Robinson+Cole

KENNETH C. BALDWIN

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Also admitted in Massachusetts
and New York

April 27, 2021

Via Electronic Mail

Melanie A. Bachman, Esq.
Executive Director/Staff Attorney
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: **Notice of Exempt Modification – Facility Modification**
Bushy Hill Fire Station
345 Bushy Hill Road, Simsbury, Connecticut

Dear Attorney Bachman:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains an existing wireless telecommunications facility at the above-referenced property address (the "Property"). The facility consists of antennas and remote radio heads attached to a tower and related equipment on the ground, near the base of the tower. The tower was approved by the Town of Simsbury ("Town") in October 2003. Cellco's shared use of the tower was approved by the Council in November of 2013 (Petition No. 1077). A copy of the Town's approval and Council Staff Report in Petition No. 1077 are included in Attachment 1.

Cellco now intends to modify its facility by replacing three (3) existing antennas with three (3) Samsung 64T64RMMU antennas; and replacing nine (9) existing remote radio heads ("RRHs") with six (6) newer model RRHs on Cellco's existing antenna platform. A set of project plans showing Cellco's proposed facility modifications and new antennas and RRHs specifications are included in Attachment 2.

Please accept this letter as notification pursuant to R.C.S.A. § 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 Simsbury'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).

1. The proposed modifications will not result in an increase in the height of the existing tower. Cellco's replacement antennas and RRHs will be installed on Cellco's existing antenna platform.

2. The proposed modifications will not involve any change to ground-mounted equipment and, therefore, 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 installation of Cellco's new antennas and RRHs will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. A cumulative General Power Density table for the modified facility is included in Attachment 3. The modified facility will be capable of providing Cellco's 5G wireless service.

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

6. According to the attached Structural Analysis ("SA") and Mount Analysis ("MA"), the existing tower, tower foundation, tower base plate and antenna mounting device, with certain modifications, can support Cellco's proposed modifications. Copies of the SA and MA are included in Attachment 4. Also included in Attachment 4 is a separate letter prepared by the consulting engineer responsible for the preparation of the SA and MA verifying that the antenna model described in the SA and MA, respectively, as a Licensed-Sub6 Antenna or VZS01 Antenna, is the Samsung 64T64R model antenna and RRH that will be installed on the tower.

A copy of the parcel map and Property owner information is included in Attachment 5. A Certificate of Mailing verifying that this filing was sent to municipal officials is included in Attachment 6.

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

Sincerely,

Kenneth C. Baldwin

Enclosures
Copy to:
Eric Wellman, Simsbury First Selectman
Michael Glidden, Simsbury Director of Planning & Community Development
Aleksey Tyurin

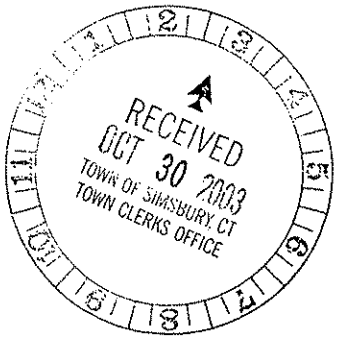
ATTACHMENT 1

Town of Simsbury

933 HOPMEADOW STREET P.O. BOX 495 SIMSBURY, CONNECTICUT 06070

Office of Community Planning and Development

October 24, 2003



Mr. Kevin Kowalski, Fire Marshal
Simsbury Fire District
871 Hopmeadow Street
Simsbury, CT 06070

REFERENCE: Bushy Hill Fire House – 345 Bushy Hill Road

Dear Mr. Kowalski:

The Simsbury Zoning Commission, at a regular meeting held on October 20, 2003, approved your application to replace an existing radio tower with a new heavy duty tower at the Bushy Hill Fire House, 345 Bushy Hill Road.

If you have any questions, please call at your convenience.

Very Truly Yours,

William S. Voelker, AICP
Director of Community Planning & Development

cc: Department File
Building Department
Town Clerk
Engineering Department

CERTIFIED MAIL NO: 7000 1530 0000 3644 6836

* AMENDED 4/7/04

No. 120938 TOWN OF SIMSBURY 345 BUSHY HILL ROAD

CONNECTICUT

** BUILDING PERMIT **

TOTAL ESTIMATED COST: $ 32000.00

DATE:03/23/2004 APPDATE: 03/22/2004 FEE: $ 0.00

Permission is hereby granted to:

OWNER
SIMSBURY FIRE DIST
871 HOPMEADOW ST
SIMSBURY
CT 06070
#658-1971

APPLICANT
KEVIN KOWALSKI
871 HOPMEADOW ST
SIMSBURY
CT 06070
#658-1971

To erect a RADIO ANTENNA-FOUNDATION & 60' TOWER
at 345 BUSHY HILL ROADas per plans on file.
FOR:RADIO ANTENNA-FOUNDATION & 60' TOWER
Lot #: Zone: No. of stories:

Building Official, Town of Simsbury

The recipient of this permit accepts this permit on the condition that he as owner or representing the owner, agrees to comply with all building and zoning ordinances of the Town of Simsbury and the State of Connecticut Statutes regarding the use, occupancy, and type of building to be constructed.

PHONE (860) 658-3234
FAX (860) 658-3217

TOWN OF SIMSBURY PERMIT APPLICATION

933 HOPMEADOW STREET
SIMSBURY CT 06070

PROPERTY ADDRESS 345 Bushy Hill

EST. COST OF JOB 84,000 COST OF PERMIT $1197.84 ($1176+21.84) CHECK# 5115

TYPE OF PERMIT: BUILDING (X) Blanket Fee (X) Non-Blanket Fee ( ) Commercial ( )

HEATING ( ) PLUMBING ( ) ELECTRICAL ( ) OTHER ( )

DESCRIPTION OF WORK: Extend monopole by 26' and place 12 antennas & associated equipment in existing compound

BUILDING OFFICIAL COMMENTS: 4/23/14 * also includes 2 outbuildings outside compound approved by city council

OWNER(S)	CONTRACTOR
Simsbury Vol. Fire Dept	Bell Atlantic
ADDRESS 345 Bushy Hill	ADDRESS 99 E River Dr
TOWN Simsbury ST CT ZIP 06070	TOWN E Htfd ST CT ZIP 06108
HOME PHONE # WORK PHONE #	LICENSE # MCO 900296 WORK PHONE # 203 606 5127

Theresa 203 606 5127

AFFIDAVIT AND AGREEMENT

I HEREBY CERTIFY THAT I AM THE OWNER OF THE PROPERTY WHICH IS THE SUBJECT OF THIS APPLICATION OR THE AUTHORIZED AGENT OF THE PROPERTY OWNER; I AGREE TO CALL AT LEAST 24 HRS. IN ADVANCE FOR EACH INSPECTION INDICATED ON THE PERMIT; I AGREE TO UNCOVER AND EXPOSE ANY WORK WHICH IS COVERED OR CONCEALED WITHOUT INSPECTOR'S APPROVAL; I UNDERSTAND THAT WHEN A PERMIT IS ISSUED, IT IS A PERMIT TO PROCEED AND GRANTS NO RIGHT TO VIOLATE ANY CODE, ORDINANCE OR STATUTE, REGARDLESS OF WHAT MAY BE SHOWN OR OMITTED ON THE SUBMITTED PLANS AND SPECIFICATIONS REGARDLESS OF ANY AGREEMENT WITH ANY OFFICIAL.

I HAVE READ AND AGREE TO ALL THE ABOVE

SIGNATURE: [signature] DATE: 2-18-14

TOWN OF SIMSBURY BUILDING PERMIT

DATE ISSUED 3-3-14 BUILDING PERMIT # B-14-56

DATE CLOSED 10/2/14 + final reck 11-18-14 JW/HM w/ complete Bros Constr.

BUILDING OFFICIAL SIGNATURE [signature]

Rec'd Town of Simsbury
FEB 21 2014
Building Dept.

REQUIRED INSPECTIONS

( ) FOOTING (FORMS IN PLACE BEFORE CONCRETE)
( ) DAMPPROOF/WATERPROOF/DRAINS
( ) INGROUND MECHANICALS
( ) FIREPLACE/THROAT
( ) ROUGH FRAME/MECHANICALS
( ) INSULATION
( ) FINAL INSPECTION
( ) CERTIFICATE OF OCCUPANCY

** OTHER APPROVALS OR PERMITS REQUIRED **

FIRE MARSHAL ______ FVHD ______ DRIVEWAY ______ SEWER ______
ZBA ______ ZONING MB WETLANDS ______ HDC ______

6-19-14 POLE COMPLETED, BLDGS IN PLACE, INSTALLING UG EL FROM POLE TO NEW BLDG.

** THIS PERMIT IS NOT VALID UNLESS PERTINENT INFORMATION IS ATTACHED **

02-21-2014 2864 CHECK 1197.84

5-27-14 PASS FOUNDATION
6-3-14 EXOTH BRNG WELD GROUND GRID PASS

Petition No. 1077
Verizon
Simsbury, Connecticut
Staff Report
November 19, 2013

On October 11, 2013, the Connecticut Siting Council (Council) received a petition from Cellco Partnership d/b/a Verizon Wireless (Verizon) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the extension of an existing telecommunications facility at 345 Bushy Hill Road in Simsbury, Connecticut. Council member Robert Hannon and Siting Analyst David Martin visited the site on November 12, 2013 to review the proposal. Attorney Kenneth Baldwin represented Verizon at the field review.

The existing telecommunications tower is 80 feet tall and is located behind the Simsbury Volunteer Fire Department (SVFD) station at 345 Bushy Hill Road. Currently, the SVFD has two six-foot whip antennas at the top of the existing tower; T-Mobile has three flush-mounted antennas at 77 feet; and MetroPCS has three flush-mounted antennas at 70 feet. Verizon proposes to extend the tower by 26 feet to a height of 106 feet in order to install 12 antennas (three LTE antennas, three cellular antennas, three PCS antennas, and three AWS antennas) on T-arms at a centerline height of 100 feet. SVFD would re-locate its antennas to the top of the extended tower. This relocation to a higher centerline is expected to improve the fire department's service in this section of Simsbury. AT&T has also submitted correspondence indicating that it would be interested in placing antennas at a centerline height of 90 feet should the tower be extended.

Verizon would install a 12-foot by 30-foot shelter just beyond the edge of the parking area in the rear of the fire station for its ground equipment. The shelter would include a natural gas-fueled backup generator—natural gas is available on the fire station property. The shelter at this location would require some filling to extend an embankment to accommodate it. A few trees would have to be taken down for this filling. AT&T would install an 11'6" by 20' shelter for its ground equipment. It would be located a short distance from Verizon's shelter along the back of the parking area.

Although the fire house is on a main road in Simsbury (State Route 167) and is surrounded by single family homes, the visibility of the existing tower is actually minimal due to the presence of mature coniferous and deciduous trees that ring the SVFD property. The proposed 26-foot extension is estimated to increase the year-round visibility of the tower by approximately 10% to 25 acres. It should not dramatically alter the tower's presence in the surrounding vicinity.

For this petition, Verizon hired C Squared Systems to take field measurements of RF levels at this facility. C Squared added calculations for Verizon's proposed antennas to its measured readings and estimated the expected power density to be approximately 4.8% of the FCC limit for maximum permissible exposure for the general public.

Verizon provided notice to the Town of Simsbury and abutting property owners on October 11, 2013. No comments or inquiries have been received. Mary Glassman, Simsbury First Selectwoman, has no objections to the Petition.

The proposed tower extension is not expected to have any substantial adverse environmental effects. Staff recommends approval.

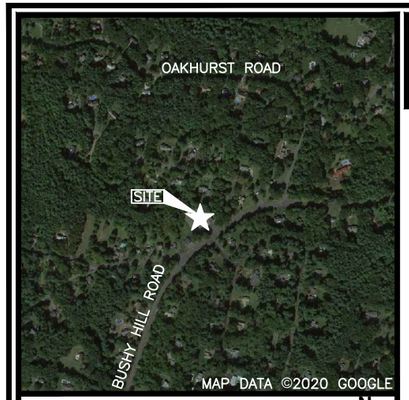
View of existing tower from behind fire house

View of existing tower from across Bushy Hill Road

View of tower from north along Bushy Hill Road

View of tower from south along Bushy Hill Road

ATTACHMENT 2



VICINITY MAP

SCALE: N.T.S.

N

APPROXIMATE COORDINATES:	LATITUDE:	N41° 50' 28.97"
	LONGITUDE:	W72° 51' 01.53"

NOTE:

AN ANALYSIS OF THE CAPACITY OF THE EXISTING STRUCTURE TO SUPPORT THE PROPOSED LOADING HAS BEEN COMPLETED BY: HUDSON DESIGN GROUP, LLC. DATED: JANUARY 28, 2021

NOTE:

AN ANALYSIS FOR THE CAPACITY OF THE EXISTING ANTENNA MOUNT TO SUPPORT THE PROPOSED LOADING IS BASED UPON THE LATEST MOUNT ASSESSMENT BY MASER CONSULTING P.A.

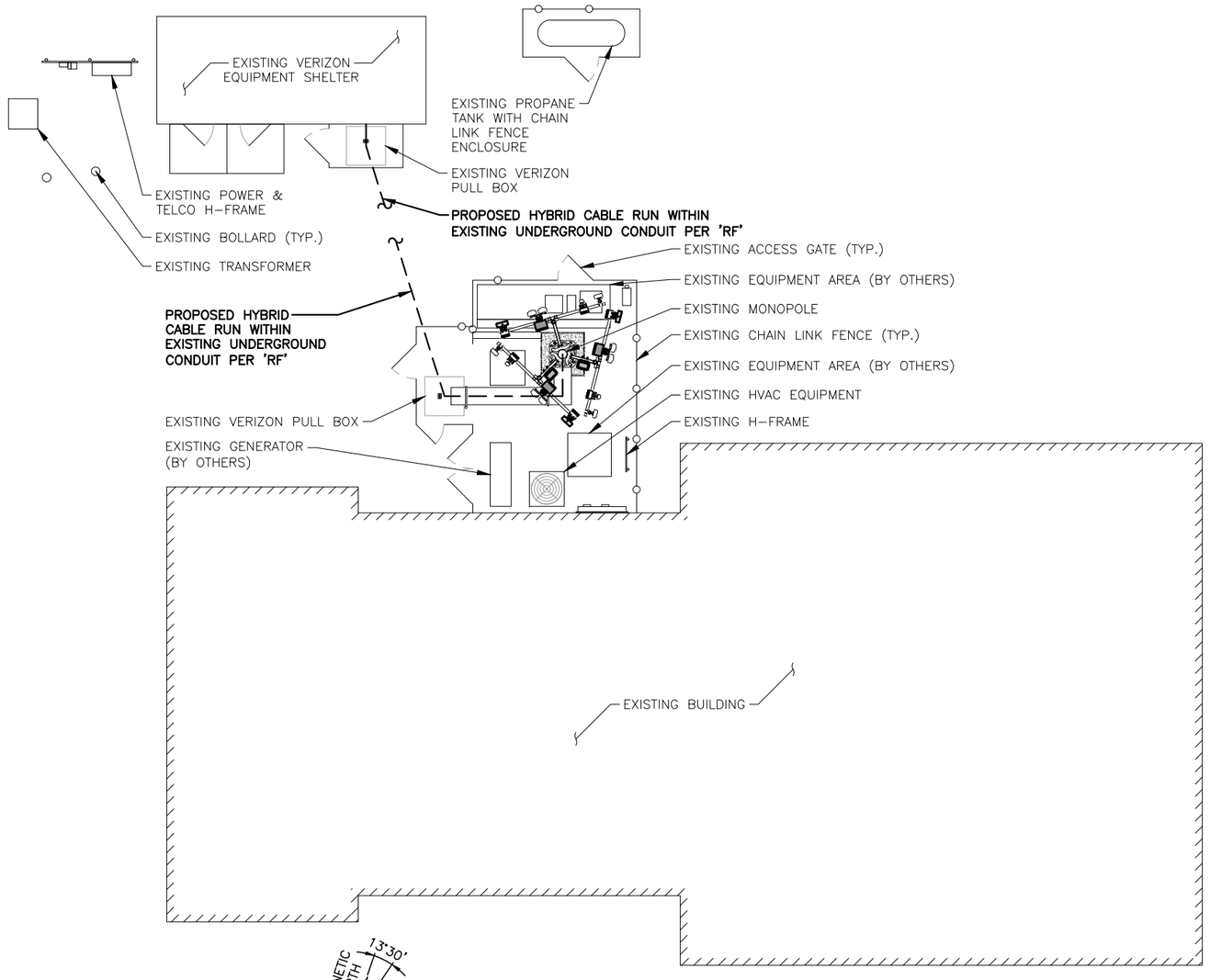
NOTE:

PROPOSED VZS01 ANTENNA SIZE AND WEIGHT ARE NOT TO EXCEED:

DIMENSIONS H35.12"xW16.06"xD5.51"
WEIGHT (INCLUDING INTEGRATED RRH) 87.1 LBS

MOUNT MODIFICATIONS:

MOUNT MODIFICATIONS TO BE COMPLETED PRIOR TO CONSTRUCTION. SEE ATTACHED MOUNT MODIFICATIONS SHEETS ATTACHED.



COMPOUND PLAN 1 / A-1

22x34 SCALE: 1/8"=1'-0"
11x17 SCALE: 1/16"=1'-0"

GRAPHIC SCALE
0 4 8 16 24 FEET

FIELD INSPECTION DATE: 11-01-2020

SCOPE

1. EXISTING (9) ANTENNAS TO REMAIN, EXISTING (3) ANTENNAS TO BE REMOVED, INSTALL (3) ANTENNAS.
2. EXISTING (9) RRHS TO BE REMOVED, INSTALL (9) RRHS.
3. EXISTING (2) JUNCTION BOXES TO BE REMOVED, INSTALL (2) JUNCTION BOXES.
4. EXISTING (2) HYBRID CABLES TO BE REMOVED, INSTALL (2) HYBRID CABLES.
5. ALL REPLACEMENT ANTENNAS TO MATCH EXISTING CONDITION & HEIGHTS.
6. RECONFIGURE/RELOCATE EXISTING ANTENNA MOUNTS AS NECESSARY TO ACCOMMODATE HORIZONTAL SEPARATION, PROPOSED AZIMUTHS, AND ANTENNAS CONFIGURATION.

NEW ANTENNA CONFIGURATION

NOTE TO GENERAL CONTRACTOR:

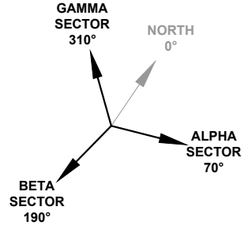
'RF' DESIGN AND EQUIPMENT IS BASED UPON **RFDS ISSUED BY VZW DATED: OCTOBER 05, 2020 REVISION #0.**

THE CONTRACTOR OF RECORD SHALL CONTACT VZW PRIOR TO ANY AND ALL ORDERING/PURCHASING/INSTALLATION OF EQUIPMENT TO VERIFY THAT THE 'RF' LISTED IN THE DRAWING SET IS CURRENT AND UP TO DATE.

NOTES

1. NORTH SHOWN AS APPROXIMATE.
2. SOME EXISTING & PROPOSED INFORMATION NOT SHOWN FOR CLARITY.
3. ANTENNAS WILL BE CAMOUFLAGED WITH 3M WRAP, AS NEEDED, PER VERIZON WIRELESS AND BUILDING OWNER'S APPROVAL.
4. PRIOR TO COMMENCEMENT OF ANY WORK, PROPOSED ANTENNA INSTALLATION IS PURSUANT TO FINDINGS DICTATED IN STRUCTURAL ANALYSIS. STRUCTURAL ANALYSIS TO VERIFY CAPACITY OF EXISTING STRUCTURE TO ENSURE STRUCTURAL INTEGRITY FOLLOWING INSTALLATION OF PROPOSED ANTENNAS, COAX CABLES AND REQUIRED HARDWARE. COPY OF STRUCTURAL ANALYSIS TO BE SENT TO DESIGN ENGINEER.
5. CONTRACTOR SHALL FIELD VERIFY SCOPE OF WORK, VERIZON WIRELESS ANTENNA MOUNT LOCATION AND ANTENNAS TO BE INSTALLED.
6. CONTRACTOR SHALL NOTIFY ENGINEERS IF FIELD CONDITIONS DIFFER FROM DESIGN.
7. RAD CENTERS MEASURED IN THE FIELD WITH LASER BY HDG. RAD CENTERS MAY NOT MATCH RF ANTENNA DESIGN SHEET.

ANTENNA ORIENTATION



PREPARED FOR: CELLCO PARTNERSHIP D.B.A.

verizon

HUDSON Design Group LLC
45 BEECHWOOD DRIVE
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

STATE OF CONNECTICUT
DANIEL P. HAMM
No. 24178
LICENSED PROFESSIONAL ENGINEER

Daniel P. Hamm

CONSTRUCTION DRAWINGS ARE VALID FOR SIX MONTHS AFTER ENGINEER OF RECORD'S STAMPED AND SIGNED SUBMITTAL DATE LISTED HEREIN

CHECKED BY: JX

APPROVED BY: DPH

SUBMITTALS

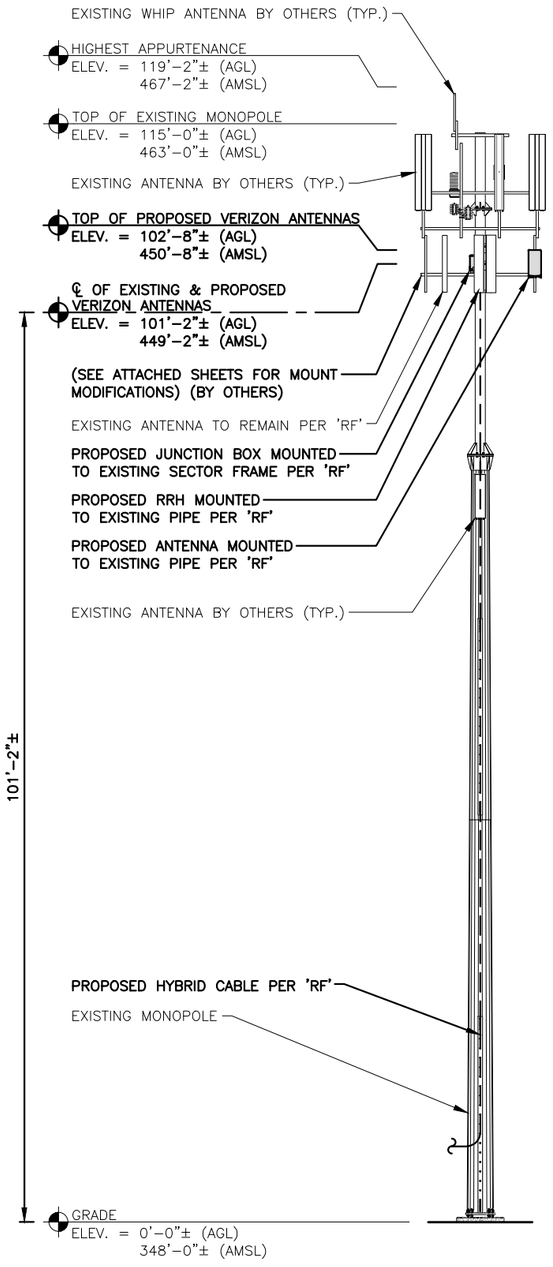
REV.	DATE	DESCRIPTION	BY
0	02/03/21	ISSUED FOR CONSTRUCTION	SF

SITE NAME:
SIMSBURY 2 CT

SITE ADDRESS:
345 BUSHY HILL ROAD
SIMSBURY, CT 06070

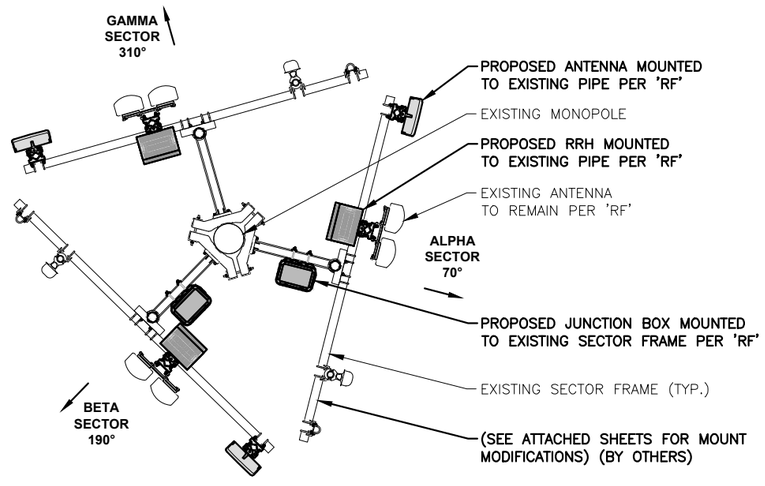
SHEET TITLE
COMPOUND PLAN

SHEET NUMBER
A-1



ELEVATION (1 / A-2)
22x34 SCALE: 1/8"=1'-0"
11x17 SCALE: 1/16"=1'-0"

GRAPHIC SCALE
0 4 8 16 24 FEET



ANTENNA PLAN (2 / A-2)
22x34 SCALE: 3/8"=1'-0"
11x17 SCALE: 3/16"=1'-0"

GRAPHIC SCALE
0 1'-4" 2'-8" 5'-4" 8'-0"

MOUNT MODIFICATIONS:

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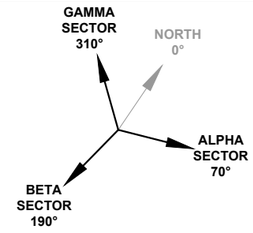

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REV.	DATE	DESCRIPTION	BY
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SIMSBURY 2 CT

SITE ADDRESS:
345 BUSHY HILL ROAD
SIMSBURY, CT 06070

SHEET TITLE
ELEVATION & ANTENNA PLAN

SHEET NUMBER
A-2

STRUCTURAL NOTES:

1. DESIGN REQUIREMENTS ARE PER STATE BUILDING CODE AND APPLICABLE SUPPLEMENTS, INTERNATIONAL BUILDING CODE, EIA/TIA-222-H STRUCTURAL STANDARDS FOR STEEL ANTENNA, TOWERS AND ANTENNA SUPPORTING STRUCTURES.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE CONSTRUCTION MANAGER AND ENGINEER OF RECORD.
3. DESIGN AND CONSTRUCTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
4. STRUCTURAL STEEL SHALL CONFORM TO ASTM A992 (Fy=50 ksi), MISCELLANEOUS STEEL SHALL CONFORM TO ASTM A36 UNLESS OTHERWISE INDICATED.
5. STEEL PIPE SHALL CONFORM TO ASTM A500 "COLD-FORMED WELDED & SEAMLESS CARBON STEEL STRUCTURAL TUBING", GRADE B, OR ASTM A53 PIPE STEEL BLACK AND HOT-DIPPED ZINC-COATED WELDED AND SEAMLESS TYPE E OR S, GRADE B. PIPE SIZES INDICATED ARE NOMINAL. ACTUAL OUTSIDE DIAMETER IS LARGER.
6. STRUCTURAL CONNECTION BOLTS SHALL BE HIGH STRENGTH BOLTS (BEARING TYPE) AND CONFORM TO ASTM A325 TYPE-X "HIGH STRENGTH BOLTS FOR STRUCTURAL JOINTS, INCLUDING SUITABLE NUTS AND PLAIN HARDENED WASHERS". ALL BOLTS SHALL BE 3/4" DIA UON.
7. ALL STEEL MATERIALS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 "ZINC (HOT-DIP GALVANIZED) COATINGS ON IRON AND STEEL PRODUCTS", UNLESS OTHERWISE NOTED.
8. ALL BOLTS, ANCHORS AND MISCELLANEOUS HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 "ZINC-COATING (HOT-DIP) ON IRON AND STEEL HARDWARE", UNLESS OTHERWISE NOTED.
9. FIELD WELDS, DRILL HOLES, SAW CUTS AND ALL DAMAGED GALVANIZED SURFACES SHALL BE REPAIRED WITH AN ORGANIC ZINC REPAIR PAINT COMPLYING WITH REQUIREMENTS OF ASTM A780. GALVANIZING REPAIR PAINT SHALL HAVE 65 PERCENT ZINC BY WEIGHT, ZIRP BY DUNCAN GALVANIZING, GALVA BRIGHT PREMIUM BY CROWN OR EQUAL. THICKNESS OF APPLIED GALVANIZING REPAIR PAINT SHALL BE NOT NOT LESS THAN 4 COATS (ALLOW TIME TO DRY BETWEEN COATS) WITH A RESULTING COATING THICKNESS REQUIRED BY ASTM A123 OR A153 AS APPLICABLE.
10. CONTRACTOR SHALL COMPLY WITH AWS CODE FOR PROCEDURES, APPEARANCE AND QUALITY OF WELDS, AND FOR METHODS USED IN CORRECTING WELDING. ALL WELDERS AND WELDING PROCESSES SHALL BE QUALIFIED IN ACCORDANCE WITH AWS "STANDARD QUALIFICATION PROCEDURES". ALL WELDING SHALL BE DONE USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND DI.I. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "STEEL CONSTRUCTION MANUAL". 14TH EDITION.
11. INCORRECTLY FABRICATED, DAMAGED OR OTHERWISE MISFITTING OR NON-CONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE CONSTRUCTION MANAGER PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE CONSTRUCTION MANAGER APPROVAL.
12. UNISTRUT SHALL BE FORMED STEEL CHANNEL STRUT FRAMING AS MANUFACTURED BY UNISTRUT CORP., WAYNE, MI OR EQUAL. STRUT MEMBERS SHALL BE 1 5/8"x1 5/8"x12GA, UNLESS OTHERWISE NOTED, AND SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.
13. EPOXY ANCHOR ASSEMBLY SHALL CONSIST OF STAINLESS STEEL ANCHOR ROD WITH NUTS & WASHERS. AN INTERNALLY THREADED INSERT, A SCREEN TUBE AND A EPOXY ADHESIVE. THE ANCHORING SYSTEM SHALL BE THE HILTI-HIT HY-270 AND OR HY-200 SYSTEMS (AS SPECIFIED IN DWG.) OR ENGINEERS APPROVED EQUAL.
14. EXPANSION BOLTS SHALL CONFORM TO FEDERAL SPECIFICATION FF-S-325, GROUP II, TYPE 4, CLASS I, HILTI KWIK BOLT III OR APPROVED EQUAL. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
15. LUMBER SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION AND THE NATIONAL FOREST PRODUCTS ASSOCIATION'S NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION. ALL LUMBER SHALL BE PRESSURE TREATED AND SHALL BE STRUCTURAL GRADE NO. 2 OR BETTER.
16. WHERE ROOF PENETRATIONS ARE REQUIRED, THE CONTRACTOR SHALL CONTACT AND COORDINATE RELATED WORK WITH THE BUILDING OWNER AND THE EXISTING ROOF INSTALLER. WORK SHALL BE PERFORMED IN SUCH A MANNER AS TO NOT VOID THE EXISTING ROOF WARRANTY. ROOF SHALL BE WATERTIGHT.
17. ALL FIBERGLASS MEMBERS USED ARE AS MANUFACTURED BY STRONGWELL COMPANY OF BRISTOL, VA 24203. ALL DESIGN CRITERIA FOR THESE MEMBERS IS BASED ON INFORMATION PROVIDED IN THE DESIGN MANUAL. ALL REQUIREMENTS PUBLISHED IN SAID MANUAL MUST BE STRICTLY ADHERED TO.
18. NO MATERIALS TO BE ORDERED AND NO WORK TO BE COMPLETED UNTIL SHOP DRAWINGS HAVE BEEN REVIEWED AND APPROVED IN WRITING.
19. SUBCONTRACTOR SHALL FIREPROOF ALL STEEL TO PRE-EXISTING CONDITIONS.

SPECIAL INSPECTIONS (REFERENCE IBC CHAPTER 17):

GENERAL: WHERE APPLICATION IS MADE FOR CONSTRUCTION, THE OWNER OR THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE ACTING AS THE OWNER'S AGENT SHALL EMPLOY ONE OR MORE APPROVED AGENCIES TO PERFORM INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED IN THE INSPECTION CHECKLIST ABOVE.

THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE AND ENGINEERS OF RECORD INVOLVED IN THE DESIGN OF THE PROJECT ARE PERMITTED TO ACT AS THE APPROVED AGENCY AND THEIR PERSONNEL ARE PERMITTED TO ACT AS THE SPECIAL INSPECTOR FOR THE WORK DESIGNED BY THEM, PROVIDED THOSE PERSONNEL MEET THE QUALIFICATION REQUIREMENTS.

STATEMENT OF SPECIAL INSPECTIONS: THE APPLICANT SHALL SUBMIT A STATEMENT OF SPECIAL INSPECTIONS PREPARED BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE IN ACCORDANCE WITH SECTION 107.1 AS A CONDITION FOR ISSUANCE. THIS STATEMENT SHALL BE IN ACCORDANCE WITH SECTION 1705.

REPORT REQUIREMENT: SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. REPORTS SHALL INDICATE THAT WORK INSPECTED WAS OR WAS NOT COMPLETED IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THEY ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS SHALL BE SUBMITTED.

SPECIAL INSPECTION CHECKLIST

BEFORE CONSTRUCTION	
CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REQUIRED (COMPLETED BY ENGINEER OF RECORD)	REPORT ITEM
REQUIRED	ENGINEER OF RECORD APPROVED SHOP DRAWINGS [1]
REQUIRED	MATERIAL SPECIFICATIONS REPORT [2]
N/A	FABRICATOR NDE INSPECTION
REQUIRED	PACKING SLIPS [3]
ADDITIONAL TESTING AND INSPECTIONS:	
DURING CONSTRUCTION	
CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REQUIRED (COMPLETED BY ENGINEER OF RECORD)	REPORT ITEM
REQUIRED	STEEL INSPECTIONS
N/A	HIGH STRENGTH BOLT INSPECTIONS
N/A	HIGH WIND ZONE INSPECTIONS [4]
N/A	FOUNDATION INSPECTIONS
N/A	CONCRETE COMP. STRENGTH, SLUMP TESTS AND PLACEMENT
N/A	POST INSTALLED ANCHOR VERIFICATION [5]
N/A	GROUT VERIFICATION
N/A	CERTIFIED WELD INSPECTION
N/A	EARTHWORK: LIFT AND DENSITY
N/A	ON SITE COLD GALVANIZING VERIFICATION
N/A	GUY WIRE TENSION REPORT
ADDITIONAL TESTING AND INSPECTIONS:	
AFTER CONSTRUCTION	
CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REQUIRED (COMPLETED BY ENGINEER OF RECORD)	REPORT ITEM
REQUIRED	MODIFICATION INSPECTOR REDLINE OR RECORD DRAWINGS [6]
N/A	POST INSTALLED ANCHOR PULL-OUT TESTING
REQUIRED	PHOTOGRAPHS
ADDITIONAL TESTING AND INSPECTIONS:	

NOTES:

1. REQUIRED FOR ANY NEW SHOP FABRICATED FRP OR STEEL.
2. PROVIDED BY MANUFACTURER, REQUIRED IF HIGH STRENGTH BOLTS OR STEEL.
3. PROVIDED BY GENERAL CONTRACTOR; PROOF OF MATERIALS.
4. HIGH WIND ZONE INSPECTION CATB 120MPH OR CAT C,D 110MPH INSPECT FRAMING OF WALLS, ANCHORING, FASTENING SCHEDULE.
5. ADHESIVE FOR REBAR AND ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ACI 355.4 AND ICC-ES AC308 FOR CRACKED CONCRETE AND SEISMIC APPLICATIONS. DESIGN ADHESIVE BOND STRENGTH HAS BEEN BASED ON ACI 355.4 TEMPERATURE CATEGORY B WITH INSTALLATIONS INTO DRY HOLES DRILLED USING A CARBIDE BIT INTO CRACKED CONCRETE THAT HAS CURED FOR AT LEAST 21 DAYS. ADHESIVE ANCHORS REQUIRING CERTIFIED INSTALLATIONS SHALL BE INSTALLED BY A CERTIFIED ADHESIVE ANCHOR INSTALLER PER ACI 318-11 D.9.2.2. INSTALLATIONS REQUIRING CERTIFIED INSTALLERS SHALL BE INSPECTED PER ACI 318-11 D.8.2.4.
6. AS REQUIRED; FOR ANY FIELD CHANGES TO THE ITEMS IN THIS TABLE.

NOTES:

1. ALL CONNECTIONS TO BE SHOP WELDED & FIELD BOLTED USING 3/4"ø A325-X BOLTS, UNLESS OTHERWISE NOTIFIED.
2. SHOP DRAWING ENGINEER REVIEW & APPROVAL REQUIRED BEFORE ORDERING MATERIAL.
3. SHOP DRAWING ENGINEER REVIEW & APPROVAL REQUIRED PRIOR TO STEEL FABRICATION.
4. VERIFICATION OF EXISTING ROOF CONSTRUCTION IS REQUIRED PRIOR TO THE INSTALLATION OF THE ROOF PLATFORM. ENGINEER OF RECORD IS TO APPROVE EXISTING CONDITIONS IN ORDER TO MOVE FORWARD.
5. CENTERLINE OF PROPOSED STEEL PLATFORM SUPPORT COLUMNS TO BE CENTRALLY LOCATED OVER THE EXISTING BUILDING COLUMNS.
6. EXISTING BRICK MASONRY COLUMNS/BEARING TO BE REPAIRED/REPLACED AT ALL PROPOSED PLATFORM SUPPORT POINTS. ENGINEER OF RECORD TO REVIEW AND APPROVE.

