

KENNETH C. BALDWIN

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Hartford, CT 06103-3597
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Also admitted in Massachusetts
and New York

July 28, 2021

Via Electronic Mail

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

Re: **Notice of Exempt Modification – Facility Modification
Town of Coventry - Town Hall
1712 Main Street, Coventry, Connecticut**

Dear Attorney Bachman:

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) currently maintains an existing wireless telecommunications facility at the above-referenced property address (the “Property”). The facility consists of antennas and remote radio heads attached to a tower and related equipment on the ground, near the base of the tower. The tower was approved by the Town of Coventry. Cellco’s consultants reached out to Town staff in an effort to obtain any copies of the original tower approval. Town staff was unable to locate those documents. Cellco’s shared use of the tower was approved by the Council in June 2004 (EM-VER-032-040614). A copy of Cellco’s approval are included in Attachment 1.

Cellco now intends to modify its facility by replacing six (6) existing antennas with three (3) new Samsung MT6407-77A antennas and six (6) NHH-65B-R2B antennas and replacing six (6) remote radio heads (“RRHs”) with six (6) new RRHs all on Cellco’s existing antenna mounts. A set of project plans showing Cellco’s proposed facility modifications and new antennas and RRHs specifications are included in Attachment 2.

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

Melanie A. Bachman, Esq.
July 28, 2021
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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 Cellco's existing antenna platform.
2. The proposed modifications will not involve any change to ground-mounted equipment and, therefore, will not require the extension of the site boundary.
3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
4. The installation of Cellco's new antennas will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. A cumulative general power density table for Cellco's modified facility is included in Attachment 3. The modified facility will be capable of providing Cellco's 5G wireless service.
5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
6. According to the attached Structural Analysis ("SA") and Mount Analysis ("MA"), the existing tower, tower foundation and antenna mounts with certain modifications, can support Cellco's proposed modifications. Copies of the SA and MA are included in Attachment 4.

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

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

Melanie A. Bachman, Esq.
July 28, 2021
Page 3

Sincerely,

A handwritten signature in black ink, appearing to read "Kenneth C. Baldwin". The signature is fluid and cursive, with a long horizontal stroke at the end.

Kenneth C. Baldwin

Enclosures

Copy to:

John Elsesser, Coventry Town Manger
Eric Trott, Coventry Director of Land Use
Aleksey Tyurin

ATTACHMENT 1



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

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

E-Mail: siting.council@po.state.ct.us

www.ct.gov/csc

June 25, 2004

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

RE: **EM-VER-032-040614** - Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 1776 Main Street, Coventry, Connecticut.

Dear Attorney Baldwin:

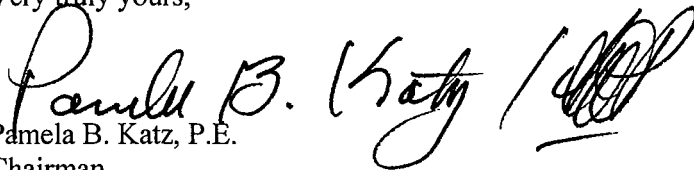
At a public meeting held on June 23, 2004, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated June 14, 2004. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

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

Thank you for your attention and cooperation.

Very truly yours,



Pamela B. Katz, P.E.
Chairman

PBK/laf

c: Honorable James E. Clark, Chairman Town Council, Town of Coventry
Eric M. Trott, Director of Planning & Development, Town of Coventry
Thomas J. Regan, Esq., Brown Rudnick Berlack Israels LLP
Thomas F. Flynn III, Nextel Communications, Inc.

ATTACHMENT 2



WIRELESS COMMUNICATIONS FACILITY

**COVENTRY EAST CT
1712 MAIN STREET
COVENTRY, CT 06238**

DRAWING INDEX

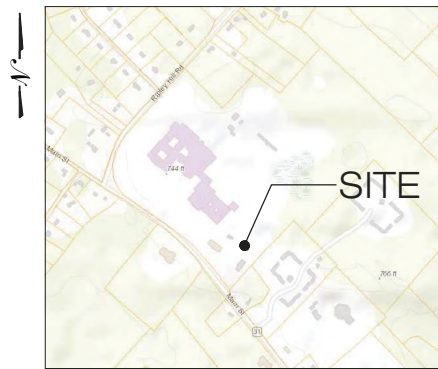
- T-1 TITLE SHEET**
- C-1 COMPOUND PLAN, SOUTH TOWER ELEVATION, EQUIPMENT CONFIGURATION PLANS & ELEVATIONS.**
- B-1 RF BILL OF MATERIALS, MECHANICAL SPECIFICATIONS & EQUIPMENT DETAILS.**
- N-1 NOTES & SPECIFICATIONS**

SITE DIRECTIONS

**START: 20 ALEXANDER DRIVE
WALLINGFORD, CONNECTICUT 06492**

**END: 1712 MAIN STREET
COVENTRY, CT 06238**

- | | |
|--|---------|
| 1. HEAD SOUTH TOWARD ALEXANDER DRIVE | 279 FT |
| 2. SLIGHT RIGHT TOWARDS ALEXANDER DRIVE | 259 FT |
| 3. TURN RIGHT TOWARD ALEXANDER DRIVE | 167 FT |
| 4. TURN RIGHT ONTO ALEXANDER DRIVE | 0.3 MI |
| 5. TURN RIGHT ONTO BARNES INDUSTRIAL ROAD S. | 0.1 MI |
| 6. TURN RIGHT ONTO CT-68 E | 1.6 MI |
| 7. CONTINUE STRAIGHT TO STAY CT-68 E | 0.2 MI |
| 8. SHARP LEFT TO MERGE ONTO I-91 N TOWARD HARTFORD | 0.3 MI |
| 9. MERGE ONTO I-91 N | 20.5 MI |
| 10. TAKE EXIT 29 TO MERGE ONTO CT-15 NUS-SN TOWARD I-48 E/
E HARTFORD/BOSTON | 0.5 MI |
| 11. CONTINUE ONTO CT-15 N | 0.8 MI |
| 12. USE LEFT 2 LANES TO MERGE ONTO I-84 E TOWARD BOSTON | 2.4 MI |
| 13. USE THE RIGHT 2 LANES TO TAKE EXIT 59 FOR I-384 E
TOWARD PROVIDENCE | 1.3 MI |
| 14. CONTINUE ONTO I-384 | 7.3 MI |
| 15. CONTINUE ONTO US-44E/US-6 E | 0.2 MI |
| 16. KEEP LEFT AT THE FORK TO CONTINUE ON US-44 E, FOLLOW SIGNS
FOR COVENTRY/MANSFIELD | 4.0 MI |
| 17. TURN RIGHT ONTO CT-31 S/ MAIN ST. | 3.4 MI |
| 18. TURN LEFT | 79 FT |
| 19. TURN RIGHT (DESTINATION WILL BE ON THE LEFT) | 125 FT |



LOCATION MAP
SCALE: 1" = 2000'

SITE INFORMATION

VZ SITE NAME: COVENTRY EAST CT
VZ PROJ FUZE I.D.: 162721141
VZ LOCATION CODE: 468160
VZ PROJECT CODE: 20212221166
LOCATION: 1712 MAIN STREET
COVENTRY, CT 06238

PROJECT SCOPE: REFER TO NOTES ON C-1 FOR SCOPE OF WORK.

MAP/BLOCK/LOT: 018/---/001A

ZONING DISTRICT: GR-40 (GENERAL RESIDENTIAL ZONE)

LATITUDE: 41° 46' 47.755" N (41.779932° N)

SITE COORDINATES & GROUND ELEVATION
OBTAINED FROM GOOGLE EARTH.

LONGITUDE: 73° 18' 34.498" W (73.309583° W)

GROUND ELEVATION: 727± AMSL

PROPERTY OWNER: VERIZON WIRELESS
C/O DUFF & PHELPS
P O BOX 2549
ADDISON, TX 75001

APPLICANT: CELCO PARTNERSHIP
d/b/a VERIZON WIRELESS
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

LEGAL/REGULATORY COUNSEL: ROBINSON & COLE, LLP
KENNETH C. BALDWIN, ESQ.
280 TRUMBULL STREET
HARTFORD, CT 06103

ENGINEER CONTACT: ALL-POINTS TECHNOLOGY CORP., P.C.
567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385
(860) 663-1697

VERIZON SMART TOOL PROJECT # 10041326; 10069538

Cellco Partnership d/b/a



20 ALEXANDER DRIVE
WALLINGFORD, CT 06492



567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860) 663-1697
WWW.ALLPOINTS TECH.COM FAX: (860) 663-0935

CONSTRUCTION DOCUMENTS

NO	DATE	REVISION
0	04/22/21	FOR REVIEW - JRM
1	06/18/21	REV. FOR FILING - JRM
2	07/09/21	REV. FOR FILING - JRM
3		
4		
5		
6		



DESIGN PROFESSIONALS OF RECORD

PROF. MICHAEL S. TRODDEN P.E.
COMP: ALL-POINTS TECHNOLOGY
CORPORATION, P.C.
ADD: 567 VAUXHALL STREET EXT.
SUITE 311
WATERFORD, CT 06385

OWNER: VERIZON WIRELESS
P O BOX 2549
ADDISON, TX 75001

COVENTRY EAST CT

SITE: 1712 MAIN STREET

ADDRESS: COVENTRY, CT 06238

APT FILING NUMBER: CT141_12670

DRAWN BY: JRM

DATE: 04/22/21 CHECKED BY: JRM

VZ PROJECT CODE: 20212221166

VZ LOCATION CODE: 468160

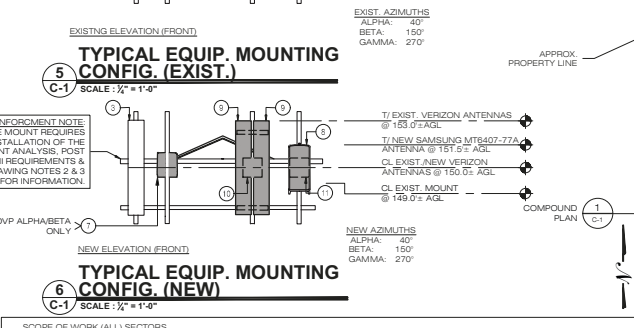
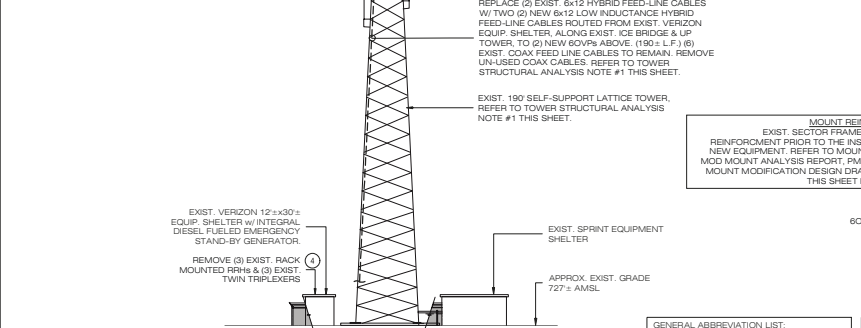
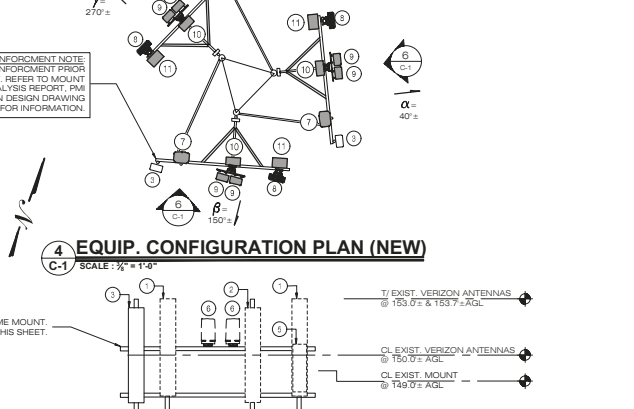
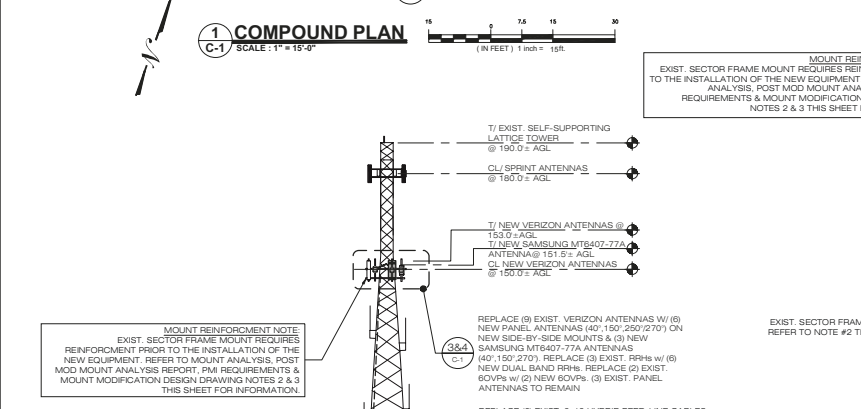
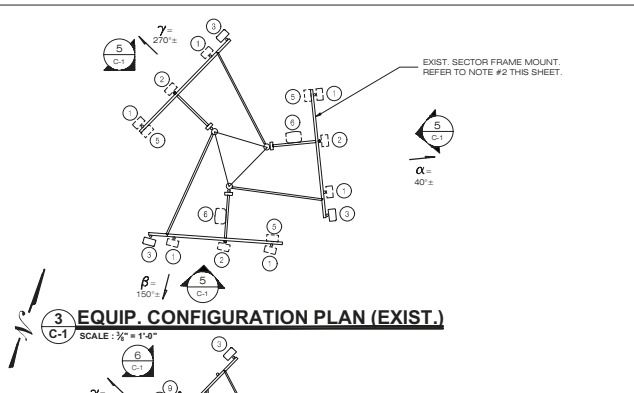
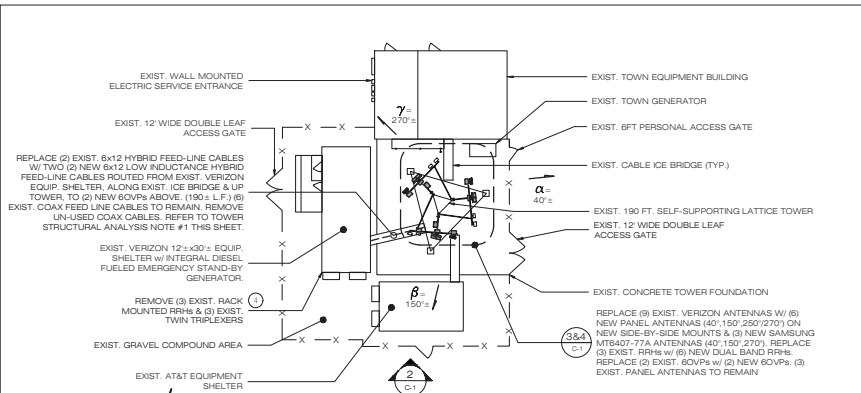
VZ FUZE ID: 162721141

SHEET TITLE:

TITLE SHEET

SHEET NUMBER:

T-1



- NOTES:**
- REFER TO TOWER STRUCTURAL ANALYSIS REPORT PREPARED BY ALL-POINTS TECHNOLOGY CORPORATION, P.C. MARKED REV. DATED 07/08/21 AVAILABLE UNDER SEPARATE COVER.
 - REFER TO MOUNT ANALYSIS REPORT PREPARED BY MASER CONSULTING, P.A., PROJECT #2177167A MARKED REV. DATED 05/06/21 AVAILABLE UNDER SEPARATE COVER.
 - REFER TO POST MOD MOUNT ANALYSIS REPORT, PMI REQUIREMENTS & MOUNT MODIFICATION DESIGN DRAWINGS PREPARED BY MASER CONSULTING, P.A., PROJECT #2177167A DATED 08/16/21 AVAILABLE UNDER SEPARATE COVER.
 - PROJECT SCOPE INCLUDES THE FOLLOWING:
 - REPLACEMENT OF (6) EXIST. PANEL ANTENNAS W/ (6) NEW PANEL ANTENNAS ON NEW SIDE-BY-SIDE MOUNTS (P/N BSAMNT-SBS-1-2) & (3) NEW SAMSUNG MT6407-77A ANTENNAS.
 - REPLACEMENT OF (3) EXIST. RRHs W/ (6) NEW DUAL-BAND RRHs.
 - REPLACEMENT OF (2) EXIST. 60VPS W/ (2) NEW 60VPS (ALPHA & BETA).
 - REPLACEMENT OF (2) 6x12 HYBRID FEED-LINE CABLES W/ (2) NEW 6x12 LOW INDUCTANCE HYBRID FEED-LINE CABLES.
 - REMOVAL OF (3) EXIST. RRHs & (3) EXIST. TWIN TRIPLEXERS FROM WITHIN EXIST. VERIZON EQUIP. SHELTER.
 - REMOVAL OF ALL UN-USED COAXIAL CABLE FEED-LINES.
 - ALL EXPOSED STEEL AND HARDWARE TO BE HOT DIP GALV. (HDG), PAINT TO MATCH EXIST. (WHERE APPLICABLE).
 - CAP & WEATHERPROOF ALL UN-USED CABLE ENTRY PORTS (WHERE APPLICABLE).
 - MOUNT & GROUND ALL NEW EQUIPMENT IN ACCORDANCE WITH NEC (NFPA-70), NESC AND MANUFACTURERS SPECIFICATION.
 - SECURE ALL NEW ANTENNA CABLES PER MANUFACTURER RECOMMENDATIONS.
 - BOND NEW ANTENNA MOUNTING PIPES TO ANTENNA SECTOR GROUND BAR W/ # 2 AWG. BOW. (WHERE APPLICABLE).
 - CONTRACTOR SHALL INSTALL NEW SIDE-BY-SIDE & DUAL-MOUNT BRACKETS PER ANTENNA MOUNT MANUFACTURER RECOMMENDATIONS, INCLUDING VERIFICATION OF MINIMUM PIPE MAST DIAMETER REQUIRED TO INSTALL NEW MOUNT BRACKETS. UNLESS NOTED OTHERWISE, CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD SHOULD EXIST. PIPE MASTS REQUIRE REPLACEMENT TO SUPPORT THE NEW MOUNT BRACKETS.
 - ANTENNA CONFIGURATIONS SHOWN HEREIN ARE FRONT ELEVATIONS.
 - ANTENNA SPACING DIMENSIONS ARE TO THE CENTER OF THE EXIST. ANTENNA AND NEW ANTENNA FACE.
 - REFER TO THE FINAL RFDS PROVIDED BY VERIZON FOR THE LATEST INFORMATION REGARDING EQUIPMENT MODELS, REQUIRED CABLES & DOWN-TILT INFORMATION.
 - APPLY 3M FILM OVER ALL EXPOSED MMWAVE ANTENNAS COLOR TO MATCH EXIST. STRUCTURE (WHERE APPLICABLE) COORDINATE WITH VERIZON CONSTRUCTION MANAGER AND LL.
 - PAINT ALL NEW NON SAMSUNG MT6407-77A ANTENNAS & APPURTENANCES TO MATCH EXIST. STRUCTURE (WHERE APPLICABLE) COORDINATE W/ VERIZON CONSTRUCTION MANAGER & BUILDING OWNER.



Cellco Partnership d/b/a

verizon

20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

ALL-POINTS TECHNOLOGY CORPORATION

567 VAUXHALL STREET EXTENSION, SUITE 311
WATERFORD, CT 06385
PHONE: (860) 663-1687
WWW.ALLPOINTSTECH.COM FAX: (860) 663-0935

CONSTRUCTION DOCUMENTS

NO	DATE	REVISION
0	04/22/21	FOR REVIEW - JRM
1	06/18/21	REV. FOR FILING - JRM
2	07/08/21	REV. FOR FILING - JRM
3		
4		
5		
6		

DESIGN PROFESSIONALS OF RECORD

PROF. MICHAEL S. TRODDEN P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION, P.C.
ADDR: 567 VAUXHALL STREET EXT. SUITE 311
WATERFORD, CT 06385

OWNER: VERIZON WIRELESS, P.O. BOX 2549
ADDRESS: ADDISON, TX 75001

COVENTRY EAST CT

SITE: 1712 MAIN STREET
ADDRESS: COVENTRY, CT 06238

APT FILING NUMBER: CT141-12670

DATE: 04/22/21
DRAWN BY: JRM
CHECKED BY: DRA

VZ PROJECT CODE: 20212221166

VZ LOCATION CODE: 468160

VZ FUZE ID: 162721141

COMPOUND PLAN, SOUTH TOWER ELEVATION, EQUIP. CONFIGURATION PLANS & ELEVATIONS

SHEET NUMBER: **C-1**

- GENERAL ABBREVIATION LIST:**
- ABP ABOVE BASE PLATE
 - AGL ABOVE GROUND LEVEL
 - AMSL ABOVE MEAN SEA LEVEL
 - AWS ADVANCED WIRELESS SERVICE
 - HDG HOT DIP GALVANIZED
 - OVP OVER VOLTAGE PROTECTION
 - RRH REMOTE RADIO HEAD
 - V.I.F. VERIFY IN FIELD
 - W.P. WORK POINT
 - A.F.R. ABOVE FINISH ROOF

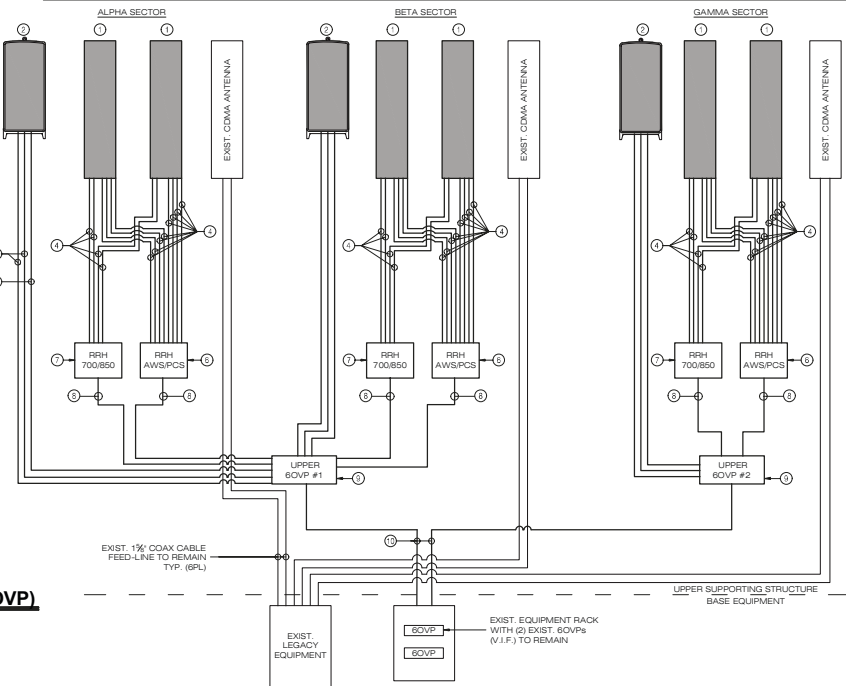
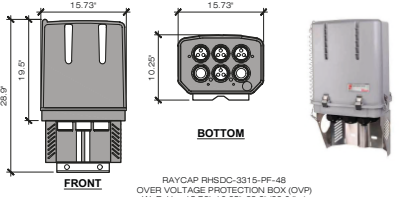
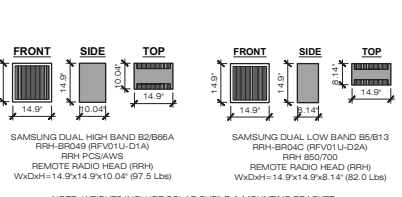
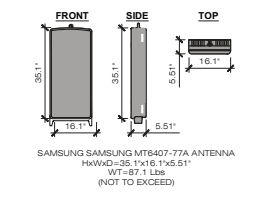
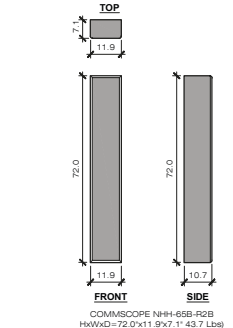
- SCOPE OF WORK (ALL SECTORS)**
- EXIST. ANTENNA (TO BE REPLACED) MODEL: ANDREW HBXX-65170S-A2M
 - EXIST. ANTENNA (TO BE REPLACED) MODEL: ANDREW LHX-6514DS-A1M
 - EXIST. ANTENNA (TO BE REMOVED) MODEL: ANDREW LHX-6514DS-A1M
 - EXIST. RRHs (TO BE REMOVED FROM WITHIN EXIST. EQUIP. SHELTER) MODEL: NOKIA B13 2x40W LTE RRH
 - EXIST. RRH (TO BE REPLACED) MODEL: NOKIA B1 RH4 2x40W AWS
 - EXIST. 6 OVP (TO BE REPLACED) (BETA & GAMMA) MODEL: RAYCAP RWD-3315-PF-48
 - EXIST. 6 OVP (ALPHA & BETA) MODEL: RAYCAP RWD-3315-PF-48
 - NEW DUAL BAND RRH MODEL: SAMSUNG B13/B5 RH1-BR04C (RFV1U-02A)
 - NEW ANTENNA MODEL: SAMSUNG MT6407-77A
 - NEW ANTENNA MOUNTED VIA NEW SIDE BY SIDE MOUNT BRACKETS (COMMSCOPE BSAMNT-SBS-1-2) MODEL: COMMSCOPE N4H-658-R28
 - NEW DUAL BAND RRH MODEL: SAMSUNG B66/B2A RH1-BR049 (RFV1U-01A)

EQUIPMENT DATA									
EQUIPMENT SPECIFICATIONS									
SECTOR	ANTENNA MAKE/MODEL	QTY	AZIMUTH	EQUIPMENT STATUS	HEIGHT (ft)	WIDTH (ft)	DEPTH (ft)	WEIGHT (LBS)	
ALPHA	SAMSUNG MT6407-77A	1	40°	NEW	35.1 ⁽¹⁾	16.1 ⁽²⁾	5.5 ⁽³⁾	87.1 ⁽⁴⁾	
	700/850/1900/2100: COMMSCOPE NHH-65B-R2B	1	40°	NEW	72.0	11.9	7.1	43.7 ⁽⁵⁾	
	700/850/1900/2100: COMMSCOPE NHH-65B-R2B	1	40°	NEW	72.0	11.9	7.1	43.7 ⁽⁵⁾	
BETA	850: ANDREW LNK-6514DS-A1M	1	40°	ETR	72.7	11.9	7.1	38.4 ⁽⁵⁾	
	SAMSUNG MT6407-77A	1	150°	NEW	35.1 ⁽¹⁾	16.1 ⁽²⁾	5.5 ⁽³⁾	87.1 ⁽⁴⁾	
	700/850/1900/2100: COMMSCOPE NHH-65B-R2B	1	150°	NEW	72.0	11.9	7.1	43.7 ⁽⁵⁾	
GAMMA	700/850/1900/2100: COMMSCOPE NHH-65B-R2B	1	150°	NEW	72.0	11.9	7.1	43.7 ⁽⁵⁾	
	850: ANDREW LNK-6514DS-A1M	1	150°	ETR	72.7	11.9	7.1	38.4 ⁽⁵⁾	
	SAMSUNG MT6407-77A	1	270°	NEW	35.1 ⁽¹⁾	16.1 ⁽²⁾	5.5 ⁽³⁾	87.1 ⁽⁴⁾	
APPURTENANCE MAKE/MODEL	700/850/1900/2100: COMMSCOPE NHH-65B-R2B	1	270°	NEW	72.0	11.9	7.1	43.7 ⁽⁵⁾	
	700/850/1900/2100: COMMSCOPE NHH-65B-R2B	1	270°	NEW	72.0	11.9	7.1	43.7 ⁽⁵⁾	
	850: ANDREW LNK-6514DS-A1M	1	270°	ETR	72.7	11.9	7.1	38.4 ⁽⁵⁾	
	SAMSUNG B2/B66A RRH-BR049 (RFV01U-D1A)	3	-	NEW	14.9	14.9	10.04	97.5	
SAMSUNG B5/B13 RRH-BR04C (RFV01U-D2A)	3	-	NEW	14.9	14.9	8.14	82.0		
RAYCAP RHSDC-3315-PF-48	2	-	NEW	15.73	10.25	28.9	32.0		

- (1) ETR DENOTES EXIST TO REMAIN.
(2) WEIGHT WITHOUT MOUNTING BRACKET.
(3) ANTENNA DATA BASED ON RFDS DATED 10/20/20
(4) EQUIPMENT CONFIGURATION INDICATED ABOVE VIEWED FROM THE FRONT.
(5) NOT TO EXCEED

BILL OF MATERIALS				COMMENTS
	QUANTITY	LENGTH		
①	6		(COMMSCOPE NHH-65B-R2B) MOUNTED TO EXIST. PIPE MAST VIA NEW SBS MOUNT (COMMSCOPE BSAMNT-SBS-1-2)	
②	3		SAMSUNG MT6407-77A	MOUNTED ON EXIST. PIPE MAST
③	36	15 FT	1/2" JUMPER CABLE	ROUTE FROM RRH TO ANTENNAS
④	6	15 M	ANTENNA LINK CABLES	ROUTE FROM UPPER OVP TO ANTENNAS
⑤	3	15 M	ANTENNA POWER CABLES	PROPRIETARY POWER CABLE FROM UPPER OVP TO ANTENNAS
⑥	3		AWS/PCS RRH	SAMSUNG B2/B66 RRH-BR049 (RFV01U-D1A) MOUNTED TO EXIST. PIPE MAST
⑦	3		700/850 RRH	SAMSUNG B5/B13 RRH-BR04C (RFV01U-D2A) MOUNTED TO EXIST. PIPE MAST
⑧	6	15M	RRH CABLES	PROPRIETARY POWER & FIBER CABLES
⑨	2		UPPER GOVP	(RAYCAP RHSDC-3315-PF-48)
⑩	2	190± FT	HYBRID CABLES	6x12 LOW INDUCTANCE HYBRID CABLE

- NOTES:
1. INFORMATION SHOWN HEREON IS FOR USE BY VERIZON EQUIPMENT OPERATIONS.
2. INFORMATION IS BASED ON RFDS DATED 10/20/20.
3. * DENOTES EQUIPMENT DESIGNATED FOR LEASING ONLY (WHERE APPLICABLE).
4. INSTALL ALARM BOARDS AT ALL OVPS WHERE REQUIRED. COORDINATE w/ VERIZON EQUIPMENT ENGINEERING.
5. INSTALL UP-CONVERTERS LOCATED AT BASE OVPS WHERE REQUIRED. COORDINATE w/ VERIZON EQUIPMENT ENGINEERING AS NECESSARY.
6. COORDINATE ANTENNA CABLING REQUIREMENTS WITH VERIZON ENGINEERING.
7. CONTRACTOR SHALL INSTALL NEW SIDE-BY-SIDE & DUAL-MOUNT BRACKETS PER ANTENNA MOUNT MANUFACTURER RECOMMENDATIONS, INCLUDING VERIFICATION OF MINIMUM PIPE MAST DIAMETER REQUIRED TO INSTALL NEW MOUNT BRACKETS. UNLESS NOTED OTHERWISE, CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD SHOULD EXIST. PIPE MAST REQUIRE REPLACEMENT TO SUPPORT THE NEW MOUNT BRACKETS.



NOTE: EQUIPMENT CONFIGURATION AS VIEWED FROM BEHIND



CONSTRUCTION DOCUMENTS		
NO	DATE	REVISION
0	04/22/21	FOR REVIEW: JRM
1	06/18/21	REV. FOR FILING: JRM
2	07/09/21	REV. FOR FILING: JRM
3		
4		
5		
6		



DESIGN PROFESSIONALS OF RECORD
PROF. MICHAEL S. TRODDEN P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION, P.C.
ADD: 567 VAUXHALL STREET EXT. SUITE 311 WATERFORD, CT 06385
OWNER: VERIZON WIRELESS, P O BOX 2549 ADDISON, TX 75001

COVENTRY EAST CT
SITE: 1712 MAIN STREET ADDRESS: COVENTRY, CT 06239
APT FILING NUMBER: CT141-12670
DATE: 04/22/21 CHECKED BY: JRM
VZ PROJECT CODE: 20212221166
VZ LOCATION CODE: 468160
VZ FUZE ID: 162721141

SHEET TITLE:
RF BILL OF MATERIALS, MECHANICAL SPECIFICATIONS & EQUIPMENT DETAILS

SHEET NUMBER:
B-1

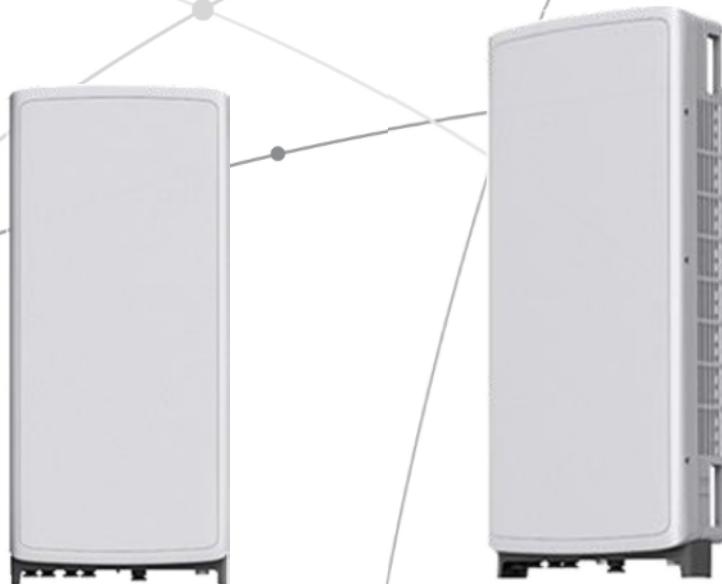
SAMSUNG

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



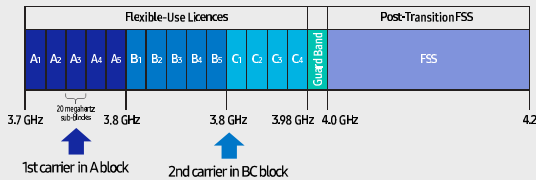
Points of Differentiation

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

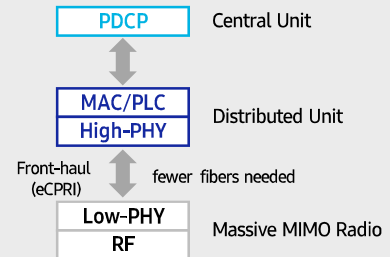
C-Band spectrum supported by Massive MIMO Radio



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.

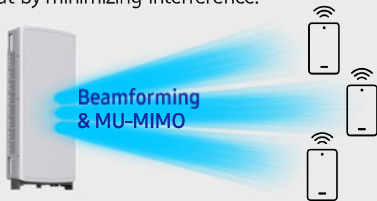


Enhanced Performance

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.

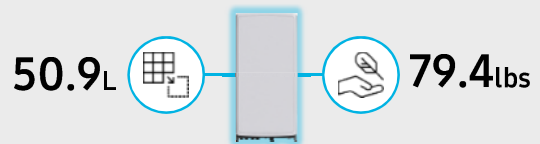
Furthermore, as C-Band massive MIMO Radio supports MU-MIMO (Multi-user MIMO), it enables to increase user throughput by minimizing interference.



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

The Samsung logo is positioned in the top right corner. The background features several thin, light gray lines that curve and intersect across the page, creating a dynamic, abstract pattern. Some lines are straight, while others are curved, and they vary in thickness. There are also small gray dots scattered across the page, some of which appear to be at the intersections of the lines.

SAMSUNG

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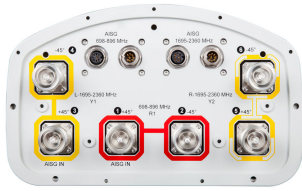
Samsung inspires the world and shapes the future with transformative ideas and technologies. The company is redefining the worlds of TVs, smartphones, wearable devices, tablets, digital appliances, network systems, and memory, system LSI, foundry and LED solutions.

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NHH-65B-R2B



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

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

General Specifications

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

Remote Electrical Tilt (RET) Information, General

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

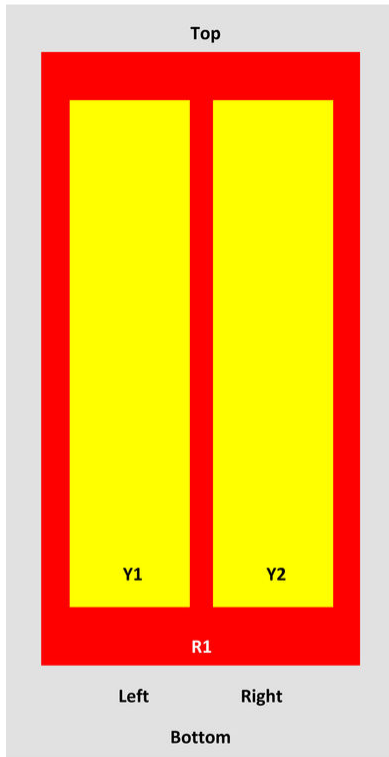
Dimensions

Width	301 mm 11.85 in
Length	1828 mm 71.969 in
Depth	180 mm 7.087 in

Array Layout

NHH-65B-R2B

NHH



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	698-896	1-2	1	ANXXXXXXXXXXXXXXXXX1
Y1	1695-2360	3-4	2	ANXXXXXXXXXXXXXXXXX2
Y2	1695-2360	5-6		

View from the front of the antenna
(Sizes of colored boxes are not true depictions of array sizes)

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2360 MHz 698 – 896 MHz
Total Input Power, maximum	900 W @ 50 °C

Remote Electrical Tilt (RET) Information, Electrical

Protocol	3GPP/AISG 2.0 (Single RET)
Power Consumption, idle state, maximum	2 W
Power Consumption, normal conditions, maximum	13 W
Input Voltage	10–30 Vdc
Internal Bias Tee	Port 1 Port 3
Internal RET	High band (1) Low band (1)

NHH-65B-R2B

Electrical Specifications

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

Electrical Specifications, BASTA

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

Material Specifications

Radiator Material

Low loss circuit board

NHH-65B-R2B

Reflector Material Aluminum

Mechanical Specifications

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

Packaging and Weights

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

Regulatory Compliance/Certifications

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



Included Products

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

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

SAMSUNG

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

ATTACHMENT 3

	General	Power	Density					
Site Name: Coventry E								
Tower Height: Verizon @ 150ft								
CARRIER	# OF CHAN.	WATTS ERP	HEIGHT	CALC. POWER DENS	FREQ.	MAX. PERMISS. EXP.	FRACTION MPE	Total
*Sprint	1	377	180	850	0.0045	0.5667	0.08%	
*Sprint	2	942	180	850	0.0224	0.5667	0.39%	
*Sprint	5	512	180	1900	0.0304	1.0000	0.30%	
*Sprint	2	1280	180	1900	0.0304	1.0000	0.30%	
*Sprint	8	778	180	2500	0.0739	1.0000	0.74%	
*Unknown	1	80	190	75.98	0.0008	0.2000	0.04%	
*Unknown	1	1000	190	449.875	0.0106	0.2999	0.35%	
*Unknown	1	200	190	33.8	0.0021	0.2000	0.11%	
*Unknown	1	750	160	450	0.0114	0.3000	0.38%	
*Unknown	1	600	160	450	0.0091	0.3000	0.30%	
*Unknown	1	100	160	450	0.0015	0.3000	0.05%	
*Unknown	1	30	140	145.63	0.0006	0.2000	0.03%	
*Unknown	1	15	140	440.925	0.0003	0.2940	0.01%	
*Unknown	1	8	140	173.20375	0.0002	0.2000	0.01%	
*Unknown	1	30	190	50.4	0.0003	0.2000	0.02%	
*Unknown	1	2	120	420.5	0.0001	0.2803	0.00%	
*Unknown	1	250	190	152.0075	0.0027	0.2000	0.13%	
*Unknown	1	4	188	903	0.0000	0.6020	0.00%	
*Unknown	1	40	95	33.44	0.0018	0.2000	0.09%	
*Unknown	1	80	75	45.4	0.0060	0.2000	0.30%	
*Unknown	1	80	95	45.14	0.0036	0.2000	0.18%	
*Unknown	1	200	75	33.8	0.0151	0.2000	0.76%	
*Unknown	1	100	120	153.955	0.0028	0.2000	0.14%	
*Unknown	1	4	188	903	0.0000	0.6020	0.00%	
*Unknown	1	80	110	45.14	0.0027	0.2000	0.13%	
*Unknown	1	50	115	47.54	0.0015	0.2000	0.08%	
*Pocket (now MetroPCS)	3	631	95	2130	0.0859	1.0000	0.86%	
VZW 700	4	689	150	0.0044	751	0.5007	0.88%	
VZW CDMA	2	467	150	0.0015	877.26	0.5848	0.26%	
VZW Cellular	4	699	150	0.0045	874	0.5857	0.77%	
VZW PCS	4	1496	150	0.0096	1975	1.0000	0.96%	
VZW AWS	4	1671	150	0.0107	2120	1.0000	1.07%	
VZW CBAND	4	6531	150	0.0418	3730.08	1.0000	4.18%	
								13.90%
* Source: Siting Council								

ATTACHMENT 4



CONDITION ASSESSMENT & STRUCTURAL ANALYSIS REPORT
FOR A PROPOSED ANTENNA & APPURTENANCE
INSTALLATION ON AN EXISTING 190-ft SELF-SUPPORTING TOWER
COVENTRY, CONNECTICUT

Prepared for
Verizon Wireless

Verizon Wireless Site Ref:
468160 Coventry East CT

Site Address: Coventry Town Hall, 1712 Main Street, Coventry, CT 06238
APT Filing No. CT141_12070

Rev. 0: June 18, 2021

Rev. 1: July 9, 2021



CONDITION ASSESSMENT & STRUCTURAL ANALYSIS REPORT
190' SELF-SUPPORTING TOWER
COVENTRY, CONNECTICUT
prepared for
Verizon Wireless

EXECUTIVE SUMMARY:

All-Points Technology Corporation, P.C. (APT) performed a condition assessment and structural evaluation of an existing 190-ft self-supporting lattice tower structure to support a proposed Verizon Wireless equipment modification.

