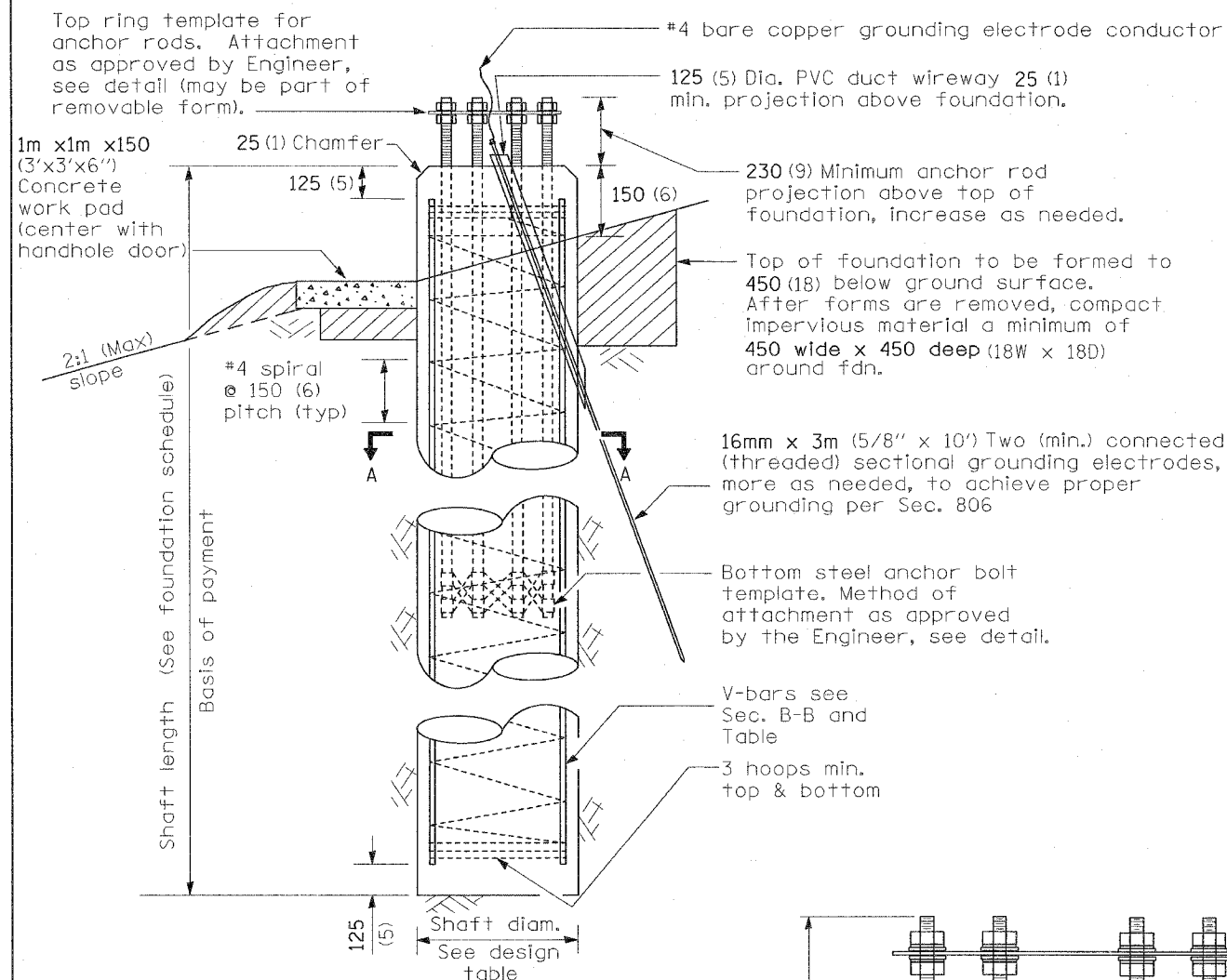


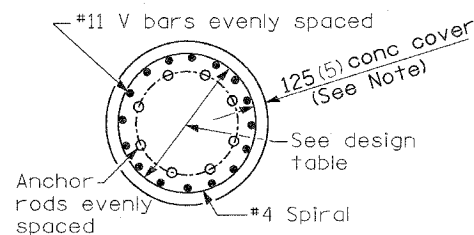
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	*	**	35	11
STA. _____		TO STA. _____		
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				

