



4545 East River Road
Suite 320
West Henrietta, NY 14586

January 23, 2020

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

**RE: Notice of Exempt Modification for Verizon
Crown Site BU: 876320
528 Wheelers Farms Road, Milford CT
06460
Lat: 41°14'54.35 / Long: -73°4'44.67"**

Dear Ms. Bachman:

Verizon currently maintains twelve (12) total antennas at the 110-foot mount on the existing 120-foot monopole tower located at 528 Wheelers Farms Road in Milford. The tower is owned by Crown Castle and the property is owned by the Boys and Girls Village Youth and Family Services. Verizon now intends to add three (3) antennas at the 110-foot mount.

Tower modifications:

- Remove twelve (12) existing remote radio units
- Add three (3) XXDWMM-12.5-65-8T antennas
- Add nine (9) new remote radio units
- Add three (3) diplexers

Ground modifications:

- None

Melanie A. Bachman

The site was originally approved by local Planning & Zoning authorities in or before 1999. The Council subsequently approved an expansion of the fenced compound in Petition 656.

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.S.C.A. § 16-50j-73, a copy of this letter is being sent to the City Mayor, Benjamin G. Blake, as well as the Zoning Enforcement Officer, Stephen H. Harris. A copy will also be sent to the property owner.

1. The proposed modifications will not result in an increase in the height of the existing tower.
2. The proposed modifications will not require the extension of the site boundary.
3. The proposed modification 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 replacement antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communication 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.

For the foregoing reasons, Verizon respectfully submits that the proposed modifications to the above-reference telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2). Please send approval/rejection letter to my attention at the address listed below.

Sincerely,



Richard Zajac
Network Real Estate Specialist
4545 East River Road, Suite 320
West Henrietta, NY 14586
585-445-5896
richard.zajac@crowncastle.com

Melanie A. Bachman

cc:

The Honorable Benjamin G. Blake, Mayor
City of Milford
110 River Street
Milford, CT 06460
203.783.3201

Mr. Stephen Harris – Zoning Enforcement Officer
City of Milford
70 West River Street
Milford, CT 06460
203.783.3200

Kim Shaunesey, President & CEO
Boys & Girls Village Youth and Family Services
528 Wheelers Farms Road
Milford, CT 06460
203.877.0300

ORIGIN ID: ONHA (585) 445-5896
RICHARD ZAJAC
CROWN CASTLE
4545 EAST RIVER ROAD
SUITE 320
WEST HENRIETTA, NY 14568
UNITED STATES US

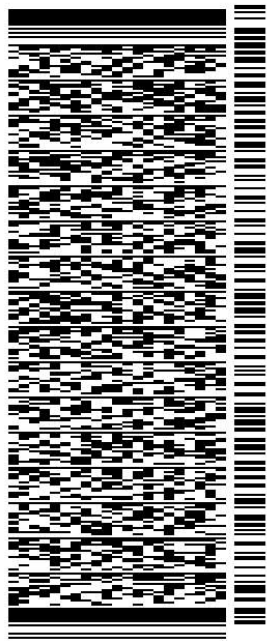
SHIP DATE: 23 JAN 20
ACTWGT: 1.00 LB
CAD: 104924194/NINET4220

BILL SENDER

TO **KIM SHAUNESSEY - PRESIDENT & CEO**
BOYS & GIRLS VILLAGE
528 WHEELERS FARMS ROAD

MILFORD CT 06460

(203) 877-0300 REF: 1734 7890
NY DEPT:
PO:



J201020011301uv

56B.J2/DF82/FE4A

TRK# 7775 8651 6870
0201

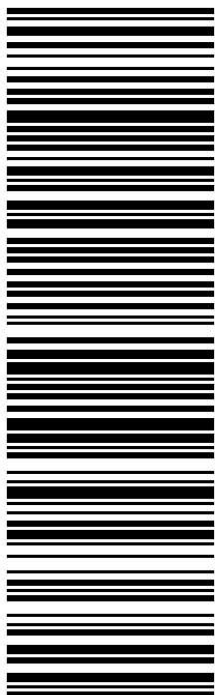
FRI - 24 JAN 3:00P
STANDARD OVERNIGHT

DSR

06460

CT-US BDL

XE OXCA



After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

ORIGIN ID: ONHA (585) 445-5896
RICHARD ZAJAC
CROWN CASTLE
4545 EAST RIVER ROAD
SUITE 320
WEST HENRIETTA, NY 14568
UNITED STATES US

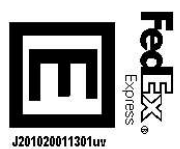
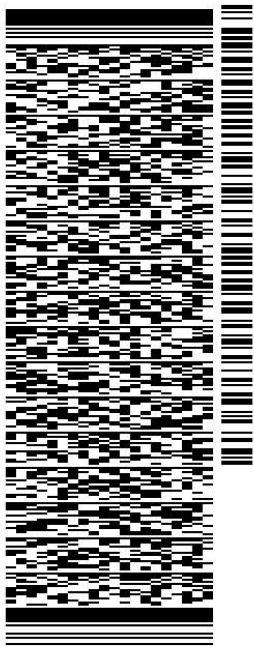
SHIP DATE: 23JAN20
ACTWGT: 1.00 LB
CAD: 104924194/N/ET4220

BILL SENDER

TO **MR. BENJAMIN G. BLAKE, MAYOR**
CITY OF MILFORD
110 RIVER STREET

MILFORD CT 06460

(203) 783-3201 REF: 1766.668
INV/ PO: DEPT:



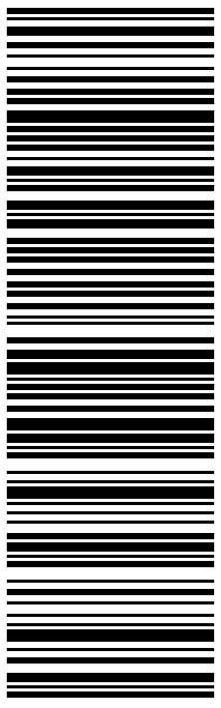
J201020011301uv

56B.J2/DF82/FE4A

TRK# 7775 8644 7010
0201
FRI - 24 JAN 3:00P
STANDARD OVERNIGHT

XE OXCA

DSR 06460
CT-US BDL



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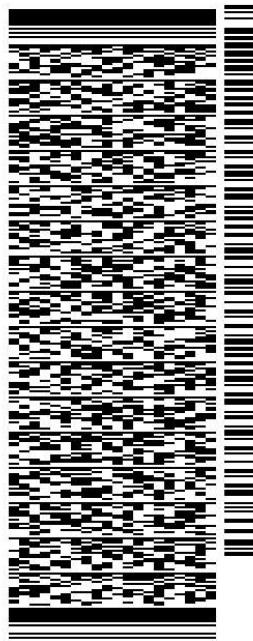
SHIP DATE: 23 JAN 20
ACTWGT: 1.00 LB
CAD: 104924194/NINET4220

BILL SENDER

TO **STEPHEN HARRIS - ZONING ENFORCEMENT**
CITY OF MILFORD
70 WEST RIVER STREET

MILFORD CT 06460

(203) 783-3200 REF: 1734 7890
INV/ DEPT:
PO:



J201020011301uv

56BJ2/DF82/FE4A

TRK# 7775 8647 5899
0201

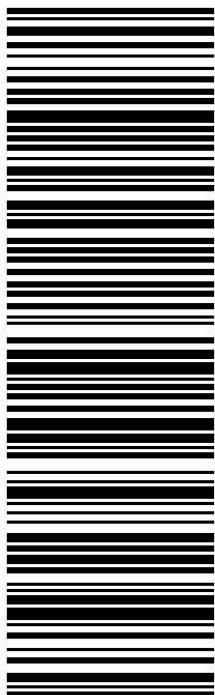
FRI - 24 JAN 3:00P
STANDARD OVERNIGHT

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06460

CT-US BDL

XE OXCA



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Exhibit A

Original Facility Approval

Petition No. 656
Cellco Partnership d/b/a Verizon Wireless
528 Wheelers Farms Road, Milford
Staff Report
February 3, 2004

On January 7, 2004, Verizon submitted a petition to the Connecticut Siting Council (Council) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need would be required to expand an existing 50' by 50' telecommunications facility compound by approximately 530 square feet. This expansion would accommodate a 12' by 30' equipment shelter to house the ground equipment to support Verizon antennas that would be installed at the 110-foot level of an existing 120-foot monopole.

Council member Gerald Heffernan and staff member David Martin met with Mark Gauger of Verizon at the site on January 21, 2004 to review the proposed changes to the affected facility compound. The compound expansion would have a minimal impact on the site and its surrounding neighbors. The facility is located at the rear of the Boys and Girls Village in Milford. Construction of new Village-related buildings is ongoing near the facility. The next door neighbor to the facility is a professional office park. The Merritt Parkway runs behind the facility. There are no residences in view of the facility compound.

The addition of Verizon's antennas would increase the power density of the facility to 52% of the Minimum Permissible Exposure established by the FCC.

Based on observations made during the field review, Verizon's proposed expansion of the compound would not have any significant adverse environmental impact.

Exhibit B

Property Card

528 WHEELERS FARMS RD

Location 528 WHEELERS FARMS RD

Mblu 104/ 915/ 13/A /

Acct# 023047

Owner VILLAGE FOUNDATION INC
THE

Assessment \$385,000

Appraisal \$550,000

PID 100284

Building Count 1

Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2016	\$550,000	\$0	\$550,000

Assessment			
Valuation Year	Improvements	Land	Total
2016	\$385,000	\$0	\$385,000

Owner of Record

Owner VILLAGE FOUNDATION INC THE
Other C/O GLOBAL SIGNAL ACQUISITIONS II LLC
Address PMB 331
4017 WASHINGTON RD
MCMURRAY, PA 15317

Sale Price \$0
Certificate
Book & Page 00259/5630
Sale Date 05/15/1942

Ownership History

Ownership History				
Owner	Sale Price	Certificate	Book & Page	Sale Date
VILLAGE FOUNDATION INC THE	\$0		00259/5630	05/15/1942

Building Information

Building 1 : Section 1

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

Building Attributes


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 Type:	
Total Bedrooms:	
Total Bthrms:	
Total Half Baths:	
Total Xtra Fixtrs:	
Total Rooms:	
Bath Description:	
Kitchen Descrip:	
Num Kitchens	
Cndtn	
Usrflid 103	
Int Condition:	
Solar Panels	
House Generator	
Usrflid 107	
Num Park	
Fireplaces	
Usrflid 108	
Usrflid 101	
Usrflid 102	
Usrflid 100	

Building Photo



(<http://images.vgsi.com/photos/MilfordCTPhotos//default.jpg>)

Building Layout

 Building Layout

(<http://images.vgsi.com/photos/MilfordCTPhotos//Sketches/1002>)

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 434V
Description CELL TOWER MDL-00
Zone
Neighborhood GG
Alt Land Appr No
Category

Land Line Valuation

Size (Acres) 0
Frontage
Depth
Assessed Value \$0
Appraised Value \$0

Outbuildings

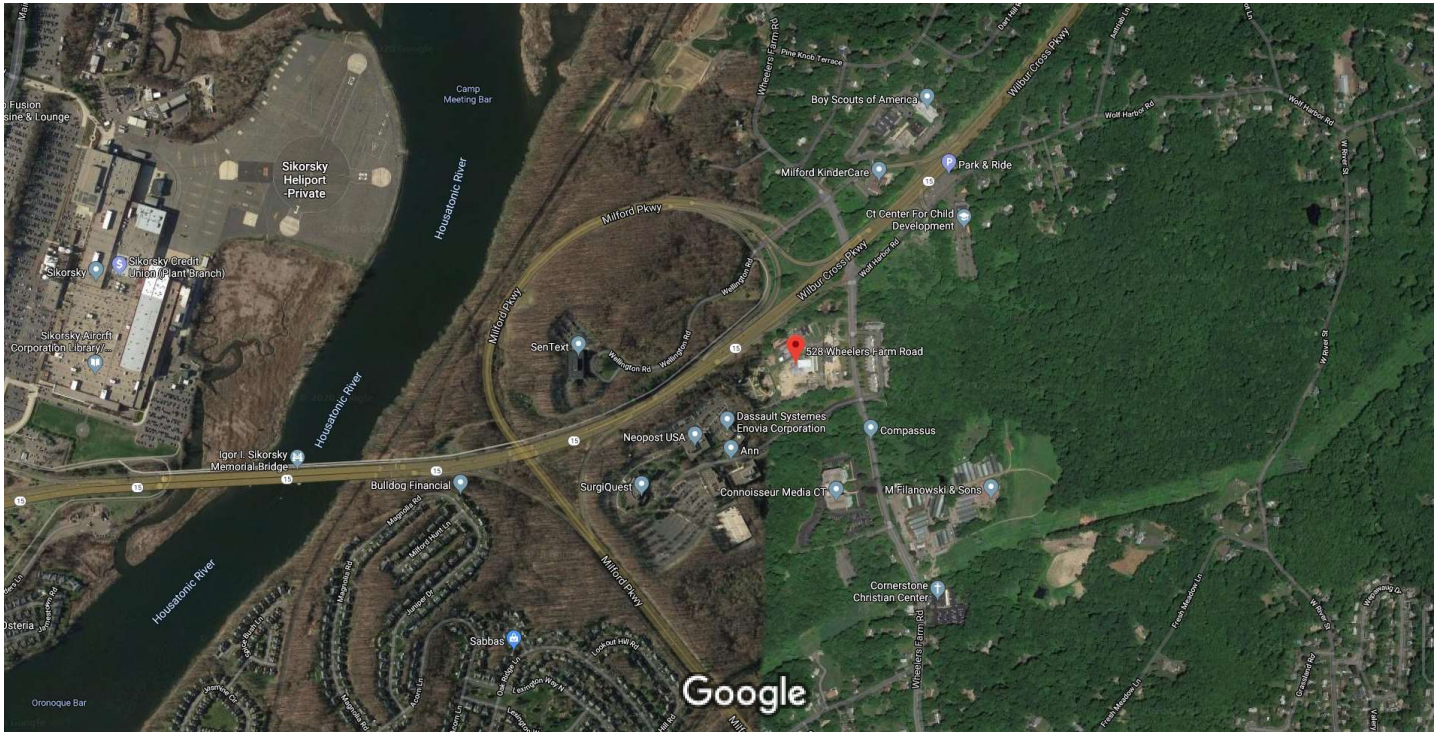
Outbuildings						Legend
Code	Description	Sub Code	Sub Description	Size	Value	Bldg #
CEL1	CEL TWR SITE			1.00 UNITS	\$550,000	1

Valuation History

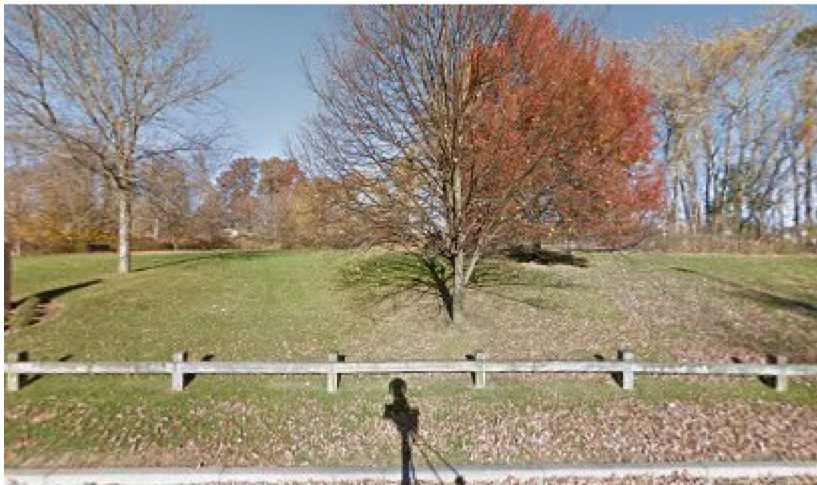
Appraisal			
Valuation Year	Improvements	Land	Total
2018	\$550,000	\$0	\$550,000
2017	\$550,000	\$0	\$550,000
2016	\$550,000	\$0	\$550,000

Assessment			
Valuation Year	Improvements	Land	Total
2018	\$385,000	\$0	\$385,000
2017	\$385,000	\$0	\$385,000
2016	\$385,000	\$0	\$385,000

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Imagery ©2020 Maxar Technologies, New York GIS, USDA Farm Service Agency, Map data ©2020 500 ft



528 Wheelers Farm Rd

Milford, CT 06461



Directions



Save



Nearby



Send to your phone

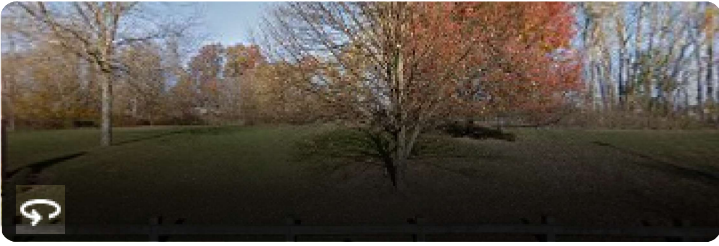


Share



6W XF+F2 Milford, Connecticut

Photos



At this location

Boys & Girls Village Inc

3.6 ★★★★★ (8)

Medical clinic · 528 Wheelers Farm Rd



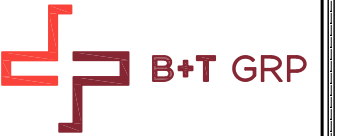
Dr. Steven M. Kant, MD

Doctor · 528 Wheelers Farm Rd



Exhibit C

Construction Drawings



verizon

400 FRIBERG PARKWAY
WESTBOROUGH, MA 01581
PH: (508) 330-3300

MILFORD NE CT

528 WHEELERS FARM RD
MILFORD, CT 06460
EXISTING MONOPOLE

verizon

MILFORD NE CT

528 WHEELERS FARM RD

MILFORD, CT 06460

LOCATION CODE: 468756

PROJECT SUMMARY

SITE NAME: MILFORD NE CT
SITE ADDRESS: 528 WHEELERS FARM RD
MILFORD, CT 06460
NEW HAVEN COUNTY
TOWER OWNER: CROWN CASTLE
2000 CORPORATE DR
CANONSBURG, PA 15317
BU NUMBER: 876320
MAP NUMBER: 104 915
LOT NUMBER: 13
CUSTOMER/APPLICANT: VERIZON WIRELESS
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492
ANDREW LEONE
(617) 620-4175
CONTACT: NADB3
LATITUDE: 41° 14' 54.35" N
LONGITUDE: 73° 4' 44.67" W
ELEVATION: 215'
CURRENT ZONING: D025
A&E FIRM: B+T GROUP
1717 S. BOULDER, SUITE 300
TULSA, OK 74119
MIKE OAKES
(918) 587-4630
OCCUPANCY TYPE: UNMANNED
A.D.A. COMPLIANCE: FACILITY IS UNMANNED AND NOT
FOR HUMAN HABITATION.

LOCATION MAP



DRIVING DIRECTIONS

DEPART FROM BRADLEY INTERNATIONAL AIRPORT ON LOCAL ROAD. TAKE LOCAL ROAD ONTO TERMINAL RD. ROAD NAME CHANGES TO BRADLEY FIELD CONNECTOR. ROAD NAME CHANGES TO CT-20 [BRADLEY FIELD CONNECTOR]. TAKE RAMP ONTO I-91 [RICHARD P HORAN MEMORIAL HWY]. AT EXIT 17, TURN RIGHT ONTO RAMP. TAKE RAMP ONTO CT-15 [WILBUR CROSS PKWY]. AT EXIT 55, KEEP RIGHT ONTO RAMP. BEAR RIGHT ONTO WELLINGTON RD EXT. TURN LEFT ONTO LOCAL ROAD. ARRIVE AT MILFORD NE CT.

DRAWING INDEX

SHEET #	SHEET DESCRIPTION	REV. #
T-1	TITLE SHEET	1
A-1	COMPOUND PLAN AND TOWER ELEVATION	1
A-2	EQUIPMENT DETAILS	1
A-3	PLUMBING DIAGRAM	1

A/E DOCUMENT REVIEW STATUS

TITLE	SIGNATURE	DATE
OWNER:		
R.F. ENGINEER:		
CONSTRUCTION MGR.:		
LEASING & ZONING:		
VERIZON WIRELESS:		

THE FOLLOWING PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS AND AUTHORIZE THE CONTRACTOR TO PROCEED WITH THE CONSTRUCTION DESCRIBED HEREIN. ALL DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT AND MAY IMPOSE CHANGES OR MODIFICATIONS.

DO NOT SCALE DRAWINGS

ALL DRAWINGS CONTAINED HEREIN ARE FORMATTED FOR 11x17. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.



CALL CONNECTICUT ONE CALL
(800) 922-4455
CALL 3 WORKING DAYS
BEFORE YOU DIG!



PROJECT NO: 80703.004.01
CHECKED BY: RMC

ISSUED FOR:

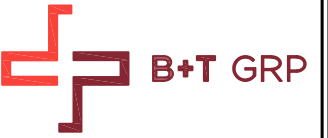
REV	DATE	DRWN	DESCRIPTION
0	11/12/19	STH	CONSTRUCTION
1	1/9/20	STH	CONSTRUCTION

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/20



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

SHEET NUMBER: T-1
REVISION: 1



verizon

400 FRIBERG PARKWAY
WESTBOROUGH, MA 01581
PH: (508) 330-3300

MILFORD NE CT

528 WHEELERS FARM RD
MILFORD, CT 06460
EXISTING MONOPOLE

PROJECT NO: 80703.004.01
CHECKED BY: RMC

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	11/12/19	STH	CONSTRUCTION
1	1/9/20	STH	CONSTRUCTION

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/20

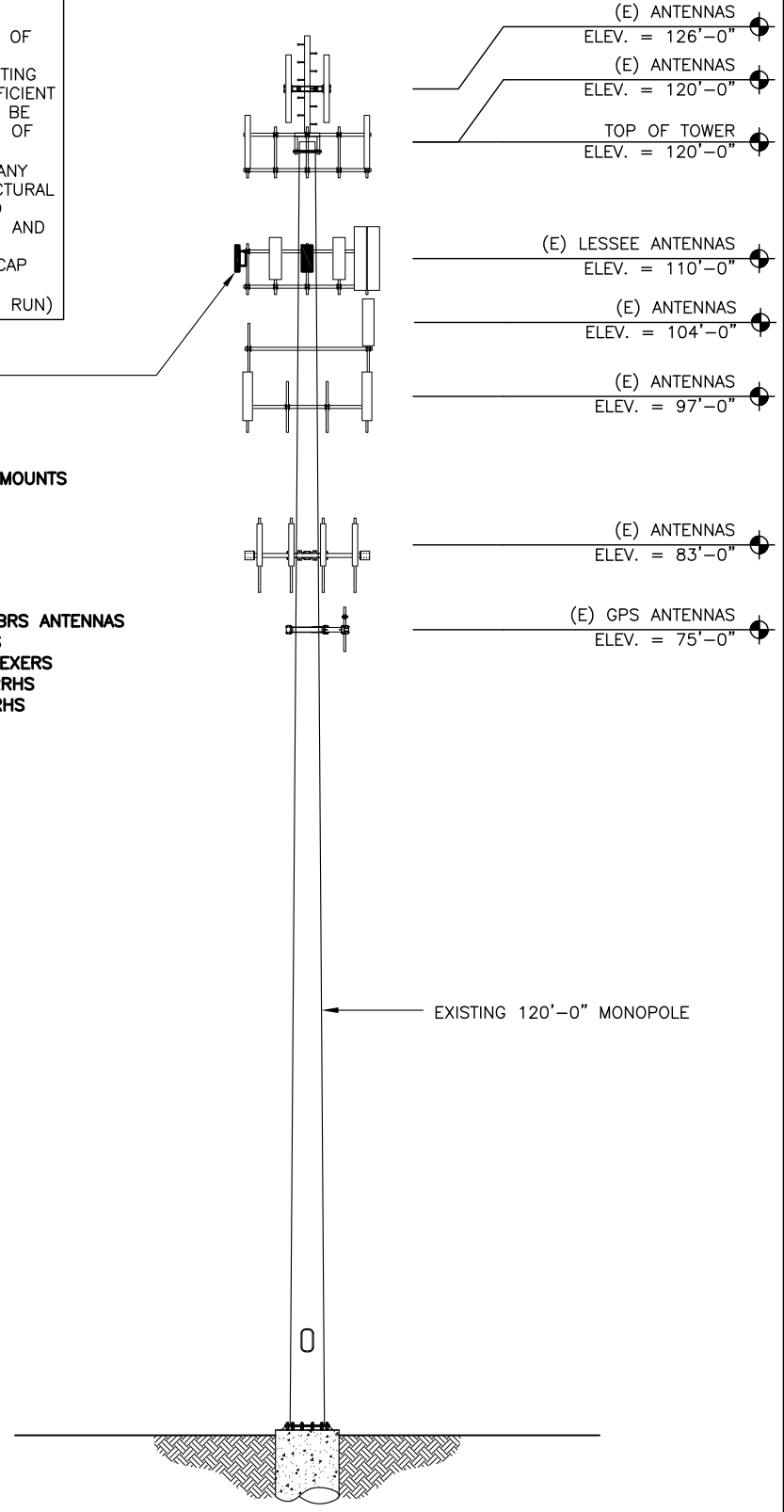
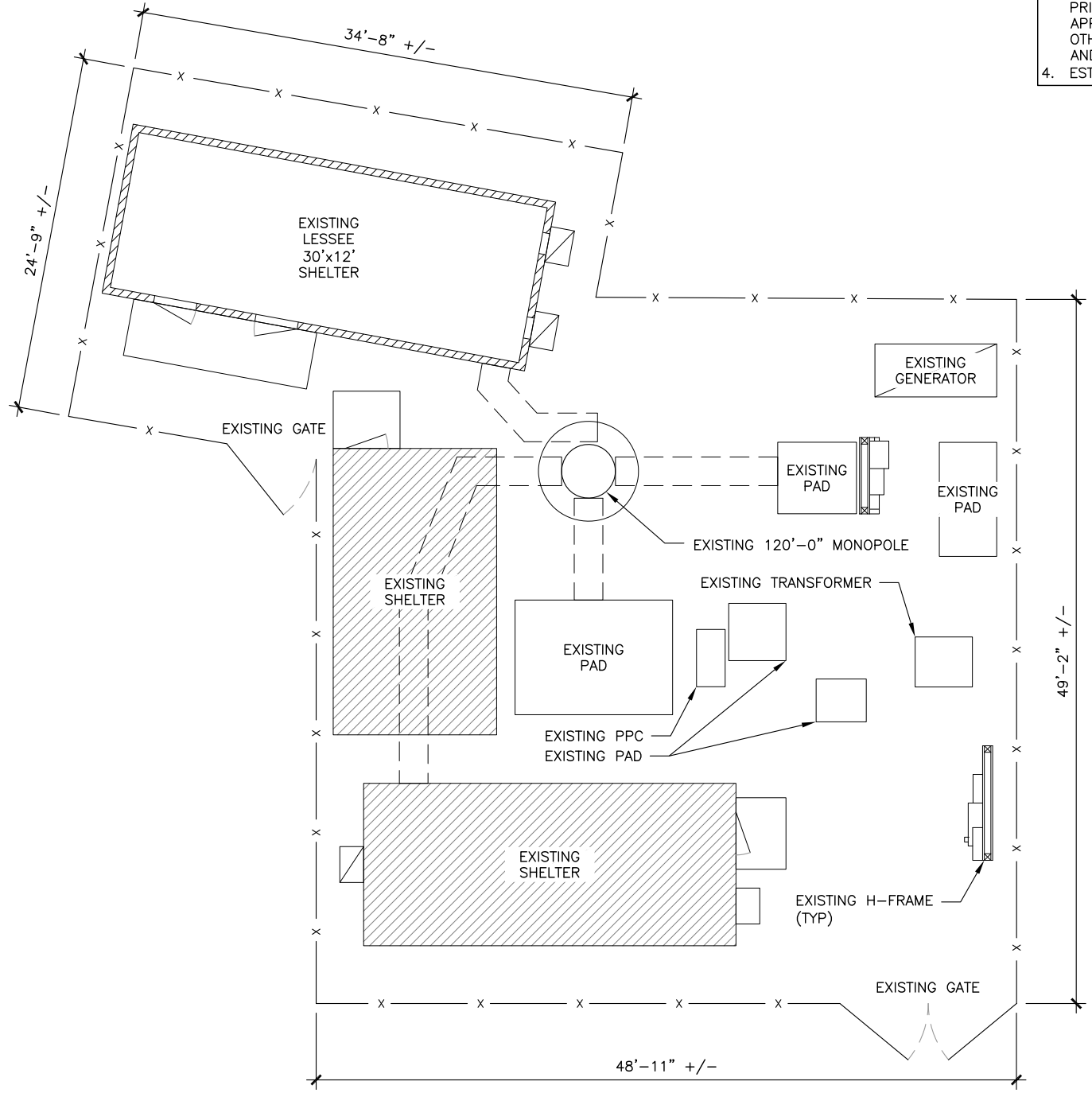


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SHEET NUMBER: **A-1** REVISION: **1**

- NOTES:
- CONTRACTOR TO VERIFY EXACT COAX AND ANTENNA INSTALLATION AND ANTENNA HEIGHT WITH LATEST RF DATA SHEETS PRIOR TO INSTALLATION.
 - STRUCTURAL ANALYSIS DONE BY OTHERS.
 - VERIZON SHALL PROVIDE A STRUCTURAL ANALYSIS OF THE TOWER PREPARED BY A LICENSED STATE STRUCTURAL ENGINEER CERTIFYING THAT THE EXISTING TOWER AND PROPOSED IMPROVEMENTS HAVE SUFFICIENT CAPACITY TO SUPPORT ALL NEW WORK THAT WILL BE DONE IN COMPLIANCE WITH THE CURRENT EDITION OF BUILDING CODES AND EIA/TIA CRITERIA. THE CONTRACTOR IS RESPONSIBLE TO CONFIRM THAT ANY AND ALL IMPROVEMENTS REQUIRED BY THE STRUCTURAL ANALYSIS CERTIFICATION ARE PROPERLY INSTALLED PRIOR TO THE ADDITION OF ANTENNAS, SUPPORTS AND APPURTENANCES PROPOSED ON THESE DRAWING OTHERWISE NOTED IN THE STRUCTURAL ANALYSIS.CAP AND WEATHERPROFF UNUSED ANTENNA PORTS.
 - ESTIMATED HYBRIFLEX CABLE LENGTH: 164' (EACH RUN)

- EXISTING TO REMAIN:
- (3) CDMA ANTENNAS
 - (6) LTE ANTENNAS
 - (1) HYBRID CABLE
 - (2) OVP BOXES
 - (3) SIDE-BY-SIDE ANTENNA MOUNTS
- EXISTING TO BE REMOVED:
- (3) B5 AHCA RRHS
 - (3) B13 UHBA RRHS
 - (3) B25 UHFA RRHS
 - (3) B66A UHIE RRHS
- PROPOSED:
- (3) XXDWM-12.5-65-8T CBRS ANTENNAS
 - (3) CBRS RT4401-48A RRHS
 - (3) CBC78T-DS-43-2X DIPLEXERS
 - (3) B2/B66A RFV01U-D1A RRHS
 - (3) B5/B13 RFV01U-D2A RRHS



1 COMPOUND PLAN
SCALE: 0' 4' 8' 16' 32'

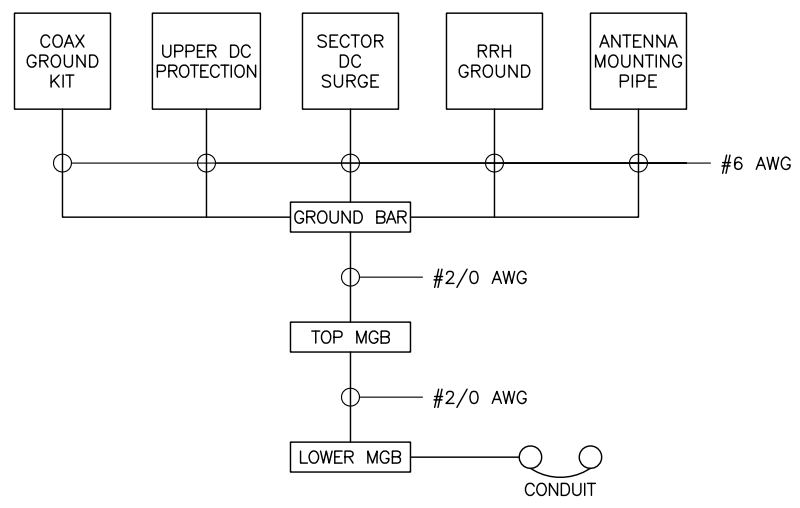


2 FINAL TOWER ELEVATION
SCALE: N.T.S.

80703_876320_Wheelers Farm Rd.dwg - Sheet-A-1 - User: rcarson - Jan 09, 2020 - 2:01pm

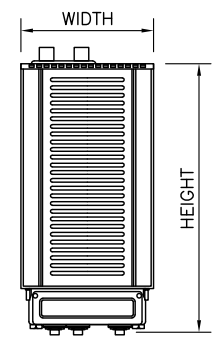
- NOTE:
1. INSTALL ALL EQUIPMENT, MOUNTING BRACKETS AND HARDWARE ACCORDING WITH MANUFACTURE'S RECOMMENDATIONS.
 2. GROUND DISTRIBUTION BOXES, MOUNTING PIPES AND RRRs IN ACCORDANCE WITH MANUFACTURE'S RECOMMENDATIONS.
 3. INSTALLED EQUIPMENT AND MOUNTING BRACKETS SHALL NOT INTERFERE WITH CLIMBING ACCESS NOR ANT INSTALLED SAFETY DEVICES.
 4. EQUIPMENT TO BE INSTALLED AT VERIZON'S RAD. CENTER IN ACCORDANCE WITH TOWER STRUCTURAL ANALYSIS (ANALYSIS BY OTHERS).

REMOTE RADIO HEAD DIMENSIONS (INCHES)				
MODEL	HEIGHT	WIDTH	DEPTH	WEIGHT
CBRS RT4401-48A	12.1"	8.5"	4.1"	18.64 LBS
B2/B66A RFV01U-D1A	15"	15"	10"	84.4 LBS
B5/B13 RFV01U-D2A	15"	15"	8.1"	70.3 LBS

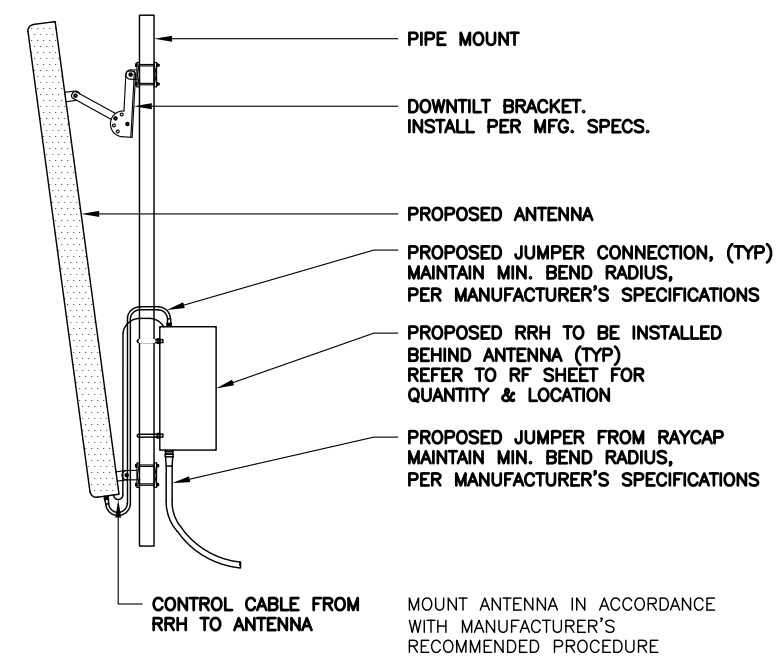


- NOTE:
1. BOND ANTENNA GROUNDING KIT CABLES TO TOP CIBE.
 2. BOND ANTENNA GROUNDING KIT CABLE TO BOTTOM CIBE.
 3. TYPICAL FOR ALL SECTORS.

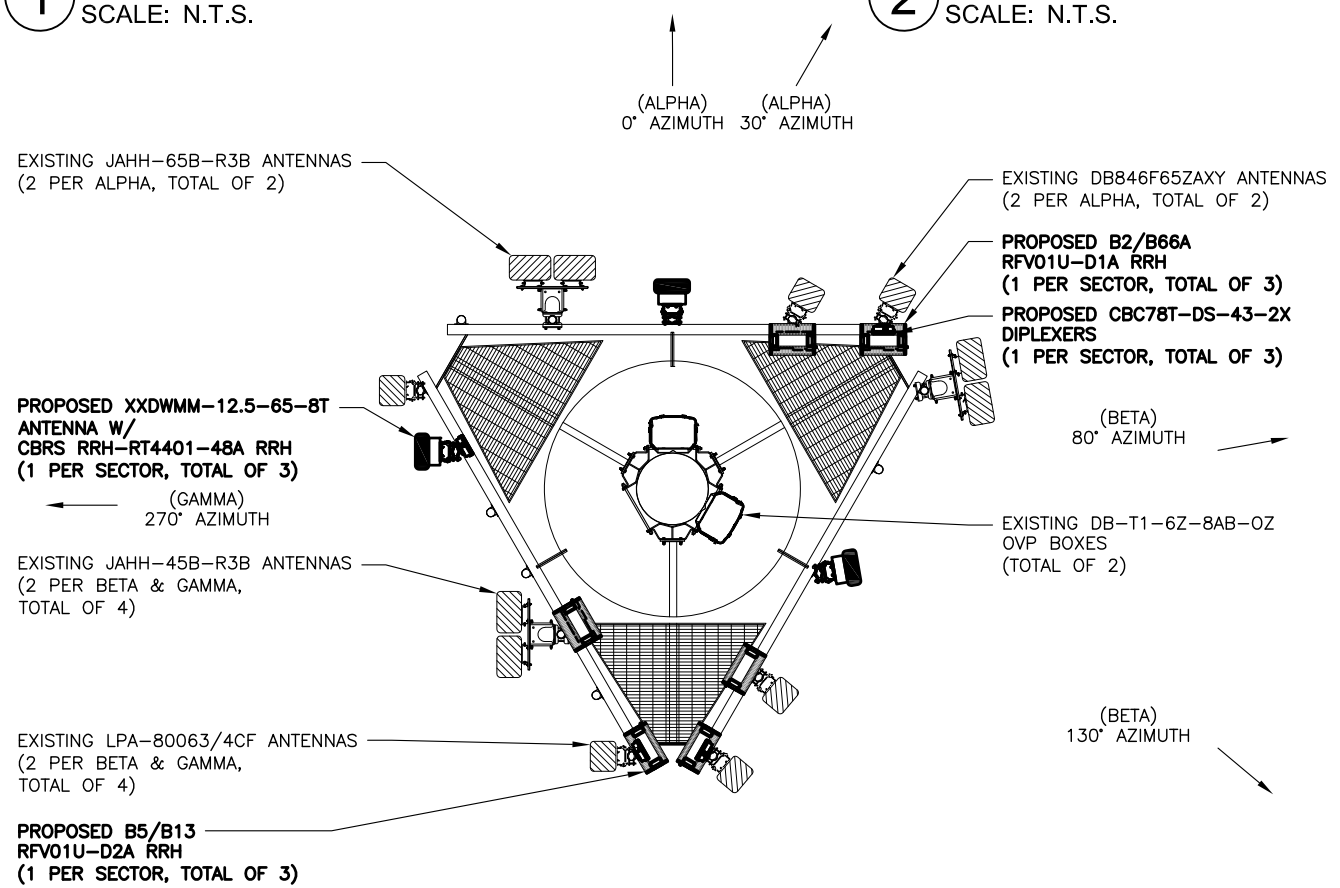
1 GROUNDING SCHEMATIC DIAGRAM
SCALE: N.T.S.



2 RRH SPECIFICATIONS
SCALE: N.T.S.



3 ANTENNA MOUNTING DETAIL
SCALE: N.T.S.



4 PROPOSED ANTENNA ORIENTATION
SCALE: N.T.S.



400 FRIBERG PARKWAY
WESTBOROUGH, MA 01581
PH: (508) 330-3300

MILFORD NE CT

528 WHEELERS FARM RD
MILFORD, CT 06460
EXISTING MONOPOLE

PROJECT NO: 80703.004.01
CHECKED BY: RMC

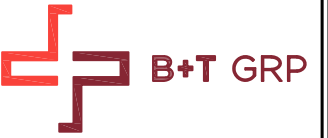
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REV	DATE	DRWN	DESCRIPTION
0	11/12/19	STH	CONSTRUCTION
1	1/9/20	STH	CONSTRUCTION

B&T ENGINEERING, INC.
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SHEET NUMBER: **A-2** REVISION: **1**



verizon

400 FRIBERG PARKWAY
WESTBOROUGH, MA 01581
PH: (508) 330-3300

MILFORD NE CT

528 WHEELERS FARM RD
MILFORD, CT 06460
EXISTING MONOPOLE

PROJECT NO: 80703.004.01
CHECKED BY: RMC

ISSUED FOR:

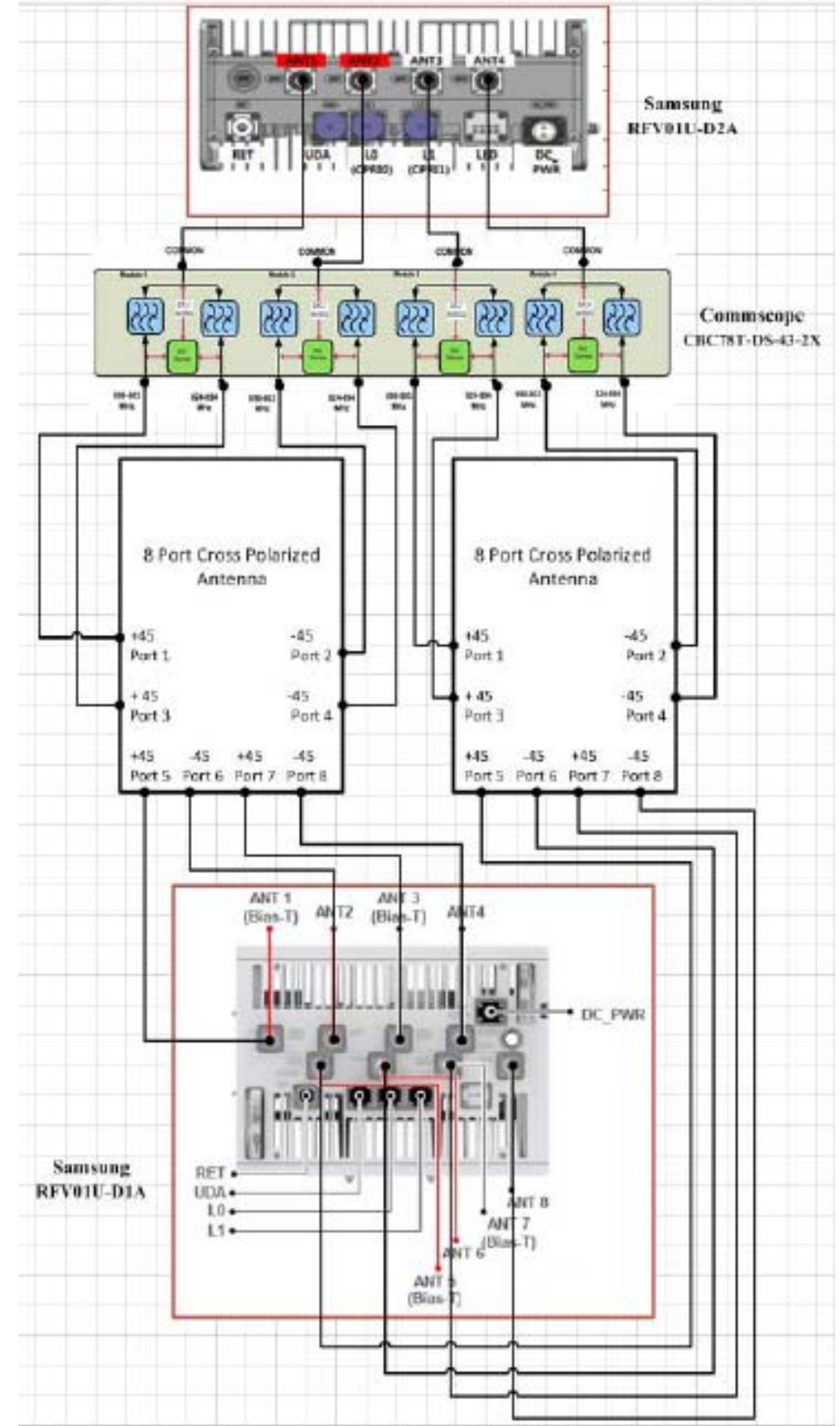
REV	DATE	DRWN	DESCRIPTION
0	11/12/19	STH	CONSTRUCTION
1	1/9/20	STH	CONSTRUCTION

B&T ENGINEERING, INC.
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SHEET NUMBER: **A-3** REVISION: **1**



1 ANTENNA SYSTEM LAYOUT
SCALE: N.T.S.

Exhibit D

Structural Analysis Report

Date: **November 8, 2019**

Amanda D Brown
Crown Castle
3530 Toringdon Way
Charlotte, NC 28277



Tower Engineering Professionals
326 Tryon Road
Raleigh, NC 27603
(919) 661-6351

Subject: Structural Analysis Report

Carrier Designation: **Verizon Wireless Co-Locate**
Carrier Site Number: NG57419
Carrier Site Name: Milford NE CT

Crown Castle Designation: **Crown Castle BU Number:** 876320
Crown Castle Site Name: 528 Wheelers Farm Rd
Crown Castle JDE Job Number: 592669
Crown Castle Work Order Number: 1802911
Crown Castle Order Number: 506764 Rev. 0

Engineering Firm Designation: **TEP Project Number:** 25570.318938

Site Data: **528 Wheelers Farm Road, Milford, New Haven County, CT 06460**
Latitude 41° 14' 54.35", Longitude -73° 04' 44.67"
120 Foot - Monopole Tower

Dear Amanda D Brown,

Tower Engineering Professionals is pleased to submit this "**Structural Analysis Report**" to determine the structural integrity of the above-mentioned tower.

The purpose of the analysis is to determine acceptability of the tower stress level. Based on our analysis we have determined the tower stress level for the structure and foundation, under the following load case, to be:

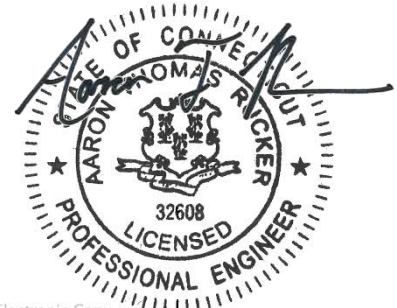
LC4.7: Modified Structure w/ Proposed Equipment Configuration **Sufficient Capacity- 94.5%**

This analysis utilizes an ultimate 3-second gust wind speed of 125 mph as required by the 2018 Connecticut State Building Code. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Structural analysis prepared by: Morteza Shakeri, EIT / MKF

Respectfully submitted by:

Aaron T. Rucker, P.E.



Electronic Copy

11/08/2019

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1) INTRODUCTION

This tower is a 120-ft monopole tower designed by Paul J. Ford and Company. The tower has been modified multiple times in the past to accommodate additional loading. The proposed modifications designed by Tower Engineering Professionals in July of 2019 were considered in this analysis. Shaft reinforcement designed by Semaan Engineering in February of 2004 was considered ineffective. All information provided to TEP was assumed to be accurate and complete.

2) ANALYSIS CRITERIA

TIA-222 Revision:	TIA-222-H
Risk Category:	II
Wind Speed:	125 mph
Exposure Category:	C
Topographic Factor:	1.0
Ice Thickness:	1.5 in
Wind Speed with Ice:	50 mph
Service Wind Speed:	60 mph

Table 1 - Proposed Equipment Configuration

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
113.0	114.0	2	Andrew	DB846F65ZAXY w/ Mount Pipe	8	1-5/8
		4	Antel	LPA-80063/4CF w/ Mount Pipe		
		2	Commscope	JAHH-45B-R3B w/ Mount Pipe		
		2	Commscope	JAHH-45B-R3B		
		1	Commscope	JAHH-65B-R3B w/ Mount Pipe		
		1	Commscope	JAHH-65B-R3B		
		3	Commscope	SSPX310R w/ Mount Pipe		
		3	Commscope	CBC78T-DS-43-2X		
		2	RFS Celwave	DB-T1-6Z-8AB-0Z		
		3	Samsung Telecommunications	20W CBRS		
		3	Samsung Telecommunications	RFV01U-D1A		
	3	Samsung Telecommunications	RFV01U-D2A			
	113.0	1	Tower Mounts	Platform Mount [LP 305-1_KCKR-HR-1]		

Table 2 - Other Considered Equipment

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
122.0	125.0	2	Andrew	VHLP2-11	6 1 3 4	5/16 1/8 7983A 1-1/4
	123.0	1	Andrew	PX2F-52		
		1	MTI Wireless Edge	MT-485025 w/ Mount Pipe		
	122.0	3	Argus Technologies	LLPX310R w/ Mount Pipe		
		3	Samsung Telecommunications	FDD_R6_RRH		
		1	Tower Mounts	Platform Mount [LP 1201-1_HRK-1]		
	121.0	1	Alcatel Lucent	800MHZ RRH		
		2	Alcatel Lucent	PCS 1900MHz 4x45W-65MHz		
		3	Alcatel Lucent	TD-RRH8x20-25		
		3	RFS Celwave	APXVSP18-C-A20 w/ Mount Pipe		
		3	RFS Celwave	APXVTM14-ALU-I20 w/ Mount Pipe		
	120.0	3	Alcatel Lucent	800 External Notch Filter		
		2	Alcatel Lucent	800MHZ RRH		
		1	Alcatel Lucent	PCS 1900MHz 4x45W-65MHz		
9		RFS Celwave	ACU-A20-N			
105.0	107.0	3	Ericsson	AIR 32 B2a/B66AA w/ Mount Pipe	2 7	1-3/8 1-5/8
		3	Ericsson	AIR 3246 B66 w/ Mount Pipe		
		3	RFS Celwave	APXVAARR24_43-U-NA20 w/ Mount Pipe		
		3	Ericsson	RADIO 4449 B71/B85A		
		3	Ericsson	KRY 112 144/1		
	105.0	1	SitePro 1	RMQP-496-HK		

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
97.0	97.0	3	Ericsson	RRUS 32 B30	-	-
		2	Raycap	DC6-48-60-18-8F		
		1	Tower Mounts	Side Arm Mount [SO 102-3]		
96.0	98.0	6	Kathrein	80010965 w/ Mount Pipe	3 6 12	3/8 3/4 1-1/4
		3	Quintel Technology	QS66512-2 w/ Mount Pipe		
		3	Powerwave Technologies	7770.00 w/ Mount Pipe		
		1	Commscope	WCS-IMFQ-AMT		
		3	Ericsson	RRUS 32		
		3	Ericsson	RRUS 4449 B5/B12		
		3	Ericsson	RRUS 4478 B14		
		3	Ericsson	RRUS 8843 B2/B66A		
		6	Kaelus	DBC0061F1V51-2		
		6	Powerwave Technologies	LGP21401		
	3	Raycap	DC6-48-60-18-8F			
		96.0	1	Tower Mounts		
	1		Tower Mounts	Platform Mount [LP 712-1]		
82.0	82.0	-	-	-	12	7/8
75.0	76.0	1	Trimble	ACUTIME 2000	1	1/2
	75.0	1	Tower Mounts	Side Arm Mount [SO 701-1]		

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Remarks	Reference	Source
Supplemental Geotechnical Report	FDH, Inc.	1613534	CCISites
Tower Foundation Drawings	Summit Manufacturing, Inc.	1614583	CCISites
Tower Manufacturer Drawings	Summit Manufacturing, Inc.	1614557	CCISites
Tower Reinforcement Drawings	Semaan Engineering Solutions	1613579	CCISites
Post Modification Inspection	Semaan Engineering Solutions	3350209	CCISites
Tower Reinforcement Drawings	B&T Engineering	2460630	CCISites
Post Modification Inspection	B&T Engineering	2460628	CCISites
Tower Reinforcement Drawings	B&T Engineering	3349207	CCISites
Post Modification Inspection	B&T Engineering	3349204	CCISites
Tower Reinforcement Drawings	Paul J. Ford and Co.	3338935	CCISites
Post Modification Inspection	Tower Engineering Professionals	3753892	CCISites
Tower Reinforcement Drawings	Paul J. Ford and Co.	4961357	CCISites
Post Modification Inspection	SGS, Inc.	5760332	CCISites
Tower Reinforcement Drawings	Paul J. Ford and Co.	5873963	CCISites
Post Modification Inspection	FDH Velocitel	6112300	CCISites
Tower Reinforcement Drawings	Tower Engineering Professionals	8550831	CCISites

3.1) Analysis Method

tnxTower (version 8.0.5.0), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A.

tnxTower was used to determine the loads on the modified structure. Additional calculations were performed to determine the stresses in the pole and in the reinforcing elements. These calculations are presented in Appendix C.

3.2) Assumptions

- 1) The tower and foundation were built and maintained in accordance with the manufacturer's specification.
- 2) The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1 and 2, and the referenced drawings.
- 3) All tower components are in sufficient condition to carry their full design capacity.
- 4) Serviceability with respect to antenna twist, tilt, roll, or lateral translation, is not checked and is left to the carrier or tower owner to ensure conformance.
- 5) All antenna mounts and mounting hardware are structurally sufficient to carry the full design capacity requirements of appurtenance wind area and weight as provided by the original manufacturer specifications. It is the carrier's responsibility to ensure compliance to the structural limitations of the existing and/or proposed antenna mounts. TEP did not perform a site visit to verify the size, condition or capacity of the antenna mounts and did not analyze antennas supporting mounts as part of this structural analysis report.
- 6) When applicable, the effective projected area (EPA) of appurtenances was determined by computation fluid dynamics (CFD) testing performed by Crown Castle. TEP assumes the means and methods used to determine the EPA's yields results that follow the intent of TIA-222-H and are accurate and complete.
- 7) The shaft modifications designed by Semaan Engineering in February of 2004 were determined to be ineffective and not considered structurally in this analysis.

This analysis may be affected if any assumptions are not valid or have been made in error. Tower Engineering Professionals should be notified to determine the effect on the structural integrity of the tower.

4) ANALYSIS RESULTS

Table 4 - Section Capacity (Summary)^{1,2}

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
120 - 115	Pole	TP23.01x22x0.25	Pole	7.4%	Pass
115 - 110	Pole	TP24.02x23.01x0.25	Pole	15.9%	Pass
110 - 105	Pole	TP25.031x24.02x0.25	Pole	24.8%	Pass
105 - 100	Pole	TP26.041x25.031x0.25	Pole	37.5%	Pass
100 - 99.25	Pole	TP26.192x26.041x0.25	Pole	39.2%	Pass
99.25 - 99	Pole + Reinf.	TP26.243x26.192x0.3625	Reinf. 14 Tension Rupture	36.4%	Pass
99 - 94	Pole + Reinf.	TP27.253x26.243x0.3563	Reinf. 14 Tension Rupture	49.3%	Pass
94 - 90.08	Pole + Reinf.	TP28.045x27.253x0.35	Reinf. 14 Tension Rupture	59.4%	Pass
90.08 - 89.83	Pole + Reinf.	TP28.096x28.045x0.5125	Reinf. 11 Tension Rupture	49.3%	Pass
89.83 - 89.5	Pole + Reinf.	TP28.162x28.096x0.5125	Reinf. 11 Tension Rupture	49.9%	Pass
89.5 - 89.25	Pole + Reinf.	TP28.213x28.162x0.725	Reinf. 15 Tension Rupture	38.7%	Pass
89.25 - 84.25	Pole + Reinf.	TP29.223x28.213x0.7	Reinf. 15 Tension Rupture	46.6%	Pass

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
84.25 - 81.75	Pole + Reinf.	TP30.486x29.223x0.7	Reinf. 15 Tension Rupture	50.5%	Pass
81.75 - 77	Pole + Reinf.	TP30.188x29.228x0.8625	Reinf. 17 Tension Rupture	45.6%	Pass
77 - 76.75	Pole + Reinf.	TP30.239x30.188x0.8625	Reinf. 17 Tension Rupture	45.9%	Pass
76.75 - 76.5	Pole + Reinf.	TP30.289x30.239x0.9625	Reinf. 14 Tension Rupture	43.1%	Pass
76.5 - 75.5	Pole + Reinf.	TP30.491x30.289x0.9625	Reinf. 14 Tension Rupture	44.2%	Pass
75.5 - 75.25	Pole + Reinf.	TP30.542x30.491x0.7625	Reinf. 17 Tension Rupture	50.8%	Pass
75.25 - 74.5	Pole + Reinf.	TP30.693x30.542x0.7625	Reinf. 17 Tension Rupture	51.7%	Pass
74.5 - 74.25	Pole + Reinf.	TP30.744x30.693x0.8375	Reinf. 17 Tension Rupture	54.5%	Pass
74.25 - 72	Pole + Reinf.	TP31.198x30.744x0.825	Reinf. 17 Tension Rupture	57.2%	Pass
72 - 71.75	Pole + Reinf.	TP31.249x31.198x0.7625	Reinf. 17 Tension Rupture	54.9%	Pass
71.75 - 70.5	Pole + Reinf.	TP31.501x31.249x0.7625	Reinf. 17 Tension Rupture	56.3%	Pass
70.5 - 70.25	Pole + Reinf.	TP31.552x31.501x0.7875	Reinf. 17 Tension Rupture	56.3%	Pass
70.25 - 70	Pole + Reinf.	TP31.602x31.552x0.7875	Reinf. 17 Tension Rupture	56.6%	Pass
70 - 69.75	Pole + Reinf.	TP31.653x31.602x0.725	Reinf. 17 Tension Rupture	58.7%	Pass
69.75 - 69.5	Pole + Reinf.	TP31.703x31.653x0.875	Reinf. 4 Tension Rupture	49.8%	Pass
69.5 - 69.25	Pole + Reinf.	TP31.754x31.703x0.75	Reinf. 4 Tension Rupture	55.7%	Pass
69.25 - 64.25	Pole + Reinf.	TP32.764x31.754x0.7375	Reinf. 4 Tension Rupture	60.9%	Pass
64.25 - 59.25	Pole + Reinf.	TP33.774x32.764x0.7125	Reinf. 4 Tension Rupture	65.9%	Pass
59.25 - 56	Pole + Reinf.	TP34.431x33.774x0.7125	Reinf. 4 Tension Rupture	68.9%	Pass
56 - 55.75	Pole + Reinf.	TP34.481x34.431x0.8125	Reinf. 7 Tension Rupture	66.3%	Pass
55.75 - 55.5	Pole + Reinf.	TP34.532x34.481x0.8125	Reinf. 7 Tension Rupture	66.6%	Pass
55.5 - 55.25	Pole + Reinf.	TP34.582x34.532x0.8875	Reinf. 7 Tension Rupture	60.0%	Pass
55.25 - 54	Pole + Reinf.	TP34.835x34.582x0.875	Reinf. 7 Tension Rupture	61.0%	Pass
54 - 53.75	Pole + Reinf.	TP34.885x34.835x0.75	Reinf. 7 Tension Rupture	70.0%	Pass
53.75 - 53.5	Pole + Reinf.	TP34.936x34.885x0.7375	Reinf. 7 Tension Rupture	70.3%	Pass
53.5 - 53.25	Pole + Reinf.	TP34.986x34.936x0.6625	Reinf. 4 Tension Rupture	75.5%	Pass
53.25 - 53	Pole + Reinf.	TP35.037x34.986x0.6	Reinf. 12 Tension Rupture	78.0%	Pass
53 - 48	Pole + Reinf.	TP36.047x35.037x0.5875	Reinf. 12 Tension Rupture	82.9%	Pass
48 - 44.5	Pole + Reinf.	TP37.714x36.047x0.5875	Reinf. 12 Tension Rupture	86.3%	Pass
44.5 - 38.75	Pole + Reinf.	TP37.291x36.129x0.6625	Reinf. 4 Tension Rupture	84.4%	Pass
38.75 - 34.75	Pole + Reinf.	TP38.099x37.291x0.6625	Reinf. 4 Tension Rupture	87.3%	Pass
34.75 - 34.5	Pole + Reinf.	TP38.15x38.099x0.825	Reinf. 3 Tension Rupture	70.0%	Pass
34.5 - 33.75	Pole + Reinf.	TP38.301x38.15x0.825	Reinf. 3 Tension Rupture	70.5%	Pass
33.75 - 33.5	Pole + Reinf.	TP38.352x38.301x0.625	Reinf. 6 Tension Rupture	86.8%	Pass
33.5 - 28.5	Pole + Reinf.	TP39.362x38.352x0.6125	Reinf. 6 Tension Rupture	90.0%	Pass
28.5 - 24	Pole + Reinf.	TP40.271x39.362x0.6625	Reinf. 3 Tension Rupture	93.0%	Pass
24 - 23.75	Pole + Reinf.	TP40.322x40.271x0.7	Reinf. 3 Tension Rupture	88.9%	Pass
23.75 - 18.75	Pole + Reinf.	TP41.332x40.322x0.6875	Reinf. 3 Tension Rupture	91.9%	Pass
18.75 - 14.25	Pole + Reinf.	TP42.241x41.332x0.675	Reinf. 3 Tension Rupture	94.5%	Pass
14.25 - 14	Pole + Reinf.	TP42.291x42.241x0.775	Reinf. 3 Tension Rupture	82.3%	Pass
14 - 9	Pole + Reinf.	TP43.302x42.291x0.7625	Reinf. 3 Tension Rupture	84.8%	Pass
9 - 5	Pole + Reinf.	TP44.11x43.302x0.75	Reinf. 3 Tension Rupture	86.7%	Pass
5 - 4.75	Pole + Reinf.	TP44.16x44.11x0.9125	Reinf. 3 Tension Rupture	78.5%	Pass
4.75 - 4.5	Pole + Reinf.	TP44.211x44.16x0.875	Reinf. 1 Compression	79.2%	Pass

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
4.5 - 0	Pole + Reinf.	TP45.12x44.211x0.85	Reinf. 1 Compression	81.0%	Pass
				Summary	
			Pole	69.6%	Pass
			Reinforcement	94.5%	Pass
			Overall	94.5%	Pass

Table 5 - Tower Component Stresses vs. Capacity - LC4.7

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1,2	Anchor Rods	-	81.3	Pass
1,2	Base Plate	-	58.3	Pass
1,2	Base Foundation Soil Interaction	-	63.4	Pass
1,2	Base Foundation Structural	-	55.3	Pass

Structure Rating (max from all components) =	94.5%
---	--------------

Notes:

- 1) See additional documentation in "Appendix C - Additional Calculations" for calculations supporting the % capacity listed.
- 2) Rating per TIA-222-H Section 15.5

4.1) Recommendations

- 1) If the load differs from that described in Tables 1 and 2 of this report, the referenced drawings, or the provisions of this analysis are found to be invalid, another structural analysis should be performed.
- 2) The tower and its foundation have sufficient capacity to carry the proposed load configuration. No further modifications are required once the proposed modifications are installed.

APPENDIX A
TNXTOWER OUTPUT

tnxTower Tower Engineering Engineering, Inc. 326 Tyron Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job 528 Wheelers Farm Rd (BU 876320)	Page 1 of 60
	Project TEP No. 25570.318938	Date 11:36:47 11/08/19
	Client Crown Castle	Designed by mshakeri

Tower Input Data

The tower is a monopole.

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

The following design criteria apply:

Tower is located in New Haven County, Connecticut.

Tower base elevation above sea level: 213.00 ft.

Basic wind speed of 125 mph.

Risk Category II.

Exposure Category C.

Simplified Topographic Factor Procedure for wind speed-up calculations is used.

Topographic Category: 1.

Crest Height: 0.00 ft.

Nominal ice thickness of 1.5000 in.

Ice thickness is considered to increase with height.

Ice density of 56 pcf.

A wind speed of 50 mph is used in combination with ice.

Temperature drop of 50 °F.

Deflections calculated using a wind speed of 60 mph.

A non-linear (P-delta) analysis was used.

Pressures are calculated at each section.

Stress ratio used in pole design is 1.05.

Tower analysis based on target reliabilities in accordance with Annex S.

Load Modification Factors used: $K_{es}(F_w) = 0.95$, $K_{es}(t_i) = 0.85$.

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

Options

<ul style="list-style-type: none"> Consider Moments - Legs Consider Moments - Horizontals Consider Moments - Diagonals Use Moment Magnification Use Code Stress Ratios √ Use Code Safety Factors - Guys Escalate Ice Always Use Max Kz Use Special Wind Profile Include Bolts In Member Capacity Leg Bolts Are At Top Of Section Secondary Horizontal Braces Leg Use Diamond Inner Bracing (4 Sided) SR Members Have Cut Ends SR Members Are Concentric 	<ul style="list-style-type: none"> Distribute Leg Loads As Uniform Assume Legs Pinned √ Assume Rigid Index Plate √ Use Clear Spans For Wind Area Use Clear Spans For KL/r Retension Guys To Initial Tension √ Bypass Mast Stability Checks √ Use Azimuth Dish Coefficients √ Project Wind Area of Appurt. Autocalc Torque Arm Areas Add IBC .6D+W Combination √ Sort Capacity Reports By Component Triangulate Diamond Inner Bracing Treat Feed Line Bundles As Cylinder Ignore KL/ry For 60 Deg. Angle Legs 	<ul style="list-style-type: none"> Use ASCE 10 X-Brace Ly Rules Calculate Redundant Bracing Forces Ignore Redundant Members in FEA SR Leg Bolts Resist Compression All Leg Panels Have Same Allowable Offset Girt At Foundation √ Consider Feed Line Torque Include Angle Block Shear Check Use TIA-222-H Bracing Resist. Exemption Use TIA-222-H Tension Splice Exemption <li style="text-align: center;">Poles √ Include Shear-Torsion Interaction Always Use Sub-Critical Flow Use Top Mounted Sockets Pole Without Linear Attachments Pole With Shroud Or No Appurtenances Outside and Inside Corner Radii Are Known
--	---	---

Tapered Pole Section Geometry

<p>tnxTower</p> <p>Tower Engineering Engineering, Inc. 326 Tyron Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</p>	<p>Job</p> <p>528 Wheelers Farm Rd (BU 876320)</p>	<p>Page</p> <p>2 of 60</p>
	<p>Project</p> <p>TEP No. 25570.318938</p>	<p>Date</p> <p>11:36:47 11/08/19</p>
	<p>Client</p> <p>Crown Castle</p>	<p>Designed by</p> <p>mshakeri</p>

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L1	120.00-115.00	5.00	0.00	12	22.0000	23.0102	0.2500	1.0000	A607-60 (60 ksi)
L2	115.00-110.00	5.00	0.00	12	23.0102	24.0205	0.2500	1.0000	A607-60 (60 ksi)
L3	110.00-105.00	5.00	0.00	12	24.0205	25.0307	0.2500	1.0000	A607-60 (60 ksi)
L4	105.00-100.00	5.00	0.00	12	25.0307	26.0410	0.2500	1.0000	A607-60 (60 ksi)
L5	100.00-99.25	0.75	0.00	12	26.0410	26.1925	0.2500	1.0000	A607-60 (60 ksi)
L6	99.25-99.00	0.25	0.00	12	26.1925	26.2430	0.3625	1.4500	A607-60 (60 ksi)
L7	99.00-94.00	5.00	0.00	12	26.2430	27.2532	0.3563	1.4250	A607-60 (60 ksi)
L8	94.00-90.08	3.92	0.00	12	27.2532	28.0453	0.3500	1.4000	A607-60 (60 ksi)
L9	90.08-89.83	0.25	0.00	12	28.0453	28.0958	0.5125	2.0500	A607-60 (60 ksi)
L10	89.83-89.50	0.33	0.00	12	28.0958	28.1625	0.5125	2.0500	A607-60 (60 ksi)
L11	89.50-89.25	0.25	0.00	12	28.1625	28.2130	0.7250	2.9000	A607-60 (60 ksi)
L12	89.25-84.25	5.00	0.00	12	28.2130	29.2232	0.7000	2.8000	A607-60 (60 ksi)
L13	84.25-78.00	6.25	3.75	12	29.2232	30.4860	0.7000	2.8000	A607-60 (60 ksi)
L14	78.00-77.00	4.75	0.00	12	29.2283	30.1880	0.8625	3.4500	A607-60 (60 ksi)
L15	77.00-76.75	0.25	0.00	12	30.1880	30.2385	0.8625	3.4500	A607-60 (60 ksi)
L16	76.75-76.50	0.25	0.00	12	30.2385	30.2890	0.9625	3.8500	A607-60 (60 ksi)
L17	76.50-75.50	1.00	0.00	12	30.2890	30.4911	0.9625	3.8500	A607-60 (60 ksi)
L18	75.50-75.25	0.25	0.00	12	30.4911	30.5416	0.7625	3.0500	A607-60 (60 ksi)
L19	75.25-74.50	0.75	0.00	12	30.5416	30.6931	0.7625	3.0500	A607-60 (60 ksi)
L20	74.50-74.25	0.25	0.00	12	30.6931	30.7436	0.8375	3.3500	A607-60 (60 ksi)
L21	74.25-72.00	2.25	0.00	12	30.7436	31.1982	0.8250	3.3000	A607-60 (60 ksi)
L22	72.00-71.75	0.25	0.00	12	31.1982	31.2487	0.7625	3.0500	A607-60 (60 ksi)
L23	71.75-70.50	1.25	0.00	12	31.2487	31.5013	0.7625	3.0500	A607-60 (60 ksi)
L24	70.50-70.25	0.25	0.00	12	31.5013	31.5518	0.7875	3.1500	A607-60 (60 ksi)
L25	70.25-70.00	0.25	0.00	12	31.5518	31.6023	0.7875	3.1500	A607-60 (60 ksi)
L26	70.00-69.75	0.25	0.00	12	31.6023	31.6528	0.7250	2.9000	A607-60 (60 ksi)
L27	69.75-69.50	0.25	0.00	12	31.6528	31.7033	0.8750	3.5000	A607-60 (60 ksi)
L28	69.50-69.25	0.25	0.00	12	31.7033	31.7538	0.7500	3.0000	A607-60 (60 ksi)
L29	69.25-64.25	5.00	0.00	12	31.7538	32.7640	0.7375	2.9500	A607-60 (60 ksi)
L30	64.25-59.25	5.00	0.00	12	32.7640	33.7742	0.7125	2.8500	A607-60 (60 ksi)

tnxTower Tower Engineering Engineering, Inc. 326 Tyron Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job 528 Wheelers Farm Rd (BU 876320)	Page 3 of 60
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	Client Crown Castle	Designed by mshakeri

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L31	59.25-56.00	3.25	0.00	12	33.7742	34.4309	0.7125	2.8500	A607-60 (60 ksi)
L32	56.00-55.75	0.25	0.00	12	34.4309	34.4814	0.8125	3.2500	A607-60 (60 ksi)
L33	55.75-55.50	0.25	0.00	12	34.4814	34.5319	0.8125	3.2500	A607-60 (60 ksi)
L34	55.50-55.25	0.25	0.00	12	34.5319	34.5824	0.8875	3.5500	A607-60 (60 ksi)
L35	55.25-54.00	1.25	0.00	12	34.5824	34.8349	0.8750	3.5000	A607-60 (60 ksi)
L36	54.00-53.75	0.25	0.00	12	34.8349	34.8854	0.7500	3.0000	A607-60 (60 ksi)
L37	53.75-53.50	0.25	0.00	12	34.8854	34.9360	0.7375	2.9500	A607-60 (60 ksi)
L38	53.50-53.25	0.25	0.00	12	34.9360	34.9865	0.6625	2.6500	A607-60 (60 ksi)
L39	53.25-53.00	0.25	0.00	12	34.9865	35.0370	0.6000	2.4000	A607-60 (60 ksi)
L40	53.00-48.00	5.00	0.00	12	35.0370	36.0472	0.5875	2.3500	A607-60 (60 ksi)
L41	48.00-39.75	8.25	4.75	12	36.0472	37.7140	0.5875	2.3500	A607-60 (60 ksi)
L42	39.75-38.75	5.75	0.00	12	36.1293	37.2910	0.6625	2.6500	A607-60 (60 ksi)
L43	38.75-34.75	4.00	0.00	12	37.2910	38.0992	0.6625	2.6500	A607-60 (60 ksi)
L44	34.75-34.50	0.25	0.00	12	38.0992	38.1497	0.8250	3.3000	A607-60 (60 ksi)
L45	34.50-33.75	0.75	0.00	12	38.1497	38.3012	0.8250	3.3000	A607-60 (60 ksi)
L46	33.75-33.50	0.25	0.00	12	38.3012	38.3517	0.6250	2.5000	A607-60 (60 ksi)
L47	33.50-28.50	5.00	0.00	12	38.3517	39.3619	0.6125	2.4500	A607-60 (60 ksi)
L48	28.50-24.00	4.50	0.00	12	39.3619	40.2711	0.6625	2.6500	A607-60 (60 ksi)
L49	24.00-23.75	0.25	0.00	12	40.2711	40.3216	0.7000	2.8000	A607-60 (60 ksi)
L50	23.75-18.75	5.00	0.00	12	40.3216	41.3318	0.6875	2.7500	A607-60 (60 ksi)
L51	18.75-14.25	4.50	0.00	12	41.3318	42.2410	0.6750	2.7000	A607-60 (60 ksi)
L52	14.25-14.00	0.25	0.00	12	42.2410	42.2915	0.7750	3.1000	A607-60 (60 ksi)
L53	14.00-9.00	5.00	0.00	12	42.2915	43.3017	0.7625	3.0500	A607-60 (60 ksi)
L54	9.00-5.00	4.00	0.00	12	43.3017	44.1098	0.7500	3.0000	A607-60 (60 ksi)
L55	5.00-4.75	0.25	0.00	12	44.1098	44.1603	0.9125	3.6500	A607-60 (60 ksi)
L56	4.75-4.50	0.25	0.00	12	44.1603	44.2108	0.8750	3.5000	A607-60 (60 ksi)
L57	4.50-0.00	4.50		12	44.2108	45.1200	0.8500	3.4000	A607-60 (60 ksi)

Tapered Pole Properties

<p>tnxTower</p> <p>Tower Engineering Engineering, Inc.</p> <p>326 Tyron Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</p>	<p>Job</p> <p>528 Wheelers Farm Rd (BU 876320)</p>	<p>Page</p> <p>4 of 60</p>
	<p>Project</p> <p>TEP No. 25570.318938</p>	<p>Date</p> <p>11:36:47 11/08/19</p>
	<p>Client</p> <p>Crown Castle</p>	<p>Designed by</p> <p>mshakeri</p>

Section	Tip Dia. in	Area in ²	I in ⁴	r in	C in	I/C in ³	J in ⁴	I/Q in ²	w in	w/t
L1	22.6879	17.5087	1057.2060	7.7865	11.3960	92.7699	2142.1860	8.6173	5.2260	20.904
	23.7338	18.3220	1211.4688	8.1482	11.9193	101.6392	2454.7642	9.0175	5.4967	21.987
L2	23.7338	18.3220	1211.4688	8.1482	11.9193	101.6392	2454.7642	9.0175	5.4967	21.987
	24.7796	19.1352	1380.0520	8.5098	12.4426	110.9134	2796.3596	9.4178	5.7675	23.07
L3	24.7796	19.1352	1380.0520	8.5098	12.4426	110.9134	2796.3596	9.4178	5.7675	23.07
	25.8255	19.9485	1563.5914	8.8715	12.9659	120.5925	3168.2601	9.8180	6.0382	24.153
L4	25.8255	19.9485	1563.5914	8.8715	12.9659	120.5925	3168.2601	9.8180	6.0382	24.153
	26.8714	20.7617	1762.7225	9.2332	13.4892	130.6765	3571.7537	10.2183	6.3090	25.236
L5	26.8714	20.7617	1762.7225	9.2332	13.4892	130.6765	3571.7537	10.2183	6.3090	25.236
	27.0283	20.8837	1793.9763	9.2874	13.5677	132.2240	3635.0824	10.2783	6.3496	25.398
L6	26.9886	30.1501	2567.5709	9.2471	13.5677	189.2413	5202.5948	14.8389	6.0481	16.684
	27.0409	30.2090	2582.6635	9.2652	13.5939	189.9873	5233.1764	14.8680	6.0616	16.722
L7	27.0431	29.6953	2539.9741	9.2675	13.5939	186.8470	5146.6761	14.6151	6.0784	17.062
	28.0890	30.8542	2849.0997	9.6291	14.1172	201.8179	5773.0484	15.1855	6.3491	17.822
L8	28.0912	30.3199	2801.0672	9.6314	14.1172	198.4155	5675.7215	14.9226	6.3659	18.188
	28.9111	31.2126	3055.8107	9.9149	14.5274	210.3474	6191.9009	15.3619	6.5781	18.795
L9	28.8538	45.4359	4396.2783	9.8567	14.5274	302.6188	8908.0517	22.3622	6.1426	11.986
	28.9061	45.5193	4420.5191	9.8748	14.5536	303.7403	8957.1702	22.4032	6.1562	12.012
L10	28.9061	45.5193	4420.5191	9.8748	14.5536	303.7403	8957.1702	22.4032	6.1562	12.012
	28.9751	45.6293	4452.6528	9.8987	14.5882	305.2240	9022.2818	22.4574	6.1740	12.047
L11	28.9002	64.0527	6154.7606	9.8226	14.5882	421.9014	12471.2135	31.5248	5.6045	7.73
	28.9525	64.1707	6188.8157	9.8407	14.6143	423.4763	12540.2184	31.5828	5.6181	7.749
L12	28.9613	62.0142	5991.7268	9.8496	14.6143	409.9902	12140.8629	30.5215	5.6851	8.122
	30.0072	64.2913	6676.2823	10.2113	15.1376	441.0391	13527.9580	31.6422	5.9558	8.508
L13	30.0072	64.2913	6676.2823	10.2113	15.1376	441.0391	13527.9580	31.6422	5.9558	8.508
	31.3145	67.1376	7602.8499	10.6634	15.7917	481.4445	15405.4352	33.0431	6.2942	8.992
L14	30.7395	78.7790	8090.7194	10.1550	15.1403	534.3840	16393.9909	38.7726	5.5217	6.402
	30.9487	81.4443	8940.0063	10.4985	15.6374	571.7070	18114.8765	40.0844	5.7789	6.7
L15	30.9487	81.4443	8940.0063	10.4985	15.6374	571.7070	18114.8765	40.0844	5.7789	6.7
	31.0010	81.5846	8986.2805	10.5166	15.6636	573.7063	18208.6405	40.1534	5.7924	6.716
L16	30.9657	90.7337	9926.1045	10.4808	15.6636	633.7070	20112.9788	44.6564	5.5244	5.74
	31.0180	90.8903	9977.5698	10.4989	15.6897	635.9304	20217.2615	44.7334	5.5380	5.754
L17	31.0180	90.8903	9977.5698	10.4989	15.6897	635.9304	20217.2615	44.7334	5.5380	5.754
	31.2271	91.5164	10185.2089	10.5712	15.7944	644.8630	20637.9945	45.0416	5.5921	5.81
L18	31.2977	72.9911	8233.8672	10.6428	15.7944	521.3164	16684.0473	35.9240	6.1281	8.037
	31.3500	73.1151	8275.9075	10.6609	15.8205	523.1116	16769.2324	35.9850	6.1416	8.055
L19	31.3500	73.1151	8275.9075	10.6609	15.8205	523.1116	16769.2324	35.9850	6.1416	8.055
	31.5069	73.4871	8402.8866	10.7152	15.8990	528.5156	17026.5265	36.1681	6.1823	8.108
L20	31.4804	80.5131	9160.1928	10.6883	15.8990	576.1478	18561.0341	39.6261	5.9813	7.142
	31.5327	80.6493	9206.7634	10.7064	15.9252	578.1256	18655.3987	39.6932	5.9948	7.158
L21	31.5371	79.4788	9080.7261	10.7109	15.9252	570.2112	18400.0129	39.1171	6.0283	7.307
	32.0077	80.6864	9500.9707	10.8736	16.1607	587.9068	19251.5424	39.7114	6.1501	7.455
L22	32.0298	74.7273	8835.5199	10.8960	16.1607	546.7297	17903.1588	36.7785	6.3176	8.285
	32.0821	74.8513	8879.5823	10.9141	16.1868	548.5680	17992.4411	36.8395	6.3312	8.303
L23	32.0821	74.8513	8879.5823	10.9141	16.1868	548.5680	17992.4411	36.8395	6.3312	8.303
	32.3435	75.4714	9102.0927	11.0045	16.3177	557.8063	18443.3075	37.1447	6.3988	8.392
L24	32.3347	77.8824	9377.6041	10.9955	16.3177	574.6905	19001.5683	38.3314	6.3318	8.04
	32.3870	78.0105	9423.9458	11.0136	16.3438	576.6059	19095.4691	38.3944	6.3454	8.058
L25	32.3870	78.0105	9423.9458	11.0136	16.3438	576.6059	19095.4691	38.3944	6.3454	8.058
	32.4393	78.1386	9470.4398	11.0317	16.3700	578.5246	19189.6786	38.4574	6.3589	8.075
L26	32.4613	72.0830	8771.9770	11.0541	16.3700	535.8573	17774.4036	35.4771	6.5264	9.002
	32.5136	72.2010	8815.0959	11.0722	16.3962	537.6320	17861.7741	35.5351	6.5400	9.021
L27	32.4607	86.7165	10484.8621	11.0185	16.3962	639.4709	21245.1731	42.6792	6.1380	7.015
	32.5130	86.8588	10536.5675	11.0365	16.4223	641.6006	21349.9424	42.7492	6.1515	7.03
L28	32.5571	74.7523	9141.6482	11.0813	16.4223	556.6601	18523.4576	36.7908	6.4865	8.649
	32.6094	74.8742	9186.4736	11.0994	16.4485	558.4998	18614.2861	36.8508	6.5000	8.667
L29	32.6138	73.6560	9044.2962	11.1038	16.4485	549.8560	18326.1962	36.2512	6.5335	8.859
	33.6596	76.0550	9957.1071	11.4655	16.9718	586.6867	20175.7986	37.4319	6.8043	9.226
L30	33.6685	73.5342	9642.1229	11.4744	16.9718	568.1273	19537.5551	36.1913	6.8713	9.644
	34.7143	75.8519	10582.8612	11.8361	17.4950	604.9061	21443.7459	37.3320	7.1420	10.024
L31	34.7143	75.8519	10582.8612	11.8361	17.4950	604.9061	21443.7459	37.3320	7.1420	10.024
	35.3941	77.3583	11226.0174	12.0712	17.8352	629.4311	22746.9548	38.0734	7.3180	10.271

<p style="text-align: center;">tnxTower</p> <p style="text-align: center;">Tower Engineering Engineering, Inc. 326 Tyron Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</p>	<p style="text-align: center;">Job</p> <p style="text-align: center;">528 Wheelers Farm Rd (BU 876320)</p>	<p style="text-align: center;">Page</p> <p style="text-align: center;">5 of 60</p>
	<p style="text-align: center;">Project</p> <p style="text-align: center;">TEP No. 25570.318938</p>	<p style="text-align: center;">Date</p> <p style="text-align: center;">11:36:47 11/08/19</p>
	<p style="text-align: center;">Client</p> <p style="text-align: center;">Crown Castle</p>	<p style="text-align: center;">Designed by</p> <p style="text-align: center;">mshakeri</p>

