Robinson+Cole

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Also admitted in Massachusetts
and New York

February 10, 2022

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**
35 Wildwood Street, New Britain, Connecticut

Dear Attorney Bachman:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains an existing wireless telecommunications facility at the above-referenced property address (the "Property"). The facility consists of antennas and remote radio heads attached to a tower and associated equipment on the ground near the base of the tower. The tower currently supports wireless communications antennas and related equipment used by AT&T, T-Mobile and Cellco and athletic field lights. According to the Siting Council's ("Council") Staff Report in Petition No. 703, the construction of the light pole tower was approved by the City of New Britain in August of 2004. In Petition No. 703, the Council determined that it did not have jurisdiction over replacement of the City-owned light pole tower. The City of New Britain issued a Building Permit for the 100-foot light pole with antennas and associated equipment in May of 2005. Cellco's shared use of the light pole tower was approved by the Siting Council ("Council") in March of 2008 in Petition No. 850. A copy of the City's Building Permit, the Council's Petition No. 703 Determination Letter and the Petition No. 850 Staff Report are included in Attachment 1.

Cellco now intends to modify its facility by removing six (6) existing antennas and installing (3) new Samsung MT6407-77A antennas and six (3) new NHH-65B-R2B antennas on its existing T-Arms. Cellco also intends to install six (6) remote radio heads ("RRHs") behind its

antennas. A set of project plans showing Cellco's proposed facility modifications and the specifications for Cellco's new antennas and RRHs are included in Attachment 2.

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

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The proposed modifications will not result in an increase in the height of the existing tower. Cellco's replacement antennas will be installed on its existing T-arms.

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 T-Arms 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 is included in Attachment 6.

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

Sincerely,

Kenneth C. Baldwin

Enclosures
Copy to:
Erin Stewart, New Britain Mayor
Steven Schiller, City Planner
Alex Tyurin, Verizon Wireless

ATTACHMENT 1

35 WILDWOOD ST

BP-2005-0618

GIS #:	15775
Map:	
Block:	
Lot:	
Category:	Accessory
Permit #	BP-2005-0618
Project #	JS-2005-1386
Est. Cost:	$84,000.00
Fee Charged:	$1,290.00
Balance Due:	$.00
Const. Class:	
Use Group:	
Lot Size(sq. ft.):	
Zoning:	T
Units Gained:	
Units Lost:	
Dig Safe #:	

STATE OF CONNECTICUT
CITY OF NEW BRITAIN

BUILDING PERMIT

PERMISSION IS HEREBY GRANTED TO:

Contractor: MCPHEE ELECTRIC ***License:***

Owner: NEW BRITAIN CITY OF - PARK & RECREATION

Applicant: MCPHEE ELECTRIC

AT: 35 WILDWOOD ST

ISSUED ON: 04-May-2005 ***AMENDED ON:*** ***EXPIRES ON:***

TO PERFORM THE FOLLOWING WORK:

Remove & replace 65' with 110' light stanchion, antennas, shelter, wireless scoreboard per plans, specs & 1999 CT State Building Code.

POST THIS CARD SO IT IS VISIBLE FROM THE STREET

Electric	Gas	Plumbing	Building
Underground:	Underground:	Underground:	Excavation:
Service:	Meter:		Footings:
Rough:	Rough:	Rough:	Foundation:
Final:	Final:	Final:	Rough Frame:
			Fireplace/Chimney:
D.P.W.	**Fire**	**Health**	Insulation:
Meter:	Oil:		Final:
House #	Smoke:		Treasury:
Water:	Alarm:		
Sewer:	Sprinklers:		

THIS PERMIT MAY BE REVOKED BY THE CITY OF NEW BRITAIN UPON VIOLATION OF ANY OF ITS RULES AND REGULATIONS.

Upon issuance of this Permit and the signing of the application the Owner / Applicant shall hereby agree to conform to all the requirements of the Laws of the State of Connecticut and the Ordinance(s) of the City of New Britain and to notify the Chief Building Official in writing of any alteration in the plans or specifications of building for which this permit is asked.

Signed by Frank M. Wiatr M.S. Director, Chief Building Official.

Signature:

Fee Type:	Receipt No:	Date Paid:	Check No:	Amount:
building permit	REC-2005-001426	28-Mar-05	2830	$1,290.00

Petition No. 703
New Cingular Wireless PCS, LLC
New Britain, Connecticut
Staff Report
March 3, 2005

New Cingular Wireless LLC (Cingular) is petitioning the Council for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need (Certificate) is required for a proposed light pole facility in the City of New Britain on the basis that the light pole is not within the Council's jurisdiction.

Cingular intends to replace a 60-foot light pole with a 110-foot light pole at a ball field in Chesley Park, a municipal park on Wildwood Avenue in New Britain. The existing light pole is one of 14 in the park.

The proposed light pole would contain stadium lights at the 60-foot level and Cingular's antennas at the 110-foot level. A fenced compound containing an equipment shelter and ball field scoreboard would be located at the base of the light pole.

The City of New Britain approved the project during a public hearing on August 11, 2004. The City of New Britain would own the proposed light pole.

Cingular asserts the proposed light pole is not within the Council's jurisdiction since the light pole is an existing use and does not constitute a telecommunications tower. Furthermore, if the Council rules that the light pole is a telecommunications tower, Cingular asserts it would be a municipal tower since it would be owned by the city, located on city owned property, and would be available to the city for future communication use.

Petition No. 850
Cellco Partnership d/b/a Verizon Wireless
New Britain, CT
Staff Report
March 13, 2008

On February 1, 2008, Cellco Partnership d/b/a Verizon Wireless (Cellco) submitted a petition to the Connecticut Siting Council (Council) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required to share the existing telecommunications tower and expand the existing compound at 35 Wildwood Street in New Britain, Connecticut. On March 10, 2008, Council member Philip T. Ashton and Christina Lepage of the Council staff met with Cellco representative Rachel Mayo to review the proposed project.

The existing tower is located at Chesley Park, which is owned by the City of New Britain. In 2005, AT&T Wireless replaced a 60-foot light pole in the park with a 110-foot pole with lights at the 60-foot level. On March 3, 2005, the Council voted that AT&T Wireless use of the pole for installation of antennas was not under Council jurisdiction due to its existing use as a light pole, which does not constitute a telecommunications tower.

AT&T Wireless owns and maintains the facility. The 110-foot structure currently consists AT&T Wireless antennas with a centerline height of 109.6 feet and T-Mobile antennas with a centerline of 100 feet. AT&T equipment is stored in a 12 foot by 20 foot equipment shelter. T-Mobile equipment is located within cabinets south of the AT&T equipment shelter.

Cellco proposes to install three cellular antennas and three PCS antennas for a total of six panel antennas at the 90 foot level of the existing 110-foot structure. The existing equipment compound would be expanded by approximately 1,080 square feet (27 feet by 40 feet) to accommodate Cellco equipment.

Cellco submitted a structural analysis dated November 29, 2007 and February 14, 2008. These analyses included Sprint (a potential future installation at 130 feet above ground level that has not been proposed to the Council), AT&T Wireless antennas, T-Mobile antennas, the proposed Cellco antennas and the light mount. The structural analyses conclude that, with the existing and proposed loading, the structure would be at 96.8% of its total capacity.

ATTACHMENT 2

verizon

WIRELESS COMMUNICATIONS FACILITY UPGRADE

NEWINGTON 3 CT
35 WILDWOOD STREET,
NEW BRITAIN, CT 06051

GENERAL NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2015 INTERNATIONAL BUILDING CODE AS MODIFIED BY THE 2018 CONNECTICUT SUPPLEMENT, INCLUDING THE TIA/EIA-222 REVISION "G" STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND SUPPORTING STRUCTURES, 2017 CONNECTICUT FIRE SAFETY CODE, NATIONAL ELECTRICAL CODE, AND LOCAL CODES.
2. SHOULD ANY FIELD CONDITIONS PRECLUDE COMPLIANCE WITH THE DRAWINGS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND SHALL NOT PROCEED WITH ANY AFFECTED WORK.
3. CONTRACTOR SHALL REVIEW ALL DRAWINGS AND SPECIFICATIONS IN THE CONTRACT DOCUMENT SET. CONTRACTOR SHALL COORDINATE ALL WORK SHOWN IN THE SET OF DRAWINGS. THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF DRAWINGS TO ALL SUBCONTRACTORS AND ALL RELATED PARTIES. THE SUBCONTRACTORS SHALL EXAMINE ALL THE DRAWINGS AND SPECIFICATIONS FOR THE INFORMATION THAT AFFECTS THEIR WORK.
4. 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.
5. CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR AND EQUIPMENT TO COMPLETE THE WORK AND FURNISH A COMPLETED JOB ALL IN ACCORDANCE WITH LOCAL AND STATE GOVERNING AUTHORITIES AND OTHER AUTHORITIES HAVING LAWFUL JURISDICTION OVER THE WORK.
6. CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND ALL INSPECTIONS REQUIRED AND SHALL ALSO PAY FEES REQUIRED FOR THE GENERAL CONSTRUCTION, AND ALL TRADES AS APPLICABLE PERMITS SHALL BE PAID FOR BY THE RESPECTIVE SUBCONTRACTORS.
7. CONTRACTOR SHALL MAINTAIN A CURRENT SET OF DRAWINGS AND SPECIFICATIONS ON SITE AT ALL TIMES AND INSURE DISTRIBUTION OF NEW DRAWINGS TO SUBCONTRACTORS AND OTHER RELEVANT PARTIES AS SOON AS THEY ARE MADE AVAILABLE. ALL OLD 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.
8. 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.
9. THE CONTRACTOR IS SOLELY RESPONSIBLE TO DETERMINE CONSTRUCTION PROCEDURE AND SEQUENCE, AND TO ENSURE THE SAFETY OF THE EXISTING STRUCTURES AND ITS COMPONENT PARTS DURING CONSTRUCTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, BRACING, UNDERPINNING, ETC. THAT MAY BE NECESSARY. MAINTAIN EXISTING BUILDING'S/PROPERTY'S OPERATIONS, COORDINATE WORK WITH BUILDING/PROPERTY OWNER.
10. 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.
11. ALL UTILITY WORK SHALL BE IN ACCORDANCE WITH LOCAL UTILITY COMPANY REQUIREMENTS AND SPECIFICATIONS.
12. ALL EQUIPMENT AND PRODUCTS PURCHASED ARE TO BE REVIEWED BY CONTRACTOR AND ALL APPLICABLE SUBCONTRACTORS FOR ANY CONDITION PER MFR.'S RECOMMENDATIONS. CONTRACTOR TO SUPPLY THESE ITEMS AT NO COST TO OWNER OR CONSTRUCTION MANAGER.
13. ANY AND ALL ERRORS, DISCREPANCIES, AND "MISSED" ITEMS ARE TO BE BROUGHT TO THE ATTENTION OF THE VERIZON WIRELESS CONSTRUCTION MANAGER DURING THE BIDDING PROCESS BY THE CONTRACTOR. ALL THESE ITEMS ARE TO BE INCLUDED IN THE BID. NO "EXTRA" WILL BE ALLOWED FOR MISSED ITEMS.
14. 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.
15. CONTRACTOR TO REVIEW 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.
16. 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.
17. COORDINATION, LAYOUT, FURNISHING AND INSTALLATION OF CONDUIT AND ALL APPURTENANCES REQUIRED FOR PROPER INSTALLATION OF ELECTRICAL AND TELECOMMUNICATION SERVICE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
18. 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 SUPPLY THESE ITEMS AT NO COST TO OWNER OR CONSTRUCTION MANAGER.
19. 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.
20. THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" AT LEAST 48 HOURS PRIOR TO ANY EXCAVATIONS AT 1-800-922-4455. ALL UTILITIES SHALL BE IDENTIFIED AND CLEARLY MARKED PRIOR TO ANY EXCAVATION WORK. CONTRACTOR SHALL MAINTAIN AND PROTECT MARKED UTILITIES THROUGHOUT PROJECT COMPLETION.

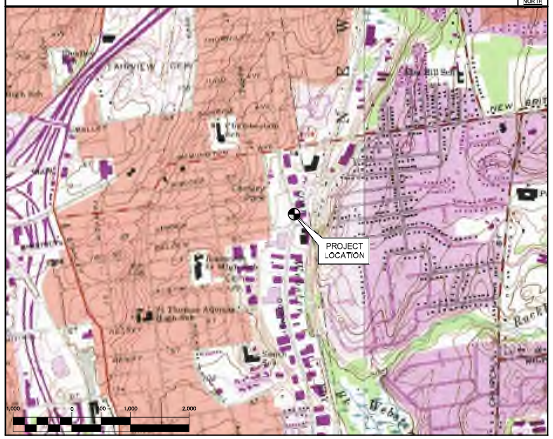
SITE DIRECTIONS

FROM: 20 ALEXANDER DRIVE, WALLINGFORD, CONNECTICUT **TO:** 35 WILDWOOD ST, NEW BRITAIN, CT 06051

1.	START OUT GOING NORTH ON ALEXANDER DR TOWARD BARNES INDUSTRIAL RD.	0.18 MI
2.	TURN RIGHT ONTO BARNES INDUSTRIAL RD.	0.11 MI
3.	TAKE THE 1ST LEFT ONTO CT-68.	0.35 MI
4.	TURN RIGHT ONTO RAMP.	0.17 MI
5.	TURN RIGHT ONTO N COLONY RD/US-5 N.	0.30 MI
6.	MERGE ONTO CT-15 N TOWARD HARTFORD.	11.74 MI
7.	TURN LEFT ONTO DEMING RD/CT-160. CONTINUE TO FOLLOW DEMING RD.	0.87 MI
8.	TURN RIGHT ONTO CHRISTIAN LN.	1.02 MI
9.	TURN LEFT ONTO SOUTH ST.	0.12 MI
10.	TAKE THE 1ST RIGHT ONTO JOHN DOWNEY DR.	0.94 MI
11.	TURN LEFT ONTO BELDEN ST.	0.07 MI
12.	TURN RIGHT ONTO WILDWOOD ST.	0.15 MI
13.	35 WILDWOOD ST, NEW BRITAIN, CT 06051-2425, 35 WILDWOOD ST IS ON THE RIGHT.	

VICINITY MAP

SCALE: 1" = 1000'



PROJECT SUMMARY

1. THE PROPOSED UPGRADE SCOPE OF WORK AT THE EXISTING UNMANNED TELECOMMUNICATIONS FACILITY GENERALLY INCLUDES THE FOLLOWING:

A. AT THE EXISTING MONOPOLE MOUNTED ANTENNA SECTORS:

- RETAIN (3) EXISTING ANTEL – BXA-80063/4CF ANTENNAS.
- RETAIN (6) EXISTING COAX CABLES.
- REMOVE (3) EXISTING AMPHENOL – BXA-70063-6CF-2 ANTENNAS.
- REMOVE (3) EXISTING ANTEL – BXA-171063-8BF-EDIN-2 ANTENNAS.
- INSTALL (6) NEW COMMSCOPE NHH-65B-R2B ANTENNAS.
- INSTALL (3) MT6407-77A ALL-IN-ONE ANTENNA/ RRUs.
- INSTALL (3) NEW COMMSCOPE BASMNT-SBS-1-2 MOUNTS.
- INSTALL (3) NEW SAMSUNG B5/B13 RRH-BR04C & (3) NEW SAMSUNG B2/B66A RRH-BR049.
- INSTALL (1) NEW OVP-6.
- INSTALL (2) NEW 6x12 LI HYBRID CABLES.

B. AT THE EXISTING VERIZON WIRELESS EQUIPMENT SHELTER

- REMOVE (6) EXISTING NOKIA RRUs.

PROJECT INFORMATION

SITE NAME:	NEWINGTON 3 CT
SITE ADDRESS:	35 WILDWOOD ST. NEW BRITAIN, CT 06051
LESSEE/TENANT:	CELLCO PARTNERSHIP d.b.a. VERIZON WIRELESS 20 ALEXANDER DRIVE WALLINGFORD, CT 06492
CONTACT PERSON:	WALTER CHARCZNSKI (CONSTRUCTION MANAGER) VERIZON WIRELESS (860) 306-1806
ENGINEER:	CENTEK ENGINEERING, INC. 63-2 NORTH BRANFORD RD. BRANFORD, CT. 06405 (203) 488-0580
PROJECT COORDINATES:	LATITUDE: 41°-40'-5.4912"N LONGITUDE: 72°-45'-18.7092"W COORDINATES BASED ON VERIZON WIRELESS RFDS DATED MARCH 18, 2021.

SHEET INDEX

SHT. NO.	DESCRIPTION	REV.
T-1	TITLE SHEET	0
N-1	NOTES AND SPECIFICATIONS	0
B-1	RF BILL OF MATERIALS	0
C-1	COMPOUND PLAN AND ELEVATION	0
C-2	ANTENNA SECTOR CONFIGURATION DETAILS	0
C-3	RF DETAILS	0
E-1	ELECTRICAL DETAILS AND SPECIFICATIONS	0

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
C	02/04/22	DMD	ANC	CONSTRUCTION DRAWINGS – ISSUED FOR CONSTRUCTION
A	07/19/21	ANC	DMD	CONSTRUCTION DRAWINGS – ISSUED FOR CLIENT REVIEW

PROFESSIONAL ENGINEER SEAL

verizon

CENTEK engineering
Centered on Solutions
(203) 488-0580
(203) 488-8587 Fax
63-2 North Branford Road
Branford, CT 06405
www.CentekEng.com

Cellco Partnership d/b/a Verizon Wireless

NEWINGTON 3 CT

35 WILDWOOD STREET,
NEW BRITAIN, CT 06051

DATE: 07/19/21
SCALE: AS NOTED
JOB NO. 21007.30

TITLE SHEET

T-1

Sheet No. 1 of 7

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)
- ULTIMATE DESIGN SPEED (TOWER): 97 MPH (Vasd) (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:

1. ALL CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE GOVERNING BUILDING CODE.
2. 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.
3. BEFORE BEGINNING THE WORK, THE CONTRACTOR IS RESPONSIBLE FOR MAKING SUCH INVESTIGATIONS CONCERNING PHYSICAL CONDITIONS (SURFACE AND SUBSURFACE) AT OR CONTIGUOUS TO THE SITE WHICH MAY AFFECT PERFORMANCE AND COST OF THE WORK.
4. DIMENSIONS AND DETAILS SHALL BE CHECKED AGAINST EXISTING FIELD CONDITIONS.
5. THE CONTRACTOR SHALL VERIFY AND COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS, SLEEVES AND ANCHOR BOLTS AS REQUIRED BY ALL TRADES.
6. ALL DIMENSIONS, ELEVATIONS, AND OTHER REFERENCES TO EXISTING STRUCTURES, SURFACE, AND SUBSURFACE CONDITIONS ARE APPROXIMATE. NO GUARANTEE IS MADE FOR THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS, ELEVATIONS, ANGLES WITH EXISTING CONDITIONS AND WITH ARCHITECTURAL AND SITE DRAWINGS BEFORE PROCEEDING WITH ANY WORK.
7. AS THE WORK PROGRESSES, THE CONTRACTOR SHALL NOTIFY THE OWNER OF ANY CONDITIONS WHICH ARE IN CONFLICT OR OTHERWISE NOT CONSISTENT WITH THE CONSTRUCTION DOCUMENTS AND SHALL NOT PROCEED WITH SUCH WORK UNTIL THE CONFLICT IS SATISFACTORILY RESOLVED.
8. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING AND MAINTAINING ADEQUATE SHORING, BRACING, AND BARRICADES AS MAY BE REQUIRED FOR THE PROTECTION OF EXISTING PROPERTY, CONSTRUCTION WORKERS, AND FOR PUBLIC SAFETY.
9. THE CONTRACTOR IS SOLELY RESPONSIBLE TO DETERMINE CONSTRUCTION PROCEDURE AND SEQUENCE, AND TO ENSURE THE SAFETY OF THE EXISTING STRUCTURES AND ITS COMPONENT PARTS DURING CONSTRUCTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, BRACING, UNDERPINNING, ETC. THAT MAY BE NECESSARY. MAINTAIN EXISTING SITE OPERATIONS, COORDINATE WORK WITH NORTHEAST UTILITIES
10. 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.
11. REFER TO DRAWING T1 FOR ADDITIONAL NOTES AND REQUIREMENTS.

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
-	02/04/22	DMD	ANC	CONSTRUCTION DRAWINGS – ISSUED FOR CONSTRUCTION
A	07/19/21	ANC	DMD	CONSTRUCTION DRAWINGS – ISSUED FOR CLIENT REVIEW

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verizon

CENTEK engineering
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Cellco Partnership d/b/a Verizon Wireless

NEWINGTON 3 CT

35 WILDWOOD STREET,
NEW BRITAIN, CT 06051

DATE: 07/19/21
SCALE: AS NOTED
JOB NO. 21007.30

NOTES AND SPECIFICATIONS

N-1

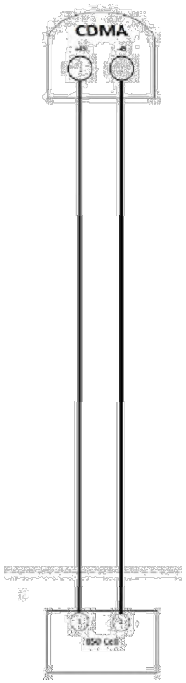
Sheet No. 2 of 7

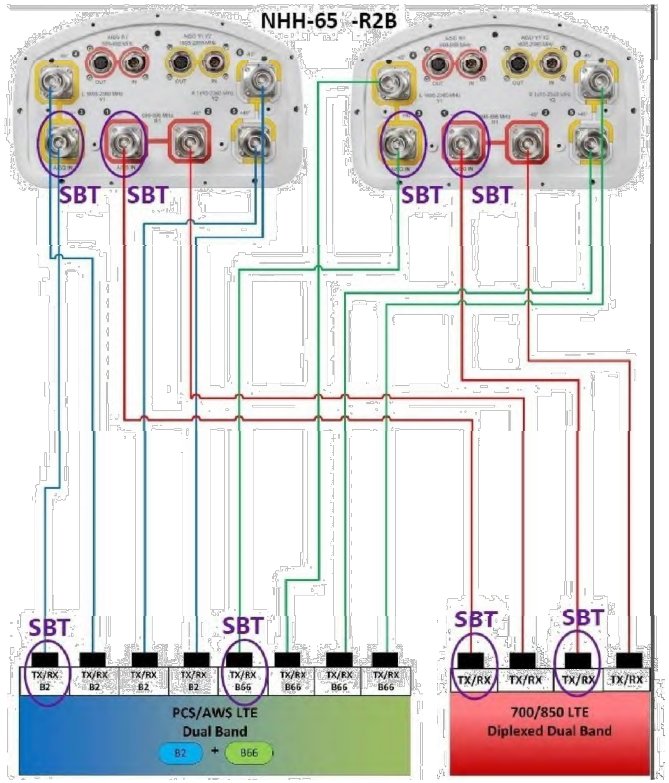
PLUMBING DIAGRAM COMMENTS:

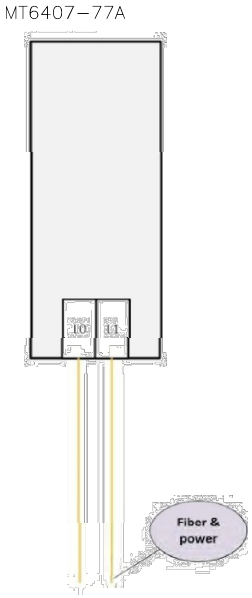
A. DIAGRAMS SHOW ANTENNA PORT CONFIGURATIONS AS VIEWED FROM BELOW ANTENNAS.

B. ANTENNA POSITIONS ARE INDICATED AS VIEWED FROM IN FRONT OF ANTENNAS.

C. CAP AND WEATHERPROOF UNUSED ANTENNA PORTS.







NOTES:

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: 02.04.2022), & VERIZON WIRELESS RF ANTENNA EQUIPMENT RECOMMENDATION (DATED 03.18.2021).

BILL OF MATERIALS		
TECHNOLOGY	QUANTITY	ANTENNA
LTE 700 LTE 850 LTE PCS 1900 LTE AWS 2100	6	COMMSCOPE ANTENNA MODEL: NHH-65B-R2B
5G	3	SAMSUNG ANTENNA MODEL: MT6407-77A

CABLES	QUANTITY	LENGTH	COMMENTS
HYBRID CABLE	2	±150FT EA	6X12 HYBRIFLEX LI

RADIOS	QUANTITY	COMMENTS
LTE 700 LTE 850	3	SAMSUNG MODEL: B5/B13 RRH-BR04C
LTE PCS 1900 LTE AWS 2100	3	SAMSUNG MODEL: B2/B66A RRH-BR049
5G	3	INTEGRATED INTO MT6407-77A ANTENNA

DIPLEXERS	QUANTITY	COMMENTS
–	–	–

OVP BOXES	QUANTITY	COMMENTS
TOWER OVP	1	RAYCAP MODEL: OVP-6

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

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
B	02/04/22	DMD	ANC	CONSTRUCTION DRAWINGS – ISSUED FOR CONSTRUCTION
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Cellco Partnership d/b/a Verizon Wireless

NEWINGTON 3 CT

35 WILDWOOD STREET,
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DATE: 07/19/21
SCALE: AS NOTED
JOB NO. 21007.30

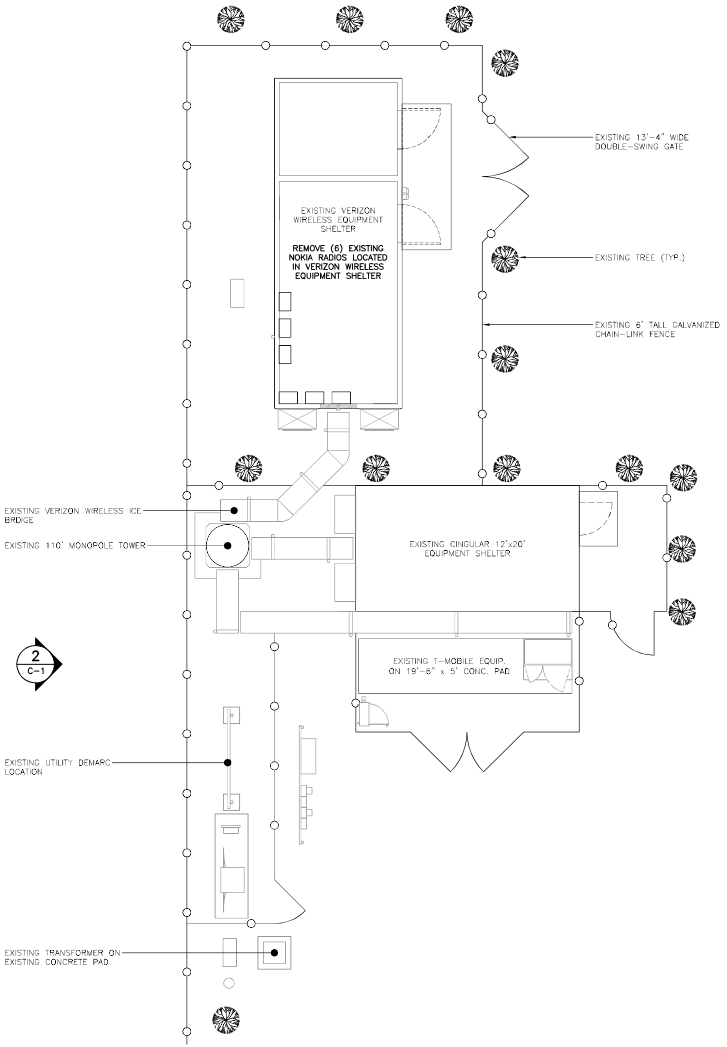
RF BILL OF MATERIALS

B-1

Sheet No. 2 of 7

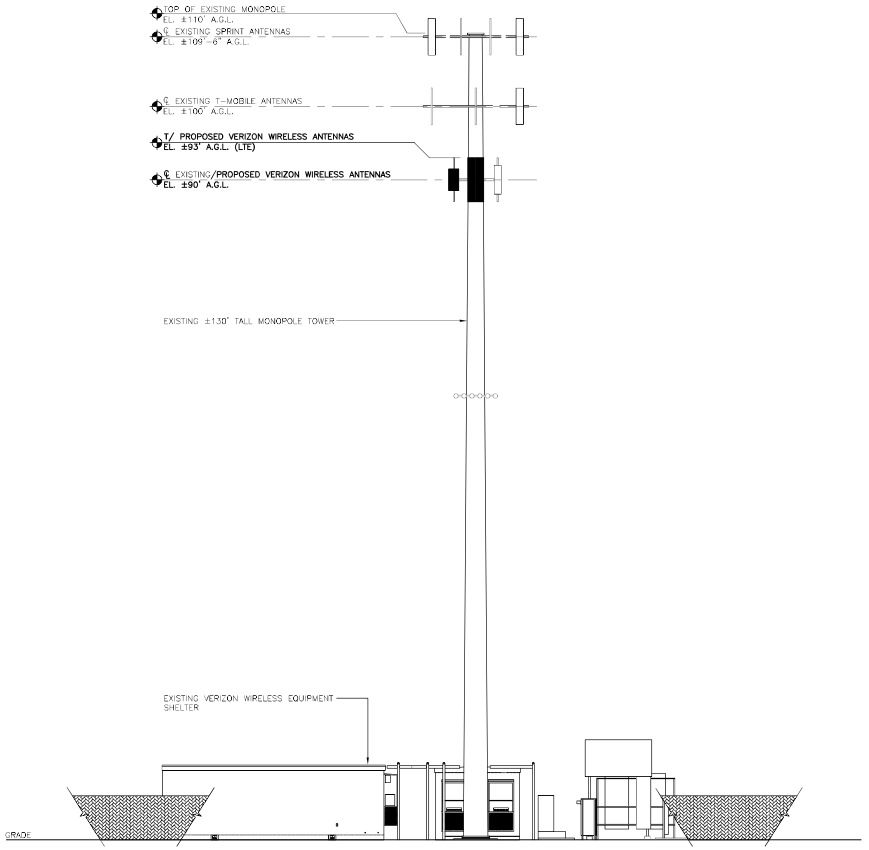
TOWER STRUCTURAL ANALYSIS REFERENCE NOTE:

REFER TO PASSING STRUCTURAL ANALYSIS REPORT PREPARED FOR BST MANAGEMENT BY GPD ENGINEERING AND ARCHITECTURE PROFESSIONAL CORPORATION (GPD), DATED 01/11/2022. GPD PROJECT #2022701.61.