PREPARED FOR: CELLCO PARTNERSHIP D.B.A.

verizon

HUDSON Design Group LLC
45 BEECHWOOD DRIVE
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

STATE OF CONNECTICUT
DANIEL P. HAMM
No. 24178
LICENSED PROFESSIONAL ENGINEER

Daniel P. Hamm

CONSTRUCTION DRAWINGS ARE VALID FOR SIX MONTHS AFTER ENGINEER OF RECORD'S STAMPED AND SIGNED SUBMITTAL DATE LISTED HEREIN

CHECKED BY: JX

APPROVED BY: DPH

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
0	02/03/21	ISSUED FOR CONSTRUCTION	SF

SITE NAME:
SIMSBURY 2 CT

SITE ADDRESS:
345 BUSHY HILL ROAD
SIMSBURY, CT 06070

SHEET TITLE
STRUCTURAL NOTES & SPECIAL INSPECTIONS

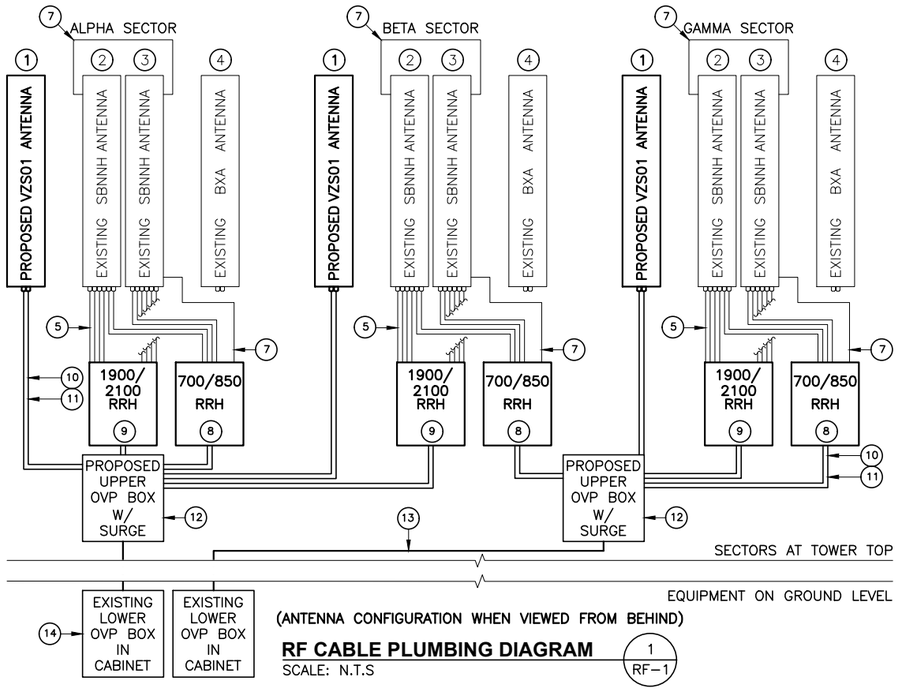
SHEET NUMBER
SN-1

BILL OF MATERIALS

SITE NAME: SIMSBURY 2 CT

ITEM	DESCRIPTION	QTY	LENGTH	COMMENTS
(1)	PROPOSED VZS01 ANTENNA W/ RRH	3		MOUNTED TO EXISTING PIPE MAST
(2)	EXISTING SBNHH-1D65B ANTENNAS	3		MOUNTED TO EXISTING PIPE MAST
(3)	EXISTING SBNHH-1D65B ANTENNAS	3		MOUNTED TO EXISTING PIPE MAST
(4)	EXISTING BXA-17063-12 ANTENNA	3		MOUNTED TO EXISTING PIPE MAST
(5)	EXISTING COAX JUMPERS	36	6 FT.	MOUNTED TO EXISTING PIPE MAST
(7)	EXISTING RET CONTROL CABLES	3	3 M.	ROUTED FROM RRH TO ANTENNA
(7)	EXISTING CONTROL RET CONTROL CABLES	3	0.5 M.	ROUTED FROM ANTENNA TO ANTENNA
(8)	PROPOSED LTE 700/850 RRH	3		SAMSUNG RRH B5/B13 RRH-BR04C PIPE MOUNTED
(9)	PROPOSED PCS/AWS 1900/2100 RRH	3		SAMSUNG RRH B2/B66A RRH-BR049 PIPE MOUNTED
(10)	PROPOSED SAMSUNG FIBER JUMPER CABLES	9	15 FT.	ROUTE FROM OVP TO RRH/ANTENNA
(11)	PROPOSED SAMSUNG POWER JUMPER CABLES	9	15 FT.	ROUTE FROM OVP TO RRH/ANTENNA
(12)	PROPOSED UPPER OVP	2		MOUNTED TO MOUNTING FRAME
(13)	PROPOSED 6X12 HYBRID CABLE	2	230 FT.	ROUTE FROM EQUIPMENT TO ANTENNA SECTOR
(14)	EXISTING LOWER OVP	2		MOUNTED TO WITHIN EQUIPMENT SHELTER

THE ABOVE RF-BOM SHEET IS BASED ON INFORMATION LISTED ON ANTENNA RECOMMENDATION SHEET DATED 10/05/20



(ANTENNA CONFIGURATION WHEN VIEWED FROM BEHIND)

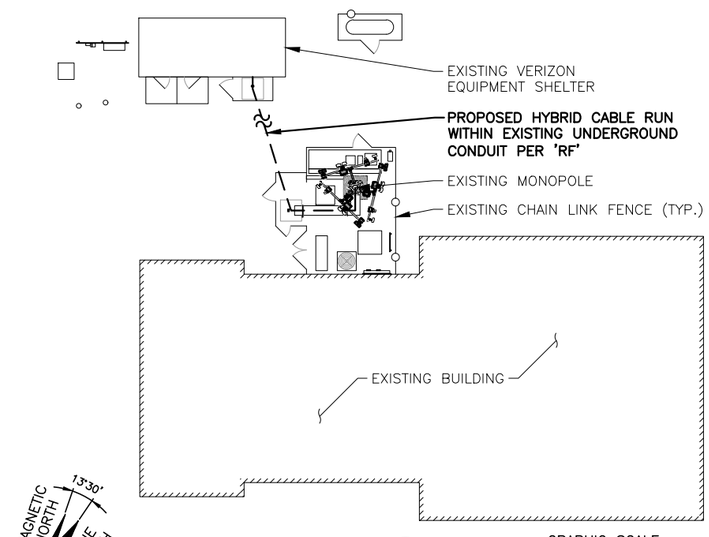
RF CABLE PLUMBING DIAGRAM (1 / RF-1)

SCALE: N.T.S

NOTE:

PROPOSED VZS01 ANTENNA SIZE AND WEIGHT ARE NOT TO EXCEED:

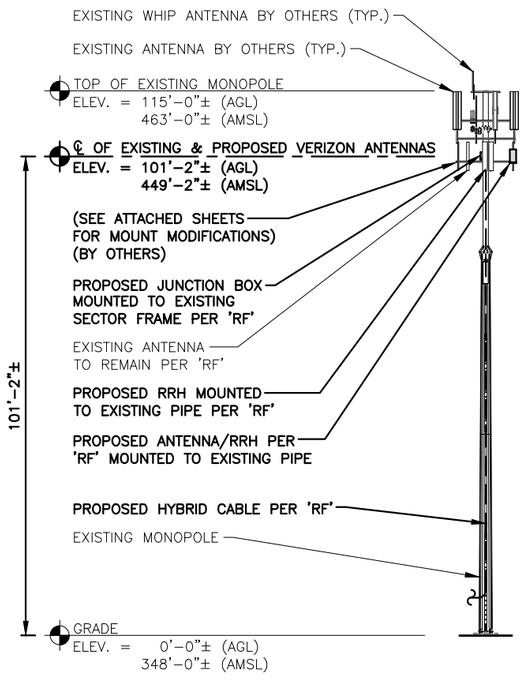
DIMENSIONS H35.12"xW16.06"xD5.51"
WEIGHT (INCLUDING INTEGRATED RRH) 87.1 LBS



COMPOUND PLAN (2 / RF-1)

22x34 SCALE: 1/16"=1'-0"
11x17 SCALE: 1/32"=1'-0"

GRAPHIC SCALE 0 8 16 32 48 FEET



ELEVATION (3 / RF-1)

22x34 SCALE: 1/16"=1'-0"
11x17 SCALE: 1/32"=1'-0"

GRAPHIC SCALE 0 8 16 32 48 FEET

PREPARED FOR: CELLCO PARTNERSHIP D.B.A.

verizon

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CHECKED BY: JX

APPROVED BY: DPH

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
0	02/03/21	ISSUED FOR CONSTRUCTION	SF

SITE NAME:
SIMSBURY 2 CT

SITE ADDRESS:
345 BUSHY HILL ROAD
SIMSBURY, CT 06070

SHEET TITLE
RF PLUMBING DIAGRAM & BILL OF MATERIALS

SHEET NUMBER
RF-1

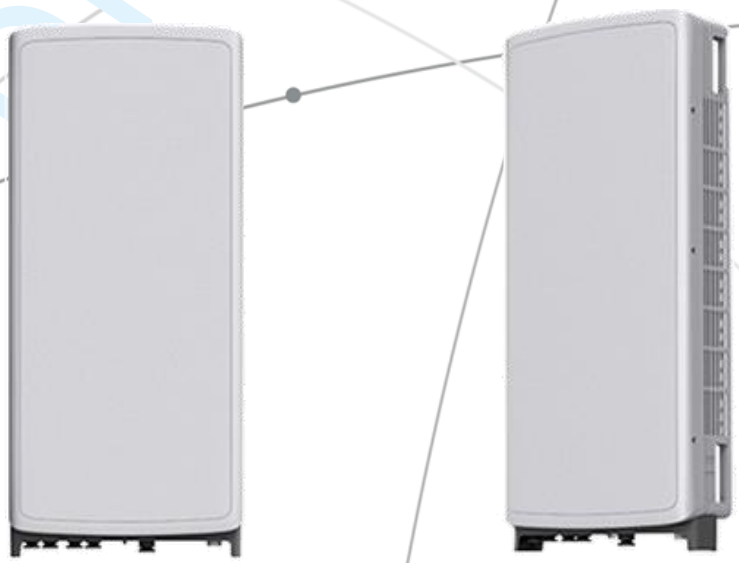
SAMSUNG

SAMSUNG C-Band 64T64R Massive MIMO

C-Band 64T64R Massive MIMO Radio for High Capacity and Wide Coverage

Samsung C-Band 64T64R Massive MIMO Radio enables mobile operators to increase coverage range, boost data speeds and ultimately offer enriched 5G experiences to users in the U.S..

Model Code : MT6407-77A

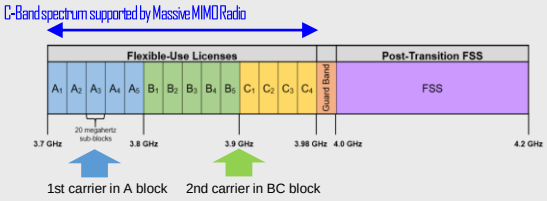


Points of Differentiation

Wide Bandwidth

Being able to support up to 2 CC carrier configuration, Samsung C-Band massive MIMO Radio supports 200 MHz bandwidth in the C-Band spectrum.

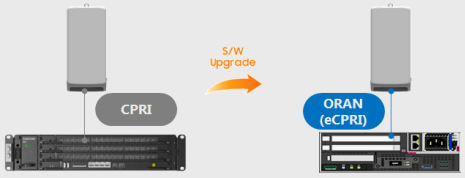
Samsung C-Band massive MIMO Radio uses C-Band 280 MHz spectrum at the same time, so it can cover all the bands the operator can be auctioned.



Future Proof Product

Samsung C-Band Massive MIMO radio supports eCPRI interface, thus, it can be used as O-RAN Massive MIMO Radio in the future. To provide O-RAN service, operators only need to update software since the hardware is already ready.

With the support of O-RAN, operators can reduce OPEX/CAPEX by increasing compatibility between equipment and get opportunity to design and develop their network with best –in-class solution that interoperate.



Enhanced Performance

C-Band massive MIMO Radio creates sharp beams and extends networks' coverage on the critical mid-band spectrum using a large number of antenna elements and high output power to boost data speeds.

This helps operators reduce their CAPEX as they now need less products to cover the same area than before.

Furthermore, as C-Band massive MIMO Radio supports MU-MIMO(Multi-user MIMO) , it enables increased user throughput by minimizing interference.

Well Matched Design

Samsung's C-Band Massive MIMO radio utilizes 64 antennas, supports up to 280MHz bandwidth, and delivers a 200W output power. despite the above advanced performance, the Radio has a compact size of 48L and 87.1lbs. This makes it easy to install the Radio.

It is designed to look solid and small, and in particular, the design with wrap around has a thinly looking effect so that it can be harmonized with the surrounding environment when installed.

Technical Specifications

Item	Specification
Tech	NR
Brand	n77
Frequency Band	3700 - 3980 MHz
EIRP	78.5dBm (53.0 dBm+25.5 dBi)
IBW/OBW	280 MHz / 200 MHz
Installation	Pole/Wall
Size/ Weight	16.06 x 35.12 x 5.51 inch (50.95L)/ 87.1lbs

SAMSUNG

About Samsung Electronics Co., Ltd.

Samsung inspires the world and shapes the future with transformative ideas and technologies. The company is redefining the worlds of TVs, smartphones, wearable devices, tablets, digital appliances, network systems, and memory, system LSI, foundry and LED solutions.

129 Samsung-ro, Yeongtong-gu, Suwon-si Gyeonggi-do, Korea

SAMSUNG

Dual-Band Radio Unit
700/850MHz (B13/B5)
RFV01U-D2A

Samsung's RFV01U-D2A is a compact remote Radio Unit (RU) designed for deployments that require flexibility in installation and rapid onlining, without compromising on coverage, capacity or operational expenses.

The RFV01U-D2A RU targets dual-band support across Band 13 (700MHz) and Band 5 (850MHz), making it an ideal product for broad coverage footprints across multiple common low-end, long-range frequencies.

The RU handles all Radio Frequency (RF) processing in a single, compact unit, and is designed to interface via CPRI with Samsung's CDU baseband offerings, in both distributed- and central-RAN configurations.

In addition to its minimal footprint and ease of installation, the RU is also designed to reduce cost of ownership through its integrated spectrum analyzer, which allows for remote RF monitoring, greatly reducing the need for on-site maintenance visits.

Features and Benefits

- Dual-band support for broad frequency coverage
- Minimal footprint reduces site costs
- Rapid, easy installation
- Flexibly deployable in any location
- Remote RF monitoring capability
- Convection cooled, silent operation

Key Technical Specifications

Duplex Type: FDD
Operating Frequencies:
B13: DL(746-756MHz)/UL(777-787MHz)
B5: DL(869-894MHz)/UL(824-849MHz)
Instantaneous Bandwidth: 10MHz(B13) + 25MHz(B5)
RF Chain: 4T4R/2T4R/2T2R
Output Power: Total 320W
DU-RU Interface: CPRI (10Gbps)
Dimensions: 380 x 380 x 207mm (29.9L)
Weight: 31.9kg
Input Power: -48V DC
Operating Temp.: -40 - 55°(w/o solar load)
Cooling: Natural convection

SAMSUNG

Dual-Band Radio Unit
AWS/PCS (B66/B2)
RFV01U-D1A

Samsung's RFV01U-D1A is a compact remote Radio Unit (RU) designed for deployments that require flexibility in installation and rapid onlining, without compromising on coverage, capacity or operational expenses.

The RFV01U-D1A RU targets dual-band support across Band 66 (AWS) and Band 2 (PCS), making it an ideal product for broad coverage footprints across multiple common mid-range frequencies.

The RU handles all Radio Frequency (RF) processing in a single, compact unit, and is designed to interface via CPRI with Samsung's CDU baseband offerings, in both distributed- and central-RAN configurations.

In addition to its minimal footprint and ease of installation, the RU is also designed to reduce cost of ownership through its integrated spectrum analyzer, which allows for remote RF monitoring, greatly reducing the need for on-site maintenance visits.

Features and Benefits

- Dual-band support for broad frequency coverage
- Minimal footprint reduces site costs
- Rapid, easy installation
- Flexibly deployable in any location
- Remote RF monitoring capability
- Convection cooled, silent operation
- Built-in Broadcast Auxiliary Services (BAS) filter ensures compliant AWS operation without impacting footprint

Key Technical Specifications

Duplex Type: FDD
Operating Frequencies:
    B66: DL(2,110-2,180MHz)/UL(1,710-1,780MHz)
    B2: DL(1,930-1,990MHz)/UL(1,850-1,910MHz)
Instantaneous Bandwidth:
    70MHz(B66) + 60MHz(B2)
RF Chain: 4T4R/2T4R/2T2R
Output Power: Total 320W
DU-RU Interface: CPRI (10Gbps)
Dimensions: 380 x 380 x 255mm (36.8L)
Weight: 38.3kg
Input Power: -48V DC
Operating Temp.: -40 - 55°(w/o solar load)
Cooling: Natural convection

ATTACHMENT 3

	General	Power	Density					
Site Name: Simsbury 2								
Tower Height: Verizon @ 100ft								
CARRIER	**# OF CHAN.**	**WATTS ERP**	**HEIGHT**	**CALC. POWER DENS**	**FREQ.**	**MAX. PERMISS. EXP.**	**FRACTION MPE**	**Total**
AT&T	2	500	90	880	0.0510	0.5867	0.87%	
AT&T	1	500	90	1900	0.0255	1.0000	0.25%	
AT&T	1	500	90	700	0.0255	0.4667	0.55%	
AT&T	1	500	90	1900	0.0255	1.0000	0.25%	
AT&T	1	500	90	2300	0.0255	1.0000	0.25%	
T-Mobile	8	157	77	1945	0.0896	1.0000	0.90%	
Simsbury Fire			85	453.1625			3.99%	
Simsbury Police			85	453.75			3.98%	
Farm. Valley Health			85	453.7875			3.98%	
Town Wide			85	453.55			3.99%	
VZW 700	4	697	100	0.0100	751	0.5007	2.00%	
VZW Cellular	4	825	100	0.0119	874	0.5827	2.04%	
VZW PCS	4	1563	100	0.0225	1975	1.0000	2.25%	
VZW AWS	4	1581	100	0.0227	2120	1.0000	2.27%	
VZW CBAND	4	6531	100	0.0940	3730.005	1.0000	9.40%	
								36.97%
* Source: Siting Council								

ATTACHMENT 4

STRUCTURAL ANALYSIS REPORT

For

SITE NUMBER: SIMSBURY 2 CT (CAOLE 2020)

345 Bushy Hill Road
Simsbury, CT 06070

Antennas Mounted on the Tower

Prepared for:

verizon

20 Alexander Drive
Wallingford CT 06492

Dated: January 28, 2021

Prepared by:

HUDSON Design Group LLC

45 Beechwood Drive
North Andover, MA 01845
(P) 978.557.5553 (F) 978.336.5586
www.hudsondesigngroupllc.com

SCOPE OF WORK:

Hudson Design Engineering, PLLC (HDG) has been authorized by Verizon to conduct a structural evaluation of the 115' Monopole supporting the proposed Verizon's antennas located at elevation 102' above the ground level.

This report represents this office's findings, conclusions and recommendations pertaining to the support of Verizon's existing and proposed antennas listed below.

Record drawings of the existing monopole were not available for our use. The following documents were used for our references:

- HDG Structural Analysis report dated by November 6, 2017.
- Tower Mapping report prepared by ProVertic dated October 2, 2020.
- Antenna mount analysis report prepared by Maser Consulting – Connecticut dated December 31, 2020.

CONCLUSION SUMMARY:

Based on our evaluation, we have determined that the existing monopole and foundation **are in conformance** with the ANSI/TIA-222-G Standard for the loading considered under the criteria listed in this report. The monopole structure is rated at **94.4 %** - (Pole Section – L2 at El. 80.5' to 106 Controlling).

HUDSON Design Group LLC

APPURTENANCES CONFIGURATION:

Tenant	Appurtenances	Elev.	Mount
	(1) 6' Omni	115'	T - Frame
	(1) DB404-B Dipole Antenna	115'	T - Frame
	(1) ANT220D3 Dipole Antenna	115'	T - Frame
	(1) DB201-P Plane Antenna	115'	T - Frame
	(6) EPBQ-654L8H8 Antennas	110'	Sector Frame
	(3) HPA65R-BU8AA Antennas	110'	Sector Frame
	(3) B2/B66A 8843 RRH's	110'	Sector Frame
	(3) B5/B12 4449 RRH's	110'	Sector Frame
	(3) B14 4478 RRH's	110'	Sector Frame
	(3) 4415 B25 RRH's	110'	Sector Frame
	(3) Surge Arrestors	110'	Sector Frame
Verizon	**(3) VZS01 Antennas**	102'	T – Frame w/ Reinforcement Kit**
Verizon	**(3) B2/B66A RRH-BR049 RRH's**	102'	T – Frame w/ Reinforcement Kit**
Verizon	**(3) B5/B13 RRH-BR04C RRH's**	102'	T – Frame w/ Reinforcement Kit**
Verizon	**(2) Junction Boxes**	102'	T – Frame w/ Reinforcement Kit**
Verizon	(6) SBNHH-1D65B Antennas	102'	T – Frame w/ Reinforcement Kit**
Verizon	(3) BXA-171063-12CF-EDIN2 Antennas	102'	T – Frame w/ Reinforcement Kit**
	(3) APX16DWV-16DWVS Antennas	78'	Tri-Bracket
	(3) ATM1900D-1CWA-TMA	78'	Tri-Bracket

Proposed Verizon Appurtenances shown in Bold.

****Mount Modification proposed by Maser Consulting – Connecticut dated December 30, 2020.***

VERIZON EXISTING/PROPOSED COAX CABLES:

Tenant	Coax Cables	Elev.	Mount
	(2) 1-5/8 Hybrid Cables	102'	Inside Monopole

Proposed Verizon Coax Cables shown in Bold.

HUDSON Design Group LLC

ANALYSIS RESULTS SUMMARY:

Component	Max. Stress Ratio	Elev. of Component (ft)	Pass/Fail	Comments
Pole Section – L1	13.5 %	106 - 115	PASS	
Pole Section – L2	**94.4 %**	80.5 - 106	PASS	**Controlling**
Pole Section – L3	29.2 %	80.0 - 80.5	PASS	
Pole Section – L4	77.1 %	62.8 – 80.0	PASS	
Pole Section – L5	33.9 %	42 - 62.8	PASS	
Pole Section – L6	71.7 %	19.75 - 42	PASS	
Pole Section – L7	47.7 %	8.25 - 19.75	PASS	
Pole Section – L8	36.4 %	3.0 - 8.25	PASS	
Pole Section – L9	50.9 %	0 - 3.0	PASS	
Bolts & Plate	52.7 %	106.0	PASS	
Anchor Bolts & Base Plate	80.7 %	0	PASS	

FOUNDATION COMPARISON SUMMARY:

	Stress Ratio	Pass/Fail	Comments
Bearing	69.2 %	PASS	
Overturning	**85.4 %**	PASS	**Controlling**
Shear	15.1 %	PASS	

HUDSON Design Group LLC

DESIGN CRITERIA:

1. EIA/TIA-222-G Structural Standards for Steel Antenna Towers and Antenna Supporting Structures

   County: Hartford
   Ultimate Wind Speed: 120 mph (3 second gust)
   Nominal Wind Speed: 93 mph
   Structural Class: II
   Exposure Category: B
   Topographic Category: 1
   Nominal Ice Thickness: 1 inch

2. Approximate height above grade to proposed antennas: 115'.

***Calculations and referenced documents are attached.**

ASSUMPTIONS:

1. The appurtenances configuration is as stated in this report. All antennas, coax cables and waveguide cables are assumed to be properly installed and supported as per the manufacturer's requirements.

2. The monopole and foundation are properly constructed and maintained. All structural members and their connections are assumed to be in good condition and are free from defects with no deterioration to its member capacities.

3. The support mounts and platforms are not analyzed and are considered adequate to support the loading. The analysis is limited to the primary support structure itself.

4. All prior structural modification, if any, are assumed to be as per the data supplied (if available), and installed properly.

SUPPORT RECOMMENDATIONS:

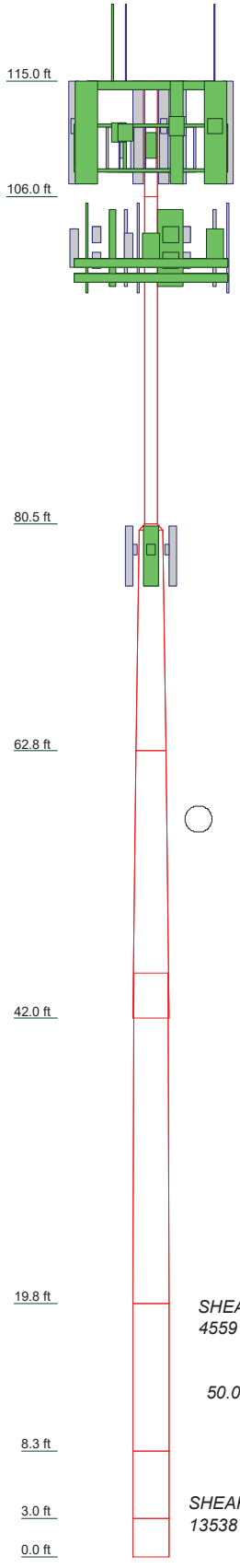
HDG recommends that the proposed antennas and RRHs be mounted on the existing T-frame w/ Reinforcement Kit supported by the monopole.

Photo 1: Photo illustrating the Tower with Appurtenances shown.

HUDSON
Design Group LLC

CALCULATIONS

Section	1	2	3	4	5	6	7	8	9
Length (ft)	9.00	25.50	0.50	17.20	20.80	25.75	11.50	5.25	3.00
Number of Sides	1	1	1	18	18	18	18	18	18
Thickness (in)	0.5600	0.6250	0.3758	0.1890	0.4000	0.2750	0.4590	0.6500	0.4730
Socket Length (ft)					3.50				
Top Dia (in)	12.7500	12.7500	12.7500	22.0000	27.5000	31.6654	33.4700	33.4700	33.4700
Bot Dia (in)	12.7500	12.7500	22.0000	27.5000	33.4700	33.4700	33.4700	33.4700	33.4700
Grade	A500-42	A500-42	A36	A36	A607-65	A607-65	A607-65	A607-65	A607-65
Weight (lb)	656.8	2065.8	374.8	862.3	2703.4	2469.8	1882.0	1209.6	505.7



ALL REACTIONS ARE FACTORED

AXIAL 49067 lb

SHEAR 4559 lb *MOMENT 456637 lb-ft*

TORQUE 548 lb-ft
50.0 mph WIND - 1.0000 in ICE

AXIAL 24652 lb

SHEAR 13538 lb *MOMENT 1245684 lb-ft*

TORQUE 1553 lb-ft
REACTIONS - 93.0 mph WIND

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Valmont 5' T-Arm (3)	115	B2/B66A RRH-BR049 RRH	102
Omni 2"x6'	115	B5/B13 RRH-BR04C RRH	102
DB404-B Dipole	115	Junction Box	102
DB201-P Omni	115	Sector Stabilizer Kit , SitePro1 P/N SFS-V	102
ANT220D3 Dipole	115	BXA-171063-12CF-EDIN2 w/Mounting Pipe	102
EPBQ-654L8H8-L2 w/Mounting Pipe	110	7'x2 1/2" Pipe Mount	102
B2/B66A 8843 RRH	110	Licensed Sub 6 Antenna w/Mounting Pipe	102
HPA65R-BU8A w/Mounting Pipe	110	B2/B66A RRH-BR049 RRH	102
B5/B12 4449 RRH	110	B5/B13 RRH-BR04C RRH	102
EPBQ-654L8H8-L2 w/Mounting Pipe	110	B5/B13 RRH-BR04C RRH	102
B14 4478 RRH	110	Junction Box	102
4415 B25 RRH	110	Sector Stabilizer Kit , SitePro1 P/N SFS-V	102
Squid Surge Arrestor	110	BXA-171063-12CF-EDIN2 w/Mounting Pipe	102
EPBQ-654L8H8-L2 w/Mounting Pipe	110	7'x2 1/2" Pipe Mount	102
B2/B66A 8843 RRH	110	Licensed Sub 6 Antenna w/Mounting Pipe	102
HPA65R-BU8A w/Mounting Pipe	110	B2/B66A RRH-BR049 RRH	102
B5/B12 4449 RRH	110	B5/B13 RRH-BR04C RRH	102
EPBQ-654L8H8-L2 w/Mounting Pipe	110	B5/B13 RRH-BR04C RRH	102
B14 4478 RRH	110	12' T- Arm	101.17
4415 B25 RRH	110	12' T- Arm	101.17
Squid Surge Arrestor	110	12' T- Arm	101.17
EPBQ-654L8H8-L2 w/Mounting Pipe	110	Valmont Unit-Tri Bracket	78
B2/B66A 8843 RRH	110	APX16DWV-16DWV-S w/ Mounting Pipe	78
HPA65R-BU8A w/Mounting Pipe	110	ATM1900D TMA	78
B5/B12 4449 RRH	110	APX16DWV-16DWV-S w/ Mounting Pipe	78
EPBQ-654L8H8-L2 w/Mounting Pipe	110	ATM1900D TMA	78
B14 4478 RRH	110	APX16DWV-16DWV-S w/ Mounting Pipe	78
4415 B25 RRH	110	ATM1900D TMA	78
Sabre 12' V-Boom	109.75		
Sabre 12' V-Boom	109.75		
Sabre 12' V-Boom	109.75		
Sector Stabilizer Kit , SitePro1 P/N SFS-V	102		
(2) SBNHH-1D65B w/Mounting Pipe	102		
BXA-171063-12CF-EDIN2 w/Mounting Pipe	102		
7'x2 1/2" Pipe Mount	102		
Licensed Sub 6 Antenna w/Mounting Pipe	102		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A500-42	42 ksi	58 ksi	A607-65	65 ksi	80 ksi
A36	36 ksi	58 ksi			

TOWER DESIGN NOTES

1. Tower is located in Hartford County, Connecticut.
2. Tower designed for Exposure B to the TIA-222-G Standard.
3. Tower designed for a 93.0 mph basic wind in accordance with the TIA-222-G Standard.
4. Tower is also designed for a 50.0 mph basic wind with 1.00 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60.0 mph wind.
6. Tower Structure Class II.
7. Topographic Category 1 with Crest Height of 0.00 ft
8. TOWER RATING: 94.4%

Hudson Design Group LLC
45 Beechwood Drive
North Andover, MA 01845
Phone: (978) 557-5553
FAX: (978) 336-5586

Job: ***SIMSBURY 2 CT***			
Project: ***115 ft Monopole***			
Client: VERIZON	Drawn by: RL		App'd:
Code: TIA-222-G	Date: 01/28/21		Scale: NTS
Path: W:\STRUCTURAL DEPARTMENT\ANALYSIS SOFTWARE\TnxTower\Tnx Projects\VERIZON\CT\Simsbury 2 CT\CAOLE 2020\Simsbury 2 CT.eri			Dwg No. E-1

Tower Input Data

The tower is a monopole.
This tower is designed using the TIA-222-G standard.
The following design criteria apply:

Tower is located in Hartford County, Connecticut.
Basic wind speed of 93.0 mph.
Structure Class II.
Exposure Category B.
Topographic Category 1.
Crest Height 0.00 ft.
Nominal ice thickness of 1.0000 in.
Ice thickness is considered to increase with height.
Ice density of 56.0 pcf.
A wind speed of 50.0 mph is used in combination with ice.
Temperature drop of 50.0 °F.
Deflections calculated using a wind speed of 60.0 mph.
A non-linear (P-delta) analysis was used.
Pressures are calculated at each section.
Stress ratio used in pole design is 1.
Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Tapered Pole Section Geometry

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L1	115.00-106.00	9.00	0.00	Round	12.7500	12.7500	0.5600		A500-42 (42 ksi)
L2	106.00-80.50	25.50	0.00	Round	12.7500	12.7500	0.6250		A500-42 (42 ksi)
L3	80.50-80.00	0.50	0.00	Round	12.7500	22.0000	6.3758		A36 (36 ksi)
L4	80.00-62.80	17.20	0.00	18	22.0000	27.5000	0.1890	0.7560	A607-65 (65 ksi)
L5	62.80-42.00	20.80	3.50	18	27.5000	33.4700	0.4000	1.6000	A607-65 (65 ksi)
L6	42.00-19.75	25.75	0.00	18	31.6654	33.4700	0.2750	1.1000	A607-65 (65 ksi)
L7	19.75-8.25	11.50	0.00	18	33.4700	33.4700	0.4590	1.8360	A607-65 (65 ksi)
L8	8.25-3.00	5.25	0.00	18	33.4700	33.4700	0.6500	2.6000	A607-65 (65 ksi)
L9	3.00-0.00	3.00		18	33.4700	33.4700	0.4730	1.8920	A607-65 (65 ksi)

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number		C_AA_A ft^2/ft	Weight plf
7/8" Coax Lines	B	No	Yes	Inside Pole	115.00 - 8.00	3	No Ice	0.00	0.30

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number		C_AA_A ft^2/ft	Weight plf
							1/2" Ice	0.00	0.30
							1" Ice	0.00	0.30
1 5/8 Cable	B	No	Yes	Inside Pole	115.00 - 8.00	1	No Ice	0.00	1.04
							1/2" Ice	0.00	1.04
							1" Ice	0.00	1.04
1/2 Cable	B	No	Yes	Inside Pole	115.00 - 8.00	1	No Ice	0.00	0.25
							1/2" Ice	0.00	0.25
							1" Ice	0.00	0.25
DC Cable	A	No	Yes	Inside Pole	110.00 - 8.00	6	No Ice	0.00	0.88
							1/2" Ice	0.00	0.88
							1" Ice	0.00	0.88
Fiber	A	No	Yes	Inside Pole	110.00 - 8.00	3	No Ice	0.00	0.48
							1/2" Ice	0.00	0.48
							1" Ice	0.00	0.48
1/2 Cable	C	No	Yes	Inside Pole	102.00 - 8.00	2	No Ice	0.00	0.25
							1/2" Ice	0.00	0.25
							1" Ice	0.00	0.25
1 5/8 Cable	C	No	Yes	Inside Pole	102.00 - 8.00	2	No Ice	0.00	1.04
							1/2" Ice	0.00	1.04
							1" Ice	0.00	1.04
7/8" Coax Lines	C	No	Yes	Inside Pole	78.00 - 8.00	6	No Ice	0.00	0.30
							1/2" Ice	0.00	0.30
							1" Ice	0.00	0.30

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
Valmont 5' T-Arm (3)	C	From Face	0.00	0.0000	115.00	No Ice	5.41	5.48	679.00
			0.00			1/2" Ice	6.43	6.46	745.00
			0.00			1" Ice	7.51	7.52	830.00
Omni 2"x6'	C	From Face	3.50	0.0000	115.00	No Ice	1.20	1.20	25.00
			3.00			1/2" Ice	1.80	1.80	34.39
			3.00			1" Ice	2.17	2.17	47.81
DB404-B Dipole	C	From Face	3.50	0.0000	115.00	No Ice	1.19	1.19	14.11
			-3.00			1/2" Ice	1.50	1.50	23.20
			3.00			1" Ice	1.81	1.81	35.73
DB201-P Omni	A	From Face	3.50	0.0000	115.00	No Ice	1.41	1.36	5.90
			3.00			1/2" Ice	1.57	1.52	20.37
			3.00			1" Ice	1.73	1.68	37.40
ANT220D3 Dipole	B	From Face	3.50	0.0000	115.00	No Ice	1.12	1.12	11.00
			3.00			1/2" Ice	1.48	1.48	19.64
			3.00			1" Ice	1.80	1.80	31.77
*********									
Sabre 12' V-Boom	C	From Face	0.00	0.0000	109.75	No Ice	9.12	5.23	462.00
			0.00			1/2" Ice	15.94	8.82	700.00
			0.00			1" Ice	22.76	12.41	938.00
EPBQ-654L8H8-L2 w/Mounting Pipe	C	From Face	3.50	0.0000	110.00	No Ice	18.09	8.93	126.20
			-5.00			1/2" Ice	18.72	10.35	240.55
			1.00			1" Ice	19.36	11.61	365.16
B2/B66A 8843 RRH	C	From Face	3.50	0.0000	110.00	No Ice	1.64	1.35	72.00
			-5.00			1/2" Ice	1.80	1.50	89.60

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
			1.50			1" Ice	1.97	1.65	109.91
HPA65R-BU8A w/Mounting Pipe	C	From Face	3.50 -2.00	0.0000	110.00	No Ice 1/2" Ice	11.23 11.85	9.94 11.37	83.20 170.99
			1.00			1" Ice	12.47	12.64	268.54
B5/B12 4449 RRH	C	From Face	3.50 -2.00	0.0000	110.00	No Ice 1/2" Ice	1.97 2.15	1.40 1.56	73.00 91.48
			1.50			1" Ice	2.33	1.72	112.77
EPBQ-654L8H8-L2 w/Mounting Pipe	C	From Face	3.50 5.00	0.0000	110.00	No Ice 1/2" Ice	18.09 18.72	8.93 10.35	126.20 240.55
			1.00			1" Ice	19.36	11.61	365.16
B14 4478 RRH	C	From Face	3.50 2.50	0.0000	110.00	No Ice 1/2" Ice	2.02 2.20	1.25 1.40	60.00 77.66
			1.00			1" Ice	2.39	1.56	98.08
4415 B25 RRH	C	From Face	3.50 2.00	0.0000	110.00	No Ice 1/2" Ice	1.84 2.01	0.82 0.94	46.00 60.07
			1.00			1" Ice	2.19	1.07	76.66
Squid Surge Arrestor	C	From Face	2.00 0.00	0.0000	110.00	No Ice 1/2" Ice	0.81 1.30	0.81 1.30	33.00 48.38
			0.00			1" Ice	1.48	1.48	66.11
Sabre 12' V-Boom	A	From Face	0.00 0.00	0.0000	109.75	No Ice 1/2" Ice	9.12 15.94	5.23 8.82	462.00 700.00
			0.00			1" Ice	22.76	12.41	938.00
EPBQ-654L8H8-L2 w/Mounting Pipe	A	From Face	3.50 -5.00	0.0000	110.00	No Ice 1/2" Ice	18.09 18.72	8.93 10.35	126.20 240.55
			1.00			1" Ice	19.36	11.61	365.16
B2/B66A 8843 RRH	A	From Face	3.50 -5.00	0.0000	110.00	No Ice 1/2" Ice	1.64 1.80	1.35 1.50	72.00 89.60
			1.50			1" Ice	1.97	1.65	109.91
HPA65R-BU8A w/Mounting Pipe	A	From Face	3.50 -2.00	0.0000	110.00	No Ice 1/2" Ice	11.23 11.85	9.94 11.37	83.20 170.99
			1.00			1" Ice	12.47	12.64	268.54
B5/B12 4449 RRH	A	From Face	3.50 -2.00	0.0000	110.00	No Ice 1/2" Ice	1.97 2.15	1.40 1.56	73.00 91.48
			1.50			1" Ice	2.33	1.72	112.77
EPBQ-654L8H8-L2 w/Mounting Pipe	A	From Face	3.50 5.00	0.0000	110.00	No Ice 1/2" Ice	18.09 18.72	8.93 10.35	126.20 240.55
			1.00			1" Ice	19.36	11.61	365.16
B14 4478 RRH	A	From Face	3.50 2.50	0.0000	110.00	No Ice 1/2" Ice	2.02 2.20	1.25 1.40	60.00 77.66
			1.00			1" Ice	2.39	1.56	98.08
4415 B25 RRH	A	From Face	3.50 2.00	0.0000	110.00	No Ice 1/2" Ice	1.84 2.01	0.82 0.94	46.00 60.07
			1.00			1" Ice	2.19	1.07	76.66
Squid Surge Arrestor	A	From Face	2.00 0.00	0.0000	110.00	No Ice 1/2" Ice	0.81 1.30	0.81 1.30	33.00 48.38
			0.00			1" Ice	1.48	1.48	66.11
Sabre 12' V-Boom	B	From Face	0.00 0.00	0.0000	109.75	No Ice 1/2" Ice	9.12 15.94	5.23 8.82	462.00 700.00
			0.00			1" Ice	22.76	12.41	938.00
EPBQ-654L8H8-L2 w/Mounting Pipe	B	From Face	3.50 -5.00	0.0000	110.00	No Ice 1/2" Ice	18.09 18.72	8.93 10.35	126.20 240.55
			1.00			1" Ice	19.36	11.61	365.16
B2/B66A 8843 RRH	B	From Face	3.50 -5.00	0.0000	110.00	No Ice 1/2" Ice	1.64 1.80	1.35 1.50	72.00 89.60
			1.50			1" Ice	1.97	1.65	109.91
HPA65R-BU8A w/Mounting Pipe	B	From Face	3.50 -2.00	0.0000	110.00	No Ice 1/2" Ice	11.23 11.85	9.94 11.37	83.20 170.99