The proposed Verizon Wireless antenna and appurtenance modification consists of the replacement of nine existing panel antennas with nine new panel antennas, replacement of their three existing remote radio heads (RRHs) with six new RRHs and replacement of two existing 6-OVPs with two new 6-OVPs. Equipment will be installed on three existing 15' sector mounts at 150' which will be receiving modifications. Equipment will be fed by six 1-5/8" feed lines and two new 6x12 low inductance hybrid lines as detailed below.

Our analysis indicates that the subject tower structure meets the requirements of the 2018 Connecticut State Building Code, International Building Code 2015 (IBC 2015) and TIA-222-G standard with the existing and proposed equipment loading.

Evaluation of the existing foundation was limited to a global stability check of the structure and was based on dimensions included within ROHN foundation drawings. APT found the foundation to be adequately sized for the existing and proposed loading.

While on-site, **APT noticed the 15' single dipole at 50' is hanging from tower and also noticed a loose ground lug on leg A at 177'**. We recommend the dipole be properly connected to the tower and the loose ground lug nut be replaced completely and not simply tightened.

INTRODUCTION:

A condition assessment and structural analysis was performed on the above-mentioned communications tower by APT for Verizon Wireless. The subject tower is located at 1712 Main Street at the Town Hall in Coventry, Connecticut.

The following information was utilized in the preparation of this analysis:

- Field notes & photos from APT's site visit on February 25, 2021.
- ROHN tower and foundation drawings, drawing #A926578 dated July 25, 1996.
- Structural Analysis by APT, project #CT141370 dated March 4, 2004.
- Structural Opinion Letter by APT, project #CT141370 dated June 3, 2004.
- Structural Analysis by Centek Engineering, project #11001.CO46 dated September 8, 2011.
- Radio Frequency Emissions Analysis by EBI Consulting, project #6218004561 dated June 20, 2018.
- Mount Analysis by Maser Consulting, project #17924002A dated July 23, 2018.
- RFDS detailing VzW's proposed equipment changes dated October 20, 2020.
- Construction Drawings by APT, project #141_12070, Revision 2 dated July 9, 2021.
- Antenna Mount Analysis Report by Maser Consulting, project #21777167A dated May 6, 2021.
- Post-Mod Antenna Mount Analysis Report and PMI Requirements by Maser Consulting, project #21777167A dated June 16, 2021.
- Mount Modification Drawings by Maser Consulting, project #21777167A Rev. 0 dated June 16, 2021.

The structure is a 190-foot, galvanized steel, self-supporting Model SSV tower manufactured by ROHN. It is a three-legged structure with tubular steel legs and angle steel X-bracing.

The analysis was conducted using the following equipment inventory (proposed equipment shown in **bold text**):

Carrier	Antenna and Appurtenance Make/Model	Elevation (AGL)	Status	Mount Type	Coax/Feed-Line
	(2) Obstruction Lights	192'	E	Leg	1/2"
	PD1142-3 Omni Whip	192'	E	Pipe extension	1-1/4"
	(2) ASP705 20' Omni Whip	192'	E	Pipe extension	(2) 7/8"
	Halo	192'	E	Pipe extension on standoff below	1/2"
	DB420, 1' Square Panel	192'	E	Pipe extension on Leg	1-1/4"
	Ground Plane Omni	190'	E	Leg	7/8"
	(2) 3' Yagi	190'	E	Pipe extension	(2) 1/2"
	4' Omni Whip	190'	E	4' standoff	3/8"
	Paraflector Grid	187'	E	4' standoff	7/8"
	PD1142-2A Omni Whip	187'	E	4' standoff	1/2"
Sprint	(3) TD-RRH8x20-25 RRHs (3) RFS APXVTM14-ALU-1120 & (3) Andrew NNVV-65B-R4 panels, (3) RRH4x45 1900 MHz RRHs, (6) RRH2x50 800 MHz RRHs,	183' 180'	E	(3) 14' sector mounts w/ kicker kit	(6) 1-5/8", 1-1/4"
	DB420	162'	E	4' sidearm	7/8"
	(2) ASP705 20' Omni Whips, 2' Microwave Dish	156'	E	(2) 4' sidearm	(2) 7/8", 7/8", 1/4"
Verizon Wireless	(3) Samsung MT6407-077A antennas, (3) Andrew LNX-6514DS-A1M & (6) Commscope NHH-65B-R2B panels, (3) Samsung RFV01U-D1A RRHs, (3) Samsung RFV01U-D2A RRHs, (2) Raycap RHSDC-3315-PF-48 6-OVP	150'	P E P P P P	(3) 15' T-Frame sector mounts w/ (3) SFK3 reinforcement kits	(6) 1-5/8", (2) 6x12 LI hybrid
	Paraflector	144'	E	Leg	7/8"
	3' Yagi 20' (DB436) Omni Whip, DB230-2A 4-bay Dipole, 4' Yagi	142'	E	(3) 4' sidearm	1/2", 7/8", 7/8", 1/2"
	Paraflector	140'	E	Leg	3/8"
	Single Dipole	136'	E	Leg	1/2"
	Dipole	113'	E	4' sidearm	1/2"
	14' Omni Whip	109'	E	4' sidearm	7/8"
	14' Omni Whip	103'	E	4' sidearm	7/8"
	GPS	102'	E	1' standoff plate	1/2"
	DB212 Single Dipole	94'	E	Leg	1/2"
	(2) 8" x 3" x 1-1/2" Panels	92'	E	On bracing	7/8", 1/4"
	16' Omni Whip	84'	E	4' sidearm	7/8"
	16' Omni Whip	74'	E	6' sidearm	7/8"
	PD320 Single Dipole	74'	E	Leg	1/2"
	Large Single Dipole	70'	E	Leg	1/2"
	3' Omni Whip	60'	E	2' standoff	1/2"
	DB212 Single Dipole (hanging)	50'	E	Leg	1/2"
	Large Single Dipole	50'	E	Leg	1/2"
	Large Single Dipole	32'	E	Leg	1/2"
	Large Single Dipole	31'	E	Leg	1/2"
	PD400 12' Omni Whip, 6' Yagi	17'	E	4' sidearm	(2) 1/2"

Notes:

1. E = Existing; P = Proposed.
2. Currently installed – six LNX-6514DS-A1M & six HBXX-6517DS-A2M panel antennas, three RRH2x60-AWS RRHs, and two 6-OVPs.

CONDITION ASSESSMENT:

General Observations: The tower, a galvanized steel structure, appeared to be in sound condition. No signs of movement or overstress of the tower were observed. **APT noticed a loose ground lug on leg A at 177'.**

Legs: Leg members appeared to be in sound condition.

Bracing: Bracing and connections were visually observed to the maximum extent practicable. All braces and connections that were observed appeared to be sound, with no loose or missing bolts noted.

Antenna Connections: Antenna mounting hardware was in good condition, with galvanized mounts and hardware prevalent. **APT noticed the 15' single dipole at 50' is hanging from tower.**

Splice Connections: Observed splice bolts and connections were in good condition. No loose or missing bolts or nuts were observed.

Base Foundations: Visible concrete appeared to be in good condition, with no signs of movement or overstress noted.

STRUCTURAL ANALYSIS:

Methodology:

This structural analysis has been prepared in accordance with the ANSI TIA-222-G standard entitled “Structural Standards for Steel Antenna Towers and Antenna Supporting Structures,” the American Institute of Steel Construction (AISC) Manual of Steel Construction, the 2018 Connecticut State Building Code and IBC 2015.

Antenna, appurtenance and mount assembly loads were evaluated utilizing the ANSI TIA-222-G standard.

- o Load Case 1: 130 mph (3-second gust), 0” ice
- o Load Case 2: 50mph (3-second gust) w/ 1.00” ice thickness
- o Load Case 3: 60mph (3-second gust) (Service Load)
- o Structure Class II
- o Exposure Category B
- o Topographic Category 1.

Note:

Based upon IBC 2015/2018 Connecticut State Building Code maximum ultimate wind speed for site location of 130 mph (3-sec gust), equivalent to a nominal design speed of 101 mph (3-sec gust) per exception #5, Section 1609.1.1.

ANALYSIS RESULTS:

The analysis was conducted in accordance with the criteria outlined above with the aforementioned existing and proposed equipment loading. The following table summarizes the results of the analysis:

Elevation	Legs ¹	Bracing ²
180'-190'	20%	17%
160'-180'	73%	40%
140'-160'	98%	46%
120'-140'	104% ³	57%
100'-120'	103% ³	71%
80'-100'	97%	67%
60'-80'	100%	80%
40'-60'	67%	60%
20'-40'	93%	63%
0'-20'	94%	83%

Notes:

1. Based on ASTM A572 Gr. 50 pipes. Pipe diameter and thickness vary.
2. Based on ASTM A572 Gr. 50 and ASTM A36 angles. Angle dimensions and thickness vary.
3. Values up to 105% are acceptable according to industry standards.

Splice and Anchor Bolts:

Splice and anchor bolts were evaluated under the proposed loading. All bolts were found to be adequately sized for the proposed loads.

Base Foundation:

Evaluation of the existing base foundation was limited to a global stability check of the structure with the existing and proposed loading. Based on the ROHN foundation drawings provided to APT the existing foundation consists of a 32-ft square x 4.5-ft thick reinforced concrete pad. Subgrade conditions were based on the presumptive soil parameters per TIA-222-G Section 9.3 and Table F-1 (Annex F) & IBC 2015.

The calculated base reactions utilized in the analysis of the foundation system with the existing and proposed loading are as follows:

Load Effect	Calculated Reactions	Usage
Compression	370.5 k	Pass
Uplift	-330.3 k	Pass
Shear	34.8 k	Pass
Overturning Moment	5827 kip-ft	(FS = 1.71 >1.0) Pass

*1 kip = 1,000 lbs

CONCLUSIONS AND RECOMMENDATIONS:

In conclusion, we find that the existing 190-ft tall self-supporting lattice tower structure and corresponding base foundation, located at 1712 Main Street at the Coventry Town Hall in Coventry, Connecticut meets the requirements of the 2018 Connecticut State Building Code, IBC 2015 and TIA-222 Rev-G with Verizon Wireless's proposed equipment changes.

While on-site, **APT noticed the 15' single dipole at 50' is hanging from tower and also noticed a loose ground lug on leg A at 177'**. We recommend the dipole be properly connected to the tower and the loose ground lug nut be replaced completely and not simply tightened.

Structural Analysis – Antenna & Appurtenance Installation
Verizon Wireless Site #468160; Coventry East CT
1712 Main Street
Coventry, CT 06328

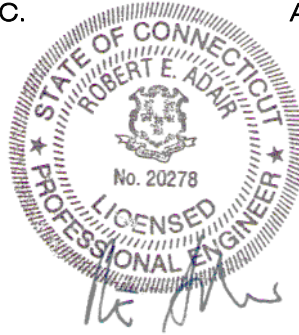
July 9, 2021
Page 5
APT Project #CT141_12070

Sincerely,
All-Points Technology Corporation, P.C.

Prepared By:
All-Points Technology Corporation, P.C.



Robert E. Adair, P.E.
Principal



Michael T. Larson, P.E.
Project Engineer

LIMITATIONS:

This report is based on the following:

1. Tower/structure is properly installed and maintained.
2. All members and components are in a non-deteriorated condition.
3. All required members are in place.
4. All bolts are in place and are properly tightened.
5. Tower/structure is in plumb condition.
6. All tower members were properly designed, detailed, fabricated, and installed and have been properly maintained since erection.

All-Points Technology Corporation, P.C. (APT) is not responsible for any modifications completed prior to or hereafter which APT is not or was not directly involved. Modifications include but are not limited to:

1. Replacing or reinforcing bracing members.
2. Reinforcing members in any manner.
3. Installing antenna mounts or waveguide cables.
4. Adding or relocating antennas.
5. Extending tower/structure.

APT hereby states that this document represents the entire report and that it assumes no liability for any factual changes that may occur after the date of this report. All representations, recommendations, and conclusions are based upon the information contained and set forth herein. If you are aware of any information which is contrary to that which is contained herein, or you are aware of any defects arising from the original design, material, fabrication and erection deficiencies, you should disregard this report and immediately contact APT. APT disclaims all liability for any representation, recommendation, or conclusion not expressly stated herein.

Appendix A

Tower Schematic

DESIGNED APPURTENANCE LOADING

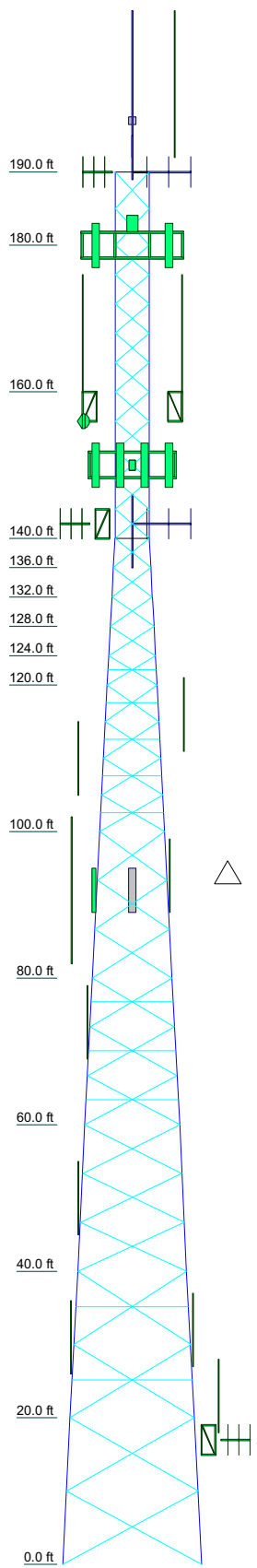
TYPE	ELEVATION	TYPE	ELEVATION
Obstruction light	190	RFV01U-D2A (Verizon Wireless)	150
Obstruction light	190	RFV01U-D2A (Verizon Wireless)	150
PD1142-3	190	RFV01U-D2A (Verizon Wireless)	150
20' x 3" omni whip	190	Raycap RHSDC-3315-PF-48 D-Box (Verizon Wireless)	150
20' x 3" omni whip	190	Raycap RHSDC-3315-PF-48 D-Box (Verizon Wireless)	150
Halo	190	Raycap RHSDC-3315-PF-48 D-Box (Verizon Wireless)	150
DB420	190	Pirot 15' T-Frame Sector Mount (1) (Verizon Wireless)	150
1' square panel	190	Pirot 15' T-Frame Sector Mount (1) (Verizon Wireless)	150
3' Yagi	190	Pirot 15' T-Frame Sector Mount (1) (Verizon Wireless)	150
3' Yagi	190	Pirot 15' T-Frame Sector Mount (1) (Verizon Wireless)	150
Ground plane omni	190	Pirot 15' T-Frame Sector Mount (1) (Verizon Wireless)	150
4' x 1" omni whip	190	Pirot 15' T-Frame Sector Mount (1) (Verizon Wireless)	150
Pirot 4' Side Mount Standoff (1)	188	SitePro1 SFK Reinf Kit (Verizon Wireless)	150
Pirot 4' Side Mount Standoff (1)	188	SitePro1 SFK Reinf Kit (Verizon Wireless)	150
Pirot 4' Side Mount Standoff (1)	188	SitePro1 SFK Reinf Kit (Verizon Wireless)	150
paraflector grid	187	SitePro1 SFK Reinf Kit (Verizon Wireless)	150
PD1142-30	187	SitePro1 SFK Reinf Kit (Verizon Wireless)	150
TD-RRH8x20-25 (Sprint)	183	MT6407-77A (Verizon Wireless)	150
TD-RRH8x20-25 (Sprint)	183	10' single dipole	146 - 136
TD-RRH8x20-25 (Sprint)	183	Paraflector	144
NNVV-65B-R4 (Sprint)	180	Pirot 4' Side Mount Standoff (1)	142
NNVV-65B-R4 (Sprint)	180	3' Yagi	142
NNVV-65B-R4 (Sprint)	180	4' yagi	142
ALU 4x45-1900 MHz RRHs (Sprint)	180	Pirot 4' Side Mount Standoff (1)	142
ALU 4x45-1900 MHz RRHs (Sprint)	180	DB230-2A	142
ALU 4x45-1900 MHz RRHs (Sprint)	180	Pirot 4' Side Mount Standoff (1)	142
(2) ALU 2x50-800 MHz RRHs (Sprint)	180	20' x 3" omni whip	142
(2) ALU 2x50-800 MHz RRHs (Sprint)	180	Paraflector	140
(2) ALU 2x50-800 MHz RRHs (Sprint)	180	14' x 3" omni whip	123 - 109
APXVTM14-ALU-120 (Sprint)	180	10' 2-bay dipole	123 - 113
APXVTM14-ALU-120 (Sprint)	180	14' x 3" omni whip	117 - 103
APXVTM14-ALU-120 (Sprint)	180	Pirot 4' Side Mount Standoff (1)	113
14' sector mount (Sprint)	180	Pirot 4' Side Mount Standoff (1)	109
Kicker kit (Sprint)	180	Pirot 4' Side Mount Standoff (1)	103
14' sector mount (Sprint)	180	1.5' x 1-1/2" standoff	102
Kicker kit (Sprint)	180	GPS on 3' standoff	102
14' sector mount (Sprint)	180	16' x 3" omni whip	100 - 84
Kicker kit (Sprint)	180	DB212-1	94
20' x 3" omni whip	176 - 156	8" x 3" X 1.5" panel	92
20' x 3" omni whip	176 - 156	8" x 3" X 1.5" panel	92
DB420	172 - 162	16' x 3" omni whip	90 - 74
4' sidearm	162	Large single dipole	85 - 70
Pirot 4' Side Mount Standoff (1)	156	4' sidearm	84
Pirot 4' Side Mount Standoff (1)	156	6' sidearm	74
2' dish with radome	156	PD320	74
MT6407-77A (Verizon Wireless)	150	3' x 2" omni whip	63 - 60
MT6407-77A (Verizon Wireless)	150	2' standoff	60
LNX-6514DS-A1M (Verizon Wireless)	150	Large single dipole (hanging)	50
LNX-6514DS-A1M (Verizon Wireless)	150	DB212-1	50
LNX-6514DS-A1M (Verizon Wireless)	150	Large single dipole	32
(2) NHH-65B-R2B (Verizon Wireless)	150	Large single dipole	31
(2) NHH-65B-R2B (Verizon Wireless)	150	PD400	29 - 17
(2) NHH-65B-R2B (Verizon Wireless)	150	6' Yagi	17
RFV01U-D1A (Verizon Wireless)	150	Pirot 4' Side Mount Standoff (1)	17
RFV01U-D1A (Verizon Wireless)	150		
RFV01U-D1A (Verizon Wireless)	150		

SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	ROHN 2 STD	C	L2x2x3/16
B	6" EHS w/ HSS7.625x0.375		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-50	50 ksi	65 ksi	A36	36 ksi	58 ksi



Section	T14	T13	T12	T11	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
Legs	ROHN 8 EHS	ROHN 6 EH	B	ROHN 5 EH	ROHN 4 EH	ROHN 3.5 EH	ROHN 3 EH	ROHN 2.5 STD	A					
Leg Grade														
Diagonals	L3 1/2x3 1/2x1/4	L3x3x1/4	L2 1/2x2 1/2x1/4	L2 1/2x2 1/2x3/16	L2x2x3/16	L1 3/4x1 3/4x3/16	L2x2x1/4	L1 3/4x1 3/4x3/16						
Diagonal Grade	A572-50	A572-50												
Top Girts														
Sec. Horizontals	N.A.	L3x3x5/16	N.A.	N.A.	L2x2x1/4	L2x2x1/4	N.A.	N.A.						
Face Width (ft)	16.99	14.85	12.92	10.83	8.83	6.76	5.35	4.128	4.72	4.69				4.65
# Panels @ (ft)	4 @ 10	4 @ 10	9 @ 6.66667	9 @ 6.66667	4 @ 5	4 @ 5	15 @ 4	2 @ 5						316.8
Weight (lb) 20485.5	3408.6	3594.9	3604.0	2675.5	1906.4	1740.8	310.6	243.5	239.2	235.0	285.4	1207.1	737.8	

All-Points Technology Corp.		Job: 190' Self-Supporting Tower	
567 Vauxhall St. Ext. Suite 311		Project: CT141_12070 Coventry East	
Waterford, CT 06385		Client: Verizon Wireless Site: Coventry East	Drawn by: M. Larson
Phone: (860) 663-1697		Code: TIA-222-G	Date: 07/09/21
FAX: (860) 663-0935		Path: Z:\Shared\NH Office\Jobs\2 Verizon\CT141_12070 Coventry East\CT141_12070 Coventry East.dwg	Scale: NTS
			Dwg No. E-1

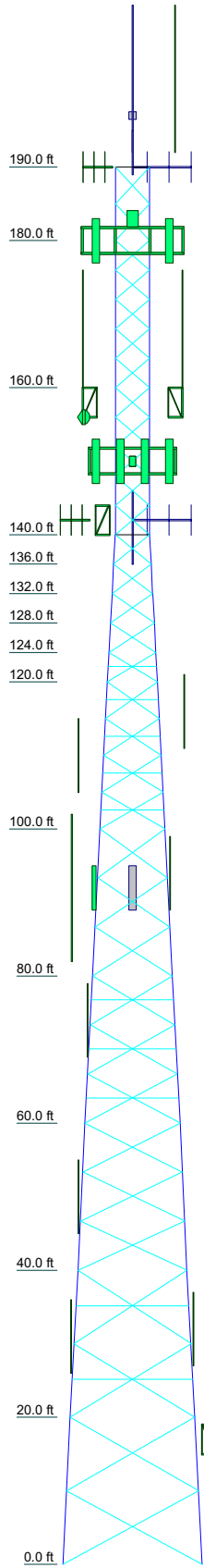
SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	ROHN 2 STD	C	L2x2x3/16
B	6" EHS w/ HSS7.625x0.375		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-50	50 ksi	65 ksi	A36	36 ksi	58 ksi

Section	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13	T14
Legs		ROHN 2.5 STD	ROHN 3 EH	ROHN 3.5 EH	ROHN 4 EH	ROHN 4 EH	ROHN 5 EH	ROHN 5 EH	ROHN 6 EH	ROHN 6 EH	ROHN 8 EHS			
Leg Grade										A572-50				
Diagonals		L1 3/4x1 3/4x3/16	L2x2x1/4	L1 3/4x1 3/4x3/16	L2x2x3/16	L2 1/2x2 1/2x1/4	L2 1/2x2 1/2x3/16	L2 1/2x2 1/2x3/16	L3x3x1/4	L3 1/2x3 1/2x1/4	L3x3x5/16	L3x3x1/4	L3x3x1/4	L3 1/2x3 1/2x1/4
Diagonal Grade				A36						A572-50				
Top Girts					C									
Sec. Horizontals					N.A.									
Face Width (ft)														
# Panels @ (ft)														
Weight (lb) 20485.5														

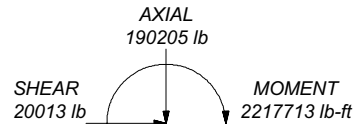


ALL REACTIONS ARE FACTORED

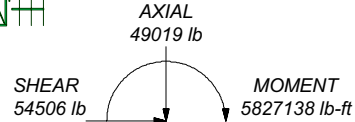
MAX. CORNER REACTIONS AT BASE:

DOWN: 370476 lb
SHEAR: 34767 lb

UPLIFT: -330291 lb
SHEAR: 31481 lb



TORQUE 11628 lb-ft
50 mph WIND - 1.0000 in ICE



TORQUE 31670 lb-ft
REACTIONS - 101 mph WIND

All-Points Technology Corp.
567 Vauxhall St. Ext. Suite 311
Waterford, CT 06385
Phone: (860) 663-1697
FAX: (860) 663-0935

Job: 190' Self-Supporting Tower			
Project: CT141_12070 Coventry East			
Client: Verizon Wireless Site: Coventry East	Drawn by: M. Larson	App'd:	
Code: TIA-222-G	Date: 07/09/21	Scale: NTS	
Path: Z:\Shared\NH Office\Jobs\2 Verizon\CT141_12070 Coventry East\CT141_12070 Coventry East.dwg	Dwg No. E-1		

Appendix B

Photographs

VERIZON WIRELESS
190' SELF-SUPPORTING TOWER
COVENTRY, CONNECTICUT
VzW SITE: 468160; COVENTRY EAST CT



Overview photos of the 190' self-supporting tower located in Coventry, Connecticut.



Photos of typical existing equipment and mounts.

VERIZON WIRELESS
190' SELF-SUPPORTING TOWER
COVENTRY, CONNECTICUT
VzW SITE: 468160; COVENTRY EAST CT



Photos of Verizon Wireless's typical existing equipment and mounts at 150'.



VERIZON WIRELESS
190' SELF-SUPPORTING TOWER
COVENTRY, CONNECTICUT
VZW SITE: 468160; COVENTRY EAST CT



Additional photos of Verizon Wireless's typical existing equipment and mounts at 150'.



VERIZON WIRELESS
190' SELF-SUPPORTING TOWER
COVENTRY, CONNECTICUT
VzW SITE: 468160; COVENTRY EAST CT



Photos of Sprint's typical existing equipment and mounts at 180'.



VERIZON WIRELESS
190' SELF-SUPPORTING TOWER
COVENTRY, CONNECTICUT
VzW SITE: 468160; COVENTRY EAST CT



Photos of typical existing equipment and mounts.



VERIZON WIRELESS
190' SELF-SUPPORTING TOWER
COVENTRY, CONNECTICUT
VzW SITE: 468160; COVENTRY EAST CT



Additional photos of typical existing equipment and mounts.



VERIZON WIRELESS
190' SELF-SUPPORTING TOWER
COVENTRY, CONNECTICUT
VzW SITE: 468160; COVENTRY EAST CT



Additional photos of typical existing equipment and mounts.



VERIZON WIRELESS
190' SELF-SUPPORTING TOWER
COVENTRY, CONNECTICUT
VzW SITE: 468160; COVENTRY EAST CT



Additional photos of typical existing equipment and mounts.



VERIZON WIRELESS
190' SELF-SUPPORTING TOWER
COVENTRY, CONNECTICUT
VzW SITE: 468160; COVENTRY EAST CT



Photos of typical existing base foundations.



VERIZON WIRELESS
190' SELF-SUPPORTING TOWER
COVENTRY, CONNECTICUT
VzW SITE: 468160; COVENTRY EAST CT



Photo of existing step bolts and safety climbing cable.



Photo of existing waveguide ladder.

Appendix C

Calculations

tnxTower All-Points Technology Corp. 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	190' Self-Supporting Tower	Page	1 of 13
	Project	CT141_12070 Coventry East	Date	11:34:01 07/09/21
	Client	Verizon Wireless Site: Coventry East	Designed by	M. Larson

Tower Input Data

The main tower is a 3x free standing tower with an overall height of 190.00 ft above the ground line.

The base of the tower is set at an elevation of 0.00 ft above the ground line.

The face width of the tower is 4.65 ft at the top and 19.00 ft at the base.

This tower is designed using the TIA-222-G standard.

The following design criteria apply:

ASCE 7-10 Wind Data is used (wind speeds converted to nominal values).

Basic wind speed of 101 mph.

Ultimate wind speed of 130e mph.

Structure Class II.

Exposure Category B.

Topographic Category 1.

Crest Height 0.00 ft.

Nominal ice thickness of 1.0000 in.

Ice thickness is considered to increase with height.

Ice density of 56 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 tower member design is 1.

Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
1/2	A	No	No	Ar (CaAa)	190.00 - 8.00	0.0000	-0.06	1	1	0.5800	0.5800		0.25
1 1/4	A	No	No	Ar (CaAa)	190.00 - 8.00	0.0000	-0.05	1	1	0.7500	1.5500		0.66
7/8	B	No	No	Ar (CaAa)	190.00 - 8.00	0.0000	0.025	2	2	1.1100	1.1100		0.54
1/2	A	No	No	Ar (CaAa)	190.00 - 8.00	0.0000	-0.04	1	1	0.5800	0.5800		0.25
1 1/4	C	No	No	Ar (CaAa)	190.00 - 8.00	0.0000	-0.04	1	1	0.7500	1.5500		0.66
7/8	C	No	No	Ar (CaAa)	190.00 - 8.00	0.0000	0.06	1	1	1.1100	1.1100		0.54
1/2	B	No	No	Ar (CaAa)	190.00 - 8.00	0.0000	0.04	2	2	0.5800	0.5800		0.25
3/8	A	No	No	Ar (CaAa)	190.00 - 8.00	0.0000	-0.07	1	1	0.4400	0.4400		0.08
7/8	B	No	No	Ar (CaAa)	187.00 - 8.00	0.0000	0.05	1	1	1.1100	1.1100		0.54
1/2	A	No	No	Ar (CaAa)	187.00 - 8.00	0.0000	-0.02	1	1	0.5800	0.5800		0.25
1 5/8 (Sprint)	A	No	No	Ar (CaAa)	180.00 - 8.00	0.0000	0	2	2	0.5000	1.9800		1.04
1 5/8 (Sprint)	B	No	No	Ar (CaAa)	180.00 - 8.00	0.0000	0	2	2	0.5000	1.9800		1.04
1 5/8	C	No	No	Ar (CaAa)	180.00 - 8.00	0.0000	0	2	2	0.5000	1.9800		1.04

tnxTower

All-Points Technology Corp.
 567 Vauxhall St. Ext. Suite 311
 Waterford, CT 06385
 Phone: (860) 663-1697
 FAX: (860) 663-0935

Job	190' Self-Supporting Tower	Page	2 of 13
Project	CT141_12070 Coventry East	Date	11:34:01 07/09/21
Client	Verizon Wireless Site: Coventry East	Designed by	M. Larson

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
(Sprint) 1 1/4	C	No	No	Ar (CaAa)	8.00 180.00 - 8.00	0.0000	0	1	1	0.7500	1.5500		0.66
(Sprint) 7/8	A	No	No	Ar (CaAa)	8.00 162.00 - 8.00	0.0000	-0.1	1	1	1.1100	1.1100		0.54
7/8	A	No	No	Ar (CaAa)	8.00 156.00 - 8.00	0.0000	0.03	2	2	1.1100	1.1100		0.54
7/8	B	No	No	Ar (CaAa)	8.00 156.00 - 8.00	0.0000	0.05	1	1	1.1100	1.1100		0.54
1/4	B	No	No	Ar (CaAa)	8.00 156.00 - 8.00	0.0000	0.07	1	1	0.2500	0.2500		0.05
1 5/8 (VzW)	A	No	No	Ar (CaAa)	8.00 150.00 - 8.00	0.0000	0.4	6	6	0.5000	1.9800		1.04
6x12 LI hybrid (VzW) 7/8	A	No	No	Ar (CaAa)	8.00 150.00 - 8.00	2.0000	0.38	2	2	0.7500	1.5500		1.88
7/8	B	No	No	Ar (CaAa)	8.00 144.00 - 8.00	0.0000	0.08	1	1	1.1100	1.1100		0.54
7/8	B	No	No	Ar (CaAa)	8.00 142.00 - 8.00	0.0000	0.07	1	1	1.1100	1.1100		0.54
1/2	B	No	No	Ar (CaAa)	8.00 142.00 - 8.00	0.0000	0.06	1	1	0.5800	0.5800		0.25
1/2	C	No	No	Ar (CaAa)	8.00 142.00 - 8.00	0.0000	-0.02	1	1	0.5800	0.5800		0.25
7/8	C	No	No	Ar (CaAa)	8.00 142.00 - 8.00	0.0000	0.03	1	1	1.1100	1.1100		0.54
3/8	B	No	No	Ar (CaAa)	8.00 140.00 - 8.00	0.0000	0.1	1	1	0.4400	0.4400		0.08
1/2	C	No	No	Ar (CaAa)	8.00 136.00 - 8.00	0.0000	0.03	1	1	0.5800	0.5800		0.25
1/2	C	No	No	Ar (CaAa)	8.00 113.00 - 8.00	0.0000	0.02	1	1	0.5800	0.5800		0.25
7/8	B	No	No	Ar (CaAa)	8.00 109.00 - 8.00	0.0000	-0.06	1	1	1.1100	1.1100		0.54
7/8	C	No	No	Ar (CaAa)	8.00 103.00 - 8.00	0.0000	-0.05	1	1	1.1100	1.1100		0.54
1/2	B	No	No	Ar (CaAa)	8.00 102.00 - 8.00	0.0000	-0.02	1	1	0.5800	0.5800		0.25
1/2	A	No	No	Ar (CaAa)	8.00 94.00 - 8.00	0.0000	0.05	1	1	0.5800	0.5800		0.25
7/8	B	No	No	Ar (CaAa)	8.00 92.00 - 8.00	0.0000	0.08	1	1	1.1100	1.1100		0.54
1/4	B	No	No	Ar (CaAa)	8.00 92.00 - 8.00	0.0000	0.09	1	1	0.2500	0.2500		0.05
7/8	C	No	No	Ar (CaAa)	8.00 84.00 - 8.00	0.0000	0.05	1	1	1.1100	1.1100		0.54
7/8	C	No	No	Ar (CaAa)	8.00 74.00 - 8.00	0.0000	-0.07	1	1	1.1100	1.1100		0.54
1/2	C	No	No	Ar (CaAa)	8.00 74.00 - 8.00	0.0000	-0.08	1	1	0.5800	0.5800		0.25
1/2	A	No	No	Ar (CaAa)	8.00 70.00 - 8.00	0.0000	0.06	1	1	0.5800	0.5800		0.25
1/2	A	No	No	Ar (CaAa)	8.00 60.00 - 8.00	0.0000	0.1	1	1	0.5800	0.5800		0.25
1/2	A	No	No	Ar (CaAa)	8.00 50.00 - 8.00	0.0000	0.07	1	1	0.5800	0.5800		0.25
1/2	A	No	No	Ar (CaAa)	8.00 50.00 - 8.00	0.0000	0.09	1	1	0.5800	0.5800		0.25
1/2	A	No	No	Ar (CaAa)	8.00 32.00 - 8.00	0.0000	0.03	1	1	0.5800	0.5800		0.25
1/2	C	No	No	Ar (CaAa)	8.00 31.00 - 8.00	0.0000	-0.06	1	1	0.5800	0.5800		0.25
1/2	A	No	No	Ar (CaAa)	8.00 17.00 - 8.00	0.0000	-0.07	2	2	0.5800	0.5800		0.25
Feedline Ladder (Af)	A	No	No	Af (CaAa)	8.00 190.00 - 8.00	0.0000	0	1	1	3.0000	3.0000		8.40
Feedline Ladder (Af)	A	No	No	Af (CaAa)	8.00 190.00 - 8.00	0.0000	0.4	1	1	3.0000	3.0000		8.40
Feedline Ladder (Af)	B	No	No	Af (CaAa)	8.00 190.00 - 8.00	0.0000	0	1	1	3.0000	3.0000		8.40
Feedline Ladder (Af)	C	No	No	Af (CaAa)	8.00 190.00 - 8.00	0.0000	0	1	1	3.0000	3.0000		8.40

tnxTower All-Points Technology Corp. 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	190' Self-Supporting Tower	Page	3 of 13
	Project	CT141_12070 Coventry East	Date	11:34:01 07/09/21
	Client	Verizon Wireless Site: Coventry East	Designed by	M. Larson

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	C _A A _A ft ² /ft	Weight plf	
3/8" safety cable	A	No	No	CaAa (Out Of Face)	190.00 - 0.00	3.0000	0.5	1	No	0.04	0.22
									Ice	0.14	0.83
									1/2"	0.24	1.98
									Ice		
								1"	Ice		

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	C _A A _A Front ft ²	C _A A _A Side ft ²	Weight lb
Obstruction light	C	From Leg	0.50	0.0000	190.00	No Ice	0.15	8.00
			0.00			1/2" Ice	0.22	10.47
			2.00			1" Ice	0.29	13.91
Obstruction light	C	From Leg	0.50	0.0000	190.00	No Ice	0.15	8.00
			0.00			1/2" Ice	0.22	10.47
			2.00			1" Ice	0.29	13.91
PD1142-3	A	From Leg	0.50	0.0000	190.00	No Ice	1.29	10.00
			0.00			1/2" Ice	2.17	20.67
			2.00			1" Ice	3.07	36.89
20' x 3" omni whip	A	From Leg	0.50	0.0000	190.00	No Ice	6.00	50.00
			0.00			1/2" Ice	8.03	93.17
			12.00			1" Ice	10.08	149.01
20' x 3" omni whip	B	From Leg	4.00	0.0000	190.00	No Ice	6.00	50.00
			0.00			1/2" Ice	8.03	93.17
			12.00			1" Ice	10.08	149.01
Halo	A	From Leg	0.50	0.0000	190.00	No Ice	4.00	45.00
			0.00			1/2" Ice	6.03	75.77
			2.00			1" Ice	8.07	119.12
DB420	A	From Leg	0.50	0.0000	190.00	No Ice	3.33	34.00
			0.00			1/2" Ice	5.99	44.20
			7.00			1" Ice	8.66	54.40
1' square panel	A	From Leg	0.50	0.0000	190.00	No Ice	1.20	15.00
			0.00			1/2" Ice	1.34	22.91
			7.00			1" Ice	1.48	32.76
3' Yagi	A	From Leg	0.50	0.0000	190.00	No Ice	2.08	30.95
			0.00			1/2" Ice	3.79	52.87
			0.00			1" Ice	5.52	85.27
3' Yagi	C	From Leg	0.50	0.0000	190.00	No Ice	2.08	30.95
			0.00			1/2" Ice	3.79	52.87
			0.00			1" Ice	5.52	85.27
Ground plane omni	C	From Leg	0.50	0.0000	190.00	No Ice	3.00	75.00
			0.00			1/2" Ice	4.03	96.79
			0.00			1" Ice	5.03	125.14
4' x 1" omni whip	A	From Leg	0.50	0.0000	190.00	No Ice	0.40	15.00
			0.00			1/2" Ice	0.81	18.77
			2.00			1" Ice	1.06	25.23
Pirod 4' Side Mount Standoff (1)	A	None		0.0000	188.00	No Ice	2.72	50.00
						1/2" Ice	4.91	89.00
						1" Ice	7.10	128.00
Pirod 4' Side Mount Standoff (1)	B	None		0.0000	188.00	No Ice	2.72	50.00
						1/2" Ice	4.91	89.00
						1" Ice	7.10	128.00
Pirod 4' Side Mount Standoff	C	None		0.0000	188.00	No Ice	2.72	50.00

tnxTower All-Points Technology Corp. 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	190' Self-Supporting Tower	Page	4 of 13
	Project	CT141_12070 Coventry East	Date	11:34:01 07/09/21
	Client	Verizon Wireless Site: Coventry East	Designed by	M. Larson

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _{AA} Front	C _{AA} Side	Weight
			Horz	Vert					
			ft	ft	°	ft	ft ²	ft ²	lb
(1)						1/2" Ice	4.91	4.91	89.00
						1" Ice	7.10	7.10	128.00
paraflector grid	B	From Leg	4.00	0.00	0.0000	No Ice	2.43	1.22	50.00
			0.00	0.00		1/2" Ice	3.50	1.75	100.00
			0.00	0.00		1" Ice	4.50	2.25	175.00
PD1142-30	B	From Leg	4.00	0.00	0.0000	No Ice	0.79	0.79	10.00
			0.00	0.00		1/2" Ice	1.49	1.49	110.00
			0.00	0.00		1" Ice	2.84	2.84	210.00
APXVTM14-ALU-120 (Sprint)	A	From Face	4.00	0.00	0.0000	No Ice	6.34	3.61	60.00
			0.00	0.00		1/2" Ice	6.72	3.97	99.53
			0.00	0.00		1" Ice	7.10	4.33	144.12
APXVTM14-ALU-120 (Sprint)	B	From Face	4.00	0.00	0.0000	No Ice	6.34	3.61	60.00
			0.00	0.00		1/2" Ice	6.72	3.97	99.53
			0.00	0.00		1" Ice	7.10	4.33	144.12
APXVTM14-ALU-120 (Sprint)	C	From Face	4.00	0.00	0.0000	No Ice	6.34	3.61	60.00
			0.00	0.00		1/2" Ice	6.72	3.97	99.53
			0.00	0.00		1" Ice	7.10	4.33	144.12
NNVV-65B-R4 (Sprint)	A	From Face	4.00	0.00	0.0000	No Ice	12.27	5.75	80.00
			0.00	0.00		1/2" Ice	12.77	6.21	152.14
			0.00	0.00		1" Ice	13.27	6.67	230.92
NNVV-65B-R4 (Sprint)	B	From Face	4.00	0.00	0.0000	No Ice	12.27	5.75	80.00
			0.00	0.00		1/2" Ice	12.77	6.21	152.14
			0.00	0.00		1" Ice	13.27	6.67	230.92
NNVV-65B-R4 (Sprint)	C	From Face	4.00	0.00	0.0000	No Ice	12.27	5.75	80.00
			0.00	0.00		1/2" Ice	12.77	6.21	152.14
			0.00	0.00		1" Ice	13.27	6.67	230.92
ALU 4x45-1900 MHz RRHs (Sprint)	A	From Face	3.50	0.00	0.0000	No Ice	2.58	2.54	60.00
			0.00	0.00		1/2" Ice	2.79	2.75	86.47
			0.00	0.00		1" Ice	3.01	2.97	116.36
ALU 4x45-1900 MHz RRHs (Sprint)	B	From Face	3.50	0.00	0.0000	No Ice	2.58	2.54	60.00
			0.00	0.00		1/2" Ice	2.79	2.75	86.47
			0.00	0.00		1" Ice	3.01	2.97	116.36
ALU 4x45-1900 MHz RRHs (Sprint)	C	From Face	3.50	0.00	0.0000	No Ice	2.58	2.54	60.00
			0.00	0.00		1/2" Ice	2.79	2.75	86.47
			0.00	0.00		1" Ice	3.01	2.97	116.36
(2) ALU 2x50-800 MHz RRHs (Sprint)	A	From Face	3.50	0.00	0.0000	No Ice	1.70	1.28	53.00
			0.00	0.00		1/2" Ice	1.86	1.43	70.01
			0.00	0.00		1" Ice	2.03	1.58	89.71
(2) ALU 2x50-800 MHz RRHs (Sprint)	B	From Face	3.50	0.00	0.0000	No Ice	1.70	1.28	53.00
			0.00	0.00		1/2" Ice	1.86	1.43	70.01
			0.00	0.00		1" Ice	2.03	1.58	89.71
(2) ALU 2x50-800 MHz RRHs (Sprint)	C	From Face	3.50	0.00	0.0000	No Ice	1.70	1.28	53.00
			0.00	0.00		1/2" Ice	1.86	1.43	70.01
			0.00	0.00		1" Ice	2.03	1.58	89.71
TD-RRH8x20-25 (Sprint)	A	From Face	3.50	0.00	0.0000	No Ice	4.05	1.53	75.00
			0.00	0.00		1/2" Ice	4.30	1.71	102.14
			0.00	0.00		1" Ice	4.56	1.90	132.80
TD-RRH8x20-25 (Sprint)	B	From Face	3.50	0.00	0.0000	No Ice	4.05	1.53	75.00
			0.00	0.00		1/2" Ice	4.30	1.71	102.14
			0.00	0.00		1" Ice	4.56	1.90	132.80
TD-RRH8x20-25 (Sprint)	C	From Face	3.50	0.00	0.0000	No Ice	4.05	1.53	75.00
			0.00	0.00		1/2" Ice	4.30	1.71	102.14
			0.00	0.00		1" Ice	4.56	1.90	132.80
14' sector mount (Sprint)	A	None			0.0000	No Ice	10.80	5.40	475.00
						1/2" Ice	12.38	6.19	700.00
						1" Ice	13.88	6.94	950.00
Kicker kit	A	None			0.0000	No Ice	3.38	3.38	466.00

