John Coleman, Project Manager
c/o Cellco Partnership d/b/a Verizon Wireless
Centerline Communications, LLC
750 West Center Street, Floor 3
West Bridgewater, MA 02379
Mobile: (240) 615 -7389
JColeman@clinellc.com

November 23, 2021

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

RE: Notice of Exempt Modification // Site: WOLCOTT RD CT (ATC: 274848)
1192 Wolcott Rd., Wolcott, CT 06716-1548
N 41.61803 // W 72.97124

Dear Ms. Bachman:

Cellco Partnership d/b/a Verizon Wireless currently maintains 12 antennas at the 135-ft level on the existing 180-foot SST tower, located at 119 Empire Ave., Meriden, CT. The tower is owned by American Tower. The tower was originally approved by the Council in 1993. Verizon Wireless now intends to remove Nine (9) antenna and install Nine (9) new antenna for the LTE (3700 MHz) replacements for its 5G upgrade. Additionally, Verizon Wireless intends to remove Three (3) RRH's, One (1) OVP and associated cabling and then add Nine (9) RRH's, One (1) OVP and associated cabling; 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 Thomas G. Dunn, Mayor, Building Officer, Peter Parks, and Edward F. Cleary, 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 November 12, 2021 by Dewberry Engineers Inc., a structural analysis dated July 6, 2021 by American Tower Corp., and a structural mount analysis by Maser Consulting Connecticut date October 12, 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 American Tower Corp., dated July 6, 2021 and a structural mount analysis by Maser Consulting Connecticut, dated October 12, 2021, pursuant to certain conditions defined therein. Design and engineering is fully illustrated within final construction drawings, signed and stamped dated November 12, 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,

John Coleman

John Coleman, Project Manager
c/o Cellco Partnership d/b/a Verizon Wireless
Centerline Communications, LLC
750 West Center Street, Floor 3
West Bridgewater, MA 02379
Mobile: (240) 615 -7389
JColeman@clinellc.com

Attachments

cc: Thomas G. Dunn, Mayor - as chief elected official
Peter Parks, Building Officer - as P&Z official
Edward F. Cleary - as Property owner

UPS CampusShip: View/Print Label

1. **Ensure there are no other shipping or tracking labels attached to your package.** Select the Print button on the print dialog box that appears. Note: If your browser does not support this function select Print from the File menu to print the label.

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**
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   Your driver will pickup your shipment(s) as usual.

   Customers without a Daily Pickup
   Take your package to any location of The UPS Store®, UPS Access Point(TM) location, UPS Drop Box, UPS Customer Center, Staples® or Authorized Shipping Outlet near you. Items sent via UPS Return Services(SM) (including via Ground) are also accepted at Drop Boxes. To find the location nearest you, please visit the Resources area of CampusShip and select UPS Locations.
   Schedule a same day or future day Pickup to have a UPS driver pickup all your CampusShip packages.
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BROCKTON ,MA 02301

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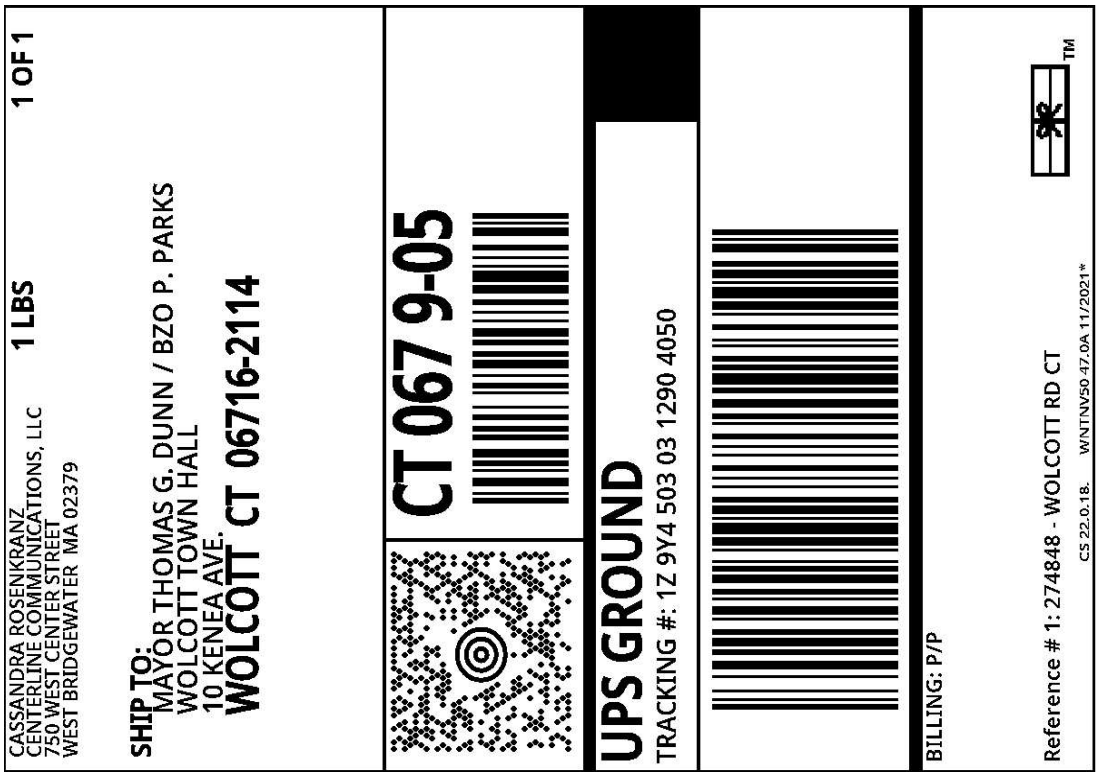

From: UPS
To: John Coleman
Subject: UPS Delivery Notification, Tracking Number 1Z9Y45030312904050
Date: Monday, November 29, 2021 10:10:30 AM

Hello, your package has been delivered.

Delivery Date: Monday, 11/29/2021
Delivery Time: 10:08 AM

CENTERLINE SITE ACQUISITION

Tracking Number:	1Z9Y45030312904050
Ship To:	WOLCOTT TOWN HALL 10 KENEA AVE. WOLCOTT, CT 067162114 US
Number of Packages:	1
UPS Service:	UPS Ground
Package Weight:	1.0 LBS
Reference Number:	274848 - WOLCOTT RD CT

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FOLD HERE

From: UPS
To: John Coleman
Subject: UPS Delivery Notification, Tracking Number 1Z9Y45030314293047
Date: Friday, November 26, 2021 9:58:58 AM

Hello, your package has been delivered.

Delivery Date: Friday, 11/26/2021
Delivery Time: 9:57 AM
Left At: OFFICE
Signed by: FITZGERALD

CENTERLINE SITE ACQUISITION

Tracking Number:	1Z9Y45030314293047
Ship To:	EDWARD F. CLEARY 50 BEACH ROAD WOLCOTT, CT 067161902 US
Number of Packages:	1
UPS Service:	UPS Ground
Package Weight:	1.0 LBS
Reference Number:	274848 - WOLCOTT RD CT

Download the UPS mobile app

TOWN OF WOLCOTT BUILDING PERMIT
OFFICE OF THE BUILDING INSPECTOR

BUILDING PERMIT

AMOUNT PAID

11-28-94
VALIDATION

DATE October 26 19 93 PERMIT NO. 8372

APPLICANT Francis Graziano ADDRESS 95 Melrose Ave, Oakville, CT 06779
(NO.) (STREET) (CONTR'S LICENSE)

PERMIT TO build a tower ( ) STORY NUMBER OF DWELLING UNITS
(TYPE OF IMPROVEMENT) NO. (PROPOSED USE)

AT (LOCATION) Lot 52 Wolcott Road # 1192 ZONING DISTRICT
(NO.) (STREET)

BETWEEN (CROSS STREET) AND (CROSS STREET)

SUBDIVISION LOT BLOCK LOT SIZE

BUILDING IS TO BE 180 FT. WIDE BY FT. LONG BY FT. IN HEIGHT AND SHALL CONFORM IN CONSTRUCTION

TYPE USE GROUP 17-28 BASEMENT WALLS OR FOUNDATION (TYPE)

REMARKS: 180 ft tower

AREA OR VOLUME (CUBIC/SQUARE FEET) ESTIMATED COST $ 70,000.00 PERMIT FEE $ 573.00

OWNER Graziano Bros.
ADDRESS 95 Melrose Ave. Oakville, Ct 06779

BUILDING DEPT. BY

B.

8 L

9 ☐ (Affidavit on reverse side of application to be completed by authorized agent of owner)
local government)

C. COST

	(Omit cents)
10. Cost of improvement	$
To be installed but not included in the above cost	
a. Electrical	
b. Plumbing	
c. Heating, air conditioning	
d. Other (elevator, etc.)	
11. TOTAL COST OF IMPROVEMENT	$

Nonresidential – Describe in detail proposed use of buildings, e.g., food processing plant, machine shop, laundry building at hospital, elementory school, secondary school, college, parochial school, parking garage for department store, rental office building, office building at industrial plant. If use of existing building is being changed, enter proposed use.

Radio Tower & Storage Shed
568.00
5.00 993.00
573.00
420.00
993.00

III. SELECTED CHARACTERISTICS OF BUILDING – *For new buildings and additions, complete Parts E – L; for wrecking, complete only Part J, for all others skip to IV.*

E. PRINCIPAL TYPE OF FRAME
- 30 ☐ Masonry (wall bearing)
- 31 ☐ Wood frame
- 32 ☐ Structural steel
- 33 ☐ Reinforced concrete
- 34 ☐ Other – *Specify*

F. PRINCIPAL TYPE OF HEATING FUEL
- 35 ☐ Gas
- 36 ☐ Oil
- 37 ☐ Electricity
- 38 ☐ Coal
- 39 ☐ Other – *Specify*

G. TYPE OF SEWAGE DISPOSAL
- 40 ☐ Public or private company
- 41 ☐ Private (septic tank, etc.)

H. TYPE OF WATER SUPPLY
- 42 ☐ Public or private company
- 43 ☐ Private (well, cistern)

I. TYPE OF MECHANICAL
Will there be central air conditioning?
- 44 ☐ Yes
- 45 ☒ No

Will there be an elevator?
- 46 ☐ Yes
- 47 ☒ No

J. DIMENSIONS

48. Number of stories	one
49. Total square feet of floor area, all floors, based on exterior dimensions	1024
50. Total land area, sq. ft.	52,206

K. NUMBER OF OFF-STREET PARKING SPACES

51. Enclosed	
52. Outdoors	

L. RESIDENTIAL BUILDINGS ONLY

53. Number of bedrooms	
54. Number of bathrooms – Full	
54. Number of bathrooms – Partial	

FORM NO. BOCA-BP 1969

From: Edna Henderson
To: John Coleman
Subject: RE: [EXTERNAL]CSC FILING REQUIREMENTS / 1192 WOLCOTT ROAD, WOLCOTT, CT
Date: Thursday, November 18, 2021 4:02:30 PM
Attachments: doc01314020211118165237.pdf

Attached is the earliest permit that we came across. We are not sure if this is the original permit or not. Maybe the CSC would have a date for when the first tower was constructed. This permit was c/o'd on 11-28-1994.

From: John Coleman <jcoleman@clinellc.com>
Sent: Thursday, November 18, 2021 2:46 PM
To: Peter Parks <pparks@wolcottct.org>
Cc: Edna Henderson <ehenderson@wolcottct.org>
Subject: [EXTERNAL]CSC FILING REQUIREMENTS / 1192 WOLCOTT ROAD, WOLCOTT, CT

Mr. Parks & Mrs. Henderson,

Centerline Communications working on behalf of Verizon Wireless will be filing with the CSC to obtain their approval. I have accessed the CSC website and the original tower approval filing for this site for is not available. The original filing is not listed under the CSC Website and therefore is needed to complete this filing. I have attached our drawings as reference to the location of the tower and information on what we will be doing there once we have obtained CSC approval and associated permits.

Per CSC requirements for filing I need to either obtain a copy of the original tower approval from your department or obtain a reply to this e-mail that the City of Wolcott no longer has a copy of this approval.

I would greatly appreciate a copy of the original approval if you have one or a response to this e-mail so that we can submit this correction. A copy of this filing is being printed today and will be sent out to you within the next week once I have received the original approval or a response and will be sent via UPS 2nd day delivery. If you have any questions, please feel free to reach out to me at any time.

Thank you and have a nice day.

John Coleman | Project Manager
750 W Center St, Suite 301 | West Bridgewater, MA 02379
Mobile: 240.615.7389
jcoleman@clinellc.com |
https://link.edgepilot.com/s/639e231c/5Rj3a_zevEOM9XIOvJDBEA?

u=http://www.centerlinecommunications.com/

Links contained in this email have been replaced. If you click on a link in the email above, the link will be analyzed for known threats. If a known threat is found, you will not be able to proceed to the destination. If suspicious content is detected, you will see a warning.

AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure	:	**180 ft Self Supported Tower**
ATC Site Name	:	**WOLCOTT RD CT, CT**
ATC Asset Number	:	**274848**
Engineering Number	:	**13669422_C3_03**
Proposed Carrier	:	**VERIZON WIRELESS**
Carrier Site Name	:	**WOLCOTT N CT**
Carrier Site Number	:	**467187**
Site Location	:	**1192 Wolcott Road** **Wolcott, CT 06716-1548** **41.618000,-72.971200**
County	:	**New Haven**
Date	:	**July 6, 2021**
Max Usage	:	**87%**
Result	:	**Pass**

Prepared By:
Kyle MacPetrie
Structural Engineer I

Reviewed By:

COA: PEC.0001553

AMERICAN TOWER®
CORPORATION

Table of Contents

Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 180 ft self supported tower to reflect the change in loading by VERIZON WIRELESS.

Supporting Documents

Tower Drawings	Rohn Eng. File #23963DB, dated November 21, 1988
Foundation Drawing	Rohn Eng. File #23963DB, dated December 5, 1988
Geotechnical Report	Heynen Report #HE-88-718, dated November 22, 1988

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.

Basic Wind Speed:	117 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 1" radial ice concurrent
Code:	ANSI/TIA-222-H / 2015 IBC / 2018 Connecticut State Building Code
Exposure Category:	B
Risk Category:	II
Topographic Factor Procedure:	Method 1
Topographic Category:	1
Spectral Response:	Ss = 0.19, S_1 = 0.05
Site Class:	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. Please include the American Tower site name, site number, and engineering number in the subject line for any questions.

Existing and Reserved Equipment

Elev.[1] (ft)	Qty	Equipment	Mount Type	Lines	Carrier
185.0	1	Andrew DB222-B	Side Arm	(2) 7/8" Coax	AMERICAN MEDICAL RESPONSE
184.0	1	RFS Celwave PD201-7			
182.0	1	RFS PD458-2		(1) 7/8" Coax	CAMPION AMBULANCE SERVICE
180.0	1	Generic 20' Omni	Side Arm	(1) 1 1/4" Coax	UNKNOWN
150.0	1	Generic 20' Omni	Side Arm	(1) 7/8" Coax	
145.0	1	Generic 12' Omni		(1) 1/2" Coax	
135.0	1	Commscope LNX-6514DS-VTM	Sector Frame	(1) 0.41" (10.3mm) LMR-400 (1) 1 5/8" (1.63"-41.3mm) Fiber (11) 1 5/8" Coax	VERIZON WIRELESS
	2	Commscope LNX-8513DS-VTM (39.2 lb)			
	1	Andrew Microwaves VHLPX2-18-2GR			

Equipment to be Removed

Elev.[1] (ft)	Qty	Equipment	Mount Type	Lines	Carrier
135.0	6	RFS FD9R6004/3C-3L	-	(1) 1 5/8" Coax	VERIZON WIRELESS
	3	Alcatel-Lucent RRH2x40-AWS			
	1	Amphenol Antel BXA-171063-8BF-EDIN-X (9.2 lbs)			
	3	Commscope HBXX-6517DS-VTM			
	1	RFS DB-T1-6Z-8AB-0Z			
	3	Antel BXA-70063/6CF_			
	2	RFS APX18-206516L-CT0			

Proposed Equipment

Elev.[1] (ft)	Qty	Equipment	Mount Type	Lines	Carrier
135.0	3	Samsung B2/B66A RRH-BR049	Sector Frame	(1) 1 5/8" (1.63"-41.3mm) Fiber	VERIZON WIRELESS
	3	Samsung B5/B13 RRH-BR04C			
	1	Raycap RCMDC-6627-PF-48			
	3	Samsung MT6407-77A			
	6	JMA Wireless MX06FRO660-03			

[1] Contracted elevations are shown for appurtenances within contracted installation tolerances. Appurtenances outside of contract limits are shown at installed elevations.

Install proposed lines alongside existing VERIZON WIRELESS lines.

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:

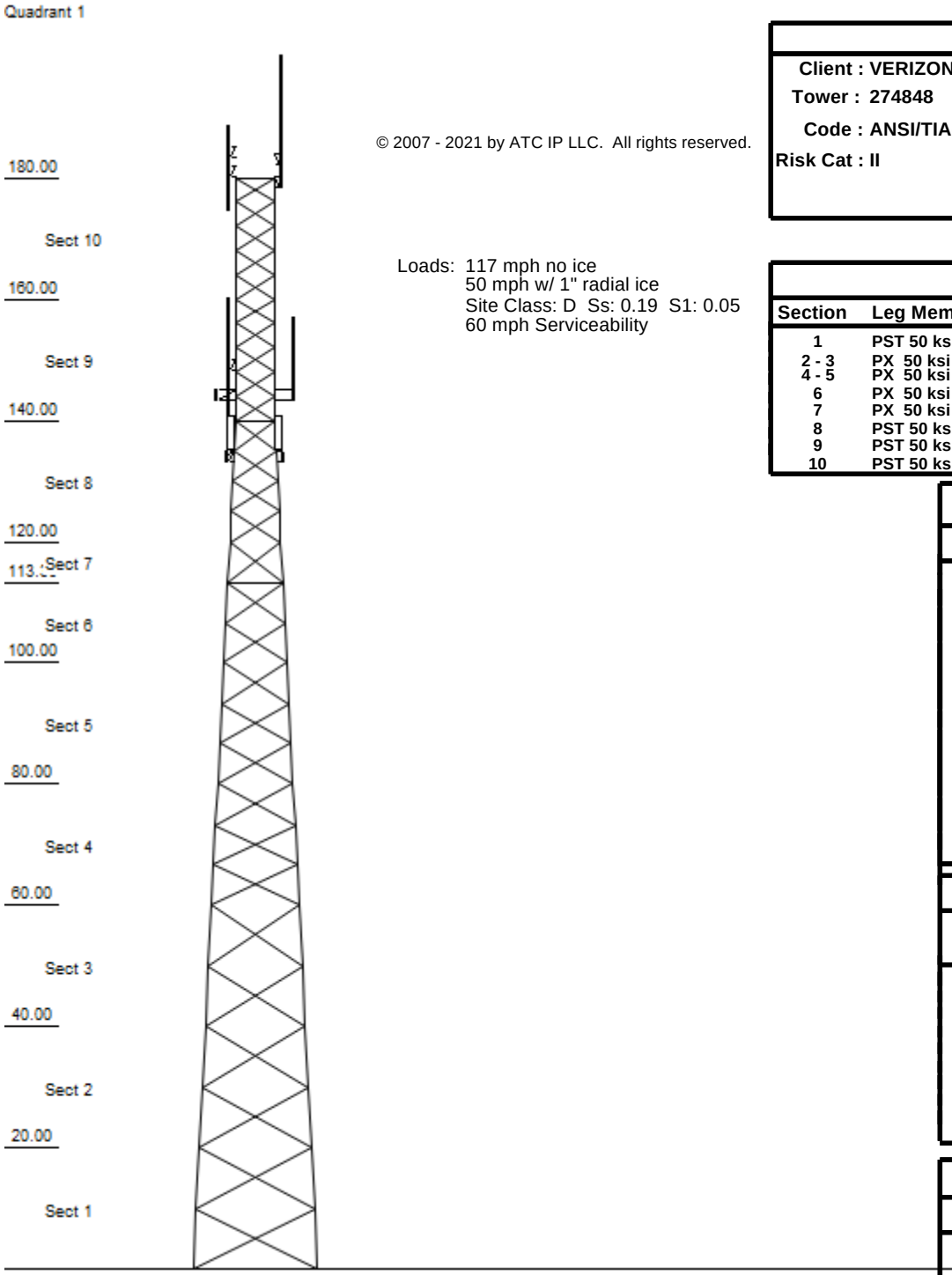
- Information supplied by the client regarding antenna, mounts and feed line loading
- Information from drawings, design and analysis documents, and field notes in the possession of A.T. Engineering Service, PLLC

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.



Loads: 117 mph no ice
50 mph w/ 1" radial ice
Site Class: D Ss: 0.19 S1: 0.05
60 mph Serviceability

Job Information

Client :	VERIZON WIRELESS				
Tower :	274848	Location :	WOLCOTT RD CT,	Base Width :	20.78 ft
Code :	ANSI/TIA-222-H	Topo Method:	Method 1	Top Width :	6.56 ft
Risk Cat :	II	Topo:	1	Tower Ht :	180.00 ft
		Exposure :	B	Shape :	Triangle

Sections Properties

Section	Leg Members		Diagonal Members	Horizontal Members
1	PST 50 ksi	5" DIA PIPE	SAE 50 ksi 3.5X3.5X0.25	
2 - 3	PX 50 ksi	4" DIA PIPE	SAE 36 ksi 3X3X0.1875	
4 - 5	PX 50 ksi	3" DIA PIPE	SAE 36 ksi 2.5X2.5X0.1875	
6	PX 50 ksi	2-1/2" DIA PIPE	SAE 36 ksi 2X2X0.1875	SAE 36 ksi 2X2X0.125
7	PX 50 ksi	2-1/2" DIA PIPE	SAE 36 ksi 2X2X0.1875	
8	PST 50 ksi	2-1/2" DIA PIPE	SAE 36 ksi 1.5X1.5X0.125	SAE 36 ksi 2X2X0.125
9	PST 50 ksi	2" DIA PIPE	SAE 36 ksi 1.5X1.5X0.125	
10	PST 50 ksi	2" DIA PIPE	SAE 36 ksi 1.5X1.5X0.125	SAE 36 ksi 2X2X0.125

Discrete Appurtenance

Elev (ft)	Type	Qty	Description
185.00	Whip	1	Andrew DB222-B
184.00	Whip	1	RFS Celwave PD201-7
182.00	Whip	1	RFS PD458-2
180.00	Whip	1	Generic 20' Omni
177.00	Straight Arm	3	Round Side Arm
150.00	Whip	1	Generic 20' Omni
145.00	Straight Arm	3	Round Side Arm
145.00	Whip	1	Generic 12' Omni
135.00	Panel	6	JMA Wireless MX06FRO660-03
135.00	Panel	1	Commscope LNX-6514DS-VTM
135.00	Panel	2	Commscope LNX-8513DS-VTM
135.00	Panel	3	Samsung MT6407-77A
135.00	Dish	1	Andrew Microwaves VHLPX2-18-2G
135.00		1	Raycap RCMDC-6627-PF-48
135.00		3	Samsung B5/B13 RRH-BR04C
135.00		3	Samsung B2/B66A RRH-BR049
131.00	Mounting Frame	3	Round Sector Frame

Linear Appurtenance

Elev (ft) From	To	Qty	Description
0.00	185.00	1	7/8" Coax
0.00	184.00	1	7/8" Coax
0.00	182.00	1	7/8" Coax
0.00	180.00	1	1 1/4" Coax
0.00	150.00	1	7/8" Coax
0.00	145.00	1	1/2" Coax
0.00	135.00	1	Waveguide
0.00	135.00	11	1 5/8" Coax
0.00	135.00	2	1 5/8" (1.63"-41.3mm
0.00	135.00	1	0.41" (10.3mm) LMR-4

Global Base Foundation Design Loads

Load Case	Moment (k-ft)	Vertical (kip)	Horizontal (kip)
DL + WL	2,139.74	21.09	22.68
DL + WL + IL	656.60	45.75	6.78

Job Information

Client :	VERIZON WIRELESS				
Tower :	274848	Location :	WOLCOTT RD CT,	Base Width :	20.78 ft
Code :	ANSI/TIA-222-H	Topo Method:	Method 1	Top Width :	6.56 ft
Risk Cat :	II	Topo:	1	Tower Ht :	180.00 ft
		Exposure :	B	Shape :	Triangle

Individual Base Foundation Design Loads

Vertical (kip)	Uplift (kip)	Horizontal (kip)
125.92	104.86	13.83

Site Number:	274848	Code:	ANSI/TIA-222-H	
Site Name:	WOLCOTT RD CT, CT	Engineering Number:	13669422_C3_03	7/6/2021 4:59:34 PM
Customer:	VERIZON WIRELESS			

Analysis Parameters

Location:	New Haven County, CT	Height (ft):	180
Code:	ANSI/TIA-222-H	Base Elevation (ft):	0.00
Shape:	Triangle	Bottom Face Width (ft):	20.78
Tower Manufacturer:	Rohn	Top Face Width (ft):	6.56
Tower Type:	Self Support	Anchor Bolt Detail Type	c
Kd:	0.85		
Ke:	0.96		

Ice & Wind Parameters

Exposure Category:	B	Design Windspeed Without Ice:	117 mph
Risk Category:	II	Design Windspeed With Ice:	50 mph
Topographic Factor Procedure:	Method 1	Operational Windspeed:	60 mph
Topographic Category:	1	Design Ice Thickness:	1.00 in
Crest Height:	0 ft	HMSL:	1050.00 ft

Seismic Parameters

Analysis Method:	Equivalent Lateral Force Method				
Site Class:	D - Stiff Soil				
Period Based on Rayleigh Method (sec):	0.77				
T_L (sec):	6	p:	1.3	C_S:	0.037
S_S:	0.191	S_1:	0.054	C_S, Max:	0.037
F_a:	1.600	F_V:	2.400	C_S, Min:	0.030
S_{ds}:	0.204	S_{d1}:	0.086		

Load Cases

1.2D + 1.0W Normal	117 mph Normal with No Ice
1.2D + 1.0W 60 deg	117 mph 60 degree with No Ice
1.2D + 1.0W 90 deg	117 mph 90 degree with No Ice
0.9D + 1.0W Normal	117 mph Normal with No Ice (Reduced DL)
0.9D + 1.0W 60 deg	117 mph 60 deg with No Ice (Reduced DL)
0.9D + 1.0W 90 deg	117 mph 90 deg with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi Normal	50 mph Normal with 1.00 in Radial Ice
1.2D + 1.0Di + 1.0Wi 60 deg	50 mph 60 deg with 1.00 in Radial Ice
1.2D + 1.0Di + 1.0Wi 90 deg	50 mph 90 deg with 1.00 in Radial Ice
1.2D + 1.0Ev + 1.0Eh Normal	Seismic Normal
1.2D + 1.0Ev + 1.0Eh 60 deg	Seismic 60 deg
1.2D + 1.0Ev + 1.0Eh 90 deg	Seismic 90 deg
0.9D - 1.0Ev + 1.0Eh Normal	Seismic (Reduced DL) Normal
0.9D - 1.0Ev + 1.0Eh 60 deg	Seismic (Reduced DL) 60 deg
0.9D - 1.0Ev + 1.0Eh 90 deg	Seismic (Reduced DL) 90 deg
1.0D + 1.0W Service Normal	Serviceability - 60 mph Wind Normal
1.0D + 1.0W Service 60 deg	Serviceability - 60 mph Wind 60 deg
1.0D + 1.0W Service 90 deg	Serviceability - 60 mph Wind 90 deg

Site Number: 274848 Code: ANSI/TIA-222-H

Site Name: WOLCOTT RD CT, CT Engineering Number: 13669422_C3_03 7/6/2021 4:59:34 PM

Customer: VERIZON WIRELESS

Tower Loading

Discrete Appurtenance Properties 1.2D + 1.0W

Elevation (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K_a	Orient. Factor	Vert. Ecc.(ft)	M_u (lb-ft)	Q_z (psf)	F_a (WL) (lb)	P_a (DL) (lb)
185.0	Andrew DB222-B	1	16	2.3	10.6	3.0	3.0	1.00	1.00	-1.0	64.5	33.73	65	19
184.0	RFS Celwave PD201-	1	4	1.1	8.3	1.3	1.3	1.00	1.00	0.0	0.0	33.73	31	5
182.0	RFS PD458-2	1	22	2.7	13.3	2.0	2.0	1.00	1.00	0.0	0.0	33.63	76	26
180.0	Generic 20' Omni	1	55	6.0	20.0	3.0	3.0	1.00	1.00	10.0	1736.2	34.04	174	66
177.0	Round Side Arm	3	150	5.2	0.0	0.0	0.0	1.00	0.67	0.0	0.0	33.36	296	540
150.0	Generic 20' Omni	1	55	6.0	20.0	3.0	3.0	1.00	1.00	0.0	0.0	31.82	162	66
145.0	Generic 12' Omni	1	40	3.6	12.0	3.0	3.0	1.00	1.00	6.0	585.3	31.88	98	48
145.0	Round Side Arm	3	150	5.2	0.0	0.0	0.0	1.00	0.67	0.0	0.0	31.51	280	540
135.0	Samsung B2/B66A	3	84	1.9	1.3	15.0	10.0	0.80	0.50	0.0	0.0	30.88	59	304
135.0	Samsung B5/B13	3	70	1.9	1.3	15.0	8.1	0.80	0.50	0.0	0.0	30.88	59	253
135.0	Raycap RCMDC-	1	32	4.1	2.5	16.5	12.6	0.80	1.00	0.0	0.0	30.88	85	38
135.0	Andrew Microwaves	1	31	4.7	2.2	26.1	13.2	1.00	1.00	0.0	0.0	30.88	123	37
135.0	Samsung MT6407-	3	82	4.7	2.9	16.1	5.5	0.80	0.61	0.0	0.0	30.88	181	294
135.0	Commscope LNX-	2	39	8.2	6.1	11.9	7.1	0.80	0.77	1.0	264.8	30.94	265	94
135.0	Commscope LNX-	1	39	8.2	6.1	11.9	7.1	0.80	0.82	4.0	567.6	31.13	142	47
135.0	JMA Wireless	6	60	9.9	5.9	15.4	10.7	0.80	0.71	0.0	0.0	30.88	883	432
131.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.0	30.61	632	1080
	Totals	35	3241	213.8									3610	3889

Discrete Appurtenance Properties 0.9D + 1.0W

Elevation (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K_a	Orient. Factor	Vert. Ecc.(ft)	M_u (lb-ft)	Q_z (psf)	F_a (WL) (lb)	P_a (DL) (lb)
185.0	Andrew DB222-B	1	16	2.3	10.6	3.0	3.0	1.00	1.00	-1.0	64.5	33.73	65	14
184.0	RFS Celwave PD201-	1	4	1.1	8.3	1.3	1.3	1.00	1.00	0.0	0.0	33.73	31	4
182.0	RFS PD458-2	1	22	2.7	13.3	2.0	2.0	1.00	1.00	0.0	0.0	33.63	76	20
180.0	Generic 20' Omni	1	55	6.0	20.0	3.0	3.0	1.00	1.00	10.0	1736.2	34.04	174	50
177.0	Round Side Arm	3	150	5.2	0.0	0.0	0.0	1.00	0.67	0.0	0.0	33.36	296	405
150.0	Generic 20' Omni	1	55	6.0	20.0	3.0	3.0	1.00	1.00	0.0	0.0	31.82	162	50
145.0	Generic 12' Omni	1	40	3.6	12.0	3.0	3.0	1.00	1.00	6.0	585.3	31.88	98	36
145.0	Round Side Arm	3	150	5.2	0.0	0.0	0.0	1.00	0.67	0.0	0.0	31.51	280	405
135.0	Samsung B2/B66A	3	84	1.9	1.3	15.0	10.0	0.80	0.50	0.0	0.0	30.88	59	228
135.0	Samsung B5/B13	3	70	1.9	1.3	15.0	8.1	0.80	0.50	0.0	0.0	30.88	59	190
135.0	Raycap RCMDC-	1	32	4.1	2.5	16.5	12.6	0.80	1.00	0.0	0.0	30.88	85	29
135.0	Andrew Microwaves	1	31	4.7	2.2	26.1	13.2	1.00	1.00	0.0	0.0	30.88	123	28
135.0	Samsung MT6407-	3	82	4.7	2.9	16.1	5.5	0.80	0.61	0.0	0.0	30.88	181	220
135.0	Commscope LNX-	2	39	8.2	6.1	11.9	7.1	0.80	0.77	1.0	264.8	30.94	265	71
135.0	Commscope LNX-	1	39	8.2	6.1	11.9	7.1	0.80	0.82	4.0	567.6	31.13	142	35
135.0	JMA Wireless	6	60	9.9	5.9	15.4	10.7	0.80	0.71	0.0	0.0	30.88	883	324
131.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.0	30.61	632	810
	Totals	35	3241	213.8									3610	2917

Discrete Appurtenance Properties 1.2D + 1.0Di + 1.0Wi

Elevation (ft)	Description	Qty	Ice Wt (lb)	Ice EPA (sf)	Length (ft)	Width (in)	Depth (in)	K_a	Orient. Factor	Vert. Ecc.(ft)	M_u (lb-ft)	Q_z (psf)	F_a (WL) (lb)	P_a (DL) (lb)
185.0	Andrew DB222-B	1	63	6.3	10.6	3.0	3.0	1.00	1.00	-1.0	33.2	6.16	33	66
184.0	RFS Celwave PD201-	1	26	3.1	8.3	1.3	1.3	1.00	1.00	0.0	0.0	6.16	16	27
182.0	RFS PD458-2	1	70	5.9	13.3	2.0	2.0	1.00	1.00	0.0	0.0	6.14	31	75
180.0	Generic 20' Omni	1	157	10.8	20.0	3.0	3.0	1.00	1.00	10.0	570.2	6.22	57	168

Site Number: 274848 Code: ANSI/TIA-222-H

Site Name: WOLCOTT RD CT, CT Engineering Number: 13669422_C3_03 7/6/2021 4:59:34 PM

Customer: VERIZON WIRELESS

Tower Loading

177.0	Round Side Arm	3	199	7.0	0.0	0.0	0.0	1.00	0.67	0.0	0.0	6.09	73	688
150.0	Generic 20' Omni	1	155	10.7	20.0	3.0	3.0	1.00	1.00	0.0	0.0	5.81	53	166
145.0	Generic 12' Omni	1	101	6.5	12.0	3.0	3.0	1.00	1.00	6.0	192.1	5.82	32	109
145.0	Round Side Arm	3	199	7.0	0.0	0.0	0.0	1.00	0.67	0.0	0.0	5.76	69	687
135.0	Samsung B2/B66A	3	126	2.5	1.3	15.0	10.0	0.80	0.50	0.0	0.0	5.64	14	430
135.0	Samsung B5/B13	3	108	2.5	1.3	15.0	8.1	0.80	0.50	0.0	0.0	5.64	14	366
135.0	Raycap RCMDC-	1	116	5.0	2.5	16.5	12.6	0.80	1.00	0.0	0.0	5.64	19	122
135.0	Andrew Microwaves	1	95	5.5	2.2	26.1	13.2	1.00	1.00	0.0	0.0	5.64	26	102
135.0	Samsung MT6407-	3	149	5.7	2.9	16.1	5.5	0.80	0.61	0.0	0.0	5.64	40	495
135.0	Commscope LNX-	2	155	10.0	6.1	11.9	7.1	0.80	0.77	1.0	59.4	5.65	59	325
135.0	Commscope LNX-	1	155	10.0	6.1	11.9	7.1	0.80	0.82	4.0	127.2	5.69	32	162
135.0	JMA Wireless	6	218	11.7	5.9	15.4	10.7	0.80	0.71	0.0	0.0	5.64	191	1379
131.0	Round Sector Frame	3	542	25.3	0.0	0.0	0.0	0.75	0.75	0.0	0.0	5.59	203	1807
	Totals	35	6525	303.9									963	7173

Discrete Appurtenance Properties 1.0D + 1.0W Service

Elevation (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K_a	Orient. Factor	Vert. Ecc.(ft)	M_u (lb-ft)	Q_z (psf)	F_a (WL) (lb)	P_a (DL) (lb)
185.0	Andrew DB222-B	1	16	2.3	10.6	3.0	3.0	1.00	1.00	-1.0	17.0	8.87	17	16
184.0	RFS Celwave PD201-	1	4	1.1	8.3	1.3	1.3	1.00	1.00	0.0	0.0	8.87	8	4
182.0	RFS PD458-2	1	22	2.7	13.3	2.0	2.0	1.00	1.00	0.0	0.0	8.84	20	22
180.0	Generic 20' Omni	1	55	6.0	20.0	3.0	3.0	1.00	1.00	10.0	456.6	8.95	46	55
177.0	Round Side Arm	3	150	5.2	0.0	0.0	0.0	1.00	0.67	0.0	0.0	8.77	78	450
150.0	Generic 20' Omni	1	55	6.0	20.0	3.0	3.0	1.00	1.00	0.0	0.0	8.37	43	55
145.0	Generic 12' Omni	1	40	3.6	12.0	3.0	3.0	1.00	1.00	6.0	153.9	8.38	26	40
145.0	Round Side Arm	3	150	5.2	0.0	0.0	0.0	1.00	0.67	0.0	0.0	8.29	74	450
135.0	Samsung B2/B66A	3	84	1.9	1.3	15.0	10.0	0.80	0.50	0.0	0.0	8.12	16	253
135.0	Samsung B5/B13	3	70	1.9	1.3	15.0	8.1	0.80	0.50	0.0	0.0	8.12	16	211
135.0	Raycap RCMDC-	1	32	4.1	2.5	16.5	12.6	0.80	1.00	0.0	0.0	8.12	22	32
135.0	Andrew Microwaves	1	31	4.7	2.2	26.1	13.2	1.00	1.00	0.0	0.0	8.12	32	31
135.0	Samsung MT6407-	3	82	4.7	2.9	16.1	5.5	0.80	0.61	0.0	0.0	8.12	48	245
135.0	Commscope LNX-	2	39	8.2	6.1	11.9	7.1	0.80	0.77	1.0	69.6	8.14	70	78
135.0	Commscope LNX-	1	39	8.2	6.1	11.9	7.1	0.80	0.82	4.0	149.3	8.19	37	39
135.0	JMA Wireless	6	60	9.9	5.9	15.4	10.7	0.80	0.71	0.0	0.0	8.12	232	360
131.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.0	8.05	166	900
	Totals	35	3241	213.8									949	3241

