

KENNETH C. BALDWIN

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Also admitted in Massachusetts
and New York

December 13, 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
1021 Blue Hills Avenue, Bloomfield, 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 the existing tower and associated equipment on the ground adjacent to the tower. The tower was approved by the Town of Bloomfield in December of 1997. Cellco’s use of the tower was approved by the Siting Council (“Council”) in October of 2008 (EM-VER-011-080916). A copy of the Town’s original tower approval and the Council’s EM-VER-011-080916 approval are included in Attachment 1.

Cellco now intends to modify its facility by replacing nine (9) existing antennas with three (3) Samsung MT6407-77A antennas, three (3) NHHSS-65B-R2B antennas and three (3) NHH-65B-R2B antennas on its existing antenna mounts. Cellco also intends to remove six (6) existing remote radio heads (“RRHs”) and install nine (9) new RRHs. All new equipment will be installed on Cellco’s existing antenna mounts. A set of project plans showing Cellco’s proposed facility modifications and specification for Cellco’s new antennas and RRHs are included in Attachment 2. Cellco refers to this site as its Cottage Grove telecommunications facility.

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 the Town’s Chief Elected Official and Land Use Officer.

Melanie A. Bachman, Esq.

December 13, 2021

Page 2

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. The new antennas 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 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 Cellco's 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 and antenna mounts, with certain modifications, can support Cellco's proposed modifications. Copies of the SA and MA are included in Attachment 4.

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 and the property owner 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).

Melanie A. Bachman, Esq.

December 13, 2021

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Sincerely,



Kenneth C. Baldwin

Enclosures

Copy to:

Stanley D. Hawthorne, Bloomfield Town Manager

Jose Giner, Director of Land Use

Blue Hills Fire District, Property Owner

Alex Tyurin, Verizon Wireless

ATTACHMENT 1

ZONING BOARD OF APPEALS

TOWN OF BLOOMFIELD

LOCATION: 1021 Blue Hills Avenue
Please type or print

OWNER OF RECORD: Blue Hills Fire District

The foregoing application for 14 Variance; 14 Special Exception pursuant to Section IV.S.4b/III.P of the Bloomfield Zoning Regulations, pertains to premises bounded and described as follows:
(Type or attach written legal boundary description)

(See Attached Description)

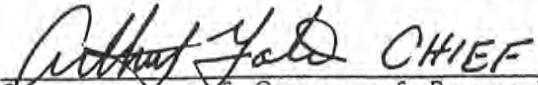
Notary:


MARK LECHAULT

MY COMMISSION EXPIRES: 11/30/2001

December 1, 1997

Date

 CHIEF
Signature of Owner of Record

PLEASE NOTE REQUIREMENTS BELOW FOR RECORDING APPROVAL ON LAND RECORDS

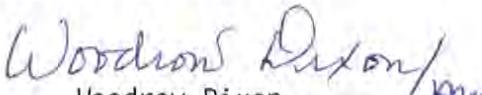
To be completed by Zoning Board of Appeals following approval:

I hereby certify that the Zoning Board of Appeals, at a meeting held on December 1, 1997, approved XX/ Variance and XXX Special Exception of Cordless Data Transfer, Inc. for a radio tower in the gateway zone,

to be located 12 feet from the property line, 1021 Blue Hills Ave., (Fire Dept.)

at the above premises, pursuant to Section IV.S.4.b of the Bloomfield Zoning Regulations, subject to the following conditions (if any):

An 8-foot chain link fence shall be placed around the tower


Woodrow Dixon/
Woodrow Dixon

Secretary - ZBA

* NOTE: PURSUANT TO SECTION 8-3d OF THE CONN. GENERAL STATUTES, THIS VARIANCE/SPECIAL EXCEPTION WILL NOT BECOME EFFECTIVE UNTIL IT HAS BEEN RECORDED ON THE LAND RECORDS OF THE TOWN OF BLOOMFIELD. IT IS THE RESPONSIBILITY OF THE OWNER TO RECORD THIS FORM AND PAY THE RECORDING FEE. (\$10.00 FOR THE FIRST PAGE, \$5.00 EACH ADDITIONAL PAGE)

* NO BUILDING PERMITS REQUIRED IN CONNECTION WITH THE ABOVE VARIANCE OR SPECIAL EXCEPTION MAY BE ISSUED UNTIL THIS APPROVAL HAS BEEN RECORDED.



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

Internet: ct.gov/csc

Daniel F. Caruso

Chairman

October 27, 2008

Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597

RE: **EM-VER-011-080916** - Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 1021 Blue Hills Avenue, Bloomfield, Connecticut.

Dear Attorney Baldwin:

The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies, with following conditions:

- The proposed coax lines shall be installed per Figure 1 of the structural analysis report dated April 29, 2008 and sealed by Christopher Michael Murphy, P.E.; and
- The Council shall be notified in writing that the coax lines were installed as specified.

The proposed modifications are to be implemented as specified here and in your notice dated September 16, 2008, including the placement of all necessary equipment and shelters within the tower compound. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/MP/cm

c: Honorable Sydney Schulman, Mayor, Town of Bloomfield
Louie Chapman, Jr., Town Manager, Town of Bloomfield
Thomas B. Hooper, Director of Planning, Town of Bloomfield
SBA

ATTACHMENT 2

verizon[✓]

COTTAGE GROVE CT 1021 BLUE HILLS AVE BLOOMFIELD, CT 06002

GENERAL NOTES

- ALL WORK SHALL BE IN ACCORDANCE WITH THE 2015 INTERNATIONAL BUILDING CODE AS MODIFIED BY THE 2018 CONNECTICUT SUPPLEMENT, INCLUDING CHANGES AND ADDENDA, AND THE STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND SUPPORTING STRUCTURES, 2017 CONNECTICUT FIRE SAFETY CODE, NATIONAL ELECTRICAL CODE, AND LOCAL ORDINANCES.
- SHOULD ANY FIELD CONDITIONS PRECLUDE COMPLIANCE WITH THE DRAWINGS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND SHALL NOT PROCEED WITH ANY AFFECTED WORK.
- CONTRACTOR SHALL REVIEW ALL DRAWINGS AND SPECIFICATIONS IN THE CONTRACT DOCUMENT SET. CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES WITH THE CONSTRUCTION MANAGER. THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF DRAWINGS TO ALL SUBCONTRACTORS AND ALL RELATED PARTIES. THE SUBCONTRACTORS SHALL EXPLAIN ALL DRAWINGS AND SPECIFICATIONS FOR THE INFORMATION THAT AFFECTS THEIR WORK.
- CONTRACTOR SHALL PROVIDE A COMPLETE BUILD-OUT WITH ALL FINISHES, STRUCTURAL, MECHANICAL, AND ELECTRICAL COMPONENTS AND PROVIDE ALL ITEMS AS SHOWN OR INDICATED ON THE DRAWINGS OR IN THE WRITTEN SPECIFICATIONS.
- CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR, AND EQUIPMENT TO CONSTRUCT AND FURNISH A COMPLETED JOB ALL IN ACCORDANCE WITH LOCAL AND STATE GOVERNING AUTHORITIES AND OTHER AUTHORITIES HAVING LAWFUL JURISDICTION OVER ANY WORK.
- CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND ALL INSPECTIONS REQUIRED AND SHALL ALSO PAY FEES REQUIRED FOR THIS PROJECT. CONTRACTOR SHALL PAY FOR ALL INSPECTIONS AND PERMITS SHALL BE PAID FOR BY THE RESPECTIVE SUBCONTRACTORS.
- CONTRACTOR SHALL MAINTAIN A CURRENT SET OF DRAWINGS AND SPECIFICATIONS ON SITE AT ALL TIMES AND INURE DISTRIBUTION OF NEW DRAWINGS TO SUBCONTRACTORS AND OTHER RELATED PARTIES AS SOON AS POSSIBLE. ALL NEW DRAWINGS SHALL BE MARKED VOID AND REMOVED FROM THE CONTRACT AREA. THE CONTRACTOR SHALL FURNISH AN "AS-BUILT" SET OF DRAWINGS TO OWNER UPON COMPLETION OF PROJECT.
- LOCATION OF EQUIPMENT, AND WORK SUPPLIED BY OTHERS THAT IS DIAGRAMMATICALLY INDICATED ON THE DRAWINGS SHALL BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL DETERMINE LOCATIONS AND DIMENSIONS SUBJECT TO STRUCTURAL CONDITIONS AND WORK OF THE SUBCONTRACTORS.
- THE CONTRACTOR IS SOLELY RESPONSIBLE TO DETERMINE CONSTRUCTION PROCEDURE, AND SEQUENCE, AS WELL AS TO ENSURE THE SAFETY OF THE EXISTING STRUCTURE AND ITS COMPONENTS DURING CONSTRUCTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, BRACING, UNDERPINNING, ETC. THAT MAY BE NECESSARY. MAINTAIN EXISTING BUILDINGS AND UTILITIES DURING CONSTRUCTIONS, COORDINATE WORK WITH BUILDING/PROPERTY OWNER.
- DRAWINGS INDICATE THE MINIMUM STANDARDS, BUT IF ANY WORK SHOULD BE INDICATED TO BE SUBSTANDARD TO ANY ORDINANCES, LAWS, CODES, RULES, OR REGULATIONS BEARING ON THE WORK, THE CONTRACTOR SHALL INCLUDE IN HIS WORK, AND SHALL EXECUTE THE WORK CORRECTLY IN ACCORDANCE WITH SUCH ORDINANCES, LAWS, CODES, RULES OR REGULATIONS WITH NO INCREASE IN COSTS.

- ALL UTILITY WORK SHALL BE IN ACCORDANCE WITH LOCAL UTILITY COMPANY REQUIREMENTS AND SPECIFICATIONS.
- ALL EQUIPMENT AND PRODUCTS PURCHASED ARE TO BE REVIEWED BY CONTRACTOR AND ALL APPLICABLE SUBCONTRACTORS FOR ANY CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL PURCHASE THESE ITEMS AT NO COST TO OWNER OR CONSTRUCTION MANAGER.
- ANY AND ALL ERRORS, DISCREPANCIES, AND "MISSING" ITEMS ARE TO BE BROUGHT TO THE ATTENTION OF THE VERIZON WIRELESS CONSTRUCTION MANAGER DURING THE BIDDING PROCESS BY THE CONTRACTOR. ALL MISSING ITEMS SHALL BE INCLUDED IN THE BID. NO "EXTRA" WILL BE ALLOWED FOR MISSED ITEMS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE SAFETY FROM THE TIME THE JOB IS AWARDED UNTIL ALL WORK IS COMPLETE AND ACCEPTED BY THE OWNER.
- CONTRACTOR TO APPROVAL ALL SHOP DRAWINGS AND SUBMIT COPY TO ENGINEER FOR APPROVAL. DRAWINGS MUST BEAR THE CHECKER'S INITIALS BEFORE SUBMITTING TO THE CONSTRUCTION MANAGER FOR REVIEW.
- THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, ANGLES, AND EXISTING CONDITIONS AT THE SITE, PRIOR TO FABRICATION AND/OR INSTALLATION OF ANY WORK IN THE CONTRACT AREA.
- COORDINATION, LAYOUT, FURNISHING AND INSTALLATION OF CONDUIT AND ALL APPURTENANCES REQUIRED FOR PROPER INSTALLATION OF ELECTRICAL SYSTEMS AND SERVICES. SERVICE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- ALL EQUIPMENT AND PRODUCTS PURCHASED ARE TO BE REVIEWED BY CONTRACTOR AND ALL APPLICABLE SUB- CONTRACTORS FOR ANY CONDITION PER THE MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR TO PURCHASE THESE ITEMS AT NO COST TO OWNER OR CONSTRUCTION MANAGER.
- ALL DAMAGE CAUSED TO ANY EXISTING STRUCTURE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE HELD LIABLE FOR ALL REPAIRS REQUIRED FOR EXISTING STRUCTURES IF DAMAGED DURING CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION ACTIVITY (203) 224-0455. ALL UTILITIES SHALL BE IDENTIFIED AND CLEARLY MARKED PRIOR TO ANY EXCAVATION WORK. CONTRACTOR SHALL MAINTAIN AND PROTECT MARKED UTILITIES THROUGHOUT PROJECT COMPLETION.

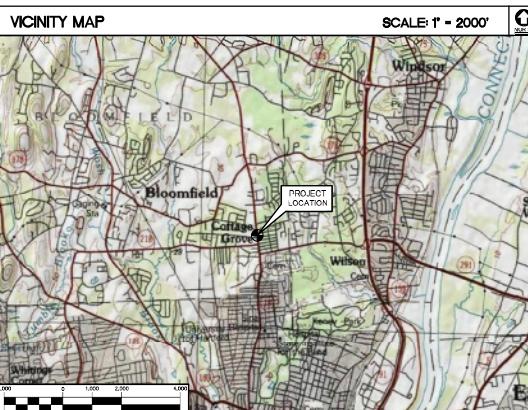
SITE DIRECTIONS

FROM: 20 ALEXANDER DRIVE
WALLINGFORD, CONNECTICUT

TO: 1021 BLUE HILLS AVE.
BLOOMFIELD, CT 06002

- START OUT GOING NORTH ON ALEXANDER DR TOWARD BARNES INDUSTRIAL RD.
- TURN LEFT ONTO BARNES INDUSTRIAL RD.
- TAKE FIRST LEFT ONTO CT-68.
- TURN RIGHT ONTO RAMP.
- TURN LEFT ONTO BROWN HILL RD/US-5 N.
- MERGE ONTO CT-15 N TOWARD HARTFORD/I-91.
- MERGE ONTO US-5 N/CT-15 N TOWARD HARTFORD/I-91.
- KEEP ON THE US-5 N/MERGE ONTO CT-2, TOWARD NORWICH/E. RIVER DR.
- KEEP ON THE CT-2 W/TOWARD E. RIVER DR RAMP TOWARD NORWICH.
- MERGE ONTO CT-2 W TOWARD E. RIVER DR.
- KEEP ON THE CT-2 W TOWARD E. RIVER DR.
- MERGE ONTO I-84 W/US-5 N VIA EXIT 35B TOWARD I-91 N.
- MERGE ONTO I-91 N TOWARD SPRINGFIELD.
- TAKE THE CT-218 EXIT, EXIT 35B, TOWARD BLOOMFIELD/WINDSOR.
- TAKE THE CT-218 EXIT, EXIT 35B, TOWARD BLOOMFIELD/WINDSOR.
- TURN LEFT ONTO CT-218.
- TURN LEFT ONTO 1021 BLUE HILLS AVE/CT-187.
- 1021 BLUE HILLS AVE, BLOOMFIELD, CT 06002-3715, 1021 BLUE HILLS AVE IS ON THE LEFT.

VICINITY MAP



SCALE: 1" = 2000'

PROJECT SUMMARY

- THE PROPOSED UPGRADE SCOPE OF WORK AT THE EXISTING UNMANNED TELECOMMUNICATIONS FACILITY GENERALLY INCLUDES THE FOLLOWING:
- AT THE EXISTING SELF-SUPPORTING LATTICE TOWER MOUNTED ANTENNA Sectors:
 - REMOVE (3) EXISTING AMPHENOL - BXA-171063-12CF-EDIN-2 ANTENNAS.
 - REMOVE (4) EXISTING ANTEL - BXA-70080-4CF-750 MHZ ANTENNAS.
 - REMOVE (2) EXISTING SWEDCOM - SLCP 2X8014 ANTENNAS.
 - REMOVE (1) EXISTING 6x12 HYBRIFLEX CABLE.
 - REMOVE (6) EXISTING NOKIA RADIOS.
 - RETAIN (3) COMMSCOPE - NHH-65B-R2B ANTENNAS.
 - RETAIN (6) EXISTING 1-5/8" COAXIAL CABLES.
 - RETAIN (1) EXISTING OVP-12 BOX.
 - INSTALL (3) COMMSCOPE - MT8407-77A ALL-IN-ONE ANTENNA/RRUs.
 - INSTALL (3) COMMSCOPE - NHHS-65B-R2B TO ANTENNAS.
 - INSTALL (3) SAMSUNG - RF4439d-25A RRUs.
 - INSTALL (3) SAMSUNG - RF4440d-13A RRUs.
 - INSTALL (3) COMMSCOPE - BASINT-SBS-1-2 ANTENNA MOUNTS.
 - INSTALL (2) 6x12 HYBRIFLEX CABLES.

PROJECT INFORMATION

SITE NAME: COTTAGE GROVE CT
SITE ADDRESS: 1021 BLUE HILLS AVE,
BLOOMFIELD, CT 06002
LESSEE/TENANT: CELCO PARTNERSHIP
d.b.a. VERIZON WIRELESS
20 ALLEGRA DRIVE
WALLINGFORD, CT 06492

CONTACT PERSON: WALTER CHARCZNSKI (CONSTRUCTION MANAGER)
VERIZON WIRELESS
(860) 306-1806

ENGINEER: CENTEK ENGINEERING, INC.
83-2 BRADFORD ROAD
BRADFORD, CT 06405
(203) 489-0580

PROJECT COORDINATES: LATITUDE: 41°49'12.4284" N
LONGITUDE: 72°41'47.4504" W
COORDINATES BASED ON VERIZON WIRELESS RFDS,
DATED JULY 30, 2021.

SHEET INDEX

SHT. NO.	DESCRIPTION	REV.
T-1	TITLE SHEET	1
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C-1	COMPOUND PLAN AND ELEVATION	1
C-2	ANTENNA SECTOR CONFIGURATION DETAILS	1
C-3	RF DETAILS	1
E-1	ELECTRICAL DETAILS AND SPECIFICATIONS	1

Celco Partnership d/b/a Verizon Wireless
Center Engineering
1021 BLUE HILLS AVE.
BLOOMFIELD, CT 06002

T-1
Sheet No. 1 of 1

PROFESSIONAL ENGINEER'S SEAL	verizon [✓]
DATE: 10/04/21	AMC
NAME: [Signature]	DAD
DATE: 10/04/21	SUM
NAME: [Signature]	DND
DATE: 10/04/21	DRN
NAME: [Signature]	DRN BY CHKO BY
REV. DATE: 10/04/21	DRN BY
CONSTRUCTION DRAWINGS = REVISED TOWER SA REFERENCE CONSTRUCTION DRAWINGS = ISSUED FOR CONSTRUCTION CONSTRUCTION DRAWINGS = ISSUED FOR CLIENT REVIEW	

NOTES AND SPECIFICATIONS

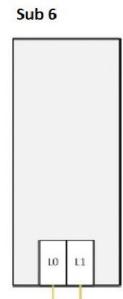
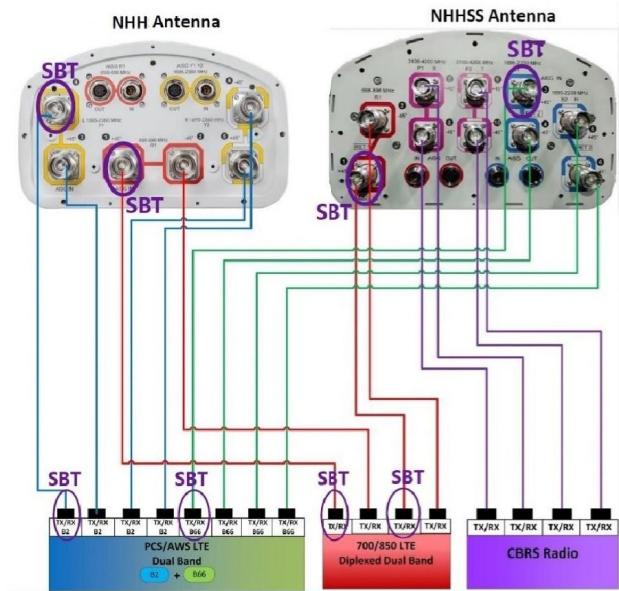
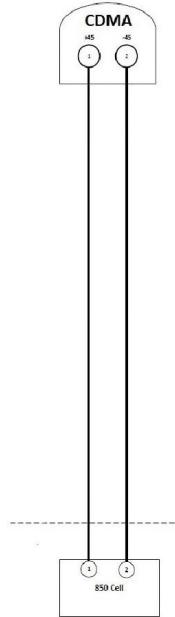
DESIGN BASIS:

GOVERNING CODE: 2015 INTERNATIONAL BUILDING (IBC) AS MODIFIED BY THE 2018 CT STATE BUILDING CODE AND AMENDMENTS.

- 1. DESIGN CRITERIA:
 - RISK CATEGORY: II (BASED ON TABLE 1604.5 OF THE 2015 IBC)
 - NOMINAL DESIGN SPEED (TOWER): 97 MPH (V_{ASD}) (EXPOSURE B/IMPORTANCE FACTOR 1.0 BASED ON ASCE 7-10) PER 2015 INTERNATIONAL BUILDING CODE (IBC) AS MODIFIED BY THE 2018 CONNECTICUT STATE BUILDING CODE.
 - SEISMIC LOAD (DOES NOT CONTROL): PER ASCE 7-10 MINIMUM DESIGN LOADS FOR BUILDING AND OTHER STRUCTURES.

GENERAL NOTES:

- ALL CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE GOVERNING BUILDING CODE.
 - DRAWINGS INDICATE THE MINIMUM STANDARDS, BUT IF ANY WORK SHOULD BE INCONGRUENT OR INCONFORMITY TO ANY LOCAL, STATE, FEDERAL, OR INTERNATIONAL REGULATIONS BEARING ON THE WORK, THE CONTRACTOR SHALL INCLUDE IN HIS WORK AND SHALL EXECUTE THE WORK CORRECTLY IN ACCORDANCE WITH SUCH ORDINANCES, LAWS, CODES, RULES OR REGULATIONS WITH NO INCREASE IN COSTS.
 - BEFORE BEGINNING THE WORK, THE CONTRACTOR IS RESPONSIBLE FOR MAKING SUCH INVESTIGATION CONCERNING PHYSICAL CONDITIONS (SOILS, ROCKS, ETC.) AND SURFACE AT OR CONTIGUOUS TO THE SITE WHICH MAY AFFECT PERFORMANCE AND COST OF THE WORK.
 - DIMENSIONS AND DETAILS SHALL BE CHECKED AGAINST EXISTING FIELD CONDITIONS.
 - THE CONTRACTOR SHALL VERIFY AND COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS, SLEEVES AND ANCHOR BOLTS AS REQUIRED BY ALL TRADES.
 - ALL DIMENSIONS, ELEVATIONS, AND OTHER REFERENCES TO EXISTING STRUCTURES, SURFACE, AND SUBSURFACE CONDITIONS ARE APPROXIMATE. NO GUARANTEE IS MADE AS TO THE ACCURACY OF THESE DIMENSIONS. THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS, ELEVATIONS, ANGLES WITH EXISTING CONDITIONS AND WITH ARCHITECTURAL AND SITE DRAWINGS BEFORE PROCEEDING WITH ANY WORK.
 - AS THE WORK PROGRESSES, THE CONTRACTOR SHALL NOTIFY THE OWNER OF ANY CONFLICTS WHICH ARE UNRESOLVED OR OTHERWISE NOT CONSISTENT WITH THE CONSTRUCTION DOCUMENTS AND SHALL NOT PROCEEDED WITH SUCH WORK UNTIL THE CONFLICT IS SATISFACTORILY RESOLVED.
 - THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY CODES AND REGULATIONS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONTRACTOR'S SOLELY RESPONSIBILITY FOR PROVIDING AND MAINTAINING ADEQUATE SHORING, BRACING, AND BARACADES AS MAY BE REQUIRED FOR THE PROTECTION OF EXISTING PROPERTY, CONSTRUCTION WORKERS, AND FOR PUBLIC SAFETY.
 - THE CONTRACTOR IS SOLELY RESPONSIBLE TO DETERMINE CONSTRUCTION REQUIREMENTS FOR EXISTING STRUCTURES AND ITS COMPONENTS DURING CONSTRUCTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, BRACING, UNDERPINNING, ETC. THAT MAY BE NECESSARY TO MANAGE EXISTING SITE CONDITIONS, COORDINATE WORK WITH NORTHEAST UTILITIES
 - ALL DAMAGE CAUSED TO ANY EXISTING STRUCTURE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE HELD LIABLE FOR ALL DAMAGES CAUSED TO EXISTING STRUCTURES IF DAMAGED DURING CONSTRUCTION ACTIVITIES.
 - REFER TO DRAWING 7A FOR ADDITIONAL NOTES AND REQUIREMENTS.



NOTE:

1. INFORMATION SHOWN HEREIN IS FOR USE BY VERIZON WIRELESS EQUIPMENT OPERATIONS.
2. THIS B.O.M. DRAWING IS BASED OFF FACILITY UPGRADE DESIGN DRAWINGS PREPARED BY CENTEK ENGINEERING (REV.0 DATED: 12.09.21), & VERIZON WIRELESS RF ANTENNA EQUIPMENT RECOMMENDATION (DATED 07.30.21).

BILL OF MATERIALS		
TECHNOLOGY	QUANTITY	ANTENNA
5G	3	SAMSUNG ANTENNA MODEL: MT6407-77A
700 LTE		
850 LTE 5G	3	COMMSCOPE ANTENNA MODEL: NHHSS-65B-R2BTO
2100 AWS LTE		
CBRS LTE		
700 LTE		
850 LTE 5G	3	COMMSCOPE ANTENNA MODEL: NHH-65B-R2B
1900 LTE		

CABLES	QUANTITY	LENGTH	COMMENTS
HYBRID CABLE	2	±187'	6x12 HYBRIFLEX

RADOS	QUANTITY	COMMENTS
5G	3	SAMSUNG MODEL: MT6407-77A
CBRS LTE	3	SAMSUNG MODEL: CBRS RRH-RT4401-48A
2100 AWS LTE	3	SAMSUNG MODEL: RF4439d-25A
1900 LTE		
850 LTE 5G	3	SAMSUNG MODEL: RF4440d-13A
700 LTE		

DIPLEXERS	QUANTITY	COMMENTS
-	-	-

OVP BOXES	QUANTITY	COMMENTS
-	-	-

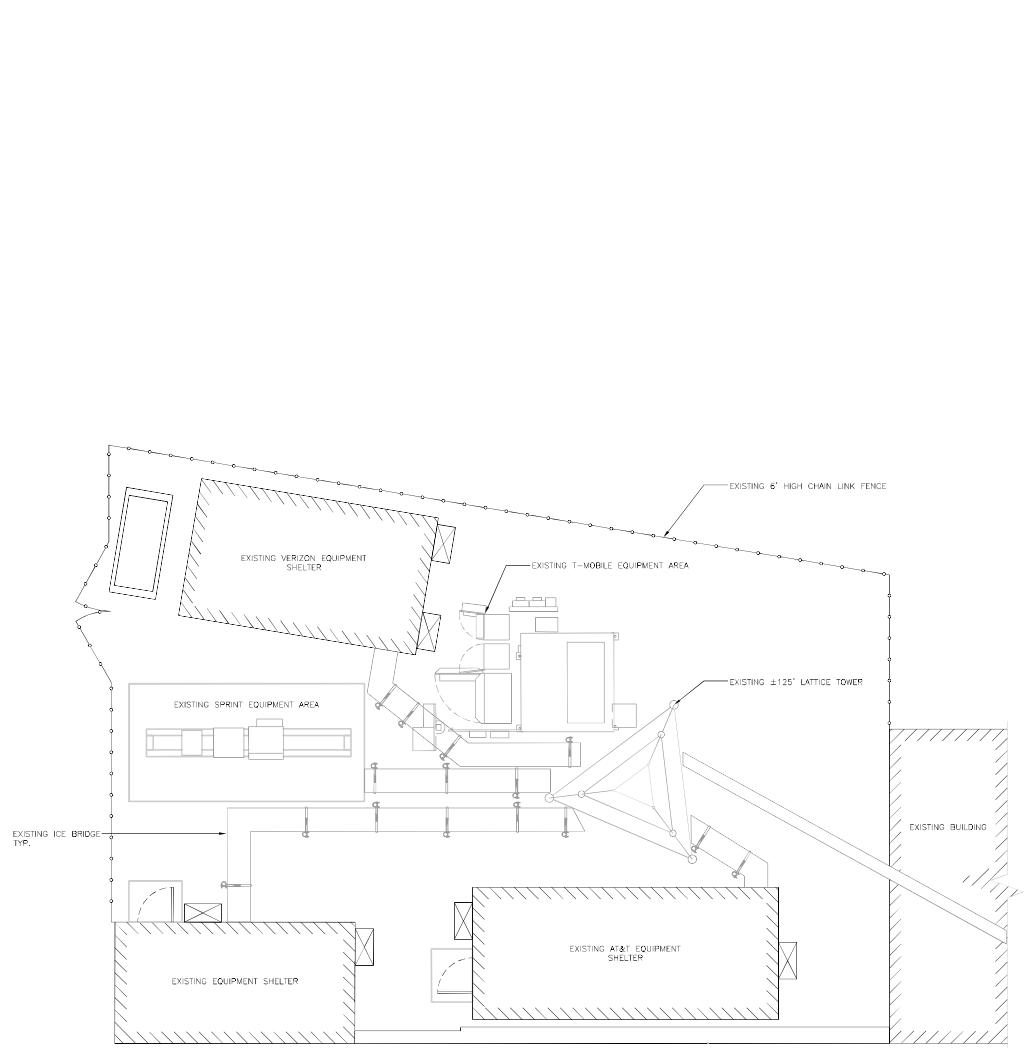
ANTENNA MOUNT	QUANTITY	COMMENTS
SIDE-BY-SIDE MOUNTING KIT	3	COMMSCOPE MODEL: BASMNT-SBS-1-2

Cellco Partnership d/b/a Verizon Wireless
CENTEK Engineering
 Company of choice
 (203) 486-8580
 62 North Bedford Road
 Stamford, CT 06902
www.CentekEng.com

DATE: 10/04/21
 SCALE: AS NOTED
 JOB NO.: 2100749

RF BILL OF MATERIALS

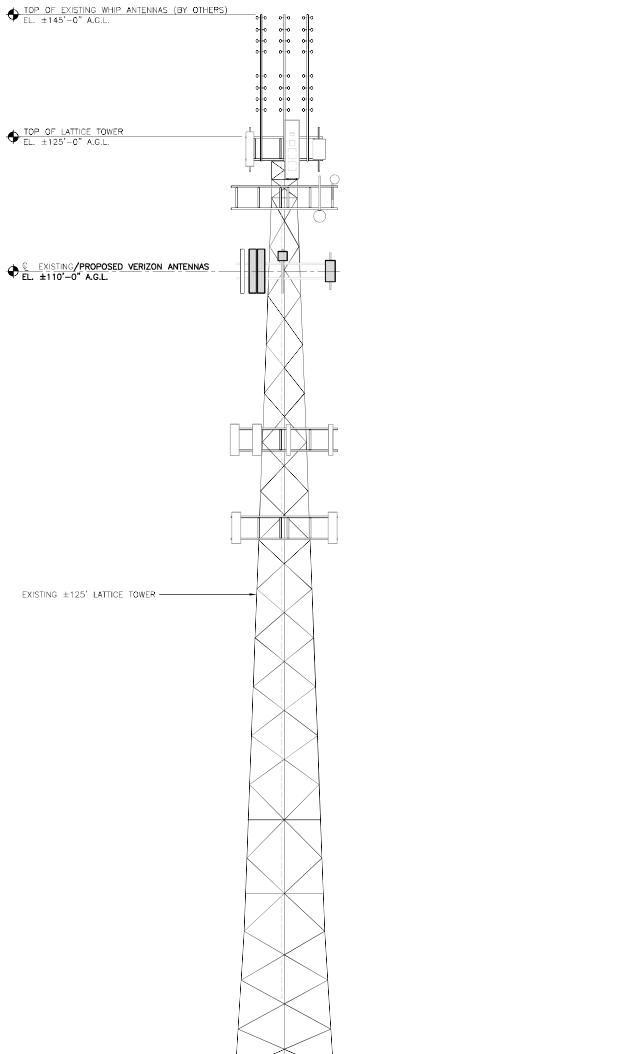
B-1
Sheet No. 3 of 7



1
C-1
COMPOUND PLAN



GRAPHIC SCALE
1 IN FEET
1 inch = 5 ft.



2
C-1
TOWER ELEVATION - PROPOSED

TOWER STRUCTURAL ANALYSIS REFERENCE NOTE
REFER TO ATTACHED TOWER STRUCTURAL ANALYSIS REPORT
REF ID: 1021BLUEHILLSTOWER FOR TOWER DESIGN AND CONSTRUCTION DETAILS.
TECHNICAL SERVICES, INC. (TSI) AND TOWER ENGINEERING SOLUTIONS (TES) DATED 12/06/2021. TES
CONSTRUCTION DRAWINGS = REVISED TOWER SA REFERENCE
CONSTRUCTION DRAWINGS = ISSUED FOR CONSTRUCTION
CONSTRUCTION DRAWINGS = ISSUED FOR CLIENT REVIEW

Celico Partnership d/b/a Verizon Wireless
CENTER
Engineering
Center of Excellence
(203) 486-8580
(203) 486-8587 Fax
62 North Bedford Road
Burlington, CT 06485
www.CenterEng.com

COTTAGE GROVE CT
1021 BLUE HILLS AVE.
BLOOMFIELD, CT 06002

DATE: 10/04/21
SCALE: AS NOTED
JOB NO.: 2100749

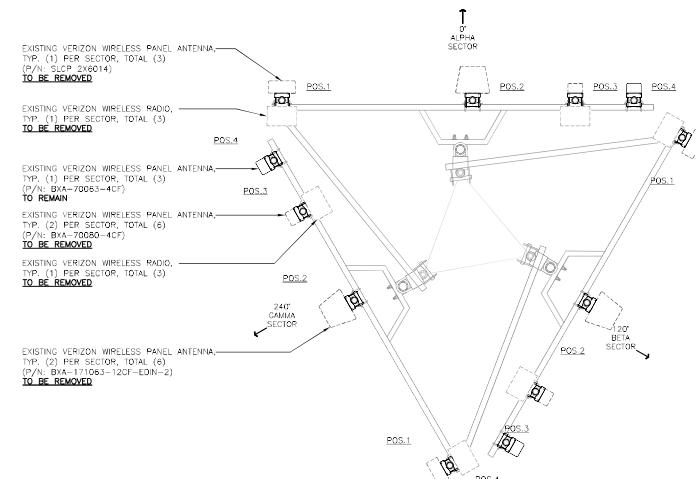
COMPOUND PLAN AND ELEVATION

C-1

Sheet No. 4 of 7

PROFESSIONAL ENGINEER'S SEAL	verizon
	
1/27/02/21	DAD
1/19/01/21	AMC
A	DAD
1/14/01/21	SUM
A	DAD
SPANN BY C.H.D. BY	DESCRIPTION
REV. DATE	
REV. DATE	

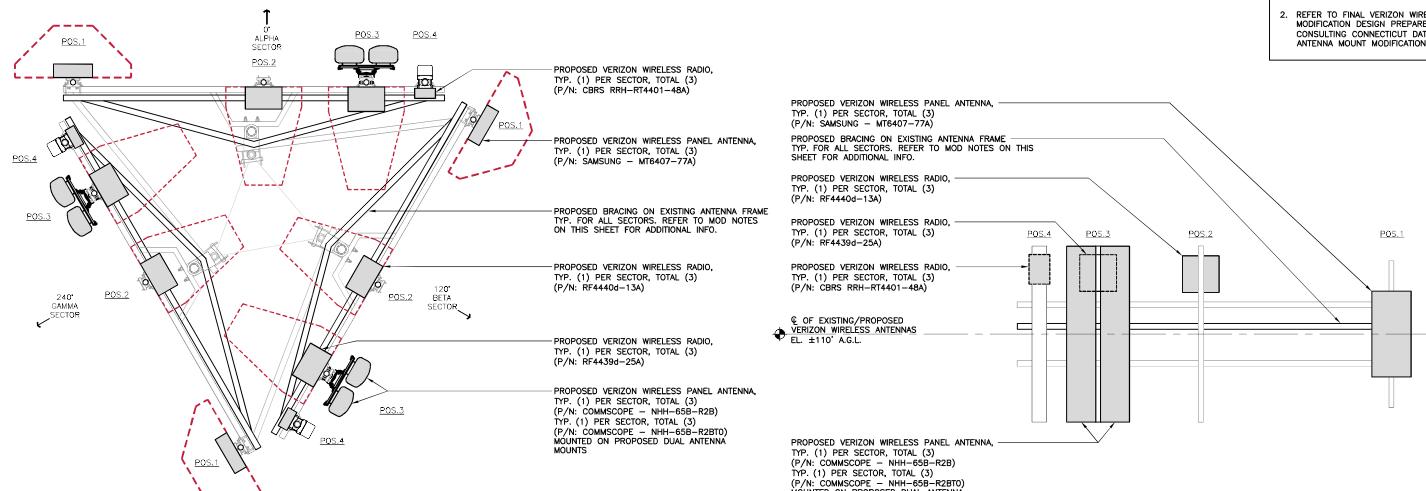
EXISTING ANTENNA CONFIGURATIONS



EXISTING SECTOR CONFIGURATION PLAN

AS FURNISHED
NORTH

PROPOSED ANTENNA CONFIGURATIONS



- ANTENNA MOUNT ANALYSIS AND MOD NOTES:**
- REFER TO PASSING VERIZON WIRELESS MOUNT ANALYSIS REPORT PREPARED BY MAYER CONSULTING CONNECTICUT DATED 9/10/2021 FOR ADDITIONAL INFORMATION.
 - REFER TO FINAL VERIZON WIRELESS MOUNT MODIFICATION DESIGN PREPARED BY MAYER CONSULTING CONNECTICUT DATED 9/15/2021 FOR ANTENNA MOUNT MODIFICATIONS.

PROFESSIONAL ENGINEER'S SEAL		
12/09/21	DAD	ANC
11/01/21	DAD	DAD
A	SUM	DAD
REV. DATE	PRINTED BY CHKD BY	DESCRIPTION

CENTER Engineering Comments or initials	verizon
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Celico Partnership d/b/a Verizon Wireless Comments or initials	COTTAGE GROVE CT 1021 BLUE HILLS AVE. BLOOMFIELD, CT 06002
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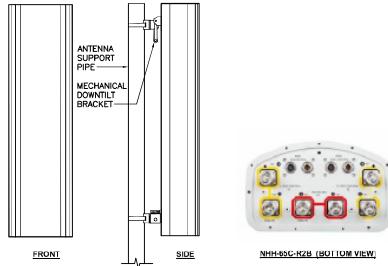
DATE: 10/04/21 SCALE: AS NOTED JOB NO. 2100749	ANTENNA SECTOR CONFIGURATION DETAILS
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C-2 Sheet No. 5 of 7

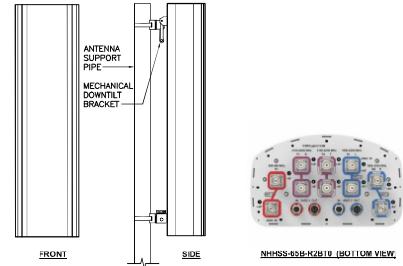


ANTENNA FRONT

ALL-IN-ONE SECTOR ANTENNA		
EQUIPMENT	DIMENSIONS	WEIGHT
MAKE: SAMSUNG MODEL: MT6407-77A	35.1" H x 15.1" W x 5.5" D (NOT TO EXCEED)	87 LBS. (NOT TO EXCEED)
CLEARANCES AND SERVICE AREA		
TOP:	31.5"	HORIZONTAL DISTANCE: 31.5" (ANT. TO ANT.)
FRONT, SIDES & BOTTOM:	15.7"	VERTICAL DISTANCE: 63.0" (ANT. TO ANT.)
NOTES:	1. THIS ANTENNA HAS ITS OWN BUILT-IN RRH.	

1 ALL-IN-ONE ANTENNA DETAIL
C-3 NOT TO SCALE

ALPHA/BETA/GAMMA ANTENNA		
EQUIPMENT	DIMENSIONS	WEIGHT (WITH MOUNTING KIT)
MAKE: COMMSCOPE MODEL: NHH-65B-R2B	72.0" L x 11.9" W x 7.0" D	43.7 LBS.



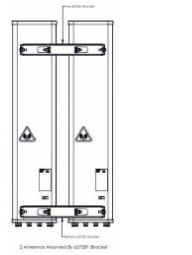
ALPHA/BETA/GAMMA ANTENNA		
EQUIPMENT	DIMENSIONS	WEIGHT (WITH MOUNTING KIT)
MAKE: COMMSCOPE MODEL: NHHSS-65B-R2BTO	72.0" L x 11.9" W x 7.0" D	51 LBS.



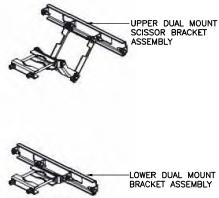
CBRS RRU (REMOTE RADIO UNIT)			
EQUIPMENT	BAND	DIMENSIONS	WEIGHT
MAKE: SAMSUNG MODEL: CBRS_RRH-RT4401-4BA	CBRS	12.1" H x 8.5" W x 4.1" D	18.6 LBS.
NOTES: 1. CONTRACTOR TO COORDINATE FINAL EQUIPMENT MODEL SELECTION WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING.			

4 CBRS RRH DETAIL
C-3 NOT TO SCALE

PROFESSIONAL ENGINEER'S SEAL	
DATE: 1/21/21	REV. DATE: 1/21/21
SCALE: AS NOTED	REV. DATE: 1/21/21
JOBSITE: RRH ONLY	DRAWN BY C-3
CONSTRUCTION DRAWINGS = REVISED TOWER SA REFERENCE	
CONSTRUCTION DRAWINGS = ISSUED FOR CONSTRUCTION	
CONSTRUCTION DRAWINGS = ISSUED FOR CLIENT REVIEW	



SIDE-BY-SIDE ANTENNA MOUNTING KIT			
MOUNT	DESCRIPTION	SUPPORTED ANTENNAS	GAP BETWEEN ANTENNAS
COMMSCOPE MODEL: BASMNT-SBS-1-2	(2) BRACKET KIT FOR MOUNTING (2) ANTENNAS SIDE-BY-SIDE	SBNHH 65° AND 85° NHH 65° AND 85°	3-3/8"
NOTES: 1. MOUNT ACCOMMODATES MAST DIAMETERS FROM 2.375" TO 4.5" (O.D.). 2. CONTRACTOR TO CONFIRM MOUNT MAKE/MODEL AND QUANTITY WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING.			

5 DUAL ANTENNA MOUNT DETAIL
C-3 NOT TO SCALE

DUAL BAND RRU (REMOTE RADIO UNIT)			
EQUIPMENT	BANDS	DIMENSIONS	WEIGHT
MAKE: SAMSUNG MODEL: RF4439d-25A	B25: PCS (1900 MHz) B65: AWS (2100 MHz)	15.0" H x 15.0" W x 10.0" D	74.7 LBS.
NOTES: 1. CONTRACTOR TO COORDINATE FINAL EQUIPMENT MODEL SELECTION WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING.			

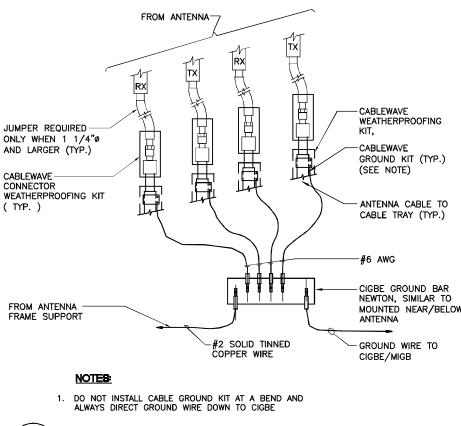
6 DUAL-BAND AWS/PCS MACRO RADIO UNIT DETAIL
C-3 NOT TO SCALE

DUAL BAND RRU (REMOTE RADIO UNIT)			
EQUIPMENT	BANDS	DIMENSIONS	WEIGHT
MAKE: SAMSUNG MODEL: RF440d-13A	B5: 850 MHz B13: 700 MHz	15.0" H x 15.0" W x 9.0" D	70.3 LBS.
NOTES: 1. CONTRACTOR TO COORDINATE FINAL EQUIPMENT MODEL SELECTION WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING.			

7 DUAL-BAND 700/850 MHZ MACRO RADIO UNIT DETAIL
C-3 NOT TO SCALE

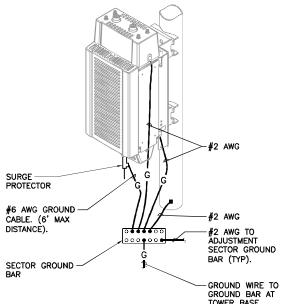
DATE: 10/04/21	SCALE: AS NOTED
JOBSITE: COTTAGE GROVE CT	DRAWN BY C-3
CONTRACTOR: CENTER Engingeering	
Address: 62 North Bedford Road, Stamford, CT 06902	
Phone: (203) 486-8587 Fax: (203) 486-8588	
Email: www.CenterEng.com	

RF DETAILS
C-3

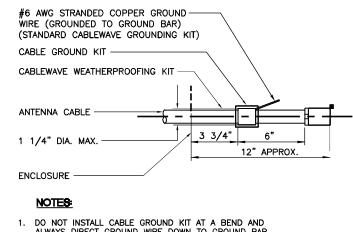


CONNECTION OF GROUND WIRES TO GROUND BAR

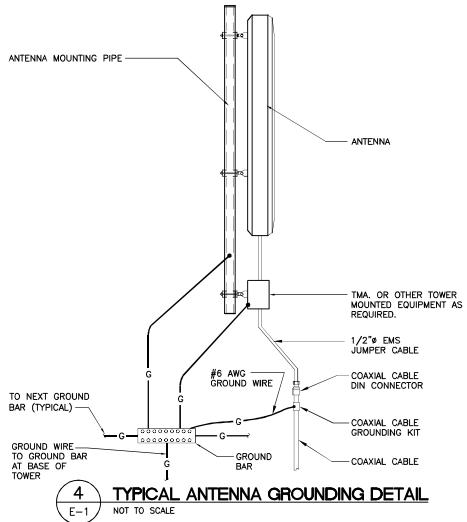
EACH RRH CABINET SHALL BE GROUNDED IN THE FOLLOWING MANNER:



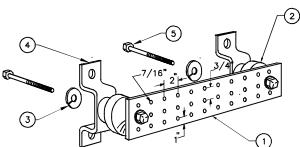
2 RRH POLE MOUNT GROUNDING
E-1 NOT TO SCALE



3 ANTENNA CABLE GROUNDING DETAIL
E-1 NOT TO SCALE



4 TYPICAL ANTENNA GROUNDING DETAIL



NOTES

- ① TINNED COPPER GROUND BAR, 1/4" x 4" x 20', NEWTON INSTRUMENT CO., HOLE CENTERS TO MATCH NEMA DOUBLE LEG CONFIGURATION.
 - ② INSULATORS, NEWTON INSTRUMENT CAT. NO. 3061-4.
 - ③ 5/8" LOCK WASHERS, NEWTON INSTRUMENT CO. CAT. NO. 3015-B.
 - ④ WALL MOUNTING BRACKET, NEWTON INSTRUMENT CO. CAT. NO. A-6056.
 - ⑤ 5/8"-11 x 1" STAINLESS STEEL TRUSS SPANNER MACHINE SCREWS



GROUND BAR DETAIL

ELECTRICAL SPECIFICATIONS

SECTION 16010

SECTION 1001

- A. WORK SHALL INCLUDE ALL LABOR, EQUIPMENT AND SERVICES REQUIRED TO COMPLETE (MAKE READY FOR OPERATION) ALL THE ELECTRICAL WORK INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:

 1. CELLULAR GROUNDING SYSTEMS CONSISTING OF ANTENNA GROUNDING, GROUND BARS, ETC.

B. GENERAL REQUIREMENTS

 - A. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE MADE IN STRICT ACCORDANCE WITH ALL LOCAL, STATE AND NATIONAL CODES AND REGULATIONS WHICH MAY APPLY AND NOTHING IN THE DRAWINGS OR SPECIFICATIONS SHALL BE INTERPRETED AS AN INFRINGEMENT OF SUCH CODES OR REGULATIONS.
 - B. THE ELECTRICAL CONTRACTOR IS TO BE RESPONSIBLE FOR THE COMPLETE INSTALLATION AND MAINTENANCE OF THE ENTIRE ELECTRICAL SERVICE. ALL ACTIVITIES TO BE COORDINATED THROUGH OWNER'S REPRESENTATIVE, DESIGN ENGINEER AND OTHER AUTHORITIES HAVING JURISDICTION OF TRADES.
 - C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND PAY ALL FEES THAT MAY BE REQUIRED FOR THE ELECTRICAL WORK AND FOR SCHEDULING OF ALL INSPECTIONS THAT MAY BE REQUIRED BY THE LOCAL AUTHORITY.
 - D. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH THE BUILDING OWNER FOR NEW AND/OR DEMOLITION WORK INVOLVED.