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
			1.00			1" Ice	12.47	12.64	268.54
B5/B12 4449 RRH	B	From Face	3.50	0.0000	110.00	No Ice	1.97	1.40	73.00
			-2.00			1/2" Ice	2.15	1.56	91.48
			1.50			1" Ice	2.33	1.72	112.77
EPBQ-654L8H8-L2 w/Mounting Pipe	B	From Face	3.50	0.0000	110.00	No Ice	18.09	8.93	126.20
			5.00			1/2" Ice	18.72	10.35	240.55
			1.00			1" Ice	19.36	11.61	365.16
B14 4478 RRH	B	From Face	3.50	0.0000	110.00	No Ice	2.02	1.25	60.00
			2.50			1/2" Ice	2.20	1.40	77.66
			1.00			1" Ice	2.39	1.56	98.08
4415 B25 RRH	B	From Face	3.50	0.0000	110.00	No Ice	1.84	0.82	46.00
			2.00			1/2" Ice	2.01	0.94	60.07
			1.00			1" Ice	2.19	1.07	76.66
********									
12' T- Arm	C	From Face	0.00	0.0000	101.17	No Ice	4.20	1.10	150.00
			0.00			1/2" Ice	5.40	2.70	225.00
			0.00			1" Ice	6.60	4.30	300.00
Sector Stabilizer Kit , SitePro1 P/N SFS-V	C	From Face	0.00	0.0000	102.00	No Ice	2.84	2.67	66.00
			0.00			1/2" Ice	3.30	3.09	84.00
			-2.00			1" Ice	3.84	3.58	113.00
(2) SBNHH-1D65B w/Mounting Pipe	C	From Face	3.50	0.0000	102.00	No Ice	14.76	6.85	103.90
			-1.50			1/2" Ice	15.28	7.81	201.66
			0.00			1" Ice	15.81	8.64	308.02
BXA-171063-12CF-EDIN2 w/Mounting Pipe	C	From Face	3.50	0.0000	102.00	No Ice	4.80	5.05	34.70
			3.00			1/2" Ice	5.25	5.99	78.08
			0.00			1" Ice	5.71	6.81	128.68
7'x2 1/2" Pipe Mount	C	From Face	3.50	0.0000	102.00	No Ice	2.01	2.01	40.50
			5.00			1/2" Ice	2.59	2.59	55.31
			0.00			1" Ice	3.02	3.02	74.85
Licensed Sub 6 Antenna w/Mounting Pipe	C	From Face	3.50	0.0000	102.00	No Ice	5.43	3.27	109.00
			-5.00			1/2" Ice	5.97	3.99	154.17
			0.00			1" Ice	6.46	4.59	204.90
B2/B66A RRH-BR049 RRH	C	From Face	3.50	0.0000	102.00	No Ice	1.88	1.25	98.00
			-1.50			1/2" Ice	2.05	1.39	116.34
			-1.00			1" Ice	2.22	1.54	137.47
B5/B13 RRH-BR04C RRH	C	From Face	3.50	0.0000	102.00	No Ice	1.88	1.01	82.00
			-1.50			1/2" Ice	2.05	1.14	98.43
			1.00			1" Ice	2.22	1.28	117.53
Junction Box	C	From Face	1.50	90.0000	102.00	No Ice	3.78	2.51	32.00
			0.00			1/2" Ice	4.03	2.72	63.40
			0.00			1" Ice	4.29	2.94	98.56
12' T- Arm	A	From Face	0.00	0.0000	101.17	No Ice	4.20	1.10	150.00
			0.00			1/2" Ice	5.40	2.70	225.00
			0.00			1" Ice	6.60	4.30	300.00
Sector Stabilizer Kit , SitePro1 P/N SFS-V	A	From Face	0.00	0.0000	102.00	No Ice	2.84	2.67	66.00
			0.00			1/2" Ice	3.30	3.09	84.00
			-2.00			1" Ice	3.84	3.58	113.00
BXA-171063-12CF-EDIN2 w/Mounting Pipe	A	From Face	3.50	0.0000	102.00	No Ice	4.80	5.05	34.70
			3.00			1/2" Ice	5.25	5.99	78.08
			0.00			1" Ice	5.71	6.81	128.68
7'x2 1/2" Pipe Mount	A	From Face	3.50	0.0000	102.00	No Ice	2.01	2.01	40.50
			5.00			1/2" Ice	2.59	2.59	55.31
			0.00			1" Ice	3.02	3.02	74.85
Licensed Sub 6 Antenna w/Mounting Pipe	A	From Face	3.50	0.0000	102.00	No Ice	5.43	3.27	109.00
			-5.00			1/2" Ice	5.97	3.99	154.17
			0.00			1" Ice	6.46	4.59	204.90
B2/B66A RRH-BR049 RRH	A	From Face	3.50	0.0000	102.00	No Ice	1.88	1.25	98.00

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
			-1.50			1/2" Ice	2.05	1.39	116.34
			-1.00			1" Ice	2.22	1.54	137.47
B5/B13 RRH-BR04C RRH	A	From Face	3.50	0.0000	102.00	No Ice	1.88	1.01	82.00
			-1.50			1/2" Ice	2.05	1.14	98.43
			1.00			1" Ice	2.22	1.28	117.53
B5/B13 RRH-BR04C RRH	A	From Face	3.50	0.0000	102.00	No Ice	1.88	1.01	82.00
			-1.50			1/2" Ice	2.05	1.14	98.43
			1.00			1" Ice	2.22	1.28	117.53
Junction Box	A	From Face	1.50	90.0000	102.00	No Ice	3.78	2.51	32.00
			0.00			1/2" Ice	4.03	2.72	63.40
			0.00			1" Ice	4.29	2.94	98.56
12' T- Arm	B	From Face	0.00	0.0000	101.17	No Ice	4.20	1.10	150.00
			0.00			1/2" Ice	5.40	2.70	225.00
			0.00			1" Ice	6.60	4.30	300.00
Sector Stabilizer Kit , SitePro1 P/N SFS-V	B	From Face	0.00	0.0000	102.00	No Ice	2.84	2.67	66.00
			0.00			1/2" Ice	3.30	3.09	84.00
			-2.00			1" Ice	3.84	3.58	113.00
BXA-171063-12CF-EDIN2 w/Mounting Pipe	B	From Face	3.50	0.0000	102.00	No Ice	4.80	5.05	34.70
			3.00			1/2" Ice	5.25	5.99	78.08
			0.00			1" Ice	5.71	6.81	128.68
7'x2 1/2" Pipe Mount	B	From Face	3.50	0.0000	102.00	No Ice	2.01	2.01	40.50
			5.00			1/2" Ice	2.59	2.59	55.31
			0.00			1" Ice	3.02	3.02	74.85
Licensed Sub 6 Antenna w/Mounting Pipe	B	From Face	3.50	0.0000	102.00	No Ice	5.43	3.27	109.00
			-5.00			1/2" Ice	5.97	3.99	154.17
			0.00			1" Ice	6.46	4.59	204.90
B2/B66A RRH-BR049 RRH	B	From Face	3.50	0.0000	102.00	No Ice	1.88	1.25	98.00
			-1.50			1/2" Ice	2.05	1.39	116.34
			-1.00			1" Ice	2.22	1.54	137.47
B5/B13 RRH-BR04C RRH	B	From Face	3.50	0.0000	102.00	No Ice	1.88	1.01	82.00
			-1.50			1/2" Ice	2.05	1.14	98.43
			1.00			1" Ice	2.22	1.28	117.53
B5/B13 RRH-BR04C RRH	B	From Face	3.50	0.0000	102.00	No Ice	1.88	1.01	82.00
			-1.50			1/2" Ice	2.05	1.14	98.43
			1.00			1" Ice	2.22	1.28	117.53
**********									
Valmont Unit-Tri Bracket	C	From Face	0.00	0.0000	78.00	No Ice	1.75	1.75	290.00
			0.00			1/2" Ice	1.94	1.94	310.00
			0.00			1" Ice	2.13	2.13	330.00
APX16DWV-16DWV-S w/ Mounting Pipe	C	From Face	1.00	0.0000	78.00	No Ice	6.91	3.60	62.90
			0.00			1/2" Ice	7.39	4.44	112.44
			0.00			1" Ice	7.86	5.15	168.54
ATM1900D TMA	C	From Face	0.50	0.0000	78.00	No Ice	0.73	0.25	9.00
			0.00			1/2" Ice	0.84	0.32	14.29
			0.50			1" Ice	0.96	0.40	21.17
APX16DWV-16DWV-S w/ Mounting Pipe	A	From Face	1.00	0.0000	78.00	No Ice	6.91	3.60	62.90
			0.00			1/2" Ice	7.39	4.44	112.44
			0.00			1" Ice	7.86	5.15	168.54
ATM1900D TMA	A	From Face	0.50	0.0000	78.00	No Ice	0.73	0.25	9.00
			0.00			1/2" Ice	0.84	0.32	14.29
			0.50			1" Ice	0.96	0.40	21.17
APX16DWV-16DWV-S w/ Mounting Pipe	B	From Face	1.00	0.0000	78.00	No Ice	6.91	3.60	62.90
			0.00			1/2" Ice	7.39	4.44	112.44
			0.00			1" Ice	7.86	5.15	168.54
ATM1900D TMA	B	From Face	0.50	0.0000	78.00	No Ice	0.73	0.25	9.00
			0.00			1/2" Ice	0.84	0.32	14.29
			0.50			1" Ice	0.96	0.40	21.17

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.6 Wind 0 deg - No Ice
3	0.9 Dead+1.6 Wind 0 deg - No Ice
4	1.2 Dead+1.6 Wind 30 deg - No Ice
5	0.9 Dead+1.6 Wind 30 deg - No Ice
6	1.2 Dead+1.6 Wind 60 deg - No Ice
7	0.9 Dead+1.6 Wind 60 deg - No Ice
8	1.2 Dead+1.6 Wind 90 deg - No Ice
9	0.9 Dead+1.6 Wind 90 deg - No Ice
10	1.2 Dead+1.6 Wind 120 deg - No Ice
11	0.9 Dead+1.6 Wind 120 deg - No Ice
12	1.2 Dead+1.6 Wind 150 deg - No Ice
13	0.9 Dead+1.6 Wind 150 deg - No Ice
14	1.2 Dead+1.6 Wind 180 deg - No Ice
15	0.9 Dead+1.6 Wind 180 deg - No Ice
16	1.2 Dead+1.6 Wind 210 deg - No Ice
17	0.9 Dead+1.6 Wind 210 deg - No Ice
18	1.2 Dead+1.6 Wind 240 deg - No Ice
19	0.9 Dead+1.6 Wind 240 deg - No Ice
20	1.2 Dead+1.6 Wind 270 deg - No Ice
21	0.9 Dead+1.6 Wind 270 deg - No Ice
22	1.2 Dead+1.6 Wind 300 deg - No Ice
23	0.9 Dead+1.6 Wind 300 deg - No Ice
24	1.2 Dead+1.6 Wind 330 deg - No Ice
25	0.9 Dead+1.6 Wind 330 deg - No Ice
26	1.2 Dead+1.0 Ice+1.0 Temp
27	1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp
28	1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp
29	1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp
30	1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp
31	1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp
32	1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp
33	1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp
34	1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp
35	1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp
36	1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp
37	1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp
38	1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp
39	Dead+Wind 0 deg - Service
40	Dead+Wind 30 deg - Service
41	Dead+Wind 60 deg - Service
42	Dead+Wind 90 deg - Service
43	Dead+Wind 120 deg - Service
44	Dead+Wind 150 deg - Service
45	Dead+Wind 180 deg - Service
46	Dead+Wind 210 deg - Service
47	Dead+Wind 240 deg - Service
48	Dead+Wind 270 deg - Service
49	Dead+Wind 300 deg - Service
50	Dead+Wind 330 deg - Service

Tower Mast Reaction Summary

Load Combination	Vertical	$Shear_x$	$Shear_z$	Overturning Moment, M_x	Overturning Moment, M_z	Torque
	lb	lb	lb	lb-ft	lb-ft	lb-ft
Dead Only	20542.96	-0.00	0.00	996.65	91.96	-0.00
1.2 Dead+1.6 Wind 0 deg - No Ice	24651.55	19.48	-13537.69	-1243181.38	-1964.50	541.50
0.9 Dead+1.6 Wind 0 deg - No Ice	18488.66	19.48	-13537.69	-1224741.57	-1967.69	544.61
1.2 Dead+1.6 Wind 30 deg - No Ice	24651.55	6661.29	-11733.72	-1077532.30	-610480.50	1211.88
0.9 Dead+1.6 Wind 30 deg - No Ice	18488.66	6661.29	-11733.72	-1061588.27	-601305.66	1201.43
1.2 Dead+1.6 Wind 60 deg - No Ice	24651.55	11518.21	-6785.72	-622832.81	-1055439.26	1553.33
0.9 Dead+1.6 Wind 60 deg - No Ice	18488.66	11518.21	-6785.72	-613747.18	-1039547.98	1532.23
1.2 Dead+1.6 Wind 90 deg - No Ice	24651.55	13288.84	-19.48	-859.86	-1217571.55	1472.66
0.9 Dead+1.6 Wind 90 deg - No Ice	18488.66	13288.84	-19.48	-1163.30	-1199229.44	1446.71
1.2 Dead+1.6 Wind 120 deg - No Ice	24651.55	11498.73	6751.97	621689.83	-1053374.48	995.79
0.9 Dead+1.6 Wind 120 deg - No Ice	18488.66	11498.73	6751.97	611985.64	-1037509.84	972.00
1.2 Dead+1.6 Wind 150 deg - No Ice	24651.55	6627.55	11714.24	1077944.15	-606878.70	256.93
0.9 Dead+1.6 Wind 150 deg - No Ice	18488.66	6627.55	11714.24	1061352.60	-597754.44	241.55
1.2 Dead+1.6 Wind 180 deg - No Ice	24651.55	-19.48	13537.69	1245682.37	2220.92	-544.44
0.9 Dead+1.6 Wind 180 deg - No Ice	18488.66	-19.48	13537.69	1226560.87	2153.40	-547.49
1.2 Dead+1.6 Wind 210 deg - No Ice	24651.55	-6661.29	11733.72	1080013.56	610746.55	-1198.95
0.9 Dead+1.6 Wind 210 deg - No Ice	18488.66	-6661.29	11733.72	1063393.96	601498.22	-1188.87
1.2 Dead+1.6 Wind 240 deg - No Ice	24651.55	-11518.21	6785.72	625296.57	1055692.58	-1537.43
0.9 Dead+1.6 Wind 240 deg - No Ice	18488.66	-11518.21	6785.72	615540.39	1039731.46	-1516.75
1.2 Dead+1.6 Wind 270 deg - No Ice	24651.55	-13288.84	19.48	3325.85	1217802.49	-1469.65
0.9 Dead+1.6 Wind 270 deg - No Ice	18488.66	-13288.84	19.48	2958.08	1199396.99	-1443.78
1.2 Dead+1.6 Wind 300 deg - No Ice	24651.55	-11498.73	-6751.97	-619204.11	1053595.79	-1008.64
0.9 Dead+1.6 Wind 300 deg - No Ice	18488.66	-11498.73	-6751.97	-610176.79	1037670.53	-984.52
1.2 Dead+1.6 Wind 330 deg - No Ice	24651.55	-6627.55	-11714.24	-1075440.93	607112.76	-272.77
0.9 Dead+1.6 Wind 330 deg - No Ice	18488.66	-6627.55	-11714.24	-1059531.27	597924.22	-256.98
1.2 Dead+1.0 Ice+1.0 Temp	49066.59	0.00	0.03	5035.34	-256.37	0.21
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	49066.59	3.96	-4559.13	-446484.68	-728.29	120.48
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	49066.59	2265.74	-3950.27	-386230.35	-224375.48	378.45
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	49066.59	3920.42	-2282.98	-221121.64	-387973.55	534.84
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	49066.59	4524.66	-3.96	4598.87	-447679.58	547.68

Load Combination	Vertical	$Shear_x$	$Shear_z$	Overturning Moment, M_x	Overturning Moment, M_z	Torque
	lb	lb	lb	lb-ft	lb-ft	lb-ft
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	49066.59	3916.46	2276.11	230448.95	-387505.78	413.76
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	49066.59	2258.88	3946.31	395908.73	-223561.48	169.25
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	49066.59	-3.96	4559.13	456637.39	217.07	-120.24
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	49066.59	-2265.74	3950.27	396378.57	223867.38	-377.38
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	49066.59	-3920.42	2282.98	231264.96	387462.80	-533.60
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	49066.59	-4524.66	3.97	5544.09	447163.06	-547.07
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	49066.59	-3916.46	-2276.11	-220301.00	386986.12	-413.96
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	49066.59	-2258.88	-3946.31	-385755.90	223044.47	-169.64
Dead+Wind 0 deg - Service	20542.96	4.53	-3153.77	-286471.87	-387.26	128.98
Dead+Wind 30 deg - Service	20542.96	1551.85	-2733.52	-248195.90	-140975.99	284.05
Dead+Wind 60 deg - Service	20542.96	2683.35	-1580.81	-143139.93	-243765.66	362.75
Dead+Wind 90 deg - Service	20542.96	3095.85	-4.53	547.32	-281213.20	343.95
Dead+Wind 120 deg - Service	20542.96	2678.82	1572.96	144364.44	-243283.57	232.92
Dead+Wind 150 deg - Service	20542.96	1544.00	2728.98	249774.79	-140140.29	59.73
Dead+Wind 180 deg - Service	20542.96	-4.53	3153.78	288533.95	578.64	-129.14
Dead+Wind 210 deg - Service	20542.96	-1551.85	2733.52	250257.10	141167.79	-283.36
Dead+Wind 240 deg - Service	20542.96	-2683.35	1580.81	145200.35	243956.90	-361.91
Dead+Wind 270 deg - Service	20542.96	-3095.85	4.53	1513.20	281403.44	-343.79
Dead+Wind 300 deg - Service	20542.96	-2678.82	-1572.96	-142303.05	243473.39	-233.61
Dead+Wind 330 deg - Service	20542.96	-1544.00	-2728.98	-247712.62	140330.68	-60.58

Solution Summary

	Sum of Applied Forces			Sum of Reactions			
Load Comb.	PX	PY	PZ	PX	PY	PZ	% Error
	lb	lb	lb	lb	lb	lb	
1	0.00	-20542.96	0.00	0.00	20542.96	-0.00	0.000%
2	19.48	-24651.55	-13537.69	-19.48	24651.55	13537.69	0.000%
3	19.48	-18488.66	-13537.69	-19.48	18488.66	13537.69	0.000%
4	6661.29	-24651.55	-11733.72	-6661.29	24651.55	11733.72	0.000%
5	6661.29	-18488.66	-11733.72	-6661.29	18488.66	11733.72	0.000%
6	11518.21	-24651.55	-6785.72	-11518.21	24651.55	6785.72	0.000%
7	11518.21	-18488.66	-6785.72	-11518.21	18488.66	6785.72	0.000%
8	13288.84	-24651.55	-19.48	-13288.84	24651.55	19.48	0.000%
9	13288.84	-18488.66	-19.48	-13288.84	18488.66	19.48	0.000%
10	11498.73	-24651.55	6751.97	-11498.73	24651.55	-6751.97	0.000%
11	11498.73	-18488.66	6751.97	-11498.73	18488.66	-6751.97	0.000%
12	6627.55	-24651.55	11714.24	-6627.55	24651.55	-11714.24	0.000%
13	6627.55	-18488.66	11714.24	-6627.55	18488.66	-11714.24	0.000%
14	-19.48	-24651.55	13537.69	19.48	24651.55	-13537.69	0.000%
15	-19.48	-18488.66	13537.69	19.48	18488.66	-13537.69	0.000%
16	-6661.29	-24651.55	11733.72	6661.29	24651.55	-11733.72	0.000%
17	-6661.29	-18488.66	11733.72	6661.29	18488.66	-11733.72	0.000%
18	-11518.21	-24651.55	6785.72	11518.21	24651.55	-6785.72	0.000%
19	-11518.21	-18488.66	6785.72	11518.21	18488.66	-6785.72	0.000%
20	-13288.84	-24651.55	19.48	13288.84	24651.55	-19.48	0.000%
21	-13288.84	-18488.66	19.48	13288.84	18488.66	-19.48	0.000%
22	-11498.73	-24651.55	-6751.97	11498.73	24651.55	6751.97	0.000%
23	-11498.73	-18488.66	-6751.97	11498.73	18488.66	6751.97	0.000%
24	-6627.55	-24651.55	-11714.24	6627.55	24651.55	11714.24	0.000%

	Sum of Applied Forces			Sum of Reactions			
Load Comb.	PX lb	PY lb	PZ lb	PX lb	PY lb	PZ lb	% Error
25	-6627.55	-18488.66	-11714.24	6627.55	18488.66	11714.24	0.000%
26	0.00	-49066.59	0.00	-0.00	49066.59	-0.03	0.000%
27	3.96	-49066.59	-4559.08	-3.96	49066.59	4559.13	0.000%
28	2265.74	-49066.59	-3950.26	-2265.74	49066.59	3950.27	0.000%
29	3920.41	-49066.59	-2282.97	-3920.42	49066.59	2282.98	0.000%
30	4524.61	-49066.59	-3.96	-4524.66	49066.59	3.96	0.000%
31	3916.45	-49066.59	2276.11	-3916.46	49066.59	-2276.11	0.000%
32	2258.87	-49066.59	3946.30	-2258.88	49066.59	-3946.31	0.000%
33	-3.96	-49066.59	4559.08	3.96	49066.59	-4559.13	0.000%
34	-2265.74	-49066.59	3950.26	2265.74	49066.59	-3950.27	0.000%
35	-3920.41	-49066.59	2282.97	3920.42	49066.59	-2282.98	0.000%
36	-4524.61	-49066.59	3.96	4524.66	49066.59	-3.97	0.000%
37	-3916.45	-49066.59	-2276.11	3916.46	49066.59	2276.11	0.000%
38	-2258.87	-49066.59	-3946.30	2258.88	49066.59	3946.31	0.000%
39	4.53	-20542.96	-3153.77	-4.53	20542.96	3153.77	0.000%
40	1551.85	-20542.96	-2733.52	-1551.85	20542.96	2733.52	0.000%
41	2683.35	-20542.96	-1580.81	-2683.35	20542.96	1580.81	0.000%
42	3095.85	-20542.96	-4.53	-3095.85	20542.96	4.53	0.000%
43	2678.82	-20542.96	1572.96	-2678.82	20542.96	-1572.96	0.000%
44	1544.00	-20542.96	2728.98	-1544.00	20542.96	-2728.98	0.000%
45	-4.53	-20542.96	3153.77	4.53	20542.96	-3153.78	0.000%
46	-1551.85	-20542.96	2733.52	1551.85	20542.96	-2733.52	0.000%
47	-2683.35	-20542.96	1580.81	2683.35	20542.96	-1580.81	0.000%
48	-3095.85	-20542.96	4.53	3095.85	20542.96	-4.53	0.000%
49	-2678.82	-20542.96	-1572.96	2678.82	20542.96	1572.96	0.000%
50	-1544.00	-20542.96	-2728.98	1544.00	20542.96	2728.98	0.000%

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	115 - 106	18.7898	45	1.6503	0.0108
L2	106 - 80.5	15.6889	45	1.6321	0.0103
L3	80.5 - 80	8.0622	45	1.0699	0.0038
L4	80 - 62.8	7.9503	45	1.0691	0.0038
L5	62.8 - 42	4.7819	45	0.6996	0.0018
L6	45.5 - 19.75	2.5321	45	0.5460	0.0012
L7	19.75 - 8.25	0.4155	45	0.2006	0.0004
L8	8.25 - 3	0.0747	45	0.0795	0.0001
L9	3 - 0	0.0112	45	0.0355	0.0001

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
115.00	Valmont 5' T-Arm (3)	45	18.7898	1.6503	0.0108	22959
110.00	EPBQ-654L8H8-L2 w/Mounting Pipe	45	17.0622	1.6568	0.0107	22959
109.75	Sabre 12' V-Boom	45	16.9761	1.6563	0.0107	21823
102.00	Sector Stabilizer Kit , SitePro1 P/N SFS-V	45	14.3325	1.5628	0.0094	5796
101.17	12' T- Arm	45	14.0546	1.5436	0.0092	5209
78.00	Valmont Unit-Tri Bracket	45	7.5155	1.0563	0.0038	2257

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
L1	115 - 106	Pole	TP12.75x12.75x0.56	1	-4823.93	810650.00	13.6	Pass
L2	106 - 80.5	Pole	TP12.75x12.75x0.625	2	-10099.90	899919.00	94.4	Pass
L3	80.5 - 80	Pole	TP22x12.75x6.3758	3	-10119.20	4136710.00	29.2	Pass
L4	80 - 62.8	Pole	TP27.5x22x0.189	4	-12672.90	1081570.00	77.1	Pass
L5	62.8 - 42	Pole	TP33.47x27.5x0.4	5	-15697.10	3024570.00	33.9	Pass
L6	42 - 19.75	Pole	TP33.47x31.6654x0.275	6	-19945.50	2041190.00	71.7	Pass
L7	19.75 - 8.25	Pole	TP33.47x33.47x0.459	7	-22504.10	3573040.00	47.7	Pass
L8	8.25 - 3	Pole	TP33.47x33.47x0.65	8	-24004.20	5030580.00	36.4	Pass
L9	3 - 0	Pole	TP33.47x33.47x0.473	9	-24645.40	3680460.00	50.9	Pass
							Summary	
						Pole (L2)	94.4	Pass
						RATING =	**94.4**	**Pass**

Stiffened or Unstiffened, Exterior Flange Plate - Any Bolt Material TIA Rev G

Site Data

BU#: *0*
Site Name: *SIMSBURY 2 CT*
App #: *0*

Reactions		
Mu	33.97	ft-kips
Axial, Pu:	4.82	kips
Shear, Vu:	6.47	kips
Elevation:	106	feet

Bolt Threads:
X-Excluded
φVn=φ(0.55*Ab*Fu)
φ=0.75, φ*Vn (kips):
9.72

Pole Manufacturer:	Other

If No stiffeners, Criteria: TIA G <-Only Applcable to Unstiffened Cases

Bolt Data			
Qty:	9		
Diameter (in.):	0.5	Bolt Fu:	120
Bolt Material:	A325	Bolt Fy:	92
N/A:	100	<-- Disregard	
N/A:	75	<-- Disregard	
Circle (in.):	25		

Plate Data		
Diam:	28	in
Thick, t:	1.5	in
Grade (Fy):	36	ksi
Strength, Fu:	58	ksi
Single-Rod B-eff:	4.45	in

Stiffener Data (Welding at Both Sides)		
Config:	0	*
Weld Type:		
Groove Depth:		<-- Disregard
Groove Angle:		<-- Disregard
Fillet H. Weld:		in
Fillet V. Weld:		in
Width:		in
Height:		in
Thick:		in
Notch:		in
Grade:		ksi
Weld str.:		ksi

Pole Data		
Diam:	12.75	in
Thick:	0.56	in
Grade:	42	ksi
# of Sides:	0	"0" IF Round
Fu	58	ksi
Reinf. Fillet Weld	0	"0" if None

Flange Bolt Results

			Non-Rigid
Bolt Tension Capacity, φ*Tn,**B1**:	12.78	kips	φ*Tn
Adjusted φ*Tn (due to Vu=Vu/Qty), **B**:	12.75	kips	φTn[(1-(Vu/φVn)^2]^0.5
Max Bolt directly applied Tu:	6.71	Kips	
Min. PL "tc" for **B** cap. **w/o** Pry:	1.135	in	
Min PL "treq" for actual **T w/ Pry**:	0.705	in	
Min PL "t1" for actual **T w/o Pry**:	0.824	in	
T allowable w/o Prying:	12.78	kips	α'<0 case
Prying Force, q:	0.00	kips	
Total Bolt Tension=Tu+q:	6.71	kips	
Non-Prying Bolt Stress Ratio, Tu/B:	52.7%	**Pass**	

Exterior Flange Plate Results Flexural Check

			Non-Rigid
Compression Side Plate Stress:	7.2	ksi	TIA G
Allowable Plate Stress:	32.4	ksi	φ*Fy
Compression Plate Stress Ratio:	22.1%	**Pass**	Comp. Y.L. Length:
No Prying			21.50
Tension Side Stress Ratio, (treq/t)^2:	22.1%	**Pass**	

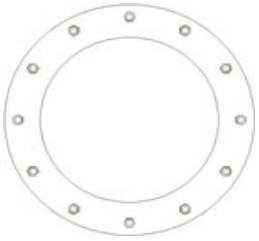
n/a

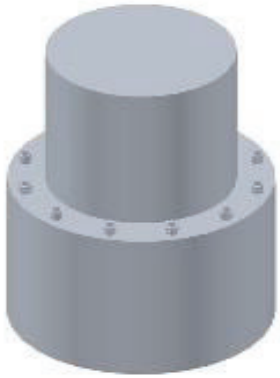
Stiffener Results

Horizontal Weld :	n/a
Vertical Weld:	n/a
Plate Flex+Shear, fb/Fb+(fv/Fv)^2:	n/a
Plate Tension+Shear, ft/Ft+(fv/Fv)^2:	n/a
Plate Comp. (AISC Bracket):	n/a

Pole Results

Pole Punching Shear Check: n/a





* 0 = none, 1 = every bolt, 2 = every 2 bolts, 3 = 2 per bolt

** Note: for complete joint penetration groove welds the groove depth must be exactly 1/2 the stiffener thickness for calculation purposes

Stiffened or Unstiffened, Exterior Flange Plate - Any Bolt Material TIA Rev G

Site Data

BU#: *0*
Site Name: *SIMSBURY 2 CT*
App #: *0*

Reactions		
Mu	33.97	ft-kips
Axial, Pu:	4.82	kips
Shear, Vu:	6.47	kips
Elevation:	106	feet

Bolt Threads:
X-Excluded
φVn=φ(0.55*Ab*Fu)
φ=0.75, φ*Vn (kips):
9.72

Pole Manufacturer:	Other

If No stiffeners, Criteria:	TIA G	<-Only Applcable to Unstiffened Cases

Bolt Data			
Qty:	9		
Diameter (in.):	0.5	Bolt Fu:	120
Bolt Material:	A325	Bolt Fy:	92
N/A:	100	<-- Disregard	
N/A:	75	<-- Disregard	
Circle (in.):	25		

Plate Data		
Diam:	28	in
Thick, t:	1.5	in
Grade (Fy):	36	ksi
Strength, Fu:	58	ksi
Single-Rod B-eff:	4.45	in

Stiffener Data (Welding at Both Sides)		
Config:	0	*
Weld Type:		
Groove Depth:		<-- Disregard
Groove Angle:		<-- Disregard
Fillet H. Weld:		in
Fillet V. Weld:		in
Width:		in
Height:		in
Thick:		in
Notch:		in
Grade:		ksi
Weld str.:		ksi

Pole Data		
Diam:	12.75	in
Thick:	0.625	in
Grade:	42	ksi
# of Sides:	0	"0" IF Round
Fu	58	ksi
Reinf. Fillet Weld	0	"0" if None

Flange Bolt Results

Bolt Tension Capacity, φ*Tn,**B1**:	12.78	kips	
Adjusted φ*Tn (due to Vu=Vu/Qty), **B**:	12.75	kips	
Max Bolt directly applied Tu:	6.71	Kips	
Min. PL "tc" for **B** cap. **w/o** Pry:	1.135	in	
Min PL "treq" for actual **T w/ Pry**:	0.705	in	
Min PL "t1" for actual **T w/o Pry**:	0.824	in	
T allowable w/o Prying:	12.78	kips	α'<0 case
Prying Force, q:	0.00	kips	
Total Bolt Tension=Tu+q:	6.71	kips	
Non-Prying Bolt Stress Ratio, Tu/B:	52.7%	**Pass**	

Non-Rigid
φ*Tn
φTn[(1-(Vu/φVn)^2]^0.5

Exterior Flange Plate Results Flexural Check

Compression Side Plate Stress:	7.2	ksi	
Allowable Plate Stress:	32.4	ksi	
Compression Plate Stress Ratio:	22.1%	**Pass**	
No Prying			
Tension Side Stress Ratio, (treq/t)^2:	22.1%	**Pass**	

Non-Rigid
TIA G
φ*Fy
Comp. Y.L. Length:
21.50

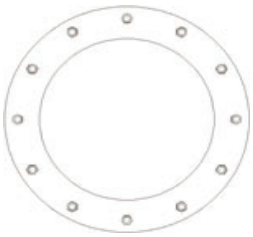
n/a

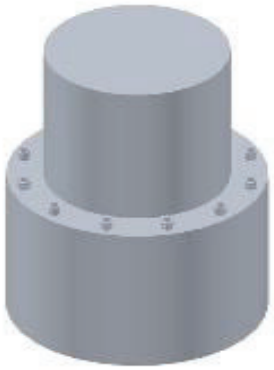
Stiffener Results

Horizontal Weld :	n/a
Vertical Weld:	n/a
Plate Flex+Shear, fb/Fb+(fv/Fv)^2:	n/a
Plate Tension+Shear, ft/Ft+(fv/Fv)^2:	n/a
Plate Comp. (AISC Bracket):	n/a

Pole Results

Pole Punching Shear Check: n/a





* 0 = none, 1 = every bolt, 2 = every 2 bolts, 3 = 2 per bolt

** Note: for complete joint penetration groove welds the groove depth must be exactly 1/2 the stiffener thickness for calculation purposes

Stiffened or Unstiffened, Exterior Flange Plate - Any Bolt Material TIA Rev G

Site Data

BU#: *0*
Site Name: *SIMSBURY 2 CT*
App #: *0*

Reactions		
Mu	274.98	ft-kips
Axial, Pu:	10.57	kips
Shear, Vu:	9.97	kips
Elevation:	80	feet

Bolt Threads:
X-Excluded
φVn=φ(0.55*Ab*Fu)
φ=0.75, φ*Vn (kips):
136.07

Pole Manufacturer:	Other

If No stiffeners, Criteria: TIA G <-Only Applcable to Unstiffened Cases

Bolt Data				
Qty:	12			
Diameter (in.):	2	Bolt Fu:	105	
Bolt Material:	A325	Bolt Fy:	81	
N/A:	100	<-- Disregard		
N/A:	75	<-- Disregard		
Circle (in.):	25			

Plate Data		
Diam:	32	in
Thick, t:	1.5	in
Grade (Fy):	36	ksi
Strength, Fu:	58	ksi
Single-Rod B-eff:	5.76	in

Stiffener Data (Welding at Both Sides)		
Config:	0	*
Weld Type:		
Groove Depth:		<-- Disregard
Groove Angle:		<-- Disregard
Fillet H. Weld:		in
Fillet V. Weld:		in
Width:		in
Height:		in
Thick:		in
Notch:		in
Grade:		ksi
Weld str.:		ksi

Pole Data		
Diam:	22	in
Thick:	6.3758	in
Grade:	36	ksi
# of Sides:	0	"0" IF Round
Fu	58	ksi
Reinf. Fillet Weld	0	"0" if None

Flange Bolt Results

			Non-Rigid
Bolt Tension Capacity, φ*Tn,**B1**:	196.88	kips	φ*Tn
Adjusted φ*Tn (due to Vu=Vu/Qty), **B**:	196.87	kips	φTn[(1-(Vu/φVn)^2]^0.5
Max Bolt directly applied Tu:	43.12	Kips	
Min. PL "tc" for **B** cap. **w/o** Pry:	1.144	in	
Min PL "treq" for actual **T w/ Pry**:	0.418	in	
Min PL "t1" for actual **T w/o Pry**:	0.535	in	
T allowable w/o Prying:	196.88	kips	α'<0 case
Prying Force, q:	0.00	kips	
Total Bolt Tension=Tu+q:	43.12	kips	
Non-Prying Bolt Stress Ratio, Tu/B:	21.9%	**Pass**	

Exterior Flange Plate Results Flexural Check

			Non-Rigid
Compression Side Plate Stress:	14.0	ksi	TIA G
Allowable Plate Stress:	32.4	ksi	φ*Fy
Compression Plate Stress Ratio:	43.1%	**Pass**	Comp. Y.L. Length:
No Prying			11.87
Tension Side Stress Ratio, (treq/t)^2:	7.8%	**Pass**	

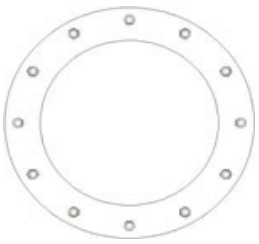
n/a

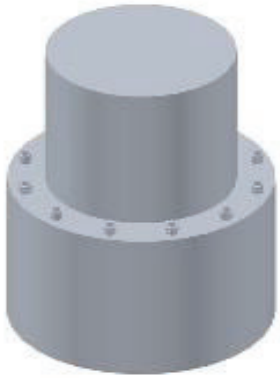
Stiffener Results

Horizontal Weld :	n/a
Vertical Weld:	n/a
Plate Flex+Shear, fb/Fb+(fv/Fv)^2:	n/a
Plate Tension+Shear, ft/Ft+(fv/Fv)^2:	n/a
Plate Comp. (AISC Bracket):	n/a

Pole Results

Pole Punching Shear Check: n/a





* 0 = none, 1 = every bolt, 2 = every 2 bolts, 3 = 2 per bolt

** Note: for complete joint penetration groove welds the groove depth must be exactly 1/2 the stiffener thickness for calculation purposes

Stiffened or Unstiffened, Exterior Flange Plate - Any Bolt Material TIA Rev G

Site Data

BU#: *0*
Site Name: *SIMSBURY 2 CT*
App #: *0*

Reactions		
Mu	274.98	ft-kips
Axial, Pu:	10.57	kips
Shear, Vu:	9.97	kips
Elevation:	80	feet

Bolt Threads:
X-Excluded
φVn=φ(0.55*Ab*Fu)
φ=0.75, φ*Vn (kips):
136.07

Pole Manufacturer:	Other

If No stiffeners, Criteria: TIA G <-Only Applcable to Unstiffened Cases

Bolt Data			
Qty:	12		
Diameter (in.):	2	Bolt Fu:	105
Bolt Material:	A325	Bolt Fy:	81
N/A:	100	<-- Disregard	
N/A:	75	<-- Disregard	
Circle (in.):	25		

Plate Data		
Diam:	32	in
Thick, t:	1.5	in
Grade (Fy):	36	ksi
Strength, Fu:	58	ksi
Single-Rod B-eff:	5.82	in

Stiffener Data (Welding at Both Sides)		
Config:	0	*
Weld Type:		
Groove Depth:		<-- Disregard
Groove Angle:		<-- Disregard
Fillet H. Weld:		in
Fillet V. Weld:		in
Width:		in
Height:		in
Thick:		in
Notch:		in
Grade:		ksi
Weld str.:		ksi

Pole Data		
Diam:	22	in
Thick:	0.189	in
Grade:	65	ksi
# of Sides:	18	"0" IF Round
Fu	80	ksi
Reinf. Fillet Weld	0	"0" if None

Flange Bolt Results

Bolt Tension Capacity, φ*Tn,**B1**:	196.88	kips	Non-Rigid
Adjusted φ*Tn (due to Vu=Vu/Qty), **B**:	196.87	kips	φ*Tn
Max Bolt directly applied Tu:	43.12	Kips	φTn[(1-(Vu/φVn)^2]^0.5
Min. PL "tc" for **B** cap. **w/o** Pry:	1.144	in	
Min PL "treq" for actual **T w/ Pry**:	0.418	in	
Min PL "t1" for actual **T w/o Pry**:	0.535	in	
T allowable w/o Prying:	196.88	kips	α'<0 case
Prying Force, q:	0.00	kips	
Total Bolt Tension=Tu+q:	43.12	kips	
Non-Prying Bolt Stress Ratio, Tu/B:	21.9%	**Pass**	

