-
1	PERFECT VISION	PV-CMX-CG-BO	WIRE ROPE GUIDE	OR EOR APPROVED EQUIVALENT	-	-
					TOTAL:	910

NOTES:

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

VZWSMART KITS - APPROVED VENDORS

COMMSCOPE	
CONTACT	SALVADOR ANGUIANO
PHONE	(817) 304-7492
EMAIL	SALVADOR.ANGUIANO@COMMSCOPE.COM
WEBSITE	WWW.COMMSCOPE.COM

METROSITE FABRICATORS, LLC	
CONTACT	KENT RAMEY
PHONE	(706) 335-7045 (O), (706) 982-9788 (M)
EMAIL	KENT@METROSITELLC.COM
WEBSITE	METROSITEFABRICATORS.COM

PERFECTVISION	
CONTACT	WIRELESS SALES
PHONE	(844) 887-6723
EMAIL	WWW.PERFECT-VISION.COM
WEBSITE	WIRELESSSALES@PERFECT-VISION.COM

SABRE INDUSTRIES, INC.	
CONTACT	ANGIE WELCH
PHONE	(866) 428-6937
EMAIL	AKWELCH@SABREINDUSTRIES.COM
WEBSITE	WWW.SABRESITESOLUTIONS.COM

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

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2000 Midlantic Drive, Suite 100
Mt. Laurel, NJ 08054
Phone: 856.797.0412
COLLIERS ENGINEERING & DESIGN, INC.
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SHEET TITLE: BILL OF MATERIALS

SHEET NUMBER: SBOM-1

GENERAL NOTES

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

STRUCTURAL STEEL

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

CHANNELS, ANGLES, PLATES, ETC.	ASTM A36 (GR 36)
STEEL PIPE	ASTM A53 (GR 35)
BOLTS	ASTM A325
NUTS	ASTM A563
LOCK WASHERS	LOCKING STRUCTURAL GRADE

3. ALL SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE APPROVED IN WRITING BY THE ENGINEER. CONTRACTOR SHALL PROVIDE DOCUMENTATION TO ENGINEER FOR VERIFYING THE SUBSTITUTE IS SUITABLE FOR USE AND MEETS ORIGINAL DESIGN CRITERIA. DIFFERENCES FROM THE ORIGINAL DESIGN, INCLUDING MAINTENANCE, REPAIR AND REPLACEMENT, SHALL BE NOTED. ESTIMATES OF COSTS/CREDITS ASSOCIATED WITH THE SUBSTITUTION (INCLUDING RE-DESIGN COSTS AND COSTS TO SUB-CONTRACTORS) SHALL BE PROVIDED TO THE ENGINEER. CONTRACTOR SHALL PROVIDE ADDITIONAL DOCUMENTATION AND/OR SPECIFICATIONS TO THE ENGINEER AS REQUESTED.
4. PROVIDE STRUCTURAL STEEL SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
   a. SUBMIT SHOP DRAWINGS TO

      PETER.ALBANO@COLLIERSENG.COM

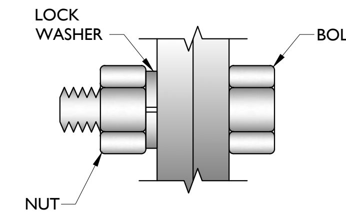
   b. PROVIDE COLLIERS ENGINEERING & DESIGN PROJECT # AND COLLIERS ENGINEERING & DESIGN PROJECT ENGINEER CONTACT IN THE BODY OF THE EMAIL.
5. DRILL NO HOLES IN ANY NEW OR EXISTING STRUCTURAL STEEL MEMBERS OTHER THAN THOSE SHOWN ON STRUCTURAL DRAWINGS WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.
6. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
7. ALL NEW STEEL SHALL BE HOT BE DIPPED GALVANIZED FOR FULL WEATHER PROTECTION. IN ADDITION ALL NEW STEEL SHALL BE PAINTED TO MATCH EXISTING STEEL. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
8. ALL BOLT ASSEMBLIES FOR STRUCTURAL MEMBERS REPRESENTED IN THIS DRAWING REQUIRE LOCKING DEVICES TO BE INSTALLED IN ACCORDANCE WITH TIA-222-H SECTION 4.9.2 REQUIREMENTS.
9. WHERE CONNECTIONS ARE NOT FULLY DETAILED ON THESE DRAWINGS, FABRICATOR SHALL DESIGN CONNECTIONS TO RESIST LOADS AND FORCES WHERE SHOWN ON DRAWINGS AND AS OUTLINED IN SPECIFICATIONS.
10. FOR MEMBERS BEING REPLACED, PROVIDE NEW BOLTS AND MATCH EXISTING SIZE AND GRADE. MAINTAIN AISC REQUIREMENTS FOR MINIMUM BOLT DISTANCE AND SPACING.
11. ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT IS AT LEAST FLUSH WITH THE FACE OF THE NUT. IT IS NOT PERMITTED FOR THE BOLT END TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.
12. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
13. ALL NEW STEEL SHALL BE HOT BE DIPPED GALVANIZED FOR FULL WEATHER PROTECTION. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
14. ALL EXISTING PAINTED/GALVANIZED SURFACES DAMAGED DURING REHAB INCLUDING AREAS UNDER STIFFENER PLATES SHALL BE WIRE BRUSHED CLEAN, REPAIRED BY COLD GALVANIZING (ZINC COTE, OR EOR APPROVED EQUAL), AND REPAINTED TO MATCH THE EXISTING FINISH (IF APPLICABLE).
15. ALL HOLES IN STEEL MEMBERS SHALL BE SIZED 1/16" LARGER THAN THE BOLT DIAMETER. STANDARD HOLES SHALL BE USED UNLESS NOTED OTHERWISE.

BOLT SCHEDULE (IN.)

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

WORKABLE GAGES (IN.)

LEG	GAGE
4	2 1/2
3 1/2	2
3	1 3/4
2 1/2	1 3/8
2	1 1/8



TYP. BOLT ASSEMBLY

NOTES:

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

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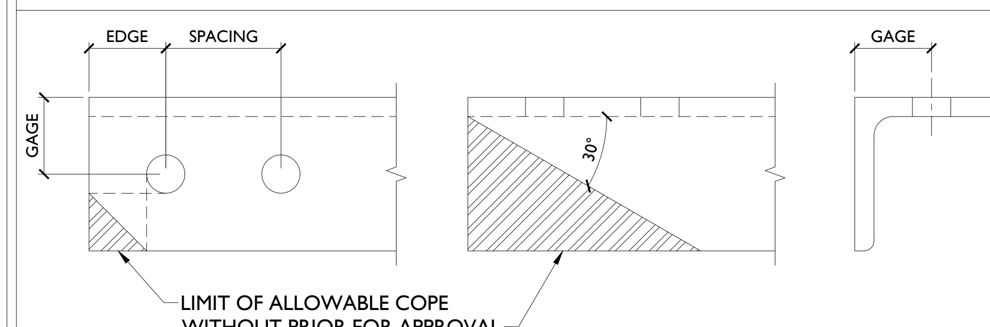

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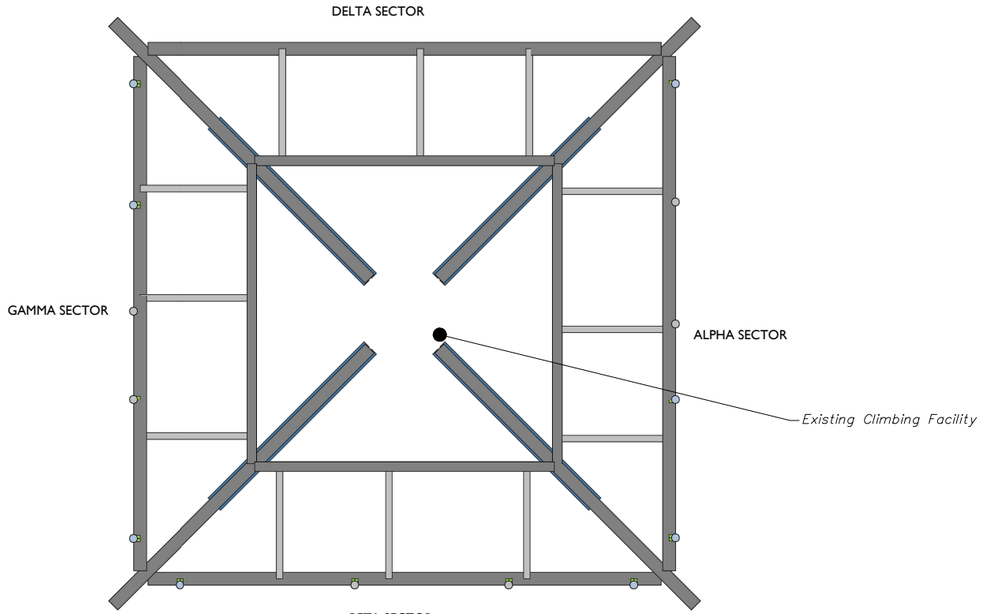
COLLIERS ENGINEERING & DESIGN, INC.
DOING BUSINESS AS MASER CONSULTING

SHEET TITLE :
GENERAL NOTES

SHEET NUMBER :
SGN-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

\AcPublish_35140\Template.Mount MOD_1_13991_520382d7.sv$.dwg\SGN-1 By: DAVID.ANUKA



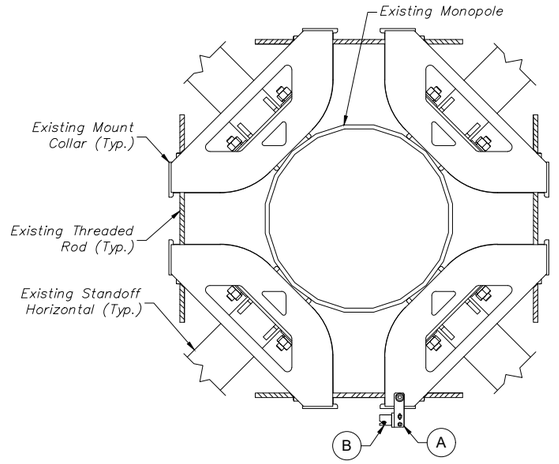
1 CLIMBING FACILITY LOCATION

SCALE : N.T.S.

STRUCTURAL NOTES:

1. PER THE MOUNT MAPPING COMPLETED BY RKS DESIGN & ENGINEERING, LLC ON 3/24/2021, THE SAFETY CLIMB AND CLIMBING FACILITIES UP TO THE VERIZON MOUNT ELEVATION (150'-0") ARE IN GOOD CONDITION. COLLIERS ENGINEERING & DESIGN DOES NOT WARRANT THIS INFORMATION.

2. INSTALL SHALL NOT CAUSE HARM TO THE STRUCTURE, CLIMBING FACILITY, SAFETY CLIMB, OR ANY SYSTEM INSTALLED ON THE STRUCTURE. TIMELY NOTICE AND DOCUMENTATION SHALL BE PROVIDED BY CONTRACTORS TO THE EOR (OF STRUCTURAL DESIGN) IF AN OBSTRUCTION WAS REQUIRED TO MEET THE RF SYSTEM DESIGN REQUIREMENTS AND PERFORMANCES.



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

2 PROPOSED WIRE ROPE GUIDE ATTACHMENT - PLAN VIEW

SCALE : N.T.S.

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

CLIMBING FACILITY PHOTO

Colliers Engineering & Design
www.colliersengineering.com

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FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

SCALE : AS SHOWN

JOB NUMBER : 21777472

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
1	3/28/2024	ISSUED FOR CONSTRUCTION	DA	DX
0	8/26/2021	ISSUED FOR CONSTRUCTION	SA	DX

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

SITE NAME:

PALMER POND CT
5000246909

53 GALLUP RD
VOLUNTOWN, CT 06384
NEW LONDON COUNTY

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

SHEET TITLE :
CLIMBING FACILITY DETAIL

SHEET NUMBER :
SCF-1

LEGEND:

- PROPOSED
- RELOCATED
- EXISTING

TOTAL VERTICAL ENVELOPE:

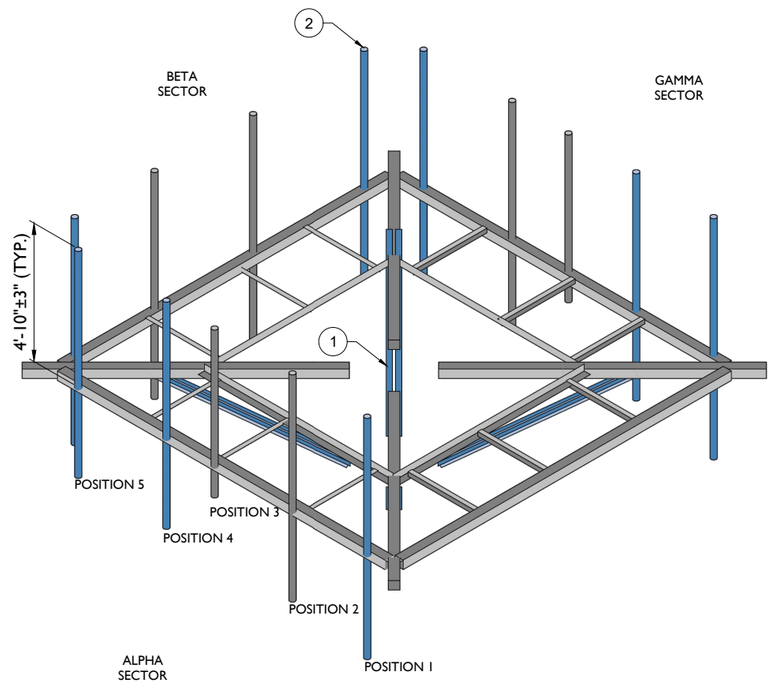
CONTRACTOR SHALL VERIFY AND CONFIRM IN FIELD THAT VERIZON'S OVERALL TIP TO TIP VERTICAL SPACE CONFIGURATION (EQUIPMENT AND STEEL COMBINED) DOES NOT EXCEED THE VERTICAL ENVELOPE LISTED IN THESE DRAWINGS. IF THE SITE'S EXISTING OR PROPOSED CONFIGURATION EXCEEDS THE ALLOWED VERTICAL ENVELOPE LISTED IN THESE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

MOUNT MODIFICATION SCHEDULE

NO.	ELEVATION	QUANTITY	DESCRIPTION	NOTES
1	150'-0"	1	PROPOSED 4-SIDED KICKER KIT (PART #: VZWSMART-PLK5Q)	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET SGN-1. CONNECT OTHER END OF KICKER KIT TO MONOPOLE COLLAR MOUNT ASSEMBLY (PART #: VZWSMART-PLK7Q). SEE GENERAL NOTE B.
2		8	PROPOSED 96" LONG, PIPE 2 SCH40 (PART #: VZWSMART-P40-238X096)	CONNECT NEW MOUNT PIPE TO EXISTING HORIZONTAL WITH CROSSOVER PLATES (PART # SITE PRO 1 SQCX4-K). MOUNT PIPES 1,2 & 5 IN ALPHA & GAMMA SECTOR, MOUNT PIPES 1 & 4 IN BETA SECTOR.

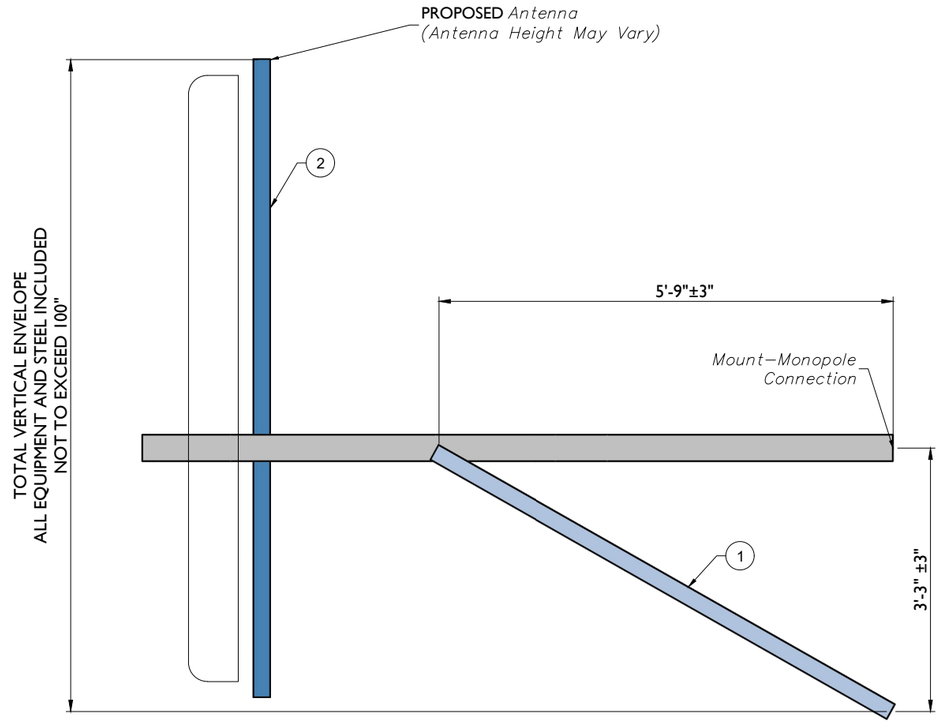
GENERAL NOTES:

A. CONTRACTOR SHALL VERIFY THAT NEW & EXISTING STEEL IS FREE OF CORROSION. VISIBLE MINOR CORROSION SHALL BE WIRE BRUSHED CLEAN AND TREATED WITH COLD GALVANIZATION. REPORT ANY SIGNIFICANT CORROSION TO EOR
B. THREADED ROD FROM PROPOSED KITS SHALL BE TRIMMED TO EXTEND NO MORE THAN 3" BEYOND THE LOCK NUT. TREAT ALL CUT ENDS WITH (2) COATS OF COLD GALVANIZATION (ZINC KOTE, OR EOR APPROVED EQUAL).
C. MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.



1 PROPOSED ISOMETRIC VIEW

SCALE : N.T.S.



2 PROPOSED SIDE ELEVATION VIEW (TYP. ALL SECTORS)

SCALE : N.T.S.

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SCALE : AS SHOWN

JOB NUMBER : 21777472

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
1	3/28/2024	ISSUED FOR CONSTRUCTION	DA	DX
0	8/26/2021	ISSUED FOR CONSTRUCTION	SA	DX

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

SITE NAME:

PALMER POND CT
5000246909

53 GALLUP RD
VOLUNTOWN, CT 06384
NEW LONDON COUNTY

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MT. LAUREL
2000 Midlantic Drive, Suite 100
Mt. Laurel, NJ 08054
Phone: 856.797.0412
COLLIERS ENGINEERING & DESIGN, INC.
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SHEET TITLE : MODIFICATION DETAILS

SHEET NUMBER : SS-1

MOUNT PHOTO 1

MOUNT PHOTO 2

MOUNT PHOTO 3

MOUNT PHOTO 4

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FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

SCALE :	JOB NUMBER :
AS SHOWN	21777472

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
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0	8/26/2021	ISSUED FOR CONSTRUCTION	SA	DX

COLLIERS ENGINEERING & DESIGN CT, P.C.
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COLLIERS ENGINEERING & DESIGN, INC.
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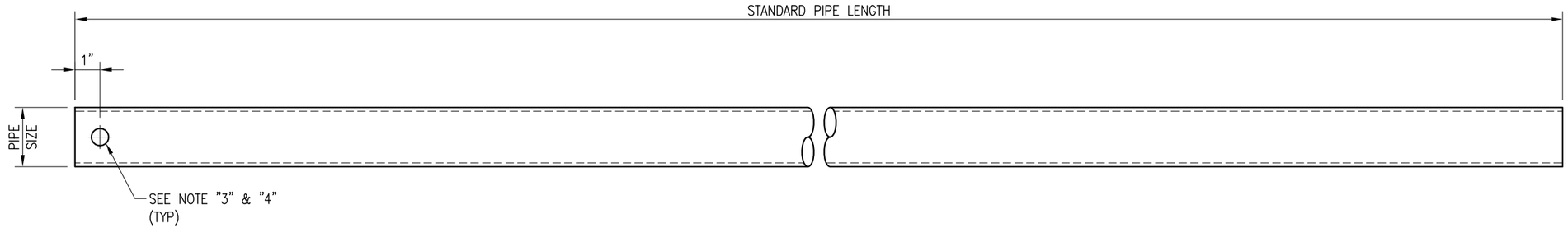
SHEET TITLE :

MOUNT PHOTOS

SHEET NUMBER :

SS-2



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

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

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

VzW SMART Tool© Vendor

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FOR REFERENCE ONLY

DRAWN BY: BT | CHECKED BY: HMA/KW

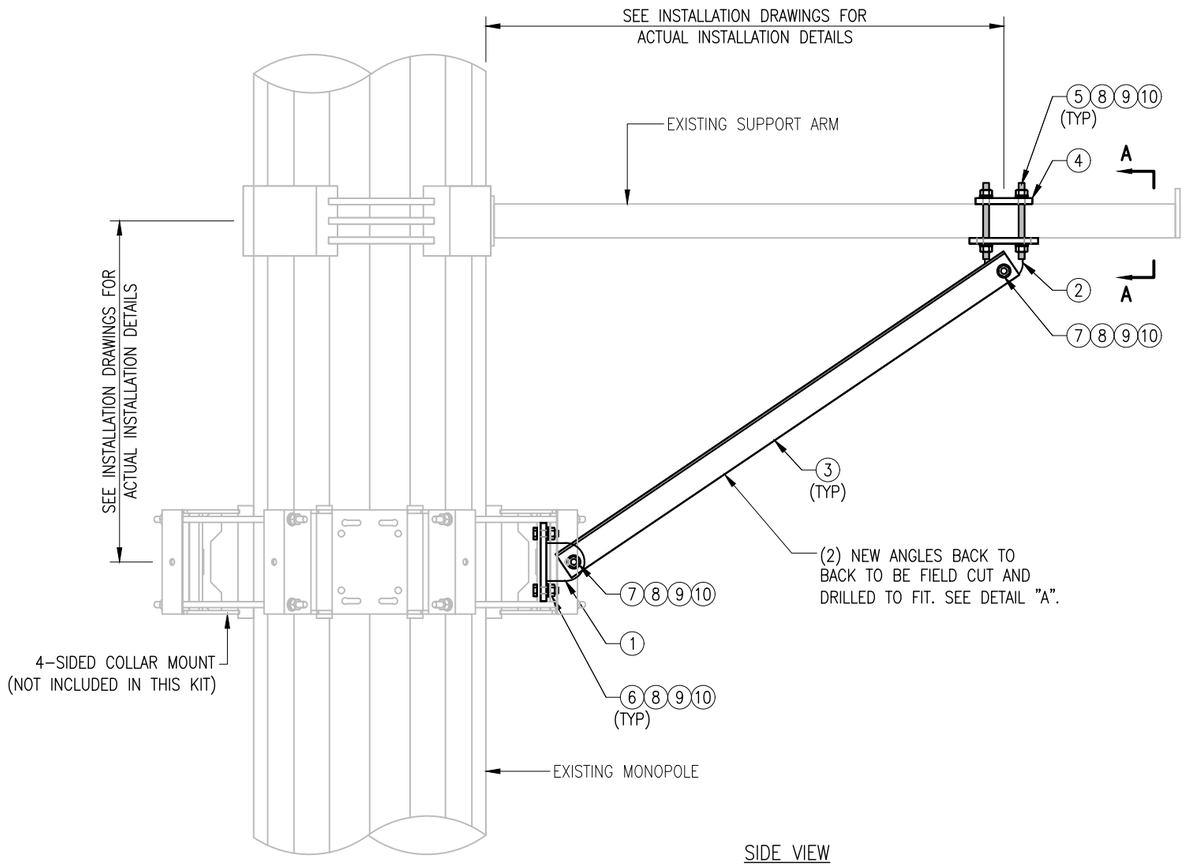
REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	BT	08/04/21

SHEET TITLE:
VZWSMART STANDARD PIPE

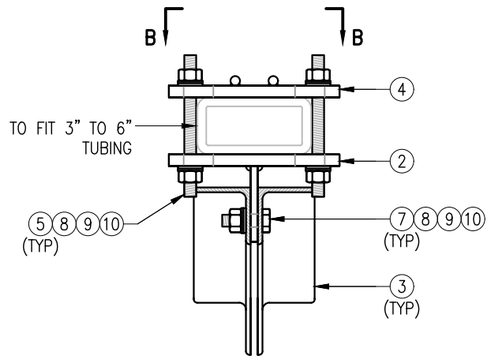
SHEET NUMBER: VZWSMART-PIPE

REV #: 0

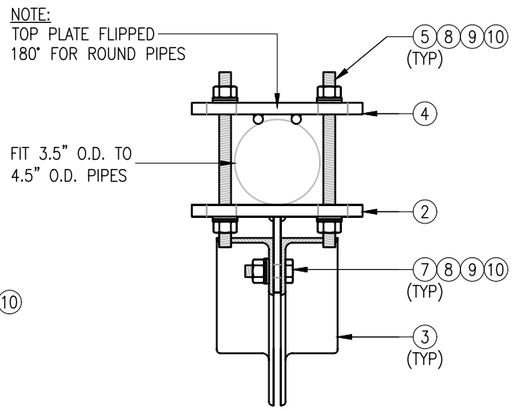
NOTE:
THE LOCATION OF KICKER AND EXISTING ANTENNA MOUNT SHOWN ON THE DRAWING IS FOR REPRESENTATION PURPOSE ONLY. SEE INSTALLATION DRAWINGS FOR ACTUAL INSTALLATION OF DETAILS.



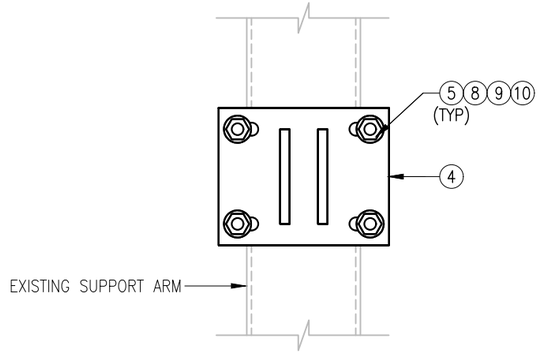
SIDE VIEW
4-SIDED KICKER KIT



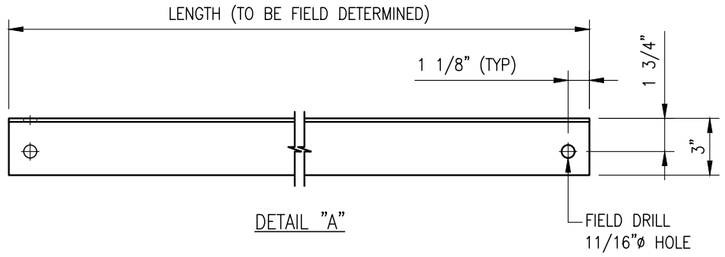
SECTION "A-A"
RECT. HSS MOUNTING



SECTION "A-A"
ROUND PIPE MOUNTING



SECTION "B-B"



DETAIL "A"

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

VZWSMART-PLK5Q (4-SIDED KICKER KIT)

ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	4	BRKW-XXX	BRACKET WELDMENT A36	PLK5-F3	52.12
2	4	BRKW-XXXX	BRACKET WELDMENT A36	PLK5-F2	50.00
3	8	L331875-8	L 3" X 3" X 3/16" X 8'-0" A36	PLK5-F4	243.9
4	4	PL-KI	PL 5/8" X 0'-7 1/4" X 9" A36	PLK5-F1	52.08
5	16	---	THREADED ROD 5/8" DIA. X 1'-0" F1554-36 HDG	---	--
6	8	---	BOLT 5/8" X 2 1/4" A325	---	--
7	16	---	BOLT 5/8" X 2" A325	---	--
8	56	FW-625	5/8" HDG USS FLAT WASHER	---	4
9	56	LW-625	5/8" HDG LOCK WASHER	---	1
10	56	NUT-625	5/8" HDG HEX NUT	---	7
				GALVANIZED WT	398

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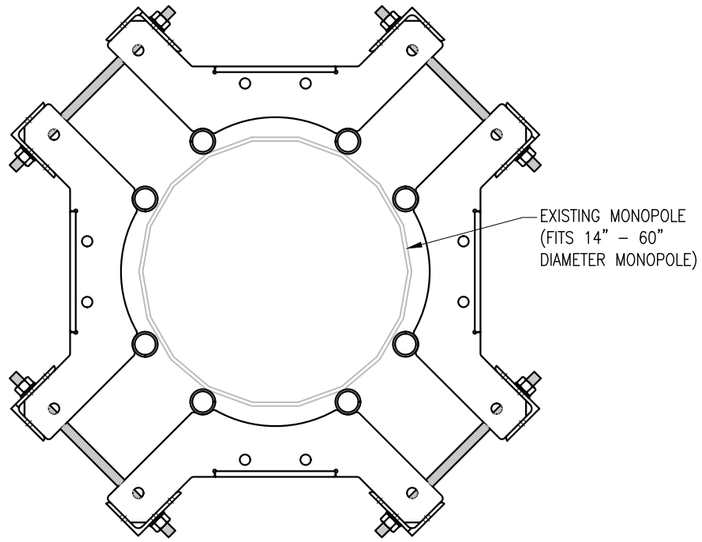
DRAWN BY: BT | CHECKED BY: HMA/KW

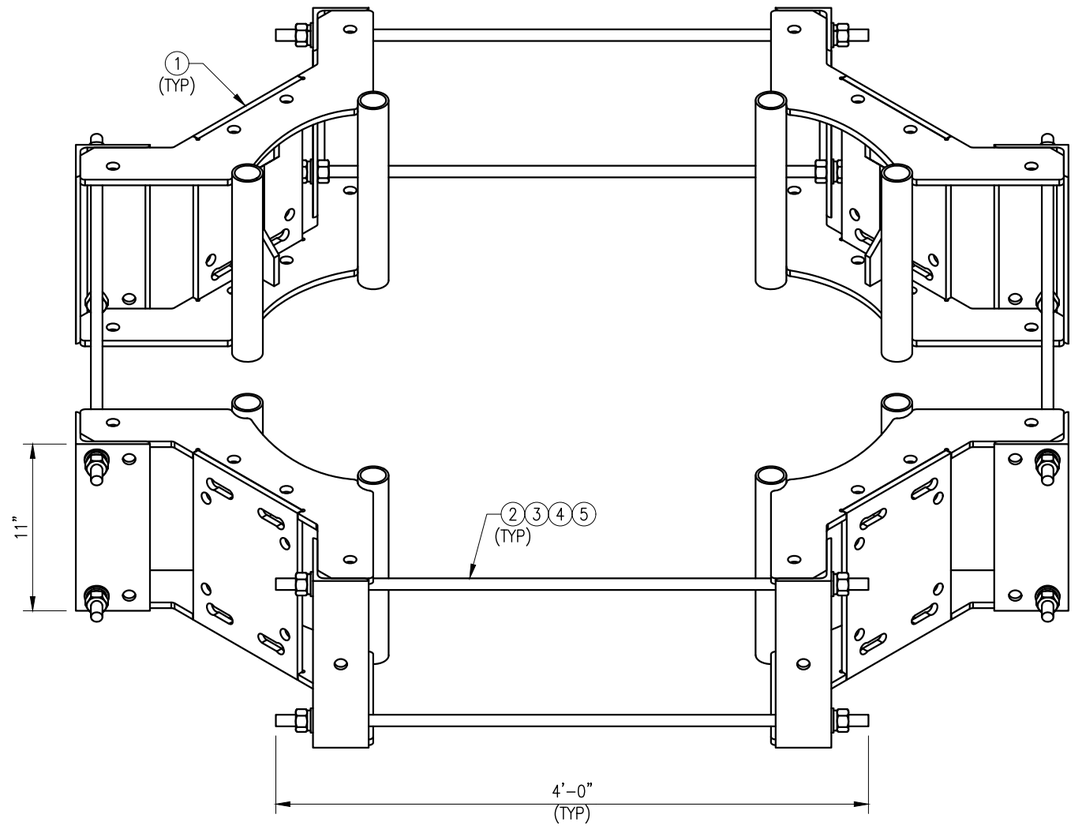
REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	BT	10/04/21

SHEET TITLE:
VZWSMART-PLK5Q
4-SIDED KICKER KIT

SHEET NUMBER: VZWSMART-PLK5Q
REV #: 0



4–SIDED COLLAR MOUNT ASSEMBLY
PLAN VIEW



4–SIDED COLLAR MOUNT ASSEMBLY
ISOMETRIC VIEW

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

VZWSMART–PLK7Q (4–SIDED COLLAR MOUNT ASSEMBLY)

ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	4	CM–1460	COLLAR MOUNT ASSEMBLY	PLK7Q–F1	41.20
2	8	---	THREADED ROD 5/8" X 4'–0" A193–B7	MSK12–F2	4.84
3	16	FW–625	5/8" HDG USS FLAT WASHER	---	0
4	16	LW–625	5/8" HDG LOCK WASHER	---	0
5	16	---	5/8" HDG HEX NUT	---	0
				GALVANIZED WT	192.28

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DRAWN BY: JBM | CHECKED BY: BT/KW

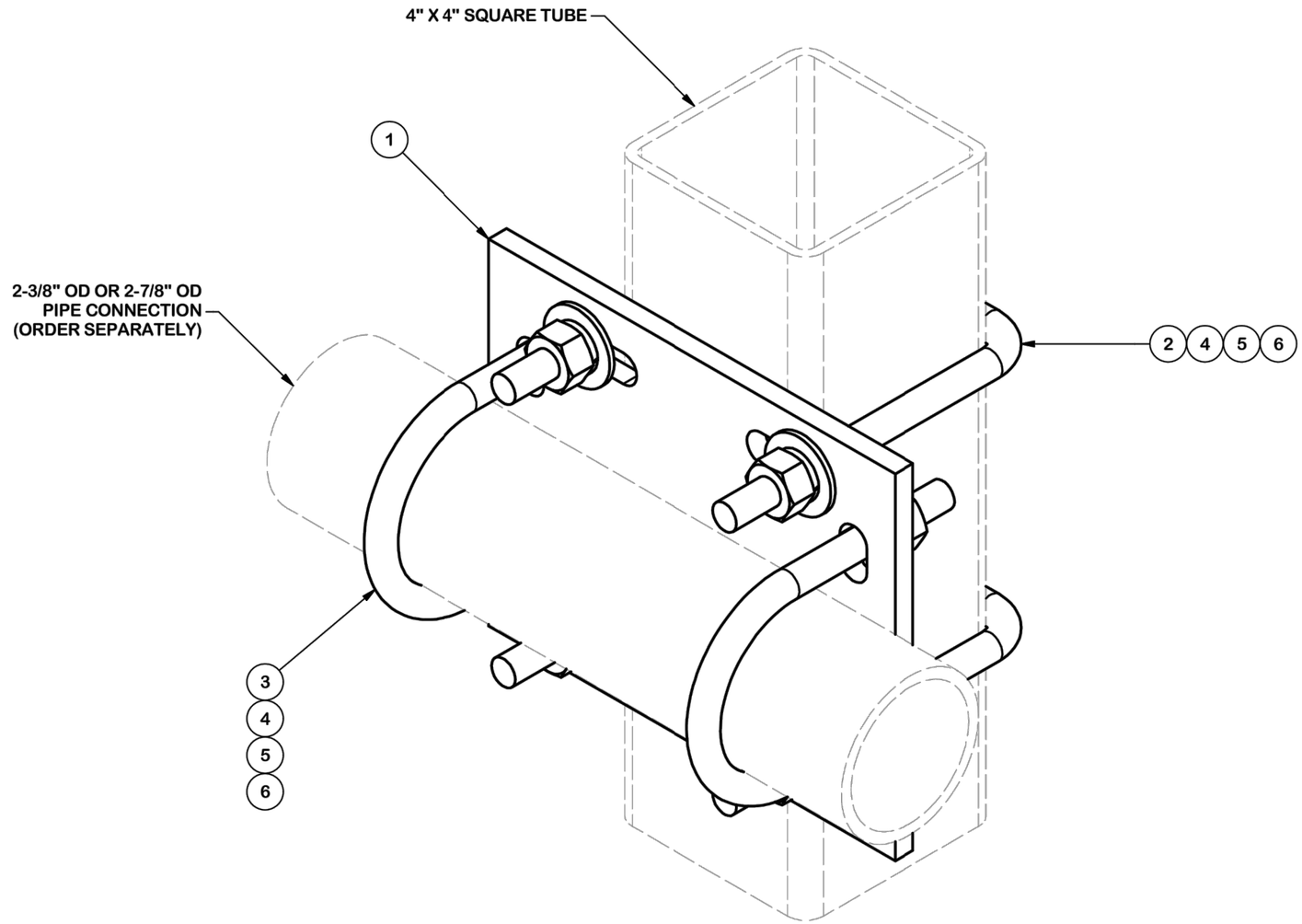
REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	JBM	09/24/20

SHEET TITLE:
VZWSMART–PLK7Q
4–SIDED COLLAR
MOUNT ASSEMBLY

SHEET NUMBER: VZWSMART–PLK7Q

REV #: 0

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



FOR REFERENCE ONLY

TOLERANCE NOTES

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

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

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

CPD NO.		DRAWN BY	ENG. APPROVAL	PART NO.	
		CSL 9/18/2018	3RD PARTY	SQCX4-K	PAGE 1 OF 1
CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.	
87	02	CUSTOMER	BMC 11/12/2018	SQCX4-K	


3/24/2021


03/24/2021

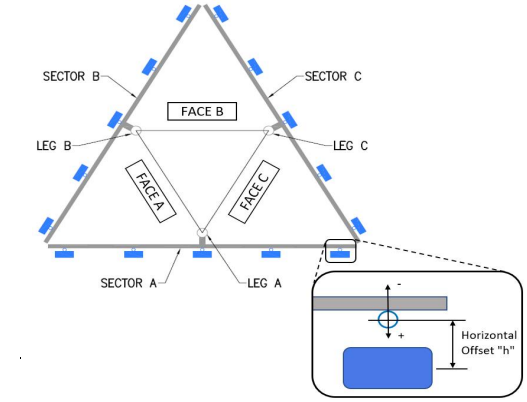
V3.0 Updated on 8-31-2020

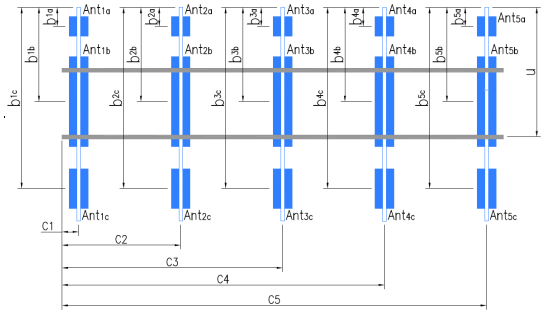
Antenna Mount Mapping Form (PATENT PENDING)

FCC # UNKNOWN

Tower Owner:	ATC	**Mapping Date:**	3/24/2021
Site Name:	ATC:PALMER POND CT CT,VZW:PALMER POND CT	**Tower Type:**	Monopole
Site Number or ID:	ATC:418914, VZW:469050	**Tower Height (Ft.):**	UNKNOWN
Mapping Contractor:	RKS Design & Engineering LLC	**Mount Elevation (Ft.):**	148.17

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





Antenna Layout (Looking Out From Tower)

Mount Pipe Configuration and Geometries [Unit = Inches]

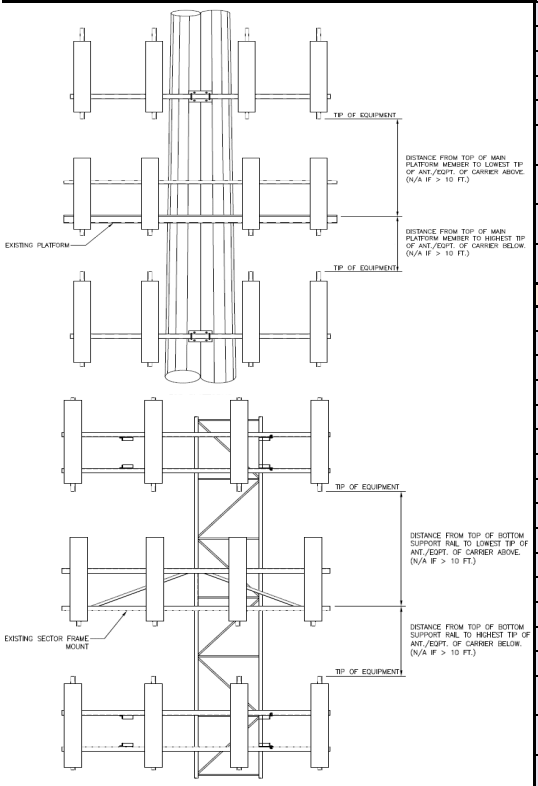
Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."
A1	Pipe 2.375"Ø X 0.16" X 102" Long	58.50	8.50	C1	Pipe 2.375"Ø X 0.16" X 102" Long	58.50	8.50
A2	Pipe 2.375"Ø X 0.16" X 96" Long	36.00	45.25	C2	Pipe 2.375"Ø X 0.16" X 96" Long	36.00	46.25
A3	Pipe 2.375"Ø X 0.15" X 71" Long	58.50	83.25	C3	Pipe 2.375"Ø X 0.15" X 71" Long	58.50	79.25
A4	Pipe 2.375"Ø X 0.16" X 102" Long	58.50	106.75	C4	Pipe 2.375"Ø X 0.16" X 102" Long	58.50	106.75
A5	Pipe 2.375"Ø X 0.16" X 102" Long	58.50	149.75	C5	Pipe 2.375"Ø X 0.16" X 102" Long	58.50	150.00
A6				C6			
B1	Pipe 2.375"Ø X 0.16" X 102" Long	58.50	8.50	D1			
B2	Pipe 2.375"Ø X 0.16" X 96" Long	36.00	47.50	D2			
B3	Pipe 2.375"Ø X 0.16" X 102" Long	58.50	95.50	D3			
B4	Pipe 2.375"Ø X 0.16" X 102" Long	58.50	150.00	D4			
B5				D5			
B6				D6			

Distance between bottom rail and mount CL elevation (dim d). Unit is inches. See 'Mount Elev Ref' tab for details. :	
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 infomation or comments below.	
Tower Face Width at Mount Elev. (ft.):	Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.): 29.87

	Enter antenna model. If not labeled, enter "Unknown".						Mounting Locations [Units are inches and degrees]			Photos of antennas
Ants. Items	Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Vertical Distances"b_{1a}, b_{2a}, b_{3a}, b_{1b}...." (Inches)	Horiz. Offset "h" (Use "-" if Ant. is behind)	Antenna Azimuth (Degrees)	Photo Numbers
Sector A										
Ant_{1a}	B66a RRH 4x45	11.80	7.20	25.80		150.928	25.40	-7.50		10,188
Ant_{1b}										
Ant_{1c}										
Ant_{2a}										
Ant_{2b}	(2)SBNHH-1D65B	11.90	7.10	72.00		148.253	35.00	10.50	160.00	10,188
Ant_{2c}										
Ant_{3a}	B13 RRH4x30	12.00	9.00	21.60		150.733	27.75	-8.50		10,189
Ant_{3b}										
Ant_{3c}										
Ant_{4a}	RRFDC-3315-PF-48	15.70	10.20	25.60		151.253	21.50	-9.50		10,189
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}	26907637	12.00	7.00	72.00		148.212	58.00	11.00	160.00	10,189
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector	
Sector A:	160.00	Deg	Leg A:		Deg
Sector B:	250.00	Deg	Leg B:		Deg
Sector C:	340.00	Deg	Leg C:		Deg
Sector D:	70.00	Deg	Leg D:		Deg

Climbing Facility Information			
Location:	205.00	Deg	N/A
Climbing Facility	Corrosion Type:		N/A
	Access:		Climbing path was unobstructed.
	Condition:		Good condition.



