

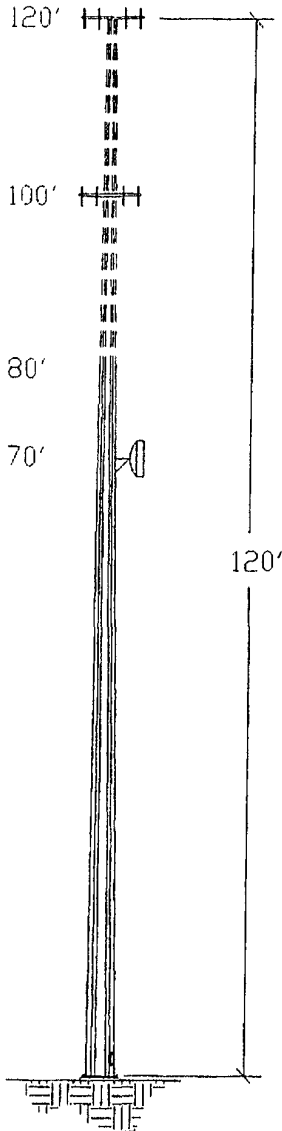
02SR028

EHRESMANN ENGINEERING, INC.
 CONSULTING ENGINEERS
 4400 WEST 31st STREET
 YANKTON, SOUTH DAKOTA 57078
 PH: 605-665-7532 OR FAX: 605-665-9780

REV. # _____
 J.O. # P2110
 STRESS # SPULE
 DATE 5/2/02
 PAGE 1
 WIND 80 MPH
 ICE 0" & 1/2"
 SITE RAPID CITY, SD
 MODEL EEI80EXT120MP
 HEIGHT 80' EXT TO 120'

- OPTION 1 PROPOSED EXTENDABLE MONOPOLE
- PROPOSED ANTENNAS
 - 80 MPH WITH NO ICE
 - 80 MPH WITH 1/2" ICE (REDUCTION ALLOWED)
 - DESIGNED PER TIA/EIA-222-F

BY: WBW



LOADS:

ELEV.	ITEM	RAD.	AZ.	LINE
120'	(12) 4' X 6' PANEL ON 14' LOW PROFILE PLATFORM	---	---	(12) 1 1/4"
100'	(12) 4' X 6' PANEL ON 14' LOW PROFILE PLATFORM	---	---	(12) 1 1/4"
70'	4' HP DISH	---	---	EW220

MAXIMUM BASE MOMENT & FORCES

MOMENT (FT-KIPS)	SHEAR (KIPS)	AXIAL (KIPS)
1209.65	16.86	16.63

PRELIMINARY FOUNDATION DESIGN

PIER DIAMETER	DEPTH	VERTICAL BARS (GR 60)	HORZ. TIES	CONCRETE (CU YDS)
6'-0" Ø	20 FT	(30) #9	(21) #4	21.5

NOTES:

1. POLE DESIGNED ACCORDING TO TIA/EIA-222-F.
2. ANTENNA LOADS FROM MANUFACTURING SPECIFICATIONS AND ANDREWS BULLETIN 1015F.
3. WELDED CONNECTIONS SHALL CONFORM TO THE LATEST REVISION OF THE AMERICAN WELDING SOCIETY, A.W.S. D 1.1-82.
4. ALL POLE MEMBERS SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION. GALVANIZING SHALL CONFORM TO ASTM A123.
5. ALL BOLTS SHALL BE GALVANIZED ACCORDING TO THE STANDARD SPECIFICATION FOR ZINC COATING OF IRON AND STEEL HARDWARE, ASTM A153.
6. BOLTS
 - A. BOLTS IN TENSION ASTM A325
 - B. STEP BOLTS ASTM A307

PRELIMINARY

IF THIS TOWER AND FOUNDATIONS WERE NOT FABRICATED, INSTALLED OR MAINTAINED IN ACCORDANCE WITH THIS ANALYSIS AND SPECIFICATION, OUR DESIGN AND/OR CERTIFICATION IS INVALID AND ECI DISCLAIMS ANY RESPONSIBILITY FOR THIS STRUCTURE IN ITS ENTIRETY.