



MJ Umali, Site Acquisition Consultant  
c/o Cellco Partnership d/b/a Verizon Wireless  
Centerline Communications, LLC  
750 West Center Street, Floor 3  
West Bridgewater, MA 02379  
Mobile: (978) 568-7906  
[MUmali@centerlinecommunications.com](mailto:MUmali@centerlinecommunications.com)

September 17, 2021

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

**RE: Notice of Exempt Modification // Site: CT Collinsville CAC 802816 CT (ATC: 411259)  
450 Albany Turnpike Collinsville, CT 06022  
N 41.8506 // W 72.9487**

Dear Ms. Bachman,

Cellco Partnership d/b/a Verizon Wireless currently maintains 12 antennas at the 121-ft level on the existing 120-ft Monopole Tower, located at 450 Albany Turnpike Collinsville, CT. The tower is owned by American Tower. The property is also owned by Perry Lansford W. The Council approved Verizon Wireless use of the existing tower in 2002. Verizon Wireless now intends to remove 6 antennas and install 9 new antennas for the LTE (3700 MHz) replacements for its 5G upgrade. Additionally, Verizon Wireless will remove (6) 1-5/8" Coax Cables, install mount modifications, 6 Remote radio heads (RRHs), 2 OVPs, 3 SBS-1-2-Mounts, and (2) 1-5/8" Hybrid Cables; altogether updating leased equipment rights, as reflected by the final configuration outlined in the structural analysis and proposed hereby.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Robert Bessel, First Selectman, its Director of Planning and Community Development, Neil Pade, American Tower, the tower owner, and Perry Lansford W., the property owner.

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2). Enclosed to accommodate this filing are construction drawings dated August 20, 2021, by Network Building and Consulting, a structural analysis dated August 2, 2021, by CLS Engineering PLLC., and a structural mount analysis by Maser Consulting Connecticut date July 1, 2021, and radio frequency (RF) analysis table showing worst-case RF emission calculation by Verizon Wireless RF Design Engineering.

1. The proposed modifications will not result in an increase in the height of the existing structure.
2. The proposed modifications will not require the extension of the site boundary.
3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
4. The operation of the new antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard.
5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
6. The existing structure and its foundation can support the proposed loading, as shown in the attached structural analysis by CLS Engineering PLLC., dated July 20, 2021, and a structural mount analysis by Maser Consulting Connecticut, dated July 1, 2021, pursuant to certain conditions defined therein. Design and engineering is fully illustrated within final construction drawings, signed and stamped dated August 20, 2021.

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

Sincerely,

*MJ Umali*

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[MUmali@centerlinecommunications.com](mailto:MUmali@centerlinecommunications.com)

Attachments

cc: Robert Bessel, First Selectman – Chief Elected Official  
Neil Pade, AICP, Director of Planning and Community Development- as P&Z official  
American Tower Corporation - as tower owner  
Perry Lansford W - as property owner

**UPS CampusShip: View/Print Label**

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- 2. **Fold the printed label at the solid line below.** Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.
- 3. **GETTING YOUR SHIPMENT TO UPS**  
**Customers with a Daily Pickup**  
 Your driver will pickup your shipment(s) as usual.

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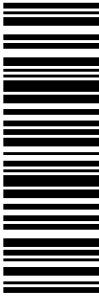
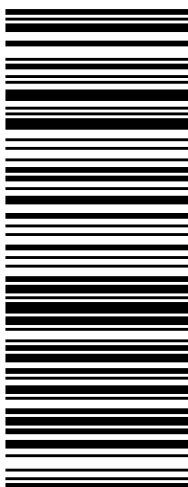

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 WEST BRIDGEWATER ,MA 02379

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<p style="text-align: right;"><b>5 LBS</b></p> <p style="text-align: right;"><b>1 OF 1</b></p> <p><b>SHIP TO:</b>        C/O CELLCO PARTNERSHIP        PERRY LANSFORD W        PO BOX 1  <b>CANTON CENTER CT 06020-0060</b></p> <p>MJ UMALT        9785687906        CENTERLINE COMMUNICATIONS, LLC        750 WEST CENTER STREET        WEST BRIDGEWATER MA 02379</p>	<p style="font-size: 2em;"><b>CT 067 9-03</b></p> 	<p style="font-size: 1.5em;"><b>UPS GROUND</b></p> <p>TRACKING #: 1Z 9Y4 503 03 2610 7985</p> 	<p><b>BILLING: P/P</b></p> <p>Reference # 1: 411259        Reference # 2: CT Collinsville CAC 802816  <small>CVS 22.0.18 WNT NV50 38.0A 09/2021*</small></p> 
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# Proof of Delivery

Dear Customer,

This notice serves as proof of delivery for the shipment listed below.

**Tracking Number**

1Z9Y45030317641236

**Weight**

0.50 LBS

**Service**

UPS Ground

**Shipped / Billed On**

09/21/2021

**Delivered On**

09/27/2021 12:52 P.M.

**Delivered To**

CANTON, CT, US

**Received By**

CD SMITH

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Receiver

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- 3. **GETTING YOUR SHIPMENT TO UPS**  
**Customers with a Daily Pickup**  
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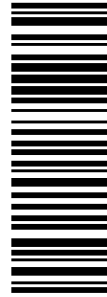
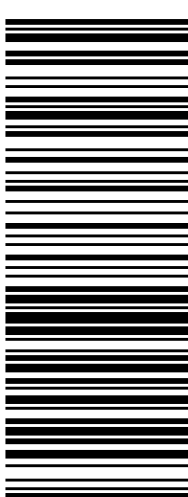

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 WEST BRIDGEWATER ,MA 02379

FOLD HERE

<p style="text-align: right;"><b>1 OF 1</b></p> <p style="text-align: center;"><b>5 LBS</b></p> <p style="font-size: small;">MJ UMALI 9785667906 CENTERLINE COMMUNICATIONS, LLC 750 WEST CENTER STREET WEST BRIDGEWATER MA 02379</p> <p><b>SHIP TO:</b>        LAND MANAGEMENT        7814287250        AMERICAN TOWER CORPORATION        10 PRESIDENTIAL WAY  <b>WOBURN MA 01801-1053</b></p>	<p style="font-size: x-large; text-align: center;"><b>MA 018 9-04</b></p> 	<p style="font-size: x-large; text-align: center;"><b>UPS GROUND</b></p> <p style="text-align: center;">TRACKING #: 1Z 9Y4 503 03 3504 7354</p> 	<p style="text-align: center; font-size: small;">BILLING: P/P</p> <div style="text-align: right; font-size: x-small;">  TM        Reference # 1: 411259        Reference # 2: CT Collinsville CAC 802816 CT  <small>WNT NV56 30.0A 06/2021*</small> </div>
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# Proof of Delivery

Dear Customer,

This notice serves as proof of delivery for the shipment listed below.

**Tracking Number**

1Z9Y45030326107985

**Weight**

5.00 LBS

**Service**

UPS Ground

**Shipped / Billed On**

09/22/2021

**Delivered On**

09/24/2021 1:13 P.M.

**Delivered To**

54 BARBOURTOWN RD  
COLLINSVILLE, CT, 06019, US

**Received By**

DRIVER RELEASE

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Garage

**Reference Number(s)**

CT COLLINSVILLE CAC 802816, 411259

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# Connecticut Siting Council<sup>(/CSC)</sup>

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[Decisions \(/CSC/Decisions/Decisions\)](#) >

[Meetings and Minutes \(/CSC/Common-Elements/v4-template/Council-Activity\)](#) >

[Pending Matters \(/CSC/1\\_Applications-and-Other-Pending-Matters/Pending-Matters\)](#) >

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**DOCKET NO. 204** - Crown Atlantic Company LLC and Cellco Partnership d/b/a Verizon Wireless application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a cellular telecommunications facility located at 650 Albany Turnpike (Route 44), Canton; or at 21 Indian Hill Road, Canton, Connecticut.

} Connecticut  
Siting  
} Council  
} February  
14, 2002

## Decision and Order

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, operation, and maintenance of a telecommunications facility at the proposed prime site in Canton, Connecticut, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate either alone or cumulatively with other effects when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by General Statutes § 16-50k, be issued to Crown Atlantic Company LLC and Cellco Partnership d/b/a Verizon Wireless for the construction, maintenance, and operation of a cellular telecommunications facility located at 650 Albany Turnpike (Route 44), in Canton, Connecticut. We deny certification of the proposed alternate site at 21 Indian Hill Road, in Canton, Connecticut.

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

1. The tower shall be constructed as a monopole, no taller than necessary to provide the proposed telecommunications services, sufficient to accommodate the antennas of Cellco and at least three other telecommunications entities, both public and private, but such tower shall not exceed a height of 110 feet above ground level (AGL), including appurtenances. The tower and foundation may be designed and constructed capable of being extended from 110 feet AGL to 150 feet AGL, with such extension subject to Council approval by petition for a declaratory ruling, pursuant to Sections 16-50j-38 through 16-50j-40 of the Regulations of Connecticut State Agencies.
2. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. The D&M Plan shall be submitted to and approved by the Council prior to the commencement of facility construction and shall include: a final site plan(s) for site development to include the location and specifications for the tower foundation, equipment building, antennas, emergency generator and fuel tank, security fence, access road, and utility line; construction plans for site clearing, tree trimming, water drainage, and erosion and sedimentation controls consistent with the Connecticut Guidelines for Soil Erosion and Sediment Control, as amended; provisions for landscaping, a tower finish that may include painting, and for the prevention and containment of spills and/or other discharge into surface water and groundwater bodies.
3. The Certificate Holder shall, prior to the commencement of operation, provide the Council with worst-case modeling of electromagnetic radio frequency power density of all proposed entities' antennas at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin No. 65, August 1997. The Certificate Holder shall provide a recalculated report of electromagnetic radio frequency power density if and when circumstances in operation cause a change in power density above the levels calculated and provided pursuant to this Decision and Order.
4. Upon the establishment of any new State or federal radio frequency standards applicable to frequencies of this facility, the facility granted herein shall be brought into compliance with such standards.
5. The Certificate Holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.
6. If the facility does not initially provide, or permanently ceases to provide wireless services following completion of construction, this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made.



7. Any antenna that becomes obsolete and ceases to function shall be removed within 60 days after such antennas become obsolete and cease to function.

8. Unless otherwise approved by the Council, this Decision and Order shall be void if all construction authorized herein is not completed within three years of the effective date of this Decision and Order or within three years after all appeals to this Decision and Order have been resolved.

Pursuant to General Statutes § 16-50p, we hereby direct that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below, and notice of issuance shall be published in The Hartford Courant and the Bristol Press (Farmington Valley Herald).

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

The parties to this proceeding are:

**Applicant**

Crown Atlantic Company LLC  
and Cellco Partnership d/b/a  
Verizon Wireless

**Its Representative**

Robert Stanford, Project Manager  
Crown Atlantic Company LLC  
703 Hebron Avenue  
Glastonbury, CT 06033  
Kenneth C. Baldwin, Esq.  
Robinson & Cole LLP  
280 Trumbull Street  
Hartford, CT 06103-3597

**Party**

Heather and Miles Loewe  
15 Indian Hill Road  
Collinsville, CT 06022

**Party**

Nancy Johnson  
3 Buttonwood Hill Road  
Canton, CT 06019

**Party**

Connecticut Sand & Stone Corporation

**Its Representative**

Joseph P. Derby  
7 West Main Street  
Plainville, CT 06062

**Party**

Town of Canton

**Its Representative**

Matthew Ranelli, Esq.  
Shipman & Goodwin LLP  
One American Row  
Hartford, CT 06103-2819



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

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## Post-Mod Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10084435  
Maser Consulting Connecticut Project #: 21777759A

July 7, 2021

### Site Information

Site ID: 469353-VZW / COLLINSVILLE CT  
Site Name: COLLINSVILLE CT  
Carrier Name: Verizon Wireless  
Address: 650 Albany Turnpike  
Collinsville, Connecticut 06022  
Hartford County  
Latitude: 41.850564°  
Longitude: -72.948725°

### Structure Information

Tower Type: 120-Ft Self Support  
Mount Type: 13.08-Ft Platform

FUZE ID # 16271924

### Analysis Results

Platform: 31.7% Pass

### \*\*\*Contractor PMI Requirements:

Included at the end of this MA report

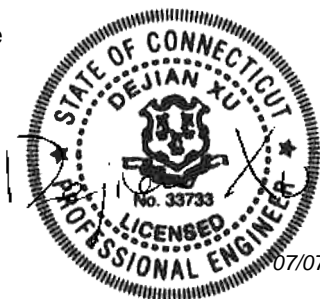
Available & Submitted via portal at <https://pmi.vzwsmart.com>

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: Frank Centone



07/07/2021

## **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:**

<b>Document Type</b>	<b>Remarks</b>
Radio Frequency Data Sheet (RFDS)	Verizon RFDS, Site ID: 323617, dated March 19, 2021
Mount Mapping Report	Structural Components, Site ID: 21777759, dated April 13, 2021
Previous Mount Analysis	Maser Consulting Connecticut Project #: 21777759A, Dated July 2, 2021
Mount Modification Drawings	Maser Consulting Connecticut Project #: 21777759A, Dated July 7, 2021

## **Analysis Criteria:**

Codes and Standards:	ANSI/TIA-222-H
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), $V_{ULT}$ : 115 mph Ice Wind Speed (3-sec. Gust): 50 mph Design Ice Thickness: 1.50 in Risk Category: II Exposure Category: B Topographic Category: 1 Topographic Feature Considered: N/A Topographic Method: N/A Ground Elevation Factor, $K_e$ : 0.982
Seismic Parameters:	$S_s$ : 0.174 $S_1$ : 0.054
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 mount:

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
118.50	120.00	6	Commscope	NHH-65B-R2B	Added
		3	Samsung	MT6407-77A	
		3	Samsung	B2/B66A RRH-BR049	
		3	Samsung	B5/B13 RRH-BR04C	
		2	Raycap	DB-B1-6C-12AB-0Z	
		4	Antel	LPA-80080/6CF	Retained
		2	Antel	LPA-80063/6CF	

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)
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	19.6%	Pass
Standoff Horizontal	31.7%	Pass
Antenna Pipe	30.5%	Pass
Dual Antenna Pipe	24.7%	Pass
OVP Pipe	14.3%	Pass
MOD Kicker	16.3%	Pass
MOD Support Rail	13.8%	Pass
MOD Corner Bracket	21.3%	Pass
Connection Check	27.8%	Pass

<b>Structure Rating – (Controlling Utilization of all Components)</b>	<b>31.7%</b>
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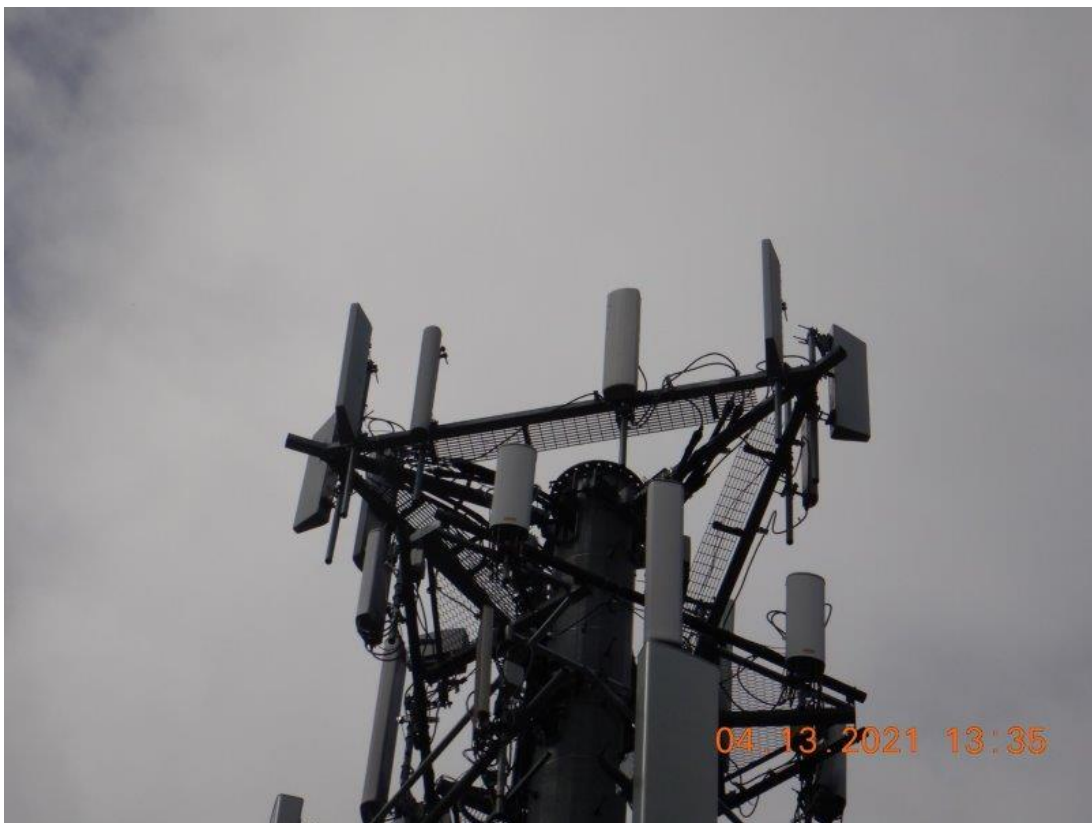
**Recommendation:**


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

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

**Attachments:**

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



	<b>Antenna Mount Mapping Form (PATENT PENDING)</b>			FCC #
	Tower Owner:	ATC	Mapping Date:	4/13/2021
	Site Name:	Collinsville CT	Tower Type:	monopole
	Site Number or ID:	21777759	Tower Height (Ft.):	120
Mapping Contractor:	Structural Components	Mount Elevation (Ft.):	118	

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

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

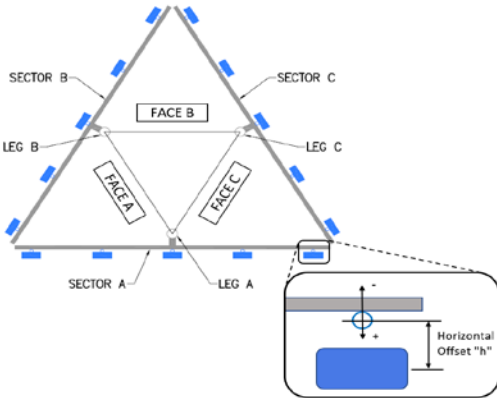
Mount Pipe Configuration and Geometries [Unit = Inches]							
Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "U"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "U"	Horizontal Offset "C1, C2, C3, etc."
A1	2-3/8x.154x102	51.25	11.50	C1	2-3/8x.154x102	50.50	12.00
A2	2-3/8x.154x102	51.25	37.00	C2	2-3/8x.154x102	51.25	33.50
A3	2-3/8x.154x102	51.00	131.00	C3	2-3/8x.154x102	51.25	130.50
A4	2-3/8x.154x102	50.25	155.50	C4	2-3/8x.154x102	51.25	156.75
A5				C5			
A6				C6			
B1	2-3/8x.154x102	53.00	10.75	D1			
B2	2-3/8x.154x102	51.50	64.00	D2			
B3	2-3/8x.154x102	51.25	131.25	D3			
B4	2-3/8x.154x102	51.25	155.25	D4			
B5				D5			
B6				D6			

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

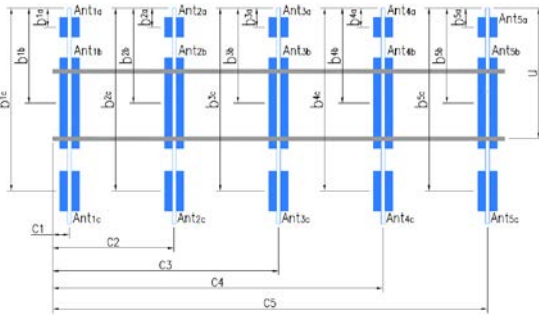
3/8" weld from main standoff to plate

Tower Face Width at Mount Elev. (ft.):	4.5	Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):	25.79
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For T-Arms/Platforms on monopoles, report the weld size from the main standoff to the plate bolting into the collar mount.



Enter antenna model. If not labeled, enter "Unknown".							Mounting Locations [Units are inches and degrees]			Photos of antennas
Ants. Items	Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Vertical Distances "b <sub>1a</sub> , b <sub>2a</sub> , b <sub>3a</sub> , b <sub>1b</sub> ,..." (Inches)	Horiz. Offset "h" (Use "-" if Ant. is behind)	Antenna Azimuth (Degrees)	Photo Numbers
Ant <sub>1a</sub>										
Ant <sub>1b</sub>	Antel LPA 80080/6CF-	5.75	13.00	72.00	1) 1-5/8" T	119.854	29.00	13.00	50.00	31
Ant <sub>1c</sub>										
Ant <sub>2a</sub>										
Ant <sub>2b</sub>	unknown	11.00	5.00	71.00	2) 1-5/8" T	119.271	36.00	9.25	50.00	40
Ant <sub>2c</sub>										
Ant <sub>3a</sub>										
Ant <sub>3b</sub>	unknown	6.00	4.00	72.00	2) 1-5/8" T	119.354	34.75	7.50	50.00	66
Ant <sub>3c</sub>										
Ant <sub>4a</sub>										
Ant <sub>4b</sub>	Antel LPA 80080/6CF-	5.75	13.00	72.00	1) 1-5/8" T	119.604	31.00	12.00	50.00	66
Ant <sub>4c</sub>										
Ant <sub>5a</sub>										
Ant <sub>5b</sub>										
Ant <sub>5c</sub>										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										



Antenna Layout (Looking Out From Tower)





**Observed Safety and Structural Issues During the Mount Mapping**

Issue #	Description of Issue	Photo #
1		
2		
3		
4		
5		
6		
7		
8		

**Observed Obstructions to Tower Lighting System**

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

**Mapping Notes**

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.



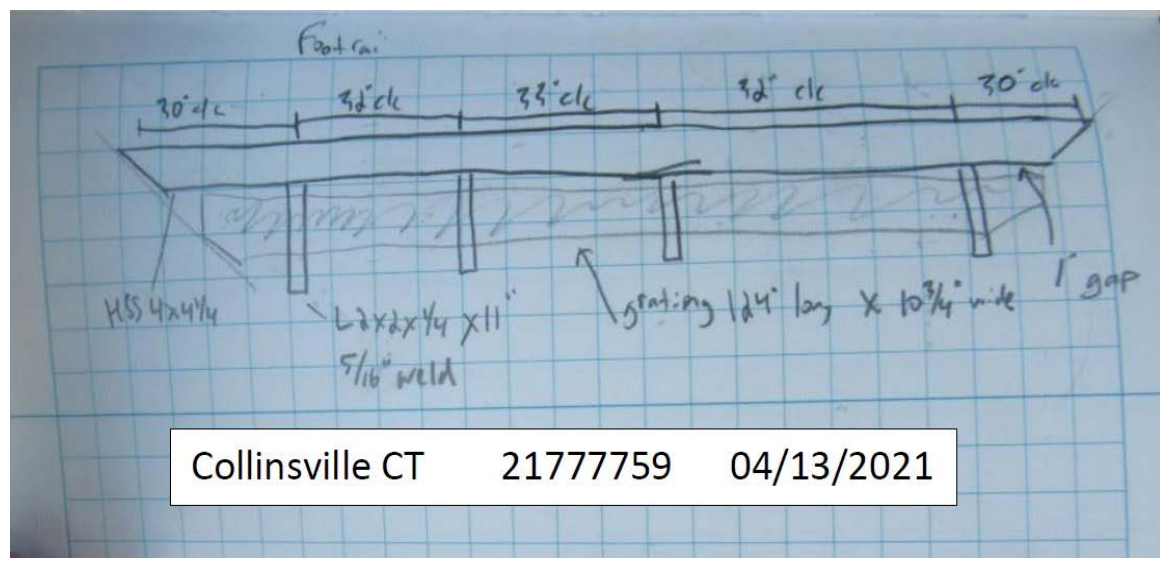
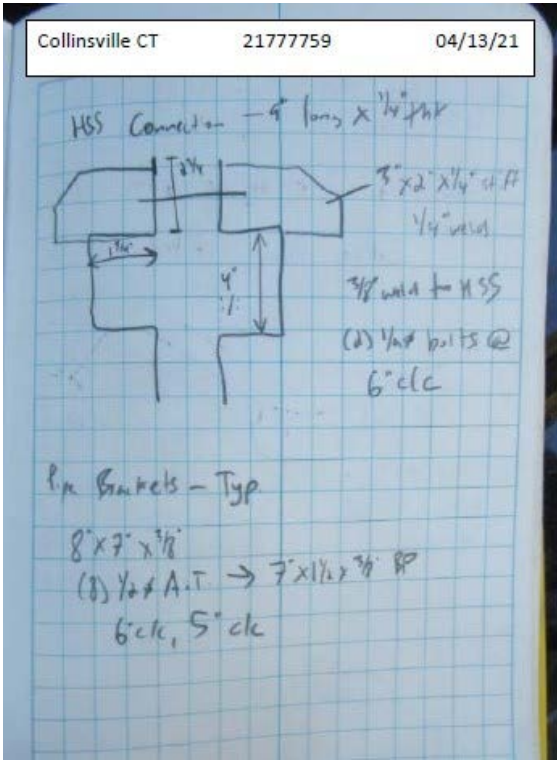
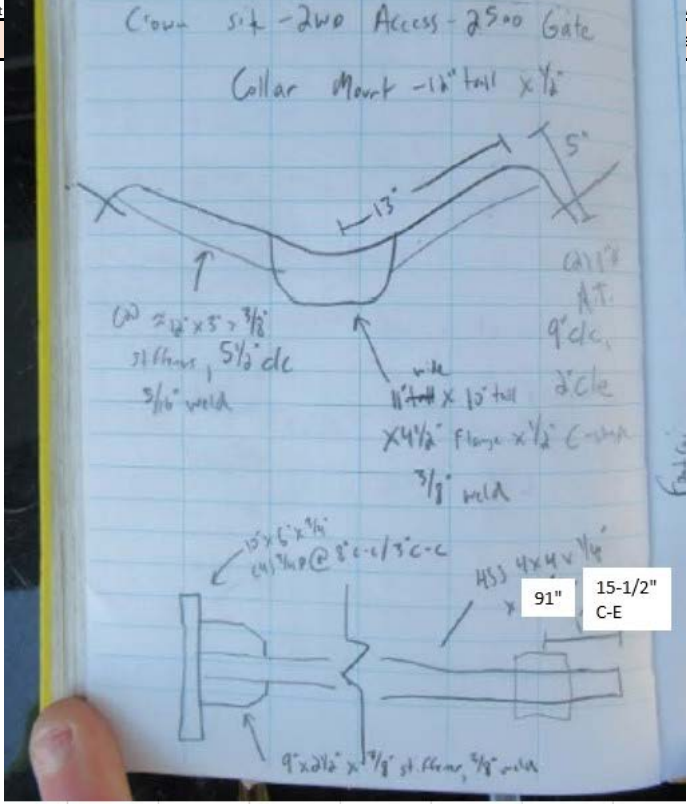
This antenna map modification or dis requirements that

Collinsville CT 21777759  
04/13/2021

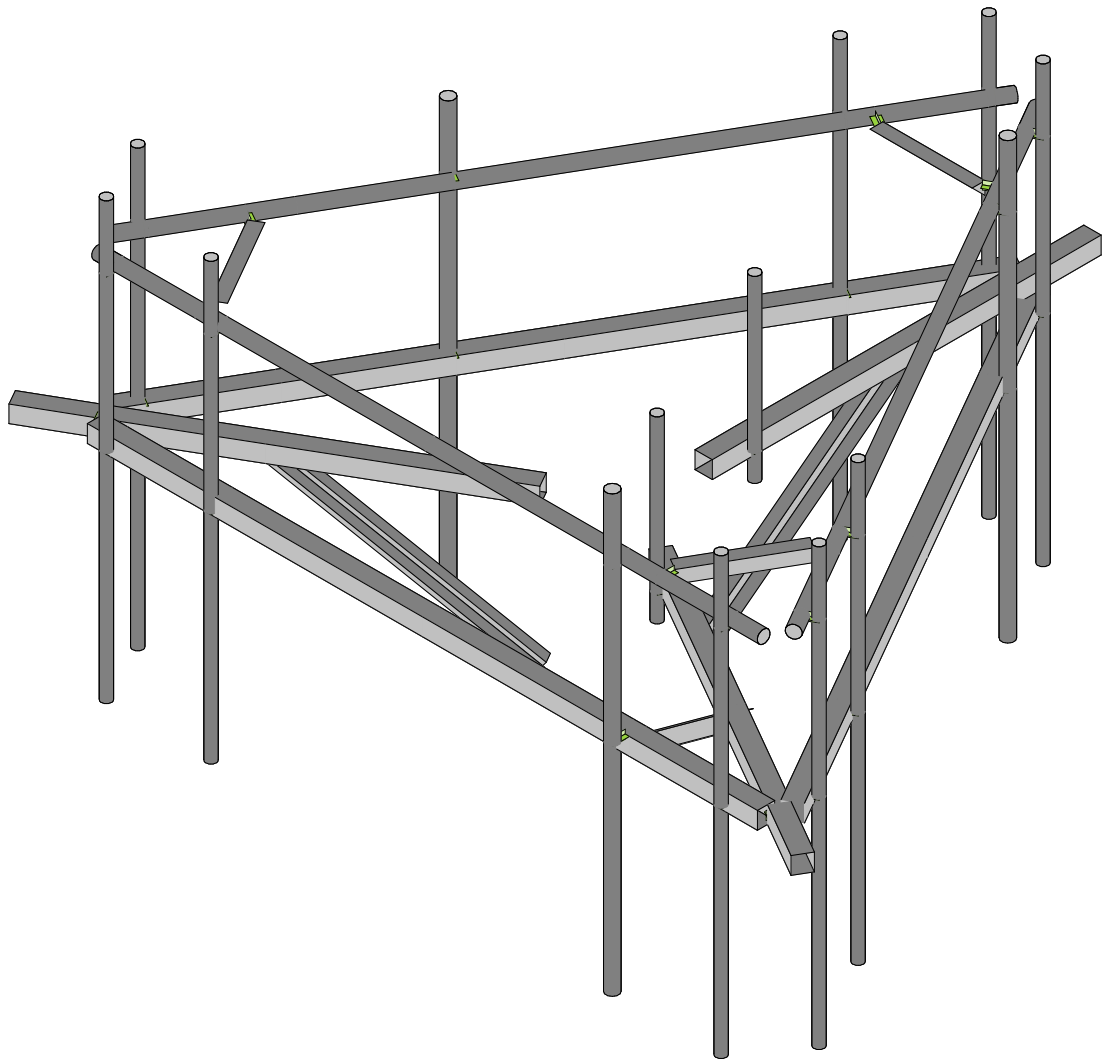
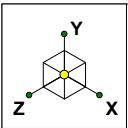
ing Form (PATENT PENDING)		FCC #
Mapping Date:	4/13/2021	
Tower Type:	monopole	
Tower Height (Ft.):	120	
Mount Elevation (Ft.):	118	

n nature and is to be used only for the specific customer it was intended for. Reproduction, transmission, publication, ibility of the contractor and the work shall be compliant with ANSI/ASSE A 10.48, OSHA, FCC, FAA and other safety with OSHA requirements.

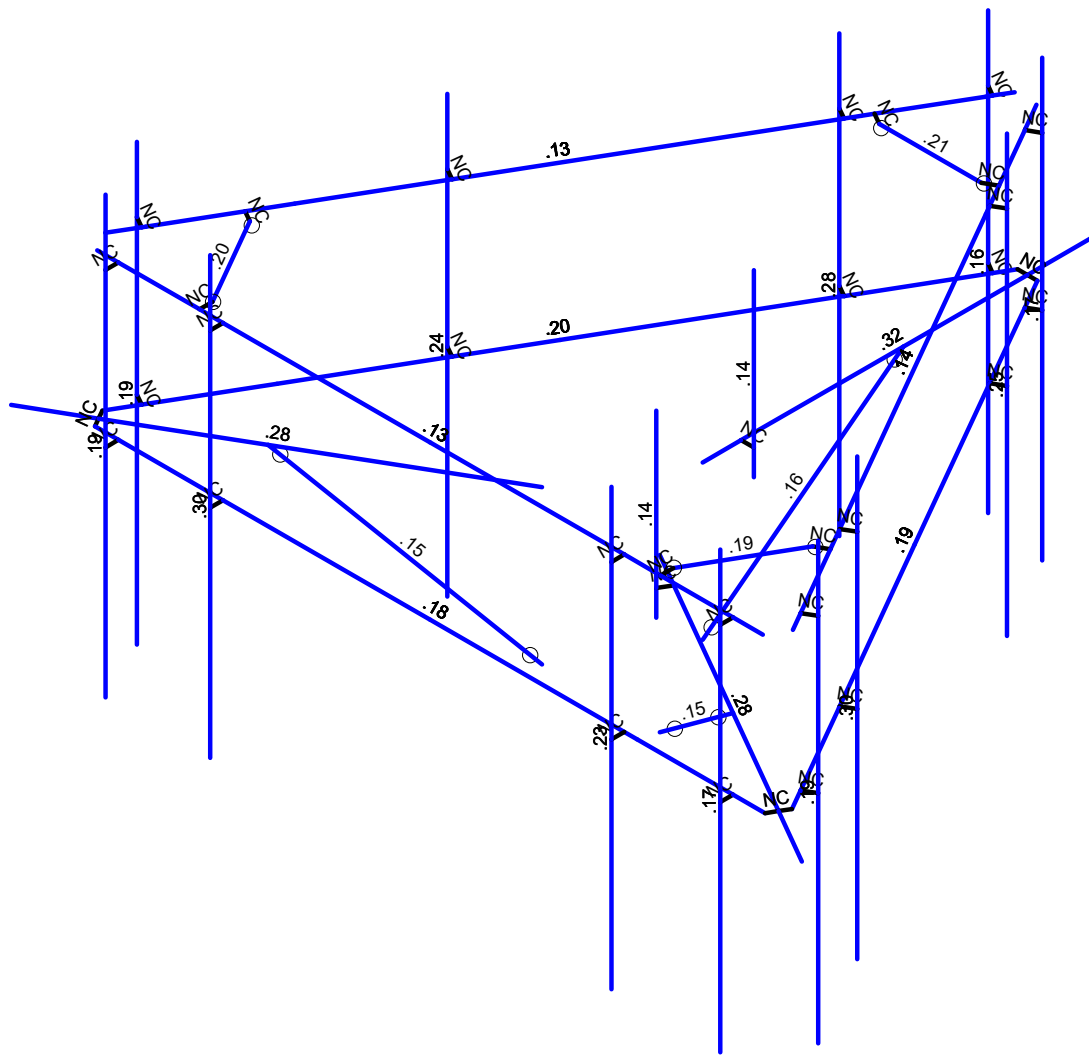
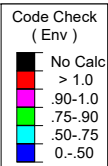
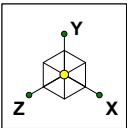
Antenna Mount



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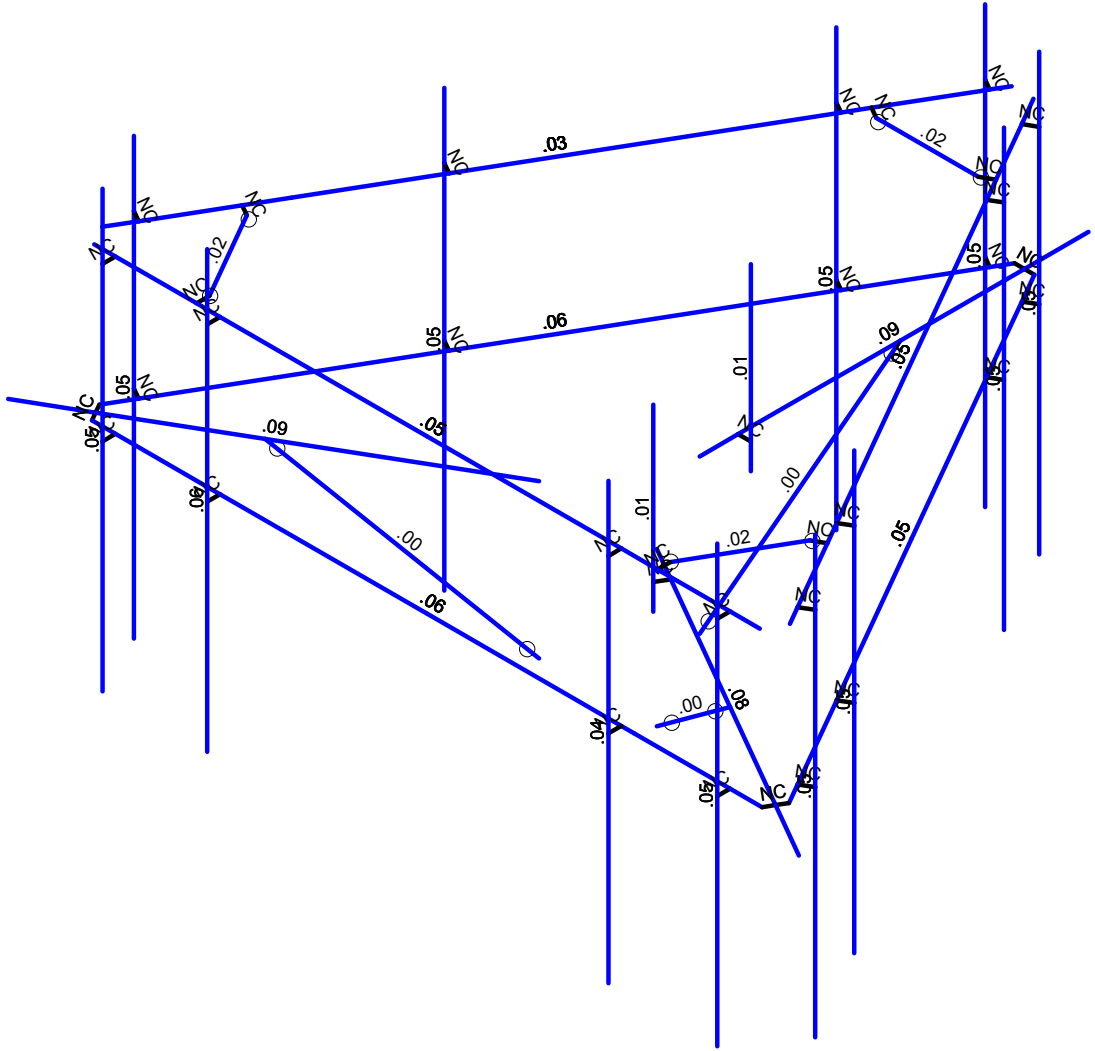
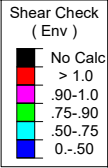
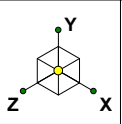


Maser Consulting	469353-VZW_MT_LO_H	SK - 1
		July 7, 2021 at 10:32 AM
		MOD_LOADED_469353-VZW_MT...



Member Code Checks Displayed (Enveloped)  
Results for LC 1, 1.2D+1.0Wo (0 Deg)

Maser Consulting	469353-VZW_MT_LO_H	SK - 2
		July 7, 2021 at 10:32 AM
		MOD_LOADED_469353-VZW_MT...



Member Shear Checks Displayed (Enveloped)  
 Results for LC 1, 1.2D+1.0Wo (0 Deg)

Maser Consulting	469353-VZW_MT_LO_H	SK - 3
		July 7, 2021 at 10:32 AM
		MOD_LOADED_469353-VZW_MT...



**Basic Load Cases**

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...	Surface(P...
1	Antenna D	None					114		
2	Antenna Di	None					114		
3	Antenna Wo (0 Deg)	None					114		
4	Antenna Wo (30 Deg)	None					114		
5	Antenna Wo (60 Deg)	None					114		
6	Antenna Wo (90 Deg)	None					114		
7	Antenna Wo (120 Deg)	None					114		
8	Antenna Wo (150 Deg)	None					114		
9	Antenna Wo (180 Deg)	None					114		
10	Antenna Wo (210 Deg)	None					114		
11	Antenna Wo (240 Deg)	None					114		
12	Antenna Wo (270 Deg)	None					114		
13	Antenna Wo (300 Deg)	None					114		
14	Antenna Wo (330 Deg)	None					114		
15	Antenna Wi (0 Deg)	None					114		
16	Antenna Wi (30 Deg)	None					114		
17	Antenna Wi (60 Deg)	None					114		
18	Antenna Wi (90 Deg)	None					114		
19	Antenna Wi (120 Deg)	None					114		
20	Antenna Wi (150 Deg)	None					114		
21	Antenna Wi (180 Deg)	None					114		
22	Antenna Wi (210 Deg)	None					114		
23	Antenna Wi (240 Deg)	None					114		
24	Antenna Wi (270 Deg)	None					114		
25	Antenna Wi (300 Deg)	None					114		
26	Antenna Wi (330 Deg)	None					114		
27	Antenna Wm (0 Deg)	None					114		
28	Antenna Wm (30 Deg)	None					114		
29	Antenna Wm (60 Deg)	None					114		
30	Antenna Wm (90 Deg)	None					114		
31	Antenna Wm (120 Deg)	None					114		
32	Antenna Wm (150 Deg)	None					114		
33	Antenna Wm (180 Deg)	None					114		
34	Antenna Wm (210 Deg)	None					114		
35	Antenna Wm (240 Deg)	None					114		
36	Antenna Wm (270 Deg)	None					114		
37	Antenna Wm (300 Deg)	None					114		
38	Antenna Wm (330 Deg)	None					114		
39	Structure D	None		-1				29	3
40	Structure Di	None						58	3
41	Structure Wo (0 Deg)	None						58	
42	Structure Wo (30 Deg)	None						58	
43	Structure Wo (60 Deg)	None						58	
44	Structure Wo (90 Deg)	None						58	
45	Structure Wo (120 D...	None						58	
46	Structure Wo (150 D...	None						58	
47	Structure Wo (180 D...	None						58	
48	Structure Wo (210 D...	None						58	
49	Structure Wo (240 D...	None						58	
50	Structure Wo (270 D...	None						58	
51	Structure Wo (300 D...	None						58	
52	Structure Wo (330 D...	None						58	
53	Structure Wi (0 Deg)	None						58	
54	Structure Wi (30 Deg)	None						58	
55	Structure Wi (60 Deg)	None						58	
56	Structure Wi (90 Deg)	None						58	



**Basic Load Cases (Continued)**

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...	Surface(P...
57	Structure Wi (120 De...	None						58	
58	Structure Wi (150 De...	None						58	
59	Structure Wi (180 De...	None						58	
60	Structure Wi (210 De...	None						58	
61	Structure Wi (240 De...	None						58	
62	Structure Wi (270 De...	None						58	
63	Structure Wi (300 De...	None						58	
64	Structure Wi (330 De...	None						58	
65	Structure Wm (0 Deg)	None						58	
66	Structure Wm (30 De...	None						58	
67	Structure Wm (60 De...	None						58	
68	Structure Wm (90 De...	None						58	
69	Structure Wm (120 D...	None						58	
70	Structure Wm (150 D...	None						58	
71	Structure Wm (180 D...	None						58	
72	Structure Wm (210 D...	None						58	
73	Structure Wm (240 D...	None						58	
74	Structure Wm (270 D...	None						58	
75	Structure Wm (300 D...	None						58	
76	Structure Wm (330 D...	None						58	
77	Lm1	None					1		
78	Lm2	None					1		
79	Lv1	None					1		
80	Lv2	None					1		
81	BLC 39 Transient Are...	None						18	
82	BLC 40 Transient Are...	None						18	

**Load Combinations**

	Description	Sol.	PD	SR	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...
1	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	3	1	41	1								
2	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	4	1	42	1								
3	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	5	1	43	1								
4	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	6	1	44	1								
5	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	7	1	45	1								
6	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	8	1	46	1								
7	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	9	1	47	1								
8	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	10	1	48	1								
9	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	11	1	49	1								
10	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	12	1	50	1								
11	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	13	1	51	1								
12	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	14	1	52	1								
13	1.2D + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1	53	1				
14	1.2D + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1				
15	1.2D + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1	55	1				
16	1.2D + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1	56	1				
17	1.2D + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1				
18	1.2D + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1				
19	1.2D + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1				
20	1.2D + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1				
21	1.2D + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1				
22	1.2D + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1				
23	1.2D + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1				
24	1.2D + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1				
25	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1						
26	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1						





### Load Combinations (Continued)

	Description	Sol.	PD	SR	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.
27	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1
28	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1
29	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1
30	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1
31	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1
32	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1
33	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1
34	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1
35	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1
36	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1
37	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1
38	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1
39	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1
40	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1
41	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1
42	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1
43	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1
44	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1
45	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1
46	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1
47	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1
48	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	78	1.5	38	1	76	1
49	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	79	1.5				
50	1.2D + 1.5..	Yes	Y		1	1.2	39	1.2	80	1.5				
51	1.4D	Yes	Y		1	1.4	39	1.4						

### Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	0	0	-0.	0	
2	N2	6.541667	0	0.	0	
3	N3	-6.541667	0	0.	0	
4	N4	0	0	-4	0	
5	N5	3.464102	0	-6	0	
6	N6	0.193268	0	-11.66525	0	
7	N7	6.734935	0	-0.33475	0	
8	N9	-3.464102	0	-6	0	
9	N10	-6.734935	0	-0.33475	0	
10	N11	-0.193268	0	-11.66525	0	
11	N11A	-6.638301	0	-0.167375	0	
12	N12	-0.	0	-5.324583	0	
13	N18	6.638301	0	-0.167375	0	
14	N22	-0.	0	-11.66525	0	
15	N17	-0.	0	-12.91525	0	
16	N20A	5.916667	0	-0.	0	
17	N21	3.791667	0	-0.	0	
18	N22A	-4.041667	0	0.	0	
19	N23A	-6.083333	0	0.	0	
20	N24	5.916667	0	.25	0	
21	N25	3.791667	0	.25	0	
22	N26	-4.041667	0	.25	0	
23	N27	-6.083333	0	.25	0	
24	N28	5.916667	4.270833	.25	0	
25	N29	3.791667	4.270833	.25	0	
26	N30	-4.041667	4.270833	.25	0	
27	N31	-6.083333	4.270833	.25	0	



Company : Maser Consulting  
 Designer :  
 Job Number :  
 Model Name : 469353-VZW\_MT\_LO\_H

July 7, 2021  
 10:32 AM  
 Checked By: \_\_\_\_\_

**Joint Coordinates and Temperatures (Continued)**

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
28	N32	5.916667	-4.229167	.25	0	
29	N33	3.791667	-4.229167	.25	0	
30	N34	-4.041667	-4.229167	.25	0	
31	N35	-6.083333	-4.229167	.25	0	
32	N37	0.526602	0	-11.087899	0	
33	N38	1.464102	0	-9.464102	0	
34	N39	5.464102	0	-2.535898	0	
35	N40	6.505768	0	-0.731679	0	
36	N41	0.743108	0	-11.212899	0	
37	N42	1.680608	0	-9.589102	0	
38	N43	5.680608	0	-2.660898	0	
39	N44	6.722275	0	-0.856679	0	
40	N45	0.743108	4.270833	-11.212899	0	
41	N46	1.680608	4.270833	-9.589102	0	
42	N47	5.680608	4.270833	-2.660898	0	
43	N48	6.722275	4.270833	-0.856679	0	
44	N49	0.743108	-4.229167	-11.212899	0	
45	N50	1.680608	-4.229167	-9.589102	0	
46	N51	5.680608	-4.229167	-2.660898	0	
47	N52	6.722275	-4.229167	-0.856679	0	
48	N54	-6.453685	0	-0.82189	0	
49	N55	-4.234935	0	-4.664878	0	
50	N56	-1.432852	0	-9.518228	0	
51	N57	-0.370352	0	-11.358532	0	
52	N58	-6.670191	0	-0.94689	0	
53	N59	-4.451441	0	-4.789878	0	
54	N60	-1.649358	0	-9.643228	0	
55	N61	-0.586858	0	-11.483532	0	
56	N62	-6.670191	4.270833	-0.94689	0	
57	N63	-4.451441	4.270833	-4.789878	0	
58	N64	-1.649358	4.270833	-9.643228	0	
59	N65	-0.586858	4.270833	-11.483532	0	
60	N66	-6.670191	-4.229167	-0.94689	0	
61	N67	-4.451441	-4.229167	-4.789878	0	
62	N68	-1.649358	-4.229167	-9.643228	0	
63	N69	-0.586858	-4.229167	-11.483532	0	
64	N68A	-0.	0	-6.074583	0	
65	N69A	.25	0	-6.074583	0	
66	N70	.25	3	-6.074583	0	
67	N71	.25	-.5	-6.074583	0	
68	N73	1.796642	0	-2.962708	0	
69	N74	1.671642	0	-2.746202	0	
70	N75	1.671642	3	-2.746202	0	
71	N76	1.671642	-.5	-2.746202	0	
72	N76A	-0.	0	-9.24125	0	
73	N77	-4.539056	0	-1.379375	0	
74	N78	4.539056	0	-1.379375	0	
75	N76B	-1.147123	0	-3.337708	0	
76	N77A	-7.720833	0	0.457625	0	
77	N79	1.147123	0	-3.337708	0	
78	N80	7.720833	0	0.457625	0	
79	N79A	4.041667	0	-0.	0	
80	N82	1.443268	0	-9.500186	0	
81	N83	5.484935	0	-2.499814	0	
82	N85	-5.484935	0	-2.499814	0	
83	N86	-1.443268	0	-9.500186	0	
84	N85A	-0.	-3	-5.324583	0	



**Joint Coordinates and Temperatures (Continued)**

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
85	N86A	-1.147123	-3	-3.337708	0	
86	N87	1.147123	-3	-3.337708	0	
87	N87A	0	3	-0.	0	
88	N88	6.5	3	-0.	0	
89	N89	-6.5	3	-0.	0	
90	N90	5.916667	3	-0.	0	
91	N91	3.791667	3	-0.	0	
92	N92	-4.041667	3	0.	0	
93	N93	-6.083333	3	0.	0	
94	N94	5.916667	3	.25	0	
95	N95	3.791667	3	.25	0	
96	N96	-4.041667	3	.25	0	
97	N97	-6.083333	3	.25	0	
98	N98	-4.5	3	-0.	0	
99	N99	4.5	3	-0.	0	
100	N100	-4.5	3	-.25	0	
101	N101	4.5	3	-.25	0	
102	N102	0.214102	3	-11.629165	0	
103	N103	6.714102	3	-0.370835	0	
104	N104	0.505768	3	-11.123984	0	
105	N105	1.568268	3	-9.28368	0	
106	N106	5.484935	3	-2.499814	0	
107	N107	6.505768	3	-0.731679	0	
108	N116	-6.714102	3	-0.370835	0	
109	N117	-0.214102	3	-11.629165	0	
110	N118	-6.422435	3	-0.876016	0	
111	N119	-5.359935	3	-2.71632	0	
112	N120	-1.443268	3	-9.500186	0	
113	N121	-0.422435	3	-11.268321	0	
114	N122	0.526602	3	-11.087899	0	
115	N123	1.464102	3	-9.464102	0	
116	N124	5.464102	3	-2.535898	0	
117	N126A	0.743108	3	-11.212899	0	
118	N127A	1.680608	3	-9.589102	0	
119	N128A	5.680608	3	-2.660898	0	
120	N129A	6.722275	3	-0.856679	0	
121	N130	-6.453685	3	-0.82189	0	
122	N131	-4.234935	3	-4.664878	0	
123	N132	-1.432852	3	-9.518228	0	
124	N133	-0.370352	3	-11.358532	0	
125	N134	-6.670191	3	-0.94689	0	
126	N135	-4.451441	3	-4.789878	0	
127	N136	-1.649358	3	-9.643228	0	
128	N137	-0.586858	3	-11.483532	0	
129	N138	5.714102	3	-2.102886	0	
130	N139	1.214102	3	-9.897114	0	
131	N140	5.497595	3	-1.977886	0	
132	N141	0.997595	3	-9.772114	0	
133	N143	-1.214102	3	-9.897114	0	
134	N144	-5.714102	3	-2.102886	0	
135	N145	-0.997595	3	-9.772114	0	
136	N146	-5.497595	3	-1.977886	0	



### Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design R...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Antenna Pipe	PIPE_2.0	Column	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
2	Dual Antenna Pipe	PIPE_2.5	Column	Pipe	A53 Gr. B	Typical	1.61	1.45	1.45	2.89
3	Face Horizontal	HSS4X4X4	Column	Tube	A500 Gr. ...	Typical	3.37	7.8	7.8	12.8
4	Standoff Horizontal	HSS4X4X4	Column	Tube	A500 Gr. ...	Typical	3.37	7.8	7.8	12.8
5	OVP Pipe	PIPE_2.0	Column	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
6	MOD Kicker	LL3x3x3x6	Column	Pipe	A36 Gr.36	Typical	2.18	4.97	1.9	.027
7	MOD Support Rail	PIPE_2.5	Column	Pipe	A53 Gr. B	Typical	1.61	1.45	1.45	2.89
8	MOD Corner Bracket	L3X3X4	Column	Pipe	A36 Gr.36	Typical	1.44	1.23	1.23	.031

### Hot Rolled Steel Properties

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

### Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N3	N2			Face Horizontal	Column	Tube	A500 Gr. ...	Typical
2	M2	N7	N6			Face Horizontal	Column	Tube	A500 Gr. ...	Typical
3	M3	N11	N10			Face Horizontal	Column	Tube	A500 Gr. ...	Typical
4	M4	N3	N10			RIGID	None	None	RIGID	Typical
5	M5	N7	N2			RIGID	None	None	RIGID	Typical
6	M6	N11	N6			RIGID	None	None	RIGID	Typical
7	M7	N12	N17			Standoff Horiz...	Column	Tube	A500 Gr. ...	Typical
8	M10	N27	N23A			RIGID	None	None	RIGID	Typical
9	M11	N26	N22A			RIGID	None	None	RIGID	Typical
10	M12	N25	N21			RIGID	None	None	RIGID	Typical
11	M13	N24	N20A			RIGID	None	None	RIGID	Typical
12	MP4A	N31	N35			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
13	MP3A	N30	N34			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
14	MP2A	N29	N33			Dual Antenna ...	Column	Pipe	A53 Gr. B	Typical
15	MP1A	N28	N32			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
16	M18	N44	N40			RIGID	None	None	RIGID	Typical
17	M19	N43	N39			RIGID	None	None	RIGID	Typical
18	M20	N42	N38			RIGID	None	None	RIGID	Typical
19	M21	N41	N37			RIGID	None	None	RIGID	Typical
20	MP4C	N48	N52			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
21	MP3C	N47	N51			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
22	MP2C	N46	N50			Dual Antenna ...	Column	Pipe	A53 Gr. B	Typical
23	MP1C	N45	N49			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
24	M26	N61	N57			RIGID	None	None	RIGID	Typical
25	M27	N60	N56			RIGID	None	None	RIGID	Typical
26	M28	N59	N55			RIGID	None	None	RIGID	Typical
27	M29	N58	N54			RIGID	None	None	RIGID	Typical
28	MP4B	N65	N69			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
29	MP3B	N64	N68			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
30	MP2B	N63	N67			Dual Antenna ...	Column	Pipe	A53 Gr. B	Typical
31	MP1B	N62	N66			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
32	M34	N68A	N69A			RIGID	None	None	RIGID	Typical
33	M35	N70	N71			OVP Pipe	Column	Pipe	A53 Gr. B	Typical



**Member Primary Data (Continued)**

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
34	M36	N73	N74			RIGID	None	None	RIGID	Typical
35	M37	N75	N76			OVP Pipe	Column	Pipe	A53 Gr. B	Typical
36	M36A	N76B	N77A			Standoff Horiz...	Column	Tube	A500 Gr. ...	Typical
37	M37A	N79	N80			Standoff Horiz...	Column	Tube	A500 Gr. ...	Typical
38	M38	N85A	N76A			MOD Kicker	Column	Pipe	A36 Gr.36	Typical
39	M39	N86A	N77			MOD Kicker	Column	Pipe	A36 Gr.36	Typical
40	M40	N87	N78			MOD Kicker	Column	Pipe	A36 Gr.36	Typical
41	M41	N97	N93			RIGID	None	None	RIGID	Typical
42	M42	N96	N92			RIGID	None	None	RIGID	Typical
43	M43	N95	N91			RIGID	None	None	RIGID	Typical
44	M44	N94	N90			RIGID	None	None	RIGID	Typical
45	M45	N89	N88			MOD Support ...	Column	Pipe	A53 Gr. B	Typical
46	M46	N100	N98			RIGID	None	None	RIGID	Typical
47	M47	N101	N99			RIGID	None	None	RIGID	Typical
48	M52	N103	N102			MOD Support ...	Column	Pipe	A53 Gr. B	Typical
49	M59	N117	N116			MOD Support ...	Column	Pipe	A53 Gr. B	Typical
50	M63	N101	N140		180	MOD Corner B...	Column	Pipe	A36 Gr.36	Typical
51	M64	N141	N145		180	MOD Corner B...	Column	Pipe	A36 Gr.36	Typical
52	M57	N129A	N107			RIGID	None	None	RIGID	Typical
53	M58	N128A	N124			RIGID	None	None	RIGID	Typical
54	M59A	N127A	N123			RIGID	None	None	RIGID	Typical
55	M60A	N126A	N122			RIGID	None	None	RIGID	Typical
56	M61A	N137	N133			RIGID	None	None	RIGID	Typical
57	M62A	N136	N132			RIGID	None	None	RIGID	Typical
58	M63A	N135	N131			RIGID	None	None	RIGID	Typical
59	M64A	N134	N130			RIGID	None	None	RIGID	Typical
60	M65	N140	N138			RIGID	None	None	RIGID	Typical
61	M66	N141	N139			RIGID	None	None	RIGID	Typical
62	M67	N145	N143			RIGID	None	None	RIGID	Typical
63	M68	N146	N144			RIGID	None	None	RIGID	Typical
64	M64B	N146	N100		180	MOD Corner B...	Column	Pipe	A36 Gr.36	Typical

**Hot Rolled Steel Design Parameters**

	Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp top[ft]	Lcomp bot[ft]	L-torqu...	Kyy	Kzz	Cb	Function
1	M1	Face Horizo...	13.083									Lateral
2	M2	Face Horizo...	13.083									Lateral
3	M3	Face Horizo...	13.083									Lateral
4	M7	Standoff Ho...	7.591									Lateral
5	MP4A	Antenna Pipe	8.5									Lateral
6	MP3A	Antenna Pipe	8.5									Lateral
7	MP2A	Dual Antenn...	8.5									Lateral
8	MP1A	Antenna Pipe	8.5									Lateral
9	MP4C	Antenna Pipe	8.5									Lateral
10	MP3C	Antenna Pipe	8.5									Lateral
11	MP2C	Dual Antenn...	8.5									Lateral
12	MP1C	Antenna Pipe	8.5									Lateral
13	MP4B	Antenna Pipe	8.5									Lateral
14	MP3B	Antenna Pipe	8.5									Lateral
15	MP2B	Dual Antenn...	8.5									Lateral
16	MP1B	Antenna Pipe	8.5									Lateral
17	M35	OVP Pipe	3.5									Lateral
18	M37	OVP Pipe	3.5									Lateral
19	M36A	Standoff Ho...	7.591									Lateral
20	M37A	Standoff Ho...	7.591									Lateral
21	M38	MOD Kicker	4.934									Lateral



**Hot Rolled Steel Design Parameters (Continued)**

Label	Shape	Length[ft]	Lby[ft]	Lbzz[ft]	Lcomp top[ft]	Lcomp bot[ft]	L-torqu...	Kyy	Kzz	Cb	Function
22	M39	MOD Kicker	4.934								Lateral
23	M40	MOD Kicker	4.934								Lateral
24	M45	MOD Supp...	13								Lateral
25	M52	MOD Supp...	13								Lateral
26	M59	MOD Supp...	13								Lateral
27	M63	MOD Corne...	1.995								Lateral
28	M64	MOD Corne...	1.995								Lateral
29	M64B	MOD Corne...	1.995								Lateral

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

Member Label	Direction	Magnitude[[b,k-ft]	Location[ft,%]	
1	MP2A	Y	-21.85	.5
2	MP2A	My	-.011	.5
3	MP2A	Mz	-.011	.5
4	MP2A	Y	-21.85	5
5	MP2A	My	-.011	5
6	MP2A	Mz	-.011	5
7	MP2B	Y	-21.85	.5
8	MP2B	My	.014	.5
9	MP2B	Mz	-.007	.5
10	MP2B	Y	-21.85	5
11	MP2B	My	.014	5
12	MP2B	Mz	-.007	5
13	MP2C	Y	-21.85	.5
14	MP2C	My	.014	.5
15	MP2C	Mz	-.007	.5
16	MP2C	Y	-21.85	5
17	MP2C	My	.014	5
18	MP2C	Mz	-.007	5
19	MP2A	Y	-21.85	.5
20	MP2A	My	-.011	.5
21	MP2A	Mz	.011	.5
22	MP2A	Y	-21.85	5
23	MP2A	My	-.011	5
24	MP2A	Mz	.011	5
25	MP2B	Y	-21.85	.5
26	MP2B	My	-.007	.5
27	MP2B	Mz	-.014	.5
28	MP2B	Y	-21.85	5
29	MP2B	My	-.007	5
30	MP2B	Mz	-.014	5
31	MP2C	Y	-21.85	.5
32	MP2C	My	-.007	.5
33	MP2C	Mz	-.014	.5
34	MP2C	Y	-21.85	5
35	MP2C	My	-.007	5
36	MP2C	Mz	-.014	5
37	MP3A	Y	-43.55	2.25
38	MP3A	My	-.022	2.25
39	MP3A	Mz	0	2.25
40	MP3A	Y	-43.55	3.25
41	MP3A	My	-.022	3.25
42	MP3A	Mz	0	3.25
43	MP3B	Y	-43.55	2.25
44	MP3B	My	.007	2.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
45	MP3B	Mz	-.02	2.25
46	MP3B	Y	-43.55	3.25
47	MP3B	My	.007	3.25
48	MP3B	Mz	-.02	3.25
49	MP3C	Y	-43.55	2.25
50	MP3C	My	.011	2.25
51	MP3C	Mz	.019	2.25
52	MP3C	Y	-43.55	3.25
53	MP3C	My	.011	3.25
54	MP3C	Mz	.019	3.25
55	MP2A	Y	-84.4	3
56	MP2A	My	.042	3
57	MP2A	Mz	0	3
58	MP2B	Y	-84.4	3
59	MP2B	My	-.014	3
60	MP2B	Mz	.04	3
61	MP2C	Y	-84.4	3
62	MP2C	My	-.021	3
63	MP2C	Mz	-.037	3
64	MP3A	Y	-70.3	3
65	MP3A	My	.035	3
66	MP3A	Mz	0	3
67	MP3B	Y	-70.3	3
68	MP3B	My	-.012	3
69	MP3B	Mz	.033	3
70	MP3C	Y	-70.3	3
71	MP3C	My	-.018	3
72	MP3C	Mz	-.03	3
73	M35	Y	-32	1
74	M35	My	0	1
75	M35	Mz	0	1
76	M37	Y	-32	1
77	M37	My	0	1
78	M37	Mz	0	1
79	MP1A	Y	-10.5	.5
80	MP1A	My	-.005	.5
81	MP1A	Mz	0	.5
82	MP1A	Y	-10.5	5
83	MP1A	My	-.005	5
84	MP1A	Mz	0	5
85	MP1C	Y	-10.5	.5
86	MP1C	My	.003	.5
87	MP1C	Mz	.005	.5
88	MP1C	Y	-10.5	5
89	MP1C	My	.003	5
90	MP1C	Mz	.005	5
91	MP4A	Y	-10.5	.5
92	MP4A	My	-.005	.5
93	MP4A	Mz	0	.5
94	MP4A	Y	-10.5	5
95	MP4A	My	-.005	5
96	MP4A	Mz	0	5
97	MP4C	Y	-10.5	.5
98	MP4C	My	.003	.5
99	MP4C	Mz	.005	.5
100	MP4C	Y	-10.5	5
101	MP4C	My	.003	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
102	MP4C	Mz	.005	5
103	MP1B	Y	-13.5	.5
104	MP1B	My	.002	.5
105	MP1B	Mz	-.006	.5
106	MP1B	Y	-13.5	5
107	MP1B	My	.002	5
108	MP1B	Mz	-.006	5
109	MP4B	Y	-13.5	.5
110	MP4B	My	.002	.5
111	MP4B	Mz	-.006	.5
112	MP4B	Y	-13.5	5
113	MP4B	My	.002	5
114	MP4B	Mz	-.006	5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	Y	-94.032	.5
2	MP2A	My	-.047	.5
3	MP2A	Mz	-.047	.5
4	MP2A	Y	-94.032	5
5	MP2A	My	-.047	5
6	MP2A	Mz	-.047	5
7	MP2B	Y	-94.032	.5
8	MP2B	My	.06	.5
9	MP2B	Mz	-.028	.5
10	MP2B	Y	-94.032	5
11	MP2B	My	.06	5
12	MP2B	Mz	-.028	5
13	MP2C	Y	-94.032	.5
14	MP2C	My	.06	.5
15	MP2C	Mz	-.028	.5
16	MP2C	Y	-94.032	5
17	MP2C	My	.06	5
18	MP2C	Mz	-.028	5
19	MP2A	Y	-94.032	.5
20	MP2A	My	-.047	.5
21	MP2A	Mz	.047	.5
22	MP2A	Y	-94.032	5
23	MP2A	My	-.047	5
24	MP2A	Mz	.047	5
25	MP2B	Y	-94.032	.5
26	MP2B	My	-.028	.5
27	MP2B	Mz	-.06	.5
28	MP2B	Y	-94.032	5
29	MP2B	My	-.028	5
30	MP2B	Mz	-.06	5
31	MP2C	Y	-94.032	.5
32	MP2C	My	-.028	.5
33	MP2C	Mz	-.06	.5
34	MP2C	Y	-94.032	5
35	MP2C	My	-.028	5
36	MP2C	Mz	-.06	5
37	MP3A	Y	-55.495	2.25
38	MP3A	My	-.028	2.25
39	MP3A	Mz	0	2.25
40	MP3A	Y	-55.495	3.25





Company : Maser Consulting  
 Designer :  
 Job Number :  
 Model Name : 469353-VZW\_MT\_LO\_H

July 7, 2021  
 10:32 AM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
41	MP3A	My	-.028	3.25
42	MP3A	Mz	0	3.25
43	MP3B	Y	-55.495	2.25
44	MP3B	My	.009	2.25
45	MP3B	Mz	-.026	2.25
46	MP3B	Y	-55.495	3.25
47	MP3B	My	.009	3.25
48	MP3B	Mz	-.026	3.25
49	MP3C	Y	-55.495	2.25
50	MP3C	My	.014	2.25
51	MP3C	Mz	.024	2.25
52	MP3C	Y	-55.495	3.25
53	MP3C	My	.014	3.25
54	MP3C	Mz	.024	3.25
55	MP2A	Y	-70.507	3
56	MP2A	My	.035	3
57	MP2A	Mz	0	3
58	MP2B	Y	-70.507	3
59	MP2B	My	-.012	3
60	MP2B	Mz	.033	3
61	MP2C	Y	-70.507	3
62	MP2C	My	-.018	3
63	MP2C	Mz	-.031	3
64	MP3A	Y	-63.648	3
65	MP3A	My	.032	3
66	MP3A	Mz	0	3
67	MP3B	Y	-63.648	3
68	MP3B	My	-.011	3
69	MP3B	Mz	.03	3
70	MP3C	Y	-63.648	3
71	MP3C	My	-.016	3
72	MP3C	Mz	-.028	3
73	M35	Y	-135.818	1
74	M35	My	0	1
75	M35	Mz	0	1
76	M37	Y	-135.818	1
77	M37	My	0	1
78	M37	Mz	0	1
79	MP1A	Y	-90.838	.5
80	MP1A	My	-.045	.5
81	MP1A	Mz	0	.5
82	MP1A	Y	-90.838	5
83	MP1A	My	-.045	5
84	MP1A	Mz	0	5
85	MP1C	Y	-90.838	.5
86	MP1C	My	.023	.5
87	MP1C	Mz	.039	.5
88	MP1C	Y	-90.838	5
89	MP1C	My	.023	5
90	MP1C	Mz	.039	5
91	MP4A	Y	-90.838	.5
92	MP4A	My	-.045	.5
93	MP4A	Mz	0	.5
94	MP4A	Y	-90.838	5
95	MP4A	My	-.045	5
96	MP4A	Mz	0	5
97	MP4C	Y	-90.838	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
98	MP4C	My	.023	.5
99	MP4C	Mz	.039	.5
100	MP4C	Y	-90.838	5
101	MP4C	My	.023	5
102	MP4C	Mz	.039	5
103	MP1B	Y	-135.888	.5
104	MP1B	My	.023	.5
105	MP1B	Mz	-.064	.5
106	MP1B	Y	-135.888	5
107	MP1B	My	.023	5
108	MP1B	Mz	-.064	5
109	MP4B	Y	-135.888	.5
110	MP4B	My	.023	.5
111	MP4B	Mz	-.064	.5
112	MP4B	Y	-135.888	5
113	MP4B	My	.023	5
114	MP4B	Mz	-.064	5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	0	.5
2	MP2A	Z	-119.172	.5
3	MP2A	Mx	.06	.5
4	MP2A	X	0	5
5	MP2A	Z	-119.172	5
6	MP2A	Mx	.06	5
7	MP2B	X	0	.5
8	MP2B	Z	-83.508	.5
9	MP2B	Mx	.025	.5
10	MP2B	X	0	5
11	MP2B	Z	-83.508	5
12	MP2B	Mx	.025	5
13	MP2C	X	0	.5
14	MP2C	Z	-83.508	.5
15	MP2C	Mx	.025	.5
16	MP2C	X	0	5
17	MP2C	Z	-83.508	5
18	MP2C	Mx	.025	5
19	MP2A	X	0	.5
20	MP2A	Z	-119.172	.5
21	MP2A	Mx	-.06	.5
22	MP2A	X	0	5
23	MP2A	Z	-119.172	5
24	MP2A	Mx	-.06	5
25	MP2B	X	0	.5
26	MP2B	Z	-83.508	.5
27	MP2B	Mx	.054	.5
28	MP2B	X	0	5
29	MP2B	Z	-83.508	5
30	MP2B	Mx	.054	5
31	MP2C	X	0	.5
32	MP2C	Z	-83.508	.5
33	MP2C	Mx	.054	.5
34	MP2C	X	0	5
35	MP2C	Z	-83.508	5
36	MP2C	Mx	.054	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
37	MP3A	X	0	2.25
38	MP3A	Z	-69.32	2.25
39	MP3A	Mx	0	2.25
40	MP3A	X	0	3.25
41	MP3A	Z	-69.32	3.25
42	MP3A	Mx	0	3.25
43	MP3B	X	0	2.25
44	MP3B	Z	-32.073	2.25
45	MP3B	Mx	.015	2.25
46	MP3B	X	0	3.25
47	MP3B	Z	-32.073	3.25
48	MP3B	Mx	.015	3.25
49	MP3C	X	0	2.25
50	MP3C	Z	-37.684	2.25
51	MP3C	Mx	-.016	2.25
52	MP3C	X	0	3.25
53	MP3C	Z	-37.684	3.25
54	MP3C	Mx	-.016	3.25
55	MP2A	X	0	3
56	MP2A	Z	-55.161	3
57	MP2A	Mx	0	3
58	MP2B	X	0	3
59	MP2B	Z	-39.012	3
60	MP2B	Mx	-.018	3
61	MP2C	X	0	3
62	MP2C	Z	-41.445	3
63	MP2C	Mx	.018	3
64	MP3A	X	0	3
65	MP3A	Z	-55.161	3
66	MP3A	Mx	0	3
67	MP3B	X	0	3
68	MP3B	Z	-32.826	3
69	MP3B	Mx	-.015	3
70	MP3C	X	0	3
71	MP3C	Z	-36.19	3
72	MP3C	Mx	.016	3
73	M35	X	0	1
74	M35	Z	-112.664	1
75	M35	Mx	0	1
76	M37	X	0	1
77	M37	Z	-112.664	1
78	M37	Mx	0	1
79	MP1A	X	0	.5
80	MP1A	Z	-63.863	.5
81	MP1A	Mx	0	.5
82	MP1A	X	0	5
83	MP1A	Z	-63.863	5
84	MP1A	Mx	0	5
85	MP1C	X	0	.5
86	MP1C	Z	-111.41	.5
87	MP1C	Mx	-.048	.5
88	MP1C	X	0	5
89	MP1C	Z	-111.41	5
90	MP1C	Mx	-.048	5
91	MP4A	X	0	.5
92	MP4A	Z	-63.863	.5
93	MP4A	Mx	0	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
94	MP4A	X	0	5
95	MP4A	Z	-63.863	5
96	MP4A	Mx	0	5
97	MP4C	X	0	.5
98	MP4C	Z	-111.41	.5
99	MP4C	Mx	-.048	.5
100	MP4C	X	0	5
101	MP4C	Z	-111.41	5
102	MP4C	Mx	-.048	5
103	MP1B	X	0	.5
104	MP1B	Z	-128.237	.5
105	MP1B	Mx	.06	.5
106	MP1B	X	0	5
107	MP1B	Z	-128.237	5
108	MP1B	Mx	.06	5
109	MP4B	X	0	.5
110	MP4B	Z	-128.237	.5
111	MP4B	Mx	.06	.5
112	MP4B	X	0	5
113	MP4B	Z	-128.237	5
114	MP4B	Mx	.06	5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	54.537	.5
2	MP2A	Z	-94.461	.5
3	MP2A	Mx	.02	.5
4	MP2A	X	54.537	5
5	MP2A	Z	-94.461	5
6	MP2A	Mx	.02	5
7	MP2B	X	40.001	.5
8	MP2B	Z	-69.284	.5
9	MP2B	Mx	.046	.5
10	MP2B	X	40.001	5
11	MP2B	Z	-69.284	5
12	MP2B	Mx	.046	5
13	MP2C	X	40.001	.5
14	MP2C	Z	-69.284	.5
15	MP2C	Mx	.046	.5
16	MP2C	X	40.001	5
17	MP2C	Z	-69.284	5
18	MP2C	Mx	.046	5
19	MP2A	X	54.537	.5
20	MP2A	Z	-94.461	.5
21	MP2A	Mx	-.074	.5
22	MP2A	X	54.537	5
23	MP2A	Z	-94.461	5
24	MP2A	Mx	-.074	5
25	MP2B	X	40.001	.5
26	MP2B	Z	-69.284	.5
27	MP2B	Mx	.032	.5
28	MP2B	X	40.001	5
29	MP2B	Z	-69.284	5
30	MP2B	Mx	.032	5
31	MP2C	X	40.001	.5
32	MP2C	Z	-69.284	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
33	MP2C	Mx	.032	.5
34	MP2C	X	40.001	5
35	MP2C	Z	-69.284	5
36	MP2C	Mx	.032	5
37	MP3A	X	29.387	2.25
38	MP3A	Z	-50.9	2.25
39	MP3A	Mx	-.015	2.25
40	MP3A	X	29.387	3.25
41	MP3A	Z	-50.9	3.25
42	MP3A	Mx	-.015	3.25
43	MP3B	X	14.205	2.25
44	MP3B	Z	-24.604	2.25
45	MP3B	Mx	.014	2.25
46	MP3B	X	14.205	3.25
47	MP3B	Z	-24.604	3.25
48	MP3B	Mx	.014	3.25
49	MP3C	X	29.387	2.25
50	MP3C	Z	-50.9	2.25
51	MP3C	Mx	-.015	2.25
52	MP3C	X	29.387	3.25
53	MP3C	Z	-50.9	3.25
54	MP3C	Mx	-.015	3.25
55	MP2A	X	25.294	3
56	MP2A	Z	-43.811	3
57	MP2A	Mx	.013	3
58	MP2B	X	18.712	3
59	MP2B	Z	-32.41	3
60	MP2B	Mx	-.018	3
61	MP2C	X	25.294	3
62	MP2C	Z	-43.811	3
63	MP2C	Mx	.013	3
64	MP3A	X	24.419	3
65	MP3A	Z	-42.294	3
66	MP3A	Mx	.012	3
67	MP3B	X	15.315	3
68	MP3B	Z	-26.526	3
69	MP3B	Mx	-.015	3
70	MP3C	X	24.419	3
71	MP3C	Z	-42.294	3
72	MP3C	Mx	.012	3
73	M35	X	49.234	1
74	M35	Z	-85.276	1
75	M35	Mx	0	1
76	M37	X	49.234	1
77	M37	Z	-85.276	1
78	M37	Mx	0	1
79	MP1A	X	39.856	.5
80	MP1A	Z	-69.033	.5
81	MP1A	Mx	-.02	.5
82	MP1A	X	39.856	5
83	MP1A	Z	-69.033	5
84	MP1A	Mx	-.02	5
85	MP1C	X	39.856	.5
86	MP1C	Z	-69.033	.5
87	MP1C	Mx	-.02	.5
88	MP1C	X	39.856	5
89	MP1C	Z	-69.033	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
90	MP1C	Mx	-.02	5
91	MP4A	X	39.856	.5
92	MP4A	Z	-69.033	.5
93	MP4A	Mx	-.02	.5
94	MP4A	X	39.856	5
95	MP4A	Z	-69.033	5
96	MP4A	Mx	-.02	5
97	MP4C	X	39.856	.5
98	MP4C	Z	-69.033	.5
99	MP4C	Mx	-.02	.5
100	MP4C	X	39.856	5
101	MP4C	Z	-69.033	5
102	MP4C	Mx	-.02	5
103	MP1B	X	63.462	.5
104	MP1B	Z	-109.92	.5
105	MP1B	Mx	.062	.5
106	MP1B	X	63.462	5
107	MP1B	Z	-109.92	5
108	MP1B	Mx	.062	5
109	MP4B	X	63.462	.5
110	MP4B	Z	-109.92	.5
111	MP4B	Mx	.062	.5
112	MP4B	X	63.462	5
113	MP4B	Z	-109.92	5
114	MP4B	Mx	.062	5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	76.973	.5
2	MP2A	Z	-44.44	.5
3	MP2A	Mx	-.016	.5
4	MP2A	X	76.973	5
5	MP2A	Z	-44.44	5
6	MP2A	Mx	-.016	5
7	MP2B	X	82.68	.5
8	MP2B	Z	-47.736	.5
9	MP2B	Mx	.067	.5
10	MP2B	X	82.68	5
11	MP2B	Z	-47.736	5
12	MP2B	Mx	.067	5
13	MP2C	X	82.68	.5
14	MP2C	Z	-47.736	.5
15	MP2C	Mx	.067	.5
16	MP2C	X	82.68	5
17	MP2C	Z	-47.736	5
18	MP2C	Mx	.067	5
19	MP2A	X	76.973	.5
20	MP2A	Z	-44.44	.5
21	MP2A	Mx	-.061	.5
22	MP2A	X	76.973	5
23	MP2A	Z	-44.44	5
24	MP2A	Mx	-.061	5
25	MP2B	X	82.68	.5
26	MP2B	Z	-47.736	.5
27	MP2B	Mx	.006	.5
28	MP2B	X	82.68	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
29	MP2B	Z	-47.736	5
30	MP2B	Mx	.006	5
31	MP2C	X	82.68	.5
32	MP2C	Z	-47.736	.5
33	MP2C	Mx	.006	.5
34	MP2C	X	82.68	5
35	MP2C	Z	-47.736	5
36	MP2C	Mx	.006	5
37	MP3A	X	32.635	2.25
38	MP3A	Z	-18.842	2.25
39	MP3A	Mx	-.016	2.25
40	MP3A	X	32.635	3.25
41	MP3A	Z	-18.842	3.25
42	MP3A	Mx	-.016	3.25
43	MP3B	X	38.596	2.25
44	MP3B	Z	-22.284	2.25
45	MP3B	Mx	.017	2.25
46	MP3B	X	38.596	3.25
47	MP3B	Z	-22.284	3.25
48	MP3B	Mx	.017	3.25
49	MP3C	X	60.033	2.25
50	MP3C	Z	-34.66	2.25
51	MP3C	Mx	0	2.25
52	MP3C	X	60.033	3.25
53	MP3C	Z	-34.66	3.25
54	MP3C	Mx	0	3.25
55	MP2A	X	35.892	3
56	MP2A	Z	-20.722	3
57	MP2A	Mx	.018	3
58	MP2B	X	38.477	3
59	MP2B	Z	-22.214	3
60	MP2B	Mx	-.017	3
61	MP2C	X	47.771	3
62	MP2C	Z	-27.581	3
63	MP2C	Mx	0	3
64	MP3A	X	31.342	3
65	MP3A	Z	-18.095	3
66	MP3A	Mx	.016	3
67	MP3B	X	34.916	3
68	MP3B	Z	-20.159	3
69	MP3B	Mx	-.015	3
70	MP3C	X	47.771	3
71	MP3C	Z	-27.581	3
72	MP3C	Mx	0	3
73	M35	X	79.129	1
74	M35	Z	-45.685	1
75	M35	Mx	0	1
76	M37	X	79.129	1
77	M37	Z	-45.685	1
78	M37	Mx	0	1
79	MP1A	X	96.484	.5
80	MP1A	Z	-55.705	.5
81	MP1A	Mx	-.048	.5
82	MP1A	X	96.484	5
83	MP1A	Z	-55.705	5
84	MP1A	Mx	-.048	5
85	MP1C	X	55.307	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
86	MP1C	Z	-31.931	.5
87	MP1C	Mx	0	.5
88	MP1C	X	55.307	5
89	MP1C	Z	-31.931	5
90	MP1C	Mx	0	5
91	MP4A	X	96.484	.5
92	MP4A	Z	-55.705	.5
93	MP4A	Mx	-.048	.5
94	MP4A	X	96.484	5
95	MP4A	Z	-55.705	5
96	MP4A	Mx	-.048	5
97	MP4C	X	55.307	.5
98	MP4C	Z	-31.931	.5
99	MP4C	Mx	0	.5
100	MP4C	X	55.307	5
101	MP4C	Z	-31.931	5
102	MP4C	Mx	0	5
103	MP1B	X	114.936	.5
104	MP1B	Z	-66.358	.5
105	MP1B	Mx	.051	.5
106	MP1B	X	114.936	5
107	MP1B	Z	-66.358	5
108	MP1B	Mx	.051	5
109	MP4B	X	114.936	.5
110	MP4B	Z	-66.358	.5
111	MP4B	Mx	.051	.5
112	MP4B	X	114.936	5
113	MP4B	Z	-66.358	5
114	MP4B	Mx	.051	5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	78.784	.5
2	MP2A	Z	0	.5
3	MP2A	Mx	-.039	.5
4	MP2A	X	78.784	5
5	MP2A	Z	0	5
6	MP2A	Mx	-.039	5
7	MP2B	X	114.447	.5
8	MP2B	Z	0	.5
9	MP2B	Mx	.073	.5
10	MP2B	X	114.447	5
11	MP2B	Z	0	5
12	MP2B	Mx	.073	5
13	MP2C	X	114.447	.5
14	MP2C	Z	0	.5
15	MP2C	Mx	.073	.5
16	MP2C	X	114.447	5
17	MP2C	Z	0	5
18	MP2C	Mx	.073	5
19	MP2A	X	78.784	.5
20	MP2A	Z	0	.5
21	MP2A	Mx	-.039	.5
22	MP2A	X	78.784	5
23	MP2A	Z	0	5
24	MP2A	Mx	-.039	5