Sector B										
Ant_{1a}	B66a RRH 4x45	11.80	7.20	25.80		150.928	25.40	-7.50		17,191
Ant_{1b}										
Ant_{1c}										
Ant_{2a}										
Ant_{2b}	(2)SBNHH-1D65B	11.90	7.10	72.00		148.253	35.00	10.50	230.00	17,191
Ant_{2c}										
Ant_{3a}	B13 RRH4x30	12.00	9.00	21.60		150.733	27.75	-8.50		17,192
Ant_{3b}										
Ant_{3c}										
Ant_{4a}										
Ant_{4b}	26907637	12.00	7.00	72.00		148.212	58.00	11.00	240.00	17,192
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										
Sector C										
Ant_{1a}	B66a RRH 4x45	11.80	7.20	25.80		150.928	25.40	-7.50		24,194
Ant_{1b}										
Ant_{1c}										
Ant_{2a}										
Ant_{2b}	(2)SBNHH-1D65B	11.90	7.10	72.00		148.253	35.00	10.50	330.00	24,194
Ant_{2c}										
Ant_{3a}	B13 RRH4x30	12.00	9.00	21.60		150.733	27.75	-8.50		24,194
Ant_{3b}										
Ant_{3c}										
Ant_{4a}	RRFDC-3315-PF-48	15.70	10.20	25.60		151.253	21.50	-9.50		24,195
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}	26907637	12.00	7.00	72.00		148.212	58.00	11.00	340.00	24,195
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										
Sector D										
Ant_{1a}										
Ant_{1b}										
Ant_{1c}										
Ant_{2a}										
Ant_{2b}										
Ant_{2c}										
Ant_{3a}										
Ant_{3b}										
Ant_{3c}										
Ant_{4a}										
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

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

1	COAX TOTAL(2): (2)1.5"Ø HYBRID	43
2		
3		
4		
5		
6		
7		
8		

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

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

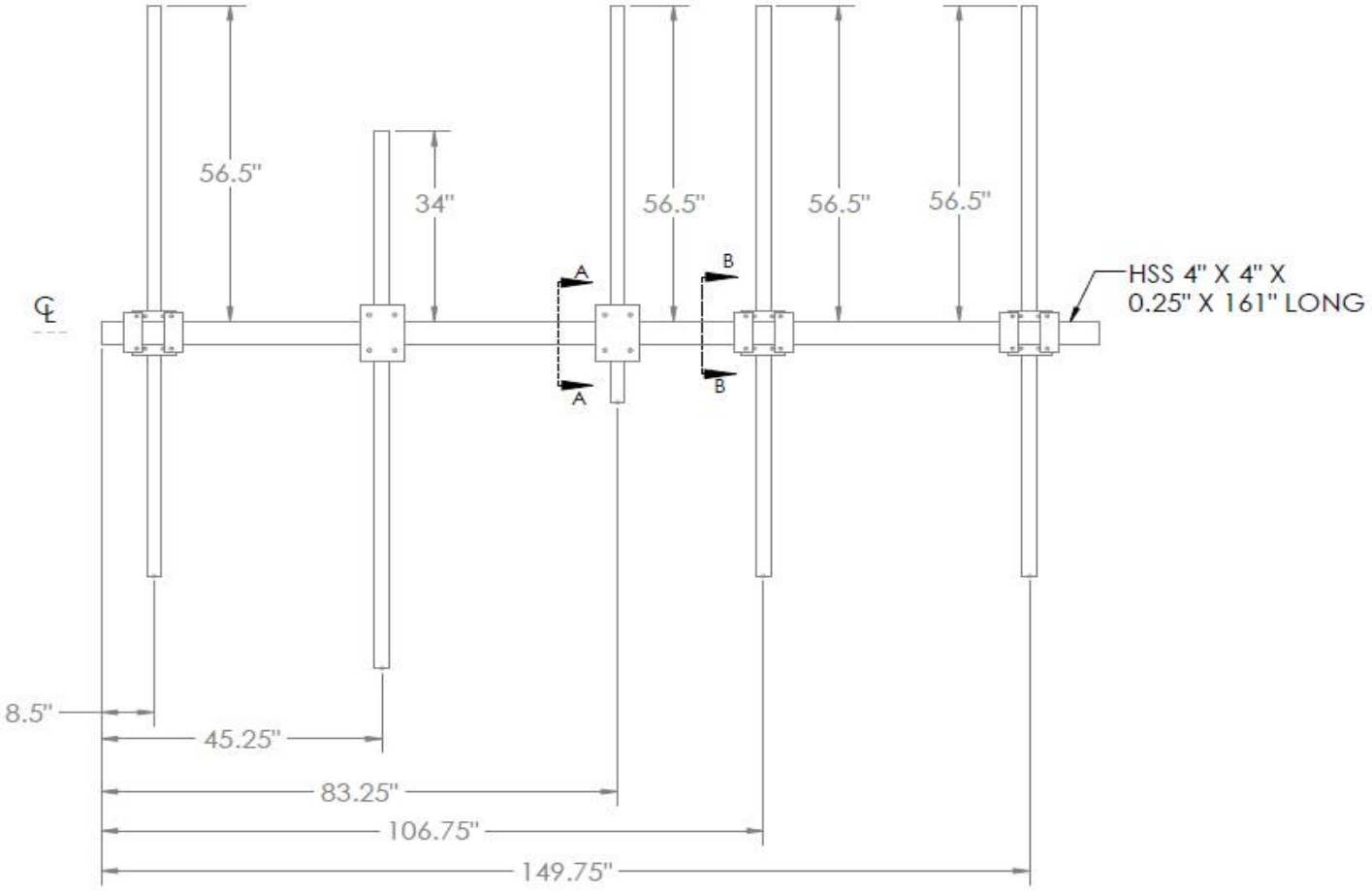
V3.0 Updated on 8-31-2020

Antenna Mount Mapping Form (PATENT PENDING)

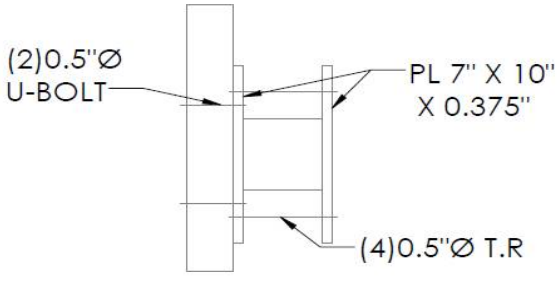
FCC # UNKNOWN

Tower Owner:	ATC	**Mapping Date:**	3/24/2021
Site Name:	ATC:PALMER POND CT CT,VZW:PALMER POND CT	**Tower Type:**	Monopole
Site Number or ID:	ATC:418914, VZW:469050	**Tower Height (Ft.):**	UNKNOWN
Mapping Contractor:	RKS Design & Engineering LLC	**Mount Elevation (Ft.):**	148.17

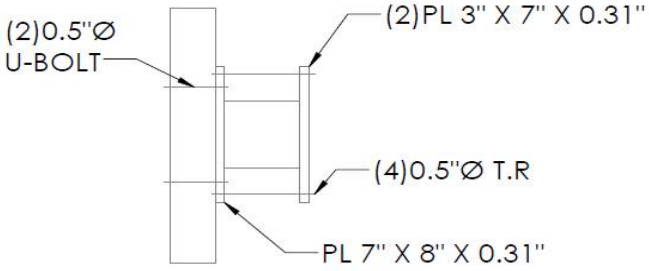
Please Insert Sketches of the Antenna Mount



SECTOR A

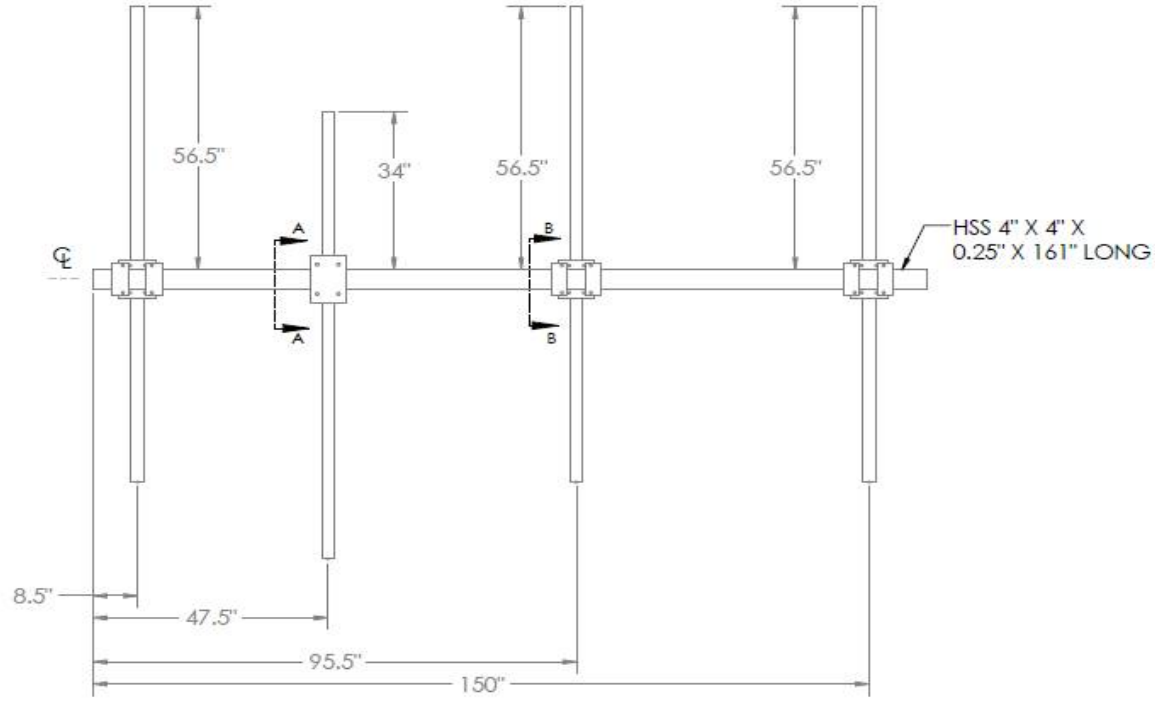


SECTION A-A

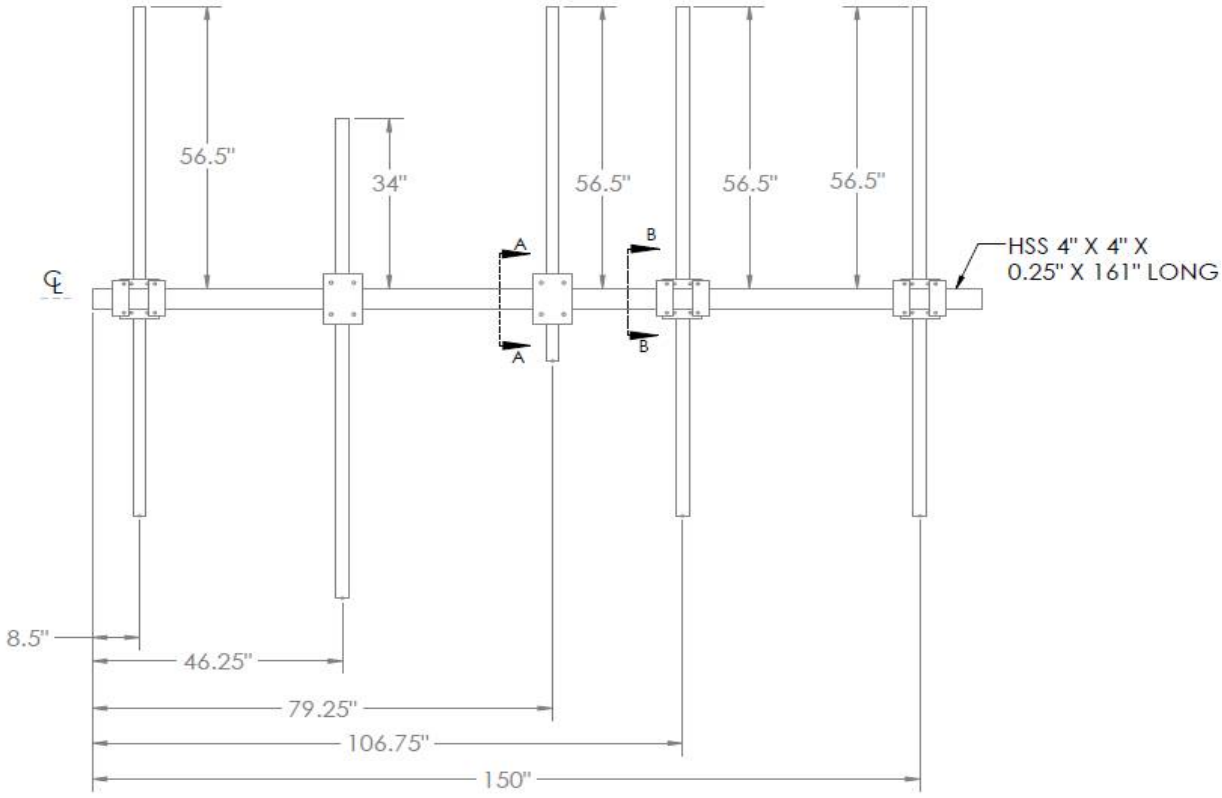


SECTION B-B

Please Insert Sketches of the Antenna Mount, cont'd

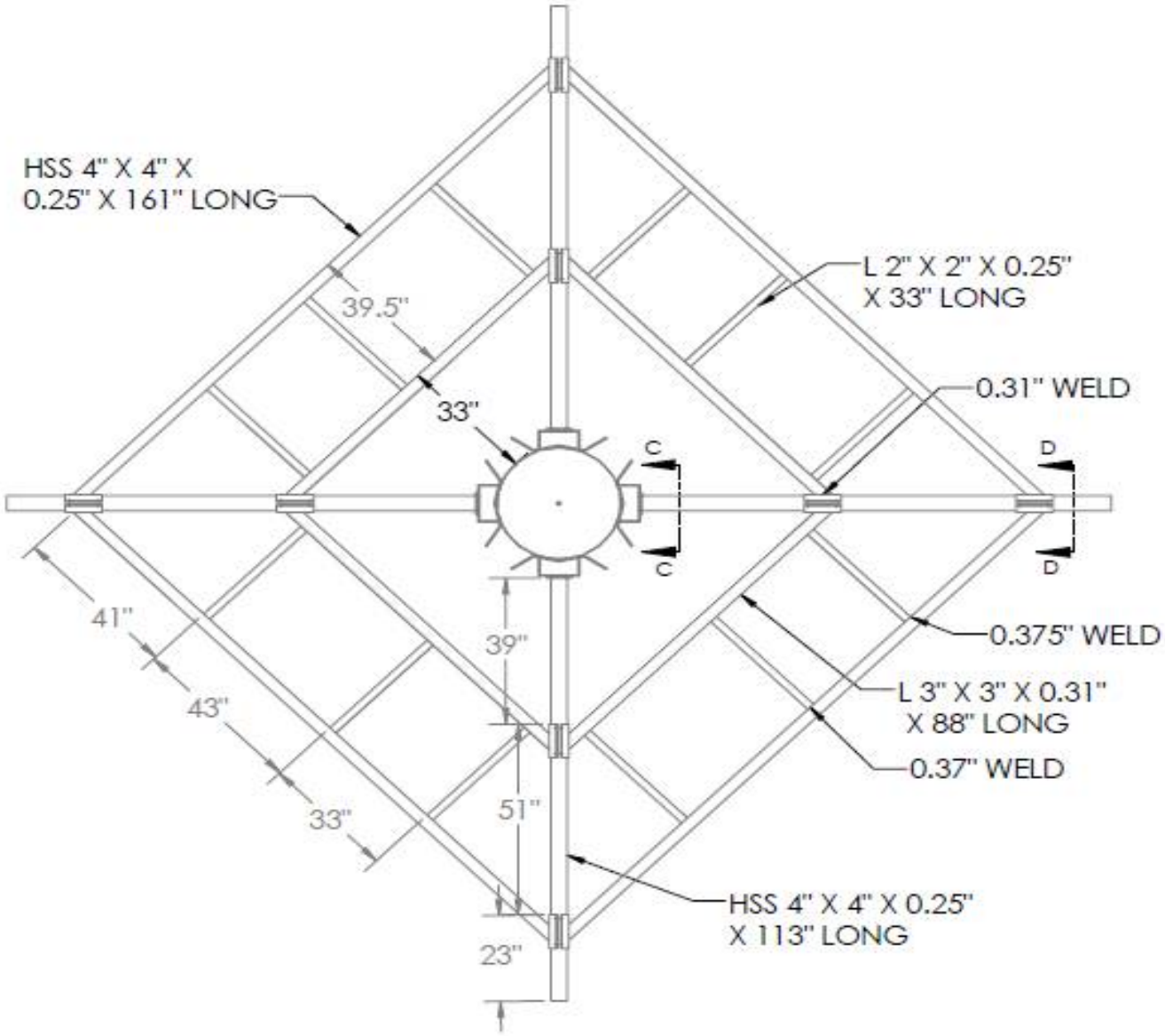


SECTOR B

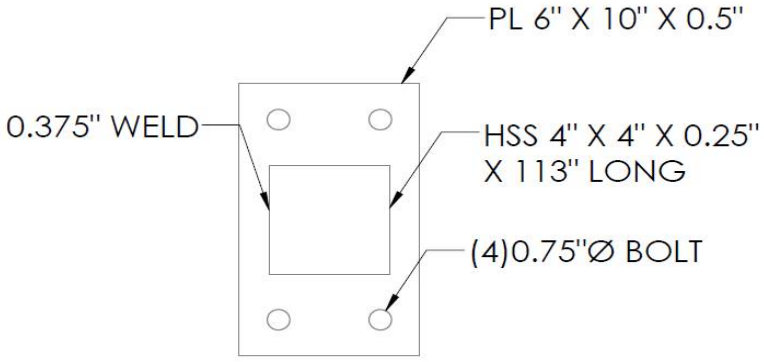


SECTOR C

Please Insert Sketches of the Antenna Mount, cont'd

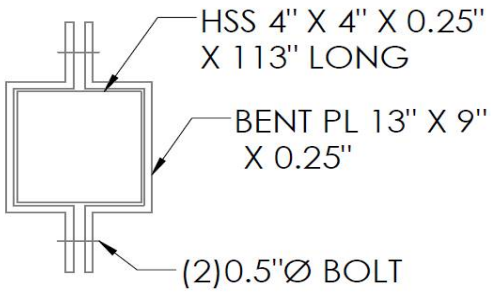


MOUNT VIEW

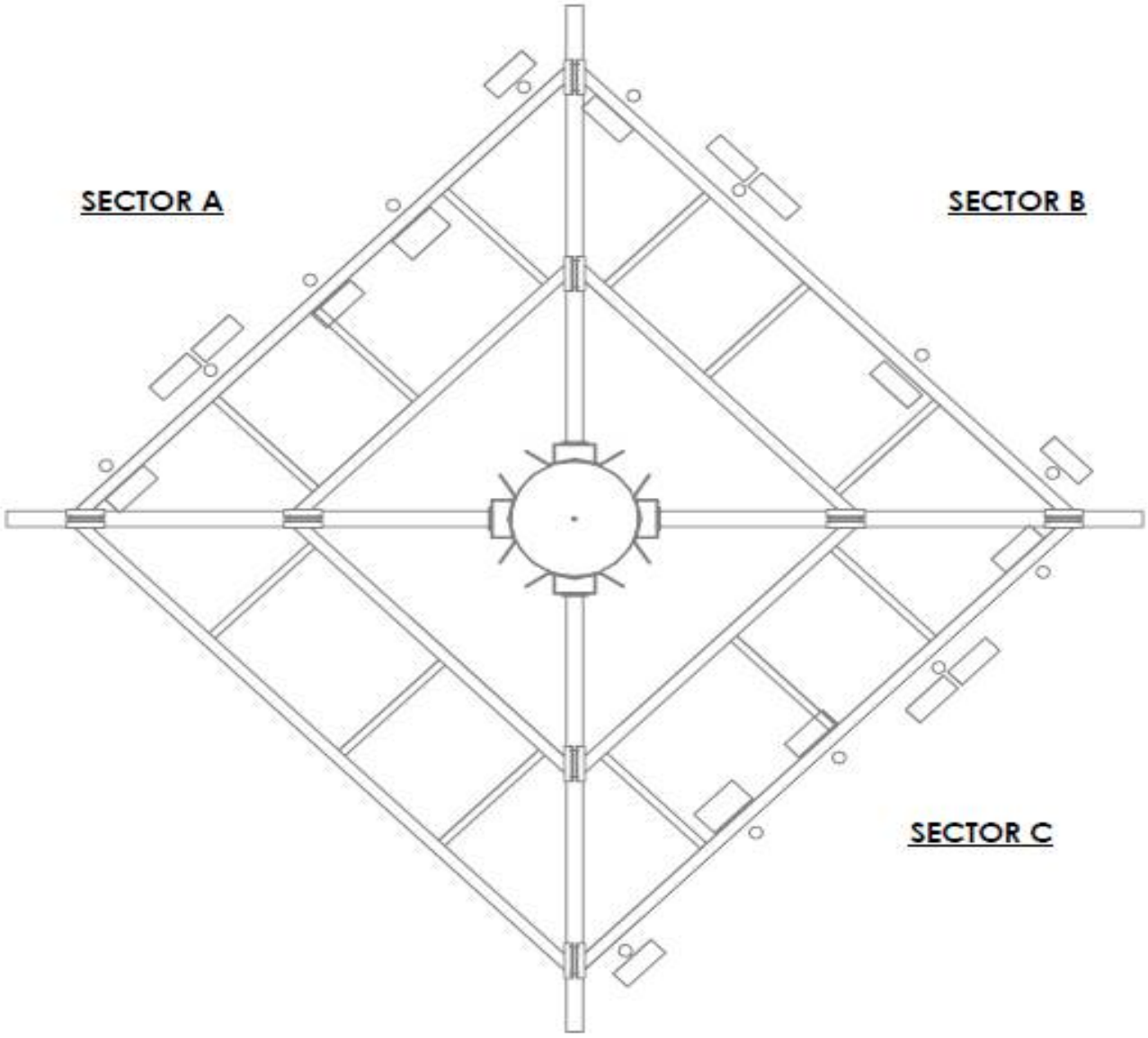


SECTION C-C

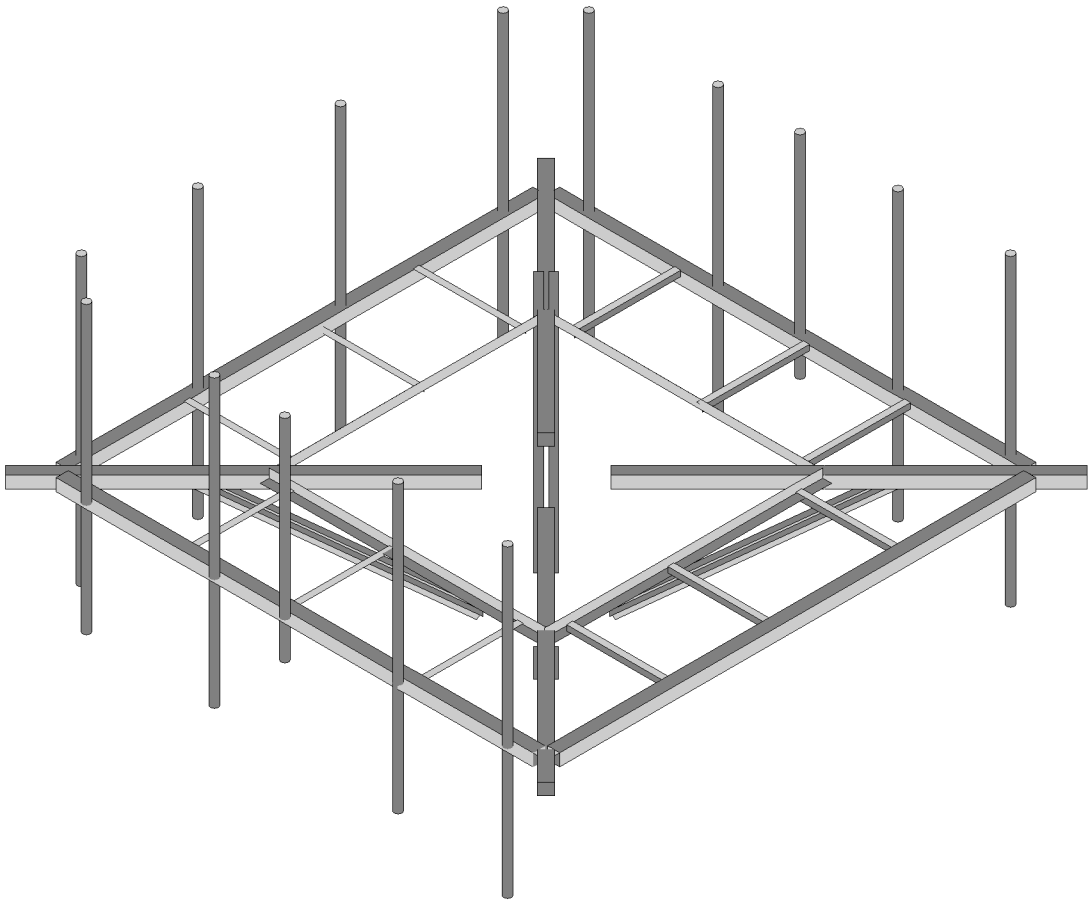
Please Insert Sketches of the Antenna Mount, cont'd



SECTION D-D

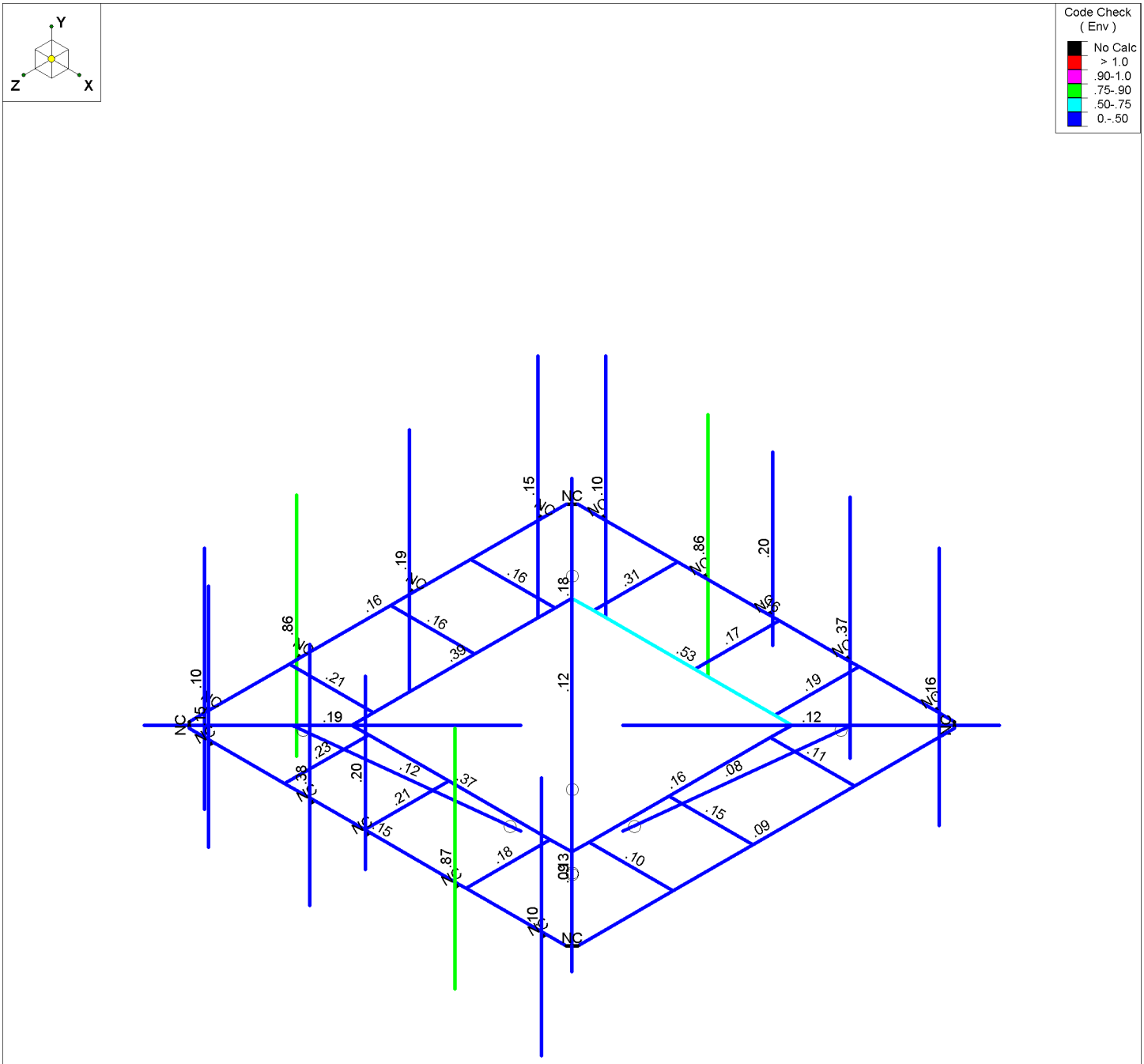


ANTENNA PLAN VIEW



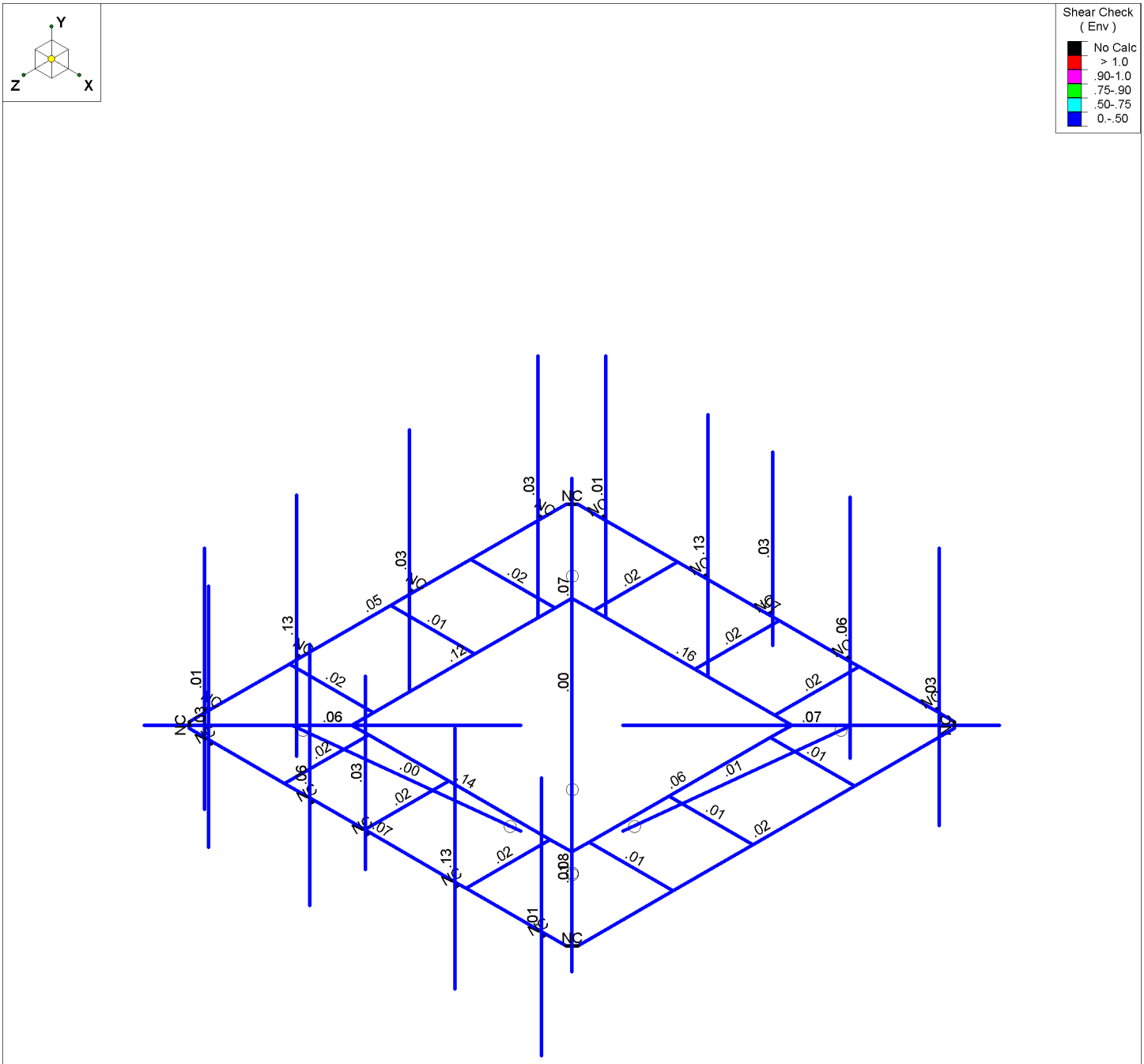
Envelope Only Solution

		SK - 1
		Mar 28, 2024 at 1:06 PM
		5000246909-VZW_MT_LO_H.r3d



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

		SK - 2
		Mar 28, 2024 at 1:07 PM
		5000246909-VZW_MT_LO_H.r3d



Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

		SK - 3
		Mar 28, 2024 at 1:07 PM
		5000246909-VZW_MT_LO_H.r3d

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
1	Antenna D	None					87			
2	Antenna Di	None					87			
3	Antenna Wo (0 Deg)	None					87			
4	Antenna Wo (30 Deg)	None					87			
5	Antenna Wo (60 Deg)	None					87			
6	Antenna Wo (90 Deg)	None					87			
7	Antenna Wo (120 Deg)	None					87			
8	Antenna Wo (150 Deg)	None					87			
9	Antenna Wo (180 Deg)	None					87			
10	Antenna Wo (210 Deg)	None					87			
11	Antenna Wo (240 Deg)	None					87			
12	Antenna Wo (270 Deg)	None					87			
13	Antenna Wo (300 Deg)	None					87			
14	Antenna Wo (330 Deg)	None					87			
15	Antenna Wi (0 Deg)	None					87			
16	Antenna Wi (30 Deg)	None					87			
17	Antenna Wi (60 Deg)	None					87			
18	Antenna Wi (90 Deg)	None					87			
19	Antenna Wi (120 Deg)	None					87			
20	Antenna Wi (150 Deg)	None					87			
21	Antenna Wi (180 Deg)	None					87			
22	Antenna Wi (210 Deg)	None					87			
23	Antenna Wi (240 Deg)	None					87			
24	Antenna Wi (270 Deg)	None					87			
25	Antenna Wi (300 Deg)	None					87			
26	Antenna Wi (330 Deg)	None					87			
27	Antenna Wm (0 Deg)	None					87			
28	Antenna Wm (30 Deg)	None					87			
29	Antenna Wm (60 Deg)	None					87			
30	Antenna Wm (90 Deg)	None					87			
31	Antenna Wm (120 De...	None					87			
32	Antenna Wm (150 De...	None					87			
33	Antenna Wm (180 De...	None					87			
34	Antenna Wm (210 De...	None					87			
35	Antenna Wm (240 De...	None					87			
36	Antenna Wm (270 De...	None					87			
37	Antenna Wm (300 De...	None					87			
38	Antenna Wm (330 De...	None					87			
39	Structure D	None		-1					4	
40	Structure Di	None						42	4	
41	Structure Wo (0 Deg)	None						84		
42	Structure Wo (30 Deg)	None						84		
43	Structure Wo (60 Deg)	None						84		
44	Structure Wo (90 Deg)	None						84		
45	Structure Wo (120 D...	None						84		
46	Structure Wo (150 D...	None						84		
47	Structure Wo (180 D...	None						84		
48	Structure Wo (210 D...	None						84		