E. NO MATERIAL OTHER THAN THAT CONTAINED IN THE "LATEST LIST OF ELECTRICAL FITTINGS" APPROVED BY THE UNDERWRITERS' LABORATORIES, SHALL BE USED IN ANY PART OF THE WORK. MATERIAL FOR WHICH LABEL SERVICE HAS BEEN ESTABLISHED SHALL BEAR THE U.L. LABEL.

F. THE CONTRACTOR SHALL GUARANTEE ALL NEW WORK FOR A PERIOD OF ONE YEAR FROM THE ACCEPTANCE DATE BY THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING WARRANTIES FROM ALL EQUIPMENT MANUFACTURED FOR SUBMISSION TO THE OWNER.

G. DRAWINGS INDICATE GENERAL ARRANGEMENT OF WORK INCLUDED IN CONTRACT. CONTRACTOR SHALL WITHOUT EXTRA CHARGE, MAKE MODIFICATIONS TO THE LAYOUT OF THE WORK TO PREVENT CONFLICT WITH WORK OF OTHER TRADES AND FOR THE PROPER INSTALLATION OF WORK. CHECK ALL DRAWINGS AND VISIT JOBSITE TO VERIFY SPACE AND TYPE OF EXISTING CONDITIONS IN WHICH WORK WILL BE DONE, PRIOR TO SUBMITTAL OF BID.

H. THE ELECTRICAL CONTRACTOR SHALL SUPPLY THREE (3) COMPLETE SETS OF APPROVED DRAWINGS, ENGINEERING DATA SHEETS, MAINTENANCE AND OPERATING INSTRUCTION MANUALS FOR ALL SYSTEMS AND THEIR RESPECTIVE EQUIPMENT. THESE MANUALS SHALL BE INSERTED IN VINYL COVERED 3-RING BINDERS AND TURNED OVER TO OWNER'S REPRESENTATIVE ONE (1) WEEK PRIOR TO FINAL PUNCH LIST.

 - I. ALL WORK SHALL BE INSTALLED IN A NEAT AND WORKMAN LIKE MANNER AND WILL BE SUBJECT TO THE APPROVAL OF THE OWNER'S REPRESENTATIVE.
 - J. ALL EQUIPMENT AND MATERIALS TO BE INSTALLED SHALL BE NEW, UNLESS OTHERWISE NOTED.

K. BEFORE FINAL PAYMENT, THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF PRINTS (AS-BUILT), LEGIBLY MARKED IN RED PENCIL TO SHOW ALL CHANGES FROM THE ORIGINAL PLANS.

SECTION 16450

1.01. GROUNDING

- A. ALL NON-CURRENT CARRYING PARTS OF THE ELECTRICAL AND TELEPHONE CONDUIT SYSTEM SHALL BE MECHANICALLY AND ELECTRICALLY CONNECTED TO PROVIDE AN INDIVIDUAL RETURN PATH TO THE EQUIPMENT GROUNDING SOURCES.
 - B. GROUNDING SYSTEM WILL BE IN ACCORDANCE WITH THE LATEST ACCEPTABLE EDITION OF THE NATIONAL ELECTRICAL CODE AND REQUIREMENTS PER LOCAL INSPECTOR HAVING JURISDICTION.
 - C. EQUIPMENT GROUNDING CONDUCTOR:
 1. EACH EQUIPMENT GROUND CONDUCTOR SHALL BE SIZED IN ACCORDANCE WITH THE N.E.C. ARTICLE 250-122.
 2. THE MINIMUM SIZE OF EQUIPMENT GROUND CONDUCTOR SHALL BE #12 AWG COPPER.
 - D. CELLULAR GROUNDING SYSTEM:

PROVIDE THE CELLULAR GROUNDING SYSTEM AS SPECIFIED ON DRAWINGS, INCLUDING, BUT NOT LIMITED TO:

 1. DRAINAGE GROUND CONNECTIONS AND PLATES.
 2. ANTENNA GROUND CONNECTIONS AND PLATES.
 - E. ALL EQUIPMENT SHALL BE BONDED TO GROUND AS REQUIRED BY N.E.C., MFG. SPECIFICATIONS, AND OWNER'S SPECIFICATIONS.

PROFESSIONAL ENGINEER SEAL							
		verizon		12/09/21		DRAFT	
				0 1/10/22		J.W.	
				0 1/10/22		DRAFT	
				REVIS.		DATE OF DRAWING OR BY CONSTRUCTION	
						CONSTRUCTION DRAWINGS - ISSUED FOR CONSTRUCTION	
						CONSTRUCTION DRAWINGS - ISSUED FOR CLIENT REVIEW	
						REVISION	
CenTek Engineering Contracted to design**		verizon					
Cellco Partnership d/b/a Verizon Wireless		COTTAGE GROVE CT 1021 BLUE HILLS AVE. BLOOMFIELD, CT 06002		1020 4th Street, Ste. 600 Baton Rouge, LA 70801 632 North Broad Road Birchwood, CT 06465		www.CenTekEng.com	
DATE:	10/04/21						
SCALE:	AS NOTED						
JOB NO.:	21007-49						
ELECTRICAL DETAILS AND SPECIFICATIONS							
E-1							

CommScope—Proprietary and Confidential. Preliminary specifications are for illustrative purposes only and will be updated prior to publication.



10-port sector antenna, 2x 698–896, 4x 1695–2200 and 4x 3100–4200 MHz, 65° HPBW, 2x RETs and 2x SBTs. Both high bands share the same electrical tilt.

- Perfect antenna to add 3.5GHz CBRS to macro sites
- 15dBi max CBRS gain to align with FCC max EIRP limitations
- Low band and mid band performance mirrors the performance of existing NHH hex port antennas
- Narrow beamwidth capacity antenna for higher level of densification and enhanced data throughput
- Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable
- Separate RS-485 RET input/output for low and high band
- One LB RET and one HB RET. Both high bands are controlled by one RET to ensure same tilt level for 4x Rx or 4x MIMO
- Interleaved dipole technology providing for attractive, low wind load mechanical package

Electrical Specifications

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	3100–3300	3300–3800	3800–4200
Gain, dBi	14.7	14.7	17.1	17.6	18.4	14.4	14.4	14.5
Beamwidth, Horizontal, degrees	66	61	72	67	64	58	65	60
Beamwidth, Vertical, degrees	12.4	11.1	5.6	5.2	5.0	11.3	10.0	9.0
Beam Tilt, degrees	0–14	0–14	0–7	0–7	0–7	5	5	5
USLS (First Lobe), dB	14	13	15	15	15	15	15	15
Front-to-Back Ratio at 180°, dB	27	29	28	28	28	25	25	25
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	30	30	30
VSWR Return Loss, dB	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-140	-140	-140
Input Power per Port at 50°C, maximum, watts	300	300	300	300	300	100	100	100
Polarization	±45°	±45°	±45°	±45°	±45°	±45°	±45°	±45°
Impedance	50 ohm							

Electrical Specifications, BASTA*

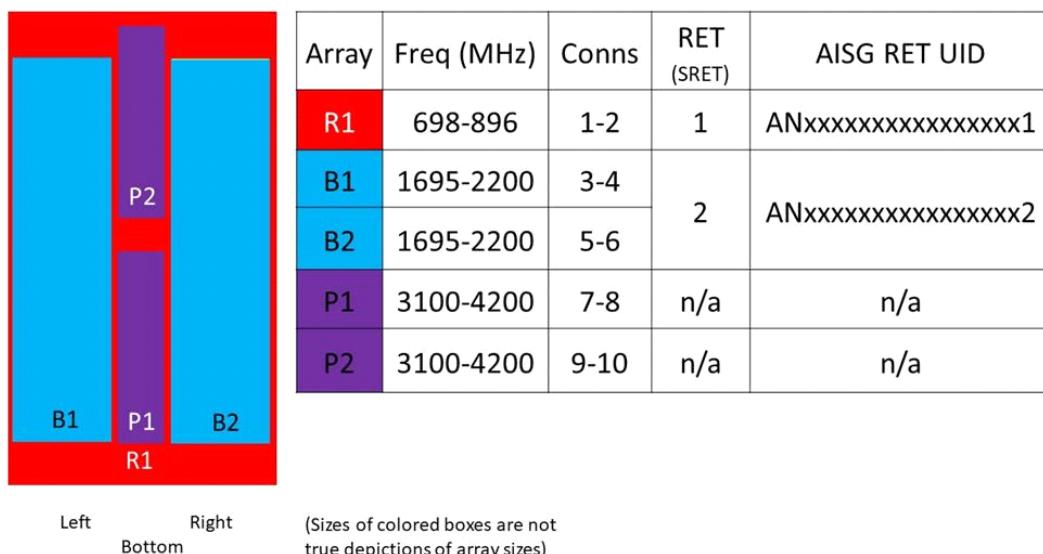
Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	3100–3300	3300–3800	3800–4200
Gain by all Beam Tilts, average, dBi	14.3	14.3	16.6	17.4	17.9	14.2	14.2	14.3
Gain by all Beam Tilts Tolerance, dB	±0.6	±1.1	±0.4	±0.4	±0.5	±0.4	±0.4	±0.4
Gain by Beam Tilt, average, dBi	0 ° 14.4 7 ° 14.4 14 ° 14.0	0 ° 14.4 7 ° 14.4 14 ° 13.9	0 ° 16.6 3 ° 16.6 7 ° 16.6	0 ° 17.4 3 ° 17.5 7 ° 17.4	0 ° 17.9 3 ° 18.0 7 ° 17.9			
Beamwidth, Horizontal Tolerance, degrees	±2.2	±3.4	±7.2	±4.6	±6.5	±6.6	±6.6	±6.6
Beamwidth, Vertical Tolerance, degrees	±0.8	±0.7	±0.3	±0.2	±0.3	±0.4	±0.4	±0.4

NHHSS-65B-R2B

USLS, beampeak to 20° above beampeak, dB	13	14	14	14	14	14	14	14
Front-to-Back Total Power at 180° ± 30°, dB	23	22	24	26	25	25	25	25
CPR at Boresight, dB	22	21	18	20	20	20	20	20
CPR at Sector, dB	10	6	6	6	5	5	5	5

* CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, [download the whitepaper Time to Raise the Bar on BSAs.](#)

Array Layout



General Specifications

Operating Frequency Band	1695 – 2200 MHz 3100 – 4200 MHz 698 – 896 MHz
Antenna Type	Sector
Band	Multiband
Performance Note	Outdoor usage Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN

Mechanical Specifications

RF Connector Quantity, total	10
RF Connector Quantity, low band	2
RF Connector Quantity, high band	8
RF Connector Interface	4.3-10 Female
Color	Light gray
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket

NHHSS-65B-R2B

Radiator Material	Aluminum Low loss circuit board
Radome Material	Fiberglass, UV resistant
Reflector Material	Aluminum
RF Connector Location	Bottom
Wind Loading, frontal	278.0 N @ 150 km/h 63.6 lbf @ 150 km/h
Wind Loading, lateral	230.0 N @ 150 km/h 51.7 lbf @ 150 km/h
Wind Loading, maximum	120.7 lbf @ 150 km/h
Effective Projected Area (EPA), frontal	0.26 m ² 2.80 ft ²
Effective Projected Area (EPA), lateral	0.22 m ² 2.37 ft ²
Wind Speed, maximum	241 km/h 150 mph

Dimensions

Length	1828.0 mm 72.0 in
Width	301.0 mm 11.9 in
Depth	181.0 mm 7.1 in
Net Weight, without mounting kit	21.8 kg 48.1 lb

Remote Electrical Tilt (RET) Information

Input Voltage	10–30 Vdc
Internal Bias Tee	Port 1 Port 3
Internal RET	High band (1) Low band (1)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	10 W
Protocol	3GPP/AISG 2.0 (Single RET)
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	2 female 2 male

Packed Dimensions

Length	1952.0 mm 76.9 in
Width	409.0 mm 16.1 in
Depth	299.0 mm 11.8 in
Shipping Weight	34.3 kg 75.6 lb

Regulatory Compliance/Certifications

Agency	Classification
RoHS 2011/65/EU	Compliant by Exemption
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
China RoHS SJ/T 11364-2014	Above Maximum Concentration Value (MCV)



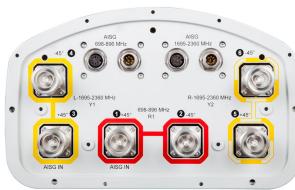
Included Products

BSAMNT-3 — Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

NHH-65B-R2B



6-port sector antenna, 2x 698–896 and 4x 1695–2360 MHz, 65° HPBW, 2x RET. Both high bands share the same electrical tilt.

- Interleaved dipole technology providing for attractive, low wind load mechanical package
- Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable
- Separate RS-485 RET input/output for low and high band
- One RET for low band and one RET for both high bands to ensure same tilt level for 4x Rx or 4x MIMO

General Specifications

Antenna Type	Sector
Band	Multiband
Color	Light gray
Effective Projective Area (EPA), frontal	0.26 m ² 2.799 ft ²
Effective Projective Area (EPA), lateral	0.22 m ² 2.368 ft ²
Grounding Type	RF connector body grounded to reflector and mounting bracket
Performance Note	Outdoor usage Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
RF Connector Interface	7-16 DIN Female
RF Connector Location	Bottom
RF Connector Quantity, high band	4
RF Connector Quantity, low band	2
RF Connector Quantity, total	6

Remote Electrical Tilt (RET) Information, General

RET Interface 8-pin DIN Female | 8-pin DIN Male

RET Interface, quantity 2 female | 2 male

Dimensions

Width 301 mm | 11.85 in

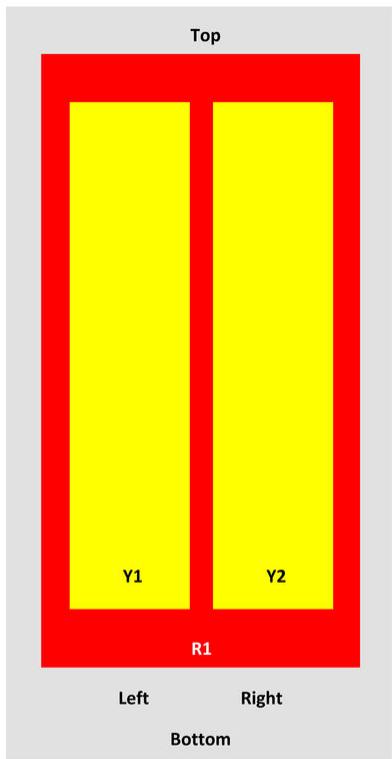
Length 1828 mm | 71.969 in

Depth 180 mm | 7.087 in

Array Layout

NHH-65B-R2B

NHH



Array	Freq (MHz)	Conns	RET (SRRET)	AISG RET UID
R1	698-896	1-2	1	ANxxxxxxxxxxxxxx1
Y1	1695-2360	3-4	2	ANxxxxxxxxxxxxxx2
Y2	1695-2360	5-6		

View from the front of the antenna

(Sizes of colored boxes are not true
depictions of array sizes)

Electrical Specifications

Impedance

50 ohm

Operating Frequency Band

1695 – 2360 MHz | 698 – 896 MHz

Total Input Power, maximum

900 W @ 50 °C

Remote Electrical Tilt (RET) Information, Electrical

Protocol

3GPP/AISG 2.0 (Single RET)

Power Consumption, idle state, maximum

2 W

Power Consumption, normal conditions, maximum

13 W

Input Voltage

10–30 Vdc

Internal Bias Tee

Port 1 | Port 3

Internal RET

High band (1) | Low band (1)

NHH-65B-R2B

Electrical Specifications

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	2300–2360
Gain, dBi	14.9	15	17.7	17.9	18.4	18.7
Beamwidth, Horizontal, degrees	65	60	71	69	64	57
Beamwidth, Vertical, degrees	12.4	11.2	5.7	5.2	4.9	4.6
Beam Tilt, degrees	0–14	0–14	0–7	0–7	0–7	0–7
USLS (First Lobe), dB	13	14	18	18	19	18
Front-to-Back Ratio at 180°, dB	30	29	31	30	29	31
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	30	30	30	30	30	30
VSWR Return loss, dB	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153
Input Power per Port at 50° C, maximum, watts	300	300	300	300	300	300

Electrical Specifications, BASTA

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	2300–2360
Gain by all Beam Tilts, average, dBi	14.5	14.5	17.3	17.7	18.1	18.5
Gain by all Beam Tilts Tolerance, dB	±0.6	±1.1	±0.4	±0.4	±0.5	±0.3
Gain by Beam Tilt, average, dBi	0° 14.4 7° 14.6 14° 14.3	0° 14.7 7° 14.7 14° 14.1	0° 17.2 4° 17.3 7° 17.3	0° 17.6 4° 17.7 7° 17.7	0° 18.0 4° 18.2 7° 18.1	0° 18.3 4° 18.5 7° 18.6
Beamwidth, Horizontal Tolerance, degrees	±2	±2.1	±3	±4.1	±6.5	±2.9
Beamwidth, Vertical Tolerance, degrees	±0.7	±0.7	±0.3	±0.2	±0.3	±0.2
USLS, beampeak to 20° above beampeak, dB	13	14	16	16	17	15
Front-to-Back Total Power at 180° ± 30°, dB	23	22	27	27	25	25
CPR at Boresight, dB	22	21	23	23	22	19
CPR at Sector, dB	10	7	16	13	11	4

Material Specifications

Radiator Material

Low loss circuit board

NHH-65B-R2B

Reflector Material

Aluminum

Mechanical Specifications

Wind Loading at Velocity, frontal	278.0 N @ 150 km/h 63.6 lbf @ 150 km/h
Wind Loading at Velocity, lateral	230.0 N @ 150 km/h 51.7 lbf @ 150 km/h
Wind Loading at Velocity, maximum	120.7 lbf @ 150 km/h 537.0 N @ 150 km/h
Wind Speed, maximum	241 km/h 149.75 mph

Packaging and Weights

Width, packed	409 mm 16.102 in
Depth, packed	299 mm 11.772 in
Length, packed	1952 mm 76.85 in
Net Weight, without mounting kit	19.8 kg 43.651 lb
Weight, gross	32.3 kg 71.209 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant



Included Products

BSAMNT-3 — Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

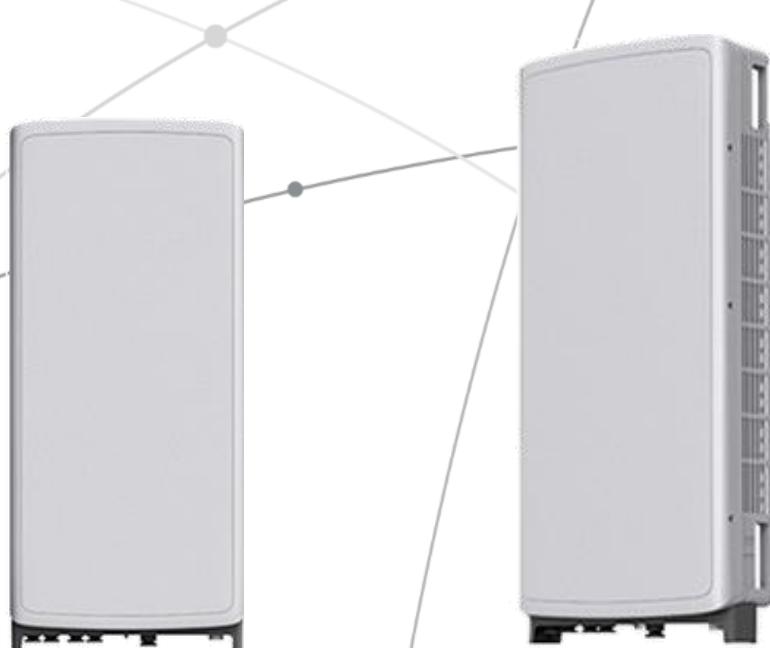
SAMSUNG

SAMSUNG 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

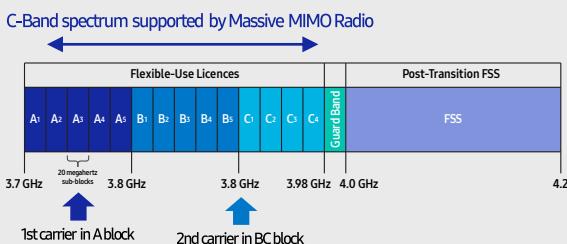


Points of Differentiation

Wide Bandwidth

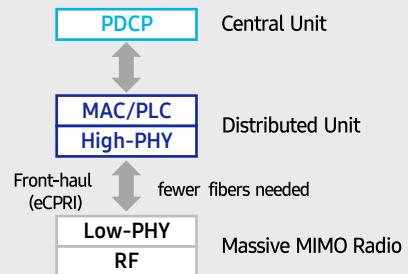
With capability to support up to 2 CC carrier configuration, Samsung C-Band massive MIMO Radio supports 200 MHz bandwidth in the C-Band spectrum.

Samsung C-Band massive MIMO Radio covers the entire C-Band 280 MHz spectrum, so it can meet the operator's needs in current A block and future B/C blocks



Future Proof Product

Samsung C-Band 64T64R Massive MIMO radio supports not only CPRI but also eCPRI as front-haul interface. It enables operators can cut down on OPEX/CAPEX by reducing front-haul bandwidth through low layer split and using ethernet based higher efficient line.



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.

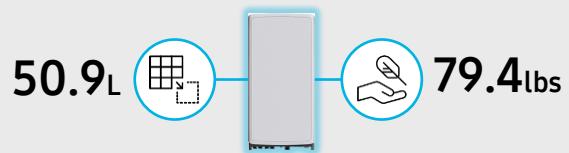
Furthermore, as C-Band massive MIMO Radio supports MU-MIMO(Multi-user MIMO), it enables to increase user throughput by minimizing interference.



Well Matched Design

Samsung 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 50.9L and 79.4lbs. This makes it easy to install the Radio.

It is designed to look solid and compact, with a low profile appearance so that, when installed, harmonizes well with the surrounding environment..



Technical Specifications

Item	Specification
Tech	NR
Band	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 35.06 x 5.51 inch (50.86L)/ 79.4 lbs

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

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Specifications

The table below outlines the main specifications of the RRH.

Table 1. Specifications

Item	RT4401-48A
Air Technology	LTE
Band	Band 48 (3.5 GHz)
Operating Frequency (MHz)	3550 to 3700
RF Chain	4TX/4RX
Input Power	-48 V DC (-38 to -57 V DC, 1 SKU), with clip-on AC-DC converter (Option)
Dimension (W × D × H) (mm)	8.55 in. (217.4) × 4.15 in. (105.5) × 13.91 in. (353.5) * RRH only 11.39 in. (289.4) × 5.45 in. (138.5) × 16.16 in. (410.5) * with Clip-on antenna, AC-DC power unit
Cooling	Natural convection
Unwanted Emission	3GPP 36.104 Category A [B48]: FCC 47 CFR 96.41 e)
Spectrum Analyzer	TX/RX Support
Antenna Type	Integrated (Clip-on) antenna (Option), External antenna (Option)
Operating Humidity	5 to 100 [%] (RH), condensing, not to exceed 30 g/m ³ absolute humidity
Altitude	-60 to 1,800 m
Earthquake	Telcordia Earthquake Risk Zone4 (Telcordia GR-63-CORE)
Vibration in Use	Office Vibration
Transportation Vibration	Transportation Vibration
Noise	Fanless (natural convection cooling)
Wind Resistance	Telcordia GR-487-CORE, Section 3.34
EMC	FCC Title 47, CFR Part 96
Safety	UL 60950-1 2nd ED

Item	RT4401-48A
	UL 62368-1 UL 60950-22
RF	FCC Title 47, CFR Part 96

The table below outlines the AC/DC power unit specifications of the RRH system.



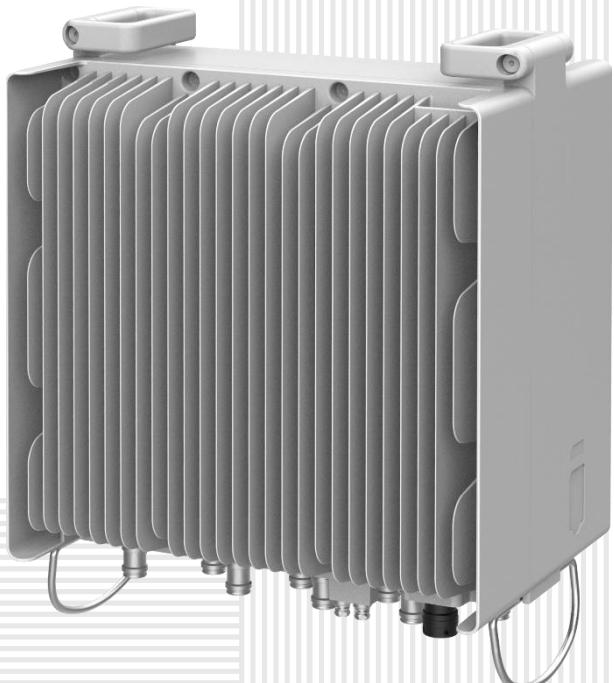
AWS/PCS MACRO RADIO

DUAL-BAND AND HIGH POWER
FOR MACRO COVERAGE

Samsung's future proof dual-band radio is designed to help effectively increase the coverage areas in wireless networks. This AWS/PCS 4T4R dual-band radio has 4Tx/4Rx to 2Tx/2Rx RF chains options and a total output power of 320W, making it ideal for macro sites.

57196

Model Code RF4439d-25A



Homepage
samsungnetworks.com

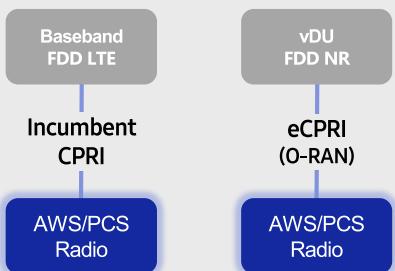


Youtube
www.youtube.com/samsung5g

Points of Differentiation

Continuous Migration

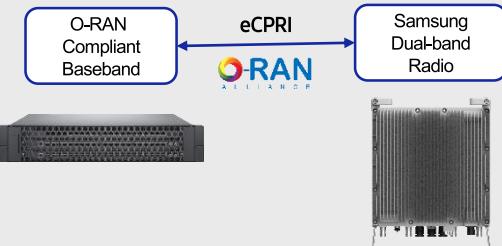
Samsung's AWS/PCS macro radio can support each incumbent CPRI interface as well as advanced eCPRI interfaces. This feature provides installable options for both legacy LTE networks and added NR networks.



O-RAN Compliant

A standardized O-RAN radio can help in implementing cost-effective networks, which are capable of sending more data without compromising additional investments.

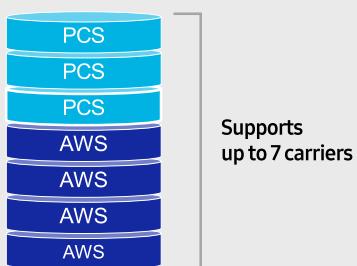
Samsung's state-of-the-art O-RAN technology will help accelerate the effort toward constructing a solid O-RAN ecosystem.



Optimum Spectrum Utilization

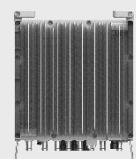
The number of required carriers varies according to site (region). Supporting many carriers is essential for using all frequencies that the operator has available.

The new AWS/PCS dual-band radio can support up to 3 carriers in the PCS (1.9GHz) band and 4 carriers in the AWS (2.1GHz) band, respectively.



Brand New Features in a Compact Size

Samsung's AWS/PCS macro radio offers several features, such as dual connectivity for baseband for both CDU and vDU, O-RAN capability, more carriers and an enlarged PCS spectrum, combined into an incumbent radio volume of 36.8L.



- 2 FH connectivity
- O-RAN capability
- More carriers and spectrum

Same as an incumbent radio volume

Technical Specifications

Item	Specification
Tech	LTE / NR
Brand	B25(PCS), B66(AWS)
Frequency Band	DL: 1930 – 1995MHz, UL: 1850 – 1915MHz DL: 2110 – 2200MHz, UL: 1710 – 1780MHz
RF Power	(B25) 4 × 40W or 2 × 60W (B66) 4 × 60W or 2 × 80W
IBW/OBW	(B25) 65MHz / 30MHz (B66) DL 90MHz, UL 70MHz / 60MHz
Installation	Pole, Wall
Size/Weight	14.96 x 14.96 x 10.04inch (36.8L) / 74.7lb

SAMSUNG

700/850MHz MACRO RADIO

DUAL-BAND AND HIGH POWER
FOR MACRO COVERAGE

Samsung's future proof dual-band radio is designed to help effectively increase the coverage areas in wireless networks. This 700/850MHz 4T4R dual-band radio has 4Tx/4Rx to 2Tx/2Rx RF chains options and a total output power of 320W, making it ideal for macro sites.

57196

Model Code RF4440d-13A



Homepage
samsungnetworks.com

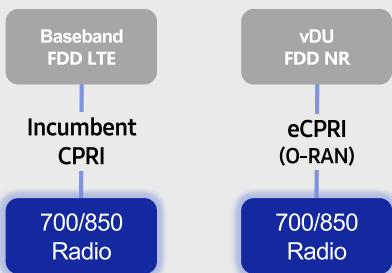


Youtube
www.youtube.com/samsung5g

● Points of Differentiation

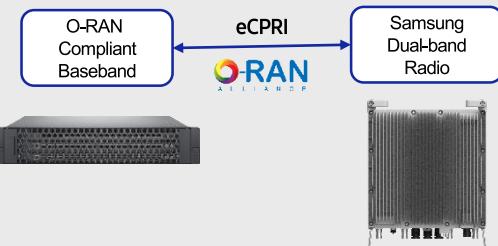
Continuous Migration

Samsung's 700/850MHz macro radio can support each incumbent CPRI interface as well as an advanced eCPRI interface. This feature provides installable options for both legacy LTE networks and added NR networks.



O-RAN Compliant

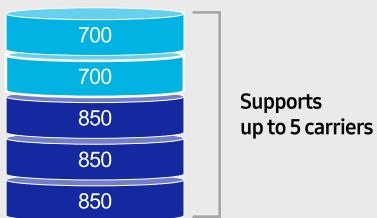
A standardized O-RAN radio can help when implementing cost-effective networks because it is capable of sending more data without compromising additional investments. Samsung's state-of-the-art O-RAN technology will help accelerate the effort toward constructing a solid O-RAN ecosystem.



Optimum Spectrum Utilization

The number of required carriers varies according to site (region). The ability to support many carriers is essential for using all frequencies that the operator has available.

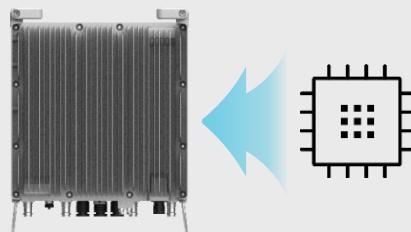
The new 700/850MHz dual-band radio can support up to 2 carriers in the B13 (700MHz) band and 3 carriers in the B5 (850MHz) band, respectively.



Secured Integrity

Access to sensitive data is allowed only to authorized software.

The Samsung radio's CPU can protect root of trust, which is credential information to verify SW integrity, and secure storage provides access control to sensitive data by using dedicated hardware (TPM).



● Technical Specifications

Item	Specification
Tech	LTE / NR
Brand	B13(700MHz), B5(850MHz)
Frequency Band	DL: 746 – 756MHz, UL: 777 – 787MHz DL: 869 – 894MHz, UL: 824 – 849MHz
RF Power	(B13) 4 × 40W or 2 × 60W (B5) 4 × 40W or 2 × 60W
IBW/OBW	(B13) 10MHz / 10MHz (B5) 25MHz / 25MHz
Installation	Pole, Wall
Size/ Weight	14.96 x 14.96 x 9.05inch (33.2L) / 70.33 lb

ATTACHMENT 3

ATTACHMENT 4



Tower Engineering Solutions

Phone (972) 483-0607, Fax (972) 975-9615
1320 Greenway Drive, Suite 600, Irving, Texas 75038

Structural Analysis Report

Existing 125 ft Nudd Corporation Self Supporting Tower

Customer Name: SBA Communications Corp

Customer Site Number: CT01725-A

Customer Site Name: Bloomfield

Carrier Name: Verizon (App#: 171854-3)

Carrier Site ID / Name: 467830 / Cottage Grove CT

Site Location: 1021 Blue Hills Avenue

Bloomfield, Connecticut

Hartford County

Latitude: 41.820119

Longitude: -72.696514



Analysis Result:

Max Structural Usage: 93.8% [Pass]

Max Foundation Usage: 43.0% [Pass]

Additional Usage Caused by New Mount/Mount Modification: +1.2%

Report Prepared By: Mohammed Al Rubaye



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Max Structural Usage: 93.8% [Pass]

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Additional Usage Caused by New Mount/Mount Modification: +1.2%

Report Prepared By: Mohammed Al Rubaye

Introduction

The purpose of this report is to summarize the analysis results on the 125 ft Nudd Corporation Self Supporting Tower to support the proposed antennas and transmission lines in addition to those currently installed. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

Sources of Information

Tower Drawings	Fred A. Nudd Corporation, Project# 97-5566A-1 dated March 11, 1998
Foundation Drawing	Fred A. Nudd Corporation, drawing #97-5566-2 dated 12/18/1997
Geotechnical Report	FDH Engineering Project #1206690EG1 dated 08/10/2012
Modification Drawings	N/A
Mount Analysis	Maser Consulting Project#: 217181042A, dated September 10, 2021
Mount Mod Drawings	Maser Consulting Project#: 21781042A, dated September 10, 2021

Analysis Criteria

The rigorous analysis was performed in accordance with the requirements and stipulations of the TIA-222-G-2. In accordance with this standard, the structure was analyzed using **TESTowers**, a proprietary analysis software. The program considers the structure as an elastic 3-D model with second-order effects and temperature effects incorporated in the analysis. The analysis was performed using multiple wind directions.

Wind Speed Used in the Analysis:	Ultimate Design Wind Speed V_{ult} = 125.0 mph (3-Sec. Gust)/ Nominal Design Wind Speed V_{asd} = 97.0 mph (3-Sec. Gust)
Wind Speed with Ice:	50 mph (3-Sec. Gust) with 1" radial ice concurrent
Operational Wind Speed:	60 mph + 0" Radial ice
Standard/Codes:	TIA-222-G-2 / 2015 IBC / 2018 Connecticut State Building Code
Exposure Category:	B
Structure Class:	II
Topographic Category:	1
Crest Height:	0 ft
Seismic Parameters:	$S_s = 0.18$, $S_1 = 0.064$

This structural analysis is based upon the tower being classified as a Structure Class II; however, if a different classification is required subsequent to the date hereof, the tower classification will be changed to meet such requirement and a new structural analysis will be run.

Existing Antennas, Mounts and Transmission Lines

The table below summarizes the antennas, mounts and transmission lines that were considered in the analysis as existing on the tower.

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
1	135.0	1	Cellwave PD455	Platform w/ Handrails w/ (3) PRK-FMA Reinforcement Kit	(1) 7/8"	Blue Hills Fire
2		1	Cellwave AS MONR 31		(1) 1/2"	
3		3	Cellwave PD455		(4) 7/8"	
4		1	Cellwave AS MONR 31		(1) 1 1/4"	
5		2	Cellwave PD455		(1) 1/2"	
6		1	Cellwave PD165S		(9) 1 5/8"	T-Mobile
7		3	Ericsson AIR6449 B41 - Panel		(2) 1-1/4"	
8		3	RFS APXVAARR24_43-U-NA20 - Panel		Hybrid	
9		3	AIR32 KRD901146-1_B66A (Octa) - Panel		(2) 1 5/8"	
10		3	Ericsson KRY 112 144/2		Hybrid	
11		3	Commscope SDX1926Q-43			
12		3	Ericsson Radio 4449 B71+B85 RRU			
13		3	Ericsson 4415 B25			
-	110.0	3	Commscope - NHH-65B-R2B - Panel	(3) Modified Sector Frames	(18) 1 5/8"	Verizon
-		3	Commscope - NHHSS-65B-R2B - Panel		(1) 1 5/8"	
-		3	Samsung - MT6407-77A - Panel		Fiber	
-		3	Antel - BXA-70063-4CF - Panel		(2) 1/2"	
-		3	Samsung - RF4440d-13A - RRU			
-		3	Samsung - RF4439d-25A - RRU			
-		1	RFS - DB-C1-12C-24AB-0Z - OVP			
22		3	Ericsson Air 6449 N77D - Panel			
23	98.0	2	Cci HPA-65R-BUU-H8 - Panel	(3) Sector Frame w/ (3) Site Pro SFR-K-L (3) Site Pro SFS-H-L		AT&T
24		1	Cci HPA-65R-BUU-H6 - Panel			
25		2	Cci DMP65R-BU8EA-K - Panel			
26		1	Cci DMP65R-BU6EA-K - Panel			
27		6	Powerwave LGP21401 TMA			
28		6	Powerwave LGP21901 Diplexer			
29		12	Powerwave 7020.00 RET			
30		3	Ericsson RRUS 8843 B2 B66A			
31		3	Ericsson RRUS 4449, B5, B12			
32		3	Ericsson RRUS 4415 B30			
33		1	Raycap DC6-48-60-18-8F - OVP			
34		1	Raycap DC6-48-60-0-18-8C-EV - OVP			
35		1	Raycap DC6-48-60-18-8C - OVP			
36		3	Kathrein 782 10253 – BIAS-T			
37	96.0	3	Ericsson Air 6419 N77G - Panel			

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
38	87.0	3	Alcatel Lucent 1900MHz RRH	(3) Sector Frame	(1) 0.7" (3) 1 1/4"	Sprint
39		3	Alcatel Lucent 800MHZ RRH			
40		3	Alcatel Lucent TD-RRH8x20-25			
41		4	RFS ACU-A20-N			
42		3	RFS APXVSPP18-C-A20 - Panel			
43		3	RFS APXVTM14-C-120 - Panel			
44	65.0	1	Nokia CS72188.01 LMU	(1) Standoff Mount	(1) ½"	AT&T

Proposed Carrier's Final Configuration of Antennas, Mounts and Transmission Lines

Information pertaining to the proposed carrier's final configuration of antennas and transmission lines was provided by SBA Communications Corp. The proposed antennas and lines are listed below.

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
13	110.0	3	Commscope - NHH-65B-R2B - Panel	(3) Sector Frames w/ Mods [(3) VZW SMART-SFK3 V-bracing kit, (15) VZW SMART - MSK1 Crossover plate, (12) VZW SMART-MSK7 Crossover & (3) 12.5' pipes]	(1) 1 5/8" Fiber (2) 1/2" (18) 1 5/8"	Verizon
14		3	Commscope - NHSS-65B-R2B - Panel			
15		3	Samsung - MT6407-77A - Panel			
16		3	Antel - BXA-70063-4CF - Panel			
17		3	Samsung - RF4440d-13A RRU			
18		3	Samsung - RF4439d-25A RRU			
19		3	Samsung - RT4401-48A RRU			
20		1	RFS - DB-C1-12C-24AB-0Z - OVP			
21		2	Andrew GPS			

See the attached coax layout for the line placement considered in the analysis.

Analysis Results

The results of the structural analysis, performed for the wind and ice loading and antenna equipment as defined above, are summarized as the following:

Tower Component	Legs	Diagonals	Horizontals
Max. Usage:	93.8%	89.9%	41.1%
Pass/Fail	Pass	Pass	Pass

Foundations

	Compression (Kips)	Uplift (Kips)	Shear (Kips)
Analysis Reactions	296.4	265.7	25.0

The foundation has been investigated using the supplied documents and soils report and was found adequate. Therefore, no modification to the foundation will be required.

Operational Condition (Rigidity):

Operational characteristics of the tower are found to be within the limits prescribed by TIA-222 for the installed antennas. The maximum twist/sway at the elevation of the proposed equipment is 0.3601 degrees under the operational wind speed as specified in the Analysis Criteria.

Conclusions

Based on the analysis results, the existing structure and its foundation were found to be adequate to safely support the existing and proposed equipment and meet the minimum requirements per the TIA-222 Standard under the design basic wind speed as specified in the Analysis Criteria.

Standard Conditions

1. This analysis was performed based on the information supplied to **(TES) Tower Engineering Solutions, LLC**. Verification of the information provided was not included in the Scope of Work for **TES**. The accuracy of the analysis is dependent on the accuracy of the information provided.
2. The structural analysis was performance based upon the evidence available at the time of this report. All information provided by the client is considered to be accurate.
3. The analyses will be performed based on the codes as specified by the client or based on the best knowledge of the engineering staff of **TES**. In the absence of information to the contrary, all work will be performed in accordance with the latest relevant revision of ANSI/TIA-222. If wind speed and/or ice loads are different from the minimum values recommended by the ANSI/TIA-222 standard or other codes, **TES** should be notified in writing and the applicable minimum values provided by the client.
4. The configuration of the existing mounts, antennas, coax and other appurtenances were supplied by the customer for the current structural analysis. **TES** has not visited the tower site to verify the adequacy of the information provided. If there is any discrepancy found in the report regarding the existing conditions, **TES** should be notified immediately to evaluate the effect of the discrepancy on the analysis results.
5. The client will assume responsibility for rework associated with the differences in initially provided information, including tower and foundation information, existing and/or proposed equipment and transmission lines.
6. If a feasibility analysis was performed, final acceptance of changed conditions shall be based upon a rigorous structural analysis.