Section	Tip Dia. in	Area in ²	I in ⁴	r in	C in	I/C in ³	J in ⁴	I/Q in ²	w in	w/t
L32	35.3588	87.9540	12688.0375	12.0354	17.8352	711.4050	25709.4038	43.2883	7.0500	8.677
	35.4111	88.0862	12745.3130	12.0535	17.8613	713.5696	25825.4595	43.3533	7.0635	8.694
L33	35.4111	88.0862	12745.3130	12.0535	17.8613	713.5696	25825.4595	43.3533	7.0635	8.694
	35.4634	88.2183	12802.7606	12.0715	17.8875	715.7375	25941.8640	43.4184	7.0770	8.71
L34	35.4369	96.1472	13891.4462	12.0447	17.8875	776.6003	28147.8362	47.3207	6.8760	7.748
	35.4892	96.2915	13954.1055	12.0628	17.9137	778.9639	28274.8009	47.3918	6.8896	7.763
L35	35.4936	94.9705	13772.8857	12.0672	17.9137	768.8476	27907.6005	46.7416	6.9231	7.912
	35.7551	95.6821	14084.7866	12.1577	18.0445	780.5587	28539.5963	47.0918	6.9908	7.989
L36	35.7992	82.3151	12206.4772	12.2024	18.0445	676.4655	24733.6321	40.5130	7.3258	9.768
	35.8515	82.4371	12260.8235	12.2205	18.0707	678.4935	24843.7524	40.5730	7.3393	9.786
L37	35.8559	81.0928	12069.7261	12.2250	18.0707	667.9184	24456.5373	39.9114	7.3728	9.997
	35.9082	81.2128	12123.3642	12.2430	18.0968	669.9167	24565.2227	39.9705	7.3863	10.015
L38	35.9347	73.1138	10962.2881	12.2699	18.0968	605.7576	22212.5677	35.9844	7.5873	11.453
	35.9869	73.2216	11010.8261	12.2880	18.1230	607.5613	22310.9189	36.0374	7.6009	11.473
L39	36.0090	66.4346	10026.6422	12.3104	18.1230	553.2555	20316.6954	32.6971	7.7684	12.947
	36.0613	66.5322	10070.8913	12.3284	18.1492	554.8960	20406.3561	32.7451	7.7819	12.97
L40	36.0657	65.1698	9871.8231	12.3329	18.1492	543.9275	20002.9900	32.0746	7.8154	13.303
	37.1115	67.0808	10765.9857	12.6946	18.6724	576.5711	21814.8058	33.0151	8.0861	13.764
L41	37.1115	67.0808	10765.9857	12.6946	18.6724	576.5711	21814.8058	33.0151	8.0861	13.764
	38.8372	70.2341	12356.6777	13.2913	19.5359	632.5129	25037.9792	34.5671	8.5329	14.524
L42	38.1636	75.6596	12147.7009	12.6971	18.7150	649.0896	24614.5354	37.2373	7.9072	11.935
	38.3728	78.1378	13380.9250	13.1130	19.3168	692.7109	27113.3819	38.4571	8.2185	12.405
L43	38.3728	78.1378	13380.9250	13.1130	19.3168	692.7109	27113.3819	38.4571	8.2185	12.405
	39.2095	79.8618	14286.2985	13.4023	19.7354	723.8929	28947.9140	39.3055	8.4351	12.732
L44	39.1521	99.0189	17559.8216	13.3442	19.7354	889.7637	35580.9593	48.7341	7.9996	9.696
	39.2044	99.1530	17631.3026	13.3622	19.7615	892.2029	35725.7991	48.8001	8.0131	9.713
L45	39.2044	99.1530	17631.3026	13.3622	19.7615	892.2029	35725.7991	48.8001	8.0131	9.713
	39.3613	99.5556	17846.9117	13.4165	19.8400	899.5405	36162.6816	48.9982	8.0537	9.762
L46	39.4319	75.8234	13078.0084	13.4881	19.8400	692.4388	27836.9296	37.3180	8.5897	13.744
	39.4842	75.9250	13793.3343	13.5062	19.8662	694.3118	27949.0348	37.3680	8.6033	13.765
L47	39.4886	74.4312	13530.9083	13.5106	19.8662	681.1022	27417.2886	36.6328	8.6368	14.101
	40.5344	76.4235	14646.8241	13.8723	20.3895	718.3522	29678.4366	37.6133	8.9075	14.543
L48	40.5168	82.5555	15781.2357	13.8544	20.3895	773.9894	31977.0620	40.6313	8.7735	13.243
	41.4580	84.4950	16919.8231	14.1799	20.8604	811.0968	34284.1489	41.5859	9.0172	13.611
L49	41.4448	89.1932	17826.8196	14.1664	20.8604	854.5761	36121.9695	43.8982	8.9167	12.738
	41.4971	89.3071	17895.1698	14.1845	20.8866	856.7780	36260.4657	43.9542	8.9302	12.757
L50	41.5015	87.7400	17592.2530	14.1890	20.8866	842.2751	35646.6740	43.1830	8.9637	13.038
	42.5473	89.9763	18971.9986	14.5507	21.4099	886.1335	38442.4128	44.2836	9.2344	13.432
L51	42.5517	88.3675	18644.2445	14.5551	21.4099	870.8249	37778.2941	43.4918	9.2679	13.73
	43.4929	90.3436	19923.1961	14.8806	21.8808	910.5326	40369.7967	44.4644	9.5116	14.091
L52	43.4577	103.4783	22710.0801	14.8448	21.8808	1037.8991	46016.7793	50.9289	9.2436	11.927
	43.5100	103.6043	22793.1696	14.8629	21.9070	1040.4524	46185.1411	50.9909	9.2571	11.945
L53	43.5144	101.9640	22445.7999	14.8674	21.9070	1024.5958	45481.2759	50.1836	9.2906	12.184
	44.5602	104.4443	24123.9455	15.2290	22.4303	1075.5090	48881.6539	51.4043	9.5613	12.539
L54	44.5646	102.7623	23749.3947	15.2335	22.4303	1058.8106	48122.7125	50.5765	9.5948	12.793
	45.4013	104.7139	25128.4208	15.5228	22.8489	1099.7659	50916.9933	51.5370	9.8114	13.082
L55	45.3439	126.9245	30230.4634	15.4646	22.8489	1323.0610	61255.1147	62.4684	9.3759	10.275
	45.3962	127.0729	30336.6316	15.4827	22.8750	1326.1889	61470.2403	62.5414	9.3895	10.29
L56	45.4095	121.9564	29165.6576	15.4961	22.8750	1274.9989	59097.5294	60.0232	9.4900	10.846
	45.4618	122.0987	29267.8757	15.5142	22.9012	1278.0057	59304.6510	60.0933	9.5035	10.861
L57	45.4706	118.6786	28480.8848	15.5232	22.9012	1243.6411	57709.9942	58.4100	9.5705	11.259
	46.4118	121.1670	30310.2357	15.8487	23.3722	1296.8521	61416.7550	59.6347	9.8142	11.546

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor A _f	Adjust. Factor A _r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals	Double Angle Stitch Bolt Spacing Horizontals	Double Angle Stitch Bolt Spacing Redundants
ft	ft ²	in					in	in	in
L1				1	1	1			
120.00-115.00									
L2				1	1	1			

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Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
ft	ft ²	in							
L34				1	1	0.978222			
55.50-55.25									
L35				1	1	0.987109			
55.25-54.00									
L36				1	1	1.03699			
54.00-53.75									
L37				1	1	1.05325			
53.75-53.50									
L38				1	1	1.10735			
53.50-53.25									
L39				1	1	1.09715			
53.25-53.00									
L40				1	1	1.10333			
53.00-48.00									
L41				1	1	1.09216			
48.00-39.75									
L42				1	1	0.976499			
39.75-38.75									
L43				1	1	0.967639			
38.75-34.75									
L44				1	1	0.981987			
34.75-34.50									
L45				1	1	0.979855			
34.50-33.75									
L46				1	1	1.02183			
33.75-33.50									
L47				1	1	1.03112			
33.50-28.50									
L48				1	1	0.945617			
28.50-24.00									
L49				1	1	0.949621			
24.00-23.75									
L50				1	1	0.956115			
23.75-18.75									
L51				1	1	0.964379			
18.75-14.25									
L52				1	1	0.954431			
14.25-14.00									
L53 14.00-9.00				1	1	0.958435			
L54 9.00-5.00				1	1	0.965286			
L55 5.00-4.75				1	1	0.899355			
L56 4.75-4.50				1	1	0.895485			
L57 4.50-0.00				1	1	0.911431			

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight plf
Miscl										
Safety Line 3/8	C	No	Surface Ar (CaAa)	120.00 - 0.00	1	1	0.500 0.500	0.3750		0.22
3" Flexible Conduit	B	No	Surface Ar (CaAa)	120.00 - 0.00	2	2	0.500 0.500	3.0000		1.04

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Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight plf
HB114-1-0813U4-M5J(1-1/4) *113*	B	No	Surface Ar (CaAa)	120.00 - 0.00	4	4	0.500 0.500	1.5400		1.20
LDF7-50A(1-5/8) *105*	A	No	Surface Ar (CaAa)	113.00 - 0.00	8	6	0.000 0.000	1.9800		0.82
LDF7-50A(1-5/8) *Existing Mods* *Mod 1613579*	B	No	Surface Ar (CaAa)	105.00 - 0.00	7	6	0.000 0.000	1.9800		0.82
C6x10.5	A	No	Surface Af (CaAa)	56.00 - 8.00	1	1	0.000 0.000	6.0000	16.0600	10.50
C6x10.5	B	No	Surface Af (CaAa)	56.00 - 8.00	1	1	0.000 0.000	6.0000	16.0600	10.50
C6x10.5	B	No	Surface Af (CaAa)	56.00 - 0.00	1	1	0.500 0.500	6.0000	16.0600	10.50
C6x10.5	C	No	Surface Af (CaAa)	56.00 - 0.00	1	1	0.500 0.500	6.0000	16.0600	10.50
Mod 2460630 (Area) Aero MP3-04	A	No	Surface Af (CaAa)	8.00 - 0.00	1	1	0.000 0.000	4.7800	12.7800	0.00
(Area) Aero MP3-04	A	No	Surface Af (CaAa)	25.50 - 8.00	1	1	0.000 0.000	4.7800	9.5600	0.00
(Area) Aero MP3-04	A	No	Surface Af (CaAa)	25.50 - 0.00	1	1	0.500 0.500	4.7800	12.7800	0.00
(Area) Aero MP3-04	B	No	Surface Af (CaAa)	25.50 - 0.00	1	1	0.500 0.500	4.7800	9.5600	0.00
(Area) Aero MP3-04	C	No	Surface Af (CaAa)	25.50 - 0.00	1	1	0.000 0.000	4.7800	12.7800	0.00
Mod 3338935 PL 1 x 5	A	No	Surface Af (CaAa)	37.00 - 2.50	1	1	0.500 0.500	5.0000	10.0000	0.00
PL 1 x 5	B	No	Surface Af (CaAa)	37.00 - 2.50	1	1	0.000 0.000	5.0000	10.0000	0.00
PL 1 x 5	C	No	Surface Af (CaAa)	37.00 - 2.50	1	1	0.000 0.000	5.0000	10.0000	0.00
PL 1 x 5	C	No	Surface Af (CaAa)	37.00 - 2.50	1	1	0.500 0.500	5.0000	10.0000	0.00
* PL 1 x 5	A	No	Surface Af (CaAa)	45.50 - 31.50	1	1	0.500 0.500	5.0000	10.0000	0.00
PL 1 x 5	A	No	Surface Af (CaAa)	68.25 - 45.50	1	1	0.500 0.500	5.0000	12.0000	0.00
PL 1 x 5	A	No	Surface Af (CaAa)	72.00 - 68.25	1	1	0.500 0.500	5.0000	10.0000	0.00
PL 1 x 5	B	No	Surface Af (CaAa)	56.00 - 31.50	1	1	0.000 0.000	5.0000	10.0000	0.00
PL 1 x 5	B	No	Surface Af (CaAa)	68.25 - 56.00	1	1	0.000 0.000	5.0000	12.0000	0.00
PL 1 x 5	B	No	Surface Af (CaAa)	72.00 - 68.25	1	1	0.000 0.000	5.0000	10.0000	0.00
PL 1 x 5	C	No	Surface Af (CaAa)	45.50 - 31.50	1	1	0.000 0.000	5.0000	10.0000	0.00
PL 1 x 5	C	No	Surface Af (CaAa)	50.50 - 45.50	1	1	0.000 0.000	5.0000	12.0000	0.00
PL 1 x 5	C	No	Surface Af (CaAa)	72.00 - 50.50	1	1	0.000 0.000	5.0000	10.0000	0.00
PL 1 x 5	C	No	Surface Af (CaAa)	56.00 - 31.50	1	1	0.500 0.500	5.0000	10.0000	0.00
PL 1 x 5	C	No	Surface Af (CaAa)	72.00 -	1	1	0.500	5.0000	12.0000	0.00

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Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight plf
			(CaAa)	56.00			0.500			
Mod 3349207										
(Area) Aero MP3-03	A	No	Surface Af (CaAa)	15.50 - 0.00	1	1	0.500 0.500	4.0600	8.1200	0.00
(Area) Aero MP3-03	B	No	Surface Af (CaAa)	8.00 - 0.00	1	1	0.000 0.000	4.0600	11.2576	0.00
(Area) Aero MP3-03	B	No	Surface Af (CaAa)	15.50 - 8.00	1	1	0.000 0.000	4.0600	8.1200	0.00
(Area) Aero MP3-03	C	No	Surface Af (CaAa)	15.50 - 0.00	1	1	0.000 0.000	4.0600	8.1200	0.00
(Area) Aero MP3-03	C	No	Surface Af (CaAa)	15.50 - 0.00	1	1	0.500 0.500	4.0600	8.1200	0.00
*										
(Area) Aero MP3-03	A	No	Surface Af (CaAa)	45.50 - 25.50	1	1	0.000 0.000	4.0600	8.1200	0.00
(Area) Aero MP3-03	A	No	Surface Af (CaAa)	45.50 - 25.50	1	1	0.500 0.500	4.0600	11.2576	0.00
(Area) Aero MP3-03	B	No	Surface Af (CaAa)	45.50 - 25.50	1	1	0.500 0.500	4.0600	8.1200	0.00
(Area) Aero MP3-03	C	No	Surface Af (CaAa)	45.50 - 25.50	1	1	0.000 0.000	4.0600	11.2576	0.00
*										
Mod 4961357										
(Area) CCI-65FP-045100	A	No	Surface Af (CaAa)	56.00 - 52.00	1	1	0.000 0.000	4.5000	9.0000	0.00
(Area) CCI-65FP-045100	A	No	Surface Af (CaAa)	68.25 - 56.00	1	1	0.000 0.000	4.5000	11.0000	0.00
(Area) CCI-65FP-045100	A	No	Surface Af (CaAa)	72.00 - 68.25	1	1	0.000 0.000	4.5000	9.0000	0.00
(Area) CCI-65FP-045100	A	No	Surface Af (CaAa)	72.00 - 52.00	1	1	0.500 0.500	4.5000	9.0000	0.00
(Area) CCI-65FP-045100	B	No	Surface Af (CaAa)	56.00 - 52.00	1	1	0.500 0.500	4.5000	9.0000	0.00
(Area) CCI-65FP-045100	B	No	Surface Af (CaAa)	68.25 - 56.00	1	1	0.500 0.500	4.5000	11.0000	0.00
(Area) CCI-65FP-045100	B	No	Surface Af (CaAa)	72.00 - 68.25	1	1	0.500 0.500	4.5000	9.0000	0.00
*										
(Area) CCI-65FP-060100 (H)	A	No	Surface Af (CaAa)	80.00 - 67.00	1	1	0.000 0.000	6.0000	12.0000	0.00
(Area) CCI-65FP-060100 (H)	A	No	Surface Af (CaAa)	92.00 - 80.00	1	1	0.000 0.000	6.0000	14.0000	0.00
(Area) CCI-65FP-060100 (H)	C	No	Surface Af (CaAa)	72.00 - 67.00	1	1	0.500 0.500	6.0000	12.0000	0.00
(Area) CCI-65FP-060100 (H)	C	No	Surface Af (CaAa)	74.00 - 72.00	1	1	0.500 0.500	6.0000	14.0000	0.00
(Area) CCI-65FP-060100 (H)	C	No	Surface Af (CaAa)	92.00 - 74.00	1	1	0.500 0.500	6.0000	12.0000	0.00
*										
(Area) CCI-65FP-045100	A	No	Surface Af (CaAa)	78.25 - 72.00	1	1	0.500 0.500	4.5000	9.0000	0.00
(Area) CCI-65FP-045100	A	No	Surface Af (CaAa)	92.08 - 78.25	1	1	0.500 0.500	4.5000	11.0000	0.00
(Area) CCI-65FP-045100	B	No	Surface Af (CaAa)	80.00 - 72.00	1	1	0.500 0.500	4.5000	9.0000	0.00
(Area) CCI-65FP-045100	B	No	Surface Af (CaAa)	92.08 - 80.00	1	1	0.500 0.500	4.5000	11.0000	0.00
PMI 5760332										
(Area) CCI-65FP-065125	C	No	Surface Af (CaAa)	74.75 - 50.50	1	1	0.000 0.000	6.5000	13.0000	0.00

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Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight plf
Mod 5873963										
(Area) CCI-65FP-045100	A	No	Surface Af (CaAa)	57.50 - 42.50	1	1	0.500 0.500	4.5000	9.0000	0.00
(Area) CCI-65FP-045100	B	No	Surface Af (CaAa)	57.50 - 42.50	1	1	0.000 0.000	4.5000	9.0000	0.00
(Area) CCI-65FP-045100	C	No	Surface Af (CaAa)	57.50 - 42.50	1	1	0.000 0.000	4.5000	9.0000	0.00
(Area) CCI-65FP-045100	C	No	Surface Af (CaAa)	57.25 - 42.25	1	1	0.500 0.500	4.5000	9.0000	0.00
*										
PL 1.25x4	A	No	Surface Af (CaAa)	80.00 - 68.25	1	1	0.000 0.000	4.0000	10.5000	0.00
PL 1.25x4	A	No	Surface Af (CaAa)	78.25 - 68.25	1	1	0.500 0.500	4.0000	10.5000	0.00
PL 1.25x4	B	No	Surface Af (CaAa)	80.00 - 68.25	1	1	0.000 0.000	4.0000	10.5000	0.00
PL 1.25x4	B	No	Surface Af (CaAa)	80.00 - 68.25	1	1	0.500 0.500	4.0000	10.5000	0.00
*										
PL 1.25x4	B	No	Surface Af (CaAa)	80.00 - 74.00	1	1	0.000 0.000	4.0000	8.0000	0.00
PL 1.25x4	B	No	Surface Af (CaAa)	100.75 - 80.00	1	1	0.000 0.000	4.0000	10.5000	0.00
PL 1.25x4	C	No	Surface Af (CaAa)	74.75 - 73.00	1	1	0.000 0.000	4.0000	8.0000	0.00
PL 1.25x4	C	No	Surface Af (CaAa)	100.75 - 74.75	1	1	0.000 0.000	4.0000	10.5000	0.00
PL 1.25x4	C	No	Surface Af (CaAa)	100.75 - 74.00	1	1	0.500 0.500	4.0000	10.5000	0.00
*										

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number		C _A A _A ft ² /ft	Weight plf
122									
1266A(1/8)	B	No	No	CaAa (Out Of Face)	120.00 - 0.00	1	No Ice	0.00	0.01
							1/2" Ice	0.00	0.41
							1" Ice	0.00	1.41
							2" Ice	0.00	5.25
7983A(ELLIPTICAL)	B	No	No	CaAa (Out Of Face)	120.00 - 0.00	3	No Ice	0.00	0.08
							1/2" Ice	0.00	0.74
							1" Ice	0.00	2.01
							2" Ice	0.00	6.37
9207(5/16)	B	No	No	Inside Pole	120.00 - 0.00	6	No Ice	0.00	0.06
							1/2" Ice	0.00	0.06
							1" Ice	0.00	0.06
							2" Ice	0.00	0.06
HCS 6X12 6AWG(1-3/8)	B	No	No	CaAa (Out Of Face)	105.00 - 0.00	2	No Ice	0.00	1.70
							1/2" Ice	0.00	2.85
							1" Ice	0.00	4.61
							2" Ice	0.00	9.96
96									
LDF6-50A(1 1/4")	C	No	No	Inside Pole	96.00 - 0.00	12	No Ice	0.00	0.66
							1/2" Ice	0.00	0.66

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Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number		C _{AA} ft ² /ft	Weight plf
FB-L98B-034-XXX(3/8)	C	No	No	Inside Pole	96.00 - 0.00	3	1" Ice	0.00	0.66
							2" Ice	0.00	0.66
							No Ice	0.00	0.06
							1/2" Ice	0.00	0.06
							1" Ice	0.00	0.06
WR-VG86ST-BRD(3/4)	C	No	No	Inside Pole	96.00 - 0.00	6	2" Ice	0.00	0.06
							No Ice	0.00	0.58
							1/2" Ice	0.00	0.58
							1" Ice	0.00	0.58
							2" Ice	0.00	0.58
2" Flexible Conduit	C	No	No	Inside Pole	96.00 - 0.00	2	No Ice	0.00	0.34
							1/2" Ice	0.00	0.34
							1" Ice	0.00	0.34
							2" Ice	0.00	0.34
82 LDF5-50A(7/8)	C	No	No	Inside Pole	82.00 - 0.00	12	No Ice	0.00	0.33
							1/2" Ice	0.00	0.33
							1" Ice	0.00	0.33
							2" Ice	0.00	0.33
75 LDF4-50A(1/2)	C	No	No	Inside Pole	75.00 - 0.00	1	No Ice	0.00	0.15
							1/2" Ice	0.00	0.15
							1" Ice	0.00	0.15
							2" Ice	0.00	0.15
Existing Mods									
*									

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A _R ft ²	A _F ft ²	C _{AA} In Face ft ²	C _{AA} Out Face ft ²	Weight K
L1	120.00-115.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	6.080	0.000	0.04
		C	0.000	0.000	0.188	0.000	0.00
L2	115.00-110.00	A	0.000	0.000	3.564	0.000	0.02
		B	0.000	0.000	6.080	0.000	0.04
		C	0.000	0.000	0.188	0.000	0.00
L3	110.00-105.00	A	0.000	0.000	5.940	0.000	0.03
		B	0.000	0.000	6.080	0.000	0.04
		C	0.000	0.000	0.188	0.000	0.00
L4	105.00-100.00	A	0.000	0.000	5.940	0.000	0.03
		B	0.000	0.000	12.520	0.000	0.08
		C	0.000	0.000	1.188	0.000	0.00
L5	100.00-99.25	A	0.000	0.000	0.891	0.000	0.00
		B	0.000	0.000	2.303	0.000	0.01
		C	0.000	0.000	1.028	0.000	0.00
L6	99.25-99.00	A	0.000	0.000	0.297	0.000	0.00
		B	0.000	0.000	0.768	0.000	0.00
		C	0.000	0.000	0.343	0.000	0.00
L7	99.00-94.00	A	0.000	0.000	5.940	0.000	0.03
		B	0.000	0.000	15.353	0.000	0.08
		C	0.000	0.000	6.854	0.000	0.03
L8	94.00-90.08	A	0.000	0.000	8.035	0.000	0.03

tnxTower Tower Engineering Engineering, Inc. 326 Tyron Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	528 Wheelers Farm Rd (BU 876320)	Page	12 of 60
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	Client	Crown Castle	Designed by	mshakeri

Tower Section	Tower Elevation ft	Face	A _R ft ²	A _F ft ²	C _{AA} In Face ft ²	C _{AA} Out Face ft ²	Weight K
		B	0.000	0.000	13.537	0.000	0.07
		C	0.000	0.000	7.294	0.000	0.05
L9	90.08-89.83	A	0.000	0.000	0.729	0.000	0.00
		B	0.000	0.000	0.955	0.000	0.00
		C	0.000	0.000	0.593	0.000	0.00
L10	89.83-89.50	A	0.000	0.000	0.962	0.000	0.00
		B	0.000	0.000	1.261	0.000	0.01
		C	0.000	0.000	0.782	0.000	0.00
L11	89.50-89.25	A	0.000	0.000	0.729	0.000	0.00
		B	0.000	0.000	0.955	0.000	0.00
		C	0.000	0.000	0.593	0.000	0.00
L12	89.25-84.25	A	0.000	0.000	14.579	0.000	0.03
		B	0.000	0.000	19.103	0.000	0.08
		C	0.000	0.000	11.854	0.000	0.06
L13	84.25-78.00	A	0.000	0.000	19.742	0.000	0.04
		B	0.000	0.000	26.299	0.000	0.10
		C	0.000	0.000	14.818	0.000	0.09
L14	78.00-77.00	A	0.000	0.000	4.167	0.000	0.01
		B	0.000	0.000	5.030	0.000	0.02
		C	0.000	0.000	2.371	0.000	0.02
L15	77.00-76.75	A	0.000	0.000	1.042	0.000	0.00
		B	0.000	0.000	1.258	0.000	0.00
		C	0.000	0.000	0.593	0.000	0.00
L16	76.75-76.50	A	0.000	0.000	1.042	0.000	0.00
		B	0.000	0.000	1.258	0.000	0.00
		C	0.000	0.000	0.593	0.000	0.00
L17	76.50-75.50	A	0.000	0.000	4.167	0.000	0.01
		B	0.000	0.000	5.030	0.000	0.02
		C	0.000	0.000	2.371	0.000	0.02
L18	75.50-75.25	A	0.000	0.000	1.042	0.000	0.00
		B	0.000	0.000	1.258	0.000	0.00
		C	0.000	0.000	0.593	0.000	0.00
L19	75.25-74.50	A	0.000	0.000	3.125	0.000	0.00
		B	0.000	0.000	3.773	0.000	0.01
		C	0.000	0.000	1.992	0.000	0.01
L20	74.50-74.25	A	0.000	0.000	1.042	0.000	0.00
		B	0.000	0.000	1.258	0.000	0.00
		C	0.000	0.000	0.807	0.000	0.00
L21	74.25-72.00	A	0.000	0.000	9.376	0.000	0.01
		B	0.000	0.000	10.141	0.000	0.04
		C	0.000	0.000	4.754	0.000	0.04
L22	72.00-71.75	A	0.000	0.000	1.361	0.000	0.00
		B	0.000	0.000	1.228	0.000	0.00
		C	0.000	0.000	0.884	0.000	0.00
L23	71.75-70.50	A	0.000	0.000	6.806	0.000	0.01
		B	0.000	0.000	6.139	0.000	0.02
		C	0.000	0.000	4.422	0.000	0.02
L24	70.50-70.25	A	0.000	0.000	1.361	0.000	0.00
		B	0.000	0.000	1.228	0.000	0.00
		C	0.000	0.000	0.884	0.000	0.00
L25	70.25-70.00	A	0.000	0.000	1.361	0.000	0.00
		B	0.000	0.000	1.228	0.000	0.00
		C	0.000	0.000	0.884	0.000	0.00
L26	70.00-69.75	A	0.000	0.000	1.361	0.000	0.00
		B	0.000	0.000	1.228	0.000	0.00
		C	0.000	0.000	0.884	0.000	0.00
L27	69.75-69.50	A	0.000	0.000	1.361	0.000	0.00
		B	0.000	0.000	1.228	0.000	0.00
		C	0.000	0.000	0.884	0.000	0.00
L28	69.50-69.25	A	0.000	0.000	1.361	0.000	0.00
		B	0.000	0.000	1.228	0.000	0.00

<p>tnxTower</p> <p>Tower Engineering Engineering, Inc. 326 Tyron Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</p>	<p>Job</p> <p>528 Wheelers Farm Rd (BU 876320)</p>	<p>Page</p> <p>13 of 60</p>
	<p>Project</p> <p>TEP No. 25570.318938</p>	<p>Date</p> <p>11:36:47 11/08/19</p>
	<p>Client</p> <p>Crown Castle</p>	<p>Designed by</p> <p>mshakeri</p>

Tower Section	Tower Elevation ft	Face	A _R ft ²	A _F ft ²	C _{AA} In Face ft ²	C _{AA} Out Face ft ²	Weight K
L29	69.25-64.25	C	0.000	0.000	0.884	0.000	0.00
		A	0.000	0.000	20.780	0.000	0.03
		B	0.000	0.000	20.860	0.000	0.08
L30	64.25-59.25	C	0.000	0.000	15.625	0.000	0.08
		A	0.000	0.000	17.607	0.000	0.03
		B	0.000	0.000	19.937	0.000	0.08
L31	59.25-56.00	C	0.000	0.000	13.938	0.000	0.08
		A	0.000	0.000	12.569	0.000	0.02
		B	0.000	0.000	14.084	0.000	0.05
L32	56.00-55.75	C	0.000	0.000	11.122	0.000	0.05
		A	0.000	0.000	1.273	0.000	0.00
		B	0.000	0.000	1.640	0.000	0.01
L33	55.75-55.50	C	0.000	0.000	1.322	0.000	0.01
		A	0.000	0.000	1.273	0.000	0.00
		B	0.000	0.000	1.640	0.000	0.01
L34	55.50-55.25	C	0.000	0.000	1.322	0.000	0.01
		A	0.000	0.000	1.273	0.000	0.00
		B	0.000	0.000	1.640	0.000	0.01
L35	55.25-54.00	C	0.000	0.000	1.322	0.000	0.01
		A	0.000	0.000	6.365	0.000	0.02
		B	0.000	0.000	8.198	0.000	0.05
L36	54.00-53.75	C	0.000	0.000	6.609	0.000	0.03
		A	0.000	0.000	1.273	0.000	0.00
		B	0.000	0.000	1.640	0.000	0.01
L37	53.75-53.50	C	0.000	0.000	1.322	0.000	0.01
		A	0.000	0.000	1.273	0.000	0.00
		B	0.000	0.000	1.640	0.000	0.01
L38	53.50-53.25	C	0.000	0.000	1.322	0.000	0.01
		A	0.000	0.000	1.273	0.000	0.00
		B	0.000	0.000	1.640	0.000	0.01
L39	53.25-53.00	C	0.000	0.000	1.322	0.000	0.01
		A	0.000	0.000	1.273	0.000	0.00
		B	0.000	0.000	1.640	0.000	0.01
L40	53.00-48.00	C	0.000	0.000	1.322	0.000	0.01
		A	0.000	0.000	20.177	0.000	0.09
		B	0.000	0.000	30.508	0.000	0.19
L41	48.00-39.75	C	0.000	0.000	23.270	0.000	0.14
		A	0.000	0.000	36.833	0.000	0.14
		B	0.000	0.000	51.224	0.000	0.31
L42	39.75-38.75	C	0.000	0.000	34.178	0.000	0.22
		A	0.000	0.000	4.375	0.000	0.02
		B	0.000	0.000	5.914	0.000	0.04
L43	38.75-34.75	C	0.000	0.000	3.381	0.000	0.03
		A	0.000	0.000	19.374	0.000	0.07
		B	0.000	0.000	25.531	0.000	0.15
L44	34.75-34.50	C	0.000	0.000	17.273	0.000	0.11
		A	0.000	0.000	1.302	0.000	0.00
		B	0.000	0.000	1.687	0.000	0.01
L45	34.50-33.75	C	0.000	0.000	1.262	0.000	0.01
		A	0.000	0.000	3.906	0.000	0.01
		B	0.000	0.000	5.061	0.000	0.03
L46	33.75-33.50	C	0.000	0.000	3.786	0.000	0.02
		A	0.000	0.000	1.302	0.000	0.00
		B	0.000	0.000	1.687	0.000	0.01
L47	33.50-28.50	C	0.000	0.000	1.262	0.000	0.01
		A	0.000	0.000	23.540	0.000	0.09
		B	0.000	0.000	31.237	0.000	0.19
L48	28.50-24.00	C	0.000	0.000	20.238	0.000	0.14
		A	0.000	0.000	20.046	0.000	0.08
		B	0.000	0.000	26.793	0.000	0.17
		C	0.000	0.000	15.394	0.000	0.12

tnxTower Tower Engineering Engineering, Inc. 326 Tyron Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	528 Wheelers Farm Rd (BU 876320)	Page	14 of 60
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	Client	Crown Castle	Designed by	mshakeri

Tower Section	Tower Elevation ft	Face	A _R ft ²	A _F ft ²	C _{AA} In Face ft ²	C _{AA} Out Face ft ²	Weight K
L49	24.00-23.75	A	0.000	0.000	1.154	0.000	0.00
		B	0.000	0.000	1.509	0.000	0.01
		C	0.000	0.000	0.875	0.000	0.01
L50	23.75-18.75	A	0.000	0.000	23.073	0.000	0.09
		B	0.000	0.000	30.170	0.000	0.19
		C	0.000	0.000	17.504	0.000	0.14
L51	18.75-14.25	A	0.000	0.000	21.612	0.000	0.08
		B	0.000	0.000	27.959	0.000	0.17
		C	0.000	0.000	17.445	0.000	0.12
L52	14.25-14.00	A	0.000	0.000	1.323	0.000	0.00
		B	0.000	0.000	1.670	0.000	0.01
		C	0.000	0.000	1.214	0.000	0.01
L53	14.00-9.00	A	0.000	0.000	26.457	0.000	0.09
		B	0.000	0.000	33.394	0.000	0.19
		C	0.000	0.000	24.271	0.000	0.14
L54	9.00-5.00	A	0.000	0.000	17.928	0.000	0.04
		B	0.000	0.000	23.711	0.000	0.12
		C	0.000	0.000	19.417	0.000	0.11
L55	5.00-4.75	A	0.000	0.000	1.053	0.000	0.00
		B	0.000	0.000	1.419	0.000	0.01
		C	0.000	0.000	1.214	0.000	0.01
L56	4.75-4.50	A	0.000	0.000	1.053	0.000	0.00
		B	0.000	0.000	1.419	0.000	0.01
		C	0.000	0.000	1.214	0.000	0.01
L57	4.50-0.00	A	0.000	0.000	16.871	0.000	0.03
		B	0.000	0.000	23.465	0.000	0.12
		C	0.000	0.000	17.677	0.000	0.12

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A _R ft ²	A _F ft ²	C _{AA} In Face ft ²	C _{AA} Out Face ft ²	Weight K
L1	120.00-115.00	A	1.448	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	11.219	0.000	0.23
		C		0.000	0.000	1.635	0.000	0.02
L2	115.00-110.00	A	1.441	0.000	0.000	5.536	0.000	0.08
		B		0.000	0.000	11.203	0.000	0.23
		C		0.000	0.000	1.629	0.000	0.02
L3	110.00-105.00	A	1.435	0.000	0.000	9.219	0.000	0.14
		B		0.000	0.000	11.187	0.000	0.22
		C		0.000	0.000	1.622	0.000	0.02
L4	105.00-100.00	A	1.428	0.000	0.000	9.210	0.000	0.14
		B		0.000	0.000	21.094	0.000	0.43
		C		0.000	0.000	3.044	0.000	0.03
L5	100.00-99.25	A	1.424	0.000	0.000	1.381	0.000	0.02
		B		0.000	0.000	3.768	0.000	0.07
		C		0.000	0.000	1.669	0.000	0.02
L6	99.25-99.00	A	1.423	0.000	0.000	0.460	0.000	0.01
		B		0.000	0.000	1.256	0.000	0.02
		C		0.000	0.000	0.556	0.000	0.01
L7	99.00-94.00	A	1.419	0.000	0.000	9.199	0.000	0.14
		B		0.000	0.000	25.100	0.000	0.47
		C		0.000	0.000	11.112	0.000	0.13
L8	94.00-90.08	A	1.413	0.000	0.000	11.410	0.000	0.15
		B		0.000	0.000	21.606	0.000	0.38
		C		0.000	0.000	11.157	0.000	0.15
L9	90.08-89.83	A	1.409	0.000	0.000	0.996	0.000	0.01

<p>tnxTower</p> <p>Tower Engineering Engineering, Inc. 326 Tyron Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</p>	Job	528 Wheelers Farm Rd (BU 876320)	Page	15 of 60
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	Client	Crown Castle	Designed by	mshakeri

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_{AA} In Face ft^2	C_{AA} Out Face ft^2	Weight K
		B		0.000	0.000	1.497	0.000	0.03
		C		0.000	0.000	0.874	0.000	0.01
L10	89.83-89.50	A	1.409	0.000	0.000	1.314	0.000	0.02
		B		0.000	0.000	1.975	0.000	0.03
		C		0.000	0.000	1.154	0.000	0.01
L11	89.50-89.25	A	1.409	0.000	0.000	0.996	0.000	0.01
		B		0.000	0.000	1.496	0.000	0.03
		C		0.000	0.000	0.874	0.000	0.01
L12	89.25-84.25	A	1.404	0.000	0.000	19.905	0.000	0.23
		B		0.000	0.000	29.904	0.000	0.50
		C		0.000	0.000	17.467	0.000	0.21
L13	84.25-78.00	A	1.395	0.000	0.000	26.896	0.000	0.31
		B		0.000	0.000	40.280	0.000	0.66
		C		0.000	0.000	21.789	0.000	0.28
L14	78.00-77.00	A	1.389	0.000	0.000	5.551	0.000	0.06
		B		0.000	0.000	7.453	0.000	0.11
		C		0.000	0.000	3.486	0.000	0.05
L15	77.00-76.75	A	1.388	0.000	0.000	1.386	0.000	0.02
		B		0.000	0.000	1.861	0.000	0.03
		C		0.000	0.000	0.870	0.000	0.01
L16	76.75-76.50	A	1.387	0.000	0.000	1.386	0.000	0.02
		B		0.000	0.000	1.861	0.000	0.03
		C		0.000	0.000	0.870	0.000	0.01
L17	76.50-75.50	A	1.386	0.000	0.000	5.543	0.000	0.06
		B		0.000	0.000	7.441	0.000	0.11
		C		0.000	0.000	3.479	0.000	0.05
L18	75.50-75.25	A	1.385	0.000	0.000	1.386	0.000	0.02
		B		0.000	0.000	1.860	0.000	0.03
		C		0.000	0.000	0.870	0.000	0.01
L19	75.25-74.50	A	1.384	0.000	0.000	4.157	0.000	0.05
		B		0.000	0.000	5.579	0.000	0.09
		C		0.000	0.000	2.859	0.000	0.04
L20	74.50-74.25	A	1.383	0.000	0.000	1.385	0.000	0.02
		B		0.000	0.000	1.859	0.000	0.03
		C		0.000	0.000	1.120	0.000	0.01
L21	74.25-72.00	A	1.381	0.000	0.000	12.465	0.000	0.14
		B		0.000	0.000	15.260	0.000	0.24
		C		0.000	0.000	6.614	0.000	0.10
L22	72.00-71.75	A	1.378	0.000	0.000	1.811	0.000	0.02
		B		0.000	0.000	1.830	0.000	0.03
		C		0.000	0.000	1.197	0.000	0.01
L23	71.75-70.50	A	1.377	0.000	0.000	9.053	0.000	0.10
		B		0.000	0.000	9.150	0.000	0.14
		C		0.000	0.000	5.984	0.000	0.07
L24	70.50-70.25	A	1.375	0.000	0.000	1.810	0.000	0.02
		B		0.000	0.000	1.830	0.000	0.03
		C		0.000	0.000	1.196	0.000	0.01
L25	70.25-70.00	A	1.375	0.000	0.000	1.810	0.000	0.02
		B		0.000	0.000	1.829	0.000	0.03
		C		0.000	0.000	1.196	0.000	0.01
L26	70.00-69.75	A	1.374	0.000	0.000	1.810	0.000	0.02
		B		0.000	0.000	1.829	0.000	0.03
		C		0.000	0.000	1.196	0.000	0.01
L27	69.75-69.50	A	1.374	0.000	0.000	1.810	0.000	0.02
		B		0.000	0.000	1.829	0.000	0.03
		C		0.000	0.000	1.196	0.000	0.01
L28	69.50-69.25	A	1.373	0.000	0.000	1.810	0.000	0.02
		B		0.000	0.000	1.829	0.000	0.03
		C		0.000	0.000	1.196	0.000	0.01
L29	69.25-64.25	A	1.368	0.000	0.000	28.420	0.000	0.29
		B		0.000	0.000	31.455	0.000	0.51

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	<p>Project</p> <p>TEP No. 25570.318938</p>	<p>Date</p> <p>11:36:47 11/08/19</p>
	<p>Client</p> <p>Crown Castle</p>	<p>Designed by</p> <p>mshakeri</p>

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A _R ft ²	A _F ft ²	C _{AA} In Face ft ²	C _{AA} Out Face ft ²	Weight K
L30	64.25-59.25	C		0.000	0.000	21.427	0.000	0.25
		A	1.357	0.000	0.000	24.632	0.000	0.26
		B		0.000	0.000	30.131	0.000	0.49
		C		0.000	0.000	19.365	0.000	0.23
L31	59.25-56.00	A	1.348	0.000	0.000	17.518	0.000	0.18
		B		0.000	0.000	21.086	0.000	0.33
		C		0.000	0.000	15.368	0.000	0.17
L32	56.00-55.75	A	1.344	0.000	0.000	1.736	0.000	0.02
		B		0.000	0.000	2.347	0.000	0.04
		C		0.000	0.000	1.792	0.000	0.02
L33	55.75-55.50	A	1.343	0.000	0.000	1.736	0.000	0.02
		B		0.000	0.000	2.347	0.000	0.04
		C		0.000	0.000	1.792	0.000	0.02
L34	55.50-55.25	A	1.343	0.000	0.000	1.736	0.000	0.02
		B		0.000	0.000	2.346	0.000	0.04
		C		0.000	0.000	1.792	0.000	0.02
L35	55.25-54.00	A	1.341	0.000	0.000	8.677	0.000	0.10
		B		0.000	0.000	11.728	0.000	0.18
		C		0.000	0.000	8.956	0.000	0.10
L36	54.00-53.75	A	1.339	0.000	0.000	1.735	0.000	0.02
		B		0.000	0.000	2.345	0.000	0.04
		C		0.000	0.000	1.791	0.000	0.02
L37	53.75-53.50	A	1.338	0.000	0.000	1.735	0.000	0.02
		B		0.000	0.000	2.345	0.000	0.04
		C		0.000	0.000	1.790	0.000	0.02
L38	53.50-53.25	A	1.338	0.000	0.000	1.735	0.000	0.02
		B		0.000	0.000	2.344	0.000	0.04
		C		0.000	0.000	1.790	0.000	0.02
L39	53.25-53.00	A	1.337	0.000	0.000	1.734	0.000	0.02
		B		0.000	0.000	2.344	0.000	0.04
		C		0.000	0.000	1.790	0.000	0.02
L40	53.00-48.00	A	1.330	0.000	0.000	27.726	0.000	0.33
		B		0.000	0.000	43.967	0.000	0.69
		C		0.000	0.000	31.612	0.000	0.38
L41	48.00-39.75	A	1.312	0.000	0.000	50.704	0.000	0.58
		B		0.000	0.000	73.743	0.000	1.13
		C		0.000	0.000	46.922	0.000	0.59
L42	39.75-38.75	A	1.297	0.000	0.000	6.037	0.000	0.07
		B		0.000	0.000	8.548	0.000	0.13
		C		0.000	0.000	4.680	0.000	0.06
L43	38.75-34.75	A	1.289	0.000	0.000	26.507	0.000	0.29
		B		0.000	0.000	36.505	0.000	0.55
		C		0.000	0.000	23.541	0.000	0.29
L44	34.75-34.50	A	1.281	0.000	0.000	1.774	0.000	0.02
		B		0.000	0.000	2.398	0.000	0.03
		C		0.000	0.000	1.707	0.000	0.02
L45	34.50-33.75	A	1.279	0.000	0.000	5.319	0.000	0.06
		B		0.000	0.000	7.190	0.000	0.10
		C		0.000	0.000	5.120	0.000	0.06
L46	33.75-33.50	A	1.277	0.000	0.000	1.773	0.000	0.02
		B		0.000	0.000	2.396	0.000	0.03
		C		0.000	0.000	1.706	0.000	0.02
L47	33.50-28.50	A	1.267	0.000	0.000	32.161	0.000	0.35
		B		0.000	0.000	44.568	0.000	0.67
		C		0.000	0.000	27.564	0.000	0.34
L48	28.50-24.00	A	1.246	0.000	0.000	27.270	0.000	0.30
		B		0.000	0.000	38.189	0.000	0.58
		C		0.000	0.000	21.001	0.000	0.28
L49	24.00-23.75	A	1.234	0.000	0.000	1.552	0.000	0.02
		B		0.000	0.000	2.137	0.000	0.03
		C		0.000	0.000	1.184	0.000	0.02

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Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A _R ft ²	A _F ft ²	C _{AA} In Face ft ²	C _{AA} Out Face ft ²	Weight K
L50	23.75-18.75	A	1.220	0.000	0.000	30.964	0.000	0.33
		B		0.000	0.000	42.630	0.000	0.63
		C		0.000	0.000	23.604	0.000	0.31
L51	18.75-14.25	A	1.190	0.000	0.000	28.866	0.000	0.30
		B		0.000	0.000	39.115	0.000	0.56
		C		0.000	0.000	23.393	0.000	0.29
L52	14.25-14.00	A	1.171	0.000	0.000	1.763	0.000	0.02
		B		0.000	0.000	2.304	0.000	0.03
		C		0.000	0.000	1.623	0.000	0.02
L53	14.00-9.00	A	1.147	0.000	0.000	35.113	0.000	0.34
		B		0.000	0.000	45.889	0.000	0.63
		C		0.000	0.000	32.302	0.000	0.35
L54	9.00-5.00	A	1.092	0.000	0.000	23.620	0.000	0.21
		B		0.000	0.000	32.698	0.000	0.43
		C		0.000	0.000	25.531	0.000	0.27
L55	5.00-4.75	A	1.053	0.000	0.000	1.380	0.000	0.01
		B		0.000	0.000	1.954	0.000	0.02
		C		0.000	0.000	1.582	0.000	0.02
L56	4.75-4.50	A	1.048	0.000	0.000	1.378	0.000	0.01
		B		0.000	0.000	1.952	0.000	0.02
		C		0.000	0.000	1.580	0.000	0.02
L57	4.50-0.00	A	0.974	0.000	0.000	21.925	0.000	0.18
		B		0.000	0.000	32.080	0.000	0.40
		C		0.000	0.000	22.841	0.000	0.25

Feed Line Center of Pressure

Section	Elevation ft	CP _X in	CP _Z in	CP _X Ice in	CP _Z Ice in
L1	120.00-115.00	4.0985	2.5051	3.2174	2.4355
L2	115.00-110.00	1.1942	0.8047	1.0413	1.0851
L3	110.00-105.00	-0.2146	-0.0189	-0.0314	0.4251
L4	105.00-100.00	2.2552	-1.4282	1.8492	-0.7623
L5	100.00-99.25	1.2085	-0.8812	1.1961	-0.5090
L6	99.25-99.00	1.2118	-0.8834	1.1997	-0.5105
L7	99.00-94.00	1.2259	-0.8928	1.2171	-0.5174
L8	94.00-90.08	0.2706	-1.1356	0.5580	-0.7530
L9	90.08-89.83	-0.4799	-1.3271	-0.0181	-0.9490
L10	89.83-89.50	-0.4809	-1.3290	-0.0184	-0.9506
L11	89.50-89.25	-0.4821	-1.3317	-0.0186	-0.9524
L12	89.25-84.25	-0.4908	-1.3485	-0.0211	-0.9663
L13	84.25-78.00	-0.4035	-1.2622	0.0113	-0.9140
L14	78.00-77.00	0.2786	-1.5041	0.4408	-1.1114
L15	77.00-76.75	0.2792	-1.5088	0.4419	-1.1164
L16	76.75-76.50	0.2795	-1.5109	0.4424	-1.1182
L17	76.50-75.50	0.2802	-1.5156	0.4437	-1.1221
L18	75.50-75.25	0.2807	-1.5195	0.4448	-1.1256
L19	75.25-74.50	0.2748	-1.2161	0.4380	-0.8970
L20	74.50-74.25	0.2633	-0.6447	0.4242	-0.4591
L21	74.25-72.00	1.1606	-0.3023	1.3219	-0.1369
L22	72.00-71.75	0.5132	-1.2752	0.7791	-0.9980
L23	71.75-70.50	0.5149	-1.2797	0.7820	-1.0020
L24	70.50-70.25	0.5167	-1.2844	0.7849	-1.0061
L25	70.25-70.00	0.5173	-1.2859	0.7859	-1.0074
L26	70.00-69.75	0.5178	-1.2873	0.7868	-1.0086
L27	69.75-69.50	0.5185	-1.2891	0.7879	-1.0102

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Section	Elevation	CP _x	CP _z	CP _x	CP _z
	ft	in	in	Ice in	Ice in
L28	69.50-69.25	0.5190	-1.2904	0.7887	-1.0113
L29	69.25-64.25	1.2195	-0.8674	1.3675	-0.6665
L30	64.25-59.25	2.2129	-0.4994	2.1600	-0.3750
L31	59.25-56.00	2.3206	-0.7633	2.2720	-0.6269
L32	56.00-55.75	1.0852	-0.9883	1.2400	-0.9117
L33	55.75-55.50	1.0864	-0.9893	1.2415	-0.9128
L34	55.50-55.25	1.0878	-0.9905	1.2431	-0.9139
L35	55.25-54.00	1.0913	-0.9934	1.2473	-0.9170
L36	54.00-53.75	1.0945	-0.9962	1.2514	-0.9200
L37	53.75-53.50	1.0956	-0.9972	1.2528	-0.9210
L38	53.50-53.25	1.0966	-0.9980	1.2541	-0.9220
L39	53.25-53.00	1.0977	-0.9989	1.2555	-0.9229
L40	53.00-48.00	0.8930	-1.5136	1.0628	-1.3491
L41	48.00-39.75	0.9069	-1.3819	1.0746	-1.1585
L42	39.75-38.75	0.8576	-0.8034	1.0389	-0.5871
L43	38.75-34.75	0.9972	-1.1077	1.1546	-0.8889
L44	34.75-34.50	1.0918	-1.3107	1.2351	-1.0915
L45	34.50-33.75	1.0939	-1.3131	1.2377	-1.0940
L46	33.75-33.50	1.0956	-1.3151	1.2399	-1.0962
L47	33.50-28.50	0.9821	-1.0477	1.1567	-0.8292
L48	28.50-24.00	0.9140	-0.7967	1.1116	-0.5976
L49	24.00-23.75	0.9472	-0.7154	1.1372	-0.5453
L50	23.75-18.75	0.9563	-0.7217	1.1489	-0.5527
L51	18.75-14.25	1.0239	-0.8700	1.1951	-0.6963
L52	14.25-14.00	1.1476	-1.1852	1.2634	-0.9991
L53	14.00-9.00	1.1586	-1.1963	1.2769	-1.0128
L54	9.00-5.00	1.3173	-0.4649	1.4799	-0.3377
L55	5.00-4.75	1.3790	-0.1926	1.5569	-0.0917
L56	4.75-4.50	1.3801	-0.1927	1.5582	-0.0928
L57	4.50-0.00	1.2612	0.2773	1.4677	0.3309

Note: For pole sections, center of pressure calculations do not consider feed line shielding.

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L1	2	Safety Line 3/8	115.00 - 120.00	1.0000	1.0000
L1	8	3" Flexible Conduit	115.00 - 120.00	1.0000	1.0000
L1	9	HB114-1-0813U4-M5J(1-1/4)	115.00 - 120.00	1.0000	1.0000
L2	2	Safety Line 3/8	110.00 - 115.00	1.0000	1.0000
L2	8	3" Flexible Conduit	110.00 - 115.00	1.0000	1.0000
L2	9	HB114-1-0813U4-M5J(1-1/4)	110.00 - 115.00	1.0000	1.0000
L2	11	LDF7-50A(1-5/8)	110.00 - 113.00	1.0000	1.0000
L3	2	Safety Line 3/8	105.00 - 110.00	1.0000	1.0000
L3	8	3" Flexible Conduit	105.00 -	1.0000	1.0000

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Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
			110.00		
L3	9	HB114-1-0813U4-M5J(1-1/4)	105.00 - 110.00	1.0000	1.0000
L3	11	LDF7-50A(1-5/8)	105.00 - 110.00	1.0000	1.0000
L4	2	Safety Line 3/8	100.00 - 105.00	1.0000	1.0000
L4	8	3" Flexible Conduit	100.00 - 105.00	1.0000	1.0000
L4	9	HB114-1-0813U4-M5J(1-1/4)	100.00 - 105.00	1.0000	1.0000
L4	11	LDF7-50A(1-5/8)	100.00 - 105.00	1.0000	1.0000
L4	14	LDF7-50A(1-5/8)	100.00 - 105.00	1.0000	1.0000
L4	103	PL 1.25x4	100.00 - 100.75	1.0000	1.0000
L4	105	PL 1.25x4	100.00 - 100.75	1.0000	1.0000
L4	106	PL 1.25x4	100.00 - 100.75	1.0000	1.0000
L5	2	Safety Line 3/8	99.25 - 100.00	1.0000	1.0000
L5	8	3" Flexible Conduit	99.25 - 100.00	1.0000	1.0000
L5	9	HB114-1-0813U4-M5J(1-1/4)	99.25 - 100.00	1.0000	1.0000
L5	11	LDF7-50A(1-5/8)	99.25 - 100.00	1.0000	1.0000
L5	14	LDF7-50A(1-5/8)	99.25 - 100.00	1.0000	1.0000
L5	103	PL 1.25x4	99.25 - 100.00	1.0000	1.0000
L5	105	PL 1.25x4	99.25 - 100.00	1.0000	1.0000
L5	106	PL 1.25x4	99.25 - 100.00	1.0000	1.0000
L6	2	Safety Line 3/8	99.00 - 99.25	1.0000	1.0000
L6	8	3" Flexible Conduit	99.00 - 99.25	1.0000	1.0000
L6	9	HB114-1-0813U4-M5J(1-1/4)	99.00 - 99.25	1.0000	1.0000
L6	11	LDF7-50A(1-5/8)	99.00 - 99.25	1.0000	1.0000
L6	14	LDF7-50A(1-5/8)	99.00 - 99.25	1.0000	1.0000
L6	103	PL 1.25x4	99.00 - 99.25	1.0000	1.0000
L6	105	PL 1.25x4	99.00 - 99.25	1.0000	1.0000
L6	106	PL 1.25x4	99.00 - 99.25	1.0000	1.0000
L7	2	Safety Line 3/8	94.00 - 99.00	1.0000	1.0000
L7	8	3" Flexible Conduit	94.00 - 99.00	1.0000	1.0000
L7	9	HB114-1-0813U4-M5J(1-1/4)	94.00 - 99.00	1.0000	1.0000
L7	11	LDF7-50A(1-5/8)	94.00 - 99.00	1.0000	1.0000
L7	14	LDF7-50A(1-5/8)	94.00 - 99.00	1.0000	1.0000
L7	103	PL 1.25x4	94.00 - 99.00	1.0000	1.0000
L7	105	PL 1.25x4	94.00 - 99.00	1.0000	1.0000
L7	106	PL 1.25x4	94.00 - 99.00	1.0000	1.0000
L8	2	Safety Line 3/8	90.08 - 94.00	1.0000	1.0000
L8	8	3" Flexible Conduit	90.08 - 94.00	1.0000	1.0000
L8	9	HB114-1-0813U4-M5J(1-1/4)	90.08 - 94.00	1.0000	1.0000
L8	11	LDF7-50A(1-5/8)	90.08 - 94.00	1.0000	1.0000
L8	14	LDF7-50A(1-5/8)	90.08 - 94.00	1.0000	1.0000
L8	80	(Area) CCI-65FP-060100 (H)	90.08 - 92.00	1.0000	1.0000
L8	83	(Area) CCI-65FP-060100 (H)	90.08 - 92.00	1.0000	1.0000
L8	86	(Area) CCI-65FP-045100	90.08 - 92.08	1.0000	1.0000
L8	88	(Area) CCI-65FP-045100	90.08 - 92.08	1.0000	1.0000
L8	103	PL 1.25x4	90.08 - 94.00	1.0000	1.0000
L8	105	PL 1.25x4	90.08 - 94.00	1.0000	1.0000
L8	106	PL 1.25x4	90.08 - 94.00	1.0000	1.0000
L9	2	Safety Line 3/8	89.83 - 90.08	1.0000	1.0000

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Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L9	8	3" Flexible Conduit	89.83 - 90.08	1.0000	1.0000
L9	9	HB114-1-0813U4-M5J(1-1/4)	89.83 - 90.08	1.0000	1.0000
L9	11	LDF7-50A(1-5/8)	89.83 - 90.08	1.0000	1.0000
L9	14	LDF7-50A(1-5/8)	89.83 - 90.08	1.0000	1.0000
L9	80	(Area) CCI-65FP-060100 (H)	89.83 - 90.08	1.0000	1.0000
L9	83	(Area) CCI-65FP-060100 (H)	89.83 - 90.08	1.0000	1.0000
L9	86	(Area) CCI-65FP-045100	89.83 - 90.08	1.0000	1.0000
L9	88	(Area) CCI-65FP-045100	89.83 - 90.08	1.0000	1.0000
L9	103	PL 1.25x4	89.83 - 90.08	1.0000	1.0000
L9	105	PL 1.25x4	89.83 - 90.08	1.0000	1.0000
L9	106	PL 1.25x4	89.83 - 90.08	1.0000	1.0000
L10	2	Safety Line 3/8	89.50 - 89.83	1.0000	1.0000
L10	8	3" Flexible Conduit	89.50 - 89.83	1.0000	1.0000
L10	9	HB114-1-0813U4-M5J(1-1/4)	89.50 - 89.83	1.0000	1.0000
L10	11	LDF7-50A(1-5/8)	89.50 - 89.83	1.0000	1.0000
L10	14	LDF7-50A(1-5/8)	89.50 - 89.83	1.0000	1.0000
L10	80	(Area) CCI-65FP-060100 (H)	89.50 - 89.83	1.0000	1.0000
L10	83	(Area) CCI-65FP-060100 (H)	89.50 - 89.83	1.0000	1.0000
L10	86	(Area) CCI-65FP-045100	89.50 - 89.83	1.0000	1.0000
L10	88	(Area) CCI-65FP-045100	89.50 - 89.83	1.0000	1.0000
L10	103	PL 1.25x4	89.50 - 89.83	1.0000	1.0000
L10	105	PL 1.25x4	89.50 - 89.83	1.0000	1.0000
L10	106	PL 1.25x4	89.50 - 89.83	1.0000	1.0000
L11	2	Safety Line 3/8	89.25 - 89.50	1.0000	1.0000
L11	8	3" Flexible Conduit	89.25 - 89.50	1.0000	1.0000
L11	9	HB114-1-0813U4-M5J(1-1/4)	89.25 - 89.50	1.0000	1.0000
L11	11	LDF7-50A(1-5/8)	89.25 - 89.50	1.0000	1.0000
L11	14	LDF7-50A(1-5/8)	89.25 - 89.50	1.0000	1.0000
L11	80	(Area) CCI-65FP-060100 (H)	89.25 - 89.50	1.0000	1.0000
L11	83	(Area) CCI-65FP-060100 (H)	89.25 - 89.50	1.0000	1.0000
L11	86	(Area) CCI-65FP-045100	89.25 - 89.50	1.0000	1.0000
L11	88	(Area) CCI-65FP-045100	89.25 - 89.50	1.0000	1.0000
L11	103	PL 1.25x4	89.25 - 89.50	1.0000	1.0000
L11	105	PL 1.25x4	89.25 - 89.50	1.0000	1.0000
L11	106	PL 1.25x4	89.25 - 89.50	1.0000	1.0000
L12	2	Safety Line 3/8	84.25 - 89.25	1.0000	1.0000
L12	8	3" Flexible Conduit	84.25 - 89.25	1.0000	1.0000
L12	9	HB114-1-0813U4-M5J(1-1/4)	84.25 - 89.25	1.0000	1.0000
L12	11	LDF7-50A(1-5/8)	84.25 - 89.25	1.0000	1.0000
L12	14	LDF7-50A(1-5/8)	84.25 - 89.25	1.0000	1.0000
L12	80	(Area) CCI-65FP-060100 (H)	84.25 - 89.25	1.0000	1.0000
L12	83	(Area) CCI-65FP-060100 (H)	84.25 - 89.25	1.0000	1.0000
L12	86	(Area) CCI-65FP-045100	84.25 - 89.25	1.0000	1.0000
L12	88	(Area) CCI-65FP-045100	84.25 - 89.25	1.0000	1.0000
L12	103	PL 1.25x4	84.25 - 89.25	1.0000	1.0000
L12	105	PL 1.25x4	84.25 - 89.25	1.0000	1.0000
L12	106	PL 1.25x4	84.25 - 89.25	1.0000	1.0000
L13	2	Safety Line 3/8	78.00 - 84.25	1.0000	1.0000
L13	8	3" Flexible Conduit	78.00 - 84.25	1.0000	1.0000
L13	9	HB114-1-0813U4-M5J(1-1/4)	78.00 - 84.25	1.0000	1.0000
L13	11	LDF7-50A(1-5/8)	78.00 - 84.25	1.0000	1.0000
L13	14	LDF7-50A(1-5/8)	78.00 - 84.25	1.0000	1.0000
L13	79	(Area) CCI-65FP-060100 (H)	78.00 - 80.00	1.0000	1.0000
L13	80	(Area) CCI-65FP-060100 (H)	80.00 - 84.25	1.0000	1.0000
L13	83	(Area) CCI-65FP-060100 (H)	78.00 - 84.25	1.0000	1.0000
L13	85	(Area) CCI-65FP-045100	78.00 - 78.25	1.0000	1.0000
L13	86	(Area) CCI-65FP-045100	78.25 - 84.25	1.0000	1.0000

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Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L13	87	(Area) CCI-65FP-045100	78.00 - 80.00	1.0000	1.0000
L13	88	(Area) CCI-65FP-045100	80.00 - 84.25	1.0000	1.0000
L13	97	PL 1.25x4	78.00 - 80.00	1.0000	1.0000
L13	98	PL 1.25x4	78.00 - 78.25	1.0000	1.0000
L13	99	PL 1.25x4	78.00 - 80.00	1.0000	1.0000
L13	100	PL 1.25x4	78.00 - 80.00	1.0000	1.0000
L13	102	PL 1.25x4	78.00 - 80.00	1.0000	1.0000
L13	103	PL 1.25x4	80.00 - 84.25	1.0000	1.0000
L13	105	PL 1.25x4	78.00 - 84.25	1.0000	1.0000
L13	106	PL 1.25x4	78.00 - 84.25	1.0000	1.0000
L15	2	Safety Line 3/8	76.75 - 77.00	1.0000	1.0000
L15	8	3" Flexible Conduit	76.75 - 77.00	1.0000	1.0000
L15	9	HB114-1-0813U4-M5J(1-1/4)	76.75 - 77.00	1.0000	1.0000
L15	11	LDF7-50A(1-5/8)	76.75 - 77.00	1.0000	1.0000
L15	14	LDF7-50A(1-5/8)	76.75 - 77.00	1.0000	1.0000
L15	79	(Area) CCI-65FP-060100 (H)	76.75 - 77.00	1.0000	1.0000
L15	83	(Area) CCI-65FP-060100 (H)	76.75 - 77.00	1.0000	1.0000
L15	85	(Area) CCI-65FP-045100	76.75 - 77.00	1.0000	1.0000
L15	87	(Area) CCI-65FP-045100	76.75 - 77.00	1.0000	1.0000
L15	97	PL 1.25x4	76.75 - 77.00	1.0000	1.0000
L15	98	PL 1.25x4	76.75 - 77.00	1.0000	1.0000
L15	99	PL 1.25x4	76.75 - 77.00	1.0000	1.0000
L15	100	PL 1.25x4	76.75 - 77.00	1.0000	1.0000
L15	102	PL 1.25x4	76.75 - 77.00	1.0000	1.0000
L15	105	PL 1.25x4	76.75 - 77.00	1.0000	1.0000
L15	106	PL 1.25x4	76.75 - 77.00	1.0000	1.0000
L16	2	Safety Line 3/8	76.50 - 76.75	1.0000	1.0000
L16	8	3" Flexible Conduit	76.50 - 76.75	1.0000	1.0000
L16	9	HB114-1-0813U4-M5J(1-1/4)	76.50 - 76.75	1.0000	1.0000
L16	11	LDF7-50A(1-5/8)	76.50 - 76.75	1.0000	1.0000
L16	14	LDF7-50A(1-5/8)	76.50 - 76.75	1.0000	1.0000
L16	79	(Area) CCI-65FP-060100 (H)	76.50 - 76.75	1.0000	1.0000
L16	83	(Area) CCI-65FP-060100 (H)	76.50 - 76.75	1.0000	1.0000
L16	85	(Area) CCI-65FP-045100	76.50 - 76.75	1.0000	1.0000
L16	87	(Area) CCI-65FP-045100	76.50 - 76.75	1.0000	1.0000
L16	97	PL 1.25x4	76.50 - 76.75	1.0000	1.0000
L16	98	PL 1.25x4	76.50 - 76.75	1.0000	1.0000
L16	99	PL 1.25x4	76.50 - 76.75	1.0000	1.0000
L16	100	PL 1.25x4	76.50 - 76.75	1.0000	1.0000
L16	102	PL 1.25x4	76.50 - 76.75	1.0000	1.0000
L16	105	PL 1.25x4	76.50 - 76.75	1.0000	1.0000
L16	106	PL 1.25x4	76.50 - 76.75	1.0000	1.0000
L17	2	Safety Line 3/8	75.50 - 76.50	1.0000	1.0000
L17	8	3" Flexible Conduit	75.50 - 76.50	1.0000	1.0000
L17	9	HB114-1-0813U4-M5J(1-1/4)	75.50 - 76.50	1.0000	1.0000
L17	11	LDF7-50A(1-5/8)	75.50 - 76.50	1.0000	1.0000
L17	14	LDF7-50A(1-5/8)	75.50 - 76.50	1.0000	1.0000
L17	79	(Area) CCI-65FP-060100 (H)	75.50 - 76.50	1.0000	1.0000
L17	83	(Area) CCI-65FP-060100 (H)	75.50 - 76.50	1.0000	1.0000
L17	85	(Area) CCI-65FP-045100	75.50 - 76.50	1.0000	1.0000
L17	87	(Area) CCI-65FP-045100	75.50 - 76.50	1.0000	1.0000
L17	97	PL 1.25x4	75.50 - 76.50	1.0000	1.0000
L17	98	PL 1.25x4	75.50 - 76.50	1.0000	1.0000
L17	99	PL 1.25x4	75.50 - 76.50	1.0000	1.0000
L17	100	PL 1.25x4	75.50 - 76.50	1.0000	1.0000
L17	102	PL 1.25x4	75.50 - 76.50	1.0000	1.0000
L17	105	PL 1.25x4	75.50 - 76.50	1.0000	1.0000
L17	106	PL 1.25x4	75.50 - 76.50	1.0000	1.0000
L18	2	Safety Line 3/8	75.25 - 75.50	1.0000	1.0000

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326 Tyron Road
Raleigh, NC 27603
Phone: (919) 661-6351
FAX: (919) 661-6350

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Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L18	8	3" Flexible Conduit	75.25 - 75.50	1.0000	1.0000
L18	9	HB114-1-0813U4-M5J(1-1/4)	75.25 - 75.50	1.0000	1.0000
L18	11	LDF7-50A(1-5/8)	75.25 - 75.50	1.0000	1.0000
L18	14	LDF7-50A(1-5/8)	75.25 - 75.50	1.0000	1.0000
L18	79	(Area) CCI-65FP-060100 (H)	75.25 - 75.50	1.0000	1.0000
L18	83	(Area) CCI-65FP-060100 (H)	75.25 - 75.50	1.0000	1.0000
L18	85	(Area) CCI-65FP-045100	75.25 - 75.50	1.0000	1.0000
L18	87	(Area) CCI-65FP-045100	75.25 - 75.50	1.0000	1.0000
L18	97	PL 1.25x4	75.25 - 75.50	1.0000	1.0000
L18	98	PL 1.25x4	75.25 - 75.50	1.0000	1.0000
L18	99	PL 1.25x4	75.25 - 75.50	1.0000	1.0000
L18	100	PL 1.25x4	75.25 - 75.50	1.0000	1.0000
L18	102	PL 1.25x4	75.25 - 75.50	1.0000	1.0000
L18	105	PL 1.25x4	75.25 - 75.50	1.0000	1.0000
L18	106	PL 1.25x4	75.25 - 75.50	1.0000	1.0000
L19	2	Safety Line 3/8	74.50 - 75.25	1.0000	1.0000
L19	8	3" Flexible Conduit	74.50 - 75.25	1.0000	1.0000
L19	9	HB114-1-0813U4-M5J(1-1/4)	74.50 - 75.25	1.0000	1.0000
L19	11	LDF7-50A(1-5/8)	74.50 - 75.25	1.0000	1.0000
L19	14	LDF7-50A(1-5/8)	74.50 - 75.25	1.0000	1.0000
L19	79	(Area) CCI-65FP-060100 (H)	74.50 - 75.25	1.0000	1.0000
L19	83	(Area) CCI-65FP-060100 (H)	74.50 - 75.25	1.0000	1.0000
L19	85	(Area) CCI-65FP-045100	74.50 - 75.25	1.0000	1.0000
L19	87	(Area) CCI-65FP-045100	74.50 - 75.25	1.0000	1.0000
L19	90	(Area) CCI-65FP-065125	74.50 - 74.75	1.0000	1.0000
L19	97	PL 1.25x4	74.50 - 75.25	1.0000	1.0000
L19	98	PL 1.25x4	74.50 - 75.25	1.0000	1.0000
L19	99	PL 1.25x4	74.50 - 75.25	1.0000	1.0000
L19	100	PL 1.25x4	74.50 - 75.25	1.0000	1.0000
L19	102	PL 1.25x4	74.50 - 75.25	1.0000	1.0000
L19	104	PL 1.25x4	74.50 - 74.75	1.0000	1.0000
L19	105	PL 1.25x4	74.75 - 75.25	1.0000	1.0000
L19	106	PL 1.25x4	74.50 - 75.25	1.0000	1.0000
L20	2	Safety Line 3/8	74.25 - 74.50	1.0000	1.0000
L20	8	3" Flexible Conduit	74.25 - 74.50	1.0000	1.0000
L20	9	HB114-1-0813U4-M5J(1-1/4)	74.25 - 74.50	1.0000	1.0000
L20	11	LDF7-50A(1-5/8)	74.25 - 74.50	1.0000	1.0000
L20	14	LDF7-50A(1-5/8)	74.25 - 74.50	1.0000	1.0000
L20	79	(Area) CCI-65FP-060100 (H)	74.25 - 74.50	1.0000	1.0000
L20	83	(Area) CCI-65FP-060100 (H)	74.25 - 74.50	1.0000	1.0000
L20	85	(Area) CCI-65FP-045100	74.25 - 74.50	1.0000	1.0000
L20	87	(Area) CCI-65FP-045100	74.25 - 74.50	1.0000	1.0000
L20	90	(Area) CCI-65FP-065125	74.25 - 74.50	1.0000	1.0000
L20	97	PL 1.25x4	74.25 - 74.50	1.0000	1.0000
L20	98	PL 1.25x4	74.25 - 74.50	1.0000	1.0000
L20	99	PL 1.25x4	74.25 - 74.50	1.0000	1.0000
L20	100	PL 1.25x4	74.25 - 74.50	1.0000	1.0000
L20	102	PL 1.25x4	74.25 - 74.50	1.0000	1.0000
L20	104	PL 1.25x4	74.25 - 74.50	1.0000	1.0000
L20	106	PL 1.25x4	74.25 - 74.50	1.0000	1.0000
L21	2	Safety Line 3/8	72.00 - 74.25	1.0000	1.0000
L21	8	3" Flexible Conduit	72.00 - 74.25	1.0000	1.0000
L21	9	HB114-1-0813U4-M5J(1-1/4)	72.00 - 74.25	1.0000	1.0000
L21	11	LDF7-50A(1-5/8)	72.00 - 74.25	1.0000	1.0000
L21	14	LDF7-50A(1-5/8)	72.00 - 74.25	1.0000	1.0000
L21	79	(Area) CCI-65FP-060100 (H)	72.00 - 74.25	1.0000	1.0000
L21	82	(Area) CCI-65FP-060100 (H)	72.00 - 74.00	1.0000	1.0000
L21	83	(Area) CCI-65FP-060100 (H)	74.00 - 74.25	1.0000	1.0000

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**Tower Engineering
Engineering, Inc.**
326 Tyron Road
Raleigh, NC 27603
Phone: (919) 661-6351
FAX: (919) 661-6350

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Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L21	85	(Area) CCI-65FP-045100	72.00 - 74.25	1.0000	1.0000
L21	87	(Area) CCI-65FP-045100	72.00 - 74.25	1.0000	1.0000
L21	90	(Area) CCI-65FP-065125	72.00 - 74.25	1.0000	1.0000
L21	97	PL 1.25x4	72.00 - 74.25	1.0000	1.0000
L21	98	PL 1.25x4	72.00 - 74.25	1.0000	1.0000
L21	99	PL 1.25x4	72.00 - 74.25	1.0000	1.0000
L21	100	PL 1.25x4	72.00 - 74.25	1.0000	1.0000
L21	102	PL 1.25x4	74.00 - 74.25	1.0000	1.0000
L21	104	PL 1.25x4	73.00 - 74.25	1.0000	1.0000
L21	106	PL 1.25x4	74.00 - 74.25	1.0000	1.0000
L22	2	Safety Line 3/8	71.75 - 72.00	1.0000	1.0000
L22	8	3" Flexible Conduit	71.75 - 72.00	1.0000	1.0000
L22	9	HB114-1-0813U4-M5J(1-1/4)	71.75 - 72.00	1.0000	1.0000
L22	11	LDF7-50A(1-5/8)	71.75 - 72.00	1.0000	1.0000
L22	14	LDF7-50A(1-5/8)	71.75 - 72.00	1.0000	1.0000
L22	45	PL 1 x 5	71.75 - 72.00	1.0000	1.0000
L22	48	PL 1 x 5	71.75 - 72.00	1.0000	1.0000
L22	51	PL 1 x 5	71.75 - 72.00	1.0000	1.0000
L22	53	PL 1 x 5	71.75 - 72.00	1.0000	1.0000
L22	73	(Area) CCI-65FP-045100	71.75 - 72.00	1.0000	1.0000
L22	74	(Area) CCI-65FP-045100	71.75 - 72.00	1.0000	1.0000
L22	77	(Area) CCI-65FP-045100	71.75 - 72.00	1.0000	1.0000
L22	79	(Area) CCI-65FP-060100 (H)	71.75 - 72.00	1.0000	1.0000
L22	81	(Area) CCI-65FP-060100 (H)	71.75 - 72.00	1.0000	1.0000
L22	90	(Area) CCI-65FP-065125	71.75 - 72.00	1.0000	1.0000
L22	97	PL 1.25x4	71.75 - 72.00	1.0000	1.0000
L22	98	PL 1.25x4	71.75 - 72.00	1.0000	1.0000
L22	99	PL 1.25x4	71.75 - 72.00	1.0000	1.0000
L22	100	PL 1.25x4	71.75 - 72.00	1.0000	1.0000
L23	2	Safety Line 3/8	70.50 - 71.75	1.0000	1.0000
L23	8	3" Flexible Conduit	70.50 - 71.75	1.0000	1.0000
L23	9	HB114-1-0813U4-M5J(1-1/4)	70.50 - 71.75	1.0000	1.0000
L23	11	LDF7-50A(1-5/8)	70.50 - 71.75	1.0000	1.0000
L23	14	LDF7-50A(1-5/8)	70.50 - 71.75	1.0000	1.0000
L23	45	PL 1 x 5	70.50 - 71.75	1.0000	1.0000
L23	48	PL 1 x 5	70.50 - 71.75	1.0000	1.0000
L23	51	PL 1 x 5	70.50 - 71.75	1.0000	1.0000
L23	53	PL 1 x 5	70.50 - 71.75	1.0000	1.0000
L23	73	(Area) CCI-65FP-045100	70.50 - 71.75	1.0000	1.0000
L23	74	(Area) CCI-65FP-045100	70.50 - 71.75	1.0000	1.0000
L23	77	(Area) CCI-65FP-045100	70.50 - 71.75	1.0000	1.0000
L23	79	(Area) CCI-65FP-060100 (H)	70.50 - 71.75	1.0000	1.0000
L23	81	(Area) CCI-65FP-060100 (H)	70.50 - 71.75	1.0000	1.0000
L23	90	(Area) CCI-65FP-065125	70.50 - 71.75	1.0000	1.0000
L23	97	PL 1.25x4	70.50 - 71.75	1.0000	1.0000
L23	98	PL 1.25x4	70.50 - 71.75	1.0000	1.0000
L23	99	PL 1.25x4	70.50 - 71.75	1.0000	1.0000
L23	100	PL 1.25x4	70.50 - 71.75	1.0000	1.0000
L24	2	Safety Line 3/8	70.25 - 70.50	1.0000	1.0000
L24	8	3" Flexible Conduit	70.25 - 70.50	1.0000	1.0000
L24	9	HB114-1-0813U4-M5J(1-1/4)	70.25 - 70.50	1.0000	1.0000
L24	11	LDF7-50A(1-5/8)	70.25 - 70.50	1.0000	1.0000
L24	14	LDF7-50A(1-5/8)	70.25 - 70.50	1.0000	1.0000
L24	45	PL 1 x 5	70.25 - 70.50	1.0000	1.0000
L24	48	PL 1 x 5	70.25 - 70.50	1.0000	1.0000
L24	51	PL 1 x 5	70.25 - 70.50	1.0000	1.0000
L24	53	PL 1 x 5	70.25 - 70.50	1.0000	1.0000
L24	73	(Area) CCI-65FP-045100	70.25 - 70.50	1.0000	1.0000
L24	74	(Area) CCI-65FP-045100	70.25 - 70.50	1.0000	1.0000

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	Client Crown Castle	Designed by mshakeri

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L24	77	(Area) CCI-65FP-045100	70.25 - 70.50	1.0000	1.0000
L24	79	(Area) CCI-65FP-060100 (H)	70.25 - 70.50	1.0000	1.0000
L24	81	(Area) CCI-65FP-060100 (H)	70.25 - 70.50	1.0000	1.0000
L24	90	(Area) CCI-65FP-065125	70.25 - 70.50	1.0000	1.0000
L24	97	PL 1.25x4	70.25 - 70.50	1.0000	1.0000
L24	98	PL 1.25x4	70.25 - 70.50	1.0000	1.0000
L24	99	PL 1.25x4	70.25 - 70.50	1.0000	1.0000
L24	100	PL 1.25x4	70.25 - 70.50	1.0000	1.0000
L25	2	Safety Line 3/8	70.00 - 70.25	1.0000	1.0000
L25	8	3" Flexible Conduit	70.00 - 70.25	1.0000	1.0000
L25	9	HB114-1-0813U4-M5J(1-1/4)	70.00 - 70.25	1.0000	1.0000
L25	11	LDF7-50A(1-5/8)	70.00 - 70.25	1.0000	1.0000
L25	14	LDF7-50A(1-5/8)	70.00 - 70.25	1.0000	1.0000
L25	45	PL 1 x 5	70.00 - 70.25	1.0000	1.0000
L25	48	PL 1 x 5	70.00 - 70.25	1.0000	1.0000
L25	51	PL 1 x 5	70.00 - 70.25	1.0000	1.0000
L25	53	PL 1 x 5	70.00 - 70.25	1.0000	1.0000
L25	73	(Area) CCI-65FP-045100	70.00 - 70.25	1.0000	1.0000
L25	74	(Area) CCI-65FP-045100	70.00 - 70.25	1.0000	1.0000
L25	77	(Area) CCI-65FP-045100	70.00 - 70.25	1.0000	1.0000
L25	79	(Area) CCI-65FP-060100 (H)	70.00 - 70.25	1.0000	1.0000
L25	81	(Area) CCI-65FP-060100 (H)	70.00 - 70.25	1.0000	1.0000
L25	90	(Area) CCI-65FP-065125	70.00 - 70.25	1.0000	1.0000
L25	97	PL 1.25x4	70.00 - 70.25	1.0000	1.0000
L25	98	PL 1.25x4	70.00 - 70.25	1.0000	1.0000
L25	99	PL 1.25x4	70.00 - 70.25	1.0000	1.0000
L25	100	PL 1.25x4	70.00 - 70.25	1.0000	1.0000
L26	2	Safety Line 3/8	69.75 - 70.00	1.0000	1.0000
L26	8	3" Flexible Conduit	69.75 - 70.00	1.0000	1.0000
L26	9	HB114-1-0813U4-M5J(1-1/4)	69.75 - 70.00	1.0000	1.0000
L26	11	LDF7-50A(1-5/8)	69.75 - 70.00	1.0000	1.0000
L26	14	LDF7-50A(1-5/8)	69.75 - 70.00	1.0000	1.0000
L26	45	PL 1 x 5	69.75 - 70.00	1.0000	1.0000
L26	48	PL 1 x 5	69.75 - 70.00	1.0000	1.0000
L26	51	PL 1 x 5	69.75 - 70.00	1.0000	1.0000
L26	53	PL 1 x 5	69.75 - 70.00	1.0000	1.0000
L26	73	(Area) CCI-65FP-045100	69.75 - 70.00	1.0000	1.0000
L26	74	(Area) CCI-65FP-045100	69.75 - 70.00	1.0000	1.0000
L26	77	(Area) CCI-65FP-045100	69.75 - 70.00	1.0000	1.0000
L26	79	(Area) CCI-65FP-060100 (H)	69.75 - 70.00	1.0000	1.0000
L26	81	(Area) CCI-65FP-060100 (H)	69.75 - 70.00	1.0000	1.0000
L26	90	(Area) CCI-65FP-065125	69.75 - 70.00	1.0000	1.0000
L26	97	PL 1.25x4	69.75 - 70.00	1.0000	1.0000
L26	98	PL 1.25x4	69.75 - 70.00	1.0000	1.0000
L26	99	PL 1.25x4	69.75 - 70.00	1.0000	1.0000
L26	100	PL 1.25x4	69.75 - 70.00	1.0000	1.0000
L27	2	Safety Line 3/8	69.50 - 69.75	1.0000	1.0000
L27	8	3" Flexible Conduit	69.50 - 69.75	1.0000	1.0000
L27	9	HB114-1-0813U4-M5J(1-1/4)	69.50 - 69.75	1.0000	1.0000
L27	11	LDF7-50A(1-5/8)	69.50 - 69.75	1.0000	1.0000
L27	14	LDF7-50A(1-5/8)	69.50 - 69.75	1.0000	1.0000
L27	45	PL 1 x 5	69.50 - 69.75	1.0000	1.0000
L27	48	PL 1 x 5	69.50 - 69.75	1.0000	1.0000
L27	51	PL 1 x 5	69.50 - 69.75	1.0000	1.0000
L27	53	PL 1 x 5	69.50 - 69.75	1.0000	1.0000
L27	73	(Area) CCI-65FP-045100	69.50 - 69.75	1.0000	1.0000
L27	74	(Area) CCI-65FP-045100	69.50 - 69.75	1.0000	1.0000
L27	77	(Area) CCI-65FP-045100	69.50 - 69.75	1.0000	1.0000
L27	79	(Area) CCI-65FP-060100 (H)	69.50 - 69.75	1.0000	1.0000

tnxTower

**Tower Engineering
Engineering, Inc.**
326 Tyron Road
Raleigh, NC 27603
Phone: (919) 661-6351
FAX: (919) 661-6350

Job

528 Wheelers Farm Rd (BU 876320)

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Project

TEP No. 25570.318938

Date

11:36:47 11/08/19

Client

Crown Castle

Designed by

mshakeri

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L27	81	(Area) CCI-65FP-060100 (H)	69.50 - 69.75	1.0000	1.0000
L27	90	(Area) CCI-65FP-065125	69.50 - 69.75	1.0000	1.0000
L27	97	PL 1.25x4	69.50 - 69.75	1.0000	1.0000
L27	98	PL 1.25x4	69.50 - 69.75	1.0000	1.0000
L27	99	PL 1.25x4	69.50 - 69.75	1.0000	1.0000
L27	100	PL 1.25x4	69.50 - 69.75	1.0000	1.0000
L28	2	Safety Line 3/8	69.25 - 69.50	1.0000	1.0000
L28	8	3" Flexible Conduit	69.25 - 69.50	1.0000	1.0000
L28	9	HB114-1-0813U4-M5J(1-1/4)	69.25 - 69.50	1.0000	1.0000
)			
L28	11	LDF7-50A(1-5/8)	69.25 - 69.50	1.0000	1.0000
L28	14	LDF7-50A(1-5/8)	69.25 - 69.50	1.0000	1.0000
L28	45	PL 1 x 5	69.25 - 69.50	1.0000	1.0000
L28	48	PL 1 x 5	69.25 - 69.50	1.0000	1.0000
L28	51	PL 1 x 5	69.25 - 69.50	1.0000	1.0000
L28	53	PL 1 x 5	69.25 - 69.50	1.0000	1.0000
L28	73	(Area) CCI-65FP-045100	69.25 - 69.50	1.0000	1.0000
L28	74	(Area) CCI-65FP-045100	69.25 - 69.50	1.0000	1.0000
L28	77	(Area) CCI-65FP-045100	69.25 - 69.50	1.0000	1.0000
L28	79	(Area) CCI-65FP-060100 (H)	69.25 - 69.50	1.0000	1.0000
L28	81	(Area) CCI-65FP-060100 (H)	69.25 - 69.50	1.0000	1.0000
L28	90	(Area) CCI-65FP-065125	69.25 - 69.50	1.0000	1.0000
L28	97	PL 1.25x4	69.25 - 69.50	1.0000	1.0000
L28	98	PL 1.25x4	69.25 - 69.50	1.0000	1.0000
L28	99	PL 1.25x4	69.25 - 69.50	1.0000	1.0000
L28	100	PL 1.25x4	69.25 - 69.50	1.0000	1.0000
L29	2	Safety Line 3/8	64.25 - 69.25	1.0000	1.0000
L29	8	3" Flexible Conduit	64.25 - 69.25	1.0000	1.0000
L29	9	HB114-1-0813U4-M5J(1-1/4)	64.25 - 69.25	1.0000	1.0000
)			
L29	11	LDF7-50A(1-5/8)	64.25 - 69.25	1.0000	1.0000
L29	14	LDF7-50A(1-5/8)	64.25 - 69.25	1.0000	1.0000
L29	44	PL 1 x 5	64.25 - 68.25	1.0000	1.0000
L29	45	PL 1 x 5	68.25 - 69.25	1.0000	1.0000
L29	47	PL 1 x 5	64.25 - 68.25	1.0000	1.0000
L29	48	PL 1 x 5	68.25 - 69.25	1.0000	1.0000
L29	51	PL 1 x 5	64.25 - 69.25	1.0000	1.0000
L29	53	PL 1 x 5	64.25 - 69.25	1.0000	1.0000
L29	72	(Area) CCI-65FP-045100	64.25 - 68.25	1.0000	1.0000
L29	73	(Area) CCI-65FP-045100	68.25 - 69.25	1.0000	1.0000
L29	74	(Area) CCI-65FP-045100	64.25 - 69.25	1.0000	1.0000
L29	76	(Area) CCI-65FP-045100	64.25 - 68.25	1.0000	1.0000
L29	77	(Area) CCI-65FP-045100	68.25 - 69.25	1.0000	1.0000
L29	79	(Area) CCI-65FP-060100 (H)	67.00 - 69.25	1.0000	1.0000
L29	81	(Area) CCI-65FP-060100 (H)	67.00 - 69.25	1.0000	1.0000
L29	90	(Area) CCI-65FP-065125	64.25 - 69.25	1.0000	1.0000
L29	97	PL 1.25x4	68.25 - 69.25	1.0000	1.0000
L29	98	PL 1.25x4	68.25 - 69.25	1.0000	1.0000
L29	99	PL 1.25x4	68.25 - 69.25	1.0000	1.0000
L29	100	PL 1.25x4	68.25 - 69.25	1.0000	1.0000
L30	2	Safety Line 3/8	59.25 - 64.25	1.0000	1.0000
L30	8	3" Flexible Conduit	59.25 - 64.25	1.0000	1.0000
L30	9	HB114-1-0813U4-M5J(1-1/4)	59.25 - 64.25	1.0000	1.0000
)			
L30	11	LDF7-50A(1-5/8)	59.25 - 64.25	1.0000	1.0000
L30	14	LDF7-50A(1-5/8)	59.25 - 64.25	1.0000	1.0000
L30	44	PL 1 x 5	59.25 - 64.25	1.0000	1.0000
L30	47	PL 1 x 5	59.25 - 64.25	1.0000	1.0000
L30	51	PL 1 x 5	59.25 - 64.25	1.0000	1.0000
L30	53	PL 1 x 5	59.25 - 64.25	1.0000	1.0000
L30	72	(Area) CCI-65FP-045100	59.25 - 64.25	1.0000	1.0000
L30	74	(Area) CCI-65FP-045100	59.25 - 64.25	1.0000	1.0000