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	Project	CT141_12070 Coventry East	Date	11:34:01 07/09/21
	Client	Verizon Wireless Site: Coventry East	Designed by	M. Larson

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _{AA} Front	C _{AA} Side	Weight	
			Horz	Vert						
			ft	ft	°	ft	ft ²	ft ²	lb	
(Sprint)						1/2" Ice	5.06	5.06	616.00	
						1" Ice	6.75	6.75	766.00	
14' sector mount (Sprint)	B	None			0.0000	180.00	No Ice	10.80	5.40	475.00
						1/2" Ice	12.38	6.19	700.00	
						1" Ice	13.88	6.94	950.00	
Kicker kit (Sprint)	B	None			0.0000	180.00	No Ice	3.38	3.38	466.00
						1/2" Ice	5.06	5.06	616.00	
						1" Ice	6.75	6.75	766.00	
14' sector mount (Sprint)	C	None			0.0000	180.00	No Ice	10.80	5.40	475.00
						1/2" Ice	12.38	6.19	700.00	
						1" Ice	13.88	6.94	950.00	
Kicker kit (Sprint)	C	None			0.0000	180.00	No Ice	3.38	3.38	466.00
						1/2" Ice	5.06	5.06	616.00	
						1" Ice	6.75	6.75	766.00	
DB420	A	From Leg	4.00		0.0000	172.00 - 162.00	No Ice	3.33	3.33	34.00
			0.00				1/2" Ice	5.99	5.99	44.20
			0.00				1" Ice	8.66	8.66	54.40
4' sidearm	A	From Leg	2.00		0.0000	162.00	No Ice	2.43	1.22	50.00
			0.00				1/2" Ice	3.50	1.75	100.00
			0.00				1" Ice	4.50	2.25	175.00
20' x 3" omni whip	B	From Leg	4.00		0.0000	176.00 - 156.00	No Ice	6.00	6.00	50.00
			0.00				1/2" Ice	8.03	8.03	93.17
			0.00				1" Ice	10.08	10.08	149.01
Pirot 4' Side Mount Standoff (1)	B	From Face	2.00		0.0000	156.00	No Ice	2.72	2.72	50.00
			0.00				1/2" Ice	4.91	4.91	89.00
			0.00				1" Ice	7.10	7.10	128.00
20' x 3" omni whip	C	From Leg	4.00		0.0000	176.00 - 156.00	No Ice	6.00	6.00	50.00
			0.00				1/2" Ice	8.03	8.03	93.17
			0.00				1" Ice	10.08	10.08	149.01
Pirot 4' Side Mount Standoff (1)	C	From Leg	2.00		0.0000	156.00	No Ice	2.72	2.72	50.00
			0.00				1/2" Ice	4.91	4.91	89.00
			0.00				1" Ice	7.10	7.10	128.00
MT6407-77A (Verizon Wireless)	A	From Face	4.00		0.0000	150.00	No Ice	4.69	1.84	90.00
			0.00				1/2" Ice	4.98	2.06	119.24
			0.00				1" Ice	5.28	2.29	152.35
MT6407-77A (Verizon Wireless)	B	From Face	4.00		0.0000	150.00	No Ice	4.69	1.84	90.00
			0.00				1/2" Ice	4.98	2.06	119.24
			0.00				1" Ice	5.28	2.29	152.35
MT6407-77A (Verizon Wireless)	C	From Face	4.00		0.0000	150.00	No Ice	4.69	1.84	90.00
			0.00				1/2" Ice	4.98	2.06	119.24
			0.00				1" Ice	5.28	2.29	152.35
LNX-6514DS-A1M (Verizon Wireless)	A	From Face	4.00		0.0000	150.00	No Ice	9.26	6.14	80.00
			0.00				1/2" Ice	9.77	6.65	135.65
			0.00				1" Ice	10.28	7.16	197.94
LNX-6514DS-A1M (Verizon Wireless)	B	From Face	4.00		0.0000	150.00	No Ice	9.26	6.14	80.00
			0.00				1/2" Ice	9.77	6.65	135.65
			0.00				1" Ice	10.28	7.16	197.94
LNX-6514DS-A1M (Verizon Wireless)	C	From Face	4.00		0.0000	150.00	No Ice	9.26	6.14	80.00
			0.00				1/2" Ice	9.77	6.65	135.65
			0.00				1" Ice	10.28	7.16	197.94
(2) NHH-65B-R2B (Verizon Wireless)	A	From Face	4.00		0.0000	150.00	No Ice	8.08	5.34	50.00
			0.00				1/2" Ice	8.53	5.79	100.05
			0.00				1" Ice	9.00	6.26	156.20
(2) NHH-65B-R2B (Verizon Wireless)	B	From Face	4.00		0.0000	150.00	No Ice	8.08	5.34	50.00
			0.00				1/2" Ice	8.53	5.79	100.05
			0.00				1" Ice	9.00	6.26	156.20
(2) NHH-65B-R2B	C	From Face	4.00		0.0000	150.00	No Ice	8.08	5.34	50.00

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	Project	CT141_12070 Coventry East	Date	11:34:01 07/09/21
	Client	Verizon Wireless Site: Coventry East	Designed by	M. Larson

<i>Description</i>	<i>Face or Leg</i>	<i>Offset Type</i>	<i>Offsets: Horz Lateral Vert</i>	<i>Azimuth Adjustment</i>	<i>Placement</i>	<i>C_{AA} Front</i>	<i>C_{AA} Side</i>	<i>Weight</i>	
			<i>ft</i>	<i>°</i>	<i>ft</i>	<i>ft²</i>	<i>ft²</i>	<i>lb</i>	
(Verizon Wireless)			0.00			1/2" Ice	8.53	5.79	100.05
			0.00			1" Ice	9.00	6.26	156.20
RFV01U-D1A	A	From Face	3.50	0.0000	150.00	No Ice	1.88	1.25	100.00
(Verizon Wireless)			0.00			1/2" Ice	2.05	1.39	118.34
			0.00			1" Ice	2.22	1.54	139.47
RFV01U-D1A	B	From Face	3.50	0.0000	150.00	No Ice	1.88	1.25	100.00
(Verizon Wireless)			0.00			1/2" Ice	2.05	1.39	118.34
			0.00			1" Ice	2.22	1.54	139.47
RFV01U-D1A	C	From Face	3.50	0.0000	150.00	No Ice	1.88	1.25	100.00
(Verizon Wireless)			0.00			1/2" Ice	2.05	1.39	118.34
			0.00			1" Ice	2.22	1.54	139.47
RFV01U-D2A	A	From Face	3.50	0.0000	150.00	No Ice	1.88	1.01	85.00
(Verizon Wireless)			0.00			1/2" Ice	2.05	1.14	101.43
			0.00			1" Ice	2.22	1.28	120.53
RFV01U-D2A	B	From Face	3.50	0.0000	150.00	No Ice	1.88	1.01	85.00
(Verizon Wireless)			0.00			1/2" Ice	2.05	1.14	101.43
			0.00			1" Ice	2.22	1.28	120.53
RFV01U-D2A	C	From Face	3.50	0.0000	150.00	No Ice	1.88	1.01	85.00
(Verizon Wireless)			0.00			1/2" Ice	2.05	1.14	101.43
			0.00			1" Ice	2.22	1.28	120.53
Raycap RHSDC-3315-PF-48 D-Box	A	None		0.0000	150.00	No Ice	1.34	3.79	40.00
(Verizon Wireless)						1/2" Ice	1.49	4.04	71.37
						1" Ice	1.65	4.30	106.49
Raycap RHSDC-3315-PF-48 D-Box	C	None		0.0000	150.00	No Ice	1.34	3.79	40.00
(Verizon Wireless)						1/2" Ice	1.49	4.04	71.37
						1" Ice	1.65	4.30	106.49
Pirot 15' T-Frame Sector Mount (1)	A	None		0.0000	150.00	No Ice	15.00	15.00	500.00
(Verizon Wireless)						1/2" Ice	20.60	20.60	650.00
						1" Ice	26.20	26.20	800.00
Pirot 15' T-Frame Sector Mount (1)	B	None		0.0000	150.00	No Ice	15.00	15.00	500.00
(Verizon Wireless)						1/2" Ice	20.60	20.60	650.00
						1" Ice	26.20	26.20	800.00
Pirot 15' T-Frame Sector Mount (1)	C	None		0.0000	150.00	No Ice	15.00	15.00	500.00
(Verizon Wireless)						1/2" Ice	20.60	20.60	650.00
						1" Ice	26.20	26.20	800.00
SitePro1 SFK Reinf Kit	A	None		0.0000	150.00	No Ice	5.39	2.70	132.00
(Verizon Wireless)						1/2" Ice	7.89	3.95	250.00
						1" Ice	10.39	5.20	375.00
SitePro1 SFK Reinf Kit	B	None		0.0000	150.00	No Ice	5.39	2.70	132.00
(Verizon Wireless)						1/2" Ice	7.89	3.95	250.00
						1" Ice	10.39	5.20	375.00
SitePro1 SFK Reinf Kit	C	None		0.0000	150.00	No Ice	5.39	2.70	132.00
(Verizon Wireless)						1/2" Ice	7.89	3.95	250.00
						1" Ice	10.39	5.20	375.00
20' x 3" omni whip	C	From Leg	4.00	0.0000	142.00	No Ice	6.00	6.00	50.00
			0.00			1/2" Ice	8.03	8.03	93.17
			0.00			1" Ice	10.08	10.08	149.01
Pirot 4' Side Mount Standoff (1)	A	From Leg	2.00	0.0000	142.00	No Ice	2.72	2.72	50.00
			0.00			1/2" Ice	4.91	4.91	89.00
			0.00			1" Ice	7.10	7.10	128.00
DB230-2A	A	From Leg	4.00	0.0000	142.00	No Ice	3.00	3.00	114.00
			0.00			1/2" Ice	5.40	5.40	148.20
			0.00			1" Ice	7.80	7.80	182.40
Pirot 4' Side Mount Standoff (1)	B	None		0.0000	142.00	No Ice	2.72	2.72	50.00
						1/2" Ice	4.91	4.91	89.00
						1" Ice	7.10	7.10	128.00
3' Yagi	A	From Leg	4.00	0.0000	142.00	No Ice	2.08	2.08	30.95

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	Project	CT141_12070 Coventry East	Date	11:34:01 07/09/21
	Client	Verizon Wireless Site: Coventry East	Designed by	M. Larson

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _{AA} Front	C _{AA} Side	Weight
			Horz	Vert					
			ft	ft	°	ft	ft ²	ft ²	lb
			0.00			1/2" Ice	3.79	3.79	52.87
			0.00			1" Ice	5.52	5.52	85.27
4' yagi	C	From Leg	4.00		0.0000	142.00	No Ice	0.50	25.00
			0.00				1/2" Ice	0.86	29.40
			0.00				1" Ice	1.11	36.53
Pirod 4' Side Mount Standoff (1)	C	From Leg	2.00		0.0000	142.00	No Ice	2.72	50.00
			0.00				1/2" Ice	4.91	89.00
			0.00				1" Ice	7.10	128.00
Paraflector	B	From Leg	0.50		0.0000	144.00	No Ice	1.20	15.00
			0.00				1/2" Ice	1.34	22.91
			0.00				1" Ice	1.48	32.76
Paraflector	B	From Leg	0.50		0.0000	140.00	No Ice	1.20	15.00
			0.00				1/2" Ice	1.34	22.91
			0.00				1" Ice	1.48	32.76
10' single dipole	A	From Leg	0.50		0.0000	146.00 - 136.00	No Ice	1.90	25.00
			0.00				1/2" Ice	4.08	43.29
			0.00				1" Ice	6.28	75.05
10' 2-bay dipole	A	From Leg	4.00		0.0000	123.00 - 113.00	No Ice	2.50	75.00
			0.00				1/2" Ice	3.53	93.64
			0.00				1" Ice	4.58	118.79
Pirod 4' Side Mount Standoff (1)	A	None			0.0000	113.00	No Ice	2.72	50.00
							1/2" Ice	4.91	89.00
							1" Ice	7.10	128.00
14' x 3" omni whip	B	From Leg	4.00		0.0000	123.00 - 109.00	No Ice	4.20	75.00
			0.00				1/2" Ice	5.63	105.34
			0.00				1" Ice	7.08	144.69
Pirod 4' Side Mount Standoff (1)	B	None			0.0000	109.00	No Ice	2.72	50.00
							1/2" Ice	4.91	89.00
							1" Ice	7.10	128.00
14' x 3" omni whip	C	From Leg	4.00		0.0000	117.00 - 103.00	No Ice	4.20	75.00
			0.00				1/2" Ice	5.63	105.34
			0.00				1" Ice	7.08	144.69
Pirod 4' Side Mount Standoff (1)	C	None			0.0000	103.00	No Ice	2.72	50.00
							1/2" Ice	4.91	89.00
							1" Ice	7.10	128.00
GPS on 3' standoff	B	From Leg	0.50		0.0000	102.00	No Ice	3.12	50.00
			0.00				1/2" Ice	3.34	71.14
			0.00				1" Ice	3.56	95.38
1.5' x 1-1/2" standoff	B	None			0.0000	102.00	No Ice	0.17	6.00
							1/2" Ice	0.27	7.99
							1" Ice	0.38	11.21
DB212-1	B	From Leg	0.50		0.0000	94.00	No Ice	4.50	31.00
			0.00				1/2" Ice	8.10	40.30
			0.00				1" Ice	11.70	49.60
8" x 3" X 1.5" panel	A	From Leg	0.50		0.0000	92.00	No Ice	1.90	25.00
			0.00				1/2" Ice	4.08	43.29
			0.00				1" Ice	6.28	75.05
8" x 3" X 1.5" panel	C	From Leg	0.50		0.0000	92.00	No Ice	1.90	25.00
			0.00				1/2" Ice	4.08	43.29
			0.00				1" Ice	6.28	75.05
16' x 3" omni whip	C	From Leg	4.00		0.0000	100.00 - 84.00	No Ice	4.80	75.00
			0.00				1/2" Ice	6.43	109.62
			0.00				1" Ice	8.08	154.46
4' sidearm	C	From Leg	2.00		0.0000	84.00	No Ice	2.43	50.00
			0.00				1/2" Ice	3.50	100.00
			0.00				1" Ice	4.50	175.00
16' x 3" omni whip	A	From Leg	6.00		0.0000	90.00 - 74.00	No Ice	4.80	75.00

tnxTower All-Points Technology Corp. 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	190' Self-Supporting Tower	Page	8 of 13
	Project	CT141_12070 Coventry East	Date	11:34:01 07/09/21
	Client	Verizon Wireless Site: Coventry East	Designed by	M. Larson

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _{AA} Front	C _{AA} Side	Weight	
			Horz	Vert						
			Lateral	ft	°	ft	ft ²	ft ²	lb	
6' sidearm	A	From Leg		0.00		74.00	1/2" Ice	6.43	6.43	109.62
				0.00			1" Ice	8.08	8.08	154.46
				3.00	0.0000		No Ice	4.17	2.09	75.00
				0.00			1/2" Ice	6.17	3.09	125.00
PD320	C	From Leg		0.00		74.00	1" Ice	8.17	4.09	200.00
				0.50	0.0000		No Ice	2.03	2.03	15.00
				0.00			1/2" Ice	4.58	4.58	34.00
				0.00			1" Ice	7.13	7.13	53.00
Large single dipole	B	From Leg		0.50	0.0000	85.00 - 70.00	No Ice	2.03	2.03	15.00
				0.00			1/2" Ice	4.58	4.58	34.00
				0.00			1" Ice	7.13	7.13	53.00
				2.00	0.0000	63.00 - 60.00	No Ice	0.52	0.52	15.00
3' x 2" omni whip	C	From Leg		0.00			1/2" Ice	0.71	0.71	19.81
				0.00			1" Ice	0.90	0.90	26.81
				1.00	0.0000	60.00	No Ice	0.60	0.07	30.00
				0.00			1/2" Ice	0.75	0.11	35.96
2' standoff	C	From Leg		0.00			1" Ice	0.91	0.16	44.06
				0.50	0.0000	50.00	No Ice	4.50	4.50	31.00
				0.00			1/2" Ice	8.10	8.10	40.30
				0.00			1" Ice	11.70	11.70	49.60
Large single dipole (hanging)	C	From Leg		0.50	0.0000	50.00	No Ice	1.90	1.90	25.00
				0.00			1/2" Ice	4.08	4.08	43.29
				0.00			1" Ice	6.28	6.28	75.05
				0.50	0.0000	32.00	No Ice	1.90	1.90	25.00
Large single dipole	B	From Leg		0.00			1/2" Ice	4.08	4.08	43.29
				0.00			1" Ice	6.28	6.28	75.05
				0.50	0.0000	31.00	No Ice	1.90	1.90	25.00
				0.00			1/2" Ice	4.08	4.08	43.29
Large single dipole	C	From Leg		0.00			1" Ice	6.28	6.28	75.05
				0.50	0.0000		No Ice	1.90	1.90	25.00
				0.00			1/2" Ice	4.08	4.08	43.29
				0.00			1" Ice	6.28	6.28	75.05
Pirod 4' Side Mount Standoff (1)	B	From Leg		2.00	0.0000	17.00	No Ice	2.72	2.72	50.00
				0.00			1/2" Ice	4.91	4.91	89.00
				0.00			1" Ice	7.10	7.10	128.00
				4.00	0.0000	29.00 - 17.00	No Ice	1.58	1.58	17.00
PD400	B	From Leg		0.00			1/2" Ice	3.56	3.56	38.00
				0.00			1" Ice	5.54	5.54	59.00
				4.00	0.0000	17.00	No Ice	0.00	0.00	0.00
				0.00			1/2" Ice	0.00	0.00	0.00
6' Yagi	B	From Leg		0.00			1" Ice	0.00	0.00	0.00
				0.00			1/2" Ice	0.00	0.00	0.00
				0.00			1" Ice	0.00	0.00	0.00

Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets:		Azimuth Adjustment	3 dB Beam Width	Elevation	Outside Diameter	Aperture Area	Weight	
				Horz	Vert							
			Lateral	ft	°	°	ft	ft	ft ²	lb		
2' dish with radome	C	Paraboloid w/Radome	From Leg		4.00	0.0000		156.00	2.00	No Ice	3.14	50.00
					0.00					1/2" Ice	3.41	67.50
					0.00						1" Ice	3.68

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Solution Summary

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	190 - 180	9.160	63	0.5156	0.0542
T2	180 - 160	8.083	63	0.5092	0.0522
T3	160 - 140	6.006	63	0.4588	0.0469
T4	140 - 136	4.215	63	0.3722	0.0412
T5	136 - 132	3.906	63	0.3511	0.0385
T6	132 - 128	3.617	63	0.3305	0.0360
T7	128 - 124	3.344	63	0.3101	0.0336
T8	124 - 120	3.088	63	0.2901	0.0313
T9	120 - 100	2.848	63	0.2705	0.0290
T10	100 - 80	1.856	63	0.1929	0.0200
T11	80 - 60	1.136	67	0.1403	0.0140
T12	60 - 40	0.635	67	0.0900	0.0092
T13	40 - 20	0.291	67	0.0631	0.0053
T14	20 - 0	0.080	67	0.0287	0.0025

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
190.00	Obstruction light	63	9.160	0.5156	0.0542	177070
188.00	Pirod 4' Side Mount Standoff (1)	63	8.944	0.5149	0.0538	177070
187.00	paraflector grid	63	8.836	0.5144	0.0537	177070
183.00	TD-RRH8x20-25	63	8.405	0.5121	0.0529	125272
180.00	APXVTM14-ALU-120	63	8.083	0.5092	0.0522	80100
176.00	20' x 3" omni whip	63	7.655	0.5032	0.0512	46168
172.00	DB420	63	7.232	0.4948	0.0500	31164
171.00	20' x 3" omni whip	63	7.127	0.4924	0.0497	28821
167.00	DB420	63	6.711	0.4816	0.0486	22156
166.00	20' x 3" omni whip	63	6.609	0.4786	0.0483	20945
162.00	DB420	63	6.204	0.4657	0.0473	17250
161.00	20' x 3" omni whip	63	6.105	0.4623	0.0471	16587
156.00	2' dish with radome	63	5.619	0.4440	0.0462	14468
150.00	MT6407-77A	63	5.064	0.4196	0.0451	12868
146.00	10' single dipole	63	4.712	0.4016	0.0440	11985
144.00	Paraflector	63	4.542	0.3922	0.0433	11584
142.00	20' x 3" omni whip	63	4.377	0.3824	0.0424	11129
141.00	10' single dipole	63	4.295	0.3773	0.0418	10842
140.00	Paraflector	63	4.215	0.3722	0.0412	10512
136.00	10' single dipole	63	3.906	0.3511	0.0385	9927
123.00	10' 2-bay dipole	63	3.027	0.2852	0.0307	12147
118.00	10' 2-bay dipole	63	2.734	0.2612	0.0279	13265
117.00	14' x 3" omni whip	63	2.678	0.2567	0.0274	13480
116.00	14' x 3" omni whip	63	2.624	0.2522	0.0269	13702
113.00	10' 2-bay dipole	63	2.464	0.2394	0.0254	14415
110.00	14' x 3" omni whip	63	2.312	0.2274	0.0241	15207
109.00	14' x 3" omni whip	63	2.263	0.2236	0.0236	15490
103.00	14' x 3" omni whip	63	1.985	0.2024	0.0212	17426
102.00	GPS on 3' standoff	63	1.941	0.1992	0.0208	17765
100.00	16' x 3" omni whip	63	1.856	0.1929	0.0200	18364
94.67	16' x 3" omni whip	63	1.639	0.1777	0.0182	19242
94.00	DB212-1	63	1.614	0.1760	0.0180	19324

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Elevation	Appurtenance	Gov. Load	Deflection	Tilt	Twist	Radius of Curvature
ft		Comb.	in	°	°	ft
92.00	8" x 3" X 1.5" panel	63	1.538	0.1707	0.0174	19573
90.00	16' x 3" omni whip	67	1.465	0.1656	0.0168	19828
89.33	16' x 3" omni whip	67	1.441	0.1639	0.0166	19915
85.00	Large single dipole	67	1.293	0.1531	0.0153	20498
84.67	16' x 3" omni whip	67	1.283	0.1523	0.0152	20544
84.00	16' x 3" omni whip	67	1.261	0.1506	0.0150	20639
80.00	Large single dipole	67	1.136	0.1403	0.0140	21390
79.33	16' x 3" omni whip	67	1.116	0.1386	0.0138	21572
75.00	Large single dipole	67	0.993	0.1269	0.0127	23165
74.00	16' x 3" omni whip	67	0.966	0.1241	0.0124	23599
70.00	Large single dipole	67	0.862	0.1133	0.0115	25510
63.00	3' x 2" omni whip	67	0.699	0.0961	0.0098	29700
61.50	3' x 2" omni whip	67	0.667	0.0930	0.0095	30678
60.00	3' x 2" omni whip	67	0.635	0.0900	0.0092	31561
50.00	DB212-1	67	0.446	0.0754	0.0071	35203
32.00	Large single dipole	67	0.190	0.0502	0.0041	34389
31.00	Large single dipole	67	0.179	0.0484	0.0040	33875
29.00	PD400	67	0.157	0.0448	0.0037	32893
23.00	PD400	67	0.103	0.0339	0.0029	30366
17.00	Pirod 4' Side Mount Standoff (1)	67	0.062	0.0238	0.0022	34366

Maximum Tower Deflections - Design Wind

Section No.	Elevation	Horz. Deflection	Gov. Load	Tilt	Twist
	ft	in	Comb.	°	°
T1	190 - 180	41.350	18	2.3158	0.2523
T2	180 - 160	36.511	18	2.2889	0.2427
T3	160 - 140	27.175	18	2.0643	0.2166
T4	140 - 136	19.111	18	1.6770	0.1898
T5	136 - 132	17.718	18	1.5833	0.1770
T6	132 - 128	16.411	18	1.4912	0.1655
T7	128 - 124	15.178	18	1.4002	0.1543
T8	124 - 120	14.021	18	1.3108	0.1435
T9	120 - 100	12.936	18	1.2231	0.1331
T10	100 - 80	8.437	18	0.8740	0.0918
T11	80 - 60	5.165	18	0.6362	0.0638
T12	60 - 40	2.883	18	0.4084	0.0419
T13	40 - 20	1.318	18	0.2865	0.0245
T14	20 - 0	0.363	18	0.1303	0.0117

Critical Deflections and Radius of Curvature - Design Wind

Elevation	Appurtenance	Gov. Load	Deflection	Tilt	Twist	Radius of Curvature
ft		Comb.	in	°	°	ft
190.00	Obstruction light	18	41.350	2.3158	0.2523	38247
188.00	Pirod 4' Side Mount Standoff (1)	18	40.380	2.3128	0.2506	38247
187.00	paraflector grid	18	39.895	2.3111	0.2497	38247
183.00	TD-RRH8x20-25	18	37.959	2.3014	0.2459	27254
180.00	APXVTM14-ALU-120	18	36.511	2.2889	0.2427	18517
176.00	20' x 3" omni whip	18	34.590	2.2624	0.2376	10479
172.00	DB420	18	32.686	2.2254	0.2320	7013
171.00	20' x 3" omni whip	18	32.214	2.2147	0.2305	6477
167.00	DB420	18	30.346	2.1663	0.2249	4960
166.00	20' x 3" omni whip	18	29.884	2.1530	0.2236	4686

<p style="text-align: center;">tnxTower</p> <p style="text-align: center;">All-Points Technology Corp. 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935</p>	Job	190' Self-Supporting Tower	Page	11 of 13
	Project	CT141_12070 Coventry East	Date	11:34:01 07/09/21
	Client	Verizon Wireless Site: Coventry East	Designed by	M. Larson

Elevation	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
162.00	DB420	18	28.066	2.0954	0.2187	3851
161.00	20' x 3" omni whip	18	27.619	2.0800	0.2176	3701
156.00	2' dish with radome	18	25.434	1.9981	0.2132	3225
150.00	MT6407-77A	18	22.935	1.8886	0.2081	2865
146.00	10' single dipole	18	21.351	1.8085	0.2030	2667
144.00	Paraflector	18	20.586	1.7662	0.1995	2578
142.00	20' x 3" omni whip	18	19.839	1.7224	0.1951	2478
141.00	10' single dipole	18	19.473	1.6999	0.1926	2416
140.00	Paraflector	18	19.111	1.6770	0.1898	2347
136.00	10' single dipole	18	17.718	1.5833	0.1770	2226
123.00	10' 2-bay dipole	18	13.743	1.2886	0.1409	2704
118.00	10' 2-bay dipole	18	12.420	1.1811	0.1281	2954
117.00	14' x 3" omni whip	18	12.167	1.1608	0.1257	3002
116.00	14' x 3" omni whip	18	11.919	1.1408	0.1233	3052
113.00	10' 2-bay dipole	18	11.197	1.0833	0.1166	3210
110.00	14' x 3" omni whip	18	10.510	1.0293	0.1102	3383
109.00	14' x 3" omni whip	18	10.287	1.0121	0.1082	3445
103.00	14' x 3" omni whip	18	9.026	0.9167	0.0970	3867
102.00	GPS on 3' standoff	18	8.827	0.9021	0.0952	3940
100.00	16' x 3" omni whip	18	8.437	0.8740	0.0918	4070
94.67	16' x 3" omni whip	18	7.457	0.8055	0.0833	4260
94.00	DB212-1	18	7.340	0.7974	0.0823	4277
92.00	8" x 3" X 1.5" panel	18	6.996	0.7738	0.0794	4331
90.00	16' x 3" omni whip	18	6.664	0.7507	0.0766	4386
89.33	16' x 3" omni whip	18	6.556	0.7431	0.0757	4404
85.00	Large single dipole	18	5.881	0.6940	0.0700	4529
84.67	16' x 3" omni whip	18	5.832	0.6903	0.0696	4539
84.00	16' x 3" omni whip	18	5.733	0.6827	0.0687	4559
80.00	Large single dipole	18	5.165	0.6362	0.0638	4722
79.33	16' x 3" omni whip	18	5.074	0.6283	0.0630	4762
75.00	Large single dipole	18	4.512	0.5752	0.0579	5113
74.00	16' x 3" omni whip	18	4.388	0.5628	0.0568	5209
70.00	Large single dipole	18	3.917	0.5139	0.0523	5632
63.00	3' x 2" omni whip	18	3.173	0.4362	0.0449	6559
61.50	3' x 2" omni whip	18	3.026	0.4218	0.0434	6775
60.00	3' x 2" omni whip	18	2.883	0.4084	0.0419	6969
50.00	DB212-1	18	2.023	0.3420	0.0326	7760
32.00	Large single dipole	18	0.858	0.2279	0.0190	7567
31.00	Large single dipole	18	0.808	0.2198	0.0183	7455
29.00	PD400	18	0.711	0.2034	0.0171	7240
23.00	PD400	18	0.463	0.1540	0.0135	6686
17.00	Pirod 4' Side Mount Standoff (1)	18	0.279	0.1081	0.0100	7568

Bolt Design Data

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt lb	Allowable Load per Bolt lb	Ratio Load Allowable	Allowable Ratio	Criteria
T1	190	Leg	A325N	0.6250	4	1181.78	20708.70	0.057	✓	1 Bolt Tension
		Diagonal	A325N	0.6250	1	1781.31	7830.00	0.227	✓	1 Member Bearing
		Top Girt	A325N	0.6250	1	401.40	7830.00	0.051	✓	1 Member Bearing
T2	180	Leg	A325N	0.7500	4	10090.30	29820.60	0.338	✓	1 Bolt Tension
		Diagonal	A325N	0.6250	1	4520.67	7830.00	0.577	✓	1 Member Bearing
T3	160	Leg	A325N	0.8750	4	26317.20	40589.10	0.648	✓	1 Bolt Tension
		Diagonal	A325N	0.6250	1	8182.66	10440.00	0.784	✓	1 Member Bearing

tnxTower All-Points Technology Corp. 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job 190' Self-Supporting Tower	Page 12 of 13
	Project CT141_12070 Coventry East	Date 11:34:01 07/09/21
	Client Verizon Wireless Site: Coventry East	Designed by M. Larson

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt lb	Allowable Load per Bolt lb	Ratio Load Allowable	Allowable Ratio	Criteria	
T4	140	Leg	A325N	0.8750	4	29708.10	40589.10	0.732	✓	1	Bolt Tension
		Diagonal	A325N	0.6250	1	4461.73	7830.00	0.570	✓	1	Member Bearing
		Top Girt	A325N	0.6250	1	2274.91	7830.00	0.291	✓	1	Member Bearing
T5	136	Diagonal	A325N	0.6250	1	4230.51	7830.00	0.540	✓	1	Member Bearing
T6	132	Diagonal	A325N	0.6250	1	3955.02	7830.00	0.505	✓	1	Member Bearing
T7	128	Diagonal	A325N	0.6250	1	4096.41	7830.00	0.523	✓	1	Member Bearing
T8	124	Diagonal	A325N	0.6250	1	4593.74	7830.00	0.587	✓	1	Member Bearing
		Secondary Horizontal	A325N	0.6250	1	2834.61	10440.00	0.272	✓	1	Member Bearing
		Leg	A325N	1.0000	4	45194.50	53014.40	0.852	✓	1	Bolt Tension
T9	120	Diagonal	A325N	0.6250	1	5511.21	7830.00	0.704	✓	1	Member Bearing
		Secondary Horizontal	A325N	0.6250	2	1719.76	12425.20	0.138	✓	1	Bolt Shear
		Leg	A325N	1.0000	4	53033.50	53014.40	1.000	✓	1	Bolt Tension
T10	100	Diagonal	A325N	0.6250	1	6021.26	7830.00	0.769	✓	1	Member Bearing
		Leg	A325N	1.0000	6	40189.70	53014.40	0.758	✓	1	Bolt Tension
T11	80	Diagonal	A325N	0.6250	1	6918.68	10440.00	0.663	✓	1	Member Bearing
		Secondary Horizontal	A325N	0.6250	2	2306.53	12425.20	0.186	✓	1	Bolt Shear
		Leg	A325N	1.0000	6	45485.20	53014.40	0.858	✓	1	Bolt Tension
T12	60	Diagonal	A325N	0.6250	1	7829.42	11700.00	0.669	✓	1	Member Bearing
		Leg	A325N	1.0000	6	49418.80	53014.40	0.932	✓	1	Bolt Tension
T13	40	Diagonal	A325N	0.6250	1	9424.22	12425.20	0.758	✓	1	Bolt Shear
		Secondary Horizontal	A325N	0.6250	2	2868.94	12425.20	0.231	✓	1	Bolt Shear
		Leg	A325N	1.0000	8	40441.30	53014.40	0.763	✓	1	Bolt Tension
T14	20	Diagonal	A325N	0.7500	1	9085.76	14137.50	0.643	✓	1	Member Bearing

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
T1	190 - 180	Leg	ROHN 2 STD	2	-6337.88	31617.20	20.0	Pass
		Diagonal	L1 3/4x1 3/4x3/16	9	-1797.43	10333.60	17.4	Pass
		Top Girt	L2x2x3/16	4	-437.52	9738.80	4.5	Pass
T2	180 - 160	Leg	ROHN 2.5 STD	21	-46248.70	63560.30	72.8	Pass
		Diagonal	L1 3/4x1 3/4x3/16	25	-4617.07	11446.10	40.3	Pass
T3	160 - 140	Leg	ROHN 3 EH	54	-116894.00	119117.00	98.1	Pass
		Diagonal	L2x2x1/4	57	-8689.41	19074.20	45.6	Pass
T4	140 - 136	Leg	ROHN 3.5 EH	87	-131172.00	149924.00	87.5	Pass
		Diagonal	L1 3/4x1 3/4x3/16	96	-4850.14	10913.00	44.4	Pass
		Top Girt	L2x2x3/16	89	-2274.91	10002.40	22.7	Pass

tnxTower All-Points Technology Corp. 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	190' Self-Supporting Tower	Page	13 of 13
	Project	CT141_12070 Coventry East	Date	11:34:01 07/09/21
	Client	Verizon Wireless Site: Coventry East	Designed by	M. Larson

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
							29.1 (b)	
T5	136 - 132	Leg	ROHN 3.5 EH	99	-140994.00	149924.00	94.0	Pass
		Diagonal	L1 3/4x1 3/4x3/16	105	-4376.93	10385.60	42.1	Pass
T6	132 - 128	Leg	ROHN 3.5 EH	108	-148754.00	149924.00	99.2	Pass
		Diagonal	L1 3/4x1 3/4x3/16	114	-4218.69	9851.90	42.8	Pass
T7	128 - 124	Leg	ROHN 3.5 EH	117	-156568.00	149924.00	104.4	Pass
		Diagonal	L1 3/4x1 3/4x3/16	123	-4311.40	9277.95	46.5	Pass
T8	124 - 120	Leg	ROHN 3.5 EH	126	-163444.00	161229.00	101.4	Pass
		Diagonal	L1 3/4x1 3/4x3/16	129	-4920.43	8568.38	57.4	Pass
		Secondary Horizontal	L2x2x1/4	134	-2834.61	14441.50	19.6	Pass
T9	120 - 100	Leg	ROHN 4 EH	137	-198316.00	191981.00	103.3	Pass
		Diagonal	L2x2x3/16	150	-5942.59	8389.57	70.8	Pass
		Secondary Horizontal	L2x2x1/4	145	-3439.53	8987.72	38.3	Pass
T10	100 - 80	Leg	ROHN 5 EH	176	-232797.00	239388.00	97.2	Pass
		Diagonal	L2 1/2x2 1/2x3/16	180	-6357.43	9563.61	66.5	Pass
T11	80 - 60	Leg	ROHN 5 EH	197	-265972.00	265071.00	100.3	Pass
		Diagonal	L2 1/2x2 1/2x1/4	201	-7520.72	9369.88	80.3	Pass
		Secondary Horizontal	L2 1/2x2 1/2x1/4	205	-4613.05	8061.44	57.2	Pass
T12	60 - 40	Leg	6" EHS w/ HSS7.625x0.375	227	-302566.00	449415.00	67.3	Pass
		Diagonal	L3x3x1/4	231	-7989.07	13351.60	59.8	Pass
T13	40 - 20	Leg	ROHN 6 EH	248	-330804.00	356650.00	92.8	Pass
		Diagonal	L3 1/2x3 1/2x1/4	252	-8964.59	14151.80	63.3	Pass
T14	20 - 0	Leg	ROHN 8 EHS	269	-362161.00	386395.00	93.7	Pass
		Diagonal	L3 1/2x3 1/2x1/4	273	-10094.90	12139.10	83.2	Pass
		Secondary Horizontal	L3x3x5/16	256	-5737.88	9894.04	58.0	Pass
		Summary						
		Leg (T7)					104.4	Pass
		Diagonal (T14)					83.2	Pass
		Secondary Horizontal (T13)					58.0	Pass
		Top Girt (T4)					29.1	Pass
		Bolt Checks					100.0	Pass
		RATING =					104.4	Pass

All-Points Technology Corp., P.C.

567 Vauxhall St. Ext., Suite 311
Waterford, CT 06385
(860) 663-1697

Client: **Verizon Wireless**
Job: **Coventry East**
Calculated By: **M. Larson**

Job No.: **CT141_12070**
Date: **09-Jul-21**

Program assumes:

Mat is square in plan view.
Water table is below bottom of mat.
Unit weight of concrete = 150 pcf
Unit weight of soil = 100 pcf

Information to be provided:

Pier is round or square in plan dimension ("R" or "S")	Shape = R
OTM = Overturning Moment to be resisted	OTM = 5827 ft-kips
P = Download reaction	P = 370.5 kips
H = Height from ground surface to top of mat (if buried)	H = 0.0 ft.
P _M = Projection of pier above mat	P _M = 0.0 ft.
y = Thickness of mat	y = 4.50 ft.
x = Width of mat	x = 32.00 ft.
d = Diameter of round pier	d = 0.0 ft.
s = Size of square pier	s = 0.0 ft.
Mass of tower and appurtenances (below)	

Results:

<u>Component</u>	<u>Mass</u>	<u>Moment Arm</u>	<u>Moment Resist.</u>
Pier	0.0 kips	16 ft.	0.0 ft-kips
Overburden	0.0 kips	16 ft.	0.0 ft-kips
Mat	622.1 kips	16 ft.	9953.3 ft-kips
Tower Dead Load	kips	16 ft.	0.0 ft-kips
Antenna Dead Load	kips	16 ft.	0.0 ft-kips

Overturning Moment Resistance : 9953.28 ft-kips
Factor of Safety = 1.71
Concrete Quantity = 170.7 c.y.

SATISFACTORY



Maser Consulting Connecticut
2000 Midlantic Drive, Suite 100
Mt. Laurel, NJ 08054
(856) 797-0412
peter.albano@colliersengineering.com

Post-Mod Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10069538
Maser Consulting Connecticut Project #: 21777167A

June 16, 2021

Site Information

Site ID: 468160-VZW / COVENTRY EAST CT
Site Name: COVENTRY EAST CT
Carrier Name: Verizon Wireless
Address: 1712 Main St
Coventry, Connecticut 06238
Tolland County
Latitude: 41.779932°
Longitude: -72.309583°

Structure Information

Tower Type: Self Support
Mount Type: 15.00-Ft T-Frame

FUZE ID # 16272141

Analysis Results

T-Frame: 72.6% Pass

***Contractor PMI Requirements:

Included at the end of this MA report

Available & Submitted via portal at <https://pmi.vzwsmart.com>

Contractor - Please Review Specific Site PMI Requirements Upon Award

Requirements also Noted on Mount Modification Drawings

Requirements may also be Noted on A & E drawings

Report Prepared By: Selene Chen



06/16/2021

Executive Summary:

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

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

Sources of Information:

Document Type	Remarks
<i>Radio Frequency Data Sheet (RFDS)</i>	<i>Verizon RFDS Site ID: 674867, dated October 20, 2020</i>
<i>Mount Mapping Report</i>	<i>Hudson Design Group LLC, Site ID: 468160, dated March 25, 2021</i>
<i>Mount Analysis Report</i>	<i>Maser Consulting Connecticut, Project #: 21777167A, dated May 6, 2021</i>
<i>Mount Modification Drawings</i>	<i>Maser Consulting Connecticut, Project #: 21777167A, dated June 16, 2021</i>

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H	
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust),	119 mph
	Ice Wind Speed (3-sec. Gust):	50 mph
	Design Ice Thickness:	1.50 in
	Risk Category:	II
	Exposure Category:	C
	Topographic Category:	1
	Topographic Feature Considered:	N/A
	Topographic Method:	N/A
	Ground Elevation Factor, K _e :	0.975
Seismic Parameters:	S _s :	0.188
	S ₁ :	0.055
Maintenance Parameters:	Wind Speed (3-sec. Gust):	30 mph
	Maintenance Live Load, L _v :	250 lbs.
	Maintenance Live Load, L _m :	500 lbs.
Analysis Software:	RISA-3D (V17)	

Final Loading Configuration:

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

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

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:
 - o Channel, Solid Round, Angle, Plate ASTM A36 (Gr. 36)
 - o HSS (Rectangular) ASTM 500 (Gr. B-46)
 - o Pipe ASTM A53 (Gr. B-35)
 - o Threaded Rod F1554 (Gr. 36)
 - o Bolts ASTM A325
8. Any mount modifications listed under Sources of Information are assumed to have been installed per the design specifications.

