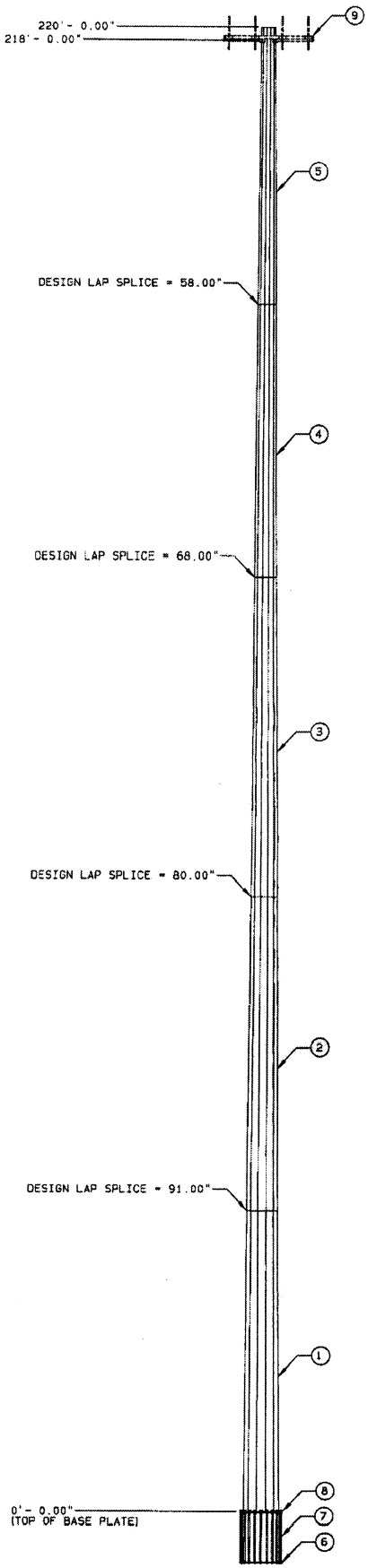
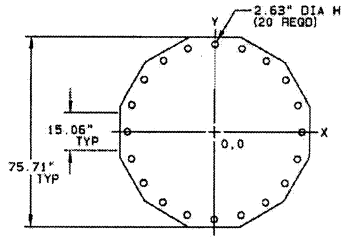


SECTION INFORMATION					
ITEM ID	LENGTH	BASE OD	TOP OD	THK	MATL
1	52' - 9.00"	62.00"	52.51"	0.438"	S-22
2	53' - 0.00"	54.62"	45.08"	0.375"	S-22
3	53' - 0.00"	46.90"	37.37"	0.313"	S-22
4	45' - 0.00"	38.88"	30.78"	0.250"	S-22
5	40' -11.00"	32.08"	24.71"	0.219"	S-22

ITEM ID	NO. REQD	FEATURES	WEIGHT (LBS)
1	1	SECTION A	14,198
2	1	SECTION B	10,647
3	1	SECTION C	7,497
4	1	SECTION D	4,213
5	1	SECTION E	2,734
6	1	BOTTOM CAGE PLATE	138
7	20	2.25"-4.5 UNC-2A ANCHOR BOLT, LENGTH = 8.00'	2,468
8	1	BASE PLATE	2,790
9	1	VALMONT PLATFORM (13'-5" FACE)	1,589
	1	TOP CAGE PLATE (REMOVE BEFORE SETTING POLE)	182
	1	SAFETY CLIMBING CABLE (LENGTH = 210.00')	138
	2	GROUNDING LUG	2
		GALVANIZING	812
	215	STEP AND CLIP (VALMONT STANDARD)	1
	4	HAND HOLE (9" x 24")	56
	2	HAND HOLE (5" x 8")	17
	2	HAND HOLE (5" x 8")	17
	3	HAND HOLE (6" x 18") (TUBE)	12
	6	HAND HOLE (6" x 18") (TUBE)	12
	3	HAND HOLE (6" x 18") (FORMED)	18
	1	POLE CAP	43