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Client	Crown Castle	Designed by	mshakeri

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L30	76	(Area) CCI-65FP-045100	59.25 - 64.25	1.0000	1.0000
L30	90	(Area) CCI-65FP-065125	59.25 - 64.25	1.0000	1.0000
L31	2	Safety Line 3/8	56.00 - 59.25	1.0000	1.0000
L31	8	3" Flexible Conduit	56.00 - 59.25	1.0000	1.0000
L31	9	HB114-1-0813U4-M5J(1-1/4)	56.00 - 59.25	1.0000	1.0000
L31	11	LDF7-50A(1-5/8)	56.00 - 59.25	1.0000	1.0000
L31	14	LDF7-50A(1-5/8)	56.00 - 59.25	1.0000	1.0000
L31	44	PL 1 x 5	56.00 - 59.25	1.0000	1.0000
L31	47	PL 1 x 5	56.00 - 59.25	1.0000	1.0000
L31	51	PL 1 x 5	56.00 - 59.25	1.0000	1.0000
L31	53	PL 1 x 5	56.00 - 59.25	1.0000	1.0000
L31	72	(Area) CCI-65FP-045100	56.00 - 59.25	1.0000	1.0000
L31	74	(Area) CCI-65FP-045100	56.00 - 59.25	1.0000	1.0000
L31	76	(Area) CCI-65FP-045100	56.00 - 59.25	1.0000	1.0000
L31	90	(Area) CCI-65FP-065125	56.00 - 59.25	1.0000	1.0000
L31	92	(Area) CCI-65FP-045100	56.00 - 57.50	1.0000	1.0000
L31	93	(Area) CCI-65FP-045100	56.00 - 57.50	1.0000	1.0000
L31	94	(Area) CCI-65FP-045100	56.00 - 57.50	1.0000	1.0000
L31	95	(Area) CCI-65FP-045100	56.00 - 57.25	1.0000	1.0000
L32	2	Safety Line 3/8	55.75 - 56.00	1.0000	1.0000
L32	8	3" Flexible Conduit	55.75 - 56.00	1.0000	1.0000
L32	9	HB114-1-0813U4-M5J(1-1/4)	55.75 - 56.00	1.0000	1.0000
L32	11	LDF7-50A(1-5/8)	55.75 - 56.00	1.0000	1.0000
L32	14	LDF7-50A(1-5/8)	55.75 - 56.00	1.0000	1.0000
L32	27	C6x10.5	55.75 - 56.00	1.0000	1.0000
L32	28	C6x10.5	55.75 - 56.00	1.0000	1.0000
L32	29	C6x10.5	55.75 - 56.00	1.0000	1.0000
L32	30	C6x10.5	55.75 - 56.00	1.0000	1.0000
L32	44	PL 1 x 5	55.75 - 56.00	1.0000	1.0000
L32	46	PL 1 x 5	55.75 - 56.00	1.0000	1.0000
L32	51	PL 1 x 5	55.75 - 56.00	1.0000	1.0000
L32	52	PL 1 x 5	55.75 - 56.00	1.0000	1.0000
L32	71	(Area) CCI-65FP-045100	55.75 - 56.00	1.0000	1.0000
L32	74	(Area) CCI-65FP-045100	55.75 - 56.00	1.0000	1.0000
L32	75	(Area) CCI-65FP-045100	55.75 - 56.00	1.0000	1.0000
L32	90	(Area) CCI-65FP-065125	55.75 - 56.00	1.0000	1.0000
L32	92	(Area) CCI-65FP-045100	55.75 - 56.00	1.0000	1.0000
L32	93	(Area) CCI-65FP-045100	55.75 - 56.00	1.0000	1.0000
L32	94	(Area) CCI-65FP-045100	55.75 - 56.00	1.0000	1.0000
L32	95	(Area) CCI-65FP-045100	55.75 - 56.00	1.0000	1.0000
L33	2	Safety Line 3/8	55.50 - 55.75	1.0000	1.0000
L33	8	3" Flexible Conduit	55.50 - 55.75	1.0000	1.0000
L33	9	HB114-1-0813U4-M5J(1-1/4)	55.50 - 55.75	1.0000	1.0000
L33	11	LDF7-50A(1-5/8)	55.50 - 55.75	1.0000	1.0000
L33	14	LDF7-50A(1-5/8)	55.50 - 55.75	1.0000	1.0000
L33	27	C6x10.5	55.50 - 55.75	1.0000	1.0000
L33	28	C6x10.5	55.50 - 55.75	1.0000	1.0000
L33	29	C6x10.5	55.50 - 55.75	1.0000	1.0000
L33	30	C6x10.5	55.50 - 55.75	1.0000	1.0000
L33	44	PL 1 x 5	55.50 - 55.75	1.0000	1.0000
L33	46	PL 1 x 5	55.50 - 55.75	1.0000	1.0000
L33	51	PL 1 x 5	55.50 - 55.75	1.0000	1.0000
L33	52	PL 1 x 5	55.50 - 55.75	1.0000	1.0000
L33	71	(Area) CCI-65FP-045100	55.50 - 55.75	1.0000	1.0000
L33	74	(Area) CCI-65FP-045100	55.50 - 55.75	1.0000	1.0000
L33	75	(Area) CCI-65FP-045100	55.50 - 55.75	1.0000	1.0000
L33	90	(Area) CCI-65FP-065125	55.50 - 55.75	1.0000	1.0000
L33	92	(Area) CCI-65FP-045100	55.50 - 55.75	1.0000	1.0000
L33	93	(Area) CCI-65FP-045100	55.50 - 55.75	1.0000	1.0000

tnxTower Tower Engineering Engineering, Inc. 326 Tyron Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job 528 Wheelers Farm Rd (BU 876320)	Page 27 of 60
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	Client Crown Castle	Designed by mshakeri

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L33	94	(Area) CCI-65FP-045100	55.50 - 55.75	1.0000	1.0000
L33	95	(Area) CCI-65FP-045100	55.50 - 55.75	1.0000	1.0000
L34	2	Safety Line 3/8	55.25 - 55.50	1.0000	1.0000
L34	8	3" Flexible Conduit	55.25 - 55.50	1.0000	1.0000
L34	9	HB114-1-0813U4-M5J(1-1/4)	55.25 - 55.50	1.0000	1.0000
)			
L34	11	LDF7-50A(1-5/8)	55.25 - 55.50	1.0000	1.0000
L34	14	LDF7-50A(1-5/8)	55.25 - 55.50	1.0000	1.0000
L34	27	C6x10.5	55.25 - 55.50	1.0000	1.0000
L34	28	C6x10.5	55.25 - 55.50	1.0000	1.0000
L34	29	C6x10.5	55.25 - 55.50	1.0000	1.0000
L34	30	C6x10.5	55.25 - 55.50	1.0000	1.0000
L34	44	PL 1 x 5	55.25 - 55.50	1.0000	1.0000
L34	46	PL 1 x 5	55.25 - 55.50	1.0000	1.0000
L34	51	PL 1 x 5	55.25 - 55.50	1.0000	1.0000
L34	52	PL 1 x 5	55.25 - 55.50	1.0000	1.0000
L34	71	(Area) CCI-65FP-045100	55.25 - 55.50	1.0000	1.0000
L34	74	(Area) CCI-65FP-045100	55.25 - 55.50	1.0000	1.0000
L34	75	(Area) CCI-65FP-045100	55.25 - 55.50	1.0000	1.0000
L34	90	(Area) CCI-65FP-065125	55.25 - 55.50	1.0000	1.0000
L34	92	(Area) CCI-65FP-045100	55.25 - 55.50	1.0000	1.0000
L34	93	(Area) CCI-65FP-045100	55.25 - 55.50	1.0000	1.0000
L34	94	(Area) CCI-65FP-045100	55.25 - 55.50	1.0000	1.0000
L34	95	(Area) CCI-65FP-045100	55.25 - 55.50	1.0000	1.0000
L35	2	Safety Line 3/8	54.00 - 55.25	1.0000	1.0000
L35	8	3" Flexible Conduit	54.00 - 55.25	1.0000	1.0000
L35	9	HB114-1-0813U4-M5J(1-1/4)	54.00 - 55.25	1.0000	1.0000
)			
L35	11	LDF7-50A(1-5/8)	54.00 - 55.25	1.0000	1.0000
L35	14	LDF7-50A(1-5/8)	54.00 - 55.25	1.0000	1.0000
L35	27	C6x10.5	54.00 - 55.25	1.0000	1.0000
L35	28	C6x10.5	54.00 - 55.25	1.0000	1.0000
L35	29	C6x10.5	54.00 - 55.25	1.0000	1.0000
L35	30	C6x10.5	54.00 - 55.25	1.0000	1.0000
L35	44	PL 1 x 5	54.00 - 55.25	1.0000	1.0000
L35	46	PL 1 x 5	54.00 - 55.25	1.0000	1.0000
L35	51	PL 1 x 5	54.00 - 55.25	1.0000	1.0000
L35	52	PL 1 x 5	54.00 - 55.25	1.0000	1.0000
L35	71	(Area) CCI-65FP-045100	54.00 - 55.25	1.0000	1.0000
L35	74	(Area) CCI-65FP-045100	54.00 - 55.25	1.0000	1.0000
L35	75	(Area) CCI-65FP-045100	54.00 - 55.25	1.0000	1.0000
L35	90	(Area) CCI-65FP-065125	54.00 - 55.25	1.0000	1.0000
L35	92	(Area) CCI-65FP-045100	54.00 - 55.25	1.0000	1.0000
L35	93	(Area) CCI-65FP-045100	54.00 - 55.25	1.0000	1.0000
L35	94	(Area) CCI-65FP-045100	54.00 - 55.25	1.0000	1.0000
L35	95	(Area) CCI-65FP-045100	54.00 - 55.25	1.0000	1.0000
L36	2	Safety Line 3/8	53.75 - 54.00	1.0000	1.0000
L36	8	3" Flexible Conduit	53.75 - 54.00	1.0000	1.0000
L36	9	HB114-1-0813U4-M5J(1-1/4)	53.75 - 54.00	1.0000	1.0000
)			
L36	11	LDF7-50A(1-5/8)	53.75 - 54.00	1.0000	1.0000
L36	14	LDF7-50A(1-5/8)	53.75 - 54.00	1.0000	1.0000
L36	27	C6x10.5	53.75 - 54.00	1.0000	1.0000
L36	28	C6x10.5	53.75 - 54.00	1.0000	1.0000
L36	29	C6x10.5	53.75 - 54.00	1.0000	1.0000
L36	30	C6x10.5	53.75 - 54.00	1.0000	1.0000
L36	44	PL 1 x 5	53.75 - 54.00	1.0000	1.0000
L36	46	PL 1 x 5	53.75 - 54.00	1.0000	1.0000
L36	51	PL 1 x 5	53.75 - 54.00	1.0000	1.0000
L36	52	PL 1 x 5	53.75 - 54.00	1.0000	1.0000
L36	71	(Area) CCI-65FP-045100	53.75 - 54.00	1.0000	1.0000
L36	74	(Area) CCI-65FP-045100	53.75 - 54.00	1.0000	1.0000

tnxTower Tower Engineering Engineering, Inc. 326 Tyron Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job 528 Wheelers Farm Rd (BU 876320)	Page 28 of 60
	Project TEP No. 25570.318938	Date 11:36:47 11/08/19
	Client Crown Castle	Designed by mshakeri

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L36	75	(Area) CCI-65FP-045100	53.75 - 54.00	1.0000	1.0000
L36	90	(Area) CCI-65FP-065125	53.75 - 54.00	1.0000	1.0000
L36	92	(Area) CCI-65FP-045100	53.75 - 54.00	1.0000	1.0000
L36	93	(Area) CCI-65FP-045100	53.75 - 54.00	1.0000	1.0000
L36	94	(Area) CCI-65FP-045100	53.75 - 54.00	1.0000	1.0000
L36	95	(Area) CCI-65FP-045100	53.75 - 54.00	1.0000	1.0000
L37	2	Safety Line 3/8	53.50 - 53.75	1.0000	1.0000
L37	8	3" Flexible Conduit	53.50 - 53.75	1.0000	1.0000
L37	9	HB114-1-0813U4-M5J(1-1/4)	53.50 - 53.75	1.0000	1.0000
L37	11	LDF7-50A(1-5/8)	53.50 - 53.75	1.0000	1.0000
L37	14	LDF7-50A(1-5/8)	53.50 - 53.75	1.0000	1.0000
L37	27	C6x10.5	53.50 - 53.75	1.0000	1.0000
L37	28	C6x10.5	53.50 - 53.75	1.0000	1.0000
L37	29	C6x10.5	53.50 - 53.75	1.0000	1.0000
L37	30	C6x10.5	53.50 - 53.75	1.0000	1.0000
L37	44	PL 1 x 5	53.50 - 53.75	1.0000	1.0000
L37	46	PL 1 x 5	53.50 - 53.75	1.0000	1.0000
L37	51	PL 1 x 5	53.50 - 53.75	1.0000	1.0000
L37	52	PL 1 x 5	53.50 - 53.75	1.0000	1.0000
L37	71	(Area) CCI-65FP-045100	53.50 - 53.75	1.0000	1.0000
L37	74	(Area) CCI-65FP-045100	53.50 - 53.75	1.0000	1.0000
L37	75	(Area) CCI-65FP-045100	53.50 - 53.75	1.0000	1.0000
L37	90	(Area) CCI-65FP-065125	53.50 - 53.75	1.0000	1.0000
L37	92	(Area) CCI-65FP-045100	53.50 - 53.75	1.0000	1.0000
L37	93	(Area) CCI-65FP-045100	53.50 - 53.75	1.0000	1.0000
L37	94	(Area) CCI-65FP-045100	53.50 - 53.75	1.0000	1.0000
L37	95	(Area) CCI-65FP-045100	53.50 - 53.75	1.0000	1.0000
L38	2	Safety Line 3/8	53.25 - 53.50	1.0000	1.0000
L38	8	3" Flexible Conduit	53.25 - 53.50	1.0000	1.0000
L38	9	HB114-1-0813U4-M5J(1-1/4)	53.25 - 53.50	1.0000	1.0000
L38	11	LDF7-50A(1-5/8)	53.25 - 53.50	1.0000	1.0000
L38	14	LDF7-50A(1-5/8)	53.25 - 53.50	1.0000	1.0000
L38	27	C6x10.5	53.25 - 53.50	1.0000	1.0000
L38	28	C6x10.5	53.25 - 53.50	1.0000	1.0000
L38	29	C6x10.5	53.25 - 53.50	1.0000	1.0000
L38	30	C6x10.5	53.25 - 53.50	1.0000	1.0000
L38	44	PL 1 x 5	53.25 - 53.50	1.0000	1.0000
L38	46	PL 1 x 5	53.25 - 53.50	1.0000	1.0000
L38	51	PL 1 x 5	53.25 - 53.50	1.0000	1.0000
L38	52	PL 1 x 5	53.25 - 53.50	1.0000	1.0000
L38	71	(Area) CCI-65FP-045100	53.25 - 53.50	1.0000	1.0000
L38	74	(Area) CCI-65FP-045100	53.25 - 53.50	1.0000	1.0000
L38	75	(Area) CCI-65FP-045100	53.25 - 53.50	1.0000	1.0000
L38	90	(Area) CCI-65FP-065125	53.25 - 53.50	1.0000	1.0000
L38	92	(Area) CCI-65FP-045100	53.25 - 53.50	1.0000	1.0000
L38	93	(Area) CCI-65FP-045100	53.25 - 53.50	1.0000	1.0000
L38	94	(Area) CCI-65FP-045100	53.25 - 53.50	1.0000	1.0000
L38	95	(Area) CCI-65FP-045100	53.25 - 53.50	1.0000	1.0000
L39	2	Safety Line 3/8	53.00 - 53.25	1.0000	1.0000
L39	8	3" Flexible Conduit	53.00 - 53.25	1.0000	1.0000
L39	9	HB114-1-0813U4-M5J(1-1/4)	53.00 - 53.25	1.0000	1.0000
L39	11	LDF7-50A(1-5/8)	53.00 - 53.25	1.0000	1.0000
L39	14	LDF7-50A(1-5/8)	53.00 - 53.25	1.0000	1.0000
L39	27	C6x10.5	53.00 - 53.25	1.0000	1.0000
L39	28	C6x10.5	53.00 - 53.25	1.0000	1.0000
L39	29	C6x10.5	53.00 - 53.25	1.0000	1.0000
L39	30	C6x10.5	53.00 - 53.25	1.0000	1.0000
L39	44	PL 1 x 5	53.00 - 53.25	1.0000	1.0000
L39	46	PL 1 x 5	53.00 - 53.25	1.0000	1.0000

<p>tnxTower</p> <p><i>Tower Engineering Engineering, Inc.</i></p> <p>326 Tyron Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</p>	<p>Job</p> <p>528 Wheelers Farm Rd (BU 876320)</p>	<p>Page</p> <p>29 of 60</p>
	<p>Project</p> <p>TEP No. 25570.318938</p>	<p>Date</p> <p>11:36:47 11/08/19</p>
	<p>Client</p> <p>Crown Castle</p>	<p>Designed by</p> <p>mshakeri</p>

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L39	51	PL 1 x 5	53.00 - 53.25	1.0000	1.0000
L39	52	PL 1 x 5	53.00 - 53.25	1.0000	1.0000
L39	71	(Area) CCI-65FP-045100	53.00 - 53.25	1.0000	1.0000
L39	74	(Area) CCI-65FP-045100	53.00 - 53.25	1.0000	1.0000
L39	75	(Area) CCI-65FP-045100	53.00 - 53.25	1.0000	1.0000
L39	90	(Area) CCI-65FP-065125	53.00 - 53.25	1.0000	1.0000
L39	92	(Area) CCI-65FP-045100	53.00 - 53.25	1.0000	1.0000
L39	93	(Area) CCI-65FP-045100	53.00 - 53.25	1.0000	1.0000
L39	94	(Area) CCI-65FP-045100	53.00 - 53.25	1.0000	1.0000
L39	95	(Area) CCI-65FP-045100	53.00 - 53.25	1.0000	1.0000
L40	2	Safety Line 3/8	48.00 - 53.00	1.0000	1.0000
L40	8	3" Flexible Conduit	48.00 - 53.00	1.0000	1.0000
L40	9	HB114-1-0813U4-M5J(1-1/4)	48.00 - 53.00	1.0000	1.0000
L40	11	LDF7-50A(1-5/8)	48.00 - 53.00	1.0000	1.0000
L40	14	LDF7-50A(1-5/8)	48.00 - 53.00	1.0000	1.0000
L40	27	C6x10.5	48.00 - 53.00	1.0000	1.0000
L40	28	C6x10.5	48.00 - 53.00	1.0000	1.0000
L40	29	C6x10.5	48.00 - 53.00	1.0000	1.0000
L40	30	C6x10.5	48.00 - 53.00	1.0000	1.0000
L40	44	PL 1 x 5	48.00 - 53.00	1.0000	1.0000
L40	46	PL 1 x 5	48.00 - 53.00	1.0000	1.0000
L40	50	PL 1 x 5	48.00 - 50.50	1.0000	1.0000
L40	51	PL 1 x 5	50.50 - 53.00	1.0000	1.0000
L40	52	PL 1 x 5	48.00 - 53.00	1.0000	1.0000
L40	71	(Area) CCI-65FP-045100	52.00 - 53.00	1.0000	1.0000
L40	74	(Area) CCI-65FP-045100	52.00 - 53.00	1.0000	1.0000
L40	75	(Area) CCI-65FP-045100	52.00 - 53.00	1.0000	1.0000
L40	90	(Area) CCI-65FP-065125	50.50 - 53.00	1.0000	1.0000
L40	92	(Area) CCI-65FP-045100	48.00 - 53.00	1.0000	1.0000
L40	93	(Area) CCI-65FP-045100	48.00 - 53.00	1.0000	1.0000
L40	94	(Area) CCI-65FP-045100	48.00 - 53.00	1.0000	1.0000
L40	95	(Area) CCI-65FP-045100	48.00 - 53.00	1.0000	1.0000
L41	2	Safety Line 3/8	39.75 - 48.00	1.0000	1.0000
L41	8	3" Flexible Conduit	39.75 - 48.00	1.0000	1.0000
L41	9	HB114-1-0813U4-M5J(1-1/4)	39.75 - 48.00	1.0000	1.0000
L41	11	LDF7-50A(1-5/8)	39.75 - 48.00	1.0000	1.0000
L41	14	LDF7-50A(1-5/8)	39.75 - 48.00	1.0000	1.0000
L41	27	C6x10.5	39.75 - 48.00	1.0000	1.0000
L41	28	C6x10.5	39.75 - 48.00	1.0000	1.0000
L41	29	C6x10.5	39.75 - 48.00	1.0000	1.0000
L41	30	C6x10.5	39.75 - 48.00	1.0000	1.0000
L41	43	PL 1 x 5	39.75 - 45.50	1.0000	1.0000
L41	44	PL 1 x 5	45.50 - 48.00	1.0000	1.0000
L41	46	PL 1 x 5	39.75 - 48.00	1.0000	1.0000
L41	49	PL 1 x 5	39.75 - 45.50	1.0000	1.0000
L41	50	PL 1 x 5	45.50 - 48.00	1.0000	1.0000
L41	52	PL 1 x 5	39.75 - 48.00	1.0000	1.0000
L41	61	(Area) Aero MP3-03	39.75 - 45.50	1.0000	1.0000
L41	62	(Area) Aero MP3-03	39.75 - 45.50	1.0000	1.0000
L41	63	(Area) Aero MP3-03	39.75 - 45.50	1.0000	1.0000
L41	64	(Area) Aero MP3-03	39.75 - 45.50	1.0000	1.0000
L41	92	(Area) CCI-65FP-045100	42.50 - 48.00	1.0000	1.0000
L41	93	(Area) CCI-65FP-045100	42.50 - 48.00	1.0000	1.0000
L41	94	(Area) CCI-65FP-045100	42.50 - 48.00	1.0000	1.0000
L41	95	(Area) CCI-65FP-045100	42.25 - 48.00	1.0000	1.0000
L43	2	Safety Line 3/8	34.75 - 38.75	1.0000	1.0000
L43	8	3" Flexible Conduit	34.75 - 38.75	1.0000	1.0000
L43	9	HB114-1-0813U4-M5J(1-1/4)	34.75 - 38.75	1.0000	1.0000
L43	11	LDF7-50A(1-5/8)	34.75 - 38.75	1.0000	1.0000

<p>tnxTower</p> <p>Tower Engineering Engineering, Inc. 326 Tyron Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</p>	<p>Job</p> <p>528 Wheelers Farm Rd (BU 876320)</p>	<p>Page</p> <p>30 of 60</p>
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	<p>Client</p> <p>Crown Castle</p>	<p>Designed by</p> <p>mshakeri</p>

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L43	14	LDF7-50A(1-5/8)	34.75 - 38.75	1.0000	1.0000
L43	27	C6x10.5	34.75 - 38.75	1.0000	1.0000
L43	28	C6x10.5	34.75 - 38.75	1.0000	1.0000
L43	29	C6x10.5	34.75 - 38.75	1.0000	1.0000
L43	30	C6x10.5	34.75 - 38.75	1.0000	1.0000
L43	38	PL 1 x 5	34.75 - 37.00	1.0000	1.0000
L43	39	PL 1 x 5	34.75 - 37.00	1.0000	1.0000
L43	40	PL 1 x 5	34.75 - 37.00	1.0000	1.0000
L43	41	PL 1 x 5	34.75 - 37.00	1.0000	1.0000
L43	43	PL 1 x 5	34.75 - 38.75	1.0000	1.0000
L43	46	PL 1 x 5	34.75 - 38.75	1.0000	1.0000
L43	49	PL 1 x 5	34.75 - 38.75	1.0000	1.0000
L43	52	PL 1 x 5	34.75 - 38.75	1.0000	1.0000
L43	61	(Area) Aero MP3-03	34.75 - 38.75	1.0000	1.0000
L43	62	(Area) Aero MP3-03	34.75 - 38.75	1.0000	1.0000
L43	63	(Area) Aero MP3-03	34.75 - 38.75	1.0000	1.0000
L43	64	(Area) Aero MP3-03	34.75 - 38.75	1.0000	1.0000
L44	2	Safety Line 3/8	34.50 - 34.75	1.0000	1.0000
L44	8	3" Flexible Conduit	34.50 - 34.75	1.0000	1.0000
L44	9	HB114-1-0813U4-M5J(1-1/4)	34.50 - 34.75	1.0000	1.0000
L44	11	LDF7-50A(1-5/8)	34.50 - 34.75	1.0000	1.0000
L44	14	LDF7-50A(1-5/8)	34.50 - 34.75	1.0000	1.0000
L44	27	C6x10.5	34.50 - 34.75	1.0000	1.0000
L44	28	C6x10.5	34.50 - 34.75	1.0000	1.0000
L44	29	C6x10.5	34.50 - 34.75	1.0000	1.0000
L44	30	C6x10.5	34.50 - 34.75	1.0000	1.0000
L44	38	PL 1 x 5	34.50 - 34.75	1.0000	1.0000
L44	39	PL 1 x 5	34.50 - 34.75	1.0000	1.0000
L44	40	PL 1 x 5	34.50 - 34.75	1.0000	1.0000
L44	41	PL 1 x 5	34.50 - 34.75	1.0000	1.0000
L44	43	PL 1 x 5	34.50 - 34.75	1.0000	1.0000
L44	46	PL 1 x 5	34.50 - 34.75	1.0000	1.0000
L44	49	PL 1 x 5	34.50 - 34.75	1.0000	1.0000
L44	52	PL 1 x 5	34.50 - 34.75	1.0000	1.0000
L44	61	(Area) Aero MP3-03	34.50 - 34.75	1.0000	1.0000
L44	62	(Area) Aero MP3-03	34.50 - 34.75	1.0000	1.0000
L44	63	(Area) Aero MP3-03	34.50 - 34.75	1.0000	1.0000
L44	64	(Area) Aero MP3-03	34.50 - 34.75	1.0000	1.0000
L45	2	Safety Line 3/8	33.75 - 34.50	1.0000	1.0000
L45	8	3" Flexible Conduit	33.75 - 34.50	1.0000	1.0000
L45	9	HB114-1-0813U4-M5J(1-1/4)	33.75 - 34.50	1.0000	1.0000
L45	11	LDF7-50A(1-5/8)	33.75 - 34.50	1.0000	1.0000
L45	14	LDF7-50A(1-5/8)	33.75 - 34.50	1.0000	1.0000
L45	27	C6x10.5	33.75 - 34.50	1.0000	1.0000
L45	28	C6x10.5	33.75 - 34.50	1.0000	1.0000
L45	29	C6x10.5	33.75 - 34.50	1.0000	1.0000
L45	30	C6x10.5	33.75 - 34.50	1.0000	1.0000
L45	38	PL 1 x 5	33.75 - 34.50	1.0000	1.0000
L45	39	PL 1 x 5	33.75 - 34.50	1.0000	1.0000
L45	40	PL 1 x 5	33.75 - 34.50	1.0000	1.0000
L45	41	PL 1 x 5	33.75 - 34.50	1.0000	1.0000
L45	43	PL 1 x 5	33.75 - 34.50	1.0000	1.0000
L45	46	PL 1 x 5	33.75 - 34.50	1.0000	1.0000
L45	49	PL 1 x 5	33.75 - 34.50	1.0000	1.0000
L45	52	PL 1 x 5	33.75 - 34.50	1.0000	1.0000
L45	61	(Area) Aero MP3-03	33.75 - 34.50	1.0000	1.0000
L45	62	(Area) Aero MP3-03	33.75 - 34.50	1.0000	1.0000
L45	63	(Area) Aero MP3-03	33.75 - 34.50	1.0000	1.0000
L45	64	(Area) Aero MP3-03	33.75 - 34.50	1.0000	1.0000
L46	2	Safety Line 3/8	33.50 - 33.75	1.0000	1.0000

tnxTower Tower Engineering Engineering, Inc. 326 Tyron Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job 528 Wheelers Farm Rd (BU 876320)	Page 31 of 60
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Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L46	8	3" Flexible Conduit	33.50 - 33.75	1.0000	1.0000
L46	9	HB114-1-0813U4-M5J(1-1/4)	33.50 - 33.75	1.0000	1.0000
L46	11	LDF7-50A(1-5/8)	33.50 - 33.75	1.0000	1.0000
L46	14	LDF7-50A(1-5/8)	33.50 - 33.75	1.0000	1.0000
L46	27	C6x10.5	33.50 - 33.75	1.0000	1.0000
L46	28	C6x10.5	33.50 - 33.75	1.0000	1.0000
L46	29	C6x10.5	33.50 - 33.75	1.0000	1.0000
L46	30	C6x10.5	33.50 - 33.75	1.0000	1.0000
L46	38	PL 1 x 5	33.50 - 33.75	1.0000	1.0000
L46	39	PL 1 x 5	33.50 - 33.75	1.0000	1.0000
L46	40	PL 1 x 5	33.50 - 33.75	1.0000	1.0000
L46	41	PL 1 x 5	33.50 - 33.75	1.0000	1.0000
L46	43	PL 1 x 5	33.50 - 33.75	1.0000	1.0000
L46	46	PL 1 x 5	33.50 - 33.75	1.0000	1.0000
L46	49	PL 1 x 5	33.50 - 33.75	1.0000	1.0000
L46	52	PL 1 x 5	33.50 - 33.75	1.0000	1.0000
L46	61	(Area) Aero MP3-03	33.50 - 33.75	1.0000	1.0000
L46	62	(Area) Aero MP3-03	33.50 - 33.75	1.0000	1.0000
L46	63	(Area) Aero MP3-03	33.50 - 33.75	1.0000	1.0000
L46	64	(Area) Aero MP3-03	33.50 - 33.75	1.0000	1.0000
L47	2	Safety Line 3/8	28.50 - 33.50	1.0000	1.0000
L47	8	3" Flexible Conduit	28.50 - 33.50	1.0000	1.0000
L47	9	HB114-1-0813U4-M5J(1-1/4)	28.50 - 33.50	1.0000	1.0000
L47	11	LDF7-50A(1-5/8)	28.50 - 33.50	1.0000	1.0000
L47	14	LDF7-50A(1-5/8)	28.50 - 33.50	1.0000	1.0000
L47	27	C6x10.5	28.50 - 33.50	1.0000	1.0000
L47	28	C6x10.5	28.50 - 33.50	1.0000	1.0000
L47	29	C6x10.5	28.50 - 33.50	1.0000	1.0000
L47	30	C6x10.5	28.50 - 33.50	1.0000	1.0000
L47	38	PL 1 x 5	28.50 - 33.50	1.0000	1.0000
L47	39	PL 1 x 5	28.50 - 33.50	1.0000	1.0000
L47	40	PL 1 x 5	28.50 - 33.50	1.0000	1.0000
L47	41	PL 1 x 5	28.50 - 33.50	1.0000	1.0000
L47	43	PL 1 x 5	31.50 - 33.50	1.0000	1.0000
L47	46	PL 1 x 5	31.50 - 33.50	1.0000	1.0000
L47	49	PL 1 x 5	31.50 - 33.50	1.0000	1.0000
L47	52	PL 1 x 5	31.50 - 33.50	1.0000	1.0000
L47	61	(Area) Aero MP3-03	28.50 - 33.50	1.0000	1.0000
L47	62	(Area) Aero MP3-03	28.50 - 33.50	1.0000	1.0000
L47	63	(Area) Aero MP3-03	28.50 - 33.50	1.0000	1.0000
L47	64	(Area) Aero MP3-03	28.50 - 33.50	1.0000	1.0000
L48	2	Safety Line 3/8	24.00 - 28.50	1.0000	1.0000
L48	8	3" Flexible Conduit	24.00 - 28.50	1.0000	1.0000
L48	9	HB114-1-0813U4-M5J(1-1/4)	24.00 - 28.50	1.0000	1.0000
L48	11	LDF7-50A(1-5/8)	24.00 - 28.50	1.0000	1.0000
L48	14	LDF7-50A(1-5/8)	24.00 - 28.50	1.0000	1.0000
L48	27	C6x10.5	24.00 - 28.50	1.0000	1.0000
L48	28	C6x10.5	24.00 - 28.50	1.0000	1.0000
L48	29	C6x10.5	24.00 - 28.50	1.0000	1.0000
L48	30	C6x10.5	24.00 - 28.50	1.0000	1.0000
L48	33	(Area) Aero MP3-04	24.00 - 25.50	1.0000	1.0000
L48	34	(Area) Aero MP3-04	24.00 - 25.50	1.0000	1.0000
L48	35	(Area) Aero MP3-04	24.00 - 25.50	1.0000	1.0000
L48	36	(Area) Aero MP3-04	24.00 - 25.50	1.0000	1.0000
L48	38	PL 1 x 5	24.00 - 28.50	1.0000	1.0000
L48	39	PL 1 x 5	24.00 - 28.50	1.0000	1.0000
L48	40	PL 1 x 5	24.00 - 28.50	1.0000	1.0000
L48	41	PL 1 x 5	24.00 - 28.50	1.0000	1.0000
L48	61	(Area) Aero MP3-03	25.50 - 28.50	1.0000	1.0000

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Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L48	62	(Area) Aero MP3-03	25.50 - 28.50	1.0000	1.0000
L48	63	(Area) Aero MP3-03	25.50 - 28.50	1.0000	1.0000
L48	64	(Area) Aero MP3-03	25.50 - 28.50	1.0000	1.0000
L49	2	Safety Line 3/8	23.75 - 24.00	1.0000	1.0000
L49	8	3" Flexible Conduit	23.75 - 24.00	1.0000	1.0000
L49	9	HB114-1-0813U4-M5J(1-1/4)	23.75 - 24.00	1.0000	1.0000
L49	11	LDF7-50A(1-5/8)	23.75 - 24.00	1.0000	1.0000
L49	14	LDF7-50A(1-5/8)	23.75 - 24.00	1.0000	1.0000
L49	27	C6x10.5	23.75 - 24.00	1.0000	1.0000
L49	28	C6x10.5	23.75 - 24.00	1.0000	1.0000
L49	29	C6x10.5	23.75 - 24.00	1.0000	1.0000
L49	30	C6x10.5	23.75 - 24.00	1.0000	1.0000
L49	33	(Area) Aero MP3-04	23.75 - 24.00	1.0000	1.0000
L49	34	(Area) Aero MP3-04	23.75 - 24.00	1.0000	1.0000
L49	35	(Area) Aero MP3-04	23.75 - 24.00	1.0000	1.0000
L49	36	(Area) Aero MP3-04	23.75 - 24.00	1.0000	1.0000
L49	38	PL 1 x 5	23.75 - 24.00	1.0000	1.0000
L49	39	PL 1 x 5	23.75 - 24.00	1.0000	1.0000
L49	40	PL 1 x 5	23.75 - 24.00	1.0000	1.0000
L49	41	PL 1 x 5	23.75 - 24.00	1.0000	1.0000
L50	2	Safety Line 3/8	18.75 - 23.75	1.0000	1.0000
L50	8	3" Flexible Conduit	18.75 - 23.75	1.0000	1.0000
L50	9	HB114-1-0813U4-M5J(1-1/4)	18.75 - 23.75	1.0000	1.0000
L50	11	LDF7-50A(1-5/8)	18.75 - 23.75	1.0000	1.0000
L50	14	LDF7-50A(1-5/8)	18.75 - 23.75	1.0000	1.0000
L50	27	C6x10.5	18.75 - 23.75	1.0000	1.0000
L50	28	C6x10.5	18.75 - 23.75	1.0000	1.0000
L50	29	C6x10.5	18.75 - 23.75	1.0000	1.0000
L50	30	C6x10.5	18.75 - 23.75	1.0000	1.0000
L50	33	(Area) Aero MP3-04	18.75 - 23.75	1.0000	1.0000
L50	34	(Area) Aero MP3-04	18.75 - 23.75	1.0000	1.0000
L50	35	(Area) Aero MP3-04	18.75 - 23.75	1.0000	1.0000
L50	36	(Area) Aero MP3-04	18.75 - 23.75	1.0000	1.0000
L50	38	PL 1 x 5	18.75 - 23.75	1.0000	1.0000
L50	39	PL 1 x 5	18.75 - 23.75	1.0000	1.0000
L50	40	PL 1 x 5	18.75 - 23.75	1.0000	1.0000
L50	41	PL 1 x 5	18.75 - 23.75	1.0000	1.0000
L51	2	Safety Line 3/8	14.25 - 18.75	1.0000	1.0000
L51	8	3" Flexible Conduit	14.25 - 18.75	1.0000	1.0000
L51	9	HB114-1-0813U4-M5J(1-1/4)	14.25 - 18.75	1.0000	1.0000
L51	11	LDF7-50A(1-5/8)	14.25 - 18.75	1.0000	1.0000
L51	14	LDF7-50A(1-5/8)	14.25 - 18.75	1.0000	1.0000
L51	27	C6x10.5	14.25 - 18.75	1.0000	1.0000
L51	28	C6x10.5	14.25 - 18.75	1.0000	1.0000
L51	29	C6x10.5	14.25 - 18.75	1.0000	1.0000
L51	30	C6x10.5	14.25 - 18.75	1.0000	1.0000
L51	33	(Area) Aero MP3-04	14.25 - 18.75	1.0000	1.0000
L51	34	(Area) Aero MP3-04	14.25 - 18.75	1.0000	1.0000
L51	35	(Area) Aero MP3-04	14.25 - 18.75	1.0000	1.0000
L51	36	(Area) Aero MP3-04	14.25 - 18.75	1.0000	1.0000
L51	38	PL 1 x 5	14.25 - 18.75	1.0000	1.0000
L51	39	PL 1 x 5	14.25 - 18.75	1.0000	1.0000
L51	40	PL 1 x 5	14.25 - 18.75	1.0000	1.0000
L51	41	PL 1 x 5	14.25 - 18.75	1.0000	1.0000
L51	55	(Area) Aero MP3-03	14.25 - 15.50	1.0000	1.0000
L51	57	(Area) Aero MP3-03	14.25 - 15.50	1.0000	1.0000
L51	58	(Area) Aero MP3-03	14.25 - 15.50	1.0000	1.0000
L51	59	(Area) Aero MP3-03	14.25 - 15.50	1.0000	1.0000
L51	2	Safety Line 3/8	14.00 - 14.25	1.0000	1.0000

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	Client Crown Castle	Designed by mshakeri

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L52	8	3" Flexible Conduit	14.00 - 14.25	1.0000	1.0000
L52	9	HB114-1-0813U4-M5J(1-1/4)	14.00 - 14.25	1.0000	1.0000
L52	11	LDF7-50A(1-5/8)	14.00 - 14.25	1.0000	1.0000
L52	14	LDF7-50A(1-5/8)	14.00 - 14.25	1.0000	1.0000
L52	27	C6x10.5	14.00 - 14.25	1.0000	1.0000
L52	28	C6x10.5	14.00 - 14.25	1.0000	1.0000
L52	29	C6x10.5	14.00 - 14.25	1.0000	1.0000
L52	30	C6x10.5	14.00 - 14.25	1.0000	1.0000
L52	33	(Area) Aero MP3-04	14.00 - 14.25	1.0000	1.0000
L52	34	(Area) Aero MP3-04	14.00 - 14.25	1.0000	1.0000
L52	35	(Area) Aero MP3-04	14.00 - 14.25	1.0000	1.0000
L52	36	(Area) Aero MP3-04	14.00 - 14.25	1.0000	1.0000
L52	38	PL 1 x 5	14.00 - 14.25	1.0000	1.0000
L52	39	PL 1 x 5	14.00 - 14.25	1.0000	1.0000
L52	40	PL 1 x 5	14.00 - 14.25	1.0000	1.0000
L52	41	PL 1 x 5	14.00 - 14.25	1.0000	1.0000
L52	55	(Area) Aero MP3-03	14.00 - 14.25	1.0000	1.0000
L52	57	(Area) Aero MP3-03	14.00 - 14.25	1.0000	1.0000
L52	58	(Area) Aero MP3-03	14.00 - 14.25	1.0000	1.0000
L52	59	(Area) Aero MP3-03	14.00 - 14.25	1.0000	1.0000
L53	2	Safety Line 3/8	9.00 - 14.00	1.0000	1.0000
L53	8	3" Flexible Conduit	9.00 - 14.00	1.0000	1.0000
L53	9	HB114-1-0813U4-M5J(1-1/4)	9.00 - 14.00	1.0000	1.0000
L53	11	LDF7-50A(1-5/8)	9.00 - 14.00	1.0000	1.0000
L53	14	LDF7-50A(1-5/8)	9.00 - 14.00	1.0000	1.0000
L53	27	C6x10.5	9.00 - 14.00	1.0000	1.0000
L53	28	C6x10.5	9.00 - 14.00	1.0000	1.0000
L53	29	C6x10.5	9.00 - 14.00	1.0000	1.0000
L53	30	C6x10.5	9.00 - 14.00	1.0000	1.0000
L53	33	(Area) Aero MP3-04	9.00 - 14.00	1.0000	1.0000
L53	34	(Area) Aero MP3-04	9.00 - 14.00	1.0000	1.0000
L53	35	(Area) Aero MP3-04	9.00 - 14.00	1.0000	1.0000
L53	36	(Area) Aero MP3-04	9.00 - 14.00	1.0000	1.0000
L53	38	PL 1 x 5	9.00 - 14.00	1.0000	1.0000
L53	39	PL 1 x 5	9.00 - 14.00	1.0000	1.0000
L53	40	PL 1 x 5	9.00 - 14.00	1.0000	1.0000
L53	41	PL 1 x 5	9.00 - 14.00	1.0000	1.0000
L53	55	(Area) Aero MP3-03	9.00 - 14.00	1.0000	1.0000
L53	57	(Area) Aero MP3-03	9.00 - 14.00	1.0000	1.0000
L53	58	(Area) Aero MP3-03	9.00 - 14.00	1.0000	1.0000
L53	59	(Area) Aero MP3-03	9.00 - 14.00	1.0000	1.0000
L54	2	Safety Line 3/8	5.00 - 9.00	1.0000	1.0000
L54	8	3" Flexible Conduit	5.00 - 9.00	1.0000	1.0000
L54	9	HB114-1-0813U4-M5J(1-1/4)	5.00 - 9.00	1.0000	1.0000
L54	11	LDF7-50A(1-5/8)	5.00 - 9.00	1.0000	1.0000
L54	14	LDF7-50A(1-5/8)	5.00 - 9.00	1.0000	1.0000
L54	27	C6x10.5	8.00 - 9.00	1.0000	1.0000
L54	28	C6x10.5	8.00 - 9.00	1.0000	1.0000
L54	29	C6x10.5	5.00 - 9.00	1.0000	1.0000
L54	30	C6x10.5	5.00 - 9.00	1.0000	1.0000
L54	32	(Area) Aero MP3-04	5.00 - 8.00	1.0000	1.0000
L54	33	(Area) Aero MP3-04	8.00 - 9.00	1.0000	1.0000
L54	34	(Area) Aero MP3-04	5.00 - 9.00	1.0000	1.0000
L54	35	(Area) Aero MP3-04	5.00 - 9.00	1.0000	1.0000
L54	36	(Area) Aero MP3-04	5.00 - 9.00	1.0000	1.0000
L54	38	PL 1 x 5	5.00 - 9.00	1.0000	1.0000
L54	39	PL 1 x 5	5.00 - 9.00	1.0000	1.0000
L54	40	PL 1 x 5	5.00 - 9.00	1.0000	1.0000
L54	41	PL 1 x 5	5.00 - 9.00	1.0000	1.0000

tnxTower

**Tower Engineering
Engineering, Inc.**
326 Tyron Road
Raleigh, NC 27603
Phone: (919) 661-6351
FAX: (919) 661-6350

Job

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Project

TEP No. 25570.318938

Date

11:36:47 11/08/19

Client

Crown Castle

Designed by

mshakeri

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L54	55	(Area) Aero MP3-03	5.00 - 9.00	1.0000	1.0000
L54	56	(Area) Aero MP3-03	5.00 - 8.00	1.0000	1.0000
L54	57	(Area) Aero MP3-03	8.00 - 9.00	1.0000	1.0000
L54	58	(Area) Aero MP3-03	5.00 - 9.00	1.0000	1.0000
L54	59	(Area) Aero MP3-03	5.00 - 9.00	1.0000	1.0000
L55	2	Safety Line 3/8	4.75 - 5.00	1.0000	1.0000
L55	8	3" Flexible Conduit	4.75 - 5.00	1.0000	1.0000
L55	9	HB114-1-0813U4-M5J(1-1/4)	4.75 - 5.00	1.0000	1.0000
L55	11	LDF7-50A(1-5/8)	4.75 - 5.00	1.0000	1.0000
L55	14	LDF7-50A(1-5/8)	4.75 - 5.00	1.0000	1.0000
L55	29	C6x10.5	4.75 - 5.00	1.0000	1.0000
L55	30	C6x10.5	4.75 - 5.00	1.0000	1.0000
L55	32	(Area) Aero MP3-04	4.75 - 5.00	1.0000	1.0000
L55	34	(Area) Aero MP3-04	4.75 - 5.00	1.0000	1.0000
L55	35	(Area) Aero MP3-04	4.75 - 5.00	1.0000	1.0000
L55	36	(Area) Aero MP3-04	4.75 - 5.00	1.0000	1.0000
L55	38	PL 1 x 5	4.75 - 5.00	1.0000	1.0000
L55	39	PL 1 x 5	4.75 - 5.00	1.0000	1.0000
L55	40	PL 1 x 5	4.75 - 5.00	1.0000	1.0000
L55	41	PL 1 x 5	4.75 - 5.00	1.0000	1.0000
L55	55	(Area) Aero MP3-03	4.75 - 5.00	1.0000	1.0000
L55	56	(Area) Aero MP3-03	4.75 - 5.00	1.0000	1.0000
L55	58	(Area) Aero MP3-03	4.75 - 5.00	1.0000	1.0000
L55	59	(Area) Aero MP3-03	4.75 - 5.00	1.0000	1.0000
L56	2	Safety Line 3/8	4.50 - 4.75	1.0000	1.0000
L56	8	3" Flexible Conduit	4.50 - 4.75	1.0000	1.0000
L56	9	HB114-1-0813U4-M5J(1-1/4)	4.50 - 4.75	1.0000	1.0000
L56	11	LDF7-50A(1-5/8)	4.50 - 4.75	1.0000	1.0000
L56	14	LDF7-50A(1-5/8)	4.50 - 4.75	1.0000	1.0000
L56	29	C6x10.5	4.50 - 4.75	1.0000	1.0000
L56	30	C6x10.5	4.50 - 4.75	1.0000	1.0000
L56	32	(Area) Aero MP3-04	4.50 - 4.75	1.0000	1.0000
L56	34	(Area) Aero MP3-04	4.50 - 4.75	1.0000	1.0000
L56	35	(Area) Aero MP3-04	4.50 - 4.75	1.0000	1.0000
L56	36	(Area) Aero MP3-04	4.50 - 4.75	1.0000	1.0000
L56	38	PL 1 x 5	4.50 - 4.75	1.0000	1.0000
L56	39	PL 1 x 5	4.50 - 4.75	1.0000	1.0000
L56	40	PL 1 x 5	4.50 - 4.75	1.0000	1.0000
L56	41	PL 1 x 5	4.50 - 4.75	1.0000	1.0000
L56	55	(Area) Aero MP3-03	4.50 - 4.75	1.0000	1.0000
L56	56	(Area) Aero MP3-03	4.50 - 4.75	1.0000	1.0000
L56	58	(Area) Aero MP3-03	4.50 - 4.75	1.0000	1.0000
L56	59	(Area) Aero MP3-03	4.50 - 4.75	1.0000	1.0000
L57	2	Safety Line 3/8	0.00 - 4.50	1.0000	1.0000
L57	8	3" Flexible Conduit	0.00 - 4.50	1.0000	1.0000
L57	9	HB114-1-0813U4-M5J(1-1/4)	0.00 - 4.50	1.0000	1.0000
L57	11	LDF7-50A(1-5/8)	0.00 - 4.50	1.0000	1.0000
L57	14	LDF7-50A(1-5/8)	0.00 - 4.50	1.0000	1.0000
L57	29	C6x10.5	0.00 - 4.50	1.0000	1.0000
L57	30	C6x10.5	0.00 - 4.50	1.0000	1.0000
L57	32	(Area) Aero MP3-04	0.00 - 4.50	1.0000	1.0000
L57	34	(Area) Aero MP3-04	0.00 - 4.50	1.0000	1.0000
L57	35	(Area) Aero MP3-04	0.00 - 4.50	1.0000	1.0000
L57	36	(Area) Aero MP3-04	0.00 - 4.50	1.0000	1.0000
L57	38	PL 1 x 5	2.50 - 4.50	1.0000	1.0000
L57	39	PL 1 x 5	2.50 - 4.50	1.0000	1.0000
L57	40	PL 1 x 5	2.50 - 4.50	1.0000	1.0000
L57	41	PL 1 x 5	2.50 - 4.50	1.0000	1.0000
L57	55	(Area) Aero MP3-03	0.00 - 4.50	1.0000	1.0000

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	Client Crown Castle	Designed by mshakeri

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L57	56	(Area) Aero MP3-03	0.00 - 4.50	1.0000	1.0000
L57	58	(Area) Aero MP3-03	0.00 - 4.50	1.0000	1.0000
L57	59	(Area) Aero MP3-03	0.00 - 4.50	1.0000	1.0000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horiz Lateral Vert	Azimuth Adjustment	Placement	C_{AA} Front	C_{AA} Side	Weight
			ft ft ft	°	ft	ft ²	ft ²	K
Misc								
Pipe 6" x 10'	C	From Leg	0.00 0.00 5.00	0.0000	120.00	No Ice 3.23 1/2" Ice 6.05 1" Ice 6.66 2" Ice 7.92	3.23 6.05 6.66 7.92	0.19 0.23 0.28 0.40
122								
APXVTM14-ALU-I20 w/ Mount Pipe	A	From Centroid-Le g	4.00 -7.00 -1.00	30.0000	122.00	No Ice 4.09 1/2" Ice 4.48 1" Ice 4.88 2" Ice 5.71	2.86 3.23 3.61 4.40	0.08 0.13 0.19 0.33
APXVTM14-ALU-I20 w/ Mount Pipe	B	From Centroid-Le g	4.00 -7.00 -1.00	10.0000	122.00	No Ice 4.09 1/2" Ice 4.48 1" Ice 4.88 2" Ice 5.71	2.86 3.23 3.61 4.40	0.08 0.13 0.19 0.33
APXVTM14-ALU-I20 w/ Mount Pipe	C	From Centroid-Le g	4.00 3.00 -1.00	30.0000	122.00	No Ice 4.09 1/2" Ice 4.48 1" Ice 4.88 2" Ice 5.71	2.86 3.23 3.61 4.40	0.08 0.13 0.19 0.33
APXVSP18-C-A20 w/ Mount Pipe	A	From Centroid-Le g	4.00 -3.00 -1.00	30.0000	122.00	No Ice 4.60 1/2" Ice 5.05 1" Ice 5.50 2" Ice 6.44	4.01 4.45 4.89 5.82	0.10 0.16 0.23 0.42
APXVSP18-C-A20 w/ Mount Pipe	B	From Centroid-Le g	4.00 -3.00 -1.00	10.0000	122.00	No Ice 4.60 1/2" Ice 5.05 1" Ice 5.50 2" Ice 6.44	4.01 4.45 4.89 5.82	0.10 0.16 0.23 0.42
APXVSP18-C-A20 w/ Mount Pipe	C	From Centroid-Le g	4.00 -3.00 -1.00	30.0000	122.00	No Ice 4.60 1/2" Ice 5.05 1" Ice 5.50 2" Ice 6.44	4.01 4.45 4.89 5.82	0.10 0.16 0.23 0.42
LLPX310R w/ Mount Pipe	A	From Centroid-Le g	4.00 0.00 0.00	30.0000	122.00	No Ice 3.88 1/2" Ice 4.29 1" Ice 4.72 2" Ice 5.61	2.36 2.73 3.12 3.94	0.06 0.09 0.13 0.24
LLPX310R w/ Mount Pipe	B	From Centroid-Le g	4.00 0.00 0.00	30.0000	122.00	No Ice 3.88 1/2" Ice 4.29 1" Ice 4.72 2" Ice 5.61	2.36 2.73 3.12 3.94	0.06 0.09 0.13 0.24
LLPX310R w/ Mount Pipe	C	From Centroid-Le g	4.00 0.00 0.00	30.0000	122.00	No Ice 3.88 1/2" Ice 4.29 1" Ice 4.72 2" Ice 5.61	2.36 2.73 3.12 3.94	0.06 0.09 0.13 0.24

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	Client	Crown Castle	Designed by	mshakeri

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _{AA} Front	C _{AA} Side	Weight
			Horz	Vert					
			ft	ft	°	ft	ft ²	ft ²	K
MT-485025/NVH w/ Mount Pipe	C	From Centroid-Le g	4.00	30.0000	122.00	No Ice	1.95	0.62	0.01
			-7.00			1/2" Ice	2.18	0.86	0.03
			1.00			1" Ice	2.43	1.11	0.05
						2" Ice	2.94	1.65	0.10
(3) ACU-A20-N	A	From Centroid-Le g	4.00	30.0000	122.00	No Ice	0.07	0.12	0.00
			-3.00			1/2" Ice	0.10	0.16	0.00
			-2.00			1" Ice	0.15	0.21	0.00
						2" Ice	0.26	0.34	0.01
(3) ACU-A20-N	B	From Centroid-Le g	4.00	10.0000	122.00	No Ice	0.07	0.12	0.00
			-3.00			1/2" Ice	0.10	0.16	0.00
			-2.00			1" Ice	0.15	0.21	0.00
						2" Ice	0.26	0.34	0.01
(3) ACU-A20-N	C	From Centroid-Le g	4.00	30.0000	122.00	No Ice	0.07	0.12	0.00
			-3.00			1/2" Ice	0.10	0.16	0.00
			-2.00			1" Ice	0.15	0.21	0.00
						2" Ice	0.26	0.34	0.01
PCS 1900MHz 4x45W-65MHz	A	From Centroid-Le g	4.00	30.0000	122.00	No Ice	2.32	2.24	0.06
			-3.00			1/2" Ice	2.53	2.44	0.08
			-1.00			1" Ice	2.74	2.65	0.11
						2" Ice	3.19	3.09	0.17
PCS 1900MHz 4x45W-65MHz	B	From Centroid-Le g	4.00	10.0000	122.00	No Ice	2.32	2.24	0.06
			-3.00			1/2" Ice	2.53	2.44	0.08
			-2.00			1" Ice	2.74	2.65	0.11
						2" Ice	3.19	3.09	0.17
PCS 1900MHz 4x45W-65MHz	C	From Centroid-Le g	4.00	30.0000	122.00	No Ice	2.32	2.24	0.06
			-3.00			1/2" Ice	2.53	2.44	0.08
			-1.00			1" Ice	2.74	2.65	0.11
						2" Ice	3.19	3.09	0.17
800MHZ RRH	A	From Centroid-Le g	4.00	30.0000	122.00	No Ice	2.13	1.77	0.05
			-3.00			1/2" Ice	2.32	1.95	0.07
			-2.00			1" Ice	2.51	2.13	0.10
						2" Ice	2.92	2.51	0.16
800MHZ RRH	B	From Centroid-Le g	4.00	10.0000	122.00	No Ice	2.13	1.77	0.05
			-3.00			1/2" Ice	2.32	1.95	0.07
			-1.00			1" Ice	2.51	2.13	0.10
						2" Ice	2.92	2.51	0.16
800MHZ RRH	C	From Centroid-Le g	4.00	30.0000	122.00	No Ice	2.13	1.77	0.05
			-3.00			1/2" Ice	2.32	1.95	0.07
			-2.00			1" Ice	2.51	2.13	0.10
						2" Ice	2.92	2.51	0.16
800 EXTERNAL NOTCH FILTER	A	From Centroid-Le g	4.00	30.0000	122.00	No Ice	0.66	0.32	0.01
			-3.00			1/2" Ice	0.76	0.40	0.02
			-2.00			1" Ice	0.87	0.48	0.02
						2" Ice	1.11	0.67	0.04
800 EXTERNAL NOTCH FILTER	B	From Centroid-Le g	4.00	10.0000	122.00	No Ice	0.66	0.32	0.01
			-3.00			1/2" Ice	0.76	0.40	0.02
			-2.00			1" Ice	0.87	0.48	0.02
						2" Ice	1.11	0.67	0.04
800 EXTERNAL NOTCH FILTER	C	From Centroid-Le g	4.00	30.0000	122.00	No Ice	0.66	0.32	0.01
			-3.00			1/2" Ice	0.76	0.40	0.02
			-2.00			1" Ice	0.87	0.48	0.02
						2" Ice	1.11	0.67	0.04
FDD_R6_RRH	A	From Centroid-Le g	4.00	25.0000	122.00	No Ice	1.53	0.68	0.03
			0.00			1/2" Ice	1.69	0.80	0.04
			0.00			1" Ice	1.85	0.92	0.06
						2" Ice	2.20	1.19	0.09
FDD_R6_RRH	B	From	4.00	10.0000	122.00	No Ice	1.53	0.68	0.03

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Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment °	Placement ft	C _{AA}		Weight K	
			Horz Lateral ft	Vert ft			Front ft ²	Side ft ²		
FDD_R6_RRH	C	Centroid-Le g	0.00	0.00	30.0000	122.00	1/2" Ice	1.69	0.80	0.04
							1" Ice	1.85	0.92	0.06
							2" Ice	2.20	1.19	0.09
							No Ice	1.53	0.68	0.03
TD-RRH8x20-25	A	From Centroid-Le g	4.00	0.00	37.0000	122.00	1/2" Ice	1.69	0.80	0.04
							1" Ice	1.85	0.92	0.06
							2" Ice	2.20	1.19	0.09
							No Ice	3.70	1.29	0.07
TD-RRH8x20-25	B	From Centroid-Le g	4.00	3.00	10.0000	122.00	1/2" Ice	3.95	1.46	0.09
							1" Ice	4.20	1.64	0.12
							2" Ice	4.72	2.02	0.18
							No Ice	3.70	1.29	0.07
TD-RRH8x20-25	C	From Centroid-Le g	4.00	3.00	30.0000	122.00	1/2" Ice	3.95	1.46	0.09
							1" Ice	4.20	1.64	0.12
							2" Ice	4.72	2.02	0.18
							No Ice	3.70	1.29	0.07
(2) 2.4" Dia x 6-ft Pipe	A	From Centroid-Le g	4.00	5.00	0.0000	122.00	1/2" Ice	1.93	1.93	0.03
							1" Ice	2.30	2.30	0.05
							2" Ice	3.06	3.06	0.09
							No Ice	1.43	1.43	0.02
(2) 2.4" Dia x 6-ft Pipe	B	From Centroid-Le g	4.00	5.00	0.0000	122.00	1/2" Ice	1.93	1.93	0.03
							1" Ice	2.30	2.30	0.05
							2" Ice	3.06	3.06	0.09
							No Ice	1.43	1.43	0.02
2.4" Dia x 6-ft Pipe	C	From Centroid-Le g	4.00	7.00	0.0000	122.00	1/2" Ice	1.93	1.93	0.03
							1" Ice	2.30	2.30	0.05
							2" Ice	3.06	3.06	0.09
							No Ice	1.43	1.43	0.02
Platform Mount [LP 1201-1_HR-1]	C	None	0.0000	0.0000	122.00	1/2" Ice	31.40	31.40	3.06	
						1" Ice	36.20	36.20	3.86	
						2" Ice	45.40	45.40	5.76	
						No Ice	26.39	26.39	2.36	
113 JAHH-65B-R3B w/ Mount Pipe	A	From Centroid-Le g	4.00	-3.00	0.0000	113.00	1/2" Ice	5.97	4.84	0.17
							1" Ice	6.45	5.30	0.25
							2" Ice	7.44	6.26	0.46
							No Ice	5.50	4.38	0.10
JAHH-45B-R3B w/ Mount Pipe	B	From Centroid-Le g	4.00	-6.00	-40.0000	113.00	1/2" Ice	8.83	4.91	0.20
							1" Ice	9.41	5.43	0.29
							2" Ice	10.61	6.53	0.50
							No Ice	8.26	4.39	0.12
JAHH-45B-R3B w/ Mount Pipe	C	From Centroid-Le g	4.00	0.00	30.0000	113.00	1/2" Ice	8.83	4.91	0.20
							1" Ice	9.41	5.43	0.29
							2" Ice	10.61	6.53	0.50
							No Ice	8.26	4.39	0.12
JAHH-65B-R3B	A	From Centroid-Le g	4.00	-3.00	0.0000	113.00	1/2" Ice	5.75	3.48	0.12
							1" Ice	6.22	3.93	0.19
							2" Ice	7.20	4.84	0.33
							No Ice	5.29	3.05	0.06
JAHH-45B-R3B	B	From Centroid-Le g	4.00	-6.00	-40.0000	113.00	1/2" Ice	8.91	3.76	0.16
							1" Ice	9.51	4.28	0.24
							2" Ice	10.74	5.37	0.40
							No Ice	8.33	3.24	0.10
JAHH-45B-R3B	C	From	4.00	0.0000	30.0000	113.00	1/2" Ice	8.91	3.76	0.16
							1" Ice	9.51	4.28	0.24
							2" Ice	10.74	5.37	0.40
							No Ice	8.33	3.24	0.10

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	Client	Crown Castle	Designed by	mshakeri

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment °	Placement ft	C _{AA}		Weight K
			Horz Lateral ft	Vert ft			Front ft ²	Side ft ²	
		Centroid-Le g	0.00 1.00			1/2" Ice 1" Ice 2" Ice	8.91 9.51 10.74	3.76 4.28 5.37	0.16 0.24 0.40
SSPX310R w/ Mount Pipe	A	From Centroid-Le g	4.00 0.00 1.00	0.0000	113.00	No Ice 1/2" Ice 1" Ice 2" Ice	2.67 2.97 3.29 3.97	1.64 1.91 2.20 2.81	0.04 0.07 0.10 0.18
SSPX310R w/ Mount Pipe	B	From Centroid-Le g	4.00 0.00 1.00	-40.0000	113.00	No Ice 1/2" Ice 1" Ice 2" Ice	2.67 2.97 3.29 3.97	1.64 1.91 2.20 2.81	0.04 0.07 0.10 0.18
SSPX310R w/ Mount Pipe	C	From Centroid-Le g	4.00 3.00 1.00	30.0000	113.00	No Ice 1/2" Ice 1" Ice 2" Ice	2.67 2.97 3.29 3.97	1.64 1.91 2.20 2.81	0.04 0.07 0.10 0.18
(2) DB846F65ZAXY w/ Mount Pipe	A	From Centroid-Le g	4.00 4.00 1.00	30.0000	113.00	No Ice 1/2" Ice 1" Ice 2" Ice	7.27 7.83 8.35 9.40	7.82 9.01 9.91 11.73	0.05 0.11 0.19 0.37
(2) LPA-80063/4CF w/ Mount Pipe	B	From Centroid-Le g	4.00 4.00 1.00	10.0000	113.00	No Ice 1/2" Ice 1" Ice 2" Ice	6.40 6.80 7.21 8.06	6.61 7.25 7.90 9.24	0.04 0.10 0.18 0.34
(2) LPA-80063/4CF w/ Mount Pipe	C	From Centroid-Le g	4.00 0.00 1.00	30.0000	113.00	No Ice 1/2" Ice 1" Ice 2" Ice	6.40 6.80 7.21 8.06	6.61 7.25 7.90 9.24	0.04 0.10 0.18 0.34
CBC78T-DS-43-2X	A	From Centroid-Le g	4.00 -3.00 1.00	0.0000	113.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.37 0.45 0.53 0.72	0.51 0.60 0.70 0.93	0.02 0.03 0.04 0.06
CBC78T-DS-43-2X	B	From Centroid-Le g	4.00 -6.00 1.00	-40.0000	113.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.37 0.45 0.53 0.72	0.51 0.60 0.70 0.93	0.02 0.03 0.04 0.06
CBC78T-DS-43-2X	C	From Centroid-Le g	4.00 3.00 1.00	30.0000	113.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.37 0.45 0.53 0.72	0.51 0.60 0.70 0.93	0.02 0.03 0.04 0.06
20W CBRS	A	From Centroid-Le g	4.00 -3.00 1.00	0.0000	113.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.86 0.98 1.10 1.37	0.42 0.51 0.61 0.83	0.02 0.03 0.03 0.06
(2) 20W CBRS	C	From Centroid-Le g	4.00 1.00 1.00	30.0000	113.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.86 0.98 1.10 1.37	0.42 0.51 0.61 0.83	0.02 0.03 0.03 0.06
DB-T1-6Z-8AB-0Z	A	From Centroid-Le g	4.00 0.00 1.00	0.0000	113.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.80 5.07 5.35 5.93	2.00 2.19 2.39 2.81	0.04 0.08 0.12 0.21
DB-T1-6Z-8AB-0Z	B	From Centroid-Le g	4.00 0.00 1.00	-40.0000	113.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.80 5.07 5.35 5.93	2.00 2.19 2.39 2.81	0.04 0.08 0.12 0.21
(2) RFV01U-D1A	A	From Centroid-Le	4.00 4.00	30.0000	113.00	No Ice 1/2" Ice	1.88 2.05	1.25 1.39	0.08 0.10

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	Client	Crown Castle	Designed by	mshakeri

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _{AA} Front	C _{AA} Side	Weight
			Horz	Vert					
			ft	ft	°	ft	ft ²	ft ²	K
		g	1.00			1" Ice	2.22	1.54	0.12
						2" Ice	2.60	1.86	0.18
RFV01U-D1A	C	From	4.00	30.0000	113.00	No Ice	1.88	1.25	0.08
		Centroid-Le	0.00			1/2" Ice	2.05	1.39	0.10
		g	1.00			1" Ice	2.22	1.54	0.12
						2" Ice	2.60	1.86	0.18
(2) RFV01U-D2A	B	From	4.00	10.0000	113.00	No Ice	1.88	1.01	0.07
		Centroid-Le	4.00			1/2" Ice	2.05	1.14	0.09
		g	1.00			1" Ice	2.22	1.28	0.11
						2" Ice	2.60	1.59	0.15
RFV01U-D2A	C	From	4.00	30.0000	113.00	No Ice	1.88	1.01	0.07
		Centroid-Le	-6.00			1/2" Ice	2.05	1.14	0.09
		g	1.00			1" Ice	2.22	1.28	0.11
						2" Ice	2.60	1.59	0.15
Platform Mount [LP 305-1_KCKR-HR-1]	C	None		0.0000	113.00	No Ice	30.81	30.81	1.64
						1/2" Ice	38.70	38.70	2.20
						1" Ice	46.63	46.63	2.88
						2" Ice	62.74	62.74	4.65
105									
AIR 3246 B66 w/ Mount Pipe	A	From	4.00	30.0000	105.00	No Ice	8.18	6.56	0.20
		Centroid-Le	-6.00			1/2" Ice	8.66	7.39	0.27
		g	2.00			1" Ice	9.12	8.13	0.35
						2" Ice	10.09	9.65	0.53
AIR 3246 B66 w/ Mount Pipe	B	From	4.00	30.0000	105.00	No Ice	8.18	6.56	0.20
		Centroid-Le	-6.00			1/2" Ice	8.66	7.39	0.27
		g	2.00			1" Ice	9.12	8.13	0.35
						2" Ice	10.09	9.65	0.53
AIR 3246 B66 w/ Mount Pipe	C	From	4.00	30.0000	105.00	No Ice	8.18	6.56	0.20
		Centroid-Le	-6.00			1/2" Ice	8.66	7.39	0.27
		g	2.00			1" Ice	9.12	8.13	0.35
						2" Ice	10.09	9.65	0.53
APXVAARR24_43-U-NA20 w/ Mount Pipe	A	From	4.00	30.0000	105.00	No Ice	14.69	6.87	0.19
		Centroid-Le	-2.00			1/2" Ice	15.46	7.55	0.31
		g	2.00			1" Ice	16.23	8.25	0.46
						2" Ice	17.82	9.67	0.79
APXVAARR24_43-U-NA20 w/ Mount Pipe	B	From	4.00	30.0000	105.00	No Ice	14.69	6.87	0.19
		Centroid-Le	-2.00			1/2" Ice	15.46	7.55	0.31
		g	2.00			1" Ice	16.23	8.25	0.46
						2" Ice	17.82	9.67	0.79
APXVAARR24_43-U-NA20 w/ Mount Pipe	C	From	4.00	30.0000	105.00	No Ice	14.69	6.87	0.19
		Centroid-Le	-2.00			1/2" Ice	15.46	7.55	0.31
		g	2.00			1" Ice	16.23	8.25	0.46
						2" Ice	17.82	9.67	0.79
AIR 32 B2a/B66Aa w/ Mount Pipe	A	From	4.00	30.0000	105.00	No Ice	6.75	6.07	0.15
		Centroid-Le	2.00			1/2" Ice	7.20	6.87	0.21
		g	2.00			1" Ice	7.65	7.58	0.28
						2" Ice	8.57	9.06	0.44
AIR 32 B2a/B66Aa w/ Mount Pipe	B	From	4.00	30.0000	105.00	No Ice	6.75	6.07	0.15
		Centroid-Le	2.00			1/2" Ice	7.20	6.87	0.21
		g	2.00			1" Ice	7.65	7.58	0.28
						2" Ice	8.57	9.06	0.44
AIR 32 B2a/B66Aa w/ Mount Pipe	C	From	4.00	30.0000	105.00	No Ice	6.75	6.07	0.15
		Centroid-Le	2.00			1/2" Ice	7.20	6.87	0.21
		g	2.00			1" Ice	7.65	7.58	0.28
						2" Ice	8.57	9.06	0.44
RADIO 4449 B71/B85A	A	From	4.00	30.0000	105.00	No Ice	1.64	1.31	0.07
		Centroid-Le	-2.00			1/2" Ice	1.80	1.46	0.09

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	Client	Crown Castle	Designed by	mshakeri

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _{AA} Front	C _{AA} Side	Weight
			Horz	Lateral					
			ft	ft	°	ft	ft ²	ft ²	K
		g	2.00			1" Ice	1.97	1.61	0.11
						2" Ice	2.33	1.94	0.16
RADIO 4449 B71/B85A	B	From Centroid-Le g	4.00	-2.00	30.0000	105.00	No Ice	1.64	1.31
						1/2" Ice	1.80	1.46	0.09
						1" Ice	1.97	1.61	0.11
						2" Ice	2.33	1.94	0.16
RADIO 4449 B71/B85A	C	From Centroid-Le g	4.00	-2.00	30.0000	105.00	No Ice	1.64	1.31
						1/2" Ice	1.80	1.46	0.09
						1" Ice	1.97	1.61	0.11
						2" Ice	2.33	1.94	0.16
KRY 112 144/1	A	From Centroid-Le g	4.00	2.00	30.0000	105.00	No Ice	0.35	0.16
						1/2" Ice	0.43	0.22	0.01
						1" Ice	0.51	0.28	0.02
						2" Ice	0.70	0.44	0.03
KRY 112 144/1	B	From Centroid-Le g	4.00	2.00	30.0000	105.00	No Ice	0.35	0.16
						1/2" Ice	0.43	0.22	0.01
						1" Ice	0.51	0.28	0.02
						2" Ice	0.70	0.44	0.03
KRY 112 144/1	C	From Centroid-Le g	4.00	2.00	30.0000	105.00	No Ice	0.35	0.16
						1/2" Ice	0.43	0.22	0.01
						1" Ice	0.51	0.28	0.02
						2" Ice	0.70	0.44	0.03
2.4" Dia x 8-ft Mount Pipe	A	From Centroid-Le g	4.00	6.00	0.0000	105.00	No Ice	1.90	1.90
						1/2" Ice	2.73	2.73	0.04
						1" Ice	3.40	3.40	0.06
						2" Ice	4.40	4.40	0.12
2.4" Dia x 8-ft Mount Pipe	B	From Centroid-Le g	4.00	6.00	0.0000	105.00	No Ice	1.90	1.90
						1/2" Ice	2.73	2.73	0.04
						1" Ice	3.40	3.40	0.06
						2" Ice	4.40	4.40	0.12
2.4" Dia x 8-ft Mount Pipe	C	From Centroid-Le g	4.00	6.00	0.0000	105.00	No Ice	1.90	1.90
						1/2" Ice	2.73	2.73	0.04
						1" Ice	3.40	3.40	0.06
						2" Ice	4.40	4.40	0.12
SitePro1 RMQP-4096-HK	C	None			0.0000	105.00	No Ice	23.14	21.40
						1/2" Ice	28.17	26.44	1.95
						1" Ice	33.23	31.60	2.34
						2" Ice	43.26	41.56	2.85
									3.50
97									
DC6-48-60-18-8F	A	From Leg	2.00	0.00	30.0000	97.00	No Ice	1.21	1.21
						1/2" Ice	1.89	1.89	0.03
						1" Ice	2.11	2.11	0.05
						2" Ice	2.57	2.57	0.08
DC6-48-60-18-8F	B	From Leg	2.00	0.00	30.0000	97.00	No Ice	1.21	1.21
						1/2" Ice	1.89	1.89	0.03
						1" Ice	2.11	2.11	0.05
						2" Ice	2.57	2.57	0.08
RRUS 32 B30	A	From Leg	2.00	0.00	30.0000	97.00	No Ice	2.74	1.67
						1/2" Ice	2.96	1.86	0.05
						1" Ice	3.19	2.05	0.07
						2" Ice	3.68	2.46	0.10
RRUS 32 B30	B	From Leg	2.00	0.00	30.0000	97.00	No Ice	2.74	1.67
						1/2" Ice	2.96	1.86	0.05
						1" Ice	3.19	2.05	0.07
						2" Ice	3.68	2.46	0.10
RRUS 32 B30	C	From Leg	2.00	0.00	30.0000	97.00	No Ice	2.74	1.67
						1/2" Ice	2.96	1.86	0.05

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Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _{AA} Front	C _{AA} Side	Weight	
			Horz	Vert						
			ft	ft	°	ft	ft ²	ft ²	K	
				0.00			1" Ice	3.19	2.05	0.10
							2" Ice	3.68	2.46	0.16
2.4" Dia. x 5-ft Pipe	A	From Leg	2.00	0.0000	97.00	No Ice	1.20	1.20	0.02	
			0.00			1/2" Ice	1.50	1.50	0.03	
			0.00			1" Ice	1.81	1.81	0.04	
2.4" Dia. x 5-ft Pipe	B	From Leg	2.00	0.0000	97.00	2" Ice	2.47	2.47	0.08	
			0.00			No Ice	1.20	1.20	0.02	
			0.00			1/2" Ice	1.50	1.50	0.03	
			0.00			1" Ice	1.81	1.81	0.04	
2.4" Dia. x 5-ft Pipe	C	From Leg	2.00	0.0000	97.00	2" Ice	2.47	2.47	0.08	
			0.00			No Ice	1.20	1.20	0.02	
			0.00			1/2" Ice	1.50	1.50	0.03	
			0.00			1" Ice	1.81	1.81	0.04	
Side Arm Mount [SO 102-3]	C	None		0.0000	97.00	2" Ice	2.47	2.47	0.08	
						No Ice	3.60	3.60	0.07	
						1/2" Ice	4.18	4.18	0.11	
						1" Ice	4.75	4.75	0.14	
						2" Ice	5.90	5.90	0.20	
96										
7770.00 w/ Mount Pipe	A	From Centroid-Le g	4.00	23.0000	96.00	No Ice	5.75	4.25	0.06	
			-6.00			1/2" Ice	6.18	5.01	0.10	
			2.00			1" Ice	6.61	5.71	0.16	
7770.00 w/ Mount Pipe	B	From Centroid-Le g	4.00	23.0000	96.00	2" Ice	7.49	7.16	0.29	
			4.00			No Ice	5.75	4.25	0.06	
			-6.00			1/2" Ice	6.18	5.01	0.10	
			2.00			1" Ice	6.61	5.71	0.16	
7770.00 w/ Mount Pipe	C	From Centroid-Le g	4.00	23.0000	96.00	2" Ice	7.49	7.16	0.29	
			4.00			No Ice	5.75	4.25	0.06	
			-6.00			1/2" Ice	6.18	5.01	0.10	
			2.00			1" Ice	6.61	5.71	0.16	
(2) 80010965 w/ Mount Pipe	A	From Centroid-Le g	4.00	30.0000	96.00	2" Ice	7.49	7.16	0.29	
			0.00			No Ice	12.26	5.79	0.14	
			2.00			1/2" Ice	13.03	6.47	0.23	
						1" Ice	13.80	7.17	0.33	
						2" Ice	15.41	8.60	0.57	
(2) 80010965 w/ Mount Pipe	B	From Centroid-Le g	4.00	30.0000	96.00	No Ice	12.26	5.79	0.14	
			0.00			1/2" Ice	13.03	6.47	0.23	
			2.00			1" Ice	13.80	7.17	0.33	
						2" Ice	15.41	8.60	0.57	
(2) 80010965 w/ Mount Pipe	C	From Centroid-Le g	4.00	30.0000	96.00	No Ice	12.26	5.79	0.14	
			0.00			1/2" Ice	13.03	6.47	0.23	
			2.00			1" Ice	13.80	7.17	0.33	
						2" Ice	15.41	8.60	0.57	
QS66512-2 w/ Mount Pipe	A	From Centroid-Le g	4.00	30.0000	96.00	No Ice	4.04	4.18	0.14	
			6.00			1/2" Ice	4.42	4.57	0.21	
			2.00			1" Ice	4.82	4.97	0.29	
						2" Ice	5.63	5.79	0.48	
QS66512-2 w/ Mount Pipe	B	From Centroid-Le g	4.00	30.0000	96.00	No Ice	4.04	4.18	0.14	
			6.00			1/2" Ice	4.42	4.57	0.21	
			2.00			1" Ice	4.82	4.97	0.29	
						2" Ice	5.63	5.79	0.48	
QS66512-2 w/ Mount Pipe	C	From Centroid-Le g	4.00	30.0000	96.00	No Ice	4.04	4.18	0.14	
			6.00			1/2" Ice	4.42	4.57	0.21	
			2.00			1" Ice	4.82	4.97	0.29	
						2" Ice	5.63	5.79	0.48	
LGP21401	A	From Centroid-Le	4.00	23.0000	96.00	No Ice	1.10	0.21	0.01	
			-6.00			1/2" Ice	1.24	0.27	0.02	

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Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment °	Placement ft	C _{AA}		Weight K
			Horz Lateral ft	Vert ft			Front ft ²	Side ft ²	
		g	2.00				1" Ice 1.38	0.35	0.03
							2" Ice 1.69	0.52	0.05
LGP21401	A	From Centroid-Le g	4.00 6.00 2.00	30.0000	96.00	No Ice 1.10 1/2" Ice 1.24 1" Ice 1.38 2" Ice 1.69	1.38 0.27 0.35 0.52	0.21 0.02 0.03 0.05	0.01 0.02 0.03 0.05
LGP21401	B	From Centroid-Le g	4.00 -6.00 2.00	23.0000	96.00	No Ice 1.10 1/2" Ice 1.24 1" Ice 1.38 2" Ice 1.69	1.10 0.27 0.35 0.52	0.21 0.02 0.03 0.05	0.01 0.02 0.03 0.05
LGP21401	B	From Centroid-Le g	4.00 6.00 2.00	30.0000	96.00	No Ice 1.10 1/2" Ice 1.24 1" Ice 1.38 2" Ice 1.69	1.10 0.27 0.35 0.52	0.21 0.02 0.03 0.05	0.01 0.02 0.03 0.05
LGP21401	C	From Centroid-Le g	4.00 -6.00 2.00	23.0000	96.00	No Ice 1.10 1/2" Ice 1.24 1" Ice 1.38 2" Ice 1.69	1.10 0.27 0.35 0.52	0.21 0.02 0.03 0.05	0.01 0.02 0.03 0.05
LGP21401	C	From Centroid-Le g	4.00 6.00 2.00	30.0000	96.00	No Ice 1.10 1/2" Ice 1.24 1" Ice 1.38 2" Ice 1.69	1.10 0.27 0.35 0.52	0.21 0.02 0.03 0.05	0.01 0.02 0.03 0.05
DC6-48-60-18-8F	A	From Centroid-Le g	4.00 -6.00 2.00	23.0000	96.00	No Ice 1.21 1/2" Ice 1.89 1" Ice 2.11 2" Ice 2.57	1.21 1.89 2.11 2.57	1.21 1.89 2.11 2.57	0.03 0.05 0.08 0.14
DC6-48-60-18-8F	B	From Centroid-Le g	4.00 -6.00 2.00	23.0000	96.00	No Ice 1.21 1/2" Ice 1.89 1" Ice 2.11 2" Ice 2.57	1.21 1.89 2.11 2.57	1.21 1.89 2.11 2.57	0.03 0.05 0.08 0.14
DC6-48-60-18-8F	C	From Centroid-Le g	4.00 -6.00 2.00	23.0000	96.00	No Ice 1.21 1/2" Ice 1.89 1" Ice 2.11 2" Ice 2.57	1.21 1.89 2.11 2.57	1.21 1.89 2.11 2.57	0.03 0.05 0.08 0.14
DBC0061F1V51-2	A	From Centroid-Le g	4.00 -6.00 2.00	23.0000	96.00	No Ice 0.43 1/2" Ice 0.51 1" Ice 0.61 2" Ice 0.81	0.43 0.51 0.59 0.79	0.41 0.50 0.59 0.79	0.03 0.03 0.04 0.06
DBC0061F1V51-2	A	From Centroid-Le g	4.00 -2.00 2.00	30.0000	96.00	No Ice 0.43 1/2" Ice 0.51 1" Ice 0.61 2" Ice 0.81	0.43 0.51 0.59 0.79	0.41 0.50 0.59 0.79	0.03 0.03 0.04 0.06
DBC0061F1V51-2	B	From Centroid-Le g	4.00 -6.00 2.00	23.0000	96.00	No Ice 0.43 1/2" Ice 0.51 1" Ice 0.61 2" Ice 0.81	0.43 0.51 0.59 0.79	0.41 0.50 0.59 0.79	0.03 0.03 0.04 0.06
DBC0061F1V51-2	B	From Centroid-Le g	4.00 -2.00 2.00	30.0000	96.00	No Ice 0.43 1/2" Ice 0.51 1" Ice 0.61 2" Ice 0.81	0.43 0.51 0.59 0.79	0.41 0.50 0.59 0.79	0.03 0.03 0.04 0.06
DBC0061F1V51-2	C	From Centroid-Le g	4.00 -6.00 2.00	23.0000	96.00	No Ice 0.43 1/2" Ice 0.51 1" Ice 0.61 2" Ice 0.81	0.43 0.51 0.59 0.79	0.41 0.50 0.59 0.79	0.03 0.03 0.04 0.06
DBC0061F1V51-2	C	From Centroid-Le g	4.00 -2.00 2.00	30.0000	96.00	No Ice 0.43 1/2" Ice 0.51 1" Ice 0.61	0.43 0.51 0.59	0.41 0.50 0.59	0.03 0.03 0.04

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Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _{AA} Front	C _{AA} Side	Weight
			Horz	Lateral Vert					
			ft	ft	°	ft	ft ²	ft ²	K
RRUS 8843 B2/B66A	A	From Centroid-Le g	4.00	23.0000	96.00	2" Ice	0.81	0.79	0.06
			-6.00	23.0000		No Ice	1.64	1.35	0.07
			2.00	23.0000		1/2" Ice	1.80	1.50	0.09
				23.0000		1" Ice	1.97	1.65	0.11
RRUS 8843 B2/B66A	B	From Centroid-Le g	4.00	23.0000	96.00	2" Ice	2.32	1.99	0.16
			-6.00	23.0000		No Ice	1.64	1.35	0.07
			2.00	23.0000		1/2" Ice	1.80	1.50	0.09
				23.0000		1" Ice	1.97	1.65	0.11
RRUS 8843 B2/B66A	C	From Centroid-Le g	4.00	23.0000	96.00	2" Ice	2.32	1.99	0.16
			-6.00	23.0000		No Ice	1.64	1.35	0.07
			2.00	23.0000		1/2" Ice	1.80	1.50	0.09
				23.0000		1" Ice	1.97	1.65	0.11
RRUS 32	A	From Centroid-Le g	4.00	30.0000	96.00	2" Ice	3.81	2.58	0.16
			-2.00	30.0000		No Ice	2.86	1.78	0.06
			2.00	30.0000		1/2" Ice	3.08	1.97	0.08
				30.0000		1" Ice	3.32	2.17	0.10
RRUS 32	B	From Centroid-Le g	4.00	30.0000	96.00	2" Ice	3.81	2.58	0.16
			-2.00	30.0000		No Ice	2.86	1.78	0.06
			2.00	30.0000		1/2" Ice	3.08	1.97	0.08
				30.0000		1" Ice	3.32	2.17	0.10
RRUS 32	C	From Centroid-Le g	4.00	30.0000	96.00	2" Ice	3.81	2.58	0.16
			-2.00	30.0000		No Ice	2.86	1.78	0.06
			2.00	30.0000		1/2" Ice	3.08	1.97	0.08
				30.0000		1" Ice	3.32	2.17	0.10
RRUS 4478 B14	A	From Centroid-Le g	4.00	30.0000	96.00	2" Ice	3.81	2.58	0.16
			2.00	30.0000		No Ice	1.84	1.06	0.06
			2.00	30.0000		1/2" Ice	2.01	1.20	0.08
				30.0000		1" Ice	2.19	1.34	0.09
RRUS 4478 B14	B	From Centroid-Le g	4.00	30.0000	96.00	2" Ice	2.57	1.66	0.14
			2.00	30.0000		No Ice	1.84	1.06	0.06
			2.00	30.0000		1/2" Ice	2.01	1.20	0.08
				30.0000		1" Ice	2.19	1.34	0.09
RRUS 4478 B14	C	From Centroid-Le g	4.00	30.0000	96.00	2" Ice	2.57	1.66	0.14
			2.00	30.0000		No Ice	1.84	1.06	0.06
			2.00	30.0000		1/2" Ice	2.01	1.20	0.08
				30.0000		1" Ice	2.19	1.34	0.09
RRUS 4449 B5/B12	A	From Centroid-Le g	4.00	30.0000	96.00	2" Ice	2.57	1.66	0.14
			6.00	30.0000		No Ice	1.97	1.41	0.07
			2.00	30.0000		1/2" Ice	2.14	1.56	0.09
				30.0000		1" Ice	2.33	1.73	0.11
RRUS 4449 B5/B12	B	From Centroid-Le g	4.00	30.0000	96.00	2" Ice	2.72	2.07	0.16
			6.00	30.0000		No Ice	1.97	1.41	0.07
			2.00	30.0000		1/2" Ice	2.14	1.56	0.09
				30.0000		1" Ice	2.33	1.73	0.11
RRUS 4449 B5/B12	C	From Centroid-Le g	4.00	30.0000	96.00	2" Ice	2.72	2.07	0.16
			6.00	30.0000		No Ice	1.97	1.41	0.07
			2.00	30.0000		1/2" Ice	2.14	1.56	0.09
				30.0000		1" Ice	2.33	1.73	0.11
WCS-IMFQ-AMT	C	From Centroid-Le g	4.00	30.0000	96.00	2" Ice	2.72	2.07	0.16
			-2.00	30.0000		No Ice	0.99	0.64	0.03
			2.00	30.0000		1/2" Ice	1.11	0.75	0.04
				30.0000		1" Ice	1.25	0.86	0.05
Platform Mount [LP 712-1]	C	None		0.0000	96.00	2" Ice	1.53	1.11	0.08
				0.0000		No Ice	24.56	24.56	1.34
				0.0000		1/2" Ice	27.92	27.92	1.91
				0.0000		1" Ice	31.27	31.27	2.55
					2" Ice	37.98	37.98	3.97	