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
49	Structure Wo (240 D...	None						84		
50	Structure Wo (270 D...	None						84		
51	Structure Wo (300 D...	None						84		
52	Structure Wo (330 D...	None						84		
53	Structure Wi (0 Deg)	None						84		
54	Structure Wi (30 Deg)	None						84		
55	Structure Wi (60 Deg)	None						84		
56	Structure Wi (90 Deg)	None						84		
57	Structure Wi (120 De...	None						84		
58	Structure Wi (150 De...	None						84		
59	Structure Wi (180 De...	None						84		
60	Structure Wi (210 De...	None						84		
61	Structure Wi (240 De...	None						84		
62	Structure Wi (270 De...	None						84		
63	Structure Wi (300 De...	None						84		
64	Structure Wi (330 De...	None						84		
65	Structure Wm (0 Deg)	None						84		
66	Structure Wm (30 D...	None						84		
67	Structure Wm (60 D...	None						84		
68	Structure Wm (90 D...	None						84		
69	Structure Wm (120 ...	None						84		
70	Structure Wm (150 ...	None						84		
71	Structure Wm (180 ...	None						84		
72	Structure Wm (210 ...	None						84		
73	Structure Wm (240 ...	None						84		
74	Structure Wm (270 ...	None						84		
75	Structure Wm (300 ...	None						84		
76	Structure Wm (330 ...	None						84		
77	Lm1	None					1			
78	Lm2	None					1			
79	Lv1	None					1			
80	Lv2	None					1			
81	Antenna Ev	None					87			
82	Antenna Eh (0 Deg)	None					58			
83	Antenna Eh (90 Deg)	None					58			
84	Structure Ev	ELY		-.04						
85	Structure Eh (0 Deg)	ELZ			-.1					
86	Structure Eh (90 Deg)	ELX	.1							
87	BLC 39 Transient Are...	None						88		
88	BLC 40 Transient Are...	None						88		

Load Combinations

	Description	So...	PDelta	S...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...
1	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	3	1	41	1												
2	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	4	1	42	1												
3	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	5	1	43	1												
4	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	6	1	44	1												
5	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	7	1	45	1												
6	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	8	1	46	1												
7	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	9	1	47	1												

Load Combinations (Continued)

	Description	So...	PDelta	S...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...
8	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	10	1	48	1												
9	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	11	1	49	1												
10	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	12	1	50	1												
11	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	13	1	51	1												
12	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	14	1	52	1												
13	1.2D + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1	53	1								
14	1.2D + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1								
15	1.2D + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1	55	1								
16	1.2D + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1	56	1								
17	1.2D + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1								
18	1.2D + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1								
19	1.2D + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1								
20	1.2D + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1								
21	1.2D + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1								
22	1.2D + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1								
23	1.2D + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1								
24	1.2D + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1								
25	1.2D + 1....	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1										
26	1.2D + 1....	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1										
27	1.2D + 1....	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1										
28	1.2D + 1....	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1										
29	1.2D + 1....	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1										
30	1.2D + 1....	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1										
31	1.2D + 1....	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1										
32	1.2D + 1....	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1										
33	1.2D + 1....	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1										
34	1.2D + 1....	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1										
35	1.2D + 1....	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1										
36	1.2D + 1....	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1										
37	1.2D + 1....	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1										
38	1.2D + 1....	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1										
39	1.2D + 1....	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1										
40	1.2D + 1....	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1										
41	1.2D + 1....	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1										
42	1.2D + 1....	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1										
43	1.2D + 1....	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1										
44	1.2D + 1....	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1										
45	1.2D + 1....	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1										
46	1.2D + 1....	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1										
47	1.2D + 1....	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1										
48	1.2D + 1....	Yes	Y		1	1.2	39	1.2	78	1.5	38	1	76	1										
49	1.2D + 1....	Yes	Y		1	1.2	39	1.2	79	1.5														
50	1.2D + 1....	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....	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	1	83		ELZ	1	ELX					
53	1.2D + 1....	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.866	83	.5	ELZ	.866	ELX	.5				
54	1.2D + 1....	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.5	83	.866	ELZ	.5	ELX	.866				
55	1.2D + 1....	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82		83	1	ELZ		ELX	1				
56	1.2D + 1....	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.5	83	.866	ELZ	-.5	ELX	.866				
57	1.2D + 1....	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.866	83	.5	ELZ	-.866	ELX	.5				
58	1.2D + 1....	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-1	83		ELZ	-1	ELX					
59	1.2D + 1....	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.866	83	-.5	ELZ	-.866	ELX	-.5				

Load Combinations (Continued)

	Description	So...	PDelta	S...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...
60	1.2D + 1....	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.5	83	-.866	ELZ	-.5	ELX	-.866				
61	1.2D + 1....	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82		83	-1	ELZ		ELX	-1				
62	1.2D + 1....	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.5	83	-.866	ELZ	.5	ELX	-.866				
63	1.2D + 1....	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.866	83	-.5	ELZ	.866	ELX	-.5				
64	0.9D - 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	1	83		ELZ	1	ELX					
65	0.9D - 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.866	83	.5	ELZ	.866	ELX	.5				
66	0.9D - 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.5	83	.866	ELZ	.5	ELX	.866				
67	0.9D - 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82		83	1	ELZ		ELX	1				
68	0.9D - 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.5	83	.866	ELZ	-.5	ELX	.866				
69	0.9D - 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.866	83	.5	ELZ	-.866	ELX	.5				
70	0.9D - 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-1	83		ELZ	-1	ELX					
71	0.9D - 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.866	83	-.5	ELZ	-.866	ELX	-.5				
72	0.9D - 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.5	83	-.866	ELZ	-.5	ELX	-.866				
73	0.9D - 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82		83	-1	ELZ		ELX	-1				
74	0.9D - 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.5	83	-.866	ELZ	.5	ELX	-.866				
75	0.9D - 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.866	83	-.5	ELZ	.866	ELX	-.5				

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rules	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	Antenna Pip...	PIPE 2.5	Column	Pipe	A53 Gr. B	Typical	1.61	1.45	1.45	2.89
3	Face Horizo...	HSS4X4X4	Beam	SquareTube	A500 Gr. B ...	Typical	3.37	7.8	7.8	12.8
4	Grating Sup...	L2x2x4	Beam	Single Angle	A36 Gr.36	Typical	.944	.346	.346	.021
5	Mount Frame	L3X3X5	Beam	Single Angle	A36 Gr.36	Typical	1.78	1.5	1.5	.06
6	Face Plate	PL1/4x4	Beam	RECT	A36 Gr.36	Typical	1	.005	1.333	.02
7	Connector P...	PL1/4x4	Beam	RECT	A36 Gr.36	Typical	1	.005	1.333	.02
8	Standoff Hor...	HSS4X4X4	Beam	SquareTube	A500 Gr. B ...	Typical	3.37	7.8	7.8	12.8
9	Proposed Rail	PIPE 2.0	Beam	SquareTube	A53 Gr. B	Typical	1.02	.627	.627	1.25
10	Proposed Ki...	LL3x3x3x0	Beam	SquareTube	A36 Gr.36	Typical	2.18	3.35	1.9	.027
11	Proposed WT	WT3X6	Beam	SquareTube	A36 Gr.36	Typical	1.78	1.5	1.32	.045
12	HR12	L3X3X4	Beam	SquareTube	A36 Gr.36	Typical	1.44	1.23	1.23	.031

Hot Rolled Steel Properties

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

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N2	N1			Face Horizontal	Beam	SquareTube	A500 Gr. ...	Typical
2	M11	N11	N10			Face Horizontal	Beam	SquareTube	A500 Gr. ...	Typical
3	M21	N20	N19			Face Horizontal	Beam	SquareTube	A500 Gr. ...	Typical
4	M31	N27	N26			Face Horizontal	Beam	SquareTube	A500 Gr. ...	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
5	M41	N1	N11			RIGID	None	None	RIGID	Typical
6	M42	N33	N34			Standoff Horiz...	Beam	SquareTube	A500 Gr. ...	Typical
7	M43	N10	N20			RIGID	None	None	RIGID	Typical
8	M44	N36	N37			Standoff Horiz...	Beam	SquareTube	A500 Gr. ...	Typical
9	M45	N19	N27			RIGID	None	None	RIGID	Typical
10	M46	N39	N40			Standoff Horiz...	Beam	SquareTube	A500 Gr. ...	Typical
11	M47	N26	N2			RIGID	None	None	RIGID	Typical
12	M48	N42	N43			Standoff Horiz...	Beam	SquareTube	A500 Gr. ...	Typical
13	M51	N6	N45		90	Grating Support	Beam	Single Angle	A36 Gr.36	Typical
14	M52	N7	N46		90	Grating Support	Beam	Single Angle	A36 Gr.36	Typical
15	M53	N8	N47		90	Grating Support	Beam	Single Angle	A36 Gr.36	Typical
16	M54	N49	N48			Mount Frame	Beam	Single Angle	A36 Gr.36	Typical
17	M60	N51	N50			RIGID	None	None	RIGID	Typical
18	MP1B	N52	N53			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
19	M63	N55	N54			RIGID	None	None	RIGID	Typical
20	MP2B	N56	N57			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
21	M66	N59	N58			RIGID	None	None	RIGID	Typical
22	MP3B	N60	N61			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
23	M69	N63	N62			RIGID	None	None	RIGID	Typical
24	MP4B	N64	N65			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
25	M72	N67	N66			RIGID	None	None	RIGID	Typical
26	MP5C	N68	N69			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
27	M75	N71	N70			RIGID	None	None	RIGID	Typical
28	MP4C	N72	N73			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
29	M78	N75	N74			RIGID	None	None	RIGID	Typical
30	MP3C	N76	N77			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
31	M81	N79	N78			RIGID	None	None	RIGID	Typical
32	MP2C	N80	N81			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
33	M94	N15	N94		90	Grating Support	Beam	Single Angle	A36 Gr.36	Typical
34	M95	N16	N95		90	Grating Support	Beam	Single Angle	A36 Gr.36	Typical
35	M96	N17	N96		90	Grating Support	Beam	Single Angle	A36 Gr.36	Typical
36	M97	N48	N97			Mount Frame	Beam	Single Angle	A36 Gr.36	Typical
37	M98	N22	N98		90	Grating Support	Beam	Single Angle	A36 Gr.36	Typical
38	M99	N23	N99		90	Grating Support	Beam	Single Angle	A36 Gr.36	Typical
39	M100	N24	N100		90	Grating Support	Beam	Single Angle	A36 Gr.36	Typical
40	M101	N97	N101			Mount Frame	Beam	Single Angle	A36 Gr.36	Typical
41	M102	N30	N102		90	Grating Support	Beam	Single Angle	A36 Gr.36	Typical
42	M103	N31	N103		90	Grating Support	Beam	Single Angle	A36 Gr.36	Typical
43	M104	N32	N104		90	Grating Support	Beam	Single Angle	A36 Gr.36	Typical
44	M105	N101	N49			Mount Frame	Beam	Single Angle	A36 Gr.36	Typical
45	M51A	N106	N105			RIGID	None	None	RIGID	Typical
46	MP1A	N107	N108			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
47	M53A	N110	N109			RIGID	None	None	RIGID	Typical
48	MP2A	N111	N112			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
49	M55	N114	N113			RIGID	None	None	RIGID	Typical
50	MP3A	N115	N116			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
51	M55A	N118	N117			RIGID	None	None	RIGID	Typical
52	MP4A	N119	N120			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
53	M55B	N122	N121			RIGID	None	None	RIGID	Typical
54	MP5A	N123	N124			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
55	M57	N126	N125			RIGID	None	None	RIGID	Typical
56	MP1C	N127	N128			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
57	M93	N176A	N180A			Proposed Kicker	Beam	SquareTube	A36 Gr.36	Typical
58	M94A	N182A	N177A			Proposed Kicker	Beam	SquareTube	A36 Gr.36	Typical
59	M95A	N185	N178A			Proposed Kicker	Beam	SquareTube	A36 Gr.36	Typical
60	M96A	N188	N179A			Proposed Kicker	Beam	SquareTube	A36 Gr.36	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M1						Yes				None
2	M11						Yes				None
3	M21						Yes				None
4	M31						Yes				None
5	M41						Yes	** NA **			None
6	M42						Yes				None
7	M43						Yes	** NA **			None
8	M44						Yes				None
9	M45						Yes	** NA **			None
10	M46						Yes				None
11	M47						Yes	** NA **			None
12	M48						Yes				None
13	M51						Yes				None
14	M52						Yes				None
15	M53						Yes				None
16	M54						Yes				None
17	M60						Yes	** NA **			None
18	MP1B						Yes	** NA **			None
19	M63						Yes	** NA **			None
20	MP2B						Yes	** NA **			None
21	M66						Yes	** NA **			None
22	MP3B						Yes	** NA **			None
23	M69						Yes	** NA **			None
24	MP4B						Yes	** NA **			None
25	M72						Yes	** NA **			None
26	MP5C						Yes	** NA **			None
27	M75						Yes	** NA **			None
28	MP4C						Yes	** NA **			None
29	M78						Yes	** NA **			None
30	MP3C						Yes	** NA **			None
31	M81						Yes	** NA **			None
32	MP2C						Yes	** NA **			None
33	M94						Yes				None
34	M95						Yes				None
35	M96						Yes				None
36	M97						Yes				None
37	M98						Yes				None
38	M99						Yes				None
39	M100						Yes				None
40	M101						Yes				None
41	M102						Yes				None
42	M103						Yes				None
43	M104						Yes				None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
44	M105						Yes				None
45	M51A						Yes	** NA **			None
46	MP1A						Yes	** NA **			None
47	M53A						Yes	** NA **			None
48	MP2A						Yes	** NA **			None
49	M55						Yes	** NA **			None
50	MP3A						Yes	** NA **			None
51	M55A						Yes	** NA **			None
52	MP4A						Yes	** NA **			None
53	M55B						Yes	** NA **			None
54	MP5A						Yes	** NA **			None
55	M57						Yes	** NA **			None
56	MP1C						Yes	** NA **			None
57	M93	BenPIN	BenPIN				Yes				None
58	M94A	BenPIN	BenPIN				Yes				None
59	M95A	BenPIN	BenPIN				Yes				None
60	M96A	BenPIN	BenPIN				Yes				None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	Y	-28.65	3.5
2	MP4B	My	-.005	3.5
3	MP4B	Mz	-.013	3.5
4	MP4B	Y	-28.65	6
5	MP4B	My	-.005	6
6	MP4B	Mz	-.013	6
7	MP5A	Y	-28.65	3.5
8	MP5A	My	-.014	3.5
9	MP5A	Mz	0	3.5
10	MP5A	Y	-28.65	6
11	MP5A	My	-.014	6
12	MP5A	Mz	0	6
13	MP5C	Y	-28.65	3.5
14	MP5C	My	.014	3.5
15	MP5C	Mz	-.002	3.5
16	MP5C	Y	-28.65	6
17	MP5C	My	.014	6
18	MP5C	Mz	-.002	6
19	MP3A	Y	-79.1	3
20	MP3A	My	.04	3
21	MP3A	Mz	0	3
22	MP3B	Y	-79.1	3
23	MP3B	My	.014	3
24	MP3B	Mz	.037	3
25	MP3C	Y	-79.1	3
26	MP3C	My	-.039	3
27	MP3C	Mz	.007	3
28	MP2A	Y	-74.7	3
29	MP2A	My	.037	3
30	MP2A	Mz	0	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
31	MP2B	Y	-74.7	3
32	MP2B	My	.013	3
33	MP2B	Mz	.035	3
34	MP2C	Y	-74.7	3
35	MP2C	My	-.037	3
36	MP2C	Mz	.006	3
37	MP4A	Y	-32	2
38	MP4A	My	.016	2
39	MP4A	Mz	0	2
40	MP4C	Y	-32	2
41	MP4C	My	-.016	2
42	MP4C	Mz	.003	2
43	MP2A	Y	-31.65	2
44	MP2A	My	-.016	2
45	MP2A	Mz	.026	2
46	MP2A	Y	-31.65	7.75
47	MP2A	My	-.016	7.75
48	MP2A	Mz	.026	7.75
49	MP2B	Y	-31.65	2
50	MP2B	My	-.03	2
51	MP2B	Mz	-.006	2
52	MP2B	Y	-31.65	7.75
53	MP2B	My	-.03	7.75
54	MP2B	Mz	-.006	7.75
55	MP2C	Y	-31.65	2
56	MP2C	My	.011	2
57	MP2C	Mz	-.029	2
58	MP2C	Y	-31.65	7.75
59	MP2C	My	.011	7.75
60	MP2C	Mz	-.029	7.75
61	MP2A	Y	-31.65	2
62	MP2A	My	-.016	2
63	MP2A	Mz	-.026	2
64	MP2A	Y	-31.65	7.75
65	MP2A	My	-.016	7.75
66	MP2A	Mz	-.026	7.75
67	MP2B	Y	-31.65	2
68	MP2B	My	.019	2
69	MP2B	Mz	-.024	2
70	MP2B	Y	-31.65	7.75
71	MP2B	My	.019	7.75
72	MP2B	Mz	-.024	7.75
73	MP2C	Y	-31.65	2
74	MP2C	My	.02	2
75	MP2C	Mz	.023	2
76	MP2C	Y	-31.65	7.75
77	MP2C	My	.02	7.75
78	MP2C	Mz	.023	7.75
79	MP1A	Y	-10.4	3
80	MP1A	My	.005	3
81	MP1A	Mz	0	3
82	MP1B	Y	-10.4	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
83	MP1B	My	.002	3
84	MP1B	Mz	.005	3
85	MP1C	Y	-10.4	3
86	MP1C	My	-.005	3
87	MP1C	Mz	.000903	3