Company : Maser Consulting  
 Designer :  
 Job Number :  
 Model Name : 469353-VZW\_MT\_LO\_H

July 7, 2021  
 10:32 AM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
25	MP2B	X	114.447	.5
26	MP2B	Z	0	.5
27	MP2B	Mx	-.034	.5
28	MP2B	X	114.447	5
29	MP2B	Z	0	5
30	MP2B	Mx	-.034	5
31	MP2C	X	114.447	.5
32	MP2C	Z	0	.5
33	MP2C	Mx	-.034	.5
34	MP2C	X	114.447	5
35	MP2C	Z	0	5
36	MP2C	Mx	-.034	5
37	MP3A	X	27.139	2.25
38	MP3A	Z	0	2.25
39	MP3A	Mx	-.014	2.25
40	MP3A	X	27.139	3.25
41	MP3A	Z	0	3.25
42	MP3A	Mx	-.014	3.25
43	MP3B	X	64.386	2.25
44	MP3B	Z	0	2.25
45	MP3B	Mx	.011	2.25
46	MP3B	X	64.386	3.25
47	MP3B	Z	0	3.25
48	MP3B	Mx	.011	3.25
49	MP3C	X	58.775	2.25
50	MP3C	Z	0	2.25
51	MP3C	Mx	.015	2.25
52	MP3C	X	58.775	3.25
53	MP3C	Z	0	3.25
54	MP3C	Mx	.015	3.25
55	MP2A	X	36.872	3
56	MP2A	Z	0	3
57	MP2A	Mx	.018	3
58	MP2B	X	53.022	3
59	MP2B	Z	0	3
60	MP2B	Mx	-.009	3
61	MP2C	X	50.589	3
62	MP2C	Z	0	3
63	MP2C	Mx	-.013	3
64	MP3A	X	29.867	3
65	MP3A	Z	0	3
66	MP3A	Mx	.015	3
67	MP3B	X	52.202	3
68	MP3B	Z	0	3
69	MP3B	Mx	-.009	3
70	MP3C	X	48.837	3
71	MP3C	Z	0	3
72	MP3C	Mx	-.012	3
73	M35	X	98.468	1
74	M35	Z	0	1
75	M35	Mx	0	1
76	M37	X	98.468	1
77	M37	Z	0	1
78	M37	Mx	0	1
79	MP1A	X	127.259	.5
80	MP1A	Z	0	.5
81	MP1A	Mx	-.064	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
82	MP1A	X	127.259	5
83	MP1A	Z	0	5
84	MP1A	Mx	-.064	5
85	MP1C	X	79.712	.5
86	MP1C	Z	0	.5
87	MP1C	Mx	.02	.5
88	MP1C	X	79.712	5
89	MP1C	Z	0	5
90	MP1C	Mx	.02	5
91	MP4A	X	127.259	.5
92	MP4A	Z	0	.5
93	MP4A	Mx	-.064	.5
94	MP4A	X	127.259	5
95	MP4A	Z	0	5
96	MP4A	Mx	-.064	5
97	MP4C	X	79.712	.5
98	MP4C	Z	0	.5
99	MP4C	Mx	.02	.5
100	MP4C	X	79.712	5
101	MP4C	Z	0	5
102	MP4C	Mx	.02	5
103	MP1B	X	139.821	.5
104	MP1B	Z	0	.5
105	MP1B	Mx	.024	.5
106	MP1B	X	139.821	5
107	MP1B	Z	0	5
108	MP1B	Mx	.024	5
109	MP4B	X	139.821	.5
110	MP4B	Z	0	.5
111	MP4B	Mx	.024	.5
112	MP4B	X	139.821	5
113	MP4B	Z	0	5
114	MP4B	Mx	.024	5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	76.973	.5
2	MP2A	Z	44.44	.5
3	MP2A	Mx	-.061	.5
4	MP2A	X	76.973	5
5	MP2A	Z	44.44	5
6	MP2A	Mx	-.061	5
7	MP2B	X	102.151	.5
8	MP2B	Z	58.977	.5
9	MP2B	Mx	.048	.5
10	MP2B	X	102.151	5
11	MP2B	Z	58.977	5
12	MP2B	Mx	.048	5
13	MP2C	X	102.151	.5
14	MP2C	Z	58.977	.5
15	MP2C	Mx	.048	.5
16	MP2C	X	102.151	5
17	MP2C	Z	58.977	5
18	MP2C	Mx	.048	5
19	MP2A	X	76.973	.5
20	MP2A	Z	44.44	.5





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
78	M37	Mx	0	1
79	MP1A	X	96.484	.5
80	MP1A	Z	55.705	.5
81	MP1A	Mx	-.048	.5
82	MP1A	X	96.484	5
83	MP1A	Z	55.705	5
84	MP1A	Mx	-.048	5
85	MP1C	X	96.484	.5
86	MP1C	Z	55.705	.5
87	MP1C	Mx	.048	.5
88	MP1C	X	96.484	5
89	MP1C	Z	55.705	5
90	MP1C	Mx	.048	5
91	MP4A	X	96.484	.5
92	MP4A	Z	55.705	.5
93	MP4A	Mx	-.048	.5
94	MP4A	X	96.484	5
95	MP4A	Z	55.705	5
96	MP4A	Mx	-.048	5
97	MP4C	X	96.484	.5
98	MP4C	Z	55.705	.5
99	MP4C	Mx	.048	.5
100	MP4C	X	96.484	5
101	MP4C	Z	55.705	5
102	MP4C	Mx	.048	5
103	MP1B	X	122.226	.5
104	MP1B	Z	70.567	.5
105	MP1B	Mx	-.012	.5
106	MP1B	X	122.226	5
107	MP1B	Z	70.567	5
108	MP1B	Mx	-.012	5
109	MP4B	X	122.226	.5
110	MP4B	Z	70.567	.5
111	MP4B	Mx	-.012	.5
112	MP4B	X	122.226	5
113	MP4B	Z	70.567	5
114	MP4B	Mx	-.012	5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	54.537	.5
2	MP2A	Z	94.461	.5
3	MP2A	Mx	-.074	.5
4	MP2A	X	54.537	5
5	MP2A	Z	94.461	5
6	MP2A	Mx	-.074	5
7	MP2B	X	51.242	.5
8	MP2B	Z	88.754	.5
9	MP2B	Mx	.006	.5
10	MP2B	X	51.242	5
11	MP2B	Z	88.754	5
12	MP2B	Mx	.006	5
13	MP2C	X	51.242	.5
14	MP2C	Z	88.754	.5
15	MP2C	Mx	.006	.5
16	MP2C	X	51.242	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
17	MP2C	Z	88.754	5
18	MP2C	Mx	.006	5
19	MP2A	X	54.537	.5
20	MP2A	Z	94.461	.5
21	MP2A	Mx	.02	.5
22	MP2A	X	54.537	5
23	MP2A	Z	94.461	5
24	MP2A	Mx	.02	5
25	MP2B	X	51.242	.5
26	MP2B	Z	88.754	.5
27	MP2B	Mx	-.072	.5
28	MP2B	X	51.242	5
29	MP2B	Z	88.754	5
30	MP2B	Mx	-.072	5
31	MP2C	X	51.242	.5
32	MP2C	Z	88.754	.5
33	MP2C	Mx	-.072	.5
34	MP2C	X	51.242	5
35	MP2C	Z	88.754	5
36	MP2C	Mx	-.072	5
37	MP3A	X	29.387	2.25
38	MP3A	Z	50.9	2.25
39	MP3A	Mx	-.015	2.25
40	MP3A	X	29.387	3.25
41	MP3A	Z	50.9	3.25
42	MP3A	Mx	-.015	3.25
43	MP3B	X	25.946	2.25
44	MP3B	Z	44.94	2.25
45	MP3B	Mx	-.017	2.25
46	MP3B	X	25.946	3.25
47	MP3B	Z	44.94	3.25
48	MP3B	Mx	-.017	3.25
49	MP3C	X	13.569	2.25
50	MP3C	Z	23.503	2.25
51	MP3C	Mx	.014	2.25
52	MP3C	X	13.569	3.25
53	MP3C	Z	23.503	3.25
54	MP3C	Mx	.014	3.25
55	MP2A	X	25.294	3
56	MP2A	Z	43.811	3
57	MP2A	Mx	.013	3
58	MP2B	X	23.802	3
59	MP2B	Z	41.227	3
60	MP2B	Mx	.015	3
61	MP2C	X	18.436	3
62	MP2C	Z	31.932	3
63	MP2C	Mx	-.018	3
64	MP3A	X	24.419	3
65	MP3A	Z	42.294	3
66	MP3A	Mx	.012	3
67	MP3B	X	22.355	3
68	MP3B	Z	38.72	3
69	MP3B	Mx	.014	3
70	MP3C	X	14.933	3
71	MP3C	Z	25.865	3
72	MP3C	Mx	-.015	3
73	M35	X	59.881	1











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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
9	MP2B	Mx	-.046	.5
10	MP2B	X	-40.001	5
11	MP2B	Z	69.284	5
12	MP2B	Mx	-.046	5
13	MP2C	X	-40.001	.5
14	MP2C	Z	69.284	.5
15	MP2C	Mx	-.046	.5
16	MP2C	X	-40.001	5
17	MP2C	Z	69.284	5
18	MP2C	Mx	-.046	5
19	MP2A	X	-54.537	.5
20	MP2A	Z	94.461	.5
21	MP2A	Mx	.074	.5
22	MP2A	X	-54.537	5
23	MP2A	Z	94.461	5
24	MP2A	Mx	.074	5
25	MP2B	X	-40.001	.5
26	MP2B	Z	69.284	.5
27	MP2B	Mx	-.032	.5
28	MP2B	X	-40.001	5
29	MP2B	Z	69.284	5
30	MP2B	Mx	-.032	5
31	MP2C	X	-40.001	.5
32	MP2C	Z	69.284	.5
33	MP2C	Mx	-.032	.5
34	MP2C	X	-40.001	5
35	MP2C	Z	69.284	5
36	MP2C	Mx	-.032	5
37	MP3A	X	-29.387	2.25
38	MP3A	Z	50.9	2.25
39	MP3A	Mx	.015	2.25
40	MP3A	X	-29.387	3.25
41	MP3A	Z	50.9	3.25
42	MP3A	Mx	.015	3.25
43	MP3B	X	-14.205	2.25
44	MP3B	Z	24.604	2.25
45	MP3B	Mx	-.014	2.25
46	MP3B	X	-14.205	3.25
47	MP3B	Z	24.604	3.25
48	MP3B	Mx	-.014	3.25
49	MP3C	X	-29.387	2.25
50	MP3C	Z	50.9	2.25
51	MP3C	Mx	.015	2.25
52	MP3C	X	-29.387	3.25
53	MP3C	Z	50.9	3.25
54	MP3C	Mx	.015	3.25
55	MP2A	X	-25.294	3
56	MP2A	Z	43.811	3
57	MP2A	Mx	-.013	3
58	MP2B	X	-18.712	3
59	MP2B	Z	32.41	3
60	MP2B	Mx	.018	3
61	MP2C	X	-25.294	3
62	MP2C	Z	43.811	3
63	MP2C	Mx	-.013	3
64	MP3A	X	-24.419	3
65	MP3A	Z	42.294	3



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
66	MP3A	Mx	-.012	3
67	MP3B	X	-15.315	3
68	MP3B	Z	26.526	3
69	MP3B	Mx	.015	3
70	MP3C	X	-24.419	3
71	MP3C	Z	42.294	3
72	MP3C	Mx	-.012	3
73	M35	X	-49.234	1
74	M35	Z	85.276	1
75	M35	Mx	0	1
76	M37	X	-49.234	1
77	M37	Z	85.276	1
78	M37	Mx	0	1
79	MP1A	X	-39.856	.5
80	MP1A	Z	69.033	.5
81	MP1A	Mx	.02	.5
82	MP1A	X	-39.856	5
83	MP1A	Z	69.033	5
84	MP1A	Mx	.02	5
85	MP1C	X	-39.856	.5
86	MP1C	Z	69.033	.5
87	MP1C	Mx	.02	.5
88	MP1C	X	-39.856	5
89	MP1C	Z	69.033	5
90	MP1C	Mx	.02	5
91	MP4A	X	-39.856	.5
92	MP4A	Z	69.033	.5
93	MP4A	Mx	.02	.5
94	MP4A	X	-39.856	5
95	MP4A	Z	69.033	5
96	MP4A	Mx	.02	5
97	MP4C	X	-39.856	.5
98	MP4C	Z	69.033	.5
99	MP4C	Mx	.02	.5
100	MP4C	X	-39.856	5
101	MP4C	Z	69.033	5
102	MP4C	Mx	.02	5
103	MP1B	X	-63.462	.5
104	MP1B	Z	109.92	.5
105	MP1B	Mx	-.062	.5
106	MP1B	X	-63.462	5
107	MP1B	Z	109.92	5
108	MP1B	Mx	-.062	5
109	MP4B	X	-63.462	.5
110	MP4B	Z	109.92	.5
111	MP4B	Mx	-.062	.5
112	MP4B	X	-63.462	5
113	MP4B	Z	109.92	5
114	MP4B	Mx	-.062	5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-76.973	.5
2	MP2A	Z	44.44	.5
3	MP2A	Mx	.016	.5
4	MP2A	X	-76.973	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
5	MP2A	Z	44.44	5
6	MP2A	Mx	.016	5
7	MP2B	X	-82.68	.5
8	MP2B	Z	47.736	.5
9	MP2B	Mx	-.067	.5
10	MP2B	X	-82.68	5
11	MP2B	Z	47.736	5
12	MP2B	Mx	-.067	5
13	MP2C	X	-82.68	.5
14	MP2C	Z	47.736	.5
15	MP2C	Mx	-.067	.5
16	MP2C	X	-82.68	5
17	MP2C	Z	47.736	5
18	MP2C	Mx	-.067	5
19	MP2A	X	-76.973	.5
20	MP2A	Z	44.44	.5
21	MP2A	Mx	.061	.5
22	MP2A	X	-76.973	5
23	MP2A	Z	44.44	5
24	MP2A	Mx	.061	5
25	MP2B	X	-82.68	.5
26	MP2B	Z	47.736	.5
27	MP2B	Mx	-.006	.5
28	MP2B	X	-82.68	5
29	MP2B	Z	47.736	5
30	MP2B	Mx	-.006	5
31	MP2C	X	-82.68	.5
32	MP2C	Z	47.736	.5
33	MP2C	Mx	-.006	.5
34	MP2C	X	-82.68	5
35	MP2C	Z	47.736	5
36	MP2C	Mx	-.006	5
37	MP3A	X	-32.635	2.25
38	MP3A	Z	18.842	2.25
39	MP3A	Mx	.016	2.25
40	MP3A	X	-32.635	3.25
41	MP3A	Z	18.842	3.25
42	MP3A	Mx	.016	3.25
43	MP3B	X	-38.596	2.25
44	MP3B	Z	22.284	2.25
45	MP3B	Mx	-.017	2.25
46	MP3B	X	-38.596	3.25
47	MP3B	Z	22.284	3.25
48	MP3B	Mx	-.017	3.25
49	MP3C	X	-60.033	2.25
50	MP3C	Z	34.66	2.25
51	MP3C	Mx	0	2.25
52	MP3C	X	-60.033	3.25
53	MP3C	Z	34.66	3.25
54	MP3C	Mx	0	3.25
55	MP2A	X	-35.892	3
56	MP2A	Z	20.722	3
57	MP2A	Mx	-.018	3
58	MP2B	X	-38.477	3
59	MP2B	Z	22.214	3
60	MP2B	Mx	.017	3
61	MP2C	X	-47.771	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
62	MP2C	Z	27.581	3
63	MP2C	Mx	0	3
64	MP3A	X	-31.342	3
65	MP3A	Z	18.095	3
66	MP3A	Mx	-.016	3
67	MP3B	X	-34.916	3
68	MP3B	Z	20.159	3
69	MP3B	Mx	.015	3
70	MP3C	X	-47.771	3
71	MP3C	Z	27.581	3
72	MP3C	Mx	0	3
73	M35	X	-79.129	1
74	M35	Z	45.685	1
75	M35	Mx	0	1
76	M37	X	-79.129	1
77	M37	Z	45.685	1
78	M37	Mx	0	1
79	MP1A	X	-96.484	.5
80	MP1A	Z	55.705	.5
81	MP1A	Mx	.048	.5
82	MP1A	X	-96.484	5
83	MP1A	Z	55.705	5
84	MP1A	Mx	.048	5
85	MP1C	X	-55.307	.5
86	MP1C	Z	31.931	.5
87	MP1C	Mx	0	.5
88	MP1C	X	-55.307	5
89	MP1C	Z	31.931	5
90	MP1C	Mx	0	5
91	MP4A	X	-96.484	.5
92	MP4A	Z	55.705	.5
93	MP4A	Mx	.048	.5
94	MP4A	X	-96.484	5
95	MP4A	Z	55.705	5
96	MP4A	Mx	.048	5
97	MP4C	X	-55.307	.5
98	MP4C	Z	31.931	.5
99	MP4C	Mx	0	.5
100	MP4C	X	-55.307	5
101	MP4C	Z	31.931	5
102	MP4C	Mx	0	5
103	MP1B	X	-114.936	.5
104	MP1B	Z	66.358	.5
105	MP1B	Mx	-.051	.5
106	MP1B	X	-114.936	5
107	MP1B	Z	66.358	5
108	MP1B	Mx	-.051	5
109	MP4B	X	-114.936	.5
110	MP4B	Z	66.358	.5
111	MP4B	Mx	-.051	.5
112	MP4B	X	-114.936	5
113	MP4B	Z	66.358	5
114	MP4B	Mx	-.051	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
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Company : Maser Consulting  
 Designer :  
 Job Number :  
 Model Name : 469353-VZW\_MT\_LO\_H

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-78.784	.5
2	MP2A	Z	0	.5
3	MP2A	Mx	.039	.5
4	MP2A	X	-78.784	5
5	MP2A	Z	0	5
6	MP2A	Mx	.039	5
7	MP2B	X	-114.447	.5
8	MP2B	Z	0	.5
9	MP2B	Mx	-.073	.5
10	MP2B	X	-114.447	5
11	MP2B	Z	0	5
12	MP2B	Mx	-.073	5
13	MP2C	X	-114.447	.5
14	MP2C	Z	0	.5
15	MP2C	Mx	-.073	.5
16	MP2C	X	-114.447	5
17	MP2C	Z	0	5
18	MP2C	Mx	-.073	5
19	MP2A	X	-78.784	.5
20	MP2A	Z	0	.5
21	MP2A	Mx	.039	.5
22	MP2A	X	-78.784	5
23	MP2A	Z	0	5
24	MP2A	Mx	.039	5
25	MP2B	X	-114.447	.5
26	MP2B	Z	0	.5
27	MP2B	Mx	.034	.5
28	MP2B	X	-114.447	5
29	MP2B	Z	0	5
30	MP2B	Mx	.034	5
31	MP2C	X	-114.447	.5
32	MP2C	Z	0	.5
33	MP2C	Mx	.034	.5
34	MP2C	X	-114.447	5
35	MP2C	Z	0	5
36	MP2C	Mx	.034	5
37	MP3A	X	-27.139	2.25
38	MP3A	Z	0	2.25
39	MP3A	Mx	.014	2.25
40	MP3A	X	-27.139	3.25
41	MP3A	Z	0	3.25
42	MP3A	Mx	.014	3.25
43	MP3B	X	-64.386	2.25
44	MP3B	Z	0	2.25
45	MP3B	Mx	-.011	2.25
46	MP3B	X	-64.386	3.25
47	MP3B	Z	0	3.25
48	MP3B	Mx	-.011	3.25
49	MP3C	X	-58.775	2.25
50	MP3C	Z	0	2.25
51	MP3C	Mx	-.015	2.25
52	MP3C	X	-58.775	3.25
53	MP3C	Z	0	3.25
54	MP3C	Mx	-.015	3.25
55	MP2A	X	-36.872	3
56	MP2A	Z	0	3
57	MP2A	Mx	-.018	3



Company : Maser Consulting  
 Designer :  
 Job Number :  
 Model Name : 469353-VZW\_MT\_LO\_H

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2B	X	-53.022	3
59	MP2B	Z	0	3
60	MP2B	Mx	.009	3
61	MP2C	X	-50.589	3
62	MP2C	Z	0	3
63	MP2C	Mx	.013	3
64	MP3A	X	-29.867	3
65	MP3A	Z	0	3
66	MP3A	Mx	-.015	3
67	MP3B	X	-52.202	3
68	MP3B	Z	0	3
69	MP3B	Mx	.009	3
70	MP3C	X	-48.837	3
71	MP3C	Z	0	3
72	MP3C	Mx	.012	3
73	M35	X	-98.468	1
74	M35	Z	0	1
75	M35	Mx	0	1
76	M37	X	-98.468	1
77	M37	Z	0	1
78	M37	Mx	0	1
79	MP1A	X	-127.259	.5
80	MP1A	Z	0	.5
81	MP1A	Mx	.064	.5
82	MP1A	X	-127.259	5
83	MP1A	Z	0	5
84	MP1A	Mx	.064	5
85	MP1C	X	-79.712	.5
86	MP1C	Z	0	.5
87	MP1C	Mx	-.02	.5
88	MP1C	X	-79.712	5
89	MP1C	Z	0	5
90	MP1C	Mx	-.02	5
91	MP4A	X	-127.259	.5
92	MP4A	Z	0	.5
93	MP4A	Mx	.064	.5
94	MP4A	X	-127.259	5
95	MP4A	Z	0	5
96	MP4A	Mx	.064	5
97	MP4C	X	-79.712	.5
98	MP4C	Z	0	.5
99	MP4C	Mx	-.02	.5
100	MP4C	X	-79.712	5
101	MP4C	Z	0	5
102	MP4C	Mx	-.02	5
103	MP1B	X	-139.821	.5
104	MP1B	Z	0	.5
105	MP1B	Mx	-.024	.5
106	MP1B	X	-139.821	5
107	MP1B	Z	0	5
108	MP1B	Mx	-.024	5
109	MP4B	X	-139.821	.5
110	MP4B	Z	0	.5
111	MP4B	Mx	-.024	.5
112	MP4B	X	-139.821	5
113	MP4B	Z	0	5
114	MP4B	Mx	-.024	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-76.973	.5
2	MP2A	Z	-44.44	.5
3	MP2A	Mx	.061	.5
4	MP2A	X	-76.973	5
5	MP2A	Z	-44.44	5
6	MP2A	Mx	.061	5
7	MP2B	X	-102.151	.5
8	MP2B	Z	-58.977	.5
9	MP2B	Mx	-.048	.5
10	MP2B	X	-102.151	5
11	MP2B	Z	-58.977	5
12	MP2B	Mx	-.048	5
13	MP2C	X	-102.151	.5
14	MP2C	Z	-58.977	.5
15	MP2C	Mx	-.048	.5
16	MP2C	X	-102.151	5
17	MP2C	Z	-58.977	5
18	MP2C	Mx	-.048	5
19	MP2A	X	-76.973	.5
20	MP2A	Z	-44.44	.5
21	MP2A	Mx	.016	.5
22	MP2A	X	-76.973	5
23	MP2A	Z	-44.44	5
24	MP2A	Mx	.016	5
25	MP2B	X	-102.151	.5
26	MP2B	Z	-58.977	.5
27	MP2B	Mx	.068	.5
28	MP2B	X	-102.151	5
29	MP2B	Z	-58.977	5
30	MP2B	Mx	.068	5
31	MP2C	X	-102.151	.5
32	MP2C	Z	-58.977	.5
33	MP2C	Mx	.068	.5
34	MP2C	X	-102.151	5
35	MP2C	Z	-58.977	5
36	MP2C	Mx	.068	5
37	MP3A	X	-32.635	2.25
38	MP3A	Z	-18.842	2.25
39	MP3A	Mx	.016	2.25
40	MP3A	X	-32.635	3.25
41	MP3A	Z	-18.842	3.25
42	MP3A	Mx	.016	3.25
43	MP3B	X	-58.931	2.25
44	MP3B	Z	-34.024	2.25
45	MP3B	Mx	.006	2.25
46	MP3B	X	-58.931	3.25
47	MP3B	Z	-34.024	3.25
48	MP3B	Mx	.006	3.25
49	MP3C	X	-32.635	2.25
50	MP3C	Z	-18.842	2.25
51	MP3C	Mx	-.016	2.25
52	MP3C	X	-32.635	3.25
53	MP3C	Z	-18.842	3.25
54	MP3C	Mx	-.016	3.25
55	MP2A	X	-35.892	3
56	MP2A	Z	-20.722	3
57	MP2A	Mx	-.018	3



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2B	X	-47.293	3
59	MP2B	Z	-27.305	3
60	MP2B	Mx	-.005	3
61	MP2C	X	-35.892	3
62	MP2C	Z	-20.722	3
63	MP2C	Mx	.018	3
64	MP3A	X	-31.342	3
65	MP3A	Z	-18.095	3
66	MP3A	Mx	-.016	3
67	MP3B	X	-47.11	3
68	MP3B	Z	-27.199	3
69	MP3B	Mx	-.005	3
70	MP3C	X	-31.342	3
71	MP3C	Z	-18.095	3
72	MP3C	Mx	.016	3
73	M35	X	-97.57	1
74	M35	Z	-56.332	1
75	M35	Mx	0	1
76	M37	X	-97.57	1
77	M37	Z	-56.332	1
78	M37	Mx	0	1
79	MP1A	X	-96.484	.5
80	MP1A	Z	-55.705	.5
81	MP1A	Mx	.048	.5
82	MP1A	X	-96.484	5
83	MP1A	Z	-55.705	5
84	MP1A	Mx	.048	5
85	MP1C	X	-96.484	.5
86	MP1C	Z	-55.705	.5
87	MP1C	Mx	-.048	.5
88	MP1C	X	-96.484	5
89	MP1C	Z	-55.705	5
90	MP1C	Mx	-.048	5
91	MP4A	X	-96.484	.5
92	MP4A	Z	-55.705	.5
93	MP4A	Mx	.048	.5
94	MP4A	X	-96.484	5
95	MP4A	Z	-55.705	5
96	MP4A	Mx	.048	5
97	MP4C	X	-96.484	.5
98	MP4C	Z	-55.705	.5
99	MP4C	Mx	-.048	.5
100	MP4C	X	-96.484	5
101	MP4C	Z	-55.705	5
102	MP4C	Mx	-.048	5
103	MP1B	X	-122.226	.5
104	MP1B	Z	-70.567	.5
105	MP1B	Mx	.012	.5
106	MP1B	X	-122.226	5
107	MP1B	Z	-70.567	5
108	MP1B	Mx	.012	5
109	MP4B	X	-122.226	.5
110	MP4B	Z	-70.567	.5
111	MP4B	Mx	.012	.5
112	MP4B	X	-122.226	5
113	MP4B	Z	-70.567	5
114	MP4B	Mx	.012	5





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-54.537	.5
2	MP2A	Z	-94.461	.5
3	MP2A	Mx	.074	.5
4	MP2A	X	-54.537	5
5	MP2A	Z	-94.461	5
6	MP2A	Mx	.074	5
7	MP2B	X	-51.242	.5
8	MP2B	Z	-88.754	.5
9	MP2B	Mx	-.006	.5
10	MP2B	X	-51.242	5
11	MP2B	Z	-88.754	5
12	MP2B	Mx	-.006	5
13	MP2C	X	-51.242	.5
14	MP2C	Z	-88.754	.5
15	MP2C	Mx	-.006	.5
16	MP2C	X	-51.242	5
17	MP2C	Z	-88.754	5
18	MP2C	Mx	-.006	5
19	MP2A	X	-54.537	.5
20	MP2A	Z	-94.461	.5
21	MP2A	Mx	-.02	.5
22	MP2A	X	-54.537	5
23	MP2A	Z	-94.461	5
24	MP2A	Mx	-.02	5
25	MP2B	X	-51.242	.5
26	MP2B	Z	-88.754	.5
27	MP2B	Mx	.072	.5
28	MP2B	X	-51.242	5
29	MP2B	Z	-88.754	5
30	MP2B	Mx	.072	5
31	MP2C	X	-51.242	.5
32	MP2C	Z	-88.754	.5
33	MP2C	Mx	.072	.5
34	MP2C	X	-51.242	5
35	MP2C	Z	-88.754	5
36	MP2C	Mx	.072	5
37	MP3A	X	-29.387	2.25
38	MP3A	Z	-50.9	2.25
39	MP3A	Mx	.015	2.25
40	MP3A	X	-29.387	3.25
41	MP3A	Z	-50.9	3.25
42	MP3A	Mx	.015	3.25
43	MP3B	X	-25.946	2.25
44	MP3B	Z	-44.94	2.25
45	MP3B	Mx	.017	2.25
46	MP3B	X	-25.946	3.25
47	MP3B	Z	-44.94	3.25
48	MP3B	Mx	.017	3.25
49	MP3C	X	-13.569	2.25
50	MP3C	Z	-23.503	2.25
51	MP3C	Mx	-.014	2.25
52	MP3C	X	-13.569	3.25
53	MP3C	Z	-23.503	3.25
54	MP3C	Mx	-.014	3.25
55	MP2A	X	-25.294	3
56	MP2A	Z	-43.811	3
57	MP2A	Mx	-.013	3



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2B	X	-23.802	3
59	MP2B	Z	-41.227	3
60	MP2B	Mx	-.015	3
61	MP2C	X	-18.436	3
62	MP2C	Z	-31.932	3
63	MP2C	Mx	.018	3
64	MP3A	X	-24.419	3
65	MP3A	Z	-42.294	3
66	MP3A	Mx	-.012	3
67	MP3B	X	-22.355	3
68	MP3B	Z	-38.72	3
69	MP3B	Mx	-.014	3
70	MP3C	X	-14.933	3
71	MP3C	Z	-25.865	3
72	MP3C	Mx	.015	3
73	M35	X	-59.881	1
74	M35	Z	-103.717	1
75	M35	Mx	0	1
76	M37	X	-59.881	1
77	M37	Z	-103.717	1
78	M37	Mx	0	1
79	MP1A	X	-39.856	.5
80	MP1A	Z	-69.033	.5
81	MP1A	Mx	.02	.5
82	MP1A	X	-39.856	5
83	MP1A	Z	-69.033	5
84	MP1A	Mx	.02	5
85	MP1C	X	-63.63	.5
86	MP1C	Z	-110.21	.5
87	MP1C	Mx	-.064	.5
88	MP1C	X	-63.63	5
89	MP1C	Z	-110.21	5
90	MP1C	Mx	-.064	5
91	MP4A	X	-39.856	.5
92	MP4A	Z	-69.033	.5
93	MP4A	Mx	.02	.5
94	MP4A	X	-39.856	5
95	MP4A	Z	-69.033	5
96	MP4A	Mx	.02	5
97	MP4C	X	-63.63	.5
98	MP4C	Z	-110.21	.5
99	MP4C	Mx	-.064	.5
100	MP4C	X	-63.63	5
101	MP4C	Z	-110.21	5
102	MP4C	Mx	-.064	5
103	MP1B	X	-67.671	.5
104	MP1B	Z	-117.21	.5
105	MP1B	Mx	.043	.5
106	MP1B	X	-67.671	5
107	MP1B	Z	-117.21	5
108	MP1B	Mx	.043	5
109	MP4B	X	-67.671	.5
110	MP4B	Z	-117.21	.5
111	MP4B	Mx	.043	.5
112	MP4B	X	-67.671	5
113	MP4B	Z	-117.21	5
114	MP4B	Mx	.043	5





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2B	X	0	3
59	MP2B	Z	-10.057	3
60	MP2B	Mx	-.005	3
61	MP2C	X	0	3
62	MP2C	Z	-10.582	3
63	MP2C	Mx	.005	3
64	MP3A	X	0	3
65	MP3A	Z	-13.543	3
66	MP3A	Mx	0	3
67	MP3B	X	0	3
68	MP3B	Z	-8.733	3
69	MP3B	Mx	-.004	3
70	MP3C	X	0	3
71	MP3C	Z	-9.457	3
72	MP3C	Mx	.004	3
73	M35	X	0	1
74	M35	Z	-25.758	1
75	M35	Mx	0	1
76	M37	X	0	1
77	M37	Z	-25.758	1
78	M37	Mx	0	1
79	MP1A	X	0	.5
80	MP1A	Z	-15.279	.5
81	MP1A	Mx	0	.5
82	MP1A	X	0	5
83	MP1A	Z	-15.279	5
84	MP1A	Mx	0	5
85	MP1C	X	0	.5
86	MP1C	Z	-24.543	.5
87	MP1C	Mx	-.011	.5
88	MP1C	X	0	5
89	MP1C	Z	-24.543	5
90	MP1C	Mx	-.011	5
91	MP4A	X	0	.5
92	MP4A	Z	-15.279	.5
93	MP4A	Mx	0	.5
94	MP4A	X	0	5
95	MP4A	Z	-15.279	5
96	MP4A	Mx	0	5
97	MP4C	X	0	.5
98	MP4C	Z	-24.543	.5
99	MP4C	Mx	-.011	.5
100	MP4C	X	0	5
101	MP4C	Z	-24.543	5
102	MP4C	Mx	-.011	5
103	MP1B	X	0	.5
104	MP1B	Z	-27.821	.5
105	MP1B	Mx	.013	.5
106	MP1B	X	0	5
107	MP1B	Z	-27.821	5
108	MP1B	Mx	.013	5
109	MP4B	X	0	.5
110	MP4B	Z	-27.821	.5
111	MP4B	Mx	.013	.5
112	MP4B	X	0	5
113	MP4B	Z	-27.821	5
114	MP4B	Mx	.013	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	12.052	.5
2	MP2A	Z	-20.874	.5
3	MP2A	Mx	.004	.5
4	MP2A	X	12.052	5
5	MP2A	Z	-20.874	5
6	MP2A	Mx	.004	5
7	MP2B	X	9.263	.5
8	MP2B	Z	-16.044	.5
9	MP2B	Mx	.011	.5
10	MP2B	X	9.263	5
11	MP2B	Z	-16.044	5
12	MP2B	Mx	.011	5
13	MP2C	X	9.263	.5
14	MP2C	Z	-16.044	.5
15	MP2C	Mx	.011	.5
16	MP2C	X	9.263	5
17	MP2C	Z	-16.044	5
18	MP2C	Mx	.011	5
19	MP2A	X	12.052	.5
20	MP2A	Z	-20.874	.5
21	MP2A	Mx	-.016	.5
22	MP2A	X	12.052	5
23	MP2A	Z	-20.874	5
24	MP2A	Mx	-.016	5
25	MP2B	X	9.263	.5
26	MP2B	Z	-16.044	.5
27	MP2B	Mx	.008	.5
28	MP2B	X	9.263	5
29	MP2B	Z	-16.044	5
30	MP2B	Mx	.008	5
31	MP2C	X	9.263	.5
32	MP2C	Z	-16.044	.5
33	MP2C	Mx	.008	.5
34	MP2C	X	9.263	5
35	MP2C	Z	-16.044	5
36	MP2C	Mx	.008	5
37	MP3A	X	6.737	2.25
38	MP3A	Z	-11.669	2.25
39	MP3A	Mx	-.003	2.25
40	MP3A	X	6.737	3.25
41	MP3A	Z	-11.669	3.25
42	MP3A	Mx	-.003	3.25
43	MP3B	X	3.601	2.25
44	MP3B	Z	-6.237	2.25
45	MP3B	Mx	.004	2.25
46	MP3B	X	3.601	3.25
47	MP3B	Z	-6.237	3.25
48	MP3B	Mx	.004	3.25
49	MP3C	X	6.737	2.25
50	MP3C	Z	-11.669	2.25
51	MP3C	Mx	-.003	2.25
52	MP3C	X	6.737	3.25
53	MP3C	Z	-11.669	3.25
54	MP3C	Mx	-.003	3.25
55	MP2A	X	6.278	3
56	MP2A	Z	-10.874	3
57	MP2A	Mx	.003	3



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2B	X	4.857	3
59	MP2B	Z	-8.413	3
60	MP2B	Mx	-.005	3
61	MP2C	X	6.278	3
62	MP2C	Z	-10.874	3
63	MP2C	Mx	.003	3
64	MP3A	X	6.09	3
65	MP3A	Z	-10.549	3
66	MP3A	Mx	.003	3
67	MP3B	X	4.13	3
68	MP3B	Z	-7.153	3
69	MP3B	Mx	-.004	3
70	MP3C	X	6.09	3
71	MP3C	Z	-10.549	3
72	MP3C	Mx	.003	3
73	M35	X	11.452	1
74	M35	Z	-19.836	1
75	M35	Mx	0	1
76	M37	X	11.452	1
77	M37	Z	-19.836	1
78	M37	Mx	0	1
79	MP1A	X	9.183	.5
80	MP1A	Z	-15.906	.5
81	MP1A	Mx	-.005	.5
82	MP1A	X	9.183	5
83	MP1A	Z	-15.906	5
84	MP1A	Mx	-.005	5
85	MP1C	X	9.183	.5
86	MP1C	Z	-15.906	.5
87	MP1C	Mx	-.005	.5
88	MP1C	X	9.183	5
89	MP1C	Z	-15.906	5
90	MP1C	Mx	-.005	5
91	MP4A	X	9.183	.5
92	MP4A	Z	-15.906	.5
93	MP4A	Mx	-.005	.5
94	MP4A	X	9.183	5
95	MP4A	Z	-15.906	5
96	MP4A	Mx	-.005	5
97	MP4C	X	9.183	.5
98	MP4C	Z	-15.906	.5
99	MP4C	Mx	-.005	.5
100	MP4C	X	9.183	5
101	MP4C	Z	-15.906	5
102	MP4C	Mx	-.005	5
103	MP1B	X	13.782	.5
104	MP1B	Z	-23.871	.5
105	MP1B	Mx	.014	.5
106	MP1B	X	13.782	5
107	MP1B	Z	-23.871	5
108	MP1B	Mx	.014	5
109	MP4B	X	13.782	.5
110	MP4B	Z	-23.871	.5
111	MP4B	Mx	.014	.5
112	MP4B	X	13.782	5
113	MP4B	Z	-23.871	5
114	MP4B	Mx	.014	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	17.519	.5
2	MP2A	Z	-10.115	.5
3	MP2A	Mx	-.004	.5
4	MP2A	X	17.519	5
5	MP2A	Z	-10.115	5
6	MP2A	Mx	-.004	5
7	MP2B	X	18.614	.5
8	MP2B	Z	-10.747	.5
9	MP2B	Mx	.015	.5
10	MP2B	X	18.614	5
11	MP2B	Z	-10.747	5
12	MP2B	Mx	.015	5
13	MP2C	X	18.614	.5
14	MP2C	Z	-10.747	.5
15	MP2C	Mx	.015	.5
16	MP2C	X	18.614	5
17	MP2C	Z	-10.747	5
18	MP2C	Mx	.015	5
19	MP2A	X	17.519	.5
20	MP2A	Z	-10.115	.5
21	MP2A	Mx	-.014	.5
22	MP2A	X	17.519	5
23	MP2A	Z	-10.115	5
24	MP2A	Mx	-.014	5
25	MP2B	X	18.614	.5
26	MP2B	Z	-10.747	.5
27	MP2B	Mx	.001	.5
28	MP2B	X	18.614	5
29	MP2B	Z	-10.747	5
30	MP2B	Mx	.001	5
31	MP2C	X	18.614	.5
32	MP2C	Z	-10.747	.5
33	MP2C	Mx	.001	.5
34	MP2C	X	18.614	5
35	MP2C	Z	-10.747	5
36	MP2C	Mx	.001	5
37	MP3A	X	7.896	2.25
38	MP3A	Z	-4.559	2.25
39	MP3A	Mx	-.004	2.25
40	MP3A	X	7.896	3.25
41	MP3A	Z	-4.559	3.25
42	MP3A	Mx	-.004	3.25
43	MP3B	X	9.127	2.25
44	MP3B	Z	-5.27	2.25
45	MP3B	Mx	.004	2.25
46	MP3B	X	9.127	3.25
47	MP3B	Z	-5.27	3.25
48	MP3B	Mx	.004	3.25
49	MP3C	X	13.556	2.25
50	MP3C	Z	-7.826	2.25
51	MP3C	Mx	0	2.25
52	MP3C	X	13.556	3.25
53	MP3C	Z	-7.826	3.25
54	MP3C	Mx	0	3.25
55	MP2A	X	9.164	3
56	MP2A	Z	-5.291	3
57	MP2A	Mx	.005	3



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2B	X	9.722	3
59	MP2B	Z	-5.613	3
60	MP2B	Mx	-.004	3
61	MP2C	X	11.728	3
62	MP2C	Z	-6.771	3
63	MP2C	Mx	0	3
64	MP3A	X	8.19	3
65	MP3A	Z	-4.729	3
66	MP3A	Mx	.004	3
67	MP3B	X	8.96	3
68	MP3B	Z	-5.173	3
69	MP3B	Mx	-.004	3
70	MP3C	X	11.728	3
71	MP3C	Z	-6.771	3
72	MP3C	Mx	0	3
73	M35	X	18.6	1
74	M35	Z	-10.739	1
75	M35	Mx	0	1
76	M37	X	18.6	1
77	M37	Z	-10.739	1
78	M37	Mx	0	1
79	MP1A	X	21.255	.5
80	MP1A	Z	-12.271	.5
81	MP1A	Mx	-.011	.5
82	MP1A	X	21.255	5
83	MP1A	Z	-12.271	5
84	MP1A	Mx	-.011	5
85	MP1C	X	13.232	.5
86	MP1C	Z	-7.639	.5
87	MP1C	Mx	0	.5
88	MP1C	X	13.232	5
89	MP1C	Z	-7.639	5
90	MP1C	Mx	0	5
91	MP4A	X	21.255	.5
92	MP4A	Z	-12.271	.5
93	MP4A	Mx	-.011	.5
94	MP4A	X	21.255	5
95	MP4A	Z	-12.271	5
96	MP4A	Mx	-.011	5
97	MP4C	X	13.232	.5
98	MP4C	Z	-7.639	.5
99	MP4C	Mx	0	.5
100	MP4C	X	13.232	5
101	MP4C	Z	-7.639	5
102	MP4C	Mx	0	5
103	MP1B	X	24.856	.5
104	MP1B	Z	-14.35	.5
105	MP1B	Mx	.011	.5
106	MP1B	X	24.856	5
107	MP1B	Z	-14.35	5
108	MP1B	Mx	.011	5
109	MP4B	X	24.856	.5
110	MP4B	Z	-14.35	.5
111	MP4B	Mx	.011	.5
112	MP4B	X	24.856	5
113	MP4B	Z	-14.35	5
114	MP4B	Mx	.011	5





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	18.293	.5
2	MP2A	Z	0	.5
3	MP2A	Mx	-.009	.5
4	MP2A	X	18.293	5
5	MP2A	Z	0	5
6	MP2A	Mx	-.009	5
7	MP2B	X	25.134	.5
8	MP2B	Z	0	.5
9	MP2B	Mx	.016	.5
10	MP2B	X	25.134	5
11	MP2B	Z	0	5
12	MP2B	Mx	.016	5
13	MP2C	X	25.134	.5
14	MP2C	Z	0	.5
15	MP2C	Mx	.016	.5
16	MP2C	X	25.134	5
17	MP2C	Z	0	5
18	MP2C	Mx	.016	5
19	MP2A	X	18.293	.5
20	MP2A	Z	0	.5
21	MP2A	Mx	-.009	.5
22	MP2A	X	18.293	5
23	MP2A	Z	0	5
24	MP2A	Mx	-.009	5
25	MP2B	X	25.134	.5
26	MP2B	Z	0	.5
27	MP2B	Mx	-.008	.5
28	MP2B	X	25.134	5
29	MP2B	Z	0	5
30	MP2B	Mx	-.008	5
31	MP2C	X	25.134	.5
32	MP2C	Z	0	.5
33	MP2C	Mx	-.008	.5
34	MP2C	X	25.134	5
35	MP2C	Z	0	5
36	MP2C	Mx	-.008	5
37	MP3A	X	6.939	2.25
38	MP3A	Z	0	2.25
39	MP3A	Mx	-.003	2.25
40	MP3A	X	6.939	3.25
41	MP3A	Z	0	3.25
42	MP3A	Mx	-.003	3.25
43	MP3B	X	14.634	2.25
44	MP3B	Z	0	2.25
45	MP3B	Mx	.003	2.25
46	MP3B	X	14.634	3.25
47	MP3B	Z	0	3.25
48	MP3B	Mx	.003	3.25
49	MP3C	X	13.474	2.25
50	MP3C	Z	0	2.25
51	MP3C	Mx	.003	2.25
52	MP3C	X	13.474	3.25
53	MP3C	Z	0	3.25
54	MP3C	Mx	.003	3.25
55	MP2A	X	9.595	3
56	MP2A	Z	0	3
57	MP2A	Mx	.005	3



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2B	X	13.081	3
59	MP2B	Z	0	3
60	MP2B	Mx	-.002	3
61	MP2C	X	12.556	3
62	MP2C	Z	0	3
63	MP2C	Mx	-.003	3
64	MP3A	X	8.096	3
65	MP3A	Z	0	3
66	MP3A	Mx	.004	3
67	MP3B	X	12.905	3
68	MP3B	Z	0	3
69	MP3B	Mx	-.002	3
70	MP3C	X	12.181	3
71	MP3C	Z	0	3
72	MP3C	Mx	-.003	3
73	M35	X	22.904	1
74	M35	Z	0	1
75	M35	Mx	0	1
76	M37	X	22.904	1
77	M37	Z	0	1
78	M37	Mx	0	1
79	MP1A	X	27.631	.5
80	MP1A	Z	0	.5
81	MP1A	Mx	-.014	.5
82	MP1A	X	27.631	5
83	MP1A	Z	0	5
84	MP1A	Mx	-.014	5
85	MP1C	X	18.367	.5
86	MP1C	Z	0	.5
87	MP1C	Mx	.005	.5
88	MP1C	X	18.367	5
89	MP1C	Z	0	5
90	MP1C	Mx	.005	5
91	MP4A	X	27.631	.5
92	MP4A	Z	0	.5
93	MP4A	Mx	-.014	.5
94	MP4A	X	27.631	5
95	MP4A	Z	0	5
96	MP4A	Mx	-.014	5
97	MP4C	X	18.367	.5
98	MP4C	Z	0	.5
99	MP4C	Mx	.005	.5
100	MP4C	X	18.367	5
101	MP4C	Z	0	5
102	MP4C	Mx	.005	5
103	MP1B	X	30.096	.5
104	MP1B	Z	0	.5
105	MP1B	Mx	.005	.5
106	MP1B	X	30.096	5
107	MP1B	Z	0	5
108	MP1B	Mx	.005	5
109	MP4B	X	30.096	.5
110	MP4B	Z	0	.5
111	MP4B	Mx	.005	.5
112	MP4B	X	30.096	5
113	MP4B	Z	0	5
114	MP4B	Mx	.005	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	17.519	.5
2	MP2A	Z	10.115	.5
3	MP2A	Mx	-.014	.5
4	MP2A	X	17.519	5
5	MP2A	Z	10.115	5
6	MP2A	Mx	-.014	5
7	MP2B	X	22.349	.5
8	MP2B	Z	12.903	.5
9	MP2B	Mx	.01	.5
10	MP2B	X	22.349	5
11	MP2B	Z	12.903	5
12	MP2B	Mx	.01	5
13	MP2C	X	22.349	.5
14	MP2C	Z	12.903	.5
15	MP2C	Mx	.01	.5
16	MP2C	X	22.349	5
17	MP2C	Z	12.903	5
18	MP2C	Mx	.01	5
19	MP2A	X	17.519	.5
20	MP2A	Z	10.115	.5
21	MP2A	Mx	-.004	.5
22	MP2A	X	17.519	5
23	MP2A	Z	10.115	5
24	MP2A	Mx	-.004	5
25	MP2B	X	22.349	.5
26	MP2B	Z	12.903	.5
27	MP2B	Mx	-.015	.5
28	MP2B	X	22.349	5
29	MP2B	Z	12.903	5
30	MP2B	Mx	-.015	5
31	MP2C	X	22.349	.5
32	MP2C	Z	12.903	.5
33	MP2C	Mx	-.015	.5
34	MP2C	X	22.349	5
35	MP2C	Z	12.903	5
36	MP2C	Mx	-.015	5
37	MP3A	X	7.896	2.25
38	MP3A	Z	4.559	2.25
39	MP3A	Mx	-.004	2.25
40	MP3A	X	7.896	3.25
41	MP3A	Z	4.559	3.25
42	MP3A	Mx	-.004	3.25
43	MP3B	X	13.328	2.25
44	MP3B	Z	7.695	2.25
45	MP3B	Mx	-.001	2.25
46	MP3B	X	13.328	3.25
47	MP3B	Z	7.695	3.25
48	MP3B	Mx	-.001	3.25
49	MP3C	X	7.896	2.25
50	MP3C	Z	4.559	2.25
51	MP3C	Mx	.004	2.25
52	MP3C	X	7.896	3.25
53	MP3C	Z	4.559	3.25
54	MP3C	Mx	.004	3.25
55	MP2A	X	9.164	3
56	MP2A	Z	5.291	3
57	MP2A	Mx	.005	3



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2B	X	11.625	3
59	MP2B	Z	6.712	3
60	MP2B	Mx	.001	3
61	MP2C	X	9.164	3
62	MP2C	Z	5.291	3
63	MP2C	Mx	-.005	3
64	MP3A	X	8.19	3
65	MP3A	Z	4.729	3
66	MP3A	Mx	.004	3
67	MP3B	X	11.586	3
68	MP3B	Z	6.689	3
69	MP3B	Mx	.001	3
70	MP3C	X	8.19	3
71	MP3C	Z	4.729	3
72	MP3C	Mx	-.004	3
73	M35	X	22.307	1
74	M35	Z	12.879	1
75	M35	Mx	0	1
76	M37	X	22.307	1
77	M37	Z	12.879	1
78	M37	Mx	0	1
79	MP1A	X	21.255	.5
80	MP1A	Z	12.271	.5
81	MP1A	Mx	-.011	.5
82	MP1A	X	21.255	5
83	MP1A	Z	12.271	5
84	MP1A	Mx	-.011	5
85	MP1C	X	21.255	.5
86	MP1C	Z	12.271	.5
87	MP1C	Mx	.011	.5
88	MP1C	X	21.255	5
89	MP1C	Z	12.271	5
90	MP1C	Mx	.011	5
91	MP4A	X	21.255	.5
92	MP4A	Z	12.271	.5
93	MP4A	Mx	-.011	.5
94	MP4A	X	21.255	5
95	MP4A	Z	12.271	5
96	MP4A	Mx	-.011	5
97	MP4C	X	21.255	.5
98	MP4C	Z	12.271	.5
99	MP4C	Mx	.011	.5
100	MP4C	X	21.255	5
101	MP4C	Z	12.271	5
102	MP4C	Mx	.011	5
103	MP1B	X	26.287	.5
104	MP1B	Z	15.177	.5
105	MP1B	Mx	-.003	.5
106	MP1B	X	26.287	5
107	MP1B	Z	15.177	5
108	MP1B	Mx	-.003	5
109	MP4B	X	26.287	.5
110	MP4B	Z	15.177	.5
111	MP4B	Mx	-.003	.5
112	MP4B	X	26.287	5
113	MP4B	Z	15.177	5
114	MP4B	Mx	-.003	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	12.052	.5
2	MP2A	Z	20.874	.5
3	MP2A	Mx	-.016	.5
4	MP2A	X	12.052	5
5	MP2A	Z	20.874	5
6	MP2A	Mx	-.016	5
7	MP2B	X	11.42	.5
8	MP2B	Z	19.779	.5
9	MP2B	Mx	.001	.5
10	MP2B	X	11.42	5
11	MP2B	Z	19.779	5
12	MP2B	Mx	.001	5
13	MP2C	X	11.42	.5
14	MP2C	Z	19.779	.5
15	MP2C	Mx	.001	.5
16	MP2C	X	11.42	5
17	MP2C	Z	19.779	5
18	MP2C	Mx	.001	5
19	MP2A	X	12.052	.5
20	MP2A	Z	20.874	.5
21	MP2A	Mx	.004	.5
22	MP2A	X	12.052	5
23	MP2A	Z	20.874	5
24	MP2A	Mx	.004	5
25	MP2B	X	11.42	.5
26	MP2B	Z	19.779	.5
27	MP2B	Mx	-.016	.5
28	MP2B	X	11.42	5
29	MP2B	Z	19.779	5
30	MP2B	Mx	-.016	5
31	MP2C	X	11.42	.5
32	MP2C	Z	19.779	.5
33	MP2C	Mx	-.016	.5
34	MP2C	X	11.42	5
35	MP2C	Z	19.779	5
36	MP2C	Mx	-.016	5
37	MP3A	X	6.737	2.25
38	MP3A	Z	11.669	2.25
39	MP3A	Mx	-.003	2.25
40	MP3A	X	6.737	3.25
41	MP3A	Z	11.669	3.25
42	MP3A	Mx	-.003	3.25
43	MP3B	X	6.026	2.25
44	MP3B	Z	10.438	2.25
45	MP3B	Mx	-.004	2.25
46	MP3B	X	6.026	3.25
47	MP3B	Z	10.438	3.25
48	MP3B	Mx	-.004	3.25
49	MP3C	X	3.47	2.25
50	MP3C	Z	6.009	2.25
51	MP3C	Mx	.003	2.25
52	MP3C	X	3.47	3.25
53	MP3C	Z	6.009	3.25
54	MP3C	Mx	.003	3.25
55	MP2A	X	6.278	3
56	MP2A	Z	10.874	3
57	MP2A	Mx	.003	3



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2B	X	5.956	3
59	MP2B	Z	10.316	3
60	MP2B	Mx	.004	3
61	MP2C	X	4.798	3
62	MP2C	Z	8.31	3
63	MP2C	Mx	-.005	3
64	MP3A	X	6.09	3
65	MP3A	Z	10.549	3
66	MP3A	Mx	.003	3
67	MP3B	X	5.646	3
68	MP3B	Z	9.779	3
69	MP3B	Mx	.004	3
70	MP3C	X	4.048	3
71	MP3C	Z	7.011	3
72	MP3C	Mx	-.004	3
73	M35	X	13.592	1
74	M35	Z	23.542	1
75	M35	Mx	0	1
76	M37	X	13.592	1
77	M37	Z	23.542	1
78	M37	Mx	0	1
79	MP1A	X	9.183	.5
80	MP1A	Z	15.906	.5
81	MP1A	Mx	-.005	.5
82	MP1A	X	9.183	5
83	MP1A	Z	15.906	5
84	MP1A	Mx	-.005	5
85	MP1C	X	13.815	.5
86	MP1C	Z	23.929	.5
87	MP1C	Mx	.014	.5
88	MP1C	X	13.815	5
89	MP1C	Z	23.929	5
90	MP1C	Mx	.014	5
91	MP4A	X	9.183	.5
92	MP4A	Z	15.906	.5
93	MP4A	Mx	-.005	.5
94	MP4A	X	9.183	5
95	MP4A	Z	15.906	5
96	MP4A	Mx	-.005	5
97	MP4C	X	13.815	.5
98	MP4C	Z	23.929	.5
99	MP4C	Mx	.014	.5
100	MP4C	X	13.815	5
101	MP4C	Z	23.929	5
102	MP4C	Mx	.014	5
103	MP1B	X	14.608	.5
104	MP1B	Z	25.302	.5
105	MP1B	Mx	-.009	.5
106	MP1B	X	14.608	5
107	MP1B	Z	25.302	5
108	MP1B	Mx	-.009	5
109	MP4B	X	14.608	.5
110	MP4B	Z	25.302	.5
111	MP4B	Mx	-.009	.5
112	MP4B	X	14.608	5
113	MP4B	Z	25.302	5
114	MP4B	Mx	-.009	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	0	.5
2	MP2A	Z	26.04	.5
3	MP2A	Mx	-.013	.5
4	MP2A	X	0	5
5	MP2A	Z	26.04	5
6	MP2A	Mx	-.013	5
7	MP2B	X	0	.5
8	MP2B	Z	19.199	.5
9	MP2B	Mx	-.006	.5
10	MP2B	X	0	5
11	MP2B	Z	19.199	5
12	MP2B	Mx	-.006	5
13	MP2C	X	0	.5
14	MP2C	Z	19.199	.5
15	MP2C	Mx	-.006	.5
16	MP2C	X	0	5
17	MP2C	Z	19.199	5
18	MP2C	Mx	-.006	5
19	MP2A	X	0	.5
20	MP2A	Z	26.04	.5
21	MP2A	Mx	.013	.5
22	MP2A	X	0	5
23	MP2A	Z	26.04	5
24	MP2A	Mx	.013	5
25	MP2B	X	0	.5
26	MP2B	Z	19.199	.5
27	MP2B	Mx	-.012	.5
28	MP2B	X	0	5
29	MP2B	Z	19.199	5
30	MP2B	Mx	-.012	5
31	MP2C	X	0	.5
32	MP2C	Z	19.199	.5
33	MP2C	Mx	-.012	.5
34	MP2C	X	0	5
35	MP2C	Z	19.199	5
36	MP2C	Mx	-.012	5
37	MP3A	X	0	2.25
38	MP3A	Z	15.653	2.25
39	MP3A	Mx	0	2.25
40	MP3A	X	0	3.25
41	MP3A	Z	15.653	3.25
42	MP3A	Mx	0	3.25
43	MP3B	X	0	2.25
44	MP3B	Z	7.958	2.25
45	MP3B	Mx	-.004	2.25
46	MP3B	X	0	3.25
47	MP3B	Z	7.958	3.25
48	MP3B	Mx	-.004	3.25
49	MP3C	X	0	2.25
50	MP3C	Z	9.118	2.25
51	MP3C	Mx	.004	2.25
52	MP3C	X	0	3.25
53	MP3C	Z	9.118	3.25
54	MP3C	Mx	.004	3.25
55	MP2A	X	0	3
56	MP2A	Z	13.543	3
57	MP2A	Mx	0	3



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2B	X	0	3
59	MP2B	Z	10.057	3
60	MP2B	Mx	.005	3
61	MP2C	X	0	3
62	MP2C	Z	10.582	3
63	MP2C	Mx	-.005	3
64	MP3A	X	0	3
65	MP3A	Z	13.543	3
66	MP3A	Mx	0	3
67	MP3B	X	0	3
68	MP3B	Z	8.733	3
69	MP3B	Mx	.004	3
70	MP3C	X	0	3
71	MP3C	Z	9.457	3
72	MP3C	Mx	-.004	3
73	M35	X	0	1
74	M35	Z	25.758	1
75	M35	Mx	0	1
76	M37	X	0	1
77	M37	Z	25.758	1
78	M37	Mx	0	1
79	MP1A	X	0	.5
80	MP1A	Z	15.279	.5
81	MP1A	Mx	0	.5
82	MP1A	X	0	5
83	MP1A	Z	15.279	5
84	MP1A	Mx	0	5
85	MP1C	X	0	.5
86	MP1C	Z	24.543	.5
87	MP1C	Mx	.011	.5
88	MP1C	X	0	5
89	MP1C	Z	24.543	5
90	MP1C	Mx	.011	5
91	MP4A	X	0	.5
92	MP4A	Z	15.279	.5
93	MP4A	Mx	0	.5
94	MP4A	X	0	5
95	MP4A	Z	15.279	5
96	MP4A	Mx	0	5
97	MP4C	X	0	.5
98	MP4C	Z	24.543	.5
99	MP4C	Mx	.011	.5
100	MP4C	X	0	5
101	MP4C	Z	24.543	5
102	MP4C	Mx	.011	5
103	MP1B	X	0	.5
104	MP1B	Z	27.821	.5
105	MP1B	Mx	-.013	.5
106	MP1B	X	0	5
107	MP1B	Z	27.821	5
108	MP1B	Mx	-.013	5
109	MP4B	X	0	.5
110	MP4B	Z	27.821	.5
111	MP4B	Mx	-.013	.5
112	MP4B	X	0	5
113	MP4B	Z	27.821	5
114	MP4B	Mx	-.013	5





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-12.052	.5
2	MP2A	Z	20.874	.5
3	MP2A	Mx	-.004	.5
4	MP2A	X	-12.052	5
5	MP2A	Z	20.874	5
6	MP2A	Mx	-.004	5
7	MP2B	X	-9.263	.5
8	MP2B	Z	16.044	.5
9	MP2B	Mx	-.011	.5
10	MP2B	X	-9.263	5
11	MP2B	Z	16.044	5
12	MP2B	Mx	-.011	5
13	MP2C	X	-9.263	.5
14	MP2C	Z	16.044	.5
15	MP2C	Mx	-.011	.5
16	MP2C	X	-9.263	5
17	MP2C	Z	16.044	5
18	MP2C	Mx	-.011	5
19	MP2A	X	-12.052	.5
20	MP2A	Z	20.874	.5
21	MP2A	Mx	.016	.5
22	MP2A	X	-12.052	5
23	MP2A	Z	20.874	5
24	MP2A	Mx	.016	5
25	MP2B	X	-9.263	.5
26	MP2B	Z	16.044	.5
27	MP2B	Mx	-.008	.5
28	MP2B	X	-9.263	5
29	MP2B	Z	16.044	5
30	MP2B	Mx	-.008	5
31	MP2C	X	-9.263	.5
32	MP2C	Z	16.044	.5
33	MP2C	Mx	-.008	.5
34	MP2C	X	-9.263	5
35	MP2C	Z	16.044	5
36	MP2C	Mx	-.008	5
37	MP3A	X	-6.737	2.25
38	MP3A	Z	11.669	2.25
39	MP3A	Mx	.003	2.25
40	MP3A	X	-6.737	3.25
41	MP3A	Z	11.669	3.25
42	MP3A	Mx	.003	3.25
43	MP3B	X	-3.601	2.25
44	MP3B	Z	6.237	2.25
45	MP3B	Mx	-.004	2.25
46	MP3B	X	-3.601	3.25
47	MP3B	Z	6.237	3.25
48	MP3B	Mx	-.004	3.25
49	MP3C	X	-6.737	2.25
50	MP3C	Z	11.669	2.25
51	MP3C	Mx	.003	2.25
52	MP3C	X	-6.737	3.25
53	MP3C	Z	11.669	3.25
54	MP3C	Mx	.003	3.25
55	MP2A	X	-6.278	3
56	MP2A	Z	10.874	3
57	MP2A	Mx	-.003	3



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2B	X	-4.857	3
59	MP2B	Z	8.413	3
60	MP2B	Mx	.005	3
61	MP2C	X	-6.278	3
62	MP2C	Z	10.874	3
63	MP2C	Mx	-.003	3
64	MP3A	X	-6.09	3
65	MP3A	Z	10.549	3
66	MP3A	Mx	-.003	3
67	MP3B	X	-4.13	3
68	MP3B	Z	7.153	3
69	MP3B	Mx	.004	3
70	MP3C	X	-6.09	3
71	MP3C	Z	10.549	3
72	MP3C	Mx	-.003	3
73	M35	X	-11.452	1
74	M35	Z	19.836	1
75	M35	Mx	0	1
76	M37	X	-11.452	1
77	M37	Z	19.836	1
78	M37	Mx	0	1
79	MP1A	X	-9.183	.5
80	MP1A	Z	15.906	.5
81	MP1A	Mx	.005	.5
82	MP1A	X	-9.183	5
83	MP1A	Z	15.906	5
84	MP1A	Mx	.005	5
85	MP1C	X	-9.183	.5
86	MP1C	Z	15.906	.5
87	MP1C	Mx	.005	.5
88	MP1C	X	-9.183	5
89	MP1C	Z	15.906	5
90	MP1C	Mx	.005	5
91	MP4A	X	-9.183	.5
92	MP4A	Z	15.906	.5
93	MP4A	Mx	.005	.5
94	MP4A	X	-9.183	5
95	MP4A	Z	15.906	5
96	MP4A	Mx	.005	5
97	MP4C	X	-9.183	.5
98	MP4C	Z	15.906	.5
99	MP4C	Mx	.005	.5
100	MP4C	X	-9.183	5
101	MP4C	Z	15.906	5
102	MP4C	Mx	.005	5
103	MP1B	X	-13.782	.5
104	MP1B	Z	23.871	.5
105	MP1B	Mx	-.014	.5
106	MP1B	X	-13.782	5
107	MP1B	Z	23.871	5
108	MP1B	Mx	-.014	5
109	MP4B	X	-13.782	.5
110	MP4B	Z	23.871	.5
111	MP4B	Mx	-.014	.5
112	MP4B	X	-13.782	5
113	MP4B	Z	23.871	5
114	MP4B	Mx	-.014	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-17.519	.5
2	MP2A	Z	10.115	.5
3	MP2A	Mx	.004	.5
4	MP2A	X	-17.519	5
5	MP2A	Z	10.115	5
6	MP2A	Mx	.004	5
7	MP2B	X	-18.614	.5
8	MP2B	Z	10.747	.5
9	MP2B	Mx	-.015	.5
10	MP2B	X	-18.614	5
11	MP2B	Z	10.747	5
12	MP2B	Mx	-.015	5
13	MP2C	X	-18.614	.5
14	MP2C	Z	10.747	.5
15	MP2C	Mx	-.015	.5
16	MP2C	X	-18.614	5
17	MP2C	Z	10.747	5
18	MP2C	Mx	-.015	5
19	MP2A	X	-17.519	.5
20	MP2A	Z	10.115	.5
21	MP2A	Mx	.014	.5
22	MP2A	X	-17.519	5
23	MP2A	Z	10.115	5
24	MP2A	Mx	.014	5
25	MP2B	X	-18.614	.5
26	MP2B	Z	10.747	.5
27	MP2B	Mx	-.001	.5
28	MP2B	X	-18.614	5
29	MP2B	Z	10.747	5
30	MP2B	Mx	-.001	5
31	MP2C	X	-18.614	.5
32	MP2C	Z	10.747	.5
33	MP2C	Mx	-.001	.5
34	MP2C	X	-18.614	5
35	MP2C	Z	10.747	5
36	MP2C	Mx	-.001	5
37	MP3A	X	-7.896	2.25
38	MP3A	Z	4.559	2.25
39	MP3A	Mx	.004	2.25
40	MP3A	X	-7.896	3.25
41	MP3A	Z	4.559	3.25
42	MP3A	Mx	.004	3.25
43	MP3B	X	-9.127	2.25
44	MP3B	Z	5.27	2.25
45	MP3B	Mx	-.004	2.25
46	MP3B	X	-9.127	3.25
47	MP3B	Z	5.27	3.25
48	MP3B	Mx	-.004	3.25
49	MP3C	X	-13.556	2.25
50	MP3C	Z	7.826	2.25
51	MP3C	Mx	0	2.25
52	MP3C	X	-13.556	3.25
53	MP3C	Z	7.826	3.25
54	MP3C	Mx	0	3.25
55	MP2A	X	-9.164	3
56	MP2A	Z	5.291	3
57	MP2A	Mx	-.005	3



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2B	X	-9.722	3
59	MP2B	Z	5.613	3
60	MP2B	Mx	.004	3
61	MP2C	X	-11.728	3
62	MP2C	Z	6.771	3
63	MP2C	Mx	0	3
64	MP3A	X	-8.19	3
65	MP3A	Z	4.729	3
66	MP3A	Mx	-.004	3
67	MP3B	X	-8.96	3
68	MP3B	Z	5.173	3
69	MP3B	Mx	.004	3
70	MP3C	X	-11.728	3
71	MP3C	Z	6.771	3
72	MP3C	Mx	0	3
73	M35	X	-18.6	1
74	M35	Z	10.739	1
75	M35	Mx	0	1
76	M37	X	-18.6	1
77	M37	Z	10.739	1
78	M37	Mx	0	1
79	MP1A	X	-21.255	.5
80	MP1A	Z	12.271	.5
81	MP1A	Mx	.011	.5
82	MP1A	X	-21.255	5
83	MP1A	Z	12.271	5
84	MP1A	Mx	.011	5
85	MP1C	X	-13.232	.5
86	MP1C	Z	7.639	.5
87	MP1C	Mx	0	.5
88	MP1C	X	-13.232	5
89	MP1C	Z	7.639	5
90	MP1C	Mx	0	5
91	MP4A	X	-21.255	.5
92	MP4A	Z	12.271	.5
93	MP4A	Mx	.011	.5
94	MP4A	X	-21.255	5
95	MP4A	Z	12.271	5
96	MP4A	Mx	.011	5
97	MP4C	X	-13.232	.5
98	MP4C	Z	7.639	.5
99	MP4C	Mx	0	.5
100	MP4C	X	-13.232	5
101	MP4C	Z	7.639	5
102	MP4C	Mx	0	5
103	MP1B	X	-24.856	.5
104	MP1B	Z	14.35	.5
105	MP1B	Mx	-.011	.5
106	MP1B	X	-24.856	5
107	MP1B	Z	14.35	5
108	MP1B	Mx	-.011	5
109	MP4B	X	-24.856	.5
110	MP4B	Z	14.35	.5
111	MP4B	Mx	-.011	.5
112	MP4B	X	-24.856	5
113	MP4B	Z	14.35	5
114	MP4B	Mx	-.011	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-18.293	.5
2	MP2A	Z	0	.5
3	MP2A	Mx	.009	.5
4	MP2A	X	-18.293	5
5	MP2A	Z	0	5
6	MP2A	Mx	.009	5
7	MP2B	X	-25.134	.5
8	MP2B	Z	0	.5
9	MP2B	Mx	-.016	.5
10	MP2B	X	-25.134	5
11	MP2B	Z	0	5
12	MP2B	Mx	-.016	5
13	MP2C	X	-25.134	.5
14	MP2C	Z	0	.5
15	MP2C	Mx	-.016	.5
16	MP2C	X	-25.134	5
17	MP2C	Z	0	5
18	MP2C	Mx	-.016	5
19	MP2A	X	-18.293	.5
20	MP2A	Z	0	.5
21	MP2A	Mx	.009	.5
22	MP2A	X	-18.293	5
23	MP2A	Z	0	5
24	MP2A	Mx	.009	5
25	MP2B	X	-25.134	.5
26	MP2B	Z	0	.5
27	MP2B	Mx	.008	.5
28	MP2B	X	-25.134	5
29	MP2B	Z	0	5
30	MP2B	Mx	.008	5
31	MP2C	X	-25.134	.5
32	MP2C	Z	0	.5
33	MP2C	Mx	.008	.5
34	MP2C	X	-25.134	5
35	MP2C	Z	0	5
36	MP2C	Mx	.008	5
37	MP3A	X	-6.939	2.25
38	MP3A	Z	0	2.25
39	MP3A	Mx	.003	2.25
40	MP3A	X	-6.939	3.25
41	MP3A	Z	0	3.25
42	MP3A	Mx	.003	3.25
43	MP3B	X	-14.634	2.25
44	MP3B	Z	0	2.25
45	MP3B	Mx	-.003	2.25
46	MP3B	X	-14.634	3.25
47	MP3B	Z	0	3.25
48	MP3B	Mx	-.003	3.25
49	MP3C	X	-13.474	2.25
50	MP3C	Z	0	2.25
51	MP3C	Mx	-.003	2.25
52	MP3C	X	-13.474	3.25
53	MP3C	Z	0	3.25
54	MP3C	Mx	-.003	3.25
55	MP2A	X	-9.595	3
56	MP2A	Z	0	3
57	MP2A	Mx	-.005	3



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2B	X	-13.081	3
59	MP2B	Z	0	3
60	MP2B	Mx	.002	3
61	MP2C	X	-12.556	3
62	MP2C	Z	0	3
63	MP2C	Mx	.003	3
64	MP3A	X	-8.096	3
65	MP3A	Z	0	3
66	MP3A	Mx	-.004	3
67	MP3B	X	-12.905	3
68	MP3B	Z	0	3
69	MP3B	Mx	.002	3
70	MP3C	X	-12.181	3
71	MP3C	Z	0	3
72	MP3C	Mx	.003	3
73	M35	X	-22.904	1
74	M35	Z	0	1
75	M35	Mx	0	1
76	M37	X	-22.904	1
77	M37	Z	0	1
78	M37	Mx	0	1
79	MP1A	X	-27.631	.5
80	MP1A	Z	0	.5
81	MP1A	Mx	.014	.5
82	MP1A	X	-27.631	5
83	MP1A	Z	0	5
84	MP1A	Mx	.014	5
85	MP1C	X	-18.367	.5
86	MP1C	Z	0	.5
87	MP1C	Mx	-.005	.5
88	MP1C	X	-18.367	5
89	MP1C	Z	0	5
90	MP1C	Mx	-.005	5
91	MP4A	X	-27.631	.5
92	MP4A	Z	0	.5
93	MP4A	Mx	.014	.5
94	MP4A	X	-27.631	5
95	MP4A	Z	0	5
96	MP4A	Mx	.014	5
97	MP4C	X	-18.367	.5
98	MP4C	Z	0	.5
99	MP4C	Mx	-.005	.5
100	MP4C	X	-18.367	5
101	MP4C	Z	0	5
102	MP4C	Mx	-.005	5
103	MP1B	X	-30.096	.5
104	MP1B	Z	0	.5
105	MP1B	Mx	-.005	.5
106	MP1B	X	-30.096	5
107	MP1B	Z	0	5
108	MP1B	Mx	-.005	5
109	MP4B	X	-30.096	.5
110	MP4B	Z	0	.5
111	MP4B	Mx	-.005	.5
112	MP4B	X	-30.096	5
113	MP4B	Z	0	5
114	MP4B	Mx	-.005	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-17.519	.5
2	MP2A	Z	-10.115	.5
3	MP2A	Mx	.014	.5
4	MP2A	X	-17.519	5
5	MP2A	Z	-10.115	5
6	MP2A	Mx	.014	5
7	MP2B	X	-22.349	.5
8	MP2B	Z	-12.903	.5
9	MP2B	Mx	-.01	.5
10	MP2B	X	-22.349	5
11	MP2B	Z	-12.903	5
12	MP2B	Mx	-.01	5
13	MP2C	X	-22.349	.5
14	MP2C	Z	-12.903	.5
15	MP2C	Mx	-.01	.5
16	MP2C	X	-22.349	5
17	MP2C	Z	-12.903	5
18	MP2C	Mx	-.01	5
19	MP2A	X	-17.519	.5
20	MP2A	Z	-10.115	.5
21	MP2A	Mx	.004	.5
22	MP2A	X	-17.519	5
23	MP2A	Z	-10.115	5
24	MP2A	Mx	.004	5
25	MP2B	X	-22.349	.5
26	MP2B	Z	-12.903	.5
27	MP2B	Mx	.015	.5
28	MP2B	X	-22.349	5
29	MP2B	Z	-12.903	5
30	MP2B	Mx	.015	5
31	MP2C	X	-22.349	.5
32	MP2C	Z	-12.903	.5
33	MP2C	Mx	.015	.5
34	MP2C	X	-22.349	5
35	MP2C	Z	-12.903	5
36	MP2C	Mx	.015	5
37	MP3A	X	-7.896	2.25
38	MP3A	Z	-4.559	2.25
39	MP3A	Mx	.004	2.25
40	MP3A	X	-7.896	3.25
41	MP3A	Z	-4.559	3.25
42	MP3A	Mx	.004	3.25
43	MP3B	X	-13.328	2.25
44	MP3B	Z	-7.695	2.25
45	MP3B	Mx	.001	2.25
46	MP3B	X	-13.328	3.25
47	MP3B	Z	-7.695	3.25
48	MP3B	Mx	.001	3.25
49	MP3C	X	-7.896	2.25
50	MP3C	Z	-4.559	2.25
51	MP3C	Mx	-.004	2.25
52	MP3C	X	-7.896	3.25
53	MP3C	Z	-4.559	3.25
54	MP3C	Mx	-.004	3.25
55	MP2A	X	-9.164	3
56	MP2A	Z	-5.291	3
57	MP2A	Mx	-.005	3