Exterior Flange Plate Results

	Flexural Check		Non-Rigid
Compression Side Plate Stress:	14.0	ksi	TIA G
Allowable Plate Stress:	32.4	ksi	φ*Fy
Compression Plate Stress Ratio:	43.1%	**Pass**	Comp. Y.L. Length:
No Prying			11.87
Tension Side Stress Ratio, (treq/t)^2:	7.8%	**Pass**	

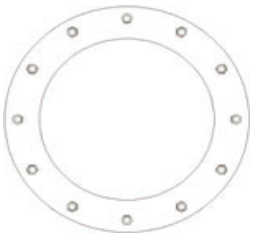
n/a

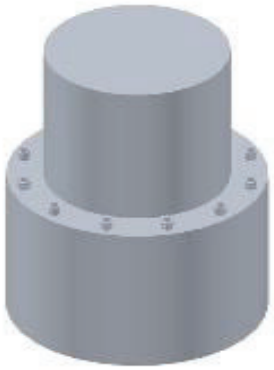
Stiffener Results

Horizontal Weld :	n/a
Vertical Weld:	n/a
Plate Flex+Shear, fb/Fb+(fv/Fv)^2:	n/a
Plate Tension+Shear, ft/Ft+(fv/Fv)^2:	n/a
Plate Comp. (AISC Bracket):	n/a

Pole Results

Pole Punching Shear Check: n/a





* 0 = none, 1 = every bolt, 2 = every 2 bolts, 3 = 2 per bolt

** Note: for complete joint penetration groove welds the groove depth must be exactly 1/2 the stiffener thickness for calculation purposes

Square, Stiffened / Unstiffened Base Plate, Any Rod Material - Rev. F /G

Assumptions: 1) Rod groups at corners. Total # rods divisible by 4. Maximum total # of rods = 48 (12 per Corner).
2) Rod Spacing = Straight Center-to-Center distance between any (2) adjacent rods (same corner)
3) Clear space between bottom of leveling nut and top of concrete **not** exceeding (1)*(Rod Diameter)

Site Data

BU#: *0*
Site Name: *SIMSBURY 2 CT*
App #: *0*

Anchor Rod Data		
Eta Factor, η	0.55	TIA G (Fig. 4-4)
Qty:	8	
Diam:	2.25	in
Rod Material:	A615-J	
Yield, Fy:	75	ksi
Strength, Fu:	100	ksi
Bolt Circle:	38.47	in
Anchor Spacing:	6	in

Plate Data		
W=Side:	38	in
Thick:	2	in
Grade:	60	ksi
Clip Distance:	4.95	in

Stiffener Data (Welding at both sides)		
Configuration:	Unstiffened	
Weld Type:		**
Groove Depth:		<-- Disregard
Groove Angle:		<-- Disregard
Fillet H. Weld:		in
Fillet V. Weld:		in
Width:		in
Height:		in
Thick:		in
Notch:		in
Grade:		ksi
Weld str.:		ksi

Pole Data		
Diam:	33.47	in
Thick:	0.473	in
Grade:	65	ksi
# of Sides:	18	"0" IF Round

Base Reactions		
TIA Revision:	G	
Factored Moment, Mu:	1246	ft-kips
Factored Axial, Pu:	25	kips
Factored Shear, Vu:	14	kips

Anchor Rod Results

TIA G --> Max Rod (Cu+ Vu/η):	200.4	Kips
Axial Design Strength, Φ*Fu*Anet:	260.0	Kips
Anchor Rod Stress Ratio:	77.1%	**Pass**

Base Plate Results	Flexural Check	
Base Plate Stress:	43.6	ksi
PL Design Bending Strength, Φ*Fy:	54.0	ksi
Base Plate Stress Ratio:	80.7%	**Pass**

PL Ref. Data
Yield Line (in): 20.27
Max PL Length: 20.27

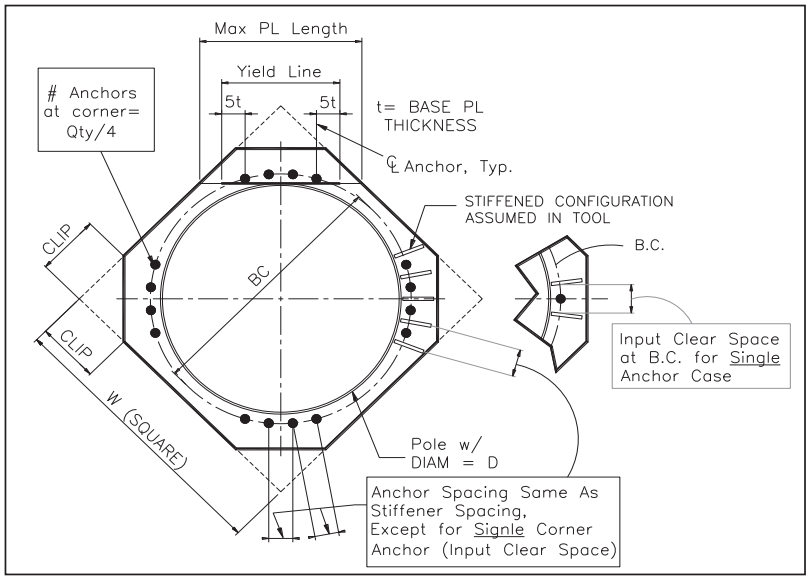
N/A - Unstiffened

Stiffener Results

Horizontal Weld :	N/A
Vertical Weld:	N/A
Plate Flex+Shear, fb/Fb+(fv/Fv)^2:	N/A
Plate Tension+Shear, ft/Ft+(fv/Fv)^2:	N/A
Plate Comp. (AISC Bracket):	N/A

Pole Results

Pole Punching Shear Check: N/A



** Note: for complete joint penetration groove welds the groove depth must be exactly 1/2 the stiffener thickness for calculation purposes

Monopole Pier and Pad Foundation

BU # :
Site Name: Simsbury 2 CT
App. Number:
TIA-222 Revision: G

Design Reactions		
Shear, **S**:	13.5	kips
Moment, **M**:	1246	ft-kips
Tower Height, **H**:	115	ft
Tower Weight, **Wt**:	24.7	kips
Base Diameter, **BD**:	2.79	ft

Foundation Dimensions		
Depth, **D**:	6	ft
Pad Width, **W**:	17	ft
Neglected Depth, **N**:	0	ft
Thickness, **T**:	3.00	ft
Pier Diameter, **Pd**:	5.00	ft
Ext. Above Grade, **E**:	0.50	ft
BP Dist. Above Pier:	3	in.
Clear Cover, **Cc**:	3.0	in

Soil Properties		
Soil Unit Weight, **γ**:	0.100	kcf
Ult. Bearing Capacity, Bc:	5.0	ksf
Angle of Friction, **Φ**:	30	deg
Cohesion, **Co**:	0.000	ksf
Passive Pressure, **Pp**:	0.000	ksf
Base Friction, **μ**:	0.45	

Material Properties		
Rebar Yield Strength, **Fy**:	60000	psi
Concrete Strength, **F'c**:	3000	psi
Concrete Unit Weight, **δc**:	0.150	kcf
Seismic Zone, **z**:	1	

Rebar Properties		
Pier Rebar Size, **Sp**:	11	
Pier Rebar Quanity, **mp**:	12	10
Pad Rebar Size, **Spad**:	8	
Pad Rebar Quanity, **mpad**:	17	9
Pier Tie Size, **St**:	4	4
Tie Quanity, **mt**:	3	5

Design Checks	Capacity/ Availability	Demand/ Limits	Check
Req'd Pier Diam.(ft)	5	4.29	**OK**
Overturning (ft-kips)	1459.16	1246.00	**85.4%**
Shear Capacity (kips)	89.35	13.50	**15.1%**
Bearing (ksf)	3.75	2.60	**69.2%**
Pad Shear - 1-way (kips)	544.71	141.22	**25.9%**
Pad Shear - 2-way (kips)	1551.88	43.84	**2.8%**
Pad Moment Capacity (k-ft)	1917.33	486.78	**25.4%**
Pier Moment Capacity (k-ft)	9815.92	1293.25	**13.2%**

HUDSON
Design Group LLC

Andrew Leone
Construction Manager
118 Flanders Rd, Third Floor
Westborough, MA 01581
VERIZON WIRELESS
Email: ALeone@structureconsulting.net

March 25, 2021

RE: **CT Siting Council Letter – LS6 Projects (Simsbury 2 CT)**

Project: Simsbury 2 CT
345 Bushy Hill Road
Simsbury, CT 06070

Engineer: Daniel P. Hamm, P.E.
Hudson Design Group LLC
45 Beechwood Drive
North Andover, MA 01845

Dear Connecticut Siting Council,

This letter is to confirm that the Samsung 64T64R MMU antenna was considered in the above referenced project's structural analysis report dated January 28, 2021 prepared by Hudson Design Group, LLC. for a 115' monopole located at 345 Bushy Hill Road, Simsbury, CT 06070 at the coordinates of N41° 50' 28.97" W72° 51' 01.53".

Respectfully Submitted,
Hudson Design Group LLC

Daniel P. Hamm, P.E.
Principal

Maser Consulting Connecticut
2000 Midlantic Drive, Suite 100
Mt. Laurel, NJ 08054
856.797.0412
GDulnik@maserconsulting.com

Post-Mod Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10027147
Maser Consulting Connecticut Project #: 20777385A

December 31, 2020

Site Information	*Site ID:*	*467891-VZW / Simsbury 2 CT*
	Site Name:	*Simsbury 2 CT*
	Carrier Name:	*Verizon Wireless*
	Address:	*345 Bushy Hill Road* *Simsbury, Connecticut 06070* *Hartford County*
	Latitude:	*41.841383°*
	Longitude:	*-72.850426°*
Structure Information	*Tower Type:*	*115-Ft Monopole*
	Mount Type:	*12.50-Ft T-Arm*

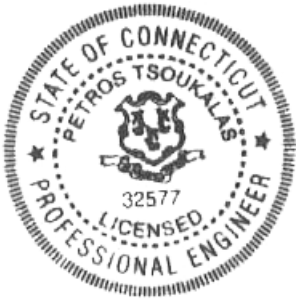
FUZE ID # 16244645

Analysis Results

T-Arm: **45.1% Pass**

******Contractor PMI Requirements***:
Included at the end of this MA report
Available & Submitted via portal at https://pmi.vzwsmart.com
Contractor - Please Review Specific Site PMI Requirements Upon Award
Requirements also Noted on Mount Modification Drawings
Requirements may also be Noted on A & E drawings

Report Prepared By: Selene Chen



Executive Summary:

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

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

Sources of Information:

Document Type	Remarks
Radio Frequency Data Sheet (RFDS)	*Verizon RFDS Site ID: 1609912, dated October 5, 2020*
Mount Mapping Report	*Tower Engineering Professionals, Site ID: 467891, dated November 17, 2020*
Previous Mount Analysis Report	*Maser Consulting Connecticut, Project #: 20777385A, dated December 3, 2020*
Mount Modification Drawing	*Maser Consulting Connecticut, Project #: 20777385A, dated December 30, 2020*

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H	
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT}:	116 mph
	Ice Wind Speed (3-sec. Gust):	50 mph
	Design Ice Thickness:	1.50 in
	Risk Category:	II
	Exposure Category:	B
	Topographic Category:	1
	Topographic Feature Considered:	N/A
	Topographic Method:	N/A
	Ground Elevation Factor, K_e:	0.987
Seismic Parameters:	S_S:	0.177
	S_1:	0.054
Maintenance Parameters:	Wind Speed (3-sec. Gust):	30 mph
	Maintenance Live Load, Lv:	250 lbs.
	Maintenance Live Load, Lm:	500 lbs.
Analysis Software:	RISA-3D (V17)	

Final Loading Configuration:

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
100.00	100.00	3	-	Licensed Sub 6 Antenna	Added
		3	Samsung	B2/B66A RRH-BR049	
		3	Samsung	B5/B13 RRH-BR04C	
		2	RFS	DB-B1-6C-12AB-0Z	
		6	Andrew	SBNHH-1D65B	Retained
		3	Amphenol Antel	BXA-171063-12	

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 mounts.

Standard Conditions:

1. All engineering services are performed on the basis that the information provided to Maser Consulting Connecticut 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 Maser Consulting Connecticut 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 by Maser Consulting Connecticut, 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. Maser Consulting Connecticut 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 Maser Consulting Connecticut.

Analysis Results:

Component	Utilization %	Pass/Fail
Antenna Pipe	*34.4%*	*Pass*
Horizontal	*24.0%*	*Pass*
Standoff Pipe	*12.1%*	*Pass*
Standoff Arm	*26.5%*	*Pass*
Connection Check	*45.1%*	*Pass*

Structure Rating – *(Controlling Utilization of all Components)*	**45.1%**

Recommendation:

The existing mounts will be **SUFFICIENT** for the final loading after the proposed modifications 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:

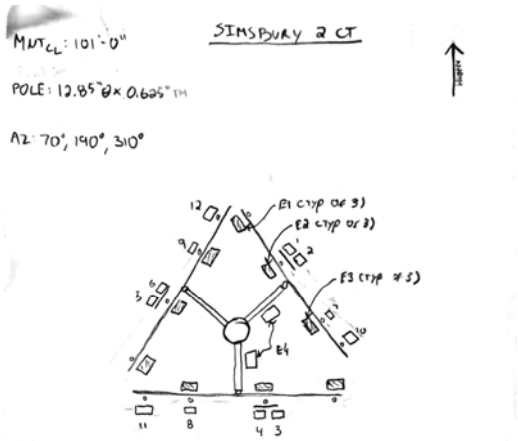
1. Mount Photos
2. Mount Mapping Report (for reference only)
3. Analysis Calculations
4. **Contractor Required PMI Report Deliverables**
5. Antenna Placement Diagrams
6. TIA Adoption and Wind Speed Usage Letter

V3.0 Updated on 8-31-2020

Antenna Mount Mapping Form (PATENT PENDING)

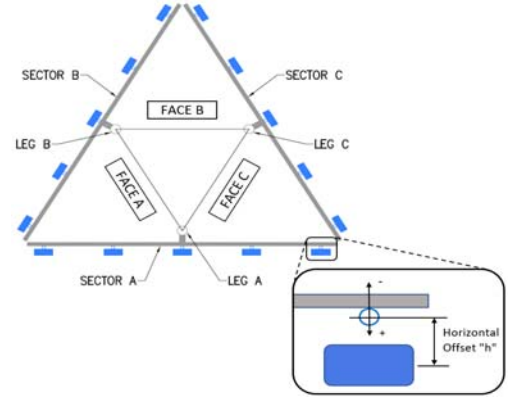
FCC # Not Posted

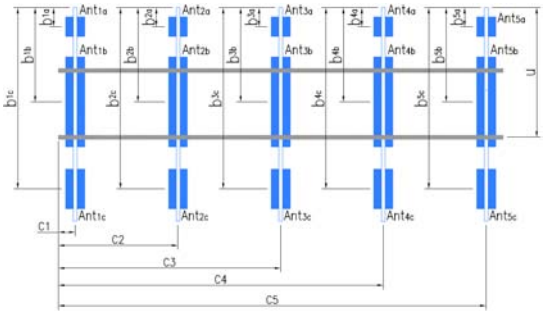
Tower Owner:	Unknown	**Mapping Date:**	11/17/2020
Site Name:	Simsbury 2 CT	**Tower Type:**	Monopole
Site Number or ID:	467891	**Tower Height (Ft.):**	115
Mapping Contractor:	TEP	**Mount Elevation (Ft.):**	101



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	2.4"Ø x 3/16" x 6'-0"	36.50	5.00	C1	2.4"Ø x 3/16" x 6'-0"	36.50	5.00
A2	2.4"Ø x 3/16" x 6'-0"	36.50	59.50	C2	2.4"Ø x 3/16" x 6'-0"	36.50	59.50
A3	2.4"Ø x 3/16" x 6'-0"	36.50	122.63	C3	2.4"Ø x 3/16" x 6'-0"	36.50	122.63
A4	2.4"Ø x 3/16" x 6'-0"	36.50	146.63	C4	2.4"Ø x 3/16" x 6'-0"	36.50	146.63
A5				C5			
A6				C6			
B1	2.4"Ø x 3/16" x 6'-0"	36.50	5.00	D1			
B2	2.4"Ø x 3/16" x 6'-0"	36.50	59.50	D2			
B3	2.4"Ø x 3/16" x 6'-0"	36.50	122.63	D3			
B4	2.4"Ø x 3/16" x 6'-0"	36.50	146.63	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. :							0.00
Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) :							3.5
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.):				12.85



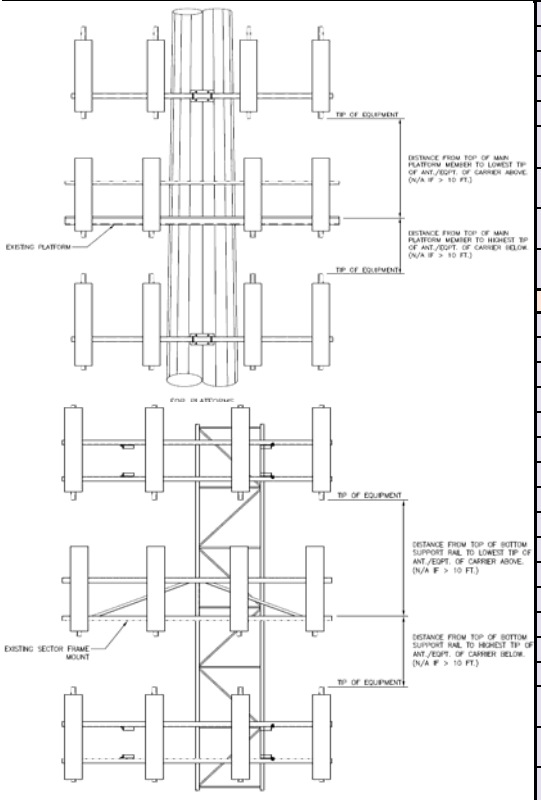


Antenna Layout (Looking Out From Tower)

Ants. Items	Enter antenna model. If not labeled, enter "Unknown". Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Mounting Locations [Units are inches and degrees] Vertical Distances"b_{1a}, b_{2a}, b_{3a}, b_{1b}...." (Inches)	Horiz. Offset "h" (Use "-" if Ant. is behind)	Antenna Azimuth (Degrees)	Photos of antennas Photo Numbers
Sector A										
Ant_{1a}	B25 RRH 4x30	12.25	8.50	21.50		102.875	14.00	6.00		26
Ant_{1b}										
Ant_{1c}										
Ant_{2a}	(2) SBNHH-1D65B	11.90	7.10	72.00	Raycap	101.875	26.00	9.50	70.00	27-29
Ant_{2b}	B13 RRH 4x30	12.50	7.75	21.00		102.5	18.50	6.00		30
Ant_{2c}										
Ant_{3a}	BXA-171063-12CF-ED	6.10	4.10	72.40	None	100.875	38.00	7.50	70.00	32-33
Ant_{3b}	B66a RRH 4x45	11.80	7.20	25.80		104.042				
Ant_{3c}										
Ant_{4a}	BXA-70063-6CF-EDIN-	11.20	5.20	71.00	None	101.042	36.00	8.50	70.00	32, 34
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff	RRFDC-3315-PF-48	15.73	10.25	25.66	(1) 1.5 Hybrid					31, 68
Ant on Standoff										
Ant on Tower										
Ant on Tower										

Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector	
Sector A:	70.00	Deg	Leg A:		Deg
Sector B:	190.00	Deg	Leg B:		Deg
Sector C:	310.00	Deg	Leg C:		Deg
Sector D:		Deg	Leg D:		Deg

Climbing Facility Information			
Location:	330.00	Deg	Sector C
Climbing Facility	Corrosion Type:		Good condition.
	Access:		Climbing path was unobstructed.
	Condition:		Good condition.



Sector B										
Ant_{1a}	B25 RRH 4x30	12.25	8.50	21.50		102.875	14.00	6.00		35, 55-56
Ant_{1b}										
Ant_{1c}										
Ant_{2a}	(2) SBNHH-1D65B	11.90	7.10	72.00	Raycap	101.875	26.00	9.50	190.00	36-38
Ant_{2b}	B13 RRH 4x30	12.50	7.75	21.00		102.5	18.50	6.00		57-58
Ant_{2c}										
Ant_{3a}	BXA-171063-12CF-ED	6.10	4.10	72.40	None	100.875	38.00	7.50	190.00	39-40
Ant_{3b}	B66a RRH 4x45	11.80	7.20	25.80		104.042				42, 59-61
Ant_{3c}										
Ant_{4a}	BXA-70063-6CF-EDIN-	11.20	5.20	71.00	None	101.042	36.00	8.50	190.00	39, 41
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff	RRFDC-3315-PF-48	15.73	10.25	25.66	(1) 1.5 Hybrid					66-67
Ant on Standoff										
Ant on Tower										
Ant on Tower										
Sector C										
Ant_{1a}	B25 RRH 4x30	12.25	8.50	21.50		102.875	14.00	6.00		43-45
Ant_{1b}										
Ant_{1c}										
Ant_{2a}	(2) SBNHH-1D65B	11.90	7.10	72.00	Raycap	101.875	26.00	9.50	310.00	46-49
Ant_{2b}	B13 RRH 4x30	12.50	7.75	21.00		102.5	18.50	6.00		
Ant_{2c}										
Ant_{3a}	BXA-171063-12CF-ED	6.10	4.10	72.40	None	100.875	38.00	7.50	310.00	50-52
Ant_{3b}	B66a RRH 4x45	11.80	7.20	25.80		104.042				
Ant_{3c}										
Ant_{4a}	BXA-70063-6CF-EDIN-	11.20	5.20	71.00	None	101.042	36.00	8.50	310.00	50, 53-54
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										
Sector D										
Ant_{1a}										
Ant_{1b}										
Ant_{1c}										
Ant_{2a}										
Ant_{2b}										
Ant_{2c}										
Ant_{3a}										
Ant_{3b}										
Ant_{3c}										
Ant_{4a}										
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

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

1		
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.

PROJECT NOTES

1. SEE MODIFICATION NOTES
2. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, LAWS AND REGULATIONS OF ALL MUNICIPALITIES, UTILITY COMPANIES OR OTHER PUBLIC/GOVERNING AUTHORITIES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS THAT MAY BE REQUIRED BY ANY FEDERAL, STATE, COUNTY OR MUNICIPAL AUTHORITIES.
4. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER, IN WRITING, OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF BIDS OR PERFORMANCE OF WORK.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SITE IMPROVEMENTS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL REPAIR ANY DAMAGE AS A RESULT OF CONSTRUCTION OF THIS FACILITY AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
6. THE SCOPE OF WORK FOR THIS PROJECT SHALL INCLUDE PROVIDING ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED TO COMPLETE THIS PROJECT. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
7. THE CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO SUBMITTING THE BID TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND CONSTRUCTION DRAWINGS.
8. THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THESE DRAWINGS MUST BE VERIFIED. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
9. SINCE THE CELL SITE MAY BE ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE REQUIRED TO BE WORN TO ALERT OF ANY POTENTIALLY DANGEROUS EXPOSURE LEVELS.
10. NO NOISE, SMOKE, DUST OR ODOR WILL RESULT FROM THIS FACILITY AS TO CAUSE A NUISANCE.
11. THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION (NO HANDICAP ACCESS IS REQUIRED).

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MOUNT MODIFICATION DRAWINGS
EXISTING 12.50' T-ARM MOUNT

SITE NAME: SIMSBURY 2 CT
SITE NUMBER: 467891

345 BUSHY HILL ROAD
SIMSBURY, CT 06070
HARTFORD COUNTY

PROJECT INFORMATION

SITE INFORMATION	
LATITUDE:	41.841383° N
LONGITUDE:	72.850426° W
JURISDICTION	HARTFORD COUNTY
APPLICANT/LESSEE	
COMPANY	VERIZON WIRELESS
CLIENT REPRESENTATIVE	
COMPANY	VERIZON WIRELESS
ADDRESS	118 FLANDERS ROAD, 3RD FLOOR
CITY, STATE, ZIP	WESTBOROUGH, MA 01518
CONTACT	ANDY CANDIELLO
E-MAIL	ANDREW.CANDIELLO@VERIZONWIRELESS.COM
PROJECT MANAGER	
COMPANY	MASER CONSULTING CONNECTICUT
CONTACT	GREG DULNIK
PHONE	(615) 686-2575
E-MAIL	GDULNIK@MASERCONSULTING.COM

SHEET INDEX

SHEET	DESCRIPTION
T-1	TITLE SHEET
S-1	BILL OF MATERIALS
S-2	MODIFICATION NOTES
S-3	MODIFICATION NOTES
S-4	MODIFICATION DETAILS
S-5	MODIFICATION DETAILS
S-6	MOUNT PHOTOS
	SPECIFICATION SHEETS

CONTRACTOR PMI REQUIREMENTS

PMI LOCATION	HTTPS://PMI.VZWSMART.COM
SMART TOOL PROJECT #	10027147
VZW LOCATION CODE (PSLC)	467891
FUZE ID	16244645

PMI REQUIREMENTS EMBEDDED WITHIN MOUNT MODIFICATION REPORT

REFERENCED DOCUMENTS

FAILING MOUNT ANALYSIS REPORT

SMART TOOL PROJECT #	10019490
MASER CONSULTING PROJECT #	20777385A
ANALYSIS DATE	12/03/2020

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

SCALE: AS SHOWN | JOB NUMBER: 20777385A

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.
0	12/30/2020	ISSUED FOR CONSTRUCTION	FAC	PET

STATE OF CONNECTICUT LICENSED PROFESSIONAL ENGINEER
PETROS TSOUKALAS
Petros Tsoukalas
CONNECTICUT LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 32577
MASER CONSULTING, INC.

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:
SIMSBURY 2 CT
467891
345 BUSHY HILL ROAD
SIMSBURY, CT 06070
HARTFORD COUNTY

MT. LAUREL OFFICE
2000 Midlantic Drive
Suite 100
Mount Laurel, NJ 08054
Phone: 856.797.0412
Fax: 856.722.1120

SHEET TITLE: TITLE SHEET

SHEET NUMBER: T-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

BILL OF MATERIALS

VZWSMART KITS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES
12	VZWSMART	VZWSMART-MSK2	CROSSOVER PLATE	
3		VZWSMART-SFK4	T-ARM KIT	FINAL LENGTH TO BE DETERMINED IN FIELD, CONTRACTOR TO TRIM AS REQUIRED
1		VZWSMART-PLK7	MONOPLE COLLAR MOUNT ASSEMBLY	

OTHER REQUIRED PARTS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES
3	-	-	150" LONG, P3.0 STD PIPE	GALVANIZED

NOTE: 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

NOTE: WHEN SPECIFIED, VZWSMART KITS SHALL BE REQUIRED AND WILL BE VERIFIED DURING THE DESKTOP PMI

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- COLORADO

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

SCALE :	JOB NUMBER :
AS SHOWN	20777385A

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
0	12/30/2020	ISSUED FOR CONSTRUCTION	FAC	PET

STATE OF CONNECTICUT
PETROS TSOUKALAS
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SITE NAME:

SIMSBURY 2 CT
467891

345 BUSHY HILL ROAD
SIMSBURY, CT 06070
HARTFORD COUNTY

MT. LAUREL OFFICE
2000 Midlantic Drive
Suite 100
Mount Laurel, NJ 08054

Phone: 856.797.0412
Fax: 856.722.1120

SHEET TITLE : BILL OF MATERIALS

SHEET NUMBER : S-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.

DESIGN LOADS

WIND LOADS

a. BASIC WIND SPEED (3 SECOND GUST), V = 116 MPH

b. EXPOSURE CATEGORY B

c. TOPOGRAPHIC CATEGORY II

d. MEAN BASE ELEVATION (AMSL) = 347.66'

ICE LOADS

a. ICE WIND SPEED (3 SECOND GUST), V = 50 MPH

b. ICE THICKNESS = 1.5 IN

SEISMIC LOADS

a. SEISMIC DESIGN CATEGORY B

b. SHORT TERM MCER GROUND MOTION, S_S = .177

c. LONG TERM MCER GROUND MOTION, S_1 = .054

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 GDULNIK@MASERCONSULTING.COM
   b. PROVIDE MASER CONSULTING PROJECT # AND MASER CONSULTING 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 (ZINGA OR ZINC COTE), 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.

\AcPublish_11744\Unsaved Drawing1.dwg\S-2 By: FCENTONE

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STATE OF CONNECTICUT · PETROS TSOUKALAS · 32577 · LICENSED · PROFESSIONAL ENGINEER

Petros Tsoukalas
CONNECTICUT LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 32577
MASER CONSULTING, INC.

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467891

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2000 Midlantic Drive
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Mount Laurel, NJ 08054
Phone: 856.797.0412
Fax: 856.722.1120

SHEET TITLE : MODIFICATION NOTES

SHEET NUMBER : S-2

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

MODIFICATION INSPECTION NOTES

MI CHECKLIST	
CONSTRUCTION/ INSTALLATION INSPECTIONS AND TESTING REQUIRED (COMPLETED BY EOR)	REPORT ITEM
PRE-CONSTRUCTION	
X	MI CHECKLIST DRAWING
X	EOR APPROVED SHOP DRAWINGS
NA	FABRICATION INSPECTION
NA	FABRICATOR CERTIFIED WELD INSPECTION
X	MATERIAL TEST REPORT (MTR)
NA	FABRICATOR NDE INSPECTION
X	PACKING SLIPS
ADDITIONAL TESTING AND INSPECTIONS:	
CONSTRUCTION	
X	CONSTRUCTION INSPECTIONS
NA	CONTRACTOR'S CERTIFIED WELD INSPECTION AND NDE REPORTS
X	ON SITE COLD GALVANIZING VERIFICATION
X	GC AS-BUILT DOCUMENTS
ADDITIONAL TESTING AND INSPECTIONS:	
POST-CONSTRUCTION	
X	MI INSPECTOR REDLINE OR RECORD DRAWING(S)
X	VZW PMI DOCUMENTS
X	PHOTOGRAPHS
ADDITIONAL TESTING AND INSPECTIONS:	

NOTE: X DENOTES A DOCUMENT REQUIRED FOR THE MI REPORT
NA DENOTES A DOCUMENT THAT IS NOT REQUIRED FOR THE MI REPORT

THE MODIFICATION INSPECTION (MI) IS A VISUAL INSPECTION OF MODIFICATIONS AND A REVIEW OF CONSTRUCTION INSPECTIONS AND OTHER REPORTS TO ENSURE THE INSTALLATION WAS CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, NAMELY THE MODIFICATION DRAWINGS, AS DESIGNED BY THE ENGINEER OF RECORD (EOR).

THE MI IS TO CONFIRM INSTALLATION CONFIGURATION AND WORKMANSHIP ONLY AND IS NOT A REVIEW OF THE MODIFICATION DESIGN ITSELF, NOR DOES THE MI INSPECTOR TAKE OWNERSHIP OF THE MODIFICATION DESIGN. OWNERSHIP OF THE STRUCTURAL MODIFICATION DESIGN EFFECTIVENESS AND INTEGRITY RESIDES WITH THE EOR AT ALL TIMES.

TO ENSURE THAT THE REQUIREMENTS OF THE MI ARE MET, IT IS VITAL THAT THE GENERAL CONTRACTOR (GC) AND THE MI INSPECTOR BEGIN COMMUNICATING AND COORDINATING AS SOON AS A PURCHASE ORDER (PO) IS RECEIVED. IT IS EXPECTED THAT EACH PARTY WILL BE PROACTIVE IN REACHING OUT TO THE OTHER PARTY.

MI INSPECTOR

THE MI INSPECTOR IS REQUIRED TO CONTACT THE GC AS SOON AS RECEIVING A PO FOR THE MI TO, AT A MINIMUM:

- REVIEW THE REQUIREMENTS OF THE MI CHECKLIST
- WORK WITH THE GC TO DEVELOP A SCHEDULE TO CONDUCT ON-SITE INSPECTIONS

THE MI INSPECTOR IS RESPONSIBLE FOR COLLECTING ALL GC INSPECTION AND TEST REPORTS, REVIEWING THE DOCUMENTS FOR ADHERENCE TO THE CONTRACT DOCUMENTS, CONDUCTING THE IN-FIELD INSPECTIONS, AND SUBMITTING THE MI REPORT TO EOR.

GENERAL CONTRACTOR

THE GC IS REQUIRED TO CONTACT THE MI INSPECTOR AS SOON AS RECEIVING A PO FOR THE MODIFICATION INSTALLATION OR TURNKEY PROJECT TO, AT A MINIMUM:

- REVIEW THE REQUIREMENTS OF THE MI CHECKLIST
- WORK WITH THE MI INSPECTOR TO DEVELOP A SCHEDULE TO CONDUCT ON-SITE MI INSPECTIONS, INCLUDING FOUNDATION INSPECTIONS
- BETTER UNDERSTAND ALL INSPECTION AND TESTING REQUIREMENTS

THE GC SHALL PERFORM AND RECORD THE TEST AND INSPECTION RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE MI CHECKLIST.

RECOMMENDATIONS

THE FOLLOWING RECOMMENDATIONS AND SUGGESTIONS ARE OFFERED TO ENHANCE THE EFFICIENCY AND EFFECTIVENESS OF DELIVERING AN MI REPORT:

- IT IS SUGGESTED THAT THE GC PROVIDE A MINIMUM OF 5 BUSINESS DAYS NOTICE, PREFERABLY 10, TO THE MI INSPECTOR AS TO WHEN THE SITE WILL BE READY FOR THE MI TO BE CONDUCTED.
- THE GC AND MI INSPECTOR COORDINATE CLOSELY THROUGHOUT THE ENTIRE PROJECT.
- WHEN POSSIBLE, IT IS PREFERRED TO HAVE THE GC AND MI INSPECTOR ON-SITE SIMULTANEOUSLY FOR ANY GUY WIRE TENSIONING OR RE-TENSIONING OPERATIONS.
- IT MAY BE BENEFICIAL TO INSTALL ALL MODIFICATIONS PRIOR TO CONDUCTING THE FOUNDATION INSPECTIONS TO ALLOW THE FOUNDATION AND MI INSPECTION(S) TO COMMENCE WITH ONE SITE VISIT.
- WHEN POSSIBLE, IT IS PREFERRED TO HAVE THE GC AND MI INSPECTOR ON-SITE DURING THE MI TO HAVE ANY DEFICIENCIES CORRECTED DURING THE INITIAL MI. THEREFORE, THE GC MAY CHOOSE TO COORDINATE THE MI CAREFULLY TO ENSURE ALL CONSTRUCTION FACILITIES ARE AT THEIR DISPOSAL WHEN THE MI INSPECTOR IS ON SITE.

CORRECTION OF FAILING MI'S

IF THE MODIFICATION INSTALLATION WOULD FAIL THE MI ("FAILED MI"), THE GC SHALL WORK WITH THE OWNER TO COORDINATE A REMEDIATION PLAN:

- CORRECT FAILING ISSUES TO COMPLY WITH THE SPECIFICATIONS CONTAINED IN THE ORIGINAL CONTRACT DOCUMENTS AND COORDINATE A SUPPLEMENT MI.

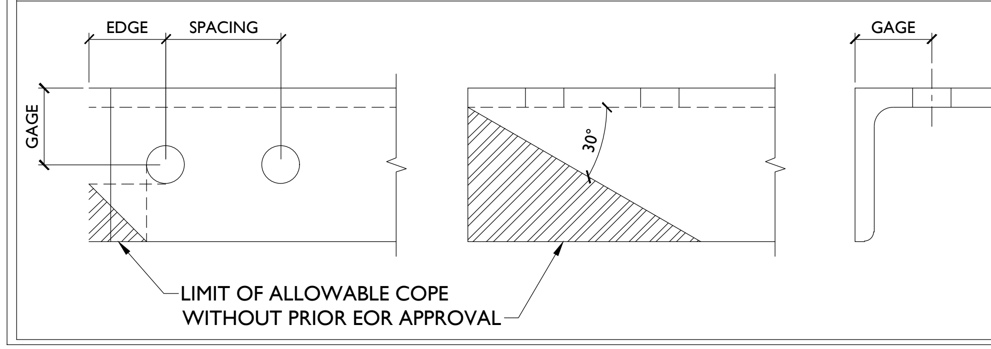
REQUIRED PHOTOS

BETWEEN THE GC AND THE MI INSPECTOR THE FOLLOWING PHOTOGRAPHS, AT A MINIMUM, ARE TO BE TAKEN AND INCLUDED IN THE MI REPORT:

- PRE-CONSTRUCTION GENERAL SITE CONDITION
- PHOTOGRAPHS DURING THE REINFORCEMENT MODIFICATION CONSTRUCTION/ERECTION AND INSPECTION
  - RAW MATERIALS
  - PHOTOS OF ALL CRITICAL DETAILS
  - FOUNDATION MODIFICATIONS
  - WELD PREPARATION
  - BOLT INSTALLATION
  - FINAL INSTALLED CONDITION
  - SURFACE COATING REPAIR
- POST CONSTRUCTION PHOTOGRAPHS
  - FINAL INFIELD CONDITION

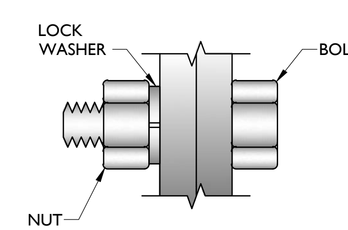
PHOTOS OF ELEVATED MODIFICATIONS TAKEN ONLY FROM THE GROUND SHALL BE CONSIDERED INADEQUATE.