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	Y	-30.053	3.5
2	MP4B	My	-.005	3.5
3	MP4B	Mz	-.014	3.5
4	MP4B	Y	-30.053	6
5	MP4B	My	-.005	6
6	MP4B	Mz	-.014	6
7	MP5A	Y	-30.053	3.5
8	MP5A	My	-.015	3.5
9	MP5A	Mz	0	3.5
10	MP5A	Y	-30.053	6
11	MP5A	My	-.015	6
12	MP5A	Mz	0	6
13	MP5C	Y	-30.053	3.5
14	MP5C	My	.015	3.5
15	MP5C	Mz	-.003	3.5
16	MP5C	Y	-30.053	6
17	MP5C	My	.015	6
18	MP5C	Mz	-.003	6
19	MP3A	Y	-45.797	3
20	MP3A	My	.023	3
21	MP3A	Mz	0	3
22	MP3B	Y	-45.797	3
23	MP3B	My	.008	3
24	MP3B	Mz	.022	3
25	MP3C	Y	-45.797	3
26	MP3C	My	-.023	3
27	MP3C	Mz	.004	3
28	MP2A	Y	-45.317	3
29	MP2A	My	.023	3
30	MP2A	Mz	0	3
31	MP2B	Y	-45.317	3
32	MP2B	My	.008	3
33	MP2B	Mz	.021	3
34	MP2C	Y	-45.317	3
35	MP2C	My	-.022	3
36	MP2C	Mz	.004	3
37	MP4A	Y	-76.638	2
38	MP4A	My	.038	2
39	MP4A	Mz	0	2
40	MP4C	Y	-76.638	2
41	MP4C	My	-.038	2
42	MP4C	Mz	.007	2
43	MP2A	Y	-70.576	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
44	MP2A	My	-.035	2
45	MP2A	Mz	.059	2
46	MP2A	Y	-70.576	7.75
47	MP2A	My	-.035	7.75
48	MP2A	Mz	.059	7.75
49	MP2B	Y	-70.576	2
50	MP2B	My	-.067	2
51	MP2B	Mz	-.013	2
52	MP2B	Y	-70.576	7.75
53	MP2B	My	-.067	7.75
54	MP2B	Mz	-.013	7.75
55	MP2C	Y	-70.576	2
56	MP2C	My	.025	2
57	MP2C	Mz	-.064	2
58	MP2C	Y	-70.576	7.75
59	MP2C	My	.025	7.75
60	MP2C	Mz	-.064	7.75
61	MP2A	Y	-70.576	2
62	MP2A	My	-.035	2
63	MP2A	Mz	-.059	2
64	MP2A	Y	-70.576	7.75
65	MP2A	My	-.035	7.75
66	MP2A	Mz	-.059	7.75
67	MP2B	Y	-70.576	2
68	MP2B	My	.043	2
69	MP2B	Mz	-.053	2
70	MP2B	Y	-70.576	7.75
71	MP2B	My	.043	7.75
72	MP2B	Mz	-.053	7.75
73	MP2C	Y	-70.576	2
74	MP2C	My	.045	2
75	MP2C	Mz	.052	2
76	MP2C	Y	-70.576	7.75
77	MP2C	My	.045	7.75
78	MP2C	Mz	.052	7.75
79	MP1A	Y	-10.853	3
80	MP1A	My	.005	3
81	MP1A	Mz	0	3
82	MP1B	Y	-10.853	3
83	MP1B	My	.002	3
84	MP1B	Mz	.005	3
85	MP1C	Y	-10.853	3
86	MP1C	My	-.005	3
87	MP1C	Mz	.000942	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	0	3.5
2	MP4B	Z	-43.446	3.5
3	MP4B	Mx	.02	3.5
4	MP4B	X	0	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
5	MP4B	Z	-43.446	6
6	MP4B	Mx	.02	6
7	MP5A	X	0	3.5
8	MP5A	Z	-95.052	3.5
9	MP5A	Mx	0	3.5
10	MP5A	X	0	6
11	MP5A	Z	-95.052	6
12	MP5A	Mx	0	6
13	MP5C	X	0	3.5
14	MP5C	Z	-93.289	3.5
15	MP5C	Mx	.008	3.5
16	MP5C	X	0	6
17	MP5C	Z	-93.289	6
18	MP5C	Mx	.008	6
19	MP3A	X	0	3
20	MP3A	Z	-93.798	3
21	MP3A	Mx	0	3
22	MP3B	X	0	3
23	MP3B	Z	-67.444	3
24	MP3B	Mx	-.032	3
25	MP3C	X	0	3
26	MP3C	Z	-92.898	3
27	MP3C	Mx	-.008	3
28	MP2A	X	0	3
29	MP2A	Z	-77.747	3
30	MP2A	Mx	0	3
31	MP2B	X	0	3
32	MP2B	Z	-55.158	3
33	MP2B	Mx	-.026	3
34	MP2C	X	0	3
35	MP2C	Z	-76.975	3
36	MP2C	Mx	-.007	3
37	MP4A	X	0	2
38	MP4A	Z	-190.103	2
39	MP4A	Mx	0	2
40	MP4C	X	0	2
41	MP4C	Z	-188.165	2
42	MP4C	Mx	-.016	2
43	MP2A	X	0	2
44	MP2A	Z	-228.475	2
45	MP2A	Mx	-.19	2
46	MP2A	X	0	7.75
47	MP2A	Z	-228.475	7.75
48	MP2A	Mx	-.19	7.75
49	MP2B	X	0	2
50	MP2B	Z	-159.232	2
51	MP2B	Mx	.029	2
52	MP2B	X	0	7.75
53	MP2B	Z	-159.232	7.75
54	MP2B	Mx	.029	7.75
55	MP2C	X	0	2
56	MP2C	Z	-226.11	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
57	MP2C	Mx	.205	2
58	MP2C	X	0	7.75
59	MP2C	Z	-226.11	7.75
60	MP2C	Mx	.205	7.75
61	MP2A	X	0	2
62	MP2A	Z	-228.475	2
63	MP2A	Mx	.19	2
64	MP2A	X	0	7.75
65	MP2A	Z	-228.475	7.75
66	MP2A	Mx	.19	7.75
67	MP2B	X	0	2
68	MP2B	Z	-159.232	2
69	MP2B	Mx	.12	2
70	MP2B	X	0	7.75
71	MP2B	Z	-159.232	7.75
72	MP2B	Mx	.12	7.75
73	MP2C	X	0	2
74	MP2C	Z	-226.11	2
75	MP2C	Mx	-.166	2
76	MP2C	X	0	7.75
77	MP2C	Z	-226.11	7.75
78	MP2C	Mx	-.166	7.75
79	MP1A	X	0	3
80	MP1A	Z	-18.559	3
81	MP1A	Mx	0	3
82	MP1B	X	0	3
83	MP1B	Z	-13.51	3
84	MP1B	Mx	-.006	3
85	MP1C	X	0	3
86	MP1C	Z	-18.386	3
87	MP1C	Mx	-.002	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	35.452	3.5
2	MP4B	Z	-61.405	3.5
3	MP4B	Mx	.023	3.5
4	MP4B	X	35.452	6
5	MP4B	Z	-61.405	6
6	MP4B	Mx	.023	6
7	MP5A	X	40.22	3.5
8	MP5A	Z	-69.664	3.5
9	MP5A	Mx	-.02	3.5
10	MP5A	X	40.22	6
11	MP5A	Z	-69.664	6
12	MP5A	Mx	-.02	6
13	MP5C	X	35.452	3.5
14	MP5C	Z	-61.405	3.5
15	MP5C	Mx	.023	3.5
16	MP5C	X	35.452	6
17	MP5C	Z	-61.405	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP5C	Mx	.023	6
19	MP3A	X	43.168	3
20	MP3A	Z	-74.77	3
21	MP3A	Mx	.022	3
22	MP3B	X	40.733	3
23	MP3B	Z	-70.552	3
24	MP3B	Mx	-.026	3
25	MP3C	X	40.733	3
26	MP3C	Z	-70.552	3
27	MP3C	Mx	-.026	3
28	MP2A	X	35.676	3
29	MP2A	Z	-61.792	3
30	MP2A	Mx	.018	3
31	MP2B	X	33.589	3
32	MP2B	Z	-58.177	3
33	MP2B	Mx	-.022	3
34	MP2C	X	33.589	3
35	MP2C	Z	-58.177	3
36	MP2C	Mx	-.022	3
37	MP4A	X	87.018	2
38	MP4A	Z	-150.719	2
39	MP4A	Mx	.044	2
40	MP4C	X	81.774	2
41	MP4C	Z	-141.637	2
42	MP4C	Mx	-.053	2
43	MP2A	X	104.435	2
44	MP2A	Z	-180.888	2
45	MP2A	Mx	-.203	2
46	MP2A	X	104.435	7.75
47	MP2A	Z	-180.888	7.75
48	MP2A	Mx	-.203	7.75
49	MP2B	X	98.038	2
50	MP2B	Z	-169.806	2
51	MP2B	Mx	-.062	2
52	MP2B	X	98.038	7.75
53	MP2B	Z	-169.806	7.75
54	MP2B	Mx	-.062	7.75
55	MP2C	X	98.038	2
56	MP2C	Z	-169.806	2
57	MP2C	Mx	.188	2
58	MP2C	X	98.038	7.75
59	MP2C	Z	-169.806	7.75
60	MP2C	Mx	.188	7.75
61	MP2A	X	104.435	2
62	MP2A	Z	-180.888	2
63	MP2A	Mx	.099	2
64	MP2A	X	104.435	7.75
65	MP2A	Z	-180.888	7.75
66	MP2A	Mx	.099	7.75
67	MP2B	X	98.038	2
68	MP2B	Z	-169.806	2
69	MP2B	Mx	.188	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
70	MP2B	X	98.038	7.75
71	MP2B	Z	-169.806	7.75
72	MP2B	Mx	.188	7.75
73	MP2C	X	98.038	2
74	MP2C	Z	-169.806	2
75	MP2C	Mx	-.062	2
76	MP2C	X	98.038	7.75
77	MP2C	Z	-169.806	7.75
78	MP2C	Mx	-.062	7.75
79	MP1A	X	8.565	3
80	MP1A	Z	-14.834	3
81	MP1A	Mx	.004	3
82	MP1B	X	8.098	3
83	MP1B	Z	-14.026	3
84	MP1B	Mx	-.005	3
85	MP1C	X	8.098	3
86	MP1C	Z	-14.026	3
87	MP1C	Mx	-.005	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	80.791	3.5
2	MP4B	Z	-46.645	3.5
3	MP4B	Mx	.008	3.5
4	MP4B	X	80.791	6
5	MP4B	Z	-46.645	6
6	MP4B	Mx	.008	6
7	MP5A	X	44.358	3.5
8	MP5A	Z	-25.61	3.5
9	MP5A	Mx	-.022	3.5
10	MP5A	X	44.358	6
11	MP5A	Z	-25.61	6
12	MP5A	Mx	-.022	6
13	MP5C	X	37.625	3.5
14	MP5C	Z	-21.723	3.5
15	MP5C	Mx	.02	3.5
16	MP5C	X	37.625	6
17	MP5C	Z	-21.723	6
18	MP5C	Mx	.02	6
19	MP3A	X	61.846	3
20	MP3A	Z	-35.707	3
21	MP3A	Mx	.031	3
22	MP3B	X	80.452	3
23	MP3B	Z	-46.449	3
24	MP3B	Mx	-.008	3
25	MP3C	X	58.408	3
26	MP3C	Z	-33.722	3
27	MP3C	Mx	-.032	3
28	MP2A	X	50.715	3
29	MP2A	Z	-29.28	3
30	MP2A	Mx	.025	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
31	MP2B	X	66.663	3
32	MP2B	Z	-38.488	3
33	MP2B	Mx	-.007	3
34	MP2C	X	47.768	3
35	MP2C	Z	-27.579	3
36	MP2C	Mx	-.026	3
37	MP4A	X	122.89	2
38	MP4A	Z	-70.95	2
39	MP4A	Mx	.061	2
40	MP4C	X	115.486	2
41	MP4C	Z	-66.676	2
42	MP4C	Mx	-.063	2
43	MP2A	X	146.933	2
44	MP2A	Z	-84.832	2
45	MP2A	Mx	-.144	2
46	MP2A	X	146.933	7.75
47	MP2A	Z	-84.832	7.75
48	MP2A	Mx	-.144	7.75
49	MP2B	X	195.817	2
50	MP2B	Z	-113.055	2
51	MP2B	Mx	-.166	2
52	MP2B	X	195.817	7.75
53	MP2B	Z	-113.055	7.75
54	MP2B	Mx	-.166	7.75
55	MP2C	X	137.899	2
56	MP2C	Z	-79.616	2
57	MP2C	Mx	.12	2
58	MP2C	X	137.899	7.75
59	MP2C	Z	-79.616	7.75
60	MP2C	Mx	.12	7.75
61	MP2A	X	146.933	2
62	MP2A	Z	-84.832	2
63	MP2A	Mx	-.003	2
64	MP2A	X	146.933	7.75
65	MP2A	Z	-84.832	7.75
66	MP2A	Mx	-.003	7.75
67	MP2B	X	195.817	2
68	MP2B	Z	-113.055	2
69	MP2B	Mx	.205	2
70	MP2B	X	195.817	7.75
71	MP2B	Z	-113.055	7.75
72	MP2B	Mx	.205	7.75
73	MP2C	X	137.899	2
74	MP2C	Z	-79.616	2
75	MP2C	Mx	.029	2
76	MP2C	X	137.899	7.75
77	MP2C	Z	-79.616	7.75
78	MP2C	Mx	.029	7.75
79	MP1A	X	12.358	3
80	MP1A	Z	-7.135	3
81	MP1A	Mx	.006	3
82	MP1B	X	15.923	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
83	MP1B	Z	-9.193	3
84	MP1B	Mx	-.002	3
85	MP1C	X	11.7	3
86	MP1C	Z	-6.755	3
87	MP1C	Mx	-.006	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	88.215	3.5
2	MP4B	Z	0	3.5
3	MP4B	Mx	-.015	3.5
4	MP4B	X	88.215	6
5	MP4B	Z	0	6
6	MP4B	Mx	-.015	6
7	MP5A	X	36.609	3.5
8	MP5A	Z	0	3.5
9	MP5A	Mx	-.018	3.5
10	MP5A	X	36.609	6
11	MP5A	Z	0	6
12	MP5A	Mx	-.018	6
13	MP5C	X	38.371	3.5
14	MP5C	Z	0	3.5
15	MP5C	Mx	.019	3.5
16	MP5C	X	38.371	6
17	MP5C	Z	0	6
18	MP5C	Mx	.019	6
19	MP3A	X	63.953	3
20	MP3A	Z	0	3
21	MP3A	Mx	.032	3
22	MP3B	X	90.306	3
23	MP3B	Z	0	3
24	MP3B	Mx	.015	3
25	MP3C	X	64.853	3
26	MP3C	Z	0	3
27	MP3C	Mx	-.032	3
28	MP2A	X	52.165	3
29	MP2A	Z	0	3
30	MP2A	Mx	.026	3
31	MP2B	X	74.754	3
32	MP2B	Z	0	3
33	MP2B	Mx	.013	3
34	MP2C	X	52.937	3
35	MP2C	Z	0	3
36	MP2C	Mx	-.026	3
37	MP4A	X	125.833	2
38	MP4A	Z	0	2
39	MP4A	Mx	.063	2
40	MP4C	X	127.771	2
41	MP4C	Z	0	2
42	MP4C	Mx	-.063	2
43	MP2A	X	150.059	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
44	MP2A	Z	0	2
45	MP2A	Mx	-.075	2
46	MP2A	X	150.059	7.75
47	MP2A	Z	0	7.75
48	MP2A	Mx	-.075	7.75
49	MP2B	X	219.302	2
50	MP2B	Z	0	2
51	MP2B	Mx	-.209	2
52	MP2B	X	219.302	7.75
53	MP2B	Z	0	7.75
54	MP2B	Mx	-.209	7.75
55	MP2C	X	152.424	2
56	MP2C	Z	0	2
57	MP2C	Mx	.053	2
58	MP2C	X	152.424	7.75
59	MP2C	Z	0	7.75
60	MP2C	Mx	.053	7.75
61	MP2A	X	150.059	2
62	MP2A	Z	0	2
63	MP2A	Mx	-.075	2
64	MP2A	X	150.059	7.75
65	MP2A	Z	0	7.75
66	MP2A	Mx	-.075	7.75
67	MP2B	X	219.302	2
68	MP2B	Z	0	2
69	MP2B	Mx	.134	2
70	MP2B	X	219.302	7.75
71	MP2B	Z	0	7.75
72	MP2B	Mx	.134	7.75
73	MP2C	X	152.424	2
74	MP2C	Z	0	2
75	MP2C	Mx	.097	2
76	MP2C	X	152.424	7.75
77	MP2C	Z	0	7.75
78	MP2C	Mx	.097	7.75
79	MP1A	X	12.841	3
80	MP1A	Z	0	3
81	MP1A	Mx	.006	3
82	MP1B	X	17.89	3
83	MP1B	Z	0	3
84	MP1B	Mx	.003	3
85	MP1C	X	13.013	3
86	MP1C	Z	0	3
87	MP1C	Mx	-.006	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	52.616	3.5
2	MP4B	Z	30.378	3.5
3	MP4B	Mx	-.023	3.5
4	MP4B	X	52.616	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
5	MP4B	Z	30.378	6
6	MP4B	Mx	-.023	6
7	MP5A	X	44.358	3.5
8	MP5A	Z	25.61	3.5
9	MP5A	Mx	-.022	3.5
10	MP5A	X	44.358	6
11	MP5A	Z	25.61	6
12	MP5A	Mx	-.022	6
13	MP5C	X	52.616	3.5
14	MP5C	Z	30.378	3.5
15	MP5C	Mx	.023	3.5
16	MP5C	X	52.616	6
17	MP5C	Z	30.378	6
18	MP5C	Mx	.023	6
19	MP3A	X	61.846	3
20	MP3A	Z	35.707	3
21	MP3A	Mx	.031	3
22	MP3B	X	66.064	3
23	MP3B	Z	38.142	3
24	MP3B	Mx	.029	3
25	MP3C	X	66.064	3
26	MP3C	Z	38.142	3
27	MP3C	Mx	-.029	3
28	MP2A	X	50.715	3
29	MP2A	Z	29.28	3
30	MP2A	Mx	.025	3
31	MP2B	X	54.33	3
32	MP2B	Z	31.368	3
33	MP2B	Mx	.024	3
34	MP2C	X	54.33	3
35	MP2C	Z	31.368	3
36	MP2C	Mx	-.024	3
37	MP4A	X	122.89	2
38	MP4A	Z	70.95	2
39	MP4A	Mx	.061	2
40	MP4C	X	131.972	2
41	MP4C	Z	76.194	2
42	MP4C	Mx	-.058	2
43	MP2A	X	146.933	2
44	MP2A	Z	84.832	2
45	MP2A	Mx	-.003	2
46	MP2A	X	146.933	7.75
47	MP2A	Z	84.832	7.75
48	MP2A	Mx	-.003	7.75
49	MP2B	X	158.014	2
50	MP2B	Z	91.229	2
51	MP2B	Mx	-.168	2
52	MP2B	X	158.014	7.75
53	MP2B	Z	91.229	7.75
54	MP2B	Mx	-.168	7.75
55	MP2C	X	158.014	2
56	MP2C	Z	91.229	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
57	MP2C	Mx	-.028	2
58	MP2C	X	158.014	7.75
59	MP2C	Z	91.229	7.75
60	MP2C	Mx	-.028	7.75
61	MP2A	X	146.933	2
62	MP2A	Z	84.832	2
63	MP2A	Mx	-.144	2
64	MP2A	X	146.933	7.75
65	MP2A	Z	84.832	7.75
66	MP2A	Mx	-.144	7.75
67	MP2B	X	158.014	2
68	MP2B	Z	91.229	2
69	MP2B	Mx	.028	2
70	MP2B	X	158.014	7.75
71	MP2B	Z	91.229	7.75
72	MP2B	Mx	.028	7.75
73	MP2C	X	158.014	2
74	MP2C	Z	91.229	2
75	MP2C	Mx	.168	2
76	MP2C	X	158.014	7.75
77	MP2C	Z	91.229	7.75
78	MP2C	Mx	.168	7.75
79	MP1A	X	12.358	3
80	MP1A	Z	7.135	3
81	MP1A	Mx	.006	3
82	MP1B	X	13.166	3
83	MP1B	Z	7.602	3
84	MP1B	Mx	.006	3
85	MP1C	X	13.166	3
86	MP1C	Z	7.602	3
87	MP1C	Mx	-.006	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	19.186	3.5
2	MP4B	Z	33.231	3.5
3	MP4B	Mx	-.019	3.5
4	MP4B	X	19.186	6
5	MP4B	Z	33.231	6
6	MP4B	Mx	-.019	6
7	MP5A	X	40.22	3.5
8	MP5A	Z	69.664	3.5
9	MP5A	Mx	-.02	3.5
10	MP5A	X	40.22	6
11	MP5A	Z	69.664	6
12	MP5A	Mx	-.02	6
13	MP5C	X	44.108	3.5
14	MP5C	Z	76.396	3.5
15	MP5C	Mx	.015	3.5
16	MP5C	X	44.108	6
17	MP5C	Z	76.396	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP5C	Mx	.015	6
19	MP3A	X	43.168	3
20	MP3A	Z	74.77	3
21	MP3A	Mx	.022	3
22	MP3B	X	32.426	3
23	MP3B	Z	56.164	3
24	MP3B	Mx	.032	3
25	MP3C	X	45.153	3
26	MP3C	Z	78.208	3
27	MP3C	Mx	-.015	3
28	MP2A	X	35.676	3
29	MP2A	Z	61.792	3
30	MP2A	Mx	.018	3
31	MP2B	X	26.468	3
32	MP2B	Z	45.845	3
33	MP2B	Mx	.026	3
34	MP2C	X	37.377	3
35	MP2C	Z	64.739	3
36	MP2C	Mx	-.013	3
37	MP4A	X	87.018	2
38	MP4A	Z	150.719	2
39	MP4A	Mx	.044	2
40	MP4C	X	91.292	2
41	MP4C	Z	158.123	2
42	MP4C	Mx	-.031	2
43	MP2A	X	104.435	2
44	MP2A	Z	180.888	2
45	MP2A	Mx	.099	2
46	MP2A	X	104.435	7.75
47	MP2A	Z	180.888	7.75
48	MP2A	Mx	.099	7.75
49	MP2B	X	76.212	2
50	MP2B	Z	132.003	2
51	MP2B	Mx	-.097	2
52	MP2B	X	76.212	7.75
53	MP2B	Z	132.003	7.75
54	MP2B	Mx	-.097	7.75
55	MP2C	X	109.651	2
56	MP2C	Z	189.921	2
57	MP2C	Mx	-.134	2
58	MP2C	X	109.651	7.75
59	MP2C	Z	189.921	7.75
60	MP2C	Mx	-.134	7.75
61	MP2A	X	104.435	2
62	MP2A	Z	180.888	2
63	MP2A	Mx	-.203	2
64	MP2A	X	104.435	7.75
65	MP2A	Z	180.888	7.75
66	MP2A	Mx	-.203	7.75
67	MP2B	X	76.212	2
68	MP2B	Z	132.003	2
69	MP2B	Mx	-.053	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
70	MP2B	X	76.212	7.75
71	MP2B	Z	132.003	7.75
72	MP2B	Mx	-.053	7.75
73	MP2C	X	109.651	2
74	MP2C	Z	189.921	2
75	MP2C	Mx	.209	2
76	MP2C	X	109.651	7.75
77	MP2C	Z	189.921	7.75
78	MP2C	Mx	.209	7.75
79	MP1A	X	8.565	3
80	MP1A	Z	14.834	3
81	MP1A	Mx	.004	3
82	MP1B	X	6.507	3
83	MP1B	Z	11.27	3
84	MP1B	Mx	.006	3
85	MP1C	X	8.945	3
86	MP1C	Z	15.493	3
87	MP1C	Mx	-.003	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	0	3.5
2	MP4B	Z	43.446	3.5
3	MP4B	Mx	-.02	3.5
4	MP4B	X	0	6
5	MP4B	Z	43.446	6
6	MP4B	Mx	-.02	6
7	MP5A	X	0	3.5
8	MP5A	Z	95.052	3.5
9	MP5A	Mx	0	3.5
10	MP5A	X	0	6
11	MP5A	Z	95.052	6
12	MP5A	Mx	0	6
13	MP5C	X	0	3.5
14	MP5C	Z	93.289	3.5
15	MP5C	Mx	-.008	3.5
16	MP5C	X	0	6
17	MP5C	Z	93.289	6
18	MP5C	Mx	-.008	6
19	MP3A	X	0	3
20	MP3A	Z	93.798	3
21	MP3A	Mx	0	3
22	MP3B	X	0	3
23	MP3B	Z	67.444	3
24	MP3B	Mx	.032	3
25	MP3C	X	0	3
26	MP3C	Z	92.898	3
27	MP3C	Mx	.008	3
28	MP2A	X	0	3
29	MP2A	Z	77.747	3
30	MP2A	Mx	0	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
31	MP2B	X	0	3
32	MP2B	Z	55.158	3
33	MP2B	Mx	.026	3
34	MP2C	X	0	3
35	MP2C	Z	76.975	3
36	MP2C	Mx	.007	3
37	MP4A	X	0	2
38	MP4A	Z	190.103	2
39	MP4A	Mx	0	2
40	MP4C	X	0	2
41	MP4C	Z	188.165	2
42	MP4C	Mx	.016	2
43	MP2A	X	0	2
44	MP2A	Z	228.475	2
45	MP2A	Mx	.19	2
46	MP2A	X	0	7.75
47	MP2A	Z	228.475	7.75
48	MP2A	Mx	.19	7.75
49	MP2B	X	0	2
50	MP2B	Z	159.232	2
51	MP2B	Mx	-.029	2
52	MP2B	X	0	7.75
53	MP2B	Z	159.232	7.75
54	MP2B	Mx	-.029	7.75
55	MP2C	X	0	2
56	MP2C	Z	226.11	2
57	MP2C	Mx	-.205	2
58	MP2C	X	0	7.75
59	MP2C	Z	226.11	7.75
60	MP2C	Mx	-.205	7.75
61	MP2A	X	0	2
62	MP2A	Z	228.475	2
63	MP2A	Mx	-.19	2
64	MP2A	X	0	7.75
65	MP2A	Z	228.475	7.75
66	MP2A	Mx	-.19	7.75
67	MP2B	X	0	2
68	MP2B	Z	159.232	2
69	MP2B	Mx	-.12	2
70	MP2B	X	0	7.75
71	MP2B	Z	159.232	7.75
72	MP2B	Mx	-.12	7.75
73	MP2C	X	0	2
74	MP2C	Z	226.11	2
75	MP2C	Mx	.166	2
76	MP2C	X	0	7.75
77	MP2C	Z	226.11	7.75
78	MP2C	Mx	.166	7.75
79	MP1A	X	0	3
80	MP1A	Z	18.559	3
81	MP1A	Mx	0	3
82	MP1B	X	0	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
83	MP1B	Z	13.51	3
84	MP1B	Mx	.006	3
85	MP1C	X	0	3
86	MP1C	Z	18.386	3
87	MP1C	Mx	.002	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	-35.452	3.5
2	MP4B	Z	61.405	3.5
3	MP4B	Mx	-.023	3.5
4	MP4B	X	-35.452	6
5	MP4B	Z	61.405	6
6	MP4B	Mx	-.023	6
7	MP5A	X	-40.22	3.5
8	MP5A	Z	69.664	3.5
9	MP5A	Mx	.02	3.5
10	MP5A	X	-40.22	6
11	MP5A	Z	69.664	6
12	MP5A	Mx	.02	6
13	MP5C	X	-35.452	3.5
14	MP5C	Z	61.405	3.5
15	MP5C	Mx	-.023	3.5
16	MP5C	X	-35.452	6
17	MP5C	Z	61.405	6
18	MP5C	Mx	-.023	6
19	MP3A	X	-43.168	3
20	MP3A	Z	74.77	3
21	MP3A	Mx	-.022	3
22	MP3B	X	-40.733	3
23	MP3B	Z	70.552	3
24	MP3B	Mx	.026	3
25	MP3C	X	-40.733	3
26	MP3C	Z	70.552	3
27	MP3C	Mx	.026	3
28	MP2A	X	-35.676	3
29	MP2A	Z	61.792	3
30	MP2A	Mx	-.018	3
31	MP2B	X	-33.589	3
32	MP2B	Z	58.177	3
33	MP2B	Mx	.022	3
34	MP2C	X	-33.589	3
35	MP2C	Z	58.177	3
36	MP2C	Mx	.022	3
37	MP4A	X	-87.018	2
38	MP4A	Z	150.719	2
39	MP4A	Mx	-.044	2
40	MP4C	X	-81.774	2
41	MP4C	Z	141.637	2
42	MP4C	Mx	.053	2
43	MP2A	X	-104.435	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
44	MP2A	Z	180.888	2
45	MP2A	Mx	.203	2
46	MP2A	X	-104.435	7.75
47	MP2A	Z	180.888	7.75
48	MP2A	Mx	.203	7.75
49	MP2B	X	-98.038	2
50	MP2B	Z	169.806	2
51	MP2B	Mx	.062	2
52	MP2B	X	-98.038	7.75
53	MP2B	Z	169.806	7.75
54	MP2B	Mx	.062	7.75
55	MP2C	X	-98.038	2
56	MP2C	Z	169.806	2
57	MP2C	Mx	-.188	2
58	MP2C	X	-98.038	7.75
59	MP2C	Z	169.806	7.75
60	MP2C	Mx	-.188	7.75
61	MP2A	X	-104.435	2
62	MP2A	Z	180.888	2
63	MP2A	Mx	-.099	2
64	MP2A	X	-104.435	7.75
65	MP2A	Z	180.888	7.75
66	MP2A	Mx	-.099	7.75
67	MP2B	X	-98.038	2
68	MP2B	Z	169.806	2
69	MP2B	Mx	-.188	2
70	MP2B	X	-98.038	7.75
71	MP2B	Z	169.806	7.75
72	MP2B	Mx	-.188	7.75
73	MP2C	X	-98.038	2
74	MP2C	Z	169.806	2
75	MP2C	Mx	.062	2
76	MP2C	X	-98.038	7.75
77	MP2C	Z	169.806	7.75
78	MP2C	Mx	.062	7.75
79	MP1A	X	-8.565	3
80	MP1A	Z	14.834	3
81	MP1A	Mx	-.004	3
82	MP1B	X	-8.098	3
83	MP1B	Z	14.026	3
84	MP1B	Mx	.005	3
85	MP1C	X	-8.098	3
86	MP1C	Z	14.026	3
87	MP1C	Mx	.005	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	-80.791	3.5
2	MP4B	Z	46.645	3.5
3	MP4B	Mx	-.008	3.5
4	MP4B	X	-80.791	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
5	MP4B	Z	46.645	6
6	MP4B	Mx	-.008	6
7	MP5A	X	-44.358	3.5
8	MP5A	Z	25.61	3.5
9	MP5A	Mx	.022	3.5
10	MP5A	X	-44.358	6
11	MP5A	Z	25.61	6
12	MP5A	Mx	.022	6
13	MP5C	X	-37.625	3.5
14	MP5C	Z	21.723	3.5
15	MP5C	Mx	-.02	3.5
16	MP5C	X	-37.625	6
17	MP5C	Z	21.723	6
18	MP5C	Mx	-.02	6
19	MP3A	X	-61.846	3
20	MP3A	Z	35.707	3
21	MP3A	Mx	-.031	3
22	MP3B	X	-80.452	3
23	MP3B	Z	46.449	3
24	MP3B	Mx	.008	3
25	MP3C	X	-58.408	3
26	MP3C	Z	33.722	3
27	MP3C	Mx	.032	3
28	MP2A	X	-50.715	3
29	MP2A	Z	29.28	3
30	MP2A	Mx	-.025	3
31	MP2B	X	-66.663	3
32	MP2B	Z	38.488	3
33	MP2B	Mx	.007	3
34	MP2C	X	-47.768	3
35	MP2C	Z	27.579	3
36	MP2C	Mx	.026	3
37	MP4A	X	-122.89	2
38	MP4A	Z	70.95	2
39	MP4A	Mx	-.061	2
40	MP4C	X	-115.486	2
41	MP4C	Z	66.676	2
42	MP4C	Mx	.063	2
43	MP2A	X	-146.933	2
44	MP2A	Z	84.832	2
45	MP2A	Mx	.144	2
46	MP2A	X	-146.933	7.75
47	MP2A	Z	84.832	7.75
48	MP2A	Mx	.144	7.75
49	MP2B	X	-195.817	2
50	MP2B	Z	113.055	2
51	MP2B	Mx	.166	2
52	MP2B	X	-195.817	7.75
53	MP2B	Z	113.055	7.75
54	MP2B	Mx	.166	7.75
55	MP2C	X	-137.899	2
56	MP2C	Z	79.616	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
57	MP2C	Mx	-.12	2
58	MP2C	X	-137.899	7.75
59	MP2C	Z	79.616	7.75
60	MP2C	Mx	-.12	7.75
61	MP2A	X	-146.933	2
62	MP2A	Z	84.832	2
63	MP2A	Mx	.003	2
64	MP2A	X	-146.933	7.75
65	MP2A	Z	84.832	7.75
66	MP2A	Mx	.003	7.75
67	MP2B	X	-195.817	2
68	MP2B	Z	113.055	2
69	MP2B	Mx	-.205	2
70	MP2B	X	-195.817	7.75
71	MP2B	Z	113.055	7.75
72	MP2B	Mx	-.205	7.75
73	MP2C	X	-137.899	2
74	MP2C	Z	79.616	2
75	MP2C	Mx	-.029	2
76	MP2C	X	-137.899	7.75
77	MP2C	Z	79.616	7.75
78	MP2C	Mx	-.029	7.75
79	MP1A	X	-12.358	3
80	MP1A	Z	7.135	3
81	MP1A	Mx	-.006	3
82	MP1B	X	-15.923	3
83	MP1B	Z	9.193	3
84	MP1B	Mx	.002	3
85	MP1C	X	-11.7	3
86	MP1C	Z	6.755	3
87	MP1C	Mx	.006	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	-88.215	3.5
2	MP4B	Z	0	3.5
3	MP4B	Mx	.015	3.5
4	MP4B	X	-88.215	6
5	MP4B	Z	0	6
6	MP4B	Mx	.015	6
7	MP5A	X	-36.609	3.5
8	MP5A	Z	0	3.5
9	MP5A	Mx	.018	3.5
10	MP5A	X	-36.609	6
11	MP5A	Z	0	6
12	MP5A	Mx	.018	6
13	MP5C	X	-38.371	3.5
14	MP5C	Z	0	3.5
15	MP5C	Mx	-.019	3.5
16	MP5C	X	-38.371	6
17	MP5C	Z	0	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP5C	Mx	-.019	6
19	MP3A	X	-63.953	3
20	MP3A	Z	0	3
21	MP3A	Mx	-.032	3
22	MP3B	X	-90.306	3
23	MP3B	Z	0	3
24	MP3B	Mx	-.015	3
25	MP3C	X	-64.853	3
26	MP3C	Z	0	3
27	MP3C	Mx	.032	3
28	MP2A	X	-52.165	3
29	MP2A	Z	0	3
30	MP2A	Mx	-.026	3
31	MP2B	X	-74.754	3
32	MP2B	Z	0	3
33	MP2B	Mx	-.013	3
34	MP2C	X	-52.937	3
35	MP2C	Z	0	3
36	MP2C	Mx	.026	3
37	MP4A	X	-125.833	2
38	MP4A	Z	0	2
39	MP4A	Mx	-.063	2
40	MP4C	X	-127.771	2
41	MP4C	Z	0	2
42	MP4C	Mx	.063	2
43	MP2A	X	-150.059	2
44	MP2A	Z	0	2
45	MP2A	Mx	.075	2
46	MP2A	X	-150.059	7.75
47	MP2A	Z	0	7.75
48	MP2A	Mx	.075	7.75
49	MP2B	X	-219.302	2
50	MP2B	Z	0	2
51	MP2B	Mx	.209	2
52	MP2B	X	-219.302	7.75
53	MP2B	Z	0	7.75
54	MP2B	Mx	.209	7.75
55	MP2C	X	-152.424	2
56	MP2C	Z	0	2
57	MP2C	Mx	-.053	2
58	MP2C	X	-152.424	7.75
59	MP2C	Z	0	7.75
60	MP2C	Mx	-.053	7.75
61	MP2A	X	-150.059	2
62	MP2A	Z	0	2
63	MP2A	Mx	.075	2
64	MP2A	X	-150.059	7.75
65	MP2A	Z	0	7.75
66	MP2A	Mx	.075	7.75
67	MP2B	X	-219.302	2
68	MP2B	Z	0	2
69	MP2B	Mx	-.134	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
70	MP2B	X	-219.302	7.75
71	MP2B	Z	0	7.75
72	MP2B	Mx	-.134	7.75
73	MP2C	X	-152.424	2
74	MP2C	Z	0	2
75	MP2C	Mx	-.097	2
76	MP2C	X	-152.424	7.75
77	MP2C	Z	0	7.75
78	MP2C	Mx	-.097	7.75
79	MP1A	X	-12.841	3
80	MP1A	Z	0	3
81	MP1A	Mx	-.006	3
82	MP1B	X	-17.89	3
83	MP1B	Z	0	3
84	MP1B	Mx	-.003	3
85	MP1C	X	-13.013	3
86	MP1C	Z	0	3
87	MP1C	Mx	.006	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	-52.616	3.5
2	MP4B	Z	-30.378	3.5
3	MP4B	Mx	.023	3.5
4	MP4B	X	-52.616	6
5	MP4B	Z	-30.378	6
6	MP4B	Mx	.023	6
7	MP5A	X	-44.358	3.5
8	MP5A	Z	-25.61	3.5
9	MP5A	Mx	.022	3.5
10	MP5A	X	-44.358	6
11	MP5A	Z	-25.61	6
12	MP5A	Mx	.022	6
13	MP5C	X	-52.616	3.5
14	MP5C	Z	-30.378	3.5
15	MP5C	Mx	-.023	3.5
16	MP5C	X	-52.616	6
17	MP5C	Z	-30.378	6
18	MP5C	Mx	-.023	6
19	MP3A	X	-61.846	3
20	MP3A	Z	-35.707	3
21	MP3A	Mx	-.031	3
22	MP3B	X	-66.064	3
23	MP3B	Z	-38.142	3
24	MP3B	Mx	-.029	3
25	MP3C	X	-66.064	3
26	MP3C	Z	-38.142	3
27	MP3C	Mx	.029	3
28	MP2A	X	-50.715	3
29	MP2A	Z	-29.28	3
30	MP2A	Mx	-.025	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
31	MP2B	X	-54.33	3
32	MP2B	Z	-31.368	3
33	MP2B	Mx	-.024	3
34	MP2C	X	-54.33	3
35	MP2C	Z	-31.368	3
36	MP2C	Mx	.024	3
37	MP4A	X	-122.89	2
38	MP4A	Z	-70.95	2
39	MP4A	Mx	-.061	2
40	MP4C	X	-131.972	2
41	MP4C	Z	-76.194	2
42	MP4C	Mx	.058	2
43	MP2A	X	-146.933	2
44	MP2A	Z	-84.832	2
45	MP2A	Mx	.003	2
46	MP2A	X	-146.933	7.75
47	MP2A	Z	-84.832	7.75
48	MP2A	Mx	.003	7.75
49	MP2B	X	-158.014	2
50	MP2B	Z	-91.229	2
51	MP2B	Mx	.168	2
52	MP2B	X	-158.014	7.75
53	MP2B	Z	-91.229	7.75
54	MP2B	Mx	.168	7.75
55	MP2C	X	-158.014	2
56	MP2C	Z	-91.229	2
57	MP2C	Mx	.028	2
58	MP2C	X	-158.014	7.75
59	MP2C	Z	-91.229	7.75
60	MP2C	Mx	.028	7.75
61	MP2A	X	-146.933	2
62	MP2A	Z	-84.832	2
63	MP2A	Mx	.144	2
64	MP2A	X	-146.933	7.75
65	MP2A	Z	-84.832	7.75
66	MP2A	Mx	.144	7.75
67	MP2B	X	-158.014	2
68	MP2B	Z	-91.229	2
69	MP2B	Mx	-.028	2
70	MP2B	X	-158.014	7.75
71	MP2B	Z	-91.229	7.75
72	MP2B	Mx	-.028	7.75
73	MP2C	X	-158.014	2
74	MP2C	Z	-91.229	2
75	MP2C	Mx	-.168	2
76	MP2C	X	-158.014	7.75
77	MP2C	Z	-91.229	7.75
78	MP2C	Mx	-.168	7.75
79	MP1A	X	-12.358	3
80	MP1A	Z	-7.135	3
81	MP1A	Mx	-.006	3
82	MP1B	X	-13.166	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
83	MP1B	Z	-7.602	3
84	MP1B	Mx	-.006	3
85	MP1C	X	-13.166	3
86	MP1C	Z	-7.602	3
87	MP1C	Mx	.006	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	-19.186	3.5
2	MP4B	Z	-33.231	3.5
3	MP4B	Mx	.019	3.5
4	MP4B	X	-19.186	6
5	MP4B	Z	-33.231	6
6	MP4B	Mx	.019	6
7	MP5A	X	-40.22	3.5
8	MP5A	Z	-69.664	3.5
9	MP5A	Mx	.02	3.5
10	MP5A	X	-40.22	6
11	MP5A	Z	-69.664	6
12	MP5A	Mx	.02	6
13	MP5C	X	-44.108	3.5
14	MP5C	Z	-76.396	3.5
15	MP5C	Mx	-.015	3.5
16	MP5C	X	-44.108	6
17	MP5C	Z	-76.396	6
18	MP5C	Mx	-.015	6
19	MP3A	X	-43.168	3
20	MP3A	Z	-74.77	3
21	MP3A	Mx	-.022	3
22	MP3B	X	-32.426	3
23	MP3B	Z	-56.164	3
24	MP3B	Mx	-.032	3
25	MP3C	X	-45.153	3
26	MP3C	Z	-78.208	3
27	MP3C	Mx	.015	3
28	MP2A	X	-35.676	3
29	MP2A	Z	-61.792	3
30	MP2A	Mx	-.018	3
31	MP2B	X	-26.468	3
32	MP2B	Z	-45.845	3
33	MP2B	Mx	-.026	3
34	MP2C	X	-37.377	3
35	MP2C	Z	-64.739	3
36	MP2C	Mx	.013	3
37	MP4A	X	-87.018	2
38	MP4A	Z	-150.719	2
39	MP4A	Mx	-.044	2
40	MP4C	X	-91.292	2
41	MP4C	Z	-158.123	2
42	MP4C	Mx	.031	2
43	MP2A	X	-104.435	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
44	MP2A	Z	-180.888	2
45	MP2A	Mx	-.099	2
46	MP2A	X	-104.435	7.75
47	MP2A	Z	-180.888	7.75
48	MP2A	Mx	-.099	7.75
49	MP2B	X	-76.212	2
50	MP2B	Z	-132.003	2
51	MP2B	Mx	.097	2
52	MP2B	X	-76.212	7.75
53	MP2B	Z	-132.003	7.75
54	MP2B	Mx	.097	7.75
55	MP2C	X	-109.651	2
56	MP2C	Z	-189.921	2
57	MP2C	Mx	.134	2
58	MP2C	X	-109.651	7.75
59	MP2C	Z	-189.921	7.75
60	MP2C	Mx	.134	7.75
61	MP2A	X	-104.435	2
62	MP2A	Z	-180.888	2
63	MP2A	Mx	.203	2
64	MP2A	X	-104.435	7.75
65	MP2A	Z	-180.888	7.75
66	MP2A	Mx	.203	7.75
67	MP2B	X	-76.212	2
68	MP2B	Z	-132.003	2
69	MP2B	Mx	.053	2
70	MP2B	X	-76.212	7.75
71	MP2B	Z	-132.003	7.75
72	MP2B	Mx	.053	7.75
73	MP2C	X	-109.651	2
74	MP2C	Z	-189.921	2
75	MP2C	Mx	-.209	2
76	MP2C	X	-109.651	7.75
77	MP2C	Z	-189.921	7.75
78	MP2C	Mx	-.209	7.75
79	MP1A	X	-8.565	3
80	MP1A	Z	-14.834	3
81	MP1A	Mx	-.004	3
82	MP1B	X	-6.507	3
83	MP1B	Z	-11.27	3
84	MP1B	Mx	-.006	3
85	MP1C	X	-8.945	3
86	MP1C	Z	-15.493	3
87	MP1C	Mx	.003	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	0	3.5
2	MP4B	Z	-7.886	3.5
3	MP4B	Mx	.004	3.5
4	MP4B	X	0	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
5	MP4B	Z	-7.886	6
6	MP4B	Mx	.004	6
7	MP5A	X	0	3.5
8	MP5A	Z	-16.091	3.5
9	MP5A	Mx	0	3.5
10	MP5A	X	0	6
11	MP5A	Z	-16.091	6
12	MP5A	Mx	0	6
13	MP5C	X	0	3.5
14	MP5C	Z	-15.811	3.5
15	MP5C	Mx	.001	3.5
16	MP5C	X	0	6
17	MP5C	Z	-15.811	6
18	MP5C	Mx	.001	6
19	MP3A	X	0	3
20	MP3A	Z	-16.626	3
21	MP3A	Mx	0	3
22	MP3B	X	0	3
23	MP3B	Z	-12.339	3
24	MP3B	Mx	-.006	3
25	MP3C	X	0	3
26	MP3C	Z	-16.479	3
27	MP3C	Mx	-.001	3
28	MP2A	X	0	3
29	MP2A	Z	-16.626	3
30	MP2A	Mx	0	3
31	MP2B	X	0	3
32	MP2B	Z	-12.16	3
33	MP2B	Mx	-.006	3
34	MP2C	X	0	3
35	MP2C	Z	-16.473	3
36	MP2C	Mx	-.001	3
37	MP4A	X	0	2
38	MP4A	Z	-31.994	2
39	MP4A	Mx	0	2
40	MP4C	X	0	2
41	MP4C	Z	-31.69	2
42	MP4C	Mx	-.003	2
43	MP2A	X	0	2
44	MP2A	Z	-37.064	2
45	MP2A	Mx	-.031	2
46	MP2A	X	0	7.75
47	MP2A	Z	-37.064	7.75
48	MP2A	Mx	-.031	7.75
49	MP2B	X	0	2
50	MP2B	Z	-26.668	2
51	MP2B	Mx	.005	2
52	MP2B	X	0	7.75
53	MP2B	Z	-26.668	7.75
54	MP2B	Mx	.005	7.75
55	MP2C	X	0	2
56	MP2C	Z	-36.709	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
57	MP2C	Mx	.033	2
58	MP2C	X	0	7.75
59	MP2C	Z	-36.709	7.75
60	MP2C	Mx	.033	7.75
61	MP2A	X	0	2
62	MP2A	Z	-37.064	2
63	MP2A	Mx	.031	2
64	MP2A	X	0	7.75
65	MP2A	Z	-37.064	7.75
66	MP2A	Mx	.031	7.75
67	MP2B	X	0	2
68	MP2B	Z	-26.668	2
69	MP2B	Mx	.02	2
70	MP2B	X	0	7.75
71	MP2B	Z	-26.668	7.75
72	MP2B	Mx	.02	7.75
73	MP2C	X	0	2
74	MP2C	Z	-36.709	2
75	MP2C	Mx	-.027	2
76	MP2C	X	0	7.75
77	MP2C	Z	-36.709	7.75
78	MP2C	Mx	-.027	7.75
79	MP1A	X	0	3
80	MP1A	Z	-4.042	3
81	MP1A	Mx	0	3
82	MP1B	X	0	3
83	MP1B	Z	-3.153	3
84	MP1B	Mx	-.001	3
85	MP1C	X	0	3
86	MP1C	Z	-4.012	3
87	MP1C	Mx	-.000348	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	6.126	3.5
2	MP4B	Z	-10.61	3.5
3	MP4B	Mx	.004	3.5
4	MP4B	X	6.126	6
5	MP4B	Z	-10.61	6
6	MP4B	Mx	.004	6
7	MP5A	X	6.884	3.5
8	MP5A	Z	-11.923	3.5
9	MP5A	Mx	-.003	3.5
10	MP5A	X	6.884	6
11	MP5A	Z	-11.923	6
12	MP5A	Mx	-.003	6
13	MP5C	X	6.126	3.5
14	MP5C	Z	-10.61	3.5
15	MP5C	Mx	.004	3.5
16	MP5C	X	6.126	6
17	MP5C	Z	-10.61	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP5C	Mx	.004	6
19	MP3A	X	7.706	3
20	MP3A	Z	-13.347	3
21	MP3A	Mx	.004	3
22	MP3B	X	7.31	3
23	MP3B	Z	-12.661	3
24	MP3B	Mx	-.005	3
25	MP3C	X	7.31	3
26	MP3C	Z	-12.661	3
27	MP3C	Mx	-.005	3
28	MP2A	X	7.681	3
29	MP2A	Z	-13.303	3
30	MP2A	Mx	.004	3
31	MP2B	X	7.268	3
32	MP2B	Z	-12.589	3
33	MP2B	Mx	-.005	3
34	MP2C	X	7.268	3
35	MP2C	Z	-12.589	3
36	MP2C	Mx	-.005	3
37	MP4A	X	14.734	2
38	MP4A	Z	-25.52	2
39	MP4A	Mx	.007	2
40	MP4C	X	13.91	2
41	MP4C	Z	-24.093	2
42	MP4C	Mx	-.009	2
43	MP2A	X	17.06	2
44	MP2A	Z	-29.549	2
45	MP2A	Mx	-.033	2
46	MP2A	X	17.06	7.75
47	MP2A	Z	-29.549	7.75
48	MP2A	Mx	-.033	7.75
49	MP2B	X	16.1	2
50	MP2B	Z	-27.886	2
51	MP2B	Mx	-.01	2
52	MP2B	X	16.1	7.75
53	MP2B	Z	-27.886	7.75
54	MP2B	Mx	-.01	7.75
55	MP2C	X	16.1	2
56	MP2C	Z	-27.886	2
57	MP2C	Mx	.031	2
58	MP2C	X	16.1	7.75
59	MP2C	Z	-27.886	7.75
60	MP2C	Mx	.031	7.75
61	MP2A	X	17.06	2
62	MP2A	Z	-29.549	2
63	MP2A	Mx	.016	2
64	MP2A	X	17.06	7.75
65	MP2A	Z	-29.549	7.75
66	MP2A	Mx	.016	7.75
67	MP2B	X	16.1	2
68	MP2B	Z	-27.886	2
69	MP2B	Mx	.031	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
70	MP2B	X	16.1	7.75
71	MP2B	Z	-27.886	7.75
72	MP2B	Mx	.031	7.75
73	MP2C	X	16.1	2
74	MP2C	Z	-27.886	2
75	MP2C	Mx	-.01	2
76	MP2C	X	16.1	7.75
77	MP2C	Z	-27.886	7.75
78	MP2C	Mx	-.01	7.75
79	MP1A	X	1.895	3
80	MP1A	Z	-3.283	3
81	MP1A	Mx	.000948	3
82	MP1B	X	1.813	3
83	MP1B	Z	-3.14	3
84	MP1B	Mx	-.001	3
85	MP1C	X	1.813	3
86	MP1C	Z	-3.14	3
87	MP1C	Mx	-.001	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	13.692	3.5
2	MP4B	Z	-7.905	3.5
3	MP4B	Mx	.001	3.5
4	MP4B	X	13.692	6
5	MP4B	Z	-7.905	6
6	MP4B	Mx	.001	6
7	MP5A	X	7.9	3.5
8	MP5A	Z	-4.561	3.5
9	MP5A	Mx	-.004	3.5
10	MP5A	X	7.9	6
11	MP5A	Z	-4.561	6
12	MP5A	Mx	-.004	6
13	MP5C	X	6.83	3.5
14	MP5C	Z	-3.943	3.5
15	MP5C	Mx	.004	3.5
16	MP5C	X	6.83	6
17	MP5C	Z	-3.943	6
18	MP5C	Mx	.004	6
19	MP3A	X	11.245	3
20	MP3A	Z	-6.492	3
21	MP3A	Mx	.006	3
22	MP3B	X	14.272	3
23	MP3B	Z	-8.24	3
24	MP3B	Mx	-.001	3
25	MP3C	X	10.686	3
26	MP3C	Z	-6.169	3
27	MP3C	Mx	-.006	3
28	MP2A	X	11.114	3
29	MP2A	Z	-6.416	3
30	MP2A	Mx	.006	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
31	MP2B	X	14.266	3
32	MP2B	Z	-8.237	3
33	MP2B	Mx	-.001	3
34	MP2C	X	10.531	3
35	MP2C	Z	-6.08	3
36	MP2C	Mx	-.006	3
37	MP4A	X	21.146	2
38	MP4A	Z	-12.209	2
39	MP4A	Mx	.011	2
40	MP4C	X	19.982	2
41	MP4C	Z	-11.537	2
42	MP4C	Mx	-.011	2
43	MP2A	X	24.451	2
44	MP2A	Z	-14.117	2
45	MP2A	Mx	-.024	2
46	MP2A	X	24.451	7.75
47	MP2A	Z	-14.117	7.75
48	MP2A	Mx	-.024	7.75
49	MP2B	X	31.791	2
50	MP2B	Z	-18.354	2
51	MP2B	Mx	-.027	2
52	MP2B	X	31.791	7.75
53	MP2B	Z	-18.354	7.75
54	MP2B	Mx	-.027	7.75
55	MP2C	X	23.095	2
56	MP2C	Z	-13.334	2
57	MP2C	Mx	.02	2
58	MP2C	X	23.095	7.75
59	MP2C	Z	-13.334	7.75
60	MP2C	Mx	.02	7.75
61	MP2A	X	24.451	2
62	MP2A	Z	-14.117	2
63	MP2A	Mx	-.000461	2
64	MP2A	X	24.451	7.75
65	MP2A	Z	-14.117	7.75
66	MP2A	Mx	-.000461	7.75
67	MP2B	X	31.791	2
68	MP2B	Z	-18.354	2
69	MP2B	Mx	.033	2
70	MP2B	X	31.791	7.75
71	MP2B	Z	-18.354	7.75
72	MP2B	Mx	.033	7.75
73	MP2C	X	23.095	2
74	MP2C	Z	-13.334	2
75	MP2C	Mx	.005	2
76	MP2C	X	23.095	7.75
77	MP2C	Z	-13.334	7.75
78	MP2C	Mx	.005	7.75
79	MP1A	X	2.846	3
80	MP1A	Z	-1.643	3
81	MP1A	Mx	.001	3
82	MP1B	X	3.474	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
83	MP1B	Z	-2.006	3
84	MP1B	Mx	-.000348	3
85	MP1C	X	2.73	3
86	MP1C	Z	-1.576	3
87	MP1C	Mx	-.001	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	15.004	3.5
2	MP4B	Z	0	3.5
3	MP4B	Mx	-.003	3.5
4	MP4B	X	15.004	6
5	MP4B	Z	0	6
6	MP4B	Mx	-.003	6
7	MP5A	X	6.799	3.5
8	MP5A	Z	0	3.5
9	MP5A	Mx	-.003	3.5
10	MP5A	X	6.799	6
11	MP5A	Z	0	6
12	MP5A	Mx	-.003	6
13	MP5C	X	7.08	3.5
14	MP5C	Z	0	3.5
15	MP5C	Mx	.003	3.5
16	MP5C	X	7.08	6
17	MP5C	Z	0	6
18	MP5C	Mx	.003	6
19	MP3A	X	11.771	3
20	MP3A	Z	0	3
21	MP3A	Mx	.006	3
22	MP3B	X	16.058	3
23	MP3B	Z	0	3
24	MP3B	Mx	.003	3
25	MP3C	X	11.917	3
26	MP3C	Z	0	3
27	MP3C	Mx	-.006	3
28	MP2A	X	11.569	3
29	MP2A	Z	0	3
30	MP2A	Mx	.006	3
31	MP2B	X	16.034	3
32	MP2B	Z	0	3
33	MP2B	Mx	.003	3
34	MP2C	X	11.721	3
35	MP2C	Z	0	3
36	MP2C	Mx	-.006	3
37	MP4A	X	21.891	2
38	MP4A	Z	0	2
39	MP4A	Mx	.011	2
40	MP4C	X	22.196	2
41	MP4C	Z	0	2
42	MP4C	Mx	-.011	2
43	MP2A	X	25.291	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
44	MP2A	Z	0	2
45	MP2A	Mx	-.013	2
46	MP2A	X	25.291	7.75
47	MP2A	Z	0	7.75
48	MP2A	Mx	-.013	7.75
49	MP2B	X	35.687	2
50	MP2B	Z	0	2
51	MP2B	Mx	-.034	2
52	MP2B	X	35.687	7.75
53	MP2B	Z	0	7.75
54	MP2B	Mx	-.034	7.75
55	MP2C	X	25.646	2
56	MP2C	Z	0	2
57	MP2C	Mx	.009	2
58	MP2C	X	25.646	7.75
59	MP2C	Z	0	7.75
60	MP2C	Mx	.009	7.75
61	MP2A	X	25.291	2
62	MP2A	Z	0	2
63	MP2A	Mx	-.013	2
64	MP2A	X	25.291	7.75
65	MP2A	Z	0	7.75
66	MP2A	Mx	-.013	7.75
67	MP2B	X	35.687	2
68	MP2B	Z	0	2
69	MP2B	Mx	.022	2
70	MP2B	X	35.687	7.75
71	MP2B	Z	0	7.75
72	MP2B	Mx	.022	7.75
73	MP2C	X	25.646	2
74	MP2C	Z	0	2
75	MP2C	Mx	.016	2
76	MP2C	X	25.646	7.75
77	MP2C	Z	0	7.75
78	MP2C	Mx	.016	7.75
79	MP1A	X	3.035	3
80	MP1A	Z	0	3
81	MP1A	Mx	.002	3
82	MP1B	X	3.924	3
83	MP1B	Z	0	3
84	MP1B	Mx	.000671	3
85	MP1C	X	3.065	3
86	MP1C	Z	0	3
87	MP1C	Mx	-.002	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	9.213	3.5
2	MP4B	Z	5.319	3.5
3	MP4B	Mx	-.004	3.5
4	MP4B	X	9.213	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
5	MP4B	Z	5.319	6
6	MP4B	Mx	-.004	6
7	MP5A	X	7.9	3.5
8	MP5A	Z	4.561	3.5
9	MP5A	Mx	-.004	3.5
10	MP5A	X	7.9	6
11	MP5A	Z	4.561	6
12	MP5A	Mx	-.004	6
13	MP5C	X	9.213	3.5
14	MP5C	Z	5.319	3.5
15	MP5C	Mx	.004	3.5
16	MP5C	X	9.213	6
17	MP5C	Z	5.319	6
18	MP5C	Mx	.004	6
19	MP3A	X	11.245	3
20	MP3A	Z	6.492	3
21	MP3A	Mx	.006	3
22	MP3B	X	11.931	3
23	MP3B	Z	6.888	3
24	MP3B	Mx	.005	3
25	MP3C	X	11.931	3
26	MP3C	Z	6.888	3
27	MP3C	Mx	-.005	3
28	MP2A	X	11.114	3
29	MP2A	Z	6.416	3
30	MP2A	Mx	.006	3
31	MP2B	X	11.828	3
32	MP2B	Z	6.829	3
33	MP2B	Mx	.005	3
34	MP2C	X	11.828	3
35	MP2C	Z	6.829	3
36	MP2C	Mx	-.005	3
37	MP4A	X	21.146	2
38	MP4A	Z	12.209	2
39	MP4A	Mx	.011	2
40	MP4C	X	22.573	2
41	MP4C	Z	13.033	2
42	MP4C	Mx	-.01	2
43	MP2A	X	24.451	2
44	MP2A	Z	14.117	2
45	MP2A	Mx	-.000461	2
46	MP2A	X	24.451	7.75
47	MP2A	Z	14.117	7.75
48	MP2A	Mx	-.000461	7.75
49	MP2B	X	26.115	2
50	MP2B	Z	15.078	2
51	MP2B	Mx	-.028	2
52	MP2B	X	26.115	7.75
53	MP2B	Z	15.078	7.75
54	MP2B	Mx	-.028	7.75
55	MP2C	X	26.115	2
56	MP2C	Z	15.078	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
57	MP2C	Mx	-.005	2
58	MP2C	X	26.115	7.75
59	MP2C	Z	15.078	7.75
60	MP2C	Mx	-.005	7.75
61	MP2A	X	24.451	2
62	MP2A	Z	14.117	2
63	MP2A	Mx	-.024	2
64	MP2A	X	24.451	7.75
65	MP2A	Z	14.117	7.75
66	MP2A	Mx	-.024	7.75
67	MP2B	X	26.115	2
68	MP2B	Z	15.078	2
69	MP2B	Mx	.005	2
70	MP2B	X	26.115	7.75
71	MP2B	Z	15.078	7.75
72	MP2B	Mx	.005	7.75
73	MP2C	X	26.115	2
74	MP2C	Z	15.078	2
75	MP2C	Mx	.028	2
76	MP2C	X	26.115	7.75
77	MP2C	Z	15.078	7.75
78	MP2C	Mx	.028	7.75
79	MP1A	X	2.846	3
80	MP1A	Z	1.643	3
81	MP1A	Mx	.001	3
82	MP1B	X	2.989	3
83	MP1B	Z	1.726	3
84	MP1B	Mx	.001	3
85	MP1C	X	2.989	3
86	MP1C	Z	1.726	3
87	MP1C	Mx	-.001	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	3.54	3.5
2	MP4B	Z	6.131	3.5
3	MP4B	Mx	-.003	3.5
4	MP4B	X	3.54	6
5	MP4B	Z	6.131	6
6	MP4B	Mx	-.003	6
7	MP5A	X	6.884	3.5
8	MP5A	Z	11.923	3.5
9	MP5A	Mx	-.003	3.5
10	MP5A	X	6.884	6
11	MP5A	Z	11.923	6
12	MP5A	Mx	-.003	6
13	MP5C	X	7.502	3.5
14	MP5C	Z	12.994	3.5
15	MP5C	Mx	.003	3.5
16	MP5C	X	7.502	6
17	MP5C	Z	12.994	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP5C	Mx	.003	6
19	MP3A	X	7.706	3
20	MP3A	Z	13.347	3
21	MP3A	Mx	.004	3
22	MP3B	X	5.959	3
23	MP3B	Z	10.321	3
24	MP3B	Mx	.006	3
25	MP3C	X	8.029	3
26	MP3C	Z	13.906	3
27	MP3C	Mx	-.003	3
28	MP2A	X	7.681	3
29	MP2A	Z	13.303	3
30	MP2A	Mx	.004	3
31	MP2B	X	5.861	3