Tower Loading

Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Description	Qty	Width (in)	Weight (lb/ft)	Pct In Block	Spread On Faces	Bundling Arrangement	Cluster Dia (in)	Out Of Zone	Spacing (in)	Orientation Factor	Ka Override
0.00	185.0	7/8" Coax	1	1.09	0.33	100	None	Individual	0.00	N	1.00	1.00	0.00
0.00	184.0	7/8" Coax	1	1.09	0.33	100	3	Individual	0.00	N	1.00	1.00	0.00
0.00	182.0	7/8" Coax	1	1.09	0.33	100	1	Individual	0.00	N	1.00	1.00	0.00
0.00	180.0	1 1/4" Coax	1	1.55	0.63	100	3	Individual	0.00	N	1.00	1.00	0.00
0.00	150.0	7/8" Coax	1	1.09	0.33	100	None	Individual	0.00	N	1.00	1.00	0.00
0.00	145.0	1/2" Coax	1	0.63	0.15	100	3	Individual	0.00	N	1.00	1.00	0.00
0.00	135.0	0.41" (10.3mm)	1	0.41	0.07	100	None	Individual	0.00	N	1.00	1.00	0.00
0.00	135.0	1 5/8" (1.63"-	2	1.63	1.61	100	1	Individual	0.00	N	1.00	1.00	0.00
0.00	135.0	1 5/8" Coax	11	1.98	0.82	55	1,2	Block	0.00	N	1.00	1.00	0.00
0.00	135.0	Waveguide	1	2.00	6.00	100	Lin App	Individual	0.00	N	1.00	1.00	0.00

Equivalent Lateral Force Method

Spectral Response Acceleration for Short Period (S_s):	0.19
Spectral Response Acceleration at 1.0 Second Period (S_1):	0.05
Long-Period Transition Period (T_L - Seconds):	6
Importance Factor (I_e):	1.00
Site Coefficient F_a:	1.60
Site Coefficient F_v:	2.40
Response Modification Coefficient (R):	3.00
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.20
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.09
Seismic Response Coefficient (C_s):	0.04
Upper Limit C_s:	0.04
Lower Limit C_s:	0.03
Period based on Rayleigh Method (sec):	0.77
Redundancy Factor (p):	1.30
Seismic Force Distribution Exponent (k):	1.13
Total Unfactored Dead Load:	17.57 k
Seismic Base Shear (E):	0.86 k

LoadCase 1.2D + 1.0Ev + 1.0Eh Seismic

Section	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
10	170.00	568	192,676	0.073	62	705
9	150.00	541	159,289	0.060	52	671
8	130.00	968	242,201	0.092	78	1,201
7	116.67	453	100,363	0.038	33	563
6	106.67	978	195,460	0.074	63	1,213
5	90.00	1,769	291,632	0.110	94	2,195
4	70.00	1,869	231,707	0.088	75	2,319
3	50.00	2,141	181,207	0.069	59	2,657
2	30.00	2,217	105,100	0.040	34	2,751
1	10.00	2,829	38,569	0.015	12	3,511
Andrew DB222-B	180.00	16	5,792	0.002	2	20
RFS Celwave PD201-7	180.00	4	1,448	0.001	0	5
RFS PD458-2	180.00	22	7,964	0.003	3	27
Generic 20' Omni	180.00	55	19,909	0.008	6	68
Round Side Arm	177.00	450	159,816	0.061	52	558
Generic 20' Omni	150.00	55	16,189	0.006	5	68
Generic 12' Omni	145.00	40	11,329	0.004	4	50
Round Side Arm	145.00	450	127,457	0.048	41	558
Samsung B2/B66A RRH-BR049	135.00	253	66,131	0.025	21	314
Samsung B5/B13 RRH-BR04C	135.00	211	55,083	0.021	18	262
Raycap RCMDC-6627-PF-48	135.00	32	8,358	0.003	3	40
Andrew Microwaves VHLPX2-18-2GR	135.00	31	8,097	0.003	3	38
Samsung MT6407-77A	135.00	245	63,937	0.024	21	304
Commscope LNX-8513DS-VTM (39.2 lb)	135.00	78	20,477	0.008	7	97
Commscope LNX-6514DS-VTM	135.00	39	10,134	0.004	3	48

Equivalent Lateral Force Method

JMA Wireless MX06FRO660-03	135.00	360	94,025	0.036	30	447
Round Sector Frame	131.00	900	227,176	0.086	74	1,117
		17,575	2,641,524	1.000	856	21,806

LoadCase 0.9D - 1.0Ev + 1.0Eh — Seismic (Reduced DL)

Section	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
10	170.00	568	192,676	0.073	62	488
9	150.00	541	159,289	0.060	52	465
8	130.00	968	242,201	0.092	78	832
7	116.67	453	100,363	0.038	33	390
6	106.67	978	195,460	0.074	63	840
5	90.00	1,769	291,632	0.110	94	1,520
4	70.00	1,869	231,707	0.088	75	1,606
3	50.00	2,141	181,207	0.069	59	1,840
2	30.00	2,217	105,100	0.040	34	1,905
1	10.00	2,829	38,569	0.015	12	2,431
Andrew DB222-B	180.00	16	5,792	0.002	2	14
RFS Celwave PD201-7	180.00	4	1,448	0.001	0	3
RFS PD458-2	180.00	22	7,964	0.003	3	19
Generic 20' Omni	180.00	55	19,909	0.008	6	47
Round Side Arm	177.00	450	159,816	0.061	52	387
Generic 20' Omni	150.00	55	16,189	0.006	5	47
Generic 12' Omni	145.00	40	11,329	0.004	4	34
Round Side Arm	145.00	450	127,457	0.048	41	387
Samsung B2/B66A RRH-BR049	135.00	253	66,131	0.025	21	218
Samsung B5/B13 RRH-BR04C	135.00	211	55,083	0.021	18	181
Raycap RCMDC-6627-PF-48	135.00	32	8,358	0.003	3	27
Andrew Microwaves VHLPX2-18-2GR	135.00	31	8,097	0.003	3	27
Samsung MT6407-77A	135.00	245	63,937	0.024	21	210
Commscope LNX-8513DS-VTM (39.2 lb)	135.00	78	20,477	0.008	7	67
Commscope LNX-6514DS-VTM	135.00	39	10,134	0.004	3	33
JMA Wireless MX06FRO660-03	135.00	360	94,025	0.036	30	309
Round Sector Frame	131.00	900	227,176	0.086	74	773
		17,575	2,641,524	1.000	856	15,101

Force/Stress Summary

Section: 1 14N-2 Bot Elev (ft): 0.00 Height (ft): 20.000

Max Compression Member		Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG	PST - 5" DIA PIPE	-122.08	1.2D + 1.0W Normal	10.02	100	100	100	63.9	50.0	143.51	0	0	0.00	0.00	85	Member X
HORIZ		0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG	SAE - 3.5X3.5X0.25	-4.23	1.2D + 1.0W 90 deg	22.61	50	50	50	197.2	50.0	12.44	1	1	13.81	19.50	34	Member Z

Max Tension Member		Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG	PST - 5" DIA PIPE	102.05	0.9D + 1.0W 60 deg	50	65	193.50	0	0	0.00	0.00		52	Member
HORIZ		0.00		0	0	0.00	0	0	0.00	0.00	0.00	0	
DIAG	SAE - 3.5X3.5X0.25	4.06	1.2D + 1.0W 90 deg	50	65	55.51	1	1	13.81	11.70	17.82	34	Bolt Bear

Max Splice Forces	Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension	92.70	0.9D + 1.0W 60 deg	0.00	0	0	
Top Compression	111.35	1.2D + 1.0W Normal	0.00	0		
Bot Tension	105.65	0.9D + 1.0W 60 deg	227.15	22	4	1" A354-BC
Bot Compression	126.12	1.2D + 1.0W Normal	264.10	51		

Section: 2 13N-3 Bot Elev (ft): 20.00 Height (ft): 20.000

Max Compression Member		Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG	PX - 4" DIA PIPE	-107.41	1.2D + 1.0W Normal	10.02	100	100	100	81.2	50.0	122.52	0	0	0.00	0.00	87	Member X
HORIZ		0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG	SAE - 3X3X0.1875	-4.22	1.2D + 1.0W 90 deg	20.83	50	50	50	209.8	36.0	7.09	1	1	13.81	13.05	59	Member Z

Max Tension Member		Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG	PX - 4" DIA PIPE	89.81	0.9D + 1.0W 60 deg	50	65	198.45	0	0	0.00	0.00		45	Member
HORIZ		0.00		0	0	0.00	0	0	0.00	0.00	0.00	0	
DIAG	SAE - 3X3X0.1875	4.10	1.2D + 1.0W 90 deg	36	58	31.36	1	1	13.81	7.83	9.89	52	Bolt Bear

Max Splice Forces	Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension	79.69	0.9D + 1.0W 60 deg	0.00	0	0	
Top Compression	95.74	1.2D + 1.0W Normal	0.00	0		
Bot Tension	92.70	0.9D + 1.0W 60 deg	218.07	43	4	1 A325
Bot Compression	0.00		0.00	0		

Force/Stress Summary

Section: 3 12N Bot Elev (ft): 40.00 Height (ft): 20.000

Max Compression Member	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG PX - 4" DIA PIPE	-91.69	1.2D + 1.0W Normal	10.02	100	100	100	81.2	50.0	122.52	0	0	0.00	0.00	74	Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG SAE - 3X3X0.1875	-3.97	1.2D + 1.0W 90 deg	19.12	50	50	50	192.5	36.0	8.42	1	1	13.81	13.05	47	Member Z

Max Tension Member	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG PX - 4" DIA PIPE	75.63	1.2D + 1.0W 60 deg	50	65	198.45	0	0	0.00	0.00		38	Member
HORIZ	0.00		0	0	0.00	0	0	0.00	0.00	0.00	0	
DIAG SAE - 3X3X0.1875	3.90	1.2D + 1.0W 90 deg	36	58	31.36	1	1	13.81	7.83	9.89	49	Bolt Bear

Max Splice Forces	Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension	66.36	0.9D + 1.0W 60 deg	0.00	0	0	
Top Compression	79.75	1.2D + 1.0W Normal	0.00	0		
Bot Tension	79.69	0.9D + 1.0W 60 deg	166.22	48	4	0.875" A325
Bot Compression	0.00		0.00	0		

Section: 4 11N11 Bot Elev (ft): 60.00 Height (ft): 20.000

Max Compression Member	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG PX - 3" DIA PIPE	-77.13	1.2D + 1.0W Normal	6.68	100	100	100	70.3	50.0	94.68	0	0	0.00	0.00	81	Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG SAE - 2.5X2.5X0.1875	-3.19	1.2D + 1.0W 90 deg	15.91	50	50	50	192.9	36.0	6.94	1	1	8.84	10.44	45	Member Z

Max Tension Member	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG PX - 3" DIA PIPE	64.68	0.9D + 1.0W 60 deg	50	65	135.90	0	0	0.00	0.00		47	Member
HORIZ	0.00		0	0	0.00	0	0	0.00	0.00	0.00	0	
DIAG SAE - 2.5X2.5X0.1875	3.15	1.2D + 1.0W 90 deg	36	58	25.99	1	1	8.84	6.20	8.77	50	Bolt Bear

Max Splice Forces	Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension	53.44	0.9D + 1.0W 60 deg	0.00	0	0	
Top Compression	64.20	1.2D + 1.0W Normal	0.00	0		
Bot Tension	66.36	0.9D + 1.0W 60 deg	166.22	40	4	0.875" A325
Bot Compression	0.00		0.00	0		

Force/Stress Summary

Section: 5 10N-5 Bot Elev (ft): 80.00 Height (ft): 20.000

Max Compression Member	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG PX - 3" DIA PIPE	-61.53	1.2D + 1.0W Normal	6.68	100	100	100	70.3	50.0	94.69	0	0	0.00	0.00	64	Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG SAE - 2.5X2.5X0.1875	-2.98	1.2D + 1.0W 90 deg	14.05	50	50	50	170.4	36.0	8.90	1	1	8.84	10.44	33	Bolt Shear

Max Tension Member	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG PX - 3" DIA PIPE	50.66	1.2D + 1.0W 60 deg	50	65	135.90	0	0	0.00	0.00		37	Member
HORIZ	0.00		0	0	0.00	0	0	0.00	0.00	0.00	0	
DIAG SAE - 2.5X2.5X0.1875	2.93	1.2D + 1.0W 90 deg	36	58	25.99	1	1	8.84	6.20	8.77	47	Bolt Bear

Max Splice Forces	Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension	39.63	0.9D + 1.0W 60 deg	0.00	0	0	
Top Compression	48.18	1.2D + 1.0W Normal	0.00	0		
Bot Tension	53.44	0.9D + 1.0W 60 deg	166.22	32	4	0.875" A325
Bot Compression	0.00		0.00	0		

Section: 6 9N240 Bot Elev (ft): 100.0 Height (ft): 13.333

Max Compression Member	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG PX - 2-1/2" DIA PIPE	-45.64	1.2D + 1.0W Normal	6.68	100	100	100	86.7	50.0	58.41	0	0	0.00	0.00	78	Member X
HORIZ SAE - 2X2X0.125	-0.37	0.9D + 1.0W Normal	9.329	100	100	100	281.3	36.0	1.74	1	1	8.84	6.96	21	Member Z
DIAG SAE - 2X2X0.1875	-2.61	1.2D + 1.0W 90 deg	12.32	50	50	50	187.6	36.0	5.81	1	1	8.84	10.44	44	Member Z

Max Tension Member	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG PX - 2-1/2" DIA PIPE	37.62	0.9D + 1.0W 60 deg	50	65	101.25	0	0	0.00	0.00		37	Member
HORIZ SAE - 2X2X0.125	0.39	1.2D + 1.0W 60 deg	36	58	13.37	1	1	8.84	4.13	4.49	9	Bolt Bear
DIAG SAE - 2X2X0.1875	2.61	1.2D + 1.0W 90 deg	36	58	19.89	1	1	8.84	6.20	6.73	42	Bolt Bear

Max Splice Forces	Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension	30.27	0.9D + 1.0W 60 deg	0.00	0	0	
Top Compression	37.54	1.2D + 1.0W Normal	0.00	0		
Bot Tension	39.63	0.9D + 1.0W 60 deg	120.41	33	4	0.75" A325
Bot Compression	0.00		0.00	0		

Force/Stress Summary

Section: 7 9N240 Bot Elev (ft): 113.3 Height (ft): 6.667

Max Compression Member	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG PX - 2-1/2" DIA PIPE	-34.60	1.2D + 1.0W Normal	6.68	100	100	100	86.7	50.0	58.42	0	0	0.00	0.00	59	Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG SAE - 2X2X0.1875	-2.57	1.2D + 1.0W 90 deg	11.19	50	50	50	170.5	36.0	7.04	1	1	8.84	10.44	36	Member Z

Max Tension Member	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG PX - 2-1/2" DIA PIPE	27.38	1.2D + 1.0W 60 deg	50	65	101.25	0	0	0.00	0.00		27	Member
HORIZ	0.00		0	0	0.00	0	0	0.00	0.00	0.00	0	
DIAG SAE - 2X2X0.1875	2.47	1.2D + 1.0W 90 deg	36	58	19.89	1	1	8.84	6.20	6.73	39	Bolt Bear

Max Splice Forces	Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension	25.33	0.9D + 1.0W 60 deg	0.00	0	0	
Top Compression	32.01	1.2D + 1.0W Normal	0.00	0		
Bot Tension	30.27	0.9D + 1.0W 60 deg	0.00	0		
Bot Compression	0.00		0.00	0		

Section: 8 8N-95-8 Bot Elev (ft): 120.0 Height (ft): 20.000

Max Compression Member	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	-30.05	1.2D + 1.0W Normal	5.01	100	100	100	63.5	50.0	57.12	0	0	0.00	0.00	52	Member X
HORIZ SAE - 2X2X0.125	-0.17	1.2D + 1.0W Normal	6.663	100	100	100	200.9	36.0	3.40	1	1	8.84	6.96	5	Member Z
DIAG SAE - 1.5X1.5X0.125	-2.18	1.2D + 1.0W 90 deg	9.788	50	50	50	198.4	36.0	2.62	1	1	8.84	6.96	83	Member Z

Max Tension Member	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	23.26	1.2D + 1.0W 60 deg	50	65	76.68	0	0	0.00	0.00		30	Member
HORIZ SAE - 2X2X0.125	0.18	1.2D + 1.0W 60 deg	36	58	13.37	1	1	8.84	4.13	4.49	4	Bolt Bear
DIAG SAE - 1.5X1.5X0.125	2.21	1.2D + 1.0W 90 deg	36	58	9.45	1	1	8.84	4.13	3.13	70	Blk Shear

Max Splice Forces	Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension	12.71	0.9D + 1.0W 60 deg	0.00	0	0	
Top Compression	16.24	1.2D + 1.0W Normal	0.00	0		
Bot Tension	25.33	0.9D + 1.0W 60 deg	81.36	31	4	5/8 A325
Bot Compression	0.00		0.00	0		

Force/Stress Summary

Section: 9 7N433 Bot Elev (ft): 140.0 Height (ft): 20.000

Max Compression Member	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG PST - 2" DIA PIPE	-14.77	1.2D + 1.0W Normal	4.00	100	100	100	61.0	50.0	36.68	0	0	0.00	0.00	40	Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG SAE - 1.5X1.5X0.125	-1.37	1.2D + 1.0W Normal	7.762	50	50	50	157.3	36.0	4.16	1	1	8.84	6.96	33	Member Z

Max Tension Member	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG PST - 2" DIA PIPE	11.58	0.9D + 1.0W 60 deg	50	65	48.15	0	0	0.00	0.00		24	Member
HORIZ	0.00		0	0	0.00	0	0	0.00	0.00	0.00	0	
DIAG SAE - 1.5X1.5X0.125	1.31	1.2D + 1.0W 90 deg	36	58	9.45	1	1	8.84	4.13	3.13	42	Blk Shear

Max Splice Forces	Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension	4.04	0.9D + 1.0W 60 deg	0.00	0	0	
Top Compression	5.67	1.2D + 1.0W Normal	0.00	0		
Bot Tension	12.71	0.9D + 1.0W 60 deg	81.36	16	4	5/8 A325
Bot Compression	0.00		0.00	0		

Section: 10 7N433 Bot Elev (ft): 160.0 Height (ft): 20.000

Max Compression Member	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG PST - 2" DIA PIPE	-4.92	1.2D + 1.0W Normal	4.00	100	100	100	61.0	50.0	36.68	0	0	0.00	0.00	13	Member X
HORIZ SAE - 2X2X0.125	-0.17	1.2D + 1.0W 60 deg	6.559	100	100	100	197.8	36.0	3.51	1	1	8.84	6.96	4	Member Z
DIAG SAE - 1.5X1.5X0.125	-0.73	1.2D + 1.0W 90 deg	7.682	50	50	50	155.7	36.0	4.25	1	1	8.84	6.96	17	Member Z

Max Tension Member	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG PST - 2" DIA PIPE	3.42	0.9D + 1.0W 60 deg	50	65	48.15	0	0	0.00	0.00		7	Member
HORIZ SAE - 2X2X0.125	0.25	1.2D + 1.0W Normal	36	58	13.37	1	1	8.84	4.13	4.49	5	Bolt Bear
DIAG SAE - 1.5X1.5X0.125	0.73	1.2D + 1.0W 90 deg	36	58	9.45	1	1	8.84	4.13	3.13	23	Blk Shear

Max Splice Forces	Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension	0.00		0.00	0	0	
Top Compression	0.26	1.2D + 1.0Di + 1.0Wi	0.00	0		
Bot Tension	4.04	0.9D + 1.0W 60 deg	81.36	5	4	5/8 A325
Bot Compression	0.00		0.00	0		

Detailed Reactions

Load Case	Radius (ft)	Elevation (ft)	Azimuth (deg)	Node	FX (kip)	FY (kip)	FZ (kip)	(-) = Uplift (+) = Down
1.2D + 1.0W Normal	**12.00**	**00.00**	**0**	**1**	**0.00**	**125.92**	**-13.83**	
	12.00	**00.00**	**120**	**1a**	**4.72**	**-52.42**	**-4.43**	
	12.00	**00.00**	**240**	**1b**	**-4.72**	**-52.42**	**-4.43**	
1.2D + 1.0W 60 deg	**12.00**	**00.00**	**0**	**1**	**-1.38**	**62.28**	**-6.59**	
	12.00	**00.00**	**120**	**1a**	**-6.39**	**62.02**	**2.10**	
	12.00	**00.00**	**240**	**1b**	**-10.34**	**-103.21**	**-5.97**	
1.2D + 1.0W 90 deg	**12.00**	**00.00**	**0**	**1**	**-1.61**	**7.03**	**-0.39**	
	12.00	**00.00**	**120**	**1a**	**-10.24**	**104.24**	**4.97**	
	12.00	**00.00**	**240**	**1b**	**-9.50**	**-90.18**	**-4.57**	
0.9D + 1.0W Normal	**12.00**	**00.00**	**0**	**1**	**0.00**	**124.06**	**-13.72**	
	12.00	**00.00**	**120**	**1a**	**4.82**	**-54.12**	**-4.48**	
	12.00	**00.00**	**240**	**1b**	**-4.82**	**-54.12**	**-4.48**	
0.9D + 1.0W 60 deg	**12.00**	**00.00**	**0**	**1**	**-1.38**	**60.47**	**-6.48**	
	12.00	**00.00**	**120**	**1a**	**-6.29**	**60.21**	**2.04**	
	12.00	**00.00**	**240**	**1b**	**-10.44**	**-104.86**	**-6.02**	
0.9D + 1.0W 90 deg	**12.00**	**00.00**	**0**	**1**	**-1.61**	**5.27**	**-0.28**	
	12.00	**00.00**	**120**	**1a**	**-10.15**	**102.39**	**4.91**	
	12.00	**00.00**	**240**	**1b**	**-9.60**	**-91.85**	**-4.63**	
1.2D + 1.0Di + 1.0Wi Normal	**12.00**	**00.00**	**0**	**1**	**0.00**	**51.73**	**-4.16**	
	12.00	**00.00**	**120**	**1a**	**1.43**	**-2.99**	**-1.31**	
	12.00	**00.00**	**240**	**1b**	**-1.43**	**-2.99**	**-1.31**	
1.2D + 1.0Di + 1.0Wi 60 deg	**12.00**	**00.00**	**0**	**1**	**-0.40**	**32.83**	**-2.06**	
	12.00	**00.00**	**120**	**1a**	**-1.98**	**32.76**	**0.68**	
	12.00	**00.00**	**240**	**1b**	**-3.24**	**-19.84**	**-1.87**	
1.2D + 1.0Di + 1.0Wi 90 deg	**12.00**	**00.00**	**0**	**1**	**-0.47**	**15.25**	**-0.12**	
	12.00	**00.00**	**120**	**1a**	**-3.16**	**45.90**	**1.55**	
	12.00	**00.00**	**240**	**1b**	**-2.94**	**-15.40**	**-1.43**	
1.2D + 1.0Ev + 1.0Eh Normal M1	**12.00**	**00.00**	**0**	**1**	**0.00**	**12.31**	**-0.98**	
	12.00	**00.00**	**120**	**1a**	**-0.20**	**4.16**	**0.08**	
	12.00	**00.00**	**240**	**1b**	**0.20**	**4.16**	**0.08**	
1.2D + 1.0Ev + 1.0Eh 60 deg M1	**12.00**	**00.00**	**0**	**1**	**-0.03**	**9.54**	**-0.72**	
	12.00	**00.00**	**120**	**1a**	**-0.64**	**9.54**	**0.33**	
	12.00	**00.00**	**240**	**1b**	**-0.03**	**1.56**	**-0.02**	
1.2D + 1.0Ev + 1.0Eh 90 deg M1	**12.00**	**00.00**	**0**	**1**	**-0.04**	**6.88**	**-0.46**	
	12.00	**00.00**	**120**	**1a**	**-0.80**	**11.58**	**0.44**	
	12.00	**00.00**	**240**	**1b**	**0.01**	**2.18**	**0.03**	
0.9D - 1.0Ev + 1.0Eh Normal M1	**12.00**	**00.00**	**0**	**1**	**0.00**	**10.19**	**-0.83**	
	12.00	**00.00**	**120**	**1a**	**-0.07**	**2.05**	**0.00**	
	12.00	**00.00**	**240**	**1b**	**0.07**	**2.05**	**0.00**	
0.9D - 1.0Ev + 1.0Eh 60 deg M1	**12.00**	**00.00**	**0**	**1**	**-0.03**	**7.42**	**-0.57**	
	12.00	**00.00**	**120**	**1a**	**-0.51**	**7.42**	**0.26**	
	12.00	**00.00**	**240**	**1b**	**-0.16**	**-0.55**	**-0.09**	
0.9D - 1.0Ev + 1.0Eh 90 deg M1	**12.00**	**00.00**	**0**	**1**	**-0.04**	**4.76**	**-0.32**	
	12.00	**00.00**	**120**	**1a**	**-0.67**	**9.46**	**0.37**	

	12.00	**00.00**	**240**	**1b**	**-0.12**	**0.07**	**-0.04**
1.0D + 1.0W Service Normal	**12.00**	**00.00**	**0**	**1**	**0.00**	**36.97**	**-3.89**
	12.00	**00.00**	**120**	**1a**	**1.01**	**-9.70**	**-1.04**
	12.00	**00.00**	**240**	**1b**	**-1.01**	**-9.70**	**-1.04**
1.0D + 1.0W Service 60 deg	**12.00**	**00.00**	**0**	**1**	**-0.36**	**20.31**	**-2.00**
	12.00	**00.00**	**120**	**1a**	**-1.91**	**20.25**	**0.69**
	12.00	**00.00**	**240**	**1b**	**-2.49**	**-22.99**	**-1.44**
1.0D + 1.0W Service 90 deg	**12.00**	**00.00**	**0**	**1**	**-0.43**	**5.86**	**-0.37**
	12.00	**00.00**	**120**	**1a**	**-2.92**	**31.29**	**1.44**
	12.00	**00.00**	**240**	**1b**	**-2.27**	**-19.58**	**-1.07**

Max Uplift:	104.86 (kip)	Moment Ice:	656.60 (kip-ft)	Moment:	2,139.74 (kip-ft)	1.2D + 1.0W Normal
Max Down:	125.92 (kip)	Total Down Ice:	45.75 (kip)	Total Down:	21.09 (kip)	
Max Shear:	13.83 (kip)	Total Shear Ice:	6.78 (kip)	Total Shear:	22.68 (kip)	

Deflections and Rotations

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
117 mph Normal with No Ice	130.00	0.714	0.0862	0.6547	0.6604
117 mph Normal with No Ice	135.00	0.773	0.0953	0.7334	0.7396
117 mph Normal with No Ice	144.00	0.883	0.0893	0.7827	0.7866
117 mph Normal with No Ice	152.00	0.987	0.0774	0.7704	0.7735
117 mph Normal with No Ice	176.00	1.320	0.0575	0.7332	0.7332
117 mph Normal with No Ice	180.00	1.376	0.0566	1.0898	1.0913
117 mph 60 degree with No Ice	130.00	0.663	0.1556	0.6197	0.6389
117 mph 60 degree with No Ice	135.00	0.718	0.1705	0.6106	0.6324
117 mph 60 degree with No Ice	144.00	0.819	0.1738	0.6497	0.6726
117 mph 60 degree with No Ice	152.00	0.915	0.1699	0.7022	0.7225
117 mph 60 degree with No Ice	176.00	1.220	0.1996	0.7773	0.7979
117 mph 60 degree with No Ice	180.00	1.271	0.2073	0.6527	0.6848
117 mph 90 degree with No Ice	130.00	0.674	-0.1406	0.6320	0.6396
117 mph 90 degree with No Ice	135.00	0.729	-0.1507	0.5949	0.6127
117 mph 90 degree with No Ice	144.00	0.832	-0.1390	0.6309	0.6440
117 mph 90 degree with No Ice	152.00	0.930	-0.1220	0.7099	0.7188
117 mph 90 degree with No Ice	176.00	1.238	-0.0931	0.8215	0.8268
117 mph 90 degree with No Ice	180.00	1.289	-0.0920	0.4614	0.4638
117 mph Normal with No Ice (Reduced DL)	130.00	0.713	0.0862	0.6537	0.6593
117 mph Normal with No Ice (Reduced DL)	135.00	0.772	0.0953	0.7321	0.7383
117 mph Normal with No Ice (Reduced DL)	144.00	0.882	0.0893	0.7815	0.7854
117 mph Normal with No Ice (Reduced DL)	152.00	0.986	0.0774	0.7690	0.7722
117 mph Normal with No Ice (Reduced DL)	176.00	1.318	0.0575	0.7318	0.7318
117 mph Normal with No Ice (Reduced DL)	180.00	1.374	0.0566	1.0884	1.0899
117 mph 60 deg with No Ice (Reduced DL)	130.00	0.663	0.1555	0.6188	0.6380
117 mph 60 deg with No Ice (Reduced DL)	135.00	0.717	0.1704	0.6097	0.6311
117 mph 60 deg with No Ice (Reduced DL)	144.00	0.818	0.1737	0.6486	0.6714
117 mph 60 deg with No Ice (Reduced DL)	152.00	0.914	0.1698	0.7010	0.7213
117 mph 60 deg with No Ice (Reduced DL)	176.00	1.218	0.1994	0.7760	0.7966
117 mph 60 deg with No Ice (Reduced DL)	180.00	1.269	0.2071	0.6514	0.6835
117 mph 90 deg with No Ice (Reduced DL)	130.00	0.673	-0.1406	0.6308	0.6386
117 mph 90 deg with No Ice (Reduced DL)	135.00	0.728	-0.1506	0.5936	0.6117
117 mph 90 deg with No Ice (Reduced DL)	144.00	0.831	-0.1390	0.6298	0.6429
117 mph 90 deg with No Ice (Reduced DL)	152.00	0.928	-0.1220	0.7086	0.7176
117 mph 90 deg with No Ice (Reduced DL)	176.00	1.236	-0.0930	0.8202	0.8255
117 mph 90 deg with No Ice (Reduced DL)	180.00	1.287	-0.0919	0.4601	0.4625
50 mph Normal with 1.00 in Radial Ice	130.00	0.222	0.0141	0.2062	0.2062
50 mph Normal with 1.00 in Radial Ice	135.00	0.240	0.0158	0.2268	0.2274
50 mph Normal with 1.00 in Radial Ice	144.00	0.275	0.0143	0.2477	0.2477
50 mph Normal with 1.00 in Radial Ice	152.00	0.308	0.0118	0.2445	0.2445
50 mph Normal with 1.00 in Radial Ice	176.00	0.414	0.0077	0.2327	0.2327
50 mph Normal with 1.00 in Radial Ice	180.00	0.432	0.0075	0.3478	0.3478
50 mph 60 deg with 1.00 in Radial Ice	130.00	0.214	0.0239	0.1995	0.2009
50 mph 60 deg with 1.00 in Radial Ice	135.00	0.232	0.0261	0.2020	0.2037
50 mph 60 deg with 1.00 in Radial Ice	144.00	0.265	0.0250	0.2132	0.2147
50 mph 60 deg with 1.00 in Radial Ice	152.00	0.296	0.0224	0.2311	0.2319
50 mph 60 deg with 1.00 in Radial Ice	176.00	0.397	0.0219	0.2563	0.2563
50 mph 60 deg with 1.00 in Radial Ice	180.00	0.414	0.0226	0.2154	0.2165
50 mph 90 deg with 1.00 in Radial Ice	130.00	0.215	-0.0304	0.2030	0.2036
50 mph 90 deg with 1.00 in Radial Ice	135.00	0.233	-0.0325	0.1979	0.1989
50 mph 90 deg with 1.00 in Radial Ice	144.00	0.266	-0.0293	0.2053	0.2063
50 mph 90 deg with 1.00 in Radial Ice	152.00	0.298	-0.0246	0.2318	0.2322
50 mph 90 deg with 1.00 in Radial Ice	176.00	0.399	-0.0167	0.2681	0.2687
50 mph 90 deg with 1.00 in Radial Ice	180.00	0.416	-0.0164	0.1530	0.1533
Seismic Normal M1	130.00	0.036	0.0012	0.0352	0.0352

Seismic Normal M1	135.00	0.039	0.0013	0.0363	0.0363
Seismic Normal M1	144.00	0.044	0.0011	0.0385	0.0385
Seismic Normal M1	152.00	0.050	0.0009	0.0405	0.0405
Seismic Normal M1	176.00	0.067	0.0004	0.0419	0.0419
Seismic Normal M1	180.00	0.070	0.0004	0.0419	0.0419
Seismic 60 deg M1	130.00	0.035	0.0012	0.0334	0.0335
Seismic 60 deg M1	135.00	0.038	0.0012	0.0354	0.0354
Seismic 60 deg M1	144.00	0.043	0.0010	0.0372	0.0372
Seismic 60 deg M1	152.00	0.049	0.0008	0.0391	0.0391
Seismic 60 deg M1	176.00	0.065	0.0003	0.0406	0.0406
Seismic 60 deg M1	180.00	0.068	0.0003	0.0407	0.0407
Seismic 90 deg M1	130.00	0.036	-0.0014	0.0349	0.0349
Seismic 90 deg M1	135.00	0.039	-0.0015	0.0364	0.0364
Seismic 90 deg M1	144.00	0.044	-0.0013	0.0385	0.0385
Seismic 90 deg M1	152.00	0.050	-0.0010	0.0404	0.0404
Seismic 90 deg M1	176.00	0.067	-0.0005	0.0419	0.0419
Seismic 90 deg M1	180.00	0.070	-0.0005	0.0419	0.0419
Seismic (Reduced DL) Normal M1	130.00	0.036	0.0012	0.0349	0.0349
Seismic (Reduced DL) Normal M1	135.00	0.039	0.0013	0.0361	0.0361
Seismic (Reduced DL) Normal M1	144.00	0.044	0.0011	0.0384	0.0384
Seismic (Reduced DL) Normal M1	152.00	0.050	0.0008	0.0404	0.0404
Seismic (Reduced DL) Normal M1	176.00	0.067	0.0004	0.0418	0.0418
Seismic (Reduced DL) Normal M1	180.00	0.070	0.0004	0.0417	0.0417
Seismic (Reduced DL) 60 deg M1	130.00	0.035	0.0012	0.0333	0.0333
Seismic (Reduced DL) 60 deg M1	135.00	0.038	0.0012	0.0350	0.0350
Seismic (Reduced DL) 60 deg M1	144.00	0.043	0.0010	0.0371	0.0371
Seismic (Reduced DL) 60 deg M1	152.00	0.049	0.0008	0.0390	0.0390
Seismic (Reduced DL) 60 deg M1	176.00	0.065	0.0003	0.0405	0.0405
Seismic (Reduced DL) 60 deg M1	180.00	0.068	0.0003	0.0405	0.0405
Seismic (Reduced DL) 90 deg M1	130.00	0.036	-0.0014	0.0347	0.0347
Seismic (Reduced DL) 90 deg M1	135.00	0.039	-0.0015	0.0360	0.0360
Seismic (Reduced DL) 90 deg M1	144.00	0.044	-0.0013	0.0383	0.0383
Seismic (Reduced DL) 90 deg M1	152.00	0.050	-0.0010	0.0403	0.0403
Seismic (Reduced DL) 90 deg M1	176.00	0.067	-0.0005	0.0418	0.0418
Seismic (Reduced DL) 90 deg M1	180.00	0.070	-0.0005	0.0418	0.0418
Serviceability - 60 mph Wind Normal	130.00	0.187	0.0201	0.1707	0.1717
Serviceability - 60 mph Wind Normal	135.00	0.202	0.0223	0.1916	0.1929
Serviceability - 60 mph Wind Normal	144.00	0.231	0.0203	0.2042	0.2049
Serviceability - 60 mph Wind Normal	152.00	0.258	0.0168	0.2009	0.2012
Serviceability - 60 mph Wind Normal	176.00	0.344	0.0111	0.1908	0.1908
Serviceability - 60 mph Wind Normal	180.00	0.359	0.0109	0.2847	0.2849
Serviceability - 60 mph Wind 60 deg	130.00	0.173	0.0273	0.1613	0.1636
Serviceability - 60 mph Wind 60 deg	135.00	0.187	0.0298	0.1595	0.1620
Serviceability - 60 mph Wind 60 deg	144.00	0.214	0.0277	0.1692	0.1715
Serviceability - 60 mph Wind 60 deg	152.00	0.239	0.0241	0.1828	0.1844
Serviceability - 60 mph Wind 60 deg	176.00	0.318	0.0206	0.2026	0.2028
Serviceability - 60 mph Wind 60 deg	180.00	0.331	0.0209	0.1694	0.1707
Serviceability - 60 mph Wind 90 deg	130.00	0.176	-0.0335	0.1651	0.1664
Serviceability - 60 mph Wind 90 deg	135.00	0.190	-0.0358	0.1556	0.1591
Serviceability - 60 mph Wind 90 deg	144.00	0.217	-0.0321	0.1643	0.1669
Serviceability - 60 mph Wind 90 deg	152.00	0.243	-0.0269	0.1851	0.1865
Serviceability - 60 mph Wind 90 deg	176.00	0.323	-0.0181	0.2142	0.2150
Serviceability - 60 mph Wind 90 deg	180.00	0.336	-0.0178	0.1196	0.1199

Maximum Reactions Summary

	Vertical (kip)				Horizontal (kip)		Moment (kip-ft)	
Anchor Group	DL+WL	DL+WL+IL	UpLift	Shear	DL+WL	DL+WL+IL	DL+WL	DL+WL+IL
Base	21.09	45.75	125.92	13.83	22.68	6.78	2139.74	656.60

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Post-Modification Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10106546
Maser Consulting Connecticut Project #: 21781139A

October 12, 2021

Site Information	*Site ID:*	*467187-VZW / WOLCOTT N CT*
	Site Name:	*WOLCOTT N CT*
	Carrier Name:	*Verizon Wireless*
	Address:	*1192 Wolcott Rd* *Wolcott, Connecticut 06716* *New Haven County*
	Latitude:	*41.61803611°*
	Longitude:	*-72.97124444°*
Structure Information	*Tower Type:*	*180-Ft Self Support*
	Mount Type:	*13.00-Ft T-Frame Mount*

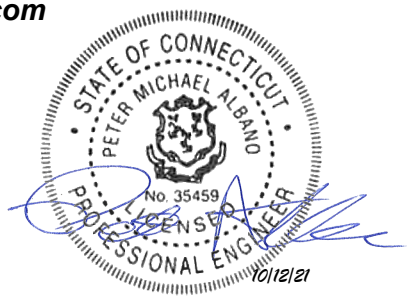
FUZE ID # 16272066

Analysis Results

T-Frame: **89.6% Pass**

******Contractor PMI Requirements*:**
Included at the end of this MA report
Available & Submitted via portal at https://pmi.vzwsmart.com
Contractor - Please Review Specific Site PMI Requirements Upon Award
Requirements also Noted on Mount Modification Drawings
Requirements may also be Noted on A & E drawings
For additional questions and support, please reach out to:
pmisupport@colliersengineering.com

Report Prepared By: Morgan Chatmon



Executive Summary:

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

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

Sources of Information:

Document Type	Remarks
Radio Frequency Data Sheet (RFDS)	*Verizon RFDS, Site ID: 325179, dated May 25, 2021*
Previous Mount Analysis	*Maser Consulting, Project #: 20777521A, dated September 27, 2021*
Mount Mapping Report	*RKS Design & Engineering, LLC Site ID: ATAC: 274848, dated November 28, 2020*
Construction Drawings	*A.T. Engineering Service, PLLC Job #: OAA761901, dated November 13,2020*
Mount Modification Drawings	*Maser Consulting, Project #: 20777521A, dated October 12, 2021*

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H	
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT}:	117 mph
	Ice Wind Speed (3-sec. Gust):	50 mph
	Design Ice Thickness:	1.00 in
	Risk Category:	II
	Exposure Category:	B
	Topographic Category:	1
	Topographic Feature Considered:	N/A
	Topographic Method:	N/A
	Ground Elevation Factor, K_e:	0.963
Seismic Parameters:	S_S:	0.191
	S_1:	0.054
Maintenance Parameters:	Wind Speed (3-sec. Gust):	30 mph
	Maintenance Live Load, Lv:	250 lbs.
	Maintenance Live Load, Lm:	500 lbs.
Analysis Software:	RISA-3D (V17)	

Final Loading Configuration:

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
133.00	135.00	1	Andrew	LNX-6514DS-VTM	Retained
		2	Andrew	LNX-8513DS-VTM	
		6	JMA Wireless	MX06FRO660-03	Added
		3	Samsung	MT6407-77A	
		3	Samsung	B2/B66A RRH-BR049	
		3	Samsung	B5/B13 RRH-BR04C	
		1	Raycap	RVZDC-6627-PF-48	

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 in accordance with the NSTD-446 Standard, the mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer's specifications.

