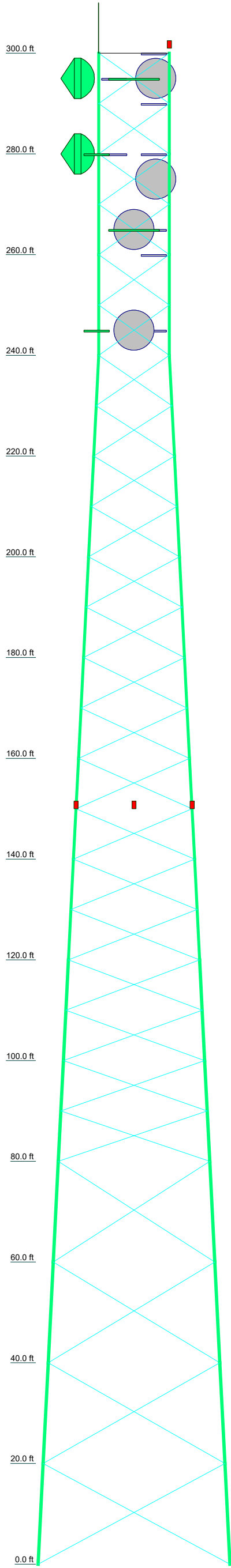


Section	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13	T14	T15
Legs	#12ZG-58 - 1.25" - 1.00" conn. (Pirod 194434)														
Leg Grade	A572-58														
Diagonals	L2 1/2x2 1/2x3/16														
Diagonal Grade	A572-50														
Top Girts	L3x3x3/16														
Face Width (ft)	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42
# Panels @ (ft)	22 @ 10														
Weight (K)	2.3	2.2	2.7	2.7	2.9	3.3	3.8	3.8	4.3	5.6	6.0	5.5	6.0	6.2	6.6



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
5/8" x 10' lightning rod	300	8' Solid w/ Radome	280
Beacon	300	2-1/2" x 14' Sch. 40 (2.875 OD X 0.203" thk) PIPE TO ATTACHED DISH/FRAME TIE BACK STRUT	280
2-1/2" x 14' Sch. 40 (2.875 OD X 0.203" thk) PIPE TO ATTACHED DISH/FRAME TIE BACK STRUT	300	100% FUTURE 8' Solid w/ Radome	280
Future 100% 2-1/2" x 14' Sch. 40 (2.875 OD X 0.203" thk) PIPE TO ATTACHED DISH/FRAME TIE BACK STRUT	300	8' Solid w/ Radome	275
		100% FUTURE 8' Solid w/ Radome	275
		Future 100% SP1 R5 (Includes 4.5"x72" Pipe)	265
SP1 R5 (Includes 4.5"x72" Pipe)	295	Future 100% 2-1/2" x 14' Sch. 40 (2.875 OD X 0.203" thk) PIPE TO ATTACHED DISH/FRAME TIE BACK STRUT	265
2-1/2" x 14' Sch. 40 (2.875 OD X 0.203" thk) PIPE TO ATTACHED DISH/FRAME TIE BACK STRUT	295		
2-1/2" x 14' Sch. 40 (2.875 OD X 0.203" thk) PIPE TO ATTACHED DISH/FRAME TIE BACK STRUT	295	Future 100% 2-1/2" x 14' Sch. 40 (2.875 OD X 0.203" thk) PIPE TO ATTACHED DISH/FRAME TIE BACK STRUT	265
SP1 R5 (Includes 4.5"x72" Pipe)	295		
SP1 R5 (Includes 4.5"x72" Pipe)	295	2-1/2" x 14' Sch. 40 (2.875 OD X 0.203" thk) PIPE TO ATTACHED DISH/FRAME TIE BACK STRUT	265
Future 100% SP1 R5 (Includes 4.5"x72" Pipe)	295		
Future 100% 2-1/2" x 14' Sch. 40 (2.875 OD X 0.203" thk) PIPE TO ATTACHED DISH/FRAME TIE BACK STRUT	295	2-1/2" x 14' Sch. 40 (2.875 OD X 0.203" thk) PIPE TO ATTACHED DISH/FRAME TIE BACK STRUT	265
Future 100% 2-1/2" x 14' Sch. 40 (2.875 OD X 0.203" thk) PIPE TO ATTACHED DISH/FRAME TIE BACK STRUT	295	8' Solid w/ Radome	265
Future 100% 2-1/2" x 14' Sch. 40 (2.875 OD X 0.203" thk) PIPE TO ATTACHED DISH/FRAME TIE BACK STRUT	295	SP1 R5 (Includes 4.5"x72" Pipe)	265
8' Solid w/ Radome	295	100% FUTURE 8' Solid w/ Radome	265
8' Solid w/ Radome	295	2-1/2" x 14' Sch. 40 (2.875 OD X 0.203" thk) PIPE TO ATTACHED DISH/FRAME TIE BACK STRUT	260
100% FUTURE 8' Solid w/ Radome	295	Future 100% 2-1/2" x 14' Sch. 40 (2.875 OD X 0.203" thk) PIPE TO ATTACHED DISH/FRAME TIE BACK STRUT	260
100% FUTURE 8' Solid w/ Radome	295	Future 100% 2-1/2" x 14' Sch. 40 (2.875 OD X 0.203" thk) PIPE TO ATTACHED DISH/FRAME TIE BACK STRUT	260
Future 100% 2-1/2" x 14' Sch. 40 (2.875 OD X 0.203" thk) PIPE TO ATTACHED DISH/FRAME TIE BACK STRUT	290	Future 100% 2-1/2" x 14' Sch. 40 (2.875 OD X 0.203" thk) PIPE TO ATTACHED DISH/FRAME TIE BACK STRUT	245
2-1/2" x 14' Sch. 40 (2.875 OD X 0.203" thk) PIPE TO ATTACHED DISH/FRAME TIE BACK STRUT	290	2-1/2" x 14' Sch. 40 (2.875 OD X 0.203" thk) PIPE TO ATTACHED DISH/FRAME TIE BACK STRUT	245
2-1/2" x 14' Sch. 40 (2.875 OD X 0.203" thk) PIPE TO ATTACHED DISH/FRAME TIE BACK STRUT	280	2-1/2" x 14' Sch. 40 (2.875 OD X 0.203" thk) PIPE TO ATTACHED DISH/FRAME TIE BACK STRUT	245
Future 100% SP1 R5 (Includes 4.5"x72" Pipe)	280	SP1 R5 (Includes 4.5"x72" Pipe)	245
2-1/2" x 14' Sch. 40 (2.875 OD X 0.203" thk) PIPE TO ATTACHED DISH/FRAME TIE BACK STRUT	280	Future 100% 2-1/2" x 14' Sch. 40 (2.875 OD X 0.203" thk) PIPE TO ATTACHED DISH/FRAME TIE BACK STRUT	245
Future 100% 2-1/2" x 14' Sch. 40 (2.875 OD X 0.203" thk) PIPE TO ATTACHED DISH/FRAME TIE BACK STRUT	280	OB light	150
Future 100% 2-1/2" x 14' Sch. 40 (2.875 OD X 0.203" thk) PIPE TO ATTACHED DISH/FRAME TIE BACK STRUT	280	OB light	150
SP1 R5 (Includes 4.5"x72" Pipe)	280	OB light	150
Future 100% 2-1/2" x 14' Sch. 40 (2.875 OD X 0.203" thk) PIPE TO ATTACHED DISH/FRAME TIE BACK STRUT	280		

SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	#12ZG-58 - 1.75" - 1.00" conn.-TR1-(Pirod 195213)	C	#12ZG-58 BASE - 2.25" - 0.875" conn.(Pirod 281172)
B	#12ZG-58 -2.00" - 0.875" conn.-TR3-(Pirod 195637)		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-58	58 ksi	75 ksi	A572-50	50 ksi	65 ksi

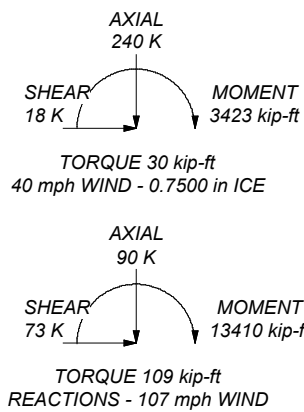
TOWER DESIGN NOTES

1. Tower is located in Du Page County, Illinois.
2. Tower designed for Exposure C to the TIA-222-G Standard.
3. Tower designed for a 107 mph basic wind in accordance with the TIA-222-G Standard.
4. Tower is also designed for a 40 mph basic wind with 0.75 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Risk Category II.
7. Topographic Category 1 with Crest Height of 0.00 ft
8. TOWER RATING: 98.4%

ALL REACTIONS ARE FACTORED

MAX. CORNER REACTIONS AT BASE:
DOWN: 435 K
SHEAR: 46 K

UPLIFT: -352 K
SHEAR: 39 K



<p>1545 Pidco Drive STRUCTURES Plymouth, IN Valmont Industries, Inc. - Global Telecom Phone: (574) 936-4221 FAX: (574) 936-6458</p>	<p>Job: Quotation 560894-02</p>
	<p>Project: U-38 x 300' - Cyrusone, IL</p>
	<p>Client: Yotta Services LLC</p>
	<p>Code: TIA-222-G</p>
<p>Drawn by: JS</p>	<p>Date: 02/09/23</p>
<p>App'd:</p>	<p>Scale: NTS</p>
<p>Dwg No. E-1</p>	<p>Path: \\P:\STYTR\FE\02\FR\Room\Documents\560894-Yotta Services LLC-Cyrusone, IL-307.pdf</p>

PRELIMINARY SELF SUPPORTING TOWER DESIGN- GENERAL NOTES

1. **The TIA standard used in the Preliminary design is per Valmont's investigation on the state code adoption per <https://codeoptions.iccsafe.org/>, during the time of this design. If any changes are required per customer's preference, please contact Valmont for reevaluation.**
2. Please confirm the loading, and Risk category shown on the Preliminary Tower Design sheet.
3. Valmont manufactures the antenna mounts used in the design.
4. Unless otherwise noted, the wind speed used is the ASCE 7-16 ultimate wind speed, based on the ASCE 7 hazards report at the provided tower coordinates.
5. If not provided, all dishes are assumed to have zero azimuth, installed on legs, A, B and C, with leg A apex facing true north.
6. If not provided, dishes are assumed to have maximum frequency of 6 ghz with 10db degradation.
7. Wherever possible, all feedlines are assumed to be stacked on (2) rows on wave guide ladders (unless leg brackets are requested) to minimize wind effect.
8. Unless otherwise requested no additional climbing ladder considered in loading, if the tower already has built in climbing facility, to minimize wind effect. However, safety line considered in the loading.
9. **Should any changes be required on above items, please contact Valmont for reevaluation, prior to ordering the PE stamped Permit Drawings/ Construction Drawings/ Tower Materials.**
10. If not provided, a geotechnical investigation is required for all Risk category III and Risk category IV structures, for review prior to the installation of foundations. Design changes and/or recommendations may be required based on the site investigation.