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2B	X	-11.625	3
59	MP2B	Z	-6.712	3
60	MP2B	Mx	-.001	3
61	MP2C	X	-9.164	3
62	MP2C	Z	-5.291	3
63	MP2C	Mx	.005	3
64	MP3A	X	-8.19	3
65	MP3A	Z	-4.729	3
66	MP3A	Mx	-.004	3
67	MP3B	X	-11.586	3
68	MP3B	Z	-6.689	3
69	MP3B	Mx	-.001	3
70	MP3C	X	-8.19	3
71	MP3C	Z	-4.729	3
72	MP3C	Mx	.004	3
73	M35	X	-22.307	1
74	M35	Z	-12.879	1
75	M35	Mx	0	1
76	M37	X	-22.307	1
77	M37	Z	-12.879	1
78	M37	Mx	0	1
79	MP1A	X	-21.255	.5
80	MP1A	Z	-12.271	.5
81	MP1A	Mx	.011	.5
82	MP1A	X	-21.255	5
83	MP1A	Z	-12.271	5
84	MP1A	Mx	.011	5
85	MP1C	X	-21.255	.5
86	MP1C	Z	-12.271	.5
87	MP1C	Mx	-.011	.5
88	MP1C	X	-21.255	5
89	MP1C	Z	-12.271	5
90	MP1C	Mx	-.011	5
91	MP4A	X	-21.255	.5
92	MP4A	Z	-12.271	.5
93	MP4A	Mx	.011	.5
94	MP4A	X	-21.255	5
95	MP4A	Z	-12.271	5
96	MP4A	Mx	.011	5
97	MP4C	X	-21.255	.5
98	MP4C	Z	-12.271	.5
99	MP4C	Mx	-.011	.5
100	MP4C	X	-21.255	5
101	MP4C	Z	-12.271	5
102	MP4C	Mx	-.011	5
103	MP1B	X	-26.287	.5
104	MP1B	Z	-15.177	.5
105	MP1B	Mx	.003	.5
106	MP1B	X	-26.287	5
107	MP1B	Z	-15.177	5
108	MP1B	Mx	.003	5
109	MP4B	X	-26.287	.5
110	MP4B	Z	-15.177	.5
111	MP4B	Mx	.003	.5
112	MP4B	X	-26.287	5
113	MP4B	Z	-15.177	5
114	MP4B	Mx	.003	5





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-12.052	.5
2	MP2A	Z	-20.874	.5
3	MP2A	Mx	.016	.5
4	MP2A	X	-12.052	5
5	MP2A	Z	-20.874	5
6	MP2A	Mx	.016	5
7	MP2B	X	-11.42	.5
8	MP2B	Z	-19.779	.5
9	MP2B	Mx	-.001	.5
10	MP2B	X	-11.42	5
11	MP2B	Z	-19.779	5
12	MP2B	Mx	-.001	5
13	MP2C	X	-11.42	.5
14	MP2C	Z	-19.779	.5
15	MP2C	Mx	-.001	.5
16	MP2C	X	-11.42	5
17	MP2C	Z	-19.779	5
18	MP2C	Mx	-.001	5
19	MP2A	X	-12.052	.5
20	MP2A	Z	-20.874	.5
21	MP2A	Mx	-.004	.5
22	MP2A	X	-12.052	5
23	MP2A	Z	-20.874	5
24	MP2A	Mx	-.004	5
25	MP2B	X	-11.42	.5
26	MP2B	Z	-19.779	.5
27	MP2B	Mx	.016	.5
28	MP2B	X	-11.42	5
29	MP2B	Z	-19.779	5
30	MP2B	Mx	.016	5
31	MP2C	X	-11.42	.5
32	MP2C	Z	-19.779	.5
33	MP2C	Mx	.016	.5
34	MP2C	X	-11.42	5
35	MP2C	Z	-19.779	5
36	MP2C	Mx	.016	5
37	MP3A	X	-6.737	2.25
38	MP3A	Z	-11.669	2.25
39	MP3A	Mx	.003	2.25
40	MP3A	X	-6.737	3.25
41	MP3A	Z	-11.669	3.25
42	MP3A	Mx	.003	3.25
43	MP3B	X	-6.026	2.25
44	MP3B	Z	-10.438	2.25
45	MP3B	Mx	.004	2.25
46	MP3B	X	-6.026	3.25
47	MP3B	Z	-10.438	3.25
48	MP3B	Mx	.004	3.25
49	MP3C	X	-3.47	2.25
50	MP3C	Z	-6.009	2.25
51	MP3C	Mx	-.003	2.25
52	MP3C	X	-3.47	3.25
53	MP3C	Z	-6.009	3.25
54	MP3C	Mx	-.003	3.25
55	MP2A	X	-6.278	3
56	MP2A	Z	-10.874	3
57	MP2A	Mx	-.003	3



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2B	X	-5.956	3
59	MP2B	Z	-10.316	3
60	MP2B	Mx	-.004	3
61	MP2C	X	-4.798	3
62	MP2C	Z	-8.31	3
63	MP2C	Mx	.005	3
64	MP3A	X	-6.09	3
65	MP3A	Z	-10.549	3
66	MP3A	Mx	-.003	3
67	MP3B	X	-5.646	3
68	MP3B	Z	-9.779	3
69	MP3B	Mx	-.004	3
70	MP3C	X	-4.048	3
71	MP3C	Z	-7.011	3
72	MP3C	Mx	.004	3
73	M35	X	-13.592	1
74	M35	Z	-23.542	1
75	M35	Mx	0	1
76	M37	X	-13.592	1
77	M37	Z	-23.542	1
78	M37	Mx	0	1
79	MP1A	X	-9.183	.5
80	MP1A	Z	-15.906	.5
81	MP1A	Mx	.005	.5
82	MP1A	X	-9.183	5
83	MP1A	Z	-15.906	5
84	MP1A	Mx	.005	5
85	MP1C	X	-13.815	.5
86	MP1C	Z	-23.929	.5
87	MP1C	Mx	-.014	.5
88	MP1C	X	-13.815	5
89	MP1C	Z	-23.929	5
90	MP1C	Mx	-.014	5
91	MP4A	X	-9.183	.5
92	MP4A	Z	-15.906	.5
93	MP4A	Mx	.005	.5
94	MP4A	X	-9.183	5
95	MP4A	Z	-15.906	5
96	MP4A	Mx	.005	5
97	MP4C	X	-13.815	.5
98	MP4C	Z	-23.929	.5
99	MP4C	Mx	-.014	.5
100	MP4C	X	-13.815	5
101	MP4C	Z	-23.929	5
102	MP4C	Mx	-.014	5
103	MP1B	X	-14.608	.5
104	MP1B	Z	-25.302	.5
105	MP1B	Mx	.009	.5
106	MP1B	X	-14.608	5
107	MP1B	Z	-25.302	5
108	MP1B	Mx	.009	5
109	MP4B	X	-14.608	.5
110	MP4B	Z	-25.302	.5
111	MP4B	Mx	.009	.5
112	MP4B	X	-14.608	5
113	MP4B	Z	-25.302	5
114	MP4B	Mx	.009	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	0	.5
2	MP2A	Z	-8.11	.5
3	MP2A	Mx	.004	.5
4	MP2A	X	0	5
5	MP2A	Z	-8.11	5
6	MP2A	Mx	.004	5
7	MP2B	X	0	.5
8	MP2B	Z	-5.683	.5
9	MP2B	Mx	.002	.5
10	MP2B	X	0	5
11	MP2B	Z	-5.683	5
12	MP2B	Mx	.002	5
13	MP2C	X	0	.5
14	MP2C	Z	-5.683	.5
15	MP2C	Mx	.002	.5
16	MP2C	X	0	5
17	MP2C	Z	-5.683	5
18	MP2C	Mx	.002	5
19	MP2A	X	0	.5
20	MP2A	Z	-8.11	.5
21	MP2A	Mx	-.004	.5
22	MP2A	X	0	5
23	MP2A	Z	-8.11	5
24	MP2A	Mx	-.004	5
25	MP2B	X	0	.5
26	MP2B	Z	-5.683	.5
27	MP2B	Mx	.004	.5
28	MP2B	X	0	5
29	MP2B	Z	-5.683	5
30	MP2B	Mx	.004	5
31	MP2C	X	0	.5
32	MP2C	Z	-5.683	.5
33	MP2C	Mx	.004	.5
34	MP2C	X	0	5
35	MP2C	Z	-5.683	5
36	MP2C	Mx	.004	5
37	MP3A	X	0	2.25
38	MP3A	Z	-4.717	2.25
39	MP3A	Mx	0	2.25
40	MP3A	X	0	3.25
41	MP3A	Z	-4.717	3.25
42	MP3A	Mx	0	3.25
43	MP3B	X	0	2.25
44	MP3B	Z	-2.183	2.25
45	MP3B	Mx	.001	2.25
46	MP3B	X	0	3.25
47	MP3B	Z	-2.183	3.25
48	MP3B	Mx	.001	3.25
49	MP3C	X	0	2.25
50	MP3C	Z	-2.565	2.25
51	MP3C	Mx	-.001	2.25
52	MP3C	X	0	3.25
53	MP3C	Z	-2.565	3.25
54	MP3C	Mx	-.001	3.25
55	MP2A	X	0	3
56	MP2A	Z	-3.754	3
57	MP2A	Mx	0	3



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2B	X	0	3
59	MP2B	Z	-2.655	3
60	MP2B	Mx	-.001	3
61	MP2C	X	0	3
62	MP2C	Z	-2.82	3
63	MP2C	Mx	.001	3
64	MP3A	X	0	3
65	MP3A	Z	-3.754	3
66	MP3A	Mx	0	3
67	MP3B	X	0	3
68	MP3B	Z	-2.234	3
69	MP3B	Mx	-.001	3
70	MP3C	X	0	3
71	MP3C	Z	-2.463	3
72	MP3C	Mx	.001	3
73	M35	X	0	1
74	M35	Z	-7.667	1
75	M35	Mx	0	1
76	M37	X	0	1
77	M37	Z	-7.667	1
78	M37	Mx	0	1
79	MP1A	X	0	.5
80	MP1A	Z	-4.346	.5
81	MP1A	Mx	0	.5
82	MP1A	X	0	5
83	MP1A	Z	-4.346	5
84	MP1A	Mx	0	5
85	MP1C	X	0	.5
86	MP1C	Z	-7.582	.5
87	MP1C	Mx	-.003	.5
88	MP1C	X	0	5
89	MP1C	Z	-7.582	5
90	MP1C	Mx	-.003	5
91	MP4A	X	0	.5
92	MP4A	Z	-4.346	.5
93	MP4A	Mx	0	.5
94	MP4A	X	0	5
95	MP4A	Z	-4.346	5
96	MP4A	Mx	0	5
97	MP4C	X	0	.5
98	MP4C	Z	-7.582	.5
99	MP4C	Mx	-.003	.5
100	MP4C	X	0	5
101	MP4C	Z	-7.582	5
102	MP4C	Mx	-.003	5
103	MP1B	X	0	.5
104	MP1B	Z	-8.727	.5
105	MP1B	Mx	.004	.5
106	MP1B	X	0	5
107	MP1B	Z	-8.727	5
108	MP1B	Mx	.004	5
109	MP4B	X	0	.5
110	MP4B	Z	-8.727	.5
111	MP4B	Mx	.004	.5
112	MP4B	X	0	5
113	MP4B	Z	-8.727	5
114	MP4B	Mx	.004	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	3.711	.5
2	MP2A	Z	-6.428	.5
3	MP2A	Mx	.001	.5
4	MP2A	X	3.711	5
5	MP2A	Z	-6.428	5
6	MP2A	Mx	.001	5
7	MP2B	X	2.722	.5
8	MP2B	Z	-4.715	.5
9	MP2B	Mx	.003	.5
10	MP2B	X	2.722	5
11	MP2B	Z	-4.715	5
12	MP2B	Mx	.003	5
13	MP2C	X	2.722	.5
14	MP2C	Z	-4.715	.5
15	MP2C	Mx	.003	.5
16	MP2C	X	2.722	5
17	MP2C	Z	-4.715	5
18	MP2C	Mx	.003	5
19	MP2A	X	3.711	.5
20	MP2A	Z	-6.428	.5
21	MP2A	Mx	-.005	.5
22	MP2A	X	3.711	5
23	MP2A	Z	-6.428	5
24	MP2A	Mx	-.005	5
25	MP2B	X	2.722	.5
26	MP2B	Z	-4.715	.5
27	MP2B	Mx	.002	.5
28	MP2B	X	2.722	5
29	MP2B	Z	-4.715	5
30	MP2B	Mx	.002	5
31	MP2C	X	2.722	.5
32	MP2C	Z	-4.715	.5
33	MP2C	Mx	.002	.5
34	MP2C	X	2.722	5
35	MP2C	Z	-4.715	5
36	MP2C	Mx	.002	5
37	MP3A	X	2	2.25
38	MP3A	Z	-3.464	2.25
39	MP3A	Mx	-.001	2.25
40	MP3A	X	2	3.25
41	MP3A	Z	-3.464	3.25
42	MP3A	Mx	-.001	3.25
43	MP3B	X	.967	2.25
44	MP3B	Z	-1.674	2.25
45	MP3B	Mx	.000952	2.25
46	MP3B	X	.967	3.25
47	MP3B	Z	-1.674	3.25
48	MP3B	Mx	.000952	3.25
49	MP3C	X	2	2.25
50	MP3C	Z	-3.464	2.25
51	MP3C	Mx	-.001	2.25
52	MP3C	X	2	3.25
53	MP3C	Z	-3.464	3.25
54	MP3C	Mx	-.001	3.25
55	MP2A	X	1.721	3
56	MP2A	Z	-2.981	3
57	MP2A	Mx	.00086	3



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2B	X	1.273	3
59	MP2B	Z	-2.206	3
60	MP2B	Mx	-.001	3
61	MP2C	X	1.721	3
62	MP2C	Z	-2.981	3
63	MP2C	Mx	.000861	3
64	MP3A	X	1.662	3
65	MP3A	Z	-2.878	3
66	MP3A	Mx	.000831	3
67	MP3B	X	1.042	3
68	MP3B	Z	-1.805	3
69	MP3B	Mx	-.001	3
70	MP3C	X	1.662	3
71	MP3C	Z	-2.878	3
72	MP3C	Mx	.000831	3
73	M35	X	3.351	1
74	M35	Z	-5.803	1
75	M35	Mx	0	1
76	M37	X	3.351	1
77	M37	Z	-5.803	1
78	M37	Mx	0	1
79	MP1A	X	2.712	.5
80	MP1A	Z	-4.698	.5
81	MP1A	Mx	-.001	.5
82	MP1A	X	2.712	5
83	MP1A	Z	-4.698	5
84	MP1A	Mx	-.001	5
85	MP1C	X	2.712	.5
86	MP1C	Z	-4.698	.5
87	MP1C	Mx	-.001	.5
88	MP1C	X	2.712	5
89	MP1C	Z	-4.698	5
90	MP1C	Mx	-.001	5
91	MP4A	X	2.712	.5
92	MP4A	Z	-4.698	.5
93	MP4A	Mx	-.001	.5
94	MP4A	X	2.712	5
95	MP4A	Z	-4.698	5
96	MP4A	Mx	-.001	5
97	MP4C	X	2.712	.5
98	MP4C	Z	-4.698	.5
99	MP4C	Mx	-.001	.5
100	MP4C	X	2.712	5
101	MP4C	Z	-4.698	5
102	MP4C	Mx	-.001	5
103	MP1B	X	4.319	.5
104	MP1B	Z	-7.48	.5
105	MP1B	Mx	.004	.5
106	MP1B	X	4.319	5
107	MP1B	Z	-7.48	5
108	MP1B	Mx	.004	5
109	MP4B	X	4.319	.5
110	MP4B	Z	-7.48	.5
111	MP4B	Mx	.004	.5
112	MP4B	X	4.319	5
113	MP4B	Z	-7.48	5
114	MP4B	Mx	.004	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	5.238	.5
2	MP2A	Z	-3.024	.5
3	MP2A	Mx	-.001	.5
4	MP2A	X	5.238	5
5	MP2A	Z	-3.024	5
6	MP2A	Mx	-.001	5
7	MP2B	X	5.627	.5
8	MP2B	Z	-3.249	.5
9	MP2B	Mx	.005	.5
10	MP2B	X	5.627	5
11	MP2B	Z	-3.249	5
12	MP2B	Mx	.005	5
13	MP2C	X	5.627	.5
14	MP2C	Z	-3.249	.5
15	MP2C	Mx	.005	.5
16	MP2C	X	5.627	5
17	MP2C	Z	-3.249	5
18	MP2C	Mx	.005	5
19	MP2A	X	5.238	.5
20	MP2A	Z	-3.024	.5
21	MP2A	Mx	-.004	.5
22	MP2A	X	5.238	5
23	MP2A	Z	-3.024	5
24	MP2A	Mx	-.004	5
25	MP2B	X	5.627	.5
26	MP2B	Z	-3.249	.5
27	MP2B	Mx	.000401	.5
28	MP2B	X	5.627	5
29	MP2B	Z	-3.249	5
30	MP2B	Mx	.000401	5
31	MP2C	X	5.627	.5
32	MP2C	Z	-3.249	.5
33	MP2C	Mx	.000401	.5
34	MP2C	X	5.627	5
35	MP2C	Z	-3.249	5
36	MP2C	Mx	.000401	5
37	MP3A	X	2.221	2.25
38	MP3A	Z	-1.282	2.25
39	MP3A	Mx	-.001	2.25
40	MP3A	X	2.221	3.25
41	MP3A	Z	-1.282	3.25
42	MP3A	Mx	-.001	3.25
43	MP3B	X	2.627	2.25
44	MP3B	Z	-1.516	2.25
45	MP3B	Mx	.001	2.25
46	MP3B	X	2.627	3.25
47	MP3B	Z	-1.516	3.25
48	MP3B	Mx	.001	3.25
49	MP3C	X	4.085	2.25
50	MP3C	Z	-2.359	2.25
51	MP3C	Mx	0	2.25
52	MP3C	X	4.085	3.25
53	MP3C	Z	-2.359	3.25
54	MP3C	Mx	0	3.25
55	MP2A	X	2.443	3
56	MP2A	Z	-1.41	3
57	MP2A	Mx	.001	3



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2B	X	2.618	3
59	MP2B	Z	-1.512	3
60	MP2B	Mx	-.001	3
61	MP2C	X	3.251	3
62	MP2C	Z	-1.877	3
63	MP2C	Mx	0	3
64	MP3A	X	2.133	3
65	MP3A	Z	-1.231	3
66	MP3A	Mx	.001	3
67	MP3B	X	2.376	3
68	MP3B	Z	-1.372	3
69	MP3B	Mx	-.001	3
70	MP3C	X	3.251	3
71	MP3C	Z	-1.877	3
72	MP3C	Mx	0	3
73	M35	X	5.385	1
74	M35	Z	-3.109	1
75	M35	Mx	0	1
76	M37	X	5.385	1
77	M37	Z	-3.109	1
78	M37	Mx	0	1
79	MP1A	X	6.566	.5
80	MP1A	Z	-3.791	.5
81	MP1A	Mx	-.003	.5
82	MP1A	X	6.566	5
83	MP1A	Z	-3.791	5
84	MP1A	Mx	-.003	5
85	MP1C	X	3.764	.5
86	MP1C	Z	-2.173	.5
87	MP1C	Mx	0	.5
88	MP1C	X	3.764	5
89	MP1C	Z	-2.173	5
90	MP1C	Mx	0	5
91	MP4A	X	6.566	.5
92	MP4A	Z	-3.791	.5
93	MP4A	Mx	-.003	.5
94	MP4A	X	6.566	5
95	MP4A	Z	-3.791	5
96	MP4A	Mx	-.003	5
97	MP4C	X	3.764	.5
98	MP4C	Z	-2.173	.5
99	MP4C	Mx	0	.5
100	MP4C	X	3.764	5
101	MP4C	Z	-2.173	5
102	MP4C	Mx	0	5
103	MP1B	X	7.822	.5
104	MP1B	Z	-4.516	.5
105	MP1B	Mx	.003	.5
106	MP1B	X	7.822	5
107	MP1B	Z	-4.516	5
108	MP1B	Mx	.003	5
109	MP4B	X	7.822	.5
110	MP4B	Z	-4.516	.5
111	MP4B	Mx	.003	.5
112	MP4B	X	7.822	5
113	MP4B	Z	-4.516	5
114	MP4B	Mx	.003	5





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	5.361	.5
2	MP2A	Z	0	.5
3	MP2A	Mx	-.003	.5
4	MP2A	X	5.361	5
5	MP2A	Z	0	5
6	MP2A	Mx	-.003	5
7	MP2B	X	7.788	.5
8	MP2B	Z	0	.5
9	MP2B	Mx	.005	.5
10	MP2B	X	7.788	5
11	MP2B	Z	0	5
12	MP2B	Mx	.005	5
13	MP2C	X	7.788	.5
14	MP2C	Z	0	.5
15	MP2C	Mx	.005	.5
16	MP2C	X	7.788	5
17	MP2C	Z	0	5
18	MP2C	Mx	.005	5
19	MP2A	X	5.361	.5
20	MP2A	Z	0	.5
21	MP2A	Mx	-.003	.5
22	MP2A	X	5.361	5
23	MP2A	Z	0	5
24	MP2A	Mx	-.003	5
25	MP2B	X	7.788	.5
26	MP2B	Z	0	.5
27	MP2B	Mx	-.002	.5
28	MP2B	X	7.788	5
29	MP2B	Z	0	5
30	MP2B	Mx	-.002	5
31	MP2C	X	7.788	.5
32	MP2C	Z	0	.5
33	MP2C	Mx	-.002	.5
34	MP2C	X	7.788	5
35	MP2C	Z	0	5
36	MP2C	Mx	-.002	5
37	MP3A	X	1.847	2.25
38	MP3A	Z	0	2.25
39	MP3A	Mx	-.000924	2.25
40	MP3A	X	1.847	3.25
41	MP3A	Z	0	3.25
42	MP3A	Mx	-.000924	3.25
43	MP3B	X	4.382	2.25
44	MP3B	Z	0	2.25
45	MP3B	Mx	.000749	2.25
46	MP3B	X	4.382	3.25
47	MP3B	Z	0	3.25
48	MP3B	Mx	.000749	3.25
49	MP3C	X	4	2.25
50	MP3C	Z	0	2.25
51	MP3C	Mx	.001	2.25
52	MP3C	X	4	3.25
53	MP3C	Z	0	3.25
54	MP3C	Mx	.001	3.25
55	MP2A	X	2.509	3
56	MP2A	Z	0	3
57	MP2A	Mx	.001	3



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2B	X	3.608	3
59	MP2B	Z	0	3
60	MP2B	Mx	-.000617	3
61	MP2C	X	3.443	3
62	MP2C	Z	0	3
63	MP2C	Mx	-.000861	3
64	MP3A	X	2.033	3
65	MP3A	Z	0	3
66	MP3A	Mx	.001	3
67	MP3B	X	3.553	3
68	MP3B	Z	0	3
69	MP3B	Mx	-.000608	3
70	MP3C	X	3.324	3
71	MP3C	Z	0	3
72	MP3C	Mx	-.000831	3
73	M35	X	6.701	1
74	M35	Z	0	1
75	M35	Mx	0	1
76	M37	X	6.701	1
77	M37	Z	0	1
78	M37	Mx	0	1
79	MP1A	X	8.66	.5
80	MP1A	Z	0	.5
81	MP1A	Mx	-.004	.5
82	MP1A	X	8.66	5
83	MP1A	Z	0	5
84	MP1A	Mx	-.004	5
85	MP1C	X	5.425	.5
86	MP1C	Z	0	.5
87	MP1C	Mx	.001	.5
88	MP1C	X	5.425	5
89	MP1C	Z	0	5
90	MP1C	Mx	.001	5
91	MP4A	X	8.66	.5
92	MP4A	Z	0	.5
93	MP4A	Mx	-.004	.5
94	MP4A	X	8.66	5
95	MP4A	Z	0	5
96	MP4A	Mx	-.004	5
97	MP4C	X	5.425	.5
98	MP4C	Z	0	.5
99	MP4C	Mx	.001	.5
100	MP4C	X	5.425	5
101	MP4C	Z	0	5
102	MP4C	Mx	.001	5
103	MP1B	X	9.515	.5
104	MP1B	Z	0	.5
105	MP1B	Mx	.002	.5
106	MP1B	X	9.515	5
107	MP1B	Z	0	5
108	MP1B	Mx	.002	5
109	MP4B	X	9.515	.5
110	MP4B	Z	0	.5
111	MP4B	Mx	.002	.5
112	MP4B	X	9.515	5
113	MP4B	Z	0	5
114	MP4B	Mx	.002	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	5.238	.5
2	MP2A	Z	3.024	.5
3	MP2A	Mx	-.004	.5
4	MP2A	X	5.238	5
5	MP2A	Z	3.024	5
6	MP2A	Mx	-.004	5
7	MP2B	X	6.952	.5
8	MP2B	Z	4.014	.5
9	MP2B	Mx	.003	.5
10	MP2B	X	6.952	5
11	MP2B	Z	4.014	5
12	MP2B	Mx	.003	5
13	MP2C	X	6.952	.5
14	MP2C	Z	4.014	.5
15	MP2C	Mx	.003	.5
16	MP2C	X	6.952	5
17	MP2C	Z	4.014	5
18	MP2C	Mx	.003	5
19	MP2A	X	5.238	.5
20	MP2A	Z	3.024	.5
21	MP2A	Mx	-.001	.5
22	MP2A	X	5.238	5
23	MP2A	Z	3.024	5
24	MP2A	Mx	-.001	5
25	MP2B	X	6.952	.5
26	MP2B	Z	4.014	.5
27	MP2B	Mx	-.005	.5
28	MP2B	X	6.952	5
29	MP2B	Z	4.014	5
30	MP2B	Mx	-.005	5
31	MP2C	X	6.952	.5
32	MP2C	Z	4.014	.5
33	MP2C	Mx	-.005	.5
34	MP2C	X	6.952	5
35	MP2C	Z	4.014	5
36	MP2C	Mx	-.005	5
37	MP3A	X	2.221	2.25
38	MP3A	Z	1.282	2.25
39	MP3A	Mx	-.001	2.25
40	MP3A	X	2.221	3.25
41	MP3A	Z	1.282	3.25
42	MP3A	Mx	-.001	3.25
43	MP3B	X	4.01	2.25
44	MP3B	Z	2.315	2.25
45	MP3B	Mx	-.000402	2.25
46	MP3B	X	4.01	3.25
47	MP3B	Z	2.315	3.25
48	MP3B	Mx	-.000402	3.25
49	MP3C	X	2.221	2.25
50	MP3C	Z	1.282	2.25
51	MP3C	Mx	.001	2.25
52	MP3C	X	2.221	3.25
53	MP3C	Z	1.282	3.25
54	MP3C	Mx	.001	3.25
55	MP2A	X	2.443	3
56	MP2A	Z	1.41	3
57	MP2A	Mx	.001	3



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2B	X	3.218	3
59	MP2B	Z	1.858	3
60	MP2B	Mx	.000323	3
61	MP2C	X	2.443	3
62	MP2C	Z	1.41	3
63	MP2C	Mx	-.001	3
64	MP3A	X	2.133	3
65	MP3A	Z	1.231	3
66	MP3A	Mx	.001	3
67	MP3B	X	3.206	3
68	MP3B	Z	1.851	3
69	MP3B	Mx	.000321	3
70	MP3C	X	2.133	3
71	MP3C	Z	1.231	3
72	MP3C	Mx	-.001	3
73	M35	X	6.64	1
74	M35	Z	3.834	1
75	M35	Mx	0	1
76	M37	X	6.64	1
77	M37	Z	3.834	1
78	M37	Mx	0	1
79	MP1A	X	6.566	.5
80	MP1A	Z	3.791	.5
81	MP1A	Mx	-.003	.5
82	MP1A	X	6.566	5
83	MP1A	Z	3.791	5
84	MP1A	Mx	-.003	5
85	MP1C	X	6.566	.5
86	MP1C	Z	3.791	.5
87	MP1C	Mx	.003	.5
88	MP1C	X	6.566	5
89	MP1C	Z	3.791	5
90	MP1C	Mx	.003	5
91	MP4A	X	6.566	.5
92	MP4A	Z	3.791	.5
93	MP4A	Mx	-.003	.5
94	MP4A	X	6.566	5
95	MP4A	Z	3.791	5
96	MP4A	Mx	-.003	5
97	MP4C	X	6.566	.5
98	MP4C	Z	3.791	.5
99	MP4C	Mx	.003	.5
100	MP4C	X	6.566	5
101	MP4C	Z	3.791	5
102	MP4C	Mx	.003	5
103	MP1B	X	8.318	.5
104	MP1B	Z	4.802	.5
105	MP1B	Mx	-.000834	.5
106	MP1B	X	8.318	5
107	MP1B	Z	4.802	5
108	MP1B	Mx	-.000834	5
109	MP4B	X	8.318	.5
110	MP4B	Z	4.802	.5
111	MP4B	Mx	-.000834	.5
112	MP4B	X	8.318	5
113	MP4B	Z	4.802	5
114	MP4B	Mx	-.000834	5

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]	
1	MP2A	X	3.711	.5
2	MP2A	Z	6.428	.5
3	MP2A	Mx	-.005	.5
4	MP2A	X	3.711	5
5	MP2A	Z	6.428	5
6	MP2A	Mx	-.005	5
7	MP2B	X	3.487	.5
8	MP2B	Z	6.04	.5
9	MP2B	Mx	.00043	.5
10	MP2B	X	3.487	5
11	MP2B	Z	6.04	5
12	MP2B	Mx	.00043	5
13	MP2C	X	3.487	.5
14	MP2C	Z	6.04	.5
15	MP2C	Mx	.00043	.5
16	MP2C	X	3.487	5
17	MP2C	Z	6.04	5
18	MP2C	Mx	.00043	5
19	MP2A	X	3.711	.5
20	MP2A	Z	6.428	.5
21	MP2A	Mx	.001	.5
22	MP2A	X	3.711	5
23	MP2A	Z	6.428	5
24	MP2A	Mx	.001	5
25	MP2B	X	3.487	.5
26	MP2B	Z	6.04	.5
27	MP2B	Mx	-.005	.5
28	MP2B	X	3.487	5
29	MP2B	Z	6.04	5
30	MP2B	Mx	-.005	5
31	MP2C	X	3.487	.5
32	MP2C	Z	6.04	.5
33	MP2C	Mx	-.005	.5
34	MP2C	X	3.487	5
35	MP2C	Z	6.04	5
36	MP2C	Mx	-.005	5
37	MP3A	X	2	2.25
38	MP3A	Z	3.464	2.25
39	MP3A	Mx	-.001	2.25
40	MP3A	X	2	3.25
41	MP3A	Z	3.464	3.25
42	MP3A	Mx	-.001	3.25
43	MP3B	X	1.766	2.25
44	MP3B	Z	3.058	2.25
45	MP3B	Mx	-.001	2.25
46	MP3B	X	1.766	3.25
47	MP3B	Z	3.058	3.25
48	MP3B	Mx	-.001	3.25
49	MP3C	X	.923	2.25
50	MP3C	Z	1.599	2.25
51	MP3C	Mx	.000923	2.25
52	MP3C	X	.923	3.25
53	MP3C	Z	1.599	3.25
54	MP3C	Mx	.000923	3.25
55	MP2A	X	1.721	3
56	MP2A	Z	2.981	3
57	MP2A	Mx	.00086	3



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2B	X	1.62	3
59	MP2B	Z	2.806	3
60	MP2B	Mx	.001	3
61	MP2C	X	1.255	3
62	MP2C	Z	2.173	3
63	MP2C	Mx	-.001	3
64	MP3A	X	1.662	3
65	MP3A	Z	2.878	3
66	MP3A	Mx	.000831	3
67	MP3B	X	1.521	3
68	MP3B	Z	2.635	3
69	MP3B	Mx	.000978	3
70	MP3C	X	1.016	3
71	MP3C	Z	1.76	3
72	MP3C	Mx	-.001	3
73	M35	X	4.075	1
74	M35	Z	7.058	1
75	M35	Mx	0	1
76	M37	X	4.075	1
77	M37	Z	7.058	1
78	M37	Mx	0	1
79	MP1A	X	2.712	.5
80	MP1A	Z	4.698	.5
81	MP1A	Mx	-.001	.5
82	MP1A	X	2.712	5
83	MP1A	Z	4.698	5
84	MP1A	Mx	-.001	5
85	MP1C	X	4.33	.5
86	MP1C	Z	7.5	.5
87	MP1C	Mx	.004	.5
88	MP1C	X	4.33	5
89	MP1C	Z	7.5	5
90	MP1C	Mx	.004	5
91	MP4A	X	2.712	.5
92	MP4A	Z	4.698	.5
93	MP4A	Mx	-.001	.5
94	MP4A	X	2.712	5
95	MP4A	Z	4.698	5
96	MP4A	Mx	-.001	5
97	MP4C	X	4.33	.5
98	MP4C	Z	7.5	.5
99	MP4C	Mx	.004	.5
100	MP4C	X	4.33	5
101	MP4C	Z	7.5	5
102	MP4C	Mx	.004	5
103	MP1B	X	4.605	.5
104	MP1B	Z	7.976	.5
105	MP1B	Mx	-.003	.5
106	MP1B	X	4.605	5
107	MP1B	Z	7.976	5
108	MP1B	Mx	-.003	5
109	MP4B	X	4.605	.5
110	MP4B	Z	7.976	.5
111	MP4B	Mx	-.003	.5
112	MP4B	X	4.605	5
113	MP4B	Z	7.976	5
114	MP4B	Mx	-.003	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	0	.5
2	MP2A	Z	8.11	.5
3	MP2A	Mx	-.004	.5
4	MP2A	X	0	5
5	MP2A	Z	8.11	5
6	MP2A	Mx	-.004	5
7	MP2B	X	0	.5
8	MP2B	Z	5.683	.5
9	MP2B	Mx	-.002	.5
10	MP2B	X	0	5
11	MP2B	Z	5.683	5
12	MP2B	Mx	-.002	5
13	MP2C	X	0	.5
14	MP2C	Z	5.683	.5
15	MP2C	Mx	-.002	.5
16	MP2C	X	0	5
17	MP2C	Z	5.683	5
18	MP2C	Mx	-.002	5
19	MP2A	X	0	.5
20	MP2A	Z	8.11	.5
21	MP2A	Mx	.004	.5
22	MP2A	X	0	5
23	MP2A	Z	8.11	5
24	MP2A	Mx	.004	5
25	MP2B	X	0	.5
26	MP2B	Z	5.683	.5
27	MP2B	Mx	-.004	.5
28	MP2B	X	0	5
29	MP2B	Z	5.683	5
30	MP2B	Mx	-.004	5
31	MP2C	X	0	.5
32	MP2C	Z	5.683	.5
33	MP2C	Mx	-.004	.5
34	MP2C	X	0	5
35	MP2C	Z	5.683	5
36	MP2C	Mx	-.004	5
37	MP3A	X	0	2.25
38	MP3A	Z	4.717	2.25
39	MP3A	Mx	0	2.25
40	MP3A	X	0	3.25
41	MP3A	Z	4.717	3.25
42	MP3A	Mx	0	3.25
43	MP3B	X	0	2.25
44	MP3B	Z	2.183	2.25
45	MP3B	Mx	-.001	2.25
46	MP3B	X	0	3.25
47	MP3B	Z	2.183	3.25
48	MP3B	Mx	-.001	3.25
49	MP3C	X	0	2.25
50	MP3C	Z	2.565	2.25
51	MP3C	Mx	.001	2.25
52	MP3C	X	0	3.25
53	MP3C	Z	2.565	3.25
54	MP3C	Mx	.001	3.25
55	MP2A	X	0	3
56	MP2A	Z	3.754	3
57	MP2A	Mx	0	3



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2B	X	0	3
59	MP2B	Z	2.655	3
60	MP2B	Mx	.001	3
61	MP2C	X	0	3
62	MP2C	Z	2.82	3
63	MP2C	Mx	-.001	3
64	MP3A	X	0	3
65	MP3A	Z	3.754	3
66	MP3A	Mx	0	3
67	MP3B	X	0	3
68	MP3B	Z	2.234	3
69	MP3B	Mx	.001	3
70	MP3C	X	0	3
71	MP3C	Z	2.463	3
72	MP3C	Mx	-.001	3
73	M35	X	0	1
74	M35	Z	7.667	1
75	M35	Mx	0	1
76	M37	X	0	1
77	M37	Z	7.667	1
78	M37	Mx	0	1
79	MP1A	X	0	.5
80	MP1A	Z	4.346	.5
81	MP1A	Mx	0	.5
82	MP1A	X	0	5
83	MP1A	Z	4.346	5
84	MP1A	Mx	0	5
85	MP1C	X	0	.5
86	MP1C	Z	7.582	.5
87	MP1C	Mx	.003	.5
88	MP1C	X	0	5
89	MP1C	Z	7.582	5
90	MP1C	Mx	.003	5
91	MP4A	X	0	.5
92	MP4A	Z	4.346	.5
93	MP4A	Mx	0	.5
94	MP4A	X	0	5
95	MP4A	Z	4.346	5
96	MP4A	Mx	0	5
97	MP4C	X	0	.5
98	MP4C	Z	7.582	.5
99	MP4C	Mx	.003	.5
100	MP4C	X	0	5
101	MP4C	Z	7.582	5
102	MP4C	Mx	.003	5
103	MP1B	X	0	.5
104	MP1B	Z	8.727	.5
105	MP1B	Mx	-.004	.5
106	MP1B	X	0	5
107	MP1B	Z	8.727	5
108	MP1B	Mx	-.004	5
109	MP4B	X	0	.5
110	MP4B	Z	8.727	.5
111	MP4B	Mx	-.004	.5
112	MP4B	X	0	5
113	MP4B	Z	8.727	5
114	MP4B	Mx	-.004	5





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-3.711	.5
2	MP2A	Z	6.428	.5
3	MP2A	Mx	-.001	.5
4	MP2A	X	-3.711	5
5	MP2A	Z	6.428	5
6	MP2A	Mx	-.001	5
7	MP2B	X	-2.722	.5
8	MP2B	Z	4.715	.5
9	MP2B	Mx	-.003	.5
10	MP2B	X	-2.722	5
11	MP2B	Z	4.715	5
12	MP2B	Mx	-.003	5
13	MP2C	X	-2.722	.5
14	MP2C	Z	4.715	.5
15	MP2C	Mx	-.003	.5
16	MP2C	X	-2.722	5
17	MP2C	Z	4.715	5
18	MP2C	Mx	-.003	5
19	MP2A	X	-3.711	.5
20	MP2A	Z	6.428	.5
21	MP2A	Mx	.005	.5
22	MP2A	X	-3.711	5
23	MP2A	Z	6.428	5
24	MP2A	Mx	.005	5
25	MP2B	X	-2.722	.5
26	MP2B	Z	4.715	.5
27	MP2B	Mx	-.002	.5
28	MP2B	X	-2.722	5
29	MP2B	Z	4.715	5
30	MP2B	Mx	-.002	5
31	MP2C	X	-2.722	.5
32	MP2C	Z	4.715	.5
33	MP2C	Mx	-.002	.5
34	MP2C	X	-2.722	5
35	MP2C	Z	4.715	5
36	MP2C	Mx	-.002	5
37	MP3A	X	-2	2.25
38	MP3A	Z	3.464	2.25
39	MP3A	Mx	.001	2.25
40	MP3A	X	-2	3.25
41	MP3A	Z	3.464	3.25
42	MP3A	Mx	.001	3.25
43	MP3B	X	-.967	2.25
44	MP3B	Z	1.674	2.25
45	MP3B	Mx	-.000952	2.25
46	MP3B	X	-.967	3.25
47	MP3B	Z	1.674	3.25
48	MP3B	Mx	-.000952	3.25
49	MP3C	X	-2	2.25
50	MP3C	Z	3.464	2.25
51	MP3C	Mx	.001	2.25
52	MP3C	X	-2	3.25
53	MP3C	Z	3.464	3.25
54	MP3C	Mx	.001	3.25
55	MP2A	X	-1.721	3
56	MP2A	Z	2.981	3
57	MP2A	Mx	-.00086	3



Company : Maser Consulting  
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**Member Point Loads (BLC 34 : Antenna Wm (210 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2B	X	-1.273	3
59	MP2B	Z	2.206	3
60	MP2B	Mx	.001	3
61	MP2C	X	-1.721	3
62	MP2C	Z	2.981	3
63	MP2C	Mx	-.000861	3
64	MP3A	X	-1.662	3
65	MP3A	Z	2.878	3
66	MP3A	Mx	-.000831	3
67	MP3B	X	-1.042	3
68	MP3B	Z	1.805	3
69	MP3B	Mx	.001	3
70	MP3C	X	-1.662	3
71	MP3C	Z	2.878	3
72	MP3C	Mx	-.000831	3
73	M35	X	-3.351	1
74	M35	Z	5.803	1
75	M35	Mx	0	1
76	M37	X	-3.351	1
77	M37	Z	5.803	1
78	M37	Mx	0	1
79	MP1A	X	-2.712	.5
80	MP1A	Z	4.698	.5
81	MP1A	Mx	.001	.5
82	MP1A	X	-2.712	5
83	MP1A	Z	4.698	5
84	MP1A	Mx	.001	5
85	MP1C	X	-2.712	.5
86	MP1C	Z	4.698	.5
87	MP1C	Mx	.001	.5
88	MP1C	X	-2.712	5
89	MP1C	Z	4.698	5
90	MP1C	Mx	.001	5
91	MP4A	X	-2.712	.5
92	MP4A	Z	4.698	.5
93	MP4A	Mx	.001	.5
94	MP4A	X	-2.712	5
95	MP4A	Z	4.698	5
96	MP4A	Mx	.001	5
97	MP4C	X	-2.712	.5
98	MP4C	Z	4.698	.5
99	MP4C	Mx	.001	.5
100	MP4C	X	-2.712	5
101	MP4C	Z	4.698	5
102	MP4C	Mx	.001	5
103	MP1B	X	-4.319	.5
104	MP1B	Z	7.48	.5
105	MP1B	Mx	-.004	.5
106	MP1B	X	-4.319	5
107	MP1B	Z	7.48	5
108	MP1B	Mx	-.004	5
109	MP4B	X	-4.319	.5
110	MP4B	Z	7.48	.5
111	MP4B	Mx	-.004	.5
112	MP4B	X	-4.319	5
113	MP4B	Z	7.48	5
114	MP4B	Mx	-.004	5



Company : Maser Consulting  
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 Job Number :  
 Model Name : 469353-VZW\_MT\_LO\_H

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-5.238	.5
2	MP2A	Z	3.024	.5
3	MP2A	Mx	.001	.5
4	MP2A	X	-5.238	5
5	MP2A	Z	3.024	5
6	MP2A	Mx	.001	5
7	MP2B	X	-5.627	.5
8	MP2B	Z	3.249	.5
9	MP2B	Mx	-.005	.5
10	MP2B	X	-5.627	5
11	MP2B	Z	3.249	5
12	MP2B	Mx	-.005	5
13	MP2C	X	-5.627	.5
14	MP2C	Z	3.249	.5
15	MP2C	Mx	-.005	.5
16	MP2C	X	-5.627	5
17	MP2C	Z	3.249	5
18	MP2C	Mx	-.005	5
19	MP2A	X	-5.238	.5
20	MP2A	Z	3.024	.5
21	MP2A	Mx	.004	.5
22	MP2A	X	-5.238	5
23	MP2A	Z	3.024	5
24	MP2A	Mx	.004	5
25	MP2B	X	-5.627	.5
26	MP2B	Z	3.249	.5
27	MP2B	Mx	-.000401	.5
28	MP2B	X	-5.627	5
29	MP2B	Z	3.249	5
30	MP2B	Mx	-.000401	5
31	MP2C	X	-5.627	.5
32	MP2C	Z	3.249	.5
33	MP2C	Mx	-.000401	.5
34	MP2C	X	-5.627	5
35	MP2C	Z	3.249	5
36	MP2C	Mx	-.000401	5
37	MP3A	X	-2.221	2.25
38	MP3A	Z	1.282	2.25
39	MP3A	Mx	.001	2.25
40	MP3A	X	-2.221	3.25
41	MP3A	Z	1.282	3.25
42	MP3A	Mx	.001	3.25
43	MP3B	X	-2.627	2.25
44	MP3B	Z	1.516	2.25
45	MP3B	Mx	-.001	2.25
46	MP3B	X	-2.627	3.25
47	MP3B	Z	1.516	3.25
48	MP3B	Mx	-.001	3.25
49	MP3C	X	-4.085	2.25
50	MP3C	Z	2.359	2.25
51	MP3C	Mx	0	2.25
52	MP3C	X	-4.085	3.25
53	MP3C	Z	2.359	3.25
54	MP3C	Mx	0	3.25
55	MP2A	X	-2.443	3
56	MP2A	Z	1.41	3
57	MP2A	Mx	-.001	3



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2B	X	-2.618	3
59	MP2B	Z	1.512	3
60	MP2B	Mx	.001	3
61	MP2C	X	-3.251	3
62	MP2C	Z	1.877	3
63	MP2C	Mx	0	3
64	MP3A	X	-2.133	3
65	MP3A	Z	1.231	3
66	MP3A	Mx	-.001	3
67	MP3B	X	-2.376	3
68	MP3B	Z	1.372	3
69	MP3B	Mx	.001	3
70	MP3C	X	-3.251	3
71	MP3C	Z	1.877	3
72	MP3C	Mx	0	3
73	M35	X	-5.385	1
74	M35	Z	3.109	1
75	M35	Mx	0	1
76	M37	X	-5.385	1
77	M37	Z	3.109	1
78	M37	Mx	0	1
79	MP1A	X	-6.566	.5
80	MP1A	Z	3.791	.5
81	MP1A	Mx	.003	.5
82	MP1A	X	-6.566	5
83	MP1A	Z	3.791	5
84	MP1A	Mx	.003	5
85	MP1C	X	-3.764	.5
86	MP1C	Z	2.173	.5
87	MP1C	Mx	0	.5
88	MP1C	X	-3.764	5
89	MP1C	Z	2.173	5
90	MP1C	Mx	0	5
91	MP4A	X	-6.566	.5
92	MP4A	Z	3.791	.5
93	MP4A	Mx	.003	.5
94	MP4A	X	-6.566	5
95	MP4A	Z	3.791	5
96	MP4A	Mx	.003	5
97	MP4C	X	-3.764	.5
98	MP4C	Z	2.173	.5
99	MP4C	Mx	0	.5
100	MP4C	X	-3.764	5
101	MP4C	Z	2.173	5
102	MP4C	Mx	0	5
103	MP1B	X	-7.822	.5
104	MP1B	Z	4.516	.5
105	MP1B	Mx	-.003	.5
106	MP1B	X	-7.822	5
107	MP1B	Z	4.516	5
108	MP1B	Mx	-.003	5
109	MP4B	X	-7.822	.5
110	MP4B	Z	4.516	.5
111	MP4B	Mx	-.003	.5
112	MP4B	X	-7.822	5
113	MP4B	Z	4.516	5
114	MP4B	Mx	-.003	5



Company : Maser Consulting  
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**Member Point Loads (BLC 36 : Antenna Wm (270 Deg))**

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-5.361	.5
2	MP2A	Z	0	.5
3	MP2A	Mx	.003	.5
4	MP2A	X	-5.361	5
5	MP2A	Z	0	5
6	MP2A	Mx	.003	5
7	MP2B	X	-7.788	.5
8	MP2B	Z	0	.5
9	MP2B	Mx	-.005	.5
10	MP2B	X	-7.788	5
11	MP2B	Z	0	5
12	MP2B	Mx	-.005	5
13	MP2C	X	-7.788	.5
14	MP2C	Z	0	.5
15	MP2C	Mx	-.005	.5
16	MP2C	X	-7.788	5
17	MP2C	Z	0	5
18	MP2C	Mx	-.005	5
19	MP2A	X	-5.361	.5
20	MP2A	Z	0	.5
21	MP2A	Mx	.003	.5
22	MP2A	X	-5.361	5
23	MP2A	Z	0	5
24	MP2A	Mx	.003	5
25	MP2B	X	-7.788	.5
26	MP2B	Z	0	.5
27	MP2B	Mx	.002	.5
28	MP2B	X	-7.788	5
29	MP2B	Z	0	5
30	MP2B	Mx	.002	5
31	MP2C	X	-7.788	.5
32	MP2C	Z	0	.5
33	MP2C	Mx	.002	.5
34	MP2C	X	-7.788	5
35	MP2C	Z	0	5
36	MP2C	Mx	.002	5
37	MP3A	X	-1.847	2.25
38	MP3A	Z	0	2.25
39	MP3A	Mx	.000924	2.25
40	MP3A	X	-1.847	3.25
41	MP3A	Z	0	3.25
42	MP3A	Mx	.000924	3.25
43	MP3B	X	-4.382	2.25
44	MP3B	Z	0	2.25
45	MP3B	Mx	-.000749	2.25
46	MP3B	X	-4.382	3.25
47	MP3B	Z	0	3.25
48	MP3B	Mx	-.000749	3.25
49	MP3C	X	-4	2.25
50	MP3C	Z	0	2.25
51	MP3C	Mx	-.001	2.25
52	MP3C	X	-4	3.25
53	MP3C	Z	0	3.25
54	MP3C	Mx	-.001	3.25
55	MP2A	X	-2.509	3
56	MP2A	Z	0	3
57	MP2A	Mx	-.001	3





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-5.238	.5
2	MP2A	Z	-3.024	.5
3	MP2A	Mx	.004	.5
4	MP2A	X	-5.238	5
5	MP2A	Z	-3.024	5
6	MP2A	Mx	.004	5
7	MP2B	X	-6.952	.5
8	MP2B	Z	-4.014	.5
9	MP2B	Mx	-.003	.5
10	MP2B	X	-6.952	5
11	MP2B	Z	-4.014	5
12	MP2B	Mx	-.003	5
13	MP2C	X	-6.952	.5
14	MP2C	Z	-4.014	.5
15	MP2C	Mx	-.003	.5
16	MP2C	X	-6.952	5
17	MP2C	Z	-4.014	5
18	MP2C	Mx	-.003	5
19	MP2A	X	-5.238	.5
20	MP2A	Z	-3.024	.5
21	MP2A	Mx	.001	.5
22	MP2A	X	-5.238	5
23	MP2A	Z	-3.024	5
24	MP2A	Mx	.001	5
25	MP2B	X	-6.952	.5
26	MP2B	Z	-4.014	.5
27	MP2B	Mx	.005	.5
28	MP2B	X	-6.952	5
29	MP2B	Z	-4.014	5
30	MP2B	Mx	.005	5
31	MP2C	X	-6.952	.5
32	MP2C	Z	-4.014	.5
33	MP2C	Mx	.005	.5
34	MP2C	X	-6.952	5
35	MP2C	Z	-4.014	5
36	MP2C	Mx	.005	5
37	MP3A	X	-2.221	2.25
38	MP3A	Z	-1.282	2.25
39	MP3A	Mx	.001	2.25
40	MP3A	X	-2.221	3.25
41	MP3A	Z	-1.282	3.25
42	MP3A	Mx	.001	3.25
43	MP3B	X	-4.01	2.25
44	MP3B	Z	-2.315	2.25
45	MP3B	Mx	.000402	2.25
46	MP3B	X	-4.01	3.25
47	MP3B	Z	-2.315	3.25
48	MP3B	Mx	.000402	3.25
49	MP3C	X	-2.221	2.25
50	MP3C	Z	-1.282	2.25
51	MP3C	Mx	-.001	2.25
52	MP3C	X	-2.221	3.25
53	MP3C	Z	-1.282	3.25
54	MP3C	Mx	-.001	3.25
55	MP2A	X	-2.443	3
56	MP2A	Z	-1.41	3
57	MP2A	Mx	-.001	3



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2B	X	-3.218	3
59	MP2B	Z	-1.858	3
60	MP2B	Mx	-.000323	3
61	MP2C	X	-2.443	3
62	MP2C	Z	-1.41	3
63	MP2C	Mx	.001	3
64	MP3A	X	-2.133	3
65	MP3A	Z	-1.231	3
66	MP3A	Mx	-.001	3
67	MP3B	X	-3.206	3
68	MP3B	Z	-1.851	3
69	MP3B	Mx	-.000321	3
70	MP3C	X	-2.133	3
71	MP3C	Z	-1.231	3
72	MP3C	Mx	.001	3
73	M35	X	-6.64	1
74	M35	Z	-3.834	1
75	M35	Mx	0	1
76	M37	X	-6.64	1
77	M37	Z	-3.834	1
78	M37	Mx	0	1
79	MP1A	X	-6.566	.5
80	MP1A	Z	-3.791	.5
81	MP1A	Mx	.003	.5
82	MP1A	X	-6.566	5
83	MP1A	Z	-3.791	5
84	MP1A	Mx	.003	5
85	MP1C	X	-6.566	.5
86	MP1C	Z	-3.791	.5
87	MP1C	Mx	-.003	.5
88	MP1C	X	-6.566	5
89	MP1C	Z	-3.791	5
90	MP1C	Mx	-.003	5
91	MP4A	X	-6.566	.5
92	MP4A	Z	-3.791	.5
93	MP4A	Mx	.003	.5
94	MP4A	X	-6.566	5
95	MP4A	Z	-3.791	5
96	MP4A	Mx	.003	5
97	MP4C	X	-6.566	.5
98	MP4C	Z	-3.791	.5
99	MP4C	Mx	-.003	.5
100	MP4C	X	-6.566	5
101	MP4C	Z	-3.791	5
102	MP4C	Mx	-.003	5
103	MP1B	X	-8.318	.5
104	MP1B	Z	-4.802	.5
105	MP1B	Mx	.000834	.5
106	MP1B	X	-8.318	5
107	MP1B	Z	-4.802	5
108	MP1B	Mx	.000834	5
109	MP4B	X	-8.318	.5
110	MP4B	Z	-4.802	.5
111	MP4B	Mx	.000834	.5
112	MP4B	X	-8.318	5
113	MP4B	Z	-4.802	5
114	MP4B	Mx	.000834	5





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-3.711	.5
2	MP2A	Z	-6.428	.5
3	MP2A	Mx	.005	.5
4	MP2A	X	-3.711	5
5	MP2A	Z	-6.428	5
6	MP2A	Mx	.005	5
7	MP2B	X	-3.487	.5
8	MP2B	Z	-6.04	.5
9	MP2B	Mx	-.00043	.5
10	MP2B	X	-3.487	5
11	MP2B	Z	-6.04	5
12	MP2B	Mx	-.00043	5
13	MP2C	X	-3.487	.5
14	MP2C	Z	-6.04	.5
15	MP2C	Mx	-.00043	.5
16	MP2C	X	-3.487	5
17	MP2C	Z	-6.04	5
18	MP2C	Mx	-.00043	5
19	MP2A	X	-3.711	.5
20	MP2A	Z	-6.428	.5
21	MP2A	Mx	-.001	.5
22	MP2A	X	-3.711	5
23	MP2A	Z	-6.428	5
24	MP2A	Mx	-.001	5
25	MP2B	X	-3.487	.5
26	MP2B	Z	-6.04	.5
27	MP2B	Mx	.005	.5
28	MP2B	X	-3.487	5
29	MP2B	Z	-6.04	5
30	MP2B	Mx	.005	5
31	MP2C	X	-3.487	.5
32	MP2C	Z	-6.04	.5
33	MP2C	Mx	.005	.5
34	MP2C	X	-3.487	5
35	MP2C	Z	-6.04	5
36	MP2C	Mx	.005	5
37	MP3A	X	-2	2.25
38	MP3A	Z	-3.464	2.25
39	MP3A	Mx	.001	2.25
40	MP3A	X	-2	3.25
41	MP3A	Z	-3.464	3.25
42	MP3A	Mx	.001	3.25
43	MP3B	X	-1.766	2.25
44	MP3B	Z	-3.058	2.25
45	MP3B	Mx	.001	2.25
46	MP3B	X	-1.766	3.25
47	MP3B	Z	-3.058	3.25
48	MP3B	Mx	.001	3.25
49	MP3C	X	-.923	2.25
50	MP3C	Z	-1.599	2.25
51	MP3C	Mx	-.000923	2.25
52	MP3C	X	-.923	3.25
53	MP3C	Z	-1.599	3.25
54	MP3C	Mx	-.000923	3.25
55	MP2A	X	-1.721	3
56	MP2A	Z	-2.981	3
57	MP2A	Mx	-.00086	3



Company : Maser Consulting  
 Designer :  
 Job Number :  
 Model Name : 469353-VZW\_MT\_LO\_H

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2B	X	-1.62	3
59	MP2B	Z	-2.806	3
60	MP2B	Mx	-.001	3
61	MP2C	X	-1.255	3
62	MP2C	Z	-2.173	3
63	MP2C	Mx	.001	3
64	MP3A	X	-1.662	3
65	MP3A	Z	-2.878	3
66	MP3A	Mx	-.000831	3
67	MP3B	X	-1.521	3
68	MP3B	Z	-2.635	3
69	MP3B	Mx	-.000978	3
70	MP3C	X	-1.016	3
71	MP3C	Z	-1.76	3
72	MP3C	Mx	.001	3
73	M35	X	-4.075	1
74	M35	Z	-7.058	1
75	M35	Mx	0	1
76	M37	X	-4.075	1
77	M37	Z	-7.058	1
78	M37	Mx	0	1
79	MP1A	X	-2.712	.5
80	MP1A	Z	-4.698	.5
81	MP1A	Mx	.001	.5
82	MP1A	X	-2.712	5
83	MP1A	Z	-4.698	5
84	MP1A	Mx	.001	5
85	MP1C	X	-4.33	.5
86	MP1C	Z	-7.5	.5
87	MP1C	Mx	-.004	.5
88	MP1C	X	-4.33	5
89	MP1C	Z	-7.5	5
90	MP1C	Mx	-.004	5
91	MP4A	X	-2.712	.5
92	MP4A	Z	-4.698	.5
93	MP4A	Mx	.001	.5
94	MP4A	X	-2.712	5
95	MP4A	Z	-4.698	5
96	MP4A	Mx	.001	5
97	MP4C	X	-4.33	.5
98	MP4C	Z	-7.5	.5
99	MP4C	Mx	-.004	.5
100	MP4C	X	-4.33	5
101	MP4C	Z	-7.5	5
102	MP4C	Mx	-.004	5
103	MP1B	X	-4.605	.5
104	MP1B	Z	-7.976	.5
105	MP1B	Mx	.003	.5
106	MP1B	X	-4.605	5
107	MP1B	Z	-7.976	5
108	MP1B	Mx	.003	5
109	MP4B	X	-4.605	.5
110	MP4B	Z	-7.976	.5
111	MP4B	Mx	.003	.5
112	MP4B	X	-4.605	5
113	MP4B	Z	-7.976	5
114	MP4B	Mx	.003	5



**Member Point Loads (BLC 77 : Lm1)**

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	M12	Y	-500	%100

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	M11	Y	-500	%100

**Member Point Loads (BLC 79 : Lv1)**

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

**Member Point Loads (BLC 80 : Lv2)**

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

**Member Distributed Loads (BLC 40 : Structure Di)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	Y	-15.33	-15.33	0	%100
2	M2	Y	-15.33	-15.33	0	%100
3	M3	Y	-15.33	-15.33	0	%100
4	M7	Y	-15.33	-15.33	0	%100
5	MP4A	Y	-8.496	-8.496	0	%100
6	MP3A	Y	-8.496	-8.496	0	%100
7	MP2A	Y	-8.496	-8.496	0	%100
8	MP1A	Y	-8.496	-8.496	0	%100
9	MP4C	Y	-8.496	-8.496	0	%100
10	MP3C	Y	-8.496	-8.496	0	%100
11	MP2C	Y	-8.496	-8.496	0	%100
12	MP1C	Y	-8.496	-8.496	0	%100
13	MP4B	Y	-8.496	-8.496	0	%100
14	MP3B	Y	-8.496	-8.496	0	%100
15	MP2B	Y	-8.496	-8.496	0	%100
16	MP1B	Y	-8.496	-8.496	0	%100
17	M35	Y	-8.496	-8.496	0	%100
18	M37	Y	-8.496	-8.496	0	%100
19	M36A	Y	-15.33	-15.33	0	%100
20	M37A	Y	-15.33	-15.33	0	%100
21	M38	Y	-17.607	-17.607	0	%100
22	M39	Y	-17.607	-17.607	0	%100
23	M40	Y	-17.607	-17.607	0	%100
24	M45	Y	-9.537	-9.537	0	%100
25	M52	Y	-9.537	-9.537	0	%100
26	M59	Y	-9.537	-9.537	0	%100
27	M63	Y	-12.385	-12.385	0	%100
28	M64	Y	-12.385	-12.385	0	%100
29	M64B	Y	-12.385	-12.385	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-12.291	-12.291	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-3.073	-3.073	0	%100
5	M3	X	0	0	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
6	M3	Z	-3.073	-3.073	0 %100
7	M7	X	0	0	0 %100
8	M7	Z	0	0	0 %100
9	MP4A	X	0	0	0 %100
10	MP4A	Z	-7.006	-7.006	0 %100
11	MP3A	X	0	0	0 %100
12	MP3A	Z	-7.006	-7.006	0 %100
13	MP2A	X	0	0	0 %100
14	MP2A	Z	-7.006	-7.006	0 %100
15	MP1A	X	0	0	0 %100
16	MP1A	Z	-7.006	-7.006	0 %100
17	MP4C	X	0	0	0 %100
18	MP4C	Z	-7.006	-7.006	0 %100
19	MP3C	X	0	0	0 %100
20	MP3C	Z	-7.006	-7.006	0 %100
21	MP2C	X	0	0	0 %100
22	MP2C	Z	-7.006	-7.006	0 %100
23	MP1C	X	0	0	0 %100
24	MP1C	Z	-7.006	-7.006	0 %100
25	MP4B	X	0	0	0 %100
26	MP4B	Z	-7.006	-7.006	0 %100
27	MP3B	X	0	0	0 %100
28	MP3B	Z	-7.006	-7.006	0 %100
29	MP2B	X	0	0	0 %100
30	MP2B	Z	-7.006	-7.006	0 %100
31	MP1B	X	0	0	0 %100
32	MP1B	Z	-7.006	-7.006	0 %100
33	M35	X	0	0	0 %100
34	M35	Z	-6.057	-6.057	0 %100
35	M37	X	0	0	0 %100
36	M37	Z	-6.057	-6.057	0 %100
37	M36A	X	0	0	0 %100
38	M36A	Z	-8.899	-8.899	0 %100
39	M37A	X	0	0	0 %100
40	M37A	Z	-8.899	-8.899	0 %100
41	M38	X	0	0	0 %100
42	M38	Z	-8.951	-8.951	0 %100
43	M39	X	0	0	0 %100
44	M39	Z	-12.329	-12.329	0 %100
45	M40	X	0	0	0 %100
46	M40	Z	-12.329	-12.329	0 %100
47	M45	X	0	0	0 %100
48	M45	Z	-8.481	-8.481	0 %100
49	M52	X	0	0	0 %100
50	M52	Z	-2.12	-2.12	0 %100
51	M59	X	0	0	0 %100
52	M59	Z	-2.12	-2.12	0 %100
53	M63	X	0	0	0 %100
54	M63	Z	-2.334	-2.334	0 %100
55	M64	X	0	0	0 %100
56	M64	Z	-9.335	-9.335	0 %100
57	M64B	X	0	0	0 %100
58	M64B	Z	-9.335	-9.335	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
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**Member Distributed Loads (BLC 42 : Structure Wo (30 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	4.609	4.609	0	%100
2	M1	Z	-7.983	-7.983	0	%100
3	M2	X	4.609	4.609	0	%100
4	M2	Z	-7.983	-7.983	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	0	0	0	%100
7	M7	X	1.483	1.483	0	%100
8	M7	Z	-2.569	-2.569	0	%100
9	MP4A	X	3.503	3.503	0	%100
10	MP4A	Z	-6.067	-6.067	0	%100
11	MP3A	X	3.503	3.503	0	%100
12	MP3A	Z	-6.067	-6.067	0	%100
13	MP2A	X	3.503	3.503	0	%100
14	MP2A	Z	-6.067	-6.067	0	%100
15	MP1A	X	3.503	3.503	0	%100
16	MP1A	Z	-6.067	-6.067	0	%100
17	MP4C	X	3.503	3.503	0	%100
18	MP4C	Z	-6.067	-6.067	0	%100
19	MP3C	X	3.503	3.503	0	%100
20	MP3C	Z	-6.067	-6.067	0	%100
21	MP2C	X	3.503	3.503	0	%100
22	MP2C	Z	-6.067	-6.067	0	%100
23	MP1C	X	3.503	3.503	0	%100
24	MP1C	Z	-6.067	-6.067	0	%100
25	MP4B	X	3.503	3.503	0	%100
26	MP4B	Z	-6.067	-6.067	0	%100
27	MP3B	X	3.503	3.503	0	%100
28	MP3B	Z	-6.067	-6.067	0	%100
29	MP2B	X	3.503	3.503	0	%100
30	MP2B	Z	-6.067	-6.067	0	%100
31	MP1B	X	3.503	3.503	0	%100
32	MP1B	Z	-6.067	-6.067	0	%100
33	M35	X	3.028	3.028	0	%100
34	M35	Z	-5.245	-5.245	0	%100
35	M37	X	3.028	3.028	0	%100
36	M37	Z	-5.245	-5.245	0	%100
37	M36A	X	1.483	1.483	0	%100
38	M36A	Z	-2.569	-2.569	0	%100
39	M37A	X	5.932	5.932	0	%100
40	M37A	Z	-10.275	-10.275	0	%100
41	M38	X	5.039	5.039	0	%100
42	M38	Z	-8.727	-8.727	0	%100
43	M39	X	5.039	5.039	0	%100
44	M39	Z	-8.727	-8.727	0	%100
45	M40	X	6.727	6.727	0	%100
46	M40	Z	-11.652	-11.652	0	%100
47	M45	X	3.18	3.18	0	%100
48	M45	Z	-5.508	-5.508	0	%100
49	M52	X	3.18	3.18	0	%100
50	M52	Z	-5.508	-5.508	0	%100
51	M59	X	0	0	0	%100
52	M59	Z	0	0	0	%100
53	M63	X	0	0	0	%100
54	M63	Z	0	0	0	%100
55	M64	X	3.501	3.501	0	%100
56	M64	Z	-6.063	-6.063	0	%100
57	M64B	X	3.501	3.501	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
58 M64B	Z	-6.063	-6.063	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1 M1	X	2.661	2.661	0	%100
2 M1	Z	-1.536	-1.536	0	%100
3 M2	X	10.644	10.644	0	%100
4 M2	Z	-6.145	-6.145	0	%100
5 M3	X	2.661	2.661	0	%100
6 M3	Z	-1.536	-1.536	0	%100
7 M7	X	7.706	7.706	0	%100
8 M7	Z	-4.449	-4.449	0	%100
9 MP4A	X	6.067	6.067	0	%100
10 MP4A	Z	-3.503	-3.503	0	%100
11 MP3A	X	6.067	6.067	0	%100
12 MP3A	Z	-3.503	-3.503	0	%100
13 MP2A	X	6.067	6.067	0	%100
14 MP2A	Z	-3.503	-3.503	0	%100
15 MP1A	X	6.067	6.067	0	%100
16 MP1A	Z	-3.503	-3.503	0	%100
17 MP4C	X	6.067	6.067	0	%100
18 MP4C	Z	-3.503	-3.503	0	%100
19 MP3C	X	6.067	6.067	0	%100
20 MP3C	Z	-3.503	-3.503	0	%100
21 MP2C	X	6.067	6.067	0	%100
22 MP2C	Z	-3.503	-3.503	0	%100
23 MP1C	X	6.067	6.067	0	%100
24 MP1C	Z	-3.503	-3.503	0	%100
25 MP4B	X	6.067	6.067	0	%100
26 MP4B	Z	-3.503	-3.503	0	%100
27 MP3B	X	6.067	6.067	0	%100
28 MP3B	Z	-3.503	-3.503	0	%100
29 MP2B	X	6.067	6.067	0	%100
30 MP2B	Z	-3.503	-3.503	0	%100
31 MP1B	X	6.067	6.067	0	%100
32 MP1B	Z	-3.503	-3.503	0	%100
33 M35	X	5.245	5.245	0	%100
34 M35	Z	-3.028	-3.028	0	%100
35 M37	X	5.245	5.245	0	%100
36 M37	Z	-3.028	-3.028	0	%100
37 M36A	X	0	0	0	%100
38 M36A	Z	0	0	0	%100
39 M37A	X	7.706	7.706	0	%100
40 M37A	Z	-4.449	-4.449	0	%100
41 M38	X	10.677	10.677	0	%100
42 M38	Z	-6.164	-6.164	0	%100
43 M39	X	7.752	7.752	0	%100
44 M39	Z	-4.476	-4.476	0	%100
45 M40	X	10.677	10.677	0	%100
46 M40	Z	-6.164	-6.164	0	%100
47 M45	X	1.836	1.836	0	%100
48 M45	Z	-1.06	-1.06	0	%100
49 M52	X	7.344	7.344	0	%100
50 M52	Z	-4.24	-4.24	0	%100
51 M59	X	1.836	1.836	0	%100
52 M59	Z	-1.06	-1.06	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
53	M63	X	2.021	2.021	0 %100
54	M63	Z	-1.167	-1.167	0 %100
55	M64	X	2.021	2.021	0 %100
56	M64	Z	-1.167	-1.167	0 %100
57	M64B	X	2.021	2.021	0 %100
58	M64B	Z	-1.167	-1.167	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0 %100
2	M1	Z	0	0	0 %100
3	M2	X	9.218	9.218	0 %100
4	M2	Z	0	0	0 %100
5	M3	X	9.218	9.218	0 %100
6	M3	Z	0	0	0 %100
7	M7	X	11.865	11.865	0 %100
8	M7	Z	0	0	0 %100
9	MP4A	X	7.006	7.006	0 %100
10	MP4A	Z	0	0	0 %100
11	MP3A	X	7.006	7.006	0 %100
12	MP3A	Z	0	0	0 %100
13	MP2A	X	7.006	7.006	0 %100
14	MP2A	Z	0	0	0 %100
15	MP1A	X	7.006	7.006	0 %100
16	MP1A	Z	0	0	0 %100
17	MP4C	X	7.006	7.006	0 %100
18	MP4C	Z	0	0	0 %100
19	MP3C	X	7.006	7.006	0 %100
20	MP3C	Z	0	0	0 %100
21	MP2C	X	7.006	7.006	0 %100
22	MP2C	Z	0	0	0 %100
23	MP1C	X	7.006	7.006	0 %100
24	MP1C	Z	0	0	0 %100
25	MP4B	X	7.006	7.006	0 %100
26	MP4B	Z	0	0	0 %100
27	MP3B	X	7.006	7.006	0 %100
28	MP3B	Z	0	0	0 %100
29	MP2B	X	7.006	7.006	0 %100
30	MP2B	Z	0	0	0 %100
31	MP1B	X	7.006	7.006	0 %100
32	MP1B	Z	0	0	0 %100
33	M35	X	6.057	6.057	0 %100
34	M35	Z	0	0	0 %100
35	M37	X	6.057	6.057	0 %100
36	M37	Z	0	0	0 %100
37	M36A	X	2.966	2.966	0 %100
38	M36A	Z	0	0	0 %100
39	M37A	X	2.966	2.966	0 %100
40	M37A	Z	0	0	0 %100
41	M38	X	13.455	13.455	0 %100
42	M38	Z	0	0	0 %100
43	M39	X	10.077	10.077	0 %100
44	M39	Z	0	0	0 %100
45	M40	X	10.077	10.077	0 %100
46	M40	Z	0	0	0 %100
47	M45	X	0	0	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
48	M45	Z	0	0	0	%100
49	M52	X	6.36	6.36	0	%100
50	M52	Z	0	0	0	%100
51	M59	X	6.36	6.36	0	%100
52	M59	Z	0	0	0	%100
53	M63	X	7.001	7.001	0	%100
54	M63	Z	0	0	0	%100
55	M64	X	0	0	0	%100
56	M64	Z	0	0	0	%100
57	M64B	X	0	0	0	%100
58	M64B	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	2.661	2.661	0	%100
2	M1	Z	1.536	1.536	0	%100
3	M2	X	2.661	2.661	0	%100
4	M2	Z	1.536	1.536	0	%100
5	M3	X	10.644	10.644	0	%100
6	M3	Z	6.145	6.145	0	%100
7	M7	X	7.706	7.706	0	%100
8	M7	Z	4.449	4.449	0	%100
9	MP4A	X	6.067	6.067	0	%100
10	MP4A	Z	3.503	3.503	0	%100
11	MP3A	X	6.067	6.067	0	%100
12	MP3A	Z	3.503	3.503	0	%100
13	MP2A	X	6.067	6.067	0	%100
14	MP2A	Z	3.503	3.503	0	%100
15	MP1A	X	6.067	6.067	0	%100
16	MP1A	Z	3.503	3.503	0	%100
17	MP4C	X	6.067	6.067	0	%100
18	MP4C	Z	3.503	3.503	0	%100
19	MP3C	X	6.067	6.067	0	%100
20	MP3C	Z	3.503	3.503	0	%100
21	MP2C	X	6.067	6.067	0	%100
22	MP2C	Z	3.503	3.503	0	%100
23	MP1C	X	6.067	6.067	0	%100
24	MP1C	Z	3.503	3.503	0	%100
25	MP4B	X	6.067	6.067	0	%100
26	MP4B	Z	3.503	3.503	0	%100
27	MP3B	X	6.067	6.067	0	%100
28	MP3B	Z	3.503	3.503	0	%100
29	MP2B	X	6.067	6.067	0	%100
30	MP2B	Z	3.503	3.503	0	%100
31	MP1B	X	6.067	6.067	0	%100
32	MP1B	Z	3.503	3.503	0	%100
33	M35	X	5.245	5.245	0	%100
34	M35	Z	3.028	3.028	0	%100
35	M37	X	5.245	5.245	0	%100
36	M37	Z	3.028	3.028	0	%100
37	M36A	X	7.706	7.706	0	%100
38	M36A	Z	4.449	4.449	0	%100
39	M37A	X	0	0	0	%100
40	M37A	Z	0	0	0	%100
41	M38	X	10.677	10.677	0	%100
42	M38	Z	6.164	6.164	0	%100





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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
43	M39	X	10.677	10.677	0	%100
44	M39	Z	6.164	6.164	0	%100
45	M40	X	7.752	7.752	0	%100
46	M40	Z	4.476	4.476	0	%100
47	M45	X	1.836	1.836	0	%100
48	M45	Z	1.06	1.06	0	%100
49	M52	X	1.836	1.836	0	%100
50	M52	Z	1.06	1.06	0	%100
51	M59	X	7.344	7.344	0	%100
52	M59	Z	4.24	4.24	0	%100
53	M63	X	8.084	8.084	0	%100
54	M63	Z	4.667	4.667	0	%100
55	M64	X	2.021	2.021	0	%100
56	M64	Z	1.167	1.167	0	%100
57	M64B	X	2.021	2.021	0	%100
58	M64B	Z	1.167	1.167	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	4.609	4.609	0	%100
2	M1	Z	7.983	7.983	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	4.609	4.609	0	%100
6	M3	Z	7.983	7.983	0	%100
7	M7	X	1.483	1.483	0	%100
8	M7	Z	2.569	2.569	0	%100
9	MP4A	X	3.503	3.503	0	%100
10	MP4A	Z	6.067	6.067	0	%100
11	MP3A	X	3.503	3.503	0	%100
12	MP3A	Z	6.067	6.067	0	%100
13	MP2A	X	3.503	3.503	0	%100
14	MP2A	Z	6.067	6.067	0	%100
15	MP1A	X	3.503	3.503	0	%100
16	MP1A	Z	6.067	6.067	0	%100
17	MP4C	X	3.503	3.503	0	%100
18	MP4C	Z	6.067	6.067	0	%100
19	MP3C	X	3.503	3.503	0	%100
20	MP3C	Z	6.067	6.067	0	%100
21	MP2C	X	3.503	3.503	0	%100
22	MP2C	Z	6.067	6.067	0	%100
23	MP1C	X	3.503	3.503	0	%100
24	MP1C	Z	6.067	6.067	0	%100
25	MP4B	X	3.503	3.503	0	%100
26	MP4B	Z	6.067	6.067	0	%100
27	MP3B	X	3.503	3.503	0	%100
28	MP3B	Z	6.067	6.067	0	%100
29	MP2B	X	3.503	3.503	0	%100
30	MP2B	Z	6.067	6.067	0	%100
31	MP1B	X	3.503	3.503	0	%100
32	MP1B	Z	6.067	6.067	0	%100
33	M35	X	3.028	3.028	0	%100
34	M35	Z	5.245	5.245	0	%100
35	M37	X	3.028	3.028	0	%100
36	M37	Z	5.245	5.245	0	%100
37	M36A	X	5.932	5.932	0	%100







