

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Flash Beacon Lighting	100	SCADA ANTENNAS	92 - 90
SCADA ANTENNAS	99 - 95	BM-0303	92 - 90
BM-0303	99 - 95	SCADA ANTENNAS	92 - 90
SCADA ANTENNAS	99 - 95	BM-0303	92 - 90
BM-0303	99 - 95	5200AP	88 - 86
SCADA ANTENNAS	99 - 95	BM-0303	88 - 86
BM-0303	99 - 95		

SYMBOL LIST

MARK	SIZE	MARK	SIZE
Α	P4x.337	С	1 @ 1.28
R	ΝΔ		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A500-50	50 ksi	62 ksi	A36	36 ksi	58 ksi

TOWER DESIGN NOTES

- 1. Tower designed for Exposure C to the TIA-222-G Standard.
- 2. Tower designed for a 110 mph basic wind in accordance with the TIA-222-G Standard.
- Tower is also designed for a 50 mph basic wind with 0.50 in ice. Ice is considered to increase in thickness with height.
- 4. Deflections are based upon a 60 mph wind.

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 Tower Structure Class II.
 Topographic Category 1 with Crest Height of 0.00 ft
 Locking washers provided for all brace bolted connections. Connection bolts meet A325X structural joint specification. All X-braces are center bolted.
- All members hot dipped galvanized after fabrication per ASTM A123. Hardware (Bolts, Nuts, Etc.) galvanized per ASTM B695 Class 50 (Mechanical).
- 9. All welded joints and connections welded in accordance per AWS D1:1:2008 and specified GlenMartin Weld Procedures (WP).
- 10. Standard base riser located at each leg footing shall be provided in accordance with GlenMartin design requirements.
- 11. TOWER RATING: 97.8%

ALL REACTIONS ARE FACTORED

MAX. CORNER REACTIONS AT BASE:

DOWN: 99157 lb UPLIFT: -95032 lb SHEAR: 6855 lb

AXIAL 16250 lb SHEAR MOMENT 2487 lb 139547 lb-ft TORQUE 316 lb-ft

50 mph WIND - 0.5000 in ICE AXIAL 7452 lb SHEAR MOMENT

12670 lb 672832 lb-ft TORQUE 1629 lb-ft REACTIONS - 110 mph WIND



REVIEWED

By Christopher J. Martin, P.E. at 11:44 am, Oct 12, 2010

GLENMARTIN Site Name: Parkland Sanitary Force Main Project: SO#:21570 Douglas County Wisconsin 13620 Old Hwy 40 Client: TWIN CITIES INDUSTRIAL CONTROL Drawn by: cjmartin App'd. Boonville, MO 65233 Scale: NTS Code: TIA-222-G Date: 10/12/10 Phone: (800) 486-1223 Dwg No. E-1 FAX: (660) 882-7200