1 C-1 **COMPOUND PLAN - PROPOSED**
SCALE: 1/8" = 1'-0"

APPROXIMATE NORTH



2 C-1 **WEST ELEVATION - PROPOSED**
SCALE: 1" = 10'-0"

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
0	02/04/22	DMD	ANC	CONSTRUCTION DRAWINGS – ISSUED FOR CONSTRUCTION
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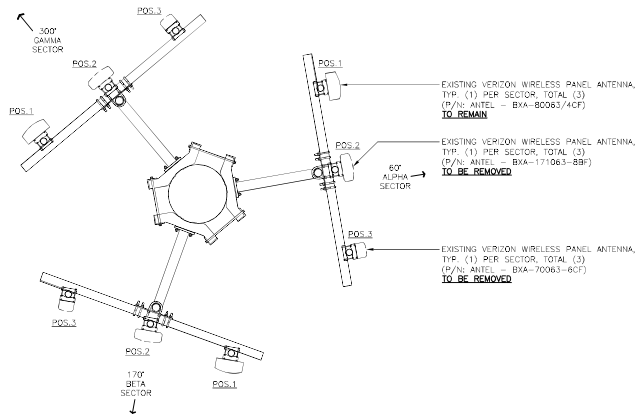
COMPOUND PLAN AND ELEVATION

C-1

Sheet No. 4 of 7

EXISTING ANTENNA CONFIGURATIONS

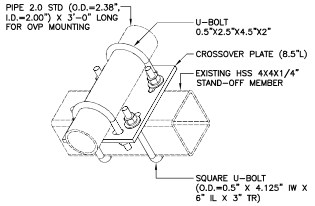


1 C-2 **EXISTING SECTOR CONFIGURATION PLAN**
SCALE: 1/2" = 1'-0"

APPROXIMATE NORTH

ANTENNA MOUNT ANALYSIS AND MODIFICATIONS REFERENCE NOTE:

MOUNT MODIFICATIONS ARE REQUIRED WHICH MAY NOT BE DEPICTED WITHIN THESE CONSTRUCTION DRAWINGS. REFER TO PASSING VERIZON WIRELESS MOUNT ANALYSIS REPORT PREPARED BY MASER CONSULTING CONNECTICUT DATED 06/28/2021 FOR REQUIRED MODIFICATIONS AND ADDITIONAL INFORMATION.



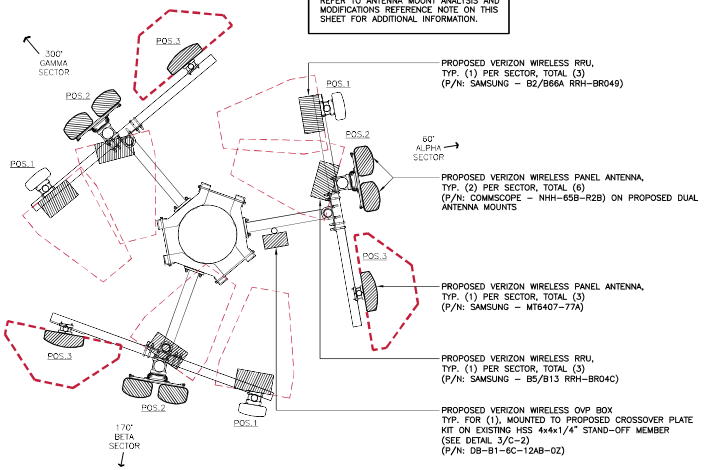
CROSSOVER PLATE	
MAKE/MODEL	DESCRIPTION
MAKE: SITE PRO MODEL: SCX43-K	HOT-DIP GALVANIZED, PIPE/HSS IN 90° JUNCTION
NOTES: 1. PIPE/HSS NOT INCLUDED IN ASSEMBLY KIT.	

3 C-2 **CROSSOVER PLATE KIT DETAIL**
NOT TO SCALE

PROPOSED ANTENNA CONFIGURATIONS

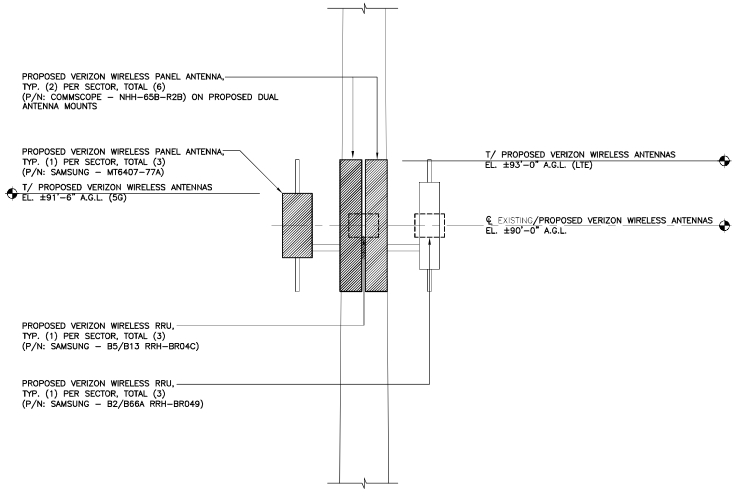
LEGEND		
		VERIZON WIRELESS MT6407-77A REQUIRED ANTENNA CLEARANCE LIMITS (PER DETAILS ON SHEET C-3)
ANTENNA CLEARANCE STATUS	ALPHA SECTOR:	COMPLIANT
	BETA SECTOR:	COMPLIANT
	GAMMA SECTOR:	COMPLIANT
		VERIZON WIRELESS RRU REQUIRED ANTENNA CLEARANCE LIMITS (PER DETAILS ON SHEET C-3)
RRU CLEARANCE STATUS	ALPHA SECTOR:	COMPLIANT
	BETA SECTOR:	COMPLIANT
	GAMMA SECTOR:	COMPLIANT

REFER TO ANTENNA MOUNT ANALYSIS AND MODIFICATIONS REFERENCE NOTE ON THIS SHEET FOR ADDITIONAL INFORMATION.



2 C-2 **PROPOSED SECTOR CONFIGURATION PLAN**
SCALE: 1/2" = 1'-0"

APPROXIMATE NORTH



FACE OF ANTENNA ELEVATION PERSPECTIVE

4 C-2 **PROPOSED SECTOR CONFIGURATION ELEVATION**
SCALE: 3/8" = 1'-0"

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
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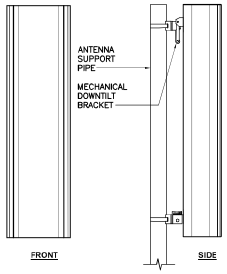
ANTENNA SECTOR CONFIGURATION DETAILS

C-2

Sheet No. 5 of 7




NHH-65B-R2B (BOTTOM VIEW)

ALPHA/BETA/GAMMA ANTENNA		
EQUIPMENT	DIMENSIONS	WEIGHT (WITH MOUNTING KIT)
MAKE: COMMSCOPE MODEL: NHH-65B-R2B	76.0"L x 16.1"W x 11.8"D	43.7 LBS.

1 / C-3 **ANTENNA DETAIL**
NOT TO SCALE


ANTENNA FRONT

SECTOR ANTENNA		
EQUIPMENT	DIMENSIONS	WEIGHT
MAKE: SAMSUNG MODEL: MT6407-77A	35.1"h x 16.1"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.		

2 / C-3 **SECTOR ANTENNA DETAIL**
NOT TO SCALE

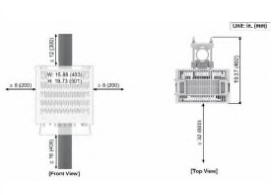

ELEVATION

ISOMETRIC

SIDE-BY-SIDE ANTENNA MOUNTING KIT			
MOUNT	DESCRIPTION	SUPPORTED ANTENNAS	GAP BETWEEN ANTENNAS
MAKE: 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. CONTRACTOR TO CONFIRM MOUNT MAKE/MODEL AND QUANTITY WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING.			

3 / C-3 **PROPOSED SIDE-BY-SIDE ANTENNA MOUNT**
NOT TO SCALE


RRH ISOMETRIC

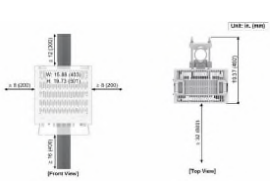


RRH CLEARANCES

DUAL BAND RRU (REMOTE RADIO UNIT)			
EQUIPMENT	BANDS	DIMENSIONS	WEIGHT
MAKE: SAMSUNG MODEL: B2/B66A RRH-BR049 (RFV01U-D1A)	B2: PCS (1900 MHz) B66: AWS (2100 MHz)	15.0"H x 15.0"W x 10.0"D	84.4 LBS.
NOTES: 1. CONTRACTOR TO COORDINATE FINAL EQUIPMENT MODEL SELECTION WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING.			

4 / C-3 **DUAL-BAND AWS/PCS RADIO UNIT DETAIL**
NOT TO SCALE


RRH ISOMETRIC



RRH CLEARANCES

DUAL BAND RRU (REMOTE RADIO UNIT)			
EQUIPMENT	BANDS	DIMENSIONS	WEIGHT
MAKE: SAMSUNG MODEL: B5/B13 RRH-BR04C (RFV01U-D2A)	B5: 850 MHz B13: 700 MHz	15.0"H x 15.0"W x 8.1"D	70.3 LBS.
NOTES: 1. CONTRACTOR TO COORDINATE FINAL EQUIPMENT MODEL SELECTION WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING.			

5 / C-3 **DUAL-BAND 700/850 MHZ RADIO UNIT DETAIL**
NOT TO SCALE

OVP BOX		
EQUIPMENT	DIMENSIONS	WEIGHT
MAKE: RFS MODEL: DB-B1-6C-12AB-0Z	29.0"H x 15.7"W x 10.3"D	32 LBS.
NOTES: 1. CONTRACTOR TO CONFIRM OVP BOX MAKE/MODEL AND QUANTITY WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING.		

6 / C-3 **PROPOSED OVER-VOLTAGE PROTECTION BOX**
NOT TO SCALE

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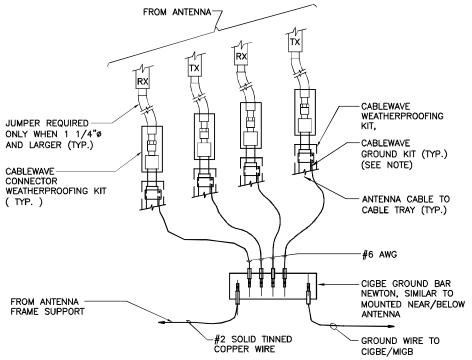
RF DETAILS

C-3
Sheet No. 6 of 7

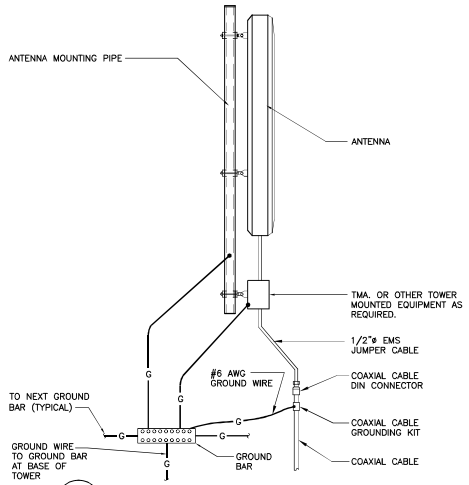


NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO CIGBE

1 E-1 CONNECTION OF GROUND WIRES TO GROUND BAR

NOT TO SCALE

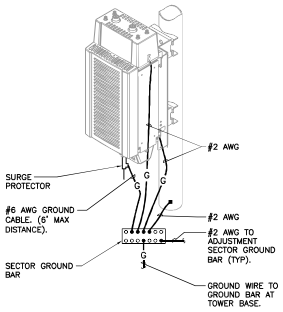


4 E-1 TYPICAL ANTENNA GROUNDING DETAIL

NOT TO SCALE

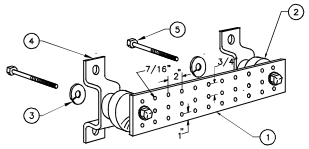
EACH RRH CABINET SHALL BE GROUNDED IN THE FOLLOWING MANNER:

1. AT TOP OF THE CABINET
2. AT RIGHT SIDE OF THE CABINET.



2 E-1 RRH POLE MOUNT GROUNDING

NOT TO SCALE

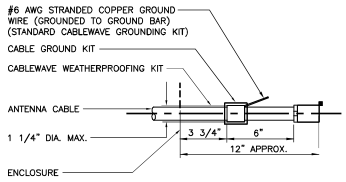


NOTES

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

5 E-1 GROUND BAR DETAIL

NOT TO SCALE



NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.

3 E-1 ANTENNA CABLE GROUNDING DETAIL

NOT TO SCALE

ELECTRICAL SPECIFICATIONS

SECTION 16010

1.01. SCOPE OF WORK

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.

1.02. 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 COORDINATION OF THE ENTIRE ELECTRICAL SERVICE. ALL ACTIVITIES TO BE COORDINATED THROUGH OWNERS 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. ALL 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 MANUFACTURERS 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 JOB SITE 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-BUILTS), LEGIBLY MARKED IN RED PENCIL TO SHOW ALL CHANGES FROM THE ORIGINAL PLANS.

L. ENTIRE ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH OWNER'S SPECIFICATIONS, AND REQUIREMENTS OF ALL LOCAL AUTHORITIES HAVING JURISDICTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH APPROPRIATE INDIVIDUALS TO OBTAIN ALL SUCH SPECIFICATIONS AND REQUIREMENTS. NOTHING CONTAINED IN, OR OMITTED FROM, THESE DOCUMENTS SHALL RELIEVE CONTRACTOR FROM THIS OBLIGATION.

SECTION 16450

1.01. GROUNDING

A. ALL NON-CURRENT CARRYING PARTS OF THE ELECTRICAL AND TELEPHONE CONDUIT SYSTEMS SHALL BE MECHANICALLY AND ELECTRICALLY CONNECTED TO PROVIDE AN INDEPENDENT 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. GROUND BARS
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.

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ELECTRICAL DETAILS AND SPECIFICATIONS

E-1

Sheet No. 7 of 7

SAMSUNG

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

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

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

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

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

Features and Benefits

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

Key Technical Specifications

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

SAMSUNG

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

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

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

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

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

Features and Benefits

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

Key Technical Specifications

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

SAMSUNG

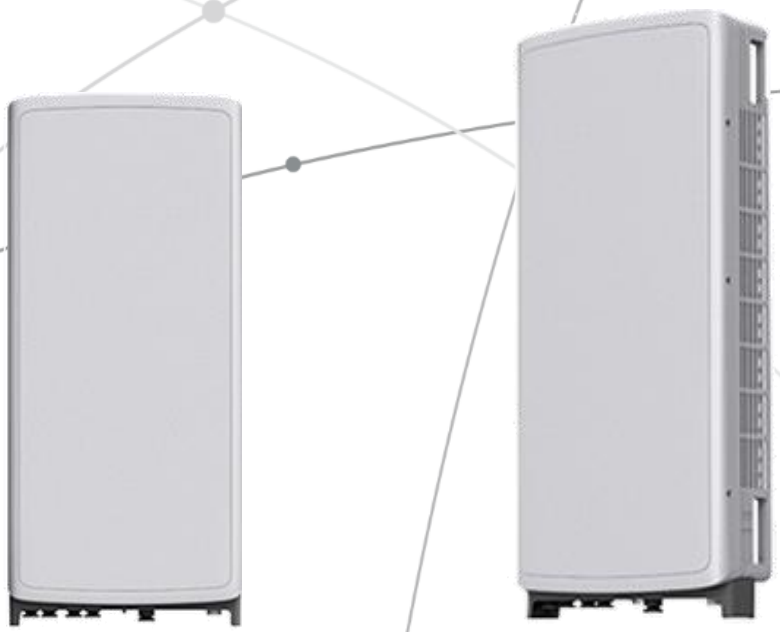
SAMSUNG

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

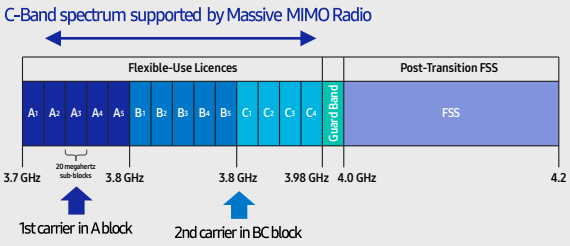


Points of Differentiation

Wide Bandwidth

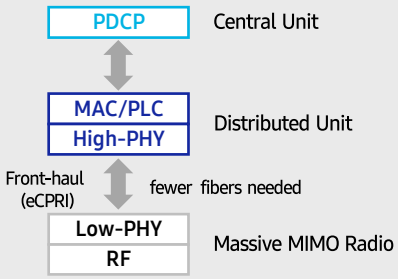
With capability to support up to 2 CC carrier configuration, Samsung C-Band massive MIMO Radio supports 200 MHz bandwidth in the C-Band spectrum.

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.

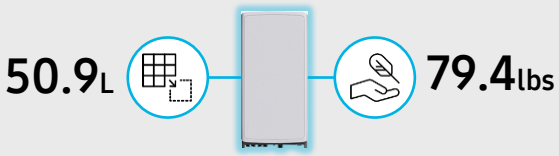
This helps operators reduce their CAPEX as they now need less products to cover the same area than before.

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

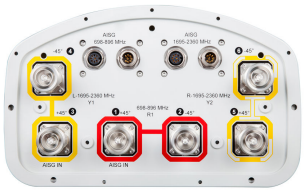
SAMSUNG

About Samsung Electronics Co., Ltd.

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

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

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
Radome Material	Fiberglass, UV resistant
Radiator Material	Low loss circuit board
Reflector Material	Aluminum
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

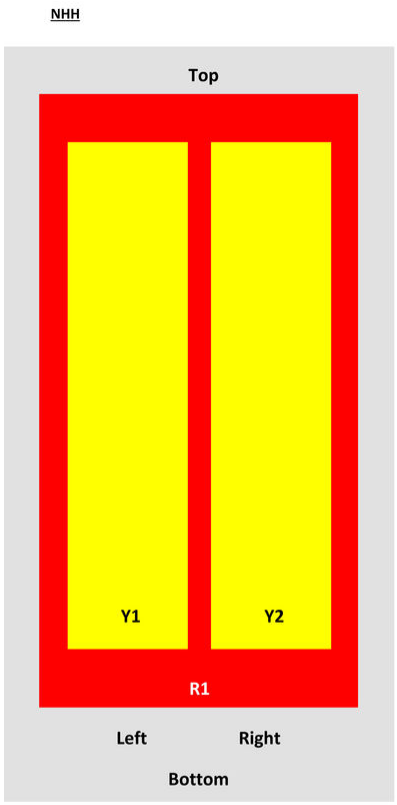
RET Interface	8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity	2 female | 2 male

Dimensions

Width	301 mm | 11.85 in
Length	1828 mm | 71.969 in

Depth	180 mm | 7.087 in

Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	698-896	1-2	1	ANxxxxxxxxxxxxxxx1
Y1	1695-2360	3-4	2	ANxxxxxxxxxxxxxxx2
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
Polarization	±45°
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

NHH-65B-R2B

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)

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

NHH-65B-R2B

CPR at Sector, dB	10	7	16	13	11	4

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

ATTACHMENT 3

	General	Power	Density					
Site Name: Newington 3								
Tower Height: Verizon @ 90ft								
CARRIER	**# OF CHAN.**	**WATTS ERP**	**HEIGHT**	**FREQ.**	**CALC. POWER DENS**	**MAX. PERMISS.EXP.**	**FRACTION MPE**	**Total**
*AT&T	1	270	114	850	0.008324541	0.566666667	0.15%	
*AT&T	1	411	114	1900	0.012671801	1	0.13%	
*AT&T	1	1476	114	700	0.045507489	0.466666667	0.98%	
*AT&T	2	1000	114	850	0.061663264	0.566666667	1.09%	
*AT&T	2	3664	114	1900	0.225934199	1	2.26%	
*AT&T	1	3837	114	2100	0.118300972	1	1.18%	
*AT&T	1	1285	113	2300	0.040362643	1	0.40%	
*Clearwire antennas	2	153	76	2496	0.022457912	1	0.22%	
*Clearwire microwave dishes	1	211	76	11 GHz	0.015485684	1	0.15%	
*Clearwire microwave dishes	1	211	76	11 GHz	0.015485684	1	0.15%	
*Clearwire microwave dishes	1	211	76	11 GHz	0.015485684	1	0.15%	
*T-Mobile	4	1028	100	1900	0.167356052	1	1.67%	
*T-Mobile	2	2057	100	1900	0.167437451	1	1.67%	
*T-Mobile	2	2308	100	2100	0.187868565	1	1.88%	
*T-Mobile	2	592	100	600	0.048188124	0.4	1.20%	
*T-Mobile	1	1578	100	600	0.064223699	0.4	1.61%	
*T-Mobile	2	649	100	700	0.052827859	0.466666667	1.13%	
*T-Mobile	2	2204	100	1900	0.179403083	1	1.79%	
*T-Mobile	2	1295	100	2100	0.105411521	1	1.05%	
*T-Mobile	2	6413	100	2500	0.522010877	1	5.22%	
*T-Mobile	2	6413	100	2500	0.522010877	1	5.22%	
VZW 700	**4**	**689**	**90**	**751**	**0.0122**	**0.5007**	**2.44%**	
VZW CDMA	**2**	**401**	**90**	**869**	**0.0036**	**0.5793**	**0.61%**	
VZW Cellular	**4**	**700**	**90**	**869**	**0.0124**	**0.5793**	**2.15%**	
VZW PCS	**4**	**1500**	**90**	**1980**	**0.0266**	**1.0000**	**2.66%**	
VZW AWS	**4**	**1691**	**90**	**2125**	**0.0300**	**1.0000**	**3.00%**	
VZW CBAND	**4**	**6531**	**90**	**3730**	**0.1160**	**1.0000**	**11.60%**	
								51.79%
* Source: Siting Council								

ATTACHMENT 4

BST Management, LLC
352 park Street, Suite 106
North Reading, MA 01864

Dan Palkovic
520 South Main Street, Suite 2531
Akron, OH 44311
(216) 927-8663
dpalkovic@gpdgroup.com

GPD# 2022701.61
January 11, 2022

COMPREHENSIVE STRUCTURAL ANALYSIS REPORT

SITE DESIGNATION:	**Site #:**	**CT-1341**
	Site Name:	**New Britain Wildwood Street**
	Verizon Site #:	**BOBDL00030A**
	Verizon Site Name:	**Newington 3 CT**
ANALYSIS CRITERIA:	**Codes:**	**TIA-222-H & 2018 Connecticut State Building Code** **118 mph (3-second gust) w/ 0" ice** **50 mph (3-second gust) w/ 1.5" ice**
SITE DATA:		**35 Wildwood Street, New Britain, CT 651, Hartford County** **Latitude 41° 40' 5.47" N, Longitude 72° 45' 18.72" W** **110' Penn Summit Monopole**

To whom it may concern,

GPD is pleased to submit this Comprehensive Structural Analysis Report to determine the structural integrity of the aforementioned tower. The purpose of the analysis is to determine the suitability of the tower with the existing and proposed loading configuration detailed in the analysis report.

Analysis Results

Tower Stress Level with Proposed Equipment:	95.9%	Sufficient Capacity
Foundation Ratio with Proposed Equipment:	71.4%	Sufficient Capacity

We at GPD appreciate the opportunity of providing our continuing professional services to you and BST Management, LLC. If you have any questions or need further assistance on this or any other projects please do not hesitate to call.

Respectfully submitted,

Christopher J. Scheks, P.E.
Connecticut #: 0030026

1/11/2022

SUMMARY & RESULTS

The purpose of this analysis was to verify whether the existing structure is capable of carrying the proposed loading configuration as specified by Verizon Wireless and commissioned by BST Management, LLC.

This analysis has been performed in accordance with the 2018 Connecticut State Building Code based upon a 3-second gust wind speed of 118 mph. Applicable Standard references and design criteria are listed in Appendices A & B.

The proposed feedlines shall be installed as shown in Appendices A & B for the analysis results to be valid.

TOWER SUMMARY AND RESULTS

Member	Capacity	Results
Monopole	95.9%	Pass
Anchor Rods	67.9%	Pass
Base Plate	80.7%	Pass
Foundation	71.4%	Pass

RECOMMENDATIONS

The tower and its foundation have sufficient capacity to carry the proposed loading configuration. No modifications are required at this time.

ANALYSIS METHOD

tnxTower (Version 8.1.1.0), a commercially available software program, was used to create a three-dimensional model of the tower and calculate primary member stresses for various load cases. Selected output from the analysis is included the report appendices. The following table details the information provided to complete this structural analysis. This analysis is solely based on this information.

DOCUMENTS PROVIDED

Document	Remarks	Source
Collocation Application	Verizon Wireless Collocation Application, updated 06/22/21	BST Management, LLC
Tower Design	PJF Job #: 29205-0027, dated 4/29/2005	GPD
Foundation Design	Not Provided	N/A
Geotechnical Report	Not Provided	N/A
Previous Tower Analysis	GPD Job #: 2021704.27, dated 10/1/2021	GPD
Tower Mapping	Not Provided	N/A

ASSUMPTIONS

This structural analysis is based on the theoretical capacity of the members and is not a condition assessment of the tower. This analysis is from information supplied, and therefore, its results are based on and are as accurate as that supplied data. GPD has made no independent determination, nor is it required to, of its accuracy. The following assumptions were made for this structural analysis.

1. The tower member sizes and shapes are considered accurate as supplied. The material grade is as per data supplied and/or as assumed and as stated in the materials section.
2. The appurtenance configuration is as supplied, determined from available photos, and/or as modeled in the analysis. It is assumed to be complete and accurate. All antennas, mounts, coax and waveguides are assumed to be properly installed and supported as per manufacturer requirements.
3. All mounts, if applicable, are considered adequate to support the loading. No actual analysis of the mount(s) is performed. This analysis is limited to analyzing the tower only.
4. The soil parameters are as per data supplied or as assumed and stated in the calculations.
5. Foundations are properly designed and constructed to resist the original design loads indicated in the documents provided.
6. The tower and structures have been properly maintained in accordance with TIA Standards and/or with manufacturer's specifications.
7. All welds and connections are assumed to develop at least the member capacity unless determined otherwise and explicitly stated in this report.
8. All prior structural modifications, if applicable, are assumed to be as per data supplied/available and to have been properly installed.
9. Loading interpreted from photos is accurate to ±5' AGL, antenna size accurate to ±3.3 sf, and coax equal to the number of existing antennas without reserve.
10. All existing and proposed loading has been taken from the available site photos as well as documents supplied to GPD at the time of generating this report. All such documents are listed in the Documents Provided Table and are assumed to be accurate. GPD is not responsible for loading scenarios outside those conveyed in the supplied documentation.

If any of these assumptions are not valid or have been made in error, this analysis may be affected, and GPD should be allowed to review any new information to determine its effect on the structural integrity of the tower.

DISCLAIMER OF WARRANTIES

GPD has not performed a site visit to the tower to verify the member sizes or antenna/coax loading. If the existing conditions are not as represented on the tower elevation contained in this report, we should be contacted immediately to evaluate the significance of the discrepancy. This is not a condition assessment of the tower or foundation. This report does not replace a full tower inspection. The tower and foundations are assumed to have been properly fabricated, erected, maintained, in good condition, twist free, and plumb.

The engineering services rendered by GPD in connection with this Comprehensive Structural Analysis are limited to a computer analysis of the tower structure and theoretical capacity of its main structural members. No allowance was made for any damaged, bent, missing, loose, or rusted members (above and below ground). No allowance was made for loose bolts or cracked welds.

This analysis is limited to the designated maximum wind and seismic conditions per the governing tower standards and code. Wind forces resulting in tower vibrations near the structure's resonant frequencies were not considered in this analysis and are outside the scope of this analysis. Lateral loading from any dynamic response was not evaluated under a time-domain based fatigue analysis.

GPD does not analyze the fabrication of the structure (including welding). It is not possible to have all the very detailed information needed to perform a thorough analysis of every structural sub-component and connection of an existing tower. GPD provides a limited scope of service in that we cannot verify the adequacy of every weld, plate connection detail, etc. The purpose of this report is to assess the capability of adding appurtenances usually accompanied by transmission lines to the structure.

It is the owner's responsibility to determine the amount of ice accumulation in excess of the code specified amount, if any, that should be considered in the structural analysis.

The attached sketches are a schematic representation of the analyzed tower. If any material is fabricated from these sketches, the contractor shall be responsible for field verifying the existing conditions, proper fit, and clearance in the field. Any mentions of structural modifications are reasonable estimates and should not be used as a precise construction document. Precise modification drawings are obtainable from GPD, but are beyond the scope of this report.

Miscellaneous items such as antenna mounts, etc., have not been designed or detailed as a part of our work. We recommend that material of adequate size and strength be purchased from a reputable tower manufacturer.

Towers are designed to carry gravity, wind, and ice loads. All members, legs, diagonals, struts, and redundant members provide structural stability to the tower with little redundancy. Absence or removal of a member can trigger catastrophic failure unless a substitute is provided before any removal. Legs carry axial loads and derive their strength from shorter unbraced lengths by the presence of redundant members and their connection to the diagonals with bolts or welds. If the bolts or welds are removed without providing any substitute to the frame, the leg is subjected to a higher unbraced length that immediately reduces its load carrying capacity. If a diagonal is also removed in addition to the connection, the unbraced length of the leg is greatly increased, jeopardizing its load carrying capacity. Failure of one leg can result in a tower collapse because there is no redundancy. Redundant members and diagonals are critical to the stability of the tower.

GPD makes no warranties, expressed and/or implied, in connection with this report and disclaims any liability arising from material, fabrication, and erection of this tower. GPD will not be responsible whatsoever for, or on account of, consequential or incidental damages sustained by any person, firm, or organization as a result of any data or conclusions contained in this report. The maximum liability of GPD pursuant to this report will be limited to the total fee received for preparation of this report.

APPENDIX A

Tower Analysis Summary Form

Tower Analysis Summary Form

General Info

Site Name	New Britain Wildwood Street
Site Number	CT-1341
Date of Analysis	1/11/2022
Company Performing Analysis	GPD

The information contained in this summary report is not to be used independently from the PE stamped tower analysis.

