

August 2, 2024

Garry Ganey
PeakNet
299 1st Avenue N, FL-Peak1,
St. Petersburg, FL 33701
(727) 798-0190



FL COA# 31011

Tower Engineering Professionals
326 Tryon Road
Raleigh, NC 27603
(919) 661-6351
Structures@tepgroup.net

Subject: Structural Analysis Report

Carrier Designation: *T-Mobile Reconfiguration*
Carrier Site Number: 9JK0344B
Carrier Site Name: Hildreth

PeakNet Services: **Site Number:** US-FL-3149
Site Name: FT. White

Engineering Firm Designation: **TEP Project Number:** 26455.976054

Site Data: **Hwy 27, Fort White, Columbia County, FL 32038**
Latitude 29° 57' 08.61", Longitude -82° 46' 45.27"
325 ± Foot - Self-Support Tower

Dear Garry Ganey,

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 stress level for the tower and foundation structure, under the following load case, to be:

LC1: Existing + Proposed + Reserved Loading

Note: See Table 1 for the existing, proposed, and reserved loading

Sufficient Capacity

Structure Capacity	Foundation Capacity
94.7%	44.6%

The analysis has been performed in accordance with the ANSI/TIA-222-H Structural Standard for Antenna Supporting Structures, Antennas, and Small Wind Turbine Support Structures and the 2023 Florida Building Code, 8th Edition.

All modifications and equipment proposed in this report shall be installed in accordance with the appurtenances listed in Table 1 for the determined available structural capacity to be effective.

We at *Tower Engineering Professionals* appreciate the opportunity of providing our continuing professional services to you and *PeakNet*. If you have any questions or need further assistance on this or any other projects please give us a call.

Respectfully submitted by:

Ronald E. Glover, P.E., S.E.

This item has been electronically signed and sealed by Ronald E. Glover, P.E., S.E. on 8/2/2024 using a Digital Signature.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.



08/02/2024

TABLE OF CONTENTS

1) INTRODUCTION

2) ANALYSIS CRITERIA

Table 1 - Existing, Proposed, and Reserved Antenna and Cable Information

3) ANALYSIS PROCEDURE

Table 2 - Documents Provided

3.1) Analysis Method

3.2) Assumptions

4) ANALYSIS RESULTS

Table 3 - Section Capacity (Summary)

Table 4 - Tower Component Stresses vs. Capacity

Table 5 - Dish Twist/Sway Results for 60 mph Service Wind Speed

4.1) Recommendations

5) APPENDIX A

tnxTower Output

6) APPENDIX B

Additional Calculations

1) INTRODUCTION

This tower is a 325-ft Self Supporting tower located in Columbia County, FL. The original design criteria were unavailable for review. The tower has been modified per reinforcement drawings by TEP in December of 2011. All information provided to TEP was assumed to be accurate and complete.

2) ANALYSIS CRITERIA

TIA-222 Revision:	ANSI/TIA-222-H
Type of Analysis:	Comprehensive
Risk Category:	III
Wind Speed:	131 mph (Ultimate)
Exposure Category:	C
Topographic Procedure:	Method 2 ($K_{zt} = 1.0$)
Ice Thickness:	0.0 in
Wind Speed with Ice:	30 mph
Seismic Design Category:	B
Seismic Ss:	0.079
Seismic S1:	0.048
Service Wind Speed:	60 mph

Table 1 - Existing, Proposed, and Reserved Antenna and Cable Information

Existing/ Proposed/ Reserved	Mount Level (ft)	Ant CL (ft)	Qty	Antenna Model	Mount Type	Qty Coax	Coax Size	Coax Location	Owner/ Tenant
Existing	323	330	2	Commscope DB810K-Y	(2) Sidearms	1	1-5/8	CA Face	Duke Energy
			1	TTA 424-93C-03C		2	7/8		
Existing	317	317	1	RFS PADX8-U57A (B-Leg)	Dish Mount	2	EU63	B Leg	Duke Energy
Existing	305	313	1	dBSpectra DS8A10P36U-D	Sidearm Mount	1	7/8	CA Face	Duke Energy
		305	1	dBSpectra DS7TMD17C		1	1/2		
Existing	285	293	1	dBSpectra DS8A10P36U-D	Sidearm Mount	1	1-5/8	CA Face	Duke Energy
Existing	280	280	1	RFS PADX6-U57A (B-Leg)	Dish Mount	2	EU63	B Leg	Duke Energy
Reserved	250	250	1	3'Ø Grid Dish	(3) Sabre C1085700 1C Sector Mounts	3	1-5/8	BC Face	T-Mobile
			3	Commscope TMA1921B78-21A					
			3	Raycap RNSNDC-7771-PF-48					
Proposed	250	250	1	Andrew VHLP3-11WA		1	1/2" Fiber	BC Face	T-Mobile
			2	Ceragon IP20D-HP11		1			
Existing	250	250	3	Commscope FFHH-65C-R3		3	1.996" Hybrid	BC Face	T-Mobile
			3	Ericsson AIR6449					
			3	Ericsson RRUS 4480					
			3	Ericsson RRUS 4460					
To Be Removed	250	250	1	3'Ø Grid Dish	-	2	1-5/8	BC Face	T-Mobile
Existing	240	240	4	Cambium C050045A102A	(2) Sidearm Mounts	4	3/8	CA Face	Duke Energy

3) ANALYSIS PROCEDURE

Table 2 - Documents Provided

Document	Remarks	Source
Foundation Mapping Report	Tower Engineering Professionals, Inc., dated November 1, 2011 TEP No. 100740	TEP
Geotechnical Report	Tower Engineering Professionals, Inc., dated October 19, 2011 TEP No. 100740	TEP
Tower Mapping Report	Tower Engineering Professionals, Inc., dated July 2, 2018 TEP No. 26455.208108	TEP
Previous Modification Design	Tower Engineering Professionals, Inc., dated December 1, 2011 TEP No. 100740	TEP
Previous Structural Analysis	Tower Engineering Professionals, Inc., dated March 21, 2022 TEP No. 26455.664933	TEP
Correspondence	Correspondence from PeakNet in reference to the existing, proposed, and reserved loading.	PeakNet

3.1) Analysis Method

tnxTower (version 8.2.4.3), 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.

3.2) Analysis Assumptions

- 1) The tower and foundation were built and maintained in accordance with the manufacturer's specification.
- 2) The configuration of existing antennas, transmission cables, mounts and other appurtenances are as specified in the tower mapping report by TEP.
- 3) Unless specified by the client or tower mapping, the location of the existing and proposed coax is assumed by TEP and listed in Table 1.
- 4) All tower components are in sufficient condition to carry their full design capacity.
- 5) 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.
- 6) 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.
- 7) The following material grades were assumed:
 - a) Connection bolts: A325N up to 1.5"Ø, ASTM A307 larger than 1.5"Ø
 - b) Leg grade: A572-50
 - c) Tower Pipe Bracing: ASTM A53B-35
 - d) Tower Angle Bracing/Other Steel: ASTM A36
 - e) Anchor Rods: ASTM A36

This analysis may be affected if any assumptions are not valid or have been made in error. Tower Engineering.

4) ANALYSIS RESULTS

Table 3 - Section Capacity (Summary)

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (lb)	ϕP_{allow} (lb)	% Capacity	Pass / Fail
T1	325 - 300	Leg	Pipe 3.5 EH	2	-14153.40	66208.27	21.4	Pass
T2	300 - 287.5	Leg	Pipe 4 EH	22	-25303.30	97668.06	25.9	Pass
T3	287.5 - 281.25	Leg	Pipe 4 EH	34	-32254.00	97668.06	33.0	Pass
T4	281.25 - 275	Leg	Pipe 4 EH	40	-37096.50	97668.06	38.0	Pass
T5	275 - 250	Leg	Pipe 5 EH	46	-64786.50	177209.55	36.6	Pass
T6	250 - 225	Leg	Pipe 5 EH	64	-88382.70	177209.55	49.9	Pass
T7	225 - 212.5	Leg	Pipe 5 EH	85	-106973.00	177209.55	60.4	Pass
T8	212.5 - 200	Leg	Pipe 5 EH	97	-124681.00	255580.48	48.8	Pass
T9	200 - 175	Leg	Pipe 6 EH	121	-162559.00	364524.28	44.6	Pass
T10	175 - 162.5	Leg	Pipe 6 EH	166	-182678.00	364524.28	50.1	Pass
T11	162.5 - 150	Leg	Pipe 6 EH	190	-203164.00	364524.28	55.7	Pass
T12	150 - 137.5	Leg	PIPE 8 X-STR (SCH80)	214	-225568.00	494485.94	45.6	Pass
T13	137.5 - 125	Leg	PIPE 8 X-STR (SCH80)	226	-246932.00	494485.94	49.9	Pass
T14	125 - 112.5	Leg	PIPE 8 X-STR (SCH80)	238	-268888.00	494485.94	54.4	Pass
T15	112.5 - 100	Leg	PIPE 8 X-STR (SCH80)	250	-290737.00	494485.94	58.8	Pass
T16	100 - 87.5	Leg	PIPE 8 X-STR (SCH80)	265	-313224.00	494485.94	63.3	Pass
T17	87.5 - 75	Leg	PIPE 8 X-STR (SCH80)	277	-334629.00	574113.75	58.3 85.2 (b)	Pass
T18	75 - 50	Leg	PIPE 8 SCH 100	301	-382121.00	672968.06	56.8 72.8 (b)	Pass
T19	50 - 25	Leg	PIPE 8 SCH 120	346	-407311.00	684253.50	59.5 76.6 (b)	Pass
T20	25 - 0	Leg	PIPE 10 SCH 100	380	-455800.00	939523.19	48.5 54.7 (b)	Pass
T1	325 - 300	Diagonal	PIPE 2.5 STD (SCH 40)	10	-8190.53	19016.45	43.1 56.5 (b)	Pass
T2	300 - 287.5	Diagonal	PIPE 2.5 STD (SCH 40)	28	-6936.76	16630.53	41.7	Pass
T3	287.5 - 281.25	Diagonal	PIPE 2.5 STD (SCH 40)	37	-7237.01	15185.41	47.7	Pass
T4	281.25 - 275	Diagonal	PIPE 3 STD (SCH40)	44	-8481.17	27281.83	31.1 40.6 (b)	Pass
T5	275 - 250	Diagonal	PIPE 3 STD (SCH40)	53	-10624.60	19982.97	53.2	Pass
T6	250 - 225	Diagonal	PIPE 3 STD (SCH40)	71	-13344.90	22113.21	60.3 66.0 (b)	Pass
T7	225 - 212.5	Diagonal	PIPE 3 STD (SCH40)	92	-13507.80	20969.02	64.4 66.7 (b)	Pass
T8	212.5 - 200	Diagonal	PIPE 3 STD (SCH40)	108	-14015.00	19875.77	70.5	Pass
T9	200 - 175	Diagonal	Pipe 3 EH	132	-15515.00	23215.71	66.8 75.1 (b)	Pass
T10	175 - 162.5	Diagonal	PIPE 3 STD (SCH40)	177	-15931.50	17035.93	93.5	Pass
T11	162.5 - 150	Diagonal	Pipe 3 EH	201	-16726.00	20830.63	80.3 80.9 (b)	Pass
T12	150 - 137.5	Diagonal	Pipe 3 EH	221	-16840.40	19991.05	84.2	Pass
T13	137.5 - 125	Diagonal	Pipe 3 EH	233	-17653.80	18939.90	93.2	Pass
T14	125 - 112.5	Diagonal	PIPE 3.5 STD	245	-17983.90	22071.63	81.5	Pass
T15	112.5 - 100	Diagonal	Pipe 3.5 EH	257	-18887.10	27458.55	68.8	Pass
T16	100 - 87.5	Diagonal	2L4x4x1/4x3/8	272	-19356.40	32964.64	58.7 69.3 (b)	Pass

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (lb)	ϕP_{allow} (lb)	% Capacity	Pass / Fail
T17	87.5 - 75	Diagonal	3.5 STD w/ 4 STD Half Sleeve	Note1	Note1	Note1	74.2 73.3 (b)	Pass
T18	75 - 50	Diagonal	3.5 STD w/ 4 STD Half Sleeve	Note1	Note1	Note1	89.1 79.0 (b)	Pass
T19	50 - 25	Diagonal	Pipe 3.5 EH	369	-31886.10	41413.26	77.0	Pass
T20	25 - 0	Diagonal	Pipe 3.5 EH	402	-31957.10	39374.05	81.2	Pass
T6	250 - 225	Horizontal	L2 1/2x3 1/2x1/4	79	-10798.40	16659.82	64.8 94.7 (b)	Pass
T7	225 - 212.5	Horizontal	L2 1/2x3 1/2x1/4	91	-8082.30	12020.71	67.2	Pass
T8	212.5 - 200	Horizontal	L3x4x1/4	107	-8613.35	17473.05	49.3 65.2 (b)	Pass
T9	200 - 175	Horizontal	L3x4x1/4	131	-9983.46	13557.91	73.6 75.7 (b)	Pass
T10	175 - 162.5	Horizontal	L3 1/2x5x1/4	176	-10621.50	20512.17	51.8 80.9 (b)	Pass
T11	162.5 - 150	Horizontal	L3 1/2x5x1/4	200	-11443.20	18321.77	62.5 86.6 (b)	Pass
T12	150 - 137.5	Horizontal	L3 1/2x5x1/4	220	-11992.90	16772.28	71.5 71.7 (b)	Pass
T13	137.5 - 125	Horizontal	L4x6x5/16	232	-12791.20	29218.35	43.8 61.3 (b)	Pass
T14	125 - 112.5	Horizontal	L4x6x5/16	244	-13278.40	26506.72	50.1 63.8 (b)	Pass
T15	112.5 - 100	Horizontal	L4x6x5/16	256	-14007.70	24155.56	58.0 67.3 (b)	Pass
T16	100 - 87.5	Horizontal	L4x6x5/16	271	-14547.80	22104.07	65.8 71.3 (b)	Pass
T17	87.5 - 75	Horizontal	2L3 1/2x5x5/16x3/8	294	-15662.70	99582.62	15.7 59.4 (b)	Pass
T18	75 - 50	Horizontal	2L3 1/2x5x5/16x3/8	318	-17234.00	86739.23	19.9 66.7 (b)	Pass
T19	50 - 25	Horizontal	Pipe 3.5 EH	365	-18258.30	33112.70	55.1	Pass
T20	25 - 0	Horizontal	Pipe 3.5 EH	398	-19265.10	29016.12	66.4	Pass
T1	325 - 300	Top Girt	L3 1/2x3 1/2x1/4	6	-861.84	18577.33	4.6 4.8 (b)	Pass
T2	300 - 287.5	Top Girt	L3 1/2x3 1/2x1/4	26	-569.76	18740.29	3.0 3.9 (b)	Pass
T5	275 - 250	Top Girt	L4x4x1/4	49	-1123.64	17703.63	6.3 8.5 (b)	Pass
T1	325 - 300	Mid Girt	L3 1/2x3 1/2x1/4	9	-1476.32	18577.33	7.9 9.6 (b)	Pass
T8	212.5 - 200	Redund Horiz 1 Bracing	L2x2x3/16	102	-2162.43	11060.49	19.6	Pass
T9	200 - 175	Redund Horiz 1 Bracing	L2x2x3/16	126	-2819.38	8634.04	32.7	Pass
T10	175 - 162.5	Redund Horiz 1 Bracing	L2x2x3/16	188	-3168.32	7648.00	41.4	Pass
T11	162.5 - 150	Redund Horiz 1 Bracing	L2 1/2x2 1/2x3/16	195	-3523.61	13583.53	25.9	Pass
T17	87.5 - 75	Redund Horiz 1 Bracing	L3x3x3/16	282	-5803.70	13677.19	42.4	Pass
T18	75 - 50	Redund Horiz 1 Bracing	L3x3x3/16	306	-6627.40	11633.58	57.0	Pass
T19	50 - 25	Redund Horiz 1 Bracing	Pipe 2 EH	351	-7064.29	19206.07	36.8	Pass
T20	25 - 0	Redund Horiz 1 Bracing	Pipe 2 EH	391	-7905.26	16945.84	46.7	Pass
T8	212.5 - 200	Redund Diag 1 Bracing	L2 1/2x2 1/2x3/16	103	-1842.79	8662.02	21.3	Pass
T9	200 - 175	Redund Diag 1 Bracing	L2 1/2x2 1/2x3/16	127	-2090.13	7872.75	26.5	Pass
T10	175 - 162.5	Redund Diag 1 Bracing	L2 1/2x2 1/2x3/16	172	-2274.57	7430.68	30.6	Pass
T11	162.5 - 150	Redund Diag 1 Bracing	L3x3x3/16	196	-2457.89	12291.09	20.0	Pass

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (lb)	ϕP_{allow} (lb)	% Capacity	Pass / Fail
T17	87.5 - 75	Redund Diag 1 Bracing	L3x3x3/16	283	-3583.60	9003.28	39.8	Pass
T18	75 - 50	Redund Diag 1 Bracing	L3x3x3/16	307	-3982.25	8082.12	49.3	Pass
T19	50 - 25	Redund Diag 1 Bracing	Pipe 3 EH	352	-5894.38	30925.54	19.1	Pass
T20	25 - 0	Redund Diag 1 Bracing	Pipe 3 EH	388	-6305.28	29879.95	21.1	Pass
T19	50 - 25	Redund Hip 1 Bracing	PIPE 1.5 SCH 80	363	-35.02	7925.24	0.4	Pass
T20	25 - 0	Redund Hip 1 Bracing	PIPE 1.5 SCH 80	396	-31.22	6898.84	0.5	Pass
T19	50 - 25	Redund Hip Diagonal 1 Bracing	PIPE 1.5 SCH 80	373	-60.33	1562.53	3.9	Pass
T20	25 - 0	Redund Hip Diagonal 1 Bracing	PIPE 1.5 SCH 80	406	-56.73	1433.46	4.0	Pass
T15	112.5 - 100	Inner Bracing	L5x3x3/8	262	-24.03	11660.14	0.2	Pass
T19	50 - 25	Inner Bracing	Pipe 3 EH	376	-19.59	19723.20	0.4	Pass
T20	25 - 0	Inner Bracing	Pipe 3 EH	409	-20.48	17168.86	0.5	Pass
							Summary	
						Leg (T17)	85.2	Pass
						Diagonal (T10)	93.5	Pass
						Horizontal (T6)	94.7	Pass
						Top Girt (T5)	8.5	Pass
						Mid Girt (T1)	9.6	Pass
						Redund Horz 1 Bracing (T18)	57.0	Pass
						Redund Diag 1 Bracing (T18)	49.3	Pass
						Redund Hip 1 Bracing (T20)	0.5	Pass
						Redund Hip Diagonal 1 Bracing (T20)	4.0	Pass
						Inner Bracing (T20)	0.5	Pass
						Bolt Checks	94.7	Pass
						RATING =	94.7	Pass

Table 4 - Tower Component Stresses vs. Capacity

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1,2	Anchor Rods	-	79.3	Pass
1,2	Base Foundation Soil Interaction	-	44.6	Pass

Structure Rating (max from all components) =	94.7%
---	--------------

Notes:

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

Table 5 - Dish Twist/Sway Results for 60 mph Service Wind Speed

Elevation (ft)	Dish Model	Beam Deflection		
		Deflection (in)	Tilt (deg)	Twist (deg)
317.0	RFS PADX8-U57A	5.759	0.1652	0.0251
280.0	RFS PADX6-U57A	4.495	0.1542	0.0169
250.0	(1) 3'Ø Grid Dish	3.521	0.1403	0.0135
250.0	Andrew VHLP3-11WA	3.521	0.1403	0.0135

4.1) Recommendations

- 1) If the load differs from that described in Table 1 of this report 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 modifications are required at this time.

APPENDIX A

TNX TOWER OUTPUT

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
2.9" x 20-ft Pipe Mount	325	FFHH-65C-R3 w/ Mount Pipe	250
5/8"x8-ft L Rod	325	4480	250
15" Dia. x 15" Beacon	325	4480	250
6' Sidearm Mount (TEP#100740)	323	4480	250
6' Sidearm Mount (TEP#100740)	323	4460	250
1" Dia x 10' Pipe	323	4460	250
1" Dia x 10' Pipe	323	4460	250
15-ft x 3" Omni	323	RNSNDC-7771-PF-48	250
15-ft x 3" Omni	323	RNSNDC-7771-PF-48	250
TTA 24"x6"x6"	323	RNSNDC-7771-PF-48	250
4.5" dia x 6"	317	TMAT1921B78-21A	250
PADX8-U57AC	317	TMAT1921B78-21A	250
16-ft x 3" Omni Antenna	305	TMAT1921B78-21A	250
DS7TM	305	1.9" x 9-ft pipe	250
Side Arm Mount [SO 308-1]	305	1.9" x 9-ft pipe	250
16-ft x 3" Omni Antenna	285	1.9" x 9-ft pipe	250
Side Arm Mount [SO 308-1]	285	(2) IP20D-HP11-40X-A-4507	250
4.5" dia x 6"	280	Sabre 12" HD V-Boom Mounts (3) (C10857001C)	250
PADX8-U57AC	280		
2.4" x 8-ft Pipe	250	2.4" x 8-ft Pipe	250
2.4" x 8-ft Pipe	250	3-FT Grid	250
AIR 6449 w/ Mount Pipe	250	VHLP3-11W	250
AIR 6449 w/ Mount Pipe	250	Side Arm Mount [SO 310-1]	240
AIR 6449 w/ Mount Pipe	250	Side Arm Mount [SO 310-1]	240
FFHH-65C-R3 w/ Mount Pipe	250	(2) C050045A102A	240
FFHH-65C-R3 w/ Mount Pipe	250	(2) C050045A102A	240

SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	PIPE 10 SCH 100	F	3.5 STD w/ 4 STD Half Sleeve
B	PIPE 3 STD (SCH40)	G	L2 1/2x2 1/2x3/16
C	PIPE 3.5 STD	H	L3x3x3/16
D	Pipe 3.5 EH	I	L5x3x3/8
E	2L4x4x1/4x3/8		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-50	50 ksi	65 ksi	A36	36 ksi	58 ksi
A53-B-35	35 ksi	60 ksi			

TOWER DESIGN NOTES

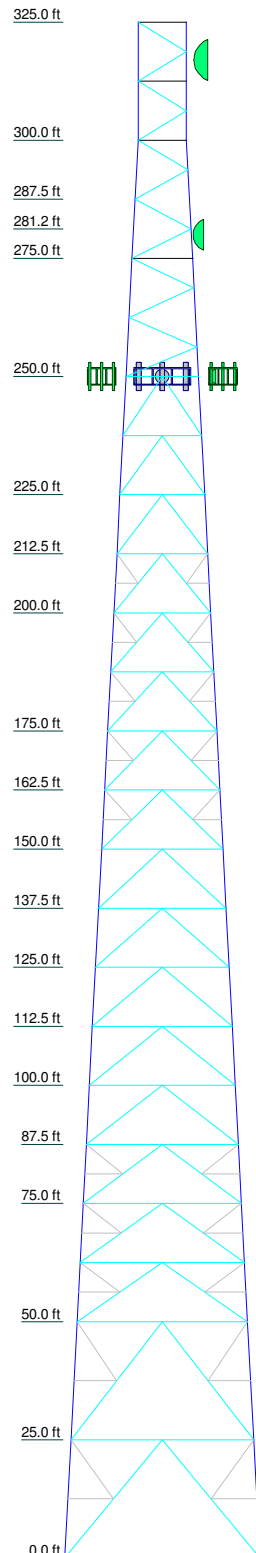
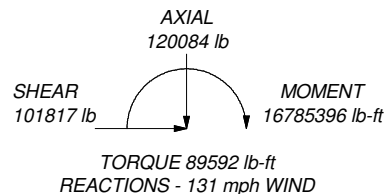
1. Tower is located in Columbia County, Florida.
2. Tower designed for Exposure C to the TIA-222-H Standard.
3. Tower designed for a 131 mph basic wind in accordance with the TIA-222-H Standard.
4. Deflections are based upon a 60 mph wind.
5. Tower Risk Category III.
6. Topographic Category 1 with Crest Height of 0.00 ft
7. TOWER RATING: 94.7%

ALL REACTIONS
ARE FACTORED

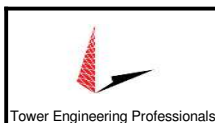
MAX. CORNER REACTIONS AT BASE:

DOWN: 501072 lb
SHEAR: 60640 lb

UPLIFT: -439113 lb
SHEAR: 54206 lb



Section	T20	T19	T18	T17	T16	T15	T14	T13	T12	T11	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
Legs	A	PIPE 8 SCH 120	PIPE 8 SCH 100																	
Leg Grade																				
Diagonals																				
Diagonal Grade																				
Top Girts																				
Mid Girts																				
Horizontals																				
Red. Horizontals																				
Red. Diagonals																				
Red. Hips																				
Inner Bracing																				
Face Width (ft)	41.25	38.6597	36.0695	32.184	30.8889	29.5938	28.2986	27.0035	25.7084	24.4132	23.1181	20.5278	19.2327	17.9375	15.3473	12.787	10.94618	12 @ 6.25	10.1667	
# Panels @ (ft)		2 @ 25																		
Weight (lb)	84803.8	11862.5	10988.3	12018.4	5506.5	4202.4	4472.3	3567.7	3630.5	2984.0	2562.9	5398.8	2061.0	1762.7	3416.3	3214.9	596.3	514.2	1174.3	2121.5



Tower Engineering Professionals

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

Job: **Ft White MW (US-FL-3149)**

Project: **TEP No. 26455.976054**

Client: **PeakNet Services LLC** Drawn by: **AK** App'd:

Code: **TIA-222-H** Date: **08/02/24** Scale: **NTS**

Path: **Dwg No. E-1**

tnxTower Tower Engineering Professionals 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	1 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

tnxTower Tower Engineering Professionals 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	2 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

Tower Input Data

The main tower is a 3x free standing tower with an overall height of 325.00 ft above the ground line.

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

The face width of the tower is 10.17 ft at the top and 41.25 ft at the base.

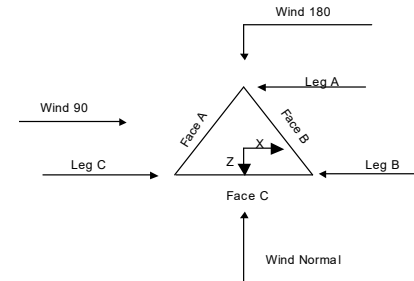
This tower is designed using the TIA-222-H standard.