ALLOWABLE COPING



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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PETROS TSOUKALAS
Petros Tsoukalas
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LICENSE NUMBER: 32577
MASER CONSULTING INC.
LICENSED PROFESSIONAL ENGINEER

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2000 Midlantic Drive
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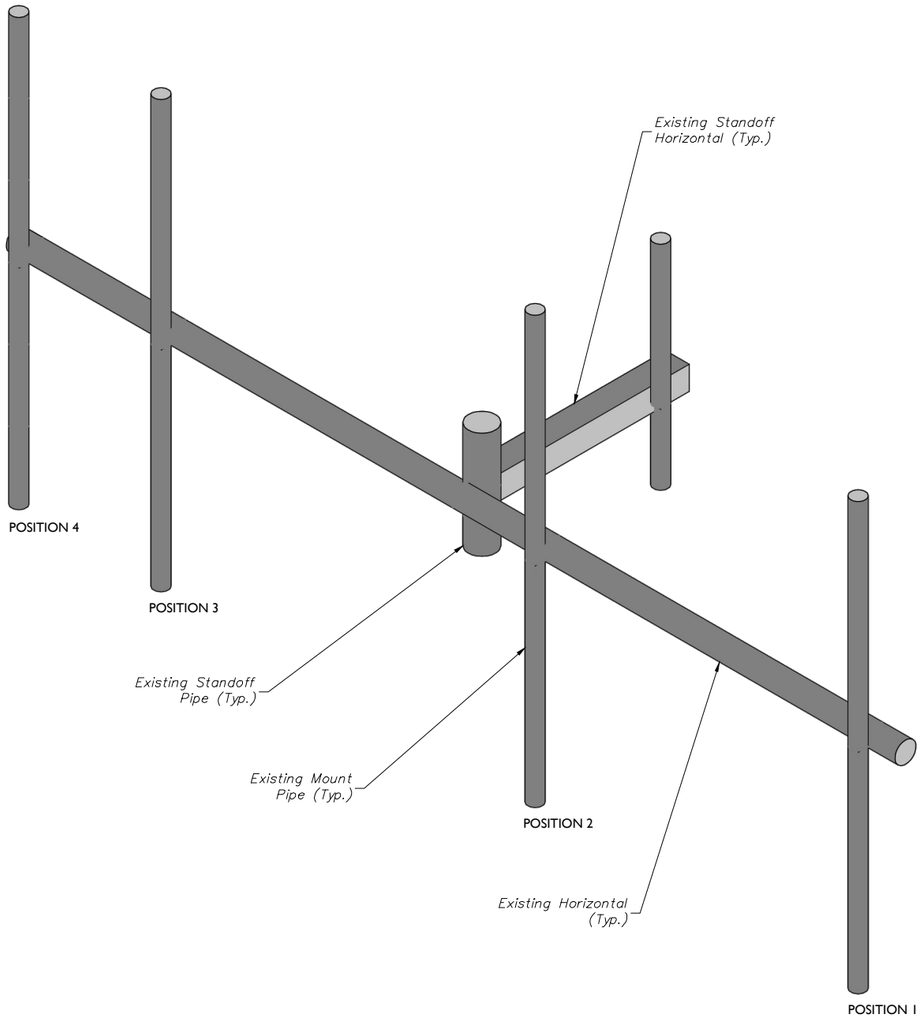
Fax: 856.722.1120

SHEET TITLE :
MODIFICATION NOTES

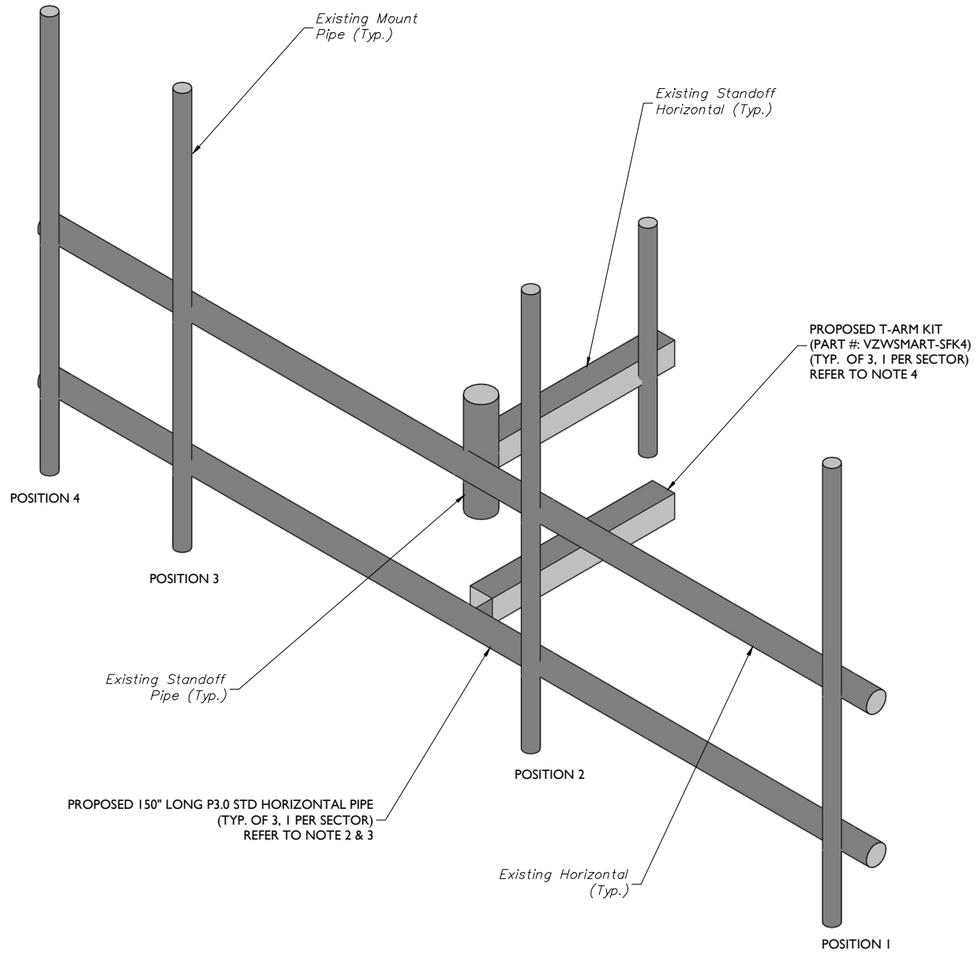
SHEET NUMBER :
S-3

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



1 EXISTING T-ARM ISOMETRIC VIEW (TYP. ALL SECTORS)

SCALE : N.T.S.



2 PROPOSED T-ARM ISOMETRIC VIEW (TYP. ALL SECTORS)

SCALE : N.T.S.

STRUCTURAL NOTES:

1. PER THE MOUNT MAPPING COMPLETED BY TOWER ENGINEERING PROFESSIONALS ON 11/17/2020, THE SAFETY CLIMB AND CLIMBING FACILITIES UP TO THE VERIZON MOUNT ELEVATION (101'-0") ARE IN GOOD CONDITION. MASER 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.

MODIFICATION NOTES:

1. MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.
2. RADIO AND/OR TME POSITIONS SHALL BE ADJUSTED VERTICALLY AS NEEDED IN ORDER TO ACHIEVE INSTALLATION OF HORIZONTAL AS SHOWN. EOR SHALL BE NOTIFIED IF EQUIPMENT NEEDS TO BE RELOCATED TO ANOTHER MOUNT PIPE.
3. CONNECT NEW HORIZONTAL TO ALL EXISTING VERTICAL MOUNT PIPES WITH CROSSOVER PLATES (PART #: VZWSMART-MSK1).
4. CONNECT NEW T-ARM TO EXISTING MONOPOLE USING NEW COLLAR MOUNT (PART #: VZWSMART-PLK4)

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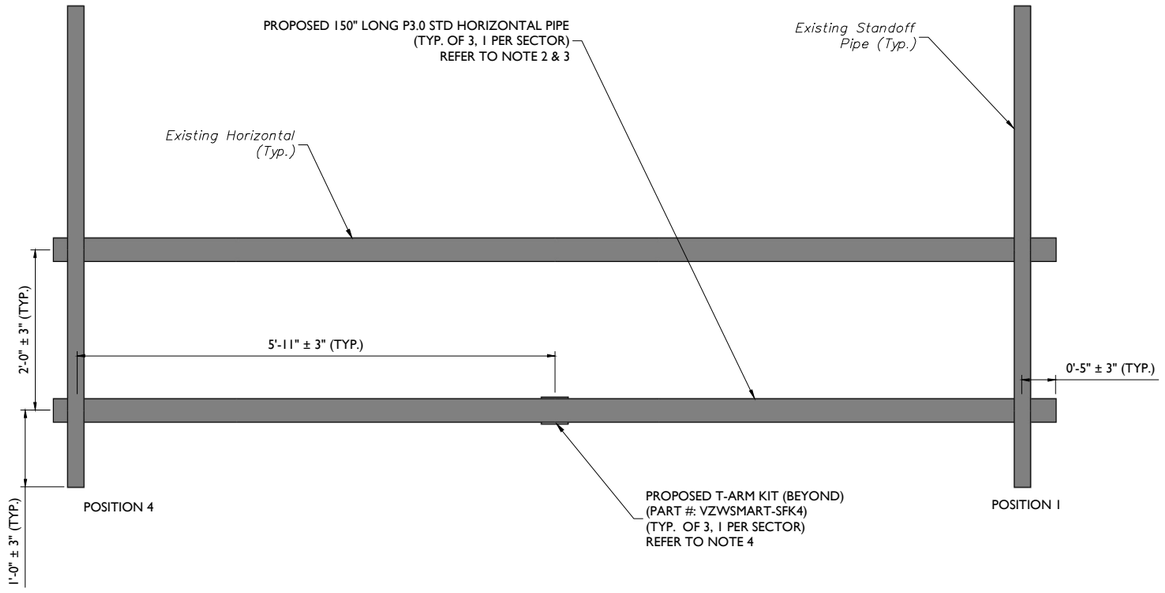
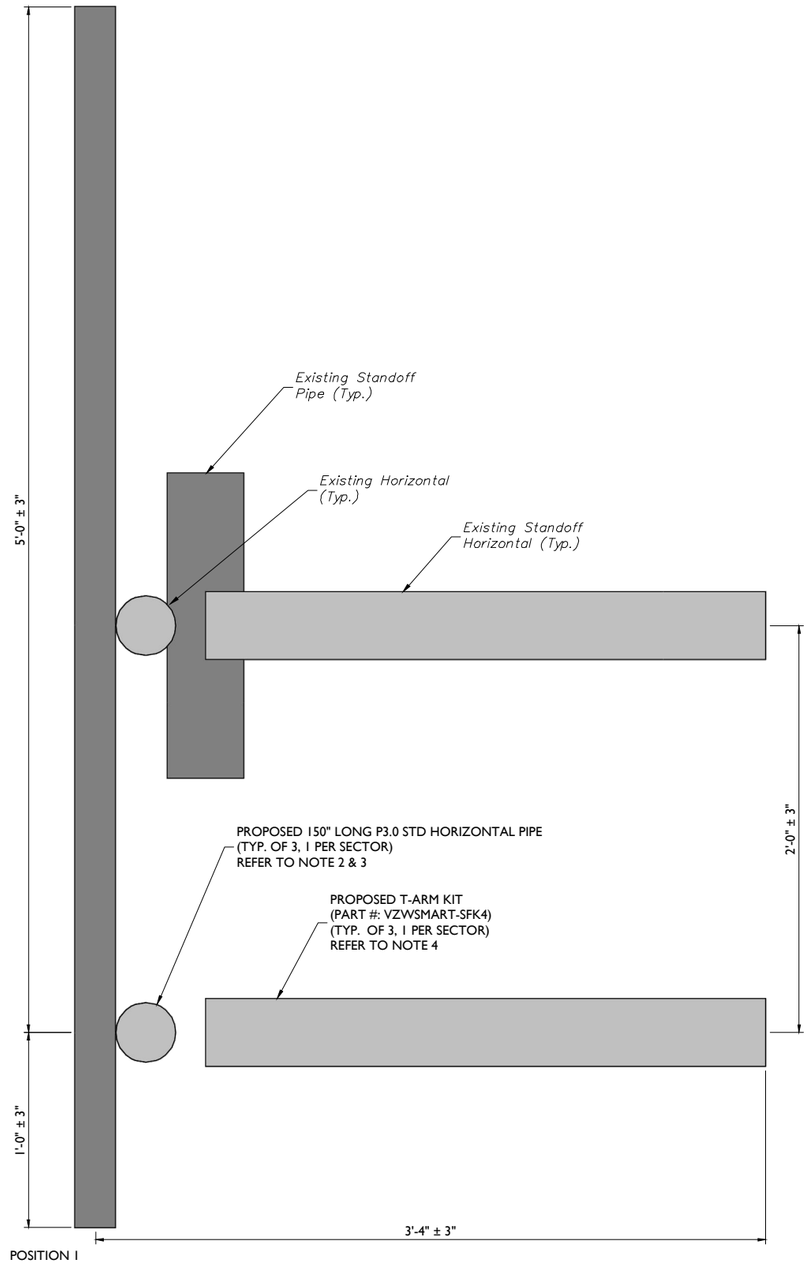
SHEET TITLE : MODIFICATION DETAILS

SHEET NUMBER : S-4



1 PROPOSED FRONT ELEVATION VIEW (TYP. ALL SECTORS)

SCALE : N.T.S.



2 PROPOSED SIDE ELEVATION VIEW (TYP. ALL SECTORS)

SCALE : N.T.S.

MODIFICATION NOTES:

1. MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.
2. RADIO AND/OR TME POSITIONS SHALL BE ADJUSTED VERTICALLY AS NEEDED IN ORDER TO ACHIEVE INSTALLATION OF HORIZONTAL AS SHOWN. EOR SHALL BE NOTIFIED IF EQUIPMENT NEEDS TO BE RELOCATED TO ANOTHER MOUNT PIPE.
3. CONNECT NEW HORIZONTAL TO ALL EXISTING VERTICAL MOUNT PIPES WITH CROSSOVER PLATES (PART #: VZWSMART-MSK1).
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SHEET TITLE : MODIFICATION DETAILS

SHEET NUMBER : S-5

MOUNT PHOTO 1

MOUNT PHOTO 2

MOUNT PHOTO 3

MOUNT PHOTO 4

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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 : 20777385A

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
0	12/30/2020	ISSUED FOR CONSTRUCTION	FAC	PET

STATE OF CONNECTICUT
PETROS TSOUKALAS
LICENSED PROFESSIONAL ENGINEER

Petros Tsoukalas
CONNECTICUT LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 32577
MASER CONSULTING, INC.

SITE NAME:

SIMSBURY 2 CT
467891

345 BUSHY HILL ROAD
SIMSBURY, CT 06070
HARTFORD COUNTY

MT. LAUREL OFFICE
2000 Midlantic Drive
Suite 100
Mount Laurel, NJ 08054

Phone: 856.797.0412
Fax: 856.722.1120

SHEET TITLE : MOUNT PHOTOS

SHEET NUMBER : S-6

Antenna Mount Mapping Form (PATENT PENDING)

FCC # Not Posted

Tower Owner:	Unknown	**Mapping Date:**	11/17/2020
Site Name:	Simsbury 2 CT	**Tower Type:**	Monopole
Site Number or ID:	467891	**Tower Height (Ft.):**	115
Mapping Contractor:	TEP	**Mount Elevation (Ft.):**	101

Please Insert Sketches of the Antenna Mount

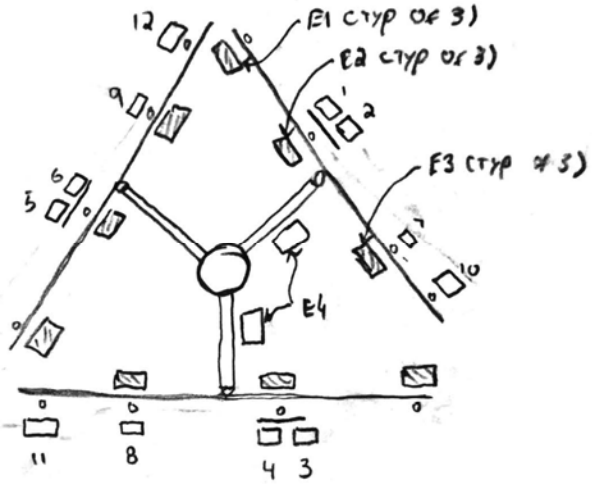
SIMSBURY 2 CT

NORTH

MNT_{CL}: 101'-0"

POLE: 12.85"Ø x 0.625" TH

AZ: 70°, 190°, 310°



"U" (TYP) = 36½"

ANT. 1-6: SBNHH-1065B
B: 26"
h: 9½"

ANT. 7-9: BXA-171063-12CF-EDIN-2
B: 38"
h: 7½"

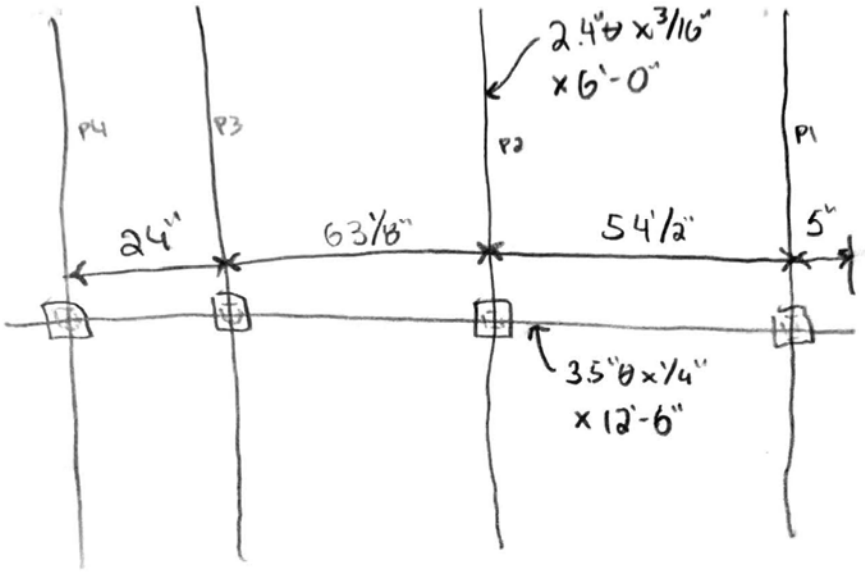
ANT. 10-12: BXA-70063-6CF-EDIN-2
B: 36"
h: 8½"

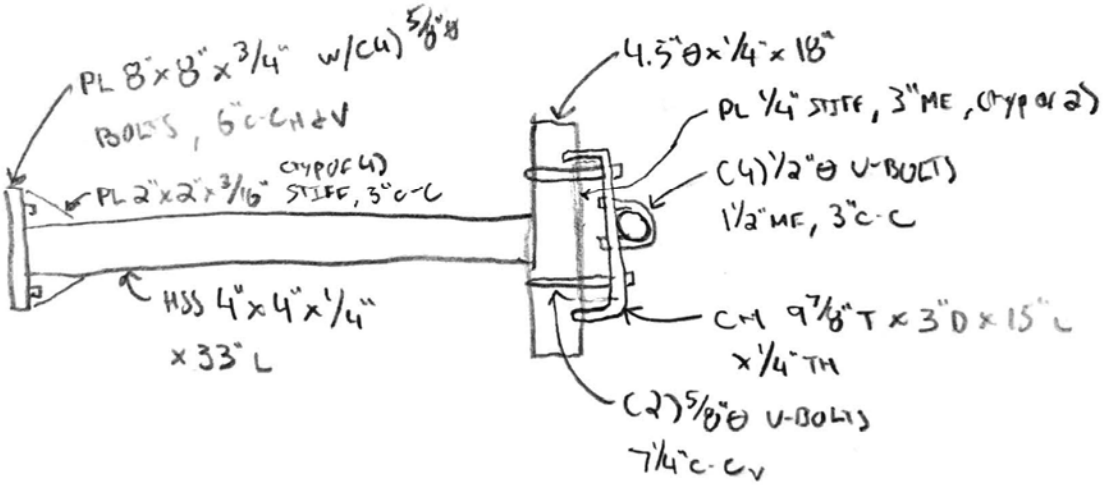
E1
B25
B: 14"
h: 6"

E2
B13
B: 18½"
h: 6"

E3
B66a
B: 14"
h: 7"

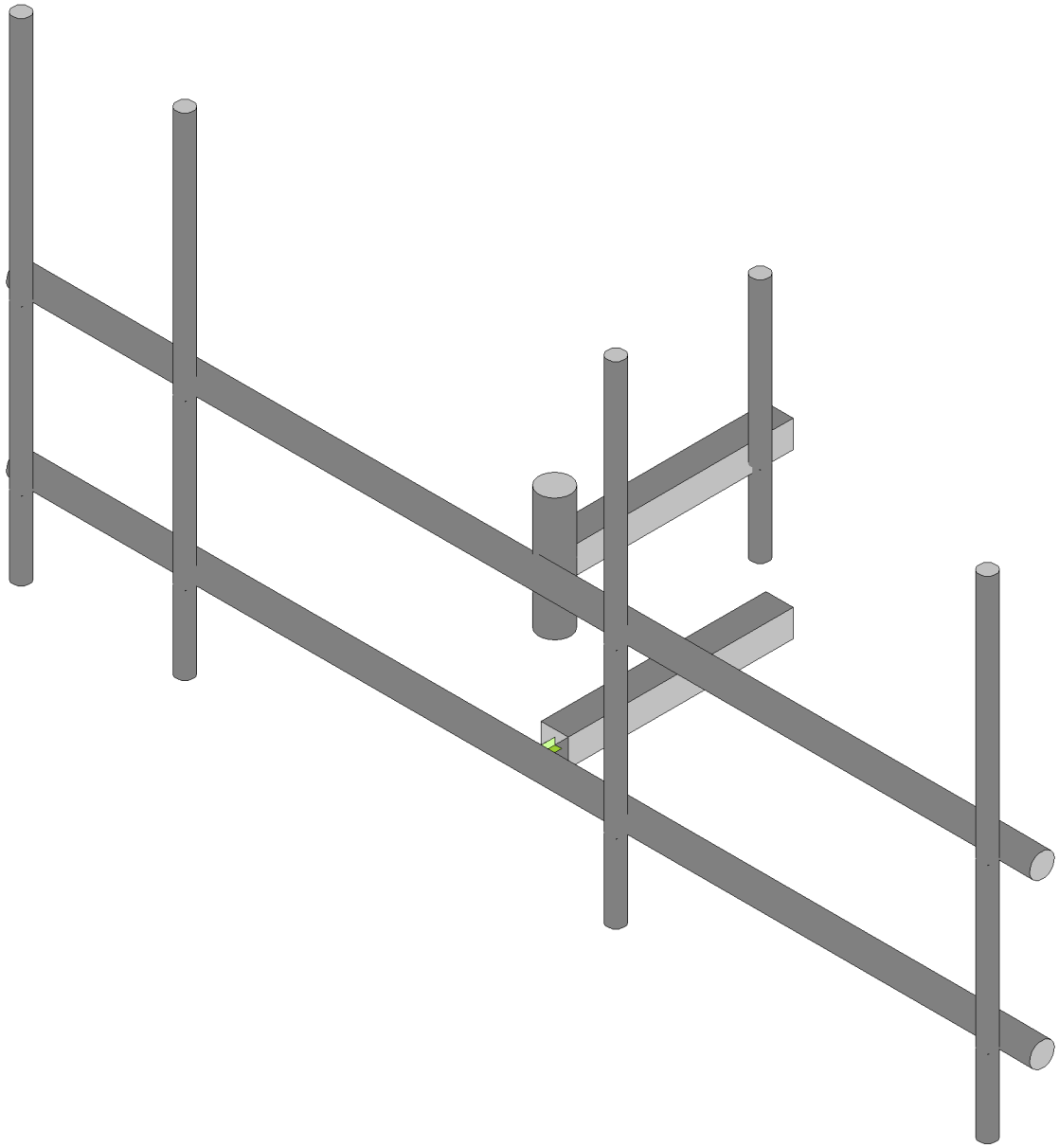
Please Insert Sketches of the Antenna Mount, cont'd



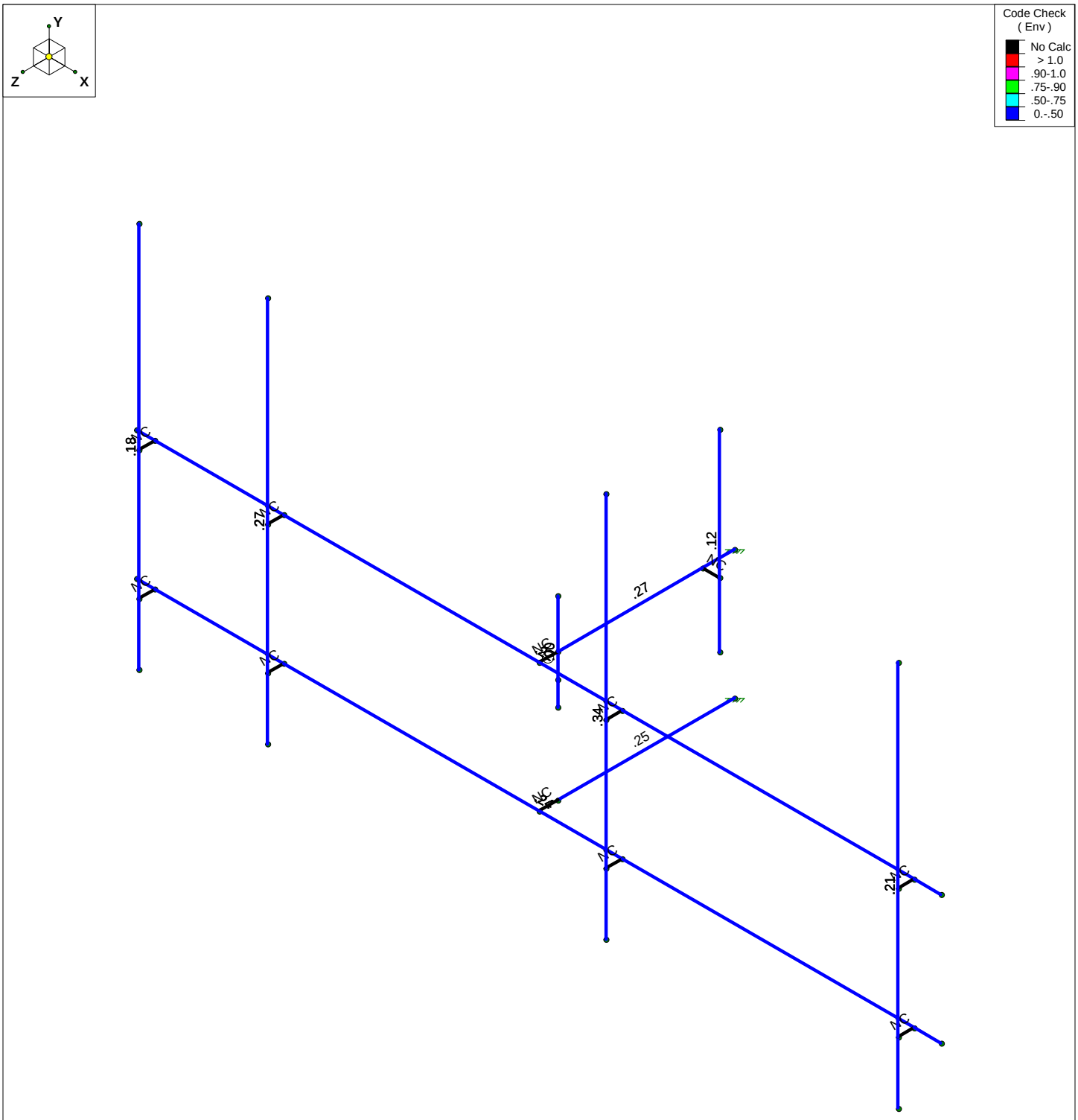


M.P. CNX

C 6 1/4" W x 2 1/4" D x 8 1/4" T x 1/4" TH
W/(4) 1/2"Ø U-BOLTS, 3 1/2" c-c H
6" c-c V

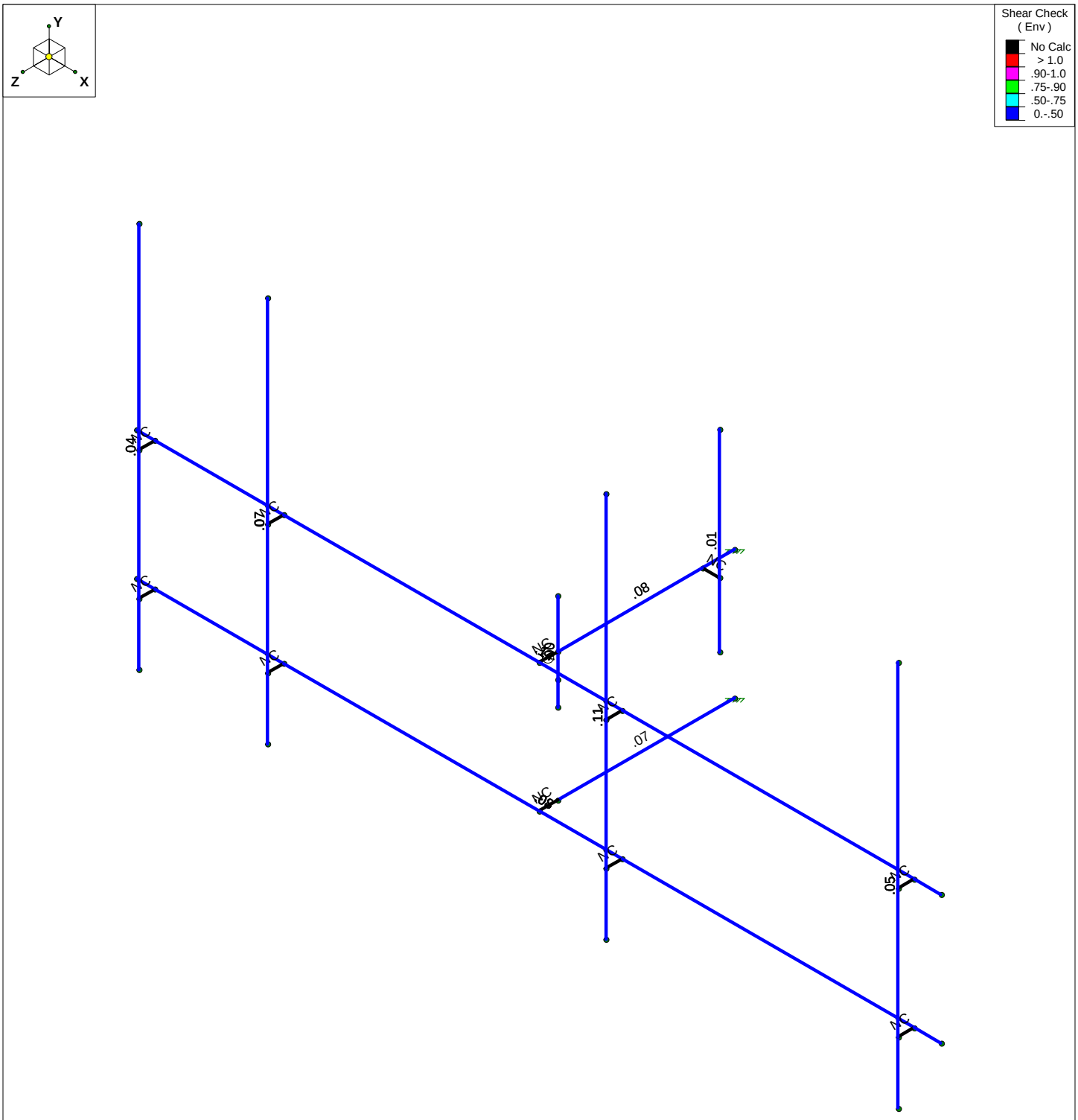


Maser Consulting	467891-VZW_MT_LOT_SectorA_H	SK - 1
AE		Dec 18, 2020 at 10:46 PM
Project No. 10019490		MOD_467891-VZW_MT_LOT_A_H....



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

Maser Consulting	467891-VZW_MT_LOT_SectorA_H	SK - 2
AE		Dec 18, 2020 at 10:48 PM
Project No. 10019490		MOD_467891-VZW_MT_LOT_A_H...



Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

Maser Consulting	467891-VZW_MT_LOT_SectorA_H	SK - 3
AE		Dec 18, 2020 at 10:48 PM
Project No. 10019490		MOD_467891-VZW_MT_LOT_A_H...

Basic Load Cases

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

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
52	Structure Wo (330 D...	None						20		
53	Structure Wi (0 Deg)	None						20		
54	Structure Wi (30 Deg)	None						20		
55	Structure Wi (60 Deg)	None						20		
56	Structure Wi (90 Deg)	None						20		
57	Structure Wi (120 De...	None						20		
58	Structure Wi (150 De...	None						20		
59	Structure Wi (180 De...	None						20		
60	Structure Wi (210 De...	None						20		
61	Structure Wi (240 De...	None						20		
62	Structure Wi (270 De...	None						20		
63	Structure Wi (300 De...	None						20		
64	Structure Wi (330 De...	None						20		
65	Structure Wm (0 Deg)	None						20		
66	Structure Wm (30 D...	None						20		
67	Structure Wm (60 D...	None						20		
68	Structure Wm (90 D...	None						20		
69	Structure Wm (120 ...	None						20		
70	Structure Wm (150 ...	None						20		
71	Structure Wm (180 ...	None						20		
72	Structure Wm (210 ...	None						20		
73	Structure Wm (240 ...	None						20		
74	Structure Wm (270 ...	None						20		
75	Structure Wm (300 ...	None						20		
76	Structure Wm (330 ...	None						20		
77	Lm1	None					1			
78	Lm2	None					1			
79	Lv1	None					1			
80	Lv2	None					1			

Load Combinations

	Description	Solve	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+1.0Wo (0...	Yes	Y		1	1.2	39	1.2	3	1	41	1												
2	1.2D+1.0Wo (3...	Yes	Y		1	1.2	39	1.2	4	1	42	1												
3	1.2D+1.0Wo (6...	Yes	Y		1	1.2	39	1.2	5	1	43	1												
4	1.2D+1.0Wo (9...	Yes	Y		1	1.2	39	1.2	6	1	44	1												
5	1.2D+1.0Wo (1...	Yes	Y		1	1.2	39	1.2	7	1	45	1												
6	1.2D+1.0Wo (1...	Yes	Y		1	1.2	39	1.2	8	1	46	1												
7	1.2D+1.0Wo (1...	Yes	Y		1	1.2	39	1.2	9	1	47	1												
8	1.2D+1.0Wo (2...	Yes	Y		1	1.2	39	1.2	10	1	48	1												
9	1.2D+1.0Wo (2...	Yes	Y		1	1.2	39	1.2	11	1	49	1												
10	1.2D+1.0Wo (2...	Yes	Y		1	1.2	39	1.2	12	1	50	1												
11	1.2D+1.0Wo (3...	Yes	Y		1	1.2	39	1.2	13	1	51	1												
12	1.2D+1.0Wo (3...	Yes	Y		1	1.2	39	1.2	14	1	52	1												
13	1.2D + 1.0Di + ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1	53	1								
14	1.2D + 1.0Di + ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1								
15	1.2D + 1.0Di + ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1	55	1								
16	1.2D + 1.0Di + ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1	56	1								
17	1.2D + 1.0Di + ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1								
18	1.2D + 1.0Di + ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1								

Load Combinations (Continued)

	Description	Solve	PDelta	S...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...
19	1.2D + 1.0Di + ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1										
20	1.2D + 1.0Di + ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1										
21	1.2D + 1.0Di + ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1										
22	1.2D + 1.0Di + ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1										
23	1.2D + 1.0Di + ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1										
24	1.2D + 1.0Di + ...	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1										
25	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1												
26	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1												
27	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1												
28	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1												
29	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1												
30	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1												
31	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1												
32	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1												
33	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1												
34	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1												
35	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1												
36	1.2D + 1.5Lm1 ...	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1												
37	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1												
38	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1												
39	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1												
40	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1												
41	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1												
42	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1												
43	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1												
44	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1												
45	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1												
46	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1												
47	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1												
48	1.2D + 1.5Lm2 ...	Yes	Y		1	1.2	39	1.2	78	1.5	38	1	76	1												
49	1.2D + 1.5Lv1	Yes	Y		1	1.2	39	1.2	79	1.5																
50	1.2D + 1.5Lv2	Yes	Y		1	1.2	39	1.2	80	1.5																
51	1.4D	Yes	Y		1	1.4	39	1.4																		
52	Seismic Mass		Y		1	1	39	1																		
53	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX		SY	1	SZ	-1												
54	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	.5	SY	1	SZ	-.866												
55	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	.866	SY	1	SZ	-.5												
56	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	1	SY	1	SZ													
57	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	.866	SY	1	SZ	.5												
58	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	.5	SY	1	SZ	.866												
59	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX		SY	1	SZ	1												
60	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	-.5	SY	1	SZ	.866												
61	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	-.866	SY	1	SZ	.5												
62	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	-1	SY	1	SZ													
63	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	-.866	SY	1	SZ	-.5												
64	1.2D + 1.0Ev + ...		Y		1	1.2	39	1.2	SX	-.5	SY	1	SZ	-.866												

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	0	0	-0.84375	0	
2	N2	0	0	1.90625	0	
3	N3	0	-.75	1.90625	0	
4	N4	0	.75	1.90625	0	
5	N5	0	0	2.197917	0	
6	N6	6.25	0	2.197917	0	
7	N7	-6.25	0	2.197917	0	
8	N11	5.833333	0	2.197917	0	
9	N12	5.833333	0	2.447917	0	
10	N13	5.833333	3.041667	2.447917	0	
11	N14	5.833333	-2.958333	2.447917	0	
12	N21	0	-.375	1.90625	0	
13	N13A	1.291667	0	2.197917	0	
14	N14A	1.291667	0	2.447917	0	
15	N15	1.291667	3.041667	2.447917	0	
16	N16	1.291667	-2.958333	2.447917	0	
17	N17	-3.969167	0	2.197917	0	
18	N18	-3.969167	0	2.447917	0	
19	N19	-3.969167	3.041667	2.447917	0	
20	N20	-3.969167	-2.958333	2.447917	0	
21	N21A	-5.969167	0	2.197917	0	
22	N22	-5.969167	0	2.447917	0	
23	N23	-5.969167	3.041667	2.447917	0	
24	N24	-5.969167	-2.958333	2.447917	0	
25	N26	-5.969167	-2	2.447917	0	
26	N29	0	0	-0.34375	0	
27	N30	0.266667	0	-0.34375	0	
28	N31	0.266667	2	-0.34375	0	
29	N32	0.266667	-1	-0.34375	0	
30	N33	6.25	-2	2.197917	0	
31	N34	-6.25	-2	2.197917	0	
32	N35	5.833333	-2	2.197917	0	
33	N36	5.833333	-2	2.447917	0	
34	N37	1.291667	-2	2.197917	0	
35	N38	1.291667	-2	2.447917	0	
36	N39	-3.969167	-2	2.197917	0	
37	N40	-3.969167	-2	2.447917	0	
38	N41	-5.969167	-2	2.197917	0	
39	N39A	0	-2	-0.84375	0	
40	N40A	0	-2	1.90625	0	
41	N41A	0	-2	2.197917	0	

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	Standoff Arm	HSS4X4X4	Beam	Tube	A500 Gr.46	Typical	3.37	7.8	7.8	12.8
3	Standoff Pipe	PIPE 4.0	Column	Pipe	A53 Gr. B	Typical	2.96	6.82	6.82	13.6
4	Horizontal	HSS3.500X...	Column	Pipe	A53 Gr. B	Typical	2.08	2.84	2.84	5.69
5	TES Horizontal	PIPE 3.0	Beam	Pipe	A53 Gr. B	Typical	2.07	2.85	2.85	5.69
6	T-Arm Kit	HSS3X3X4	Beam	Tube	A500 Gr.46	Typical	2.44	3.02	3.02	5.08

Hot Rolled Steel Section Sets (Continued)

	Label	Shape	Type	Design List	Material	Design Rules	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
7	Secondary Horizo...	PIPE_3.0	Beam	Pipe	A53 Gr. B	Typical	2.07	2.85	2.85	5.69

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	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	65	1.1
3	A992	29000	11154	.3	.65	.49	50	1.1	65	1.1
4	A500 Gr.42	29000	11154	.3	.65	.49	42	1.4	58	1.3
5	A500 Gr.46	29000	11154	.3	.65	.49	46	1.4	58	1.3
6	A53 Gr. B	29000	11154	.3	.65	.49	35	1.5	60	1.2
7	A500 Gr 50	29000	11154	.3	.65	.49	50	1.5	58	1.2