4. All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected member unless otherwise specified in this report.

5. The mount was checked up to, and including, the bolts that fasten it to the mount collar/attachment and threaded rod connections in collar members if applicable. Local deformation and interaction between the mount collar/attachment and the supporting tower structure are outside the scope of this analysis.

6. All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. Maser Consulting Connecticut is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.

7. Structural Steel Grades have been assumed as follows, if applicable, unless otherwise noted in this analysis:
   - Channel, Solid Round, Angle, Plate — ASTM A36 (Gr. 36)
   - HSS (Rectangular) — ASTM 500 (Gr. B-46)
   - Pipe — ASTM A53 (Gr. B-35)
   - Threaded Rod — F1554 (Gr. 36)
   - Bolts — ASTM A325

8. Any mount modifications listed under Sources of Information are assumed to have been installed per the design specifications.

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

Analysis Results:

Component	Utilization %	Pass/Fail
Face Horizontal	*89.6%*	*Pass*
Antenna Pipe	*50.9%*	*Pass*
Standoff Horizontal	*40.5%*	*Pass*
Standoff Bracing	*13.7%*	*Pass*
Mast Pipe	*16.9%*	*Pass*
Tie-Back	*26.3%*	*Pass*
V-Brace Angle	*14.7%*	*Pass*
Mount Connection	*15.4%*	*Pass*

Structure Rating – *(Controlling Utilization of all Components)*	**89.6%**

Recommendation:

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

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

Attachments:

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

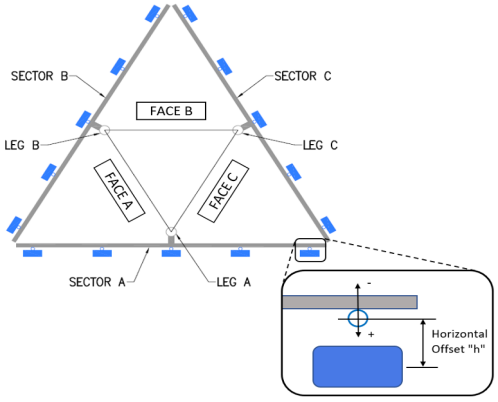
V3.0 Updated on 8-31-2020

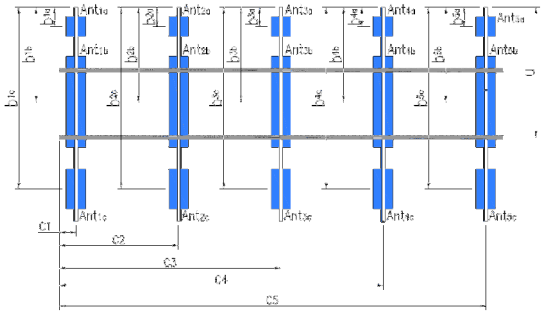
Antenna Mount Mapping Form (PATENT PENDING)

FCC #
UNKNOWN

Tower Owner:	ATC	**Mapping Date:**	11-28-2020
Site Name:	ATC: WOLCOTT RD CT	**Tower Type:**	Self Support
Site Number or ID:	ATC: 274848	**Tower Height (Ft.):**	UNKNOWN
Mapping Contractor:	RKS Design & Engineering LLC.	**Mount Elevation (Ft.):**	132

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





Antenna Layout (Looking Out From Tower)

Mount Pipe Configuration and Geometries [Unit = Inches]

Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."
A1	PIPE 2.375"Ø X 0.15" X 84" Long	67.00	12.00	C1	PIPE 2.375"Ø X 0.15" X 84" Long	67.00	12.00
A2	PIPE 2.375"Ø X 0.15" X 84" Long	67.00	78.00	C2	PIPE 2.375"Ø X 0.15" X 84" Long	67.00	78.00
A3	PIPE 2.375"Ø X 0.15" X 84" Long	67.00	120.00	C3	PIPE 2.375"Ø X 0.15" X 84" Long	67.00	120.00
A4	PIPE 2.375"Ø X 0.15" X 84" Long	67.00	144.00	C4	PIPE 2.375"Ø X 0.15" X 84" Long	67.00	144.00
A5				C5			
A6				C6			
B1	PIPE 2.375"Ø X 0.15" X 84" Long	67.00	12.00	D1			
B2	PIPE 2.375"Ø X 0.15" X 84" Long	67.00	78.00	D2			
B3	PIPE 2.375"Ø X 0.15" X 84" Long	67.00	120.00	D3			
B4	PIPE 2.375"Ø X 0.15" X 84" Long	67.00	144.00	D4			
B5				D5			
B6				D6			

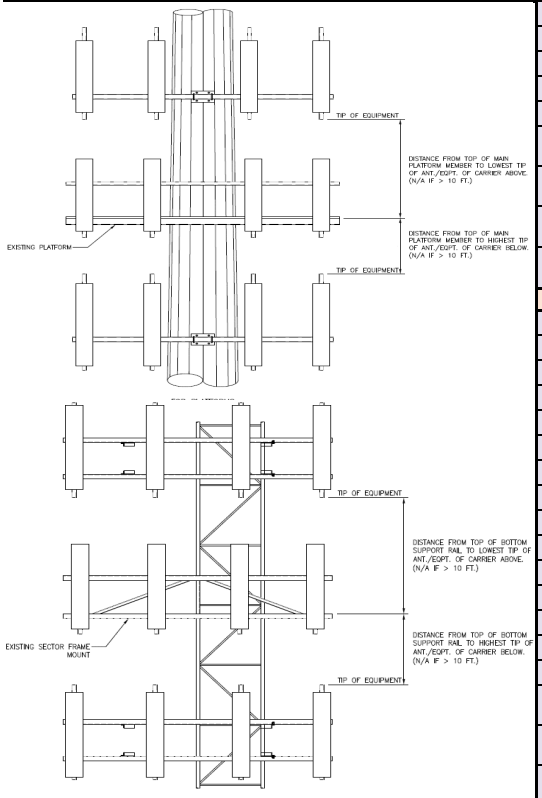
Distance between bottom rail and mount CL elevation (dim d). Unit is inches. See 'Mount Elev Ref' tab for details. :	15.00
Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) :	
Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) :	
Please enter additional infomation or comments below.	

Tower Face Width at Mount Elev. (ft.):	4.5	Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):	2	

	Enter antenna model. If not labeled, enter "Unknown".						Mounting Locations [Units are inches and degrees]			Photos of antennas
Ants. Items	Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Vertical Distances"b_{1a}, b_{2a}, b_{3a}, b_{1b}...." (Inches)	Horiz. Offset "h" (Use "-" if Ant. is behind)	Antenna Azimuth (Degrees)	Photo Numbers
Sector A										
Ant_{1a}										
Ant_{1b}	UNKNOWN:ANTENNA	7.00	2.50	71.00		132.375	47.50	7.75	30.00	18
Ant_{1c}										
Ant_{2a}										
Ant_{2b}	BXA-70063/6CFEDING	11.00	5.00	71.00		132.708	43.50	10.50	30.00	18
Ant_{2c}										
Ant_{3a}										
Ant_{3b}	UNKNOWN:ANTENNA	8.00	4.00	48.00		133.833	30.00	8.75	30.00	18
Ant_{3c}										
Ant_{4a}										
Ant_{4b}	UNKNOWN:ANTENNA	11.00	6.00	72.00		132.667	44.00	10.50	30.00	18
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff	UNKNOWN	6.00	2.00	4.00			37.00	1.50		40, 42, 43
Ant on Tower	9442 RRH2X40-AWS	10.50	6.50	24.50			44.00	4.25		41
Ant on Tower										

Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector	
Sector A:	30.00	Deg	Leg A:	30.00	Deg
Sector B:	150.00	Deg	Leg B:	150.00	Deg
Sector C:	250.00	Deg	Leg C:	270.00	Deg
Sector D:		Deg	Leg D:		Deg

Climbing Facility Information			
Location:	30.00	Deg	Sector B
Climbing Facility	Corrosion Type:		Good condition.
	Access:		Climbing path was unobstructed.
	Condition:		Good condition.



Sector B										
Ant_{1a}										
Ant_{1b}	UNKNOWN:ANTENNA	7.00	2.50	71.00		132.375	47.50	7.75	150.00	21
Ant_{1c}										
Ant_{2a}										
Ant_{2b}	BXA-70063/6CFEDING	11.00	5.00	71.00		132.708	43.50	10.50	150.00	21
Ant_{2c}										
Ant_{3a}										
Ant_{3b}	UNKNOWN:ANTENNA	8.00	4.00	48.00		133.833	30.00	8.75	150.00	21
Ant_{3c}										
Ant_{4a}										
Ant_{4b}	UNKNOWN:ANTENNA	11.00	6.00	72.00		132.667	44.00	10.50	150.00	21
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff	UNKNOWN	6.00	2.00	4.00			37.00	1.50		85
Ant on Tower	9442 RRH2X40-AWS	10.50	6.50	24.50			44.00	4.25		86
Ant on Tower	UNKNOWN: COVP	15.00	10.00	25.00			43.25	6.00		87
Sector C										
Ant_{1a}										
Ant_{1b}	UNKNOWN:ANTENNA	7.00	2.50	71.00		132.375	47.50	7.75	250.00	24
Ant_{1c}										
Ant_{2a}										
Ant_{2b}	BXA-70063/6CFEDING	11.00	5.00	71.00		132.708	43.50	10.50	250.00	24
Ant_{2c}										
Ant_{3a}										
Ant_{3b}	UNKNOWN:ANTENNA	8.00	4.00	48.00		133.833	30.00	8.75	250.00	24
Ant_{3c}										
Ant_{4a}										
Ant_{4b}	UNKNOWN:ANTENNA	11.00	6.00	72.00		132.667	44.00	10.50	250.00	24
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff	UNKNOWN	6.00	2.00	4.00			37.00	1.50		89
Ant on Tower	9442 RRH2X40-AWS	10.50	6.50	24.50			44.00	4.25		89
Ant on Tower										
Sector D										
Ant_{1a}										
Ant_{1b}										
Ant_{1c}										
Ant_{2a}										
Ant_{2b}										
Ant_{2c}										
Ant_{3a}										
Ant_{3b}										
Ant_{3c}										
Ant_{4a}										
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

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

1	TOTAL COAX :(13)FH 1-5/8 , (1) 1.55"Ø	
2		
3		
4		
5		
6		
7		
8		

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

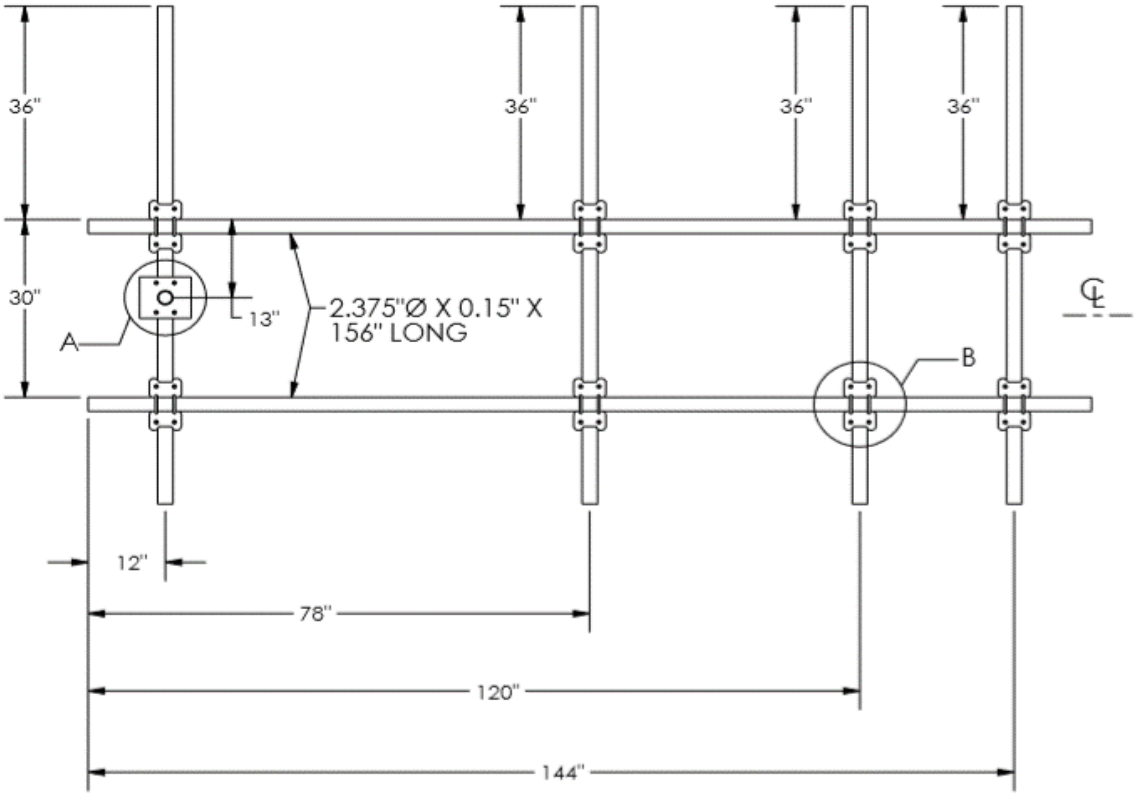
Standard Conditions
1. Obvious safety and structural issues/deficiencies noticed at the time of the mount mapping are to be reported in this mapping. However, this mount mapping is not a condition assessment of the mount.

V3.0 Updated on 8-31-2020

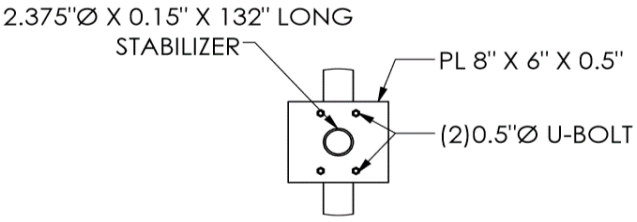
Antenna Mount Mapping Form (PATENT PENDING)			FCC #
			UNKNOWN

Tower Owner:	ATC	**Mapping Date:**	11-28-2020
Site Name:	ATC: WOLCOTT RD CT	**Tower Type:**	Self Support
Site Number or ID:	ATC: 274848	**Tower Height (Ft.):**	UNKNOWN
Mapping Contractor:	RKS Design & Engineering LLC.	**Mount Elevation (Ft.):**	132

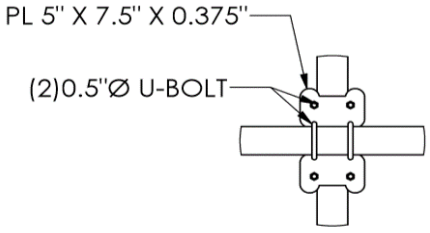
Please Insert Sketches of the Antenna Mount



SECTOR: A& C

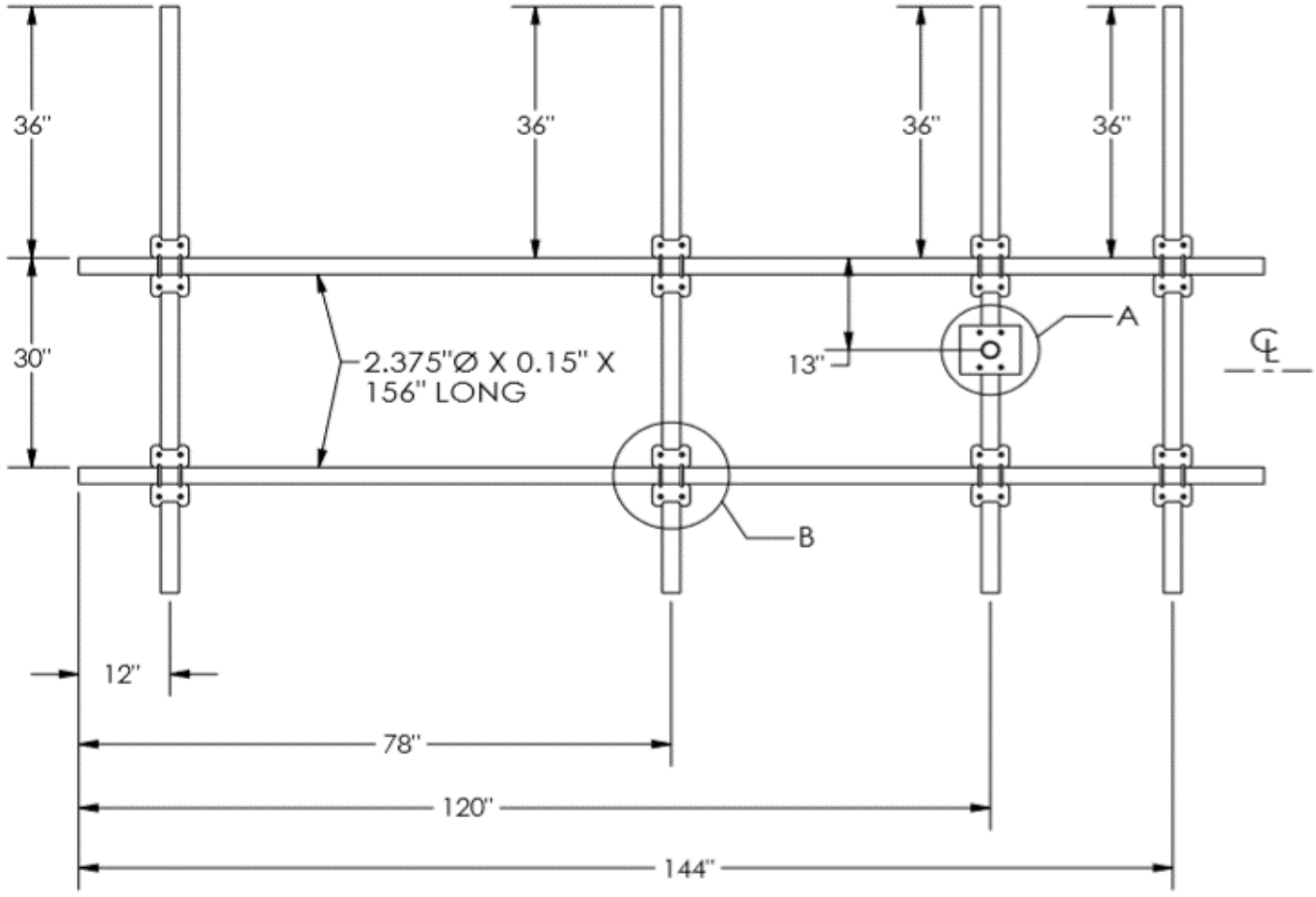


DETAIL A

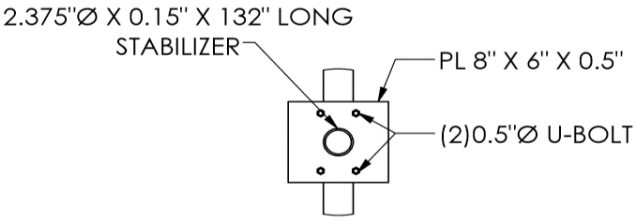


DETAIL B

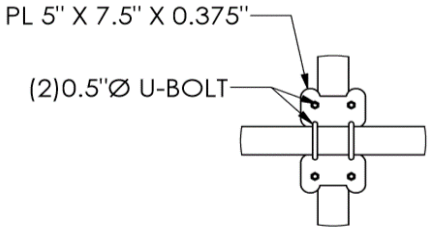
Please Insert Sketches of the Antenna Mount, cont'd



SECTOR: B

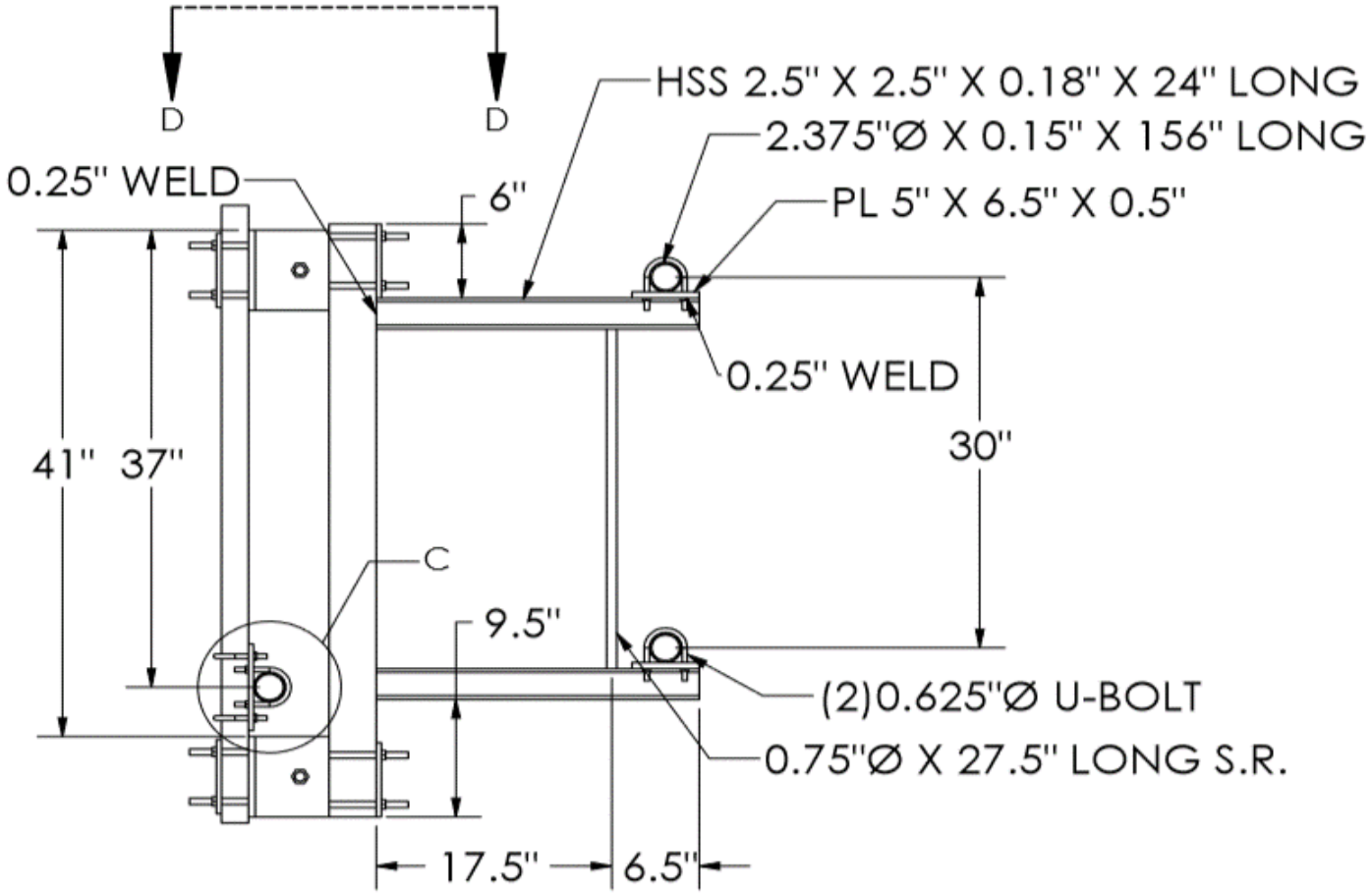


DETAIL A

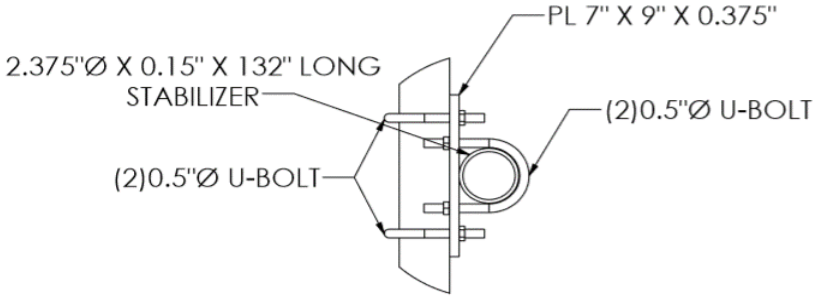


DETAIL B

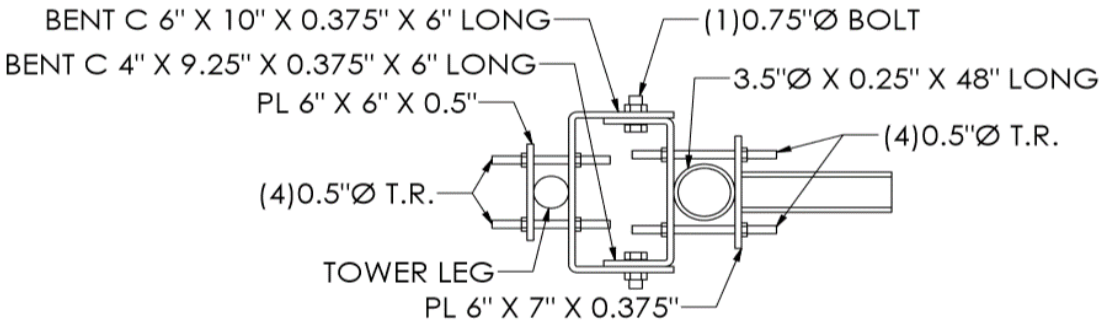
Please Insert Sketches of the Antenna Mount, cont'd



STANDOFF VIEW

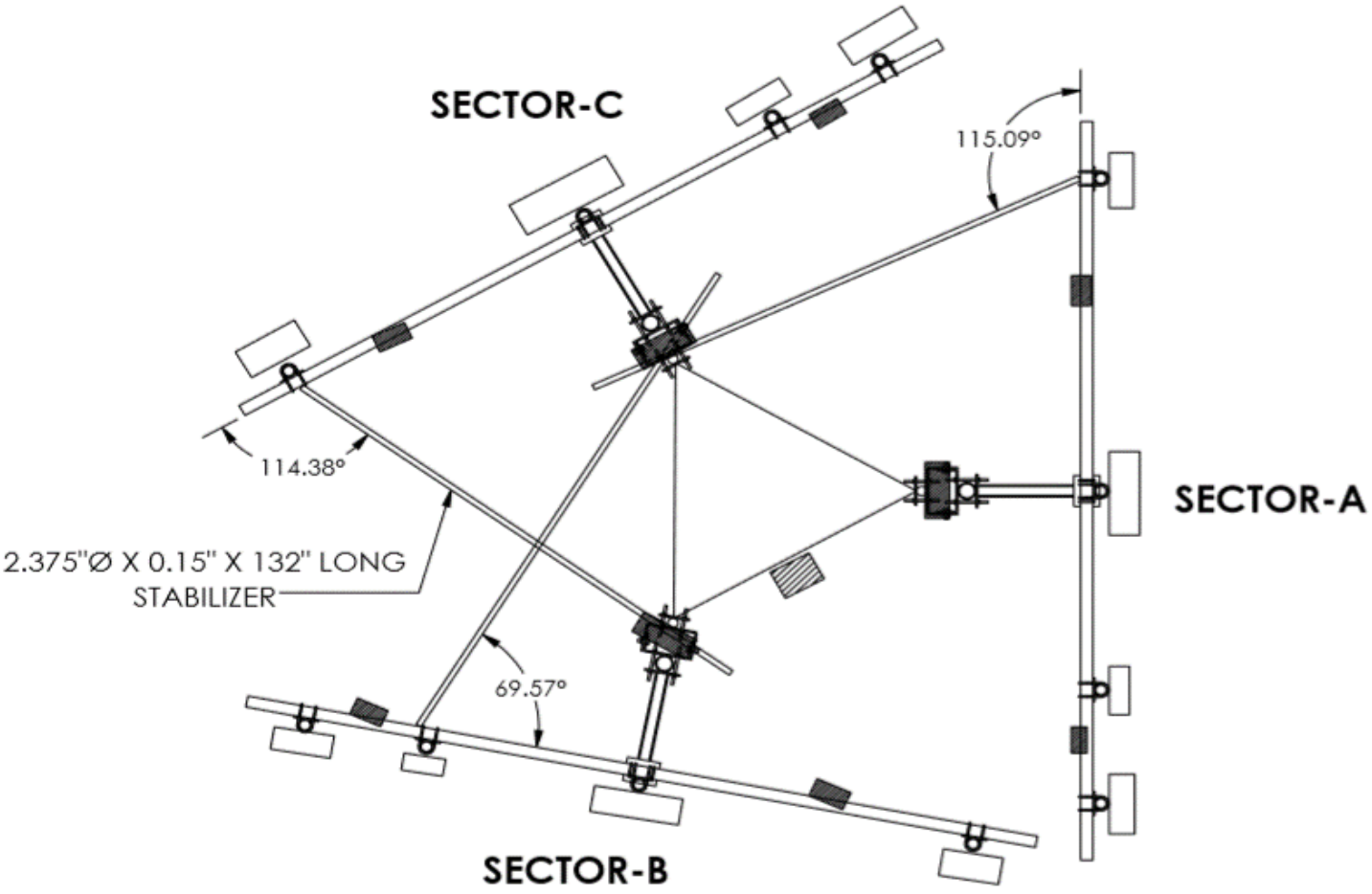


DETAIL C
STABILIZER CONNECTION DETAIL

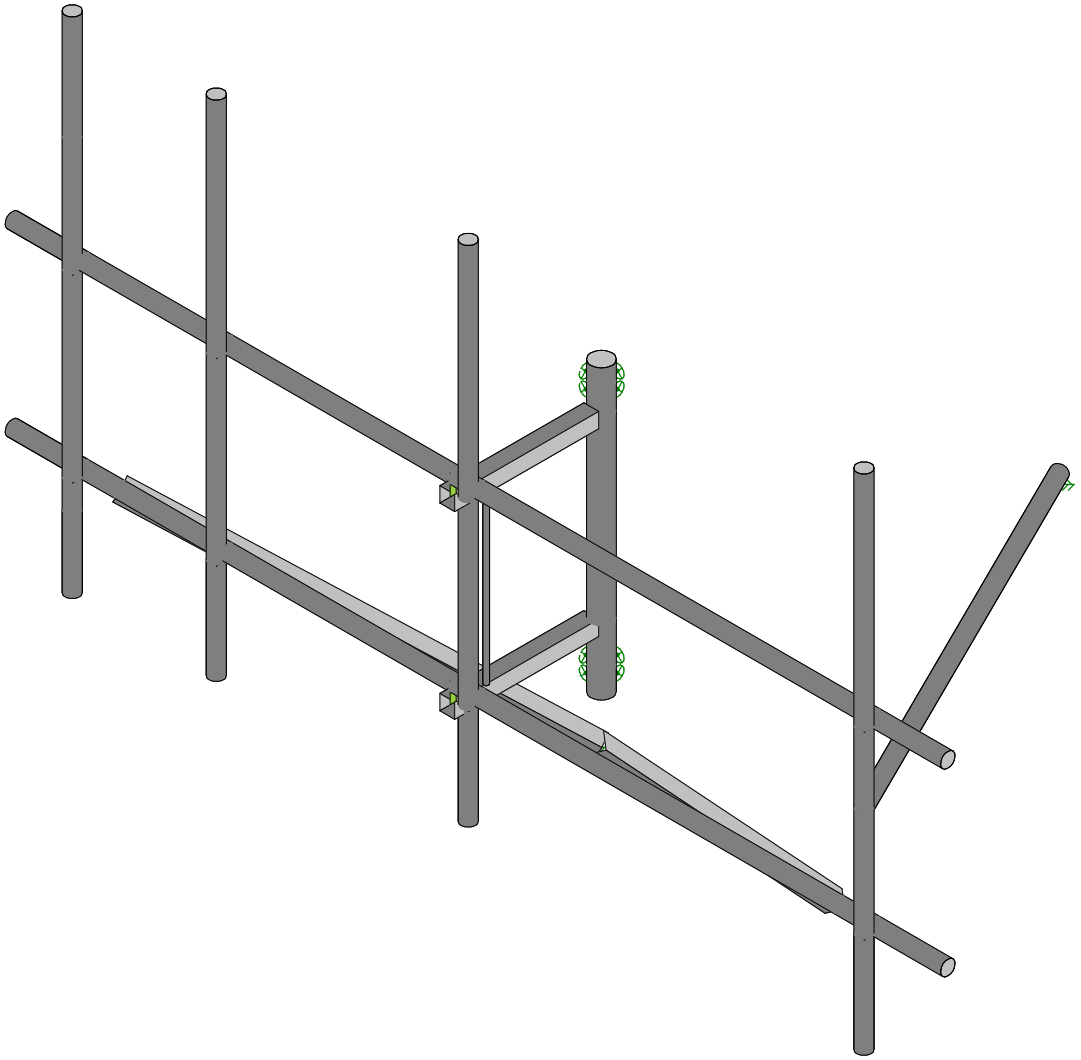


SECTION D-D

Please Insert Sketches of the Antenna Mount, cont'd

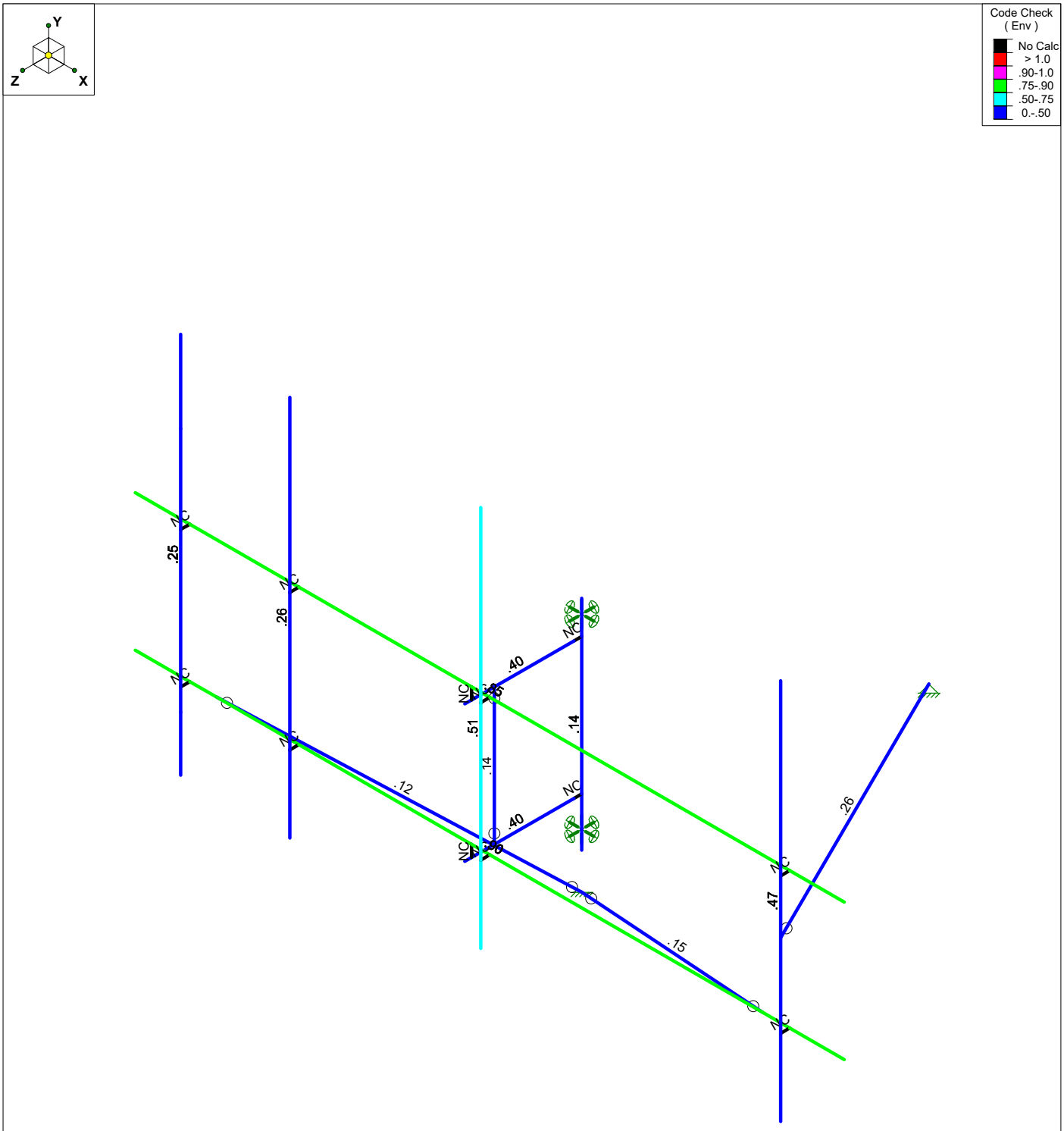


PLAN VIEW



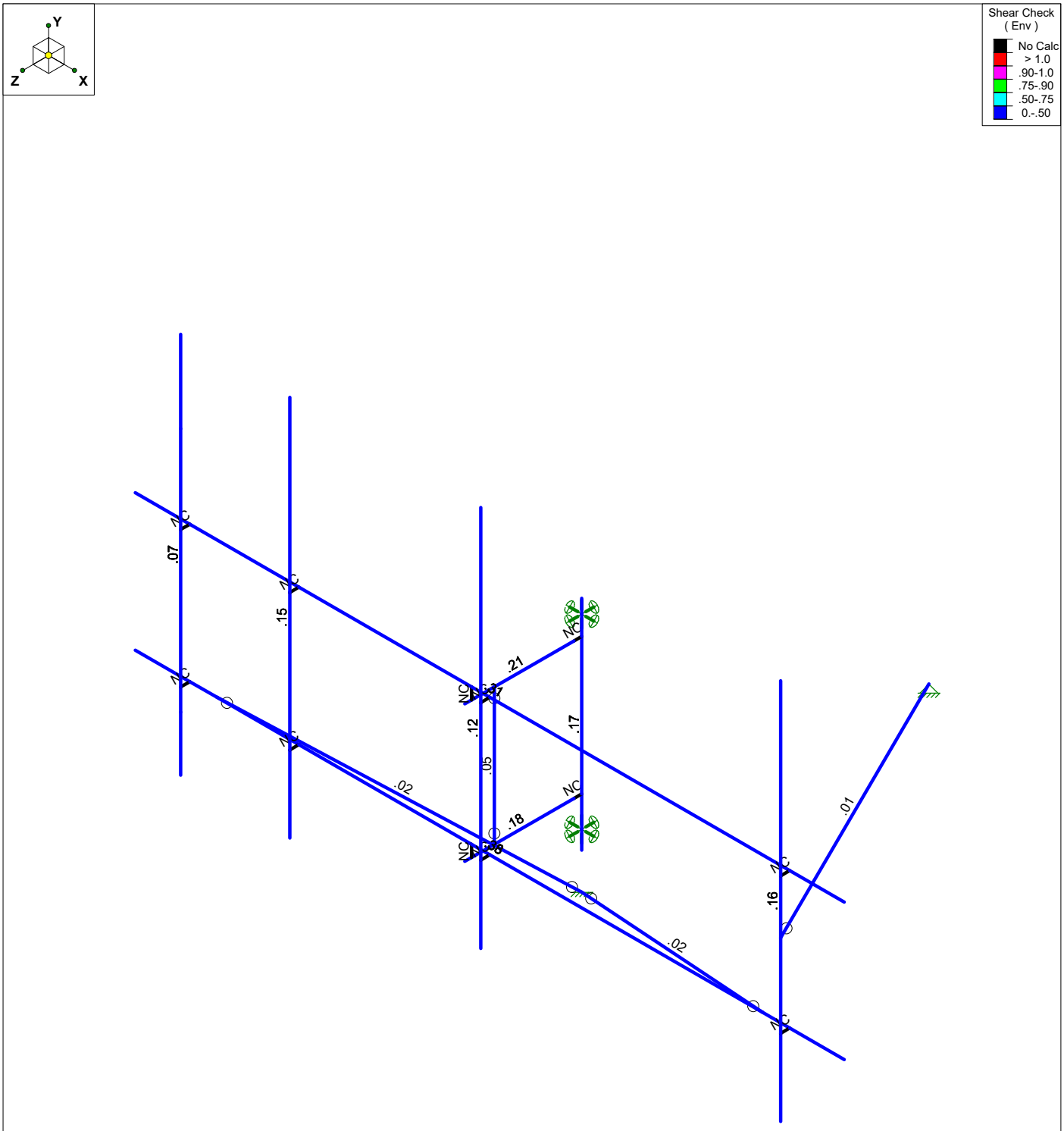
Envelope Only Solution

Maser Consulting	467187-VZW_MT_LOT_SectorC_H	SK - 1
		Oct 11, 2021 at 5:00 PM
Project No. 21781139A		467187-VZW_MT_LOT_C_H MO...