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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
28	MP3B	Z	6.067	6.067	0	%100
29	MP2B	X	-3.503	-3.503	0	%100
30	MP2B	Z	6.067	6.067	0	%100
31	MP1B	X	-3.503	-3.503	0	%100
32	MP1B	Z	6.067	6.067	0	%100
33	M35	X	-3.028	-3.028	0	%100
34	M35	Z	5.245	5.245	0	%100
35	M37	X	-3.028	-3.028	0	%100
36	M37	Z	5.245	5.245	0	%100
37	M36A	X	-1.483	-1.483	0	%100
38	M36A	Z	2.569	2.569	0	%100
39	M37A	X	-5.932	-5.932	0	%100
40	M37A	Z	10.275	10.275	0	%100
41	M38	X	-5.039	-5.039	0	%100
42	M38	Z	8.727	8.727	0	%100
43	M39	X	-5.039	-5.039	0	%100
44	M39	Z	8.727	8.727	0	%100
45	M40	X	-6.727	-6.727	0	%100
46	M40	Z	11.652	11.652	0	%100
47	M45	X	-3.18	-3.18	0	%100
48	M45	Z	5.508	5.508	0	%100
49	M52	X	-3.18	-3.18	0	%100
50	M52	Z	5.508	5.508	0	%100
51	M59	X	0	0	0	%100
52	M59	Z	0	0	0	%100
53	M63	X	0	0	0	%100
54	M63	Z	0	0	0	%100
55	M64	X	-3.501	-3.501	0	%100
56	M64	Z	6.063	6.063	0	%100
57	M64B	X	-3.501	-3.501	0	%100
58	M64B	Z	6.063	6.063	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-2.661	-2.661	0	%100
2	M1	Z	1.536	1.536	0	%100
3	M2	X	-10.644	-10.644	0	%100
4	M2	Z	6.145	6.145	0	%100
5	M3	X	-2.661	-2.661	0	%100
6	M3	Z	1.536	1.536	0	%100
7	M7	X	-7.706	-7.706	0	%100
8	M7	Z	4.449	4.449	0	%100
9	MP4A	X	-6.067	-6.067	0	%100
10	MP4A	Z	3.503	3.503	0	%100
11	MP3A	X	-6.067	-6.067	0	%100
12	MP3A	Z	3.503	3.503	0	%100
13	MP2A	X	-6.067	-6.067	0	%100
14	MP2A	Z	3.503	3.503	0	%100
15	MP1A	X	-6.067	-6.067	0	%100
16	MP1A	Z	3.503	3.503	0	%100
17	MP4C	X	-6.067	-6.067	0	%100
18	MP4C	Z	3.503	3.503	0	%100
19	MP3C	X	-6.067	-6.067	0	%100
20	MP3C	Z	3.503	3.503	0	%100
21	MP2C	X	-6.067	-6.067	0	%100
22	MP2C	Z	3.503	3.503	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, %]
23	MP1C	X	-6.067	-6.067	0	%100
24	MP1C	Z	3.503	3.503	0	%100
25	MP4B	X	-6.067	-6.067	0	%100
26	MP4B	Z	3.503	3.503	0	%100
27	MP3B	X	-6.067	-6.067	0	%100
28	MP3B	Z	3.503	3.503	0	%100
29	MP2B	X	-6.067	-6.067	0	%100
30	MP2B	Z	3.503	3.503	0	%100
31	MP1B	X	-6.067	-6.067	0	%100
32	MP1B	Z	3.503	3.503	0	%100
33	M35	X	-5.245	-5.245	0	%100
34	M35	Z	3.028	3.028	0	%100
35	M37	X	-5.245	-5.245	0	%100
36	M37	Z	3.028	3.028	0	%100
37	M36A	X	0	0	0	%100
38	M36A	Z	0	0	0	%100
39	M37A	X	-7.706	-7.706	0	%100
40	M37A	Z	4.449	4.449	0	%100
41	M38	X	-10.677	-10.677	0	%100
42	M38	Z	6.164	6.164	0	%100
43	M39	X	-7.752	-7.752	0	%100
44	M39	Z	4.476	4.476	0	%100
45	M40	X	-10.677	-10.677	0	%100
46	M40	Z	6.164	6.164	0	%100
47	M45	X	-1.836	-1.836	0	%100
48	M45	Z	1.06	1.06	0	%100
49	M52	X	-7.344	-7.344	0	%100
50	M52	Z	4.24	4.24	0	%100
51	M59	X	-1.836	-1.836	0	%100
52	M59	Z	1.06	1.06	0	%100
53	M63	X	-2.021	-2.021	0	%100
54	M63	Z	1.167	1.167	0	%100
55	M64	X	-2.021	-2.021	0	%100
56	M64	Z	1.167	1.167	0	%100
57	M64B	X	-2.021	-2.021	0	%100
58	M64B	Z	1.167	1.167	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	-9.218	-9.218	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	-9.218	-9.218	0	%100
6	M3	Z	0	0	0	%100
7	M7	X	-11.865	-11.865	0	%100
8	M7	Z	0	0	0	%100
9	MP4A	X	-7.006	-7.006	0	%100
10	MP4A	Z	0	0	0	%100
11	MP3A	X	-7.006	-7.006	0	%100
12	MP3A	Z	0	0	0	%100
13	MP2A	X	-7.006	-7.006	0	%100
14	MP2A	Z	0	0	0	%100
15	MP1A	X	-7.006	-7.006	0	%100
16	MP1A	Z	0	0	0	%100
17	MP4C	X	-7.006	-7.006	0	%100















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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
58 M64B	Z	-1.889	-1.889	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1 M1	X	.915	.915	0	%100
2 M1	Z	-.528	-.528	0	%100
3 M2	X	3.658	3.658	0	%100
4 M2	Z	-2.112	-2.112	0	%100
5 M3	X	.915	.915	0	%100
6 M3	Z	-.528	-.528	0	%100
7 M7	X	2.692	2.692	0	%100
8 M7	Z	-1.554	-1.554	0	%100
9 MP4A	X	2.793	2.793	0	%100
10 MP4A	Z	-1.613	-1.613	0	%100
11 MP3A	X	2.793	2.793	0	%100
12 MP3A	Z	-1.613	-1.613	0	%100
13 MP2A	X	2.793	2.793	0	%100
14 MP2A	Z	-1.613	-1.613	0	%100
15 MP1A	X	2.793	2.793	0	%100
16 MP1A	Z	-1.613	-1.613	0	%100
17 MP4C	X	2.793	2.793	0	%100
18 MP4C	Z	-1.613	-1.613	0	%100
19 MP3C	X	2.793	2.793	0	%100
20 MP3C	Z	-1.613	-1.613	0	%100
21 MP2C	X	2.793	2.793	0	%100
22 MP2C	Z	-1.613	-1.613	0	%100
23 MP1C	X	2.793	2.793	0	%100
24 MP1C	Z	-1.613	-1.613	0	%100
25 MP4B	X	2.793	2.793	0	%100
26 MP4B	Z	-1.613	-1.613	0	%100
27 MP3B	X	2.793	2.793	0	%100
28 MP3B	Z	-1.613	-1.613	0	%100
29 MP2B	X	2.793	2.793	0	%100
30 MP2B	Z	-1.613	-1.613	0	%100
31 MP1B	X	2.793	2.793	0	%100
32 MP1B	Z	-1.613	-1.613	0	%100
33 M35	X	2.251	2.251	0	%100
34 M35	Z	-1.3	-1.3	0	%100
35 M37	X	2.251	2.251	0	%100
36 M37	Z	-1.3	-1.3	0	%100
37 M36A	X	0	0	0	%100
38 M36A	Z	0	0	0	%100
39 M37A	X	2.692	2.692	0	%100
40 M37A	Z	-1.554	-1.554	0	%100
41 M38	X	3.209	3.209	0	%100
42 M38	Z	-1.853	-1.853	0	%100
43 M39	X	1.988	1.988	0	%100
44 M39	Z	-1.148	-1.148	0	%100
45 M40	X	3.209	3.209	0	%100
46 M40	Z	-1.853	-1.853	0	%100
47 M45	X	.759	.759	0	%100
48 M45	Z	-.438	-.438	0	%100
49 M52	X	3.035	3.035	0	%100
50 M52	Z	-1.752	-1.752	0	%100
51 M59	X	.759	.759	0	%100
52 M59	Z	-.438	-.438	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
53	M63	X	.63	.63	0	%100
54	M63	Z	-.364	-.364	0	%100
55	M64	X	.63	.63	0	%100
56	M64	Z	-.364	-.364	0	%100
57	M64B	X	.63	.63	0	%100
58	M64B	Z	-.364	-.364	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	3.168	3.168	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	3.168	3.168	0	%100
6	M3	Z	0	0	0	%100
7	M7	X	4.144	4.144	0	%100
8	M7	Z	0	0	0	%100
9	MP4A	X	3.225	3.225	0	%100
10	MP4A	Z	0	0	0	%100
11	MP3A	X	3.225	3.225	0	%100
12	MP3A	Z	0	0	0	%100
13	MP2A	X	3.225	3.225	0	%100
14	MP2A	Z	0	0	0	%100
15	MP1A	X	3.225	3.225	0	%100
16	MP1A	Z	0	0	0	%100
17	MP4C	X	3.225	3.225	0	%100
18	MP4C	Z	0	0	0	%100
19	MP3C	X	3.225	3.225	0	%100
20	MP3C	Z	0	0	0	%100
21	MP2C	X	3.225	3.225	0	%100
22	MP2C	Z	0	0	0	%100
23	MP1C	X	3.225	3.225	0	%100
24	MP1C	Z	0	0	0	%100
25	MP4B	X	3.225	3.225	0	%100
26	MP4B	Z	0	0	0	%100
27	MP3B	X	3.225	3.225	0	%100
28	MP3B	Z	0	0	0	%100
29	MP2B	X	3.225	3.225	0	%100
30	MP2B	Z	0	0	0	%100
31	MP1B	X	3.225	3.225	0	%100
32	MP1B	Z	0	0	0	%100
33	M35	X	2.6	2.6	0	%100
34	M35	Z	0	0	0	%100
35	M37	X	2.6	2.6	0	%100
36	M37	Z	0	0	0	%100
37	M36A	X	1.036	1.036	0	%100
38	M36A	Z	0	0	0	%100
39	M37A	X	1.036	1.036	0	%100
40	M37A	Z	0	0	0	%100
41	M38	X	4.176	4.176	0	%100
42	M38	Z	0	0	0	%100
43	M39	X	2.766	2.766	0	%100
44	M39	Z	0	0	0	%100
45	M40	X	2.766	2.766	0	%100
46	M40	Z	0	0	0	%100
47	M45	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
48	M45	Z	0	0	0	%100
49	M52	X	2.628	2.628	0	%100
50	M52	Z	0	0	0	%100
51	M59	X	2.628	2.628	0	%100
52	M59	Z	0	0	0	%100
53	M63	X	2.182	2.182	0	%100
54	M63	Z	0	0	0	%100
55	M64	X	0	0	0	%100
56	M64	Z	0	0	0	%100
57	M64B	X	0	0	0	%100
58	M64B	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	.915	.915	0	%100
2	M1	Z	.528	.528	0	%100
3	M2	X	.915	.915	0	%100
4	M2	Z	.528	.528	0	%100
5	M3	X	3.658	3.658	0	%100
6	M3	Z	2.112	2.112	0	%100
7	M7	X	2.692	2.692	0	%100
8	M7	Z	1.554	1.554	0	%100
9	MP4A	X	2.793	2.793	0	%100
10	MP4A	Z	1.613	1.613	0	%100
11	MP3A	X	2.793	2.793	0	%100
12	MP3A	Z	1.613	1.613	0	%100
13	MP2A	X	2.793	2.793	0	%100
14	MP2A	Z	1.613	1.613	0	%100
15	MP1A	X	2.793	2.793	0	%100
16	MP1A	Z	1.613	1.613	0	%100
17	MP4C	X	2.793	2.793	0	%100
18	MP4C	Z	1.613	1.613	0	%100
19	MP3C	X	2.793	2.793	0	%100
20	MP3C	Z	1.613	1.613	0	%100
21	MP2C	X	2.793	2.793	0	%100
22	MP2C	Z	1.613	1.613	0	%100
23	MP1C	X	2.793	2.793	0	%100
24	MP1C	Z	1.613	1.613	0	%100
25	MP4B	X	2.793	2.793	0	%100
26	MP4B	Z	1.613	1.613	0	%100
27	MP3B	X	2.793	2.793	0	%100
28	MP3B	Z	1.613	1.613	0	%100
29	MP2B	X	2.793	2.793	0	%100
30	MP2B	Z	1.613	1.613	0	%100
31	MP1B	X	2.793	2.793	0	%100
32	MP1B	Z	1.613	1.613	0	%100
33	M35	X	2.251	2.251	0	%100
34	M35	Z	1.3	1.3	0	%100
35	M37	X	2.251	2.251	0	%100
36	M37	Z	1.3	1.3	0	%100
37	M36A	X	2.692	2.692	0	%100
38	M36A	Z	1.554	1.554	0	%100
39	M37A	X	0	0	0	%100
40	M37A	Z	0	0	0	%100
41	M38	X	3.209	3.209	0	%100
42	M38	Z	1.853	1.853	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
43	M39	X	3.209	3.209	0	%100
44	M39	Z	1.853	1.853	0	%100
45	M40	X	1.988	1.988	0	%100
46	M40	Z	1.148	1.148	0	%100
47	M45	X	.759	.759	0	%100
48	M45	Z	.438	.438	0	%100
49	M52	X	.759	.759	0	%100
50	M52	Z	.438	.438	0	%100
51	M59	X	3.035	3.035	0	%100
52	M59	Z	1.752	1.752	0	%100
53	M63	X	2.519	2.519	0	%100
54	M63	Z	1.454	1.454	0	%100
55	M64	X	.63	.63	0	%100
56	M64	Z	.364	.364	0	%100
57	M64B	X	.63	.63	0	%100
58	M64B	Z	.364	.364	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	1.584	1.584	0	%100
2	M1	Z	2.744	2.744	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	1.584	1.584	0	%100
6	M3	Z	2.744	2.744	0	%100
7	M7	X	.518	.518	0	%100
8	M7	Z	.897	.897	0	%100
9	MP4A	X	1.613	1.613	0	%100
10	MP4A	Z	2.793	2.793	0	%100
11	MP3A	X	1.613	1.613	0	%100
12	MP3A	Z	2.793	2.793	0	%100
13	MP2A	X	1.613	1.613	0	%100
14	MP2A	Z	2.793	2.793	0	%100
15	MP1A	X	1.613	1.613	0	%100
16	MP1A	Z	2.793	2.793	0	%100
17	MP4C	X	1.613	1.613	0	%100
18	MP4C	Z	2.793	2.793	0	%100
19	MP3C	X	1.613	1.613	0	%100
20	MP3C	Z	2.793	2.793	0	%100
21	MP2C	X	1.613	1.613	0	%100
22	MP2C	Z	2.793	2.793	0	%100
23	MP1C	X	1.613	1.613	0	%100
24	MP1C	Z	2.793	2.793	0	%100
25	MP4B	X	1.613	1.613	0	%100
26	MP4B	Z	2.793	2.793	0	%100
27	MP3B	X	1.613	1.613	0	%100
28	MP3B	Z	2.793	2.793	0	%100
29	MP2B	X	1.613	1.613	0	%100
30	MP2B	Z	2.793	2.793	0	%100
31	MP1B	X	1.613	1.613	0	%100
32	MP1B	Z	2.793	2.793	0	%100
33	M35	X	1.3	1.3	0	%100
34	M35	Z	2.251	2.251	0	%100
35	M37	X	1.3	1.3	0	%100
36	M37	Z	2.251	2.251	0	%100
37	M36A	X	2.072	2.072	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
38	M36A	Z	3.589	3.589	0	%100
39	M37A	X	.518	.518	0	%100
40	M37A	Z	.897	.897	0	%100
41	M38	X	1.383	1.383	0	%100
42	M38	Z	2.395	2.395	0	%100
43	M39	X	2.088	2.088	0	%100
44	M39	Z	3.616	3.616	0	%100
45	M40	X	1.383	1.383	0	%100
46	M40	Z	2.395	2.395	0	%100
47	M45	X	1.314	1.314	0	%100
48	M45	Z	2.276	2.276	0	%100
49	M52	X	0	0	0	%100
50	M52	Z	0	0	0	%100
51	M59	X	1.314	1.314	0	%100
52	M59	Z	2.276	2.276	0	%100
53	M63	X	1.091	1.091	0	%100
54	M63	Z	1.889	1.889	0	%100
55	M64	X	1.091	1.091	0	%100
56	M64	Z	1.889	1.889	0	%100
57	M64B	X	1.091	1.091	0	%100
58	M64B	Z	1.889	1.889	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	4.224	4.224	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	1.056	1.056	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	1.056	1.056	0	%100
7	M7	X	0	0	0	%100
8	M7	Z	0	0	0	%100
9	MP4A	X	0	0	0	%100
10	MP4A	Z	3.225	3.225	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	3.225	3.225	0	%100
13	MP2A	X	0	0	0	%100
14	MP2A	Z	3.225	3.225	0	%100
15	MP1A	X	0	0	0	%100
16	MP1A	Z	3.225	3.225	0	%100
17	MP4C	X	0	0	0	%100
18	MP4C	Z	3.225	3.225	0	%100
19	MP3C	X	0	0	0	%100
20	MP3C	Z	3.225	3.225	0	%100
21	MP2C	X	0	0	0	%100
22	MP2C	Z	3.225	3.225	0	%100
23	MP1C	X	0	0	0	%100
24	MP1C	Z	3.225	3.225	0	%100
25	MP4B	X	0	0	0	%100
26	MP4B	Z	3.225	3.225	0	%100
27	MP3B	X	0	0	0	%100
28	MP3B	Z	3.225	3.225	0	%100
29	MP2B	X	0	0	0	%100
30	MP2B	Z	3.225	3.225	0	%100
31	MP1B	X	0	0	0	%100
32	MP1B	Z	3.225	3.225	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
33	M35	X	0	0	0	%100
34	M35	Z	2.6	2.6	0	%100
35	M37	X	0	0	0	%100
36	M37	Z	2.6	2.6	0	%100
37	M36A	X	0	0	0	%100
38	M36A	Z	3.108	3.108	0	%100
39	M37A	X	0	0	0	%100
40	M37A	Z	3.108	3.108	0	%100
41	M38	X	0	0	0	%100
42	M38	Z	2.296	2.296	0	%100
43	M39	X	0	0	0	%100
44	M39	Z	3.706	3.706	0	%100
45	M40	X	0	0	0	%100
46	M40	Z	3.706	3.706	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	3.504	3.504	0	%100
49	M52	X	0	0	0	%100
50	M52	Z	.876	.876	0	%100
51	M59	X	0	0	0	%100
52	M59	Z	.876	.876	0	%100
53	M63	X	0	0	0	%100
54	M63	Z	.727	.727	0	%100
55	M64	X	0	0	0	%100
56	M64	Z	2.909	2.909	0	%100
57	M64B	X	0	0	0	%100
58	M64B	Z	2.909	2.909	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	-1.584	-1.584	0	%100
2	M1	Z	2.744	2.744	0	%100
3	M2	X	-1.584	-1.584	0	%100
4	M2	Z	2.744	2.744	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	0	0	0	%100
7	M7	X	-.518	-.518	0	%100
8	M7	Z	.897	.897	0	%100
9	MP4A	X	-1.613	-1.613	0	%100
10	MP4A	Z	2.793	2.793	0	%100
11	MP3A	X	-1.613	-1.613	0	%100
12	MP3A	Z	2.793	2.793	0	%100
13	MP2A	X	-1.613	-1.613	0	%100
14	MP2A	Z	2.793	2.793	0	%100
15	MP1A	X	-1.613	-1.613	0	%100
16	MP1A	Z	2.793	2.793	0	%100
17	MP4C	X	-1.613	-1.613	0	%100
18	MP4C	Z	2.793	2.793	0	%100
19	MP3C	X	-1.613	-1.613	0	%100
20	MP3C	Z	2.793	2.793	0	%100
21	MP2C	X	-1.613	-1.613	0	%100
22	MP2C	Z	2.793	2.793	0	%100
23	MP1C	X	-1.613	-1.613	0	%100
24	MP1C	Z	2.793	2.793	0	%100
25	MP4B	X	-1.613	-1.613	0	%100
26	MP4B	Z	2.793	2.793	0	%100
27	MP3B	X	-1.613	-1.613	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, %]
28	MP3B	Z	2.793	2.793	0	%100
29	MP2B	X	-1.613	-1.613	0	%100
30	MP2B	Z	2.793	2.793	0	%100
31	MP1B	X	-1.613	-1.613	0	%100
32	MP1B	Z	2.793	2.793	0	%100
33	M35	X	-1.3	-1.3	0	%100
34	M35	Z	2.251	2.251	0	%100
35	M37	X	-1.3	-1.3	0	%100
36	M37	Z	2.251	2.251	0	%100
37	M36A	X	-0.518	-0.518	0	%100
38	M36A	Z	0.897	0.897	0	%100
39	M37A	X	-2.072	-2.072	0	%100
40	M37A	Z	3.589	3.589	0	%100
41	M38	X	-1.383	-1.383	0	%100
42	M38	Z	2.395	2.395	0	%100
43	M39	X	-1.383	-1.383	0	%100
44	M39	Z	2.395	2.395	0	%100
45	M40	X	-2.088	-2.088	0	%100
46	M40	Z	3.616	3.616	0	%100
47	M45	X	-1.314	-1.314	0	%100
48	M45	Z	2.276	2.276	0	%100
49	M52	X	-1.314	-1.314	0	%100
50	M52	Z	2.276	2.276	0	%100
51	M59	X	0	0	0	%100
52	M59	Z	0	0	0	%100
53	M63	X	0	0	0	%100
54	M63	Z	0	0	0	%100
55	M64	X	-1.091	-1.091	0	%100
56	M64	Z	1.889	1.889	0	%100
57	M64B	X	-1.091	-1.091	0	%100
58	M64B	Z	1.889	1.889	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	-0.915	-0.915	0	%100
2	M1	Z	0.528	0.528	0	%100
3	M2	X	-3.658	-3.658	0	%100
4	M2	Z	2.112	2.112	0	%100
5	M3	X	-0.915	-0.915	0	%100
6	M3	Z	0.528	0.528	0	%100
7	M7	X	-2.692	-2.692	0	%100
8	M7	Z	1.554	1.554	0	%100
9	MP4A	X	-2.793	-2.793	0	%100
10	MP4A	Z	1.613	1.613	0	%100
11	MP3A	X	-2.793	-2.793	0	%100
12	MP3A	Z	1.613	1.613	0	%100
13	MP2A	X	-2.793	-2.793	0	%100
14	MP2A	Z	1.613	1.613	0	%100
15	MP1A	X	-2.793	-2.793	0	%100
16	MP1A	Z	1.613	1.613	0	%100
17	MP4C	X	-2.793	-2.793	0	%100
18	MP4C	Z	1.613	1.613	0	%100
19	MP3C	X	-2.793	-2.793	0	%100
20	MP3C	Z	1.613	1.613	0	%100
21	MP2C	X	-2.793	-2.793	0	%100
22	MP2C	Z	1.613	1.613	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
23	MP1C	X	-2.793	-2.793	0	%100
24	MP1C	Z	1.613	1.613	0	%100
25	MP4B	X	-2.793	-2.793	0	%100
26	MP4B	Z	1.613	1.613	0	%100
27	MP3B	X	-2.793	-2.793	0	%100
28	MP3B	Z	1.613	1.613	0	%100
29	MP2B	X	-2.793	-2.793	0	%100
30	MP2B	Z	1.613	1.613	0	%100
31	MP1B	X	-2.793	-2.793	0	%100
32	MP1B	Z	1.613	1.613	0	%100
33	M35	X	-2.251	-2.251	0	%100
34	M35	Z	1.3	1.3	0	%100
35	M37	X	-2.251	-2.251	0	%100
36	M37	Z	1.3	1.3	0	%100
37	M36A	X	0	0	0	%100
38	M36A	Z	0	0	0	%100
39	M37A	X	-2.692	-2.692	0	%100
40	M37A	Z	1.554	1.554	0	%100
41	M38	X	-3.209	-3.209	0	%100
42	M38	Z	1.853	1.853	0	%100
43	M39	X	-1.988	-1.988	0	%100
44	M39	Z	1.148	1.148	0	%100
45	M40	X	-3.209	-3.209	0	%100
46	M40	Z	1.853	1.853	0	%100
47	M45	X	-.759	-.759	0	%100
48	M45	Z	.438	.438	0	%100
49	M52	X	-3.035	-3.035	0	%100
50	M52	Z	1.752	1.752	0	%100
51	M59	X	-.759	-.759	0	%100
52	M59	Z	.438	.438	0	%100
53	M63	X	-.63	-.63	0	%100
54	M63	Z	.364	.364	0	%100
55	M64	X	-.63	-.63	0	%100
56	M64	Z	.364	.364	0	%100
57	M64B	X	-.63	-.63	0	%100
58	M64B	Z	.364	.364	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	-3.168	-3.168	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	-3.168	-3.168	0	%100
6	M3	Z	0	0	0	%100
7	M7	X	-4.144	-4.144	0	%100
8	M7	Z	0	0	0	%100
9	MP4A	X	-3.225	-3.225	0	%100
10	MP4A	Z	0	0	0	%100
11	MP3A	X	-3.225	-3.225	0	%100
12	MP3A	Z	0	0	0	%100
13	MP2A	X	-3.225	-3.225	0	%100
14	MP2A	Z	0	0	0	%100
15	MP1A	X	-3.225	-3.225	0	%100
16	MP1A	Z	0	0	0	%100
17	MP4C	X	-3.225	-3.225	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
18	MP4C	Z	0	0	0	%100
19	MP3C	X	-3.225	-3.225	0	%100
20	MP3C	Z	0	0	0	%100
21	MP2C	X	-3.225	-3.225	0	%100
22	MP2C	Z	0	0	0	%100
23	MP1C	X	-3.225	-3.225	0	%100
24	MP1C	Z	0	0	0	%100
25	MP4B	X	-3.225	-3.225	0	%100
26	MP4B	Z	0	0	0	%100
27	MP3B	X	-3.225	-3.225	0	%100
28	MP3B	Z	0	0	0	%100
29	MP2B	X	-3.225	-3.225	0	%100
30	MP2B	Z	0	0	0	%100
31	MP1B	X	-3.225	-3.225	0	%100
32	MP1B	Z	0	0	0	%100
33	M35	X	-2.6	-2.6	0	%100
34	M35	Z	0	0	0	%100
35	M37	X	-2.6	-2.6	0	%100
36	M37	Z	0	0	0	%100
37	M36A	X	-1.036	-1.036	0	%100
38	M36A	Z	0	0	0	%100
39	M37A	X	-1.036	-1.036	0	%100
40	M37A	Z	0	0	0	%100
41	M38	X	-4.176	-4.176	0	%100
42	M38	Z	0	0	0	%100
43	M39	X	-2.766	-2.766	0	%100
44	M39	Z	0	0	0	%100
45	M40	X	-2.766	-2.766	0	%100
46	M40	Z	0	0	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	0	0	0	%100
49	M52	X	-2.628	-2.628	0	%100
50	M52	Z	0	0	0	%100
51	M59	X	-2.628	-2.628	0	%100
52	M59	Z	0	0	0	%100
53	M63	X	-2.182	-2.182	0	%100
54	M63	Z	0	0	0	%100
55	M64	X	0	0	0	%100
56	M64	Z	0	0	0	%100
57	M64B	X	0	0	0	%100
58	M64B	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	-0.915	-0.915	0	%100
2	M1	Z	-0.528	-0.528	0	%100
3	M2	X	-0.915	-0.915	0	%100
4	M2	Z	-0.528	-0.528	0	%100
5	M3	X	-3.658	-3.658	0	%100
6	M3	Z	-2.112	-2.112	0	%100
7	M7	X	-2.692	-2.692	0	%100
8	M7	Z	-1.554	-1.554	0	%100
9	MP4A	X	-2.793	-2.793	0	%100
10	MP4A	Z	-1.613	-1.613	0	%100
11	MP3A	X	-2.793	-2.793	0	%100
12	MP3A	Z	-1.613	-1.613	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
13	MP2A	X	-2.793	-2.793	0	%100
14	MP2A	Z	-1.613	-1.613	0	%100
15	MP1A	X	-2.793	-2.793	0	%100
16	MP1A	Z	-1.613	-1.613	0	%100
17	MP4C	X	-2.793	-2.793	0	%100
18	MP4C	Z	-1.613	-1.613	0	%100
19	MP3C	X	-2.793	-2.793	0	%100
20	MP3C	Z	-1.613	-1.613	0	%100
21	MP2C	X	-2.793	-2.793	0	%100
22	MP2C	Z	-1.613	-1.613	0	%100
23	MP1C	X	-2.793	-2.793	0	%100
24	MP1C	Z	-1.613	-1.613	0	%100
25	MP4B	X	-2.793	-2.793	0	%100
26	MP4B	Z	-1.613	-1.613	0	%100
27	MP3B	X	-2.793	-2.793	0	%100
28	MP3B	Z	-1.613	-1.613	0	%100
29	MP2B	X	-2.793	-2.793	0	%100
30	MP2B	Z	-1.613	-1.613	0	%100
31	MP1B	X	-2.793	-2.793	0	%100
32	MP1B	Z	-1.613	-1.613	0	%100
33	M35	X	-2.251	-2.251	0	%100
34	M35	Z	-1.3	-1.3	0	%100
35	M37	X	-2.251	-2.251	0	%100
36	M37	Z	-1.3	-1.3	0	%100
37	M36A	X	-2.692	-2.692	0	%100
38	M36A	Z	-1.554	-1.554	0	%100
39	M37A	X	0	0	0	%100
40	M37A	Z	0	0	0	%100
41	M38	X	-3.209	-3.209	0	%100
42	M38	Z	-1.853	-1.853	0	%100
43	M39	X	-3.209	-3.209	0	%100
44	M39	Z	-1.853	-1.853	0	%100
45	M40	X	-1.988	-1.988	0	%100
46	M40	Z	-1.148	-1.148	0	%100
47	M45	X	-.759	-.759	0	%100
48	M45	Z	-.438	-.438	0	%100
49	M52	X	-.759	-.759	0	%100
50	M52	Z	-.438	-.438	0	%100
51	M59	X	-3.035	-3.035	0	%100
52	M59	Z	-1.752	-1.752	0	%100
53	M63	X	-2.519	-2.519	0	%100
54	M63	Z	-1.454	-1.454	0	%100
55	M64	X	-.63	-.63	0	%100
56	M64	Z	-.364	-.364	0	%100
57	M64B	X	-.63	-.63	0	%100
58	M64B	Z	-.364	-.364	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	-1.584	-1.584	0	%100
2	M1	Z	-2.744	-2.744	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	-1.584	-1.584	0	%100
6	M3	Z	-2.744	-2.744	0	%100
7	M7	X	-.518	-.518	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
8	M7	Z	-0.897	-0.897	0	%100
9	MP4A	X	-1.613	-1.613	0	%100
10	MP4A	Z	-2.793	-2.793	0	%100
11	MP3A	X	-1.613	-1.613	0	%100
12	MP3A	Z	-2.793	-2.793	0	%100
13	MP2A	X	-1.613	-1.613	0	%100
14	MP2A	Z	-2.793	-2.793	0	%100
15	MP1A	X	-1.613	-1.613	0	%100
16	MP1A	Z	-2.793	-2.793	0	%100
17	MP4C	X	-1.613	-1.613	0	%100
18	MP4C	Z	-2.793	-2.793	0	%100
19	MP3C	X	-1.613	-1.613	0	%100
20	MP3C	Z	-2.793	-2.793	0	%100
21	MP2C	X	-1.613	-1.613	0	%100
22	MP2C	Z	-2.793	-2.793	0	%100
23	MP1C	X	-1.613	-1.613	0	%100
24	MP1C	Z	-2.793	-2.793	0	%100
25	MP4B	X	-1.613	-1.613	0	%100
26	MP4B	Z	-2.793	-2.793	0	%100
27	MP3B	X	-1.613	-1.613	0	%100
28	MP3B	Z	-2.793	-2.793	0	%100
29	MP2B	X	-1.613	-1.613	0	%100
30	MP2B	Z	-2.793	-2.793	0	%100
31	MP1B	X	-1.613	-1.613	0	%100
32	MP1B	Z	-2.793	-2.793	0	%100
33	M35	X	-1.3	-1.3	0	%100
34	M35	Z	-2.251	-2.251	0	%100
35	M37	X	-1.3	-1.3	0	%100
36	M37	Z	-2.251	-2.251	0	%100
37	M36A	X	-2.072	-2.072	0	%100
38	M36A	Z	-3.589	-3.589	0	%100
39	M37A	X	-0.518	-0.518	0	%100
40	M37A	Z	-0.897	-0.897	0	%100
41	M38	X	-1.383	-1.383	0	%100
42	M38	Z	-2.395	-2.395	0	%100
43	M39	X	-2.088	-2.088	0	%100
44	M39	Z	-3.616	-3.616	0	%100
45	M40	X	-1.383	-1.383	0	%100
46	M40	Z	-2.395	-2.395	0	%100
47	M45	X	-1.314	-1.314	0	%100
48	M45	Z	-2.276	-2.276	0	%100
49	M52	X	0	0	0	%100
50	M52	Z	0	0	0	%100
51	M59	X	-1.314	-1.314	0	%100
52	M59	Z	-2.276	-2.276	0	%100
53	M63	X	-1.091	-1.091	0	%100
54	M63	Z	-1.889	-1.889	0	%100
55	M64	X	-1.091	-1.091	0	%100
56	M64	Z	-1.889	-1.889	0	%100
57	M64B	X	-1.091	-1.091	0	%100
58	M64B	Z	-1.889	-1.889	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	-0.836	-0.836	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
3	M2	X	0	0	%100
4	M2	Z	-.209	-.209	%100
5	M3	X	0	0	%100
6	M3	Z	-.209	-.209	%100
7	M7	X	0	0	%100
8	M7	Z	0	0	%100
9	MP4A	X	0	0	%100
10	MP4A	Z	-.477	-.477	%100
11	MP3A	X	0	0	%100
12	MP3A	Z	-.477	-.477	%100
13	MP2A	X	0	0	%100
14	MP2A	Z	-.477	-.477	%100
15	MP1A	X	0	0	%100
16	MP1A	Z	-.477	-.477	%100
17	MP4C	X	0	0	%100
18	MP4C	Z	-.477	-.477	%100
19	MP3C	X	0	0	%100
20	MP3C	Z	-.477	-.477	%100
21	MP2C	X	0	0	%100
22	MP2C	Z	-.477	-.477	%100
23	MP1C	X	0	0	%100
24	MP1C	Z	-.477	-.477	%100
25	MP4B	X	0	0	%100
26	MP4B	Z	-.477	-.477	%100
27	MP3B	X	0	0	%100
28	MP3B	Z	-.477	-.477	%100
29	MP2B	X	0	0	%100
30	MP2B	Z	-.477	-.477	%100
31	MP1B	X	0	0	%100
32	MP1B	Z	-.477	-.477	%100
33	M35	X	0	0	%100
34	M35	Z	-.412	-.412	%100
35	M37	X	0	0	%100
36	M37	Z	-.412	-.412	%100
37	M36A	X	0	0	%100
38	M36A	Z	-.606	-.606	%100
39	M37A	X	0	0	%100
40	M37A	Z	-.606	-.606	%100
41	M38	X	0	0	%100
42	M38	Z	-.609	-.609	%100
43	M39	X	0	0	%100
44	M39	Z	-.839	-.839	%100
45	M40	X	0	0	%100
46	M40	Z	-.839	-.839	%100
47	M45	X	0	0	%100
48	M45	Z	-.577	-.577	%100
49	M52	X	0	0	%100
50	M52	Z	-.144	-.144	%100
51	M59	X	0	0	%100
52	M59	Z	-.144	-.144	%100
53	M63	X	0	0	%100
54	M63	Z	-.159	-.159	%100
55	M64	X	0	0	%100
56	M64	Z	-.635	-.635	%100
57	M64B	X	0	0	%100
58	M64B	Z	-.635	-.635	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	.314	.314	0 %100
2	M1	Z	-.543	-.543	0 %100
3	M2	X	.314	.314	0 %100
4	M2	Z	-.543	-.543	0 %100
5	M3	X	0	0	0 %100
6	M3	Z	0	0	0 %100
7	M7	X	.101	.101	0 %100
8	M7	Z	-.175	-.175	0 %100
9	MP4A	X	.238	.238	0 %100
10	MP4A	Z	-.413	-.413	0 %100
11	MP3A	X	.238	.238	0 %100
12	MP3A	Z	-.413	-.413	0 %100
13	MP2A	X	.238	.238	0 %100
14	MP2A	Z	-.413	-.413	0 %100
15	MP1A	X	.238	.238	0 %100
16	MP1A	Z	-.413	-.413	0 %100
17	MP4C	X	.238	.238	0 %100
18	MP4C	Z	-.413	-.413	0 %100
19	MP3C	X	.238	.238	0 %100
20	MP3C	Z	-.413	-.413	0 %100
21	MP2C	X	.238	.238	0 %100
22	MP2C	Z	-.413	-.413	0 %100
23	MP1C	X	.238	.238	0 %100
24	MP1C	Z	-.413	-.413	0 %100
25	MP4B	X	.238	.238	0 %100
26	MP4B	Z	-.413	-.413	0 %100
27	MP3B	X	.238	.238	0 %100
28	MP3B	Z	-.413	-.413	0 %100
29	MP2B	X	.238	.238	0 %100
30	MP2B	Z	-.413	-.413	0 %100
31	MP1B	X	.238	.238	0 %100
32	MP1B	Z	-.413	-.413	0 %100
33	M35	X	.206	.206	0 %100
34	M35	Z	-.357	-.357	0 %100
35	M37	X	.206	.206	0 %100
36	M37	Z	-.357	-.357	0 %100
37	M36A	X	.101	.101	0 %100
38	M36A	Z	-.175	-.175	0 %100
39	M37A	X	.404	.404	0 %100
40	M37A	Z	-.699	-.699	0 %100
41	M38	X	.343	.343	0 %100
42	M38	Z	-.594	-.594	0 %100
43	M39	X	.343	.343	0 %100
44	M39	Z	-.594	-.594	0 %100
45	M40	X	.458	.458	0 %100
46	M40	Z	-.793	-.793	0 %100
47	M45	X	.216	.216	0 %100
48	M45	Z	-.375	-.375	0 %100
49	M52	X	.216	.216	0 %100
50	M52	Z	-.375	-.375	0 %100
51	M59	X	0	0	0 %100
52	M59	Z	0	0	0 %100
53	M63	X	0	0	0 %100
54	M63	Z	0	0	0 %100
55	M64	X	.238	.238	0 %100
56	M64	Z	-.413	-.413	0 %100
57	M64B	X	.238	.238	0 %100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
58 M64B	Z	-.413	-.413	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1 M1	X	.181	.181	0	%100
2 M1	Z	-.105	-.105	0	%100
3 M2	X	.724	.724	0	%100
4 M2	Z	-.418	-.418	0	%100
5 M3	X	.181	.181	0	%100
6 M3	Z	-.105	-.105	0	%100
7 M7	X	.524	.524	0	%100
8 M7	Z	-.303	-.303	0	%100
9 MP4A	X	.413	.413	0	%100
10 MP4A	Z	-.238	-.238	0	%100
11 MP3A	X	.413	.413	0	%100
12 MP3A	Z	-.238	-.238	0	%100
13 MP2A	X	.413	.413	0	%100
14 MP2A	Z	-.238	-.238	0	%100
15 MP1A	X	.413	.413	0	%100
16 MP1A	Z	-.238	-.238	0	%100
17 MP4C	X	.413	.413	0	%100
18 MP4C	Z	-.238	-.238	0	%100
19 MP3C	X	.413	.413	0	%100
20 MP3C	Z	-.238	-.238	0	%100
21 MP2C	X	.413	.413	0	%100
22 MP2C	Z	-.238	-.238	0	%100
23 MP1C	X	.413	.413	0	%100
24 MP1C	Z	-.238	-.238	0	%100
25 MP4B	X	.413	.413	0	%100
26 MP4B	Z	-.238	-.238	0	%100
27 MP3B	X	.413	.413	0	%100
28 MP3B	Z	-.238	-.238	0	%100
29 MP2B	X	.413	.413	0	%100
30 MP2B	Z	-.238	-.238	0	%100
31 MP1B	X	.413	.413	0	%100
32 MP1B	Z	-.238	-.238	0	%100
33 M35	X	.357	.357	0	%100
34 M35	Z	-.206	-.206	0	%100
35 M37	X	.357	.357	0	%100
36 M37	Z	-.206	-.206	0	%100
37 M36A	X	0	0	0	%100
38 M36A	Z	0	0	0	%100
39 M37A	X	.524	.524	0	%100
40 M37A	Z	-.303	-.303	0	%100
41 M38	X	.727	.727	0	%100
42 M38	Z	-.42	-.42	0	%100
43 M39	X	.528	.528	0	%100
44 M39	Z	-.305	-.305	0	%100
45 M40	X	.727	.727	0	%100
46 M40	Z	-.42	-.42	0	%100
47 M45	X	.125	.125	0	%100
48 M45	Z	-.072	-.072	0	%100
49 M52	X	.5	.5	0	%100
50 M52	Z	-.289	-.289	0	%100
51 M59	X	.125	.125	0	%100
52 M59	Z	-.072	-.072	0	%100





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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
53	M63	X	.138	.138	0	%100
54	M63	Z	-.079	-.079	0	%100
55	M64	X	.138	.138	0	%100
56	M64	Z	-.079	-.079	0	%100
57	M64B	X	.138	.138	0	%100
58	M64B	Z	-.079	-.079	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	.627	.627	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	.627	.627	0	%100
6	M3	Z	0	0	0	%100
7	M7	X	.807	.807	0	%100
8	M7	Z	0	0	0	%100
9	MP4A	X	.477	.477	0	%100
10	MP4A	Z	0	0	0	%100
11	MP3A	X	.477	.477	0	%100
12	MP3A	Z	0	0	0	%100
13	MP2A	X	.477	.477	0	%100
14	MP2A	Z	0	0	0	%100
15	MP1A	X	.477	.477	0	%100
16	MP1A	Z	0	0	0	%100
17	MP4C	X	.477	.477	0	%100
18	MP4C	Z	0	0	0	%100
19	MP3C	X	.477	.477	0	%100
20	MP3C	Z	0	0	0	%100
21	MP2C	X	.477	.477	0	%100
22	MP2C	Z	0	0	0	%100
23	MP1C	X	.477	.477	0	%100
24	MP1C	Z	0	0	0	%100
25	MP4B	X	.477	.477	0	%100
26	MP4B	Z	0	0	0	%100
27	MP3B	X	.477	.477	0	%100
28	MP3B	Z	0	0	0	%100
29	MP2B	X	.477	.477	0	%100
30	MP2B	Z	0	0	0	%100
31	MP1B	X	.477	.477	0	%100
32	MP1B	Z	0	0	0	%100
33	M35	X	.412	.412	0	%100
34	M35	Z	0	0	0	%100
35	M37	X	.412	.412	0	%100
36	M37	Z	0	0	0	%100
37	M36A	X	.202	.202	0	%100
38	M36A	Z	0	0	0	%100
39	M37A	X	.202	.202	0	%100
40	M37A	Z	0	0	0	%100
41	M38	X	.916	.916	0	%100
42	M38	Z	0	0	0	%100
43	M39	X	.686	.686	0	%100
44	M39	Z	0	0	0	%100
45	M40	X	.686	.686	0	%100
46	M40	Z	0	0	0	%100
47	M45	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
48	M45	Z	0	0	0	%100
49	M52	X	.433	.433	0	%100
50	M52	Z	0	0	0	%100
51	M59	X	.433	.433	0	%100
52	M59	Z	0	0	0	%100
53	M63	X	.476	.476	0	%100
54	M63	Z	0	0	0	%100
55	M64	X	0	0	0	%100
56	M64	Z	0	0	0	%100
57	M64B	X	0	0	0	%100
58	M64B	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	.181	.181	0	%100
2	M1	Z	.105	.105	0	%100
3	M2	X	.181	.181	0	%100
4	M2	Z	.105	.105	0	%100
5	M3	X	.724	.724	0	%100
6	M3	Z	.418	.418	0	%100
7	M7	X	.524	.524	0	%100
8	M7	Z	.303	.303	0	%100
9	MP4A	X	.413	.413	0	%100
10	MP4A	Z	.238	.238	0	%100
11	MP3A	X	.413	.413	0	%100
12	MP3A	Z	.238	.238	0	%100
13	MP2A	X	.413	.413	0	%100
14	MP2A	Z	.238	.238	0	%100
15	MP1A	X	.413	.413	0	%100
16	MP1A	Z	.238	.238	0	%100
17	MP4C	X	.413	.413	0	%100
18	MP4C	Z	.238	.238	0	%100
19	MP3C	X	.413	.413	0	%100
20	MP3C	Z	.238	.238	0	%100
21	MP2C	X	.413	.413	0	%100
22	MP2C	Z	.238	.238	0	%100
23	MP1C	X	.413	.413	0	%100
24	MP1C	Z	.238	.238	0	%100
25	MP4B	X	.413	.413	0	%100
26	MP4B	Z	.238	.238	0	%100
27	MP3B	X	.413	.413	0	%100
28	MP3B	Z	.238	.238	0	%100
29	MP2B	X	.413	.413	0	%100
30	MP2B	Z	.238	.238	0	%100
31	MP1B	X	.413	.413	0	%100
32	MP1B	Z	.238	.238	0	%100
33	M35	X	.357	.357	0	%100
34	M35	Z	.206	.206	0	%100
35	M37	X	.357	.357	0	%100
36	M37	Z	.206	.206	0	%100
37	M36A	X	.524	.524	0	%100
38	M36A	Z	.303	.303	0	%100
39	M37A	X	0	0	0	%100
40	M37A	Z	0	0	0	%100
41	M38	X	.727	.727	0	%100
42	M38	Z	.42	.42	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
43	M39	X	.727	.727	0	%100
44	M39	Z	.42	.42	0	%100
45	M40	X	.528	.528	0	%100
46	M40	Z	.305	.305	0	%100
47	M45	X	.125	.125	0	%100
48	M45	Z	.072	.072	0	%100
49	M52	X	.125	.125	0	%100
50	M52	Z	.072	.072	0	%100
51	M59	X	.5	.5	0	%100
52	M59	Z	.289	.289	0	%100
53	M63	X	.55	.55	0	%100
54	M63	Z	.318	.318	0	%100
55	M64	X	.138	.138	0	%100
56	M64	Z	.079	.079	0	%100
57	M64B	X	.138	.138	0	%100
58	M64B	Z	.079	.079	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	.314	.314	0	%100
2	M1	Z	.543	.543	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	.314	.314	0	%100
6	M3	Z	.543	.543	0	%100
7	M7	X	.101	.101	0	%100
8	M7	Z	.175	.175	0	%100
9	MP4A	X	.238	.238	0	%100
10	MP4A	Z	.413	.413	0	%100
11	MP3A	X	.238	.238	0	%100
12	MP3A	Z	.413	.413	0	%100
13	MP2A	X	.238	.238	0	%100
14	MP2A	Z	.413	.413	0	%100
15	MP1A	X	.238	.238	0	%100
16	MP1A	Z	.413	.413	0	%100
17	MP4C	X	.238	.238	0	%100
18	MP4C	Z	.413	.413	0	%100
19	MP3C	X	.238	.238	0	%100
20	MP3C	Z	.413	.413	0	%100
21	MP2C	X	.238	.238	0	%100
22	MP2C	Z	.413	.413	0	%100
23	MP1C	X	.238	.238	0	%100
24	MP1C	Z	.413	.413	0	%100
25	MP4B	X	.238	.238	0	%100
26	MP4B	Z	.413	.413	0	%100
27	MP3B	X	.238	.238	0	%100
28	MP3B	Z	.413	.413	0	%100
29	MP2B	X	.238	.238	0	%100
30	MP2B	Z	.413	.413	0	%100
31	MP1B	X	.238	.238	0	%100
32	MP1B	Z	.413	.413	0	%100
33	M35	X	.206	.206	0	%100
34	M35	Z	.357	.357	0	%100
35	M37	X	.206	.206	0	%100
36	M37	Z	.357	.357	0	%100
37	M36A	X	.404	.404	0	%100



Company : Maser Consulting  
 Designer :  
 Job Number :  
 Model Name : 469353-VZW\_MT\_LO\_H

July 7, 2021  
 10:32 AM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
38	M36A	Z	.699	.699	0	%100
39	M37A	X	.101	.101	0	%100
40	M37A	Z	.175	.175	0	%100
41	M38	X	.343	.343	0	%100
42	M38	Z	.594	.594	0	%100
43	M39	X	.458	.458	0	%100
44	M39	Z	.793	.793	0	%100
45	M40	X	.343	.343	0	%100
46	M40	Z	.594	.594	0	%100
47	M45	X	.216	.216	0	%100
48	M45	Z	.375	.375	0	%100
49	M52	X	0	0	0	%100
50	M52	Z	0	0	0	%100
51	M59	X	.216	.216	0	%100
52	M59	Z	.375	.375	0	%100
53	M63	X	.238	.238	0	%100
54	M63	Z	.413	.413	0	%100
55	M64	X	.238	.238	0	%100
56	M64	Z	.413	.413	0	%100
57	M64B	X	.238	.238	0	%100
58	M64B	Z	.413	.413	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	.836	.836	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	.209	.209	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	.209	.209	0	%100
7	M7	X	0	0	0	%100
8	M7	Z	0	0	0	%100
9	MP4A	X	0	0	0	%100
10	MP4A	Z	.477	.477	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	.477	.477	0	%100
13	MP2A	X	0	0	0	%100
14	MP2A	Z	.477	.477	0	%100
15	MP1A	X	0	0	0	%100
16	MP1A	Z	.477	.477	0	%100
17	MP4C	X	0	0	0	%100
18	MP4C	Z	.477	.477	0	%100
19	MP3C	X	0	0	0	%100
20	MP3C	Z	.477	.477	0	%100
21	MP2C	X	0	0	0	%100
22	MP2C	Z	.477	.477	0	%100
23	MP1C	X	0	0	0	%100
24	MP1C	Z	.477	.477	0	%100
25	MP4B	X	0	0	0	%100
26	MP4B	Z	.477	.477	0	%100
27	MP3B	X	0	0	0	%100
28	MP3B	Z	.477	.477	0	%100
29	MP2B	X	0	0	0	%100
30	MP2B	Z	.477	.477	0	%100
31	MP1B	X	0	0	0	%100
32	MP1B	Z	.477	.477	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
33	M35	X	0	0	0	%100
34	M35	Z	.412	.412	0	%100
35	M37	X	0	0	0	%100
36	M37	Z	.412	.412	0	%100
37	M36A	X	0	0	0	%100
38	M36A	Z	.606	.606	0	%100
39	M37A	X	0	0	0	%100
40	M37A	Z	.606	.606	0	%100
41	M38	X	0	0	0	%100
42	M38	Z	.609	.609	0	%100
43	M39	X	0	0	0	%100
44	M39	Z	.839	.839	0	%100
45	M40	X	0	0	0	%100
46	M40	Z	.839	.839	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	.577	.577	0	%100
49	M52	X	0	0	0	%100
50	M52	Z	.144	.144	0	%100
51	M59	X	0	0	0	%100
52	M59	Z	.144	.144	0	%100
53	M63	X	0	0	0	%100
54	M63	Z	.159	.159	0	%100
55	M64	X	0	0	0	%100
56	M64	Z	.635	.635	0	%100
57	M64B	X	0	0	0	%100
58	M64B	Z	.635	.635	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	-.314	-.314	0	%100
2	M1	Z	.543	.543	0	%100
3	M2	X	-.314	-.314	0	%100
4	M2	Z	.543	.543	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	0	0	0	%100
7	M7	X	-.101	-.101	0	%100
8	M7	Z	.175	.175	0	%100
9	MP4A	X	-.238	-.238	0	%100
10	MP4A	Z	.413	.413	0	%100
11	MP3A	X	-.238	-.238	0	%100
12	MP3A	Z	.413	.413	0	%100
13	MP2A	X	-.238	-.238	0	%100
14	MP2A	Z	.413	.413	0	%100
15	MP1A	X	-.238	-.238	0	%100
16	MP1A	Z	.413	.413	0	%100
17	MP4C	X	-.238	-.238	0	%100
18	MP4C	Z	.413	.413	0	%100
19	MP3C	X	-.238	-.238	0	%100
20	MP3C	Z	.413	.413	0	%100
21	MP2C	X	-.238	-.238	0	%100
22	MP2C	Z	.413	.413	0	%100
23	MP1C	X	-.238	-.238	0	%100
24	MP1C	Z	.413	.413	0	%100
25	MP4B	X	-.238	-.238	0	%100
26	MP4B	Z	.413	.413	0	%100
27	MP3B	X	-.238	-.238	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
28	MP3B	Z	.413	.413	0	%100
29	MP2B	X	-.238	-.238	0	%100
30	MP2B	Z	.413	.413	0	%100
31	MP1B	X	-.238	-.238	0	%100
32	MP1B	Z	.413	.413	0	%100
33	M35	X	-.206	-.206	0	%100
34	M35	Z	.357	.357	0	%100
35	M37	X	-.206	-.206	0	%100
36	M37	Z	.357	.357	0	%100
37	M36A	X	-.101	-.101	0	%100
38	M36A	Z	.175	.175	0	%100
39	M37A	X	-.404	-.404	0	%100
40	M37A	Z	.699	.699	0	%100
41	M38	X	-.343	-.343	0	%100
42	M38	Z	.594	.594	0	%100
43	M39	X	-.343	-.343	0	%100
44	M39	Z	.594	.594	0	%100
45	M40	X	-.458	-.458	0	%100
46	M40	Z	.793	.793	0	%100
47	M45	X	-.216	-.216	0	%100
48	M45	Z	.375	.375	0	%100
49	M52	X	-.216	-.216	0	%100
50	M52	Z	.375	.375	0	%100
51	M59	X	0	0	0	%100
52	M59	Z	0	0	0	%100
53	M63	X	0	0	0	%100
54	M63	Z	0	0	0	%100
55	M64	X	-.238	-.238	0	%100
56	M64	Z	.413	.413	0	%100
57	M64B	X	-.238	-.238	0	%100
58	M64B	Z	.413	.413	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	-.181	-.181	0	%100
2	M1	Z	.105	.105	0	%100
3	M2	X	-.724	-.724	0	%100
4	M2	Z	.418	.418	0	%100
5	M3	X	-.181	-.181	0	%100
6	M3	Z	.105	.105	0	%100
7	M7	X	-.524	-.524	0	%100
8	M7	Z	.303	.303	0	%100
9	MP4A	X	-.413	-.413	0	%100
10	MP4A	Z	.238	.238	0	%100
11	MP3A	X	-.413	-.413	0	%100
12	MP3A	Z	.238	.238	0	%100
13	MP2A	X	-.413	-.413	0	%100
14	MP2A	Z	.238	.238	0	%100
15	MP1A	X	-.413	-.413	0	%100
16	MP1A	Z	.238	.238	0	%100
17	MP4C	X	-.413	-.413	0	%100
18	MP4C	Z	.238	.238	0	%100
19	MP3C	X	-.413	-.413	0	%100
20	MP3C	Z	.238	.238	0	%100
21	MP2C	X	-.413	-.413	0	%100
22	MP2C	Z	.238	.238	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
23	MP1C	X	-.413	-.413	0	%100
24	MP1C	Z	.238	.238	0	%100
25	MP4B	X	-.413	-.413	0	%100
26	MP4B	Z	.238	.238	0	%100
27	MP3B	X	-.413	-.413	0	%100
28	MP3B	Z	.238	.238	0	%100
29	MP2B	X	-.413	-.413	0	%100
30	MP2B	Z	.238	.238	0	%100
31	MP1B	X	-.413	-.413	0	%100
32	MP1B	Z	.238	.238	0	%100
33	M35	X	-.357	-.357	0	%100
34	M35	Z	.206	.206	0	%100
35	M37	X	-.357	-.357	0	%100
36	M37	Z	.206	.206	0	%100
37	M36A	X	0	0	0	%100
38	M36A	Z	0	0	0	%100
39	M37A	X	-.524	-.524	0	%100
40	M37A	Z	.303	.303	0	%100
41	M38	X	-.727	-.727	0	%100
42	M38	Z	.42	.42	0	%100
43	M39	X	-.528	-.528	0	%100
44	M39	Z	.305	.305	0	%100
45	M40	X	-.727	-.727	0	%100
46	M40	Z	.42	.42	0	%100
47	M45	X	-.125	-.125	0	%100
48	M45	Z	.072	.072	0	%100
49	M52	X	-.5	-.5	0	%100
50	M52	Z	.289	.289	0	%100
51	M59	X	-.125	-.125	0	%100
52	M59	Z	.072	.072	0	%100
53	M63	X	-.138	-.138	0	%100
54	M63	Z	.079	.079	0	%100
55	M64	X	-.138	-.138	0	%100
56	M64	Z	.079	.079	0	%100
57	M64B	X	-.138	-.138	0	%100
58	M64B	Z	.079	.079	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	-.627	-.627	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	-.627	-.627	0	%100
6	M3	Z	0	0	0	%100
7	M7	X	-.807	-.807	0	%100
8	M7	Z	0	0	0	%100
9	MP4A	X	-.477	-.477	0	%100
10	MP4A	Z	0	0	0	%100
11	MP3A	X	-.477	-.477	0	%100
12	MP3A	Z	0	0	0	%100
13	MP2A	X	-.477	-.477	0	%100
14	MP2A	Z	0	0	0	%100
15	MP1A	X	-.477	-.477	0	%100
16	MP1A	Z	0	0	0	%100
17	MP4C	X	-.477	-.477	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
18	MP4C	Z	0	0	0	%100
19	MP3C	X	-477	-477	0	%100
20	MP3C	Z	0	0	0	%100
21	MP2C	X	-477	-477	0	%100
22	MP2C	Z	0	0	0	%100
23	MP1C	X	-477	-477	0	%100
24	MP1C	Z	0	0	0	%100
25	MP4B	X	-477	-477	0	%100
26	MP4B	Z	0	0	0	%100
27	MP3B	X	-477	-477	0	%100
28	MP3B	Z	0	0	0	%100
29	MP2B	X	-477	-477	0	%100
30	MP2B	Z	0	0	0	%100
31	MP1B	X	-477	-477	0	%100
32	MP1B	Z	0	0	0	%100
33	M35	X	-412	-412	0	%100
34	M35	Z	0	0	0	%100
35	M37	X	-412	-412	0	%100
36	M37	Z	0	0	0	%100
37	M36A	X	-202	-202	0	%100
38	M36A	Z	0	0	0	%100
39	M37A	X	-202	-202	0	%100
40	M37A	Z	0	0	0	%100
41	M38	X	-916	-916	0	%100
42	M38	Z	0	0	0	%100
43	M39	X	-686	-686	0	%100
44	M39	Z	0	0	0	%100
45	M40	X	-686	-686	0	%100
46	M40	Z	0	0	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	0	0	0	%100
49	M52	X	-433	-433	0	%100
50	M52	Z	0	0	0	%100
51	M59	X	-433	-433	0	%100
52	M59	Z	0	0	0	%100
53	M63	X	-476	-476	0	%100
54	M63	Z	0	0	0	%100
55	M64	X	0	0	0	%100
56	M64	Z	0	0	0	%100
57	M64B	X	0	0	0	%100
58	M64B	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	-181	-181	0	%100
2	M1	Z	-105	-105	0	%100
3	M2	X	-181	-181	0	%100
4	M2	Z	-105	-105	0	%100
5	M3	X	-724	-724	0	%100
6	M3	Z	-418	-418	0	%100
7	M7	X	-524	-524	0	%100
8	M7	Z	-303	-303	0	%100
9	MP4A	X	-413	-413	0	%100
10	MP4A	Z	-238	-238	0	%100
11	MP3A	X	-413	-413	0	%100
12	MP3A	Z	-238	-238	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, %]
13	MP2A	X	-413	-413	0	%100
14	MP2A	Z	-238	-238	0	%100
15	MP1A	X	-413	-413	0	%100
16	MP1A	Z	-238	-238	0	%100
17	MP4C	X	-413	-413	0	%100
18	MP4C	Z	-238	-238	0	%100
19	MP3C	X	-413	-413	0	%100
20	MP3C	Z	-238	-238	0	%100
21	MP2C	X	-413	-413	0	%100
22	MP2C	Z	-238	-238	0	%100
23	MP1C	X	-413	-413	0	%100
24	MP1C	Z	-238	-238	0	%100
25	MP4B	X	-413	-413	0	%100
26	MP4B	Z	-238	-238	0	%100
27	MP3B	X	-413	-413	0	%100
28	MP3B	Z	-238	-238	0	%100
29	MP2B	X	-413	-413	0	%100
30	MP2B	Z	-238	-238	0	%100
31	MP1B	X	-413	-413	0	%100
32	MP1B	Z	-238	-238	0	%100
33	M35	X	-357	-357	0	%100
34	M35	Z	-206	-206	0	%100
35	M37	X	-357	-357	0	%100
36	M37	Z	-206	-206	0	%100
37	M36A	X	-524	-524	0	%100
38	M36A	Z	-303	-303	0	%100
39	M37A	X	0	0	0	%100
40	M37A	Z	0	0	0	%100
41	M38	X	-727	-727	0	%100
42	M38	Z	-42	-42	0	%100
43	M39	X	-727	-727	0	%100
44	M39	Z	-42	-42	0	%100
45	M40	X	-528	-528	0	%100
46	M40	Z	-305	-305	0	%100
47	M45	X	-125	-125	0	%100
48	M45	Z	-072	-072	0	%100
49	M52	X	-125	-125	0	%100
50	M52	Z	-072	-072	0	%100
51	M59	X	-.5	-.5	0	%100
52	M59	Z	-289	-289	0	%100
53	M63	X	-.55	-.55	0	%100
54	M63	Z	-.318	-.318	0	%100
55	M64	X	-.138	-.138	0	%100
56	M64	Z	-.079	-.079	0	%100
57	M64B	X	-.138	-.138	0	%100
58	M64B	Z	-.079	-.079	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	-.314	-.314	0	%100
2	M1	Z	-.543	-.543	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	-.314	-.314	0	%100
6	M3	Z	-.543	-.543	0	%100
7	M7	X	-.101	-.101	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
8	M7	Z	-175	-175	0 %100
9	MP4A	X	-238	-238	0 %100
10	MP4A	Z	-413	-413	0 %100
11	MP3A	X	-238	-238	0 %100
12	MP3A	Z	-413	-413	0 %100
13	MP2A	X	-238	-238	0 %100
14	MP2A	Z	-413	-413	0 %100
15	MP1A	X	-238	-238	0 %100
16	MP1A	Z	-413	-413	0 %100
17	MP4C	X	-238	-238	0 %100
18	MP4C	Z	-413	-413	0 %100
19	MP3C	X	-238	-238	0 %100
20	MP3C	Z	-413	-413	0 %100
21	MP2C	X	-238	-238	0 %100
22	MP2C	Z	-413	-413	0 %100
23	MP1C	X	-238	-238	0 %100
24	MP1C	Z	-413	-413	0 %100
25	MP4B	X	-238	-238	0 %100
26	MP4B	Z	-413	-413	0 %100
27	MP3B	X	-238	-238	0 %100
28	MP3B	Z	-413	-413	0 %100
29	MP2B	X	-238	-238	0 %100
30	MP2B	Z	-413	-413	0 %100
31	MP1B	X	-238	-238	0 %100
32	MP1B	Z	-413	-413	0 %100
33	M35	X	-206	-206	0 %100
34	M35	Z	-357	-357	0 %100
35	M37	X	-206	-206	0 %100
36	M37	Z	-357	-357	0 %100
37	M36A	X	-404	-404	0 %100
38	M36A	Z	-699	-699	0 %100
39	M37A	X	-101	-101	0 %100
40	M37A	Z	-175	-175	0 %100
41	M38	X	-343	-343	0 %100
42	M38	Z	-594	-594	0 %100
43	M39	X	-458	-458	0 %100
44	M39	Z	-793	-793	0 %100
45	M40	X	-343	-343	0 %100
46	M40	Z	-594	-594	0 %100
47	M45	X	-216	-216	0 %100
48	M45	Z	-375	-375	0 %100
49	M52	X	0	0	0 %100
50	M52	Z	0	0	0 %100
51	M59	X	-216	-216	0 %100
52	M59	Z	-375	-375	0 %100
53	M63	X	-238	-238	0 %100
54	M63	Z	-413	-413	0 %100
55	M64	X	-238	-238	0 %100
56	M64	Z	-413	-413	0 %100
57	M64B	X	-238	-238	0 %100
58	M64B	Z	-413	-413	0 %100

**Member Distributed Loads (BLC 81 : BLC 39 Transient Area Loads)**

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	Y	-872	-8.625	1.308 3.402
2	M3	Y	-8.625	-12.498	3.402 5.495



**Member Distributed Loads (BLC 81 : BLC 39 Transient Area Loads) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
3	M3	Y	-12.498	-12.514	5.495	7.588
4	M3	Y	-12.514	-8.641	7.588	9.682
5	M3	Y	-8.641	-.856	9.682	11.775
6	M7	Y	-14.295	-14.295	2.846	3.981
7	M36A	Y	-14.295	-14.295	2.846	3.981
8	M1	Y	-.871	-8.64	1.308	3.402
9	M1	Y	-8.64	-12.504	3.402	5.495
10	M1	Y	-12.504	-12.487	5.495	7.588
11	M1	Y	-12.487	-8.618	7.588	9.682
12	M1	Y	-8.618	-.873	9.682	11.775
13	M37A	Y	-14.295	-14.295	2.848	3.981
14	M2	Y	-.856	-8.641	1.308	3.402
15	M2	Y	-8.641	-12.514	3.402	5.495
16	M2	Y	-12.514	-12.498	5.495	7.588
17	M2	Y	-12.498	-8.625	7.588	9.682
18	M2	Y	-8.625	-.872	9.682	11.775

**Member Distributed Loads (BLC 82 : BLC 40 Transient Area Loads)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	Y	-1.552	-15.322	1.308	3.402
2	M3	Y	-15.322	-22.199	3.402	5.495
3	M3	Y	-22.199	-22.229	5.495	7.588
4	M3	Y	-22.229	-15.36	7.588	9.682
5	M3	Y	-15.36	-1.549	9.682	11.775
6	M7	Y	-25.414	-25.414	2.848	3.981
7	M36A	Y	-25.414	-25.414	2.837	3.979
8	M1	Y	-1.549	-15.36	1.308	3.402
9	M1	Y	-15.36	-22.229	3.402	5.495
10	M1	Y	-22.229	-22.199	5.495	7.588
11	M1	Y	-22.199	-15.322	7.588	9.682
12	M1	Y	-15.322	-1.552	9.682	11.775
13	M37A	Y	-25.414	-25.414	2.848	3.981
14	M2	Y	-1.522	-15.362	1.308	3.402
15	M2	Y	-15.362	-22.248	3.402	5.495
16	M2	Y	-22.248	-22.219	5.495	7.588
17	M2	Y	-22.219	-15.333	7.588	9.682
18	M2	Y	-15.333	-1.55	9.682	11.775

**Member Area Loads (BLC 39 : Structure D)**

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N77	N85	N86	N76A	Y	Two Way	-.009
2	N22A	N77	N78	N79A	Y	Two Way	-.009
3	N78	N83	N82	N76A	Y	Two Way	-.009

**Member Area Loads (BLC 40 : Structure Di)**

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N85	N77	N76A	N86	Y	Two Way	-.016
2	N22A	N77	N78	N79A	Y	Two Way	-.016
3	N78	N83	N82	N76A	Y	Two Way	-.016

### 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	N12	max	655.374	10	37.634	7	4989.964	1	-.158	6	1.63	4	.439	4
2		min	-660.804	4	-853.101	13	-2316.318	7	-.973	13	-1.621	10	-.465	10
3	N76B	max	3951.975	9	-38.575	3	1165.731	3	.619	23	.859	12	.804	20
4		min	-1973.05	3	-929.764	21	-2311.323	9	-.073	5	-.862	6	.049	2
5	N79	max	2313.645	11	99.271	11	1466.558	11	.474	2	.944	8	-.019	1
6		min	-4386.839	5	-730.8	17	-2665.526	5	-.229	8	-.953	2	-.819	19
7	N85A	max	30.443	10	4639.563	13	-1024.836	7	0	51	0	12	0	6
8		min	-30.431	4	790.033	7	-5969.564	13	0	1	0	6	0	12
9	N86A	max	-794.208	3	4204.116	21	2700.51	21	0	10	0	4	0	4
10		min	-4676.736	21	707.397	3	458.276	3	0	4	0	10	0	10
11	N87	max	4645.788	17	4176.843	17	2682.836	17	0	4	0	4	0	4
12		min	684.71	11	610.502	11	394.902	11	0	10	0	10	0	10
13	Totals:	max	4865.29	10	10160.462	16	4628.454	1						
14		min	-4865.287	4	3603.153	10	-4628.453	7						

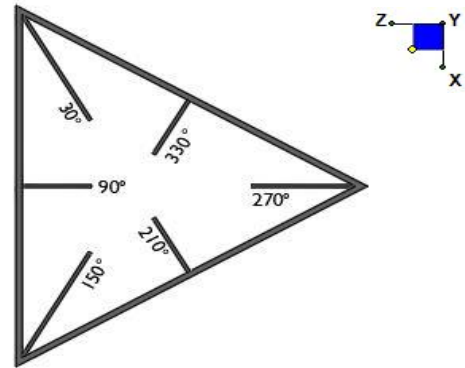
### Envelope AISC 15th(360-16): LRFD Steel Code Checks

Member	Shape	Code Check	Loc[ft]	LC	Shear ... Loc[ft]	Dir	LC	phi*Pnc ... phi*Pnt [... phi*Mn y... phi*Mn z... Cb	Eqn	
1	M1	HSS4X4X4	.182	13.083	13	.055	0	y 19	68157.1... 139518 16.181 16.181 3...	H1-1b
2	M2	HSS4X4X4	.194	13.083	21	.049	13.083	y 15	68157.1... 139518 16.181 16.181 3...	H1-1b
3	M3	HSS4X4X4	.196	0	17	.057	0	y 23	68157.1... 139518 16.181 16.181 3...	H1-1b
4	M7	HSS4X4X4	.317	6.326	16	.094	3.953	y 23	109623... 139518 16.181 16.181 1...	H1-1b
5	MP4A	PIPE 2.0	.188	4.25	11	.054	4.339	10	13511.2... 32130 1.872 1.872 1...	H1-1b
6	MP3A	PIPE 2.0	.305	4.25	11	.059	3.188	11	13511.2... 32130 1.872 1.872 1...	H1-1b
7	MP2A	PIPE 2.5	.230	4.25	4	.040	2.922	5	28077.3... 50715 3.596 3.596 1.7	H1-1b
8	MP1A	PIPE 2.0	.169	4.25	4	.054	4.339	10	13511.2... 32130 1.872 1.872 1...	H1-1b
9	MP4C	PIPE 2.0	.188	4.25	6	.054	4.339	6	13511.2... 32130 1.872 1.872 1...	H1-1b
10	MP3C	PIPE 2.0	.301	4.25	6	.051	3.188	7	13511.2... 32130 1.872 1.872 1...	H1-1b
11	MP2C	PIPE 2.5	.247	4.25	11	.053	4.25	11	28077.3... 50715 3.596 3.596 1...	H1-1b
12	MP1C	PIPE 2.0	.172	4.25	11	.054	4.339	12	13511.2... 32130 1.872 1.872 1...	H1-1b
13	MP4B	PIPE 2.0	.162	4.25	3	.054	4.339	2	13511.2... 32130 1.872 1.872 1...	H1-1b
14	MP3B	PIPE 2.0	.281	4.25	3	.050	3.188	3	13511.2... 32130 1.872 1.872 1...	H1-1b
15	MP2B	PIPE 2.5	.244	4.25	8	.049	2.922	9	28077.3... 50715 3.596 3.596 1...	H1-1b
16	MP1B	PIPE 2.0	.192	4.25	8	.054	4.339	2	13511.2... 32130 1.872 1.872 1...	H1-1b
17	M35	PIPE 2.0	.143	2.99	6	.014	2.99	6	27741.09 32130 1.872 1.872 1...	H1-1b
18	M37	PIPE 2.0	.143	2.99	12	.014	2.99	12	27741.09 32130 1.872 1.872 1...	H1-1b
19	M36A	HSS4X4X4	.285	6.326	18	.088	3.953	y 23	109623... 139518 16.181 16.181 1...	H1-1b
20	M37A	HSS4X4X4	.279	6.326	14	.084	3.953	y 19	109623... 139518 16.181 16.181 1...	H1-1b
21	M38	LL3x3x3x6	.163	0	13	.003	4.934	y 24	46405.9... 70632 6.362 3.751 1	H1-1b*
22	M39	LL3x3x3x6	.147	0	21	.004	4.934	y 22	46405.9... 70632 6.362 3.751 1	H1-1b*
23	M40	LL3x3x3x6	.147	0	17	.003	4.934	y 18	46405.9... 70632 6.362 3.751 1	H1-1b*
24	M45	PIPE 2.5	.131	10.292	4	.046	10.969	4	13460.4... 50715 3.596 3.596 2...	H1-1b
25	M52	PIPE 2.5	.138	10.563	11	.047	10.969	12	13460.4... 50715 3.596 3.596 2...	H1-1b
26	M59	PIPE 2.5	.127	8.125	9	.034	2.438	1	13460.4... 50715 3.596 3.596 2...	H1-1b
27	M63	L3X3X4	.186	1.995	1	.017	1.559	z 8	42718.0... 46656 1.688 3.756 2...	H2-1
28	M64	L3X3X4	.213	0	11	.023	0	z 10	42718.0... 46656 1.688 3.756 2...	H2-1
29	M64B	L3X3X4	.203	1.995	5	.020	1.995	z 11	42718.0... 46656 1.688 3.756 2...	H2-1

## I. Mount-to-Tower Connection Check

### RISA Model Data

Nodes (labeled per RISA)	Orientation (per graphic of typical platform)
N76B	30
N12	270
N79	150



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):

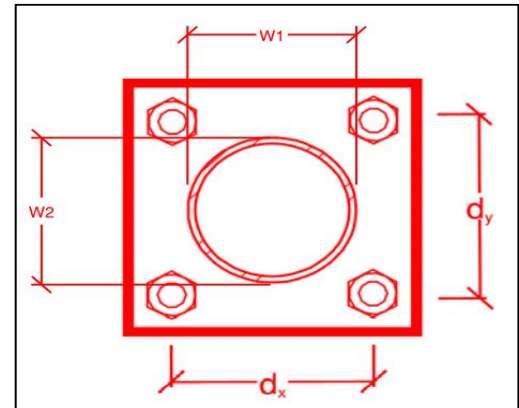
Tensile Strength / bolt (kips):

Shear Strength / bolt (kips):

Tensile Capacity Overall:

Shear Capacity Overall:

yes
4
3
8
A325N
0.75
14.5
4.4
29.8
17.9
<b>12.2%*</b>
<b>6.2%</b>



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

### Tower Connection Plate and Weld Check

Connecting Standoff Member Shape:

Plate Width (in):

Plate Height (in):

W1 (in):

W2 (in):

Fy (ksi, plate):

$t_{plate}$  (in):

Weld Size (1/16 in):

$\Phi \cdot R_n$  (kip/in):

Required Weld Strength (kip/in):

Plate Bending Capacity:

Weld Capacity:

Rect
6
10
4
4
36
0.75
6
8.35
1.05
<b>27.8%</b>
<b>12.5%</b>

### Max Plate Bending Strengths

$M_{u_{xx}}$ (kip-in):	7.6
$\Phi \cdot M_{n_{xx}}$ (kip-in):	27.3
$M_{u_{yy}}$ (kip-in):	0.0
$\Phi \cdot M_{n_{yy}}$ (kip-in):	45.6

# 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 TES certification of such is included in the contractor submission package. There may be an additional charge for this certification if the equivalent submission doesn't meet specifications as prescribed in the drawings.
- The contractor must certify that the materials meet these specifications by one of these methods.

The Material utilized was as specified on the 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 to install 42" long P2.0 STD mount pipe on standoff horizontal between Alpha & Gamma and Beta & Gamma sector. Attach proposed mount pipe to the standoff with crossover plate (Site Pro 1 – SQCX4-K, or EOR approved equivalent). Contractor shall attach proposed OVP 12" from top of mount pipe.