The following design criteria apply:

- 1) Tower is located in Columbia County, Florida.
- 2) Tower base elevation above sea level: 43.40 ft.
- 3) Basic wind speed of 131 mph.
- 4) Risk Category III.
- 5) Exposure Category C.
- 6) Simplified Topographic Factor Procedure for wind speed-up calculations is used.
- 7) Topographic Category: 1.
- 8) Crest Height: 0.00 ft.
- 9) Deflections calculated using a wind speed of 60 mph.
- 10) Pressures are calculated at each section.
- 11) Stress ratio used in tower member design is 1.05.
- 12) Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

Consider Moments - Legs	Assume Legs Pinned	✓ Calculate Redundant Bracing Forces
Consider Moments - Horizontals	✓ Assume Rigid Index Plate	Ignore Redundant Members in FEA
Consider Moments - Diagonals	✓ Use Clear Spans For Wind Area	✓ SR Leg Bolts Resist Compression
Use Moment Magnification	✓ Use Clear Spans For KL/r	All Leg Panels Have Same Allowable
Use Code Stress Ratios	Retention Guys To Initial Tension	Offset Girt At Foundation
✓ Use Code Safety Factors - Guys	✓ Bypass Mast Stability Checks	✓ Consider Feed Line Torque
Escalate Ice	✓ Use Azimuth Dish Coefficients	✓ Include Angle Block Shear Check
Always Use Max Kz	✓ Project Wind Area of Appurtenances	Use TIA-222-H Bracing Resist. Exemption
Use Special Wind Profile	✓ Alternative Appurt. EPA Calculation	Use TIA-222-H Tension Splice Exemption
✓ Include Bolts In Member Capacity	Autocalc Torque Arm Areas	Poles
Leg Bolts Are At Top Of Section	Add IBC .6D+W Combination	Include Shear-Torsion Interaction
✓ Secondary Horizontal Braces Leg	✓ Sort Capacity Reports By Component	Always Use Sub-Critical Flow
Use Diamond Inner Bracing (4 Sided)	Triangulate Diamond Inner Bracing	Use Top Mounted Sockets
✓ SR Members Have Cut Ends	Ignore KL/ry For 60 Deg. Angle Legs	Pole Without Linear Attachments
SR Members Are Concentric	Use ASCE 10 X-Brace Ly Rules	Treat Feed Line Bundles As Cylinder
Distribute Leg Loads As Uniform		Ignore KL/ry For 60 Deg. Angle Legs
		Outside and Inside Corner Radii Are Known



Triangular Tower

Tower Section Geometry

Tower Section	Tower Elevation	Assembly Database	Description	Section Width	Number of Sections	Section Length
	ft			ft		ft
T1	325.00-300.00			10.17	1	25.00
T2	300.00-287.50			10.17	1	12.50
T3	287.50-281.25			11.46	1	6.25
T4	281.25-275.00			12.11	1	6.25
T5	275.00-250.00			12.76	1	25.00
T6	250.00-225.00			15.35	1	25.00
T7	225.00-212.50			17.94	1	12.50
T8	212.50-200.00			19.23	1	12.50
T9	200.00-175.00			20.53	1	25.00
T10	175.00-162.50			23.12	1	12.50
T11	162.50-150.00			24.41	1	12.50
T12	150.00-137.50			25.71	1	12.50
T13	137.50-125.00			27.00	1	12.50
T14	125.00-112.50			28.30	1	12.50
T15	112.50-100.00			29.59	1	12.50
T16	100.00-87.50			30.89	1	12.50
T17	87.50-75.00			32.18	1	12.50
T18	75.00-50.00			33.48	1	25.00
T19	50.00-25.00			36.07	1	25.00
T20	25.00-0.00			38.66	1	25.00

Tower Section Geometry (cont'd)

<i>tnxTower</i> <i>Tower Engineering Professionals</i> 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job Ft White MW (US-FL-3149)	Page 3 of 55
	Project TEP No. 26455.976054	Date 12:18:38 08/02/24
	Client PeakNet Services LLC	Designed by AK

<i>Tower Section</i>	<i>Tower Elevation</i>	<i>Diagonal Spacing</i>	<i>Bracing Type</i>	<i>Has K Brace End Panels</i>	<i>Has Horizontals</i>	<i>Top Girt Offset</i>	<i>Bottom Girt Offset</i>
	<i>ft</i>	<i>ft</i>				<i>in</i>	<i>in</i>
T1	325.00-300.00	6.25	K Brace Left	No	No	0.0000	0.0000
T2	300.00-287.50	6.25	K Brace Left	No	No	0.0000	0.0000
T3	287.50-281.25	6.25	K Brace Right	No	No	0.0000	0.0000
T4	281.25-275.00	6.25	K Brace Left	No	No	0.0000	0.0000
T5	275.00-250.00	6.25	K Brace Left	No	No	0.0000	0.0000
T6	250.00-225.00	12.50	K Brace Down	No	Yes	0.0000	0.0000
T7	225.00-212.50	12.50	K Brace Down	No	Yes	0.0000	0.0000
T8	212.50-200.00	12.50	K1 Down	No	Yes	0.0000	0.0000
T9	200.00-175.00	12.50	K1 Down	No	Yes	0.0000	0.0000
T10	175.00-162.50	12.50	K1 Down	No	Yes	0.0000	0.0000
T11	162.50-150.00	12.50	K1 Down	No	Yes	0.0000	0.0000
T12	150.00-137.50	12.50	K Brace Down	No	Yes	0.0000	0.0000
T13	137.50-125.00	12.50	K Brace Down	No	Yes	0.0000	0.0000
T14	125.00-112.50	12.50	K Brace Down	No	Yes	0.0000	0.0000
T15	112.50-100.00	12.50	K Brace Down	No	Yes	0.0000	0.0000
T16	100.00-87.50	12.50	K Brace Down	No	Yes	0.0000	0.0000
T17	87.50-75.00	12.50	K1 Down	No	Yes	0.0000	0.0000
T18	75.00-50.00	12.50	K1 Down	No	Yes	0.0000	0.0000
T19	50.00-25.00	25.00	K1 Down	No	Yes	0.0000	0.0000
T20	25.00-0.00	25.00	K1 Down	No	Yes	0.0000	0.0000

Tower Section Geometry (cont'd)

<i>Tower Elevation</i>	<i>Leg Type</i>	<i>Leg Size</i>	<i>Leg Grade</i>	<i>Diagonal Type</i>	<i>Diagonal Size</i>	<i>Diagonal Grade</i>
<i>ft</i>						
T1 325.00-300.00	Pipe	Pipe 3.5 EH	A572-50 (50 ksi)	Pipe	PIPE 2.5 STD (SCH 40)	A53-B-35 (35 ksi)
T2 300.00-287.50	Pipe	Pipe 4 EH	A572-50 (50 ksi)	Pipe	PIPE 2.5 STD (SCH 40)	A53-B-35 (35 ksi)
T3 287.50-281.25	Pipe	Pipe 4 EH	A572-50 (50 ksi)	Pipe	PIPE 2.5 STD (SCH 40)	A53-B-35 (35 ksi)
T4 281.25-275.00	Pipe	Pipe 4 EH	A572-50 (50 ksi)	Pipe	PIPE 3 STD (SCH40)	A53-B-35 (35 ksi)
T5 275.00-250.00	Pipe	Pipe 5 EH	A572-50 (50 ksi)	Pipe	PIPE 3 STD (SCH40)	A53-B-35 (35 ksi)
T6 250.00-225.00	Pipe	Pipe 5 EH	A572-50 (50 ksi)	Pipe	PIPE 3 STD (SCH40)	A53-B-35 (35 ksi)
T7 225.00-212.50	Pipe	Pipe 5 EH	A572-50 (50 ksi)	Pipe	PIPE 3 STD (SCH40)	A53-B-35 (35 ksi)
T8 212.50-200.00	Pipe	Pipe 5 EH	A572-50 (50 ksi)	Pipe	PIPE 3 STD (SCH40)	A53-B-35 (35 ksi)
T9 200.00-175.00	Pipe	Pipe 6 EH	A572-50 (50 ksi)	Pipe	Pipe 3 EH	A53-B-35 (35 ksi)
T10 175.00-162.50	Pipe	Pipe 6 EH	A572-50 (50 ksi)	Pipe	PIPE 3 STD (SCH40)	A53-B-35 (35 ksi)
T11 162.50-150.00	Pipe	Pipe 6 EH	A572-50 (50 ksi)	Pipe	Pipe 3 EH	A53-B-35 (35 ksi)
T12 150.00-137.50	Pipe	PIPE 8 X-STR (SCH80)	A572-50 (50 ksi)	Pipe	Pipe 3 EH	A53-B-35 (35 ksi)
T13 137.50-125.00	Pipe	PIPE 8 X-STR (SCH80)	A572-50 (50 ksi)	Pipe	Pipe 3 EH	A53-B-35 (35 ksi)
T14 125.00-112.50	Pipe	PIPE 8 X-STR (SCH80)	A572-50 (50 ksi)	Pipe	PIPE 3.5 STD	A53-B-35 (35 ksi)
T15 112.50-100.00	Pipe	PIPE 8 X-STR (SCH80)	A572-50 (50 ksi)	Pipe	Pipe 3.5 EH	A53-B-35 (35 ksi)

<i>tnxTower</i> <i>Tower Engineering Professionals</i> 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job Ft White MW (US-FL-3149)	Page 4 of 55
	Project TEP No. 26455.976054	Date 12:18:38 08/02/24
	Client PeakNet Services LLC	Designed by AK

<i>Tower Elevation</i>	<i>Leg Type</i>	<i>Leg Size</i>	<i>Leg Grade</i>	<i>Diagonal Type</i>	<i>Diagonal Size</i>	<i>Diagonal Grade</i>
<i>ft</i>						
T16 100.00-87.50	Pipe	PIPE 8 X-STR (SCH80)	A572-50 (50 ksi)	Double Angle	2L4x4x1/4x3/8	A36 (36 ksi)
T17 87.50-75.00	Pipe	PIPE 8 X-STR (SCH80)	A572-50 (50 ksi)	Arbitrary Shape	3.5 STD w/ 4 STD Half Sleeve	A53-B-35 (35 ksi)
T18 75.00-50.00	Pipe	PIPE 8 SCH 100	A572-50 (50 ksi)	Arbitrary Shape	3.5 STD w/ 4 STD Half Sleeve	A53-B-35 (35 ksi)
T19 50.00-25.00	Pipe	PIPE 8 SCH 120	A572-50 (50 ksi)	Pipe	Pipe 3.5 EH	A53-B-35 (35 ksi)
T20 25.00-0.00	Pipe	PIPE 10 SCH 100	A572-50 (50 ksi)	Pipe	Pipe 3.5 EH	A53-B-35 (35 ksi)

Tower Section Geometry (cont'd)

<i>Tower Elevation</i>	<i>Top Girt Type</i>	<i>Top Girt Size</i>	<i>Top Girt Grade</i>	<i>Bottom Girt Type</i>	<i>Bottom Girt Size</i>	<i>Bottom Girt Grade</i>
<i>ft</i>						
T1 325.00-300.00	Single Angle	L3 1/2x3 1/2x1/4	A36 (36 ksi)	Solid Round		A36 (36 ksi)
T2 300.00-287.50	Single Angle	L3 1/2x3 1/2x1/4	A36 (36 ksi)	Solid Round		A36 (36 ksi)
T5 275.00-250.00	Single Angle	L4x4x1/4	A36 (36 ksi)	Solid Round		A36 (36 ksi)

Tower Section Geometry (cont'd)

<i>Tower Elevation</i>	<i>No. of Mid Girts</i>	<i>Mid Girt Type</i>	<i>Mid Girt Size</i>	<i>Mid Girt Grade</i>	<i>Horizontal Type</i>	<i>Horizontal Size</i>	<i>Horizontal Grade</i>
<i>ft</i>							
T1 325.00-300.00	1	Single Angle	L3 1/2x3 1/2x1/4	A36 (36 ksi)	Single Angle		A36 (36 ksi)
T6 250.00-225.00	None	Flat Bar		A36 (36 ksi)	Single Angle	L2 1/2x3 1/2x1/4	A36 (36 ksi)
T7 225.00-212.50	None	Flat Bar		A36 (36 ksi)	Single Angle	L2 1/2x3 1/2x1/4	A36 (36 ksi)
T8 212.50-200.00	None	Flat Bar		A36 (36 ksi)	Single Angle	L3x4x1/4	A36 (36 ksi)
T9 200.00-175.00	None	Flat Bar		A36 (36 ksi)	Single Angle	L3x4x1/4	A36 (36 ksi)
T10 175.00-162.50	None	Flat Bar		A36 (36 ksi)	Single Angle	L3 1/2x5x1/4	A36 (36 ksi)
T11 162.50-150.00	None	Flat Bar		A36 (36 ksi)	Single Angle	L3 1/2x5x1/4	A36 (36 ksi)
T12 150.00-137.50	None	Flat Bar		A36 (36 ksi)	Single Angle	L3 1/2x5x1/4	A36 (36 ksi)
T13 137.50-125.00	None	Flat Bar		A36 (36 ksi)	Single Angle	L4x6x5/16	A36 (36 ksi)
T14 125.00-112.50	None	Flat Bar		A36 (36 ksi)	Single Angle	L4x6x5/16	A36 (36 ksi)
T15 112.50-100.00	None	Flat Bar		A36 (36 ksi)	Single Angle	L4x6x5/16	A36 (36 ksi)

<i>tnxTower</i> <i>Tower Engineering Professionals</i> <i>326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</i>	Job Ft White MW (US-FL-3149)	Page 5 of 55
	Project TEP No. 26455.976054	Date 12:18:38 08/02/24
	Client PeakNet Services LLC	Designed by AK

<i>Tower Elevation</i>	<i>No. of Mid Girts</i>	<i>Mid Girt Type</i>	<i>Mid Girt Size</i>	<i>Mid Girt Grade</i>	<i>Horizontal Type</i>	<i>Horizontal Size</i>	<i>Horizontal Grade</i>
<i>ft</i>							
T16 100.00-87.50	None	Flat Bar		A36 (36 ksi)	Single Angle	L4x6x5/16	A36 (36 ksi)
T17 87.50-75.00	None	Flat Bar		A36 (36 ksi)	Double Angle	2L3 1/2x5x5/16x3/8	A36 (36 ksi)
T18 75.00-50.00	None	Flat Bar		A36 (36 ksi)	Double Angle	2L3 1/2x5x5/16x3/8	A36 (36 ksi)
T19 50.00-25.00	None	Flat Bar		A36 (36 ksi)	Pipe	Pipe 3.5 EH	A53-B-35 (35 ksi)
T20 25.00-0.00	None	Flat Bar		A36 (36 ksi)	Pipe	Pipe 3.5 EH	A53-B-35 (35 ksi)

Tower Section Geometry (cont'd)

<i>Tower Elevation</i>	<i>Secondary Horizontal Type</i>	<i>Secondary Horizontal Size</i>	<i>Secondary Horizontal Grade</i>	<i>Inner Bracing Type</i>	<i>Inner Bracing Size</i>	<i>Inner Bracing Grade</i>
<i>ft</i>						
T15	Solid Round		A36 (36 ksi)	Single Angle	L5x3x3/8	A36 (36 ksi)
T19 50.00-25.00	Solid Round		A36 (36 ksi)	Pipe	Pipe 3 EH	A53-B-35 (35 ksi)
T20 25.00-0.00	Solid Round		A36 (36 ksi)	Pipe	Pipe 3 EH	A53-B-35 (35 ksi)

Tower Section Geometry (cont'd)

Tower Elevation	Redundant Bracing Grade		Redundant Type	Redundant Size	K Factor
ft					
T8	A36 (36 ksi)	Horizontal (1)	Single Angle	L2x2x3/16	1
212.50-200.00	A36 (36 ksi)	Diagonal (1)	Single Angle	L2 1/2x2 1/2x3/16	1
T9	A36 (36 ksi)	Horizontal (1)	Single Angle	L2x2x3/16	1
200.00-175.00	A36 (36 ksi)	Diagonal (1)	Single Angle	L2 1/2x2 1/2x3/16	1
T10	A36 (36 ksi)	Horizontal (1)	Single Angle	L2x2x3/16	1
175.00-162.50	A36 (36 ksi)	Diagonal (1)	Single Angle	L2 1/2x2 1/2x3/16	1
T11	A36 (36 ksi)	Horizontal (1)	Single Angle	L2 1/2x2 1/2x3/16	1
162.50-150.00	A36 (36 ksi)	Diagonal (1)	Single Angle	L3x3x3/16	1
T17	A36 (36 ksi)	Horizontal (1)	Single Angle	L3x3x3/16	1
87.50-75.00	A36 (36 ksi)	Diagonal (1)	Single Angle	L3x3x3/16	1
T18	A36 (36 ksi)	Horizontal (1)	Single Angle	L3x3x3/16	1
75.00-50.00	A36 (36 ksi)	Diagonal (1)	Single Angle	L3x3x3/16	1
T19	A53-B-35 (35 ksi)	Horizontal (1)	Pipe	Pipe 2 EH	1
50.00-25.00	A53-B-35 (35 ksi)	Diagonal (1)	Pipe	Pipe 3 EH	1
	A53-B-35 (35 ksi)	Hip (1)	Pipe	PIPE 1.5 SCH 80	1
	A53-B-35 (35 ksi)	Hip Diagonal (1)	Pipe	PIPE 1.5 SCH 80	1
	A53-B-35 (35 ksi)				
T20	A53-B-35 (35 ksi)	Horizontal (1)	Pipe	Pipe 2 EH	1

<i>tnxTower</i> <i>Tower Engineering Professionals</i> <i>326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</i>	Job Ft White MW (US-FL-3149)	Page 6 of 55
	Project TEP No. 26455.976054	Date 12:18:38 08/02/24
	Client PeakNet Services LLC	Designed by AK

<i>Tower Elevation</i>	<i>Redundant Bracing Grade</i>	<i>Redundant Type</i>	<i>Redundant Size</i>	<i>K Factor</i>	
<i>ft</i>					
25.00-0.00	ksi)	Diagonal (1)	Pipe	Pipe 3 EH	1
	A53-B-35 (35 ksi)	Hip (1)	Pipe	PIPE 1.5 SCH 80	1
	A53-B-35 (35 ksi)	Hip Diagonal (1)	Pipe	PIPE 1.5 SCH 80	1
	A53-B-35 (35 ksi)				

Tower Section Geometry (cont'd)

<i>Tower Elevation</i>	<i>Gusset Area (per face)</i>	<i>Gusset Thickness</i>	<i>Gusset Grade</i>	<i>Adjust. Factor A_f</i>	<i>Adjust. Factor A_r</i>	<i>Weight Mult.</i>	<i>Double Angle Stitch Bolt Spacing Diagonals in</i>	<i>Double Angle Stitch Bolt Spacing Horizontals in</i>	<i>Double Angle Stitch Bolt Spacing Redundants in</i>
<i>ft</i>	<i>ft²</i>	<i>in</i>							
T1	0.00	0.3750	A36 (36 ksi)	1	1	1	0.0000	0.0000	36.0000
325.00-300.00									
T2	0.00	0.3750	A36 (36 ksi)	1	1	1	0.0000	0.0000	36.0000
300.00-287.50									
T3	0.00	0.3750	A36 (36 ksi)	1	1	1	0.0000	0.0000	36.0000
287.50-281.25									
T4	0.00	0.3750	A36 (36 ksi)	1	1	1	0.0000	0.0000	36.0000
281.25-275.00									
T5	0.00	0.3750	A36 (36 ksi)	1	1	1	0.0000	0.0000	36.0000
275.00-250.00									
T6	0.00	0.3750	A36 (36 ksi)	1	1	1	0.0000	0.0000	36.0000
250.00-225.00									
T7	0.00	0.3750	A36 (36 ksi)	1	1	1	0.0000	0.0000	36.0000
225.00-212.50									
T8	0.00	0.3750	A36 (36 ksi)	1	1	1	0.0000	0.0000	36.0000
212.50-200.00									
T9	0.00	0.3750	A36 (36 ksi)	1	1	1	0.0000	0.0000	36.0000
200.00-175.00									
T10	0.00	0.3750	A36 (36 ksi)	1	1	1	0.0000	0.0000	36.0000
175.00-162.50									
T11	0.00	0.3750	A36 (36 ksi)	1	1	1	0.0000	0.0000	36.0000
162.50-150.00									
T12	0.00	0.3750	A36 (36 ksi)	1	1	1	0.0000	0.0000	36.0000
150.00-137.50									
T13	0.00	0.3750	A36 (36 ksi)	1	1	1	0.0000	0.0000	36.0000
137.50-125.00									
T14	0.00	0.3750	A36 (36 ksi)	1	1	1	0.0000	0.0000	36.0000
125.00-112.50									
T15	0.00	0.3750	A36 (36 ksi)	1	1	1	0.0000	0.0000	36.0000
112.50-100.00									
T16	0.00	0.3750	A36 (36 ksi)	1	1	1	72.0000	0.0000	36.0000
100.00-87.50									
T17	0.00	0.3750	A36 (36 ksi)	1.05	1	1	0.0000	24.0000	36.0000
87.50-75.00									
T18	0.00	0.3750	A36 (36 ksi)	1.05	1	1	0.0000	24.0000	36.0000
75.00-50.00									
T19	0.00	0.5000	A36 (36 ksi)	1	1	1	0.0000	0.0000	36.0000
50.00-25.00									
T20 25.00-0.00	0.00	0.5000	A36 (36 ksi)	1	1	1	0.0000	0.0000	36.0000

tnxTower Tower Engineering Professionals 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job Ft White MW (US-FL-3149)	Page 7 of 55
	Project TEP No. 26455.976054	Date 12:18:38 08/02/24
	Client PeakNet Services LLC	Designed by AK

tnxTower Tower Engineering Professionals 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job Ft White MW (US-FL-3149)	Page 8 of 55
	Project TEP No. 26455.976054	Date 12:18:38 08/02/24
	Client PeakNet Services LLC	Designed by AK

Tower Section Geometry (cont'd)

Tower Elevation <i>ft</i>	Calc K Single Angles	Calc K Solid Rounds	K Factors ¹									
			Legs	X Brace Diags	K Brace Diags	Single Diags	Girts	Horiz.	Sec. Horiz.	Inner Brace		
				X Y	X Y	X Y	X Y	X Y	X Y	X Y	X Y	X Y
T1	Yes	Yes	1	1	1	1	1	1	1	1	1	1
325.00-300.00				1	1	1	1	1	1	1	1	1
T2	Yes	Yes	1	1	1	1	1	1	1	1	1	1
300.00-287.50				1	1	1	1	1	1	1	1	1
T3	Yes	Yes	1	1	1	1	1	1	1	1	1	1
287.50-281.25				1	1	1	1	1	1	1	1	1
T4	Yes	Yes	1	1	1	1	1	1	1	1	1	1
281.25-275.00				1	1	1	1	1	1	1	1	1
T5	Yes	Yes	1	1	1	1	1	1	1	1	1	1
275.00-250.00				1	1	1	1	1	1	1	1	1
T6	Yes	Yes	1	1	1	1	1	1	1	1	1	1
250.00-225.00				1	1	1	1	1	1	1	1	1
T7	Yes	Yes	1	1	1	1	1	1	1	1	1	1
225.00-212.50				1	1	1	1	1	1	1	1	1
T8	Yes	Yes	1	1	1	1	1	1	1	1	1	1
212.50-200.00				1	1	1	1	1	1	1	1	1
T9	Yes	Yes	1	1	1	1	1	1	1	1	1	1
200.00-175.00				1	1	1	1	1	1	1	1	1
T10	Yes	Yes	1	1	1	1	1	1	1	1	1	1
175.00-162.50				1	1	1	1	1	1	1	1	1
T11	Yes	Yes	1	1	1	1	1	1	1	1	1	1
162.50-150.00				1	1	1	1	1	1	1	1	1
T12	Yes	Yes	1	1	1	1	1	1	1	1	1	1
150.00-137.50				1	1	1	1	1	1	1	1	1
T13	Yes	Yes	1	1	1	1	1	1	1	1	1	1
137.50-125.00				1	1	1	1	1	1	1	1	1
T14	Yes	Yes	1	1	1	1	1	1	1	1	1	1
125.00-112.50				1	1	1	1	1	1	1	1	1
T15	Yes	Yes	1	1	1	1	1	1	1	1	1	1
112.50-100.00				1	1	1	1	1	1	1	1	1
T16	Yes	Yes	1	1	1	1	1	1	1	1	1	1
100.00-87.50				1	1	1	1	1	1	1	1	1
T17	Yes	Yes	1	1	1	1	1	0.5	1	1	1	1
87.50-75.00				1	1	1	1	1	1	1	1	1
T18	Yes	Yes	1	1	1	1	1	0.5	1	1	1	1
75.00-50.00				1	1	1	1	1	1	1	1	1
T19	Yes	Yes	1	1	1	1	1	1	1	1	1	1
50.00-25.00				1	1	1	1	1	1	1	1	1
T20	Yes	Yes	1	1	1	1	1	1	1	1	1	1
25.00-0.00				1	1	1	1	1	1	1	1	1

¹Note: K factors are applied to member segment lengths. K-braces without inner supporting members will have the K factor in the out-of-plane direction applied to the overall length.