HOLE COORDS (INCHES)	
X-COORD	Y-COORD
34.86	0.00
33.15	10.77
28.20	20.49
20.49	28.20
10.77	33.15
0.00	34.86



NOTES:
1. BASE PLATE THICKNESS = 2.500"
2. BASE PLATE ALLOWABLE STRESS (KSI) = 60
3. VENT AND DRAIN HOLES PROVIDED
4. MAXIMUM BOLT CIRCLE DIAMETER = 69.71"
5. MAXIMUM TEMPLATE DIAMETER = 75.71"

BASE PLATE / ANCHORAGE CHARACTERISTICS

NOTES:

1. REACTIONS FOR FOUNDATION DESIGN.
   MOMENT = 61,724 IN-KIPS
   SHEAR = 35,890 #
   VERTICAL = 48,574 #
2. GALVANIZED PER ASTM A-123.
3. DESIGN CRITERIA: EIA/TIA 222-F
4. THIS STRUCTURE HAS BEEN DESIGNED FOR THE FOLLOWING LOADING:
   A. CASE 1: WIND = 80 MPH
   B. CASE 2: WIND = 69 MPH, ICE = 0.50 INCH
   C. EQUIPMENT

DESCRIPTION	MTG HT. (FT)	CENTROID HT. (FT)	CENTROID ECC (FT)	WITHOUT ICE EPA (FT**2)	WITHOUT ICE WT (LBS)	WITH ICE EPA (FT**2)	WITH ICE WT (LBS)
1-Dual Red/White Lig	220.00	223.00	0.00	5.63	92	6.17	147
1-Lightning Rod, 15'	220.00	227.50	0.00	3.60	100	5.10	126
12-RR65-19-00	218.00	221.00	0.00	50.76	276	60.72	624
1-Platform, PiRod w/	218.00	219.50	0.00	15.70	1300	20.10	1765
12-RR65-19-00	205.00	208.00	0.00	50.76	276	60.72	624
1-Platform, PiRod w/	205.00	206.50	0.00	15.70	1300	20.10	1765
12-RR65-19-00	190.00	193.00	0.00	50.76	276	60.72	624
1-Platform, PiRod w/	190.00	191.50	0.00	15.70	1300	20.10	1765
12-RR65-19-00	175.00	178.00	0.00	50.76	276	60.72	624
1-Platform, PiRod w/	175.00	176.50	0.00	15.70	1300	20.10	1765