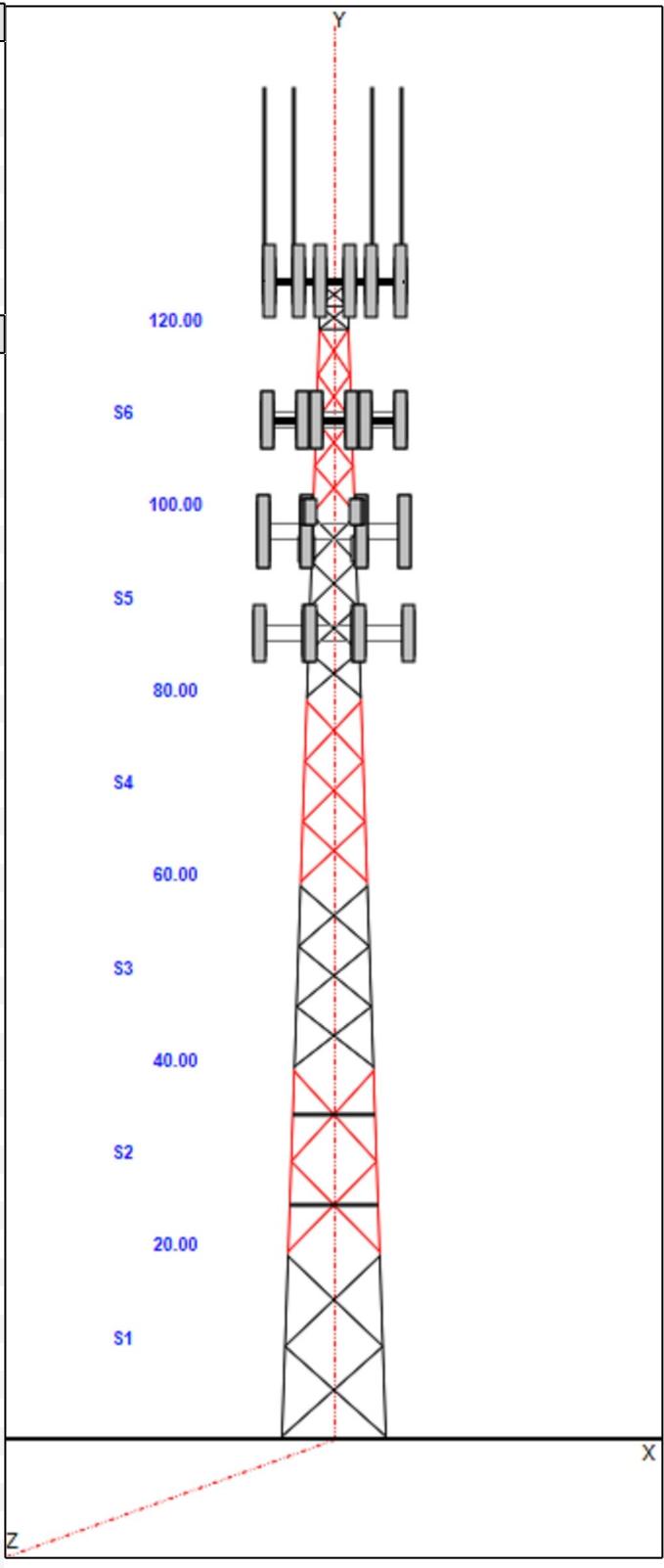
Structure: CT01725-A-SBA

Site Name: Bloomfield	Code: EIA/TIA-222-G	12/6/2021
Type: Self Support	Base Shape: Triangle	Basic WS: 97.00
Height: 125.00 (ft)	Base Width: 12.50	Basic Ice WS: 50.00
Base Elev: 0.00 (ft)	Top Width: 3.50	Operational WS: 60.00



Section Properties			
Sect	Leg Members	Diagonal Members	Horizontal Members
1	PST 8" DIA PIPE	SAE 3.5X3.5X0.25	
2	PST 6" DIA PIPE	SAE 3X3X0.25	
3	PST 6" DIA PIPE	SAE 2.5X2.5X0.1875	
4	PST 5" DIA PIPE	SAE 2.5X2.5X0.1875	
5	PST 3-1/2" DIA PIPE	SAE 2X2X0.1875	
6	PST 2-1/2" DIA PIPE	SAE 1.5X1.5X0.1875	
7	PST 2-1/2" DIA PIPE	SOL 5/8" SOLID	SAE 1.5X1.5X0.1875

Discrete Appurtenances			
Attach Elev (ft)	Force Elev (ft)	Qty	Description
125.00	125.00	3	APXVAARR24_43-U-NA20
125.00	125.00	3	AIR32 KRD901146-1_B66A
125.00	125.00	3	KRY 112 144/1
125.00	125.00	3	Radio 4449 B71+B85 RRU
125.00	125.00	1	Lightning Rod
125.00	125.00	1	Beacon
125.00	125.00	1	PD165S
125.00	135.00	1	Cellwave AS MONR 31
125.00	125.00	3	AIR6449 B41
125.00	125.00	3	SDX1926Q-43
125.00	125.00	3	4415 B25
125.00	135.00	3	PD455
125.00	135.00	3	PD455
125.00	125.00	1	Platform w/ HR
125.00	125.00	1	PRK-FMA
125.00	133.00	1	Cellwave AS MONR 31
125.00	125.00	1	(3) HR w/ V-Brace Kits
110.00	110.00	3	Sector Frame
110.00	110.00	3	NHH-65B-R2B
110.00	110.00	3	NHHSS-65B-R2B
110.00	110.00	3	MT6407-77A
110.00	110.00	3	BXA-70063-4CF
110.00	110.00	3	RF4440d-13A
110.00	110.00	3	RF4439d-25A
110.00	110.00	1	DB-C1-12C-24AB-0Z
110.00	110.00	1	(3) 12.5' - 2.5" Horizontal Pi
110.00	110.00	1	(3) SFS-H-L (V-Braces)
110.00	110.00	3	RT4401-48A
100.00	100.00	3	Air 6449 N77D
98.00	98.00	2	DMP65R-BU8EA-K
98.00	98.00	1	(3) SFR-K-L
98.00	98.00	2	HPA-65R-BUU-H8
98.00	98.00	1	HPA-65R-BUU-H6
98.00	98.00	6	LGP-21401
98.00	98.00	6	LGP-21903 Diplexer
98.00	98.00	12	7020.00 RET
98.00	98.00	3	8843 B2 B66A
98.00	98.00	3	4449 B5/B12
98.00	98.00	3	4415 B30
98.00	98.00	1	DC6-48-60-18-8F
98.00	98.00	1	DC6-48-60-0-18-8C-EV
98.00	98.00	1	DC6-48-60-18-8C



Structure: CT01725-A-SBA

Site Name:	Bloomfield	Code:	EIA/TIA-222-G	12/6/2021
Type:	Self Support	Base Shape:	Triangle	Basic WS: 97.00
Height:	125.00 (ft)	Base Width:	12.50	Basic Ice WS: 50.00
Base Elev:	0.00 (ft)	Top Width:	3.50	Operational WS: 60.00



98.00	98.00	3	782 10253	
98.00	98.00	1	(3) SFS-H-L	
98.00	98.00	3	Sector Frame	
98.00	98.00	1	(3) Stiff Arm Kit	
98.00	98.00	1	DMP65R-BU6EA-K	
96.00	96.00	3	Air 6419 N77G	
87.00	87.00	3	Sector Frame	
87.00	87.00	3	APXVTM14-C-120	
87.00	87.00	3	800MHz Filter	
87.00	87.00	3	1900MHz RRH	
87.00	87.00	3	800MHZ RRH	
87.00	87.00	3	TD-RRH8x20-25	
87.00	87.00	4	ACU-A20-N	
87.00	87.00	3	APXVSPP18-C-A20	
65.00	65.00	1	CS72188.01 LMU	
65.00	65.00	1	Standoff Mount	

Linear Appurtenances

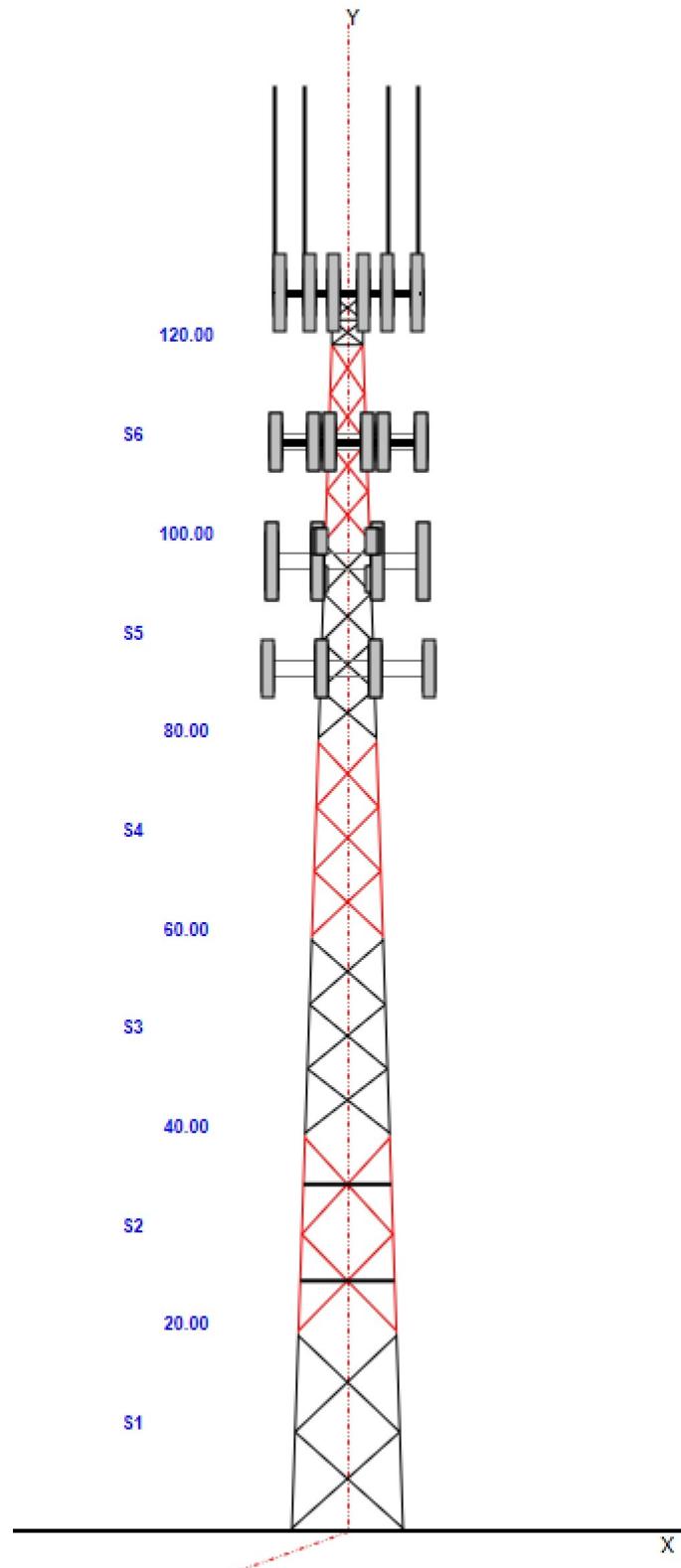
Elev From (ft)	Elev To (ft)	Qty	Description
0.00	125.00	1	1 1/4" Coax
0.00	125.00	9	1 5/8" Coax
0.00	125.00	2	1 5/8" Hybrid
0.00	125.00	2	1-1/4" Hybrid
0.00	125.00	2	1/2" Coax
0.00	125.00	1	7/8" Coax
0.00	125.00	4	7/8" Coax
0.00	125.00	1	Climbing Ladder
0.00	125.00	1	W/G Ladder
0.00	125.00	1	W/G Ladder
0.00	110.00	18	1 5/8" Coax
0.00	110.00	1	1 5/8" Fiber
0.00	110.00	2	1/2" Coax
0.00	110.00	1	W/G Ladder
0.00	98.00	1	1/2" Fiber
0.00	98.00	1	3" Conduit
0.00	98.00	4	3/4" DC
0.00	98.00	12	7/8" Coax
0.00	98.00	1	W/G Ladder
0.00	87.00	4	1 1/4" Coax
0.00	87.00	1	W/G Ladder
0.00	65.00	1	1/2" Coax

Base Reactions

Leg	Overswing
Max Uplift:	-265.74 (kips)
Moment:	3062.70 (ft-kips)
Max Down:	296.36 (kips)
Total Down:	40.33 (kips)
Max Shear:	24.98 (kips)
Total Shear:	38.82 (kips)

Structure: CT01725-A-SBA

Site Name:	Bloomfield	Code:	EIA/TIA-222-G	12/6/2021	 ES <small>Tower Engineering Solutions</small>
Type:	Self Support	Base Shape:	Triangle	Basic WS: 97.00	
Height:	125.00 (ft)	Base Width:	12.50	Basic Ice WS: 50.00	
Base Elev:	0.00 (ft)	Top Width:	3.50	Operational WS: 60.00	

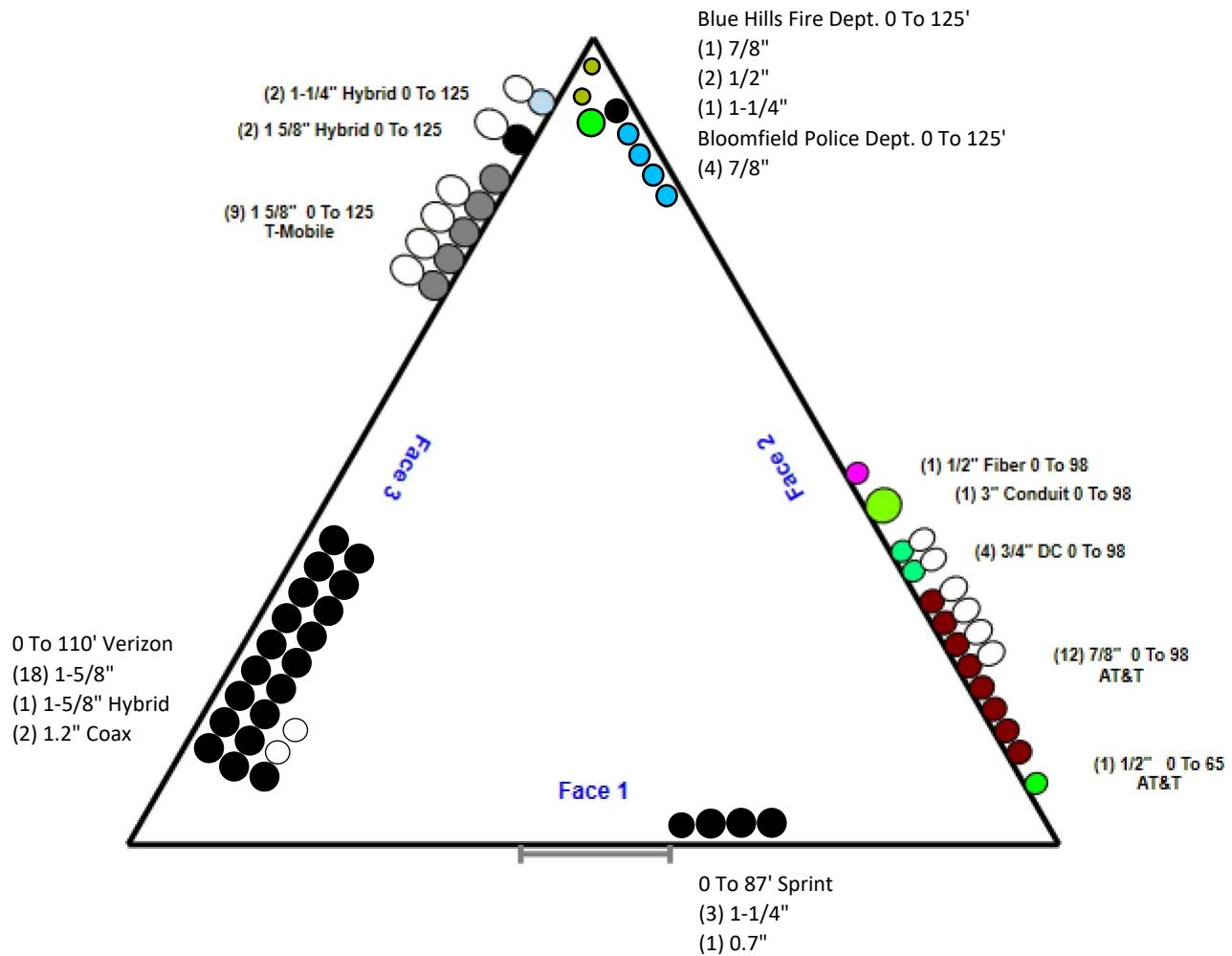


Structure: CT01725-A-SBA - Coax Line Placement

Type: Self Support
Site Name: Bloomfield
Height: 125.00 (ft)

12/6/2021

Page: 4



Loading Summary

Structure: CT01725-A-SBA
Site Name: Bloomfield
Height: 125.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Code: EIA/TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

12/6/2021

 Tower Engineering Solutions
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Discrete Appurtenances Properties

Attach Elev (ft)	Description	Qty	No Ice		Ice		Len (in)	Width (in)	Depth (in)	Ka	Orientation Factor	Vert Ecc (ft)
			Weight (lb)	CaAa (sf)	Weight (lb)	CaAa (sf)						
125.00	APXVAARR24_43-U-NA20	3	128.00	20.240	695.54	22.751	95.900	24.000	7.800	0.75	0.70	0.000
125.00	AIR32 KRD901146-1_B66A	3	132.20	6.510	385.26	8.005	56.600	12.900	8.700	0.75	0.87	0.000
125.00	KRY 112 144/1	3	11.00	0.410	25.09	1.031	6.900	6.100	2.700	0.75	0.67	0.000
125.00	Radio 4449 B71+B85 RRU	3	70.00	1.650	166.38	2.376	15.000	13.200	9.300	0.75	0.67	0.000
125.00	Lightning Rod	1	5.00	0.500	32.36	2.780	72.000	1.000	1.000	1.00	1.00	0.000
125.00	Beacon	1	36.00	2.720	210.03	3.961	28.000	17.500	17.500	1.00	1.00	0.000
125.00	PD165S	1	5.00	1.810	120.44	22.822	0.700	39.000	50.000	1.00	1.00	0.000
125.00	Cellwave AS MONR 31	1	22.00	0.940	529.93	11.852	0.700	39.000	50.000	1.00	1.00	10.00
125.00	AIR6449 B41	3	103.00	5.650	282.16	6.892	33.100	20.500	8.300	0.75	0.71	0.000
125.00	SDX1926Q-43	3	6.10	0.300	43.70	0.692	6.900	5.500	8.200	0.75	0.67	0.000
125.00	4415 B25	3	46.00	1.640	99.71	2.313	15.000	13.200	5.400	0.75	0.67	0.000
125.00	PD455	3	24.00	6.020	223.34	15.970	258.000	2.800	2.800	1.00	1.00	10.00
125.00	PD455	3	24.00	6.020	223.34	15.970	258.000	2.800	2.800	1.00	1.00	10.00
125.00	Platform w/ HR	1	1800.0	56.000	4262.73	94.309	0.000	0.000	0.000	1.00	1.00	0.000
125.00	PRK-FMA	1	337.91	5.330	954.34	12.622	0.000	0.000	0.000	1.00	1.00	0.000
125.00	Cellwave AS MONR 31	1	22.00	0.940	529.93	11.852	0.700	39.000	50.000	1.00	1.00	8.000
125.00	(3) HR w/ V-Brace Kits	1	650.00	15.500	1717.18	36.707	0.000	0.000	0.000	0.75	1.00	0.000
110.00	Sector Frame	3	500.00	18.450	1402.36	35.502	0.000	0.000	0.000	0.75	0.75	0.000
110.00	NHH-65B-R2B	3	43.70	8.080	319.08	9.784	72.000	11.900	7.100	0.80	0.83	0.000
110.00	NHHSS-65B-R2B	3	43.70	8.080	319.08	9.784	72.000	11.900	7.100	0.80	0.83	0.000
110.00	MT6407-77A	3	79.40	4.690	243.58	5.931	35.100	16.100	5.500	0.80	0.70	0.000
110.00	BXA-70063-4CF	3	9.90	4.720	141.55	7.109	47.400	11.200	5.200	0.80	0.73	0.000
110.00	RF4440d-13A	3	84.40	1.880	150.66	2.592	15.000	15.000	10.000	0.80	0.67	0.000
110.00	RF4439d-25A	3	70.30	1.880	133.16	2.592	15.000	15.000	8.100	0.80	0.67	0.000
110.00	DB-C1-12C-24AB-0Z	1	32.00	4.060	179.26	5.122	29.500	16.500	12.500	1.00	1.00	0.000
110.00	(3) 12.5' - 2.5" Horizontal Pi	1	217.50	7.188	492.27	18.862	0.000	0.000	0.000	0.75	1.00	0.000
110.00	(3) SFS-H-L (V-Braces)	1	230.00	6.700	645.08	15.769	0.000	0.000	0.000	0.75	1.00	0.000
110.00	RT4401-48A	3	18.60	0.990	0.00	0.000	13.900	8.600	4.200	0.80	1.00	0.000
100.00	Air 6449 N77D	3	88.00	4.130	271.02	5.236	30.800	16.100	10.800	0.80	0.85	0.000
98.00	DMP65R-BU8EA-K	2	82.50	17.870	584.94	20.146	96.000	20.700	7.700	0.80	0.72	0.000
98.00	(3) SFR-K-L	1	394.00	16.600	1311.16	32.016	0.000	0.000	0.000	0.75	1.00	0.000
98.00	HPA-65R-BUU-H8	2	68.00	12.980	453.09	15.060	92.400	14.800	7.400	0.80	0.79	0.000
98.00	HPA-65R-BUU-H6	1	51.00	9.660	379.18	11.418	72.000	14.800	9.000	0.80	0.85	0.000
98.00	LGP-21401	6	14.10	1.290	45.77	2.349	14.400	9.200	2.600	0.80	0.67	0.000
98.00	LGP-21903 Diplexer	6	5.50	0.230	15.24	0.696	4.000	6.000	3.000	0.80	0.67	0.000
98.00	7020.00 RET	12	2.20	0.400	15.16	1.013	4.900	8.300	2.400	0.80	0.67	0.000
98.00	8843 B2 B66A	3	72.00	1.640	131.35	2.269	14.900	13.200	10.900	0.80	0.67	0.000
98.00	4449 B5/B12	3	71.00	1.970	138.63	2.663	17.900	13.200	9.400	0.80	0.67	0.000
98.00	4415 B30	3	44.10	1.860	104.20	2.586	13.500	16.500	4.800	0.80	0.67	0.000
98.00	DC6-48-60-18-8F	1	31.80	2.200	110.13	3.527	24.000	11.000	18.500	0.80	0.67	0.000
98.00	DC6-48-60-0-18-8C-EV	1	20.00	1.900	101.83	2.690	23.500	9.700	9.700	0.80	0.67	0.000
98.00	DC6-48-60-18-8C	1	20.00	1.900	101.83	2.690	23.500	9.700	9.700	0.80	0.67	0.000
98.00	782 10253	3	2.90	0.120	8.12	0.463	2.900	4.200	1.800	0.80	0.67	0.000
98.00	(3) SFS-H-L	1	230.00	6.700	636.84	15.588	0.000	0.000	0.000	0.75	1.00	0.000
98.00	Sector Frame	3	500.00	17.500	1384.43	35.144	0.000	0.000	0.000	0.75	0.75	0.000
98.00	(3) Stiff Arm Kit	1	180.00	6.100	466.55	14.193	0.000	0.000	0.000	0.75	1.00	0.000
98.00	DMP65R-BU6EA-K	1	79.40	12.710	452.57	14.565	71.200	20.700	7.700	0.80	0.72	0.000
96.00	Air 6419 N77G	3	88.00	4.130	271.02	5.236	30.800	16.100	10.800	0.80	0.85	0.000

Loading Summary

Structure: CT01725-A-SBA	Code:	EIA/TIA-222-G	12/6/2021	
Site Name: Bloomfield	Exposure:	B		
Height: 125.00 (ft)	Crest Height:	0.00		
Base Elev: 0.000 (ft)	Site Class:	D - Stiff Soil		
Gh: 0.85	Topography:	1	Struct Class: II	Page: 6
87.00 Sector Frame	3	450.00	18.000	895.75 22.915 0.000 0.000 0.000 0.75 0.75 0.000
87.00 APXVTM14-C-120	3	56.00	6.340	270.33 7.775 56.300 12.600 6.300 0.80 0.79 0.000
87.00 800MHz Filter	3	10.00	0.490	30.33 1.201 4.600 11.000 4.500 0.80 0.67 0.000
87.00 1900MHz RRH	3	60.00	2.770	165.71 4.377 25.000 11.100 11.400 0.80 0.67 0.000
87.00 800MHZ RRH	3	59.50	2.640	158.33 4.106 18.000 15.100 11.300 0.80 0.67 0.000
87.00 TD-RRH8x20-25	3	70.00	4.050	217.87 5.101 26.100 18.600 6.700 0.80 0.67 0.000
87.00 ACU-A20-N	4	1.00	0.140	6.44 0.516 4.000 2.000 3.500 0.80 0.67 0.000
87.00 APXVSPP18-C-A20	3	57.00	8.020	275.99 11.559 72.000 11.800 7.000 0.80 0.83 0.000
65.00 CS72188.01 LMU	1	0.31	0.170	1.14 0.403 4.500 4.500 4.500 1.00 1.00 0.000
65.00 Standoff Mount	1	40.00	1.500	74.50 2.794 0.000 0.000 0.000 1.00 1.00 0.000
Totals:	146	13,921.32	43,490.33	Number of Appurtenances : 58

Loading Summary

Structure: CT01725-A-SBA
Site Name: Bloomfield
Height: 125.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Topography: 1

Code: EIA/TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

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Linear Appurtenances Properties

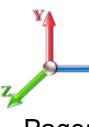
Elev. From (ft)	Elev. To (ft)	Description	Qty	Width (in)	Weight (lb/ft)	Pct In Block	Spread On Faces	Bundling Arrangement	Cluster Dia (in)	Out of Zone	Spacing (in)	Orientation Factor	Ka Override
0.00	125.00	1 1/4" Coax	1	1.55	0.66	100.00	2	Individual NR	N	1.00	1.00		
0.00	125.00	1 5/8" Coax	9	1.98	1.04	50.00	3	Block	N	0.50	1.00		
0.00	125.00	1 5/8" Hybrid	2	2.00	1.10	50.00	3	Block	N	0.50	1.00		
0.00	125.00	1-1/4" Hybrid	2	1.25	0.95	50.00	3	Block	N	0.50	1.00		
0.00	125.00	1/2" Coax	2	0.65	0.16	100.00	2	Individual NR	N	1.00	1.00		
0.00	125.00	7/8" Coax	1	1.11	0.52	100.00	2	Individual NR	N	1.00	1.00		
0.00	125.00	7/8" Coax	4	1.11	0.52	100.00	2	Individual IR	N	1.00	1.00		
0.00	125.00	Climbing Ladder	1	3.00	6.90	100.00	1	Individual NR	N	1.00	1.00		
0.00	125.00	W/G Ladder	1	2.00	6.00	100.00	2	Individual NR	N	1.00	1.00		
0.00	125.00	W/G Ladder	1	3.00	6.00	100.00	3	Individual NR	N	1.00	1.00		
0.00	110.00	1 5/8" Coax	18	1.98	1.04	50.00	3	Block	N	0.50	1.00		
0.00	110.00	1 5/8" Fiber	1	2.00	1.10	100.00	3	Individual NR	N	1.00	1.00		
0.00	110.00	1/2" Coax	2	0.65	0.16	100.00	3	Individual NR	N	1.00	1.00		
0.00	110.00	W/G Ladder	1	2.00	6.00	100.00	3	Individual NR	N	1.00	1.00		
0.00	98.00	1/2" Fiber	1	0.65	0.16	100.00	2	Individual IR	Y	1.00	1.00	0	
0.00	98.00	3" Conduit	1	3.00	1.61	100.00	2	Individual NR	N	1.00	1.00		
0.00	98.00	3/4" DC	4	0.75	0.40	50.00	2	Block	N	0.50	1.00		
0.00	98.00	7/8" Coax	12	1.11	0.52	66.60	2	Block	N	0.50	1.00		
0.00	98.00	W/G Ladder	1	2.00	6.00	100.00	2	Individual NR	N	1.00	1.00		
0.00	87.00	1 1/4" Coax	4	1.55	0.66	100.00	1	Individual IR	N	1.00	1.00		
0.00	87.00	W/G Ladder	1	2.00	6.00	100.00	1	Individual NR	N	1.00	1.00		
0.00	65.00	1/2" Coax	1	0.65	0.16	100.00	2	Individual NR	N	1.00	1.00		

Section Forces

Structure: CT01725-A-SBA
Site Name: Bloomfield
Height: 125.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Topography: 1

Code: EIA/TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

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Load Case: 1.2D + 1.6W Normal Wind

1.2D + 1.6W 97 mph Wind at Normal To Face

Wind Load Factor: 1.60

Wind Importance Factor: 1.00

Dead Load Factor: 1.20

Ice Dead Load Factor: 0.00

Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total Flat	Total Round	Ice Round		Ice		Eff Area (sqft)	Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Area (sqft)	Area (sqft)	Sol Ratio	Cf	Df	Dr							
1	10.0	14.33	16.978	28.78	0.00	0.18	2.65	1.00	1.00	0.00	30.23	147.48	0.00	5,409.0	0.0 1562.59 2526.04
2	30.0	14.34	18.717	22.10	0.00	0.19	2.63	1.00	1.00	0.00	30.19	147.48	0.00	4,802.7	0.0 1551.12 2528.18
3	50.0	16.60	12.939	22.10	0.00	0.19	2.64	1.00	1.00	0.00	24.10	147.48	0.00	4,166.1	0.0 1433.70 2925.45
4	70.0	18.27	11.598	18.56	0.00	0.20	2.61	1.00	1.00	0.00	21.45	146.67	0.00	3,772.7	0.0 1392.04 3206.11
5	90.0	19.63	9.614	13.35	0.00	0.19	2.63	1.00	1.00	0.00	17.26	134.02	0.00	3,086.5	0.0 1213.66 3166.59
6	110.0	20.79	6.277	9.59	0.00	0.18	2.68	1.00	1.00	0.00	11.75	75.18	0.00	1,931.5	0.0 889.15 1955.32
7	122.5	21.44	1.223	3.24	0.00	0.24	2.47	1.00	1.00	0.00	3.14	13.15	0.00	452.6	0.0 226.28 355.78
												23,621.1	0.0		24,932.03

Load Case: 1.2D + 1.6W 60° Wind

1.2D + 1.6W 97 mph Wind at 60° From Face

Wind Load Factor: 1.60

Wind Importance Factor: 1.00

Dead Load Factor: 1.20

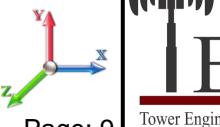
Ice Dead Load Factor: 0.00 **Ice Importance Factor:** 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total Flat	Total Round	Ice Round		Ice		Eff Area (sqft)	Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Area (sqft)	Area (sqft)	Sol Ratio	Cf	Df	Dr							
1	10.0	14.33	16.978	28.78	0.00	0.18	2.65	0.80	1.00	0.00	26.83	147.48	0.00	5,409.0	0.0 1387.06 2526.04
2	30.0	14.34	18.717	22.10	0.00	0.19	2.63	0.80	1.00	0.00	26.45	147.48	0.00	4,802.7	0.0 1358.82 2528.18
3	50.0	16.60	12.939	22.10	0.00	0.19	2.64	0.80	1.00	0.00	21.51	147.48	0.00	4,166.1	0.0 1279.76 2925.45
4	70.0	18.27	11.598	18.56	0.00	0.20	2.61	0.80	1.00	0.00	19.13	146.67	0.00	3,772.7	0.0 1241.53 3206.11
5	90.0	19.63	9.614	13.35	0.00	0.19	2.63	0.80	1.00	0.00	15.33	134.02	0.00	3,086.5	0.0 1078.43 3166.59
6	110.0	20.79	6.277	9.59	0.00	0.18	2.68	0.80	1.00	0.00	10.50	75.18	0.00	1,931.5	0.0 794.16 1955.32
7	122.5	21.44	1.223	3.24	0.00	0.24	2.47	0.80	1.00	0.00	2.90	13.15	0.00	452.6	0.0 208.65 355.78
												23,621.1	0.0		24,011.90

Section Forces

Structure: CT01725-A-SBA
Site Name: Bloomfield
Height: 125.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Code: EIA/TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

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Topography: 1

Load Case: 1.2D + 1.6W 90° Wind

1.2D + 1.6W 97 mph Wind at 90° From Face

Wind Load Factor: 1.60
Dead Load Factor: 1.20
Ice Dead Load Factor: 0.00

Wind Importance Factor: 1.00
Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total Flat	Total Round	Ice Round		Ice		Ice		Total	Struct	Linear	Total	
			Area (sqft)	Area (sqft)	Sol Ratio	Cf	Df	Dr	Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Area (sqft)	Weight (lb)	Weight Ice (lb)	Force (lb)
1	10.0	14.33	16.978	28.78	0.00	0.18	2.65	0.85	1.00	0.00	27.68	147.48	0.00	5,409.0	0.0 1430.95 2526.04
2	30.0	14.34	18.717	22.10	0.00	0.19	2.63	0.85	1.00	0.00	27.39	147.48	0.00	4,802.7	0.0 1406.90 2528.18
3	50.0	16.60	12.939	22.10	0.00	0.19	2.64	0.85	1.00	0.00	22.16	147.48	0.00	4,166.1	0.0 1318.24 2925.45
4	70.0	18.27	11.598	18.56	0.00	0.20	2.61	0.85	1.00	0.00	19.71	146.67	0.00	3,772.7	0.0 1279.16 3206.11
5	90.0	19.63	9.614	13.35	0.00	0.19	2.63	0.85	1.00	0.00	15.81	134.02	0.00	3,086.5	0.0 1112.24 3166.59
6	110.0	20.79	6.277	9.59	0.00	0.18	2.68	0.85	1.00	0.00	10.81	75.18	0.00	1,931.5	0.0 817.91 1955.32
7	122.5	21.44	1.223	3.24	0.00	0.24	2.47	0.85	1.00	0.00	2.96	13.15	0.00	452.6	0.0 213.06 355.78
												23,621.1	0.0		24,241.93

Load Case: 0.9D + 1.6W Normal Wind

0.9D + 1.6W 97 mph Wind at Normal To Face

Wind Load Factor: 1.60
Dead Load Factor: 0.90
Ice Dead Load Factor: 0.00

Wind Importance Factor: 1.00

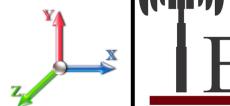
Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total Flat	Total Round	Ice Round		Ice		Ice		Total	Struct	Linear	Total	
			Area (sqft)	Area (sqft)	Sol Ratio	Cf	Df	Dr	Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Area (sqft)	Weight (lb)	Weight Ice (lb)	Force (lb)
1	10.0	14.33	16.978	28.78	0.00	0.18	2.65	1.00	1.00	0.00	30.23	147.48	0.00	4,056.7	0.0 1562.59 2526.04
2	30.0	14.34	18.717	22.10	0.00	0.19	2.63	1.00	1.00	0.00	30.19	147.48	0.00	3,602.0	0.0 1551.12 2528.18
3	50.0	16.60	12.939	22.10	0.00	0.19	2.64	1.00	1.00	0.00	24.10	147.48	0.00	3,124.6	0.0 1433.70 2925.45
4	70.0	18.27	11.598	18.56	0.00	0.20	2.61	1.00	1.00	0.00	21.45	146.67	0.00	2,829.5	0.0 1392.04 3206.11
5	90.0	19.63	9.614	13.35	0.00	0.19	2.63	1.00	1.00	0.00	17.26	134.02	0.00	2,314.9	0.0 1213.66 3166.59
6	110.0	20.79	6.277	9.59	0.00	0.18	2.68	1.00	1.00	0.00	11.75	75.18	0.00	1,448.7	0.0 889.15 1955.32
7	122.5	21.44	1.223	3.24	0.00	0.24	2.47	1.00	1.00	0.00	3.14	13.15	0.00	339.5	0.0 226.28 355.78
												17,715.9	0.0		24,932.03

Section Forces

Structure: CT01725-A-SBA
Site Name: Bloomfield
Height: 125.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Code: EIA/TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

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Tower Engineering Solutions

Load Case: 0.9D + 1.6W 60° Wind

0.9D + 1.6W 97 mph Wind at 60° From Face

Wind Load Factor: 1.60
Dead Load Factor: 0.90
Ice Dead Load Factor: 0.00

Wind Importance Factor: 1.00
Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round		Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
					Sol	Cf							Area (sqft)	Area (sqft)	Weight (lb)	Weight Ice (lb)	Force (lb)	Force (lb)	Force (lb)
1	10.0	14.33	16.978	28.78	0.00	0.18	2.65	0.80	1.00	0.00	26.83	147.48	0.00	4,056.7	0.0	1387.06	2526.04	3,913.11	
2	30.0	14.34	18.717	22.10	0.00	0.19	2.63	0.80	1.00	0.00	26.45	147.48	0.00	3,602.0	0.0	1358.82	2528.18	3,887.00	
3	50.0	16.60	12.939	22.10	0.00	0.19	2.64	0.80	1.00	0.00	21.51	147.48	0.00	3,124.6	0.0	1279.76	2925.45	4,205.21	
4	70.0	18.27	11.598	18.56	0.00	0.20	2.61	0.80	1.00	0.00	19.13	146.67	0.00	2,829.5	0.0	1241.53	3206.11	4,447.64	
5	90.0	19.63	9.614	13.35	0.00	0.19	2.63	0.80	1.00	0.00	15.33	134.02	0.00	2,314.9	0.0	1078.43	3166.59	4,245.01	
6	110.0	20.79	6.277	9.59	0.00	0.18	2.68	0.80	1.00	0.00	10.50	75.18	0.00	1,448.7	0.0	794.16	1955.32	2,749.49	
7	122.5	21.44	1.223	3.24	0.00	0.24	2.47	0.80	1.00	0.00	2.90	13.15	0.00	339.5	0.0	208.65	355.78	564.44	
													17,715.9	0.0				24,011.90	

Load Case: 0.9D + 1.6W 90° Wind

0.9D + 1.6W 97 mph Wind at 90° From Face

Wind Load Factor: 1.60
Dead Load Factor: 0.90
Ice Dead Load Factor: 0.00

Wind Importance Factor: 1.00
Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round		Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
					Sol	Cf							Area (sqft)	Area (sqft)	Weight (lb)	Weight Ice (lb)	Force (lb)	Force (lb)	Force (lb)
1	10.0	14.33	16.978	28.78	0.00	0.18	2.65	0.85	1.00	0.00	27.68	147.48	0.00	4,056.7	0.0	1430.95	2526.04	3,956.99	
2	30.0	14.34	18.717	22.10	0.00	0.19	2.63	0.85	1.00	0.00	27.39	147.48	0.00	3,602.0	0.0	1406.90	2528.18	3,935.08	
3	50.0	16.60	12.939	22.10	0.00	0.19	2.64	0.85	1.00	0.00	22.16	147.48	0.00	3,124.6	0.0	1318.24	2925.45	4,243.70	
4	70.0	18.27	11.598	18.56	0.00	0.20	2.61	0.85	1.00	0.00	19.71	146.67	0.00	2,829.5	0.0	1279.16	3206.11	4,485.27	
5	90.0	19.63	9.614	13.35	0.00	0.19	2.63	0.85	1.00	0.00	15.81	134.02	0.00	2,314.9	0.0	1112.24	3166.59	4,278.82	
6	110.0	20.79	6.277	9.59	0.00	0.18	2.68	0.85	1.00	0.00	10.81	75.18	0.00	1,448.7	0.0	817.91	1955.32	2,773.23	
7	122.5	21.44	1.223	3.24	0.00	0.24	2.47	0.85	1.00	0.00	2.96	13.15	0.00	339.5	0.0	213.06	355.78	568.84	
													17,715.9	0.0				24,241.93	

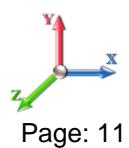
Section Forces

Structure: CT01725-A-SBA
Site Name: Bloomfield
Height: 125.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Topography: 1

Code: EIA/TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

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ES

Tower Engineering Solutions

Load Case: 1.2D + 1.0Di + 1.0Wi Normal Wind

1.2D + 1.0Di + 1.0Wi 50 mph Wind at Normal From Face

Wind Load Factor: 1.00

Wind Importance Factor: 1.00

Dead Load Factor: 1.20

Ice Dead Load Factor: 1.00

Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round		Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice Linear		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Area (sqft)	Area (sqft)	Sol	Cf							Area (sqft)	Area (sqft)					
1	10.0	3.81	16.978	58.69	29.91	0.30	2.31	1.00	1.00	1.77	52.06	238.75	59.16	14,842.	9434.0	388.55	918.90	1,307.45	
2	30.0	3.81	18.717	54.01	31.91	0.33	2.23	1.00	1.00	1.98	51.54	248.36	66.03	15,661.	10858.8	371.90	962.18	1,334.08	
3	50.0	4.41	12.939	58.75	36.64	0.37	2.12	1.00	1.00	2.08	49.62	253.21	69.50	14,994.	10828.3	394.94	1126.78	1,521.72	
4	70.0	4.86	11.598	53.95	35.39	0.41	2.05	1.00	1.00	2.16	46.07	255.73	66.48	14,564.	10791.5	390.15	1220.40	1,399.27	
5	90.0	5.22	9.614	50.34	36.99	0.46	1.95	1.00	1.00	2.21	43.17	230.75	64.86	13,029.	9943.1	373.29	1083.38	1,456.67	
6	110.0	5.52	6.277	44.25	34.66	0.52	1.88	1.00	1.00	2.26	37.05	140.34	41.36	8,582.6	6651.1	326.47	627.61	954.08	
7	122.5	5.70	1.223	17.57	14.33	0.91	1.94	1.00	1.00	2.28	18.42	27.70	7.60	2,222.0	1769.4	173.23	23.19	196.43	
													83,897.3	60276.1					8,169.68

Load Case: 1.2D + 1.0Di + 1.0Wi 60° Wind

1.2D + 1.0Di + 1.0Wi 50 mph Wind at 60° From Face

Wind Load Factor: 1.00

Wind Importance Factor: 1.00

Dead Load Factor: 1.20

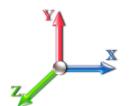
Ice Dead Load Factor: 1.00 Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round		Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice Linear		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Area (sqft)	Area (sqft)	Sol	Cf							Area (sqft)	Area (sqft)					
1	10.0	3.81	16.978	58.69	29.91	0.30	2.31	0.80	1.00	1.77	48.67	238.75	59.16	14,842.	9434.0	363.21	918.90	1,282.10	
2	30.0	3.81	18.717	54.01	31.91	0.33	2.23	0.80	1.00	1.98	47.79	248.36	66.03	15,661.	10858.8	344.89	962.18	1,307.07	
3	50.0	4.41	12.939	58.75	36.64	0.37	2.12	0.80	1.00	2.08	47.03	253.21	69.50	14,994.	10828.3	374.34	1126.78	1,501.12	
4	70.0	4.86	11.598	53.95	35.39	0.41	2.05	0.80	1.00	2.16	43.75	255.73	66.48	14,564.	10791.5	370.51	1220.40	1,590.91	
5	90.0	5.22	9.614	50.34	36.99	0.46	1.95	0.80	1.00	2.21	41.24	230.75	64.86	13,029.	9943.1	356.66	1083.38	1,440.04	
6	110.0	5.52	6.277	44.25	34.66	0.52	1.88	0.80	1.00	2.26	35.80	140.34	41.36	8,582.6	6651.1	315.41	627.61	943.02	
7	122.5	5.70	1.223	17.57	14.33	0.91	1.94	0.80	1.00	2.28	18.18	27.70	7.60	2,222.0	1769.4	170.93	23.19	194.13	
													83,897.3	60276.1					8,258.38

Section Forces

Structure: CT01725-A-SBA
Site Name: Bloomfield
Height: 125.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Code: EIA/TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

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Topography: 1

Load Case: 1.2D + 1.0Di + 1.0Wi 90° Wind

1.2D + 1.0Di + 1.0Wi 50 mph Wind at 90° From Face

Wind Load Factor: 1.00

Wind Importance Factor: 1.00

Dead Load Factor: 1.20

Ice Dead Load Factor: 1.00

Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total Flat	Total Round	Ice Round		Ice		Ice		Total	Struct	Linear	Total				
			Area (sqft)	Area (sqft)	Sol Ratio	Cf	Df	Dr	Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Area (sqft)	Weight (lb)	Weight Ice (lb)	Force (lb)			
1	10.0	3.81	16.978	58.69	29.91	0.30	2.31	0.85	1.00	1.77	49.52	238.75	59.16	14,842.	9434.0	369.54	918.90	1,288.44
2	30.0	3.81	18.717	54.01	31.91	0.33	2.23	0.85	1.00	1.98	48.73	248.36	66.03	15,661.	10858.8	351.64	962.18	1,313.82
3	50.0	4.41	12.939	58.75	36.64	0.37	2.12	0.85	1.00	2.08	47.68	253.21	69.50	14,994.	10828.3	379.49	1126.78	1,506.27
4	70.0	4.86	11.598	53.95	35.39	0.41	2.05	0.85	1.00	2.16	44.33	255.73	66.48	14,564.	10791.5	375.42	1220.40	1,595.82
5	90.0	5.22	9.614	50.34	36.99	0.46	1.95	0.85	1.00	2.21	41.73	230.75	64.86	13,029.	9943.1	360.82	1083.38	1,444.20
6	110.0	5.52	6.277	44.25	34.66	0.52	1.88	0.85	1.00	2.26	36.11	140.34	41.36	8,582.6	6651.1	318.17	627.61	945.78
7	122.5	5.70	1.223	17.57	14.33	0.91	1.94	0.85	1.00	2.28	18.24	27.70	7.60	2,222.0	1769.4	171.51	23.19	194.70
												83,897.3	60276.1				8,289.03	

Load Case: 1.0D + 1.0W Normal Wind

1.0D + 1.0W 60 mph Wind at Normal To Face

Wind Load Factor: 1.00

Wind Importance Factor: 1.00

Dead Load Factor: 1.00

Ice Dead Load Factor: 0.00

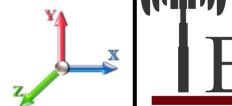
Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total Flat	Total Round	Ice Round		Ice		Ice		Total	Struct	Linear	Total				
			Area (sqft)	Area (sqft)	Sol Ratio	Cf	Df	Dr	Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Area (sqft)	Weight (lb)	Weight Ice (lb)	Force (lb)			
1	10.0	5.48	16.978	28.78	0.00	0.18	2.65	1.00	1.00	0.00	32.94	147.48	0.00	4,507.5	0.0	407.14	604.06	1,011.20
2	30.0	5.49	18.717	22.10	0.00	0.19	2.63	1.00	1.00	0.00	31.37	147.48	0.00	4,002.2	0.0	385.41	604.57	989.98
3	50.0	6.35	12.939	22.10	0.00	0.19	2.64	1.00	1.00	0.00	25.59	147.48	0.00	3,471.8	0.0	364.10	699.57	1,063.67
4	70.0	6.99	11.598	18.56	0.00	0.20	2.61	1.00	1.00	0.00	22.25	146.67	0.00	3,143.9	0.0	345.20	766.69	1,111.88
5	90.0	7.51	9.614	13.35	0.00	0.19	2.63	1.00	1.00	0.00	17.26	134.02	0.00	2,572.1	0.0	290.23	757.23	1,047.46
6	110.0	7.96	6.277	9.59	0.00	0.18	2.68	1.00	1.00	0.00	11.75	75.18	0.00	1,609.6	0.0	212.62	467.58	680.21
7	122.5	8.20	1.223	3.24	0.00	0.24	2.47	1.00	1.00	0.00	3.14	13.15	0.00	377.2	0.0	54.11	85.08	139.19
												19,684.3	0.0				6,043.58	

Section Forces

Structure: CT01725-A-SBA
Site Name: Bloomfield
Height: 125.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Code: EIA/TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

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Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60° Wind

1.0D + 1.0W 60 mph Wind at 60° From Face

Wind Load Factor: 1.00
Dead Load Factor: 1.00
Ice Dead Load Factor: 0.00

Wind Importance Factor: 1.00
Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round		Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice Linear		Total Area (sqft)	Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
					Sol	Cf							Area (sqft)	Area (sqft)						
1	10.0	5.48	16.978	28.78	0.00	0.18	2.65	0.80	1.00	0.00	29.54	147.48	0.00	4,507.5	0.0	365.16	604.06	969.22		
2	30.0	5.49	18.717	22.10	0.00	0.19	2.63	0.80	1.00	0.00	27.63	147.48	0.00	4,002.2	0.0	339.43	604.57	944.00		
3	50.0	6.35	12.939	22.10	0.00	0.19	2.64	0.80	1.00	0.00	23.01	147.48	0.00	3,471.8	0.0	327.28	699.57	1,026.85		
4	70.0	6.99	11.598	18.56	0.00	0.20	2.61	0.80	1.00	0.00	19.93	146.67	0.00	3,143.9	0.0	309.20	766.69	1,075.89		
5	90.0	7.51	9.614	13.35	0.00	0.19	2.63	0.80	1.00	0.00	15.33	134.02	0.00	2,572.1	0.0	257.89	757.23	1,015.12		
6	110.0	7.96	6.277	9.59	0.00	0.18	2.68	0.80	1.00	0.00	10.50	75.18	0.00	1,609.6	0.0	189.91	467.58	657.49		
7	122.5	8.20	1.223	3.24	0.00	0.24	2.47	0.80	1.00	0.00	2.90	13.15	0.00	377.2	0.0	49.90	85.08	134.98		
														19,684.3	0.0			5,823.55		

Load Case: 1.0D + 1.0W 90° Wind

1.0D + 1.0W 60 mph Wind at 90° From Face

Wind Load Factor: 1.00
Dead Load Factor: 1.00
Ice Dead Load Factor: 0.00

Wind Importance Factor: 1.00
Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round		Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice Linear		Total Area (sqft)	Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
					Sol	Cf							Area (sqft)	Area (sqft)						
1	10.0	5.48	16.978	28.78	0.00	0.18	2.65	0.85	1.00	0.00	30.39	147.48	0.00	4,507.5	0.0	375.65	604.06	979.71		
2	30.0	5.49	18.717	22.10	0.00	0.19	2.63	0.85	1.00	0.00	28.57	147.48	0.00	4,002.2	0.0	350.92	604.57	955.49		
3	50.0	6.35	12.939	22.10	0.00	0.19	2.64	0.85	1.00	0.00	23.65	147.48	0.00	3,471.8	0.0	336.49	699.57	1,036.06		
4	70.0	6.99	11.598	18.56	0.00	0.20	2.61	0.85	1.00	0.00	20.51	146.67	0.00	3,143.9	0.0	318.20	766.69	1,084.89		
5	90.0	7.51	9.614	13.35	0.00	0.19	2.63	0.85	1.00	0.00	15.81	134.02	0.00	2,572.1	0.0	265.97	757.23	1,023.21		
6	110.0	7.96	6.277	9.59	0.00	0.18	2.68	0.85	1.00	0.00	10.81	75.18	0.00	1,609.6	0.0	195.59	467.58	663.17		
7	122.5	8.20	1.223	3.24	0.00	0.24	2.47	0.85	1.00	0.00	2.96	13.15	0.00	377.2	0.0	50.95	85.08	136.03		
														19,684.3	0.0			5,878.56		

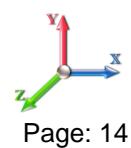
Force/Stress Compression Summary

Structure: CT01725-A-SBA
Site Name: Bloomfield
Height: 125.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Topography: 1

Code: EIA/TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

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Tower Engineering Solutions

LEG MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case			Len (ft)	Bracing %			KL/R	Fy (ksi)	Mem Cap (kips)	Leg Use %	Controls
				X	Y	Z		X	Y	Z					
1	20	PST - 8" DIA PIPE	-284.95	1.2D + 1.6W Normal Wind	9.76	100	100	100	39.83	55.00	365.98	77.9	Member X		
2	40	PST - 6" DIA PIPE	-245.47	1.2D + 1.6W Normal Wind	9.76	50	50	50	26.02	55.00	261.57	93.8	Member X		
3	60	PST - 6" DIA PIPE	-204.99	1.2D + 1.6W Normal Wind	6.51	100	100	100	34.70	55.00	250.72	81.8	Member X		
4	80	PST - 5" DIA PIPE	-156.16	1.2D + 1.6W Normal Wind	6.51	100	100	100	41.53	55.00	185.28	84.3	Member X		
5	100	PST - 3-1/2" DIA PIPE	-104.50	1.2D + 1.6W Normal Wind	4.88	100	100	100	43.70	55.00	113.77	91.8	Member X		
6	120	PST - 2-1/2" DIA PIPE	-48.48	1.2D + 1.6W Normal Wind	4.94	100	100	100	62.62	55.00	61.53	78.8	Member X		
7	125	PST - 2-1/2" DIA PIPE	-12.22	1.2D + 1.6W Normal Wind	2.50	100	100	100	31.68	55.00	77.81	15.7	Member X		

Splices

Top Splice

Sect	Top Elev	Load Case	Force (kips)	Cap (kips)	Use %	Bolt Type	Num Bolts	Load Case			Force (kips)	Cap (kips)	Use %	Bolt Type	Num Bolts
								X	Y	Z					
1	20	1.2D + 1.6W Normal Wind	257.45	0.00	0.0			1.2D + 1.6W Normal Wind			296.79	0.00			
2	40	1.2D + 1.6W Normal Wind	213.60	0.00	0.0			1.2D + 1.6W Normal Wind			257.45	0.00	1/4 A325	8	
3	60	1.2D + 1.6W Normal Wind	165.60	0.00	0.0			1.2D + 1.6W Normal Wind			213.60	0.00	1 A325	8	
4	80	1.2D + 1.6W Normal Wind	112.31	0.00	0.0			1.2D + 1.6W Normal Wind			165.60	0.00	1 A325	8	
5	100	1.2D + 1.6W Normal Wind	54.29	0.00	0.0			1.2D + 1.6W Normal Wind			112.31	0.00	1 A325	6	
6	120	1.2D + 1.6W Normal Wind	15.08	0.00	0.0			1.2D + 1.6W Normal Wind			54.29	0.00	3/4 A325	6	
7	125	1.2D + 1.0Di + 1.0Wi 90° Wind	5.16	0.00	0.0			1.2D + 1.6W Normal Wind			15.08	0.00	3/4 A325	4	

HORIZONTAL MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case			Len (ft)	Bracing %	X	Y	Z	KL/R	Fy (ksi)	Mem Cap (kips)	Num Bolts	Shear Cap (kips)	Bear Cap (kips)	Shear Use %	Bear Use %	Controls
				Num	Holes	Cap (kips)														
1	20					0.00			0	0	0									
2	40					0.00			0	0	0									
3	60					0.00			0	0	0									
4	80					0.00			0	0	0									
5	100					0.00			0	0	0									
6	120					0.00			0	0	0									
7	125	SAE - 1.5X1.5X0.1875	-4.15	1.2D + 1.6W Normal Wind	3.50	100	100	100	100.34	36.00	10.11	2	1	35.78	27.73	41	Member Z			