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N1	N2			Standoff Arm	Beam	Tube	A500 Gr.46	Typical
2	M2	N4	N3			Standoff Pipe	Column	Pipe	A53 Gr. B	Typical
3	M4	N7	N6			TES Horizontal	Beam	Pipe	A53 Gr. B	Typical
4	MP1A	N13	N14			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
5	M8	N11	N12			RIGID	None	None	RIGID	Typical
6	M10A	N2	N5			RIGID	None	None	RIGID	Typical
7	MP2A	N15	N16			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
8	M8A	N13A	N14A			RIGID	None	None	RIGID	Typical
9	MP3A	N19	N20			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
10	M10	N17	N18			RIGID	None	None	RIGID	Typical
11	MP4A	N23	N24			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
12	M12	N21A	N22			RIGID	None	None	RIGID	Typical
13	M13	N29	N30			RIGID	None	None	RIGID	Typical
14	M14	N31	N32			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
15	M15	N34	N33			Secondary Hor...	Beam	Pipe	A53 Gr. B	Typical
16	M16	N35	N36			RIGID	None	None	RIGID	Typical
17	M17	N37	N38			RIGID	None	None	RIGID	Typical
18	M18	N39	N40			RIGID	None	None	RIGID	Typical
19	M19	N41	N26			RIGID	None	None	RIGID	Typical
20	M20	N39A	N40A			Standoff Arm	Beam	Tube	A500 Gr.46	Typical
21	M21	N40A	N41A			RIGID	None	None	RIGID	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	Default			None
2	M2						Yes	** NA **			None
3	M4						Yes				None
4	MP1A						Yes	** NA **			None
5	M8						Yes	** NA **			None
6	M10A	OOOOXO					Yes	** NA **			None
7	MP2A						Yes	** NA **			None
8	M8A						Yes	** NA **			None
9	MP3A						Yes	** NA **			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
10	M10						Yes	** NA **			None
11	MP4A						Yes	** NA **			None
12	M12						Yes	** NA **			None
13	M13						Yes	** NA **			None
14	M14						Yes	** NA **			None
15	M15						Yes				None
16	M16						Yes	** NA **			None
17	M17						Yes	** NA **			None
18	M18						Yes	** NA **			None
19	M19						Yes	** NA **			None
20	M20						Yes	Default			None
21	M21						Yes	** NA **			None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Y	-43.55	2.04
2	MP1A	My	-.022	2.04
3	MP1A	Mz	0	2.04
4	MP1A	Y	-43.55	4.04
5	MP1A	My	-.022	4.04
6	MP1A	Mz	0	4.04
7	MP2A	Y	-20	1.02
8	MP2A	My	-.016	1.02
9	MP2A	Mz	.013	1.02
10	MP2A	Y	-20	5.04
11	MP2A	My	-.016	5.04
12	MP2A	Mz	.013	5.04
13	MP2A	Y	-20	1.02
14	MP2A	My	-.016	1.02
15	MP2A	Mz	-.013	1.02
16	MP2A	Y	-20	5.04
17	MP2A	My	-.016	5.04
18	MP2A	Mz	-.013	5.04
19	MP3A	Y	-7.5	1.04
20	MP3A	My	-.005	1.04
21	MP3A	Mz	0	1.04
22	MP3A	Y	-7.5	5.04
23	MP3A	My	-.005	5.04
24	MP3A	Mz	0	5.04
25	MP2A	Y	-84.4	2.04
26	MP2A	My	.042	2.04
27	MP2A	Mz	0	2.04
28	MP2A	Y	-70.3	4
29	MP2A	My	.035	4
30	MP2A	Mz	0	4
31	M14	Y	-32	%1
32	M14	My	0	%1
33	M14	Mz	0	%1

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Y	-54.474	2.04
2	MP1A	My	-.027	2.04
3	MP1A	Mz	0	2.04
4	MP1A	Y	-54.474	4.04
5	MP1A	My	-.027	4.04
6	MP1A	Mz	0	4.04
7	MP2A	Y	-93.026	1.02
8	MP2A	My	-.074	1.02
9	MP2A	Mz	.062	1.02
10	MP2A	Y	-93.026	5.04
11	MP2A	My	-.074	5.04
12	MP2A	Mz	.062	5.04
13	MP2A	Y	-93.026	1.02
14	MP2A	My	-.074	1.02
15	MP2A	Mz	-.062	1.02
16	MP2A	Y	-93.026	5.04
17	MP2A	My	-.074	5.04
18	MP2A	Mz	-.062	5.04
19	MP3A	Y	-53.66	1.04
20	MP3A	My	-.034	1.04
21	MP3A	Mz	0	1.04
22	MP3A	Y	-53.66	5.04
23	MP3A	My	-.034	5.04
24	MP3A	Mz	0	5.04
25	MP2A	Y	-69.184	2.04
26	MP2A	My	.035	2.04
27	MP2A	Mz	0	2.04
28	MP2A	Y	-62.442	4
29	MP2A	My	.031	4
30	MP2A	Mz	0	4
31	M14	Y	-115.652	%1
32	M14	My	0	%1
33	M14	Mz	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	2.04
2	MP1A	Z	-67.736	2.04
3	MP1A	Mx	0	2.04
4	MP1A	X	0	4.04
5	MP1A	Z	-67.736	4.04
6	MP1A	Mx	0	4.04
7	MP2A	X	0	1.02
8	MP2A	Z	-117.601	1.02
9	MP2A	Mx	-.078	1.02
10	MP2A	X	0	5.04
11	MP2A	Z	-117.601	5.04
12	MP2A	Mx	-.078	5.04
13	MP2A	X	0	1.02
14	MP2A	Z	-117.601	1.02
15	MP2A	Mx	.078	1.02

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
16	MP2A	X	0	5.04
17	MP2A	Z	-117.601	5.04
18	MP2A	Mx	.078	5.04
19	MP3A	X	0	1.04
20	MP3A	Z	-68.889	1.04
21	MP3A	Mx	0	1.04
22	MP3A	X	0	5.04
23	MP3A	Z	-68.889	5.04
24	MP3A	Mx	0	5.04
25	MP2A	X	0	2.04
26	MP2A	Z	-53.9	2.04
27	MP2A	Mx	0	2.04
28	MP2A	X	0	4
29	MP2A	Z	-53.9	4
30	MP2A	Mx	0	4
31	M14	X	0	%1
32	M14	Z	-109.242	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	28.716	2.04
2	MP1A	Z	-49.737	2.04
3	MP1A	Mx	-.014	2.04
4	MP1A	X	28.716	4.04
5	MP1A	Z	-49.737	4.04
6	MP1A	Mx	-.014	4.04
7	MP2A	X	53.822	1.02
8	MP2A	Z	-93.222	1.02
9	MP2A	Mx	-.105	1.02
10	MP2A	X	53.822	5.04
11	MP2A	Z	-93.222	5.04
12	MP2A	Mx	-.105	5.04
13	MP2A	X	53.822	1.02
14	MP2A	Z	-93.222	1.02
15	MP2A	Mx	.02	1.02
16	MP2A	X	53.822	5.04
17	MP2A	Z	-93.222	5.04
18	MP2A	Mx	.02	5.04
19	MP3A	X	32.352	1.04
20	MP3A	Z	-56.035	1.04
21	MP3A	Mx	-.02	1.04
22	MP3A	X	32.352	5.04
23	MP3A	Z	-56.035	5.04
24	MP3A	Mx	-.02	5.04
25	MP2A	X	24.716	2.04
26	MP2A	Z	-42.81	2.04
27	MP2A	Mx	.012	2.04
28	MP2A	X	23.861	4
29	MP2A	Z	-41.328	4
30	MP2A	Mx	.012	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
31	M14	X	50.004	%1
32	M14	Z	-86.61	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	31.889	2.04
2	MP1A	Z	-18.411	2.04
3	MP1A	Mx	-.016	2.04
4	MP1A	X	31.889	4.04
5	MP1A	Z	-18.411	4.04
6	MP1A	Mx	-.016	4.04
7	MP2A	X	75.975	1.02
8	MP2A	Z	-43.864	1.02
9	MP2A	Mx	-.089	1.02
10	MP2A	X	75.975	5.04
11	MP2A	Z	-43.864	5.04
12	MP2A	Mx	-.089	5.04
13	MP2A	X	75.975	1.02
14	MP2A	Z	-43.864	1.02
15	MP2A	Mx	-.031	1.02
16	MP2A	X	75.975	5.04
17	MP2A	Z	-43.864	5.04
18	MP2A	Mx	-.031	5.04
19	MP3A	X	48.785	1.04
20	MP3A	Z	-28.166	1.04
21	MP3A	Mx	-.03	1.04
22	MP3A	X	48.785	5.04
23	MP3A	Z	-28.166	5.04
24	MP3A	Mx	-.03	5.04
25	MP2A	X	35.072	2.04
26	MP2A	Z	-20.249	2.04
27	MP2A	Mx	.018	2.04
28	MP2A	X	30.625	4
29	MP2A	Z	-17.682	4
30	MP2A	Mx	.015	4
31	M14	X	70.618	%1
32	M14	Z	-40.771	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	26.518	2.04
2	MP1A	Z	0	2.04
3	MP1A	Mx	-.013	2.04
4	MP1A	X	26.518	4.04
5	MP1A	Z	0	4.04
6	MP1A	Mx	-.013	4.04
7	MP2A	X	77.77	1.02
8	MP2A	Z	0	1.02
9	MP2A	Mx	-.062	1.02

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
10	MP2A	X	77.77	5.04
11	MP2A	Z	0	5.04
12	MP2A	Mx	-.062	5.04
13	MP2A	X	77.77	1.02
14	MP2A	Z	0	1.02
15	MP2A	Mx	-.062	1.02
16	MP2A	X	77.77	5.04
17	MP2A	Z	0	5.04
18	MP2A	Mx	-.062	5.04
19	MP3A	X	52.147	1.04
20	MP3A	Z	0	1.04
21	MP3A	Mx	-.033	1.04
22	MP3A	X	52.147	5.04
23	MP3A	Z	0	5.04
24	MP3A	Mx	-.033	5.04
25	MP2A	X	36.03	2.04
26	MP2A	Z	0	2.04
27	MP2A	Mx	.018	2.04
28	MP2A	X	29.184	4
29	MP2A	Z	0	4
30	MP2A	Mx	.015	4
31	M14	X	72.31	%1
32	M14	Z	0	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	31.889	2.04
2	MP1A	Z	18.411	2.04
3	MP1A	Mx	-.016	2.04
4	MP1A	X	31.889	4.04
5	MP1A	Z	18.411	4.04
6	MP1A	Mx	-.016	4.04
7	MP2A	X	75.975	1.02
8	MP2A	Z	43.864	1.02
9	MP2A	Mx	-.031	1.02
10	MP2A	X	75.975	5.04
11	MP2A	Z	43.864	5.04
12	MP2A	Mx	-.031	5.04
13	MP2A	X	75.975	1.02
14	MP2A	Z	43.864	1.02
15	MP2A	Mx	-.089	1.02
16	MP2A	X	75.975	5.04
17	MP2A	Z	43.864	5.04
18	MP2A	Mx	-.089	5.04
19	MP3A	X	48.785	1.04
20	MP3A	Z	28.166	1.04
21	MP3A	Mx	-.03	1.04
22	MP3A	X	48.785	5.04
23	MP3A	Z	28.166	5.04
24	MP3A	Mx	-.03	5.04

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP2A	X	35.072	2.04
26	MP2A	Z	20.249	2.04
27	MP2A	Mx	.018	2.04
28	MP2A	X	30.625	4
29	MP2A	Z	17.682	4
30	MP2A	Mx	.015	4
31	M14	X	70.618	%1
32	M14	Z	40.771	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	28.716	2.04
2	MP1A	Z	49.737	2.04
3	MP1A	Mx	-.014	2.04
4	MP1A	X	28.716	4.04
5	MP1A	Z	49.737	4.04
6	MP1A	Mx	-.014	4.04
7	MP2A	X	53.822	1.02
8	MP2A	Z	93.222	1.02
9	MP2A	Mx	.02	1.02
10	MP2A	X	53.822	5.04
11	MP2A	Z	93.222	5.04
12	MP2A	Mx	.02	5.04
13	MP2A	X	53.822	1.02
14	MP2A	Z	93.222	1.02
15	MP2A	Mx	-.105	1.02
16	MP2A	X	53.822	5.04
17	MP2A	Z	93.222	5.04
18	MP2A	Mx	-.105	5.04
19	MP3A	X	32.352	1.04
20	MP3A	Z	56.035	1.04
21	MP3A	Mx	-.02	1.04
22	MP3A	X	32.352	5.04
23	MP3A	Z	56.035	5.04
24	MP3A	Mx	-.02	5.04
25	MP2A	X	24.716	2.04
26	MP2A	Z	42.81	2.04
27	MP2A	Mx	.012	2.04
28	MP2A	X	23.861	4
29	MP2A	Z	41.328	4
30	MP2A	Mx	.012	4
31	M14	X	50.004	%1
32	M14	Z	86.61	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	2.04
2	MP1A	Z	67.736	2.04
3	MP1A	Mx	0	2.04

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
4	MP1A	X	0	4.04
5	MP1A	Z	67.736	4.04
6	MP1A	Mx	0	4.04
7	MP2A	X	0	1.02
8	MP2A	Z	117.601	1.02
9	MP2A	Mx	.078	1.02
10	MP2A	X	0	5.04
11	MP2A	Z	117.601	5.04
12	MP2A	Mx	.078	5.04
13	MP2A	X	0	1.02
14	MP2A	Z	117.601	1.02
15	MP2A	Mx	-.078	1.02
16	MP2A	X	0	5.04
17	MP2A	Z	117.601	5.04
18	MP2A	Mx	-.078	5.04
19	MP3A	X	0	1.04
20	MP3A	Z	68.889	1.04
21	MP3A	Mx	0	1.04
22	MP3A	X	0	5.04
23	MP3A	Z	68.889	5.04
24	MP3A	Mx	0	5.04
25	MP2A	X	0	2.04
26	MP2A	Z	53.9	2.04
27	MP2A	Mx	0	2.04
28	MP2A	X	0	4
29	MP2A	Z	53.9	4
30	MP2A	Mx	0	4
31	M14	X	0	%1
32	M14	Z	109.242	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-28.716	2.04
2	MP1A	Z	49.737	2.04
3	MP1A	Mx	.014	2.04
4	MP1A	X	-28.716	4.04
5	MP1A	Z	49.737	4.04
6	MP1A	Mx	.014	4.04
7	MP2A	X	-53.822	1.02
8	MP2A	Z	93.222	1.02
9	MP2A	Mx	.105	1.02
10	MP2A	X	-53.822	5.04
11	MP2A	Z	93.222	5.04
12	MP2A	Mx	.105	5.04
13	MP2A	X	-53.822	1.02
14	MP2A	Z	93.222	1.02
15	MP2A	Mx	-.02	1.02
16	MP2A	X	-53.822	5.04
17	MP2A	Z	93.222	5.04
18	MP2A	Mx	-.02	5.04

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
19	MP3A	X	-32.352	1.04
20	MP3A	Z	56.035	1.04
21	MP3A	Mx	.02	1.04
22	MP3A	X	-32.352	5.04
23	MP3A	Z	56.035	5.04
24	MP3A	Mx	.02	5.04
25	MP2A	X	-24.716	2.04
26	MP2A	Z	42.81	2.04
27	MP2A	Mx	-.012	2.04
28	MP2A	X	-23.861	4
29	MP2A	Z	41.328	4
30	MP2A	Mx	-.012	4
31	M14	X	-50.004	%1
32	M14	Z	86.61	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-31.889	2.04
2	MP1A	Z	18.411	2.04
3	MP1A	Mx	.016	2.04
4	MP1A	X	-31.889	4.04
5	MP1A	Z	18.411	4.04
6	MP1A	Mx	.016	4.04
7	MP2A	X	-75.975	1.02
8	MP2A	Z	43.864	1.02
9	MP2A	Mx	.089	1.02
10	MP2A	X	-75.975	5.04
11	MP2A	Z	43.864	5.04
12	MP2A	Mx	.089	5.04
13	MP2A	X	-75.975	1.02
14	MP2A	Z	43.864	1.02
15	MP2A	Mx	.031	1.02
16	MP2A	X	-75.975	5.04
17	MP2A	Z	43.864	5.04
18	MP2A	Mx	.031	5.04
19	MP3A	X	-48.785	1.04
20	MP3A	Z	28.166	1.04
21	MP3A	Mx	.03	1.04
22	MP3A	X	-48.785	5.04
23	MP3A	Z	28.166	5.04
24	MP3A	Mx	.03	5.04
25	MP2A	X	-35.072	2.04
26	MP2A	Z	20.249	2.04
27	MP2A	Mx	-.018	2.04
28	MP2A	X	-30.625	4
29	MP2A	Z	17.682	4
30	MP2A	Mx	-.015	4
31	M14	X	-70.618	%1
32	M14	Z	40.771	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-26.518	2.04
2	MP1A	Z	0	2.04
3	MP1A	Mx	.013	2.04
4	MP1A	X	-26.518	4.04
5	MP1A	Z	0	4.04
6	MP1A	Mx	.013	4.04
7	MP2A	X	-77.77	1.02
8	MP2A	Z	0	1.02
9	MP2A	Mx	.062	1.02
10	MP2A	X	-77.77	5.04
11	MP2A	Z	0	5.04
12	MP2A	Mx	.062	5.04
13	MP2A	X	-77.77	1.02
14	MP2A	Z	0	1.02
15	MP2A	Mx	.062	1.02
16	MP2A	X	-77.77	5.04
17	MP2A	Z	0	5.04
18	MP2A	Mx	.062	5.04
19	MP3A	X	-52.147	1.04
20	MP3A	Z	0	1.04
21	MP3A	Mx	.033	1.04
22	MP3A	X	-52.147	5.04
23	MP3A	Z	0	5.04
24	MP3A	Mx	.033	5.04
25	MP2A	X	-36.03	2.04
26	MP2A	Z	0	2.04
27	MP2A	Mx	-.018	2.04
28	MP2A	X	-29.184	4
29	MP2A	Z	0	4
30	MP2A	Mx	-.015	4
31	M14	X	-72.31	%1
32	M14	Z	0	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-31.889	2.04
2	MP1A	Z	-18.411	2.04
3	MP1A	Mx	.016	2.04
4	MP1A	X	-31.889	4.04
5	MP1A	Z	-18.411	4.04
6	MP1A	Mx	.016	4.04
7	MP2A	X	-75.975	1.02
8	MP2A	Z	-43.864	1.02
9	MP2A	Mx	.031	1.02
10	MP2A	X	-75.975	5.04
11	MP2A	Z	-43.864	5.04
12	MP2A	Mx	.031	5.04
13	MP2A	X	-75.975	1.02
14	MP2A	Z	-43.864	1.02
15	MP2A	Mx	.089	1.02

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
16	MP2A	X	-75.975	5.04
17	MP2A	Z	-43.864	5.04
18	MP2A	Mx	.089	5.04
19	MP3A	X	-48.785	1.04
20	MP3A	Z	-28.166	1.04
21	MP3A	Mx	.03	1.04
22	MP3A	X	-48.785	5.04
23	MP3A	Z	-28.166	5.04
24	MP3A	Mx	.03	5.04
25	MP2A	X	-35.072	2.04
26	MP2A	Z	-20.249	2.04
27	MP2A	Mx	-.018	2.04
28	MP2A	X	-30.625	4
29	MP2A	Z	-17.682	4
30	MP2A	Mx	-.015	4
31	M14	X	-70.618	%1
32	M14	Z	-40.771	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-28.716	2.04
2	MP1A	Z	-49.737	2.04
3	MP1A	Mx	.014	2.04
4	MP1A	X	-28.716	4.04
5	MP1A	Z	-49.737	4.04
6	MP1A	Mx	.014	4.04
7	MP2A	X	-53.822	1.02
8	MP2A	Z	-93.222	1.02
9	MP2A	Mx	-.02	1.02
10	MP2A	X	-53.822	5.04
11	MP2A	Z	-93.222	5.04
12	MP2A	Mx	-.02	5.04
13	MP2A	X	-53.822	1.02
14	MP2A	Z	-93.222	1.02
15	MP2A	Mx	.105	1.02
16	MP2A	X	-53.822	5.04
17	MP2A	Z	-93.222	5.04
18	MP2A	Mx	.105	5.04
19	MP3A	X	-32.352	1.04
20	MP3A	Z	-56.035	1.04
21	MP3A	Mx	.02	1.04
22	MP3A	X	-32.352	5.04
23	MP3A	Z	-56.035	5.04
24	MP3A	Mx	.02	5.04
25	MP2A	X	-24.716	2.04
26	MP2A	Z	-42.81	2.04
27	MP2A	Mx	-.012	2.04
28	MP2A	X	-23.861	4
29	MP2A	Z	-41.328	4
30	MP2A	Mx	-.012	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
31	M14	X	-50.004	%1
32	M14	Z	-86.61	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	2.04
2	MP1A	Z	-14.992	2.04
3	MP1A	Mx	0	2.04
4	MP1A	X	0	4.04
5	MP1A	Z	-14.992	4.04
6	MP1A	Mx	0	4.04
7	MP2A	X	0	1.02
8	MP2A	Z	-25.186	1.02
9	MP2A	Mx	-.017	1.02
10	MP2A	X	0	5.04
11	MP2A	Z	-25.186	5.04
12	MP2A	Mx	-.017	5.04
13	MP2A	X	0	1.02
14	MP2A	Z	-25.186	1.02
15	MP2A	Mx	.017	1.02
16	MP2A	X	0	5.04
17	MP2A	Z	-25.186	5.04
18	MP2A	Mx	.017	5.04
19	MP3A	X	0	1.04
20	MP3A	Z	-15.974	1.04
21	MP3A	Mx	0	1.04
22	MP3A	X	0	5.04
23	MP3A	Z	-15.974	5.04
24	MP3A	Mx	0	5.04
25	MP2A	X	0	2.04
26	MP2A	Z	-12.954	2.04
27	MP2A	Mx	0	2.04
28	MP2A	X	0	4
29	MP2A	Z	-12.954	4
30	MP2A	Mx	0	4
31	M14	X	0	%1
32	M14	Z	-24.437	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	6.451	2.04
2	MP1A	Z	-11.174	2.04
3	MP1A	Mx	-.003	2.04
4	MP1A	X	6.451	4.04
5	MP1A	Z	-11.174	4.04
6	MP1A	Mx	-.003	4.04
7	MP2A	X	11.655	1.02
8	MP2A	Z	-20.186	1.02
9	MP2A	Mx	-.023	1.02

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
10	MP2A	X	11.655	5.04
11	MP2A	Z	-20.186	5.04
12	MP2A	Mx	-.023	5.04
13	MP2A	X	11.655	1.02
14	MP2A	Z	-20.186	1.02
15	MP2A	Mx	.004	1.02
16	MP2A	X	11.655	5.04
17	MP2A	Z	-20.186	5.04
18	MP2A	Mx	.004	5.04
19	MP3A	X	7.571	1.04
20	MP3A	Z	-13.113	1.04
21	MP3A	Mx	-.005	1.04
22	MP3A	X	7.571	5.04
23	MP3A	Z	-13.113	5.04
24	MP3A	Mx	-.005	5.04
25	MP2A	X	6.004	2.04
26	MP2A	Z	-10.399	2.04
27	MP2A	Mx	.003	2.04
28	MP2A	X	5.824	4
29	MP2A	Z	-10.088	4
30	MP2A	Mx	.003	4
31	M14	X	11.289	%1
32	M14	Z	-19.553	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	7.554	2.04
2	MP1A	Z	-4.361	2.04
3	MP1A	Mx	-.004	2.04
4	MP1A	X	7.554	4.04
5	MP1A	Z	-4.361	4.04
6	MP1A	Mx	-.004	4.04
7	MP2A	X	16.936	1.02
8	MP2A	Z	-9.778	1.02
9	MP2A	Mx	-.02	1.02
10	MP2A	X	16.936	5.04
11	MP2A	Z	-9.778	5.04
12	MP2A	Mx	-.02	5.04
13	MP2A	X	16.936	1.02
14	MP2A	Z	-9.778	1.02
15	MP2A	Mx	-.007	1.02
16	MP2A	X	16.936	5.04
17	MP2A	Z	-9.778	5.04
18	MP2A	Mx	-.007	5.04
19	MP3A	X	11.671	1.04
20	MP3A	Z	-6.738	1.04
21	MP3A	Mx	-.007	1.04
22	MP3A	X	11.671	5.04
23	MP3A	Z	-6.738	5.04
24	MP3A	Mx	-.007	5.04

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP2A	X	8.761	2.04
26	MP2A	Z	-5.058	2.04
27	MP2A	Mx	.004	2.04
28	MP2A	X	7.827	4
29	MP2A	Z	-4.519	4
30	MP2A	Mx	.004	4
31	M14	X	16.333	%1
32	M14	Z	-9.43	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	6.633	2.04
2	MP1A	Z	0	2.04
3	MP1A	Mx	-.003	2.04
4	MP1A	X	6.633	4.04
5	MP1A	Z	0	4.04
6	MP1A	Mx	-.003	4.04
7	MP2A	X	17.679	1.02
8	MP2A	Z	0	1.02
9	MP2A	Mx	-.014	1.02
10	MP2A	X	17.679	5.04
11	MP2A	Z	0	5.04
12	MP2A	Mx	-.014	5.04
13	MP2A	X	17.679	1.02
14	MP2A	Z	0	1.02
15	MP2A	Mx	-.014	1.02
16	MP2A	X	17.679	5.04
17	MP2A	Z	0	5.04
18	MP2A	Mx	-.014	5.04
19	MP3A	X	12.644	1.04
20	MP3A	Z	0	1.04
21	MP3A	Mx	-.008	1.04
22	MP3A	X	12.644	5.04
23	MP3A	Z	0	5.04
24	MP3A	Mx	-.008	5.04
25	MP2A	X	9.171	2.04
26	MP2A	Z	0	2.04
27	MP2A	Mx	.005	2.04
28	MP2A	X	7.733	4
29	MP2A	Z	0	4
30	MP2A	Mx	.004	4
31	M14	X	17.001	%1
32	M14	Z	0	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	7.554	2.04
2	MP1A	Z	4.361	2.04
3	MP1A	Mx	-.004	2.04

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
4	MP1A	X	7.554	4.04
5	MP1A	Z	4.361	4.04
6	MP1A	Mx	-.004	4.04
7	MP2A	X	16.936	1.02
8	MP2A	Z	9.778	1.02
9	MP2A	Mx	-.007	1.02
10	MP2A	X	16.936	5.04
11	MP2A	Z	9.778	5.04
12	MP2A	Mx	-.007	5.04
13	MP2A	X	16.936	1.02
14	MP2A	Z	9.778	1.02
15	MP2A	Mx	-.02	1.02
16	MP2A	X	16.936	5.04
17	MP2A	Z	9.778	5.04
18	MP2A	Mx	-.02	5.04
19	MP3A	X	11.671	1.04
20	MP3A	Z	6.738	1.04
21	MP3A	Mx	-.007	1.04
22	MP3A	X	11.671	5.04
23	MP3A	Z	6.738	5.04
24	MP3A	Mx	-.007	5.04
25	MP2A	X	8.761	2.04
26	MP2A	Z	5.058	2.04
27	MP2A	Mx	.004	2.04
28	MP2A	X	7.827	4
29	MP2A	Z	4.519	4
30	MP2A	Mx	.004	4
31	M14	X	16.333	%1
32	M14	Z	9.43	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	6.451	2.04
2	MP1A	Z	11.174	2.04
3	MP1A	Mx	-.003	2.04
4	MP1A	X	6.451	4.04
5	MP1A	Z	11.174	4.04
6	MP1A	Mx	-.003	4.04
7	MP2A	X	11.655	1.02
8	MP2A	Z	20.186	1.02
9	MP2A	Mx	.004	1.02
10	MP2A	X	11.655	5.04
11	MP2A	Z	20.186	5.04
12	MP2A	Mx	.004	5.04
13	MP2A	X	11.655	1.02
14	MP2A	Z	20.186	1.02
15	MP2A	Mx	-.023	1.02
16	MP2A	X	11.655	5.04
17	MP2A	Z	20.186	5.04
18	MP2A	Mx	-.023	5.04

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
19	MP3A	X	7.571	1.04
20	MP3A	Z	13.113	1.04
21	MP3A	Mx	-.005	1.04
22	MP3A	X	7.571	5.04
23	MP3A	Z	13.113	5.04
24	MP3A	Mx	-.005	5.04
25	MP2A	X	6.004	2.04
26	MP2A	Z	10.399	2.04
27	MP2A	Mx	.003	2.04
28	MP2A	X	5.824	4
29	MP2A	Z	10.088	4
30	MP2A	Mx	.003	4
31	M14	X	11.289	%1
32	M14	Z	19.553	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	2.04
2	MP1A	Z	14.992	2.04
3	MP1A	Mx	0	2.04
4	MP1A	X	0	4.04
5	MP1A	Z	14.992	4.04
6	MP1A	Mx	0	4.04
7	MP2A	X	0	1.02
8	MP2A	Z	25.186	1.02
9	MP2A	Mx	.017	1.02
10	MP2A	X	0	5.04
11	MP2A	Z	25.186	5.04
12	MP2A	Mx	.017	5.04
13	MP2A	X	0	1.02
14	MP2A	Z	25.186	1.02
15	MP2A	Mx	-.017	1.02
16	MP2A	X	0	5.04
17	MP2A	Z	25.186	5.04
18	MP2A	Mx	-.017	5.04
19	MP3A	X	0	1.04
20	MP3A	Z	15.974	1.04
21	MP3A	Mx	0	1.04
22	MP3A	X	0	5.04
23	MP3A	Z	15.974	5.04
24	MP3A	Mx	0	5.04
25	MP2A	X	0	2.04
26	MP2A	Z	12.954	2.04
27	MP2A	Mx	0	2.04
28	MP2A	X	0	4
29	MP2A	Z	12.954	4
30	MP2A	Mx	0	4
31	M14	X	0	%1
32	M14	Z	24.437	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-6.451	2.04
2	MP1A	Z	11.174	2.04
3	MP1A	Mx	.003	2.04
4	MP1A	X	-6.451	4.04
5	MP1A	Z	11.174	4.04
6	MP1A	Mx	.003	4.04
7	MP2A	X	-11.655	1.02
8	MP2A	Z	20.186	1.02
9	MP2A	Mx	.023	1.02
10	MP2A	X	-11.655	5.04
11	MP2A	Z	20.186	5.04
12	MP2A	Mx	.023	5.04
13	MP2A	X	-11.655	1.02
14	MP2A	Z	20.186	1.02
15	MP2A	Mx	-.004	1.02
16	MP2A	X	-11.655	5.04
17	MP2A	Z	20.186	5.04
18	MP2A	Mx	-.004	5.04
19	MP3A	X	-7.571	1.04
20	MP3A	Z	13.113	1.04
21	MP3A	Mx	.005	1.04
22	MP3A	X	-7.571	5.04
23	MP3A	Z	13.113	5.04
24	MP3A	Mx	.005	5.04
25	MP2A	X	-6.004	2.04
26	MP2A	Z	10.399	2.04
27	MP2A	Mx	-.003	2.04
28	MP2A	X	-5.824	4
29	MP2A	Z	10.088	4
30	MP2A	Mx	-.003	4
31	M14	X	-11.289	%1
32	M14	Z	19.553	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-7.554	2.04
2	MP1A	Z	4.361	2.04
3	MP1A	Mx	.004	2.04
4	MP1A	X	-7.554	4.04
5	MP1A	Z	4.361	4.04
6	MP1A	Mx	.004	4.04
7	MP2A	X	-16.936	1.02
8	MP2A	Z	9.778	1.02
9	MP2A	Mx	.02	1.02
10	MP2A	X	-16.936	5.04
11	MP2A	Z	9.778	5.04
12	MP2A	Mx	.02	5.04
13	MP2A	X	-16.936	1.02
14	MP2A	Z	9.778	1.02
15	MP2A	Mx	.007	1.02

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
16	MP2A	X	-16.936	5.04
17	MP2A	Z	9.778	5.04
18	MP2A	Mx	.007	5.04
19	MP3A	X	-11.671	1.04
20	MP3A	Z	6.738	1.04
21	MP3A	Mx	.007	1.04
22	MP3A	X	-11.671	5.04
23	MP3A	Z	6.738	5.04
24	MP3A	Mx	.007	5.04
25	MP2A	X	-8.761	2.04
26	MP2A	Z	5.058	2.04
27	MP2A	Mx	-.004	2.04
28	MP2A	X	-7.827	4
29	MP2A	Z	4.519	4
30	MP2A	Mx	-.004	4
31	M14	X	-16.333	%1
32	M14	Z	9.43	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-6.633	2.04
2	MP1A	Z	0	2.04
3	MP1A	Mx	.003	2.04
4	MP1A	X	-6.633	4.04
5	MP1A	Z	0	4.04
6	MP1A	Mx	.003	4.04
7	MP2A	X	-17.679	1.02
8	MP2A	Z	0	1.02
9	MP2A	Mx	.014	1.02
10	MP2A	X	-17.679	5.04
11	MP2A	Z	0	5.04
12	MP2A	Mx	.014	5.04
13	MP2A	X	-17.679	1.02
14	MP2A	Z	0	1.02
15	MP2A	Mx	.014	1.02
16	MP2A	X	-17.679	5.04
17	MP2A	Z	0	5.04
18	MP2A	Mx	.014	5.04
19	MP3A	X	-12.644	1.04
20	MP3A	Z	0	1.04
21	MP3A	Mx	.008	1.04
22	MP3A	X	-12.644	5.04
23	MP3A	Z	0	5.04
24	MP3A	Mx	.008	5.04
25	MP2A	X	-9.171	2.04
26	MP2A	Z	0	2.04
27	MP2A	Mx	-.005	2.04
28	MP2A	X	-7.733	4
29	MP2A	Z	0	4
30	MP2A	Mx	-.004	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
31	M14	X	-17.001	%1
32	M14	Z	0	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-7.554	2.04
2	MP1A	Z	-4.361	2.04
3	MP1A	Mx	.004	2.04
4	MP1A	X	-7.554	4.04
5	MP1A	Z	-4.361	4.04
6	MP1A	Mx	.004	4.04
7	MP2A	X	-16.936	1.02
8	MP2A	Z	-9.778	1.02
9	MP2A	Mx	.007	1.02
10	MP2A	X	-16.936	5.04
11	MP2A	Z	-9.778	5.04
12	MP2A	Mx	.007	5.04
13	MP2A	X	-16.936	1.02
14	MP2A	Z	-9.778	1.02
15	MP2A	Mx	.02	1.02
16	MP2A	X	-16.936	5.04
17	MP2A	Z	-9.778	5.04
18	MP2A	Mx	.02	5.04
19	MP3A	X	-11.671	1.04
20	MP3A	Z	-6.738	1.04
21	MP3A	Mx	.007	1.04
22	MP3A	X	-11.671	5.04
23	MP3A	Z	-6.738	5.04
24	MP3A	Mx	.007	5.04
25	MP2A	X	-8.761	2.04
26	MP2A	Z	-5.058	2.04
27	MP2A	Mx	-.004	2.04
28	MP2A	X	-7.827	4
29	MP2A	Z	-4.519	4
30	MP2A	Mx	-.004	4
31	M14	X	-16.333	%1
32	M14	Z	-9.43	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-6.451	2.04
2	MP1A	Z	-11.174	2.04
3	MP1A	Mx	.003	2.04
4	MP1A	X	-6.451	4.04
5	MP1A	Z	-11.174	4.04
6	MP1A	Mx	.003	4.04
7	MP2A	X	-11.655	1.02
8	MP2A	Z	-20.186	1.02
9	MP2A	Mx	-.004	1.02

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
10	MP2A	X	-11.655	5.04
11	MP2A	Z	-20.186	5.04
12	MP2A	Mx	-.004	5.04
13	MP2A	X	-11.655	1.02
14	MP2A	Z	-20.186	1.02
15	MP2A	Mx	.023	1.02
16	MP2A	X	-11.655	5.04
17	MP2A	Z	-20.186	5.04
18	MP2A	Mx	.023	5.04
19	MP3A	X	-7.571	1.04
20	MP3A	Z	-13.113	1.04
21	MP3A	Mx	.005	1.04
22	MP3A	X	-7.571	5.04
23	MP3A	Z	-13.113	5.04
24	MP3A	Mx	.005	5.04
25	MP2A	X	-6.004	2.04
26	MP2A	Z	-10.399	2.04
27	MP2A	Mx	-.003	2.04
28	MP2A	X	-5.824	4
29	MP2A	Z	-10.088	4
30	MP2A	Mx	-.003	4
31	M14	X	-11.289	%1
32	M14	Z	-19.553	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	2.04
2	MP1A	Z	-4.53	2.04
3	MP1A	Mx	0	2.04
4	MP1A	X	0	4.04
5	MP1A	Z	-4.53	4.04
6	MP1A	Mx	0	4.04
7	MP2A	X	0	1.02
8	MP2A	Z	-7.866	1.02
9	MP2A	Mx	-.005	1.02
10	MP2A	X	0	5.04
11	MP2A	Z	-7.866	5.04
12	MP2A	Mx	-.005	5.04
13	MP2A	X	0	1.02
14	MP2A	Z	-7.866	1.02
15	MP2A	Mx	.005	1.02
16	MP2A	X	0	5.04
17	MP2A	Z	-7.866	5.04
18	MP2A	Mx	.005	5.04
19	MP3A	X	0	1.04
20	MP3A	Z	-4.608	1.04
21	MP3A	Mx	0	1.04
22	MP3A	X	0	5.04
23	MP3A	Z	-4.608	5.04
24	MP3A	Mx	0	5.04

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP2A	X	0	2.04
26	MP2A	Z	-3.605	2.04
27	MP2A	Mx	0	2.04
28	MP2A	X	0	4
29	MP2A	Z	-3.605	4
30	MP2A	Mx	0	4
31	M14	X	0	%1
32	M14	Z	-7.307	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	1.921	2.04
2	MP1A	Z	-3.327	2.04
3	MP1A	Mx	-.00096	2.04
4	MP1A	X	1.921	4.04
5	MP1A	Z	-3.327	4.04
6	MP1A	Mx	-.00096	4.04
7	MP2A	X	3.6	1.02
8	MP2A	Z	-6.235	1.02
9	MP2A	Mx	-.007	1.02
10	MP2A	X	3.6	5.04
11	MP2A	Z	-6.235	5.04
12	MP2A	Mx	-.007	5.04
13	MP2A	X	3.6	1.02
14	MP2A	Z	-6.235	1.02
15	MP2A	Mx	.001	1.02
16	MP2A	X	3.6	5.04
17	MP2A	Z	-6.235	5.04
18	MP2A	Mx	.001	5.04
19	MP3A	X	2.164	1.04
20	MP3A	Z	-3.748	1.04
21	MP3A	Mx	-.001	1.04
22	MP3A	X	2.164	5.04
23	MP3A	Z	-3.748	5.04
24	MP3A	Mx	-.001	5.04
25	MP2A	X	1.653	2.04
26	MP2A	Z	-2.863	2.04
27	MP2A	Mx	.000826	2.04
28	MP2A	X	1.596	4
29	MP2A	Z	-2.764	4
30	MP2A	Mx	.000798	4
31	M14	X	3.345	%1
32	M14	Z	-5.793	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	2.133	2.04
2	MP1A	Z	-1.231	2.04
3	MP1A	Mx	-.001	2.04