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

Maser Consulting	467187-VZW_MT_LOT_SectorC_H	SK - 2
		Oct 11, 2021 at 5:02 PM
Project No. 21781139A		467187-VZW_MT_LOT_C_H MO...



Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

Maser Consulting	467187-VZW_MT_LOT_SectorC_H	SK - 3
		Oct 11, 2021 at 5:02 PM
Project No. 21781139A		467187-VZW_MT_LOT_C_H MO...

Basic Load Cases

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

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
59	Structure Wi (180 De...	None						26		
60	Structure Wi (210 De...	None						26		
61	Structure Wi (240 De...	None						26		
62	Structure Wi (270 De...	None						26		
63	Structure Wi (300 De...	None						26		
64	Structure Wi (330 De...	None						26		
65	Structure Wm (0 Deg)	None						26		
66	Structure Wm (30 De...	None						26		
67	Structure Wm (60 De...	None						26		
68	Structure Wm (90 De...	None						26		
69	Structure Wm (120 D...	None						26		
70	Structure Wm (150 D...	None						26		
71	Structure Wm (180 D...	None						26		
72	Structure Wm (210 D...	None						26		
73	Structure Wm (240 D...	None						26		
74	Structure Wm (270 D...	None						26		
75	Structure Wm (300 D...	None						26		
76	Structure Wm (330 D...	None						26		
77	Lm1	None					1			
78	Lm2	None					1			
79	Lv1	None					1			
80	Lv2	None					1			

Load Combinations

	Description	Sol...	P...	S...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...
1	1.2D+1.0Wo (0 Deg)	Yes	Y		1	1.2	39	1.2	3	1	41	1												
2	1.2D+1.0Wo (30 Deg)	Yes	Y		1	1.2	39	1.2	4	1	42	1												
3	1.2D+1.0Wo (60 Deg)	Yes	Y		1	1.2	39	1.2	5	1	43	1												
4	1.2D+1.0Wo (90 Deg)	Yes	Y		1	1.2	39	1.2	6	1	44	1												
5	1.2D+1.0Wo (120 D...	Yes	Y		1	1.2	39	1.2	7	1	45	1												
6	1.2D+1.0Wo (150 D...	Yes	Y		1	1.2	39	1.2	8	1	46	1												
7	1.2D+1.0Wo (180 D...	Yes	Y		1	1.2	39	1.2	9	1	47	1												
8	1.2D+1.0Wo (210 D...	Yes	Y		1	1.2	39	1.2	10	1	48	1												
9	1.2D+1.0Wo (240 D...	Yes	Y		1	1.2	39	1.2	11	1	49	1												
10	1.2D+1.0Wo (270 D...	Yes	Y		1	1.2	39	1.2	12	1	50	1												
11	1.2D+1.0Wo (300 D...	Yes	Y		1	1.2	39	1.2	13	1	51	1												
12	1.2D+1.0Wo (330 D...	Yes	Y		1	1.2	39	1.2	14	1	52	1												
13	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1	53	1								
14	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1								
15	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1	55	1								
16	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1	56	1								
17	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1								
18	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1								
19	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1								
20	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1								
21	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1								
22	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1								
23	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1								
24	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1								
25	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1										
26	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1										
27	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1										
28	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1										
29	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1										
30	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1										
31	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1										
32	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1										

Load Combinations (Continued)

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

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	6.5	0	0	0	
2	N2	-6.5	0	0	0	
3	N3	6.5	2.5	0	0	
4	N4	-6.5	2.5	0	0	
5	N5	-5.5	2.5	0	0	
6	N6	-5.5	2.5	0.166667	0	
7	N7	-5.5	5.598958	0.166667	0	
8	N8	-5.5	-1.401042	0.166667	0	
9	N9	-5.5	0	0	0	
10	N10	-5.5	0	0.166667	0	
11	N11	0	2.5	0	0	
12	N12	0	2.5	0.166667	0	
13	N13	0	5.598958	0.166667	0	
14	N14	0	-1.401042	0.166667	0	
15	N15	0	0	0	0	
16	N16	0	0	0.166667	0	
17	N17	-3.5	2.5	0	0	
18	N18	-3.5	2.5	0.166667	0	
19	N19	-3.5	5.598958	0.166667	0	
20	N20	-3.5	-1.401042	0.166667	0	
21	N21	-3.5	0	0	0	
22	N22	-3.5	0	0.166667	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
23	N30	-0.333333	2.5	0	0	
24	N31	-0.333333	2.291667	0	0	
25	N32	-0.333333	2.291667	.125	0	
26	N33	-0.333333	2.291667	-1.875	0	
27	N34	-0.333333	0	0	0	
28	N35	-0.333333	-0.208333	0	0	
29	N36	-0.333333	-0.208333	.125	0	
30	N37	-0.333333	-0.208333	-1.875	0	
31	N38	-0.333333	2.291667	-0.416667	0	
32	N39	-0.333333	-0.208333	-0.416667	0	
33	N40	-0.333333	2.291667	-2.020833	0	
34	N41	-0.333333	-0.208333	-2.020833	0	
35	N42	-0.333333	2.895833	-2.020833	0	
36	N43	-0.333333	-1.104167	-2.020833	0	
37	N44	-0.333333	2.645833	-2.020833	0	
38	N45	-0.333333	-0.770833	-2.020833	0	
39	N48	2.828128	1.515667	-5.223202	0	
40	N48A	5.5	1.515667	0.166667	0	
41	N47	5.5	2.5	0	0	
42	N48B	5.5	2.5	0.166667	0	
43	N49	5.5	5.598958	0.166667	0	
44	N50	5.5	-1.401042	0.166667	0	
45	N51	5.5	0	0	0	
46	N52	5.5	0	0.166667	0	
47	N47A	-5.5	4.098958	0.166667	0	
48	N48C	-5.5	-0.401042	0.166667	0	
49	N49A	-5	0	0	0	
50	N51B	5	0	0	0	
51	N52A	-0.333333	-1.770833	-2.020833	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rules	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Antenna Pipe	PIPE_2.0	Column	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
2	Dish Pipe	PIPE_4.0	Column	Pipe	A53 Gr. B	Typical	2.96	6.82	6.82	13.6
3	Face Horizontal	PIPE_2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
4	Standoff Horizontal	HSS2.5X2.5X3	Beam	SquareTube	A500 Gr. B 42	Typical	1.54	1.35	1.35	2.25
5	Standoff Bracing	SR 0.75	Column	BAR	A36 Gr.36	Typical	.442	.016	.016	.031
6	Tie-Back	PIPE_2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
7	Mast Pipe	PIPE_3.0	Column	Pipe	A53 Gr. B	Typical	2.07	2.85	2.85	5.69
8	MOD TIEBACK	PIPE_2.0	Column	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
9	MOD V-BRACE	L2.5x2.5x4	Column	Single Angle	A36 Gr.36	Typical	1.19	.692	.692	.026

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/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	N2	N1			Face Horizontal	Beam	Pipe	A53 Gr. B	Typical
2	M2	N4	N3			Face Horizontal	Beam	Pipe	A53 Gr. B	Typical
3	M3	N6	N5			RIGID	None	None	RIGID	Typical
4	MP4A	N7	N8			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
5	M5	N10	N9			RIGID	None	None	RIGID	Typical
6	M6	N12	N11			RIGID	None	None	RIGID	Typical
7	MP2A	N13	N14			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
8	M8	N16	N15			RIGID	None	None	RIGID	Typical
9	M9	N18	N17			RIGID	None	None	RIGID	Typical
10	MP3A	N19	N20			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
11	M11	N22	N21			RIGID	None	None	RIGID	Typical
12	M15	N32	N33			Standoff Horiz...	Beam	SquareTube	A500 Gr. ...	Typical
13	M16	N30	N31			RIGID	None	None	RIGID	Typical
14	M17	N36	N37			Standoff Horiz...	Beam	SquareTube	A500 Gr. ...	Typical
15	M18	N34	N35			RIGID	None	None	RIGID	Typical
16	M19	N38	N39			Standoff Braci...	Column	BAR	A36 Gr.36	Typical
17	M20	N33	N40			RIGID	None	None	RIGID	Typical
18	M21	N37	N41			RIGID	None	None	RIGID	Typical
19	M22	N42	N43			Mast Pipe	Column	Pipe	A53 Gr. B	Typical
20	M23	N48A	N48			Tie-Back	Beam	Pipe	A53 Gr. B	Typical
21	M24	N48B	N47			RIGID	None	None	RIGID	Typical
22	MP1A	N49	N50			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
23	M26	N52	N51			RIGID	None	None	RIGID	Typical
24	M24A	N49A	N52A			MOD V-BRACE	Column	Single Angle	A36 Gr.36	Typical
25	M25	N52A	N51B			MOD V-BRACE	Column	Single Angle	A36 Gr.36	Typical

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	Y	-16.55	1.5
2	MP4A	My	-.014	1.5
3	MP4A	Mz	0	1.5
4	MP4A	Y	-16.55	6
5	MP4A	My	-.014	6
6	MP4A	Mz	0	6
7	MP2A	Y	-23	1.5
8	MP2A	My	-.011	1.5
9	MP2A	Mz	.017	1.5
10	MP2A	Y	-23	6
11	MP2A	My	-.011	6
12	MP2A	Mz	.017	6
13	MP2A	Y	-23	1.5
14	MP2A	My	-.011	1.5
15	MP2A	Mz	-.017	1.5
16	MP2A	Y	-23	6
17	MP2A	My	-.011	6
18	MP2A	Mz	-.017	6
19	MP1A	Y	-43.55	2
20	MP1A	My	-.022	2
21	MP1A	Mz	0	2
22	MP1A	Y	-43.55	4
23	MP1A	My	-.022	4
24	MP1A	Mz	0	4
25	MP2A	Y	-84.4	4
26	MP2A	My	.042	4
27	MP2A	Mz	0	4
28	MP3A	Y	-70.3	4
29	MP3A	My	.035	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
30	MP3A	Mz	-.006	4
31	M22	Y	-32	2
32	M22	My	0	2
33	M22	Mz	0	2

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	Y	-60.337	1.5
2	MP4A	My	-.053	1.5
3	MP4A	Mz	0	1.5
4	MP4A	Y	-60.337	6
5	MP4A	My	-.053	6
6	MP4A	Mz	0	6
7	MP2A	Y	-82.122	1.5
8	MP2A	My	-.041	1.5
9	MP2A	Mz	.062	1.5
10	MP2A	Y	-82.122	6
11	MP2A	My	-.041	6
12	MP2A	Mz	.062	6
13	MP2A	Y	-82.122	1.5
14	MP2A	My	-.041	1.5
15	MP2A	Mz	-.062	1.5
16	MP2A	Y	-82.122	6
17	MP2A	My	-.041	6
18	MP2A	Mz	-.062	6
19	MP1A	Y	-35.461	2
20	MP1A	My	-.018	2
21	MP1A	Mz	0	2
22	MP1A	Y	-35.461	4
23	MP1A	My	-.018	4
24	MP1A	Mz	0	4
25	MP2A	Y	-44.705	4
26	MP2A	My	.022	4
27	MP2A	Mz	0	4
28	MP3A	Y	-40.202	4
29	MP3A	My	.02	4
30	MP3A	Mz	-.003	4
31	M22	Y	-87.543	2
32	M22	My	0	2
33	M22	Mz	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	0	1.5
2	MP4A	Z	-125.135	1.5
3	MP4A	Mx	0	1.5
4	MP4A	X	0	6
5	MP4A	Z	-125.135	6
6	MP4A	Mx	0	6
7	MP2A	X	0	1.5
8	MP2A	Z	-152.668	1.5
9	MP2A	Mx	-.115	1.5
10	MP2A	X	0	6
11	MP2A	Z	-152.668	6
12	MP2A	Mx	-.115	6
13	MP2A	X	0	1.5
14	MP2A	Z	-152.668	1.5
15	MP2A	Mx	.115	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
16	MP2A	X	0	6
17	MP2A	Z	-152.668	6
18	MP2A	Mx	.115	6
19	MP1A	X	0	2
20	MP1A	Z	-72.699	2
21	MP1A	Mx	0	2
22	MP1A	X	0	4
23	MP1A	Z	-72.699	4
24	MP1A	Mx	0	4
25	MP2A	X	0	4
26	MP2A	Z	-57.85	4
27	MP2A	Mx	0	4
28	MP3A	X	0	4
29	MP3A	Z	-57.05	4
30	MP3A	Mx	.005	4
31	M22	X	0	2
32	M22	Z	-96.721	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	57.254	1.5
2	MP4A	Z	-99.166	1.5
3	MP4A	Mx	-.05	1.5
4	MP4A	X	57.254	6
5	MP4A	Z	-99.166	6
6	MP4A	Mx	-.05	6
7	MP2A	X	71.438	1.5
8	MP2A	Z	-123.735	1.5
9	MP2A	Mx	-.129	1.5
10	MP2A	X	71.438	6
11	MP2A	Z	-123.735	6
12	MP2A	Mx	-.129	6
13	MP2A	X	71.438	1.5
14	MP2A	Z	-123.735	1.5
15	MP2A	Mx	.057	1.5
16	MP2A	X	71.438	6
17	MP2A	Z	-123.735	6
18	MP2A	Mx	.057	6
19	MP1A	X	30.82	2
20	MP1A	Z	-53.382	2
21	MP1A	Mx	-.015	2
22	MP1A	X	30.82	4
23	MP1A	Z	-53.382	4
24	MP1A	Mx	-.015	4
25	MP2A	X	26.527	4
26	MP2A	Z	-45.947	4
27	MP2A	Mx	.013	4
28	MP3A	X	23.445	4
29	MP3A	Z	-40.607	4
30	MP3A	Mx	.015	4
31	M22	X	54.063	2
32	M22	Z	-93.64	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	80.759	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
2	MP4A	Z	-46.626	1.5
3	MP4A	Mx	-.071	1.5
4	MP4A	X	80.759	6
5	MP4A	Z	-46.626	6
6	MP4A	Mx	-.071	6
7	MP2A	X	106.776	1.5
8	MP2A	Z	-61.647	1.5
9	MP2A	Mx	-.1	1.5
10	MP2A	X	106.776	6
11	MP2A	Z	-61.647	6
12	MP2A	Mx	-.1	6
13	MP2A	X	106.776	1.5
14	MP2A	Z	-61.647	1.5
15	MP2A	Mx	-.007	1.5
16	MP2A	X	106.776	6
17	MP2A	Z	-61.647	6
18	MP2A	Mx	-.007	6
19	MP1A	X	34.226	2
20	MP1A	Z	-19.76	2
21	MP1A	Mx	-.017	2
22	MP1A	X	34.226	4
23	MP1A	Z	-19.76	4
24	MP1A	Mx	-.017	4
25	MP2A	X	37.642	4
26	MP2A	Z	-21.732	4
27	MP2A	Mx	.019	4
28	MP3A	X	29.813	4
29	MP3A	Z	-17.213	4
30	MP3A	Mx	.016	4
31	M22	X	105.756	2
32	M22	Z	-61.058	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	82.624	1.5
2	MP4A	Z	0	1.5
3	MP4A	Mx	-.072	1.5
4	MP4A	X	82.624	6
5	MP4A	Z	0	6
6	MP4A	Mx	-.072	6
7	MP2A	X	113.503	1.5
8	MP2A	Z	0	1.5
9	MP2A	Mx	-.057	1.5
10	MP2A	X	113.503	6
11	MP2A	Z	0	6
12	MP2A	Mx	-.057	6
13	MP2A	X	113.503	1.5
14	MP2A	Z	0	1.5
15	MP2A	Mx	-.057	1.5
16	MP2A	X	113.503	6
17	MP2A	Z	0	6
18	MP2A	Mx	-.057	6
19	MP1A	X	28.462	2
20	MP1A	Z	0	2
21	MP1A	Mx	-.014	2
22	MP1A	X	28.462	4
23	MP1A	Z	0	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
24	MP1A	Mx	-.014	4
25	MP2A	X	38.67	4
26	MP2A	Z	0	4
27	MP2A	Mx	.019	4
28	MP3A	X	32.122	4
29	MP3A	Z	0	4
30	MP3A	Mx	.016	4
31	M22	X	124.701	2
32	M22	Z	0	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	80.759	1.5
2	MP4A	Z	46.626	1.5
3	MP4A	Mx	-.071	1.5
4	MP4A	X	80.759	6
5	MP4A	Z	46.626	6
6	MP4A	Mx	-.071	6
7	MP2A	X	106.776	1.5
8	MP2A	Z	61.647	1.5
9	MP2A	Mx	-.007	1.5
10	MP2A	X	106.776	6
11	MP2A	Z	61.647	6
12	MP2A	Mx	-.007	6
13	MP2A	X	106.776	1.5
14	MP2A	Z	61.647	1.5
15	MP2A	Mx	-.1	1.5
16	MP2A	X	106.776	6
17	MP2A	Z	61.647	6
18	MP2A	Mx	-.1	6
19	MP1A	X	34.226	2
20	MP1A	Z	19.76	2
21	MP1A	Mx	-.017	2
22	MP1A	X	34.226	4
23	MP1A	Z	19.76	4
24	MP1A	Mx	-.017	4
25	MP2A	X	37.642	4
26	MP2A	Z	21.732	4
27	MP2A	Mx	.019	4
28	MP3A	X	36.618	4
29	MP3A	Z	21.141	4
30	MP3A	Mx	.016	4
31	M22	X	98.118	2
32	M22	Z	56.648	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	57.254	1.5
2	MP4A	Z	99.166	1.5
3	MP4A	Mx	-.05	1.5
4	MP4A	X	57.254	6
5	MP4A	Z	99.166	6
6	MP4A	Mx	-.05	6
7	MP2A	X	71.438	1.5
8	MP2A	Z	123.735	1.5
9	MP2A	Mx	.057	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
10	MP2A	X	71.438	6
11	MP2A	Z	123.735	6
12	MP2A	Mx	.057	6
13	MP2A	X	71.438	1.5
14	MP2A	Z	123.735	1.5
15	MP2A	Mx	-.129	1.5
16	MP2A	X	71.438	6
17	MP2A	Z	123.735	6
18	MP2A	Mx	-.129	6
19	MP1A	X	30.82	2
20	MP1A	Z	53.382	2
21	MP1A	Mx	-.015	2
22	MP1A	X	30.82	4
23	MP1A	Z	53.382	4
24	MP1A	Mx	-.015	4
25	MP2A	X	26.527	4
26	MP2A	Z	45.947	4
27	MP2A	Mx	.013	4
28	MP3A	X	27.373	4
29	MP3A	Z	47.412	4
30	MP3A	Mx	.009	4
31	M22	X	49.653	2
32	M22	Z	86.002	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	0	1.5
2	MP4A	Z	125.135	1.5
3	MP4A	Mx	0	1.5
4	MP4A	X	0	6
5	MP4A	Z	125.135	6
6	MP4A	Mx	0	6
7	MP2A	X	0	1.5
8	MP2A	Z	152.668	1.5
9	MP2A	Mx	.115	1.5
10	MP2A	X	0	6
11	MP2A	Z	152.668	6
12	MP2A	Mx	.115	6
13	MP2A	X	0	1.5
14	MP2A	Z	152.668	1.5
15	MP2A	Mx	-.115	1.5
16	MP2A	X	0	6
17	MP2A	Z	152.668	6
18	MP2A	Mx	-.115	6
19	MP1A	X	0	2
20	MP1A	Z	72.699	2
21	MP1A	Mx	0	2
22	MP1A	X	0	4
23	MP1A	Z	72.699	4
24	MP1A	Mx	0	4
25	MP2A	X	0	4
26	MP2A	Z	57.85	4
27	MP2A	Mx	0	4
28	MP3A	X	0	4
29	MP3A	Z	57.05	4
30	MP3A	Mx	-.005	4
31	M22	X	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
32	M22	Z	96.721	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-57.254	1.5
2	MP4A	Z	99.166	1.5
3	MP4A	Mx	.05	1.5
4	MP4A	X	-57.254	6
5	MP4A	Z	99.166	6
6	MP4A	Mx	.05	6
7	MP2A	X	-71.438	1.5
8	MP2A	Z	123.735	1.5
9	MP2A	Mx	.129	1.5
10	MP2A	X	-71.438	6
11	MP2A	Z	123.735	6
12	MP2A	Mx	.129	6
13	MP2A	X	-71.438	1.5
14	MP2A	Z	123.735	1.5
15	MP2A	Mx	-.057	1.5
16	MP2A	X	-71.438	6
17	MP2A	Z	123.735	6
18	MP2A	Mx	-.057	6
19	MP1A	X	-30.82	2
20	MP1A	Z	53.382	2
21	MP1A	Mx	.015	2
22	MP1A	X	-30.82	4
23	MP1A	Z	53.382	4
24	MP1A	Mx	.015	4
25	MP2A	X	-26.527	4
26	MP2A	Z	45.947	4
27	MP2A	Mx	-.013	4
28	MP3A	X	-23.445	4
29	MP3A	Z	40.607	4
30	MP3A	Mx	-.015	4
31	M22	X	-54.063	2
32	M22	Z	93.64	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-80.759	1.5
2	MP4A	Z	46.626	1.5
3	MP4A	Mx	.071	1.5
4	MP4A	X	-80.759	6
5	MP4A	Z	46.626	6
6	MP4A	Mx	.071	6
7	MP2A	X	-106.776	1.5
8	MP2A	Z	61.647	1.5
9	MP2A	Mx	.1	1.5
10	MP2A	X	-106.776	6
11	MP2A	Z	61.647	6
12	MP2A	Mx	.1	6
13	MP2A	X	-106.776	1.5
14	MP2A	Z	61.647	1.5
15	MP2A	Mx	.007	1.5
16	MP2A	X	-106.776	6
17	MP2A	Z	61.647	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP2A	Mx	.007	6
19	MP1A	X	-34.226	2
20	MP1A	Z	19.76	2
21	MP1A	Mx	.017	2
22	MP1A	X	-34.226	4
23	MP1A	Z	19.76	4
24	MP1A	Mx	.017	4
25	MP2A	X	-37.642	4
26	MP2A	Z	21.732	4
27	MP2A	Mx	-.019	4
28	MP3A	X	-29.813	4
29	MP3A	Z	17.213	4
30	MP3A	Mx	-.016	4
31	M22	X	-105.756	2
32	M22	Z	61.058	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-82.624	1.5
2	MP4A	Z	0	1.5
3	MP4A	Mx	.072	1.5
4	MP4A	X	-82.624	6
5	MP4A	Z	0	6
6	MP4A	Mx	.072	6
7	MP2A	X	-113.503	1.5
8	MP2A	Z	0	1.5
9	MP2A	Mx	.057	1.5
10	MP2A	X	-113.503	6
11	MP2A	Z	0	6
12	MP2A	Mx	.057	6
13	MP2A	X	-113.503	1.5
14	MP2A	Z	0	1.5
15	MP2A	Mx	.057	1.5
16	MP2A	X	-113.503	6
17	MP2A	Z	0	6
18	MP2A	Mx	.057	6
19	MP1A	X	-28.462	2
20	MP1A	Z	0	2
21	MP1A	Mx	.014	2
22	MP1A	X	-28.462	4
23	MP1A	Z	0	4
24	MP1A	Mx	.014	4
25	MP2A	X	-38.67	4
26	MP2A	Z	0	4
27	MP2A	Mx	-.019	4
28	MP3A	X	-32.122	4
29	MP3A	Z	0	4
30	MP3A	Mx	-.016	4
31	M22	X	-124.701	2
32	M22	Z	0	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-80.759	1.5
2	MP4A	Z	-46.626	1.5
3	MP4A	Mx	.071	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
4	MP4A	X	-80.759	6
5	MP4A	Z	-46.626	6
6	MP4A	Mx	.071	6
7	MP2A	X	-106.776	1.5
8	MP2A	Z	-61.647	1.5
9	MP2A	Mx	.007	1.5
10	MP2A	X	-106.776	6
11	MP2A	Z	-61.647	6
12	MP2A	Mx	.007	6
13	MP2A	X	-106.776	1.5
14	MP2A	Z	-61.647	1.5
15	MP2A	Mx	.1	1.5
16	MP2A	X	-106.776	6
17	MP2A	Z	-61.647	6
18	MP2A	Mx	.1	6
19	MP1A	X	-34.226	2
20	MP1A	Z	-19.76	2
21	MP1A	Mx	.017	2
22	MP1A	X	-34.226	4
23	MP1A	Z	-19.76	4
24	MP1A	Mx	.017	4
25	MP2A	X	-37.642	4
26	MP2A	Z	-21.732	4
27	MP2A	Mx	-.019	4
28	MP3A	X	-36.618	4
29	MP3A	Z	-21.141	4
30	MP3A	Mx	-.016	4
31	M22	X	-98.118	2
32	M22	Z	-56.648	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-57.254	1.5
2	MP4A	Z	-99.166	1.5
3	MP4A	Mx	.05	1.5
4	MP4A	X	-57.254	6
5	MP4A	Z	-99.166	6
6	MP4A	Mx	.05	6
7	MP2A	X	-71.438	1.5
8	MP2A	Z	-123.735	1.5
9	MP2A	Mx	-.057	1.5
10	MP2A	X	-71.438	6
11	MP2A	Z	-123.735	6
12	MP2A	Mx	-.057	6
13	MP2A	X	-71.438	1.5
14	MP2A	Z	-123.735	1.5
15	MP2A	Mx	.129	1.5
16	MP2A	X	-71.438	6
17	MP2A	Z	-123.735	6
18	MP2A	Mx	.129	6
19	MP1A	X	-30.82	2
20	MP1A	Z	-53.382	2
21	MP1A	Mx	.015	2
22	MP1A	X	-30.82	4
23	MP1A	Z	-53.382	4
24	MP1A	Mx	.015	4
25	MP2A	X	-26.527	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
26	MP2A	Z	-45.947	4
27	MP2A	Mx	-.013	4
28	MP3A	X	-27.373	4
29	MP3A	Z	-47.412	4
30	MP3A	Mx	-.009	4
31	M22	X	-49.653	2
32	M22	Z	-86.002	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	0	1.5
2	MP4A	Z	-25.169	1.5
3	MP4A	Mx	0	1.5
4	MP4A	X	0	6
5	MP4A	Z	-25.169	6
6	MP4A	Mx	0	6
7	MP2A	X	0	1.5
8	MP2A	Z	-30.393	1.5
9	MP2A	Mx	-.023	1.5
10	MP2A	X	0	6
11	MP2A	Z	-30.393	6
12	MP2A	Mx	-.023	6
13	MP2A	X	0	1.5
14	MP2A	Z	-30.393	1.5
15	MP2A	Mx	.023	1.5
16	MP2A	X	0	6
17	MP2A	Z	-30.393	6
18	MP2A	Mx	.023	6
19	MP1A	X	0	2
20	MP1A	Z	-14.992	2
21	MP1A	Mx	0	2
22	MP1A	X	0	4
23	MP1A	Z	-14.992	4
24	MP1A	Mx	0	4
25	MP2A	X	0	4
26	MP2A	Z	-12.633	4
27	MP2A	Mx	0	4
28	MP3A	X	0	4
29	MP3A	Z	-12.473	4
30	MP3A	Mx	.001	4
31	M22	X	0	2
32	M22	Z	-20.474	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	11.607	1.5
2	MP4A	Z	-20.104	1.5
3	MP4A	Mx	-.01	1.5
4	MP4A	X	11.607	6
5	MP4A	Z	-20.104	6
6	MP4A	Mx	-.01	6
7	MP2A	X	14.271	1.5
8	MP2A	Z	-24.719	1.5
9	MP2A	Mx	-.026	1.5
10	MP2A	X	14.271	6
11	MP2A	Z	-24.719	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
12	MP2A	Mx	-.026	6
13	MP2A	X	14.271	1.5
14	MP2A	Z	-24.719	1.5
15	MP2A	Mx	.011	1.5
16	MP2A	X	14.271	6
17	MP2A	Z	-24.719	6
18	MP2A	Mx	.011	6
19	MP1A	X	6.42	2
20	MP1A	Z	-11.12	2
21	MP1A	Mx	-.003	2
22	MP1A	X	6.42	4
23	MP1A	Z	-11.12	4
24	MP1A	Mx	-.003	4
25	MP2A	X	5.836	4
26	MP2A	Z	-10.107	4
27	MP2A	Mx	.003	4
28	MP3A	X	5.22	4
29	MP3A	Z	-9.041	4
30	MP3A	Mx	.003	4
31	M22	X	11.322	2
32	M22	Z	-19.61	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	16.72	1.5
2	MP4A	Z	-9.653	1.5
3	MP4A	Mx	-.015	1.5
4	MP4A	X	16.72	6
5	MP4A	Z	-9.653	6
6	MP4A	Mx	-.015	6
7	MP2A	X	21.514	1.5
8	MP2A	Z	-12.421	1.5
9	MP2A	Mx	-.02	1.5
10	MP2A	X	21.514	6
11	MP2A	Z	-12.421	6
12	MP2A	Mx	-.02	6
13	MP2A	X	21.514	1.5
14	MP2A	Z	-12.421	1.5
15	MP2A	Mx	-.001	1.5
16	MP2A	X	21.514	6
17	MP2A	Z	-12.421	6
18	MP2A	Mx	-.001	6
19	MP1A	X	7.392	2
20	MP1A	Z	-4.268	2
21	MP1A	Mx	-.004	2
22	MP1A	X	7.392	4
23	MP1A	Z	-4.268	4
24	MP1A	Mx	-.004	4
25	MP2A	X	8.442	4
26	MP2A	Z	-4.874	4
27	MP2A	Mx	.004	4
28	MP3A	X	6.881	4
29	MP3A	Z	-3.973	4
30	MP3A	Mx	.004	4
31	M22	X	21.914	2
32	M22	Z	-12.652	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	17.353	1.5
2	MP4A	Z	0	1.5
3	MP4A	Mx	-.015	1.5
4	MP4A	X	17.353	6
5	MP4A	Z	0	6
6	MP4A	Mx	-.015	6
7	MP2A	X	22.991	1.5
8	MP2A	Z	0	1.5
9	MP2A	Mx	-.011	1.5
10	MP2A	X	22.991	6
11	MP2A	Z	0	6
12	MP2A	Mx	-.011	6
13	MP2A	X	22.991	1.5
14	MP2A	Z	0	1.5
15	MP2A	Mx	-.011	1.5
16	MP2A	X	22.991	6
17	MP2A	Z	0	6
18	MP2A	Mx	-.011	6
19	MP1A	X	6.384	2
20	MP1A	Z	0	2
21	MP1A	Mx	-.003	2
22	MP1A	X	6.384	4
23	MP1A	Z	0	4
24	MP1A	Mx	-.003	4
25	MP2A	X	8.786	4
26	MP2A	Z	0	4
27	MP2A	Mx	.004	4
28	MP3A	X	7.484	4
29	MP3A	Z	0	4
30	MP3A	Mx	.004	4
31	M22	X	25.796	2
32	M22	Z	0	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	16.72	1.5
2	MP4A	Z	9.653	1.5
3	MP4A	Mx	-.015	1.5
4	MP4A	X	16.72	6
5	MP4A	Z	9.653	6
6	MP4A	Mx	-.015	6
7	MP2A	X	21.514	1.5
8	MP2A	Z	12.421	1.5
9	MP2A	Mx	-.001	1.5
10	MP2A	X	21.514	6
11	MP2A	Z	12.421	6
12	MP2A	Mx	-.001	6
13	MP2A	X	21.514	1.5
14	MP2A	Z	12.421	1.5
15	MP2A	Mx	-.02	1.5
16	MP2A	X	21.514	6
17	MP2A	Z	12.421	6
18	MP2A	Mx	-.02	6
19	MP1A	X	7.392	2
20	MP1A	Z	4.268	2
21	MP1A	Mx	-.004	2
22	MP1A	X	7.392	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
23	MP1A	Z	4.268	4
24	MP1A	Mx	-.004	4
25	MP2A	X	8.442	4
26	MP2A	Z	4.874	4
27	MP2A	Mx	.004	4
28	MP3A	X	8.242	4
29	MP3A	Z	4.759	4
30	MP3A	Mx	.004	4
31	M22	X	20.461	2
32	M22	Z	11.813	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	11.607	1.5
2	MP4A	Z	20.104	1.5
3	MP4A	Mx	-.01	1.5
4	MP4A	X	11.607	6
5	MP4A	Z	20.104	6
6	MP4A	Mx	-.01	6
7	MP2A	X	14.271	1.5
8	MP2A	Z	24.719	1.5
9	MP2A	Mx	.011	1.5
10	MP2A	X	14.271	6
11	MP2A	Z	24.719	6
12	MP2A	Mx	.011	6
13	MP2A	X	14.271	1.5
14	MP2A	Z	24.719	1.5
15	MP2A	Mx	-.026	1.5
16	MP2A	X	14.271	6
17	MP2A	Z	24.719	6
18	MP2A	Mx	-.026	6
19	MP1A	X	6.42	2
20	MP1A	Z	11.12	2
21	MP1A	Mx	-.003	2
22	MP1A	X	6.42	4
23	MP1A	Z	11.12	4
24	MP1A	Mx	-.003	4
25	MP2A	X	5.836	4
26	MP2A	Z	10.107	4
27	MP2A	Mx	.003	4
28	MP3A	X	6.006	4
29	MP3A	Z	10.403	4
30	MP3A	Mx	.002	4
31	M22	X	10.483	2
32	M22	Z	18.157	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	0	1.5
2	MP4A	Z	25.169	1.5
3	MP4A	Mx	0	1.5
4	MP4A	X	0	6
5	MP4A	Z	25.169	6
6	MP4A	Mx	0	6
7	MP2A	X	0	1.5
8	MP2A	Z	30.393	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
9	MP2A	Mx	.023	1.5
10	MP2A	X	0	6
11	MP2A	Z	30.393	6
12	MP2A	Mx	.023	6
13	MP2A	X	0	1.5
14	MP2A	Z	30.393	1.5
15	MP2A	Mx	-.023	1.5
16	MP2A	X	0	6
17	MP2A	Z	30.393	6
18	MP2A	Mx	-.023	6
19	MP1A	X	0	2
20	MP1A	Z	14.992	2
21	MP1A	Mx	0	2
22	MP1A	X	0	4
23	MP1A	Z	14.992	4
24	MP1A	Mx	0	4
25	MP2A	X	0	4
26	MP2A	Z	12.633	4
27	MP2A	Mx	0	4
28	MP3A	X	0	4
29	MP3A	Z	12.473	4
30	MP3A	Mx	-.001	4
31	M22	X	0	2
32	M22	Z	20.474	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-11.607	1.5
2	MP4A	Z	20.104	1.5
3	MP4A	Mx	.01	1.5
4	MP4A	X	-11.607	6
5	MP4A	Z	20.104	6
6	MP4A	Mx	.01	6
7	MP2A	X	-14.271	1.5
8	MP2A	Z	24.719	1.5
9	MP2A	Mx	.026	1.5
10	MP2A	X	-14.271	6
11	MP2A	Z	24.719	6
12	MP2A	Mx	.026	6
13	MP2A	X	-14.271	1.5
14	MP2A	Z	24.719	1.5
15	MP2A	Mx	-.011	1.5
16	MP2A	X	-14.271	6
17	MP2A	Z	24.719	6
18	MP2A	Mx	-.011	6
19	MP1A	X	-6.42	2
20	MP1A	Z	11.12	2
21	MP1A	Mx	.003	2
22	MP1A	X	-6.42	4
23	MP1A	Z	11.12	4
24	MP1A	Mx	.003	4
25	MP2A	X	-5.836	4
26	MP2A	Z	10.107	4
27	MP2A	Mx	-.003	4
28	MP3A	X	-5.22	4
29	MP3A	Z	9.041	4
30	MP3A	Mx	-.003	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
31	M22	X	-11.322	2
32	M22	Z	19.61	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-16.72	1.5
2	MP4A	Z	9.653	1.5
3	MP4A	Mx	.015	1.5
4	MP4A	X	-16.72	6
5	MP4A	Z	9.653	6
6	MP4A	Mx	.015	6
7	MP2A	X	-21.514	1.5
8	MP2A	Z	12.421	1.5
9	MP2A	Mx	.02	1.5
10	MP2A	X	-21.514	6
11	MP2A	Z	12.421	6
12	MP2A	Mx	.02	6
13	MP2A	X	-21.514	1.5
14	MP2A	Z	12.421	1.5
15	MP2A	Mx	.001	1.5
16	MP2A	X	-21.514	6
17	MP2A	Z	12.421	6
18	MP2A	Mx	.001	6
19	MP1A	X	-7.392	2
20	MP1A	Z	4.268	2
21	MP1A	Mx	.004	2
22	MP1A	X	-7.392	4
23	MP1A	Z	4.268	4
24	MP1A	Mx	.004	4
25	MP2A	X	-8.442	4
26	MP2A	Z	4.874	4
27	MP2A	Mx	-.004	4
28	MP3A	X	-6.881	4
29	MP3A	Z	3.973	4
30	MP3A	Mx	-.004	4
31	M22	X	-21.914	2
32	M22	Z	12.652	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-17.353	1.5
2	MP4A	Z	0	1.5
3	MP4A	Mx	.015	1.5
4	MP4A	X	-17.353	6
5	MP4A	Z	0	6
6	MP4A	Mx	.015	6
7	MP2A	X	-22.991	1.5
8	MP2A	Z	0	1.5
9	MP2A	Mx	.011	1.5
10	MP2A	X	-22.991	6
11	MP2A	Z	0	6
12	MP2A	Mx	.011	6
13	MP2A	X	-22.991	1.5
14	MP2A	Z	0	1.5
15	MP2A	Mx	.011	1.5
16	MP2A	X	-22.991	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP2A	Z	0	6
18	MP2A	Mx	.011	6
19	MP1A	X	-6.384	2
20	MP1A	Z	0	2
21	MP1A	Mx	.003	2
22	MP1A	X	-6.384	4
23	MP1A	Z	0	4
24	MP1A	Mx	.003	4
25	MP2A	X	-8.786	4
26	MP2A	Z	0	4
27	MP2A	Mx	-.004	4
28	MP3A	X	-7.484	4
29	MP3A	Z	0	4
30	MP3A	Mx	-.004	4
31	M22	X	-25.796	2
32	M22	Z	0	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-16.72	1.5
2	MP4A	Z	-9.653	1.5
3	MP4A	Mx	.015	1.5
4	MP4A	X	-16.72	6
5	MP4A	Z	-9.653	6
6	MP4A	Mx	.015	6
7	MP2A	X	-21.514	1.5
8	MP2A	Z	-12.421	1.5
9	MP2A	Mx	.001	1.5
10	MP2A	X	-21.514	6
11	MP2A	Z	-12.421	6
12	MP2A	Mx	.001	6
13	MP2A	X	-21.514	1.5
14	MP2A	Z	-12.421	1.5
15	MP2A	Mx	.02	1.5
16	MP2A	X	-21.514	6
17	MP2A	Z	-12.421	6
18	MP2A	Mx	.02	6
19	MP1A	X	-7.392	2
20	MP1A	Z	-4.268	2
21	MP1A	Mx	.004	2
22	MP1A	X	-7.392	4
23	MP1A	Z	-4.268	4
24	MP1A	Mx	.004	4
25	MP2A	X	-8.442	4
26	MP2A	Z	-4.874	4
27	MP2A	Mx	-.004	4
28	MP3A	X	-8.242	4
29	MP3A	Z	-4.759	4
30	MP3A	Mx	-.004	4
31	M22	X	-20.461	2
32	M22	Z	-11.813	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-11.607	1.5
2	MP4A	Z	-20.104	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
3	MP4A	Mx	.01	1.5
4	MP4A	X	-11.607	6
5	MP4A	Z	-20.104	6
6	MP4A	Mx	.01	6
7	MP2A	X	-14.271	1.5
8	MP2A	Z	-24.719	1.5
9	MP2A	Mx	-.011	1.5
10	MP2A	X	-14.271	6
11	MP2A	Z	-24.719	6
12	MP2A	Mx	-.011	6
13	MP2A	X	-14.271	1.5
14	MP2A	Z	-24.719	1.5
15	MP2A	Mx	.026	1.5
16	MP2A	X	-14.271	6
17	MP2A	Z	-24.719	6
18	MP2A	Mx	.026	6
19	MP1A	X	-6.42	2
20	MP1A	Z	-11.12	2
21	MP1A	Mx	.003	2
22	MP1A	X	-6.42	4
23	MP1A	Z	-11.12	4
24	MP1A	Mx	.003	4
25	MP2A	X	-5.836	4
26	MP2A	Z	-10.107	4
27	MP2A	Mx	-.003	4
28	MP3A	X	-6.006	4
29	MP3A	Z	-10.403	4
30	MP3A	Mx	-.002	4
31	M22	X	-10.483	2
32	M22	Z	-18.157	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	0	1.5
2	MP4A	Z	-8.227	1.5
3	MP4A	Mx	0	1.5
4	MP4A	X	0	6
5	MP4A	Z	-8.227	6
6	MP4A	Mx	0	6
7	MP2A	X	0	1.5
8	MP2A	Z	-10.037	1.5
9	MP2A	Mx	-.008	1.5
10	MP2A	X	0	6
11	MP2A	Z	-10.037	6
12	MP2A	Mx	-.008	6
13	MP2A	X	0	1.5
14	MP2A	Z	-10.037	1.5
15	MP2A	Mx	.008	1.5
16	MP2A	X	0	6
17	MP2A	Z	-10.037	6
18	MP2A	Mx	.008	6
19	MP1A	X	0	2
20	MP1A	Z	-4.78	2
21	MP1A	Mx	0	2
22	MP1A	X	0	4
23	MP1A	Z	-4.78	4
24	MP1A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP2A	X	0	4
26	MP2A	Z	-3.803	4
27	MP2A	Mx	0	4
28	MP3A	X	0	4
29	MP3A	Z	-3.751	4
30	MP3A	Mx	.000326	4
31	M22	X	0	2
32	M22	Z	-6.359	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	3.764	1.5
2	MP4A	Z	-6.52	1.5
3	MP4A	Mx	-.003	1.5
4	MP4A	X	3.764	6
5	MP4A	Z	-6.52	6
6	MP4A	Mx	-.003	6
7	MP2A	X	4.697	1.5
8	MP2A	Z	-8.135	1.5
9	MP2A	Mx	-.008	1.5
10	MP2A	X	4.697	6
11	MP2A	Z	-8.135	6
12	MP2A	Mx	-.008	6
13	MP2A	X	4.697	1.5
14	MP2A	Z	-8.135	1.5
15	MP2A	Mx	.004	1.5
16	MP2A	X	4.697	6
17	MP2A	Z	-8.135	6
18	MP2A	Mx	.004	6
19	MP1A	X	2.026	2
20	MP1A	Z	-3.51	2
21	MP1A	Mx	-.001	2
22	MP1A	X	2.026	4
23	MP1A	Z	-3.51	4
24	MP1A	Mx	-.001	4
25	MP2A	X	1.744	4
26	MP2A	Z	-3.021	4
27	MP2A	Mx	.000872	4
28	MP3A	X	1.541	4
29	MP3A	Z	-2.67	4
30	MP3A	Mx	.000991	4
31	M22	X	3.554	2
32	M22	Z	-6.156	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	5.31	1.5
2	MP4A	Z	-3.065	1.5
3	MP4A	Mx	-.005	1.5
4	MP4A	X	5.31	6
5	MP4A	Z	-3.065	6
6	MP4A	Mx	-.005	6
7	MP2A	X	7.02	1.5
8	MP2A	Z	-4.053	1.5
9	MP2A	Mx	-.007	1.5
10	MP2A	X	7.02	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
11	MP2A	Z	-4.053	6
12	MP2A	Mx	-.007	6
13	MP2A	X	7.02	1.5
14	MP2A	Z	-4.053	1.5
15	MP2A	Mx	-.00047	1.5
16	MP2A	X	7.02	6
17	MP2A	Z	-4.053	6
18	MP2A	Mx	-.00047	6
19	MP1A	X	2.25	2
20	MP1A	Z	-1.299	2
21	MP1A	Mx	-.001	2
22	MP1A	X	2.25	4
23	MP1A	Z	-1.299	4
24	MP1A	Mx	-.001	4
25	MP2A	X	2.475	4
26	MP2A	Z	-1.429	4
27	MP2A	Mx	.001	4
28	MP3A	X	1.96	4
29	MP3A	Z	-1.132	4
30	MP3A	Mx	.001	4
31	M22	X	6.953	2
32	M22	Z	-4.014	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	5.432	1.5
2	MP4A	Z	0	1.5
3	MP4A	Mx	-.005	1.5
4	MP4A	X	5.432	6
5	MP4A	Z	0	6
6	MP4A	Mx	-.005	6
7	MP2A	X	7.462	1.5
8	MP2A	Z	0	1.5
9	MP2A	Mx	-.004	1.5
10	MP2A	X	7.462	6
11	MP2A	Z	0	6
12	MP2A	Mx	-.004	6
13	MP2A	X	7.462	1.5
14	MP2A	Z	0	1.5
15	MP2A	Mx	-.004	1.5
16	MP2A	X	7.462	6
17	MP2A	Z	0	6
18	MP2A	Mx	-.004	6
19	MP1A	X	1.871	2
20	MP1A	Z	0	2
21	MP1A	Mx	-.000935	2
22	MP1A	X	1.871	4
23	MP1A	Z	0	4
24	MP1A	Mx	-.000935	4
25	MP2A	X	2.542	4
26	MP2A	Z	0	4
27	MP2A	Mx	.001	4
28	MP3A	X	2.112	4
29	MP3A	Z	0	4
30	MP3A	Mx	.001	4
31	M22	X	8.199	2
32	M22	Z	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	5.31	1.5
2	MP4A	Z	3.065	1.5
3	MP4A	Mx	-.005	1.5
4	MP4A	X	5.31	6
5	MP4A	Z	3.065	6
6	MP4A	Mx	-.005	6
7	MP2A	X	7.02	1.5
8	MP2A	Z	4.053	1.5
9	MP2A	Mx	-.00047	1.5
10	MP2A	X	7.02	6
11	MP2A	Z	4.053	6
12	MP2A	Mx	-.00047	6
13	MP2A	X	7.02	1.5
14	MP2A	Z	4.053	1.5
15	MP2A	Mx	-.007	1.5
16	MP2A	X	7.02	6
17	MP2A	Z	4.053	6
18	MP2A	Mx	-.007	6
19	MP1A	X	2.25	2
20	MP1A	Z	1.299	2
21	MP1A	Mx	-.001	2
22	MP1A	X	2.25	4
23	MP1A	Z	1.299	4
24	MP1A	Mx	-.001	4
25	MP2A	X	2.475	4
26	MP2A	Z	1.429	4
27	MP2A	Mx	.001	4
28	MP3A	X	2.408	4
29	MP3A	Z	1.39	4
30	MP3A	Mx	.001	4
31	M22	X	6.451	2
32	M22	Z	3.724	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	3.764	1.5
2	MP4A	Z	6.52	1.5
3	MP4A	Mx	-.003	1.5
4	MP4A	X	3.764	6
5	MP4A	Z	6.52	6
6	MP4A	Mx	-.003	6
7	MP2A	X	4.697	1.5
8	MP2A	Z	8.135	1.5
9	MP2A	Mx	.004	1.5
10	MP2A	X	4.697	6
11	MP2A	Z	8.135	6
12	MP2A	Mx	.004	6
13	MP2A	X	4.697	1.5
14	MP2A	Z	8.135	1.5
15	MP2A	Mx	-.008	1.5
16	MP2A	X	4.697	6
17	MP2A	Z	8.135	6
18	MP2A	Mx	-.008	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
19	MP1A	X	2.026	2
20	MP1A	Z	3.51	2
21	MP1A	Mx	-.001	2
22	MP1A	X	2.026	4
23	MP1A	Z	3.51	4
24	MP1A	Mx	-.001	4
25	MP2A	X	1.744	4
26	MP2A	Z	3.021	4
27	MP2A	Mx	.000872	4
28	MP3A	X	1.8	4
29	MP3A	Z	3.117	4
30	MP3A	Mx	.000616	4
31	M22	X	3.265	2
32	M22	Z	5.654	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	0	1.5
2	MP4A	Z	8.227	1.5
3	MP4A	Mx	0	1.5
4	MP4A	X	0	6
5	MP4A	Z	8.227	6
6	MP4A	Mx	0	6
7	MP2A	X	0	1.5
8	MP2A	Z	10.037	1.5
9	MP2A	Mx	.008	1.5
10	MP2A	X	0	6
11	MP2A	Z	10.037	6
12	MP2A	Mx	.008	6
13	MP2A	X	0	1.5
14	MP2A	Z	10.037	1.5
15	MP2A	Mx	-.008	1.5
16	MP2A	X	0	6
17	MP2A	Z	10.037	6
18	MP2A	Mx	-.008	6
19	MP1A	X	0	2
20	MP1A	Z	4.78	2
21	MP1A	Mx	0	2
22	MP1A	X	0	4
23	MP1A	Z	4.78	4
24	MP1A	Mx	0	4
25	MP2A	X	0	4
26	MP2A	Z	3.803	4
27	MP2A	Mx	0	4
28	MP3A	X	0	4
29	MP3A	Z	3.751	4
30	MP3A	Mx	-.000326	4
31	M22	X	0	2
32	M22	Z	6.359	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-3.764	1.5
2	MP4A	Z	6.52	1.5
3	MP4A	Mx	.003	1.5
4	MP4A	X	-3.764	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
5	MP4A	Z	6.52	6
6	MP4A	Mx	.003	6
7	MP2A	X	-4.697	1.5
8	MP2A	Z	8.135	1.5
9	MP2A	Mx	.008	1.5
10	MP2A	X	-4.697	6
11	MP2A	Z	8.135	6
12	MP2A	Mx	.008	6
13	MP2A	X	-4.697	1.5
14	MP2A	Z	8.135	1.5
15	MP2A	Mx	-.004	1.5
16	MP2A	X	-4.697	6
17	MP2A	Z	8.135	6
18	MP2A	Mx	-.004	6
19	MP1A	X	-2.026	2
20	MP1A	Z	3.51	2
21	MP1A	Mx	.001	2
22	MP1A	X	-2.026	4
23	MP1A	Z	3.51	4
24	MP1A	Mx	.001	4
25	MP2A	X	-1.744	4
26	MP2A	Z	3.021	4
27	MP2A	Mx	-.000872	4
28	MP3A	X	-1.541	4
29	MP3A	Z	2.67	4
30	MP3A	Mx	-.000991	4
31	M22	X	-3.554	2
32	M22	Z	6.156	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-5.31	1.5
2	MP4A	Z	3.065	1.5
3	MP4A	Mx	.005	1.5
4	MP4A	X	-5.31	6
5	MP4A	Z	3.065	6
6	MP4A	Mx	.005	6
7	MP2A	X	-7.02	1.5
8	MP2A	Z	4.053	1.5
9	MP2A	Mx	.007	1.5
10	MP2A	X	-7.02	6
11	MP2A	Z	4.053	6
12	MP2A	Mx	.007	6
13	MP2A	X	-7.02	1.5
14	MP2A	Z	4.053	1.5
15	MP2A	Mx	.00047	1.5
16	MP2A	X	-7.02	6
17	MP2A	Z	4.053	6
18	MP2A	Mx	.00047	6
19	MP1A	X	-2.25	2
20	MP1A	Z	1.299	2
21	MP1A	Mx	.001	2
22	MP1A	X	-2.25	4
23	MP1A	Z	1.299	4
24	MP1A	Mx	.001	4
25	MP2A	X	-2.475	4
26	MP2A	Z	1.429	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
27	MP2A	Mx	-.001	4
28	MP3A	X	-1.96	4
29	MP3A	Z	1.132	4
30	MP3A	Mx	-.001	4
31	M22	X	-6.953	2
32	M22	Z	4.014	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-5.432	1.5
2	MP4A	Z	0	1.5
3	MP4A	Mx	.005	1.5
4	MP4A	X	-5.432	6
5	MP4A	Z	0	6
6	MP4A	Mx	.005	6
7	MP2A	X	-7.462	1.5
8	MP2A	Z	0	1.5
9	MP2A	Mx	.004	1.5
10	MP2A	X	-7.462	6
11	MP2A	Z	0	6
12	MP2A	Mx	.004	6
13	MP2A	X	-7.462	1.5
14	MP2A	Z	0	1.5
15	MP2A	Mx	.004	1.5
16	MP2A	X	-7.462	6
17	MP2A	Z	0	6
18	MP2A	Mx	.004	6
19	MP1A	X	-1.871	2
20	MP1A	Z	0	2
21	MP1A	Mx	.000935	2
22	MP1A	X	-1.871	4
23	MP1A	Z	0	4
24	MP1A	Mx	.000935	4
25	MP2A	X	-2.542	4
26	MP2A	Z	0	4
27	MP2A	Mx	-.001	4
28	MP3A	X	-2.112	4
29	MP3A	Z	0	4
30	MP3A	Mx	-.001	4
31	M22	X	-8.199	2
32	M22	Z	0	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-5.31	1.5
2	MP4A	Z	-3.065	1.5
3	MP4A	Mx	.005	1.5
4	MP4A	X	-5.31	6
5	MP4A	Z	-3.065	6
6	MP4A	Mx	.005	6
7	MP2A	X	-7.02	1.5
8	MP2A	Z	-4.053	1.5
9	MP2A	Mx	.00047	1.5
10	MP2A	X	-7.02	6
11	MP2A	Z	-4.053	6
12	MP2A	Mx	.00047	6