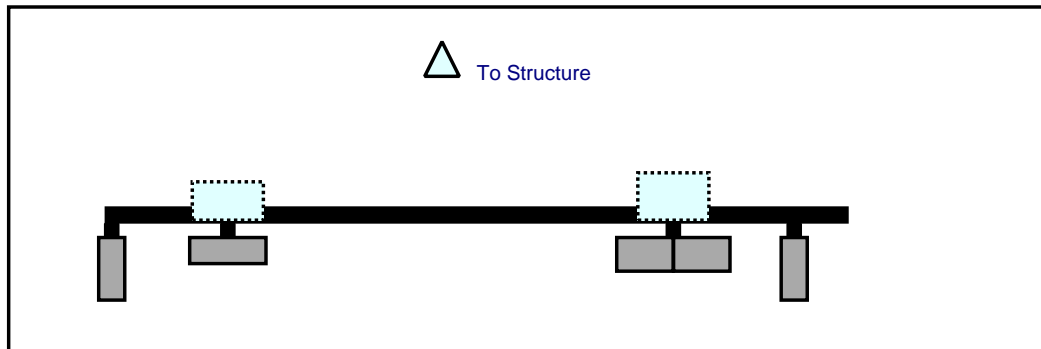
**Response:**



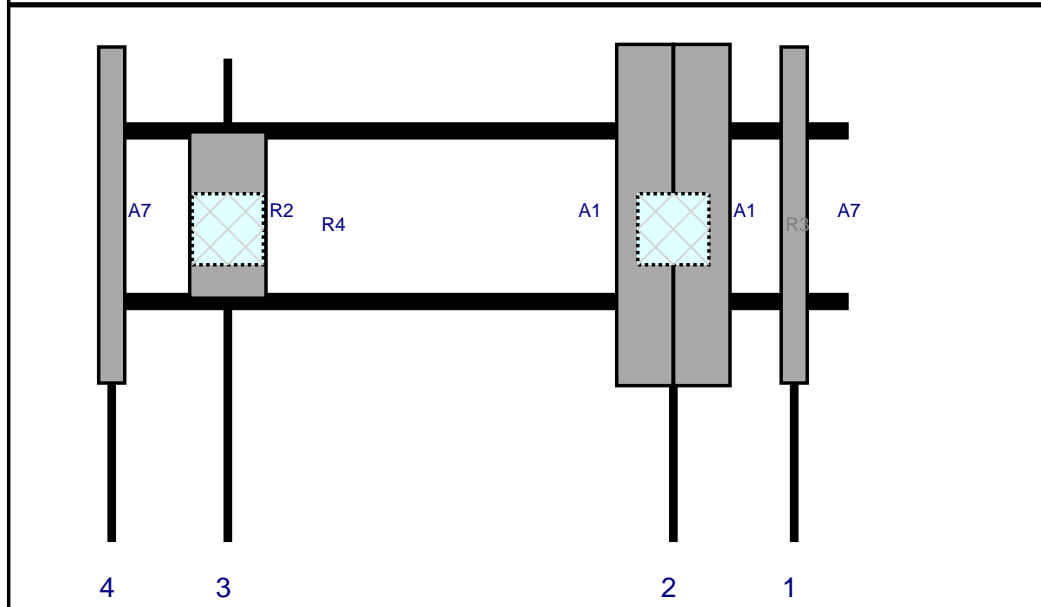
## **Schedule A – Photo & Document File Structure**

-  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
A7	LPA-80080/6CF	70.9	5.5	145.5	1	a	Front	33	0	Retained	04/13/2021
A1	NHH-65B-R2B	72	11.9	120	2	a	Front	33	-6	Added	
A1	NHH-65B-R2B	72	11.9	120	2	b	Front	33	6	Added	
R3	B2/B66A RRH-BR049	15	15	120	2	a	Behind	36	0	Added	
R2	MT6407-77A	35.1	16.1	26	3	a	Front	33	0	Added	
R4	B5/B13 RRH-BR04C	15	15	26	3	a	Behind	36	0	Added	
A7	LPA-80080/6CF	70.9	5.5	1.5	4	a	Front	33	0	Retained	04/13/2021

Sector: **B**  
 Structure Type: Self Support  
 Mount Elev: 118.50

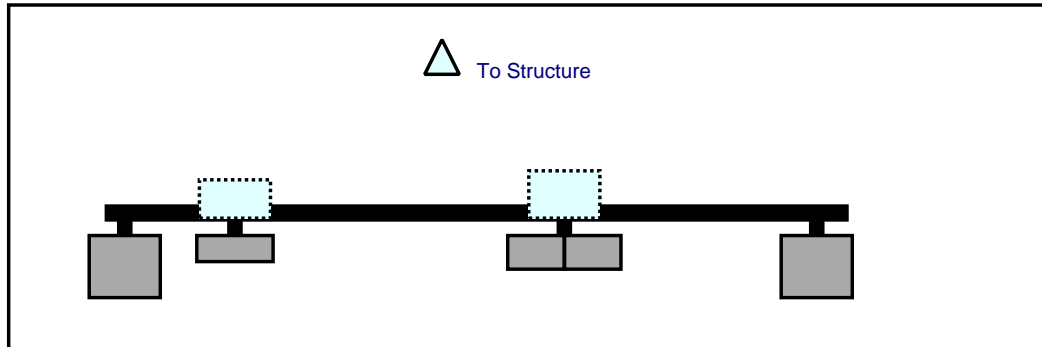
10058950

7/6/2021

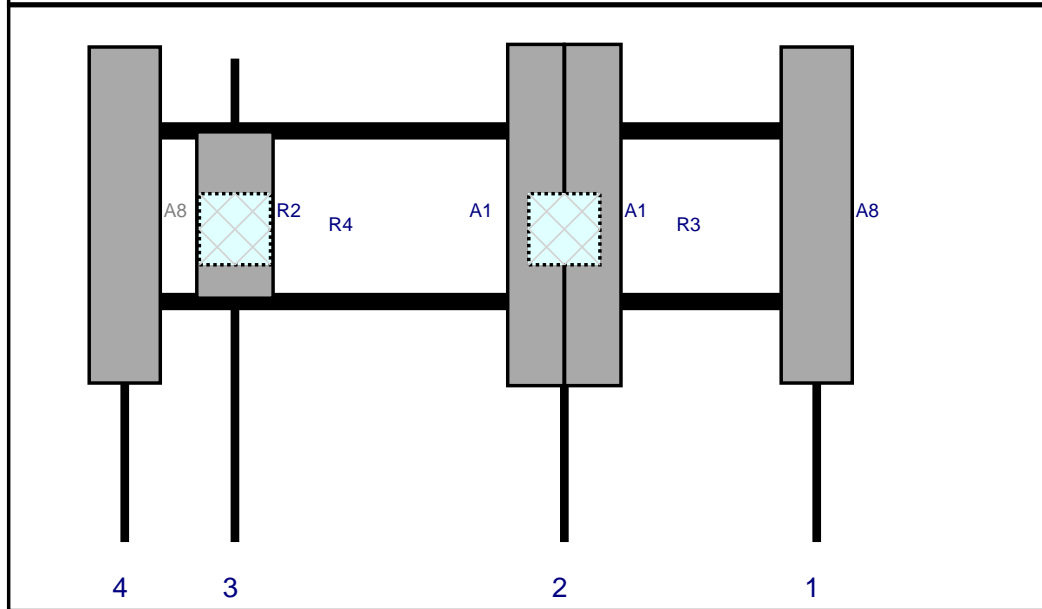
Page: 2



Plan View

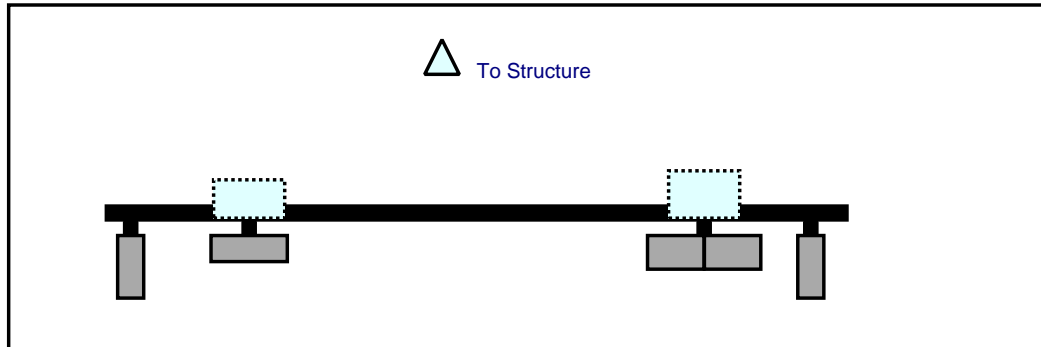


Front View  
 Looking at Structure

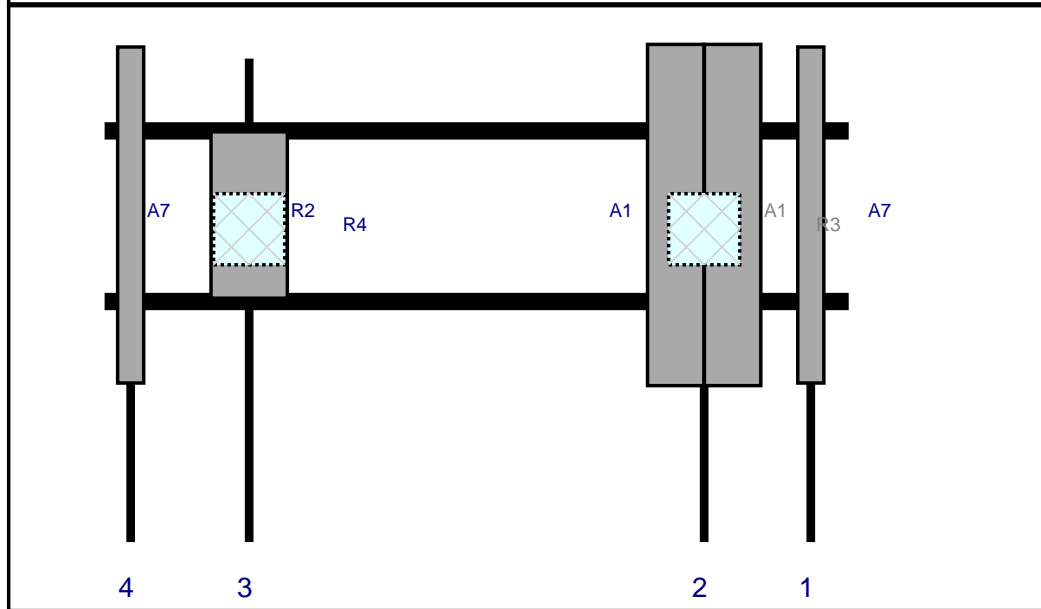


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A8	LPA-80063/6CF	70.9	15	150.25	1	a	Front	33	0	Retained	04/13/2021
A1	NHH-65B-R2B	72	11.9	97	2	a	Front	33	-6	Added	
A1	NHH-65B-R2B	72	11.9	97	2	b	Front	33	6	Added	
R3	B2/B66A RRH-BR049	15	15	97	2	a	Behind	36	0	Added	
R2	MT6407-77A	35.1	16.1	27.5	3	a	Front	33	0	Added	
R4	B5/B13 RRH-BR04C	15	15	27.5	3	a	Behind	36	0	Added	
A8	LPA-80063/6CF	70.9	15	4.25	4	a	Front	33	0	Retained	04/13/2021

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
A7	LPA-80080/6CF	70.9	5.5	149	1	a	Front	33	0	Retained	04/13/2021
A1	NHH-65B-R2B	72	11.9	126.5	2	a	Front	33	-6	Added	
A1	NHH-65B-R2B	72	11.9	126.5	2	b	Front	33	6	Added	
R3	B2/B66A RRH-BR049	15	15	126.5	2	a	Behind	36	0	Added	
R2	MT6407-77A	35.1	16.1	30.5	3	a	Front	33	0	Added	
R4	B5/B13 RRH-BR04C	15	15	30.5	3	a	Behind	36	0	Added	
A7	LPA-80080/6CF	70.9	5.5	5.5	4	a	Front	33	0	Retained	04/13/2021

# Maser Consulting Connecticut

**Subject**

TIA-222-H Adoption and Wind Speed Usage

**Site Information**

*Site ID:* 469353-VZW / COLLINSVILLE CT  
*Site Name:* COLLINSVILLE CT  
*Carrier Name:* Verizon Wireless  
*Address:* 650 Albany Turnpike  
Collinsville, Connecticut 06022  
Hartford County  
*Latitude:* 41.850564°  
*Longitude:* -72.948725°

**Structure Information**

*Tower Type:* 120-Ft Self Support  
*Mount Type:* 13.08-Ft Platform

**FUZE ID # 16281612**

To Whom It May Concern,

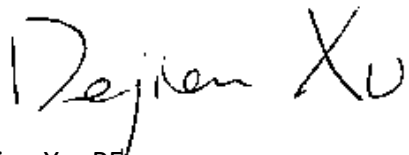
We respectfully submit the above referenced Antenna Mount Structural Analysis report in conformance with ANSI/TIA-222-H, Structural Standard for Antenna Supporting Structures and Antennas and Small Wind Turbine Support Structures.

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

Sincerely,



Dejian Xu, PE  
Technical Manager

# PROJECT NOTES

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



## MOUNT MODIFICATION DRAWINGS EXISTING 13.08' PLATFORM

**SITE NAME: COLLINSVILLE CT  
SITE NUMBER: 469353**

**650 ALBANY TURNPIKE  
COLLINSVILLE, CT 06022  
HARTFORD COUNTY**

PROJECT INFORMATION	
<b>SITE INFORMATION</b>	
LATITUDE:	41.850564° N
LONGITUDE:	72.948725° W
JURISDICTION:	HARTFORD COUNTY
<b>APPLICANT/LESSEE</b>	
COMPANY:	VERIZON WIRELESS
<b>CLIENT REPRESENTATIVE</b>	
COMPANY:	VERIZON WIRELESS
ADDRESS:	118 FLANDERS ROAD, THIRD FLOOR
CITY, STATE, ZIP:	WESTBOROUGH, MA 01581
CONTACT:	ANDREW CANDIELLO
EMAIL:	ANDREW.CANDIELLO@VERIZONWIRELESS.COM
<b>PROJECT MANAGER</b>	
COMPANY:	MASER CONSULTING CONNECTICUT
CONTACT:	PETER ALBANO
PHONE:	856-797-0412
E-MAIL:	PETER.ALBANO@COLLIERSENGINEERING.COM

SHEET INDEX	
SHEET	DESCRIPTION
T-1	TITLE SHEET
S-1	BILL OF MATERIALS
S-2	MODIFICATION NOTES
S-3	MODIFICATION NOTES
S-4	MODIFICATION DETAILS
S-5	MODIFICATION DETAILS
S-6	MODIFICATION DETAILS
S-7	MOUNT PHOTOS
	SPECIFICATION SHEETS

CONTRACTOR PMI REQUIREMENTS	
PMI LOCATION:	HTTPS://PMI.VZWSMART.COM
SMART TOOL PROJECT #:	10084435
VZW LOCATION CODE (PSLC):	16271924
FUZE ID:	469353

REFERENCED DOCUMENTS	
	FAILING MOUNT ANALYSIS REPORT
SMART TOOL PROJECT #:	10058950
MASER CONSULTING PROJECT #:	21777759A
ANALYSIS DATE:	7/2/2021

PMI REQUIREMENTS EMBEDDED WITHIN MOUNT MODIFICATION REPORT

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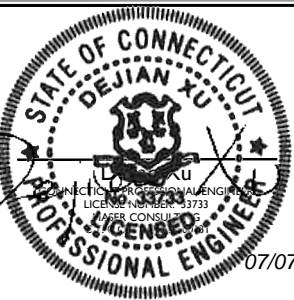
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**SITE NAME:**  
**COLLINSVILLE CT  
469353**  
**650 ALBANY TURNPIKE  
COLLINSVILLE, CT 06022  
HARTFORD COUNTY**

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

SHEET TITLE:  
**TITLE SHEET**

SHEET NUMBER:  
**T-1**

# BILL OF MATERIALS

VZWSMART KITS				
QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES
1	VZWSMART	VZWSMART-PLK5	KICKER KIT	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET S-2
1		VZWSMART-PLK7	MONOPOLE COLLAR MOUNT ASSEMBLY	
3		VZWSMART-PLK3	SUPPORT RAIL CORNER BRACKET	
12		VZWSMART-MSK1	CROSSOVER PLATE	

OTHER REQUIRED PARTS				
QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES
3	-	-	156" LONG, P2.5 STD	GALVANIZED
2	-	-	42" LONG, P2.0 STD	GALVANIZED
3	-	-	30" LONG, L3X3X1/4	GALVANIZED, CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET S-2.
5	SITE PRO 1	SQCX4-K	CROSSOVER PLATE KIT W/ SQUARE U-BOLTS AND STD. U-BOLTS	OR EOR APPROVED EQUAL, CONTACT MASER CONSULTING FOR APPROVAL OF SUBSTITUTION
3	-	-	102" LONG, P2.5 STD	GALVANIZED

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

VZWSMART KITS - APPROVED VENDORS	
<b>COMMSCOPE</b>	
CONTACT	SALVADOR ANGUIANO
PHONE	(817) 304-7492
EMAIL	SALVADOR.ANGUIANO@COMMSCOPE.COM
WEBSITE	WWW.COMMSCOPE.COM
<b>METROSITE FABRICATORS, LLC</b>	
CONTACT	KENT RAMEY
PHONE	(706) 335-7045 (O), (706) 982-9788 (M)
EMAIL	KENT@METROSITELLC.COM
WEBSITE	METROSITEFABRICATORS.COM
<b>PERFECTVISION</b>	
CONTACT	WIRELESS SALES
PHONE	(844) 887-6723
EMAIL	WWW.PERFECT-VISION.COM
WEBSITE	WIRELESSALES@PERFECT-VISION.COM
<b>SABRE INDUSTRIES, INC.</b>	
CONTACT	ANGIE WELCH
PHONE	(866) 428-6937
EMAIL	AKWELCH@SABREINDUSTRIES.COM
WEBSITE	WWW.SABRESITESOLUTIONS.COM
<b>SITE PRO 1</b>	
CONTACT	PAULA BOSWELL
PHONE	(972) 236-9843
EMAIL	PAULA.BOSWELL@VALMONT.COM
WEBSITE	WWW.SITEPRO1.COM

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



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

SHEET TITLE:  
**BILL OF MATERIALS**

SHEET NUMBER:  
**S-1**

**GENERAL NOTES**

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

**DESIGN LOADS**

- WIND LOADS
- a. BASIC WIND SPEED (3 SECOND GUST), V = 115 MPH
  - b. EXPOSURE CATEGORY B
  - c. TOPOGRAPHIC CATEGORY I
  - d. MEAN BASE ELEVATION (AMSL) = 491.78'

- ICE LOADS
- a. ICE WIND SPEED (3 SECOND GUST), V = 50 MPH
  - b. ICE THICKNESS = 1.50 IN

- SEISMIC LOADS
- a. SEISMIC DESIGN CATEGORY B
  - b. SHORT TERM MCER GROUND MOTION, S<sub>s</sub> = .174
  - c. LONG TERM MCER GROUND MOTION, S<sub>l</sub> = .054

**STRUCTURAL STEEL**

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

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

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

PROTECT STEEL BY ANY OTHER MEANS.

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



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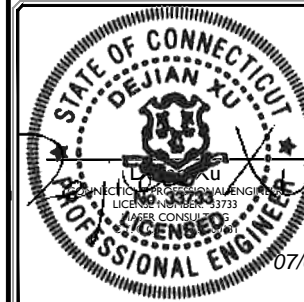
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**MT. LAUREL OFFICE**  
2000 Highlands Drive  
Suite 100  
Mount Laurel, NJ 08054

Phone: 856.797.0412  
Fax: 856.722.1120

SHEET TITLE:  
**MODIFICATION NOTES**

SHEET NUMBER:  
**S-2**



**MODIFICATION INSPECTION NOTES**

MI CHECKLIST	
CONSTRUCTION/ INSTALLATION INSPECTIONS AND TESTING REQUIRED (COMPLETED BY EOR)	REPORT ITEM
<b>PRE-CONSTRUCTION</b>	
X	MI CHECKLIST DRAWING
X	EOB 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:	
<b>CONSTRUCTION</b>	
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:	
<b>POST-CONSTRUCTION</b>	
X	MI INSPECTOR REDLINE OR RECORD DRAWING(S)
X	VZW PMI DOCUMENTS
X	PHOTOGRAPHS
ADDITIONAL TESTING AND INSPECTIONS:	

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

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

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

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

**MI INSPECTOR**

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

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

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

**GENERAL CONTRACTOR**

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

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

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

**RECOMMENDATIONS**

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

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

**CORRECTION OF FAILING MI'S**

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

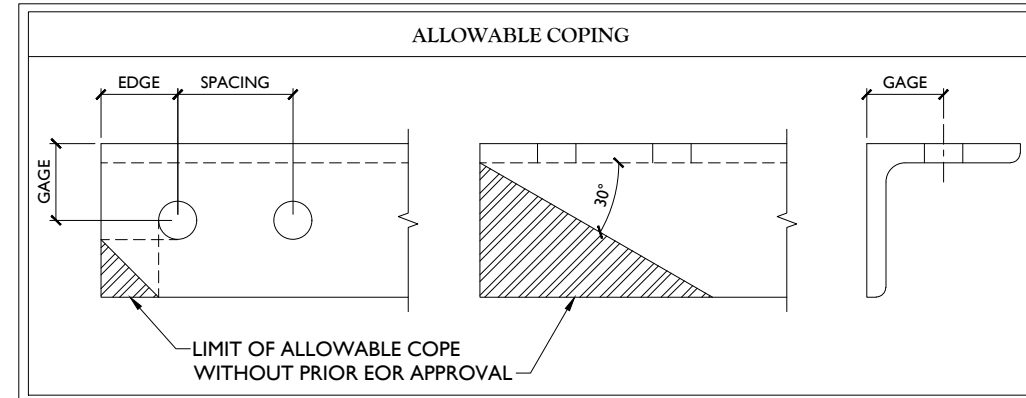
- CORRECT FAILING ISSUES TO COMPLY WITH THE SPECIFICATIONS CONTAINED IN THE ORIGINAL CONTRACT DOCUMENTS AND COORDINATE A SUPPLEMENT MI.

**REQUIRED PHOTOS**

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

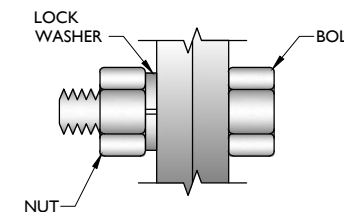
- PRE-CONSTRUCTION GENERAL SITE CONDITION
- PHOTOGRAPHS DURING THE REINFORCEMENT MODIFICATION CONSTRUCTION/ERECTION AND INSPECTION
  - RAW MATERIALS
  - PHOTOS OF ALL CRITICAL DETAILS
  - FOUNDATION MODIFICATIONS
  - WELD PREPARATION
  - BOLT INSTALLATION
  - FINAL INSTALLED CONDITION
  - SURFACE COATING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

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



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 AISC MINIMUM REQUIREMENTS. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ENGINEER IF DISTANCES ARE LESS THAN THOSE PROVIDED.
- THE DIMENSIONS PROVIDED ARE MINIMUM REQUIREMENTS. ACTUAL DIMENSIONS OF PROPOSED MEMBERS WITHIN THESE DRAWINGS MAY VARY FROM THE AISC 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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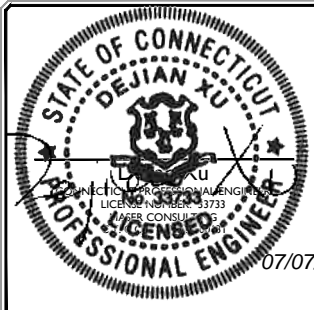
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 469353  
 650 ALBANY TURNPIKE  
 COLLINSVILLE, CT 06022  
 HARTFORD COUNTY

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

SHEET TITLE:  
**MODIFICATION NOTES**

SHEET NUMBER:  
**S-3**

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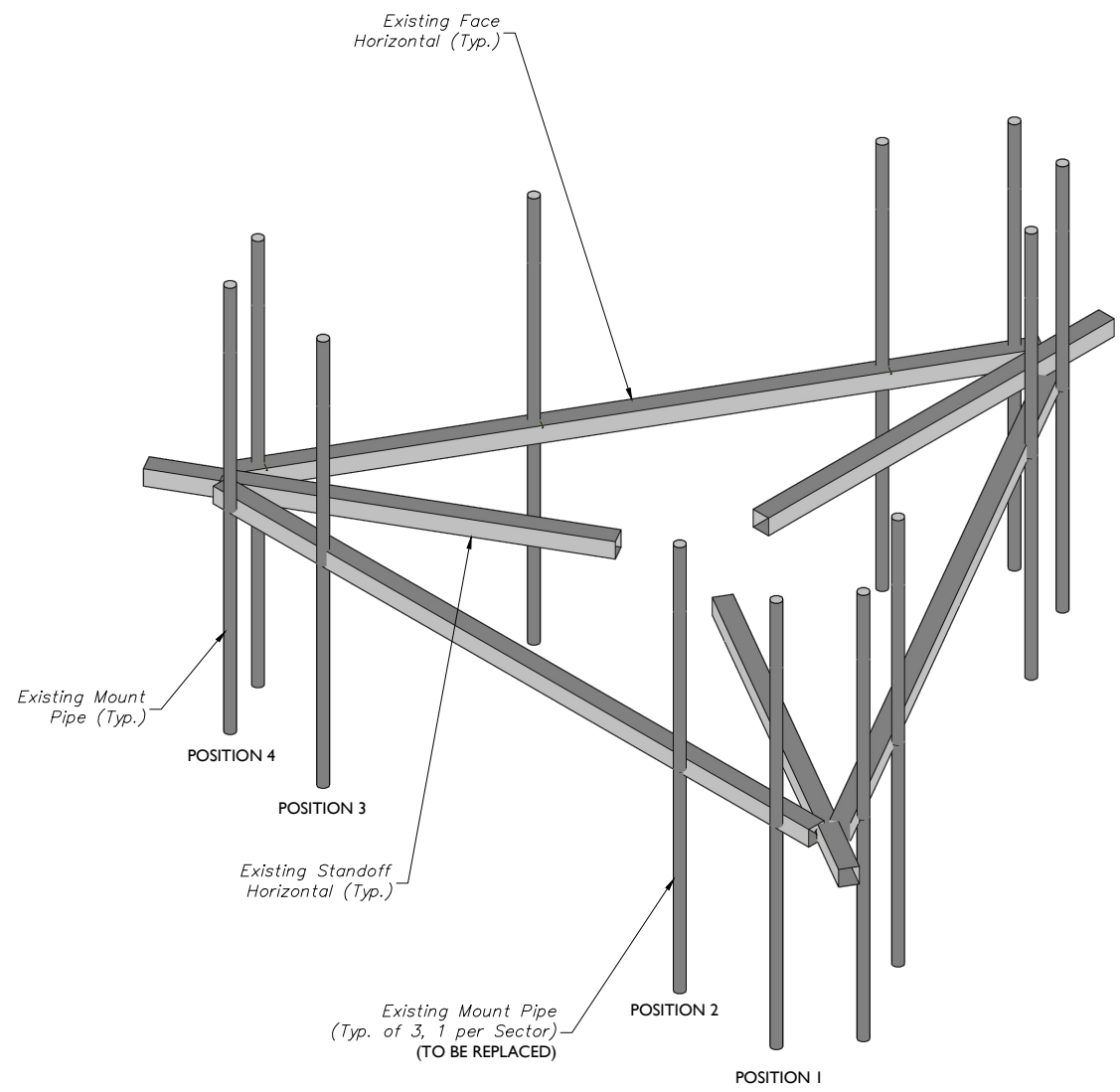
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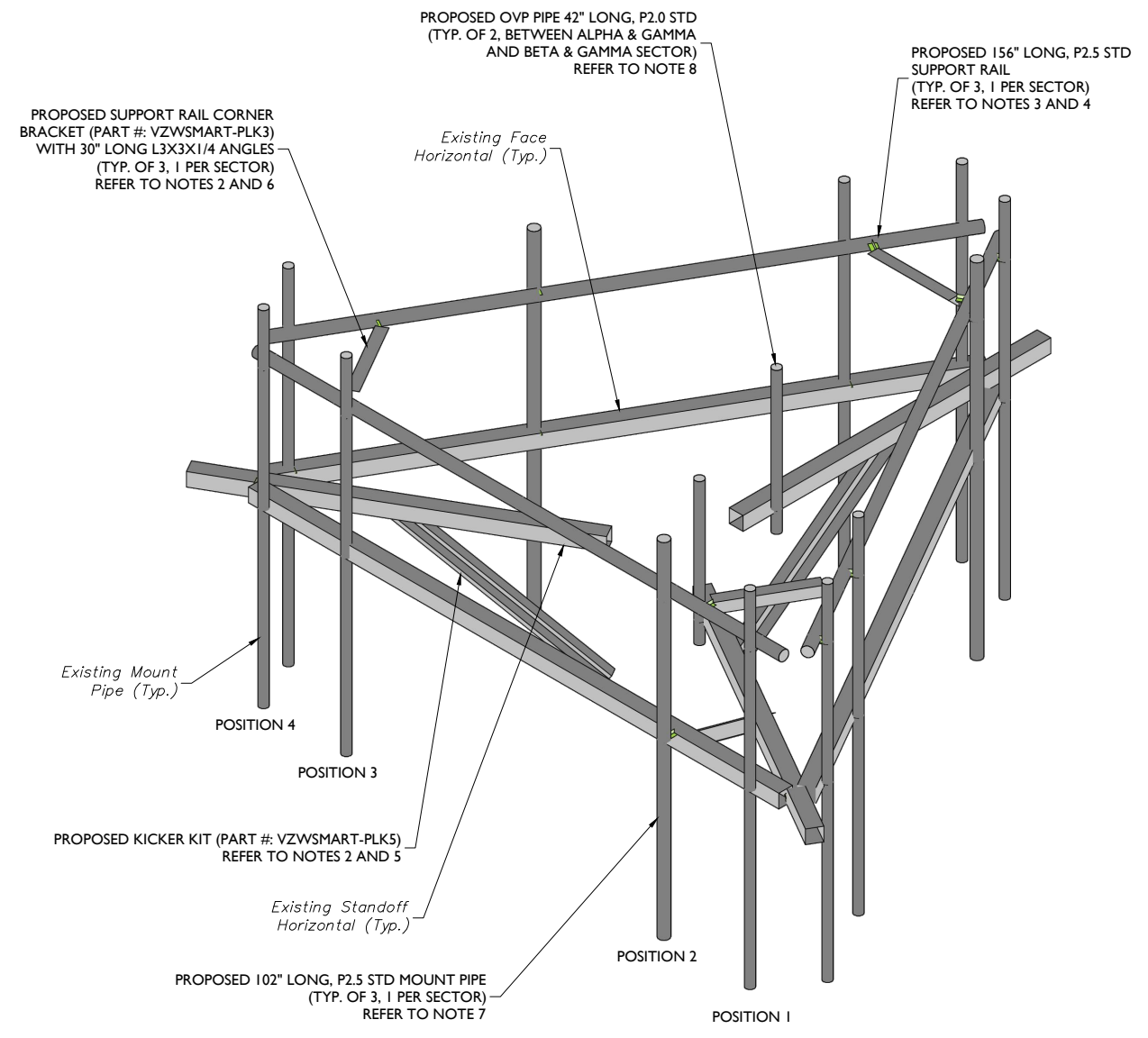
SHEET TITLE:  
**MODIFICATION DETAILS**

SHEET NUMBER:  
**S-4**



**1** EXISTING PLATFORM ISOMETRIC VIEW  
 SCALE : N.T.S.

- STRUCTURAL NOTES:**
- PER THE MOUNT MAPPING COMPLETED BY STRUCTURAL COMPONENTS, LLC ON 4/13/2021, THE SAFETY CLIMB AND CLIMBING FACILITIES UP TO THE VERIZON MOUNT ELEVATION (118'-6") ARE IN GOOD CONDITION. MASER DOES NOT WARRANT THIS INFORMATION.
  - 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.



**2** PROPOSED PLATFORM ISOMETRIC VIEW  
 SCALE : N.T.S.

- MODIFICATION NOTES:**
- MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.
  - CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET S-2.
  - RADIO AND/OR TME POSITIONS SHALL BE ADJUSTED VERTICALLY AS NEEDED IN ORDER TO ACHIEVE INSTALLATION OF HORIZONTAL AS SHOWN. EOR SHALL BE NOTIFIED IF EQUIPMENT NEEDS TO BE RELOCATED TO ANOTHER MOUNT PIPE.
  - CONNECT NEW HORIZONTAL TO ALL VERTICAL MOUNT PIPES WITH CROSSOVER PLATES (PART #: VZWSMART-MSK1).
  - CONNECT OTHER END OF KICKER KIT TO MONOPOLE COLLAR MOUNT ASSEMBLY (PART #: VZWSMART-PLK7).
  - CONTRACTOR SHALL CONNECT PROPOSED L3X3X1/4 ANGLES TO CORNER BRACKETS USING THE PROVIDED (8) 5/8" DIA. BOLTS, (4) BOLTS PER CONNECTION.
  - CONNECT NEW MOUNT PIPE TO EXISTING HORIZONTAL WITH CROSSOVER PLATES (PART #: SITE PRO 1 - SQCX4-K, OR EOR APPROVED EQUAL).
  - CONNECT NEW OVP PIPE TO EXISTING STANDOFF HORIZONTAL WITH CROSSOVER PLATES (PART #: SITE PRO 1 - SQCX4-K, OR EOR APPROVED EQUAL).

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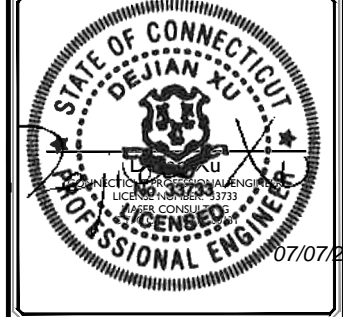
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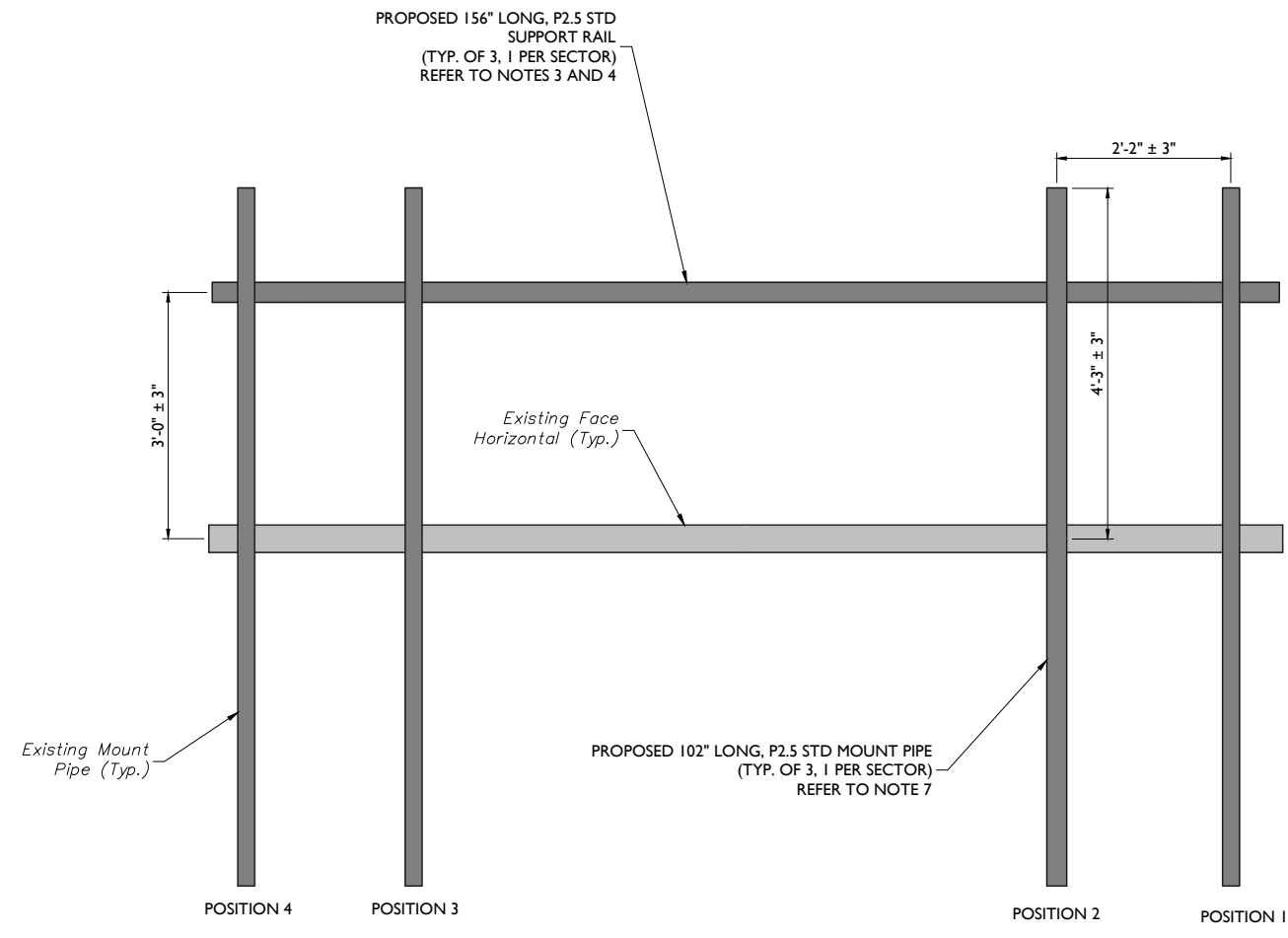
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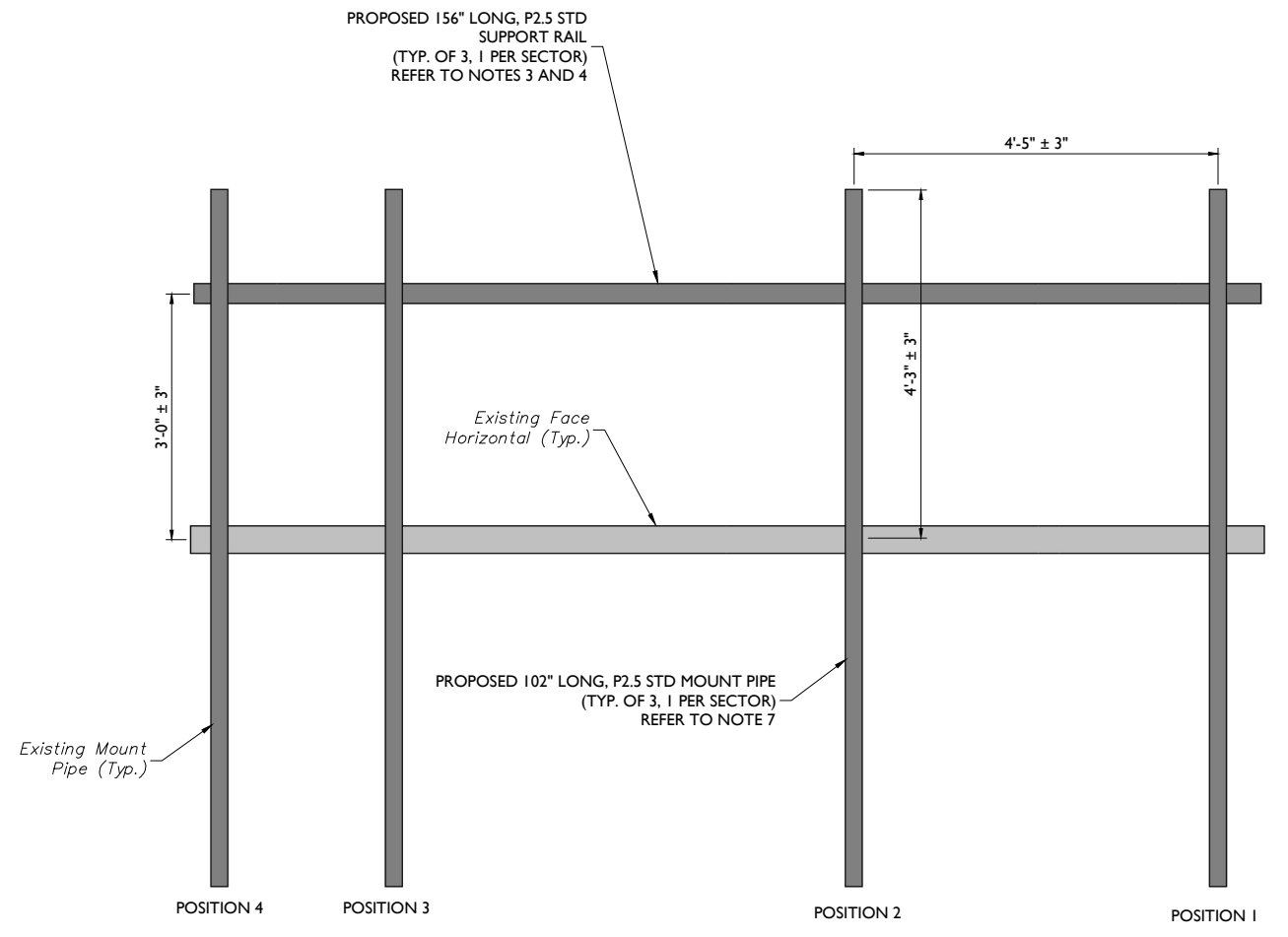
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SHEET TITLE:  
**MODIFICATION DETAILS**

SHEET NUMBER:  
**S-5**



**1** PROPOSED FRONT ELEVATION (ALPHA & GAMMA SECTOR)  
 SCALE : N.T.S.



**2** PROPOSED FRONT ELEVATION (BETA SECTOR)  
 SCALE : N.T.S.

**MODIFICATION NOTES:**

- MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.
- CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET S-2.
- RADIO AND/OR TME POSITIONS SHALL BE ADJUSTED VERTICALLY AS NEEDED IN ORDER TO ACHIEVE INSTALLATION OF HORIZONTAL AS SHOWN. EOR SHALL BE NOTIFIED IF EQUIPMENT NEEDS TO BE RELOCATED TO ANOTHER MOUNT PIPE.
- CONNECT NEW HORIZONTAL TO ALL VERTICAL MOUNT PIPES WITH CROSSOVER PLATES (PART #: VZWSMART-MSK1).
- CONNECT OTHER END OF KICKER KIT TO MONOPOLE COLLAR MOUNT ASSEMBLY (PART #: VZWSMART-PLK7).
- CONTRACTOR SHALL CONNECT PROPOSED L3X3X1/4 ANGLES TO CORNER BRACKETS USING THE PROVIDED (8) 5/8" DIA. BOLTS, (4) BOLTS PER CONNECTION.
- CONNECT NEW MOUNT PIPE TO EXISTING HORIZONTAL WITH CROSSOVER PLATES (PART #: SITE PRO I - SQCX4-K, OR EOR APPROVED EQUAL).
- CONNECT NEW OVP PIPE TO EXISTING STANDOFF HORIZONTAL WITH CROSSOVER PLATES (PART #: SITE PRO I - SQCX4-K, OR EOR APPROVED EQUAL).



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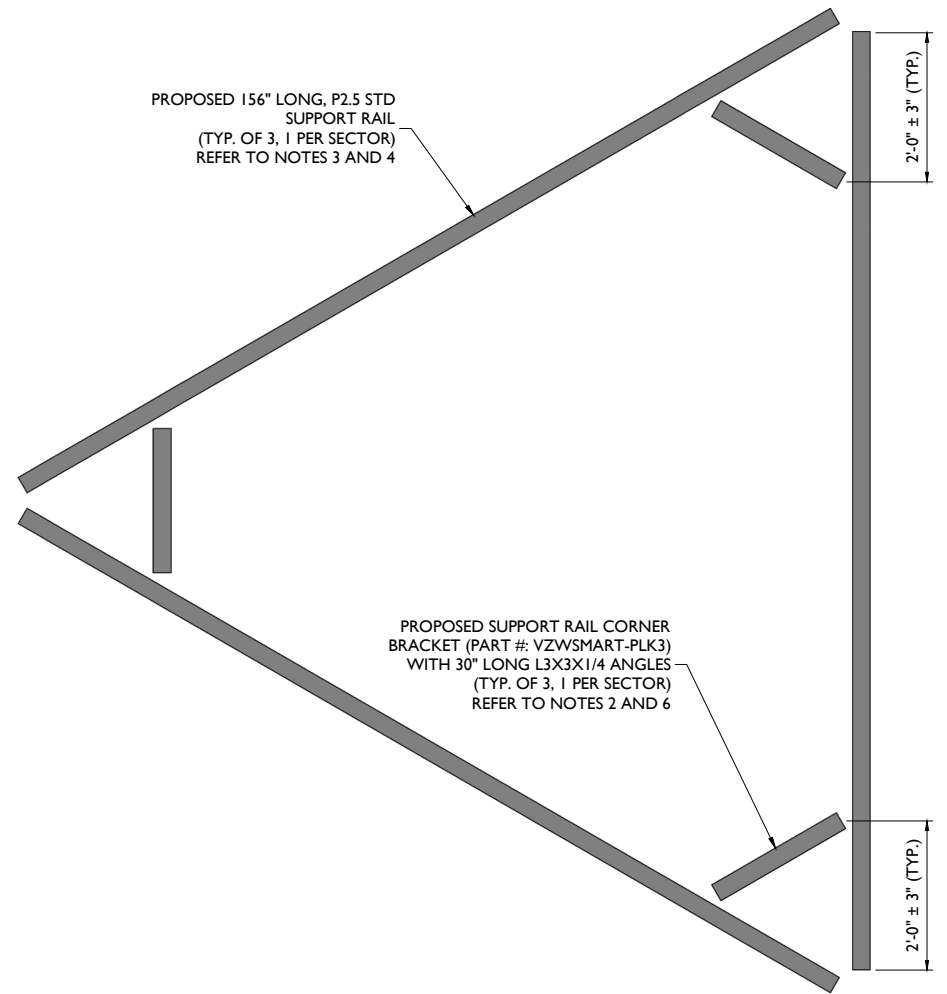
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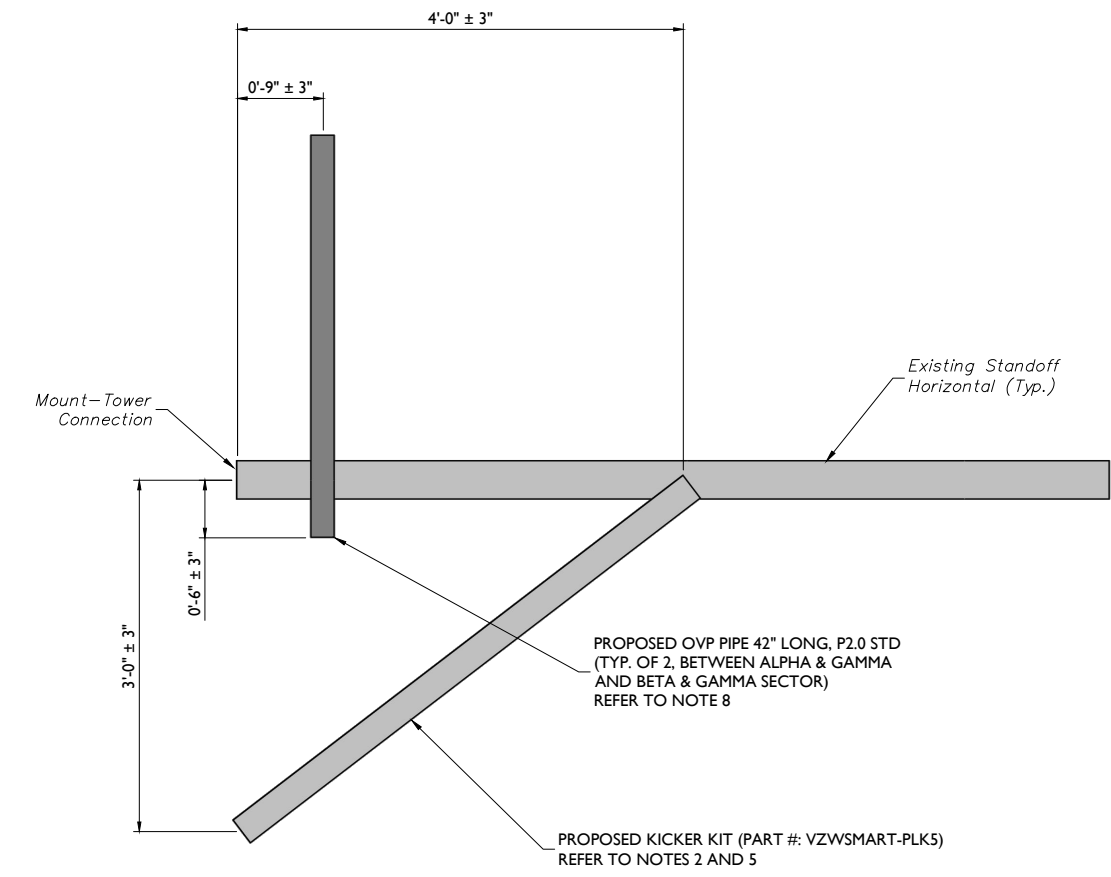
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SHEET TITLE:  
**MODIFICATION DETAILS**

SHEET NUMBER:  
**S-6**



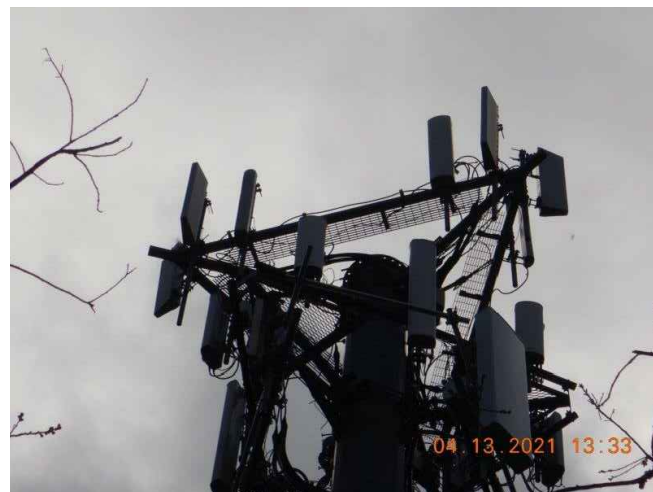
**1** PROPOSED PLAN VIEW  
 SCALE: N.T.S.



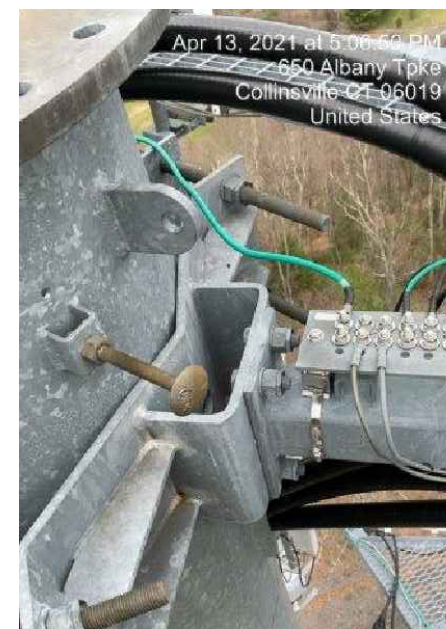
**2** PROPOSED SIDE ELEVATION (TYP. ALL SECTORS)  
 SCALE: N.T.S.

**MODIFICATION NOTES:**

- MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.
- CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET S-2.
- RADIO AND/OR TME POSITIONS SHALL BE ADJUSTED VERTICALLY AS NEEDED IN ORDER TO ACHIEVE INSTALLATION OF HORIZONTAL AS SHOWN. EOR SHALL BE NOTIFIED IF EQUIPMENT NEEDS TO BE RELOCATED TO ANOTHER MOUNT PIPE.
- CONNECT NEW HORIZONTAL TO ALL VERTICAL MOUNT PIPES WITH CROSSOVER PLATES (PART #: VZWSMART-MSK1).
- CONNECT OTHER END OF KICKER KIT TO MONOPOLE COLLAR MOUNT ASSEMBLY (PART #: VZWSMART-PLK7).
- CONTRACTOR SHALL CONNECT PROPOSED L3X3X1/4 ANGLES TO CORNER BRACKETS USING THE PROVIDED (8) 5/8" DIA. BOLTS, (4) BOLTS PER CONNECTION.
- CONNECT NEW MOUNT PIPE TO EXISTING HORIZONTAL WITH CROSSOVER PLATES (PART #: SITE PRO I - SQCX4-K, OR EOR APPROVED EQUAL).
- CONNECT NEW OVP PIPE TO EXISTING STANDOFF HORIZONTAL WITH CROSSOVER PLATES (PART #: SITE PRO I - SQCX4-K, OR EOR APPROVED EQUAL).



MOUNT PHOTO 1



MOUNT PHOTO 2



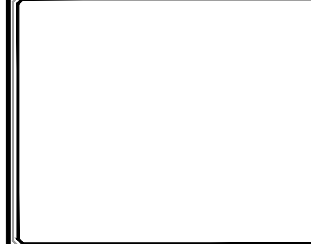
MOUNT PHOTO 3



MOUNT PHOTO 4

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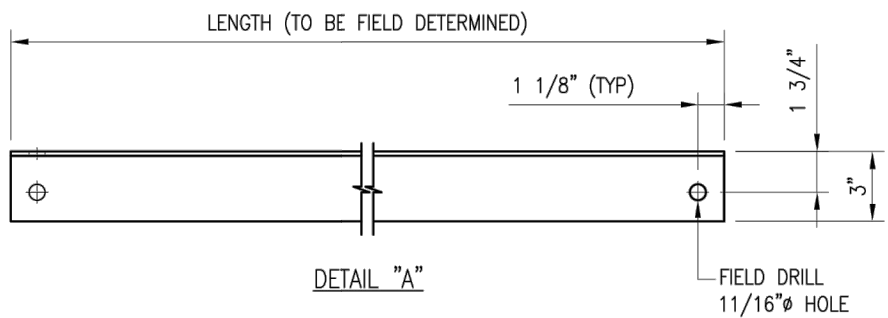
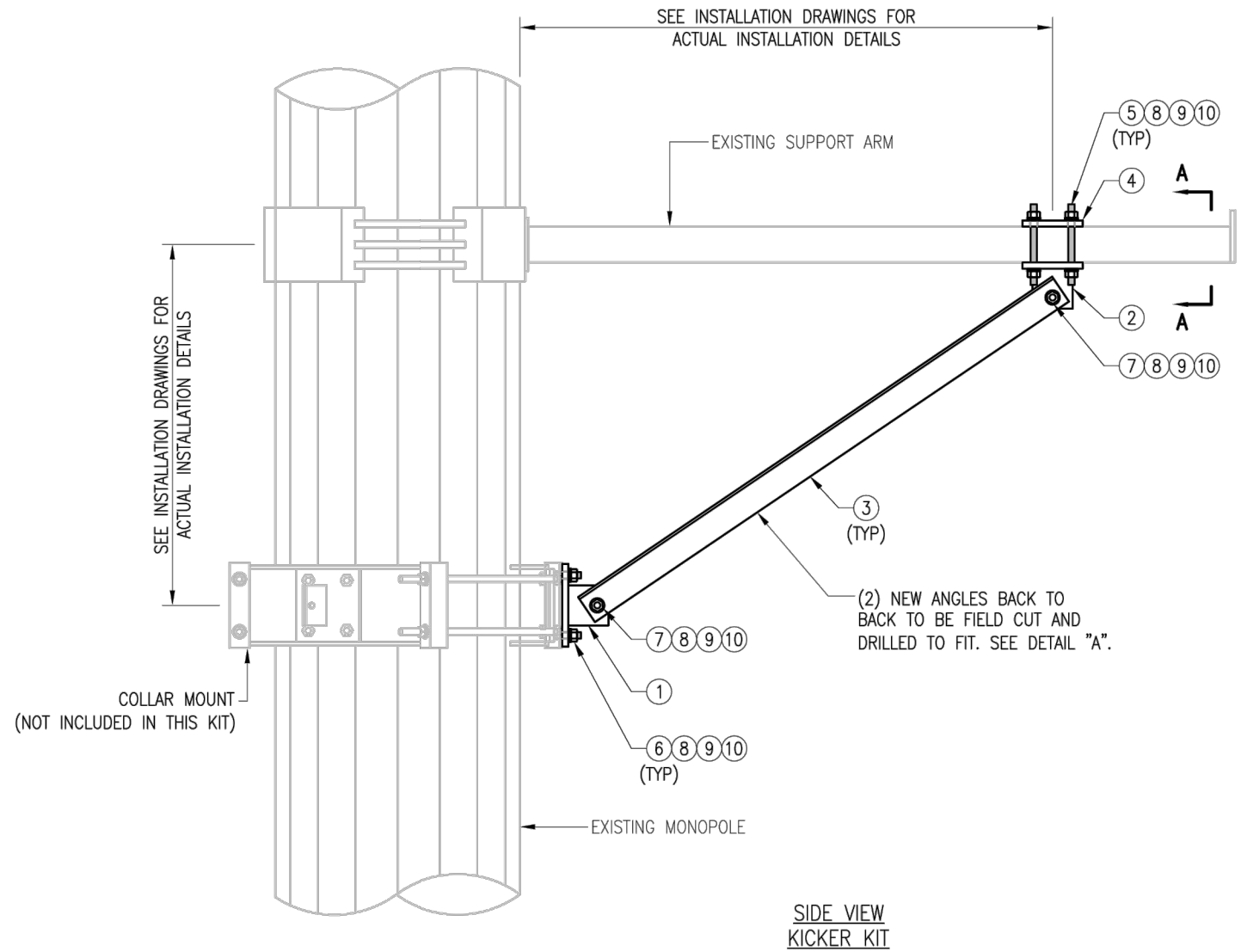
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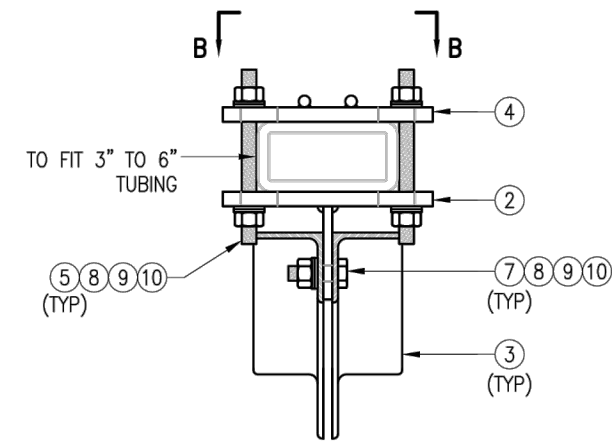
SHEET TITLE:  
 MOUNT PHOTOS

SHEET NUMBER:  
 S-7

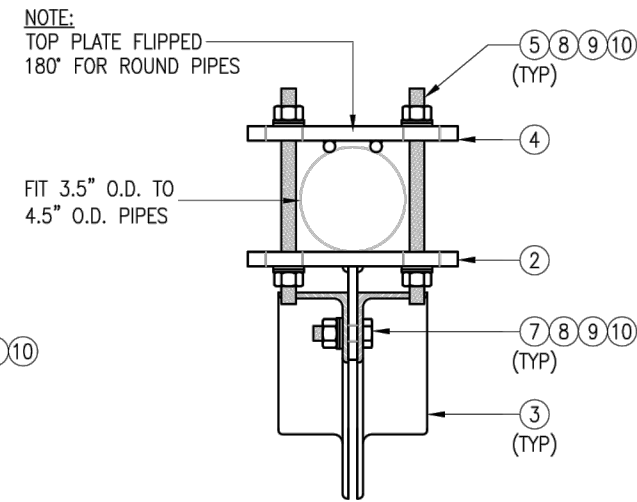
NOTE:  
THE LOCATION OF KICKER AND EXISTING ANTENNA MOUNT SHOWN ON THE DRAWING IS FOR REPRESENTATION PURPOSE ONLY. SEE INSTALLATION DRAWINGS FOR ACTUAL INSTALLATION OF DETAILS.



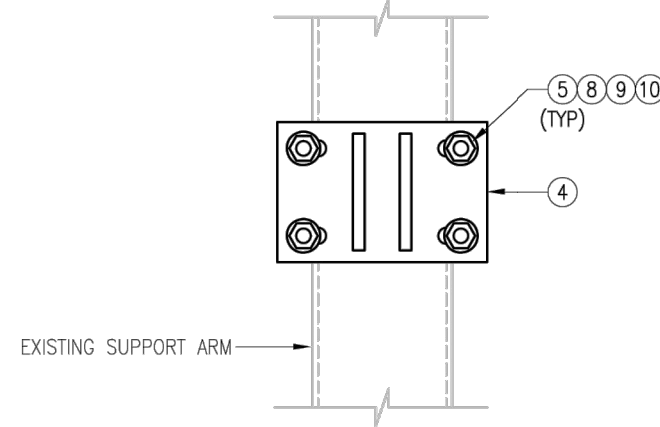
- NOTES:
1. ALL HOLES ARE 11/16" DIA. U.N.O
  2. HOT-DIPPED GALVANIZED PER ASTM A123.
  3. FIT UP TO 6" SQ. TUBING OR 4 1/2" O.D. PIPE



SECTION "A-A"  
RECT. HSS MOUNTING



SECTION "A-A"  
ROUND PIPE MOUNTING



SECTION "B-B"

VZSMART-PLK5 (KICKER KIT)					
ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	3	BRKW-XXX	BRACKET WELDMENT A36	PLK5-F3	43.8
2	3	BRKW-XXXX	BRACKET WELDMENT A36	PLK5-F2	35.7
3	6	L331875-8	L 3" X 3" X 3/16" X 8'-0" A36	PLK5-F4	182.9
4	3	PL-KI	PL 5/8" X 6" X 9" A36	PLK5-F1	29.0
5	12	---	THREADED ROD 5/8" DIA. X 1'-0" F1554-36 HDG	---	---
6	6	---	BOLT 5/8" X 2" A325	---	---
7	12	---	BOLT 5/8" X 2 1/2" A325	---	---
8	42	FW-625	5/8" HDG USS FLAT WASHER	---	3
9	42	LW-625	5/8" HDG LOCK WASHER	---	1
10	42	NUT-625	5/8" HDG HEX NUT	---	5
GALVANIZED WT					291

VzW  
**SMART Tool**<sup>®</sup>  
Vendor

**verizon**<sup>✓</sup>

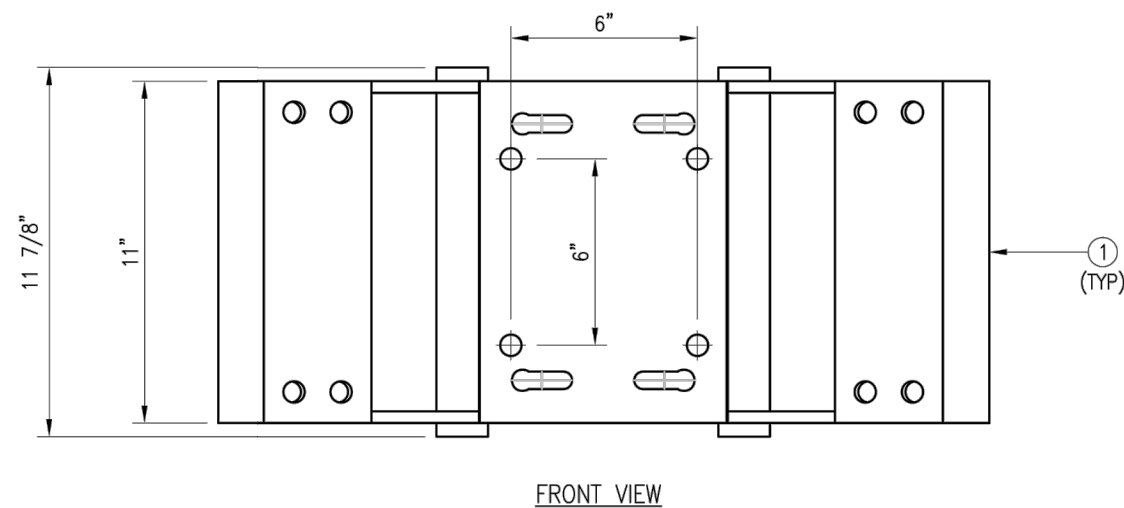
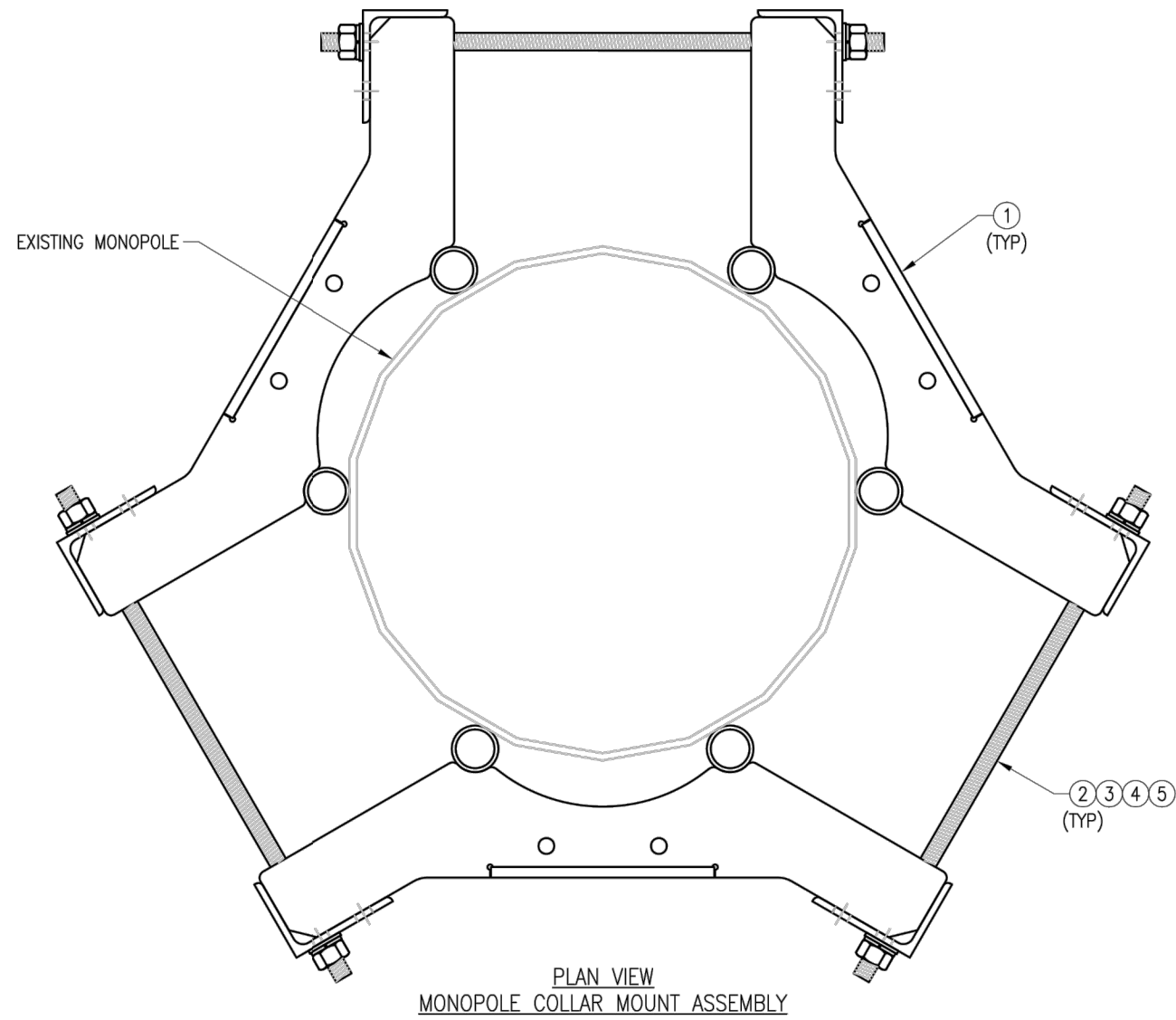
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REV.	DESCRIPTION	BY	DATE
△	FIRST ISSUE	MN	05/08/20
△			
△			
△			

SHEET TITLE:

VZSMART-PLK5  
KICKER KIT

SHEET NUMBER: VZSMART-PLK5 REV #: 0



NOTES:  
 1. FIT 12" TO 45" DIA MONOPOLE.  
 2. HOT-DIPPED GALVANIZED PER ASTM A123.

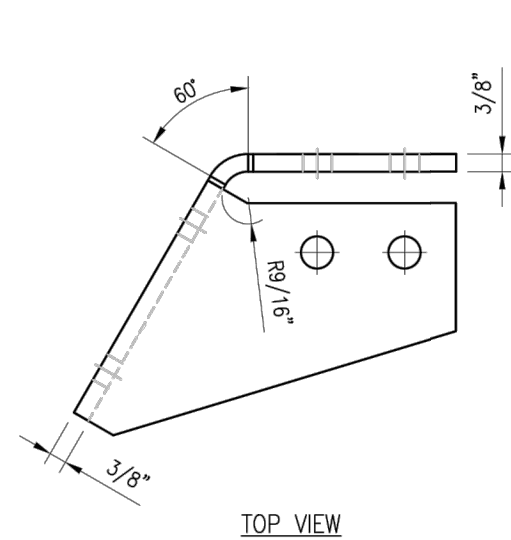
VZSMART-PLK7 (MONOPOLE COLLAR MOUNT ASSEMBLY)					
ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	3	CM-1245	COLLAR MOUNT ASSEMBLY	PLK7-F1	147
2	6	---	THREADED ROD 5/8" X 4'-0" A193-B7	---	---
3	12	FW-625	5/8" HDG USS FLAT WASHER	---	1
4	12	LW-625	5/8" HDG LOCK WASHER	---	0
5	12	NUT-625	5/8" HDG HEX NUT	---	1
GALVANIZED WT					150

DRAWN BY: BT      CHECKED BY: HMA/KW

REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	BT	05/11/20

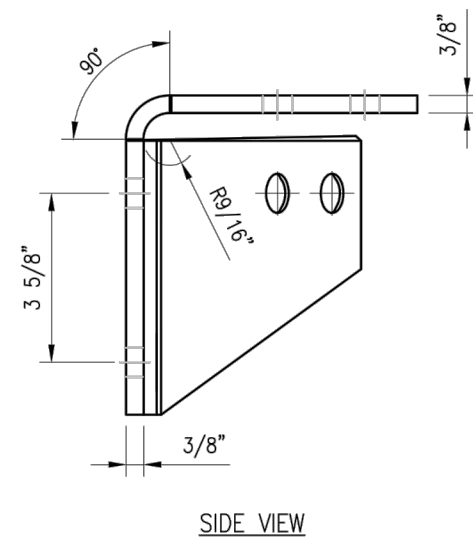
SHEET TITLE:  
 VZSMART-PLK7  
 MONOPOLE COLLAR  
 MOUNT ASSEMBLY

SHEET NUMBER: VZSMART-PLK7      REV #: 0

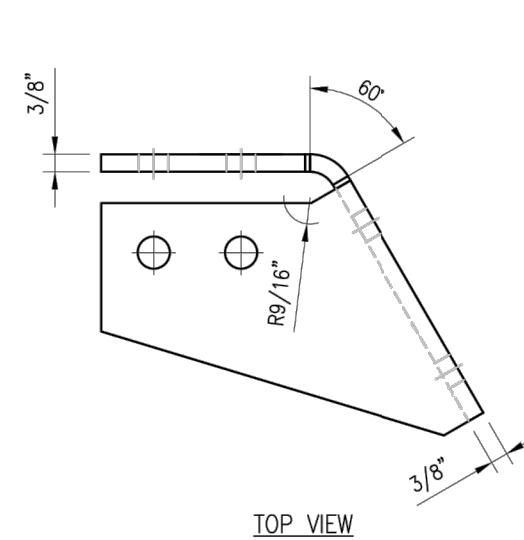


TOP VIEW

CBP-L

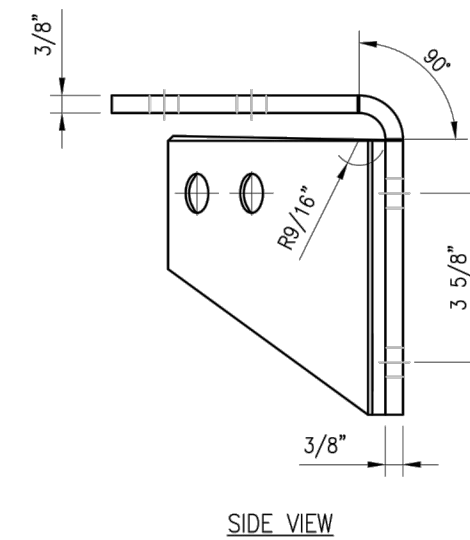


SIDE VIEW



TOP VIEW

CBP-R



SIDE VIEW

**NOTES:**

- HOT-DIPPED GALVANIZED PER ASTM A123.

VZSMART-PLK3 (SUPPORT RAIL CORNER BRACKET)					
ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	1	CBP-L	CORNER BENT PLATE BRACKET	PLK3-F1	9
2	1	CBP-R	CORNER BENT PLATE BRACKET	PLK3-F1	9
3	4	MS02-625-300-500	RU-BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)	RBC-1	5
4	8	---	BOLT 5/8" X 2" A325	---	3
5	16	FW-625	5/8" HDG USS FLAT WASHER	---	1
6	16	LW-625	5/8" HDG LOCK WASHER	---	0
7	16	NUT-625	5/8" HDG HEX NUT	---	2
GALVANIZED WT					30

DRAWN BY: H.R. CHECKED BY: HMA

REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	H.R.	05/08/20

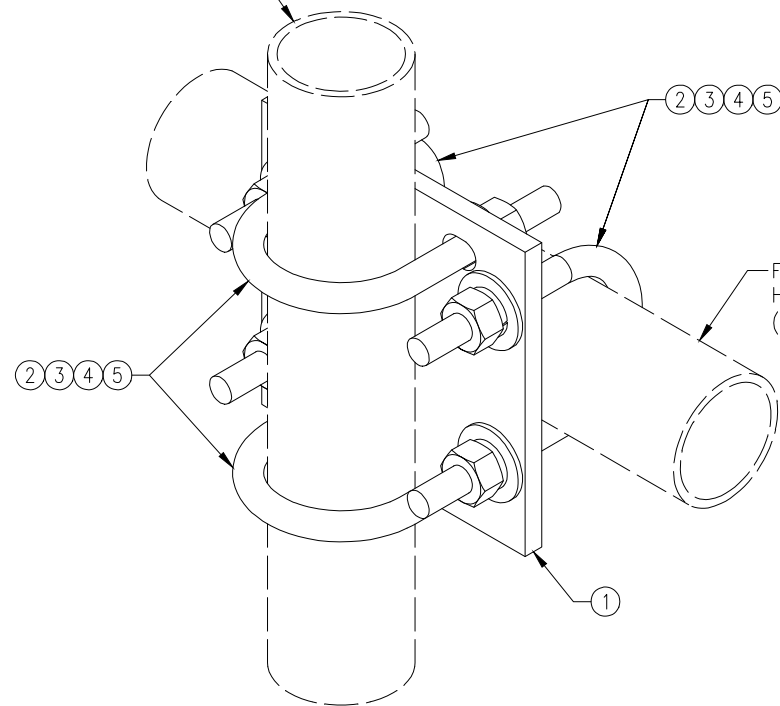
SHEET TITLE:  
 VZSMART-PLK3  
 SUPPORT RAIL CORNER  
 BRACKET

SHEET NUMBER: VZSMART-PLK3 REV #: 0

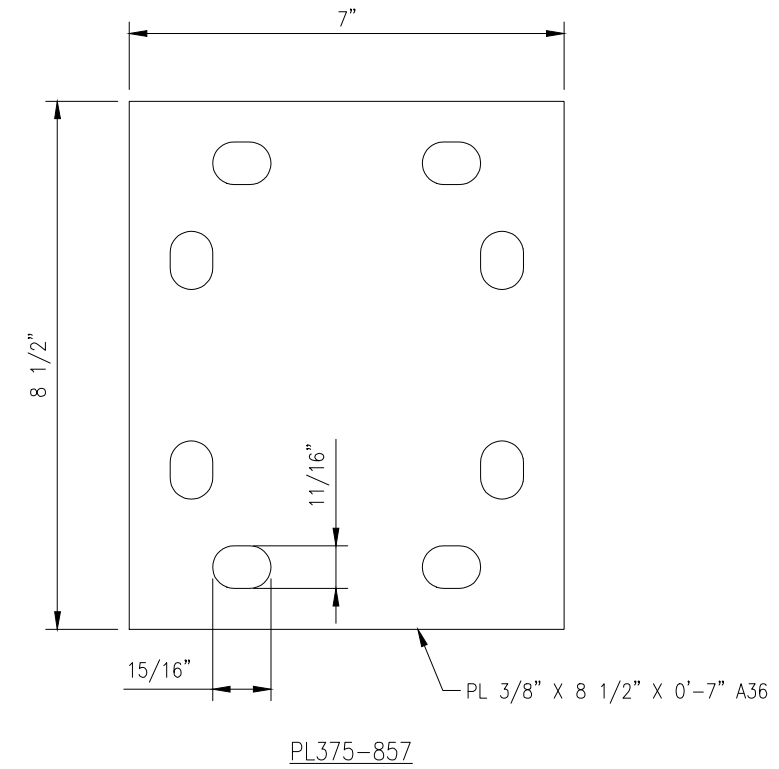




FITS 2.375" O.D. AND 2.875" O.D.  
 VERTICAL PIPE.  
 (NOT INCLUDED IN THIS KIT)



FITS 2.375" O.D. AND 2.875" O.D.  
 HORIZONTAL PIPE.  
 (NOT INCLUDED IN THIS KIT)



PL375-857

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

SHEET TITLE:

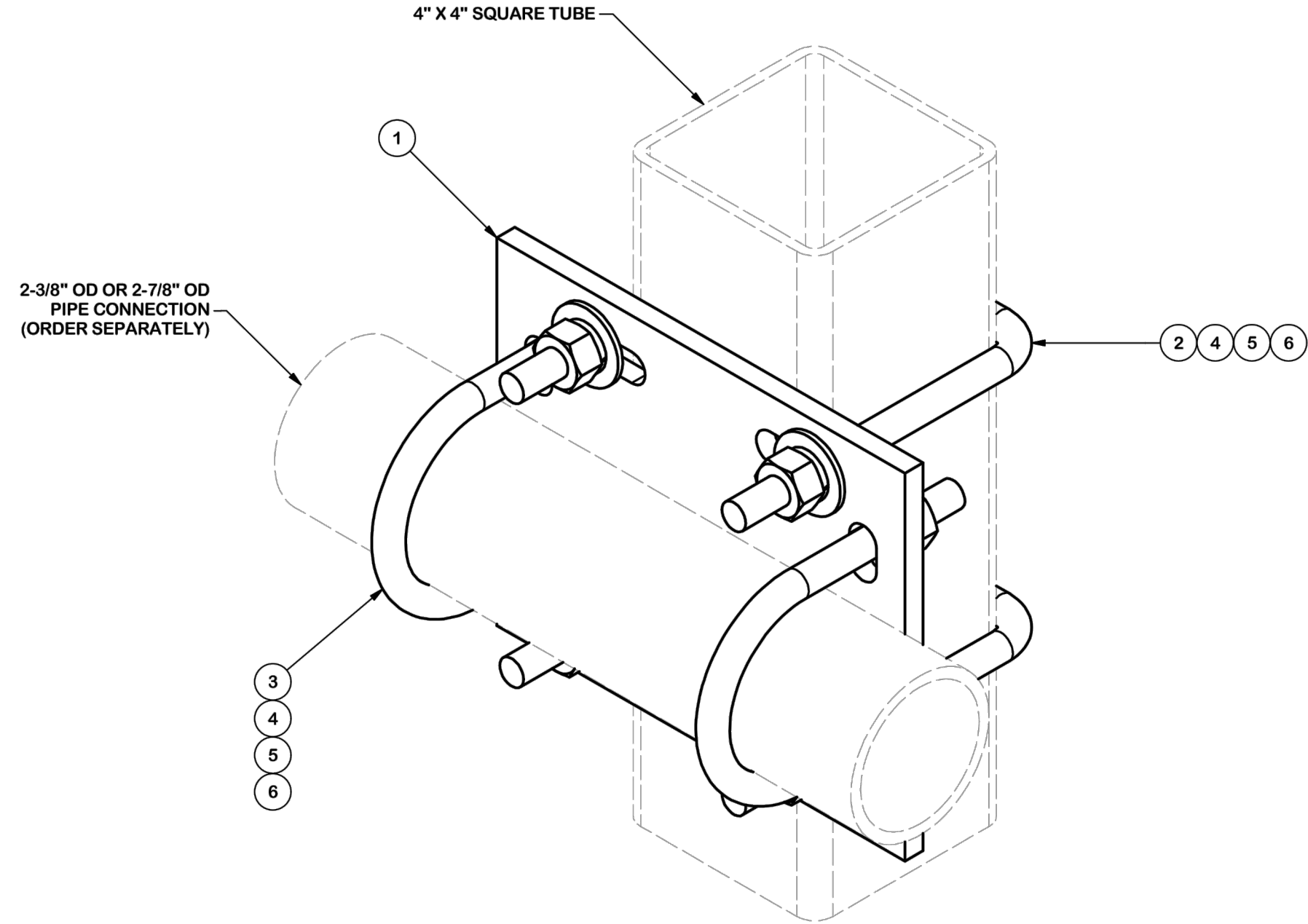
VZSMART-MSK1  
 CROSSOVER PLATE

SHEET NUMBER:	REV #:
VZSMART-MSK1	0

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

VZSMART-MSK1 (CROSSOVER PLATE)					
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	MS02-625-300-500	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


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



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

PROPRIETARY NOTE:  
THE DATA AND TECHNIQUES CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALMONT INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF VALMONT INDUSTRIES IS STRICTLY PROHIBITED.

DESCRIPTION <b>CROSSOVER PLATE KIT W/ SQUARE U-BOLTS AND STD. U-BOLTS</b>		
CPD NO.	DRAWN BY <b>CSL 9/18/2018</b>	ENG. APPROVAL <b>3RD PARTY</b>
CLASS <b>87</b>	SUB <b>02</b>	DRAWING USAGE <b>CUSTOMER</b>
		CHECKED BY <b>BMC 11/12/2018</b>

 <b>A valmont COMPANY</b>	Locations: New York, NY Atlanta, GA Los Angeles, CA Plymouth, IN Salem, OR Dallas, TX
	Engineering Support Team: 1-888-753-7446
PART NO.	<b>SQCX4-K</b>
DWG. NO.	<b>SQCX4-K</b>



**AMERICAN TOWER®**  
CORPORATION

This report was prepared for American Tower Corporation by



**TOWER  
ENGINEERING  
PROFESSIONALS**

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## Structural Analysis Report

**Structure** : 120 ft Monopole  
**ATC Site Name** : CT Collinsville CAC 802816 CT, CT  
**ATC Asset Number** : 411259  
**Engineering Number** : 13701314\_C3\_02  
**Proposed Carrier** : VERIZON WIRELESS  
**Carrier Site Name** : COLLINSVILLE CT  
**Carrier Site Number** : 469353  
**Site Location** : 650 Albany Turnpike  
Collinsville, CT 06019-3522  
41.850600,-72.948700  
**County** : Hartford  
**Date** : August 2, 2021  
**Max Usage** : 58%  
**Result** : Pass

Prepared By:  
Ryan N. Morofsky, E.I.  
TEP

Reviewed By:



08/02/2021

**COA: PEC.0001553**



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## Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 120 ft monopole to reflect the change in loading by VERIZON WIRELESS.

## Supporting Documents

<b>Tower Drawings</b>	EEI Project #11936 Rev 3, dated January 29, 2004
<b>Foundation Drawing</b>	EEI Project #11936, dated September 10, 2003
<b>Geotechnical Report</b>	CHA Project #11869.1006.1502, dated November 20, 2002
<b>Mount Modification</b>	Master Consulting -Connecticut- Project #21777759A, dated July 7, 2021

## Analysis

The tower was analyzed using American Tower Corporation's tower analysis software. This program considers an elastic three-dimensional model and second-order effects per ANSI/TIA-222.