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

Analysis Results:

Component	Utilization %	Pass/Fail
Face Horizontal		Pass
Mount Pipe		Pass
Mast Pipe		Pass
Tieback		Pass
Standoff Horizontal		Pass
V-Bracing		Pass
Mount Connection		Pass

Structure Rating – (Controlling Utilization of all Components)	72.6%
---	--------------

Prior to the removal of any antennas and associated equipment, the contractor shall verify which existing antennas are serving CDMA technology. The CDMA antennas SHALL NOT be removed. For the purpose of this analysis, the CDMA antennas are assumed to be located in position 4 (looking from behind the antennas left to right). If actual site conditions differ from this assumption, the contractor is required to notify both Verizon and Maser Consulting Connecticut before proceeding with their scope of work. Changes in proposed antenna placement and/or mount reanalysis may be required based on in-field location of CDMA antennas.

Recommendation:

The existing mounts will be **SUFFICIENT** for the final loading after the proposed modifications are successfully completed.

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

Attachments:

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

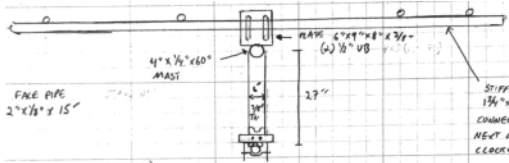




Antenna Mount Mapping Form (PATENT PENDING)

Tower Owner:	Other	Mapping Date:	3/25/2021
Site Name:	COVENTRY EAST CT	Tower Type:	Self Support
Site Number or ID:	468160	Tower Height (Ft.):	
Mapping Contractor:	HUDSON DESIGN GROUP, LLC.	Mount Elevation (Ft.):	150.1

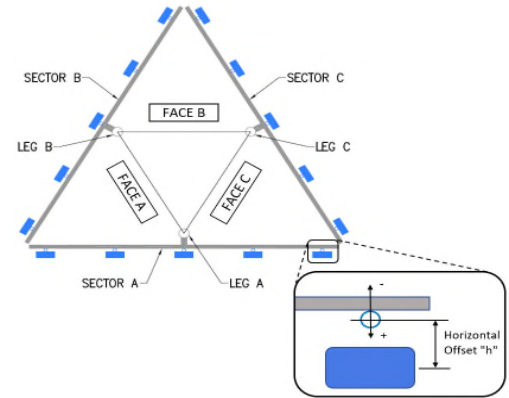
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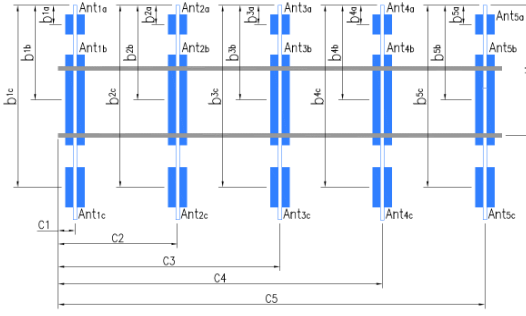
Mount Pipe Configuration and Geometries [Unit = Inches]							
Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."

Distance between bottom rail and mount CL elevation (dim d). Unit is inches. See 'Mount Elev Ref' tab for details. :
 Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) :
 Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) :
 Please enter additional information or comments below.

Tower Face Width at Mount Elev. (ft.):	Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):
--	---



Ants. Items	Enter antenna model. If not labeled, enter "Unknown".					Mounting Locations [Units are inches and degrees]			Photos of antennas	
	Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Vertical Distances "b , b b , b _{1b}" (Inches)	Horiz. Offset "h" (Use "-" if Ant. is behind)		Antenna Azimuth (Degrees)
Sector A										
Ant										
Ant _{1b}										
Ant _{1c}										
Ant										
Ant _{2b}										
Ant _{2c}										
Ant										
Ant _{3b}										
Ant _{3c}										
Ant										
Ant _{4b}										
Ant _{4c}										
Ant										
Ant _{5b}										
Ant _{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										



Antenna Layout (Looking Out From Tower)

Mount Azimuth (Degree) for Each Sector		Tower Leg Azimuth (Degree) for Each Sector		Sector B																							
Sector A:	Deg	Leg A:	Deg	Ant																							
Sector B:	Deg	Leg B:	Deg	Ant _{1b}																							
Sector C:	Deg	Leg C:	Deg	Ant _{1c}																							
Sector D:	Deg	Leg D:	Deg	Ant																							
Climbing Facility Information				Ant _{2b}																							
Location:	Deg	On Leg A		Ant _{2c}																							
Climbing Facility	Corrosion Type:	Good condition.		Ant _{3b}																							
	Access:	Climbing path was unobstructed.		Ant _{3c}																							
	Condition:	Good condition.		Ant																							
				Ant _{4b}																							
				Ant _{4c}																							
				Ant																							
				Ant _{5b}																							
				Ant _{5c}																							
				Ant on Standoff																							
				Ant on Standoff																							
				Ant on Tower																							
				Ant on Tower																							
				Sector C																							
				Ant																							
				Ant _{1b}																							
				Ant _{1c}																							
				Ant																							
				Ant _{2b}																							
Ant _{2c}																											
Ant																											
Ant _{3b}																											
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Ant _{4b}																											
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Ant on Tower																											
Ant on Tower																											
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Ant																											
Ant _{4b}																											
Ant _{4c}																											
Ant																											
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 #
---------	----------------------	---------

Mapping Notes

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

Standard Conditions

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



Antenna Mount Mapping Form (PATENT PENDING)

Tower Owner:	Other	Mapping Date:	3/25/2021
Site Name:	COVENTRY EAST CT	Tower Type:	Self Support
Site Number or ID:	468160	Tower Height (Ft.):	
Mapping Contractor:	HUDSON DESIGN GROUP, LLC.	Mount Elevation (Ft.):	150.1

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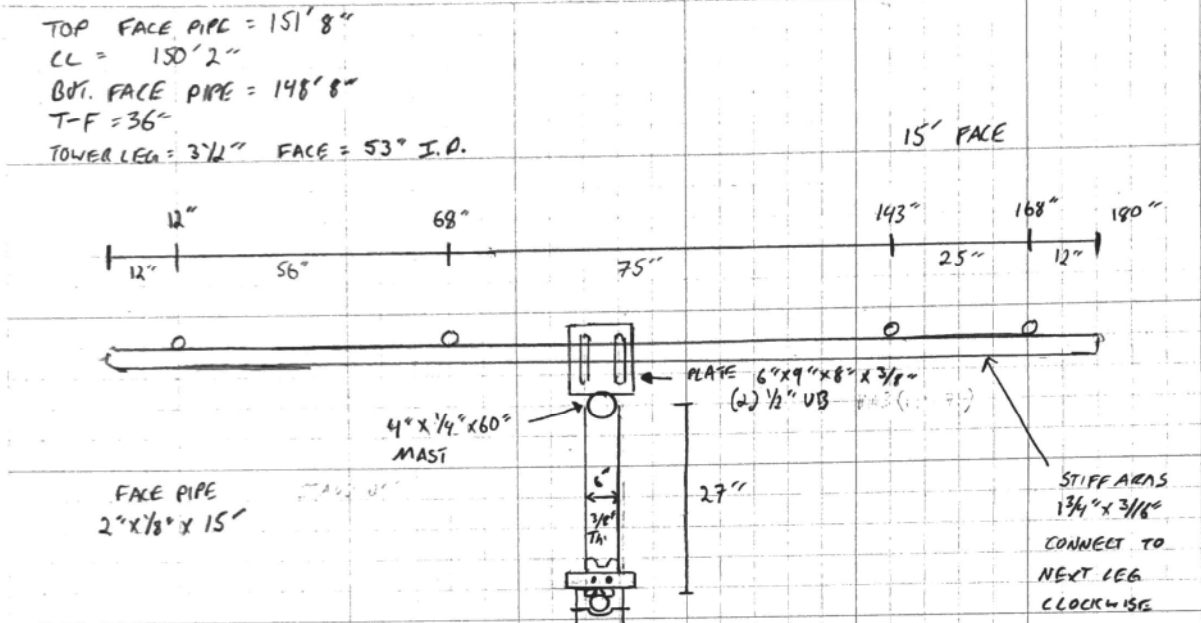
Please Insert Sketches of the Antenna Mount

DATE: _____
 Project Name: _____
 Project No.: COVENTRY EAST CT
 Design By: [Signature] Chk'd By: _____ Page 2 of 2

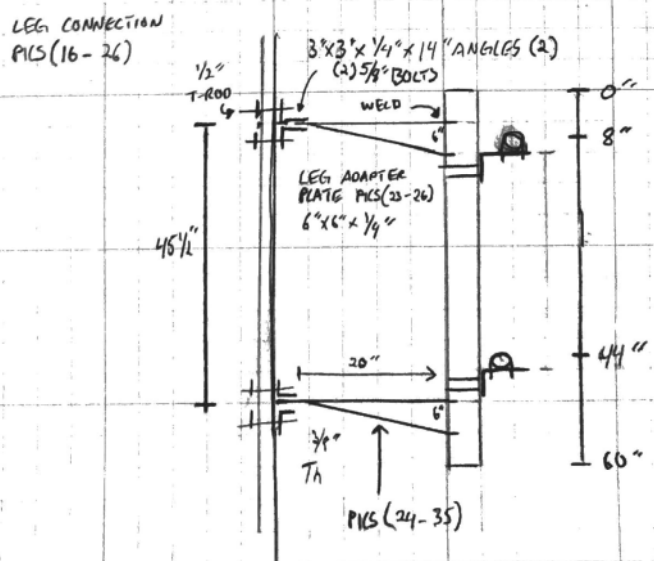
HUDSON
Design Group LLC

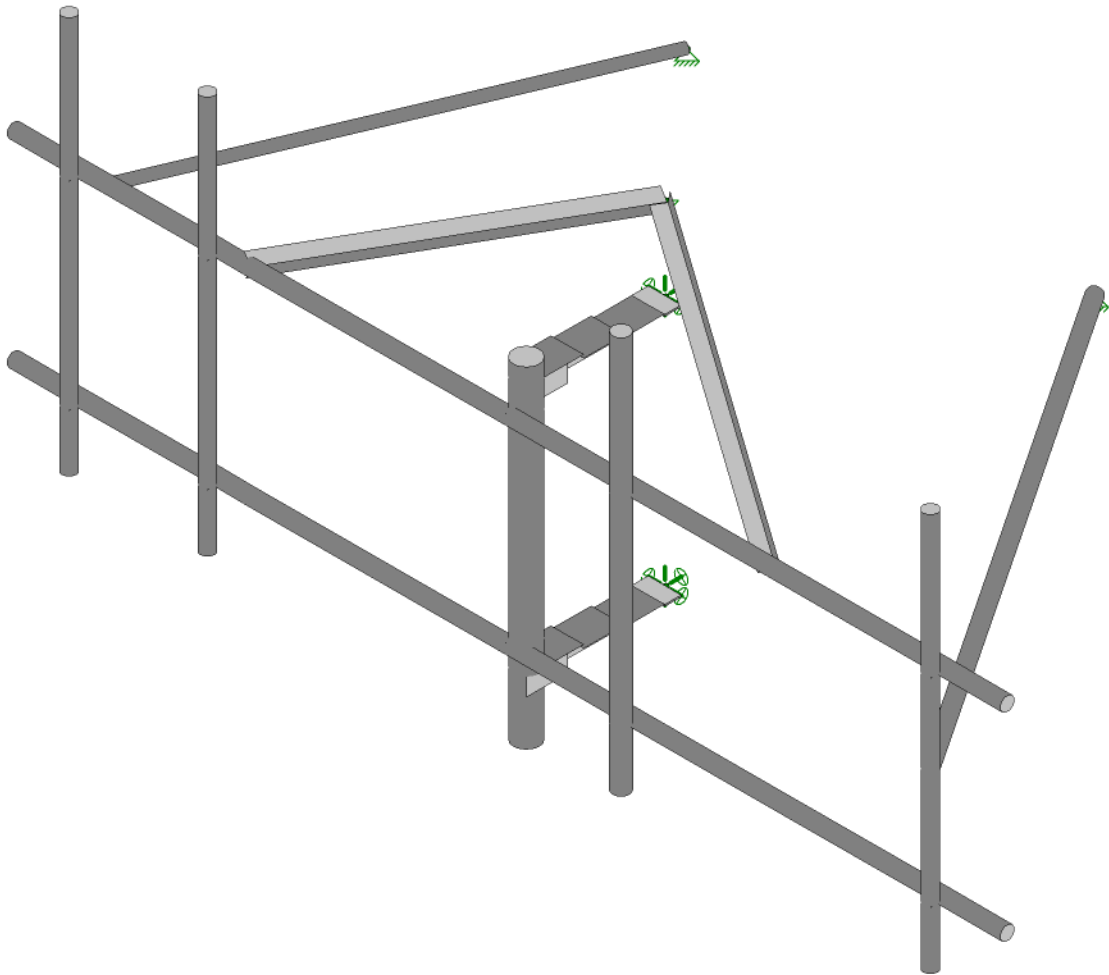
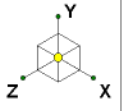
45 BEECHWOOD DRIVE
NORTH ANDOVER, MA 01845

TEL: (978) 557-5553
FAX: (978) 336-5586



CROSSOVER PLATES PKGS (70-73)
 6" x 8" x 3/16"





Envelope Only Solution

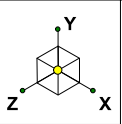
Maser Consulting

468160-VZW_MT_LOT_SectorA_H

SK - 1

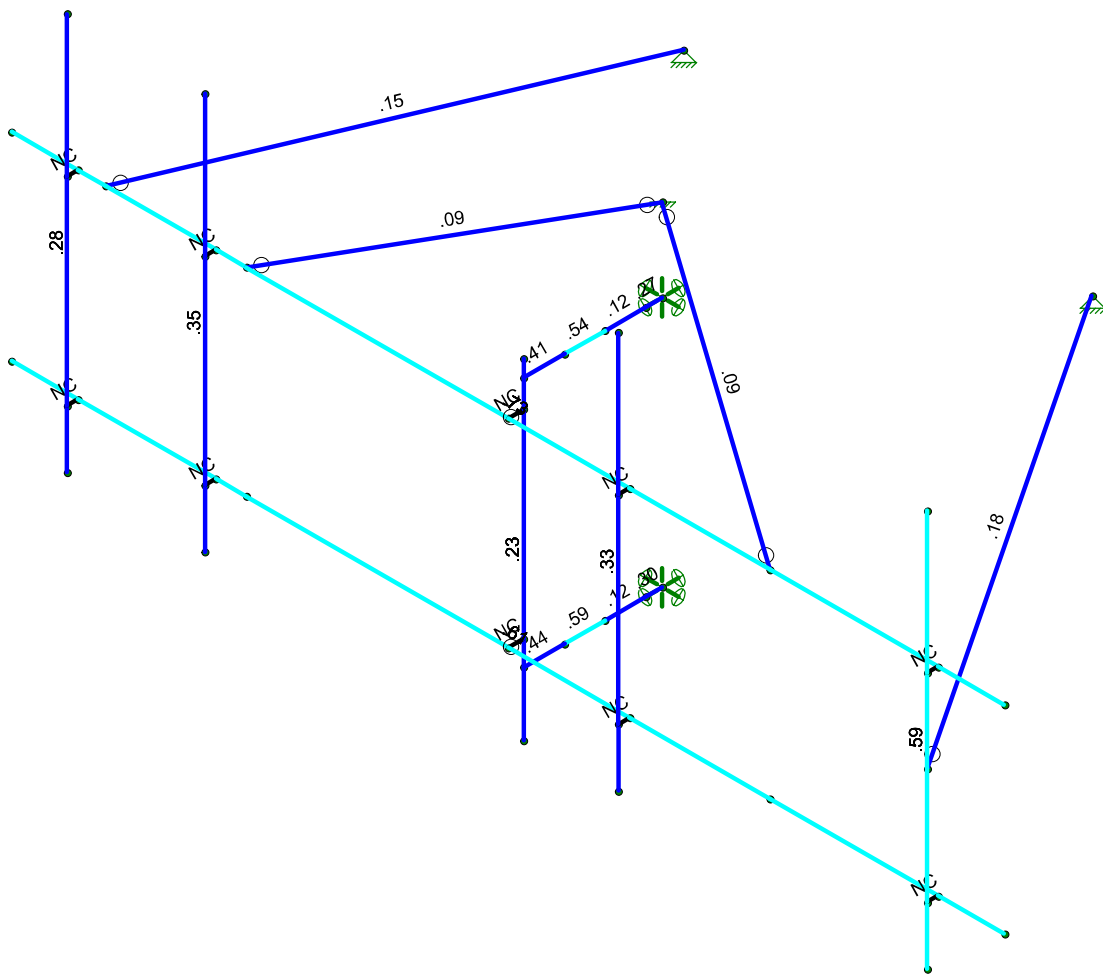
June 11, 2021 at 4:17 PM

MOD_468160-VZW_MT_LOT_A_H....



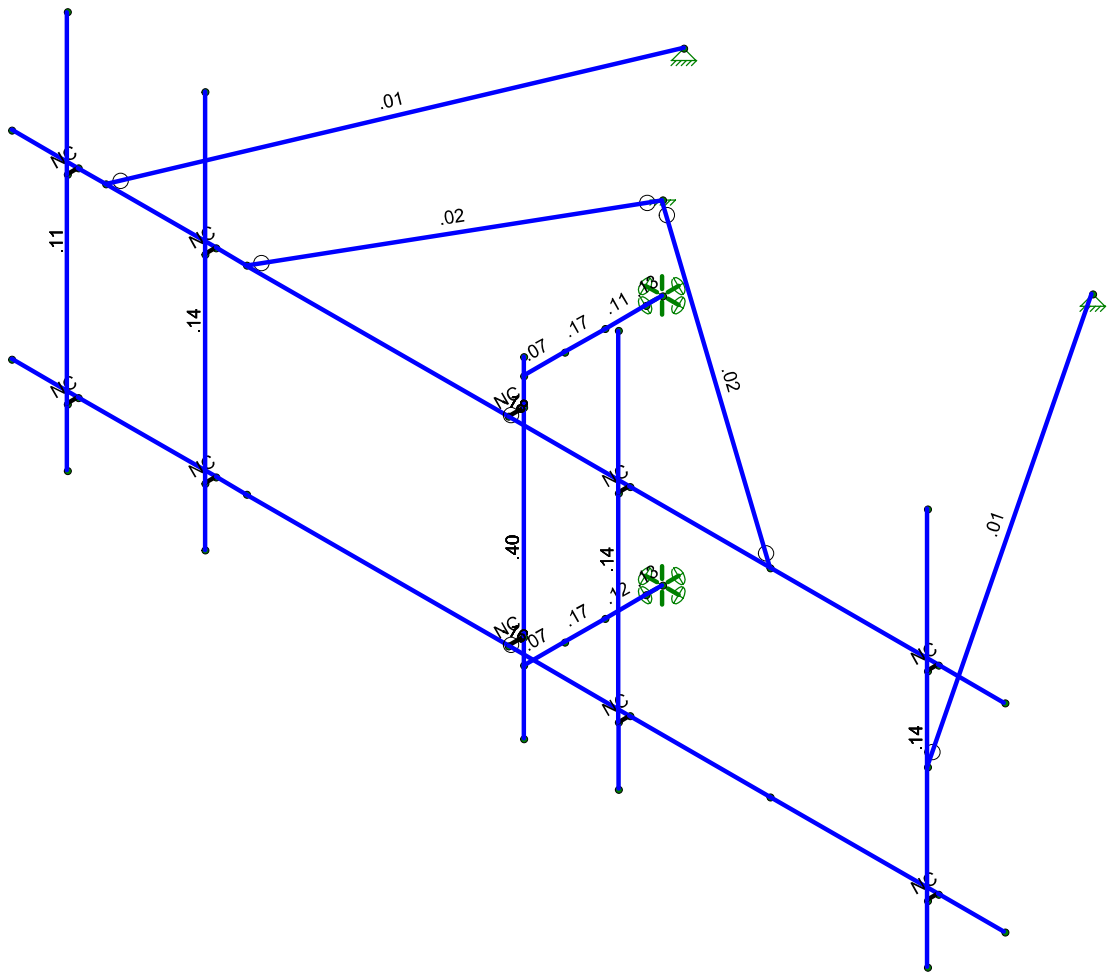
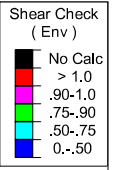
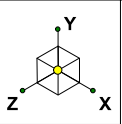
Code Check (Env)

Black	No Calc
Red	> 1.0
Magenta	.90-1.0
Green	.75-.90
Cyan	.50-.75
Blue	0.-.50



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

Maser Consulting	468160-VZW_MT_LOT_SectorA_H	SK - 2
		June 11, 2021 at 4:18 PM
		MOD_468160-VZW_MT_LOT_A_H....



Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

Maser Consulting		SK - 3
	468160-VZW_MT_LOT_SectorA_H	June 11, 2021 at 4:18 PM
		MOD_468160-VZW_MT_LOT_A_H....



Basic Load Cases

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

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...)	Surface(P...
52	Structure Wo (330 D..)	None						38	
53	Structure Wi (0 Deg)	None						38	
54	Structure Wi (30 Deg)	None						38	
55	Structure Wi (60 Deg)	None						38	
56	Structure Wi (90 Deg)	None						38	
57	Structure Wi (120 De...	None						38	
58	Structure Wi (150 De...	None						38	
59	Structure Wi (180 De...	None						38	
60	Structure Wi (210 De...	None						38	
61	Structure Wi (240 De...	None						38	
62	Structure Wi (270 De...	None						38	
63	Structure Wi (300 De...	None						38	
64	Structure Wi (330 De...	None						38	
65	Structure Wm (0 Deg)	None						38	
66	Structure Wm (30 D...	None						38	
67	Structure Wm (60 D...	None						38	
68	Structure Wm (90 D...	None						38	
69	Structure Wm (120 ...	None						38	
70	Structure Wm (150 ...	None						38	
71	Structure Wm (180 ...	None						38	
72	Structure Wm (210 ...	None						38	
73	Structure Wm (240 ...	None						38	
74	Structure Wm (270 ...	None						38	
75	Structure Wm (300 ...	None						38	
76	Structure Wm (330 ...	None						38	
77	Lm1	None					1		
78	Lm2	None					1		
79	Lv1	None					1		
80	Lv2	None					1		

Load Combinations

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



Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	-7.5	-.5	0	0	
2	N2	7.5	-.5	0	0	
3	N3	-7.5	2.5	0	0	
4	N4	7.5	2.5	0	0	
5	N5	0	-.5	0	0	
6	N7	1.833333	-.5	0	0	
7	N8	1.833333	2.5	0	0	
8	N9	-4.416667	-.5	0	0	
9	N10	-4.416667	2.5	0	0	
10	N13	-6.5	-.5	0	0	
11	N14	-6.5	2.5	0	0	
12	N15	1.833333	-.5	0.166667	0	
13	N16	1.833333	2.5	0.166667	0	
14	N17	-4.416667	-.5	0.166667	0	
15	N18	-4.416667	2.5	0.166667	0	
16	N21	-6.5	-.5	0.166667	0	
17	N22	-6.5	2.5	0.166667	0	
18	N23	1.833333	4.625	0.166667	0	
19	N24	-4.416667	4.625	0.166667	0	
20	N26	-6.5	4.625	0.166667	0	
21	N27	1.833333	-1.375	0.166667	0	
22	N28	-4.416667	-1.375	0.166667	0	
23	N30	-6.5	-1.375	0.166667	0	
24	N31	0.	-.5	-0.234923	0	
25	N32	0.	3.166667	-0.234923	0	
26	N33	0.	-.875	-0.234923	0	
27	N34	0.	-1.833333	-0.234923	0	
28	N35	0.	2.916667	-0.234923	0	
29	N36	0.	-.875	-2.327674	0	
30	N37	0.	2.916667	-2.327674	0	
31	N39	-3.496668	2.5	-6.146841	0	
32	N40	0.	-.875	-2.077667	0	
33	N41	0.	2.916667	-2.077667	0	
34	N42	0.	-.875	-1.461796	0	
35	N43	0.	2.916667	-1.461796	0	
36	N44	-0.	-.875	-0.850849	0	
37	N45	-0.	2.916667	-0.850849	0	
38	N40A	0	2.5	0	0	
39	N41A	0.	2.5	-0.234923	0	
40	N41B	6.5	-.5	0	0	
41	N42A	6.5	2.5	0	0	
42	N43A	6.5	-.5	0.166667	0	
43	N44A	6.5	2.5	0.166667	0	
44	N45A	6.5	4.625	0.166667	0	
45	N46	6.5	-1.375	0.166667	0	
46	N47	-6.083333	2.5	0	0	
47	N48	-3.958333	-.5	0	0	
48	N49	3.958333	-.5	0	0	
49	N50	0.	4.166667	-2.327674	0	
50	N51	-3.958333	2.5	0	0	
51	N52	3.958333	2.5	0	0	
52	N54	1.559162	1.25	-7.265461	0	



Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
53	N54A	6.5	1.25	0.166667	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rul...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Mount Pipe	PIPE 2.0	Column	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25
2	Face Pipe	PIPE 2.0	Beam	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25
3	Tieback	PIPE_1.25	Beam	Pipe	A53 Gr.B	Typical	.625	.184	.184	.368
4	Mast Pipe	PIPE 4.0	Beam	Pipe	A53 Gr.B	Typical	2.96	6.82	6.82	13.6
5	SO1	WT6X3/8_...	Beam	W Tee	A36 Gr.36	Typical	3.81	7.05	7.86	.201
6	SO2	WT3X3/8	Beam	W Tee	A36 Gr.36	Typical	2.21	4.66	1.41	.05
7	SO3	WT1x3/8	Beam	W Tee	A36 Gr.36	Typical	4.42	8.35	9.28	.31
8	SO4	PL3/8x6	Beam	RECT	A36 Gr.36	Typical	2.25	.026	6.75	.101
9	TES SO1	PL3/8x6	Beam	RECT	A36 Gr.36	Typical	2.25	.026	6.75	.101
10	TES SO2	PL3/8X3_...	Beam	RECT	A36 Gr.36	Typical	2.25	.026	6.75	.101
11	TES SO3	PL3/8x2_H..	Beam	RECT	A36 Gr.36	Typical	1	.021	.333	.07
12	Secondary Horizontal	PIPE 2.5	Beam	Pipe	A53 Gr.B	Typical	1.61	1.45	1.45	2.89
13	V-Brace	L2.5x2.5x4	Beam	Single Angle	A36 Gr.36	Typical	1.19	.692	.692	.026
14	Replacment Pipe	PIPE 2.5	Column	Pipe	A53 Gr.B	Typical	1.61	1.45	1.45	2.89
15	Proposed Tie-Back	PIPE 2.0	Beam	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/1E...Density[k/ft...	Yield[ksi]	Ry	Fu[ksi]	Rt	
1	A992	29000	11154	.3	.65	.49	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	.3	.65	.527	42	1.4	58	1.3
5	A500 Gr.B Rect	29000	11154	.3	.65	.527	46	1.4	58	1.3
6	A53 Gr.B	29000	11154	.3	.65	.49	35	1.6	60	1.2
7	A1085	29000	11154	.3	.65	.49	50	1.4	65	1.3

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N1	N2			Face Pipe	Beam	Pipe	A53 Gr.B	Typical
2	M2	N3	N4			Face Pipe	Beam	Pipe	A53 Gr.B	Typical
3	M3	N13	N21			RIGID	None	None	RIGID	Typical
4	M4	N14	N22			RIGID	None	None	RIGID	Typical
5	M7	N10	N18			RIGID	None	None	RIGID	Typical
6	M8	N9	N17			RIGID	None	None	RIGID	Typical
7	M9	N8	N16			RIGID	None	None	RIGID	Typical
8	M10	N7	N15			RIGID	None	None	RIGID	Typical
9	MP2A	N23	N27			Replacment ...	Column	Pipe	A53 Gr.B	Typical
10	MP3A	N24	N28			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
11	MP4A	N26	N30			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
12	M16	N5	N31			RIGID	None	None	RIGID	Typical
13	M17	N34	N32			Mast Pipe	Beam	Pipe	A53 Gr.B	Typical
14	M20	N47	N39			Tieback	Beam	Pipe	A53 Gr.B	Typical
15	M19	N35	N45			SO1	Beam	W Tee	A36 Gr.36	Typical



Company : Maser Consulting
 Designer :
 Job Number :
 Model Name : 468160-VZW_MT_LOT_SectorA_H

June 11, 2021
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 Checked By: _____

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
36	MP3A	Mx	.013	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	104.976	1
2	MP2A	Z	-60.608	1
3	MP2A	Mx	-.086	1
4	MP2A	X	104.976	5
5	MP2A	Z	-60.608	5
6	MP2A	Mx	-.086	5
7	MP2A	X	104.976	1
8	MP2A	Z	-60.608	1
9	MP2A	Mx	-.024	1
10	MP2A	X	104.976	5
11	MP2A	Z	-60.608	5
12	MP2A	Mx	-.024	5
13	MP1A	X	42.324	2.5
14	MP1A	Z	-24.436	2.5
15	MP1A	Mx	-.022	2.5
16	MP1A	X	42.324	3.5
17	MP1A	Z	-24.436	3.5
18	MP1A	Mx	-.022	3.5
19	MP1A	X	48.997	3
20	MP1A	Z	-28.288	3
21	MP1A	Mx	-.043	3
22	MP2A	X	41.973	3
23	MP2A	Z	-24.233	3
24	MP2A	Mx	-.037	3
25	MP4A	X	120.482	1
26	MP4A	Z	-69.56	1
27	MP4A	Mx	-.063	1
28	MP4A	X	120.482	5
29	MP4A	Z	-69.56	5
30	MP4A	Mx	-.063	5
31	MP3A	X	49.286	2.5
32	MP3A	Z	-28.455	2.5
33	MP3A	Mx	.017	2.5
34	MP3A	X	49.286	3.5
35	MP3A	Z	-28.455	3.5
36	MP3A	Mx	.017	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	111.481	1
2	MP2A	Z	0	1
3	MP2A	Mx	-.05	1
4	MP2A	X	111.481	5
5	MP2A	Z	0	5
6	MP2A	Mx	-.05	5
7	MP2A	X	111.481	1
8	MP2A	Z	0	1



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
9	MP2A	Mx	-.061	1
10	MP2A	X	111.481	5
11	MP2A	Z	0	5
12	MP2A	Mx	-.061	5
13	MP1A	X	38.704	2.5
14	MP1A	Z	0	2.5
15	MP1A	Mx	-.019	2.5
16	MP1A	X	38.704	3.5
17	MP1A	Z	0	3.5
18	MP1A	Mx	-.019	3.5
19	MP1A	X	52.169	3
20	MP1A	Z	0	3
21	MP1A	Mx	-.043	3
22	MP2A	X	42.369	3
23	MP2A	Z	0	3
24	MP2A	Mx	-.035	3
25	MP4A	X	128.136	1
26	MP4A	Z	0	1
27	MP4A	Mx	-.064	1
28	MP4A	X	128.136	5
29	MP4A	Z	0	5
30	MP4A	Mx	-.064	5
31	MP3A	X	52.356	2.5
32	MP3A	Z	0	2.5
33	MP3A	Mx	.017	2.5
34	MP3A	X	52.356	3.5
35	MP3A	Z	0	3.5
36	MP3A	Mx	.017	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	112.39	1
2	MP2A	Z	64.888	1
3	MP2A	Mx	-.008	1
4	MP2A	X	112.39	5
5	MP2A	Z	64.888	5
6	MP2A	Mx	-.008	5
7	MP2A	X	112.39	1
8	MP2A	Z	64.888	1
9	MP2A	Mx	-.098	1
10	MP2A	X	112.39	5
11	MP2A	Z	64.888	5
12	MP2A	Mx	-.098	5
13	MP1A	X	50.068	2.5
14	MP1A	Z	28.907	2.5
15	MP1A	Mx	-.024	2.5
16	MP1A	X	50.068	3.5
17	MP1A	Z	28.907	3.5
18	MP1A	Mx	-.024	3.5
19	MP1A	X	52.354	3
20	MP1A	Z	30.227	3



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
21	MP1A	Mx	-.041	3
22	MP2A	X	46.616	3
23	MP2A	Z	26.914	3
24	MP2A	Mx	-.037	3
25	MP4A	X	128.848	1
26	MP4A	Z	74.39	1
27	MP4A	Mx	-.061	1
28	MP4A	X	128.848	5
29	MP4A	Z	74.39	5
30	MP4A	Mx	-.061	5
31	MP3A	X	52.755	2.5
32	MP3A	Z	30.458	2.5
33	MP3A	Mx	.017	2.5
34	MP3A	X	52.755	3.5
35	MP3A	Z	30.458	3.5
36	MP3A	Mx	.017	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	78.904	1
2	MP2A	Z	136.666	1
3	MP2A	Mx	.053	1
4	MP2A	X	78.904	5
5	MP2A	Z	136.666	5
6	MP2A	Mx	.053	5
7	MP2A	X	78.904	1
8	MP2A	Z	136.666	1
9	MP2A	Mx	-.12	1
10	MP2A	X	78.904	5
11	MP2A	Z	136.666	5
12	MP2A	Mx	-.12	5
13	MP1A	X	43.545	2.5
14	MP1A	Z	75.422	2.5
15	MP1A	Mx	-.018	2.5
16	MP1A	X	43.545	3.5
17	MP1A	Z	75.422	3.5
18	MP1A	Mx	-.018	3.5
19	MP1A	X	36.573	3
20	MP1A	Z	63.347	3
21	MP1A	Mx	-.026	3
22	MP2A	X	35.692	3
23	MP2A	Z	61.82	3
24	MP2A	Mx	-.025	3
25	MP4A	X	90.205	1
26	MP4A	Z	156.24	1
27	MP4A	Mx	-.038	1
28	MP4A	X	90.205	5
29	MP4A	Z	156.24	5
30	MP4A	Mx	-.038	5
31	MP3A	X	37.017	2.5
32	MP3A	Z	64.114	2.5



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP3A	Mx	.01	2.5
34	MP3A	X	37.017	3.5
35	MP3A	Z	64.114	3.5
36	MP3A	Mx	.01	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	1
2	MP2A	Z	167.543	1
3	MP2A	Mx	.108	1
4	MP2A	X	0	5
5	MP2A	Z	167.543	5
6	MP2A	Mx	.108	5
7	MP2A	X	0	1
8	MP2A	Z	167.543	1
9	MP2A	Mx	-.094	1
10	MP2A	X	0	5
11	MP2A	Z	167.543	5
12	MP2A	Mx	-.094	5
13	MP1A	X	0	2.5
14	MP1A	Z	97.257	2.5
15	MP1A	Mx	.004	2.5
16	MP1A	X	0	3.5
17	MP1A	Z	97.257	3.5
18	MP1A	Mx	.004	3.5
19	MP1A	X	0	3
20	MP1A	Z	77.555	3
21	MP1A	Mx	.006	3
22	MP2A	X	0	3
23	MP2A	Z	77.48	3
24	MP2A	Mx	.006	3
25	MP4A	X	0	1
26	MP4A	Z	191.395	1
27	MP4A	Mx	.008	1
28	MP4A	X	0	5
29	MP4A	Z	191.395	5
30	MP4A	Mx	.008	5
31	MP3A	X	0	2.5
32	MP3A	Z	78.588	2.5
33	MP3A	Mx	-.002	2.5
34	MP3A	X	0	3.5
35	MP3A	Z	78.588	3.5
36	MP3A	Mx	-.002	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-74.624	1
2	MP2A	Z	129.252	1
3	MP2A	Mx	.117	1
4	MP2A	X	-74.624	5
5	MP2A	Z	129.252	5



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
6	MP2A	Mx	.117	5
7	MP2A	X	-74.624	1
8	MP2A	Z	129.252	1
9	MP2A	Mx	-.031	1
10	MP2A	X	-74.624	5
11	MP2A	Z	129.252	5
12	MP2A	Mx	-.031	5
13	MP1A	X	-39.074	2.5
14	MP1A	Z	67.678	2.5
15	MP1A	Mx	.022	2.5
16	MP1A	X	-39.074	3.5
17	MP1A	Z	67.678	3.5
18	MP1A	Mx	.022	3.5
19	MP1A	X	-34.635	3
20	MP1A	Z	59.99	3
21	MP1A	Mx	.033	3
22	MP2A	X	-33.011	3
23	MP2A	Z	57.176	3
24	MP2A	Mx	.032	3
25	MP4A	X	-85.375	1
26	MP4A	Z	147.874	1
27	MP4A	Mx	.049	1
28	MP4A	X	-85.375	5
29	MP4A	Z	147.874	5
30	MP4A	Mx	.049	5
31	MP3A	X	-35.014	2.5
32	MP3A	Z	60.645	2.5
33	MP3A	Mx	-.013	2.5
34	MP3A	X	-35.014	3.5
35	MP3A	Z	60.645	3.5
36	MP3A	Mx	-.013	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-104.976	1
2	MP2A	Z	60.608	1
3	MP2A	Mx	.086	1
4	MP2A	X	-104.976	5
5	MP2A	Z	60.608	5
6	MP2A	Mx	.086	5
7	MP2A	X	-104.976	1
8	MP2A	Z	60.608	1
9	MP2A	Mx	.024	1
10	MP2A	X	-104.976	5
11	MP2A	Z	60.608	5
12	MP2A	Mx	.024	5
13	MP1A	X	-42.324	2.5
14	MP1A	Z	24.436	2.5
15	MP1A	Mx	.022	2.5
16	MP1A	X	-42.324	3.5
17	MP1A	Z	24.436	3.5



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP1A	Mx	.022	3.5
19	MP1A	X	-48.997	3
20	MP1A	Z	28.288	3
21	MP1A	Mx	.043	3
22	MP2A	X	-41.973	3
23	MP2A	Z	24.233	3
24	MP2A	Mx	.037	3
25	MP4A	X	-120.482	1
26	MP4A	Z	69.56	1
27	MP4A	Mx	.063	1
28	MP4A	X	-120.482	5
29	MP4A	Z	69.56	5
30	MP4A	Mx	.063	5
31	MP3A	X	-49.286	2.5
32	MP3A	Z	28.455	2.5
33	MP3A	Mx	-.017	2.5
34	MP3A	X	-49.286	3.5
35	MP3A	Z	28.455	3.5
36	MP3A	Mx	-.017	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-111.481	1
2	MP2A	Z	0	1
3	MP2A	Mx	.05	1
4	MP2A	X	-111.481	5
5	MP2A	Z	0	5
6	MP2A	Mx	.05	5
7	MP2A	X	-111.481	1
8	MP2A	Z	0	1
9	MP2A	Mx	.061	1
10	MP2A	X	-111.481	5
11	MP2A	Z	0	5
12	MP2A	Mx	.061	5
13	MP1A	X	-38.704	2.5
14	MP1A	Z	0	2.5
15	MP1A	Mx	.019	2.5
16	MP1A	X	-38.704	3.5
17	MP1A	Z	0	3.5
18	MP1A	Mx	.019	3.5
19	MP1A	X	-52.169	3
20	MP1A	Z	0	3
21	MP1A	Mx	.043	3
22	MP2A	X	-42.369	3
23	MP2A	Z	0	3
24	MP2A	Mx	.035	3
25	MP4A	X	-128.136	1
26	MP4A	Z	0	1
27	MP4A	Mx	.064	1
28	MP4A	X	-128.136	5
29	MP4A	Z	0	5



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
30	MP4A	Mx	.064	5
31	MP3A	X	-52.356	2.5
32	MP3A	Z	0	2.5
33	MP3A	Mx	-.017	2.5
34	MP3A	X	-52.356	3.5
35	MP3A	Z	0	3.5
36	MP3A	Mx	-.017	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	MP2A	X	-112.39	1
2	MP2A	Z	-64.888	1
3	MP2A	Mx	.008	1
4	MP2A	X	-112.39	5
5	MP2A	Z	-64.888	5
6	MP2A	Mx	.008	5
7	MP2A	X	-112.39	1
8	MP2A	Z	-64.888	1
9	MP2A	Mx	.098	1
10	MP2A	X	-112.39	5
11	MP2A	Z	-64.888	5
12	MP2A	Mx	.098	5
13	MP1A	X	-50.068	2.5
14	MP1A	Z	-28.907	2.5
15	MP1A	Mx	.024	2.5
16	MP1A	X	-50.068	3.5
17	MP1A	Z	-28.907	3.5
18	MP1A	Mx	.024	3.5
19	MP1A	X	-52.354	3
20	MP1A	Z	-30.227	3
21	MP1A	Mx	.041	3
22	MP2A	X	-46.616	3
23	MP2A	Z	-26.914	3
24	MP2A	Mx	.037	3
25	MP4A	X	-128.848	1
26	MP4A	Z	-74.39	1
27	MP4A	Mx	.061	1
28	MP4A	X	-128.848	5
29	MP4A	Z	-74.39	5
30	MP4A	Mx	.061	5
31	MP3A	X	-52.755	2.5
32	MP3A	Z	-30.458	2.5
33	MP3A	Mx	-.017	2.5
34	MP3A	X	-52.755	3.5
35	MP3A	Z	-30.458	3.5
36	MP3A	Mx	-.017	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	MP2A	X	-78.904	1
2	MP2A	Z	-136.666	1