32	MP2B	Z	10.151	3
33	MP2B	Mx	.006	3
34	MP2C	X	8.017	3
35	MP2C	Z	13.886	3
36	MP2C	Mx	-.003	3
37	MP4A	X	14.734	2
38	MP4A	Z	25.52	2
39	MP4A	Mx	.007	2
40	MP4C	X	15.406	2
41	MP4C	Z	26.684	2
42	MP4C	Mx	-.005	2
43	MP2A	X	17.06	2
44	MP2A	Z	29.549	2
45	MP2A	Mx	.016	2
46	MP2A	X	17.06	7.75
47	MP2A	Z	29.549	7.75
48	MP2A	Mx	.016	7.75
49	MP2B	X	12.823	2
50	MP2B	Z	22.21	2
51	MP2B	Mx	-.016	2
52	MP2B	X	12.823	7.75
53	MP2B	Z	22.21	7.75
54	MP2B	Mx	-.016	7.75
55	MP2C	X	17.843	2
56	MP2C	Z	30.906	2
57	MP2C	Mx	-.022	2
58	MP2C	X	17.843	7.75
59	MP2C	Z	30.906	7.75
60	MP2C	Mx	-.022	7.75
61	MP2A	X	17.06	2
62	MP2A	Z	29.549	2
63	MP2A	Mx	-.033	2
64	MP2A	X	17.06	7.75
65	MP2A	Z	29.549	7.75
66	MP2A	Mx	-.033	7.75
67	MP2B	X	12.823	2
68	MP2B	Z	22.21	2
69	MP2B	Mx	-.009	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
70	MP2B	X	12.823	7.75
71	MP2B	Z	22.21	7.75
72	MP2B	Mx	-.009	7.75
73	MP2C	X	17.843	2
74	MP2C	Z	30.906	2
75	MP2C	Mx	.034	2
76	MP2C	X	17.843	7.75
77	MP2C	Z	30.906	7.75
78	MP2C	Mx	.034	7.75
79	MP1A	X	1.895	3
80	MP1A	Z	3.283	3
81	MP1A	Mx	.000948	3
82	MP1B	X	1.533	3
83	MP1B	Z	2.655	3
84	MP1B	Mx	.002	3
85	MP1C	X	1.962	3
86	MP1C	Z	3.399	3
87	MP1C	Mx	-.000671	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	0	3.5
2	MP4B	Z	7.886	3.5
3	MP4B	Mx	-.004	3.5
4	MP4B	X	0	6
5	MP4B	Z	7.886	6
6	MP4B	Mx	-.004	6
7	MP5A	X	0	3.5
8	MP5A	Z	16.091	3.5
9	MP5A	Mx	0	3.5
10	MP5A	X	0	6
11	MP5A	Z	16.091	6
12	MP5A	Mx	0	6
13	MP5C	X	0	3.5
14	MP5C	Z	15.811	3.5
15	MP5C	Mx	-.001	3.5
16	MP5C	X	0	6
17	MP5C	Z	15.811	6
18	MP5C	Mx	-.001	6
19	MP3A	X	0	3
20	MP3A	Z	16.626	3
21	MP3A	Mx	0	3
22	MP3B	X	0	3
23	MP3B	Z	12.339	3
24	MP3B	Mx	.006	3
25	MP3C	X	0	3
26	MP3C	Z	16.479	3
27	MP3C	Mx	.001	3
28	MP2A	X	0	3
29	MP2A	Z	16.626	3
30	MP2A	Mx	0	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
31	MP2B	X	0	3
32	MP2B	Z	12.16	3
33	MP2B	Mx	.006	3
34	MP2C	X	0	3
35	MP2C	Z	16.473	3
36	MP2C	Mx	.001	3
37	MP4A	X	0	2
38	MP4A	Z	31.994	2
39	MP4A	Mx	0	2
40	MP4C	X	0	2
41	MP4C	Z	31.69	2
42	MP4C	Mx	.003	2
43	MP2A	X	0	2
44	MP2A	Z	37.064	2
45	MP2A	Mx	.031	2
46	MP2A	X	0	7.75
47	MP2A	Z	37.064	7.75
48	MP2A	Mx	.031	7.75
49	MP2B	X	0	2
50	MP2B	Z	26.668	2
51	MP2B	Mx	-.005	2
52	MP2B	X	0	7.75
53	MP2B	Z	26.668	7.75
54	MP2B	Mx	-.005	7.75
55	MP2C	X	0	2
56	MP2C	Z	36.709	2
57	MP2C	Mx	-.033	2
58	MP2C	X	0	7.75
59	MP2C	Z	36.709	7.75
60	MP2C	Mx	-.033	7.75
61	MP2A	X	0	2
62	MP2A	Z	37.064	2
63	MP2A	Mx	-.031	2
64	MP2A	X	0	7.75
65	MP2A	Z	37.064	7.75
66	MP2A	Mx	-.031	7.75
67	MP2B	X	0	2
68	MP2B	Z	26.668	2
69	MP2B	Mx	-.02	2
70	MP2B	X	0	7.75
71	MP2B	Z	26.668	7.75
72	MP2B	Mx	-.02	7.75
73	MP2C	X	0	2
74	MP2C	Z	36.709	2
75	MP2C	Mx	.027	2
76	MP2C	X	0	7.75
77	MP2C	Z	36.709	7.75
78	MP2C	Mx	.027	7.75
79	MP1A	X	0	3
80	MP1A	Z	4.042	3
81	MP1A	Mx	0	3
82	MP1B	X	0	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
83	MP1B	Z	3.153	3
84	MP1B	Mx	.001	3
85	MP1C	X	0	3
86	MP1C	Z	4.012	3
87	MP1C	Mx	.000348	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	-6.126	3.5
2	MP4B	Z	10.61	3.5
3	MP4B	Mx	-.004	3.5
4	MP4B	X	-6.126	6
5	MP4B	Z	10.61	6
6	MP4B	Mx	-.004	6
7	MP5A	X	-6.884	3.5
8	MP5A	Z	11.923	3.5
9	MP5A	Mx	.003	3.5
10	MP5A	X	-6.884	6
11	MP5A	Z	11.923	6
12	MP5A	Mx	.003	6
13	MP5C	X	-6.126	3.5
14	MP5C	Z	10.61	3.5
15	MP5C	Mx	-.004	3.5
16	MP5C	X	-6.126	6
17	MP5C	Z	10.61	6
18	MP5C	Mx	-.004	6
19	MP3A	X	-7.706	3
20	MP3A	Z	13.347	3
21	MP3A	Mx	-.004	3
22	MP3B	X	-7.31	3
23	MP3B	Z	12.661	3
24	MP3B	Mx	.005	3
25	MP3C	X	-7.31	3
26	MP3C	Z	12.661	3
27	MP3C	Mx	.005	3
28	MP2A	X	-7.681	3
29	MP2A	Z	13.303	3
30	MP2A	Mx	-.004	3
31	MP2B	X	-7.268	3
32	MP2B	Z	12.589	3
33	MP2B	Mx	.005	3
34	MP2C	X	-7.268	3
35	MP2C	Z	12.589	3
36	MP2C	Mx	.005	3
37	MP4A	X	-14.734	2
38	MP4A	Z	25.52	2
39	MP4A	Mx	-.007	2
40	MP4C	X	-13.91	2
41	MP4C	Z	24.093	2
42	MP4C	Mx	.009	2
43	MP2A	X	-17.06	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
44	MP2A	Z	29.549	2
45	MP2A	Mx	.033	2
46	MP2A	X	-17.06	7.75
47	MP2A	Z	29.549	7.75
48	MP2A	Mx	.033	7.75
49	MP2B	X	-16.1	2
50	MP2B	Z	27.886	2
51	MP2B	Mx	.01	2
52	MP2B	X	-16.1	7.75
53	MP2B	Z	27.886	7.75
54	MP2B	Mx	.01	7.75
55	MP2C	X	-16.1	2
56	MP2C	Z	27.886	2
57	MP2C	Mx	-.031	2
58	MP2C	X	-16.1	7.75
59	MP2C	Z	27.886	7.75
60	MP2C	Mx	-.031	7.75
61	MP2A	X	-17.06	2
62	MP2A	Z	29.549	2
63	MP2A	Mx	-.016	2
64	MP2A	X	-17.06	7.75
65	MP2A	Z	29.549	7.75
66	MP2A	Mx	-.016	7.75
67	MP2B	X	-16.1	2
68	MP2B	Z	27.886	2
69	MP2B	Mx	-.031	2
70	MP2B	X	-16.1	7.75
71	MP2B	Z	27.886	7.75
72	MP2B	Mx	-.031	7.75
73	MP2C	X	-16.1	2
74	MP2C	Z	27.886	2
75	MP2C	Mx	.01	2
76	MP2C	X	-16.1	7.75
77	MP2C	Z	27.886	7.75
78	MP2C	Mx	.01	7.75
79	MP1A	X	-1.895	3
80	MP1A	Z	3.283	3
81	MP1A	Mx	-.000948	3
82	MP1B	X	-1.813	3
83	MP1B	Z	3.14	3
84	MP1B	Mx	.001	3
85	MP1C	X	-1.813	3
86	MP1C	Z	3.14	3
87	MP1C	Mx	.001	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	-13.692	3.5
2	MP4B	Z	7.905	3.5
3	MP4B	Mx	-.001	3.5
4	MP4B	X	-13.692	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
5	MP4B	Z	7.905	6
6	MP4B	Mx	-.001	6
7	MP5A	X	-7.9	3.5
8	MP5A	Z	4.561	3.5
9	MP5A	Mx	.004	3.5
10	MP5A	X	-7.9	6
11	MP5A	Z	4.561	6
12	MP5A	Mx	.004	6
13	MP5C	X	-6.83	3.5
14	MP5C	Z	3.943	3.5
15	MP5C	Mx	-.004	3.5
16	MP5C	X	-6.83	6
17	MP5C	Z	3.943	6
18	MP5C	Mx	-.004	6
19	MP3A	X	-11.245	3
20	MP3A	Z	6.492	3
21	MP3A	Mx	-.006	3
22	MP3B	X	-14.272	3
23	MP3B	Z	8.24	3
24	MP3B	Mx	.001	3
25	MP3C	X	-10.686	3
26	MP3C	Z	6.169	3
27	MP3C	Mx	.006	3
28	MP2A	X	-11.114	3
29	MP2A	Z	6.416	3
30	MP2A	Mx	-.006	3
31	MP2B	X	-14.266	3
32	MP2B	Z	8.237	3
33	MP2B	Mx	.001	3
34	MP2C	X	-10.531	3
35	MP2C	Z	6.08	3
36	MP2C	Mx	.006	3
37	MP4A	X	-21.146	2
38	MP4A	Z	12.209	2
39	MP4A	Mx	-.011	2
40	MP4C	X	-19.982	2
41	MP4C	Z	11.537	2
42	MP4C	Mx	.011	2
43	MP2A	X	-24.451	2
44	MP2A	Z	14.117	2
45	MP2A	Mx	.024	2
46	MP2A	X	-24.451	7.75
47	MP2A	Z	14.117	7.75
48	MP2A	Mx	.024	7.75
49	MP2B	X	-31.791	2
50	MP2B	Z	18.354	2
51	MP2B	Mx	.027	2
52	MP2B	X	-31.791	7.75
53	MP2B	Z	18.354	7.75
54	MP2B	Mx	.027	7.75
55	MP2C	X	-23.095	2
56	MP2C	Z	13.334	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
57	MP2C	Mx	-.02	2
58	MP2C	X	-23.095	7.75
59	MP2C	Z	13.334	7.75
60	MP2C	Mx	-.02	7.75
61	MP2A	X	-24.451	2
62	MP2A	Z	14.117	2
63	MP2A	Mx	.000461	2
64	MP2A	X	-24.451	7.75
65	MP2A	Z	14.117	7.75
66	MP2A	Mx	.000461	7.75
67	MP2B	X	-31.791	2
68	MP2B	Z	18.354	2
69	MP2B	Mx	-.033	2
70	MP2B	X	-31.791	7.75
71	MP2B	Z	18.354	7.75
72	MP2B	Mx	-.033	7.75
73	MP2C	X	-23.095	2
74	MP2C	Z	13.334	2
75	MP2C	Mx	-.005	2
76	MP2C	X	-23.095	7.75
77	MP2C	Z	13.334	7.75
78	MP2C	Mx	-.005	7.75
79	MP1A	X	-2.846	3
80	MP1A	Z	1.643	3
81	MP1A	Mx	-.001	3
82	MP1B	X	-3.474	3
83	MP1B	Z	2.006	3
84	MP1B	Mx	.000348	3
85	MP1C	X	-2.73	3
86	MP1C	Z	1.576	3
87	MP1C	Mx	.001	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	-15.004	3.5
2	MP4B	Z	0	3.5
3	MP4B	Mx	.003	3.5
4	MP4B	X	-15.004	6
5	MP4B	Z	0	6
6	MP4B	Mx	.003	6
7	MP5A	X	-6.799	3.5
8	MP5A	Z	0	3.5
9	MP5A	Mx	.003	3.5
10	MP5A	X	-6.799	6
11	MP5A	Z	0	6
12	MP5A	Mx	.003	6
13	MP5C	X	-7.08	3.5
14	MP5C	Z	0	3.5
15	MP5C	Mx	-.003	3.5
16	MP5C	X	-7.08	6
17	MP5C	Z	0	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP5C	Mx	-.003	6
19	MP3A	X	-11.771	3
20	MP3A	Z	0	3
21	MP3A	Mx	-.006	3
22	MP3B	X	-16.058	3
23	MP3B	Z	0	3
24	MP3B	Mx	-.003	3
25	MP3C	X	-11.917	3
26	MP3C	Z	0	3
27	MP3C	Mx	.006	3
28	MP2A	X	-11.569	3
29	MP2A	Z	0	3
30	MP2A	Mx	-.006	3
31	MP2B	X	-16.034	3
32	MP2B	Z	0	3
33	MP2B	Mx	-.003	3
34	MP2C	X	-11.721	3
35	MP2C	Z	0	3
36	MP2C	Mx	.006	3
37	MP4A	X	-21.891	2
38	MP4A	Z	0	2
39	MP4A	Mx	-.011	2
40	MP4C	X	-22.196	2
41	MP4C	Z	0	2
42	MP4C	Mx	.011	2
43	MP2A	X	-25.291	2
44	MP2A	Z	0	2
45	MP2A	Mx	.013	2
46	MP2A	X	-25.291	7.75
47	MP2A	Z	0	7.75
48	MP2A	Mx	.013	7.75
49	MP2B	X	-35.687	2
50	MP2B	Z	0	2
51	MP2B	Mx	.034	2
52	MP2B	X	-35.687	7.75
53	MP2B	Z	0	7.75
54	MP2B	Mx	.034	7.75
55	MP2C	X	-25.646	2
56	MP2C	Z	0	2
57	MP2C	Mx	-.009	2
58	MP2C	X	-25.646	7.75
59	MP2C	Z	0	7.75
60	MP2C	Mx	-.009	7.75
61	MP2A	X	-25.291	2
62	MP2A	Z	0	2
63	MP2A	Mx	.013	2
64	MP2A	X	-25.291	7.75
65	MP2A	Z	0	7.75
66	MP2A	Mx	.013	7.75
67	MP2B	X	-35.687	2
68	MP2B	Z	0	2
69	MP2B	Mx	-.022	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
70	MP2B	X	-35.687	7.75
71	MP2B	Z	0	7.75
72	MP2B	Mx	-.022	7.75
73	MP2C	X	-25.646	2
74	MP2C	Z	0	2
75	MP2C	Mx	-.016	2
76	MP2C	X	-25.646	7.75
77	MP2C	Z	0	7.75
78	MP2C	Mx	-.016	7.75
79	MP1A	X	-3.035	3
80	MP1A	Z	0	3
81	MP1A	Mx	-.002	3
82	MP1B	X	-3.924	3
83	MP1B	Z	0	3
84	MP1B	Mx	-.000671	3
85	MP1C	X	-3.065	3
86	MP1C	Z	0	3
87	MP1C	Mx	.002	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	-9.213	3.5
2	MP4B	Z	-5.319	3.5
3	MP4B	Mx	.004	3.5
4	MP4B	X	-9.213	6
5	MP4B	Z	-5.319	6
6	MP4B	Mx	.004	6
7	MP5A	X	-7.9	3.5
8	MP5A	Z	-4.561	3.5
9	MP5A	Mx	.004	3.5
10	MP5A	X	-7.9	6
11	MP5A	Z	-4.561	6
12	MP5A	Mx	.004	6
13	MP5C	X	-9.213	3.5
14	MP5C	Z	-5.319	3.5
15	MP5C	Mx	-.004	3.5
16	MP5C	X	-9.213	6
17	MP5C	Z	-5.319	6
18	MP5C	Mx	-.004	6
19	MP3A	X	-11.245	3
20	MP3A	Z	-6.492	3
21	MP3A	Mx	-.006	3
22	MP3B	X	-11.931	3
23	MP3B	Z	-6.888	3
24	MP3B	Mx	-.005	3
25	MP3C	X	-11.931	3
26	MP3C	Z	-6.888	3
27	MP3C	Mx	.005	3
28	MP2A	X	-11.114	3
29	MP2A	Z	-6.416	3
30	MP2A	Mx	-.006	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
31	MP2B	X	-11.828	3
32	MP2B	Z	-6.829	3
33	MP2B	Mx	-.005	3
34	MP2C	X	-11.828	3
35	MP2C	Z	-6.829	3
36	MP2C	Mx	.005	3
37	MP4A	X	-21.146	2
38	MP4A	Z	-12.209	2
39	MP4A	Mx	-.011	2
40	MP4C	X	-22.573	2
41	MP4C	Z	-13.033	2
42	MP4C	Mx	.01	2
43	MP2A	X	-24.451	2
44	MP2A	Z	-14.117	2
45	MP2A	Mx	.000461	2
46	MP2A	X	-24.451	7.75
47	MP2A	Z	-14.117	7.75
48	MP2A	Mx	.000461	7.75
49	MP2B	X	-26.115	2
50	MP2B	Z	-15.078	2
51	MP2B	Mx	.028	2
52	MP2B	X	-26.115	7.75
53	MP2B	Z	-15.078	7.75
54	MP2B	Mx	.028	7.75
55	MP2C	X	-26.115	2
56	MP2C	Z	-15.078	2
57	MP2C	Mx	.005	2
58	MP2C	X	-26.115	7.75
59	MP2C	Z	-15.078	7.75
60	MP2C	Mx	.005	7.75
61	MP2A	X	-24.451	2
62	MP2A	Z	-14.117	2
63	MP2A	Mx	.024	2
64	MP2A	X	-24.451	7.75
65	MP2A	Z	-14.117	7.75
66	MP2A	Mx	.024	7.75
67	MP2B	X	-26.115	2
68	MP2B	Z	-15.078	2
69	MP2B	Mx	-.005	2
70	MP2B	X	-26.115	7.75
71	MP2B	Z	-15.078	7.75
72	MP2B	Mx	-.005	7.75
73	MP2C	X	-26.115	2
74	MP2C	Z	-15.078	2
75	MP2C	Mx	-.028	2
76	MP2C	X	-26.115	7.75
77	MP2C	Z	-15.078	7.75
78	MP2C	Mx	-.028	7.75
79	MP1A	X	-2.846	3
80	MP1A	Z	-1.643	3
81	MP1A	Mx	-.001	3
82	MP1B	X	-2.989	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
83	MP1B	Z	-1.726	3
84	MP1B	Mx	-.001	3
85	MP1C	X	-2.989	3
86	MP1C	Z	-1.726	3
87	MP1C	Mx	.001	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	-3.54	3.5
2	MP4B	Z	-6.131	3.5
3	MP4B	Mx	.003	3.5
4	MP4B	X	-3.54	6
5	MP4B	Z	-6.131	6
6	MP4B	Mx	.003	6
7	MP5A	X	-6.884	3.5
8	MP5A	Z	-11.923	3.5
9	MP5A	Mx	.003	3.5
10	MP5A	X	-6.884	6
11	MP5A	Z	-11.923	6
12	MP5A	Mx	.003	6
13	MP5C	X	-7.502	3.5
14	MP5C	Z	-12.994	3.5
15	MP5C	Mx	-.003	3.5
16	MP5C	X	-7.502	6
17	MP5C	Z	-12.994	6
18	MP5C	Mx	-.003	6
19	MP3A	X	-7.706	3
20	MP3A	Z	-13.347	3
21	MP3A	Mx	-.004	3
22	MP3B	X	-5.959	3
23	MP3B	Z	-10.321	3
24	MP3B	Mx	-.006	3
25	MP3C	X	-8.029	3
26	MP3C	Z	-13.906	3
27	MP3C	Mx	.003	3
28	MP2A	X	-7.681	3
29	MP2A	Z	-13.303	3
30	MP2A	Mx	-.004	3
31	MP2B	X	-5.861	3
32	MP2B	Z	-10.151	3
33	MP2B	Mx	-.006	3
34	MP2C	X	-8.017	3
35	MP2C	Z	-13.886	3
36	MP2C	Mx	.003	3
37	MP4A	X	-14.734	2
38	MP4A	Z	-25.52	2
39	MP4A	Mx	-.007	2
40	MP4C	X	-15.406	2
41	MP4C	Z	-26.684	2
42	MP4C	Mx	.005	2
43	MP2A	X	-17.06	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
44	MP2A	Z	-29.549	2
45	MP2A	Mx	-.016	2
46	MP2A	X	-17.06	7.75
47	MP2A	Z	-29.549	7.75
48	MP2A	Mx	-.016	7.75
49	MP2B	X	-12.823	2
50	MP2B	Z	-22.21	2
51	MP2B	Mx	.016	2
52	MP2B	X	-12.823	7.75
53	MP2B	Z	-22.21	7.75
54	MP2B	Mx	.016	7.75
55	MP2C	X	-17.843	2
56	MP2C	Z	-30.906	2
57	MP2C	Mx	.022	2
58	MP2C	X	-17.843	7.75
59	MP2C	Z	-30.906	7.75
60	MP2C	Mx	.022	7.75
61	MP2A	X	-17.06	2
62	MP2A	Z	-29.549	2
63	MP2A	Mx	.033	2
64	MP2A	X	-17.06	7.75
65	MP2A	Z	-29.549	7.75
66	MP2A	Mx	.033	7.75
67	MP2B	X	-12.823	2
68	MP2B	Z	-22.21	2
69	MP2B	Mx	.009	2
70	MP2B	X	-12.823	7.75
71	MP2B	Z	-22.21	7.75
72	MP2B	Mx	.009	7.75
73	MP2C	X	-17.843	2
74	MP2C	Z	-30.906	2
75	MP2C	Mx	-.034	2
76	MP2C	X	-17.843	7.75
77	MP2C	Z	-30.906	7.75
78	MP2C	Mx	-.034	7.75
79	MP1A	X	-1.895	3
80	MP1A	Z	-3.283	3
81	MP1A	Mx	-.000948	3
82	MP1B	X	-1.533	3
83	MP1B	Z	-2.655	3
84	MP1B	Mx	-.002	3
85	MP1C	X	-1.962	3
86	MP1C	Z	-3.399	3
87	MP1C	Mx	.000671	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	0	3.5
2	MP4B	Z	-2.314	3.5
3	MP4B	Mx	.001	3.5
4	MP4B	X	0	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
5	MP4B	Z	-2.314	6
6	MP4B	Mx	.001	6
7	MP5A	X	0	3.5
8	MP5A	Z	-5.062	3.5
9	MP5A	Mx	0	3.5
10	MP5A	X	0	6
11	MP5A	Z	-5.062	6
12	MP5A	Mx	0	6
13	MP5C	X	0	3.5
14	MP5C	Z	-4.968	3.5
15	MP5C	Mx	.000431	3.5
16	MP5C	X	0	6
17	MP5C	Z	-4.968	6
18	MP5C	Mx	.000431	6
19	MP3A	X	0	3
20	MP3A	Z	-4.995	3
21	MP3A	Mx	0	3
22	MP3B	X	0	3
23	MP3B	Z	-3.592	3
24	MP3B	Mx	-.002	3
25	MP3C	X	0	3
26	MP3C	Z	-4.947	3
27	MP3C	Mx	-.00043	3
28	MP2A	X	0	3
29	MP2A	Z	-4.14	3
30	MP2A	Mx	0	3
31	MP2B	X	0	3
32	MP2B	Z	-2.937	3
33	MP2B	Mx	-.001	3
34	MP2C	X	0	3
35	MP2C	Z	-4.099	3
36	MP2C	Mx	-.000356	3
37	MP4A	X	0	2
38	MP4A	Z	-10.124	2
39	MP4A	Mx	0	2
40	MP4C	X	0	2
41	MP4C	Z	-10.021	2
42	MP4C	Mx	-.00087	2
43	MP2A	X	0	2
44	MP2A	Z	-12.167	2
45	MP2A	Mx	-.01	2
46	MP2A	X	0	7.75
47	MP2A	Z	-12.167	7.75
48	MP2A	Mx	-.01	7.75
49	MP2B	X	0	2
50	MP2B	Z	-8.48	2
51	MP2B	Mx	.002	2
52	MP2B	X	0	7.75
53	MP2B	Z	-8.48	7.75
54	MP2B	Mx	.002	7.75
55	MP2C	X	0	2
56	MP2C	Z	-12.041	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
57	MP2C	Mx	.011	2
58	MP2C	X	0	7.75
59	MP2C	Z	-12.041	7.75
60	MP2C	Mx	.011	7.75
61	MP2A	X	0	2
62	MP2A	Z	-12.167	2
63	MP2A	Mx	.01	2
64	MP2A	X	0	7.75
65	MP2A	Z	-12.167	7.75
66	MP2A	Mx	.01	7.75
67	MP2B	X	0	2
68	MP2B	Z	-8.48	2
69	MP2B	Mx	.006	2
70	MP2B	X	0	7.75
71	MP2B	Z	-8.48	7.75
72	MP2B	Mx	.006	7.75
73	MP2C	X	0	2
74	MP2C	Z	-12.041	2
75	MP2C	Mx	-.009	2
76	MP2C	X	0	7.75
77	MP2C	Z	-12.041	7.75
78	MP2C	Mx	-.009	7.75
79	MP1A	X	0	3
80	MP1A	Z	-.988	3
81	MP1A	Mx	0	3
82	MP1B	X	0	3
83	MP1B	Z	-.719	3
84	MP1B	Mx	-.000338	3
85	MP1C	X	0	3
86	MP1C	Z	-.979	3
87	MP1C	Mx	-8.5e-5	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	1.888	3.5
2	MP4B	Z	-3.27	3.5
3	MP4B	Mx	.001	3.5
4	MP4B	X	1.888	6
5	MP4B	Z	-3.27	6
6	MP4B	Mx	.001	6
7	MP5A	X	2.142	3.5
8	MP5A	Z	-3.71	3.5
9	MP5A	Mx	-.001	3.5
10	MP5A	X	2.142	6
11	MP5A	Z	-3.71	6
12	MP5A	Mx	-.001	6
13	MP5C	X	1.888	3.5
14	MP5C	Z	-3.27	3.5
15	MP5C	Mx	.001	3.5
16	MP5C	X	1.888	6
17	MP5C	Z	-3.27	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP5C	Mx	.001	6
19	MP3A	X	2.299	3
20	MP3A	Z	-3.982	3
21	MP3A	Mx	.001	3
22	MP3B	X	2.169	3
23	MP3B	Z	-3.757	3
24	MP3B	Mx	-.001	3
25	MP3C	X	2.169	3
26	MP3C	Z	-3.757	3
27	MP3C	Mx	-.001	3
28	MP2A	X	1.9	3
29	MP2A	Z	-3.291	3
30	MP2A	Mx	.00095	3
31	MP2B	X	1.789	3
32	MP2B	Z	-3.098	3
33	MP2B	Mx	-.001	3
34	MP2C	X	1.789	3
35	MP2C	Z	-3.098	3
36	MP2C	Mx	-.001	3
37	MP4A	X	4.634	2
38	MP4A	Z	-8.026	2
39	MP4A	Mx	.002	2
40	MP4C	X	4.355	2
41	MP4C	Z	-7.543	2
42	MP4C	Mx	-.003	2
43	MP2A	X	5.562	2
44	MP2A	Z	-9.633	2
45	MP2A	Mx	-.011	2
46	MP2A	X	5.562	7.75
47	MP2A	Z	-9.633	7.75
48	MP2A	Mx	-.011	7.75
49	MP2B	X	5.221	2
50	MP2B	Z	-9.043	2
51	MP2B	Mx	-.003	2
52	MP2B	X	5.221	7.75
53	MP2B	Z	-9.043	7.75
54	MP2B	Mx	-.003	7.75
55	MP2C	X	5.221	2
56	MP2C	Z	-9.043	2
57	MP2C	Mx	.01	2
58	MP2C	X	5.221	7.75
59	MP2C	Z	-9.043	7.75
60	MP2C	Mx	.01	7.75
61	MP2A	X	5.562	2
62	MP2A	Z	-9.633	2
63	MP2A	Mx	.005	2
64	MP2A	X	5.562	7.75
65	MP2A	Z	-9.633	7.75
66	MP2A	Mx	.005	7.75
67	MP2B	X	5.221	2
68	MP2B	Z	-9.043	2
69	MP2B	Mx	.01	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
70	MP2B	X	5.221	7.75
71	MP2B	Z	-9.043	7.75
72	MP2B	Mx	.01	7.75
73	MP2C	X	5.221	2
74	MP2C	Z	-9.043	2
75	MP2C	Mx	-.003	2
76	MP2C	X	5.221	7.75
77	MP2C	Z	-9.043	7.75
78	MP2C	Mx	-.003	7.75
79	MP1A	X	.456	3
80	MP1A	Z	-.79	3
81	MP1A	Mx	.000228	3
82	MP1B	X	.431	3
83	MP1B	Z	-.747	3
84	MP1B	Mx	-.000277	3
85	MP1C	X	.431	3
86	MP1C	Z	-.747	3
87	MP1C	Mx	-.000277	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	4.302	3.5
2	MP4B	Z	-2.484	3.5
3	MP4B	Mx	.000431	3.5
4	MP4B	X	4.302	6
5	MP4B	Z	-2.484	6
6	MP4B	Mx	.000431	6
7	MP5A	X	2.362	3.5
8	MP5A	Z	-1.364	3.5
9	MP5A	Mx	-.001	3.5
10	MP5A	X	2.362	6
11	MP5A	Z	-1.364	6
12	MP5A	Mx	-.001	6
13	MP5C	X	2.004	3.5
14	MP5C	Z	-1.157	3.5
15	MP5C	Mx	.001	3.5
16	MP5C	X	2.004	6
17	MP5C	Z	-1.157	6
18	MP5C	Mx	.001	6
19	MP3A	X	3.294	3
20	MP3A	Z	-1.902	3
21	MP3A	Mx	.002	3
22	MP3B	X	4.284	3
23	MP3B	Z	-2.474	3
24	MP3B	Mx	-.00043	3
25	MP3C	X	3.11	3
26	MP3C	Z	-1.796	3
27	MP3C	Mx	-.002	3
28	MP2A	X	2.701	3
29	MP2A	Z	-1.559	3
30	MP2A	Mx	.001	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
31	MP2B	X	3.55	3
32	MP2B	Z	-2.05	3
33	MP2B	Mx	-.000356	3
34	MP2C	X	2.544	3
35	MP2C	Z	-1.469	3
36	MP2C	Mx	-.001	3
37	MP4A	X	6.544	2
38	MP4A	Z	-3.778	2
39	MP4A	Mx	.003	2
40	MP4C	X	6.15	2
41	MP4C	Z	-3.551	2
42	MP4C	Mx	-.003	2
43	MP2A	X	7.825	2
44	MP2A	Z	-4.518	2
45	MP2A	Mx	-.008	2
46	MP2A	X	7.825	7.75
47	MP2A	Z	-4.518	7.75
48	MP2A	Mx	-.008	7.75
49	MP2B	X	10.428	2
50	MP2B	Z	-6.021	2
51	MP2B	Mx	-.009	2
52	MP2B	X	10.428	7.75
53	MP2B	Z	-6.021	7.75
54	MP2B	Mx	-.009	7.75
55	MP2C	X	7.344	2
56	MP2C	Z	-4.24	2
57	MP2C	Mx	.006	2
58	MP2C	X	7.344	7.75
59	MP2C	Z	-4.24	7.75
60	MP2C	Mx	.006	7.75
61	MP2A	X	7.825	2
62	MP2A	Z	-4.518	2
63	MP2A	Mx	-.000148	2
64	MP2A	X	7.825	7.75
65	MP2A	Z	-4.518	7.75
66	MP2A	Mx	-.000148	7.75
67	MP2B	X	10.428	2
68	MP2B	Z	-6.021	2
69	MP2B	Mx	.011	2
70	MP2B	X	10.428	7.75
71	MP2B	Z	-6.021	7.75
72	MP2B	Mx	.011	7.75
73	MP2C	X	7.344	2
74	MP2C	Z	-4.24	2
75	MP2C	Mx	.002	2
76	MP2C	X	7.344	7.75
77	MP2C	Z	-4.24	7.75
78	MP2C	Mx	.002	7.75
79	MP1A	X	.658	3
80	MP1A	Z	-.38	3
81	MP1A	Mx	.000329	3
82	MP1B	X	.848	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
83	MP1B	Z	-.49	3
84	MP1B	Mx	-8.5e-5	3
85	MP1C	X	.623	3
86	MP1C	Z	-.36	3
87	MP1C	Mx	-.000338	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	4.698	3.5
2	MP4B	Z	0	3.5
3	MP4B	Mx	-.000803	3.5
4	MP4B	X	4.698	6
5	MP4B	Z	0	6
6	MP4B	Mx	-.000803	6
7	MP5A	X	1.95	3.5
8	MP5A	Z	0	3.5
9	MP5A	Mx	-.000975	3.5
10	MP5A	X	1.95	6
11	MP5A	Z	0	6
12	MP5A	Mx	-.000975	6
13	MP5C	X	2.043	3.5
14	MP5C	Z	0	3.5
15	MP5C	Mx	.001	3.5
16	MP5C	X	2.043	6
17	MP5C	Z	0	6
18	MP5C	Mx	.001	6
19	MP3A	X	3.406	3
20	MP3A	Z	0	3
21	MP3A	Mx	.002	3
22	MP3B	X	4.809	3
23	MP3B	Z	0	3
24	MP3B	Mx	.000822	3
25	MP3C	X	3.454	3
26	MP3C	Z	0	3
27	MP3C	Mx	-.002	3
28	MP2A	X	2.778	3
29	MP2A	Z	0	3
30	MP2A	Mx	.001	3
31	MP2B	X	3.981	3
32	MP2B	Z	0	3
33	MP2B	Mx	.000681	3
34	MP2C	X	2.819	3
35	MP2C	Z	0	3
36	MP2C	Mx	-.001	3
37	MP4A	X	6.701	2
38	MP4A	Z	0	2
39	MP4A	Mx	.003	2
40	MP4C	X	6.804	2
41	MP4C	Z	0	2
42	MP4C	Mx	-.003	2
43	MP2A	X	7.991	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
44	MP2A	Z	0	2
45	MP2A	Mx	-.004	2
46	MP2A	X	7.991	7.75
47	MP2A	Z	0	7.75
48	MP2A	Mx	-.004	7.75
49	MP2B	X	11.679	2
50	MP2B	Z	0	2
51	MP2B	Mx	-.011	2
52	MP2B	X	11.679	7.75
53	MP2B	Z	0	7.75
54	MP2B	Mx	-.011	7.75
55	MP2C	X	8.117	2
56	MP2C	Z	0	2
57	MP2C	Mx	.003	2
58	MP2C	X	8.117	7.75
59	MP2C	Z	0	7.75
60	MP2C	Mx	.003	7.75
61	MP2A	X	7.991	2
62	MP2A	Z	0	2
63	MP2A	Mx	-.004	2
64	MP2A	X	7.991	7.75
65	MP2A	Z	0	7.75
66	MP2A	Mx	-.004	7.75
67	MP2B	X	11.679	2
68	MP2B	Z	0	2
69	MP2B	Mx	.007	2
70	MP2B	X	11.679	7.75
71	MP2B	Z	0	7.75
72	MP2B	Mx	.007	7.75
73	MP2C	X	8.117	2
74	MP2C	Z	0	2
75	MP2C	Mx	.005	2
76	MP2C	X	8.117	7.75
77	MP2C	Z	0	7.75
78	MP2C	Mx	.005	7.75
79	MP1A	X	.684	3
80	MP1A	Z	0	3
81	MP1A	Mx	.000342	3
82	MP1B	X	.953	3
83	MP1B	Z	0	3
84	MP1B	Mx	.000163	3
85	MP1C	X	.693	3
86	MP1C	Z	0	3
87	MP1C	Mx	-.000341	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	2.802	3.5
2	MP4B	Z	1.618	3.5
3	MP4B	Mx	-.001	3.5
4	MP4B	X	2.802	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
5	MP4B	Z	1.618	6
6	MP4B	Mx	-.001	6
7	MP5A	X	2.362	3.5
8	MP5A	Z	1.364	3.5
9	MP5A	Mx	-.001	3.5
10	MP5A	X	2.362	6
11	MP5A	Z	1.364	6
12	MP5A	Mx	-.001	6
13	MP5C	X	2.802	3.5
14	MP5C	Z	1.618	3.5
15	MP5C	Mx	.001	3.5
16	MP5C	X	2.802	6
17	MP5C	Z	1.618	6
18	MP5C	Mx	.001	6
19	MP3A	X	3.294	3
20	MP3A	Z	1.902	3
21	MP3A	Mx	.002	3
22	MP3B	X	3.518	3
23	MP3B	Z	2.031	3
24	MP3B	Mx	.002	3
25	MP3C	X	3.518	3
26	MP3C	Z	2.031	3
27	MP3C	Mx	-.002	3
28	MP2A	X	2.701	3
29	MP2A	Z	1.559	3
30	MP2A	Mx	.001	3
31	MP2B	X	2.893	3
32	MP2B	Z	1.67	3
33	MP2B	Mx	.001	3
34	MP2C	X	2.893	3
35	MP2C	Z	1.67	3
36	MP2C	Mx	-.001	3
37	MP4A	X	6.544	2
38	MP4A	Z	3.778	2
39	MP4A	Mx	.003	2
40	MP4C	X	7.028	2
41	MP4C	Z	4.058	2
42	MP4C	Mx	-.003	2
43	MP2A	X	7.825	2
44	MP2A	Z	4.518	2
45	MP2A	Mx	-.000148	2
46	MP2A	X	7.825	7.75
47	MP2A	Z	4.518	7.75
48	MP2A	Mx	-.000148	7.75
49	MP2B	X	8.415	2
50	MP2B	Z	4.858	2
51	MP2B	Mx	-.009	2
52	MP2B	X	8.415	7.75
53	MP2B	Z	4.858	7.75
54	MP2B	Mx	-.009	7.75
55	MP2C	X	8.415	2
56	MP2C	Z	4.858	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
57	MP2C	Mx	-.001	2
58	MP2C	X	8.415	7.75
59	MP2C	Z	4.858	7.75
60	MP2C	Mx	-.001	7.75
61	MP2A	X	7.825	2
62	MP2A	Z	4.518	2
63	MP2A	Mx	-.008	2
64	MP2A	X	7.825	7.75
65	MP2A	Z	4.518	7.75
66	MP2A	Mx	-.008	7.75
67	MP2B	X	8.415	2
68	MP2B	Z	4.858	2
69	MP2B	Mx	.001	2
70	MP2B	X	8.415	7.75
71	MP2B	Z	4.858	7.75
72	MP2B	Mx	.001	7.75
73	MP2C	X	8.415	2
74	MP2C	Z	4.858	2
75	MP2C	Mx	.009	2
76	MP2C	X	8.415	7.75
77	MP2C	Z	4.858	7.75
78	MP2C	Mx	.009	7.75
79	MP1A	X	.658	3
80	MP1A	Z	.38	3
81	MP1A	Mx	.000329	3
82	MP1B	X	.701	3
83	MP1B	Z	.405	3
84	MP1B	Mx	.00031	3
85	MP1C	X	.701	3
86	MP1C	Z	.405	3
87	MP1C	Mx	-.00031	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	1.022	3.5
2	MP4B	Z	1.77	3.5
3	MP4B	Mx	-.001	3.5
4	MP4B	X	1.022	6
5	MP4B	Z	1.77	6
6	MP4B	Mx	-.001	6
7	MP5A	X	2.142	3.5
8	MP5A	Z	3.71	3.5
9	MP5A	Mx	-.001	3.5
10	MP5A	X	2.142	6
11	MP5A	Z	3.71	6
12	MP5A	Mx	-.001	6
13	MP5C	X	2.349	3.5
14	MP5C	Z	4.068	3.5
15	MP5C	Mx	.000803	3.5
16	MP5C	X	2.349	6
17	MP5C	Z	4.068	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP5C	Mx	.000803	6
19	MP3A	X	2.299	3
20	MP3A	Z	3.982	3
21	MP3A	Mx	.001	3
22	MP3B	X	1.727	3
23	MP3B	Z	2.991	3
24	MP3B	Mx	.002	3
25	MP3C	X	2.405	3
26	MP3C	Z	4.165	3
27	MP3C	Mx	-.000823	3
28	MP2A	X	1.9	3
29	MP2A	Z	3.291	3
30	MP2A	Mx	.00095	3
31	MP2B	X	1.41	3
32	MP2B	Z	2.441	3
33	MP2B	Mx	.001	3
34	MP2C	X	1.99	3
35	MP2C	Z	3.448	3
36	MP2C	Mx	-.000681	3
37	MP4A	X	4.634	2
38	MP4A	Z	8.026	2
39	MP4A	Mx	.002	2
40	MP4C	X	4.862	2
41	MP4C	Z	8.421	2
42	MP4C	Mx	-.002	2
43	MP2A	X	5.562	2
44	MP2A	Z	9.633	2
45	MP2A	Mx	.005	2
46	MP2A	X	5.562	7.75
47	MP2A	Z	9.633	7.75
48	MP2A	Mx	.005	7.75
49	MP2B	X	4.059	2
50	MP2B	Z	7.03	2
51	MP2B	Mx	-.005	2
52	MP2B	X	4.059	7.75
53	MP2B	Z	7.03	7.75
54	MP2B	Mx	-.005	7.75
55	MP2C	X	5.839	2
56	MP2C	Z	10.114	2
57	MP2C	Mx	-.007	2
58	MP2C	X	5.839	7.75
59	MP2C	Z	10.114	7.75
60	MP2C	Mx	-.007	7.75
61	MP2A	X	5.562	2
62	MP2A	Z	9.633	2
63	MP2A	Mx	-.011	2
64	MP2A	X	5.562	7.75
65	MP2A	Z	9.633	7.75
66	MP2A	Mx	-.011	7.75
67	MP2B	X	4.059	2
68	MP2B	Z	7.03	2
69	MP2B	Mx	-.003	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
70	MP2B	X	4.059	7.75
71	MP2B	Z	7.03	7.75
72	MP2B	Mx	-.003	7.75
73	MP2C	X	5.839	2
74	MP2C	Z	10.114	2
75	MP2C	Mx	.011	2
76	MP2C	X	5.839	7.75
77	MP2C	Z	10.114	7.75
78	MP2C	Mx	.011	7.75
79	MP1A	X	.456	3
80	MP1A	Z	.79	3
81	MP1A	Mx	.000228	3
82	MP1B	X	.347	3
83	MP1B	Z	.6	3
84	MP1B	Mx	.000341	3
85	MP1C	X	.476	3
86	MP1C	Z	.825	3
87	MP1C	Mx	-.000163	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	0	3.5
2	MP4B	Z	2.314	3.5
3	MP4B	Mx	-.001	3.5
4	MP4B	X	0	6
5	MP4B	Z	2.314	6
6	MP4B	Mx	-.001	6
7	MP5A	X	0	3.5
8	MP5A	Z	5.062	3.5
9	MP5A	Mx	0	3.5
10	MP5A	X	0	6
11	MP5A	Z	5.062	6
12	MP5A	Mx	0	6
13	MP5C	X	0	3.5
14	MP5C	Z	4.968	3.5
15	MP5C	Mx	-.000431	3.5
16	MP5C	X	0	6
17	MP5C	Z	4.968	6
18	MP5C	Mx	-.000431	6
19	MP3A	X	0	3
20	MP3A	Z	4.995	3
21	MP3A	Mx	0	3
22	MP3B	X	0	3
23	MP3B	Z	3.592	3
24	MP3B	Mx	.002	3
25	MP3C	X	0	3
26	MP3C	Z	4.947	3
27	MP3C	Mx	.00043	3
28	MP2A	X	0	3
29	MP2A	Z	4.14	3
30	MP2A	Mx	0	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
31	MP2B	X	0	3
32	MP2B	Z	2.937	3
33	MP2B	Mx	.001	3
34	MP2C	X	0	3
35	MP2C	Z	4.099	3
36	MP2C	Mx	.000356	3
37	MP4A	X	0	2
38	MP4A	Z	10.124	2
39	MP4A	Mx	0	2
40	MP4C	X	0	2
41	MP4C	Z	10.021	2
42	MP4C	Mx	.00087	2
43	MP2A	X	0	2
44	MP2A	Z	12.167	2
45	MP2A	Mx	.01	2
46	MP2A	X	0	7.75
47	MP2A	Z	12.167	7.75
48	MP2A	Mx	.01	7.75
49	MP2B	X	0	2
50	MP2B	Z	8.48	2
51	MP2B	Mx	-.002	2
52	MP2B	X	0	7.75
53	MP2B	Z	8.48	7.75
54	MP2B	Mx	-.002	7.75
55	MP2C	X	0	2
56	MP2C	Z	12.041	2
57	MP2C	Mx	-.011	2
58	MP2C	X	0	7.75
59	MP2C	Z	12.041	7.75
60	MP2C	Mx	-.011	7.75
61	MP2A	X	0	2
62	MP2A	Z	12.167	2
63	MP2A	Mx	-.01	2
64	MP2A	X	0	7.75
65	MP2A	Z	12.167	7.75
66	MP2A	Mx	-.01	7.75
67	MP2B	X	0	2
68	MP2B	Z	8.48	2
69	MP2B	Mx	-.006	2
70	MP2B	X	0	7.75
71	MP2B	Z	8.48	7.75
72	MP2B	Mx	-.006	7.75
73	MP2C	X	0	2
74	MP2C	Z	12.041	2
75	MP2C	Mx	.009	2
76	MP2C	X	0	7.75
77	MP2C	Z	12.041	7.75
78	MP2C	Mx	.009	7.75
79	MP1A	X	0	3
80	MP1A	Z	.988	3
81	MP1A	Mx	0	3
82	MP1B	X	0	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
83	MP1B	Z	.719	3
84	MP1B	Mx	.000338	3
85	MP1C	X	0	3
86	MP1C	Z	.979	3
87	MP1C	Mx	8.5e-5	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	-1.888	3.5
2	MP4B	Z	3.27	3.5
3	MP4B	Mx	-.001	3.5
4	MP4B	X	-1.888	6
5	MP4B	Z	3.27	6
6	MP4B	Mx	-.001	6
7	MP5A	X	-2.142	3.5
8	MP5A	Z	3.71	3.5
9	MP5A	Mx	.001	3.5
10	MP5A	X	-2.142	6
11	MP5A	Z	3.71	6
12	MP5A	Mx	.001	6
13	MP5C	X	-1.888	3.5
14	MP5C	Z	3.27	3.5
15	MP5C	Mx	-.001	3.5
16	MP5C	X	-1.888	6
17	MP5C	Z	3.27	6
18	MP5C	Mx	-.001	6
19	MP3A	X	-2.299	3
20	MP3A	Z	3.982	3
21	MP3A	Mx	-.001	3
22	MP3B	X	-2.169	3
23	MP3B	Z	3.757	3
24	MP3B	Mx	.001	3
25	MP3C	X	-2.169	3
26	MP3C	Z	3.757	3
27	MP3C	Mx	.001	3
28	MP2A	X	-1.9	3
29	MP2A	Z	3.291	3
30	MP2A	Mx	-.00095	3
31	MP2B	X	-1.789	3
32	MP2B	Z	3.098	3
33	MP2B	Mx	.001	3
34	MP2C	X	-1.789	3
35	MP2C	Z	3.098	3
36	MP2C	Mx	.001	3
37	MP4A	X	-4.634	2
38	MP4A	Z	8.026	2
39	MP4A	Mx	-.002	2
40	MP4C	X	-4.355	2
41	MP4C	Z	7.543	2
42	MP4C	Mx	.003	2
43	MP2A	X	-5.562	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
44	MP2A	Z	9.633	2
45	MP2A	Mx	.011	2
46	MP2A	X	-5.562	7.75
47	MP2A	Z	9.633	7.75
48	MP2A	Mx	.011	7.75
49	MP2B	X	-5.221	2
50	MP2B	Z	9.043	2
51	MP2B	Mx	.003	2
52	MP2B	X	-5.221	7.75
53	MP2B	Z	9.043	7.75
54	MP2B	Mx	.003	7.75
55	MP2C	X	-5.221	2
56	MP2C	Z	9.043	2
57	MP2C	Mx	-.01	2
58	MP2C	X	-5.221	7.75
59	MP2C	Z	9.043	7.75
60	MP2C	Mx	-.01	7.75
61	MP2A	X	-5.562	2
62	MP2A	Z	9.633	2
63	MP2A	Mx	-.005	2
64	MP2A	X	-5.562	7.75
65	MP2A	Z	9.633	7.75
66	MP2A	Mx	-.005	7.75
67	MP2B	X	-5.221	2
68	MP2B	Z	9.043	2
69	MP2B	Mx	-.01	2
70	MP2B	X	-5.221	7.75
71	MP2B	Z	9.043	7.75
72	MP2B	Mx	-.01	7.75
73	MP2C	X	-5.221	2
74	MP2C	Z	9.043	2
75	MP2C	Mx	.003	2
76	MP2C	X	-5.221	7.75
77	MP2C	Z	9.043	7.75
78	MP2C	Mx	.003	7.75
79	MP1A	X	-.456	3
80	MP1A	Z	.79	3
81	MP1A	Mx	-.000228	3
82	MP1B	X	-.431	3
83	MP1B	Z	.747	3
84	MP1B	Mx	.000277	3
85	MP1C	X	-.431	3
86	MP1C	Z	.747	3
87	MP1C	Mx	.000277	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	-4.302	3.5
2	MP4B	Z	2.484	3.5
3	MP4B	Mx	-.000431	3.5
4	MP4B	X	-4.302	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
5	MP4B	Z	2.484	6
6	MP4B	Mx	-.000431	6
7	MP5A	X	-2.362	3.5
8	MP5A	Z	1.364	3.5
9	MP5A	Mx	.001	3.5
10	MP5A	X	-2.362	6
11	MP5A	Z	1.364	6
12	MP5A	Mx	.001	6
13	MP5C	X	-2.004	3.5
14	MP5C	Z	1.157	3.5
15	MP5C	Mx	-.001	3.5
16	MP5C	X	-2.004	6
17	MP5C	Z	1.157	6
18	MP5C	Mx	-.001	6
19	MP3A	X	-3.294	3
20	MP3A	Z	1.902	3
21	MP3A	Mx	-.002	3
22	MP3B	X	-4.284	3
23	MP3B	Z	2.474	3
24	MP3B	Mx	.00043	3
25	MP3C	X	-3.11	3
26	MP3C	Z	1.796	3
27	MP3C	Mx	.002	3
28	MP2A	X	-2.701	3
29	MP2A	Z	1.559	3
30	MP2A	Mx	-.001	3
31	MP2B	X	-3.55	3
32	MP2B	Z	2.05	3
33	MP2B	Mx	.000356	3
34	MP2C	X	-2.544	3
35	MP2C	Z	1.469	3
36	MP2C	Mx	.001	3
37	MP4A	X	-6.544	2
38	MP4A	Z	3.778	2
39	MP4A	Mx	-.003	2
40	MP4C	X	-6.15	2
41	MP4C	Z	3.551	2
42	MP4C	Mx	.003	2
43	MP2A	X	-7.825	2
44	MP2A	Z	4.518	2
45	MP2A	Mx	.008	2
46	MP2A	X	-7.825	7.75
47	MP2A	Z	4.518	7.75
48	MP2A	Mx	.008	7.75
49	MP2B	X	-10.428	2
50	MP2B	Z	6.021	2
51	MP2B	Mx	.009	2
52	MP2B	X	-10.428	7.75
53	MP2B	Z	6.021	7.75
54	MP2B	Mx	.009	7.75
55	MP2C	X	-7.344	2
56	MP2C	Z	4.24	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
57	MP2C	Mx	-.006	2
58	MP2C	X	-7.344	7.75
59	MP2C	Z	4.24	7.75
60	MP2C	Mx	-.006	7.75
61	MP2A	X	-7.825	2
62	MP2A	Z	4.518	2
63	MP2A	Mx	.000148	2
64	MP2A	X	-7.825	7.75
65	MP2A	Z	4.518	7.75
66	MP2A	Mx	.000148	7.75
67	MP2B	X	-10.428	2
68	MP2B	Z	6.021	2
69	MP2B	Mx	-.011	2
70	MP2B	X	-10.428	7.75
71	MP2B	Z	6.021	7.75
72	MP2B	Mx	-.011	7.75
73	MP2C	X	-7.344	2
74	MP2C	Z	4.24	2
75	MP2C	Mx	-.002	2
76	MP2C	X	-7.344	7.75
77	MP2C	Z	4.24	7.75
78	MP2C	Mx	-.002	7.75
79	MP1A	X	-.658	3
80	MP1A	Z	.38	3
81	MP1A	Mx	-.000329	3
82	MP1B	X	-.848	3
83	MP1B	Z	.49	3
84	MP1B	Mx	8.5e-5	3
85	MP1C	X	-.623	3
86	MP1C	Z	.36	3
87	MP1C	Mx	.000338	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	-4.698	3.5
2	MP4B	Z	0	3.5
3	MP4B	Mx	.000803	3.5
4	MP4B	X	-4.698	6
5	MP4B	Z	0	6
6	MP4B	Mx	.000803	6
7	MP5A	X	-1.95	3.5
8	MP5A	Z	0	3.5
9	MP5A	Mx	.000975	3.5
10	MP5A	X	-1.95	6
11	MP5A	Z	0	6
12	MP5A	Mx	.000975	6
13	MP5C	X	-2.043	3.5
14	MP5C	Z	0	3.5
15	MP5C	Mx	-.001	3.5
16	MP5C	X	-2.043	6
17	MP5C	Z	0	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP5C	Mx	-.001	6
19	MP3A	X	-3.406	3
20	MP3A	Z	0	3
21	MP3A	Mx	-.002	3
22	MP3B	X	-4.809	3
23	MP3B	Z	0	3
24	MP3B	Mx	-.000822	3
25	MP3C	X	-3.454	3
26	MP3C	Z	0	3
27	MP3C	Mx	.002	3
28	MP2A	X	-2.778	3
29	MP2A	Z	0	3
30	MP2A	Mx	-.001	3
31	MP2B	X	-3.981	3
32	MP2B	Z	0	3
33	MP2B	Mx	-.000681	3
34	MP2C	X	-2.819	3
35	MP2C	Z	0	3
36	MP2C	Mx	.001	3
37	MP4A	X	-6.701	2
38	MP4A	Z	0	2
39	MP4A	Mx	-.003	2
40	MP4C	X	-6.804	2
41	MP4C	Z	0	2
42	MP4C	Mx	.003	2
43	MP2A	X	-7.991	2
44	MP2A	Z	0	2
45	MP2A	Mx	.004	2
46	MP2A	X	-7.991	7.75
47	MP2A	Z	0	7.75
48	MP2A	Mx	.004	7.75
49	MP2B	X	-11.679	2
50	MP2B	Z	0	2
51	MP2B	Mx	.011	2
52	MP2B	X	-11.679	7.75
53	MP2B	Z	0	7.75
54	MP2B	Mx	.011	7.75
55	MP2C	X	-8.117	2
56	MP2C	Z	0	2
57	MP2C	Mx	-.003	2
58	MP2C	X	-8.117	7.75
59	MP2C	Z	0	7.75
60	MP2C	Mx	-.003	7.75
61	MP2A	X	-7.991	2
62	MP2A	Z	0	2
63	MP2A	Mx	.004	2
64	MP2A	X	-7.991	7.75
65	MP2A	Z	0	7.75
66	MP2A	Mx	.004	7.75
67	MP2B	X	-11.679	2
68	MP2B	Z	0	2
69	MP2B	Mx	-.007	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
70	MP2B	X	-11.679	7.75
71	MP2B	Z	0	7.75
72	MP2B	Mx	-.007	7.75
73	MP2C	X	-8.117	2
74	MP2C	Z	0	2
75	MP2C	Mx	-.005	2
76	MP2C	X	-8.117	7.75
77	MP2C	Z	0	7.75
78	MP2C	Mx	-.005	7.75
79	MP1A	X	-.684	3
80	MP1A	Z	0	3
81	MP1A	Mx	-.000342	3
82	MP1B	X	-.953	3
83	MP1B	Z	0	3
84	MP1B	Mx	-.000163	3
85	MP1C	X	-.693	3
86	MP1C	Z	0	3
87	MP1C	Mx	.000341	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	-2.802	3.5
2	MP4B	Z	-1.618	3.5
3	MP4B	Mx	.001	3.5
4	MP4B	X	-2.802	6
5	MP4B	Z	-1.618	6
6	MP4B	Mx	.001	6
7	MP5A	X	-2.362	3.5
8	MP5A	Z	-1.364	3.5
9	MP5A	Mx	.001	3.5
10	MP5A	X	-2.362	6
11	MP5A	Z	-1.364	6
12	MP5A	Mx	.001	6
13	MP5C	X	-2.802	3.5
14	MP5C	Z	-1.618	3.5
15	MP5C	Mx	-.001	3.5
16	MP5C	X	-2.802	6
17	MP5C	Z	-1.618	6
18	MP5C	Mx	-.001	6
19	MP3A	X	-3.294	3
20	MP3A	Z	-1.902	3
21	MP3A	Mx	-.002	3
22	MP3B	X	-3.518	3
23	MP3B	Z	-2.031	3
24	MP3B	Mx	-.002	3
25	MP3C	X	-3.518	3
26	MP3C	Z	-2.031	3
27	MP3C	Mx	.002	3
28	MP2A	X	-2.701	3
29	MP2A	Z	-1.559	3
30	MP2A	Mx	-.001	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
31	MP2B	X	-2.893	3
32	MP2B	Z	-1.67	3
33	MP2B	Mx	-.001	3
34	MP2C	X	-2.893	3
35	MP2C	Z	-1.67	3
36	MP2C	Mx	.001	3
37	MP4A	X	-6.544	2
38	MP4A	Z	-3.778	2
39	MP4A	Mx	-.003	2
40	MP4C	X	-7.028	2
41	MP4C	Z	-4.058	2
42	MP4C	Mx	.003	2
43	MP2A	X	-7.825	2
44	MP2A	Z	-4.518	2
45	MP2A	Mx	.000148	2
46	MP2A	X	-7.825	7.75
47	MP2A	Z	-4.518	7.75
48	MP2A	Mx	.000148	7.75
49	MP2B	X	-8.415	2
50	MP2B	Z	-4.858	2
51	MP2B	Mx	.009	2
52	MP2B	X	-8.415	7.75
53	MP2B	Z	-4.858	7.75
54	MP2B	Mx	.009	7.75
55	MP2C	X	-8.415	2
56	MP2C	Z	-4.858	2
57	MP2C	Mx	.001	2
58	MP2C	X	-8.415	7.75
59	MP2C	Z	-4.858	7.75
60	MP2C	Mx	.001	7.75
61	MP2A	X	-7.825	2
62	MP2A	Z	-4.518	2
63	MP2A	Mx	.008	2
64	MP2A	X	-7.825	7.75
65	MP2A	Z	-4.518	7.75
66	MP2A	Mx	.008	7.75
67	MP2B	X	-8.415	2
68	MP2B	Z	-4.858	2
69	MP2B	Mx	-.001	2
70	MP2B	X	-8.415	7.75
71	MP2B	Z	-4.858	7.75
72	MP2B	Mx	-.001	7.75
73	MP2C	X	-8.415	2
74	MP2C	Z	-4.858	2
75	MP2C	Mx	-.009	2
76	MP2C	X	-8.415	7.75
77	MP2C	Z	-4.858	7.75
78	MP2C	Mx	-.009	7.75
79	MP1A	X	-.658	3
80	MP1A	Z	-.38	3
81	MP1A	Mx	-.000329	3
82	MP1B	X	-.701	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
83	MP1B	Z	-.405	3
84	MP1B	Mx	-.00031	3
85	MP1C	X	-.701	3
86	MP1C	Z	-.405	3
87	MP1C	Mx	.00031	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	-1.022	3.5
2	MP4B	Z	-1.77	3.5
3	MP4B	Mx	.001	3.5
4	MP4B	X	-1.022	6
5	MP4B	Z	-1.77	6
6	MP4B	Mx	.001	6
7	MP5A	X	-2.142	3.5
8	MP5A	Z	-3.71	3.5
9	MP5A	Mx	.001	3.5
10	MP5A	X	-2.142	6
11	MP5A	Z	-3.71	6
12	MP5A	Mx	.001	6
13	MP5C	X	-2.349	3.5
14	MP5C	Z	-4.068	3.5
15	MP5C	Mx	-.000803	3.5
16	MP5C	X	-2.349	6
17	MP5C	Z	-4.068	6
18	MP5C	Mx	-.000803	6
19	MP3A	X	-2.299	3
20	MP3A	Z	-3.982	3
21	MP3A	Mx	-.001	3
22	MP3B	X	-1.727	3
23	MP3B	Z	-2.991	3
24	MP3B	Mx	-.002	3
25	MP3C	X	-2.405	3
26	MP3C	Z	-4.165	3
27	MP3C	Mx	.000823	3
28	MP2A	X	-1.9	3
29	MP2A	Z	-3.291	3
30	MP2A	Mx	-.00095	3
31	MP2B	X	-1.41	3
32	MP2B	Z	-2.441	3
33	MP2B	Mx	-.001	3
34	MP2C	X	-1.99	3
35	MP2C	Z	-3.448	3
36	MP2C	Mx	.000681	3
37	MP4A	X	-4.634	2
38	MP4A	Z	-8.026	2
39	MP4A	Mx	-.002	2
40	MP4C	X	-4.862	2
41	MP4C	Z	-8.421	2
42	MP4C	Mx	.002	2
43	MP2A	X	-5.562	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
44	MP2A	Z	-9.633	2
45	MP2A	Mx	-.005	2
46	MP2A	X	-5.562	7.75
47	MP2A	Z	-9.633	7.75
48	MP2A	Mx	-.005	7.75
49	MP2B	X	-4.059	2
50	MP2B	Z	-7.03	2
51	MP2B	Mx	.005	2
52	MP2B	X	-4.059	7.75
53	MP2B	Z	-7.03	7.75
54	MP2B	Mx	.005	7.75
55	MP2C	X	-5.839	2
56	MP2C	Z	-10.114	2
57	MP2C	Mx	.007	2
58	MP2C	X	-5.839	7.75
59	MP2C	Z	-10.114	7.75
60	MP2C	Mx	.007	7.75
61	MP2A	X	-5.562	2
62	MP2A	Z	-9.633	2
63	MP2A	Mx	.011	2
64	MP2A	X	-5.562	7.75
65	MP2A	Z	-9.633	7.75
66	MP2A	Mx	.011	7.75
67	MP2B	X	-4.059	2
68	MP2B	Z	-7.03	2
69	MP2B	Mx	.003	2
70	MP2B	X	-4.059	7.75
71	MP2B	Z	-7.03	7.75
72	MP2B	Mx	.003	7.75
73	MP2C	X	-5.839	2
74	MP2C	Z	-10.114	2
75	MP2C	Mx	-.011	2
76	MP2C	X	-5.839	7.75
77	MP2C	Z	-10.114	7.75
78	MP2C	Mx	-.011	7.75
79	MP1A	X	-.456	3
80	MP1A	Z	-.79	3
81	MP1A	Mx	-.000228	3
82	MP1B	X	-.347	3
83	MP1B	Z	-.6	3
84	MP1B	Mx	-.000341	3
85	MP1C	X	-.476	3
86	MP1C	Z	-.825	3
87	MP1C	Mx	.000163	3