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
13	MP2A	X	-7.02	1.5
14	MP2A	Z	-4.053	1.5
15	MP2A	Mx	.007	1.5
16	MP2A	X	-7.02	6
17	MP2A	Z	-4.053	6
18	MP2A	Mx	.007	6
19	MP1A	X	-2.25	2
20	MP1A	Z	-1.299	2
21	MP1A	Mx	.001	2
22	MP1A	X	-2.25	4
23	MP1A	Z	-1.299	4
24	MP1A	Mx	.001	4
25	MP2A	X	-2.475	4
26	MP2A	Z	-1.429	4
27	MP2A	Mx	-.001	4
28	MP3A	X	-2.408	4
29	MP3A	Z	-1.39	4
30	MP3A	Mx	-.001	4
31	M22	X	-6.451	2
32	M22	Z	-3.724	2
33	M22	Mx	0	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-3.764	1.5
2	MP4A	Z	-6.52	1.5
3	MP4A	Mx	.003	1.5
4	MP4A	X	-3.764	6
5	MP4A	Z	-6.52	6
6	MP4A	Mx	.003	6
7	MP2A	X	-4.697	1.5
8	MP2A	Z	-8.135	1.5
9	MP2A	Mx	-.004	1.5
10	MP2A	X	-4.697	6
11	MP2A	Z	-8.135	6
12	MP2A	Mx	-.004	6
13	MP2A	X	-4.697	1.5
14	MP2A	Z	-8.135	1.5
15	MP2A	Mx	.008	1.5
16	MP2A	X	-4.697	6
17	MP2A	Z	-8.135	6
18	MP2A	Mx	.008	6
19	MP1A	X	-2.026	2
20	MP1A	Z	-3.51	2
21	MP1A	Mx	.001	2
22	MP1A	X	-2.026	4
23	MP1A	Z	-3.51	4
24	MP1A	Mx	.001	4
25	MP2A	X	-1.744	4
26	MP2A	Z	-3.021	4
27	MP2A	Mx	-.000872	4
28	MP3A	X	-1.8	4
29	MP3A	Z	-3.117	4
30	MP3A	Mx	-.000616	4
31	M22	X	-3.265	2
32	M22	Z	-5.654	2
33	M22	Mx	0	2

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-500	%92.307

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-500	%50

Member Point Loads (BLC 79 : Lv1)

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

Member Point Loads (BLC 80 : Lv2)