Tower Section Geometry (cont'd)

Tower Elevation <i>ft</i>	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T1	0.0000	1	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
325.00-300.00														
T2	0.0000	1	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
300.00-287.50														
T3	0.0000	1	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
287.50-281.25														
T4	0.0000	1	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
281.25-275.00														
T5	0.0000	1	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
275.00-250.00														
T6	0.0000	1	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
250.00-225.00														
T7	0.0000	1	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
225.00-212.50														
T8	0.0000	1	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
212.50-200.00														
T9	0.0000	1	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
200.00-175.00														
T10	0.0000	1	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
175.00-162.50														
T11	0.0000	1	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
162.50-150.00														
T12	0.0000	1	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
150.00-137.50														
T13	0.0000	1	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
137.50-125.00														
T14	0.0000	1	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
125.00-112.50														
T15	0.0000	1	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
112.50-100.00														
T16	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
100.00-87.50														
T17	0.0000	1	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
87.50-75.00														
T18	0.0000	1	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
75.00-50.00														
T19	0.0000	1	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	1	0.0000	0.75
50.00-25.00														
T20 25.00-0.00	0.0000	1	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	1	0.0000	0.75

Tower Elevation <i>ft</i>	Redundant Horizontal		Redundant Diagonal		Redundant Sub-Diagonal		Redundant Sub-Horizontal		Redundant Vertical		Redundant Hip		Redundant Hip Diagonal		
	<i>Net Width Deduct in</i>	<i>U</i>	<i>Net Width Deduct in</i>	<i>U</i>	<i>Net Width Deduct in</i>	<i>U</i>	<i>Net Width Deduct in</i>	<i>U</i>	<i>Net Width Deduct in</i>	<i>U</i>	<i>Net Width Deduct in</i>	<i>U</i>	<i>Net Width Deduct in</i>	<i>U</i>	
T1	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)	
325.00-300.00	0.0000	0.75 (2)	0.0000	0.75 (2)						0.0000	0.75 (2)	0.0000	0.75 (2)		
	0.0000	0.75 (3)	0.0000	0.75 (3)						0.0000	0.75 (3)	0.0000	0.75 (3)		
	0.0000	0.75 (4)	0.0000	0.75 (4)						0.0000	0.75 (4)	0.0000	0.75 (4)		

tnxTower Tower Engineering Professionals 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job Ft White MW (US-FL-3149)	Page 11 of 55
	Project TEP No. 26455.976054	Date 12:18:38 08/02/24
	Client PeakNet Services LLC	Designed by AK

tnxTower Tower Engineering Professionals 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job Ft White MW (US-FL-3149)	Page 12 of 55
	Project TEP No. 26455.976054	Date 12:18:38 08/02/24
	Client PeakNet Services LLC	Designed by AK

Tower Elevation ft	Redundant Horizontal		Redundant Diagonal		Redundant Sub-Diagonal		Redundant Sub-Horizontal		Redundant Vertical		Redundant Hip		Redundant Hip Diagonal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T16 100.00-87.50	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T17 87.50-75.00	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T18 75.00-50.00	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T19 50.00-25.00	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T20 25.00-0.00	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)

Tower Section Geometry (cont'd)

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T1	Flange	0.8750	4	0.6250	1	0.7500	1	0.6250	0	0.7500	1	0.6250	0	0.6250	0
325.00-300.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T2	Flange	0.7500	0	0.7500	1	0.7500	1	0.6250	0	0.6250	0	0.6250	0	0.6250	0
300.00-287.50		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T3	Flange	0.7500	0	0.7500	1	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
287.50-281.25		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T4	Flange	1.0000	4	0.7500	1	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
281.25-275.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T5	Flange	1.1250	4	0.7500	1	0.7500	1	0.6250	0	0.6250	0	0.6250	0	0.6250	0
275.00-250.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T6	Flange	1.2500	4	0.7500	1	0.6250	0	0.6250	0	0.6250	0	0.7500	1	0.6250	0
250.00-225.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T7	Flange	0.7500	0	0.7500	1	0.6250	0	0.6250	0	0.6250	0	0.7500	1	0.6250	0
225.00-212.50		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T8	Flange	1.3750	4	0.7500	1	0.6250	0	0.6250	0	0.6250	0	0.7500	1	0.6250	0
212.50-200.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T9	Flange	1.3750	4	0.7500	1	0.6250	0	0.6250	0	0.6250	0	0.7500	1	0.6250	0
200.00-175.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T10	Flange	0.7500	0	0.7500	1	0.6250	0	0.6250	0	0.6250	0	0.7500	1	0.6250	0
175.00-162.50		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T11	Flange	1.5000	4	0.7500	1	0.6250	0	0.6250	0	0.6250	0	0.7500	1	0.6250	0
162.50-150.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T12	Flange	0.7500	0	1.0000	1	0.6250	0	0.6250	0	0.6250	0	1.0000	1	0.6250	0
150.00-137.50		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T13	Flange	1.5000	4	1.0000	1	0.6250	0	0.6250	0	0.6250	0	1.0000	1	0.6250	0
137.50-125.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T14	Flange	0.7500	0	1.0000	1	0.6250	0	0.6250	0	0.6250	0	1.0000	1	0.6250	0
125.00-112.50		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T15	Flange	1.5000	4	1.0000	1	0.6250	0	0.6250	0	0.6250	0	1.0000	1	0.6250	0
112.50-100.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T16	Flange	0.7500	0	1.0000	1	0.6250	0	0.6250	0	0.6250	0	1.0000	1	0.6250	0
100.00-87.50		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T17	Flange	1.7500	4	1.0000	1	0.6250	0	0.6250	0	0.6250	0	1.0000	1	0.6250	0
87.50-75.00		A307		A325N		A325N		A325N		A325N		A325N		A325N	
T18	Flange	2.0000	4	1.0000	1	0.6250	0	0.6250	0	0.6250	0	1.0000	1	0.6250	0
75.00-50.00		A307		A325N		A325N		A325N		A325N		A325N		A325N	
T19	Flange	2.0000	4	1.2500	1	0.6250	0	0.6250	0	0.6250	0	1.0000	1	0.6250	0
50.00-25.00		A307		A325N		A325N		A325N		A325N		A325N		A325N	
T20 25.00-0.00	Flange	2.5000	4	1.2500	1	0.6250	0	0.6250	0	0.6250	0	1.1250	1	0.6250	0
		A36		A325N		A325N		A325N		A325N		A325N		A325N	

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
Ladder 2 Rail (L2x3x1/4)	A	No	No	Af (CaAa)	325.00 - 250.00	0.0000	0.4	1	1	0.5000	1.9000	4.09
Ladder Rail 2 (L2x3x1/4) - Weight Only	B	No	No	Af (CaAa)	325.00 - 250.00	0.0000	-0.4	1	1	0.5000	0.0000	4.09

Ladder Rung -	A	No	No	Ar (CaAa)	325.00 -	0.0000	0.5	1	1	0.5000	0.0000	2.08

<i>tnxTower</i> <i>Tower Engineering Professionals</i> 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	13 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
Weight Only ****					0.00								
Ladder Mount Rung - Weight Only ****	A	No	No	Af (CaAa)	325.00 - 0.00	0.0000	0.5	1	1	0.5000	0.0000		3.37
Rail L1 1/2 x 1 1/2 x 1/8 WG2 Rung ****	A	No	No	Af (CaAa)	312.50 - 9.00	0.0000	0.44	2	2	35.0000	1.4500		1.23
	A	No	No	Af (CaAa)	312.50 - 9.00	0.0000	0.44	1	1	0.5000	1.4500		1.05
Rail L2x2x3/16 WG1 Rung ****	C	No	No	Af (CaAa)	250.00 - 1.50	0.0000	0.4	2	2	21.0000	1.9000		2.46
	C	No	No	Af (CaAa)	250.00 - 1.50	0.0000	0.4	1	1	0.5000	0.0000		1.06
Ladder 1 Rail (PL1.5x3/8) ****	A	No	No	Af (CaAa)	250.00 - 0.00	0.0000	0.4	1	1	0.5000	1.5000		1.91
Ladder Rail 1 (PL1.5x3/8) - Weight Only ****	A	No	No	Af (CaAa)	250.00 - 0.00	0.0000	-0.4	1	1	0.5000	0.0000		1.91
5/8" dia. coax ****	B	No	No	Ar (CaAa)	325.00 - 8.00	0.0000	-0.5	1	1	0.5000	0.6250		0.15
9/16" EHS Cable ****	B	No	No	Ar (CaAa)	325.00 - 0.00	0.0000	-0.5	1	1	0.5000	0.5625		0.67
Safety Line 3/8 ****	B	No	No	Ar (CaAa)	325.00 - 0.00	0.0000	-0.5	1	1	0.5000	0.3750		0.22
LDF5-50A (7/8 FOAM) ****	A	No	No	Ar (CaAa)	322.50 - 8.00	0.0000	0.44	2	2	0.5000	1.0900		0.33
LDF7-50A (1-5/8 FOAM) ****	A	No	No	Ar (CaAa)	322.50 - 8.00	0.0000	0.45	1	1	0.5000	1.9800		0.82
EU63 ****	B	No	No	Ar (CaAa)	317.00 - 279.00	0.0000	0.5	2	2	0.5000	2.0300		0.56
LDF5-50A (7/8 FOAM) ****	A	No	No	Ar (CaAa)	305.00 - 8.00	0.0000	0.44	1	1	0.5000	1.0900		0.33
LDF4P-50A (1/2 FOAM) ****	A	No	No	Ar (CaAa)	305.00 - 8.00	0.0000	0.44	1	1	0.6300	0.6300		0.15
LDF7-50A (1-5/8 FOAM) ****	A	No	No	Ar (CaAa)	285.00 - 8.00	0.0000	0.45	1	1	0.5000	1.9800		0.82
EU63 ****	B	No	No	Ar (CaAa)	279.00 - 8.00	0.0000	0.5	4	2	0.5000	2.0300		0.56
1/2" dia. coax ****	C	No	No	Ar (CaAa)	250.00 - 1.00	0.0000	0.4	1	1	0.5000	0.5000		0.15
2" Fiber ****	C	No	No	Ar (CaAa)	250.00 - 1.00	0.0000	0.4	1	1	0.5000	2.0000		0.87
LDF7-50A (1-5/8 FOAM) ****	C	No	No	Ar (CaAa)	250.00 - 1.00	0.0000	0.4	3	3	0.5000	1.9800		0.82
2" Hybrid ****	C	No	No	Ar (CaAa)	250.00 - 1.00	0.0000	0.4	3	3	0.5000	2.0000		3.10

<i>tnxTower</i> <i>Tower Engineering Professionals</i> 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	14 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
*** LDF2-50A (3/8 FOAM) ***	A	No	No	Ar (CaAa)	240.00 - 0.00	0.0000	0.4	4	4	0.5000	0.4400		0.08

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	C _L A _L ft ² /ft	Weight plf
*** ***								

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A _R ft ²	A _F ft ²	C _L A _L In Face ft ²	C _L A _L Out Face ft ²	Weight lb
T1	325.00-300.00	A	0.000	0.000	24.782	0.000	318.16
		B	0.000	0.000	10.808	0.000	147.31
		C	0.000	0.000	0.000	0.000	0.00
T2	300.00-287.50	A	0.000	0.000	17.954	0.000	187.65
		B	0.000	0.000	7.028	0.000	78.14
		C	0.000	0.000	0.000	0.000	0.00
T3	287.50-281.25	A	0.000	0.000	9.720	0.000	96.90
		B	0.000	0.000	3.514	0.000	39.07
		C	0.000	0.000	0.000	0.000	0.00
T4	281.25-275.00	A	0.000	0.000	10.215	0.000	98.95
		B	0.000	0.000	5.138	0.000	43.55
		C	0.000	0.000	0.000	0.000	0.00
T5	275.00-250.00	A	0.000	0.000	40.858	0.000	395.80
		B	0.000	0.000	24.206	0.000	184.28
		C	0.000	0.000	0.000	0.000	0.00
T6	250.00-225.00	A	0.000	0.000	41.832	0.000	393.85
		B	0.000	0.000	24.206	0.000	82.03
		C	0.000	0.000	51.933	0.000	469.18
T7	225.00-212.50	A	0.000	0.000	21.796	0.000	198.53
		B	0.000	0.000	12.103	0.000	41.01
		C	0.000	0.000	25.967	0.000	234.59
T8	212.50-200.00	A	0.000	0.000	21.796	0.000	198.53
		B	0.000	0.000	12.103	0.000	41.01
		C	0.000	0.000	25.967	0.000	234.59
T9	200.00-175.00	A	0.000	0.000	43.592	0.000	397.05
		B	0.000	0.000	24.206	0.000	82.03
		C	0.000	0.000	51.933	0.000	469.18
T10	175.00-162.50	A	0.000	0.000	21.796	0.000	198.53
		B	0.000	0.000	12.103	0.000	41.01
		C	0.000	0.000	25.967	0.000	234.59
T11	162.50-150.00	A	0.000	0.000	21.796	0.000	198.53

<i>tnxTower</i> <i>Tower Engineering Professionals</i> 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	15 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

Tower Section	Tower Elevation ft	Face	A _R ft ²	A _F ft ²	C _r A _r In Face ft ²	C _r A _r Out Face ft ²	Weight lb
T12	150.00-137.50	B	0.000	0.000	12.103	0.000	41.01
		C	0.000	0.000	25.967	0.000	234.59
		A	0.000	0.000	21.796	0.000	198.53
T13	137.50-125.00	B	0.000	0.000	12.103	0.000	41.01
		C	0.000	0.000	25.967	0.000	234.59
		A	0.000	0.000	21.796	0.000	198.53
T14	125.00-112.50	B	0.000	0.000	12.103	0.000	41.01
		C	0.000	0.000	25.967	0.000	234.59
		A	0.000	0.000	21.796	0.000	198.53
T15	112.50-100.00	B	0.000	0.000	12.103	0.000	41.01
		C	0.000	0.000	25.967	0.000	234.59
		A	0.000	0.000	21.796	0.000	198.53
T16	100.00-87.50	B	0.000	0.000	12.103	0.000	41.01
		C	0.000	0.000	25.967	0.000	234.59
		A	0.000	0.000	21.796	0.000	198.53
T17	87.50-75.00	B	0.000	0.000	12.103	0.000	41.01
		C	0.000	0.000	25.967	0.000	234.59
		A	0.000	0.000	21.796	0.000	198.53
T18	75.00-50.00	B	0.000	0.000	12.103	0.000	41.01
		C	0.000	0.000	25.967	0.000	234.59
		A	0.000	0.000	43.592	0.000	397.05
T19	50.00-25.00	B	0.000	0.000	24.206	0.000	82.03
		C	0.000	0.000	51.933	0.000	469.18
		A	0.000	0.000	43.592	0.000	397.05
T20	25.00-0.00	B	0.000	0.000	24.206	0.000	82.03
		C	0.000	0.000	51.933	0.000	469.18
		A	0.000	0.000	32.519	0.000	343.25
		B	0.000	0.000	17.210	0.000	62.91
		C	0.000	0.000	49.539	0.000	447.42

Feed Line Center of Pressure

Section	Elevation ft	CP _X in	CP _Z in	CP _X Ice in	CP _Z Ice in
T1	325.00-300.00	2.2842	-10.7717	2.1872	-10.3184
T2	300.00-287.50	3.1508	-14.0402	2.9705	-13.2521
T3	287.50-281.25	3.9059	-19.0622	3.6245	-17.7598
T4	281.25-275.00	5.9825	-18.8769	5.4880	-17.3775
T5	275.00-250.00	6.7094	-17.5970	5.9708	-15.6830
T6	250.00-225.00	-12.9468	-10.2378	-11.8890	-9.2999
T7	225.00-212.50	-13.9978	-11.8622	-12.8792	-10.8024
T8	212.50-200.00	-12.1749	-10.3892	-11.4275	-9.6695
T9	200.00-175.00	-12.6952	-10.7952	-11.7588	-9.9009
T10	175.00-162.50	-12.9942	-11.0555	-12.0844	-10.1851
T11	162.50-150.00	-12.9672	-11.0428	-12.1088	-10.2194
T12	150.00-137.50	-15.4468	-12.9582	-13.9624	-11.5796
T13	137.50-125.00	-15.3825	-12.9224	-13.9783	-11.6139
T14	125.00-112.50	-15.5750	-13.0572	-14.0684	-11.6595
T15	112.50-100.00	-15.9429	-13.3620	-14.4222	-11.9516
T16	100.00-87.50	-13.7706	-11.9686	-12.8227	-11.0228
T17	87.50-75.00	-13.5914	-11.4742	-12.5185	-10.4630
T18	75.00-50.00	-13.9100	-11.7398	-12.8503	-10.7411
T19	50.00-25.00	-22.2273	-17.9326	-19.8307	-15.8657
T20	25.00-0.00	-24.9039	-11.6571	-22.0028	-10.2103

<i>tnxTower</i> <i>Tower Engineering Professionals</i> 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	16 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

Shielding Factor Ka						
Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice	
T1	3	Ladder 2 Rail (L2x3x1/4)	300.00 - 325.00	0.6000	0.6000	
T1	4	Ladder Rail 2 (L2x3x1/4) - Weight Only	300.00 - 325.00	0.6000	0.6000	
T1	6	Ladder Rung - Weight Only	300.00 - 325.00	0.6000	0.6000	
T1	8	Ladder Mount Rung - Weight Only	300.00 - 325.00	0.6000	0.6000	
T1	10	Rail L1 1/2 x 1 1/2 x 1/8	300.00 - 312.50	0.6000	0.6000	
T1	12	WG2 Rung	300.00 - 312.50	0.6000	0.6000	
T1	22	5/8" dia. coax	300.00 - 325.00	0.6000	0.6000	
T1	24	9/16" EHS Cable	300.00 - 325.00	0.6000	0.6000	
T1	26	Safety Line 3/8	300.00 - 325.00	0.6000	0.6000	
T1	28	LDF5-50A (7/8 FOAM)	300.00 - 322.50	0.6000	0.6000	
T1	30	LDF7-50A (1-5/8 FOAM)	300.00 - 322.50	0.6000	0.6000	
T1	32	EU63	300.00 - 317.00	0.6000	0.6000	
T1	34	LDF5-50A (7/8 FOAM)	300.00 - 305.00	0.6000	0.6000	
T1	35	LDF4P-50A (1/2 FOAM)	300.00 - 305.00	0.6000	0.6000	
T2	3	Ladder 2 Rail (L2x3x1/4)	287.50 - 300.00	0.6000	0.6000	
T2	4	Ladder Rail 2 (L2x3x1/4) - Weight Only	287.50 - 300.00	0.6000	0.6000	
T2	6	Ladder Rung - Weight Only	287.50 - 300.00	0.6000	0.6000	
T2	8	Ladder Mount Rung - Weight Only	287.50 - 300.00	0.6000	0.6000	
T2	10	Rail L1 1/2 x 1 1/2 x 1/8	287.50 - 300.00	0.6000	0.6000	
T2	12	WG2 Rung	287.50 - 300.00	0.6000	0.6000	
T2	22	5/8" dia. coax	287.50 - 300.00	0.6000	0.6000	
T2	24	9/16" EHS Cable	287.50 - 300.00	0.6000	0.6000	
T2	26	Safety Line 3/8	287.50 - 300.00	0.6000	0.6000	
T2	28	LDF5-50A (7/8 FOAM)	287.50 - 300.00	0.6000	0.6000	
T2	30	LDF7-50A (1-5/8 FOAM)	287.50 - 300.00	0.6000	0.6000	
T2	32	EU63	287.50 - 300.00	0.6000	0.6000	
T2	34	LDF5-50A (7/8 FOAM)	287.50 - 300.00	0.6000	0.6000	
T2	35	LDF4P-50A (1/2 FOAM)	287.50 - 300.00	0.6000	0.6000	

tnxTower Tower Engineering Professionals 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	17 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

<i>Tower Section</i>	<i>Feed Line Record No.</i>	<i>Description</i>	<i>Feed Line Segment Elev.</i>	<i>K_a No Ice</i>	<i>K_a Ice</i>
T3	3	Ladder 2 Rail (L2x3x1/4)	281.25 - 287.50	0.6000	0.6000
T3	4	Ladder Rail 2 (L2x3x1/4) - Weight Only	281.25 - 287.50	0.6000	0.6000
T3	6	Ladder Rung - Weight Only	281.25 - 287.50	0.6000	0.6000
T3	8	Ladder Mount Rung - Weight Only	281.25 - 287.50	0.6000	0.6000
T3	10	Rail L1 1/2 x 1 1/2 x 1/8	281.25 - 287.50	0.6000	0.6000
T3	12	WG2 Rung	281.25 - 287.50	0.6000	0.6000
T3	22	5/8" dia. coax	281.25 - 287.50	0.6000	0.6000
T3	24	9/16" EHS Cable	281.25 - 287.50	0.6000	0.6000
T3	26	Safety Line 3/8	281.25 - 287.50	0.6000	0.6000
T3	28	LDF5-50A (7/8 FOAM)	281.25 - 287.50	0.6000	0.6000
T3	30	LDF7-50A (1-5/8 FOAM)	281.25 - 287.50	0.6000	0.6000
T3	32	EU63	281.25 - 287.50	0.6000	0.6000
T3	34	LDF5-50A (7/8 FOAM)	281.25 - 287.50	0.6000	0.6000
T3	35	LDF4P-50A (1/2 FOAM)	281.25 - 287.50	0.6000	0.6000
T3	37	LDF7-50A (1-5/8 FOAM)	281.25 - 285.00	0.6000	0.6000
T4	3	Ladder 2 Rail (L2x3x1/4)	275.00 - 281.25	0.6000	0.6000
T4	4	Ladder Rail 2 (L2x3x1/4) - Weight Only	275.00 - 281.25	0.6000	0.6000
T4	6	Ladder Rung - Weight Only	275.00 - 281.25	0.6000	0.6000
T4	8	Ladder Mount Rung - Weight Only	275.00 - 281.25	0.6000	0.6000
T4	10	Rail L1 1/2 x 1 1/2 x 1/8	275.00 - 281.25	0.6000	0.6000
T4	12	WG2 Rung	275.00 - 281.25	0.6000	0.6000
T4	22	5/8" dia. coax	275.00 - 281.25	0.6000	0.6000
T4	24	9/16" EHS Cable	275.00 - 281.25	0.6000	0.6000
T4	26	Safety Line 3/8	275.00 - 281.25	0.6000	0.6000
T4	28	LDF5-50A (7/8 FOAM)	275.00 - 281.25	0.6000	0.6000
T4	30	LDF7-50A (1-5/8 FOAM)	275.00 - 281.25	0.6000	0.6000
T4	32	EU63	279.00 - 281.25	0.6000	0.6000
T4	34	LDF5-50A (7/8 FOAM)	275.00 - 281.25	0.6000	0.6000
T4	35	LDF4P-50A (1/2 FOAM)	275.00 - 281.25	0.6000	0.6000
T4	37	LDF7-50A (1-5/8 FOAM)	275.00 - 281.25	0.6000	0.6000
T4	39	EU63	275.00 - 279.00	0.6000	0.6000

tnxTower Tower Engineering Professionals 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	18 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

<i>Tower Section</i>	<i>Feed Line Record No.</i>	<i>Description</i>	<i>Feed Line Segment Elev.</i>	<i>K_a No Ice</i>	<i>K_a Ice</i>
T5	3	Ladder 2 Rail (L2x3x1/4)	250.00 - 275.00	0.6000	0.6000
T5	4	Ladder Rail 2 (L2x3x1/4) - Weight Only	250.00 - 275.00	0.6000	0.6000
T5	6	Ladder Rung - Weight Only	250.00 - 275.00	0.6000	0.6000
T5	8	Ladder Mount Rung - Weight Only	250.00 - 275.00	0.6000	0.6000
T5	10	Rail L1 1/2 x 1 1/2 x 1/8	250.00 - 275.00	0.6000	0.6000
T5	12	WG2 Rung	250.00 - 275.00	0.6000	0.6000
T5	22	5/8" dia. coax	250.00 - 275.00	0.6000	0.6000
T5	24	9/16" EHS Cable	250.00 - 275.00	0.6000	0.6000
T5	26	Safety Line 3/8	250.00 - 275.00	0.6000	0.6000
T5	28	LDF5-50A (7/8 FOAM)	250.00 - 275.00	0.6000	0.6000
T5	30	LDF7-50A (1-5/8 FOAM)	250.00 - 275.00	0.6000	0.6000
T5	34	LDF5-50A (7/8 FOAM)	250.00 - 275.00	0.6000	0.6000
T5	35	LDF4P-50A (1/2 FOAM)	250.00 - 275.00	0.6000	0.6000
T5	37	LDF7-50A (1-5/8 FOAM)	250.00 - 275.00	0.6000	0.6000
T5	39	EU63	250.00 - 275.00	0.6000	0.6000
T6	6	Ladder Rung - Weight Only	225.00 - 250.00	0.6000	0.6000
T6	8	Ladder Mount Rung - Weight Only	225.00 - 250.00	0.6000	0.6000
T6	10	Rail L1 1/2 x 1 1/2 x 1/8	225.00 - 250.00	0.6000	0.6000
T6	12	WG2 Rung	225.00 - 250.00	0.6000	0.6000
T6	14	Rail L2x2x3/16	225.00 - 250.00	0.6000	0.6000
T6	16	WG1 Rung	225.00 - 250.00	0.6000	0.6000
T6	19	Ladder 1 Rail (PL1.5x3/8)	225.00 - 250.00	0.6000	0.6000
T6	20	Ladder Rail 1 (PL1.5x3/8) - Weight Only	225.00 - 250.00	0.6000	0.6000
T6	22	5/8" dia. coax	225.00 - 250.00	0.6000	0.6000
T6	24	9/16" EHS Cable	225.00 - 250.00	0.6000	0.6000
T6	26	Safety Line 3/8	225.00 - 250.00	0.6000	0.6000
T6	28	LDF5-50A (7/8 FOAM)	225.00 - 250.00	0.6000	0.6000
T6	30	LDF7-50A (1-5/8 FOAM)	225.00 - 250.00	0.6000	0.6000
T6	34	LDF5-50A (7/8 FOAM)	225.00 - 250.00	0.6000	0.6000
T6	35	LDF4P-50A (1/2 FOAM)	225.00 - 250.00	0.6000	0.6000
T6	37	LDF7-50A (1-5/8 FOAM)	225.00 - 250.00	0.6000	0.6000

tnxTower Tower Engineering Professionals 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	19 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

tnxTower Tower Engineering Professionals 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	20 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