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
4	MP1A	X	2.133	4.04
5	MP1A	Z	-1.231	4.04
6	MP1A	Mx	-.001	4.04
7	MP2A	X	5.082	1.02
8	MP2A	Z	-2.934	1.02
9	MP2A	Mx	-.006	1.02
10	MP2A	X	5.082	5.04
11	MP2A	Z	-2.934	5.04
12	MP2A	Mx	-.006	5.04
13	MP2A	X	5.082	1.02
14	MP2A	Z	-2.934	1.02
15	MP2A	Mx	-.002	1.02
16	MP2A	X	5.082	5.04
17	MP2A	Z	-2.934	5.04
18	MP2A	Mx	-.002	5.04
19	MP3A	X	3.263	1.04
20	MP3A	Z	-1.884	1.04
21	MP3A	Mx	-.002	1.04
22	MP3A	X	3.263	5.04
23	MP3A	Z	-1.884	5.04
24	MP3A	Mx	-.002	5.04
25	MP2A	X	2.346	2.04
26	MP2A	Z	-1.354	2.04
27	MP2A	Mx	.001	2.04
28	MP2A	X	2.048	4
29	MP2A	Z	-1.183	4
30	MP2A	Mx	.001	4
31	M14	X	4.723	%1
32	M14	Z	-2.727	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	1.774	2.04
2	MP1A	Z	0	2.04
3	MP1A	Mx	-.000887	2.04
4	MP1A	X	1.774	4.04
5	MP1A	Z	0	4.04
6	MP1A	Mx	-.000887	4.04
7	MP2A	X	5.202	1.02
8	MP2A	Z	0	1.02
9	MP2A	Mx	-.004	1.02
10	MP2A	X	5.202	5.04
11	MP2A	Z	0	5.04
12	MP2A	Mx	-.004	5.04
13	MP2A	X	5.202	1.02
14	MP2A	Z	0	1.02
15	MP2A	Mx	-.004	1.02
16	MP2A	X	5.202	5.04
17	MP2A	Z	0	5.04
18	MP2A	Mx	-.004	5.04

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
19	MP3A	X	3.488	1.04
20	MP3A	Z	0	1.04
21	MP3A	Mx	-.002	1.04
22	MP3A	X	3.488	5.04
23	MP3A	Z	0	5.04
24	MP3A	Mx	-.002	5.04
25	MP2A	X	2.41	2.04
26	MP2A	Z	0	2.04
27	MP2A	Mx	.001	2.04
28	MP2A	X	1.952	4
29	MP2A	Z	0	4
30	MP2A	Mx	.000976	4
31	M14	X	4.836	%1
32	M14	Z	0	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	2.133	2.04
2	MP1A	Z	1.231	2.04
3	MP1A	Mx	-.001	2.04
4	MP1A	X	2.133	4.04
5	MP1A	Z	1.231	4.04
6	MP1A	Mx	-.001	4.04
7	MP2A	X	5.082	1.02
8	MP2A	Z	2.934	1.02
9	MP2A	Mx	-.002	1.02
10	MP2A	X	5.082	5.04
11	MP2A	Z	2.934	5.04
12	MP2A	Mx	-.002	5.04
13	MP2A	X	5.082	1.02
14	MP2A	Z	2.934	1.02
15	MP2A	Mx	-.006	1.02
16	MP2A	X	5.082	5.04
17	MP2A	Z	2.934	5.04
18	MP2A	Mx	-.006	5.04
19	MP3A	X	3.263	1.04
20	MP3A	Z	1.884	1.04
21	MP3A	Mx	-.002	1.04
22	MP3A	X	3.263	5.04
23	MP3A	Z	1.884	5.04
24	MP3A	Mx	-.002	5.04
25	MP2A	X	2.346	2.04
26	MP2A	Z	1.354	2.04
27	MP2A	Mx	.001	2.04
28	MP2A	X	2.048	4
29	MP2A	Z	1.183	4
30	MP2A	Mx	.001	4
31	M14	X	4.723	%1
32	M14	Z	2.727	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	1.921	2.04
2	MP1A	Z	3.327	2.04
3	MP1A	Mx	-.00096	2.04
4	MP1A	X	1.921	4.04
5	MP1A	Z	3.327	4.04
6	MP1A	Mx	-.00096	4.04
7	MP2A	X	3.6	1.02
8	MP2A	Z	6.235	1.02
9	MP2A	Mx	.001	1.02
10	MP2A	X	3.6	5.04
11	MP2A	Z	6.235	5.04
12	MP2A	Mx	.001	5.04
13	MP2A	X	3.6	1.02
14	MP2A	Z	6.235	1.02
15	MP2A	Mx	-.007	1.02
16	MP2A	X	3.6	5.04
17	MP2A	Z	6.235	5.04
18	MP2A	Mx	-.007	5.04
19	MP3A	X	2.164	1.04
20	MP3A	Z	3.748	1.04
21	MP3A	Mx	-.001	1.04
22	MP3A	X	2.164	5.04
23	MP3A	Z	3.748	5.04
24	MP3A	Mx	-.001	5.04
25	MP2A	X	1.653	2.04
26	MP2A	Z	2.863	2.04
27	MP2A	Mx	.000826	2.04
28	MP2A	X	1.596	4
29	MP2A	Z	2.764	4
30	MP2A	Mx	.000798	4
31	M14	X	3.345	%1
32	M14	Z	5.793	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	2.04
2	MP1A	Z	4.53	2.04
3	MP1A	Mx	0	2.04
4	MP1A	X	0	4.04
5	MP1A	Z	4.53	4.04
6	MP1A	Mx	0	4.04
7	MP2A	X	0	1.02
8	MP2A	Z	7.866	1.02
9	MP2A	Mx	.005	1.02
10	MP2A	X	0	5.04
11	MP2A	Z	7.866	5.04
12	MP2A	Mx	.005	5.04
13	MP2A	X	0	1.02
14	MP2A	Z	7.866	1.02
15	MP2A	Mx	-.005	1.02

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
16	MP2A	X	0	5.04
17	MP2A	Z	7.866	5.04
18	MP2A	Mx	-.005	5.04
19	MP3A	X	0	1.04
20	MP3A	Z	4.608	1.04
21	MP3A	Mx	0	1.04
22	MP3A	X	0	5.04
23	MP3A	Z	4.608	5.04
24	MP3A	Mx	0	5.04
25	MP2A	X	0	2.04
26	MP2A	Z	3.605	2.04
27	MP2A	Mx	0	2.04
28	MP2A	X	0	4
29	MP2A	Z	3.605	4
30	MP2A	Mx	0	4
31	M14	X	0	%1
32	M14	Z	7.307	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-1.921	2.04
2	MP1A	Z	3.327	2.04
3	MP1A	Mx	.00096	2.04
4	MP1A	X	-1.921	4.04
5	MP1A	Z	3.327	4.04
6	MP1A	Mx	.00096	4.04
7	MP2A	X	-3.6	1.02
8	MP2A	Z	6.235	1.02
9	MP2A	Mx	.007	1.02
10	MP2A	X	-3.6	5.04
11	MP2A	Z	6.235	5.04
12	MP2A	Mx	.007	5.04
13	MP2A	X	-3.6	1.02
14	MP2A	Z	6.235	1.02
15	MP2A	Mx	-.001	1.02
16	MP2A	X	-3.6	5.04
17	MP2A	Z	6.235	5.04
18	MP2A	Mx	-.001	5.04
19	MP3A	X	-2.164	1.04
20	MP3A	Z	3.748	1.04
21	MP3A	Mx	.001	1.04
22	MP3A	X	-2.164	5.04
23	MP3A	Z	3.748	5.04
24	MP3A	Mx	.001	5.04
25	MP2A	X	-1.653	2.04
26	MP2A	Z	2.863	2.04
27	MP2A	Mx	-.000826	2.04
28	MP2A	X	-1.596	4
29	MP2A	Z	2.764	4
30	MP2A	Mx	-.000798	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
31	M14	X	-3.345	%1
32	M14	Z	5.793	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-2.133	2.04
2	MP1A	Z	1.231	2.04
3	MP1A	Mx	.001	2.04
4	MP1A	X	-2.133	4.04
5	MP1A	Z	1.231	4.04
6	MP1A	Mx	.001	4.04
7	MP2A	X	-5.082	1.02
8	MP2A	Z	2.934	1.02
9	MP2A	Mx	.006	1.02
10	MP2A	X	-5.082	5.04
11	MP2A	Z	2.934	5.04
12	MP2A	Mx	.006	5.04
13	MP2A	X	-5.082	1.02
14	MP2A	Z	2.934	1.02
15	MP2A	Mx	.002	1.02
16	MP2A	X	-5.082	5.04
17	MP2A	Z	2.934	5.04
18	MP2A	Mx	.002	5.04
19	MP3A	X	-3.263	1.04
20	MP3A	Z	1.884	1.04
21	MP3A	Mx	.002	1.04
22	MP3A	X	-3.263	5.04
23	MP3A	Z	1.884	5.04
24	MP3A	Mx	.002	5.04
25	MP2A	X	-2.346	2.04
26	MP2A	Z	1.354	2.04
27	MP2A	Mx	-.001	2.04
28	MP2A	X	-2.048	4
29	MP2A	Z	1.183	4
30	MP2A	Mx	-.001	4
31	M14	X	-4.723	%1
32	M14	Z	2.727	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-1.774	2.04
2	MP1A	Z	0	2.04
3	MP1A	Mx	.000887	2.04
4	MP1A	X	-1.774	4.04
5	MP1A	Z	0	4.04
6	MP1A	Mx	.000887	4.04
7	MP2A	X	-5.202	1.02
8	MP2A	Z	0	1.02
9	MP2A	Mx	.004	1.02

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
10	MP2A	X	-5.202	5.04
11	MP2A	Z	0	5.04
12	MP2A	Mx	.004	5.04
13	MP2A	X	-5.202	1.02
14	MP2A	Z	0	1.02
15	MP2A	Mx	.004	1.02
16	MP2A	X	-5.202	5.04
17	MP2A	Z	0	5.04
18	MP2A	Mx	.004	5.04
19	MP3A	X	-3.488	1.04
20	MP3A	Z	0	1.04
21	MP3A	Mx	.002	1.04
22	MP3A	X	-3.488	5.04
23	MP3A	Z	0	5.04
24	MP3A	Mx	.002	5.04
25	MP2A	X	-2.41	2.04
26	MP2A	Z	0	2.04
27	MP2A	Mx	-.001	2.04
28	MP2A	X	-1.952	4
29	MP2A	Z	0	4
30	MP2A	Mx	-.000976	4
31	M14	X	-4.836	%1
32	M14	Z	0	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-2.133	2.04
2	MP1A	Z	-1.231	2.04
3	MP1A	Mx	.001	2.04
4	MP1A	X	-2.133	4.04
5	MP1A	Z	-1.231	4.04
6	MP1A	Mx	.001	4.04
7	MP2A	X	-5.082	1.02
8	MP2A	Z	-2.934	1.02
9	MP2A	Mx	.002	1.02
10	MP2A	X	-5.082	5.04
11	MP2A	Z	-2.934	5.04
12	MP2A	Mx	.002	5.04
13	MP2A	X	-5.082	1.02
14	MP2A	Z	-2.934	1.02
15	MP2A	Mx	.006	1.02
16	MP2A	X	-5.082	5.04
17	MP2A	Z	-2.934	5.04
18	MP2A	Mx	.006	5.04
19	MP3A	X	-3.263	1.04
20	MP3A	Z	-1.884	1.04
21	MP3A	Mx	.002	1.04
22	MP3A	X	-3.263	5.04
23	MP3A	Z	-1.884	5.04
24	MP3A	Mx	.002	5.04

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP2A	X	-2.346	2.04
26	MP2A	Z	-1.354	2.04
27	MP2A	Mx	-.001	2.04
28	MP2A	X	-2.048	4
29	MP2A	Z	-1.183	4
30	MP2A	Mx	-.001	4
31	M14	X	-4.723	%1
32	M14	Z	-2.727	%1
33	M14	Mx	0	%1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-1.921	2.04
2	MP1A	Z	-3.327	2.04
3	MP1A	Mx	.00096	2.04
4	MP1A	X	-1.921	4.04
5	MP1A	Z	-3.327	4.04
6	MP1A	Mx	.00096	4.04
7	MP2A	X	-3.6	1.02
8	MP2A	Z	-6.235	1.02
9	MP2A	Mx	-.001	1.02
10	MP2A	X	-3.6	5.04
11	MP2A	Z	-6.235	5.04
12	MP2A	Mx	-.001	5.04
13	MP2A	X	-3.6	1.02
14	MP2A	Z	-6.235	1.02
15	MP2A	Mx	.007	1.02
16	MP2A	X	-3.6	5.04
17	MP2A	Z	-6.235	5.04
18	MP2A	Mx	.007	5.04
19	MP3A	X	-2.164	1.04
20	MP3A	Z	-3.748	1.04
21	MP3A	Mx	.001	1.04
22	MP3A	X	-2.164	5.04
23	MP3A	Z	-3.748	5.04
24	MP3A	Mx	.001	5.04
25	MP2A	X	-1.653	2.04
26	MP2A	Z	-2.863	2.04
27	MP2A	Mx	-.000826	2.04
28	MP2A	X	-1.596	4
29	MP2A	Z	-2.764	4
30	MP2A	Mx	-.000798	4
31	M14	X	-3.345	%1
32	M14	Z	-5.793	%1
33	M14	Mx	0	%1

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M4	Y	-500	%18

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M4	Y	-500	%60

Member Point Loads (BLC 79 : Lv1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M4	Y	-250	%50

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M4	Y	-250	0

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	Y	-15.032	-15.032	0	%100
2	M2	Y	-12.661	-12.661	0	%100
3	M4	Y	-10.611	-10.611	0	%100
4	MP1A	Y	-8.306	-8.306	0	%100
5	MP2A	Y	-8.306	-8.306	0	%100
6	MP3A	Y	-8.306	-8.306	0	%100
7	MP4A	Y	-8.306	-8.306	0	%100
8	M14	Y	-8.306	-8.306	0	%100
9	M15	Y	-10.611	-10.611	0	%100
10	M20	Y	-15.032	-15.032	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-7.193	-7.193	0	%100
5	M4	X	0	0	0	%100
6	M4	Z	-10.088	-10.088	0	%100
7	MP1A	X	0	0	0	%100
8	MP1A	Z	-5.958	-5.958	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	-5.958	-5.958	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	-5.958	-5.958	0	%100
13	MP4A	X	0	0	0	%100
14	MP4A	Z	-5.958	-5.958	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	-5.121	-5.121	0	%100
17	M15	X	0	0	0	%100
18	M15	Z	-10.088	-10.088	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.11	1.11	0	%100
2	M1	Z	-1.923	-1.923	0	%100
3	M2	X	3.645	3.645	0	%100
4	M2	Z	-6.313	-6.313	0	%100
5	M4	X	3.783	3.783	0	%100
6	M4	Z	-6.553	-6.553	0	%100
7	MP1A	X	3.09	3.09	0	%100
8	MP1A	Z	-5.352	-5.352	0	%100
9	MP2A	X	3.09	3.09	0	%100
10	MP2A	Z	-5.352	-5.352	0	%100
11	MP3A	X	3.09	3.09	0	%100
12	MP3A	Z	-5.352	-5.352	0	%100
13	MP4A	X	3.09	3.09	0	%100
14	MP4A	Z	-5.352	-5.352	0	%100
15	M14	X	2.62	2.62	0	%100
16	M14	Z	-4.538	-4.538	0	%100
17	M15	X	3.783	3.783	0	%100
18	M15	Z	-6.553	-6.553	0	%100
19	M20	X	1.11	1.11	0	%100
20	M20	Z	-1.923	-1.923	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	5.768	5.768	0	%100
2	M1	Z	-3.33	-3.33	0	%100
3	M2	X	6.48	6.48	0	%100
4	M2	Z	-3.741	-3.741	0	%100
5	M4	X	2.184	2.184	0	%100
6	M4	Z	-1.261	-1.261	0	%100
7	MP1A	X	5.736	5.736	0	%100
8	MP1A	Z	-3.312	-3.312	0	%100
9	MP2A	X	5.736	5.736	0	%100
10	MP2A	Z	-3.312	-3.312	0	%100
11	MP3A	X	5.736	5.736	0	%100
12	MP3A	Z	-3.312	-3.312	0	%100
13	MP4A	X	5.736	5.736	0	%100
14	MP4A	Z	-3.312	-3.312	0	%100
15	M14	X	4.745	4.745	0	%100
16	M14	Z	-2.739	-2.739	0	%100
17	M15	X	2.184	2.184	0	%100
18	M15	Z	-1.261	-1.261	0	%100
19	M20	X	5.768	5.768	0	%100
20	M20	Z	-3.33	-3.33	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	8.881	8.881	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	7.579	7.579	0	%100
4	M2	Z	0	0	0	%100
5	M4	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
6	M4	Z	0	0	0	%100
7	MP1A	X	6.846	6.846	0	%100
8	MP1A	Z	0	0	0	%100
9	MP2A	X	6.846	6.846	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	6.846	6.846	0	%100
12	MP3A	Z	0	0	0	%100
13	MP4A	X	6.846	6.846	0	%100
14	MP4A	Z	0	0	0	%100
15	M14	X	5.598	5.598	0	%100
16	M14	Z	0	0	0	%100
17	M15	X	0	0	0	%100
18	M15	Z	0	0	0	%100
19	M20	X	8.881	8.881	0	%100
20	M20	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	5.768	5.768	0	%100
2	M1	Z	3.33	3.33	0	%100
3	M2	X	6.48	6.48	0	%100
4	M2	Z	3.741	3.741	0	%100
5	M4	X	2.184	2.184	0	%100
6	M4	Z	1.261	1.261	0	%100
7	MP1A	X	5.736	5.736	0	%100
8	MP1A	Z	3.312	3.312	0	%100
9	MP2A	X	5.736	5.736	0	%100
10	MP2A	Z	3.312	3.312	0	%100
11	MP3A	X	5.736	5.736	0	%100
12	MP3A	Z	3.312	3.312	0	%100
13	MP4A	X	5.736	5.736	0	%100
14	MP4A	Z	3.312	3.312	0	%100
15	M14	X	4.745	4.745	0	%100
16	M14	Z	2.739	2.739	0	%100
17	M15	X	2.184	2.184	0	%100
18	M15	Z	1.261	1.261	0	%100
19	M20	X	5.768	5.768	0	%100
20	M20	Z	3.33	3.33	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.11	1.11	0	%100
2	M1	Z	1.923	1.923	0	%100
3	M2	X	3.645	3.645	0	%100
4	M2	Z	6.313	6.313	0	%100
5	M4	X	3.783	3.783	0	%100
6	M4	Z	6.553	6.553	0	%100
7	MP1A	X	3.09	3.09	0	%100
8	MP1A	Z	5.352	5.352	0	%100
9	MP2A	X	3.09	3.09	0	%100
10	MP2A	Z	5.352	5.352	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
11	MP3A	X	3.09	3.09	0	%100
12	MP3A	Z	5.352	5.352	0	%100
13	MP4A	X	3.09	3.09	0	%100
14	MP4A	Z	5.352	5.352	0	%100
15	M14	X	2.62	2.62	0	%100
16	M14	Z	4.538	4.538	0	%100
17	M15	X	3.783	3.783	0	%100
18	M15	Z	6.553	6.553	0	%100
19	M20	X	1.11	1.11	0	%100
20	M20	Z	1.923	1.923	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	7.193	7.193	0	%100
5	M4	X	0	0	0	%100
6	M4	Z	10.088	10.088	0	%100
7	MP1A	X	0	0	0	%100
8	MP1A	Z	5.958	5.958	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	5.958	5.958	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	5.958	5.958	0	%100
13	MP4A	X	0	0	0	%100
14	MP4A	Z	5.958	5.958	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	5.121	5.121	0	%100
17	M15	X	0	0	0	%100
18	M15	Z	10.088	10.088	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.11	-1.11	0	%100
2	M1	Z	1.923	1.923	0	%100
3	M2	X	-3.645	-3.645	0	%100
4	M2	Z	6.313	6.313	0	%100
5	M4	X	-3.783	-3.783	0	%100
6	M4	Z	6.553	6.553	0	%100
7	MP1A	X	-3.09	-3.09	0	%100
8	MP1A	Z	5.352	5.352	0	%100
9	MP2A	X	-3.09	-3.09	0	%100
10	MP2A	Z	5.352	5.352	0	%100
11	MP3A	X	-3.09	-3.09	0	%100
12	MP3A	Z	5.352	5.352	0	%100
13	MP4A	X	-3.09	-3.09	0	%100
14	MP4A	Z	5.352	5.352	0	%100
15	M14	X	-2.62	-2.62	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
16	M14	Z	4.538	4.538	0	%100
17	M15	X	-3.783	-3.783	0	%100
18	M15	Z	6.553	6.553	0	%100
19	M20	X	-1.11	-1.11	0	%100
20	M20	Z	1.923	1.923	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-5.768	-5.768	0	%100
2	M1	Z	3.33	3.33	0	%100
3	M2	X	-6.48	-6.48	0	%100
4	M2	Z	3.741	3.741	0	%100
5	M4	X	-2.184	-2.184	0	%100
6	M4	Z	1.261	1.261	0	%100
7	MP1A	X	-5.736	-5.736	0	%100
8	MP1A	Z	3.312	3.312	0	%100
9	MP2A	X	-5.736	-5.736	0	%100
10	MP2A	Z	3.312	3.312	0	%100
11	MP3A	X	-5.736	-5.736	0	%100
12	MP3A	Z	3.312	3.312	0	%100
13	MP4A	X	-5.736	-5.736	0	%100
14	MP4A	Z	3.312	3.312	0	%100
15	M14	X	-4.745	-4.745	0	%100
16	M14	Z	2.739	2.739	0	%100
17	M15	X	-2.184	-2.184	0	%100
18	M15	Z	1.261	1.261	0	%100
19	M20	X	-5.768	-5.768	0	%100
20	M20	Z	3.33	3.33	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-8.881	-8.881	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	-7.579	-7.579	0	%100
4	M2	Z	0	0	0	%100
5	M4	X	0	0	0	%100
6	M4	Z	0	0	0	%100
7	MP1A	X	-6.846	-6.846	0	%100
8	MP1A	Z	0	0	0	%100
9	MP2A	X	-6.846	-6.846	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	-6.846	-6.846	0	%100
12	MP3A	Z	0	0	0	%100
13	MP4A	X	-6.846	-6.846	0	%100
14	MP4A	Z	0	0	0	%100
15	M14	X	-5.598	-5.598	0	%100
16	M14	Z	0	0	0	%100
17	M15	X	0	0	0	%100
18	M15	Z	0	0	0	%100
19	M20	X	-8.881	-8.881	0	%100
20	M20	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-5.768	-5.768	0	%100
2	M1	Z	-3.33	-3.33	0	%100
3	M2	X	-6.48	-6.48	0	%100
4	M2	Z	-3.741	-3.741	0	%100
5	M4	X	-2.184	-2.184	0	%100
6	M4	Z	-1.261	-1.261	0	%100
7	MP1A	X	-5.736	-5.736	0	%100
8	MP1A	Z	-3.312	-3.312	0	%100
9	MP2A	X	-5.736	-5.736	0	%100
10	MP2A	Z	-3.312	-3.312	0	%100
11	MP3A	X	-5.736	-5.736	0	%100
12	MP3A	Z	-3.312	-3.312	0	%100
13	MP4A	X	-5.736	-5.736	0	%100
14	MP4A	Z	-3.312	-3.312	0	%100
15	M14	X	-4.745	-4.745	0	%100
16	M14	Z	-2.739	-2.739	0	%100
17	M15	X	-2.184	-2.184	0	%100
18	M15	Z	-1.261	-1.261	0	%100
19	M20	X	-5.768	-5.768	0	%100
20	M20	Z	-3.33	-3.33	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.11	-1.11	0	%100
2	M1	Z	-1.923	-1.923	0	%100
3	M2	X	-3.645	-3.645	0	%100
4	M2	Z	-6.313	-6.313	0	%100
5	M4	X	-3.783	-3.783	0	%100
6	M4	Z	-6.553	-6.553	0	%100
7	MP1A	X	-3.09	-3.09	0	%100
8	MP1A	Z	-5.352	-5.352	0	%100
9	MP2A	X	-3.09	-3.09	0	%100
10	MP2A	Z	-5.352	-5.352	0	%100
11	MP3A	X	-3.09	-3.09	0	%100
12	MP3A	Z	-5.352	-5.352	0	%100
13	MP4A	X	-3.09	-3.09	0	%100
14	MP4A	Z	-5.352	-5.352	0	%100
15	M14	X	-2.62	-2.62	0	%100
16	M14	Z	-4.538	-4.538	0	%100
17	M15	X	-3.783	-3.783	0	%100
18	M15	Z	-6.553	-6.553	0	%100
19	M20	X	-1.11	-1.11	0	%100
20	M20	Z	-1.923	-1.923	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-2.48	-2.48	0	%100
5	M4	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
6	M4	Z	-3.671	-3.671	0	%100
7	MP1A	X	0	0	0	%100
8	MP1A	Z	-2.786	-2.786	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	-2.786	-2.786	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	-2.786	-2.786	0	%100
13	MP4A	X	0	0	0	%100
14	MP4A	Z	-2.786	-2.786	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	-2.273	-2.273	0	%100
17	M15	X	0	0	0	%100
18	M15	Z	-3.671	-3.671	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.368	.368	0	%100
2	M1	Z	-.637	-.637	0	%100
3	M2	X	1.257	1.257	0	%100
4	M2	Z	-2.177	-2.177	0	%100
5	M4	X	1.377	1.377	0	%100
6	M4	Z	-2.384	-2.384	0	%100
7	MP1A	X	1.414	1.414	0	%100
8	MP1A	Z	-2.448	-2.448	0	%100
9	MP2A	X	1.414	1.414	0	%100
10	MP2A	Z	-2.448	-2.448	0	%100
11	MP3A	X	1.414	1.414	0	%100
12	MP3A	Z	-2.448	-2.448	0	%100
13	MP4A	X	1.414	1.414	0	%100
14	MP4A	Z	-2.448	-2.448	0	%100
15	M14	X	1.148	1.148	0	%100
16	M14	Z	-1.988	-1.988	0	%100
17	M15	X	1.377	1.377	0	%100
18	M15	Z	-2.384	-2.384	0	%100
19	M20	X	.368	.368	0	%100
20	M20	Z	-.637	-.637	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.911	1.911	0	%100
2	M1	Z	-1.103	-1.103	0	%100
3	M2	X	2.236	2.236	0	%100
4	M2	Z	-1.291	-1.291	0	%100
5	M4	X	.795	.795	0	%100
6	M4	Z	-.459	-.459	0	%100
7	MP1A	X	2.52	2.52	0	%100
8	MP1A	Z	-1.455	-1.455	0	%100
9	MP2A	X	2.52	2.52	0	%100
10	MP2A	Z	-1.455	-1.455	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
11	MP3A	X	2.52	2.52	0	%100
12	MP3A	Z	-1.455	-1.455	0	%100
13	MP4A	X	2.52	2.52	0	%100
14	MP4A	Z	-1.455	-1.455	0	%100
15	M14	X	2.026	2.026	0	%100
16	M14	Z	-1.17	-1.17	0	%100
17	M15	X	.795	.795	0	%100
18	M15	Z	-.459	-.459	0	%100
19	M20	X	1.911	1.911	0	%100
20	M20	Z	-1.103	-1.103	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	2.942	2.942	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	2.616	2.616	0	%100
4	M2	Z	0	0	0	%100
5	M4	X	0	0	0	%100
6	M4	Z	0	0	0	%100
7	MP1A	X	2.951	2.951	0	%100
8	MP1A	Z	0	0	0	%100
9	MP2A	X	2.951	2.951	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	2.951	2.951	0	%100
12	MP3A	Z	0	0	0	%100
13	MP4A	X	2.951	2.951	0	%100
14	MP4A	Z	0	0	0	%100
15	M14	X	2.362	2.362	0	%100
16	M14	Z	0	0	0	%100
17	M15	X	0	0	0	%100
18	M15	Z	0	0	0	%100
19	M20	X	2.942	2.942	0	%100
20	M20	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.911	1.911	0	%100
2	M1	Z	1.103	1.103	0	%100
3	M2	X	2.236	2.236	0	%100
4	M2	Z	1.291	1.291	0	%100
5	M4	X	.795	.795	0	%100
6	M4	Z	.459	.459	0	%100
7	MP1A	X	2.52	2.52	0	%100
8	MP1A	Z	1.455	1.455	0	%100
9	MP2A	X	2.52	2.52	0	%100
10	MP2A	Z	1.455	1.455	0	%100
11	MP3A	X	2.52	2.52	0	%100
12	MP3A	Z	1.455	1.455	0	%100
13	MP4A	X	2.52	2.52	0	%100
14	MP4A	Z	1.455	1.455	0	%100
15	M14	X	2.026	2.026	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
16	M14	Z	1.17	1.17	0	%100
17	M15	X	.795	.795	0	%100
18	M15	Z	.459	.459	0	%100
19	M20	X	1.911	1.911	0	%100
20	M20	Z	1.103	1.103	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.368	.368	0	%100
2	M1	Z	.637	.637	0	%100
3	M2	X	1.257	1.257	0	%100
4	M2	Z	2.177	2.177	0	%100
5	M4	X	1.377	1.377	0	%100
6	M4	Z	2.384	2.384	0	%100
7	MP1A	X	1.414	1.414	0	%100
8	MP1A	Z	2.448	2.448	0	%100
9	MP2A	X	1.414	1.414	0	%100
10	MP2A	Z	2.448	2.448	0	%100
11	MP3A	X	1.414	1.414	0	%100
12	MP3A	Z	2.448	2.448	0	%100
13	MP4A	X	1.414	1.414	0	%100
14	MP4A	Z	2.448	2.448	0	%100
15	M14	X	1.148	1.148	0	%100
16	M14	Z	1.988	1.988	0	%100
17	M15	X	1.377	1.377	0	%100
18	M15	Z	2.384	2.384	0	%100
19	M20	X	.368	.368	0	%100
20	M20	Z	.637	.637	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	2.48	2.48	0	%100
5	M4	X	0	0	0	%100
6	M4	Z	3.671	3.671	0	%100
7	MP1A	X	0	0	0	%100
8	MP1A	Z	2.786	2.786	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	2.786	2.786	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	2.786	2.786	0	%100
13	MP4A	X	0	0	0	%100
14	MP4A	Z	2.786	2.786	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	2.273	2.273	0	%100
17	M15	X	0	0	0	%100
18	M15	Z	3.671	3.671	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.368	-.368	0	%100
2	M1	Z	.637	.637	0	%100
3	M2	X	-1.257	-1.257	0	%100
4	M2	Z	2.177	2.177	0	%100
5	M4	X	-1.377	-1.377	0	%100
6	M4	Z	2.384	2.384	0	%100
7	MP1A	X	-1.414	-1.414	0	%100
8	MP1A	Z	2.448	2.448	0	%100
9	MP2A	X	-1.414	-1.414	0	%100
10	MP2A	Z	2.448	2.448	0	%100
11	MP3A	X	-1.414	-1.414	0	%100
12	MP3A	Z	2.448	2.448	0	%100
13	MP4A	X	-1.414	-1.414	0	%100
14	MP4A	Z	2.448	2.448	0	%100
15	M14	X	-1.148	-1.148	0	%100
16	M14	Z	1.988	1.988	0	%100
17	M15	X	-1.377	-1.377	0	%100
18	M15	Z	2.384	2.384	0	%100
19	M20	X	-.368	-.368	0	%100
20	M20	Z	.637	.637	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.911	-1.911	0	%100
2	M1	Z	1.103	1.103	0	%100
3	M2	X	-2.236	-2.236	0	%100
4	M2	Z	1.291	1.291	0	%100
5	M4	X	-.795	-.795	0	%100
6	M4	Z	.459	.459	0	%100
7	MP1A	X	-2.52	-2.52	0	%100
8	MP1A	Z	1.455	1.455	0	%100
9	MP2A	X	-2.52	-2.52	0	%100
10	MP2A	Z	1.455	1.455	0	%100
11	MP3A	X	-2.52	-2.52	0	%100
12	MP3A	Z	1.455	1.455	0	%100
13	MP4A	X	-2.52	-2.52	0	%100
14	MP4A	Z	1.455	1.455	0	%100
15	M14	X	-2.026	-2.026	0	%100
16	M14	Z	1.17	1.17	0	%100
17	M15	X	-.795	-.795	0	%100
18	M15	Z	.459	.459	0	%100
19	M20	X	-1.911	-1.911	0	%100
20	M20	Z	1.103	1.103	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-2.942	-2.942	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	-2.616	-2.616	0	%100
4	M2	Z	0	0	0	%100
5	M4	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
6	M4	Z	0	0	0	%100
7	MP1A	X	-2.951	-2.951	0	%100
8	MP1A	Z	0	0	0	%100
9	MP2A	X	-2.951	-2.951	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	-2.951	-2.951	0	%100
12	MP3A	Z	0	0	0	%100
13	MP4A	X	-2.951	-2.951	0	%100
14	MP4A	Z	0	0	0	%100
15	M14	X	-2.362	-2.362	0	%100
16	M14	Z	0	0	0	%100
17	M15	X	0	0	0	%100
18	M15	Z	0	0	0	%100
19	M20	X	-2.942	-2.942	0	%100
20	M20	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.911	-1.911	0	%100
2	M1	Z	-1.103	-1.103	0	%100
3	M2	X	-2.236	-2.236	0	%100
4	M2	Z	-1.291	-1.291	0	%100
5	M4	X	-.795	-.795	0	%100
6	M4	Z	-.459	-.459	0	%100
7	MP1A	X	-2.52	-2.52	0	%100
8	MP1A	Z	-1.455	-1.455	0	%100
9	MP2A	X	-2.52	-2.52	0	%100
10	MP2A	Z	-1.455	-1.455	0	%100
11	MP3A	X	-2.52	-2.52	0	%100
12	MP3A	Z	-1.455	-1.455	0	%100
13	MP4A	X	-2.52	-2.52	0	%100
14	MP4A	Z	-1.455	-1.455	0	%100
15	M14	X	-2.026	-2.026	0	%100
16	M14	Z	-1.17	-1.17	0	%100
17	M15	X	-.795	-.795	0	%100
18	M15	Z	-.459	-.459	0	%100
19	M20	X	-1.911	-1.911	0	%100
20	M20	Z	-1.103	-1.103	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.368	-.368	0	%100
2	M1	Z	-.637	-.637	0	%100
3	M2	X	-1.257	-1.257	0	%100
4	M2	Z	-2.177	-2.177	0	%100
5	M4	X	-1.377	-1.377	0	%100
6	M4	Z	-2.384	-2.384	0	%100
7	MP1A	X	-1.414	-1.414	0	%100
8	MP1A	Z	-2.448	-2.448	0	%100
9	MP2A	X	-1.414	-1.414	0	%100
10	MP2A	Z	-2.448	-2.448	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
11	MP3A	X	-1.414	-1.414	0	%100
12	MP3A	Z	-2.448	-2.448	0	%100
13	MP4A	X	-1.414	-1.414	0	%100
14	MP4A	Z	-2.448	-2.448	0	%100
15	M14	X	-1.148	-1.148	0	%100
16	M14	Z	-1.988	-1.988	0	%100
17	M15	X	-1.377	-1.377	0	%100
18	M15	Z	-2.384	-2.384	0	%100
19	M20	X	-.368	-.368	0	%100
20	M20	Z	-.637	-.637	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-.481	-.481	0	%100
5	M4	X	0	0	0	%100
6	M4	Z	-.675	-.675	0	%100
7	MP1A	X	0	0	0	%100
8	MP1A	Z	-.398	-.398	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	-.398	-.398	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	-.398	-.398	0	%100
13	MP4A	X	0	0	0	%100
14	MP4A	Z	-.398	-.398	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	-.343	-.343	0	%100
17	M15	X	0	0	0	%100
18	M15	Z	-.675	-.675	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.074	.074	0	%100
2	M1	Z	-.129	-.129	0	%100
3	M2	X	.244	.244	0	%100
4	M2	Z	-.422	-.422	0	%100
5	M4	X	.253	.253	0	%100
6	M4	Z	-.438	-.438	0	%100
7	MP1A	X	.207	.207	0	%100
8	MP1A	Z	-.358	-.358	0	%100
9	MP2A	X	.207	.207	0	%100
10	MP2A	Z	-.358	-.358	0	%100
11	MP3A	X	.207	.207	0	%100
12	MP3A	Z	-.358	-.358	0	%100
13	MP4A	X	.207	.207	0	%100
14	MP4A	Z	-.358	-.358	0	%100
15	M14	X	.175	.175	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
16	M14	Z	-.304	-.304	0	%100
17	M15	X	.253	.253	0	%100
18	M15	Z	-.438	-.438	0	%100
19	M20	X	.074	.074	0	%100
20	M20	Z	-.129	-.129	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.386	.386	0	%100
2	M1	Z	-.223	-.223	0	%100
3	M2	X	.433	.433	0	%100
4	M2	Z	-.25	-.25	0	%100
5	M4	X	.146	.146	0	%100
6	M4	Z	-.084	-.084	0	%100
7	MP1A	X	.384	.384	0	%100
8	MP1A	Z	-.222	-.222	0	%100
9	MP2A	X	.384	.384	0	%100
10	MP2A	Z	-.222	-.222	0	%100
11	MP3A	X	.384	.384	0	%100
12	MP3A	Z	-.222	-.222	0	%100
13	MP4A	X	.384	.384	0	%100
14	MP4A	Z	-.222	-.222	0	%100
15	M14	X	.317	.317	0	%100
16	M14	Z	-.183	-.183	0	%100
17	M15	X	.146	.146	0	%100
18	M15	Z	-.084	-.084	0	%100
19	M20	X	.386	.386	0	%100
20	M20	Z	-.223	-.223	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.594	.594	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	.507	.507	0	%100
4	M2	Z	0	0	0	%100
5	M4	X	0	0	0	%100
6	M4	Z	0	0	0	%100
7	MP1A	X	.458	.458	0	%100
8	MP1A	Z	0	0	0	%100
9	MP2A	X	.458	.458	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	.458	.458	0	%100
12	MP3A	Z	0	0	0	%100
13	MP4A	X	.458	.458	0	%100
14	MP4A	Z	0	0	0	%100
15	M14	X	.374	.374	0	%100
16	M14	Z	0	0	0	%100
17	M15	X	0	0	0	%100
18	M15	Z	0	0	0	%100
19	M20	X	.594	.594	0	%100
20	M20	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.386	.386	0	%100
2	M1	Z	.223	.223	0	%100
3	M2	X	.433	.433	0	%100
4	M2	Z	.25	.25	0	%100
5	M4	X	.146	.146	0	%100
6	M4	Z	.084	.084	0	%100
7	MP1A	X	.384	.384	0	%100
8	MP1A	Z	.222	.222	0	%100
9	MP2A	X	.384	.384	0	%100
10	MP2A	Z	.222	.222	0	%100
11	MP3A	X	.384	.384	0	%100
12	MP3A	Z	.222	.222	0	%100
13	MP4A	X	.384	.384	0	%100
14	MP4A	Z	.222	.222	0	%100
15	M14	X	.317	.317	0	%100
16	M14	Z	.183	.183	0	%100
17	M15	X	.146	.146	0	%100
18	M15	Z	.084	.084	0	%100
19	M20	X	.386	.386	0	%100
20	M20	Z	.223	.223	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.074	.074	0	%100
2	M1	Z	.129	.129	0	%100
3	M2	X	.244	.244	0	%100
4	M2	Z	.422	.422	0	%100
5	M4	X	.253	.253	0	%100
6	M4	Z	.438	.438	0	%100
7	MP1A	X	.207	.207	0	%100
8	MP1A	Z	.358	.358	0	%100
9	MP2A	X	.207	.207	0	%100
10	MP2A	Z	.358	.358	0	%100
11	MP3A	X	.207	.207	0	%100
12	MP3A	Z	.358	.358	0	%100
13	MP4A	X	.207	.207	0	%100
14	MP4A	Z	.358	.358	0	%100
15	M14	X	.175	.175	0	%100
16	M14	Z	.304	.304	0	%100
17	M15	X	.253	.253	0	%100
18	M15	Z	.438	.438	0	%100
19	M20	X	.074	.074	0	%100
20	M20	Z	.129	.129	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	.481	.481	0	%100
5	M4	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
6	M4	Z	.675	.675	0	%100
7	MP1A	X	0	0	0	%100
8	MP1A	Z	.398	.398	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	.398	.398	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	.398	.398	0	%100
13	MP4A	X	0	0	0	%100
14	MP4A	Z	.398	.398	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	.343	.343	0	%100
17	M15	X	0	0	0	%100
18	M15	Z	.675	.675	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.074	-.074	0	%100
2	M1	Z	.129	.129	0	%100
3	M2	X	-.244	-.244	0	%100
4	M2	Z	.422	.422	0	%100
5	M4	X	-.253	-.253	0	%100
6	M4	Z	.438	.438	0	%100
7	MP1A	X	-.207	-.207	0	%100
8	MP1A	Z	.358	.358	0	%100
9	MP2A	X	-.207	-.207	0	%100
10	MP2A	Z	.358	.358	0	%100
11	MP3A	X	-.207	-.207	0	%100
12	MP3A	Z	.358	.358	0	%100
13	MP4A	X	-.207	-.207	0	%100
14	MP4A	Z	.358	.358	0	%100
15	M14	X	-.175	-.175	0	%100
16	M14	Z	.304	.304	0	%100
17	M15	X	-.253	-.253	0	%100
18	M15	Z	.438	.438	0	%100
19	M20	X	-.074	-.074	0	%100
20	M20	Z	.129	.129	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.386	-.386	0	%100
2	M1	Z	.223	.223	0	%100
3	M2	X	-.433	-.433	0	%100
4	M2	Z	.25	.25	0	%100
5	M4	X	-.146	-.146	0	%100
6	M4	Z	.084	.084	0	%100
7	MP1A	X	-.384	-.384	0	%100
8	MP1A	Z	.222	.222	0	%100
9	MP2A	X	-.384	-.384	0	%100
10	MP2A	Z	.222	.222	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
11	MP3A	X	-.384	-.384	0	%100
12	MP3A	Z	.222	.222	0	%100
13	MP4A	X	-.384	-.384	0	%100
14	MP4A	Z	.222	.222	0	%100
15	M14	X	-.317	-.317	0	%100
16	M14	Z	.183	.183	0	%100
17	M15	X	-.146	-.146	0	%100
18	M15	Z	.084	.084	0	%100
19	M20	X	-.386	-.386	0	%100
20	M20	Z	.223	.223	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.594	-.594	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	-.507	-.507	0	%100
4	M2	Z	0	0	0	%100
5	M4	X	0	0	0	%100
6	M4	Z	0	0	0	%100
7	MP1A	X	-.458	-.458	0	%100
8	MP1A	Z	0	0	0	%100
9	MP2A	X	-.458	-.458	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	-.458	-.458	0	%100
12	MP3A	Z	0	0	0	%100
13	MP4A	X	-.458	-.458	0	%100
14	MP4A	Z	0	0	0	%100
15	M14	X	-.374	-.374	0	%100
16	M14	Z	0	0	0	%100
17	M15	X	0	0	0	%100
18	M15	Z	0	0	0	%100
19	M20	X	-.594	-.594	0	%100
20	M20	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.386	-.386	0	%100
2	M1	Z	-.223	-.223	0	%100
3	M2	X	-.433	-.433	0	%100
4	M2	Z	-.25	-.25	0	%100
5	M4	X	-.146	-.146	0	%100
6	M4	Z	-.084	-.084	0	%100
7	MP1A	X	-.384	-.384	0	%100
8	MP1A	Z	-.222	-.222	0	%100
9	MP2A	X	-.384	-.384	0	%100
10	MP2A	Z	-.222	-.222	0	%100
11	MP3A	X	-.384	-.384	0	%100
12	MP3A	Z	-.222	-.222	0	%100
13	MP4A	X	-.384	-.384	0	%100
14	MP4A	Z	-.222	-.222	0	%100
15	M14	X	-.317	-.317	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
16	M14	Z	-.183	-.183	0	%100
17	M15	X	-.146	-.146	0	%100
18	M15	Z	-.084	-.084	0	%100
19	M20	X	-.386	-.386	0	%100
20	M20	Z	-.223	-.223	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.074	-.074	0	%100
2	M1	Z	-.129	-.129	0	%100
3	M2	X	-.244	-.244	0	%100
4	M2	Z	-.422	-.422	0	%100
5	M4	X	-.253	-.253	0	%100
6	M4	Z	-.438	-.438	0	%100
7	MP1A	X	-.207	-.207	0	%100
8	MP1A	Z	-.358	-.358	0	%100
9	MP2A	X	-.207	-.207	0	%100
10	MP2A	Z	-.358	-.358	0	%100
11	MP3A	X	-.207	-.207	0	%100
12	MP3A	Z	-.358	-.358	0	%100
13	MP4A	X	-.207	-.207	0	%100
14	MP4A	Z	-.358	-.358	0	%100
15	M14	X	-.175	-.175	0	%100
16	M14	Z	-.304	-.304	0	%100
17	M15	X	-.253	-.253	0	%100
18	M15	Z	-.438	-.438	0	%100
19	M20	X	-.074	-.074	0	%100
20	M20	Z	-.129	-.129	0	%100