Tower Info	Description	Date
Tower Type (G, SST, MP)	MP	
Tower Height (top of steel AGL)	110'	
Tower Manufacturer	Penn Summit	
Tower Model	n/a	
Tower Design	PJF Job #: 29205-0027	4/29/2005
Foundation Design	n/a	
Geotechnical Report	n/a	
Previous Tower Analysis	GPD Job #: 2021704.27	10/1/2021
Tower Mapping	n/a	
Modification Drawings	n/a	

Design Parameters

Design Code Used	TIA-222-H & 2018 Connecticut State Building Code
Location of Tower (County, State)	Hartford, CT
Wind Speed (mph)	118 (3-second gust)
Ice Thickness (in)	1.5
Risk Category (I, II, III)	II
Exposure Category (B, C, D)	C
Topographic Category (1 to 5)	1

Analysis Results (% Maximum Usage)

Existing/Reserved + Future + Proposed Condition	
Tower (%)	95.9%
Tower Base (%)	80.7%
Foundation (%)	71.4%
Foundation Adequate?	Yes

Existing / Reserved Loading

Antenna								Mount			Transmission Line			
Antenna Owner	Mount Height (ft)	Antenna CL (ft)	Quantity	Type	Manufacturer	Model	Azimuth	Quantity	Manufacturer	Type	Quantity	Model	Size	Attachment Int/Ext
AT&T Mobility	110	114	3	Panel	Powerwave	7770	30/150/270	1	Unknown	LP Platform w/ Rails	12	Unknown	1-5/8"	Internal
AT&T Mobility	110	114	3	Panel	Kathrein	800 10798	30/150/270	3	Unknown	Kicker Reinforcement	4	DC Power	3/4"	Internal
AT&T Mobility	110	113	3	Panel	KMW	AM-X-CD-16-65-00T-RET	30/150/270			on the same mount	2	Fiber Cable	1/2"	Internal
AT&T Mobility	110	113	6	TMA	Powerwave	LGP 21401				on the same mount				
AT&T Mobility	110	113	6	Diplexer	Kaelus	DBC0061F1V51-2				on the same mount				
AT&T Mobility	110	113	3	RRU	Ericsson	RRUS 11 B12				on the same mount				
AT&T Mobility	110	113	3	RRU	Ericsson	RRUS 12 B2				on the same mount				
AT&T Mobility	110	113	3	RRU	Ericsson	RRUS 4478 B5				on the same mount				
AT&T Mobility	110	113	3	RRU	Ericsson	RRUS 4426 B66				on the same mount				
AT&T Mobility	110	113	3	RRU	Ericsson	RRUS 32 B30				on the same mount				
AT&T Mobility	110	110	1	Surge	Raycap	DC6-48-60-18-8F				Tower Mounted				
AT&T Mobility	110	110	1	Surge	Raycap	DC6-48-60-18-8C				Tower Mounted				
T-Mobile	97	100	3	TMA	RFS	1412D-1S20	60/160/310	1	Unknown	Platform w/ Rails	6	Unknown	1-5/8"	External
T-Mobile	97	100	3	Panel	RFS	APXVARR24_43 C-NA20	60/160/310			on the same mount				
T-Mobile	97	100	3	Panel	Ericsson	AIR 32 B66AaB2a				on the same mount				
T-Mobile	97	100	3	RRU	Ericsson	4449-B12+71				on the same mount				
Verizon	90	90	3*	Panel	Amphenol	BXA-17163	60/170/300	3	Unknown	T-Arms	6	Unknown	1-5/8"	External
Verizon	90	90	3*	Panel	Antel	BXA-70063	60/170/300			on the same mount				
Verizon	90	90	3	Panel	Antel	BXA-80063	60/170/300			on the same mount				
Township	60	60	9	Lights	Unknown	2' Diameter Stadium Lights		1	Unknown	Stadium Light Rack				

*Indicates equipment/feedline quantity to be removed.

Proposed Loading

Antenna								Mount			Transmission Line			
Antenna Owner	Mount Height (ft)	Antenna CL (ft)	Quantity	Type	Manufacturer	Model	Azimuth	Quantity	Manufacturer	Type	Quantity	Model	Size	Attachment Int/Ext
Verizon	90	90	6	Panel	Commscope	NHH-65B-R2B	60/170/300	3	Commscope	BSAMNT-SBS-1-2	2	Hybrid	1-1/4"	External
Verizon	90	90	3	Panel	Samsung	MT6407-77A	60/170/300			on the modified mounts				
Verizon	90	90	3	RRH	Samsung	B2/B66A				on the modified mounts				
Verizon	90	90	3	RRH	Samsung	B5/B66A				on the modified mounts				
Verizon	90	90	1	Surge	Raycap	DC6-48-60-18-8F				on the modified mounts				

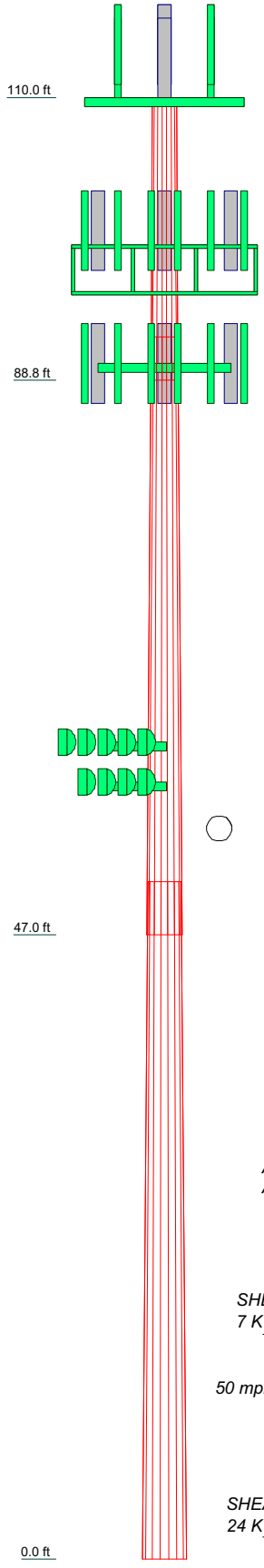
Note: The proposed loading shall be in addition to the remaining existing equipment at the same elevation.

Future Loading

Antenna								Mount			Transmission Line			
Antenna Owner	Mount Height (ft)	Antenna CL (ft)	Quantity	Type	Manufacturer	Model	Azimuth	Quantity	Manufacturer	Type	Quantity	Model	Size	Attachment Int/Ext

APPENDIX B

Tower Analysis Output File



Section	1	2	3	
Length (ft)	21.25	45.00	51.00	
Number of Sides	18	18	18	
Thickness (in)	0.1875	0.2500	0.3125	
Socket Length (ft)	3.25	4.00		
Top Dia (in)	21.0000	23.8650	30.7655	
Bot Dia (in)	24.8250	31.9875	39.9300	
Grade	A572-65			
Weight (K)	1.0	3.4	6.0	10.4

ALL REACTIONS ARE FACTORED

AXIAL 55 K

SHEAR 7 K — *MOMENT 624 kip-ft*

TORQUE 1 kip-ft
50 mph WIND - 1.5000 in ICE

AXIAL 28 K

SHEAR 24 K — *MOMENT 2069 kip-ft*

TORQUE 4 kip-ft
REACTIONS - 118 mph WIND

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

TOWER DESIGN NOTES

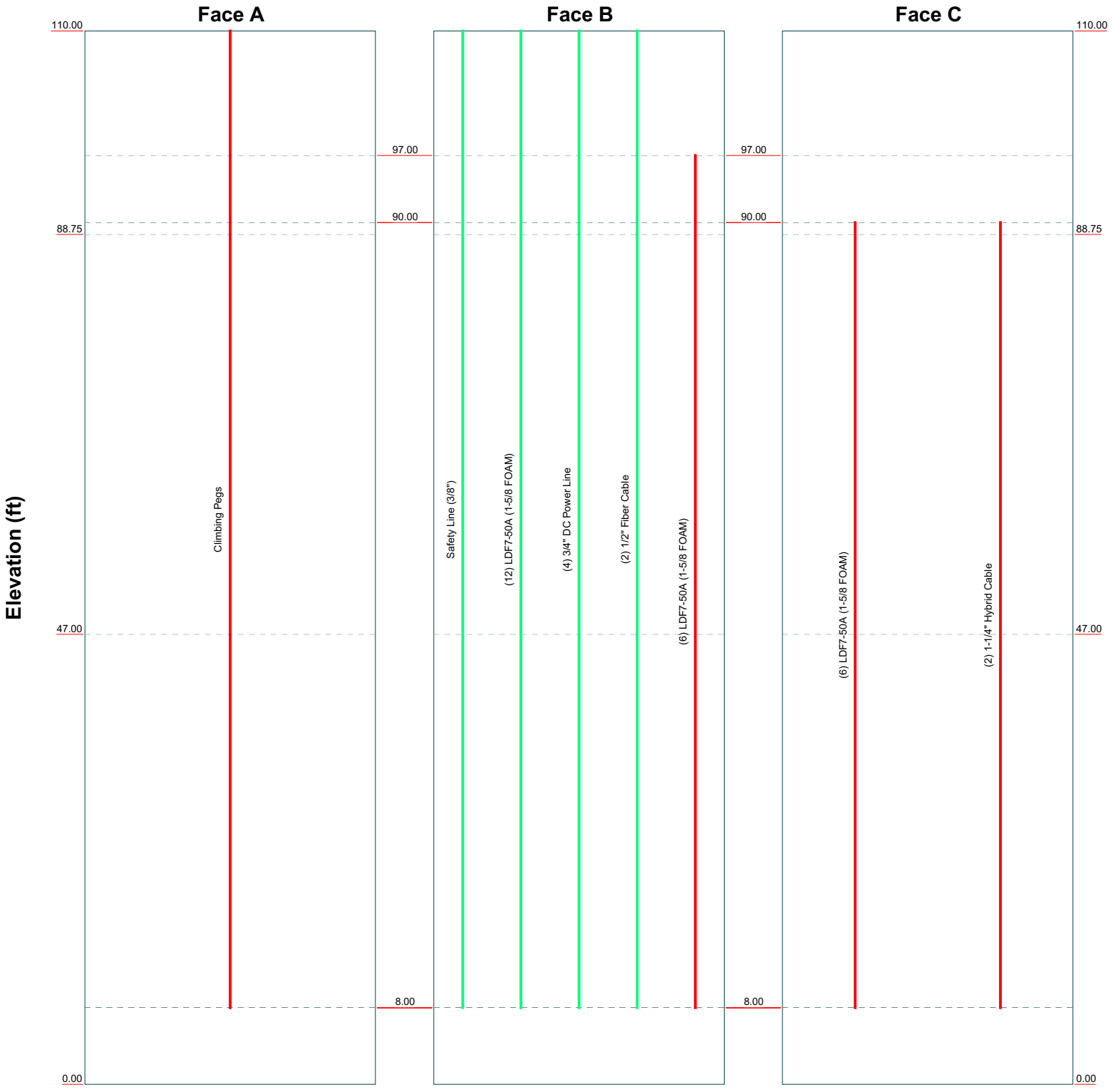
1. Tower is located in Hartford County, Connecticut.
2. Tower designed for Exposure C to the TIA-222-H Standard.
3. Tower designed for a 118 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 50 mph basic wind with 1.50 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Risk Category II.
7. Topographic Category 1 with Crest Height of 0.00 ft
8. TOWER RATING: 95.9%

GPD
520 South Main Street Suite 2531
Akron, Ohio 44311
Phone: (330) 572-2100
FAX: (330) 572-2101

Job: ***(CT-1341) NEW BRITAIN WILDWOOD STREET***		
Project: ***2022701.61***		
Client: Blue Sky	Drawn by: msteward	App'd:
Code: TIA-222-H	Date: 01/10/22	Scale: NTS
Path: T:\ATandT\88241\10 2022701 61 Blue Sky RR\5_Structural\00_Structural\00_Rev_003_Modeling\88241.eri		Dwg No. E-1

Feed Line Distribution Chart
0' - 110'

Round | Flat | App In Face | App Out Face | Truss Leg



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Tower Input Data

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

Tower is located in Hartford County, Connecticut.
Tower base elevation above sea level: 56.00 ft.
Basic wind speed of 118 mph.
Risk Category II.
Exposure Category C.
Simplified Topographic Factor Procedure for wind speed-up calculations is used.
Topographic Category: 1.
Crest Height: 0.00 ft.
Nominal ice thickness of 1.5000 in.
Ice thickness is considered to increase with height.
Ice density of 56 pcf.
A wind speed of 50 mph is used in combination with ice.
Temperature drop of 50 °F.
Deflections calculated using a wind speed of 60 mph.
A non-linear (P-delta) analysis was used.
Pressures are calculated at each section.
Stress ratio used in pole design is 1.
Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

	Consider Moments - Legs		Distribute Leg Loads As Uniform		Use ASCE 10 X-Brace Ly Rules
	Consider Moments - Horizontals		Assume Legs Pinned		Calculate Redundant Bracing Forces
	Consider Moments - Diagonals	√	Assume Rigid Index Plate		Ignore Redundant Members in FEA
	Use Moment Magnification	√	Use Clear Spans For Wind Area		SR Leg Bolts Resist Compression
√	Use Code Stress Ratios		Use Clear Spans For KL/r		All Leg Panels Have Same Allowable
√	Use Code Safety Factors - Guys		Retension Guys To Initial Tension		Offset Girt At Foundation
	Escalate Ice	√	Bypass Mast Stability Checks	√	Consider Feed Line Torque
	Always Use Max Kz	√	Use Azimuth Dish Coefficients		Include Angle Block Shear Check
	Use Special Wind Profile	√	Project Wind Area of Appurt.		Use TIA-222-H Bracing Resist. Exemption
	Include Bolts In Member Capacity		Autocalc Torque Arm Areas		Use TIA-222-H Tension Splice Exemption
	Leg Bolts Are At Top Of Section		Add IBC .6D+W Combination		Poles
	Secondary Horizontal Braces Leg	√	Sort Capacity Reports By Component	√	Include Shear-Torsion Interaction
	Use Diamond Inner Bracing (4 Sided)		Triangulate Diamond Inner Bracing		Always Use Sub-Critical Flow
	SR Members Have Cut Ends		Treat Feed Line Bundles As Cylinder		Use Top Mounted Sockets
	SR Members Are Concentric		Ignore KL/ry For 60 Deg. Angle Legs		Pole Without Linear Attachments
					Pole With Shroud Or No Appurtenances
					Outside and Inside Corner Radii Are Known

Tapered Pole Section Geometry

Section	*Elevation*	*Section Length*	*Splice Length*	*Number of Sides*	*Top Diameter*	*Bottom Diameter*	*Wall Thickness*	*Bend Radius*	*Pole Grade*
	ft	*ft*	*ft*		*in*	*in*	*in*	*in*	
L1	110.00-88.75	21.25	3.25	18	21.0000	24.8250	0.1875	0.7500	A572-65 (65 ksi)
L2	88.75-47.00	45.00	4.00	18	23.8650	31.9875	0.2500	1.0000	A572-65

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L3	47.00-0.00	51.00		18	30.7655	39.9300	0.3125	1.2500	(65 ksi) A572-65 (65 ksi)

Tapered Pole Properties

Section	Tip Dia. in	Area in^2	I in^4	r in	C in	I/C in^3	J in^4	It/Q in^2	w in	w/t
L1	21.2950	12.3860	677.8263	7.3884	10.6680	63.5383	1356.5444	6.1942	3.3660	17.952
	25.1790	14.6624	1124.4381	8.7463	12.6111	89.1626	2250.3558	7.3326	4.0392	21.542
L2	24.7903	18.7385	1320.2258	8.3833	12.1234	108.8988	2642.1889	9.3710	3.7602	15.041
	32.4424	25.1837	3204.8117	11.2668	16.2496	197.2234	6413.8405	12.5942	5.1898	20.759
L3	31.9218	30.2056	3539.0332	10.8108	15.6289	226.4420	7082.7232	15.1057	4.8647	15.567
	40.4978	39.2956	7792.1193	14.0642	20.2844	384.1427	15594.4917	19.6515	6.4777	20.729

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
L1 110.00-88.75				1	1	1			
L2 88.75-47.00				1	1	1			
L3 47.00-0.00				1	1	1			

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight plf
Climbing Pegs	A	No	Surface Ar (CaAa)	110.00 - 8.00	1	1	0.000 0.000	0.1500		0.31
LDF7-50A (1-5/8 FOAM)	B	No	Surface Ar (CaAa)	97.00 - 8.00	6	6	-0.100 0.400	1.9800		0.82
LDF7-50A (1-5/8 FOAM)	C	No	Surface Ar (CaAa)	90.00 - 8.00	6	6	-0.250 0.250	1.9800		0.82
1-1/4" Hybrid Cable	C	No	Surface Ar (CaAa)	90.00 - 8.00	2	2	0.000 0.000	1.2500		1.00

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number		C_AA_A ft^2/ft	Weight plf
Safety Line (3/8")	B	No	No	CaAa (Out Of Face)	110.00 - 8.00	1	No Ice	0.04	0.22
							1/2" Ice	0.14	0.75
							1" Ice	0.24	1.28
							2" Ice	0.44	2.34
LDF7-50A (1-5/8	B	No	No	Inside Pole	110.00 - 8.00	12	No Ice	0.00	0.82

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number		C_AA_A ft^2/ft	Weight plf
FOAM)							1/2" Ice	0.00	0.82
							1" Ice	0.00	0.82
							2" Ice	0.00	0.82
3/4" DC Power Line	B	No	No	Inside Pole	110.00 - 8.00	4	No Ice	0.00	0.33
							1/2" Ice	0.00	0.33
							1" Ice	0.00	0.33
							2" Ice	0.00	0.33
1/2" Fiber Cable	B	No	No	Inside Pole	110.00 - 8.00	2	No Ice	0.00	0.15
							1/2" Ice	0.00	0.15
							1" Ice	0.00	0.15
							2" Ice	0.00	0.15

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
Platform w/ Handrails & Kickers [LP 1201-1_KCKR-HR-1]	C	None		0.0000	110.00	No Ice	37.61	37.61	2.63
						1/2" Ice	45.62	45.62	3.48
						1" Ice	53.59	53.59	4.46
						2" Ice	69.65	69.65	6.85
Pipe Mount 6'x2.375"	A	From Centroid-Leg	4.00 0.00 3.00	30.0000	110.00	No Ice	1.43	1.43	0.03
						1/2" Ice	1.92	1.92	0.04
						1" Ice	2.29	2.29	0.05
						2" Ice	3.06	3.06	0.09
Pipe Mount 6'x2.375"	B	From Centroid-Leg	4.00 0.00 3.00	30.0000	110.00	No Ice	1.43	1.43	0.03
						1/2" Ice	1.92	1.92	0.04
						1" Ice	2.29	2.29	0.05
						2" Ice	3.06	3.06	0.09
Pipe Mount 6'x2.375"	C	From Centroid-Leg	4.00 0.00 3.00	30.0000	110.00	No Ice	1.43	1.43	0.03
						1/2" Ice	1.92	1.92	0.04
						1" Ice	2.29	2.29	0.05
						2" Ice	3.06	3.06	0.09
7770.00 w/Mount Pipe	A	From Centroid-Leg	4.00 0.00 4.00	30.0000	110.00	No Ice	5.51	4.10	0.06
						1/2" Ice	5.87	4.73	0.11
						1" Ice	6.23	5.37	0.16
						2" Ice	6.99	6.70	0.29
7770.00 w/Mount Pipe	B	From Centroid-Leg	4.00 0.00 4.00	30.0000	110.00	No Ice	5.51	4.10	0.06
						1/2" Ice	5.87	4.73	0.11
						1" Ice	6.23	5.37	0.16
						2" Ice	6.99	6.70	0.29
7770.00 w/Mount Pipe	C	From Centroid-Leg	4.00 0.00 4.00	30.0000	110.00	No Ice	5.51	4.10	0.06
						1/2" Ice	5.87	4.73	0.11
						1" Ice	6.23	5.37	0.16
						2" Ice	6.99	6.70	0.29
AM-X-CD-16-65-00T-RET w/ Mount Pipe	A	From Centroid-Leg	4.00 0.00 3.00	30.0000	110.00	No Ice	8.31	6.65	0.09
						1/2" Ice	8.85	7.68	0.16
						1" Ice	9.37	8.56	0.23
						2" Ice	10.45	10.38	0.41
AM-X-CD-16-65-00T-RET w/ Mount Pipe	B	From Centroid-Leg	4.00 0.00 3.00	30.0000	110.00	No Ice	8.31	6.65	0.09
						1/2" Ice	8.85	7.68	0.16
						1" Ice	9.37	8.56	0.23
						2" Ice	10.45	10.38	0.41

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
AM-X-CD-16-65-00T-RET w/ Mount Pipe	C	From Centroid-Leg	4.00 0.00 3.00	30.0000	110.00	No Ice 1/2" Ice 1" Ice 2" Ice	8.31 8.85 9.37 10.45	6.65 7.68 8.56 10.38	0.09 0.16 0.23 0.41
800 10798 w/ Mount Pipe	A	From Centroid-Leg	4.00 0.00 4.00	30.0000	110.00	No Ice 1/2" Ice 1" Ice 2" Ice	10.69 11.19 11.71 12.75	5.69 6.18 6.67 7.68	0.08 0.14 0.21 0.37
800 10798 w/ Mount Pipe	B	From Centroid-Leg	4.00 0.00 4.00	30.0000	110.00	No Ice 1/2" Ice 1" Ice 2" Ice	10.69 11.19 11.71 12.75	5.69 6.18 6.67 7.68	0.08 0.14 0.21 0.37
800 10798 w/ Mount Pipe	C	From Centroid-Leg	4.00 0.00 4.00	30.0000	110.00	No Ice 1/2" Ice 1" Ice 2" Ice	10.69 11.19 11.71 12.75	5.69 6.18 6.67 7.68	0.08 0.14 0.21 0.37
(2) LGP21401	A	From Centroid-Leg	4.00 0.00 3.00	30.0000	110.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.10 1.24 1.38 1.69	0.21 0.27 0.35 0.52	0.01 0.02 0.03 0.05
(2) LGP21401	B	From Centroid-Leg	4.00 0.00 3.00	30.0000	110.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.10 1.24 1.38 1.69	0.21 0.27 0.35 0.52	0.01 0.02 0.03 0.05
(2) LGP21401	C	From Centroid-Leg	4.00 0.00 3.00	30.0000	110.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.10 1.24 1.38 1.69	0.21 0.27 0.35 0.52	0.01 0.02 0.03 0.05
(2) DBC0061F1V51-2	A	From Centroid-Leg	4.00 0.00 3.00	30.0000	110.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.43 0.51 0.61 0.81	0.41 0.50 0.59 0.79	0.03 0.03 0.04 0.06
(2) DBC0061F1V51-2	B	From Centroid-Leg	4.00 0.00 3.00	30.0000	110.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.43 0.51 0.61 0.81	0.41 0.50 0.59 0.79	0.03 0.03 0.04 0.06
(2) DBC0061F1V51-2	C	From Centroid-Leg	4.00 0.00 3.00	30.0000	110.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.43 0.51 0.61 0.81	0.41 0.50 0.59 0.79	0.03 0.03 0.04 0.06
RRUS 11 B12	A	From Centroid-Leg	4.00 0.00 3.00	30.0000	110.00	No Ice 1/2" Ice 1" Ice 2" Ice	2.83 3.04 3.26 3.71	1.18 1.33 1.48 1.83	0.05 0.07 0.10 0.15
RRUS 11 B12	B	From Centroid-Leg	4.00 0.00 3.00	30.0000	110.00	No Ice 1/2" Ice 1" Ice 2" Ice	2.83 3.04 3.26 3.71	1.18 1.33 1.48 1.83	0.05 0.07 0.10 0.15
RRUS 11 B12	C	From Centroid-Leg	4.00 0.00 3.00	30.0000	110.00	No Ice 1/2" Ice 1" Ice 2" Ice	2.83 3.04 3.26 3.71	1.18 1.33 1.48 1.83	0.05 0.07 0.10 0.15
RRUS 12 B2	A	From Centroid-Leg	4.00 0.00 3.00	30.0000	110.00	No Ice 1/2" Ice 1" Ice 2" Ice	3.14 3.36 3.59 4.07	1.28 1.43 1.60 1.95	0.05 0.07 0.10 0.16
RRUS 12 B2	B	From	4.00	30.0000	110.00	No Ice	3.14	1.28	0.05

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
		Centroid-Leg	0.00 3.00			1/2" Ice 1" Ice 2" Ice	3.36 3.59 4.07	1.43 1.60 1.95	0.07 0.10 0.16
RRUS 12 B2	C	From Centroid-Leg	4.00 0.00 3.00	30.0000	110.00	No Ice 1/2" Ice 1" Ice 2" Ice	3.14 3.36 3.59 4.07	1.28 1.43 1.60 1.95	0.05 0.07 0.10 0.16
RRUS 4478 B5	A	From Centroid-Leg	4.00 0.00 3.00	30.0000	110.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.84 2.01 2.19 2.57	1.06 1.20 1.34 1.66	0.06 0.08 0.09 0.14
RRUS 4478 B5	B	From Centroid-Leg	4.00 0.00 3.00	30.0000	110.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.84 2.01 2.19 2.57	1.06 1.20 1.34 1.66	0.06 0.08 0.09 0.14
RRUS 4478 B5	C	From Centroid-Leg	4.00 0.00 3.00	30.0000	110.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.84 2.01 2.19 2.57	1.06 1.20 1.34 1.66	0.06 0.08 0.09 0.14
RRUS 4426 B66	A	From Centroid-Leg	4.00 0.00 3.00	30.0000	110.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.64 1.80 1.97 2.33	0.73 0.84 0.97 1.24	0.05 0.06 0.08 0.11
RRUS 4426 B66	B	From Centroid-Leg	4.00 0.00 3.00	30.0000	110.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.64 1.80 1.97 2.33	0.73 0.84 0.97 1.24	0.05 0.06 0.08 0.11
RRUS 4426 B66	C	From Centroid-Leg	4.00 0.00 3.00	30.0000	110.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.64 1.80 1.97 2.33	0.73 0.84 0.97 1.24	0.05 0.06 0.08 0.11
RRUS 32 B30	A	From Centroid-Leg	4.00 0.00 3.00	30.0000	110.00	No Ice 1/2" Ice 1" Ice 2" Ice	2.69 2.91 3.14 3.61	1.57 1.76 1.95 2.35	0.06 0.08 0.10 0.16
RRUS 32 B30	B	From Centroid-Leg	4.00 0.00 3.00	30.0000	110.00	No Ice 1/2" Ice 1" Ice 2" Ice	2.69 2.91 3.14 3.61	1.57 1.76 1.95 2.35	0.06 0.08 0.10 0.16
RRUS 32 B30	C	From Centroid-Leg	4.00 0.00 3.00	30.0000	110.00	No Ice 1/2" Ice 1" Ice 2" Ice	2.69 2.91 3.14 3.61	1.57 1.76 1.95 2.35	0.06 0.08 0.10 0.16
DC6-48-60-18-8F Surge Suppression Unit	C	From Leg	0.50 0.00 0.00	0.0000	110.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.92 1.46 1.64 2.04	0.92 1.46 1.64 2.04	0.02 0.04 0.06 0.11
DC6-48-60-18-8C Surge Suppression Unit	B	From Leg	0.50 0.00 0.00	0.0000	110.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.14 1.79 2.00 2.45	1.14 1.79 2.00 2.45	0.03 0.05 0.07 0.13
Platform w/ Handrails [LP 304-1_HR-1]	C	None		0.0000	97.00	No Ice 1/2" Ice 1" Ice 2" Ice	21.41 26.62 31.66 41.38	21.41 26.62 31.66 41.38	1.60 2.06 2.60 3.96
1412D-1S20	A	From Centroid-Le	4.00 0.00	30.0000	97.00	No Ice 1/2" Ice	1.00 1.13	0.41 0.50	0.01 0.02

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
		g	3.00			1" Ice	1.26	0.59	0.03
						2" Ice	1.55	0.81	0.06
1412D-1S20	B	From Centroid-Le g	4.00 0.00 3.00	30.0000	97.00	No Ice 1/2" Ice 1" Ice	1.00 1.13 1.26	0.41 0.50 0.59	0.01 0.02 0.03
						2" Ice	1.55	0.81	0.06
1412D-1S20	C	From Centroid-Le g	4.00 0.00 3.00	30.0000	97.00	No Ice 1/2" Ice 1" Ice	1.00 1.13 1.26	0.41 0.50 0.59	0.01 0.02 0.03
						2" Ice	1.55	0.81	0.06
AIR32 B66Aa/B2A w/ 60" Mount Pipe	A	From Centroid-Le g	4.00 0.00 3.00	30.0000	97.00	No Ice 1/2" Ice 1" Ice	6.58 6.97 7.37	5.90 6.56 7.24	0.15 0.21 0.28
						2" Ice	8.20	8.64	0.43
AIR32 B66Aa/B2A w/ 60" Mount Pipe	B	From Centroid-Le g	4.00 0.00 3.00	30.0000	97.00	No Ice 1/2" Ice 1" Ice	6.58 6.97 7.37	5.90 6.56 7.24	0.15 0.21 0.28
						2" Ice	8.20	8.64	0.43
AIR32 B66Aa/B2A w/ 60" Mount Pipe	C	From Centroid-Le g	4.00 0.00 3.00	30.0000	97.00	No Ice 1/2" Ice 1" Ice	6.58 6.97 7.37	5.90 6.56 7.24	0.15 0.21 0.28
						2" Ice	8.20	8.64	0.43
APXVARR24_43 C-NA20 w/ Mount Pipe	A	From Centroid-Le g	4.00 0.00 3.00	30.0000	97.00	No Ice 1/2" Ice 1" Ice	17.15 17.77 18.40	10.64 12.07 13.35	0.12 0.24 0.37
						2" Ice	19.69	15.58	0.66
APXVARR24_43 C-NA20 w/ Mount Pipe	B	From Centroid-Le g	4.00 0.00 3.00	30.0000	97.00	No Ice 1/2" Ice 1" Ice	17.15 17.77 18.40	10.64 12.07 13.35	0.12 0.24 0.37
						2" Ice	19.69	15.58	0.66
APXVARR24_43 C-NA20 w/ Mount Pipe	C	From Centroid-Le g	4.00 0.00 3.00	30.0000	97.00	No Ice 1/2" Ice 1" Ice	17.15 17.77 18.40	10.64 12.07 13.35	0.12 0.24 0.37
						2" Ice	19.69	15.58	0.66
RRUS 4449-B12+71	A	From Centroid-Le g	4.00 0.00 3.00	30.0000	97.00	No Ice 1/2" Ice 1" Ice	1.65 1.81 1.98	1.16 1.30 1.45	0.07 0.09 0.10
						2" Ice	2.34	1.76	0.15
RRUS 4449-B12+71	B	From Centroid-Le g	4.00 0.00 3.00	30.0000	97.00	No Ice 1/2" Ice 1" Ice	1.65 1.81 1.98	1.16 1.30 1.45	0.07 0.09 0.10
						2" Ice	2.34	1.76	0.15
RRUS 4449-B12+71	C	From Centroid-Le g	4.00 0.00 3.00	30.0000	97.00	No Ice 1/2" Ice 1" Ice	1.65 1.81 1.98	1.16 1.30 1.45	0.07 0.09 0.10
						2" Ice	2.34	1.76	0.15
T-Arm Mount [TA 601-3]	A	None		0.0000	90.00	No Ice 1/2" Ice 1" Ice	12.56 15.36 18.04	12.56 15.36 18.04	0.73 0.94 1.21
						2" Ice	23.69	23.69	1.92
BSAMNT-SBS-1-2	A	From Leg	3.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice	0.11 0.15 0.21	0.00 0.03 0.08	0.01 0.02 0.02
						2" Ice	0.35	0.19	0.02
BSAMNT-SBS-1-2	B	From Leg	3.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice	0.11 0.15 0.21	0.00 0.03 0.08	0.01 0.02 0.02