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
3	MP2A	Mx	-.053	1
4	MP2A	X	-78.904	5
5	MP2A	Z	-136.666	5
6	MP2A	Mx	-.053	5
7	MP2A	X	-78.904	1
8	MP2A	Z	-136.666	1
9	MP2A	Mx	.12	1
10	MP2A	X	-78.904	5
11	MP2A	Z	-136.666	5
12	MP2A	Mx	.12	5
13	MP1A	X	-43.545	2.5
14	MP1A	Z	-75.422	2.5
15	MP1A	Mx	.018	2.5
16	MP1A	X	-43.545	3.5
17	MP1A	Z	-75.422	3.5
18	MP1A	Mx	.018	3.5
19	MP1A	X	-36.573	3
20	MP1A	Z	-63.347	3
21	MP1A	Mx	.026	3
22	MP2A	X	-35.692	3
23	MP2A	Z	-61.82	3
24	MP2A	Mx	.025	3
25	MP4A	X	-90.205	1
26	MP4A	Z	-156.24	1
27	MP4A	Mx	.038	1
28	MP4A	X	-90.205	5
29	MP4A	Z	-156.24	5
30	MP4A	Mx	.038	5
31	MP3A	X	-37.017	2.5
32	MP3A	Z	-64.114	2.5
33	MP3A	Mx	-.01	2.5
34	MP3A	X	-37.017	3.5
35	MP3A	Z	-64.114	3.5
36	MP3A	Mx	-.01	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	1
2	MP2A	Z	-34.316	1
3	MP2A	Mx	-.022	1
4	MP2A	X	0	5
5	MP2A	Z	-34.316	5
6	MP2A	Mx	-.022	5
7	MP2A	X	0	1
8	MP2A	Z	-34.316	1
9	MP2A	Mx	.019	1
10	MP2A	X	0	5
11	MP2A	Z	-34.316	5
12	MP2A	Mx	.019	5
13	MP1A	X	0	2.5
14	MP1A	Z	-20.6	2.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
15	MP1A	Mx	-.000898	2.5
16	MP1A	X	0	3.5
17	MP1A	Z	-20.6	3.5
18	MP1A	Mx	-.000898	3.5
19	MP1A	X	0	3
20	MP1A	Z	-17.891	3
21	MP1A	Mx	-.001	3
22	MP2A	X	0	3
23	MP2A	Z	-17.876	3
24	MP2A	Mx	-.001	3
25	MP4A	X	0	1
26	MP4A	Z	-39.003	1
27	MP4A	Mx	-.002	1
28	MP4A	X	0	5
29	MP4A	Z	-39.003	5
30	MP4A	Mx	-.002	5
31	MP3A	X	0	2.5
32	MP3A	Z	-16.831	2.5
33	MP3A	Mx	.000489	2.5
34	MP3A	X	0	3.5
35	MP3A	Z	-16.831	3.5
36	MP3A	Mx	.000489	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	15.518	1
2	MP2A	Z	-26.879	1
3	MP2A	Mx	-.024	1
4	MP2A	X	15.518	5
5	MP2A	Z	-26.879	5
6	MP2A	Mx	-.024	5
7	MP2A	X	15.518	1
8	MP2A	Z	-26.879	1
9	MP2A	Mx	.006	1
10	MP2A	X	15.518	5
11	MP2A	Z	-26.879	5
12	MP2A	Mx	.006	5
13	MP1A	X	8.453	2.5
14	MP1A	Z	-14.642	2.5
15	MP1A	Mx	-.005	2.5
16	MP1A	X	8.453	3.5
17	MP1A	Z	-14.642	3.5
18	MP1A	Mx	-.005	3.5
19	MP1A	X	8.108	3
20	MP1A	Z	-14.044	3
21	MP1A	Mx	-.008	3
22	MP2A	X	7.783	3
23	MP2A	Z	-13.48	3
24	MP2A	Mx	-.007	3
25	MP4A	X	17.644	1
26	MP4A	Z	-30.561	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
27	MP4A	Mx	-.01	1
28	MP4A	X	17.644	5
29	MP4A	Z	-30.561	5
30	MP4A	Mx	-.01	5
31	MP3A	X	7.594	2.5
32	MP3A	Z	-13.154	2.5
33	MP3A	Mx	.003	2.5
34	MP3A	X	7.594	3.5
35	MP3A	Z	-13.154	3.5
36	MP3A	Mx	.003	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	22.529	1
2	MP2A	Z	-13.007	1
3	MP2A	Mx	-.018	1
4	MP2A	X	22.529	5
5	MP2A	Z	-13.007	5
6	MP2A	Mx	-.018	5
7	MP2A	X	22.529	1
8	MP2A	Z	-13.007	1
9	MP2A	Mx	-.005	1
10	MP2A	X	22.529	5
11	MP2A	Z	-13.007	5
12	MP2A	Mx	-.005	5
13	MP1A	X	9.742	2.5
14	MP1A	Z	-5.624	2.5
15	MP1A	Mx	-.005	2.5
16	MP1A	X	9.742	3.5
17	MP1A	Z	-5.624	3.5
18	MP1A	Mx	-.005	3.5
19	MP1A	X	11.823	3
20	MP1A	Z	-6.826	3
21	MP1A	Mx	-.01	3
22	MP2A	X	10.414	3
23	MP2A	Z	-6.013	3
24	MP2A	Mx	-.009	3
25	MP4A	X	25.631	1
26	MP4A	Z	-14.798	1
27	MP4A	Mx	-.013	1
28	MP4A	X	25.631	5
29	MP4A	Z	-14.798	5
30	MP4A	Mx	-.013	5
31	MP3A	X	10.975	2.5
32	MP3A	Z	-6.337	2.5
33	MP3A	Mx	.004	2.5
34	MP3A	X	10.975	3.5
35	MP3A	Z	-6.337	3.5
36	MP3A	Mx	.004	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	24.269	1
2	MP2A	Z	0	1
3	MP2A	Mx	-.011	1
4	MP2A	X	24.269	5
5	MP2A	Z	0	5
6	MP2A	Mx	-.011	5
7	MP2A	X	24.269	1
8	MP2A	Z	0	1
9	MP2A	Mx	-.013	1
10	MP2A	X	24.269	5
11	MP2A	Z	0	5
12	MP2A	Mx	-.013	5
13	MP1A	X	9.284	2.5
14	MP1A	Z	0	2.5
15	MP1A	Mx	-.005	2.5
16	MP1A	X	9.284	3.5
17	MP1A	Z	0	3.5
18	MP1A	Mx	-.005	3.5
19	MP1A	X	12.761	3
20	MP1A	Z	0	3
21	MP1A	Mx	-.011	3
22	MP2A	X	10.796	3
23	MP2A	Z	0	3
24	MP2A	Mx	-.009	3
25	MP4A	X	27.62	1
26	MP4A	Z	0	1
27	MP4A	Mx	-.014	1
28	MP4A	X	27.62	5
29	MP4A	Z	0	5
30	MP4A	Mx	-.014	5
31	MP3A	X	11.799	2.5
32	MP3A	Z	0	2.5
33	MP3A	Mx	.004	2.5
34	MP3A	X	11.799	3.5
35	MP3A	Z	0	3.5
36	MP3A	Mx	.004	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	23.857	1
2	MP2A	Z	13.774	1
3	MP2A	Mx	-.002	1
4	MP2A	X	23.857	5
5	MP2A	Z	13.774	5
6	MP2A	Mx	-.002	5
7	MP2A	X	23.857	1
8	MP2A	Z	13.774	1
9	MP2A	Mx	-.021	1
10	MP2A	X	23.857	5
11	MP2A	Z	13.774	5
12	MP2A	Mx	-.021	5



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
13	MP1A	X	11.238	2.5
14	MP1A	Z	6.488	2.5
15	MP1A	Mx	-.005	2.5
16	MP1A	X	11.238	3.5
17	MP1A	Z	6.488	3.5
18	MP1A	Mx	-.005	3.5
19	MP1A	X	12.501	3
20	MP1A	Z	7.218	3
21	MP1A	Mx	-.01	3
22	MP2A	X	11.351	3
23	MP2A	Z	6.553	3
24	MP2A	Mx	-.009	3
25	MP4A	X	27.137	1
26	MP4A	Z	15.667	1
27	MP4A	Mx	-.013	1
28	MP4A	X	27.137	5
29	MP4A	Z	15.667	5
30	MP4A	Mx	-.013	5
31	MP3A	X	11.641	2.5
32	MP3A	Z	6.721	2.5
33	MP3A	Mx	.004	2.5
34	MP3A	X	11.641	3.5
35	MP3A	Z	6.721	3.5
36	MP3A	Mx	.004	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	16.286	1
2	MP2A	Z	28.207	1
3	MP2A	Mx	.011	1
4	MP2A	X	16.286	5
5	MP2A	Z	28.207	5
6	MP2A	Mx	.011	5
7	MP2A	X	16.286	1
8	MP2A	Z	28.207	1
9	MP2A	Mx	-.025	1
10	MP2A	X	16.286	5
11	MP2A	Z	28.207	5
12	MP2A	Mx	-.025	5
13	MP1A	X	9.317	2.5
14	MP1A	Z	16.138	2.5
15	MP1A	Mx	-.004	2.5
16	MP1A	X	9.317	3.5
17	MP1A	Z	16.138	3.5
18	MP1A	Mx	-.004	3.5
19	MP1A	X	8.5	3
20	MP1A	Z	14.723	3
21	MP1A	Mx	-.006	3
22	MP2A	X	8.323	3
23	MP2A	Z	14.417	3
24	MP2A	Mx	-.006	3



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP4A	X	18.513	1
26	MP4A	Z	32.066	1
27	MP4A	Mx	-.008	1
28	MP4A	X	18.513	5
29	MP4A	Z	32.066	5
30	MP4A	Mx	-.008	5
31	MP3A	X	7.979	2.5
32	MP3A	Z	13.819	2.5
33	MP3A	Mx	.002	2.5
34	MP3A	X	7.979	3.5
35	MP3A	Z	13.819	3.5
36	MP3A	Mx	.002	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	1
2	MP2A	Z	34.316	1
3	MP2A	Mx	.022	1
4	MP2A	X	0	5
5	MP2A	Z	34.316	5
6	MP2A	Mx	.022	5
7	MP2A	X	0	1
8	MP2A	Z	34.316	1
9	MP2A	Mx	-.019	1
10	MP2A	X	0	5
11	MP2A	Z	34.316	5
12	MP2A	Mx	-.019	5
13	MP1A	X	0	2.5
14	MP1A	Z	20.6	2.5
15	MP1A	Mx	.000898	2.5
16	MP1A	X	0	3.5
17	MP1A	Z	20.6	3.5
18	MP1A	Mx	.000898	3.5
19	MP1A	X	0	3
20	MP1A	Z	17.891	3
21	MP1A	Mx	.001	3
22	MP2A	X	0	3
23	MP2A	Z	17.876	3
24	MP2A	Mx	.001	3
25	MP4A	X	0	1
26	MP4A	Z	39.003	1
27	MP4A	Mx	.002	1
28	MP4A	X	0	5
29	MP4A	Z	39.003	5
30	MP4A	Mx	.002	5
31	MP3A	X	0	2.5
32	MP3A	Z	16.831	2.5
33	MP3A	Mx	-.000489	2.5
34	MP3A	X	0	3.5
35	MP3A	Z	16.831	3.5
36	MP3A	Mx	-.000489	3.5



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-15.518	1
2	MP2A	Z	26.879	1
3	MP2A	Mx	.024	1
4	MP2A	X	-15.518	5
5	MP2A	Z	26.879	5
6	MP2A	Mx	.024	5
7	MP2A	X	-15.518	1
8	MP2A	Z	26.879	1
9	MP2A	Mx	-.006	1
10	MP2A	X	-15.518	5
11	MP2A	Z	26.879	5
12	MP2A	Mx	-.006	5
13	MP1A	X	-8.453	2.5
14	MP1A	Z	14.642	2.5
15	MP1A	Mx	.005	2.5
16	MP1A	X	-8.453	3.5
17	MP1A	Z	14.642	3.5
18	MP1A	Mx	.005	3.5
19	MP1A	X	-8.108	3
20	MP1A	Z	14.044	3
21	MP1A	Mx	.008	3
22	MP2A	X	-7.783	3
23	MP2A	Z	13.48	3
24	MP2A	Mx	.007	3
25	MP4A	X	-17.644	1
26	MP4A	Z	30.561	1
27	MP4A	Mx	.01	1
28	MP4A	X	-17.644	5
29	MP4A	Z	30.561	5
30	MP4A	Mx	.01	5
31	MP3A	X	-7.594	2.5
32	MP3A	Z	13.154	2.5
33	MP3A	Mx	-.003	2.5
34	MP3A	X	-7.594	3.5
35	MP3A	Z	13.154	3.5
36	MP3A	Mx	-.003	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-22.529	1
2	MP2A	Z	13.007	1
3	MP2A	Mx	.018	1
4	MP2A	X	-22.529	5
5	MP2A	Z	13.007	5
6	MP2A	Mx	.018	5
7	MP2A	X	-22.529	1
8	MP2A	Z	13.007	1
9	MP2A	Mx	.005	1
10	MP2A	X	-22.529	5
11	MP2A	Z	13.007	5
12	MP2A	Mx	.005	5



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
13	MP1A	X	-9.742	2.5
14	MP1A	Z	5.624	2.5
15	MP1A	Mx	.005	2.5
16	MP1A	X	-9.742	3.5
17	MP1A	Z	5.624	3.5
18	MP1A	Mx	.005	3.5
19	MP1A	X	-11.823	3
20	MP1A	Z	6.826	3
21	MP1A	Mx	.01	3
22	MP2A	X	-10.414	3
23	MP2A	Z	6.013	3
24	MP2A	Mx	.009	3
25	MP4A	X	-25.631	1
26	MP4A	Z	14.798	1
27	MP4A	Mx	.013	1
28	MP4A	X	-25.631	5
29	MP4A	Z	14.798	5
30	MP4A	Mx	.013	5
31	MP3A	X	-10.975	2.5
32	MP3A	Z	6.337	2.5
33	MP3A	Mx	-.004	2.5
34	MP3A	X	-10.975	3.5
35	MP3A	Z	6.337	3.5
36	MP3A	Mx	-.004	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-24.269	1
2	MP2A	Z	0	1
3	MP2A	Mx	.011	1
4	MP2A	X	-24.269	5
5	MP2A	Z	0	5
6	MP2A	Mx	.011	5
7	MP2A	X	-24.269	1
8	MP2A	Z	0	1
9	MP2A	Mx	.013	1
10	MP2A	X	-24.269	5
11	MP2A	Z	0	5
12	MP2A	Mx	.013	5
13	MP1A	X	-9.284	2.5
14	MP1A	Z	0	2.5
15	MP1A	Mx	.005	2.5
16	MP1A	X	-9.284	3.5
17	MP1A	Z	0	3.5
18	MP1A	Mx	.005	3.5
19	MP1A	X	-12.761	3
20	MP1A	Z	0	3
21	MP1A	Mx	.011	3
22	MP2A	X	-10.796	3
23	MP2A	Z	0	3
24	MP2A	Mx	.009	3



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP4A	X	-27.62	1
26	MP4A	Z	0	1
27	MP4A	Mx	.014	1
28	MP4A	X	-27.62	5
29	MP4A	Z	0	5
30	MP4A	Mx	.014	5
31	MP3A	X	-11.799	2.5
32	MP3A	Z	0	2.5
33	MP3A	Mx	-.004	2.5
34	MP3A	X	-11.799	3.5
35	MP3A	Z	0	3.5
36	MP3A	Mx	-.004	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-23.857	1
2	MP2A	Z	-13.774	1
3	MP2A	Mx	.002	1
4	MP2A	X	-23.857	5
5	MP2A	Z	-13.774	5
6	MP2A	Mx	.002	5
7	MP2A	X	-23.857	1
8	MP2A	Z	-13.774	1
9	MP2A	Mx	.021	1
10	MP2A	X	-23.857	5
11	MP2A	Z	-13.774	5
12	MP2A	Mx	.021	5
13	MP1A	X	-11.238	2.5
14	MP1A	Z	-6.488	2.5
15	MP1A	Mx	.005	2.5
16	MP1A	X	-11.238	3.5
17	MP1A	Z	-6.488	3.5
18	MP1A	Mx	.005	3.5
19	MP1A	X	-12.501	3
20	MP1A	Z	-7.218	3
21	MP1A	Mx	.01	3
22	MP2A	X	-11.351	3
23	MP2A	Z	-6.553	3
24	MP2A	Mx	.009	3
25	MP4A	X	-27.137	1
26	MP4A	Z	-15.667	1
27	MP4A	Mx	.013	1
28	MP4A	X	-27.137	5
29	MP4A	Z	-15.667	5
30	MP4A	Mx	.013	5
31	MP3A	X	-11.641	2.5
32	MP3A	Z	-6.721	2.5
33	MP3A	Mx	-.004	2.5
34	MP3A	X	-11.641	3.5
35	MP3A	Z	-6.721	3.5
36	MP3A	Mx	-.004	3.5



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
13	MP1A	X	0	2.5
14	MP1A	Z	-6.181	2.5
15	MP1A	Mx	-.000269	2.5
16	MP1A	X	0	3.5
17	MP1A	Z	-6.181	3.5
18	MP1A	Mx	-.000269	3.5
19	MP1A	X	0	3
20	MP1A	Z	-4.929	3
21	MP1A	Mx	-.000358	3
22	MP2A	X	0	3
23	MP2A	Z	-4.924	3
24	MP2A	Mx	-.000358	3
25	MP4A	X	0	1
26	MP4A	Z	-12.164	1
27	MP4A	Mx	-.00053	1
28	MP4A	X	0	5
29	MP4A	Z	-12.164	5
30	MP4A	Mx	-.00053	5
31	MP3A	X	0	2.5
32	MP3A	Z	-4.995	2.5
33	MP3A	Mx	.000145	2.5
34	MP3A	X	0	3.5
35	MP3A	Z	-4.995	3.5
36	MP3A	Mx	.000145	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	4.743	1
2	MP2A	Z	-8.215	1
3	MP2A	Mx	-.007	1
4	MP2A	X	4.743	5
5	MP2A	Z	-8.215	5
6	MP2A	Mx	-.007	5
7	MP2A	X	4.743	1
8	MP2A	Z	-8.215	1
9	MP2A	Mx	.002	1
10	MP2A	X	4.743	5
11	MP2A	Z	-8.215	5
12	MP2A	Mx	.002	5
13	MP1A	X	2.483	2.5
14	MP1A	Z	-4.301	2.5
15	MP1A	Mx	-.001	2.5
16	MP1A	X	2.483	3.5
17	MP1A	Z	-4.301	3.5
18	MP1A	Mx	-.001	3.5
19	MP1A	X	2.201	3
20	MP1A	Z	-3.813	3
21	MP1A	Mx	-.002	3
22	MP2A	X	2.098	3
23	MP2A	Z	-3.634	3
24	MP2A	Mx	-.002	3



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP4A	X	5.426	1
26	MP4A	Z	-9.398	1
27	MP4A	Mx	-.003	1
28	MP4A	X	5.426	5
29	MP4A	Z	-9.398	5
30	MP4A	Mx	-.003	5
31	MP3A	X	2.225	2.5
32	MP3A	Z	-3.854	2.5
33	MP3A	Mx	.000851	2.5
34	MP3A	X	2.225	3.5
35	MP3A	Z	-3.854	3.5
36	MP3A	Mx	.000851	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	6.672	1
2	MP2A	Z	-3.852	1
3	MP2A	Mx	-.005	1
4	MP2A	X	6.672	5
5	MP2A	Z	-3.852	5
6	MP2A	Mx	-.005	5
7	MP2A	X	6.672	1
8	MP2A	Z	-3.852	1
9	MP2A	Mx	-.002	1
10	MP2A	X	6.672	5
11	MP2A	Z	-3.852	5
12	MP2A	Mx	-.002	5
13	MP1A	X	2.69	2.5
14	MP1A	Z	-1.553	2.5
15	MP1A	Mx	-.001	2.5
16	MP1A	X	2.69	3.5
17	MP1A	Z	-1.553	3.5
18	MP1A	Mx	-.001	3.5
19	MP1A	X	3.114	3
20	MP1A	Z	-1.798	3
21	MP1A	Mx	-.003	3
22	MP2A	X	2.668	3
23	MP2A	Z	-1.54	3
24	MP2A	Mx	-.002	3
25	MP4A	X	7.657	1
26	MP4A	Z	-4.421	1
27	MP4A	Mx	-.004	1
28	MP4A	X	7.657	5
29	MP4A	Z	-4.421	5
30	MP4A	Mx	-.004	5
31	MP3A	X	3.132	2.5
32	MP3A	Z	-1.808	2.5
33	MP3A	Mx	.001	2.5
34	MP3A	X	3.132	3.5
35	MP3A	Z	-1.808	3.5
36	MP3A	Mx	.001	3.5



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	7.085	1
2	MP2A	Z	0	1
3	MP2A	Mx	-.003	1
4	MP2A	X	7.085	5
5	MP2A	Z	0	5
6	MP2A	Mx	-.003	5
7	MP2A	X	7.085	1
8	MP2A	Z	0	1
9	MP2A	Mx	-.004	1
10	MP2A	X	7.085	5
11	MP2A	Z	0	5
12	MP2A	Mx	-.004	5
13	MP1A	X	2.46	2.5
14	MP1A	Z	0	2.5
15	MP1A	Mx	-.001	2.5
16	MP1A	X	2.46	3.5
17	MP1A	Z	0	3.5
18	MP1A	Mx	-.001	3.5
19	MP1A	X	3.316	3
20	MP1A	Z	0	3
21	MP1A	Mx	-.003	3
22	MP2A	X	2.693	3
23	MP2A	Z	0	3
24	MP2A	Mx	-.002	3
25	MP4A	X	8.144	1
26	MP4A	Z	0	1
27	MP4A	Mx	-.004	1
28	MP4A	X	8.144	5
29	MP4A	Z	0	5
30	MP4A	Mx	-.004	5
31	MP3A	X	3.327	2.5
32	MP3A	Z	0	2.5
33	MP3A	Mx	.001	2.5
34	MP3A	X	3.327	3.5
35	MP3A	Z	0	3.5
36	MP3A	Mx	.001	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	7.143	1
2	MP2A	Z	4.124	1
3	MP2A	Mx	-.00052	1
4	MP2A	X	7.143	5
5	MP2A	Z	4.124	5
6	MP2A	Mx	-.00052	5
7	MP2A	X	7.143	1
8	MP2A	Z	4.124	1
9	MP2A	Mx	-.006	1
10	MP2A	X	7.143	5
11	MP2A	Z	4.124	5
12	MP2A	Mx	-.006	5



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-4.743	1
2	MP2A	Z	8.215	1
3	MP2A	Mx	.007	1
4	MP2A	X	-4.743	5
5	MP2A	Z	8.215	5
6	MP2A	Mx	.007	5
7	MP2A	X	-4.743	1
8	MP2A	Z	8.215	1
9	MP2A	Mx	-.002	1
10	MP2A	X	-4.743	5
11	MP2A	Z	8.215	5
12	MP2A	Mx	-.002	5
13	MP1A	X	-2.483	2.5
14	MP1A	Z	4.301	2.5
15	MP1A	Mx	.001	2.5
16	MP1A	X	-2.483	3.5
17	MP1A	Z	4.301	3.5
18	MP1A	Mx	.001	3.5
19	MP1A	X	-2.201	3
20	MP1A	Z	3.813	3
21	MP1A	Mx	.002	3
22	MP2A	X	-2.098	3
23	MP2A	Z	3.634	3
24	MP2A	Mx	.002	3
25	MP4A	X	-5.426	1
26	MP4A	Z	9.398	1
27	MP4A	Mx	.003	1
28	MP4A	X	-5.426	5
29	MP4A	Z	9.398	5
30	MP4A	Mx	.003	5
31	MP3A	X	-2.225	2.5
32	MP3A	Z	3.854	2.5
33	MP3A	Mx	-.000851	2.5
34	MP3A	X	-2.225	3.5
35	MP3A	Z	3.854	3.5
36	MP3A	Mx	-.000851	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-6.672	1
2	MP2A	Z	3.852	1
3	MP2A	Mx	.005	1
4	MP2A	X	-6.672	5
5	MP2A	Z	3.852	5
6	MP2A	Mx	.005	5
7	MP2A	X	-6.672	1
8	MP2A	Z	3.852	1
9	MP2A	Mx	.002	1
10	MP2A	X	-6.672	5
11	MP2A	Z	3.852	5
12	MP2A	Mx	.002	5



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
13	MP1A	X	-2.69	2.5
14	MP1A	Z	1.553	2.5
15	MP1A	Mx	.001	2.5
16	MP1A	X	-2.69	3.5
17	MP1A	Z	1.553	3.5
18	MP1A	Mx	.001	3.5
19	MP1A	X	-3.114	3
20	MP1A	Z	1.798	3
21	MP1A	Mx	.003	3
22	MP2A	X	-2.668	3
23	MP2A	Z	1.54	3
24	MP2A	Mx	.002	3
25	MP4A	X	-7.657	1
26	MP4A	Z	4.421	1
27	MP4A	Mx	.004	1
28	MP4A	X	-7.657	5
29	MP4A	Z	4.421	5
30	MP4A	Mx	.004	5
31	MP3A	X	-3.132	2.5
32	MP3A	Z	1.808	2.5
33	MP3A	Mx	-.001	2.5
34	MP3A	X	-3.132	3.5
35	MP3A	Z	1.808	3.5
36	MP3A	Mx	-.001	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-7.085	1
2	MP2A	Z	0	1
3	MP2A	Mx	.003	1
4	MP2A	X	-7.085	5
5	MP2A	Z	0	5
6	MP2A	Mx	.003	5
7	MP2A	X	-7.085	1
8	MP2A	Z	0	1
9	MP2A	Mx	.004	1
10	MP2A	X	-7.085	5
11	MP2A	Z	0	5
12	MP2A	Mx	.004	5
13	MP1A	X	-2.46	2.5
14	MP1A	Z	0	2.5
15	MP1A	Mx	.001	2.5
16	MP1A	X	-2.46	3.5
17	MP1A	Z	0	3.5
18	MP1A	Mx	.001	3.5
19	MP1A	X	-3.316	3
20	MP1A	Z	0	3
21	MP1A	Mx	.003	3
22	MP2A	X	-2.693	3
23	MP2A	Z	0	3
24	MP2A	Mx	.002	3



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP4A	X	-8.144	1
26	MP4A	Z	0	1
27	MP4A	Mx	.004	1
28	MP4A	X	-8.144	5
29	MP4A	Z	0	5
30	MP4A	Mx	.004	5
31	MP3A	X	-3.327	2.5
32	MP3A	Z	0	2.5
33	MP3A	Mx	-.001	2.5
34	MP3A	X	-3.327	3.5
35	MP3A	Z	0	3.5
36	MP3A	Mx	-.001	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-7.143	1
2	MP2A	Z	-4.124	1
3	MP2A	Mx	.00052	1
4	MP2A	X	-7.143	5
5	MP2A	Z	-4.124	5
6	MP2A	Mx	.00052	5
7	MP2A	X	-7.143	1
8	MP2A	Z	-4.124	1
9	MP2A	Mx	.006	1
10	MP2A	X	-7.143	5
11	MP2A	Z	-4.124	5
12	MP2A	Mx	.006	5
13	MP1A	X	-3.182	2.5
14	MP1A	Z	-1.837	2.5
15	MP1A	Mx	.002	2.5
16	MP1A	X	-3.182	3.5
17	MP1A	Z	-1.837	3.5
18	MP1A	Mx	.002	3.5
19	MP1A	X	-3.327	3
20	MP1A	Z	-1.921	3
21	MP1A	Mx	.003	3
22	MP2A	X	-2.963	3
23	MP2A	Z	-1.71	3
24	MP2A	Mx	.002	3
25	MP4A	X	-8.189	1
26	MP4A	Z	-4.728	1
27	MP4A	Mx	.004	1
28	MP4A	X	-8.189	5
29	MP4A	Z	-4.728	5
30	MP4A	Mx	.004	5
31	MP3A	X	-3.353	2.5
32	MP3A	Z	-1.936	2.5
33	MP3A	Mx	-.001	2.5
34	MP3A	X	-3.353	3.5
35	MP3A	Z	-1.936	3.5
36	MP3A	Mx	-.001	3.5



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-5.015	1
2	MP2A	Z	-8.686	1
3	MP2A	Mx	-.003	1
4	MP2A	X	-5.015	5
5	MP2A	Z	-8.686	5
6	MP2A	Mx	-.003	5
7	MP2A	X	-5.015	1
8	MP2A	Z	-8.686	1
9	MP2A	Mx	.008	1
10	MP2A	X	-5.015	5
11	MP2A	Z	-8.686	5
12	MP2A	Mx	.008	5
13	MP1A	X	-2.767	2.5
14	MP1A	Z	-4.793	2.5
15	MP1A	Mx	.001	2.5
16	MP1A	X	-2.767	3.5
17	MP1A	Z	-4.793	3.5
18	MP1A	Mx	.001	3.5
19	MP1A	X	-2.324	3
20	MP1A	Z	-4.026	3
21	MP1A	Mx	.002	3
22	MP2A	X	-2.268	3
23	MP2A	Z	-3.929	3
24	MP2A	Mx	.002	3
25	MP4A	X	-5.733	1
26	MP4A	Z	-9.93	1
27	MP4A	Mx	.002	1
28	MP4A	X	-5.733	5
29	MP4A	Z	-9.93	5
30	MP4A	Mx	.002	5
31	MP3A	X	-2.353	2.5
32	MP3A	Z	-4.075	2.5
33	MP3A	Mx	-.000663	2.5
34	MP3A	X	-2.353	3.5
35	MP3A	Z	-4.075	3.5
36	MP3A	Mx	-.000663	3.5

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-500	%21

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-500	%93

Member Point Loads (BLC 79 : Lv1)

