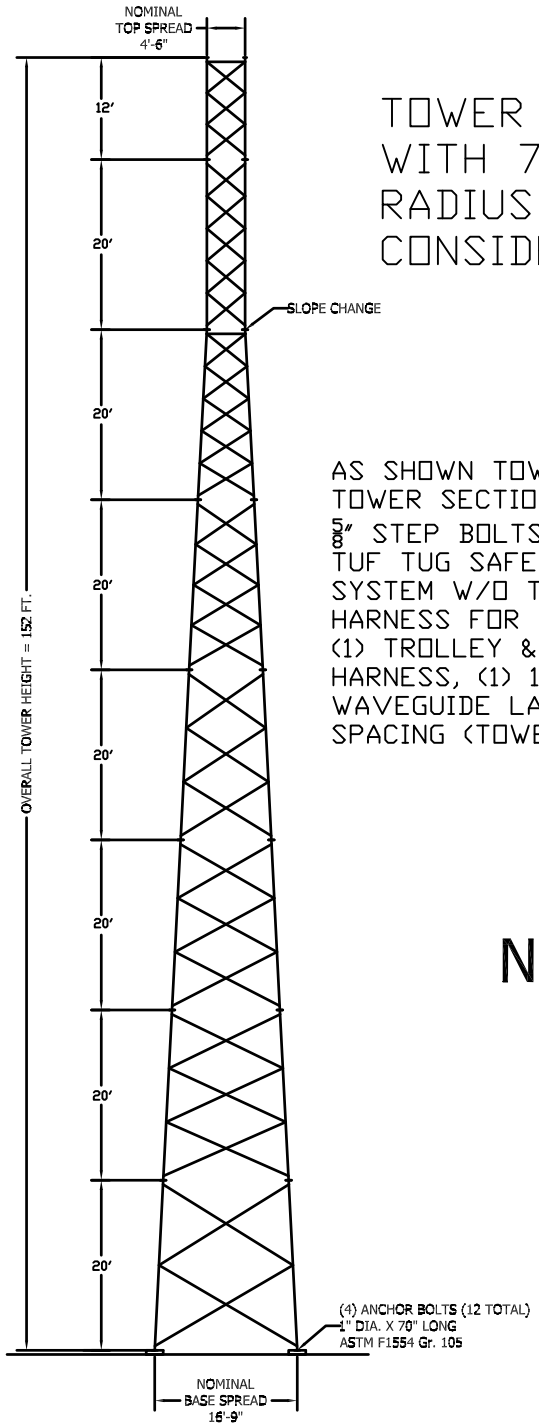

TOWER DESIGNED WITH 75 FT FALL RADIUS CONSIDERATION

AS SHOWN TOWER INCLUDES: TOWER SECTIONS, 5/8" STEP BOLTS FOR CLIMBING, TUF TUG SAFETY CABLE TYPE SYSTEM W/O TROLLEY OR HARNESS FOR STEP BOLTS, (1) TROLLEY & (1) JOURNEYMAN HARNESS, (1) 15-HOLE WAVEGUIDE LADDER W/4FT SPACING (TOWER BASE TO TOP).

TOWER DESIGN LOADING

DESIGN WIND LOAD PER ANSI/TIA-222-G:
ASCE 7-10 ULTIMATE WIND SPEED (NO ICE) = 120 MPH
BASIC WIND SPEED (ICE) = 30 MPH
DESIGN ICE THICKNESS = 0.75 IN.
STRUCTURE CLASS = III
EXPOSURE CATEGORY = C
TOPOGRAPHIC CATEGORY = 1

THIS TOWER IS DESIGNED TO SUPPORT THE FOLLOWING LOADS:

ELEVATION (FT)	ANTENNA TYPE	LINE SIZE (NOM)
152	LIGHTNING ROD	-
148	SD6ft TIA w/o radome (AZ. 0 DEG)	(1) 7/8"
148	(2)DB224, (2)3' SA	(2) 7/8"
140	(4)PD220, (4)3' SA	(4) 7/8"
130	(4)PD220, (4)3' SA	(4) 7/8"
125	SD4ft TIA w/o radome (AZ. 0 DEG)	(1) 7/8"
125	(3)DB224, (3)3' SA	(3) 7/8"
115	SD4ft TIA w/o radome (AZ. 0 DEG)	(1) 7/8"
115	(3)DB224, (3)3' SA	(3) 7/8"

PRELIMINARY
NOT FOR CONSTRUCTION

NOT TO SCALE

MAXIMUM FACTORED REACTIONS			
COMPRESSION	=	159.2	KIPS
TENSION	=	137.5	KIPS
TOTAL SHEAR	=	25.8	KIPS
O.T.M.	=	2,249.4	FT-KIPS

DRAWING COURTESY OF ROHN PRODUCTS LLC, PEORIA, IL.

SECTION MAIN MEMBER SCHEDULE

SECTION	LEG	DIAGONAL
6NSTB	PIPE 2.375x0.218	L1 1/2x1 1/2x1/8 (3)
6NST	PIPE 2.375x0.218	L1 1/2x1 1/2x1/8 (5)
7N	PIPE 2.875x0.203	L1 1/2x1 1/2x1/8 (5)
8N	PIPE 3.500x0.216	L1 3/4x1 3/4x1/8 (4)
9N	PIPE 4x0.318	L2x2x1/8 (3)
10N	PIPE 4x0.318	L2x2x3/16 (3)
11N	PIPE 4.500x0.337	L2 1/2x2 1/2x3/16 (3)
12N	PIPE 5.563x0.375	L3x3x3/16 (2)

NOTE: SECTION NUMBERS ARE FOR REFERENCE ONLY. FOR NOMINAL FACE WIDTH DIMENSIONS, REFER TO THE STRESS ANALYSIS.
THE NUMBERS SHOWN IN PARENTHESES INDICATE THE NUMBER OF BAYS FROM TOP TO BOTTOM.

RANDOLPH COUNTY EMERGENCY SERVICES HEADQUARTERS

SITE TOWER PRELIMINARY DETAILS