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
						2" Ice	0.35	0.19	0.02
BSAMNT-SBS-1-2	C	From Leg	3.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.11 0.15 0.21 0.35	0.00 0.03 0.08 0.19	0.01 0.02 0.02 0.02
BXA-80063 w/ mount pipe	A	From Leg	3.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	3.58 3.88 4.20 4.84	3.66 4.21 4.77 5.93	0.03 0.06 0.10 0.20
BXA-80063 w/ mount pipe	B	From Leg	3.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	3.58 3.88 4.20 4.84	3.66 4.21 4.77 5.93	0.03 0.06 0.10 0.20
BXA-80063 w/ mount pipe	C	From Leg	3.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	3.58 3.88 4.20 4.84	3.66 4.21 4.77 5.93	0.03 0.06 0.10 0.20
(2) NHH-65B-R2B w/ Mount Pipe	A	From Leg	3.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	8.32 8.88 9.40 10.47	7.00 8.19 9.08 10.90	0.07 0.14 0.21 0.39
(2) NHH-65B-R2B w/ Mount Pipe	B	From Leg	3.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	8.32 8.88 9.40 10.47	7.00 8.19 9.08 10.90	0.07 0.14 0.21 0.39
(2) NHH-65B-R2B w/ Mount Pipe	C	From Leg	3.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	8.32 8.88 9.40 10.47	7.00 8.19 9.08 10.90	0.07 0.14 0.21 0.39
MT6407-77A w/ Mount Pipe	A	From Leg	3.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.91 5.26 5.61 6.36	2.68 3.14 3.62 4.63	0.10 0.14 0.18 0.29
MT6407-77A w/ Mount Pipe	B	From Leg	3.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.91 5.26 5.61 6.36	2.68 3.14 3.62 4.63	0.10 0.14 0.18 0.29
MT6407-77A w/ Mount Pipe	C	From Leg	3.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.91 5.26 5.61 6.36	2.68 3.14 3.62 4.63	0.10 0.14 0.18 0.29
B2/B66A RRH	A	From Leg	3.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.88 2.05 2.22 2.60	1.25 1.39 1.54 1.86	0.08 0.10 0.12 0.18
B2/B66A RRH	B	From Leg	3.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.88 2.05 2.22 2.60	1.25 1.39 1.54 1.86	0.08 0.10 0.12 0.18
B2/B66A RRH	C	From Leg	3.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.88 2.05 2.22 2.60	1.25 1.39 1.54 1.86	0.08 0.10 0.12 0.18
B5/B66A RRH	A	From Leg	3.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.88 2.05 2.22 2.60	1.25 1.39 1.54 1.86	0.08 0.10 0.12 0.18

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
B5/B66A RRH	B	From Leg	3.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.88 2.05 2.22 2.60	1.25 1.39 1.54 1.86	0.08 0.10 0.12 0.18
B5/B66A RRH	C	From Leg	3.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.88 2.05 2.22 2.60	1.25 1.39 1.54 1.86	0.08 0.10 0.12 0.18
DC6-48-60-18-8F Surge Suppression Unit	A	From Leg	3.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.92 1.46 1.64 2.04	0.92 1.46 1.64 2.04	0.02 0.04 0.06 0.11
12' T-Arm - Round (GPD)	C	From Leg	1.50 0.00 1.50	0.0000	60.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.70 5.33 6.00 6.67	2.33 2.96 3.60 4.87	0.33 0.40 0.47 0.53
10' T-Arm - Round (GPD)	C	From Leg	1.50 0.00 -1.50	0.0000	60.00	No Ice 1/2" Ice 1" Ice 2" Ice	3.90 4.30 4.70 5.50	2.33 2.96 3.60 4.87	0.25 0.30 0.35 0.45

Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral ft / Vert ft	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft		Aperture Area ft^2	Weight K
Stadium Light (2')	C	Paraboloid w/Shroud (HP)	From Leg	3.00 -6.00 1.50	0.0000		60.00	2.00	No Ice 1/2" Ice 1" Ice 2" Ice	3.14 3.41 3.68 4.21	0.08 0.02 0.00 0.00
Stadium Light (2')	C	Paraboloid w/Shroud (HP)	From Leg	3.00 -3.00 1.50	0.0000		60.00	2.00	No Ice 1/2" Ice 1" Ice 2" Ice	3.14 3.41 3.68 4.21	0.08 0.02 0.00 0.00
Stadium Light (2')	C	Paraboloid w/Shroud (HP)	From Leg	3.00 0.00 1.50	0.0000		60.00	2.00	No Ice 1/2" Ice 1" Ice 2" Ice	3.14 3.41 3.68 4.21	0.08 0.02 0.00 0.00
Stadium Light (2')	C	Paraboloid w/Shroud (HP)	From Leg	3.00 3.00 1.50	0.0000		60.00	2.00	No Ice 1/2" Ice 1" Ice 2" Ice	3.14 3.41 3.68 4.21	0.08 0.02 0.00 0.00
Stadium Light (2')	C	Paraboloid w/Shroud (HP)	From Leg	3.00 6.00 1.50	0.0000		60.00	2.00	No Ice 1/2" Ice 1" Ice 2" Ice	3.14 3.41 3.68 4.21	0.08 0.02 0.00 0.00
Stadium Light (2')	C	Paraboloid w/Shroud (HP)	From Leg	3.00 -6.00 -1.50	0.0000		60.00	2.00	No Ice 1/2" Ice 1" Ice 2" Ice	3.14 3.41 3.68 4.21	0.08 0.02 0.00 0.00
Stadium Light (2')	C	Paraboloid w/Shroud (HP)	From Leg	3.00 -3.00	0.0000		60.00	2.00	No Ice 1/2" Ice	3.14 3.41	0.08 0.02

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral Vert ft	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft		Aperture Area ft²	Weight K
				-1.50					1" Ice	3.68	0.00
									2" Ice	4.21	0.00
Stadium Light (2')	C	Paraboloid w/Shroud (HP)	From Leg	3.00 0.00 -1.50	0.0000		60.00	2.00	No Ice 1/2" Ice 1" Ice	3.14 3.41 3.68	0.08 0.02 0.00
									2" Ice	4.21	0.00
Stadium Light (2')	C	Paraboloid w/Shroud (HP)	From Leg	3.00 3.00 -1.50	0.0000		60.00	2.00	No Ice 1/2" Ice 1" Ice	3.14 3.41 3.68	0.08 0.02 0.00
									2" Ice	4.21	0.00

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	110 - 88.75	21.579	47	1.6451	0.0041
L2	92 - 47	15.547	47	1.5264	0.0041
L3	51 - 0	4.846	47	0.8782	0.0030

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
110.00	Platform w/ Handrails & Kickers [LP 1201-1_KCKR-HR-1]	47	21.579	1.6451	0.0043	20713
97.00	Platform w/ Handrails [LP 304-1_HR-1]	47	17.184	1.5685	0.0043	7966
90.00	T-Arm Mount [TA 601-3]	47	14.905	1.5064	0.0042	5432
61.50	Stadium Light (2')	47	6.988	1.0712	0.0035	2851
60.00	12' T-Arm - Round (GPD)	47	6.651	1.0438	0.0035	2781
58.50	Stadium Light (2')	47	6.325	1.0163	0.0034	2714

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	110 - 88.75	92.991	8	7.1132	0.0182
L2	92 - 47	66.991	8	6.5969	0.0179
L3	51 - 0	20.928	8	3.7857	0.0128

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
110.00	Platform w/ Handrails & Kickers [LP 1201-1_KCKR-HR-1]	8	92.991	7.1132	0.0190	4915
97.00	Platform w/ Handrails [LP 304-1_HR-1]	8	74.046	6.7800	0.0189	1888
90.00	T-Arm Mount [TA 601-3]	8	64.227	6.5098	0.0186	1283
61.50	Stadium Light (2')	8	30.146	4.6214	0.0153	668
60.00	12' T-Arm - Round (GPD)	8	28.699	4.5026	0.0151	652
58.50	Stadium Light (2')	8	27.293	4.3833	0.0148	636

Compression Checks

Pole Design Data

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
L1	110 - 88.75 (1)	TP24.825x21x0.1875	21.25	0.00	0.0	14.3142	-8.51	837.38	0.010
L2	88.75 - 47 (2)	TP31.9875x23.865x0.25	45.00	0.00	0.0	24.6108	-17.52	1439.73	0.012
L3	47 - 0 (3)	TP39.93x30.7655x0.3125	51.00	0.00	0.0	39.2956	-27.72	2298.79	0.012

Pole Bending Design Data

Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{nx} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} kip-ft	ϕM_{ny} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
L1	110 - 88.75 (1)	TP24.825x21x0.1875	186.21	482.21	0.386	0.00	482.21	0.000
L2	88.75 - 47 (2)	TP31.9875x23.865x0.25	924.99	1081.13	0.856	0.00	1081.13	0.000
L3	47 - 0 (3)	TP39.93x30.7655x0.3125	2069.31	2189.18	0.945	0.00	2189.18	0.000

Pole Shear Design Data

Section No.	Elevation ft	Size	Actual V_u K	ϕV_n K	Ratio $\frac{V_u}{\phi V_n}$	Actual T_u kip-ft	ϕT_n kip-ft	Ratio $\frac{T_u}{\phi T_n}$
L1	110 - 88.75 (1)	TP24.825x21x0.1875	12.47	251.22	0.050	0.10	529.16	0.000
L2	88.75 - 47 (2)	TP31.9875x23.865x0.25	20.80	431.92	0.048	0.82	1173.18	0.001
L3	47 - 0 (3)	TP39.93x30.7655x0.3125	23.83	689.64	0.035	2.33	2392.70	0.001

Pole Interaction Design Data

Section No.	Elevation ft	Ratio $\frac{P_u}{\phi P_n}$	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	Ratio $\frac{M_{uy}}{\phi M_{ny}}$	Ratio $\frac{V_u}{\phi V_n}$	Ratio $\frac{T_u}{\phi T_n}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
L1	110 - 88.75 (1)	0.010	0.386	0.000	0.050	0.000	0.399	1.000	4.8.2
L2	88.75 - 47 (2)	0.012	0.856	0.000	0.048	0.001	0.870	1.000	4.8.2
L3	47 - 0 (3)	0.012	0.945	0.000	0.035	0.001	0.959	1.000	4.8.2

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
L1	110 - 88.75	Pole	TP24.825x21x0.1875	1	-8.51	837.38	39.9	Pass
L2	88.75 - 47	Pole	TP31.9875x23.865x0.25	2	-17.52	1439.73	87.0	Pass
L3	47 - 0	Pole	TP39.93x30.7655x0.3125	3	-27.72	2298.79	95.9	Pass
						Summary	ELC:	Existing + Proposed
						Pole (L3)	95.9	Pass
						Rating =	95.9	Pass

APPENDIX C

Additional Calculations

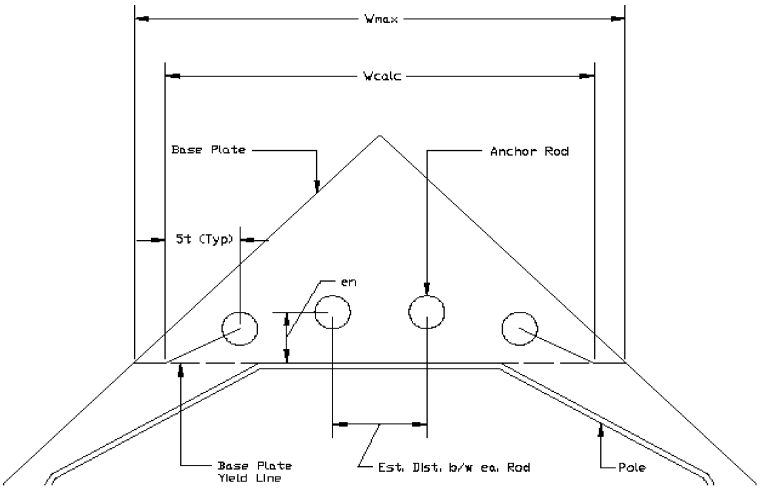
Anchor Rod and Base Plate Stresses, TIA-222-H-1
New Britain Wildwood Street (CT-1341)
2022701.61

Overturning Moment =	2069.00	k*ft
Axial Force =	28.00	k
Shear Force =	24.00	k

Maximum Capacity	100%
Apply TIA-222-H Section 15.5?	No

Anchor Rods		
Pole Diameter =	39.93	in
Number of Rods =	12	
Rod Yield Strength, F_y =	75	ksi
Rod Ultimate Strength, F_u =	100	ksi
Rod Circle =	46	in
Rod Diameter =	2.25	in
Rod Projection, l_{ar} =	2.25	in
Is grout present?	No	
Max Tension on Rod, P_{ut} =	177.36	k
Max Compression on Rod, P_{uc} =	182.03	k
Shear on Rod, V_u =	2.00	k
Moment on Rod, M_u =	0.00	k-in
Tension Interaction =	**53.0%**	**OK**
Compression Interaction =	**67.9%**	**OK**

Base Plate		
Plate Yield Strength, F_y =	50	ksi
ϕ =	0.9	
Plate Thickness =	2.5	in
Plate Width =	45	in
Est. Dist. b/w ea. Rod =	6	in
w_{calc} =	36.90	in
w_{max} =	23.71	in
w =	23.71	in
Z =	37.05	in^3
M_u =	1344.93	k-in
φM_n =	1667.08	k-in
Base Plate Capacity =	**80.7%**	**OK**



Pier and Pad Foundation

Site # :	CT-1341
Site Name:	New Britain Wildwo

TIA-222 Revision:	H
Tower Type:	Monopole

Top & Bot. Pad Rein. Different?:	☐
Block Foundation?:	☐
Rectangular Pad?:	☐

Superstructure Analysis Reactions		
Compression, P_{comp}:	28	kips
Base Shear, Vu_comp:	24	kips
Moment, M_u:	2069	ft-kips
Tower Height, **H**:	110	ft
BP Dist. Above Fdn, bp_{dist}:	3	in

Pier Properties		
Pier Shape:	Circular	
Pier Diameter, **dpier**:	6	ft
Ext. Above Grade, **E**:	0.5	ft
Pier Rebar Size, **Sc**:	8	
Pier Rebar Quantity, **mc**:	36	
Pier Tie/Spiral Size, **St**:	4	
Pier Tie/Spiral Quantity, **mt**:		
Pier Reinforcement Type:	Tie	
Pier Clear Cover, cc_{pier}:	3	in

Pad Properties		
Depth, **D**:	6	ft
Pad Width, W_1:	21.5	ft
Pad Thickness, **T**:	3	ft
Pad Rebar Size (Bottom dir. 2), Sp_2:	8	
Pad Rebar Quantity (Bottom dir. 2), mp_2:	22	
Pad Clear Cover, cc_{pad}:	3	in

Material Properties		
Rebar Grade, **Fy**:	60	ksi
Concrete Compressive Strength, **F'c**:	3	ksi
Dry Concrete Density, δ**c**:	150	pcf

Soil Properties		
Total Soil Unit Weight, γ:	100	pcf
Ultimate Net Bearing, Qnet:	6.000	ksf
Cohesion, **Cu**:	0.000	ksf
Friction Angle, φ:		degrees
SPT Blow Count, N_{blows}:		
Base Friction, μ:	0.3	
Neglected Depth, **N**:	3.33	ft
Foundation Bearing on Rock?	No	
Groundwater Depth, **gw**:	N/A	ft

<--Toggle between Gross and Net

Foundation Analysis Checks				
	Capacity	**Demand**	**Rating**	**Check**
Lateral (Sliding) (kips)	96.29	24.00	**24.9%**	**Pass**
Bearing Pressure (ksf)	4.95	2.25	**45.4%**	**Pass**
*Overturning (kip*ft)*	3124.12	2231.00	**71.4%**	**Pass**
*Pier Flexure (Comp.) (kip*ft)*	3778.37	2153.00	**57.0%**	**Pass**
Pier Compression (kip)	13497.04	45.81	**0.3%**	**Pass**
*Pad Flexure (kip*ft)*	2401.63	856.09	**35.6%**	**Pass**
Pad Shear - 1-way (kips)	667.70	146.56	**21.9%**	**Pass**
Pad Shear - 2-way (Comp) (ksi)	0.164	0.026	**16.0%**	**Pass**
*Flexural 2-way (Comp) (kip*ft)*	3289.60	1291.80	**39.3%**	**Pass**

Structural Rating:	**57.0%**
Soil Rating:	**71.4%**

Maser Consulting Connecticut
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Mt. Laurel, NJ 08054
856.797.0412
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Antenna Mount Analysis Report and PMI Requirements

Mount Analysis

SMART Tool Project #: 10061290
Maser Consulting Connecticut Project #: 21777831A

June 28, 2021

Site Information	*Site ID:*	*467964-VZW / NEWINGTON 3 CT*
	Site Name:	*NEWINGTON 3 CT*
	Carrier Name:	*Verizon Wireless*
	Address:	*35 Wildwood Street* *New Britain, Connecticut 06051* *Hartford County*
	Latitude:	*41.668192°*
	Longitude:	*-72.755197°*
Structure Information	*Tower Type:*	*100-Ft Monopole*
	Mount Type:	*8.00-Ft T-Arm*

FUZE ID # 16232013

Analysis Results

T-Arm: **76.1% Pass**

Digitally signed by Taqi Khawaja
Date: 2021.07.01 21:04:03-04'00'

******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: Evelina Lopez

Executive Summary:

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

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

Sources of Information:

Document Type	Remarks
Radio Frequency Data Sheet (RFDS)	*Verizon RFDS Site ID: 674990, dated March 18, 2021*
Mount Mapping Report	*Hudson Design Group, LLC, Site ID: 467964, dated April 28, 2021*

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H	
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust),	118 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:	0.998
Seismic Parameters:	S_S:	0.196
	S_1:	0.055
Maintenance Parameters:	Wind Speed (3-sec. Gust):	30 mph
	Maintenance Live Load, Lv:	250 lbs.
	Maintenance Live Load, Lm:	500 lbs.
Analysis Software:	RISA-3D (V17)	

Final Loading Configuration:

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
			Commscope		Added
			Samsung		
			Samsung		
			Samsung		
			Raycap		
			Antel		Retained

The recent mount mapping did not report existing OVP units. However, 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.

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:
   - Channel, Solid Round, Angle, Plate — ASTM A36 (Gr. 36)
   - HSS (Rectangular) — ASTM 500 (Gr. B-46)
   - Pipe — ASTM A53 (Gr. B-35)
   - Threaded Rod — F1554 (Gr. 36)
   - Bolts — ASTM A325

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

Analysis Results:

Component	Utilization %	Pass/Fail
Face Horizontal		*Pass*
Standoff Arm		*Pass*
Antenna Pipe		*Pass*
Dual Mount Pipe		*Pass*
Mount Connection		*Pass*

Structure Rating – *(Controlling Utilization of all Components)*	**76.1%**

The mount has been found structurally adequate for all steel and external connection capacities. Serviceability in accordance with TIA-222-H Section 4.9.11.3 has not been considered.

Recommendation:

The existing mounts are **SUFFICIENT** for the final loading configuration and do not require modifications.

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:

Mount Photos
Mount Mapping Report (for reference only)
Analysis Calculations
Contractor Required Post Installation Inspection (PMI) Report Deliverables
Antenna Placement Diagrams
TIA Adoption and Wind Speed Usage Letter

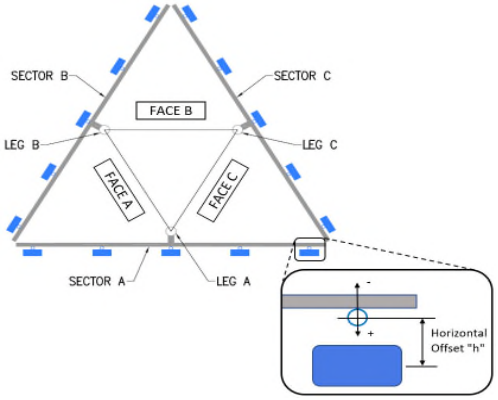
V4.0 Updated on 3-31-2021

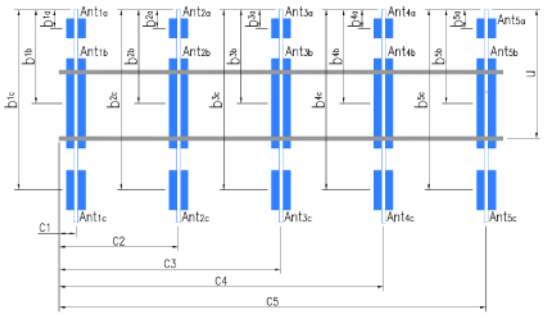
Antenna Mount Mapping Form (PATENT PENDING)

FCC #

Tower Owner:	OTHER	**Mapping Date:**	4/28/2021
Site Name:	NEWINGTON 3 CT	**Tower Type:**	Monopole
Site Number or ID:	467964	**Tower Height (Ft.):**	100
Mapping Contractor:	HUDSON DESIGN GROUP, LLC.	**Mount Elevation (Ft.):**	86

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





Antenna Layout (Looking Out From Tower)

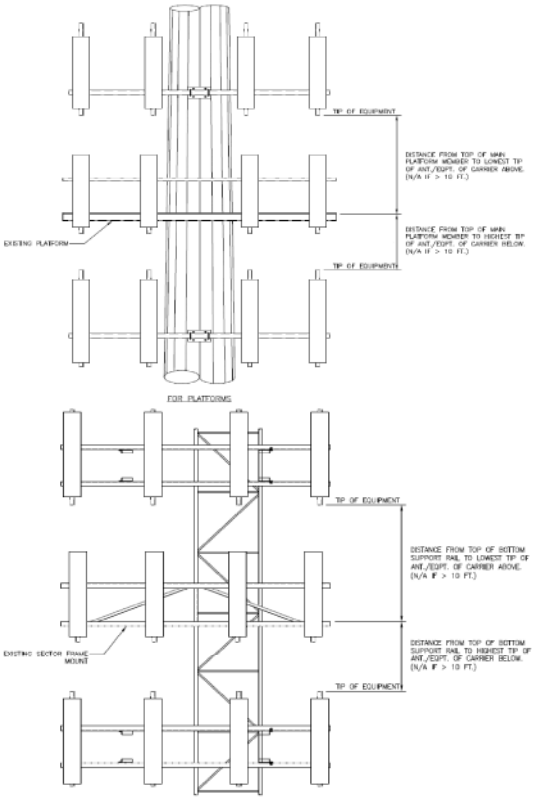
Mount Pipe Configuration and Geometries [Unit = Inches]							
Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."
A1	2" STD. PIPE X 72" LONG	39.00	11.00	C1	2" STD. PIPE X 72" LONG	39.00	11.00
A2	2" STD. PIPE X 72" LONG	46.00	59.00	C2	2" STD. PIPE X 72" LONG	46.00	59.00
A3	2" STD. PIPE X 72" LONG	46.00	85.00	C3	2" STD. PIPE X 72" LONG	46.00	85.00
A4				C4			
A5				C5			
A6				C6			
B1	2" STD. PIPE X 72" LONG	39.00	11.00	D1			
B2	2" STD. PIPE X 72" LONG	46.00	59.00	D2			
B3	2" STD. PIPE X 72" LONG	46.00	85.00	D3			
B4				D4			
B5				D5			
B6				D6			
Distance between bottom rail and mount CL elevation (dim d). Unit is inches. See 'Mount Elev Ref' tab for details. :							
Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) :							8.5
Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) :							
Please enter additional infomation or comments below.							
MONOPOLE WALL THICKNESS: .220",.219",.222"							
Tower Face Width at Mount Elev. (ft.):			Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):				24
For T-Arms/Platforms on monopoles, report the weld size from the main standoff to the plate bolting into the collar mount.							0.313

	Enter antenna model. If not labeled, enter "Unknown".						Mounting Locations [Units are inches and degrees]			Photos of antennas
Ants. Items	Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Vertical Distances"b_{1a}, b_{2a}, b_{3a}, b_{1b}..." (Inches)	Horiz. Offset "h" (Use "-" if Ant. is behind)	Antenna Azimuth (Degrees)	Photo Numbers
Sector A										
Ant_{1a}										
Ant_{1b}	BXA-80063-4CF-EDIN	11.50	5.00	48.00		87	27.00	10.00	50.00	38,48
Ant_{1c}										
Ant_{2a}										
Ant_{2b}	BXA-70063-6CF-EDIN	11.00	5.00	71.00		86.8333	36.00	10.00	50.00	39,49
Ant_{2c}										
Ant_{3a}										
Ant_{3b}	BXA-171063-8BF-EDI	6.00	4.00	48.00		87.6667	26.00	9.00	50.00	39,50
Ant_{3c}										
Ant_{4a}										
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

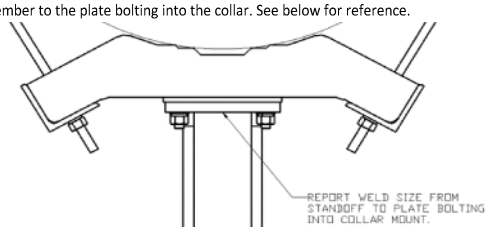
Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector	
Sector A:	50.00	Deg	Leg A:		Deg
Sector B:	170.00	Deg	Leg B:		Deg
Sector C:	290.00	Deg	Leg C:		Deg
Sector D:		Deg	Leg D:		Deg

Climbing Facility Information		
Location:	310.00 Deg	N/A
Climbing Facility	Corrosion Type:	Good condition.
	Access:	Climbing path was obstructed.
	Condition:	Good condition.

Please insert a photo of the mount centerline measurement here.