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

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	Y	-4.95	-4.95	0	%100
2	M2	Y	-4.95	-4.95	0	%100
3	MP4A	Y	-4.95	-4.95	0	%100
4	MP2A	Y	-4.95	-4.95	0	%100
5	MP3A	Y	-4.95	-4.95	0	%100
6	M15	Y	-6.58	-6.58	0	%100
7	M17	Y	-6.58	-6.58	0	%100
8	M19	Y	-2.668	-2.668	0	%100
9	M22	Y	-6.53	-6.53	0	%100
10	M23	Y	-4.95	-4.95	0	%100
11	MP1A	Y	-4.95	-4.95	0	%100
12	M24A	Y	-6.58	-6.58	0	%100
13	M25	Y	-6.58	-6.58	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-7.347	-7.347	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-7.347	-7.347	0	%100
5	MP4A	X	0	0	0	%100
6	MP4A	Z	-7.347	-7.347	0	%100
7	MP2A	X	0	0	0	%100
8	MP2A	Z	-7.347	-7.347	0	%100
9	MP3A	X	0	0	0	%100
10	MP3A	Z	-7.347	-7.347	0	%100
11	M15	X	0	0	0	%100
12	M15	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	0	0	0	%100
15	M19	X	0	0	0	%100
16	M19	Z	-2.32	-2.32	0	%100
17	M22	X	0	0	0	%100
18	M22	Z	-8.565	-8.565	0	%100
19	M23	X	0	0	0	%100
20	M23	Z	-1.449	-1.449	0	%100
21	MP1A	X	0	0	0	%100
22	MP1A	Z	-7.347	-7.347	0	%100
23	M24A	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,...	Start Location[ft,%]	End Location[ft,%]
24	M24A	Z	-11.075	-11.075	0	%100
25	M25	X	0	0	0	%100
26	M25	Z	-11.414	-11.414	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	2.755	2.755	0	%100
2	M1	Z	-4.772	-4.772	0	%100
3	M2	X	2.755	2.755	0	%100
4	M2	Z	-4.772	-4.772	0	%100
5	MP4A	X	3.674	3.674	0	%100
6	MP4A	Z	-6.363	-6.363	0	%100
7	MP2A	X	3.674	3.674	0	%100
8	MP2A	Z	-6.363	-6.363	0	%100
9	MP3A	X	3.674	3.674	0	%100
10	MP3A	Z	-6.363	-6.363	0	%100
11	M15	X	.766	.766	0	%100
12	M15	Z	-1.326	-1.326	0	%100
13	M17	X	.766	.766	0	%100
14	M17	Z	-1.326	-1.326	0	%100
15	M19	X	1.16	1.16	0	%100
16	M19	Z	-2.009	-2.009	0	%100
17	M22	X	4.282	4.282	0	%100
18	M22	Z	-7.417	-7.417	0	%100
19	M23	X	2.547	2.547	0	%100
20	M23	Z	-4.411	-4.411	0	%100
21	MP1A	X	3.674	3.674	0	%100
22	MP1A	Z	-6.363	-6.363	0	%100
23	M24A	X	2.739	2.739	0	%100
24	M24A	Z	-4.744	-4.744	0	%100
25	M25	X	6.293	6.293	0	%100
26	M25	Z	-10.9	-10.9	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.591	1.591	0	%100
2	M1	Z	-.918	-.918	0	%100
3	M2	X	1.591	1.591	0	%100
4	M2	Z	-.918	-.918	0	%100
5	MP4A	X	6.363	6.363	0	%100
6	MP4A	Z	-3.674	-3.674	0	%100
7	MP2A	X	6.363	6.363	0	%100
8	MP2A	Z	-3.674	-3.674	0	%100
9	MP3A	X	6.363	6.363	0	%100
10	MP3A	Z	-3.674	-3.674	0	%100
11	M15	X	3.979	3.979	0	%100
12	M15	Z	-2.297	-2.297	0	%100
13	M17	X	3.979	3.979	0	%100
14	M17	Z	-2.297	-2.297	0	%100
15	M19	X	2.009	2.009	0	%100
16	M19	Z	-1.16	-1.16	0	%100
17	M22	X	7.417	7.417	0	%100
18	M22	Z	-4.282	-4.282	0	%100
19	M23	X	6.337	6.337	0	%100
20	M23	Z	-3.659	-3.659	0	%100
21	MP1A	X	6.363	6.363	0	%100
22	MP1A	Z	-3.674	-3.674	0	%100
23	M24A	X	1.338	1.338	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
24	M24A	Z	-.773	-.773	0	%100
25	M25	X	7.088	7.088	0	%100
26	M25	Z	-4.092	-4.092	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	MP4A	X	7.347	7.347	0	%100
6	MP4A	Z	0	0	0	%100
7	MP2A	X	7.347	7.347	0	%100
8	MP2A	Z	0	0	0	%100
9	MP3A	X	7.347	7.347	0	%100
10	MP3A	Z	0	0	0	%100
11	M15	X	6.126	6.126	0	%100
12	M15	Z	0	0	0	%100
13	M17	X	6.126	6.126	0	%100
14	M17	Z	0	0	0	%100
15	M19	X	2.32	2.32	0	%100
16	M19	Z	0	0	0	%100
17	M22	X	8.565	8.565	0	%100
18	M22	Z	0	0	0	%100
19	M23	X	5.898	5.898	0	%100
20	M23	Z	0	0	0	%100
21	MP1A	X	7.347	7.347	0	%100
22	MP1A	Z	0	0	0	%100
23	M24A	X	3.209	3.209	0	%100
24	M24A	Z	0	0	0	%100
25	M25	X	2.609	2.609	0	%100
26	M25	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,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.591	1.591	0	%100
2	M1	Z	.918	.918	0	%100
3	M2	X	1.591	1.591	0	%100
4	M2	Z	.918	.918	0	%100
5	MP4A	X	6.363	6.363	0	%100
6	MP4A	Z	3.674	3.674	0	%100
7	MP2A	X	6.363	6.363	0	%100
8	MP2A	Z	3.674	3.674	0	%100
9	MP3A	X	6.363	6.363	0	%100
10	MP3A	Z	3.674	3.674	0	%100
11	M15	X	3.979	3.979	0	%100
12	M15	Z	2.297	2.297	0	%100
13	M17	X	3.979	3.979	0	%100
14	M17	Z	2.297	2.297	0	%100
15	M19	X	2.009	2.009	0	%100
16	M19	Z	1.16	1.16	0	%100
17	M22	X	7.417	7.417	0	%100
18	M22	Z	4.282	4.282	0	%100
19	M23	X	1.952	1.952	0	%100
20	M23	Z	1.127	1.127	0	%100
21	MP1A	X	6.363	6.363	0	%100
22	MP1A	Z	3.674	3.674	0	%100
23	M24A	X	7.626	7.626	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
24	M24A	Z	4.403	4.403	0	%100
25	M25	X	1.244	1.244	0	%100
26	M25	Z	.719	.719	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	2.755	2.755	0	%100
2	M1	Z	4.772	4.772	0	%100
3	M2	X	2.755	2.755	0	%100
4	M2	Z	4.772	4.772	0	%100
5	MP4A	X	3.674	3.674	0	%100
6	MP4A	Z	6.363	6.363	0	%100
7	MP2A	X	3.674	3.674	0	%100
8	MP2A	Z	6.363	6.363	0	%100
9	MP3A	X	3.674	3.674	0	%100
10	MP3A	Z	6.363	6.363	0	%100
11	M15	X	.766	.766	0	%100
12	M15	Z	1.326	1.326	0	%100
13	M17	X	.766	.766	0	%100
14	M17	Z	1.326	1.326	0	%100
15	M19	X	1.16	1.16	0	%100
16	M19	Z	2.009	2.009	0	%100
17	M22	X	4.282	4.282	0	%100
18	M22	Z	7.417	7.417	0	%100
19	M23	X	.015	.015	0	%100
20	M23	Z	.026	.026	0	%100
21	MP1A	X	3.674	3.674	0	%100
22	MP1A	Z	6.363	6.363	0	%100
23	M24A	X	6.369	6.369	0	%100
24	M24A	Z	11.032	11.032	0	%100
25	M25	X	2.92	2.92	0	%100
26	M25	Z	5.057	5.057	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	7.347	7.347	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	7.347	7.347	0	%100
5	MP4A	X	0	0	0	%100
6	MP4A	Z	7.347	7.347	0	%100
7	MP2A	X	0	0	0	%100
8	MP2A	Z	7.347	7.347	0	%100
9	MP3A	X	0	0	0	%100
10	MP3A	Z	7.347	7.347	0	%100
11	M15	X	0	0	0	%100
12	M15	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	0	0	0	%100
15	M19	X	0	0	0	%100
16	M19	Z	2.32	2.32	0	%100
17	M22	X	0	0	0	%100
18	M22	Z	8.565	8.565	0	%100
19	M23	X	0	0	0	%100
20	M23	Z	1.449	1.449	0	%100
21	MP1A	X	0	0	0	%100
22	MP1A	Z	7.347	7.347	0	%100
23	M24A	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
24	M24A	Z	11.075	11.075	0	%100
25	M25	X	0	0	0	%100
26	M25	Z	11.414	11.414	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-2.755	-2.755	0	%100
2	M1	Z	4.772	4.772	0	%100
3	M2	X	-2.755	-2.755	0	%100
4	M2	Z	4.772	4.772	0	%100
5	MP4A	X	-3.674	-3.674	0	%100
6	MP4A	Z	6.363	6.363	0	%100
7	MP2A	X	-3.674	-3.674	0	%100
8	MP2A	Z	6.363	6.363	0	%100
9	MP3A	X	-3.674	-3.674	0	%100
10	MP3A	Z	6.363	6.363	0	%100
11	M15	X	-.766	-.766	0	%100
12	M15	Z	1.326	1.326	0	%100
13	M17	X	-.766	-.766	0	%100
14	M17	Z	1.326	1.326	0	%100
15	M19	X	-1.16	-1.16	0	%100
16	M19	Z	2.009	2.009	0	%100
17	M22	X	-4.282	-4.282	0	%100
18	M22	Z	7.417	7.417	0	%100
19	M23	X	-2.547	-2.547	0	%100
20	M23	Z	4.411	4.411	0	%100
21	MP1A	X	-3.674	-3.674	0	%100
22	MP1A	Z	6.363	6.363	0	%100
23	M24A	X	-2.739	-2.739	0	%100
24	M24A	Z	4.744	4.744	0	%100
25	M25	X	-6.293	-6.293	0	%100
26	M25	Z	10.9	10.9	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.591	-1.591	0	%100
2	M1	Z	.918	.918	0	%100
3	M2	X	-1.591	-1.591	0	%100
4	M2	Z	.918	.918	0	%100
5	MP4A	X	-6.363	-6.363	0	%100
6	MP4A	Z	3.674	3.674	0	%100
7	MP2A	X	-6.363	-6.363	0	%100
8	MP2A	Z	3.674	3.674	0	%100
9	MP3A	X	-6.363	-6.363	0	%100
10	MP3A	Z	3.674	3.674	0	%100
11	M15	X	-3.979	-3.979	0	%100
12	M15	Z	2.297	2.297	0	%100
13	M17	X	-3.979	-3.979	0	%100
14	M17	Z	2.297	2.297	0	%100
15	M19	X	-2.009	-2.009	0	%100
16	M19	Z	1.16	1.16	0	%100
17	M22	X	-7.417	-7.417	0	%100
18	M22	Z	4.282	4.282	0	%100
19	M23	X	-6.337	-6.337	0	%100
20	M23	Z	3.659	3.659	0	%100
21	MP1A	X	-6.363	-6.363	0	%100
22	MP1A	Z	3.674	3.674	0	%100
23	M24A	X	-1.338	-1.338	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
24	M24A	Z	.773	.773	0	%100
25	M25	X	-7.088	-7.088	0	%100
26	M25	Z	4.092	4.092	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	MP4A	X	-7.347	-7.347	0	%100
6	MP4A	Z	0	0	0	%100
7	MP2A	X	-7.347	-7.347	0	%100
8	MP2A	Z	0	0	0	%100
9	MP3A	X	-7.347	-7.347	0	%100
10	MP3A	Z	0	0	0	%100
11	M15	X	-6.126	-6.126	0	%100
12	M15	Z	0	0	0	%100
13	M17	X	-6.126	-6.126	0	%100
14	M17	Z	0	0	0	%100
15	M19	X	-2.32	-2.32	0	%100
16	M19	Z	0	0	0	%100
17	M22	X	-8.565	-8.565	0	%100
18	M22	Z	0	0	0	%100
19	M23	X	-5.898	-5.898	0	%100
20	M23	Z	0	0	0	%100
21	MP1A	X	-7.347	-7.347	0	%100
22	MP1A	Z	0	0	0	%100
23	M24A	X	-3.209	-3.209	0	%100
24	M24A	Z	0	0	0	%100
25	M25	X	-2.609	-2.609	0	%100
26	M25	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.591	-1.591	0	%100
2	M1	Z	-.918	-.918	0	%100
3	M2	X	-1.591	-1.591	0	%100
4	M2	Z	-.918	-.918	0	%100
5	MP4A	X	-6.363	-6.363	0	%100
6	MP4A	Z	-3.674	-3.674	0	%100
7	MP2A	X	-6.363	-6.363	0	%100
8	MP2A	Z	-3.674	-3.674	0	%100
9	MP3A	X	-6.363	-6.363	0	%100
10	MP3A	Z	-3.674	-3.674	0	%100
11	M15	X	-3.979	-3.979	0	%100
12	M15	Z	-2.297	-2.297	0	%100
13	M17	X	-3.979	-3.979	0	%100
14	M17	Z	-2.297	-2.297	0	%100
15	M19	X	-2.009	-2.009	0	%100
16	M19	Z	-1.16	-1.16	0	%100
17	M22	X	-7.417	-7.417	0	%100
18	M22	Z	-4.282	-4.282	0	%100
19	M23	X	-1.952	-1.952	0	%100
20	M23	Z	-1.127	-1.127	0	%100
21	MP1A	X	-6.363	-6.363	0	%100
22	MP1A	Z	-3.674	-3.674	0	%100
23	M24A	X	-7.626	-7.626	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
24	M24A	Z	-4.403	-4.403	0	%100
25	M25	X	-1.244	-1.244	0	%100
26	M25	Z	-.719	-.719	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-2.755	-2.755	0	%100
2	M1	Z	-4.772	-4.772	0	%100
3	M2	X	-2.755	-2.755	0	%100
4	M2	Z	-4.772	-4.772	0	%100
5	MP4A	X	-3.674	-3.674	0	%100
6	MP4A	Z	-6.363	-6.363	0	%100
7	MP2A	X	-3.674	-3.674	0	%100
8	MP2A	Z	-6.363	-6.363	0	%100
9	MP3A	X	-3.674	-3.674	0	%100
10	MP3A	Z	-6.363	-6.363	0	%100
11	M15	X	-.766	-.766	0	%100
12	M15	Z	-1.326	-1.326	0	%100
13	M17	X	-.766	-.766	0	%100
14	M17	Z	-1.326	-1.326	0	%100
15	M19	X	-1.16	-1.16	0	%100
16	M19	Z	-2.009	-2.009	0	%100
17	M22	X	-4.282	-4.282	0	%100
18	M22	Z	-7.417	-7.417	0	%100
19	M23	X	-.015	-.015	0	%100
20	M23	Z	-.026	-.026	0	%100
21	MP1A	X	-3.674	-3.674	0	%100
22	MP1A	Z	-6.363	-6.363	0	%100
23	M24A	X	-6.369	-6.369	0	%100
24	M24A	Z	-11.032	-11.032	0	%100
25	M25	X	-2.92	-2.92	0	%100
26	M25	Z	-5.057	-5.057	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-2.641	-2.641	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-2.641	-2.641	0	%100
5	MP4A	X	0	0	0	%100
6	MP4A	Z	-2.641	-2.641	0	%100
7	MP2A	X	0	0	0	%100
8	MP2A	Z	-2.641	-2.641	0	%100
9	MP3A	X	0	0	0	%100
10	MP3A	Z	-2.641	-2.641	0	%100
11	M15	X	0	0	0	%100
12	M15	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	0	0	0	%100
15	M19	X	0	0	0	%100
16	M19	Z	-1.435	-1.435	0	%100
17	M22	X	0	0	0	%100
18	M22	Z	-2.764	-2.764	0	%100
19	M23	X	0	0	0	%100
20	M23	Z	-.521	-.521	0	%100
21	MP1A	X	0	0	0	%100
22	MP1A	Z	-2.641	-2.641	0	%100
23	M24A	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
24	M24A	Z	-3.139	-3.139	0	%100
25	M25	X	0	0	0	%100
26	M25	Z	-3.235	-3.235	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.99	.99	0	%100
2	M1	Z	-1.715	-1.715	0	%100
3	M2	X	.99	.99	0	%100
4	M2	Z	-1.715	-1.715	0	%100
5	MP4A	X	1.32	1.32	0	%100
6	MP4A	Z	-2.287	-2.287	0	%100
7	MP2A	X	1.32	1.32	0	%100
8	MP2A	Z	-2.287	-2.287	0	%100
9	MP3A	X	1.32	1.32	0	%100
10	MP3A	Z	-2.287	-2.287	0	%100
11	M15	X	.258	.258	0	%100
12	M15	Z	-.448	-.448	0	%100
13	M17	X	.258	.258	0	%100
14	M17	Z	-.448	-.448	0	%100
15	M19	X	.718	.718	0	%100
16	M19	Z	-1.243	-1.243	0	%100
17	M22	X	1.382	1.382	0	%100
18	M22	Z	-2.394	-2.394	0	%100
19	M23	X	.915	.915	0	%100
20	M23	Z	-1.585	-1.585	0	%100
21	MP1A	X	1.32	1.32	0	%100
22	MP1A	Z	-2.287	-2.287	0	%100
23	M24A	X	.776	.776	0	%100
24	M24A	Z	-1.344	-1.344	0	%100
25	M25	X	1.783	1.783	0	%100
26	M25	Z	-3.089	-3.089	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.572	.572	0	%100
2	M1	Z	-.33	-.33	0	%100
3	M2	X	.572	.572	0	%100
4	M2	Z	-.33	-.33	0	%100
5	MP4A	X	2.287	2.287	0	%100
6	MP4A	Z	-1.32	-1.32	0	%100
7	MP2A	X	2.287	2.287	0	%100
8	MP2A	Z	-1.32	-1.32	0	%100
9	MP3A	X	2.287	2.287	0	%100
10	MP3A	Z	-1.32	-1.32	0	%100
11	M15	X	1.343	1.343	0	%100
12	M15	Z	-.775	-.775	0	%100
13	M17	X	1.343	1.343	0	%100
14	M17	Z	-.775	-.775	0	%100
15	M19	X	1.243	1.243	0	%100
16	M19	Z	-.718	-.718	0	%100
17	M22	X	2.394	2.394	0	%100
18	M22	Z	-1.382	-1.382	0	%100
19	M23	X	2.278	2.278	0	%100
20	M23	Z	-1.315	-1.315	0	%100
21	MP1A	X	2.287	2.287	0	%100
22	MP1A	Z	-1.32	-1.32	0	%100
23	M24A	X	.379	.379	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
24	M24A	Z	-.219	-.219	0	%100
25	M25	X	2.009	2.009	0	%100
26	M25	Z	-1.16	-1.16	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	MP4A	X	2.641	2.641	0	%100
6	MP4A	Z	0	0	0	%100
7	MP2A	X	2.641	2.641	0	%100
8	MP2A	Z	0	0	0	%100
9	MP3A	X	2.641	2.641	0	%100
10	MP3A	Z	0	0	0	%100
11	M15	X	2.068	2.068	0	%100
12	M15	Z	0	0	0	%100
13	M17	X	2.068	2.068	0	%100
14	M17	Z	0	0	0	%100
15	M19	X	1.435	1.435	0	%100
16	M19	Z	0	0	0	%100
17	M22	X	2.764	2.764	0	%100
18	M22	Z	0	0	0	%100
19	M23	X	2.12	2.12	0	%100
20	M23	Z	0	0	0	%100
21	MP1A	X	2.641	2.641	0	%100
22	MP1A	Z	0	0	0	%100
23	M24A	X	.91	.91	0	%100
24	M24A	Z	0	0	0	%100
25	M25	X	.739	.739	0	%100
26	M25	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,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.572	.572	0	%100
2	M1	Z	.33	.33	0	%100
3	M2	X	.572	.572	0	%100
4	M2	Z	.33	.33	0	%100
5	MP4A	X	2.287	2.287	0	%100
6	MP4A	Z	1.32	1.32	0	%100
7	MP2A	X	2.287	2.287	0	%100
8	MP2A	Z	1.32	1.32	0	%100
9	MP3A	X	2.287	2.287	0	%100
10	MP3A	Z	1.32	1.32	0	%100
11	M15	X	1.343	1.343	0	%100
12	M15	Z	.775	.775	0	%100
13	M17	X	1.343	1.343	0	%100
14	M17	Z	.775	.775	0	%100
15	M19	X	1.243	1.243	0	%100
16	M19	Z	.718	.718	0	%100
17	M22	X	2.394	2.394	0	%100
18	M22	Z	1.382	1.382	0	%100
19	M23	X	.702	.702	0	%100
20	M23	Z	.405	.405	0	%100
21	MP1A	X	2.287	2.287	0	%100
22	MP1A	Z	1.32	1.32	0	%100
23	M24A	X	2.161	2.161	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
24	M24A	Z	1.248	1.248	0	%100
25	M25	X	.353	.353	0	%100
26	M25	Z	.204	.204	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.99	.99	0	%100
2	M1	Z	1.715	1.715	0	%100
3	M2	X	.99	.99	0	%100
4	M2	Z	1.715	1.715	0	%100
5	MP4A	X	1.32	1.32	0	%100
6	MP4A	Z	2.287	2.287	0	%100
7	MP2A	X	1.32	1.32	0	%100
8	MP2A	Z	2.287	2.287	0	%100
9	MP3A	X	1.32	1.32	0	%100
10	MP3A	Z	2.287	2.287	0	%100
11	M15	X	.258	.258	0	%100
12	M15	Z	.448	.448	0	%100
13	M17	X	.258	.258	0	%100
14	M17	Z	.448	.448	0	%100
15	M19	X	.718	.718	0	%100
16	M19	Z	1.243	1.243	0	%100
17	M22	X	1.382	1.382	0	%100
18	M22	Z	2.394	2.394	0	%100
19	M23	X	.005	.005	0	%100
20	M23	Z	.009	.009	0	%100
21	MP1A	X	1.32	1.32	0	%100
22	MP1A	Z	2.287	2.287	0	%100
23	M24A	X	1.805	1.805	0	%100
24	M24A	Z	3.126	3.126	0	%100
25	M25	X	.827	.827	0	%100
26	M25	Z	1.433	1.433	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	2.641	2.641	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	2.641	2.641	0	%100
5	MP4A	X	0	0	0	%100
6	MP4A	Z	2.641	2.641	0	%100
7	MP2A	X	0	0	0	%100
8	MP2A	Z	2.641	2.641	0	%100
9	MP3A	X	0	0	0	%100
10	MP3A	Z	2.641	2.641	0	%100
11	M15	X	0	0	0	%100
12	M15	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	0	0	0	%100
15	M19	X	0	0	0	%100
16	M19	Z	1.435	1.435	0	%100
17	M22	X	0	0	0	%100
18	M22	Z	2.764	2.764	0	%100
19	M23	X	0	0	0	%100
20	M23	Z	.521	.521	0	%100
21	MP1A	X	0	0	0	%100
22	MP1A	Z	2.641	2.641	0	%100
23	M24A	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
24	M24A	Z	3.139	3.139	0	%100
25	M25	X	0	0	0	%100
26	M25	Z	3.235	3.235	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.99	-.99	0	%100
2	M1	Z	1.715	1.715	0	%100
3	M2	X	-.99	-.99	0	%100
4	M2	Z	1.715	1.715	0	%100
5	MP4A	X	-1.32	-1.32	0	%100
6	MP4A	Z	2.287	2.287	0	%100
7	MP2A	X	-1.32	-1.32	0	%100
8	MP2A	Z	2.287	2.287	0	%100
9	MP3A	X	-1.32	-1.32	0	%100
10	MP3A	Z	2.287	2.287	0	%100
11	M15	X	-.258	-.258	0	%100
12	M15	Z	.448	.448	0	%100
13	M17	X	-.258	-.258	0	%100
14	M17	Z	.448	.448	0	%100
15	M19	X	-.718	-.718	0	%100
16	M19	Z	1.243	1.243	0	%100
17	M22	X	-1.382	-1.382	0	%100
18	M22	Z	2.394	2.394	0	%100
19	M23	X	-.915	-.915	0	%100
20	M23	Z	1.585	1.585	0	%100
21	MP1A	X	-1.32	-1.32	0	%100
22	MP1A	Z	2.287	2.287	0	%100
23	M24A	X	-.776	-.776	0	%100
24	M24A	Z	1.344	1.344	0	%100
25	M25	X	-1.783	-1.783	0	%100
26	M25	Z	3.089	3.089	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.572	-.572	0	%100
2	M1	Z	.33	.33	0	%100
3	M2	X	-.572	-.572	0	%100
4	M2	Z	.33	.33	0	%100
5	MP4A	X	-2.287	-2.287	0	%100
6	MP4A	Z	1.32	1.32	0	%100
7	MP2A	X	-2.287	-2.287	0	%100
8	MP2A	Z	1.32	1.32	0	%100
9	MP3A	X	-2.287	-2.287	0	%100
10	MP3A	Z	1.32	1.32	0	%100
11	M15	X	-1.343	-1.343	0	%100
12	M15	Z	.775	.775	0	%100
13	M17	X	-1.343	-1.343	0	%100
14	M17	Z	.775	.775	0	%100
15	M19	X	-1.243	-1.243	0	%100
16	M19	Z	.718	.718	0	%100
17	M22	X	-2.394	-2.394	0	%100
18	M22	Z	1.382	1.382	0	%100
19	M23	X	-2.278	-2.278	0	%100
20	M23	Z	1.315	1.315	0	%100
21	MP1A	X	-2.287	-2.287	0	%100
22	MP1A	Z	1.32	1.32	0	%100
23	M24A	X	-.379	-.379	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
24	M24A	Z	.219	.219	0	%100
25	M25	X	-2.009	-2.009	0	%100
26	M25	Z	1.16	1.16	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	MP4A	X	-2.641	-2.641	0	%100
6	MP4A	Z	0	0	0	%100
7	MP2A	X	-2.641	-2.641	0	%100
8	MP2A	Z	0	0	0	%100
9	MP3A	X	-2.641	-2.641	0	%100
10	MP3A	Z	0	0	0	%100
11	M15	X	-2.068	-2.068	0	%100
12	M15	Z	0	0	0	%100
13	M17	X	-2.068	-2.068	0	%100
14	M17	Z	0	0	0	%100
15	M19	X	-1.435	-1.435	0	%100
16	M19	Z	0	0	0	%100
17	M22	X	-2.764	-2.764	0	%100
18	M22	Z	0	0	0	%100
19	M23	X	-2.12	-2.12	0	%100
20	M23	Z	0	0	0	%100
21	MP1A	X	-2.641	-2.641	0	%100
22	MP1A	Z	0	0	0	%100
23	M24A	X	-.91	-.91	0	%100
24	M24A	Z	0	0	0	%100
25	M25	X	-.739	-.739	0	%100
26	M25	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,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.572	-.572	0	%100
2	M1	Z	-.33	-.33	0	%100
3	M2	X	-.572	-.572	0	%100
4	M2	Z	-.33	-.33	0	%100
5	MP4A	X	-2.287	-2.287	0	%100
6	MP4A	Z	-1.32	-1.32	0	%100
7	MP2A	X	-2.287	-2.287	0	%100
8	MP2A	Z	-1.32	-1.32	0	%100
9	MP3A	X	-2.287	-2.287	0	%100
10	MP3A	Z	-1.32	-1.32	0	%100
11	M15	X	-1.343	-1.343	0	%100
12	M15	Z	-.775	-.775	0	%100
13	M17	X	-1.343	-1.343	0	%100
14	M17	Z	-.775	-.775	0	%100
15	M19	X	-1.243	-1.243	0	%100
16	M19	Z	-.718	-.718	0	%100
17	M22	X	-2.394	-2.394	0	%100
18	M22	Z	-1.382	-1.382	0	%100
19	M23	X	-.702	-.702	0	%100
20	M23	Z	-.405	-.405	0	%100
21	MP1A	X	-2.287	-2.287	0	%100
22	MP1A	Z	-1.32	-1.32	0	%100
23	M24A	X	-2.161	-2.161	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
24	M24A	Z	-1.248	-1.248	0	%100
25	M25	X	-.353	-.353	0	%100
26	M25	Z	-.204	-.204	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.99	-.99	0	%100
2	M1	Z	-1.715	-1.715	0	%100
3	M2	X	-.99	-.99	0	%100
4	M2	Z	-1.715	-1.715	0	%100
5	MP4A	X	-1.32	-1.32	0	%100
6	MP4A	Z	-2.287	-2.287	0	%100
7	MP2A	X	-1.32	-1.32	0	%100
8	MP2A	Z	-2.287	-2.287	0	%100
9	MP3A	X	-1.32	-1.32	0	%100
10	MP3A	Z	-2.287	-2.287	0	%100
11	M15	X	-.258	-.258	0	%100
12	M15	Z	-.448	-.448	0	%100
13	M17	X	-.258	-.258	0	%100
14	M17	Z	-.448	-.448	0	%100
15	M19	X	-.718	-.718	0	%100
16	M19	Z	-1.243	-1.243	0	%100
17	M22	X	-1.382	-1.382	0	%100
18	M22	Z	-2.394	-2.394	0	%100
19	M23	X	-.005	-.005	0	%100
20	M23	Z	-.009	-.009	0	%100
21	MP1A	X	-1.32	-1.32	0	%100
22	MP1A	Z	-2.287	-2.287	0	%100
23	M24A	X	-1.805	-1.805	0	%100
24	M24A	Z	-3.126	-3.126	0	%100
25	M25	X	-.827	-.827	0	%100
26	M25	Z	-1.433	-1.433	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-.483	-.483	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-.483	-.483	0	%100
5	MP4A	X	0	0	0	%100
6	MP4A	Z	-.483	-.483	0	%100
7	MP2A	X	0	0	0	%100
8	MP2A	Z	-.483	-.483	0	%100
9	MP3A	X	0	0	0	%100
10	MP3A	Z	-.483	-.483	0	%100
11	M15	X	0	0	0	%100
12	M15	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	0	0	0	%100
15	M19	X	0	0	0	%100
16	M19	Z	-.153	-.153	0	%100
17	M22	X	0	0	0	%100
18	M22	Z	-.563	-.563	0	%100
19	M23	X	0	0	0	%100
20	M23	Z	-.095	-.095	0	%100
21	MP1A	X	0	0	0	%100
22	MP1A	Z	-.483	-.483	0	%100
23	M24A	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
24	M24A	Z	-.728	-.728	0	%100
25	M25	X	0	0	0	%100
26	M25	Z	-.75	-.75	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.181	.181	0	%100
2	M1	Z	-.314	-.314	0	%100
3	M2	X	.181	.181	0	%100
4	M2	Z	-.314	-.314	0	%100
5	MP4A	X	.242	.242	0	%100
6	MP4A	Z	-.418	-.418	0	%100
7	MP2A	X	.242	.242	0	%100
8	MP2A	Z	-.418	-.418	0	%100
9	MP3A	X	.242	.242	0	%100
10	MP3A	Z	-.418	-.418	0	%100
11	M15	X	.05	.05	0	%100
12	M15	Z	-.087	-.087	0	%100
13	M17	X	.05	.05	0	%100
14	M17	Z	-.087	-.087	0	%100
15	M19	X	.076	.076	0	%100
16	M19	Z	-.132	-.132	0	%100
17	M22	X	.282	.282	0	%100
18	M22	Z	-.488	-.488	0	%100
19	M23	X	.167	.167	0	%100
20	M23	Z	-.29	-.29	0	%100
21	MP1A	X	.242	.242	0	%100
22	MP1A	Z	-.418	-.418	0	%100
23	M24A	X	.18	.18	0	%100
24	M24A	Z	-.312	-.312	0	%100
25	M25	X	.414	.414	0	%100
26	M25	Z	-.717	-.717	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.105	.105	0	%100
2	M1	Z	-.06	-.06	0	%100
3	M2	X	.105	.105	0	%100
4	M2	Z	-.06	-.06	0	%100
5	MP4A	X	.418	.418	0	%100
6	MP4A	Z	-.242	-.242	0	%100
7	MP2A	X	.418	.418	0	%100
8	MP2A	Z	-.242	-.242	0	%100
9	MP3A	X	.418	.418	0	%100
10	MP3A	Z	-.242	-.242	0	%100
11	M15	X	.262	.262	0	%100
12	M15	Z	-.151	-.151	0	%100
13	M17	X	.262	.262	0	%100
14	M17	Z	-.151	-.151	0	%100
15	M19	X	.132	.132	0	%100
16	M19	Z	-.076	-.076	0	%100
17	M22	X	.488	.488	0	%100
18	M22	Z	-.282	-.282	0	%100
19	M23	X	.417	.417	0	%100
20	M23	Z	-.241	-.241	0	%100
21	MP1A	X	.418	.418	0	%100
22	MP1A	Z	-.242	-.242	0	%100
23	M24A	X	.088	.088	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
24	M24A	Z	-.051	-.051	0	%100
25	M25	X	.466	.466	0	%100
26	M25	Z	-.269	-.269	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	MP4A	X	.483	.483	0	%100
6	MP4A	Z	0	0	0	%100
7	MP2A	X	.483	.483	0	%100
8	MP2A	Z	0	0	0	%100
9	MP3A	X	.483	.483	0	%100
10	MP3A	Z	0	0	0	%100
11	M15	X	.403	.403	0	%100
12	M15	Z	0	0	0	%100
13	M17	X	.403	.403	0	%100
14	M17	Z	0	0	0	%100
15	M19	X	.153	.153	0	%100
16	M19	Z	0	0	0	%100
17	M22	X	.563	.563	0	%100
18	M22	Z	0	0	0	%100
19	M23	X	.388	.388	0	%100
20	M23	Z	0	0	0	%100
21	MP1A	X	.483	.483	0	%100
22	MP1A	Z	0	0	0	%100
23	M24A	X	.211	.211	0	%100
24	M24A	Z	0	0	0	%100
25	M25	X	.172	.172	0	%100
26	M25	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,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.105	.105	0	%100
2	M1	Z	.06	.06	0	%100
3	M2	X	.105	.105	0	%100
4	M2	Z	.06	.06	0	%100
5	MP4A	X	.418	.418	0	%100
6	MP4A	Z	.242	.242	0	%100
7	MP2A	X	.418	.418	0	%100
8	MP2A	Z	.242	.242	0	%100
9	MP3A	X	.418	.418	0	%100
10	MP3A	Z	.242	.242	0	%100
11	M15	X	.262	.262	0	%100
12	M15	Z	.151	.151	0	%100
13	M17	X	.262	.262	0	%100
14	M17	Z	.151	.151	0	%100
15	M19	X	.132	.132	0	%100
16	M19	Z	.076	.076	0	%100
17	M22	X	.488	.488	0	%100
18	M22	Z	.282	.282	0	%100
19	M23	X	.128	.128	0	%100
20	M23	Z	.074	.074	0	%100
21	MP1A	X	.418	.418	0	%100
22	MP1A	Z	.242	.242	0	%100
23	M24A	X	.501	.501	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
24	M24A	Z	.289	.289	0	%100
25	M25	X	.082	.082	0	%100
26	M25	Z	.047	.047	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.181	.181	0	%100
2	M1	Z	.314	.314	0	%100
3	M2	X	.181	.181	0	%100
4	M2	Z	.314	.314	0	%100
5	MP4A	X	.242	.242	0	%100
6	MP4A	Z	.418	.418	0	%100
7	MP2A	X	.242	.242	0	%100
8	MP2A	Z	.418	.418	0	%100
9	MP3A	X	.242	.242	0	%100
10	MP3A	Z	.418	.418	0	%100
11	M15	X	.05	.05	0	%100
12	M15	Z	.087	.087	0	%100
13	M17	X	.05	.05	0	%100
14	M17	Z	.087	.087	0	%100
15	M19	X	.076	.076	0	%100
16	M19	Z	.132	.132	0	%100
17	M22	X	.282	.282	0	%100
18	M22	Z	.488	.488	0	%100
19	M23	X	.000969	.000969	0	%100
20	M23	Z	.002	.002	0	%100
21	MP1A	X	.242	.242	0	%100
22	MP1A	Z	.418	.418	0	%100
23	M24A	X	.419	.419	0	%100
24	M24A	Z	.725	.725	0	%100
25	M25	X	.192	.192	0	%100
26	M25	Z	.332	.332	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	.483	.483	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	.483	.483	0	%100
5	MP4A	X	0	0	0	%100
6	MP4A	Z	.483	.483	0	%100
7	MP2A	X	0	0	0	%100
8	MP2A	Z	.483	.483	0	%100
9	MP3A	X	0	0	0	%100
10	MP3A	Z	.483	.483	0	%100
11	M15	X	0	0	0	%100
12	M15	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	0	0	0	%100
15	M19	X	0	0	0	%100
16	M19	Z	.153	.153	0	%100
17	M22	X	0	0	0	%100
18	M22	Z	.563	.563	0	%100
19	M23	X	0	0	0	%100
20	M23	Z	.095	.095	0	%100
21	MP1A	X	0	0	0	%100
22	MP1A	Z	.483	.483	0	%100
23	M24A	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
24	M24A	Z	.728	.728	0	%100
25	M25	X	0	0	0	%100
26	M25	Z	.75	.75	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.181	-.181	0	%100
2	M1	Z	.314	.314	0	%100
3	M2	X	-.181	-.181	0	%100
4	M2	Z	.314	.314	0	%100
5	MP4A	X	-.242	-.242	0	%100
6	MP4A	Z	.418	.418	0	%100
7	MP2A	X	-.242	-.242	0	%100
8	MP2A	Z	.418	.418	0	%100
9	MP3A	X	-.242	-.242	0	%100
10	MP3A	Z	.418	.418	0	%100
11	M15	X	-.05	-.05	0	%100
12	M15	Z	.087	.087	0	%100
13	M17	X	-.05	-.05	0	%100
14	M17	Z	.087	.087	0	%100
15	M19	X	-.076	-.076	0	%100
16	M19	Z	.132	.132	0	%100
17	M22	X	-.282	-.282	0	%100
18	M22	Z	.488	.488	0	%100
19	M23	X	-.167	-.167	0	%100
20	M23	Z	.29	.29	0	%100
21	MP1A	X	-.242	-.242	0	%100
22	MP1A	Z	.418	.418	0	%100
23	M24A	X	-.18	-.18	0	%100
24	M24A	Z	.312	.312	0	%100
25	M25	X	-.414	-.414	0	%100
26	M25	Z	.717	.717	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.105	-.105	0	%100
2	M1	Z	.06	.06	0	%100
3	M2	X	-.105	-.105	0	%100
4	M2	Z	.06	.06	0	%100
5	MP4A	X	-.418	-.418	0	%100
6	MP4A	Z	.242	.242	0	%100
7	MP2A	X	-.418	-.418	0	%100
8	MP2A	Z	.242	.242	0	%100
9	MP3A	X	-.418	-.418	0	%100
10	MP3A	Z	.242	.242	0	%100
11	M15	X	-.262	-.262	0	%100
12	M15	Z	.151	.151	0	%100
13	M17	X	-.262	-.262	0	%100
14	M17	Z	.151	.151	0	%100
15	M19	X	-.132	-.132	0	%100
16	M19	Z	.076	.076	0	%100
17	M22	X	-.488	-.488	0	%100
18	M22	Z	.282	.282	0	%100
19	M23	X	-.417	-.417	0	%100
20	M23	Z	.241	.241	0	%100
21	MP1A	X	-.418	-.418	0	%100
22	MP1A	Z	.242	.242	0	%100
23	M24A	X	-.088	-.088	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
24	M24A	Z	.051	.051	0	%100
25	M25	X	-.466	-.466	0	%100
26	M25	Z	.269	.269	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	MP4A	X	-.483	-.483	0	%100
6	MP4A	Z	0	0	0	%100
7	MP2A	X	-.483	-.483	0	%100
8	MP2A	Z	0	0	0	%100
9	MP3A	X	-.483	-.483	0	%100
10	MP3A	Z	0	0	0	%100
11	M15	X	-.403	-.403	0	%100
12	M15	Z	0	0	0	%100
13	M17	X	-.403	-.403	0	%100
14	M17	Z	0	0	0	%100
15	M19	X	-.153	-.153	0	%100
16	M19	Z	0	0	0	%100
17	M22	X	-.563	-.563	0	%100
18	M22	Z	0	0	0	%100
19	M23	X	-.388	-.388	0	%100
20	M23	Z	0	0	0	%100
21	MP1A	X	-.483	-.483	0	%100
22	MP1A	Z	0	0	0	%100
23	M24A	X	-.211	-.211	0	%100
24	M24A	Z	0	0	0	%100
25	M25	X	-.172	-.172	0	%100
26	M25	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,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.105	-.105	0	%100
2	M1	Z	-.06	-.06	0	%100
3	M2	X	-.105	-.105	0	%100
4	M2	Z	-.06	-.06	0	%100
5	MP4A	X	-.418	-.418	0	%100
6	MP4A	Z	-.242	-.242	0	%100
7	MP2A	X	-.418	-.418	0	%100
8	MP2A	Z	-.242	-.242	0	%100
9	MP3A	X	-.418	-.418	0	%100
10	MP3A	Z	-.242	-.242	0	%100
11	M15	X	-.262	-.262	0	%100
12	M15	Z	-.151	-.151	0	%100
13	M17	X	-.262	-.262	0	%100
14	M17	Z	-.151	-.151	0	%100
15	M19	X	-.132	-.132	0	%100
16	M19	Z	-.076	-.076	0	%100
17	M22	X	-.488	-.488	0	%100
18	M22	Z	-.282	-.282	0	%100
19	M23	X	-.128	-.128	0	%100
20	M23	Z	-.074	-.074	0	%100
21	MP1A	X	-.418	-.418	0	%100
22	MP1A	Z	-.242	-.242	0	%100
23	M24A	X	-.501	-.501	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
24	M24A	Z	-.289	-.289	0	%100
25	M25	X	-.082	-.082	0	%100
26	M25	Z	-.047	-.047	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.181	-.181	0	%100
2	M1	Z	-.314	-.314	0	%100
3	M2	X	-.181	-.181	0	%100
4	M2	Z	-.314	-.314	0	%100
5	MP4A	X	-.242	-.242	0	%100
6	MP4A	Z	-.418	-.418	0	%100
7	MP2A	X	-.242	-.242	0	%100
8	MP2A	Z	-.418	-.418	0	%100
9	MP3A	X	-.242	-.242	0	%100
10	MP3A	Z	-.418	-.418	0	%100
11	M15	X	-.05	-.05	0	%100
12	M15	Z	-.087	-.087	0	%100
13	M17	X	-.05	-.05	0	%100
14	M17	Z	-.087	-.087	0	%100
15	M19	X	-.076	-.076	0	%100
16	M19	Z	-.132	-.132	0	%100
17	M22	X	-.282	-.282	0	%100
18	M22	Z	-.488	-.488	0	%100
19	M23	X	-.000969	-.000969	0	%100
20	M23	Z	-.002	-.002	0	%100
21	MP1A	X	-.242	-.242	0	%100
22	MP1A	Z	-.418	-.418	0	%100
23	M24A	X	-.419	-.419	0	%100
24	M24A	Z	-.725	-.725	0	%100
25	M25	X	-.192	-.192	0	%100
26	M25	Z	-.332	-.332	0	%100

Member Area Loads

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

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N44	max	1152.381	10	981.493	18	1136.421	12	.013	8	0	51	.087	11
2		min	-1276.952	4	-27.913	12	-1860.583	6	-.374	14	0	1	-.126	5
3	N45	max	348.914	3	889.891	18	849.147	18	.126	1	0	51	.104	29
4		min	-343.309	9	-18.235	12	-203.775	12	-.305	7	0	1	-.075	11
5	N48	max	293.028	5	94.567	36	584.765	5	0	51	0	51	0	51
6		min	-284.474	11	-14.424	6	-593.467	11	0	1	0	1	0	1
7	N52A	max	852.671	33	851.13	12	970.774	12	.004	12	0	12	0	12
8		min	-536.751	3	-596.686	6	-782.305	6	-.003	6	-.001	49	-.001	49
9	Totals:	max	1210.31	10	1970.764	23	1791.2	1						
10		min	-1210.31	4	847.269	5	-1791.146	7						

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

	Member	Shape	Code ...	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	phi*Pnc ...	phi*Pnt [...	phi*Mn y...	phi*Mn z...	Cb	Eqn
1	M1	PIPE_2.0	.896	6.5	6	.384	6.229		6	5820.472	32130	1.872	1.872	1....	H3-6
2	M2	PIPE_2.0	.851	6.229	5	.314	6.229		6	5820.472	32130	1.872	1.872	1....	H1-1b

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

	Member	Shape	Code ...	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	phi*Pnc ...	phi*Pnt [...	phi*Mn y...	phi*Mn z...	Cb	Eqn
3	MP4A	PIPE_2.0	.246	5.542	49	.070	5.542		7	17855.0...	32130	1.872	1.872	1....	H1-1b
4	MP2A	PIPE_2.0	.509	3.135	6	.120	3.135		29	17855.0...	32130	1.872	1.872	1....	H1-1b
5	MP3A	PIPE_2.0	.259	3.135	49	.152	3.938		6	17855.0...	32130	1.872	1.872	1....	H1-1b
6	M15	HSS2.5X2.5...	.399	.125	3	.212	2	z	3	55909.5...	58212	4.158	4.158	2....	H1-1b
7	M17	HSS2.5X2.5...	.405	2	5	.175	.542	y	5	55909.5...	58212	4.158	4.158	1....	H1-1b
8	M19	SR 0.75	.137	2.5	12	.050	0		4	3898.632	14313.8...	.179	.179	1....	H1-1b*
9	M22	PIPE_3.0	.140	.583	18	.169	.625		5	59852.6...	65205	5.749	5.749	2....	H1-1b
10	M23	PIPE_2.0	.263	0	36	.010	6.016		25	20819.3...	32130	1.872	1.872	1....	H1-1b
11	MP1A	PIPE_2.0	.475	5.542	30	.156	3.135		5	17855.0...	32130	1.872	1.872	1....	H1-1b
12	M24A	L2.5x2.5x4	.122	2.692	12	.015	0	y	49	14957.5...	38556	1.114	2.212	1....	H2-1
13	M25	L2.5x2.5x4	.147	2.862	12	.018	0	y	6	12161.5...	38556	1.114	2.157	1....	H2-1

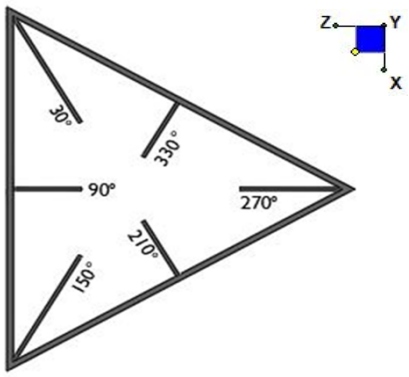
Client:	Verizon Wireless	Date:	10/11/2021
Site Name:	Wolcott N		
Project No.	20777521A		
Title:	Mount Fix	Page:	1

Version 3.1

I. Mount-to-Tower Connection Check

RISA Model Data

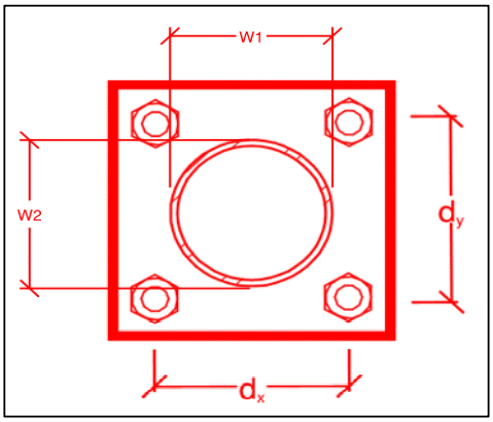
Nodes *(labeled per RISA)*	Orientation *(per graphic of typical platform)*
N44	90
N45	90



TYPICAL PLATFORM

Tower Connection Bolt Checks

Any moment resistance?:	yes
Bolt Quantity per Reaction:	4
d_x (in) *(Delta X of typ. bolt config. sketch)* :	3.5
d_y (in) *(Delta Y of typ. bolt config. sketch)* :	3
Bolt Type:	A307
Bolt Diameter (in):	0.5
Required Tensile Strength (kips):	3.9
Required Shear Strength (kips):	2.3
Tensile Strength / bolt (kips):	6.4
Shear Strength / bolt (kips):	3.8
Tensile Capacity Overall:	**15.4%***
Shear Capacity Overall:	**15.1%**



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

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Mount Modification

Electronic pdf version of this can be downloaded at https://pmi.vzwsmart.com
For additional questions and support, please reach out to pmisupport@colliersengineering.com

---

Purpose – to upload the proper documentation to the SMART Tool in order to allow the SMART Tool engineering vendor 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:

- If installation of the modification will cause damage to the structure, the climbing facility, or safety climb if present or any installed system, SMART Tool vendor to be notified prior to install. 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) shall be shown. NOTE: If loading is different than what is conveyed in the post-modification passing mount analysis (MA) contact the SMART Tool vendor immediately.
- Each photo shall be time and date stamped.
- Photos should be high resolution.
- Contractor shall ensure that the safety climb wire rope is 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. If there is conflict, contact the SMART Tool engineer for recommendations.
- The PMI can be accessed at the following portal: **https://pmi.vzwsmart.com**

Photo Requirements:

- *Photos taken at ground level*
  - Photo of Gate Signs showing the tower owner, site name, and number.
  - Overall tower structure after installation of the modifications.
  - Photos of the mount 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 the safety climb wire rope above and below the mount prior to modification.
  - Photos showing the climbing facility and safety climb if present.
  - Photos showing each individual sector after installation of modifications. Each entire sector must be in one photo to show the interconnection of members.

        - These photos shall also certify that the placement and geometry of the equipment on the mount is as depicted in the antenna placement diagram in this form.
    - Photos that show the model number of each antenna and piece of equipment installed per sector.
    - Photos of each installed modification per the modification drawings; pictures shall also include connection hardware (U-bolts, bolts, nuts, all-threaded rods, etc.)
    - Photos showing the distances (relative distance between collars) of the installed modifications from the appropriate reference locations shown in the modification drawings.
    - Photos showing the installed modifications onto the tower (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, an elevation measurement shall be provided before the elevation change.

Material Certification:

- Materials utilized must be as per specification on the drawings or the equivalent as validated by the SMART Tool vendor.
    - If the materials are as specified on the drawings
        - The contractor shall provide the packing list, or the materials certifications for the materials utilized to perform the mount modification
        - Commscope, Metrosite, Perfect Vision, Sabre, and Site Pro have all agreed to support Verizon vendors with the necessary material certifications
    - If seeking permission to use an equivalent
        - It is required that the SMART Tool engineering vendor approval of such is included in the contractor submission package. There may be an additional charge for approval if the equivalent submission doesn't meet specifications as prescribed in the drawings.

☐ All hardware has been properly installed, and the existing hardware was inspected.

☐ The material utilized was as specified on the SMART Tool engineering vendor Mount Modification Drawings and included in the material certification folder is a packing list or invoice for these materials.

OR

☐ The material utilized was approved by a SMART Tool as an "equivalent" and this approval is included as part of the contractor submission.

Antenna & equipment placement and Geometry Confirmation:

☐ The contractor certifies that the photos support and the equipment on the mount is as depicted on the sketch and table included in this form and with the mount analysis provided.

OR

☐ The contractor notes that the equipment on the mount is not in accordance with the sketch and has noted the differences below and provided photo documentation of any alterations.

Comments:

Certifying Individual:

Company:	
Employee Name:	
Contact Phone:	
Email:	
Date:	

Was the mount modification completed in conjunction with the equipment change / installation?

☐ Yes ☐ No

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

Issue:

1. Contractor shall install proposed OVP directly to the existing mast pipe in Alpha sector.
2. Contractor shall install (1) pipe mount reinforcement kit (Part #: Site Pro 1 - R5-REINF or EOR approved equal) to the existing mount-to-tower connection in each sector.

Response:

Contractor certifies that the climbing facility / safety climb was not damaged during installation:

☐ Yes ☐ No

Comments:

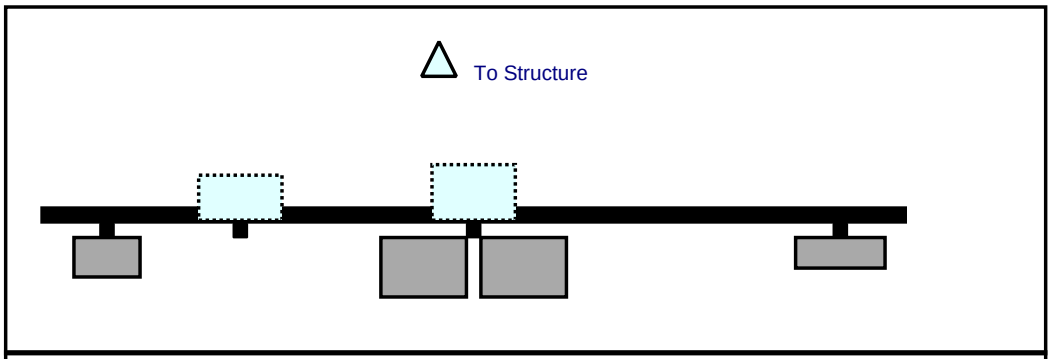
Structure: 467187-VZW - WOLCOTT N

Sector: **A** 10/11/2021

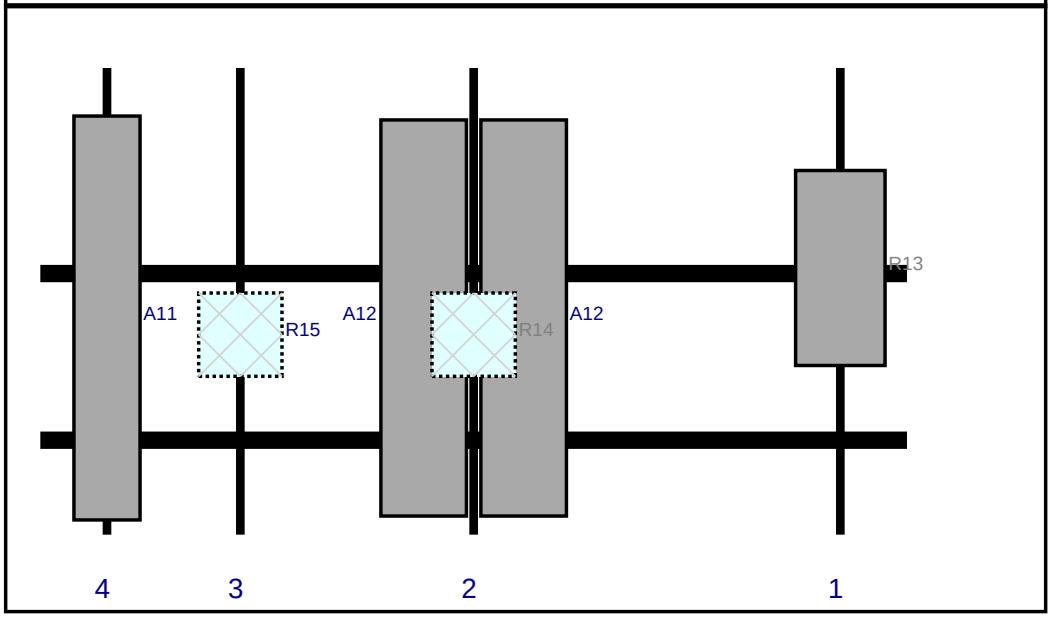
Structure Type: Self Support 10104933

Mount Elev: 133.00 Page: 1

Plan View



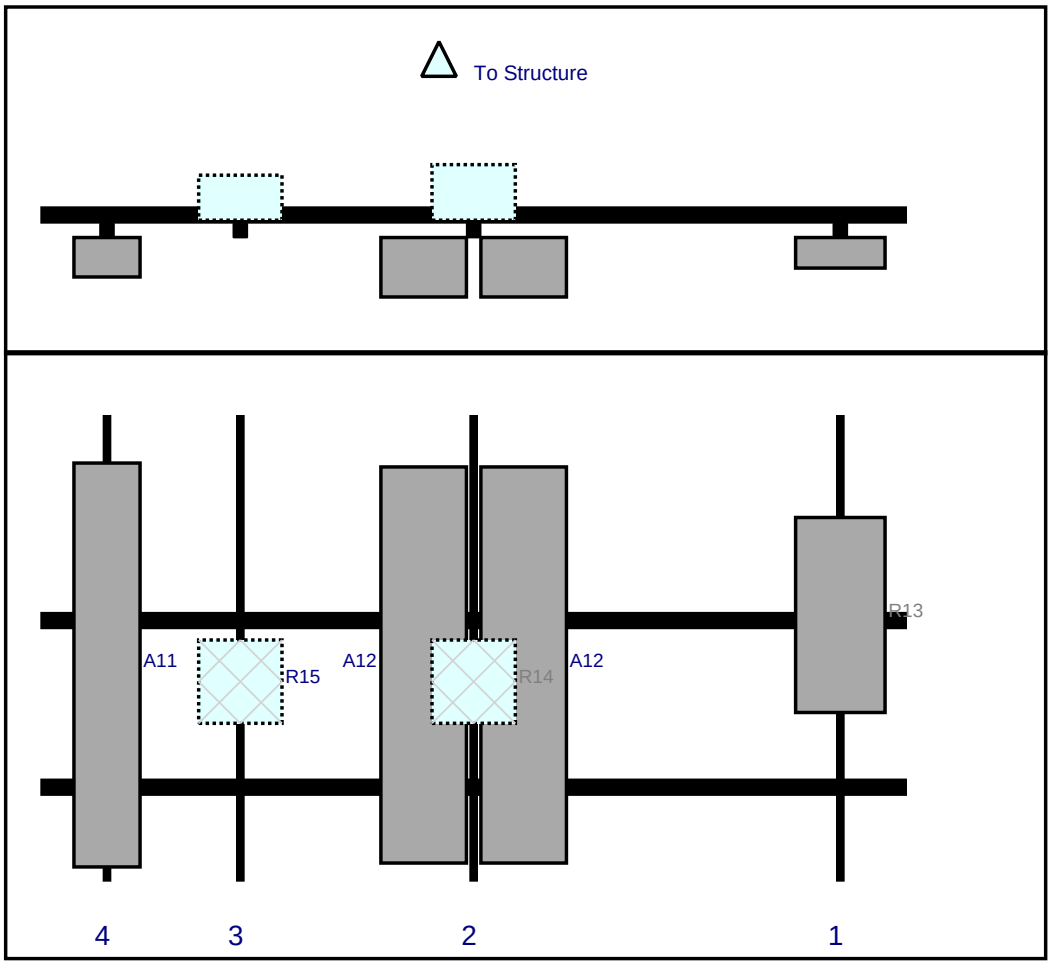
Front View
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R13	MT6407-77A	35.1	16.1	144	1	a	Front	36	0	Added	
A12	MX06FRO660-03	71.3	15.4	78	2	a	Front	45	9	Added	
A12	MX06FRO660-03	71.3	15.4	78	2	b	Front	45	-9	Added	
R14	B2/B66A RRH-BR049	15	15	78	2	a	Behind	48	0	Added	
R15	B5/B13 RRH-BR04C	15	15	36	3	a	Behind	48	0	Added	
A11	LNX-8513DS-VTM	72.7	11.9	12	4	a	Front	45	0	Retained	11/28/2020