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Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	CAA Front	CAA Side	Weight
			Horz Lateral	Vert					
			ft	ft	°	ft	ft ²	ft ²	K
Miscellaneous [NA 507-1]	C	None			0.0000	96.00	No Ice 4.56 1/2" Ice 6.39 1" Ice 8.18 2" Ice 11.66	4.56 6.39 8.18 11.66	0.25 0.31 0.40 0.66
75									
ACUTIME 2000	A	From Leg	3.00 0.00 1.00		0.0000	75.00	No Ice 0.26 1/2" Ice 0.32 1" Ice 0.39 2" Ice 0.56	0.26 0.32 0.39 0.56	0.00 0.00 0.01 0.02
Side Arm Mount [SO 701-1]	A	From Leg	0.50 0.00 0.00		0.0000	75.00	No Ice 0.85 1/2" Ice 1.14 1" Ice 1.43 2" Ice 2.01	1.67 2.34 3.01 4.35	0.07 0.08 0.09 0.12
*									

Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets:		Azimuth Adjustment	3 dB Beam Width	Elevation	Outside Diameter	Aperture Area	Weight
				Horz Lateral	Vert						
			ft	ft	°	°	ft	ft	ft ²	K	
PX2F-52	A	Paraboloid w/Radome	From Centroid -Leg	4.00		25.0000		122.00	2.09	No Ice 3.44	0.02
				0.00						1/2" Ice 3.72	0.04
				1.00						1" Ice 3.99	0.06
										2" Ice 4.55	0.09
VHLP2-11	A	Paraboloid w/Shroud (HP)	From Centroid -Leg	4.00		37.0000		122.00	2.00	No Ice 3.72	0.03
				2.00						1/2" Ice 4.01	0.05
				3.00						1" Ice 4.30	0.07
										2" Ice 4.88	0.11
VHLP2-11	B	Paraboloid w/Shroud (HP)	From Centroid -Leg	4.00		10.0000		122.00	2.00	No Ice 3.72	0.03
				0.00						1/2" Ice 4.01	0.05
				3.00						1" Ice 4.30	0.07
										2" Ice 4.88	0.11

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.0 Wind 0 deg - No Ice
3	0.9 Dead+1.0 Wind 0 deg - No Ice
4	1.2 Dead+1.0 Wind 30 deg - No Ice
5	0.9 Dead+1.0 Wind 30 deg - No Ice
6	1.2 Dead+1.0 Wind 60 deg - No Ice
7	0.9 Dead+1.0 Wind 60 deg - No Ice
8	1.2 Dead+1.0 Wind 90 deg - No Ice
9	0.9 Dead+1.0 Wind 90 deg - No Ice

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Comb. No.	Description
10	1.2 Dead+1.0 Wind 120 deg - No Ice
11	0.9 Dead+1.0 Wind 120 deg - No Ice
12	1.2 Dead+1.0 Wind 150 deg - No Ice
13	0.9 Dead+1.0 Wind 150 deg - No Ice
14	1.2 Dead+1.0 Wind 180 deg - No Ice
15	0.9 Dead+1.0 Wind 180 deg - No Ice
16	1.2 Dead+1.0 Wind 210 deg - No Ice
17	0.9 Dead+1.0 Wind 210 deg - No Ice
18	1.2 Dead+1.0 Wind 240 deg - No Ice
19	0.9 Dead+1.0 Wind 240 deg - No Ice
20	1.2 Dead+1.0 Wind 270 deg - No Ice
21	0.9 Dead+1.0 Wind 270 deg - No Ice
22	1.2 Dead+1.0 Wind 300 deg - No Ice
23	0.9 Dead+1.0 Wind 300 deg - No Ice
24	1.2 Dead+1.0 Wind 330 deg - No Ice
25	0.9 Dead+1.0 Wind 330 deg - No Ice
26	1.2 Dead+1.0 Ice+1.0 Temp
27	1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp
28	1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp
29	1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp
30	1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp
31	1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp
32	1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp
33	1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp
34	1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp
35	1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp
36	1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp
37	1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp
38	1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp
39	Dead+Wind 0 deg - Service
40	Dead+Wind 30 deg - Service
41	Dead+Wind 60 deg - Service
42	Dead+Wind 90 deg - Service
43	Dead+Wind 120 deg - Service
44	Dead+Wind 150 deg - Service
45	Dead+Wind 180 deg - Service
46	Dead+Wind 210 deg - Service
47	Dead+Wind 240 deg - Service
48	Dead+Wind 270 deg - Service
49	Dead+Wind 300 deg - Service
50	Dead+Wind 330 deg - Service

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L1	120 - 115	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-11.23	0.54	2.07
			Max. Mx	20	-4.87	41.48	0.35
			Max. My	2	-4.91	0.80	39.80
			Max. Vy	20	-6.45	41.48	0.35
			Max. Vx	14	6.18	0.24	-38.75
			Max. Torque	18			-1.84
L2	115 - 110	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-21.83	-1.99	3.54
			Max. Mx	20	-8.79	97.29	0.37
			Max. My	2	-8.89	-0.05	92.64
			Max. Vy	20	-13.24	97.29	0.37

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Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L3	110 - 105	Pole	Max. Vx	14	12.29	-0.40	-91.12
			Max. Torque	18			-1.84
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-22.85	-2.09	3.69
			Max. Mx	20	-9.27	164.75	-0.07
			Max. My	2	-9.36	-0.09	155.17
			Max. Vy	20	-13.76	164.75	-0.07
L4	105 - 100	Pole	Max. Vx	14	12.82	-0.10	-153.83
			Max. Torque	22			-1.39
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-32.91	-2.42	3.90
			Max. Mx	20	-14.18	265.61	-0.50
			Max. My	2	-14.28	-0.18	251.12
			Max. Vy	20	-19.17	265.61	-0.50
L5	100 - 99.25	Pole	Max. Vx	14	18.22	0.14	-249.94
			Max. Torque	22			-1.40
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-33.12	-2.47	3.92
			Max. Mx	20	-14.27	280.00	-0.56
			Max. My	2	-14.37	-0.19	264.78
			Max. Vy	20	-19.24	280.00	-0.56
L6	99.25 - 99	Pole	Max. Vx	14	18.29	0.18	-263.62
			Max. Torque	22			-1.40
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-33.21	-2.48	3.93
			Max. Mx	20	-14.32	284.81	-0.58
			Max. My	2	-14.41	-0.20	269.35
			Max. Vy	20	-19.27	284.81	-0.58
L7	99 - 94	Pole	Max. Vx	14	18.32	0.19	-268.19
			Max. Torque	22			-1.40
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-47.14	-2.94	3.98
			Max. Mx	20	-20.20	406.06	-1.08
			Max. My	2	-20.29	-0.30	386.13
			Max. Vy	20	-26.77	406.06	-1.08
L8	94 - 90.08	Pole	Max. Vx	2	-25.94	-0.30	386.13
			Max. Torque	22			-1.53
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-48.63	-3.19	4.12
			Max. Mx	20	-21.00	511.95	-1.42
			Max. My	2	-21.08	-0.38	488.94
			Max. Vy	20	-27.30	511.95	-1.42
L9	90.08 - 89.83	Pole	Max. Vx	2	-26.52	-0.38	488.94
			Max. Torque	22			-1.37
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-48.74	-3.21	4.12
			Max. Mx	20	-21.07	518.78	-1.44
			Max. My	2	-21.15	-0.38	495.58
			Max. Vy	20	-27.33	518.78	-1.44
L10	89.83 - 89.5	Pole	Max. Vx	2	-26.55	-0.38	495.58
			Max. Torque	22			-1.37
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-48.89	-3.23	4.14
			Max. Mx	20	-21.15	527.80	-1.47
			Max. My	2	-21.23	-0.39	504.35
			Max. Vy	20	-27.38	527.80	-1.47
L11	89.5 - 89.25	Pole	Max. Vx	2	-26.60	-0.39	504.35
			Max. Torque	22			-1.37
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-49.01	-3.24	4.15
			Max. Mx	20	-21.22	534.65	-1.49

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Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L12	89.25 - 84.25	Pole	Max. My	2	-21.30	-0.39	511.01
			Max. Vy	20	-27.42	534.65	-1.49
			Max. Vx	2	-26.64	-0.39	511.01
			Max. Torque	22			-1.37
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-51.45	-3.54	4.33
			Max. Mx	20	-22.64	673.55	-1.91
			Max. My	2	-22.71	-0.49	646.35
			Max. Vy	20	-28.18	673.55	-1.91
			Max. Vx	2	-27.48	-0.49	646.35
L13	84.25 - 78	Pole	Max. Torque	22			-1.37
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-52.70	-3.70	4.43
			Max. Mx	20	-23.37	744.44	-2.13
			Max. My	2	-23.44	-0.55	715.60
			Max. Vy	8	28.58	-742.73	2.80
			Max. Vx	2	-27.90	-0.55	715.60
			Max. Torque	22			-1.37
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-56.65	-4.01	4.63
L14	78 - 77	Pole	Max. Mx	20	-26.07	882.09	-2.53
			Max. My	2	-26.13	-0.64	850.35
			Max. Vy	8	29.47	-880.67	3.10
			Max. Vx	2	-28.81	-0.64	850.35
			Max. Torque	22			-1.37
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-56.80	-4.03	4.65
			Max. Mx	20	-26.17	889.45	-2.55
			Max. My	2	-26.23	-0.65	857.56
			Max. Vy	8	29.51	-888.04	3.12
L15	77 - 76.75	Pole	Max. Vx	2	-28.85	-0.65	857.56
			Max. Torque	22			-1.37
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-56.96	-4.04	4.66
			Max. Mx	20	-26.27	896.81	-2.57
			Max. My	2	-26.33	-0.65	864.78
			Max. Vy	8	29.55	-895.43	3.14
			Max. Vx	2	-28.89	-0.65	864.78
			Max. Torque	22			-1.37
			Max Tension	1	0.00	0.00	0.00
L16	76.75 - 76.5	Pole	Max. Compression	26	-57.60	-4.11	4.72
			Max. Mx	20	-26.67	926.38	-2.66
			Max. My	2	-26.73	-0.68	893.78
			Max. Vy	8	29.73	-925.08	3.20
			Max. Vx	2	-29.08	-0.68	893.78
			Max. Torque	22			-1.37
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-57.74	-4.13	4.73
			Max. Mx	20	-26.77	933.80	-2.68
			Max. My	2	-26.83	-0.68	901.06
L17	76.5 - 75.5	Pole	Max. Vy	8	29.77	-932.52	3.21
			Max. Vx	2	-29.12	-0.68	901.06
			Max. Torque	22			-1.37
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-58.33	-4.18	5.04
			Max. Mx	20	-27.11	956.18	-2.61
			Max. My	2	-27.17	-0.70	923.13
			Max. Vy	8	30.00	-954.97	3.39
			Max. Vx	2	-29.31	-0.70	923.13
			Max. Torque	22			-1.53
L18	75.25 - 74.5	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-58.33	-4.18	5.04
L19	75.25 - 74.5	Pole	Max. Mx	20	-27.11	956.18	-2.61
			Max. My	2	-27.17	-0.70	923.13
			Max. Vy	8	30.00	-954.97	3.39
			Max. Vx	2	-29.31	-0.70	923.13
			Max. Torque	22			-1.53
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-58.33	-4.18	5.04
			Max. Mx	20	-27.11	956.18	-2.61
			Max. My	2	-27.17	-0.70	923.13
			Max. Vy	8	30.00	-954.97	3.39
L20	74.5 - 74.25	Pole	Max. Vx	2	-29.31	-0.70	923.13
			Max. Torque	22			-1.53
L20	74.5 - 74.25	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-58.33	-4.18	5.04

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Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L21	74.25 - 72	Pole	Max. Compression	26	-58.47	-4.20	5.06
			Max. Mx	20	-27.20	963.66	-2.63
			Max. My	2	-27.27	-0.70	930.47
			Max. Vy	8	30.04	-962.47	3.41
			Max. Vx	2	-29.35	-0.70	930.47
			Max. Torque	22			-1.53
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-59.75	-4.36	5.18
			Max. Mx	20	-27.98	1031.47	-2.82
			Max. My	2	-28.04	-0.75	996.98
L22	72 - 71.75	Pole	Max. Vy	8	30.42	-1030.51	3.55
			Max. Vx	2	-29.75	-0.75	996.98
			Max. Torque	22			-1.53
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-59.91	-4.38	5.19
			Max. Mx	20	-28.08	1039.06	-2.85
			Max. My	2	-28.14	-0.75	1004.43
			Max. Vy	8	30.46	-1038.12	3.57
			Max. Vx	2	-29.80	-0.75	1004.43
			Max. Torque	22			-1.53
L23	71.75 - 70.5	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-60.71	-4.45	5.27
			Max. Mx	20	-28.55	1077.13	-2.95
			Max. My	2	-28.61	-0.78	1041.83
			Max. Vy	8	30.69	-1076.34	3.65
			Max. Vx	2	-30.04	-0.78	1041.83
			Max. Torque	22			-1.53
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-60.87	-4.47	5.29
			Max. Mx	20	-28.66	1084.78	-2.97
L24	70.5 - 70.25	Pole	Max. My	2	-28.72	-0.79	1049.35
			Max. Vy	8	30.73	-1084.02	3.67
			Max. Vx	2	-30.08	-0.79	1049.35
			Max. Torque	22			-1.53
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-61.04	-4.48	5.31
			Max. Mx	20	-28.77	1092.44	-2.99
			Max. My	2	-28.82	-0.79	1056.88
			Max. Vy	8	30.77	-1091.71	3.68
			Max. Vx	2	-30.12	-0.79	1056.88
L25	70.25 - 70	Pole	Max. Torque	22			-1.53
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-61.20	-4.50	5.32
			Max. Mx	20	-28.86	1100.11	-3.02
			Max. My	2	-28.92	-0.80	1064.42
			Max. Vy	8	30.82	-1099.41	3.70
			Max. Vx	2	-30.17	-0.80	1064.42
			Max. Torque	22			-1.53
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-61.36	-4.51	5.34
L26	70 - 69.75	Pole	Max. Mx	20	-28.96	1107.79	-3.04
			Max. My	2	-29.02	-0.80	1071.97
			Max. Vy	8	30.86	-1107.12	3.71
			Max. Vx	2	-30.22	-0.80	1071.97
			Max. Torque	22			-1.53
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-61.51	-4.53	5.36
			Max. Mx	20	-29.05	1115.48	-3.06
			Max. My	2	-29.10	-0.81	1079.53
			Max. Vy	8	30.91	-1114.85	3.73
L27	69.75 - 69.5	Pole	Max. Vx	2	-30.27	-0.81	1079.53
			Max. Torque	22			-1.53
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-61.51	-4.53	5.36
L28	69.5 - 69.25	Pole	Max. Mx	20	-29.05	1115.48	-3.06
			Max. My	2	-29.10	-0.81	1079.53
			Max. Vy	8	30.91	-1114.85	3.73
			Max. Vx	2	-30.27	-0.81	1079.53

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Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L29	69.25 - 64.25	Pole	Max. Torque	22			-1.53
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-64.39	-4.85	5.62
			Max. Mx	8	-30.82	-1271.45	4.05
			Max. My	2	-30.88	-0.91	1233.09
			Max. Vy	8	31.72	-1271.45	4.05
			Max. Vx	2	-31.15	-0.91	1233.09
L30	64.25 - 59.25	Pole	Max. Torque	22			-1.53
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-67.22	-5.22	5.88
			Max. Mx	8	-32.65	-1431.99	4.37
			Max. My	2	-32.70	-1.02	1390.95
			Max. Vy	8	32.48	-1431.99	4.37
			Max. Vx	2	-31.99	-1.02	1390.95
L31	59.25 - 56	Pole	Max. Torque	22			-1.53
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-69.11	-5.46	6.05
			Max. Mx	8	-33.85	-1538.39	4.58
			Max. My	2	-33.89	-1.10	1495.84
			Max. Vy	8	32.99	-1538.39	4.58
			Max. Vx	2	-32.55	-1.10	1495.84
L32	56 - 55.75	Pole	Max. Torque	22			-1.53
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-69.30	-5.48	6.06
			Max. Mx	8	-33.98	-1546.64	4.59
			Max. My	2	-34.02	-1.10	1503.99
			Max. Vy	8	33.02	-1546.64	4.59
			Max. Vx	2	-32.59	-1.10	1503.99
L33	55.75 - 55.5	Pole	Max. Torque	22			-1.53
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-69.49	-5.50	6.07
			Max. Mx	8	-34.10	-1554.91	4.60
			Max. My	2	-34.14	-1.11	1512.14
			Max. Vy	8	33.07	-1554.91	4.60
			Max. Vx	2	-32.64	-1.11	1512.14
L34	55.5 - 55.25	Pole	Max. Torque	22			-1.53
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-69.68	-5.52	6.08
			Max. Mx	8	-34.22	-1563.18	4.62
			Max. My	2	-34.26	-1.12	1520.31
			Max. Vy	8	33.11	-1563.18	4.62
			Max. Vx	2	-32.69	-1.12	1520.31
L35	55.25 - 54	Pole	Max. Torque	22			-1.53
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-70.64	-5.62	6.13
			Max. Mx	8	-34.83	-1604.74	4.69
			Max. My	2	-34.87	-1.16	1561.33
			Max. Vy	8	33.35	-1604.74	4.69
			Max. Vx	2	-32.94	-1.16	1561.33
L36	54 - 53.75	Pole	Max. Torque	22			-1.53
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-70.82	-5.65	6.14
			Max. Mx	8	-34.95	-1613.08	4.71
			Max. My	2	-34.99	-1.16	1569.57
			Max. Vy	8	33.38	-1613.08	4.71
			Max. Vx	2	-32.98	-1.16	1569.57
L37	53.75 - 53.5	Pole	Max. Torque	22			-1.53
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-71.00	-5.67	6.15
			Max. Mx	8	-35.07	-1621.44	4.72
			Max. My	2	-35.11	-1.17	1577.82

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Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L38	53.5 - 53.25	Pole	Max. Vy	8	33.43	-1621.44	4.72
			Max. Vx	2	-33.03	-1.17	1577.82
			Max. Torque	22			-1.53
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-71.18	-5.69	6.16
			Max. Mx	8	-35.18	-1629.81	4.74
			Max. My	2	-35.22	-1.18	1586.09
			Max. Vy	8	33.47	-1629.81	4.74
L39	53.25 - 53	Pole	Max. Vx	2	-33.08	-1.18	1586.09
			Max. Torque	22			-1.53
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-71.35	-5.71	6.17
			Max. Mx	8	-35.28	-1638.18	4.75
			Max. My	2	-35.32	-1.19	1594.36
			Max. Vy	8	33.51	-1638.18	4.75
			Max. Vx	2	-33.12	-1.19	1594.36
L40	53 - 48	Pole	Max. Torque	22			-1.53
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-74.63	-6.12	6.34
			Max. Mx	8	-37.36	-1807.88	5.04
			Max. My	2	-37.39	-1.34	1762.25
			Max. Vy	8	34.34	-1807.88	5.04
			Max. Vx	2	-34.03	-1.34	1762.25
			Max. Torque	24			-1.53
L41	48 - 39.75	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-76.94	-6.42	6.48
			Max. Mx	8	-38.84	-1929.06	5.24
			Max. My	2	-38.87	-1.45	1882.40
			Max. Vy	8	34.89	-1929.06	5.24
			Max. Vx	2	-34.64	-1.45	1882.40
			Max. Torque	24			-1.56
			Max Tension	1	0.00	0.00	0.00
L42	39.75 - 38.75	Pole	Max. Compression	26	-82.52	-6.92	6.71
			Max. Mx	8	-42.70	-2132.79	5.58
			Max. My	2	-42.72	-1.63	2084.83
			Max. Vy	8	35.93	-2132.79	5.58
			Max. Vx	2	-35.76	-1.63	2084.83
			Max. Torque	24			-1.60
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-85.21	-7.26	6.87
L43	38.75 - 34.75	Pole	Max. Mx	8	-44.44	-2277.76	5.81
			Max. My	2	-44.46	-1.75	2229.18
			Max. Vy	8	36.54	-2277.76	5.81
			Max. Vx	2	-36.43	-1.75	2229.18
			Max. Torque	24			-1.62
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-85.40	-7.28	6.88
			Max. Mx	8	-44.58	-2286.90	5.82
L44	34.75 - 34.5	Pole	Max. My	2	-44.60	-1.76	2238.29
			Max. Vy	8	36.57	-2286.90	5.82
			Max. Vx	2	-36.46	-1.76	2238.29
			Max. Torque	24			-1.62
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-85.98	-7.34	6.91
			Max. Mx	8	-44.96	-2314.39	5.86
			Max. My	2	-44.98	-1.78	2265.69
L45	34.5 - 33.75	Pole	Max. Vy	8	36.70	-2314.39	5.86
			Max. Vx	2	-36.61	-1.78	2265.69
			Max. Torque	24			-1.63
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-86.15	-7.36	6.92
			Max. Mx	8	-44.96	-2314.39	5.86
			Max. My	2	-44.98	-1.78	2265.69
			Max. Vy	8	36.70	-2314.39	5.86
L46	33.75 - 33.5	Pole	Max. Vx	2	-36.61	-1.78	2265.69
			Max. Torque	24			-1.63
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-86.15	-7.36	6.92

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Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L47	33.5 - 28.5	Pole	Max. Mx	8	-45.07	-2323.57	5.88
			Max. My	2	-45.09	-1.79	2274.85
			Max. Vy	8	36.73	-2323.57	5.88
			Max. Vx	2	-36.64	-1.79	2274.85
			Max. Torque	24			-1.63
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-89.50	-7.76	7.10
			Max. Mx	8	-47.28	-2509.13	6.17
			Max. My	2	-47.29	-1.95	2460.05
			Max. Vy	8	37.47	-2509.13	6.17
L48	28.5 - 24	Pole	Max. Vx	2	-37.45	-1.95	2460.05
			Max. Torque	24			-1.66
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-92.47	-8.14	7.27
			Max. Mx	8	-49.29	-2679.16	6.42
			Max. My	2	-49.30	-2.10	2630.05
			Max. Vy	8	38.10	-2679.16	6.42
			Max. Vx	2	-38.13	-2.10	2630.05
			Max. Torque	24			-1.68
			Max Tension	1	0.00	0.00	0.00
L49	24 - 23.75	Pole	Max. Compression	26	-92.64	-8.16	7.28
			Max. Mx	8	-49.42	-2688.69	6.44
			Max. My	2	-49.43	-2.11	2639.58
			Max. Vy	8	38.11	-2688.69	6.44
			Max. Vx	2	-38.15	-2.11	2639.58
			Max. Torque	24			-1.69
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-96.05	-8.59	7.47
			Max. Mx	8	-51.77	-2881.04	6.72
			Max. My	2	-51.77	-2.27	2832.18
L50	23.75 - 18.75	Pole	Max. Vy	8	38.80	-2881.04	6.72
			Max. Vx	2	-38.89	-2.27	2832.18
			Max. Torque	24			-1.69
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-99.15	-8.96	7.64
			Max. Mx	8	-53.92	-3056.96	6.98
			Max. My	2	-53.92	-2.42	3008.56
			Max. Vy	8	39.37	-3056.96	6.98
			Max. Vx	2	-39.52	-2.42	3008.56
			Max. Torque	24			-1.69
L51	18.75 - 14.25	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-99.33	-8.98	7.65
			Max. Mx	8	-54.06	-3066.80	6.99
			Max. My	2	-54.07	-2.43	3018.45
			Max. Vy	8	39.39	-3066.80	6.99
			Max. Vx	2	-39.54	-2.43	3018.45
			Max. Torque	24			-1.69
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-103.07	-9.37	7.84
			Max. Mx	8	-56.69	-3265.50	7.27
L52	14.25 - 14	Pole	Max. My	2	-56.69	-2.60	3218.01
			Max. Vy	8	40.06	-3265.50	7.27
			Max. Vx	2	-40.29	-2.60	3218.01
			Max. Torque	24			-1.69
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-105.91	-9.67	7.88
			Max. Mx	8	-58.75	-3426.79	7.42
			Max. My	2	-58.75	-2.74	3380.22
			Max. Vy	8	40.57	-3426.79	7.42
			Max. Vx	2	-40.87	-2.74	3380.22
L53	14 - 9	Pole	Max. Torque	24			-1.68
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-105.91	-9.67	7.88
			Max. Mx	8	-58.75	-3426.79	7.42
			Max. My	2	-58.75	-2.74	3380.22
			Max. Vy	8	40.57	-3426.79	7.42
L54	9 - 5	Pole	Max. Vx	2	-40.87	-2.74	3380.22
			Max. Torque	24			-1.68

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Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L55	5 - 4.75	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-106.10	-9.69	7.88
			Max. Mx	8	-58.90	-3436.94	7.43
			Max. My	2	-58.90	-2.74	3390.44
			Max. Vy	8	40.58	-3436.94	7.43
			Max. Vx	2	-40.90	-2.74	3390.44
L56	4.75 - 4.5	Pole	Max. Torque	24			-1.68
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-106.28	-9.71	7.88
			Max. Mx	8	-59.04	-3447.09	7.44
			Max. My	2	-59.04	-2.75	3400.66
			Max. Vy	8	40.62	-3447.09	7.44
L57	4.5 - 0	Pole	Max. Vx	2	-40.93	-2.75	3400.66
			Max. Torque	24			-1.68
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-109.43	-10.04	7.89
			Max. Mx	8	-61.47	-3631.26	7.58
			Max. My	2	-61.47	-2.91	3586.25
			Max. Vy	8	41.20	-3631.26	7.58
			Max. Vx	2	-41.60	-2.91	3586.25
			Max. Torque	24			-1.68

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Pole	Max. Vert	26	109.43	-0.00	0.00
	Max. H _x	20	61.49	41.04	-0.10
	Max. H _z	2	61.49	-0.01	41.58
	Max. M _x	2	3586.25	-0.01	41.58
	Max. M _z	8	3631.26	-41.18	0.05
	Max. Torsion	12	1.50	-21.88	-37.24
	Min. Vert	23	46.11	36.67	20.62
	Min. H _x	8	61.49	-41.18	0.05
	Min. H _z	16	61.49	24.39	-41.38
	Min. M _x	14	-3561.24	0.06	-41.24
	Min. M _z	20	-3618.83	41.04	-0.10
	Min. Torsion	24	-1.68	21.93	37.20

Tower Mast Reaction Summary

Load Combination	Vertical K	Shear _x K	Shear _z K	Overturning Moment, M _x kip-ft	Overturning Moment, M _z kip-ft	Torque kip-ft
Dead Only	51.24	0.00	0.00	-1.87	-2.30	-0.00
1.2 Dead+1.0 Wind 0 deg - No Ice	61.49	0.01	-41.58	-3586.25	-2.91	0.74
0.9 Dead+1.0 Wind 0 deg - No Ice	46.11	0.01	-41.58	-3554.85	-2.18	0.73
1.2 Dead+1.0 Wind 30 deg - No Ice	61.49	24.48	-41.52	-3467.44	-2063.98	0.50
0.9 Dead+1.0 Wind 30 deg - No Ice	46.11	24.48	-41.52	-3437.53	-2045.74	0.50

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	<p style="text-align: center;">Client</p> <p style="text-align: center;">Crown Castle</p>	<p style="text-align: center;">Designed by</p> <p style="text-align: center;">mshakeri</p>

Load Combination	Vertical K	Shear _x K	Shear _z K	Overturning Moment, M _x kip-ft	Overturning Moment, M _z kip-ft	Torque kip-ft
Ice						
1.2 Dead+1.0 Wind 60 deg - No Ice	61.49	36.90	-20.81	-1797.56	-3213.62	-0.48
0.9 Dead+1.0 Wind 60 deg - No Ice	46.11	36.90	-20.81	-1781.53	-3185.20	-0.47
1.2 Dead+1.0 Wind 90 deg - No Ice	61.49	41.18	-0.05	-7.58	-3631.26	-1.12
0.9 Dead+1.0 Wind 90 deg - No Ice	46.11	41.18	-0.05	-6.92	-3599.08	-1.10
1.2 Dead+1.0 Wind 120 deg - No Ice	61.49	36.63	20.61	1772.60	-3186.67	-1.44
0.9 Dead+1.0 Wind 120 deg - No Ice	46.11	36.63	20.61	1757.97	-3158.48	-1.42
1.2 Dead+1.0 Wind 150 deg - No Ice	61.49	21.88	37.24	3206.28	-1899.82	-1.50
0.9 Dead+1.0 Wind 150 deg - No Ice	46.11	21.88	37.24	3179.47	-1882.83	-1.48
1.2 Dead+1.0 Wind 180 deg - No Ice	61.49	-0.06	41.24	3561.24	4.25	-0.68
0.9 Dead+1.0 Wind 180 deg - No Ice	46.11	-0.06	41.24	3531.21	4.92	-0.67
1.2 Dead+1.0 Wind 210 deg - No Ice	61.49	-24.39	41.38	3458.92	2054.62	-0.46
0.9 Dead+1.0 Wind 210 deg - No Ice	46.11	-24.39	41.38	3430.23	2037.87	-0.45
1.2 Dead+1.0 Wind 240 deg - No Ice	61.49	-36.61	20.63	1778.89	3186.81	0.73
0.9 Dead+1.0 Wind 240 deg - No Ice	46.11	-36.61	20.63	1764.18	3159.99	0.72
1.2 Dead+1.0 Wind 270 deg - No Ice	61.49	-41.04	0.10	9.31	3618.83	1.23
0.9 Dead+1.0 Wind 270 deg - No Ice	46.11	-41.04	0.10	9.80	3588.13	1.21
1.2 Dead+1.0 Wind 300 deg - No Ice	61.49	-36.67	-20.62	-1779.22	3188.16	1.53
0.9 Dead+1.0 Wind 300 deg - No Ice	46.11	-36.67	-20.62	-1763.35	3161.36	1.51
1.2 Dead+1.0 Wind 330 deg - No Ice	61.49	-21.93	-37.20	-3201.73	1898.61	1.68
0.9 Dead+1.0 Wind 330 deg - No Ice	46.11	-21.93	-37.20	-3173.78	1883.03	1.67
1.2 Dead+1.0 Ice+1.0 Temp	109.43	0.00	-0.00	-7.89	-10.04	-0.00
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	109.43	-0.00	-8.41	-799.32	-9.57	0.25
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	109.43	5.11	-8.70	-780.77	-466.83	0.15
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	109.43	7.44	-4.21	-403.75	-714.31	-0.20
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	109.43	8.38	-0.00	-8.46	-812.39	-0.40
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	109.43	7.42	4.19	386.45	-712.48	-0.49
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	109.43	4.60	7.85	717.43	-436.87	-0.51
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	109.43	-0.01	8.39	782.95	-9.29	-0.23
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	109.43	-5.10	8.68	764.37	445.98	-0.14
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	109.43	-7.42	4.19	386.93	693.17	0.25
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	109.43	-8.35	0.01	-6.19	791.20	0.42

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Load Combination	Vertical K	Shear _x K	Shear _z K	Overturning Moment, M _x kip-ft	Overturning Moment, M _z kip-ft	Torque kip-ft
deg+1.0 Ice+1.0 Temp						
1.2 Dead+1.0 Wind 300	109.43	-7.40	-4.18	-401.25	690.94	0.50
deg+1.0 Ice+1.0 Temp						
1.2 Dead+1.0 Wind 330	109.43	-4.61	-7.84	-731.61	417.54	0.55
deg+1.0 Ice+1.0 Temp						
Dead+Wind 0 deg - Service	51.24	0.00	-9.02	-775.71	-2.38	0.16
Dead+Wind 30 deg - Service	51.24	5.31	-9.01	-750.23	-447.46	0.11
Dead+Wind 60 deg - Service	51.24	8.01	-4.52	-389.55	-695.59	-0.10
Dead+Wind 90 deg - Service	51.24	8.94	-0.01	-3.07	-785.74	-0.24
Dead+Wind 120 deg - Service	51.24	7.95	4.47	381.28	-689.77	-0.31
Dead+Wind 150 deg - Service	51.24	4.75	8.08	690.85	-411.95	-0.33
Dead+Wind 180 deg - Service	51.24	-0.01	8.95	767.43	-0.84	-0.15
Dead+Wind 210 deg - Service	51.24	-5.29	8.98	745.51	441.93	-0.10
Dead+Wind 240 deg - Service	51.24	-7.94	4.48	382.64	686.29	0.16
Dead+Wind 270 deg - Service	51.24	-8.91	0.02	0.57	779.54	0.27
Dead+Wind 300 deg - Service	51.24	-7.96	-4.47	-385.58	686.58	0.33
Dead+Wind 330 deg - Service	51.24	-4.76	-8.07	-692.74	408.18	0.36

Solution Summary

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
1	0.00	-51.24	0.00	0.00	51.24	0.00	0.000%
2	0.01	-61.49	-41.58	-0.01	61.49	41.58	0.000%
3	0.01	-46.11	-41.58	-0.01	46.11	41.58	0.000%
4	24.48	-61.49	-41.52	-24.48	61.49	41.52	0.000%
5	24.48	-46.11	-41.52	-24.48	46.11	41.52	0.000%
6	36.90	-61.49	-20.81	-36.90	61.49	20.81	0.000%
7	36.90	-46.11	-20.81	-36.90	46.11	20.81	0.000%
8	41.18	-61.49	-0.05	-41.18	61.49	0.05	0.000%
9	41.18	-46.11	-0.05	-41.18	46.11	0.05	0.000%
10	36.63	-61.49	20.61	-36.63	61.49	-20.61	0.000%
11	36.63	-46.11	20.61	-36.63	46.11	-20.61	0.000%
12	21.88	-61.49	37.24	-21.88	61.49	-37.24	0.000%
13	21.88	-46.11	37.24	-21.88	46.11	-37.24	0.000%
14	-0.06	-61.49	41.24	0.06	61.49	-41.24	0.000%
15	-0.06	-46.11	41.24	0.06	46.11	-41.24	0.000%
16	-24.39	-61.49	41.38	24.39	61.49	-41.38	0.000%
17	-24.39	-46.11	41.38	24.39	46.11	-41.38	0.000%
18	-36.61	-61.49	20.63	36.61	61.49	-20.63	0.000%
19	-36.61	-46.11	20.63	36.61	46.11	-20.63	0.000%
20	-41.04	-61.49	0.10	41.04	61.49	-0.10	0.000%
21	-41.04	-46.11	0.10	41.04	46.11	-0.10	0.000%
22	-36.67	-61.49	-20.62	36.67	61.49	20.62	0.000%
23	-36.67	-46.11	-20.62	36.67	46.11	20.62	0.000%
24	-21.93	-61.49	-37.20	21.93	61.49	37.20	0.000%
25	-21.93	-46.11	-37.20	21.93	46.11	37.20	0.000%
26	0.00	-109.43	0.00	-0.00	109.43	0.00	0.000%
27	-0.00	-109.43	-8.41	0.00	109.43	8.41	0.000%
28	5.11	-109.43	-8.70	-5.11	109.43	8.70	0.000%
29	7.44	-109.43	-4.21	-7.44	109.43	4.21	0.000%
30	8.38	-109.43	-0.00	-8.38	109.43	0.00	0.000%
31	7.42	-109.43	4.19	-7.42	109.43	-4.19	0.000%
32	4.60	-109.43	7.85	-4.60	109.43	-7.85	0.000%
33	-0.01	-109.43	8.39	0.01	109.43	-8.39	0.000%
34	-5.10	-109.43	8.68	5.10	109.43	-8.68	0.000%
35	-7.42	-109.43	4.19	7.42	109.43	-4.19	0.000%

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Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
36	-8.35	-109.43	0.01	8.35	109.43	-0.01	0.000%
37	-7.40	-109.43	-4.18	7.40	109.43	4.18	0.000%
38	-4.61	-109.43	-7.84	4.61	109.43	7.84	0.000%
39	0.00	-51.24	-9.02	-0.00	51.24	9.02	0.000%
40	5.31	-51.24	-9.01	-5.31	51.24	9.01	0.000%
41	8.01	-51.24	-4.52	-8.01	51.24	4.52	0.000%
42	8.94	-51.24	-0.01	-8.94	51.24	0.01	0.000%
43	7.95	-51.24	4.47	-7.95	51.24	-4.47	0.000%
44	4.75	-51.24	8.08	-4.75	51.24	-8.08	0.000%
45	-0.01	-51.24	8.95	0.01	51.24	-8.95	0.000%
46	-5.29	-51.24	8.98	5.29	51.24	-8.98	0.000%
47	-7.94	-51.24	4.48	7.94	51.24	-4.48	0.000%
48	-8.91	-51.24	0.02	8.91	51.24	-0.02	0.000%
49	-7.96	-51.24	-4.47	7.96	51.24	4.47	0.000%
50	-4.76	-51.24	-8.07	4.76	51.24	8.07	0.000%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	4	0.00000001	0.00000001
2	Yes	5	0.00000001	0.00025809
3	Yes	5	0.00000001	0.00011297
4	Yes	6	0.00000001	0.00042536
5	Yes	6	0.00000001	0.00013777
6	Yes	6	0.00000001	0.00036286
7	Yes	6	0.00000001	0.00012093
8	Yes	5	0.00000001	0.00038836
9	Yes	5	0.00000001	0.00017543
10	Yes	6	0.00000001	0.00034196
11	Yes	6	0.00000001	0.00011420
12	Yes	6	0.00000001	0.00037879
13	Yes	6	0.00000001	0.00012596
14	Yes	5	0.00000001	0.00020807
15	Yes	5	0.00000001	0.00008791
16	Yes	6	0.00000001	0.00041864
17	Yes	6	0.00000001	0.00013576
18	Yes	6	0.00000001	0.00034874
19	Yes	6	0.00000001	0.00011652
20	Yes	5	0.00000001	0.00031393
21	Yes	5	0.00000001	0.00014006
22	Yes	6	0.00000001	0.00036343
23	Yes	6	0.00000001	0.00012168
24	Yes	6	0.00000001	0.00036167
25	Yes	6	0.00000001	0.00011988
26	Yes	5	0.00000001	0.00010509
27	Yes	6	0.00000001	0.00041474
28	Yes	6	0.00000001	0.00052538
29	Yes	6	0.00000001	0.00047753
30	Yes	6	0.00000001	0.00042330
31	Yes	6	0.00000001	0.00046313
32	Yes	6	0.00000001	0.00048091
33	Yes	6	0.00000001	0.00040153
34	Yes	6	0.00000001	0.00049883
35	Yes	6	0.00000001	0.00045195
36	Yes	6	0.00000001	0.00041069

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37	Yes	6	0.00000001	0.00046270
38	Yes	6	0.00000001	0.00048067
39	Yes	4	0.00000001	0.00073033
40	Yes	5	0.00000001	0.00014536
41	Yes	5	0.00000001	0.00011810
42	Yes	4	0.00000001	0.00081256
43	Yes	5	0.00000001	0.00010345
44	Yes	5	0.00000001	0.00012666
45	Yes	4	0.00000001	0.00070700
46	Yes	5	0.00000001	0.00013756
47	Yes	5	0.00000001	0.00010658
48	Yes	4	0.00000001	0.00081144
49	Yes	5	0.00000001	0.00012160
50	Yes	5	0.00000001	0.00011175

Compression Checks

Pole Design Data

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio P _u / φP _n
L1	120 - 115 (1)	TP23.0102x22x0.25	5.00	0.00	0.0	18.3220	-4.87	989.39	0.005
L2	115 - 110 (2)	TP24.0205x23.0102x0.25	5.00	0.00	0.0	19.1352	-8.79	1033.30	0.009
L3	110 - 105 (3)	TP25.0307x24.0205x0.25	5.00	0.00	0.0	19.9485	-9.27	1077.22	0.009
L4	105 - 100 (4)	TP26.041x25.0307x0.25	5.00	0.00	0.0	20.7617	-14.05	1121.13	0.013
L5	100 - 99.25 (5)	TP26.1925x26.041x0.25	0.75	0.00	0.0	20.8837	-14.14	1127.72	0.013
L6	99.25 - 99 (6)	TP26.243x26.1925x0.3625	0.25	0.00	0.0	30.2090	-14.19	1631.29	0.009
L7	99 - 94 (7)	TP27.2532x26.243x0.3563	5.00	0.00	0.0	30.8542	-20.00	1666.13	0.012
L8	94 - 90.08 (8)	TP28.0453x27.2532x0.35	3.92	0.00	0.0	31.2126	-20.79	1685.48	0.012
L9	90.08 - 89.83 (9)	TP28.0958x28.0453x0.5125	0.25	0.00	0.0	45.5193	-20.86	2458.04	0.008
L10	89.83 - 89.5 (10)	TP28.1625x28.0958x0.5125	0.33	0.00	0.0	45.6293	-20.94	2463.98	0.008
L11	89.5 - 89.25 (11)	TP28.213x28.1625x0.725	0.25	0.00	0.0	64.1707	-21.01	3465.22	0.006
L12	89.25 - 84.25 (12)	TP29.2232x28.213x0.7	5.00	0.00	0.0	64.2913	-22.41	3471.73	0.006
L13	84.25 - 78 (13)	TP30.486x29.2232x0.7	6.25	0.00	0.0	65.4298	-23.14	3533.21	0.007
L14	78 - 77 (14)	TP30.188x29.2283x0.8625	4.75	0.00	0.0	81.4443	-25.81	4397.99	0.006
L15	77 - 76.75 (15)	TP30.2385x30.188x0.8625	0.25	0.00	0.0	81.5846	-25.91	4405.57	0.006
L16	76.75 - 76.5 (16)	TP30.289x30.2385x0.9625	0.25	0.00	0.0	90.8903	-26.01	4908.07	0.005
L17	76.5 - 75.5 (17)	TP30.4911x30.289x0.9625	1.00	0.00	0.0	91.5164	-26.41	4941.89	0.005
L18	75.5 - 75.25 (18)	TP30.5416x30.4911x0.7625	0.25	0.00	0.0	73.1151	-26.51	3948.22	0.007
L19	75.25 - 74.5 (19)	TP30.6931x30.5416x0.7625	0.75	0.00	0.0	73.4871	-26.85	3968.31	0.007
L20	74.5 - 74.25 (20)	TP30.7436x30.6931x0.8375	0.25	0.00	0.0	80.6493	-26.94	4355.06	0.006
L21	74.25 - 72 (21)	TP31.1982x30.7436x0.825	2.25	0.00	0.0	80.6864	-27.71	4357.07	0.006
L22	72 - 71.75 (22)	TP31.2487x31.1982x0.7625	0.25	0.00	0.0	74.8513	-27.81	4041.97	0.007
L23	71.75 - 70.5 (23)	TP31.5013x31.2487x0.7625	1.25	0.00	0.0	75.4714	-28.28	4075.45	0.007
L24	70.5 - 70.25 (24)	TP31.5518x31.5013x0.7875	0.25	0.00	0.0	78.0105	-28.39	4212.57	0.007
L25	70.25 - 70 (25)	TP31.6023x31.5518x0.7875	0.25	0.00	0.0	78.1386	-28.49	4219.49	0.007

tnxTower Tower Engineering Engineering, Inc. 326 Tyron Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	528 Wheelers Farm Rd (BU 876320)	Page	57 of 60
	Project	TEP No. 25570.318938	Date	11:36:47 11/08/19
	Client	Crown Castle	Designed by	mshakeri

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
L26	70 - 69.75 (26)	TP31.6528x31.6023x0.725	0.25	0.00	0.0	72.2010	-28.59	3898.85	0.007
L27	69.75 - 69.5 (27)	TP31.7033x31.6528x0.875	0.25	0.00	0.0	86.8588	-28.69	4690.37	0.006
L28	69.5 - 69.25 (28)	TP31.7538x31.7033x0.75	0.25	0.00	0.0	74.8742	-28.78	4043.21	0.007
L29	69.25 - 64.25 (29)	TP32.764x31.7538x0.7375	5.00	0.00	0.0	76.0550	-30.55	4106.97	0.007
L30	64.25 - 59.25 (30)	TP33.7742x32.764x0.7125	5.00	0.00	0.0	75.8519	-32.37	4096.00	0.008
L31	59.25 - 56 (31)	TP34.4309x33.7742x0.7125	3.25	0.00	0.0	77.3583	-33.58	4177.35	0.008
L32	56 - 55.75 (32)	TP34.4814x34.4309x0.8125	0.25	0.00	0.0	88.0862	-33.71	4756.65	0.007
L33	55.75 - 55.5 (33)	TP34.5319x34.4814x0.8125	0.25	0.00	0.0	88.2183	-33.83	4763.79	0.007
L34	55.5 - 55.25 (34)	TP34.5824x34.5319x0.8875	0.25	0.00	0.0	96.2915	-33.95	5199.74	0.007
L35	55.25 - 54 (35)	TP34.8349x34.5824x0.875	1.25	0.00	0.0	95.6821	-34.55	5166.83	0.007
L36	54 - 53.75 (36)	TP34.8854x34.8349x0.75	0.25	0.00	0.0	82.4371	-34.68	4451.60	0.008
L37	53.75 - 53.5 (37)	TP34.936x34.8854x0.7375	0.25	0.00	0.0	81.2128	-34.80	4385.49	0.008
L38	53.5 - 53.25 (38)	TP34.9865x34.936x0.6625	0.25	0.00	0.0	73.2216	-34.91	3953.97	0.009
L39	53.25 - 53 (39)	TP35.037x34.9865x0.6	0.25	0.00	0.0	66.5322	-35.01	3592.74	0.010
L40	53 - 48 (40)	TP36.0472x35.037x0.5875	5.00	0.00	0.0	67.0808	-37.09	3622.37	0.010
L41	48 - 39.75 (41)	TP37.714x36.0472x0.5875	8.25	0.00	0.0	68.4186	-38.58	3694.60	0.010
L42	39.75 - 38.75 (42)	TP37.291x36.1293x0.6625	5.75	0.00	0.0	78.1378	-42.45	4219.44	0.010
L43	38.75 - 34.75 (43)	TP38.0992x37.291x0.6625	4.00	0.00	0.0	79.8618	-44.21	4312.54	0.010
L44	34.75 - 34.5 (44)	TP38.1497x38.0992x0.825	0.25	0.00	0.0	99.1530	-44.35	5354.26	0.008
L45	34.5 - 33.75 (45)	TP38.3012x38.1497x0.825	0.75	0.00	0.0	99.5556	-44.73	5376.00	0.008
L46	33.75 - 33.5 (46)	TP38.3517x38.3012x0.625	0.25	0.00	0.0	75.9250	-44.85	4099.95	0.011
L47	33.5 - 28.5 (47)	TP39.3619x38.3517x0.6125	5.00	0.00	0.0	76.4235	-47.08	4126.87	0.011
L48	28.5 - 24 (48)	TP40.2711x39.3619x0.6625	4.50	0.00	0.0	84.4950	-49.12	4562.73	0.011
L49	24 - 23.75 (49)	TP40.3216x40.2711x0.7	0.25	0.00	0.0	89.3071	-49.25	4822.58	0.010
L50	23.75 - 18.75 (50)	TP41.3318x40.3216x0.6875	5.00	0.00	0.0	89.9763	-51.63	4858.72	0.011
L51	18.75 - 14.25 (51)	TP42.241x41.3318x0.675	4.50	0.00	0.0	90.3436	-53.81	4878.56	0.011
L52	14.25 - 14 (52)	TP42.2915x42.241x0.775	0.25	0.00	0.0	103.604 0	-53.96	5594.63	0.010
L53	14 - 9 (53)	TP43.3017x42.2915x0.7625	5.00	0.00	0.0	104.444 0	-56.62	5639.99	0.010
L54	9 - 5 (54)	TP44.1098x43.3017x0.75	4.00	0.00	0.0	104.714 0	-58.71	5654.55	0.010
L55	5 - 4.75 (55)	TP44.1603x44.1098x0.9125	0.25	0.00	0.0	127.073 0	-58.87	6861.94	0.009
L56	4.75 - 4.5 (56)	TP44.2108x44.1603x0.875	0.25	0.00	0.0	122.099 0	-59.00	6593.33	0.009
L57	4.5 - 0 (57)	TP45.12x44.2108x0.85	4.50	0.00	0.0	121.167 0	-61.47	6543.02	0.009

Pole Bending Design Data

Section No.	Elevation ft	Size	M _{ux} kip-ft	φM _{ux} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{ux}}$	M _{uy} kip-ft	φM _{uy} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{uy}}$
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<p style="text-align: center;">tnxTower</p> <p style="text-align: center;">Tower Engineering Engineering, Inc. 326 Tyron Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</p>	<p style="text-align: center;">Job</p> <p style="text-align: center;">528 Wheelers Farm Rd (BU 876320)</p>	<p style="text-align: center;">Page</p> <p style="text-align: center;">58 of 60</p>
	<p style="text-align: center;">Project</p> <p style="text-align: center;">TEP No. 25570.318938</p>	<p style="text-align: center;">Date</p> <p style="text-align: center;">11:36:47 11/08/19</p>
	<p style="text-align: center;">Client</p> <p style="text-align: center;">Crown Castle</p>	<p style="text-align: center;">Designed by</p> <p style="text-align: center;">mshakeri</p>

Section No.	Elevation ft	Size	M_{ux}	ϕM_{ux}	Ratio	M_{uy}	ϕM_{uy}	Ratio
			kip-ft	kip-ft	$\frac{M_{ux}}{\phi M_{ux}}$	kip-ft	kip-ft	$\frac{M_{uy}}{\phi M_{uy}}$
L1	120 - 115 (1)	TP23.0102x22x0.25	41.48	564.83	0.073	0.00	564.83	0.000
L2	115 - 110 (2)	TP24.0205x23.0102x0.25	97.29	607.66	0.160	0.00	607.66	0.000
L3	110 - 105 (3)	TP25.0307x24.0205x0.25	164.75	651.21	0.253	0.00	651.21	0.000
L4	105 - 100 (4)	TP26.041x25.0307x0.25	266.83	695.40	0.384	0.00	695.40	0.000
L5	100 - 99.25 (5)	TP26.1925x26.041x0.25	281.74	702.08	0.401	0.00	702.08	0.000
L6	99.25 - 99 (6)	TP26.243x26.1925x0.3625	286.73	1077.22	0.266	0.00	1077.22	0.000
L7	99 - 94 (7)	TP27.2532x26.243x0.3563	412.69	1144.31	0.361	0.00	1144.31	0.000
L8	94 - 90.08 (8)	TP28.0453x27.2532x0.35	523.71	1192.67	0.439	0.00	1192.67	0.000
L9	90.08 - 89.83 (9)	TP28.0958x28.0453x0.5125	530.89	1722.21	0.308	0.00	1722.21	0.000
L10	89.83 - 89.5 (10)	TP28.1625x28.0958x0.5125	540.40	1730.62	0.312	0.00	1730.62	0.000
L11	89.5 - 89.25 (11)	TP28.213x28.1625x0.725	547.62	2401.11	0.228	0.00	2401.11	0.000
L12	89.25 - 84.25 (12)	TP29.2232x28.213x0.7	694.92	2500.69	0.278	0.00	2500.69	0.000
L13	84.25 - 78 (13)	TP30.486x29.2232x0.7	770.68	2591.13	0.297	0.00	2591.13	0.000
L14	78 - 77 (14)	TP30.188x29.2283x0.8625	918.79	3241.57	0.283	0.00	3241.57	0.000
L15	77 - 76.75 (15)	TP30.2385x30.188x0.8625	926.74	3252.92	0.285	0.00	3252.92	0.000
L16	76.75 - 76.5 (16)	TP30.289x30.2385x0.9625	934.70	3605.72	0.259	0.00	3605.72	0.000
L17	76.5 - 75.5 (17)	TP30.4911x30.289x0.9625	966.70	3656.38	0.264	0.00	3656.38	0.000
L18	75.5 - 75.25 (18)	TP30.5416x30.4911x0.7625	974.73	2966.04	0.329	0.00	2966.04	0.000
L19	75.25 - 74.5 (19)	TP30.6931x30.5416x0.7625	999.09	2996.68	0.333	0.00	2996.68	0.000
L20	74.5 - 74.25 (20)	TP30.7436x30.6931x0.8375	1007.20	3277.97	0.307	0.00	3277.97	0.000
L21	74.25 - 72 (21)	TP31.1982x30.7436x0.825	1080.83	3333.43	0.324	0.00	3333.43	0.000
L22	72 - 71.75 (22)	TP31.2487x31.1982x0.7625	1089.08	3110.38	0.350	0.00	3110.38	0.000
L23	71.75 - 70.5 (23)	TP31.5013x31.2487x0.7625	1130.57	3162.76	0.357	0.00	3162.76	0.000
L24	70.5 - 70.25 (24)	TP31.5518x31.5013x0.7875	1138.91	3269.36	0.348	0.00	3269.36	0.000
L25	70.25 - 70 (25)	TP31.6023x31.5518x0.7875	1147.27	3280.23	0.350	0.00	3280.23	0.000
L26	70 - 69.75 (26)	TP31.6528x31.6023x0.725	1155.64	3048.38	0.379	0.00	3048.38	0.000
L27	69.75 - 69.5 (27)	TP31.7033x31.6528x0.875	1164.03	3637.88	0.320	0.00	3637.88	0.000
L28	69.5 - 69.25 (28)	TP31.7538x31.7033x0.75	1172.43	3166.69	0.370	0.00	3166.69	0.000
L29	69.25 - 64.25 (29)	TP32.764x31.7538x0.7375	1343.47	3326.52	0.404	0.00	3326.52	0.000
L30	64.25 - 59.25 (30)	TP33.7742x32.764x0.7125	1520.15	3429.82	0.443	0.00	3429.82	0.000
L31	59.25 - 56 (31)	TP34.4309x33.7742x0.7125	1637.97	3568.88	0.459	0.00	3568.88	0.000
L32	56 - 55.75 (32)	TP34.4814x34.4309x0.8125	1647.13	4045.94	0.407	0.00	4045.94	0.000
L33	55.75 - 55.5 (33)	TP34.5319x34.4814x0.8125	1656.31	4058.23	0.408	0.00	4058.23	0.000
L34	55.5 - 55.25 (34)	TP34.5824x34.5319x0.8875	1665.50	4416.73	0.377	0.00	4416.73	0.000
L35	55.25 - 54 (35)	TP34.8349x34.5824x0.875	1711.72	4425.77	0.387	0.00	4425.77	0.000
L36	54 - 53.75 (36)	TP34.8854x34.8349x0.75	1721.01	3847.06	0.447	0.00	3847.06	0.000
L37	53.75 - 53.5 (37)	TP34.936x34.8854x0.7375	1730.32	3798.43	0.456	0.00	3798.43	0.000
L38	53.5 - 53.25 (38)	TP34.9865x34.936x0.6625	1739.64	3444.88	0.505	0.00	3444.88	0.000
L39	53.25 - 53 (39)	TP35.037x34.9865x0.6	1748.98	3146.26	0.556	0.00	3146.26	0.000
L40	53 - 48 (40)	TP36.0472x35.037x0.5875	1938.87	3269.16	0.593	0.00	3269.16	0.000
L41	48 - 39.75 (41)	TP37.714x36.0472x0.5875	2075.24	3401.93	0.610	0.00	3401.93	0.000
L42	39.75 - 38.75	TP37.291x36.1293x0.6625	2305.77	3927.67	0.587	0.00	3927.67	0.000

<p>tnxTower</p> <p>Tower Engineering Engineering, Inc. 326 Tyron Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</p>	<p>Job</p> <p>528 Wheelers Farm Rd (BU 876320)</p>	<p>Page</p> <p>59 of 60</p>
	<p>Project</p> <p>TEP No. 25570.318938</p>	<p>Date</p> <p>11:36:47 11/08/19</p>
	<p>Client</p> <p>Crown Castle</p>	<p>Designed by</p> <p>mshakeri</p>

Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{ux} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{ux}}$	M_{uy} kip-ft	ϕM_{uy} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{uy}}$
L43	38.75 - 34.75 (42)	TP38.0992x37.291x0.6625	2470.67	4104.48	0.602	0.00	4104.48	0.000
L44	34.75 - 34.5 (43)	TP38.1497x38.0992x0.825	2481.08	5058.79	0.490	0.00	5058.79	0.000
L45	34.5 - 33.75 (44)	TP38.3012x38.1497x0.825	2512.43	5100.39	0.493	0.00	5100.39	0.000
L46	33.75 - 33.5 (45)	TP38.3517x38.3012x0.625	2522.92	3936.75	0.641	0.00	3936.75	0.000
L47	33.5 - 28.5 (46)	TP39.3619x38.3517x0.6125	2735.18	4073.06	0.672	0.00	4073.06	0.000
L48	28.5 - 24 (48)	TP40.2711x39.3619x0.6625	2930.48	4598.92	0.637	0.00	4598.92	0.000
L49	24 - 23.75 (49)	TP40.3216x40.2711x0.7	2941.45	4857.93	0.605	0.00	4857.93	0.000
L50	23.75 - 18.75 (50)	TP41.3318x40.3216x0.6875	3163.22	5024.38	0.630	0.00	5024.38	0.000
L51	18.75 - 14.25 (51)	TP42.241x41.3318x0.675	3366.72	5162.72	0.652	0.00	5162.72	0.000
L52	14.25 - 14 (52)	TP42.2915x42.241x0.775	3378.13	5899.37	0.573	0.00	5899.37	0.000
L53	14 - 9 (53)	TP43.3017x42.2915x0.7625	3608.76	6098.13	0.592	0.00	6098.13	0.000
L54	9 - 5 (54)	TP44.1098x43.3017x0.75	3796.50	6235.67	0.609	0.00	6235.67	0.000
L55	5 - 4.75 (55)	TP44.1603x44.1098x0.9125	3808.32	7519.49	0.506	0.00	7519.49	0.000
L56	4.75 - 4.5 (56)	TP44.2108x44.1603x0.875	3820.17	7246.29	0.527	0.00	7246.29	0.000
L57	4.5 - 0 (57)	TP45.12x44.2108x0.85	4035.23	7353.15	0.549	0.00	7353.15	0.000

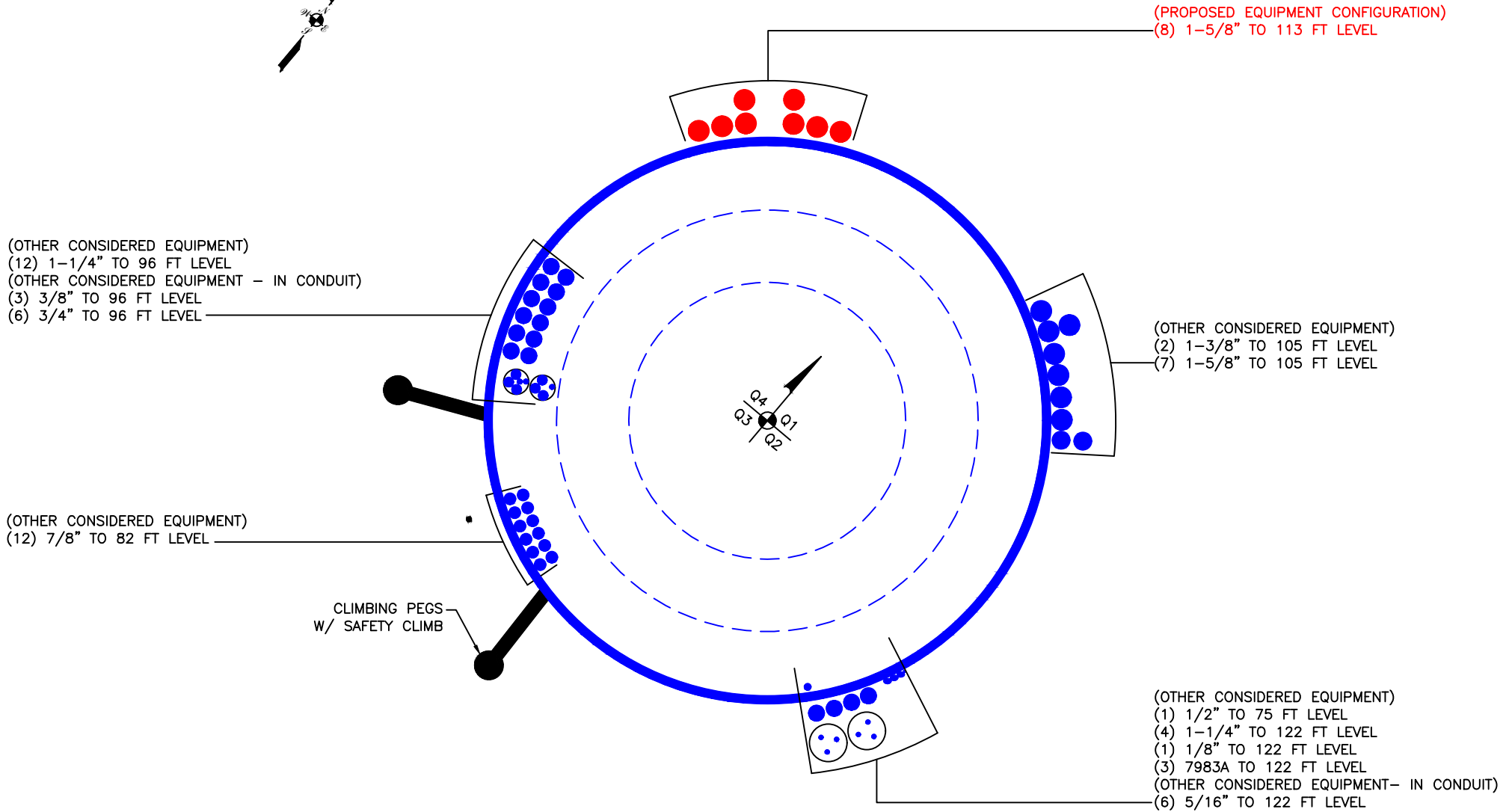
Pole Shear Design Data

Section No.	Elevation ft	Size	Actual V_u K	ϕV_n K	Ratio $\frac{V_u}{\phi V_n}$	Actual T_u kip-ft	ϕT_n kip-ft	Ratio $\frac{T_u}{\phi T_n}$
L1	120 - 115 (1)	TP23.0102x22x0.25	6.45	296.82	0.022	1.73	594.24	0.003
L2	115 - 110 (2)	TP24.0205x23.0102x0.25	13.24	309.99	0.043	1.12	648.17	0.002
L3	110 - 105 (3)	TP25.0307x24.0205x0.25	13.76	323.17	0.043	1.12	704.43	0.002
L4	105 - 100 (4)	TP26.041x25.0307x0.25	19.80	336.34	0.059	0.32	763.04	0.000
L5	100 - 99.25 (5)	TP26.1925x26.041x0.25	19.94	338.32	0.059	0.32	772.03	0.000
L6	99.25 - 99 (6)	TP26.243x26.1925x0.3625	19.98	489.39	0.041	0.32	1114.10	0.000
L7	99 - 94 (7)	TP27.2532x26.243x0.3563	27.92	499.84	0.056	0.43	1182.58	0.000
L8	94 - 90.08 (8)	TP28.0453x27.2532x0.35	28.71	505.64	0.057	0.43	1231.83	0.000
L9	90.08 - 89.83 (9)	TP28.0958x28.0453x0.5125	28.76	737.41	0.039	0.42	1789.19	0.000
L10	89.83 - 89.5 (10)	TP28.1625x28.0958x0.5125	28.83	739.20	0.039	0.42	1797.85	0.000
L11	89.5 - 89.25 (11)	TP28.213x28.1625x0.725	28.89	1039.56	0.028	0.42	2513.58	0.000
L12	89.25 - 84.25 (12)	TP29.2232x28.213x0.7	30.01	1041.52	0.029	0.38	2613.16	0.000
L13	84.25 - 78 (13)	TP30.486x29.2232x0.7	30.57	1059.96	0.029	0.37	2706.53	0.000
L14	78 - 77 (14)	TP30.188x29.2283x0.8625	31.75	1319.40	0.024	0.33	3403.47	0.000
L15	77 - 76.75 (15)	TP30.2385x30.188x0.8625	31.81	1321.67	0.024	0.33	3415.20	0.000
L16	76.75 - 76.5 (16)	TP30.289x30.2385x0.9625	31.86	1472.42	0.022	0.33	3798.33	0.000
L17	76.5 - 75.5 (17)	TP30.4911x30.289x0.9625	32.10	1482.57	0.022	0.33	3850.85	0.000
L18	75.5 - 75.25 (18)	TP30.5416x30.4911x0.7625	32.15	1184.46	0.027	0.32	3102.65	0.000
L19	75.25 - 74.5 (19)	TP30.6931x30.5416x0.7625	32.40	1190.49	0.027	0.32	3134.31	0.000
L20	74.5 - 74.25 (20)	TP30.7436x30.6931x0.8375	32.45	1306.52	0.025	0.23	3436.97	0.000

tnxTower Tower Engineering Engineering, Inc. 326 Tyron Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	528 Wheelers Farm Rd (BU 876320)	Page	60 of 60
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	Client	Crown Castle	Designed by	mshakeri

Section No.	Elevation ft	Size	Actual V_u K	ϕV_n K	Ratio $\frac{V_u}{\phi V_n}$	Actual T_u kip-ft	ϕT_n kip-ft	Ratio $\frac{T_u}{\phi T_n}$
L21	74.25 - 72 (21)	TP31.1982x30.7436x0.825	32.97	1307.12	0.025	0.24	3492.26	0.000
L22	72 - 71.75 (22)	TP31.2487x31.1982x0.7625	33.03	1212.59	0.027	0.24	3251.76	0.000
L23	71.75 - 70.5 (23)	TP31.5013x31.2487x0.7625	33.33	1222.64	0.027	0.24	3305.85	0.000
L24	70.5 - 70.25 (24)	TP31.5518x31.5013x0.7875	33.39	1263.77	0.026	0.24	3419.91	0.000
L25	70.25 - 70 (25)	TP31.6023x31.5518x0.7875	33.45	1265.85	0.026	0.24	3431.15	0.000
L26	70 - 69.75 (26)	TP31.6528x31.6023x0.725	33.51	1169.66	0.029	0.24	3182.05	0.000
L27	69.75 - 69.5 (27)	TP31.7033x31.6528x0.875	33.57	1407.11	0.024	0.24	3815.73	0.000
L28	69.5 - 69.25 (28)	TP31.7538x31.7033x0.75	33.63	1212.96	0.028	0.24	3307.97	0.000
L29	69.25 - 64.25 (29)	TP32.764x31.7538x0.7375	34.77	1232.09	0.028	0.26	3470.98	0.000
L30	64.25 - 59.25 (30)	TP33.7742x32.764x0.7125	35.88	1228.80	0.029	0.31	3573.61	0.000
L31	59.25 - 56 (31)	TP34.4309x33.7742x0.7125	36.61	1253.20	0.029	0.35	3716.97	0.000
L32	56 - 55.75 (32)	TP34.4814x34.4309x0.8125	36.67	1427.00	0.026	0.35	4226.21	0.000
L33	55.75 - 55.5 (33)	TP34.5319x34.4814x0.8125	36.73	1429.14	0.026	0.35	4238.90	0.000
L34	55.5 - 55.25 (34)	TP34.5824x34.5319x0.8875	36.80	1559.92	0.024	0.35	4623.46	0.000
L35	55.25 - 54 (35)	TP34.8349x34.5824x0.875	37.13	1550.05	0.024	0.36	4630.33	0.000
L36	54 - 53.75 (36)	TP34.8854x34.8349x0.75	37.18	1335.48	0.028	0.36	4009.99	0.000
L37	53.75 - 53.5 (37)	TP34.936x34.8854x0.7375	37.25	1315.65	0.028	0.36	3957.72	0.000
L38	53.5 - 53.25 (38)	TP34.9865x34.936x0.6625	37.31	1186.19	0.031	0.36	3581.39	0.000
L39	53.25 - 53 (39)	TP35.037x34.9865x0.6	37.37	1077.82	0.035	0.36	3264.92	0.000
L40	53 - 48 (40)	TP36.0472x35.037x0.5875	38.57	1086.71	0.035	0.36	3389.60	0.000
L41	48 - 39.75 (41)	TP37.714x36.0472x0.5875	39.36	1108.38	0.036	0.36	3526.13	0.000
L42	39.75 - 38.75 (42)	TP37.291x36.1293x0.6625	40.79	1265.83	0.032	0.37	4078.45	0.000
L43	38.75 - 34.75 (43)	TP38.0992x37.291x0.6625	41.66	1293.76	0.032	0.38	4260.41	0.000
L44	34.75 - 34.5 (44)	TP38.1497x38.0992x0.825	41.70	1606.28	0.026	0.38	5273.72	0.000
L45	34.5 - 33.75 (45)	TP38.3012x38.1497x0.825	41.88	1612.80	0.026	0.38	5316.63	0.000
L46	33.75 - 33.5 (46)	TP38.3517x38.3012x0.625	41.93	1229.99	0.034	0.38	4081.78	0.000
L47	33.5 - 28.5 (47)	TP39.3619x38.3517x0.6125	42.97	1238.06	0.035	0.39	4219.95	0.000
L48	28.5 - 24 (48)	TP40.2711x39.3619x0.6625	43.84	1368.82	0.032	0.40	4769.09	0.000
L49	24 - 23.75 (49)	TP40.3216x40.2711x0.7	43.87	1446.77	0.030	0.40	5042.35	0.000
L50	23.75 - 18.75 (50)	TP41.3318x40.3216x0.6875	44.82	1457.62	0.031	0.42	5211.26	0.000
L51	18.75 - 14.25 (51)	TP42.241x41.3318x0.675	45.62	1463.57	0.031	0.43	5351.18	0.000
L52	14.25 - 14 (52)	TP42.2915x42.241x0.775	45.65	1678.39	0.027	0.43	6129.33	0.000
L53	14 - 9 (53)	TP43.3017x42.2915x0.7625	46.59	1692.00	0.028	0.44	6331.23	0.000
L54	9 - 5 (54)	TP44.1098x43.3017x0.75	47.31	1696.37	0.028	0.46	6470.03	0.000
L55	5 - 4.75 (55)	TP44.1603x44.1098x0.9125	47.34	2058.58	0.023	0.46	7831.27	0.000
L56	4.75 - 4.5 (56)	TP44.2108x44.1603x0.875	47.39	1978.00	0.024	0.46	7540.02	0.000
L57	4.5 - 0 (57)	TP45.12x44.2108x0.85	48.22	1962.91	0.025	0.50	7643.79	0.000

APPENDIX B
BASE LEVEL DRAWING



BUSINESS UNIT: 876320 TOWER ID: C_BASELEVEL

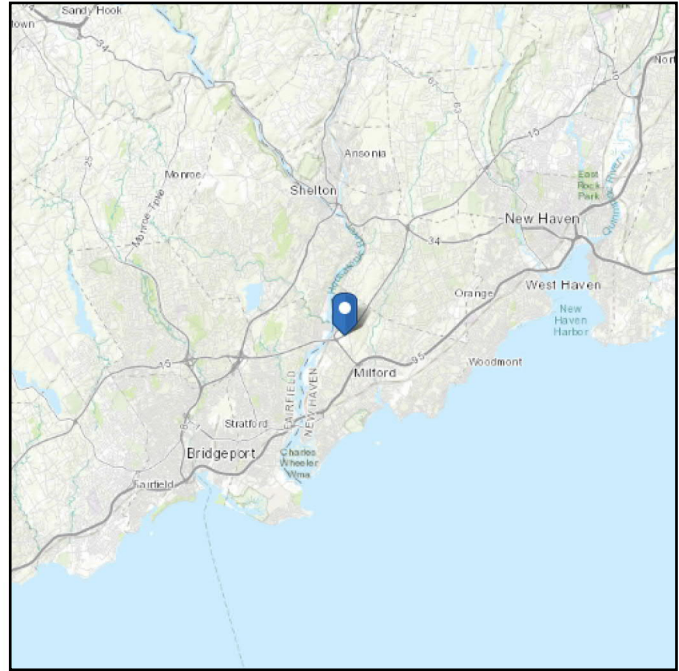
APPENDIX C
ADDITIONAL CALCULATIONS

ASCE 7 Hazards Report

Address:
No Address at This Location

Standard: ASCE/SEI 7-10
Risk Category: II
Soil Class: D - Stiff Soil

Elevation: 212.97 ft (NAVD 88)
Latitude: 41.248431
Longitude: -73.079075



Wind

Results:

Wind Speed:	124 Vmph	125 Vmph per Jurisdiction
10-year MRI	77 Vmph	
25-year MRI	87 Vmph	
50-year MRI	93 Vmph	
100-year MRI	100 Vmph	

Data Source: ASCE/SEI 7-10, Fig. 26.5-1A and Figs. CC-1–CC-4, incorporating errata of March 12, 2014

Date Accessed: Tue Nov 05 2019

Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-10 Standard. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (annual exceedance probability = 0.00143, MRI = 700 years).

Site is in a hurricane-prone region as defined in ASCE/SEI 7-10 Section 26.2. Glazed openings need not be protected against wind-borne debris.

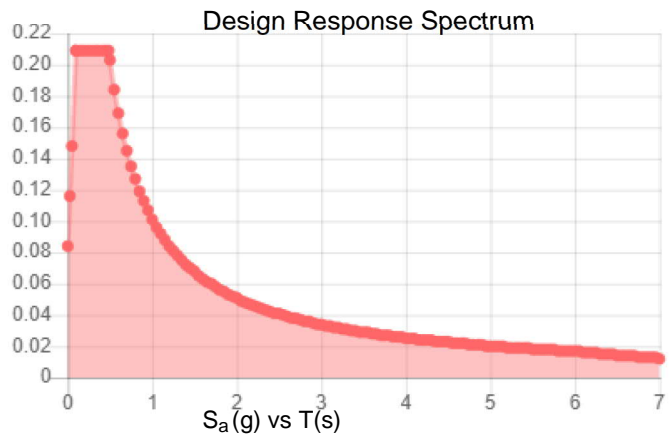
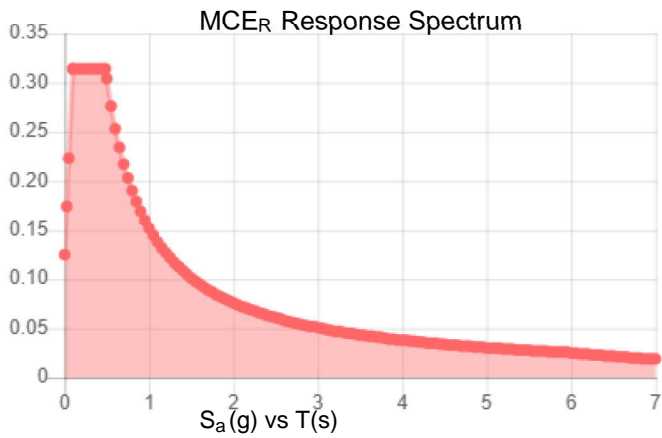
Mountainous terrain, gorges, ocean promontories, and special wind regions should be examined for unusual wind conditions.

Site Soil Class: D - Stiff Soil

Results:

S_s :	0.196	S_{DS} :	0.209
S_1 :	0.063	S_{D1} :	0.101
F_a :	1.6	T_L :	6
F_v :	2.4	PGA :	0.104
S_{MS} :	0.314	PGA _M :	0.166
S_{M1} :	0.152	F _{PGA} :	1.591
		I_e :	1

Seismic Design Category B



Data Accessed:

Tue Nov 05 2019

Date Source:

USGS Seismic Design Maps based on ASCE/SEI 7-10, incorporating Supplement 1 and errata of March 31, 2013, and ASCE/SEI 7-10 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-10 Ch. 21 are available from USGS.

Ice

Results:

Ice Thickness: 0.75 in.