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



Sector B										
Ant_{1a}										
Ant_{1b}	BXA-80063-4CF-EDIN	11.50	5.00	48.00		87	27.00	10.00	170.00	41,48
Ant_{1c}										
Ant_{2a}										
Ant_{2b}	BXA-70063-6CF-EDIN	11.00	5.00	71.00		86.8333	36.00	10.00	170.00	42,49
Ant_{2c}										
Ant_{3a}										
Ant_{3b}	BXA-171063-8BF-EDI	6.00	4.00	48.00		87.6667	26.00	9.00	170.00	42,50
Ant_{3c}										
Ant_{4a}										
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										
Sector C										
Ant_{1a}										
Ant_{1b}	BXA-80063-4CF-EDIN	11.50	5.00	48.00		87	27.00	10.00	290.00	35,48
Ant_{1c}										
Ant_{2a}										
Ant_{2b}	BXA-70063-6CF-EDIN	11.00	5.00	71.00		86.8333	36.00	10.00	290.00	36,49
Ant_{2c}										
Ant_{3a}										
Ant_{3b}	BXA-171063-8BF-EDI	6.00	4.00	48.00		87.6667	26.00	9.00	290.00	37,50
Ant_{3c}										
Ant_{4a}										
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										
Sector D										
Ant_{1a}										
Ant_{1b}										
Ant_{1c}										
Ant_{2a}										
Ant_{2b}										
Ant_{2c}										
Ant_{2a}										
Ant_{3b}										
Ant_{3c}										
Ant_{4a}										
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

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

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

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

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

V4.0 Updated on 3-31-2021

Antenna Mount Mapping Form (PATENT PENDING)

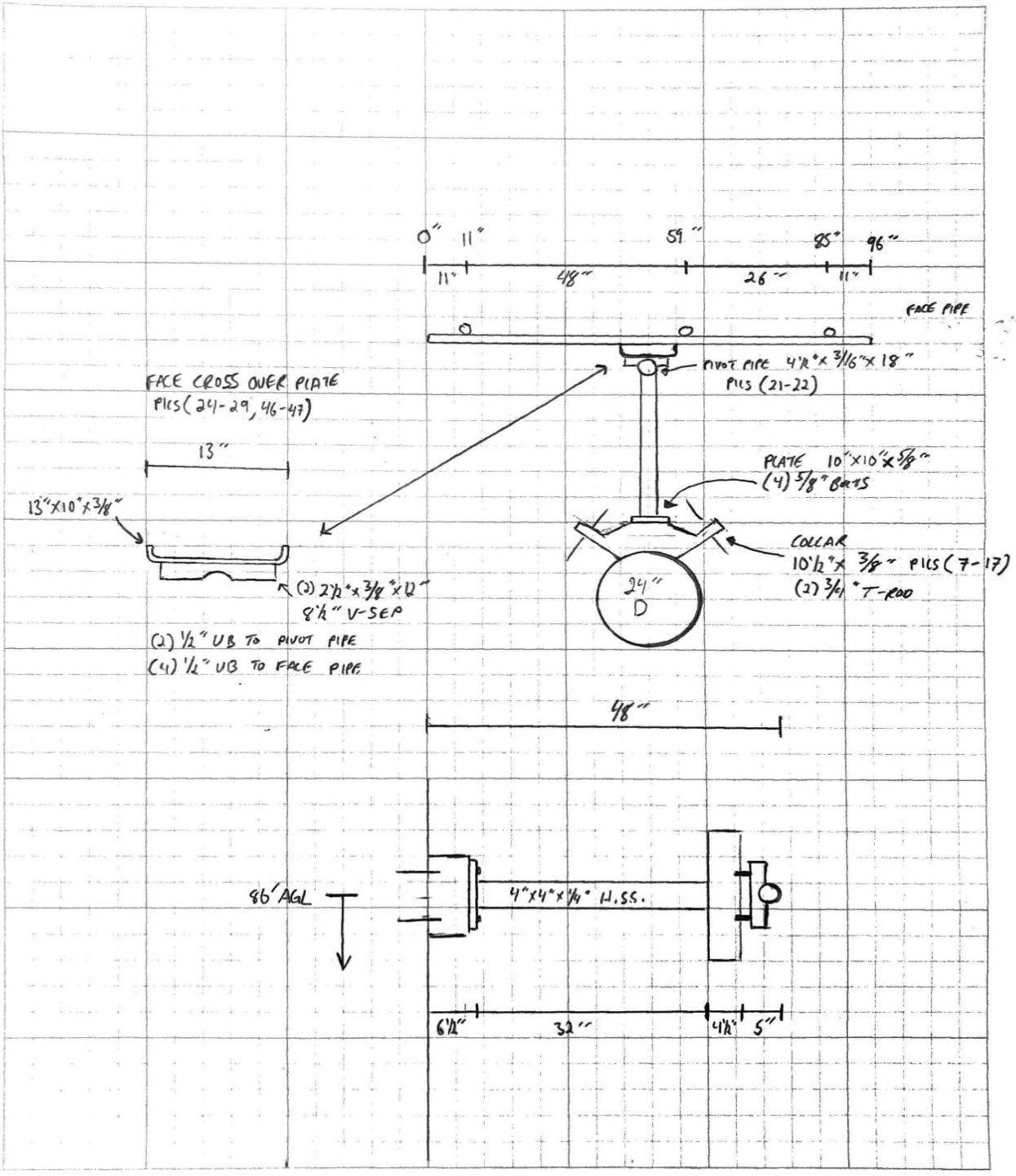
FCC #

Tower Owner:	OTHER	**Mapping Date:**	4/28/2021
Site Name:	NEWINGTON 3 CT	**Tower Type:**	Monopole
Site Number or ID:	467964	**Tower Height (Ft.):**	100
Mapping Contractor:	HUDSON DESIGN GROUP, LLC.	**Mount Elevation (Ft.):**	86

Please Insert Sketches of the Antenna Mount

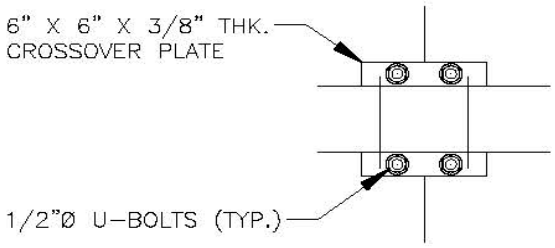
DATE: 04282021
Project Name:
Project No.: NEWINGTON 3 CT
Design By: [illegible] Chk'd By:
Page 2 of 2

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

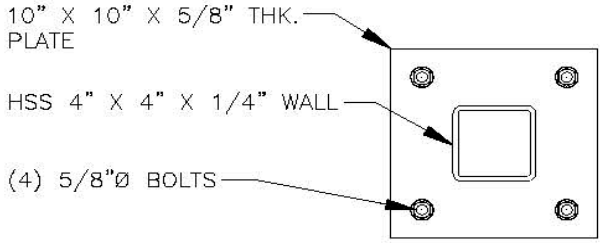


157132

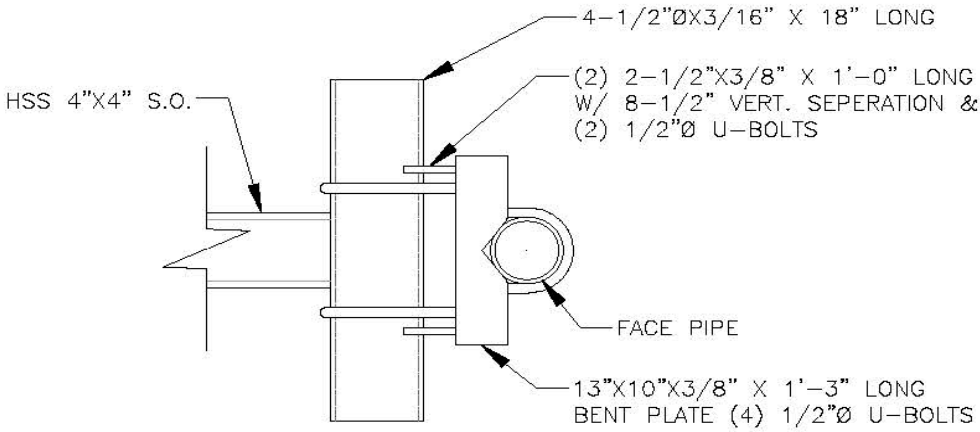
Please Insert Sketches of the Antenna Mount, cont'd



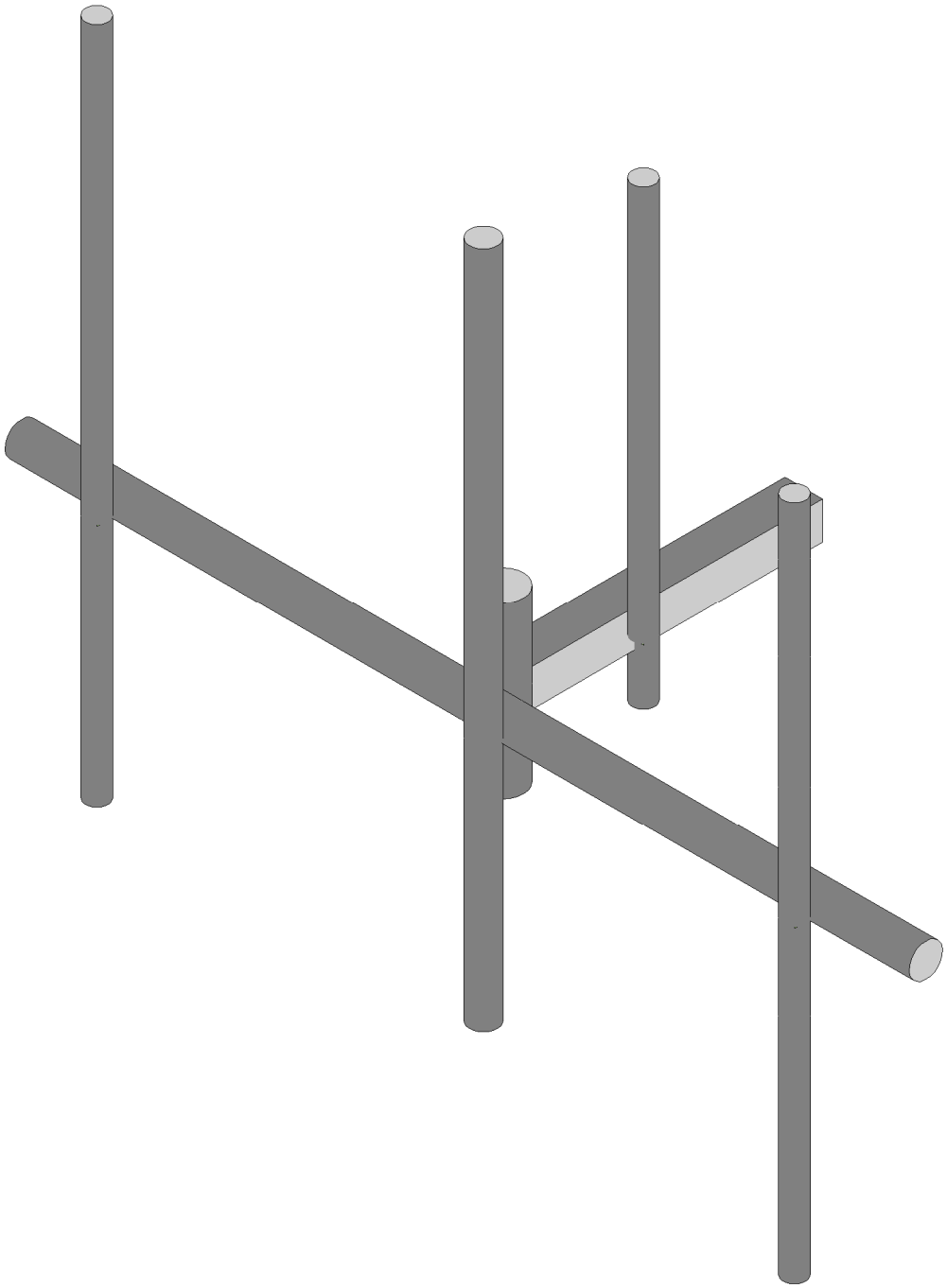
CROSSOVER PLATE DETAIL



STANDOFF TO RING MOUNT CONNECTION

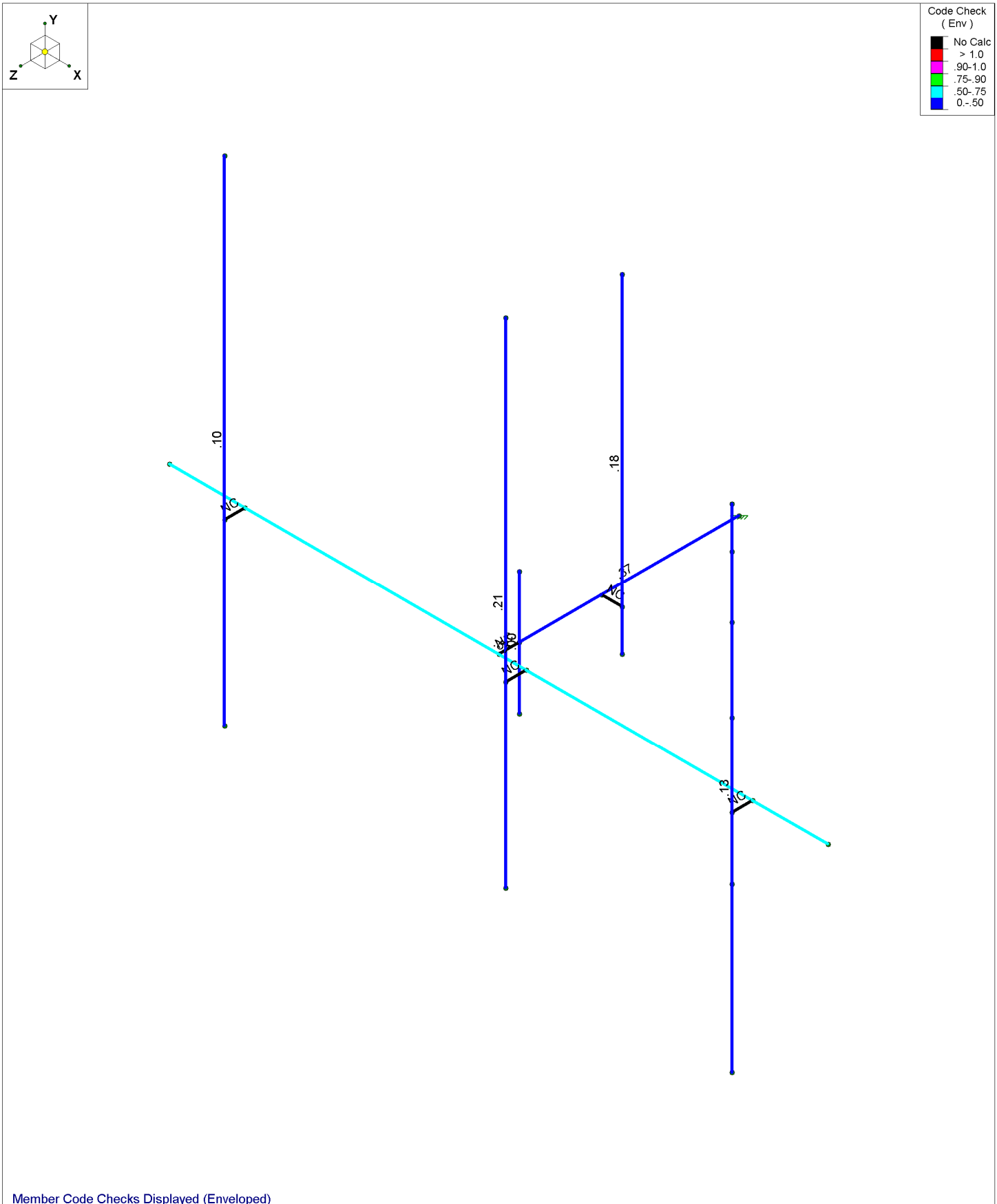


PIVOT MAST DETAIL



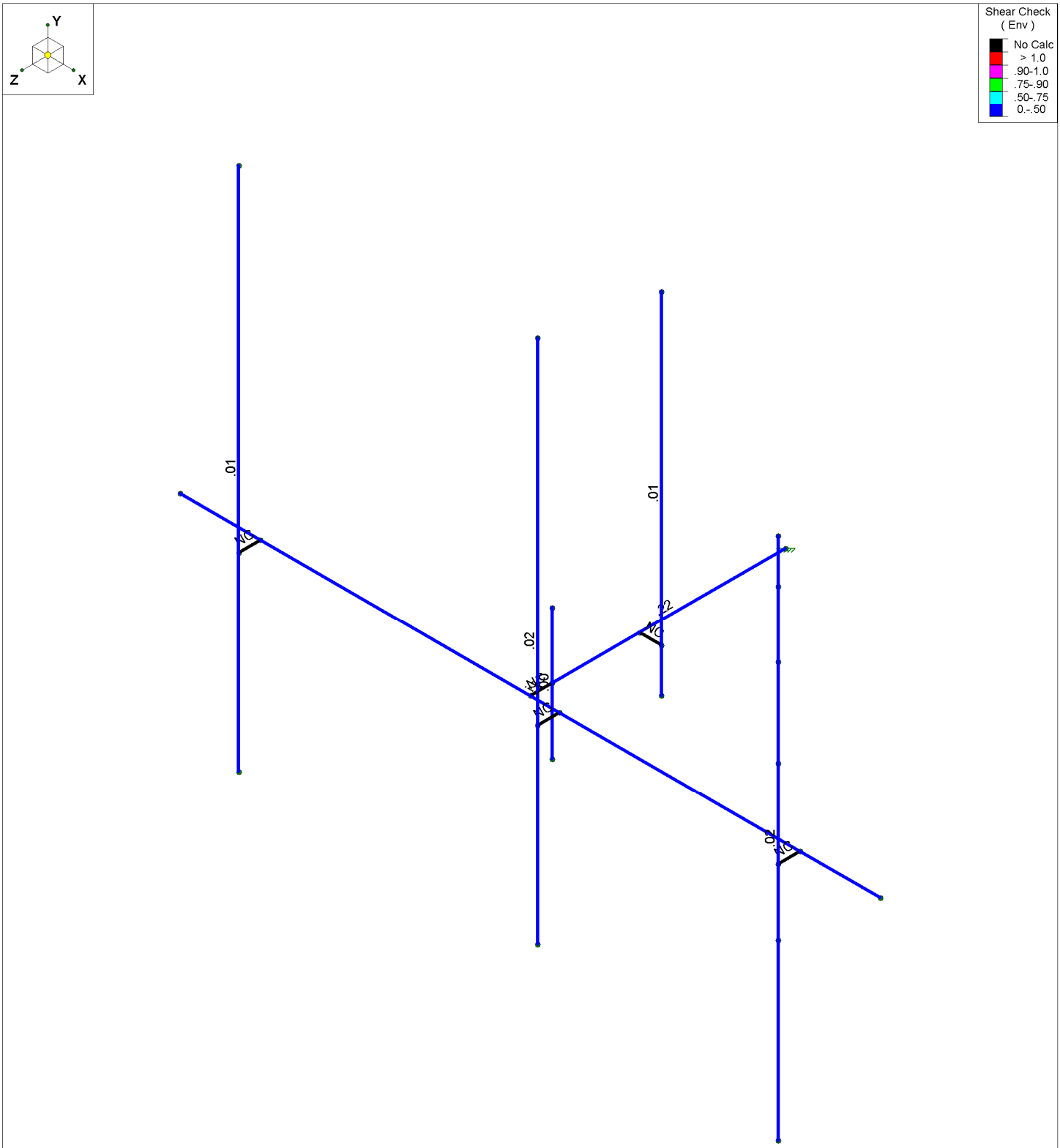
Envelope Only Solution

		SK - 1
		June 28, 2021 at 11:10 AM
		467964-VZW_MT_LOT_A_H.r3d



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

		SK - 2
		June 28, 2021 at 11:11 AM
		467964-VZW_MT_LOT_A_H.r3d



Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

		SK - 4
		June 28, 2021 at 11:12 AM
		467964-VZW_MT_LOT_A_H.r3d

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
1	Antenna D	None					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						7		
41	Structure Wo (0 Deg)	None						14		
42	Structure Wo (30 Deg)	None						14		
43	Structure Wo (60 Deg)	None						14		
44	Structure Wo (90 Deg)	None						14		
45	Structure Wo (120 D...	None						14		
46	Structure Wo (150 D...	None						14		
47	Structure Wo (180 D...	None						14		
48	Structure Wo (210 D...	None						14		
49	Structure Wo (240 D...	None						14		
50	Structure Wo (270 D...	None						14		
51	Structure Wo (300 D...	None						14		
52	Structure Wo (330 D...	None						14		
53	Structure Wi (0 Deg)	None						14		

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
54	Structure Wi (30 Deg)	None						14		
55	Structure Wi (60 Deg)	None						14		
56	Structure Wi (90 Deg)	None						14		
57	Structure Wi (120 De...	None						14		
58	Structure Wi (150 De...	None						14		
59	Structure Wi (180 De...	None						14		
60	Structure Wi (210 De...	None						14		
61	Structure Wi (240 De...	None						14		
62	Structure Wi (270 De...	None						14		
63	Structure Wi (300 De...	None						14		
64	Structure Wi (330 De...	None						14		
65	Structure Wm (0 Deg)	None						14		
66	Structure Wm (30 De...	None						14		
67	Structure Wm (60 De...	None						14		
68	Structure Wm (90 De...	None						14		
69	Structure Wm (120 D...	None						14		
70	Structure Wm (150 D...	None						14		
71	Structure Wm (180 D...	None						14		
72	Structure Wm (210 D...	None						14		
73	Structure Wm (240 D...	None						14		
74	Structure Wm (270 D...	None						14		
75	Structure Wm (300 D...	None						14		
76	Structure Wm (330 D...	None						14		
77	Lm1	None					1			
78	Lm2	None					1			
79	Lv1	None					1			
80	Lv2	None					1			

Load Combinations

	Description	So...	PDelta	S...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...
1	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	3	1	41	1												
2	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	4	1	42	1												
3	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	5	1	43	1												
4	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	6	1	44	1												
5	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	7	1	45	1												
6	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	8	1	46	1												
7	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	9	1	47	1												
8	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	10	1	48	1												
9	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	11	1	49	1												
10	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	12	1	50	1												
11	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	13	1	51	1												
12	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	14	1	52	1												
13	1.2D + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1	53	1								
14	1.2D + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1								
15	1.2D + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1	55	1								
16	1.2D + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1	56	1								
17	1.2D + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1								
18	1.2D + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1								
19	1.2D + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1								
20	1.2D + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1								
21	1.2D + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1								
22	1.2D + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1								
23	1.2D + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1								
24	1.2D + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1								
25	1.2D + 1....	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1										

Load Combinations (Continued)

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

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N25	0.000002	0	-0.166667	0	
2	N2	0.000002	0	2.5	0	
3	N3	0.000002	.75	2.5	0	
4	N4	0.000002	-.75	2.5	0	
5	N5	0.000002	0	2.75	0	
6	N6	4.000002	0	2.75	0	
7	N7	-3.999998	0	2.75	0	
8	N8	3.083336	0	2.75	0	
9	N9	0.333336	0	2.75	0	
10	N10	-3.083331	0	2.75	0	
11	N11	3.083336	0	3	0	
12	N12	0.333336	0	3	0	
13	N13	-3.083331	0	3	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
14	N14	3.083336	3.25	3	0	
15	N15	3.083336	-2.75	3	0	
16	N16	0.333336	3.833333	3	0	
17	N17	-3.083331	3.833333	3	0	
18	N18	0.333336	-2.166667	3	0	
19	N19	-3.083331	-2.166667	3	0	
20	N20	3.083336	1	3	0	
21	N21	3.083336	2.75	3	0	
22	N22	3.083336	-.75	3	0	
23	N23	3.083336	2	3	0	
24	N24	0.000002	0	1.5	0	
25	N25A	0.250002	0	1.5	0	
26	N26	0.250002	-.5	1.5	0	
27	N27	0.250002	3.5	1.5	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design R...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Antenna Pipe	PIPE_2.0	Column	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
2	Mast Pipe	PIPE_4.0	Column	Pipe	A53 Gr. B	Typical	2.96	6.82	6.82	13.6
3	Face Horizontal	PIPE_3.0	Column	Pipe	A53 Gr. B	Typical	2.07	2.85	2.85	5.69
4	Standoff Arm	HSS4X4X4	Column	Pipe	A500 Gr. B 46	Typical	3.37	7.8	7.8	12.8
5	Dual Mount Pipe	PIPE_2.5	Column	Pipe	A53 Gr. B	Typical	1.61	1.45	1.45	2.89

Hot Rolled Steel Properties

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

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Rul...
1	M1	N7	N6			Face Horizontal	Column	Pipe	A53 Gr. B	Typical
2	M2	N25	N2			Standoff Arm	Column	Pipe	A500 Gr...	Typical
3	M3	N3	N4			Mast Pipe	Column	Pipe	A53 Gr. B	Typical
4	M4	N5	N2			RIGID	None	None	RIGID	Typical
5	M5	N13	N10			RIGID	None	None	RIGID	Typical
6	M6	N12	N9			RIGID	None	None	RIGID	Typical
7	M7	N11	N8			RIGID	None	None	RIGID	Typical
8	MP1A	N14	N15			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
9	MP2A	N16	N18			Dual Mount Pipe	Column	Pipe	A53 Gr. B	Typical
10	MP3A	N17	N19			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
11	M11	N24	N25A			RIGID	None	None	RIGID	Typical
12	OVP	N27	N26			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M1						Yes	** NA **			None
2	M2						Yes	** NA **			None
3	M3						Yes	** NA **			None
4	M4						Yes	** NA **			None
5	M5						Yes	** NA **			None
6	M6						Yes	** NA **			None
7	M7						Yes	** NA **			None
8	MP1A						Yes	** NA **			None
9	MP2A						Yes	** NA **			None
10	MP3A						Yes	** NA **			None
11	M11						Yes	** NA **			None
12	OVP						Yes	** NA **			None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	Y	-21.85	1.08
2	MP2A	My	-.016	1.08
3	MP2A	Mz	.011	1.08
4	MP2A	Y	-21.85	4.58
5	MP2A	My	-.016	4.58
6	MP2A	Mz	.011	4.58
7	MP2A	Y	-21.85	1.08
8	MP2A	My	-.016	1.08
9	MP2A	Mz	-.011	1.08
10	MP2A	Y	-21.85	4.58
11	MP2A	My	-.016	4.58
12	MP2A	Mz	-.011	4.58
13	MP3A	Y	-43.55	1.83
14	MP3A	My	-.033	1.83
15	MP3A	Mz	0	1.83
16	MP3A	Y	-43.55	3.83
17	MP3A	My	-.033	3.83
18	MP3A	Mz	0	3.83
19	MP1A	Y	-84.4	3
20	MP1A	My	.042	3
21	MP1A	Mz	0	3
22	MP2A	Y	-70.3	3
23	MP2A	My	.035	3
24	MP2A	Mz	0	3
25	OVP	Y	-32	1
26	OVP	My	0	1
27	OVP	Mz	0	1
28	MP1A	Y	-4.95	.5
29	MP1A	My	-.004	.5
30	MP1A	Mz	0	.5
31	MP1A	Y	-4.95	4
32	MP1A	My	-.004	4
33	MP1A	Mz	0	4

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	Y	-91.107	1.08
2	MP2A	My	-.068	1.08
3	MP2A	Mz	.046	1.08
4	MP2A	Y	-91.107	4.58

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
5	MP2A	My	-.068	4.58
6	MP2A	Mz	.046	4.58
7	MP2A	Y	-91.107	1.08
8	MP2A	My	-.068	1.08
9	MP2A	Mz	-.046	1.08
10	MP2A	Y	-91.107	4.58
11	MP2A	My	-.068	4.58
12	MP2A	Mz	-.046	4.58
13	MP3A	Y	-53.75	1.83
14	MP3A	My	-.04	1.83
15	MP3A	Mz	0	1.83
16	MP3A	Y	-53.75	3.83
17	MP3A	My	-.04	3.83
18	MP3A	Mz	0	3.83
19	MP1A	Y	-68.247	3
20	MP1A	My	.034	3
21	MP1A	Mz	0	3
22	MP2A	Y	-61.588	3
23	MP2A	My	.031	3
24	MP2A	Mz	0	3
25	OVP	Y	-131.64	1
26	OVP	My	0	1
27	OVP	Mz	0	1
28	MP1A	Y	-53.489	.5
29	MP1A	My	-.04	.5
30	MP1A	Mz	0	.5
31	MP1A	Y	-53.489	4
32	MP1A	My	-.04	4
33	MP1A	Mz	0	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	0	1.08
2	MP2A	Z	-117.829	1.08
3	MP2A	Mx	-.059	1.08
4	MP2A	X	0	4.58
5	MP2A	Z	-117.829	4.58
6	MP2A	Mx	-.059	4.58
7	MP2A	X	0	1.08
8	MP2A	Z	-117.829	1.08
9	MP2A	Mx	.059	1.08
10	MP2A	X	0	4.58
11	MP2A	Z	-117.829	4.58
12	MP2A	Mx	.059	4.58
13	MP3A	X	0	1.83
14	MP3A	Z	-68.539	1.83
15	MP3A	Mx	0	1.83
16	MP3A	X	0	3.83
17	MP3A	Z	-68.539	3.83
18	MP3A	Mx	0	3.83
19	MP1A	X	0	3
20	MP1A	Z	-54.54	3
21	MP1A	Mx	0	3
22	MP2A	X	0	3
23	MP2A	Z	-54.54	3
24	MP2A	Mx	0	3

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
25	OVP	X	0	1
26	OVP	Z	-97.358	1
27	OVP	Mx	0	1
28	MP1A	X	0	.5
29	MP1A	Z	-68.831	.5
30	MP1A	Mx	0	.5
31	MP1A	X	0	4
32	MP1A	Z	-68.831	4
33	MP1A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	53.923	1.08
2	MP2A	Z	-93.397	1.08
3	MP2A	Mx	-.087	1.08
4	MP2A	X	53.923	4.58
5	MP2A	Z	-93.397	4.58
6	MP2A	Mx	-.087	4.58
7	MP2A	X	53.923	1.08
8	MP2A	Z	-93.397	1.08
9	MP2A	Mx	.006	1.08
10	MP2A	X	53.923	4.58
11	MP2A	Z	-93.397	4.58
12	MP2A	Mx	.006	4.58
13	MP3A	X	29.056	1.83
14	MP3A	Z	-50.327	1.83
15	MP3A	Mx	-.022	1.83
16	MP3A	X	29.056	3.83
17	MP3A	Z	-50.327	3.83
18	MP3A	Mx	-.022	3.83
19	MP1A	X	25.009	3
20	MP1A	Z	-43.318	3
21	MP1A	Mx	.013	3
22	MP2A	X	24.144	3
23	MP2A	Z	-41.818	3
24	MP2A	Mx	.012	3
25	OVP	X	45.17	1
26	OVP	Z	-78.237	1
27	OVP	Mx	0	1
28	MP1A	X	30.26	.5
29	MP1A	Z	-52.411	.5
30	MP1A	Mx	-.023	.5
31	MP1A	X	30.26	4
32	MP1A	Z	-52.411	4
33	MP1A	Mx	-.023	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	76.106	1.08
2	MP2A	Z	-43.94	1.08
3	MP2A	Mx	-.079	1.08
4	MP2A	X	76.106	4.58
5	MP2A	Z	-43.94	4.58
6	MP2A	Mx	-.079	4.58
7	MP2A	X	76.106	1.08
8	MP2A	Z	-43.94	1.08

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
9	MP2A	Mx	-.035	1.08
10	MP2A	X	76.106	4.58
11	MP2A	Z	-43.94	4.58
12	MP2A	Mx	-.035	4.58
13	MP3A	X	32.268	1.83
14	MP3A	Z	-18.63	1.83
15	MP3A	Mx	-.024	1.83
16	MP3A	X	32.268	3.83
17	MP3A	Z	-18.63	3.83
18	MP3A	Mx	-.024	3.83
19	MP1A	X	35.488	3
20	MP1A	Z	-20.489	3
21	MP1A	Mx	.018	3
22	MP2A	X	30.989	3
23	MP2A	Z	-17.891	3
24	MP2A	Mx	.015	3
25	OVP	X	84.315	1
26	OVP	Z	-48.679	1
27	OVP	Mx	0	1
28	MP1A	X	38.016	.5
29	MP1A	Z	-21.948	.5
30	MP1A	Mx	-.029	.5
31	MP1A	X	38.016	4
32	MP1A	Z	-21.948	4
33	MP1A	Mx	-.029	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	77.896	1.08
2	MP2A	Z	0	1.08
3	MP2A	Mx	-.058	1.08
4	MP2A	X	77.896	4.58
5	MP2A	Z	0	4.58
6	MP2A	Mx	-.058	4.58
7	MP2A	X	77.896	1.08
8	MP2A	Z	0	1.08
9	MP2A	Mx	-.058	1.08
10	MP2A	X	77.896	4.58
11	MP2A	Z	0	4.58
12	MP2A	Mx	-.058	4.58
13	MP3A	X	26.833	1.83
14	MP3A	Z	0	1.83
15	MP3A	Mx	-.02	1.83
16	MP3A	X	26.833	3.83
17	MP3A	Z	0	3.83
18	MP3A	Mx	-.02	3.83
19	MP1A	X	36.457	3
20	MP1A	Z	0	3
21	MP1A	Mx	.018	3
22	MP2A	X	29.53	3
23	MP2A	Z	0	3
24	MP2A	Mx	.015	3
25	OVP	X	111.394	1
26	OVP	Z	0	1
27	OVP	Mx	0	1
28	MP1A	X	35.585	.5