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-500	%6

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-500	%72

Member Point Loads (BLC 79 : Lv1)

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

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-250	0

Member Point Loads (BLC 81 : Antenna Ev)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	Y	-1.149	3.5
2	MP4B	My	-.000197	3.5
3	MP4B	Mz	-.00054	3.5
4	MP4B	Y	-1.149	6
5	MP4B	My	-.000197	6
6	MP4B	Mz	-.00054	6
7	MP5A	Y	-1.149	3.5
8	MP5A	My	-.000575	3.5
9	MP5A	Mz	0	3.5
10	MP5A	Y	-1.149	6
11	MP5A	My	-.000575	6
12	MP5A	Mz	0	6
13	MP5C	Y	-1.149	3.5
14	MP5C	My	.000566	3.5
15	MP5C	Mz	-.0001	3.5
16	MP5C	Y	-1.149	6
17	MP5C	My	.000566	6
18	MP5C	Mz	-.0001	6
19	MP3A	Y	-3.172	3
20	MP3A	My	.002	3
21	MP3A	Mz	0	3
22	MP3B	Y	-3.172	3
23	MP3B	My	.000543	3
24	MP3B	Mz	.001	3
25	MP3C	Y	-3.172	3
26	MP3C	My	-.002	3
27	MP3C	Mz	.000275	3
28	MP2A	Y	-2.996	3
29	MP2A	My	.001	3
30	MP2A	Mz	0	3
31	MP2B	Y	-2.996	3
32	MP2B	My	.000512	3
33	MP2B	Mz	.001	3
34	MP2C	Y	-2.996	3
35	MP2C	My	-.001	3
36	MP2C	Mz	.00026	3
37	MP4A	Y	-1.283	2
38	MP4A	My	.000642	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
39	MP4A	Mz	0	2
40	MP4C	Y	-1.283	2
41	MP4C	My	-.000632	2
42	MP4C	Mz	.000111	2
43	MP2A	Y	-1.269	2
44	MP2A	My	-.000635	2
45	MP2A	Mz	.001	2
46	MP2A	Y	-1.269	7.75
47	MP2A	My	-.000635	7.75
48	MP2A	Mz	.001	7.75
49	MP2B	Y	-1.269	2
50	MP2B	My	-.001	2
51	MP2B	Mz	-.000235	2
52	MP2B	Y	-1.269	7.75
53	MP2B	My	-.001	7.75
54	MP2B	Mz	-.000235	7.75
55	MP2C	Y	-1.269	2
56	MP2C	My	.000441	2
57	MP2C	Mz	-.001	2
58	MP2C	Y	-1.269	7.75
59	MP2C	My	.000441	7.75
60	MP2C	Mz	-.001	7.75
61	MP2A	Y	-1.269	2
62	MP2A	My	-.000635	2
63	MP2A	Mz	-.001	2
64	MP2A	Y	-1.269	7.75
65	MP2A	My	-.000635	7.75
66	MP2A	Mz	-.001	7.75
67	MP2B	Y	-1.269	2
68	MP2B	My	.000777	2
69	MP2B	Mz	-.000958	2
70	MP2B	Y	-1.269	7.75
71	MP2B	My	.000777	7.75
72	MP2B	Mz	-.000958	7.75
73	MP2C	Y	-1.269	2
74	MP2C	My	.000809	2
75	MP2C	Mz	.000932	2
76	MP2C	Y	-1.269	7.75
77	MP2C	My	.000809	7.75
78	MP2C	Mz	.000932	7.75
79	MP1A	Y	-.417	3
80	MP1A	My	.000209	3
81	MP1A	Mz	0	3
82	MP1B	Y	-.417	3
83	MP1B	My	7.1e-5	3
84	MP1B	Mz	.000196	3
85	MP1C	Y	-.417	3
86	MP1C	My	-.000205	3
87	MP1C	Mz	3.6e-5	3

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	Z	-2.873	3.5
2	MP4B	Mx	.001	3.5
3	MP4B	Z	-2.873	6
4	MP4B	Mx	.001	6
5	MP5A	Z	-2.873	3.5
6	MP5A	Mx	0	3.5
7	MP5A	Z	-2.873	6
8	MP5A	Mx	0	6
9	MP5C	Z	-2.873	3.5
10	MP5C	Mx	.000249	3.5
11	MP5C	Z	-2.873	6
12	MP5C	Mx	.000249	6
13	MP3A	Z	-7.931	3
14	MP3A	Mx	0	3
15	MP3B	Z	-7.931	3
16	MP3B	Mx	-.004	3
17	MP3C	Z	-7.931	3
18	MP3C	Mx	-.000689	3
19	MP2A	Z	-7.49	3
20	MP2A	Mx	0	3
21	MP2B	Z	-7.49	3
22	MP2B	Mx	-.004	3
23	MP2C	Z	-7.49	3
24	MP2C	Mx	-.00065	3
25	MP4A	Z	-3.209	2
26	MP4A	Mx	0	2
27	MP4C	Z	-3.209	2
28	MP4C	Mx	-.000279	2
29	MP2A	Z	-3.173	2
30	MP2A	Mx	-.003	2
31	MP2A	Z	-3.173	7.75
32	MP2A	Mx	-.003	7.75
33	MP2B	Z	-3.173	2
34	MP2B	Mx	.000587	2
35	MP2B	Z	-3.173	7.75
36	MP2B	Mx	.000587	7.75
37	MP2C	Z	-3.173	2
38	MP2C	Mx	.003	2
39	MP2C	Z	-3.173	7.75
40	MP2C	Mx	.003	7.75
41	MP2A	Z	-3.173	2
42	MP2A	Mx	.003	2
43	MP2A	Z	-3.173	7.75
44	MP2A	Mx	.003	7.75
45	MP2B	Z	-3.173	2
46	MP2B	Mx	.002	2
47	MP2B	Z	-3.173	7.75
48	MP2B	Mx	.002	7.75
49	MP2C	Z	-3.173	2
50	MP2C	Mx	-.002	2
51	MP2C	Z	-3.173	7.75
52	MP2C	Mx	-.002	7.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
53	MP1A	Z	-1.043	3
54	MP1A	Mx	0	3
55	MP1B	Z	-1.043	3
56	MP1B	Mx	-.00049	3
57	MP1C	Z	-1.043	3
58	MP1C	Mx	-9.1e-5	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4B	X	2.873	3.5
2	MP4B	Mx	-.000491	3.5
3	MP4B	X	2.873	6
4	MP4B	Mx	-.000491	6
5	MP5A	X	2.873	3.5
6	MP5A	Mx	-.001	3.5
7	MP5A	X	2.873	6
8	MP5A	Mx	-.001	6
9	MP5C	X	2.873	3.5
10	MP5C	Mx	.001	3.5
11	MP5C	X	2.873	6
12	MP5C	Mx	.001	6
13	MP3A	X	7.931	3
14	MP3A	Mx	.004	3
15	MP3B	X	7.931	3
16	MP3B	Mx	.001	3
17	MP3C	X	7.931	3
18	MP3C	Mx	-.004	3
19	MP2A	X	7.49	3
20	MP2A	Mx	.004	3
21	MP2B	X	7.49	3
22	MP2B	Mx	.001	3
23	MP2C	X	7.49	3
24	MP2C	Mx	-.004	3
25	MP4A	X	3.209	2
26	MP4A	Mx	.002	2
27	MP4C	X	3.209	2
28	MP4C	Mx	-.002	2
29	MP2A	X	3.173	2
30	MP2A	Mx	-.002	2
31	MP2A	X	3.173	7.75
32	MP2A	Mx	-.002	7.75
33	MP2B	X	3.173	2
34	MP2B	Mx	-.003	2
35	MP2B	X	3.173	7.75
36	MP2B	Mx	-.003	7.75
37	MP2C	X	3.173	2
38	MP2C	Mx	.001	2
39	MP2C	X	3.173	7.75
40	MP2C	Mx	.001	7.75
41	MP2A	X	3.173	2
42	MP2A	Mx	-.002	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
43	MP2A	X	3.173	7.75
44	MP2A	Mx	-.002	7.75
45	MP2B	X	3.173	2
46	MP2B	Mx	.002	2
47	MP2B	X	3.173	7.75
48	MP2B	Mx	.002	7.75
49	MP2C	X	3.173	2
50	MP2C	Mx	.002	2
51	MP2C	X	3.173	7.75
52	MP2C	Mx	.002	7.75
53	MP1A	X	1.043	3
54	MP1A	Mx	.000521	3
55	MP1B	X	1.043	3
56	MP1B	Mx	.000178	3
57	MP1C	X	1.043	3
58	MP1C	Mx	-.000513	3

Member Area Loads (BLC 39 : Structure D)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N41	N38	N97	N101	Y	A-B	-.009
2	N38	N35	N48	N97	Y	A-B	-.009
3	N35	N44	N49	N48	Y	A-B	-.009
4	N44	N41	N101	N49	Y	A-B	-.009

Member Area Loads (BLC 40 : Structure Di)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N44	N41	N101	N49	Y	A-B	-.009
2	N41	N38	N97	N101	Y	A-B	-.009
3	N38	N35	N48	N97	Y	A-B	-.009
4	N35	N2	N49	N48	Y	A-B	-.009