Concurrent Temperature: 15 F

Gust Speed: 50 mph

Data Source: Standard ASCE/SEI 7-10, Figs. 10-2 through 10-8

Date Accessed: Tue Nov 05 2019

Ice thicknesses on structures in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

Values provided are equivalent radial ice thicknesses due to freezing rain with concurrent 3-second gust speeds, for a 50-year mean recurrence interval, and temperatures concurrent with ice thicknesses due to freezing rain. Thicknesses for ice accretions caused by other sources shall be obtained from local meteorological studies. Ice thicknesses in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

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Pole Geometry

	Pole Height Above Base (ft)	Section Length (ft)	Lap Splice Length (ft)	Number of Sides	Top Diameter (in)	Bottom Diameter (in)	Wall Thickness (in)	Bend Radius (in)	Pole Material
1	120	42	3.75	12	22	30.486	0.25	Auto	A607-60
2	81.75	42	4.75	12	29.23	37.714	0.3125	Auto	A607-60
3	44.5	44.5	0	12	36.13	45.12	0.375	Auto	A607-60

Reinforcement Configuration

	Bottom Effective Elevation (ft)	Top Effective Elevation (ft)	Type	Model	Number	1	2	3	4	5	6	7	8	9	10	11	12
1	0	4.75	plate	(TS) 1.25x4.00 (65 ksi)	3			0	0							0	
2	0	24	channel	MP3-04 (1.25in)	4			0	0					0		0	
3	4.75	34.75	plate	PL 1" X 5"	4		3			-3		-4					-3.3
4	33.75	69.75	plate	PL 1" X 5"	4		-2.5			2.5		2.5					2.5
5	0	14.25	channel	MP3-03 (1.25in)	4		-1.8			1.5		1.5					1.75
6	24	44.25	channel	MP3-03 (1.25in)	4		0		0					0		0	
7	53.5	70.5	plate	CCI-SFP-045100	1												2.25
8	53.25	72	plate	CCI-SFP-065125	1			0									
9	54	70	plate	CCI-AFP-045100	2				0					0			
10	69.5	89.5	plate	CCI-AFP-060100	2	0										0	
11	70	90.08	plate	CCI-AFP-045100	2				0					0			
12	44	56	plate	CCI-SFP-045100	3			3		-3		-3					
13	43.75	55.5	plate	CCI-SFP-045100	1												-3
14	74.5	99.25	plate	PL 1.25" X 4"	1			0									
15	75.5	99.25	plate	PL 1.25" X 4"	1					0							
16	75.5	99.25	plate	PL 1.25" X 4"	1												0
17	69.75	78.5	plate	PL 1.25" X 4"	2			0			0						
18	70	78.5	plate	PL 1.25" X 4"	1												-2
19	69.75	76.75	plate	PL 1.25" X 4"	1							-3					
20	0	5	plate	(TS) 1.25x6.00	2						0				0		
21																	

Reinforcement Details

	B (in)	H (in)	Gross Area (in ²)	Pole Face to Centroid (in)	Bottom Termination Length (in)	Top Termination Length (in)	L _v (in)	Net Area (in ²)	Bolt Hole Size (in)	Reinforcement Material
1	1.25	4	5	8	n/a	n/a	6.000	5.000	0.0000	A572-65
2	4.78	1.61	4.13	0.61	17.000	17.000	18.000	3.566	1.2500	A572-65
3	5	1	5	0.5	27.000	27.000	18.000	3.750	1.1875	A572-65
4	5	1	5	0.5	27.000	27.000	18.000	3.750	1.1875	A572-65
5	4.06	1.57	2.92	0.59	14.000	14.000	18.000	2.526	1.2500	A572-65
6	4.06	1.57	2.92	0.59	14.000	14.000	18.000	2.526	1.2500	A572-65
7	4.5	1	4.5	0.5	18.000	18.000	20.000	3.250	1.1875	A572-65
8	6.5	1.25	8.125	0.625	33.000	33.000	19.000	6.563	1.1875	A572-65
9	4.5	1	4.5	0.5	24.000	24.000	20.000	3.250	1.1875	A572-65
10	6	1	6	0.5	30.000	30.000	16.000	4.750	1.1875	A572-65
11	4.5	1	4.5	0.5	24.000	24.000	20.000	3.250	1.1875	A572-65
12	4.5	1	4.5	0.5	18.000	18.000	20.000	3.250	1.1875	A572-65
13	4.5	1	4.5	0.5	18.000	18.000	20.000	3.250	1.1875	A572-65
14	4	1.25	5	0.625	18.000	18.000	27.000	3.438	1.1875	A572-65
15	4	1.25	5	0.625	18.000	18.000	27.000	3.438	1.1875	A572-65
16	4	1.25	5	0.625	18.000	18.000	27.000	3.438	1.1875	A572-65
17	4	1.25	5	0.625	18.000	18.000	27.000	3.438	1.1875	A572-65
18	4	1.25	5	0.625	18.000	18.000	27.000	3.438	1.1875	A572-65
19	4	1.25	5	0.625	18.000	18.000	27.000	3.438	1.1875	A572-65
20	1.25	5.25	6.5625	3.375	n/a	n/a	1.250	6.563	0.0000	A572-65

TNX Geometry Input

Increment (ft): 5

	Section Height (ft)	Section Length (ft)	Lap Splice Length (ft)	Number of Sides	Top Diameter (in)	Bottom Diameter (in)	Wall Thickness (in)	Tapered Pole Grade	Weight Multiplier
1	120 - 115	5		12	22.000	23.010	0.25	A607-60	1.000
2	115 - 110	5		12	23.010	24.020	0.25	A607-60	1.000
3	110 - 105	5		12	24.020	25.031	0.25	A607-60	1.000
4	105 - 100	5		12	25.031	26.041	0.25	A607-60	1.000
5	100 - 99.25	0.75		12	26.041	26.192	0.25	A607-60	1.000
6	99.25 - 99	0.25		12	26.192	26.243	0.3625	A607-60	1.190
7	99 - 94	5		12	26.243	27.253	0.35625	A607-60	1.191
8	94 - 90.08	3.92		12	27.253	28.045	0.35	A607-60	1.198
9	90.08 - 89.83	0.25		12	28.045	28.096	0.5125	A607-60	1.020
10	89.83 - 89.5	0.33		12	28.096	28.162	0.5125	A607-60	1.019
11	89.5 - 89.25	0.25		12	28.162	28.213	0.725	A607-60	0.913
12	89.25 - 84.25	5		12	28.213	29.223	0.7	A607-60	0.924
13	84.25 - 81.75	6.25	3.75	12	29.223	30.486	0.7	A607-60	0.914
14	81.75 - 77	4.75		12	29.228	30.188	0.8625	A607-60	0.996
15	77 - 76.75	0.25		12	30.188	30.239	0.8625	A607-60	0.995
16	76.75 - 76.5	0.25		12	30.239	30.289	0.9625	A607-60	0.949
17	76.5 - 75.5	1		12	30.289	30.491	0.9625	A607-60	0.945
18	75.5 - 75.25	0.25		12	30.491	30.542	0.7625	A607-60	1.046
19	75.25 - 74.5	0.75		12	30.542	30.693	0.7625	A607-60	1.043
20	74.5 - 74.25	0.25		12	30.693	30.744	0.8375	A607-60	0.889
21	74.25 - 72	2.25		12	30.744	31.198	0.825	A607-60	0.894
22	72 - 71.75	0.25		12	31.198	31.249	0.7625	A607-60	1.073
23	71.75 - 70.5	1.25		12	31.249	31.501	0.7625	A607-60	1.068
24	70.5 - 70.25	0.25		12	31.501	31.552	0.7875	A607-60	1.091
25	70.25 - 70	0.25		12	31.552	31.602	0.7875	A607-60	1.090
26	70 - 69.75	0.25		12	31.602	31.653	0.725	A607-60	1.111
27	69.75 - 69.5	0.25		12	31.653	31.703	0.875	A607-60	0.982
28	69.5 - 69.25	0.25		12	31.703	31.754	0.75	A607-60	0.979
29	69.25 - 64.25	5		12	31.754	32.764	0.7375	A607-60	0.977
30	64.25 - 59.25	5		12	32.764	33.774	0.7125	A607-60	0.993
31	59.25 - 56	3.25		12	33.774	34.431	0.7125	A607-60	0.983
32	56 - 55.75	0.25		12	34.431	34.481	0.8125	A607-60	1.017
33	55.75 - 55.5	0.25		12	34.481	34.532	0.8125	A607-60	1.016
34	55.5 - 55.25	0.25		12	34.532	34.582	0.8875	A607-60	0.978
35	55.25 - 54	1.25		12	34.582	34.835	0.875	A607-60	0.987
36	54 - 53.75	0.25		12	34.835	34.885	0.75	A607-60	1.037
37	53.75 - 53.5	0.25		12	34.885	34.936	0.7375	A607-60	1.053
38	53.5 - 53.25	0.25		12	34.936	34.986	0.6625	A607-60	1.107
39	53.25 - 53	0.25		12	34.986	35.037	0.6	A607-60	1.097
40	53 - 48	5		12	35.037	36.047	0.5875	A607-60	1.103
41	48 - 44.5	8.25	4.75	12	36.047	37.714	0.5875	A607-60	1.092
42	44.5 - 38.75	5.75		12	36.129	37.291	0.6625	A607-60	0.976
43	38.75 - 34.75	4		12	37.291	38.099	0.6625	A607-60	0.968
44	34.75 - 34.5	0.25		12	38.099	38.150	0.825	A607-60	0.982
45	34.5 - 33.75	0.75		12	38.150	38.301	0.825	A607-60	0.980
46	33.75 - 33.5	0.25		12	38.301	38.352	0.625	A607-60	1.022
47	33.5 - 28.5	5		12	38.352	39.362	0.6125	A607-60	1.031
48	28.5 - 24	4.5		12	39.362	40.271	0.6625	A607-60	0.946
49	24 - 23.75	0.25		12	40.271	40.322	0.7	A607-60	0.950
50	23.75 - 18.75	5		12	40.322	41.332	0.6875	A607-60	0.956
51	18.75 - 14.25	4.5		12	41.332	42.241	0.675	A607-60	0.964
52	14.25 - 14	0.25		12	42.241	42.291	0.775	A607-60	0.954
53	14 - 9	5		12	42.291	43.302	0.7625	A607-60	0.958
54	9 - 5	4		12	43.302	44.110	0.75	A607-60	0.965
55	5 - 4.75	0.25		12	44.110	44.160	0.9125	A607-60	0.899
56	4.75 - 4.5	0.25		12	44.160	44.211	0.875	A607-60	0.895
57	4.5 - 0	4.5		12	44.211	45.120	0.85	A607-60	0.911

TNX Section Forces

Increment (ft):		TNX Output		
	5	P _u	M _{ux} (kip-ft)	V _u (K)
Section Height (ft)		(K)		
1	120 - 115	4.87	41.48	6.45
2	115 - 110	8.79	97.29	13.24
3	110 - 105	9.27	164.75	13.76
4	105 - 100	14.05	266.83	19.80
5	100 - 99.25	14.14	281.74	19.94
6	99.25 - 99	14.19	286.73	19.98
7	99 - 94	20.00	412.69	27.92
8	94 - 90.08	20.79	523.71	28.71
9	90.08 - 89.83	20.86	530.89	28.76
10	89.83 - 89.5	20.94	540.40	28.83
11	89.5 - 89.25	21.01	547.62	28.89
12	89.25 - 84.25	22.41	694.92	30.01
13	84.25 - 81.75	23.14	770.68	30.57
14	81.75 - 77	25.81	918.79	31.75
15	77 - 76.75	25.91	926.74	31.81
16	76.75 - 76.5	26.01	934.70	31.86
17	76.5 - 75.5	26.41	966.70	32.10
18	75.5 - 75.25	26.51	974.73	32.15
19	75.25 - 74.5	26.85	999.09	32.40
20	74.5 - 74.25	26.94	1007.20	32.45
21	74.25 - 72	27.71	1080.83	32.97
22	72 - 71.75	27.81	1089.08	33.03
23	71.75 - 70.5	28.28	1130.57	33.33
24	70.5 - 70.25	28.39	1138.91	33.39
25	70.25 - 70	28.49	1147.27	33.45
26	70 - 69.75	28.59	1155.64	33.51
27	69.75 - 69.5	28.69	1164.03	33.57
28	69.5 - 69.25	28.78	1172.43	33.63
29	69.25 - 64.25	30.55	1343.48	34.77
30	64.25 - 59.25	32.37	1520.15	35.88
31	59.25 - 56	33.58	1637.97	36.61
32	56 - 55.75	33.71	1647.13	36.67
33	55.75 - 55.5	33.83	1656.31	36.73
34	55.5 - 55.25	33.95	1665.50	36.80
35	55.25 - 54	34.55	1711.72	37.13
36	54 - 53.75	34.68	1721.01	37.18
37	53.75 - 53.5	34.80	1730.32	37.25
38	53.5 - 53.25	34.91	1739.64	37.31
39	53.25 - 53	35.01	1748.98	37.37
40	53 - 48	37.09	1938.87	38.57
41	48 - 44.5	38.58	2075.25	39.36
42	44.5 - 38.75	42.45	2305.77	40.79
43	38.75 - 34.75	44.21	2470.66	41.66
44	34.75 - 34.5	44.35	2481.08	41.70
45	34.5 - 33.75	44.73	2512.44	41.88
46	33.75 - 33.5	44.85	2522.92	41.93
47	33.5 - 28.5	47.08	2735.18	42.97
48	28.5 - 24	49.12	2930.48	43.84
49	24 - 23.75	49.25	2941.45	43.87
50	23.75 - 18.75	51.63	3163.23	44.82
51	18.75 - 14.25	53.81	3366.72	45.62
52	14.25 - 14	53.96	3378.13	45.65
53	14 - 9	56.62	3608.76	46.59
54	9 - 5	58.71	3796.50	47.31
55	5 - 4.75	58.87	3808.33	47.34
56	4.75 - 4.5	59.00	3820.17	47.39
57	4.5 - 0	61.47	4035.23	48.22

Analysis Results

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
120 - 115	Pole	TP23.01x22x0.25	Pole	7.4%	Pass
115 - 110	Pole	TP24.02x23.01x0.25	Pole	15.9%	Pass
110 - 105	Pole	TP25.031x24.02x0.25	Pole	24.8%	Pass
105 - 100	Pole	TP26.041x25.031x0.25	Pole	37.5%	Pass
100 - 99.25	Pole	TP26.192x26.041x0.25	Pole	39.2%	Pass
99.25 - 99	Pole + Reinf.	TP26.243x26.192x0.3625	Reinf. 14 Tension Rupture	36.4%	Pass
99 - 94	Pole + Reinf.	TP27.253x26.243x0.3563	Reinf. 14 Tension Rupture	49.3%	Pass
94 - 90.08	Pole + Reinf.	TP28.045x27.253x0.35	Reinf. 14 Tension Rupture	59.4%	Pass
90.08 - 89.83	Pole + Reinf.	TP28.096x28.045x0.5125	Reinf. 11 Tension Rupture	49.3%	Pass
89.83 - 89.5	Pole + Reinf.	TP28.162x28.096x0.5125	Reinf. 11 Tension Rupture	49.9%	Pass
89.5 - 89.25	Pole + Reinf.	TP28.213x28.162x0.725	Reinf. 15 Tension Rupture	38.7%	Pass
89.25 - 84.25	Pole + Reinf.	TP29.223x28.213x0.7	Reinf. 15 Tension Rupture	46.6%	Pass
84.25 - 81.75	Pole + Reinf.	TP30.486x29.223x0.7	Reinf. 15 Tension Rupture	50.5%	Pass
81.75 - 77	Pole + Reinf.	TP30.188x29.228x0.8625	Reinf. 17 Tension Rupture	45.6%	Pass
77 - 76.75	Pole + Reinf.	TP30.239x30.188x0.8625	Reinf. 17 Tension Rupture	45.9%	Pass
76.75 - 76.5	Pole + Reinf.	TP30.289x30.239x0.9625	Reinf. 14 Tension Rupture	43.1%	Pass
76.5 - 75.5	Pole + Reinf.	TP30.491x30.289x0.9625	Reinf. 14 Tension Rupture	44.2%	Pass
75.5 - 75.25	Pole + Reinf.	TP30.542x30.491x0.7625	Reinf. 17 Tension Rupture	50.8%	Pass
75.25 - 74.5	Pole + Reinf.	TP30.693x30.542x0.7625	Reinf. 17 Tension Rupture	51.7%	Pass
74.5 - 74.25	Pole + Reinf.	TP30.744x30.693x0.8375	Reinf. 17 Tension Rupture	54.5%	Pass
74.25 - 72	Pole + Reinf.	TP31.198x30.744x0.825	Reinf. 17 Tension Rupture	57.2%	Pass
72 - 71.75	Pole + Reinf.	TP31.249x31.198x0.7625	Reinf. 17 Tension Rupture	54.9%	Pass
71.75 - 70.5	Pole + Reinf.	TP31.501x31.249x0.7625	Reinf. 17 Tension Rupture	56.3%	Pass
70.5 - 70.25	Pole + Reinf.	TP31.552x31.501x0.7875	Reinf. 17 Tension Rupture	56.3%	Pass
70.25 - 70	Pole + Reinf.	TP31.602x31.552x0.7875	Reinf. 17 Tension Rupture	56.6%	Pass
70 - 69.75	Pole + Reinf.	TP31.653x31.602x0.725	Reinf. 17 Tension Rupture	58.7%	Pass
69.75 - 69.5	Pole + Reinf.	TP31.703x31.653x0.875	Reinf. 4 Tension Rupture	49.8%	Pass
69.5 - 69.25	Pole + Reinf.	TP31.754x31.703x0.75	Reinf. 4 Tension Rupture	55.7%	Pass
69.25 - 64.25	Pole + Reinf.	TP32.764x31.754x0.7375	Reinf. 4 Tension Rupture	60.9%	Pass
64.25 - 59.25	Pole + Reinf.	TP33.774x32.764x0.7125	Reinf. 4 Tension Rupture	65.9%	Pass
59.25 - 56	Pole + Reinf.	TP34.431x33.774x0.7125	Reinf. 4 Tension Rupture	68.9%	Pass
56 - 55.75	Pole + Reinf.	TP34.481x34.431x0.8125	Reinf. 7 Tension Rupture	66.3%	Pass
55.75 - 55.5	Pole + Reinf.	TP34.532x34.481x0.8125	Reinf. 7 Tension Rupture	66.6%	Pass
55.5 - 55.25	Pole + Reinf.	TP34.582x34.532x0.8875	Reinf. 7 Tension Rupture	60.0%	Pass
55.25 - 54	Pole + Reinf.	TP34.835x34.582x0.875	Reinf. 7 Tension Rupture	61.0%	Pass
54 - 53.75	Pole + Reinf.	TP34.885x34.835x0.75	Reinf. 7 Tension Rupture	70.0%	Pass
53.75 - 53.5	Pole + Reinf.	TP34.936x34.885x0.7375	Reinf. 7 Tension Rupture	70.3%	Pass
53.5 - 53.25	Pole + Reinf.	TP34.986x34.936x0.6625	Reinf. 4 Tension Rupture	75.5%	Pass
53.25 - 53	Pole + Reinf.	TP35.037x34.986x0.6	Reinf. 12 Tension Rupture	78.0%	Pass
53 - 48	Pole + Reinf.	TP36.047x35.037x0.5875	Reinf. 12 Tension Rupture	82.9%	Pass
48 - 44.5	Pole + Reinf.	TP37.714x36.047x0.5875	Reinf. 12 Tension Rupture	86.3%	Pass
44.5 - 38.75	Pole + Reinf.	TP37.291x36.129x0.6625	Reinf. 4 Tension Rupture	84.4%	Pass
38.75 - 34.75	Pole + Reinf.	TP38.099x37.291x0.6625	Reinf. 4 Tension Rupture	87.3%	Pass
34.75 - 34.5	Pole + Reinf.	TP38.15x38.099x0.825	Reinf. 3 Tension Rupture	70.0%	Pass
34.5 - 33.75	Pole + Reinf.	TP38.301x38.15x0.825	Reinf. 3 Tension Rupture	70.5%	Pass
33.75 - 33.5	Pole + Reinf.	TP38.352x38.301x0.625	Reinf. 6 Tension Rupture	86.8%	Pass
33.5 - 28.5	Pole + Reinf.	TP39.362x38.352x0.6125	Reinf. 6 Tension Rupture	90.0%	Pass
28.5 - 24	Pole + Reinf.	TP40.271x39.362x0.6625	Reinf. 3 Tension Rupture	93.0%	Pass
24 - 23.75	Pole + Reinf.	TP40.322x40.271x0.7	Reinf. 3 Tension Rupture	88.9%	Pass
23.75 - 18.75	Pole + Reinf.	TP41.332x40.322x0.6875	Reinf. 3 Tension Rupture	91.9%	Pass
18.75 - 14.25	Pole + Reinf.	TP42.241x41.332x0.675	Reinf. 3 Tension Rupture	94.5%	Pass
14.25 - 14	Pole + Reinf.	TP42.291x42.241x0.775	Reinf. 3 Tension Rupture	82.3%	Pass
14 - 9	Pole + Reinf.	TP43.302x42.291x0.7625	Reinf. 3 Tension Rupture	84.8%	Pass
9 - 5	Pole + Reinf.	TP44.11x43.302x0.75	Reinf. 3 Tension Rupture	86.7%	Pass
5 - 4.75	Pole + Reinf.	TP44.16x44.11x0.9125	Reinf. 3 Tension Rupture	78.5%	Pass
4.75 - 4.5	Pole + Reinf.	TP44.211x44.16x0.875	Reinf. 1 Compression	79.2%	Pass
4.5 - 0	Pole + Reinf.	TP45.12x44.211x0.85	Reinf. 1 Compression	81.0%	Pass
				Summary	
			Pole	69.6%	Pass
			Reinforcement	94.5%	Pass
			Overall	94.5%	Pass

Additional Calculations

Section Elevation (ft)	Moment of Inertia (in ⁴)			Area (in ²)			% Capacity*																				
	Pole	Reinf.	Total	Pole	Reinf.	Total	Pole	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15	R16	R17	R18	R19	R20
120 - 115	1213	n/a	1213	18.30	n/a	18.30	7.4%																				
115 - 110	1382	n/a	1382	19.11	n/a	19.11	15.9%																				
110 - 105	1566	n/a	1566	19.92	n/a	19.92	24.8%																				
105 - 100	1765	n/a	1765	20.73	n/a	20.73	37.5%																				
100 - 99.25	1796	n/a	1796	20.85	n/a	20.85	39.2%																				
99.25 - 99	1884	751	2634	20.89	15.00	35.89	30.1%															36.4%	30.8%	30.8%			
99 - 94	2108	809	2917	21.71	15.00	36.71	41.1%															49.3%	41.9%	41.9%			
94 - 90.08	2295	857	3153	22.34	15.00	37.34	50.0%															59.4%	50.7%	50.7%			
90.08 - 89.83	2235	2180	4415	22.38	24.00	46.38	34.3%										49.3%					47.3%	41.2%	47.5%			
89.83 - 89.5	2251	2190	4441	22.44	24.00	46.44	34.9%										50.0%					48.0%	41.8%	48.2%			
89.5 - 89.25	2276	3952	6228	22.48	36.00	58.48	26.1%										31.5%	37.8%				38.8%	38.7%	33.4%			
89.25 - 84.25	2521	4227	6748	23.29	36.00	59.29	31.9%										38.1%	45.6%				46.5%	46.6%	40.3%			
84.25 - 81.75	2665	4368	7033	23.70	36.00	59.70	34.8%										41.2%	49.3%				50.3%	50.5%	43.7%			
81.75 - 77	3434	5537	8970	30.02	51.00	81.02	29.0%										37.5%	43.8%				45.4%	40.5%	38.4%	45.6%	36.7%	
77 - 76.75	3451	5554	9005	30.07	51.00	81.07	29.2%										37.8%	44.1%				45.7%	40.8%	38.6%	45.9%	36.9%	
76.75 - 76.5	3483	6565	10048	30.12	56.00	86.12	26.9%										36.3%	36.9%				43.1%	38.8%	38.8%	40.6%	37.1%	40.8%
76.5 - 75.5	3554	6648	10202	30.32	56.00	86.32	27.6%										37.2%	37.8%				44.2%	39.7%	39.8%	41.6%	38.0%	41.8%
75.5 - 75.25	3556	4807	8363	30.37	46.00	76.37	33.0%										45.6%	46.2%				45.0%		50.8%	48.6%	44.4%	
75.25 - 74.5	3609	4852	8461	30.53	46.00	76.53	33.6%										46.4%	47.0%				45.8%		51.7%	49.4%	45.2%	
74.5 - 74.25	3738	5532	9270	30.58	41.00	71.58	34.2%										50.8%	50.3%						54.5%	49.4%	48.1%	
74.25 - 72	3906	5690	9596	31.03	41.00	72.03	36.1%										53.4%	52.8%						57.2%	51.9%	50.5%	
72 - 71.75	3808	5092	8900	31.09	49.13	80.21	35.4%										37.0%	47.5%	48.7%					54.9%	52.6%	46.8%	
71.75 - 70.5	3902	5171	9072	31.34	49.13	80.46	36.5%										38.0%	48.7%	50.0%					56.3%	54.0%	48.1%	
70.5 - 70.25	3925	5537	9462	31.39	53.63	85.01	35.6%										41.2%	38.3%	46.6%	48.0%				56.3%	47.3%	48.3%	
70.25 - 70	3944	5554	9498	31.44	53.63	85.07	35.8%										41.4%	38.5%	46.9%	48.2%				56.6%	47.6%	48.6%	
70 - 69.75	3961	4823	8785	31.49	48.63	80.12	39.3%										50.2%	38.5%	51.8%	52.4%				58.7%		48.5%	
69.75 - 69.5	4028	6551	10579	31.54	53.63	85.17	34.0%										42.7%	37.9%	48.5%	40.8%							
69.5 - 69.25	4004	5187	9190	31.59	41.63	73.22	38.3%										55.7%	43.1%	52.8%								
69.25 - 64.25	4401	5507	9909	32.61	41.63	74.23	42.4%										60.5%	47.3%	57.9%								
64.25 - 59.25	4825	5838	10663	33.62	41.63	75.25	46.5%										65.5%	51.3%	62.8%								
59.25 - 56	5114	6058	11172	34.28	41.63	75.91	49.0%										68.7%	53.8%	65.8%								
56 - 55.75	5209	7530	12738	34.33	55.13	89.46	45.1%										66.3%	44.6%	56.4%				57.4%				
55.75 - 55.5	5232	7551	12782	34.38	55.13	89.51	45.3%										65.7%	44.8%	56.6%				57.6%				
55.5 - 55.25	5199	8671	13870	34.43	59.63	94.06	41.3%										60.0%	44.7%	54.7%				54.3%	56.7%			
55.25 - 54	5314	8793	14107	34.69	59.63	94.31	42.1%										61.0%	45.5%	55.6%				55.2%	57.7%			
54 - 53.75	5328	6906	12234	34.74	50.63	85.36	48.9%										70.0%	51.4%					62.3%	60.3%			
53.75 - 53.5	5351	6925	12276	34.79	50.63	85.41	49.1%										70.3%	51.6%					62.6%	60.5%			
53.5 - 53.25	5418	5610	11027	34.84	46.13	80.97	56.3%										53.7%						67.7%	70.5%			
53.25 - 53	5388	4730	10118	34.89	38.00	72.89	59.4%																78.0%	70.1%			
53 - 48	5872	4982	10854	35.91	38.00	73.91	63.9%																82.9%	74.5%			
48 - 44.5	6228	5162	11390	36.62	38.00	74.62	67.0%																86.3%	77.6%			
44.5 - 38.75	7765	5730	13494	44.51	31.68	76.19	58.9%																84.4%	78.7%			
38.75 - 34.75	8286	5977	14263	45.49	31.68	77.17	61.5%																87.3%	81.5%			
34.75 - 34.5	8319	9340	17659	45.55	51.68	97.23	49.3%																70.0%	68.9%	69.0%		
34.5 - 33.75	8419	9410	17829	45.73	51.68	97.41	49.8%																70.5%	69.4%	69.5%		
33.75 - 33.5	8462	5245	13707	45.79	31.68	77.47	66.4%																86.6%	86.8%			
33.5 - 28.5	9155	5523	14678	47.01	31.68	78.69	69.6%																90.0%	90.0%			
28.5 - 24	9807	7211	17019	48.11	31.68	79.79	65.0%																93.0%	92.8%			
24 - 23.75	9844	8023	17867	48.17	36.52	84.69	62.2%																84.8%	88.9%			
23.75 - 18.75	10609	8417	19026	49.38	36.52	85.90	65.0%																87.5%	91.9%			
18.75 - 14.25	11331	8779	20110	50.48	36.52	87.00	67.4%																89.9%	94.5%			
14.25 - 14	11366	11460	22827	50.54	48.20	98.74	60.8%																80.6%	82.2%	75.8%		
14 - 9	12208	11986	24194	51.76	48.20	99.96	63.4%																83.0%	84.7%	78.1%		
9 - 5	12911	12415	25326	52.73	48.20	100.93	65.4%																84.8%	86.6%	79.8%		
5 - 4.75	13165	17467	30632	52.80	61.33	114.12	57.3%																77.8%	78.5%	74.0%		65.9%
4.75 - 4.5	13035	16226	29262	52.86	56.33	109.18	59.2%	79.2%	69.2%														77.5%				69.2%
4.5 - 0	13863	16815	30677	53.95	56.33	110.28	61.4%	81.0%	71.2%														79.5%				70.9%

Note: Section capacity checked in 5 degree increments.
Rating per TIA-222-H Section 15.5.

Monopole Base Plate Connection

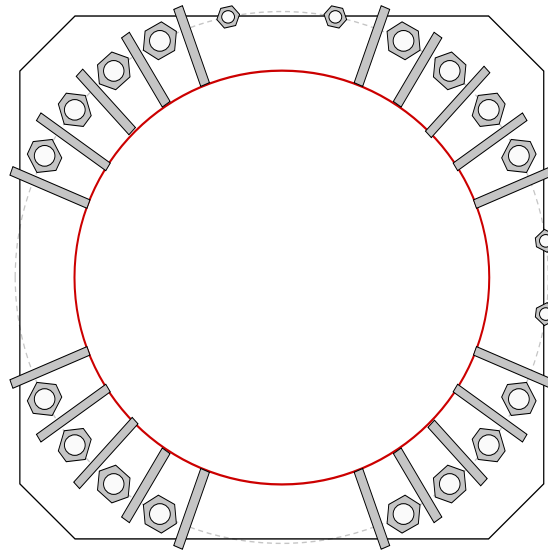


Site Info	
BU #	876320
Site Name	528 Wheelers Farm Rd
Order #	506764 Rev. 0

Analysis Considerations	
TIA-222 Revision	H
Grout Considered:	No
l_{ar} (in)	2

Applied Loads	
Moment (kip-ft)	4035.23
Axial Force (kips)	61.47
Shear Force (kips)	48.22

*TIA-222-H Section 15.5 Applied



Connection Properties	Analysis Results
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Anchor Rod Data

GROUP 1: (16) 2-1/4" ϕ bolts (A615-75 N; $F_y=75$ ksi, $F_u=100$ ksi) on 58" BC
Anchor Spacing: 6 in

GROUP 2: (4) 1-3/8" ϕ bolts (R71 150ksi 1-3/8" N; $F_y=120$ ksi, $F_u=125$ ksi) on 58" BC
pos. (deg): 7.9, 78.4, 101.6, 352.1

Base Plate Data

57" OD x 3.25" Plate (A572-50; $F_y=50$ ksi, $F_u=65$ ksi)

Stiffener Data

(20) 18"H x 9"W x 1"T, Notch: 0.75"
 plate: $F_y=50$ ksi ; weld: $F_y=80$ ksi
 horiz. weld: 0.5" groove, 45° dbl bevel, 0.5" fillet
 vert. weld: 0.375" fillet

Pole Data

45.12" x 0.375" 12-sided pole (A607-60; $F_y=60$ ksi, $F_u=75$ ksi)

Anchor Rod Summary *(units of kips, kip-in)*

GROUP 1:

$P_{u_c} = 207.58$	$\phi P_{n_c} = 243.75$	Stress Rating
$V_u = 3.01$	$\phi V_n = 73.13$	81.3%
$M_u = n/a$	$\phi M_n = n/a$	Pass

GROUP 2:

$P_{u_c} = 66.51$	$\phi P_{n_c} = 139.2$	Stress Rating
$V_u = 0$	$\phi V_n = 41.76$	45.5%
$M_u = n/a$	$\phi M_n = n/a$	Pass

Base Plate Summary

Max Stress (ksi):	3.97	(Shear)
Allowable Stress (ksi):	29.25	
Stress Rating:	12.9%	Pass

Stiffener Summary

Horizontal Weld:	40.3%	Pass
Vertical Weld:	52.3%	Pass
Plate Flexure+Shear:	20.9%	Pass
Plate Tension+Shear:	41.8%	Pass
Plate Compression:	58.3%	Pass

Pole Summary

Punching Shear:	22.7%	Pass
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Drilled Pier Foundation

BU #: 876320
 Site Name: 528 Wheelers Farm Rd
 Order Number: 506764 Rev. 0

TIA-222 Revison: H
 Tower Type: Monopole



Applied Loads		
	Comp.	Uplift
Moment (kip-ft)	4035.23	
Axial Force (kips)	61.47	
Shear Force (kips)	48.22	

Material Properties		
Concrete Strength, f _c :	3	ksi
Rebar Strength, F _y :	60	ksi

Pier Design Data		
Depth	19	ft
Ext. Above Grade	0.5	ft
Pier Section 1		
<i>From 0.5' above grade to 19' below grade</i>		
Pier Diameter	7	ft
Rebar Quantity	32	
Rebar Size	11	
Clear Cover to Ties	4	in
Tie Size	5	

Analysis Results		
Soil Lateral Capacity	Compression	Uplift
D _{v=0} (ft from TOC)	5.74	-
Soil Safety Factor	2.00	-
Max Moment (kip-ft)	4385.45	-
Rating*	63.4%	-

Soil Vertical Capacity	Compression	Uplift
Skin Friction (kips)	525.15	-
End Bearing (kips)	600.00	-
Weight of Concrete (kips)	100.50	-
Total Capacity (kips)	1125.15	-
Axial (kips)	161.97	-
Rating*	13.7%	-

Reinforced Concrete Capacity	Compression	Uplift
Critical Depth (ft from TOC)	5.57	-
Critical Moment (kip-ft)	4384.91	-
Critical Moment Capacity	7546.69	-
Rating*	55.3%	-

Soil Interaction Rating*	63.4%
Structural Foundation Rating*	55.3%

*Rating per TIA-222-H Section 15.5

Check Limitation	
Apply TIA-222-H Section 15.5:	<input checked="" type="checkbox"/>
	N/A <input type="checkbox"/>

Soil Profile			
Groundwater Depth	7	ft	# of Layers
			7

Layer	Top (ft)	Bottom (ft)	Thickness (ft)	γ _{soil} (pcf)	γ _{concrete} (pcf)	Cohesion (ksf)	Angle of Friction (degrees)	Calculated Ultimate Skin Friction Comp (ksf)	Calculated Ultimate Skin Friction Uplift (ksf)	Ultimate Skin Friction Comp Override (ksf)	Ultimate Skin Friction Uplift Override (ksf)	Ult. Gross Bearing Capacity (ksf)	SPT Blow Count	Soil Type
1	0	2	2	100	150	0		0.000	0.000	0.00	0.00			Cohesionless
2	2	3.5	1.5	135	150	0		0.000	0.000	0.00	0.00			Cohesionless
3	3.5	6	2.5	135	150		42	0.000	0.000	0.00	0.00			Cohesionless
4	6	7	1	135	150		42	0.000	0.000	1.28	1.28			Cohesionless
5	7	13.5	6.5	72.6	87.6		42	0.000	0.000	1.28	1.28			Cohesionless
6	13.5	14	0.5	77.6	87.6	8		3.600	3.600	1.28	1.28			Cohesive
7	14	19	5	77.6	87.6	8		3.60	3.60	4.32	4.32	20.78758		Cohesive

Exhibit E

Mount Analysis

Date: **November 1, 2019**

Darcy Tarr
Crown Castle
3530 Toringdon Way, Suite 300
Charlotte, NC 28277
(704) 405-6589



Engineered Tower Solutions, PLLC
8774 Yates Drive, Suite 150
Westminster, CO 80031
(919) 782-2710
Helen.Tesfaye@ets-pllc.com

Subject: Mount Analysis Report

Carrier Designation: Verizon Wireless Equipment Change-Out
Carrier Site Number: NG57419
Carrier Site Name: MILFORD NE CT

Crown Castle Designation: **Crown Castle BU Number:** 876320
Crown Castle Site Name: 528 WHEELERS FARM RD
Crown Castle JDE Job Number: 592669
Crown Castle Order Number: 506764 Rev. 0

Engineering Firm Designation: ETS, PLLC Report Designation: 196670.14

Site Data: 528 Wheelers Farm Road, Milford, New Haven County, CT 06460
Latitude: 41° 14' 54.35" Longitude: -73° 4' 44.67"

Structure Information: **Tower Height & Type:** 120.0 ft Monopole
Mount Elevation: 113.0 ft
Mount Type: 12.0 ft Platform Mount

Dear Kevin Morrow,

ETS, PLLC is pleased to submit this “**Mount Analysis Report**” to determine the structural integrity of Verizon Wireless’s antenna mounting system with the proposed appurtenance and equipment addition on the above mentioned supporting tower structure. Analysis of the existing supporting tower structure is to be completed by others and therefore is not part of this analysis. Analysis of the antenna mounting system as a tie-off point for fall protection or rigging is not part of this document.

The purpose of the analysis is to determine acceptability of the mount stress level. Based on our analysis we have determined the mount stress level to be:

Platform Mount

Sufficient

This analysis has been performed in accordance with the 2018 Connecticut State Building Code based upon an ultimate 3-second gust wind speed of 125 mph. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Mount analysis prepared by: Helen Tesfaye, EI

Respectfully Submitted by:

Frederic G. Bost, PE
Owner/ President
(919) 782-2710
Geoff.Bost@ets-pllc.com



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1) INTRODUCTION

This mount is an existing 12.0 ft Platform Mount. This mount is installed at the 113.0 ft elevation of the 120.0 ft Monopole. Engineered Tower Solutions, PLLC, did not visit the site. A mapping and/or mount manufacturer drawings were not provided. Therefore, per direction of Crown Castle, photos of the tower were compared with other mounts within our database and a similar and comparable mount was used to perform this mount analysis.

2) ANALYSIS CRITERIA

Building Code:	2015 IBC
TIA-222 Revision:	TIA-222-H
Risk Category:	II
Ultimate Wind Speed:	125 mph
Exposure Category:	C
Topographic Factor at Base:	1.0
Topographic Factor at Mount:	1.0
Ice Thickness:	1.5 in
Wind Speed with Ice:	50 mph
Seismic S_s:	0.194
Seismic S₁:	0.063
Live Loading Wind Speed:	30 mph
Man Live Load at Mid/End-Points:	250 lb
Man Live Load at Mount Pipes:	500 lb

Table 1 - Proposed Equipment Configuration

Mount Centerline (ft)	Antenna Centerline (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Mount / Modification Details
113.0	114.0	2	ANDREW	DB846F65ZAXY	12.0 ft Platform Mount
		4	ANDREW	LPA-80063/4CF	
		4	COMMSCOPE	JAHH-45B-R3B	
		2	COMMSCOPE	JAHH-65B-R3B	
		3	COMMSCOPE	SSPX310R	
		3	COMMSCOPE	CBC78T-DS-43-2X	
		2	RFS/CELWAVE	DB-T1-6Z-8AB-0Z	
		3	SAMSUNG TELECOMMUNICATIONS	20W CBRS	
		3	SAMSUNG TELECOMMUNICATIONS	RFV01U-D1A	
		3	SAMSUNG TELECOMMUNICATIONS	RFV01U-D2A	

3) ANALYSIS PROCEDURE

Table 2 - Documents Provided

Document	Remarks	Reference	Source
Carrier Application	Verizon Wireless	10/22/2019	CCIsites
4-Structural Analysis Report	Tower Engineering Professionals	8550816	CCIsites
Structure Level Drawings (Proposed)	Verizon Wireless	10/22/2019	CCIsites
4-Mount Analysis	All Points Technology Corp.	05/25/2018	CCIsites
4-Construction Drawings	All Points Technology Corp.	05/24/2018	CCIsites

3.1) Analysis Method

RISA 3D (Version 17.0.2), a commercially available analysis software package, was used to create a three-dimensional model of the antenna mounting system and calculate member stresses for various loading cases.

A tool internally developed, using Microsoft Excel, by ETS, PLLC was used to calculate wind loading on all appurtenances, dishes, and mount members for various load cases. Selected output from the analysis is included in Appendix B.

This analysis was performed in accordance with Crown Castle's ENG-SOW-10208 Tower Mount Analysis (Revision C).

3.2) Assumptions

- 1) The mount modifications have been installed per previous All-Point Technology Corp. mount analysis report recommendation dated 05/25/2018.
- 2) Engineered Tower Solutions, PLLC, did not visit the site. A mapping and/or mount manufacturer drawings were not provided. Therefore, per direction of Crown Castle, photos of the tower were compared with other mounts within our database and a similar and comparable mount was used to perform this mount analysis.
- 3) The antenna mounting system was properly fabricated, installed and maintained in good condition in accordance with its original design and manufacturer's specification.
- 4) The configuration of antennas, mounts and other appurtenances are as specified in Table 1 and the referenced drawings.
- 5) 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.
- 6) This Structural Analysis is not a condition assessment of the mount and is an evaluation of the theoretical structural capacity.
- 7) This analysis is based from the information supplied, and therefore, this report's results are as accurate as the supplied data.
- 8) Engineered Tower Solutions, PLLC makes no warranties, expressed and/or implied, in connection with this report, and disclaims any liability associated with material, fabrication, or erection of the mount. Engineered Tower Solutions, PLLC will not be held responsible from any consequential or incidental damages sustained by any person, firm, or organization as a result of the contents of this report. The maximum liability of Engineered Tower Solutions, PLLC pursuant to this report will be limited to the total fee received for compilation of this report.
- 9) It is the tower owner's responsibility to verify that the mount modeled and analyzed is the correct structure modeled.
- 10) The use of this report shall be limited to the purpose for which it was commissioned and may not be used for any other purposes without the written consent of Engineered Tower Solutions, PLLC.
- 11) Steel grades have been assumed as follows:

a) Channel, Solid Round, Angle, Plate	ASTM A36 (GR 36)
b) HSS (Rectangular)	ASTM A500 (GR B-46)
c) HSS (Round)	ASTM A500 (GR B-42)
d) Pipe	ASTM A53 (GR 35)
e) Connection Bolts	ASTM A325
f) U-Bolts	SAE 429 Gr.2

This analysis may be affected if any assumptions are not valid or have been made in error. ETS, PLLC should be notified to determine the effect on the structural integrity of the antenna mounting system.

4) ANALYSIS RESULTS

Table 3 - Mount Component Stresses vs. Capacity (Platform Mount)

Notes	Component	Critical Member	Centerline (ft)	% Capacity	Pass / Fail
1	Face Mount Horizontal (3.0 SCH40)	FM-0	113.0	50.6	Pass
	Side Arm Horizontal (HSS4x4x1/4)	SA2		36.6	Pass
	Bracing Horizontal (PL3/8x4)	BRACE-2		58.5	Pass
	Connection Plate (PL5.5x3/16)	CORNER-PL-2		76.9	Pass
	Mount Pipes (2.0 SCH40)	MP3		40.5	Pass

Structure Rating (max from all components) =	76.9%
---	--------------

Notes:
 1) See additional documentation in "Appendix C - Software Analysis Output" for calculations supporting the % capacity consumed.

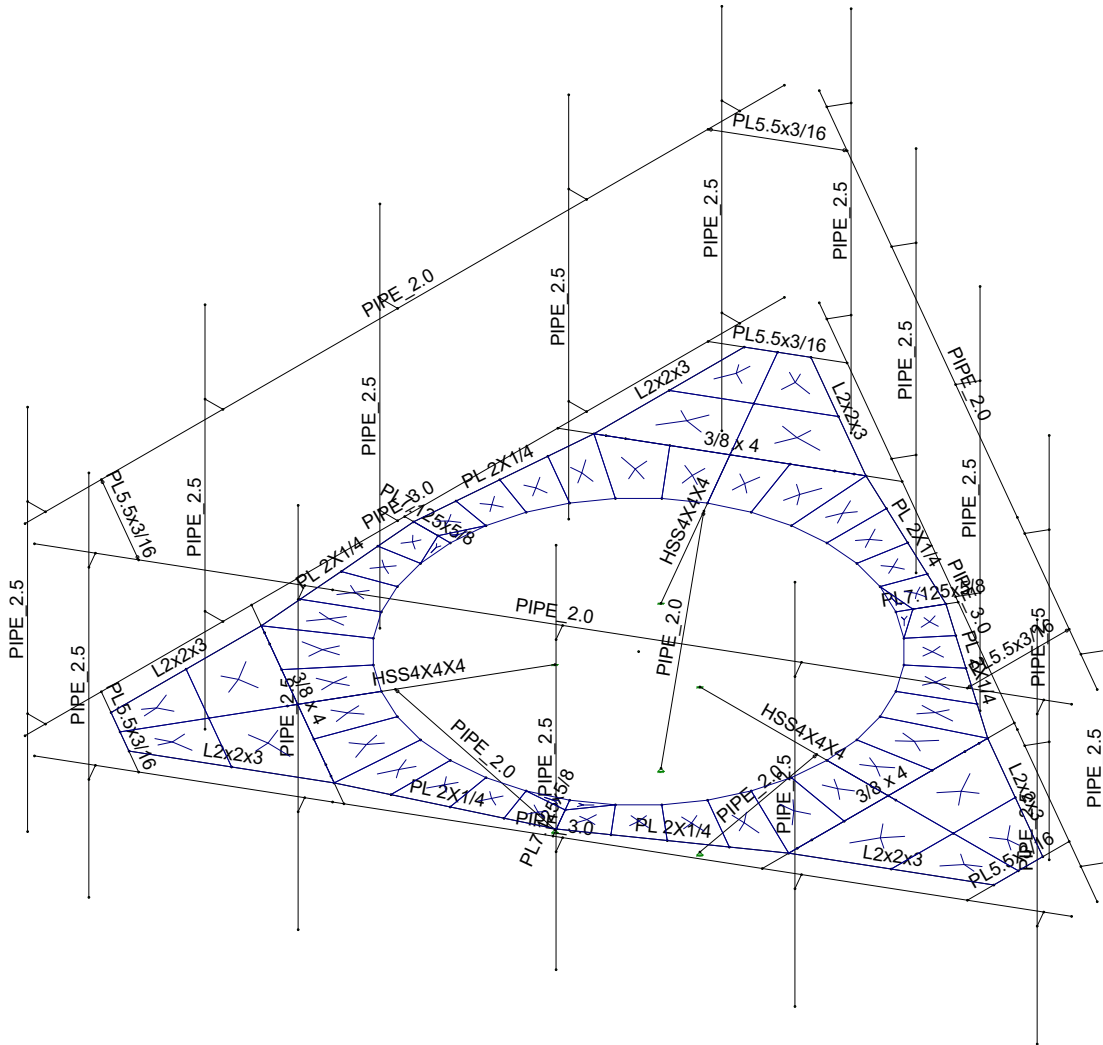
Verizon Mount Classification	M450R(550)-5[12]
-------------------------------------	-------------------------

4.1) Recommendations

The mount has sufficient capacity to carry the proposed loading configuration. No modifications are required at this time.

APPENDIX A

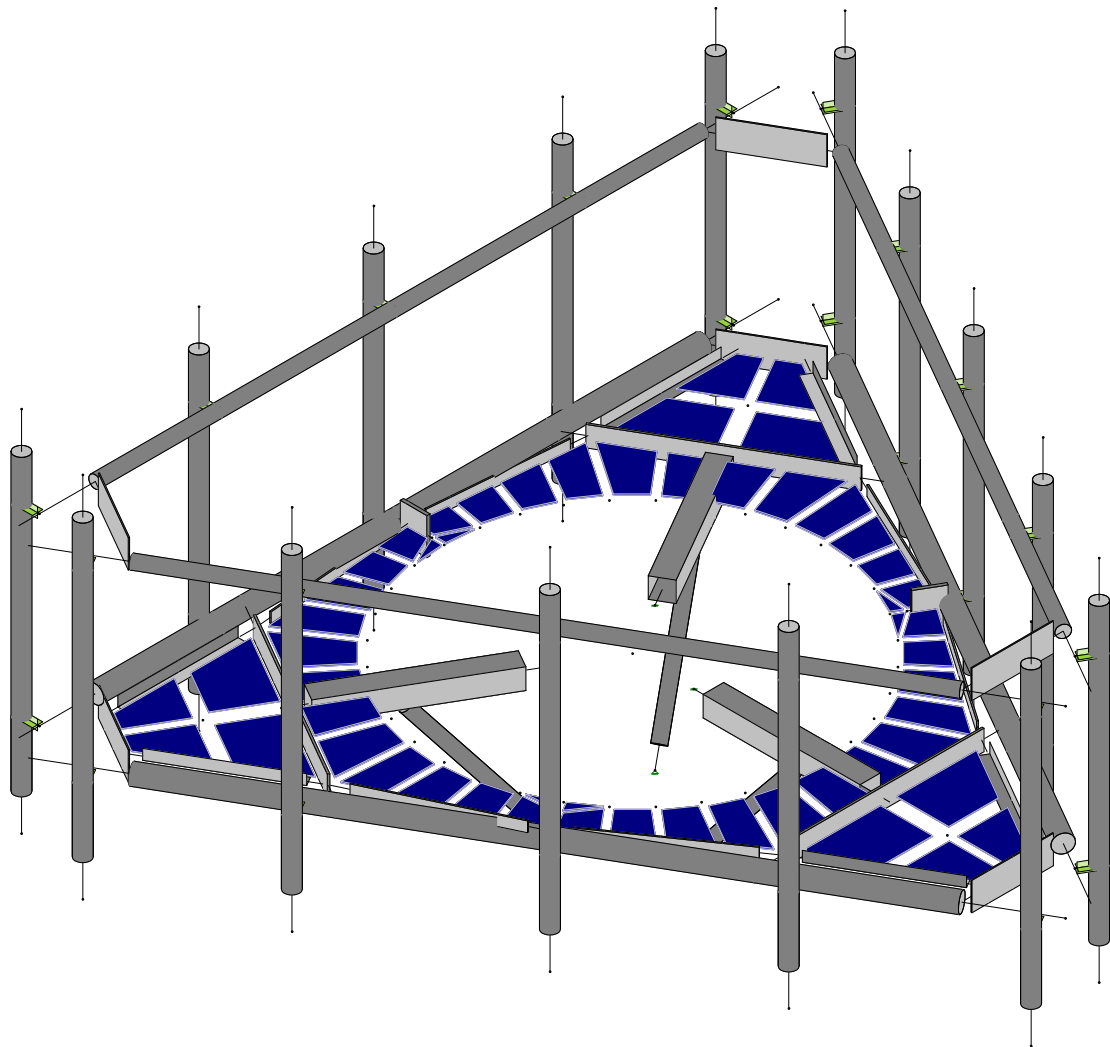
WIRE FRAME AND RENDERED MODELS



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DHK
196670.14

528 WHEELERS FARM RD

SK - 1
Nov 1, 2019 at 2:53 PM
528 WHEELERS FARM RD_Load...



ETS, PLLC

DHK

196670.14

528 WHEELERS FARM RD

SK - 2

Nov 1, 2019 at 2:54 PM

528 WHEELERS FARM RD_Load...

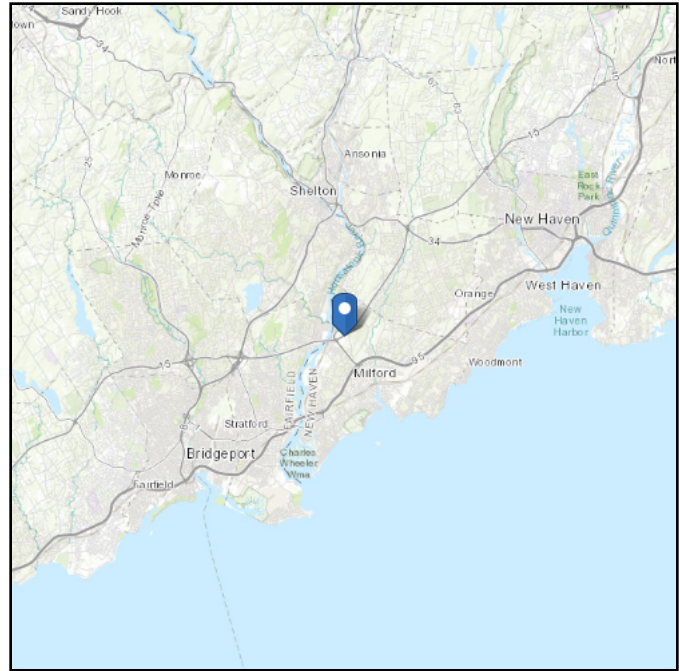
APPENDIX B
SOFTWARE INPUT CALCULATIONS

ASCE 7 Hazards Report

Address:
No Address at This Location

Standard: ASCE/SEI 7-10
Risk Category: II
Soil Class: D - Stiff Soil

Elevation: 212.97 ft (NAVD 88)
Latitude: 41.248431
Longitude: -73.079075



Wind

Results:

Wind Speed:	124 Vmph
10-year MRI	77 Vmph
25-year MRI	87 Vmph
50-year MRI	93 Vmph
100-year MRI	100 Vmph

Data Source: ASCE/SEI 7-10, Fig. 26.5-1A and Figs. CC-1–CC-4, incorporating errata of March 12, 2014

Date Accessed: Wed Oct 30 2019

Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-10 Standard. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (annual exceedance probability = 0.00143, MRI = 700 years).

Site is in a hurricane-prone region as defined in ASCE/SEI 7-10 Section 26.2. Glazed openings need not be protected against wind-borne debris.

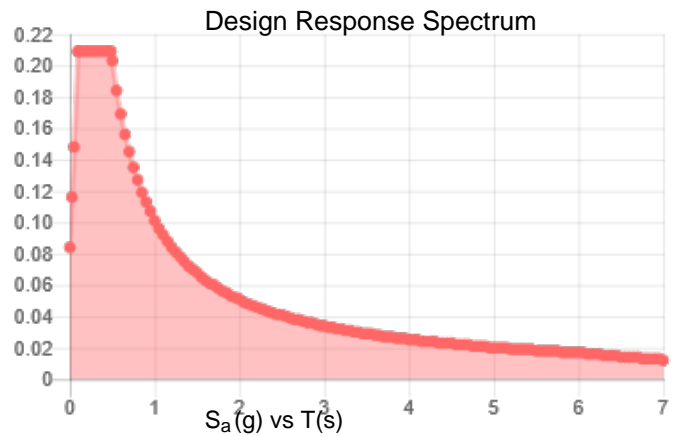
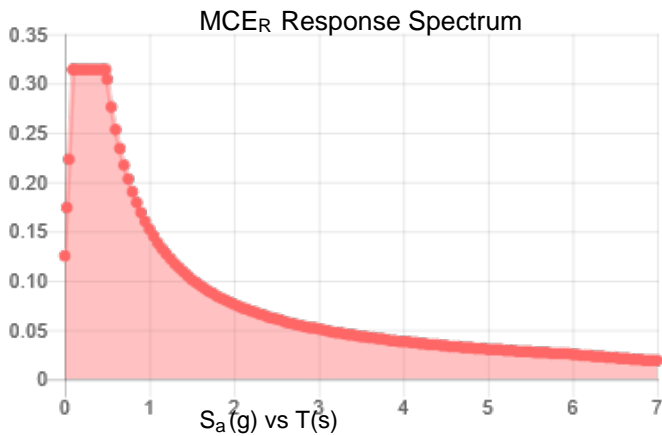
Mountainous terrain, gorges, ocean promontories, and special wind regions should be examined for unusual wind conditions.

Site Soil Class: D - Stiff Soil

Results:

S_s :	0.196	S_{DS} :	0.209
S_1 :	0.063	S_{D1} :	0.101
F_a :	1.6	T_L :	6
F_v :	2.4	PGA :	0.104
S_{MS} :	0.314	PGA _M :	0.166
S_{M1} :	0.152	F _{PGA} :	1.591
		I_e :	1

Seismic Design Category B



Data Accessed:

Wed Oct 30 2019

Date Source:

USGS Seismic Design Maps based on ASCE/SEI 7-10, incorporating Supplement 1 and errata of March 31, 2013, and ASCE/SEI 7-10 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-10 Ch. 21 are available from USGS.

Ice

Results:

Ice Thickness: 0.75 in.
Concurrent Temperature: 15 F
Gust Speed: 50 mph

Data Source: Standard ASCE/SEI 7-10, Figs. 10-2 through 10-8

Date Accessed: Wed Oct 30 2019

Ice thicknesses on structures in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

Values provided are equivalent radial ice thicknesses due to freezing rain with concurrent 3-second gust speeds, for a 50-year mean recurrence interval, and temperatures concurrent with ice thicknesses due to freezing rain. Thicknesses for ice accretions caused by other sources shall be obtained from local meteorological studies. Ice thicknesses in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

The ASCE 7 Hazard Tool is provided for your convenience, for informational purposes only, and is provided “as is” and without warranties of any kind. The location data included herein has been obtained from information developed, produced, and maintained by third party providers; or has been extrapolated from maps incorporated in the ASCE 7 standard. While ASCE has made every effort to use data obtained from reliable sources or methodologies, ASCE does not make any representations or warranties as to the accuracy, completeness, reliability, currency, or quality of any data provided herein. Any third-party links provided by this Tool should not be construed as an endorsement, affiliation, relationship, or sponsorship of such third-party content by or from ASCE.

ASCE does not intend, nor should anyone interpret, the results provided by this Tool to replace the sound judgment of a competent professional, having knowledge and experience in the appropriate field(s) of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the contents of this Tool or the ASCE 7 standard.

In using this Tool, you expressly assume all risks associated with your use. Under no circumstances shall ASCE or its officers, directors, employees, members, affiliates, or agents be liable to you or any other person for any direct, indirect, special, incidental, or consequential damages arising from or related to your use of, or reliance on, the Tool or any information obtained therein. To the fullest extent permitted by law, you agree to release and hold harmless ASCE from any and all liability of any nature arising out of or resulting from any use of data provided by the ASCE 7 Hazard Tool.

APPENDIX C
SOFTWARE ANALYSIS OUTPUT



Company : ETS, PLLC
 Designer : DHK
 Job Number : 196670.14
 Model Name : 528 WHEELERS FARM RD

Nov 1, 2019
 2:53 PM
 Checked By: JAA

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate...	Section/Shape	Type	Design List	Material	Design ...
1	BPL-1	N44	N50			PL 2X1/4	None	None	A36 Gr.36	Typical
2	BPL-2	N50	N32			PL 2X1/4	None	None	A36 Gr.36	Typical
3	BPL-3	N30	N56			PL 2X1/4	None	None	A36 Gr.36	Typical
4	BPL-4	N56	N18			PL 2X1/4	None	None	A36 Gr.36	Typical
5	BPL-5	N16	N53			PL 2X1/4	None	None	A36 Gr.36	Typical
6	BPL-6	N53	N46			PL 2X1/4	None	None	A36 Gr.36	Typical
7	BRACE-1	N39	N38			3/8 x 4	None	None	A36 Gr.36	Typical
8	BRACE-2	N24	N25			3/8 x 4	None	None	A36 Gr.36	Typical
9	BRACE-3	N10	N11			3/8 x 4	None	None	A36 Gr.36	Typical
10	CORNER-PL-1	N36	N37			PL5.5x3/16	None	None	A36 Gr.36	Typical
11	CORNER-PL-2	N22	N23			PL5.5x3/16	None	None	A36 Gr.36	Typical
12	CORNER-PL-3	N8	N9			PL5.5x3/16	None	None	A36 Gr.36	Typical
13	FM-0	N1	N2			PIPE 3.0	None	None	A53 Gr.B	Typical
14	FM-120	N3	N4			PIPE 3.0	None	None	A53 Gr.B	Typical
15	FM-240	N5	N6			PIPE 3.0	None	None	A53 Gr.B	Typical
16	GRATE-L-0-1	N44	N45		270	L2x2x3	None	None	A36 Gr.36	Typical
17	GRATE-L-0-2	N32	N33			L2x2x3	None	None	A36 Gr.36	Typical
18	GRATE-L-120-1	N30	N31		270	L2x2x3	None	None	A36 Gr.36	Typical
19	GRATE-L-120-2	N18	N19			L2x2x3	None	None	A36 Gr.36	Typical
20	GRATE-L-240-1	N16	N17		270	L2x2x3	None	None	A36 Gr.36	Typical
21	GRATE-L-240-2	N46	N47			L2x2x3	None	None	A36 Gr.36	Typical
22	COR1	N147	N148			PL5.5x3/16	None	None	A36 Gr.36	Typical
23	COR2	N145	N146			PL5.5x3/16	None	None	A36 Gr.36	Typical
24	COR3	N143	N144			PL5.5x3/16	None	None	A36 Gr.36	Typical
25	HR1	N137A	N138			PIPE 2.0	None	None	A53 Gr.B	Typical
26	HR2	N139	N140A			PIPE 2.0	None	None	A53 Gr.B	Typical
27	HR3	N141	N142			PIPE 2.0	None	None	A53 Gr.B	Typical
28	M34	N134	N135A			RIGID	None	None	RIGID	Typical
29	M35	N136	N137B			RIGID	None	None	RIGID	Typical
30	M37A	N140B	N141A			RIGID	None	None	RIGID	Typical
31	M38A	N142A	N143A			RIGID	None	None	RIGID	Typical
32	M40	N146A	N147A			RIGID	None	None	RIGID	Typical
33	M41	N148A	N149			RIGID	None	None	RIGID	Typical
34	M43	N156	N157			RIGID	None	None	RIGID	Typical
35	M44	N158A	N159			RIGID	None	None	RIGID	Typical
36	M46	N162	N163			RIGID	None	None	RIGID	Typical
37	M47	N164	N165			RIGID	None	None	RIGID	Typical
38	M49	N168	N169			RIGID	None	None	RIGID	Typical
39	M50	N170	N171			RIGID	None	None	RIGID	Typical
40	M52	N175	N176			RIGID	None	None	RIGID	Typical
41	M53	N177	N178			RIGID	None	None	RIGID	Typical
42	M55	N181	N182			RIGID	None	None	RIGID	Typical
43	M56	N183	N184			RIGID	None	None	RIGID	Typical
44	M58	N187	N188			RIGID	None	None	RIGID	Typical
45	M59	N189	N190			RIGID	None	None	RIGID	Typical
46	M72	N213	N214			RIGID	None	None	RIGID	Typical
47	M73	N215	N216			RIGID	None	None	RIGID	Typical
48	MP1	N139A	N138A			PIPE 2.5	Colu...	Pipe	A53 Gr.B	Typical
49	MP3	N145A	N144A			PIPE 2.5	Colu...	Pipe	A53 Gr.B	Typical
50	MP5	N151	N150			PIPE 2.5	Colu...	Pipe	A53 Gr.B	Typical
51	MP6	N180	N179			PIPE 2.5	Colu...	Pipe	A53 Gr.B	Typical
52	MP8	N186	N185			PIPE 2.5	Colu...	Pipe	A53 Gr.B	Typical
53	MP10	N192	N191			PIPE 2.5	Colu...	Pipe	A53 Gr.B	Typical
54	MP11	N161	N160			PIPE 2.5	Colu...	Pipe	A53 Gr.B	Typical
55	MP13	N167	N166			PIPE 2.5	Colu...	Pipe	A53 Gr.B	Typical
56	MP15	N173	N172			PIPE 2.5	Colu...	Pipe	A53 Gr.B	Typical



Company : ETS, PLLC
 Designer : DHK
 Job Number : 196670.14
 Model Name : 528 WHEELERS FARM RD

Nov 1, 2019
 2:53 PM
 Checked By: JAA

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate...	Section/Shape	Type	Design List	Material	Design ...
57	MP4	N218	N217			PIPE 2.5	Colu...	Pipe	A53 Gr.B	Typical
58	PL-0	N51	N52			PL7.125x5/8	None	None	A36 Gr.36	Typical
59	PL-120	N57	N58			PL7.125x5/8	None	None	A36 Gr.36	Typical
60	PL-240	N54	N55			PL7.125x5/8	None	None	A36 Gr.36	Typical
61	SA3	N231A	N232A			HSS4X4X4	Beam	Tube	A500 Gr.B Rect	Typical
62	SA2	N228A	N229A			HSS4X4X4	Beam	Tube	A500 Gr.B Rect	Typical
63	SA1	N231B	N232B			HSS4X4X4	Beam	Tube	A500 Gr.B Rect	Typical
64	M71	N233	N234			RIGID	None	None	RIGID	Typical
65	M72A	N235	N236			RIGID	None	None	RIGID	Typical
66	MP2	N238	N237			PIPE 2.5	Colu...	Pipe	A53 Gr.B	Typical
67	M68	N240	N241			RIGID	None	None	RIGID	Typical
68	M69	N242	N243			RIGID	None	None	RIGID	Typical
69	MP14	N245	N244			PIPE 2.5	Colu...	Pipe	A53 Gr.B	Typical
70	M71A	N246	N247			RIGID	None	None	RIGID	Typical
71	M72B	N248	N249			RIGID	None	None	RIGID	Typical
72	MP12	N251	N250			PIPE 2.5	Colu...	Pipe	A53 Gr.B	Typical
73	M74	N253	N254			RIGID	None	None	RIGID	Typical
74	M75	N255	N256			RIGID	None	None	RIGID	Typical
75	MP9	N258	N257			PIPE 2.5	Colu...	Pipe	A53 Gr.B	Typical
76	M77	N259	N260			RIGID	None	None	RIGID	Typical
77	M78	N261	N262			RIGID	None	None	RIGID	Typical
78	MP7	N264	N263			PIPE 2.5	Colu...	Pipe	A53 Gr.B	Typical
79	KIK3	N232C	N231C			PIPE 2.0	VBra...	Pipe	A53 Gr.B	Typical
80	KIK2	N265	N264A			PIPE 2.0	VBra...	Pipe	A53 Gr.B	Typical
81	KIK1	N268	N267			PIPE 2.0	VBra...	Pipe	A53 Gr.B	Typical

Material Takeoff

	Material	Size	Pieces	Length[in]	Weight[K]
1	General				
2	RIGID		30	105	0
3	Total General		30	105	0
4					
5	Hot Rolled Steel				
6	A36 Gr.36	3/8 x 4	3	148.1	0
7	A36 Gr.36	L2x2x3	6	176.6	0
8	A36 Gr.36	PL 2X1/4	6	196.3	0
9	A36 Gr.36	PL5.5x3/16	6	119.7	0
10	A36 Gr.36	PL7.125x5/8	3	19.5	0
11	A500 Gr.B Rect	HSS4X4X4	3	115.1	.1
12	A53 Gr.B	PIPE 2.0	6	554.8	.2
13	A53 Gr.B	PIPE 2.5	15	1080	.5
14	A53 Gr.B	PIPE 3.0	3	446.2	.3
15	Total HR Steel		51	2856.3	1.2
16					
17	Plate Elements	Thickness (in)		Volume (yds^3)	
18	gen Steel	.3	42	0	.2
19	GRATE	.1	12	0	0
20	Total Plates		54	0	.3

Member Point Loads (BLC 1 : Dead Load)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	Y	0	%50
2	MP2	Y	-165.9	%67
3	MP3	Y	-60.5	%67



Member Point Loads (BLC 1 : Dead Load) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
4	MP4	Y	-105.3	%67
5	MP5	Y	-105.3	%67
6	MP6	Y	-188.3	%67
7	MP7	Y	0	%50
8	MP8	Y	-60.5	%67
9	MP9	Y	-90.3	%67
10	MP10	Y	-90.3	%67
11	MP11	Y	-90.3	%67
12	MP12	Y	-18.6	%67
13	MP13	Y	-252	%67
14	MP14	Y	-37.2	%67
15	MP15	Y	-38.6	%67

Member Point Loads (BLC 2 : Wind Load (0 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	76	%50
2	MP2	X	64.6	%67
3	MP3	X	249.3	%67
4	MP4	X	93.3	%67
5	MP5	X	93.3	%67
6	MP6	X	80.7	%67
7	MP7	X	76	%50
8	MP8	X	185.6	%67
9	MP9	X	116.6	%67
10	MP10	X	116.6	%67
11	MP11	X	116.6	%67
12	MP12	X	96.2	%67
13	MP13	X	121.7	%67
14	MP14	X	87.4	%67
15	MP15	X	85.8	%67
16	MP1	Z	0	%50
17	MP2	Z	0	%67
18	MP3	Z	0	%67
19	MP4	Z	0	%67
20	MP5	Z	0	%67
21	MP6	Z	0	%67
22	MP7	Z	0	%50
23	MP8	Z	0	%67
24	MP9	Z	0	%67
25	MP10	Z	0	%67
26	MP11	Z	0	%67
27	MP12	Z	0	%67
28	MP13	Z	0	%67
29	MP14	Z	0	%67
30	MP15	Z	0	%67

Member Point Loads (BLC 3 : Wind Load (30 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	65.8	%50
2	MP2	X	67.4	%67
3	MP3	X	197.5	%67
4	MP4	X	89	%67
5	MP5	X	89	%67
6	MP6	X	85.4	%67
7	MP7	X	65.8	%50
8	MP8	X	142.3	%67



Member Point Loads (BLC 3 : Wind Load (30 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
9	MP9	X	104.6	%67
10	MP10	X	104.6	%67
11	MP11	X	93.9	%67
12	MP12	X	86.2	%67
13	MP13	X	89	%67
14	MP14	X	56.2	%67
15	MP15	X	59.1	%67
16	MP1	Z	38	%50
17	MP2	Z	38.9	%67
18	MP3	Z	114	%67
19	MP4	Z	51.4	%67
20	MP5	Z	51.4	%67
21	MP6	Z	49.3	%67
22	MP7	Z	38	%50
23	MP8	Z	82.2	%67
24	MP9	Z	60.4	%67
25	MP10	Z	60.4	%67
26	MP11	Z	54.2	%67
27	MP12	Z	49.8	%67
28	MP13	Z	51.4	%67
29	MP14	Z	32.4	%67
30	MP15	Z	34.1	%67

Member Point Loads (BLC 4 : Wind Load (60 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	38	%50
2	MP2	X	52	%67
3	MP3	X	92.8	%67
4	MP4	X	60.9	%67
5	MP5	X	60.9	%67
6	MP6	X	40.3	%67
7	MP7	X	38	%50
8	MP8	X	92.8	%67
9	MP9	X	58.3	%67
10	MP10	X	58.3	%67
11	MP11	X	52.2	%67
12	MP12	X	50.6	%67
13	MP13	X	46.7	%67
14	MP14	X	26.8	%67
15	MP15	X	29.7	%67
16	MP1	Z	65.8	%50
17	MP2	Z	90.1	%67
18	MP3	Z	160.7	%67
19	MP4	Z	105.4	%67
20	MP5	Z	105.4	%67
21	MP6	Z	69.9	%67
22	MP7	Z	65.8	%50
23	MP8	Z	160.7	%67
24	MP9	Z	101	%67
25	MP10	Z	101	%67
26	MP11	Z	90.4	%67
27	MP12	Z	87.6	%67
28	MP13	Z	80.8	%67
29	MP14	Z	46.5	%67
30	MP15	Z	51.5	%67



Member Point Loads (BLC 5 : Wind Load (90 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	%50
2	MP2	X	0	%67
3	MP3	X	0	%67
4	MP4	X	0	%67
5	MP5	X	0	%67
6	MP6	X	0	%67
7	MP7	X	0	%50
8	MP8	X	0	%67
9	MP9	X	0	%67
10	MP10	X	0	%67
11	MP11	X	0	%67
12	MP12	X	0	%67
13	MP13	X	0	%67
14	MP14	X	0	%67
15	MP15	X	0	%67
16	MP1	Z	76	%50
17	MP2	Z	117.2	%67
18	MP3	Z	164.3	%67
19	MP4	Z	131.2	%67
20	MP5	Z	131.2	%67
21	MP6	Z	44.8	%67
22	MP7	Z	76	%50
23	MP8	Z	228.1	%67
24	MP9	Z	108.5	%67
25	MP10	Z	108.5	%67
26	MP11	Z	108.5	%67
27	MP12	Z	99.5	%67
28	MP13	Z	102.8	%67
29	MP14	Z	64.9	%67
30	MP15	Z	68.2	%67

Member Point Loads (BLC 6 : Wind Load (120 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	-38	%50
2	MP2	X	-52	%67
3	MP3	X	-92.8	%67
4	MP4	X	-60.9	%67
5	MP5	X	-60.9	%67
6	MP6	X	-13.4	%67
7	MP7	X	-38	%50
8	MP8	X	-124.7	%67
9	MP9	X	-52.2	%67
10	MP10	X	-52.2	%67
11	MP11	X	-58.3	%67
12	MP12	X	-48.1	%67
13	MP13	X	-60.9	%67
14	MP14	X	-43.7	%67
15	MP15	X	-42.9	%67
16	MP1	Z	65.8	%50
17	MP2	Z	90.1	%67
18	MP3	Z	160.7	%67
19	MP4	Z	105.4	%67
20	MP5	Z	105.4	%67
21	MP6	Z	23.2	%67
22	MP7	Z	65.8	%50
23	MP8	Z	215.9	%67



Member Point Loads (BLC 6 : Wind Load (120 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
24	MP9	Z	90.4	%67
25	MP10	Z	90.4	%67
26	MP11	Z	101	%67
27	MP12	Z	83.3	%67
28	MP13	Z	105.4	%67
29	MP14	Z	75.7	%67
30	MP15	Z	74.3	%67

Member Point Loads (BLC 7 : Wind Load (150 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	-65.8	%50
2	MP2	X	-67.4	%67
3	MP3	X	-197.5	%67
4	MP4	X	-89	%67
5	MP5	X	-89	%67
6	MP6	X	-38.8	%67
7	MP7	X	-65.8	%50
8	MP8	X	-197.5	%67
9	MP9	X	-93.9	%67
10	MP10	X	-93.9	%67
11	MP11	X	-104.6	%67
12	MP12	X	-81.9	%67
13	MP13	X	-113.6	%67
14	MP14	X	-85.4	%67
15	MP15	X	-81.9	%67
16	MP1	Z	38	%50
17	MP2	Z	38.9	%67
18	MP3	Z	114	%67
19	MP4	Z	51.4	%67
20	MP5	Z	51.4	%67
21	MP6	Z	22.4	%67
22	MP7	Z	38	%50
23	MP8	Z	114	%67
24	MP9	Z	54.2	%67
25	MP10	Z	54.2	%67
26	MP11	Z	60.4	%67
27	MP12	Z	47.3	%67
28	MP13	Z	65.6	%67
29	MP14	Z	49.3	%67
30	MP15	Z	47.3	%67

Member Point Loads (BLC 8 : Wind Load (180 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	-76	%50
2	MP2	X	-64.6	%67
3	MP3	X	-249.3	%67
4	MP4	X	-93.3	%67
5	MP5	X	-93.3	%67
6	MP6	X	-80.7	%67
7	MP7	X	-76	%50
8	MP8	X	-185.6	%67
9	MP9	X	-116.6	%67
10	MP10	X	-116.6	%67
11	MP11	X	-116.6	%67
12	MP12	X	-96.2	%67
13	MP13	X	-121.7	%67



Member Point Loads (BLC 8 : Wind Load (180 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
14	MP14	X	-87.4	%67
15	MP15	X	-85.8	%67
16	MP1	Z	0	%50
17	MP2	Z	0	%67
18	MP3	Z	0	%67
19	MP4	Z	0	%67
20	MP5	Z	0	%67
21	MP6	Z	0	%67
22	MP7	Z	0	%50
23	MP8	Z	0	%67
24	MP9	Z	0	%67
25	MP10	Z	0	%67
26	MP11	Z	0	%67
27	MP12	Z	0	%67
28	MP13	Z	0	%67
29	MP14	Z	0	%67
30	MP15	Z	0	%67

Member Point Loads (BLC 9 : Wind Load (210 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	-65.8	%50
2	MP2	X	-67.4	%67
3	MP3	X	-197.5	%67
4	MP4	X	-89	%67
5	MP5	X	-89	%67
6	MP6	X	-85.4	%67
7	MP7	X	-65.8	%50
8	MP8	X	-142.3	%67
9	MP9	X	-104.6	%67
10	MP10	X	-104.6	%67
11	MP11	X	-93.9	%67
12	MP12	X	-86.2	%67
13	MP13	X	-89	%67
14	MP14	X	-56.2	%67
15	MP15	X	-59.1	%67
16	MP1	Z	-38	%50
17	MP2	Z	-38.9	%67
18	MP3	Z	-114	%67
19	MP4	Z	-51.4	%67
20	MP5	Z	-51.4	%67
21	MP6	Z	-49.3	%67
22	MP7	Z	-38	%50
23	MP8	Z	-82.2	%67
24	MP9	Z	-60.4	%67
25	MP10	Z	-60.4	%67
26	MP11	Z	-54.2	%67
27	MP12	Z	-49.8	%67
28	MP13	Z	-51.4	%67
29	MP14	Z	-32.4	%67
30	MP15	Z	-34.1	%67

Member Point Loads (BLC 10 : Wind Load (240 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	-38	%50
2	MP2	X	-52	%67
3	MP3	X	-92.8	%67



Member Point Loads (BLC 10 : Wind Load (240 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
4	MP4	X	-60.9	%67
5	MP5	X	-60.9	%67
6	MP6	X	-40.3	%67
7	MP7	X	-38	%50
8	MP8	X	-92.8	%67
9	MP9	X	-58.3	%67
10	MP10	X	-58.3	%67
11	MP11	X	-52.2	%67
12	MP12	X	-50.6	%67
13	MP13	X	-46.7	%67
14	MP14	X	-26.8	%67
15	MP15	X	-29.7	%67
16	MP1	Z	-65.8	%50
17	MP2	Z	-90.1	%67
18	MP3	Z	-160.7	%67
19	MP4	Z	-105.4	%67
20	MP5	Z	-105.4	%67
21	MP6	Z	-69.9	%67
22	MP7	Z	-65.8	%50
23	MP8	Z	-160.7	%67
24	MP9	Z	-101	%67
25	MP10	Z	-101	%67
26	MP11	Z	-90.4	%67
27	MP12	Z	-87.6	%67
28	MP13	Z	-80.8	%67
29	MP14	Z	-46.5	%67
30	MP15	Z	-51.5	%67

Member Point Loads (BLC 11 : Wind Load (270 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	0	%50
2	MP2	X	0	%67
3	MP3	X	0	%67
4	MP4	X	0	%67
5	MP5	X	0	%67
6	MP6	X	0	%67
7	MP7	X	0	%50
8	MP8	X	0	%67
9	MP9	X	0	%67
10	MP10	X	0	%67
11	MP11	X	0	%67
12	MP12	X	0	%67
13	MP13	X	0	%67
14	MP14	X	0	%67
15	MP15	X	0	%67
16	MP1	Z	-76	%50
17	MP2	Z	-117.2	%67
18	MP3	Z	-164.3	%67
19	MP4	Z	-131.2	%67
20	MP5	Z	-131.2	%67
21	MP6	Z	-44.8	%67
22	MP7	Z	-76	%50
23	MP8	Z	-228.1	%67
24	MP9	Z	-108.5	%67
25	MP10	Z	-108.5	%67
26	MP11	Z	-108.5	%67



Member Point Loads (BLC 11 : Wind Load (270 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
27	MP12	Z	-99.5	%67
28	MP13	Z	-102.8	%67
29	MP14	Z	-64.9	%67
30	MP15	Z	-68.2	%67

Member Point Loads (BLC 12 : Wind Load (300 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	38	%50
2	MP2	X	52	%67
3	MP3	X	92.8	%67
4	MP4	X	60.9	%67
5	MP5	X	60.9	%67
6	MP6	X	13.4	%67
7	MP7	X	38	%50
8	MP8	X	124.7	%67
9	MP9	X	52.2	%67
10	MP10	X	52.2	%67
11	MP11	X	58.3	%67
12	MP12	X	48.1	%67
13	MP13	X	60.9	%67
14	MP14	X	43.7	%67
15	MP15	X	42.9	%67
16	MP1	Z	-65.8	%50
17	MP2	Z	-90.1	%67
18	MP3	Z	-160.7	%67
19	MP4	Z	-105.4	%67
20	MP5	Z	-105.4	%67
21	MP6	Z	-23.2	%67
22	MP7	Z	-65.8	%50
23	MP8	Z	-215.9	%67
24	MP9	Z	-90.4	%67
25	MP10	Z	-90.4	%67
26	MP11	Z	-101	%67
27	MP12	Z	-83.3	%67
28	MP13	Z	-105.4	%67
29	MP14	Z	-75.7	%67
30	MP15	Z	-74.3	%67

Member Point Loads (BLC 13 : Wind Load (330 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	65.8	%50
2	MP2	X	67.4	%67
3	MP3	X	197.5	%67
4	MP4	X	89	%67
5	MP5	X	89	%67
6	MP6	X	38.8	%67
7	MP7	X	65.8	%50
8	MP8	X	197.5	%67
9	MP9	X	93.9	%67
10	MP10	X	93.9	%67
11	MP11	X	104.6	%67
12	MP12	X	81.9	%67
13	MP13	X	113.6	%67
14	MP14	X	85.4	%67
15	MP15	X	81.9	%67
16	MP1	Z	-38	%50



Member Point Loads (BLC 13 : Wind Load (330 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
17	MP2	Z	-38.9	%67
18	MP3	Z	-114	%67
19	MP4	Z	-51.4	%67
20	MP5	Z	-51.4	%67
21	MP6	Z	-22.4	%67
22	MP7	Z	-38	%50
23	MP8	Z	-114	%67
24	MP9	Z	-54.2	%67
25	MP10	Z	-54.2	%67
26	MP11	Z	-60.4	%67
27	MP12	Z	-47.3	%67
28	MP13	Z	-65.6	%67
29	MP14	Z	-49.3	%67
30	MP15	Z	-47.3	%67

Member Point Loads (BLC 14 : Ice Load)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	Y	-56.9	%50
2	MP2	Y	-1004.5	%67
3	MP3	Y	-244.8	%67
4	MP4	Y	-292.5	%67
5	MP5	Y	-292.5	%67
6	MP6	Y	-1087.3	%67
7	MP7	Y	-56.9	%50
8	MP8	Y	-244.8	%67
9	MP9	Y	-284.4	%67
10	MP10	Y	-284.4	%67
11	MP11	Y	-284.4	%67
12	MP12	Y	-80.1	%67
13	MP13	Y	-1123.5	%67
14	MP14	Y	-144.9	%67
15	MP15	Y	-259.1	%67

Member Point Loads (BLC 15 : Wind on Ice (0 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	21.1	%50
2	MP2	X	16.3	%67
3	MP3	X	52.2	%67
4	MP4	X	20.3	%67
5	MP5	X	20.3	%67
6	MP6	X	22.3	%67
7	MP7	X	21.1	%50
8	MP8	X	42.7	%67
9	MP9	X	29.5	%67
10	MP10	X	29.5	%67
11	MP11	X	29.5	%67
12	MP12	X	27.6	%67
13	MP13	X	30	%67
14	MP14	X	24.7	%67
15	MP15	X	23.8	%67
16	MP1	Z	0	%50
17	MP2	Z	0	%67
18	MP3	Z	0	%67
19	MP4	Z	0	%67
20	MP5	Z	0	%67
21	MP6	Z	0	%67



Member Point Loads (BLC 15 : Wind on Ice (0 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
22	MP7	Z	0	%50
23	MP8	Z	0	%67
24	MP9	Z	0	%67
25	MP10	Z	0	%67
26	MP11	Z	0	%67
27	MP12	Z	0	%67
28	MP13	Z	0	%67
29	MP14	Z	0	%67
30	MP15	Z	0	%67

Member Point Loads (BLC 16 : Wind on Ice (30 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	18.3	%50
2	MP2	X	17.6	%67
3	MP3	X	42.5	%67
4	MP4	X	20.4	%67
5	MP5	X	20.4	%67
6	MP6	X	23.4	%67
7	MP7	X	18.3	%50
8	MP8	X	34.3	%67
9	MP9	X	27.1	%67
10	MP10	X	27.1	%67
11	MP11	X	22.4	%67
12	MP12	X	26.2	%67
13	MP13	X	20.3	%67
14	MP14	X	17.4	%67
15	MP15	X	16.4	%67
16	MP1	Z	10.5	%50
17	MP2	Z	10.1	%67
18	MP3	Z	24.5	%67
19	MP4	Z	11.8	%67
20	MP5	Z	11.8	%67
21	MP6	Z	13.5	%67
22	MP7	Z	10.5	%50
23	MP8	Z	19.8	%67
24	MP9	Z	15.7	%67
25	MP10	Z	15.7	%67
26	MP11	Z	12.9	%67
27	MP12	Z	15.1	%67
28	MP13	Z	11.7	%67
29	MP14	Z	10.1	%67
30	MP15	Z	9.5	%67

Member Point Loads (BLC 17 : Wind on Ice (60 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	10.5	%50
2	MP2	X	14.1	%67
3	MP3	X	21.4	%67
4	MP4	X	15	%67
5	MP5	X	15	%67
6	MP6	X	11.2	%67
7	MP7	X	10.5	%50
8	MP8	X	21.4	%67
9	MP9	X	14.7	%67
10	MP10	X	14.7	%67
11	MP11	X	12	%67



Member Point Loads (BLC 17 : Wind on Ice (60 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
12	MP12	X	15.8	%67
13	MP13	X	10.1	%67
14	MP14	X	8.9	%67
15	MP15	X	8.2	%67
16	MP1	Z	18.3	%50
17	MP2	Z	24.4	%67
18	MP3	Z	37	%67
19	MP4	Z	26	%67
20	MP5	Z	26	%67
21	MP6	Z	19.4	%67
22	MP7	Z	18.3	%50
23	MP8	Z	37	%67
24	MP9	Z	25.5	%67
25	MP10	Z	25.5	%67
26	MP11	Z	20.8	%67
27	MP12	Z	27.4	%67
28	MP13	Z	17.4	%67
29	MP14	Z	15.4	%67
30	MP15	Z	14.2	%67

Member Point Loads (BLC 18 : Wind on Ice (90 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	0	%50
2	MP2	X	0	%67
3	MP3	X	0	%67
4	MP4	X	0	%67
5	MP5	X	0	%67
6	MP6	X	0	%67
7	MP7	X	0	%50
8	MP8	X	0	%67
9	MP9	X	0	%67
10	MP10	X	0	%67
11	MP11	X	0	%67
12	MP12	X	0	%67
13	MP13	X	0	%67
14	MP14	X	0	%67
15	MP15	X	0	%67
16	MP1	Z	21.1	%50
17	MP2	Z	32.2	%67
18	MP3	Z	39.6	%67
19	MP4	Z	33.2	%67
20	MP5	Z	33.2	%67
21	MP6	Z	13.1	%67
22	MP7	Z	21.1	%50
23	MP8	Z	49.1	%67
24	MP9	Z	25.8	%67
25	MP10	Z	25.8	%67
26	MP11	Z	25.8	%67
27	MP12	Z	30.3	%67
28	MP13	Z	23.4	%67
29	MP14	Z	20.1	%67
30	MP15	Z	18.9	%67

Member Point Loads (BLC 19 : Wind on Ice (120 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	-10.5	%50



Member Point Loads (BLC 19 : Wind on Ice (120 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.%]
2	MP2	X	-14.1	%67
3	MP3	X	-21.4	%67
4	MP4	X	-15	%67
5	MP5	X	-15	%67
6	MP6	X	-4.2	%67
7	MP7	X	-10.5	%50
8	MP8	X	-26.1	%67
9	MP9	X	-12	%67
10	MP10	X	-12	%67
11	MP11	X	-14.7	%67
12	MP12	X	-13.8	%67
13	MP13	X	-15	%67
14	MP14	X	-12.3	%67
15	MP15	X	-11.9	%67
16	MP1	Z	18.3	%50
17	MP2	Z	24.4	%67
18	MP3	Z	37	%67
19	MP4	Z	26	%67
20	MP5	Z	26	%67
21	MP6	Z	7.3	%67
22	MP7	Z	18.3	%50
23	MP8	Z	45.2	%67
24	MP9	Z	20.8	%67
25	MP10	Z	20.8	%67
26	MP11	Z	25.5	%67
27	MP12	Z	23.9	%67
28	MP13	Z	25.9	%67
29	MP14	Z	21.4	%67
30	MP15	Z	20.6	%67

Member Point Loads (BLC 20 : Wind on Ice (150 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.%]
1	MP1	X	-18.3	%50
2	MP2	X	-17.6	%67
3	MP3	X	-42.5	%67
4	MP4	X	-20.4	%67
5	MP5	X	-20.4	%67
6	MP6	X	-11.3	%67
7	MP7	X	-18.3	%50
8	MP8	X	-42.5	%67
9	MP9	X	-22.4	%67
10	MP10	X	-22.4	%67
11	MP11	X	-27.1	%67
12	MP12	X	-22.8	%67
13	MP13	X	-28.8	%67
14	MP14	X	-23.4	%67
15	MP15	X	-22.8	%67
16	MP1	Z	10.5	%50
17	MP2	Z	10.1	%67
18	MP3	Z	24.5	%67
19	MP4	Z	11.8	%67
20	MP5	Z	11.8	%67
21	MP6	Z	6.5	%67
22	MP7	Z	10.5	%50
23	MP8	Z	24.5	%67
24	MP9	Z	12.9	%67



Member Point Loads (BLC 20 : Wind on Ice (150 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
25	MP10	Z	12.9	%67
26	MP11	Z	15.7	%67
27	MP12	Z	13.2	%67
28	MP13	Z	16.6	%67
29	MP14	Z	13.5	%67
30	MP15	Z	13.2	%67

Member Point Loads (BLC 21 : Wind on Ice (180 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	-21.1	%50
2	MP2	X	-16.3	%67
3	MP3	X	-52.2	%67
4	MP4	X	-20.3	%67
5	MP5	X	-20.3	%67
6	MP6	X	-22.3	%67
7	MP7	X	-21.1	%50
8	MP8	X	-42.7	%67
9	MP9	X	-29.5	%67
10	MP10	X	-29.5	%67
11	MP11	X	-29.5	%67
12	MP12	X	-27.6	%67
13	MP13	X	-30	%67
14	MP14	X	-24.7	%67
15	MP15	X	-23.8	%67
16	MP1	Z	0	%50
17	MP2	Z	0	%67
18	MP3	Z	0	%67
19	MP4	Z	0	%67
20	MP5	Z	0	%67
21	MP6	Z	0	%67
22	MP7	Z	0	%50
23	MP8	Z	0	%67
24	MP9	Z	0	%67
25	MP10	Z	0	%67
26	MP11	Z	0	%67
27	MP12	Z	0	%67
28	MP13	Z	0	%67
29	MP14	Z	0	%67
30	MP15	Z	0	%67

Member Point Loads (BLC 22 : Wind on Ice (210 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	-18.3	%50
2	MP2	X	-17.6	%67
3	MP3	X	-42.5	%67
4	MP4	X	-20.4	%67
5	MP5	X	-20.4	%67
6	MP6	X	-23.4	%67
7	MP7	X	-18.3	%50
8	MP8	X	-34.3	%67
9	MP9	X	-27.1	%67
10	MP10	X	-27.1	%67
11	MP11	X	-22.4	%67
12	MP12	X	-26.2	%67
13	MP13	X	-20.3	%67
14	MP14	X	-17.4	%67



Member Point Loads (BLC 22 : Wind on Ice (210 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
15	MP15	X	-16.4	%67
16	MP1	Z	-10.5	%50
17	MP2	Z	-10.1	%67
18	MP3	Z	-24.5	%67
19	MP4	Z	-11.8	%67
20	MP5	Z	-11.8	%67
21	MP6	Z	-13.5	%67
22	MP7	Z	-10.5	%50
23	MP8	Z	-19.8	%67
24	MP9	Z	-15.7	%67
25	MP10	Z	-15.7	%67
26	MP11	Z	-12.9	%67
27	MP12	Z	-15.1	%67
28	MP13	Z	-11.7	%67
29	MP14	Z	-10.1	%67
30	MP15	Z	-9.5	%67

Member Point Loads (BLC 23 : Wind on Ice (240 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	-10.5	%50
2	MP2	X	-14.1	%67
3	MP3	X	-21.4	%67
4	MP4	X	-15	%67
5	MP5	X	-15	%67
6	MP6	X	-11.2	%67
7	MP7	X	-10.5	%50
8	MP8	X	-21.4	%67
9	MP9	X	-14.7	%67
10	MP10	X	-14.7	%67
11	MP11	X	-12	%67
12	MP12	X	-15.8	%67
13	MP13	X	-10.1	%67
14	MP14	X	-8.9	%67
15	MP15	X	-8.2	%67
16	MP1	Z	-18.3	%50
17	MP2	Z	-24.4	%67
18	MP3	Z	-37	%67
19	MP4	Z	-26	%67
20	MP5	Z	-26	%67
21	MP6	Z	-19.4	%67
22	MP7	Z	-18.3	%50
23	MP8	Z	-37	%67
24	MP9	Z	-25.5	%67
25	MP10	Z	-25.5	%67
26	MP11	Z	-20.8	%67
27	MP12	Z	-27.4	%67
28	MP13	Z	-17.4	%67
29	MP14	Z	-15.4	%67
30	MP15	Z	-14.2	%67

Member Point Loads (BLC 24 : Wind on Ice (270 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	%50
2	MP2	X	0	%67
3	MP3	X	0	%67
4	MP4	X	0	%67



Member Point Loads (BLC 24 : Wind on Ice (270 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
5	MP5	X	0	%67
6	MP6	X	0	%67
7	MP7	X	0	%50
8	MP8	X	0	%67
9	MP9	X	0	%67
10	MP10	X	0	%67
11	MP11	X	0	%67
12	MP12	X	0	%67
13	MP13	X	0	%67
14	MP14	X	0	%67
15	MP15	X	0	%67
16	MP1	Z	-21.1	%50
17	MP2	Z	-32.2	%67
18	MP3	Z	-39.6	%67
19	MP4	Z	-33.2	%67
20	MP5	Z	-33.2	%67
21	MP6	Z	-13.1	%67
22	MP7	Z	-21.1	%50
23	MP8	Z	-49.1	%67
24	MP9	Z	-25.8	%67
25	MP10	Z	-25.8	%67
26	MP11	Z	-25.8	%67
27	MP12	Z	-30.3	%67
28	MP13	Z	-23.4	%67
29	MP14	Z	-20.1	%67
30	MP15	Z	-18.9	%67