Member Area Loads

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

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	N1	max	539.332	9	1278.618	13	782.006	1	-.714	1	1.282	9	.618	40
2		min	-866.951	3	356.049	7	-1184.616	7	-3.013	19	-2.185	3	-.746	34
3	N39A	max	363.128	23	1060.194	19	723.754	13	-.629	1	1.786	8	.581	42
4		min	-359.804	30	288.025	1	-197.378	7	-2.906	19	-1.045	26	-.746	36
5	Totals:	max	849.52	9	2286.983	14	1381.997	1						
6		min	-849.52	3	860.136	8	-1381.994	7						

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

	Member	Shape	Code C...	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	phi*Pnc [lb]	phi*Pnt [lb]	phi*Mn y-...	phi*Mn z-...	Cb	Eqn
1	M1	HSS4X4X4	.265	0	17	.077	0	y	35	135171.43	139518	16.181	16.181	1....	H1-1b
2	M2	PIPE_4.0	.000	.75	4	.000	.75		4	92571.332	93240	10.631	10.631	1....	H1-1b
3	M4	PIPE_3.0	.221	6.25	7	.138	6.25		1	28250.554	65205	5.749	5.749	1....	H1-1b

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

	Member	Shape	Code C...	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	phi*Pnc [lb]	phi*Pnt [lb]	phi*Mn y-...	phi*Mn z-...	Cb	Eqn
4	MP1A	PIPE_2.0	.212	3.063	16	.055	3.063		18	20866.733	32130	1.872	1.872	3....	H1-1b
5	MP2A	PIPE_2.0	.344	3.063	18	.114	3.063		19	20866.733	32130	1.872	1.872	2....	H1-1b
6	MP3A	PIPE_2.0	.275	5	32	.070	3.063		20	20866.733	32130	1.872	1.872	3....	H1-1b
7	MP4A	PIPE_2.0	.179	3.063	50	.040	3.063		50	20866.733	32130	1.872	1.872	3....	H1-1b
8	M14	PIPE_2.0	.121	2	7	.012	2		7	28843.414	32130	1.872	1.872	1	H1-1b
9	M15	PIPE_3.0	.240	6.25	1	.080	6.25		14	28250.554	65205	5.749	5.749	1....	H1-1b
10	M20	HSS4X4X4	.253	0	20	.074	0	y	35	135171.43	139518	16.181	16.181	1....	H1-1b

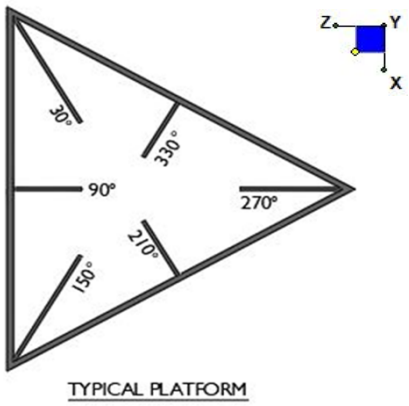
Client:	Verizon	Date:	12/18/2020
Site Name:	Simsbury 2 CT		
Project No.	20777385A		
Title:	Antenna Mount Fix	Page:	1

Version 3.1

I. Mount-to-Tower Connection Check

RISA Model Data

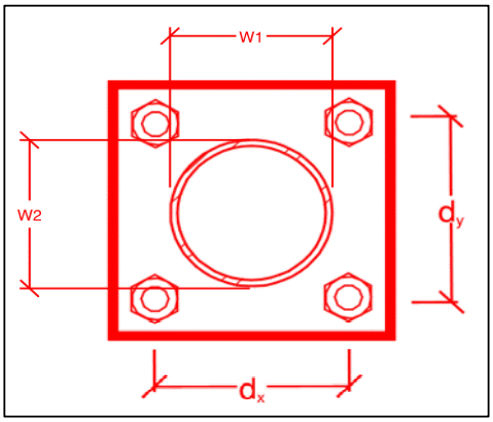
Nodes *(labeled per RISA)*	Orientation *(per graphic of typical platform)*
N1	90



TYPICAL PLATFORM

Tower Connection Bolt Checks

Any moment resistance?:	yes
Bolt Quantity per Reaction:	4
d_x (in) *(Delta X of typ. bolt config. sketch)* :	6
d_y (in) *(Delta Y of typ. bolt config. sketch)* :	6
Bolt Type:	A307
Bolt Diameter (in):	0.625
Required Tensile Strength (kips):	13.6
Required Shear Strength (kips):	3.9
Tensile Strength / bolt (kips):	10.0
Shear Strength / bolt (kips):	6.0
Tensile Capacity Overall:	**34.0%***
Shear Capacity Overall:	**16.4%**



**Note: Tension reduction not required if tension or shear capacity < 30%*

Tower Connection Plate and Weld Check

Connecting Standoff Member Shape:	Rect
Plate Width (in):	8
Plate Height (in):	8
W1 (in):	4
W2 (in):	4
Fy (ksi, plate):	36
t_{Plate} (in):	0.75
Weld Size (1/16 in):	3
Phi*Rn (kip/in):	4.18
Required Weld Strength (kip/in):	1.88
Plate Bending Capacity:	**24.3%**
Weld Capacity:	**45.1%**

Max Plate Bending Strengths

Mu_{xx} *(kip-in)* :	6.1
Phi*Mn_{xx} *(kip-in)* :	36.5
Mu_{yy} *(kip-in)* :	2.7
Phi*Mn_{yy} *(kip-in)* :	36.5

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Mount Modification

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

- Contractor is responsible for making certain the photos provided as noted below provide confirmation that the 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:

- 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) must be shown.
- Notation that all hardware was properly installed, and the existing hardware was inspected for any issues.
- Verification that loading is as communicated in the modification drawings. NOTE If loading is different than what is conveyed in the modification drawing contact TES immediately.
- Each photo should be time and date stamped
- Photos should be high resolution and submitted in a Zip File and should be organized in the file structure as depicted in Schedule A attached.
- Contractor shall ensure that the safety climb wire rope is supported and not adversely impacted by the install of the modification components. This may involve the install of wire rope guides, or other items to protect the wire rope.
- The photos in the file structure should be uploaded **to** https://pmi.vzwsmart.com as depicted on the drawings

Photo Requirements:

- *Base and "During Installation Photos"*
  - Base pictures include
    - Photo of Gate Signs showing the tower owner, site name, and number
    - Photo of carrier shelter showing the carrier site name and number if available
    - Photos of the galvanizing compound and/or paint used (if applicable), clearly showing the label and name
  - "During Installation Photos if provided - must be placed only in this folder
- *Photos taken at ground level*
  - Overall tower structure before and after installation of the modifications
  - Photos of the appropriate mount before and 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 each individual sector before and also after installation of modifications. Each entire sector must be in one photo to show in the inter-connection of members.
        - These photos should also certify that the placement and geometry of the equipment on the mount is as depicted on the sketch and table in the mount analysis
    - Close-up photos of each installed modification per the modification drawings; pictures should also include connection hardware (U-bolts, bolts, nuts, all-threaded rods, etc.)
    - Photos showing the measurements of the installed modification member sizes (i.e. lengths, widths, depths, diameters, thicknesses)
    - Photos showing the elevation or distances of the installed modifications from the appropriate reference locations shown in the modification drawings
    - Photos showing the installed modifications onto the tower with tape drop measurements (if applicable) (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, a tape drop measurement shall be provided before the elevation change
    - 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.

Material Certification:

- Materials utilized must be as per specification on the drawings or the equivalent as validated by TES.

    - If the drawings are as specified on the drawings
        - The contractor should provide the packing list or the materials utilized to perform the mount modification
    - If an equivalent is utilized
        - It is required that the TES certification of such is included in the contractor submission package. There may be an additional charge for this certification if the equivalent submission doesn't meet specifications as prescribed in the drawings.

- The contractor must certify that the materials meet these specifications by one of these methods.

☐ The Material utilized was as specified on the TES Mount Modification Drawings and included in the Material certification folder is a packing list or invoice for these materials

☐ The material utilized was an "equivalent" and included as part of the contractor submission is the TES certification, invoices, or specifications validating accepted status

Certifying Individual: Company _____

Name _____

Signature _____

Antenna & equipment placement and Geometry Confirmation:

- The contractor must certify that the antenna & equipment placement and geometry is in accordance with the antenna placement diagrams as included in this mount analysis.

☐ The contractor certifies that the photos support and the equipment on the mount is as depicted on the antenna placement diagrams as included in this mount analysis.

☐ The contractor notes that the equipment on the mount is not in accordance with the antenna placement diagrams and has accordingly marked up the diagrams or provided a diagram outlining the differences.

Certifying Individual: Company _____

Name _____

Signature _____

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

Issue:

Response:

Schedule A – Photo & Document File Structure

- VzW Site Number / Name
  - Base & “During Installation” Photos
  - Pre-Installation Photos
    - Alpha
    - Beta
    - Gamma
    - Ground Level
    - Tape Drop
  - Post-Installation Photos
    - Alpha
    - Beta
    - Gamma
    - Ground Level
    - Tape Drop
    - Photos of climbing facility and safety climb – If Present
  - Certifications – Submission of this document including certifications
  - Specific Required Additional Photos

Structure: 46 1-VZW - Simsbury 2 CT

Sector: **A**

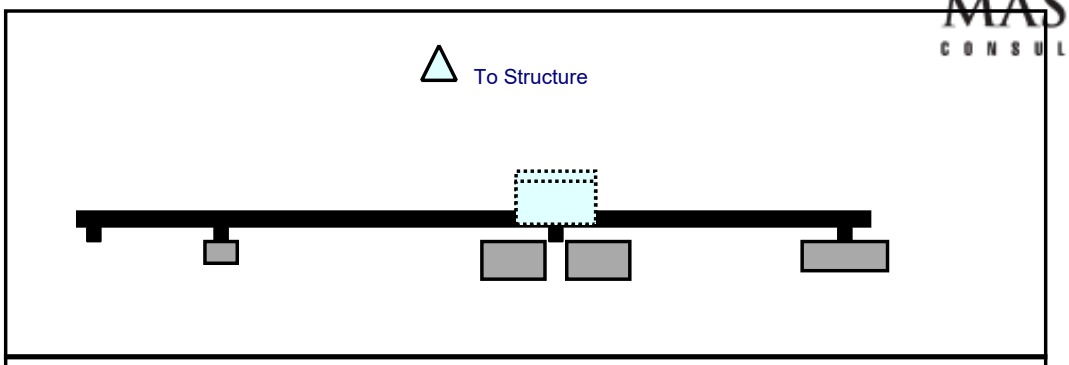
Structure Type: Monopole

Mount Elev: 101.00

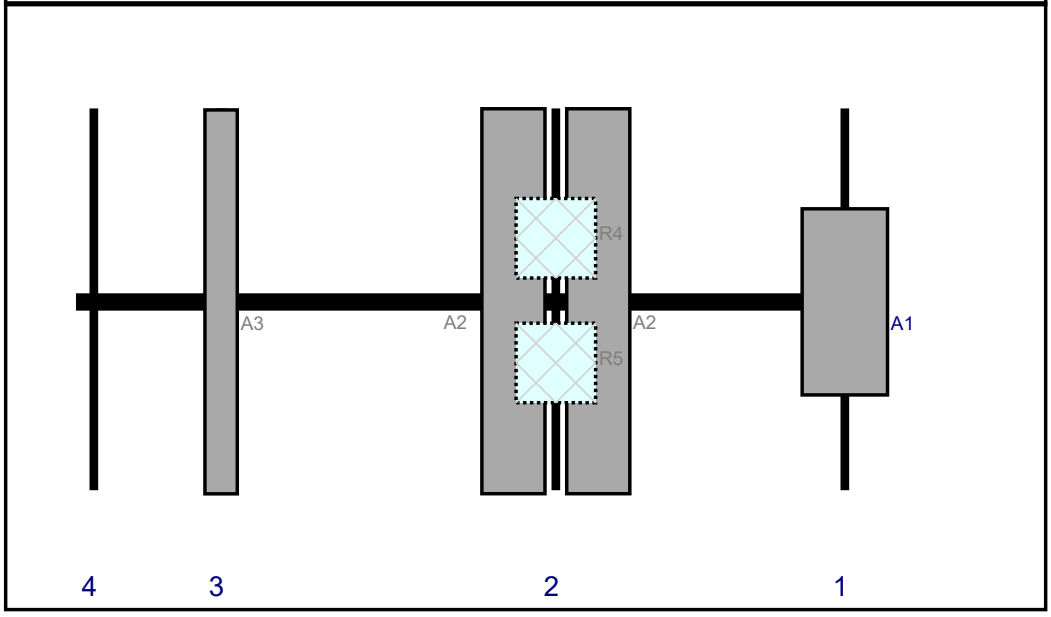
12/18/2020

Page: 1

Plan View



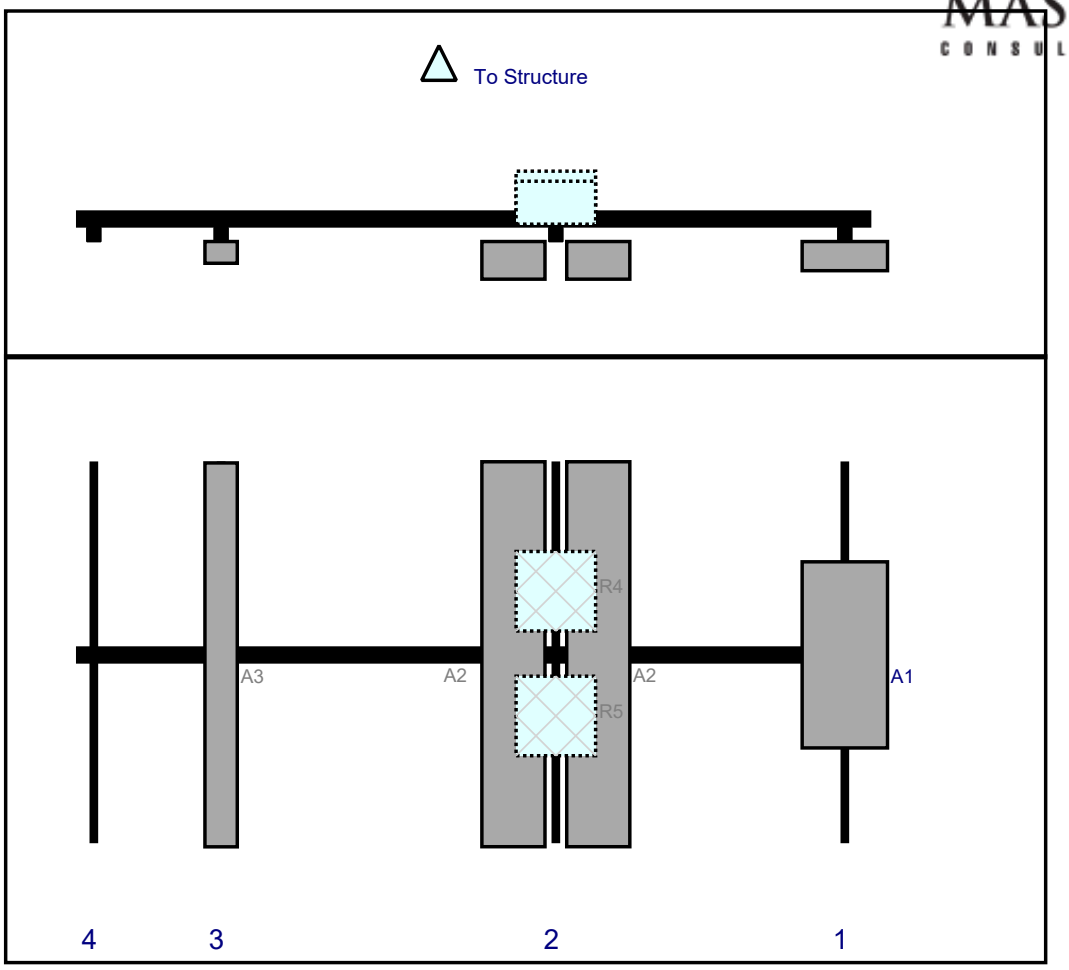
Front View
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A1	Licensed Sub6 Antenna	35.1	16.1	145	1	a	Front	36.48	0	Added	
A2	SBNHH-1D65B	72.6	11.9	90.5	2	a	Front	36.36	8	Retained	11/17/2020
A2	SBNHH-1D65B	72.6	11.9	90.5	2	b	Front	36.36	-8	Retained	11/17/2020
R4	B2/B66A RRH-BR049	15	15	90.5	2	a	Behind	24.48	0	Added	
R5	B5/B13 RRH-BR04C	15	15	90.5	2	a	Behind	48	0	Added	
A3	BXA-171063-12	72.4	6.1	27.37	3	a	Front	36.48	0	Retained	11/17/2020

Plan View

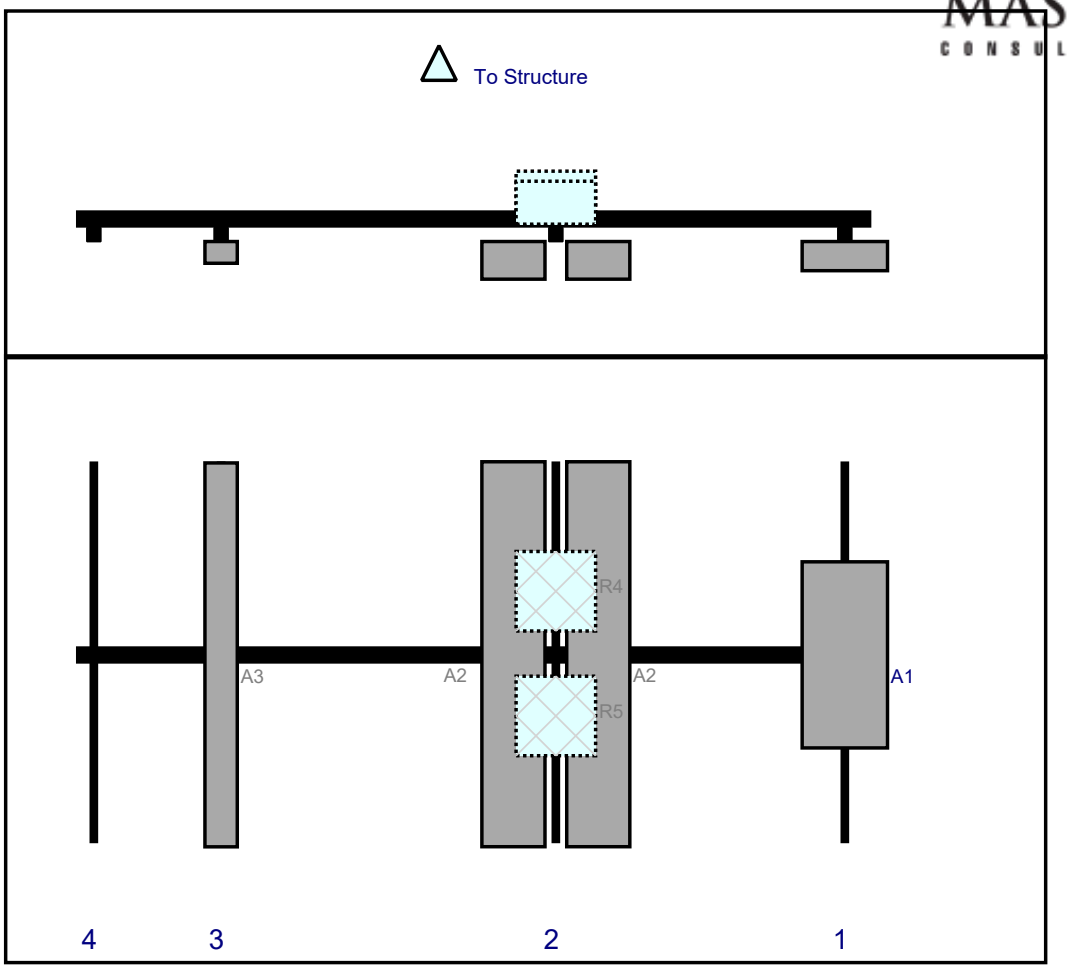
Front View
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A1	Licensed Sub6 Antenna	35.1	16.1	145	1	a	Front	36.48	0	Added	
A2	SBNHH-1D65B	72.6	11.9	90.5	2	a	Front	36.36	8	Retained	11/17/2020
A2	SBNHH-1D65B	72.6	11.9	90.5	2	b	Front	36.36	-8	Retained	11/17/2020
R4	B2/B66A RRH-BR049	15	15	90.5	2	a	Behind	24.48	0	Added	
R5	B5/B13 RRH-BR04C	15	15	90.5	2	a	Behind	48	0	Added	
A3	BXA-171063-12	72.4	6.1	27.37	3	a	Front	36.48	0	Retained	11/17/2020

Plan View

Front View
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A1	Licensed Sub6 Antenna	35.1	16.1	145	1	a	Front	36.48	0	Added	
A2	SBNHH-1D65B	72.6	11.9	90.5	2	a	Front	36.36	8	Retained	11/17/2020
A2	SBNHH-1D65B	72.6	11.9	90.5	2	b	Front	36.36	-8	Retained	11/17/2020
R4	B2/B66A RRH-BR049	15	15	90.5	2	a	Behind	24.48	0	Added	
R5	B5/B13 RRH-BR04C	15	15	90.5	2	a	Behind	48	0	Added	
A3	BXA-171063-12	72.4	6.1	27.37	3	a	Front	36.48	0	Retained	11/17/2020

Maser Consulting

Subject	TIA-222-H Adoption and Wind Speed Usage
Site Information	Site ID: 467891-VZW / Simsbury 2 CT Site Name: Simsbury 2 CT Carrier Name: Verizon Wireless Address: 345 Bushy Hill Road Simsbury, Connecticut 06070 Hartford County Latitude: 41.841383° Longitude: -72.850426°
Structure Information	Tower Type: 115-Ft Monopole Mount Type: 12.50-Ft T-Arm

To Whom It May Concern,

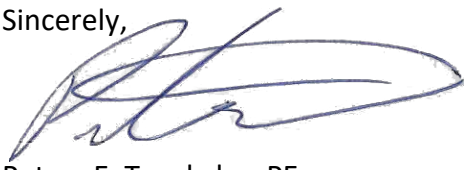
We respectfully submit the above referenced Antenna Mount Structural Analysis report in conformance with ANSI/TIA-222-H, Structural Standard for Antenna Supporting Structures and Antennas and Small Wind Turbine Support Structures.

The 2015 International Building Code states that, in Section 3108, telecommunication towers shall be designed and constructed in accordance with the provisions of TIA-222. The TIA-222-H is the latest revision of the TIA-222 Standard, effective as of January 01, 2018.

As with all ANSI standards and engineering best practice is to apply the most current revision of the standard. This ensures the engineer is applying all updates. As an example, the TIA-222-H standard includes updates to bring it in line with the latest AISC and ACI standards and it also incorporates the latest wind speed maps by ASCE 7 based on updated studies of the wind data.

The TIA-222-H standard clarifies these specific requirements for the antenna mount analysis such as modeling methods, seismic analysis, 30-degree increment wind directions and maintenance loading. Therefore, it is our opinion that TIA-222-H is the most appropriate standard for antenna mount structural analysis and is acceptable for use at this tower site to ensure the engineer is taking into account the most current engineering standard available.

Sincerely,



Petros E. Tsoukalas, PE
Geographical Discipline Leader

MASER CONSULTING
— CONNECTICUT —

331 Newman Springs Road, Suite 203
Red Bank, NJ 07701
T: 732.383.1950
www.maserconsulting.com

March 29, 2021

Mr. Andrew Leone
Verizon Wireless
20 Alexander Dr.
Wallingford, CT 06492

Re: Verizon Wireless antenna Model Clarification for CT Siting Council

Dear Mr. Leone,

This letter is intended to clarify and confirm the antenna naming convention used by Verizon Wireless as a part of an antenna upgrade project on numerous wireless facilities.

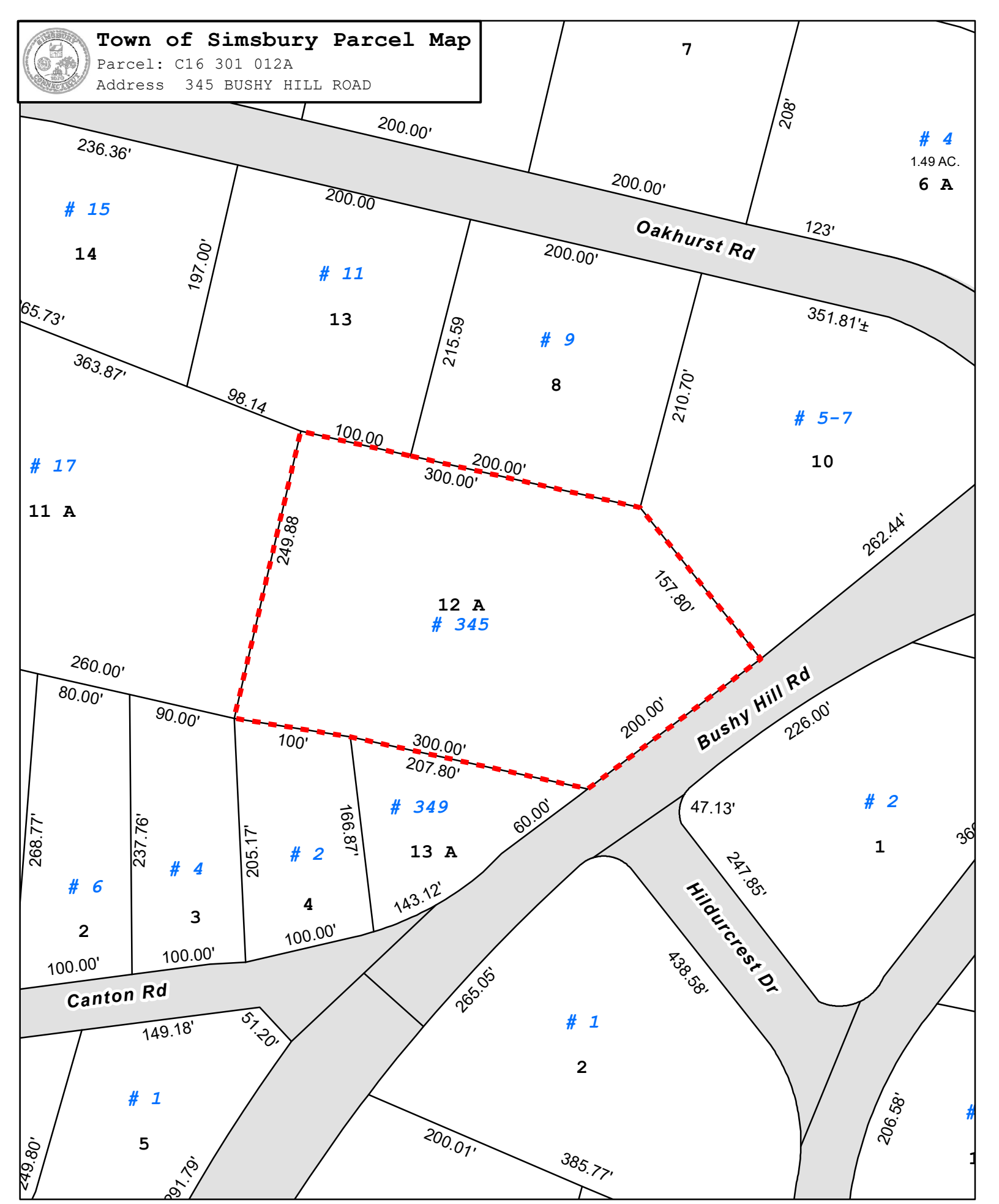
The antenna naming convention "Licensed Sub-6, L-Sub6, nL-Sub6, VZS01" and any other slight variants refer to the 64T64RMMU antenna manufactured by Samsung Electronics. These names are interchangeable and are used in various documents, including but not limited to the "Antenna Mount Analysis".

If you have any questions or comments, or require additional information, please do not hesitate to contact me.

Very truly yours,
MASER CONSULTING CONNECTICUT

Petros Toukalas
Connecticut Professional Engineer
License Number: 32577

ATTACHMENT 5


Town of Simsbury Parcel Map
Parcel: C16 301 012A
Address 345 BUSHY HILL ROAD
Oakhurst Rd
Bushy Hill Rd
Canton Rd
Hildurcrest Dr
345
12 A
15
14
11
13
9
8
4
1.49 AC.
6 A
5-7
10
17
11 A
349
13 A
6
2
4
3
2
4
2
1
1
2
1
5
7
236.36'
200.00'
200.00'
208'
200.00
200.00'
123'
197.00'
65.73'
363.87'
98.14
215.59
351.81'±
210.70'
100.00
200.00'
300.00'
249.88
157.80'
262.44'
260.00'
80.00'
90.00'
100'
300.00'
207.80'
200.00'
226.00'
47.13'
60.00'
247.85'
268.77'
237.76'
205.17'
166.87'
143.12'
100.00'
100.00'
100.00'
149.18'
51.20'
265.05'
438.58'
249.80'
291.79'
200.01'
385.77'
206.58'
1 inch = 100 feet
0 50 100 150 200 Feet
Disclaimer: This map is for informational purposes only All information is subject to verification by any user. The Town of Simsbury and its mapping contractors assume no legal responsibility for the information contained herein.
Map Produced: February 2021

Town of Simsbury, CT

Property Listing Report

Map Block Lot: C16 301 012A | Building #: 1 | Unique Identifier: 04007606

Property Information

Property Location	345 BUSHY HILL ROAD
Mailing Address	869 HOPMEADOW STREET SIMSBURY CT 06070
Land Use	Fire Station - Volunteer
Zoning Code	R-40
Neighborhood	0225

Owner	SIMSBURY FIRE DISTSRICT
Co-Owner	
Book / Page	0257/0645
Land Class	Public Utility
Census Tract	4661010
Acreage	1.74

Valuation Summary

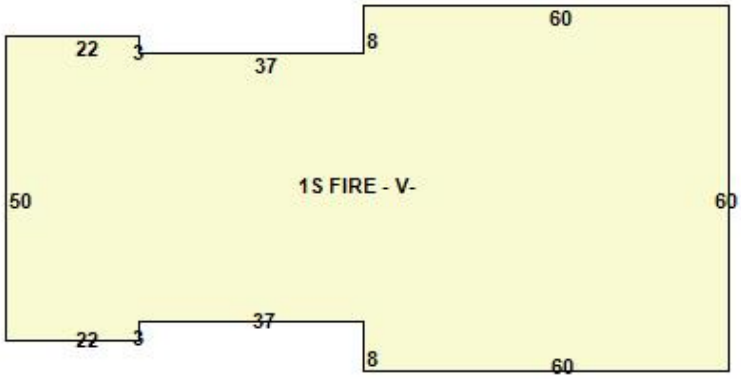
(Assessed value = 70% of Appraised Value)

Item	Appraised	Assessed
Buildings	973238	681270
Outbuildings	34845	24390
Land	309720	216800
Total	1317803	922460

Utility Information

Electric	No
Gas	No
Sewer	No
Public Water	No
Well	No

C16-301-012A 03/17/2012



Primary Construction Details

Year Built	1998	Heating Fuel	Gas	Livable Area (ft)	6328	Bsmt Area	0
Building Desc.	Commercial	Heating Type	Hot Water	Building Use	Fire Station -	Fin Bsmt Area	0
Building Style		AC Type	Central	Building Condition	VG	Fin Bsmt Quality	
Stories	1	Bedrooms	0	Frame Type	Good	Bsmt Access	
Exterior Walls	Brick	Full Bathrooms	0	Building Grade	20	Bsmt Gar	0
Exterior Walls 2		Half Bathrooms	0	Fireplaces	0	Bsmt Sump Pump	No
Interior Walls	Dry Wall	Extra Fixtures	9	Wood Stoves	0		
Interior Walls 2		Total Rooms	0	Attic Access			
Interior Floors 1	Carpet	Bath Style	NA	Roof Style			
Interior Floors 2		Kitchen Style		Roof Cover	Compo_Built		
		Occupancy	0				

Report Created On 4/26/2021

Town of Simsbury, CT

Property Listing Report | Map Block Lot **C16 301 012A** | Building # **1** | Unique Identifier **04007606**

Detached Outbuildings

Type	Description	Area (sq ft)	Condition	Year Built
Paving	Paving	19700	Average	1998
Poles	Light Poles	1	Average	1998

Attached Extra Features

Type	Description	Area (sq ft)	Condition	Year Built

Sales History

Owner of Record	Book/ Page	Sale Date	Sale Price
SIMSBURY FIRE DISTSRICT	0257_0645	12/21/1981	0

Report Created On **4/26/2021**

ATTACHMENT 6

UNITED STATES POSTAL SERVICE®

SIMSBURY 2

Certificate of Mailing — Firm

Name and Address of Sender	TOTAL NO. of Pieces Listed by Sender	TOTAL NO. of Pieces Received at Post Office™	Affix Stamp Here *Postmark with Date of Receipt.*
Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103	2	2	neopost 04/27/2021 US POSTAGE $002.89⁰ ZIP 06103 041L12203937
	Postmaster, per *(name of receiving employee)* MD		

USPS® Tracking Number / Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.	Eric Wellman, First Selectman Town of Simsbury 933 Hopmeadow Street Simsbury, CT 06070				
2.	Michael Glidden, Director of Planning & Community Development ~~Town of Simsbury~~ 933 Hopmeadow Street Simsbury, CT 06070	STATE HOUSE STATION 06103 APR 27 2021 USPS			
3.					
4.					
5.					
6.					