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



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
25	M24	X	0	0	0	%100
26	M24	Z	0	0	0	%100
27	M25	X	0	0	0	%100
28	M25	Z	0	0	0	%100
29	M26	X	0	0	0	%100
30	M26	Z	0	0	0	%100
31	MP1A	X	0	0	0	%100
32	MP1A	Z	-9.875	-9.875	0	%100
33	M29	X	0	0	0	%100
34	M29	Z	-13.045	-13.045	0	%100
35	M30	X	0	0	0	%100
36	M30	Z	-13.045	-13.045	0	%100
37	M31	X	0	0	0	%100
38	M31	Z	-2.115	-2.115	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	3.703	3.703	0	%100
2	M1	Z	-6.414	-6.414	0	%100
3	M2	X	3.703	3.703	0	%100
4	M2	Z	-6.414	-6.414	0	%100
5	MP2A	X	4.937	4.937	0	%100
6	MP2A	Z	-8.552	-8.552	0	%100
7	MP3A	X	4.937	4.937	0	%100
8	MP3A	Z	-8.552	-8.552	0	%100
9	MP4A	X	4.937	4.937	0	%100
10	MP4A	Z	-8.552	-8.552	0	%100
11	M17	X	6.081	6.081	0	%100
12	M17	Z	-10.533	-10.533	0	%100
13	M20	X	.054	.054	0	%100
14	M20	Z	-.093	-.093	0	%100
15	M19	X	3.118	3.118	0	%100
16	M19	Z	-5.401	-5.401	0	%100
17	M20A	X	3.118	3.118	0	%100
18	M20A	Z	-5.401	-5.401	0	%100
19	M21	X	1.559	1.559	0	%100
20	M21	Z	-2.701	-2.701	0	%100
21	M22	X	1.559	1.559	0	%100
22	M22	Z	-2.701	-2.701	0	%100
23	M23	X	1.085	1.085	0	%100
24	M23	Z	-1.88	-1.88	0	%100
25	M24	X	1.085	1.085	0	%100
26	M24	Z	-1.88	-1.88	0	%100
27	M25	X	.195	.195	0	%100
28	M25	Z	-.338	-.338	0	%100
29	M26	X	.195	.195	0	%100
30	M26	Z	-.338	-.338	0	%100
31	MP1A	X	4.937	4.937	0	%100
32	MP1A	Z	-8.552	-8.552	0	%100
33	M29	X	2.795	2.795	0	%100
34	M29	Z	-4.841	-4.841	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
4	M2	Z	0	0	0	%100
5	MP2A	X	9.875	9.875	0	%100
6	MP2A	Z	0	0	0	%100
7	MP3A	X	9.875	9.875	0	%100
8	MP3A	Z	0	0	0	%100
9	MP4A	X	9.875	9.875	0	%100
10	MP4A	Z	0	0	0	%100
11	M17	X	12.162	12.162	0	%100
12	M17	Z	0	0	0	%100
13	M20	X	5.864	5.864	0	%100
14	M20	Z	0	0	0	%100
15	M19	X	24.947	24.947	0	%100
16	M19	Z	0	0	0	%100
17	M20A	X	24.947	24.947	0	%100
18	M20A	Z	0	0	0	%100
19	M21	X	12.473	12.473	0	%100
20	M21	Z	0	0	0	%100
21	M22	X	12.473	12.473	0	%100
22	M22	Z	0	0	0	%100
23	M23	X	8.684	8.684	0	%100
24	M23	Z	0	0	0	%100
25	M24	X	8.684	8.684	0	%100
26	M24	Z	0	0	0	%100
27	M25	X	1.559	1.559	0	%100
28	M25	Z	0	0	0	%100
29	M26	X	1.559	1.559	0	%100
30	M26	Z	0	0	0	%100
31	MP1A	X	9.875	9.875	0	%100
32	MP1A	Z	0	0	0	%100
33	M29	X	5.796	5.796	0	%100
34	M29	Z	0	0	0	%100
35	M30	X	5.796	5.796	0	%100
36	M30	Z	0	0	0	%100
37	M31	X	4.787	4.787	0	%100
38	M31	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	2.138	2.138	0	%100
2	M1	Z	1.234	1.234	0	%100
3	M2	X	2.138	2.138	0	%100
4	M2	Z	1.234	1.234	0	%100
5	MP2A	X	8.552	8.552	0	%100
6	MP2A	Z	4.937	4.937	0	%100
7	MP3A	X	8.552	8.552	0	%100
8	MP3A	Z	4.937	4.937	0	%100
9	MP4A	X	8.552	8.552	0	%100
10	MP4A	Z	4.937	4.937	0	%100
11	M17	X	10.533	10.533	0	%100
12	M17	Z	6.081	6.081	0	%100
13	M20	X	5.884	5.884	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
14	M20	Z	3.397	3.397	0	% 100
15	M19	X	16.203	16.203	0	% 100
16	M19	Z	9.355	9.355	0	% 100
17	M20A	X	16.203	16.203	0	% 100
18	M20A	Z	9.355	9.355	0	% 100
19	M21	X	8.102	8.102	0	% 100
20	M21	Z	4.678	4.678	0	% 100
21	M22	X	8.102	8.102	0	% 100
22	M22	Z	4.678	4.678	0	% 100
23	M23	X	5.64	5.64	0	% 100
24	M23	Z	3.256	3.256	0	% 100
25	M24	X	5.64	5.64	0	% 100
26	M24	Z	3.256	3.256	0	% 100
27	M25	X	1.013	1.013	0	% 100
28	M25	Z	.585	.585	0	% 100
29	M26	X	1.013	1.013	0	% 100
30	M26	Z	.585	.585	0	% 100
31	MP1A	X	8.552	8.552	0	% 100
32	MP1A	Z	4.937	4.937	0	% 100
33	M29	X	11.476	11.476	0	% 100
34	M29	Z	6.625	6.625	0	% 100
35	M30	X	1.702	1.702	0	% 100
36	M30	Z	.983	.983	0	% 100
37	M31	X	1.18	1.18	0	% 100
38	M31	Z	.682	.682	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	3.703	3.703	0	% 100
2	M1	Z	6.414	6.414	0	% 100
3	M2	X	3.703	3.703	0	% 100
4	M2	Z	6.414	6.414	0	% 100
5	MP2A	X	4.937	4.937	0	% 100
6	MP2A	Z	8.552	8.552	0	% 100
7	MP3A	X	4.937	4.937	0	% 100
8	MP3A	Z	8.552	8.552	0	% 100
9	MP4A	X	4.937	4.937	0	% 100
10	MP4A	Z	8.552	8.552	0	% 100
11	M17	X	6.081	6.081	0	% 100
12	M17	Z	10.533	10.533	0	% 100
13	M20	X	2.191	2.191	0	% 100
14	M20	Z	3.795	3.795	0	% 100
15	M19	X	3.118	3.118	0	% 100
16	M19	Z	5.401	5.401	0	% 100
17	M20A	X	3.118	3.118	0	% 100
18	M20A	Z	5.401	5.401	0	% 100
19	M21	X	1.559	1.559	0	% 100
20	M21	Z	2.701	2.701	0	% 100
21	M22	X	1.559	1.559	0	% 100
22	M22	Z	2.701	2.701	0	% 100
23	M23	X	1.085	1.085	0	% 100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
3	M2	X	-2.138	-2.138	0	%100
4	M2	Z	1.234	1.234	0	%100
5	MP2A	X	-8.552	-8.552	0	%100
6	MP2A	Z	4.937	4.937	0	%100
7	MP3A	X	-8.552	-8.552	0	%100
8	MP3A	Z	4.937	4.937	0	%100
9	MP4A	X	-8.552	-8.552	0	%100
10	MP4A	Z	4.937	4.937	0	%100
11	M17	X	-10.533	-10.533	0	%100
12	M17	Z	6.081	6.081	0	%100
13	M20	X	-2.183	-2.183	0	%100
14	M20	Z	1.26	1.26	0	%100
15	M19	X	-16.203	-16.203	0	%100
16	M19	Z	9.355	9.355	0	%100
17	M20A	X	-16.203	-16.203	0	%100
18	M20A	Z	9.355	9.355	0	%100
19	M21	X	-8.102	-8.102	0	%100
20	M21	Z	4.678	4.678	0	%100
21	M22	X	-8.102	-8.102	0	%100
22	M22	Z	4.678	4.678	0	%100
23	M23	X	-5.64	-5.64	0	%100
24	M23	Z	3.256	3.256	0	%100
25	M24	X	-5.64	-5.64	0	%100
26	M24	Z	3.256	3.256	0	%100
27	M25	X	-1.013	-1.013	0	%100
28	M25	Z	.585	.585	0	%100
29	M26	X	-1.013	-1.013	0	%100
30	M26	Z	.585	.585	0	%100
31	MP1A	X	-8.552	-8.552	0	%100
32	MP1A	Z	4.937	4.937	0	%100
33	M29	X	-1.702	-1.702	0	%100
34	M29	Z	.983	.983	0	%100
35	M30	X	-11.476	-11.476	0	%100
36	M30	Z	6.625	6.625	0	%100
37	M31	X	-5.954	-5.954	0	%100
38	M31	Z	3.437	3.437	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	MP2A	X	-9.875	-9.875	0	%100
6	MP2A	Z	0	0	0	%100
7	MP3A	X	-9.875	-9.875	0	%100
8	MP3A	Z	0	0	0	%100
9	MP4A	X	-9.875	-9.875	0	%100
10	MP4A	Z	0	0	0	%100
11	M17	X	-12.162	-12.162	0	%100
12	M17	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,%]
13	M20	X	-5.864	-5.864	0	% 100
14	M20	Z	0	0	0	% 100
15	M19	X	-24.947	-24.947	0	% 100
16	M19	Z	0	0	0	% 100
17	M20A	X	-24.947	-24.947	0	% 100
18	M20A	Z	0	0	0	% 100
19	M21	X	-12.473	-12.473	0	% 100
20	M21	Z	0	0	0	% 100
21	M22	X	-12.473	-12.473	0	% 100
22	M22	Z	0	0	0	% 100
23	M23	X	-8.684	-8.684	0	% 100
24	M23	Z	0	0	0	% 100
25	M24	X	-8.684	-8.684	0	% 100
26	M24	Z	0	0	0	% 100
27	M25	X	-1.559	-1.559	0	% 100
28	M25	Z	0	0	0	% 100
29	M26	X	-1.559	-1.559	0	% 100
30	M26	Z	0	0	0	% 100
31	MP1A	X	-9.875	-9.875	0	% 100
32	MP1A	Z	0	0	0	% 100
33	M29	X	-5.796	-5.796	0	% 100
34	M29	Z	0	0	0	% 100
35	M30	X	-5.796	-5.796	0	% 100
36	M30	Z	0	0	0	% 100
37	M31	X	-4.787	-4.787	0	% 100
38	M31	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	-2.138	-2.138	0	% 100
2	M1	Z	-1.234	-1.234	0	% 100
3	M2	X	-2.138	-2.138	0	% 100
4	M2	Z	-1.234	-1.234	0	% 100
5	MP2A	X	-8.552	-8.552	0	% 100
6	MP2A	Z	-4.937	-4.937	0	% 100
7	MP3A	X	-8.552	-8.552	0	% 100
8	MP3A	Z	-4.937	-4.937	0	% 100
9	MP4A	X	-8.552	-8.552	0	% 100
10	MP4A	Z	-4.937	-4.937	0	% 100
11	M17	X	-10.533	-10.533	0	% 100
12	M17	Z	-6.081	-6.081	0	% 100
13	M20	X	-5.884	-5.884	0	% 100
14	M20	Z	-3.397	-3.397	0	% 100
15	M19	X	-16.203	-16.203	0	% 100
16	M19	Z	-9.355	-9.355	0	% 100
17	M20A	X	-16.203	-16.203	0	% 100
18	M20A	Z	-9.355	-9.355	0	% 100
19	M21	X	-8.102	-8.102	0	% 100
20	M21	Z	-4.678	-4.678	0	% 100
21	M22	X	-8.102	-8.102	0	% 100
22	M22	Z	-4.678	-4.678	0	% 100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
33	M29	X	-8.438	-8.438	0	%100
34	M29	Z	-14.614	-14.614	0	%100
35	M30	X	-2.795	-2.795	0	%100
36	M30	Z	-4.841	-4.841	0	%100
37	M31	X	-.014	-.014	0	%100
38	M31	Z	-.024	-.024	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	-4.304	-4.304	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-4.304	-4.304	0	%100
5	MP2A	X	0	0	0	%100
6	MP2A	Z	-4.097	-4.097	0	%100
7	MP3A	X	0	0	0	%100
8	MP3A	Z	-4.097	-4.097	0	%100
9	MP4A	X	0	0	0	%100
10	MP4A	Z	-4.097	-4.097	0	%100
11	M17	X	0	0	0	%100
12	M17	Z	-4.78	-4.78	0	%100
13	M20	X	0	0	0	%100
14	M20	Z	-.554	-.554	0	%100
15	M19	X	0	0	0	%100
16	M19	Z	0	0	0	%100
17	M20A	X	0	0	0	%100
18	M20A	Z	0	0	0	%100
19	M21	X	0	0	0	%100
20	M21	Z	0	0	0	%100
21	M22	X	0	0	0	%100
22	M22	Z	0	0	0	%100
23	M23	X	0	0	0	%100
24	M23	Z	0	0	0	%100
25	M24	X	0	0	0	%100
26	M24	Z	0	0	0	%100
27	M25	X	0	0	0	%100
28	M25	Z	0	0	0	%100
29	M26	X	0	0	0	%100
30	M26	Z	0	0	0	%100
31	MP1A	X	0	0	0	%100
32	MP1A	Z	-4.097	-4.097	0	%100
33	M29	X	0	0	0	%100
34	M29	Z	-3.982	-3.982	0	%100
35	M30	X	0	0	0	%100
36	M30	Z	-3.982	-3.982	0	%100
37	M31	X	0	0	0	%100
38	M31	Z	-1.158	-1.158	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	1.614	1.614	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
22	M22	Z	0	0	0	%100
23	M23	X	3.027	3.027	0	%100
24	M23	Z	0	0	0	%100
25	M24	X	3.027	3.027	0	%100
26	M24	Z	0	0	0	%100
27	M25	X	1.769	1.769	0	%100
28	M25	Z	0	0	0	%100
29	M26	X	1.769	1.769	0	%100
30	M26	Z	0	0	0	%100
31	MP1A	X	4.097	4.097	0	%100
32	MP1A	Z	0	0	0	%100
33	M29	X	1.769	1.769	0	%100
34	M29	Z	0	0	0	%100
35	M30	X	1.769	1.769	0	%100
36	M30	Z	0	0	0	%100
37	M31	X	2.621	2.621	0	%100
38	M31	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	.932	.932	0	%100
2	M1	Z	.538	.538	0	%100
3	M2	X	.932	.932	0	%100
4	M2	Z	.538	.538	0	%100
5	MP2A	X	3.548	3.548	0	%100
6	MP2A	Z	2.049	2.049	0	%100
7	MP3A	X	3.548	3.548	0	%100
8	MP3A	Z	2.049	2.049	0	%100
9	MP4A	X	3.548	3.548	0	%100
10	MP4A	Z	2.049	2.049	0	%100
11	M17	X	4.14	4.14	0	%100
12	M17	Z	2.39	2.39	0	%100
13	M20	X	3.138	3.138	0	%100
14	M20	Z	1.812	1.812	0	%100
15	M19	X	3.831	3.831	0	%100
16	M19	Z	2.212	2.212	0	%100
17	M20A	X	3.831	3.831	0	%100
18	M20A	Z	2.212	2.212	0	%100
19	M21	X	2.4	2.4	0	%100
20	M21	Z	1.386	1.386	0	%100
21	M22	X	2.4	2.4	0	%100
22	M22	Z	1.386	1.386	0	%100
23	M23	X	1.966	1.966	0	%100
24	M23	Z	1.135	1.135	0	%100
25	M24	X	1.966	1.966	0	%100
26	M24	Z	1.135	1.135	0	%100
27	M25	X	1.149	1.149	0	%100
28	M25	Z	.663	.663	0	%100
29	M26	X	1.149	1.149	0	%100
30	M26	Z	.663	.663	0	%100
31	MP1A	X	3.548	3.548	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
32	MP1A	Z	2.049	2.049	0 % 100
33	M29	X	3.503	3.503	0 % 100
34	M29	Z	2.022	2.022	0 % 100
35	M30	X	.52	.52	0 % 100
36	M30	Z	.3	.3	0 % 100
37	M31	X	.646	.646	0 % 100
38	M31	Z	.373	.373	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	1.614	1.614	0 % 100
2	M1	Z	2.795	2.795	0 % 100
3	M2	X	1.614	1.614	0 % 100
4	M2	Z	2.795	2.795	0 % 100
5	MP2A	X	2.049	2.049	0 % 100
6	MP2A	Z	3.548	3.548	0 % 100
7	MP3A	X	2.049	2.049	0 % 100
8	MP3A	Z	3.548	3.548	0 % 100
9	MP4A	X	2.049	2.049	0 % 100
10	MP4A	Z	3.548	3.548	0 % 100
11	M17	X	2.39	2.39	0 % 100
12	M17	Z	4.14	4.14	0 % 100
13	M20	X	1.168	1.168	0 % 100
14	M20	Z	2.024	2.024	0 % 100
15	M19	X	.737	.737	0 % 100
16	M19	Z	1.277	1.277	0 % 100
17	M20A	X	.737	.737	0 % 100
18	M20A	Z	1.277	1.277	0 % 100
19	M21	X	.462	.462	0 % 100
20	M21	Z	.8	.8	0 % 100
21	M22	X	.462	.462	0 % 100
22	M22	Z	.8	.8	0 % 100
23	M23	X	.378	.378	0 % 100
24	M23	Z	.655	.655	0 % 100
25	M24	X	.378	.378	0 % 100
26	M24	Z	.655	.655	0 % 100
27	M25	X	.221	.221	0 % 100
28	M25	Z	.383	.383	0 % 100
29	M26	X	.221	.221	0 % 100
30	M26	Z	.383	.383	0 % 100
31	MP1A	X	2.049	2.049	0 % 100
32	MP1A	Z	3.548	3.548	0 % 100
33	M29	X	2.575	2.575	0 % 100
34	M29	Z	4.461	4.461	0 % 100
35	M30	X	.853	.853	0 % 100
36	M30	Z	1.478	1.478	0 % 100
37	M31	X	.008	.008	0 % 100
38	M31	Z	.013	.013	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,%]
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 Job Number :
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Member Distributed Loads (BLC 59 : Structure Wi (180 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	4.304	4.304	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	4.304	4.304	0	%100
5	MP2A	X	0	0	0	%100
6	MP2A	Z	4.097	4.097	0	%100
7	MP3A	X	0	0	0	%100
8	MP3A	Z	4.097	4.097	0	%100
9	MP4A	X	0	0	0	%100
10	MP4A	Z	4.097	4.097	0	%100
11	M17	X	0	0	0	%100
12	M17	Z	4.78	4.78	0	%100
13	M20	X	0	0	0	%100
14	M20	Z	.554	.554	0	%100
15	M19	X	0	0	0	%100
16	M19	Z	0	0	0	%100
17	M20A	X	0	0	0	%100
18	M20A	Z	0	0	0	%100
19	M21	X	0	0	0	%100
20	M21	Z	0	0	0	%100
21	M22	X	0	0	0	%100
22	M22	Z	0	0	0	%100
23	M23	X	0	0	0	%100
24	M23	Z	0	0	0	%100
25	M24	X	0	0	0	%100
26	M24	Z	0	0	0	%100
27	M25	X	0	0	0	%100
28	M25	Z	0	0	0	%100
29	M26	X	0	0	0	%100
30	M26	Z	0	0	0	%100
31	MP1A	X	0	0	0	%100
32	MP1A	Z	4.097	4.097	0	%100
33	M29	X	0	0	0	%100
34	M29	Z	3.982	3.982	0	%100
35	M30	X	0	0	0	%100
36	M30	Z	3.982	3.982	0	%100
37	M31	X	0	0	0	%100
38	M31	Z	1.158	1.158	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	-1.614	-1.614	0	%100
2	M1	Z	2.795	2.795	0	%100
3	M2	X	-1.614	-1.614	0	%100
4	M2	Z	2.795	2.795	0	%100
5	MP2A	X	-2.049	-2.049	0	%100
6	MP2A	Z	3.548	3.548	0	%100
7	MP3A	X	-2.049	-2.049	0	%100
8	MP3A	Z	3.548	3.548	0	%100
9	MP4A	X	-2.049	-2.049	0	%100
10	MP4A	Z	3.548	3.548	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
11	M17	X	-2.39	-2.39	0	%100
12	M17	Z	4.14	4.14	0	%100
13	M20	X	-.029	-.029	0	%100
14	M20	Z	.05	.05	0	%100
15	M19	X	-.737	-.737	0	%100
16	M19	Z	1.277	1.277	0	%100
17	M20A	X	-.737	-.737	0	%100
18	M20A	Z	1.277	1.277	0	%100
19	M21	X	-.462	-.462	0	%100
20	M21	Z	.8	.8	0	%100
21	M22	X	-.462	-.462	0	%100
22	M22	Z	.8	.8	0	%100
23	M23	X	-.378	-.378	0	%100
24	M23	Z	.655	.655	0	%100
25	M24	X	-.378	-.378	0	%100
26	M24	Z	.655	.655	0	%100
27	M25	X	-.221	-.221	0	%100
28	M25	Z	.383	.383	0	%100
29	M26	X	-.221	-.221	0	%100
30	M26	Z	.383	.383	0	%100
31	MP1A	X	-2.049	-2.049	0	%100
32	MP1A	Z	3.548	3.548	0	%100
33	M29	X	-.853	-.853	0	%100
34	M29	Z	1.478	1.478	0	%100
35	M30	X	-2.575	-2.575	0	%100
36	M30	Z	4.461	4.461	0	%100
37	M31	X	-1.516	-1.516	0	%100
38	M31	Z	2.626	2.626	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	-.932	-.932	0	%100
2	M1	Z	.538	.538	0	%100
3	M2	X	-.932	-.932	0	%100
4	M2	Z	.538	.538	0	%100
5	MP2A	X	-3.548	-3.548	0	%100
6	MP2A	Z	2.049	2.049	0	%100
7	MP3A	X	-3.548	-3.548	0	%100
8	MP3A	Z	2.049	2.049	0	%100
9	MP4A	X	-3.548	-3.548	0	%100
10	MP4A	Z	2.049	2.049	0	%100
11	M17	X	-4.14	-4.14	0	%100
12	M17	Z	2.39	2.39	0	%100
13	M20	X	-1.164	-1.164	0	%100
14	M20	Z	.672	.672	0	%100
15	M19	X	-3.831	-3.831	0	%100
16	M19	Z	2.212	2.212	0	%100
17	M20A	X	-3.831	-3.831	0	%100
18	M20A	Z	2.212	2.212	0	%100
19	M21	X	-2.4	-2.4	0	%100
20	M21	Z	1.386	1.386	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
31	MP1A	X	-4.097	-4.097	0	%100
32	MP1A	Z	0	0	0	%100
33	M29	X	-1.769	-1.769	0	%100
34	M29	Z	0	0	0	%100
35	M30	X	-1.769	-1.769	0	%100
36	M30	Z	0	0	0	%100
37	M31	X	-2.621	-2.621	0	%100
38	M31	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	-.932	-.932	0	%100
2	M1	Z	-.538	-.538	0	%100
3	M2	X	-.932	-.932	0	%100
4	M2	Z	-.538	-.538	0	%100
5	MP2A	X	-3.548	-3.548	0	%100
6	MP2A	Z	-2.049	-2.049	0	%100
7	MP3A	X	-3.548	-3.548	0	%100
8	MP3A	Z	-2.049	-2.049	0	%100
9	MP4A	X	-3.548	-3.548	0	%100
10	MP4A	Z	-2.049	-2.049	0	%100
11	M17	X	-4.14	-4.14	0	%100
12	M17	Z	-2.39	-2.39	0	%100
13	M20	X	-3.138	-3.138	0	%100
14	M20	Z	-1.812	-1.812	0	%100
15	M19	X	-3.831	-3.831	0	%100
16	M19	Z	-2.212	-2.212	0	%100
17	M20A	X	-3.831	-3.831	0	%100
18	M20A	Z	-2.212	-2.212	0	%100
19	M21	X	-2.4	-2.4	0	%100
20	M21	Z	-1.386	-1.386	0	%100
21	M22	X	-2.4	-2.4	0	%100
22	M22	Z	-1.386	-1.386	0	%100
23	M23	X	-1.966	-1.966	0	%100
24	M23	Z	-1.135	-1.135	0	%100
25	M24	X	-1.966	-1.966	0	%100
26	M24	Z	-1.135	-1.135	0	%100
27	M25	X	-1.149	-1.149	0	%100
28	M25	Z	-.663	-.663	0	%100
29	M26	X	-1.149	-1.149	0	%100
30	M26	Z	-.663	-.663	0	%100
31	MP1A	X	-3.548	-3.548	0	%100
32	MP1A	Z	-2.049	-2.049	0	%100
33	M29	X	-3.503	-3.503	0	%100
34	M29	Z	-2.022	-2.022	0	%100
35	M30	X	-.52	-.52	0	%100
36	M30	Z	-.3	-.3	0	%100
37	M31	X	-.646	-.646	0	%100
38	M31	Z	-.373	-.373	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	-1.614	-1.614	0	%100
2	M1	Z	-2.795	-2.795	0	%100
3	M2	X	-1.614	-1.614	0	%100
4	M2	Z	-2.795	-2.795	0	%100
5	MP2A	X	-2.049	-2.049	0	%100
6	MP2A	Z	-3.548	-3.548	0	%100
7	MP3A	X	-2.049	-2.049	0	%100
8	MP3A	Z	-3.548	-3.548	0	%100
9	MP4A	X	-2.049	-2.049	0	%100
10	MP4A	Z	-3.548	-3.548	0	%100
11	M17	X	-2.39	-2.39	0	%100
12	M17	Z	-4.14	-4.14	0	%100
13	M20	X	-1.168	-1.168	0	%100
14	M20	Z	-2.024	-2.024	0	%100
15	M19	X	-.737	-.737	0	%100
16	M19	Z	-1.277	-1.277	0	%100
17	M20A	X	-.737	-.737	0	%100
18	M20A	Z	-1.277	-1.277	0	%100
19	M21	X	-.462	-.462	0	%100
20	M21	Z	-.8	-.8	0	%100
21	M22	X	-.462	-.462	0	%100
22	M22	Z	-.8	-.8	0	%100
23	M23	X	-.378	-.378	0	%100
24	M23	Z	-.655	-.655	0	%100
25	M24	X	-.378	-.378	0	%100
26	M24	Z	-.655	-.655	0	%100
27	M25	X	-.221	-.221	0	%100
28	M25	Z	-.383	-.383	0	%100
29	M26	X	-.221	-.221	0	%100
30	M26	Z	-.383	-.383	0	%100
31	MP1A	X	-2.049	-2.049	0	%100
32	MP1A	Z	-3.548	-3.548	0	%100
33	M29	X	-2.575	-2.575	0	%100
34	M29	Z	-4.461	-4.461	0	%100
35	M30	X	-.853	-.853	0	%100
36	M30	Z	-1.478	-1.478	0	%100
37	M31	X	-.008	-.008	0	%100
38	M31	Z	-.013	-.013	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	-.628	-.628	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-.628	-.628	0	%100
5	MP2A	X	0	0	0	%100
6	MP2A	Z	-.628	-.628	0	%100
7	MP3A	X	0	0	0	%100
8	MP3A	Z	-.628	-.628	0	%100
9	MP4A	X	0	0	0	%100
10	MP4A	Z	-.628	-.628	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
31	MP1A	X	.544	.544	0	%100
32	MP1A	Z	-.314	-.314	0	%100
33	M29	X	.108	.108	0	%100
34	M29	Z	-.062	-.062	0	%100
35	M30	X	.729	.729	0	%100
36	M30	Z	-.421	-.421	0	%100
37	M31	X	.378	.378	0	%100
38	M31	Z	-.218	-.218	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	MP2A	X	.628	.628	0	%100
6	MP2A	Z	0	0	0	%100
7	MP3A	X	.628	.628	0	%100
8	MP3A	Z	0	0	0	%100
9	MP4A	X	.628	.628	0	%100
10	MP4A	Z	0	0	0	%100
11	M17	X	.773	.773	0	%100
12	M17	Z	0	0	0	%100
13	M20	X	.373	.373	0	%100
14	M20	Z	0	0	0	%100
15	M19	X	1.585	1.585	0	%100
16	M19	Z	0	0	0	%100
17	M20A	X	1.585	1.585	0	%100
18	M20A	Z	0	0	0	%100
19	M21	X	.793	.793	0	%100
20	M21	Z	0	0	0	%100
21	M22	X	.793	.793	0	%100
22	M22	Z	0	0	0	%100
23	M23	X	.552	.552	0	%100
24	M23	Z	0	0	0	%100
25	M24	X	.552	.552	0	%100
26	M24	Z	0	0	0	%100
27	M25	X	.099	.099	0	%100
28	M25	Z	0	0	0	%100
29	M26	X	.099	.099	0	%100
30	M26	Z	0	0	0	%100
31	MP1A	X	.628	.628	0	%100
32	MP1A	Z	0	0	0	%100
33	M29	X	.368	.368	0	%100
34	M29	Z	0	0	0	%100
35	M30	X	.368	.368	0	%100
36	M30	Z	0	0	0	%100
37	M31	X	.304	.304	0	%100
38	M31	Z	0	0	0	%100



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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	.136	.136	0	%100
2	M1	Z	.078	.078	0	%100
3	M2	X	.136	.136	0	%100
4	M2	Z	.078	.078	0	%100
5	MP2A	X	.544	.544	0	%100
6	MP2A	Z	.314	.314	0	%100
7	MP3A	X	.544	.544	0	%100
8	MP3A	Z	.314	.314	0	%100
9	MP4A	X	.544	.544	0	%100
10	MP4A	Z	.314	.314	0	%100
11	M17	X	.669	.669	0	%100
12	M17	Z	.386	.386	0	%100
13	M20	X	.374	.374	0	%100
14	M20	Z	.216	.216	0	%100
15	M19	X	1.03	1.03	0	%100
16	M19	Z	.595	.595	0	%100
17	M20A	X	1.03	1.03	0	%100
18	M20A	Z	.595	.595	0	%100
19	M21	X	.515	.515	0	%100
20	M21	Z	.297	.297	0	%100
21	M22	X	.515	.515	0	%100
22	M22	Z	.297	.297	0	%100
23	M23	X	.358	.358	0	%100
24	M23	Z	.207	.207	0	%100
25	M24	X	.358	.358	0	%100
26	M24	Z	.207	.207	0	%100
27	M25	X	.064	.064	0	%100
28	M25	Z	.037	.037	0	%100
29	M26	X	.064	.064	0	%100
30	M26	Z	.037	.037	0	%100
31	MP1A	X	.544	.544	0	%100
32	MP1A	Z	.314	.314	0	%100
33	M29	X	.729	.729	0	%100
34	M29	Z	.421	.421	0	%100
35	M30	X	.108	.108	0	%100
36	M30	Z	.062	.062	0	%100
37	M31	X	.075	.075	0	%100
38	M31	Z	.043	.043	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	.235	.235	0	%100
2	M1	Z	.408	.408	0	%100
3	M2	X	.235	.235	0	%100
4	M2	Z	.408	.408	0	%100
5	MP2A	X	.314	.314	0	%100
6	MP2A	Z	.544	.544	0	%100
7	MP3A	X	.314	.314	0	%100
8	MP3A	Z	.544	.544	0	%100
9	MP4A	X	.314	.314	0	%100
10	MP4A	Z	.544	.544	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
21	M22	X	0	0	0	%100
22	M22	Z	0	0	0	%100
23	M23	X	0	0	0	%100
24	M23	Z	0	0	0	%100
25	M24	X	0	0	0	%100
26	M24	Z	0	0	0	%100
27	M25	X	0	0	0	%100
28	M25	Z	0	0	0	%100
29	M26	X	0	0	0	%100
30	M26	Z	0	0	0	%100
31	MP1A	X	0	0	0	%100
32	MP1A	Z	.628	.628	0	%100
33	M29	X	0	0	0	%100
34	M29	Z	.829	.829	0	%100
35	M30	X	0	0	0	%100
36	M30	Z	.829	.829	0	%100
37	M31	X	0	0	0	%100
38	M31	Z	.134	.134	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	-.235	-.235	0	%100
2	M1	Z	.408	.408	0	%100
3	M2	X	-.235	-.235	0	%100
4	M2	Z	.408	.408	0	%100
5	MP2A	X	-.314	-.314	0	%100
6	MP2A	Z	.544	.544	0	%100
7	MP3A	X	-.314	-.314	0	%100
8	MP3A	Z	.544	.544	0	%100
9	MP4A	X	-.314	-.314	0	%100
10	MP4A	Z	.544	.544	0	%100
11	M17	X	-.386	-.386	0	%100
12	M17	Z	.669	.669	0	%100
13	M20	X	-.003	-.003	0	%100
14	M20	Z	.006	.006	0	%100
15	M19	X	-.198	-.198	0	%100
16	M19	Z	.343	.343	0	%100
17	M20A	X	-.198	-.198	0	%100
18	M20A	Z	.343	.343	0	%100
19	M21	X	-.099	-.099	0	%100
20	M21	Z	.172	.172	0	%100
21	M22	X	-.099	-.099	0	%100
22	M22	Z	.172	.172	0	%100
23	M23	X	-.069	-.069	0	%100
24	M23	Z	.119	.119	0	%100
25	M24	X	-.069	-.069	0	%100
26	M24	Z	.119	.119	0	%100
27	M25	X	-.012	-.012	0	%100
28	M25	Z	.021	.021	0	%100
29	M26	X	-.012	-.012	0	%100
30	M26	Z	.021	.021	0	%100



Company : Maser Consulting
 Designer :
 Job Number :
 Model Name : 468160-VZW_MT_LOT_SectorA_H

June 11, 2021
 4:18 PM
 Checked By: _____

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
31	MP1A	X	-.314	-.314	0	% 100
32	MP1A	Z	.544	.544	0	% 100
33	M29	X	-.178	-.178	0	% 100
34	M29	Z	.308	.308	0	% 100
35	M30	X	-.536	-.536	0	% 100
36	M30	Z	.929	.929	0	% 100
37	M31	X	-.176	-.176	0	% 100
38	M31	Z	.305	.305	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	-.136	-.136	0	% 100
2	M1	Z	.078	.078	0	% 100
3	M2	X	-.136	-.136	0	% 100
4	M2	Z	.078	.078	0	% 100
5	MP2A	X	-.544	-.544	0	% 100
6	MP2A	Z	.314	.314	0	% 100
7	MP3A	X	-.544	-.544	0	% 100
8	MP3A	Z	.314	.314	0	% 100
9	MP4A	X	-.544	-.544	0	% 100
10	MP4A	Z	.314	.314	0	% 100
11	M17	X	-.669	-.669	0	% 100
12	M17	Z	.386	.386	0	% 100
13	M20	X	-.139	-.139	0	% 100
14	M20	Z	.08	.08	0	% 100
15	M19	X	-1.03	-1.03	0	% 100
16	M19	Z	.595	.595	0	% 100
17	M20A	X	-1.03	-1.03	0	% 100
18	M20A	Z	.595	.595	0	% 100
19	M21	X	-.515	-.515	0	% 100
20	M21	Z	.297	.297	0	% 100
21	M22	X	-.515	-.515	0	% 100
22	M22	Z	.297	.297	0	% 100
23	M23	X	-.358	-.358	0	% 100
24	M23	Z	.207	.207	0	% 100
25	M24	X	-.358	-.358	0	% 100
26	M24	Z	.207	.207	0	% 100
27	M25	X	-.064	-.064	0	% 100
28	M25	Z	.037	.037	0	% 100
29	M26	X	-.064	-.064	0	% 100
30	M26	Z	.037	.037	0	% 100
31	MP1A	X	-.544	-.544	0	% 100
32	MP1A	Z	.314	.314	0	% 100
33	M29	X	-.108	-.108	0	% 100
34	M29	Z	.062	.062	0	% 100
35	M30	X	-.729	-.729	0	% 100
36	M30	Z	.421	.421	0	% 100
37	M31	X	-.378	-.378	0	% 100
38	M31	Z	.218	.218	0	% 100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	MP2A	X	-.628	-.628	0	%100
6	MP2A	Z	0	0	0	%100
7	MP3A	X	-.628	-.628	0	%100
8	MP3A	Z	0	0	0	%100
9	MP4A	X	-.628	-.628	0	%100
10	MP4A	Z	0	0	0	%100
11	M17	X	-.773	-.773	0	%100
12	M17	Z	0	0	0	%100
13	M20	X	-.373	-.373	0	%100
14	M20	Z	0	0	0	%100
15	M19	X	-1.585	-1.585	0	%100
16	M19	Z	0	0	0	%100
17	M20A	X	-1.585	-1.585	0	%100
18	M20A	Z	0	0	0	%100
19	M21	X	-.793	-.793	0	%100
20	M21	Z	0	0	0	%100
21	M22	X	-.793	-.793	0	%100
22	M22	Z	0	0	0	%100
23	M23	X	-.552	-.552	0	%100
24	M23	Z	0	0	0	%100
25	M24	X	-.552	-.552	0	%100
26	M24	Z	0	0	0	%100
27	M25	X	-.099	-.099	0	%100
28	M25	Z	0	0	0	%100
29	M26	X	-.099	-.099	0	%100
30	M26	Z	0	0	0	%100
31	MP1A	X	-.628	-.628	0	%100
32	MP1A	Z	0	0	0	%100
33	M29	X	-.368	-.368	0	%100
34	M29	Z	0	0	0	%100
35	M30	X	-.368	-.368	0	%100
36	M30	Z	0	0	0	%100
37	M31	X	-.304	-.304	0	%100
38	M31	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	-.136	-.136	0	%100
2	M1	Z	-.078	-.078	0	%100
3	M2	X	-.136	-.136	0	%100
4	M2	Z	-.078	-.078	0	%100
5	MP2A	X	-.544	-.544	0	%100
6	MP2A	Z	-.314	-.314	0	%100
7	MP3A	X	-.544	-.544	0	%100
8	MP3A	Z	-.314	-.314	0	%100
9	MP4A	X	-.544	-.544	0	%100
10	MP4A	Z	-.314	-.314	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
11	M17	X	-.669	-.669	0	%100
12	M17	Z	-.386	-.386	0	%100
13	M20	X	-.374	-.374	0	%100
14	M20	Z	-.216	-.216	0	%100
15	M19	X	-1.03	-1.03	0	%100
16	M19	Z	-.595	-.595	0	%100
17	M20A	X	-1.03	-1.03	0	%100
18	M20A	Z	-.595	-.595	0	%100
19	M21	X	-.515	-.515	0	%100
20	M21	Z	-.297	-.297	0	%100
21	M22	X	-.515	-.515	0	%100
22	M22	Z	-.297	-.297	0	%100
23	M23	X	-.358	-.358	0	%100
24	M23	Z	-.207	-.207	0	%100
25	M24	X	-.358	-.358	0	%100
26	M24	Z	-.207	-.207	0	%100
27	M25	X	-.064	-.064	0	%100
28	M25	Z	-.037	-.037	0	%100
29	M26	X	-.064	-.064	0	%100
30	M26	Z	-.037	-.037	0	%100
31	MP1A	X	-.544	-.544	0	%100
32	MP1A	Z	-.314	-.314	0	%100
33	M29	X	-.729	-.729	0	%100
34	M29	Z	-.421	-.421	0	%100
35	M30	X	-.108	-.108	0	%100
36	M30	Z	-.062	-.062	0	%100
37	M31	X	-.075	-.075	0	%100
38	M31	Z	-.043	-.043	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	-.235	-.235	0	%100
2	M1	Z	-.408	-.408	0	%100
3	M2	X	-.235	-.235	0	%100
4	M2	Z	-.408	-.408	0	%100
5	MP2A	X	-.314	-.314	0	%100
6	MP2A	Z	-.544	-.544	0	%100
7	MP3A	X	-.314	-.314	0	%100
8	MP3A	Z	-.544	-.544	0	%100
9	MP4A	X	-.314	-.314	0	%100
10	MP4A	Z	-.544	-.544	0	%100
11	M17	X	-.386	-.386	0	%100
12	M17	Z	-.669	-.669	0	%100
13	M20	X	-.139	-.139	0	%100
14	M20	Z	-.241	-.241	0	%100
15	M19	X	-.198	-.198	0	%100
16	M19	Z	-.343	-.343	0	%100
17	M20A	X	-.198	-.198	0	%100
18	M20A	Z	-.343	-.343	0	%100
19	M21	X	-.099	-.099	0	%100
20	M21	Z	-.172	-.172	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,%]
21	M22	X	-.099	-.099	0	%100
22	M22	Z	-.172	-.172	0	%100
23	M23	X	-.069	-.069	0	%100
24	M23	Z	-.119	-.119	0	%100
25	M24	X	-.069	-.069	0	%100
26	M24	Z	-.119	-.119	0	%100
27	M25	X	-.012	-.012	0	%100
28	M25	Z	-.021	-.021	0	%100
29	M26	X	-.012	-.012	0	%100
30	M26	Z	-.021	-.021	0	%100
31	MP1A	X	-.314	-.314	0	%100
32	MP1A	Z	-.544	-.544	0	%100
33	M29	X	-.536	-.536	0	%100
34	M29	Z	-.929	-.929	0	%100
35	M30	X	-.178	-.178	0	%100
36	M30	Z	-.308	-.308	0	%100
37	M31	X	-.000872	-.000872	0	%100
38	M31	Z	-.002	-.002	0	%100

Member Area Loads

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

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N36	max	1542.038	45	833.337	14	1222.673	13	-.027	8	0	51	.035	45
2		min	-954.677	3	137.92	8	-246.545	7	-.167	14	0	1	-.022	3
3	N37	max	954.193	3	739.099	14	214.131	1	-.029	8	0	51	.035	45
4		min	-1556.415	45	150.78	8	-403.81	7	-.153	14	0	1	-.022	3
5	N39	max	266.111	6	32.657	21	920.338	12	0	51	0	51	0	51
6		min	-378.751	12	5.887	36	-666.582	6	0	1	0	1	0	1
7	N50	max	1831.034	11	1201.812	20	-120.107	2	.003	18	.001	6	.003	48
8		min	-1869.095	5	144.555	2	-1561.1	20	-.001	12	-.002	48	-.002	6
9	N54	max	508.334	2	59.23	14	796.796	2	0	51	0	51	0	51
10		min	-321.316	8	13.343	7	-530.244	8	0	1	0	1	0	1
11	Totals:	max	1485.445	11	2734.611	15	2307.065	1						
12		min	-1485.425	5	946.94	11	-2307.029	7						

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

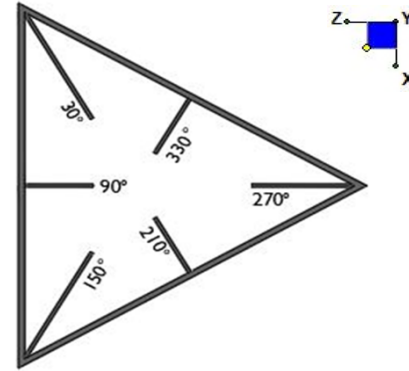
Member	Shape	Code C...	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	phi*Pnc [lb]	phi*Pnt [lb]	phi*Mn y-...	phi*Mn z-...	Cb	Eqn
1	M1	PIPE 2.0	.608	7.5	47	.163	7.5	7	4371.821	32130	1.872	1.872	2...	H1-1a
2	M2	PIPE 2.0	.726	3.594	9	.182	7.5	2	4371.821	32130	1.872	1.872	1...	H1-1a
3	MP2A	PIPE 2.5	.328	5.125	47	.144	5.125	3	37773.818	50715	3.596	3.596	2...	H1-1b
4	MP3A	PIPE 2.0	.353	2.125	27	.142	5.125	12	20866.733	32130	1.872	1.872	2...	H1-1b
5	MP4A	PIPE 2.0	.282	5.125	49	.114	2.125	12	20866.733	32130	1.872	1.872	2...	H1-1b
6	M17	PIPE 4.0	.233	4.375	47	.399	.99	45	86073.938	93240	10.631	10.631	2...	H3-6
7	M20	PIPE 1.25	.153	6.669	12	.006	6.669	23	6490.591	19687.5	.801	.801	1...	H1-1b*



I. Mount-to-Tower Connection Check

RISA Model Data

Nodes (labeled per RISA)	Orientation (per graphic of typical platform)
N36	90
N37	90



TYPICAL PLATFORM

Tower Connection Bolt Checks

Any moment resistance?:

Bolt Quantity per Reaction:

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

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

Bolt Type:

Bolt Diameter (in):

Required Tensile Strength (kips):

Required Shear Strength (kips):

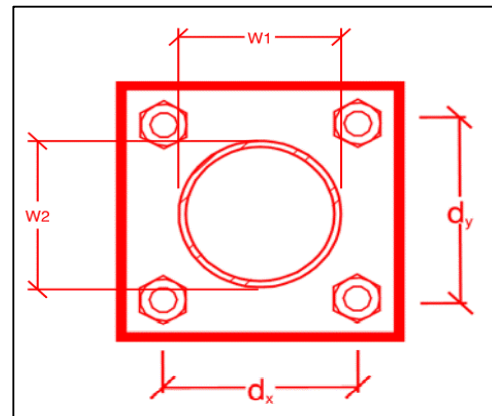
Tensile Strength / bolt (kips):

Shear Strength / bolt (kips):

Tensile Capacity Overall:

Shear Capacity Overall:

yes
4
6
4
A307
0.625
1.8
1.6
10.0
6.0
4.6%*
6.8%



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

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Mount Modification

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

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

Base Requirements:

- Any special photos outside of the standard requirements will be indicated on the drawings
- Provide “as built drawings” showing contractor’s name, preparer’s signature, and date. Any deviations from the drawings (proposed modification) must be shown.
- Notation that all hardware was properly installed, and the existing hardware was inspected for any issues.
- Verification that loading is as communicated in the modification drawings. NOTE If loading is different than what is conveyed in the modification drawing contact Maser Consulting Connecticut immediately.
- Each photo should be time and date stamped
- Photos should be high resolution and submitted in a Zip File and should be organized in the file structure as depicted in Schedule A attached.
- Contractor shall ensure that the safety climb wire rope is supported and not adversely impacted by the install of the modification components. This may involve the install of wire rope guides, or other items to protect the wire rope.
- The photos in the file structure should be uploaded to <https://pmi.vzwsmart.com> as depicted on the drawings

Photo Requirements:

- Base and “During Installation Photos”
 - Base pictures include
 - Photo of Gate Signs showing the tower owner, site name, and number
 - Photo of carrier shelter showing the carrier site name and number if available
 - Photos of the galvanizing compound and/or paint used (if applicable), clearly showing the label and name
 - “During Installation Photos if provided - must be placed only in this folder
- Photos taken at ground level
 - Overall tower structure before and after installation of the modifications
 - Photos of the appropriate mount before and after installation of the modifications; if the mounts are at different rad elevations, pictures must be provided for all elevations that the modifications were installed

- Photos taken at Mount Elevation
 - Photos showing each individual sector before and also after installation of modifications. Each entire sector must be in one photo to show in the inter-connection of members.
 - These photos should also certify that the placement and geometry of the equipment on the mount is as depicted on the sketch and table in the mount analysis
 - Close-up photos of each installed modification per the modification drawings; pictures should also include connection hardware (U-bolts, bolts, nuts, all-threaded rods, etc.)
 - Photos showing the measurements of the installed modification member sizes (i.e. lengths, widths, depths, diameters, thicknesses)
 - Photos showing the elevation or distances of the installed modifications from the appropriate reference locations shown in the modification drawings
 - Photos showing the installed modifications onto the tower with tape drop measurements (if applicable) (i.e. ring/collar mounts, tie-backs, V-bracing kits, etc.); if the existing mount elevation needs to be changed according to the modification drawings, a tape drop measurement shall be provided before the elevation change
 - Photos showing the safety climb wire rope above and below the mount prior to modification.
 - Photos showing the climbing facility and safety climb if present.

Material Certification:

- Materials utilized must be as per specification on the drawings or the equivalent as validated by Maser Consulting Connecticut.
 - If the drawings are as specified on the drawings
 - The contractor should provide the packing list or the materials utilized to perform the mount modification
 - If an equivalent is utilized
 - It is required that the Maser Consulting Connecticut certification of such is included in the contractor submission package. There may be an additional charge for this certification if the equivalent submission doesn't meet specifications as prescribed in the drawings.
- The contractor must certify that the materials meet these specifications by one of these methods.

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

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

Certifying Individual: Company _____

Name _____

Signature _____

Antenna & equipment placement and Geometry Confirmation:

- The contractor must certify that the antenna & equipment placement and geometry is in accordance with the antenna placement diagrams as included in this mount analysis.
- The contractor certifies that the photos support and the equipment on the mount is as depicted on the antenna placement diagrams as included in this mount analysis.
- The contractor notes that the equipment on the mount is not in accordance with the antenna placement diagrams and has accordingly marked up the diagrams or provided a diagram outlining the differences.

Certifying Individual: Company _____
 Name _____
 Signature _____


















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

Issue:

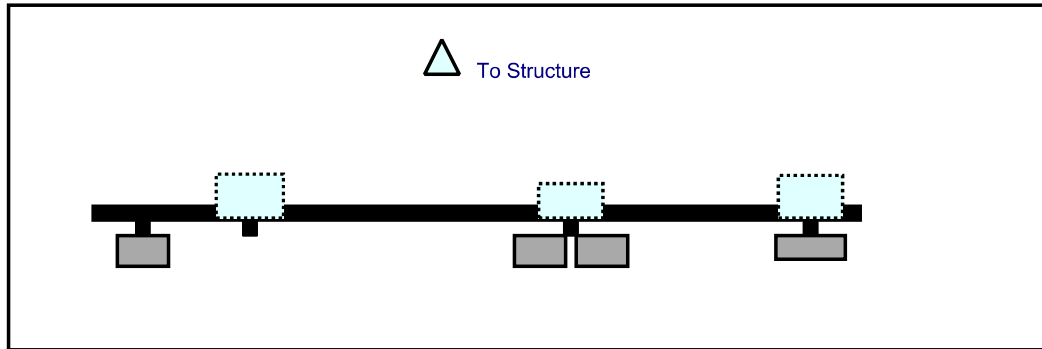
Contractor shall install new safety climb wire rope guides to the existing tower leg to prevent interference with mount connection.