DIAGONAL MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case			Len (ft)	Bracing %	X	Y	Z	KL/R	Fy (ksi)	Mem Cap (kips)	Num Bolts	Shear Cap (kips)	Bear Cap (kips)	Shear Use %	Bear Use %	Controls	
				Num	Holes	Cap (kips)															
1	20	SAE - 3.5X3.5X0.25	-8.95	0.9D + 1.6W 90° Wind	14.99	50	50	50	129.60	36.00	22.62	1	1	12.43	13.0	72	Bolt Shear				
2	40	SAE - 3X3X0.25	-9.32	1.2D + 1.6W 90° Wind	13.89	50	50	50	140.73	36.00	16.43	1	1	12.43	13.0	75	Bolt Shear				
3	60	SAE - 2.5X2.5X0.1875	-7.95	1.2D + 1.6W 90° Wind	10.51	50	50	50	127.44	36.00	12.43	1	1	12.43	9.79	81	Bolt Bear				
4	80	SAE - 2.5X2.5X0.1875	-8.21	1.2D + 1.6W 90° Wind	9.38	50	50	50	115.28	36.00	14.52	2	1	15.90	18.6	57	Member Z				
5	100	SAE - 2X2X0.1875	-6.65	1.2D + 1.6W 90° Wind	7.97	50	50	50	121.30	36.00	10.60	1	1	7.95	7.50	89	Bolt Bear				
6	120	SAE - 1.5X1.5X0.1875	-4.28	1.2D + 1.6W 90° Wind	6.88	50	50	50	140.97	36.00	6.02	1	1	7.95	7.50	71	Member Z				
7	125	SOL - 5/8" SOLID	-2.43	1.2D + 1.6W Normal Wind	4.30	50	50	50	148.89	36.00	3.13	0	0	0						T-Only	

Force/Stress Tension Summary

Structure: CT01725-A-SBA
Site Name: Bloomfield
Height: 125.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Topography: 1

Code: EIA/TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

12/6/2021



Tower Engineering Solutions

LEG MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case		Fy (ksi)	Cap (kips)	Leg Use %	Controls
1	20	PST - 8" DIA PIPE	266.77	0.9D + 1.6W 60° Wind		55	415.80	64.2	Member
2	40	PST - 6" DIA PIPE	230.61	0.9D + 1.6W 60° Wind		55	276.21	83.5	Member
3	60	PST - 6" DIA PIPE	190.36	0.9D + 1.6W 60° Wind		55	276.21	68.9	Member
4	80	PST - 5" DIA PIPE	145.52	0.9D + 1.6W 60° Wind		55	212.85	68.4	Member
5	100	PST - 3-1/2" DIA PIPE	94.92	0.9D + 1.6W 60° Wind		55	132.66	71.6	Member
6	120	PST - 2-1/2" DIA PIPE	42.96	0.9D + 1.6W 60° Wind		55	84.35	50.9	Member
7	125	PST - 2-1/2" DIA PIPE	4.36	0.9D + 1.6W Normal Wind		55	84.35	5.2	Member

Splices

Sect	Top Elev	Top Splice					Bottom Splice						
		Load Case	Force (kips)	Cap (kips)	Use %	Bolt Type	Num Bolts	Load Case	Force (kips)	Cap (kips)	Use %	Bolt Type	Num Bolts
1	20	0.9D + 1.6W 60° Wind	230.35	0.00	0.0			0.9D + 1.6W 60° Wind	266.7	0.00			
2	40	0.9D + 1.6W 60° Wind	190.07	0.00	0.0			0.9D + 1.6W 60° Wind	230.3	610.56	37.7	1 1/4 A325	8
3	60	0.9D + 1.6W 60° Wind	145.33	0.00	0.0			0.9D + 1.6W 60° Wind	190.0	424.08	44.8	1 A325	8
4	80	0.9D + 1.6W 60° Wind	94.75	0.00	0.0			0.9D + 1.6W 60° Wind	145.3	424.08	34.3	1 A325	8
5	100	0.9D + 1.6W 60° Wind	42.77	0.00	0.0			0.9D + 1.6W 60° Wind	94.75	318.06	29.8	1 A325	6
6	120	0.9D + 1.6W 60° Wind	5.98	0.00	0.0			0.9D + 1.6W 60° Wind	42.77	180.60	23.7	3/4 A325	6
7	125		0.00	0.00	0.0			0.9D + 1.6W 60° Wind	5.98	120.40	5.0	3/4 A325	4

HORIZONTAL MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case	Mem			Shear Cap (kips)	Bear Cap (kips)	B.S. Cap (kips)	Use %	Controls	
					Fy (ksi)	Cap (kips)	Num Bolts						
1	20	-			36	0.00	0	0					
2	40	-			36	0.00	0	0					
3	60	-			36	0.00	0	0					
4	80	-			36	0.00	0	0					
5	100	-			36	0.00	0	0					
6	120	-			36	0.00	0	0					
7	125	SAE - 1.5X1.5X0.1875	2.01	1.2D + 1.6W Normal Wi	36	15.92	2	1	35.78	27.73	13.18	15.2	Blck Shear

DIAGONAL MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case	Fy (ksi)	Mem			Shear Cap (kips)	Bear Cap (kips)	B.S. Cap (kips)	Use %	Controls
						Cap (kips)	Num Bolts	Num Holes					
1	20	SAE - 3.5X3.5X0.25	8.54	0.9D + 1.6W 90° Wind	36	54.76	1	1	12.43	13.05	16.79	68.7	Bolt Shear
2	40	SAE - 3X3X0.25	8.58	0.9D + 1.6W 90° Wind	36	46.66	1	1	12.43	13.05	14.07	69.1	Bolt Shear
3	60	SAE - 2.5X2.5X0.1875	7.68	1.2D + 1.6W 90° Wind	36	29.22	1	1	12.43	9.79	9.53	80.6	Blck Shear
4	80	SAE - 2.5X2.5X0.1875	7.94	1.2D + 1.6W 90° Wind	36	29.22	2	1	15.90	18.60	13.66	58.1	Blck Shear
5	100	SAE - 2X2X0.1875	6.51	1.2D + 1.6W 90° Wind	36	23.00	1	1	7.95	7.50	7.25	89.9	Blck Shear
6	120	SAE - 1.5X1.5X0.1875	4.28	1.2D + 1.6W 90° Wind	36	17.17	1	1	7.95	7.50	5.21	82.3	Blck Shear
7	125	SOL - 5/8" SOLID	7.67	1.2D + 1.6W Normal Wi	36	9.94	0	0				77.2	Member

Seismic Section Forces

Structure: CT01725-A-SBA
Site Name: Bloomfield
Height: 125.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Code: EIA/TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

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Load Case: 1.2D + 1.0E

Dead Load Factor	1.20	Sds	0.192	Ss	0.1800	Fa	1.6000	Ke	0.0000
Seismic Load Factor	1.00	Sd1	0.102	S1	0.0640	Fv	2.4000	Kg	0.0000
Seismic Importance Factor	1.00	SA	0.192	R	3.0000	Vs	2.5822	f1	2.0155

Sect #	Elev (ft)	Wz (lb)	Lateral			Fsz (lb)
			a	b	c	
1	10.00	4507.4	0.01	0.06	0.03	19.78
2	30.00	4002.2	0.11	0.07	0.04	45.18
3	50.00	3471.7	0.30	0.04	0.01	76.71
4	70.00	3184.2	0.59	-0.05	0.01	109.84
5	90.00	8912.8	0.98	-0.11	0.12	466.36
6	110.00	4639.1	1.46	0.42	0.50	455.66
7	122.50	4887.9	1.82	1.61	1.00	756.98

Load Case: 0.9D + 1.0E

Dead Load Factor	0.90	Sds	0.192	Ss	0.1800	Fa	1.6000	Ke	0.0000
Seismic Load Factor	1.00	Sd1	0.102	S1	0.0640	Fv	2.4000	Kg	0.0000
Seismic Importance Factor	1.00	SA	0.192	R	3.0000	Vs	2.5822	f1	2.0155

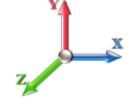
Sect #	Elev (ft)	Wz (lb)	Lateral			Fsz (lb)
			a	b	c	
1	10.00	4507.4	0.01	0.06	0.03	19.78
2	30.00	4002.2	0.11	0.07	0.04	45.18
3	50.00	3471.7	0.30	0.04	0.01	76.71
4	70.00	3184.2	0.59	-0.05	0.01	109.84
5	90.00	8912.8	0.98	-0.11	0.12	466.36
6	110.00	4639.1	1.46	0.42	0.50	455.66
7	122.50	4887.9	1.82	1.61	1.00	756.98

Support Forces Summary

Structure: CT01725-A-SBA
Site Name: Bloomfield
Height: 125.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Topography: 1

Code: EIA/TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

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Load Case	Node	FX (kips)	FY (kips)	FZ (kips)	(-) = Uplift (+) = Down
1.2D + 1.6W Normal Wind	1	0.00	296.36	-24.98	
	1a	9.36	-128.02	-6.92	
	1b	-9.36	-128.02	-6.92	
1.2D + 1.6W 60° Wind	1	-1.31	152.52	-12.52	
	1a	-11.46	150.91	5.13	
	1b	-20.05	-263.10	-11.56	
1.2D + 1.6W 90° Wind	1	-1.52	13.46	-0.61	
	1a	-18.86	253.48	10.00	
	1b	-17.75	-226.62	-9.39	
0.9D + 1.6W Normal Wind	1	0.00	292.27	-24.78	
	1a	9.51	-131.01	-7.02	
	1b	-9.51	-131.01	-7.02	
0.9D + 1.6W 60° Wind	1	-1.32	148.80	-12.32	
	1a	-11.29	147.19	5.02	
	1b	-20.21	-265.74	-11.65	
0.9D + 1.6W 90° Wind	1	-1.53	10.10	-0.42	
	1a	-18.69	249.50	9.90	
	1b	-17.92	-229.36	-9.48	
1.2D + 1.0Di + 1.0Wi Normal Wind	1	0.00	132.24	-8.75	
	1a	2.20	-3.14	-1.72	
	1b	-2.20	-3.14	-1.72	
1.2D + 1.0Di + 1.0Wi 60° Wind	1	-0.41	87.61	-4.94	
	1a	-4.47	86.73	2.11	
	1b	-5.77	-48.38	-3.32	
1.2D + 1.0Di + 1.0Wi 90° Wind	1	-0.48	41.99	-1.07	
	1a	-6.85	120.12	3.68	
	1b	-4.99	-36.15	-2.61	
1.2D + 1.0E	1	0.00	31.92	0.81	
	1a	2.41	4.20	-1.36	
	1b	-2.41	4.20	-1.36	
0.9D + 1.0E	1	0.00	28.51	1.01	
	1a	2.58	0.87	-1.46	
	1b	-2.58	0.87	-1.46	
1.0D + 1.0W Normal Wind	1	0.00	78.75	-6.48	
	1a	1.82	-22.57	-1.43	
	1b	-1.82	-22.57	-1.43	
1.0D + 1.0W 60° Wind	1	-0.32	44.53	-3.50	
	1a	-3.19	44.15	1.47	
	1b	-4.41	-55.07	-2.54	
1.0D + 1.0W 90° Wind	1	-0.37	11.20	-0.64	
	1a	-4.96	68.73	2.65	
	1b	-3.86	-46.32	-2.01	

Max Reactions

Leg	Overspinning
Max Uplift: -265.74 (kips)	Moment: 3062.70 (ft-kips)
Max Down: 296.36 (kips)	Total Down: 40.33 (kips)
Max Shear: 24.98 (kips)	Total Shear: 38.82 (kips)

Analysis Summary

Structure: CT01725-A-SBA
Site Name: Bloomfield
Height: 125.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Topography: 1

Code: EIA/TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

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Max Reactions

Leg		Overturning	
Max Uplift:	-265.74 (kips)	Moment:	3062.70 (ft-kips)
Max Down:	296.36 (kips)	Total Down:	40.33 (kips)
Max Shear:	24.98 (kips)	Total Shear:	38.82 (kips)

Anchor Bolts

Bolt Size (in.): 1.50
Yield Strength (Ksi): 36.00
Detail Type: D

Number Bolts: 8
Tensile Strength (Ksi): 58.00
Length: 1.00

Interaction Ratio: 0.66

Max Usages

Max Leg: 93.8% (1.2D + 1.6W Normal Wind - Sect 2)
Max Diag: 89.9% (1.2D + 1.6W 90° Wind - Sect 5)
Max Horiz: 41.1% (1.2D + 1.6W Normal Wind - Sect 7)

Max Deflection, Twist and Sway

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)
0.9D + 1.0E - Normal To Face	66.75	0.0325	0.0022	0.0609
	85.13	0.0556	0.0030	0.0852
	94.88	0.0715	0.0035	0.1001
	99.75	0.0805	-0.0039	0.1208
	100.00	0.0810	0.0039	0.1227
	110.13	0.1019	0.0041	0.1279
	125.00	0.1368	0.0043	0.1372
0.9D + 1.6W 97 mph Wind at 60° From Face	66.75	0.4490	0.0993	0.7970
	85.13	0.7482	0.1725	1.0674
	94.88	0.9443	0.2441	1.2236
	99.75	1.0509	0.2830	1.4161
	100.00	1.0572	0.2850	1.4343
	110.13	1.2994	0.5038	1.4590
	125.00	1.6856	0.8121	1.3822
0.9D + 1.6W 97 mph Wind at 90° From Face	66.75	0.4481	-0.0394	0.7940
	85.13	0.7470	-0.0558	1.0665
	94.88	0.9422	-0.0674	1.2212
	99.75	1.0490	-0.0750	1.3957
	100.00	1.0551	-0.0753	1.4112
	110.13	1.2957	-0.0948	1.4308
	125.00	1.6760	-0.1119	0.9393

0.9D + 1.6W 97 mph Wind at Normal To Face	66.75	0.4577	0.0303	0.8118
	85.13	0.7633	0.0407	1.0902
	94.88	0.9646	0.0465	1.2528
	99.75	1.0752	0.0496	1.4557
	100.00	1.0814	0.0496	1.4749
	110.13	1.3326	0.0524	1.5042
	125.00	1.7452	0.0564	2.2980
<hr/>				
1.0D + 1.0W 60 mph Wind at 60° From Face	66.75	0.1075	0.0113	0.1906
	85.13	0.1791	0.0175	0.2545
	94.88	0.2261	0.0229	0.2917
	99.75	0.2518	0.0260	0.3413
	100.00	0.2533	0.0262	0.3456
	110.13	0.3114	0.0401	0.3462
	125.00	0.4039	0.0590	0.3264
<hr/>				
1.0D + 1.0W 60 mph Wind at 90° From Face	66.75	0.1076	-0.0093	0.1905
	85.13	0.1793	-0.0132	0.2558
	94.88	0.2261	-0.0158	0.2929
	99.75	0.2516	-0.0176	0.3360
	100.00	0.2530	-0.0177	0.3395
	110.13	0.3108	-0.0222	0.3431
	125.00	0.4019	-0.0262	0.2259
<hr/>				
1.0D + 1.0W 60 mph Wind at Normal To Face	66.75	0.1098	0.0070	0.1941
	85.13	0.1829	0.0091	0.2610
	94.88	0.2311	0.0102	0.2997
	99.75	0.2571	0.0111	0.3456
	100.00	0.2587	0.0111	0.3503
	110.13	0.3187	0.0108	0.3601
	125.00	0.4163	0.0109	0.5251
<hr/>				
1.2D + 1.0Di + 1.0Wi 50 mph Wind at 60° From Face	66.75	0.1472	0.0220	0.2611
	85.13	0.2453	0.0364	0.3487
	94.88	0.3096	0.0500	0.4010
	99.75	0.3451	0.0574	0.4754
	100.00	0.3472	0.0578	0.4810
	110.13	0.4274	0.0969	0.4801
	125.00	0.5557	0.1515	0.4622
<hr/>				
1.2D + 1.0Di + 1.0Wi 50 mph Wind at 90° From Face	66.75	0.1464	-0.0134	0.2593
	85.13	0.2440	-0.0193	0.3487
	94.88	0.3079	-0.0237	0.3997
	99.75	0.3431	-0.0265	0.4648
	100.00	0.3452	-0.0267	0.4694
	110.13	0.4243	-0.0350	0.4713
	125.00	0.5492	-0.0423	0.2055
<hr/>				
1.2D + 1.0Di + 1.0Wi 50 mph Wind at Normal From Face	66.75	0.1471	0.0090	0.2625
	85.13	0.2463	0.0117	0.3567
	94.88	0.3124	0.0129	0.4116
	99.75	0.3485	0.0139	0.4726
	100.00	0.3505	0.0139	0.4794
	110.13	0.4338	-0.0125	0.5034
	125.00	0.5714	0.0118	0.8434
<hr/>				
1.2D + 1.0E - Normal To Face	66.75	0.0326	0.0022	0.0611
	85.13	0.0558	0.0030	0.0856
	94.88	0.0717	0.0035	0.1005
	99.75	0.0807	0.0039	0.1210
	100.00	0.0813	0.0040	0.1230
	110.13	0.1022	-0.0042	0.1284
	125.00	0.1374	-0.0043	0.1379
<hr/>				
1.2D + 1.6W 97 mph Wind at 60° From Face	66.75	0.4504	0.0997	0.8001
	85.13	0.7508	0.1733	1.0719
	94.88	0.9478	0.2454	1.2291
	99.75	1.0549	0.2844	1.4233
	100.00	1.0612	0.2864	1.4415
	110.13	1.3046	0.5063	1.4660
	125.00	1.6927	0.8162	1.3895

1.2D + 1.6W 97 mph Wind at 90° From Face	66.75	0.4495	-0.0395	0.7971
	85.13	0.7496	-0.0560	1.0712
	94.88	0.9456	-0.0677	1.2268
	99.75	1.0530	-0.0753	1.4018
	100.00	1.0592	-0.0756	1.4175
	110.13	1.3008	-0.0953	1.4378
	125.00	1.6830	-0.1125	0.9470

1.2D + 1.6W 97 mph Wind at Normal To Face	66.75	0.4593	0.0304	0.8150
	85.13	0.7661	0.0409	1.0950
	94.88	0.9683	0.0468	1.2586
	99.75	1.0794	0.0499	1.4620
	100.00	1.0856	0.0498	1.4814
	110.13	1.3380	0.0528	1.5116
	125.00	1.7525	-0.0568	2.3069



Mat Foundation Design for Self Supporting Tower

	<i>Date</i>
	12/6/2021

Customer Name:	SBA Communications Corp	EIA/TIA Standard:	EIA-222-G
Site Name:		Structure Height (Ft.):	125
Site Nmber:	CT01725-A-SBA	Engineer Name:	J. Tibbetts
Engr. Number:	120238	Engineer Login ID:	

Foundation Info Obtained from:

Drawings/Calculations

Analysis

3 Legs

Analysis or Design?Number of Tower Legs:Base Reactions (Factored):

(1). Individual Leg:

Axial Load (Kips):

296.4

Shear Force (Kips):

25.0

Uplift Force (Kips):

265.7

(2). Tower Base:

Total Vertical Load (Kips):

40.3

Moment (Kips-ft):

3062.7

Foundation Geometries:

Leg distance (Center-to-Center ft.):

12.5

Mods required -Yes/No ?:

No

Diameter of Pier (ft.):

Round

Pier Height A. G. (ft.):

0.00

Tower center to mat center (ft.):

1.01

Depth of Base BG (ft.):

4.3

Length of Pad (ft.):

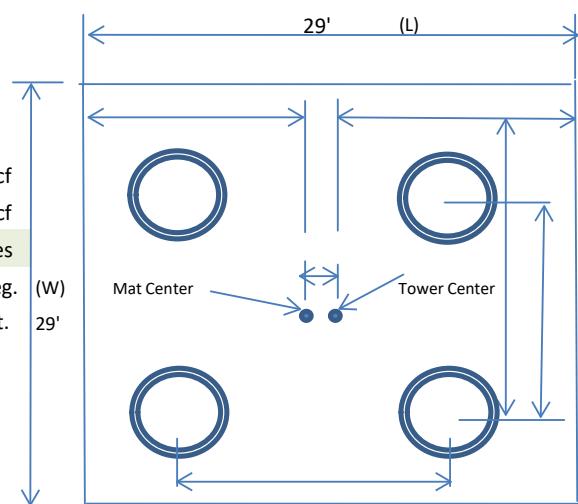
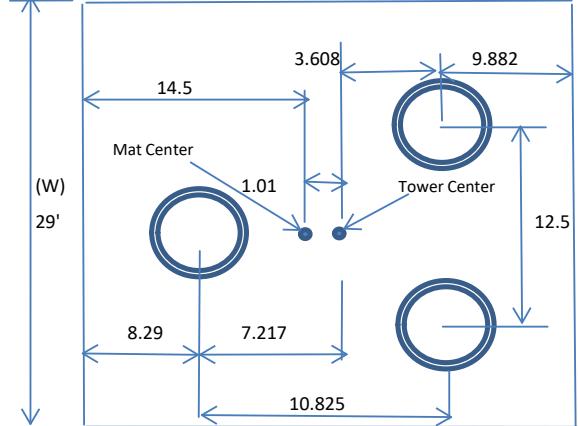
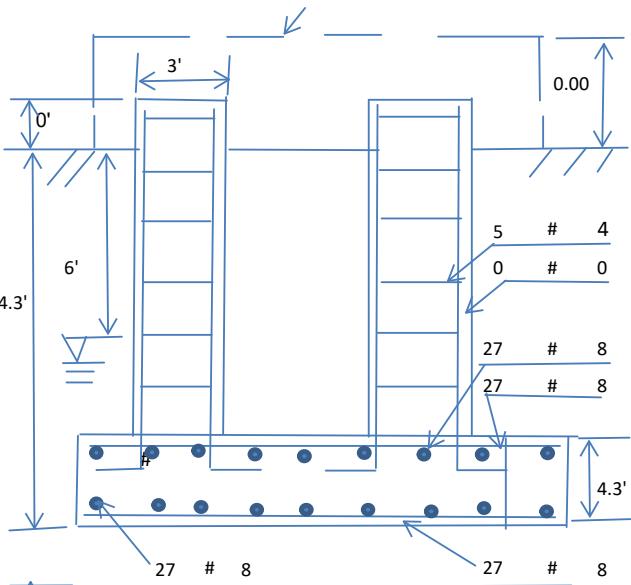
29

Width of Pad (ft.):

29

Thickness of Pad (ft.):

4.30

Material Properties and Rebar Info:

Concrete Strength (psi):

3000

Steel Elastic Modulus:

29000

ksi

Vertical bar yield (ksi):

60

Tie steel yield (ksi):

60

Vertical Rebar Size #:

4

Tie / Stirrup Size #:

4

Qty. of Vertical Rebars:

12.0

Tie Spacing (in):

12.0

Pad Rebar Yield (Ksi):

60

Pad Steel Rebar Size (#):

8

Concrete Cover (in.):

3

Unit Weight of Concrete:

150.0

pcf

Rebar at the bottom of the concrete pad:

27

Qty. of Rebar in Pad (L):

27

Rebar at the top of the concrete pad:

27

Qty. of Rebar in Pad (W):

27

Soil Design Parameters:

Soil Unit Weight (pcf):

100.0

Soil Buoyant Weight:

50.0

pcf

Water Table B.G.S. (ft.):

6.0

Unit Weight of Water:

62.4

pcf

Ultimate Bearing Pressure (psf):

6000

Consider ties in concrete shear strength:

Yes

Consider Soil Lateral Resistance ?

Yes

Enter soil C (psf) or Phi (deg.):

30.0

Deg.

Depth to ignor lateral resistance

Ft.

1.0

Apply 1.35 for e/w per G/H: 1.35

Foundation Analysis and Design:	Uplift Strength Reduction Factor:	0.75	Compression Strength Reduction Factor:	0.75		
Total Dry Soil Volume (cu. Ft.):	0.08	Total Dry Soil Weight (Kips):	0.01			
Total Buoyant Soil Volume (cu. Ft.):	0.00	Total Buoyant Soil Weight (Kips):	0.00			
Total Effective Soil Weight (Kips):	0.01	Weight from the Concrete Block at Top (K):	0.00			
Total Dry Concrete Volume (cu. Ft.):	3616.32	Total Dry Concrete Weight (Kips):	542.45			
Total Buoyant Concrete Volume (cu. Ft.):	0.00	Total Buoyant Concrete Weight (Kips):	0.00			
Total Effective Concrete Weight (Kips):	542.45	Total Vertical Load on Base (Kips):	582.78			
Check Soil Capacities:					Load/ Capacity Ratio	
Calculated Maximum Net Soil Pressure under the base (psf):	1637.46	< Allowable Factored Soil Bearing (psf):	4500	0.36	OK!	
Allowable Foundation Overturning Resistance (kips-ft.):	7663.8	> Design Factored Moment (kips-ft):	3271	0.43	OK!	
Factor of Safety Against Overturning (O. R. Moment/Design Moment):	2.34	OK!				
Check the capacities of Reinforcing Concrete:						
Strength reduction factor (Flexure and axial tension):	0.90	Strength reduction factor (Shear):	0.75			
Strength reduction factor (Axial compression):	0.65	Wind Load Factor on Concrete Design:	1.00			
(1) Concrete Pier:					Load/ Capacity Ratio	
Vertical Steel Rebar Area (sq. in./each):	#N/A	Tie / Stirrup Area (sq. in./each):	0.20			
Calculated Moment Capacity (Mn,Kips-Ft):	#N/A	Design Factored Moment (Mu, Kips-Ft)	0.1	#N/A	###	
Calculated Shear Capacity (Kips):	79.6	> Design Factored Shear (Kips):	25.0	0.31	OK!	
Calculated Tension Capacity (Tn, Kips):	#N/A	Design Factored Tension (Tu Kips):	265.7	#N/A	###	
Calculated Compression Capacity (Pn, Kips):	#N/A	Design Factored Axial Load (Pu Kips):	296.4	#N/A	###	
Moment & Tension Strength Combination:	#N/A	#N/A Check Tie Spacing (Design/Req'd):	#DIV/0!			
Pier Reinforcement Ratio:	#N/A		#N/A			
(2).Concrete Pad:						
One-Way Design Shear Capacity (L or W Direction, Kips):	1375.2	> One-Way Factored Shear (L/W-Dir Kips	261.3	0.19	OK!	
One-Way Design Shear Capacity (Diagonal Dir., Kips):	1226.1	> One-Way Factored Shear (Dia. Dir, Kips	280.0	0.23	OK!	
Lower Steel Pad Reinforcement Ratio (L or W-Direct.):	0.0013	Lower Steel Reinf. Ratio (Dia. Dir.):	0.0011			
Lower Steel Pad Moment Capacity (L or W-Dir. Kips-ft):	4547.5	> Moment at Bottom (L-Direct. K-Ft):	1697.5	0.37	OK!	
Lower Steel Pad Moment Capacity (Dia. Direction,K-ft):	4556.8	> Moment at Bottom (Dia. Dir. K-Ft):	1632.8	0.36	OK!	
Upper Steel Pad Reinforcement Ratio (L or W -Direction):	0.0013	Upper Steel Reinf. Ratio (Dia. Dir.):	0.0011			
Upper Steel Pad Moment Capacity (L or W-Dir., Kips-ft):	4547.5	> Moment at the top (L-Dir Kips-Ft):	717.5	0.16	OK!	
Upper Steel Pad Moment Capacity (Dia. Direction, K-ft):	4556.8	> Moment at the top (Dia. Dir., K-Ft):	536.6	0.12	OK!	
Punching Failure Capacity (Kips):	2088.1	> Punch. Failure Factored Shear (K):	296.4	0.14	OK!	



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Mt. Laurel, NJ 08054
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Post-Mod Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10100065
Maser Consulting Connecticut Project #: 217181042A

September 10, 2021

Site Information

Site ID: 467830-VZW / COTTAGE GROVE CT
Site Name: COTTAGE GROVE CT
Carrier Name: Verizon Wireless
Address: 1021 Blue Hill Ave
Bloomfield, Connecticut 06002
Hartford County
Latitude: 41.820119°
Longitude: -72.696514°

Structure Information

Tower Type: Self Support
Mount Type: 12.00-Ft Sector Frame

FUZE ID # 16502125

Analysis Results

Sector Frame: 85.6% 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: Nathan LaPorte



Digitally signed by Peter Albano
Date: 2021.09.10 14:48:17-04'00

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: 674866, dated July 30, 2021
Mount Mapping Report	Hudson Design Group, LLC., Site ID: 467830, dated June 10, 2021
Previous Mount Analysis	Maser Consulting Project #: 21781042A, dated August 30, 2021
Mount Modification Drawings	Maser Consulting Project #: 21781042A, dated September 10, 2021

Analysis Criteria:

Codes and Standards: ANSI/TIA-222-H

Wind Parameters: Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT} : 117 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 : 0.996

Seismic Parameters: S_s : 0.183
 S_1 : 0.055

Maintenance Parameters: Wind Speed (3-sec. Gust): 30 mph
Maintenance Live Load, L_v : 250 lbs.
Maintenance Live Load, L_m : 500 lbs.

Analysis Software: RISA-3D (V17)

Final Loading Configuration:

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
108.75	110.00	3	Commscope	NHH-65B-R2B	Added
		3	Commscope	NHHSS-65B-R2BT0	
		3	Samsung	MT6407-77A	
		3	Samsung	RF4439d-25A	
		3	Samsung	RF4440d-13A	
		3	Samsung	RT4401-48A	
		3	Antel	BXA-70063-4CF	
		1	Raycap	RRFDC-3315-PF-48*	Retained

* Equipment to be flush mounted directly to the Self-Support tower. They are not mounted on Sector Frame mounts and are not included in this mount analysis.

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

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

Standard Conditions:

1. All engineering services are performed on the basis that the information provided to 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:
 - o Channel, Solid Round, Angle, Plate ASTM A36 (Gr. 36)
 - o HSS (Rectangular) ASTM 500 (Gr. B-46)
 - o Pipe ASTM A53 (Gr. B-35)
 - o Threaded Rod F1554 (Gr. 36)
 - o Bolts ASTM A325

Discrepancies between in-field conditions and the assumptions listed above may render this analysis invalid unless explicitly approved by Maser Consulting Connecticut.

Analysis Results:

Component	Utilization %	Pass/Fail
V-Brace	13.2%	Pass
Secondary Horizontal	28.3%	Pass
End Plate	49.0%	Pass
Mount Pipe	37.2%	Pass
Tieback	13.3%	Pass
Standoff Vertical	69.8%	Pass
Mast Pipe	46.6%	Pass
Standoff Arm	68.8%	Pass
Threaded Rod	76.3%	Pass
Face Vertical	32.0%	Pass
Face Horizontal	85.6%	Pass
Mount Connection	12.7 %	Pass

Structure Rating – (Controlling Utilization of all Components)	85.6%
---	--------------

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



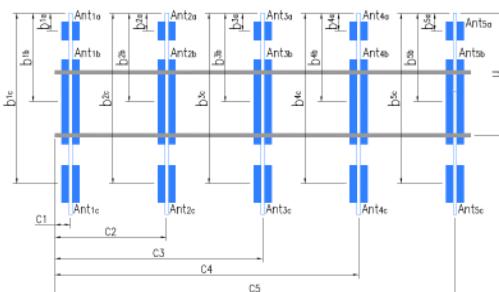
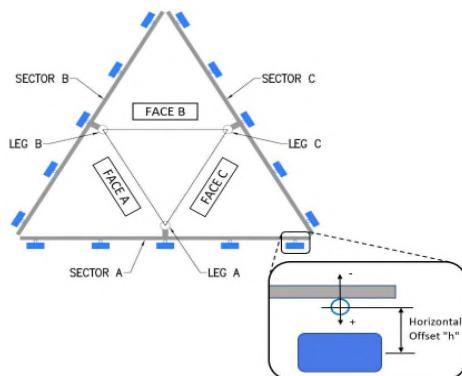


Antenna Mount Mapping Form (PATENT PENDING)

FCC #
120980

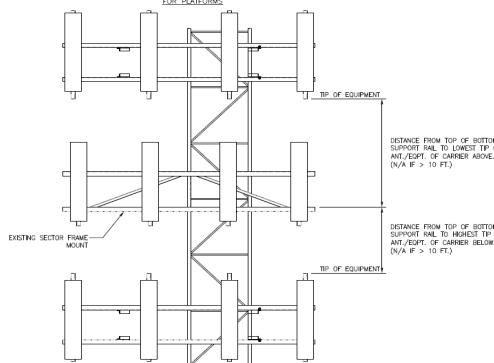
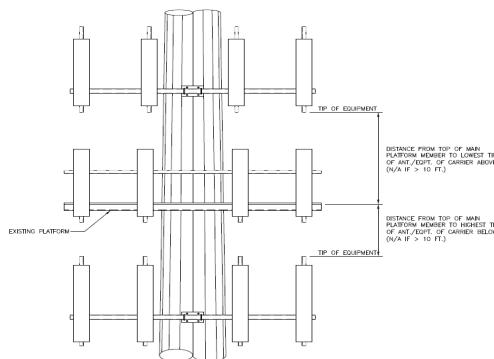
Tower Owner:	SBA	Mapping Date:	6/10/2021
Site Name:	COTTAGE GROVE CT	Tower Type:	Self Support
Site Number or ID:	467830	Tower Height (Ft.):	
Mapping Contractor:	HUDSON DESIGN GROUP LLC	Mount Elevation (Feet):	106.5

This antenna mapping form is the property of TES and under **PATENT PENDING**. The formation contained herein is considered confidential in nature and is to be used only for the specific customer it was intended for. Reproduction, transmission, publication, modification or disclosure by any method is prohibited except by express written permission of TES. All means and methods are the responsibility of the contractor and the work shall be compliant with ANSI/ASSE 10.48, OSHA, FCC, FAA and other safety requirements that may apply. TES is not warranting the usability of the safety climb as it must be assessed prior to each use in compliance with OSHA requirements.

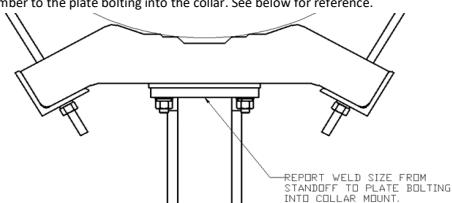


Mount Azimuth (Degree) for Each Sector			Tower Leg Azimuth (Degree) for Each Sector			Sector B							
Sector A:	30.00	Deg	Leg A:	20.00	Deg	Ant _{1a}							
Sector B:	150.00	Deg	Leg B:	140.00	Deg	Ant _{1b}	BXA-17ID63-12CF-EDI	6.00	4.00	72.00	108.75	35.00	12.50
Sector C:	270.00	Deg	Leg C:	250.00	Deg	Ant _{1c}							
Sector D:		Deg	Leg D:		Deg	Ant _{2a}							
Climbing Facility Information						Ant _{2b}	SCCP-2X6014	14.00	11.00	53.00	109.5	26.00	13.00
Location:		Deg				Ant _{2c}							
Climbing Facility	Corrosion Type:		Good condition.			Ant _{3a}							
	Access:		Climbing path was unobstructed.			Ant _{3b}	BXA-171063-8BF-EDIN	6.00	4.00	48.00	109.542	25.50	11.50
	Condition:		Good condition.			Ant _{3c}							

Please insert a photo of the mount centerline measurement here.



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



Sector B							
Ant _{1a}							
Ant _{1b}	BXA-17ID63-12CF-EDI	6.00	4.00	72.00	108.75	35.00	12.50
Ant _{1c}							
Ant _{2a}							
Ant _{2b}	SCCP-2X6014	14.00	11.00	53.00	109.5	26.00	13.00
Ant _{2c}							
Ant _{3a}							
Ant _{3b}	BXA-171063-8BF-EDIN	6.00	4.00	48.00	109.542	25.50	11.50
Ant _{3c}							
Ant on Standoff							
Ant on Standoff							
Ant on Tower							
Ant on Tower							

Sector C							
Ant _{1a}							
Ant _{1b}	BXA-17ID63-12CF-EDI	6.00	4.00	72.00	108.75	35.00	12.50
Ant _{1c}							
Ant _{2a}							
Ant _{2b}	SCCP-2X6014	14.00	11.00	53.00	109.5	26.00	13.00
Ant _{2c}							
Ant _{3a}							
Ant _{3b}	BXA-171063-8BF-EDIN	6.00	4.00	48.00	109.542	25.50	11.50
Ant _{3c}							
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 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		

Observed Obstructions to Tower Lighting System		
If the tower lighting system is being obstructed by the carrier's equipment (for example: a light nested by the antennas), please provide photos and fill in the information below.		Photo #
Description of Obstruction:		
Type of Light:	Photo #	Additional Comments:
Lighting Technology:	Photo #	
Elevation (AGL) at base of light (Ft.):	Photo #	
Is a service loop available?	Photo #	
Is beacon installed on an extension?	Photo #	

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

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



Antenna Mount Mapping Form (PATENT PENDING)

Tower Owner:	SBA	Mapping Date:	6/10/2021
Site Name:	COTTAGE GROVE CT	Tower Type:	Self Support
Site Number or ID:	467830	Tower Height (Ft.):	
Mapping Contractor:	HUDSON DESIGN GROUP,LLC.	Mount Elevation (Ft.):	106.5

This antenna mapping form is the property of TES and under **PATENT PENDING**. The formation contained herein is considered confidential in nature and is to be used only for the specific customer it was intended for. Reproduction, transmission, publication, modification or disclosure by any method is prohibited except by express written permission of TES. All means and methods are the responsibility of the contractor and the work shall be compliant with ANSI/ASSE A 10.48, OSHA, FCC, FAA and other safety requirements that may apply. TES is not warranting the usability of the safety climb as it must be assessed prior to each use in compliance with OSHA requirements.

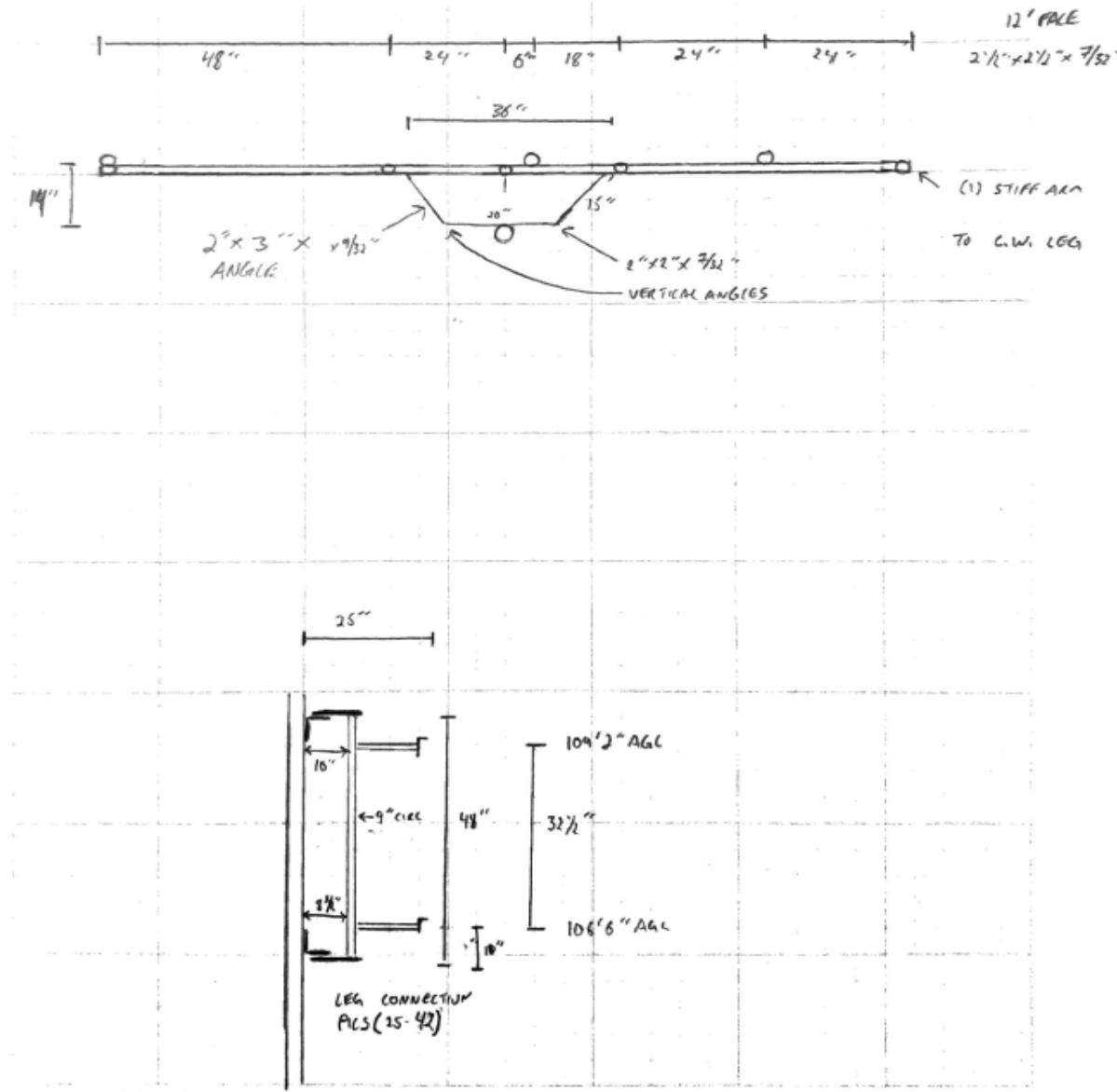
Please Insert Sketches of the Antenna Mount

DATE: 06/10/2021
 Project Name: COOKERS
 Project No.: COTTAGE GROVE CT
 Design By: (Signature) Chkd By: _____

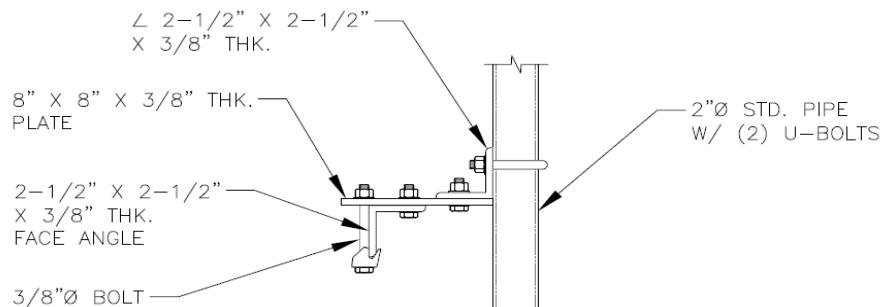
Page 2 of 2



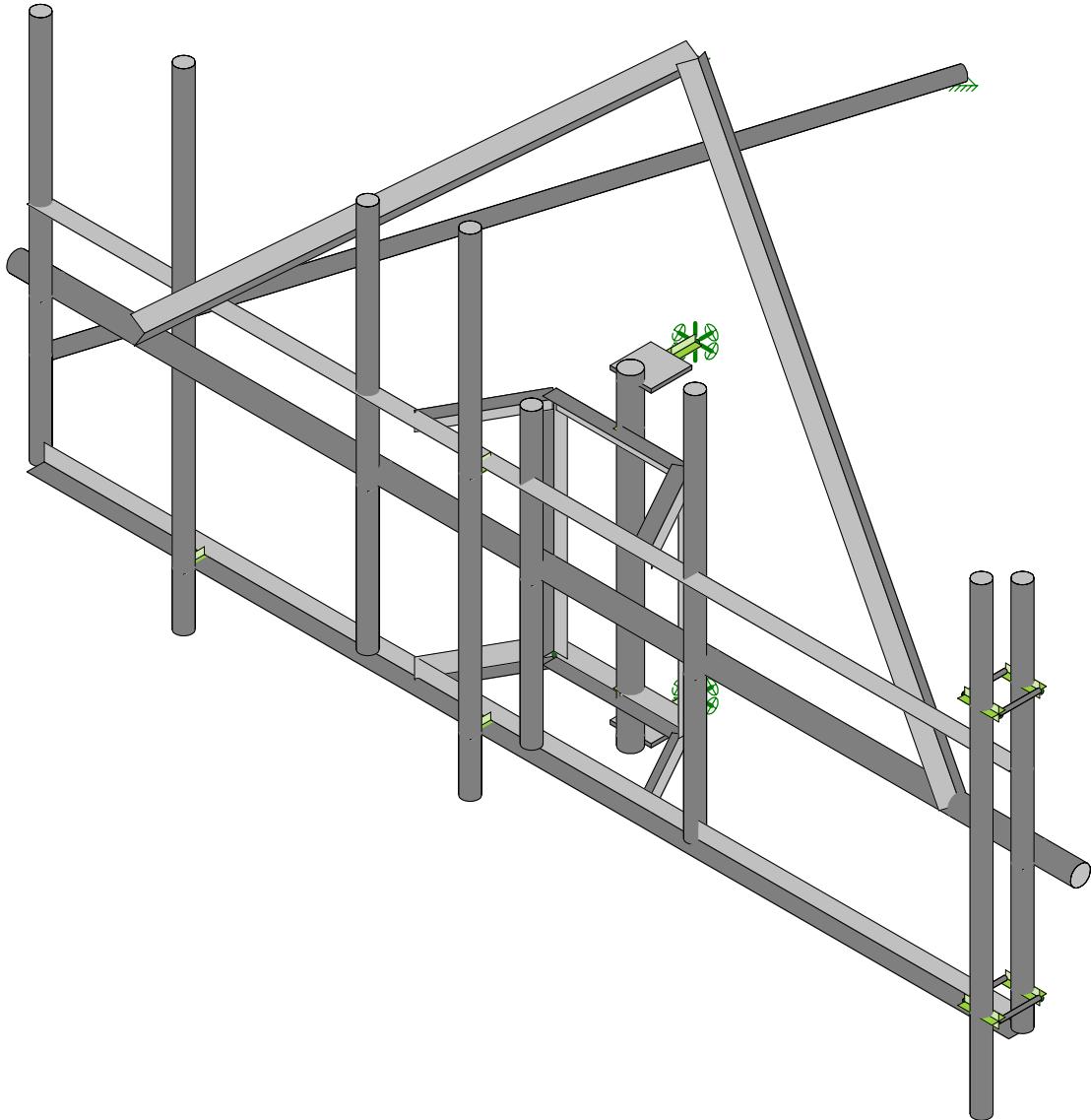
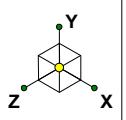
48-261-5-18-24-24-23



Please Insert Sketches of the Antenna Mount, cont'd



ANTENNA PIPE MOUNT CONNECTION



Envelope Only Solution

Maser Consulting

NL

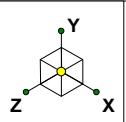
21781042A

SK - 1

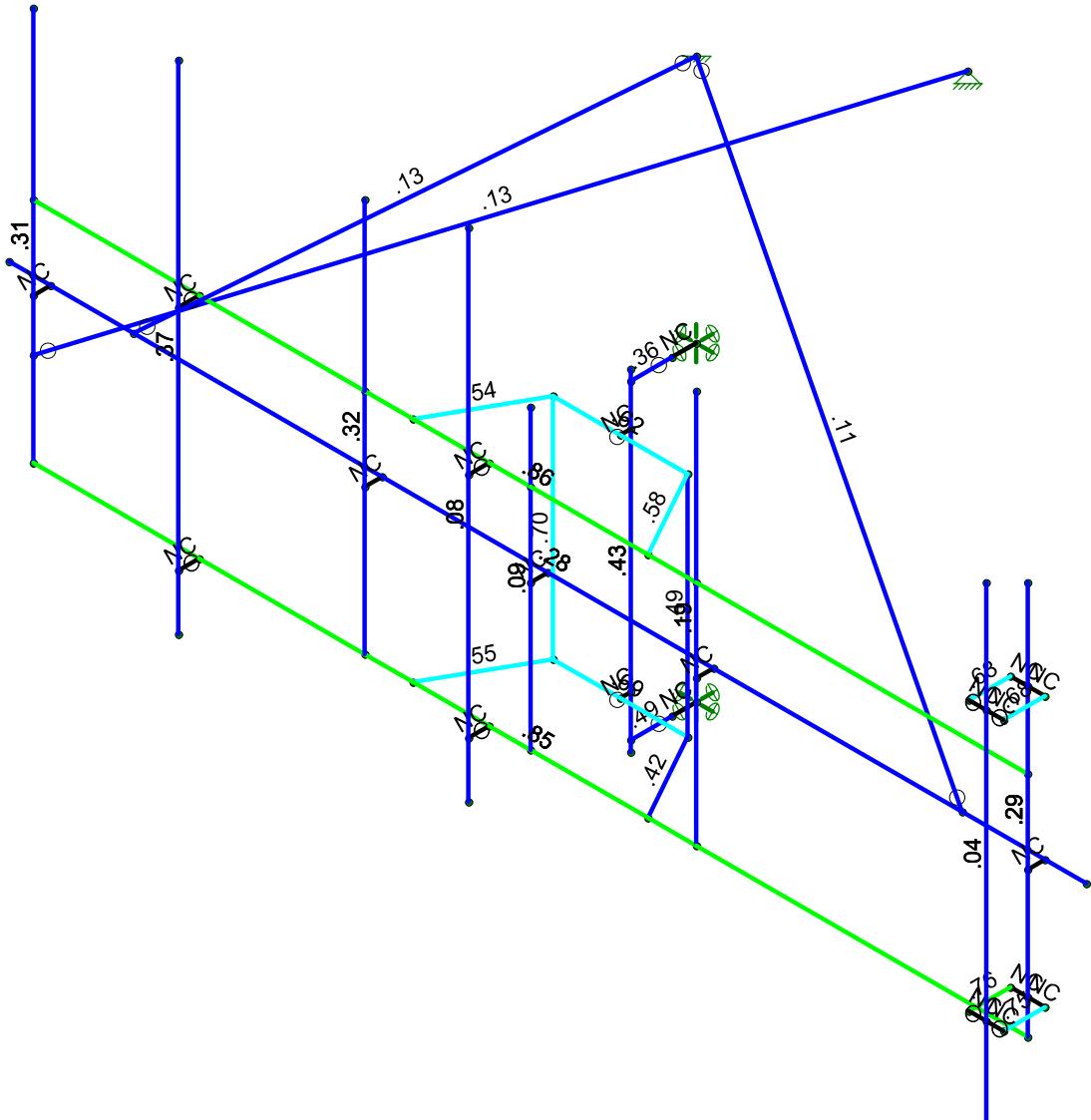
Sept 10, 2021 at 11:06 AM

MOD - 467830-VZW_MT_LOT_A_...