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	N43	max	3555.991	9	93.442	2	2221.756	2	.253	33	1.645	1	.463	31
2		min	-1739.302	3	-307.168	32	-4040.077	8	-.121	39	-1.639	7	-.116	1
3	N37	max	2104.447	8	94.706	7	2419.546	2	.285	19	1.304	1	0	7
4		min	-2933.863	2	-75.149	1	-1622.324	8	.043	1	-1.298	7	-.272	13
5	N40	max	3183.471	12	56.524	6	3915.623	12	.101	4	1.739	1	.257	24
6		min	-1408.05	6	-118.627	12	-2130.48	6	-.055	10	-1.755	7	-.041	6
7	N34	max	2116.819	12	73.928	1	1699.572	12	-.045	8	1.224	1	-.034	1
8		min	-3056.268	6	-97.949	43	-2619.231	6	-.254	14	-1.234	7	-.395	43
9	N177A	max	2662.79	18	2201.063	18	2658.112	18	0	1	0	1	0	1
10		min	950.667	75	783.497	74	950.426	74	0	43	0	43	0	43
11	N178A	max	2482.979	14	2056.868	14	-911.055	72	0	13	0	13	0	7
12		min	911.338	71	751.865	72	-2478.629	14	0	7	0	7	0	13
13	N179A	max	-1246.937	69	2891.831	24	-1247.329	68	0	17	0	1	0	17
14		min	-3521.868	24	1021.592	69	-3520.593	24	0	1	0	17	0	1
15	N180A	max	-1261.423	65	2981.123	20	3632.111	20	0	8	0	38	0	38

Envelope Joint Reactions (Continued)

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
16		min	-3632.938	20	1033.247	65	1262.075	66	0	38	0	8	0	8
17	Totals:	max	6510.166	10	9687.885	14	7211.951	1						
18		min	-6510.167	4	3598.258	71	-7211.953	7						

Joint Reactions

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
1	1	N43	-770.683	72.166	1547.682	-.046	1.645	-.116
2	1	N37	-2362.748	-75.149	1864.193	.043	1.304	-.214
3	1	N40	2513.982	-100.694	3397.392	.007	1.739	.211
4	1	N34	1501.349	73.928	1092.872	-.188	1.224	-.034
5	1	N177A	1117.897	928.732	1176.063	0	0	0
6	1	N178A	1473.893	1211.357	-1414.713	0	0	0
7	1	N179A	-2012.019	1647.622	-1963.455	0	0	0
8	1	N180A	-1461.676	1201.675	1511.917	0	0	0
9	1	Totals:	-.005	4959.637	7211.951			
10	1	COG (ft):	X: -.733	Y: .283	Z: 3.802			
11	2	N43	-1633.225	93.442	2221.756	-.089	1.379	-.111
12	2	N37	-2933.863	-71.647	2419.546	.055	1.262	-.203
13	2	N40	1320.633	-58.313	2160.731	.05	1.625	.17
14	2	N34	251.34	53.804	-98.466	-.193	1.105	-.066
15	2	N177A	1221.877	1039.064	1316.64	0	0	0
16	2	N178A	1506.338	1254.576	-1486.43	0	0	0
17	2	N179A	-1884.508	1518.177	-1798.579	0	0	0
18	2	N180A	-1394.09	1130.534	1405.819	0	0	0
19	2	Totals:	-3545.498	4959.637	6141.018			
20	2	COG (ft):	X: -.733	Y: .283	Z: 3.802			
21	3	N43	-1739.302	75.277	1905.532	-.109	.554	-.046
22	3	N37	-2689.734	-45.477	2390.596	.093	.697	-.174
23	3	N40	104.098	-9.308	596.961	.09	.901	.11
24	3	N34	-1135.38	21.714	-1259.455	-.176	.509	-.108
25	3	N177A	1335.231	1149.074	1428.481	0	0	0
26	3	N178A	1464.315	1234.222	-1477.743	0	0	0
27	3	N179A	-1730.819	1374.106	-1642.101	0	0	0
28	3	N180A	-1445.531	1160.022	1427.816	0	0	0
29	3	Totals:	-5837.12	4959.631	3370.087			
30	3	COG (ft):	X: -.733	Y: .283	Z: 3.802			
31	4	N43	-1177.57	32.058	839.232	-.103	-.512	.043
32	4	N37	-1938.709	-15.967	1981.915	.13	-.182	-.145
33	4	N40	-814.627	27.813	-841.53	.101	-.166	.048
34	4	N34	-2238.111	-10.315	-2038.453	-.143	-.364	-.14
35	4	N177A	1437.512	1227.542	1491.437	0	0	0
36	4	N178A	1385.276	1186.238	-1440.776	0	0	0
37	4	N179A	-1578.687	1253.162	-1523.162	0	0	0
38	4	N180A	-1585.251	1259.092	1531.329	0	0	0
39	4	Totals:	-6510.167	4959.622	-.007			
40	4	COG (ft):	X: -.733	Y: .283	Z: 3.802			
41	5	N43	-129.992	-26.822	-544.709	-.065	-1.251	.132
42	5	N37	-917.303	19.332	1192.812	.159	-.827	-.099
43	5	N40	-1370.297	50.003	-1828.192	.088	-1.02	-.007
44	5	N34	-2923.505	-40.255	-2521.534	-.107	-.961	-.168

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
45	5	N177A	1526.785	1283.975	1539.224	0	0	0
46	5	N178A	1285.257	1109.231	-1379.215	0	0	0
47	5	N179A	-1459.185	1170.657	-1440.681	0	0	0
48	5	N180A	-1754.445	1393.492	1666.721	0	0	0
49	5	Totals:	-5742.686	4959.612	-3315.574			
50	5	COG (ft):	X: -.733	Y: .283	Z: 3.802			
51	6	N43	1238.21	-94.72	-2031.729	-.004	-1.561	.218
52	6	N37	342.953	63.589	36.266	.188	-1.121	-.036
53	6	N40	-1408.05	56.524	-2130.48	.068	-1.503	-.041
54	6	N34	-3056.268	-63.674	-2619.231	-.073	-1.164	-.193
55	6	N177A	1569.455	1305.213	1549.466	0	0	0
56	6	N178A	1164.69	993.045	-1259.229	0	0	0
57	6	N179A	-1417.948	1149.712	-1429.742	0	0	0
58	6	N180A	-1924.011	1549.91	1838.087	0	0	0
59	6	Totals:	-3490.971	4959.601	-6046.593			
60	6	COG (ft):	X: -.733	Y: .283	Z: 3.802			
61	7	N43	2589.915	-151.068	-3369.277	.056	-1.639	.275
62	7	N37	1537.739	94.706	-1067.787	.209	-1.298	0
63	7	N40	-734.658	38.237	-1608.296	.039	-1.755	-.037
64	7	N34	-2436.772	-68.244	-2011.759	-.05	-1.234	-.195
65	7	N177A	1528.801	1255.341	1469.375	0	0	0
66	7	N178A	1061.109	883.071	-1119.163	0	0	0
67	7	N179A	-1476.403	1213.466	-1526.549	0	0	0
68	7	N180A	-2069.727	1694.085	2021.502	0	0	0
69	7	Totals:	.005	4959.594	-7211.953			
70	7	COG (ft):	X: -.733	Y: .283	Z: 3.802			
71	8	N43	3448.124	-171.791	-4040.077	.097	-1.37	.269
72	8	N37	2104.447	91.517	-1622.324	.198	-1.253	-.011
73	8	N40	463.865	-5.169	-372.765	-.005	-1.637	.006
74	8	N34	-1182.868	-49.15	-824.177	-.045	-1.113	-.165
75	8	N177A	1425.274	1145.759	1330.114	0	0	0
76	8	N178A	1028.811	839.841	-1047.352	0	0	0
77	8	N179A	-1605.37	1343.721	-1691.836	0	0	0
78	8	N180A	-2136.784	1764.867	2127.396	0	0	0
79	8	Totals:	3545.498	4959.594	-6141.02			
80	8	COG (ft):	X: -.733	Y: .283	Z: 3.802			
81	9	N43	3555.991	-153.836	-3717.872	.118	-.546	.205
82	9	N37	1860.381	65.021	-1587.681	.161	-.689	-.041
83	9	N40	1681.116	-54.618	1184.812	-.045	-.915	.068
84	9	N34	202.624	-17.446	331.681	-.062	-.517	-.124
85	9	N177A	1312.057	1036.078	1218.962	0	0	0
86	9	N178A	1071.051	860.681	-1057.005	0	0	0
87	9	N179A	-1759.774	1488.021	-1848.151	0	0	0
88	9	N180A	-2086.327	1735.7	2105.165	0	0	0
89	9	Totals:	5837.12	4959.6	-3370.089			
90	9	COG (ft):	X: -.733	Y: .283	Z: 3.802			
91	10	N43	3000.28	-111.211	-2650.044	.112	.517	.118
92	10	N37	1114.23	35.017	-1175.444	.123	.187	-.071
93	10	N40	2595.111	-91.472	2619.653	-.055	.148	.13
94	10	N34	1299.869	14.91	1110.322	-.094	.351	-.092
95	10	N177A	1209.832	957.465	1155.66	0	0	0
96	10	N178A	1150.102	909.05	-1094.848	0	0	0

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
97	10	N179A	-1911.348	1608.631	-1966.933	0	0	0
98	10	N180A	-1947.909	1637.219	2001.639	0	0	0
99	10	Totals:	6510.166	4959.609	.005			
100	10	COG (ft):	X: -.733	Y: .283	Z: 3.802			
101	11	N43	1956.249	-52.908	-1270.374	.075	1.253	.029
102	11	N37	96.449	-.601	-388.099	.093	.829	-.117
103	11	N40	3146.161	-112.866	3608.588	-.042	1	.183
104	11	N34	1982.44	45.602	1597.693	-.132	.947	-.062
105	11	N177A	1120.179	900.379	1106.711	0	0	0
106	11	N178A	1250.129	986.151	-1156.566	0	0	0
107	11	N179A	-2029.59	1690.502	-2049.233	0	0	0
108	11	N180A	-1779.331	1503.36	1866.85	0	0	0
109	11	Totals:	5742.686	4959.619	3315.571			
110	11	COG (ft):	X: -.733	Y: .283	Z: 3.802			
111	12	N43	586.33	15.032	211.755	.015	1.563	-.057
112	12	N37	-1164.343	-44.681	764.067	.063	1.125	-.178
113	12	N40	3183.471	-118.627	3915.623	-.022	1.484	.215
114	12	N34	2116.819	69.715	1699.572	-.166	1.151	-.036
115	12	N177A	1077.01	878.544	1095.509	0	0	0
116	12	N178A	1370.571	1101.983	-1275.785	0	0	0
117	12	N179A	-2069.89	1710.937	-2059.877	0	0	0
118	12	N180A	-1608.997	1346.725	1695.727	0	0	0
119	12	Totals:	3490.971	4959.63	6046.59			
120	12	COG (ft):	X: -.733	Y: .283	Z: 3.802			
121	13	N43	1505.979	-90.154	-1332.923	.03	.351	.162
122	13	N37	-1153.276	-9.357	1029.343	.251	.283	-.272
123	13	N40	2109.307	-103.998	2285.217	.041	.345	.257
124	13	N34	-509.705	-5.343	-591.293	-.254	.251	-.268
125	13	N177A	2562.585	2118.595	2576.017	0	0	0
126	13	N178A	2474.221	2046.414	-2460.958	0	0	0
127	13	N179A	-3507.565	2877.101	-3497.781	0	0	0
128	13	N180A	-3481.547	2854.628	3491.232	0	0	0
129	13	Totals:	-.001	9687.885	1498.854			
130	13	COG (ft):	X: -.783	Y: .266	Z: 3.843			
131	14	N43	1327.249	-84.952	-1195.108	.019	.29	.163
132	14	N37	-1276.466	-8.957	1152.638	.254	.266	-.271
133	14	N40	1856.637	-93.89	2023.365	.052	.315	.247
134	14	N34	-771.092	-9.916	-834.554	-.254	.217	-.275
135	14	N177A	2584.863	2142.526	2607.162	0	0	0
136	14	N178A	2482.979	2056.868	-2478.629	0	0	0
137	14	N179A	-3478.773	2847.809	-3459.738	0	0	0
138	14	N180A	-3465.374	2838.398	3466.545	0	0	0
139	14	Totals:	-739.978	9687.885	1281.681			
140	14	COG (ft):	X: -.783	Y: .266	Z: 3.843			
141	15	N43	1303.021	-88.142	-1256.43	.013	.123	.177
142	15	N37	-1235.993	-3.79	1155.018	.262	.152	-.265
143	15	N40	1593.935	-82.339	1692.158	.062	.17	.233
144	15	N34	-1063.382	-17.173	-1079.058	-.25	.094	-.285
145	15	N177A	2610.332	2167.156	2631.924	0	0	0
146	15	N178A	2475.825	2053.872	-2478.318	0	0	0
147	15	N179A	-3443.339	2814.532	-3423.336	0	0	0
148	15	N180A	-3474.663	2843.769	3470.644	0	0	0

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
149	15	Totals:	-1234.263	9687.884	712.602			
150	15	COG (ft):	X: -.783	Y: .266	Z: 3.843			
151	16	N43	1420.534	-97.499	-1476.705	.015	-.09	.196
152	16	N37	-1081.551	2.75	1066.23	.269	-.02	-.258
153	16	N40	1391.88	-73.344	1386.127	.066	-.041	.218
154	16	N34	-1299.807	-24.637	-1252.271	-.244	-.078	-.293
155	16	N177A	2635.151	2185.535	2646.682	0	0	0
156	16	N178A	2457.527	2043.245	-2469.765	0	0	0
157	16	N179A	-3407.172	2786.103	-3394.829	0	0	0
158	16	N180A	-3505.918	2865.728	3494.527	0	0	0
159	16	Totals:	-1389.356	9687.882	-.003			
160	16	COG (ft):	X: -.783	Y: .266	Z: 3.843			
161	17	N43	1644.412	-110.848	-1774.588	.023	-.248	.216
162	17	N37	-858.633	10.55	891.957	.276	-.156	-.248
163	17	N40	1275.185	-68.115	1178.797	.063	-.22	.206
164	17	N34	-1444.01	-31.441	-1353.343	-.236	-.205	-.3
165	17	N177A	2655.441	2197.815	2657.367	0	0	0
166	17	N178A	2433.626	2025.491	-2455.655	0	0	0
167	17	N179A	-3379.819	2767.402	-3375.169	0	0	0
168	17	N180A	-3545.776	2897.026	3526.5	0	0	0
169	17	Totals:	-1219.574	9687.88	-704.134			
170	17	COG (ft):	X: -.783	Y: .266	Z: 3.843			
171	18	N43	1933.841	-125.969	-2094.03	.038	-.324	.235
172	18	N37	-588.173	19.545	648.45	.282	-.228	-.235
173	18	N40	1274.869	-67.158	1120.001	.058	-.329	.198
174	18	N34	-1465.758	-36.302	-1362.2	-.229	-.259	-.306
175	18	N177A	2662.79	2201.063	2658.112	0	0	0
176	18	N178A	2407.671	2000.339	-2430.092	0	0	0
177	18	N179A	-3372.198	2763.529	-3373.131	0	0	0
178	18	N180A	-3584.535	2932.831	3565.889	0	0	0
179	18	Totals:	-731.495	9687.877	-1267			
180	18	COG (ft):	X: -.783	Y: .266	Z: 3.843			
181	19	N43	2215.086	-138.471	-2371.732	.052	-.34	.247
182	19	N37	-338.595	25.691	419.053	.285	-.265	-.228
183	19	N40	1420.544	-71.947	1233.969	.049	-.381	.199
184	19	N34	-1332.159	-36.804	-1230.96	-.224	-.273	-.306
185	19	N177A	2652.467	2189.348	2638.856	0	0	0
186	19	N178A	2385.976	1976.869	-2399.525	0	0	0
187	19	N179A	-3386.527	2778.278	-3395.957	0	0	0
188	19	N180A	-3616.79	2964.912	3607.436	0	0	0
189	19	Totals:	0	9687.876	-1498.859			
190	19	COG (ft):	X: -.783	Y: .266	Z: 3.843			
191	20	N43	2393.63	-143.649	-2509.395	.063	-.278	.246
192	20	N37	-215.589	25.308	295.797	.282	-.248	-.229
193	20	N40	1673.441	-82.096	1495.759	.038	-.351	.209
194	20	N34	-1070.609	-32.274	-987.869	-.224	-.239	-.298
195	20	N177A	2630.206	2165.449	2607.77	0	0	0
196	20	N178A	2377.218	1966.41	-2381.843	0	0	0
197	20	N179A	-3415.382	2807.604	-3434.014	0	0	0
198	20	N180A	-3632.938	2981.123	3632.111	0	0	0
199	20	Totals:	739.977	9687.876	-1281.686			
200	20	COG (ft):	X: -.783	Y: .266	Z: 3.843			

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
201	21	N43	2417.934	-140.467	-2447.817	.068	-.112	.233
202	21	N37	-256.061	20.127	293.655	.274	-.133	-.234
203	21	N40	1936.177	-93.664	1826.702	.028	-.206	.223
204	21	N34	-778.369	-25.033	-743.584	-.228	-.116	-.289
205	21	N177A	2604.742	2140.833	2583.038	0	0	0
206	21	N178A	2384.38	1969.425	-2382.194	0	0	0
207	21	N179A	-3450.848	2840.891	-3470.407	0	0	0
208	21	N180A	-3623.692	2975.766	3628	0	0	0
209	21	Totals:	1234.263	9687.877	-712.607			
210	21	COG (ft):	X: -.783	Y: .266	Z: 3.843			
211	22	N43	2300.681	-131.138	-2227.475	.067	.101	.213
212	22	N37	-410.302	13.562	382.6	.266	.039	-.241
213	22	N40	2138.028	-102.647	2132.578	.025	.005	.237
214	22	N34	-542.17	-17.553	-570.387	-.235	.057	-.28
215	22	N177A	2579.925	2122.446	2568.263	0	0	0
216	22	N178A	2402.682	1980.072	-2390.79	0	0	0
217	22	N179A	-3486.989	2869.303	-3498.906	0	0	0
218	22	N180A	-3592.498	2953.835	3604.117	0	0	0
219	22	Totals:	1389.356	9687.879	-.001			
220	22	COG (ft):	X: -.783	Y: .266	Z: 3.843			
221	23	N43	2076.964	-117.814	-1929.777	.058	.26	.193
222	23	N37	-633.059	5.746	556.801	.26	.174	-.251
223	23	N40	2254.516	-107.843	2340.009	.027	.184	.25
224	23	N34	-398.096	-10.716	-469.127	-.242	.183	-.273
225	23	N177A	2559.619	2110.137	2557.524	0	0	0
226	23	N178A	2426.585	1997.833	-2404.91	0	0	0
227	23	N179A	-3514.286	2887.977	-3518.561	0	0	0
228	23	N180A	-3552.668	2922.561	3572.171	0	0	0
229	23	Totals:	1219.574	9687.881	704.129			
230	23	COG (ft):	X: -.783	Y: .266	Z: 3.843			
231	24	N43	1787.46	-102.689	-1610.555	.044	.335	.174
232	24	N37	-903.538	-3.241	800.113	.254	.246	-.264
233	24	N40	2254.808	-108.771	2399.02	.032	.293	.257
234	24	N34	-376.283	-5.828	-460.081	-.249	.237	-.267
235	24	N177A	2552.251	2106.864	2556.739	0	0	0
236	24	N178A	2452.537	2022.971	-2430.442	0	0	0
237	24	N179A	-3521.868	2891.831	-3520.593	0	0	0
238	24	N180A	-3513.873	2886.747	3532.795	0	0	0
239	24	Totals:	731.494	9687.883	1266.996			
240	24	COG (ft):	X: -.783	Y: .266	Z: 3.843			
241	25	N43	1965.593	-294.371	-1914.878	.244	.093	.443
242	25	N37	-327.462	3.354	292.226	.128	.071	-.127
243	25	N40	745.496	-49.364	785.806	.021	.072	.134
244	25	N34	-208.768	-5.634	-230.164	-.132	.069	-.152
245	25	N177A	1341.911	1107.322	1345.047	0	0	0
246	25	N178A	1267.632	1047.514	-1264.562	0	0	0
247	25	N179A	-1709.519	1402.489	-1706.782	0	0	0
248	25	N180A	-3074.884	2498.275	3077.371	0	0	0
249	25	Totals:	0	5709.586	384.064			
250	25	COG (ft):	X: -1.407	Y: .246	Z: 4.698			
251	26	N43	1919.78	-293.283	-1879.096	.242	.079	.443
252	26	N37	-357.759	3.531	321.776	.128	.069	-.127

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
253	26	N40	681.828	-47.08	719.993	.023	.066	.131
254	26	N34	-275.417	-6.677	-293.495	-.132	.062	-.153
255	26	N177A	1347.424	1113.169	1352.487	0	0	0
256	26	N178A	1269.354	1049.814	-1268.382	0	0	0
257	26	N179A	-1702.711	1395.591	-1698.011	0	0	0
258	26	N180A	-3071.315	2494.522	3071.762	0	0	0
259	26	Totals:	-188.816	5709.586	327.035			
260	26	COG (ft):	X: -1.407	Y: .246	Z: 4.698			
261	27	N43	1914.032	-294.236	-1896.121	.241	.035	.446
262	27	N37	-344.768	4.932	320.091	.13	.039	-.125
263	27	N40	617.031	-44.458	636.895	.025	.027	.128
264	27	N34	-349.212	-8.368	-355.178	-.131	.031	-.155
265	27	N177A	1353.437	1119.002	1358.404	0	0	0
266	27	N178A	1267.113	1048.719	-1267.896	0	0	0
267	27	N179A	-1694.519	1387.922	-1689.696	0	0	0
268	27	N180A	-3073.967	2496.073	3072.977	0	0	0
269	27	Totals:	-310.852	5709.586	179.476			
270	27	COG (ft):	X: -1.407	Y: .246	Z: 4.698			
271	28	N43	1943.702	-296.483	-1952.982	.241	-.022	.451
272	28	N37	-304.909	6.517	298.242	.132	-.008	-.123
273	28	N40	568.222	-42.486	560.396	.026	-.029	.125
274	28	N34	-407.782	-10.074	-396.645	-.129	-.016	-.157
275	28	N177A	1358.861	1123.166	1361.74	0	0	0
276	28	N178A	1262.907	1046.157	-1265.908	0	0	0
277	28	N179A	-1686.429	1381.49	-1683.369	0	0	0
278	28	N180A	-3081.266	2501.299	3078.525	0	0	0
279	28	Totals:	-346.694	5709.585	-.002			
280	28	COG (ft):	X: -1.407	Y: .246	Z: 4.698			
281	29	N43	1999.313	-299.555	-2026.58	.243	-.061	.456
282	29	N37	-250.624	8.406	256.27	.134	-.042	-.121
283	29	N40	538.749	-41.323	507.813	.025	-.075	.122
284	29	N34	-444.197	-11.677	-422.475	-.127	-.048	-.159
285	29	N177A	1363.604	1126.17	1364.291	0	0	0
286	29	N178A	1257.584	1042.056	-1262.629	0	0	0
287	29	N179A	-1680.096	1377.113	-1678.985	0	0	0
288	29	N180A	-3090.156	2508.395	3085.724	0	0	0
289	29	Totals:	-305.823	5709.585	-176.569			
290	29	COG (ft):	X: -1.407	Y: .246	Z: 4.698			
291	30	N43	2072.142	-303.116	-2105.618	.246	-.078	.46
292	30	N37	-183.511	10.76	194.804	.135	-.058	-.118
293	30	N40	536.754	-40.994	491.604	.024	-.101	.12
294	30	N34	-451.308	-12.932	-427.781	-.126	-.058	-.16
295	30	N177A	1365.876	1127.305	1364.847	0	0	0
296	30	N178A	1251.172	1035.882	-1256.263	0	0	0
297	30	N179A	-1677.921	1376.009	-1678.409	0	0	0
298	30	N180A	-3099.117	2516.671	3094.807	0	0	0
299	30	Totals:	-185.913	5709.584	-322.009			
300	30	COG (ft):	X: -1.407	Y: .246	Z: 4.698			
301	31	N43	2144.204	-306.082	-2176.766	.249	-.082	.463
302	31	N37	-119.81	12.403	136.12	.136	-.067	-.116
303	31	N40	572.511	-41.959	519.313	.022	-.114	.12
304	31	N34	-418.424	-13.161	-395.459	-.124	-.062	-.16

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
305	31	N177A	1363.704	1124.64	1360.568	0	0	0
306	31	N178A	1245.669	1030.045	-1248.839	0	0	0
307	31	N179A	-1681.006	1379.383	-1683.542	0	0	0
308	31	N180A	-3106.848	2524.316	3104.538	0	0	0
309	31	Totals:	0	5709.584	-384.067			
310	31	COG (ft):	X: -1.407	Y: .246	Z: 4.698			
311	32	N43	2190.005	-307.168	-2212.539	.252	-.068	.463
312	32	N37	-89.526	12.227	106.572	.136	-.065	-.116
313	32	N40	636.194	-44.246	585.124	.02	-.108	.123
314	32	N34	-351.763	-12.121	-332.138	-.124	-.056	-.158
315	32	N177A	1358.191	1118.795	1353.131	0	0	0
316	32	N178A	1243.947	1027.745	-1245.019	0	0	0
317	32	N179A	-1687.818	1386.284	-1692.314	0	0	0
318	32	N180A	-3110.415	2528.068	3110.145	0	0	0
319	32	Totals:	188.815	5709.584	-327.038			
320	32	COG (ft):	X: -1.407	Y: .246	Z: 4.698			
321	33	N43	2195.758	-306.216	-2195.497	.253	-.024	.459
322	33	N37	-102.516	10.825	108.273	.134	-.035	-.118
323	33	N40	700.993	-46.87	668.204	.018	-.069	.126
324	33	N34	-277.972	-10.43	-270.469	-.125	-.024	-.156
325	33	N177A	1352.178	1112.963	1347.217	0	0	0
326	33	N178A	1246.189	1028.841	-1245.507	0	0	0
327	33	N179A	-1696.013	1393.953	-1700.629	0	0	0
328	33	N180A	-3107.766	2526.518	3108.931	0	0	0
329	33	Totals:	310.852	5709.584	-179.479			
330	33	COG (ft):	X: -1.407	Y: .246	Z: 4.698			
331	34	N43	2166.105	-303.97	-2138.631	.252	.033	.455
332	34	N37	-142.361	9.238	130.132	.132	.012	-.119
333	34	N40	749.788	-48.841	744.693	.017	-.013	.129
334	34	N34	-219.417	-8.724	-229.003	-.127	.022	-.155
335	34	N177A	1346.755	1108.799	1343.88	0	0	0
336	34	N178A	1250.395	1031.405	-1247.498	0	0	0
337	34	N179A	-1704.101	1400.384	-1706.955	0	0	0
338	34	N180A	-3100.471	2521.293	3103.382	0	0	0
339	34	Totals:	346.694	5709.585	-.001			
340	34	COG (ft):	X: -1.407	Y: .246	Z: 4.698			
341	35	N43	2110.504	-300.901	-2065.045	.25	.072	.45
342	35	N37	-196.636	7.349	172.099	.13	.046	-.122
343	35	N40	779.248	-50.002	797.282	.018	.033	.132
344	35	N34	-183.01	-7.118	-203.162	-.129	.054	-.153
345	35	N177A	1342.011	1105.793	1341.325	0	0	0
346	35	N178A	1255.718	1035.506	-1250.778	0	0	0
347	35	N179A	-1710.43	1404.759	-1711.339	0	0	0
348	35	N180A	-3091.583	2514.199	3096.184	0	0	0
349	35	Totals:	305.822	5709.585	176.566			
350	35	COG (ft):	X: -1.407	Y: .246	Z: 4.698			
351	36	N43	2037.67	-297.339	-1986.021	.247	.089	.446
352	36	N37	-263.75	4.995	233.552	.129	.062	-.125
353	36	N40	781.242	-50.328	813.505	.019	.059	.134
354	36	N34	-175.895	-5.862	-197.843	-.13	.065	-.152
355	36	N177A	1339.738	1104.656	1340.767	0	0	0
356	36	N178A	1262.13	1041.679	-1257.141	0	0	0

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
357	36	N179A	-1712.602	1405.862	-1711.914	0	0	0
358	36	N180A	-3082.62	2505.922	3087.102	0	0	0
359	36	Totals:	185.913	5709.586	322.007			
360	36	COG (ft):	X: -1.407	Y: .246	Z: 4.698			
361	37	N43	926.718	-31.577	-874.942	-.118	.09	.175
362	37	N37	-284.732	1.51	241.811	.163	.084	-.169
363	37	N40	797.291	-36.025	842.552	.055	.082	.133
364	37	N34	-1143.787	-90.626	-1150.187	-.191	.05	-.387
365	37	N177A	2233.956	1823.612	2237.207	0	0	0
366	37	N178A	1197.164	990.917	-1194.09	0	0	0
367	37	N179A	-1725.141	1415.04	-1722.429	0	0	0
368	37	N180A	-2001.469	1636.737	2004.142	0	0	0
369	37	Totals:	0	5709.588	384.064			
370	37	COG (ft):	X: -.251	Y: .246	Z: 4.698			
371	38	N43	880.913	-30.442	-839.15	-.12	.076	.175
372	38	N37	-315.051	1.682	271.38	.164	.081	-.168
373	38	N40	733.623	-33.737	776.737	.057	.076	.131
374	38	N34	-1210.378	-91.623	-1213.448	-.192	.043	-.389
375	38	N177A	2239.397	1829.39	2244.562	0	0	0
376	38	N178A	1198.892	993.222	-1197.914	0	0	0
377	38	N179A	-1718.318	1408.129	-1713.642	0	0	0
378	38	N180A	-1997.893	1632.968	1998.511	0	0	0
379	38	Totals:	-188.815	5709.588	327.035			
380	38	COG (ft):	X: -.251	Y: .246	Z: 4.698			
381	39	N43	875.185	-31.365	-856.119	-.121	.032	.179
382	39	N37	-302.085	3.082	269.716	.166	.051	-.167
383	39	N40	668.834	-31.115	693.641	.059	.038	.128
384	39	N34	-1284.154	-93.262	-1275.049	-.191	.012	-.391
385	39	N177A	2245.379	1835.168	2250.383	0	0	0
386	39	N178A	1196.66	992.133	-1197.434	0	0	0
387	39	N179A	-1710.116	1400.452	-1705.317	0	0	0
388	39	N180A	-2000.555	1634.495	1999.654	0	0	0
389	39	Totals:	-310.852	5709.588	179.476			
390	39	COG (ft):	X: -.251	Y: .246	Z: 4.698			
391	40	N43	904.897	-33.608	-912.912	-.121	-.025	.183
392	40	N37	-262.238	4.667	247.872	.168	.004	-.165
393	40	N40	620.034	-29.147	617.147	.06	-.019	.125
394	40	N34	-1342.745	-94.926	-1316.446	-.189	-.035	-.393
395	40	N177A	2250.818	1839.303	2253.642	0	0	0
396	40	N178A	1192.457	989.569	-1195.441	0	0	0
397	40	N179A	-1702.026	1394.019	-1698.988	0	0	0
398	40	N180A	-2007.892	1639.71	2005.124	0	0	0
399	40	Totals:	-346.694	5709.587	-.002			
400	40	COG (ft):	X: -.251	Y: .246	Z: 4.698			
401	41	N43	960.554	-36.697	-986.474	-.119	-.064	.188
402	41	N37	-207.958	6.557	205.901	.169	-.03	-.163
403	41	N40	590.574	-27.992	564.575	.059	-.064	.122
404	41	N34	-1379.163	-96.49	-1342.213	-.187	-.067	-.394
405	41	N177A	2255.565	1842.28	2256.128	0	0	0
406	41	N178A	1187.135	985.467	-1192.157	0	0	0
407	41	N179A	-1695.701	1389.648	-1694.611	0	0	0
408	41	N180A	-2016.828	1646.813	2012.281	0	0	0

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
409	41	Totals:	-305.822	5709.587	-176.569			
410	41	COG (ft):	X: -.251	Y: .246	Z: 4.698			
411	42	N43	1033.405	-40.291	-1065.498	-.116	-.08	.192
412	42	N37	-140.853	8.913	144.441	.171	-.046	-.159
413	42	N40	588.595	-27.673	548.38	.058	-.09	.12
414	42	N34	-1386.263	-97.714	-1347.481	-.186	-.077	-.395
415	42	N177A	2257.83	1843.397	2256.646	0	0	0
416	42	N178A	1180.73	979.297	-1185.796	0	0	0
417	42	N179A	-1693.542	1388.556	-1694.049	0	0	0
418	42	N180A	-2025.815	1655.101	2021.348	0	0	0
419	42	Totals:	-185.913	5709.586	-322.009			
420	42	COG (ft):	X: -.251	Y: .246	Z: 4.698			
421	43	N43	1105.468	-43.302	-1136.633	-.112	-.085	.195
422	43	N37	-77.149	10.56	85.754	.172	-.055	-.157
423	43	N40	624.362	-28.646	576.101	.057	-.104	.12
424	43	N34	-1353.408	-97.949	-1315.176	-.184	-.081	-.395
425	43	N177A	2255.698	1840.76	2252.393	0	0	0
426	43	N178A	1175.231	973.463	-1178.375	0	0	0
427	43	N179A	-1696.645	1391.945	-1699.202	0	0	0
428	43	N180A	-2033.556	1662.753	2031.071	0	0	0
429	43	Totals:	0	5709.586	-384.067			
430	43	COG (ft):	X: -.251	Y: .246	Z: 4.698			
431	44	N43	1151.261	-44.435	-1172.415	-.11	-.07	.195
432	44	N37	-46.843	10.389	56.186	.171	-.053	-.158
433	44	N40	688.045	-30.937	641.913	.054	-.097	.122
434	44	N34	-1286.806	-96.954	-1251.926	-.184	-.075	-.394
435	44	N177A	2250.258	1834.984	2245.042	0	0	0
436	44	N178A	1173.504	971.158	-1174.55	0	0	0
437	44	N179A	-1703.473	1398.859	-1707.99	0	0	0
438	44	N180A	-2037.13	1666.521	2036.701	0	0	0
439	44	Totals:	188.816	5709.586	-327.038			
440	44	COG (ft):	X: -.251	Y: .246	Z: 4.698			
441	45	N43	1156.993	-43.513	-1155.43	-.109	-.026	.192
442	45	N37	-59.808	8.989	57.867	.169	-.023	-.16
443	45	N40	752.837	-33.561	724.991	.052	-.059	.126
444	45	N34	-1213.034	-95.317	-1190.339	-.185	-.043	-.392
445	45	N177A	2244.276	1829.207	2239.223	0	0	0
446	45	N178A	1175.736	972.249	-1175.034	0	0	0
447	45	N179A	-1711.677	1406.536	-1716.315	0	0	0
448	45	N180A	-2034.471	1664.995	2035.558	0	0	0
449	45	Totals:	310.852	5709.586	-179.479			
450	45	COG (ft):	X: -.251	Y: .246	Z: 4.698			
451	46	N43	1127.299	-41.272	-1098.632	-.109	.03	.187
452	46	N37	-99.642	7.402	79.721	.167	.024	-.161
453	46	N40	801.623	-35.528	801.476	.052	-.002	.129
454	46	N34	-1154.458	-93.652	-1148.944	-.186	.003	-.39
455	46	N177A	2238.837	1825.072	2235.963	0	0	0
456	46	N178A	1179.939	974.813	-1177.029	0	0	0
457	46	N179A	-1719.765	1412.968	-1722.643	0	0	0
458	46	N180A	-2027.138	1659.782	2030.088	0	0	0
459	46	Totals:	346.694	5709.586	-.001			
460	46	COG (ft):	X: -.251	Y: .246	Z: 4.698			

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
461	47	N43	1071.652	-38.185	-1025.082	-.111	.07	.182
462	47	N37	-153.912	5.511	121.687	.166	.058	-.164
463	47	N40	831.07	-36.68	854.054	.052	.043	.132
464	47	N34	-1118.048	-92.086	-1123.165	-.188	.035	-.389
465	47	N177A	2234.089	1822.093	2233.473	0	0	0
466	47	N178A	1185.262	978.916	-1180.314	0	0	0
467	47	N179A	-1726.087	1417.337	-1727.02	0	0	0
468	47	N180A	-2018.204	1652.681	2022.932	0	0	0
469	47	Totals:	305.823	5709.587	176.566			
470	47	COG (ft):	X: -.251	Y: .246	Z: 4.698			
471	48	N43	998.796	-34.59	-946.072	-.114	.086	.178
472	48	N37	-221.018	3.155	183.135	.164	.074	-.167
473	48	N40	833.048	-36.998	870.262	.053	.069	.134
474	48	N34	-1110.943	-90.86	-1117.885	-.19	.046	-.387
475	48	N177A	2231.823	1820.975	2232.953	0	0	0
476	48	N178A	1191.666	985.085	-1186.672	0	0	0
477	48	N179A	-1728.244	1418.428	-1727.58	0	0	0
478	48	N180A	-2009.215	1644.392	2013.866	0	0	0
479	48	Totals:	185.913	5709.588	322.007			
480	48	COG (ft):	X: -.251	Y: .246	Z: 4.698			
481	49	N43	1121.418	-47.374	-1110.687	-.081	.005	.173
482	49	N37	-309.923	9.27	297.617	.151	.005	-.135
483	49	N40	790.491	-32.314	787.806	.046	-.013	.116
484	49	N34	-680.824	-5.913	-673.396	-.202	-.009	-.208
485	49	N177A	1600.648	1314.981	1600.617	0	0	0
486	49	N178A	1234.093	1020.658	-1234.148	0	0	0
487	49	N179A	-1711.939	1404.322	-1711.853	0	0	0
488	49	N180A	-2043.964	1670.967	2044.042	0	0	0
489	49	Totals:	0	5334.597	-.002			
490	49	COG (ft):	X: -.681	Y: .263	Z: 4.281			
491	50	N43	1531.207	-200.102	-1526.645	.19	.003	.279
492	50	N37	-312.876	8.397	303.213	.125	.003	-.111
493	50	N40	778.962	-41.238	775.296	.012	-.014	.104
494	50	N34	-361.573	-6.466	-359.638	-.109	0	-.129
495	50	N177A	1316.246	1086.613	1316.242	0	0	0
496	50	N178A	1262.823	1043.73	-1262.87	0	0	0
497	50	N179A	-1730.259	1419.037	-1730.18	0	0	0
498	50	N180A	-2484.533	2024.63	2484.581	0	0	0
499	50	Totals:	0	5334.6	-.001			
500	50	COG (ft):	X: -1.15	Y: .263	Z: 4.281			
501	51	N43	1062.816	-47.235	-1057.227	.007	.003	.095
502	51	N37	-481.614	10.811	470.181	.147	.003	-.126
503	51	N40	1040.049	-37.778	1038.24	.025	-.01	.104
504	51	N34	-546.255	2.346	-541.75	-.138	-.007	-.135
505	51	N177A	1544.759	1274.991	1544.729	0	0	0
506	51	N178A	1479.331	1222.491	-1479.398	0	0	0
507	51	N179A	-2036.998	1670.198	-2036.915	0	0	0
508	51	N180A	-2062.089	1690.396	2062.14	0	0	0
509	51	Totals:	0	5786.218	-.001			
510	51	COG (ft):	X: -.733	Y: .283	Z: 3.802			
511	52	N43	862.593	-38.524	-827.148	.006	.065	.078
512	52	N37	-500.951	5.664	474.258	.126	.05	-.116