<i>Tower Section</i>	<i>Feed Line Record No.</i>	<i>Description</i>	<i>Feed Line Segment Elev.</i>	<i>K_a No Ice</i>	<i>K_a Ice</i>
T6	39	EU63	225.00 - 250.00	0.6000	0.6000
T6	41	1/2" dia. coax	225.00 - 250.00	0.6000	0.6000
T6	42	2" Fiber	225.00 - 250.00	0.6000	0.6000
T6	43	LDF7-50A (1-5/8 FOAM)	225.00 - 250.00	0.6000	0.6000
T6	44	2" Hybrid	225.00 - 250.00	0.6000	0.6000
T6	49	LDF2-50A (3/8 FOAM)	225.00 - 240.00	0.6000	0.6000
T7	6	Ladder Rung - Weight Only	212.50 - 225.00	0.6000	0.6000
T7	8	Ladder Mount Rung - Weight Only	212.50 - 225.00	0.6000	0.6000
T7	10	Rail L1 1/2 x 1 1/2 x 1/8	212.50 - 225.00	0.6000	0.6000
T7	12	WG2 Rung	212.50 - 225.00	0.6000	0.6000
T7	14	Rail L2x2x3/16	212.50 - 225.00	0.6000	0.6000
T7	16	WG1 Rung	212.50 - 225.00	0.6000	0.6000
T7	19	Ladder 1 Rail (PL1.5x3/8)	212.50 - 225.00	0.6000	0.6000
T7	20	Ladder Rail 1 (PL1.5x3/8) - Weight Only	212.50 - 225.00	0.6000	0.6000
T7	22	5/8" dia. coax	212.50 - 225.00	0.6000	0.6000
T7	24	9/16" EHS Cable	212.50 - 225.00	0.6000	0.6000
T7	26	Safety Line 3/8	212.50 - 225.00	0.6000	0.6000
T7	28	LDF5-50A (7/8 FOAM)	212.50 - 225.00	0.6000	0.6000
T7	30	LDF7-50A (1-5/8 FOAM)	212.50 - 225.00	0.6000	0.6000
T7	34	LDF5-50A (7/8 FOAM)	212.50 - 225.00	0.6000	0.6000
T7	35	LDF4P-50A (1/2 FOAM)	212.50 - 225.00	0.6000	0.6000
T7	37	LDF7-50A (1-5/8 FOAM)	212.50 - 225.00	0.6000	0.6000
T7	39	EU63	212.50 - 225.00	0.6000	0.6000
T7	41	1/2" dia. coax	212.50 - 225.00	0.6000	0.6000
T7	42	2" Fiber	212.50 - 225.00	0.6000	0.6000
T7	43	LDF7-50A (1-5/8 FOAM)	212.50 - 225.00	0.6000	0.6000
T7	44	2" Hybrid	212.50 - 225.00	0.6000	0.6000
T7	49	LDF2-50A (3/8 FOAM)	212.50 - 225.00	0.6000	0.6000
T8	6	Ladder Rung - Weight Only	200.00 - 212.50	0.6000	0.6000
T8	8	Ladder Mount Rung - Weight Only	200.00 - 212.50	0.6000	0.6000
T8	10	Rail L1 1/2 x 1 1/2 x 1/8	200.00 - 212.50	0.6000	0.6000

<i>Tower Section</i>	<i>Feed Line Record No.</i>	<i>Description</i>	<i>Feed Line Segment Elev.</i>	<i>K_a No Ice</i>	<i>K_a Ice</i>
T8	12	WG2 Rung	200.00 - 212.50	0.6000	0.6000
T8	14	Rail L2x2x3/16	200.00 - 212.50	0.6000	0.6000
T8	16	WG1 Rung	200.00 - 212.50	0.6000	0.6000
T8	19	Ladder 1 Rail (PL1.5x3/8)	200.00 - 212.50	0.6000	0.6000
T8	20	Ladder Rail 1 (PL1.5x3/8) - Weight Only	200.00 - 212.50	0.6000	0.6000
T8	22	5/8" dia. coax	200.00 - 212.50	0.6000	0.6000
T8	24	9/16" EHS Cable	200.00 - 212.50	0.6000	0.6000
T8	26	Safety Line 3/8	200.00 - 212.50	0.6000	0.6000
T8	28	LDF5-50A (7/8 FOAM)	200.00 - 212.50	0.6000	0.6000
T8	30	LDF7-50A (1-5/8 FOAM)	200.00 - 212.50	0.6000	0.6000
T8	34	LDF5-50A (7/8 FOAM)	200.00 - 212.50	0.6000	0.6000
T8	35	LDF4P-50A (1/2 FOAM)	200.00 - 212.50	0.6000	0.6000
T8	37	LDF7-50A (1-5/8 FOAM)	200.00 - 212.50	0.6000	0.6000
T8	39	EU63	200.00 - 212.50	0.6000	0.6000
T8	41	1/2" dia. coax	200.00 - 212.50	0.6000	0.6000
T8	42	2" Fiber	200.00 - 212.50	0.6000	0.6000
T8	43	LDF7-50A (1-5/8 FOAM)	200.00 - 212.50	0.6000	0.6000
T8	44	2" Hybrid	200.00 - 212.50	0.6000	0.6000
T8	49	LDF2-50A (3/8 FOAM)	200.00 - 212.50	0.6000	0.6000
T9	6	Ladder Rung - Weight Only	175.00 - 200.00	0.6000	0.6000
T9	8	Ladder Mount Rung - Weight Only	175.00 - 200.00	0.6000	0.6000
T9	10	Rail L1 1/2 x 1 1/2 x 1/8	175.00 - 200.00	0.6000	0.6000
T9	12	WG2 Rung	175.00 - 200.00	0.6000	0.6000
T9	14	Rail L2x2x3/16	175.00 - 200.00	0.6000	0.6000
T9	16	WG1 Rung	175.00 - 200.00	0.6000	0.6000
T9	19	Ladder 1 Rail (PL1.5x3/8)	175.00 - 200.00	0.6000	0.6000
T9	20	Ladder Rail 1 (PL1.5x3/8) - Weight Only	175.00 - 200.00	0.6000	0.6000
T9	22	5/8" dia. coax	175.00 - 200.00	0.6000	0.6000
T9	24	9/16" EHS Cable	175.00 - 200.00	0.6000	0.6000
T9	26	Safety Line 3/8	175.00 - 200.00	0.6000	0.6000
T9	28	LDF5-50A (7/8 FOAM)	175.00 - 200.00	0.6000	0.6000

tnxTower Tower Engineering Professionals 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	21 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

<i>Tower Section</i>	<i>Feed Line Record No.</i>	<i>Description</i>	<i>Feed Line Segment Elev.</i>	<i>K_a No Ice</i>	<i>K_a Ice</i>
T9	30	LDF7-50A (1-5/8 FOAM)	175.00 - 200.00	0.6000	0.6000
T9	34	LDF5-50A (7/8 FOAM)	175.00 - 200.00	0.6000	0.6000
T9	35	LDF4P-50A (1/2 FOAM)	175.00 - 200.00	0.6000	0.6000
T9	37	LDF7-50A (1-5/8 FOAM)	175.00 - 200.00	0.6000	0.6000
T9	39	EU63	175.00 - 200.00	0.6000	0.6000
T9	41	1/2" dia. coax	175.00 - 200.00	0.6000	0.6000
T9	42	2" Fiber	175.00 - 200.00	0.6000	0.6000
T9	43	LDF7-50A (1-5/8 FOAM)	175.00 - 200.00	0.6000	0.6000
T9	44	2" Hybrid	175.00 - 200.00	0.6000	0.6000
T9	49	LDF2-50A (3/8 FOAM)	175.00 - 200.00	0.6000	0.6000
T10	6	Ladder Rung - Weight Only	162.50 - 175.00	0.6000	0.6000
T10	8	Ladder Mount Rung - Weight Only	162.50 - 175.00	0.6000	0.6000
T10	10	Rail L1 1/2 x 1 1/2 x 1/8	162.50 - 175.00	0.6000	0.6000
T10	12	WG2 Rung	162.50 - 175.00	0.6000	0.6000
T10	14	Rail L2x2x3/16	162.50 - 175.00	0.6000	0.6000
T10	16	WG1 Rung	162.50 - 175.00	0.6000	0.6000
T10	19	Ladder 1 Rail (PL1.5x3/8)	162.50 - 175.00	0.6000	0.6000
T10	20	Ladder Rail 1 (PL1.5x3/8) - Weight Only	162.50 - 175.00	0.6000	0.6000
T10	22	5/8" dia. coax	162.50 - 175.00	0.6000	0.6000
T10	24	9/16" EHS Cable	162.50 - 175.00	0.6000	0.6000
T10	26	Safety Line 3/8	162.50 - 175.00	0.6000	0.6000
T10	28	LDF5-50A (7/8 FOAM)	162.50 - 175.00	0.6000	0.6000
T10	30	LDF7-50A (1-5/8 FOAM)	162.50 - 175.00	0.6000	0.6000
T10	34	LDF5-50A (7/8 FOAM)	162.50 - 175.00	0.6000	0.6000
T10	35	LDF4P-50A (1/2 FOAM)	162.50 - 175.00	0.6000	0.6000
T10	37	LDF7-50A (1-5/8 FOAM)	162.50 - 175.00	0.6000	0.6000
T10	39	EU63	162.50 - 175.00	0.6000	0.6000
T10	41	1/2" dia. coax	162.50 - 175.00	0.6000	0.6000
T10	42	2" Fiber	162.50 - 175.00	0.6000	0.6000
T10	43	LDF7-50A (1-5/8 FOAM)	162.50 - 175.00	0.6000	0.6000
T10	44	2" Hybrid	162.50 - 175.00	0.6000	0.6000

tnxTower Tower Engineering Professionals 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	22 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

<i>Tower Section</i>	<i>Feed Line Record No.</i>	<i>Description</i>	<i>Feed Line Segment Elev.</i>	<i>K_a No Ice</i>	<i>K_a Ice</i>
T10	49	LDF2-50A (3/8 FOAM)	162.50 - 175.00	0.6000	0.6000
T11	6	Ladder Rung - Weight Only	150.00 - 162.50	0.6000	0.6000
T11	8	Ladder Mount Rung - Weight Only	150.00 - 162.50	0.6000	0.6000
T11	10	Rail L1 1/2 x 1 1/2 x 1/8	150.00 - 162.50	0.6000	0.6000
T11	12	WG2 Rung	150.00 - 162.50	0.6000	0.6000
T11	14	Rail L2x2x3/16	150.00 - 162.50	0.6000	0.6000
T11	16	WG1 Rung	150.00 - 162.50	0.6000	0.6000
T11	19	Ladder 1 Rail (PL1.5x3/8)	150.00 - 162.50	0.6000	0.6000
T11	20	Ladder Rail 1 (PL1.5x3/8) - Weight Only	150.00 - 162.50	0.6000	0.6000
T11	22	5/8" dia. coax	150.00 - 162.50	0.6000	0.6000
T11	24	9/16" EHS Cable	150.00 - 162.50	0.6000	0.6000
T11	26	Safety Line 3/8	150.00 - 162.50	0.6000	0.6000
T11	28	LDF5-50A (7/8 FOAM)	150.00 - 162.50	0.6000	0.6000
T11	30	LDF7-50A (1-5/8 FOAM)	150.00 - 162.50	0.6000	0.6000
T11	34	LDF5-50A (7/8 FOAM)	150.00 - 162.50	0.6000	0.6000
T11	35	LDF4P-50A (1/2 FOAM)	150.00 - 162.50	0.6000	0.6000
T11	37	LDF7-50A (1-5/8 FOAM)	150.00 - 162.50	0.6000	0.6000
T11	39	EU63	150.00 - 162.50	0.6000	0.6000
T11	41	1/2" dia. coax	150.00 - 162.50	0.6000	0.6000
T11	42	2" Fiber	150.00 - 162.50	0.6000	0.6000
T11	43	LDF7-50A (1-5/8 FOAM)	150.00 - 162.50	0.6000	0.6000
T11	44	2" Hybrid	150.00 - 162.50	0.6000	0.6000
T11	49	LDF2-50A (3/8 FOAM)	150.00 - 162.50	0.6000	0.6000
T12	6	Ladder Rung - Weight Only	137.50 - 150.00	0.6000	0.6000
T12	8	Ladder Mount Rung - Weight Only	137.50 - 150.00	0.6000	0.6000
T12	10	Rail L1 1/2 x 1 1/2 x 1/8	137.50 - 150.00	0.6000	0.6000
T12	12	WG2 Rung	137.50 - 150.00	0.6000	0.6000
T12	14	Rail L2x2x3/16	137.50 - 150.00	0.6000	0.6000
T12	16	WG1 Rung	137.50 - 150.00	0.6000	0.6000
T12	19	Ladder 1 Rail (PL1.5x3/8)	137.50 - 150.00	0.6000	0.6000
T12	20	Ladder Rail 1 (PL1.5x3/8) - Weight Only	137.50 - 150.00	0.6000	0.6000

tnxTower Tower Engineering Professionals 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	23 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

tnxTower Tower Engineering Professionals 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	24 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

<i>Tower Section</i>	<i>Feed Line Record No.</i>	<i>Description</i>	<i>Feed Line Segment Elev.</i>	<i>K_a No Ice</i>	<i>K_a Ice</i>
T12	22	5/8" dia. coax	137.50 - 150.00	0.6000	0.6000
T12	24	9/16" EHS Cable	137.50 - 150.00	0.6000	0.6000
T12	26	Safety Line 3/8	137.50 - 150.00	0.6000	0.6000
T12	28	LDF5-50A (7/8 FOAM)	137.50 - 150.00	0.6000	0.6000
T12	30	LDF7-50A (1-5/8 FOAM)	137.50 - 150.00	0.6000	0.6000
T12	34	LDF5-50A (7/8 FOAM)	137.50 - 150.00	0.6000	0.6000
T12	35	LDF4P-50A (1/2 FOAM)	137.50 - 150.00	0.6000	0.6000
T12	37	LDF7-50A (1-5/8 FOAM)	137.50 - 150.00	0.6000	0.6000
T12	39	EU63	137.50 - 150.00	0.6000	0.6000
T12	41	1/2" dia. coax	137.50 - 150.00	0.6000	0.6000
T12	42	2" Fiber	137.50 - 150.00	0.6000	0.6000
T12	43	LDF7-50A (1-5/8 FOAM)	137.50 - 150.00	0.6000	0.6000
T12	44	2" Hybrid	137.50 - 150.00	0.6000	0.6000
T12	49	LDF2-50A (3/8 FOAM)	137.50 - 150.00	0.6000	0.6000
T13	6	Ladder Rung - Weight Only	125.00 - 137.50	0.6000	0.6000
T13	8	Ladder Mount Rung - Weight Only	125.00 - 137.50	0.6000	0.6000
T13	10	Rail L1 1/2 x 1 1/2 x 1/8	125.00 - 137.50	0.6000	0.6000
T13	12	WG2 Rung	125.00 - 137.50	0.6000	0.6000
T13	14	Rail L2x2x3/16	125.00 - 137.50	0.6000	0.6000
T13	16	WG1 Rung	125.00 - 137.50	0.6000	0.6000
T13	19	Ladder 1 Rail (PL1.5x3/8)	125.00 - 137.50	0.6000	0.6000
T13	20	Ladder Rail 1 (PL1.5x3/8) - Weight Only	125.00 - 137.50	0.6000	0.6000
T13	22	5/8" dia. coax	125.00 - 137.50	0.6000	0.6000
T13	24	9/16" EHS Cable	125.00 - 137.50	0.6000	0.6000
T13	26	Safety Line 3/8	125.00 - 137.50	0.6000	0.6000
T13	28	LDF5-50A (7/8 FOAM)	125.00 - 137.50	0.6000	0.6000
T13	30	LDF7-50A (1-5/8 FOAM)	125.00 - 137.50	0.6000	0.6000
T13	34	LDF5-50A (7/8 FOAM)	125.00 - 137.50	0.6000	0.6000
T13	35	LDF4P-50A (1/2 FOAM)	125.00 - 137.50	0.6000	0.6000
T13	37	LDF7-50A (1-5/8 FOAM)	125.00 - 137.50	0.6000	0.6000
T13	39	EU63	125.00 - 137.50	0.6000	0.6000

<i>Tower Section</i>	<i>Feed Line Record No.</i>	<i>Description</i>	<i>Feed Line Segment Elev.</i>	<i>K_a No Ice</i>	<i>K_a Ice</i>
T13	41	1/2" dia. coax	125.00 - 137.50	0.6000	0.6000
T13	42	2" Fiber	125.00 - 137.50	0.6000	0.6000
T13	43	LDF7-50A (1-5/8 FOAM)	125.00 - 137.50	0.6000	0.6000
T13	44	2" Hybrid	125.00 - 137.50	0.6000	0.6000
T13	49	LDF2-50A (3/8 FOAM)	125.00 - 137.50	0.6000	0.6000
T14	6	Ladder Rung - Weight Only	112.50 - 125.00	0.6000	0.6000
T14	8	Ladder Mount Rung - Weight Only	112.50 - 125.00	0.6000	0.6000
T14	10	Rail L1 1/2 x 1 1/2 x 1/8	112.50 - 125.00	0.6000	0.6000
T14	12	WG2 Rung	112.50 - 125.00	0.6000	0.6000
T14	14	Rail L2x2x3/16	112.50 - 125.00	0.6000	0.6000
T14	16	WG1 Rung	112.50 - 125.00	0.6000	0.6000
T14	19	Ladder 1 Rail (PL1.5x3/8)	112.50 - 125.00	0.6000	0.6000
T14	20	Ladder Rail 1 (PL1.5x3/8) - Weight Only	112.50 - 125.00	0.6000	0.6000
T14	22	5/8" dia. coax	112.50 - 125.00	0.6000	0.6000
T14	24	9/16" EHS Cable	112.50 - 125.00	0.6000	0.6000
T14	26	Safety Line 3/8	112.50 - 125.00	0.6000	0.6000
T14	28	LDF5-50A (7/8 FOAM)	112.50 - 125.00	0.6000	0.6000
T14	30	LDF7-50A (1-5/8 FOAM)	112.50 - 125.00	0.6000	0.6000
T14	34	LDF5-50A (7/8 FOAM)	112.50 - 125.00	0.6000	0.6000
T14	35	LDF4P-50A (1/2 FOAM)	112.50 - 125.00	0.6000	0.6000
T14	37	LDF7-50A (1-5/8 FOAM)	112.50 - 125.00	0.6000	0.6000
T14	39	EU63	112.50 - 125.00	0.6000	0.6000
T14	41	1/2" dia. coax	112.50 - 125.00	0.6000	0.6000
T14	42	2" Fiber	112.50 - 125.00	0.6000	0.6000
T14	43	LDF7-50A (1-5/8 FOAM)	112.50 - 125.00	0.6000	0.6000
T14	44	2" Hybrid	112.50 - 125.00	0.6000	0.6000
T14	49	LDF2-50A (3/8 FOAM)	112.50 - 125.00	0.6000	0.6000
T15	6	Ladder Rung - Weight Only	100.00 - 112.50	0.6000	0.6000
T15	8	Ladder Mount Rung - Weight Only	100.00 - 112.50	0.6000	0.6000
T15	10	Rail L1 1/2 x 1 1/2 x 1/8	100.00 - 112.50	0.6000	0.6000
T15	12	WG2 Rung	100.00 - 112.50	0.6000	0.6000

<i>tnxTower</i> <i>Tower Engineering Professionals</i> 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	25 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

<i>Tower Section</i>	<i>Feed Line Record No.</i>	<i>Description</i>	<i>Feed Line Segment Elev.</i>	<i>K_a No Ice</i>	<i>K_a Ice</i>
T15	14	Rail L2x2x3/16	100.00 - 112.50	0.6000	0.6000
T15	16	WG1 Rung	100.00 - 112.50	0.6000	0.6000
T15	19	Ladder 1 Rail (PL1.5x3/8)	100.00 - 112.50	0.6000	0.6000
T15	20	Ladder Rail 1 (PL1.5x3/8) - Weight Only	100.00 - 112.50	0.6000	0.6000
T15	22	5/8" dia. coax	100.00 - 112.50	0.6000	0.6000
T15	24	9/16" EHS Cable	100.00 - 112.50	0.6000	0.6000
T15	26	Safety Line 3/8	100.00 - 112.50	0.6000	0.6000
T15	28	LDF5-50A (7/8 FOAM)	100.00 - 112.50	0.6000	0.6000
T15	30	LDF7-50A (1-5/8 FOAM)	100.00 - 112.50	0.6000	0.6000
T15	34	LDF5-50A (7/8 FOAM)	100.00 - 112.50	0.6000	0.6000
T15	35	LDF4P-50A (1/2 FOAM)	100.00 - 112.50	0.6000	0.6000
T15	37	LDF7-50A (1-5/8 FOAM)	100.00 - 112.50	0.6000	0.6000
T15	39	EU63	100.00 - 112.50	0.6000	0.6000
T15	41	1/2" dia. coax	100.00 - 112.50	0.6000	0.6000
T15	42	2" Fiber	100.00 - 112.50	0.6000	0.6000
T15	43	LDF7-50A (1-5/8 FOAM)	100.00 - 112.50	0.6000	0.6000
T15	44	2" Hybrid	100.00 - 112.50	0.6000	0.6000
T15	49	LDF2-50A (3/8 FOAM)	100.00 - 112.50	0.6000	0.6000
T16	6	Ladder Rung - Weight Only	87.50 - 100.00	0.6000	0.6000
T16	8	Ladder Mount Rung - Weight Only	87.50 - 100.00	0.6000	0.6000
T16	10	Rail L1 1/2 x 1 1/2 x 1/8	87.50 - 100.00	0.6000	0.6000
T16	12	WG2 Rung	87.50 - 100.00	0.6000	0.6000
T16	14	Rail L2x2x3/16	87.50 - 100.00	0.6000	0.6000
T16	16	WG1 Rung	87.50 - 100.00	0.6000	0.6000
T16	19	Ladder 1 Rail (PL1.5x3/8)	87.50 - 100.00	0.6000	0.6000
T16	20	Ladder Rail 1 (PL1.5x3/8) - Weight Only	87.50 - 100.00	0.6000	0.6000
T16	22	5/8" dia. coax	87.50 - 100.00	0.6000	0.6000
T16	24	9/16" EHS Cable	87.50 - 100.00	0.6000	0.6000
T16	26	Safety Line 3/8	87.50 - 100.00	0.6000	0.6000
T16	28	LDF5-50A (7/8 FOAM)	87.50 - 100.00	0.6000	0.6000
T16	30	LDF7-50A (1-5/8 FOAM)	87.50 - 100.00	0.6000	0.6000
T16	34	LDF5-50A (7/8 FOAM)	87.50 - 100.00	0.6000	0.6000
T16	35	LDF4P-50A (1/2 FOAM)	87.50 - 100.00	0.6000	0.6000
T16	37	LDF7-50A (1-5/8 FOAM)	87.50 - 100.00	0.6000	0.6000
T16	39	EU63	87.50 - 100.00	0.6000	0.6000
T16	41	1/2" dia. coax	87.50 - 100.00	0.6000	0.6000
T16	42	2" Fiber	87.50 - 100.00	0.6000	0.6000
T16	43	LDF7-50A (1-5/8 FOAM)	87.50 - 100.00	0.6000	0.6000
T16	44	2" Hybrid	87.50 - 100.00	0.6000	0.6000
T16	49	LDF2-50A (3/8 FOAM)	87.50 - 100.00	0.6000	0.6000
T17	6	Ladder Rung - Weight Only	75.00 - 87.50	0.6000	0.6000
T17	8	Ladder Mount Rung - Weight	75.00 - 87.50	0.6000	0.6000

<i>tnxTower</i> <i>Tower Engineering Professionals</i> 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	26 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

<i>Tower Section</i>	<i>Feed Line Record No.</i>	<i>Description</i>	<i>Feed Line Segment Elev.</i>	<i>K_a No Ice</i>	<i>K_a Ice</i>
T17	10	Only	75.00 - 87.50	0.6000	0.6000
T17	12	Rail L1 1/2 x 1 1/2 x 1/8	75.00 - 87.50	0.6000	0.6000
T17	14	WG2 Rung	75.00 - 87.50	0.6000	0.6000
T17	16	Rail L2x2x3/16	75.00 - 87.50	0.6000	0.6000
T17	19	WG1 Rung	75.00 - 87.50	0.6000	0.6000
T17	20	Ladder 1 Rail (PL1.5x3/8)	75.00 - 87.50	0.6000	0.6000
T17	22	Ladder Rail 1 (PL1.5x3/8) - Weight Only	75.00 - 87.50	0.6000	0.6000
T17	24	5/8" dia. coax	75.00 - 87.50	0.6000	0.6000
T17	26	9/16" EHS Cable	75.00 - 87.50	0.6000	0.6000
T17	28	Safety Line 3/8	75.00 - 87.50	0.6000	0.6000
T17	30	LDF5-50A (7/8 FOAM)	75.00 - 87.50	0.6000	0.6000
T17	34	LDF7-50A (1-5/8 FOAM)	75.00 - 87.50	0.6000	0.6000
T17	35	LDF5-50A (7/8 FOAM)	75.00 - 87.50	0.6000	0.6000
T17	37	LDF4P-50A (1/2 FOAM)	75.00 - 87.50	0.6000	0.6000
T17	39	LDF7-50A (1-5/8 FOAM)	75.00 - 87.50	0.6000	0.6000
T17	41	EU63	75.00 - 87.50	0.6000	0.6000
T17	42	1/2" dia. coax	75.00 - 87.50	0.6000	0.6000
T17	43	2" Fiber	75.00 - 87.50	0.6000	0.6000
T17	44	LDF7-50A (1-5/8 FOAM)	75.00 - 87.50	0.6000	0.6000
T17	49	2" Hybrid	75.00 - 87.50	0.6000	0.6000
T18	6	LDF2-50A (3/8 FOAM)	50.00 - 75.00	0.6000	0.6000
T18	8	Ladder Rung - Weight Only	50.00 - 75.00	0.6000	0.6000
T18	10	Ladder Mount Rung - Weight Only	50.00 - 75.00	0.6000	0.6000
T18	12	Rail L1 1/2 x 1 1/2 x 1/8	50.00 - 75.00	0.6000	0.6000
T18	14	WG2 Rung	50.00 - 75.00	0.6000	0.6000
T18	16	Rail L2x2x3/16	50.00 - 75.00	0.6000	0.6000
T18	19	WG1 Rung	50.00 - 75.00	0.6000	0.6000
T18	20	Ladder 1 Rail (PL1.5x3/8)	50.00 - 75.00	0.6000	0.6000
T18	22	Ladder Rail 1 (PL1.5x3/8) - Weight Only	50.00 - 75.00	0.6000	0.6000
T18	24	5/8" dia. coax	50.00 - 75.00	0.6000	0.6000
T18	26	9/16" EHS Cable	50.00 - 75.00	0.6000	0.6000
T18	28	Safety Line 3/8	50.00 - 75.00	0.6000	0.6000
T18	30	LDF5-50A (7/8 FOAM)	50.00 - 75.00	0.6000	0.6000
T18	34	LDF7-50A (1-5/8 FOAM)	50.00 - 75.00	0.6000	0.6000
T18	35	LDF5-50A (7/8 FOAM)	50.00 - 75.00	0.6000	0.6000
T18	37	LDF4P-50A (1/2 FOAM)	50.00 - 75.00	0.6000	0.6000
T18	39	LDF7-50A (1-5/8 FOAM)	50.00 - 75.00	0.6000	0.6000
T18	41	EU63	50.00 - 75.00	0.6000	0.6000
T18	42	1/2" dia. coax	50.00 - 75.00	0.6000	0.6000
T18	43	2" Fiber	50.00 - 75.00	0.6000	0.6000
T18	44	LDF7-50A (1-5/8 FOAM)	50.00 - 75.00	0.6000	0.6000
T18	49	2" Hybrid	50.00 - 75.00	0.6000	0.6000
T19	6	LDF2-50A (3/8 FOAM)	25.00 - 50.00	0.6000	0.6000
T19	8	Ladder Rung - Weight Only	25.00 - 50.00	0.6000	0.6000
T19	10	Ladder Mount Rung - Weight Only	25.00 - 50.00	0.6000	0.6000
T19	12	Rail L1 1/2 x 1 1/2 x 1/8	25.00 - 50.00	0.6000	0.6000
T19	14	WG2 Rung	25.00 - 50.00	0.6000	0.6000
T19	16	Rail L2x2x3/16	25.00 - 50.00	0.6000	0.6000
T19	19	WG1 Rung	25.00 - 50.00	0.6000	0.6000
T19	20	Ladder 1 Rail (PL1.5x3/8)	25.00 - 50.00	0.6000	0.6000
T19	22	Ladder Rail 1 (PL1.5x3/8) - Weight Only	25.00 - 50.00	0.6000	0.6000
T19	24	5/8" dia. coax	25.00 - 50.00	0.6000	0.6000
T19	26	9/16" EHS Cable	25.00 - 50.00	0.6000	0.6000
T19	28	Safety Line 3/8	25.00 - 50.00	0.6000	0.6000
T19	30	LDF5-50A (7/8 FOAM)	25.00 - 50.00	0.6000	0.6000
T19	34	LDF7-50A (1-5/8 FOAM)	25.00 - 50.00	0.6000	0.6000