<b>Basic Wind Speed:</b>	115 mph (3-Second Gust)
<b>Basic Wind Speed w/ Ice:</b>	50 mph (3-Second Gust) w/ 1 1/2" radial ice concurrent
<b>Code:</b>	ANSI/TIA-222-H / 2015 IBC / 2018 Connecticut State Building Code
<b>Exposure Category:</b>	B
<b>Risk Category:</b>	II
<b>Topographic Factor Procedure:</b>	Method 1
<b>Topographic Category:</b>	1
<b>Crest Height (H):</b>	0 ft
<b>Spectral Response:</b>	$S_s = 0.17, S_1 = 0.05$
<b>Site Class:</b>	D - Stiff Soil

## Conclusion

Based on the analysis results, the structure meets the requirements per the applicable codes listed above. The tower and foundation can support the equipment as described in this report.

If you have any questions or require additional information, please contact American Tower via email at [Engineering@americantower.com](mailto:Engineering@americantower.com). Please include the American Tower site name, site number, and engineering number in the subject line for any questions.



**Existing and Reserved Equipment**

Elev. <sup>1</sup> (ft)	Qty	Equipment	Mount Type	Lines	Carrier
121.0	4	Antel LPA-80080/6CF ____	-	(6) 1 5/8" Coax	VERIZON WIRELESS
	1	VZW Unused Reserve (15340.47 sqin)			
110.0	1	Andrew ABT-DFDM-ADB	Low Profile Platform	(1) 0.39" (10mm) Fiber Trunk (2) 0.78" (19.7mm) 8 AWG 6 (12) 1 5/8" Coax (1) 3" conduit	AT&T MOBILITY
	12	Powerwave Allgon TT19-08BP111-001			
	1	Raycap DC6-48-60-0-8F			
	6	Ericsson RRUS-11 (50 lbs.)			
	6	Powerwave Allgon P65-15-XLH-RR			
	3	Powerwave Allgon P65-17-XLH-RR			
100.0	3	Ericsson KRY 112 144/1	Platform with Handrails	(3) 1 5/8" (1.63"-41.3mm) Fiber (12) 1 5/8" Coax	T-MOBILE
	3	RFS APXVAARR24_43-U-NA20			
	3	RFS APX16DWV-16DWV-S-E-ACU			
	3	Ericsson Radio 4449 B12,B71			
	3	Ericsson KRY 112 489/2			
89.0	3	Fujitsu TA08025-B605	Platform with Handrails	(1) 1.60" (40.6mm) Hybrid	DISH WIRELESS L.L.C.
	1	Commscope RDIDC-9181-PF-48			
	3	Fujitsu TA08025-B604			
	3	JMA Wireless MX08FRO665-21			

**Equipment to be Removed**

Elev. <sup>1</sup> (ft)	Qty	Equipment	Mount Type	Lines	Carrier
121.0	3	Amphenol Antel BXA-171085-12BF-EDIN-X	Low Profile Platform	(12) 1 5/8" Coax	VERIZON WIRELESS
	2	Antel LPA-80080/6CF ____			
	3	Antel BXA-70063/6CF __ 2°			

**Proposed Equipment**

Elev. <sup>1</sup> (ft)	Qty	Equipment	Mount Type	Lines	Carrier
121.0	3	Samsung B2/B66A RRH-BR049	Platform with Handrails	(2) 1 5/8" Hybriflex	VERIZON WIRELESS
	3	Samsung B5/B13 RRH-BR04C			
	2	Raycap RRFDC-3315-PF-48			
	3	Samsung MT6407-77A			
	6	Commscope NHH-65B-R2B			
	2	Antel LPA-80063/6CF			

<sup>1</sup> Contracted elevations are shown for appurtenances within contracted installation tolerances. Appurtenances outside of contract limits are shown at installed elevations.

Install proposed lines inside the pole shaft.



**Structure Usages**

Structural Component	Controlling Usage	Pass/Fail
Anchor Bolts	41%	Pass
Shaft	43%	Pass
Base Plate	29%	Pass

**Foundations**

Reaction Component	Original Design Reactions	Factored Design Reactions*	Analysis Reactions	% of Design
Moment (Kips-Ft)	3,083.8	4,163.1	2,039.9	49%
Shear (Kips)	27.5	37.1	21.5	58%

\* The design reactions are factored by 1.35 per ANSI/TIA-222-H, Sec. 15.6.2

The structure base reactions resulting from this analysis are acceptable when compared to those shown on the original structure drawings, therefore no modification or reinforcement of the foundation will be required.

**Deflection and Sway\***

Antenna Elevation (ft)	Antenna	Carrier	Deflection (ft)	Sway (Rotation) (°)
121.0	Samsung B2/B66A RRH-BR049	VERIZON WIRELESS	0.812	0.670
	Samsung B5/B13 RRH-BR04C			
	Raycap RRFDC-3315-PF-48			
	Samsung MT6407-77A			
	Commscope NHH-65B-R2B			
	Antel LPA-80063/6CF			

\*Deflection and Sway was evaluated considering a design wind speed of 60 mph (3-Second Gust) per ANSI/TIA-222-H



## **Standard Conditions**

All engineering services performed by A.T. Engineering Service, PLLC are prepared on the basis that the information used is current and correct. This information may consist of, but is not limited to the following:

- Information supplied by the client regarding antenna, mounts and feed line loading
- Information from drawings, design and analysis documents, and field notes in the possession of A.T. Engineering Service, PLLC

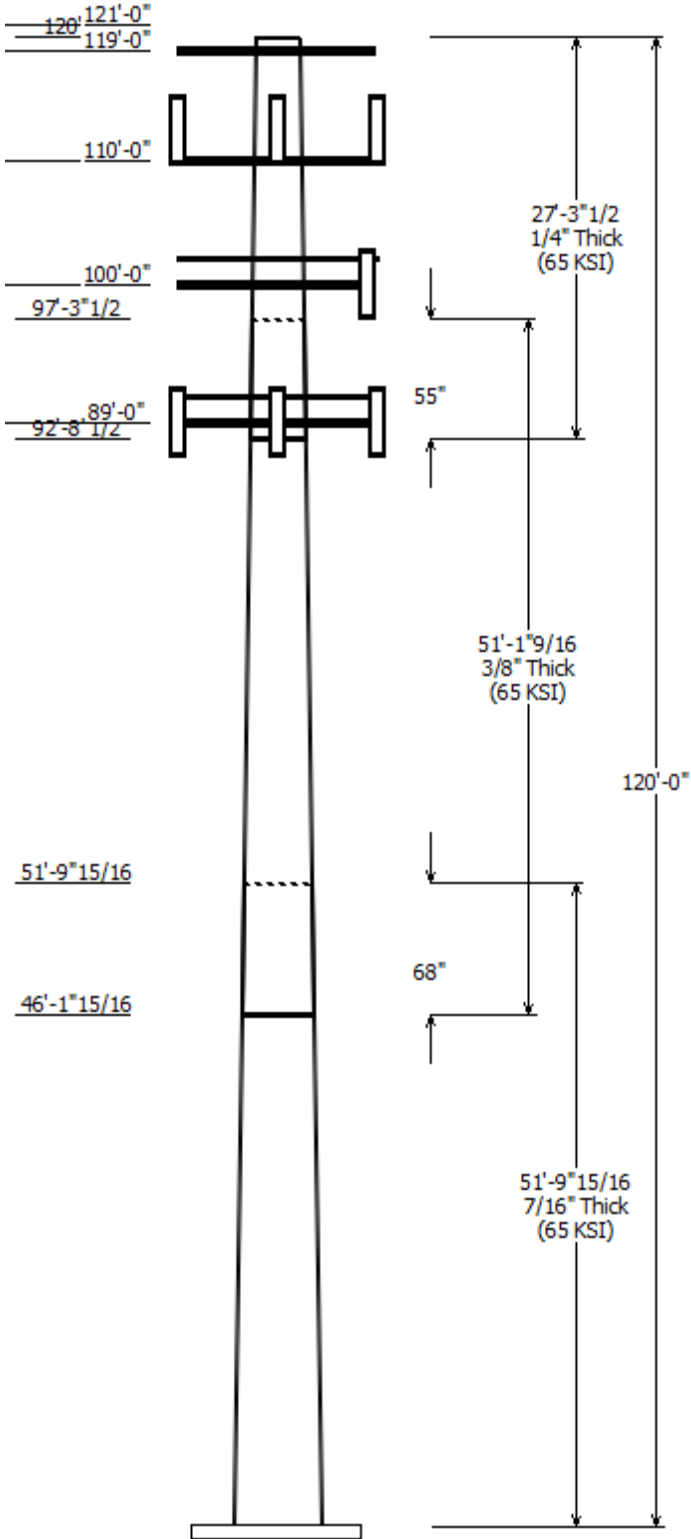
It is the responsibility of the client to ensure that the information provided to A.T. Engineering Service, PLLC and used in the performance of our engineering services is correct and complete.

All assets of American Tower Corporation, its affiliates and subsidiaries (collectively "American Tower") are inspected at regular intervals. Based upon these inspections and in the absence of information to the contrary, American Tower assumes that all structures were constructed in accordance with the drawings and specifications.

Unless explicitly agreed by both the client and A.T. Engineering Service, PLLC, all services will be performed in accordance with the current revision of ANSI/TIA-222.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. A.T. Engineering Service, PLLC is not responsible for the conclusions, opinions and recommendations made by others based on the information supplied herein.



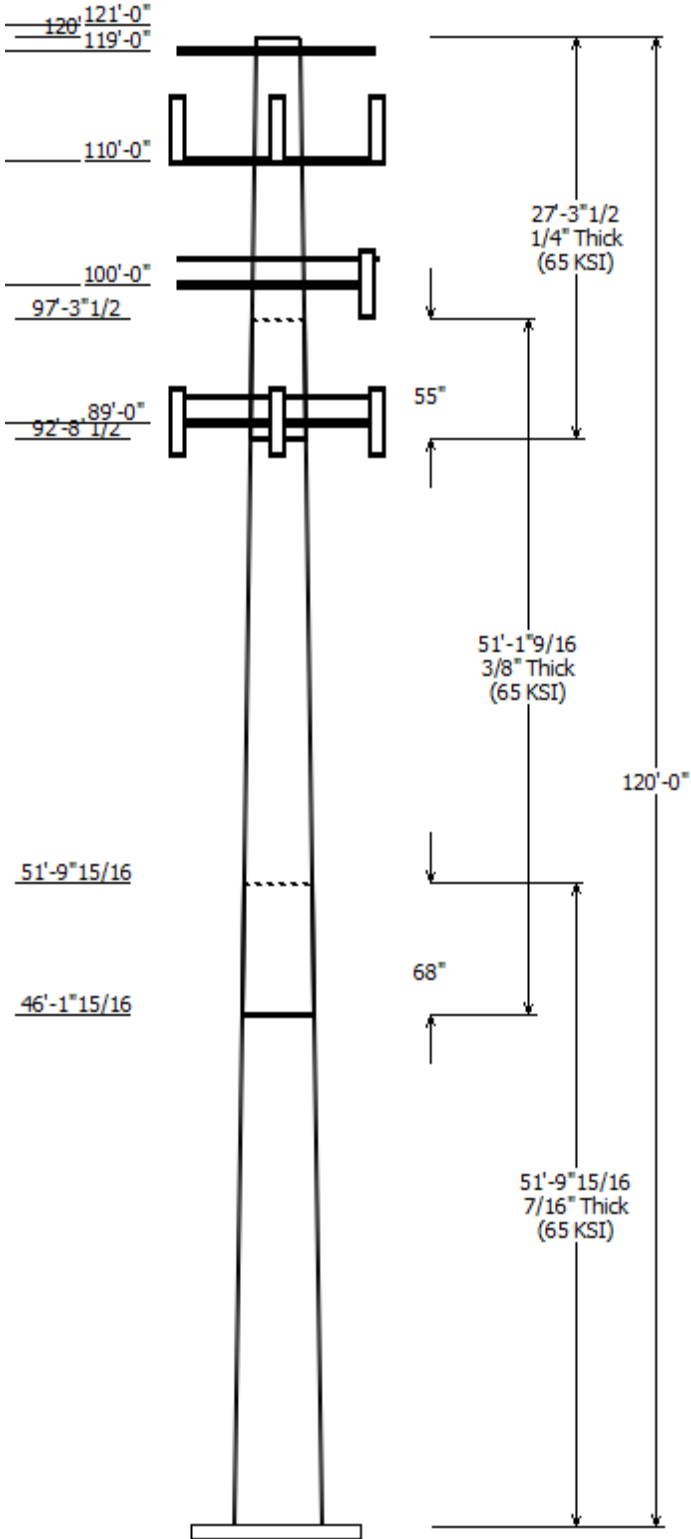


Job Information	
Client : VERIZON WIRELESS	Code: ANSI/TIA-222-H
Pole : 411259	Location : CT Collinsville CAC 802816 CT, CT
Description :	Risk Category : II
Shape : 18 Sides	Exposure : B
Height : 120.00 (ft)	Topo Method : Method 1
Base Elev (ft): 0.00	Topographic Category : 1
Taper: 0.194584in/ft)	

Sections Properties							
Shaft Section	Length (ft)	Diameter (in)		Thick (in)	Joint Type	Overlap Length (in)	Steel Grade
		Accross Top	Flats Bottom				
1	51.830	38.91	49.00	0.438		0.000	18 Sides 65
2	51.130	30.81	40.76	0.375	Slip Joint	68.000	18 Sides 65
3	27.290	26.90	32.21	0.250	Slip Joint	55.000	18 Sides 65

Discrete Appurtenance			
Attach Elev (ft)	Force Elev (ft)	Qty	Description
121.000	121.000	1	VZW Unused Reserve
121.000	121.000	2	Antel LPA-80063/6CF
121.000	121.000	4	Antel LPA-80080/6CF
121.000	121.000	6	Commscope NHH-65B-R2B
121.000	121.000	3	Samsung MT6407-77A
121.000	121.000	2	Raycap RRFDC-3315-PF-48
121.000	121.000	3	Samsung B5/B13 RRH-BR04C
121.000	121.000	3	Samsung B2/B66A RRH-BR049
119.000	119.000	1	Flat Platform w/ Handrails
110.000	110.000	1	Round Low Profile Platform
110.000	111.000	3	Powerwave Allgon P65-17-
110.000	111.000	6	Powerwave Allgon P65-15-
110.000	111.000	6	Ericsson RRUS-11 (50 lbs.)
110.000	111.000	1	Raycap DC6-48-60-0-8F
110.000	110.000	12	Powerwave Allgon TT19-
110.000	111.000	1	Andrew ABT-DFDM-ADB
100.000	100.000	1	Site PRO 1 RMQP-4096-HK (Platf
100.000	100.000	3	RFS APXVAARR24_43-U-NA20
100.000	100.000	3	RFS APX16DWV-16DWV-S-E-
100.000	100.000	3	Ericsson Radio 4449 B12,B71
100.000	100.000	3	Ericsson KRY 112 489/2
100.000	100.000	3	Ericsson KRY 112 144/1
89.000	89.000	1	Generic Flat Platform with Han
89.000	89.000	3	JMA Wireless MX08FRO665-21
89.000	89.000	3	Fujitsu TA08025-B604
89.000	89.000	3	Fujitsu TA08025-B605
89.000	89.000	1	Commscope RDIDC-9181-PF-48

Linear Appurtenance			
Elev (ft) From	To	Description	Exposed To Wind
0.000	89.000	1.60" (40.6mm)	Yes
0.000	100.0	1 5/8" (1.63"-	No
0.000	100.0	1 5/8" Coax	No
0.000	110.0	0.39" (10mm)	No
0.000	110.0	0.78" (19.7mm) 8	No
0.000	110.0	1 5/8" Coax	No
0.000	110.0	3" conduit	No
0.000	121.0	1 5/8" Coax	No
0.000	121.0	1 5/8" Hybriflex	No

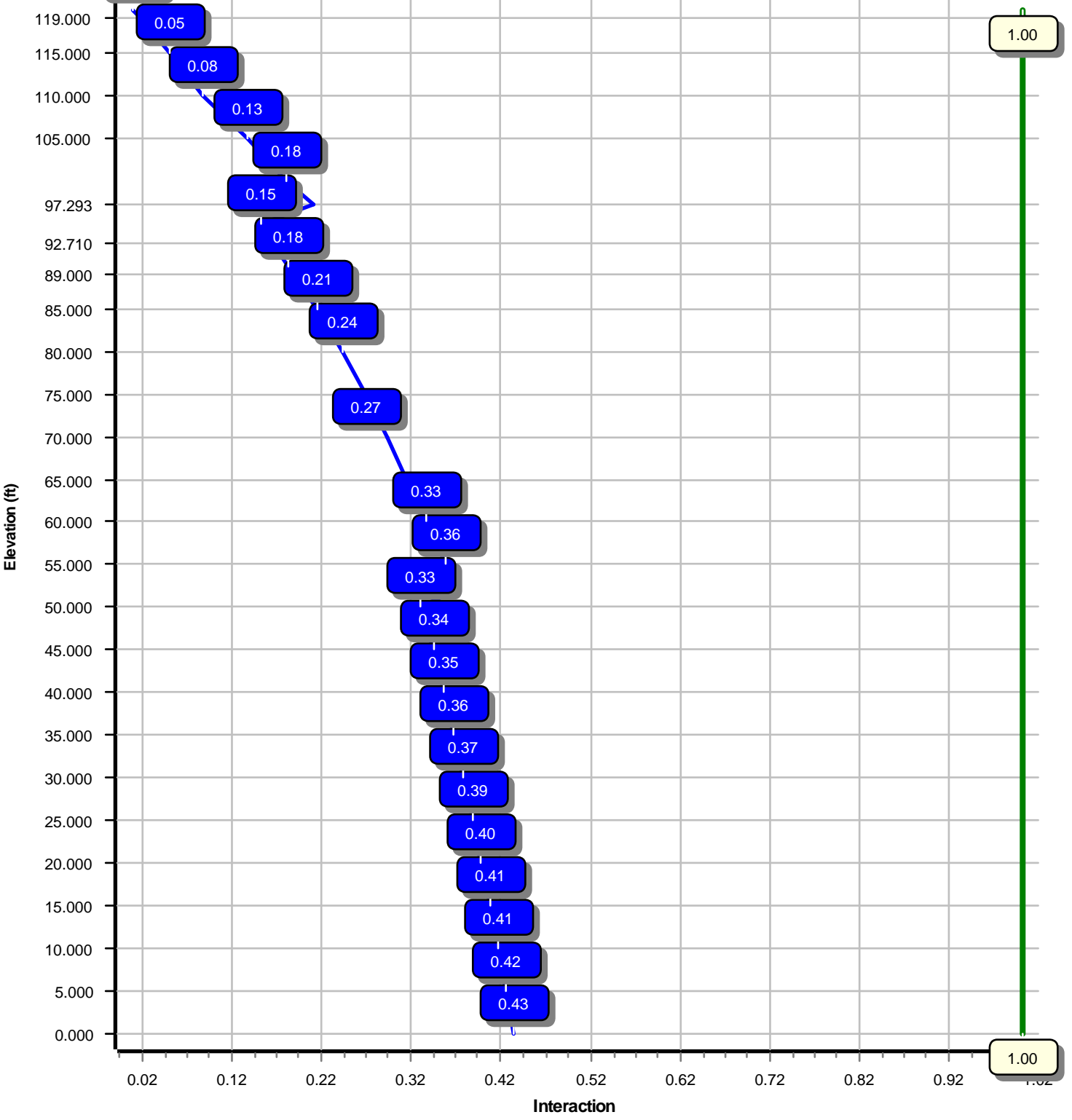


Load Cases	
1.2D + 1.0W	115 mph with No Ice
0.9D + 1.0W	115 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50 mph with 1.50 in Radial Ice
1.2D + 1.0Ev + 1.0Eh	Seismic
0.9D - 1.0Ev + 1.0Eh	Seismic (Reduced DL)
1.0D + 1.0W	Serviceability 60 mph

Reactions			
Load Case	Moment (kip-ft)	Shear (kip)	Axial (kip)
1.2D + 1.0W	2039.86	21.51	45.95
0.9D + 1.0W	2021.42	21.50	34.45
1.2D + 1.0Di + 1.0Wi	606.86	6.42	67.18
1.2D + 1.0Ev + 1.0Eh	117.44	1.19	45.72
0.9D - 1.0Ev + 1.0Eh	116.19	1.19	31.89
1.0D + 1.0W	493.97	5.24	38.31

Dish Deflections			
Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)
	0.00	0.000	0.000

Load Case : 1.2D + 1.0W  
Max Ratio 43.17% at 0.0 ft



Site Number: 411259

Code: ANSI/TIA-222-H

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Site Name: CT Collinsville CAC 802816 CT, CEngineering Number:13701314\_C3\_02

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Customer: VERIZON WIRELESS

**Analysis Parameters**

Location :	Hartford County, CT	Height (ft) :	120
Code :	ANSI/TIA-222-H	Base Diameter (in) :	49.00
Shape :	18 Sides	Top Diameter (in) :	26.90
Pole Type :	Taper	Taper (in/ft) :	0.195
Pole Manufacturer :	EEL	Rotation (deg) :	0.00
Kd (non-service) :	0.95	Ke :	0.98

**Ice & Wind Parameters**

Exposure Category:	B	Design Wind Speed Without Ice:	115 mph
Risk Category:	II	Design Wind Speed With Ice:	50 mph
Topographic Factor Procedure:	Method 1	Operational Wind Speed:	60 mph
Topographic Category:	1	Design Ice Thickness:	1.50 in
Crest Height:	0 ft	HMSL:	492.00 ft

**Seismic Parameters**

Analysis Method:	Equivalent Lateral Force Method		
Site Class:	D - Stiff Soil		
Period Based on Rayleigh Method (sec):	1.86		
T <sub>L</sub> (sec):	6	p:	1
S <sub>s</sub> :	0.174	S <sub>1</sub> :	0.054
F <sub>a</sub> :	1.600	F <sub>v</sub> :	2.400
S <sub>ds</sub> :	0.186	S <sub>d1</sub> :	0.086
		C <sub>s</sub> :	0.031
		C <sub>s</sub> Max:	0.031
		C <sub>s</sub> Min:	0.030

**Load Cases**

1.2D + 1.0W	115 mph with No Ice
0.9D + 1.0W	115 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50 mph with 1.50 in Radial Ice
1.2D + 1.0Ev + 1.0Eh	Seismic
0.9D - 1.0Ev + 1.0Eh	Seismic (Reduced DL)
1.0D + 1.0W	Serviceability 60 mph

Site Number: 411259

Code: ANSI/TIA-222-H

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Site Name: CT Collinsville CAC 802816 CT, CEngineering Number:13701314\_C3\_02

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Customer: VERIZON WIRELESS

**Shaft Section Properties**

Sect Info	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Slip Joint Len (in)	Weight (lb)	Bottom					Top							
							Dia (in)	Elev (ft)	Area (in <sup>2</sup> )	Ix (in <sup>4</sup> )	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)	Area (in <sup>2</sup> )	Ix (in <sup>4</sup> )	W/t Ratio	D/t Ratio	Taper (in/ft)
1-18	51.830	0.4375	65		0.00	10,658	49.00	0.00	67.43	20092.1	18.34	112.00	38.91	51.83	53.43	9993.9	14.27	88.95	0.194583
2-18	51.130	0.3750	65	Slip	68.00	7,334	40.76	46.16	48.08	9910.0	17.76	108.71	30.81	97.29	36.23	4242.8	13.08	82.18	0.194583
3-18	27.290	0.2500	65	Slip	55.00	2,159	32.21	92.71	25.36	3272.7	21.31	128.84	26.90	120.00	21.15	1897.5	17.56	107.60	0.194583
Shaft Weight						20,151													

**Discrete Appurtenance Properties**

Attach Elev (ft)	Description	Qty	Ka	Vert Ecc (ft)	Weight (lb)	No Ice EPAa (sf)	Orientation Factor	Weight (lb)	Ice EPAa (sf)	Orientation Factor
121.00	Samsung B2/B66A RRH-BR049	3	0.75	0.000	84.40	1.875	0.50	146.89	2.759	0.50
121.00	Samsung B5/B13 RRH-BR04C	3	0.75	0.000	70.30	1.875	0.50	126.33	2.759	0.50
121.00	Raycap RRFDC-3315-PF-48	2	0.75	0.000	26.90	2.512	0.67	104.93	3.532	0.67
121.00	Samsung MT6407-77A	3	0.75	0.000	81.60	4.709	0.75	181.44	6.197	0.75
121.00	Commscope NHH-65B-R2B	6	0.75	0.000	43.70	8.079	0.69	214.48	10.808	0.69
121.00	Antel LPA-80080/6CF	4	0.75	0.000	21.00	8.628	0.62	210.72	5.481	0.62
121.00	Antel LPA-80063/6CF	2	0.75	0.000	27.00	9.593	0.82	307.66	10.920	0.82
121.00	VZW Unused Reserve (15340.47	1	0.75	0.000	1,337.10	106.531	0.90	2,249.53	179.227	0.90
119.00	Flat Platform w/ Handrails	1	1.00	0.000	2,000.00	42.400	1.00	3,389.13	62.899	1.00
110.00	Andrew ABT-DFDM-ADB	1	0.80	1.000	1.10	0.045	1.00	3.26	0.213	1.00
110.00	Powerwave Allgon TT19-	12	0.80	0.000	16.00	0.553	0.50	35.58	1.048	0.50
110.00	Raycap DC6-48-60-0-8F	1	0.80	1.000	32.80	1.360	1.00	89.14	2.003	1.00
110.00	Ericsson RRUS-11 (50 lbs.)	6	0.80	1.000	50.00	2.566	0.67	116.07	3.581	0.67
110.00	Powerwave Allgon P65-15-XLH-	6	0.80	1.000	41.00	5.431	0.66	156.97	7.349	0.66
110.00	Powerwave Allgon P65-17-XLH-	3	0.80	1.000	59.00	11.460	0.67	268.51	14.594	0.67
110.00	Round Low Profile Platform	1	1.00	0.000	1,500.00	21.700	1.00	2,127.95	40.308	1.00
100.00	Ericsson KRY 112 144/1	3	0.75	0.000	11.00	0.351	0.50	21.34	0.741	0.50
100.00	Ericsson KRY 112 489/2	3	0.75	0.000	15.40	0.559	0.50	32.37	1.063	0.50
100.00	Ericsson Radio 4449 B12,B71	3	0.75	0.000	74.00	1.639	0.50	127.80	2.450	0.50
100.00	RFS APX16DWV-16DWV-S-E-ACU	3	0.75	0.000	39.60	6.077	0.60	118.41	8.054	0.60
100.00	RFS APXVAARR24_43-U-NA20	3	0.75	0.000	127.90	20.243	0.63	505.14	23.807	0.63
100.00	Site PRO 1 RMQP-4096-HK	1	1.00	0.000	2,645.80	27.200	1.00	4,293.01	50.689	1.00
89.00	Commscope RDIDC-9181-PF-48	1	0.75	0.000	21.90	1.867	1.00	75.90	2.721	1.00
89.00	Fujitsu TA08025-B605	3	0.75	0.000	75.00	1.962	0.50	134.45	2.835	0.50
89.00	Fujitsu TA08025-B604	3	0.75	0.000	63.90	1.962	0.50	119.24	2.835	0.50
89.00	JMA Wireless MX08FRO665-21	3	0.75	0.000	64.50	12.489	0.64	308.40	15.156	0.64
89.00	Generic Flat Platform with	1	1.00	0.000	2,500.00	42.400	1.00	4,185.75	62.301	1.00
Totals	Num Loadings:27	82			13,530.50			27,704.70		

**Linear Appurtenance Properties**

Load Case Azimuth (deg) :

Elev From (ft)	Elev To (ft)	Qty	Description	Coax Dia (in)	Coax Wt (lb/ft)	Max Coax / Row	Dist Between Rows (in)	Dist Between Cols (in)	Dist Azimuth (deg)	Dist Exposed From Face (in)	Dist Exposed To Wind Carrier
0.00	121.00	6	1 5/8" Coax	1.98	0.82	N	0	0.00	0.00	0	N VERIZON WIRELESS
0.00	121.00	2	1 5/8" Hybriflex	1.98	1.30	N	0	0.00	0.00	0	N VERIZON WIRELESS
0.00	110.00	1	0.39" (10mm) Fiber	0.39	0.06	N	0	0.00	0.00	0	N AT&T MOBILITY
0.00	110.00	2	0.78" (19.7mm) 8 AWG	0.78	0.59	N	0	0.00	0.00	0	N AT&T MOBILITY
0.00	110.00	12	1 5/8" Coax	1.98	0.82	N	0	0.00	0.00	0	N AT&T MOBILITY
0.00	110.00	1	3" conduit	3.50	7.58	N	0	0.00	0.00	0	N AT&T MOBILITY
0.00	100.00	3	1 5/8" (1.63"-41.3mm)	1.63	1.61	N	0	0.00	0.00	0	N T-MOBILE
0.00	100.00	12	1 5/8" Coax	1.98	0.82	N	0	0.00	0.00	0	N T-MOBILE
0.00	89.00	1	1.60" (40.6mm) Hybrid	1.60	2.34	N	1	1.00	1.00	180	Y DISH WIRELESS

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**Site Number: 411259**

**Code: ANSI/TIA-222-H**

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**Site Name: CT Collinsville CAC 802816 CT, CEngineering Number:13701314\_C3\_02**

**8/2/2021 3:28:27 PM**

**Customer: VERIZON WIRELESS**

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Site Number: 411259

Code: ANSI/TIA-222-H

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Site Name: CT Collinsville CAC 802816 CT, CEngineering Number:13701314\_C3\_02

8/2/2021 3:28:27 PM

Customer: VERIZON WIRELESS

**Segment Properties** (Max Len : 5.ft)

Seg Top Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in <sup>2</sup> )	Ix (in <sup>4</sup> )	W/t Ratio	D/t Ratio	F'y (ksi)	S (in <sup>3</sup> )	Z (in <sup>3</sup> )	Weight (lb)
0.00		0.4375	49.000	67.433	20,092.1	18.34	112.00	79.8	807.6	0.0	0.0
5.00		0.4375	48.027	66.082	18,908.5	17.95	109.78	80.3	775.4	0.0	1,135.8
10.00		0.4375	47.054	64.731	17,772.4	17.55	107.55	80.8	743.9	0.0	1,112.8
15.00		0.4375	46.081	63.380	16,682.7	17.16	105.33	81.2	713.1	0.0	1,089.8
20.00		0.4375	45.108	62.029	15,638.5	16.77	103.10	81.7	682.8	0.0	1,066.8
25.00		0.4375	44.135	60.678	14,638.8	16.38	100.88	82.1	653.3	0.0	1,043.9
30.00		0.4375	43.162	59.327	13,682.6	15.99	98.66	82.6	624.4	0.0	1,020.9
35.00		0.4375	42.190	57.976	12,769.0	15.59	96.43	82.6	596.1	0.0	997.9
40.00		0.4375	41.217	56.625	11,897.0	15.20	94.21	82.6	568.5	0.0	974.9
45.00		0.4375	40.244	55.274	11,065.6	14.81	91.99	82.6	541.6	0.0	951.9
46.16	Bot - Section 2	0.4375	40.017	54.960	10,877.9	14.72	91.47	82.6	535.4	0.0	218.2
50.00		0.4375	39.271	53.923	10,273.9	14.42	89.76	82.6	515.3	0.0	1,332.6
51.83	Top - Section 1	0.3750	39.665	46.763	9,120.4	17.24	105.77	81.1	452.9	0.0	626.8
55.00		0.3750	39.048	46.029	8,697.5	16.95	104.13	81.5	438.7	0.0	500.5
60.00		0.3750	38.075	44.871	8,057.5	16.49	101.53	82.0	416.8	0.0	773.3
65.00		0.3750	37.102	43.713	7,449.6	16.03	98.94	82.5	395.5	0.0	753.6
70.00		0.3750	36.129	42.555	6,873.1	15.58	96.34	82.6	374.7	0.0	733.9
75.00		0.3750	35.156	41.397	6,327.2	15.12	93.75	82.6	354.5	0.0	714.2
80.00		0.3750	34.183	40.239	5,810.9	14.66	91.16	82.6	334.8	0.0	694.5
85.00		0.3750	33.210	39.081	5,323.6	14.21	88.56	82.6	315.7	0.0	674.8
89.00		0.3750	32.432	38.155	4,953.9	13.84	86.49	82.6	300.9	0.0	525.6
90.00		0.3750	32.237	37.923	4,864.2	13.75	85.97	82.6	297.2	0.0	129.4
92.71	Bot - Section 3	0.3750	31.710	37.295	4,626.7	13.50	84.56	82.6	287.4	0.0	346.8
95.00		0.3750	31.265	36.765	4,432.1	13.29	83.37	82.6	279.2	0.0	484.8
97.29	Top - Section 2	0.2500	31.318	24.652	3,006.3	20.68	125.27	77.1	189.1	0.0	478.6
100.0		0.2500	30.792	24.234	2,856.0	20.31	123.17	77.5	182.7	0.0	225.1
105.0		0.2500	29.819	23.462	2,591.7	19.62	119.27	78.3	171.2	0.0	405.7
110.0		0.2500	28.846	22.690	2,344.2	18.93	115.38	79.1	160.1	0.0	392.6
115.0		0.2500	27.873	21.918	2,113.0	18.25	111.49	79.9	149.3	0.0	379.5
119.0		0.2500	27.095	21.300	1,939.3	17.70	108.38	80.6	141.0	0.0	294.1
120.0		0.2500	26.900	21.146	1,897.5	17.56	107.60	80.7	138.9	0.0	72.2
											20,151.4

<b>Load Case: 1.2D + 1.0W</b>	<b>115 mph with No Ice</b>	<b>20 Iterations</b>
Gust Response Factor :1.10		
Dead Load Factor :1.20		
Wind Load Factor :1.00		

**Applied Segment Forces Summary**

Seg Elev (ft)	Description	Shaft Forces		Discrete Forces			Linear Forces		Sum of Forces				
		Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		182.3	0.0					0.0	0.0	182.3	0.0	0.0	0.0
5.00		360.9	1,363.0					0.0	259.1	360.9	1,622.1	0.0	0.0
10.00		353.6	1,335.4					0.0	259.1	353.6	1,594.5	0.0	0.0
15.00		346.3	1,307.8					0.0	259.1	346.3	1,566.9	0.0	0.0
20.00		338.9	1,280.2					0.0	259.1	338.9	1,539.4	0.0	0.0
25.00		331.6	1,252.6					0.0	259.1	331.6	1,511.8	0.0	0.0
30.00		328.2	1,225.0					0.0	259.1	328.2	1,484.2	0.0	0.0
35.00		331.3	1,197.5					0.0	259.1	331.3	1,456.6	0.0	0.0
40.00		336.3	1,169.9					0.0	259.1	336.3	1,429.0	0.0	0.0
45.00		208.7	1,142.3					0.0	259.1	208.7	1,401.4	0.0	0.0
46.16	Bot - Section 2	172.9	261.8					0.0	60.3	172.9	322.1	0.0	0.0
50.00		197.1	1,599.1					0.0	198.8	197.1	1,798.0	0.0	0.0
51.83	Top - Section 1	174.4	752.1					0.0	94.8	174.4	847.0	0.0	0.0
55.00		285.3	600.6					0.0	164.3	285.3	764.9	0.0	0.0
60.00		348.9	927.9					0.0	259.1	348.9	1,187.1	0.0	0.0
65.00		347.9	904.3					0.0	259.1	347.9	1,163.4	0.0	0.0
70.00		346.0	880.6					0.0	259.1	346.0	1,139.8	0.0	0.0
75.00		343.4	857.0					0.0	259.1	343.4	1,116.1	0.0	0.0
80.00		340.1	833.4					0.0	259.1	340.1	1,092.5	0.0	0.0
85.00		303.0	809.7					0.0	259.1	303.0	1,068.9	0.0	0.0
89.00	Appurtenance(s)	167.1	630.8	2,199.2	0.0	0.0	3,758.5	0.0	207.3	2,366.3	4,596.6	0.0	0.0
90.00		122.8	155.3					0.0	49.0	122.8	204.3	0.0	0.0
92.71	Bot - Section 3	165.9	416.2					0.0	132.8	165.9	549.0	0.0	0.0
95.00		152.2	581.7					0.0	112.3	152.2	694.0	0.0	0.0
97.29	Top - Section 2	164.7	574.3					0.0	112.4	164.7	686.7	0.0	0.0
100.00	Appurtenance(s)	250.7	270.1	2,300.0	0.0	0.0	4,139.4	0.0	132.7	2,550.7	4,542.2	0.0	0.0
105.00		320.7	486.9					0.0	157.1	320.7	644.0	0.0	0.0
110.00	Appurtenance(s)	314.4	471.1	2,452.2	0.0	1,592.7	2,938.7	0.0	157.1	2,766.6	3,566.9	0.0	0.0
115.00		277.5	455.4					0.0	45.1	277.5	500.5	0.0	0.0
119.00	Appurtenance(s)	152.1	353.0	1,530.5	0.0	0.0	2,400.0	0.0	36.1	1,682.6	2,789.0	0.0	0.0
120.00		30.1	86.7					0.0	9.0	30.1	95.7	0.0	0.0
<b>Totals:</b>										<b>16,577.4</b>	<b>42,974.6</b>	<b>0.00</b>	<b>0.00</b>



Site Number: 411259

Code: ANSI/TIA-222-H

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Site Name: CT Collinsville CAC 802816 CT, CEngineering Number:13701314\_C3\_02

8/2/2021 3:28:30 PM

Customer: VERIZON WIRELESS

**Load Case: 1.2D + 1.0W**

115 mph with No Ice

20 Iterations

Gust Response Factor :1.10

Dead Load Factor :1.20

Wind Load Factor :1.00

**Calculated Forces**

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-45.95	-21.51	0.00	-2,039.86	0.00	2,039.86	4,844.94	1,183.44	5,191.11	4,835.57	0.00	0.00	0.432
5.00	-44.27	-21.26	0.00	-1,932.30	0.00	1,932.30	4,775.31	1,159.73	4,985.22	4,669.74	0.08	-0.14	0.423
10.00	-42.63	-21.01	0.00	-1,826.00	0.00	1,826.00	4,704.55	1,136.02	4,783.50	4,505.63	0.30	-0.28	0.415
15.00	-41.01	-20.75	0.00	-1,720.98	0.00	1,720.98	4,632.67	1,112.31	4,585.94	4,343.33	0.67	-0.42	0.405
20.00	-39.43	-20.50	0.00	-1,617.23	0.00	1,617.23	4,559.67	1,088.61	4,392.55	4,182.90	1.19	-0.57	0.396
25.00	-37.87	-20.24	0.00	-1,514.74	0.00	1,514.74	4,485.55	1,064.90	4,203.32	4,024.42	1.86	-0.71	0.385
30.00	-36.34	-19.98	0.00	-1,413.53	0.00	1,413.53	4,407.69	1,041.19	4,018.26	3,865.64	2.68	-0.85	0.374
35.00	-34.84	-19.72	0.00	-1,313.61	0.00	1,313.61	4,307.32	1,017.48	3,837.37	3,690.72	3.65	-0.99	0.364
40.00	-33.37	-19.43	0.00	-1,215.04	0.00	1,215.04	4,206.95	993.77	3,660.64	3,519.85	4.76	-1.13	0.354
45.00	-31.94	-19.24	0.00	-1,117.86	0.00	1,117.86	4,106.58	970.06	3,488.08	3,353.03	6.03	-1.27	0.342
46.16	-31.60	-19.10	0.00	-1,095.48	0.00	1,095.48	4,083.23	964.54	3,448.53	3,314.80	6.34	-1.31	0.339
50.00	-29.78	-18.90	0.00	-1,022.19	0.00	1,022.19	4,006.21	946.35	3,319.69	3,190.26	7.43	-1.41	0.328
51.83	-28.92	-18.74	0.00	-987.60	0.00	987.60	3,414.21	820.69	2,912.57	2,755.48	7.99	-1.46	0.367
55.00	-28.12	-18.49	0.00	-928.18	0.00	928.18	3,374.74	807.81	2,821.85	2,680.46	8.99	-1.55	0.355
60.00	-26.90	-18.18	0.00	-835.71	0.00	835.71	3,311.56	787.48	2,681.68	2,563.48	10.69	-1.69	0.335
65.00	-25.71	-17.86	0.00	-744.82	0.00	744.82	3,247.27	767.16	2,545.07	2,448.20	12.54	-1.83	0.313
70.00	-24.54	-17.53	0.00	-655.54	0.00	655.54	3,161.61	746.84	2,412.04	2,319.84	14.53	-1.97	0.291
75.00	-23.40	-17.20	0.00	-567.90	0.00	567.90	3,075.58	726.52	2,282.58	2,194.67	16.66	-2.09	0.267
80.00	-22.29	-16.86	0.00	-481.92	0.00	481.92	2,989.55	706.19	2,156.68	2,072.97	18.92	-2.21	0.241
85.00	-21.21	-16.55	0.00	-397.62	0.00	397.62	2,903.52	685.87	2,034.36	1,954.74	21.29	-2.32	0.211
89.00	-16.70	-14.01	0.00	-331.43	0.00	331.43	2,834.69	669.61	1,939.08	1,862.66	23.27	-2.40	0.184
90.00	-16.49	-13.89	0.00	-317.42	0.00	317.42	2,817.49	665.55	1,915.61	1,839.98	23.77	-2.42	0.179
92.71	-15.94	-13.71	0.00	-279.79	0.00	279.79	2,770.86	654.53	1,852.74	1,779.23	25.16	-2.46	0.163
95.00	-15.24	-13.54	0.00	-248.40	0.00	248.40	2,731.46	645.23	1,800.43	1,728.70	26.35	-2.50	0.150
97.29	-14.56	-13.35	0.00	-217.35	0.00	217.35	1,710.13	432.64	1,214.07	1,093.00	27.56	-2.53	0.208
100.00	-10.12	-10.61	0.00	-181.22	0.00	181.22	1,690.67	425.31	1,173.26	1,062.09	29.01	-2.57	0.177
105.00	-9.48	-10.27	0.00	-128.17	0.00	128.17	1,653.85	411.76	1,099.71	1,005.60	31.74	-2.65	0.134
110.00	-6.04	-7.35	0.00	-75.21	0.00	75.21	1,615.92	398.21	1,028.54	949.94	34.55	-2.70	0.083
115.00	-5.55	-7.05	0.00	-38.48	0.00	38.48	1,576.86	384.66	959.75	895.16	37.40	-2.74	0.047
119.00	-2.85	-5.23	0.00	-10.29	0.00	10.29	1,544.80	373.82	906.44	852.03	39.70	-2.75	0.014
120.00	0.00	-5.09	0.00	-5.06	0.00	5.06	1,536.68	371.11	893.35	841.35	40.28	-2.75	0.006

<b>Load Case: 0.9D + 1.0W</b>	<b>115 mph with No Ice (Reduced DL)</b>	<b>20 Iterations</b>
Gust Response Factor :1.10		
Dead Load Factor :0.90		
Wind Load Factor :1.00		

**Applied Segment Forces Summary**

Seg Elev (ft)	Description	Shaft Forces		Discrete Forces			Linear Forces		Sum of Forces				
		Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		182.3	0.0					0.0	0.0	182.3	0.0	0.0	0.0
5.00		360.9	1,022.2					0.0	194.4	360.9	1,216.6	0.0	0.0
10.00		353.6	1,001.5					0.0	194.4	353.6	1,195.9	0.0	0.0
15.00		346.3	980.8					0.0	194.4	346.3	1,175.2	0.0	0.0
20.00		338.9	960.2					0.0	194.4	338.9	1,154.5	0.0	0.0
25.00		331.6	939.5					0.0	194.4	331.6	1,133.8	0.0	0.0
30.00		328.2	918.8					0.0	194.4	328.2	1,113.1	0.0	0.0
35.00		331.3	898.1					0.0	194.4	331.3	1,092.5	0.0	0.0
40.00		336.3	877.4					0.0	194.4	336.3	1,071.8	0.0	0.0
45.00		208.7	856.7					0.0	194.4	208.7	1,051.1	0.0	0.0
46.16	Bot - Section 2	172.9	196.4					0.0	45.2	172.9	241.6	0.0	0.0
50.00		197.1	1,199.3					0.0	149.1	197.1	1,348.5	0.0	0.0
51.83	Top - Section 1	174.4	564.1					0.0	71.1	174.4	635.2	0.0	0.0
55.00		285.3	450.4					0.0	123.2	285.3	573.6	0.0	0.0
60.00		348.9	695.9					0.0	194.4	348.9	890.3	0.0	0.0
65.00		347.9	678.2					0.0	194.4	347.9	872.6	0.0	0.0
70.00		346.0	660.5					0.0	194.4	346.0	854.8	0.0	0.0
75.00		343.4	642.8					0.0	194.4	343.4	837.1	0.0	0.0
80.00		340.1	625.0					0.0	194.4	340.1	819.4	0.0	0.0
85.00		303.0	607.3					0.0	194.4	303.0	801.6	0.0	0.0
89.00	Appurtenance(s)	167.1	473.1	2,199.2	0.0	0.0	2,818.9	0.0	155.5	2,366.3	3,447.4	0.0	0.0
90.00		122.8	116.5					0.0	36.8	122.8	153.3	0.0	0.0
92.71	Bot - Section 3	165.9	312.1					0.0	99.6	165.9	411.8	0.0	0.0
95.00		152.2	436.3					0.0	84.2	152.2	520.5	0.0	0.0
97.29	Top - Section 2	164.7	430.7					0.0	84.3	164.7	515.0	0.0	0.0
100.00	Appurtenance(s)	250.7	202.6	2,300.0	0.0	0.0	3,104.5	0.0	99.5	2,550.7	3,406.7	0.0	0.0
105.00		320.7	365.2					0.0	117.8	320.7	483.0	0.0	0.0
110.00	Appurtenance(s)	314.4	353.4	2,452.2	0.0	1,592.7	2,204.0	0.0	117.8	2,766.6	2,675.2	0.0	0.0
115.00		277.5	341.5					0.0	33.8	277.5	375.4	0.0	0.0
119.00	Appurtenance(s)	152.1	264.7	1,530.5	0.0	0.0	1,800.0	0.0	27.1	1,682.6	2,091.8	0.0	0.0
120.00		30.1	65.0					0.0	6.8	30.1	71.8	0.0	0.0
<b>Totals:</b>										<b>16,577.4</b>	<b>32,230.9</b>	<b>0.00</b>	<b>0.00</b>

<b>Load Case: 0.9D + 1.0W</b>	<b>115 mph with No Ice (Reduced DL)</b>	<b>20 Iterations</b>
Gust Response Factor :1.10		
Dead Load Factor :0.90		
Wind Load Factor :1.00		

**Calculated Forces**

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-34.45	-21.50	0.00	-2,021.42	0.00	2,021.42	4,844.94	1,183.44	5,191.11	4,835.57	0.00	0.00	0.425
5.00	-33.19	-21.22	0.00	-1,913.93	0.00	1,913.93	4,775.31	1,159.73	4,985.22	4,669.74	0.07	-0.14	0.417
10.00	-31.94	-20.94	0.00	-1,807.85	0.00	1,807.85	4,704.55	1,136.02	4,783.50	4,505.63	0.30	-0.28	0.408
15.00	-30.72	-20.66	0.00	-1,703.16	0.00	1,703.16	4,632.67	1,112.31	4,585.94	4,343.33	0.66	-0.42	0.399
20.00	-29.52	-20.38	0.00	-1,599.87	0.00	1,599.87	4,559.67	1,088.61	4,392.55	4,182.90	1.18	-0.56	0.389
25.00	-28.34	-20.11	0.00	-1,497.95	0.00	1,497.95	4,485.55	1,064.90	4,203.32	4,024.42	1.84	-0.70	0.379
30.00	-27.18	-19.83	0.00	-1,397.41	0.00	1,397.41	4,407.69	1,041.19	4,018.26	3,865.64	2.65	-0.84	0.368
35.00	-26.04	-19.55	0.00	-1,298.25	0.00	1,298.25	4,307.32	1,017.48	3,837.37	3,690.72	3.61	-0.98	0.358
40.00	-24.93	-19.25	0.00	-1,200.52	0.00	1,200.52	4,206.95	993.77	3,660.64	3,519.85	4.71	-1.12	0.347
45.00	-23.86	-19.06	0.00	-1,104.26	0.00	1,104.26	4,106.58	970.06	3,488.08	3,353.03	5.96	-1.26	0.336
46.16	-23.60	-18.91	0.00	-1,082.10	0.00	1,082.10	4,083.23	964.54	3,448.53	3,314.80	6.27	-1.29	0.333
50.00	-22.23	-18.71	0.00	-1,009.56	0.00	1,009.56	4,006.21	946.35	3,319.69	3,190.26	7.36	-1.40	0.322
51.83	-21.58	-18.54	0.00	-975.33	0.00	975.33	3,414.21	820.69	2,912.57	2,755.48	7.90	-1.45	0.361
55.00	-20.97	-18.29	0.00	-916.55	0.00	916.55	3,374.74	807.81	2,821.85	2,680.46	8.89	-1.53	0.349
60.00	-20.05	-17.96	0.00	-825.12	0.00	825.12	3,311.56	787.48	2,681.68	2,563.48	10.57	-1.68	0.328
65.00	-19.15	-17.63	0.00	-735.32	0.00	735.32	3,247.27	767.16	2,545.07	2,448.20	12.40	-1.81	0.307
70.00	-18.26	-17.30	0.00	-647.17	0.00	647.17	3,161.61	746.84	2,412.04	2,319.84	14.37	-1.94	0.285
75.00	-17.40	-16.96	0.00	-560.68	0.00	560.68	3,075.58	726.52	2,282.58	2,194.67	16.48	-2.07	0.262
80.00	-16.57	-16.62	0.00	-475.87	0.00	475.87	2,989.55	706.19	2,156.68	2,072.97	18.71	-2.19	0.236
85.00	-15.75	-16.32	0.00	-392.74	0.00	392.74	2,903.52	685.87	2,034.36	1,954.74	21.06	-2.29	0.207
89.00	-12.39	-13.82	0.00	-327.48	0.00	327.48	2,834.69	669.61	1,939.08	1,862.66	23.01	-2.37	0.181
90.00	-12.24	-13.70	0.00	-313.66	0.00	313.66	2,817.49	665.55	1,915.61	1,839.98	23.51	-2.39	0.175
92.71	-11.82	-13.52	0.00	-276.54	0.00	276.54	2,770.86	654.53	1,852.74	1,779.23	24.88	-2.43	0.160
95.00	-11.30	-13.36	0.00	-245.57	0.00	245.57	2,731.46	645.23	1,800.43	1,728.70	26.06	-2.47	0.147
97.29	-10.78	-13.18	0.00	-214.94	0.00	214.94	1,710.13	432.64	1,214.07	1,093.00	27.25	-2.51	0.204
100.00	-7.48	-10.49	0.00	-179.27	0.00	179.27	1,690.67	425.31	1,173.26	1,062.09	28.68	-2.54	0.174
105.00	-7.00	-10.15	0.00	-126.85	0.00	126.85	1,653.85	411.76	1,099.71	1,005.60	31.39	-2.62	0.131
110.00	-4.45	-7.27	0.00	-74.49	0.00	74.49	1,615.92	398.21	1,028.54	949.94	34.16	-2.67	0.082
115.00	-4.09	-6.97	0.00	-38.15	0.00	38.15	1,576.86	384.66	959.75	895.16	36.98	-2.71	0.046
119.00	-2.08	-5.20	0.00	-10.26	0.00	10.26	1,544.80	373.82	906.44	852.03	39.26	-2.72	0.014
120.00	0.00	-5.09	0.00	-5.06	0.00	5.06	1,536.68	371.11	893.35	841.35	39.83	-2.72	0.006

<b>Load Case:</b> 1.2D + 1.0Di + 1.0Wi	50 mph with 1.50 in Radial Ice	19 Iterations
Gust Response Factor :1.10	Ice Dead Load Factor :1.00	
Dead Load Factor :1.20		Ice Importance Factor :1.00
Wind Load Factor :1.00		

**Applied Segment Forces Summary**

Seg Elev (ft)	Description	Shaft Forces		Discrete Forces			Linear Forces		Sum of Forces				
		Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		59.3	0.0					0.0	0.0	59.3	0.0	0.0	0.0
5.00		117.8	1,720.0					0.0	266.9	117.8	1,986.9	0.0	0.0
10.00		116.0	1,727.1					0.0	268.0	116.0	1,995.1	0.0	0.0
15.00		114.0	1,712.3					0.0	268.6	114.0	1,980.9	0.0	0.0
20.00		111.9	1,690.4					0.0	269.0	111.9	1,959.4	0.0	0.0
25.00		109.8	1,664.8					0.0	269.4	109.8	1,934.2	0.0	0.0
30.00		108.9	1,636.8					0.0	269.7	108.9	1,906.5	0.0	0.0
35.00		110.2	1,607.3					0.0	269.9	110.2	1,877.2	0.0	0.0
40.00		112.1	1,576.5					0.0	270.1	112.1	1,846.6	0.0	0.0
45.00		69.7	1,544.9					0.0	270.3	69.7	1,815.2	0.0	0.0
46.16	Bot - Section 2	57.8	355.7					0.0	62.9	57.8	418.6	0.0	0.0
50.00		65.9	1,910.3					0.0	207.5	65.9	2,117.9	0.0	0.0
51.83	Top - Section 1	58.4	900.2					0.0	99.0	58.4	999.2	0.0	0.0
55.00		95.7	854.4					0.0	171.6	95.7	1,026.0	0.0	0.0
60.00		117.4	1,321.8					0.0	270.7	117.4	1,592.5	0.0	0.0
65.00		117.3	1,291.8					0.0	270.9	117.3	1,562.7	0.0	0.0
70.00		117.0	1,261.5					0.0	271.0	117.0	1,532.5	0.0	0.0
75.00		116.5	1,230.8					0.0	271.1	116.5	1,501.9	0.0	0.0
80.00		115.7	1,199.8					0.0	271.2	115.7	1,471.0	0.0	0.0
85.00		103.3	1,168.5					0.0	271.3	103.3	1,439.8	0.0	0.0
89.00	Appurtenance(s)	57.1	913.0	581.2	0.0	0.0	6,148.4	0.0	217.1	638.3	7,278.4	0.0	0.0
90.00		42.1	225.7					0.0	49.0	42.1	274.7	0.0	0.0
92.71	Bot - Section 3	56.8	604.3					0.0	132.8	56.8	737.1	0.0	0.0
95.00		52.2	741.4					0.0	112.3	52.2	853.7	0.0	0.0
97.29	Top - Section 2	56.6	732.5					0.0	112.4	56.6	844.9	0.0	0.0
100.00	Appurtenance(s)	86.3	454.3	649.9	0.0	0.0	6,911.3	0.0	132.7	736.2	7,498.3	0.0	0.0
105.00		110.7	818.2					0.0	157.1	110.7	975.3	0.0	0.0
110.00	Appurtenance(s)	109.0	793.9	704.1	0.0	401.6	5,189.5	0.0	157.1	813.1	6,140.4	0.0	0.0
115.00		96.6	769.3					0.0	45.1	96.6	814.4	0.0	0.0
119.00	Appurtenance(s)	53.1	598.5	429.2	0.0	0.0	3,339.1	0.0	36.1	482.2	3,973.7	0.0	0.0
120.00		10.5	147.8					0.0	9.0	10.5	156.8	0.0	0.0
<b>Totals:</b>										<b>5,089.99</b>	<b>60,511.8</b>	<b>0.00</b>	<b>0.00</b>

Site Number: 411259

Code: ANSI/TIA-222-H

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Site Name: CT Collinsville CAC 802816 CT, CEngineering Number:13701314\_C3\_02

8/2/2021 3:28:35 PM

Customer: VERIZON WIRELESS

<b>Load Case:</b> 1.2D + 1.0Di + 1.0Wi	50 mph with 1.50 in Radial Ice	19 Iterations
Gust Response Factor :1.10	Ice Dead Load Factor :1.00	
Dead Load Factor :1.20		Ice Importance Factor :1.00
Wind Load Factor :1.00		

**Calculated Forces**

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-67.18	-6.42	0.00	-606.86	0.00	606.86	4,844.94	1,183.44	5,191.11	4,835.57	0.00	0.00	0.139
5.00	-65.18	-6.34	0.00	-574.78	0.00	574.78	4,775.31	1,159.73	4,985.22	4,669.74	0.02	-0.04	0.137
10.00	-63.18	-6.27	0.00	-543.06	0.00	543.06	4,704.55	1,136.02	4,783.50	4,505.63	0.09	-0.08	0.134
15.00	-61.20	-6.20	0.00	-511.70	0.00	511.70	4,632.67	1,112.31	4,585.94	4,343.33	0.20	-0.13	0.131
20.00	-59.24	-6.13	0.00	-480.70	0.00	480.70	4,559.67	1,088.61	4,392.55	4,182.90	0.35	-0.17	0.128
25.00	-57.30	-6.05	0.00	-450.07	0.00	450.07	4,485.55	1,064.90	4,203.32	4,024.42	0.55	-0.21	0.125
30.00	-55.39	-5.98	0.00	-419.80	0.00	419.80	4,407.69	1,041.19	4,018.26	3,865.64	0.80	-0.25	0.121
35.00	-53.51	-5.90	0.00	-389.92	0.00	389.92	4,307.32	1,017.48	3,837.37	3,690.72	1.08	-0.30	0.118
40.00	-51.66	-5.81	0.00	-360.43	0.00	360.43	4,206.95	993.77	3,660.64	3,519.85	1.42	-0.34	0.115
45.00	-49.84	-5.75	0.00	-331.37	0.00	331.37	4,106.58	970.06	3,488.08	3,353.03	1.79	-0.38	0.111
46.16	-49.42	-5.71	0.00	-324.68	0.00	324.68	4,083.23	964.54	3,448.53	3,314.80	1.88	-0.39	0.110
50.00	-47.30	-5.65	0.00	-302.77	0.00	302.77	4,006.21	946.35	3,319.69	3,190.26	2.21	-0.42	0.107
51.83	-46.30	-5.60	0.00	-292.43	0.00	292.43	3,414.21	820.69	2,912.57	2,755.48	2.37	-0.43	0.120
55.00	-45.27	-5.52	0.00	-274.68	0.00	274.68	3,374.74	807.81	2,821.85	2,680.46	2.67	-0.46	0.116
60.00	-43.67	-5.42	0.00	-247.06	0.00	247.06	3,311.56	787.48	2,681.68	2,563.48	3.18	-0.50	0.110
65.00	-42.11	-5.32	0.00	-219.94	0.00	219.94	3,247.27	767.16	2,545.07	2,448.20	3.73	-0.54	0.103
70.00	-40.57	-5.22	0.00	-193.33	0.00	193.33	3,161.61	746.84	2,412.04	2,319.84	4.32	-0.58	0.096
75.00	-39.07	-5.11	0.00	-167.24	0.00	167.24	3,075.58	726.52	2,282.58	2,194.67	4.95	-0.62	0.089
80.00	-37.60	-5.00	0.00	-141.69	0.00	141.69	2,989.55	706.19	2,156.68	2,072.97	5.62	-0.66	0.081
85.00	-36.16	-4.90	0.00	-116.70	0.00	116.70	2,903.52	685.87	2,034.36	1,954.74	6.32	-0.69	0.072
89.00	-28.89	-4.18	0.00	-97.11	0.00	97.11	2,834.69	669.61	1,939.08	1,862.66	6.91	-0.71	0.062
90.00	-28.61	-4.14	0.00	-92.93	0.00	92.93	2,817.49	665.55	1,915.61	1,839.98	7.06	-0.72	0.061
92.71	-27.87	-4.08	0.00	-81.73	0.00	81.73	2,770.86	654.53	1,852.74	1,779.23	7.47	-0.73	0.056
95.00	-27.02	-4.02	0.00	-72.39	0.00	72.39	2,731.46	645.23	1,800.43	1,728.70	7.82	-0.74	0.052
97.29	-26.17	-3.95	0.00	-63.18	0.00	63.18	1,710.13	432.64	1,214.07	1,093.00	8.18	-0.75	0.073
100.00	-18.69	-3.13	0.00	-52.47	0.00	52.47	1,690.67	425.31	1,173.26	1,062.09	8.61	-0.76	0.061
105.00	-17.71	-3.01	0.00	-36.85	0.00	36.85	1,653.85	411.76	1,099.71	1,005.60	9.42	-0.78	0.047
110.00	-11.58	-2.11	0.00	-21.41	0.00	21.41	1,615.92	398.21	1,028.54	949.94	10.25	-0.80	0.030
115.00	-10.77	-2.01	0.00	-10.85	0.00	10.85	1,576.86	384.66	959.75	895.16	11.09	-0.81	0.019
119.00	-6.80	-1.47	0.00	-2.83	0.00	2.83	1,544.80	373.82	906.44	852.03	11.77	-0.81	0.008
120.00	0.00	-1.37	0.00	-1.36	0.00	1.36	1,536.68	371.11	893.35	841.35	11.94	-0.81	0.002

<b>Load Case: 1.0D + 1.0W</b>	<b>Serviceability 60 mph</b>	<b>19 Iterations</b>
Gust Response Factor :1.10		
Dead Load Factor :1.00		
Wind Load Factor :1.00		

**Applied Segment Forces Summary**

Seg Elev (ft)	Description	Shaft Forces		Discrete Forces			Linear Forces		Sum of Forces				
		Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		44.4	0.0					0.0	0.0	44.4	0.0	0.0	0.0
5.00		87.9	1,135.8					0.0	216.0	87.9	1,351.7	0.0	0.0
10.00		86.1	1,112.8					0.0	216.0	86.1	1,328.8	0.0	0.0
15.00		84.3	1,089.8					0.0	216.0	84.3	1,305.8	0.0	0.0
20.00		82.6	1,066.8					0.0	216.0	82.6	1,282.8	0.0	0.0
25.00		80.8	1,043.9					0.0	216.0	80.8	1,259.8	0.0	0.0
30.00		79.9	1,020.9					0.0	216.0	79.9	1,236.8	0.0	0.0
35.00		80.7	997.9					0.0	216.0	80.7	1,213.8	0.0	0.0
40.00		81.9	974.9					0.0	216.0	81.9	1,190.9	0.0	0.0
45.00		50.8	951.9					0.0	216.0	50.8	1,167.9	0.0	0.0
46.16	Bot - Section 2	42.1	218.2					0.0	50.2	42.1	268.4	0.0	0.0
50.00		48.0	1,332.6					0.0	165.7	48.0	1,498.3	0.0	0.0
51.83	Top - Section 1	42.5	626.8					0.0	79.0	42.5	705.8	0.0	0.0
55.00		69.5	500.5					0.0	136.9	69.5	637.4	0.0	0.0
60.00		85.0	773.3					0.0	216.0	85.0	989.2	0.0	0.0
65.00		84.7	753.6					0.0	216.0	84.7	969.5	0.0	0.0
70.00		84.3	733.9					0.0	216.0	84.3	949.8	0.0	0.0
75.00		83.6	714.2					0.0	216.0	83.6	930.1	0.0	0.0
80.00		82.8	694.5					0.0	216.0	82.8	910.4	0.0	0.0
85.00		73.8	674.8					0.0	216.0	73.8	890.7	0.0	0.0
89.00	Appurtenance(s)	40.7	525.6	535.6	0.0	0.0	3,132.1	0.0	172.8	576.3	3,830.5	0.0	0.0
90.00		29.9	129.4					0.0	40.9	29.9	170.3	0.0	0.0
92.71	Bot - Section 3	40.4	346.8					0.0	110.7	40.4	457.5	0.0	0.0
95.00		37.1	484.8					0.0	93.5	37.1	578.3	0.0	0.0
97.29	Top - Section 2	40.1	478.6					0.0	93.7	40.1	572.3	0.0	0.0
100.00	Appurtenance(s)	61.1	225.1	560.2	0.0	0.0	3,449.5	0.0	110.6	621.2	3,785.2	0.0	0.0
105.00		78.1	405.7					0.0	130.9	78.1	536.6	0.0	0.0
110.00	Appurtenance(s)	76.6	392.6	597.3	0.0	387.9	2,448.9	0.0	130.9	673.8	2,972.4	0.0	0.0
115.00		67.6	379.5					0.0	37.6	67.6	417.1	0.0	0.0
119.00	Appurtenance(s)	37.0	294.1	372.8	0.0	0.0	2,000.0	0.0	30.1	409.8	2,324.2	0.0	0.0
120.00		7.3	72.2					0.0	7.5	7.3	79.7	0.0	0.0
<b>Totals:</b>										<b>4,037.57</b>	<b>35,812.1</b>	<b>0.00</b>	<b>0.00</b>

Site Number: 411259

Code: ANSI/TIA-222-H

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Site Name: CT Collinsville CAC 802816 CT, CEngineering Number:13701314\_C3\_02

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Customer: VERIZON WIRELESS

**Load Case: 1.0D + 1.0W**

Serviceability 60 mph

19 Iterations

Gust Response Factor :1.10

Dead Load Factor :1.00

Wind Load Factor :1.00

**Calculated Forces**

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-38.31	-5.24	0.00	-493.97	0.00	493.97	4,844.94	1,183.44	5,191.11	4,835.57	0.00	0.00	0.110
5.00	-36.96	-5.17	0.00	-467.79	0.00	467.79	4,775.31	1,159.73	4,985.22	4,669.74	0.02	-0.03	0.108
10.00	-35.62	-5.10	0.00	-441.93	0.00	441.93	4,704.55	1,136.02	4,783.50	4,505.63	0.07	-0.07	0.106
15.00	-34.32	-5.04	0.00	-416.41	0.00	416.41	4,632.67	1,112.31	4,585.94	4,343.33	0.16	-0.10	0.103
20.00	-33.03	-4.97	0.00	-391.22	0.00	391.22	4,559.67	1,088.61	4,392.55	4,182.90	0.29	-0.14	0.101
25.00	-31.77	-4.91	0.00	-366.35	0.00	366.35	4,485.55	1,064.90	4,203.32	4,024.42	0.45	-0.17	0.098
30.00	-30.53	-4.84	0.00	-341.81	0.00	341.81	4,407.69	1,041.19	4,018.26	3,865.64	0.65	-0.21	0.095
35.00	-29.31	-4.77	0.00	-317.59	0.00	317.59	4,307.32	1,017.48	3,837.37	3,690.72	0.88	-0.24	0.093
40.00	-28.12	-4.70	0.00	-293.72	0.00	293.72	4,206.95	993.77	3,660.64	3,519.85	1.15	-0.27	0.090
45.00	-26.95	-4.66	0.00	-270.20	0.00	270.20	4,106.58	970.06	3,488.08	3,353.03	1.46	-0.31	0.087
46.16	-26.68	-4.62	0.00	-264.78	0.00	264.78	4,083.23	964.54	3,448.53	3,314.80	1.53	-0.32	0.086
50.00	-25.18	-4.57	0.00	-247.05	0.00	247.05	4,006.21	946.35	3,319.69	3,190.26	1.80	-0.34	0.084
51.83	-24.47	-4.53	0.00	-238.68	0.00	238.68	3,414.21	820.69	2,912.57	2,755.48	1.93	-0.35	0.094
55.00	-23.83	-4.47	0.00	-224.31	0.00	224.31	3,374.74	807.81	2,821.85	2,680.46	2.17	-0.37	0.091
60.00	-22.84	-4.39	0.00	-201.95	0.00	201.95	3,311.56	787.48	2,681.68	2,563.48	2.59	-0.41	0.086
65.00	-21.87	-4.31	0.00	-179.99	0.00	179.99	3,247.27	767.16	2,545.07	2,448.20	3.03	-0.44	0.080
70.00	-20.92	-4.23	0.00	-158.41	0.00	158.41	3,161.61	746.84	2,412.04	2,319.84	3.52	-0.48	0.075
75.00	-19.99	-4.15	0.00	-137.25	0.00	137.25	3,075.58	726.52	2,282.58	2,194.67	4.03	-0.51	0.069
80.00	-19.08	-4.07	0.00	-116.48	0.00	116.48	2,989.55	706.19	2,156.68	2,072.97	4.58	-0.53	0.063
85.00	-18.19	-4.00	0.00	-96.13	0.00	96.13	2,903.52	685.87	2,034.36	1,954.74	5.15	-0.56	0.055
89.00	-14.36	-3.38	0.00	-80.15	0.00	80.15	2,834.69	669.61	1,939.08	1,862.66	5.63	-0.58	0.048
90.00	-14.19	-3.35	0.00	-76.77	0.00	76.77	2,817.49	665.55	1,915.61	1,839.98	5.75	-0.58	0.047
92.71	-13.73	-3.31	0.00	-67.68	0.00	67.68	2,770.86	654.53	1,852.74	1,779.23	6.09	-0.60	0.043
95.00	-13.15	-3.27	0.00	-60.09	0.00	60.09	2,731.46	645.23	1,800.43	1,728.70	6.37	-0.60	0.040
97.29	-12.58	-3.23	0.00	-52.59	0.00	52.59	1,710.13	432.64	1,214.07	1,093.00	6.67	-0.61	0.056
100.00	-8.80	-2.57	0.00	-43.86	0.00	43.86	1,690.67	425.31	1,173.26	1,062.09	7.02	-0.62	0.047
105.00	-8.27	-2.48	0.00	-31.03	0.00	31.03	1,653.85	411.76	1,099.71	1,005.60	7.68	-0.64	0.036
110.00	-5.30	-1.78	0.00	-18.22	0.00	18.22	1,615.92	398.21	1,028.54	949.94	8.36	-0.65	0.022
115.00	-4.88	-1.71	0.00	-9.33	0.00	9.33	1,576.86	384.66	959.75	895.16	9.05	-0.66	0.014
119.00	-2.57	-1.27	0.00	-2.50	0.00	2.50	1,544.80	373.82	906.44	852.03	9.60	-0.67	0.005
120.00	0.00	-1.24	0.00	-1.23	0.00	1.23	1,536.68	371.11	893.35	841.35	9.74	-0.67	0.001

**Equivalent Lateral Forces Method Analysis**

Spectral Response Acceleration for Short Period ( $S_s$ ):	0.17
Spectral Response Acceleration at 1.0 Second Period ( $S_{d1}$ ):	0.05
Long-Period Transition Period ( $T_L$ ):	6
Importance Factor ( $I_E$ ):	1.00
Site Coefficient $F_a$ :	1.60
Site Coefficient $F_v$ :	2.40
Response Modification Coefficient (R):	1.50
Design Spectral Response Acceleration at Short Period ( $S_{ds}$ ):	0.19
Design Spectral Response Acceleration at 1.0 Second Period ( $S_{d1}$ ):	0.09
Seismic Response Coefficient ( $C_s$ ):	0.03
Upper Limit $C_s$	0.03
Lower Limit $C_s$	0.03
Period based on Rayleigh Method (sec):	1.86
Redundancy Factor (p):	1.00
Seismic Force Distribution Exponent (k):	1.68
Total Unfactored Dead Load:	38.31 k
Seismic Base Shear (E):	1.19 k

**Load Case 1.2D + 1.0Ev + 1.0Eh**

**Seismic**

Segment	Height Above Base (ft)	Weight (lb)	$W_z$ (lb-ft)	$C_{vx}$	Horizontal Force (lb)	Vertical Force (lb)
30	119.50	80	247	0.004	5	99
29	117.00	324	971	0.017	20	401
28	112.50	417	1,169	0.021	24	516
27	107.50	524	1,360	0.024	28	648
26	102.50	537	1,287	0.023	27	664
25	98.65	336	755	0.013	16	415
24	96.15	572	1,232	0.022	26	708
23	93.85	578	1,196	0.021	25	715
22	91.35	458	904	0.016	19	566
21	89.50	170	325	0.006	7	211
20	87.00	698	1,271	0.022	26	864
19	82.50	891	1,483	0.026	31	1,102
18	77.50	910	1,364	0.024	28	1,126
17	72.50	930	1,246	0.022	26	1,151
16	67.50	950	1,128	0.020	23	1,175
15	62.50	970	1,012	0.018	21	1,199
14	57.50	989	898	0.016	19	1,224
13	53.42	637	511	0.009	11	789
12	50.92	706	522	0.009	11	873
11	48.08	1,498	1,006	0.018	21	1,854
10	45.58	268	165	0.003	3	332
9	42.50	1,168	638	0.011	13	1,445
8	37.50	1,191	527	0.009	11	1,473
7	32.50	1,214	422	0.007	9	1,502
6	27.50	1,237	325	0.006	7	1,530



Site Number: 411259

Code: ANSI/TIA-222-H

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Site Name: CT Collinsville CAC 802816 CT, CEngineering Number:13701314\_C3\_02

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Customer: VERIZON WIRELESS

5	22.50	1,260	236	0.004	5	1,559
4	17.50	1,283	158	0.003	3	1,587
3	12.50	1,306	91	0.002	2	1,615
2	7.50	1,329	39	0.001	1	1,644
1	2.50	1,352	6	0.000	0	1,672
Samsung B2/B66A RRH-	120.00	253	791	0.014	16	313
Samsung B5/B13 RRH-B	120.00	211	659	0.012	14	261
Raycap RRFDC-3315-PF	120.00	54	168	0.003	4	67
Samsung MT6407-77A	120.00	245	765	0.013	16	303
Commscope NHH-65B-R2	120.00	262	819	0.014	17	324
Antel LPA-80080/6CF	120.00	84	262	0.005	5	104
Antel LPA-80063/6CF	120.00	54	169	0.003	4	67
VZW Unused Reserve (	120.00	1,337	4,178	0.073	87	1,654
Flat Platform w/ Han	119.00	2,000	6,162	0.108	128	2,474
Andrew ABT-DFDM-ADB	110.00	1	3	0.000	0	1
Powerwave Allgon TT1	110.00	192	518	0.009	11	238
Raycap DC6-48-60-0-8	110.00	33	89	0.002	2	41
Ericsson RRUS-11 (50	110.00	300	810	0.014	17	371
Powerwave Allgon P65	110.00	246	664	0.012	14	304
Powerwave Allgon P65	110.00	177	478	0.008	10	219
Round Low Profile PI	110.00	1,500	4,049	0.071	84	1,856
Ericsson KRY 112 144	100.00	33	76	0.001	2	41
Ericsson KRY 112 489	100.00	46	106	0.002	2	57
Ericsson Radio 4449	100.00	222	511	0.009	11	275
RFS APX16DWV-16DWV-S	100.00	119	273	0.005	6	147
RFS APXVAARR24_43-U-	100.00	384	882	0.016	18	475
Site PRO 1 RMQP-4096	100.00	2,646	6,085	0.107	127	3,273
Commscope RDIDC-9181	89.00	22	41	0.001	1	27
Fujitsu TA08025-B605	89.00	225	425	0.007	9	278
Fujitsu TA08025-B604	89.00	192	362	0.006	8	237
JMA Wireless MX08FRO	89.00	193	366	0.006	8	239
Generic Flat Platfor	89.00	2,500	4,727	0.083	98	3,093
		38,312	56,933	1.000	1,185	47,397

**Load Case 0.9D - 1.0Ev + 1.0Eh**

**Seismic (Reduced DL)**

Segment	Height Above Base (ft)	Weight (lb)	W <sub>z</sub> (lb-ft)	C <sub>vx</sub>	Horizontal Force (lb)	Vertical Force (lb)
30	119.50	80	247	0.004	5	69
29	117.00	324	971	0.017	20	280
28	112.50	417	1,169	0.021	24	360
27	107.50	524	1,360	0.024	28	452
26	102.50	537	1,287	0.023	27	463
25	98.65	336	755	0.013	16	290
24	96.15	572	1,232	0.022	26	494
23	93.85	578	1,196	0.021	25	499
22	91.35	458	904	0.016	19	395
21	89.50	170	325	0.006	7	147
20	87.00	698	1,271	0.022	26	603
19	82.50	891	1,483	0.026	31	769
18	77.50	910	1,364	0.024	28	786
17	72.50	930	1,246	0.022	26	803
16	67.50	950	1,128	0.020	23	820
15	62.50	970	1,012	0.018	21	837
14	57.50	989	898	0.016	19	854
13	53.42	637	511	0.009	11	550
12	50.92	706	522	0.009	11	609
11	48.08	1,498	1,006	0.018	21	1,293
10	45.58	268	165	0.003	3	232
9	42.50	1,168	638	0.011	13	1,008
8	37.50	1,191	527	0.009	11	1,028

Site Number: 411259

Code: ANSI/TIA-222-H

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Site Name: CT Collinsville CAC 802816 CT, CEngineering Number:13701314\_C3\_02

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Customer: VERIZON WIRELESS

7	32.50	1,214	422	0.007	9	1,047
6	27.50	1,237	325	0.006	7	1,067
5	22.50	1,260	236	0.004	5	1,087
4	17.50	1,283	158	0.003	3	1,107
3	12.50	1,306	91	0.002	2	1,127
2	7.50	1,329	39	0.001	1	1,147
1	2.50	1,352	6	0.000	0	1,166
Samsung B2/B66A RRH-	120.00	253	791	0.014	16	218
Samsung B5/B13 RRH-B	120.00	211	659	0.012	14	182
Raycap RRFC-3315-PF	120.00	54	168	0.003	4	46
Samsung MT6407-77A	120.00	245	765	0.013	16	211
Commscope NHH-65B-R2	120.00	262	819	0.014	17	226
Antel LPA-80080/6CF	120.00	84	262	0.005	5	72
Antel LPA-80063/6CF	120.00	54	169	0.003	4	47
VZW Unused Reserve (	120.00	1,337	4,178	0.073	87	1,154
Flat Platform w/ Han	119.00	2,000	6,162	0.108	128	1,726
Andrew ABT-DFDM-ADB	110.00	1	3	0.000	0	1
Powerwave Allgon TT1	110.00	192	518	0.009	11	166
Raycap DC6-48-60-0-8	110.00	33	89	0.002	2	28
Ericsson RRUS-11 (50	110.00	300	810	0.014	17	259
Powerwave Allgon P65	110.00	246	664	0.012	14	212
Powerwave Allgon P65	110.00	177	478	0.008	10	153
Round Low Profile PI	110.00	1,500	4,049	0.071	84	1,294
Ericsson KRY 112 144	100.00	33	76	0.001	2	28
Ericsson KRY 112 489	100.00	46	106	0.002	2	40
Ericsson Radio 4449	100.00	222	511	0.009	11	192
RFS APX16DWV-16DWV-S	100.00	119	273	0.005	6	103
RFS APXVAARR24_43-U-	100.00	384	882	0.016	18	331
Site PRO 1 RMQP-4096	100.00	2,646	6,085	0.107	127	2,283
Commscope RDIDC-9181	89.00	22	41	0.001	1	19
Fujitsu TA08025-B605	89.00	225	425	0.007	9	194
Fujitsu TA08025-B604	89.00	192	362	0.006	8	165
JMA Wireless MX08FRO	89.00	193	366	0.006	8	167
Generic Flat Platfor	89.00	2,500	4,727	0.083	98	2,157
		38,312	56,933	1.000	1,185	33,059