5. FEEDLINES ARE PLACED INTERIOR TO POLE SHAFT (UNLESS NOTED OTHERWISE).

ORDER	PROJECT	FILE ID	SCALE	DATE	ENGR
17071-54	1700	17006R0	NONE	02/18/04	KWD

DESCRIPTION: T-MOBILE 220' POLE, SITE: SPRING GROVE, IL — 17006R0

VALMONT

SO# 17071-64
FOUNDATION NOTES

1. THIS FOUNDATION HAS BEEN DESIGNED FOR A TAPERED POLE TOWER. THE BASE REACTIONS USED IN THE DESIGN ARE:

MOMENT =	61724	IN-KIPS
SHEAR =	35890	LBS
VERTICAL =	48574	LBS

2. SOIL AS PER REPORT EDGE, DATED: 1/30/04 (FILE: 1338)
3. CONCRETE TO BE 3000 PSI @ 28 DAYS. REINFORCING BAR TO CONFORM TO ASTM A615 GRADE 60 SPECIFICATIONS. CONCRETE INSTALLATION TO CONFORM TO ACI-318 BUILDING REQUIREMENTS FOR REINFORCED CONCRETE. ALL CONCRETE TO BE PLACED AGAINST UNDISTURBED EARTH FREE OF WATER AND ALL FOREIGN OBJECTS AND MATERIALS. A MINIMUM OF THREE INCHES OF CONCRETE SHALL COVER ALL REINFORCEMENT. WELDING OF REBAR NOT PERMITTED.
4. A COLD JOINT IS PERMISSIBLE UPON CONSULTATION WITH PIROD. ALL COLD JOINTS SHALL BE COATED WITH BONDING AGENTS PRIOR TO SECOND POUR.
5. ALL REINFORCING STEEL TO BE FORMED INTO A CAGE PRIOR TO SETTING INTO POSITION IN THE EXCAVATED PIER.
6. PERMANENT STEEL CASING SHALL NOT BE USED WITHOUT CONSENT FROM FOUNDATION DESIGNERS.
7. BENDING, STRAIGHTENING OR REALIGNING (HOT OR COLD) OF THE ANCHOR BOLTS BY ANY METHOD IS PROHIBITED.
8. CROWN TOP OF FOUNDATION FOR PROPER DRAINAGE.
9. A TEMPORARY, FULL LENGTH STEEL CASING MAY BE REQUIRED DURING INSTALLATION.
10. DRILLING SLURRY MAY BE REQUIRED TO MAINTAIN AN OPEN EXCAVATION DURING DRILLING AND CONCRETE PLACEMENT.
11. CONCRETE IS TO BE PLACED USING A TREMIE IF THE GROUND WATER CAN NOT BE REMOVED FROM THE EXCAVATION.
12. ADEQUATE CONCRETE IS TO BE MAINTAINED IN THE STEEL CASING SO AS TO OFFSET THE HYDROSTATIC HEAD OF THE GROUNDWATER AND SIDE WALL PRESSURE.
13. CONCRETE IS TO BE PLACED THE SAME DAY THE CAISSON IS DRILLED.
14. GRADE SITE TO DRAIN AWAY FROM THE FOUNDATION.
15. DURING CONSTRUCTION, THE ON-SITE GEOTECHNICAL ENGINEER SHALL CONFIRM THE SOIL PARAMETERS AS MEETING AND/OR EXCEEDING THE PARAMETERS GIVEN IN THE SOIL REPORT.

TOWER FOUNDATION

REV	DESCRIPTION OF REVISIONS	INI	DATE
C	AUTOCAD EDITS	PRG	02/23/2004
B	DRAWING SHUFFLE	PRG	02/23/2004
A	FOUNDATION PER SOIL REPORT	PRG	02/23/2004

T-MOBILE
CH46-599B SPRING GROVE, IL
TP62 X 220'

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DRAWING NO. 180825
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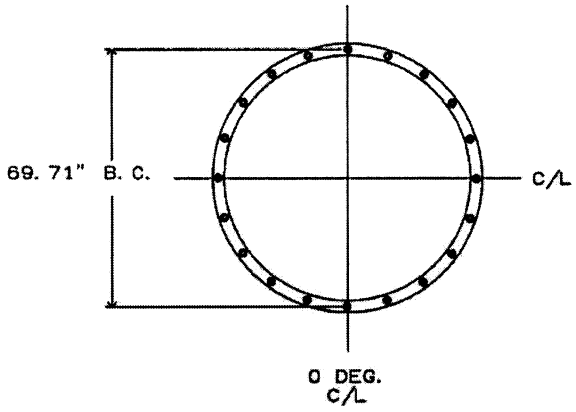
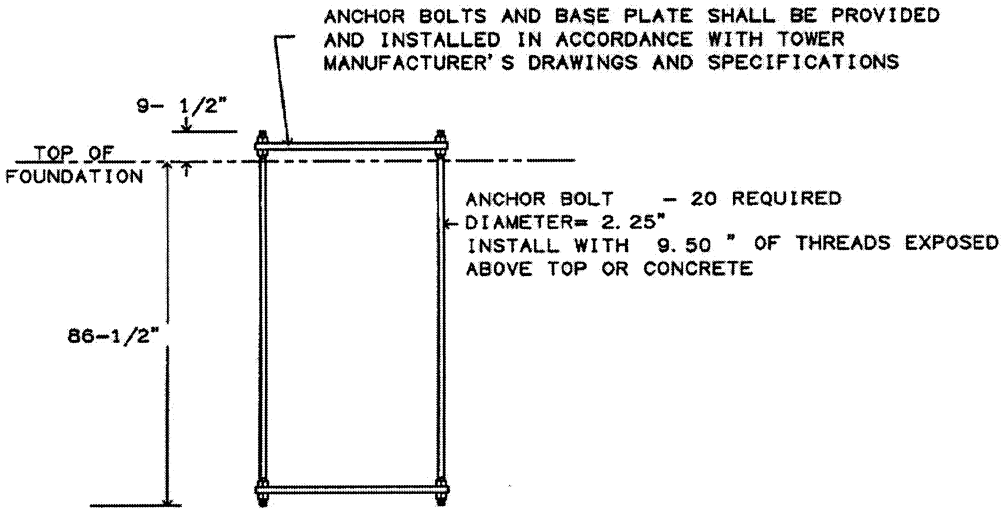
BASE FLANGE MUST BE CENTERED IN PIER
WITHIN +/- 10% OF PIER DIAMETER.