<i>tnxTower</i> <i>Tower Engineering Professionals</i> 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	27 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

<i>Tower Section</i>	<i>Feed Line Record No.</i>	<i>Description</i>	<i>Feed Line Segment Elev.</i>	<i>K_a No Ice</i>	<i>K_a Ice</i>
T19	35	LDF4P-50A (1/2 FOAM)	25.00 - 50.00	0.6000	0.6000
T19	37	LDF7-50A (1-5/8 FOAM)	25.00 - 50.00	0.6000	0.6000
T19	39	EU63	25.00 - 50.00	0.6000	0.6000
T19	41	1/2" dia. coax	25.00 - 50.00	0.6000	0.6000
T19	42	2" Fiber	25.00 - 50.00	0.6000	0.6000
T19	43	LDF7-50A (1-5/8 FOAM)	25.00 - 50.00	0.6000	0.6000
T19	44	2" Hybrid	25.00 - 50.00	0.6000	0.6000
T19	49	LDF2-50A (3/8 FOAM)	25.00 - 50.00	0.6000	0.6000
T20	6	Ladder Rung - Weight Only	0.00 - 25.00	0.6000	0.6000
T20	8	Ladder Mount Rung - Weight Only	0.00 - 25.00	0.6000	0.6000
T20	10	Rail L1 1/2 x 1 1/2 x 1/8	9.00 - 25.00	0.6000	0.6000
T20	12	WG2 Rung	9.00 - 25.00	0.6000	0.6000
T20	14	Rail L2x2x3/16	1.50 - 25.00	0.6000	0.6000
T20	16	WG1 Rung	1.50 - 25.00	0.6000	0.6000
T20	19	Ladder 1 Rail (PL1.5x3/8)	0.00 - 25.00	0.6000	0.6000
T20	20	Ladder Rail 1 (PL1.5x3/8) - Weight Only	0.00 - 25.00	0.6000	0.6000
T20	22	5/8" dia. coax	8.00 - 25.00	0.6000	0.6000
T20	24	9/16" EHS Cable	0.00 - 25.00	0.6000	0.6000
T20	26	Safety Line 3/8	0.00 - 25.00	0.6000	0.6000
T20	28	LDF5-50A (7/8 FOAM)	8.00 - 25.00	0.6000	0.6000
T20	30	LDF7-50A (1-5/8 FOAM)	8.00 - 25.00	0.6000	0.6000
T20	34	LDF5-50A (7/8 FOAM)	8.00 - 25.00	0.6000	0.6000
T20	35	LDF4P-50A (1/2 FOAM)	8.00 - 25.00	0.6000	0.6000
T20	37	LDF7-50A (1-5/8 FOAM)	8.00 - 25.00	0.6000	0.6000
T20	39	EU63	8.00 - 25.00	0.6000	0.6000
T20	41	1/2" dia. coax	1.00 - 25.00	0.6000	0.6000
T20	42	2" Fiber	1.00 - 25.00	0.6000	0.6000
T20	43	LDF7-50A (1-5/8 FOAM)	1.00 - 25.00	0.6000	0.6000
T20	44	2" Hybrid	1.00 - 25.00	0.6000	0.6000
T20	49	LDF2-50A (3/8 FOAM)	0.00 - 25.00	0.6000	0.6000

Discrete Tower Loads

<i>Description</i>	<i>Face or Leg</i>	<i>Offset Type</i>	<i>Offsets: Horz Lateral Vert ft ft ft</i>	<i>Azimuth Adjustment</i>	<i>Placement</i>		<i>C_fA_f Front</i>	<i>C_sA_s Side</i>	<i>Weight</i>
				°	ft		ft ²	ft ²	lb
2.9" x 20-ft Pipe Mount	B	From Leg	0.00 0.00 12.50	0.0000	325.00	No Ice	5.80	5.80	116.00
5/8"x8-ft LRod	B	From Leg	0.00 0.00 27.00	0.0000	325.00	No Ice	0.50	0.50	8.35
***325** 15" Dia. x 15" Beacon	C	From Leg	0.62 0.00 0.00	0.0000	325.00	No Ice	0.78	0.78	30.00
***323** 6' Sidearm Mount (TEP#100740)	A	From Leg	3.00 0.00	10.0000	323.00	No Ice	1.79	4.31	67.75

<i>tnxTower</i> <i>Tower Engineering Professionals</i> 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	28 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C ₁ A ₁ Front ft ²	C ₂ A ₁ Side ft ²	Weight lb
6' Sidearm Mount (TEP#100740)	C	From Leg	0.00 3.00 0.00	-10.0000	323.00	No Ice	1.79	4.31	67.75
1" Dia x 10' Pipe	A	From Leg	0.00 0.00 -2.00	0.0000	323.00	No Ice	0.00	1.00	16.80
1" Dia x 10' Pipe	C	From Leg	0.00 0.00 -2.00	0.0000	323.00	No Ice	0.00	1.00	16.80
15-ft x 3" Omni	A	From Leg	0.00 6.00 0.00	0.0000	323.00	No Ice	4.21	4.21	19.40
15-ft x 3" Omni	C	From Leg	0.00 6.00 0.00	0.0000	323.00	No Ice	4.21	4.21	19.40
TTA 24"x6"x6"	C	From Leg	7.50 0.25 0.00	0.0000	323.00	No Ice	1.27	1.27	25.00
317 4.5" dia x 6'	B	From Leg	0.00 0.83 0.00	0.0000	317.00	No Ice	1.59	1.59	64.80
305 Side Arm Mount [SO 308-1]	C	From Leg	0.00 3.00 0.00	0.0000	305.00	No Ice	0.98	3.03	53.00
16-ft x 3" Omni Antenna	C	From Leg	0.00 6.00 0.00	0.0000	305.00	No Ice	3.20	3.20	30.00
DS7TM	C	From Leg	8.00 6.00 0.00	0.0000	305.00	No Ice	0.58	0.36	10.00
285 Side Arm Mount [SO 308-1]	A	From Leg	0.00 3.00 0.00	0.0000	285.00	No Ice	0.98	3.03	53.00
16-ft x 3" Omni Antenna	A	From Leg	0.00 6.00 0.00	0.0000	285.00	No Ice	3.20	3.20	30.00
280 4.5" dia x 6'	B	From Leg	8.00 0.83 0.00	0.0000	280.00	No Ice	1.60	1.60	64.80
250 Sabre 12' HD V-Boom Mounts (3) (C10857001C)	C	None		0.0000	250.00	No Ice	15.85	15.85	1335.00
2.4" x 8-ft Pipe	A	From Leg	0.00 3.00 0.00	0.0000	250.00	No Ice	1.90	1.90	29.28
2.4" x 8-ft Pipe	B	From Leg	0.00 3.00 0.00	0.0000	250.00	No Ice	1.90	1.90	29.28
2.4" x 8-ft Pipe	C	From Leg	0.00 3.00 0.00	0.0000	250.00	No Ice	1.90	1.90	29.28
AIR 6449 w/ Mount Pipe	A	From Leg	0.00 3.00	0.0000	250.00	No Ice	4.37	3.58	98.40

<i>tnxTower</i> <i>Tower Engineering Professionals</i> 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	31 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

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
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	Dead+Wind 0 deg - Service
27	Dead+Wind 30 deg - Service
28	Dead+Wind 60 deg - Service
29	Dead+Wind 90 deg - Service
30	Dead+Wind 120 deg - Service
31	Dead+Wind 150 deg - Service
32	Dead+Wind 180 deg - Service
33	Dead+Wind 210 deg - Service
34	Dead+Wind 240 deg - Service
35	Dead+Wind 270 deg - Service
36	Dead+Wind 300 deg - Service
37	Dead+Wind 330 deg - Service

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial lb	Major Axis Moment lb-ft	Minor Axis Moment lb-ft
T1	325 - 300	Leg	Max Tension	23	15574.77	260.13	250.81
			Max. Compression	10	-14153.44	-211.76	-19.39
			Max. Mx	25	-112.93	-3942.65	-1856.10
			Max. My	13	-2734.41	-164.69	2803.18
		Diagonal	Max. Vy	24	-1582.82	3110.37	1634.70
			Max. Vx	12	1143.78	-54.86	-2135.61
			Max Tension	22	7890.66	0.00	0.00
			Max. Compression	22	-8190.53	0.00	0.00
		Top Girt	Max. Mx	2	6193.64	105.73	0.00
			Max. Vy	2	-35.44	0.00	0.00
			Max Tension	20	630.18	0.00	0.00
			Max. Compression	25	-861.84	0.00	0.00

<i>tnxTower</i> <i>Tower Engineering Professionals</i> 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	32 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial lb	Major Axis Moment lb-ft	Minor Axis Moment lb-ft
T2	300 - 287.5	Mid Girt	Max. Mx	2	157.61	-89.16	0.00
			Max. Vy	2	35.08	0.00	0.00
			Max Tension	6	1265.66	0.00	0.00
			Max. Compression	25	-1476.32	0.00	0.00
		Leg	Max. Mx	2	733.78	-89.16	0.00
			Max. Vy	2	35.08	0.00	0.00
			Max Tension	23	2692.95	314.25	191.65
			Max. Compression	18	-25303.28	823.96	950.72
		Diagonal	Max. Mx	20	-8137.90	-1873.14	-179.48
			Max. My	19	-24890.85	824.94	952.79
			Max. Vy	20	493.93	-1873.14	-179.48
			Max. Vx	19	-189.67	-68.30	-114.84
	287.5 - 281.25	Top Girt	Max Tension	22	7330.01	0.00	0.00
			Max. Compression	22	-6936.76	0.00	0.00
			Max. Mx	2	5486.33	123.99	0.00
			Max. Vy	2	-38.83	0.00	0.00
		Leg	Max Tension	25	517.00	0.00	0.00
			Max. Compression	2	-569.76	0.00	0.00
			Max. Mx	2	-569.76	-89.12	0.00
			Max. My	2	389.51	0.00	2.67
		Diagonal	Max. Vy	2	35.06	0.00	0.00
			Max. Vx	2	-1.05	0.00	0.00
			Max Tension	23	31802.43	-37.44	487.14
			Max. Compression	18	-32254.04	-680.65	-1466.66
T3	281.25 - 275	Top Girt	Max. Mx	21	-5461.90	1881.07	205.52
			Max. My	19	-31794.32	-679.48	-1469.69
			Max. Vy	20	-610.26	-1873.14	-179.48
			Max. Vx	19	463.43	-679.48	-1469.69
		Leg	Max Tension	22	7728.34	0.00	0.00
			Max. Compression	8	-7237.01	0.00	0.00
			Max. Mx	2	3994.19	137.04	0.00
			Max. Vy	2	-41.09	0.00	0.00
		Diagonal	Max Tension	23	39003.72	-37.44	487.14
			Max. Compression	18	-37096.50	1011.00	1396.27
			Max. Mx	21	-10149.93	1881.07	205.52
			Max. My	19	-36487.79	-679.48	-1783.93
	275 - 250	Top Girt	Max. Vy	18	-905.06	-810.89	410.79
			Max. Vx	23	-645.44	1437.54	1626.09
			Max Tension	8	7940.28	0.00	0.00
			Max. Compression	12	-8481.17	0.00	0.00
		Leg	Max. Mx	2	7215.05	196.84	0.00
			Max. Vy	2	-56.58	0.00	0.00
			Max Tension	23	66569.99	344.64	229.82
			Max. Compression	18	-64786.45	844.17	-30.63
		Diagonal	Max. Mx	24	-19306.55	1536.28	1641.20
			Max. My	25	-18711.57	1535.64	1645.80
			Max. Vy	10	-370.63	-1033.37	463.91
			Max. Vx	20	291.63	-169.83	-1044.46
T4	250 - 225	Top Girt	Max Tension	12	10551.53	0.00	0.00
			Max. Compression	12	-10624.64	0.00	0.00
			Max. Mx	2	8950.01	278.10	0.00
			Max. Vy	2	-68.36	0.00	0.00
		Leg	Max Tension	7	510.25	0.00	0.00
			Max. Compression	24	-559.58	0.00	0.00
			Max. Mx	2	353.84	-161.08	0.00
			Max. My	2	243.84	0.00	4.82
		Top Girt	Max. Vy	2	50.51	0.00	0.00
			Max. Vx	2	-1.51	0.00	0.00
			Max Tension	23	86315.16	-581.98	12.44
			Max. Compression	18	-88382.67	671.90	-66.62
		Leg	Max. Mx	24	63867.37	-1038.65	-68.35

<i>tnxTower</i> <i>Tower Engineering Professionals</i> 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	33 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial lb	Major Axis Moment lb-ft	Minor Axis Moment lb-ft
T7	225 - 212.5	Diagonal	Max. My	20	-15089.14	-169.83	-1044.46
			Max. Vy	22	-2061.23	-1022.94	237.84
			Max. Vx	20	-1993.36	-169.83	-1044.46
			Max Tension	13	13107.18	0.00	0.00
			Max. Compression	12	-13344.91	0.00	0.00
			Max. Mx	2	11218.49	157.13	0.00
			Max. Vy	2	-40.84	0.00	0.00
			Max Tension	13	11895.05	34.72	15.64
			Max. Compression	2	-10798.41	0.00	0.00
			Max. Mx	22	-300.21	76.19	23.55
			Max. My	22	-1134.79	76.19	23.55
			Max. Vy	22	33.61	76.19	23.55
		Horizontal	Max. Vx	22	3.56	0.00	0.00
			Max Tension	23	104427.08	-705.68	16.53
			Max. Compression	18	-106973.11	-323.69	107.65
			Max. Mx	23	104427.08	-705.68	16.53
			Max. My	20	-21448.69	-176.58	-1037.32
			Max. Vy	10	220.09	681.21	-4.28
			Max. Vx	24	-233.16	-254.13	1018.97
			Max Tension	13	13255.39	0.00	0.00
			Max. Compression	12	-13507.85	0.00	0.00
			Max. Mx	2	11302.22	172.68	0.00
			Max. Vy	2	-43.79	0.00	0.00
		Leg	Max Tension	12	8163.63	62.34	26.32
			Max. Compression	13	-8082.30	46.86	19.74
			Max. Mx	22	-60.80	85.19	26.36
			Max. My	22	-60.80	85.19	26.36
			Max. Vy	22	35.85	85.19	26.36
			Max. Vx	22	3.73	0.00	0.00
			Max Tension	23	121358.71	222.23	41.32
			Max. Compression	18	-124680.68	-2135.76	240.38
			Max. Mx	18	-124465.42	2260.79	-116.40
			Max. My	20	-23532.11	-590.86	-1826.00
			Max. Vy	18	778.75	2260.79	-116.40
			Max. Vx	20	531.76	-590.86	-1826.00
T8	212.5 - 200	Diagonal	Max Tension	13	13606.98	-89.89	12.84
			Max. Compression	12	-14014.96	0.00	0.00
			Max. Mx	20	8728.96	-170.04	-19.49
			Max. My	20	8728.96	-170.04	-19.49
			Max. Vy	20	44.39	-170.04	-19.49
			Max. Vx	20	-2.41	0.00	0.00
		Horizontal	Max Tension	12	8636.07	85.22	33.75
			Max. Compression	12	-8613.35	85.22	33.75
			Max. Mx	22	-941.82	124.73	33.81
			Max. My	22	-182.07	124.73	33.81
			Max. Vy	22	46.14	124.73	33.81
			Max. Vx	22	4.51	0.00	0.00
		Redund Horz 1 Bracing	Max Tension	20	943.94	0.00	0.00
			Max. Compression	19	-828.00	0.00	0.00
			Max. Mx	2	-7.68	-8.43	0.00
			Max. My	2	-509.94	0.00	0.25
			Max. Vy	2	7.02	0.00	0.00
			Max. Vx	2	-0.21	0.00	0.00
		Redund Diag 1 Bracing	Max Tension	18	763.39	0.00	0.00
			Max. Compression	21	-727.90	0.00	0.00
			Max. Mx	2	-386.22	-15.88	0.00
			Max. My	2	714.01	0.00	0.81
			Max. Vy	2	-8.25	0.00	0.00
			Max. Vx	2	-0.42	0.00	0.00

<i>tnxTower</i> <i>Tower Engineering Professionals</i> 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	34 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial lb	Major Axis Moment lb-ft	Minor Axis Moment lb-ft
T9	200 - 175	Leg	Max Tension	23	156561.28	2490.39	101.65
			Max. Compression	18	-162559.44	-3041.18	259.53
			Max. Mx	18	-162409.02	3882.54	-100.32
			Max. My	20	-27928.47	-754.00	-2179.00
			Max. Vy	18	1192.22	3882.54	-100.32
			Max. Vx	20	641.83	-754.00	-2179.00
		Diagonal	Max Tension	13	14923.93	-98.38	16.54
			Max. Compression	12	-15514.97	0.00	0.00
			Max. Mx	20	9609.45	-185.52	-24.40
			Max. My	20	8509.57	-185.52	-24.40
			Max. Vy	20	-57.39	-185.52	-24.40
			Max. Vx	20	2.88	0.00	0.00
		Horizontal	Max Tension	12	10029.20	106.41	50.22
			Max. Compression	13	-9983.46	79.92	37.66
			Max. Mx	22	-397.03	135.05	50.17
			Max. My	10	1325.80	79.40	50.26
			Max. Vy	22	50.01	135.05	50.17
			Max. Vx	10	-5.73	0.00	0.00
		Redund Horz 1 Bracing	Max Tension	20	1633.29	0.00	0.00
			Max. Compression	21	-1438.67	0.00	0.00
			Max. Mx	2	-105.65	-10.86	0.00
			Max. My	2	-887.93	0.00	0.32
			Max. Vy	2	7.96	0.00	0.00
			Max. Vx	2	-0.24	0.00	0.00
		Redund Diag 1 Bracing	Max Tension	20	1186.89	0.00	0.00
			Max. Compression	20	-1145.94	0.00	0.00
			Max. Mx	2	-737.21	-19.10	0.00
			Max. My	2	786.80	0.00	-0.90
			Max. Vy	2	-9.45	0.00	0.00
			Max. Vx	2	0.45	0.00	0.00
T10	175 - 162.5	Leg	Max Tension	23	174884.77	2667.07	96.31
			Max. Compression	18	-182678.32	-2784.72	265.90
			Max. Mx	18	-182524.45	3776.18	-90.30
			Max. My	24	-47213.69	-1082.99	2758.67
			Max. Vy	18	-1176.10	3776.18	-90.30
			Max. Vx	24	-787.47	-1082.99	2758.67
		Diagonal	Max Tension	13	15354.71	-73.53	13.27
			Max. Compression	12	-15931.50	0.00	0.00
			Max. Mx	20	8756.11	-143.13	-19.63
			Max. My	20	9837.07	-143.13	-19.63
			Max. Vy	20	44.16	-143.13	-19.63
			Max. Vx	20	-2.25	0.00	0.00
		Horizontal	Max Tension	12	10714.42	146.38	48.37
			Max. Compression	13	-10621.46	109.96	36.28
			Max. Mx	22	-340.56	192.89	48.40
			Max. My	22	-977.45	192.89	48.40
			Max. Vy	22	65.28	192.89	48.40
			Max. Vx	22	5.64	0.00	0.00
		Redund Horz 1 Bracing	Max Tension	22	1730.60	0.00	0.00
			Max. Compression	19	-1520.51	0.00	0.00
			Max. Mx	2	57.44	-12.18	0.00
			Max. My	2	-1064.04	0.00	0.36
			Max. Vy	2	8.43	0.00	0.00
			Max. Vx	2	0.25	0.00	0.00
		Redund Diag 1 Bracing	Max Tension	18	1185.35	0.00	0.00
			Max. Compression	22	-1189.16	0.00	0.00
			Max. Mx	2	-895.28	-20.83	0.00

<i>tnxTower</i> <i>Tower Engineering Professionals</i> 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	35 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial lb	Major Axis Moment lb-ft	Minor Axis Moment lb-ft
T11	162.5 - 150	Leg	Max. My	2	1104.59	0.00	0.95
			Max. Vy	2	10.04	0.00	0.00
			Max. Vx	2	-0.46	0.00	0.00
			Max Tension	23	193370.14	2387.70	105.53
			Max. Compression	18	-203163.74	-1914.07	147.31
			Max. Mx	18	-202998.25	4024.56	-74.06
			Max. My	24	-49633.44	-1082.99	2758.67
			Max. Vy	18	-1175.67	4024.56	-74.06
		Diagonal	Max. Vx	24	758.84	-1082.99	2758.67
			Max Tension	13	16071.92	-119.68	19.14
			Max. Compression	12	-16725.99	0.00	0.00
			Max. Mx	24	9891.34	-210.08	27.64
			Max. My	24	9891.34	-210.08	27.64
			Max. Vy	24	63.02	-210.08	27.64
			Max. Vx	24	3.08	0.00	0.00
		Horizontal	Max Tension	12	11474.93	162.41	64.55
			Max. Compression	12	-11443.24	162.41	64.55
			Max. Mx	22	-557.46	209.33	64.54
			Max. My	18	-289.88	117.29	64.55
			Max. Vy	22	-68.47	209.33	64.54
			Max. Vx	22	-6.83	0.00	0.00
			Max Tension	22	1562.48	0.00	0.00
		Redund Horz 1 Bracing	Max. Compression	19	-1372.74	0.00	0.00
			Max. Mx	2	-8.21	-17.14	0.00
			Max. My	2	-958.92	0.00	0.51
			Max. Vy	2	11.23	0.00	0.00
			Max. Vx	2	-0.34	0.00	0.00
			Max Tension	18	1096.87	0.00	0.00
		Redund Diag 1 Bracing	Max. Compression	23	-1016.34	0.00	0.00
			Max. Mx	2	-651.38	-27.37	0.00
			Max. My	2	816.39	0.00	-1.21
			Max. Vy	2	12.86	0.00	0.00
			Max. Vx	2	0.57	0.00	0.00
		Leg	Max Tension	23	213376.30	1620.91	61.62
			Max. Compression	18	-225568.22	2182.91	95.20
			Max. Mx	23	213006.98	-2211.67	46.35
			Max. My	20	-33841.34	-497.84	-1612.28
			Max. Vy	10	-522.70	2183.56	4.46
			Max. Vx	25	256.66	-641.63	1602.63
		Diagonal	Max Tension	13	16345.98	0.00	0.00
			Max. Compression	12	-16840.39	0.00	0.00
			Max. Mx	2	13923.07	382.65	0.00
			Max. Vy	2	-83.17	0.00	0.00
		Horizontal	Max Tension	12	12241.36	177.18	64.32
			Max. Compression	13	-11992.90	132.99	48.24
			Max. Mx	22	-959.70	208.63	64.34
			Max. My	22	-396.54	208.63	64.34
			Max. Vy	22	70.27	208.63	64.34
			Max. Vx	22	6.62	0.00	0.00
		Leg	Max Tension	23	231990.54	-2211.67	46.35
			Max. Compression	18	-246931.97	725.66	110.75
			Max. Mx	23	231990.54	-2211.67	46.35
			Max. My	20	-35997.56	180.85	-1472.90
			Max. Vy	22	-323.97	-2205.03	46.33
			Max. Vx	25	284.79	322.51	1463.48
		Diagonal	Max Tension	13	17041.55	0.00	0.00
			Max. Compression	12	-17653.79	0.00	0.00
			Max. Mx	2	14513.15	411.45	0.00
			Max. Vy	2	-87.16	0.00	0.00