• DIST 8 ITS 2007-1, 2A
• MADISON & ST CLAIR COUNTIES

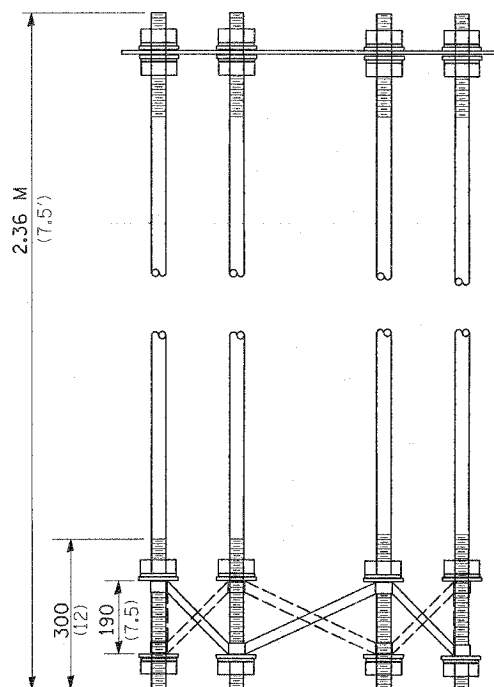


TOWER NUMBER	STATION	EP OFFSET (FT.)	SHAFT LENGTH (FT.)
025523.5	1229+30	20	80

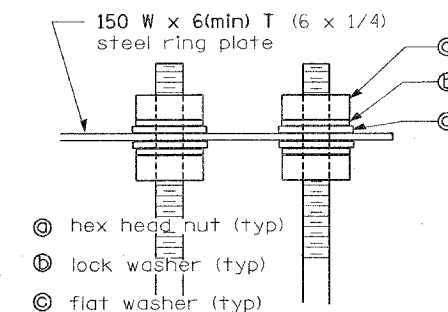
FOUNDATION ELEVATION



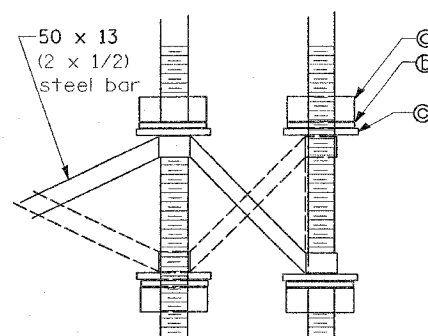
SECTION A-A



ANCHOR ROD CAGE



ANCHOR ROD CAGE TOP



ANCHOR ROD CAGE BOTTOM

TOWER HEIGHT (ft)	ANCHOR ROD DIAM. (IN)	ROD CIRCLE DIAM. (MIN) (IN)	TOWER BASE DIAM. (MIN) (IN)	DRILLED SHAFT	
				DIAM. (IN)	V Bar # 11 (each)
80	1.5	30	21	48	14
90	1.5	30	21	48	14
100	1.5	30	21	48	14
110	1.5	30	21	48	14
120	1.75	36	26	54	18
130	1.75	36	28	54	18
140	1.75	36	28	54	18
150	2.25	38	30	60	21
160	2.25	38	32	60	21

SOIL CONSISTENCY	AVERAGE STRENGTH (Qu in tsf)	LIGHT TOWER HEIGHT (feet)								
		80	90	100	110	120	130	140	150	160
Cohesive	SOFT (< 0.5)	20.4	21.5	22.5	23.6	25.0	26.1	27.2	28.5	29.8
	MEDIUM (0.5 to 1)	16.8	17.5	18.3	19.0	20.3	21.1	21.8	23.1	24.0
	STIFF (1 to 2)	14.3	14.8	15.4	15.9	17.1	17.6	18.1	19.3	19.9
	VERY STIFF (2 to 4)	12.6	13.0	13.3	13.7	14.8	15.2	15.6	16.7	17.1
Granular	HARD (> 4)	11.4	11.6	11.9	12.2	13.2	13.5	13.8	14.9	15.2
	(N in BLOWS/FT.)									
	VERY LOOSE (< 5)	16.4	17.1	17.8	18.5	18.9	19.6	20.2	20.7	21.4
	LOOSE (5 to 10)	15.0	15.6	16.2	16.8	17.3	17.9	18.4	18.9	19.5
	MEDIUM (10 to 25)	14.3	14.9	15.5	16.0	16.4	17.0	17.5	17.9	18.5
DENSE (25 to 50)	13.6	14.1	14.6	15.1	15.5	16.1	16.5	16.9	17.5	
VERY DENSE (> 50)	12.9	13.4	13.9	14.4	14.8	15.3	15.7	16.1	16.6	

GENERAL NOTES

- The shaft length(s) provided in the foundation schedule are based on the soil borings included in the plans. If different soils are encountered, the engineer shall be notified to provide a revised length.
- Use 8 rods min., see design table for minimum anchor rod diameter. Anchor rod quantity, diameter, and length shall be determined by the approved drawings furnished by pole manufacturer.
- All foundation reinforcement steel to be epoxy coated. Use #11 vertical bars and #4 spiral reinforcement - see design table.
- The cost of reinforcing is incidental to the foundation.
- Steel anchor bolt forms shall not be removed for a minimum of 3 days after concrete is poured and the tower shall not be set for a minimum of 7 days or as approved by the Engineer.
- Coordinate bolt circle diameter of the tower with the bolt circle diameter of the anchor bolt cage.
- Foundation shall be in accordance with applicable portions of Section 516 and 837 of the Standard Specifications.
- Foundation shall be poured monolithically with no construction joints allowed.
- Place grounding electrodes in an access well, if there is a conflict in using the wireway window.
- Diameters listed in the tables are based upon a 125 (5") concrete cover. The minimum cover is 75 (3") in a dry shaft excavation or 100 (4") in a wet hole. When rock is encountered, a 125 (5") cover is required against soil to allow a 50 (2") cover against rock.

All dimensions are in millimeters (inches) unless otherwise shown.

DATE	REVISIONS
	Corrected 4/12/06

ILLINOIS DEPARTMENT OF TRANSPORTATION

LIGHT TOWER FOUNDATION

FAI 255
SECTION DIST 8 ITS 2007-1, 2A
MADISON & ST. CLAIR COUNTIES