Member Point Loads (BLC 25 : Wind on Ice (300 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	10.5	%50
2	MP2	X	14.1	%67
3	MP3	X	21.4	%67
4	MP4	X	15	%67
5	MP5	X	15	%67
6	MP6	X	4.2	%67
7	MP7	X	10.5	%50
8	MP8	X	26.1	%67
9	MP9	X	12	%67
10	MP10	X	12	%67
11	MP11	X	14.7	%67
12	MP12	X	13.8	%67
13	MP13	X	15	%67
14	MP14	X	12.3	%67
15	MP15	X	11.9	%67
16	MP1	Z	-18.3	%50
17	MP2	Z	-24.4	%67
18	MP3	Z	-37	%67
19	MP4	Z	-26	%67
20	MP5	Z	-26	%67
21	MP6	Z	-7.3	%67
22	MP7	Z	-18.3	%50
23	MP8	Z	-45.2	%67
24	MP9	Z	-20.8	%67
25	MP10	Z	-20.8	%67
26	MP11	Z	-25.5	%67
27	MP12	Z	-23.9	%67



Member Point Loads (BLC 25 : Wind on Ice (300 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
28	MP13	Z	-25.9	%67
29	MP14	Z	-21.4	%67
30	MP15	Z	-20.6	%67

Member Point Loads (BLC 26 : Wind on Ice (330 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	18.3	%50
2	MP2	X	17.6	%67
3	MP3	X	42.5	%67
4	MP4	X	20.4	%67
5	MP5	X	20.4	%67
6	MP6	X	11.3	%67
7	MP7	X	18.3	%50
8	MP8	X	42.5	%67
9	MP9	X	22.4	%67
10	MP10	X	22.4	%67
11	MP11	X	27.1	%67
12	MP12	X	22.8	%67
13	MP13	X	28.8	%67
14	MP14	X	23.4	%67
15	MP15	X	22.8	%67
16	MP1	Z	-10.5	%50
17	MP2	Z	-10.1	%67
18	MP3	Z	-24.5	%67
19	MP4	Z	-11.8	%67
20	MP5	Z	-11.8	%67
21	MP6	Z	-6.5	%67
22	MP7	Z	-10.5	%50
23	MP8	Z	-24.5	%67
24	MP9	Z	-12.9	%67
25	MP10	Z	-12.9	%67
26	MP11	Z	-15.7	%67
27	MP12	Z	-13.2	%67
28	MP13	Z	-16.6	%67
29	MP14	Z	-13.5	%67
30	MP15	Z	-13.2	%67

Member Point Loads (BLC 27 : Horizontal Seismic, Eh (0))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	0	%50
2	MP2	X	165.9	%67
3	MP3	X	60.5	%67
4	MP4	X	105.3	%67
5	MP5	X	105.3	%67
6	MP6	X	188.3	%67
7	MP7	X	0	%50
8	MP8	X	60.5	%67
9	MP9	X	90.3	%67
10	MP10	X	90.3	%67
11	MP11	X	90.3	%67
12	MP12	X	18.6	%67
13	MP13	X	252	%67
14	MP14	X	37.2	%67
15	MP15	X	38.6	%67
16	MP1	Z	0	%50
17	MP2	Z	0	%67



Member Point Loads (BLC 27 : Horizontal Seismic, Eh (0)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
18	MP3	Z	0	%67
19	MP4	Z	0	%67
20	MP5	Z	0	%67
21	MP6	Z	0	%67
22	MP7	Z	0	%50
23	MP8	Z	0	%67
24	MP9	Z	0	%67
25	MP10	Z	0	%67
26	MP11	Z	0	%67
27	MP12	Z	0	%67
28	MP13	Z	0	%67
29	MP14	Z	0	%67
30	MP15	Z	0	%67

Member Point Loads (BLC 28 : Horizontal Seismic, Eh (30))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	%50
2	MP2	X	143.7	%67
3	MP3	X	52.4	%67
4	MP4	X	91.2	%67
5	MP5	X	91.2	%67
6	MP6	X	163.1	%67
7	MP7	X	0	%50
8	MP8	X	52.4	%67
9	MP9	X	78.2	%67
10	MP10	X	78.2	%67
11	MP11	X	78.2	%67
12	MP12	X	16.1	%67
13	MP13	X	218.2	%67
14	MP14	X	32.2	%67
15	MP15	X	33.5	%67
16	MP1	Z	0	%50
17	MP2	Z	83	%67
18	MP3	Z	30.2	%67
19	MP4	Z	52.6	%67
20	MP5	Z	52.6	%67
21	MP6	Z	94.1	%67
22	MP7	Z	0	%50
23	MP8	Z	30.2	%67
24	MP9	Z	45.1	%67
25	MP10	Z	45.1	%67
26	MP11	Z	45.1	%67
27	MP12	Z	9.3	%67
28	MP13	Z	126	%67
29	MP14	Z	18.6	%67
30	MP15	Z	19.3	%67

Member Point Loads (BLC 29 : Horizontal Seismic, Eh (60))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	%50
2	MP2	X	83	%67
3	MP3	X	30.3	%67
4	MP4	X	52.7	%67
5	MP5	X	52.7	%67
6	MP6	X	94.2	%67
7	MP7	X	0	%50



Member Point Loads (BLC 29 : Horizontal Seismic, Eh (60)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
8	MP8	X	30.3	%67
9	MP9	X	45.2	%67
10	MP10	X	45.2	%67
11	MP11	X	45.2	%67
12	MP12	X	9.3	%67
13	MP13	X	126	%67
14	MP14	X	18.6	%67
15	MP15	X	19.3	%67
16	MP1	Z	0	%50
17	MP2	Z	143.7	%67
18	MP3	Z	52.4	%67
19	MP4	Z	91.2	%67
20	MP5	Z	91.2	%67
21	MP6	Z	163.1	%67
22	MP7	Z	0	%50
23	MP8	Z	52.4	%67
24	MP9	Z	78.2	%67
25	MP10	Z	78.2	%67
26	MP11	Z	78.2	%67
27	MP12	Z	16.1	%67
28	MP13	Z	218.2	%67
29	MP14	Z	32.2	%67
30	MP15	Z	33.5	%67

Member Point Loads (BLC 30 : Horizontal Seismic, Eh (90))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	%50
2	MP2	X	0	%67
3	MP3	X	0	%67
4	MP4	X	0	%67
5	MP5	X	0	%67
6	MP6	X	0	%67
7	MP7	X	0	%50
8	MP8	X	0	%67
9	MP9	X	0	%67
10	MP10	X	0	%67
11	MP11	X	0	%67
12	MP12	X	0	%67
13	MP13	X	0	%67
14	MP14	X	0	%67
15	MP15	X	0	%67
16	MP1	Z	0	%50
17	MP2	Z	165.9	%67
18	MP3	Z	60.5	%67
19	MP4	Z	105.3	%67
20	MP5	Z	105.3	%67
21	MP6	Z	188.3	%67
22	MP7	Z	0	%50
23	MP8	Z	60.5	%67
24	MP9	Z	90.3	%67
25	MP10	Z	90.3	%67
26	MP11	Z	90.3	%67
27	MP12	Z	18.6	%67
28	MP13	Z	252	%67
29	MP14	Z	37.2	%67
30	MP15	Z	38.6	%67



Member Point Loads (BLC 31 : Horizontal Seismic, Eh (120))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	%50
2	MP2	X	-83	%67
3	MP3	X	-30.2	%67
4	MP4	X	-52.6	%67
5	MP5	X	-52.6	%67
6	MP6	X	-94.1	%67
7	MP7	X	0	%50
8	MP8	X	-30.2	%67
9	MP9	X	-45.1	%67
10	MP10	X	-45.1	%67
11	MP11	X	-45.1	%67
12	MP12	X	-9.3	%67
13	MP13	X	-126	%67
14	MP14	X	-18.6	%67
15	MP15	X	-19.3	%67
16	MP1	Z	0	%50
17	MP2	Z	143.7	%67
18	MP3	Z	52.4	%67
19	MP4	Z	91.2	%67
20	MP5	Z	91.2	%67
21	MP6	Z	163.1	%67
22	MP7	Z	0	%50
23	MP8	Z	52.4	%67
24	MP9	Z	78.2	%67
25	MP10	Z	78.2	%67
26	MP11	Z	78.2	%67
27	MP12	Z	16.1	%67
28	MP13	Z	218.2	%67
29	MP14	Z	32.2	%67
30	MP15	Z	33.5	%67

Member Point Loads (BLC 32 : Horizontal Seismic, Eh (150))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	%50
2	MP2	X	-143.7	%67
3	MP3	X	-52.4	%67
4	MP4	X	-91.2	%67
5	MP5	X	-91.2	%67
6	MP6	X	-163.1	%67
7	MP7	X	0	%50
8	MP8	X	-52.4	%67
9	MP9	X	-78.2	%67
10	MP10	X	-78.2	%67
11	MP11	X	-78.2	%67
12	MP12	X	-16.1	%67
13	MP13	X	-218.2	%67
14	MP14	X	-32.2	%67
15	MP15	X	-33.5	%67
16	MP1	Z	0	%50
17	MP2	Z	83	%67
18	MP3	Z	30.2	%67
19	MP4	Z	52.6	%67
20	MP5	Z	52.6	%67
21	MP6	Z	94.1	%67
22	MP7	Z	0	%50
23	MP8	Z	30.2	%67



Member Point Loads (BLC 32 : Horizontal Seismic, Eh (150)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
24	MP9	Z	45.1	%67
25	MP10	Z	45.1	%67
26	MP11	Z	45.1	%67
27	MP12	Z	9.3	%67
28	MP13	Z	126	%67
29	MP14	Z	18.6	%67
30	MP15	Z	19.3	%67

Member Point Loads (BLC 33 : Horizontal Seismic, Eh (180))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	%50
2	MP2	X	-165.9	%67
3	MP3	X	-60.5	%67
4	MP4	X	-105.3	%67
5	MP5	X	-105.3	%67
6	MP6	X	-188.3	%67
7	MP7	X	0	%50
8	MP8	X	-60.5	%67
9	MP9	X	-90.3	%67
10	MP10	X	-90.3	%67
11	MP11	X	-90.3	%67
12	MP12	X	-18.6	%67
13	MP13	X	-252	%67
14	MP14	X	-37.2	%67
15	MP15	X	-38.6	%67
16	MP1	Z	0	%50
17	MP2	Z	0	%67
18	MP3	Z	0	%67
19	MP4	Z	0	%67
20	MP5	Z	0	%67
21	MP6	Z	0	%67
22	MP7	Z	0	%50
23	MP8	Z	0	%67
24	MP9	Z	0	%67
25	MP10	Z	0	%67
26	MP11	Z	0	%67
27	MP12	Z	0	%67
28	MP13	Z	0	%67
29	MP14	Z	0	%67
30	MP15	Z	0	%67

Member Point Loads (BLC 34 : Horizontal Seismic, Eh (210))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	%50
2	MP2	X	-143.7	%67
3	MP3	X	-52.4	%67
4	MP4	X	-91.2	%67
5	MP5	X	-91.2	%67
6	MP6	X	-163.1	%67
7	MP7	X	0	%50
8	MP8	X	-52.4	%67
9	MP9	X	-78.2	%67
10	MP10	X	-78.2	%67
11	MP11	X	-78.2	%67
12	MP12	X	-16.1	%67
13	MP13	X	-218.2	%67



Member Point Loads (BLC 34 : Horizontal Seismic, Eh (210)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
14	MP14	X	-32.2	%67
15	MP15	X	-33.5	%67
16	MP1	Z	0	%50
17	MP2	Z	-83	%67
18	MP3	Z	-30.3	%67
19	MP4	Z	-52.7	%67
20	MP5	Z	-52.7	%67
21	MP6	Z	-94.2	%67
22	MP7	Z	0	%50
23	MP8	Z	-30.3	%67
24	MP9	Z	-45.2	%67
25	MP10	Z	-45.2	%67
26	MP11	Z	-45.2	%67
27	MP12	Z	-9.3	%67
28	MP13	Z	-126	%67
29	MP14	Z	-18.6	%67
30	MP15	Z	-19.3	%67

Member Point Loads (BLC 35 : Horizontal Seismic, Eh (240))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	%50
2	MP2	X	-83	%67
3	MP3	X	-30.3	%67
4	MP4	X	-52.7	%67
5	MP5	X	-52.7	%67
6	MP6	X	-94.2	%67
7	MP7	X	0	%50
8	MP8	X	-30.3	%67
9	MP9	X	-45.2	%67
10	MP10	X	-45.2	%67
11	MP11	X	-45.2	%67
12	MP12	X	-9.3	%67
13	MP13	X	-126	%67
14	MP14	X	-18.6	%67
15	MP15	X	-19.3	%67
16	MP1	Z	0	%50
17	MP2	Z	-143.7	%67
18	MP3	Z	-52.4	%67
19	MP4	Z	-91.2	%67
20	MP5	Z	-91.2	%67
21	MP6	Z	-163.1	%67
22	MP7	Z	0	%50
23	MP8	Z	-52.4	%67
24	MP9	Z	-78.2	%67
25	MP10	Z	-78.2	%67
26	MP11	Z	-78.2	%67
27	MP12	Z	-16.1	%67
28	MP13	Z	-218.2	%67
29	MP14	Z	-32.2	%67
30	MP15	Z	-33.5	%67

Member Point Loads (BLC 36 : Horizontal Seismic, Eh (270))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	%50
2	MP2	X	0	%67
3	MP3	X	0	%67



Member Point Loads (BLC 36 : Horizontal Seismic, Eh (270)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
4	MP4	X	0	%67
5	MP5	X	0	%67
6	MP6	X	0	%67
7	MP7	X	0	%50
8	MP8	X	0	%67
9	MP9	X	0	%67
10	MP10	X	0	%67
11	MP11	X	0	%67
12	MP12	X	0	%67
13	MP13	X	0	%67
14	MP14	X	0	%67
15	MP15	X	0	%67
16	MP1	Z	0	%50
17	MP2	Z	-165.9	%67
18	MP3	Z	-60.5	%67
19	MP4	Z	-105.3	%67
20	MP5	Z	-105.3	%67
21	MP6	Z	-188.3	%67
22	MP7	Z	0	%50
23	MP8	Z	-60.5	%67
24	MP9	Z	-90.3	%67
25	MP10	Z	-90.3	%67
26	MP11	Z	-90.3	%67
27	MP12	Z	-18.6	%67
28	MP13	Z	-252	%67
29	MP14	Z	-37.2	%67
30	MP15	Z	-38.6	%67

Member Point Loads (BLC 37 : Horizontal Seismic, Eh (300))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	0	%50
2	MP2	X	83	%67
3	MP3	X	30.3	%67
4	MP4	X	52.7	%67
5	MP5	X	52.7	%67
6	MP6	X	94.2	%67
7	MP7	X	0	%50
8	MP8	X	30.3	%67
9	MP9	X	45.2	%67
10	MP10	X	45.2	%67
11	MP11	X	45.2	%67
12	MP12	X	9.3	%67
13	MP13	X	126	%67
14	MP14	X	18.6	%67
15	MP15	X	19.3	%67
16	MP1	Z	0	%50
17	MP2	Z	-143.7	%67
18	MP3	Z	-52.4	%67
19	MP4	Z	-91.2	%67
20	MP5	Z	-91.2	%67
21	MP6	Z	-163.1	%67
22	MP7	Z	0	%50
23	MP8	Z	-52.4	%67
24	MP9	Z	-78.2	%67
25	MP10	Z	-78.2	%67
26	MP11	Z	-78.2	%67



Member Point Loads (BLC 37 : Horizontal Seismic, Eh (300)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
27	MP12	Z	-16.1	%67
28	MP13	Z	-218.2	%67
29	MP14	Z	-32.2	%67
30	MP15	Z	-33.5	%67

Member Point Loads (BLC 38 : Horizontal Seismic, Eh (330))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	0	%50
2	MP2	X	143.7	%67
3	MP3	X	52.4	%67
4	MP4	X	91.2	%67
5	MP5	X	91.2	%67
6	MP6	X	163.1	%67
7	MP7	X	0	%50
8	MP8	X	52.4	%67
9	MP9	X	78.2	%67
10	MP10	X	78.2	%67
11	MP11	X	78.2	%67
12	MP12	X	16.1	%67
13	MP13	X	218.2	%67
14	MP14	X	32.2	%67
15	MP15	X	33.5	%67
16	MP1	Z	0	%50
17	MP2	Z	-83	%67
18	MP3	Z	-30.3	%67
19	MP4	Z	-52.7	%67
20	MP5	Z	-52.7	%67
21	MP6	Z	-94.2	%67
22	MP7	Z	0	%50
23	MP8	Z	-30.3	%67
24	MP9	Z	-45.2	%67
25	MP10	Z	-45.2	%67
26	MP11	Z	-45.2	%67
27	MP12	Z	-9.3	%67
28	MP13	Z	-126	%67
29	MP14	Z	-18.6	%67
30	MP15	Z	-19.3	%67

Member Point Loads (BLC 39 : Maintenance Load, Lm (MP1))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	Y	-500	%50

Member Point Loads (BLC 40 : Maintenance Load, Lm (MP2))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP2	Y	-500	%50

Member Point Loads (BLC 41 : Maintenance Load, Lm (MP3))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP3	Y	-500	%50

Member Point Loads (BLC 42 : Maintenance Load, Lm (MP4))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP4	Y	-500	%50



Member Point Loads (BLC 43 : Maintenance Load, Lm (MP5))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP5	Y	-500	%50

Member Point Loads (BLC 44 : Maintenance Load, Lm (MP6))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP6	Y	-500	%50

Member Point Loads (BLC 45 : Maintenance Load, Lm (MP7))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP7	Y	-500	%50

Member Point Loads (BLC 46 : Maintenance Load, Lm (MP8))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP8	Y	-500	%50

Member Point Loads (BLC 47 : Maintenance Load, Lm (MP9))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP9	Y	-500	%50

Member Point Loads (BLC 48 : Maintenance Load, Lm (MP10))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP10	Y	-500	%50

Member Point Loads (BLC 49 : Maintenance Load, Lm (MP11))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP11	Y	-500	%50

Member Point Loads (BLC 50 : Maintenance Load, Lm (MP12))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP12	Y	-500	%50

Member Point Loads (BLC 51 : Maintenance Load, Lm (MP13))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP13	Y	-500	%50

Member Point Loads (BLC 52 : Maintenance Load, Lm (MP14))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP14	Y	-500	%50

Member Point Loads (BLC 53 : Maintenance Load, Lm (MP15))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP15	Y	-500	%50

Member Point Loads (BLC 75 : Maintenance Load, Lv (Pos. 1))

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

Member Point Loads (BLC 76 : Maintenance Load, Lv (Pos. 2))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	FM-0	Y	-250	%50



Member Point Loads (BLC 77 : Maintenance Load, Lv (Pos. 3))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	FM-0	Y	-250	%100

Member Point Loads (BLC 78 : Maintenance Load, Lv (Pos. 4))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	FM-120	Y	-250	0

Member Point Loads (BLC 79 : Maintenance Load, Lv (Pos. 5))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	FM-120	Y	-250	%50

Member Point Loads (BLC 80 : Maintenance Load, Lv (Pos. 6))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	FM-120	Y	-250	%100

Member Point Loads (BLC 81 : Maintenance Load, Lv (Pos. 7))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	FM-240	Y	-250	0

Member Point Loads (BLC 82 : Maintenance Load, Lv (Pos. 8))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	FM-240	Y	-250	%50

Member Point Loads (BLC 83 : Maintenance Load, Lv (Pos. 9))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	FM-240	Y	-250	%100

Member Point Loads (BLC 84 : Maintenance Load, Lv (Pos. 10))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	SA1	Y	-250	0

Member Point Loads (BLC 85 : Maintenance Load, Lv (Pos. 11))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	SA2	Y	-250	0

Member Point Loads (BLC 86 : Maintenance Load, Lv (Pos. 12))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	SA3	Y	-250	0

Member Point Loads (BLC 87 : Maintenance Load, Lv (Pos. 13))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	HR1	Y	-250	%50

Member Point Loads (BLC 88 : Maintenance Load, Lv (Pos. 14))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	HR2	Y	-250	%50

Member Point Loads (BLC 89 : Maintenance Load, Lv (Pos. 15))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	HR3	Y	-250	%50



Company : ETS, PLLC
 Designer : DHK
 Job Number : 196670.14
 Model Name : 528 WHEELERS FARM RD

Nov 1, 2019
 2:53 PM
 Checked By: JAA

Member Point Loads (BLC 175 : Antenna Wind Load (0 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP2	X	192.2	%25
4	MP2	X	274.6	%95.833
5	MP3	X	64	%54.514
6	MP3	X	64	%78.819
7	MP4	X	127.9	%25
8	MP4	X	182.7	%95.833
9	MP5	X	127.9	%25
10	MP5	X	182.7	%95.833
11	MP6	X	119.9	%25
12	MP6	X	171.3	%95.833
13	MP7	X	0	0
14	MP7	X	0	0
15	MP8	X	37.1	%54.514
16	MP8	X	37.1	%78.819
17	MP9	X	123.8	%42.056
18	MP9	X	123.8	%91.278
19	MP10	X	123.8	%42.056
20	MP10	X	123.8	%91.278
21	MP11	X	123.8	%42.056
22	MP11	X	123.8	%91.278
23	MP12	X	0	0
24	MP12	X	0	0
25	MP13	X	119.9	%25
26	MP13	X	171.3	%95.833
27	MP14	X	37.1	%54.514
28	MP14	X	37.1	%78.819
29	MP15	X	123.8	%42.056
30	MP15	X	123.8	%91.278
31	MP1	Z	0	0
32	MP1	Z	0	0
33	MP2	Z	0	0
34	MP2	Z	0	0
35	MP3	Z	0	0
36	MP3	Z	0	0
37	MP4	Z	0	0
38	MP4	Z	0	0
39	MP5	Z	0	0
40	MP5	Z	0	0
41	MP6	Z	0	0
42	MP6	Z	0	0
43	MP7	Z	0	0
44	MP7	Z	0	0
45	MP8	Z	0	0
46	MP8	Z	0	0
47	MP9	Z	0	0
48	MP9	Z	0	0
49	MP10	Z	0	0
50	MP10	Z	0	0
51	MP11	Z	0	0
52	MP11	Z	0	0
53	MP12	Z	0	0
54	MP12	Z	0	0
55	MP13	Z	0	0
56	MP13	Z	0	0
57	MP14	Z	0	0



Member Point Loads (BLC 175 : Antenna Wind Load (0 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
58	MP14	Z	0	0
59	MP15	Z	0	0
60	MP15	Z	0	0

Member Point Loads (BLC 176 : Antenna Wind Load (30 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP2	X	136.9	%25
4	MP2	X	195.5	%95.833
5	MP3	X	47.7	%54.514
6	MP3	X	47.7	%78.819
7	MP4	X	107.3	%25
8	MP4	X	153.3	%95.833
9	MP5	X	107.3	%25
10	MP5	X	153.3	%95.833
11	MP6	X	51.1	%25
12	MP6	X	73	%95.833
13	MP7	X	0	0
14	MP7	X	0	0
15	MP8	X	24.3	%54.514
16	MP8	X	24.3	%78.819
17	MP9	X	103.7	%42.056
18	MP9	X	103.7	%91.278
19	MP10	X	103.7	%42.056
20	MP10	X	103.7	%91.278
21	MP11	X	114.1	%42.056
22	MP11	X	114.1	%91.278
23	MP12	X	0	0
24	MP12	X	0	0
25	MP13	X	209.5	%25
26	MP13	X	299.2	%95.833
27	MP14	X	47.7	%54.514
28	MP14	X	47.7	%78.819
29	MP15	X	114.1	%42.056
30	MP15	X	114.1	%91.278
31	MP1	Z	0	0
32	MP1	Z	0	0
33	MP2	Z	79	%25
34	MP2	Z	112.9	%95.833
35	MP3	Z	27.5	%54.514
36	MP3	Z	27.5	%78.819
37	MP4	Z	61.9	%25
38	MP4	Z	88.5	%95.833
39	MP5	Z	61.9	%25
40	MP5	Z	88.5	%95.833
41	MP6	Z	29.5	%25
42	MP6	Z	42.1	%95.833
43	MP7	Z	0	0
44	MP7	Z	0	0
45	MP8	Z	14	%54.514
46	MP8	Z	14	%78.819
47	MP9	Z	59.9	%42.056
48	MP9	Z	59.9	%91.278
49	MP10	Z	59.9	%42.056
50	MP10	Z	59.9	%91.278



Member Point Loads (BLC 176 : Antenna Wind Load (30 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
51	MP11	Z	65.9	%42.056
52	MP11	Z	65.9	%91.278
53	MP12	Z	0	0
54	MP12	Z	0	0
55	MP13	Z	120.9	%25
56	MP13	Z	172.8	%95.833
57	MP14	Z	27.5	%54.514
58	MP14	Z	27.5	%78.819
59	MP15	Z	65.9	%42.056
60	MP15	Z	65.9	%91.278

Member Point Loads (BLC 177 : Antenna Wind Load (60 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP2	X	44.8	%25
4	MP2	X	64.1	%95.833
5	MP3	X	18.5	%54.514
6	MP3	X	18.5	%78.819
7	MP4	X	58	%25
8	MP4	X	82.8	%95.833
9	MP5	X	58	%25
10	MP5	X	82.8	%95.833
11	MP6	X	60	%25
12	MP6	X	85.7	%95.833
13	MP7	X	0	0
14	MP7	X	0	0
15	MP8	X	18.5	%54.514
16	MP8	X	18.5	%78.819
17	MP9	X	61.9	%42.056
18	MP9	X	61.9	%91.278
19	MP10	X	61.9	%42.056
20	MP10	X	61.9	%91.278
21	MP11	X	67.9	%42.056
22	MP11	X	67.9	%91.278
23	MP12	X	0	0
24	MP12	X	0	0
25	MP13	X	151.4	%25
26	MP13	X	216.3	%95.833
27	MP14	X	32	%54.514
28	MP14	X	32	%78.819
29	MP15	X	67.9	%42.056
30	MP15	X	67.9	%91.278
31	MP1	Z	0	0
32	MP1	Z	0	0
33	MP2	Z	77.7	%25
34	MP2	Z	111	%95.833
35	MP3	Z	32.1	%54.514
36	MP3	Z	32.1	%78.819
37	MP4	Z	100.4	%25
38	MP4	Z	143.4	%95.833
39	MP5	Z	100.4	%25
40	MP5	Z	143.4	%95.833
41	MP6	Z	103.9	%25
42	MP6	Z	148.4	%95.833
43	MP7	Z	0	0



Member Point Loads (BLC 177 : Antenna Wind Load (60 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
44	MP7	Z	0	0
45	MP8	Z	32.1	%54.514
46	MP8	Z	32.1	%78.819
47	MP9	Z	107.2	%42.056
48	MP9	Z	107.2	%91.278
49	MP10	Z	107.2	%42.056
50	MP10	Z	107.2	%91.278
51	MP11	Z	117.5	%42.056
52	MP11	Z	117.5	%91.278
53	MP12	Z	0	0
54	MP12	Z	0	0
55	MP13	Z	262.2	%25
56	MP13	Z	374.6	%95.833
57	MP14	Z	55.5	%54.514
58	MP14	Z	55.5	%78.819
59	MP15	Z	117.5	%42.056
60	MP15	Z	117.5	%91.278

Member Point Loads (BLC 178 : Antenna Wind Load (90 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP2	X	0	0
4	MP2	X	0	0
5	MP3	X	0	0
6	MP3	X	0	0
7	MP4	X	0	0
8	MP4	X	0	0
9	MP5	X	0	0
10	MP5	X	0	0
11	MP6	X	0	0
12	MP6	X	0	0
13	MP7	X	0	0
14	MP7	X	0	0
15	MP8	X	0	0
16	MP8	X	0	0
17	MP9	X	0	0
18	MP9	X	0	0
19	MP10	X	0	0
20	MP10	X	0	0
21	MP11	X	0	0
22	MP11	X	0	0
23	MP12	X	0	0
24	MP12	X	0	0
25	MP13	X	0	0
26	MP13	X	0	0
27	MP14	X	0	0
28	MP14	X	0	0
29	MP15	X	0	0
30	MP15	X	0	0
31	MP1	Z	0	0
32	MP1	Z	0	0
33	MP2	Z	55.5	%25
34	MP2	Z	79.3	%95.833
35	MP3	Z	28.1	%54.514
36	MP3	Z	28.1	%78.819



Member Point Loads (BLC 178 : Antenna Wind Load (90 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
37	MP4	Z	112	%25
38	MP4	Z	159.9	%95.833
39	MP5	Z	112	%25
40	MP5	Z	159.9	%95.833
41	MP6	Z	241.9	%25
42	MP6	Z	345.5	%95.833
43	MP7	Z	0	0
44	MP7	Z	0	0
45	MP8	Z	55.1	%54.514
46	MP8	Z	55.1	%78.819
47	MP9	Z	131.7	%42.056
48	MP9	Z	131.7	%91.278
49	MP10	Z	131.7	%42.056
50	MP10	Z	131.7	%91.278
51	MP11	Z	131.7	%42.056
52	MP11	Z	131.7	%91.278
53	MP12	Z	0	0
54	MP12	Z	0	0
55	MP13	Z	241.9	%25
56	MP13	Z	345.5	%95.833
57	MP14	Z	55.1	%54.514
58	MP14	Z	55.1	%78.819
59	MP15	Z	131.7	%42.056
60	MP15	Z	131.7	%91.278

Member Point Loads (BLC 179 : Antenna Wind Load (120 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP2	X	-44.8	%25
4	MP2	X	-64.1	%95.833
5	MP3	X	-18.5	%54.514
6	MP3	X	-18.5	%78.819
7	MP4	X	-58	%25
8	MP4	X	-82.8	%95.833
9	MP5	X	-58	%25
10	MP5	X	-82.8	%95.833
11	MP6	X	-151.4	%25
12	MP6	X	-216.3	%95.833
13	MP7	X	0	0
14	MP7	X	0	0
15	MP8	X	-32	%54.514
16	MP8	X	-32	%78.819
17	MP9	X	-67.9	%42.056
18	MP9	X	-67.9	%91.278
19	MP10	X	-67.9	%42.056
20	MP10	X	-67.9	%91.278
21	MP11	X	-61.9	%42.056
22	MP11	X	-61.9	%91.278
23	MP12	X	0	0
24	MP12	X	0	0
25	MP13	X	-60	%25
26	MP13	X	-85.7	%95.833
27	MP14	X	-18.5	%54.514
28	MP14	X	-18.5	%78.819
29	MP15	X	-61.9	%42.056



Member Point Loads (BLC 179 : Antenna Wind Load (120 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
30	MP15	X	-61.9	%91.278
31	MP1	Z	0	0
32	MP1	Z	0	0
33	MP2	Z	77.7	%25
34	MP2	Z	111	%95.833
35	MP3	Z	32.1	%54.514
36	MP3	Z	32.1	%78.819
37	MP4	Z	100.4	%25
38	MP4	Z	143.4	%95.833
39	MP5	Z	100.4	%25
40	MP5	Z	143.4	%95.833
41	MP6	Z	262.2	%25
42	MP6	Z	374.6	%95.833
43	MP7	Z	0	0
44	MP7	Z	0	0
45	MP8	Z	55.5	%54.514
46	MP8	Z	55.5	%78.819
47	MP9	Z	117.5	%42.056
48	MP9	Z	117.5	%91.278
49	MP10	Z	117.5	%42.056
50	MP10	Z	117.5	%91.278
51	MP11	Z	107.2	%42.056
52	MP11	Z	107.2	%91.278
53	MP12	Z	0	0
54	MP12	Z	0	0
55	MP13	Z	103.9	%25
56	MP13	Z	148.4	%95.833
57	MP14	Z	32.1	%54.514
58	MP14	Z	32.1	%78.819
59	MP15	Z	107.2	%42.056
60	MP15	Z	107.2	%91.278

Member Point Loads (BLC 180 : Antenna Wind Load (150 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP2	X	-136.9	%25
4	MP2	X	-195.5	%95.833
5	MP3	X	-47.7	%54.514
6	MP3	X	-47.7	%78.819
7	MP4	X	-107.3	%25
8	MP4	X	-153.3	%95.833
9	MP5	X	-107.3	%25
10	MP5	X	-153.3	%95.833
11	MP6	X	-209.5	%25
12	MP6	X	-299.2	%95.833
13	MP7	X	0	0
14	MP7	X	0	0
15	MP8	X	-47.7	%54.514
16	MP8	X	-47.7	%78.819
17	MP9	X	-114.1	%42.056
18	MP9	X	-114.1	%91.278
19	MP10	X	-114.1	%42.056
20	MP10	X	-114.1	%91.278
21	MP11	X	-103.7	%42.056
22	MP11	X	-103.7	%91.278



Member Point Loads (BLC 180 : Antenna Wind Load (150 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
23	MP12	X	0	0
24	MP12	X	0	0
25	MP13	X	-51.1	%25
26	MP13	X	-73	%95.833
27	MP14	X	-24.3	%54.514
28	MP14	X	-24.3	%78.819
29	MP15	X	-103.7	%42.056
30	MP15	X	-103.7	%91.278
31	MP1	Z	0	0
32	MP1	Z	0	0
33	MP2	Z	79	%25
34	MP2	Z	112.9	%95.833
35	MP3	Z	27.5	%54.514
36	MP3	Z	27.5	%78.819
37	MP4	Z	61.9	%25
38	MP4	Z	88.5	%95.833
39	MP5	Z	61.9	%25
40	MP5	Z	88.5	%95.833
41	MP6	Z	120.9	%25
42	MP6	Z	172.8	%95.833
43	MP7	Z	0	0
44	MP7	Z	0	0
45	MP8	Z	27.5	%54.514
46	MP8	Z	27.5	%78.819
47	MP9	Z	65.9	%42.056
48	MP9	Z	65.9	%91.278
49	MP10	Z	65.9	%42.056
50	MP10	Z	65.9	%91.278
51	MP11	Z	59.9	%42.056
52	MP11	Z	59.9	%91.278
53	MP12	Z	0	0
54	MP12	Z	0	0
55	MP13	Z	29.5	%25
56	MP13	Z	42.1	%95.833
57	MP14	Z	14	%54.514
58	MP14	Z	14	%78.819
59	MP15	Z	59.9	%42.056
60	MP15	Z	59.9	%91.278

Member Point Loads (BLC 181 : Antenna Wind Load (180 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP2	X	-192.2	%25
4	MP2	X	-274.6	%95.833
5	MP3	X	-64	%54.514
6	MP3	X	-64	%78.819
7	MP4	X	-127.9	%25
8	MP4	X	-182.7	%95.833
9	MP5	X	-127.9	%25
10	MP5	X	-182.7	%95.833
11	MP6	X	-119.9	%25
12	MP6	X	-171.3	%95.833
13	MP7	X	0	0
14	MP7	X	0	0
15	MP8	X	-37.1	%54.514



Member Point Loads (BLC 181 : Antenna Wind Load (180 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
16	MP8	X	-37.1	%78.819
17	MP9	X	-123.8	%42.056
18	MP9	X	-123.8	%91.278
19	MP10	X	-123.8	%42.056
20	MP10	X	-123.8	%91.278
21	MP11	X	-123.8	%42.056
22	MP11	X	-123.8	%91.278
23	MP12	X	0	0
24	MP12	X	0	0
25	MP13	X	-119.9	%25
26	MP13	X	-171.3	%95.833
27	MP14	X	-37.1	%54.514
28	MP14	X	-37.1	%78.819
29	MP15	X	-123.8	%42.056
30	MP15	X	-123.8	%91.278
31	MP1	Z	0	0
32	MP1	Z	0	0
33	MP2	Z	0	0
34	MP2	Z	0	0
35	MP3	Z	0	0
36	MP3	Z	0	0
37	MP4	Z	0	0
38	MP4	Z	0	0
39	MP5	Z	0	0
40	MP5	Z	0	0
41	MP6	Z	0	0
42	MP6	Z	0	0
43	MP7	Z	0	0
44	MP7	Z	0	0
45	MP8	Z	0	0
46	MP8	Z	0	0
47	MP9	Z	0	0
48	MP9	Z	0	0
49	MP10	Z	0	0
50	MP10	Z	0	0
51	MP11	Z	0	0
52	MP11	Z	0	0
53	MP12	Z	0	0
54	MP12	Z	0	0
55	MP13	Z	0	0
56	MP13	Z	0	0
57	MP14	Z	0	0
58	MP14	Z	0	0
59	MP15	Z	0	0
60	MP15	Z	0	0

Member Point Loads (BLC 182 : Antenna Wind Load (210 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP2	X	-136.9	%25
4	MP2	X	-195.5	%95.833
5	MP3	X	-47.7	%54.514
6	MP3	X	-47.7	%78.819
7	MP4	X	-107.3	%25
8	MP4	X	-153.3	%95.833



Member Point Loads (BLC 182 : Antenna Wind Load (210 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
9	MP5	X	-107.3	%25
10	MP5	X	-153.3	%95.833
11	MP6	X	-51.1	%25
12	MP6	X	-73	%95.833
13	MP7	X	0	0
14	MP7	X	0	0
15	MP8	X	-24.3	%54.514
16	MP8	X	-24.3	%78.819
17	MP9	X	-103.7	%42.056
18	MP9	X	-103.7	%91.278
19	MP10	X	-103.7	%42.056
20	MP10	X	-103.7	%91.278
21	MP11	X	-114.1	%42.056
22	MP11	X	-114.1	%91.278
23	MP12	X	0	0
24	MP12	X	0	0
25	MP13	X	-209.5	%25
26	MP13	X	-299.2	%95.833
27	MP14	X	-47.7	%54.514
28	MP14	X	-47.7	%78.819
29	MP15	X	-114.1	%42.056
30	MP15	X	-114.1	%91.278
31	MP1	Z	0	0
32	MP1	Z	0	0
33	MP2	Z	-79	%25
34	MP2	Z	-112.9	%95.833
35	MP3	Z	-27.5	%54.514
36	MP3	Z	-27.5	%78.819
37	MP4	Z	-61.9	%25
38	MP4	Z	-88.5	%95.833
39	MP5	Z	-61.9	%25
40	MP5	Z	-88.5	%95.833
41	MP6	Z	-29.5	%25
42	MP6	Z	-42.1	%95.833
43	MP7	Z	0	0
44	MP7	Z	0	0
45	MP8	Z	-14	%54.514
46	MP8	Z	-14	%78.819
47	MP9	Z	-59.9	%42.056
48	MP9	Z	-59.9	%91.278
49	MP10	Z	-59.9	%42.056
50	MP10	Z	-59.9	%91.278
51	MP11	Z	-65.9	%42.056
52	MP11	Z	-65.9	%91.278
53	MP12	Z	0	0
54	MP12	Z	0	0
55	MP13	Z	-120.9	%25
56	MP13	Z	-172.8	%95.833
57	MP14	Z	-27.5	%54.514
58	MP14	Z	-27.5	%78.819
59	MP15	Z	-65.9	%42.056
60	MP15	Z	-65.9	%91.278

Member Point Loads (BLC 183 : Antenna Wind Load (240 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	0



Company : ETS, PLLC
 Designer : DHK
 Job Number : 196670.14
 Model Name : 528 WHEELERS FARM RD

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Member Point Loads (BLC 183 : Antenna Wind Load (240 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.-lb-ft]	Location[in, %]
2	MP1	X	0	0
3	MP2	X	-44.8	%25
4	MP2	X	-64.1	%95.833
5	MP3	X	-18.5	%54.514
6	MP3	X	-18.5	%78.819
7	MP4	X	-58	%25
8	MP4	X	-82.8	%95.833
9	MP5	X	-58	%25
10	MP5	X	-82.8	%95.833
11	MP6	X	-60	%25
12	MP6	X	-85.7	%95.833
13	MP7	X	0	0
14	MP7	X	0	0
15	MP8	X	-18.5	%54.514
16	MP8	X	-18.5	%78.819
17	MP9	X	-61.9	%42.056
18	MP9	X	-61.9	%91.278
19	MP10	X	-61.9	%42.056
20	MP10	X	-61.9	%91.278
21	MP11	X	-67.9	%42.056
22	MP11	X	-67.9	%91.278
23	MP12	X	0	0
24	MP12	X	0	0
25	MP13	X	-151.4	%25
26	MP13	X	-216.3	%95.833
27	MP14	X	-32	%54.514
28	MP14	X	-32	%78.819
29	MP15	X	-67.9	%42.056
30	MP15	X	-67.9	%91.278
31	MP1	Z	0	0
32	MP1	Z	0	0
33	MP2	Z	-77.7	%25
34	MP2	Z	-111	%95.833
35	MP3	Z	-32.1	%54.514
36	MP3	Z	-32.1	%78.819
37	MP4	Z	-100.4	%25
38	MP4	Z	-143.4	%95.833
39	MP5	Z	-100.4	%25
40	MP5	Z	-143.4	%95.833
41	MP6	Z	-103.9	%25
42	MP6	Z	-148.4	%95.833
43	MP7	Z	0	0
44	MP7	Z	0	0
45	MP8	Z	-32.1	%54.514
46	MP8	Z	-32.1	%78.819
47	MP9	Z	-107.2	%42.056
48	MP9	Z	-107.2	%91.278
49	MP10	Z	-107.2	%42.056
50	MP10	Z	-107.2	%91.278
51	MP11	Z	-117.5	%42.056
52	MP11	Z	-117.5	%91.278
53	MP12	Z	0	0
54	MP12	Z	0	0
55	MP13	Z	-262.2	%25
56	MP13	Z	-374.6	%95.833
57	MP14	Z	-55.5	%54.514
58	MP14	Z	-55.5	%78.819



Company : ETS, PLLC
 Designer : DHK
 Job Number : 196670.14
 Model Name : 528 WHEELERS FARM RD

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Member Point Loads (BLC 183 : Antenna Wind Load (240 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
59	MP15	Z	-117.5	%42.056
60	MP15	Z	-117.5	%91.278

Member Point Loads (BLC 184 : Antenna Wind Load (270 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP2	X	0	0
4	MP2	X	0	0
5	MP3	X	0	0
6	MP3	X	0	0
7	MP4	X	0	0
8	MP4	X	0	0
9	MP5	X	0	0
10	MP5	X	0	0
11	MP6	X	0	0
12	MP6	X	0	0
13	MP7	X	0	0
14	MP7	X	0	0
15	MP8	X	0	0
16	MP8	X	0	0
17	MP9	X	0	0
18	MP9	X	0	0
19	MP10	X	0	0
20	MP10	X	0	0
21	MP11	X	0	0
22	MP11	X	0	0
23	MP12	X	0	0
24	MP12	X	0	0
25	MP13	X	0	0
26	MP13	X	0	0
27	MP14	X	0	0
28	MP14	X	0	0
29	MP15	X	0	0
30	MP15	X	0	0
31	MP1	Z	0	0
32	MP1	Z	0	0
33	MP2	Z	-55.5	%25
34	MP2	Z	-79.3	%95.833
35	MP3	Z	-28.1	%54.514
36	MP3	Z	-28.1	%78.819
37	MP4	Z	-112	%25
38	MP4	Z	-159.9	%95.833
39	MP5	Z	-112	%25
40	MP5	Z	-159.9	%95.833
41	MP6	Z	-241.9	%25
42	MP6	Z	-345.5	%95.833
43	MP7	Z	0	0
44	MP7	Z	0	0
45	MP8	Z	-55.1	%54.514
46	MP8	Z	-55.1	%78.819
47	MP9	Z	-131.7	%42.056
48	MP9	Z	-131.7	%91.278
49	MP10	Z	-131.7	%42.056
50	MP10	Z	-131.7	%91.278
51	MP11	Z	-131.7	%42.056



Member Point Loads (BLC 184 : Antenna Wind Load (270 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.%]
52	MP11	Z	-131.7	%91.278
53	MP12	Z	0	0
54	MP12	Z	0	0
55	MP13	Z	-241.9	%25
56	MP13	Z	-345.5	%95.833
57	MP14	Z	-55.1	%54.514
58	MP14	Z	-55.1	%78.819
59	MP15	Z	-131.7	%42.056
60	MP15	Z	-131.7	%91.278

Member Point Loads (BLC 185 : Antenna Wind Load (300 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.%]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP2	X	44.8	%25
4	MP2	X	64.1	%95.833
5	MP3	X	18.5	%54.514
6	MP3	X	18.5	%78.819
7	MP4	X	58	%25
8	MP4	X	82.8	%95.833
9	MP5	X	58	%25
10	MP5	X	82.8	%95.833
11	MP6	X	151.4	%25
12	MP6	X	216.3	%95.833
13	MP7	X	0	0
14	MP7	X	0	0
15	MP8	X	32	%54.514
16	MP8	X	32	%78.819
17	MP9	X	67.9	%42.056
18	MP9	X	67.9	%91.278
19	MP10	X	67.9	%42.056
20	MP10	X	67.9	%91.278
21	MP11	X	61.9	%42.056
22	MP11	X	61.9	%91.278
23	MP12	X	0	0
24	MP12	X	0	0
25	MP13	X	60	%25
26	MP13	X	85.7	%95.833
27	MP14	X	18.5	%54.514
28	MP14	X	18.5	%78.819
29	MP15	X	61.9	%42.056
30	MP15	X	61.9	%91.278
31	MP1	Z	0	0
32	MP1	Z	0	0
33	MP2	Z	-77.7	%25
34	MP2	Z	-111	%95.833
35	MP3	Z	-32.1	%54.514
36	MP3	Z	-32.1	%78.819
37	MP4	Z	-100.4	%25
38	MP4	Z	-143.4	%95.833
39	MP5	Z	-100.4	%25
40	MP5	Z	-143.4	%95.833
41	MP6	Z	-262.2	%25
42	MP6	Z	-374.6	%95.833
43	MP7	Z	0	0
44	MP7	Z	0	0



Member Point Loads (BLC 185 : Antenna Wind Load (300 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
45	MP8	Z	-55.5	%54.514
46	MP8	Z	-55.5	%78.819
47	MP9	Z	-117.5	%42.056
48	MP9	Z	-117.5	%91.278
49	MP10	Z	-117.5	%42.056
50	MP10	Z	-117.5	%91.278
51	MP11	Z	-107.2	%42.056
52	MP11	Z	-107.2	%91.278
53	MP12	Z	0	0
54	MP12	Z	0	0
55	MP13	Z	-103.9	%25
56	MP13	Z	-148.4	%95.833
57	MP14	Z	-32.1	%54.514
58	MP14	Z	-32.1	%78.819
59	MP15	Z	-107.2	%42.056
60	MP15	Z	-107.2	%91.278

Member Point Loads (BLC 186 : Antenna Wind Load (330 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP2	X	136.9	%25
4	MP2	X	195.5	%95.833
5	MP3	X	47.7	%54.514
6	MP3	X	47.7	%78.819
7	MP4	X	107.3	%25
8	MP4	X	153.3	%95.833
9	MP5	X	107.3	%25
10	MP5	X	153.3	%95.833
11	MP6	X	209.5	%25
12	MP6	X	299.2	%95.833
13	MP7	X	0	0
14	MP7	X	0	0
15	MP8	X	47.7	%54.514
16	MP8	X	47.7	%78.819
17	MP9	X	114.1	%42.056
18	MP9	X	114.1	%91.278
19	MP10	X	114.1	%42.056
20	MP10	X	114.1	%91.278
21	MP11	X	103.7	%42.056
22	MP11	X	103.7	%91.278
23	MP12	X	0	0
24	MP12	X	0	0
25	MP13	X	51.1	%25
26	MP13	X	73	%95.833
27	MP14	X	24.3	%54.514
28	MP14	X	24.3	%78.819
29	MP15	X	103.7	%42.056
30	MP15	X	103.7	%91.278
31	MP1	Z	0	0
32	MP1	Z	0	0
33	MP2	Z	-79	%25
34	MP2	Z	-112.9	%95.833
35	MP3	Z	-27.5	%54.514
36	MP3	Z	-27.5	%78.819
37	MP4	Z	-61.9	%25



Member Point Loads (BLC 186 : Antenna Wind Load (330 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
38	MP4	Z	-88.5	%95.833
39	MP5	Z	-61.9	%25
40	MP5	Z	-88.5	%95.833
41	MP6	Z	-120.9	%25
42	MP6	Z	-172.8	%95.833
43	MP7	Z	0	0
44	MP7	Z	0	0
45	MP8	Z	-27.5	%54.514
46	MP8	Z	-27.5	%78.819
47	MP9	Z	-65.9	%42.056
48	MP9	Z	-65.9	%91.278
49	MP10	Z	-65.9	%42.056
50	MP10	Z	-65.9	%91.278
51	MP11	Z	-59.9	%42.056
52	MP11	Z	-59.9	%91.278
53	MP12	Z	0	0
54	MP12	Z	0	0
55	MP13	Z	-29.5	%25
56	MP13	Z	-42.1	%95.833
57	MP14	Z	-14	%54.514
58	MP14	Z	-14	%78.819
59	MP15	Z	-59.9	%42.056
60	MP15	Z	-59.9	%91.278

Member Point Loads (BLC 187 : Antenna Wind on Ice (0 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP2	X	40.2	%25
4	MP2	X	57.5	%95.833
5	MP3	X	12.2	%54.514
6	MP3	X	12.2	%78.819
7	MP4	X	23.5	%25
8	MP4	X	33.5	%95.833
9	MP5	X	23.5	%25
10	MP5	X	33.5	%95.833
11	MP6	X	26.6	%25
12	MP6	X	38.1	%95.833
13	MP7	X	0	0
14	MP7	X	0	0
15	MP8	X	7.9	%54.514
16	MP8	X	7.9	%78.819
17	MP9	X	23.1	%42.056
18	MP9	X	23.1	%91.278
19	MP10	X	23.1	%42.056
20	MP10	X	23.1	%91.278
21	MP11	X	23.1	%42.056
22	MP11	X	23.1	%91.278
23	MP12	X	0	0
24	MP12	X	0	0
25	MP13	X	26.6	%25
26	MP13	X	38.1	%95.833
27	MP14	X	7.9	%54.514
28	MP14	X	7.9	%78.819
29	MP15	X	23.1	%42.056
30	MP15	X	23.1	%91.278



Member Point Loads (BLC 187 : Antenna Wind on Ice (0 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
31	MP1	Z	0	0
32	MP1	Z	0	0
33	MP2	Z	0	0
34	MP2	Z	0	0
35	MP3	Z	0	0
36	MP3	Z	0	0
37	MP4	Z	0	0
38	MP4	Z	0	0
39	MP5	Z	0	0
40	MP5	Z	0	0
41	MP6	Z	0	0
42	MP6	Z	0	0
43	MP7	Z	0	0
44	MP7	Z	0	0
45	MP8	Z	0	0
46	MP8	Z	0	0
47	MP9	Z	0	0
48	MP9	Z	0	0
49	MP10	Z	0	0
50	MP10	Z	0	0
51	MP11	Z	0	0
52	MP11	Z	0	0
53	MP12	Z	0	0
54	MP12	Z	0	0
55	MP13	Z	0	0
56	MP13	Z	0	0
57	MP14	Z	0	0
58	MP14	Z	0	0
59	MP15	Z	0	0
60	MP15	Z	0	0

Member Point Loads (BLC 188 : Antenna Wind on Ice (30 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP2	X	31.9	%25
4	MP2	X	45.6	%95.833
5	MP3	X	9.3	%54.514
6	MP3	X	9.3	%78.819
7	MP4	X	19.9	%25
8	MP4	X	28.4	%95.833
9	MP5	X	19.9	%25
10	MP5	X	28.4	%95.833
11	MP6	X	12.7	%25
12	MP6	X	18.2	%95.833
13	MP7	X	0	0
14	MP7	X	0	0
15	MP8	X	5.6	%54.514
16	MP8	X	5.6	%78.819
17	MP9	X	19.6	%42.056
18	MP9	X	19.6	%91.278
19	MP10	X	19.6	%42.056
20	MP10	X	19.6	%91.278
21	MP11	X	20.7	%42.056
22	MP11	X	20.7	%91.278
23	MP12	X	0	0



Member Point Loads (BLC 188 : Antenna Wind on Ice (30 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
24	MP12	X	0	0
25	MP13	X	43.8	%25
26	MP13	X	62.5	%95.833
27	MP14	X	9.3	%54.514
28	MP14	X	9.3	%78.819
29	MP15	X	20.7	%42.056
30	MP15	X	20.7	%91.278
31	MP1	Z	0	0
32	MP1	Z	0	0
33	MP2	Z	18.4	%25
34	MP2	Z	26.3	%95.833
35	MP3	Z	5.4	%54.514
36	MP3	Z	5.4	%78.819
37	MP4	Z	11.5	%25
38	MP4	Z	16.4	%95.833
39	MP5	Z	11.5	%25
40	MP5	Z	16.4	%95.833
41	MP6	Z	7.4	%25
42	MP6	Z	10.5	%95.833
43	MP7	Z	0	0
44	MP7	Z	0	0
45	MP8	Z	3.2	%54.514
46	MP8	Z	3.2	%78.819
47	MP9	Z	11.3	%42.056
48	MP9	Z	11.3	%91.278
49	MP10	Z	11.3	%42.056
50	MP10	Z	11.3	%91.278
51	MP11	Z	12	%42.056
52	MP11	Z	12	%91.278
53	MP12	Z	0	0
54	MP12	Z	0	0
55	MP13	Z	25.3	%25
56	MP13	Z	36.1	%95.833
57	MP14	Z	5.4	%54.514
58	MP14	Z	5.4	%78.819
59	MP15	Z	12	%42.056
60	MP15	Z	12	%91.278

Member Point Loads (BLC 189 : Antenna Wind on Ice (60 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP2	X	15	%25
4	MP2	X	21.4	%95.833
5	MP3	X	3.9	%54.514
6	MP3	X	3.9	%78.819
7	MP4	X	11	%25
8	MP4	X	15.7	%95.833
9	MP5	X	11	%25
10	MP5	X	15.7	%95.833
11	MP6	X	13.3	%25
12	MP6	X	19	%95.833
13	MP7	X	0	0
14	MP7	X	0	0
15	MP8	X	3.9	%54.514
16	MP8	X	3.9	%78.819



Member Point Loads (BLC 189 : Antenna Wind on Ice (60 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
17	MP9	X	11.5	%42.056
18	MP9	X	11.5	%91.278
19	MP10	X	11.5	%42.056
20	MP10	X	11.5	%91.278
21	MP11	X	12.2	%42.056
22	MP11	X	12.2	%91.278
23	MP12	X	0	0
24	MP12	X	0	0
25	MP13	X	31.2	%25
26	MP13	X	44.6	%95.833
27	MP14	X	6.1	%54.514
28	MP14	X	6.1	%78.819
29	MP15	X	12.2	%42.056
30	MP15	X	12.2	%91.278
31	MP1	Z	0	0
32	MP1	Z	0	0
33	MP2	Z	26	%25
34	MP2	Z	37.1	%95.833
35	MP3	Z	6.8	%54.514
36	MP3	Z	6.8	%78.819
37	MP4	Z	19	%25
38	MP4	Z	27.2	%95.833
39	MP5	Z	19	%25
40	MP5	Z	27.2	%95.833
41	MP6	Z	23.1	%25
42	MP6	Z	33	%95.833
43	MP7	Z	0	0
44	MP7	Z	0	0
45	MP8	Z	6.8	%54.514
46	MP8	Z	6.8	%78.819
47	MP9	Z	20	%42.056
48	MP9	Z	20	%91.278
49	MP10	Z	20	%42.056
50	MP10	Z	20	%91.278
51	MP11	Z	21.1	%42.056
52	MP11	Z	21.1	%91.278
53	MP12	Z	0	0
54	MP12	Z	0	0
55	MP13	Z	54.1	%25
56	MP13	Z	77.3	%95.833
57	MP14	Z	10.5	%54.514
58	MP14	Z	10.5	%78.819
59	MP15	Z	21.1	%42.056
60	MP15	Z	21.1	%91.278

Member Point Loads (BLC 190 : Antenna Wind on Ice (90 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP2	X	0	0
4	MP2	X	0	0
5	MP3	X	0	0
6	MP3	X	0	0
7	MP4	X	0	0
8	MP4	X	0	0
9	MP5	X	0	0



Member Point Loads (BLC 190 : Antenna Wind on Ice (90 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
10	MP5	X	0	0
11	MP6	X	0	0
12	MP6	X	0	0
13	MP7	X	0	0
14	MP7	X	0	0
15	MP8	X	0	0
16	MP8	X	0	0
17	MP9	X	0	0
18	MP9	X	0	0
19	MP10	X	0	0
20	MP10	X	0	0
21	MP11	X	0	0
22	MP11	X	0	0
23	MP12	X	0	0
24	MP12	X	0	0
25	MP13	X	0	0
26	MP13	X	0	0
27	MP14	X	0	0
28	MP14	X	0	0
29	MP15	X	0	0
30	MP15	X	0	0
31	MP1	Z	0	0
32	MP1	Z	0	0
33	MP2	Z	26.6	%25
34	MP2	Z	38	%95.833
35	MP3	Z	6.4	%54.514
36	MP3	Z	6.4	%78.819
37	MP4	Z	21.5	%25
38	MP4	Z	30.7	%95.833
39	MP5	Z	21.5	%25
40	MP5	Z	30.7	%95.833
41	MP6	Z	50.5	%25
42	MP6	Z	72.2	%95.833
43	MP7	Z	0	0
44	MP7	Z	0	0
45	MP8	Z	10.7	%54.514
46	MP8	Z	10.7	%78.819
47	MP9	Z	23.9	%42.056
48	MP9	Z	23.9	%91.278
49	MP10	Z	23.9	%42.056
50	MP10	Z	23.9	%91.278
51	MP11	Z	23.9	%42.056
52	MP11	Z	23.9	%91.278
53	MP12	Z	0	0
54	MP12	Z	0	0
55	MP13	Z	50.5	%25
56	MP13	Z	72.2	%95.833
57	MP14	Z	10.7	%54.514
58	MP14	Z	10.7	%78.819
59	MP15	Z	23.9	%42.056
60	MP15	Z	23.9	%91.278

Member Point Loads (BLC 191 : Antenna Wind on Ice (120 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	0	0
2	MP1	X	0	0



Member Point Loads (BLC 191 : Antenna Wind on Ice (120 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
3	MP2	X	-15	%25
4	MP2	X	-21.4	%95.833
5	MP3	X	-3.9	%54.514
6	MP3	X	-3.9	%78.819
7	MP4	X	-11	%25
8	MP4	X	-15.7	%95.833
9	MP5	X	-11	%25
10	MP5	X	-15.7	%95.833
11	MP6	X	-31.2	%25
12	MP6	X	-44.6	%95.833
13	MP7	X	0	0
14	MP7	X	0	0
15	MP8	X	-6.1	%54.514
16	MP8	X	-6.1	%78.819
17	MP9	X	-12.2	%42.056
18	MP9	X	-12.2	%91.278
19	MP10	X	-12.2	%42.056
20	MP10	X	-12.2	%91.278
21	MP11	X	-11.5	%42.056
22	MP11	X	-11.5	%91.278
23	MP12	X	0	0
24	MP12	X	0	0
25	MP13	X	-13.3	%25
26	MP13	X	-19	%95.833
27	MP14	X	-3.9	%54.514
28	MP14	X	-3.9	%78.819
29	MP15	X	-11.5	%42.056
30	MP15	X	-11.5	%91.278
31	MP1	Z	0	0
32	MP1	Z	0	0
33	MP2	Z	26	%25
34	MP2	Z	37.1	%95.833
35	MP3	Z	6.8	%54.514
36	MP3	Z	6.8	%78.819
37	MP4	Z	19	%25
38	MP4	Z	27.2	%95.833
39	MP5	Z	19	%25
40	MP5	Z	27.2	%95.833
41	MP6	Z	54.1	%25
42	MP6	Z	77.3	%95.833
43	MP7	Z	0	0
44	MP7	Z	0	0
45	MP8	Z	10.5	%54.514
46	MP8	Z	10.5	%78.819
47	MP9	Z	21.1	%42.056
48	MP9	Z	21.1	%91.278
49	MP10	Z	21.1	%42.056
50	MP10	Z	21.1	%91.278
51	MP11	Z	20	%42.056
52	MP11	Z	20	%91.278
53	MP12	Z	0	0
54	MP12	Z	0	0
55	MP13	Z	23.1	%25
56	MP13	Z	33	%95.833
57	MP14	Z	6.8	%54.514
58	MP14	Z	6.8	%78.819
59	MP15	Z	20	%42.056



Company : ETS, PLLC
 Designer : DHK
 Job Number : 196670.14
 Model Name : 528 WHEELERS FARM RD

Nov 1, 2019
 2:53 PM
 Checked By: JAA

Member Point Loads (BLC 191 : Antenna Wind on Ice (120 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
60	MP15	Z	20	%91.278

Member Point Loads (BLC 192 : Antenna Wind on Ice (150 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP2	X	-31.9	%25
4	MP2	X	-45.6	%95.833
5	MP3	X	-9.3	%54.514
6	MP3	X	-9.3	%78.819
7	MP4	X	-19.9	%25
8	MP4	X	-28.4	%95.833
9	MP5	X	-19.9	%25
10	MP5	X	-28.4	%95.833
11	MP6	X	-43.8	%25
12	MP6	X	-62.5	%95.833
13	MP7	X	0	0
14	MP7	X	0	0
15	MP8	X	-9.3	%54.514
16	MP8	X	-9.3	%78.819
17	MP9	X	-20.7	%42.056
18	MP9	X	-20.7	%91.278
19	MP10	X	-20.7	%42.056
20	MP10	X	-20.7	%91.278
21	MP11	X	-19.6	%42.056
22	MP11	X	-19.6	%91.278
23	MP12	X	0	0
24	MP12	X	0	0
25	MP13	X	-12.7	%25
26	MP13	X	-18.2	%95.833
27	MP14	X	-5.6	%54.514
28	MP14	X	-5.6	%78.819
29	MP15	X	-19.6	%42.056
30	MP15	X	-19.6	%91.278
31	MP1	Z	0	0
32	MP1	Z	0	0
33	MP2	Z	18.4	%25
34	MP2	Z	26.3	%95.833
35	MP3	Z	5.4	%54.514
36	MP3	Z	5.4	%78.819
37	MP4	Z	11.5	%25
38	MP4	Z	16.4	%95.833
39	MP5	Z	11.5	%25
40	MP5	Z	16.4	%95.833
41	MP6	Z	25.3	%25
42	MP6	Z	36.1	%95.833
43	MP7	Z	0	0
44	MP7	Z	0	0
45	MP8	Z	5.4	%54.514
46	MP8	Z	5.4	%78.819
47	MP9	Z	12	%42.056
48	MP9	Z	12	%91.278
49	MP10	Z	12	%42.056
50	MP10	Z	12	%91.278
51	MP11	Z	11.3	%42.056
52	MP11	Z	11.3	%91.278



Member Point Loads (BLC 192 : Antenna Wind on Ice (150 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
53	MP12	Z	0	0
54	MP12	Z	0	0
55	MP13	Z	7.4	%25
56	MP13	Z	10.5	%95.833
57	MP14	Z	3.2	%54.514
58	MP14	Z	3.2	%78.819
59	MP15	Z	11.3	%42.056
60	MP15	Z	11.3	%91.278

Member Point Loads (BLC 193 : Antenna Wind on Ice (180 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP2	X	-40.2	%25
4	MP2	X	-57.5	%95.833
5	MP3	X	-12.2	%54.514
6	MP3	X	-12.2	%78.819
7	MP4	X	-23.5	%25
8	MP4	X	-33.5	%95.833
9	MP5	X	-23.5	%25
10	MP5	X	-33.5	%95.833
11	MP6	X	-26.6	%25
12	MP6	X	-38.1	%95.833
13	MP7	X	0	0
14	MP7	X	0	0
15	MP8	X	-7.9	%54.514
16	MP8	X	-7.9	%78.819
17	MP9	X	-23.1	%42.056
18	MP9	X	-23.1	%91.278
19	MP10	X	-23.1	%42.056
20	MP10	X	-23.1	%91.278
21	MP11	X	-23.1	%42.056
22	MP11	X	-23.1	%91.278
23	MP12	X	0	0
24	MP12	X	0	0
25	MP13	X	-26.6	%25
26	MP13	X	-38.1	%95.833
27	MP14	X	-7.9	%54.514
28	MP14	X	-7.9	%78.819
29	MP15	X	-23.1	%42.056
30	MP15	X	-23.1	%91.278
31	MP1	Z	0	0
32	MP1	Z	0	0
33	MP2	Z	0	0
34	MP2	Z	0	0
35	MP3	Z	0	0
36	MP3	Z	0	0
37	MP4	Z	0	0
38	MP4	Z	0	0
39	MP5	Z	0	0
40	MP5	Z	0	0
41	MP6	Z	0	0
42	MP6	Z	0	0
43	MP7	Z	0	0
44	MP7	Z	0	0
45	MP8	Z	0	0



Member Point Loads (BLC 193 : Antenna Wind on Ice (180 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.%]
46	MP8	Z	0	0
47	MP9	Z	0	0
48	MP9	Z	0	0
49	MP10	Z	0	0
50	MP10	Z	0	0
51	MP11	Z	0	0
52	MP11	Z	0	0
53	MP12	Z	0	0
54	MP12	Z	0	0
55	MP13	Z	0	0
56	MP13	Z	0	0
57	MP14	Z	0	0
58	MP14	Z	0	0
59	MP15	Z	0	0
60	MP15	Z	0	0

Member Point Loads (BLC 194 : Antenna Wind on Ice (210 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.%]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP2	X	-31.9	%25
4	MP2	X	-45.6	%95.833
5	MP3	X	-9.3	%54.514
6	MP3	X	-9.3	%78.819
7	MP4	X	-19.9	%25
8	MP4	X	-28.4	%95.833
9	MP5	X	-19.9	%25
10	MP5	X	-28.4	%95.833
11	MP6	X	-12.7	%25
12	MP6	X	-18.2	%95.833
13	MP7	X	0	0
14	MP7	X	0	0
15	MP8	X	-5.6	%54.514
16	MP8	X	-5.6	%78.819
17	MP9	X	-19.6	%42.056
18	MP9	X	-19.6	%91.278
19	MP10	X	-19.6	%42.056
20	MP10	X	-19.6	%91.278
21	MP11	X	-20.7	%42.056
22	MP11	X	-20.7	%91.278
23	MP12	X	0	0
24	MP12	X	0	0
25	MP13	X	-43.8	%25
26	MP13	X	-62.5	%95.833
27	MP14	X	-9.3	%54.514
28	MP14	X	-9.3	%78.819
29	MP15	X	-20.7	%42.056
30	MP15	X	-20.7	%91.278
31	MP1	Z	0	0
32	MP1	Z	0	0
33	MP2	Z	-18.4	%25
34	MP2	Z	-26.3	%95.833
35	MP3	Z	-5.4	%54.514
36	MP3	Z	-5.4	%78.819
37	MP4	Z	-11.5	%25
38	MP4	Z	-16.4	%95.833



Member Point Loads (BLC 194 : Antenna Wind on Ice (210 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
39	MP5	Z	-11.5	%25
40	MP5	Z	-16.4	%95.833
41	MP6	Z	-7.4	%25
42	MP6	Z	-10.5	%95.833
43	MP7	Z	0	0
44	MP7	Z	0	0
45	MP8	Z	-3.2	%54.514
46	MP8	Z	-3.2	%78.819
47	MP9	Z	-11.3	%42.056
48	MP9	Z	-11.3	%91.278
49	MP10	Z	-11.3	%42.056
50	MP10	Z	-11.3	%91.278
51	MP11	Z	-12	%42.056
52	MP11	Z	-12	%91.278
53	MP12	Z	0	0
54	MP12	Z	0	0
55	MP13	Z	-25.3	%25
56	MP13	Z	-36.1	%95.833
57	MP14	Z	-5.4	%54.514
58	MP14	Z	-5.4	%78.819
59	MP15	Z	-12	%42.056
60	MP15	Z	-12	%91.278

Member Point Loads (BLC 195 : Antenna Wind on Ice (240 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP2	X	-15	%25
4	MP2	X	-21.4	%95.833
5	MP3	X	-3.9	%54.514
6	MP3	X	-3.9	%78.819
7	MP4	X	-11	%25
8	MP4	X	-15.7	%95.833
9	MP5	X	-11	%25
10	MP5	X	-15.7	%95.833
11	MP6	X	-13.3	%25
12	MP6	X	-19	%95.833
13	MP7	X	0	0
14	MP7	X	0	0
15	MP8	X	-3.9	%54.514
16	MP8	X	-3.9	%78.819
17	MP9	X	-11.5	%42.056
18	MP9	X	-11.5	%91.278
19	MP10	X	-11.5	%42.056
20	MP10	X	-11.5	%91.278
21	MP11	X	-12.2	%42.056
22	MP11	X	-12.2	%91.278
23	MP12	X	0	0
24	MP12	X	0	0
25	MP13	X	-31.2	%25
26	MP13	X	-44.6	%95.833
27	MP14	X	-6.1	%54.514
28	MP14	X	-6.1	%78.819
29	MP15	X	-12.2	%42.056
30	MP15	X	-12.2	%91.278
31	MP1	Z	0	0



Member Point Loads (BLC 195 : Antenna Wind on Ice (240 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.%]
32	MP1	Z	0	0
33	MP2	Z	-26	%25
34	MP2	Z	-37.1	%95.833
35	MP3	Z	-6.8	%54.514
36	MP3	Z	-6.8	%78.819
37	MP4	Z	-19	%25
38	MP4	Z	-27.2	%95.833
39	MP5	Z	-19	%25
40	MP5	Z	-27.2	%95.833
41	MP6	Z	-23.1	%25
42	MP6	Z	-33	%95.833
43	MP7	Z	0	0
44	MP7	Z	0	0
45	MP8	Z	-6.8	%54.514
46	MP8	Z	-6.8	%78.819
47	MP9	Z	-20	%42.056
48	MP9	Z	-20	%91.278
49	MP10	Z	-20	%42.056
50	MP10	Z	-20	%91.278
51	MP11	Z	-21.1	%42.056
52	MP11	Z	-21.1	%91.278
53	MP12	Z	0	0
54	MP12	Z	0	0
55	MP13	Z	-54.1	%25
56	MP13	Z	-77.3	%95.833
57	MP14	Z	-10.5	%54.514
58	MP14	Z	-10.5	%78.819
59	MP15	Z	-21.1	%42.056
60	MP15	Z	-21.1	%91.278

Member Point Loads (BLC 196 : Antenna Wind on Ice (270 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.%]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP2	X	0	0
4	MP2	X	0	0
5	MP3	X	0	0
6	MP3	X	0	0
7	MP4	X	0	0
8	MP4	X	0	0
9	MP5	X	0	0
10	MP5	X	0	0
11	MP6	X	0	0
12	MP6	X	0	0
13	MP7	X	0	0
14	MP7	X	0	0
15	MP8	X	0	0
16	MP8	X	0	0
17	MP9	X	0	0
18	MP9	X	0	0
19	MP10	X	0	0
20	MP10	X	0	0
21	MP11	X	0	0
22	MP11	X	0	0
23	MP12	X	0	0
24	MP12	X	0	0



Member Point Loads (BLC 196 : Antenna Wind on Ice (270 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
25	MP13	X	0	0
26	MP13	X	0	0
27	MP14	X	0	0
28	MP14	X	0	0
29	MP15	X	0	0
30	MP15	X	0	0
31	MP1	Z	0	0
32	MP1	Z	0	0
33	MP2	Z	-26.6	%25
34	MP2	Z	-38	%95.833
35	MP3	Z	-6.4	%54.514
36	MP3	Z	-6.4	%78.819
37	MP4	Z	-21.5	%25
38	MP4	Z	-30.7	%95.833
39	MP5	Z	-21.5	%25
40	MP5	Z	-30.7	%95.833
41	MP6	Z	-50.5	%25
42	MP6	Z	-72.2	%95.833
43	MP7	Z	0	0
44	MP7	Z	0	0
45	MP8	Z	-10.7	%54.514
46	MP8	Z	-10.7	%78.819
47	MP9	Z	-23.9	%42.056
48	MP9	Z	-23.9	%91.278
49	MP10	Z	-23.9	%42.056
50	MP10	Z	-23.9	%91.278
51	MP11	Z	-23.9	%42.056
52	MP11	Z	-23.9	%91.278
53	MP12	Z	0	0
54	MP12	Z	0	0
55	MP13	Z	-50.5	%25
56	MP13	Z	-72.2	%95.833
57	MP14	Z	-10.7	%54.514
58	MP14	Z	-10.7	%78.819
59	MP15	Z	-23.9	%42.056
60	MP15	Z	-23.9	%91.278

Member Point Loads (BLC 197 : Antenna Wind on Ice (300 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP2	X	15	%25
4	MP2	X	21.4	%95.833
5	MP3	X	3.9	%54.514
6	MP3	X	3.9	%78.819
7	MP4	X	11	%25
8	MP4	X	15.7	%95.833
9	MP5	X	11	%25
10	MP5	X	15.7	%95.833
11	MP6	X	31.2	%25
12	MP6	X	44.6	%95.833
13	MP7	X	0	0
14	MP7	X	0	0
15	MP8	X	6.1	%54.514
16	MP8	X	6.1	%78.819
17	MP9	X	12.2	%42.056



Member Point Loads (BLC 197 : Antenna Wind on Ice (300 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
18	MP9	X	12.2	%91.278
19	MP10	X	12.2	%42.056
20	MP10	X	12.2	%91.278
21	MP11	X	11.5	%42.056
22	MP11	X	11.5	%91.278
23	MP12	X	0	0
24	MP12	X	0	0
25	MP13	X	13.3	%25
26	MP13	X	19	%95.833
27	MP14	X	3.9	%54.514
28	MP14	X	3.9	%78.819
29	MP15	X	11.5	%42.056
30	MP15	X	11.5	%91.278
31	MP1	Z	0	0
32	MP1	Z	0	0
33	MP2	Z	-26	%25
34	MP2	Z	-37.1	%95.833
35	MP3	Z	-6.8	%54.514
36	MP3	Z	-6.8	%78.819
37	MP4	Z	-19	%25
38	MP4	Z	-27.2	%95.833
39	MP5	Z	-19	%25
40	MP5	Z	-27.2	%95.833
41	MP6	Z	-54.1	%25
42	MP6	Z	-77.3	%95.833
43	MP7	Z	0	0
44	MP7	Z	0	0
45	MP8	Z	-10.5	%54.514
46	MP8	Z	-10.5	%78.819
47	MP9	Z	-21.1	%42.056
48	MP9	Z	-21.1	%91.278
49	MP10	Z	-21.1	%42.056
50	MP10	Z	-21.1	%91.278
51	MP11	Z	-20	%42.056
52	MP11	Z	-20	%91.278
53	MP12	Z	0	0
54	MP12	Z	0	0
55	MP13	Z	-23.1	%25
56	MP13	Z	-33	%95.833
57	MP14	Z	-6.8	%54.514
58	MP14	Z	-6.8	%78.819
59	MP15	Z	-20	%42.056
60	MP15	Z	-20	%91.278

Member Point Loads (BLC 198 : Antenna Wind on Ice (330 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP2	X	31.9	%25
4	MP2	X	45.6	%95.833
5	MP3	X	9.3	%54.514
6	MP3	X	9.3	%78.819
7	MP4	X	19.9	%25
8	MP4	X	28.4	%95.833
9	MP5	X	19.9	%25
10	MP5	X	28.4	%95.833



Member Point Loads (BLC 198 : Antenna Wind on Ice (330 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
11	MP6	X	43.8	%25
12	MP6	X	62.5	%95.833
13	MP7	X	0	0
14	MP7	X	0	0
15	MP8	X	9.3	%54.514
16	MP8	X	9.3	%78.819
17	MP9	X	20.7	%42.056
18	MP9	X	20.7	%91.278
19	MP10	X	20.7	%42.056
20	MP10	X	20.7	%91.278
21	MP11	X	19.6	%42.056
22	MP11	X	19.6	%91.278
23	MP12	X	0	0
24	MP12	X	0	0
25	MP13	X	12.7	%25
26	MP13	X	18.2	%95.833
27	MP14	X	5.6	%54.514
28	MP14	X	5.6	%78.819
29	MP15	X	19.6	%42.056
30	MP15	X	19.6	%91.278
31	MP1	Z	0	0
32	MP1	Z	0	0
33	MP2	Z	-18.4	%25
34	MP2	Z	-26.3	%95.833
35	MP3	Z	-5.4	%54.514
36	MP3	Z	-5.4	%78.819
37	MP4	Z	-11.5	%25
38	MP4	Z	-16.4	%95.833
39	MP5	Z	-11.5	%25
40	MP5	Z	-16.4	%95.833
41	MP6	Z	-25.3	%25
42	MP6	Z	-36.1	%95.833
43	MP7	Z	0	0
44	MP7	Z	0	0
45	MP8	Z	-5.4	%54.514
46	MP8	Z	-5.4	%78.819
47	MP9	Z	-12	%42.056
48	MP9	Z	-12	%91.278
49	MP10	Z	-12	%42.056
50	MP10	Z	-12	%91.278
51	MP11	Z	-11.3	%42.056
52	MP11	Z	-11.3	%91.278
53	MP12	Z	0	0
54	MP12	Z	0	0
55	MP13	Z	-7.4	%25
56	MP13	Z	-10.5	%95.833
57	MP14	Z	-3.2	%54.514
58	MP14	Z	-3.2	%78.819
59	MP15	Z	-11.3	%42.056
60	MP15	Z	-11.3	%91.278

Member Distributed Loads (BLC 2 : Wind Load (0 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	BPL-1	X	12.6	12.6	0	0
2	BPL-2	X	12.6	12.6	0	0



Company : ETS, PLLC
 Designer : DHK
 Job Number : 196670.14
 Model Name : 528 WHEELERS FARM RD

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Member Distributed Loads (BLC 2 : Wind Load (0 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]	
3	BPL-3	X	12.6	12.6	0	0
4	BPL-4	X	12.6	12.6	0	0
5	BPL-5	X	12.6	12.6	0	0
6	BPL-6	X	12.6	12.6	0	0
7	BRACE-1	X	23.2	23.2	0	0
8	BRACE-2	X	23.2	23.2	0	0
9	BRACE-3	X	23.2	23.2	0	0
10	CORNER-PL-1	X	25.2	25.2	0	0
11	CORNER-PL-2	X	25.2	25.2	0	0
12	CORNER-PL-3	X	25.2	25.2	0	0
13	FM-0	X	14.5	14.5	0	0
14	FM-120	X	14.5	14.5	0	0
15	FM-240	X	14.5	14.5	0	0
16	GRATE-L-0-1	X	12.2	12.2	0	0
17	GRATE-L-0-2	X	12.2	12.2	0	0
18	GRATE-L-120-1	X	12.2	12.2	0	0
19	GRATE-L-120-2	X	12.2	12.2	0	0
20	GRATE-L-240-1	X	12.2	12.2	0	0
21	GRATE-L-240-2	X	12.2	12.2	0	0
22	PL-0	X	0	0	0	0
23	PL-120	X	31.4	31.4	0	0
24	PL-240	X	31.4	31.4	0	0
25	COR1	X	25.2	25.2	0	0
26	COR2	X	25.2	25.2	0	0
27	COR3	X	25.2	25.2	0	0
28	HR1	X	10.6	10.6	0	0
29	HR2	X	10.6	10.6	0	0
30	HR3	X	10.6	10.6	0	0
31	SA1	X	13.8	13.8	0	0
32	SA2	X	13.8	13.8	0	0
33	SA3	X	13.8	13.8	0	0
34	HR1	X	10.6	10.6	0	0
35	HR2	X	10.6	10.6	0	0
36	HR3	X	10.6	10.6	0	0
37	KIK3	X	10.6	10.6	0	0
38	KIK2	X	10.6	10.6	0	0
39	KIK1	X	10.6	10.6	0	0
40	BPL-1	Z	0	0	0	0
41	BPL-2	Z	0	0	0	0
42	BPL-3	Z	0	0	0	0
43	BPL-4	Z	0	0	0	0
44	BPL-5	Z	0	0	0	0
45	BPL-6	Z	0	0	0	0
46	BRACE-1	Z	0	0	0	0
47	BRACE-2	Z	0	0	0	0
48	BRACE-3	Z	0	0	0	0
49	CORNER-PL-1	Z	0	0	0	0
50	CORNER-PL-2	Z	0	0	0	0
51	CORNER-PL-3	Z	0	0	0	0
52	FM-0	Z	0	0	0	0
53	FM-120	Z	0	0	0	0
54	FM-240	Z	0	0	0	0
55	GRATE-L-0-1	Z	0	0	0	0
56	GRATE-L-0-2	Z	0	0	0	0
57	GRATE-L-120-1	Z	0	0	0	0
58	GRATE-L-120-2	Z	0	0	0	0
59	GRATE-L-240-1	Z	0	0	0	0



Member Distributed Loads (BLC 2 : Wind Load (0 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in, %]	End Location[in, %]
60	GRATE-L-240-2	Z	0	0	0	0
61	PL-0	Z	0	0	0	0
62	PL-120	Z	0	0	0	0
63	PL-240	Z	0	0	0	0
64	COR1	Z	0	0	0	0
65	COR2	Z	0	0	0	0
66	COR3	Z	0	0	0	0
67	HR1	Z	0	0	0	0
68	HR2	Z	0	0	0	0
69	HR3	Z	0	0	0	0
70	SA1	Z	0	0	0	0
71	SA2	Z	0	0	0	0
72	SA3	Z	0	0	0	0
73	HR1	Z	0	0	0	0
74	HR2	Z	0	0	0	0
75	HR3	Z	0	0	0	0
76	KIK3	Z	0	0	0	0
77	KIK2	Z	0	0	0	0
78	KIK1	Z	0	0	0	0

Member Distributed Loads (BLC 3 : Wind Load (30 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in, %]	End Location[in, %]
1	BPL-1	X	10.9	10.9	0	0
2	BPL-2	X	10.9	10.9	0	0
3	BPL-3	X	0	0	0	0
4	BPL-4	X	0	0	0	0
5	BPL-5	X	10.9	10.9	0	0
6	BPL-6	X	10.9	10.9	0	0
7	BRACE-1	X	0	0	0	0
8	BRACE-2	X	20.1	20.1	0	0
9	BRACE-3	X	20.1	20.1	0	0
10	CORNER-PL-1	X	0	0	0	0
11	CORNER-PL-2	X	21.9	21.9	0	0
12	CORNER-PL-3	X	21.9	21.9	0	0
13	FM-0	X	12.6	12.6	0	0
14	FM-120	X	0	0	0	0
15	FM-240	X	12.6	12.6	0	0
16	GRATE-L-0-1	X	10.5	10.5	0	0
17	GRATE-L-0-2	X	10.5	10.5	0	0
18	GRATE-L-120-1	X	0	0	0	0
19	GRATE-L-120-2	X	0	0	0	0
20	GRATE-L-240-1	X	10.5	10.5	0	0
21	GRATE-L-240-2	X	10.5	10.5	0	0
22	PL-0	X	27.2	27.2	0	0
23	PL-120	X	27.2	27.2	0	0
24	PL-240	X	27.2	27.2	0	0
25	COR1	X	0	0	0	0
26	COR2	X	21.9	21.9	0	0
27	COR3	X	21.9	21.9	0	0
28	HR1	X	9.2	9.2	0	0
29	HR2	X	0	0	0	0
30	HR3	X	9.2	9.2	0	0
31	SA1	X	12	12	0	0
32	SA2	X	12	12	0	0
33	SA3	X	12	12	0	0
34	HR1	X	9.2	9.2	0	0



Member Distributed Loads (BLC 3 : Wind Load (30 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
35	HR2	X	0	0	0	0
36	HR3	X	9.2	9.2	0	0
37	KIK3	X	9.2	9.2	0	0
38	KIK2	X	9.2	9.2	0	0
39	KIK1	X	9.2	9.2	0	0
40	BPL-1	Z	6.3	6.3	0	0
41	BPL-2	Z	6.3	6.3	0	0
42	BPL-3	Z	0	0	0	0
43	BPL-4	Z	0	0	0	0
44	BPL-5	Z	6.3	6.3	0	0
45	BPL-6	Z	6.3	6.3	0	0
46	BRACE-1	Z	0	0	0	0
47	BRACE-2	Z	11.6	11.6	0	0
48	BRACE-3	Z	11.6	11.6	0	0
49	CORNER-PL-1	Z	0	0	0	0
50	CORNER-PL-2	Z	12.6	12.6	0	0
51	CORNER-PL-3	Z	12.6	12.6	0	0
52	FM-0	Z	7.3	7.3	0	0
53	FM-120	Z	0	0	0	0
54	FM-240	Z	7.3	7.3	0	0
55	GRATE-L-0-1	Z	6.1	6.1	0	0
56	GRATE-L-0-2	Z	6.1	6.1	0	0
57	GRATE-L-120-1	Z	0	0	0	0
58	GRATE-L-120-2	Z	0	0	0	0
59	GRATE-L-240-1	Z	6.1	6.1	0	0
60	GRATE-L-240-2	Z	6.1	6.1	0	0
61	PL-0	Z	15.7	15.7	0	0
62	PL-120	Z	15.7	15.7	0	0
63	PL-240	Z	15.7	15.7	0	0
64	COR1	Z	0	0	0	0
65	COR2	Z	12.6	12.6	0	0
66	COR3	Z	12.6	12.6	0	0
67	HR1	Z	5.3	5.3	0	0
68	HR2	Z	0	0	0	0
69	HR3	Z	5.3	5.3	0	0
70	SA1	Z	6.9	6.9	0	0
71	SA2	Z	6.9	6.9	0	0
72	SA3	Z	6.9	6.9	0	0
73	HR1	Z	5.3	5.3	0	0
74	HR2	Z	0	0	0	0
75	HR3	Z	5.3	5.3	0	0
76	KIK3	Z	5.3	5.3	0	0
77	KIK2	Z	5.3	5.3	0	0
78	KIK1	Z	5.3	5.3	0	0

Member Distributed Loads (BLC 4 : Wind Load (60 deg))

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
1	BPL-1	X	6.3	6.3	0	0
2	BPL-2	X	6.3	6.3	0	0
3	BPL-3	X	6.3	6.3	0	0
4	BPL-4	X	6.3	6.3	0	0
5	BPL-5	X	6.3	6.3	0	0
6	BPL-6	X	6.3	6.3	0	0
7	BRACE-1	X	11.6	11.6	0	0
8	BRACE-2	X	11.6	11.6	0	0
9	BRACE-3	X	11.6	11.6	0	0



Company : ETS, PLLC
 Designer : DHK
 Job Number : 196670.14
 Model Name : 528 WHEELERS FARM RD