Mount Fix



Code Check (Env)	
No Calc	
> 1.0	
.90-1.0	
.75-.90	
.50-.75	
0.-.50	



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

Maser Consulting

NL

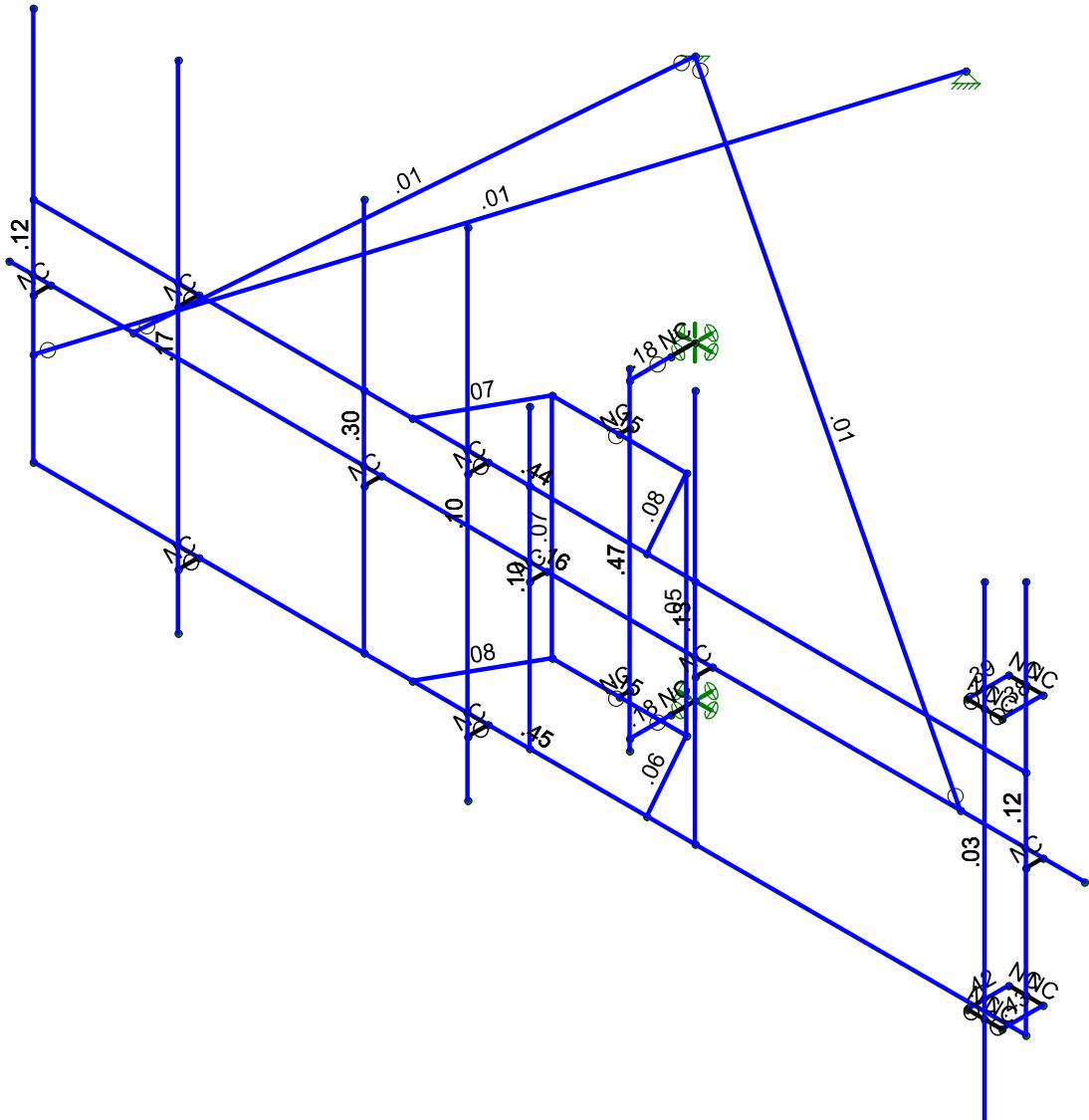
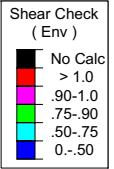
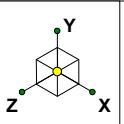
21781042A

Mount Fix

SK - 2

Sept 10, 2021 at 11:07 AM

MOD - 467830-VZW_MT_LOT_A...



Member Shear Checks Displayed (Enveloped) Envelope Only Solution

Maser Consulting		SK - 3
NL	Mount Fix	Sept 10, 2021 at 11:07 AM
21781042A		MOD - 467830-VZW_MT_LOT_A_...

Basic Load Cases

	BLC Description	Category	X Grav...	Y Grav...	Z Grav...	Joint	Point	Distrib...	Area(M..)	Surfac...
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 Deg)	None					33			
32	Antenna Wm (150 Deg)	None					33			
33	Antenna Wm (180 Deg)	None					33			
34	Antenna Wm (210 Deg)	None					33			
35	Antenna Wm (240 Deg)	None					33			
36	Antenna Wm (270 Deg)	None					33			
37	Antenna Wm (300 Deg)	None					33			
38	Antenna Wm (330 Deg)	None					33			
39	Structure D	None			-1					
40	Structure Di	None						29		
41	Structure Wo (0 Deg)	None						58		
42	Structure Wo (30 Deg)	None						58		
43	Structure Wo (60 Deg)	None						58		
44	Structure Wo (90 Deg)	None						58		
45	Structure Wo (120 Deg)	None						58		
46	Structure Wo (150 Deg)	None						58		
47	Structure Wo (180 Deg)	None						58		
48	Structure Wo (210 Deg)	None						58		
49	Structure Wo (240 Deg)	None						58		
50	Structure Wo (270 Deg)	None						58		
51	Structure Wo (300 Deg)	None						58		
52	Structure Wo (330 Deg)	None						58		
53	Structure Wi (0 Deg)	None						58		
54	Structure Wi (30 Deg)	None						58		
55	Structure Wi (60 Deg)	None						58		
56	Structure Wi (90 Deg)	None						58		

Company : Maser Consulting
Designer : NL
Job Number : 21781042A
Model Name : Mount Fix

Sept 10, 2021
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Checked By: PA

Basic Load Cases (Continued)

	BLC Description	Category	X Grav...	Y Grav...	Z Grav...	Joint	Point	Distrib...	Area(M...)	Surfac...
57	Structure Wi (120 Deg)	None						58		
58	Structure Wi (150 Deg)	None						58		
59	Structure Wi (180 Deg)	None						58		
60	Structure Wi (210 Deg)	None						58		
61	Structure Wi (240 Deg)	None						58		
62	Structure Wi (270 Deg)	None						58		
63	Structure Wi (300 Deg)	None						58		
64	Structure Wi (330 Deg)	None						58		
65	Structure Wm (0 Deg)	None						58		
66	Structure Wm (30 Deg)	None						58		
67	Structure Wm (60 Deg)	None						58		
68	Structure Wm (90 Deg)	None						58		
69	Structure Wm (120 Deg)	None						58		
70	Structure Wm (150 Deg)	None						58		
71	Structure Wm (180 Deg)	None						58		
72	Structure Wm (210 Deg)	None						58		
73	Structure Wm (240 Deg)	None						58		
74	Structure Wm (270 Deg)	None						58		
75	Structure Wm (300 Deg)	None						58		
76	Structure Wm (330 Deg)	None						58		
77	Lm1	None					1			
78	Lm2	None					1			
79	Lv1	None					1			
80	Lv2	None					1			

Load Combinations

Company : Maser Consulting
Designer : NL
Job Number : 21781042A
Model Name : Mount Fix

Sept 10, 2021
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Checked By: PA

Load Combinations (Continued)

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	-6	0	0	0	
2	N2	6	0	0	0	
3	N3	-6	2.75	0	0	
4	N4	6	2.75	0	0	
5	N7	-2.	0	0	0	
6	N8	-2.	4.75	0	0	
7	N9	0	0	0	0	
8	N10	0	3.583333	0	0	
9	N11	2.000003	0	0	0	
10	N12	2.000003	4.75	0	0	
11	N16	6	0.416667	0	0	
12	N20	6	3.666667	0	0	
13	N23	6.208333	0.416667	0	0	
14	N25	6.208333	3.666667	0	0	
15	N27	5.791667	0.416667	0	0	
16	N29	5.791667	3.666667	0	0	

Joint Coordinates and Temperatures (Continued)

Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
17	N31	6	0.416667	.5	0
18	N33	6	3.666667	.5	0
19	N35	6.208333	0.416667	.5	0
20	N37	6.208333	3.666667	.5	0
21	N39	5.791667	0.416667	.5	0
22	N41	5.791667	3.666667	.5	0
23	N43	6	4.999997	.5	0
24	N45	6	-0.666667	.5	0
25	N55	0	0	-1.083333	0
26	N56	0	2.75	-1.083333	0
27	N57	1.416667	0	0	0
28	N58	1.416667	2.75	0	0
29	N59	-1.416667	0	0	0
30	N60	-1.416667	2.75	0	0
31	N61	0.8125	0	-1.083333	0
32	N62	0.8125	2.75	-1.083333	0
33	N63	-0.8125	0	-1.083333	0
34	N64	-0.8125	2.75	-1.083333	0
35	N65	0	0	-1.208333	0
36	N66	0	2.75	-1.208333	0
37	N67	0	3.375	-1.208333	0
38	N68	0	-625	-1.208333	0
39	N69	0	3.25	-1.708333	0
40	N70	0	-5	-1.708333	0
41	N71	0	3.25	-2	0
42	N72	0	-5	-2	0
43	N73	-3.333333	1.125	-8.609142	0
44	N74	-6	1.125	0	0
45	N76	6	4.75	0	0
46	N46	-6	4.75	0	0
47	N47	-.5	5.333333	.25	0
48	N48	-.5	-0.666667	.25	0
49	N49	-.5	2.749997	.25	0
50	N50	-.5	-0.000003	.25	0
51	N51	-.5	2.749997	0.	0
52	N52	-.5	-0.000003	0.	0
53	N53	-4	5.333333	.25	0
54	N54	-4	-0.666667	.25	0
55	N55A	-4	2.749997	.25	0
56	N56A	-4	-0.000003	.25	0
57	N57A	-4	2.749997	0.	0
58	N58A	-4	-0.000003	0.	0
59	N59A	0	3.25	-1.208333	0
60	N60A	0	-5	-1.208333	0
61	N61A	0	2.75	0	0
62	N62A	-2.	2.75	0	0
63	N63A	2.000003	2.75	0	0
64	N64A	-6	1.75	0	0
65	N65A	6	1.75	0	0
66	N66A	0	1.75	0	0
67	N67A	-2.	1.75	0	0
68	N68A	2.000003	1.75	0	0
69	N69A	-6	1.75	-0.208333	0
70	N70A	6	1.75	-0.208333	0
71	N71A	0	1.75	-0.208333	0
72	N72A	-2.	1.75	-0.208333	0
73	N73A	2.000003	1.75	-0.208333	0

Company : Maser Consulting
 Designer : NL
 Job Number : 21781042A
 Model Name : Mount Fix

Sept 10, 2021
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Joint Coordinates and Temperatures (Continued)

Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
74 N74A	-6.5	1.75	-0.208333	0	
75 N75	6.5	1.75	-0.208333	0	
76 N76A	0	6.25	-2	0	
77 N77	-5	1.75	-0.208333	0	
78 N78	5	1.75	-0.208333	0	

Hot Rolled Steel Section Sets

Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1 Face Horizontal	L2.5x2.5x3	Beam	Single Angle	A36 Gr.36	Typical	.901	.535	.535	.011
2 Face Vertical	PIPE_2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
3 Threaded Rod	SR_0.5	Beam	BAR	A36 Gr.36	Typical	.196	.003	.003	.006
4 Mount Pipe	PIPE_2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
5 Standoff Smart Tool	L3X2X3	Beam	Single Angle	A36 Gr.36	Typical	.917	.305	.847	.012
6 Standoff Arm	L2.75x2x4	Beam	Single Angle	A36 Gr.36	Typical	1.125	.383	.853	.022
7 Mast Pipe	PIPE_2.5	Beam	Pipe	A53 Gr. B	Typical	1.61	1.45	1.45	2.89
8 Tube Standoff	HSS3X3X4	Beam	SquareTube	A500 Gr. B 46	Typical	2.44	3.02	3.02	5.08
9 Standoff Vertical	L2x2x4	Beam	Single Angle	A36 Gr.36	Typical	.944	.346	.346	.021
10 End Plate	PL1/2x6	Beam	BAR	A36 Gr.36	Typical	3	.063	9	237
11 Tieback	PIPE_1.5	Beam	Pipe	A53 Gr. B	Typical	.749	.293	.293	.586
12 HR12	PIPE_1.5	Beam	Pipe	A53 Gr. B	Typical	.749	.293	.293	.586
13 Secondary Horizo...	PIPE_2.5	Beam	Pipe	A53 Gr. B	Typical	1.61	1.45	1.45	2.89
14 V-Brace	L2.5x2.5x4	Column	Single Angle	A36 Gr.36	Typical	1.19	.692	.692	.026

Hot Rolled Steel Properties

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

Member Primary Data

Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1 M1	N1	N2			Face Horizontal	Beam	Single Angle	A36 Gr.36	Typical
2 M2	N3	N4		90	Face Horizontal	Beam	Single Angle	A36 Gr.36	Typical
3 MP4A	N46	N1			Face Vertical	Beam	Pipe	A53 Gr. B	Typical
4 M5	N7	N8			Face Vertical	Beam	Pipe	A53 Gr. B	Typical
5 M6	N9	N10			Face Vertical	Beam	Pipe	A53 Gr. B	Typical
6 M7	N11	N12			Face Vertical	Beam	Pipe	A53 Gr. B	Typical
7 M9	N2	N76			Face Vertical	Beam	Pipe	A53 Gr. B	Typical
8 M14	N29	N20			RIGID	None	None	RIGID	Typical
9 M15	N25	N20			RIGID	None	None	RIGID	Typical
10 M16	N27	N16			RIGID	None	None	RIGID	Typical
11 M17	N23	N16			RIGID	None	None	RIGID	Typical
12 M22	N41	N33			RIGID	None	None	RIGID	Typical
13 M23	N37	N33			RIGID	None	None	RIGID	Typical
14 M24	N39	N31			RIGID	None	None	RIGID	Typical
15 M25	N35	N31			RIGID	None	None	RIGID	Typical
16 M30	N29	N41			Threded Rod	Beam	BAR	A36 Gr.36	Typical
17 M31	N25	N37			Threded Rod	Beam	BAR	A36 Gr.36	Typical
18 M32	N27	N39			Threded Rod	Beam	BAR	A36 Gr.36	Typical

Member Primary Data (Continued)

Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
19	M33	N23	N35		Threded Rod	Beam	BAR	A36 Gr.36	Typical
20	MP1A	N43	N45		Mount Pipe	Beam	Pipe	A53 Gr. B	Typical
21	RCP	N64	N60	180	Standoff Arm	Beam	Single Angle	A36 Gr.36	Typical
22	M43	N62	N64	180	Standoff Arm	Beam	Single Angle	A36 Gr.36	Typical
23	M44	N58	N62	180	Standoff Arm	Beam	Single Angle	A36 Gr.36	Typical
24	M45	N59	N63		Standoff Arm	Beam	Single Angle	A36 Gr.36	Typical
25	M46	N63	N61		Standoff Arm	Beam	Single Angle	A36 Gr.36	Typical
26	M47	N61	N57		Standoff Arm	Beam	Single Angle	A36 Gr.36	Typical
27	M48	N56	N66		RIGID	None	None	RIGID	Typical
28	M49	N55	N65		RIGID	None	None	RIGID	Typical
29	M50	N67	N68		Mast Pipe	Beam	Pipe	A53 Gr. B	Typical
30	M51	N69	N71		RIGID	None	None	RIGID	Typical
31	M52	N70	N72		RIGID	None	None	RIGID	Typical
32	M53	N64	N63	180	Standoff Vertical	Beam	Single Angle	A36 Gr.36	Typical
33	M54	N62	N61	270	Standoff Vertical	Beam	Single Angle	A36 Gr.36	Typical
34	M55	N74	N73		Tieback	Beam	Pipe	A53 Gr. B	Typical
35	MP2A	N47	N48		Mount Pipe	Beam	Pipe	A53 Gr. B	Typical
36	M36	N51	N49		RIGID	None	None	RIGID	Typical
37	M37	N52	N50		RIGID	None	None	RIGID	Typical
38	MP3A	N53	N54		Mount Pipe	Beam	Pipe	A53 Gr. B	Typical
39	M39	N57A	N55A		RIGID	None	None	RIGID	Typical
40	M40	N58A	N56A		RIGID	None	None	RIGID	Typical
41	M41	N59A	N69	90	End Plate	Beam	BAR	A36 Gr.36	Typical
42	M42	N60A	N70	90	End Plate	Beam	BAR	A36 Gr.36	Typical
43	M43A	N64A	N69A		RIGID	None	None	RIGID	Typical
44	M44A	N67A	N72A		RIGID	None	None	RIGID	Typical
45	M45A	N66A	N71A		RIGID	None	None	RIGID	Typical
46	M46A	N68A	N73A		RIGID	None	None	RIGID	Typical
47	M47A	N65A	N70A		RIGID	None	None	RIGID	Typical
48	M48A	N74A	N75		Secondary Hor...	Beam	Pipe	A53 Gr. B	Typical
49	M49A	N77	N76A		V-Brace	Column	Single Angle	A36 Gr.36	Typical
50	M50A	N78	N76A	270	V-Brace	Column	Single Angle	A36 Gr.36	Typical

Member Advanced Data

Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M1					Yes				None
2	M2					Yes	Default			None
3	MP4A					Yes				None
4	M5					Yes				None
5	M6					Yes				None
6	M7					Yes				None
7	M9					Yes				None
8	M14					Yes	** NA **			None
9	M15					Yes	** NA **			None
10	M16					Yes	** NA **			None
11	M17					Yes	** NA **			None
12	M22	OOOXOO				Yes	** NA **			None
13	M23	OOOXOO				Yes	** NA **			None
14	M24	OOOXOO				Yes	** NA **			None
15	M25	OOOXOO				Yes	** NA **			None
16	M30					Yes				None
17	M31					Yes				None
18	M32					Yes				None
19	M33					Yes				None
20	MP1A					Yes				None

Company : Maser Consulting
 Designer : NL
 Job Number : 21781042A
 Model Name : Mount Fix

Sept 10, 2021
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 Checked By: PA

Member Advanced Data (Continued)

Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
21	RCP					Yes	Default			None
22	M43					Yes				None
23	M44					Yes	Default			None
24	M45					Yes				None
25	M46					Yes				None
26	M47					Yes				None
27	M48	OOOOOO				Yes	** NA **			None
28	M49	OOOOOO				Yes	** NA **			None
29	M50					Yes				None
30	M51					Yes	** NA **			None
31	M52					Yes	** NA **			None
32	M53					Yes	Default			None
33	M54					Yes				None
34	M55	BenPIN				Yes	Default			None
35	MP2A					Yes				None
36	M36	OOOXOO				Yes	** NA **			None
37	M37	OOOXOO				Yes	** NA **			None
38	MP3A					Yes				None
39	M39	OOOXOO				Yes	** NA **			None
40	M40	OOOXOO				Yes	** NA **			None
41	M41	OOOOOO				Yes				None
42	M42	OOOOOO				Yes				None
43	M43A					Yes	** NA **			None
44	M44A					Yes	** NA **			None
45	M45A					Yes	** NA **			None
46	M46A					Yes	** NA **			None
47	M47A					Yes	** NA **			None
48	M48A					Yes				None
49	M49A	BenPIN	BenPIN			Yes	** NA **			None
50	M50A	BenPIN	BenPIN			Yes	** NA **			None

Member Point Loads (BLC 1 : Antenna D)

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	Y	-21.85
2	MP3A	My	-.011
3	MP3A	Mz	-.015
4	MP3A	Y	-21.85
5	MP3A	My	-.011
6	MP3A	Mz	-.015
7	MP3A	Y	-32.3
8	MP3A	My	-.016
9	MP3A	Mz	.022
10	MP3A	Y	-32.3
11	MP3A	My	-.016
12	MP3A	Mz	.022
13	MP1A	Y	-43.55
14	MP1A	My	-.022
15	MP1A	Mz	0
16	MP1A	Y	-43.55
17	MP1A	My	-.022
18	MP1A	Mz	0
19	MP3A	Y	-74.7
20	MP3A	My	.037
21	MP3A	Mz	0
22	MP2A	Y	-70.3

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
23	MP2A	.035	1
24	MP2A	0	1
25	MP4A	-4.95	.5
26	MP4A	-.002	.5
27	MP4A	0	.5
28	MP4A	-4.95	4.5
29	MP4A	-.002	4.5
30	MP4A	0	4.5
31	MP4A	-18.7	1.5
32	MP4A	.006	1.5
33	MP4A	0	1.5

Member Point Loads (BLC 2 : Antenna Di)

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	-92.935	.25
2	MP3A	-.046	.25
3	MP3A	-.062	.25
4	MP3A	-92.935	5
5	MP3A	-.046	5
6	MP3A	-.062	5
7	MP3A	-92.935	.25
8	MP3A	-.046	.25
9	MP3A	.062	.25
10	MP3A	-92.935	5
11	MP3A	-.046	5
12	MP3A	.062	5
13	MP1A	-54.84	1.25
14	MP1A	-.027	1.25
15	MP1A	0	1.25
16	MP1A	-54.84	3.25
17	MP1A	-.027	3.25
18	MP1A	0	3.25
19	MP3A	-69.659	1
20	MP3A	.035	1
21	MP3A	0	1
22	MP2A	-66.445	1
23	MP2A	.033	1
24	MP2A	0	1
25	MP4A	-55.262	.5
26	MP4A	-.028	.5
27	MP4A	0	.5
28	MP4A	-55.262	4.5
29	MP4A	-.028	4.5
30	MP4A	0	4.5
31	MP4A	-31.798	1.5
32	MP4A	.011	1.5
33	MP4A	0	1.5

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	0	.25
2	MP3A	-121.43	.25
3	MP3A	.081	.25
4	MP3A	0	5
5	MP3A	-121.43	5
6	MP3A	.081	5

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
7	MP3A	X	0 .25
8	MP3A	Z	-120.979 .25
9	MP3A	Mx	.081 .25
10	MP3A	X	0 5
11	MP3A	Z	-120.979 5
12	MP3A	Mx	.081 5
13	MP1A	X	0 1.25
14	MP1A	Z	-70.634 1.25
15	MP1A	Mx	0 1.25
16	MP1A	X	0 3.25
17	MP1A	Z	-70.634 3.25
18	MP1A	Mx	0 3.25
19	MP3A	X	0 1
20	MP3A	Z	-56.206 1
21	MP3A	Mx	0 1
22	MP2A	X	0 1
23	MP2A	Z	-56.206 1
24	MP2A	Mx	0 1
25	MP4A	X	0 .5
26	MP4A	Z	-70.934 .5
27	MP4A	Mx	0 .5
28	MP4A	X	0 4.5
29	MP4A	Z	-70.934 4.5
30	MP4A	Mx	0 4.5
31	MP4A	X	0 1.5
32	MP4A	Z	-30.057 1.5
33	MP4A	Mx	0 1.5

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	55.571 .25
2	MP3A	Z	-96.251 .25
3	MP3A	Mx	.036 .25
4	MP3A	X	55.571 5
5	MP3A	Z	-96.251 5
6	MP3A	Mx	.036 5
7	MP3A	X	55.402 .25
8	MP3A	Z	-95.959 .25
9	MP3A	Mx	-.092 .25
10	MP3A	X	55.402 5
11	MP3A	Z	-95.959 5
12	MP3A	Mx	-.092 5
13	MP1A	X	29.944 1.25
14	MP1A	Z	-51.865 1.25
15	MP1A	Mx	-.015 1.25
16	MP1A	X	29.944 3.25
17	MP1A	Z	-51.865 3.25
18	MP1A	Mx	-.015 3.25
19	MP3A	X	25.774 1
20	MP3A	Z	-44.642 1
21	MP3A	Mx	.013 1
22	MP2A	X	25.351 1
23	MP2A	Z	-43.909 1
24	MP2A	Mx	.013 1
25	MP4A	X	31.329 .5
26	MP4A	Z	-54.263 .5

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
27	MP4A	Mx	-.016
28	MP4A	X	31.329
29	MP4A	Z	-54.263
30	MP4A	Mx	-.016
31	MP4A	X	13.154
32	MP4A	Z	-22.783
33	MP4A	Mx	.004

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	78.432
2	MP3A	Z	-45.283
3	MP3A	Mx	-.009
4	MP3A	X	78.432
5	MP3A	Z	-45.283
6	MP3A	Mx	-.009
7	MP3A	X	78.334
8	MP3A	Z	-45.226
9	MP3A	Mx	-.069
10	MP3A	X	78.334
11	MP3A	Z	-45.226
12	MP3A	Mx	-.069
13	MP1A	X	33.254
14	MP1A	Z	-19.199
15	MP1A	Mx	-.017
16	MP1A	X	33.254
17	MP1A	Z	-19.199
18	MP1A	Mx	-.017
19	MP3A	X	36.572
20	MP3A	Z	-21.115
21	MP3A	Mx	.018
22	MP2A	X	34.376
23	MP2A	Z	-19.847
24	MP2A	Mx	.017
25	MP4A	X	39.927
26	MP4A	Z	-23.052
27	MP4A	Mx	-.02
28	MP4A	X	39.927
29	MP4A	Z	-23.052
30	MP4A	Mx	-.02
31	MP4A	X	16.29
32	MP4A	Z	-9.405
33	MP4A	Mx	.005

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	80.277
2	MP3A	Z	0
3	MP3A	Mx	-.04
4	MP3A	X	80.277
5	MP3A	Z	0
6	MP3A	Mx	-.04
7	MP3A	X	80.277
8	MP3A	Z	0
9	MP3A	Mx	-.04
10	MP3A	X	80.277

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
11	MP3A	Z	0
12	MP3A	Mx	-.04
13	MP1A	X	27.653
14	MP1A	Z	0
15	MP1A	Mx	-.014
16	MP1A	X	27.653
17	MP1A	Z	0
18	MP1A	Mx	-.014
19	MP3A	X	37.571
20	MP3A	Z	0
21	MP3A	Mx	.019
22	MP2A	X	34.19
23	MP2A	Z	0
24	MP2A	Mx	.017
25	MP4A	X	37.827
26	MP4A	Z	0
27	MP4A	Mx	-.019
28	MP4A	X	37.827
29	MP4A	Z	0
30	MP4A	Mx	-.019
31	MP4A	X	15.061
32	MP4A	Z	0
33	MP4A	Mx	.005

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	78.432
2	MP3A	Z	45.283
3	MP3A	Mx	-.069
4	MP3A	X	78.432
5	MP3A	Z	45.283
6	MP3A	Mx	-.069
7	MP3A	X	78.334
8	MP3A	Z	45.226
9	MP3A	Mx	-.009
10	MP3A	X	78.334
11	MP3A	Z	45.226
12	MP3A	Mx	-.009
13	MP1A	X	33.254
14	MP1A	Z	19.199
15	MP1A	Mx	-.017
16	MP1A	X	33.254
17	MP1A	Z	19.199
18	MP1A	Mx	-.017
19	MP3A	X	36.572
20	MP3A	Z	21.115
21	MP3A	Mx	.018
22	MP2A	X	34.376
23	MP2A	Z	19.847
24	MP2A	Mx	.017
25	MP4A	X	39.927
26	MP4A	Z	23.052
27	MP4A	Mx	-.02
28	MP4A	X	39.927
29	MP4A	Z	23.052
30	MP4A	Mx	-.02

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
31	MP4A	X	16.29
32	MP4A	Z	9.405
33	MP4A	Mx	.005

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	55.571
2	MP3A	Z	96.251
3	MP3A	Mx	-.092
4	MP3A	X	55.571
5	MP3A	Z	96.251
6	MP3A	Mx	-.092
7	MP3A	X	55.402
8	MP3A	Z	95.959
9	MP3A	Mx	.036
10	MP3A	X	55.402
11	MP3A	Z	95.959
12	MP3A	Mx	.036
13	MP1A	X	29.944
14	MP1A	Z	51.865
15	MP1A	Mx	-.015
16	MP1A	X	29.944
17	MP1A	Z	51.865
18	MP1A	Mx	-.015
19	MP3A	X	25.774
20	MP3A	Z	44.642
21	MP3A	Mx	.013
22	MP2A	X	25.351
23	MP2A	Z	43.909
24	MP2A	Mx	.013
25	MP4A	X	31.329
26	MP4A	Z	54.263
27	MP4A	Mx	-.016
28	MP4A	X	31.329
29	MP4A	Z	54.263
30	MP4A	Mx	-.016
31	MP4A	X	13.154
32	MP4A	Z	22.783
33	MP4A	Mx	.004

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	0
2	MP3A	Z	121.43
3	MP3A	Mx	-.081
4	MP3A	X	0
5	MP3A	Z	121.43
6	MP3A	Mx	-.081
7	MP3A	X	0
8	MP3A	Z	120.979
9	MP3A	Mx	.081
10	MP3A	X	0
11	MP3A	Z	120.979
12	MP3A	Mx	.081
13	MP1A	X	0
14	MP1A	Z	70.634

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
15 MP1A	Mx	0	1.25
16 MP1A	X	0	3.25
17 MP1A	Z	70.634	3.25
18 MP1A	Mx	0	3.25
19 MP3A	X	0	1
20 MP3A	Z	56.206	1
21 MP3A	Mx	0	1
22 MP2A	X	0	1
23 MP2A	Z	56.206	1
24 MP2A	Mx	0	1
25 MP4A	X	0	.5
26 MP4A	Z	70.934	.5
27 MP4A	Mx	0	.5
28 MP4A	X	0	4.5
29 MP4A	Z	70.934	4.5
30 MP4A	Mx	0	4.5
31 MP4A	X	0	1.5
32 MP4A	Z	30.057	1.5
33 MP4A	Mx	0	1.5

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
1 MP3A	X	-55.571	.25
2 MP3A	Z	96.251	.25
3 MP3A	Mx	-.036	.25
4 MP3A	X	-55.571	5
5 MP3A	Z	96.251	5
6 MP3A	Mx	-.036	5
7 MP3A	X	-55.402	.25
8 MP3A	Z	95.959	.25
9 MP3A	Mx	.092	.25
10 MP3A	X	-55.402	5
11 MP3A	Z	95.959	5
12 MP3A	Mx	.092	5
13 MP1A	X	-29.944	1.25
14 MP1A	Z	51.865	1.25
15 MP1A	Mx	.015	1.25
16 MP1A	X	-29.944	3.25
17 MP1A	Z	51.865	3.25
18 MP1A	Mx	.015	3.25
19 MP3A	X	-25.774	1
20 MP3A	Z	44.642	1
21 MP3A	Mx	-.013	1
22 MP2A	X	-25.351	1
23 MP2A	Z	43.909	1
24 MP2A	Mx	-.013	1
25 MP4A	X	-31.329	.5
26 MP4A	Z	54.263	.5
27 MP4A	Mx	.016	.5
28 MP4A	X	-31.329	4.5
29 MP4A	Z	54.263	4.5
30 MP4A	Mx	.016	4.5
31 MP4A	X	-13.154	1.5
32 MP4A	Z	22.783	1.5
33 MP4A	Mx	-.004	1.5

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-78.432
2	MP3A	Z	45.283
3	MP3A	Mx	.009
4	MP3A	X	-78.432
5	MP3A	Z	45.283
6	MP3A	Mx	.009
7	MP3A	X	-78.334
8	MP3A	Z	45.226
9	MP3A	Mx	.069
10	MP3A	X	-78.334
11	MP3A	Z	45.226
12	MP3A	Mx	.069
13	MP1A	X	-33.254
14	MP1A	Z	19.199
15	MP1A	Mx	.017
16	MP1A	X	-33.254
17	MP1A	Z	19.199
18	MP1A	Mx	.017
19	MP3A	X	-36.572
20	MP3A	Z	21.115
21	MP3A	Mx	-.018
22	MP2A	X	-34.376
23	MP2A	Z	19.847
24	MP2A	Mx	-.017
25	MP4A	X	-39.927
26	MP4A	Z	23.052
27	MP4A	Mx	.02
28	MP4A	X	-39.927
29	MP4A	Z	23.052
30	MP4A	Mx	.02
31	MP4A	X	-16.29
32	MP4A	Z	9.405
33	MP4A	Mx	-.005

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-80.277
2	MP3A	Z	0
3	MP3A	Mx	.04
4	MP3A	X	-80.277
5	MP3A	Z	0
6	MP3A	Mx	.04
7	MP3A	X	-80.277
8	MP3A	Z	0
9	MP3A	Mx	.04
10	MP3A	X	-80.277
11	MP3A	Z	0
12	MP3A	Mx	.04
13	MP1A	X	-27.653
14	MP1A	Z	0
15	MP1A	Mx	.014
16	MP1A	X	-27.653
17	MP1A	Z	0
18	MP1A	Mx	.014
19	MP3A	X	-37.571
20	MP3A	Z	0

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
21	MP3A	Mx	-.019
22	MP2A	X	-34.19
23	MP2A	Z	0
24	MP2A	Mx	-.017
25	MP4A	X	-37.827
26	MP4A	Z	0
27	MP4A	Mx	.019
28	MP4A	X	-37.827
29	MP4A	Z	0
30	MP4A	Mx	.019
31	MP4A	X	-15.061
32	MP4A	Z	0
33	MP4A	Mx	-.005

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
1	MP3A	X	-78.432
2	MP3A	Z	-45.283
3	MP3A	Mx	.069
4	MP3A	X	-78.432
5	MP3A	Z	-45.283
6	MP3A	Mx	.069
7	MP3A	X	-78.334
8	MP3A	Z	-45.226
9	MP3A	Mx	.009
10	MP3A	X	-78.334
11	MP3A	Z	-45.226
12	MP3A	Mx	.009
13	MP1A	X	-33.254
14	MP1A	Z	-19.199
15	MP1A	Mx	.017
16	MP1A	X	-33.254
17	MP1A	Z	-19.199
18	MP1A	Mx	.017
19	MP3A	X	-36.572
20	MP3A	Z	-21.115
21	MP3A	Mx	-.018
22	MP2A	X	-34.376
23	MP2A	Z	-19.847
24	MP2A	Mx	-.017
25	MP4A	X	-39.927
26	MP4A	Z	-23.052
27	MP4A	Mx	.02
28	MP4A	X	-39.927
29	MP4A	Z	-23.052
30	MP4A	Mx	.02
31	MP4A	X	-16.29
32	MP4A	Z	-9.405
33	MP4A	Mx	-.005

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
1	MP3A	X	-55.571
2	MP3A	Z	-96.251
3	MP3A	Mx	.092
4	MP3A	X	-55.571

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
5	MP3A	Z	-96.251
6	MP3A	Mx	.092
7	MP3A	X	-55.402
8	MP3A	Z	-95.959
9	MP3A	Mx	-.036
10	MP3A	X	-55.402
11	MP3A	Z	-95.959
12	MP3A	Mx	-.036
13	MP1A	X	-29.944
14	MP1A	Z	-51.865
15	MP1A	Mx	.015
16	MP1A	X	-29.944
17	MP1A	Z	-51.865
18	MP1A	Mx	.015
19	MP3A	X	-25.774
20	MP3A	Z	-44.642
21	MP3A	Mx	-.013
22	MP2A	X	-25.351
23	MP2A	Z	-43.909
24	MP2A	Mx	-.013
25	MP4A	X	-31.329
26	MP4A	Z	-54.263
27	MP4A	Mx	.016
28	MP4A	X	-31.329
29	MP4A	Z	-54.263
30	MP4A	Mx	.016
31	MP4A	X	-13.154
32	MP4A	Z	-22.783
33	MP4A	Mx	-.004

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	0
2	MP3A	Z	-25.597
3	MP3A	Mx	.017
4	MP3A	X	0
5	MP3A	Z	-25.597
6	MP3A	Mx	.017
7	MP3A	X	0
8	MP3A	Z	-25.597
9	MP3A	Mx	-.017
10	MP3A	X	0
11	MP3A	Z	-25.597
12	MP3A	Mx	-.017
13	MP1A	X	0
14	MP1A	Z	-15.382
15	MP1A	Mx	0
16	MP1A	X	0
17	MP1A	Z	-15.382
18	MP1A	Mx	0
19	MP3A	X	0
20	MP3A	Z	-13.298
21	MP3A	Mx	0
22	MP2A	X	0
23	MP2A	Z	-13.298
24	MP2A	Mx	0

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP4A	X	0
26	MP4A	Z	-15.462
27	MP4A	Mx	0
28	MP4A	X	0
29	MP4A	Z	-15.462
30	MP4A	Mx	0
31	MP4A	X	0
32	MP4A	Z	-7.798
33	MP4A	Mx	0

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	11.845
2	MP3A	Z	-20.516
3	MP3A	Mx	.008
4	MP3A	X	11.845
5	MP3A	Z	-20.516
6	MP3A	Mx	.008
7	MP3A	X	11.845
8	MP3A	Z	-20.516
9	MP3A	Mx	-.02
10	MP3A	X	11.845
11	MP3A	Z	-20.516
12	MP3A	Mx	-.02
13	MP1A	X	6.62
14	MP1A	Z	-11.466
15	MP1A	Mx	-.003
16	MP1A	X	6.62
17	MP1A	Z	-11.466
18	MP1A	Mx	-.003
19	MP3A	X	6.164
20	MP3A	Z	-10.676
21	MP3A	Mx	.003
22	MP2A	X	6.076
23	MP2A	Z	-10.524
24	MP2A	Mx	.003
25	MP4A	X	6.941
26	MP4A	Z	-12.023
27	MP4A	Mx	-.003
28	MP4A	X	6.941
29	MP4A	Z	-12.023
30	MP4A	Mx	-.003
31	MP4A	X	3.5
32	MP4A	Z	-6.062
33	MP4A	Mx	.001

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	17.214
2	MP3A	Z	-9.939
3	MP3A	Mx	-.002
4	MP3A	X	17.214
5	MP3A	Z	-9.939
6	MP3A	Mx	-.002
7	MP3A	X	17.214
8	MP3A	Z	-9.939

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
9	MP3A	Mx	-.015
10	MP3A	X	17.214
11	MP3A	Z	-9.939
12	MP3A	Mx	-.015
13	MP1A	X	7.754
14	MP1A	Z	-4.477
15	MP1A	Mx	-.004
16	MP1A	X	7.754
17	MP1A	Z	-4.477
18	MP1A	Mx	-.004
19	MP3A	X	8.995
20	MP3A	Z	-5.193
21	MP3A	Mx	.004
22	MP2A	X	8.541
23	MP2A	Z	-4.931
24	MP2A	Mx	.004
25	MP4A	X	9.288
26	MP4A	Z	-5.362
27	MP4A	Mx	-.005
28	MP4A	X	9.288
29	MP4A	Z	-5.362
30	MP4A	Mx	-.005
31	MP4A	X	4.679
32	MP4A	Z	-2.701
33	MP4A	Mx	.002

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
1	MP3A	X	17.971
2	MP3A	Z	0
3	MP3A	Mx	-.009
4	MP3A	X	17.971
5	MP3A	Z	0
6	MP3A	Mx	-.009
7	MP3A	X	17.971
8	MP3A	Z	0
9	MP3A	Mx	-.009
10	MP3A	X	17.971
11	MP3A	Z	0
12	MP3A	Mx	-.009
13	MP1A	X	6.811
14	MP1A	Z	0
15	MP1A	Mx	-.003
16	MP1A	X	6.811
17	MP1A	Z	0
18	MP1A	Mx	-.003
19	MP3A	X	9.417
20	MP3A	Z	0
21	MP3A	Mx	.005
22	MP2A	X	8.718
23	MP2A	Z	0
24	MP2A	Mx	.004
25	MP4A	X	9.146
26	MP4A	Z	0
27	MP4A	Mx	-.005
28	MP4A	X	9.146

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP4A	Z	0
30	MP4A	Mx	-.005
31	MP4A	X	4.604
32	MP4A	Z	0
33	MP4A	Mx	.002

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	17.214
2	MP3A	Z	9.939
3	MP3A	Mx	-.015
4	MP3A	X	17.214
5	MP3A	Z	9.939
6	MP3A	Mx	-.015
7	MP3A	X	17.214
8	MP3A	Z	9.939
9	MP3A	Mx	-.002
10	MP3A	X	17.214
11	MP3A	Z	9.939
12	MP3A	Mx	-.002
13	MP1A	X	7.754
14	MP1A	Z	4.477
15	MP1A	Mx	-.004
16	MP1A	X	7.754
17	MP1A	Z	4.477
18	MP1A	Mx	-.004
19	MP3A	X	8.995
20	MP3A	Z	5.193
21	MP3A	Mx	.004
22	MP2A	X	8.541
23	MP2A	Z	4.931
24	MP2A	Mx	.004
25	MP4A	X	9.288
26	MP4A	Z	5.362
27	MP4A	Mx	-.005
28	MP4A	X	9.288
29	MP4A	Z	5.362
30	MP4A	Mx	-.005
31	MP4A	X	4.679
32	MP4A	Z	2.701
33	MP4A	Mx	.002

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	11.845
2	MP3A	Z	20.516
3	MP3A	Mx	-.02
4	MP3A	X	11.845
5	MP3A	Z	20.516
6	MP3A	Mx	-.02
7	MP3A	X	11.845
8	MP3A	Z	20.516
9	MP3A	Mx	.008
10	MP3A	X	11.845
11	MP3A	Z	20.516
12	MP3A	Mx	.008

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 Model Name : Mount Fix

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
13	MP1A	X	6.62
14	MP1A	Z	11.466
15	MP1A	Mx	-.003
16	MP1A	X	6.62
17	MP1A	Z	11.466
18	MP1A	Mx	-.003
19	MP3A	X	6.164
20	MP3A	Z	10.676
21	MP3A	Mx	.003
22	MP2A	X	6.076
23	MP2A	Z	10.524
24	MP2A	Mx	.003
25	MP4A	X	6.941
26	MP4A	Z	12.023
27	MP4A	Mx	-.003
28	MP4A	X	6.941
29	MP4A	Z	12.023
30	MP4A	Mx	-.003
31	MP4A	X	3.5
32	MP4A	Z	6.062
33	MP4A	Mx	.001

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
1	MP3A	X	0
2	MP3A	Z	25.597
3	MP3A	Mx	-.017
4	MP3A	X	0
5	MP3A	Z	25.597
6	MP3A	Mx	-.017
7	MP3A	X	0
8	MP3A	Z	25.597
9	MP3A	Mx	.017
10	MP3A	X	0
11	MP3A	Z	25.597
12	MP3A	Mx	.017
13	MP1A	X	0
14	MP1A	Z	15.382
15	MP1A	Mx	0
16	MP1A	X	0
17	MP1A	Z	15.382
18	MP1A	Mx	0
19	MP3A	X	0
20	MP3A	Z	13.298
21	MP3A	Mx	0
22	MP2A	X	0
23	MP2A	Z	13.298
24	MP2A	Mx	0
25	MP4A	X	0
26	MP4A	Z	15.462
27	MP4A	Mx	0
28	MP4A	X	0
29	MP4A	Z	15.462
30	MP4A	Mx	0
31	MP4A	X	0
32	MP4A	Z	7.798

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP4A	Mx	0

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-11.845
2	MP3A	Z	20.516
3	MP3A	Mx	-.008
4	MP3A	X	-11.845
5	MP3A	Z	20.516
6	MP3A	Mx	-.008
7	MP3A	X	-11.845
8	MP3A	Z	20.516
9	MP3A	Mx	.02
10	MP3A	X	-11.845
11	MP3A	Z	20.516
12	MP3A	Mx	.02
13	MP1A	X	-6.62
14	MP1A	Z	11.466
15	MP1A	Mx	.003
16	MP1A	X	-6.62
17	MP1A	Z	11.466
18	MP1A	Mx	.003
19	MP3A	X	-6.164
20	MP3A	Z	10.676
21	MP3A	Mx	-.003
22	MP2A	X	-6.076
23	MP2A	Z	10.524
24	MP2A	Mx	-.003
25	MP4A	X	-6.941
26	MP4A	Z	12.023
27	MP4A	Mx	.003
28	MP4A	X	-6.941
29	MP4A	Z	12.023
30	MP4A	Mx	.003
31	MP4A	X	-3.5
32	MP4A	Z	6.062
33	MP4A	Mx	-.001

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-17.214
2	MP3A	Z	9.939
3	MP3A	Mx	.002
4	MP3A	X	-17.214
5	MP3A	Z	9.939
6	MP3A	Mx	.002
7	MP3A	X	-17.214
8	MP3A	Z	9.939
9	MP3A	Mx	.015
10	MP3A	X	-17.214
11	MP3A	Z	9.939
12	MP3A	Mx	.015
13	MP1A	X	-7.754
14	MP1A	Z	4.477
15	MP1A	Mx	.004
16	MP1A	X	-7.754

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17 MP1A	Z	4.477	3.25
18 MP1A	Mx	.004	3.25
19 MP3A	X	-8.995	1
20 MP3A	Z	5.193	1
21 MP3A	Mx	-.004	1
22 MP2A	X	-8.541	1
23 MP2A	Z	4.931	1
24 MP2A	Mx	-.004	1
25 MP4A	X	-9.288	.5
26 MP4A	Z	5.362	.5
27 MP4A	Mx	.005	.5
28 MP4A	X	-9.288	4.5
29 MP4A	Z	5.362	4.5
30 MP4A	Mx	.005	4.5
31 MP4A	X	-4.679	1.5
32 MP4A	Z	2.701	1.5
33 MP4A	Mx	-.002	1.5

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1 MP3A	X	-17.971	.25
2 MP3A	Z	0	.25
3 MP3A	Mx	.009	.25
4 MP3A	X	-17.971	5
5 MP3A	Z	0	5
6 MP3A	Mx	.009	5
7 MP3A	X	-17.971	.25
8 MP3A	Z	0	.25
9 MP3A	Mx	.009	.25
10 MP3A	X	-17.971	5
11 MP3A	Z	0	5
12 MP3A	Mx	.009	5
13 MP1A	X	-6.811	1.25
14 MP1A	Z	0	1.25
15 MP1A	Mx	.003	1.25
16 MP1A	X	-6.811	3.25
17 MP1A	Z	0	3.25
18 MP1A	Mx	.003	3.25
19 MP3A	X	-9.417	1
20 MP3A	Z	0	1
21 MP3A	Mx	-.005	1
22 MP2A	X	-8.718	1
23 MP2A	Z	0	1
24 MP2A	Mx	-.004	1
25 MP4A	X	-9.146	.5
26 MP4A	Z	0	.5
27 MP4A	Mx	.005	.5
28 MP4A	X	-9.146	4.5
29 MP4A	Z	0	4.5
30 MP4A	Mx	.005	4.5
31 MP4A	X	-4.604	1.5
32 MP4A	Z	0	1.5
33 MP4A	Mx	-.002	1.5

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
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Member Point Loads (BLC 25 : Antenna Wi (300 Deg)) (Continued)