<i>tnxTower</i> <i>Tower Engineering Professionals</i> 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	36 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial lb	Major Axis Moment lb-ft	Minor Axis Moment lb-ft
T14	125 - 112.5	Horizontal	Max Tension	12	13082.30	288.07	80.65
			Max. Compression	13	-12791.15	216.24	60.49
			Max. Mx	22	-725.61	346.41	80.69
			Max. My	22	-159.90	346.41	80.69
			Max. Vy	22	109.14	346.41	80.69
			Max. Vx	22	8.47	0.00	0.00
		Leg	Max Tension	23	251003.38	-829.22	42.84
			Max. Compression	18	-268887.54	1538.52	97.15
			Max. Mx	22	246375.29	-1627.97	50.99
			Max. My	24	-59010.39	101.94	1820.81
			Max. Vy	6	274.09	-1495.97	53.38
			Max. Vx	25	-306.16	112.89	1820.12
		Diagonal	Max Tension	13	17372.74	0.00	0.00
			Max. Compression	12	-17983.91	0.00	0.00
			Max. Mx	2	14791.24	392.20	0.00
			Max. Vy	2	-80.98	0.00	0.00
		Horizontal	Max Tension	12	13618.14	315.58	81.87
			Max. Compression	13	-13278.37	236.86	61.40
			Max. Mx	22	-237.32	373.46	81.84
			Max. My	18	2115.44	259.39	81.89
			Max. Vy	22	-113.89	373.46	81.84
			Max. Vx	2	8.40	0.00	0.00
		Leg	Max Tension	23	269892.79	-1619.56	50.98
			Max. Compression	18	-290736.91	1734.04	90.52
			Max. Mx	22	264878.26	-1754.33	36.63
			Max. My	24	-60960.11	101.91	1820.74
			Max. Vy	6	217.47	-1550.74	36.65
			Max. Vx	25	304.27	112.85	1820.05
		Diagonal	Max Tension	13	17879.07	0.00	0.00
			Max. Compression	12	-18887.09	0.00	0.00
			Max. Mx	2	15145.27	576.42	0.00
			Max. Vy	2	-116.02	0.00	0.00
		Horizontal	Max Tension	12	14370.57	343.74	-9.45
			Max. Compression	13	-14007.65	258.06	-7.01
			Max. Mx	22	-356.32	400.10	66.71
			Max. My	10	1456.09	289.14	-89.20
			Max. Vy	22	-118.54	400.10	66.71
			Max. Vx	10	8.77	289.14	-89.20
		Inner Bracing	Max Tension	11	3.34	0.00	0.00
			Max. Compression	22	-24.03	0.00	0.00
			Max. Mx	2	-18.55	-319.62	0.00
			Max. Vy	2	86.40	0.00	0.00
		Leg	Max Tension	23	288729.15	-1754.16	36.56
			Max. Compression	18	-313223.98	-650.98	138.85
			Max. Mx	22	283738.96	-1754.33	36.63
			Max. My	24	-64686.42	-516.94	2881.83
			Max. Vy	10	429.42	1733.05	-13.28
			Max. Vx	25	-421.58	-443.81	2881.04
		Diagonal	Max Tension	13	18520.13	0.00	0.00
			Max. Compression	12	-19356.41	0.00	0.00
			Max. Mx	2	15782.46	649.20	0.00
			Max. My	2	-2245.10	0.00	-24.59
			Max. Vy	2	-127.42	0.00	0.00
			Max. Vx	2	4.83	0.00	0.00
		Horizontal	Max Tension	12	15227.71	375.30	118.66
			Max. Compression	13	-14547.76	281.64	88.99
			Max. Mx	22	-387.96	430.61	118.63
			Max. My	18	2176.89	321.28	118.68
			Max. Vy	22	-123.38	430.61	118.63
			Max. Vx	2	10.54	0.00	0.00
		Leg	Max Tension	23	306222.86	321.27	71.43

tnxTower Tower Engineering Professionals 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	37 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial lb	Major Axis Moment lb-ft	Minor Axis Moment lb-ft
T18	75 - 50	Diagonal	Max. Compression	18	-334628.58	-5375.60	201.69
			Max. Mx	18	-334240.61	6667.69	41.83
			Max. My	24	-67525.78	-1675.28	3600.23
			Max. Vy	18	2019.21	6667.69	41.83
			Max. Vx	24	-959.86	-1675.28	3600.23
			Max Tension	13	19575.78	-216.06	26.03
			Max. Compression	16	-21072.24	0.00	0.00
			Max. Mx	24	11544.30	-336.13	34.71
			Max. My	10	960.99	-292.24	34.72
			Max. Vy	24	-105.11	-336.13	34.71
		Horizontal	Max. Vx	22	6.05	0.00	0.00
			Max Tension	12	15881.86	-684.39	-178.20
			Max. Compression	17	-15662.71	0.00	0.00
			Max. Mx	22	-925.75	-752.92	-178.24
			Max. My	22	-423.37	-752.92	-178.24
			Max. Vy	22	-214.93	-752.92	-178.24
			Max. Vx	22	-16.11	0.00	0.00
			Max Tension	22	2264.31	0.00	0.00
		Redund Horz 1 Bracing	Max. Compression	19	-1939.65	0.00	0.00
			Max. Mx	2	1779.91	-36.00	0.00
			Max. My	2	-1525.33	0.00	1.08
			Max. Vy	2	17.90	0.00	0.00
			Max. Vx	2	-0.54	0.00	0.00
			Max Tension	18	1426.98	0.00	0.00
		Redund Diag 1 Bracing	Max. Compression	23	-1238.80	0.00	0.00
			Max. Mx	2	-895.41	-42.67	0.00
			Max. My	2	1192.91	0.00	-1.64
			Max. Vy	2	17.18	0.00	0.00
			Max. Vx	2	0.66	0.00	0.00
			Max Tension	23	344041.85	3664.14	89.28
		Diagonal	Max. Compression	18	-382121.33	-6661.57	337.44
			Max. Mx	18	-381677.34	6989.61	75.71
			Max. My	24	-74241.29	-2066.74	5761.51
			Max. Vy	18	2269.96	6989.61	75.71
			Max. Vx	24	-1312.69	-2066.74	5761.51
			Max Tension	5	21102.95	-184.11	28.78
			Max. Compression	16	-22891.99	0.00	0.00
			Max. Mx	24	12170.74	-314.69	38.37
			Max. My	22	-2890.30	-91.67	38.37
			Max. Vy	24	107.26	-314.69	38.37
		Horizontal	Max. Vx	2	6.36	0.00	0.00
			Max Tension	16	17810.20	0.00	0.00
			Max. Compression	5	-17234.04	-594.70	-153.76
			Max. Mx	22	-537.86	-852.25	-205.01
			Max. My	2	2623.27	-741.67	-205.01
			Max. Vy	22	-230.69	-852.25	-205.01
			Max. Vx	2	17.22	0.00	0.00
			Max Tension	22	3018.08	0.00	0.00
		Redund Horz 1 Bracing	Max. Compression	19	-2527.22	0.00	0.00
			Max. Mx	2	311.23	-42.03	0.00
			Max. My	2	-2054.28	0.00	1.26
			Max. Vy	2	19.34	0.00	0.00
			Max. Vx	2	0.58	0.00	0.00
			Max Tension	18	1751.20	0.00	0.00
		Redund Diag 1 Bracing	Max. Compression	23	-1616.04	0.00	0.00
			Max. Mx	2	-1151.17	-48.63	0.00
			Max. My	2	1505.34	0.00	-1.82

tnxTower Tower Engineering Professionals 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	38 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial lb	Major Axis Moment lb-ft	Minor Axis Moment lb-ft
T19	50 - 25	Leg	Max. Vy	2	18.62	0.00	0.00
			Max. Vx	2	0.70	0.00	0.00
			Max Tension	23	362321.78	5093.73	152.23
			Max. Compression	18	-407311.04	-8752.68	197.65
			Max. Mx	18	-406284.23	10033.95	-65.92
			Max. My	24	-78956.62	-2761.39	8208.44
			Max. Vy	18	1610.80	10033.95	-65.92
			Max. Vx	24	-1199.88	-2761.39	8208.44
		Diagonal	Max Tension	5	30166.01	-283.98	-32.72
			Max. Compression	16	-31886.12	0.00	0.00
			Max. Mx	22	26740.48	-426.69	114.04
			Max. My	4	-31457.14	-187.31	-144.43
			Max. Vy	22	99.64	-426.69	114.04
			Max. Vx	4	9.14	0.00	0.00
			Max Tension	4	18854.63	-620.87	0.02
			Max. Compression	17	-18258.32	0.00	0.00
			Max. Mx	22	-411.42	-733.01	-39.00
			Max. My	11	935.08	-364.99	40.35
			Max. Vy	22	176.09	-733.01	-39.00
		Redund Horz 1 Bracing	Max. Vx	11	2.24	-367.22	40.35
			Max Tension	22	2319.31	0.00	0.00
			Max. Compression	19	-2041.43	0.00	0.00
			Max. Mx	2	385.29	61.45	0.00
			Max. Vy	2	-27.26	0.00	0.00
			Max Tension	18	2046.85	0.00	0.00
		Redund Diag 1 Bracing	Max. Compression	23	-1730.80	0.00	0.00
			Max. Mx	2	-987.68	194.08	0.00
			Max. Vy	2	-51.59	0.00	0.00
			Max Tension	13	10.17	0.00	0.00
		Redund Hip 1 Bracing	Max. Compression	24	-35.02	0.00	0.00
			Max. Mx	2	-32.76	44.33	0.00
			Max. Vy	2	-19.67	0.00	0.00
			Max Tension	18	58.76	0.00	0.00
		Redund Hip Diagonal 1 Bracing	Max. Compression	6	-60.33	0.00	0.00
			Max. Mx	2	54.44	177.21	0.00
			Max. Vy	2	-34.90	0.00	0.00
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	18	-21.84	0.00	0.00
			Max. Mx	2	-19.59	500.69	0.00
			Max. Vy	2	-111.05	0.00	0.00
			Max Tension	23	400808.39	6793.88	164.71
		Inner Bracing	Max. Compression	10	-455799.55	0.00	0.34
			Max. Mx	18	-454552.44	11522.22	142.09
			Max. My	24	-82987.67	-2762.66	8206.25
			Max. Vy	18	1725.60	11522.22	142.09
			Max. Vx	24	1251.14	-2762.66	8206.25
			Max Tension	5	30259.28	-268.96	-18.83
		Diagonal	Max. Compression	16	-31957.08	0.00	0.00
			Max. Mx	20	17169.84	-411.53	51.84
			Max. My	4	-31604.63	-253.64	-122.14
			Max. Vy	20	102.89	-411.53	51.84
			Max. Vx	4	-7.54	0.00	0.00
			Max Tension	4	19412.93	-708.76	0.28
		Horizontal	Max. Compression	17	-19265.15	0.00	0.00
			Max. Mx	22	-1288.97	-792.76	-38.59
			Max. My	11	1289.96	-456.82	40.13
			Max. Vy	22	186.18	-792.76	-38.59

tnxTower Tower Engineering Professionals 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	39 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial lb	Major Axis Moment lb-ft	Minor Axis Moment lb-ft
		Redund Horz 1 Bracing	Max. Vx Max Tension	11 12	2.08 1852.11	-458.22 0.00	40.13 0.00
			Max. Compression	25	-1700.36	0.00	0.00
			Max. Mx	2	1530.23	70.60	0.00
			Max. Vy	2	-29.22	0.00	0.00
		Redund Diag 1 Bracing	Max Tension	24	1749.90	0.00	0.00
			Max. Compression	25	-1297.14	0.00	0.00
			Max. Mx	2	-823.69	214.20	0.00
			Max. Vy	2	-55.57	0.00	0.00
		Redund Hip 1 Bracing	Max Tension	5	5.84	0.00	0.00
			Max. Compression	24	-31.22	0.00	0.00
			Max. Mx	2	-29.98	50.93	0.00
			Max. Vy	2	-21.08	0.00	0.00
		Redund Hip Diagonal 1 Bracing	Max Tension	18	54.58	0.00	0.00
			Max. Compression	6	-56.73	0.00	0.00
			Max. Mx	2	50.62	197.98	0.00
			Max. Vy	2	-37.35	0.00	0.00
		Inner Bracing	Max Tension	1	0.00	0.00	0.00
			Max. Compression	18	-22.23	0.00	0.00
			Max. Mx	2	-20.48	575.18	0.00
			Max. Vy	2	-119.02	0.00	0.00

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical lb	Horizontal, X lb	Horizontal, Z lb
Leg C	Max. Vert	18	500060.03	51631.24	-30384.44
	Max. H _x	18	500060.03	51631.24	-30384.44
	Max. H _y	5	-332495.96	-34827.09	26475.39
	Min. Vert	7	-389089.11	-43150.72	25465.42
	Min. H _x	7	-389089.11	-43150.72	25465.42
Leg B	Min. H _y	18	500060.03	51631.24	-30384.44
	Max. Vert	10	501071.68	-52404.29	-30513.18
	Max. H _x	23	-439112.66	46973.32	27051.15
	Max. H _y	25	-396205.95	40373.40	27719.48
	Min. Vert	23	-439112.66	46973.32	27051.15
Leg A	Min. H _x	10	501071.68	-52404.29	-30513.18
	Min. H _y	10	501071.68	-52404.29	-30513.18
	Max. Vert	2	490048.82	-1078.31	59819.03
	Max. H _x	21	54290.67	10622.00	4202.54
	Max. H _y	2	490048.82	-1078.31	59819.03
	Min. Vert	15	-389514.16	1031.37	-50726.64
	Min. H _x	8	38201.45	-10406.24	3023.48
	Min. H _y	15	-389514.16	1031.37	-50726.64

Tower Mast Reaction Summary

tnxTower Tower Engineering Professionals 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	40 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

Load Combination	Vertical lb	Shear _x lb	Shear _y lb	Overturning Moment, M _x lb-ft	Overturning Moment, M _y lb-ft	Torque lb-ft
Dead Only	100069.59	-0.00	-0.00	-17492.47	50434.74	-0.00
1.2 Dead+1.0 Wind 0 deg - No lce	120083.51	-5430.48	-100540.45	-16076346.04	1681697.73	-89592.02
0.9 Dead+1.0 Wind 0 deg - No lce	90062.63	-5430.48	-100540.45	-16071098.30	1666567.31	-89592.02
1.2 Dead+1.0 Wind 30 deg - No lce	120083.51	47939.49	-79757.88	-12514953.78	-7716206.93	-51257.96
0.9 Dead+1.0 Wind 30 deg - No lce	90062.63	47939.49	-79757.88	-12509706.04	-7731337.35	-51257.96
1.2 Dead+1.0 Wind 60 deg - No lce	120083.51	81010.32	-46077.19	-7374566.86	-13018477.97	-37131.84
0.9 Dead+1.0 Wind 60 deg - No lce	90062.63	81010.32	-46077.19	-7369319.13	-13033608.39	-37131.84
1.2 Dead+1.0 Wind 90 deg - No lce	120083.51	93420.13	281.71	65244.92	-15302365.85	-65183.99
0.9 Dead+1.0 Wind 90 deg - No lce	90062.63	93420.13	281.71	70492.66	-15317496.27	-65183.99
1.2 Dead+1.0 Wind 120 deg - No lce	120083.51	88295.25	50701.71	8190676.72	-14289169.02	-17098.66
0.9 Dead+1.0 Wind 120 deg - No lce	90062.63	88295.25	50701.71	8195924.46	-14304299.44	-17098.66
1.2 Dead+1.0 Wind 150 deg - No lce	120083.51	49699.85	85051.23	13585555.88	-7964546.08	49316.05
0.9 Dead+1.0 Wind 150 deg - No lce	90062.63	49699.85	85051.23	13590803.62	-7979676.50	49316.05
1.2 Dead+1.0 Wind 180 deg - No lce	120083.51	1668.36	94481.93	14982032.41	-443174.67	79241.53
0.9 Dead+1.0 Wind 180 deg - No lce	90062.63	1668.36	94481.93	14987280.15	-458305.10	79241.53
1.2 Dead+1.0 Wind 210 deg - No lce	120083.51	-50269.73	79088.15	12269683.79	8544613.38	49231.24
0.9 Dead+1.0 Wind 210 deg - No lce	90062.63	-50269.73	79088.15	12274931.53	8529482.95	49231.24
1.2 Dead+1.0 Wind 240 deg - No lce	120083.51	-90038.26	44763.64	6562791.89	15187298.33	50780.46
0.9 Dead+1.0 Wind 240 deg - No lce	90062.63	-90038.26	44763.64	6568039.63	15172167.90	50780.46
1.2 Dead+1.0 Wind 270 deg - No lce	120083.51	-96123.39	-2861.71	-872250.92	16234008.18	76633.11
0.9 Dead+1.0 Wind 270 deg - No lce	90062.63	-96123.39	-2861.71	-867003.18	16218877.75	76633.11
1.2 Dead+1.0 Wind 300 deg - No lce	120083.51	-87475.43	-48253.59	-7872007.10	14825013.16	578.69
0.9 Dead+1.0 Wind 300 deg - No lce	90062.63	-87475.43	-48253.59	-7866759.36	14809882.74	578.69
1.2 Dead+1.0 Wind 330 deg - No lce	120083.51	-55413.09	-84659.18	-13507681.88	9801353.15	-82111.40
0.9 Dead+1.0 Wind 330 deg - No lce	90062.63	-55413.09	-84659.18	-13502434.14	9786222.73	-82111.40
Dead+Wind 0 deg - Service	100069.59	-1139.20	-22608.12	-3606792.29	390521.79	-18738.47
Dead+Wind 30 deg - Service	100069.59	10815.12	-18045.16	-2830050.08	-1691571.61	-10688.17
Dead+Wind 60 deg - Service	100069.59	18307.89	-10424.45	-1670730.69	-2884850.72	-7733.48
Dead+Wind 90 deg - Service	100069.59	21114.43	59.10	597.92	-3393600.63	-13641.85
Dead+Wind 120 deg - Service	100069.59	19836.11	11394.57	1815754.52	-3151413.73	-3586.92
Dead+Wind 150 deg - Service	100069.59	11184.41	19155.59	3028460.78	-1743667.69	10313.11
Dead+Wind 180 deg - Service	100069.59	349.99	21337.17	3351051.33	-55229.67	16567.16
Dead+Wind 210 deg - Service	100069.59	-11303.95	17904.66	2752419.79	1940830.29	10263.01
Dead+Wind 240 deg - Service	100069.59	-20201.76	10148.90	1474260.12	3415298.74	10596.66
Dead+Wind 270 deg - Service	100069.59	-21681.51	-600.32	-196068.07	3664515.93	16043.63
Dead+Wind 300 deg - Service	100069.59	-19664.13	-10881.01	-1775082.70	3339299.29	121.40
Dead+Wind 330 deg - Service	100069.59	-12382.92	-19073.34	-3038302.58	2204466.63	-17192.85

tnxTower Tower Engineering Professionals 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job Ft White MW (US-FL-3149)	Page 41 of 55
	Project TEP No. 26455.976054	Date 12:18:38 08/02/24
	Client PeakNet Services LLC	Designed by AK

tnxTower Tower Engineering Professionals 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job Ft White MW (US-FL-3149)	Page 42 of 55
	Project TEP No. 26455.976054	Date 12:18:38 08/02/24
	Client PeakNet Services LLC	Designed by AK

Solution Summary

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX lb	PY lb	PZ lb	PX lb	PY lb	PZ lb	
1	0.00	-100069.59	0.00	0.00	100069.59	0.00	0.000%
2	-5430.48	-120083.51	-100540.45	5430.48	120083.51	100540.45	0.000%
3	-5430.48	-90062.63	-100540.45	5430.48	90062.63	100540.45	0.000%
4	47939.49	-120083.51	-79757.88	-47939.49	120083.51	79757.88	0.000%
5	47939.49	-90062.63	-79757.88	-47939.49	90062.63	79757.88	0.000%
6	81010.31	-120083.51	-46077.19	-81010.32	120083.51	46077.19	0.000%
7	81010.31	-90062.63	-46077.19	-81010.32	90062.63	46077.19	0.000%
8	93420.12	-120083.51	281.71	-93420.13	120083.51	-281.71	0.000%
9	93420.12	-90062.63	281.71	-93420.13	90062.63	-281.71	0.000%
10	88295.25	-120083.51	50701.71	-88295.25	120083.51	-50701.71	0.000%
11	88295.25	-90062.63	50701.71	-88295.25	90062.63	-50701.71	0.000%
12	49699.85	-120083.51	85051.23	-49699.85	120083.51	-85051.23	0.000%
13	49699.85	-90062.63	85051.23	-49699.85	90062.63	-85051.23	0.000%
14	1668.36	-120083.51	94481.92	-1668.36	120083.51	-94481.93	0.000%
15	1668.36	-90062.63	94481.92	-1668.36	90062.63	-94481.93	0.000%
16	-50269.73	-120083.51	79088.14	50269.73	120083.51	-79088.15	0.000%
17	-50269.73	-90062.63	79088.14	50269.73	90062.63	-79088.15	0.000%
18	-90038.25	-120083.51	44763.63	90038.26	120083.51	-44763.64	0.000%
19	-90038.25	-90062.63	44763.63	90038.26	90062.63	-44763.64	0.000%
20	-96123.38	-120083.51	-2861.71	96123.39	120083.51	2861.71	0.000%
21	-96123.38	-90062.63	-2861.71	96123.39	90062.63	2861.71	0.000%
22	-87475.42	-120083.51	-48253.59	87475.43	120083.51	-48253.59	0.000%
23	-87475.42	-90062.63	-48253.59	87475.43	90062.63	-48253.59	0.000%
24	-55413.09	-120083.51	-84659.18	55413.09	120083.51	84659.18	0.000%
25	-55413.09	-90062.63	-84659.18	55413.09	90062.63	84659.18	0.000%
26	-1139.19	-100069.59	-22608.11	1139.20	100069.59	22608.12	0.000%
27	10815.12	-100069.59	-18045.16	-10815.12	100069.59	18045.16	0.000%
28	18307.89	-100069.59	-10424.45	-18307.89	100069.59	10424.45	0.000%
29	21114.43	-100069.59	59.10	-21114.43	100069.59	-59.10	0.000%
30	19836.11	-100069.59	11394.57	-19836.11	100069.59	-11394.57	0.000%
31	11184.40	-100069.59	19155.59	-11184.41	100069.59	-19155.59	0.000%
32	349.99	-100069.59	21337.17	-349.99	100069.59	-21337.17	0.000%
33	-11303.95	-100069.59	17904.66	11303.95	100069.59	-17904.66	0.000%
34	-20201.75	-100069.59	10148.90	20201.76	100069.59	-10148.90	0.000%
35	-21681.51	-100069.59	-600.32	21681.51	100069.59	600.32	0.000%
36	-19664.13	-100069.59	-10881.01	19664.13	100069.59	10881.01	0.000%
37	-12382.92	-100069.59	-19073.34	12382.92	100069.59	19073.34	0.000%

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	325 - 300	6.042	36	0.1659	0.0252
T2	300 - 287.5	5.164	36	0.1623	0.0208
T3	287.5 - 281.25	4.742	36	0.1579	0.0191
T4	281.25 - 275	4.538	36	0.1548	0.0174
T5	275 - 250	4.318	36	0.1519	0.0154
T6	250 - 225	3.521	36	0.1403	0.0135
T7	225 - 212.5	2.807	36	0.1256	0.0117
T8	212.5 - 200	2.482	36	0.1167	0.0109

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T9	200 - 175	2.184	36	0.1068	0.0101
T10	175 - 162.5	1.651	36	0.0910	0.0087
T11	162.5 - 150	1.414	36	0.0825	0.0078
T12	150 - 137.5	1.203	36	0.0734	0.0071
T13	137.5 - 125	1.007	36	0.0672	0.0064
T14	125 - 112.5	0.829	36	0.0607	0.0058
T15	112.5 - 100	0.666	36	0.0541	0.0052
T16	100 - 87.5	0.524	36	0.0471	0.0046
T17	87.5 - 75	0.400	36	0.0400	0.0040
T18	75 - 50	0.299	37	0.0327	0.0036
T19	50 - 25	0.147	30	0.0198	0.0026
T20	25 - 0	0.052	30	0.0088	0.0013

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
325.00	2.9" x 20-ft Pipe Mount	36	6.042	0.1659	0.0252	740468
323.00	6' Sidearm Mount (TEP#100740)	36	5.971	0.1658	0.0253	740468
317.00	PADX8-U57AC	36	5.759	0.1652	0.0251	462790
305.00	Side Arm Mount [SO 308-1]	36	5.338	0.1634	0.0230	185116
285.00	Side Arm Mount [SO 308-1]	36	4.662	0.1567	0.0183	74016
280.00	PADX6-U57AC	36	4.495	0.1542	0.0169	25902
250.00	3-FT Grnd	36	3.521	0.1403	0.0135	161197
240.00	Side Arm Mount [SO 310-1]	36	3.227	0.1349	0.0128	118839

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	325 - 300	27.104	22	0.7488	0.1229
T2	300 - 287.5	23.141	22	0.7317	0.1001
T3	287.5 - 281.25	21.238	22	0.7112	0.0924
T4	281.25 - 275	20.319	22	0.6971	0.0847
T5	275 - 250	19.323	22	0.6838	0.0747
T6	250 - 225	15.738	22	0.6303	0.0650
T7	225 - 212.5	12.530	22	0.5633	0.0562
T8	212.5 - 200	11.077	22	0.5225	0.0520
T9	200 - 175	9.739	22	0.4780	0.0480
T10	175 - 162.5	7.359	22	0.4066	0.0412
T11	162.5 - 150	6.298	22	0.3681	0.0372
T12	150 - 137.5	5.356	22	0.3272	0.0337
T13	137.5 - 125	4.482	22	0.2995	0.0305
T14	125 - 112.5	3.689	22	0.2706	0.0277
T15	112.5 - 100	2.963	22	0.2408	0.0245
T16	100 - 87.5	2.331	22	0.2098	0.0218
T17	87.5 - 75	1.782	24	0.1780	0.0191
T18	75 - 50	1.334	11	0.1452	0.0168
T19	50 - 25	0.653	10	0.0878	0.0123
T20	25 - 0	0.228	10	0.0393	0.0061

tnxTower Tower Engineering Professionals 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	43 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

tnxTower Tower Engineering Professionals 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	44 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

Section No.	Elevation	Horz. Deflection	Gov. Load Comb.	Tilt	Twist
	ft	in		°	°

Critical Deflections and Radius of Curvature - Design Wind

Elevation	Appurtenance	Gov. Load Comb.	Deflection	Tilt	Twist	Radius of Curvature
ft			in	°	°	ft
325.00	2.9" x 20-ft Pipe Mount	22	27.104	0.7488	0.1229	161378
323.00	6' Sidearm Mount (TEP#100740)	22	26.784	0.7480	0.1227	161378
317.00	PADX8-U57AC	22	25.827	0.7452	0.1216	100861
305.00	Side Arm Mount [SO 308-1]	22	23.925	0.7370	0.1107	40344
285.00	Side Arm Mount [SO 308-1]	22	20.875	0.7057	0.0898	15978
280.00	PADX6-U57AC	22	20.125	0.6944	0.0838	5597
250.00	3-FT Grid	22	15.738	0.6303	0.0650	35541
240.00	Side Arm Mount [SO 310-1]	22	14.418	0.6056	0.0613	26076