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Member Distributed Loads (BLC 4 : Wind Load (60 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft....]	Start Location[in,%]	End Location[in,%]
10	CORNER-PL-1	X	12.6	12.6	0 0
11	CORNER-PL-2	X	12.6	12.6	0 0
12	CORNER-PL-3	X	12.6	12.6	0 0
13	FM-0	X	7.3	7.3	0 0
14	FM-120	X	7.3	7.3	0 0
15	FM-240	X	7.3	7.3	0 0
16	GRATE-L-0-1	X	6.1	6.1	0 0
17	GRATE-L-0-2	X	6.1	6.1	0 0
18	GRATE-L-120-1	X	6.1	6.1	0 0
19	GRATE-L-120-2	X	6.1	6.1	0 0
20	GRATE-L-240-1	X	6.1	6.1	0 0
21	GRATE-L-240-2	X	6.1	6.1	0 0
22	PL-0	X	15.7	15.7	0 0
23	PL-120	X	15.7	15.7	0 0
24	PL-240	X	0	0	0 0
25	COR1	X	12.6	12.6	0 0
26	COR2	X	12.6	12.6	0 0
27	COR3	X	12.6	12.6	0 0
28	HR1	X	5.3	5.3	0 0
29	HR2	X	5.3	5.3	0 0
30	HR3	X	5.3	5.3	0 0
31	SA1	X	6.9	6.9	0 0
32	SA2	X	0	0	0 0
33	SA3	X	6.9	6.9	0 0
34	HR1	X	5.3	5.3	0 0
35	HR2	X	5.3	5.3	0 0
36	HR3	X	5.3	5.3	0 0
37	KIK3	X	5.3	5.3	0 0
38	KIK2	X	5.3	5.3	0 0
39	KIK1	X	5.3	5.3	0 0
40	BPL-1	Z	10.9	10.9	0 0
41	BPL-2	Z	10.9	10.9	0 0
42	BPL-3	Z	10.9	10.9	0 0
43	BPL-4	Z	10.9	10.9	0 0
44	BPL-5	Z	10.9	10.9	0 0
45	BPL-6	Z	10.9	10.9	0 0
46	BRACE-1	Z	20.1	20.1	0 0
47	BRACE-2	Z	20.1	20.1	0 0
48	BRACE-3	Z	20.1	20.1	0 0
49	CORNER-PL-1	Z	21.9	21.9	0 0
50	CORNER-PL-2	Z	21.9	21.9	0 0
51	CORNER-PL-3	Z	21.9	21.9	0 0
52	FM-0	Z	12.6	12.6	0 0
53	FM-120	Z	12.6	12.6	0 0
54	FM-240	Z	12.6	12.6	0 0
55	GRATE-L-0-1	Z	10.5	10.5	0 0
56	GRATE-L-0-2	Z	10.5	10.5	0 0
57	GRATE-L-120-1	Z	10.5	10.5	0 0
58	GRATE-L-120-2	Z	10.5	10.5	0 0
59	GRATE-L-240-1	Z	10.5	10.5	0 0
60	GRATE-L-240-2	Z	10.5	10.5	0 0
61	PL-0	Z	27.2	27.2	0 0
62	PL-120	Z	27.2	27.2	0 0
63	PL-240	Z	0	0	0 0
64	COR1	Z	21.9	21.9	0 0
65	COR2	Z	21.9	21.9	0 0
66	COR3	Z	21.9	21.9	0 0



Member Distributed Loads (BLC 4 : Wind Load (60 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft....]	Start Location[in, %]	End Location[in, %]
67	HR1	Z	9.2	9.2	0	0
68	HR2	Z	9.2	9.2	0	0
69	HR3	Z	9.2	9.2	0	0
70	SA1	Z	12	12	0	0
71	SA2	Z	0	0	0	0
72	SA3	Z	12	12	0	0
73	HR1	Z	9.2	9.2	0	0
74	HR2	Z	9.2	9.2	0	0
75	HR3	Z	9.2	9.2	0	0
76	KIK3	Z	9.2	9.2	0	0
77	KIK2	Z	9.2	9.2	0	0
78	KIK1	Z	9.2	9.2	0	0

Member Distributed Loads (BLC 5 : Wind Load (90 deg))

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft....]	Start Location[in, %]	End Location[in, %]
1	BPL-1	X	0	0	0	0
2	BPL-2	X	0	0	0	0
3	BPL-3	X	0	0	0	0
4	BPL-4	X	0	0	0	0
5	BPL-5	X	0	0	0	0
6	BPL-6	X	0	0	0	0
7	BRACE-1	X	0	0	0	0
8	BRACE-2	X	0	0	0	0
9	BRACE-3	X	0	0	0	0
10	CORNER-PL-1	X	0	0	0	0
11	CORNER-PL-2	X	0	0	0	0
12	CORNER-PL-3	X	0	0	0	0
13	FM-0	X	0	0	0	0
14	FM-120	X	0	0	0	0
15	FM-240	X	0	0	0	0
16	GRATE-L-0-1	X	0	0	0	0
17	GRATE-L-0-2	X	0	0	0	0
18	GRATE-L-120-1	X	0	0	0	0
19	GRATE-L-120-2	X	0	0	0	0
20	GRATE-L-240-1	X	0	0	0	0
21	GRATE-L-240-2	X	0	0	0	0
22	PL-0	X	0	0	0	0
23	PL-120	X	0	0	0	0
24	PL-240	X	0	0	0	0
25	COR1	X	0	0	0	0
26	COR2	X	0	0	0	0
27	COR3	X	0	0	0	0
28	HR1	X	0	0	0	0
29	HR2	X	0	0	0	0
30	HR3	X	0	0	0	0
31	SA1	X	0	0	0	0
32	SA2	X	0	0	0	0
33	SA3	X	0	0	0	0
34	HR1	X	0	0	0	0
35	HR2	X	0	0	0	0
36	HR3	X	0	0	0	0
37	KIK3	X	0	0	0	0
38	KIK2	X	0	0	0	0
39	KIK1	X	0	0	0	0
40	BPL-1	Z	0	0	0	0
41	BPL-2	Z	0	0	0	0



Company : ETS, PLLC
 Designer : DHK
 Job Number : 196670.14
 Model Name : 528 WHEELERS FARM RD

Nov 1, 2019
 2:53 PM
 Checked By: JAA

Member Distributed Loads (BLC 5 : Wind Load (90 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
42	BPL-3	Z	12.6	12.6	0	0
43	BPL-4	Z	12.6	12.6	0	0
44	BPL-5	Z	12.6	12.6	0	0
45	BPL-6	Z	12.6	12.6	0	0
46	BRACE-1	Z	23.2	23.2	0	0
47	BRACE-2	Z	23.2	23.2	0	0
48	BRACE-3	Z	0	0	0	0
49	CORNER-PL-1	Z	25.2	25.2	0	0
50	CORNER-PL-2	Z	25.2	25.2	0	0
51	CORNER-PL-3	Z	0	0	0	0
52	FM-0	Z	0	0	0	0
53	FM-120	Z	14.5	14.5	0	0
54	FM-240	Z	14.5	14.5	0	0
55	GRATE-L-0-1	Z	0	0	0	0
56	GRATE-L-0-2	Z	0	0	0	0
57	GRATE-L-120-1	Z	12.2	12.2	0	0
58	GRATE-L-120-2	Z	12.2	12.2	0	0
59	GRATE-L-240-1	Z	12.2	12.2	0	0
60	GRATE-L-240-2	Z	12.2	12.2	0	0
61	PL-0	Z	31.4	31.4	0	0
62	PL-120	Z	31.4	31.4	0	0
63	PL-240	Z	31.4	31.4	0	0
64	COR1	Z	25.2	25.2	0	0
65	COR2	Z	25.2	25.2	0	0
66	COR3	Z	0	0	0	0
67	HR1	Z	0	0	0	0
68	HR2	Z	10.6	10.6	0	0
69	HR3	Z	10.6	10.6	0	0
70	SA1	Z	13.8	13.8	0	0
71	SA2	Z	13.8	13.8	0	0
72	SA3	Z	13.8	13.8	0	0
73	HR1	Z	0	0	0	0
74	HR2	Z	10.6	10.6	0	0
75	HR3	Z	10.6	10.6	0	0
76	KIK3	Z	10.6	10.6	0	0
77	KIK2	Z	10.6	10.6	0	0
78	KIK1	Z	10.6	10.6	0	0

Member Distributed Loads (BLC 6 : Wind Load (120 deg))

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
1	BPL-1	X	-6.3	-6.3	0	0
2	BPL-2	X	-6.3	-6.3	0	0
3	BPL-3	X	-6.3	-6.3	0	0
4	BPL-4	X	-6.3	-6.3	0	0
5	BPL-5	X	-6.3	-6.3	0	0
6	BPL-6	X	-6.3	-6.3	0	0
7	BRACE-1	X	-11.6	-11.6	0	0
8	BRACE-2	X	-11.6	-11.6	0	0
9	BRACE-3	X	-11.6	-11.6	0	0
10	CORNER-PL-1	X	-12.6	-12.6	0	0
11	CORNER-PL-2	X	-12.6	-12.6	0	0
12	CORNER-PL-3	X	-12.6	-12.6	0	0
13	FM-0	X	-7.3	-7.3	0	0
14	FM-120	X	-7.3	-7.3	0	0
15	FM-240	X	-7.3	-7.3	0	0
16	GRATE-L-0-1	X	-6.1	-6.1	0	0



Member Distributed Loads (BLC 6 : Wind Load (120 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]	
17	GRATE-L-0-2	X	-6.1	-6.1	0	0
18	GRATE-L-120-1	X	-6.1	-6.1	0	0
19	GRATE-L-120-2	X	-6.1	-6.1	0	0
20	GRATE-L-240-1	X	-6.1	-6.1	0	0
21	GRATE-L-240-2	X	-6.1	-6.1	0	0
22	PL-0	X	-15.7	-15.7	0	0
23	PL-120	X	0	0	0	0
24	PL-240	X	-15.7	-15.7	0	0
25	COR1	X	-12.6	-12.6	0	0
26	COR2	X	-12.6	-12.6	0	0
27	COR3	X	-12.6	-12.6	0	0
28	HR1	X	-5.3	-5.3	0	0
29	HR2	X	-5.3	-5.3	0	0
30	HR3	X	-5.3	-5.3	0	0
31	SA1	X	0	0	0	0
32	SA2	X	-6.9	-6.9	0	0
33	SA3	X	0	0	0	0
34	HR1	X	-5.3	-5.3	0	0
35	HR2	X	-5.3	-5.3	0	0
36	HR3	X	-5.3	-5.3	0	0
37	KIK3	X	-5.3	-5.3	0	0
38	KIK2	X	-5.3	-5.3	0	0
39	KIK1	X	-5.3	-5.3	0	0
40	BPL-1	Z	10.9	10.9	0	0
41	BPL-2	Z	10.9	10.9	0	0
42	BPL-3	Z	10.9	10.9	0	0
43	BPL-4	Z	10.9	10.9	0	0
44	BPL-5	Z	10.9	10.9	0	0
45	BPL-6	Z	10.9	10.9	0	0
46	BRACE-1	Z	20.1	20.1	0	0
47	BRACE-2	Z	20.1	20.1	0	0
48	BRACE-3	Z	20.1	20.1	0	0
49	CORNER-PL-1	Z	21.9	21.9	0	0
50	CORNER-PL-2	Z	21.9	21.9	0	0
51	CORNER-PL-3	Z	21.9	21.9	0	0
52	FM-0	Z	12.6	12.6	0	0
53	FM-120	Z	12.6	12.6	0	0
54	FM-240	Z	12.6	12.6	0	0
55	GRATE-L-0-1	Z	10.5	10.5	0	0
56	GRATE-L-0-2	Z	10.5	10.5	0	0
57	GRATE-L-120-1	Z	10.5	10.5	0	0
58	GRATE-L-120-2	Z	10.5	10.5	0	0
59	GRATE-L-240-1	Z	10.5	10.5	0	0
60	GRATE-L-240-2	Z	10.5	10.5	0	0
61	PL-0	Z	27.2	27.2	0	0
62	PL-120	Z	0	0	0	0
63	PL-240	Z	27.2	27.2	0	0
64	COR1	Z	21.9	21.9	0	0
65	COR2	Z	21.9	21.9	0	0
66	COR3	Z	21.9	21.9	0	0
67	HR1	Z	9.2	9.2	0	0
68	HR2	Z	9.2	9.2	0	0
69	HR3	Z	9.2	9.2	0	0
70	SA1	Z	0	0	0	0
71	SA2	Z	12	12	0	0
72	SA3	Z	0	0	0	0
73	HR1	Z	9.2	9.2	0	0



Member Distributed Loads (BLC 6 : Wind Load (120 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft....]	Start Location[in, %]	End Location[in, %]
74	HR2	Z	9.2	9.2	0	0
75	HR3	Z	9.2	9.2	0	0
76	KIK3	Z	9.2	9.2	0	0
77	KIK2	Z	9.2	9.2	0	0
78	KIK1	Z	9.2	9.2	0	0

Member Distributed Loads (BLC 7 : Wind Load (150 deg))

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft....]	Start Location[in, %]	End Location[in, %]
1	BPL-1	X	-10.9	-10.9	0	0
2	BPL-2	X	-10.9	-10.9	0	0
3	BPL-3	X	-10.9	-10.9	0	0
4	BPL-4	X	-10.9	-10.9	0	0
5	BPL-5	X	0	0	0	0
6	BPL-6	X	0	0	0	0
7	BRACE-1	X	-20.1	-20.1	0	0
8	BRACE-2	X	0	0	0	0
9	BRACE-3	X	-20.1	-20.1	0	0
10	CORNER-PL-1	X	-21.9	-21.9	0	0
11	CORNER-PL-2	X	0	0	0	0
12	CORNER-PL-3	X	-21.9	-21.9	0	0
13	FM-0	X	-12.6	-12.6	0	0
14	FM-120	X	-12.6	-12.6	0	0
15	FM-240	X	0	0	0	0
16	GRATE-L-0-1	X	-10.5	-10.5	0	0
17	GRATE-L-0-2	X	-10.5	-10.5	0	0
18	GRATE-L-120-1	X	-10.5	-10.5	0	0
19	GRATE-L-120-2	X	-10.5	-10.5	0	0
20	GRATE-L-240-1	X	0	0	0	0
21	GRATE-L-240-2	X	0	0	0	0
22	PL-0	X	-27.2	-27.2	0	0
23	PL-120	X	-27.2	-27.2	0	0
24	PL-240	X	-27.2	-27.2	0	0
25	COR1	X	-21.9	-21.9	0	0
26	COR2	X	0	0	0	0
27	COR3	X	-21.9	-21.9	0	0
28	HR1	X	-9.2	-9.2	0	0
29	HR2	X	-9.2	-9.2	0	0
30	HR3	X	0	0	0	0
31	SA1	X	-12	-12	0	0
32	SA2	X	-12	-12	0	0
33	SA3	X	-12	-12	0	0
34	HR1	X	-9.2	-9.2	0	0
35	HR2	X	-9.2	-9.2	0	0
36	HR3	X	0	0	0	0
37	KIK3	X	-9.2	-9.2	0	0
38	KIK2	X	-9.2	-9.2	0	0
39	KIK1	X	-9.2	-9.2	0	0
40	BPL-1	Z	6.3	6.3	0	0
41	BPL-2	Z	6.3	6.3	0	0
42	BPL-3	Z	6.3	6.3	0	0
43	BPL-4	Z	6.3	6.3	0	0
44	BPL-5	Z	0	0	0	0
45	BPL-6	Z	0	0	0	0
46	BRACE-1	Z	11.6	11.6	0	0
47	BRACE-2	Z	0	0	0	0
48	BRACE-3	Z	11.6	11.6	0	0



Member Distributed Loads (BLC 7 : Wind Load (150 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,...]	Start Location[in,%]	End Location[in,%]	
49	CORNER-PL-1	Z	12.6	12.6	0	0
50	CORNER-PL-2	Z	0	0	0	0
51	CORNER-PL-3	Z	12.6	12.6	0	0
52	FM-0	Z	7.3	7.3	0	0
53	FM-120	Z	7.3	7.3	0	0
54	FM-240	Z	0	0	0	0
55	GRATE-L-0-1	Z	6.1	6.1	0	0
56	GRATE-L-0-2	Z	6.1	6.1	0	0
57	GRATE-L-120-1	Z	6.1	6.1	0	0
58	GRATE-L-120-2	Z	6.1	6.1	0	0
59	GRATE-L-240-1	Z	0	0	0	0
60	GRATE-L-240-2	Z	0	0	0	0
61	PL-0	Z	15.7	15.7	0	0
62	PL-120	Z	15.7	15.7	0	0
63	PL-240	Z	15.7	15.7	0	0
64	COR1	Z	12.6	12.6	0	0
65	COR2	Z	0	0	0	0
66	COR3	Z	12.6	12.6	0	0
67	HR1	Z	5.3	5.3	0	0
68	HR2	Z	5.3	5.3	0	0
69	HR3	Z	0	0	0	0
70	SA1	Z	6.9	6.9	0	0
71	SA2	Z	6.9	6.9	0	0
72	SA3	Z	6.9	6.9	0	0
73	HR1	Z	5.3	5.3	0	0
74	HR2	Z	5.3	5.3	0	0
75	HR3	Z	0	0	0	0
76	KIK3	Z	5.3	5.3	0	0
77	KIK2	Z	5.3	5.3	0	0
78	KIK1	Z	5.3	5.3	0	0

Member Distributed Loads (BLC 8 : Wind Load (180 deg))

Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,...]	Start Location[in,%]	End Location[in,%]	
1	BPL-1	X	-12.6	-12.6	0	0
2	BPL-2	X	-12.6	-12.6	0	0
3	BPL-3	X	-12.6	-12.6	0	0
4	BPL-4	X	-12.6	-12.6	0	0
5	BPL-5	X	-12.6	-12.6	0	0
6	BPL-6	X	-12.6	-12.6	0	0
7	BRACE-1	X	-23.2	-23.2	0	0
8	BRACE-2	X	-23.2	-23.2	0	0
9	BRACE-3	X	-23.2	-23.2	0	0
10	CORNER-PL-1	X	-25.2	-25.2	0	0
11	CORNER-PL-2	X	-25.2	-25.2	0	0
12	CORNER-PL-3	X	-25.2	-25.2	0	0
13	FM-0	X	-14.5	-14.5	0	0
14	FM-120	X	-14.5	-14.5	0	0
15	FM-240	X	-14.5	-14.5	0	0
16	GRATE-L-0-1	X	-12.2	-12.2	0	0
17	GRATE-L-0-2	X	-12.2	-12.2	0	0
18	GRATE-L-120-1	X	-12.2	-12.2	0	0
19	GRATE-L-120-2	X	-12.2	-12.2	0	0
20	GRATE-L-240-1	X	-12.2	-12.2	0	0
21	GRATE-L-240-2	X	-12.2	-12.2	0	0
22	PL-0	X	0	0	0	0
23	PL-120	X	-31.4	-31.4	0	0



Member Distributed Loads (BLC 8 : Wind Load (180 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in, %]	End Location[in, %]	
24	PL-240	X	-31.4	-31.4	0	0
25	COR1	X	-25.2	-25.2	0	0
26	COR2	X	-25.2	-25.2	0	0
27	COR3	X	-25.2	-25.2	0	0
28	HR1	X	-10.6	-10.6	0	0
29	HR2	X	-10.6	-10.6	0	0
30	HR3	X	-10.6	-10.6	0	0
31	SA1	X	-13.8	-13.8	0	0
32	SA2	X	-13.8	-13.8	0	0
33	SA3	X	-13.8	-13.8	0	0
34	HR1	X	-10.6	-10.6	0	0
35	HR2	X	-10.6	-10.6	0	0
36	HR3	X	-10.6	-10.6	0	0
37	KIK3	X	-10.6	-10.6	0	0
38	KIK2	X	-10.6	-10.6	0	0
39	KIK1	X	-10.6	-10.6	0	0
40	BPL-1	Z	0	0	0	0
41	BPL-2	Z	0	0	0	0
42	BPL-3	Z	0	0	0	0
43	BPL-4	Z	0	0	0	0
44	BPL-5	Z	0	0	0	0
45	BPL-6	Z	0	0	0	0
46	BRACE-1	Z	0	0	0	0
47	BRACE-2	Z	0	0	0	0
48	BRACE-3	Z	0	0	0	0
49	CORNER-PL-1	Z	0	0	0	0
50	CORNER-PL-2	Z	0	0	0	0
51	CORNER-PL-3	Z	0	0	0	0
52	FM-0	Z	0	0	0	0
53	FM-120	Z	0	0	0	0
54	FM-240	Z	0	0	0	0
55	GRATE-L-0-1	Z	0	0	0	0
56	GRATE-L-0-2	Z	0	0	0	0
57	GRATE-L-120-1	Z	0	0	0	0
58	GRATE-L-120-2	Z	0	0	0	0
59	GRATE-L-240-1	Z	0	0	0	0
60	GRATE-L-240-2	Z	0	0	0	0
61	PL-0	Z	0	0	0	0
62	PL-120	Z	0	0	0	0
63	PL-240	Z	0	0	0	0
64	COR1	Z	0	0	0	0
65	COR2	Z	0	0	0	0
66	COR3	Z	0	0	0	0
67	HR1	Z	0	0	0	0
68	HR2	Z	0	0	0	0
69	HR3	Z	0	0	0	0
70	SA1	Z	0	0	0	0
71	SA2	Z	0	0	0	0
72	SA3	Z	0	0	0	0
73	HR1	Z	0	0	0	0
74	HR2	Z	0	0	0	0
75	HR3	Z	0	0	0	0
76	KIK3	Z	0	0	0	0
77	KIK2	Z	0	0	0	0
78	KIK1	Z	0	0	0	0



Member Distributed Loads (BLC 9 : Wind Load (210 deg))

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]	
1	BPL-1	X	-10.9	-10.9	0	0
2	BPL-2	X	-10.9	-10.9	0	0
3	BPL-3	X	0	0	0	0
4	BPL-4	X	0	0	0	0
5	BPL-5	X	-10.9	-10.9	0	0
6	BPL-6	X	-10.9	-10.9	0	0
7	BRACE-1	X	0	0	0	0
8	BRACE-2	X	-20.1	-20.1	0	0
9	BRACE-3	X	-20.1	-20.1	0	0
10	CORNER-PL-1	X	0	0	0	0
11	CORNER-PL-2	X	-21.9	-21.9	0	0
12	CORNER-PL-3	X	-21.9	-21.9	0	0
13	FM-0	X	-12.6	-12.6	0	0
14	FM-120	X	0	0	0	0
15	FM-240	X	-12.6	-12.6	0	0
16	GRATE-L-0-1	X	-10.5	-10.5	0	0
17	GRATE-L-0-2	X	-10.5	-10.5	0	0
18	GRATE-L-120-1	X	0	0	0	0
19	GRATE-L-120-2	X	0	0	0	0
20	GRATE-L-240-1	X	-10.5	-10.5	0	0
21	GRATE-L-240-2	X	-10.5	-10.5	0	0
22	PL-0	X	-27.2	-27.2	0	0
23	PL-120	X	-27.2	-27.2	0	0
24	PL-240	X	-27.2	-27.2	0	0
25	COR1	X	0	0	0	0
26	COR2	X	-21.9	-21.9	0	0
27	COR3	X	-21.9	-21.9	0	0
28	HR1	X	-9.2	-9.2	0	0
29	HR2	X	0	0	0	0
30	HR3	X	-9.2	-9.2	0	0
31	SA1	X	-12	-12	0	0
32	SA2	X	-12	-12	0	0
33	SA3	X	-12	-12	0	0
34	HR1	X	-9.2	-9.2	0	0
35	HR2	X	0	0	0	0
36	HR3	X	-9.2	-9.2	0	0
37	KIK3	X	-9.2	-9.2	0	0
38	KIK2	X	-9.2	-9.2	0	0
39	KIK1	X	-9.2	-9.2	0	0
40	BPL-1	Z	-6.3	-6.3	0	0
41	BPL-2	Z	-6.3	-6.3	0	0
42	BPL-3	Z	0	0	0	0
43	BPL-4	Z	0	0	0	0
44	BPL-5	Z	-6.3	-6.3	0	0
45	BPL-6	Z	-6.3	-6.3	0	0
46	BRACE-1	Z	0	0	0	0
47	BRACE-2	Z	-11.6	-11.6	0	0
48	BRACE-3	Z	-11.6	-11.6	0	0
49	CORNER-PL-1	Z	0	0	0	0
50	CORNER-PL-2	Z	-12.6	-12.6	0	0
51	CORNER-PL-3	Z	-12.6	-12.6	0	0
52	FM-0	Z	-7.3	-7.3	0	0
53	FM-120	Z	0	0	0	0
54	FM-240	Z	-7.3	-7.3	0	0
55	GRATE-L-0-1	Z	-6.1	-6.1	0	0
56	GRATE-L-0-2	Z	-6.1	-6.1	0	0
57	GRATE-L-120-1	Z	0	0	0	0



Member Distributed Loads (BLC 9 : Wind Load (210 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,...]	Start Location[in,%]	End Location[in,%]
58	GRATE-L-120-2	Z	0	0	0	0
59	GRATE-L-240-1	Z	-6.1	-6.1	0	0
60	GRATE-L-240-2	Z	-6.1	-6.1	0	0
61	PL-0	Z	-15.7	-15.7	0	0
62	PL-120	Z	-15.7	-15.7	0	0
63	PL-240	Z	-15.7	-15.7	0	0
64	COR1	Z	0	0	0	0
65	COR2	Z	-12.6	-12.6	0	0
66	COR3	Z	-12.6	-12.6	0	0
67	HR1	Z	-5.3	-5.3	0	0
68	HR2	Z	0	0	0	0
69	HR3	Z	-5.3	-5.3	0	0
70	SA1	Z	-6.9	-6.9	0	0
71	SA2	Z	-6.9	-6.9	0	0
72	SA3	Z	-6.9	-6.9	0	0
73	HR1	Z	-5.3	-5.3	0	0
74	HR2	Z	0	0	0	0
75	HR3	Z	-5.3	-5.3	0	0
76	KIK3	Z	-5.3	-5.3	0	0
77	KIK2	Z	-5.3	-5.3	0	0
78	KIK1	Z	-5.3	-5.3	0	0

Member Distributed Loads (BLC 10 : Wind Load (240 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...]	End Magnitude[lb/ft,...]	Start Location[in,%]	End Location[in,%]
1	BPL-1	X	-6.3	-6.3	0	0
2	BPL-2	X	-6.3	-6.3	0	0
3	BPL-3	X	-6.3	-6.3	0	0
4	BPL-4	X	-6.3	-6.3	0	0
5	BPL-5	X	-6.3	-6.3	0	0
6	BPL-6	X	-6.3	-6.3	0	0
7	BRACE-1	X	-11.6	-11.6	0	0
8	BRACE-2	X	-11.6	-11.6	0	0
9	BRACE-3	X	-11.6	-11.6	0	0
10	CORNER-PL-1	X	-12.6	-12.6	0	0
11	CORNER-PL-2	X	-12.6	-12.6	0	0
12	CORNER-PL-3	X	-12.6	-12.6	0	0
13	FM-0	X	-7.3	-7.3	0	0
14	FM-120	X	-7.3	-7.3	0	0
15	FM-240	X	-7.3	-7.3	0	0
16	GRATE-L-0-1	X	-6.1	-6.1	0	0
17	GRATE-L-0-2	X	-6.1	-6.1	0	0
18	GRATE-L-120-1	X	-6.1	-6.1	0	0
19	GRATE-L-120-2	X	-6.1	-6.1	0	0
20	GRATE-L-240-1	X	-6.1	-6.1	0	0
21	GRATE-L-240-2	X	-6.1	-6.1	0	0
22	PL-0	X	-15.7	-15.7	0	0
23	PL-120	X	-15.7	-15.7	0	0
24	PL-240	X	0	0	0	0
25	COR1	X	-12.6	-12.6	0	0
26	COR2	X	-12.6	-12.6	0	0
27	COR3	X	-12.6	-12.6	0	0
28	HR1	X	-5.3	-5.3	0	0
29	HR2	X	-5.3	-5.3	0	0
30	HR3	X	-5.3	-5.3	0	0
31	SA1	X	-6.9	-6.9	0	0
32	SA2	X	0	0	0	0



Member Distributed Loads (BLC 10 : Wind Load (240 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]	
33	SA3	X	-6.9	-6.9	0	0
34	HR1	X	-5.3	-5.3	0	0
35	HR2	X	-5.3	-5.3	0	0
36	HR3	X	-5.3	-5.3	0	0
37	KIK3	X	-5.3	-5.3	0	0
38	KIK2	X	-5.3	-5.3	0	0
39	KIK1	X	-5.3	-5.3	0	0
40	BPL-1	Z	-10.9	-10.9	0	0
41	BPL-2	Z	-10.9	-10.9	0	0
42	BPL-3	Z	-10.9	-10.9	0	0
43	BPL-4	Z	-10.9	-10.9	0	0
44	BPL-5	Z	-10.9	-10.9	0	0
45	BPL-6	Z	-10.9	-10.9	0	0
46	BRACE-1	Z	-20.1	-20.1	0	0
47	BRACE-2	Z	-20.1	-20.1	0	0
48	BRACE-3	Z	-20.1	-20.1	0	0
49	CORNER-PL-1	Z	-21.9	-21.9	0	0
50	CORNER-PL-2	Z	-21.9	-21.9	0	0
51	CORNER-PL-3	Z	-21.9	-21.9	0	0
52	FM-0	Z	-12.6	-12.6	0	0
53	FM-120	Z	-12.6	-12.6	0	0
54	FM-240	Z	-12.6	-12.6	0	0
55	GRATE-L-0-1	Z	-10.5	-10.5	0	0
56	GRATE-L-0-2	Z	-10.5	-10.5	0	0
57	GRATE-L-120-1	Z	-10.5	-10.5	0	0
58	GRATE-L-120-2	Z	-10.5	-10.5	0	0
59	GRATE-L-240-1	Z	-10.5	-10.5	0	0
60	GRATE-L-240-2	Z	-10.5	-10.5	0	0
61	PL-0	Z	-27.2	-27.2	0	0
62	PL-120	Z	-27.2	-27.2	0	0
63	PL-240	Z	0	0	0	0
64	COR1	Z	-21.9	-21.9	0	0
65	COR2	Z	-21.9	-21.9	0	0
66	COR3	Z	-21.9	-21.9	0	0
67	HR1	Z	-9.2	-9.2	0	0
68	HR2	Z	-9.2	-9.2	0	0
69	HR3	Z	-9.2	-9.2	0	0
70	SA1	Z	-12	-12	0	0
71	SA2	Z	0	0	0	0
72	SA3	Z	-12	-12	0	0
73	HR1	Z	-9.2	-9.2	0	0
74	HR2	Z	-9.2	-9.2	0	0
75	HR3	Z	-9.2	-9.2	0	0
76	KIK3	Z	-9.2	-9.2	0	0
77	KIK2	Z	-9.2	-9.2	0	0
78	KIK1	Z	-9.2	-9.2	0	0

Member Distributed Loads (BLC 11 : Wind Load (270 deg))

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]	
1	BPL-1	X	0	0	0	0
2	BPL-2	X	0	0	0	0
3	BPL-3	X	0	0	0	0
4	BPL-4	X	0	0	0	0
5	BPL-5	X	0	0	0	0
6	BPL-6	X	0	0	0	0
7	BRACE-1	X	0	0	0	0



Member Distributed Loads (BLC 11 : Wind Load (270 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
8	BRACE-2	X	0	0	0
9	BRACE-3	X	0	0	0
10	CORNER-PL-1	X	0	0	0
11	CORNER-PL-2	X	0	0	0
12	CORNER-PL-3	X	0	0	0
13	FM-0	X	0	0	0
14	FM-120	X	0	0	0
15	FM-240	X	0	0	0
16	GRATE-L-0-1	X	0	0	0
17	GRATE-L-0-2	X	0	0	0
18	GRATE-L-120-1	X	0	0	0
19	GRATE-L-120-2	X	0	0	0
20	GRATE-L-240-1	X	0	0	0
21	GRATE-L-240-2	X	0	0	0
22	PL-0	X	0	0	0
23	PL-120	X	0	0	0
24	PL-240	X	0	0	0
25	COR1	X	0	0	0
26	COR2	X	0	0	0
27	COR3	X	0	0	0
28	HR1	X	0	0	0
29	HR2	X	0	0	0
30	HR3	X	0	0	0
31	SA1	X	0	0	0
32	SA2	X	0	0	0
33	SA3	X	0	0	0
34	HR1	X	0	0	0
35	HR2	X	0	0	0
36	HR3	X	0	0	0
37	KIK3	X	0	0	0
38	KIK2	X	0	0	0
39	KIK1	X	0	0	0
40	BPL-1	Z	0	0	0
41	BPL-2	Z	0	0	0
42	BPL-3	Z	-12.6	-12.6	0
43	BPL-4	Z	-12.6	-12.6	0
44	BPL-5	Z	-12.6	-12.6	0
45	BPL-6	Z	-12.6	-12.6	0
46	BRACE-1	Z	-23.2	-23.2	0
47	BRACE-2	Z	-23.2	-23.2	0
48	BRACE-3	Z	0	0	0
49	CORNER-PL-1	Z	-25.2	-25.2	0
50	CORNER-PL-2	Z	-25.2	-25.2	0
51	CORNER-PL-3	Z	0	0	0
52	FM-0	Z	0	0	0
53	FM-120	Z	-14.5	-14.5	0
54	FM-240	Z	-14.5	-14.5	0
55	GRATE-L-0-1	Z	0	0	0
56	GRATE-L-0-2	Z	0	0	0
57	GRATE-L-120-1	Z	-12.2	-12.2	0
58	GRATE-L-120-2	Z	-12.2	-12.2	0
59	GRATE-L-240-1	Z	-12.2	-12.2	0
60	GRATE-L-240-2	Z	-12.2	-12.2	0
61	PL-0	Z	-31.4	-31.4	0
62	PL-120	Z	-31.4	-31.4	0
63	PL-240	Z	-31.4	-31.4	0
64	COR1	Z	-25.2	-25.2	0



Member Distributed Loads (BLC 11 : Wind Load (270 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
65	COR2	Z	-25.2	-25.2	0	0
66	COR3	Z	0	0	0	0
67	HR1	Z	0	0	0	0
68	HR2	Z	-10.6	-10.6	0	0
69	HR3	Z	-10.6	-10.6	0	0
70	SA1	Z	-13.8	-13.8	0	0
71	SA2	Z	-13.8	-13.8	0	0
72	SA3	Z	-13.8	-13.8	0	0
73	HR1	Z	0	0	0	0
74	HR2	Z	-10.6	-10.6	0	0
75	HR3	Z	-10.6	-10.6	0	0
76	KIK3	Z	-10.6	-10.6	0	0
77	KIK2	Z	-10.6	-10.6	0	0
78	KIK1	Z	-10.6	-10.6	0	0

Member Distributed Loads (BLC 12 : Wind Load (300 deg))

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
1	BPL-1	X	6.3	6.3	0	0
2	BPL-2	X	6.3	6.3	0	0
3	BPL-3	X	6.3	6.3	0	0
4	BPL-4	X	6.3	6.3	0	0
5	BPL-5	X	6.3	6.3	0	0
6	BPL-6	X	6.3	6.3	0	0
7	BRACE-1	X	11.6	11.6	0	0
8	BRACE-2	X	11.6	11.6	0	0
9	BRACE-3	X	11.6	11.6	0	0
10	CORNER-PL-1	X	12.6	12.6	0	0
11	CORNER-PL-2	X	12.6	12.6	0	0
12	CORNER-PL-3	X	12.6	12.6	0	0
13	FM-0	X	7.3	7.3	0	0
14	FM-120	X	7.3	7.3	0	0
15	FM-240	X	7.3	7.3	0	0
16	GRATE-L-0-1	X	6.1	6.1	0	0
17	GRATE-L-0-2	X	6.1	6.1	0	0
18	GRATE-L-120-1	X	6.1	6.1	0	0
19	GRATE-L-120-2	X	6.1	6.1	0	0
20	GRATE-L-240-1	X	6.1	6.1	0	0
21	GRATE-L-240-2	X	6.1	6.1	0	0
22	PL-0	X	15.7	15.7	0	0
23	PL-120	X	0	0	0	0
24	PL-240	X	15.7	15.7	0	0
25	COR1	X	12.6	12.6	0	0
26	COR2	X	12.6	12.6	0	0
27	COR3	X	12.6	12.6	0	0
28	HR1	X	5.3	5.3	0	0
29	HR2	X	5.3	5.3	0	0
30	HR3	X	5.3	5.3	0	0
31	SA1	X	0	0	0	0
32	SA2	X	6.9	6.9	0	0
33	SA3	X	0	0	0	0
34	HR1	X	5.3	5.3	0	0
35	HR2	X	5.3	5.3	0	0
36	HR3	X	5.3	5.3	0	0
37	KIK3	X	5.3	5.3	0	0
38	KIK2	X	5.3	5.3	0	0
39	KIK1	X	5.3	5.3	0	0



Member Distributed Loads (BLC 12 : Wind Load (300 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in, %]	End Location[in, %]
40	BPL-1	Z	-10.9	-10.9	0	0
41	BPL-2	Z	-10.9	-10.9	0	0
42	BPL-3	Z	-10.9	-10.9	0	0
43	BPL-4	Z	-10.9	-10.9	0	0
44	BPL-5	Z	-10.9	-10.9	0	0
45	BPL-6	Z	-10.9	-10.9	0	0
46	BRACE-1	Z	-20.1	-20.1	0	0
47	BRACE-2	Z	-20.1	-20.1	0	0
48	BRACE-3	Z	-20.1	-20.1	0	0
49	CORNER-PL-1	Z	-21.9	-21.9	0	0
50	CORNER-PL-2	Z	-21.9	-21.9	0	0
51	CORNER-PL-3	Z	-21.9	-21.9	0	0
52	FM-0	Z	-12.6	-12.6	0	0
53	FM-120	Z	-12.6	-12.6	0	0
54	FM-240	Z	-12.6	-12.6	0	0
55	GRATE-L-0-1	Z	-10.5	-10.5	0	0
56	GRATE-L-0-2	Z	-10.5	-10.5	0	0
57	GRATE-L-120-1	Z	-10.5	-10.5	0	0
58	GRATE-L-120-2	Z	-10.5	-10.5	0	0
59	GRATE-L-240-1	Z	-10.5	-10.5	0	0
60	GRATE-L-240-2	Z	-10.5	-10.5	0	0
61	PL-0	Z	-27.2	-27.2	0	0
62	PL-120	Z	0	0	0	0
63	PL-240	Z	-27.2	-27.2	0	0
64	COR1	Z	-21.9	-21.9	0	0
65	COR2	Z	-21.9	-21.9	0	0
66	COR3	Z	-21.9	-21.9	0	0
67	HR1	Z	-9.2	-9.2	0	0
68	HR2	Z	-9.2	-9.2	0	0
69	HR3	Z	-9.2	-9.2	0	0
70	SA1	Z	0	0	0	0
71	SA2	Z	-12	-12	0	0
72	SA3	Z	0	0	0	0
73	HR1	Z	-9.2	-9.2	0	0
74	HR2	Z	-9.2	-9.2	0	0
75	HR3	Z	-9.2	-9.2	0	0
76	KIK3	Z	-9.2	-9.2	0	0
77	KIK2	Z	-9.2	-9.2	0	0
78	KIK1	Z	-9.2	-9.2	0	0

Member Distributed Loads (BLC 13 : Wind Load (330 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in, %]	End Location[in, %]
1	BPL-1	X	10.9	10.9	0	0
2	BPL-2	X	10.9	10.9	0	0
3	BPL-3	X	10.9	10.9	0	0
4	BPL-4	X	10.9	10.9	0	0
5	BPL-5	X	0	0	0	0
6	BPL-6	X	0	0	0	0
7	BRACE-1	X	20.1	20.1	0	0
8	BRACE-2	X	0	0	0	0
9	BRACE-3	X	20.1	20.1	0	0
10	CORNER-PL-1	X	21.9	21.9	0	0
11	CORNER-PL-2	X	0	0	0	0
12	CORNER-PL-3	X	21.9	21.9	0	0
13	FM-0	X	12.6	12.6	0	0
14	FM-120	X	12.6	12.6	0	0



Member Distributed Loads (BLC 13 : Wind Load (330 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
15	FM-240	X	0	0	0
16	GRATE-L-0-1	X	10.5	10.5	0
17	GRATE-L-0-2	X	10.5	10.5	0
18	GRATE-L-120-1	X	10.5	10.5	0
19	GRATE-L-120-2	X	10.5	10.5	0
20	GRATE-L-240-1	X	0	0	0
21	GRATE-L-240-2	X	0	0	0
22	PL-0	X	27.2	27.2	0
23	PL-120	X	27.2	27.2	0
24	PL-240	X	27.2	27.2	0
25	COR1	X	21.9	21.9	0
26	COR2	X	0	0	0
27	COR3	X	21.9	21.9	0
28	HR1	X	9.2	9.2	0
29	HR2	X	9.2	9.2	0
30	HR3	X	0	0	0
31	SA1	X	12	12	0
32	SA2	X	12	12	0
33	SA3	X	12	12	0
34	HR1	X	9.2	9.2	0
35	HR2	X	9.2	9.2	0
36	HR3	X	0	0	0
37	KIK3	X	9.2	9.2	0
38	KIK2	X	9.2	9.2	0
39	KIK1	X	9.2	9.2	0
40	BPL-1	Z	-6.3	-6.3	0
41	BPL-2	Z	-6.3	-6.3	0
42	BPL-3	Z	-6.3	-6.3	0
43	BPL-4	Z	-6.3	-6.3	0
44	BPL-5	Z	0	0	0
45	BPL-6	Z	0	0	0
46	BRACE-1	Z	-11.6	-11.6	0
47	BRACE-2	Z	0	0	0
48	BRACE-3	Z	-11.6	-11.6	0
49	CORNER-PL-1	Z	-12.6	-12.6	0
50	CORNER-PL-2	Z	0	0	0
51	CORNER-PL-3	Z	-12.6	-12.6	0
52	FM-0	Z	-7.3	-7.3	0
53	FM-120	Z	-7.3	-7.3	0
54	FM-240	Z	0	0	0
55	GRATE-L-0-1	Z	-6.1	-6.1	0
56	GRATE-L-0-2	Z	-6.1	-6.1	0
57	GRATE-L-120-1	Z	-6.1	-6.1	0
58	GRATE-L-120-2	Z	-6.1	-6.1	0
59	GRATE-L-240-1	Z	0	0	0
60	GRATE-L-240-2	Z	0	0	0
61	PL-0	Z	-15.7	-15.7	0
62	PL-120	Z	-15.7	-15.7	0
63	PL-240	Z	-15.7	-15.7	0
64	COR1	Z	-12.6	-12.6	0
65	COR2	Z	0	0	0
66	COR3	Z	-12.6	-12.6	0
67	HR1	Z	-5.3	-5.3	0
68	HR2	Z	-5.3	-5.3	0
69	HR3	Z	0	0	0
70	SA1	Z	-6.9	-6.9	0
71	SA2	Z	-6.9	-6.9	0



Member Distributed Loads (BLC 13 : Wind Load (330 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in, %]	End Location[in, %]
72	SA3	Z	-6.9	-6.9	0	0
73	HR1	Z	-5.3	-5.3	0	0
74	HR2	Z	-5.3	-5.3	0	0
75	HR3	Z	0	0	0	0
76	KIK3	Z	-5.3	-5.3	0	0
77	KIK2	Z	-5.3	-5.3	0	0
78	KIK1	Z	-5.3	-5.3	0	0

Member Distributed Loads (BLC 14 : Ice Load)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in, %]	End Location[in, %]
1	BPL-1	Y	-7.7	-7.7	0	0
2	BPL-2	Y	-7.7	-7.7	0	0
3	BPL-3	Y	-7.7	-7.7	0	0
4	BPL-4	Y	-7.7	-7.7	0	0
5	BPL-5	Y	-7.7	-7.7	0	0
6	BPL-6	Y	-7.7	-7.7	0	0
7	BRACE-1	Y	-11.8	-11.8	0	0
8	BRACE-2	Y	-11.8	-11.8	0	0
9	BRACE-3	Y	-11.8	-11.8	0	0
10	CORNER-PL-1	Y	-14.9	-14.9	0	0
11	CORNER-PL-2	Y	-14.9	-14.9	0	0
12	CORNER-PL-3	Y	-14.9	-14.9	0	0
13	FM-0	Y	-10.8	-10.8	0	0
14	FM-120	Y	-10.8	-10.8	0	0
15	FM-240	Y	-10.8	-10.8	0	0
16	GRATE-L-0-1	Y	-9.4	-9.4	0	0
17	GRATE-L-0-2	Y	-9.4	-9.4	0	0
18	GRATE-L-120-1	Y	-9.4	-9.4	0	0
19	GRATE-L-120-2	Y	-9.4	-9.4	0	0
20	GRATE-L-240-1	Y	-9.4	-9.4	0	0
21	GRATE-L-240-2	Y	-9.4	-9.4	0	0
22	PL-0	Y	-18.3	-18.3	0	0
23	PL-120	Y	-18.3	-18.3	0	0
24	PL-240	Y	-18.3	-18.3	0	0
25	COR1	Y	-14.9	-14.9	0	0
26	COR2	Y	-14.9	-14.9	0	0
27	COR3	Y	-14.9	-14.9	0	0
28	HR1	Y	-8.5	-8.5	0	0
29	HR2	Y	-8.5	-8.5	0	0
30	HR3	Y	-8.5	-8.5	0	0
31	SA1	Y	-15.2	-15.2	0	0
32	SA2	Y	-15.2	-15.2	0	0
33	SA3	Y	-15.2	-15.2	0	0
34	HR1	Y	-8.5	-8.5	0	0
35	HR2	Y	-8.5	-8.5	0	0
36	HR3	Y	-8.5	-8.5	0	0
37	KIK3	Y	-8.5	-8.5	0	0
38	KIK2	Y	-8.5	-8.5	0	0
39	KIK1	Y	-8.5	-8.5	0	0

Member Distributed Loads (BLC 15 : Wind on Ice (0 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in, %]	End Location[in, %]
1	BPL-1	X	3.6	3.6	0	0
2	BPL-2	X	3.6	3.6	0	0
3	BPL-3	X	3.6	3.6	0	0
4	BPL-4	X	3.6	3.6	0	0



Company : ETS, PLLC
 Designer : DHK
 Job Number : 196670.14
 Model Name : 528 WHEELERS FARM RD

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Member Distributed Loads (BLC 15 : Wind on Ice (0 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]	
5	BPL-5	X	3.6	3.6	0	0
6	BPL-6	X	3.6	3.6	0	0
7	BRACE-1	X	5.3	5.3	0	0
8	BRACE-2	X	5.3	5.3	0	0
9	BRACE-3	X	5.3	5.3	0	0
10	CORNER-PL-1	X	5.4	5.4	0	0
11	CORNER-PL-2	X	5.4	5.4	0	0
12	CORNER-PL-3	X	5.4	5.4	0	0
13	FM-0	X	4.6	4.6	0	0
14	FM-120	X	4.6	4.6	0	0
15	FM-240	X	4.6	4.6	0	0
16	GRATE-L-0-1	X	3.5	3.5	0	0
17	GRATE-L-0-2	X	3.5	3.5	0	0
18	GRATE-L-120-1	X	3.5	3.5	0	0
19	GRATE-L-120-2	X	3.5	3.5	0	0
20	GRATE-L-240-1	X	3.5	3.5	0	0
21	GRATE-L-240-2	X	3.5	3.5	0	0
22	PL-0	X	0	0	0	0
23	PL-120	X	6.4	6.4	0	0
24	PL-240	X	6.4	6.4	0	0
25	COR1	X	5.4	5.4	0	0
26	COR2	X	5.4	5.4	0	0
27	COR3	X	5.4	5.4	0	0
28	HR1	X	4.1	4.1	0	0
29	HR2	X	4.1	4.1	0	0
30	HR3	X	4.1	4.1	0	0
31	SA1	X	3.7	3.7	0	0
32	SA2	X	3.7	3.7	0	0
33	SA3	X	3.7	3.7	0	0
34	HR1	X	4.1	4.1	0	0
35	HR2	X	4.1	4.1	0	0
36	HR3	X	4.1	4.1	0	0
37	KIK3	X	4.1	4.1	0	0
38	KIK2	X	4.1	4.1	0	0
39	KIK1	X	4.1	4.1	0	0
40	BPL-1	Z	0	0	0	0
41	BPL-2	Z	0	0	0	0
42	BPL-3	Z	0	0	0	0
43	BPL-4	Z	0	0	0	0
44	BPL-5	Z	0	0	0	0
45	BPL-6	Z	0	0	0	0
46	BRACE-1	Z	0	0	0	0
47	BRACE-2	Z	0	0	0	0
48	BRACE-3	Z	0	0	0	0
49	CORNER-PL-1	Z	0	0	0	0
50	CORNER-PL-2	Z	0	0	0	0
51	CORNER-PL-3	Z	0	0	0	0
52	FM-0	Z	0	0	0	0
53	FM-120	Z	0	0	0	0
54	FM-240	Z	0	0	0	0
55	GRATE-L-0-1	Z	0	0	0	0
56	GRATE-L-0-2	Z	0	0	0	0
57	GRATE-L-120-1	Z	0	0	0	0
58	GRATE-L-120-2	Z	0	0	0	0
59	GRATE-L-240-1	Z	0	0	0	0
60	GRATE-L-240-2	Z	0	0	0	0
61	PL-0	Z	0	0	0	0



Member Distributed Loads (BLC 15 : Wind on Ice (0 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in, %]	End Location[in, %]
62	PL-120	Z	0	0	0	0
63	PL-240	Z	0	0	0	0
64	COR1	Z	0	0	0	0
65	COR2	Z	0	0	0	0
66	COR3	Z	0	0	0	0
67	HR1	Z	0	0	0	0
68	HR2	Z	0	0	0	0
69	HR3	Z	0	0	0	0
70	SA1	Z	0	0	0	0
71	SA2	Z	0	0	0	0
72	SA3	Z	0	0	0	0
73	HR1	Z	0	0	0	0
74	HR2	Z	0	0	0	0
75	HR3	Z	0	0	0	0
76	KIK3	Z	0	0	0	0
77	KIK2	Z	0	0	0	0
78	KIK1	Z	0	0	0	0

Member Distributed Loads (BLC 16 : Wind on Ice (30 deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in, %]	End Location[in, %]
1	BPL-1	X	3.1	3.1	0	0
2	BPL-2	X	3.1	3.1	0	0
3	BPL-3	X	0	0	0	0
4	BPL-4	X	0	0	0	0
5	BPL-5	X	3.1	3.1	0	0
6	BPL-6	X	3.1	3.1	0	0
7	BRACE-1	X	0	0	0	0
8	BRACE-2	X	4.6	4.6	0	0
9	BRACE-3	X	4.6	4.6	0	0
10	CORNER-PL-1	X	0	0	0	0
11	CORNER-PL-2	X	4.7	4.7	0	0
12	CORNER-PL-3	X	4.7	4.7	0	0
13	FM-0	X	4	4	0	0
14	FM-120	X	0	0	0	0
15	FM-240	X	4	4	0	0
16	GRATE-L-0-1	X	3	3	0	0
17	GRATE-L-0-2	X	3	3	0	0
18	GRATE-L-120-1	X	0	0	0	0
19	GRATE-L-120-2	X	0	0	0	0
20	GRATE-L-240-1	X	3	3	0	0
21	GRATE-L-240-2	X	3	3	0	0
22	PL-0	X	5.6	5.6	0	0
23	PL-120	X	5.6	5.6	0	0
24	PL-240	X	5.6	5.6	0	0
25	COR1	X	0	0	0	0
26	COR2	X	4.7	4.7	0	0
27	COR3	X	4.7	4.7	0	0
28	HR1	X	3.5	3.5	0	0
29	HR2	X	0	0	0	0
30	HR3	X	3.5	3.5	0	0
31	SA1	X	3.2	3.2	0	0
32	SA2	X	3.2	3.2	0	0
33	SA3	X	3.2	3.2	0	0
34	HR1	X	3.5	3.5	0	0
35	HR2	X	0	0	0	0
36	HR3	X	3.5	3.5	0	0



Member Distributed Loads (BLC 16 : Wind on Ice (30 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
37	KIK3	X	3.5	3.5	0	0
38	KIK2	X	3.5	3.5	0	0
39	KIK1	X	3.5	3.5	0	0
40	BPL-1	Z	1.8	1.8	0	0
41	BPL-2	Z	1.8	1.8	0	0
42	BPL-3	Z	0	0	0	0
43	BPL-4	Z	0	0	0	0
44	BPL-5	Z	1.8	1.8	0	0
45	BPL-6	Z	1.8	1.8	0	0
46	BRACE-1	Z	0	0	0	0
47	BRACE-2	Z	2.7	2.7	0	0
48	BRACE-3	Z	2.7	2.7	0	0
49	CORNER-PL-1	Z	0	0	0	0
50	CORNER-PL-2	Z	2.7	2.7	0	0
51	CORNER-PL-3	Z	2.7	2.7	0	0
52	FM-0	Z	2.3	2.3	0	0
53	FM-120	Z	0	0	0	0
54	FM-240	Z	2.3	2.3	0	0
55	GRATE-L-0-1	Z	1.8	1.8	0	0
56	GRATE-L-0-2	Z	1.8	1.8	0	0
57	GRATE-L-120-1	Z	0	0	0	0
58	GRATE-L-120-2	Z	0	0	0	0
59	GRATE-L-240-1	Z	1.8	1.8	0	0
60	GRATE-L-240-2	Z	1.8	1.8	0	0
61	PL-0	Z	3.2	3.2	0	0
62	PL-120	Z	3.2	3.2	0	0
63	PL-240	Z	3.2	3.2	0	0
64	COR1	Z	0	0	0	0
65	COR2	Z	2.7	2.7	0	0
66	COR3	Z	2.7	2.7	0	0
67	HR1	Z	2	2	0	0
68	HR2	Z	0	0	0	0
69	HR3	Z	2	2	0	0
70	SA1	Z	1.9	1.9	0	0
71	SA2	Z	1.9	1.9	0	0
72	SA3	Z	1.9	1.9	0	0
73	HR1	Z	2	2	0	0
74	HR2	Z	0	0	0	0
75	HR3	Z	2	2	0	0
76	KIK3	Z	2	2	0	0
77	KIK2	Z	2	2	0	0
78	KIK1	Z	2	2	0	0

Member Distributed Loads (BLC 17 : Wind on Ice (60 deg))

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
1	BPL-1	X	1.8	1.8	0	0
2	BPL-2	X	1.8	1.8	0	0
3	BPL-3	X	1.8	1.8	0	0
4	BPL-4	X	1.8	1.8	0	0
5	BPL-5	X	1.8	1.8	0	0
6	BPL-6	X	1.8	1.8	0	0
7	BRACE-1	X	2.7	2.7	0	0
8	BRACE-2	X	2.7	2.7	0	0
9	BRACE-3	X	2.7	2.7	0	0
10	CORNER-PL-1	X	2.7	2.7	0	0
11	CORNER-PL-2	X	2.7	2.7	0	0



Company : ETS, PLLC
 Designer : DHK
 Job Number : 196670.14
 Model Name : 528 WHEELERS FARM RD

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Member Distributed Loads (BLC 17 : Wind on Ice (60 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in,%]	End Location[in,%]	
12	CORNER-PL-3	X	2.7	2.7	0	0
13	FM-0	X	2.3	2.3	0	0
14	FM-120	X	2.3	2.3	0	0
15	FM-240	X	2.3	2.3	0	0
16	GRATE-L-0-1	X	1.8	1.8	0	0
17	GRATE-L-0-2	X	1.8	1.8	0	0
18	GRATE-L-120-1	X	1.8	1.8	0	0
19	GRATE-L-120-2	X	1.8	1.8	0	0
20	GRATE-L-240-1	X	1.8	1.8	0	0
21	GRATE-L-240-2	X	1.8	1.8	0	0
22	PL-0	X	3.2	3.2	0	0
23	PL-120	X	3.2	3.2	0	0
24	PL-240	X	0	0	0	0
25	COR1	X	2.7	2.7	0	0
26	COR2	X	2.7	2.7	0	0
27	COR3	X	2.7	2.7	0	0
28	HR1	X	2	2	0	0
29	HR2	X	2	2	0	0
30	HR3	X	2	2	0	0
31	SA1	X	1.9	1.9	0	0
32	SA2	X	0	0	0	0
33	SA3	X	1.9	1.9	0	0
34	HR1	X	2	2	0	0
35	HR2	X	2	2	0	0
36	HR3	X	2	2	0	0
37	KIK3	X	2	2	0	0
38	KIK2	X	2	2	0	0
39	KIK1	X	2	2	0	0
40	BPL-1	Z	3.1	3.1	0	0
41	BPL-2	Z	3.1	3.1	0	0
42	BPL-3	Z	3.1	3.1	0	0
43	BPL-4	Z	3.1	3.1	0	0
44	BPL-5	Z	3.1	3.1	0	0
45	BPL-6	Z	3.1	3.1	0	0
46	BRACE-1	Z	4.6	4.6	0	0
47	BRACE-2	Z	4.6	4.6	0	0
48	BRACE-3	Z	4.6	4.6	0	0
49	CORNER-PL-1	Z	4.7	4.7	0	0
50	CORNER-PL-2	Z	4.7	4.7	0	0
51	CORNER-PL-3	Z	4.7	4.7	0	0
52	FM-0	Z	4	4	0	0
53	FM-120	Z	4	4	0	0
54	FM-240	Z	4	4	0	0
55	GRATE-L-0-1	Z	3	3	0	0
56	GRATE-L-0-2	Z	3	3	0	0
57	GRATE-L-120-1	Z	3	3	0	0
58	GRATE-L-120-2	Z	3	3	0	0
59	GRATE-L-240-1	Z	3	3	0	0
60	GRATE-L-240-2	Z	3	3	0	0
61	PL-0	Z	5.6	5.6	0	0
62	PL-120	Z	5.6	5.6	0	0
63	PL-240	Z	0	0	0	0
64	COR1	Z	4.7	4.7	0	0
65	COR2	Z	4.7	4.7	0	0
66	COR3	Z	4.7	4.7	0	0
67	HR1	Z	3.5	3.5	0	0
68	HR2	Z	3.5	3.5	0	0



Member Distributed Loads (BLC 17 : Wind on Ice (60 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft....]	Start Location[in.%]	End Location[in.%]
69	HR3	Z	3.5	3.5	0	0
70	SA1	Z	3.2	3.2	0	0
71	SA2	Z	0	0	0	0
72	SA3	Z	3.2	3.2	0	0
73	HR1	Z	3.5	3.5	0	0
74	HR2	Z	3.5	3.5	0	0
75	HR3	Z	3.5	3.5	0	0
76	KIK3	Z	3.5	3.5	0	0
77	KIK2	Z	3.5	3.5	0	0
78	KIK1	Z	3.5	3.5	0	0

Member Distributed Loads (BLC 18 : Wind on Ice (90 deg))

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft....]	Start Location[in.%]	End Location[in.%]
1	BPL-1	X	0	0	0	0
2	BPL-2	X	0	0	0	0
3	BPL-3	X	0	0	0	0
4	BPL-4	X	0	0	0	0
5	BPL-5	X	0	0	0	0
6	BPL-6	X	0	0	0	0
7	BRACE-1	X	0	0	0	0
8	BRACE-2	X	0	0	0	0
9	BRACE-3	X	0	0	0	0
10	CORNER-PL-1	X	0	0	0	0
11	CORNER-PL-2	X	0	0	0	0
12	CORNER-PL-3	X	0	0	0	0
13	FM-0	X	0	0	0	0
14	FM-120	X	0	0	0	0
15	FM-240	X	0	0	0	0
16	GRATE-L-0-1	X	0	0	0	0
17	GRATE-L-0-2	X	0	0	0	0
18	GRATE-L-120-1	X	0	0	0	0
19	GRATE-L-120-2	X	0	0	0	0
20	GRATE-L-240-1	X	0	0	0	0
21	GRATE-L-240-2	X	0	0	0	0
22	PL-0	X	0	0	0	0
23	PL-120	X	0	0	0	0
24	PL-240	X	0	0	0	0
25	COR1	X	0	0	0	0
26	COR2	X	0	0	0	0
27	COR3	X	0	0	0	0
28	HR1	X	0	0	0	0
29	HR2	X	0	0	0	0
30	HR3	X	0	0	0	0
31	SA1	X	0	0	0	0
32	SA2	X	0	0	0	0
33	SA3	X	0	0	0	0
34	HR1	X	0	0	0	0
35	HR2	X	0	0	0	0
36	HR3	X	0	0	0	0
37	KIK3	X	0	0	0	0
38	KIK2	X	0	0	0	0
39	KIK1	X	0	0	0	0
40	BPL-1	Z	0	0	0	0
41	BPL-2	Z	0	0	0	0
42	BPL-3	Z	3.6	3.6	0	0
43	BPL-4	Z	3.6	3.6	0	0



Member Distributed Loads (BLC 18 : Wind on Ice (90 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in, %]	End Location[in, %]	
44	BPL-5	Z	3.6	3.6	0	0
45	BPL-6	Z	3.6	3.6	0	0
46	BRACE-1	Z	5.3	5.3	0	0
47	BRACE-2	Z	5.3	5.3	0	0
48	BRACE-3	Z	0	0	0	0
49	CORNER-PL-1	Z	5.4	5.4	0	0
50	CORNER-PL-2	Z	5.4	5.4	0	0
51	CORNER-PL-3	Z	0	0	0	0
52	FM-0	Z	0	0	0	0
53	FM-120	Z	4.6	4.6	0	0
54	FM-240	Z	4.6	4.6	0	0
55	GRATE-L-0-1	Z	0	0	0	0
56	GRATE-L-0-2	Z	0	0	0	0
57	GRATE-L-120-1	Z	3.5	3.5	0	0
58	GRATE-L-120-2	Z	3.5	3.5	0	0
59	GRATE-L-240-1	Z	3.5	3.5	0	0
60	GRATE-L-240-2	Z	3.5	3.5	0	0
61	PL-0	Z	6.4	6.4	0	0
62	PL-120	Z	6.4	6.4	0	0
63	PL-240	Z	6.4	6.4	0	0
64	COR1	Z	5.4	5.4	0	0
65	COR2	Z	5.4	5.4	0	0
66	COR3	Z	0	0	0	0
67	HR1	Z	0	0	0	0
68	HR2	Z	4.1	4.1	0	0
69	HR3	Z	4.1	4.1	0	0
70	SA1	Z	3.7	3.7	0	0
71	SA2	Z	3.7	3.7	0	0
72	SA3	Z	3.7	3.7	0	0
73	HR1	Z	0	0	0	0
74	HR2	Z	4.1	4.1	0	0
75	HR3	Z	4.1	4.1	0	0
76	KIK3	Z	4.1	4.1	0	0
77	KIK2	Z	4.1	4.1	0	0
78	KIK1	Z	4.1	4.1	0	0

Member Distributed Loads (BLC 19 : Wind on Ice (120 deg))

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in, %]	End Location[in, %]	
1	BPL-1	X	-1.8	-1.8	0	0
2	BPL-2	X	-1.8	-1.8	0	0
3	BPL-3	X	-1.8	-1.8	0	0
4	BPL-4	X	-1.8	-1.8	0	0
5	BPL-5	X	-1.8	-1.8	0	0
6	BPL-6	X	-1.8	-1.8	0	0
7	BRACE-1	X	-2.7	-2.7	0	0
8	BRACE-2	X	-2.7	-2.7	0	0
9	BRACE-3	X	-2.7	-2.7	0	0
10	CORNER-PL-1	X	-2.7	-2.7	0	0
11	CORNER-PL-2	X	-2.7	-2.7	0	0
12	CORNER-PL-3	X	-2.7	-2.7	0	0
13	FM-0	X	-2.3	-2.3	0	0
14	FM-120	X	-2.3	-2.3	0	0
15	FM-240	X	-2.3	-2.3	0	0
16	GRATE-L-0-1	X	-1.8	-1.8	0	0
17	GRATE-L-0-2	X	-1.8	-1.8	0	0
18	GRATE-L-120-1	X	-1.8	-1.8	0	0



Company : ETS, PLLC
 Designer : DHK
 Job Number : 196670.14
 Model Name : 528 WHEELERS FARM RD

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Member Distributed Loads (BLC 19 : Wind on Ice (120 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]	
19	GRATE-L-120-2	X	-1.8	-1.8	0	0
20	GRATE-L-240-1	X	-1.8	-1.8	0	0
21	GRATE-L-240-2	X	-1.8	-1.8	0	0
22	PL-0	X	-3.2	-3.2	0	0
23	PL-120	X	0	0	0	0
24	PL-240	X	-3.2	-3.2	0	0
25	COR1	X	-2.7	-2.7	0	0
26	COR2	X	-2.7	-2.7	0	0
27	COR3	X	-2.7	-2.7	0	0
28	HR1	X	-2	-2	0	0
29	HR2	X	-2	-2	0	0
30	HR3	X	-2	-2	0	0
31	SA1	X	0	0	0	0
32	SA2	X	-1.9	-1.9	0	0
33	SA3	X	0	0	0	0
34	HR1	X	-2	-2	0	0
35	HR2	X	-2	-2	0	0
36	HR3	X	-2	-2	0	0
37	KIK3	X	-2	-2	0	0
38	KIK2	X	-2	-2	0	0
39	KIK1	X	-2	-2	0	0
40	BPL-1	Z	3.1	3.1	0	0
41	BPL-2	Z	3.1	3.1	0	0
42	BPL-3	Z	3.1	3.1	0	0
43	BPL-4	Z	3.1	3.1	0	0
44	BPL-5	Z	3.1	3.1	0	0
45	BPL-6	Z	3.1	3.1	0	0
46	BRACE-1	Z	4.6	4.6	0	0
47	BRACE-2	Z	4.6	4.6	0	0
48	BRACE-3	Z	4.6	4.6	0	0
49	CORNER-PL-1	Z	4.7	4.7	0	0
50	CORNER-PL-2	Z	4.7	4.7	0	0
51	CORNER-PL-3	Z	4.7	4.7	0	0
52	FM-0	Z	4	4	0	0
53	FM-120	Z	4	4	0	0
54	FM-240	Z	4	4	0	0
55	GRATE-L-0-1	Z	3	3	0	0
56	GRATE-L-0-2	Z	3	3	0	0
57	GRATE-L-120-1	Z	3	3	0	0
58	GRATE-L-120-2	Z	3	3	0	0
59	GRATE-L-240-1	Z	3	3	0	0
60	GRATE-L-240-2	Z	3	3	0	0
61	PL-0	Z	5.6	5.6	0	0
62	PL-120	Z	0	0	0	0
63	PL-240	Z	5.6	5.6	0	0
64	COR1	Z	4.7	4.7	0	0
65	COR2	Z	4.7	4.7	0	0
66	COR3	Z	4.7	4.7	0	0
67	HR1	Z	3.5	3.5	0	0
68	HR2	Z	3.5	3.5	0	0
69	HR3	Z	3.5	3.5	0	0
70	SA1	Z	0	0	0	0
71	SA2	Z	3.2	3.2	0	0
72	SA3	Z	0	0	0	0
73	HR1	Z	3.5	3.5	0	0
74	HR2	Z	3.5	3.5	0	0
75	HR3	Z	3.5	3.5	0	0



Member Distributed Loads (BLC 19 : Wind on Ice (120 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
76	KIK3	Z	3.5	3.5	0	0
77	KIK2	Z	3.5	3.5	0	0
78	KIK1	Z	3.5	3.5	0	0

Member Distributed Loads (BLC 20 : Wind on Ice (150 deg))

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
1	BPL-1	X	-3.1	-3.1	0	0
2	BPL-2	X	-3.1	-3.1	0	0
3	BPL-3	X	-3.1	-3.1	0	0
4	BPL-4	X	-3.1	-3.1	0	0
5	BPL-5	X	0	0	0	0
6	BPL-6	X	0	0	0	0
7	BRACE-1	X	-4.6	-4.6	0	0
8	BRACE-2	X	0	0	0	0
9	BRACE-3	X	-4.6	-4.6	0	0
10	CORNER-PL-1	X	-4.7	-4.7	0	0
11	CORNER-PL-2	X	0	0	0	0
12	CORNER-PL-3	X	-4.7	-4.7	0	0
13	FM-0	X	-4	-4	0	0
14	FM-120	X	-4	-4	0	0
15	FM-240	X	0	0	0	0
16	GRATE-L-0-1	X	-3	-3	0	0
17	GRATE-L-0-2	X	-3	-3	0	0
18	GRATE-L-120-1	X	-3	-3	0	0
19	GRATE-L-120-2	X	-3	-3	0	0
20	GRATE-L-240-1	X	0	0	0	0
21	GRATE-L-240-2	X	0	0	0	0
22	PL-0	X	-5.6	-5.6	0	0
23	PL-120	X	-5.6	-5.6	0	0
24	PL-240	X	-5.6	-5.6	0	0
25	COR1	X	-4.7	-4.7	0	0
26	COR2	X	0	0	0	0
27	COR3	X	-4.7	-4.7	0	0
28	HR1	X	-3.5	-3.5	0	0
29	HR2	X	-3.5	-3.5	0	0
30	HR3	X	0	0	0	0
31	SA1	X	-3.2	-3.2	0	0
32	SA2	X	-3.2	-3.2	0	0
33	SA3	X	-3.2	-3.2	0	0
34	HR1	X	-3.5	-3.5	0	0
35	HR2	X	-3.5	-3.5	0	0
36	HR3	X	0	0	0	0
37	KIK3	X	-3.5	-3.5	0	0
38	KIK2	X	-3.5	-3.5	0	0
39	KIK1	X	-3.5	-3.5	0	0
40	BPL-1	Z	1.8	1.8	0	0
41	BPL-2	Z	1.8	1.8	0	0
42	BPL-3	Z	1.8	1.8	0	0
43	BPL-4	Z	1.8	1.8	0	0
44	BPL-5	Z	0	0	0	0
45	BPL-6	Z	0	0	0	0
46	BRACE-1	Z	2.7	2.7	0	0
47	BRACE-2	Z	0	0	0	0
48	BRACE-3	Z	2.7	2.7	0	0
49	CORNER-PL-1	Z	2.7	2.7	0	0
50	CORNER-PL-2	Z	0	0	0	0



Member Distributed Loads (BLC 20 : Wind on Ice (150 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in, %]	End Location[in, %]	
51	CORNER-PL-3	Z	2.7	2.7	0	0
52	FM-0	Z	2.3	2.3	0	0
53	FM-120	Z	2.3	2.3	0	0
54	FM-240	Z	0	0	0	0
55	GRATE-L-0-1	Z	1.8	1.8	0	0
56	GRATE-L-0-2	Z	1.8	1.8	0	0
57	GRATE-L-120-1	Z	1.8	1.8	0	0
58	GRATE-L-120-2	Z	1.8	1.8	0	0
59	GRATE-L-240-1	Z	0	0	0	0
60	GRATE-L-240-2	Z	0	0	0	0
61	PL-0	Z	3.2	3.2	0	0
62	PL-120	Z	3.2	3.2	0	0
63	PL-240	Z	3.2	3.2	0	0
64	COR1	Z	2.7	2.7	0	0
65	COR2	Z	0	0	0	0
66	COR3	Z	2.7	2.7	0	0
67	HR1	Z	2	2	0	0
68	HR2	Z	2	2	0	0
69	HR3	Z	0	0	0	0
70	SA1	Z	1.9	1.9	0	0
71	SA2	Z	1.9	1.9	0	0
72	SA3	Z	1.9	1.9	0	0
73	HR1	Z	2	2	0	0
74	HR2	Z	2	2	0	0
75	HR3	Z	0	0	0	0
76	KIK3	Z	2	2	0	0
77	KIK2	Z	2	2	0	0
78	KIK1	Z	2	2	0	0

Member Distributed Loads (BLC 21 : Wind on Ice (180 deg))

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in, %]	End Location[in, %]	
1	BPL-1	X	-3.6	-3.6	0	0
2	BPL-2	X	-3.6	-3.6	0	0
3	BPL-3	X	-3.6	-3.6	0	0
4	BPL-4	X	-3.6	-3.6	0	0
5	BPL-5	X	-3.6	-3.6	0	0
6	BPL-6	X	-3.6	-3.6	0	0
7	BRACE-1	X	-5.3	-5.3	0	0
8	BRACE-2	X	-5.3	-5.3	0	0
9	BRACE-3	X	-5.3	-5.3	0	0
10	CORNER-PL-1	X	-5.4	-5.4	0	0
11	CORNER-PL-2	X	-5.4	-5.4	0	0
12	CORNER-PL-3	X	-5.4	-5.4	0	0
13	FM-0	X	-4.6	-4.6	0	0
14	FM-120	X	-4.6	-4.6	0	0
15	FM-240	X	-4.6	-4.6	0	0
16	GRATE-L-0-1	X	-3.5	-3.5	0	0
17	GRATE-L-0-2	X	-3.5	-3.5	0	0
18	GRATE-L-120-1	X	-3.5	-3.5	0	0
19	GRATE-L-120-2	X	-3.5	-3.5	0	0
20	GRATE-L-240-1	X	-3.5	-3.5	0	0
21	GRATE-L-240-2	X	-3.5	-3.5	0	0
22	PL-0	X	0	0	0	0
23	PL-120	X	-6.4	-6.4	0	0
24	PL-240	X	-6.4	-6.4	0	0
25	COR1	X	-5.4	-5.4	0	0



Member Distributed Loads (BLC 21 : Wind on Ice (180 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in, %]	End Location[in, %]
26	COR2	X	-5.4	-5.4	0	0
27	COR3	X	-5.4	-5.4	0	0
28	HR1	X	-4.1	-4.1	0	0
29	HR2	X	-4.1	-4.1	0	0
30	HR3	X	-4.1	-4.1	0	0
31	SA1	X	-3.7	-3.7	0	0
32	SA2	X	-3.7	-3.7	0	0
33	SA3	X	-3.7	-3.7	0	0
34	HR1	X	-4.1	-4.1	0	0
35	HR2	X	-4.1	-4.1	0	0
36	HR3	X	-4.1	-4.1	0	0
37	KIK3	X	-4.1	-4.1	0	0
38	KIK2	X	-4.1	-4.1	0	0
39	KIK1	X	-4.1	-4.1	0	0
40	BPL-1	Z	0	0	0	0
41	BPL-2	Z	0	0	0	0
42	BPL-3	Z	0	0	0	0
43	BPL-4	Z	0	0	0	0
44	BPL-5	Z	0	0	0	0
45	BPL-6	Z	0	0	0	0
46	BRACE-1	Z	0	0	0	0
47	BRACE-2	Z	0	0	0	0
48	BRACE-3	Z	0	0	0	0
49	CORNER-PL-1	Z	0	0	0	0
50	CORNER-PL-2	Z	0	0	0	0
51	CORNER-PL-3	Z	0	0	0	0
52	FM-0	Z	0	0	0	0
53	FM-120	Z	0	0	0	0
54	FM-240	Z	0	0	0	0
55	GRATE-L-0-1	Z	0	0	0	0
56	GRATE-L-0-2	Z	0	0	0	0
57	GRATE-L-120-1	Z	0	0	0	0
58	GRATE-L-120-2	Z	0	0	0	0
59	GRATE-L-240-1	Z	0	0	0	0
60	GRATE-L-240-2	Z	0	0	0	0
61	PL-0	Z	0	0	0	0
62	PL-120	Z	0	0	0	0
63	PL-240	Z	0	0	0	0
64	COR1	Z	0	0	0	0
65	COR2	Z	0	0	0	0
66	COR3	Z	0	0	0	0
67	HR1	Z	0	0	0	0
68	HR2	Z	0	0	0	0
69	HR3	Z	0	0	0	0
70	SA1	Z	0	0	0	0
71	SA2	Z	0	0	0	0
72	SA3	Z	0	0	0	0
73	HR1	Z	0	0	0	0
74	HR2	Z	0	0	0	0
75	HR3	Z	0	0	0	0
76	KIK3	Z	0	0	0	0
77	KIK2	Z	0	0	0	0
78	KIK1	Z	0	0	0	0

Member Distributed Loads (BLC 22 : Wind on Ice (210 deg))

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in, %]	End Location[in, %]
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Company : ETS, PLLC
 Designer : DHK
 Job Number : 196670.14
 Model Name : 528 WHEELERS FARM RD

Nov 1, 2019
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Member Distributed Loads (BLC 22 : Wind on Ice (210 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]	
1	BPL-1	X	-3.1	-3.1	0	0
2	BPL-2	X	-3.1	-3.1	0	0
3	BPL-3	X	0	0	0	0
4	BPL-4	X	0	0	0	0
5	BPL-5	X	-3.1	-3.1	0	0
6	BPL-6	X	-3.1	-3.1	0	0
7	BRACE-1	X	0	0	0	0
8	BRACE-2	X	-4.6	-4.6	0	0
9	BRACE-3	X	-4.6	-4.6	0	0
10	CORNER-PL-1	X	0	0	0	0
11	CORNER-PL-2	X	-4.7	-4.7	0	0
12	CORNER-PL-3	X	-4.7	-4.7	0	0
13	FM-0	X	-4	-4	0	0
14	FM-120	X	0	0	0	0
15	FM-240	X	-4	-4	0	0
16	GRATE-L-0-1	X	-3	-3	0	0
17	GRATE-L-0-2	X	-3	-3	0	0
18	GRATE-L-120-1	X	0	0	0	0
19	GRATE-L-120-2	X	0	0	0	0
20	GRATE-L-240-1	X	-3	-3	0	0
21	GRATE-L-240-2	X	-3	-3	0	0
22	PL-0	X	-5.6	-5.6	0	0
23	PL-120	X	-5.6	-5.6	0	0
24	PL-240	X	-5.6	-5.6	0	0
25	COR1	X	0	0	0	0
26	COR2	X	-4.7	-4.7	0	0
27	COR3	X	-4.7	-4.7	0	0
28	HR1	X	-3.5	-3.5	0	0
29	HR2	X	0	0	0	0
30	HR3	X	-3.5	-3.5	0	0
31	SA1	X	-3.2	-3.2	0	0
32	SA2	X	-3.2	-3.2	0	0
33	SA3	X	-3.2	-3.2	0	0
34	HR1	X	-3.5	-3.5	0	0
35	HR2	X	0	0	0	0
36	HR3	X	-3.5	-3.5	0	0
37	KIK3	X	-3.5	-3.5	0	0
38	KIK2	X	-3.5	-3.5	0	0
39	KIK1	X	-3.5	-3.5	0	0
40	BPL-1	Z	-1.8	-1.8	0	0
41	BPL-2	Z	-1.8	-1.8	0	0
42	BPL-3	Z	0	0	0	0
43	BPL-4	Z	0	0	0	0
44	BPL-5	Z	-1.8	-1.8	0	0
45	BPL-6	Z	-1.8	-1.8	0	0
46	BRACE-1	Z	0	0	0	0
47	BRACE-2	Z	-2.7	-2.7	0	0
48	BRACE-3	Z	-2.7	-2.7	0	0
49	CORNER-PL-1	Z	0	0	0	0
50	CORNER-PL-2	Z	-2.7	-2.7	0	0
51	CORNER-PL-3	Z	-2.7	-2.7	0	0
52	FM-0	Z	-2.3	-2.3	0	0
53	FM-120	Z	0	0	0	0
54	FM-240	Z	-2.3	-2.3	0	0
55	GRATE-L-0-1	Z	-1.8	-1.8	0	0
56	GRATE-L-0-2	Z	-1.8	-1.8	0	0
57	GRATE-L-120-1	Z	0	0	0	0



Member Distributed Loads (BLC 22 : Wind on Ice (210 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
58	GRATE-L-120-2	Z	0	0	0	0
59	GRATE-L-240-1	Z	-1.8	-1.8	0	0
60	GRATE-L-240-2	Z	-1.8	-1.8	0	0
61	PL-0	Z	-3.2	-3.2	0	0
62	PL-120	Z	-3.2	-3.2	0	0
63	PL-240	Z	-3.2	-3.2	0	0
64	COR1	Z	0	0	0	0
65	COR2	Z	-2.7	-2.7	0	0
66	COR3	Z	-2.7	-2.7	0	0
67	HR1	Z	-2	-2	0	0
68	HR2	Z	0	0	0	0
69	HR3	Z	-2	-2	0	0
70	SA1	Z	-1.9	-1.9	0	0
71	SA2	Z	-1.9	-1.9	0	0
72	SA3	Z	-1.9	-1.9	0	0
73	HR1	Z	-2	-2	0	0
74	HR2	Z	0	0	0	0
75	HR3	Z	-2	-2	0	0
76	KIK3	Z	-2	-2	0	0
77	KIK2	Z	-2	-2	0	0
78	KIK1	Z	-2	-2	0	0

Member Distributed Loads (BLC 23 : Wind on Ice (240 deg))

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
1	BPL-1	X	-1.8	-1.8	0	0
2	BPL-2	X	-1.8	-1.8	0	0
3	BPL-3	X	-1.8	-1.8	0	0
4	BPL-4	X	-1.8	-1.8	0	0
5	BPL-5	X	-1.8	-1.8	0	0
6	BPL-6	X	-1.8	-1.8	0	0
7	BRACE-1	X	-2.7	-2.7	0	0
8	BRACE-2	X	-2.7	-2.7	0	0
9	BRACE-3	X	-2.7	-2.7	0	0
10	CORNER-PL-1	X	-2.7	-2.7	0	0
11	CORNER-PL-2	X	-2.7	-2.7	0	0
12	CORNER-PL-3	X	-2.7	-2.7	0	0
13	FM-0	X	-2.3	-2.3	0	0
14	FM-120	X	-2.3	-2.3	0	0
15	FM-240	X	-2.3	-2.3	0	0
16	GRATE-L-0-1	X	-1.8	-1.8	0	0
17	GRATE-L-0-2	X	-1.8	-1.8	0	0
18	GRATE-L-120-1	X	-1.8	-1.8	0	0
19	GRATE-L-120-2	X	-1.8	-1.8	0	0
20	GRATE-L-240-1	X	-1.8	-1.8	0	0
21	GRATE-L-240-2	X	-1.8	-1.8	0	0
22	PL-0	X	-3.2	-3.2	0	0
23	PL-120	X	-3.2	-3.2	0	0
24	PL-240	X	0	0	0	0
25	COR1	X	-2.7	-2.7	0	0
26	COR2	X	-2.7	-2.7	0	0
27	COR3	X	-2.7	-2.7	0	0
28	HR1	X	-2	-2	0	0
29	HR2	X	-2	-2	0	0
30	HR3	X	-2	-2	0	0
31	SA1	X	-1.9	-1.9	0	0
32	SA2	X	0	0	0	0



Member Distributed Loads (BLC 23 : Wind on Ice (240 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]	
33	SA3	X	-1.9	-1.9	0	0
34	HR1	X	-2	-2	0	0
35	HR2	X	-2	-2	0	0
36	HR3	X	-2	-2	0	0
37	KIK3	X	-2	-2	0	0
38	KIK2	X	-2	-2	0	0
39	KIK1	X	-2	-2	0	0
40	BPL-1	Z	-3.1	-3.1	0	0
41	BPL-2	Z	-3.1	-3.1	0	0
42	BPL-3	Z	-3.1	-3.1	0	0
43	BPL-4	Z	-3.1	-3.1	0	0
44	BPL-5	Z	-3.1	-3.1	0	0
45	BPL-6	Z	-3.1	-3.1	0	0
46	BRACE-1	Z	-4.6	-4.6	0	0
47	BRACE-2	Z	-4.6	-4.6	0	0
48	BRACE-3	Z	-4.6	-4.6	0	0
49	CORNER-PL-1	Z	-4.7	-4.7	0	0
50	CORNER-PL-2	Z	-4.7	-4.7	0	0
51	CORNER-PL-3	Z	-4.7	-4.7	0	0
52	FM-0	Z	-4	-4	0	0
53	FM-120	Z	-4	-4	0	0
54	FM-240	Z	-4	-4	0	0
55	GRATE-L-0-1	Z	-3	-3	0	0
56	GRATE-L-0-2	Z	-3	-3	0	0
57	GRATE-L-120-1	Z	-3	-3	0	0
58	GRATE-L-120-2	Z	-3	-3	0	0
59	GRATE-L-240-1	Z	-3	-3	0	0
60	GRATE-L-240-2	Z	-3	-3	0	0
61	PL-0	Z	-5.6	-5.6	0	0
62	PL-120	Z	-5.6	-5.6	0	0
63	PL-240	Z	0	0	0	0
64	COR1	Z	-4.7	-4.7	0	0
65	COR2	Z	-4.7	-4.7	0	0
66	COR3	Z	-4.7	-4.7	0	0
67	HR1	Z	-3.5	-3.5	0	0
68	HR2	Z	-3.5	-3.5	0	0
69	HR3	Z	-3.5	-3.5	0	0
70	SA1	Z	-3.2	-3.2	0	0
71	SA2	Z	0	0	0	0
72	SA3	Z	-3.2	-3.2	0	0
73	HR1	Z	-3.5	-3.5	0	0
74	HR2	Z	-3.5	-3.5	0	0
75	HR3	Z	-3.5	-3.5	0	0
76	KIK3	Z	-3.5	-3.5	0	0
77	KIK2	Z	-3.5	-3.5	0	0
78	KIK1	Z	-3.5	-3.5	0	0

Member Distributed Loads (BLC 24 : Wind on Ice (270 deg))

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]	
1	BPL-1	X	0	0	0	0
2	BPL-2	X	0	0	0	0
3	BPL-3	X	0	0	0	0
4	BPL-4	X	0	0	0	0
5	BPL-5	X	0	0	0	0
6	BPL-6	X	0	0	0	0
7	BRACE-1	X	0	0	0	0



Company : ETS, PLLC
 Designer : DHK
 Job Number : 196670.14
 Model Name : 528 WHEELERS FARM RD