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-17.214
2	MP3A	Z	-9.939
3	MP3A	Mx	.015
4	MP3A	X	-17.214
5	MP3A	Z	-9.939
6	MP3A	Mx	.015
7	MP3A	X	-17.214
8	MP3A	Z	-9.939
9	MP3A	Mx	.002
10	MP3A	X	-17.214
11	MP3A	Z	-9.939
12	MP3A	Mx	.002
13	MP1A	X	-7.754
14	MP1A	Z	-4.477
15	MP1A	Mx	.004
16	MP1A	X	-7.754
17	MP1A	Z	-4.477
18	MP1A	Mx	.004
19	MP3A	X	-8.995
20	MP3A	Z	-5.193
21	MP3A	Mx	-.004
22	MP2A	X	-8.541
23	MP2A	Z	-4.931
24	MP2A	Mx	-.004
25	MP4A	X	-9.288
26	MP4A	Z	-5.362
27	MP4A	Mx	.005
28	MP4A	X	-9.288
29	MP4A	Z	-5.362
30	MP4A	Mx	.005
31	MP4A	X	-4.679
32	MP4A	Z	-2.701
33	MP4A	Mx	-.002

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-11.845
2	MP3A	Z	-20.516
3	MP3A	Mx	.02
4	MP3A	X	-11.845
5	MP3A	Z	-20.516
6	MP3A	Mx	.02
7	MP3A	X	-11.845
8	MP3A	Z	-20.516
9	MP3A	Mx	-.008
10	MP3A	X	-11.845
11	MP3A	Z	-20.516
12	MP3A	Mx	-.008
13	MP1A	X	-6.62
14	MP1A	Z	-11.466
15	MP1A	Mx	.003
16	MP1A	X	-6.62
17	MP1A	Z	-11.466
18	MP1A	Mx	.003
19	MP3A	X	-6.164
20	MP3A	Z	-10.676

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
21	MP3A	Mx	-.003
22	MP2A	X	-6.076
23	MP2A	Z	-10.524
24	MP2A	Mx	-.003
25	MP4A	X	-6.941
26	MP4A	Z	-12.023
27	MP4A	Mx	.003
28	MP4A	X	-6.941
29	MP4A	Z	-12.023
30	MP4A	Mx	.003
31	MP4A	X	-3.5
32	MP4A	Z	-6.062
33	MP4A	Mx	-.001

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	0
2	MP3A	Z	-7.984
3	MP3A	Mx	.005
4	MP3A	X	0
5	MP3A	Z	-7.984
6	MP3A	Mx	.005
7	MP3A	X	0
8	MP3A	Z	-7.954
9	MP3A	Mx	-.005
10	MP3A	X	0
11	MP3A	Z	-7.954
12	MP3A	Mx	-.005
13	MP1A	X	0
14	MP1A	Z	-4.644
15	MP1A	Mx	0
16	MP1A	X	0
17	MP1A	Z	-4.644
18	MP1A	Mx	0
19	MP3A	X	0
20	MP3A	Z	-3.695
21	MP3A	Mx	0
22	MP2A	X	0
23	MP2A	Z	-3.695
24	MP2A	Mx	0
25	MP4A	X	0
26	MP4A	Z	-4.664
27	MP4A	Mx	0
28	MP4A	X	0
29	MP4A	Z	-4.664
30	MP4A	Mx	0
31	MP4A	X	0
32	MP4A	Z	-1.976
33	MP4A	Mx	0

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	3.654
2	MP3A	Z	-6.328
3	MP3A	Mx	.002
4	MP3A	X	3.654

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
5	MP3A	Z	-6.328
6	MP3A	Mx	.002
7	MP3A	X	3.642
8	MP3A	Z	-6.309
9	MP3A	Mx	-.006
10	MP3A	X	3.642
11	MP3A	Z	-6.309
12	MP3A	Mx	-.006
13	MP1A	X	1.969
14	MP1A	Z	-3.41
15	MP1A	Mx	-.000984
16	MP1A	X	1.969
17	MP1A	Z	-3.41
18	MP1A	Mx	-.000984
19	MP3A	X	1.695
20	MP3A	Z	-2.935
21	MP3A	Mx	.000848
22	MP2A	X	1.667
23	MP2A	Z	-2.887
24	MP2A	Mx	.000834
25	MP4A	X	2.06
26	MP4A	Z	-3.568
27	MP4A	Mx	-.001
28	MP4A	X	2.06
29	MP4A	Z	-3.568
30	MP4A	Mx	-.001
31	MP4A	X	.865
32	MP4A	Z	-1.498
33	MP4A	Mx	.000288

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	5.157
2	MP3A	Z	-2.977
3	MP3A	Mx	-.000594
4	MP3A	X	5.157
5	MP3A	Z	-2.977
6	MP3A	Mx	-.000594
7	MP3A	X	5.15
8	MP3A	Z	-2.973
9	MP3A	Mx	-.005
10	MP3A	X	5.15
11	MP3A	Z	-2.973
12	MP3A	Mx	-.005
13	MP1A	X	2.186
14	MP1A	Z	-1.262
15	MP1A	Mx	-.001
16	MP1A	X	2.186
17	MP1A	Z	-1.262
18	MP1A	Mx	-.001
19	MP3A	X	2.404
20	MP3A	Z	-1.388
21	MP3A	Mx	.001
22	MP2A	X	2.26
23	MP2A	Z	-1.305
24	MP2A	Mx	.001

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP4A	X	2.625
26	MP4A	Z	-1.516
27	MP4A	Mx	.001
28	MP4A	X	2.625
29	MP4A	Z	-1.516
30	MP4A	Mx	.001
31	MP4A	X	1.071
32	MP4A	Z	-.618
33	MP4A	Mx	.000357

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	5.278
2	MP3A	Z	0
3	MP3A	Mx	-.003
4	MP3A	X	5.278
5	MP3A	Z	0
6	MP3A	Mx	-.003
7	MP3A	X	5.278
8	MP3A	Z	0
9	MP3A	Mx	-.003
10	MP3A	X	5.278
11	MP3A	Z	0
12	MP3A	Mx	-.003
13	MP1A	X	1.818
14	MP1A	Z	0
15	MP1A	Mx	-.000909
16	MP1A	X	1.818
17	MP1A	Z	0
18	MP1A	Mx	-.000909
19	MP3A	X	2.47
20	MP3A	Z	0
21	MP3A	Mx	.001
22	MP2A	X	2.248
23	MP2A	Z	0
24	MP2A	Mx	.001
25	MP4A	X	2.487
26	MP4A	Z	0
27	MP4A	Mx	-.001
28	MP4A	X	2.487
29	MP4A	Z	0
30	MP4A	Mx	-.001
31	MP4A	X	.99
32	MP4A	Z	0
33	MP4A	Mx	.00033

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	5.157
2	MP3A	Z	2.977
3	MP3A	Mx	-.005
4	MP3A	X	5.157
5	MP3A	Z	2.977
6	MP3A	Mx	-.005
7	MP3A	X	5.15
8	MP3A	Z	2.973

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
9	MP3A	Mx	-.000593
10	MP3A	X	5.15
11	MP3A	Z	2.973
12	MP3A	Mx	-.000593
13	MP1A	X	2.186
14	MP1A	Z	1.262
15	MP1A	Mx	-.001
16	MP1A	X	2.186
17	MP1A	Z	1.262
18	MP1A	Mx	-.001
19	MP3A	X	2.404
20	MP3A	Z	1.388
21	MP3A	Mx	.001
22	MP2A	X	2.26
23	MP2A	Z	1.305
24	MP2A	Mx	.001
25	MP4A	X	2.625
26	MP4A	Z	1.516
27	MP4A	Mx	-.001
28	MP4A	X	2.625
29	MP4A	Z	1.516
30	MP4A	Mx	-.001
31	MP4A	X	1.071
32	MP4A	Z	.618
33	MP4A	Mx	.000357

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
1	MP3A	X	3.654
2	MP3A	Z	6.328
3	MP3A	Mx	-.006
4	MP3A	X	3.654
5	MP3A	Z	6.328
6	MP3A	Mx	-.006
7	MP3A	X	3.642
8	MP3A	Z	6.309
9	MP3A	Mx	.002
10	MP3A	X	3.642
11	MP3A	Z	6.309
12	MP3A	Mx	.002
13	MP1A	X	1.969
14	MP1A	Z	3.41
15	MP1A	Mx	-.000984
16	MP1A	X	1.969
17	MP1A	Z	3.41
18	MP1A	Mx	-.000984
19	MP3A	X	1.695
20	MP3A	Z	2.935
21	MP3A	Mx	.000848
22	MP2A	X	1.667
23	MP2A	Z	2.887
24	MP2A	Mx	.000834
25	MP4A	X	2.06
26	MP4A	Z	3.568
27	MP4A	Mx	-.001
28	MP4A	X	2.06

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP4A	Z	3.568
30	MP4A	Mx	-.001
31	MP4A	X	.865
32	MP4A	Z	1.498
33	MP4A	Mx	.000288

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	0
2	MP3A	Z	7.984
3	MP3A	Mx	-.005
4	MP3A	X	0
5	MP3A	Z	7.984
6	MP3A	Mx	-.005
7	MP3A	X	0
8	MP3A	Z	7.954
9	MP3A	Mx	.005
10	MP3A	X	0
11	MP3A	Z	7.954
12	MP3A	Mx	.005
13	MP1A	X	0
14	MP1A	Z	4.644
15	MP1A	Mx	0
16	MP1A	X	0
17	MP1A	Z	4.644
18	MP1A	Mx	0
19	MP3A	X	0
20	MP3A	Z	3.695
21	MP3A	Mx	0
22	MP2A	X	0
23	MP2A	Z	3.695
24	MP2A	Mx	0
25	MP4A	X	0
26	MP4A	Z	4.664
27	MP4A	Mx	0
28	MP4A	X	0
29	MP4A	Z	4.664
30	MP4A	Mx	0
31	MP4A	X	0
32	MP4A	Z	1.976
33	MP4A	Mx	0

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-3.654
2	MP3A	Z	6.328
3	MP3A	Mx	-.002
4	MP3A	X	-3.654
5	MP3A	Z	6.328
6	MP3A	Mx	-.002
7	MP3A	X	-3.642
8	MP3A	Z	6.309
9	MP3A	Mx	.006
10	MP3A	X	-3.642
11	MP3A	Z	6.309
12	MP3A	Mx	.006

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
13	MP1A	X	-1.969
14	MP1A	Z	3.41
15	MP1A	Mx	.000984
16	MP1A	X	-1.969
17	MP1A	Z	3.41
18	MP1A	Mx	.000984
19	MP3A	X	-1.695
20	MP3A	Z	2.935
21	MP3A	Mx	-.000848
22	MP2A	X	-1.667
23	MP2A	Z	2.887
24	MP2A	Mx	-.000834
25	MP4A	X	-2.06
26	MP4A	Z	3.568
27	MP4A	Mx	.001
28	MP4A	X	-2.06
29	MP4A	Z	3.568
30	MP4A	Mx	.001
31	MP4A	X	-.865
32	MP4A	Z	1.498
33	MP4A	Mx	-.000288

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
1	MP3A	X	-5.157
2	MP3A	Z	2.977
3	MP3A	Mx	.000594
4	MP3A	X	-5.157
5	MP3A	Z	2.977
6	MP3A	Mx	.000594
7	MP3A	X	-5.15
8	MP3A	Z	2.973
9	MP3A	Mx	.005
10	MP3A	X	-5.15
11	MP3A	Z	2.973
12	MP3A	Mx	.005
13	MP1A	X	-2.186
14	MP1A	Z	1.262
15	MP1A	Mx	.001
16	MP1A	X	-2.186
17	MP1A	Z	1.262
18	MP1A	Mx	.001
19	MP3A	X	-2.404
20	MP3A	Z	1.388
21	MP3A	Mx	-.001
22	MP2A	X	-2.26
23	MP2A	Z	1.305
24	MP2A	Mx	-.001
25	MP4A	X	-2.625
26	MP4A	Z	1.516
27	MP4A	Mx	.001
28	MP4A	X	-2.625
29	MP4A	Z	1.516
30	MP4A	Mx	.001
31	MP4A	X	-1.071
32	MP4A	Z	.618

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP4A	Mx	- .000357

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-5.278
2	MP3A	Z	0
3	MP3A	Mx	.003
4	MP3A	X	-5.278
5	MP3A	Z	0
6	MP3A	Mx	.003
7	MP3A	X	-5.278
8	MP3A	Z	0
9	MP3A	Mx	.003
10	MP3A	X	-5.278
11	MP3A	Z	0
12	MP3A	Mx	.003
13	MP1A	X	-1.818
14	MP1A	Z	0
15	MP1A	Mx	.000909
16	MP1A	X	-1.818
17	MP1A	Z	0
18	MP1A	Mx	.000909
19	MP3A	X	-2.47
20	MP3A	Z	0
21	MP3A	Mx	-.001
22	MP2A	X	-2.248
23	MP2A	Z	0
24	MP2A	Mx	-.001
25	MP4A	X	-2.487
26	MP4A	Z	0
27	MP4A	Mx	.001
28	MP4A	X	-2.487
29	MP4A	Z	0
30	MP4A	Mx	.001
31	MP4A	X	-.99
32	MP4A	Z	0
33	MP4A	Mx	- .00033

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-5.157
2	MP3A	Z	-2.977
3	MP3A	Mx	.005
4	MP3A	X	-5.157
5	MP3A	Z	-2.977
6	MP3A	Mx	.005
7	MP3A	X	-5.15
8	MP3A	Z	-2.973
9	MP3A	Mx	.000593
10	MP3A	X	-5.15
11	MP3A	Z	-2.973
12	MP3A	Mx	.000593
13	MP1A	X	-2.186
14	MP1A	Z	-1.262
15	MP1A	Mx	.001
16	MP1A	X	-2.186

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP1A	Z	-1.262
18	MP1A	Mx	.001
19	MP3A	X	-2.404
20	MP3A	Z	-1.388
21	MP3A	Mx	-.001
22	MP2A	X	-2.26
23	MP2A	Z	-1.305
24	MP2A	Mx	-.001
25	MP4A	X	-2.625
26	MP4A	Z	-1.516
27	MP4A	Mx	.001
28	MP4A	X	-2.625
29	MP4A	Z	-1.516
30	MP4A	Mx	.001
31	MP4A	X	-1.071
32	MP4A	Z	-.618
33	MP4A	Mx	-.000357

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

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP3A	X	-3.654
2	MP3A	Z	-6.328
3	MP3A	Mx	.006
4	MP3A	X	-3.654
5	MP3A	Z	-6.328
6	MP3A	Mx	.006
7	MP3A	X	-3.642
8	MP3A	Z	-6.309
9	MP3A	Mx	-.002
10	MP3A	X	-3.642
11	MP3A	Z	-6.309
12	MP3A	Mx	-.002
13	MP1A	X	-1.969
14	MP1A	Z	-3.41
15	MP1A	Mx	.000984
16	MP1A	X	-1.969
17	MP1A	Z	-3.41
18	MP1A	Mx	.000984
19	MP3A	X	-1.695
20	MP3A	Z	-2.935
21	MP3A	Mx	-.000848
22	MP2A	X	-1.667
23	MP2A	Z	-2.887
24	MP2A	Mx	-.000834
25	MP4A	X	-2.06
26	MP4A	Z	-3.568
27	MP4A	Mx	.001
28	MP4A	X	-2.06
29	MP4A	Z	-3.568
30	MP4A	Mx	.001
31	MP4A	X	-.865
32	MP4A	Z	-1.498
33	MP4A	Mx	-.000288

Member Point Loads (BLC 77 : Lm1)

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
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Member Point Loads (BLC 77 : Lm1) (Continued)

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1 M1	Y	-500	%33

Member Point Loads (BLC 78 : Lm2)

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1 M1	Y	-500	%100

Member Point Loads (BLC 79 : Lv1)

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

Member Point Loads (BLC 80 : Lv2)

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

Member 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	-10.766	-10.766	0	%100
2 M2	Y	-10.766	-10.766	0	%100
3 MP4A	Y	-8.374	-8.374	0	%100
4 M5	Y	-8.374	-8.374	0	%100
5 M6	Y	-8.374	-8.374	0	%100
6 M7	Y	-8.374	-8.374	0	%100
7 M9	Y	-8.374	-8.374	0	%100
8 M30	Y	-4.509	-4.509	0	%100
9 M31	Y	-4.509	-4.509	0	%100
10 M32	Y	-4.509	-4.509	0	%100
11 M33	Y	-4.509	-4.509	0	%100
12 MP1A	Y	-8.374	-8.374	0	%100
13 RCP	Y	-9.308	-9.308	0	%100
14 M43	Y	-9.308	-9.308	0	%100
15 M44	Y	-9.308	-9.308	0	%100
16 M45	Y	-9.308	-9.308	0	%100
17 M46	Y	-9.308	-9.308	0	%100
18 M47	Y	-9.308	-9.308	0	%100
19 M50	Y	-9.404	-9.404	0	%100
20 M53	Y	-9.308	-9.308	0	%100
21 M54	Y	-9.308	-9.308	0	%100
22 M55	Y	-7.395	-7.395	0	%100
23 MP2A	Y	-8.374	-8.374	0	%100
24 MP3A	Y	-8.374	-8.374	0	%100
25 M41	Y	-15.889	-15.889	0	%100
26 M42	Y	-15.889	-15.889	0	%100
27 M48A	Y	-9.404	-9.404	0	%100
28 M49A	Y	-10.766	-10.766	0	%100
29 M50A	Y	-10.766	-10.766	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	-12.524	-12.524	0	%100
3 M2	X	0	0	0	%100
4 M2	Z	-12.524	-12.524	0	%100
5 MP4A	X	0	0	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
6	MP4A	Z	-7.006	-7.006	0 %100
7	M5	X	0	0	0 %100
8	M5	Z	-7.006	-7.006	0 %100
9	M6	X	0	0	0 %100
10	M6	Z	-6.227	-6.227	0 %100
11	M7	X	0	0	0 %100
12	M7	Z	-7.006	-7.006	0 %100
13	M9	X	0	0	0 %100
14	M9	Z	-7.006	-7.006	0 %100
15	M30	X	0	0	0 %100
16	M30	Z	0	0	0 %100
17	M31	X	0	0	0 %100
18	M31	Z	0	0	0 %100
19	M32	X	0	0	0 %100
20	M32	Z	0	0	0 %100
21	M33	X	0	0	0 %100
22	M33	Z	0	0	0 %100
23	MP1A	X	0	0	0 %100
24	MP1A	Z	-7.139	-7.139	0 %100
25	RCP	X	0	0	0 %100
26	RCP	Z	-1.681	-1.681	0 %100
27	M43	X	0	0	0 %100
28	M43	Z	-7.472	-7.472	0 %100
29	M44	X	0	0	0 %100
30	M44	Z	-1.681	-1.681	0 %100
31	M45	X	0	0	0 %100
32	M45	Z	-1.681	-1.681	0 %100
33	M46	X	0	0	0 %100
34	M46	Z	-7.472	-7.472	0 %100
35	M47	X	0	0	0 %100
36	M47	Z	-1.681	-1.681	0 %100
37	M50	X	0	0	0 %100
38	M50	Z	-7.312	-7.312	0 %100
39	M53	X	0	0	0 %100
40	M53	Z	-8.6	-8.6	0 %100
41	M54	X	0	0	0 %100
42	M54	Z	-8.6	-8.6	0 %100
43	M55	X	0	0	0 %100
44	M55	Z	-.5	-.5	0 %100
45	MP2A	X	0	0	0 %100
46	MP2A	Z	-7.139	-7.139	0 %100
47	MP3A	X	0	0	0 %100
48	MP3A	Z	-7.139	-7.139	0 %100
49	M41	X	0	0	0 %100
50	M41	Z	0	0	0 %100
51	M42	X	0	0	0 %100
52	M42	Z	0	0	0 %100
53	M48A	X	0	0	0 %100
54	M48A	Z	-8.641	-8.641	0 %100
55	M49A	X	0	0	0 %100
56	M49A	Z	-11.694	-11.694	0 %100
57	M50A	X	0	0	0 %100
58	M50A	Z	-11.694	-11.694	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,%]
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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	4.696	4.696	0 %100
2	M1	Z	-8.134	-8.134	0 %100
3	M2	X	4.696	4.696	0 %100
4	M2	Z	-8.134	-8.134	0 %100
5	MP4A	X	3.503	3.503	0 %100
6	MP4A	Z	-6.068	-6.068	0 %100
7	M5	X	3.503	3.503	0 %100
8	M5	Z	-6.068	-6.068	0 %100
9	M6	X	3.114	3.114	0 %100
10	M6	Z	-5.393	-5.393	0 %100
11	M7	X	3.503	3.503	0 %100
12	M7	Z	-6.068	-6.068	0 %100
13	M9	X	3.503	3.503	0 %100
14	M9	Z	-6.068	-6.068	0 %100
15	M30	X	.143	.143	0 %100
16	M30	Z	-.247	-.247	0 %100
17	M31	X	.143	.143	0 %100
18	M31	Z	-.247	-.247	0 %100
19	M32	X	.143	.143	0 %100
20	M32	Z	-.247	-.247	0 %100
21	M33	X	.143	.143	0 %100
22	M33	Z	-.247	-.247	0 %100
23	MP1A	X	3.569	3.569	0 %100
24	MP1A	Z	-6.182	-6.182	0 %100
25	RCP	X	.000783	.000783	0 %100
26	RCP	Z	-.001	-.001	0 %100
27	M43	X	2.802	2.802	0 %100
28	M43	Z	-4.854	-4.854	0 %100
29	M44	X	2.612	2.612	0 %100
30	M44	Z	-4.524	-4.524	0 %100
31	M45	X	.000783	.000783	0 %100
32	M45	Z	-.001	-.001	0 %100
33	M46	X	2.802	2.802	0 %100
34	M46	Z	-4.854	-4.854	0 %100
35	M47	X	2.612	2.612	0 %100
36	M47	Z	-4.524	-4.524	0 %100
37	M50	X	3.656	3.656	0 %100
38	M50	Z	-6.333	-6.333	0 %100
39	M53	X	4.3	4.3	0 %100
40	M53	Z	-7.447	-7.447	0 %100
41	M54	X	4.3	4.3	0 %100
42	M54	Z	-7.447	-7.447	0 %100
43	M55	X	.14	.14	0 %100
44	M55	Z	-.242	-.242	0 %100
45	MP2A	X	3.569	3.569	0 %100
46	MP2A	Z	-6.182	-6.182	0 %100
47	MP3A	X	3.569	3.569	0 %100
48	MP3A	Z	-6.182	-6.182	0 %100
49	M41	X	.188	.188	0 %100
50	M41	Z	-.325	-.325	0 %100
51	M42	X	.188	.188	0 %100
52	M42	Z	-.325	-.325	0 %100
53	M48A	X	3.241	3.241	0 %100
54	M48A	Z	-5.613	-5.613	0 %100
55	M49A	X	4.141	4.141	0 %100
56	M49A	Z	-7.172	-7.172	0 %100
57	M50A	X	6.146	6.146	0 %100

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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,%]
58	M50A	Z	-10.645	-10.645	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	2.711	2.711	0 %100
2	M1	Z	-1.565	-1.565	0 %100
3	M2	X	2.711	2.711	0 %100
4	M2	Z	-1.565	-1.565	0 %100
5	MP4A	X	6.068	6.068	0 %100
6	MP4A	Z	-3.503	-3.503	0 %100
7	M5	X	6.068	6.068	0 %100
8	M5	Z	-3.503	-3.503	0 %100
9	M6	X	5.393	5.393	0 %100
10	M6	Z	-3.114	-3.114	0 %100
11	M7	X	6.068	6.068	0 %100
12	M7	Z	-3.503	-3.503	0 %100
13	M9	X	6.068	6.068	0 %100
14	M9	Z	-3.503	-3.503	0 %100
15	M30	X	.741	.741	0 %100
16	M30	Z	-.428	-.428	0 %100
17	M31	X	.741	.741	0 %100
18	M31	Z	-.428	-.428	0 %100
19	M32	X	.741	.741	0 %100
20	M32	Z	-.428	-.428	0 %100
21	M33	X	.741	.741	0 %100
22	M33	Z	-.428	-.428	0 %100
23	MP1A	X	6.182	6.182	0 %100
24	MP1A	Z	-3.569	-3.569	0 %100
25	RCP	X	1.614	1.614	0 %100
26	RCP	Z	-.932	-.932	0 %100
27	M43	X	1.618	1.618	0 %100
28	M43	Z	-.934	-.934	0 %100
29	M44	X	6.136	6.136	0 %100
30	M44	Z	-3.543	-3.543	0 %100
31	M45	X	1.614	1.614	0 %100
32	M45	Z	-.932	-.932	0 %100
33	M46	X	1.618	1.618	0 %100
34	M46	Z	-.934	-.934	0 %100
35	M47	X	6.136	6.136	0 %100
36	M47	Z	-3.543	-3.543	0 %100
37	M50	X	6.333	6.333	0 %100
38	M50	Z	-3.656	-3.656	0 %100
39	M53	X	7.447	7.447	0 %100
40	M53	Z	-4.3	-4.3	0 %100
41	M54	X	7.447	7.447	0 %100
42	M54	Z	-4.3	-4.3	0 %100
43	M55	X	2.282	2.282	0 %100
44	M55	Z	-1.318	-1.318	0 %100
45	MP2A	X	6.182	6.182	0 %100
46	MP2A	Z	-3.569	-3.569	0 %100
47	MP3A	X	6.182	6.182	0 %100
48	MP3A	Z	-3.569	-3.569	0 %100
49	M41	X	.976	.976	0 %100
50	M41	Z	-.564	-.564	0 %100
51	M42	X	.976	.976	0 %100
52	M42	Z	-.564	-.564	0 %100

Company : Maser Consulting
 Designer : NL
 Job Number : 21781042A
 Model Name : Mount Fix

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
53	M48A	X	1.871	1.871	0 %100
54	M48A	Z	-1.08	-1.08	0 %100
55	M49A	X	4.733	4.733	0 %100
56	M49A	Z	-2.733	-2.733	0 %100
57	M50A	X	8.206	8.206	0 %100
58	M50A	Z	-4.738	-4.738	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	0	0	0 %100
2	M1	Z	0	0	0 %100
3	M2	X	0	0	0 %100
4	M2	Z	0	0	0 %100
5	MP4A	X	7.006	7.006	0 %100
6	MP4A	Z	0	0	0 %100
7	M5	X	7.006	7.006	0 %100
8	M5	Z	0	0	0 %100
9	M6	X	6.227	6.227	0 %100
10	M6	Z	0	0	0 %100
11	M7	X	7.006	7.006	0 %100
12	M7	Z	0	0	0 %100
13	M9	X	7.006	7.006	0 %100
14	M9	Z	0	0	0 %100
15	M30	X	1.141	1.141	0 %100
16	M30	Z	0	0	0 %100
17	M31	X	1.141	1.141	0 %100
18	M31	Z	0	0	0 %100
19	M32	X	1.141	1.141	0 %100
20	M32	Z	0	0	0 %100
21	M33	X	1.141	1.141	0 %100
22	M33	Z	0	0	0 %100
23	MP1A	X	7.139	7.139	0 %100
24	MP1A	Z	0	0	0 %100
25	RCP	X	5.406	5.406	0 %100
26	RCP	Z	0	0	0 %100
27	M43	X	0	0	0 %100
28	M43	Z	0	0	0 %100
29	M44	X	5.406	5.406	0 %100
30	M44	Z	0	0	0 %100
31	M45	X	5.406	5.406	0 %100
32	M45	Z	0	0	0 %100
33	M46	X	0	0	0 %100
34	M46	Z	0	0	0 %100
35	M47	X	5.406	5.406	0 %100
36	M47	Z	0	0	0 %100
37	M50	X	7.312	7.312	0 %100
38	M50	Z	0	0	0 %100
39	M53	X	8.6	8.6	0 %100
40	M53	Z	0	0	0 %100
41	M54	X	8.6	8.6	0 %100
42	M54	Z	0	0	0 %100
43	M55	X	5.211	5.211	0 %100
44	M55	Z	0	0	0 %100
45	MP2A	X	7.139	7.139	0 %100
46	MP2A	Z	0	0	0 %100
47	MP3A	X	7.139	7.139	0 %100

Company : Maser Consulting
 Designer : NL
 Job Number : 21781042A
 Model Name : Mount Fix

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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,%]
48	MP3A	Z	0	0	%100
49	M41	X	1.503	1.503	0
50	M41	Z	0	0	%100
51	M42	X	1.503	1.503	0
52	M42	Z	0	0	%100
53	M48A	X	0	0	%100
54	M48A	Z	0	0	%100
55	M49A	X	6.063	6.063	0
56	M49A	Z	0	0	%100
57	M50A	X	6.063	6.063	0
58	M50A	Z	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	2.711	2.711	0
2	M1	Z	1.565	1.565	0
3	M2	X	2.711	2.711	0
4	M2	Z	1.565	1.565	0
5	MP4A	X	6.068	6.068	0
6	MP4A	Z	3.503	3.503	0
7	M5	X	6.068	6.068	0
8	M5	Z	3.503	3.503	0
9	M6	X	5.393	5.393	0
10	M6	Z	3.114	3.114	0
11	M7	X	6.068	6.068	0
12	M7	Z	3.503	3.503	0
13	M9	X	6.068	6.068	0
14	M9	Z	3.503	3.503	0
15	M30	X	.741	.741	0
16	M30	Z	.428	.428	0
17	M31	X	.741	.741	0
18	M31	Z	.428	.428	0
19	M32	X	.741	.741	0
20	M32	Z	.428	.428	0
21	M33	X	.741	.741	0
22	M33	Z	.428	.428	0
23	MP1A	X	6.182	6.182	0
24	MP1A	Z	3.569	3.569	0
25	RCP	X	6.136	6.136	0
26	RCP	Z	3.543	3.543	0
27	M43	X	1.618	1.618	0
28	M43	Z	.934	.934	0
29	M44	X	1.614	1.614	0
30	M44	Z	.932	.932	0
31	M45	X	6.136	6.136	0
32	M45	Z	3.543	3.543	0
33	M46	X	1.618	1.618	0
34	M46	Z	.934	.934	0
35	M47	X	1.614	1.614	0
36	M47	Z	.932	.932	0
37	M50	X	6.333	6.333	0
38	M50	Z	3.656	3.656	0
39	M53	X	7.447	7.447	0
40	M53	Z	4.3	4.3	0
41	M54	X	7.447	7.447	0
42	M54	Z	4.3	4.3	0

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft.%]	End Location[ft.%]
43	M55	X	4.703	4.703	0 %100
44	M55	Z	2.715	2.715	0 %100
45	MP2A	X	6.182	6.182	0 %100
46	MP2A	Z	3.569	3.569	0 %100
47	MP3A	X	6.182	6.182	0 %100
48	MP3A	Z	3.569	3.569	0 %100
49	M41	X	.976	.976	0 %100
50	M41	Z	.564	.564	0 %100
51	M42	X	.976	.976	0 %100
52	M42	Z	.564	.564	0 %100
53	M48A	X	1.871	1.871	0 %100
54	M48A	Z	1.08	1.08	0 %100
55	M49A	X	8.206	8.206	0 %100
56	M49A	Z	4.738	4.738	0 %100
57	M50A	X	4.733	4.733	0 %100
58	M50A	Z	2.733	2.733	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	4.696	4.696	0 %100
2	M1	Z	8.134	8.134	0 %100
3	M2	X	4.696	4.696	0 %100
4	M2	Z	8.134	8.134	0 %100
5	MP4A	X	3.503	3.503	0 %100
6	MP4A	Z	6.068	6.068	0 %100
7	M5	X	3.503	3.503	0 %100
8	M5	Z	6.068	6.068	0 %100
9	M6	X	3.114	3.114	0 %100
10	M6	Z	5.393	5.393	0 %100
11	M7	X	3.503	3.503	0 %100
12	M7	Z	6.068	6.068	0 %100
13	M9	X	3.503	3.503	0 %100
14	M9	Z	6.068	6.068	0 %100
15	M30	X	.143	.143	0 %100
16	M30	Z	.247	.247	0 %100
17	M31	X	.143	.143	0 %100
18	M31	Z	.247	.247	0 %100
19	M32	X	.143	.143	0 %100
20	M32	Z	.247	.247	0 %100
21	M33	X	.143	.143	0 %100
22	M33	Z	.247	.247	0 %100
23	MP1A	X	3.569	3.569	0 %100
24	MP1A	Z	6.182	6.182	0 %100
25	RCP	X	2.612	2.612	0 %100
26	RCP	Z	4.524	4.524	0 %100
27	M43	X	2.802	2.802	0 %100
28	M43	Z	4.854	4.854	0 %100
29	M44	X	.000783	.000783	0 %100
30	M44	Z	.001	.001	0 %100
31	M45	X	2.612	2.612	0 %100
32	M45	Z	4.524	4.524	0 %100
33	M46	X	2.802	2.802	0 %100
34	M46	Z	4.854	4.854	0 %100
35	M47	X	.000783	.000783	0 %100
36	M47	Z	.001	.001	0 %100
37	M50	X	3.656	3.656	0 %100

Company : Maser Consulting
 Designer : NL
 Job Number : 21781042A
 Model Name : Mount Fix

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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,%]
38	M50	Z	6.333	6.333	0 %100
39	M53	X	4.3	4.3	0 %100
40	M53	Z	7.447	7.447	0 %100
41	M54	X	4.3	4.3	0 %100
42	M54	Z	7.447	7.447	0 %100
43	M55	X	1.538	1.538	0 %100
44	M55	Z	2.663	2.663	0 %100
45	MP2A	X	3.569	3.569	0 %100
46	MP2A	Z	6.182	6.182	0 %100
47	MP3A	X	3.569	3.569	0 %100
48	MP3A	Z	6.182	6.182	0 %100
49	M41	X	.188	.188	0 %100
50	M41	Z	.325	.325	0 %100
51	M42	X	.188	.188	0 %100
52	M42	Z	.325	.325	0 %100
53	M48A	X	3.241	3.241	0 %100
54	M48A	Z	5.613	5.613	0 %100
55	M49A	X	6.146	6.146	0 %100
56	M49A	Z	10.645	10.645	0 %100
57	M50A	X	4.141	4.141	0 %100
58	M50A	Z	7.172	7.172	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	12.524	12.524	0 %100
3	M2	X	0	0	0 %100
4	M2	Z	12.524	12.524	0 %100
5	MP4A	X	0	0	0 %100
6	MP4A	Z	7.006	7.006	0 %100
7	M5	X	0	0	0 %100
8	M5	Z	7.006	7.006	0 %100
9	M6	X	0	0	0 %100
10	M6	Z	6.227	6.227	0 %100
11	M7	X	0	0	0 %100
12	M7	Z	7.006	7.006	0 %100
13	M9	X	0	0	0 %100
14	M9	Z	7.006	7.006	0 %100
15	M30	X	0	0	0 %100
16	M30	Z	0	0	0 %100
17	M31	X	0	0	0 %100
18	M31	Z	0	0	0 %100
19	M32	X	0	0	0 %100
20	M32	Z	0	0	0 %100
21	M33	X	0	0	0 %100
22	M33	Z	0	0	0 %100
23	MP1A	X	0	0	0 %100
24	MP1A	Z	7.139	7.139	0 %100
25	RCP	X	0	0	0 %100
26	RCP	Z	1.681	1.681	0 %100
27	M43	X	0	0	0 %100
28	M43	Z	7.472	7.472	0 %100
29	M44	X	0	0	0 %100
30	M44	Z	1.681	1.681	0 %100
31	M45	X	0	0	0 %100
32	M45	Z	1.681	1.681	0 %100

Company : Maser Consulting
 Designer : NL
 Job Number : 21781042A
 Model Name : Mount Fix

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft.%]	End Location[ft.%]
33	M46	X	0	0	%100
34	M46	Z	7.472	7.472	%100
35	M47	X	0	0	%100
36	M47	Z	1.681	1.681	%100
37	M50	X	0	0	%100
38	M50	Z	7.312	7.312	%100
39	M53	X	0	0	%100
40	M53	Z	8.6	8.6	%100
41	M54	X	0	0	%100
42	M54	Z	8.6	8.6	%100
43	M55	X	0	0	%100
44	M55	Z	.5	.5	%100
45	MP2A	X	0	0	%100
46	MP2A	Z	7.139	7.139	%100
47	MP3A	X	0	0	%100
48	MP3A	Z	7.139	7.139	%100
49	M41	X	0	0	%100
50	M41	Z	0	0	%100
51	M42	X	0	0	%100
52	M42	Z	0	0	%100
53	M48A	X	0	0	%100
54	M48A	Z	8.641	8.641	%100
55	M49A	X	0	0	%100
56	M49A	Z	11.694	11.694	%100
57	M50A	X	0	0	%100
58	M50A	Z	11.694	11.694	%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	-4.696	-4.696	0 %100
2	M1	Z	8.134	8.134	0 %100
3	M2	X	-4.696	-4.696	0 %100
4	M2	Z	8.134	8.134	0 %100
5	MP4A	X	-3.503	-3.503	0 %100
6	MP4A	Z	6.068	6.068	0 %100
7	M5	X	-3.503	-3.503	0 %100
8	M5	Z	6.068	6.068	0 %100
9	M6	X	-3.114	-3.114	0 %100
10	M6	Z	5.393	5.393	0 %100
11	M7	X	-3.503	-3.503	0 %100
12	M7	Z	6.068	6.068	0 %100
13	M9	X	-3.503	-3.503	0 %100
14	M9	Z	6.068	6.068	0 %100
15	M30	X	-.143	-.143	0 %100
16	M30	Z	.247	.247	0 %100
17	M31	X	-.143	-.143	0 %100
18	M31	Z	.247	.247	0 %100
19	M32	X	-.143	-.143	0 %100
20	M32	Z	.247	.247	0 %100
21	M33	X	-.143	-.143	0 %100
22	M33	Z	.247	.247	0 %100
23	MP1A	X	-3.569	-3.569	0 %100
24	MP1A	Z	6.182	6.182	0 %100
25	RCP	X	-.000783	-.000783	0 %100
26	RCP	Z	.001	.001	0 %100
27	M43	X	-2.802	-2.802	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,%]
28	M43	Z	4.854	4.854	0 %100
29	M44	X	-2.612	-2.612	0 %100
30	M44	Z	4.524	4.524	0 %100
31	M45	X	-.000783	-.000783	0 %100
32	M45	Z	.001	.001	0 %100
33	M46	X	-2.802	-2.802	0 %100
34	M46	Z	4.854	4.854	0 %100
35	M47	X	-2.612	-2.612	0 %100
36	M47	Z	4.524	4.524	0 %100
37	M50	X	-3.656	-3.656	0 %100
38	M50	Z	6.333	6.333	0 %100
39	M53	X	-4.3	-4.3	0 %100
40	M53	Z	7.447	7.447	0 %100
41	M54	X	-4.3	-4.3	0 %100
42	M54	Z	7.447	7.447	0 %100
43	M55	X	-.14	-.14	0 %100
44	M55	Z	.242	.242	0 %100
45	MP2A	X	-3.569	-3.569	0 %100
46	MP2A	Z	6.182	6.182	0 %100
47	MP3A	X	-3.569	-3.569	0 %100
48	MP3A	Z	6.182	6.182	0 %100
49	M41	X	-.188	-.188	0 %100
50	M41	Z	.325	.325	0 %100
51	M42	X	-.188	-.188	0 %100
52	M42	Z	.325	.325	0 %100
53	M48A	X	-3.241	-3.241	0 %100
54	M48A	Z	5.613	5.613	0 %100
55	M49A	X	-4.141	-4.141	0 %100
56	M49A	Z	7.172	7.172	0 %100
57	M50A	X	-6.146	-6.146	0 %100
58	M50A	Z	10.645	10.645	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	-2.711	-2.711	0 %100
2	M1	Z	1.565	1.565	0 %100
3	M2	X	-2.711	-2.711	0 %100
4	M2	Z	1.565	1.565	0 %100
5	MP4A	X	-6.068	-6.068	0 %100
6	MP4A	Z	3.503	3.503	0 %100
7	M5	X	-6.068	-6.068	0 %100
8	M5	Z	3.503	3.503	0 %100
9	M6	X	-5.393	-5.393	0 %100
10	M6	Z	3.114	3.114	0 %100
11	M7	X	-6.068	-6.068	0 %100
12	M7	Z	3.503	3.503	0 %100
13	M9	X	-6.068	-6.068	0 %100
14	M9	Z	3.503	3.503	0 %100
15	M30	X	-.741	-.741	0 %100
16	M30	Z	.428	.428	0 %100
17	M31	X	-.741	-.741	0 %100
18	M31	Z	.428	.428	0 %100
19	M32	X	-.741	-.741	0 %100
20	M32	Z	.428	.428	0 %100
21	M33	X	-.741	-.741	0 %100
22	M33	Z	.428	.428	0 %100

Company : Maser Consulting
 Designer : NL
 Job Number : 21781042A
 Model Name : Mount Fix

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft.%]	End Location[ft.%]
23	MP1A	X	-6.182	-6.182	0 %100
24	MP1A	Z	3.569	3.569	0 %100
25	RCP	X	-1.614	-1.614	0 %100
26	RCP	Z	.932	.932	0 %100
27	M43	X	-1.618	-1.618	0 %100
28	M43	Z	.934	.934	0 %100
29	M44	X	-6.136	-6.136	0 %100
30	M44	Z	3.543	3.543	0 %100
31	M45	X	-1.614	-1.614	0 %100
32	M45	Z	.932	.932	0 %100
33	M46	X	-1.618	-1.618	0 %100
34	M46	Z	.934	.934	0 %100
35	M47	X	-6.136	-6.136	0 %100
36	M47	Z	3.543	3.543	0 %100
37	M50	X	-6.333	-6.333	0 %100
38	M50	Z	3.656	3.656	0 %100
39	M53	X	-7.447	-7.447	0 %100
40	M53	Z	4.3	4.3	0 %100
41	M54	X	-7.447	-7.447	0 %100
42	M54	Z	4.3	4.3	0 %100
43	M55	X	-2.282	-2.282	0 %100
44	M55	Z	1.318	1.318	0 %100
45	MP2A	X	-6.182	-6.182	0 %100
46	MP2A	Z	3.569	3.569	0 %100
47	MP3A	X	-6.182	-6.182	0 %100
48	MP3A	Z	3.569	3.569	0 %100
49	M41	X	-.976	-.976	0 %100
50	M41	Z	.564	.564	0 %100
51	M42	X	-.976	-.976	0 %100
52	M42	Z	.564	.564	0 %100
53	M48A	X	-1.871	-1.871	0 %100
54	M48A	Z	1.08	1.08	0 %100
55	M49A	X	-4.733	-4.733	0 %100
56	M49A	Z	2.733	2.733	0 %100
57	M50A	X	-8.206	-8.206	0 %100
58	M50A	Z	4.738	4.738	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	0	0	0 %100
2	M1	Z	0	0	0 %100
3	M2	X	0	0	0 %100
4	M2	Z	0	0	0 %100
5	MP4A	X	-7.006	-7.006	0 %100
6	MP4A	Z	0	0	0 %100
7	M5	X	-7.006	-7.006	0 %100
8	M5	Z	0	0	0 %100
9	M6	X	-6.227	-6.227	0 %100
10	M6	Z	0	0	0 %100
11	M7	X	-7.006	-7.006	0 %100
12	M7	Z	0	0	0 %100
13	M9	X	-7.006	-7.006	0 %100
14	M9	Z	0	0	0 %100
15	M30	X	-1.141	-1.141	0 %100
16	M30	Z	0	0	0 %100
17	M31	X	-1.141	-1.141	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft.%]	End Location[ft.%]
18	M31	Z	0	0	%100
19	M32	X	-1.141	-1.141	0
20	M32	Z	0	0	%100
21	M33	X	-1.141	-1.141	0
22	M33	Z	0	0	%100
23	MP1A	X	-7.139	-7.139	0
24	MP1A	Z	0	0	%100
25	RCP	X	-5.406	-5.406	0
26	RCP	Z	0	0	%100
27	M43	X	0	0	%100
28	M43	Z	0	0	%100
29	M44	X	-5.406	-5.406	0
30	M44	Z	0	0	%100
31	M45	X	-5.406	-5.406	0
32	M45	Z	0	0	%100
33	M46	X	0	0	%100
34	M46	Z	0	0	%100
35	M47	X	-5.406	-5.406	0
36	M47	Z	0	0	%100
37	M50	X	-7.312	-7.312	0
38	M50	Z	0	0	%100
39	M53	X	-8.6	-8.6	0
40	M53	Z	0	0	%100
41	M54	X	-8.6	-8.6	0
42	M54	Z	0	0	%100
43	M55	X	-5.211	-5.211	0
44	M55	Z	0	0	%100
45	MP2A	X	-7.139	-7.139	0
46	MP2A	Z	0	0	%100
47	MP3A	X	-7.139	-7.139	0
48	MP3A	Z	0	0	%100
49	M41	X	-1.503	-1.503	0
50	M41	Z	0	0	%100
51	M42	X	-1.503	-1.503	0
52	M42	Z	0	0	%100
53	M48A	X	0	0	%100
54	M48A	Z	0	0	%100
55	M49A	X	-6.063	-6.063	0
56	M49A	Z	0	0	%100
57	M50A	X	-6.063	-6.063	0
58	M50A	Z	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	-2.711	-2.711	0
2	M1	Z	-1.565	-1.565	0
3	M2	X	-2.711	-2.711	0
4	M2	Z	-1.565	-1.565	0
5	MP4A	X	-6.068	-6.068	0
6	MP4A	Z	-3.503	-3.503	0
7	M5	X	-6.068	-6.068	0
8	M5	Z	-3.503	-3.503	0
9	M6	X	-5.393	-5.393	0
10	M6	Z	-3.114	-3.114	0
11	M7	X	-6.068	-6.068	0
12	M7	Z	-3.503	-3.503	0

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
13	M9	X	-6.068	-6.068	0 %100
14	M9	Z	-3.503	-3.503	0 %100
15	M30	X	.741	.741	0 %100
16	M30	Z	-.428	-.428	0 %100
17	M31	X	-.741	-.741	0 %100
18	M31	Z	-.428	-.428	0 %100
19	M32	X	-.741	-.741	0 %100
20	M32	Z	-.428	-.428	0 %100
21	M33	X	-.741	-.741	0 %100
22	M33	Z	-.428	-.428	0 %100
23	MP1A	X	-6.182	-6.182	0 %100
24	MP1A	Z	-3.569	-3.569	0 %100
25	RCP	X	-6.136	-6.136	0 %100
26	RCP	Z	-3.543	-3.543	0 %100
27	M43	X	-1.618	-1.618	0 %100
28	M43	Z	-.934	-.934	0 %100
29	M44	X	-1.614	-1.614	0 %100
30	M44	Z	-.932	-.932	0 %100
31	M45	X	-6.136	-6.136	0 %100
32	M45	Z	-3.543	-3.543	0 %100
33	M46	X	-1.618	-1.618	0 %100
34	M46	Z	-.934	-.934	0 %100
35	M47	X	-1.614	-1.614	0 %100
36	M47	Z	-.932	-.932	0 %100
37	M50	X	-6.333	-6.333	0 %100
38	M50	Z	-3.656	-3.656	0 %100
39	M53	X	-7.447	-7.447	0 %100
40	M53	Z	-4.3	-4.3	0 %100
41	M54	X	-7.447	-7.447	0 %100
42	M54	Z	-4.3	-4.3	0 %100
43	M55	X	-4.703	-4.703	0 %100
44	M55	Z	-2.715	-2.715	0 %100
45	MP2A	X	-6.182	-6.182	0 %100
46	MP2A	Z	-3.569	-3.569	0 %100
47	MP3A	X	-6.182	-6.182	0 %100
48	MP3A	Z	-3.569	-3.569	0 %100
49	M41	X	-.976	-.976	0 %100
50	M41	Z	-.564	-.564	0 %100
51	M42	X	-.976	-.976	0 %100
52	M42	Z	-.564	-.564	0 %100
53	M48A	X	-1.871	-1.871	0 %100
54	M48A	Z	-1.08	-1.08	0 %100
55	M49A	X	-8.206	-8.206	0 %100
56	M49A	Z	-4.738	-4.738	0 %100
57	M50A	X	-4.733	-4.733	0 %100
58	M50A	Z	-2.733	-2.733	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	-4.696	-4.696	0 %100
2	M1	Z	-8.134	-8.134	0 %100
3	M2	X	-4.696	-4.696	0 %100
4	M2	Z	-8.134	-8.134	0 %100
5	MP4A	X	-3.503	-3.503	0 %100
6	MP4A	Z	-6.068	-6.068	0 %100
7	M5	X	-3.503	-3.503	0 %100