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
29	MP1A	Z	0	.5
30	MP1A	Mx	-.027	.5
31	MP1A	X	35.585	4
32	MP1A	Z	0	4
33	MP1A	Mx	-.027	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	76.106	1.08
2	MP2A	Z	43.94	1.08
3	MP2A	Mx	-.035	1.08
4	MP2A	X	76.106	4.58
5	MP2A	Z	43.94	4.58
6	MP2A	Mx	-.035	4.58
7	MP2A	X	76.106	1.08
8	MP2A	Z	43.94	1.08
9	MP2A	Mx	-.079	1.08
10	MP2A	X	76.106	4.58
11	MP2A	Z	43.94	4.58
12	MP2A	Mx	-.079	4.58
13	MP3A	X	32.268	1.83
14	MP3A	Z	18.63	1.83
15	MP3A	Mx	-.024	1.83
16	MP3A	X	32.268	3.83
17	MP3A	Z	18.63	3.83
18	MP3A	Mx	-.024	3.83
19	MP1A	X	35.488	3
20	MP1A	Z	20.489	3
21	MP1A	Mx	.018	3
22	MP2A	X	30.989	3
23	MP2A	Z	17.891	3
24	MP2A	Mx	.015	3
25	OVP	X	102.548	1
26	OVP	Z	59.206	1
27	OVP	Mx	0	1
28	MP1A	X	38.016	.5
29	MP1A	Z	21.948	.5
30	MP1A	Mx	-.029	.5
31	MP1A	X	38.016	4
32	MP1A	Z	21.948	4
33	MP1A	Mx	-.029	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	53.923	1.08
2	MP2A	Z	93.397	1.08
3	MP2A	Mx	.006	1.08
4	MP2A	X	53.923	4.58
5	MP2A	Z	93.397	4.58
6	MP2A	Mx	.006	4.58
7	MP2A	X	53.923	1.08
8	MP2A	Z	93.397	1.08
9	MP2A	Mx	-.087	1.08
10	MP2A	X	53.923	4.58
11	MP2A	Z	93.397	4.58
12	MP2A	Mx	-.087	4.58

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
13	MP3A	X	29.056	1.83
14	MP3A	Z	50.327	1.83
15	MP3A	Mx	-.022	1.83
16	MP3A	X	29.056	3.83
17	MP3A	Z	50.327	3.83
18	MP3A	Mx	-.022	3.83
19	MP1A	X	25.009	3
20	MP1A	Z	43.318	3
21	MP1A	Mx	.013	3
22	MP2A	X	24.144	3
23	MP2A	Z	41.818	3
24	MP2A	Mx	.012	3
25	OVP	X	55.697	1
26	OVP	Z	96.47	1
27	OVP	Mx	0	1
28	MP1A	X	30.26	.5
29	MP1A	Z	52.411	.5
30	MP1A	Mx	-.023	.5
31	MP1A	X	30.26	4
32	MP1A	Z	52.411	4
33	MP1A	Mx	-.023	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	0	1.08
2	MP2A	Z	117.829	1.08
3	MP2A	Mx	.059	1.08
4	MP2A	X	0	4.58
5	MP2A	Z	117.829	4.58
6	MP2A	Mx	.059	4.58
7	MP2A	X	0	1.08
8	MP2A	Z	117.829	1.08
9	MP2A	Mx	-.059	1.08
10	MP2A	X	0	4.58
11	MP2A	Z	117.829	4.58
12	MP2A	Mx	-.059	4.58
13	MP3A	X	0	1.83
14	MP3A	Z	68.539	1.83
15	MP3A	Mx	0	1.83
16	MP3A	X	0	3.83
17	MP3A	Z	68.539	3.83
18	MP3A	Mx	0	3.83
19	MP1A	X	0	3
20	MP1A	Z	54.54	3
21	MP1A	Mx	0	3
22	MP2A	X	0	3
23	MP2A	Z	54.54	3
24	MP2A	Mx	0	3
25	OVP	X	0	1
26	OVP	Z	97.358	1
27	OVP	Mx	0	1
28	MP1A	X	0	.5
29	MP1A	Z	68.831	.5
30	MP1A	Mx	0	.5
31	MP1A	X	0	4
32	MP1A	Z	68.831	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
33	MP1A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	-53.923	1.08
2	MP2A	Z	93.397	1.08
3	MP2A	Mx	.087	1.08
4	MP2A	X	-53.923	4.58
5	MP2A	Z	93.397	4.58
6	MP2A	Mx	.087	4.58
7	MP2A	X	-53.923	1.08
8	MP2A	Z	93.397	1.08
9	MP2A	Mx	-.006	1.08
10	MP2A	X	-53.923	4.58
11	MP2A	Z	93.397	4.58
12	MP2A	Mx	-.006	4.58
13	MP3A	X	-29.056	1.83
14	MP3A	Z	50.327	1.83
15	MP3A	Mx	.022	1.83
16	MP3A	X	-29.056	3.83
17	MP3A	Z	50.327	3.83
18	MP3A	Mx	.022	3.83
19	MP1A	X	-25.009	3
20	MP1A	Z	43.318	3
21	MP1A	Mx	-.013	3
22	MP2A	X	-24.144	3
23	MP2A	Z	41.818	3
24	MP2A	Mx	-.012	3
25	OVP	X	-45.17	1
26	OVP	Z	78.237	1
27	OVP	Mx	0	1
28	MP1A	X	-30.26	.5
29	MP1A	Z	52.411	.5
30	MP1A	Mx	.023	.5
31	MP1A	X	-30.26	4
32	MP1A	Z	52.411	4
33	MP1A	Mx	.023	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	-76.106	1.08
2	MP2A	Z	43.94	1.08
3	MP2A	Mx	.079	1.08
4	MP2A	X	-76.106	4.58
5	MP2A	Z	43.94	4.58
6	MP2A	Mx	.079	4.58
7	MP2A	X	-76.106	1.08
8	MP2A	Z	43.94	1.08
9	MP2A	Mx	.035	1.08
10	MP2A	X	-76.106	4.58
11	MP2A	Z	43.94	4.58
12	MP2A	Mx	.035	4.58
13	MP3A	X	-32.268	1.83
14	MP3A	Z	18.63	1.83
15	MP3A	Mx	.024	1.83
16	MP3A	X	-32.268	3.83

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
17	MP3A	Z	18.63	3.83
18	MP3A	Mx	.024	3.83
19	MP1A	X	-35.488	3
20	MP1A	Z	20.489	3
21	MP1A	Mx	-.018	3
22	MP2A	X	-30.989	3
23	MP2A	Z	17.891	3
24	MP2A	Mx	-.015	3
25	OVP	X	-84.315	1
26	OVP	Z	48.679	1
27	OVP	Mx	0	1
28	MP1A	X	-38.016	.5
29	MP1A	Z	21.948	.5
30	MP1A	Mx	.029	.5
31	MP1A	X	-38.016	4
32	MP1A	Z	21.948	4
33	MP1A	Mx	.029	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	-77.896	1.08
2	MP2A	Z	0	1.08
3	MP2A	Mx	.058	1.08
4	MP2A	X	-77.896	4.58
5	MP2A	Z	0	4.58
6	MP2A	Mx	.058	4.58
7	MP2A	X	-77.896	1.08
8	MP2A	Z	0	1.08
9	MP2A	Mx	.058	1.08
10	MP2A	X	-77.896	4.58
11	MP2A	Z	0	4.58
12	MP2A	Mx	.058	4.58
13	MP3A	X	-26.833	1.83
14	MP3A	Z	0	1.83
15	MP3A	Mx	.02	1.83
16	MP3A	X	-26.833	3.83
17	MP3A	Z	0	3.83
18	MP3A	Mx	.02	3.83
19	MP1A	X	-36.457	3
20	MP1A	Z	0	3
21	MP1A	Mx	-.018	3
22	MP2A	X	-29.53	3
23	MP2A	Z	0	3
24	MP2A	Mx	-.015	3
25	OVP	X	-111.394	1
26	OVP	Z	0	1
27	OVP	Mx	0	1
28	MP1A	X	-35.585	.5
29	MP1A	Z	0	.5
30	MP1A	Mx	.027	.5
31	MP1A	X	-35.585	4
32	MP1A	Z	0	4
33	MP1A	Mx	.027	4

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

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

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	-76.106	1.08
2	MP2A	Z	-43.94	1.08
3	MP2A	Mx	.035	1.08
4	MP2A	X	-76.106	4.58
5	MP2A	Z	-43.94	4.58
6	MP2A	Mx	.035	4.58
7	MP2A	X	-76.106	1.08
8	MP2A	Z	-43.94	1.08
9	MP2A	Mx	.079	1.08
10	MP2A	X	-76.106	4.58
11	MP2A	Z	-43.94	4.58
12	MP2A	Mx	.079	4.58
13	MP3A	X	-32.268	1.83
14	MP3A	Z	-18.63	1.83
15	MP3A	Mx	.024	1.83
16	MP3A	X	-32.268	3.83
17	MP3A	Z	-18.63	3.83
18	MP3A	Mx	.024	3.83
19	MP1A	X	-35.488	3
20	MP1A	Z	-20.489	3
21	MP1A	Mx	-.018	3
22	MP2A	X	-30.989	3
23	MP2A	Z	-17.891	3
24	MP2A	Mx	-.015	3
25	OVP	X	-102.548	1
26	OVP	Z	-59.206	1
27	OVP	Mx	0	1
28	MP1A	X	-38.016	.5
29	MP1A	Z	-21.948	.5
30	MP1A	Mx	.029	.5
31	MP1A	X	-38.016	4
32	MP1A	Z	-21.948	4
33	MP1A	Mx	.029	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	-53.923	1.08
2	MP2A	Z	-93.397	1.08
3	MP2A	Mx	-.006	1.08
4	MP2A	X	-53.923	4.58
5	MP2A	Z	-93.397	4.58
6	MP2A	Mx	-.006	4.58
7	MP2A	X	-53.923	1.08
8	MP2A	Z	-93.397	1.08
9	MP2A	Mx	.087	1.08
10	MP2A	X	-53.923	4.58
11	MP2A	Z	-93.397	4.58
12	MP2A	Mx	.087	4.58
13	MP3A	X	-29.056	1.83
14	MP3A	Z	-50.327	1.83
15	MP3A	Mx	.022	1.83
16	MP3A	X	-29.056	3.83
17	MP3A	Z	-50.327	3.83
18	MP3A	Mx	.022	3.83
19	MP1A	X	-25.009	3
20	MP1A	Z	-43.318	3

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
21	MP1A	Mx	-.013	3
22	MP2A	X	-24.144	3
23	MP2A	Z	-41.818	3
24	MP2A	Mx	-.012	3
25	OVP	X	-55.697	1
26	OVP	Z	-96.47	1
27	OVP	Mx	0	1
28	MP1A	X	-30.26	.5
29	MP1A	Z	-52.411	.5
30	MP1A	Mx	.023	.5
31	MP1A	X	-30.26	4
32	MP1A	Z	-52.411	4
33	MP1A	Mx	.023	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	0	1.08
2	MP2A	Z	-24.359	1.08
3	MP2A	Mx	-.012	1.08
4	MP2A	X	0	4.58
5	MP2A	Z	-24.359	4.58
6	MP2A	Mx	-.012	4.58
7	MP2A	X	0	1.08
8	MP2A	Z	-24.359	1.08
9	MP2A	Mx	.012	1.08
10	MP2A	X	0	4.58
11	MP2A	Z	-24.359	4.58
12	MP2A	Mx	.012	4.58
13	MP3A	X	0	1.83
14	MP3A	Z	-14.631	1.83
15	MP3A	Mx	0	1.83
16	MP3A	X	0	3.83
17	MP3A	Z	-14.631	3.83
18	MP3A	Mx	0	3.83
19	MP1A	X	0	3
20	MP1A	Z	-12.631	3
21	MP1A	Mx	0	3
22	MP2A	X	0	3
23	MP2A	Z	-12.631	3
24	MP2A	Mx	0	3
25	OVP	X	0	1
26	OVP	Z	-21.392	1
27	OVP	Mx	0	1
28	MP1A	X	0	.5
29	MP1A	Z	-14.706	.5
30	MP1A	Mx	0	.5
31	MP1A	X	0	4
32	MP1A	Z	-14.706	4
33	MP1A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	11.27	1.08
2	MP2A	Z	-19.521	1.08
3	MP2A	Mx	-.018	1.08
4	MP2A	X	11.27	4.58

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
5	MP2A	Z	-19.521	4.58
6	MP2A	Mx	-.018	4.58
7	MP2A	X	11.27	1.08
8	MP2A	Z	-19.521	1.08
9	MP2A	Mx	.001	1.08
10	MP2A	X	11.27	4.58
11	MP2A	Z	-19.521	4.58
12	MP2A	Mx	.001	4.58
13	MP3A	X	6.295	1.83
14	MP3A	Z	-10.903	1.83
15	MP3A	Mx	-.005	1.83
16	MP3A	X	6.295	3.83
17	MP3A	Z	-10.903	3.83
18	MP3A	Mx	-.005	3.83
19	MP1A	X	5.854	3
20	MP1A	Z	-10.139	3
21	MP1A	Mx	.003	3
22	MP2A	X	5.678	3
23	MP2A	Z	-9.835	3
24	MP2A	Mx	.003	3
25	OVP	X	10.027	1
26	OVP	Z	-17.368	1
27	OVP	Mx	0	1
28	MP1A	X	6.575	.5
29	MP1A	Z	-11.388	.5
30	MP1A	Mx	-.005	.5
31	MP1A	X	6.575	4
32	MP1A	Z	-11.388	4
33	MP1A	Mx	-.005	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	16.371	1.08
2	MP2A	Z	-9.452	1.08
3	MP2A	Mx	-.017	1.08
4	MP2A	X	16.371	4.58
5	MP2A	Z	-9.452	4.58
6	MP2A	Mx	-.017	4.58
7	MP2A	X	16.371	1.08
8	MP2A	Z	-9.452	1.08
9	MP2A	Mx	-.008	1.08
10	MP2A	X	16.371	4.58
11	MP2A	Z	-9.452	4.58
12	MP2A	Mx	-.008	4.58
13	MP3A	X	7.367	1.83
14	MP3A	Z	-4.253	1.83
15	MP3A	Mx	-.006	1.83
16	MP3A	X	7.367	3.83
17	MP3A	Z	-4.253	3.83
18	MP3A	Mx	-.006	3.83
19	MP1A	X	8.539	3
20	MP1A	Z	-4.93	3
21	MP1A	Mx	.004	3
22	MP2A	X	7.627	3
23	MP2A	Z	-4.404	3
24	MP2A	Mx	.004	3

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
25	OVP	X	18.526	1
26	OVP	Z	-10.696	1
27	OVP	Mx	0	1
28	MP1A	X	8.692	.5
29	MP1A	Z	-5.019	.5
30	MP1A	Mx	-.007	.5
31	MP1A	X	8.692	4
32	MP1A	Z	-5.019	4
33	MP1A	Mx	-.007	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	17.086	1.08
2	MP2A	Z	0	1.08
3	MP2A	Mx	-.013	1.08
4	MP2A	X	17.086	4.58
5	MP2A	Z	0	4.58
6	MP2A	Mx	-.013	4.58
7	MP2A	X	17.086	1.08
8	MP2A	Z	0	1.08
9	MP2A	Mx	-.013	1.08
10	MP2A	X	17.086	4.58
11	MP2A	Z	0	4.58
12	MP2A	Mx	-.013	4.58
13	MP3A	X	6.465	1.83
14	MP3A	Z	0	1.83
15	MP3A	Mx	-.005	1.83
16	MP3A	X	6.465	3.83
17	MP3A	Z	0	3.83
18	MP3A	Mx	-.005	3.83
19	MP1A	X	8.936	3
20	MP1A	Z	0	3
21	MP1A	Mx	.004	3
22	MP2A	X	7.532	3
23	MP2A	Z	0	3
24	MP2A	Mx	.004	3
25	OVP	X	24.067	1
26	OVP	Z	0	1
27	OVP	Mx	0	1
28	MP1A	X	8.481	.5
29	MP1A	Z	0	.5
30	MP1A	Mx	-.006	.5
31	MP1A	X	8.481	4
32	MP1A	Z	0	4
33	MP1A	Mx	-.006	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	16.371	1.08
2	MP2A	Z	9.452	1.08
3	MP2A	Mx	-.008	1.08
4	MP2A	X	16.371	4.58
5	MP2A	Z	9.452	4.58
6	MP2A	Mx	-.008	4.58
7	MP2A	X	16.371	1.08
8	MP2A	Z	9.452	1.08

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
9	MP2A	Mx	-.017	1.08
10	MP2A	X	16.371	4.58
11	MP2A	Z	9.452	4.58
12	MP2A	Mx	-.017	4.58
13	MP3A	X	7.367	1.83
14	MP3A	Z	4.253	1.83
15	MP3A	Mx	-.006	1.83
16	MP3A	X	7.367	3.83
17	MP3A	Z	4.253	3.83
18	MP3A	Mx	-.006	3.83
19	MP1A	X	8.539	3
20	MP1A	Z	4.93	3
21	MP1A	Mx	.004	3
22	MP2A	X	7.627	3
23	MP2A	Z	4.404	3
24	MP2A	Mx	.004	3
25	OVP	X	22.001	1
26	OVP	Z	12.702	1
27	OVP	Mx	0	1
28	MP1A	X	8.692	.5
29	MP1A	Z	5.019	.5
30	MP1A	Mx	-.007	.5
31	MP1A	X	8.692	4
32	MP1A	Z	5.019	4
33	MP1A	Mx	-.007	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	11.27	1.08
2	MP2A	Z	19.521	1.08
3	MP2A	Mx	.001	1.08
4	MP2A	X	11.27	4.58
5	MP2A	Z	19.521	4.58
6	MP2A	Mx	.001	4.58
7	MP2A	X	11.27	1.08
8	MP2A	Z	19.521	1.08
9	MP2A	Mx	-.018	1.08
10	MP2A	X	11.27	4.58
11	MP2A	Z	19.521	4.58
12	MP2A	Mx	-.018	4.58
13	MP3A	X	6.295	1.83
14	MP3A	Z	10.903	1.83
15	MP3A	Mx	-.005	1.83
16	MP3A	X	6.295	3.83
17	MP3A	Z	10.903	3.83
18	MP3A	Mx	-.005	3.83
19	MP1A	X	5.854	3
20	MP1A	Z	10.139	3
21	MP1A	Mx	.003	3
22	MP2A	X	5.678	3
23	MP2A	Z	9.835	3
24	MP2A	Mx	.003	3
25	OVP	X	12.033	1
26	OVP	Z	20.843	1
27	OVP	Mx	0	1
28	MP1A	X	6.575	.5

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
29	MP1A	Z	11.388	.5
30	MP1A	Mx	-.005	.5
31	MP1A	X	6.575	4
32	MP1A	Z	11.388	4
33	MP1A	Mx	-.005	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	0	1.08
2	MP2A	Z	24.359	1.08
3	MP2A	Mx	.012	1.08
4	MP2A	X	0	4.58
5	MP2A	Z	24.359	4.58
6	MP2A	Mx	.012	4.58
7	MP2A	X	0	1.08
8	MP2A	Z	24.359	1.08
9	MP2A	Mx	-.012	1.08
10	MP2A	X	0	4.58
11	MP2A	Z	24.359	4.58
12	MP2A	Mx	-.012	4.58
13	MP3A	X	0	1.83
14	MP3A	Z	14.631	1.83
15	MP3A	Mx	0	1.83
16	MP3A	X	0	3.83
17	MP3A	Z	14.631	3.83
18	MP3A	Mx	0	3.83
19	MP1A	X	0	3
20	MP1A	Z	12.631	3
21	MP1A	Mx	0	3
22	MP2A	X	0	3
23	MP2A	Z	12.631	3
24	MP2A	Mx	0	3
25	OVP	X	0	1
26	OVP	Z	21.392	1
27	OVP	Mx	0	1
28	MP1A	X	0	.5
29	MP1A	Z	14.706	.5
30	MP1A	Mx	0	.5
31	MP1A	X	0	4
32	MP1A	Z	14.706	4
33	MP1A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	-11.27	1.08
2	MP2A	Z	19.521	1.08
3	MP2A	Mx	.018	1.08
4	MP2A	X	-11.27	4.58
5	MP2A	Z	19.521	4.58
6	MP2A	Mx	.018	4.58
7	MP2A	X	-11.27	1.08
8	MP2A	Z	19.521	1.08
9	MP2A	Mx	-.001	1.08
10	MP2A	X	-11.27	4.58
11	MP2A	Z	19.521	4.58
12	MP2A	Mx	-.001	4.58

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
13	MP3A	X	-6.295	1.83
14	MP3A	Z	10.903	1.83
15	MP3A	Mx	.005	1.83
16	MP3A	X	-6.295	3.83
17	MP3A	Z	10.903	3.83
18	MP3A	Mx	.005	3.83
19	MP1A	X	-5.854	3
20	MP1A	Z	10.139	3
21	MP1A	Mx	-.003	3
22	MP2A	X	-5.678	3
23	MP2A	Z	9.835	3
24	MP2A	Mx	-.003	3
25	OVP	X	-10.027	1
26	OVP	Z	17.368	1
27	OVP	Mx	0	1
28	MP1A	X	-6.575	.5
29	MP1A	Z	11.388	.5
30	MP1A	Mx	.005	.5
31	MP1A	X	-6.575	4
32	MP1A	Z	11.388	4
33	MP1A	Mx	.005	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	-16.371	1.08
2	MP2A	Z	9.452	1.08
3	MP2A	Mx	.017	1.08
4	MP2A	X	-16.371	4.58
5	MP2A	Z	9.452	4.58
6	MP2A	Mx	.017	4.58
7	MP2A	X	-16.371	1.08
8	MP2A	Z	9.452	1.08
9	MP2A	Mx	.008	1.08
10	MP2A	X	-16.371	4.58
11	MP2A	Z	9.452	4.58
12	MP2A	Mx	.008	4.58
13	MP3A	X	-7.367	1.83
14	MP3A	Z	4.253	1.83
15	MP3A	Mx	.006	1.83
16	MP3A	X	-7.367	3.83
17	MP3A	Z	4.253	3.83
18	MP3A	Mx	.006	3.83
19	MP1A	X	-8.539	3
20	MP1A	Z	4.93	3
21	MP1A	Mx	-.004	3
22	MP2A	X	-7.627	3
23	MP2A	Z	4.404	3
24	MP2A	Mx	-.004	3
25	OVP	X	-18.526	1
26	OVP	Z	10.696	1
27	OVP	Mx	0	1
28	MP1A	X	-8.692	.5
29	MP1A	Z	5.019	.5
30	MP1A	Mx	.007	.5
31	MP1A	X	-8.692	4
32	MP1A	Z	5.019	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
33	MP1A	Mx	.007	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	-17.086	1.08
2	MP2A	Z	0	1.08
3	MP2A	Mx	.013	1.08
4	MP2A	X	-17.086	4.58
5	MP2A	Z	0	4.58
6	MP2A	Mx	.013	4.58
7	MP2A	X	-17.086	1.08
8	MP2A	Z	0	1.08
9	MP2A	Mx	.013	1.08
10	MP2A	X	-17.086	4.58
11	MP2A	Z	0	4.58
12	MP2A	Mx	.013	4.58
13	MP3A	X	-6.465	1.83
14	MP3A	Z	0	1.83
15	MP3A	Mx	.005	1.83
16	MP3A	X	-6.465	3.83
17	MP3A	Z	0	3.83
18	MP3A	Mx	.005	3.83
19	MP1A	X	-8.936	3
20	MP1A	Z	0	3
21	MP1A	Mx	-.004	3
22	MP2A	X	-7.532	3
23	MP2A	Z	0	3
24	MP2A	Mx	-.004	3
25	OVP	X	-24.067	1
26	OVP	Z	0	1
27	OVP	Mx	0	1
28	MP1A	X	-8.481	.5
29	MP1A	Z	0	.5
30	MP1A	Mx	.006	.5
31	MP1A	X	-8.481	4
32	MP1A	Z	0	4
33	MP1A	Mx	.006	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	-16.371	1.08
2	MP2A	Z	-9.452	1.08
3	MP2A	Mx	.008	1.08
4	MP2A	X	-16.371	4.58
5	MP2A	Z	-9.452	4.58
6	MP2A	Mx	.008	4.58
7	MP2A	X	-16.371	1.08
8	MP2A	Z	-9.452	1.08
9	MP2A	Mx	.017	1.08
10	MP2A	X	-16.371	4.58
11	MP2A	Z	-9.452	4.58
12	MP2A	Mx	.017	4.58
13	MP3A	X	-7.367	1.83
14	MP3A	Z	-4.253	1.83
15	MP3A	Mx	.006	1.83
16	MP3A	X	-7.367	3.83

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
17	MP3A	Z	-4.253	3.83
18	MP3A	Mx	.006	3.83
19	MP1A	X	-8.539	3
20	MP1A	Z	-4.93	3
21	MP1A	Mx	-.004	3
22	MP2A	X	-7.627	3
23	MP2A	Z	-4.404	3
24	MP2A	Mx	-.004	3
25	OVP	X	-22.001	1
26	OVP	Z	-12.702	1
27	OVP	Mx	0	1
28	MP1A	X	-8.692	.5
29	MP1A	Z	-5.019	.5
30	MP1A	Mx	.007	.5
31	MP1A	X	-8.692	4
32	MP1A	Z	-5.019	4
33	MP1A	Mx	.007	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	-11.27	1.08
2	MP2A	Z	-19.521	1.08
3	MP2A	Mx	-.001	1.08
4	MP2A	X	-11.27	4.58
5	MP2A	Z	-19.521	4.58
6	MP2A	Mx	-.001	4.58
7	MP2A	X	-11.27	1.08
8	MP2A	Z	-19.521	1.08
9	MP2A	Mx	.018	1.08
10	MP2A	X	-11.27	4.58
11	MP2A	Z	-19.521	4.58
12	MP2A	Mx	.018	4.58
13	MP3A	X	-6.295	1.83
14	MP3A	Z	-10.903	1.83
15	MP3A	Mx	.005	1.83
16	MP3A	X	-6.295	3.83
17	MP3A	Z	-10.903	3.83
18	MP3A	Mx	.005	3.83
19	MP1A	X	-5.854	3
20	MP1A	Z	-10.139	3
21	MP1A	Mx	-.003	3
22	MP2A	X	-5.678	3
23	MP2A	Z	-9.835	3
24	MP2A	Mx	-.003	3
25	OVP	X	-12.033	1
26	OVP	Z	-20.843	1
27	OVP	Mx	0	1
28	MP1A	X	-6.575	.5
29	MP1A	Z	-11.388	.5
30	MP1A	Mx	.005	.5
31	MP1A	X	-6.575	4
32	MP1A	Z	-11.388	4
33	MP1A	Mx	.005	4

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

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

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	0	1.08
2	MP2A	Z	-7.616	1.08
3	MP2A	Mx	-.004	1.08
4	MP2A	X	0	4.58
5	MP2A	Z	-7.616	4.58
6	MP2A	Mx	-.004	4.58
7	MP2A	X	0	1.08
8	MP2A	Z	-7.616	1.08
9	MP2A	Mx	.004	1.08
10	MP2A	X	0	4.58
11	MP2A	Z	-7.616	4.58
12	MP2A	Mx	.004	4.58
13	MP3A	X	0	1.83
14	MP3A	Z	-4.43	1.83
15	MP3A	Mx	0	1.83
16	MP3A	X	0	3.83
17	MP3A	Z	-4.43	3.83
18	MP3A	Mx	0	3.83
19	MP1A	X	0	3
20	MP1A	Z	-3.525	3
21	MP1A	Mx	0	3
22	MP2A	X	0	3
23	MP2A	Z	-3.525	3
24	MP2A	Mx	0	3
25	OVP	X	0	1
26	OVP	Z	-6.293	1
27	OVP	Mx	0	1
28	MP1A	X	0	.5
29	MP1A	Z	-4.449	.5
30	MP1A	Mx	0	.5
31	MP1A	X	0	4
32	MP1A	Z	-4.449	4
33	MP1A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	3.485	1.08
2	MP2A	Z	-6.037	1.08
3	MP2A	Mx	-.006	1.08
4	MP2A	X	3.485	4.58
5	MP2A	Z	-6.037	4.58
6	MP2A	Mx	-.006	4.58
7	MP2A	X	3.485	1.08
8	MP2A	Z	-6.037	1.08
9	MP2A	Mx	.000405	1.08
10	MP2A	X	3.485	4.58
11	MP2A	Z	-6.037	4.58
12	MP2A	Mx	.000405	4.58
13	MP3A	X	1.878	1.83
14	MP3A	Z	-3.253	1.83
15	MP3A	Mx	-.001	1.83
16	MP3A	X	1.878	3.83
17	MP3A	Z	-3.253	3.83
18	MP3A	Mx	-.001	3.83
19	MP1A	X	1.617	3
20	MP1A	Z	-2.8	3