Nov 1, 2019
 2:53 PM
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Member Distributed Loads (BLC 24 : Wind on Ice (270 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
8	BRACE-2	X	0	0	0
9	BRACE-3	X	0	0	0
10	CORNER-PL-1	X	0	0	0
11	CORNER-PL-2	X	0	0	0
12	CORNER-PL-3	X	0	0	0
13	FM-0	X	0	0	0
14	FM-120	X	0	0	0
15	FM-240	X	0	0	0
16	GRATE-L-0-1	X	0	0	0
17	GRATE-L-0-2	X	0	0	0
18	GRATE-L-120-1	X	0	0	0
19	GRATE-L-120-2	X	0	0	0
20	GRATE-L-240-1	X	0	0	0
21	GRATE-L-240-2	X	0	0	0
22	PL-0	X	0	0	0
23	PL-120	X	0	0	0
24	PL-240	X	0	0	0
25	COR1	X	0	0	0
26	COR2	X	0	0	0
27	COR3	X	0	0	0
28	HR1	X	0	0	0
29	HR2	X	0	0	0
30	HR3	X	0	0	0
31	SA1	X	0	0	0
32	SA2	X	0	0	0
33	SA3	X	0	0	0
34	HR1	X	0	0	0
35	HR2	X	0	0	0
36	HR3	X	0	0	0
37	KIK3	X	0	0	0
38	KIK2	X	0	0	0
39	KIK1	X	0	0	0
40	BPL-1	Z	0	0	0
41	BPL-2	Z	0	0	0
42	BPL-3	Z	-3.6	-3.6	0
43	BPL-4	Z	-3.6	-3.6	0
44	BPL-5	Z	-3.6	-3.6	0
45	BPL-6	Z	-3.6	-3.6	0
46	BRACE-1	Z	-5.3	-5.3	0
47	BRACE-2	Z	-5.3	-5.3	0
48	BRACE-3	Z	0	0	0
49	CORNER-PL-1	Z	-5.4	-5.4	0
50	CORNER-PL-2	Z	-5.4	-5.4	0
51	CORNER-PL-3	Z	0	0	0
52	FM-0	Z	0	0	0
53	FM-120	Z	-4.6	-4.6	0
54	FM-240	Z	-4.6	-4.6	0
55	GRATE-L-0-1	Z	0	0	0
56	GRATE-L-0-2	Z	0	0	0
57	GRATE-L-120-1	Z	-3.5	-3.5	0
58	GRATE-L-120-2	Z	-3.5	-3.5	0
59	GRATE-L-240-1	Z	-3.5	-3.5	0
60	GRATE-L-240-2	Z	-3.5	-3.5	0
61	PL-0	Z	-6.4	-6.4	0
62	PL-120	Z	-6.4	-6.4	0
63	PL-240	Z	-6.4	-6.4	0
64	COR1	Z	-5.4	-5.4	0



Member Distributed Loads (BLC 24 : Wind on Ice (270 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
65	COR2	Z	-5.4	-5.4	0	0
66	COR3	Z	0	0	0	0
67	HR1	Z	0	0	0	0
68	HR2	Z	-4.1	-4.1	0	0
69	HR3	Z	-4.1	-4.1	0	0
70	SA1	Z	-3.7	-3.7	0	0
71	SA2	Z	-3.7	-3.7	0	0
72	SA3	Z	-3.7	-3.7	0	0
73	HR1	Z	0	0	0	0
74	HR2	Z	-4.1	-4.1	0	0
75	HR3	Z	-4.1	-4.1	0	0
76	KIK3	Z	-4.1	-4.1	0	0
77	KIK2	Z	-4.1	-4.1	0	0
78	KIK1	Z	-4.1	-4.1	0	0

Member Distributed Loads (BLC 25 : Wind on Ice (300 deg))

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
1	BPL-1	X	1.8	1.8	0	0
2	BPL-2	X	1.8	1.8	0	0
3	BPL-3	X	1.8	1.8	0	0
4	BPL-4	X	1.8	1.8	0	0
5	BPL-5	X	1.8	1.8	0	0
6	BPL-6	X	1.8	1.8	0	0
7	BRACE-1	X	2.7	2.7	0	0
8	BRACE-2	X	2.7	2.7	0	0
9	BRACE-3	X	2.7	2.7	0	0
10	CORNER-PL-1	X	2.7	2.7	0	0
11	CORNER-PL-2	X	2.7	2.7	0	0
12	CORNER-PL-3	X	2.7	2.7	0	0
13	FM-0	X	2.3	2.3	0	0
14	FM-120	X	2.3	2.3	0	0
15	FM-240	X	2.3	2.3	0	0
16	GRATE-L-0-1	X	1.8	1.8	0	0
17	GRATE-L-0-2	X	1.8	1.8	0	0
18	GRATE-L-120-1	X	1.8	1.8	0	0
19	GRATE-L-120-2	X	1.8	1.8	0	0
20	GRATE-L-240-1	X	1.8	1.8	0	0
21	GRATE-L-240-2	X	1.8	1.8	0	0
22	PL-0	X	3.2	3.2	0	0
23	PL-120	X	0	0	0	0
24	PL-240	X	3.2	3.2	0	0
25	COR1	X	2.7	2.7	0	0
26	COR2	X	2.7	2.7	0	0
27	COR3	X	2.7	2.7	0	0
28	HR1	X	2	2	0	0
29	HR2	X	2	2	0	0
30	HR3	X	2	2	0	0
31	SA1	X	0	0	0	0
32	SA2	X	1.9	1.9	0	0
33	SA3	X	0	0	0	0
34	HR1	X	2	2	0	0
35	HR2	X	2	2	0	0
36	HR3	X	2	2	0	0
37	KIK3	X	2	2	0	0
38	KIK2	X	2	2	0	0
39	KIK1	X	2	2	0	0



Member Distributed Loads (BLC 25 : Wind on Ice (300 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
40	BPL-1	Z	-3.1	-3.1	0	0
41	BPL-2	Z	-3.1	-3.1	0	0
42	BPL-3	Z	-3.1	-3.1	0	0
43	BPL-4	Z	-3.1	-3.1	0	0
44	BPL-5	Z	-3.1	-3.1	0	0
45	BPL-6	Z	-3.1	-3.1	0	0
46	BRACE-1	Z	-4.6	-4.6	0	0
47	BRACE-2	Z	-4.6	-4.6	0	0
48	BRACE-3	Z	-4.6	-4.6	0	0
49	CORNER-PL-1	Z	-4.7	-4.7	0	0
50	CORNER-PL-2	Z	-4.7	-4.7	0	0
51	CORNER-PL-3	Z	-4.7	-4.7	0	0
52	FM-0	Z	-4	-4	0	0
53	FM-120	Z	-4	-4	0	0
54	FM-240	Z	-4	-4	0	0
55	GRATE-L-0-1	Z	-3	-3	0	0
56	GRATE-L-0-2	Z	-3	-3	0	0
57	GRATE-L-120-1	Z	-3	-3	0	0
58	GRATE-L-120-2	Z	-3	-3	0	0
59	GRATE-L-240-1	Z	-3	-3	0	0
60	GRATE-L-240-2	Z	-3	-3	0	0
61	PL-0	Z	-5.6	-5.6	0	0
62	PL-120	Z	0	0	0	0
63	PL-240	Z	-5.6	-5.6	0	0
64	COR1	Z	-4.7	-4.7	0	0
65	COR2	Z	-4.7	-4.7	0	0
66	COR3	Z	-4.7	-4.7	0	0
67	HR1	Z	-3.5	-3.5	0	0
68	HR2	Z	-3.5	-3.5	0	0
69	HR3	Z	-3.5	-3.5	0	0
70	SA1	Z	0	0	0	0
71	SA2	Z	-3.2	-3.2	0	0
72	SA3	Z	0	0	0	0
73	HR1	Z	-3.5	-3.5	0	0
74	HR2	Z	-3.5	-3.5	0	0
75	HR3	Z	-3.5	-3.5	0	0
76	KIK3	Z	-3.5	-3.5	0	0
77	KIK2	Z	-3.5	-3.5	0	0
78	KIK1	Z	-3.5	-3.5	0	0

Member Distributed Loads (BLC 26 : Wind on Ice (330 deg))

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
1	BPL-1	X	3.1	3.1	0	0
2	BPL-2	X	3.1	3.1	0	0
3	BPL-3	X	3.1	3.1	0	0
4	BPL-4	X	3.1	3.1	0	0
5	BPL-5	X	0	0	0	0
6	BPL-6	X	0	0	0	0
7	BRACE-1	X	4.6	4.6	0	0
8	BRACE-2	X	0	0	0	0
9	BRACE-3	X	4.6	4.6	0	0
10	CORNER-PL-1	X	4.7	4.7	0	0
11	CORNER-PL-2	X	0	0	0	0
12	CORNER-PL-3	X	4.7	4.7	0	0
13	FM-0	X	4	4	0	0
14	FM-120	X	4	4	0	0



Company : ETS, PLLC
 Designer : DHK
 Job Number : 196670.14
 Model Name : 528 WHEELERS FARM RD

Nov 1, 2019
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Member Distributed Loads (BLC 26 : Wind on Ice (330 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
15	FM-240	X	0	0	0
16	GRATE-L-0-1	X	3	3	0
17	GRATE-L-0-2	X	3	3	0
18	GRATE-L-120-1	X	3	3	0
19	GRATE-L-120-2	X	3	3	0
20	GRATE-L-240-1	X	0	0	0
21	GRATE-L-240-2	X	0	0	0
22	PL-0	X	5.6	5.6	0
23	PL-120	X	5.6	5.6	0
24	PL-240	X	5.6	5.6	0
25	COR1	X	4.7	4.7	0
26	COR2	X	0	0	0
27	COR3	X	4.7	4.7	0
28	HR1	X	3.5	3.5	0
29	HR2	X	3.5	3.5	0
30	HR3	X	0	0	0
31	SA1	X	3.2	3.2	0
32	SA2	X	3.2	3.2	0
33	SA3	X	3.2	3.2	0
34	HR1	X	3.5	3.5	0
35	HR2	X	3.5	3.5	0
36	HR3	X	0	0	0
37	KIK3	X	3.5	3.5	0
38	KIK2	X	3.5	3.5	0
39	KIK1	X	3.5	3.5	0
40	BPL-1	Z	-1.8	-1.8	0
41	BPL-2	Z	-1.8	-1.8	0
42	BPL-3	Z	-1.8	-1.8	0
43	BPL-4	Z	-1.8	-1.8	0
44	BPL-5	Z	0	0	0
45	BPL-6	Z	0	0	0
46	BRACE-1	Z	-2.7	-2.7	0
47	BRACE-2	Z	0	0	0
48	BRACE-3	Z	-2.7	-2.7	0
49	CORNER-PL-1	Z	-2.7	-2.7	0
50	CORNER-PL-2	Z	0	0	0
51	CORNER-PL-3	Z	-2.7	-2.7	0
52	FM-0	Z	-2.3	-2.3	0
53	FM-120	Z	-2.3	-2.3	0
54	FM-240	Z	0	0	0
55	GRATE-L-0-1	Z	-1.8	-1.8	0
56	GRATE-L-0-2	Z	-1.8	-1.8	0
57	GRATE-L-120-1	Z	-1.8	-1.8	0
58	GRATE-L-120-2	Z	-1.8	-1.8	0
59	GRATE-L-240-1	Z	0	0	0
60	GRATE-L-240-2	Z	0	0	0
61	PL-0	Z	-3.2	-3.2	0
62	PL-120	Z	-3.2	-3.2	0
63	PL-240	Z	-3.2	-3.2	0
64	COR1	Z	-2.7	-2.7	0
65	COR2	Z	0	0	0
66	COR3	Z	-2.7	-2.7	0
67	HR1	Z	-2	-2	0
68	HR2	Z	-2	-2	0
69	HR3	Z	0	0	0
70	SA1	Z	-1.9	-1.9	0
71	SA2	Z	-1.9	-1.9	0



Member Distributed Loads (BLC 26 : Wind on Ice (330 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft....]	Start Location[in,%]	End Location[in,%]
72	SA3	Z	-1.9	-1.9	0 0
73	HR1	Z	-2	-2	0 0
74	HR2	Z	-2	-2	0 0
75	HR3	Z	0	0	0 0
76	KIK3	Z	-2	-2	0 0
77	KIK2	Z	-2	-2	0 0
78	KIK1	Z	-2	-2	0 0

Load Combinations

Description	Solve	PDelta	S...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...
1	1.4D	Yes	Y	1	1.4								
2	1.2D + 1.0W (0 deg)	Yes	Y	1	1.2	2	1	175	1				
3	1.2D + 1.0W (30 d...	Yes	Y	1	1.2	3	1	176	1				
4	1.2D + 1.0W (60 d...	Yes	Y	1	1.2	4	1	177	1				
5	1.2D + 1.0W (90 d...	Yes	Y	1	1.2	5	1	178	1				
6	1.2D + 1.0W (120 ...	Yes	Y	1	1.2	6	1	179	1				
7	1.2D + 1.0W (150 ...	Yes	Y	1	1.2	7	1	180	1				
8	1.2D + 1.0W (180 ...	Yes	Y	1	1.2	8	1	181	1				
9	1.2D + 1.0W (210 ...	Yes	Y	1	1.2	9	1	182	1				
10	1.2D + 1.0W (240 ...	Yes	Y	1	1.2	10	1	183	1				
11	1.2D + 1.0W (270 ...	Yes	Y	1	1.2	11	1	184	1				
12	1.2D + 1.0W (300 ...	Yes	Y	1	1.2	12	1	185	1				
13	1.2D + 1.0W (330 ...	Yes	Y	1	1.2	13	1	186	1				
14	1.2D + Di + Wi (0 d...	Yes	Y	1	1.2	14	1	15	1	187	1		
15	1.2D + Di + Wi (30 ...	Yes	Y	1	1.2	14	1	16	1	188	1		
16	1.2D + Di + Wi (60 ...	Yes	Y	1	1.2	14	1	17	1	189	1		
17	1.2D + Di + Wi (90 ...	Yes	Y	1	1.2	14	1	18	1	190	1		
18	1.2D + Di + Wi (12...	Yes	Y	1	1.2	14	1	19	1	191	1		
19	1.2D + Di + Wi (15...	Yes	Y	1	1.2	14	1	20	1	192	1		
20	1.2D + Di + Wi (18...	Yes	Y	1	1.2	14	1	21	1	193	1		
21	1.2D + Di + Wi (21...	Yes	Y	1	1.2	14	1	22	1	194	1		
22	1.2D + Di + Wi (24...	Yes	Y	1	1.2	14	1	23	1	195	1		
23	1.2D + Di + Wi (27...	Yes	Y	1	1.2	14	1	24	1	196	1		
24	1.2D + Di + Wi (30...	Yes	Y	1	1.2	14	1	25	1	197	1		
25	1.2D + Di + Wi (33...	Yes	Y	1	1.2	14	1	26	1	198	1		
26	1.2D + 1.0 Ev + 1.0...	Yes	Y	1	1.2	1	.041	27	.103				
27	1.2D + 1.0 Ev + 1.0...	Yes	Y	1	1.2	1	.041	28	.103				
28	1.2D + 1.0 Ev + 1.0...	Yes	Y	1	1.2	1	.041	29	.103				
29	1.2D + 1.0 Ev + 1.0...	Yes	Y	1	1.2	1	.041	30	.103				
30	1.2D + 1.0 Ev + 1.0...	Yes	Y	1	1.2	1	.041	31	.103				
31	1.2D + 1.0 Ev + 1.0...	Yes	Y	1	1.2	1	.041	32	.103				
32	1.2D + 1.0 Ev + 1.0...	Yes	Y	1	1.2	1	.041	33	.103				
33	1.2D + 1.0 Ev + 1.0...	Yes	Y	1	1.2	1	.041	34	.103				
34	1.2D + 1.0 Ev + 1.0...	Yes	Y	1	1.2	1	.041	35	.103				
35	1.2D + 1.0 Ev + 1.0...	Yes	Y	1	1.2	1	.041	36	.103				
36	1.2D + 1.0 Ev + 1.0...	Yes	Y	1	1.2	1	.041	37	.103				
37	1.2D + 1.0 Ev + 1.0...	Yes	Y	1	1.2	1	.041	38	.103				
38	1.2D + 1.5Lm1 + 1...	Yes	Y	1	1.2	39	1.5	2	.058	175	.058		
39	1.2D + 1.5Lm1 + 1...	Yes	Y	1	1.2	39	1.5	3	.058	176	.058		
40	1.2D + 1.5Lm1 + 1...	Yes	Y	1	1.2	39	1.5	4	.058	177	.058		
41	1.2D + 1.5Lm1 + 1...	Yes	Y	1	1.2	39	1.5	5	.058	178	.058		
42	1.2D + 1.5Lm1 + 1...	Yes	Y	1	1.2	39	1.5	6	.058	179	.058		
43	1.2D + 1.5Lm1 + 1...	Yes	Y	1	1.2	39	1.5	7	.058	180	.058		
44	1.2D + 1.5Lm1 + 1...	Yes	Y	1	1.2	39	1.5	8	.058	181	.058		
45	1.2D + 1.5Lm1 + 1...	Yes	Y	1	1.2	39	1.5	9	.058	182	.058		



Load Combinations (Continued)

Description	Solve	PDelta	S...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...
46	1.2D + 1.5Lm1 + 1...	Yes	Y	1	1.2	39	1.5	10	.058	183	.058		
47	1.2D + 1.5Lm1 + 1...	Yes	Y	1	1.2	39	1.5	11	.058	184	.058		
48	1.2D + 1.5Lm1 + 1...	Yes	Y	1	1.2	39	1.5	12	.058	185	.058		
49	1.2D + 1.5Lm1 + 1...	Yes	Y	1	1.2	39	1.5	13	.058	186	.058		
50	1.2D + 1.5Lm2 + 1...	Yes	Y	1	1.2	40	1.5	2	.058	175	.058		
51	1.2D + 1.5Lm2 + 1...	Yes	Y	1	1.2	40	1.5	3	.058	176	.058		
52	1.2D + 1.5Lm2 + 1...	Yes	Y	1	1.2	40	1.5	4	.058	177	.058		
53	1.2D + 1.5Lm2 + 1...	Yes	Y	1	1.2	40	1.5	5	.058	178	.058		
54	1.2D + 1.5Lm2 + 1...	Yes	Y	1	1.2	40	1.5	6	.058	179	.058		
55	1.2D + 1.5Lm2 + 1...	Yes	Y	1	1.2	40	1.5	7	.058	180	.058		
56	1.2D + 1.5Lm2 + 1...	Yes	Y	1	1.2	40	1.5	8	.058	181	.058		
57	1.2D + 1.5Lm2 + 1...	Yes	Y	1	1.2	40	1.5	9	.058	182	.058		
58	1.2D + 1.5Lm2 + 1...	Yes	Y	1	1.2	40	1.5	10	.058	183	.058		
59	1.2D + 1.5Lm2 + 1...	Yes	Y	1	1.2	40	1.5	11	.058	184	.058		
60	1.2D + 1.5Lm2 + 1...	Yes	Y	1	1.2	40	1.5	12	.058	185	.058		
61	1.2D + 1.5Lm2 + 1...	Yes	Y	1	1.2	40	1.5	13	.058	186	.058		
62	1.2D + 1.5Lm3 + 1...	Yes	Y	1	1.2	41	1.5	2	.058	175	.058		
63	1.2D + 1.5Lm3 + 1...	Yes	Y	1	1.2	41	1.5	3	.058	176	.058		
64	1.2D + 1.5Lm3 + 1...	Yes	Y	1	1.2	41	1.5	4	.058	177	.058		
65	1.2D + 1.5Lm3 + 1...	Yes	Y	1	1.2	41	1.5	5	.058	178	.058		
66	1.2D + 1.5Lm3 + 1...	Yes	Y	1	1.2	41	1.5	6	.058	179	.058		
67	1.2D + 1.5Lm3 + 1...	Yes	Y	1	1.2	41	1.5	7	.058	180	.058		
68	1.2D + 1.5Lm3 + 1...	Yes	Y	1	1.2	41	1.5	8	.058	181	.058		
69	1.2D + 1.5Lm3 + 1...	Yes	Y	1	1.2	41	1.5	9	.058	182	.058		
70	1.2D + 1.5Lm3 + 1...	Yes	Y	1	1.2	41	1.5	10	.058	183	.058		
71	1.2D + 1.5Lm3 + 1...	Yes	Y	1	1.2	41	1.5	11	.058	184	.058		
72	1.2D + 1.5Lm3 + 1...	Yes	Y	1	1.2	41	1.5	12	.058	185	.058		
73	1.2D + 1.5Lm3 + 1...	Yes	Y	1	1.2	41	1.5	13	.058	186	.058		
74	1.2D + 1.5Lm4 + 1...	Yes	Y	1	1.2	42	1.5	2	.058	175	.058		
75	1.2D + 1.5Lm4 + 1...	Yes	Y	1	1.2	42	1.5	3	.058	176	.058		
76	1.2D + 1.5Lm4 + 1...	Yes	Y	1	1.2	42	1.5	4	.058	177	.058		
77	1.2D + 1.5Lm4 + 1...	Yes	Y	1	1.2	42	1.5	5	.058	178	.058		
78	1.2D + 1.5Lm4 + 1...	Yes	Y	1	1.2	42	1.5	6	.058	179	.058		
79	1.2D + 1.5Lm4 + 1...	Yes	Y	1	1.2	42	1.5	7	.058	180	.058		
80	1.2D + 1.5Lm4 + 1...	Yes	Y	1	1.2	42	1.5	8	.058	181	.058		
81	1.2D + 1.5Lm4 + 1...	Yes	Y	1	1.2	42	1.5	9	.058	182	.058		
82	1.2D + 1.5Lm4 + 1...	Yes	Y	1	1.2	42	1.5	10	.058	183	.058		
83	1.2D + 1.5Lm4 + 1...	Yes	Y	1	1.2	42	1.5	11	.058	184	.058		
84	1.2D + 1.5Lm4 + 1...	Yes	Y	1	1.2	42	1.5	12	.058	185	.058		
85	1.2D + 1.5Lm4 + 1...	Yes	Y	1	1.2	42	1.5	13	.058	186	.058		
86	1.2D + 1.5Lm5 + 1...	Yes	Y	1	1.2	43	1.5	2	.058	175	.058		
87	1.2D + 1.5Lm5 + 1...	Yes	Y	1	1.2	43	1.5	3	.058	176	.058		
88	1.2D + 1.5Lm5 + 1...	Yes	Y	1	1.2	43	1.5	4	.058	177	.058		
89	1.2D + 1.5Lm5 + 1...	Yes	Y	1	1.2	43	1.5	5	.058	178	.058		
90	1.2D + 1.5Lm5 + 1...	Yes	Y	1	1.2	43	1.5	6	.058	179	.058		
91	1.2D + 1.5Lm5 + 1...	Yes	Y	1	1.2	43	1.5	7	.058	180	.058		
92	1.2D + 1.5Lm5 + 1...	Yes	Y	1	1.2	43	1.5	8	.058	181	.058		
93	1.2D + 1.5Lm5 + 1...	Yes	Y	1	1.2	43	1.5	9	.058	182	.058		
94	1.2D + 1.5Lm5 + 1...	Yes	Y	1	1.2	43	1.5	10	.058	183	.058		
95	1.2D + 1.5Lm5 + 1...	Yes	Y	1	1.2	43	1.5	11	.058	184	.058		
96	1.2D + 1.5Lm5 + 1...	Yes	Y	1	1.2	43	1.5	12	.058	185	.058		
97	1.2D + 1.5Lm5 + 1...	Yes	Y	1	1.2	43	1.5	13	.058	186	.058		
98	1.2D + 1.5Lm6 + 1...	Yes	Y	1	1.2	44	1.5	2	.058	175	.058		
99	1.2D + 1.5Lm6 + 1...	Yes	Y	1	1.2	44	1.5	3	.058	176	.058		
100	1.2D + 1.5Lm6 + 1...	Yes	Y	1	1.2	44	1.5	4	.058	177	.058		
101	1.2D + 1.5Lm6 + 1...	Yes	Y	1	1.2	44	1.5	5	.058	178	.058		
102	1.2D + 1.5Lm6 + 1...	Yes	Y	1	1.2	44	1.5	6	.058	179	.058		



Load Combinations (Continued)

Description	Solve	PDelta	S...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...
103 1.2D + 1.5Lm6 + 1...	Yes	Y		1	1.2	44	1.5	7	.058	180	.058		
104 1.2D + 1.5Lm6 + 1...	Yes	Y		1	1.2	44	1.5	8	.058	181	.058		
105 1.2D + 1.5Lm6 + 1...	Yes	Y		1	1.2	44	1.5	9	.058	182	.058		
106 1.2D + 1.5Lm6 + 1...	Yes	Y		1	1.2	44	1.5	10	.058	183	.058		
107 1.2D + 1.5Lm6 + 1...	Yes	Y		1	1.2	44	1.5	11	.058	184	.058		
108 1.2D + 1.5Lm6 + 1...	Yes	Y		1	1.2	44	1.5	12	.058	185	.058		
109 1.2D + 1.5Lm6 + 1...	Yes	Y		1	1.2	44	1.5	13	.058	186	.058		
110 1.2D + 1.5Lm7 + 1...	Yes	Y		1	1.2	45	1.5	2	.058	175	.058		
111 1.2D + 1.5Lm7 + 1...	Yes	Y		1	1.2	45	1.5	3	.058	176	.058		
112 1.2D + 1.5Lm7 + 1...	Yes	Y		1	1.2	45	1.5	4	.058	177	.058		
113 1.2D + 1.5Lm7 + 1...	Yes	Y		1	1.2	45	1.5	5	.058	178	.058		
114 1.2D + 1.5Lm7 + 1...	Yes	Y		1	1.2	45	1.5	6	.058	179	.058		
115 1.2D + 1.5Lm7 + 1...	Yes	Y		1	1.2	45	1.5	7	.058	180	.058		
116 1.2D + 1.5Lm7 + 1...	Yes	Y		1	1.2	45	1.5	8	.058	181	.058		
117 1.2D + 1.5Lm7 + 1...	Yes	Y		1	1.2	45	1.5	9	.058	182	.058		
118 1.2D + 1.5Lm7 + 1...	Yes	Y		1	1.2	45	1.5	10	.058	183	.058		
119 1.2D + 1.5Lm7 + 1...	Yes	Y		1	1.2	45	1.5	11	.058	184	.058		
120 1.2D + 1.5Lm7 + 1...	Yes	Y		1	1.2	45	1.5	12	.058	185	.058		
121 1.2D + 1.5Lm7 + 1...	Yes	Y		1	1.2	45	1.5	13	.058	186	.058		
122 1.2D + 1.5Lm8 + 1...	Yes	Y		1	1.2	46	1.5	2	.058	175	.058		
123 1.2D + 1.5Lm8 + 1...	Yes	Y		1	1.2	46	1.5	3	.058	176	.058		
124 1.2D + 1.5Lm8 + 1...	Yes	Y		1	1.2	46	1.5	4	.058	177	.058		
125 1.2D + 1.5Lm8 + 1...	Yes	Y		1	1.2	46	1.5	5	.058	178	.058		
126 1.2D + 1.5Lm8 + 1...	Yes	Y		1	1.2	46	1.5	6	.058	179	.058		
127 1.2D + 1.5Lm8 + 1...	Yes	Y		1	1.2	46	1.5	7	.058	180	.058		
128 1.2D + 1.5Lm8 + 1...	Yes	Y		1	1.2	46	1.5	8	.058	181	.058		
129 1.2D + 1.5Lm8 + 1...	Yes	Y		1	1.2	46	1.5	9	.058	182	.058		
130 1.2D + 1.5Lm8 + 1...	Yes	Y		1	1.2	46	1.5	10	.058	183	.058		
131 1.2D + 1.5Lm8 + 1...	Yes	Y		1	1.2	46	1.5	11	.058	184	.058		
132 1.2D + 1.5Lm8 + 1...	Yes	Y		1	1.2	46	1.5	12	.058	185	.058		
133 1.2D + 1.5Lm8 + 1...	Yes	Y		1	1.2	46	1.5	13	.058	186	.058		
134 1.2D + 1.5Lm9 + 1...	Yes	Y		1	1.2	47	1.5	2	.058	175	.058		
135 1.2D + 1.5Lm9 + 1...	Yes	Y		1	1.2	47	1.5	3	.058	176	.058		
136 1.2D + 1.5Lm9 + 1...	Yes	Y		1	1.2	47	1.5	4	.058	177	.058		
137 1.2D + 1.5Lm9 + 1...	Yes	Y		1	1.2	47	1.5	5	.058	178	.058		
138 1.2D + 1.5Lm9 + 1...	Yes	Y		1	1.2	47	1.5	6	.058	179	.058		
139 1.2D + 1.5Lm9 + 1...	Yes	Y		1	1.2	47	1.5	7	.058	180	.058		
140 1.2D + 1.5Lm9 + 1...	Yes	Y		1	1.2	47	1.5	8	.058	181	.058		
141 1.2D + 1.5Lm9 + 1...	Yes	Y		1	1.2	47	1.5	9	.058	182	.058		
142 1.2D + 1.5Lm9 + 1...	Yes	Y		1	1.2	47	1.5	10	.058	183	.058		
143 1.2D + 1.5Lm9 + 1...	Yes	Y		1	1.2	47	1.5	11	.058	184	.058		
144 1.2D + 1.5Lm9 + 1...	Yes	Y		1	1.2	47	1.5	12	.058	185	.058		
145 1.2D + 1.5Lm9 + 1...	Yes	Y		1	1.2	47	1.5	13	.058	186	.058		
146 1.2D + 1.5Lm10 + ...	Yes	Y		1	1.2	48	1.5	2	.058	175	.058		
147 1.2D + 1.5Lm10 + ...	Yes	Y		1	1.2	48	1.5	3	.058	176	.058		
148 1.2D + 1.5Lm10 + ...	Yes	Y		1	1.2	48	1.5	4	.058	177	.058		
149 1.2D + 1.5Lm10 + ...	Yes	Y		1	1.2	48	1.5	5	.058	178	.058		
150 1.2D + 1.5Lm10 + ...	Yes	Y		1	1.2	48	1.5	6	.058	179	.058		
151 1.2D + 1.5Lm10 + ...	Yes	Y		1	1.2	48	1.5	7	.058	180	.058		
152 1.2D + 1.5Lm10 + ...	Yes	Y		1	1.2	48	1.5	8	.058	181	.058		
153 1.2D + 1.5Lm10 + ...	Yes	Y		1	1.2	48	1.5	9	.058	182	.058		
154 1.2D + 1.5Lm10 + ...	Yes	Y		1	1.2	48	1.5	10	.058	183	.058		
155 1.2D + 1.5Lm10 + ...	Yes	Y		1	1.2	48	1.5	11	.058	184	.058		
156 1.2D + 1.5Lm10 + ...	Yes	Y		1	1.2	48	1.5	12	.058	185	.058		
157 1.2D + 1.5Lm10 + ...	Yes	Y		1	1.2	48	1.5	13	.058	186	.058		
158 1.2D + 1.5Lm11 + ...	Yes	Y		1	1.2	49	1.5	2	.058	175	.058		
159 1.2D + 1.5Lm11 + ...	Yes	Y		1	1.2	49	1.5	3	.058	176	.058		



Load Combinations (Continued)

Description	Solve	PDelta	S...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...
160 1.2D + 1.5Lm11 + ...	Yes	Y		1	1.2	49	1.5	4	.058	177	.058		
161 1.2D + 1.5Lm11 + ...	Yes	Y		1	1.2	49	1.5	5	.058	178	.058		
162 1.2D + 1.5Lm11 + ...	Yes	Y		1	1.2	49	1.5	6	.058	179	.058		
163 1.2D + 1.5Lm11 + ...	Yes	Y		1	1.2	49	1.5	7	.058	180	.058		
164 1.2D + 1.5Lm11 + ...	Yes	Y		1	1.2	49	1.5	8	.058	181	.058		
165 1.2D + 1.5Lm11 + ...	Yes	Y		1	1.2	49	1.5	9	.058	182	.058		
166 1.2D + 1.5Lm11 + ...	Yes	Y		1	1.2	49	1.5	10	.058	183	.058		
167 1.2D + 1.5Lm11 + ...	Yes	Y		1	1.2	49	1.5	11	.058	184	.058		
168 1.2D + 1.5Lm11 + ...	Yes	Y		1	1.2	49	1.5	12	.058	185	.058		
169 1.2D + 1.5Lm11 + ...	Yes	Y		1	1.2	49	1.5	13	.058	186	.058		
170 1.2D + 1.5Lm12 + ...	Yes	Y		1	1.2	50	1.5	2	.058	175	.058		
171 1.2D + 1.5Lm12 + ...	Yes	Y		1	1.2	50	1.5	3	.058	176	.058		
172 1.2D + 1.5Lm12 + ...	Yes	Y		1	1.2	50	1.5	4	.058	177	.058		
173 1.2D + 1.5Lm12 + ...	Yes	Y		1	1.2	50	1.5	5	.058	178	.058		
174 1.2D + 1.5Lm12 + ...	Yes	Y		1	1.2	50	1.5	6	.058	179	.058		
175 1.2D + 1.5Lm12 + ...	Yes	Y		1	1.2	50	1.5	7	.058	180	.058		
176 1.2D + 1.5Lm12 + ...	Yes	Y		1	1.2	50	1.5	8	.058	181	.058		
177 1.2D + 1.5Lm12 + ...	Yes	Y		1	1.2	50	1.5	9	.058	182	.058		
178 1.2D + 1.5Lm12 + ...	Yes	Y		1	1.2	50	1.5	10	.058	183	.058		
179 1.2D + 1.5Lm12 + ...	Yes	Y		1	1.2	50	1.5	11	.058	184	.058		
180 1.2D + 1.5Lm12 + ...	Yes	Y		1	1.2	50	1.5	12	.058	185	.058		
181 1.2D + 1.5Lm12 + ...	Yes	Y		1	1.2	50	1.5	13	.058	186	.058		
182 1.2D + 1.5Lm13 + ...	Yes	Y		1	1.2	51	1.5	2	.058	175	.058		
183 1.2D + 1.5Lm13 + ...	Yes	Y		1	1.2	51	1.5	3	.058	176	.058		
184 1.2D + 1.5Lm13 + ...	Yes	Y		1	1.2	51	1.5	4	.058	177	.058		
185 1.2D + 1.5Lm13 + ...	Yes	Y		1	1.2	51	1.5	5	.058	178	.058		
186 1.2D + 1.5Lm13 + ...	Yes	Y		1	1.2	51	1.5	6	.058	179	.058		
187 1.2D + 1.5Lm13 + ...	Yes	Y		1	1.2	51	1.5	7	.058	180	.058		
188 1.2D + 1.5Lm13 + ...	Yes	Y		1	1.2	51	1.5	8	.058	181	.058		
189 1.2D + 1.5Lm13 + ...	Yes	Y		1	1.2	51	1.5	9	.058	182	.058		
190 1.2D + 1.5Lm13 + ...	Yes	Y		1	1.2	51	1.5	10	.058	183	.058		
191 1.2D + 1.5Lm13 + ...	Yes	Y		1	1.2	51	1.5	11	.058	184	.058		
192 1.2D + 1.5Lm13 + ...	Yes	Y		1	1.2	51	1.5	12	.058	185	.058		
193 1.2D + 1.5Lm13 + ...	Yes	Y		1	1.2	51	1.5	13	.058	186	.058		
194 1.2D + 1.5Lm14 + ...	Yes	Y		1	1.2	52	1.5	2	.058	175	.058		
195 1.2D + 1.5Lm14 + ...	Yes	Y		1	1.2	52	1.5	3	.058	176	.058		
196 1.2D + 1.5Lm14 + ...	Yes	Y		1	1.2	52	1.5	4	.058	177	.058		
197 1.2D + 1.5Lm14 + ...	Yes	Y		1	1.2	52	1.5	5	.058	178	.058		
198 1.2D + 1.5Lm14 + ...	Yes	Y		1	1.2	52	1.5	6	.058	179	.058		
199 1.2D + 1.5Lm14 + ...	Yes	Y		1	1.2	52	1.5	7	.058	180	.058		
200 1.2D + 1.5Lm14 + ...	Yes	Y		1	1.2	52	1.5	8	.058	181	.058		
201 1.2D + 1.5Lm14 + ...	Yes	Y		1	1.2	52	1.5	9	.058	182	.058		
202 1.2D + 1.5Lm14 + ...	Yes	Y		1	1.2	52	1.5	10	.058	183	.058		
203 1.2D + 1.5Lm14 + ...	Yes	Y		1	1.2	52	1.5	11	.058	184	.058		
204 1.2D + 1.5Lm14 + ...	Yes	Y		1	1.2	52	1.5	12	.058	185	.058		
205 1.2D + 1.5Lm14 + ...	Yes	Y		1	1.2	52	1.5	13	.058	186	.058		
206 1.2D + 1.5Lm15 + ...	Yes	Y		1	1.2	53	1.5	2	.058	175	.058		
207 1.2D + 1.5Lm15 + ...	Yes	Y		1	1.2	53	1.5	3	.058	176	.058		
208 1.2D + 1.5Lm15 + ...	Yes	Y		1	1.2	53	1.5	4	.058	177	.058		
209 1.2D + 1.5Lm15 + ...	Yes	Y		1	1.2	53	1.5	5	.058	178	.058		
210 1.2D + 1.5Lm15 + ...	Yes	Y		1	1.2	53	1.5	6	.058	179	.058		
211 1.2D + 1.5Lm15 + ...	Yes	Y		1	1.2	53	1.5	7	.058	180	.058		
212 1.2D + 1.5Lm15 + ...	Yes	Y		1	1.2	53	1.5	8	.058	181	.058		
213 1.2D + 1.5Lm15 + ...	Yes	Y		1	1.2	53	1.5	9	.058	182	.058		
214 1.2D + 1.5Lm15 + ...	Yes	Y		1	1.2	53	1.5	10	.058	183	.058		
215 1.2D + 1.5Lm15 + ...	Yes	Y		1	1.2	53	1.5	11	.058	184	.058		
216 1.2D + 1.5Lm15 + ...	Yes	Y		1	1.2	53	1.5	12	.058	185	.058		



Load Combinations (Continued)

	Description	Solve	PDelta	S...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...
217	1.2D + 1.5Lm15 + ...	Yes	Y		1	1.2	53	1.5	13	.058	186	.058		
218	1.2D + 1.5Lm16 + ...		Y		1	1.2	54	1.5	2	.058	175	.058		
219	1.2D + 1.5Lm16 + ...		Y		1	1.2	54	1.5	3	.058	176	.058		
220	1.2D + 1.5Lm16 + ...		Y		1	1.2	54	1.5	4	.058	177	.058		
221	1.2D + 1.5Lm16 + ...		Y		1	1.2	54	1.5	5	.058	178	.058		
222	1.2D + 1.5Lm16 + ...		Y		1	1.2	54	1.5	6	.058	179	.058		
223	1.2D + 1.5Lm16 + ...		Y		1	1.2	54	1.5	7	.058	180	.058		
224	1.2D + 1.5Lm16 + ...		Y		1	1.2	54	1.5	8	.058	181	.058		
225	1.2D + 1.5Lm16 + ...		Y		1	1.2	54	1.5	9	.058	182	.058		
226	1.2D + 1.5Lm16 + ...		Y		1	1.2	54	1.5	10	.058	183	.058		
227	1.2D + 1.5Lm16 + ...		Y		1	1.2	54	1.5	11	.058	184	.058		
228	1.2D + 1.5Lm16 + ...		Y		1	1.2	54	1.5	12	.058	185	.058		
229	1.2D + 1.5Lm16 + ...		Y		1	1.2	54	1.5	13	.058	186	.058		
230	1.2D + 1.5Lm17 + ...		Y		1	1.2	55	1.5	2	.058	175	.058		
231	1.2D + 1.5Lm17 + ...		Y		1	1.2	55	1.5	3	.058	176	.058		
232	1.2D + 1.5Lm17 + ...		Y		1	1.2	55	1.5	4	.058	177	.058		
233	1.2D + 1.5Lm17 + ...		Y		1	1.2	55	1.5	5	.058	178	.058		
234	1.2D + 1.5Lm17 + ...		Y		1	1.2	55	1.5	6	.058	179	.058		
235	1.2D + 1.5Lm17 + ...		Y		1	1.2	55	1.5	7	.058	180	.058		
236	1.2D + 1.5Lm17 + ...		Y		1	1.2	55	1.5	8	.058	181	.058		
237	1.2D + 1.5Lm17 + ...		Y		1	1.2	55	1.5	9	.058	182	.058		
238	1.2D + 1.5Lm17 + ...		Y		1	1.2	55	1.5	10	.058	183	.058		
239	1.2D + 1.5Lm17 + ...		Y		1	1.2	55	1.5	11	.058	184	.058		
240	1.2D + 1.5Lm17 + ...		Y		1	1.2	55	1.5	12	.058	185	.058		
241	1.2D + 1.5Lm17 + ...		Y		1	1.2	55	1.5	13	.058	186	.058		
242	1.2D + 1.5Lm18 + ...		Y		1	1.2	56	1.5	2	.058	175	.058		
243	1.2D + 1.5Lm18 + ...		Y		1	1.2	56	1.5	3	.058	176	.058		
244	1.2D + 1.5Lm18 + ...		Y		1	1.2	56	1.5	4	.058	177	.058		
245	1.2D + 1.5Lm18 + ...		Y		1	1.2	56	1.5	5	.058	178	.058		
246	1.2D + 1.5Lm18 + ...		Y		1	1.2	56	1.5	6	.058	179	.058		
247	1.2D + 1.5Lm18 + ...		Y		1	1.2	56	1.5	7	.058	180	.058		
248	1.2D + 1.5Lm18 + ...		Y		1	1.2	56	1.5	8	.058	181	.058		
249	1.2D + 1.5Lm18 + ...		Y		1	1.2	56	1.5	9	.058	182	.058		
250	1.2D + 1.5Lm18 + ...		Y		1	1.2	56	1.5	10	.058	183	.058		
251	1.2D + 1.5Lm18 + ...		Y		1	1.2	56	1.5	11	.058	184	.058		
252	1.2D + 1.5Lm18 + ...		Y		1	1.2	56	1.5	12	.058	185	.058		
253	1.2D + 1.5Lm18 + ...		Y		1	1.2	56	1.5	13	.058	186	.058		
254	1.2D + 1.5Lm19 + ...		Y		1	1.2	57	1.5	2	.058	175	.058		
255	1.2D + 1.5Lm19 + ...		Y		1	1.2	57	1.5	3	.058	176	.058		
256	1.2D + 1.5Lm19 + ...		Y		1	1.2	57	1.5	4	.058	177	.058		
257	1.2D + 1.5Lm19 + ...		Y		1	1.2	57	1.5	5	.058	178	.058		
258	1.2D + 1.5Lm19 + ...		Y		1	1.2	57	1.5	6	.058	179	.058		
259	1.2D + 1.5Lm19 + ...		Y		1	1.2	57	1.5	7	.058	180	.058		
260	1.2D + 1.5Lm19 + ...		Y		1	1.2	57	1.5	8	.058	181	.058		
261	1.2D + 1.5Lm19 + ...		Y		1	1.2	57	1.5	9	.058	182	.058		
262	1.2D + 1.5Lm19 + ...		Y		1	1.2	57	1.5	10	.058	183	.058		
263	1.2D + 1.5Lm19 + ...		Y		1	1.2	57	1.5	11	.058	184	.058		
264	1.2D + 1.5Lm19 + ...		Y		1	1.2	57	1.5	12	.058	185	.058		
265	1.2D + 1.5Lm19 + ...		Y		1	1.2	57	1.5	13	.058	186	.058		
266	1.2D + 1.5Lm20 + ...		Y		1	1.2	58	1.5	2	.058	175	.058		
267	1.2D + 1.5Lm20 + ...		Y		1	1.2	58	1.5	3	.058	176	.058		
268	1.2D + 1.5Lm20 + ...		Y		1	1.2	58	1.5	4	.058	177	.058		
269	1.2D + 1.5Lm20 + ...		Y		1	1.2	58	1.5	5	.058	178	.058		
270	1.2D + 1.5Lm20 + ...		Y		1	1.2	58	1.5	6	.058	179	.058		
271	1.2D + 1.5Lm20 + ...		Y		1	1.2	58	1.5	7	.058	180	.058		
272	1.2D + 1.5Lm20 + ...		Y		1	1.2	58	1.5	8	.058	181	.058		
273	1.2D + 1.5Lm20 + ...		Y		1	1.2	58	1.5	9	.058	182	.058		



Load Combinations (Continued)

Description	Solve	P	Delta	S...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...
274	1.2D + 1.5Lm20 + ...		Y		1	1.2	58	1.5	10	.058	183	.058	
275	1.2D + 1.5Lm20 + ...		Y		1	1.2	58	1.5	11	.058	184	.058	
276	1.2D + 1.5Lm20 + ...		Y		1	1.2	58	1.5	12	.058	185	.058	
277	1.2D + 1.5Lm20 + ...		Y		1	1.2	58	1.5	13	.058	186	.058	
278	1.2D + 1.5Lm21 + ...		Y		1	1.2	59	1.5	2	.058	175	.058	
279	1.2D + 1.5Lm21 + ...		Y		1	1.2	59	1.5	3	.058	176	.058	
280	1.2D + 1.5Lm21 + ...		Y		1	1.2	59	1.5	4	.058	177	.058	
281	1.2D + 1.5Lm21 + ...		Y		1	1.2	59	1.5	5	.058	178	.058	
282	1.2D + 1.5Lm21 + ...		Y		1	1.2	59	1.5	6	.058	179	.058	
283	1.2D + 1.5Lm21 + ...		Y		1	1.2	59	1.5	7	.058	180	.058	
284	1.2D + 1.5Lm21 + ...		Y		1	1.2	59	1.5	8	.058	181	.058	
285	1.2D + 1.5Lm21 + ...		Y		1	1.2	59	1.5	9	.058	182	.058	
286	1.2D + 1.5Lm21 + ...		Y		1	1.2	59	1.5	10	.058	183	.058	
287	1.2D + 1.5Lm21 + ...		Y		1	1.2	59	1.5	11	.058	184	.058	
288	1.2D + 1.5Lm21 + ...		Y		1	1.2	59	1.5	12	.058	185	.058	
289	1.2D + 1.5Lm21 + ...		Y		1	1.2	59	1.5	13	.058	186	.058	
290	1.2D + 1.5Lm22 + ...		Y		1	1.2	60	1.5	2	.058	175	.058	
291	1.2D + 1.5Lm22 + ...		Y		1	1.2	60	1.5	3	.058	176	.058	
292	1.2D + 1.5Lm22 + ...		Y		1	1.2	60	1.5	4	.058	177	.058	
293	1.2D + 1.5Lm22 + ...		Y		1	1.2	60	1.5	5	.058	178	.058	
294	1.2D + 1.5Lm22 + ...		Y		1	1.2	60	1.5	6	.058	179	.058	
295	1.2D + 1.5Lm22 + ...		Y		1	1.2	60	1.5	7	.058	180	.058	
296	1.2D + 1.5Lm22 + ...		Y		1	1.2	60	1.5	8	.058	181	.058	
297	1.2D + 1.5Lm22 + ...		Y		1	1.2	60	1.5	9	.058	182	.058	
298	1.2D + 1.5Lm22 + ...		Y		1	1.2	60	1.5	10	.058	183	.058	
299	1.2D + 1.5Lm22 + ...		Y		1	1.2	60	1.5	11	.058	184	.058	
300	1.2D + 1.5Lm22 + ...		Y		1	1.2	60	1.5	12	.058	185	.058	
301	1.2D + 1.5Lm22 + ...		Y		1	1.2	60	1.5	13	.058	186	.058	
302	1.2D + 1.5Lm23 + ...		Y		1	1.2	61	1.5	2	.058	175	.058	
303	1.2D + 1.5Lm23 + ...		Y		1	1.2	61	1.5	3	.058	176	.058	
304	1.2D + 1.5Lm23 + ...		Y		1	1.2	61	1.5	4	.058	177	.058	
305	1.2D + 1.5Lm23 + ...		Y		1	1.2	61	1.5	5	.058	178	.058	
306	1.2D + 1.5Lm23 + ...		Y		1	1.2	61	1.5	6	.058	179	.058	
307	1.2D + 1.5Lm23 + ...		Y		1	1.2	61	1.5	7	.058	180	.058	
308	1.2D + 1.5Lm23 + ...		Y		1	1.2	61	1.5	8	.058	181	.058	
309	1.2D + 1.5Lm23 + ...		Y		1	1.2	61	1.5	9	.058	182	.058	
310	1.2D + 1.5Lm23 + ...		Y		1	1.2	61	1.5	10	.058	183	.058	
311	1.2D + 1.5Lm23 + ...		Y		1	1.2	61	1.5	11	.058	184	.058	
312	1.2D + 1.5Lm23 + ...		Y		1	1.2	61	1.5	12	.058	185	.058	
313	1.2D + 1.5Lm23 + ...		Y		1	1.2	61	1.5	13	.058	186	.058	
314	1.2D + 1.5Lm24 + ...		Y		1	1.2	62	1.5	2	.058	175	.058	
315	1.2D + 1.5Lm24 + ...		Y		1	1.2	62	1.5	3	.058	176	.058	
316	1.2D + 1.5Lm24 + ...		Y		1	1.2	62	1.5	4	.058	177	.058	
317	1.2D + 1.5Lm24 + ...		Y		1	1.2	62	1.5	5	.058	178	.058	
318	1.2D + 1.5Lm24 + ...		Y		1	1.2	62	1.5	6	.058	179	.058	
319	1.2D + 1.5Lm24 + ...		Y		1	1.2	62	1.5	7	.058	180	.058	
320	1.2D + 1.5Lm24 + ...		Y		1	1.2	62	1.5	8	.058	181	.058	
321	1.2D + 1.5Lm24 + ...		Y		1	1.2	62	1.5	9	.058	182	.058	
322	1.2D + 1.5Lm24 + ...		Y		1	1.2	62	1.5	10	.058	183	.058	
323	1.2D + 1.5Lm24 + ...		Y		1	1.2	62	1.5	11	.058	184	.058	
324	1.2D + 1.5Lm24 + ...		Y		1	1.2	62	1.5	12	.058	185	.058	
325	1.2D + 1.5Lm24 + ...		Y		1	1.2	62	1.5	13	.058	186	.058	
326	1.2D + 1.5Lm25 + ...		Y		1	1.2	63	1.5	2	.058	175	.058	
327	1.2D + 1.5Lm25 + ...		Y		1	1.2	63	1.5	3	.058	176	.058	
328	1.2D + 1.5Lm25 + ...		Y		1	1.2	63	1.5	4	.058	177	.058	
329	1.2D + 1.5Lm25 + ...		Y		1	1.2	63	1.5	5	.058	178	.058	
330	1.2D + 1.5Lm25 + ...		Y		1	1.2	63	1.5	6	.058	179	.058	



Load Combinations (Continued)

Description	Solve	PDelta	S...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...
331 1.2D + 1.5Lm25 + ...		Y		1	1.2	63	1.5	7	.058	180	.058		
332 1.2D + 1.5Lm25 + ...		Y		1	1.2	63	1.5	8	.058	181	.058		
333 1.2D + 1.5Lm25 + ...		Y		1	1.2	63	1.5	9	.058	182	.058		
334 1.2D + 1.5Lm25 + ...		Y		1	1.2	63	1.5	10	.058	183	.058		
335 1.2D + 1.5Lm25 + ...		Y		1	1.2	63	1.5	11	.058	184	.058		
336 1.2D + 1.5Lm25 + ...		Y		1	1.2	63	1.5	12	.058	185	.058		
337 1.2D + 1.5Lm25 + ...		Y		1	1.2	63	1.5	13	.058	186	.058		
338 1.2D + 1.5Lm26 + ...		Y		1	1.2	64	1.5	2	.058	175	.058		
339 1.2D + 1.5Lm26 + ...		Y		1	1.2	64	1.5	3	.058	176	.058		
340 1.2D + 1.5Lm26 + ...		Y		1	1.2	64	1.5	4	.058	177	.058		
341 1.2D + 1.5Lm26 + ...		Y		1	1.2	64	1.5	5	.058	178	.058		
342 1.2D + 1.5Lm26 + ...		Y		1	1.2	64	1.5	6	.058	179	.058		
343 1.2D + 1.5Lm26 + ...		Y		1	1.2	64	1.5	7	.058	180	.058		
344 1.2D + 1.5Lm26 + ...		Y		1	1.2	64	1.5	8	.058	181	.058		
345 1.2D + 1.5Lm26 + ...		Y		1	1.2	64	1.5	9	.058	182	.058		
346 1.2D + 1.5Lm26 + ...		Y		1	1.2	64	1.5	10	.058	183	.058		
347 1.2D + 1.5Lm26 + ...		Y		1	1.2	64	1.5	11	.058	184	.058		
348 1.2D + 1.5Lm26 + ...		Y		1	1.2	64	1.5	12	.058	185	.058		
349 1.2D + 1.5Lm26 + ...		Y		1	1.2	64	1.5	13	.058	186	.058		
350 1.2D + 1.5Lm27 + ...		Y		1	1.2	65	1.5	2	.058	175	.058		
351 1.2D + 1.5Lm27 + ...		Y		1	1.2	65	1.5	3	.058	176	.058		
352 1.2D + 1.5Lm27 + ...		Y		1	1.2	65	1.5	4	.058	177	.058		
353 1.2D + 1.5Lm27 + ...		Y		1	1.2	65	1.5	5	.058	178	.058		
354 1.2D + 1.5Lm27 + ...		Y		1	1.2	65	1.5	6	.058	179	.058		
355 1.2D + 1.5Lm27 + ...		Y		1	1.2	65	1.5	7	.058	180	.058		
356 1.2D + 1.5Lm27 + ...		Y		1	1.2	65	1.5	8	.058	181	.058		
357 1.2D + 1.5Lm27 + ...		Y		1	1.2	65	1.5	9	.058	182	.058		
358 1.2D + 1.5Lm27 + ...		Y		1	1.2	65	1.5	10	.058	183	.058		
359 1.2D + 1.5Lm27 + ...		Y		1	1.2	65	1.5	11	.058	184	.058		
360 1.2D + 1.5Lm27 + ...		Y		1	1.2	65	1.5	12	.058	185	.058		
361 1.2D + 1.5Lm27 + ...		Y		1	1.2	65	1.5	13	.058	186	.058		
362 1.2D + 1.5Lm28 + ...		Y		1	1.2	66	1.5	2	.058	175	.058		
363 1.2D + 1.5Lm28 + ...		Y		1	1.2	66	1.5	3	.058	176	.058		
364 1.2D + 1.5Lm28 + ...		Y		1	1.2	66	1.5	4	.058	177	.058		
365 1.2D + 1.5Lm28 + ...		Y		1	1.2	66	1.5	5	.058	178	.058		
366 1.2D + 1.5Lm28 + ...		Y		1	1.2	66	1.5	6	.058	179	.058		
367 1.2D + 1.5Lm28 + ...		Y		1	1.2	66	1.5	7	.058	180	.058		
368 1.2D + 1.5Lm28 + ...		Y		1	1.2	66	1.5	8	.058	181	.058		
369 1.2D + 1.5Lm28 + ...		Y		1	1.2	66	1.5	9	.058	182	.058		
370 1.2D + 1.5Lm28 + ...		Y		1	1.2	66	1.5	10	.058	183	.058		
371 1.2D + 1.5Lm28 + ...		Y		1	1.2	66	1.5	11	.058	184	.058		
372 1.2D + 1.5Lm28 + ...		Y		1	1.2	66	1.5	12	.058	185	.058		
373 1.2D + 1.5Lm28 + ...		Y		1	1.2	66	1.5	13	.058	186	.058		
374 1.2D + 1.5Lm29 + ...		Y		1	1.2	67	1.5	2	.058	175	.058		
375 1.2D + 1.5Lm29 + ...		Y		1	1.2	67	1.5	3	.058	176	.058		
376 1.2D + 1.5Lm29 + ...		Y		1	1.2	67	1.5	4	.058	177	.058		
377 1.2D + 1.5Lm29 + ...		Y		1	1.2	67	1.5	5	.058	178	.058		
378 1.2D + 1.5Lm29 + ...		Y		1	1.2	67	1.5	6	.058	179	.058		
379 1.2D + 1.5Lm29 + ...		Y		1	1.2	67	1.5	7	.058	180	.058		
380 1.2D + 1.5Lm29 + ...		Y		1	1.2	67	1.5	8	.058	181	.058		
381 1.2D + 1.5Lm29 + ...		Y		1	1.2	67	1.5	9	.058	182	.058		
382 1.2D + 1.5Lm29 + ...		Y		1	1.2	67	1.5	10	.058	183	.058		
383 1.2D + 1.5Lm29 + ...		Y		1	1.2	67	1.5	11	.058	184	.058		
384 1.2D + 1.5Lm29 + ...		Y		1	1.2	67	1.5	12	.058	185	.058		
385 1.2D + 1.5Lm29 + ...		Y		1	1.2	67	1.5	13	.058	186	.058		
386 1.2D + 1.5Lm30 + ...		Y		1	1.2	68	1.5	2	.058	175	.058		
387 1.2D + 1.5Lm30 + ...		Y		1	1.2	68	1.5	3	.058	176	.058		



Company : ETS, PLLC
 Designer : DHK
 Job Number : 196670.14
 Model Name : 528 WHEELERS FARM RD

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 2:53 PM
 Checked By: JAA

Load Combinations (Continued)

Description	Solve	P	Delta	S...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...
388 1.2D + 1.5Lm30 + ...		Y			1	1.2	68	1.5	4	.058	177	.058		
389 1.2D + 1.5Lm30 + ...		Y			1	1.2	68	1.5	5	.058	178	.058		
390 1.2D + 1.5Lm30 + ...		Y			1	1.2	68	1.5	6	.058	179	.058		
391 1.2D + 1.5Lm30 + ...		Y			1	1.2	68	1.5	7	.058	180	.058		
392 1.2D + 1.5Lm30 + ...		Y			1	1.2	68	1.5	8	.058	181	.058		
393 1.2D + 1.5Lm30 + ...		Y			1	1.2	68	1.5	9	.058	182	.058		
394 1.2D + 1.5Lm30 + ...		Y			1	1.2	68	1.5	10	.058	183	.058		
395 1.2D + 1.5Lm30 + ...		Y			1	1.2	68	1.5	11	.058	184	.058		
396 1.2D + 1.5Lm30 + ...		Y			1	1.2	68	1.5	12	.058	185	.058		
397 1.2D + 1.5Lm30 + ...		Y			1	1.2	68	1.5	13	.058	186	.058		
398 1.2D + 1.5Lm31 + ...		Y			1	1.2	69	1.5	2	.058	175	.058		
399 1.2D + 1.5Lm31 + ...		Y			1	1.2	69	1.5	3	.058	176	.058		
400 1.2D + 1.5Lm31 + ...		Y			1	1.2	69	1.5	4	.058	177	.058		
401 1.2D + 1.5Lm31 + ...		Y			1	1.2	69	1.5	5	.058	178	.058		
402 1.2D + 1.5Lm31 + ...		Y			1	1.2	69	1.5	6	.058	179	.058		
403 1.2D + 1.5Lm31 + ...		Y			1	1.2	69	1.5	7	.058	180	.058		
404 1.2D + 1.5Lm31 + ...		Y			1	1.2	69	1.5	8	.058	181	.058		
405 1.2D + 1.5Lm31 + ...		Y			1	1.2	69	1.5	9	.058	182	.058		
406 1.2D + 1.5Lm31 + ...		Y			1	1.2	69	1.5	10	.058	183	.058		
407 1.2D + 1.5Lm31 + ...		Y			1	1.2	69	1.5	11	.058	184	.058		
408 1.2D + 1.5Lm31 + ...		Y			1	1.2	69	1.5	12	.058	185	.058		
409 1.2D + 1.5Lm31 + ...		Y			1	1.2	69	1.5	13	.058	186	.058		
410 1.2D + 1.5Lm32 + ...		Y			1	1.2	70	1.5	2	.058	175	.058		
411 1.2D + 1.5Lm32 + ...		Y			1	1.2	70	1.5	3	.058	176	.058		
412 1.2D + 1.5Lm32 + ...		Y			1	1.2	70	1.5	4	.058	177	.058		
413 1.2D + 1.5Lm32 + ...		Y			1	1.2	70	1.5	5	.058	178	.058		
414 1.2D + 1.5Lm32 + ...		Y			1	1.2	70	1.5	6	.058	179	.058		
415 1.2D + 1.5Lm32 + ...		Y			1	1.2	70	1.5	7	.058	180	.058		
416 1.2D + 1.5Lm32 + ...		Y			1	1.2	70	1.5	8	.058	181	.058		
417 1.2D + 1.5Lm32 + ...		Y			1	1.2	70	1.5	9	.058	182	.058		
418 1.2D + 1.5Lm32 + ...		Y			1	1.2	70	1.5	10	.058	183	.058		
419 1.2D + 1.5Lm32 + ...		Y			1	1.2	70	1.5	11	.058	184	.058		
420 1.2D + 1.5Lm32 + ...		Y			1	1.2	70	1.5	12	.058	185	.058		
421 1.2D + 1.5Lm32 + ...		Y			1	1.2	70	1.5	13	.058	186	.058		
422 1.2D + 1.5Lm33 + ...		Y			1	1.2	71	1.5	2	.058	175	.058		
423 1.2D + 1.5Lm33 + ...		Y			1	1.2	71	1.5	3	.058	176	.058		
424 1.2D + 1.5Lm33 + ...		Y			1	1.2	71	1.5	4	.058	177	.058		
425 1.2D + 1.5Lm33 + ...		Y			1	1.2	71	1.5	5	.058	178	.058		
426 1.2D + 1.5Lm33 + ...		Y			1	1.2	71	1.5	6	.058	179	.058		
427 1.2D + 1.5Lm33 + ...		Y			1	1.2	71	1.5	7	.058	180	.058		
428 1.2D + 1.5Lm33 + ...		Y			1	1.2	71	1.5	8	.058	181	.058		
429 1.2D + 1.5Lm33 + ...		Y			1	1.2	71	1.5	9	.058	182	.058		
430 1.2D + 1.5Lm33 + ...		Y			1	1.2	71	1.5	10	.058	183	.058		
431 1.2D + 1.5Lm33 + ...		Y			1	1.2	71	1.5	11	.058	184	.058		
432 1.2D + 1.5Lm33 + ...		Y			1	1.2	71	1.5	12	.058	185	.058		
433 1.2D + 1.5Lm33 + ...		Y			1	1.2	71	1.5	13	.058	186	.058		
434 1.2D + 1.5Lm34 + ...		Y			1	1.2	72	1.5	2	.058	175	.058		
435 1.2D + 1.5Lm34 + ...		Y			1	1.2	72	1.5	3	.058	176	.058		
436 1.2D + 1.5Lm34 + ...		Y			1	1.2	72	1.5	4	.058	177	.058		
437 1.2D + 1.5Lm34 + ...		Y			1	1.2	72	1.5	5	.058	178	.058		
438 1.2D + 1.5Lm34 + ...		Y			1	1.2	72	1.5	6	.058	179	.058		
439 1.2D + 1.5Lm34 + ...		Y			1	1.2	72	1.5	7	.058	180	.058		
440 1.2D + 1.5Lm34 + ...		Y			1	1.2	72	1.5	8	.058	181	.058		
441 1.2D + 1.5Lm34 + ...		Y			1	1.2	72	1.5	9	.058	182	.058		
442 1.2D + 1.5Lm34 + ...		Y			1	1.2	72	1.5	10	.058	183	.058		
443 1.2D + 1.5Lm34 + ...		Y			1	1.2	72	1.5	11	.058	184	.058		
444 1.2D + 1.5Lm34 + ...		Y			1	1.2	72	1.5	12	.058	185	.058		



Company : ETS, PLLC
 Designer : DHK
 Job Number : 196670.14
 Model Name : 528 WHEELERS FARM RD

Nov 1, 2019
 2:53 PM
 Checked By: JAA

Load Combinations (Continued)

	Description	Solve	PDelta	S...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...
445	1.2D + 1.5Lm34 + ...		Y		1	1.2	72	1.5	13	.058	186	.058		
446	1.2D + 1.5Lm35 + ...		Y		1	1.2	73	1.5	2	.058	175	.058		
447	1.2D + 1.5Lm35 + ...		Y		1	1.2	73	1.5	3	.058	176	.058		
448	1.2D + 1.5Lm35 + ...		Y		1	1.2	73	1.5	4	.058	177	.058		
449	1.2D + 1.5Lm35 + ...		Y		1	1.2	73	1.5	5	.058	178	.058		
450	1.2D + 1.5Lm35 + ...		Y		1	1.2	73	1.5	6	.058	179	.058		
451	1.2D + 1.5Lm35 + ...		Y		1	1.2	73	1.5	7	.058	180	.058		
452	1.2D + 1.5Lm35 + ...		Y		1	1.2	73	1.5	8	.058	181	.058		
453	1.2D + 1.5Lm35 + ...		Y		1	1.2	73	1.5	9	.058	182	.058		
454	1.2D + 1.5Lm35 + ...		Y		1	1.2	73	1.5	10	.058	183	.058		
455	1.2D + 1.5Lm35 + ...		Y		1	1.2	73	1.5	11	.058	184	.058		
456	1.2D + 1.5Lm35 + ...		Y		1	1.2	73	1.5	12	.058	185	.058		
457	1.2D + 1.5Lm35 + ...		Y		1	1.2	73	1.5	13	.058	186	.058		
458	1.2D + 1.5Lm36 + ...		Y		1	1.2	74	1.5	2	.058	175	.058		
459	1.2D + 1.5Lm36 + ...		Y		1	1.2	74	1.5	3	.058	176	.058		
460	1.2D + 1.5Lm36 + ...		Y		1	1.2	74	1.5	4	.058	177	.058		
461	1.2D + 1.5Lm36 + ...		Y		1	1.2	74	1.5	5	.058	178	.058		
462	1.2D + 1.5Lm36 + ...		Y		1	1.2	74	1.5	6	.058	179	.058		
463	1.2D + 1.5Lm36 + ...		Y		1	1.2	74	1.5	7	.058	180	.058		
464	1.2D + 1.5Lm36 + ...		Y		1	1.2	74	1.5	8	.058	181	.058		
465	1.2D + 1.5Lm36 + ...		Y		1	1.2	74	1.5	9	.058	182	.058		
466	1.2D + 1.5Lm36 + ...		Y		1	1.2	74	1.5	10	.058	183	.058		
467	1.2D + 1.5Lm36 + ...		Y		1	1.2	74	1.5	11	.058	184	.058		
468	1.2D + 1.5Lm36 + ...		Y		1	1.2	74	1.5	12	.058	185	.058		
469	1.2D + 1.5Lm36 + ...		Y		1	1.2	74	1.5	13	.058	186	.058		
470	1.2D + 1.5Lv (Posit...	Yes	Y		1	1.2	75	1.5						
471	1.2D + 1.5Lv (Posit...	Yes	Y		1	1.2	76	1.5						
472	1.2D + 1.5Lv (Posit...	Yes	Y		1	1.2	77	1.5						
473	1.2D + 1.5Lv (Posit...	Yes	Y		1	1.2	78	1.5						
474	1.2D + 1.5Lv (Posit...	Yes	Y		1	1.2	79	1.5						
475	1.2D + 1.5Lv (Posit...	Yes	Y		1	1.2	80	1.5						
476	1.2D + 1.5Lv (Posit...	Yes	Y		1	1.2	81	1.5						
477	1.2D + 1.5Lv (Posit...	Yes	Y		1	1.2	82	1.5						
478	1.2D + 1.5Lv (Posit...	Yes	Y		1	1.2	83	1.5						
479	1.2D + 1.5Lv (Posit...	Yes	Y		1	1.2	84	1.5						
480	1.2D + 1.5Lv (Posit...	Yes	Y		1	1.2	85	1.5						
481	1.2D + 1.5Lv (Posit...	Yes	Y		1	1.2	86	1.5						
482	1.2D + 1.5Lv (Posit...	Yes	Y		1	1.2	87	1.5						
483	1.2D + 1.5Lv (Posit...	Yes	Y		1	1.2	88	1.5						
484	1.2D + 1.5Lv (Posit...	Yes	Y		1	1.2	89	1.5						
485	1.2D + 1.5Lv (Posit...		Y		1	1.2	90	1.5						
486	1.2D + 1.5Lv (Posit...		Y		1	1.2	91	1.5						
487	1.2D + 1.5Lv (Posit...		Y		1	1.2	92	1.5						
488	1.2D + 1.5Lv (Posit...		Y		1	1.2	93	1.5						
489	1.2D + 1.5Lv (Posit...		Y		1	1.2	94	1.5						
490	1.2D + 1.5Lv (Posit...		Y		1	1.2	95	1.5						
491	1.2D + 1.5Lv (Posit...		Y		1	1.2	96	1.5						
492	1.2D + 1.5Lv (Posit...		Y		1	1.2	97	1.5						
493	1.2D + 1.5Lv (Posit...		Y		1	1.2	98	1.5						
494	1.2D + 1.5Lv (Posit...		Y		1	1.2	99	1.5						
495	1.2D + 1.5Lv (Posit...		Y		1	1.2	100	1.5						
496	1.2D + 1.5Lv (Posit...		Y		1	1.2	101	1.5						
497	1.2D + 1.5Lv (Posit...		Y		1	1.2	102	1.5						
498	1.2D + 1.5Lv (Posit...		Y		1	1.2	103	1.5						
499	1.2D + 1.5Lv (Posit...		Y		1	1.2	104	1.5						
500	1.2D + 1.5Lv (Posit...		Y		1	1.2	105	1.5						
501	1.2D + 1.5Lv (Posit...		Y		1	1.2	106	1.5						



Company : ETS, PLLC
 Designer : DHK
 Job Number : 196670.14
 Model Name : 528 WHEELERS FARM RD

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 Checked By: JAA

Load Combinations (Continued)

Description	Solve	P	Delta	S...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...
502 1.2D + 1.5Lv (Posit...		Y			1	1.2	107	1.5				
503 1.2D + 1.5Lv (Posit...		Y			1	1.2	108	1.5				
504 1.2D + 1.5Lv (Posit...		Y			1	1.2	109	1.5				
505 1.2D + 1.5Lv (Posit...		Y			1	1.2	110	1.5				
506 1.2D + 1.5Lv (Posit...		Y			1	1.2	111	1.5				
507 1.2D + 1.5Lv (Posit...		Y			1	1.2	112	1.5				
508 1.2D + 1.5Lv (Posit...		Y			1	1.2	113	1.5				
509 1.2D + 1.5Lv (Posit...		Y			1	1.2	114	1.5				
510 1.2D + 1.5Lv (Posit...		Y			1	1.2	115	1.5				
511 1.2D + 1.5Lv (Posit...		Y			1	1.2	116	1.5				
512 1.2D + 1.5Lv (Posit...		Y			1	1.2	117	1.5				
513 1.2D + 1.5Lv (Posit...		Y			1	1.2	118	1.5				
514 1.2D + 1.5Lv (Posit...		Y			1	1.2	119	1.5				
515 1.2D + 1.5Lv (Posit...		Y			1	1.2	120	1.5				
516 1.2D + 1.5Lv (Posit...		Y			1	1.2	121	1.5				
517 1.2D + 1.5Lv (Posit...		Y			1	1.2	122	1.5				
518 1.2D + 1.5Lv (Posit...		Y			1	1.2	123	1.5				
519 1.2D + 1.5Lv (Posit...		Y			1	1.2	124	1.5				
520 1.2D + 1.5Lv (Posit...		Y			1	1.2	125	1.5				
521 1.2D + 1.5Lv (Posit...		Y			1	1.2	126	1.5				
522 1.2D + 1.5Lv (Posit...		Y			1	1.2	127	1.5				
523 1.2D + 1.5Lv (Posit...		Y			1	1.2	128	1.5				
524 1.2D + 1.5Lv (Posit...		Y			1	1.2	129	1.5				
525 1.2D + 1.5Lv (Posit...		Y			1	1.2	130	1.5				
526 1.2D + 1.5Lv (Posit...		Y			1	1.2	131	1.5				
527 1.2D + 1.5Lv (Posit...		Y			1	1.2	132	1.5				
528 1.2D + 1.5Lv (Posit...		Y			1	1.2	133	1.5				
529 1.2D + 1.5Lv (Posit...		Y			1	1.2	134	1.5				
530 1.2D + 1.5Lv (Posit...		Y			1	1.2	135	1.5				
531 1.2D + 1.5Lv (Posit...		Y			1	1.2	136	1.5				
532 1.2D + 1.5Lv (Posit...		Y			1	1.2	137	1.5				
533 1.2D + 1.5Lv (Posit...		Y			1	1.2	138	1.5				
534 1.2D + 1.5Lv (Posit...		Y			1	1.2	139	1.5				
535 1.2D + 1.5Lv (Posit...		Y			1	1.2	140	1.5				
536 1.2D + 1.5Lv (Posit...		Y			1	1.2	141	1.5				
537 1.2D + 1.5Lv (Posit...		Y			1	1.2	142	1.5				
538 1.2D + 1.5Lv (Posit...		Y			1	1.2	143	1.5				
539 1.2D + 1.5Lv (Posit...		Y			1	1.2	144	1.5				
540 1.2D + 1.5Lv (Posit...		Y			1	1.2	145	1.5				
541 1.2D + 1.5Lv (Posit...		Y			1	1.2	146	1.5				
542 1.2D + 1.5Lv (Posit...		Y			1	1.2	147	1.5				
543 1.2D + 1.5Lv (Posit...		Y			1	1.2	148	1.5				
544 1.2D + 1.5Lv (Posit...		Y			1	1.2	149	1.5				
545 1.2D + 1.5Lv (Posit...		Y			1	1.2	150	1.5				
546 1.2D + 1.5Lv (Posit...		Y			1	1.2	151	1.5				
547 1.2D + 1.5Lv (Posit...		Y			1	1.2	152	1.5				
548 1.2D + 1.5Lv (Posit...		Y			1	1.2	153	1.5				
549 1.2D + 1.5Lv (Posit...		Y			1	1.2	154	1.5				
550 1.2D + 1.5Lv (Posit...		Y			1	1.2	155	1.5				
551 1.2D + 1.5Lv (Posit...		Y			1	1.2	156	1.5				
552 1.2D + 1.5Lv (Posit...		Y			1	1.2	157	1.5				
553 1.2D + 1.5Lv (Posit...		Y			1	1.2	158	1.5				
554 1.2D + 1.5Lv (Posit...		Y			1	1.2	159	1.5				
555 1.2D + 1.5Lv (Posit...		Y			1	1.2	160	1.5				
556 1.2D + 1.5Lv (Posit...		Y			1	1.2	161	1.5				
557 1.2D + 1.5Lv (Posit...		Y			1	1.2	162	1.5				
558 1.2D + 1.5Lv (Posit...		Y			1	1.2	163	1.5				



Load Combinations (Continued)

Description	Solve	PDelta	S...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...
559 1.2D + 1.5Lv (Posit..		Y		1	1.2	164	1.5						
560 1.2D + 1.5Lv (Posit..		Y		1	1.2	165	1.5						
561 1.2D + 1.5Lv (Posit..		Y		1	1.2	166	1.5						
562 1.2D + 1.5Lv (Posit..		Y		1	1.2	167	1.5						
563 1.2D + 1.5Lv (Posit..		Y		1	1.2	168	1.5						
564 1.2D + 1.5Lv (Posit..		Y		1	1.2	169	1.5						
565 1.2D + 1.5Lv (Posit..		Y		1	1.2	170	1.5						
566 1.2D + 1.5Lv (Posit..		Y		1	1.2	171	1.5						
567 1.2D + 1.5Lv (Posit..		Y		1	1.2	172	1.5						
568 1.2D + 1.5Lv (Posit..		Y		1	1.2	173	1.5						
569 1.2D + 1.5Lv (Posit..		Y		1	1.2	174	1.5						

Envelope Joint Reactions

Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC	
1	N231A	max	5341.732	8	550.849	8	1083.361	11	1412.11	11	1343.918	5	44.15	8
2		min	-7372.032	2	-2317.091	14	-1072.511	5	-1478.971	5	-1358.012	11	-375.191	14
3	N228A	max	4019.957	10	485.092	4	6516.743	10	623.702	13	1958.081	13	1325.962	13
4		min	-2826.704	4	-3112.926	22	-4452.149	4	-888.68	7	-1953.874	7	-1281.932	7
5	N231B	max	3363.185	6	654.729	12	5133.851	12	753.907	9	1214.002	9	1202.15	3
6		min	-2502.555	12	-2612.314	18	-6624.156	6	-581.886	3	-1212.936	3	-1116.446	9
7	N232C	max	4872.022	14	5981.376	14	15.149	11	0	484	0	484	0	484
8		min	-1030.527	8	-1273.898	8	-15.136	5	0	1	0	1	0	1
9	N265	max	450.643	4	7936.288	22	780.785	4	0	484	0	484	0	484
10		min	-3236.597	22	-1116.077	4	-5605.681	22	0	1	0	1	0	1
11	N268	max	619.481	12	6724.401	18	4746.393	18	0	484	0	484	0	484
12		min	-2740	18	-1528.161	12	-1072.223	12	0	1	0	1	0	1
13	Totals:	max	7110.05	8	11201.118	22	6593.194	11						
14		min	-7110.055	2	3353.537	4	-6593.194	5						

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

Member	Shape	Code ...	Loc[in]	LC	Shear ...	Loc[in]	Dir	LC	phi*Pnc [...]	phi*Pnt [lb]	phi*Mn y...	phi*Mn z...	Cb	Eqn	
1	CORNER-P...	PL5.5x3/16	.769	19.949	5	.141	9.975	y	4	1715.004	33412.5	130.518	1332.038	1...	H1-1a
2	CORNER-P...	PL5.5x3/16	.766	0	3	.158	9.975	y	5	1715.004	33412.5	130.518	1371.689	1...	H1-1a
3	CORNER-P...	PL5.5x3/16	.766	0	11	.173	9.975	y	12	1715.004	33412.5	130.518	1334.741	1...	H1-1a
4	BRACE-2	3/8 x 4	.585	49.375	13	.219	44.232	y	24	48600	48600	379.688	4050	1...	H1-1b
5	BRACE-3	3/8 x 4	.544	24.688	4	.186	5.143	y	12	48600	48600	379.688	3595.517	1...	H1-1b
6	BRACE-1	3/8 x 4	.524	24.687	7	.177	44.232	y	4	48600	48600	379.688	3554.192	1...	H1-1b
7	FM-0	PIPE 3.0	.506	105.3...	12	.444	105.3...		12	28645.471	65205	5748.75	5748.75	2...	H3-6
8	FM-120	PIPE 3.0	.440	105.3...	4	.399	105.3...		4	28645.471	65205	5748.75	5748.75	2...	H3-6
9	FM-240	PIPE 3.0	.425	105.3...	12	.374	105.3...		12	28645.471	65205	5748.75	5748.75	2...	H3-6
10	MP3	PIPE 2.5	.405	20.25	12	.152	20.25		6	37773.818	50715	3596.25	3596.25	2...	H1-1b
11	MP8	PIPE 2.5	.394	20.25	8	.143	20.25		3	37773.818	50715	3596.25	3596.25	2...	H1-1b
12	MP4	PIPE 2.5	.383	20.25	12	.168	20.25		11	37773.818	50715	3596.25	3596.25	2...	H1-1b
13	MP13	PIPE 2.5	.376	20.25	12	.138	20.25		7	37773.818	50715	3596.25	3596.25	2...	H1-1b
14	COR2	PL5.5x3/16	.374	9.975	4	.127	0	y	13	1715.004	33412.5	130.518	1422.379	1...	H1-1a
15	COR3	PL5.5x3/16	.366	9.975	8	.113	0	y	5	1715.004	33412.5	130.518	1422.379	1...	H1-1a
16	KIK2	PIPE 2.0	.361	17.331	22	.002	0		12	28814.246	32130	1871.625	1871.625	1...	H1-1a
17	SA2	HSS4X4X4	.360	22.787	22	.155	23.187	y	12	133671....	139518	16180.5	16180.5	1...	H1-1b
18	COR1	PL5.5x3/16	.354	9.975	12	.100	19.949	y	9	1715.004	33412.5	130.518	1422.379	1...	H1-1a
19	MP6	PIPE 2.5	.351	20.25	19	.095	20.25		7	37773.818	50715	3596.25	3596.25	2...	H1-1b
20	MP12	PIPE 2.5	.350	20.25	12	.156	20.25		13	37773.818	50715	3596.25	3596.25	2...	H1-1b
21	MP9	PIPE 2.5	.339	20.25	10	.166	20.25		3	37773.818	50715	3596.25	3596.25	2...	H1-1b
22	MP14	PIPE 2.5	.336	20.25	8	.155	20.25		7	37773.818	50715	3596.25	3596.25	2...	H1-1b
23	MP2	PIPE 2.5	.335	20.25	4	.165	20.25		6	37773.818	50715	3596.25	3596.25	2...	H1-1b



Company : ETS, PLLC
 Designer : DHK
 Job Number : 196670.14
 Model Name : 528 WHEELERS FARM RD

Nov 1, 2019
 2:53 PM
 Checked By: JAA

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

Member	Shape	Code ...	Loc[in]	LC	Shear ...	Loc[in]	Dir	LC	phi*Pnc [...]	phi*Pnt [lb]	phi*Mn y...	phi*Mn z...	Cb	Eqn	
24	MP7	PIPE 2.5	.327	20.25	8	.159	20.25	9	37773.818	50715	3596.25	3596.25	2...	H1-1b	
25	HR2	PIPE 2.0	.325	38.737	21	.179	40.286	9	6401.672	32130	1871.625	1871.625	1...	H1-1b	
26	HR3	PIPE 2.0	.323	75.924	12	.178	108.4...	13	6401.672	32130	1871.625	1871.625	2...	H1-1b	
27	KIK1	PIPE 2.0	.307	17.331	18	.002	0	4	28814.246	32130	1871.625	1871.625	1...	H1-1a	
28	HR1	PIPE 2.0	.304	108.4...	12	.187	108.4...	12	6401.672	32130	1871.625	1871.625	1...	H1-1b	
29	SA1	HSS4X4X4	.304	22.787	18	.138	23.187	y	4	133671....	139518	16180.5	16180.5	1...	H1-1b
30	MP5	PIPE 2.5	.278	20.25	12	.112	48.75	11	37773.818	50715	3596.25	3596.25	2...	H1-1b	
31	KIK3	PIPE 2.0	.273	17.707	14	.002	36.168	12	28814.246	32130	1871.625	1871.625	1...	H1-1a	
32	SA3	HSS4X4X4	.268	22.787	14	.146	23.187	y	4	133671....	139518	16180.5	16180.5	1...	H1-1b
33	MP10	PIPE 2.5	.232	20.25	4	.108	48.75	3	37773.818	50715	3596.25	3596.25	2...	H1-1b	
34	MP11	PIPE 2.5	.222	20.25	12	.079	48.75	13	37773.818	50715	3596.25	3596.25	2...	H1-1b	
35	MP15	PIPE 2.5	.207	20.25	8	.098	48.75	7	37773.818	50715	3596.25	3596.25	3...	H1-1b	
36	GRATE-L-0-2	L2x2x3	.204	14.713	24	.066	14.713	z	12	17308.445	23392.8	557.717	1212.677	1...	H2-1
37	GRATE-L-1...	L2x2x3	.195	14.713	20	.060	14.713	y	8	17308.445	23392.8	557.717	1213.37	1...	H2-1
38	MP1	PIPE 2.5	.176	20.25	4	.071	36.75	6	37773.818	50715	3596.25	3596.25	2...	H1-1b	
39	GRATE-L-1...	L2x2x3	.175	14.713	4	.060	14.713	z	4	17308.445	23392.8	557.717	1212.809	1...	H2-1
40	GRATE-L-2...	L2x2x3	.174	14.713	13	.058	14.713	y	12	17308.445	23392.8	557.717	1214.205	1...	H2-1
41	GRATE-L-2...	L2x2x3	.171	14.713	7	.052	14.713	z	8	17308.445	23392.8	557.717	1214.784	1...	H2-1
42	GRATE-L-0-1	L2x2x3	.158	14.713	5	.054	14.713	y	4	17308.445	23392.8	557.717	1214.55	1...	H2-1
43	BPL-2	PL 2X1/4	.148	32.709	12	.045	15.332	y	2	16200	16200	84.375	675	1...	H1-1b
44	BPL-3	PL 2X1/4	.142	0	20	.053	0	y	24	16200	16200	84.375	675	1...	H1-1b
45	BPL-4	PL 2X1/4	.131	32.709	4	.046	7.837	y	12	16200	16200	84.375	675	1...	H1-1b
46	BPL-5	PL 2X1/4	.128	0	13	.045	17.377	y	10	16200	16200	84.375	675	1...	H1-1b
47	BPL-6	PL 2X1/4	.127	32.709	7	.046	7.837	y	4	16200	16200	84.375	675	1...	H1-1b
48	BPL-1	PL 2X1/4	.115	0	4	.058	17.377	y	8	16200	16200	84.375	675	1...	H1-1b
49	PL-0	PL7.125x5/8	.081	0	10	.051	1.693	z	10	134752....	144281.25	1878.662	21416.748	1...	H1-1b
50	PL-120	PL7.125x5/8	.079	0	8	.050	1.693	z	8	134752....	144281.25	1878.662	21416.748	1...	H1-1b
51	PL-240	PL7.125x5/8	.071	0	8	.046	1.693	z	2	134752....	144281.25	1878.662	21416.748	1...	H1-1b

Exhibit F

Power Density/RF Emissions Report

Site Name: Milford NE 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	746	4	959	3837.6	114	0.1062	0.4973333333	21.35%
VZW Cellular	869	1	738	737.94	114	0.0204	0.5793333333	3.52%
VZW Cellular	880	4	460	1841	114	0.0509	0.5866666667	8.68%
VZW PCS	1970	4	2091	8364.88	114	0.2315	1.0	23.15%
VZW AWS	2145	4	2603	10412.6	114	0.2881	1.0	28.81%
VZW CBRS	3550	4	16	63.32	114	0.0018	1.0	0.18%

Total Percentage of Maximum Permissible Exposure 85.70%

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Section 1.13101 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992

MHz = Megahertz

mW/cm² = milliwatts per square centimeter

ERP = Effective Radiated Power

Absolute worst case maximum values used, including the following assumptions:

1. closest accessible point is distance from antenna to base of pole;
2. continuous transmission from all available channels at full power for indefinite time period; and,
3. all RF energy is assumed to be directed solely to the base of the pole.