**Load Case 1.2D + 1.0Ev + 1.0Eh**

**Seismic**

**Calculated Forces**

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-45.72	-1.19	0.00	-117.44	0.00	117.44	4,844.94	1,183.44	5,191.11	4,835.57	0.00	0.00	0.034
5.00	-44.08	-1.19	0.00	-111.50	0.00	111.50	4,775.31	1,159.73	4,985.22	4,669.74	0.00	-0.01	0.033
10.00	-42.46	-1.20	0.00	-105.54	0.00	105.54	4,704.55	1,136.02	4,783.50	4,505.63	0.02	-0.02	0.032
15.00	-40.88	-1.20	0.00	-99.55	0.00	99.55	4,632.67	1,112.31	4,585.94	4,343.33	0.04	-0.02	0.032
20.00	-39.32	-1.20	0.00	-93.56	0.00	93.56	4,559.67	1,088.61	4,392.55	4,182.90	0.07	-0.03	0.031
25.00	-37.79	-1.20	0.00	-87.56	0.00	87.56	4,485.55	1,064.90	4,203.32	4,024.42	0.11	-0.04	0.030
30.00	-36.29	-1.19	0.00	-81.58	0.00	81.58	4,407.69	1,041.19	4,018.26	3,865.64	0.15	-0.05	0.029
35.00	-34.81	-1.18	0.00	-75.62	0.00	75.62	4,307.32	1,017.48	3,837.37	3,690.72	0.21	-0.06	0.029
40.00	-33.37	-1.17	0.00	-69.69	0.00	69.69	4,206.95	993.77	3,660.64	3,519.85	0.28	-0.07	0.028
45.00	-33.04	-1.17	0.00	-63.82	0.00	63.82	4,106.58	970.06	3,488.08	3,353.03	0.35	-0.07	0.027
46.16	-31.18	-1.15	0.00	-62.45	0.00	62.45	4,083.23	964.54	3,448.53	3,314.80	0.37	-0.08	0.026
50.00	-30.31	-1.14	0.00	-58.03	0.00	58.03	4,006.21	946.35	3,319.69	3,190.26	0.43	-0.08	0.026
51.83	-29.52	-1.13	0.00	-55.94	0.00	55.94	3,414.21	820.69	2,912.57	2,755.48	0.46	-0.08	0.029
55.00	-28.30	-1.12	0.00	-52.35	0.00	52.35	3,374.74	807.81	2,821.85	2,680.46	0.52	-0.09	0.028
60.00	-27.10	-1.10	0.00	-46.77	0.00	46.77	3,311.56	787.48	2,681.68	2,563.48	0.62	-0.10	0.026
65.00	-25.92	-1.07	0.00	-41.29	0.00	41.29	3,247.27	767.16	2,545.07	2,448.20	0.72	-0.10	0.025
70.00	-24.77	-1.05	0.00	-35.92	0.00	35.92	3,161.61	746.84	2,412.04	2,319.84	0.84	-0.11	0.023
75.00	-23.65	-1.02	0.00	-30.68	0.00	30.68	3,075.58	726.52	2,282.58	2,194.67	0.96	-0.12	0.022
80.00	-22.54	-0.99	0.00	-25.57	0.00	25.57	2,989.55	706.19	2,156.68	2,072.97	1.09	-0.13	0.020
85.00	-21.68	-0.96	0.00	-20.62	0.00	20.62	2,903.52	685.87	2,034.36	1,954.74	1.22	-0.13	0.018
89.00	-17.59	-0.83	0.00	-16.76	0.00	16.76	2,834.69	669.61	1,939.08	1,862.66	1.33	-0.14	0.015
90.00	-17.03	-0.81	0.00	-15.94	0.00	15.94	2,817.49	665.55	1,915.61	1,839.98	1.36	-0.14	0.015
92.71	-16.31	-0.78	0.00	-13.76	0.00	13.76	2,770.86	654.53	1,852.74	1,779.23	1.44	-0.14	0.014
95.00	-15.60	-0.75	0.00	-11.97	0.00	11.97	2,731.46	645.23	1,800.43	1,728.70	1.51	-0.14	0.013
97.29	-15.19	-0.74	0.00	-10.25	0.00	10.25	1,710.13	432.64	1,214.07	1,093.00	1.57	-0.14	0.018
100.00	-10.26	-0.53	0.00	-8.25	0.00	8.25	1,690.67	425.31	1,173.26	1,062.09	1.65	-0.14	0.014
105.00	-9.61	-0.50	0.00	-5.59	0.00	5.59	1,653.85	411.76	1,099.71	1,005.60	1.81	-0.15	0.011
110.00	-6.07	-0.33	0.00	-3.08	0.00	3.08	1,615.92	398.21	1,028.54	949.94	1.96	-0.15	0.007
115.00	-5.66	-0.31	0.00	-1.41	0.00	1.41	1,576.86	384.66	959.75	895.16	2.12	-0.15	0.005
119.00	-3.09	-0.17	0.00	-0.17	0.00	0.17	1,544.80	373.82	906.44	852.03	2.25	-0.15	0.002
120.00	0.00	-0.16	0.00	0.00	0.00	0.00	1,536.68	371.11	893.35	841.35	2.28	-0.15	0.000

**Load Case 0.9D - 1.0Ev + 1.0Eh**

**Seismic (Reduced DL)**

**Calculated Forces**

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-31.89	-1.19	0.00	-116.19	0.00	116.19	4,844.94	1,183.44	5,191.11	4,835.57	0.00	0.00	0.031
5.00	-30.75	-1.19	0.00	-110.26	0.00	110.26	4,775.31	1,159.73	4,985.22	4,669.74	0.00	-0.01	0.030
10.00	-29.62	-1.19	0.00	-104.31	0.00	104.31	4,704.55	1,136.02	4,783.50	4,505.63	0.02	-0.02	0.029
15.00	-28.51	-1.19	0.00	-98.34	0.00	98.34	4,632.67	1,112.31	4,585.94	4,343.33	0.04	-0.02	0.029
20.00	-27.42	-1.19	0.00	-92.38	0.00	92.38	4,559.67	1,088.61	4,392.55	4,182.90	0.07	-0.03	0.028
25.00	-26.36	-1.19	0.00	-86.42	0.00	86.42	4,485.55	1,064.90	4,203.32	4,024.42	0.11	-0.04	0.027
30.00	-25.31	-1.18	0.00	-80.49	0.00	80.49	4,407.69	1,041.19	4,018.26	3,865.64	0.15	-0.05	0.027
35.00	-24.28	-1.17	0.00	-74.58	0.00	74.58	4,307.32	1,017.48	3,837.37	3,690.72	0.21	-0.06	0.026
40.00	-23.27	-1.16	0.00	-68.71	0.00	68.71	4,206.95	993.77	3,660.64	3,519.85	0.27	-0.06	0.025
45.00	-23.04	-1.16	0.00	-62.90	0.00	62.90	4,106.58	970.06	3,488.08	3,353.03	0.34	-0.07	0.024
46.16	-21.75	-1.14	0.00	-61.55	0.00	61.55	4,083.23	964.54	3,448.53	3,314.80	0.36	-0.07	0.024
50.00	-21.14	-1.13	0.00	-57.18	0.00	57.18	4,006.21	946.35	3,319.69	3,190.26	0.42	-0.08	0.023
51.83	-20.59	-1.12	0.00	-55.12	0.00	55.12	3,414.21	820.69	2,912.57	2,755.48	0.46	-0.08	0.026
55.00	-19.74	-1.10	0.00	-51.57	0.00	51.57	3,374.74	807.81	2,821.85	2,680.46	0.51	-0.09	0.025
60.00	-18.90	-1.08	0.00	-46.06	0.00	46.06	3,311.56	787.48	2,681.68	2,563.48	0.61	-0.10	0.024
65.00	-18.08	-1.06	0.00	-40.66	0.00	40.66	3,247.27	767.16	2,545.07	2,448.20	0.71	-0.10	0.022
70.00	-17.28	-1.03	0.00	-35.36	0.00	35.36	3,161.61	746.84	2,412.04	2,319.84	0.83	-0.11	0.021
75.00	-16.49	-1.01	0.00	-30.19	0.00	30.19	3,075.58	726.52	2,282.58	2,194.67	0.95	-0.12	0.019
80.00	-15.72	-0.97	0.00	-25.17	0.00	25.17	2,989.55	706.19	2,156.68	2,072.97	1.07	-0.12	0.017
85.00	-15.12	-0.95	0.00	-20.29	0.00	20.29	2,903.52	685.87	2,034.36	1,954.74	1.20	-0.13	0.016
89.00	-12.27	-0.81	0.00	-16.50	0.00	16.50	2,834.69	669.61	1,939.08	1,862.66	1.32	-0.13	0.013
90.00	-11.88	-0.79	0.00	-15.69	0.00	15.69	2,817.49	665.55	1,915.61	1,839.98	1.34	-0.13	0.013
92.71	-11.38	-0.77	0.00	-13.54	0.00	13.54	2,770.86	654.53	1,852.74	1,779.23	1.42	-0.14	0.012
95.00	-10.88	-0.74	0.00	-11.79	0.00	11.79	2,731.46	645.23	1,800.43	1,728.70	1.49	-0.14	0.011
97.29	-10.59	-0.72	0.00	-10.09	0.00	10.09	1,710.13	432.64	1,214.07	1,093.00	1.55	-0.14	0.015
100.00	-7.15	-0.52	0.00	-8.13	0.00	8.13	1,690.67	425.31	1,173.26	1,062.09	1.63	-0.14	0.012
105.00	-6.70	-0.50	0.00	-5.51	0.00	5.51	1,653.85	411.76	1,099.71	1,005.60	1.78	-0.15	0.010
110.00	-4.23	-0.33	0.00	-3.03	0.00	3.03	1,615.92	398.21	1,028.54	949.94	1.94	-0.15	0.006
115.00	-3.95	-0.31	0.00	-1.39	0.00	1.39	1,576.86	384.66	959.75	895.16	2.09	-0.15	0.004
119.00	-2.16	-0.17	0.00	-0.17	0.00	0.17	1,544.80	373.82	906.44	852.03	2.22	-0.15	0.002
120.00	0.00	-0.16	0.00	0.00	0.00	0.00	1,536.68	371.11	893.35	841.35	2.25	-0.15	0.000

Site Number: 411259

Code: ANSI/TIA-222-H

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Site Name: CT Collinsville CAC 802816 CT, CEngineering Number:13701314\_C3\_02

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Customer: VERIZON WIRELESS

## Analysis Summary

Load Case	Reactions						Max Usage	
	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Elev (ft)	Interaction Ratio
1.2D + 1.0W	21.51	0.00	45.95	0.00	0.00	2039.86	0.00	0.43
0.9D + 1.0W	21.50	0.00	34.45	0.00	0.00	2021.42	0.00	0.43
1.2D + 1.0Di + 1.0Wi	6.42	0.00	67.18	0.00	0.00	606.86	0.00	0.14
1.2D + 1.0Ev + 1.0Eh	1.19	0.00	45.72	0.00	0.00	117.44	0.00	0.03
0.9D - 1.0Ev + 1.0Eh	1.19	0.00	31.89	0.00	0.00	116.19	0.00	0.03
1.0D + 1.0W	5.24	0.00	38.31	0.00	0.00	493.97	0.00	0.11

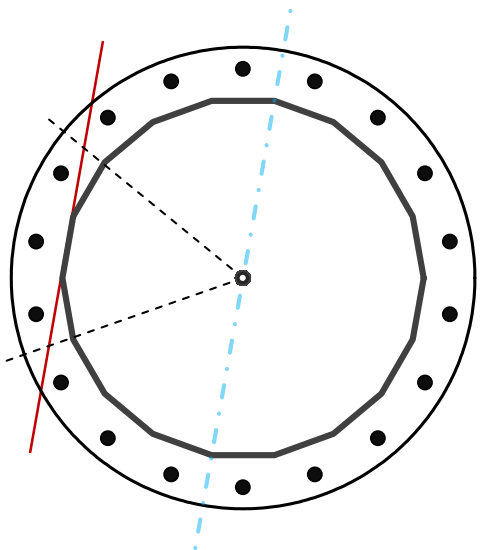
## Base Plate & Anchor Rod Analysis

Pole Dimensions		
Number of Sides	18	-
Diameter	49	in
Thickness	7/16	in
Orientation Offset		°

Base Reactions		
Moment, Mu	2,039.9	k-ft
Axial, Pu	46.0	k
Shear, Vu	21.5	k
Neutral Axis	80	°

Report Capacities		
Component	Capacity	Result
Base Plate	29%	Pass
Anchor Rods	41%	Pass
Dwyidag	-	-

Base Plate		
Shape	Round	-
Diameter, $\phi$	64	in
Thickness	2 1/4	in
Grade	A572-60	
Yield Strength, Fy	60	ksi
Tensile Strength, Fu	75	ksi
Clip	N/A	in
Orientation Offset	0	°
Anchor Rod Detail	d	$\eta=0.5$
Clear Distance	3	in
Applied Moment, Mu	622.8	k
Bending Stress, $\phi Mn$	2172.9	k



Original Anchor Rods		
Arrangement	Radial	-
Quantity	18	-
Diameter, $\phi$	2 1/4	in
Bolt Circle	58	in
Grade	A615-75	
Yield Strength, Fy	75	ksi
Tensile Strength, Fu	100	ksi
Spacing	10.1	in
Orientation Offset	10	°
Applied Force, Pu	100.3	k
Anchor Rods, $\phi Pn$	243.6	k

# Calculations for Monopole Base Plate & Anchor Rod Analysis

## Reaction Distribution

Reaction	Shear Vu	Moment Mu	Factor
-	k	k-ft	-
Base Forces	21.5	2039.9	1.00
Anchor Rod Forces	21.5	2039.9	1.00
Additional Bolt (Grp1) Forces	0.0	0.0	0.00
Additional Bolt (Grp2) Forces	0.0	0.0	0.00
Dywidag Forces	0.0	0.0	0.00
Stiffener Forces	0.0	0.0	0.00

## Geometric Properties

Section	Gross Area	Net Area	Individual Inertia	Threads per Inch	Moment of Inertia
-	in <sup>2</sup>	in <sup>2</sup>	in <sup>4</sup>	#	in <sup>4</sup>
Pole	66.4082	3.6893	0.2364		19580.70
Bolt	3.9761	3.2477	0.8393	4.5	22624.93
Bolt1	0.0000	0.0000	0.0000	0	0.00
Bolt2	0.0000	0.0000	0.0000	0	0.00
Dywidag	0.0000	0.0000	0.0000		0.00
Stiffener	0.0000	0.0000	0.0000		0.00

Base Plate		
Shape	Round	-
Diameter, D	64	in
Thickness, t	2.25	in
Yield Strength, Fy	60	ksi
Tensile Strength, Fu	75	ksi
Base Plate Chord	41.170	in
Detail Type	d	-
Detail Factor	0.50	-
Clear Distance	3	-

Anchor Rods		
Anchor Rod Quantity, N	18	-
Rod Diameter, d	2.25	in
Bolt Circle, BC	58	in
Yield Strength, Fy	75	ksi
Tensile Strength, Fu	100	ksi
Applied Axial, Pu	100.3	k
Applied Shear, Vu	0.3	k
Compressive Capacity, φPn	243.6	k
Tensile Capacity, φRnt	0.412	OK
Interaction Capacity	0.414	OK

External Base Plate		
Chord Length AA	35.313	in
Additional AA	4.500	in
Section Modulus, Z	50.388	in <sup>3</sup>
Applied Moment, Mu	622.8	k-ft
Bending Capacity, φMn	2720.9	k-ft
Capacity, Mu/φMn	0.229	OK
Chord Length AB	34.234	in
Additional AB	4.500	in
Section Modulus, Z	49.022	in <sup>3</sup>
Applied Moment, Mu	513.3	k-ft
Bending Capacity, φMn	2647.2	k-ft
Capacity, Mu/φMn	0.194	OK
Bend Line Length	31.794	in
Additional Bend Line	0.000	in
Section Modulus, Z	40.239	in <sup>3</sup>
Applied Moment, Mu	622.8	k-ft
Bending Capacity, φMn	2172.9	k-ft
Capacity, Mu/φMn	0.287	OK

Internal Base Plate		
Arc Length	0.000	in
Section Modulus, Z	0.000	in <sup>3</sup>
Moment Arm	0.000	in
Applied Moment, Mu	0.0	k-ft
Bending Capacity, φMn	0.0	k-ft
Capacity, Mu/φMn		

Site Name: **COLLINSVILLE CT**  
 Cumulative Power Density

Operator	Operating Frequency	Number of Trans.	ERP Per Trans.	Total ERP	Distance to Target	Calculated Power Density	Maximum Permissible Exposure*	Fraction of MPE
	(MHz)		(watts)	(watts)	(feet)	(mW/cm <sup>2</sup> )	(mW/cm <sup>2</sup> )	(%)
VZW 700	751	4	641	2564	120	0.0064	0.5007	1.28%
VZW CDMA	869	2	397	794	120	0.0020	0.5793	0.34%
VZW Cellular	869	4	690	2760	120	0.0069	0.5793	1.19%
VZW PCS	1970	4	1390	5560	120	0.0139	1.0000	1.39%
VZW AWS	2110	4	1574	6296	120	0.0157	1.0000	1.57%
VZW CBAND	3730	4	731	2924	120	0.0073	1.0000	0.73%
<b>Total Percentage of Maximum Permissible Exposure</b>								<b>6.50%</b>

\*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992

\*\*Calculation includes a -10 dB Off Beam Antenna Pattern Adjustment pursuant to Attachments B and C of the Siting Council's November 10, 2015 Memorandum for Exempt Modification filings

MHz = Megahertz

mW/cm<sup>2</sup> = milliwatts per square centimeter

ERP = Effective Radiated Power

Absolute worst case maximum values used.



The Assessor's office is responsible for the maintenance of records on the ownership of properties. Assessments are computed at 70% of the estimated market value of real property at the time of the last revaluation which was 2018.



# TOWN OF CANTON<sub>CT</sub>

Information on the Property Records for the Municipality of Canton was last updated on 9/14/2021.



## Parcel Information

Location:	650 T ALBANY TURNPIKE	Property Use:	Vacant Land	Primary Use:	Commercial Vacant Land
Unique ID:	1010650T	Map Block Lot:	21/101/0650T	Acres:	0.23
490 Acres:	0.00	Zone:	AR-2	Volume / Page:	275/ 32
Developers Map / Lot:		Census:			

## Value Information

	Appraised Value	Assessed Value
Land	400,000	280,000
Buildings	0	0
Detached Outbuildings	3,674	2,570

	Appraised Value	Assessed Value
Total	403,674	282,570

### Owner's Information

Owner's Data
PERRY LANSFORD W C/O CELLS CO PARTNERSHIP PO BOX 2549 ADDISON TX 75001

### Detached Outbuildings

Type:	Year Built:	Length:	Width:	Area:
Cblk/Fr Shed	2002	10.00	12.00	120
Cblk/Fr Shed	2002	20.00	10.00	200

### Owner History - Sales

Owner Name	Volume	Page	Sale Date	Deed Type	Sale Price
PERRY LANSFORD W	275	32	12/30/2020	Quit Claim	\$0

Information Published With Permission From The Assessor

The Assessor's office is responsible for the maintenance of records on the ownership of properties. Assessments are computed at 70% of the estimated market value of real property at the time of the last revaluation which was 2018.



# TOWN OF CANTON<sub>CT</sub>

Information on the Property Records for the Municipality of Canton was last updated on 9/14/2021.



## Parcel Information

Location:	650 ALBANY TURNPIKE	Property Use:	Residential	Primary Use:	Residential
Unique ID:	1010650	Map Block Lot:	21/101/0650	Acres:	10.61
490 Acres:	0.00	Zone:	R-2	Volume / Page:	460/ 79
Developers Map / Lot:		Census:			

## Value Information

	Appraised Value	Assessed Value
Land	119,965	83,980
Buildings	140,331	98,230
Detached Outbuildings	9,664	6,760

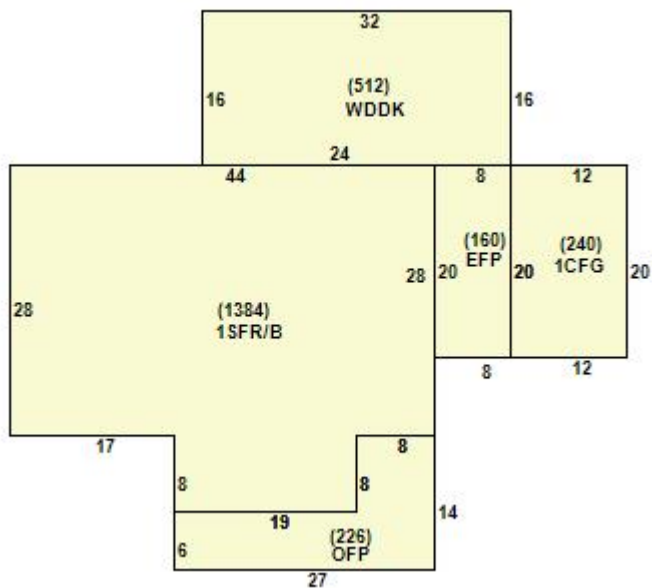
	Appraised Value	Assessed Value
Total	269,960	188,970

## Owner's Information

### Owner's Data

PERRY LANSFORD W  
 PO BOX 1  
 CANTON CENTER CT 06020

## Building 1



Building Use:	Single Family	Style:	Ranch	Living Area:	1,384
---------------	---------------	--------	-------	--------------	-------

Stories:	1.00	Construction:	Wood Frame	Year Built:	1957
Total Rooms:	6	Bedrooms:	3	Full Baths:	1
Half Baths:	2	Fireplaces:	2	Heating:	Hot Water
Fuel:	Oil	Cooling Percent:	0	Basement Area:	1,384
Basement Finished Area:	640	Basement Garages:	0	Roof Material:	Asphalt
Siding:	Wood Shingles	Units:			

### Special Features

Solar Panels	1
--------------	---

### Attached Components

Type:	Year Built:	Area:
Wood Deck	1957	512
Frame Garage	1957	240
Enclosed Porch	1957	160
Open Frame Porch	1957	226

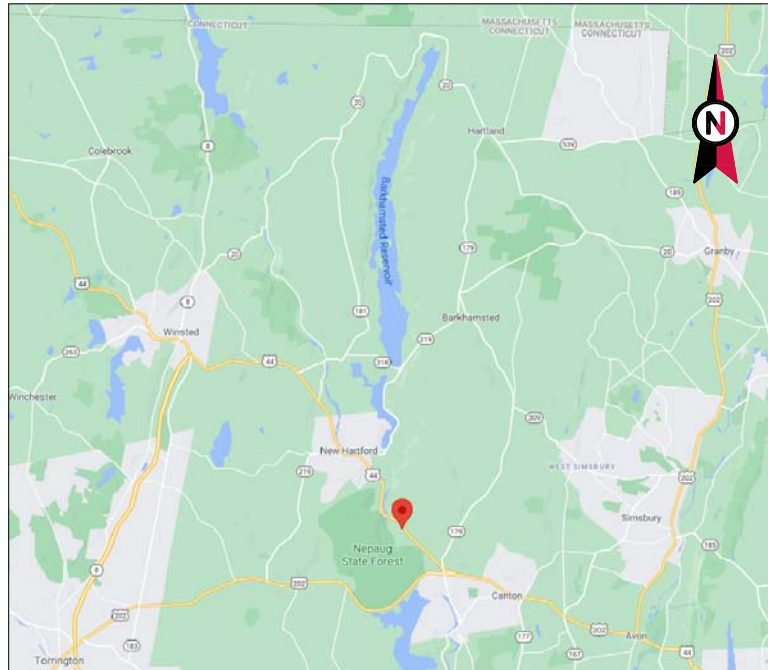
### Detached Outbuildings

Type:	Year Built:	Length:	Width:	Area:
1 Story Frame	2011	15.00	10.00	150
Frame Shed	1957	12.00	12.00	144
Frame Shed	1957	12.00	12.00	144
Metal Shed	1957	0.00	0.00	720

## Owner History - Sales

Owner Name	Volume	Page	Sale Date	Deed Type	Sale Price
PERRY LANSFORD W	460	79	12/30/2020	Warranty Deed	\$275,000
CHELLMAN ANDREW	379	1112	09/27/2010		\$325,000
CHELLMAN ANDREW	384	386			\$0
LALLY EDWARD T JR	163	559			\$0

Information Published With Permission From The Assessor



VICINITY MAP



**AMERICAN TOWER®**

ATC SITE NAME: CT COLLINSVILLE CAC 802816 CT  
 ATC SITE NUMBER: 411259  
 VERIZON SITE NAME: COLLINSVILLE CT  
 VERIZON SITE NUMBER: 469353  
 SITE ADDRESS: 450 ALBANY TURNPIKE  
 COLLINSVILLE, CT 06022



LOCATION MAP

**VERIZON  
 ANTENNA AMENDMENT DRAWINGS**

**AMERICAN TOWER®**  
 A.T. ENGINEERING SERVICE, PLLC  
 3500 REGENCY PARKWAY  
 SUITE 100  
 CARY, NC 27518  
 PHONE: (919) 468-0112  
 COA: P-1177

**NB+C™**  
 TOTALLY COMMITTED.  
 NB+C ENGINEERING SERVICES, LLC.  
 8601 SIX FORKS ROAD, SUITE 540  
 RALEIGH, NC 27615  
 (919) 657-9131

REV.	DESCRIPTION	BY	DATE
A	PRELIM	LJS	07/23/21
B	FOR CONSTRUCTION	BIW	08/20/21
C			
D			
E			

ATC SITE NUMBER:  
 411259

ATC SITE NAME:  
 CT COLLINSVILLE CAC 802816 CT

VERIZON SITE NAME:  
 COLLINSVILLE CT

SITE ADDRESS:  
 450 ALBANY TURNPIKE  
 COLLINSVILLE, CT 06022



**verizon**

DATE DRAWN: 08/20/21  
 ATC JOB NO: 13701314  
 CUSTOMER ID: COLLINSVILLE CT  
 CUSTOMER #: 469353

**TITLE SHEET**

SHEET NUMBER: **G-001**  
 REVISION: **0**

COMPLIANCE CODE	PROJECT SUMMARY	PROJECT DESCRIPTION	SHEET INDEX				
ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNMENT AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.  1. INTERNATIONAL BUILDING CODE (IBC) 2. NATIONAL ELECTRIC CODE (NEC) 3. LOCAL BUILDING CODE 4. CITY/COUNTY ORDINANCES	<u>SITE ADDRESS:</u> 450 ALBANY TURNPIKE COLLINSVILLE, CT 06022 COUNTY: HARTFORD  <u>GEOGRAPHIC COORDINATES:</u> LATITUDE: 41.850564 LONGITUDE: -72.948725 GROUND ELEVATION: 490' AMSL	THE PROPOSED PROJECT INCLUDES MODIFYING GROUND BASED AND TOWER MOUNTED EQUIPMENT AS INDICATED PER BELOW:  <u>TOWER WORK:</u> REMOVE (6) ANTENNA(S), AND (6) 1-5/8" COAX CABLE(S)  INSTALL MOUNT MODIFICATION(S), (9) ANTENNA(S), (6) RRH(S), (2) OVP(S), (3) SBS-1-2 MOUNT(S), AND (2) 1-5/8" HYBRID CABLE(S)  EXISTING (6) ANTENNA(S) AND (6) 1-5/8" COAX CABLE(S) TO REMAIN  <u>GROUND WORK:</u> REMOVE (3) RRH(S)	SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
	<u>PROJECT TEAM</u>  <u>TOWER OWNER:</u> AMERICAN TOWER 10 PRESIDENTIAL WAY WOBURN, MA 01801  <u>ENGINEER:</u> NB+C ENGINEERING SERVICES, LLC 8601 SIX FORKS ROAD, SUITE 540 RALEIGH, NC 27615  <u>PROPERTY OWNER:</u> LANDMARK INFRASTRUCTURE INC 650 ALBANY TURNPIKE COLLINSVILLE, CT 06019	<u>PROJECT NOTES</u>  1. THE FACILITY IS UNMANNED. 2. A TECHNICIAN WILL VISIT THE SITE APPROXIMATELY ONCE A MONTH FOR ROUTINE INSPECTION AND MAINTENANCE. 3. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT LAND DISTURBANCE OR EFFECT OF STORM WATER DRAINAGE. 4. NO SANITARY SEWER, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED. 5. HANDICAP ACCESS IS NOT REQUIRED. 6. THE PROJECT DEPICTED IN THESE PLANS QUALIFIES AS AN ELIGIBLE FACILITIES REQUEST ENTITLED TO EXPEDITED REVIEW UNDER 47 U.S.C. 1455(A) AS A MODIFICATION OF AN EXISTING WIRELESS TOWER THAT INVOLVES THE COLLOCATION REMOVAL AND/OR REPLACEMENT OF TRANSMISSION EQUIPMENT THAT IS NOT A SUBSTANTIAL CHANGE UNDER CFR 1.61000 (B)(7).					
<u>UTILITY COMPANIES</u>  POWER COMPANY: NORTH UTILITY SERVICE PHONE: (800) 286-2000  TELEPHONE COMPANY: SNET PHONE: (203) 771-5200		<u>PROJECT LOCATION DIRECTIONS</u>  FROM 99 EAST RIVER DR...I-84 WEST TO US-44 WEST/MAIN ST. (I-91) CONTINUE ON US-44 WEST...US-WEST/US 202 BECOMES US-44 WEST/US-202 SOUTH...CONTINUE ON US-44 WEST...ARRIVE AT 650 ALBANY TPKE COLLINSVILLE LOOK FOR MAILBOX WITH 650 ON IT GO UP THE DRIVEWAY AND SITE IS PAST THE HOUSE					



Know what's below.  
 Call before you dig.

**GENERAL CONSTRUCTION NOTES:**

1. OWNER FURNISHED MATERIALS, VERIZON "THE COMPANY" WILL PROVIDE AND THE CONTRACTOR WILL INSTALL
  - A. BTS EQUIPMENT FRAME (PLATFORM) AND ICEBRIDGE SHELTER (GROUND BUILD/CO-LOCATE ONLY)
  - B. AC/TELCO INTERFACE BOX (PPC)
  - C. ICE BRIDGE (CABLE TRAY WITH COVER) (GROUND BUILD/CO-LOCATE ONLY, GC TO FURNISH AND INSTALL FOR ROOFTOP INSTALLATION)
  - D. TOWERS, MONOPOLES
  - E. TOWER LIGHTING
  - F. GENERATORS & LIQUID PROPANE TANK
  - G. ANTENNA STANDARD BRACKETS, FRAMES AND PIPES FOR MOUNTING
  - H. ANTENNAS (INSTALLED BY OTHERS)
  - I. TRANSMISSION LINE
  - J. TRANSMISSION LINE JUMPERS
  - K. TRANSMISSION LINE CONNECTORS WITH WEATHERPROOFING KITS
  - L. TRANSMISSION LINE GROUND KITS
  - M. HANGERS
  - N. HOISTING GRIPS
  - O. BTS EQUIPMENT
2. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL OTHER MATERIALS FOR THE COMPLETE INSTALLATION OF THE SITE INCLUDING, BUT NOT LIMITED TO, SUCH MATERIALS AS FENCING, STRUCTURAL STEEL SUPPORTING SUB-FRAME FOR PLATFORM, ROOFING LABOR AND MATERIALS, GROUNDING RINGS, GROUNDING WIRES, COPPER-CLAD OR XIT CHEMICAL GROUND ROD(S), BUSS BARS, TRANSFORMERS AND DISCONNECT SWITCHES WHERE APPLICABLE, TEMPORARY ELECTRICAL POWER, CONDUIT, LANDSCAPING COMPOUND STONE, CRANES, CORE DRILLING, SLEEPERS AND RUBBER MATTING, REBAR, CONCRETE CAISSONS, PADS AND/OR AUGER MOUNTS, MISCELLANEOUS FASTENERS, CABLE TRAYS, NON-STANDARD ANTENNA FRAMES AND ALL OTHER MATERIAL AND LABOR REQUIRED TO COMPLETE THE JOB ACCORDING TO THE DRAWINGS AND SPECIFICATIONS. IT IS THE POSITION OF VERIZON TO APPLY FOR PERMITTING AND CONTRACTOR RESPONSIBLE FOR PICKUP AND PAYMENT OF REQUIRED PERMITS.
3. ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING ANSI/EIA/TIA-222, AND COMPLY WITH ATC CONSTRUCTION SPECIFICATIONS.
4. CONTRACTOR SHALL CONTACT LOCAL 811 FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS.
6. ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
7. DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
8. DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
9. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
10. CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
11. CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
12. INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE VERIZON REP PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE VERIZON REP PRIOR TO PROCEEDING.
13. EACH CONTRACTOR SHALL COOPERATE WITH THE VERIZON REP, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
14. CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE VERIZON CONSTRUCTION MANAGER.
15. ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT.
16. WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR SHALL NOTIFY THE VERIZON REP AND ENGINEER OF RECORD IMMEDIATELY.
17. CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A COMPLETE AND CURRENT SET OF DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
18. CONTRACTOR SHALL REMOVE ALL RUBBISH AND DEBRIS FROM THE SITE AT THE END OF EACH DAY.
19. CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH AMERICAN TOWER CORPORATION (ATC) AND TAKE PRECAUTIONS TO MINIMIZE IMPACT AND DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
20. CONTRACTOR SHALL FURNISH VERIZON AND AMERICAN TOWER CORPORATION (ATC) WITH A PDF MARKED UP AS-BUILT SET OF DRAWINGS UPON COMPLETION OF WORK.
21. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH VERIZON REP TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED. ALL ITEMS NOT PROVIDED SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL ALL ITEMS PROVIDED.

22. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH VERIZON REP TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY CONTRACTOR. ALL REQUIRED PERMITS NOT OBTAINED BY VERIZON MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR.
23. CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH VERIZON SPECIFICATIONS AND REQUIREMENTS.
24. CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO VERIZON FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
25. ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO VERIZON SPECIFICATIONS, AND AS SHOWN IN THESE PLANS.
26. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
27. CONTRACTOR SHALL NOTIFY VERIZON REP A MINIMUM OF 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING ANY UNDERGROUND UTILITIES, FOUNDATIONS OR SEALING ANY WALL, FLOOR OR ROOF PENETRATIONS FOR ENGINEERING REVIEW AND APPROVAL.
28. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE WITH ALL APPLICABLE OSHA STANDARDS AND RECOMMENDATIONS AND SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE AND PPM AND CONSTRUCTION DEVICES SUCH AS WELDING AND FIRE PREVENTION, TEMPORARY SHORING, SCAFFOLDING, TRENCH BOXES/SLOPING, BARRIERS, ETC.
29. THE CONTRACTOR SHALL PROTECT AT HIS OWN EXPENSE, ALL EXISTING FACILITIES AND SUCH OF HIS NEW WORK LIABLE TO INJURY DURING THE CONSTRUCTION PERIOD. ANY DAMAGE CAUSED BY NEGLIGENCE ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, OR BY THE ELEMENTS DUE TO NEGLIGENCE ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, EITHER TO THE EXISTING WORK, OR TO HIS WORK OR THE WORK OF ANY OTHER CONTRACTOR, SHALL BE REPAIRED AT HIS EXPENSE TO THE OWNER'S SATISFACTION.
30. ALL WORK SHALL BE INSTALLED IN A FIRST CLASS, NEAT AND WORKMANLIKE MANNER BY MECHANICS SKILLED IN THE TRADE INVOLVED. THE QUALITY OF WORKMANSHIP SHALL BE SUBJECT TO THE APPROVAL OF THE VERIZON REP. ANY WORK FOUND BY THE VERIZON REP TO BE OF INFERIOR QUALITY AND/OR WORKMANSHIP SHALL BE REPLACED AND/OR REWORKED AT CONTRACTOR EXPENSE UNTIL APPROVAL IS OBTAINED.
31. IN ORDER TO ESTABLISH STANDARDS OF QUALITY AND PERFORMANCE, ALL TYPES OF MATERIALS LISTED HEREINAFTER BY MANUFACTURER'S NAMES AND/OR MANUFACTURER'S CATALOG NUMBER SHALL BE PROVIDED BY THESE MANUFACTURERS AS SPECIFIED.
32. VERIZON FURNISHED EQUIPMENT SHALL BE PICKED-UP AT THE VERIZON WAREHOUSE, NO LATER THAN 48HR AFTER BEING NOTIFIED INSURED, STORED, UNCRATE, PROTECTED AND INSTALLED BY THE CONTRACTOR WITH ALL APPURTENANCES REQUIRED TO PLACE THE EQUIPMENT IN OPERATION, READY FOR USE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE EQUIPMENT AFTER PICKING IT UP.
33. VERIZON OR HIS ARCHITECT/ENGINEER RESERVES THE RIGHT TO REJECT ANY EQUIPMENT OR MATERIALS WHICH, IN HIS OWN OPINION ARE NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS, EITHER BEFORE OR AFTER INSTALLATION AND THE EQUIPMENT SHALL BE REPLACED WITH EQUIPMENT CONFORMING TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS BY THE CONTRACTOR AT NO COST TO VERIZON OR THEIR ARCHITECT/ENGINEER.

**STRUCTURAL STEEL NOTES:**

1. STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS."
2. STRUCTURAL STEEL ROLLED SHAPES, PLATES AND BARS SHALL CONFORM TO THE FOLLOWING ASTM DESIGNATIONS:
  - A. ASTM A-572, GRADE 50 - ALL W SHAPES, UNLESS NOTED OR A992 OTHERWISE
  - B. ASTM A-36 - ALL OTHER ROLLED SHAPES, PLATES AND BARS UNLESS NOTED OTHERWISE.
  - C. ASTM A-500, GRADE B - HSS SECTION (SQUARE, RECTANGULAR, AND ROUND)
  - D. ASTM A-325, TYPE SC OR N - ALL BOLTS FOR CONNECTING STRUCTURAL MEMBERS
  - E. ASTM F-1554 07 - ALL ANCHOR BOLTS, UNLESS NOTED OTHERWISE
3. ALL EXPOSED STRUCTURAL STEEL MEMBERS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION PER ASTM A123, EXPOSED STEEL HARDWARE AND ANCHOR BOLTS SHALL BE GALVANIZED PER ASTM A153 OR B695.
4. ALL FIELD CUT SURFACES, FIELD DRILLED HOLES AND GROUND SURFACES WHERE EXISTING PAINT OR GALVANIZATION REMOVAL WAS REQUIRED SHALL BE REPAIRED WITH (2) BRUSHED COATS OF ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.
5. DO NOT DRILL HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT AS SHOWN AND DETAILED ON STRUCTURAL DRAWINGS.
6. CONNECTIONS:
  - A. ALL WELDING TO BE PERFORMED BY AWS CERTIFIED WELDERS AND CONDUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AWS WELDING CODE D1.1.

- B. ALL WELDS SHALL BE INSPECTED VISUALLY. 25% OF WELDS SHALL BE INSPECTED WITH DYE PENETRANT OR MAGNETIC PARTICLE TO MEET THE ACCEPTANCE CRITERIA OF AWS D1.1. REPAIR ALL WELDS AS NECESSARY.
- C. INSPECTION SHALL BE PERFORMED BY AN AWS CERTIFIED WELD INSPECTOR.
- D. IT IS THE CONTRACTORS RESPONSIBILITY TO PROVIDE BURNING/WELDING PERMITS AS REQUIRED BY LOCAL GOVERNING AUTHORITY AND IF REQUIRED SHALL HAVE FIRE DEPARTMENT DETAIL FOR ANY WELDING ACTIVITY.
- E. ALL ELECTRODES TO BE LOW HYDROGEN, MATCHING FILLER METAL, PER AWS D1.1, UNLESS NOTED OTHERWISE.
- F. MINIMUM WELD SIZE TO BE 0.1875 INCH FILLET WELDS, UNLESS NOTED OTHERWISE.
- G. PRIOR TO FIELD WELDING GALVANIZING MATERIAL, CONTRACTOR SHALL GRIND OFF GALVANIZING 1/2" BEYOND ALL FIELD WELD SURFACES. AFTER WELD AND WELD INSPECTION IS COMPLETE, REPAIR ALL GROUND AND WELDED SURFACES WITH ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS RECOMMENDATIONS.
- H. THE CONTRACTOR SHALL PROVIDE ADEQUATE SHORING AND/OR BRACING WHERE REQUIRED DURING CONSTRUCTION UNTIL ALL CONNECTIONS ARE COMPLETE.
- I. ANY FIELD CHANGES OR SUBSTITUTIONS SHALL HAVE PRIOR APPROVAL FROM THE ENGINEER, AND T- MOBILE PROJECT MANAGER IN WRITING

**SPECIAL CONSTRUCTION ANTENNA INSTALLATION NOTES:**

1. WORK INCLUDED:
  - A. ANTENNA AND COAXIAL CABLES ARE FURNISHED BY VERIZON UNDER A SEPARATE CONTRACT. THE CONTRACTOR SHALL ASSIST ANTENNA INSTALLATION CONTRACTOR IN TERMS OF COORDINATION AND SITE ACCESS. ERECTION SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PERSONNEL AND
  - B. INSTALL ANTENNA AS INDICATE ON DRAWINGS AND VERIZON SPECIFICATIONS.
  - C. INSTALL GALVANIZED STEEL ANTENNA MOUNTS AS INDICATED ON DRAWINGS
  - D. INSTALL FURNISHED GALVANIZED STEEL OR ALUMINUM WAVEGUIDE AND PROVIDE PRINTOUT OF THAT TEST.
  - E. CONTRACTOR SHALL PROVIDE FOUR (4) SETS OF SWEEP TESTS USING ANRITZU-PACKARD 8713B RF SCALAR NETWORK ANALYZER. SUBMIT FREQUENCY DOMAIN REFLECTOMETER(FDR) TESTS RESULTS TO THE PROJECT MANAGER. SWEEP TESTS SHALL BE AS PER ATTACHED RFS "MINIMUM FIELD TESTING RECOMMENDED FOR ANTENNA AND HELIAX COAXIAL CABLE SYSTEMS" DATED 10/5/93. TESTING SHALL BE PERFORMED BY AN INDEPENDENT TESTING SERVICE AND BE BOUND AND SUBMITTED WITHIN ONE WEEK OF WORK COMPLETION.
  - F. INSTALL COAXIAL CABLES AND TERMINATING BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. WEATHERPROOF ALL CONNECTIONS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL CABLE THREE (3) FEET IN EXCESS OF ENTRY PORT LOCATION UNLESS OTHERWISE STATED.
  - G. ANTENNA AND COAXIAL CABLE GROUNDING:
2. ALL EXTERIOR #6 GREED GROUND WIRE "DAISY CHAIN" CONNECTIONS ARE TO BE WEATHER SEALED WITH RFS CONNECTORS/SPLICE WEATHERPROOFING KIT #221213 OR EQUAL.
3. ALL COAXIAL CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL CABLE (NOT WITHIN BENDS)

ALL DISCREPANCIES FROM WHAT IS SHOWN ON THESE CONSTRUCTION DRAWINGS SHALL BE COMMUNICATED TO ATC ENGINEERING IMMEDIATELY FOR CORRECTION OR RE-DESIGN. FAILURE TO COMMUNICATE DIRECTLY WITH ATC ENGINEERING OR ANY CHANGES FROM THE DESIGN CONDUCTED WITHOUT PRIOR APPROVAL FROM ATC ENGINEERING SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR.



**AMERICAN TOWER®**  
**A.T. ENGINEERING SERVICE, PLLC**  
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 CARY, NC 27518  
 PHONE: (919) 468-0112  
 COA: P-1177



**NB+C ENGINEERING SERVICES, LLC.**  
 8601 SIX FORKS ROAD, SUITE 540  
 RALEIGH, NC 27615  
 (919) 657-9131

REV.	DESCRIPTION	BY	DATE
A	PRELIM	LJS	07/23/21
0	FOR CONSTRUCTION	BIW	08/20/21

ATC SITE NUMBER:  
**411259**

ATC SITE NAME:  
**CT COLLINSVILLE CAC 802816 CT**

VERIZON SITE NAME:  
**COLLINSVILLE CT**

SITE ADDRESS:  
 450 ALBANY TURNPIKE  
 COLLINSVILLE, CT 06022

SEAL:



DATE DRAWN:	08/20/21
ATC JOB NO:	13701314
CUSTOMER ID:	COLLINSVILLE CT
CUSTOMER #:	469353

GENERAL NOTES	
SHEET NUMBER: <b>G-002</b>	REVISION: <b>0</b>

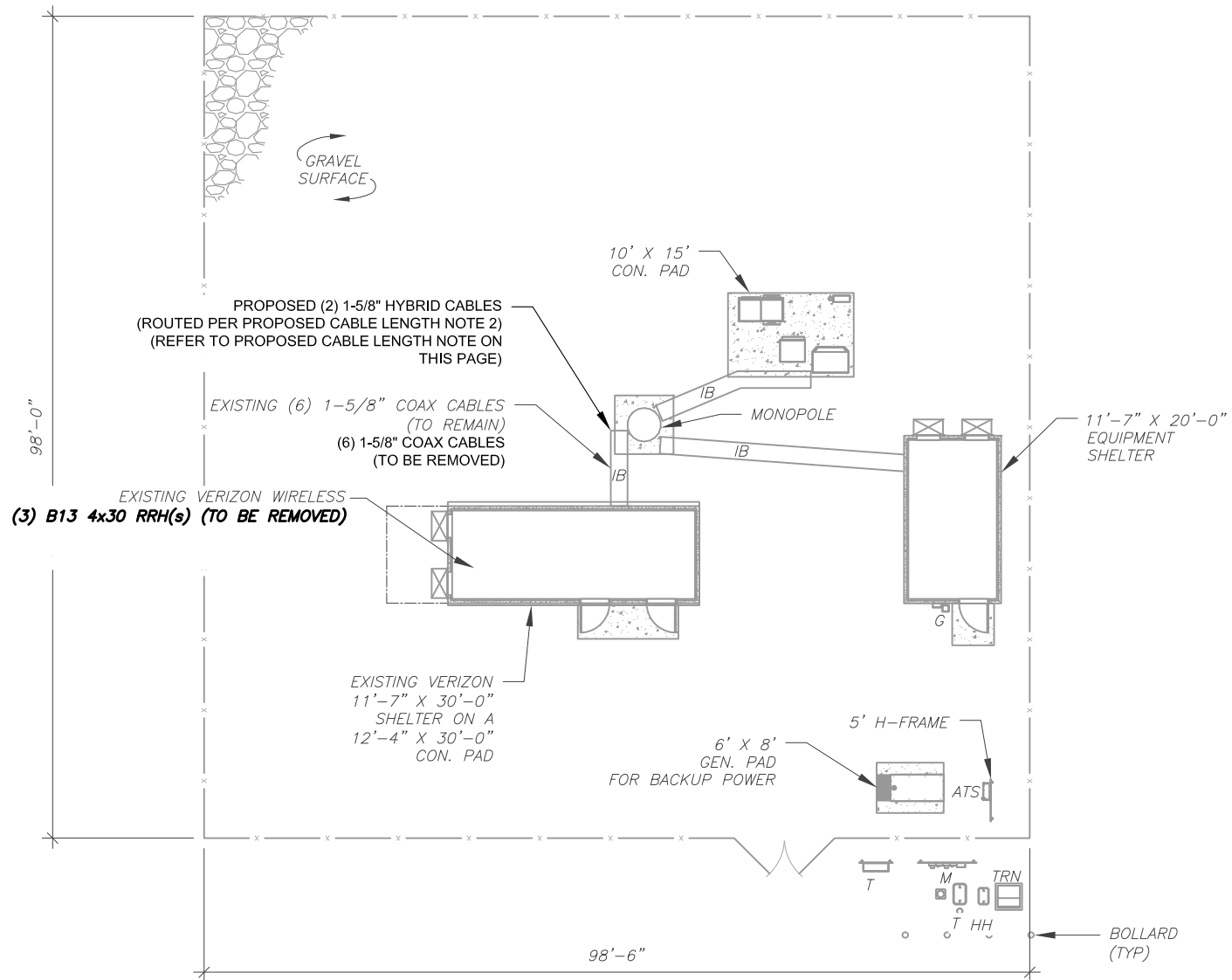
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**SITE PLAN NOTES:**

1. THIS SITE PLAN REPRESENTS THE BEST PRESENT KNOWLEDGE AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WORK FOR THIS PROJECT.
2. ICE BRIDGE, CABLE LADDER, COAX PORT, AND COAX CABLE ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL CONFIRM THE EXACT LOCATION OF ALL PROPOSED AND EXISTING EQUIPMENT AND STRUCTURES DEPICTED ON THIS PLAN. BEFORE UTILIZING EXISTING CABLE SUPPORTS, COAX PORTS, INSTALLING NEW PORTS OR ANY OTHER EQUIPMENT, CONTRACTOR SHALL VERIFY ALL ASPECTS OF THE COMPONENTS MEET THE ATC SPECIFICATIONS.
3. THIS PROJECT INCLUDES NO INSTALL OR MODIFICATION AT GRADE.

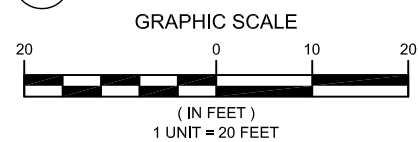

LEGEND	
⊗	GROUNDING TEST WELL
ATS	AUTOMATIC TRANSFER SWITCH
B	BOLLARD
CSC	CELL SITE CABINET
D	DISCONNECT
E	ELECTRICAL
F	FIBER
GEN	GENERATOR
G	GENERATOR RECEPTACAL
HH, V	HAND HOLE, VAULT
IB	ICE BRIDGE
K	KENTROX BOX
LC	LIGHTING CONTROL
M	METER
PB	PULL BOX
PP	POWER POLE
T	TELCO
TRN	TRANSFORMER
x	CHAINLINK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



**PROPOSED CABLE LENGTH:**

1. ESTIMATED LENGTH OF PROPOSED CABLE IS **150'±**. ESTIMATED LENGTH OF CABLE WAS PROVIDED BY CUSTOMER OR CALCULATED BY ADDING THE RAD CENTER AND THE DISTANCE FROM THE SHELTER ENTRY PLATE TO THE TOWER (ALONG THE ICE BRIDGE) AND A SAFETY FACTOR MEASUREMENT OF 15% (OF THE TWO PREVIOUS VALUES), CDS DEFER TO GREATEST CABLE LENGTH.
2. ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. IF ADEQUATE SPACE EXISTS, ROUTE CABLES THROUGH ENTRY PORT HOLE, UP INSIDE OF MONOPOLE, AND THROUGH EXIT PORT HOLE. IF ROUTING OUTSIDE THE MONOPOLE, ATTACH CABLES USING STAND-OFF ADAPTERS MOUNTED TO TOWER USING STAINLESS STEEL BANDING. ADEQUATELY SECURE CABLES USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER.

**1 DETAILED SITE PLAN**

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**TOTALLY COMMITTED.**  
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SITE ADDRESS:  
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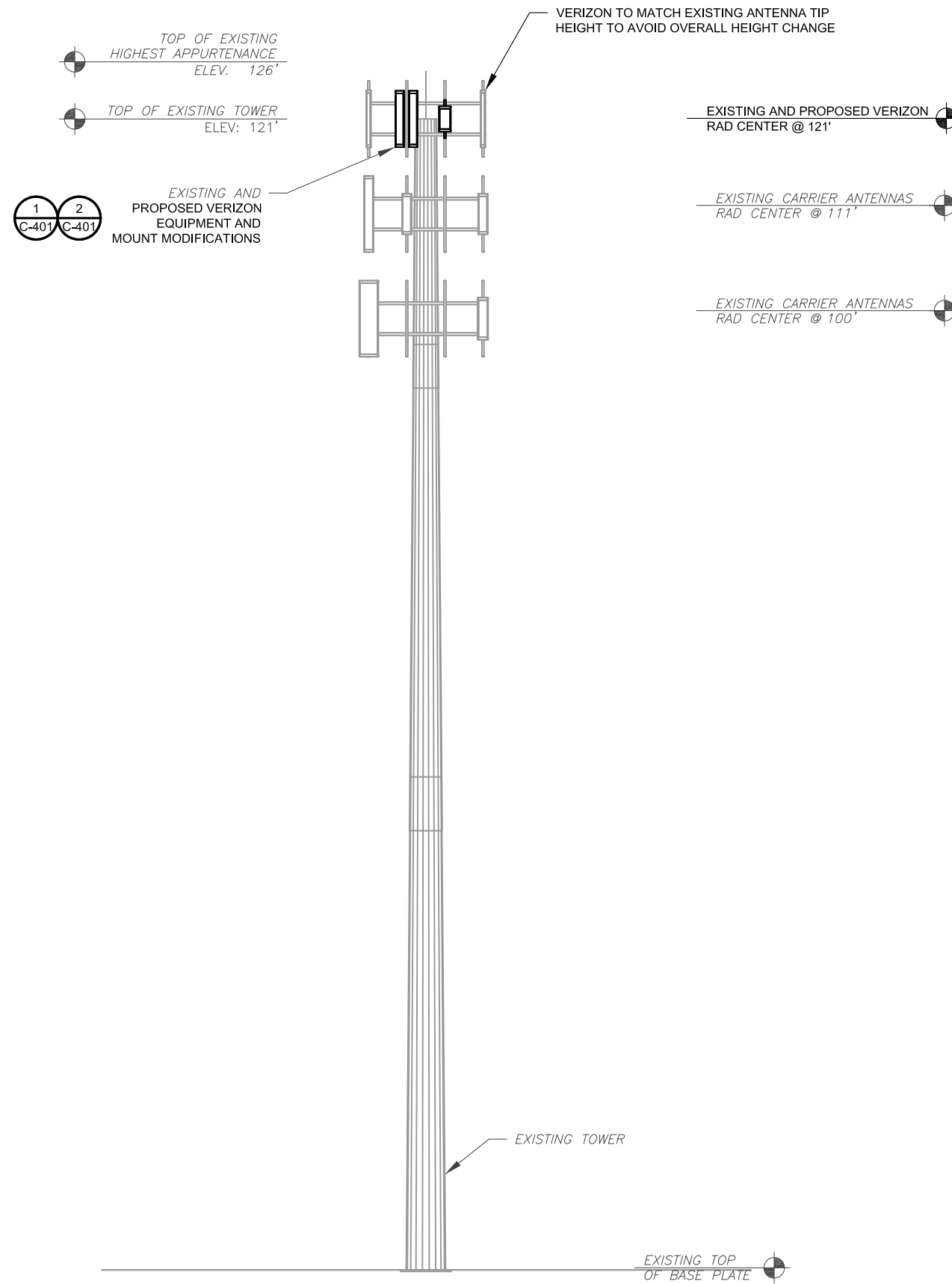
SEAL:




DATE DRAWN:	08/20/21
ATC JOB NO:	13701314
CUSTOMER ID:	COLLINSVILLE CT
CUSTOMER #:	469353

<b>DETAILED SITE PLAN</b>	
SHEET NUMBER:	REVISION:
<b>C-101</b>	<b>0</b>

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PER MOUNT ANALYSIS COMPLETED BY MASER CONSULTING, DATED 07/07/2021, THE EXISTING MOUNT MUST BE MODIFIED TO ADEQUATELY SUPPORT THE PROPOSED LOADING. THE MOUNT MODIFICATION PROPOSED IN THE MOUNT ANALYSIS, INCLUDED AT THE END OF THIS PLAN SET, MUST BE INSTALLED PRIOR TO THE INSTALLATION OF THE PROPOSED ANTENNAS AND OTHER EQUIPMENT.

- TOWER NOTE:**
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM WITH THE PROJECT MANAGER THAT THEY HAVE THE MOST RECENT VERSION OF THE STRUCTURAL ANALYSIS BEFORE COMMENCING WORK. EXISTING AND PROPOSED TOWER APPURTENANCES, MOUNTS, AND ANTENNAS ARE SHOWN BASED ON THE STRUCTURAL ANALYSIS.
  - WHERE APPLICABLE, ALL NEW ANTENNAS, EQUIPMENT, MOUNTS, CABLING, ETC. SHALL BE PAINTED/SOCKED TO MATCH EXISTING EQUIPMENT IN ACCORDANCE WITH FAA, JURISDICTION, AND/OR OTHER LOCAL REQUIREMENTS.
  - ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. IF ADEQUATE SPACE EXISTS, ROUTE CABLES THROUGH ENTRY PORT HOLE, UP INSIDE OF MONOPOLE, AND THROUGH EXIT PORT HOLE. IF ROUTING OUTSIDE THE MONOPOLE, ATTACH CABLES USING STAND-OFF ADAPTERS MOUNTED TO TOWER USING STAINLESS STEEL BANDING. ADEQUATELY SECURE CABLES USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER.
  - TOWER ELEVATIONS ARE MEASURED FROM TOP OF BASE PLATE TO MATCH STRUCTURAL ANALYSIS. ELEVATIONS DO NOT REFLECT TRUE ABOVE GROUND LEVEL (A.G.L.)

**1 TOWER ELEVATION**  
SCALE: N.T.S.



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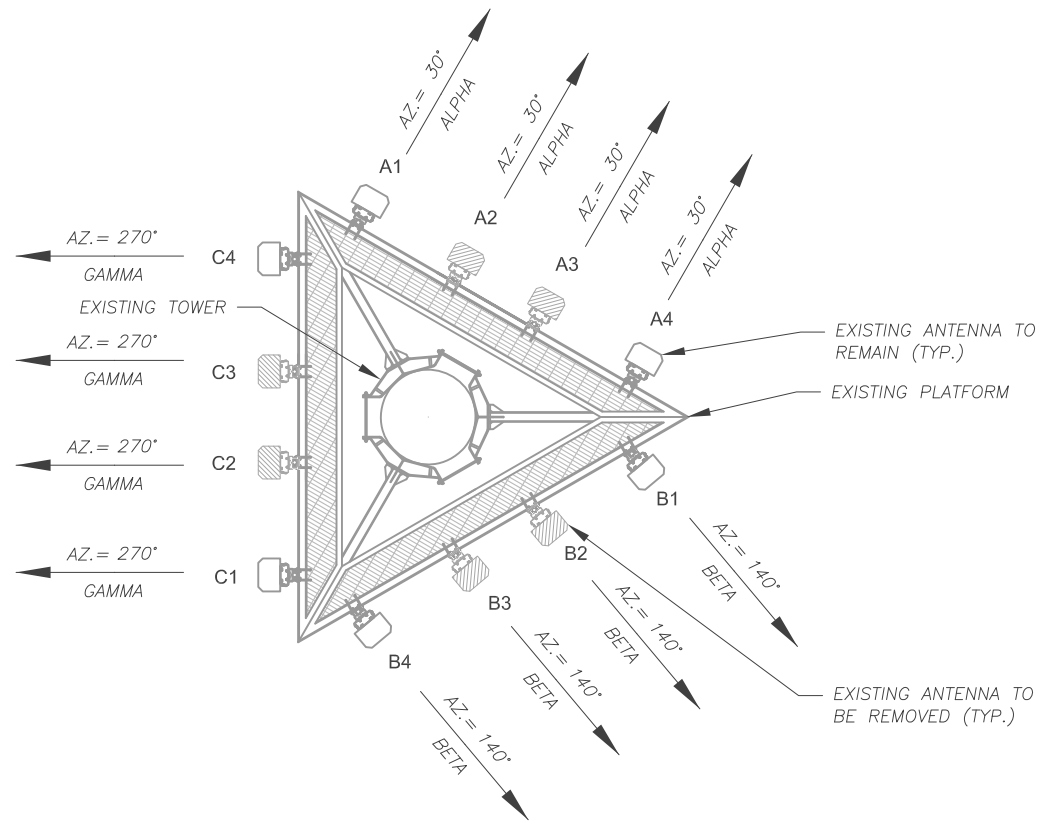


**verizon**

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CUSTOMER ID:	COLLINSVILLE CT
CUSTOMER #:	469353

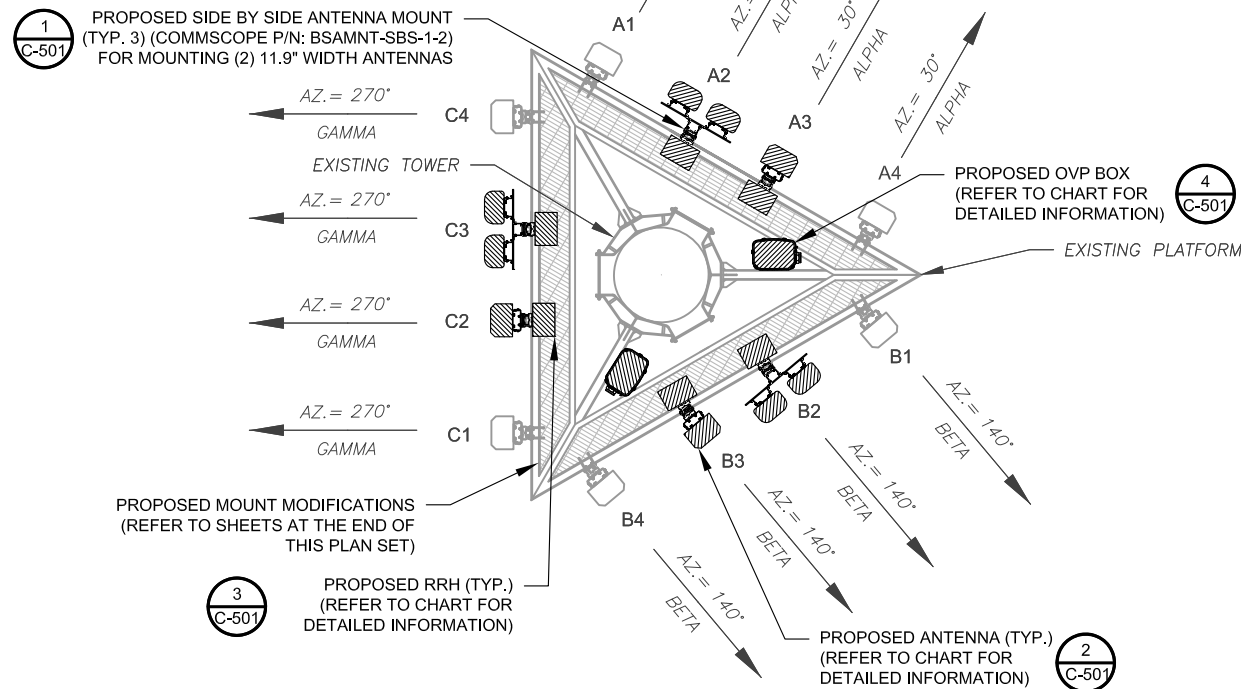
<b>TOWER ELEVATION</b>	
SHEET NUMBER: <b>C-201</b>	REVISION: <b>0</b>

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**1 EXISTING ANTENNA PLAN**  
SCALE: N.T.S.

PER MOUNT ANALYSIS COMPLETED BY MASER CONSULTING, DATED 07/07/2021, THE EXISTING MOUNT MUST BE MODIFIED TO ADEQUATELY SUPPORT THE PROPOSED LOADING. THE MOUNT MODIFICATION PROPOSED IN THE MOUNT ANALYSIS, INCLUDED AT THE END OF THIS PLAN SET, MUST BE INSTALLED PRIOR TO THE INSTALLATION OF THE PROPOSED ANTENNAS AND OTHER EQUIPMENT.



**2 FINAL ANTENNA PLAN**  
SCALE: N.T.S.

EXISTING ANTENNA SCHEDULE									
LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY		
SECTOR	RAD	AZ	POS	ANTENNA	BAND	MECH/ELEC D-TILT	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	120'	30°	A1	LPA-80080/6CF	850 CDMA	0°/0°	RMN	-	-
			A2	BXA-70063-6CF	700	0°/2°	RMV	-	-
			A3	BXA-171085-12BF	700	0°/2°	RMV	-	-
			A4	LPA-80080/6CF	850 CDMA	0°/0°	RMN	-	-
BETA	120'	140°	B1	LPA-80063/6CF	850 CDMA	4°/0°	RMN	-	-
			B2	BXA-70063-6CF	700	4°/2°	RMV	-	-
			B3	BXA-171085-12BF	700	4°/2°	RMV	-	-
			B4	LPA-80063/6CF	850 CDMA	4°/0°	RMN	-	-
GAMMA	120'	270°	C1	LPA-80080/6CF	850 CDMA	0°/0°	RMN	-	-
			C2	BXA-70063-6CF	700	0°/2°	RMV	-	-
			C3	BXA-171085-12BF	700	0°/2°	RMV	-	-
			C4	LPA-80080/6CF	850 CDMA	0°/0°	RMN	-	-

**NOTES**

- CONFIRM WITH VERIZON REP FOR APPLICABLE UPDATES/REVISIONS AND MOST RECENT RFDS FOR NSN CONFIGURATION (CONFIG). GC TO CAP ALL UNUSED PORTS.
- CONFIRM SPACING OF PROPOSED EQUIP DOES NOT CAUSE TOWER CONFLICTS NOR IMPEDE TOWER CLIMBING PEGS.

**STATUS ABBREVIATIONS**

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

**CABLE LENGTHS FOR JUMPERS**

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

FINAL ANTENNA SCHEDULE									
LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY		
SECTOR	RAD	AZ	POS	ANTENNA	BAND	MECH/ELEC D-TILT	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	120'	30°	A1	LPA-80080-6CF	850 CDMA	0°/0°	RMN	-	-
			A2	MT6407-77A	L-SUB6 5G	0°/3°	ADD	B2/B66A RRH	ADD
			A3	NHH65B-R2B NHH65B-R2B	700/850/1900 700/850/AWS	0°/2°/0° 0°/2°/0°	ADD	B5/B13 RRH	ADD
			A4	LPA-80080-6CF	850 CDMA	0°/0°	RMN	-	-
BETA	120'	140°	B1	LPA-80063-6CF	850 CDMA	4°/0°	RMN	-	-
			B2	MT6407-77A	L-SUB6 5G	0°/3°	ADD	B2/B66A RRH	ADD
			B3	NHH65B-R2B NHH65B-R2B	700/850/1900 700/850/AWS	0°/2°/0° 0°/2°/0°	ADD	B5/B13 RRH	ADD
			B4	LPA-80063-6CF	850 CDMA	4°/0°	RMN	-	-
GAMMA	120'	270°	C1	LPA-80080-6CF	850 CDMA	0°/0°	RMN	-	-
			C2	MT6407-77A	L-SUB6 5G	0°/3°	ADD	B2/B66A RRH	ADD
			C3	NHH65B-R2B NHH65B-R2B	700/850/1900 700/850/AWS	0°/2°/0° 0°/2°/0°	ADD	B5/B13 RRH	ADD
			C4	LPA-80080-6CF	850 CDMA	0°/0°	RMN	-	-

EXISTING FIBER DISTRIBUTION/OVP BOX		EXISTING CABLING SUMMARY		
MODEL NUMBER	STATUS	COAX	HYBRID	STATUS
-	-	(6) 1-5/8"	----	RMN
-	-	(6) 1-5/8"	----	RMV

**3 EQUIPMENT SCHEDULES**

FINAL FIBER DISTRIBUTION / OVP BOX		FINAL CABLING SUMMARY		
MODEL NUMBER	STATUS	COAX	HYBRID	STATUS
RRFDC-3315-PF-48	ADD	(6) 1-5/8"	----	RMN
RRFDC-3315-PF-48	ADD	--	(2) 1-5/8"	ADD

**AMERICAN TOWER®**  
A.T. ENGINEERING SERVICE, PLLC  
3500 REGENCY PARKWAY  
SUITE 100  
CARY, NC 27518  
PHONE: (919) 468-0112  
COA: P-1177

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NB+C ENGINEERING SERVICES, LLC.  
8601 SIX FORKS ROAD, SUITE 540  
RALEIGH, NC 27615  
(919) 657-9131

REV.	DESCRIPTION	BY	DATE
A	PRELIM	LJS	07/23/21
0	FOR CONSTRUCTION	BIW	08/20/21

ATC SITE NUMBER:  
411259

ATC SITE NAME:  
CT COLLINSVILLE CAC 802816 CT

VERIZON SITE NAME:  
COLLINSVILLE CT

SITE ADDRESS:  
450 ALBANY TURNPIKE  
COLLINSVILLE, CT 06022

SEAL:

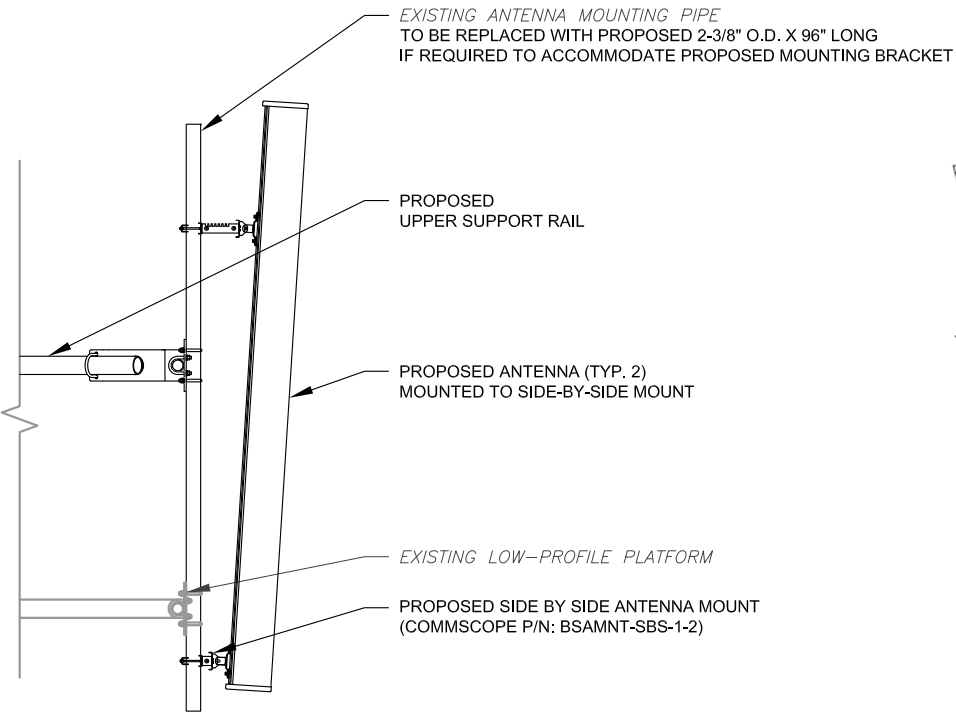
**verizon**

DATE DRAWN:	08/20/21
ATC JOB NO:	13701314
CUSTOMER ID:	COLLINSVILLE CT
CUSTOMER #:	469353

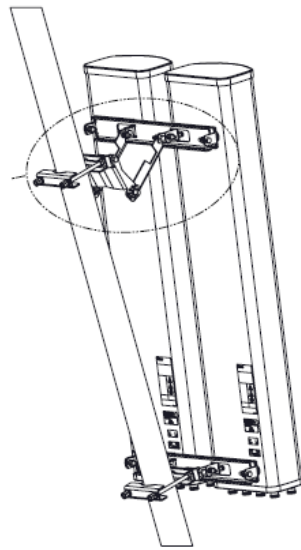
**ANTENNA INFORMATION & SCHEDULE**

SHEET NUMBER:	REVISION:
<b>C-401</b>	<b>0</b>

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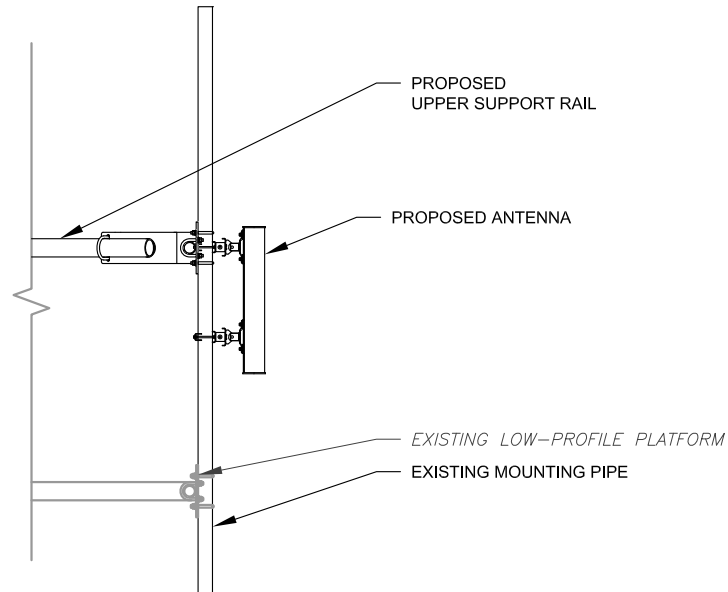


PROFILE VIEW

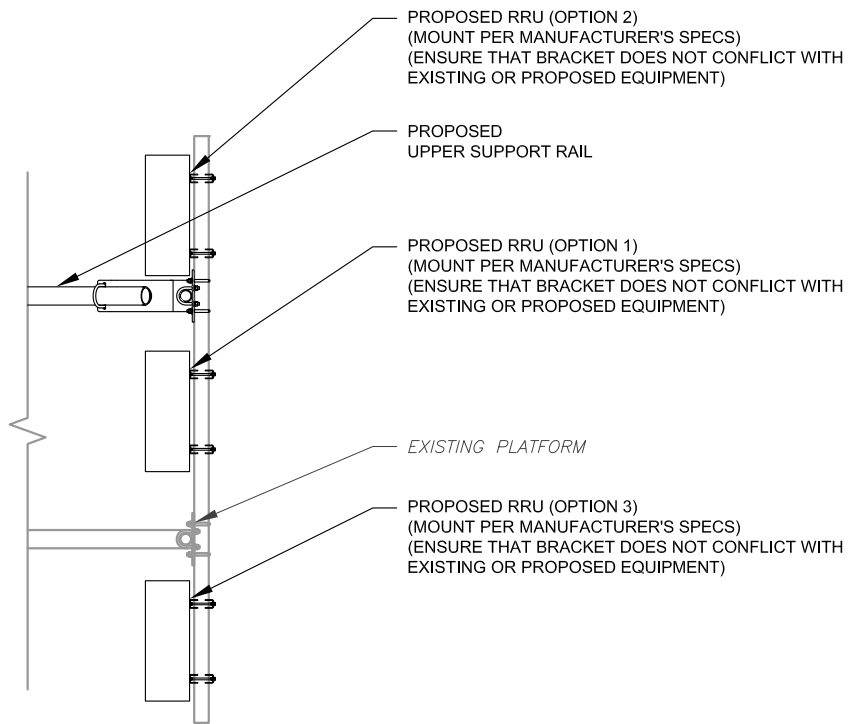


ISOMETRIC VIEW (BY MANUFACTURER)

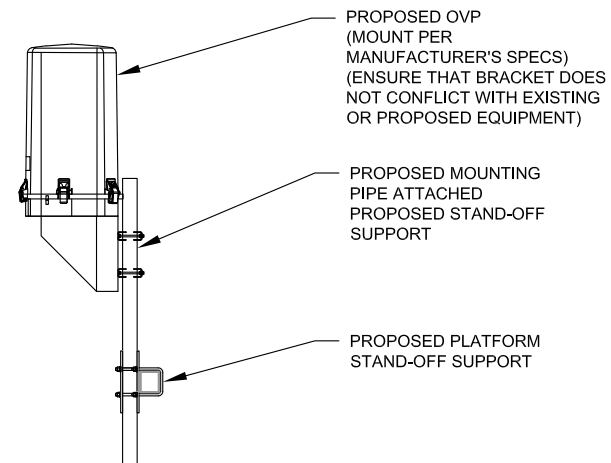
1 PROPOSED SIDE-BY-SIDE MOUNT  
SCALE: NOT TO SCALE



2 PROPOSED 5G ANTENNA MOUNTING DETAIL - TYPICAL  
SCALE: N.T.S.



3 PROPOSED RRU MOUNTING DETAIL - TYPICAL  
SCALE: N.T.S.



4 PROPOSED OVP MOUNTING  
SCALE: N.T.S.



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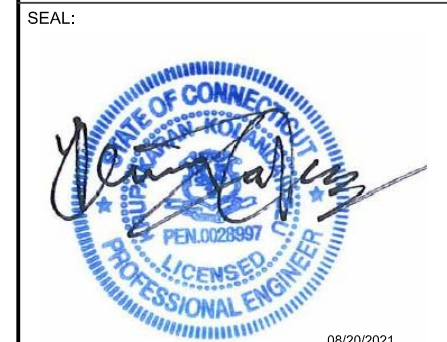
REV.	DESCRIPTION	BY	DATE
A	PRELIM	LJS	07/23/21
0	FOR CONSTRUCTION	BIW	08/20/21

ATC SITE NUMBER:  
411259

ATC SITE NAME:  
CT COLLINSVILLE CAC 802816 CT

VERIZON SITE NAME:  
COLLINSVILLE CT

SITE ADDRESS:  
450 ALBANY TURNPIKE  
COLLINSVILLE, CT 06022

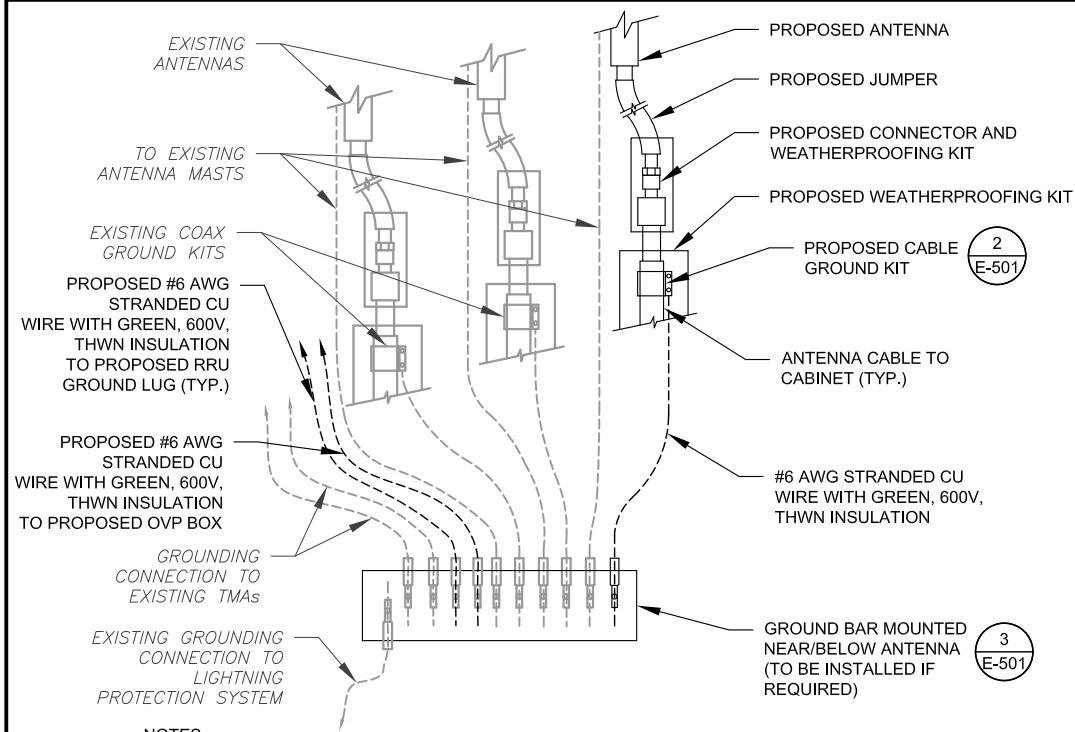


DATE DRAWN:	08/20/21
ATC JOB NO:	13701314
CUSTOMER ID:	COLLINSVILLE CT
CUSTOMER #:	469353

**CONSTRUCTION  
DETAILS**

SHEET NUMBER:	REVISION:
<b>C-501</b>	<b>0</b>

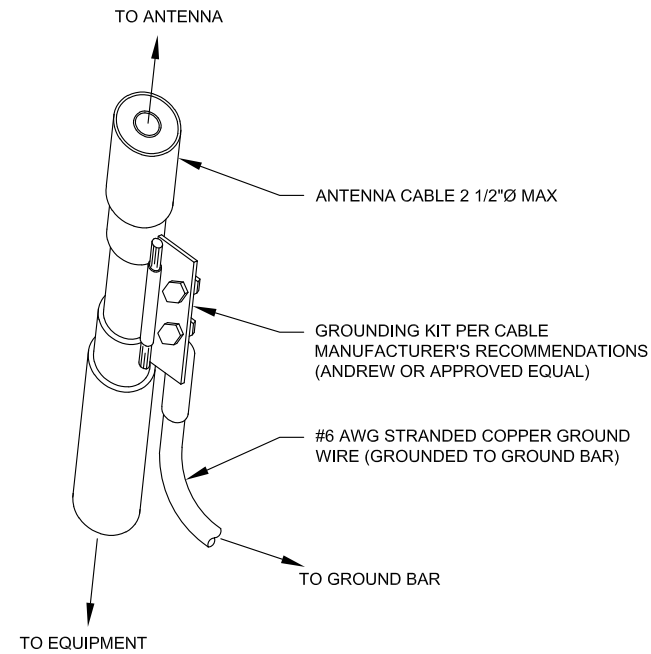
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**NOTES:**

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

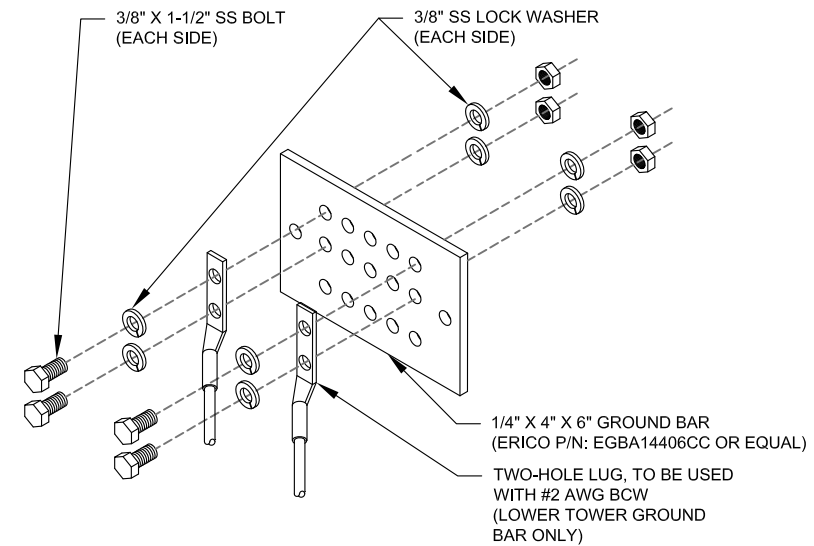
**1** TYPICAL ANTENNA GROUNDING DIAGRAM  
SCALE: N.T.S.