Response:

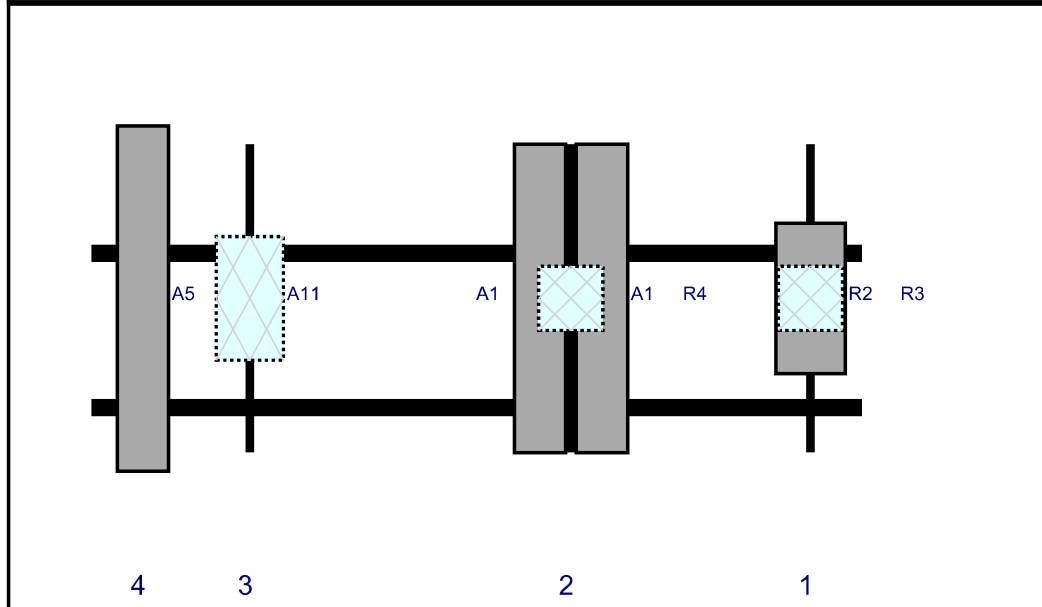
Schedule A – Photo & Document File Structure

-  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

Plan View

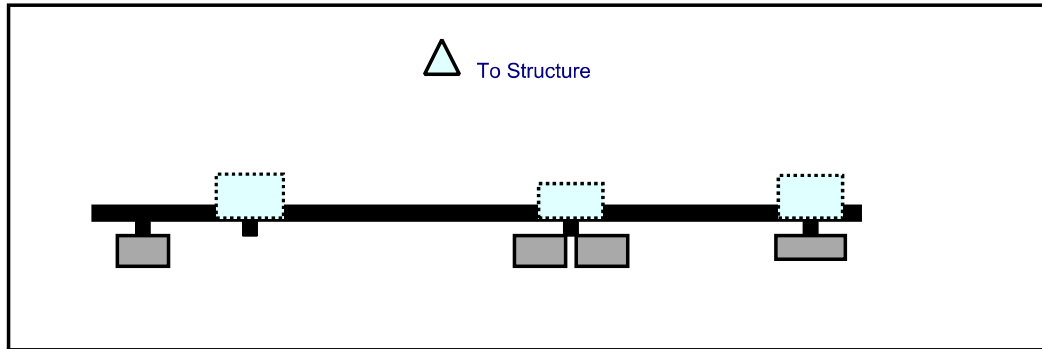


Front View
Looking at Structure

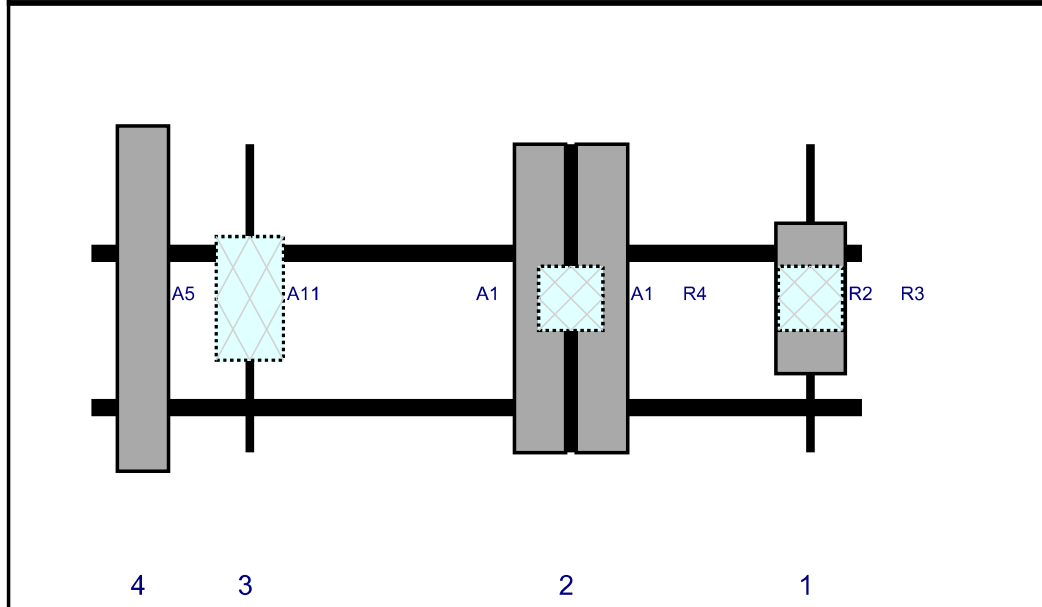


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R2	MT6407-77A	35.1	16.1	168	1	a	Front	36	0	Added	
R3	B2/B66A RRR-BR049 (RFV01U-D1A)	15	15	168	1	a	Behind	36	0	Added	
A1	NHH-65B-R2B	72	11.9	112	2	a	Front	36	7.25	Added	
A1	NHH-65B-R2B	72	11.9	112	2	b	Front	36	-7.25	Added	
R4	B5/B13 RRR-BR04C (RFV01U-D2A)	15	15	112	2	a	Behind	36	0	Added	
A11	DB-B1-6C-12AB-OZ	28.9	15.7	37	3	a	Behind	36	0	Added	
A5	LNx-6514DS-A1M	80.6	11.9	12	4	a	Front	36	0	Retained	03/25/2021

Plan View

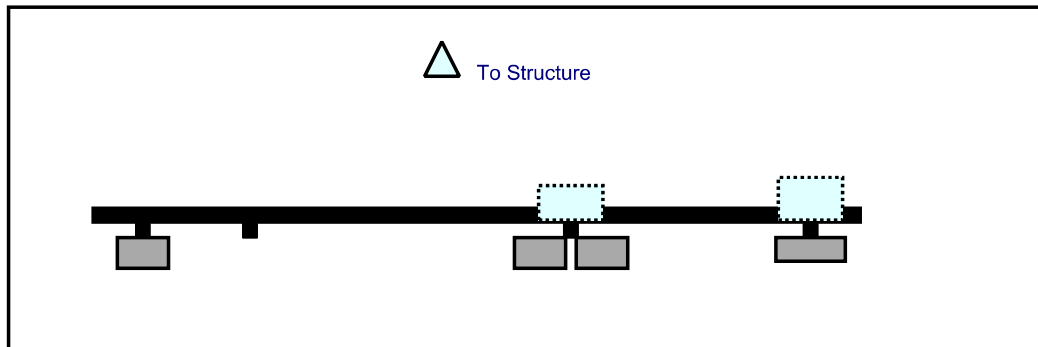


Front View
Looking at Structure

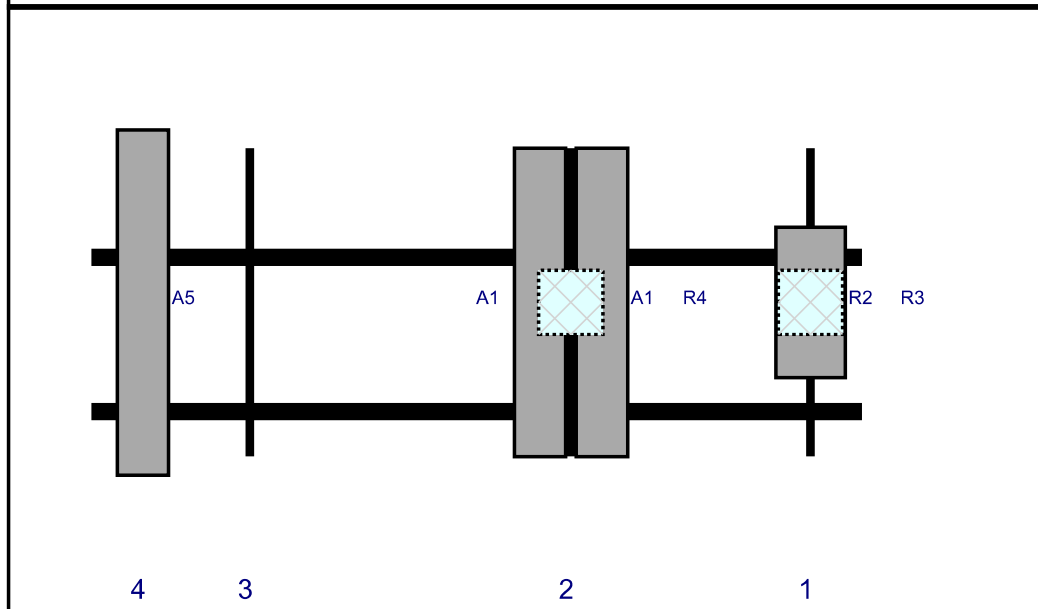


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R2	MT6407-77A	35.1	16.1	168	1	a	Front	36	0	Added	
R3	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	168	1	a	Behind	36	0	Added	
A1	NHH-65B-R2B	72	11.9	112	2	a	Front	36	7.25	Added	
A1	NHH-65B-R2B	72	11.9	112	2	b	Front	36	-7.25	Added	
R4	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	112	2	a	Behind	36	0	Added	
A11	DB-B1-6C-12AB-OZ	28.9	15.7	37	3	a	Behind	36	0	Added	
A5	LNx-6514DS-A1M	80.6	11.9	12	4	a	Front	36	0	Retained	03/25/2021

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
R2	MT6407-77A	35.1	16.1	168	1	a	Front	36	0	Added	
R3	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	168	1	a	Behind	36	0	Added	
A1	NHH-65B-R2B	72	11.9	112	2	a	Front	36	7.25	Added	
A1	NHH-65B-R2B	72	11.9	112	2	b	Front	36	-7.25	Added	
R4	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	112	2	a	Behind	36	0	Added	
A5	LNx-6514DS-A1M	80.6	11.9	12	4	a	Front	36	0	Retained	03/25/2021



Subject

TIA-222-H Usage

Site Information

Site ID: 468160-VZW / COVENTRY EAST CT
Site Name: COVENTRY EAST CT
Carrier Name: Verizon Wireless
Address: 1712 Main St
Coventry, Connecticut 06238
Tolland County
Latitude: 41.779932°
Longitude: -72.309583°

Structure Information

Tower Type: Self Support
Mount Type: 15.00-Ft T-Frame

To Whom It May Concern,

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

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

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

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

Sincerely,

Dejian Xu, PE
Technical Manager

PROJECT NOTES

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



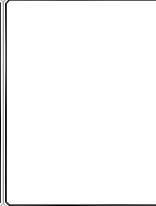
MOUNT MODIFICATION DRAWINGS EXISTING 15.00' T-FRAME

**SITE NAME: COVENTRY EAST CT
SITE NUMBER: 468160**

**1712 MAIN ST
COVENTRY, CT 06238
TOLLAND COUNTY**

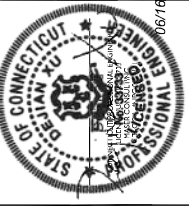
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IF THE REVISION OF ANY PART OF THIS DRAWING UNLESS THEY ARE FACTING UNDER THE DIRECTION OF THE ENGINEER, THE USER SHALL BE RESPONSIBLE TO OBTAIN THIS DOCUMENT.

SITE NAME:
COVENTRY EAST CT
468160
1712 MAIN ST
COVENTRY, CT 06238
TOLLAND COUNTY

MASER CONSULTING CONNECTICUT
1712 MAIN ST
COVENTRY, CT 06238
TOLLAND COUNTY
Phone: 862.577.8412
Fax: 862.572.1100

TITLE SHEET
T-1

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

PROJECT INFORMATION	
SITE INFORMATION	
LATITUDE:	41.779937° N
LONGITUDE:	73.399587° W
JURISDICTION:	TOLLAND COUNTY
APPLICANT/LESEE	
COMPANY:	VERIZON WIRELESS
CLIENT REPRESENTATIVE	
COMPANY:	VERIZON WIRELESS
ADDRESS:	1712 MAIN ST, THIRD FLOOR
CITY, STATE, ZIP:	WESTBOROUGH, MA 01581
CONTACT:	ANDREW CANDELLO
EMAIL:	ANDREW.CANDELLO@VERIZONWIRELESS.COM
PROJECT MANAGER	
COMPANY:	MASER CONSULTING CONNECTICUT
CONTACT:	PETER ALBANO
PHONE:	862.577.4012
EMAIL:	PETER.ALBANO@COLLIERENGINEERING.COM

REFERENCED DOCUMENTS	
SMART TOOL PROJECT #:	1004374
MASER CONSULTING PROJECT #:	21777167A
ANALYSIS DATE:	5/6/2021

CONTRACTOR PMI REQUIREMENTS	
PMI LOCATION:	HTTPS://PMI.VZVSMART.COM
SMART TOOL PROJECT #:	10049538
VZV LOCATION CODE (PLC):	468160
FUZE ID:	1627141

PMI REQUIREMENTS EMBEDDED WITHIN MOUNT MODIFICATION REPORT

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NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

BILL OF MATERIALS


VZWSMART KITS		
QUANTITY	MANUFACTURER	DESCRIPTION
3	VZWSMART-SFK3	V-BRACING KIT CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE STRUCTURAL STEEL NOTES ON SHEET S-2
3	VZWSMART-SFK1	TIE BACK ASSEMBLY CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE STRUCTURAL STEEL NOTES ON SHEET S-2
9	VZWSMART-MSK1	CROSSOVER PLATE
OTHER REQUIRED PARTS		
3	-	72" LONG P2.5 STD GALVANIZED
NOTES		

NOTE: ALL MATERIALS REQUIRED FOR THE DESIGNED MODIFICATIONS BUT NOT LISTED IN THIS SHEET ARE ASSUMED TO BE PROVIDED BY THE CONTRACTOR

VZWSMART KITS - APPROVED VENDORS

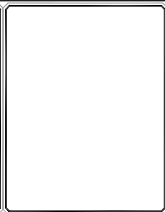
COMMSCOPE		
CONTACT SALVADOR ANGUIANO (817) 306-7492	SALVADOR.ANGUIANO@COMMSCOPE.COM	
EMAIL	WWW.COMMSCOPE.COM	
METROSITE FABRICATORS, LLC		
CONTACT KENT RAMEY (766) 335-7645 (O), (766) 882-9788 (M)	KENT@METROSITELLC.COM	
PHONE	METROSITEFABRICATORS.COM	
EMAIL	PERFECTVISION	
CONTACT	WIRELESS SALES (841) 887-6723	
PHONE	WWW.PERFECT-VISION.COM	
EMAIL	WIRELESSALES@PERFECT-VISION.COM	
WEBSITE	SABRE INDUSTRIES, INC.	
CONTACT	ANGIE WELCH (866) 428-6937	
PHONE	AKWELCH@SABREINDUSTRIES.COM	
EMAIL	WWW.SABRESITESOLUTIONS.COM	
WEBSITE	SITE PRO 1	
CONTACT	PAULA BOSWELL (972) 236-9843	
PHONE	PAULA.BOSWELL@VALMONT.COM	
EMAIL	WWW.SITEPRO1.COM	
WEBSITE		

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



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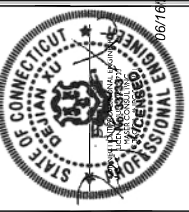
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AS SHOWN 1/27/16/16A



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TOLLAND COUNTY



BILL OF MATERIALS
S-1

GENERAL NOTES

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

DESIGN LOADS

- WIND LOADS
- BASIC WIND SPEED (3 SECOND GUST), $V = 119$ MPH
 - EXPOSURE CATEGORY C
 - TOPOGRAPHIC CATEGORY I
 - MEAN BASE ELEVATION (AMS), $Z = 712.3'$
- ICE LOADS
- ICE WIND SPEED (3 SECOND GUST), $V = 90$ MPH
 - ICE THICKNESS = 1.50 IN
- SEISMIC LOADS
- SEISMIC DESIGN CATEGORY B
 - SHORT TERM MCEER GROUND MOTION, $S_s = 1.88$
 - LONG TERM MCEER GROUND MOTION, $S_1 = .055$

PROTECT BY ANY OTHER MEANS.

- ALL EXISTING PAINTED GALVANIZED SURFACES DAMAGED DURING REHAB INCLUDING AREAS UNDER STIFFENER PLATES SHALL BE WIRE BRUSHED CLEAN, REPAIRED BY COLD GALVANIZING (ZINCA OR ZINC COTE), AND REPAINTED TO MATCH THE EXISTING FINISH (IF APPLICABLE).
- ALL HOLES IN STEEL MEMBERS SHALL BE SIZED 1/16" LARGER THAN THE BOLT DIAMETER. STANDARD HOLES SHALL BE USED UNLESS NOTED OTHERWISE.

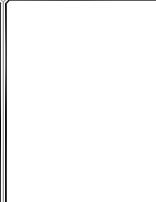
STRUCTURAL STEEL

- DESIGN, DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING PUBLICATIONS EXCEPT AS SPECIFICALLY INDICATED IN THE CONTRACT DOCUMENTS.
 - AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) MANUAL OF STEEL CONSTRUCTION (15TH EDITION)
 - SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS
 - AISC CODE OF STANDARD PRACTICE
- STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING UNLESS OTHERWISE SHOWN:
 - CHANNELS, ANGLES, PLATES, ETC. ASTM A36 (GR 36)
 - STEEL PIPE ASTM A53 (GR 35)
 - BOLTS ASTM A325
 - WASHERS AND LOCK WASHERS LOCKING STRUCTURAL GRADE
- ALL SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE APPROVED IN WRITING BY THE ENGINEER. CONTRACTOR SHALL PROVIDE DOCUMENTATION TO ENGINEER FOR VERIFYING THE SUBSTITUTE IS SUITABLE FOR USE AND MEETS ORIGINAL DESIGN CRITERIA. DIFFERENCES FROM THE ORIGINAL DESIGN, INCLUDING MAINTENANCE, REPAIR AND CORRECTION, SHALL BE NOTED IN THE SHOP DRAWINGS. COSTS ASSOCIATED WITH THE SUBSTITUTIONS SHALL BE PROVIDED TO THE ENGINEER. CONTRACTOR SUB-CONTRACTORS SHALL BE PROVIDED TO THE ENGINEER. CONTRACTOR SHALL PROVIDE ADDITIONAL DOCUMENTATION AND/OR SPECIFICATIONS TO THE ENGINEER AS REQUESTED.
- PROVIDE STRUCTURAL STEEL SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
 - SUBMIT SHOP DRAWINGS TO PETER.ALBANO@COLLIERSENGINEERING.COM
 - PROVIDE MASER CONSULTING PROJECT # AND MASER CONSULTING PROJECT ENGINEER CONTACT IN THE BODY OF THE EMAIL.
- DRILL NO HOLES IN ANY NEW OR EXISTING STRUCTURAL STEEL MEMBERS OTHER THAN THOSE SHOWN ON STRUCTURAL DRAWINGS WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.
- GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
- ALL NEW STEEL SHALL BE HOT DIPPED GALVANIZED FOR FULL WEATHER PROTECTION. IN ADDITION ALL NEW STEEL SHALL BE PAINTED TO MATCH EXISTING STEEL. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
- ALL BOLTS ASSEMBLED FOR STRUCTURAL MEMBERS REPRESENTED IN THIS DRAWING REQUIRE LOCKING DEVICES TO BE INSTALLED IN ACCORDANCE WITH TIA-222-H SECTION 4.92 REQUIREMENTS.
- WHERE CONNECTIONS ARE NOT FULLY DETAILED ON THESE DRAWINGS FABRICATOR SHALL DESIGN CONNECTIONS TO RESIST LOADS AND FORCES WHERE SHOWN ON DRAWINGS AND AS OUTLINED IN SPECIFICATIONS.
- FOR MEMBERS BEING REPLACED, PROVIDE USK BOLTS AND MATCH EXISTING SIZE AND GRADE. MAINTAIN AISC REQUIREMENTS FOR MINIMUM BOLT DISTANCE AND SPACING.
- ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH TO PERMIT THE BOLT TO EXTEND THROUGH THE FACE OF THE MEMBER TO BE REPLACED. THE END OF THE BOLT TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.
- GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
- ALL NEW STEEL SHALL BE HOT DIPPED GALVANIZED FOR FULL WEATHER PROTECTION. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO

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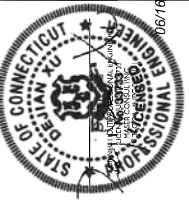
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DATE	AS SHOWN	REVISIONS	DATE	BY



DATE OF REVISION: 06/18/2021
 UNLESS THERE ARE FACTORS TO THE CONTRARY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF THE INFORMATION PROVIDED IN THIS DOCUMENT.

SITE NAME:
 COVENTRY EAST CT
 468160
 1713 MAIN ST
 COVENTRY, CT 06238
 TOLLAND COUNTY



MODIFICATION NOTES

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

MODIFICATION INSPECTION NOTES

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

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

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

THE MI IS TO CONFIRM INSTALLATION CONFIGURATION AND WORKMANSHIP ONLY AND IS NOT A REVIEW OF THE MODIFICATION DESIGN. THE MI INSPECTOR TAKE A REVIEW OF THE MODIFICATION DESIGN, INCLUDING THE ORIGINAL MODIFICATION DESIGN EFFECTIVENESS AND INTEGRITY RESIDES WITH THE EOR AT ALL TIMES.

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

MI INSPECTOR

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

- REVIEW THE REQUIREMENTS OF THE MI CHECKLIST
- WORK WITH THE GC TO DEVELOP A SCHEDULE TO CONDUCT ON-SITE INSPECTIONS
- THE MI INSPECTOR IS RESPONSIBLE FOR COLLECTING ALL GC INSPECTION AND TEST REPORTS, REVIEWING THE DOCUMENTS FOR ADHERENCE TO THE CONTRACT DOCUMENTS, CONDUCTING THE IN-FIELD INSPECTIONS, AND SUBMITTING THE MI REPORT TO EOR.

GENERAL CONTRACTOR

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

- REVIEW THE REQUIREMENTS OF THE MI CHECKLIST
- WORK WITH THE MI INSPECTOR TO DEVELOP A SCHEDULE TO CONDUCT ON-SITE MI INSPECTIONS, INCLUDING FOUNDATION INSPECTIONS
- BETTER UNDERSTAND ALL INSPECTION AND TESTING REQUIREMENTS
- THE GC SHALL PERFORM AND RECORD THE TEST AND INSPECTION RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE MI CHECKLIST.

RECOMMENDATIONS

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

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

CORRECTION OF FAILING MIs

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

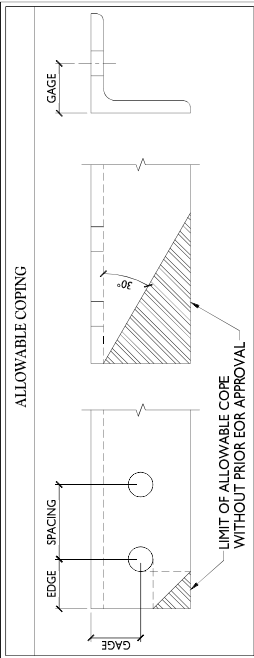
- CORRECT FAILING ISSUES TO COMPLY WITH THE SPECIFICATIONS CONTAINED IN THE ORIGINAL CONTRACT DOCUMENTS AND COORDINATE A SUPPLEMENT MI.

REQUIRED PHOTOS

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

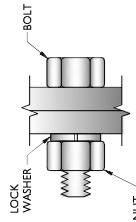
- PRE-CONSTRUCTION GENERAL SITE CONDITION
- PHOTOGRAPHS DURING THE REINFORCEMENT MODIFICATION CONSTRUCTION/ERECTION
- RAW MATERIALS
- PHOTOS OF ALL CRITICAL DETAILS
- FOUNDATION MODIFICATIONS
- FOUNDATION CONSTRUCTION
- BOLT INSTALLATION
- FINAL INSTALLED CONDITION
- SURFACE COATING REPAIR
- POST CONSTRUCTION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

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



BOLT SCHEDULE (IN.)				
BOLT DIAMETER	STANDARD HOLE	SHORT SLOT	MIN EDGE DISTANCE	SPACING
1/2	9/16	9/16 x 1 1/16	7/8	1 1/2
5/8	1 1/16	1 1/16 x 7/8	1 1/8	1 7/8
3/4	1 3/16	1 3/16 x 1	1 1/4	2 1/4
7/8	1 5/16	1 5/16 x 1 1/8	1 1/2	2 5/8
1	1 1/16	1 1/16 x 1 5/16	1 3/4	3

WORKABLE GAGES (IN.)	
LEG	GAGE
4	2 1/2
3 1/2	2
3	1 3/4
2 1/2	1 3/8
2	1 1/8



TYP. BOLT ASSEMBLY

NOTES:

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

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 REGISTERED PROFESSIONAL ENGINEER
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 EXPIRES: 12/31/2024

REV	DATE	DESCRIPTION	BY	CHK



STATE OF CONNECTICUT
 REGISTERED PROFESSIONAL ENGINEER
 No. 1277167A
 EXPIRES: 12/31/2024

SITE NAME:
 COVENTRY EAST CT
 468160
 1713 MAIN ST
 COVENTRY, CT 06238
 TOLLAND COUNTY

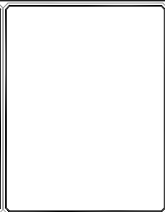
1713 MAIN ST
 COVENTRY, CT 06238
 Phone: 863.979.8412
 Fax: 863.972.1100

MODIFICATION NOTES

SEE SHEET: S-3

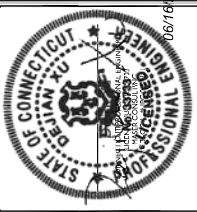
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DATE	DESCRIPTION	BY	CHK



06/16/2021

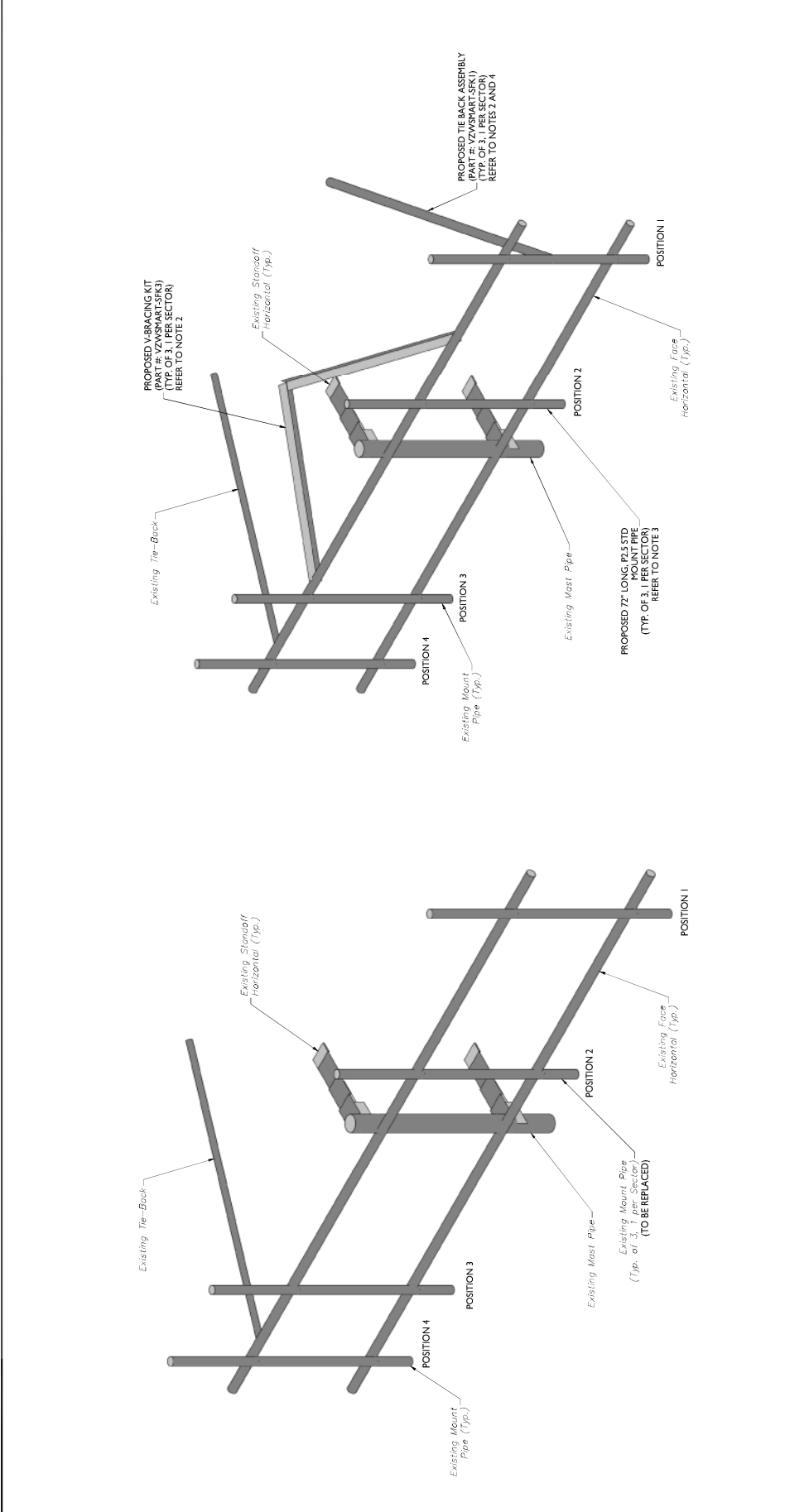
IF THE REVISIONS AFFECT ANY PERSON, UNLESS THE AFFECTING UNDER THE DIRECTION OF THE ENGINEER, TO ALTER THIS DOCUMENT.

SITE NAME:
 COVENTRY EAST CT
 468160
 1713 MAIN ST
 COVENTRY, CT 06238
 TOLLAND COUNTY



MODIFICATION DETAILS

DATE: 06/16/2021
 TIME: 10:00 AM
 DRAWN BY: J. [Name]
 CHECKED BY: [Name]



2 PROPOSED T-FRAME ISOMETRIC VIEW (TYP. ALL SECTORS)
 SCALE: N.T.S.

MODIFICATION NOTES:

1. MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.
2. CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE STRUCTURAL STEEL NOTES ON SHEET S-2.
3. CONNECT NEW MOUNT PIPE TO EXISTING HORIZONTAL WITH CROSSOVER PLATES (PART #: VZWSMART-MSK1).
4. CONNECT NEW TIE BACK TO MOUNT PIPE WITH CROSSOVER PLATES (PART #: VZWSMART-MSK1), CONNECT OTHER END TO ADJACENT TOWER LEG.

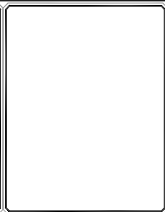
1 EXISTING T-FRAME ISOMETRIC VIEW (TYP. ALL SECTORS)
 SCALE: N.T.S.

STRUCTURAL NOTES:

1. PER THE MOUNT MAPPING COMPLETED BY HUDSON DESIGN GROUP LLC ON 3/25/2021, THE SAFETY CLIMB AND CLIMBING FACILITIES UP TO THE VERIZON MOUNT ELEVATION (149'-0") ARE IN GOOD CONDITION, HOWEVER, THEY ARE OBSTRUCTED BEFORE ACCESSING VERIZON'S MOUNT. MASER DOES NOT WARRANT THIS INFORMATION.
2. INSTALL SHALL NOT CAUSE HARM TO THE STRUCTURE, CLIMBING FACILITY, SAFETY CLIMB, OR ANY SYSTEM INSTALLED ON THE STRUCTURE. TIMELY NOTICE AND DOCUMENTATION SHALL BE PROVIDED BY CONTRACTORS TO THE EOR (OF STRUCTURAL DESIGN) IF AN OBSTRUCTION WAS REQUIRED TO MEET THE RF SYSTEM DESIGN REQUIREMENTS AND PERFORMANCES.

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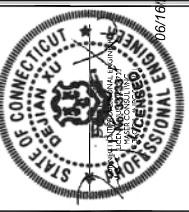
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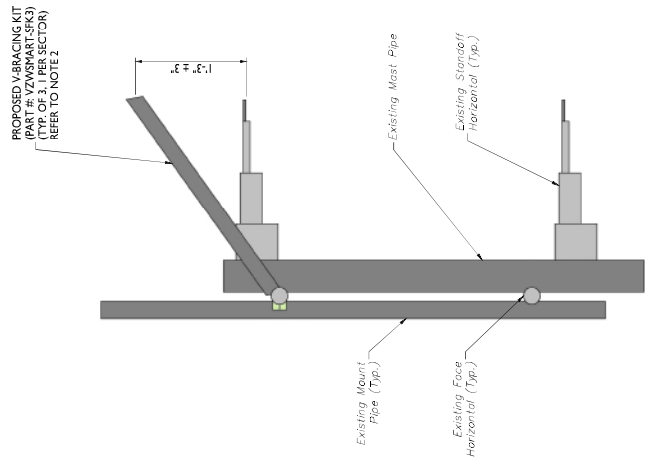
PROJECT: AS SHOWN
DATE: 1/27/16



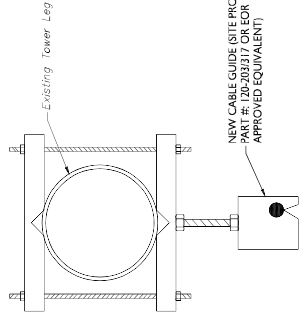
SITE NAME:
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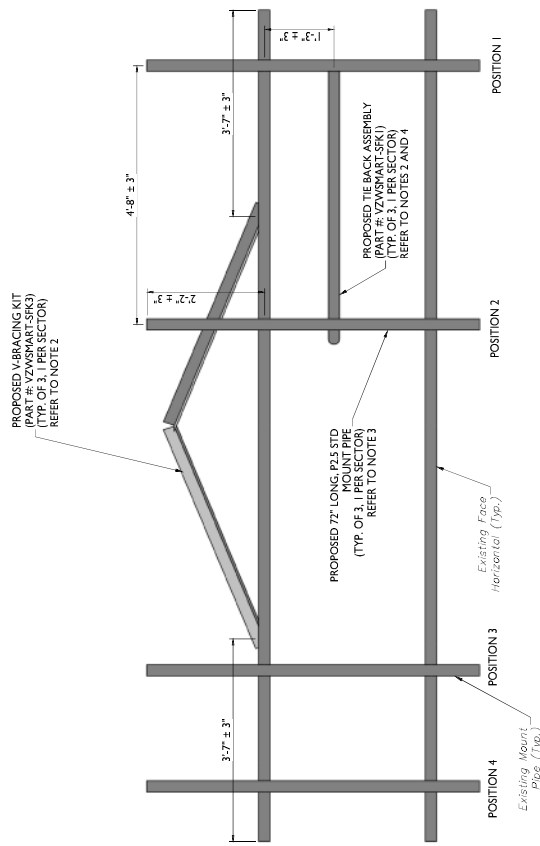
MODIFICATION DETAILS



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



3 PROPOSED CABLE GUIDE TOWER LEG ATTACHMENT - PLAN VIEW
SCALE: N.T.S.



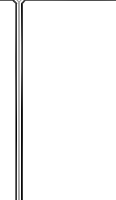
1 PROPOSED FRONT ELEVATION (TYP. ALL SECTORS)
SCALE: N.T.S.

- MODIFICATION NOTES:**
1. MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.
 2. CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE STRUCTURAL STEEL NOTES ON SHEET S-2.
 3. CONNECT NEW MOUNT PIPE TO EXISTING HORIZONTAL WITH CROSSOVER PLATES (PART #: VZWSMART-MSK1).
 4. CONNECT NEW TIE BACK TO MOUNT PIPE WITH CROSSOVER PLATES (PART#:VZWSMART-MSK1). CONNECT OTHER END TO ADJACENT TOWER LEG.

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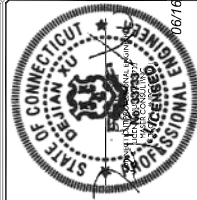
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REV	DATE	DESCRIPTION	BY



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SITE NAME:
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MOUNT PHOTOS
 S-6



MOUNT PHOTO 2



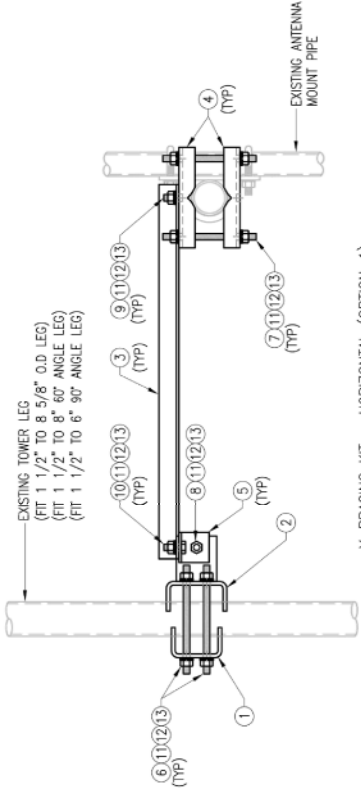
MOUNT PHOTO 4



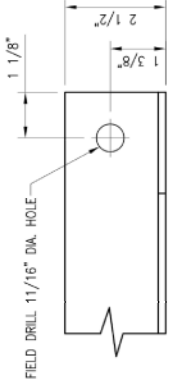
MOUNT PHOTO 1



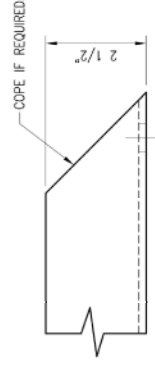
MOUNT PHOTO 3



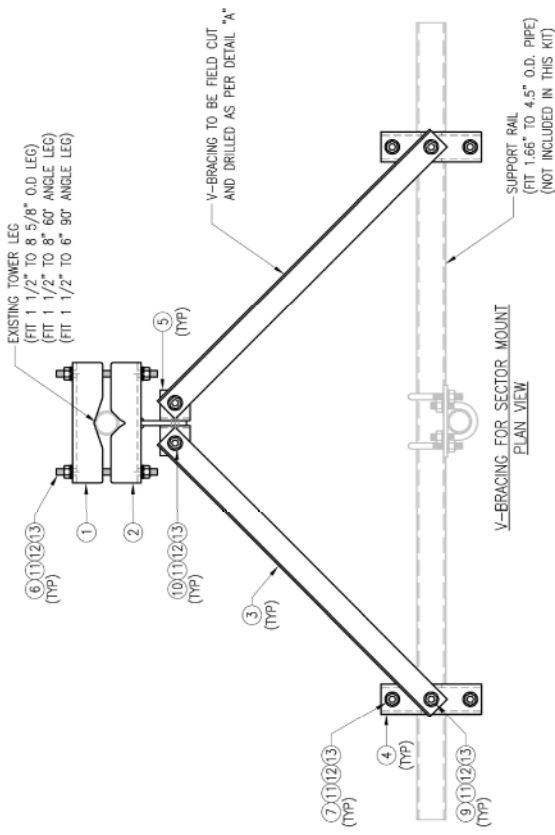
V-BRACING KIT - HORIZONTAL (OPTION-1)
 SIDE VIEW



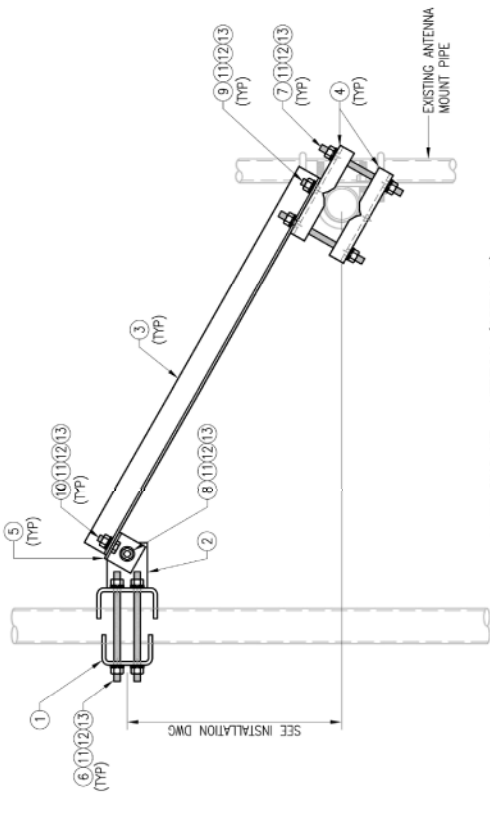
PLAN VIEW



FRONT VIEW
 DETAIL "A"



V-BRACING FOR SECTOR MOUNT
 PLAN VIEW



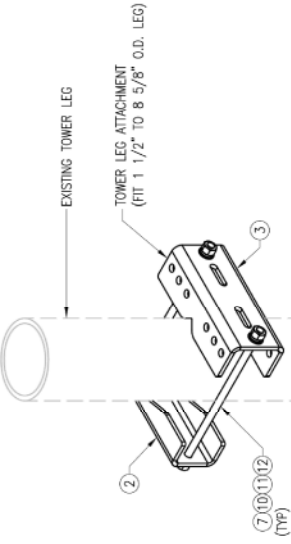
V-BRACING KIT - VERTICAL (OPTION-2)
 SIDE VIEW

VZWSMART-SFK3 (V-BRACING KIT)

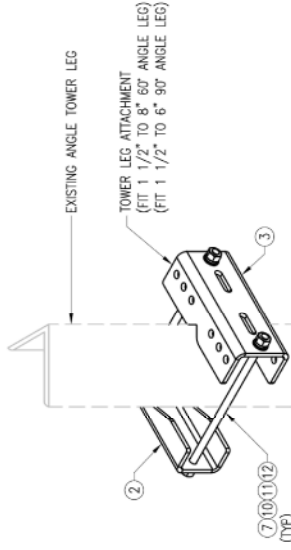
ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	1	BP625-12	PL 3/8" X 9 5/8" X 1'-0" A36 BENT PLATE	VBSM-F1	12
2	1	BRKW-VBSM	WELDMENT BRACKET	VBSM-F3	16
3	2	L252525-8	L 2 1/2" X 2 1/2" X 1/4" X 8'-0" A36	VBSM-F5	67
4	4	BP6875-10	PL 3/8" X 6 7/8" X 10" A36 BENT PLATE	VBSM-F2	20
5	2	AL-333	L 3" X 3" X 1/4" X 3" A36	VBSM-F2	3
6	4	---	THREADED ROD 5/8" DIA. X 1'-6" F1554-36 HDG	---	---
7	4	---	THREADED ROD 5/8" DIA. X 10" F1554-36 HDG	---	---
8	1	---	BOLT 5/8" X 2 1/4" A325	---	---
9	2	---	BOLT 5/8" X 1 3/4" A325	---	---
10	2	---	BOLT 5/8" X 1 3/4" A325	---	---
11	21	FW-625	5/8" HDG USS FLAT WASHER	---	2
12	21	LW-625	5/8" HDG LOCK WASHER	---	0
13	21	NUT-625	5/8" HDG HEX NUT	---	2
				GALVANIZED WT	122

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

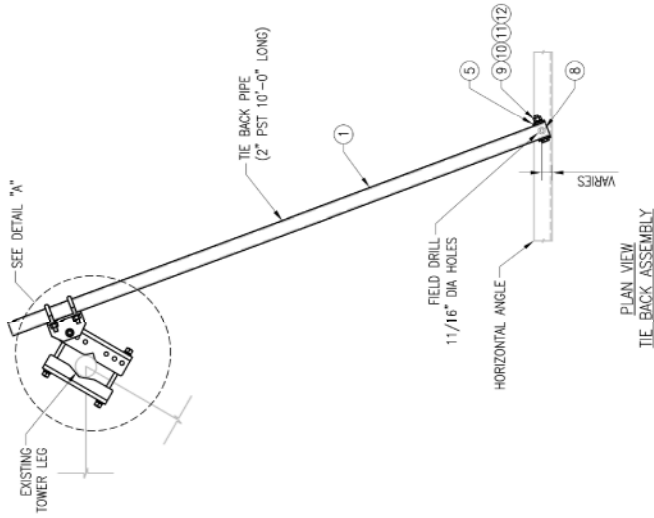
DRAWN BY: H.R.	CHECKED BY: HMA
REV. DESCRIPTION	DATE
1 FIRST ISSUE	H.R. 05/08/20
△	
△	
△	
△	
SHEET TITLE:	
VZWSMART-SFK3 V-BRACING KIT	
SHEET NUMBER:	REV #
VZWSMART-SFK3	0



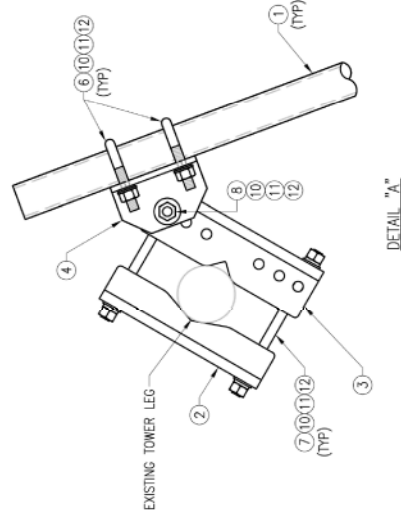
ROUND TOWER LEG ATTACHMENT DETAIL



ANGLE TOWER LEG ATTACHMENT DETAIL



PLAN VIEW
 TIE BACK ASSEMBLY



DETAIL "A"

VZWSMART-SFK1 (TIE BACK ASSEMBLY)

ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	1	PST2375-10	2" PST (2.375" O.D. X 0.154" THK) X 10'-0" A53 GR-B 35KSI	SFK1-F1	38
2	1	B9925-12	PL 3/8" X 8 1/4" X 1'-0" A36 BENT PLATE	SFK1-F2	11
3	1	BP11125-12	PL 3/8" X 11 1/8" X 1'-0" A36 BENT PLATE	SFK1-F3	14
4	1	BP6-9375	PL 3/8" X 6" X 9 3/8" A36 BENT PLATE	SFK1-F4	6
5	1	BP2-875	PL 1/4" X 2" X 8 3/4" A36 BENT PLATE	SFK1-F4	1
6	2	MS02-625-300-500	RU-BOLT 5/8" X 3" LW. X 5" LL. A36 (OR EQUIV.)	RBC-1	2
7	2	---	THREADED ROD 5/8" DIA. X 1'-6" F1554-36 HDG	---	0
8	2	---	BOLT 5/8" X 2" A325	---	0
9	1	---	BOLT 5/8" X 4 1/4" A325	---	0
10	11	PW-625	5/8" HDG- USS- FLAT WASHER	---	1
11	11	LW-625	5/8" HDG- LOCK WASHER	---	0
12	11	NUT-625	5/8" HDG- HEX NUT	---	1
				GALVANIZED WT	72

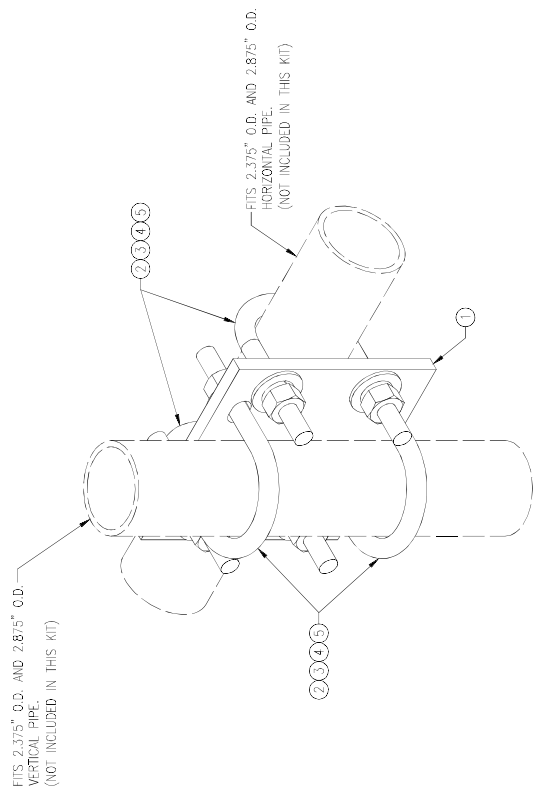
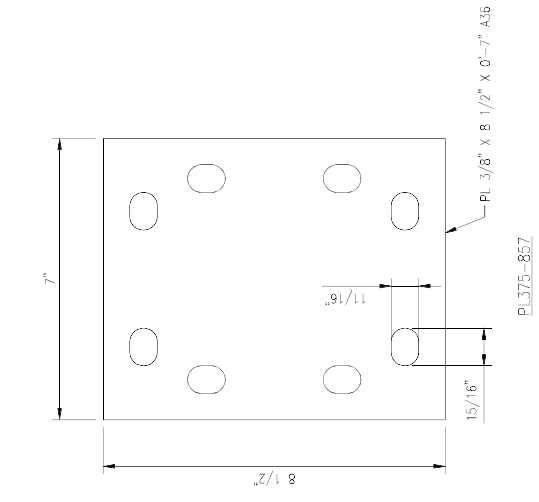
NOTES:
 1. HOT-DIPPED GALVANIZED PER ASTM A123.