Bolt Design Data

Section No.	Elevation	Component Type	Bolt Grade	Bolt Size	Number Of Bolts	Maximum Load per Bolt	Allowable Load per Bolt	Ratio Load Allowable	Allowable Ratio	Criteria
	ft			in		lb	lb			
T1	325	Leg	A325N	0.8750	4	3893.69	41556.00	0.094	1.05	Bolt Tension
		Diagonal	A325N	0.6250	1	8190.53	13805.80	0.593	1.05	Bolt Shear
		Top Girt	A325N	0.7500	1	630.18	12615.00	0.050	1.05	Member Bearing
T2	300	Mid Girt	A325N	0.7500	1	1265.66	12615.00	0.100	1.05	Member Bearing
		Diagonal	A325N	0.7500	1	7330.01	18922.50	0.387	1.05	Gusset Bearing
		Top Girt	A325N	0.7500	1	517.00	12615.00	0.041	1.05	Member Bearing
T3	287.5	Diagonal	A325N	0.7500	1	7728.34	18922.50	0.408	1.05	Gusset Bearing
T4	281.25	Leg	A325N	1.0000	4	9750.93	54517.00	0.179	1.05	Bolt Tension
T5	275	Diagonal	A325N	0.7500	1	8481.17	19880.40	0.427	1.05	Bolt Shear
		Leg	A325N	1.1250	4	16642.50	68694.60	0.242	1.05	Bolt Tension
		Diagonal	A325N	0.7500	1	10551.50	18922.50	0.558	1.05	Gusset Bearing
T6	250	Top Girt	A325N	0.7500	1	1123.64	12615.00	0.089	1.05	Member Bearing
		Leg	A325N	1.2500	4	21578.80	87219.80	0.247	1.05	Bolt Tension
		Diagonal	A325N	0.7500	1	13107.20	18922.50	0.693	1.05	Gusset Bearing
T7	225	Horizontal	A325N	0.7500	1	11895.00	11962.50	0.994	1.05	Member Block Shear
		Diagonal	A325N	0.7500	1	13255.40	18922.50	0.701	1.05	Gusset Bearing
		Horizontal	A325N	0.7500	1	8163.63	11962.50	0.682	1.05	Member Block Shear
T8	212.5	Leg	A325N	1.3750	4	30304.60	103939.00	0.292	1.05	Bolt Tension
		Diagonal	A325N	0.7500	1	13607.00	18922.50	0.719	1.05	Gusset Bearing
		Horizontal	A325N	0.7500	1	8636.07	12615.00	0.685	1.05	Member Bearing
T9	200	Leg	A325N	1.3750	4	39079.50	103939.00	0.376	1.05	Bolt Tension
		Diagonal	A325N	0.7500	1	14923.90	18922.50	0.789	1.05	Gusset Bearing
		Horizontal	A325N	0.7500	1	10029.20	12615.00	0.795	1.05	Member Bearing
T10	175	Diagonal	A325N	0.7500	1	15354.70	18922.50	0.811	1.05	Gusset Bearing
		Horizontal	A325N	0.7500	1	10714.40	12615.00	0.849	1.05	Member Bearing
		Leg	A325N	1.5000	4	48282.70	126472.00	0.382	1.05	Bolt Tension
T11	162.5	Diagonal	A325N	0.7500	1	16071.90	18922.50	0.849	1.05	Gusset Bearing
		Horizontal	A325N	0.7500	1	11474.90	12615.00	0.910	1.05	Member Bearing
		Diagonal	A325N	1.0000	1	16346.00	25447.50	0.642	1.05	Gusset Bearing

Section No.	Elevation	Component Type	Bolt Grade	Bolt Size	Number Of Bolts	Maximum Load per Bolt	Allowable Load per Bolt	Ratio Load Allowable	Allowable Ratio	Criteria
	ft			in		lb	lb			
T13	137.5	Horizontal	A325N	1.0000	1	12241.40	16270.30	0.752	1.05	Member Block Shear
		Leg	A325N	1.5000	4	57997.60	126472.00	0.459	1.05	Bolt Tension
		Diagonal	A325N	1.0000	1	17041.50	25447.50	0.670	1.05	Gusset Bearing
T14	125	Horizontal	A325N	1.0000	1	13082.30	20337.90	0.643	1.05	Member Block Shear
		Diagonal	A325N	1.0000	1	17372.70	25447.50	0.683	1.05	Gusset Bearing
		Horizontal	A325N	1.0000	1	13618.10	20337.90	0.670	1.05	Member Block Shear
T15	112.5	Leg	A325N	1.5000	4	67473.20	126472.00	0.534	1.05	Bolt Tension
		Diagonal	A325N	1.0000	1	17879.10	25447.50	0.703	1.05	Gusset Bearing
		Horizontal	A325N	1.0000	1	14370.60	20337.90	0.707	1.05	Member Block Shear
T16	100	Diagonal	A325N	1.0000	1	18520.10	25447.50	0.728	1.05	Gusset Bearing
		Horizontal	A325N	1.0000	1	15227.70	20337.90	0.749	1.05	Member Block Shear
T17	87.5	Leg	A307	1.7500	4	76460.60	85475.40	0.895	1.05	Bolt Tension
		Diagonal	A325N	1.0000	1	19575.80	25447.50	0.769	1.05	Gusset Bearing
		Horizontal	A325N	1.0000	1	15881.90	25447.50	0.624	1.05	Gusset Bearing
T18	75	Leg	A307	2.0000	4	85894.00	112420.00	0.764	1.05	Bolt Tension
		Diagonal	A325N	1.0000	1	21102.90	25447.50	0.829	1.05	Gusset Bearing
		Horizontal	A325N	1.0000	1	17810.20	25447.50	0.700	1.05	Gusset Bearing
T19	50	Leg	A307	2.0000	4	90388.10	112420.00	0.804	1.05	Bolt Tension
		Diagonal	A325N	1.2500	1	30166.00	42630.00	0.708	1.05	Gusset Bearing
		Horizontal	A325N	1.0000	1	18854.60	33930.00	0.556	1.05	Gusset Bearing
T20	25	Leg	A36	2.5000	4	99964.60	173949.00	0.575	1.05	Bolt Tension
		Diagonal	A325N	1.2500	1	30259.30	42630.00	0.710	1.05	Gusset Bearing
		Horizontal	A325N	1.1250	1	19412.90	38280.00	0.507	1.05	Gusset Bearing

Compression Checks

Leg Design Data (Compression)

Section No.	Elevation	Size	L	L _u	Kl/r	A	P _e	ΦP _e	Ratio P _e
	ft		ft	ft		in ²	lb	lb	ΦP _e
T1	325 - 300	Pipe 3.5 EH	25.00	6.25	114.8 K=2.00	3.6784	-14153.40	63055.50	0.224 ¹
T2	300 - 287.5	Pipe 4 EH	12.52	6.26	101.8 K=2.00	4.4074	-25303.30	93017.20	0.272 ¹
T3	287.5 - 281.25	Pipe 4 EH	6.26	6.26	101.8 K=2.00	4.4074	-32254.00	93017.20	0.347 ¹
T4	281.25 - 275	Pipe 4 EH	6.26	6.26	101.8 K=2.00	4.4074	-37096.50	93017.20	0.399 ¹
T5	275 - 250	Pipe 5 EH	25.04	6.26	81.7 K=2.00	6.1114	-64786.50	168771.00	0.384 ¹
T6	250 - 225	Pipe 5 EH	25.04	12.52	81.7 K=1.00	6.1114	-88382.70	168771.00	0.524 ¹
T7	225 - 212.5	Pipe 5 EH	12.52	12.52	81.7 K=1.00	6.1114	-106973.00	168771.00	0.634 ¹
T8	212.5 - 200	Pipe 5 EH	12.52	6.26	40.9 K=1.00	6.1114	-124681.00	243410.00	0.512 ¹

<i>tnxTower</i> <i>Tower Engineering Professionals</i> <i>326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</i>	Job	Ft White MW (US-FL-3149)	Page	45 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

Section No.	Elevation	Size	L	L _u	KL/r	A	P _a	ΦP _a	Ratio $\frac{P_a}{\Phi P_a}$
	ft		ft	ft		in ²	lb	lb	$\frac{\Phi P_a}{\Phi P_a}$
T9	200 - 175	Pipe 6 EH	25.04	6.26	34.2	8.4049	-162559.00	347166.00	0.468 ¹
T10	175 - 162.5	Pipe 6 EH	12.52	6.26	K=1.00 34.2	8.4049	-182678.00	347166.00	0.526 ¹
T11	162.5 - 150	Pipe 6 EH	12.52	6.26	K=1.00 34.2	8.4049	-203164.00	347166.00	0.585 ¹
T12	150 - 137.5	PIPE 8 X-STR (SCH80)	12.52	12.52	K=1.00 52.2	12.7706	-225568.00	470939.00	0.479 ¹
T13	137.5 - 125	PIPE 8 X-STR (SCH80)	12.52	12.52	K=1.00 52.2	12.7706	-246932.00	470939.00	0.524 ¹
T14	125 - 112.5	PIPE 8 X-STR (SCH80)	12.52	12.52	K=1.00 52.2	12.7706	-268888.00	470939.00	0.571 ¹
T15	112.5 - 100	PIPE 8 X-STR (SCH80)	12.52	12.52	K=1.00 52.2	12.7706	-290737.00	470939.00	0.617 ¹
T16	100 - 87.5	PIPE 8 X-STR (SCH80)	12.52	12.52	K=1.00 52.2	12.7706	-313224.00	470939.00	0.665 ¹
T17	87.5 - 75	PIPE 8 X-STR (SCH80)	12.52	6.26	K=1.00 26.1	12.7706	-334629.00	546775.00	0.612 ¹
T18	75 - 50	PIPE 8 SCH 100	25.04	6.26	K=1.00 26.4	14.9867	-382121.00	640922.00	0.596 ¹
T19	50 - 25	PIPE 8 SCH 120	25.04	12.52	K=1.00 53.5	17.8581	-407311.00	651670.00	0.625 ¹
T20	25 - 0	PIPE 10 SCH 100	25.04	12.52	K=1.00 42.3	22.6581	-455800.00	894784.00	0.509 ¹
					K=1.00				

¹ P_a / ΦP_a controls

Diagonal Design Data (Compression)

Section No.	Elevation	Size	L	L _u	KL/r	A	P _a	ΦP _a	Ratio $\frac{P_a}{\Phi P_a}$
	ft		ft	ft		in ²	lb	lb	$\frac{\Phi P_a}{\Phi P_a}$
T1	325 - 300	PIPE 2.5 STD (SCH 40)	11.93	11.54	145.9	1.7072	-8190.53	18110.90	0.452 ¹
T2	300 - 287.5	PIPE 2.5 STD (SCH 40)	12.77	12.34	K=1.00 156.0	1.7072	-6936.76	15838.60	0.438 ¹
T3	287.5 - 281.25	PIPE 2.5 STD (SCH 40)	13.34	12.92	K=1.00 163.3	1.7072	-7237.01	14462.30	0.500 ¹
T4	281.25 - 275	PIPE 3 STD (SCH40)	13.92	13.50	K=1.00 139.2	2.2285	-8481.17	25982.70	0.326 ¹
T5	275 - 250	PIPE 3 STD (SCH40)	16.27	15.77	K=1.00 162.6	2.2285	-10624.60	19031.40	0.558 ¹
T6	250 - 225	PIPE 3 STD (SCH40)	15.39	14.99	K=1.00 154.6	2.2285	-13344.90	21060.20	0.634 ¹
T7	225 - 212.5	PIPE 3 STD (SCH40)	15.78	15.40	K=1.00 158.8	2.2285	-13507.80	19970.50	0.676 ¹
T8	212.5 - 200	PIPE 3 STD (SCH40)	16.18	15.81	K=1.00 163.1	2.2285	-14015.00	18929.30	0.740 ¹
T9	200 - 175	Pipe 3 EH	17.03	16.62	K=1.00 175.5	3.0159	-15515.00	22110.20	0.702 ¹
T10	175 - 162.5	PIPE 3 STD (SCH40)	17.48	17.08	K=1.00 176.2	2.2285	-15931.50	16224.70	0.982 ¹
T11	162.5 - 150	Pipe 3 EH	17.93	17.55	K=1.00 185.3	3.0159	-16726.00	19838.70	0.843 ¹
T12	150 - 137.5	Pipe 3 EH	18.40	17.91	K=1.00 189.2	3.0159	-16840.40	19039.10	0.885 ¹
					K=1.00				

<i>tnxTower</i> <i>Tower Engineering Professionals</i> <i>326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</i>	Job	Ft White MW (US-FL-3149)	Page	46 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

Section No.	Elevation	Size	L	L _u	KL/r	A	P _a	ΦP _a	Ratio $\frac{P_a}{\Phi P_a}$
	ft		ft	ft		in ²	lb	lb	$\frac{\Phi P_a}{\Phi P_a}$
T13	137.5 - 125	Pipe 3 EH	18.88	18.40	194.4	3.0159	-17653.80	18038.00	0.979 ¹
T14	125 - 112.5	PIPE 3.5 STD	19.37	18.90	K=1.00 169.7	2.6795	-17983.90	21020.60	0.856 ¹
T15	112.5 - 100	Pipe 3.5 EH	19.87	19.41	K=1.00 178.3	3.6784	-18887.10	26151.00	0.722 ¹
T16	100 - 87.5	2L4x4x1/4x3/8	20.38	19.59	K=1.00 188.1	3.8800	-19356.40	31394.90	0.617 ¹
T17	87.5 - 75	3.5 STD w/ 4 STD Half Sleeve	20.90	20.45	K=1.00 175.3	4.2700	-21072.20	31407.30	0.671 ¹
T18	75 - 50	3.5 STD w/ 4 STD Half Sleeve	21.95	21.51	K=1.00 184.4	4.2700	-22892.00	28380.20	0.807 ¹
T19	50 - 25	Pipe 3.5 EH	31.61	15.81	K=1.00 145.2	3.6784	-31886.10	39441.20	0.808 ¹
T20	25 - 0	Pipe 3.5 EH	32.42	16.21	K=1.00 148.9	3.6784	-31957.10	37499.10	0.852 ¹
					K=1.00				

¹ P_a / ΦP_a controls

Horizontal Design Data (Compression)

Section No.	Elevation	Size	L	L _u	KL/r	A	P _a	ΦP _a	Ratio $\frac{P_a}{\Phi P_a}$
	ft		ft	ft		in ²	lb	lb	$\frac{\Phi P_a}{\Phi P_a}$
T6	250 - 225	L2 1/2x3 1/2x1/4	15.35	7.31	161.2	1.4400	-10798.40	15866.50	0.681 ¹
T7	225 - 212.5	L2 1/2x3 1/2x1/4	17.94	8.60	K=1.00 189.7	1.4400	-8082.30	11448.30	0.706 ¹
T8	212.5 - 200	L3x4x1/4	19.23	9.25	K=1.00 170.5	1.6900	-8613.35	16641.00	0.518 ¹
T9	200 - 175	L3x4x1/4	21.82	10.50	K=1.00 193.5	1.6900	-9983.46	12912.30	0.773 ¹
T10	175 - 162.5	L3 1/2x5x1/4	23.12	11.15	K=1.00 173.7	2.0600	-10621.50	19535.40	0.544 ¹
T11	162.5 - 150	L3 1/2x5x1/4	24.41	11.80	K=1.00 183.8	2.0600	-11443.20	17449.30	0.656 ¹
T12	150 - 137.5	L3 1/2x5x1/4	25.71	12.33	K=1.00 192.1	2.0600	-11992.90	15973.60	0.751 ¹
T13	137.5 - 125	L4x6x5/16	27.00	12.98	K=1.00 176.5	3.0300	-12791.20	27827.00	0.460 ¹
T14	125 - 112.5	L4x6x5/16	28.30	13.62	K=1.00 185.3	3.0300	-13278.40	25244.50	0.526 ¹
T15	112.5 - 100	L4x6x5/16	29.59	14.27	K=1.00 194.2	3.0300	-14007.70	23005.30	0.609 ¹
T16	100 - 87.5	L4x6x5/16	30.89	14.92	K=1.00 203.0	3.0300	-14547.80	21051.50	0.691 ¹
T17	87.5 - 75	KL/R > 200 (C) - 271 2L3 1/2x5x5/16x3/8	32.18	23.43	121.8	5.1200	-15662.70	94840.60	0.165 ¹
T18	75 - 50	2L3 1/2x5x5/16x3/8	34.77	25.38	K=1.00 131.2	5.1200	-17234.00	82608.80	0.209 ¹
T19	50 - 25	Pipe 3.5 EH	36.07	17.68	K=1.00 162.3	3.6784	-18258.30	31535.90	0.579 ¹
T20	25 - 0	Pipe 3.5 EH	38.66	18.88	K=1.00 173.4	3.6784	-19265.10	27634.40	0.697 ¹
					K=1.00				

<i>tnxTower</i> <i>Tower Engineering Professionals</i> 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job Ft White MW (US-FL-3149)	Page 47 of 55
	Project TEP No. 26455.976054	Date 12:18:38 08/02/24
	Client PeakNet Services LLC	Designed by AK

¹ P_u / ϕP_n controls

Top Girt Design Data (Compression)

Section No.	Elevation	Size	L	L _n	Kl/r	A	P _n	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in ²	lb	lb	$\frac{P_u}{\phi P_n}$
T1	325 - 300	L3 1/2x3 1/2x1/4	10.17	9.56	165.3 K=1.00	1.6900	-861.84	17692.70	0.049 ¹
T2	300 - 287.5	L3 1/2x3 1/2x1/4	10.17	9.52	164.6 K=1.00	1.6900	-569.76	17847.90	0.032 ¹
T5	275 - 250	L4x4x1/4	12.76	12.02	181.5 K=1.00	1.9400	-1123.64	16860.60	0.067 ¹

¹ P_u / ϕP_n controls

Mid Girt Design Data (Compression)

Section No.	Elevation	Size	L	L _n	Kl/r	A	P _n	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in ²	lb	lb	$\frac{P_u}{\phi P_n}$
T1	325 - 300	L3 1/2x3 1/2x1/4	10.17	9.56	165.3 K=1.00	1.6900	-1476.32	17692.70	0.083 ¹

¹ P_u / ϕP_n controls

Redundant Horizontal (1) Design Data (Compression)

Section No.	Elevation	Size	L	L _n	Kl/r	A	P _n	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in ²	lb	lb	$\frac{P_u}{\phi P_n}$
T8	212.5 - 200	L2x2x3/16	4.81	4.58	139.4 K=1.00	0.7150	-2162.43	10533.80	0.205 ¹
T9	200 - 175	L2x2x3/16	5.46	5.18	157.8 K=1.00	0.7150	-2819.38	8222.90	0.343 ¹
T10	175 - 162.5	L2x2x3/16	5.78	5.50	167.6 K=1.00	0.7150	-3168.32	7283.81	0.435 ¹
T11	162.5 - 150	L2 1/2x2 1/2x3/16	6.10	5.83	141.3 K=1.00	0.9020	-3523.61	12936.70	0.272 ¹
T17	87.5 - 75	L3x3x3/16	8.05	7.69	154.8 K=1.00	1.0900	-5803.70	13025.90	0.446 ¹
T18	75 - 50	L3x3x3/16	8.69	8.33	167.8 K=1.00	1.0900	-6627.40	11079.60	0.598 ¹
T19	50 - 25	Pipe 2 EH	9.02	8.66	135.2 K=1.00	1.4807	-7064.29	18291.50	0.386 ¹
T20	25 - 0	Pipe 2 EH	9.66	9.22	144.0 K=1.00	1.4807	-7905.26	16138.90	0.490 ¹

¹ P_u / ϕP_n controls

<i>tnxTower</i> <i>Tower Engineering Professionals</i> 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job Ft White MW (US-FL-3149)	Page 48 of 55
	Project TEP No. 26455.976054	Date 12:18:38 08/02/24
	Client PeakNet Services LLC	Designed by AK

Redundant Diagonal (1) Design Data (Compression)

Section No.	Elevation	Size	L	L _n	Kl/r	A	P _n	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in ²	lb	lb	$\frac{P_u}{\phi P_n}$
T8	212.5 - 200	L2 1/2x2 1/2x3/16	7.69	7.30	176.9 K=1.00	0.9020	-1842.79	8249.54	0.223 ¹
T9	200 - 175	L2 1/2x2 1/2x3/16	8.09	7.65	185.6 K=1.00	0.9020	-2090.13	7497.86	0.279 ¹
T10	175 - 162.5	L2 1/2x2 1/2x3/16	8.30	7.88	191.0 K=1.00	0.9020	-2274.57	7076.84	0.321 ¹
T11	162.5 - 150	L3x3x3/16	8.51	8.11	163.3 K=1.00	1.0900	-2457.89	11705.80	0.210 ¹
T17	87.5 - 75	L3x3x3/16	9.94	9.47	190.7 K=1.00	1.0900	-3583.60	8574.55	0.418 ¹
T18	75 - 50	L3x3x3/16	10.45	10.00	201.3 K=1.00	1.0900	-3982.25	7697.25	0.517 ¹
T19	50 - 25	Pipe 3 EH	15.05	14.40	152.1 K=1.00	3.0159	-5894.38	29452.90	0.200 ¹
T20	25 - 0	Pipe 3 EH	15.42	14.65	154.7 K=1.00	3.0159	-6305.28	28457.10	0.222 ¹

¹ P_u / ϕP_n controls

Redundant Hip (1) Design Data (Compression)

Section No.	Elevation	Size	L	L _n	Kl/r	A	P _n	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in ²	lb	lb	$\frac{P_u}{\phi P_n}$
T19	50 - 25	PIPE 1.5 SCH 80	9.02	9.02	178.8 K=1.00	1.0681	-35.02	7547.85	0.005 ¹
T20	25 - 0	PIPE 1.5 SCH 80	9.66	9.66	191.6 K=1.00	1.0681	-31.22	6570.32	0.005 ¹

¹ P_u / ϕP_n controls

Redundant Hip Diagonal (1) Design Data (Compression)

Section No.	Elevation	Size	L	L _n	Kl/r	A	P _n	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in ²	lb	lb	$\frac{P_u}{\phi P_n}$
T19	50 - 25	PIPE 1.5 SCH 80	20.31	20.31	402.7 K=1.00	1.0681	-60.33	1488.12	0.041 ¹
T20	25 - 0	KL/R > 250 (C) - 373 PIPE 1.5 SCH 80 KL/R > 250 (C) - 406	21.20	21.20	420.4 K=1.00	1.0681	-56.73	1365.20	0.042 ¹

¹ P_u / ϕP_n controls

tnxTower Tower Engineering Professionals 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job Ft White MW (US-FL-3149)	Page 49 of 55
	Project TEP No. 26455.976054	Date 12:18:38 08/02/24
	Client PeakNet Services LLC	Designed by AK

tnxTower Tower Engineering Professionals 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job Ft White MW (US-FL-3149)	Page 50 of 55
	Project TEP No. 26455.976054	Date 12:18:38 08/02/24
	Client PeakNet Services LLC	Designed by AK

Inner Bracing Design Data (Compression)

Section No.	Elevation	Size	L	L _u	Kl/r	A	P _a	ΦP _a	Ratio $\frac{P_a}{\Phi P_a}$
	ft		ft	ft		in ²	lb	lb	
T15	112.5 - 100	L5x3x3/8	14.80	14.80	271.5 K=1.00	2.8600	-24.03	11104.90	0.002 ¹
T19	50 - 25	KL/R > 250 (C) - 262 Pipe 3 EH	18.03	18.03	190.5 K=1.00	3.0159	-21.84	18784.00	0.001 ¹
T20	25 - 0	Pipe 3 EH	19.33	19.33	204.1 K=1.00	3.0159	-22.23	16351.30	0.001 ¹

¹ P_a / ΦP_a controls

Tension Checks

Leg Design Data (Tension)

Section No.	Elevation	Size	L	L _u	Kl/r	A	P _a	ΦP _a	Ratio $\frac{P_a}{\Phi P_a}$
	ft		ft	ft		in ²	lb	lb	
T1	325 - 300	Pipe 3.5 EH	25.00	6.25	57.4	3.6784	15574.80	165529.00	0.094 ¹
T2	300 - 287.5	Pipe 4 EH	12.52	6.26	50.9	4.4074	26993.00	198335.00	0.136 ¹
T3	287.5 - 281.25	Pipe 4 EH	6.26	6.26	50.9	4.4074	31802.40	198335.00	0.160 ¹
T4	281.25 - 275	Pipe 4 EH	6.26	6.26	50.9	4.4074	39003.70	198335.00	0.197 ¹
T5	275 - 250	Pipe 5 EH	25.04	6.26	40.9	6.1114	66570.00	275012.00	0.242 ¹
T6	250 - 225	Pipe 5 EH	25.04	12.52	81.7	6.1114	86315.20	275012.00	0.314 ¹
T7	225 - 212.5	Pipe 5 EH	12.52	12.52	81.7	6.1114	104427.00	275012.00	0.380 ¹
T8	212.5 - 200	Pipe 5 EH	12.52	6.26	40.9	6.1114	121359.00	275012.00	0.441 ¹
T9	200 - 175	Pipe 6 EH	25.04	6.26	34.2	8.4049	156561.00	378222.00	0.414 ¹
T10	175 - 162.5	Pipe 6 EH	12.52	6.26	34.2	8.4049	174885.00	378222.00	0.462 ¹
T11	162.5 - 150	Pipe 6 EH	12.52	6.26	34.2	8.4049	193370.00	378222.00	0.511 ¹
T12	150 - 137.5	PIPE 8 X-STR (SCH80)	12.52	12.52	52.2	12.7706	213376.00	574676.00	0.371 ¹
T13	137.5 - 125	PIPE 8 X-STR (SCH80)	12.52	12.52	52.2	12.7706	231991.00	574676.00	0.404 ¹
T14	125 - 112.5	PIPE 8 X-STR (SCH80)	12.52	12.52	52.2	12.7706	251003.00	574676.00	0.437 ¹
T15	112.5 - 100	PIPE 8 X-STR (SCH80)	12.52	12.52	52.2	12.7706	269893.00	574676.00	0.470 ¹
T16	100 - 87.5	PIPE 8 X-STR (SCH80)	12.52	12.52	52.2	12.7706	288729.00	574676.00	0.502 ¹
T17	87.5 - 75	PIPE 8 X-STR (SCH80)	12.52	6.26	26.1	12.7706	306223.00	574676.00	0.533 ¹
T18	75 - 50	PIPE 8 SCH 100	25.04	6.26	26.4	14.9867	344042.00	674401.00	0.510 ¹
T19	50 - 25	PIPE 8 SCH 120	25.04	12.52	53.5	17.8581	362322.00	803615.00	0.451 ¹
T20	25 - 0	PIPE 10 SCH 100	25.04	12.52	42.3	22.6581	400808.00	1019610.00	0.393 ¹

¹ P_a / ΦP_a controls

Diagonal Design Data (Tension)