**GROUND KIT NOTES:**

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

**2** CABLE GROUND KIT CONNECTION DETAIL  
SCALE: N.T.S.



**GROUND BAR NOTES:**

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

**3** TOWER GROUND BAR DETAIL  
SCALE: N.T.S.



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REV.	DESCRIPTION	BY	DATE
A	PRELIM	LJS	07/23/21
0	FOR CONSTRUCTION	BIW	08/20/21

ATC SITE NUMBER:  
**411259**

ATC SITE NAME:  
**CT COLLINSVILLE CAC 802816 CT**

VERIZON SITE NAME:  
**COLLINSVILLE CT**

SITE ADDRESS:  
 450 ALBANY TURNPIKE  
 COLLINSVILLE, CT 06022

SEAL:

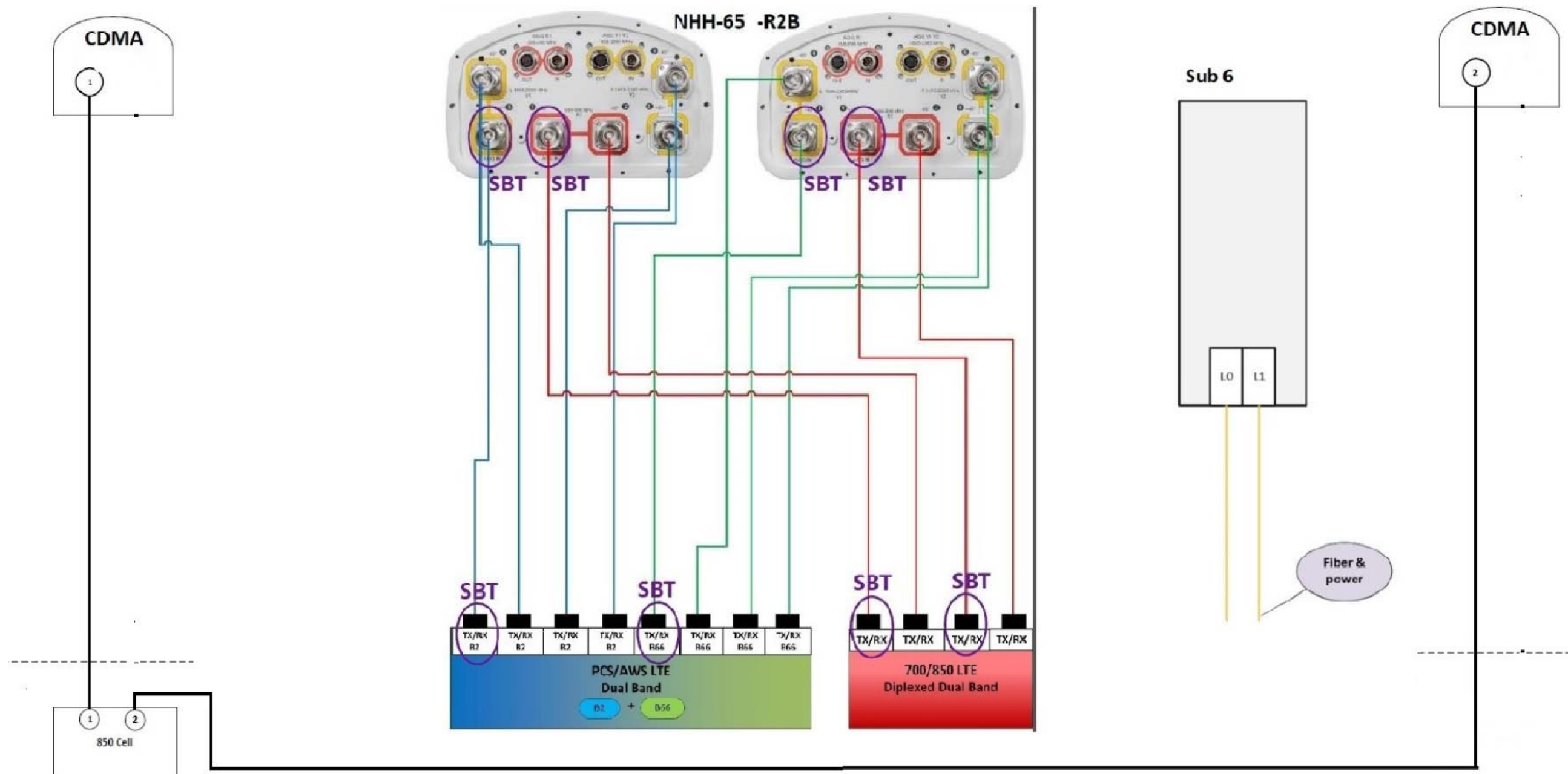


DATE DRAWN:	08/20/21
ATC JOB NO:	13701314
CUSTOMER ID:	COLLINSVILLE CT
CUSTOMER #:	469353

**GROUNDING DETAILS**

SHEET NUMBER:	REVISION:
<b>E-501</b>	<b>0</b>

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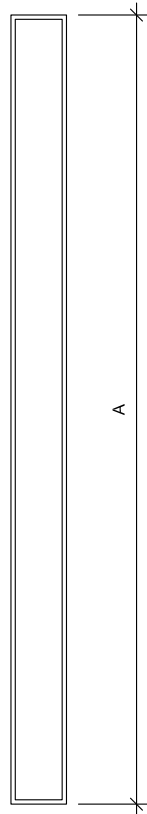
1 PLUMBING DIAGRAM  
SCALE: NOT TO SCALE

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

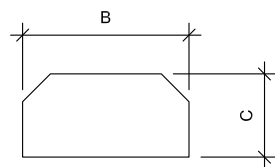
SUPPLEMENTAL

SHEET NUMBER:  
**R-601**

REVISION:  
**0**



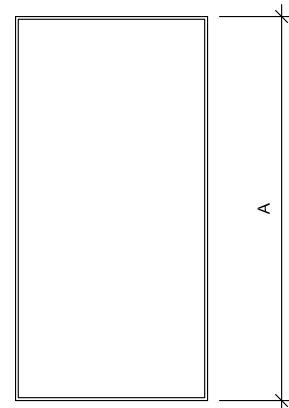
FRONT VIEW



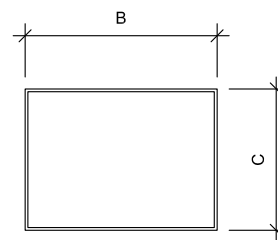
TOP VIEW

**1** ANTENNA SPECIFICATIONS  
FOR ILLUSTRATIVE PURPOSES ONLY - NOT TO SCALE

ANTENNA SPECIFICATIONS				
ANTENNA MODEL	A	B	C	WEIGHT (LBS)
MT6407-77A	35.1"	16.1"	5.5"	81.6
NHH-65B-R2B	72.0"	11.9"	7.1"	43.7



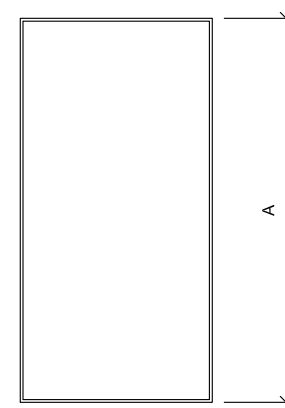
FRONT VIEW



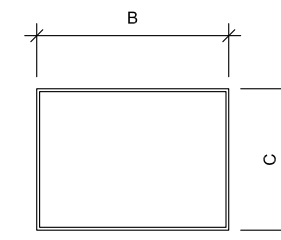
TOP VIEW

**2** RRU SPECIFICATIONS  
FOR ILLUSTRATIVE PURPOSES ONLY - NOT TO SCALE

RRU SPECIFICATIONS				
RRU MODEL	A	B	C	WEIGHT (LBS)
RADIO 4449 B71 B85A	15.0"	13.2"	10.5"	75.0
RRUS 4415 B25	16.5"	13.4"	5.9"	46



FRONT VIEW



TOP VIEW

**3** BOB SPECIFICATIONS  
FOR ILLUSTRATIVE PURPOSES ONLY - NOT TO SCALE

BOB SPECIFICATIONS				
BOB MODEL	A	B	C	WEIGHT (LBS)
RRFDC-3315-PF-48	19.2"	15.7"	10.3"	26.9

SUPPLEMENTAL

SHEET NUMBER: <b>R-602</b>	REVISION: <b>0</b>
-------------------------------	-----------------------



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

Mount Post-Modification Analysis Report  
 (1) 13.08-Ft Platform

July 7, 2021  
 Site ID: 469353-VZW / COLLINSVILLE CT  
 Page | 4

## Post-Mod Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10084435  
 Maser Consulting Connecticut Project #: 21777759A

July 7, 2021

### Site Information

Site ID: 469353-VZW / COLLINSVILLE CT  
 Site Name: COLLINSVILLE CT  
 Carrier Name: Verizon Wireless  
 Address: 650 Albany Turnpike  
 Collinsville, Connecticut 06022  
 Hartford County  
 Latitude: 41.850564°  
 Longitude: -72.948725°

### Structure Information

Tower Type: 120-Ft Self Support  
 Mount Type: 13.08-Ft Platform

FUZE ID # 16271924

### Analysis Results

Platform: 31.7% 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: Frank Centone



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)

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	19.6%	Pass
Standoff Horizontal	31.7%	Pass
Antenna Pipe	30.5%	Pass
Dual Antenna Pipe	24.7%	Pass
OVP Pipe	14.3%	Pass
MOD Kicker	16.3%	Pass
MOD Support Rail	13.8%	Pass
MOD Corner Bracket	21.3%	Pass
Connection Check	27.8%	Pass
Structure Rating – (Controlling Utilization of all Components)		31.7%

### Recommendation:

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

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

### Attachments:

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



## PROJECT NOTES

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



## MOUNT MODIFICATION DRAWINGS EXISTING 13.08' PLATFORM

SITE NAME: COLLINSVILLE CT  
SITE NUMBER: 469353

650 ALBANY TURNPIKE  
COLLINSVILLE, CT 06022  
HARTFORD COUNTY

PROJECT INFORMATION	
<b>SITE INFORMATION</b>	
LATITUDE:	41.850564° N
LONGITUDE:	72.948725° W
JURISDICTION:	HARTFORD COUNTY
<b>APPLICANT/LESSEE</b>	
COMPANY:	VERIZON WIRELESS
<b>CLIENT REPRESENTATIVE</b>	
COMPANY:	VERIZON WIRELESS
ADDRESS:	118 FLANDERS ROAD, THIRD FLOOR
CITY, STATE, ZIP:	WESTBOROUGH, MA 01581
CONTACT:	ANDREW CANDIELLO
EMAIL:	ANDREW.CANDIELLO@VERIZONWIRELESS.COM
<b>PROJECT MANAGER</b>	
COMPANY:	MASER CONSULTING CONNECTICUT
CONTACT:	PETER ALBANO
PHONE:	856-797-0412
E-MAIL:	PETER.ALBANO@COLLIERSENGINEERING.COM

SHEET INDEX	
SHEET	DESCRIPTION
T-1	TITLE SHEET
S-1	BILL OF MATERIALS
S-2	MODIFICATION NOTES
S-3	MODIFICATION NOTES
S-4	MODIFICATION DETAILS
S-5	MODIFICATION DETAILS
S-6	MODIFICATION DETAILS
S-7	MOUNT PHOTOS
	SPECIFICATION SHEETS

CONTRACTOR PMI REQUIREMENTS	
PMI LOCATION:	HTTPS://PMI.VZWSMART.COM
SMART TOOL PROJECT #:	10084435
VZW LOCATION CODE (PSLC):	16271924
FUZE ID:	469353

REFERENCED DOCUMENTS	
	FAILING MOUNT ANALYSIS REPORT
SMART TOOL PROJECT #:	10058950
MASER CONSULTING PROJECT #:	21777759A
ANALYSIS DATE:	7/2/2021

PMI REQUIREMENTS EMBEDDED WITHIN MOUNT MODIFICATION REPORT

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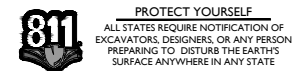
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  - NORTH CAROLINA
  - COLORADO
  - SOUTH CAROLINA

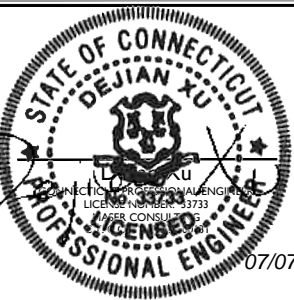
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469353

650 ALBANY TURNPIKE  
COLLINSVILLE, CT 06022  
HARTFORD COUNTY

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

SHEET TITLE:  
TITLE SHEET

SHEET NUMBER:  
T-1

# BILL OF MATERIALS

VZWSMART KITS				
QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES
1	VZWSMART	VZWSMART-PLK5	KICKER KIT	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET S-2
1		VZWSMART-PLK7	MONOPOLE COLLAR MOUNT ASSEMBLY	
3		VZWSMART-PLK3	SUPPORT RAIL CORNER BRACKET	
12		VZWSMART-MSK1	CROSSOVER PLATE	

OTHER REQUIRED PARTS				
QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES
3	-	-	156" LONG, P2.5 STD	GALVANIZED
2	-	-	42" LONG, P2.0 STD	GALVANIZED
3	-	-	30" LONG, L3X3X1/4	GALVANIZED, CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET S-2.
5	SITE PRO 1	SQCX4-K	CROSSOVER PLATE KIT W/ SQUARE U-BOLTS AND STD. U-BOLTS	OR EOR APPROVED EQUAL, CONTACT MASER CONSULTING FOR APPROVAL OF SUBSTITUTION
3	-	-	102" LONG, P2.5 STD	GALVANIZED

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

VZWSMART KITS - APPROVED VENDORS	
<b>COMMSCOPE</b>	
CONTACT	SALVADOR ANGUIANO
PHONE	(817) 304-7492
EMAIL	SALVADOR.ANGUIANO@COMMSCOPE.COM
WEBSITE	WWW.COMMSCOPE.COM
<b>METROSITE FABRICATORS, LLC</b>	
CONTACT	KENT RAMEY
PHONE	(706) 335-7045 (O), (706) 982-9788 (M)
EMAIL	KENT@METROSITELLC.COM
WEBSITE	METROSITEFABRICATORS.COM
<b>PERFECTVISION</b>	
CONTACT	WIRELESS SALES
PHONE	(844) 887-6723
EMAIL	WWW.PERFECT-VISION.COM
WEBSITE	WIRELESSALES@PERFECT-VISION.COM
<b>SABRE INDUSTRIES, INC.</b>	
CONTACT	ANGIE WELCH
PHONE	(866) 428-6937
EMAIL	AKWELCH@SABREINDUSTRIES.COM
WEBSITE	WWW.SABRESITESOLUTIONS.COM
<b>SITE PRO 1</b>	
CONTACT	PAULA BOSWELL
PHONE	(972) 236-9843
EMAIL	PAULA.BOSWELL@VALMONT.COM
WEBSITE	WWW.SITEPRO1.COM

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



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SHEET TITLE:  
**BILL OF MATERIALS**

SHEET NUMBER:  
**S-1**

**GENERAL NOTES**

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

**DESIGN LOADS**

- WIND LOADS
- a. BASIC WIND SPEED (3 SECOND GUST), V = 115 MPH
  - b. EXPOSURE CATEGORY B
  - c. TOPOGRAPHIC CATEGORY I
  - d. MEAN BASE ELEVATION (AMSL) = 491.78'

- ICE LOADS
- a. ICE WIND SPEED (3 SECOND GUST), V = 50 MPH
  - b. ICE THICKNESS = 1.50 IN

- SEISMIC LOADS
- a. SEISMIC DESIGN CATEGORY B
  - b. SHORT TERM MCER GROUND MOTION, S<sub>s</sub> = .174
  - c. LONG TERM MCER GROUND MOTION, S<sub>l</sub> = .054

**STRUCTURAL STEEL**

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

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

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

PROTECT STEEL BY ANY OTHER MEANS.

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



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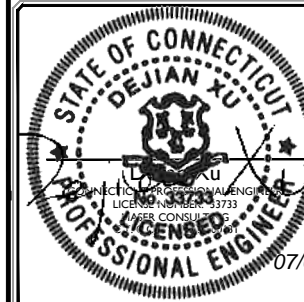
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SHEET TITLE:  
**MODIFICATION NOTES**

SHEET NUMBER:  
**S-2**

**MODIFICATION INSPECTION NOTES**

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

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

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

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

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

**MI INSPECTOR**

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

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

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

**GENERAL CONTRACTOR**

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

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

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

**RECOMMENDATIONS**

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

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

**CORRECTION OF FAILING MI'S**

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

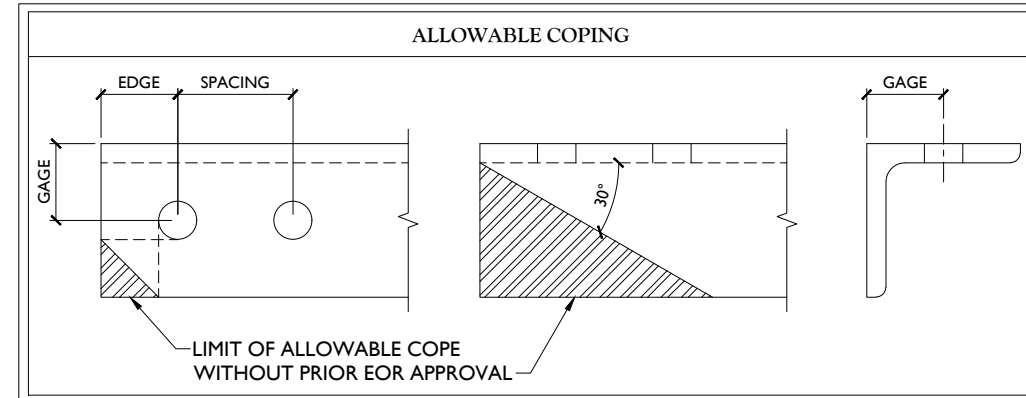
- CORRECT FAILING ISSUES TO COMPLY WITH THE SPECIFICATIONS CONTAINED IN THE ORIGINAL CONTRACT DOCUMENTS AND COORDINATE A SUPPLEMENT MI.

**REQUIRED PHOTOS**

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

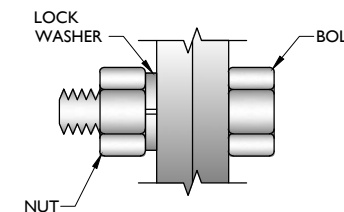
- PRE-CONSTRUCTION GENERAL SITE CONDITION
- PHOTOGRAPHS DURING THE REINFORCEMENT MODIFICATION CONSTRUCTION/ERECTION AND INSPECTION
  - RAW MATERIALS
  - PHOTOS OF ALL CRITICAL DETAILS
  - FOUNDATION MODIFICATIONS
  - WELD PREPARATION
  - BOLT INSTALLATION
  - FINAL INSTALLED CONDITION
  - SURFACE COATING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

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



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

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



**TYP. BOLT ASSEMBLY**

**NOTES:**

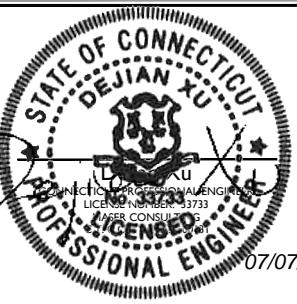
- ALL DIMENSIONS REPRESENTED IN THE ABOVE TABLES ARE AISC MINIMUM REQUIREMENTS. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ENGINEER IF DISTANCES ARE LESS THAN THOSE PROVIDED.
- THE DIMENSIONS PROVIDED ARE MINIMUM REQUIREMENTS. ACTUAL DIMENSIONS OF PROPOSED MEMBERS WITHIN THESE DRAWINGS MAY VARY FROM THE AISC 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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SHEET TITLE:  
**MODIFICATION NOTES**

SHEET NUMBER:  
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SCALE:	AS SHOWN	JOB NUMBER:	2177759A
REV	DATE	DESCRIPTION	DRAWN BY / CHECKED BY
0	7/7/2021	ISSUED FOR CONSTRUCTION	FAC. / DX.



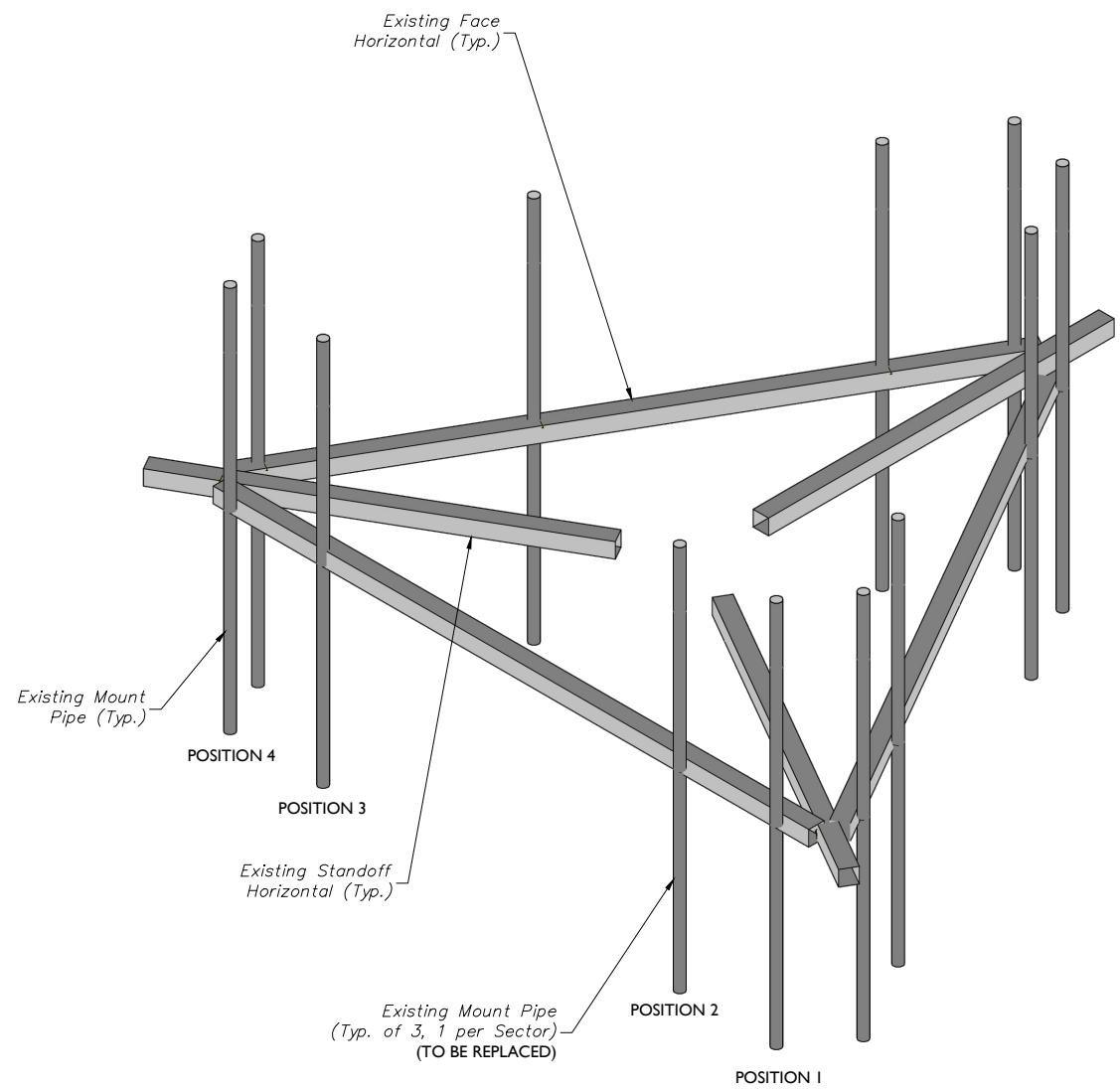
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**SITE NAME:**  
 COLLINSVILLE CT  
 469353  
 650 ALBANY TURNPIKE  
 COLLINSVILLE, CT 06022  
 HARTFORD COUNTY

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

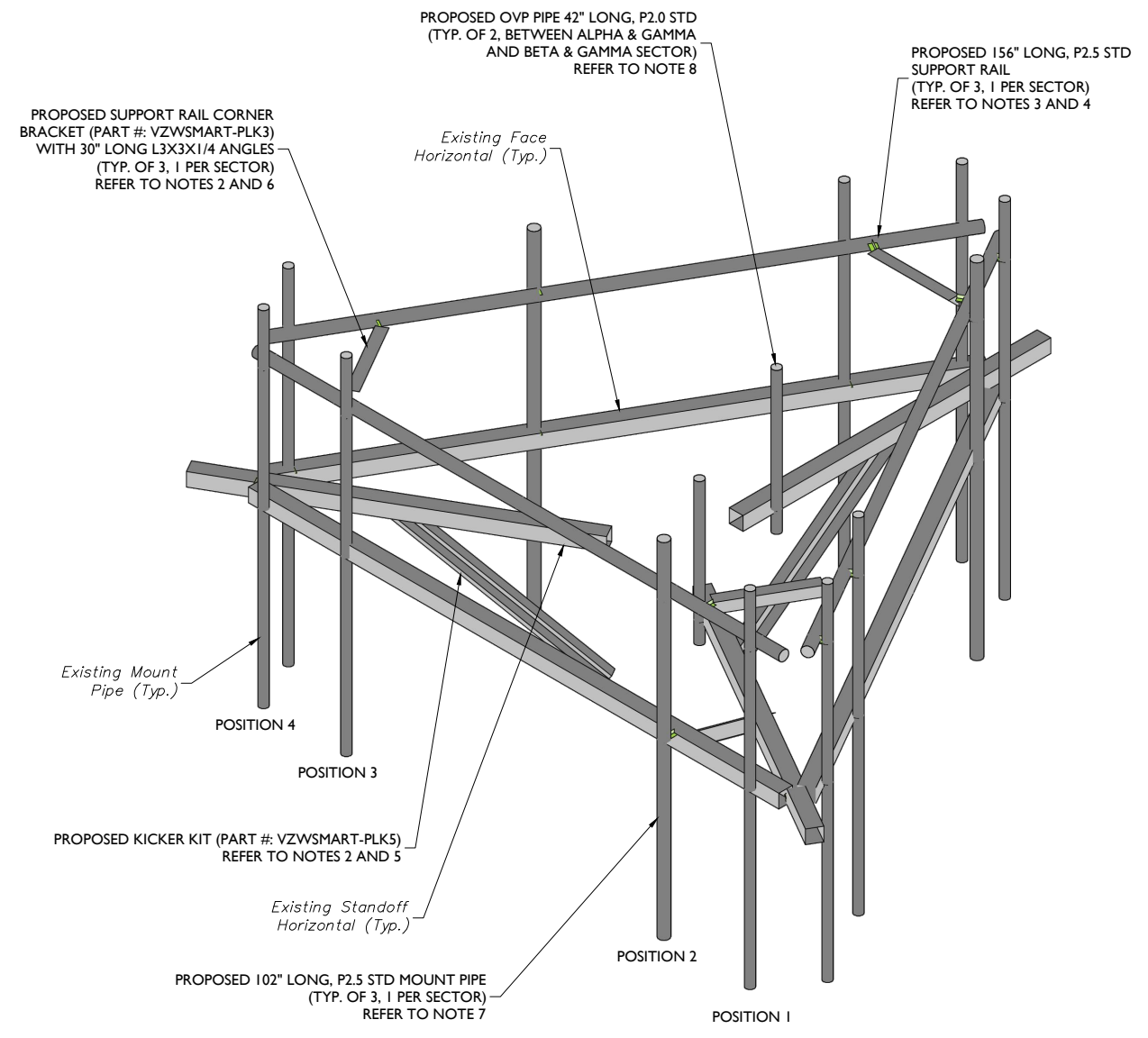
SHEET TITLE:  
**MODIFICATION DETAILS**

SHEET NUMBER:  
**S-4**



**1** EXISTING PLATFORM ISOMETRIC VIEW  
 SCALE : N.T.S.

- STRUCTURAL NOTES:**
- PER THE MOUNT MAPPING COMPLETED BY STRUCTURAL COMPONENTS, LLC ON 4/13/2021, THE SAFETY CLIMB AND CLIMBING FACILITIES UP TO THE VERIZON MOUNT ELEVATION (118'-6") ARE IN GOOD CONDITION. MASER DOES NOT WARRANT THIS INFORMATION.
  - 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.



**2** PROPOSED PLATFORM ISOMETRIC VIEW  
 SCALE : N.T.S.

- MODIFICATION NOTES:**
- MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.
  - CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET S-2.
  - RADIO AND/OR TME POSITIONS SHALL BE ADJUSTED VERTICALLY AS NEEDED IN ORDER TO ACHIEVE INSTALLATION OF HORIZONTAL AS SHOWN. EOR SHALL BE NOTIFIED IF EQUIPMENT NEEDS TO BE RELOCATED TO ANOTHER MOUNT PIPE.
  - CONNECT NEW HORIZONTAL TO ALL VERTICAL MOUNT PIPES WITH CROSSOVER PLATES (PART #: VZWSMART-MSK1).
  - CONNECT OTHER END OF KICKER KIT TO MONOPOLE COLLAR MOUNT ASSEMBLY (PART #: VZWSMART-PLK7).
  - CONTRACTOR SHALL CONNECT PROPOSED L3X3X1/4 ANGLES TO CORNER BRACKETS USING THE PROVIDED (8) 5/8" DIA. BOLTS, (4) BOLTS PER CONNECTION.
  - CONNECT NEW MOUNT PIPE TO EXISTING HORIZONTAL WITH CROSSOVER PLATES (PART #: SITE PRO 1 - SQCX4-K, OR EOR APPROVED EQUAL).
  - CONNECT NEW OVP PIPE TO EXISTING STANDOFF HORIZONTAL WITH CROSSOVER PLATES (PART #: SITE PRO 1 - SQCX4-K, OR EOR APPROVED EQUAL).

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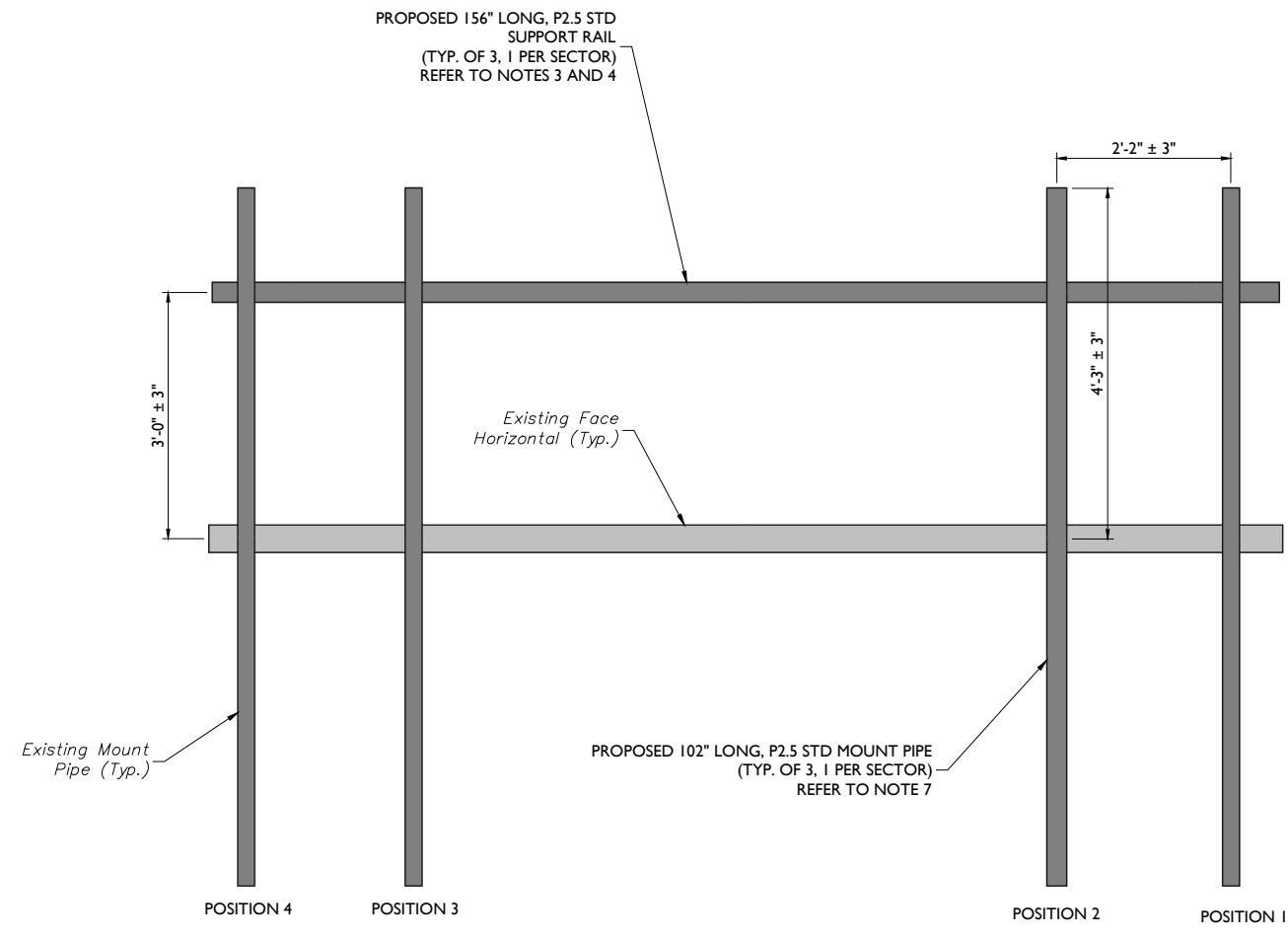
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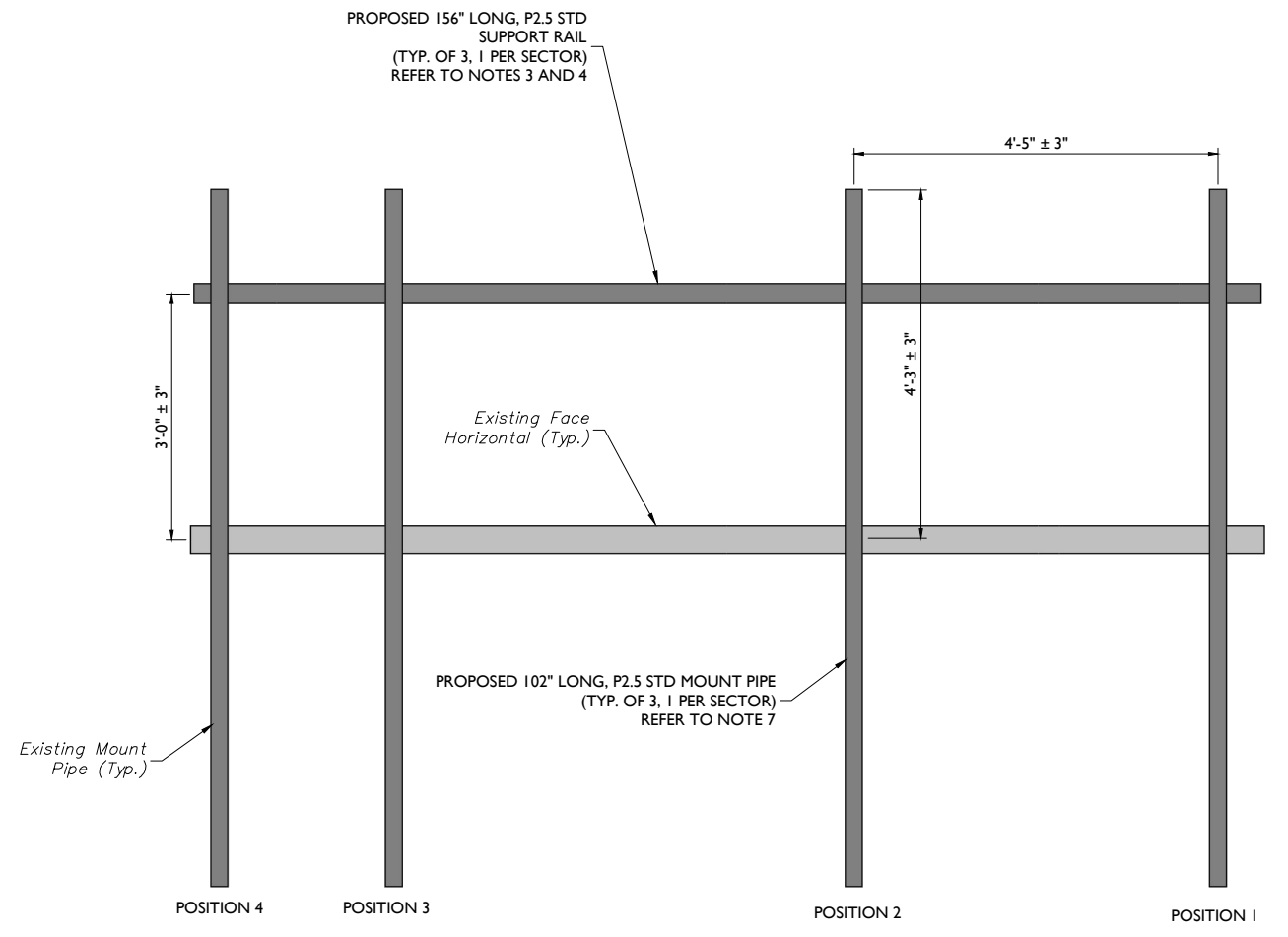
**MT. LAUREL OFFICE**  
 2000 Madison Drive  
 Suite 100  
 Mount Laurel, NJ 08054  
 Phone: 856.797.0412  
 Fax: 856.722.1120

SHEET TITLE:  
**MODIFICATION DETAILS**

SHEET NUMBER:  
**S-5**



**1** PROPOSED FRONT ELEVATION (ALPHA & GAMMA SECTOR)  
 SCALE : N.T.S.



**2** PROPOSED FRONT ELEVATION (BETA SECTOR)  
 SCALE : N.T.S.

**MODIFICATION NOTES:**

- MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.
- CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET S-2.
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- CONNECT NEW MOUNT PIPE TO EXISTING HORIZONTAL WITH CROSSOVER PLATES (PART #: SITE PRO I - SQCX4-K, OR EOR APPROVED EQUAL).
- CONNECT NEW OVP PIPE TO EXISTING STANDOFF HORIZONTAL WITH CROSSOVER PLATES (PART #: SITE PRO I - SQCX4-K, OR EOR APPROVED EQUAL).



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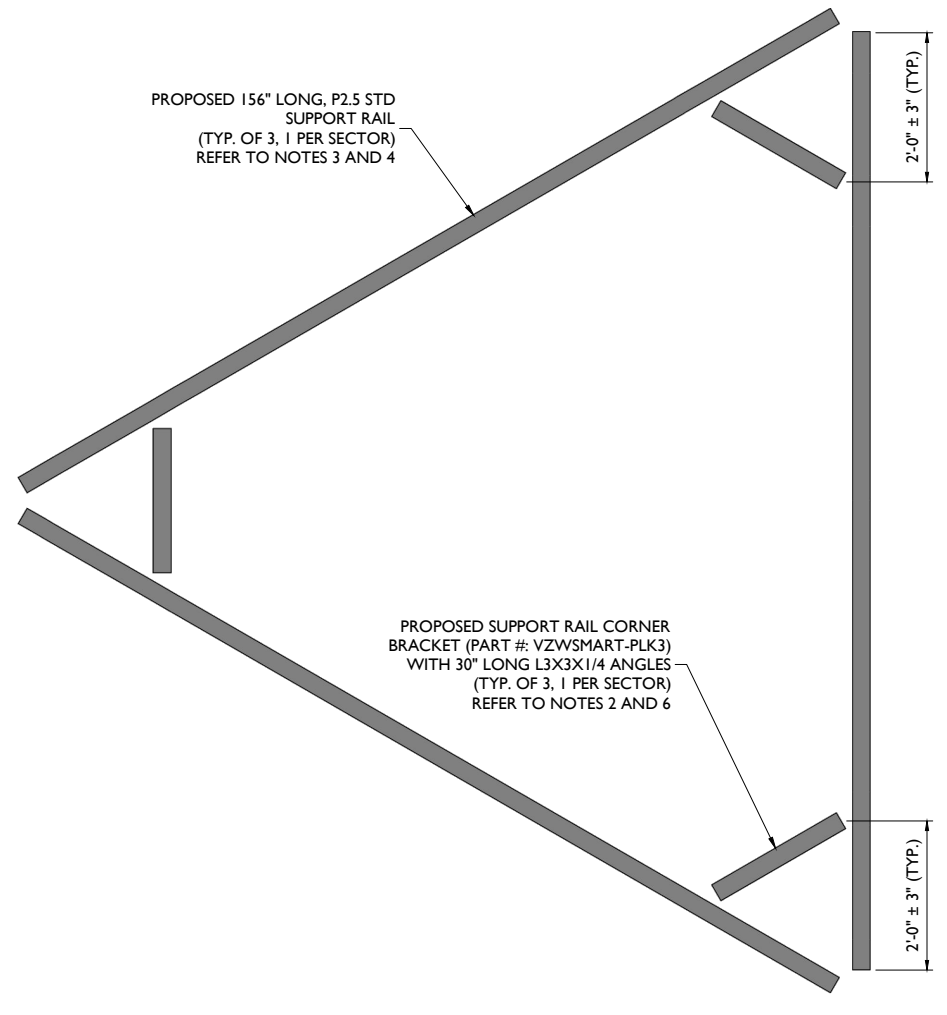
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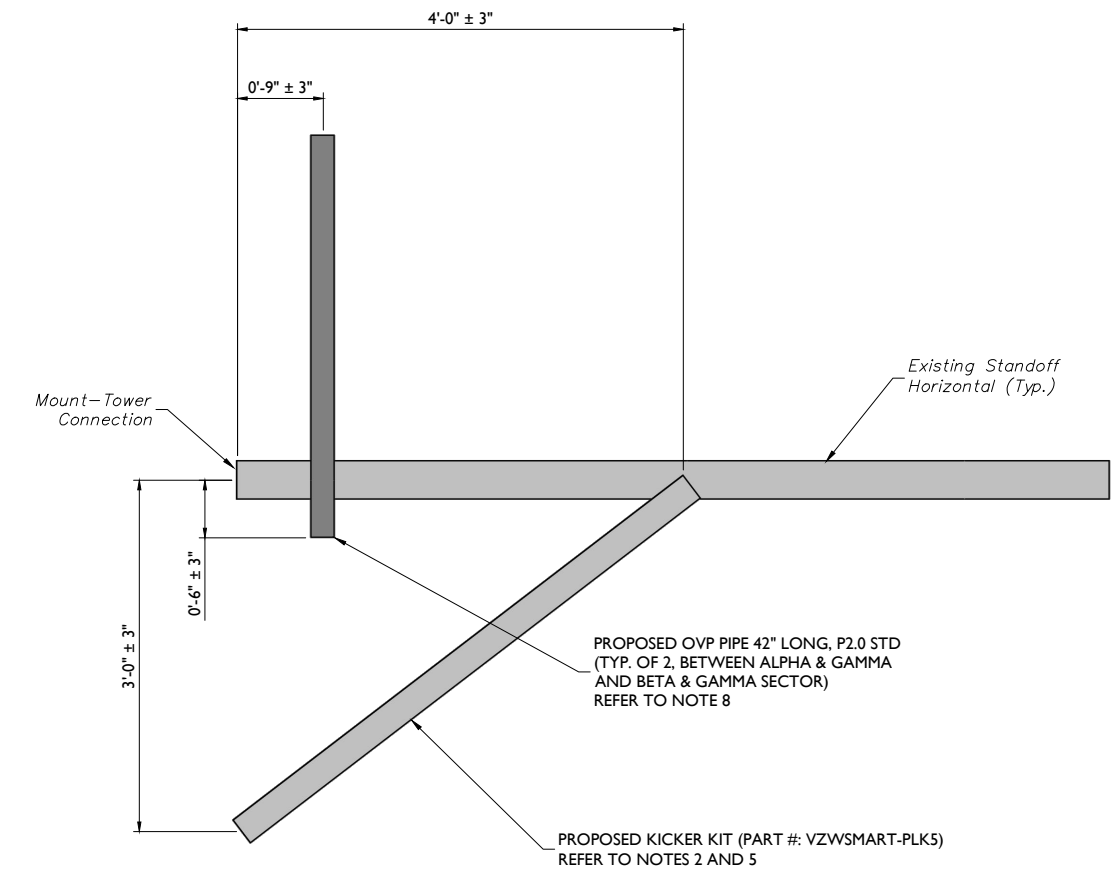
**MT. LAUREL OFFICE**  
 2000 Mattamoras Drive  
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 Mount Laurel, NJ 08054  
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 Fax: 856.722.1120

SHEET TITLE:  
**MODIFICATION DETAILS**

SHEET NUMBER:  
**S-6**



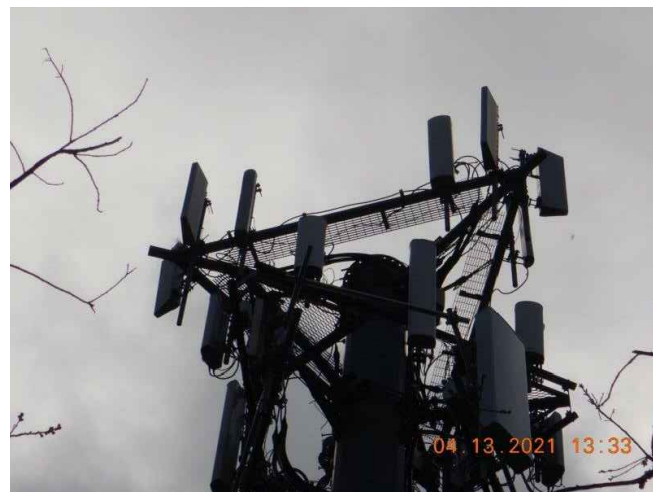
**1** PROPOSED PLAN VIEW  
 SCALE: N.T.S.



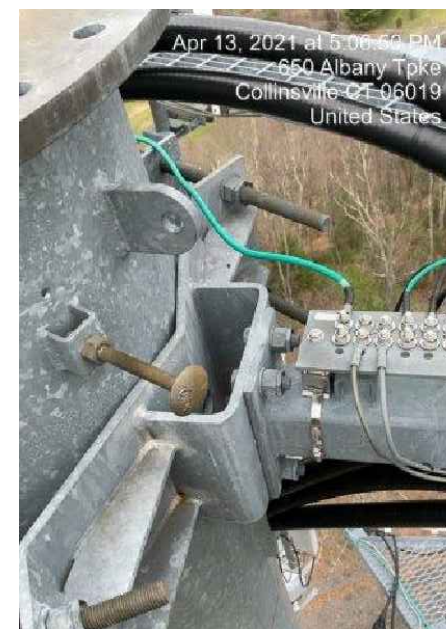
**2** PROPOSED SIDE ELEVATION (TYP. ALL SECTORS)  
 SCALE: N.T.S.

**MODIFICATION NOTES:**

- MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.
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- CONNECT NEW OVP PIPE TO EXISTING STANDOFF HORIZONTAL WITH CROSSOVER PLATES (PART #: SITE PRO I - SQCX4-K, OR EOR APPROVED EQUAL).



MOUNT PHOTO 1



MOUNT PHOTO 2



MOUNT PHOTO 3



MOUNT PHOTO 4

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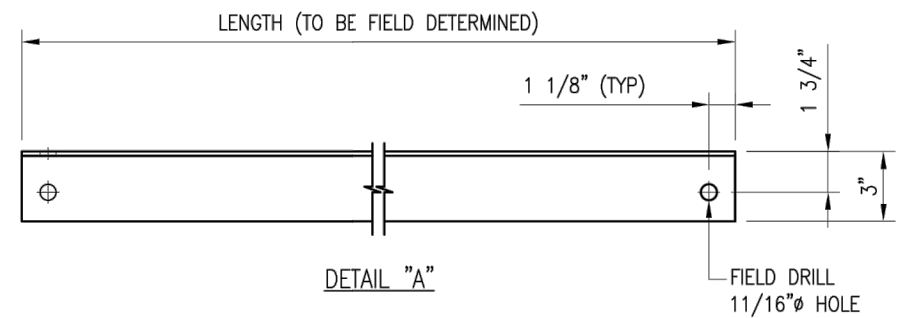
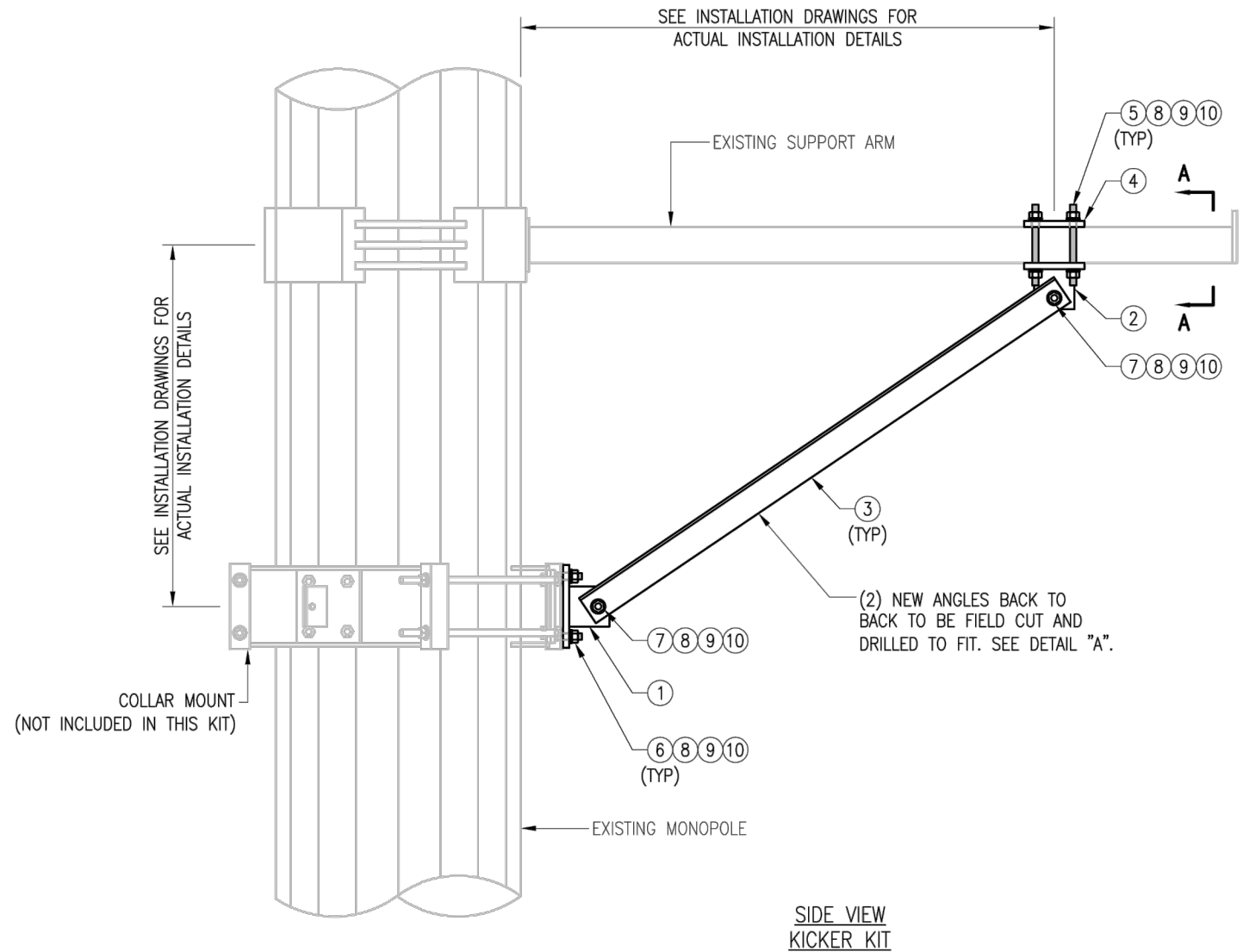
**M** MT. LAUREL OFFICE  
 2000 Millstone Drive  
 Suite 100  
 Mount Laurel, NJ 08054  
 Phone: 856.797.0412  
 Fax: 856.722.1120

SHEET TITLE:  
 MOUNT PHOTOS

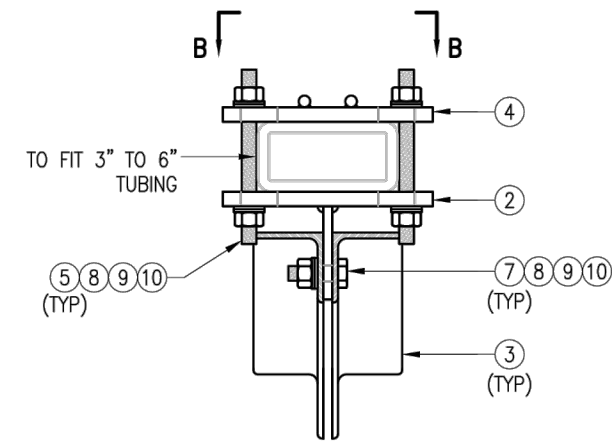
SHEET NUMBER:  
 S-7



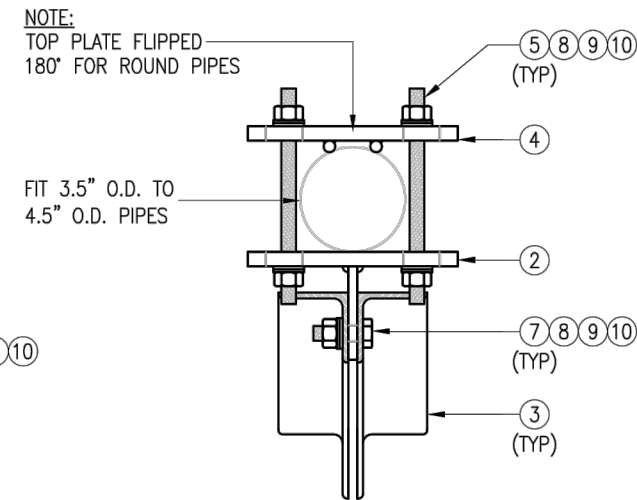
NOTE:  
THE LOCATION OF KICKER AND EXISTING ANTENNA MOUNT SHOWN ON THE DRAWING IS FOR REPRESENTATION PURPOSE ONLY. SEE INSTALLATION DRAWINGS FOR ACTUAL INSTALLATION OF DETAILS.



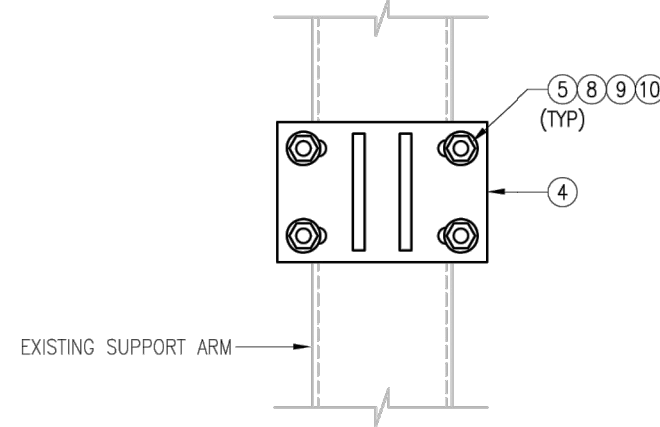
- NOTES:
1. ALL HOLES ARE 11/16" DIA. U.N.O
  2. HOT-DIPPED GALVANIZED PER ASTM A123.
  3. FIT UP TO 6" SQ. TUBING OR 4 1/2" O.D. PIPE



SECTION "A-A"  
RECT. HSS MOUNTING



SECTION "A-A"  
ROUND PIPE MOUNTING



SECTION "B-B"

VZSMART-PLK5 (KICKER KIT)					
ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	3	BRKW-XXX	BRACKET WELDMNT A36	PLK5-F3	43.8
2	3	BRKW-XXXX	BRACKET WELDMNT A36	PLK5-F2	35.7
3	6	L331875-8	L 3" X 3" X 3/16" X 8'-0" A36	PLK5-F4	182.9
4	3	PL-KI	PL 5/8" X 6" X 9" A36	PLK5-F1	29.0
5	12	---	THREADED ROD 5/8" DIA. X 1'-0" F1554-36 HDG	---	---
6	6	---	BOLT 5/8" X 2" A325	---	---
7	12	---	BOLT 5/8" X 2 1/2" A325	---	---
8	42	FW-625	5/8" HDG USS FLAT WASHER	---	3
9	42	LW-625	5/8" HDG LOCK WASHER	---	1
10	42	NUT-625	5/8" HDG HEX NUT	---	5
GALVANIZED WT					291

VzW  
**SMART Tool**<sup>®</sup>  
Vendor

**verizon**<sup>✓</sup>

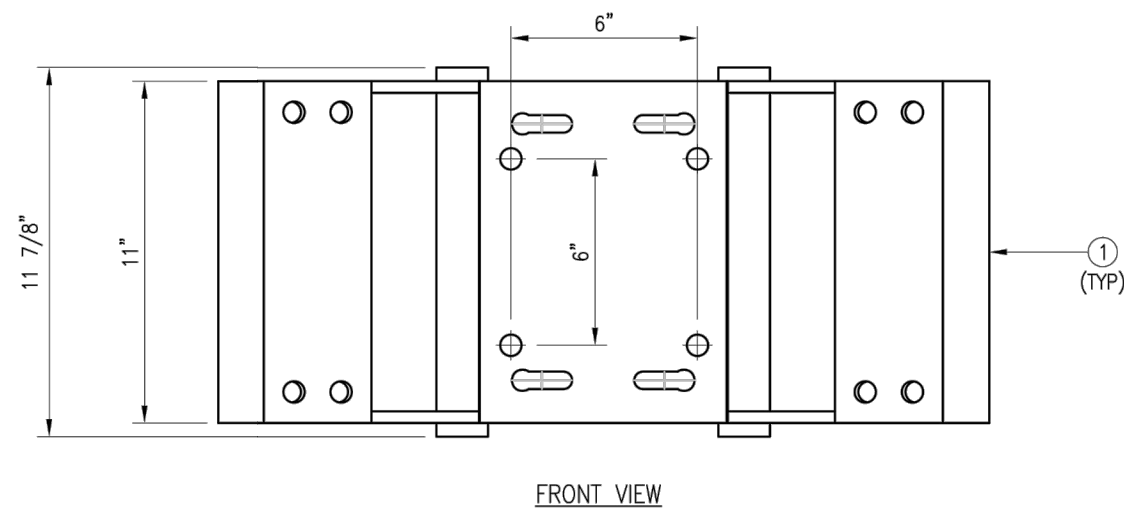
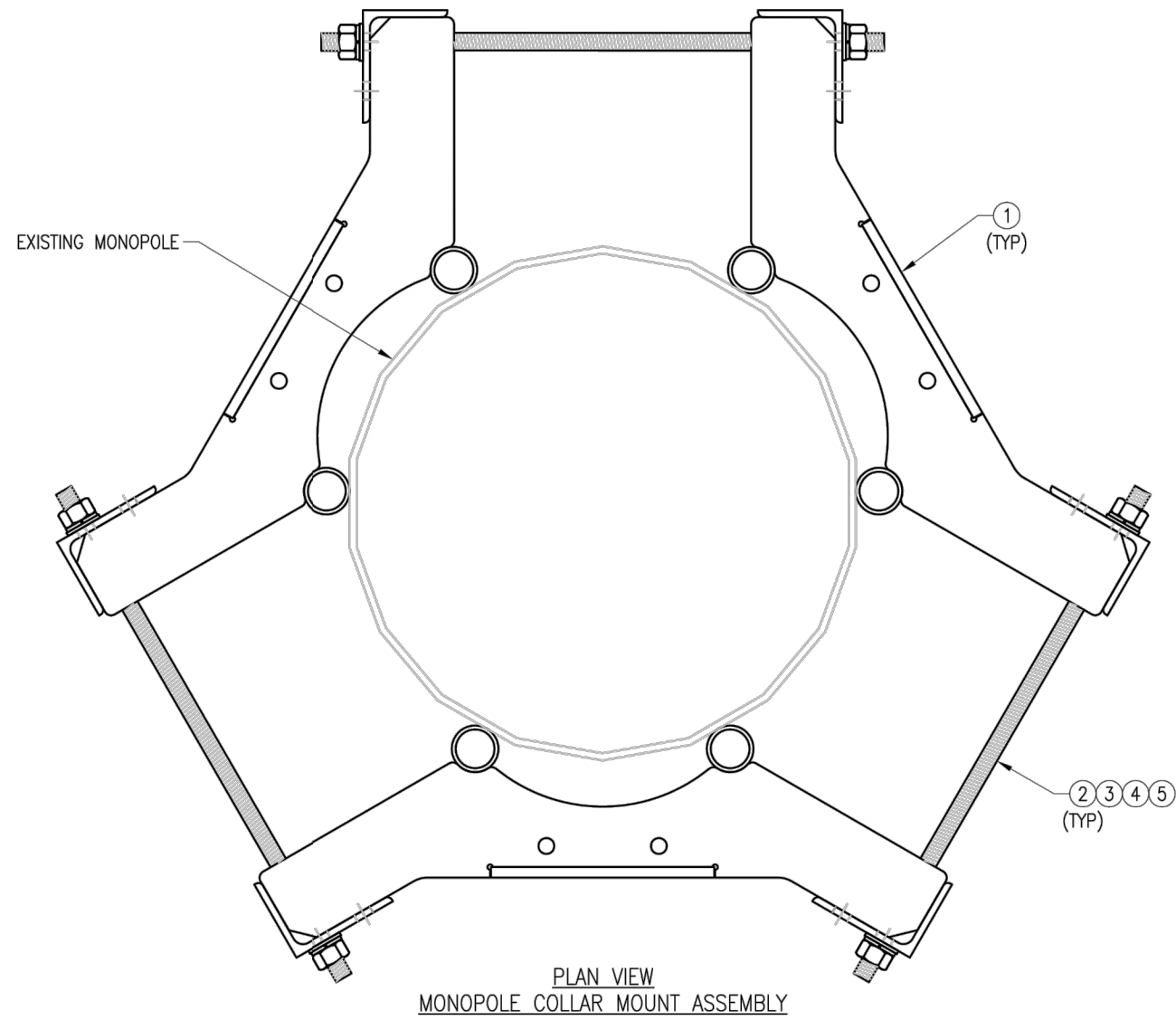
DRAWN BY: MN CHECKED BY: HMA/KW

REV.	DESCRIPTION	BY	DATE
△	FIRST ISSUE	MN	05/08/20
△			
△			
△			

SHEET TITLE:

VZSMART-PLK5  
KICKER KIT

SHEET NUMBER: VZSMART-PLK5 REV #: 0



NOTES:  
 1. FIT 12" TO 45" DIA MONOPOLE.  
 2. HOT-DIPPED GALVANIZED PER ASTM A123.

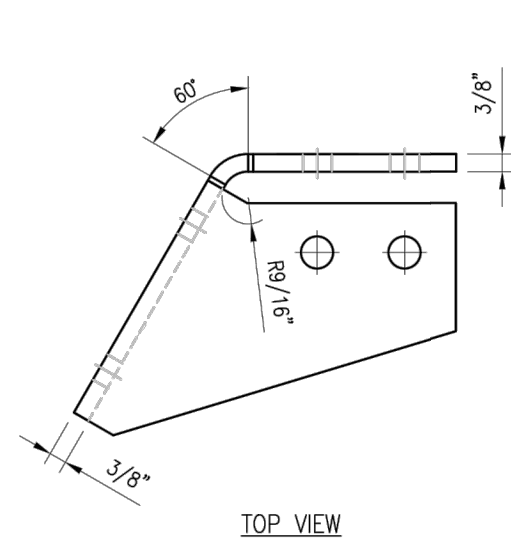
VZSMART-PLK7 (MONOPOLE COLLAR MOUNT ASSEMBLY)					
ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	3	CM-1245	COLLAR MOUNT ASSEMBLY	PLK7-F1	147
2	6	---	THREADED ROD 5/8" X 4'-0" A193-B7	---	---
3	12	FW-625	5/8" HDG USS FLAT WASHER	---	1
4	12	LW-625	5/8" HDG LOCK WASHER	---	0
5	12	NUT-625	5/8" HDG HEX NUT	---	1
GALVANIZED WT					150

DRAWN BY: BT | CHECKED BY: HMA/KW

REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	BT	05/11/20

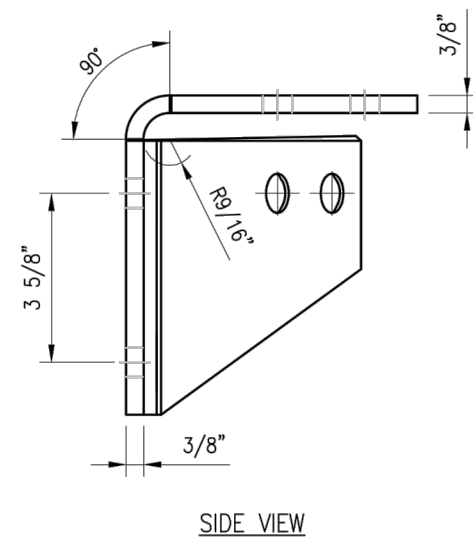
SHEET TITLE:  
 VZSMART-PLK7  
 MONOPOLE COLLAR  
 MOUNT ASSEMBLY

SHEET NUMBER: VZSMART-PLK7 | REV #: 0

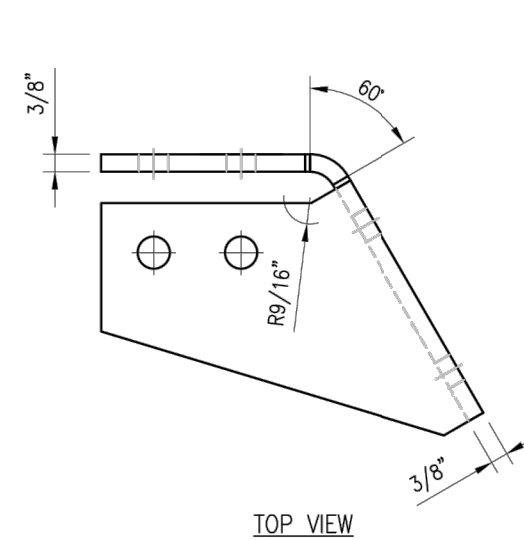


TOP VIEW

CBP-L

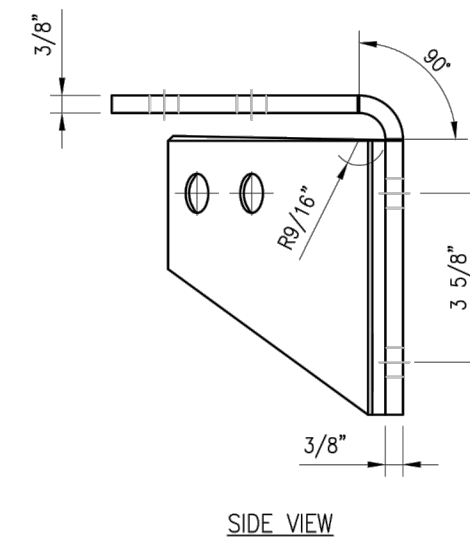


SIDE VIEW



TOP VIEW

CBP-R



SIDE VIEW

**NOTES:**

- HOT-DIPPED GALVANIZED PER ASTM A123.

VZSMART-PLK3 (SUPPORT RAIL CORNER BRACKET)					
ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	1	CBP-L	CORNER BENT PLATE BRACKET	PLK3-F1	9
2	1	CBP-R	CORNER BENT PLATE BRACKET	PLK3-F1	9
3	4	MS02-625-300-500	RU-BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)	RBC-1	5
4	8	---	BOLT 5/8" X 2" A325	---	3
5	16	FW-625	5/8" HDG USS FLAT WASHER	---	1
6	16	LW-625	5/8" HDG LOCK WASHER	---	0
7	16	NUT-625	5/8" HDG HEX NUT	---	2
GALVANIZED WT					30

DRAWN BY: H.R. CHECKED BY: HMA

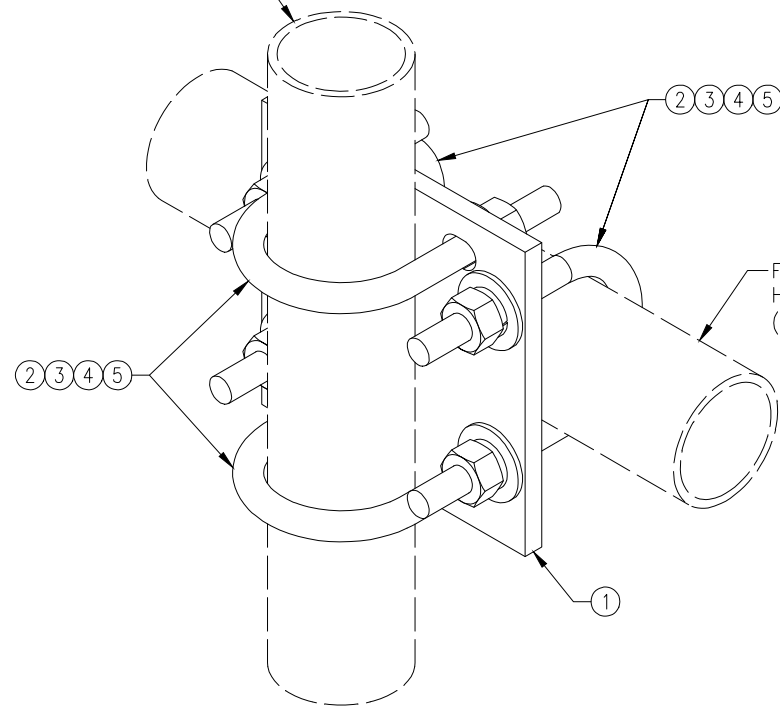
REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	H.R.	05/08/20

SHEET TITLE:  
 VZSMART-PLK3  
 SUPPORT RAIL CORNER  
 BRACKET

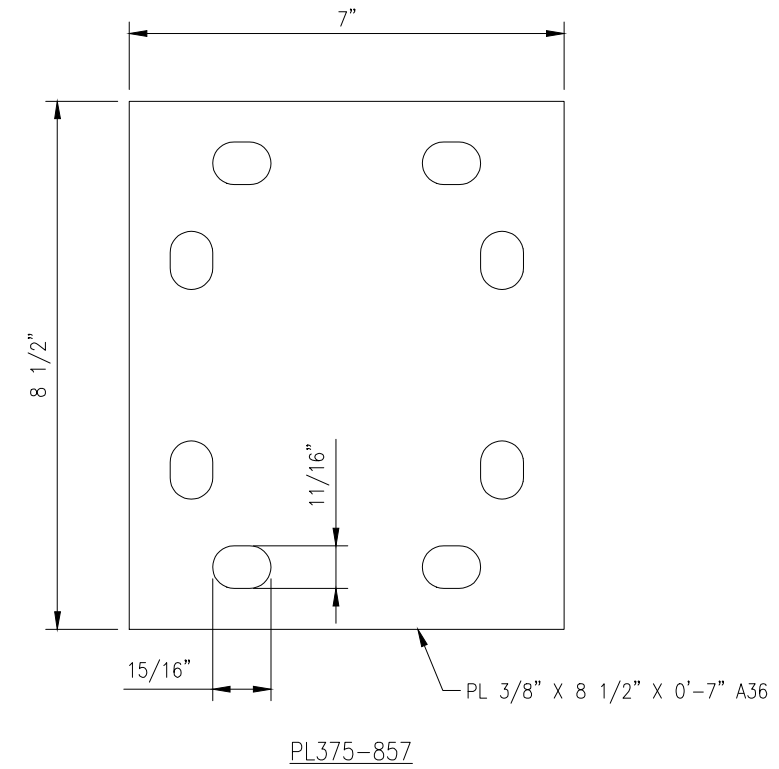
SHEET NUMBER: VZSMART-PLK3 REV #: 0



FITS 2.375" O.D. AND 2.875" O.D.  
 VERTICAL PIPE.  
 (NOT INCLUDED IN THIS KIT)



FITS 2.375" O.D. AND 2.875" O.D.  
 HORIZONTAL PIPE.  
 (NOT INCLUDED IN THIS KIT)



PL375-857

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

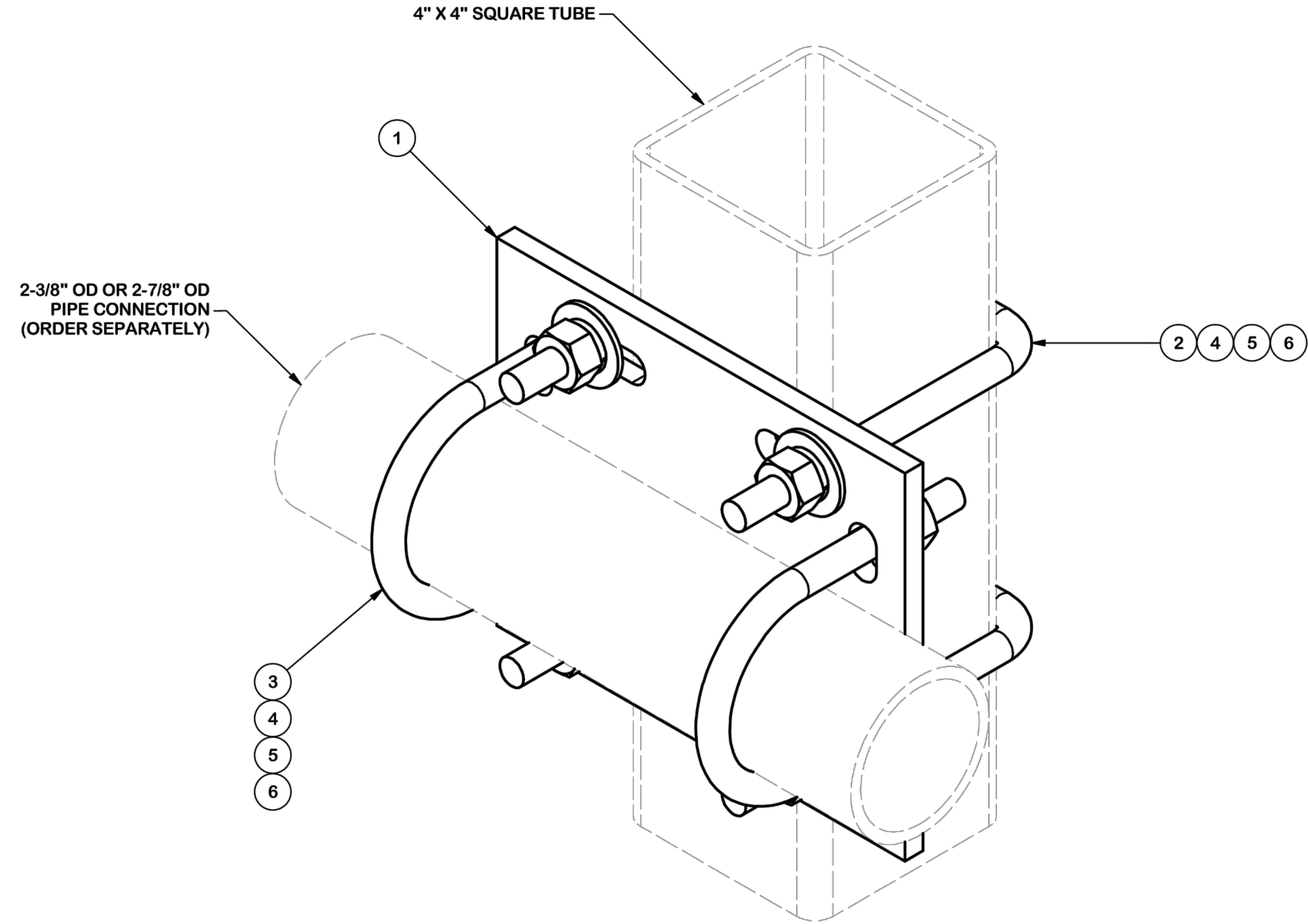
SHEET TITLE:  
 VZSMART-MSK1  
 CROSSOVER PLATE

SHEET NUMBER: VZSMART-MSK1  
 REV #: 0

VZSMART-MSK1 (CROSSOVER PLATE)					
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	MS02-625-300-500	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.

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



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

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DESCRIPTION <b>CROSSOVER PLATE KIT W/ SQUARE U-BOLTS AND STD. U-BOLTS</b>			
CPD NO.	DRAWN BY	ENG. APPROVAL	
	CSL 9/18/2018	3RD PARTY	
CLASS	SUB	DRAWING USAGE	CHECKED BY
87	02	CUSTOMER	BMC 11/12/2018

 <b>A valmont COMPANY</b>	Engineering Support Team: 1-888-753-7446	Locations: New York, NY Atlanta, GA Los Angeles, CA Plymouth, IN Salem, OR Dallas, TX
	PART NO. <b>SQCX4-K</b>	DWG. NO. <b>SQCX4-K</b>