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REV. DESCRIPTION	BY DATE
△ FIRST ISSUE	BT 06/08/20
△	
△	
△	
SHEET TITLE:	
VZWSMART-SFK1 TIE BACK ASSEMBLY	
SHEET NUMBER:	REV #
VZWSMART-SFK1	0

DRAWN BY: HLR	CHECKED BY: HMA
REV. DESCRIPTION	BY DATE
1 FIRST ISSUE	HLR 05/08/20
△	
△	
△	
△	

SHEET TITLE:
 VZWSMART-MSK1
 CROSSOVER PLATE

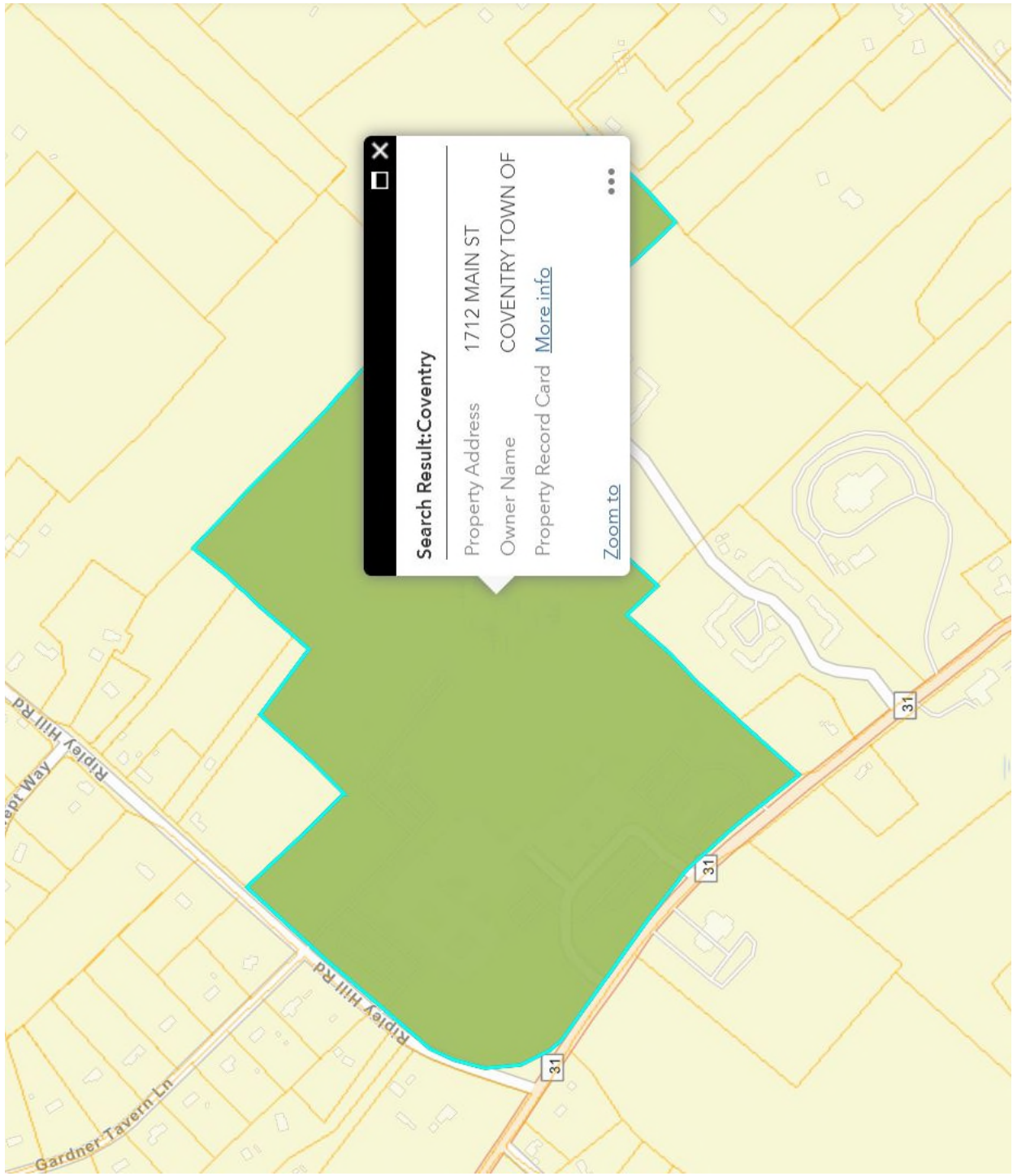
SHEET NUMBER:	REV #
VZWSMART-MSK1	0



ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	1	PL375-857	PL 3/8" X 8 1/2" X 0'-7" A36	MSK1-F1	6
2	4	MSD2-625-300-500	RU-BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)	RBC-1	5
3	8	FW-625	5/8" HDG USS FLAT WASHER	---	1
4	8	LW-625	5/8" HDG LOCK WASHER	---	0
5	8	NUT-625	5/8" HDG HEX NUT	---	1
				GALVANIZED WT	14

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

ATTACHMENT 5



Search Result: Coventry

Property Address: 1712 MAIN ST

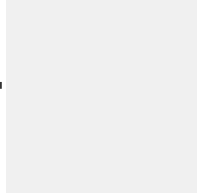
Owner Name: COVENTRY TOWN OF

Property Record Card: [More info](#)

Zoom to



Coventry, CT



1712 MAIN ST

Location

1712 MAIN ST

Mblu

29/ / 159/ /

Acct#

R30305

Owner

COVENTRY TOWN OF

PBN

Assessment

\$16,333,700

Appraisal

\$23,333,600

PID

6578

Building Count

5

Current Value

Appraisal

Valuation Year	Improvements	Land	Total
2019	\$20,161,600	\$3,172,000	\$23,333,600

Assessment

Valuation Year	Improvements	Land	Total
2019	\$14,113,300	\$2,220,400	\$16,333,700

Owner of Record**Owner** COVENTRY TOWN OF**Co-Owner****Address** 1712 MAIN ST
COVENTRY, CT 06238**Sale Price** \$0**Certificate****Book & Page** 0100/0064**Sale Date** 01/06/1960**Instrument** 29

Ownership History

Ownership History

Owner	Sale Price	Certificate	Book & Page	Instrument	Sale Date
COVENTRY TOWN OF	\$0		0100/0064	29	01/06/1960

Building Information

Building 1 : Section 1

Year Built: 1962**Living Area:** 6,036**Replacement Cost:** \$1,464,038**Building Percent Good:** 69**Replacement Cost****Less Depreciation:** \$1,010,200**Building Attributes**

Field	Description
Style	City/Town Hall
Model	Comm/Ind
Grade	C
Stories:	1
Occupancy	1.00
Exterior Wall 1	Brick

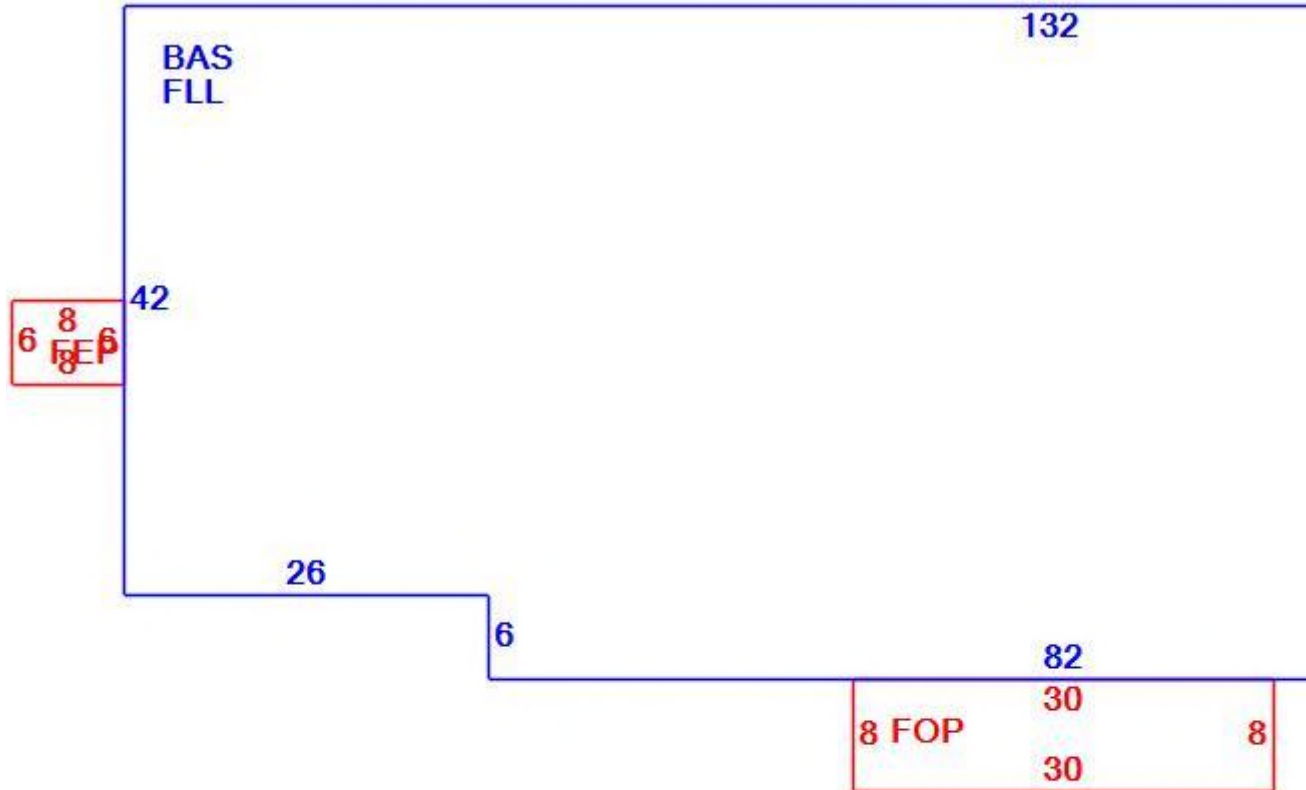
Exterior Wall 2	
Roof Structure	Gable
Roof Cover	Asphalt Shingl
Interior Wall 1	Drywall
Interior Wall 2	
Interior Floor 1	Asphalt Tile
Interior Floor 2	Carpet
Heating Fuel	Oil
Heating Type	Forced Air
AC Type	Central
Struct Class	
Bldg Use	Town MDL-94
Total Rooms	0
Usrflid 216	
Total Baths	
Usrflid 218	
Usrflid 219	
1st Floor Use:	201
Heat/AC	HEAT/AC PKGS
Frame Type	MASONRY
Baths/Plumbing	AVERAGE
Ceiling/Wall	SUS-CEIL & WL
Rooms/Prtns	AVERAGE
Wall Height	9.00
% Comn Wall	0.00
Usrflid 100	
Usrflid 302	

Usrflid 301	
Usrflid 303	
Usrflid 103	
Usrflid 107	
Usrflid 304	
Usrflid 104	
Usrflid 105	
Usrflid 101	
Usrflid 225	
Usrflid 300	
Usrflid 220	
Usrflid 221	
Usrflid 102	
Usrflid 701	
Usrflid 106	
Usrflid 305	
Usrflid 900	No
Usrflid 901	No

Building Photo



Building Layout



Building Sub-Areas (sq ft) Legend

Code	Description	Gross Area	Living Area
BAS	First Floor	6,036	6,036
FEP	Porch, Enclosed	48	0
FLL	Fin. Lower Level	6,036	0
FOP	Porch, Open	240	0
		12,360	6,036

Building 2 : Section 1

Year Built: 1970
Living Area: 1,152
Replacement Cost: \$151,027
Building Percent Good: 72

**Replacement Cost
Less Depreciation:**

\$108,700

Building Attributes : Bldg 2 of 5

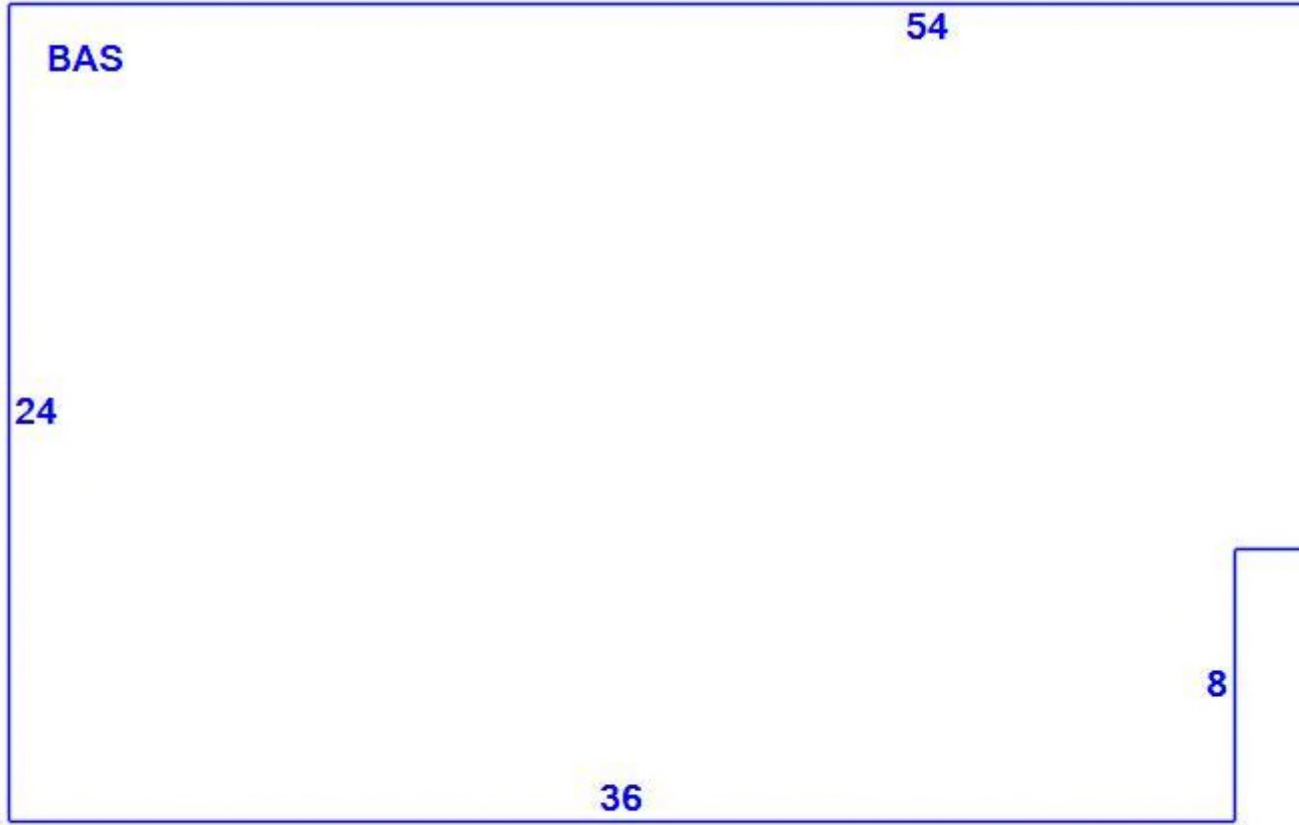
Field	Description
Style	Office
Model	Comm/Ind
Grade	C
Stories:	1
Occupancy	1.00
Exterior Wall 1	Vinyl
Exterior Wall 2	
Roof Structure	Gable
Roof Cover	Asphalt Shingl
Interior Wall 1	Drywall
Interior Wall 2	
Interior Floor 1	Carpet
Interior Floor 2	
Heating Fuel	Gas
Heating Type	Forced Air
AC Type	Central
Struct Class	
Bldg Use	Town MDL-94
Total Rooms	0
Usrflid 216	
Total Baths	
Usrflid 218	
Usrflid 219	
1st Floor Use:	201

Heat/AC	HEAT/AC SPLIT
Frame Type	WOOD FRAME
Baths/Plumbing	AVERAGE
Ceiling/Wall	SUS-CEIL & WL
Rooms/Prtns	AVERAGE
Wall Height	8.00
% Comn Wall	0.00
Usrflid 100	
Usrflid 302	
Usrflid 301	
Usrflid 303	
Usrflid 103	
Usrflid 107	
Usrflid 304	
Usrflid 104	
Usrflid 105	
Usrflid 101	
Usrflid 225	
Usrflid 300	
Usrflid 220	
Usrflid 221	
Usrflid 102	
Usrflid 701	
Usrflid 106	
Usrflid 305	
Usrflid 900	No
Usrflid 901	No

Building Photo



Building Layout



Building Sub-Areas (sq ft) Legend

Code	Description	Gross Area	Living Area
BAS	First Floor	1,152	1,152
		1,152	1,152

Building 3 : Section 1

Year Built: 1999
Living Area: 4,324
Replacement Cost: \$400,359
Building Percent Good: 86
Replacement Cost Less Depreciation: \$344,300

Building Attributes : Bldg 3 of 5

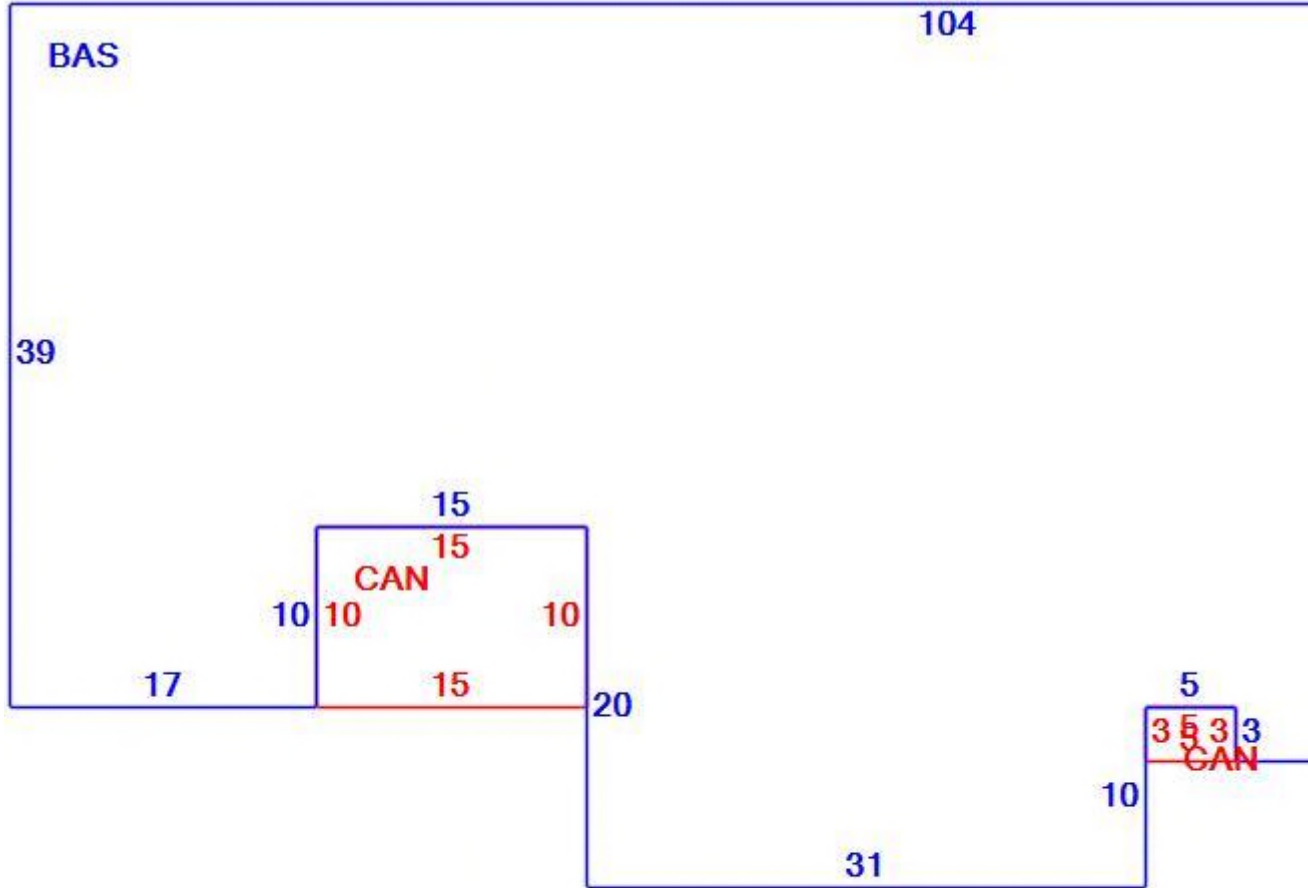
Field	Description
Style	Office
Model	Comm/Ind
Grade	C
Stories:	1
Occupancy	1.00
Exterior Wall 1	Brick
Exterior Wall 2	Vinyl
Roof Structure	Gable
Roof Cover	Asphalt Shingl
Interior Wall 1	Drywall
Interior Wall 2	
Interior Floor 1	Carpet
Interior Floor 2	
Heating Fuel	Gas
Heating Type	Forced Air
AC Type	Central
Struct Class	
Bldg Use	Town MDL-94
Total Rooms	0
UsrflD 216	
Total Baths	
UsrflD 218	
UsrflD 219	
1st Floor Use:	201
Heat/AC	HEAT/AC PKGS
Frame Type	WOOD FRAME

Baths/Plumbing	AVERAGE
Ceiling/Wall	SUS-CEIL & WL
Rooms/Prtns	AVERAGE
Wall Height	10.00
% Comn Wall	0.00
Usrflid 100	
Usrflid 302	
Usrflid 301	
Usrflid 303	
Usrflid 103	
Usrflid 107	
Usrflid 304	
Usrflid 104	
Usrflid 105	
Usrflid 101	
Usrflid 225	
Usrflid 300	
Usrflid 220	
Usrflid 221	
Usrflid 102	
Usrflid 701	
Usrflid 106	
Usrflid 305	
Usrflid 900	No
Usrflid 901	No

Building Photo



Building Layout



Building Sub-Areas (sq ft) Legend

Code	Description	Gross Area	Living Area
BAS	First Floor	4,324	4,324
CAN	Canopy	165	0
		4,489	4,324

Building 4 : Section 1

Year Built:

1961

Living Area:

131,671

Replacement Cost:

\$15,905,105

Building Percent Good:

69

**Replacement Cost
Less Depreciation:**

\$10,974,500

Building Attributes : Bldg 4 of 5

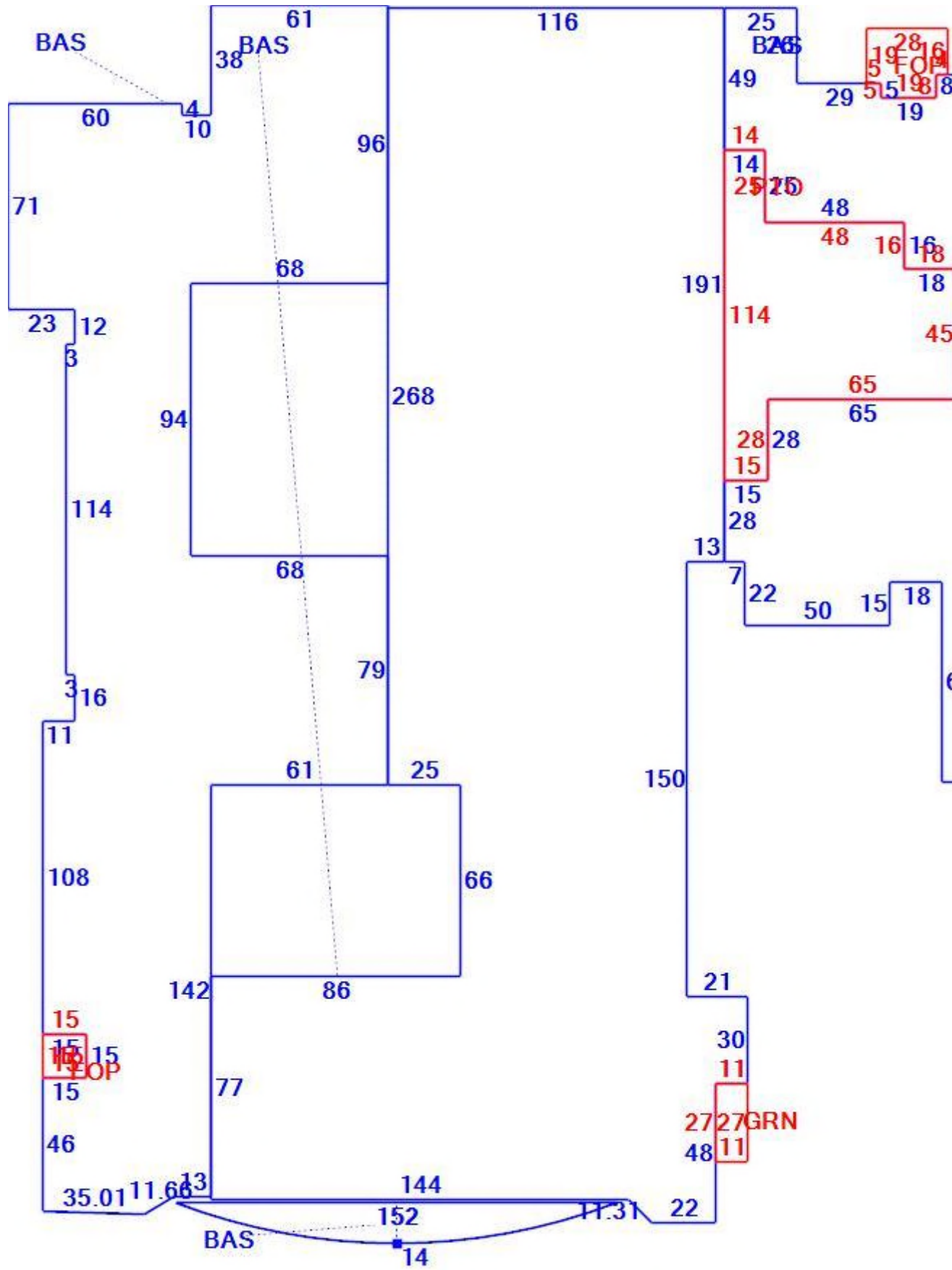
Field	Description
Style	Schools-Public
Model	Comm/Ind
Grade	C
Stories:	
Occupancy	
Exterior Wall 1	Brick
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	Tar + Gravel
Interior Wall 1	Drywall
Interior Wall 2	Minimum
Interior Floor 1	Asphalt Tile
Interior Floor 2	
Heating Fuel	Oil
Heating Type	Hot Water
AC Type	None/partial
Struct Class	
Bldg Use	Town School
Total Rooms	0
Usrflid 216	
Total Baths	
Usrflid 218	
Usrflid 219	
1st Floor Use:	201

Heat/AC	HEAT ONLY
Frame Type	STEEL
Baths/Plumbing	AVERAGE
Ceiling/Wall	CEIL & WALLS
Rooms/Prtns	AVERAGE
Wall Height	10.00
% Comn Wall	0.00
Usrflid 100	
Usrflid 302	
Usrflid 301	
Usrflid 303	
Usrflid 103	
Usrflid 107	
Usrflid 304	
Usrflid 104	
Usrflid 105	
Usrflid 101	
Usrflid 225	
Usrflid 300	
Usrflid 220	
Usrflid 221	
Usrflid 102	
Usrflid 701	
Usrflid 106	
Usrflid 305	
Usrflid 900	No
Usrflid 901	No

Building Photo



| Building Layout |



Building Sub-Areas (sq ft) Legend

Code	Description	Gross Area	Living Area
BAS	First Floor	131,671	131,671
FOP	Porch, Open	840	0
GRN	Greenhouse	297	0
PTO	Patio	5,362	0
		138,170	131,671

Building 5 : Section 1

Year Built:

1962

Living Area:

75,960

Replacement Cost:

\$9,998,986

Building Percent Good:

69

Replacement Cost**Less Depreciation:**

\$6,899,300

Building Attributes : Bldg 5 of 5

Field	Description
Style	Schools-Public
Model	Comm/Ind
Grade	C
Stories:	1
Occupancy	1.00
Exterior Wall 1	Brick
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	Tar + Gravel
Interior Wall 1	Drywall
Interior Wall 2	
Interior Floor 1	Asphalt Tile

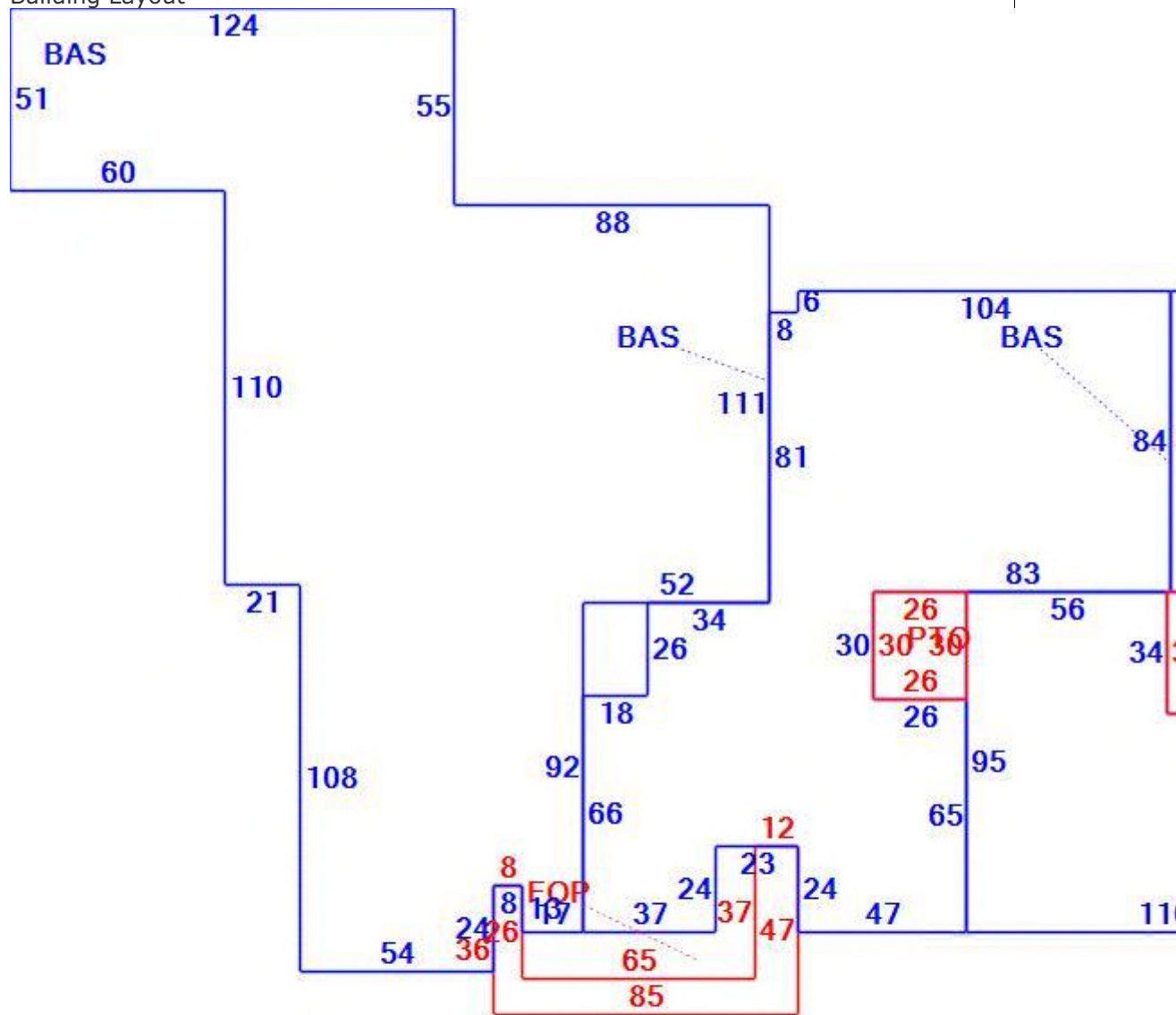
Interior Floor 2	
Heating Fuel	Oil
Heating Type	Hot Water
AC Type	None/partial
Struct Class	
Bldg Use	Town School
Total Rooms	0
Usrflid 216	
Total Baths	
Usrflid 218	
Usrflid 219	
1st Floor Use:	201
Heat/AC	HEAT ONLY
Frame Type	MASONRY
Baths/Plumbing	AVERAGE
Ceiling/Wall	SUS-CEIL & WL
Rooms/Prtns	AVERAGE
Wall Height	12.00
% Comn Wall	0.00
Usrflid 100	
Usrflid 302	
Usrflid 301	
Usrflid 303	
Usrflid 103	
Usrflid 107	
Usrflid 304	
Usrflid 104	

Usrflid 105	
Usrflid 101	
Usrflid 225	
Usrflid 300	
Usrflid 220	
Usrflid 221	
Usrflid 102	
Usrflid 701	
Usrflid 106	
Usrflid 305	
Usrflid 900	No
Usrflid 901	No

Building Photo



Building Layout



Building Sub-Areas (sq ft) Legend

Code	Description	Gross Area	Living Area
BAS	First Floor	75,960	75,960

FOP	Porch, Open	1,502	0
PTO	Patio	1,664	0
WDK	Wood Deck	201	0
		79,327	75,960

Extra Features

Extra Features Legend

Code	Description	Size	Value	Bldg #
SP	Solar Panel	18.00 UNITS	\$0	2
A/C	Air Condition	3240.00 S.F.	\$4,500	5
SPR1	Sprinklers-Wet	76920.00 S.F.	\$42,500	5
SP	Solar Panel	320.00 UNITS	\$0	5
SPR1	Sprinklers-Wet	138169.00 S.F.	\$76,300	4
A/C	Air Condition	35390.00 S.F.	\$48,800	4
MEZ1	Mezzanine-Unf	1984.00 S.F.	\$11,000	4

Land

Land Use

Use Code 901

Description Town MDL-94

Zone GR40

Neighborhood G

Alt Land Appr No

Category

Land Line Valuation

Size (Acres) 98.00

Frontage

Depth

Assessed Value \$2,220,400

Appraised Value \$3,172,000

Outbuildings

Outbuildings Legend

Code	Description	Sub Code	Sub Description	Size	Value	Bldg #
FGR1	Garage			2400.00 S.F.	\$48,000	4
PAV1	Paving			5000.00 S.F.	\$6,300	5
SHD5	Cell Shed			288.00 S.F.	\$82,100	1
PAV1	Paving			26000.00 S.F.	\$32,800	4
PAV1	Paving			20000.00 S.F.	\$25,200	1
TEN	Tennis Court			3.00 UNITS	\$42,000	5
TNK1	Elevated Tank			10000.00 GALS	\$16,600	4
BHS1	Bathhouse			510.00 S.F.	\$7,800	4
FNC	Fence	M	Metal	1500.00 L.F.	\$20,000	5
SHD1	Shed			600.00 S.F.	\$4,800	1
FOP	Open Porch			304.00 S.F.	\$5,800	4
SHD5	Cell Shed			200.00 S.F.	\$57,000	1
SHD1	Shed			384.00 S.F.	\$3,600	4
FNC	Fence	M	Metal	1500.00 L.F.	\$14,700	5
SHD1	Shed			96.00 S.F.	\$900	1
TEN	Tennis Court			3.00 UNITS	\$57,000	4
FCP	Carport			5712.00 S.F.	\$40,000	5
FGR1	Garage			2000.00 S.F.	\$47,500	4
FNC	Fence	M	Metal	200.00 L.F.	\$2,700	1
LT1	Light 1			34.00 UNITS	\$64,600	1
OFSD	Off/Studio			960.00 S.F.	\$41,000	4
LT2	Light 2			7.00 UNITS	\$19,300	1
LNT	Lean-to			192.00 S.F.	\$900	4
LNT	Lean-to			192.00 S.F.	\$900	4
LT3	Light 3			0.00 UNITS	\$0	4

Valuation History

Appraisal

Valuation Year	Improvements	Land	Total
2018	\$20,573,300	\$2,360,800	\$22,934,100
2018	\$20,573,300	\$2,360,800	\$22,934,100
2017	\$20,573,300	\$2,360,800	\$22,934,100

Assessment

Valuation Year	Improvements	Land	Total
2018	\$14,401,400	\$1,652,600	\$16,054,000
2018	\$14,401,400	\$1,652,600	\$16,054,000
2017	\$14,401,400	\$1,652,600	\$16,054,000

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ATTACHMENT 6



**COVENTRY EAST
Certificate of Mailing — Firm**

Name and Address of Sender Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103	TOTAL NO. of Pieces Listed by Sender <div style="text-align: center; font-size: 2em;">2</div>	TOTAL NO. of Pieces Received at Post Office™ <div style="text-align: center; font-size: 2em;">2</div>	Affix Stamp Here <i>Postmark with Date of Receipt.</i> <div style="text-align: right; color: red;"> neopost[®] 07/28/2021 US POSTAGE \$002.89⁰ </div> <div style="text-align: right; color: red; margin-top: 10px;"> ZIP 06103 041L12203937 </div>
Postmaster, per (name of receiving employee) <div style="text-align: center;"> </div>			

USPS® Tracking Number Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.	John Elsesser, Town Manager Town of Coventry 1712 Main Street Coventry, CT 06238				
2.	Eric Trott, Director of Land Use Town of Coventry 1712 Main Street Coventry, CT 06238				
3.					
4.					
5.					
6.					