TOWER FOUNDATION

TOWER ANCHOR BOLT PLACEMENT

REV	DESCRIPTION OF REVISIONS	INI	DATE
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CH46-599B SPRING GROVE, IL
TP62 X 220'

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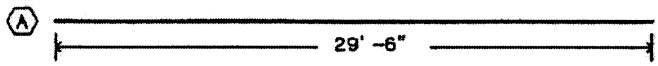
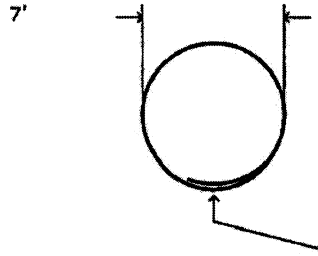


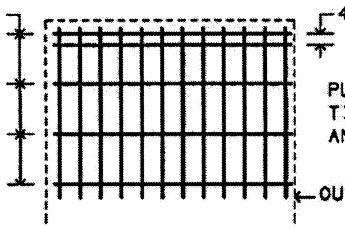
(A) #11 REBAR - 30 PIECES REQ. TOTAL
APPROX WT = 156.7# EACH, 4701# TOTAL



(B) # 5 REBAR - 22 PIECES REQUIRED TOTAL
APPROX UNBENT LENGTH = 24' - 2- 3/4"
APPROX WT = 25.3# EACH, 557# TOTAL

LAP DIMENSION: 2' - 2- 3/4"
PLACE REBAR RINGS SO THAT LAPS ON ADJACENT RINGS ARE 180 DEGREES APART.
SEE PAGE 2 FOR RING PLACEMENT.

PLACE FIRST TIE AT END OF VERTICAL BARS (TOP AND BOTTOM) AND CONTINUE SPACING AS SHOWN THROUGHOUT PIER.



PLACE AN ADDITIONAL CIRCULAR TIE 4" FROM THE END TIE (TOP AND BOTTOM) AS SHOWN.

OUTLINE OF CONCRETE PIER

DETAIL OF REBAR CAGE END
(E)

TOWER FOUNDATION

REBAR DETAIL

TOTAL APPROX REBAR WEIGHT = 5258#
REINFORCING BAR TO CONFORM TO ASTM A615 GRADE 60 SPECIFICATIONS.

T-MOBILE
CH46-599B SPRING GROVE, IL
TP62 X 220'

REV	DESCRIPTION OF REVISIONS	INI	DATE
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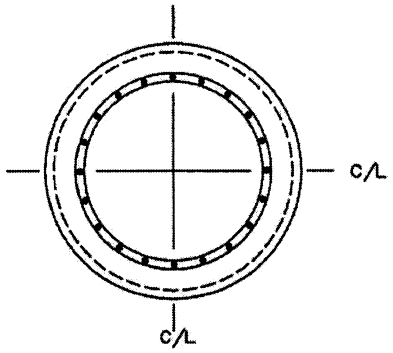
TOP VIEW