Plan View

Front View
Looking at Structure



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R14	B2/B66A RRH-BR049	15	15	78	2	a	Behind	48	0	Added	
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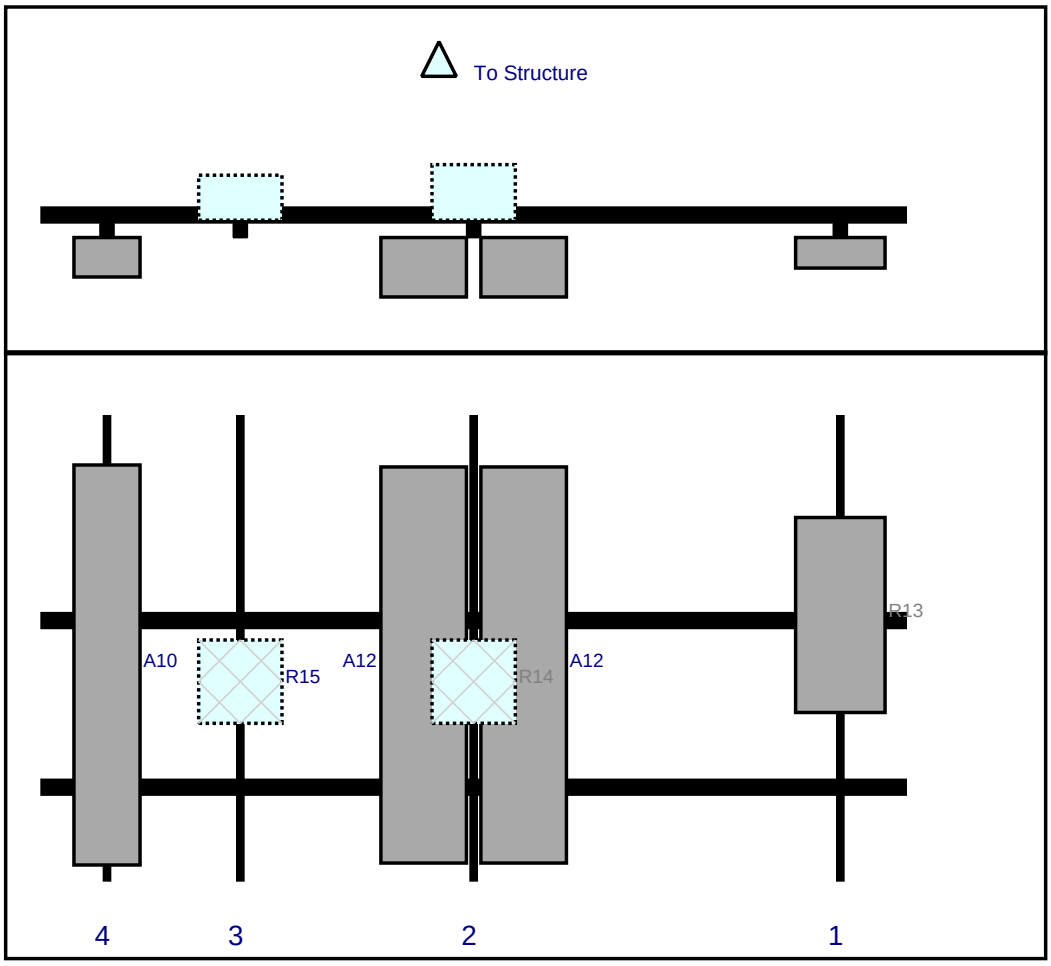
Plan View

Front View
Looking at Structure



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R13	MT6407-77A	35.1	16.1	144	1	a	Front	36	0	Added	
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A12	MX06FRO660-03	71.3	15.4	78	2	b	Front	45	-9	Added	
R14	B2/B66A RRH-BR049	15	15	78	2	a	Behind	48	0	Added	
R15	B5/B13 RRH-BR04C	15	15	36	3	a	Behind	48	0	Added	
A10	LNX-6514DS-VTM	72	11.9	12	4	a	Front	45	0	Retained	11/28/2020

Maser Consulting Connecticut

Subject	TIA-222-H Usage
Site Information	Site ID: 467187-VZW / WOLCOTT N CT Site Name: WOLCOTT N CT Carrier Name: Verizon Wireless Address: 1192 Wolcott Rd, Wolcott, Connecticut 06716 New Haven County Latitude: 41.61803611° Longitude: -72.97124444°
Structure Information	Tower Type: 180-Ft Self Support Mount Type: 13.00-Ft T-Frame Mount

To Whom It May Concern,

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

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

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

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

Sincerely,

Peter Albano, PE
Project Manager

Site Name: ***WOLCOTT N CT***
Cumulative Power Density

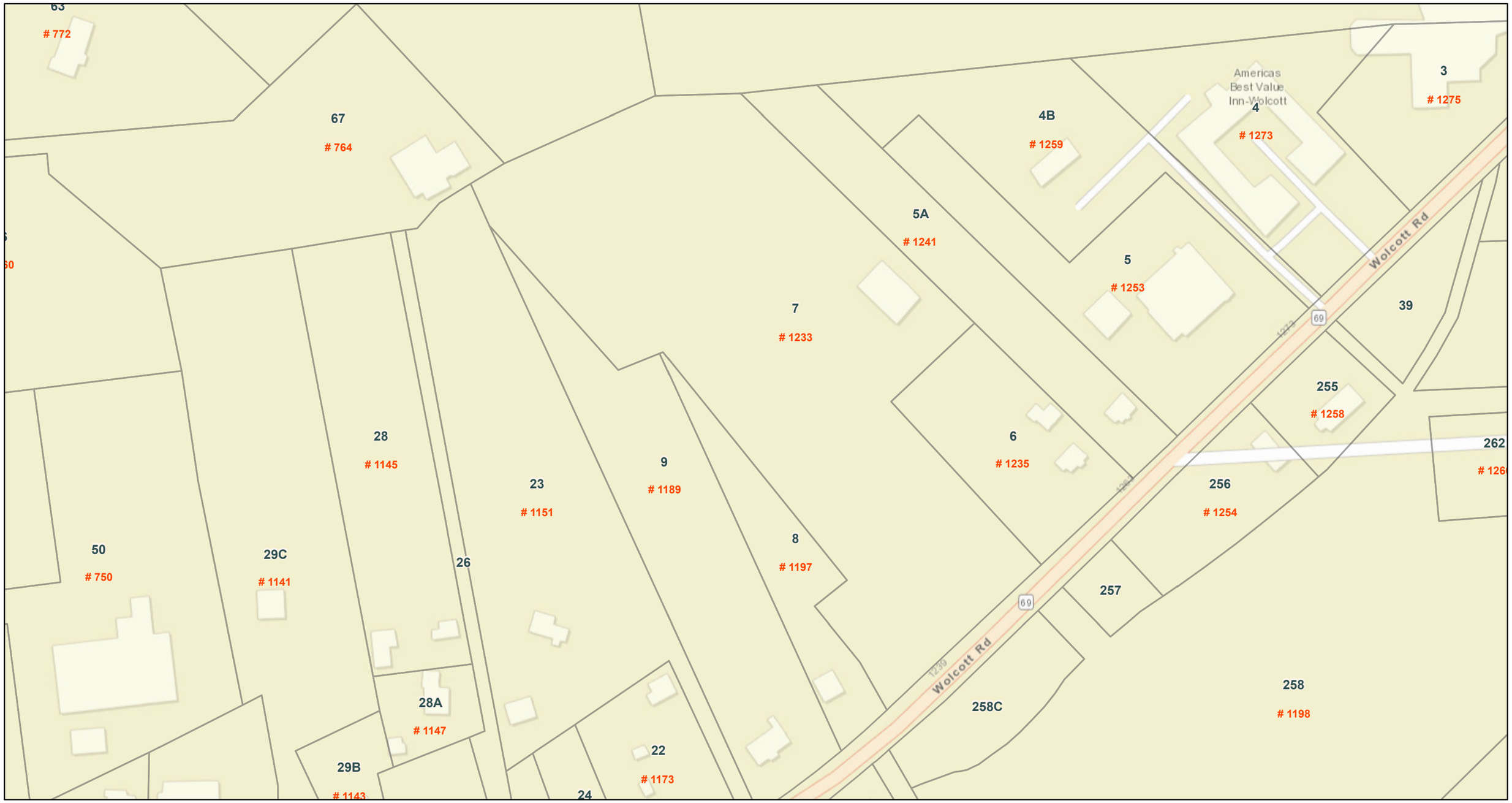
Operator	Operating Frequency	Number of Trans.	ERP Per Trans.	Total ERP	Distance to Target	Calculated Power Density	Maximum Permissible Exposure*	Fraction of MPE
	(MHz)		(watts)	(watts)	(feet)	(mW/cm^2)	(mW/cm^2)	(%)
VZW 700	751	4	623	2494	135	0.0049	0.5007	0.98%
VZW CDMA	877.26	2	395	791	135	0.0016	0.5848	0.27%
VZW Cellular	874	4	623	2494	135	0.0049	0.5827	0.84%
VZW PCS	1975	4	1396	5583	135	0.0110	1.0000	1.10%
VZW AWS	2120	4	1530	6122	135	0.0121	1.0000	1.21%
VZW CBAND	3730.08	4	6531	26125	135	0.0516	1.0000	5.16%
Total Percentage of Maximum Permissible Exposure								9.56%

*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^2 = milliwatts per square centimeter
ERP = Effective Radiated Power

Absolute worst case maximum values used.

Town of Wolcott



11/3/2021, 1:34:31 PM

Parcels

1:2,257

0 0.02 0.04 0.08 mi

0 0.03 0.07 0.13 km

UConn/CTDEEP, Esri, HERE, Garmin, INCREMENT P, NGA, USGS

1233 WOLCOTT RD

Location	1233 WOLCOTT RD	**Mblu**	119/ 3/ 7/ /
Acct#	C0109000	**Owner**	CLEARY EDWARD F
Assessment	$411,360	**Appraisal**	$587,640
PID	1226	**Building Count**	2

Current Value

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2016	$255,360	$332,280	$587,640

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2016	$178,760	$232,600	$411,360

Owner of Record

Owner	CLEARY EDWARD F	**Sale Price**	$0
Co-Owner		**Certificate**	
Address	50 BEACH RD WOLCOTT, CT 06716	**Book & Page**	0192/0018
		Sale Date	02/28/1990
		Instrument	25

Ownership History

Ownership History					
Owner	**Sale Price**	**Certificate**	**Book & Page**	**Instrument**	**Sale Date**
CLEARY EDWARD F	$0		0192/0018	25	02/28/1990

Building Information

Building 1 : Section 1

Year Built:	1999
Living Area:	4,000
Replacement Cost:	$154,800
Building Percent Good:	89
Replacement Cost Less Depreciation:	$137,770

Building Attributes

Field	Description
Style:	Comm Garage
Model	Comm/Ind
Grade	D
Stories:	1
Occupancy	3.00
Exterior Wall 1	Pre-finish Metl
Exterior Wall 2	
Roof Structure	Gable
Roof Cover	Metal
Interior Wall 1	Minimum
Interior Wall 2	
Interior Floor 1	Concrete
Interior Floor 2	
Heating Fuel	Oil
Heating Type	Forced Hot Air
AC %	0
Foundation	Poured Conc
Bldg Use	Commercial
Total Rooms	0
Total Bedrms	0
Total Fixtures	0
Perimeter	260
SF Fin Bsmt	0
1st Floor Use:	
Heat/AC	NONE
Frame Type	STEEL
Baths/Plumbing	LIGHT
Ceiling/Wall	NONE
Rooms/Prtns	LIGHT
Wall Height	14.00
% Comn Wall	

Building Photo

(http://images.vgsi.com/photos/WolcottCTPhotos//\00\01\12\49.jpg)

Building Layout

(http://images.vgsi.com/photos/WolcottCTPhotos//Sketches/1226_1226.jpg

Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
BAS	First Floor	4,000	4,000
SLB	Slab	4,000	0
		8,000	4,000

Building 2 : Section 1

Year Built:
Living Area: 0
Replacement Cost: $0
Building Percent Good:
Replacement Cost Less Depreciation: $0

Building Attributes : Bldg 2 of 2	
Field	Description

Style	Outbuildings
Model	
Grade:	
Stories	
Occupancy	
Exterior Wall 1	
Exterior Wall 2	
Roof Structure	
Roof Cover	
Interior Wall 1	
Interior Wall 2	
Interior Flr 1	
Interior Flr 2	
Heat Fuel	
Heat Type:	
AC Percent	
Total Bedrooms:	
Full Bthrms:	
Half Baths:	
Extra Fixtures	
Total Rooms:	
Bath Style:	
Kitchen Style:	
Num Kitchens	
Fireplace(s)	
% Attic Fin	
LF Dormer	
Foundation	
Bsmt Gar(s)	
Bsmt %	
SF FBM	
SF Rec Rm	
Fin Bsmt Qual	
Bsmt Access	
Fndtn Cndtn	
Basement	

Building Photo

(http://images.vgsi.com/photos/WolcottCTPhotos//\00\01\12\50.jpg)

Building Layout

Building Layout

(http://images.vgsi.com/photos/WolcottCTPhotos//Sketches/1226_20020.jp

Building Sub-Areas (sq ft)	Legend
No Data for Building Sub-Areas	

Extra Features

Extra Features	Legend

No Data for Extra Features

Land

Land Use

Use Code	201
Description	Commercial
Zone	GC
Neighborhood	C150
Alt Land Appr	No
Category	

Land Line Valuation

Size (Acres)	7.04
Frontage	
Depth	
Assessed Value	$232,600
Appraised Value	$332,280

Outbuildings

Outbuildings						Legend
Code	**Description**	**Sub Code**	**Sub Description**	**Size**	**Value**	**Bldg #**
CELL	Cell	SH	Cell Shed	450.00 S.F.	$60,750	2
CELL	Cell	SH	Cell Shed	200.00 S.F.	$27,000	2
PAV1	Paving	AS	Asphalt	31500.00 S.F.	$27,560	1
FN4	FENCE-8' CHAIN			240.00 L.F.	$2,280	2

Valuation History

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2020	$255,360	$332,280	$587,640
2019	$255,360	$332,280	$587,640
2018	$255,360	$332,280	$587,640

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2020	$178,760	$232,600	$411,360
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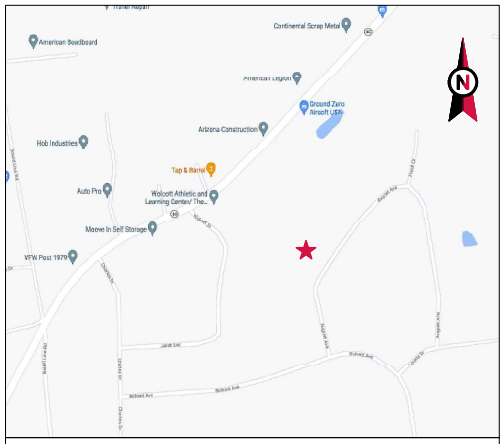
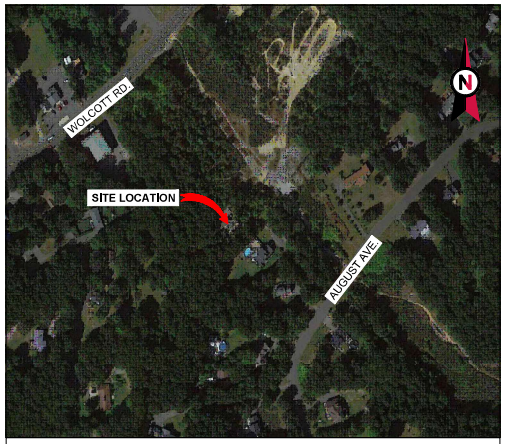


VICINITY MAP

AMERICAN TOWER®

ATC SITE NAME: WOLCOTT RD CT
ATC SITE NUMBER: 274848
VERIZON SITE NAME: WOLCOTT N CT
VERIZON SITE NUMBER:467187
SITE ADDRESS: 1192 WOLCOTT ROAD,
WOLCOTT, CT 06716



LOCATION MAP

VERIZON
5G L-SUB6 CARRIER ADD ANTENNA AMENDMENT DRAWINGS

COMPLIANCE CODE

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. 2018 CONNECTICUT STATE BUILDING CODE-AMENDMENTS TO IBC 2015
2. INTERNATIONAL BUILDING CODE 2015, INTERNATIONAL CODE COUNCIL
3. TIA-222-G-4, STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS
4. ASCE 7-10 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, AMERICAN SOCIETY OF CIVIL ENGINEERS
5. STEEL CONSTRUCTION MANUAL 14TH EDITION, AMERICAN INSTITUTE OF STEEL CONSTRUCTION
6. CITY/COUNTY ORDINANCES

UTILITY COMPANIES

POWER COMPANY: EVERSORCE ENERGY
PHONE: (800)-592-2000

TELEPHONE COMPANY: N/A
PHONE: N/A

811
Know what's below.
Call before you dig.

PROJECT SUMMARY

SITE ADDRESS:

1192 WOLCOTT ROAD,

WOLCOTT, CT 06716

COUNTY: NEW HAVEN

GEOGRAPHIC COORDINATES:

LATITUDE: 41.61803

LONGITUDE: -72.97124

GROUND ELEVATION: 1050' AMSL

PROJECT TEAM

TOWER OWNER:

AMERICAN TOWER
10 PRESIDENTIAL WAY
WOBURN, MA 01801

APPLICANT:

VERIZON WIRELESS
118 FLANDERS ROAD
WESTBOROUGH, MA 01581

ENGINEER:

DEWBERRY ENGINEERS, INC.
99 SUMMER STREET
SUITE 700
BOSTON, MA 02110

PROPERTY OWNER:

AMERICAN TOWERS INC
C/O PROPERTY TAX DEPT
P/O BOX 723597
ATLANTA, GA 31139

PROJECT DESCRIPTION

THE PROPOSED PROJECT INCLUDES MODIFYING GROUND BASED AND TOWER MOUNTED EQUIPMENT AS INDICATED PER BELOW:

TOWER WORK:

REMOVE (9) ANTENNA(s), (3) RRH(s), (1) OVP(s), (2) 1-1/4" COAX CABLE AND (2) 1-5/8" 6X12 HYBRID CABLE(s)

INSTALL (9) ANTENNA(s), (9) RRH(s), (1) OVP(s), (2) 1-1/4" 6X12 HYBRID CABLE

EXISTING (3) ANTENNA(s) AND (11) 1-5/8" COAX CABLE(s) TO REMAIN

GROUND WORK:

REMOVE (3) RRH(s)

PROJECT NOTES

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).

PROJECT LOCATION DIRECTIONS

ROUTE 322 TO WOLCOTT ROAD NEAR BEACH ROAD

SHEET INDEX

SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
G-001	TITLE SHEET	0	11/12/21	BR
G-002	GENERAL NOTES	0	11/12/21	BR
C-101	DETAILED SITE PLAN	0	11/12/21	BR
C-201	TOWER ELEVATION	0	11/12/21	BR
C-401	ANTENNA INFORMATION & SCHEDULE	0	11/12/21	BR
C-501	CONSTRUCTION DETAILS	0	11/12/21	BR
E-501	GROUNDING DETAILS	0	11/12/21	BR
R-601	SUPPLEMENTAL			
R-602	SUPPLEMENTAL			
	MOUNT MODIFICATION DRAWINGS (8 SHEETS)			

AMERICAN TOWER®

Dewberry®
Dewberry Engineers Inc.
99 SUMMER STREET
SUITE 700
BOSTON, MA 02110
PHONE: 617.695.3400
FAX: 617.695.3310

REV.	DESCRIPTION	BY	DATE
A	PRELIM	PP	05/28/21
0	FINAL	BR	11/12/21

ATC SITE NUMBER:
274848

ATC SITE NAME:
WOLCOTT RD CT

VERIZON SITE NAME:
WOLCOTT N CT

SITE ADDRESS:
1192 WOLCOTT ROAD,
WOLCOTT, CT 06716

SEAL:

verizon

DATE DRAWN:	05/28/21
ATC JOB NO:	13669422
CUSTOMER ID:	WOLCOTT N CT
CUSTOMER #:	467187

TITLE SHEET

SHEET NUMBER:	REVISION:
G-001	0

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 NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, OR BY THE ELEMENTS DUE TO NEGLECT 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.

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 OD 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.
   - 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.

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PHONE: 617.695.3400
FAX: 617.695.3310

REV.	DESCRIPTION	BY	DATE
A	PRELIM	PP	05/28/21
0	FINAL	BR	11/12/21

ATC SITE NUMBER:
274848

ATC SITE NAME:
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VERIZON SITE NAME:
WOLCOTT N CT

SITE ADDRESS:
1192 WOLCOTT ROAD,
WOLCOTT, CT 06716

SEAL:

verizon

DATE DRAWN:	05/28/21
ATC JOB NO:	13669422
CUSTOMER ID:	WOLCOTT N CT
CUSTOMER #:	467187

GENERAL NOTES

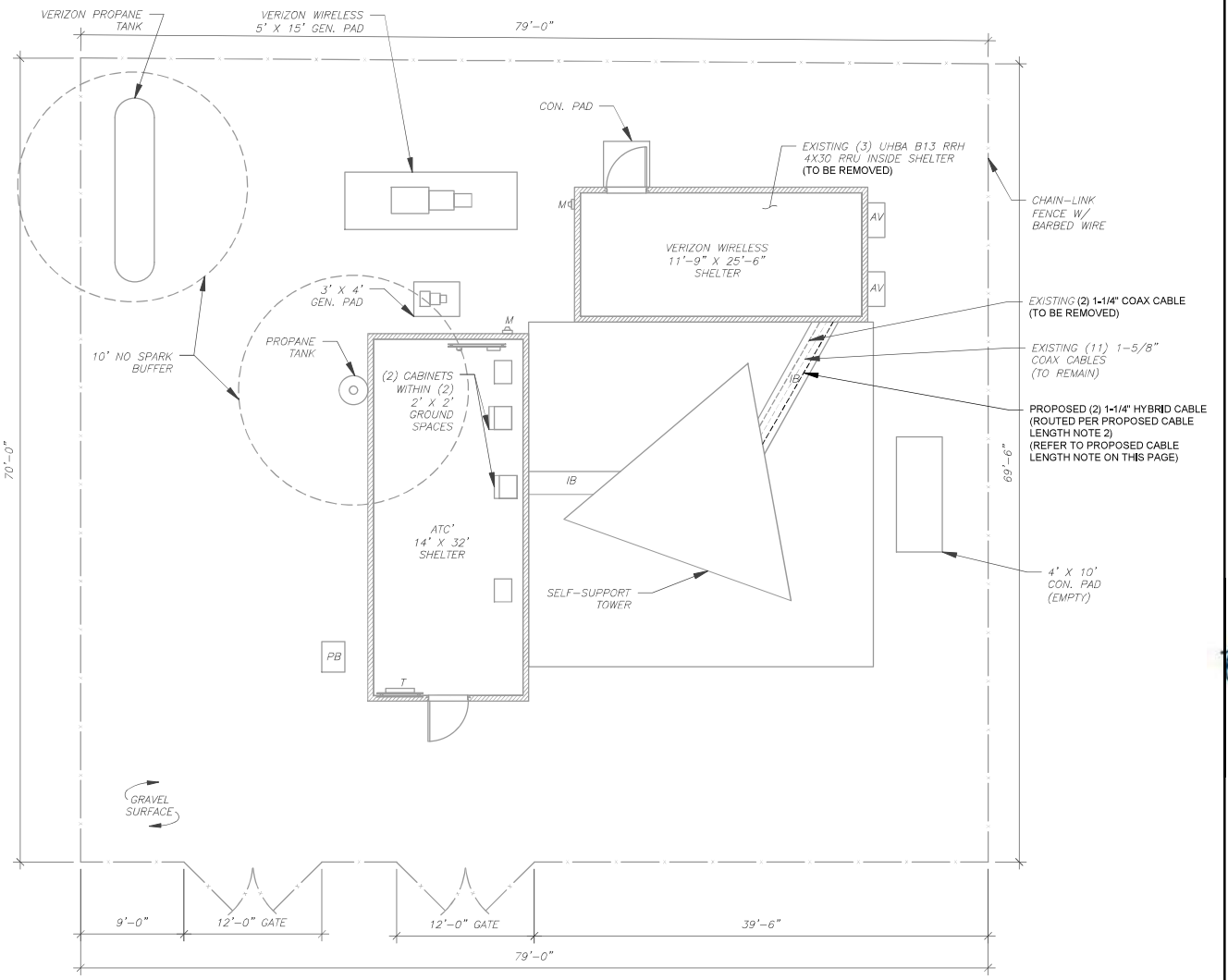
SHEET NUMBER:	REVISION:
G-002	0

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. NO ELECTRICAL SCOPE IS INCLUDED IN THIS PROJECT.

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
—o—o—	WOOD FENCE



1 DETAILED SITE PLAN

GRAPHIC SCALE

10 0 5 10

(IN FEET)
1 UNIT = 10 FEET

PROPOSED CABLE LENGTH:

1. ESTIMATED LENGTH OF PROPOSED CABLE IS **170'**. 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.

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REV.	DESCRIPTION	BY	DATE
A	PRELIM	PP	05/28/21
0	FINAL	BR	11/12/21

ATC SITE NUMBER:
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VERIZON SITE NAME:
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SITE ADDRESS:
1192 WOLCOTT ROAD,
WOLCOTT, CT 06716

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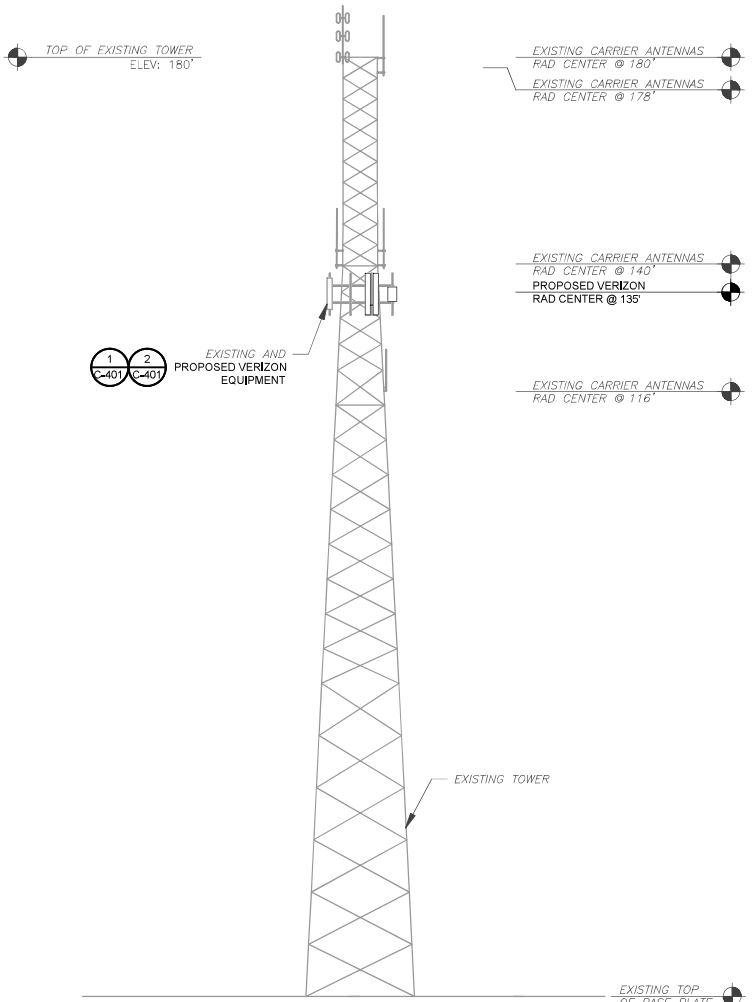
verizon

DATE DRAWN:	05/28/21
ATC JOB NO:	13669422
CUSTOMER ID:	WOLCOTT N CT
CUSTOMER #:	467187

DETAILED SITE PLAN

SHEET NUMBER:	REVISION:
C-101	0

PER MOUNT ANALYSIS COMPLETED BY MASER CONSULTING CONNECTICUT, DATED 10/12/21, THE EXISTING MOUNT MUST BE MODIFIED TO ADEQUATELY SUPPORT THE PROPOSED LOADING. THE MOUNT MODIFICATION DETAILED AT THE END OF THIS PLAN SET, MUST BE INSTALLED PRIOR TO THE INSTALLATION OF THE PROPOSED ANTENNAS AND OTHER EQUIPMENT.



1 TOWER ELEVATION
SCALE: N.T.S.

TOWER NOTE:
1. 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.
2. 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.
3. ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. WHERE POSSIBLE UTILIZE EXISTING CABLE SUPPORT STRUCTURES AS PROVIDED FOR CARRIER TO ADEQUATELY SECURE CABLES, USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER. OTHERWISE, ATTACH CABLES TO HORIZONTAL OR DIAGONAL TOWER MEMBERS USING PROPOSED STAINLESS STEEL ADAPTERS (DO NOT ATTACH TO TOWER LEG).
4. TOWER ELEVATIONS ARE MEASURED FROM TOP OF BASE PLATE TO MATCH STRUCTURAL ANALYSIS. ELEVATIONS DO NOT REFLECT TRUE ABOVE GROUND LEVEL (A.G.L.)

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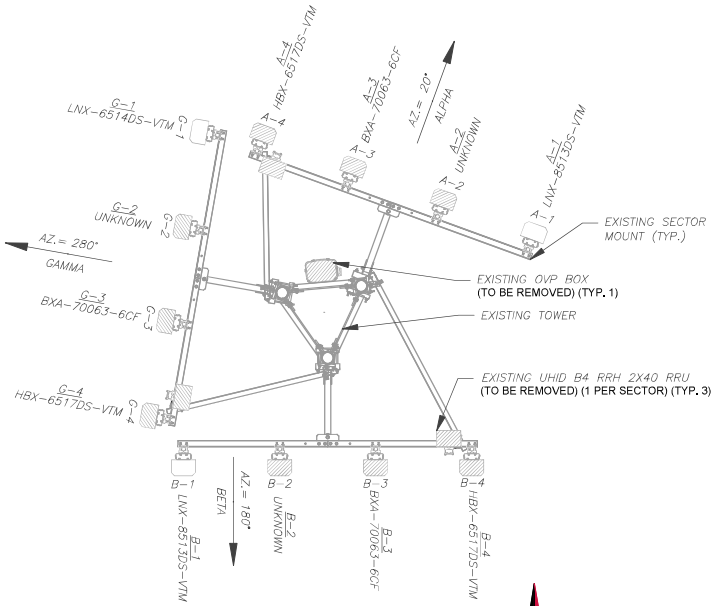
TOWER ELEVATION

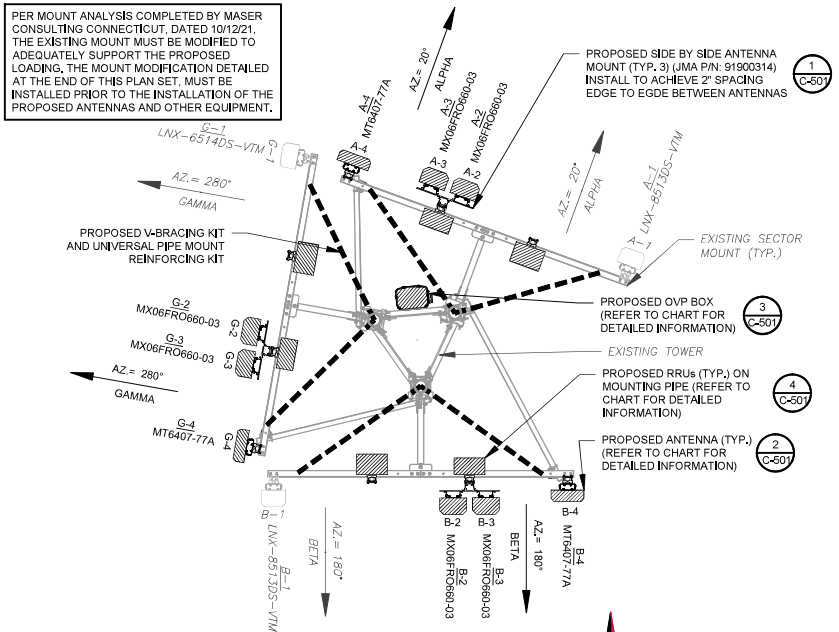
SHEET NUMBER:	REVISION:
C-201	0



1 EXISTING ANTENNA PLAN

SCALE: N.T.S.

PER MOUNT ANALYSIS COMPLETED BY MASER CONSULTING CONNECTICUT, DATED 10/12/21, THE EXISTING MOUNT MUST BE MODIFIED TO ADEQUATELY SUPPORT THE PROPOSED LOADING. THE MOUNT MODIFICATION DETAILED 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	135'	20°	A1	LNX-8513DS-VTM	CDMA 850	0/4	RMN	–	–
			A2	UNKNOWN	–	–	RMV	–	–
			A3	BXA-70063-6CF	700	0/4	RMV	–	–
			A4	HBX-6517DS-VTM	AWS	2/3	RMV	UHID B4 RRH 2X40	RMV
BETA	135'	180°	B1	LNX-8513DS-VTM	CDMA 850	0/6	RMN	–	–
			B2	UNKNOWN	–	–	RMV	–	–
			B3	BXA-70063-6CF	700	0/4	RMV	–	–
			B4	HBX-6517DS-VTM	AWS	3/5	RMV	UHID B4 RRH 2X40	RMV
GAMMA	135'	280°	G1	LNX-6514DS-VTM	CDMA 850	0/4	RMN	–	–
			G2	UNKNOWN	–	–	RMV	–	–
			G3	BXA-70063-6CF	700	0/6	RMV	–	–
			G4	HBX-6517DS-VTM	AWS	3/3	RMV	UHID B4 RRH 2X40	RMV

NOTES

1. CONFIRM WITH VERIZON REP FOR APPLICABLE UPDATES/REVISIONS AND MOST RECENT RFDS FOR NSN CONFIGURATION (CONFIG). GC TO CAP ALL UNUSED PORTS.
2. 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	135'	20°	A1	LNX-8513DS-VTM	CDMA 850	0/4	*RMN*	-	-
			A2	MX06FRO660-03	700/850/1900/AWS	0/4,4,3,5	ADD	B2/B66A RRH-BR049	ADD
			A3	MX06FRO660-03	700/850/1900/AWS	0/4,4,3,5	ADD	B5/B13 RRH-BR04C	ADD
			A4	MT6407-77A	L-SUB6	0/6	ADD	MT6407-77A	ADD
BETA	135'	180°	B1	LNX-8513DS-VTM	CDMA 850	0/6	*RMN*	-	-
			B2	MX06FRO660-03	700/850/1900/AWS	0/4,4,3,8	ADD	B2/B66A RRH-BR049	ADD
			B3	MX06FRO660-03	700/850/1900/AWS	0/4,4,3,8	ADD	B5/B13 RRH-BR04C	ADD
			B4	MT6407-77A	L-SUB6	0/6	ADD	MT6407-77A	ADD
GAMMA	135'	280°	G1	LNX-6514DS-VTM	CDMA 850	0/4	*RMN*	-	-
			G2	MX06FRO660-03	700/850/1900/AWS	0/6,6,3,6	ADD	B2/B66A RRH-BR049	ADD
			G3	MX06FRO660-03	700/850/1900/AWS	0/6,6,3,6	ADD	B5/B13 RRH-BR04C	ADD
			G4	MT6407-77A	L-SUB6	0/6	ADD	MT6407-77A	ADD

EXISTING FIBER DISTRIBUTION/OVP BOX

MODEL NUMBER	STATUS
(1) RRFDC-3315-PF-48	RMV
–	-

EXISTING CABLING SUMMARY

COAX	HYBRID	STATUS
(1) 1-5/8"	(2) 1-1/4" 6X12	RMV
(11) 1-5/8"	–	*RMN*

3 EQUIPMENT SCHEDULES

FINAL FIBER DISTRIBUTION / OVP BOX

MODEL NUMBER	STATUS
(1) RCMDC-6627-PF-48	ADD
-	-

FINAL CABLING SUMMARY

COAX	HYBRID	STATUS
-	(2) 1-1/4" 6X12	ADD
(11) 1-5/8"	-	*RMN*

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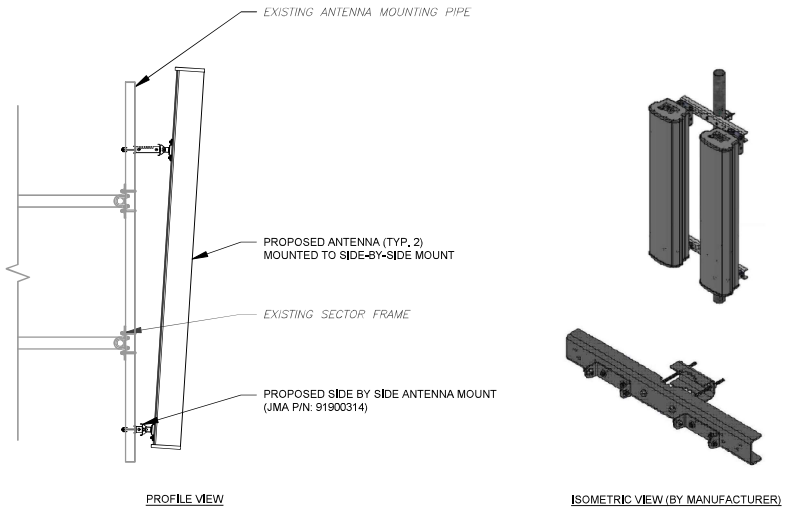
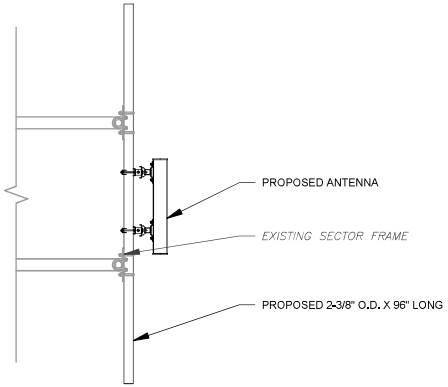
CUSTOMER #:	467187

ANTENNA INFORMATION & SCHEDULE

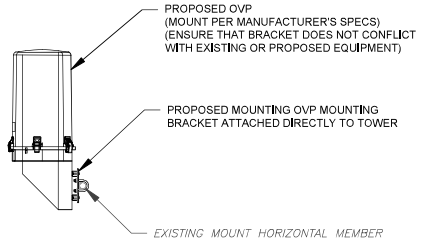
SHEET NUMBER:	REVISION:
C-401	0



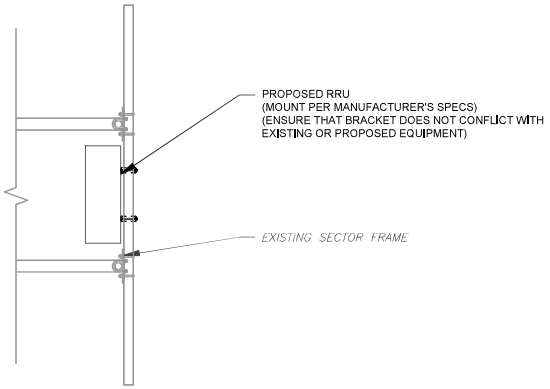
1 PROPOSED SIDE-BY-SIDE MOUNT
SCALE: NOT TO SCALE



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



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



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

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Dewberry Engineers Inc.
99 SUMMER STREET
SUITE 700
BOSTON, MA 02110
PHONE: 617.695.3400
FAX: 617.695.3310

REV.	DESCRIPTION	BY	DATE
A	PRELIM	PP	05/28/21
0	FINAL	BR	11/12/21

ATC SITE NUMBER:
274848

ATC SITE NAME:
WOLCOTT RD CT

VERIZON SITE NAME:
WOLCOTT N CT

SITE ADDRESS:
1192 WOLCOTT ROAD,
WOLCOTT, CT 06716

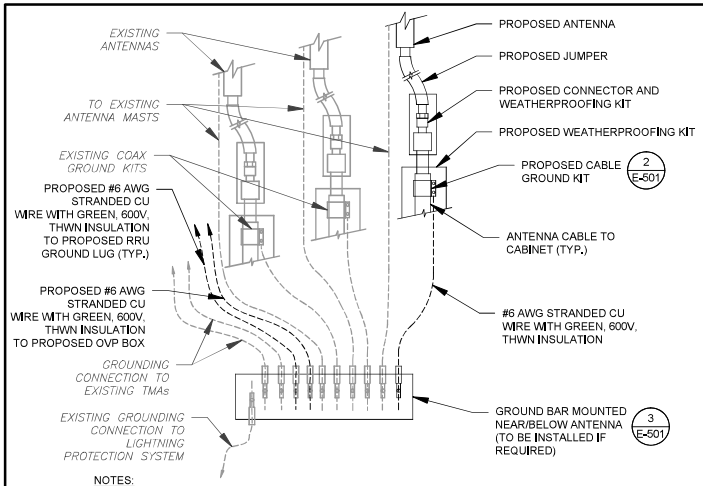
SEAL:

verizon

DATE DRAWN:	05/28/21
ATC JOB NO:	13669422
CUSTOMER ID:	WOLCOTT N CT
CUSTOMER #:	467187

CONSTRUCTION DETAILS

SHEET NUMBER:	REVISION:
C-501	0

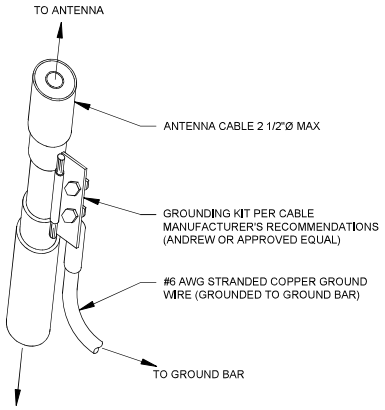


NOTES:

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.