Section No.	Elevation	Size	L	L _u	Kl/r	A	P _a	ΦP _a	Ratio $\frac{P_a}{\Phi P_a}$
	ft		ft	ft		in ²	lb	lb	
T1	325 - 300	PIPE 2.5 STD (SCH 40)	11.93	11.54	145.9	1.7072	7890.66	53778.00	0.147 ¹
T2	300 - 287.5	PIPE 2.5 STD (SCH 40)	12.21	11.78	149.0	1.7072	7330.01	53778.00	0.136 ¹
T3	287.5 - 281.25	PIPE 2.5 STD (SCH 40)	13.34	12.92	163.3	1.7072	7728.34	53778.00	0.144 ¹
T4	281.25 - 275	PIPE 3 STD (SCH40)	13.92	13.50	139.2	2.2285	7940.28	70196.80	0.113 ¹
T5	275 - 250	PIPE 3 STD (SCH40)	15.68	15.17	156.5	2.2285	10551.50	70196.80	0.150 ¹
T6	250 - 225	PIPE 3 STD (SCH40)	15.39	14.99	154.6	2.2285	13107.20	70196.80	0.187 ¹
T7	225 - 212.5	PIPE 3 STD (SCH40)	15.78	15.40	158.8	2.2285	13255.40	70196.80	0.189 ¹
T8	212.5 - 200	PIPE 3 STD (SCH40)	16.18	15.81	163.1	2.2285	13607.00	70196.80	0.194 ¹
T9	200 - 175	Pipe 3 EH	17.03	16.62	175.5	3.0159	14923.90	95001.80	0.157 ¹
T10	175 - 162.5	PIPE 3 STD (SCH40)	17.48	17.08	176.2	2.2285	15354.70	70196.80	0.219 ¹
T11	162.5 - 150	Pipe 3 EH	17.93	17.55	185.3	3.0159	16071.90	95001.80	0.169 ¹
T12	150 - 137.5	Pipe 3 EH	18.40	17.91	189.2	3.0159	16346.00	95001.80	0.172 ¹
T13	137.5 - 125	Pipe 3 EH	18.88	18.40	194.4	3.0159	17041.50	95001.80	0.179 ¹
T14	125 - 112.5	PIPE 3.5 STD	19.37	18.90	169.7	2.6795	17372.70	84405.50	0.206 ¹
T15	112.5 - 100	Pipe 3.5 EH	19.87	19.41	178.3	3.6784	115879.10	115870.00	0.154 ¹
T16	100 - 87.5	2L4x4x1/4x3/8	20.38	19.59	191.3	2.4881	18520.10	108233.00	0.171 ¹
T17	87.5 - 75	3.5 STD w/ 4 STD Half Sleeve	20.90	20.45	175.3	4.2700	19575.80	134505.00	0.146 ¹
T18	75 - 50	3.5 STD w/ 4 STD Half Sleeve	21.95	21.51	184.4	4.2700	21102.90	134505.00	0.157 ¹
T19	50 - 25	Pipe 3.5 EH	31.61	15.81	145.2	3.6784	30166.00	115870.00	0.260 ¹
T20	25 - 0	Pipe 3.5 EH	32.42	16.21	148.9	3.6784	30259.30	115870.00	0.261 ¹

¹ P_a / ΦP_a controls

Horizontal Design Data (Tension)

Section No.	Elevation	Size	L	L _u	Kl/r	A	P _a	ΦP _a	Ratio $\frac{P_a}{\Phi P_a}$
	ft		ft	ft		in ²	lb	lb	
T6	250 - 225	L2 1/2x3 1/2x1/4	15.35	7.31	121.3	0.9159	11895.00	39843.30	0.299 ¹
T7	225 - 212.5	L2 1/2x3 1/2x1/4	17.94	8.60	142.5	0.9159	8163.63	39843.30	0.205 ¹
T8	212.5 - 200	L3x4x1/4	19.23	9.25	131.9	1.1034	8636.07	47999.50	0.180 ¹
T9	200 - 175	L3x4x1/4	21.82	10.50	149.5	1.1034	10029.20	47999.50	0.209 ¹
T10	175 - 162.5	L3 1/2x5x1/4	23.12	11.15	130.2	1.3809	10714.40	60070.80	0.178 ¹
T11	162.5 - 150	L3 1/2x5x1/4	24.41	11.80	137.7	1.3809	11474.90	60070.80	0.191 ¹
T12	150 - 137.5	L3 1/2x5x1/4	25.71	12.33	144.2	1.3341	12241.40	58031.70	0.211 ¹
T13	137.5 - 125	L4x6x5/16	27.00	12.98	134.3	2.0088	13082.30	87384.00	0.150 ¹
T14	125 - 112.5	L4x6x5/16	28.30	13.62	140.9	2.0088	13618.10	87384.00	0.156 ¹
T15	112.5 - 100	L4x6x5/16	29.59	14.27	147.5	2.0088	14370.60	87384.00	0.164 ¹
T16	100 - 87.5	L4x6x5/16	30.89	14.92	154.1	2.0088	15227.70	87384.00	0.174 ¹
T17	87.5 - 75	2L3 1/2x5x5/16x3/8	32.18	23.43	183.3	3.3127	15881.90	144101.00	0.110 ¹
T18	75 - 50	2L3 1/2x5x5/16x3/8	34.77	25.38	198.4	3.3127	17810.20	144101.00	0.124 ¹
T19	50 - 25	Pipe 3.5 EH	36.07	17.68	162.3	3.6784	18854.60	115870.00	0.163 ¹
T20	25 - 0	Pipe 3.5 EH	38.66	18.88	173.4	3.6784	19412.90	115870.00	0.168 ¹

¹ P_a / ΦP_a controls

Top Girt Design Data (Tension)

<i>tnxTower</i> <i>Tower Engineering Professionals</i> 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	51 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

Section No.	Elevation	Size	L	L _u	Kl/r	A	P _u	φP _u	Ratio $\frac{P_u}{\phi P_u}$
	ft		ft	ft		in ²	lb	lb	$\frac{\phi P_u}{\phi P_u}$
T1	325 - 300	L3 1/2x3 1/2x1/4	10.17	9.56	108.3	1.1034	630.18	47999.50	0.013 ¹
T2	300 - 287.5	L3 1/2x3 1/2x1/4	10.17	9.52	107.8	1.1034	517.00	47999.50	0.011 ¹
T5	275 - 250	L4x4x1/4	12.76	12.02	118.0	1.2909	1123.64	56155.80	0.020 ¹

¹ P_u / φP_u controls

Mid Girt Design Data (Tension)

Section No.	Elevation	Size	L	L _u	Kl/r	A	P _u	φP _u	Ratio $\frac{P_u}{\phi P_u}$
	ft		ft	ft		in ²	lb	lb	$\frac{\phi P_u}{\phi P_u}$
T1	325 - 300	L3 1/2x3 1/2x1/4	10.17	9.56	108.3	1.1034	1265.66	47999.50	0.026 ¹

¹ P_u / φP_u controls

Redundant Horizontal (1) Design Data (Tension)

Section No.	Elevation	Size	L	L _u	Kl/r	A	P _u	φP _u	Ratio $\frac{P_u}{\phi P_u}$
	ft		ft	ft		in ²	lb	lb	$\frac{\phi P_u}{\phi P_u}$
T8	212.5 - 200	L2x2x3/16	4.81	4.58	89.0	0.7150	2162.43	23166.00	0.093 ¹
T9	200 - 175	L2x2x3/16	5.46	5.18	100.7	0.7150	2819.38	23166.00	0.122 ¹
T10	175 - 162.5	L2x2x3/16	5.78	5.50	107.0	0.7150	3168.32	23166.00	0.137 ¹
T11	162.5 - 150	L2 1/2x2 1/2x3/16	6.10	5.83	89.9	0.9020	3523.61	29224.80	0.121 ¹
T17	87.5 - 75	L3x3x3/16	8.05	7.69	98.2	1.0900	5803.70	35316.00	0.164 ¹
T18	75 - 50	L3x3x3/16	8.69	8.33	106.5	1.0900	6627.40	35316.00	0.188 ¹
T19	50 - 25	Pipe 2 EH	9.02	8.66	135.2	1.4807	7064.29	46641.50	0.151 ¹
T20	25 - 0	Pipe 2 EH	9.66	9.22	144.0	1.4807	7905.26	46641.50	0.169 ¹

¹ P_u / φP_u controls

Redundant Diagonal (1) Design Data (Tension)

Section No.	Elevation	Size	L	L _u	Kl/r	A	P _u	φP _u	Ratio $\frac{P_u}{\phi P_u}$
	ft		ft	ft		in ²	lb	lb	$\frac{\phi P_u}{\phi P_u}$
T8	212.5 - 200	L2 1/2x2 1/2x3/16	7.69	7.30	112.6	0.9020	1842.79	29224.80	0.063 ¹
T9	200 - 175	L2 1/2x2 1/2x3/16	7.89	7.45	115.0	0.9020	2166.67	29224.80	0.074 ¹
T10	175 - 162.5	L2 1/2x2 1/2x3/16	8.30	7.88	121.5	0.9020	2274.57	29224.80	0.078 ¹
T11	162.5 - 150	L3x3x3/16	8.51	8.11	103.6	1.0900	2457.89	35316.00	0.070 ¹
T17	87.5 - 75	L3x3x3/16	9.94	9.47	121.1	1.0900	3583.60	35316.00	0.101 ¹
T18	75 - 50	L3x3x3/16	10.19	9.74	124.5	1.0900	4034.33	35316.00	0.114 ¹
T19	50 - 25	Pipe 3 EH	15.05	14.40	152.1	3.0159	5894.38	95001.80	0.062 ¹
T20	25 - 0	Pipe 3 EH	15.42	14.65	154.7	3.0159	6305.28	95001.80	0.066 ¹

<i>tnxTower</i> <i>Tower Engineering Professionals</i> 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	52 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

¹ P_u / φP_u controls

Redundant Hip (1) Design Data (Tension)

Section No.	Elevation	Size	L	L _u	Kl/r	A	P _u	φP _u	Ratio $\frac{P_u}{\phi P_u}$
	ft		ft	ft		in ²	lb	lb	$\frac{\phi P_u}{\phi P_u}$
T19	50 - 25	PIPE 1.5 SCH 80	9.02	9.02	178.8	1.0681	10.17	33646.50	0.000 ¹
T20	25 - 0	PIPE 1.5 SCH 80	9.66	9.66	191.6	1.0681	5.84	33646.50	0.000 ¹

¹ P_u / φP_u controls

Redundant Hip Diagonal (1) Design Data (Tension)

Section No.	Elevation	Size	L	L _u	Kl/r	A	P _u	φP _u	Ratio $\frac{P_u}{\phi P_u}$
	ft		ft	ft		in ²	lb	lb	$\frac{\phi P_u}{\phi P_u}$
T19	50 - 25	PIPE 1.5 SCH 80	20.31	20.31	402.7	1.0681	58.76	33646.50	0.002 ¹
T20	25 - 0	PIPE 1.5 SCH 80	21.20	21.20	420.4	1.0681	54.58	33646.50	0.002 ¹

¹ P_u / φP_u controls

Inner Bracing Design Data (Tension)

Section No.	Elevation	Size	L	L _u	Kl/r	A	P _u	φP _u	Ratio $\frac{P_u}{\phi P_u}$
	ft		ft	ft		in ²	lb	lb	$\frac{\phi P_u}{\phi P_u}$
T15	112.5 - 100	L5x3x3/8	14.80	14.80	210.2	2.8600	3.34	92664.00	0.000 ¹

¹ P_u / φP_u controls

Section Capacity Table

Section No.	Elevation	Component Type	Size	Critical Element	P lb	φP _{allow} lb	% Capacity	Pass Fail
T1	325 - 300	Leg	Pipe 3.5 EH	2	-14153.40	66208.27	21.4	Pass
T2	300 - 287.5	Leg	Pipe 4 EH	22	-25303.30	97668.06	25.9	Pass
T3	287.5 - 281.25	Leg	Pipe 4 EH	34	-32254.00	97668.06	33.0	Pass
T4	281.25 - 275	Leg	Pipe 4 EH	40	-37096.50	97668.06	38.0	Pass
T5	275 - 250	Leg	Pipe 5 EH	46	-64786.50	177209.55	36.6	Pass
T6	250 - 225	Leg	Pipe 5 EH	64	-88382.70	177209.55	49.9	Pass
T7	225 - 212.5	Leg	Pipe 5 EH	85	-106973.00	177209.55	60.4	Pass
T8	212.5 - 200	Leg	Pipe 5 EH	97	-124681.00	255580.48	48.8	Pass
T9	200 - 175	Leg	Pipe 6 EH	121	-162559.00	364524.28	44.6	Pass
T10	175 - 162.5	Leg	Pipe 6 EH	166	-182678.00	364524.28	50.1	Pass
T11	162.5 - 150	Leg	Pipe 6 EH	190	-203164.00	364524.28	55.7	Pass
T12	150 - 137.5	Leg	PIPE 8 X-STR (SCH80)	214	-225568.00	494485.94	45.6	Pass

tnxTower Tower Engineering Professionals 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	Job	Ft White MW (US-FL-3149)	Page	55 of 55
	Project	TEP No. 26455.976054	Date	12:18:38 08/02/24
	Client	PeakNet Services LLC	Designed by	AK

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
						(T10)		
						Horizontal (T6)	94.7	Pass
						Top Girt (T5)	8.5	Pass
						Mid Girt (T1)	9.6	Pass
						Redund Horz 1 Bracing (T18)	57.0	Pass
						Redund Diag 1 Bracing (T18)	49.3	Pass
						Redund Hip 1 Bracing (T20)	0.5	Pass
						Redund Hip Diagonal 1 Bracing (T20)	4.0	Pass
						Inner Bracing (T20)	0.5	Pass
						Bolt Checks	94.7	Pass
						RATING =	94.7	Pass

Notes: 1) See additional documentation in “Appendix B - Additional Calculations” for calculations supporting the % capacity listed.

APPENDIX B

ADDITIONAL CALCULATIONS

Project Name: Ft White MW
Project Number: TEP No. 26455.976054
Client Site Number: US-FL-3149
Elevation: 75 ft - 87.5 ft

Engineer: AKK
Check: JHJ
Date: 8/2/2024
CODE: TIA-H

Grouted/Un-Grouted Pipe Leg + Half Sleeve R/F

ϕ_{CL} = 0.90 - LRFD strength reduction factor (leg, compression)
 ϕ_{TL} = 0.90 - LRFD strength reduction factor (leg, tension)
 ϕ_{CS} = 0.90 - LRFD strength reduction factor (sleeve, compression)
 ϕ_{TS} = 0.90 - LRFD strength reduction factor (sleeve, tension)
 ϕ_W = 0.75 - LRFD strength reduction factor (weld shear)
 ϕ_V = 0.75 - LRFD strength reduction factor (shear)

Mast St.: 1.00 - from trnTower
Moment Ratio: 0 - Moment ratio from trnTower

Input - Loads

$P_{initial}$: 0.9 kips - force from initial load (no wind)
 P_{wind} : 21.1 kips - force due to final loading including reinforcement
 T_U : 19.6 kips - maximum load on leg

Input - Tower Leg

3.5 STD

K : 1.00 - effective length factor for leg
 L_U : 20.45 ft - unbraced length of tower leg
 $F_{y_{leg}}$: 35.00 ksi - minimum specified yield strength of tower leg
 $F_{u_{leg}}$: 63.00 ksi - minimum specified ultimate strength of tower leg
 r : 1.34 in - minimum radius of gyration of tower leg
 A_{leg} : 2.68 in² - area of tower leg
 D_I : 3.55 in - inside diameter of tower leg
 t_{leg} : 0.226 in - thickness of tower leg
 f'_c : 0.00 ksi - minimum specified compressive strength of grout (If ungrouted enter 0)

Quick Check

Weld Size: OK
Weld Connection: 7.1%
Crushing Check: 23.8%
Leg Comp. Check: 15.4%
Sleeve Check: 14.1%
Built-up Check: 74.2%
Slenderness Check: OK
Leg Tension Check: 22.1%
Flange Connection: 5.5%

Input - Sleeve R/F

4 STD

Gap Check: OK

$F_{y_{sleeve}}$: 36.00 ksi - minimum specified yield strength of sleeve r/f
 $F_{u_{sleeve}}$: 58.00 ksi - minimum specified ultimate strength of sleeve r/f
 $r_{x_{sleeve}}$: 0.66 in - minimum radius of gyration of sleeve r/f about the x-axis
 $r_{y_{sleeve}}$: 1.51 in - minimum radius of gyration of sleeve r/f about the y-axis
 A_{sleeve} : 1.59 in² - area of sleeve r/f
 t_{sleeve} : 0.237 in - thickness of sleeve r/f

Termination: Connected to Leg ONLY

Input - Sleeve Connection to Leg

a : 12.00 in - spacing of connectors connecting the sleeve to the leg
 D : 3.00 - weld size for the weld connecting the sleeve to the leg (unit = # of 16ths)
Length //: 12.00 in - length of weld on each side of the leg at the termination
Length $\perp$: 0.00 in - length of weld at the bottom/top of the leg sleeve at termination ($\pi D/2$)
 N_o : 2.00 - number of longitudinal welds per end of the leg (typically near side # far side, so 2)
 F_{EXX} : 70.00 ksi - weld electrode classification
Width: 4.00 in - maximum width of the built-up leg
Gap: 3.00 in - length of leg considered for crushing

Input - Built-up Leg Section

3.5 STD w/4 STD Half Sleeve

$r_{x_{bu}}$: 1.31 in - minimum radius of gyration of the built-up section about the x-axis
 $r_{y_{bu}}$: 1.40 in - minimum radius of gyration of the built-up section about the y-axis

Project Name: Ft White MW
Project Number: TEP No. 26455.976054
Client Site Number: US-FL-3149
Elevation: 50 ft - 75 ft

Engineer: AKK
Check: JHJ
Date: 8/2/2024
CODE: TIA-H

Grouted/Un-Grouted Pipe Leg + Half Sleeve R/F

ϕ_{CL} = 0.90 - LRFD strength reduction factor (leg, compression)
 ϕ_{TL} = 0.90 - LRFD strength reduction factor (leg, tension)
 ϕ_{CS} = 0.90 - LRFD strength reduction factor (sleeve, compression)
 ϕ_{TS} = 0.90 - LRFD strength reduction factor (sleeve, tension)
 ϕ_W = 0.75 - LRFD strength reduction factor (weld shear)
 ϕ_V = 0.75 - LRFD strength reduction factor (shear)

Mast St.: 1.00 - from trnTower
Moment Ratio: 0 - Moment ratio from trnTower

Input - Loads

$P_{initial}$: 1.0 kips - force from initial load (no wind)
 P_{wind} : 22.9 kips - force due to final loading including reinforcement
 T_u : 21.1 kips - maximum load on leg

Input - Tower Leg

3.5 STD

K : 1.00 - effective length factor for leg
 L_u : 21.51 ft - unbraced length of tower leg
 $F_{y_{leg}}$: 35.00 ksi - minimum specified yield strength of tower leg
 $F_{u_{leg}}$: 63.00 ksi - minimum specified ultimate strength of tower leg
 r : 1.34 in - minimum radius of gyration of tower leg
 A_{leg} : 2.68 in² - area of tower leg
 D_I : 3.55 in - inside diameter of tower leg
 t_{leg} : 0.226 in - thickness of tower leg
 f'_c : 0.00 ksi - minimum specified compressive strength of grout (If ungrouted enter 0)

Quick Check

Weld Size: OK
Weld Connection: 5.5%
Crushing Check: 25.8%
Leg Comp. Check: 16.7%
Sleeve Check: 15.3%
Built-up Check: 89.1%
Slenderness Check: OK
Leg Tension Check: 23.8%
Flange Connection: 6.8%

Input - Sleeve R/F

4 STD

Gap Check: OK

$F_{y_{sleeve}}$: 36.00 ksi - minimum specified yield strength of sleeve r/f
 $F_{u_{sleeve}}$: 58.00 ksi - minimum specified ultimate strength of sleeve r/f
 $r_{x_{sleeve}}$: 0.66 in - minimum radius of gyration of sleeve r/f about the x-axis
 $r_{y_{sleeve}}$: 1.51 in - minimum radius of gyration of sleeve r/f about the y-axis
 A_{sleeve} : 1.59 in² - area of sleeve r/f
 t_{sleeve} : 0.237 in - thickness of sleeve r/f

Termination: Connected to Leg ONLY

Input - Sleeve Connection to Leg

a : 12.00 in - spacing of connectors connecting the sleeve to the leg
 D : 3.00 - weld size for the weld connecting the sleeve to the leg (unit = # of 16ths)
Length //: 12.00 in - length of weld on each side of the leg at the termination
Length $\perp$: 6.28 in - length of weld at the bottom/top of the leg sleeve at termination ($\pi D/2$)
 N_o : 2.00 - number of longitudinal welds per end of the leg (typically near side # far side, so 2)
 F_{EXX} : 70.00 ksi - weld electrode classification
Width: 4.00 in - maximum width of the built-up leg
Gap: 3.00 in - length of leg considered for crushing

Input - Built-up Leg Section

3.5 STD w/4 STD Half Sleeve

$r_{x_{bu}}$: 1.31 in - minimum radius of gyration of the built-up section about the x-axis
 $r_{y_{bu}}$: 1.40 in - minimum radius of gyration of the built-up section about the y-axis

Self Support Anchor Rod Capacity

Site Info		
Site #	US-FL-3149	
Site Name	Ft White MW	
TEP #	26455.976054	

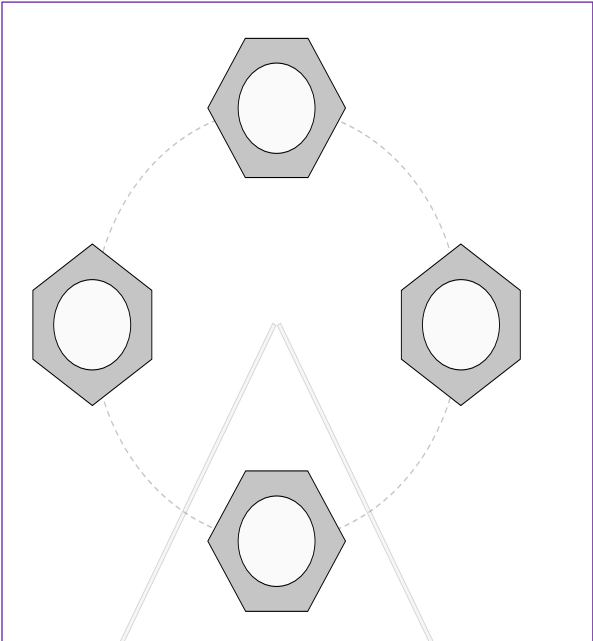
Analysis Considerations		
TIA-222 Revision	H	
Grout Considered:	No	
l_{ar} (in)	0	

Applied Loads		
	Comp.	Uplift
Axial Force (kips)	501.07	439.11
Shear Force (kips)	60.64	54.21

*TIA-222-H Section 15.5 Applied

Considered Eccentricity		
Leg Mod Eccentricity (in)	0.000	
Anchor Rod N.A Shift (in)	0.000	
Total Eccentricity (in)	0.000	

*Anchor Rod Eccentricity Applied



Connection Properties	Analysis Results
-----------------------	------------------

Anchor Rod Data
(4) 2-1/2" $\varnothing$ bolts (A36 N; Fy=36 ksi, Fu=58 ksi)
l_{ar} (in): 0

Anchor Rod Summary		(units of kips, kip-in)
$Pu_c = 125.27$	$\phi Pn_c = 159.04$	Stress Rating
$Vu = 15.16$	$\phi Vn = 71.57$	79.3%
$Mu = n/a$	$\phi Mn = n/a$	Pass

Project Name: Ft White MW
Project Number: 26455.976054
Client Site Number: US-FL-3149

Engineer: AKK
Check: JHJ
Date: 08/02/24

Input:

Foundation:

Pier Shape: Square
d: 3.00 ft - length of side of pier
L: 13.00 ft - pier length
l: 0.33 ft - pier extension above grade
B: 18.00 ft - width of pad
t: 2.00 ft - thickness of pad
 γ_c : 150.00 pcf - unit weight of concrete
 γ_w : 62.40 pcf - unit weight of water

Code: TIA-H

Loads:

P: 501.07 kip - maximum axial reaction
U: 439.11 kip - maximum uplift reaction
V: 60.64 kip - maximum shear reaction
 ϕ_b : 0.75 - strength reduction factor for bearing
 ϕ_L : 0.75 - strength reduction factor for lateral
 ϕ_u : 0.75 - strength reduction factor uplift
DLF_{min}: 0.9 - minimum deadload factor
DLF_{max}: 1.2 - maximum deadload factor

Soil:

t_1 : 4.67 ft - thickness of soil layer (t/ pad)
 γ_1 : 118.00 pcf - effective unit weight of soil
 ϕ_1 : 31.00 deg - friction angle of soil layer
 t_2 : 2.00 ft - thickness of soil layer
 γ_2 : 118.00 pcf - effective unit weight of soil
 ϕ_2 : 32.00 deg - friction angle of soil layer
 t_3 : 2.00 ft - thickness of soil layer
 γ_3 : 118.00 pcf - effective unit weight of soil
 ϕ_3 : 32.00 deg - friction angle of soil layer
 t_4 : 2.00 ft - thickness of soil layer
 γ_4 : 118.00 pcf - effective unit weight of soil
 ϕ_4 : 32.00 deg - friction angle of soil layer
 t_5 : 2.00 ft - thickness of soil layer
 γ_5 : 118.00 pcf - effective unit weight of soil
 ϕ_5 : 32.00 deg - friction angle of soil layer
 q_{ult} : 23.53 ksf - ultimate end bearing capacity
FS: 2.00 - factor of safety for bearing
Net? Yes
 f_s : 0.00 ksf - ultimate skin friction on sides of pad
 μ : 0.00 - friction factor along base of foundation
 F_{lat} : 368.60 psf - ultimate lateral resistance per foot
 D_w : 50.00 ft - depth to water table

Bearing Capacity:

Foundation is Adequate in Bearing 11.7%

q_{max} : 2.07 ksf
 q_{all} : 17.65 ksf

Uplift Capacity:

Foundation is Adequate in Uplift 43.5%

U: 439.11 kip
 U_{all} : 1009.71 kip

Lateral Capacity:

Foundation is Adequate in Lateral 44.6%

TIA-H: 136.05 kip
V: 60.64 kip
 V_{all} : 136.05 kip