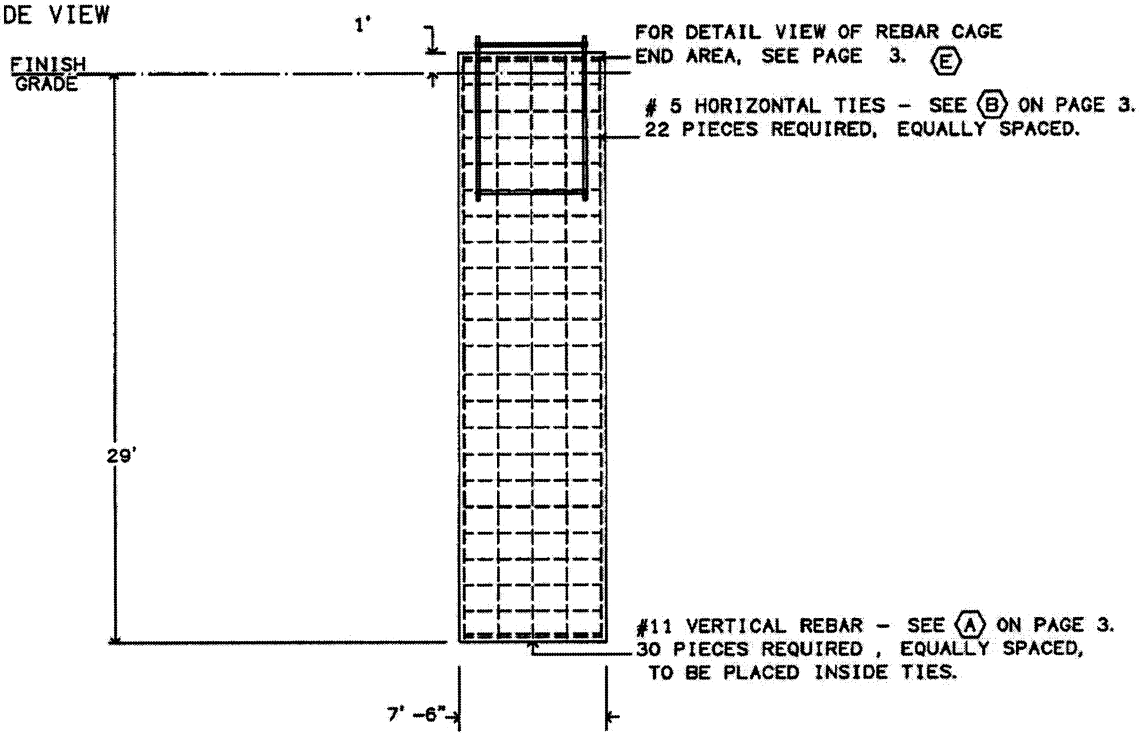
TOP AND SIDE VIEWS ARE DRAWN TO DIFFERENT SCALE

BASE FLANGE MUST BE CENTERED IN PIER WITHIN +/- 10% OF PIER DIAMETER



CROWN TOP OF FOUNDATION TO FACILITATE DRAINAGE.

SIDE VIEW



TOWER FOUNDATION

49. 1 CUBIC YARDS CONCRETE REQUIRED

FOR INSTALLATION SPECIFICATIONS AND ADDITIONAL INFORMATION, SEE PAGE 1 OF THIS DRAWING.

T-MOBILE
CH46-599B SPRING GROVE, IL
TP62 X 220'