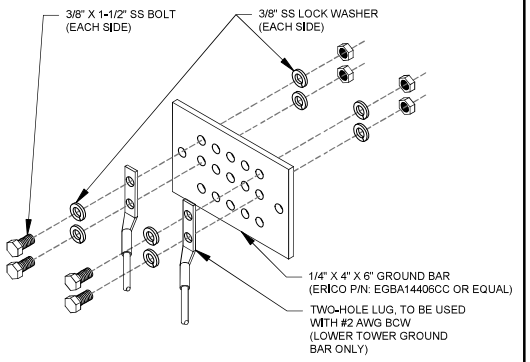


GROUND KIT NOTES:

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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99 SUMMER STREET
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REV.	DESCRIPTION	BY	DATE
A	PRELIM	PP	05/28/21
0	FINAL	BR	11/12/21

ATC SITE NUMBER:
274848

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WOLCOTT RD CT

VERIZON SITE NAME:
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SITE ADDRESS:
1192 WOLCOTT ROAD,
WOLCOTT, CT 06716

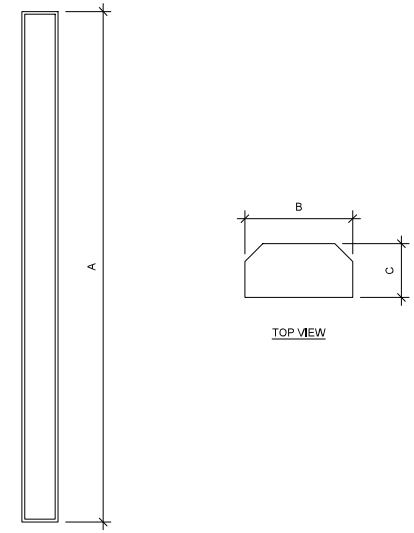
SEAL:

verizon

DATE DRAWN:	05/28/21
ATC JOB NO:	13669422
CUSTOMER ID:	WOLCOTT N CT
CUSTOMER #:	467187

GROUNDING DETAILS

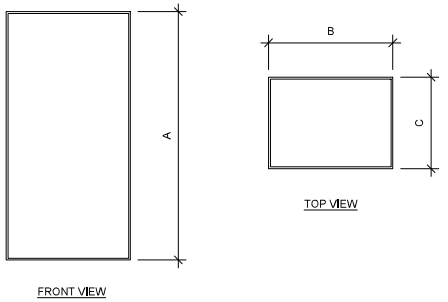
SHEET NUMBER:	REVISION:
E-501	0



1 ANTENNA SPECIFICATIONS

FOR ILLUSTRATIVE PURPOSES ONLY - NOT TO SCALE

ANTENNA SPECIFICATIONS				
ANTENNA MODEL	A	B	C	WEIGHT (LBS)
MX06FRO660-03	71.3"	15.4"	10.7"	60.0
MT6407-77A	35.1"	16.1"	5.5"	81.6



2 RRU SPECIFICATIONS

FOR ILLUSTRATIVE PURPOSES ONLY - NOT TO SCALE

RRU SPECIFICATIONS				
RRU MODEL	A	B	C	WEIGHT (LBS)
B2/B66A RRH-BR049	15.0"	15.0"	10.0"	84.4
B5/B13 RRH-BR04C	15.0"	15.0"	8.1"	70.3

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ATC SITE NUMBER:
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verizon

DATE DRAWN:	05/28/21
ATC JOB NO:	13669422
CUSTOMER ID:	WOLCOTT N CT
CUSTOMER #:	467187

SUPPLEMENTAL

SHEET NUMBER:
R-601

verizon

MASER CONSULTING CONNECTICUT

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

Post-Modification Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10106546
Maser Consulting Connecticut Project #: 21781139A

October 12, 2021

Site Information

Site ID:	467187-VZW / WOLCOTT N CT
Site Name:	WOLCOTT N CT
Carrier Name:	Verizon Wireless
Address:	1192 Wolcott Rd Wolcott, Connecticut 06716 New Haven County
Latitude:	41.61803611°
Longitude:	-72.97124444°

Structure Information

Tower Type:	180-Ft Self Support
Mount Type:	13.00-Ft T-Frame Mount

FUZE ID # 16272066

Analysis Results

T-Frame: 89.6% Pass

***Contractor PMI Requirements:**
Included at the end of this MA report
Available & Submitted via portal at https://pmi.vzwsmart.com
Contractor - Please Review Specific Site PMI Requirements Upon Award
Requirements also Noted on Mount Modification Drawings
Requirements may also be Noted on A & E drawings
For additional questions and support, please reach out to:
pmisupport@colliersengineering.com

Report Prepared By: Morgan Chatmon

STATE OF CONNECTICUT PETER MICHAEL ALBANO No. 35459 LICENSED PROFESSIONAL ENGINEER

6. All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. Maser Consulting Connecticut is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.

7. Structural Steel Grades have been assumed as follows, if applicable, unless otherwise noted in this analysis:
   - Channel, Solid Round, Angle, Plate — ASTM A36 (Gr. 36)
   - HSS (Rectangular) — ASTM 500 (Gr. B-46)
   - Pipe — ASTM A53 (Gr. B-35)
   - Threaded Rod — F1554 (Gr. 36)
   - Bolts — ASTM A325

8. Any mount modifications listed under Sources of Information are assumed to have been installed per the design specifications.

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

Analysis Results:

Component	Utilization %	Pass/Fail
Face Horizontal	89.6%	Pass
Antenna Pipe	30.9%	Pass
Standoff Horizontal	40.5%	Pass
Standoff Bracing	13.7%	Pass
Mast Pipe	16.9%	Pass
Tie-Back	26.3%	Pass
V-Brace Angle	14.7%	Pass
Mount Connection	15.4%	Pass
Structure Rating – *(Controlling Utilization of all Components)*	**89.6%**	

Recommendation:

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

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

Attachments:

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

1 MOUNT ANALYSIS

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 CONTRUCTION.

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BOSTON, MA 02110
PHONE: 617.695.3400
FAX: 617.695.3310

ATC SITE NUMBER:
274848

ATC SITE NAME:
WOLCOTT RD CT

VERIZON SITE NAME:
WOLCOTT N CT

SITE ADDRESS:
1192 WOLCOTT ROAD,
WOLCOTT, CT 06716

verizon

DATE DRAWN:	05/28/21
ATC JOB NO:	13669422
CUSTOMER ID:	WOLCOTT N CT
CUSTOMER #:	467187

SUPPLEMENTAL

SHEET NUMBER:
R-602

verizon

MOUNT MODIFICATION DRAWINGS
EXISTING 13.00' T-FRAME

TOWER OWNER: ATC
TOWER OWNER SITE NUMBER: 274848

CARRIER SITE NAME: WOLCOTT N CT
CARRIER SITE NUMBER: 467187
FUZE ID: 16272066

1192 WOLCOTT RD.
WOLCOTT, CT 06716
NEW HAVEN COUNTY

LATITUDE: 41.61803611° N
LONGITUDE: 72.97124444° W

DESIGN CRITERIA

WIND LOADS

BASIC WIND SPEED (3 SECOND GUST), V = 117 MPH
EXPOSURE CATEGORY B
TOPOGRAPHIC CATEGORY 1
MEAN BASE ELEVATION (AMSL) = 1040.71'

ICE LOADS

ICE WIND SPEED (3 SECOND GUST), V = 50 MPH
ICE THICKNESS = 1.00 IN

SEISMIC LOADS

SEISMIC DESIGN CATEGORY B
SHORT TERM MCER GROUND MOTION, S_s = .191
LONG TERM MCER GROUND MOTION, S_1 = .054

PROJECT INFORMATION

APPLICANT/LESSEE

COMPANY: VERIZON WIRELESS

CLIENT REPRESENTATIVE

COMPANY: VERIZON WIRELESS

PROJECT MANAGER

COMPANY: COLLIERS ENGINEERING & DESIGN
CONTACT: PETER ALBANO
PHONE: 856-797-0412
E-MAIL: PETER.ALBANO@COLLIERSENGINEERING.COM

CONTRACTOR PMI REQUIREMENTS

PMI LOCATION: HTTPS://PMI.VZWSMART.COM
SMART TOOL PROJECT #: 10106546
VZW LOCATION CODE (PSLC): 467187
ANALYSIS DATE: 10/12/2021

PMI REQUIREMENTS EMBEDDED WITHIN MOUNT MODIFICATION REPORT

SHEET INDEX

SHEET	DESCRIPTION
ST-1	TITLE SHEET
SBOM-1	BILL OF MATERIALS
SGN-1	GENERAL NOTES
SCF-1	CLIMBING FACILITY DETAIL
SS-1	MODIFICATION DETAILS
SS-2	MOUNT PHOTOS
	SPECIFICATION SHEETS

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

SCALE:	JOB NUMBER:
AS SHOWN	21781139A

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
0	10/12/2021	ISSUED FOR CONSTRUCTION	MNC	PMA

STATE OF CONNECTICUT
PETER MICHAEL ALBANO
No. 35458
LICENSED PROFESSIONAL ENGINEER
10/12/21

SITE NAME:

WOLCOTT N CT
467187

1192 WOLCOTT RD.
WOLCOTT, CT 06716
NEW HAVEN COUNTY

MT. LAUREL
2000 Midlantic Drive
Suite 100
Mt. Laurel, NJ 08054
Phone: 856.797.0412
COLLIERS ENGINEERING & DESIGN, INC. DOING BUSINESS AS MASER CONSULTING

SHEET TITLE:
TITLE SHEET

SHEET NUMBER:
ST-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

BILL OF MATERIALS

SECTION 1 - VZWSMART KITS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
3	VZWSMART	VZWSMART-SFK3	V-BRACING KIT	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET SGN-1	122	366

SECTION 2 - OTHER REQUIRED PARTS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
3	SITE PRO 1	R5-REINF	R5 UNIVERSAL PIPE MOUNT REINFORCEMT KIT	OR EOR APPROVED EQUAL, CONTACT MASER CONSULTING FOR APPROVAL OF SUBSTITUTION.	34	102
					TOTAL:	468

VZWSMART KITS - APPROVED VENDORS

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

NOTES:

1. THE MANUFACTURERS LISTED ARE THE APPROVED VENDORS FOR THE VZW MOUNT KITS. EACH MANUFACTURER WILL BE AWARE OF WHICH KITS HAVE BEEN THROUGH THE VZW APPROVAL PROCESS AND THEY ARE IN TURN APPROVED TO SELL. PLEASE NOTE THAT THE MATERIAL UTILIZED ON THE MOUNT MODIFICATIONS WILL BE REVIEWED AS A PART OF THE DESKTOP PMI COMPLETED BY THE SMART TOOL VENDOR. IT WILL BE REQUIRED THAT THE VZW KITS SPECIFIED ARE UTILIZED IN THE MODIFICATIONS.
2. ALL MATERIALS REQUIRED FOR THE DESIGNED MODIFICATIONS BUT NOT LISTED IN THIS SHEET ARE ASSUMED TO BE PROVIDED BY THE CONTRACTOR.

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SHEET TITLE: BILL OF MATERIALS

SHEET NUMBER: SBOM-1

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).

GENERAL NOTES

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

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. CONTRACTOR SHALL PROTECT CUT ENDS OF ALL FIELD-CUT STEEL WITH TWO (2) COATS OF COLD GALVANIZATION (ZINGA OR ZINC COTE).
9. 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.
10. 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.
11. FOR MEMBERS BEING REPLACED, PROVIDE NEW BOLTS AND MATCH EXISTING SIZE AND GRADE. MAINTAIN AISC REQUIREMENTS FOR MINIMUM BOLT DISTANCE AND SPACING.
12. 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.
13. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
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.

WELDING NOTES

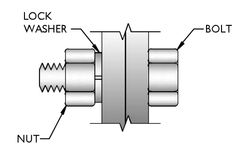
1. ALL WELDING SHALL BE DONE IN ACCORDANCE WITH AWS D1.0 (LATEST EDITION). THIS SHALL INCLUDE A CERTIFIED WELD INSPECTION (CWI) FOR ACCEPTANCE OR REJECTION OF ALL WELDING OPERATIONS, PRE, DURING, AND POST INSTALLATION, USING THE ACCEPTANCE CRITERIA OF AWS D1.1.
2. CONTRACTOR IS RESPONSIBLE FOR COMMISSIONING A THIRD PARTY CERTIFIED WELD INSPECTOR (CWI) THROUGHOUT THE ENTIRETY OF THE PROJECT. A PASSING CWI REPORT SHALL BE PROVIDED TO THE ENGINEER UPON COMPLETION OF THE PROJECT.
3. THE CERTIFIED WELD INSPECTOR SHALL INDICATE, IN A WRITTEN CWI REPORT, THAT ALL WELDING OPERATIONS PRE, DURING, AND POST INSTALLATION WERE CONDUCTED IN ACCORDANCE WITH AWS D1.1 WITH PHOTOGRAPHS AND DOCUMENTATION SUPPORTING THE ACCEPTANCE OR REJECTION OF ALL WELDING. ALL CWI WELD INSPECTION DOCUMENTATION AND PHOTOS SHALL BE SUBMITTED DURING THE PMI.
4. IN CASES WHERE A WELD IS SPECIFIED BETWEEN TWO MEMBERS IN WHICH THERE IS A GAP IN BETWEEN, THE WELD IS TO BE BUILT-UP SUCH THAT THE SIZE OF WELD ON THE MEMBER IS EQUAL TO THAT SHOWN IN THE DRAWINGS.
5. OXY FUEL GAS WELDING OR BRAZING IS STRICTLY PROHIBITED. SPECIFICALLY, NO TORCH CUTTING IS PERMITTED ON SITE. ALL HOLES SHALL BE CUT WITH A GRINDER.
6. CONTRACTOR SHALL EXERCISE CAUTION WHEN WELDING A GALVANIZED SURFACE.
7. CONTRACTOR SHALL HAVE A FIRE PROTECTION PLAN IN PLACE THAT CONFORMS WITH ALL OSHA, ANSI/ASSP A10.48, ANSI Z49.1, AND LOCAL JURISDICTIONAL REQUIREMENTS.

BOLT SCHEDULE (IN.)

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

WORKABLE GAGES (IN.)

LEG	GAGE
4	2 1/2
3 1/2	2
3	1 3/4
2 1/2	1 3/8
2	1 1/8

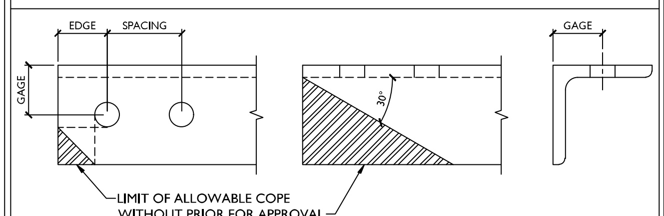


TYP. BOLT ASSEMBLY

NOTES:

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

ALLOWABLE COPING



Colliers Engineering & Design

MASER CONSULTING C.T. C.O.A. #: JPC.0000131

www.colliersengineering.com

Doing Business as MASER CONSULTING

verizon

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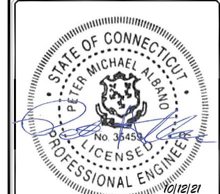
PROTECT YOURSELF

ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

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

SCALE :	JOB NUMBER :
AS SHOWN	21781139A

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.
0	10/12/2021	ISSUED FOR CONSTRUCTION	MNC	PMA



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF THE RESPONSIBLE LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SITE NAME:

WOLCOTT N CT
467187

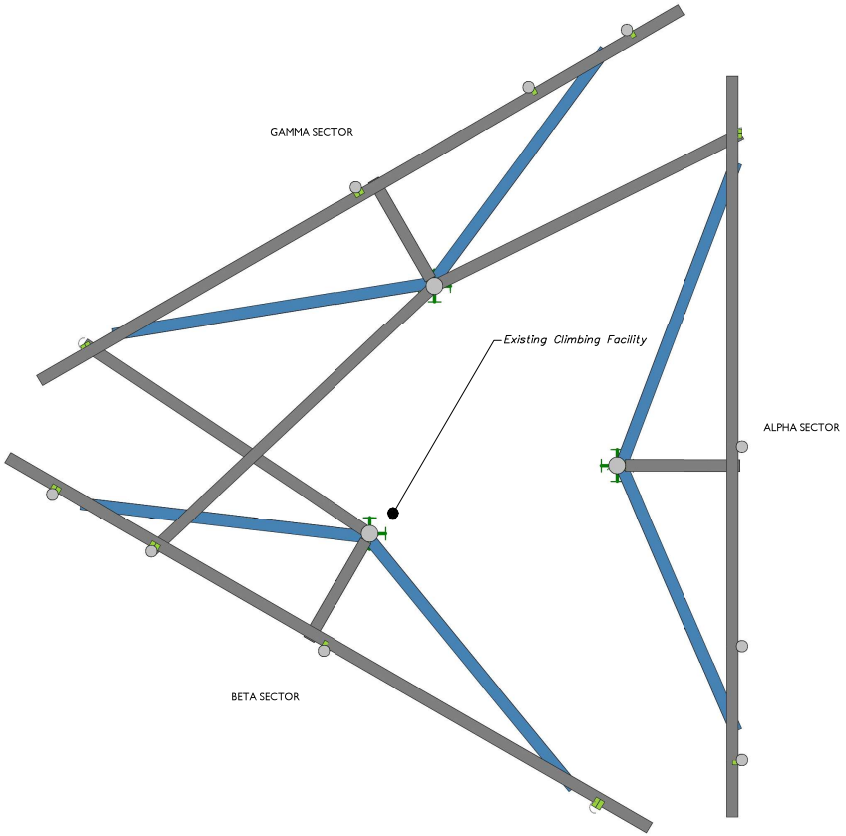
1192 WOLCOTT RD.
WOLCOTT, CT 06716
NEW HAVEN COUNTY

MT. LAUREL
2000 Midlantic Drive,
Suite 100
Mt. Laurel, NJ 08054
Phone: 856.797.0412
COLLIERS ENGINEERING & DESIGN, INC.
DOING BUSINESS AS MASER CONSULTING

SHEET TITLE :
MODIFICATION NOTES

SHEET NUMBER :
SGN-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



1 CLIMBING FACILITY LOCATION

SCALE : N.T.S.

STRUCTURAL NOTES:

1. PER THE MOUNT MAPPING COMPLETED BY RKS DESIGN & ENGINEERING, LLC ON 11/28/2020, THE SAFETY CLIMB AND CLIMBING FACILITIES UP TO THE VERIZON MOUNT ELEVATION (133'-0") ARE IN GOOD CONDITION. MASER DOES NOT WARRANT THIS INFORMATION.

2. INSTALL SHALL NOT CAUSE HARM TO THE STRUCTURE, CLIMBING FACILITY, SAFETY CLIMB, OR ANY SYSTEM INSTALLED ON THE STRUCTURE. TIMELY NOTICE AND DOCUMENTATION SHALL BE PROVIDED BY CONTRACTORS TO THE EOR (OF STRUCTURAL DESIGN) IF AN OBSTRUCTION WAS REQUIRED TO MEET THE RF SYSTEM DESIGN REQUIREMENTS AND PERFORMANCES.

CLIMBING FACILITY PHOTO

Colliers Engineering & Design
MASER CONSULTING CT. C.O.A. # PC.0000131
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SCALE:	TES NUMBER:
AS SHOWN	21781139A

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
0	10/12/2021	ISSUED FOR CONSTRUCTION	MWC	PMA

STATE OF CONNECTICUT
PETER MICHAEL ALBANO
No. 35458
LICENSED PROFESSIONAL ENGINEER
10/12/21

SITE NAME:

WOLCOTT N CT
467187

1192 WOLCOTT RD.
WOLCOTT, CT 06716
NEW HAVEN COUNTY

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2000 Midlantic Drive
Suite 100
Mt. Laurel, NJ 08054
Phone: 856.797.0412
COLLIERS ENGINEERING & DESIGN, INC.
DOING BUSINESS AS MASER CONSULTING

SHEET TITLE:
CLIMBING FACILITY DETAIL

SHEET NUMBER:
SCF-1

LEGEND:

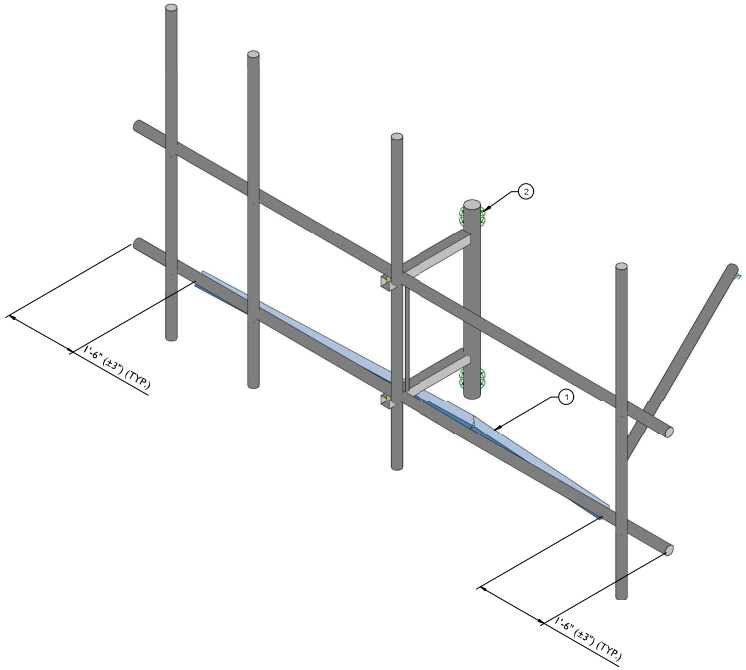
- PROPOSED
- RELOCATED
- EXISTING

MOUNT MODIFICATION SCHEDULE

NO.	ELEVATION	QUANTITY	DESCRIPTION	NOTES
1	133'-0"	3	V-BRACING KIT	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET SGN-1
2		3	RS UNIVERSAL PIPE MOUNT REINFORCEMT KIT	OR EOR APPROVED EQUAL, CONTACT MASER CONSULTING FOR APPROVAL OF SUBSTITUTION.

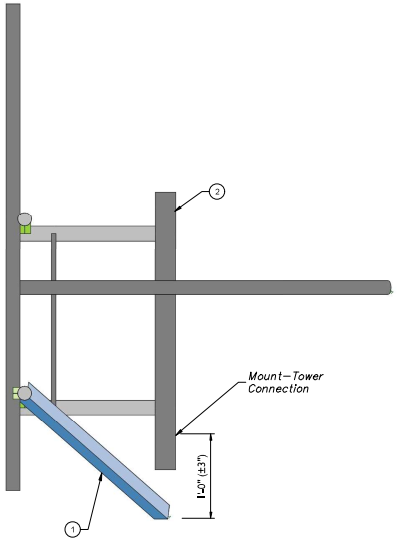
NOTES:

MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.



1 PROPOSED ISOMETRIC VIEW

SCALE : N.T.S.



2 PROPOSED SIDE ELEVATION VIEW (TYP. ALL SECTORS)

SCALE : N.T.S.

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SHEET TITLE:

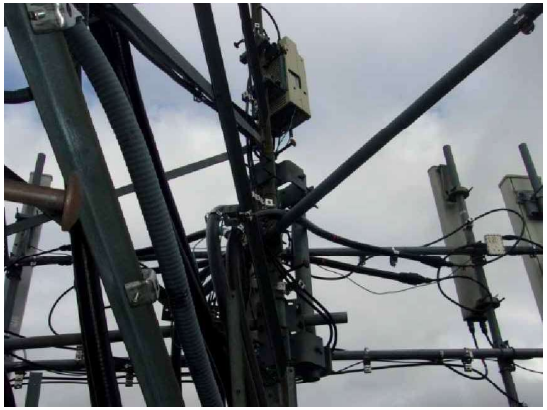
MODIFICATION DETAILS

SHEET NUMBER:

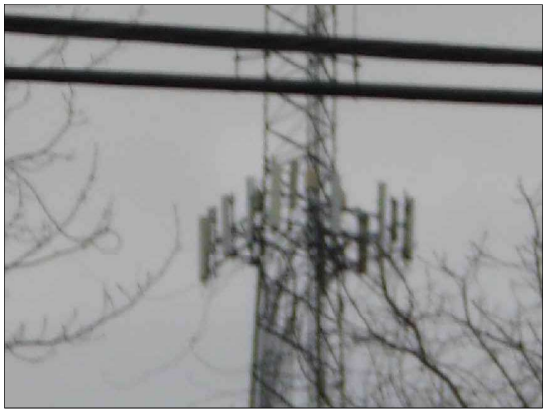
SS-1

MOUNT PHOTO 1

MOUNT PHOTO 2



MOUNT PHOTO 3



MOUNT PHOTO 4

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SCALE:	SITE NUMBER:
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Phone: 856.797.0412
COLLIERS ENGINEERING & DESIGN, INC.
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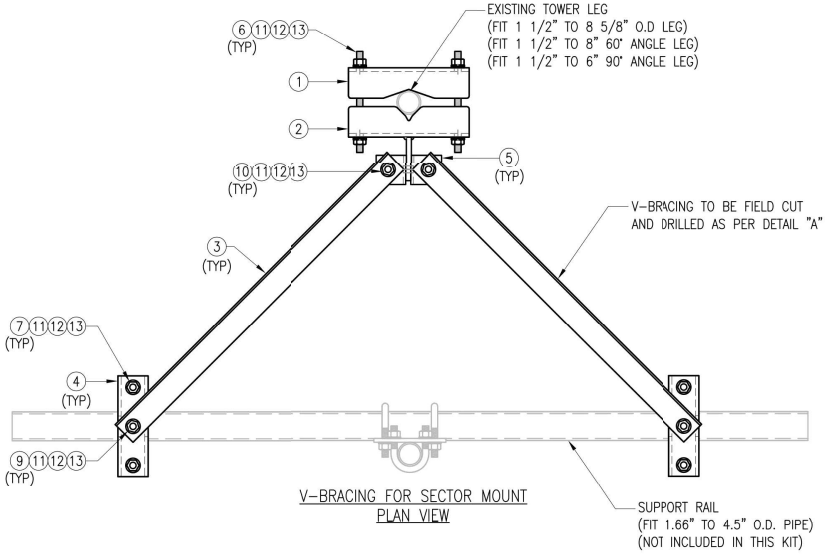
SHEET TITLE:

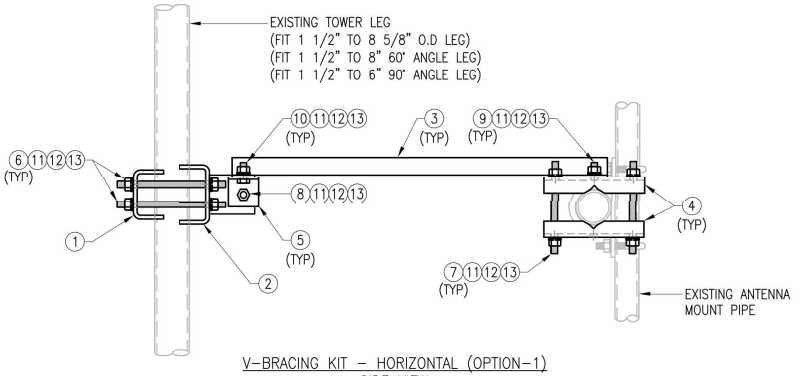
MOUNT PHOTOS

SHEET NUMBER:

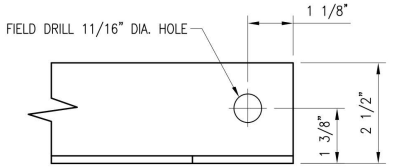
SS-2



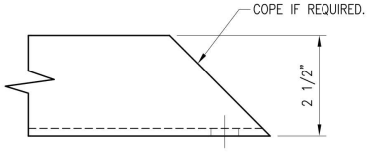
V-BRACING FOR SECTOR MOUNT
PLAN VIEW



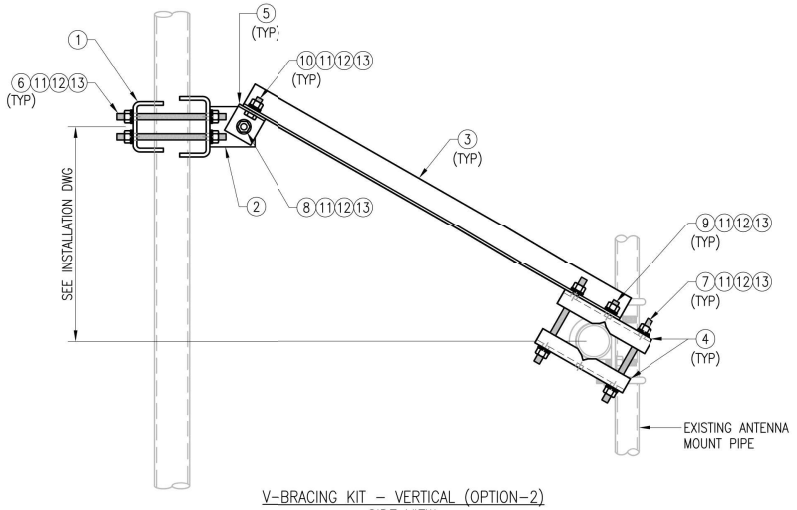
V-BRACING KIT – HORIZONTAL (OPTION-1)
SIDE VIEW



PLAN VIEW



FRONT VIEW
DETAIL "A"



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

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

VZWSMART-SFK3 (V-BRACING KIT)

ITEM NO	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	1	BP9625-12	PL 3/8" X 9 5/8" X 1'-0" A36 BENT PLATE	VBSM-F1	12
2	1	BRKW-VBSM	WELDMENT BRACKET	VBSM-F3	16
3	2	L252525-8	L 2 1/2" X 2 1/2" X 1/4" X 8'-0" A36	VBSM-F5	67
4	4	BP6875-10	PL 3/8" X 6 7/8" X 10" A36 BENT PLATE	VBSM-F2	20
5	2	AL-333	L 3" X 3" X 1/4" X 3" A36	VBSM-F2	3
6	4	---	THREADED ROD 5/8" DIA. X 1'-6" F1554-36 HDG	---	--
7	4	---	THREADED ROD 5/8" DIA. X 10" F1554-36 HDG	---	--
8	1	---	BOLT 5/8" X 2 1/4" A325	---	--
9	2	---	BOLT 5/8" X 2" A325	---	--
10	2	---	BOLT 5/8" X 1 3/4" A325	---	--
11	21	FW-625	5/8" HDG USS FLAT WASHER	---	2
12	21	LW-625	5/8" HDG LOCK WASHER	---	0
13	21	NUT-625	5/8" HDG HEX NUT	---	2
				GALVANIZED WT	122

VzW
SMART Tool©
Vendor

verizon

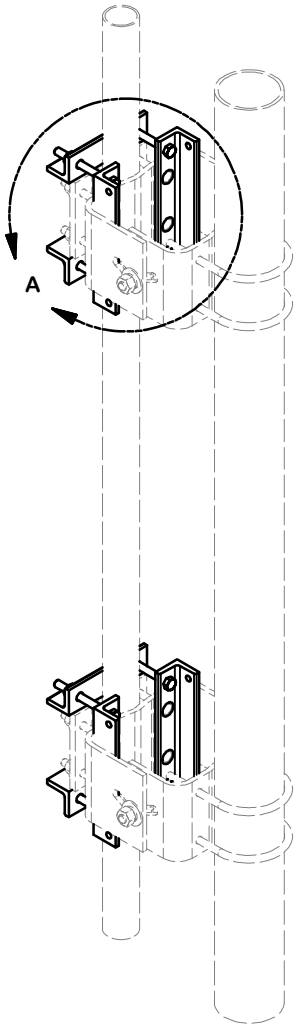
DRAWN BY: H.R. | CHECKED BY: HMA

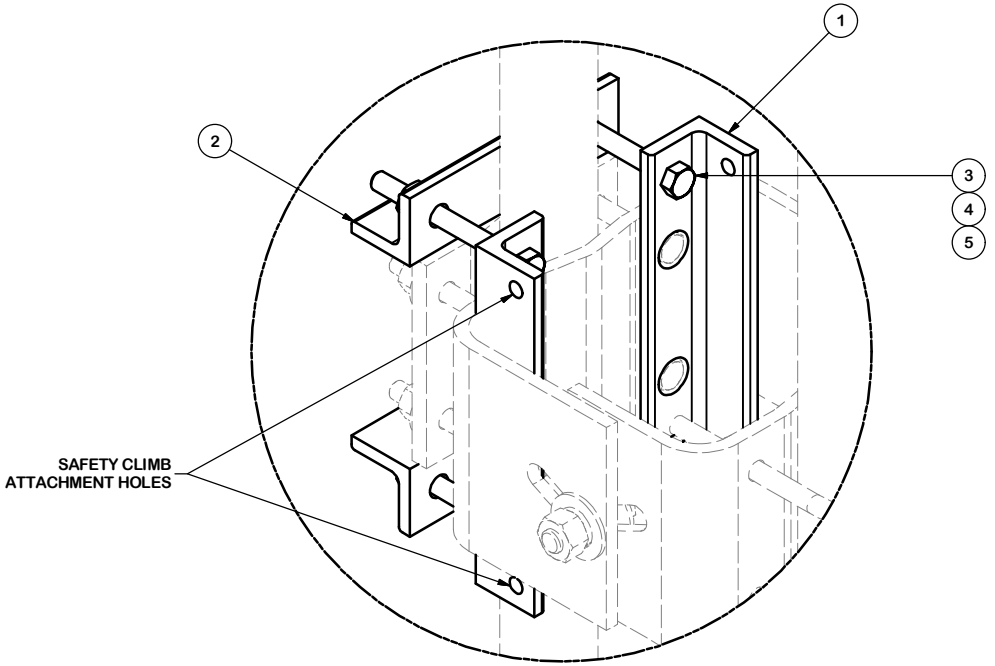
REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	H.R.	05/08/20

SHEET TITLE:
VZWSMART-SFK3
V-BRACING KIT

SHEET NUMBER: VZWSMART-SFK3
REV #: 0

PARTS LIST						
ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	4	X-R5-FRA1	REINFORCEMENT ANGLE	10 in	3.84	15.36
2	4	X-R5-RFA2	REINFORCEMENT ANGLE	7 1/8 in	2.86	11.45
3	8	G1208	1/2" x 8" HDG HEX BOLT GR5 FULL THREAD	8 in	0.49	3.94
3	8	G1205	1/2" x 5" HDG HEX BOLT GR5 FULL THREAD	5 in	0.33	2.61
4	8	G12LW	1/2" HDG LOCKWASHER		0.01	0.11
5	8	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	0.57
					TOTAL WT. #	34.04





DETAIL A

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")

DESCRIPTION
R5 UNIVERSAL PIPE MOUNT
REINFORCEMENT KIT

SITE PRO 1
A valmont COMPANY

Engineering Support Team:
1-888-753-7446

Locations:
New York, NY
Atlanta, GA
Los Angeles, CA
Plymouth, IN
Salem, OR
Dallas, TX

CPD NO.	DRAWN BY	ENG. APPROVAL	PART NO.
	JFS 4/22/2020	5/6/2020	R5-REINF

CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.
81	02	CUSTOMER	BMC 5/6/2020	R5-REINF