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
21	MP1A	Mx	.000808	3
22	MP2A	X	1.561	3
23	MP2A	Z	-2.703	3
24	MP2A	Mx	.00078	3
25	OVP	X	2.92	1
26	OVP	Z	-5.057	1
27	OVP	Mx	0	1
28	MP1A	X	1.956	.5
29	MP1A	Z	-3.388	.5
30	MP1A	Mx	-.001	.5
31	MP1A	X	1.956	4
32	MP1A	Z	-3.388	4
33	MP1A	Mx	-.001	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	4.919	1.08
2	MP2A	Z	-2.84	1.08
3	MP2A	Mx	-.005	1.08
4	MP2A	X	4.919	4.58
5	MP2A	Z	-2.84	4.58
6	MP2A	Mx	-.005	4.58
7	MP2A	X	4.919	1.08
8	MP2A	Z	-2.84	1.08
9	MP2A	Mx	-.002	1.08
10	MP2A	X	4.919	4.58
11	MP2A	Z	-2.84	4.58
12	MP2A	Mx	-.002	4.58
13	MP3A	X	2.086	1.83
14	MP3A	Z	-1.204	1.83
15	MP3A	Mx	-.002	1.83
16	MP3A	X	2.086	3.83
17	MP3A	Z	-1.204	3.83
18	MP3A	Mx	-.002	3.83
19	MP1A	X	2.294	3
20	MP1A	Z	-1.324	3
21	MP1A	Mx	.001	3
22	MP2A	X	2.003	3
23	MP2A	Z	-1.156	3
24	MP2A	Mx	.001	3
25	OVP	X	5.45	1
26	OVP	Z	-3.146	1
27	OVP	Mx	0	1
28	MP1A	X	2.457	.5
29	MP1A	Z	-1.419	.5
30	MP1A	Mx	-.002	.5
31	MP1A	X	2.457	4
32	MP1A	Z	-1.419	4
33	MP1A	Mx	-.002	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	5.035	1.08
2	MP2A	Z	0	1.08
3	MP2A	Mx	-.004	1.08
4	MP2A	X	5.035	4.58

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
5	MP2A	Z	0	4.58
6	MP2A	Mx	-.004	4.58
7	MP2A	X	5.035	1.08
8	MP2A	Z	0	1.08
9	MP2A	Mx	-.004	1.08
10	MP2A	X	5.035	4.58
11	MP2A	Z	0	4.58
12	MP2A	Mx	-.004	4.58
13	MP3A	X	1.734	1.83
14	MP3A	Z	0	1.83
15	MP3A	Mx	-.001	1.83
16	MP3A	X	1.734	3.83
17	MP3A	Z	0	3.83
18	MP3A	Mx	-.001	3.83
19	MP1A	X	2.356	3
20	MP1A	Z	0	3
21	MP1A	Mx	.001	3
22	MP2A	X	1.909	3
23	MP2A	Z	0	3
24	MP2A	Mx	.000954	3
25	OVP	X	7.2	1
26	OVP	Z	0	1
27	OVP	Mx	0	1
28	MP1A	X	2.3	.5
29	MP1A	Z	0	.5
30	MP1A	Mx	-.002	.5
31	MP1A	X	2.3	4
32	MP1A	Z	0	4
33	MP1A	Mx	-.002	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	4.919	1.08
2	MP2A	Z	2.84	1.08
3	MP2A	Mx	-.002	1.08
4	MP2A	X	4.919	4.58
5	MP2A	Z	2.84	4.58
6	MP2A	Mx	-.002	4.58
7	MP2A	X	4.919	1.08
8	MP2A	Z	2.84	1.08
9	MP2A	Mx	-.005	1.08
10	MP2A	X	4.919	4.58
11	MP2A	Z	2.84	4.58
12	MP2A	Mx	-.005	4.58
13	MP3A	X	2.086	1.83
14	MP3A	Z	1.204	1.83
15	MP3A	Mx	-.002	1.83
16	MP3A	X	2.086	3.83
17	MP3A	Z	1.204	3.83
18	MP3A	Mx	-.002	3.83
19	MP1A	X	2.294	3
20	MP1A	Z	1.324	3
21	MP1A	Mx	.001	3
22	MP2A	X	2.003	3
23	MP2A	Z	1.156	3
24	MP2A	Mx	.001	3

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
25	OVP	X	6.628	1
26	OVP	Z	3.827	1
27	OVP	Mx	0	1
28	MP1A	X	2.457	.5
29	MP1A	Z	1.419	.5
30	MP1A	Mx	-.002	.5
31	MP1A	X	2.457	4
32	MP1A	Z	1.419	4
33	MP1A	Mx	-.002	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	3.485	1.08
2	MP2A	Z	6.037	1.08
3	MP2A	Mx	.000405	1.08
4	MP2A	X	3.485	4.58
5	MP2A	Z	6.037	4.58
6	MP2A	Mx	.000405	4.58
7	MP2A	X	3.485	1.08
8	MP2A	Z	6.037	1.08
9	MP2A	Mx	-.006	1.08
10	MP2A	X	3.485	4.58
11	MP2A	Z	6.037	4.58
12	MP2A	Mx	-.006	4.58
13	MP3A	X	1.878	1.83
14	MP3A	Z	3.253	1.83
15	MP3A	Mx	-.001	1.83
16	MP3A	X	1.878	3.83
17	MP3A	Z	3.253	3.83
18	MP3A	Mx	-.001	3.83
19	MP1A	X	1.617	3
20	MP1A	Z	2.8	3
21	MP1A	Mx	.000808	3
22	MP2A	X	1.561	3
23	MP2A	Z	2.703	3
24	MP2A	Mx	.00078	3
25	OVP	X	3.6	1
26	OVP	Z	6.235	1
27	OVP	Mx	0	1
28	MP1A	X	1.956	.5
29	MP1A	Z	3.388	.5
30	MP1A	Mx	-.001	.5
31	MP1A	X	1.956	4
32	MP1A	Z	3.388	4
33	MP1A	Mx	-.001	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	0	1.08
2	MP2A	Z	7.616	1.08
3	MP2A	Mx	.004	1.08
4	MP2A	X	0	4.58
5	MP2A	Z	7.616	4.58
6	MP2A	Mx	.004	4.58
7	MP2A	X	0	1.08
8	MP2A	Z	7.616	1.08

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
9	MP2A	Mx	-.004	1.08
10	MP2A	X	0	4.58
11	MP2A	Z	7.616	4.58
12	MP2A	Mx	-.004	4.58
13	MP3A	X	0	1.83
14	MP3A	Z	4.43	1.83
15	MP3A	Mx	0	1.83
16	MP3A	X	0	3.83
17	MP3A	Z	4.43	3.83
18	MP3A	Mx	0	3.83
19	MP1A	X	0	3
20	MP1A	Z	3.525	3
21	MP1A	Mx	0	3
22	MP2A	X	0	3
23	MP2A	Z	3.525	3
24	MP2A	Mx	0	3
25	OVP	X	0	1
26	OVP	Z	6.293	1
27	OVP	Mx	0	1
28	MP1A	X	0	.5
29	MP1A	Z	4.449	.5
30	MP1A	Mx	0	.5
31	MP1A	X	0	4
32	MP1A	Z	4.449	4
33	MP1A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	-3.485	1.08
2	MP2A	Z	6.037	1.08
3	MP2A	Mx	.006	1.08
4	MP2A	X	-3.485	4.58
5	MP2A	Z	6.037	4.58
6	MP2A	Mx	.006	4.58
7	MP2A	X	-3.485	1.08
8	MP2A	Z	6.037	1.08
9	MP2A	Mx	-.000405	1.08
10	MP2A	X	-3.485	4.58
11	MP2A	Z	6.037	4.58
12	MP2A	Mx	-.000405	4.58
13	MP3A	X	-1.878	1.83
14	MP3A	Z	3.253	1.83
15	MP3A	Mx	.001	1.83
16	MP3A	X	-1.878	3.83
17	MP3A	Z	3.253	3.83
18	MP3A	Mx	.001	3.83
19	MP1A	X	-1.617	3
20	MP1A	Z	2.8	3
21	MP1A	Mx	-.000808	3
22	MP2A	X	-1.561	3
23	MP2A	Z	2.703	3
24	MP2A	Mx	-.00078	3
25	OVP	X	-2.92	1
26	OVP	Z	5.057	1
27	OVP	Mx	0	1
28	MP1A	X	-1.956	.5

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
29	MP1A	Z	3.388	.5
30	MP1A	Mx	.001	.5
31	MP1A	X	-1.956	4
32	MP1A	Z	3.388	4
33	MP1A	Mx	.001	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	-4.919	1.08
2	MP2A	Z	2.84	1.08
3	MP2A	Mx	.005	1.08
4	MP2A	X	-4.919	4.58
5	MP2A	Z	2.84	4.58
6	MP2A	Mx	.005	4.58
7	MP2A	X	-4.919	1.08
8	MP2A	Z	2.84	1.08
9	MP2A	Mx	.002	1.08
10	MP2A	X	-4.919	4.58
11	MP2A	Z	2.84	4.58
12	MP2A	Mx	.002	4.58
13	MP3A	X	-2.086	1.83
14	MP3A	Z	1.204	1.83
15	MP3A	Mx	.002	1.83
16	MP3A	X	-2.086	3.83
17	MP3A	Z	1.204	3.83
18	MP3A	Mx	.002	3.83
19	MP1A	X	-2.294	3
20	MP1A	Z	1.324	3
21	MP1A	Mx	-.001	3
22	MP2A	X	-2.003	3
23	MP2A	Z	1.156	3
24	MP2A	Mx	-.001	3
25	OVP	X	-5.45	1
26	OVP	Z	3.146	1
27	OVP	Mx	0	1
28	MP1A	X	-2.457	.5
29	MP1A	Z	1.419	.5
30	MP1A	Mx	.002	.5
31	MP1A	X	-2.457	4
32	MP1A	Z	1.419	4
33	MP1A	Mx	.002	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	-5.035	1.08
2	MP2A	Z	0	1.08
3	MP2A	Mx	.004	1.08
4	MP2A	X	-5.035	4.58
5	MP2A	Z	0	4.58
6	MP2A	Mx	.004	4.58
7	MP2A	X	-5.035	1.08
8	MP2A	Z	0	1.08
9	MP2A	Mx	.004	1.08
10	MP2A	X	-5.035	4.58
11	MP2A	Z	0	4.58
12	MP2A	Mx	.004	4.58

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
13	MP3A	X	-1.734	1.83
14	MP3A	Z	0	1.83
15	MP3A	Mx	.001	1.83
16	MP3A	X	-1.734	3.83
17	MP3A	Z	0	3.83
18	MP3A	Mx	.001	3.83
19	MP1A	X	-2.356	3
20	MP1A	Z	0	3
21	MP1A	Mx	-.001	3
22	MP2A	X	-1.909	3
23	MP2A	Z	0	3
24	MP2A	Mx	-.000954	3
25	OVP	X	-7.2	1
26	OVP	Z	0	1
27	OVP	Mx	0	1
28	MP1A	X	-2.3	.5
29	MP1A	Z	0	.5
30	MP1A	Mx	.002	.5
31	MP1A	X	-2.3	4
32	MP1A	Z	0	4
33	MP1A	Mx	.002	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	-4.919	1.08
2	MP2A	Z	-2.84	1.08
3	MP2A	Mx	.002	1.08
4	MP2A	X	-4.919	4.58
5	MP2A	Z	-2.84	4.58
6	MP2A	Mx	.002	4.58
7	MP2A	X	-4.919	1.08
8	MP2A	Z	-2.84	1.08
9	MP2A	Mx	.005	1.08
10	MP2A	X	-4.919	4.58
11	MP2A	Z	-2.84	4.58
12	MP2A	Mx	.005	4.58
13	MP3A	X	-2.086	1.83
14	MP3A	Z	-1.204	1.83
15	MP3A	Mx	.002	1.83
16	MP3A	X	-2.086	3.83
17	MP3A	Z	-1.204	3.83
18	MP3A	Mx	.002	3.83
19	MP1A	X	-2.294	3
20	MP1A	Z	-1.324	3
21	MP1A	Mx	-.001	3
22	MP2A	X	-2.003	3
23	MP2A	Z	-1.156	3
24	MP2A	Mx	-.001	3
25	OVP	X	-6.628	1
26	OVP	Z	-3.827	1
27	OVP	Mx	0	1
28	MP1A	X	-2.457	.5
29	MP1A	Z	-1.419	.5
30	MP1A	Mx	.002	.5
31	MP1A	X	-2.457	4
32	MP1A	Z	-1.419	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
33	MP1A	Mx	.002	4

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	MP2A	X	-3.485	1.08
2	MP2A	Z	-6.037	1.08
3	MP2A	Mx	-.000405	1.08
4	MP2A	X	-3.485	4.58
5	MP2A	Z	-6.037	4.58
6	MP2A	Mx	-.000405	4.58
7	MP2A	X	-3.485	1.08
8	MP2A	Z	-6.037	1.08
9	MP2A	Mx	.006	1.08
10	MP2A	X	-3.485	4.58
11	MP2A	Z	-6.037	4.58
12	MP2A	Mx	.006	4.58
13	MP3A	X	-1.878	1.83
14	MP3A	Z	-3.253	1.83
15	MP3A	Mx	.001	1.83
16	MP3A	X	-1.878	3.83
17	MP3A	Z	-3.253	3.83
18	MP3A	Mx	.001	3.83
19	MP1A	X	-1.617	3
20	MP1A	Z	-2.8	3
21	MP1A	Mx	-.000808	3
22	MP2A	X	-1.561	3
23	MP2A	Z	-2.703	3
24	MP2A	Mx	-.00078	3
25	OVP	X	-3.6	1
26	OVP	Z	-6.235	1
27	OVP	Mx	0	1
28	MP1A	X	-1.956	.5
29	MP1A	Z	-3.388	.5
30	MP1A	Mx	.001	.5
31	MP1A	X	-1.956	4
32	MP1A	Z	-3.388	4
33	MP1A	Mx	.001	4

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	M1	Y	-500	%54

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[ft,%]
1	M1	Y	-500	%89

Member Point Loads (BLC 79 : Lv1)

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

Member Point Loads (BLC 80 : Lv2)

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

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	-10.451	-10.451	0	%100
2	M2	Y	-14.821	-14.821	0	%100
3	M3	Y	-12.477	-12.477	0	%100
4	MP1A	Y	-8.171	-8.171	0	%100
5	MP2A	Y	-9.184	-9.184	0	%100
6	MP3A	Y	-8.171	-8.171	0	%100
7	OVP	Y	-8.171	-8.171	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	-10.208	-10.208	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	-7.648	-7.648	0	%100
7	MP1A	X	0	0	0	%100
8	MP1A	Z	-6.927	-6.927	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	-8.385	-8.385	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	-6.927	-6.927	0	%100
13	OVP	X	0	0	0	%100
14	OVP	Z	-6.312	-6.312	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	3.828	3.828	0	%100
2	M1	Z	-6.63	-6.63	0	%100
3	M2	X	1.117	1.117	0	%100
4	M2	Z	-1.935	-1.935	0	%100
5	M3	X	3.824	3.824	0	%100
6	M3	Z	-6.624	-6.624	0	%100
7	MP1A	X	3.463	3.463	0	%100
8	MP1A	Z	-5.999	-5.999	0	%100
9	MP2A	X	4.193	4.193	0	%100
10	MP2A	Z	-7.262	-7.262	0	%100
11	MP3A	X	3.463	3.463	0	%100
12	MP3A	Z	-5.999	-5.999	0	%100
13	OVP	X	3.156	3.156	0	%100
14	OVP	Z	-5.467	-5.467	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	2.21	2.21	0	%100
2	M1	Z	-1.276	-1.276	0	%100
3	M2	X	5.806	5.806	0	%100
4	M2	Z	-3.352	-3.352	0	%100
5	M3	X	6.624	6.624	0	%100
6	M3	Z	-3.824	-3.824	0	%100
7	MP1A	X	5.999	5.999	0	%100
8	MP1A	Z	-3.463	-3.463	0	%100
9	MP2A	X	7.262	7.262	0	%100
10	MP2A	Z	-4.193	-4.193	0	%100

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,%]
11	MP3A	X	5.999	5.999	0	%100
12	MP3A	Z	-3.463	-3.463	0	%100
13	OVP	X	5.467	5.467	0	%100
14	OVP	Z	-3.156	-3.156	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	8.939	8.939	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	7.648	7.648	0	%100
6	M3	Z	0	0	0	%100
7	MP1A	X	6.927	6.927	0	%100
8	MP1A	Z	0	0	0	%100
9	MP2A	X	8.385	8.385	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	6.927	6.927	0	%100
12	MP3A	Z	0	0	0	%100
13	OVP	X	6.312	6.312	0	%100
14	OVP	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	2.21	2.21	0	%100
2	M1	Z	1.276	1.276	0	%100
3	M2	X	5.806	5.806	0	%100
4	M2	Z	3.352	3.352	0	%100
5	M3	X	6.624	6.624	0	%100
6	M3	Z	3.824	3.824	0	%100
7	MP1A	X	5.999	5.999	0	%100
8	MP1A	Z	3.463	3.463	0	%100
9	MP2A	X	7.262	7.262	0	%100
10	MP2A	Z	4.193	4.193	0	%100
11	MP3A	X	5.999	5.999	0	%100
12	MP3A	Z	3.463	3.463	0	%100
13	OVP	X	5.467	5.467	0	%100
14	OVP	Z	3.156	3.156	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	3.828	3.828	0	%100
2	M1	Z	6.63	6.63	0	%100
3	M2	X	1.117	1.117	0	%100
4	M2	Z	1.935	1.935	0	%100
5	M3	X	3.824	3.824	0	%100
6	M3	Z	6.624	6.624	0	%100
7	MP1A	X	3.463	3.463	0	%100
8	MP1A	Z	5.999	5.999	0	%100
9	MP2A	X	4.193	4.193	0	%100
10	MP2A	Z	7.262	7.262	0	%100
11	MP3A	X	3.463	3.463	0	%100
12	MP3A	Z	5.999	5.999	0	%100
13	OVP	X	3.156	3.156	0	%100
14	OVP	Z	5.467	5.467	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	10.208	10.208	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	7.648	7.648	0	%100
7	MP1A	X	0	0	0	%100
8	MP1A	Z	6.927	6.927	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	8.385	8.385	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	6.927	6.927	0	%100
13	OVP	X	0	0	0	%100
14	OVP	Z	6.312	6.312	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-3.828	-3.828	0	%100
2	M1	Z	6.63	6.63	0	%100
3	M2	X	-1.117	-1.117	0	%100
4	M2	Z	1.935	1.935	0	%100
5	M3	X	-3.824	-3.824	0	%100
6	M3	Z	6.624	6.624	0	%100
7	MP1A	X	-3.463	-3.463	0	%100
8	MP1A	Z	5.999	5.999	0	%100
9	MP2A	X	-4.193	-4.193	0	%100
10	MP2A	Z	7.262	7.262	0	%100
11	MP3A	X	-3.463	-3.463	0	%100
12	MP3A	Z	5.999	5.999	0	%100
13	OVP	X	-3.156	-3.156	0	%100
14	OVP	Z	5.467	5.467	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	-2.21	-2.21	0	%100
2	M1	Z	1.276	1.276	0	%100
3	M2	X	-5.806	-5.806	0	%100
4	M2	Z	3.352	3.352	0	%100
5	M3	X	-6.624	-6.624	0	%100
6	M3	Z	3.824	3.824	0	%100
7	MP1A	X	-5.999	-5.999	0	%100
8	MP1A	Z	3.463	3.463	0	%100
9	MP2A	X	-7.262	-7.262	0	%100
10	MP2A	Z	4.193	4.193	0	%100
11	MP3A	X	-5.999	-5.999	0	%100
12	MP3A	Z	3.463	3.463	0	%100
13	OVP	X	-5.467	-5.467	0	%100
14	OVP	Z	3.156	3.156	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	-8.939	-8.939	0	%100
4	M2	Z	0	0	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,%]
5	M3	X	-7.648	-7.648	0	%100
6	M3	Z	0	0	0	%100
7	MP1A	X	-6.927	-6.927	0	%100
8	MP1A	Z	0	0	0	%100
9	MP2A	X	-8.385	-8.385	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	-6.927	-6.927	0	%100
12	MP3A	Z	0	0	0	%100
13	OVP	X	-6.312	-6.312	0	%100
14	OVP	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-2.21	-2.21	0	%100
2	M1	Z	-1.276	-1.276	0	%100
3	M2	X	-5.806	-5.806	0	%100
4	M2	Z	-3.352	-3.352	0	%100
5	M3	X	-6.624	-6.624	0	%100
6	M3	Z	-3.824	-3.824	0	%100
7	MP1A	X	-5.999	-5.999	0	%100
8	MP1A	Z	-3.463	-3.463	0	%100
9	MP2A	X	-7.262	-7.262	0	%100
10	MP2A	Z	-4.193	-4.193	0	%100
11	MP3A	X	-5.999	-5.999	0	%100
12	MP3A	Z	-3.463	-3.463	0	%100
13	OVP	X	-5.467	-5.467	0	%100
14	OVP	Z	-3.156	-3.156	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	-3.828	-3.828	0	%100
2	M1	Z	-6.63	-6.63	0	%100
3	M2	X	-1.117	-1.117	0	%100
4	M2	Z	-1.935	-1.935	0	%100
5	M3	X	-3.824	-3.824	0	%100
6	M3	Z	-6.624	-6.624	0	%100
7	MP1A	X	-3.463	-3.463	0	%100
8	MP1A	Z	-5.999	-5.999	0	%100
9	MP2A	X	-4.193	-4.193	0	%100
10	MP2A	Z	-7.262	-7.262	0	%100
11	MP3A	X	-3.463	-3.463	0	%100
12	MP3A	Z	-5.999	-5.999	0	%100
13	OVP	X	-3.156	-3.156	0	%100
14	OVP	Z	-5.467	-5.467	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	-3.57	-3.57	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	-2.547	-2.547	0	%100
7	MP1A	X	0	0	0	%100
8	MP1A	Z	-2.875	-2.875	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,%]
9	MP2A	X	0	0	0	%100
10	MP2A	Z	-3.136	-3.136	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	-2.875	-2.875	0	%100
13	OVP	X	0	0	0	%100
14	OVP	Z	-2.532	-2.532	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.339	1.339	0	%100
2	M1	Z	-2.318	-2.318	0	%100
3	M2	X	.356	.356	0	%100
4	M2	Z	-.617	-.617	0	%100
5	M3	X	1.274	1.274	0	%100
6	M3	Z	-2.206	-2.206	0	%100
7	MP1A	X	1.437	1.437	0	%100
8	MP1A	Z	-2.489	-2.489	0	%100
9	MP2A	X	1.568	1.568	0	%100
10	MP2A	Z	-2.716	-2.716	0	%100
11	MP3A	X	1.437	1.437	0	%100
12	MP3A	Z	-2.489	-2.489	0	%100
13	OVP	X	1.266	1.266	0	%100
14	OVP	Z	-2.192	-2.192	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	.773	.773	0	%100
2	M1	Z	-.446	-.446	0	%100
3	M2	X	1.85	1.85	0	%100
4	M2	Z	-1.068	-1.068	0	%100
5	M3	X	2.206	2.206	0	%100
6	M3	Z	-1.274	-1.274	0	%100
7	MP1A	X	2.489	2.489	0	%100
8	MP1A	Z	-1.437	-1.437	0	%100
9	MP2A	X	2.716	2.716	0	%100
10	MP2A	Z	-1.568	-1.568	0	%100
11	MP3A	X	2.489	2.489	0	%100
12	MP3A	Z	-1.437	-1.437	0	%100
13	OVP	X	2.192	2.192	0	%100
14	OVP	Z	-1.266	-1.266	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	2.848	2.848	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	2.547	2.547	0	%100
6	M3	Z	0	0	0	%100
7	MP1A	X	2.875	2.875	0	%100
8	MP1A	Z	0	0	0	%100
9	MP2A	X	3.136	3.136	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	2.875	2.875	0	%100
12	MP3A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
13	OVP	X	2.532	2.532	0	%100
14	OVP	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.773	.773	0	%100
2	M1	Z	.446	.446	0	%100
3	M2	X	1.85	1.85	0	%100
4	M2	Z	1.068	1.068	0	%100
5	M3	X	2.206	2.206	0	%100
6	M3	Z	1.274	1.274	0	%100
7	MP1A	X	2.489	2.489	0	%100
8	MP1A	Z	1.437	1.437	0	%100
9	MP2A	X	2.716	2.716	0	%100
10	MP2A	Z	1.568	1.568	0	%100
11	MP3A	X	2.489	2.489	0	%100
12	MP3A	Z	1.437	1.437	0	%100
13	OVP	X	2.192	2.192	0	%100
14	OVP	Z	1.266	1.266	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	1.339	1.339	0	%100
2	M1	Z	2.318	2.318	0	%100
3	M2	X	.356	.356	0	%100
4	M2	Z	.617	.617	0	%100
5	M3	X	1.274	1.274	0	%100
6	M3	Z	2.206	2.206	0	%100
7	MP1A	X	1.437	1.437	0	%100
8	MP1A	Z	2.489	2.489	0	%100
9	MP2A	X	1.568	1.568	0	%100
10	MP2A	Z	2.716	2.716	0	%100
11	MP3A	X	1.437	1.437	0	%100
12	MP3A	Z	2.489	2.489	0	%100
13	OVP	X	1.266	1.266	0	%100
14	OVP	Z	2.192	2.192	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	3.57	3.57	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	2.547	2.547	0	%100
7	MP1A	X	0	0	0	%100
8	MP1A	Z	2.875	2.875	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	3.136	3.136	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	2.875	2.875	0	%100
13	OVP	X	0	0	0	%100
14	OVP	Z	2.532	2.532	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.339	-1.339	0	%100
2	M1	Z	2.318	2.318	0	%100
3	M2	X	-.356	-.356	0	%100
4	M2	Z	.617	.617	0	%100
5	M3	X	-1.274	-1.274	0	%100
6	M3	Z	2.206	2.206	0	%100
7	MP1A	X	-1.437	-1.437	0	%100
8	MP1A	Z	2.489	2.489	0	%100
9	MP2A	X	-1.568	-1.568	0	%100
10	MP2A	Z	2.716	2.716	0	%100
11	MP3A	X	-1.437	-1.437	0	%100
12	MP3A	Z	2.489	2.489	0	%100
13	OVP	X	-1.266	-1.266	0	%100
14	OVP	Z	2.192	2.192	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	-.773	-.773	0	%100
2	M1	Z	.446	.446	0	%100
3	M2	X	-1.85	-1.85	0	%100
4	M2	Z	1.068	1.068	0	%100
5	M3	X	-2.206	-2.206	0	%100
6	M3	Z	1.274	1.274	0	%100
7	MP1A	X	-2.489	-2.489	0	%100
8	MP1A	Z	1.437	1.437	0	%100
9	MP2A	X	-2.716	-2.716	0	%100
10	MP2A	Z	1.568	1.568	0	%100
11	MP3A	X	-2.489	-2.489	0	%100
12	MP3A	Z	1.437	1.437	0	%100
13	OVP	X	-2.192	-2.192	0	%100
14	OVP	Z	1.266	1.266	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	-2.848	-2.848	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	-2.547	-2.547	0	%100
6	M3	Z	0	0	0	%100
7	MP1A	X	-2.875	-2.875	0	%100
8	MP1A	Z	0	0	0	%100
9	MP2A	X	-3.136	-3.136	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	-2.875	-2.875	0	%100
12	MP3A	Z	0	0	0	%100
13	OVP	X	-2.532	-2.532	0	%100
14	OVP	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.773	-.773	0	%100
2	M1	Z	-.446	-.446	0	%100
3	M2	X	-1.85	-1.85	0	%100
4	M2	Z	-1.068	-1.068	0	%100