Company : Maser Consulting
 Designer : NL
 Job Number : 21781042A
 Model Name : Mount Fix

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
8	M5	Z	-6.068	-6.068	0 %100
9	M6	X	-3.114	-3.114	0 %100
10	M6	Z	-5.393	-5.393	0 %100
11	M7	X	-3.503	-3.503	0 %100
12	M7	Z	-6.068	-6.068	0 %100
13	M9	X	-3.503	-3.503	0 %100
14	M9	Z	-6.068	-6.068	0 %100
15	M30	X	-.143	-.143	0 %100
16	M30	Z	-.247	-.247	0 %100
17	M31	X	-.143	-.143	0 %100
18	M31	Z	-.247	-.247	0 %100
19	M32	X	-.143	-.143	0 %100
20	M32	Z	-.247	-.247	0 %100
21	M33	X	-.143	-.143	0 %100
22	M33	Z	-.247	-.247	0 %100
23	MP1A	X	-3.569	-3.569	0 %100
24	MP1A	Z	-6.182	-6.182	0 %100
25	RCP	X	-2.612	-2.612	0 %100
26	RCP	Z	-4.524	-4.524	0 %100
27	M43	X	-2.802	-2.802	0 %100
28	M43	Z	-4.854	-4.854	0 %100
29	M44	X	-.000783	-.000783	0 %100
30	M44	Z	-.001	-.001	0 %100
31	M45	X	-2.612	-2.612	0 %100
32	M45	Z	-4.524	-4.524	0 %100
33	M46	X	-2.802	-2.802	0 %100
34	M46	Z	-4.854	-4.854	0 %100
35	M47	X	-.000783	-.000783	0 %100
36	M47	Z	-.001	-.001	0 %100
37	M50	X	-3.656	-3.656	0 %100
38	M50	Z	-6.333	-6.333	0 %100
39	M53	X	-4.3	-4.3	0 %100
40	M53	Z	-7.447	-7.447	0 %100
41	M54	X	-4.3	-4.3	0 %100
42	M54	Z	-7.447	-7.447	0 %100
43	M55	X	-1.538	-1.538	0 %100
44	M55	Z	-2.663	-2.663	0 %100
45	MP2A	X	-3.569	-3.569	0 %100
46	MP2A	Z	-6.182	-6.182	0 %100
47	MP3A	X	-3.569	-3.569	0 %100
48	MP3A	Z	-6.182	-6.182	0 %100
49	M41	X	-.188	-.188	0 %100
50	M41	Z	-.325	-.325	0 %100
51	M42	X	-.188	-.188	0 %100
52	M42	Z	-.325	-.325	0 %100
53	M48A	X	-3.241	-3.241	0 %100
54	M48A	Z	-5.613	-5.613	0 %100
55	M49A	X	-6.146	-6.146	0 %100
56	M49A	Z	-10.645	-10.645	0 %100
57	M50A	X	-4.141	-4.141	0 %100
58	M50A	Z	-7.172	-7.172	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	-4.14	-4.14	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,%]
3	M2	X	0	0	%100
4	M2	Z	-4.14	-4.14	%100
5	MP4A	X	0	0	%100
6	MP4A	Z	-2.854	-2.854	%100
7	M5	X	0	0	%100
8	M5	Z	-2.854	-2.854	%100
9	M6	X	0	0	%100
10	M6	Z	-2.569	-2.569	%100
11	M7	X	0	0	%100
12	M7	Z	-2.854	-2.854	%100
13	M9	X	0	0	%100
14	M9	Z	-2.854	-2.854	%100
15	M30	X	0	0	%100
16	M30	Z	0	0	%100
17	M31	X	0	0	%100
18	M31	Z	0	0	%100
19	M32	X	0	0	%100
20	M32	Z	0	0	%100
21	M33	X	0	0	%100
22	M33	Z	0	0	%100
23	MP1A	X	0	0	%100
24	MP1A	Z	-2.99	-2.99	%100
25	RCP	X	0	0	%100
26	RCP	Z	-.579	-.579	%100
27	M43	X	0	0	%100
28	M43	Z	-2.558	-2.558	%100
29	M44	X	0	0	%100
30	M44	Z	-.579	-.579	%100
31	M45	X	0	0	%100
32	M45	Z	-.579	-.579	%100
33	M46	X	0	0	%100
34	M46	Z	-2.558	-2.558	%100
35	M47	X	0	0	%100
36	M47	Z	-.579	-.579	%100
37	M50	X	0	0	%100
38	M50	Z	-2.818	-2.818	%100
39	M53	X	0	0	%100
40	M53	Z	-2.901	-2.901	%100
41	M54	X	0	0	%100
42	M54	Z	-2.901	-2.901	%100
43	M55	X	0	0	%100
44	M55	Z	-.253	-.253	%100
45	MP2A	X	0	0	%100
46	MP2A	Z	-3.03	-3.03	%100
47	MP3A	X	0	0	%100
48	MP3A	Z	-3.03	-3.03	%100
49	M41	X	0	0	%100
50	M41	Z	0	0	%100
51	M42	X	0	0	%100
52	M42	Z	0	0	%100
53	M48A	X	0	0	%100
54	M48A	Z	-3.43	-3.43	%100
55	M49A	X	0	0	%100
56	M49A	Z	-3.857	-3.857	%100
57	M50A	X	0	0	%100
58	M50A	Z	-3.857	-3.857	%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	1.552	1.552	0 %100
2	M1	Z	-2.689	-2.689	0 %100
3	M2	X	1.552	1.552	0 %100
4	M2	Z	-2.689	-2.689	0 %100
5	MP4A	X	1.427	1.427	0 %100
6	MP4A	Z	-2.471	-2.471	0 %100
7	M5	X	1.427	1.427	0 %100
8	M5	Z	-2.471	-2.471	0 %100
9	M6	X	1.285	1.285	0 %100
10	M6	Z	-2.225	-2.225	0 %100
11	M7	X	1.427	1.427	0 %100
12	M7	Z	-2.471	-2.471	0 %100
13	M9	X	1.427	1.427	0 %100
14	M9	Z	-2.471	-2.471	0 %100
15	M30	X	.161	.161	0 %100
16	M30	Z	-.279	-.279	0 %100
17	M31	X	.161	.161	0 %100
18	M31	Z	-.279	-.279	0 %100
19	M32	X	.161	.161	0 %100
20	M32	Z	-.279	-.279	0 %100
21	M33	X	.161	.161	0 %100
22	M33	Z	-.279	-.279	0 %100
23	MP1A	X	1.495	1.495	0 %100
24	MP1A	Z	-2.589	-2.589	0 %100
25	RCP	X	.00027	.00027	0 %100
26	RCP	Z	-.000467	-.000467	0 %100
27	M43	X	.959	.959	0 %100
28	M43	Z	-1.661	-1.661	0 %100
29	M44	X	.899	.899	0 %100
30	M44	Z	-1.558	-1.558	0 %100
31	M45	X	.00027	.00027	0 %100
32	M45	Z	-.000467	-.000467	0 %100
33	M46	X	.959	.959	0 %100
34	M46	Z	-1.661	-1.661	0 %100
35	M47	X	.899	.899	0 %100
36	M47	Z	-1.558	-1.558	0 %100
37	M50	X	1.409	1.409	0 %100
38	M50	Z	-2.441	-2.441	0 %100
39	M53	X	1.45	1.45	0 %100
40	M53	Z	-2.512	-2.512	0 %100
41	M54	X	1.45	1.45	0 %100
42	M54	Z	-2.512	-2.512	0 %100
43	M55	X	.071	.071	0 %100
44	M55	Z	-.123	-.123	0 %100
45	MP2A	X	1.515	1.515	0 %100
46	MP2A	Z	-2.624	-2.624	0 %100
47	MP3A	X	1.515	1.515	0 %100
48	MP3A	Z	-2.624	-2.624	0 %100
49	M41	X	.169	.169	0 %100
50	M41	Z	-.293	-.293	0 %100
51	M42	X	.169	.169	0 %100
52	M42	Z	-.293	-.293	0 %100
53	M48A	X	1.286	1.286	0 %100
54	M48A	Z	-2.228	-2.228	0 %100
55	M49A	X	1.366	1.366	0 %100
56	M49A	Z	-2.366	-2.366	0 %100
57	M50A	X	2.027	2.027	0 %100

Company : Maser Consulting
 Designer : NL
 Job Number : 21781042A
 Model Name : Mount Fix

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
58	M50A	Z	-3.511	-3.511	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	.896	.896	0 %100
2	M1	Z	-.517	-.517	0 %100
3	M2	X	.896	.896	0 %100
4	M2	Z	-.517	-.517	0 %100
5	MP4A	X	2.471	2.471	0 %100
6	MP4A	Z	-1.427	-1.427	0 %100
7	M5	X	2.471	2.471	0 %100
8	M5	Z	-1.427	-1.427	0 %100
9	M6	X	2.225	2.225	0 %100
10	M6	Z	-1.285	-1.285	0 %100
11	M7	X	2.471	2.471	0 %100
12	M7	Z	-1.427	-1.427	0 %100
13	M9	X	2.471	2.471	0 %100
14	M9	Z	-1.427	-1.427	0 %100
15	M30	X	.837	.837	0 %100
16	M30	Z	-.483	-.483	0 %100
17	M31	X	.837	.837	0 %100
18	M31	Z	-.483	-.483	0 %100
19	M32	X	.837	.837	0 %100
20	M32	Z	-.483	-.483	0 %100
21	M33	X	.837	.837	0 %100
22	M33	Z	-.483	-.483	0 %100
23	MP1A	X	2.589	2.589	0 %100
24	MP1A	Z	-1.495	-1.495	0 %100
25	RCP	X	.556	.556	0 %100
26	RCP	Z	-.321	-.321	0 %100
27	M43	X	.554	.554	0 %100
28	M43	Z	-.32	-.32	0 %100
29	M44	X	2.113	2.113	0 %100
30	M44	Z	-1.22	-1.22	0 %100
31	M45	X	.556	.556	0 %100
32	M45	Z	-.321	-.321	0 %100
33	M46	X	.554	.554	0 %100
34	M46	Z	-.32	-.32	0 %100
35	M47	X	2.113	2.113	0 %100
36	M47	Z	-1.22	-1.22	0 %100
37	M50	X	2.441	2.441	0 %100
38	M50	Z	-1.409	-1.409	0 %100
39	M53	X	2.512	2.512	0 %100
40	M53	Z	-1.45	-1.45	0 %100
41	M54	X	2.512	2.512	0 %100
42	M54	Z	-1.45	-1.45	0 %100
43	M55	X	1.157	1.157	0 %100
44	M55	Z	-.668	-.668	0 %100
45	MP2A	X	2.624	2.624	0 %100
46	MP2A	Z	-1.515	-1.515	0 %100
47	MP3A	X	2.624	2.624	0 %100
48	MP3A	Z	-1.515	-1.515	0 %100
49	M41	X	.88	.88	0 %100
50	M41	Z	-.508	-.508	0 %100
51	M42	X	.88	.88	0 %100
52	M42	Z	-.508	-.508	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,%]
53	M48A	X .743	.743	0	%100
54	M48A	Z -.429	-.429	0	%100
55	M49A	X 1.561	1.561	0	%100
56	M49A	Z -.901	-.901	0	%100
57	M50A	X 2.707	2.707	0	%100
58	M50A	Z -1.563	-1.563	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 0	0	0	%100
2	M1	Z 0	0	0	%100
3	M2	X 0	0	0	%100
4	M2	Z 0	0	0	%100
5	MP4A	X 2.854	2.854	0	%100
6	MP4A	Z 0	0	0	%100
7	M5	X 2.854	2.854	0	%100
8	M5	Z 0	0	0	%100
9	M6	X 2.569	2.569	0	%100
10	M6	Z 0	0	0	%100
11	M7	X 2.854	2.854	0	%100
12	M7	Z 0	0	0	%100
13	M9	X 2.854	2.854	0	%100
14	M9	Z 0	0	0	%100
15	M30	X 1.289	1.289	0	%100
16	M30	Z 0	0	0	%100
17	M31	X 1.289	1.289	0	%100
18	M31	Z 0	0	0	%100
19	M32	X 1.289	1.289	0	%100
20	M32	Z 0	0	0	%100
21	M33	X 1.289	1.289	0	%100
22	M33	Z 0	0	0	%100
23	MP1A	X 2.99	2.99	0	%100
24	MP1A	Z 0	0	0	%100
25	RCP	X 1.861	1.861	0	%100
26	RCP	Z 0	0	0	%100
27	M43	X 0	0	0	%100
28	M43	Z 0	0	0	%100
29	M44	X 1.861	1.861	0	%100
30	M44	Z 0	0	0	%100
31	M45	X 1.861	1.861	0	%100
32	M45	Z 0	0	0	%100
33	M46	X 0	0	0	%100
34	M46	Z 0	0	0	%100
35	M47	X 1.861	1.861	0	%100
36	M47	Z 0	0	0	%100
37	M50	X 2.818	2.818	0	%100
38	M50	Z 0	0	0	%100
39	M53	X 2.901	2.901	0	%100
40	M53	Z 0	0	0	%100
41	M54	X 2.901	2.901	0	%100
42	M54	Z 0	0	0	%100
43	M55	X 2.642	2.642	0	%100
44	M55	Z 0	0	0	%100
45	MP2A	X 3.03	3.03	0	%100
46	MP2A	Z 0	0	0	%100
47	MP3A	X 3.03	3.03	0	%100

Company : Maser Consulting
 Designer : NL
 Job Number : 21781042A
 Model Name : Mount Fix

Sept 10, 2021
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Member Distributed Loads (BLC 56 : Structure Wi (90 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
48	MP3A	Z	0	0	%100
49	M41	X	1.355	1.355	0
50	M41	Z	0	0	%100
51	M42	X	1.355	1.355	0
52	M42	Z	0	0	%100
53	M48A	X	0	0	%100
54	M48A	Z	0	0	%100
55	M49A	X	2	2	0
56	M49A	Z	0	0	%100
57	M50A	X	2	2	0
58	M50A	Z	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	.896	.896	0
2	M1	Z	.517	.517	%100
3	M2	X	.896	.896	0
4	M2	Z	.517	.517	%100
5	MP4A	X	2.471	2.471	0
6	MP4A	Z	1.427	1.427	%100
7	M5	X	2.471	2.471	0
8	M5	Z	1.427	1.427	%100
9	M6	X	2.225	2.225	0
10	M6	Z	1.285	1.285	%100
11	M7	X	2.471	2.471	0
12	M7	Z	1.427	1.427	%100
13	M9	X	2.471	2.471	0
14	M9	Z	1.427	1.427	%100
15	M30	X	.837	.837	0
16	M30	Z	.483	.483	%100
17	M31	X	.837	.837	0
18	M31	Z	.483	.483	%100
19	M32	X	.837	.837	0
20	M32	Z	.483	.483	%100
21	M33	X	.837	.837	0
22	M33	Z	.483	.483	%100
23	MP1A	X	2.589	2.589	0
24	MP1A	Z	1.495	1.495	%100
25	RCP	X	2.113	2.113	0
26	RCP	Z	1.22	1.22	%100
27	M43	X	.554	.554	0
28	M43	Z	.32	.32	%100
29	M44	X	.556	.556	0
30	M44	Z	.321	.321	%100
31	M45	X	2.113	2.113	0
32	M45	Z	1.22	1.22	%100
33	M46	X	.554	.554	0
34	M46	Z	.32	.32	%100
35	M47	X	.556	.556	0
36	M47	Z	.321	.321	%100
37	M50	X	2.441	2.441	0
38	M50	Z	1.409	1.409	%100
39	M53	X	2.512	2.512	0
40	M53	Z	1.45	1.45	%100
41	M54	X	2.512	2.512	0
42	M54	Z	1.45	1.45	%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.%]
43	M55	X	2.385	2.385	0 %100
44	M55	Z	1.377	1.377	0 %100
45	MP2A	X	2.624	2.624	0 %100
46	MP2A	Z	1.515	1.515	0 %100
47	MP3A	X	2.624	2.624	0 %100
48	MP3A	Z	1.515	1.515	0 %100
49	M41	X	.88	.88	0 %100
50	M41	Z	.508	.508	0 %100
51	M42	X	.88	.88	0 %100
52	M42	Z	.508	.508	0 %100
53	M48A	X	.743	.743	0 %100
54	M48A	Z	.429	.429	0 %100
55	M49A	X	2.707	2.707	0 %100
56	M49A	Z	1.563	1.563	0 %100
57	M50A	X	1.561	1.561	0 %100
58	M50A	Z	.901	.901	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	1.552	1.552	0 %100
2	M1	Z	2.689	2.689	0 %100
3	M2	X	1.552	1.552	0 %100
4	M2	Z	2.689	2.689	0 %100
5	MP4A	X	1.427	1.427	0 %100
6	MP4A	Z	2.471	2.471	0 %100
7	M5	X	1.427	1.427	0 %100
8	M5	Z	2.471	2.471	0 %100
9	M6	X	1.285	1.285	0 %100
10	M6	Z	2.225	2.225	0 %100
11	M7	X	1.427	1.427	0 %100
12	M7	Z	2.471	2.471	0 %100
13	M9	X	1.427	1.427	0 %100
14	M9	Z	2.471	2.471	0 %100
15	M30	X	.161	.161	0 %100
16	M30	Z	.279	.279	0 %100
17	M31	X	.161	.161	0 %100
18	M31	Z	.279	.279	0 %100
19	M32	X	.161	.161	0 %100
20	M32	Z	.279	.279	0 %100
21	M33	X	.161	.161	0 %100
22	M33	Z	.279	.279	0 %100
23	MP1A	X	1.495	1.495	0 %100
24	MP1A	Z	2.589	2.589	0 %100
25	RCP	X	.899	.899	0 %100
26	RCP	Z	1.558	1.558	0 %100
27	M43	X	.959	.959	0 %100
28	M43	Z	1.661	1.661	0 %100
29	M44	X	.00027	.00027	0 %100
30	M44	Z	.000467	.000467	0 %100
31	M45	X	.899	.899	0 %100
32	M45	Z	1.558	1.558	0 %100
33	M46	X	.959	.959	0 %100
34	M46	Z	1.661	1.661	0 %100
35	M47	X	.00027	.00027	0 %100
36	M47	Z	.000467	.000467	0 %100
37	M50	X	1.409	1.409	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
38	M50	Z	2.441	2.441	0 %100
39	M53	X	1.45	1.45	0 %100
40	M53	Z	2.512	2.512	0 %100
41	M54	X	1.45	1.45	0 %100
42	M54	Z	2.512	2.512	0 %100
43	M55	X	.78	.78	0 %100
44	M55	Z	1.35	1.35	0 %100
45	MP2A	X	1.515	1.515	0 %100
46	MP2A	Z	2.624	2.624	0 %100
47	MP3A	X	1.515	1.515	0 %100
48	MP3A	Z	2.624	2.624	0 %100
49	M41	X	.169	.169	0 %100
50	M41	Z	.293	.293	0 %100
51	M42	X	.169	.169	0 %100
52	M42	Z	.293	.293	0 %100
53	M48A	X	1.286	1.286	0 %100
54	M48A	Z	2.228	2.228	0 %100
55	M49A	X	2.027	2.027	0 %100
56	M49A	Z	3.511	3.511	0 %100
57	M50A	X	1.366	1.366	0 %100
58	M50A	Z	2.366	2.366	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	4.14	4.14	0 %100
3	M2	X	0	0	0 %100
4	M2	Z	4.14	4.14	0 %100
5	MP4A	X	0	0	0 %100
6	MP4A	Z	2.854	2.854	0 %100
7	M5	X	0	0	0 %100
8	M5	Z	2.854	2.854	0 %100
9	M6	X	0	0	0 %100
10	M6	Z	2.569	2.569	0 %100
11	M7	X	0	0	0 %100
12	M7	Z	2.854	2.854	0 %100
13	M9	X	0	0	0 %100
14	M9	Z	2.854	2.854	0 %100
15	M30	X	0	0	0 %100
16	M30	Z	0	0	0 %100
17	M31	X	0	0	0 %100
18	M31	Z	0	0	0 %100
19	M32	X	0	0	0 %100
20	M32	Z	0	0	0 %100
21	M33	X	0	0	0 %100
22	M33	Z	0	0	0 %100
23	MP1A	X	0	0	0 %100
24	MP1A	Z	2.99	2.99	0 %100
25	RCP	X	0	0	0 %100
26	RCP	Z	.579	.579	0 %100
27	M43	X	0	0	0 %100
28	M43	Z	2.558	2.558	0 %100
29	M44	X	0	0	0 %100
30	M44	Z	.579	.579	0 %100
31	M45	X	0	0	0 %100
32	M45	Z	.579	.579	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft.%]	End Location[ft.%]
33	M46	X	0	0	%100
34	M46	Z	2.558	2.558	%100
35	M47	X	0	0	%100
36	M47	Z	.579	.579	%100
37	M50	X	0	0	%100
38	M50	Z	2.818	2.818	%100
39	M53	X	0	0	%100
40	M53	Z	2.901	2.901	%100
41	M54	X	0	0	%100
42	M54	Z	2.901	2.901	%100
43	M55	X	0	0	%100
44	M55	Z	.253	.253	%100
45	MP2A	X	0	0	%100
46	MP2A	Z	3.03	3.03	%100
47	MP3A	X	0	0	%100
48	MP3A	Z	3.03	3.03	%100
49	M41	X	0	0	%100
50	M41	Z	0	0	%100
51	M42	X	0	0	%100
52	M42	Z	0	0	%100
53	M48A	X	0	0	%100
54	M48A	Z	3.43	3.43	%100
55	M49A	X	0	0	%100
56	M49A	Z	3.857	3.857	%100
57	M50A	X	0	0	%100
58	M50A	Z	3.857	3.857	%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	-1.552	-1.552	0 %100
2	M1	Z	2.689	2.689	0 %100
3	M2	X	-1.552	-1.552	0 %100
4	M2	Z	2.689	2.689	0 %100
5	MP4A	X	-1.427	-1.427	0 %100
6	MP4A	Z	2.471	2.471	0 %100
7	M5	X	-1.427	-1.427	0 %100
8	M5	Z	2.471	2.471	0 %100
9	M6	X	-1.285	-1.285	0 %100
10	M6	Z	2.225	2.225	0 %100
11	M7	X	-1.427	-1.427	0 %100
12	M7	Z	2.471	2.471	0 %100
13	M9	X	-1.427	-1.427	0 %100
14	M9	Z	2.471	2.471	0 %100
15	M30	X	-.161	-.161	0 %100
16	M30	Z	.279	.279	0 %100
17	M31	X	-.161	-.161	0 %100
18	M31	Z	.279	.279	0 %100
19	M32	X	-.161	-.161	0 %100
20	M32	Z	.279	.279	0 %100
21	M33	X	-.161	-.161	0 %100
22	M33	Z	.279	.279	0 %100
23	MP1A	X	-1.495	-1.495	0 %100
24	MP1A	Z	2.589	2.589	0 %100
25	RCP	X	-.00027	-.00027	0 %100
26	RCP	Z	.000467	.000467	0 %100
27	M43	X	-.959	-.959	0 %100

Company : Maser Consulting
 Designer : NL
 Job Number : 21781042A
 Model Name : Mount Fix

Sept 10, 2021
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 Checked By: PA

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
28	M43	Z	1.661	1.661	0 %100
29	M44	X	-.899	-.899	0 %100
30	M44	Z	1.558	1.558	0 %100
31	M45	X	-.00027	-.00027	0 %100
32	M45	Z	.000467	.000467	0 %100
33	M46	X	-.959	-.959	0 %100
34	M46	Z	1.661	1.661	0 %100
35	M47	X	-.899	-.899	0 %100
36	M47	Z	1.558	1.558	0 %100
37	M50	X	-1.409	-1.409	0 %100
38	M50	Z	2.441	2.441	0 %100
39	M53	X	-1.45	-1.45	0 %100
40	M53	Z	2.512	2.512	0 %100
41	M54	X	-1.45	-1.45	0 %100
42	M54	Z	2.512	2.512	0 %100
43	M55	X	-.071	-.071	0 %100
44	M55	Z	.123	.123	0 %100
45	MP2A	X	-1.515	-1.515	0 %100
46	MP2A	Z	2.624	2.624	0 %100
47	MP3A	X	-1.515	-1.515	0 %100
48	MP3A	Z	2.624	2.624	0 %100
49	M41	X	-.169	-.169	0 %100
50	M41	Z	.293	.293	0 %100
51	M42	X	-.169	-.169	0 %100
52	M42	Z	.293	.293	0 %100
53	M48A	X	-1.286	-1.286	0 %100
54	M48A	Z	2.228	2.228	0 %100
55	M49A	X	-1.366	-1.366	0 %100
56	M49A	Z	2.366	2.366	0 %100
57	M50A	X	-2.027	-2.027	0 %100
58	M50A	Z	3.511	3.511	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	-.896	-.896	0 %100
2	M1	Z	.517	.517	0 %100
3	M2	X	-.896	-.896	0 %100
4	M2	Z	.517	.517	0 %100
5	MP4A	X	-2.471	-2.471	0 %100
6	MP4A	Z	1.427	1.427	0 %100
7	M5	X	-2.471	-2.471	0 %100
8	M5	Z	1.427	1.427	0 %100
9	M6	X	-2.225	-2.225	0 %100
10	M6	Z	1.285	1.285	0 %100
11	M7	X	-2.471	-2.471	0 %100
12	M7	Z	1.427	1.427	0 %100
13	M9	X	-2.471	-2.471	0 %100
14	M9	Z	1.427	1.427	0 %100
15	M30	X	-.837	-.837	0 %100
16	M30	Z	.483	.483	0 %100
17	M31	X	-.837	-.837	0 %100
18	M31	Z	.483	.483	0 %100
19	M32	X	-.837	-.837	0 %100
20	M32	Z	.483	.483	0 %100
21	M33	X	-.837	-.837	0 %100
22	M33	Z	.483	.483	0 %100

Company : Maser Consulting
 Designer : NL
 Job Number : 21781042A
 Model Name : Mount Fix

Sept 10, 2021
 11:07 AM
 Checked By: PA

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft.%]	End Location[ft.%]
23	MP1A	X	-2.589	-2.589	0 %100
24	MP1A	Z	1.495	1.495	0 %100
25	RCP	X	-.556	-.556	0 %100
26	RCP	Z	.321	.321	0 %100
27	M43	X	-.554	-.554	0 %100
28	M43	Z	.32	.32	0 %100
29	M44	X	-2.113	-2.113	0 %100
30	M44	Z	1.22	1.22	0 %100
31	M45	X	-.556	-.556	0 %100
32	M45	Z	.321	.321	0 %100
33	M46	X	-.554	-.554	0 %100
34	M46	Z	.32	.32	0 %100
35	M47	X	-2.113	-2.113	0 %100
36	M47	Z	1.22	1.22	0 %100
37	M50	X	-2.441	-2.441	0 %100
38	M50	Z	1.409	1.409	0 %100
39	M53	X	-2.512	-2.512	0 %100
40	M53	Z	1.45	1.45	0 %100
41	M54	X	-2.512	-2.512	0 %100
42	M54	Z	1.45	1.45	0 %100
43	M55	X	-1.157	-1.157	0 %100
44	M55	Z	.668	.668	0 %100
45	MP2A	X	-2.624	-2.624	0 %100
46	MP2A	Z	1.515	1.515	0 %100
47	MP3A	X	-2.624	-2.624	0 %100
48	MP3A	Z	1.515	1.515	0 %100
49	M41	X	-.88	-.88	0 %100
50	M41	Z	.508	.508	0 %100
51	M42	X	-.88	-.88	0 %100
52	M42	Z	.508	.508	0 %100
53	M48A	X	-.743	-.743	0 %100
54	M48A	Z	.429	.429	0 %100
55	M49A	X	-1.561	-1.561	0 %100
56	M49A	Z	.901	.901	0 %100
57	M50A	X	-2.707	-2.707	0 %100
58	M50A	Z	1.563	1.563	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	0	0	0 %100
2	M1	Z	0	0	0 %100
3	M2	X	0	0	0 %100
4	M2	Z	0	0	0 %100
5	MP4A	X	-2.854	-2.854	0 %100
6	MP4A	Z	0	0	0 %100
7	M5	X	-2.854	-2.854	0 %100
8	M5	Z	0	0	0 %100
9	M6	X	-2.569	-2.569	0 %100
10	M6	Z	0	0	0 %100
11	M7	X	-2.854	-2.854	0 %100
12	M7	Z	0	0	0 %100
13	M9	X	-2.854	-2.854	0 %100
14	M9	Z	0	0	0 %100
15	M30	X	-1.289	-1.289	0 %100
16	M30	Z	0	0	0 %100
17	M31	X	-1.289	-1.289	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.%]
18	M31	Z	0	0	%100
19	M32	X	-1.289	-1.289	0
20	M32	Z	0	0	%100
21	M33	X	-1.289	-1.289	0
22	M33	Z	0	0	%100
23	MP1A	X	-2.99	-2.99	0
24	MP1A	Z	0	0	%100
25	RCP	X	-1.861	-1.861	0
26	RCP	Z	0	0	%100
27	M43	X	0	0	%100
28	M43	Z	0	0	%100
29	M44	X	-1.861	-1.861	0
30	M44	Z	0	0	%100
31	M45	X	-1.861	-1.861	0
32	M45	Z	0	0	%100
33	M46	X	0	0	%100
34	M46	Z	0	0	%100
35	M47	X	-1.861	-1.861	0
36	M47	Z	0	0	%100
37	M50	X	-2.818	-2.818	0
38	M50	Z	0	0	%100
39	M53	X	-2.901	-2.901	0
40	M53	Z	0	0	%100
41	M54	X	-2.901	-2.901	0
42	M54	Z	0	0	%100
43	M55	X	-2.642	-2.642	0
44	M55	Z	0	0	%100
45	MP2A	X	-3.03	-3.03	0
46	MP2A	Z	0	0	%100
47	MP3A	X	-3.03	-3.03	0
48	MP3A	Z	0	0	%100
49	M41	X	-1.355	-1.355	0
50	M41	Z	0	0	%100
51	M42	X	-1.355	-1.355	0
52	M42	Z	0	0	%100
53	M48A	X	0	0	%100
54	M48A	Z	0	0	%100
55	M49A	X	-2	-2	0
56	M49A	Z	0	0	%100
57	M50A	X	-2	-2	0
58	M50A	Z	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	-.896	-.896	0
2	M1	Z	-.517	-.517	0
3	M2	X	-.896	-.896	0
4	M2	Z	-.517	-.517	0
5	MP4A	X	-2.471	-2.471	0
6	MP4A	Z	-1.427	-1.427	0
7	M5	X	-2.471	-2.471	0
8	M5	Z	-1.427	-1.427	0
9	M6	X	-2.225	-2.225	0
10	M6	Z	-1.285	-1.285	0
11	M7	X	-2.471	-2.471	0
12	M7	Z	-1.427	-1.427	0

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
13	M9	X	-2.471	-2.471	0 %100
14	M9	Z	-1.427	-1.427	0 %100
15	M30	X	-.837	-.837	0 %100
16	M30	Z	-.483	-.483	0 %100
17	M31	X	-.837	-.837	0 %100
18	M31	Z	-.483	-.483	0 %100
19	M32	X	-.837	-.837	0 %100
20	M32	Z	-.483	-.483	0 %100
21	M33	X	-.837	-.837	0 %100
22	M33	Z	-.483	-.483	0 %100
23	MP1A	X	-2.589	-2.589	0 %100
24	MP1A	Z	-1.495	-1.495	0 %100
25	RCP	X	-2.113	-2.113	0 %100
26	RCP	Z	-1.22	-1.22	0 %100
27	M43	X	-.554	-.554	0 %100
28	M43	Z	-.32	-.32	0 %100
29	M44	X	-.556	-.556	0 %100
30	M44	Z	-.321	-.321	0 %100
31	M45	X	-2.113	-2.113	0 %100
32	M45	Z	-1.22	-1.22	0 %100
33	M46	X	-.554	-.554	0 %100
34	M46	Z	-.32	-.32	0 %100
35	M47	X	-.556	-.556	0 %100
36	M47	Z	-.321	-.321	0 %100
37	M50	X	-2.441	-2.441	0 %100
38	M50	Z	-1.409	-1.409	0 %100
39	M53	X	-2.512	-2.512	0 %100
40	M53	Z	-1.45	-1.45	0 %100
41	M54	X	-2.512	-2.512	0 %100
42	M54	Z	-1.45	-1.45	0 %100
43	M55	X	-2.385	-2.385	0 %100
44	M55	Z	-1.377	-1.377	0 %100
45	MP2A	X	-2.624	-2.624	0 %100
46	MP2A	Z	-1.515	-1.515	0 %100
47	MP3A	X	-2.624	-2.624	0 %100
48	MP3A	Z	-1.515	-1.515	0 %100
49	M41	X	-.88	-.88	0 %100
50	M41	Z	-.508	-.508	0 %100
51	M42	X	-.88	-.88	0 %100
52	M42	Z	-.508	-.508	0 %100
53	M48A	X	-.743	-.743	0 %100
54	M48A	Z	-.429	-.429	0 %100
55	M49A	X	-2.707	-2.707	0 %100
56	M49A	Z	-1.563	-1.563	0 %100
57	M50A	X	-1.561	-1.561	0 %100
58	M50A	Z	-.901	-.901	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	-1.552	-1.552	0 %100
2	M1	Z	-2.689	-2.689	0 %100
3	M2	X	-1.552	-1.552	0 %100
4	M2	Z	-2.689	-2.689	0 %100
5	MP4A	X	-1.427	-1.427	0 %100
6	MP4A	Z	-2.471	-2.471	0 %100
7	M5	X	-1.427	-1.427	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,%]
8	M5	Z	-2.471	-2.471	0 %100
9	M6	X	-1.285	-1.285	0 %100
10	M6	Z	-2.225	-2.225	0 %100
11	M7	X	-1.427	-1.427	0 %100
12	M7	Z	-2.471	-2.471	0 %100
13	M9	X	-1.427	-1.427	0 %100
14	M9	Z	-2.471	-2.471	0 %100
15	M30	X	-.161	-.161	0 %100
16	M30	Z	-.279	-.279	0 %100
17	M31	X	-.161	-.161	0 %100
18	M31	Z	-.279	-.279	0 %100
19	M32	X	-.161	-.161	0 %100
20	M32	Z	-.279	-.279	0 %100
21	M33	X	-.161	-.161	0 %100
22	M33	Z	-.279	-.279	0 %100
23	MP1A	X	-1.495	-1.495	0 %100
24	MP1A	Z	-2.589	-2.589	0 %100
25	RCP	X	-.899	-.899	0 %100
26	RCP	Z	-1.558	-1.558	0 %100
27	M43	X	-.959	-.959	0 %100
28	M43	Z	-1.661	-1.661	0 %100
29	M44	X	-.00027	-.00027	0 %100
30	M44	Z	-.000467	-.000467	0 %100
31	M45	X	-.899	-.899	0 %100
32	M45	Z	-1.558	-1.558	0 %100
33	M46	X	-.959	-.959	0 %100
34	M46	Z	-1.661	-1.661	0 %100
35	M47	X	-.00027	-.00027	0 %100
36	M47	Z	-.000467	-.000467	0 %100
37	M50	X	-1.409	-1.409	0 %100
38	M50	Z	-2.441	-2.441	0 %100
39	M53	X	-1.45	-1.45	0 %100
40	M53	Z	-2.512	-2.512	0 %100
41	M54	X	-1.45	-1.45	0 %100
42	M54	Z	-2.512	-2.512	0 %100
43	M55	X	-.78	-.78	0 %100
44	M55	Z	-1.35	-1.35	0 %100
45	MP2A	X	-1.515	-1.515	0 %100
46	MP2A	Z	-2.624	-2.624	0 %100
47	MP3A	X	-1.515	-1.515	0 %100
48	MP3A	Z	-2.624	-2.624	0 %100
49	M41	X	-.169	-.169	0 %100
50	M41	Z	-.293	-.293	0 %100
51	M42	X	-.169	-.169	0 %100
52	M42	Z	-.293	-.293	0 %100
53	M48A	X	-1.286	-1.286	0 %100
54	M48A	Z	-2.228	-2.228	0 %100
55	M49A	X	-2.027	-2.027	0 %100
56	M49A	Z	-3.511	-3.511	0 %100
57	M50A	X	-1.366	-1.366	0 %100
58	M50A	Z	-2.366	-2.366	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	-.823	-.823	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
3	M2	X	0	0	%100
4	M2	Z	-.823	-.823	%100
5	MP4A	X	0	0	%100
6	MP4A	Z	-.461	-.461	%100
7	M5	X	0	0	%100
8	M5	Z	-.461	-.461	%100
9	M6	X	0	0	%100
10	M6	Z	-.409	-.409	%100
11	M7	X	0	0	%100
12	M7	Z	-.461	-.461	%100
13	M9	X	0	0	%100
14	M9	Z	-.461	-.461	%100
15	M30	X	0	0	%100
16	M30	Z	0	0	%100
17	M31	X	0	0	%100
18	M31	Z	0	0	%100
19	M32	X	0	0	%100
20	M32	Z	0	0	%100
21	M33	X	0	0	%100
22	M33	Z	0	0	%100
23	MP1A	X	0	0	%100
24	MP1A	Z	-.469	-.469	%100
25	RCP	X	0	0	%100
26	RCP	Z	-.111	-.111	%100
27	M43	X	0	0	%100
28	M43	Z	-.491	-.491	%100
29	M44	X	0	0	%100
30	M44	Z	-.111	-.111	%100
31	M45	X	0	0	%100
32	M45	Z	-.111	-.111	%100
33	M46	X	0	0	%100
34	M46	Z	-.491	-.491	%100
35	M47	X	0	0	%100
36	M47	Z	-.111	-.111	%100
37	M50	X	0	0	%100
38	M50	Z	-.481	-.481	%100
39	M53	X	0	0	%100
40	M53	Z	-.565	-.565	%100
41	M54	X	0	0	%100
42	M54	Z	-.565	-.565	%100
43	M55	X	0	0	%100
44	M55	Z	-.033	-.033	%100
45	MP2A	X	0	0	%100
46	MP2A	Z	-.469	-.469	%100
47	MP3A	X	0	0	%100
48	MP3A	Z	-.469	-.469	%100
49	M41	X	0	0	%100
50	M41	Z	0	0	%100
51	M42	X	0	0	%100
52	M42	Z	0	0	%100
53	M48A	X	0	0	%100
54	M48A	Z	-.568	-.568	%100
55	M49A	X	0	0	%100
56	M49A	Z	-.769	-.769	%100
57	M50A	X	0	0	%100
58	M50A	Z	-.769	-.769	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 .309	.309	0	%100
2	M1	Z -.535	-.535	0	%100
3	M2	X .309	.309	0	%100
4	M2	Z -.535	-.535	0	%100
5	MP4A	X .23	.23	0	%100
6	MP4A	Z -.399	-.399	0	%100
7	M5	X .23	.23	0	%100
8	M5	Z -.399	-.399	0	%100
9	M6	X .205	.205	0	%100
10	M6	Z -.355	-.355	0	%100
11	M7	X .23	.23	0	%100
12	M7	Z -.399	-.399	0	%100
13	M9	X .23	.23	0	%100
14	M9	Z -.399	-.399	0	%100
15	M30	X .009	.009	0	%100
16	M30	Z -.016	-.016	0	%100
17	M31	X .009	.009	0	%100
18	M31	Z -.016	-.016	0	%100
19	M32	X .009	.009	0	%100
20	M32	Z -.016	-.016	0	%100
21	M33	X .009	.009	0	%100
22	M33	Z -.016	-.016	0	%100
23	MP1A	X .235	.235	0	%100
24	MP1A	Z -.406	-.406	0	%100
25	RCP	X 5.2e-5	5.2e-5	0	%100
26	RCP	Z -8.9e-5	-8.9e-5	0	%100
27	M43	X .184	.184	0	%100
28	M43	Z -.319	-.319	0	%100
29	M44	X .172	.172	0	%100
30	M44	Z -.297	-.297	0	%100
31	M45	X 5.2e-5	5.2e-5	0	%100
32	M45	Z -8.9e-5	-8.9e-5	0	%100
33	M46	X .184	.184	0	%100
34	M46	Z -.319	-.319	0	%100
35	M47	X .172	.172	0	%100
36	M47	Z -.297	-.297	0	%100
37	M50	X .24	.24	0	%100
38	M50	Z -.416	-.416	0	%100
39	M53	X .283	.283	0	%100
40	M53	Z -.49	-.49	0	%100
41	M54	X .283	.283	0	%100
42	M54	Z -.49	-.49	0	%100
43	M55	X .009	.009	0	%100
44	M55	Z -.016	-.016	0	%100
45	MP2A	X .235	.235	0	%100
46	MP2A	Z -.406	-.406	0	%100
47	MP3A	X .235	.235	0	%100
48	MP3A	Z -.406	-.406	0	%100
49	M41	X .012	.012	0	%100
50	M41	Z -.021	-.021	0	%100
51	M42	X .012	.012	0	%100
52	M42	Z -.021	-.021	0	%100
53	M48A	X .213	.213	0	%100
54	M48A	Z -.369	-.369	0	%100
55	M49A	X .272	.272	0	%100
56	M49A	Z -.472	-.472	0	%100
57	M50A	X .404	.404	0	%100

Company : Maser Consulting
 Designer : NL
 Job Number : 21781042A
 Model Name : Mount Fix

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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,%]
58	M50A	Z	-.7	-.7	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	.178	.178	0 %100
2	M1	Z	-.103	-.103	0 %100
3	M2	X	.178	.178	0 %100
4	M2	Z	-.103	-.103	0 %100
5	MP4A	X	.399	.399	0 %100
6	MP4A	Z	-.23	-.23	0 %100
7	M5	X	.399	.399	0 %100
8	M5	Z	-.23	-.23	0 %100
9	M6	X	.355	.355	0 %100
10	M6	Z	-.205	-.205	0 %100
11	M7	X	.399	.399	0 %100
12	M7	Z	-.23	-.23	0 %100
13	M9	X	.399	.399	0 %100
14	M9	Z	-.23	-.23	0 %100
15	M30	X	.049	.049	0 %100
16	M30	Z	-.028	-.028	0 %100
17	M31	X	.049	.049	0 %100
18	M31	Z	-.028	-.028	0 %100
19	M32	X	.049	.049	0 %100
20	M32	Z	-.028	-.028	0 %100
21	M33	X	.049	.049	0 %100
22	M33	Z	-.028	-.028	0 %100
23	MP1A	X	.406	.406	0 %100
24	MP1A	Z	-.235	-.235	0 %100
25	RCP	X	.106	.106	0 %100
26	RCP	Z	-.061	-.061	0 %100
27	M43	X	.106	.106	0 %100
28	M43	Z	-.061	-.061	0 %100
29	M44	X	.403	.403	0 %100
30	M44	Z	-.233	-.233	0 %100
31	M45	X	.106	.106	0 %100
32	M45	Z	-.061	-.061	0 %100
33	M46	X	.106	.106	0 %100
34	M46	Z	-.061	-.061	0 %100
35	M47	X	.403	.403	0 %100
36	M47	Z	-.233	-.233	0 %100
37	M50	X	.416	.416	0 %100
38	M50	Z	-.24	-.24	0 %100
39	M53	X	.49	.49	0 %100
40	M53	Z	-.283	-.283	0 %100
41	M54	X	.49	.49	0 %100
42	M54	Z	-.283	-.283	0 %100
43	M55	X	.15	.15	0 %100
44	M55	Z	-.087	-.087	0 %100
45	MP2A	X	.406	.406	0 %100
46	MP2A	Z	-.235	-.235	0 %100
47	MP3A	X	.406	.406	0 %100
48	MP3A	Z	-.235	-.235	0 %100
49	M41	X	.064	.064	0 %100
50	M41	Z	-.037	-.037	0 %100
51	M42	X	.064	.064	0 %100
52	M42	Z	-.037	-.037	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
53	M48A	X	.123	.123	0 %100
54	M48A	Z	-.071	-.071	0 %100
55	M49A	X	.311	.311	0 %100
56	M49A	Z	-.18	-.18	0 %100
57	M50A	X	.54	.54	0 %100
58	M50A	Z	-.311	-.311	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	0	0	0 %100
2	M1	Z	0	0	0 %100
3	M2	X	0	0	0 %100
4	M2	Z	0	0	0 %100
5	MP4A	X	.461	.461	0 %100
6	MP4A	Z	0	0	0 %100
7	M5	X	.461	.461	0 %100
8	M5	Z	0	0	0 %100
9	M6	X	.409	.409	0 %100
10	M6	Z	0	0	0 %100
11	M7	X	.461	.461	0 %100
12	M7	Z	0	0	0 %100
13	M9	X	.461	.461	0 %100
14	M9	Z	0	0	0 %100
15	M30	X	.075	.075	0 %100
16	M30	Z	0	0	0 %100
17	M31	X	.075	.075	0 %100
18	M31	Z	0	0	0 %100
19	M32	X	.075	.075	0 %100
20	M32	Z	0	0	0 %100
21	M33	X	.075	.075	0 %100
22	M33	Z	0	0	0 %100
23	MP1A	X	.469	.469	0 %100
24	MP1A	Z	0	0	0 %100
25	RCP	X	.355	.355	0 %100
26	RCP	Z	0	0	0 %100
27	M43	X	0	0	0 %100
28	M43	Z	0	0	0 %100
29	M44	X	.355	.355	0 %100
30	M44	Z	0	0	0 %100
31	M45	X	.355	.355	0 %100
32	M45	Z	0	0	0 %100
33	M46	X	0	0	0 %100
34	M46	Z	0	0	0 %100
35	M47	X	.355	.355	0 %100
36	M47	Z	0	0	0 %100
37	M50	X	.481	.481	0 %100
38	M50	Z	0	0	0 %100
39	M53	X	.565	.565	0 %100
40	M53	Z	0	0	0 %100
41	M54	X	.565	.565	0 %100
42	M54	Z	0	0	0 %100
43	M55	X	.343	.343	0 %100
44	M55	Z	0	0	0 %100
45	MP2A	X	.469	.469	0 %100
46	MP2A	Z	0	0	0 %100
47	MP3A	X	.469	.469	0 %100

Company : Maser Consulting
 Designer : NL
 Job Number : 21781042A
 Model Name : Mount Fix

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
48	MP3A	Z	0	0	%100
49	M41	X	.099	.099	%100
50	M41	Z	0	0	%100
51	M42	X	.099	.099	%100
52	M42	Z	0	0	%100
53	M48A	X	0	0	%100
54	M48A	Z	0	0	%100
55	M49A	X	.399	.399	0
56	M49A	Z	0	0	%100
57	M50A	X	.399	.399	0
58	M50A	Z	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	.178	.178	0
2	M1	Z	.103	.103	%100
3	M2	X	.178	.178	0
4	M2	Z	.103	.103	%100
5	MP4A	X	.399	.399	0
6	MP4A	Z	.23	.23	%100
7	M5	X	.399	.399	0
8	M5	Z	.23	.23	%100
9	M6	X	.355	.355	0
10	M6	Z	.205	.205	%100
11	M7	X	.399	.399	0
12	M7	Z	.23	.23	%100
13	M9	X	.399	.399	0
14	M9	Z	.23	.23	%100
15	M30	X	.049	.049	0
16	M30	Z	.028	.028	%100
17	M31	X	.049	.049	0
18	M31	Z	.028	.028	%100
19	M32	X	.049	.049	0
20	M32	Z	.028	.028	%100
21	M33	X	.049	.049	0
22	M33	Z	.028	.028	%100
23	MP1A	X	.406	.406	0
24	MP1A	Z	.235	.235	%100
25	RCP	X	.403	.403	0
26	RCP	Z	.233	.233	%100
27	M43	X	.106	.106	0
28	M43	Z	.061	.061	%100
29	M44	X	.106	.106	0
30	M44	Z	.061	.061	%100
31	M45	X	.403	.403	0
32	M45	Z	.233	.233	%100
33	M46	X	.106	.106	0
34	M46	Z	.061	.061	%100
35	M47	X	.106	.106	0
36	M47	Z	.061	.061	%100
37	M50	X	.416	.416	0
38	M50	Z	.24	.24	%100
39	M53	X	.49	.49	0
40	M53	Z	.283	.283	%100
41	M54	X	.49	.49	0
42	M54	Z	.283	.283	0

