

STRUCTURAL NOTES:

Design Codes, criteria, and specifications for the structure supporting the antenna canister (designed by others) and the transmission wire. Pole manufacturer's capacity chart with applicable reduction factors will meet or exceed the applied factored loads. The spun concrete pole is designed and fabricated by Valmont-Newmark.

A - Design Codes

- 1) NESC 2007
- 2) ANSI/TIA-222-G, April 2007

B - Wind Load Design Criteria

3-Second Gust Wind Speed: 146 mph
 Importance Factor: 1.15
 Exposure C, Pole Drag Factor Applied = 1.0
 Load Combinations per NESC 2007 in accordance with FL Statute 366.04 for Transmission Facilities

C - Transmission Design

SW: (2) 7#8 AW
 Conductor: (3) 954 ACSR/AZ
 Ruling Span: 550'
 Deflection Angle: 0°

D - Concrete Pole Specifications

FPL Spun Concrete Specifications: A-099555, A-99201
 FPL Framing Standard: A-200086-9 (modified for antennas)
 130-ft, 52-kip special round spun concrete pole set 31 ft
 Transmission components designed per FPL standard design

E - Concrete Pole Capacity @ Fulcrum Point

Pole Manufacturer Ultimate Moment Capacity: 5,400 ft-kip, $\phi 0.9$
 Pole Manufacturer Zero Tension Capacity: 1,103 ft-kip
 Factored Applied Moment without Antennas: 1,823 ft-kip
 Factored Applied Moment with Antennas: 4,573 ft-kip

F - Structure Type

This structure is a standard 104 ft array pole with 5 ft truncated from the bottom section.

INSTALL FOUR REINFORCED EXIT PORTS AT AN ELEVATION TO BE DESIGNATED BY THE CARRIER. SIZE: 4" x 24" IN LONGITUDINAL FACE ONLY AT 180°. PORTS TO BE STACKED WITH 12" SPACE BETWEEN.

DESIGN EPA (EFFECTIVE PROJECTED AREA) OF 12' X 18' PLATFORM AND EQUIPMENT WILL BE 282 SQ FT, INCLUDING SHAPE FACTORS, APPLIED AT 12 FT ABOVE GROUND. MAXIMUM FACTORED VERTICAL WEIGHT = 29,300 LBS. PLATFORM DESIGN BY OTHERS.

REACTIONS @ GROUNDLINE
 MOMENT: 3,691 ft-kip @ (146 mph)
 SHEAR: 69 kips @ (146 mph)
 AXIAL: 160 kips @ (NESC Light)

STRUCTURE FOUNDATION TO BE AUGERED 6 ft DIAMETER X 31 ft DEEP IN ACCORDANCE WITH FPL STANDARD A-88039-7 USING ROCK BACKFILL

NOTICE TO POLE MANUFACTURER:
 REACTIONS @ SPLICE JOINT
 MOMENT: 1,713 ft-kip
 SHEAR: 42 kips
 AXIAL: 41 kips
 MOMENT @ FULCRUM=4,573 ft-kip
 FULCRUM IS 11 ft BELOW GRADE.

PROVIDE A 2 FT. CONCRETE PLUG IN BUTT OF POLE. BUTT OD = 54.27"


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CERTIFICATE OF AUTHORIZATION 26060

11/10/2012
 DATE: 9/18/12

SIGNATURE: _____

DRAWING DATE: SEPTEMBER 14, 2012

REV	DESCRIPTION	DRN	CHK	REV	APP	DATE
 LONGWOOD, FLORIDA						
FPL Fibernet Broward-Westinghouse 138kV						
Verizon Wireless Co-Location Site 80T2						
SIZE	DWG NO.					REV
A	80T2	COCONUT CREEK				0
SCALE	NONE	SHEET			1 of 1	