REV	DESCRIPTION OF REVISIONS	INI	DATE
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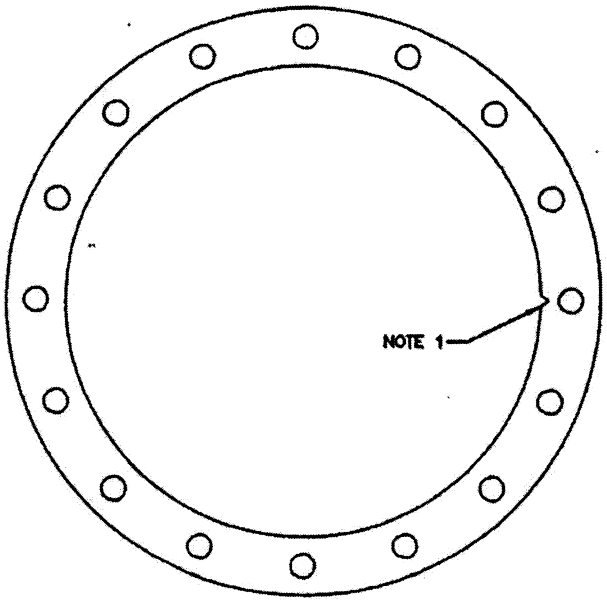
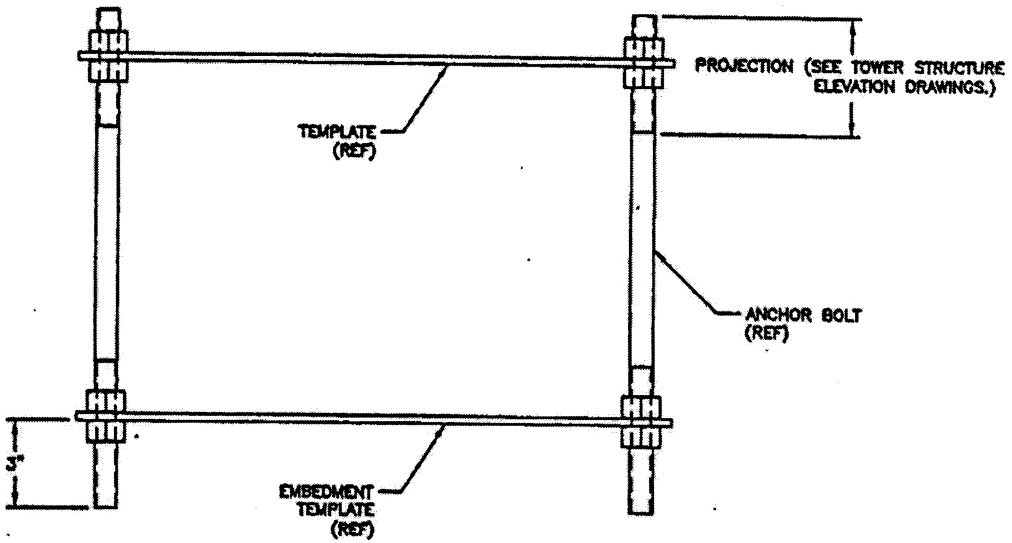
Printed: 01/21/2004 09:37

FIELD ASSEMBLY/ERECTION DRAWING

NOTES:

1. V-NOTCH INDICATES CENTERLINE FLAT #10 ON 12 SIDED POLES.
   V-NOTCH INDICATES CENTERLINE FLAT #13 ON 16 SIDED POLES.
   V-NOTCH INDICATES CENTERLINE 270° ON 18 SIDED POLES.
   (UNLESS OTHERWISE NOTED, PORTHOLE C/L AT 8' ELEVATION IN LINE WITH "V" NOTCH.)
2. QUANTITY, SIZE, AND ORIENTATION OF BOLTS FOR REFERENCE ONLY.
   BOLT CIRCLE FOR REFERENCE ONLY.
   SEE TOWER STRUCTURE ELEVATION VIEW FOR DETAILS.





REV.	DESCRIPTION OF REVISIONS	CPD	BY	DATE

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TOLERANCE NOTE:
TOLERANCES ON DIMENSIONS UNLESS OTHERWISE NOTED ARE (PLUS OR MINUS) MACHINING 0.030" AND STRUCTURAL 0.060". BENDS ARE (+ OR −) 1/2 DEGREE.

DESCRIPTION: ANCHOR BOLT CAGE ASSEMBLY

DR BY	CPD NO.	DRAWING USAGE
SAN 12/02/2003	3309	CUSTOMER

ENG. APPROVAL	CHECKED BY
WBR 12/04/2003	MVC 12/03/2003

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SHEET 1 OF 1