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft.%]	End Location[ft.%]
43	M55	X .309	.309	0	%100
44	M55	Z .179	.179	0	%100
45	MP2A	X .406	.406	0	%100
46	MP2A	Z .235	.235	0	%100
47	MP3A	X .406	.406	0	%100
48	MP3A	Z .235	.235	0	%100
49	M41	X .064	.064	0	%100
50	M41	Z .037	.037	0	%100
51	M42	X .064	.064	0	%100
52	M42	Z .037	.037	0	%100
53	M48A	X .123	.123	0	%100
54	M48A	Z .071	.071	0	%100
55	M49A	X .54	.54	0	%100
56	M49A	Z .311	.311	0	%100
57	M50A	X .311	.311	0	%100
58	M50A	Z .18	.18	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 .309	.309	0	%100
2	M1	Z .535	.535	0	%100
3	M2	X .309	.309	0	%100
4	M2	Z .535	.535	0	%100
5	MP4A	X .23	.23	0	%100
6	MP4A	Z .399	.399	0	%100
7	M5	X .23	.23	0	%100
8	M5	Z .399	.399	0	%100
9	M6	X .205	.205	0	%100
10	M6	Z .355	.355	0	%100
11	M7	X .23	.23	0	%100
12	M7	Z .399	.399	0	%100
13	M9	X .23	.23	0	%100
14	M9	Z .399	.399	0	%100
15	M30	X .009	.009	0	%100
16	M30	Z .016	.016	0	%100
17	M31	X .009	.009	0	%100
18	M31	Z .016	.016	0	%100
19	M32	X .009	.009	0	%100
20	M32	Z .016	.016	0	%100
21	M33	X .009	.009	0	%100
22	M33	Z .016	.016	0	%100
23	MP1A	X .235	.235	0	%100
24	MP1A	Z .406	.406	0	%100
25	RCP	X .172	.172	0	%100
26	RCP	Z .297	.297	0	%100
27	M43	X .184	.184	0	%100
28	M43	Z .319	.319	0	%100
29	M44	X 5.2e-5	5.2e-5	0	%100
30	M44	Z 8.9e-5	8.9e-5	0	%100
31	M45	X .172	.172	0	%100
32	M45	Z .297	.297	0	%100
33	M46	X .184	.184	0	%100
34	M46	Z .319	.319	0	%100
35	M47	X 5.2e-5	5.2e-5	0	%100
36	M47	Z 8.9e-5	8.9e-5	0	%100
37	M50	X .24	.24	0	%100

Company : Maser Consulting
 Designer : NL
 Job Number : 21781042A
 Model Name : Mount Fix

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
38	M50	Z	.416	.416	0 %100
39	M53	X	.283	.283	0 %100
40	M53	Z	.49	.49	0 %100
41	M54	X	.283	.283	0 %100
42	M54	Z	.49	.49	0 %100
43	M55	X	.101	.101	0 %100
44	M55	Z	.175	.175	0 %100
45	MP2A	X	.235	.235	0 %100
46	MP2A	Z	.406	.406	0 %100
47	MP3A	X	.235	.235	0 %100
48	MP3A	Z	.406	.406	0 %100
49	M41	X	.012	.012	0 %100
50	M41	Z	.021	.021	0 %100
51	M42	X	.012	.012	0 %100
52	M42	Z	.021	.021	0 %100
53	M48A	X	.213	.213	0 %100
54	M48A	Z	.369	.369	0 %100
55	M49A	X	.404	.404	0 %100
56	M49A	Z	.7	.7	0 %100
57	M50A	X	.272	.272	0 %100
58	M50A	Z	.472	.472	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	.823	.823	0 %100
3	M2	X	0	0	0 %100
4	M2	Z	.823	.823	0 %100
5	MP4A	X	0	0	0 %100
6	MP4A	Z	.461	.461	0 %100
7	M5	X	0	0	0 %100
8	M5	Z	.461	.461	0 %100
9	M6	X	0	0	0 %100
10	M6	Z	.409	.409	0 %100
11	M7	X	0	0	0 %100
12	M7	Z	.461	.461	0 %100
13	M9	X	0	0	0 %100
14	M9	Z	.461	.461	0 %100
15	M30	X	0	0	0 %100
16	M30	Z	0	0	0 %100
17	M31	X	0	0	0 %100
18	M31	Z	0	0	0 %100
19	M32	X	0	0	0 %100
20	M32	Z	0	0	0 %100
21	M33	X	0	0	0 %100
22	M33	Z	0	0	0 %100
23	MP1A	X	0	0	0 %100
24	MP1A	Z	.469	.469	0 %100
25	RCP	X	0	0	0 %100
26	RCP	Z	.111	.111	0 %100
27	M43	X	0	0	0 %100
28	M43	Z	.491	.491	0 %100
29	M44	X	0	0	0 %100
30	M44	Z	.111	.111	0 %100
31	M45	X	0	0	0 %100
32	M45	Z	.111	.111	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.%]
33	M46	X	0	0	%100
34	M46	Z	.491	.491	%100
35	M47	X	0	0	%100
36	M47	Z	.111	.111	%100
37	M50	X	0	0	%100
38	M50	Z	.481	.481	%100
39	M53	X	0	0	%100
40	M53	Z	.565	.565	%100
41	M54	X	0	0	%100
42	M54	Z	.565	.565	%100
43	M55	X	0	0	%100
44	M55	Z	.033	.033	%100
45	MP2A	X	0	0	%100
46	MP2A	Z	.469	.469	%100
47	MP3A	X	0	0	%100
48	MP3A	Z	.469	.469	%100
49	M41	X	0	0	%100
50	M41	Z	0	0	%100
51	M42	X	0	0	%100
52	M42	Z	0	0	%100
53	M48A	X	0	0	%100
54	M48A	Z	.568	.568	%100
55	M49A	X	0	0	%100
56	M49A	Z	.769	.769	%100
57	M50A	X	0	0	%100
58	M50A	Z	.769	.769	%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	-.309	-.309	0 %100
2	M1	Z	.535	.535	0 %100
3	M2	X	-.309	-.309	0 %100
4	M2	Z	.535	.535	0 %100
5	MP4A	X	-.23	-.23	0 %100
6	MP4A	Z	.399	.399	0 %100
7	M5	X	-.23	-.23	0 %100
8	M5	Z	.399	.399	0 %100
9	M6	X	-.205	-.205	0 %100
10	M6	Z	.355	.355	0 %100
11	M7	X	-.23	-.23	0 %100
12	M7	Z	.399	.399	0 %100
13	M9	X	-.23	-.23	0 %100
14	M9	Z	.399	.399	0 %100
15	M30	X	-.009	-.009	0 %100
16	M30	Z	.016	.016	0 %100
17	M31	X	-.009	-.009	0 %100
18	M31	Z	.016	.016	0 %100
19	M32	X	-.009	-.009	0 %100
20	M32	Z	.016	.016	0 %100
21	M33	X	-.009	-.009	0 %100
22	M33	Z	.016	.016	0 %100
23	MP1A	X	-.235	-.235	0 %100
24	MP1A	Z	.406	.406	0 %100
25	RCP	X	-5.2e-5	-5.2e-5	0 %100
26	RCP	Z	8.9e-5	8.9e-5	0 %100
27	M43	X	-.184	-.184	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
28	M43	Z	.319	.319	0 %100
29	M44	X	-.172	-.172	0 %100
30	M44	Z	.297	.297	0 %100
31	M45	X	-5.2e-5	-5.2e-5	0 %100
32	M45	Z	8.9e-5	8.9e-5	0 %100
33	M46	X	-.184	-.184	0 %100
34	M46	Z	.319	.319	0 %100
35	M47	X	-.172	-.172	0 %100
36	M47	Z	.297	.297	0 %100
37	M50	X	-.24	-.24	0 %100
38	M50	Z	.416	.416	0 %100
39	M53	X	-.283	-.283	0 %100
40	M53	Z	.49	.49	0 %100
41	M54	X	-.283	-.283	0 %100
42	M54	Z	.49	.49	0 %100
43	M55	X	-.009	-.009	0 %100
44	M55	Z	.016	.016	0 %100
45	MP2A	X	-.235	-.235	0 %100
46	MP2A	Z	.406	.406	0 %100
47	MP3A	X	-.235	-.235	0 %100
48	MP3A	Z	.406	.406	0 %100
49	M41	X	-.012	-.012	0 %100
50	M41	Z	.021	.021	0 %100
51	M42	X	-.012	-.012	0 %100
52	M42	Z	.021	.021	0 %100
53	M48A	X	-.213	-.213	0 %100
54	M48A	Z	.369	.369	0 %100
55	M49A	X	-.272	-.272	0 %100
56	M49A	Z	.472	.472	0 %100
57	M50A	X	-.404	-.404	0 %100
58	M50A	Z	.7	.7	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	-.178	-.178	0 %100
2	M1	Z	.103	.103	0 %100
3	M2	X	-.178	-.178	0 %100
4	M2	Z	.103	.103	0 %100
5	MP4A	X	-.399	-.399	0 %100
6	MP4A	Z	.23	.23	0 %100
7	M5	X	-.399	-.399	0 %100
8	M5	Z	.23	.23	0 %100
9	M6	X	-.355	-.355	0 %100
10	M6	Z	.205	.205	0 %100
11	M7	X	-.399	-.399	0 %100
12	M7	Z	.23	.23	0 %100
13	M9	X	-.399	-.399	0 %100
14	M9	Z	.23	.23	0 %100
15	M30	X	-.049	-.049	0 %100
16	M30	Z	.028	.028	0 %100
17	M31	X	-.049	-.049	0 %100
18	M31	Z	.028	.028	0 %100
19	M32	X	-.049	-.049	0 %100
20	M32	Z	.028	.028	0 %100
21	M33	X	-.049	-.049	0 %100
22	M33	Z	.028	.028	0 %100

Company : Maser Consulting
 Designer : NL
 Job Number : 21781042A
 Model Name : Mount Fix

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft.%]	End Location[ft.%]
23	MP1A	X	-.406	-.406	0 %100
24	MP1A	Z	.235	.235	0 %100
25	RCP	X	-.106	-.106	0 %100
26	RCP	Z	.061	.061	0 %100
27	M43	X	-.106	-.106	0 %100
28	M43	Z	.061	.061	0 %100
29	M44	X	-.403	-.403	0 %100
30	M44	Z	.233	.233	0 %100
31	M45	X	-.106	-.106	0 %100
32	M45	Z	.061	.061	0 %100
33	M46	X	-.106	-.106	0 %100
34	M46	Z	.061	.061	0 %100
35	M47	X	-.403	-.403	0 %100
36	M47	Z	.233	.233	0 %100
37	M50	X	-.416	-.416	0 %100
38	M50	Z	.24	.24	0 %100
39	M53	X	-.49	-.49	0 %100
40	M53	Z	.283	.283	0 %100
41	M54	X	-.49	-.49	0 %100
42	M54	Z	.283	.283	0 %100
43	M55	X	-.15	-.15	0 %100
44	M55	Z	.087	.087	0 %100
45	MP2A	X	-.406	-.406	0 %100
46	MP2A	Z	.235	.235	0 %100
47	MP3A	X	-.406	-.406	0 %100
48	MP3A	Z	.235	.235	0 %100
49	M41	X	-.064	-.064	0 %100
50	M41	Z	.037	.037	0 %100
51	M42	X	-.064	-.064	0 %100
52	M42	Z	.037	.037	0 %100
53	M48A	X	-.123	-.123	0 %100
54	M48A	Z	.071	.071	0 %100
55	M49A	X	-.311	-.311	0 %100
56	M49A	Z	.18	.18	0 %100
57	M50A	X	-.54	-.54	0 %100
58	M50A	Z	.311	.311	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	0	0	0 %100
2	M1	Z	0	0	0 %100
3	M2	X	0	0	0 %100
4	M2	Z	0	0	0 %100
5	MP4A	X	-.461	-.461	0 %100
6	MP4A	Z	0	0	0 %100
7	M5	X	-.461	-.461	0 %100
8	M5	Z	0	0	0 %100
9	M6	X	-.409	-.409	0 %100
10	M6	Z	0	0	0 %100
11	M7	X	-.461	-.461	0 %100
12	M7	Z	0	0	0 %100
13	M9	X	-.461	-.461	0 %100
14	M9	Z	0	0	0 %100
15	M30	X	-.075	-.075	0 %100
16	M30	Z	0	0	0 %100
17	M31	X	-.075	-.075	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft.%]	End Location[ft.%]
18	M31	Z	0	0	%100
19	M32	X	-.075	-.075	%100
20	M32	Z	0	0	%100
21	M33	X	-.075	-.075	%100
22	M33	Z	0	0	%100
23	MP1A	X	-.469	-.469	%100
24	MP1A	Z	0	0	%100
25	RCP	X	-.355	-.355	%100
26	RCP	Z	0	0	%100
27	M43	X	0	0	%100
28	M43	Z	0	0	%100
29	M44	X	-.355	-.355	%100
30	M44	Z	0	0	%100
31	M45	X	-.355	-.355	%100
32	M45	Z	0	0	%100
33	M46	X	0	0	%100
34	M46	Z	0	0	%100
35	M47	X	-.355	-.355	%100
36	M47	Z	0	0	%100
37	M50	X	-.481	-.481	%100
38	M50	Z	0	0	%100
39	M53	X	-.565	-.565	%100
40	M53	Z	0	0	%100
41	M54	X	-.565	-.565	%100
42	M54	Z	0	0	%100
43	M55	X	-.343	-.343	%100
44	M55	Z	0	0	%100
45	MP2A	X	-.469	-.469	%100
46	MP2A	Z	0	0	%100
47	MP3A	X	-.469	-.469	%100
48	MP3A	Z	0	0	%100
49	M41	X	-.099	-.099	%100
50	M41	Z	0	0	%100
51	M42	X	-.099	-.099	%100
52	M42	Z	0	0	%100
53	M48A	X	0	0	%100
54	M48A	Z	0	0	%100
55	M49A	X	-.399	-.399	%100
56	M49A	Z	0	0	%100
57	M50A	X	-.399	-.399	%100
58	M50A	Z	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	-.178	-.178	%100
2	M1	Z	-.103	-.103	%100
3	M2	X	-.178	-.178	%100
4	M2	Z	-.103	-.103	%100
5	MP4A	X	-.399	-.399	%100
6	MP4A	Z	-.23	-.23	%100
7	M5	X	-.399	-.399	%100
8	M5	Z	-.23	-.23	%100
9	M6	X	-.355	-.355	%100
10	M6	Z	-.205	-.205	%100
11	M7	X	-.399	-.399	%100
12	M7	Z	-.23	-.23	%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.%]
13	M9	X	-.399	-.399	0 %100
14	M9	Z	-.23	-.23	0 %100
15	M30	X	-.049	-.049	0 %100
16	M30	Z	-.028	-.028	0 %100
17	M31	X	-.049	-.049	0 %100
18	M31	Z	-.028	-.028	0 %100
19	M32	X	-.049	-.049	0 %100
20	M32	Z	-.028	-.028	0 %100
21	M33	X	-.049	-.049	0 %100
22	M33	Z	-.028	-.028	0 %100
23	MP1A	X	-.406	-.406	0 %100
24	MP1A	Z	-.235	-.235	0 %100
25	RCP	X	-.403	-.403	0 %100
26	RCP	Z	-.233	-.233	0 %100
27	M43	X	-.106	-.106	0 %100
28	M43	Z	-.061	-.061	0 %100
29	M44	X	-.106	-.106	0 %100
30	M44	Z	-.061	-.061	0 %100
31	M45	X	-.403	-.403	0 %100
32	M45	Z	-.233	-.233	0 %100
33	M46	X	-.106	-.106	0 %100
34	M46	Z	-.061	-.061	0 %100
35	M47	X	-.106	-.106	0 %100
36	M47	Z	-.061	-.061	0 %100
37	M50	X	-.416	-.416	0 %100
38	M50	Z	-.24	-.24	0 %100
39	M53	X	-.49	-.49	0 %100
40	M53	Z	-.283	-.283	0 %100
41	M54	X	-.49	-.49	0 %100
42	M54	Z	-.283	-.283	0 %100
43	M55	X	-.309	-.309	0 %100
44	M55	Z	-.179	-.179	0 %100
45	MP2A	X	-.406	-.406	0 %100
46	MP2A	Z	-.235	-.235	0 %100
47	MP3A	X	-.406	-.406	0 %100
48	MP3A	Z	-.235	-.235	0 %100
49	M41	X	-.064	-.064	0 %100
50	M41	Z	-.037	-.037	0 %100
51	M42	X	-.064	-.064	0 %100
52	M42	Z	-.037	-.037	0 %100
53	M48A	X	-.123	-.123	0 %100
54	M48A	Z	-.071	-.071	0 %100
55	M49A	X	-.54	-.54	0 %100
56	M49A	Z	-.311	-.311	0 %100
57	M50A	X	-.311	-.311	0 %100
58	M50A	Z	-.18	-.18	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	-.309	-.309	0 %100
2	M1	Z	-.535	-.535	0 %100
3	M2	X	-.309	-.309	0 %100
4	M2	Z	-.535	-.535	0 %100
5	MP4A	X	-.23	-.23	0 %100
6	MP4A	Z	-.399	-.399	0 %100
7	M5	X	-.23	-.23	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,F...]	Start Location[ft,%]	End Location[ft,%]
8	M5	Z	-.399	-.399	0 %100
9	M6	X	-.205	-.205	0 %100
10	M6	Z	-.355	-.355	0 %100
11	M7	X	-.23	-.23	0 %100
12	M7	Z	-.399	-.399	0 %100
13	M9	X	-.23	-.23	0 %100
14	M9	Z	-.399	-.399	0 %100
15	M30	X	-.009	-.009	0 %100
16	M30	Z	-.016	-.016	0 %100
17	M31	X	-.009	-.009	0 %100
18	M31	Z	-.016	-.016	0 %100
19	M32	X	-.009	-.009	0 %100
20	M32	Z	-.016	-.016	0 %100
21	M33	X	-.009	-.009	0 %100
22	M33	Z	-.016	-.016	0 %100
23	MP1A	X	-.235	-.235	0 %100
24	MP1A	Z	-.406	-.406	0 %100
25	RCP	X	-.172	-.172	0 %100
26	RCP	Z	-.297	-.297	0 %100
27	M43	X	-.184	-.184	0 %100
28	M43	Z	-.319	-.319	0 %100
29	M44	X	-5.2e-5	-5.2e-5	0 %100
30	M44	Z	-8.9e-5	-8.9e-5	0 %100
31	M45	X	-.172	-.172	0 %100
32	M45	Z	-.297	-.297	0 %100
33	M46	X	-.184	-.184	0 %100
34	M46	Z	-.319	-.319	0 %100
35	M47	X	-5.2e-5	-5.2e-5	0 %100
36	M47	Z	-8.9e-5	-8.9e-5	0 %100
37	M50	X	-.24	-.24	0 %100
38	M50	Z	-.416	-.416	0 %100
39	M53	X	-.283	-.283	0 %100
40	M53	Z	-.49	-.49	0 %100
41	M54	X	-.283	-.283	0 %100
42	M54	Z	-.49	-.49	0 %100
43	M55	X	-.101	-.101	0 %100
44	M55	Z	-.175	-.175	0 %100
45	MP2A	X	-.235	-.235	0 %100
46	MP2A	Z	-.406	-.406	0 %100
47	MP3A	X	-.235	-.235	0 %100
48	MP3A	Z	-.406	-.406	0 %100
49	M41	X	-.012	-.012	0 %100
50	M41	Z	-.021	-.021	0 %100
51	M42	X	-.012	-.012	0 %100
52	M42	Z	-.021	-.021	0 %100
53	M48A	X	-.213	-.213	0 %100
54	M48A	Z	-.369	-.369	0 %100
55	M49A	X	-.404	-.404	0 %100
56	M49A	Z	-.7	-.7	0 %100
57	M50A	X	-.272	-.272	0 %100
58	M50A	Z	-.472	-.472	0 %100

Member Area Loads

Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
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	N72	max	1150.361	11	845.298	14	1130.821	14	.058	8	0	51	.088	47
2		min	-1418.037	5	-200.006	8	-146.492	8	-.247	14	0	1	-.112	5
3	N71	max	1436.061	5	598.868	14	751.304	1	-.018	8	0	51	.087	47
4		min	-1161.503	11	61.813	8	-1002.311	7	-.175	14	0	1	-.112	5
5	N73	max	205.604	6	48.157	17	720.81	12	0	51	0	51	0	51
6		min	-215.722	12	13.301	1	-711.669	6	0	1	0	1	0	1
7	N76A	max	1291.428	11	1743.043	20	106.836	2	.003	2	0	50	0	45
8		min	-1290.262	5	-71.124	2	-667.3	20	-.003	7	-.001	45	0	50
9	Totals:	max	1106.071	11	2862.703	18	1881.34	1						
10		min	-1106.07	5	978.475	12	-1881.339	7						

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

Member	Shape	Code Check	Loc[...]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc...	phi*Pnt...	phi*Mn...	phi*Mn...	Cb	Eqn
1	M1	L2.5x2.5x3	.847	4	5	.448	4	y	15	2280.519	29192.4	.873	1.45	1.. H2-1
2	M2	L2.5x2.5x3	.856	4	8	.441	4	z	14	2280.519	29192.4	.873	1.529	2.. H2-1
3	MP4A	PIPE_2.0	.311	2.969	2	.120	2.969		5	24514.6..	32130	1.872	1.872	4.. H1-1b
4	M5	PIPE_2.0	.320	1.781	3	.298	1.781		2	24514.6..	32130	1.872	1.872	3.. H1-1b
5	M6	PIPE_2.0	.094	1.717	7	.103	1.717		3	27545.4..	32130	1.872	1.872	3.. H1-1b
6	M7	PIPE_2.0	.193	1.781	2	.135	1.781		6	24514.6..	32130	1.872	1.872	2.. H1-1b
7	M9	PIPE_2.0	.285	1.781	37	.121	2.721		37	24514.6..	32130	1.872	1.872	3.. H1-1b
8	M30	SR_0.5	.678	0	13	.389	0		13	5610.827	6350.4	.052	.052	1.. H1-1b
9	M31	SR_0.5	.685	0	13	.384	0		24	5610.827	6350.4	.052	.052	1.. H1-1b
10	M32	SR_0.5	.763	0	19	.422	0		18	5610.827	6350.4	.052	.052	1.. H1-1b
11	M33	SR_0.5	.750	0	19	.432	0		19	5610.827	6350.4	.052	.052	1.. H1-1b
12	MP1A	PIPE_2.0	.041	3.306	1	.029	4.545		8	21862.7..	32130	1.872	1.872	1.. H1-1b
13	RCP	L2.75x2x4	.539	0	2	.071	1.24	z	6	34233.8..	36450	.827	2.202	1.. H2-1
14	M43	L2.75x2x4	.623	.813	6	.146	.813	z	6	32729.85	36450	.827	2.202	1.. H2-1
15	M44	L2.75x2x4	.579	0	2	.081	0	z	3	34233.8..	36450	.827	2.202	2.. H2-1
16	M45	L2.75x2x4	.548	1.24	17	.082	1.24	z	5	34233.8..	36450	.827	2.202	1.. H2-1
17	M46	L2.75x2x4	.688	.813	15	.153	.813	z	15	32729.85	36450	.827	2.202	1.. H2-1
18	M47	L2.75x2x4	.418	0	48	.062	0	z	47	34233.8..	36450	.827	2.202	1.. H2-1
19	M50	PIPE_2.5	.434	3.375	5	.466	3.875		5	44490.9..	50715	3.596	3.596	3.. H3-6
20	M53	L2x2x4	.698	0	3	.074	2.75	z	3	20858.0..	30585.6	.691	1.577	2.. H2-1
21	M54	L2x2x4	.492	0	47	.052	2.75	y	47	20858.0..	30585.6	.691	1.577	2.. H2-1
22	M55	PIPE_1.5	.133	9.013	12	.007	9.013		23	5658.964	23593.5	1.105	1.105	1.. H1-1b*
23	MP2A	PIPE_2.0	.084	2.562	1	.102	2.625		3	20866.7..	32130	1.872	1.872	1.. H1-1b
24	MP3A	PIPE_2.0	.372	2.562	1	.171	5.062		6	20866.7..	32130	1.872	1.872	1.. H1-1b
25	M41	PL1/2x6	.365	0	15	.183	0	y	5	88748.0..	97200	1.012	12.15	1.. H1-1b
26	M42	PL1/2x6	.490	0	14	.184	.5	y	5	88748.0..	97200	1.012	12.15	1.. H1-1b
27	M48A	PIPE_2.5	.283	4.469	3	.163	4.469		6	13460.4..	50715	3.596	3.596	2.. H1-1b
28	M49A	L2.5x2.5x4	.132	3.481	2	.013	6.961	z	7	8950.233	38556	1.114	2.07	1.. H2-1
29	M50A	L2.5x2.5x4	.108	3.481	13	.013	6.961	y	2	8950.233	38556	1.114	2.07	1.. H2-1

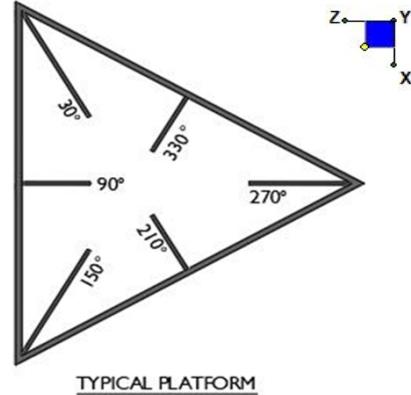


Client: Verizon Wireless Date: 9/2/2021
 Site Name: Cottage Grove CT
 Project No. 21781042A
 Title: Mount Fix Page: 1
 Version 3.1

I. Mount-to-Tower Connection Check

RISA Model Data

Nodes (labeled per RISA)	Orientation (per graphic of typical platform)
N71	90
N72	90



Tower Connection Bolt Checks

Any moment resistance?: yes

Bolt Quantity per Reaction:

d_x (in) (Delta X of typ. bolt config. sketch): 2

d_y (in) (Delta Y of typ. bolt config. sketch): 3

Bolt Type:

Bolt Diameter (in): 0.5

Required Tensile Strength (kips): 4.1

Required Shear Strength (kips): 2.3

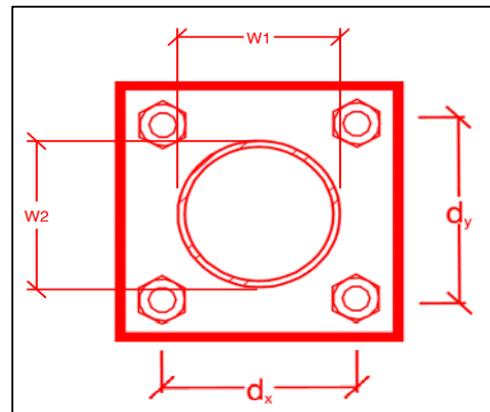
Tensile Strength / bolt (kips): 16.3

Shear Strength / bolt (kips): 9.8

Tensile Capacity Overall: 12.7%*

Shear Capacity Overall: 11.9%

yes
2
3
2
U-Bolt
0.5
4.1
2.3
16.3
9.8
12.7%*
11.9%



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

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Mount Modification

Purpose – to provide Maser Consulting Connecticut 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 Maser Consulting Connecticut 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 Maser Consulting Connecticut.
 - 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 Maser Consulting Connecticut 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 Maser Consulting Connecticut 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 Maser Consulting Connecticut 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

Sector: A

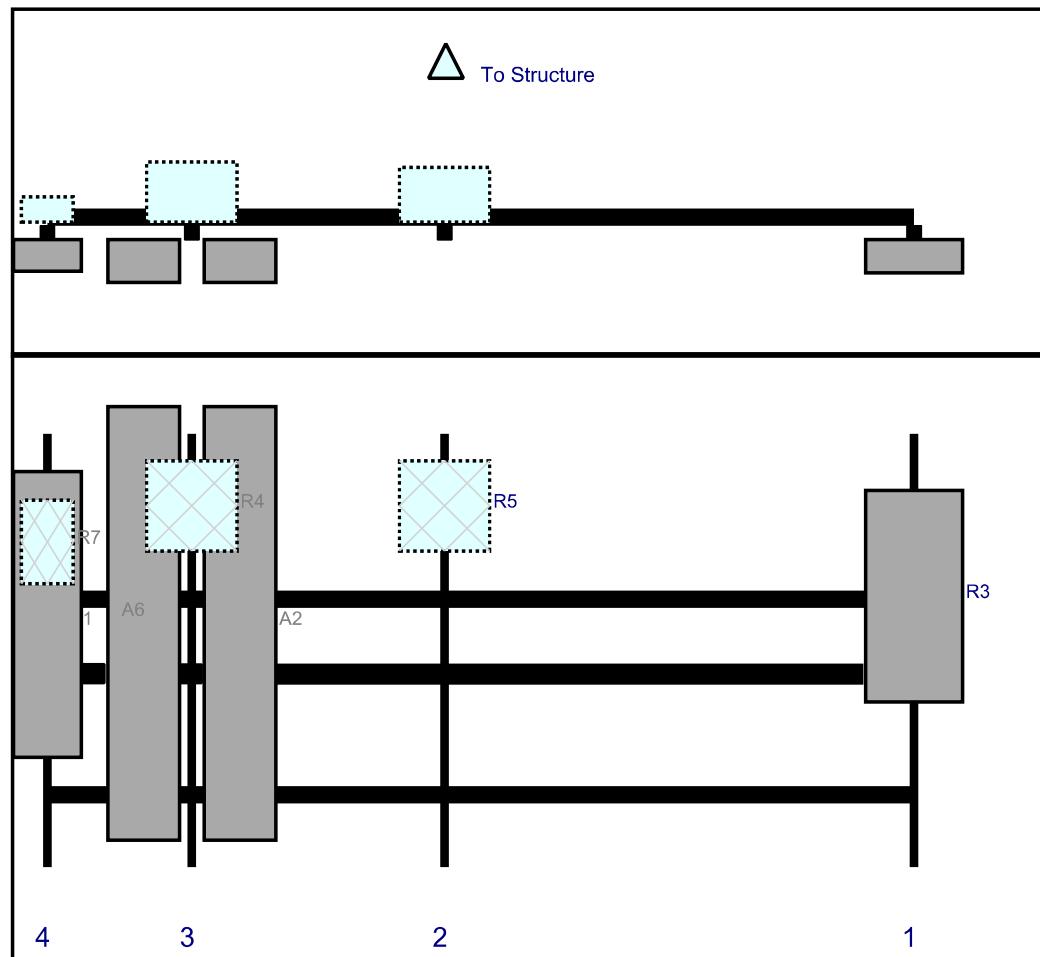
9/10/2021

Structure Type: Self Support

10100065

Mount Elev: 107.00

Page: 1



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant	Ant	Status	Validation
								Frm T.	H Off		
R3	MT6407-77A	35.1	16.1	144	1	a	Front	27	0	Added	
R5	RF4440d-13A	15	15	66	2	a	Behind	12	0	Added	
A1	NHH-65B-R2B	72	11.9	24	3	b	Front	31.5	-8	Added	
A2	NHHSS-65B-R2BT0	72	11.9	24	3	a	Front	31.5	8	Added	
R4	RF4439d-25A	15	15	24	3	a	Behind	12	0	Added	
A6	BXA-70063-4CF	47.4	11.2	0	4	a	Front	30	0	Retained	06/10/2021
R7	CBRS RRH - RT4401-48A	13.9	8.6	0	4	a	Behind	18	0	Added	

Sector: B

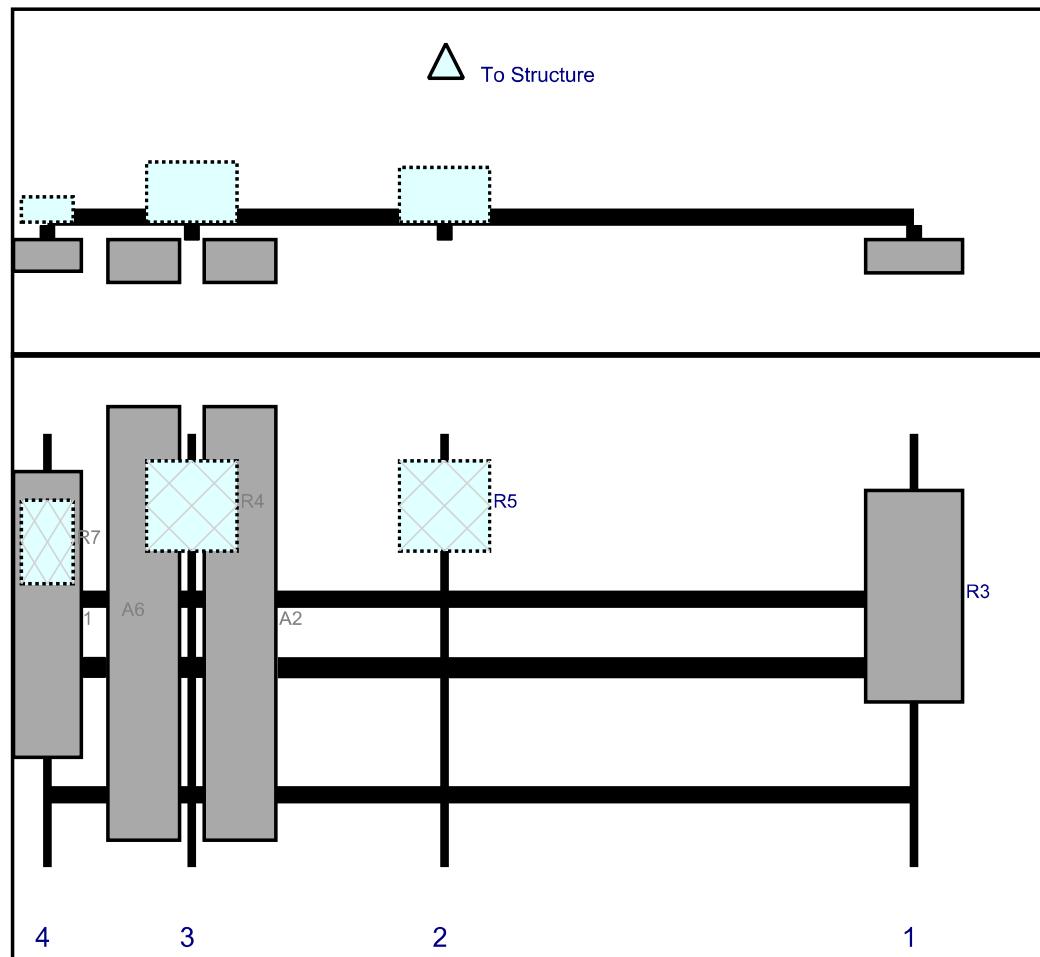
9/10/2021

Structure Type: Self Support

10100065

Mount Elev: 107.00

Page: 2



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant	Ant	Status	Validation
								Frm T.	H Off		
R3	MT6407-77A	35.1	16.1	144	1	a	Front	27	0	Added	
R5	RF4440d-13A	15	15	66	2	a	Behind	12	0	Added	
A1	NHH-65B-R2B	72	11.9	24	3	b	Front	31.5	-8	Added	
A2	NHHSS-65B-R2BT0	72	11.9	24	3	a	Front	31.5	8	Added	
R4	RF4439d-25A	15	15	24	3	a	Behind	12	0	Added	
A6	BXA-70063-4CF	47.4	11.2	0	4	a	Front	30	0	Retained	06/10/2021
R7	CBRS RRH - RT4401-48A	13.9	8.6	0	4	a	Behind	18	0	Added	

Sector: C

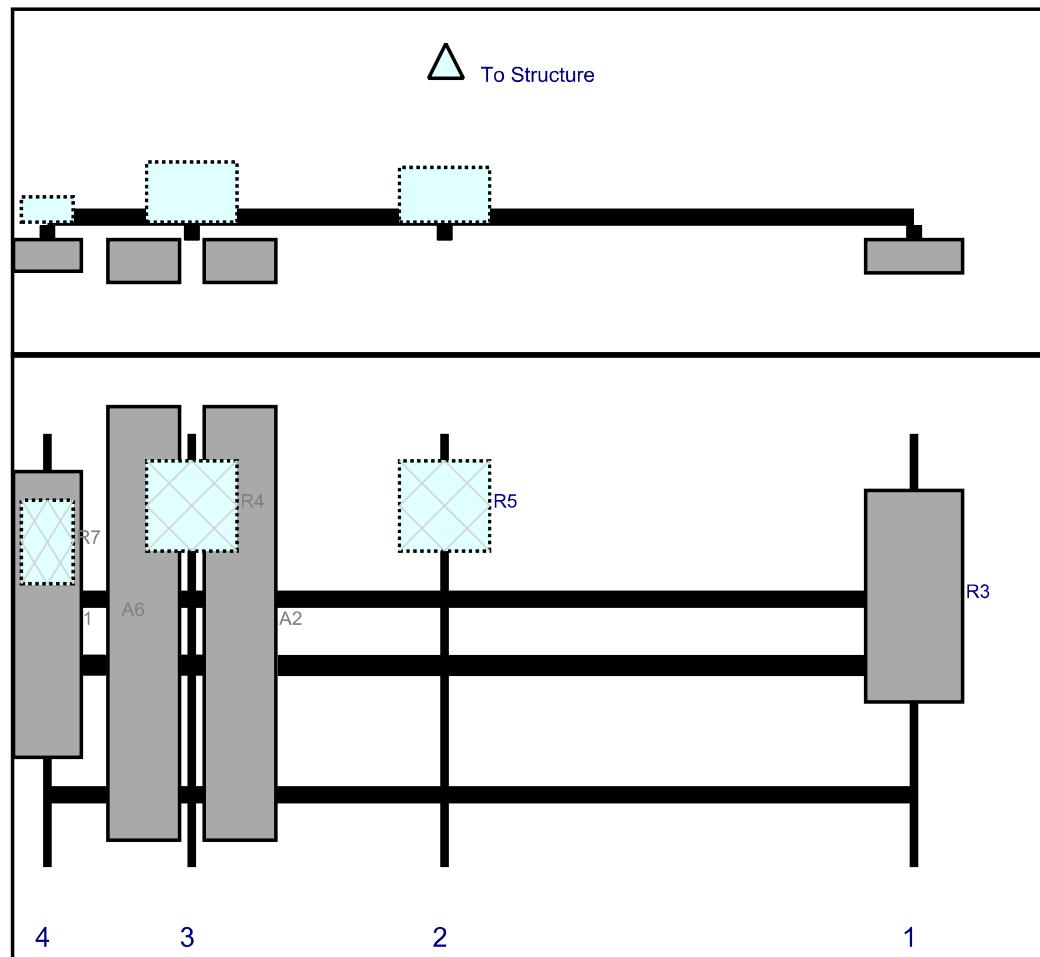
9/10/2021

Structure Type: Self Support

10100065

Mount Elev: 107.00

Page: 3



Ref#	Model	Height	Width	H Dist	Pipe	Pipe	Ant	C. Ant	Ant	Status	Validation
		(in)	(in)	Frm L.	#	Pos V	Pos	Frm T.	H Off		
R3	MT6407-77A	35.1	16.1	144	1	a	Front	27	0	Added	
R5	RF4440d-13A	15	15	66	2	a	Behind	12	0	Added	
A1	NHH-65B-R2B	72	11.9	24	3	b	Front	31.5	-8	Added	
A2	NHHSS-65B-R2BT0	72	11.9	24	3	a	Front	31.5	8	Added	
R4	RF4439d-25A	15	15	24	3	a	Behind	12	0	Added	
A6	BXA-70063-4CF	47.4	11.2	0	4	a	Front	30	0	Retained	06/10/2021
R7	CBRS RRH - RT4401-48A	13.9	8.6	0	4	a	Behind	18	0	Added	

Maser Consulting Connecticut

<u>Site Information</u>	Site ID:	467830-VZW / COTTAGE GROVE CT
	Site Name:	COTTAGE GROVE CT
	Carrier Name:	Verizon Wireless
	Address:	1021 Blue Hill Ave Bloomfield, Connecticut 06002
	Latitude:	Hartford County 41.820119°
	Longitude:	-72.696514°
<u>Structure Information</u>	Tower Type:	Self Support
	Mount Type:	12.00-Ft Sector Frame

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. 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 site to ensure the engineer is taking into account the most current engineering standard available.

Sincerely,



Peter Albano, P.E.
Project Manager

ATTACHMENT 5

Town of Bloomfield, Connecticut - Assessment Parcel Map

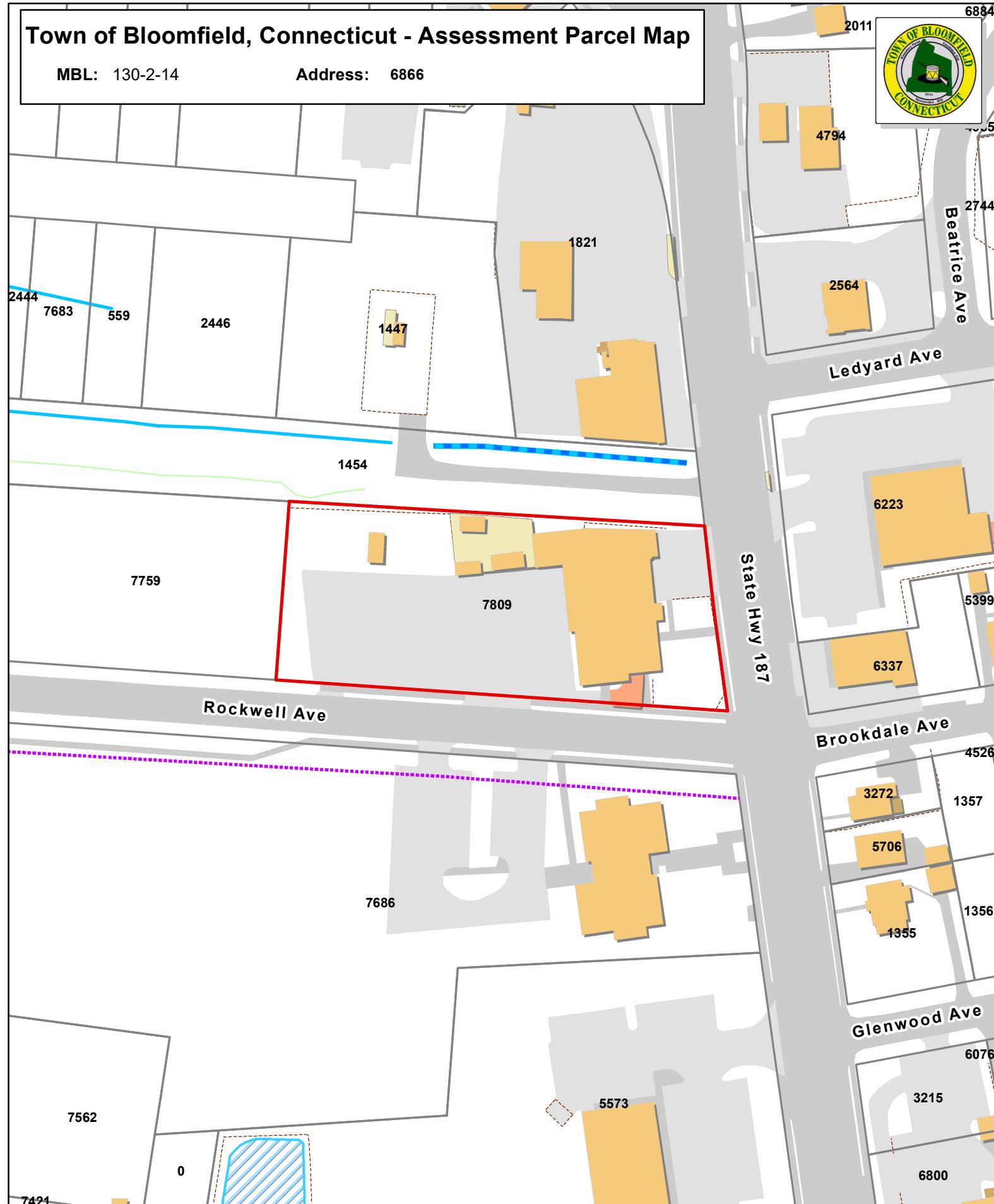
MBL: 130-2-14

Address: 6866

2011



6884



Approximate Scale:

1 inch = 100 feet

Disclaimer:

This map is for informational purposes only.
All information is subject to verification by any user.
The Town of Bloomfield and its mapping contractors
assume no legal responsibility for the information contained herein.

Map Produced November 2021

Parcels labeled by Unique ID



Town of Bloomfield, CT

Property Listing Report

Map Block Lot

39-29

Building # 1

PID 7809

Account

Property Information

Property Location	1021 BLUE HILLS AVE		
Owner	BLUE HILLS FIRE DIST		
Co-Owner	BLUE HILLS AVE COR		
Mailing Address	ROCKWELL AVENUE BLOOMFIELD CT 06002		
Land Use	922	Mun Bldg Com	
Land Class	E		
Zoning Code	GWB		
Census Tract	4712		

Site Index	C
Acreage	1.23
Utilities	
Lot Setting/Desc	
Fire District	B
Book / Page	0091/0376

Primary Construction Details

Year Built	1962
Building Desc.	Commercial
Building Style	Fire Station
Building Grade	C
Stories	1
Occupancy	1.00
Exterior Walls	Brick Veneer
Exterior Walls 2	NA
Roof Style	Gable
Roof Cover	Arch Shingles
Interior Walls	Drywall
Interior Walls 2	Minimum
Interior Floors 1	Vinyl/Asphalt
Interior Floors 2	Concrete

Heating Fuel	Gas
Heating Type	Hot Water
AC Type	42
Bedrooms	0
Full Bathrooms	0
Half Bathrooms	0
Extra Fixtures	0
Total Rooms	0
Bath Style	NA
Kitchen Style	NA
Bsmt Fin Area	0
Rec Rm Area	0
Bsmt Gar	0
Fireplaces	0

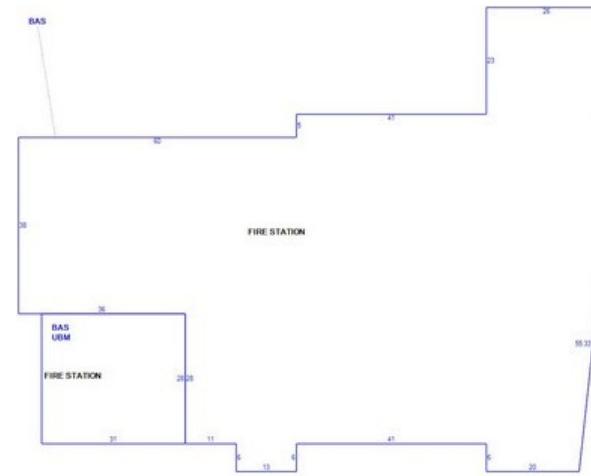
(*Industrial / Commercial Details)

Building Use	Commercial
Building Condition	G
Sprinkler %	100
Heat / AC	HEAT/AC SPLIT
Frame Type	Masonry
Baths / Plumbing	Average
Ceiling / Wall	Sus Ceil & Wal
Rooms / Prtns	Average
Wall Height	12.00
First Floor Use	
Foundation	NA

Photo



Sketch





Town of Bloomfield, CT

Property Listing Report

Map Block Lot

39-29

Building # 1

PID **7809**

Account

Valuation Summary		(Assessed value = 70% of Appraised Value)	Sub Areas		
Item	Appraised	Assessed	Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
Buildings	617000	431900	Office Area	3898	3898
Extras	0	0	First Floor	5346	5346
Improvements			Canopy	75	0
Outbuildings	85700	59990	Basement	868	0
Land	377100	263970			
Total	1079800	755860			

Outbuilding and Extra Features

Type	Description
Cell Shed	260 S.F.
Cell Shed	200 S.F.
Cell Shed	200 S.F.
Paving	23120 S.F.
Shed	288 S.F.

Sales History

Owner of Record	Book/ Page	Sale Date	Sale Price
BLUE HILLS FIRE DIST	0091/0376	1900-01-01	0

ATTACHMENT 6



COTTAGE GROVE
Certificate of Mailing — Firm

Name and Address of Sender Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103	TOTAL NO. of Pieces Listed by Sender 3	TOTAL NO. of Pieces Received at Post Office™ 3	Affix Stamp Here <i>Postmark with Date of Receipt.</i>		
	Postmaster, per (Name of receiving employee) JW		 12/13/2021 US POSTAGE \$002.99 ZIP 06103 041L12203937		
USPS® Tracking Number Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.	Stanley D. Hawthorne, Town Manager Town of Bloomfield				
	800 Bloomfield Avenue Bloomfield, CT 06002				
2.	Jose Giner, Director of Land Use Town of Bloomfield				
	800 Bloomfield Avenue Bloomfield, CT 06002				
3.	Blue Hills Fire District 1021 Blue Hills Avenue Bloomfield, CT 06002				
4.					
5.					
6.					