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,%]
5	M3	X	-2.206	-2.206	0	%100
6	M3	Z	-1.274	-1.274	0	%100
7	MP1A	X	-2.489	-2.489	0	%100
8	MP1A	Z	-1.437	-1.437	0	%100
9	MP2A	X	-2.716	-2.716	0	%100
10	MP2A	Z	-1.568	-1.568	0	%100
11	MP3A	X	-2.489	-2.489	0	%100
12	MP3A	Z	-1.437	-1.437	0	%100
13	OVP	X	-2.192	-2.192	0	%100
14	OVP	Z	-1.266	-1.266	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	-1.339	-1.339	0	%100
2	M1	Z	-2.318	-2.318	0	%100
3	M2	X	-.356	-.356	0	%100
4	M2	Z	-.617	-.617	0	%100
5	M3	X	-1.274	-1.274	0	%100
6	M3	Z	-2.206	-2.206	0	%100
7	MP1A	X	-1.437	-1.437	0	%100
8	MP1A	Z	-2.489	-2.489	0	%100
9	MP2A	X	-1.568	-1.568	0	%100
10	MP2A	Z	-2.716	-2.716	0	%100
11	MP3A	X	-1.437	-1.437	0	%100
12	MP3A	Z	-2.489	-2.489	0	%100
13	OVP	X	-1.266	-1.266	0	%100
14	OVP	Z	-2.192	-2.192	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	-.66	-.66	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	-.494	-.494	0	%100
7	MP1A	X	0	0	0	%100
8	MP1A	Z	-.448	-.448	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	-.542	-.542	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	-.448	-.448	0	%100
13	OVP	X	0	0	0	%100
14	OVP	Z	-.408	-.408	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	.247	.247	0	%100
2	M1	Z	-.429	-.429	0	%100
3	M2	X	.072	.072	0	%100
4	M2	Z	-.125	-.125	0	%100
5	M3	X	.247	.247	0	%100
6	M3	Z	-.428	-.428	0	%100
7	MP1A	X	.224	.224	0	%100
8	MP1A	Z	-.388	-.388	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
9	MP2A	X	.271	.271	0	%100
10	MP2A	Z	-.469	-.469	0	%100
11	MP3A	X	.224	.224	0	%100
12	MP3A	Z	-.388	-.388	0	%100
13	OVP	X	.204	.204	0	%100
14	OVP	Z	-.353	-.353	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	.143	.143	0	%100
2	M1	Z	-.082	-.082	0	%100
3	M2	X	.375	.375	0	%100
4	M2	Z	-.217	-.217	0	%100
5	M3	X	.428	.428	0	%100
6	M3	Z	-.247	-.247	0	%100
7	MP1A	X	.388	.388	0	%100
8	MP1A	Z	-.224	-.224	0	%100
9	MP2A	X	.469	.469	0	%100
10	MP2A	Z	-.271	-.271	0	%100
11	MP3A	X	.388	.388	0	%100
12	MP3A	Z	-.224	-.224	0	%100
13	OVP	X	.353	.353	0	%100
14	OVP	Z	-.204	-.204	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	.578	.578	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	.494	.494	0	%100
6	M3	Z	0	0	0	%100
7	MP1A	X	.448	.448	0	%100
8	MP1A	Z	0	0	0	%100
9	MP2A	X	.542	.542	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	.448	.448	0	%100
12	MP3A	Z	0	0	0	%100
13	OVP	X	.408	.408	0	%100
14	OVP	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.143	.143	0	%100
2	M1	Z	.082	.082	0	%100
3	M2	X	.375	.375	0	%100
4	M2	Z	.217	.217	0	%100
5	M3	X	.428	.428	0	%100
6	M3	Z	.247	.247	0	%100
7	MP1A	X	.388	.388	0	%100
8	MP1A	Z	.224	.224	0	%100
9	MP2A	X	.469	.469	0	%100
10	MP2A	Z	.271	.271	0	%100
11	MP3A	X	.388	.388	0	%100
12	MP3A	Z	.224	.224	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
13	OVP	X	.353	.353	0	%100
14	OVP	Z	.204	.204	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	.247	.247	0	%100
2	M1	Z	.429	.429	0	%100
3	M2	X	.072	.072	0	%100
4	M2	Z	.125	.125	0	%100
5	M3	X	.247	.247	0	%100
6	M3	Z	.428	.428	0	%100
7	MP1A	X	.224	.224	0	%100
8	MP1A	Z	.388	.388	0	%100
9	MP2A	X	.271	.271	0	%100
10	MP2A	Z	.469	.469	0	%100
11	MP3A	X	.224	.224	0	%100
12	MP3A	Z	.388	.388	0	%100
13	OVP	X	.204	.204	0	%100
14	OVP	Z	.353	.353	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	.66	.66	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	.494	.494	0	%100
7	MP1A	X	0	0	0	%100
8	MP1A	Z	.448	.448	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	.542	.542	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	.448	.448	0	%100
13	OVP	X	0	0	0	%100
14	OVP	Z	.408	.408	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.247	-.247	0	%100
2	M1	Z	.429	.429	0	%100
3	M2	X	-.072	-.072	0	%100
4	M2	Z	.125	.125	0	%100
5	M3	X	-.247	-.247	0	%100
6	M3	Z	.428	.428	0	%100
7	MP1A	X	-.224	-.224	0	%100
8	MP1A	Z	.388	.388	0	%100
9	MP2A	X	-.271	-.271	0	%100
10	MP2A	Z	.469	.469	0	%100
11	MP3A	X	-.224	-.224	0	%100
12	MP3A	Z	.388	.388	0	%100
13	OVP	X	-.204	-.204	0	%100
14	OVP	Z	.353	.353	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	-.143	-.143	0	%100
2	M1	Z	.082	.082	0	%100
3	M2	X	-.375	-.375	0	%100
4	M2	Z	.217	.217	0	%100
5	M3	X	-.428	-.428	0	%100
6	M3	Z	.247	.247	0	%100
7	MP1A	X	-.388	-.388	0	%100
8	MP1A	Z	.224	.224	0	%100
9	MP2A	X	-.469	-.469	0	%100
10	MP2A	Z	.271	.271	0	%100
11	MP3A	X	-.388	-.388	0	%100
12	MP3A	Z	.224	.224	0	%100
13	OVP	X	-.353	-.353	0	%100
14	OVP	Z	.204	.204	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	-.578	-.578	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	-.494	-.494	0	%100
6	M3	Z	0	0	0	%100
7	MP1A	X	-.448	-.448	0	%100
8	MP1A	Z	0	0	0	%100
9	MP2A	X	-.542	-.542	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	-.448	-.448	0	%100
12	MP3A	Z	0	0	0	%100
13	OVP	X	-.408	-.408	0	%100
14	OVP	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.143	-.143	0	%100
2	M1	Z	-.082	-.082	0	%100
3	M2	X	-.375	-.375	0	%100
4	M2	Z	-.217	-.217	0	%100
5	M3	X	-.428	-.428	0	%100
6	M3	Z	-.247	-.247	0	%100
7	MP1A	X	-.388	-.388	0	%100
8	MP1A	Z	-.224	-.224	0	%100
9	MP2A	X	-.469	-.469	0	%100
10	MP2A	Z	-.271	-.271	0	%100
11	MP3A	X	-.388	-.388	0	%100
12	MP3A	Z	-.224	-.224	0	%100
13	OVP	X	-.353	-.353	0	%100
14	OVP	Z	-.204	-.204	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	-.247	-.247	0	%100
2	M1	Z	-.429	-.429	0	%100
3	M2	X	-.072	-.072	0	%100
4	M2	Z	-.125	-.125	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,%]
5	M3	X	-.247	-.247	0	%100
6	M3	Z	-.428	-.428	0	%100
7	MP1A	X	-.224	-.224	0	%100
8	MP1A	Z	-.388	-.388	0	%100
9	MP2A	X	-.271	-.271	0	%100
10	MP2A	Z	-.469	-.469	0	%100
11	MP3A	X	-.224	-.224	0	%100
12	MP3A	Z	-.388	-.388	0	%100
13	OVP	X	-.204	-.204	0	%100
14	OVP	Z	-.353	-.353	0	%100

Member Area Loads

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

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
1	N25	max	807.79	10	1841.928	18	1204.318	1	-781.256	1	2432.2...	9	2517.653	40
2		min	-807.79	4	673.85	12	-1204.318	7	-5589....	19	-2434....	3	-1387.071	49
3	Totals:	max	807.79	10	1841.928	18	1204.318	1						
4		min	-807.79	4	673.85	12	-1204.318	7						

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

	Mem...	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*...	phi*...	phi*...	phi*...	Cb	Eqn
1	M1	PIPE...	.512	4	40	.207	4		7	462...	652...	574...	574...	1...	H1...
2	M2	HSS4...	.375	0	21	.221	0	y	40	135...	139...	161...	161...	1...	H1...
3	M3	PIPE...	.000	.75	7	.000	.75		7	925...	932...	106...	106...	1...	H1...
4	MP1A	PIPE...	.131	3.25	7	.015	3.25		7	208...	321...	187...	187...	1...	H1...
5	MP2A	PIPE...	.211	3.813	7	.021	3.813		7	377...	507...	359...	359...	1...	H1...
6	MP3A	PIPE...	.103	3.813	7	.013	3.813		7	208...	321...	187...	187...	1...	H1...
7	OVP	PIPE...	.180	3.5	5	.015	3.5		5	265...	321...	187...	187...	1...	H1...

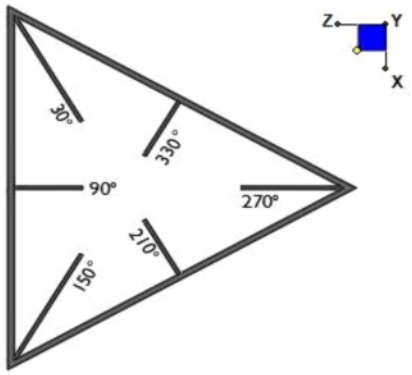
Client:	Verizon	Date:	6/28/2021
Site Name:	Newington 3 CT		
Project No.	21777831A		
Title:	Mount Analysis	Page:	1

Version 3.1

I. Mount-to-Tower Connection Check

RISA Model Data

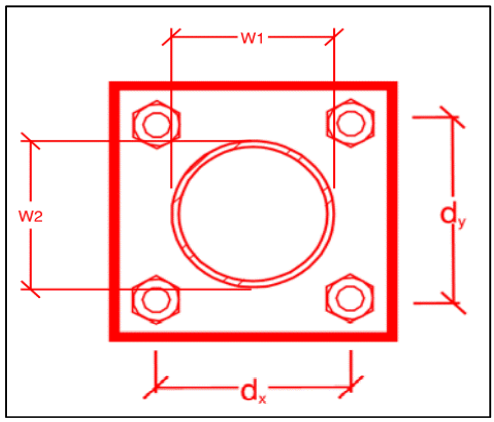
Nodes *(labeled per RISA)*	Orientation *(per graphic of typical platform)*
N25	90



TYPICAL PLATFORM

Tower Connection Bolt Checks

Any moment resistance?:	yes
Bolt Quantity per Reaction:	4
d_x (in) *(Delta X of typ. bolt config. sketch)*:	7
d_y (in) *(Delta Y of typ. bolt config. sketch)*:	7
Bolt Type:	A325N
Bolt Diameter (in):	0.625
Required Tensile Strength (kips):	19.5
Required Shear Strength (kips):	10.1
Tensile Strength / bolt (kips):	20.7
Shear Strength / bolt (kips):	12.4
Tensile Capacity Overall:	**23.5%***
Shear Capacity Overall:	**20.2%**



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

Tower Connection Plate and Weld Check

Connecting Standoff Member Shape:	Rect
Plate Width (in):	10
Plate Height (in):	10
W1 (in):	4
W2 (in):	4
Fy (ksi, plate):	36
t_{Plate} (in):	0.625
Weld Size (1/16 in):	3
Phi*Rn (kip/in):	4.18
Required Weld Strength (kip/in):	3.18
Plate Bending Capacity:	**49.5%**
Weld Capacity:	**76.1%**

Max Plate Bending Strengths

Mu_{xx} *(kip-in)*:	14.0
Phi*Mn_{xx} *(kip-in)*:	31.6
Mu_{yy} *(kip-in)*:	1.6
Phi*Mn_{yy} *(kip-in)*:	31.6

Mount Desktop Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor Passing Mount Analysis

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 installation was completed in accordance with this Passing Mount Analysis.

Contractor shall relay any data that can impact the performance of the mount, this includes safety issues.

Base Requirements:

Any special photos outside of the standard requirements will be indicated on the passing MA Verification that loading is as communicated in the Passing Mount Analysis. NOTE If loading is different than what is conveyed 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 equipment 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 equipment.

- 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
- 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.

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 any other information the contractor deems necessary to share that was identified:

Issue:

-Contractor shall install 48" long P2.0 STD equipment pipe on standoff arm in the Alpha sector. Attach the proposed equipment pipe to the standoff with crossover plates (Site Pro 1 Part #: SQCX4-K or EOR approved equivalent). Contractor shall attach proposed OVP 12" from the top of equipment pipe.

-Contractor shall replace existing mount pipe in position 2 on all sectors (position 1 being on the left side when looking from behind) with new 72" long P2.5 STD mount pipe. Connect to existing face horizontal with crossover plates (VZWSMART-MSK1). Contractor shall install pipe 55" from right edge of Face horizontal (looking from behind).

-Contractor to install safety climb cable guide (Site Pro 1, Part #: 120-123/317 or EOR approved equivalent) in locations where wire rope is rubbing against mount to tower attachments. Contractor to provide photos of safety climb guide installation.

Response:

Schedule A Photo & Document File Structure

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

Structure: 67 6 -VZW - NEWINGTON 3 CT

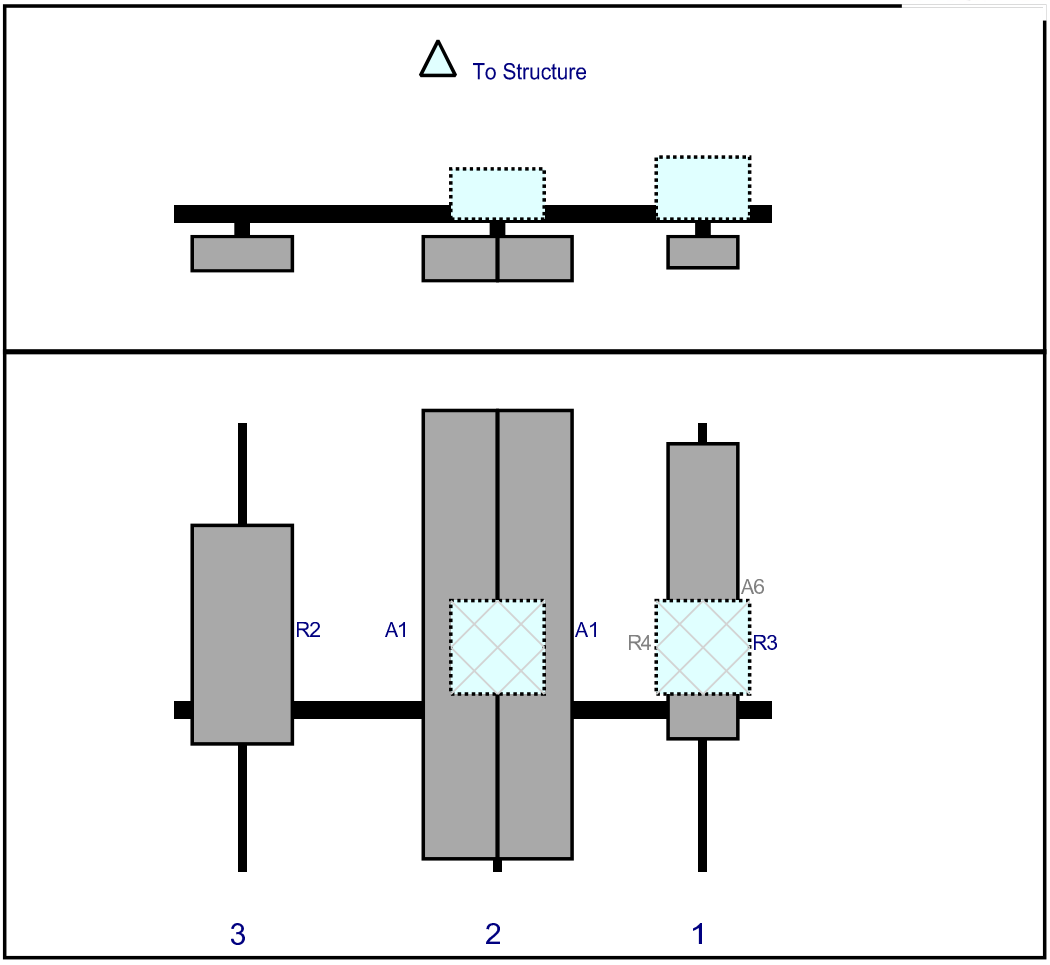
Sector: **A** 6/28/2021

Structure Type: Monopole 10061290

Mount Elev: 90.00 Page: 1

MASER CONSULTING — CONNECTICUT —

Plan View



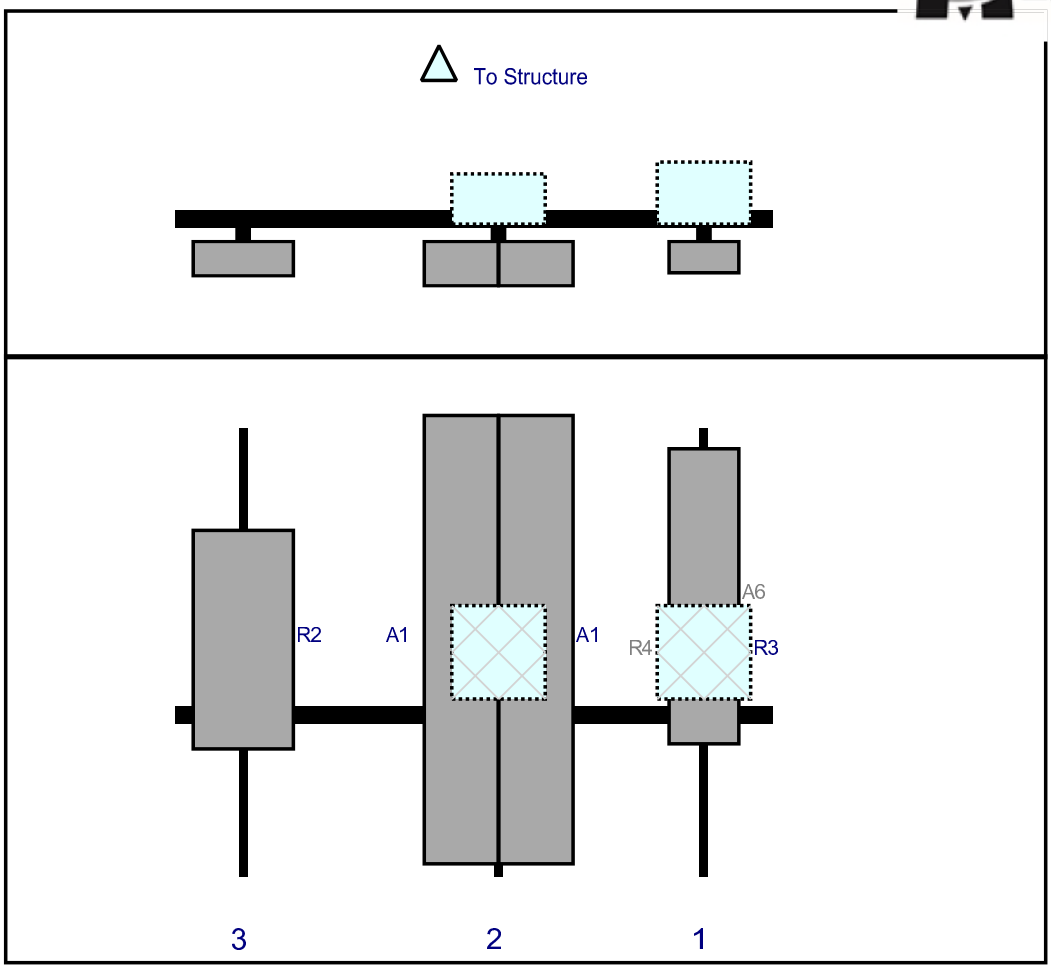
Front View
Looking at Structure

Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A6	BXA-80063/4CF	47.4	11.2	85	1	a	Front	27	0	Retained	04/28/2021
R3	B2/B66A RRH-BR049	15	15	85	1	a	Behind	36	0	Added	
A1	NHH-65B-R2B	72	11.9	52	2	a	Front	33.96	6	Added	
A1	NHH-65B-R2B	72	11.9	52	2	b	Front	33.96	-6	Added	
R4	B5/B13 RRH-BR04C	15	15	52	2	a	Behind	36	0	Added	
R2	MT6407-77A	35.1	16.1	11	3	a	Front	33.96	0	Added	

MASER CONSULTING CONNECTICUT

Plan View

Front View
Looking at Structure

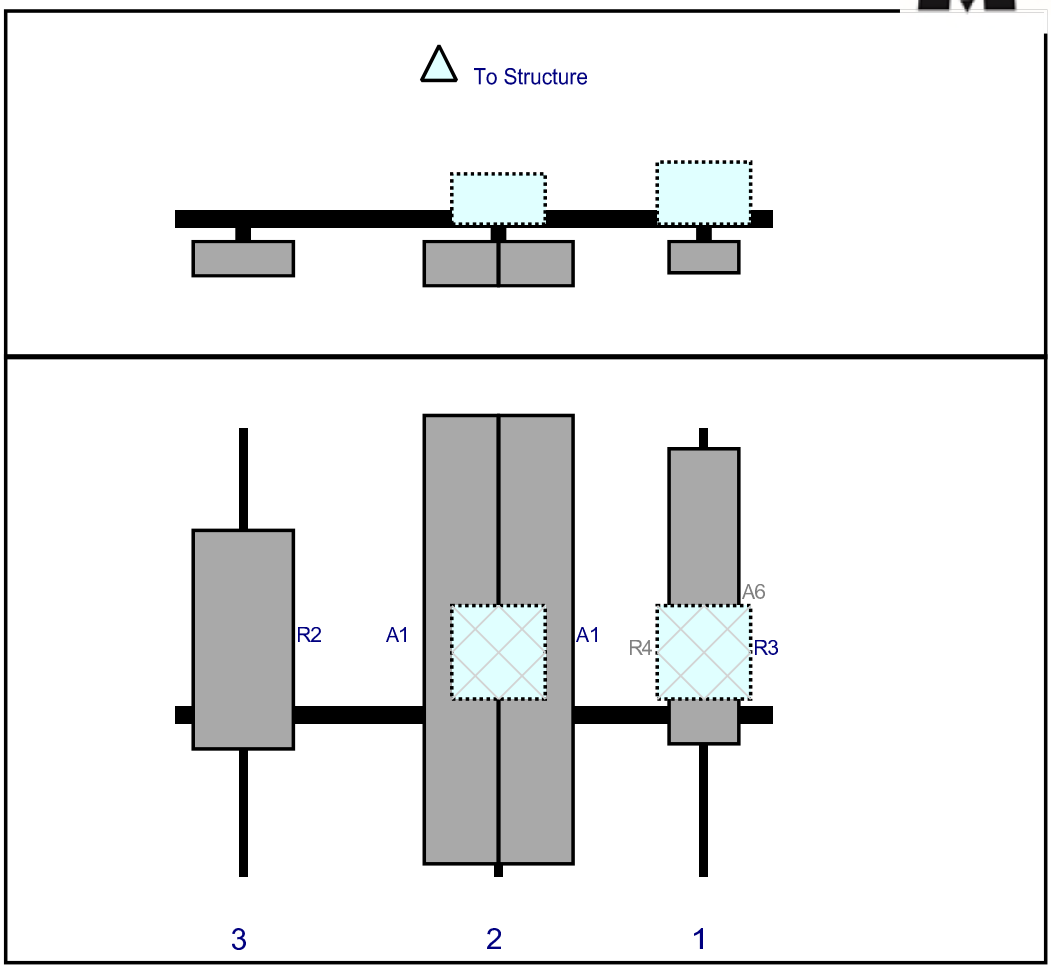


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A6	BXA-80063/4CF	47.4	11.2	85	1	a	Front	27	0	Retained	04/28/2021
R3	B2/B66A RRH-BR049	15	15	85	1	a	Behind	36	0	Added	
A1	NHH-65B-R2B	72	11.9	52	2	a	Front	33.96	6	Added	
A1	NHH-65B-R2B	72	11.9	52	2	b	Front	33.96	-6	Added	
R4	B5/B13 RRH-BR04C	15	15	52	2	a	Behind	36	0	Added	
R2	MT6407-77A	35.1	16.1	11	3	a	Front	33.96	0	Added	

MASER CONSULTING CONNECTICUT

Plan View

Front View
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A6	BXA-80063/4CF	47.4	11.2	85	1	a	Front	27	0	Retained	04/28/2021
R3	B2/B66A RRH-BR049	15	15	85	1	a	Behind	36	0	Added	
A1	NHH-65B-R2B	72	11.9	52	2	a	Front	33.96	6	Added	
A1	NHH-65B-R2B	72	11.9	52	2	b	Front	33.96	-6	Added	
R4	B5/B13 RRH-BR04C	15	15	52	2	a	Behind	36	0	Added	
R2	MT6407-77A	35.1	16.1	11	3	a	Front	33.96	0	Added	

Maser Consulting Connecticut

Subject:	*TIA-222-H Usage*	
Site Information	*Site ID:*	
	Site Name:	
	Carrier Name:	*Verizon Wireless*
	Address:	*35 Wildwood Street* *New Britain, Connecticut 06051* *Hartford County*
	Latitude:	
	Longitude:	
Structure Information	*Tower Type:*	*100-Ft Monopole*
	Mount Type:	*8.00-Ft T-arm*

To Whom It May Concern,

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

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

As with all ANSI standards and engineering best practice is to apply the most current revision of the standard. This ensures the engineer is applying all updates. As an example, the TIA-222-H standard includes updates to bring it in line with the latest AISC and ACI standards and it also incorporates the latest wind speed map 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 method, seismic analysis, 30-degree increment wind direction 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.

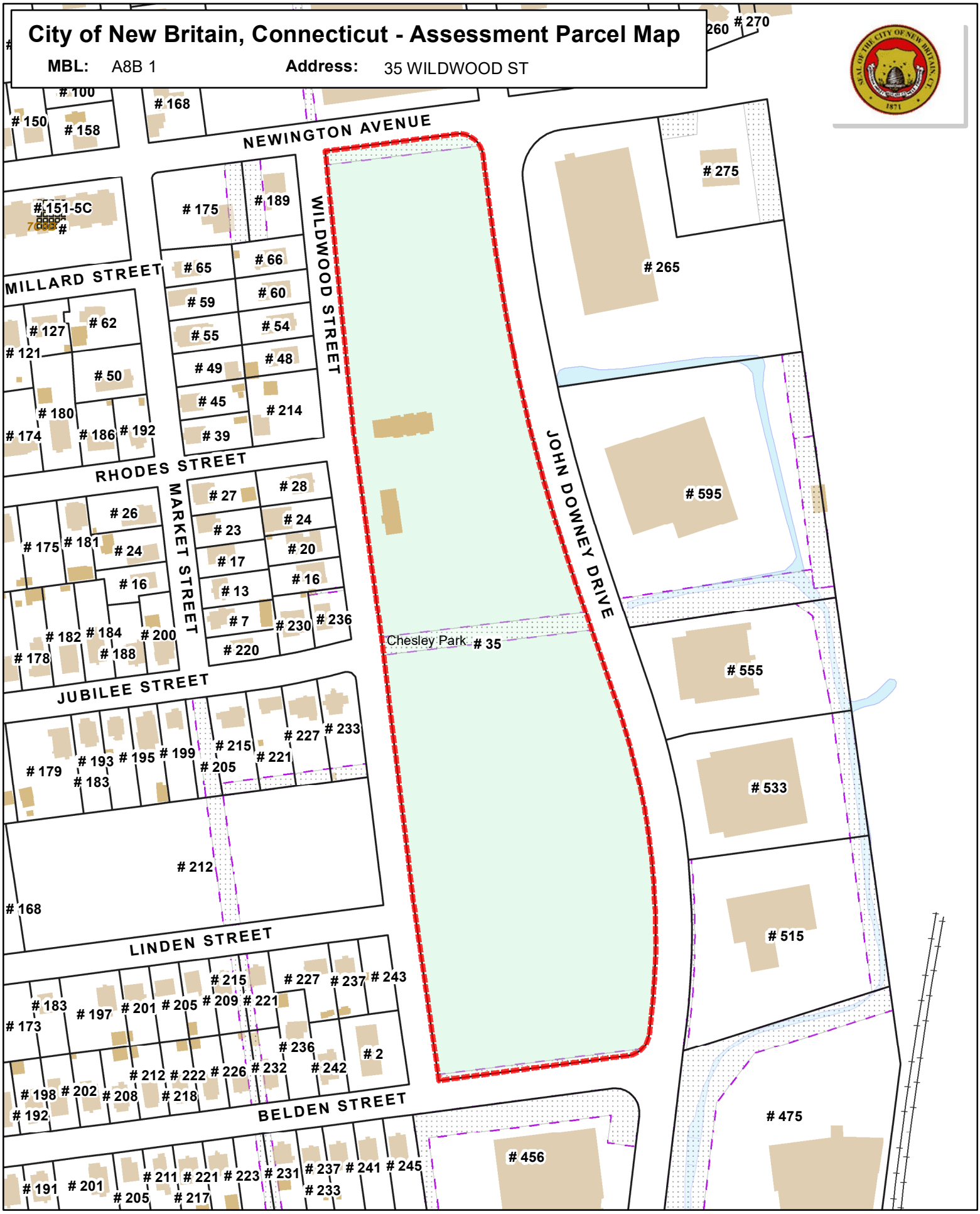
Sincerely,

Taqi Khawaja, PE
Technical Specialist

ATTACHMENT 5

City of New Britain, Connecticut - Assessment Parcel Map

MBL: A8B 1 **Address:** 35 WILDWOOD ST



Approximate Scale:

1 inch = 200 feet

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

Map Produced April 2020

City of New Britain, CT

Property Listing Report

Map Block Lot	A8B 1	Building #	1	PID	1830	Account	91200035

Property Information

Property Location	35 WILDWOOD ST
Owner	NEW BRITAIN CITY OF - PARK
Co-Owner	CHESLEY PARK
Mailing Address	27 WEST MAIN ST NEW BRITAIN CT 06051
Land Use	903A Mun Park MDL-00
Land Class	E
Zoning Code	T
Census Tract	415400

Neighborhood	107
Acreage	11.85
Utilities	All Public
Lot Setting/Desc	Level
Fire District	
Book / Page	0/0

Photo

Sketch

Primary Construction Details

Year Built	0
Building Desc.	Mun Park MDL-00
Building Style	UNKNOWN
Building Grade	
Stories	
Occupancy	
Exterior Walls	
Exterior Walls 2	NA
Roof Style	
Roof Cover	
Interior Walls	
Interior Walls 2	NA
Interior Floors 1	
Interior Floors 2	NA

Heating Fuel	
Heating Type	
AC Type	
Bedrooms	0
Full Bathrooms	0
Half Bathrooms	0
Extra Fixtures	0
Total Rooms	0
Bath Style	NA
Kitchen Style	NA
Rec Rm Area	0
Rec Rm Quality	NA
Bsmt Gar	0
Fireplaces	0

(*Industrial / Commercial Details)

Building Use	Vacant
Building Condition	
Sprinkler %	NA
Heat / AC	NA
Frame Type	NA
Baths / Plumbing	NA
Ceiling / Wall	NA
Rooms / Prtns	NA
Wall Height	NA
First Floor Use	NA
Foundation	

Report Created On 2/2/2022

City of New Britain, CT

Property Listing Report | Map Block Lot **A8B 1** | Building # **1** | PID **1830** | Account **91200035**

Valuation Summary

(Assessed value = 70% of Appraised Value)

Item	Appraised	Assessed
Buildings	0	0
Extras	0	0
Improvements		
Outbuildings	1020300	714210
Land	715900	501130
Total	1736200	1215340

Outbuilding and Extra Features

Type	Description
Tennis Crt Asp	4 Units
Paving Asphalt	50000 S.F.
Fence-10' Chai	888 L.F.
RestRoom stone	2697 S.F.
RestRoom stone	1875 S.F.
Fence - Chain	4000 L.F.
Canopy rf/slb	800 S.F.
PreCastConcCel	240 S.F.
Fence - Chain	100 L.F.
PreCastConcCel	360 S.F.

Sub Areas

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
Total Area	0	0

Sales History

Owner of Record	Book/ Page	Sale Date	Sale Price
NEW BRITAIN CITY OF - PARK	0/0	1900-01-01	0

Report Created On 2/2/2022

ATTACHMENT 6

NEWINGTON 3

UNITED STATES POSTAL SERVICE®

Certificate of Mailing — Firm

Name and Address of Sender	TOTAL NO. of Pieces Listed by Sender	TOTAL NO. of Pieces Received at Post Office™	Affix Stamp Here *Postmark with Date of Receipt.*
Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103	2	2	neopost 02/10/2022 US POSTAGE $002.99⁰ ZIP 06103 041L12203937
	Postmaster, per *(name of receiving employee)*		

USPS® Tracking Number / Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.	Erin Stewart, Mayor City of New Britain 27 West Main Street New Britain, CT 06051	OLD STATE HOUSE STATION 06103 FEB 10 2022 USPS			
2.	Steven Schiller, City Planner City of New Britain 27 West Main Street New Britain, CT 06051				
3.					
4.					
5.					
6.					