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
513	52	N40	988.271	-38.071	1018.971	.019	.055	.099
514	52	N34	-397.902	4.283	-409.329	-.124	.04	-.117
515	52	N177A	1347.688	1112.892	1350.259	0	0	0
516	52	N178A	1305.293	1078.751	-1302.755	0	0	0
517	52	N179A	-1805.095	1480.18	-1802.795	0	0	0
518	52	N180A	-1799.899	1475.894	1802.173	0	0	0
519	52	Totals:	0	5081.069	303.634			
520	52	COG (ft):	X: -.739	Y: .286	Z: 3.802			
521	53	N43	827.282	-37.265	-800.624	.003	.051	.078
522	53	N37	-529.358	5.663	503.265	.127	.045	-.117
523	53	N40	935.958	-35.753	964.687	.022	.048	.097
524	53	N34	-449.536	3.311	-455.827	-.124	.03	-.119
525	53	N177A	1352.017	1117.337	1355.457	0	0	0
526	53	N178A	1307.266	1081.324	-1306.299	0	0	0
527	53	N179A	-1798.572	1473.953	-1795.346	0	0	0
528	53	N180A	-1796.874	1472.5	1797.634	0	0	0
529	53	Totals:	-151.817	5081.069	262.947			
530	53	COG (ft):	X: -.739	Y: .286	Z: 3.802			
531	54	N43	821.09	-37.52	-809.029	.002	.024	.08
532	54	N37	-528.765	6.424	507.549	.128	.028	-.116
533	54	N40	878.238	-33.109	896.876	.025	.026	.094
534	54	N34	-508.902	1.72	-507.3	-.123	.01	-.121
535	54	N177A	1357.368	1122.326	1360.748	0	0	0
536	54	N178A	1306.72	1081.626	-1307.598	0	0	0
537	54	N179A	-1790.242	1466.519	-1786.937	0	0	0
538	54	N180A	-1798.454	1473.084	1797.507	0	0	0
539	54	Totals:	-262.947	5081.069	151.817			
540	54	COG (ft):	X: -.739	Y: .286	Z: 3.802			
541	55	N43	845.675	-39.222	-850.115	.002	-.009	.083
542	55	N37	-499.332	7.744	485.961	.13	.004	-.115
543	55	N40	830.568	-30.846	833.698	.026	-.005	.091
544	55	N34	-560.103	-.064	-549.965	-.121	-.014	-.123
545	55	N177A	1362.308	1126.523	1364.716	0	0	0
546	55	N178A	1303.801	1079.576	-1306.303	0	0	0
547	55	N179A	-1782.335	1459.869	-1779.821	0	0	0
548	55	N180A	-1804.217	1477.488	1801.827	0	0	0
549	55	Totals:	-303.634	5081.069	-.001			
550	55	COG (ft):	X: -.739	Y: .286	Z: 3.802			
551	56	N43	894.452	-41.913	-912.88	.004	-.038	.087
552	56	N37	-448.94	9.268	444.278	.131	-.02	-.113
553	56	N40	805.732	-29.571	792.093	.026	-.038	.089
554	56	N34	-589.409	-1.562	-572.379	-.12	-.036	-.125
555	56	N177A	1365.513	1128.802	1366.297	0	0	0
556	56	N178A	1299.292	1075.723	-1302.761	0	0	0
557	56	N179A	-1776.971	1455.786	-1775.904	0	0	0
558	56	N180A	-1812.617	1484.534	1809.437	0	0	0
559	56	Totals:	-262.947	5081.068	-151.819			
560	56	COG (ft):	X: -.739	Y: .286	Z: 3.802			
561	57	N43	954.339	-44.872	-980.493	.007	-.056	.091
562	57	N37	-391.105	10.588	393.679	.132	-.037	-.111
563	57	N40	810.382	-29.625	783.204	.025	-.062	.087
564	57	N34	-588.97	-2.374	-568.545	-.119	-.05	-.126

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
565	57	N177A	1366.125	1128.555	1365.068	0	0	0
566	57	N178A	1294.402	1071.1	-1297.92	0	0	0
567	57	N179A	-1775.587	1455.364	-1776.237	0	0	0
568	57	N180A	-1821.403	1492.331	1818.295	0	0	0
569	57	Totals:	-151.817	5081.068	-262.95			
570	57	COG (ft):	X: -.739	Y: .286	Z: 3.802			
571	58	N43	1009.301	-47.306	-1034.847	.01	-.059	.093
572	58	N37	-341.312	11.352	347.713	.131	-.044	-.11
573	58	N40	843.273	-30.995	809.407	.022	-.072	.088
574	58	N34	-558.905	-2.282	-539.492	-.118	-.052	-.126
575	58	N177A	1363.98	1125.847	1361.36	0	0	0
576	58	N178A	1290.438	1066.944	-1293.078	0	0	0
577	58	N179A	-1778.555	1458.716	-1780.729	0	0	0
578	58	N180A	-1828.221	1498.792	1826.03	0	0	0
579	58	Totals:	0	5081.067	-303.637			
580	58	COG (ft):	X: -.739	Y: .286	Z: 3.802			
581	59	N43	1044.606	-48.564	-1061.365	.013	-.045	.093
582	59	N37	-312.911	11.353	318.708	.13	-.039	-.11
583	59	N40	895.595	-33.314	863.688	.02	-.065	.09
584	59	N34	-507.266	-1.312	-493.001	-.118	-.042	-.124
585	59	N177A	1359.652	1121.403	1356.164	0	0	0
586	59	N178A	1288.465	1064.37	-1289.533	0	0	0
587	59	N179A	-1785.08	1464.945	-1788.178	0	0	0
588	59	N180A	-1831.246	1502.185	1830.568	0	0	0
589	59	Totals:	151.817	5081.067	-262.95			
590	59	COG (ft):	X: -.739	Y: .286	Z: 3.802			
591	60	N43	1050.799	-48.309	-1052.952	.014	-.018	.091
592	60	N37	-313.504	10.592	314.431	.129	-.022	-.11
593	60	N40	953.316	-35.959	931.491	.017	-.043	.093
594	60	N34	-447.901	.279	-441.534	-.119	-.022	-.122
595	60	N177A	1354.302	1116.415	1350.874	0	0	0
596	60	N178A	1289.011	1064.069	-1288.236	0	0	0
597	60	N179A	-1793.41	1472.379	-1796.586	0	0	0
598	60	N180A	-1829.666	1501.602	1830.694	0	0	0
599	60	Totals:	262.947	5081.067	-151.819			
600	60	COG (ft):	X: -.739	Y: .286	Z: 3.802			
601	61	N43	1026.223	-46.609	-1011.863	.013	.014	.088
602	61	N37	-342.932	9.272	336.024	.127	.002	-.112
603	61	N40	1000.98	-38.221	994.664	.016	-.012	.096
604	61	N34	-396.706	2.063	-398.871	-.12	.002	-.12
605	61	N177A	1349.361	1112.217	1346.905	0	0	0
606	61	N178A	1291.93	1066.12	-1289.532	0	0	0
607	61	N179A	-1801.317	1479.028	-1803.702	0	0	0
608	61	N180A	-1823.906	1497.198	1826.374	0	0	0
609	61	Totals:	303.634	5081.068	-.001			
610	61	COG (ft):	X: -.739	Y: .286	Z: 3.802			
611	62	N43	977.453	-43.919	-949.104	.011	.043	.084
612	62	N37	-393.317	7.747	377.705	.126	.025	-.113
613	62	N40	1025.808	-39.495	1036.271	.016	.021	.099
614	62	N34	-367.406	3.562	-376.45	-.122	.024	-.118
615	62	N177A	1346.155	1109.936	1345.322	0	0	0
616	62	N178A	1296.439	1069.973	-1293.075	0	0	0

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
617	62	N179A	-1806.679	1483.11	-1807.618	0	0	0
618	62	N180A	-1815.507	1490.154	1818.766	0	0	0
619	62	Totals:	262.947	5081.068	151.817			
620	62	COG (ft):	X: -.739	Y: .286	Z: 3.802			
621	63	N43	917.564	-40.96	-881.499	.009	.062	.081
622	63	N37	-451.152	6.426	428.298	.125	.043	-.115
623	63	N40	1021.156	-39.44	1045.169	.017	.045	.1
624	63	N34	-367.843	4.375	-380.277	-.123	.038	-.117
625	63	N177A	1345.543	1110.183	1346.55	0	0	0
626	63	N178A	1301.33	1074.596	-1297.915	0	0	0
627	63	N179A	-1808.061	1483.531	-1807.286	0	0	0
628	63	N180A	-1806.72	1482.356	1809.908	0	0	0
629	63	Totals:	151.817	5081.069	262.947			
630	63	COG (ft):	X: -.739	Y: .286	Z: 3.802			
631	64	N43	584.688	-23.362	-550.804	0	.064	.049
632	64	N37	-380.934	5.036	357.367	.089	.049	-.079
633	64	N40	716.625	-25.516	747.777	.016	.058	.068
634	64	N34	-260.359	5.969	-272.978	-.09	.042	-.077
635	64	N177A	952.817	786.456	955.357	0	0	0
636	64	N178A	928.158	766.576	-925.635	0	0	0
637	64	N179A	-1276.545	1046.452	-1274.216	0	0	0
638	64	N180A	-1264.45	1036.649	1266.767	0	0	0
639	64	Totals:	0	3598.26	303.635			
640	64	COG (ft):	X: -.723	Y: .28	Z: 3.801			
641	65	N43	549.374	-22.096	-524.27	-.002	.05	.049
642	65	N37	-409.348	5.033	386.377	.09	.044	-.079
643	65	N40	664.298	-23.187	693.486	.019	.051	.066
644	65	N34	-311.997	4.991	-319.485	-.09	.032	-.079
645	65	N177A	957.147	790.907	960.564	0	0	0
646	65	N178A	930.138	769.153	-929.18	0	0	0
647	65	N179A	-1270.006	1040.212	-1266.759	0	0	0
648	65	N180A	-1261.423	1033.247	1262.215	0	0	0
649	65	Totals:	-151.817	3598.26	262.948			
650	65	COG (ft):	X: -.723	Y: .28	Z: 3.801			
651	66	N43	543.19	-22.352	-532.667	-.003	.023	.051
652	66	N37	-408.76	5.795	390.658	.092	.027	-.079
653	66	N40	606.559	-20.528	625.67	.021	.029	.063
654	66	N34	-371.366	3.393	-370.971	-.089	.012	-.081
655	66	N177A	962.496	795.903	965.871	0	0	0
656	66	N178A	929.599	769.455	-930.471	0	0	0
657	66	N179A	-1261.651	1032.764	-1258.349	0	0	0
658	66	N180A	-1263.015	1033.83	1262.075	0	0	0
659	66	Totals:	-262.947	3598.26	151.817			
660	66	COG (ft):	X: -.723	Y: .28	Z: 3.801			
661	67	N43	567.79	-24.061	-573.748	-.003	-.009	.054
662	67	N37	-379.328	7.119	369.061	.093	.003	-.077
663	67	N40	558.868	-18.25	562.491	.023	-.003	.06
664	67	N34	-422.567	1.602	-413.649	-.087	-.012	-.083
665	67	N177A	967.432	800.106	969.857	0	0	0
666	67	N178A	926.686	767.4	-929.16	0	0	0
667	67	N179A	-1253.716	1026.102	-1251.236	0	0	0
668	67	N180A	-1268.799	1038.241	1266.384	0	0	0

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
669	67	Totals:	-303.634	3598.259	0			
670	67	COG (ft):	X: -.723	Y: .28	Z: 3.801			
671	68	N43	616.587	-26.765	-636.513	-.001	-.039	.058
672	68	N37	-328.935	8.651	327.365	.095	-.02	-.076
673	68	N40	534.017	-16.965	520.89	.023	-.035	.057
674	68	N34	-451.87	.098	-436.073	-.086	-.034	-.085
675	68	N177A	970.631	802.39	971.452	0	0	0
676	68	N178A	922.179	763.539	-925.599	0	0	0
677	68	N179A	-1248.331	1022.013	-1247.329	0	0	0
678	68	N180A	-1277.225	1045.297	1273.988	0	0	0
679	68	Totals:	-262.947	3598.259	-151.819			
680	68	COG (ft):	X: -.723	Y: .28	Z: 3.801			
681	69	N43	676.493	-29.739	-704.131	.002	-.057	.062
682	69	N37	-271.094	9.98	276.753	.095	-.038	-.074
683	69	N40	538.66	-17.017	512.007	.021	-.059	.056
684	69	N34	-451.427	-.715	-432.242	-.085	-.048	-.086
685	69	N177A	971.236	802.143	970.231	0	0	0
686	69	N178A	917.286	758.907	-920.742	0	0	0
687	69	N179A	-1246.937	1021.592	-1247.674	0	0	0
688	69	N180A	-1286.034	1053.108	1282.848	0	0	0
689	69	Totals:	-151.817	3598.258	-262.949			
690	69	COG (ft):	X: -.723	Y: .28	Z: 3.801			
691	70	N43	731.467	-32.186	-758.493	.005	-.06	.064
692	70	N37	-221.294	10.75	230.778	.095	-.045	-.073
693	70	N40	571.555	-18.392	538.219	.019	-.07	.056
694	70	N34	-421.356	-.622	-403.186	-.084	-.05	-.086
695	70	N177A	969.086	799.432	966.521	0	0	0
696	70	N178A	913.318	754.743	-915.89	0	0	0
697	70	N179A	-1249.909	1024.951	-1252.178	0	0	0
698	70	N180A	-1292.867	1059.581	1290.592	0	0	0
699	70	Totals:	0	3598.258	-303.637			
700	70	COG (ft):	X: -.723	Y: .28	Z: 3.801			
701	71	N43	766.775	-33.45	-785.02	.007	-.046	.064
702	71	N37	-192.886	10.754	201.769	.094	-.04	-.072
703	71	N40	623.891	-20.722	592.508	.016	-.063	.058
704	71	N34	-369.713	.355	-356.686	-.084	-.04	-.084
705	71	N177A	964.757	794.982	961.316	0	0	0
706	71	N178A	911.338	752.166	-912.344	0	0	0
707	71	N179A	-1256.45	1031.192	-1259.635	0	0	0
708	71	N180A	-1295.893	1062.981	1295.143	0	0	0
709	71	Totals:	151.817	3598.258	-262.949			
710	71	COG (ft):	X: -.723	Y: .28	Z: 3.801			
711	72	N43	772.961	-33.194	-776.615	.008	-.019	.062
712	72	N37	-193.474	9.992	197.495	.092	-.023	-.073
713	72	N40	681.631	-23.382	660.315	.014	-.04	.061
714	72	N34	-310.346	1.953	-305.206	-.085	-.02	-.082
715	72	N177A	959.408	789.986	956.01	0	0	0
716	72	N178A	911.877	751.865	-911.055	0	0	0
717	72	N179A	-1264.807	1038.641	-1268.045	0	0	0
718	72	N180A	-1294.303	1062.398	1295.283	0	0	0
719	72	Totals:	262.947	3598.258	-151.819			
720	72	COG (ft):	X: -.723	Y: .28	Z: 3.801			

Joint Reactions (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
721	73	N43	748.369	-31.487	-735.531	.008	.013	.059
722	73	N37	-222.9	8.666	219.098	.091	0	-.074
723	73	N40	729.315	-25.659	723.489	.012	-.009	.065
724	73	N34	-259.151	3.745	-262.53	-.086	.004	-.08
725	73	N177A	954.472	785.782	952.024	0	0	0
726	73	N178A	914.79	753.92	-912.367	0	0	0
727	73	N179A	-1272.74	1045.302	-1275.158	0	0	0
728	73	N180A	-1288.521	1057.989	1290.974	0	0	0
729	73	Totals:	303.634	3598.259	0			
730	73	COG (ft):	X: -.723	Y: .28	Z: 3.801			
731	74	N43	699.579	-28.784	-672.773	.006	.043	.055
732	74	N37	-273.288	7.134	260.792	.09	.025	-.076
733	74	N40	754.158	-26.943	765.093	.012	.023	.067
734	74	N34	-229.853	5.249	-240.1	-.088	.026	-.078
735	74	N177A	951.273	783.497	950.426	0	0	0
736	74	N178A	919.297	757.782	-915.929	0	0	0
737	74	N179A	-1278.123	1049.39	-1279.064	0	0	0
738	74	N180A	-1280.096	1050.933	1283.371	0	0	0
739	74	Totals:	262.947	3598.259	151.817			
740	74	COG (ft):	X: -.723	Y: .28	Z: 3.801			
741	75	N43	639.671	-25.81	-605.164	.003	.061	.051
742	75	N37	-331.128	5.805	311.397	.089	.042	-.078
743	75	N40	749.513	-26.89	773.984	.013	.048	.068
744	75	N34	-230.295	6.064	-243.923	-.089	.04	-.077
745	75	N177A	950.667	783.744	951.646	0	0	0
746	75	N178A	924.19	762.414	-920.785	0	0	0
747	75	N179A	-1279.516	1049.811	-1278.72	0	0	0
748	75	N180A	-1271.286	1043.123	1274.511	0	0	0
749	75	Totals:	151.817	3598.259	262.948			
750	75	COG (ft):	X: -.723	Y: .28	Z: 3.801			

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

	Member	Shape	Code Check	Loc[..	LC	Shear..	Loc[..	Dir	LC	phi*Pn...	phi*Pnt...	phi*Mn...	phi*Mn...	Cb	Eqn
1	M1	HSS4X4X4	.155	0	22	.066	9.722	z	7	66299....	139518	16.181	16.181	2.188	H1-1b
2	M11	HSS4X4X4	.093	0	19	.015	0	y	42	66299....	139518	16.181	16.181	2.627	H1-1b
3	M21	HSS4X4X4	.165	13.3..	21	.073	9.722	z	1	66299....	139518	16.181	16.181	2.101	H1-1b
4	M31	HSS4X4X4	.160	13.3..	19	.050	9.722	z	10	66299....	139518	16.181	16.181	3.013	H1-1b
5	M42	HSS4X4X4	.135	1.177	13	.076	3.629	y	18	96263....	139518	16.181	16.181	2.556	H1-1b
6	M44	HSS4X4X4	.122	1.177	19	.070	3.629	y	13	96263....	139518	16.181	16.181	2.601	H1-1b
7	M46	HSS4X4X4	.183	1.177	19	.070	3.629	y	13	96263....	139518	16.181	16.181	2.513	H1-1b
8	M48	HSS4X4X4	.187	1.177	16	.061	3.629	y	19	96263....	139518	16.181	16.181	2.482	H1-1b
9	M51	L2x2x4	.234	0	1	.019	2.982	z	14	19502....	30585.6	.691	1.577	1.894	H2-1
10	M52	L2x2x4	.205	0	1	.016	2.982	z	14	19502....	30585.6	.691	1.577	1.675	H2-1
11	M53	L2x2x4	.183	.435	1	.018	2.982	z	18	19502....	30585.6	.691	1.54	1.113	H2-1
12	M54	L3X3X5	.372	0	7	.138	0	z	1	15674....	57672	2.015	4.572	3.255	H2-1
13	MP1B	PIPE_2.0	.097	4.833	3	.011	4.833		7	14916....	32130	1.872	1.872	2.09	H1-1b
14	MP2B	PIPE_2.0	.864	4.833	3	.128	4.917		1	14916....	32130	1.872	1.872	1.808	H1-1b
15	MP3B	PIPE_2.0	.195	4.833	3	.032	4.833		7	14916....	32130	1.872	1.872	2.249	H1-1b
16	MP4B	PIPE_2.0	.152	4.833	9	.027	4.833		2	14916....	32130	1.872	1.872	2.401	H1-1b
17	MP5C	PIPE_2.0	.155	4.87	1	.027	4.87		2	13511....	32130	1.872	1.872	1.892	H1-1b

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

	Member	Shape	Code Check	Loc[..	LC	Shear..	Loc[..	Dir	LC	phi*Pn...	phi*Pnt..	phi*Mn...	phi*Mn...	Cb	Eqn
18	MP4C	PIPE_2.0	.372	4.833	7	.058	4.833		9	14916....	32130	1.872	1.872	1.656	H1-1b
19	MP3C	PIPE_2.0	.197	4.869	7	.032	4.869		3	21116....	32130	1.872	1.872	2.271	H1-1b
20	MP2C	PIPE_2.0	.865	4.833	7	.128	4.917		3	14916....	32130	1.872	1.872	1.676	H1-1b
21	M94	L2x2x4	.105	0	1	.011	2.982	z	23	19502....	30585.6	.691	1.577	1.697	H2-1
22	M95	L2x2x4	.147	0	1	.012	0	z	20	19502....	30585.6	.691	1.577	1.653	H2-1
23	M96	L2x2x4	.111	1.273	21	.012	2.982	z	13	19502....	30585.6	.691	1.536	1.095	H2-1
24	M97	L3X3X5	.162	7.782	8	.058	0	y	14	15674....	57672	2.015	4.572	3.316	H2-1
25	M98	L2x2x4	.191	.155	7	.017	2.982	z	19	19502....	30585.6	.691	1.577	1.652	H2-1
26	M99	L2x2x4	.173	.342	7	.015	2.982	z	19	19502....	30585.6	.691	1.557	1.198	H2-1
27	M100	L2x2x4	.306	2.982	7	.021	2.982	z	13	19502....	30585.6	.691	1.546	1.141	H2-1
28	M101	L3X3X5	.532	7.782	1	.156	7.782	z	1	15674....	57672	2.015	4.572	3.423	H2-1
29	M102	L2x2x4	.156	0	3	.017	2.982	z	14	19502....	30585.6	.691	1.577	1.826	H2-1
30	M103	L2x2x4	.157	1.149	16	.015	2.982	z	15	19502....	30585.6	.691	1.547	1.147	H2-1
31	M104	L2x2x4	.206	2.982	4	.017	2.982	z	22	19502....	30585.6	.691	1.525	1.047	H2-1
32	M105	L3X3X5	.385	7.782	4	.122	7.782	z	10	15674....	57672	2.015	4.572	2.862	H2-1
33	MP1A	PIPE_2.0	.099	4.87	1	.011	4.87		9	13511....	32130	1.872	1.872	1.582	H1-1b
34	MP2A	PIPE_2.0	.872	4.833	1	.128	4.917		9	14916....	32130	1.872	1.872	1.636	H1-1b
35	MP3A	PIPE_2.0	.198	4.869	1	.032	4.869		5	21116....	32130	1.872	1.872	1.458	H1-1b
36	MP4A	PIPE_2.0	.375	4.833	1	.058	4.833		5	14916....	32130	1.872	1.872	1.706	H1-1b
37	MP5A	PIPE_2.0	.153	4.833	7	.026	4.833		6	14916....	32130	1.872	1.872	1.539	H1-1b
38	MP1C	PIPE_2.0	.097	4.833	7	.011	4.833		3	14916....	32130	1.872	1.872	1.905	H1-1b
39	M93	LL3x3x3x0	.124	6.579	20	.003	6.579	z	12	48022....	70632	4.823	3.708	1.136	H1-1b*
40	M94A	LL3x3x3x0	.091	6.579	18	.005	0	y	19	48022....	70632	4.823	3.708	1.136	H1-1b*
41	M95A	LL3x3x3x0	.085	6.579	14	.005	6.579	z	12	48022....	70632	4.823	3.708	1.136	H1-1b*
42	M96A	LL3x3x3x0	.120	6.579	24	.004	6.579	z	8	48022....	70632	4.823	3.708	1.136	H1-1b*

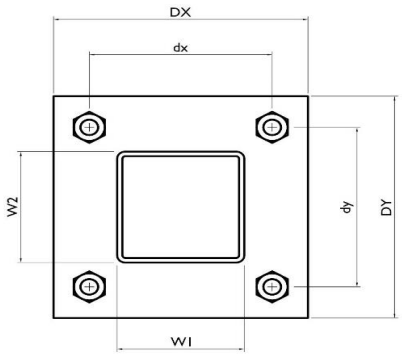
VzW SMART Tool© Vendor

Client:	Verizon Wireless	Date:	3/25/2024
Site Name:	PALMER POND CT		
MDG #:	5000246909		
Fuze ID #:	16272100	Page:	1

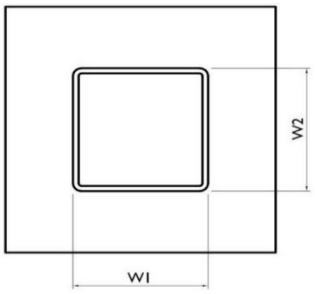
Version 2.00

I. Mount-to-Tower Connection Check

Custom Orientation Required	No
Tower Connection Bolt Checks	Yes
Bolt Orientation	Parallel
Bolt Quantity per Reaction:	4
d_x (in) *(Delta X of typ. bolt config. sketch)* :	3
d_y (in) *(Delta Y of typ. bolt config. sketch)* :	8
Bolt Type:	A325N
Bolt Diameter (in):	0.75
Required Tensile Strength / bolt (kips):	4.3
Required Shear Strength / bolt (kips):	0.6
Tensile Capacity / bolt (kips):	29.8
Shear Capacity / bolt (kips):	17.9
Bolt Overall Utilization:	**14.4%**



Tower Connection Baseplate Checks	Yes
Connecting Standoff Member Shape:	Rect Tube
Weld Stiffener Configuration:	No Stiffeners
Plate Width, D_x (in):	6
Plate Height, D_y (in):	10
W1(in):	4
W2 (in):	4
Member Thickness (in):	0.25
Stiffener location a_1 (in):	
Stiffener location b_1 (in):	
Stiffener location a_2 (in):	
Stiffener location b_2 (in):	
F_y (ksi, plate):	36
Plate Thickness (in):	0.5
Length of Yield Line, L_y (in):	4.90
Bolt Eccentricity, e (in):	1.86
M_u (kip-in):	7.98
Phi*M_n (kip-in):	9.92
Plate Bending Utilization:	**80.5%**



VzW SMART Tool© Vendor

Client:	Verizon Wireless	Date:	3/25/2024
Site Name:	PALMER POND CT		
PSLC #:	5000246909		
Fuze ID #:	16272100	Page:	2

Version 2.00

Tower Connection Weld Checks	Yes

Weld Shape:	Rectangle
Weld Stiffener Configuration:	None
Stiffener Notch Length, n (in):	None
Weld Size (1/16 in):	6
W1 (in):	4
W2 (in):	4
Weld Total Length (in):	16.00
Z_x (in^3/in):	21.33
Z_y (in^3/in):	21.33
J_p (in^4/in):	85.33
c_x (in)	2.25
c_y (in)	2.25
Required combined strength (kip/in):	0.86
Weld Capacity (kip/in):	8.35
Weld Utilization:	**10.4%**

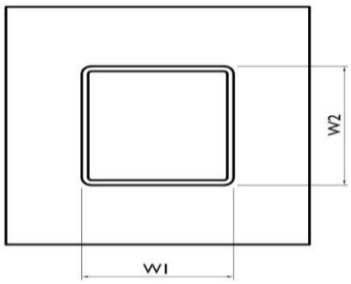


EXHIBIT 5

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Non-Ionizing Electromagnetic Radiation (NIER) Study

Site Number:
418914

Site Name:
Palmer Pond CT CT

Location:
Voluntown, Connecticut

Tenants:
AT&T Mobility & Verizon Wireless

Prepared For:

American Tower, Inc.
Woburn, Massachusetts

May 7th, 2024

181734 P-426450

Prepared By:

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

Approved By:

STATE OF CONNECTICUT
SCOTT C. BRANT
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LICENSED
PROFESSIONAL ENGINEER

07/09/24

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APPENDIX 4 INFORMATION PERTAINING TO MPE STUDIES 10
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Non-Ionizing Electromagnetic Radiation (NIER) Study

418914 Palmer Pond CT CT
Voluntown, 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 the facilities at this location. This evaluation uses compliance standards as outlined in Federal Communications Commission (FCC) document OET-65.

SITE AND FACILITY CONSIDERATIONS

Site 418914 Palmer Pond CT CT is located at 75 Gallup Rd., in Voluntown, Connecticut at coordinates 41.536717, -71.829358. The support structure is a 153' monopole. An aerial view of the tower can be found in Appendix 1, Site Photos. The tenants are AT&T Mobility (AT&T), & Verizon Wireless (VZW). A table listing all antennae and effective radiated power (ERP) levels that were used in this study may be found in Appendix 2, Antenna Inventory.

POWER DENSITY CALCULATIONS

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

For the purpose of this study, a radius of 100' from the base of the tower with a height of 6' above ground level was used, beyond 100' the MPE levels become *di minimus*. This study utilized FCC recognized and accepted software programs using the maximum ERP levels for the antenna models provided by ATC. Diagrams depicting the predicted spatial average power density level at any specific location may be found in Appendix 3, MPE Limit Study. A discussion regarding the FCC limits may be found in Appendix 4, Information Pertaining to MPE Studies. Study methodology describing Non-ionizing Radiation Prediction Models used in this study may be found in Appendix 5, MPE Standards Methodology.

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

- ATC furnished data and does not include other unidentified communication facilities.
- Load List at 418914 Palmer Pond CT CT.RF NIER Study 4/15/24.
- FCC databases.
- Carrier standard configurations.
- Empirical data collected by TEP.

SITE MITIGATION & CONTROL

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

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

COMPLIANCE DETERMINATION

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

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APPENDIX 1 Site Photos

Aerial View of Site

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Appendix 2 Antenna Inventory

418914 Palmer Pond CT CT							
Antenna Inventory							
Antenna #	Carrier	Antenna Manufacturer	Antenna Model	Frequency Band (MHz)	Azmiuth (°)	Effective Radiated Power (W)	Radiation Center (ft)
1	VZW	Samsung	MT6407-77A	3700	150	18286	153.0
2	VZW	Samsung	MT6407-77A	3700	220	18286	153.0
3	VZW	Samsung	MT6407-77A	3700	320	18286	153.0
4	VZW	Commscope	JAHH-65B-R3B	700/800/1900	150	49561	153.0
5	VZW	Commscope	JAHH-65B-R3B	700/800/1900	220	49561	153.0
6	VZW	Commscope	JAHH-65B-R3B	700/800/1900	320	49561	153.0
7	VZW	Commscope	JAHH-65B-R3B	700/800/1900	150	49561	153.0
8	VZW	Commscope	JAHH-65B-R3B	700/800/1900	220	49561	153.0
9	VZW	Commscope	JAHH-65B-R3B	700/800/1900	320	49561	153.0
10	AT&T	CCI	TPA65R-BU8A	700/800/1900/2100/2300	090	81630	137.0
11	AT&T	CCI	TPA65R-BU8A	700/800/1900/2100/2300	210	81630	137.0
12	AT&T	CCI	TPA65R-BU8A	700/800/1900/2100/2300	330	81630	137.0
13	AT&T	CCI	DMP65R-BU8D	700/800/1900/2100/2300	090	57987	137.0
14	AT&T	CCI	DMP65R-BU8D	700/800/1900/2100/2300	210	57987	137.0
15	AT&T	CCI	DMP65R-BU8D	700/800/1900/2100/2300	330	57987	137.0

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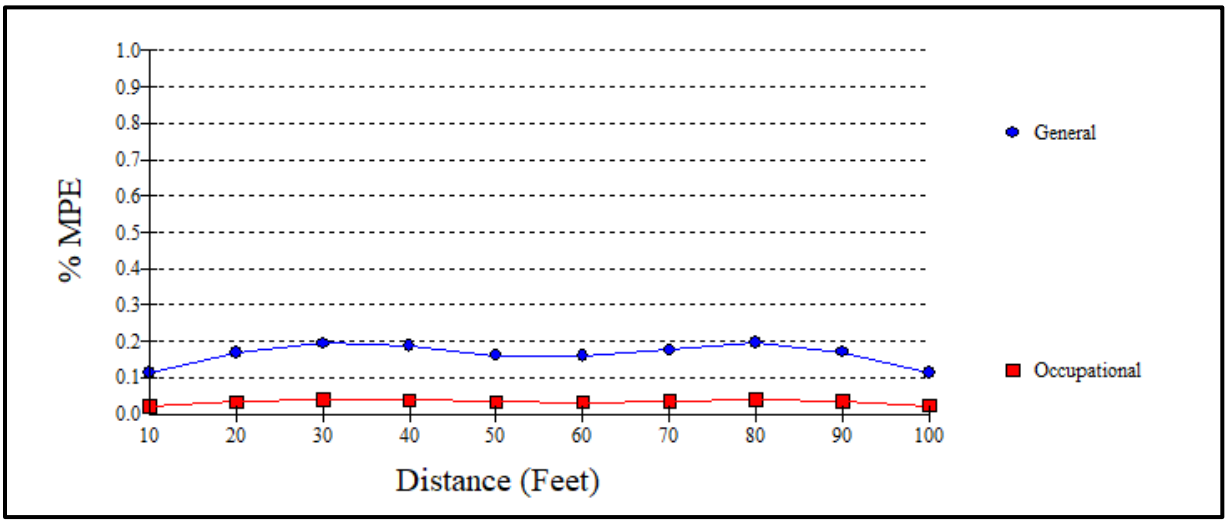
Appendix 3.1 MPE Limit Study



Maximum Power Density (@80'):	0.0013 mW/cm²
General Population MPE (@80'):	0.1958%
Occupational MPE (@80'):	0.03928%

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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

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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

DOCKET NO. 438 - Cellco Partnership d/b/a Verizon Application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a telecommunications facility located at one of two sites: 596 Pendleton Hill Road or 53 Gallup Road, Voluntown, Connecticut.	}	Connecticut
	}	Siting
	}	Council
		September 5, 2013

Decision and Order

Pursuant to Connecticut General Statutes §16-50p and the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, maintenance, and operation of a telecommunications facility, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate, either alone or cumulatively with other effects, when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application, and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by General Statutes **§** 16-50k, be issued to Cellco Partnership d/b/a Verizon, hereinafter referred to as the Certificate Holder, for a telecommunications facility at 53 Gallup Road, Voluntown, Connecticut. The Council denies certification of Site 1 proposed at 596 Pendleton Hill Road, Voluntown, Connecticut.

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

1. The tower shall be constructed as a monopole, no taller than necessary to provide the proposed telecommunications services, sufficient to accommodate the antennas of the Certificate Holder and other entities, both public and private, but such tower shall not exceed a height of 150 feet above ground level. The height at the top of the Certificate Holder's antennas shall not exceed 153 feet above ground level.

2. The site of the telecommunications facility shall be moved closer to Gallup Road from the location shown in the plans accompanying the Certificate Holder's original application.

3. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. The D&M Plan shall be served on the Town of Voluntown for comment, and all parties and intervenors as listed in the service list, and submitted to and approved by the Council prior to the commencement of facility construction and shall include:
    a) a final site plan(s) of site development to include specifications for the tower, tower foundation, antennas, equipment compound, radio equipment, access road, utility line, and landscaping; and
    b) construction plans for site clearing, grading, landscaping, water drainage, and erosion and sedimentation controls consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended.

4. The Certificate Holder shall provide the Council with the results of any survey conducted for vernal pool obligate species in the vicinity of the approved site with recommendations for protective measures to be implemented, if necessary.

5. Prior to the commencement of operation, the Certificate Holder shall provide the Council worst-case modeling of the electromagnetic radio frequency power density of all proposed entities' antennas at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin No. 65, August 1997. The Certificate Holder shall ensure a recalculated report of the electromagnetic radio frequency power density be submitted to the Council if and when circumstances in operation cause a change in power density above the levels calculated and provided pursuant to this Decision and Order.

6. Upon the establishment of any new State or federal radio frequency standards applicable to frequencies of this facility, the facility granted herein shall be brought into compliance with such standards.

7. The Certificate Holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.

8. Unless otherwise approved by the Council, if the facility authorized herein is not fully constructed with at least one fully operational wireless telecommunications carrier providing wireless service within eighteen months from the date of the mailing of the Council's Findings of Fact, Opinion, and Decision and Order (collectively called "Final Decision"), this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made. The time between the filing and resolution of any appeals of the Council's Final Decision shall not be counted in calculating this deadline. Authority to monitor and modify this schedule, as necessary, is delegated to the Executive Director. The Certificate Holder shall provide written notice to the Executive Director of any schedule changes as soon as is practicable.

9. Any request for extension of the time period referred to in Condition 8 shall be filed with the Council not later than 60 days prior to the expiration date of this Certificate and shall be served on all parties and intervenors, as listed in the service list, and the Town of Voluntown. Any proposed modifications to this Decision and Order shall likewise be so served.

10. If the facility ceases to provide wireless services for a period of one year, this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made.

11. Any nonfunctioning antenna, and associated antenna mounting equipment, on this facility shall be removed within 60 days of the date the antenna ceased to function.

12. In accordance with Section 16-50j-77 of the Regulations of Connecticut State Agencies, the Certificate Holder shall provide the Council with written notice two weeks prior to the commencement of site construction activities. In addition, the Certificate Holder shall provide the Council with written notice of the completion of site construction, and the commencement of site operation.

13. The Certificate Holder shall remit timely payments associated with annual assessments and invoices submitted by the Council for expenses attributable to the facility under Conn. Gen. Stat. §16-50v.

14. This Certificate may be transferred in accordance with Conn. Gen. Stat. §16-50k(b), provided both the Certificate Holder/transferor and the transferee are current with payments to the Council for their respective annual assessments and invoices under Conn. Gen. Stat. §16-50v. In addition, both the Certificate Holder/transferor and the transferee shall provide the Council a written agreement as to the entity responsible for any quarterly assessment charges under Conn. Gen. Stat. §16-50v(b)(2) that may be associated with this facility.

15. The Certificate Holder shall maintain the facility and associated equipment, including but not limited to, the tower, tower foundation, antennas, equipment compound, radio equipment, access road, utility line and landscaping in a reasonable physical and operational condition that is consistent with this Decision and Order and a Development and Management Plan to be approved by the Council.

16. If the Certificate Holder is a wholly-owned subsidiary of a corporation or other entity and is sold/transferred to another corporation or other entity, the Council shall be notified of such sale and/or transfer and of any change in contact information for the individual or representative responsible for management and operations of the Certificate Holder within 30 days of the sale and/or transfer.

17. This Certificate may be surrendered by the Certificate Holder upon written notification and approval by the Council.

We hereby direct that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed in the Service List, dated May 10, 2013, and notice of issuance published in the Norwich Bulletin.

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

EXHIBIT 7

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Delivery Time: 12:33 PM
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Number of Packages:	1
UPS Service:	UPS Ground
Package Weight:	1.0 LBS
Reference Number:	14678893

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To:Barbara Kassabian <BKASSABIAN@CLINELLC.COM>

Hello, your package has been delivered.

Delivery Date: Wednesday, 05/15/2024
Delivery Time: 12:33 PM
Signed by: NIX

CENTERLINE SITE ACQUISITION

Tracking Number:	**1Z9Y45030305676230**
Ship To:	JOHN GUSZKOWSKI ZONING ENFORCEMENT 115 MAIN STREET VOLUNTOWN TOWN HALL VOLUNTOWN, CT 063841820 US
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