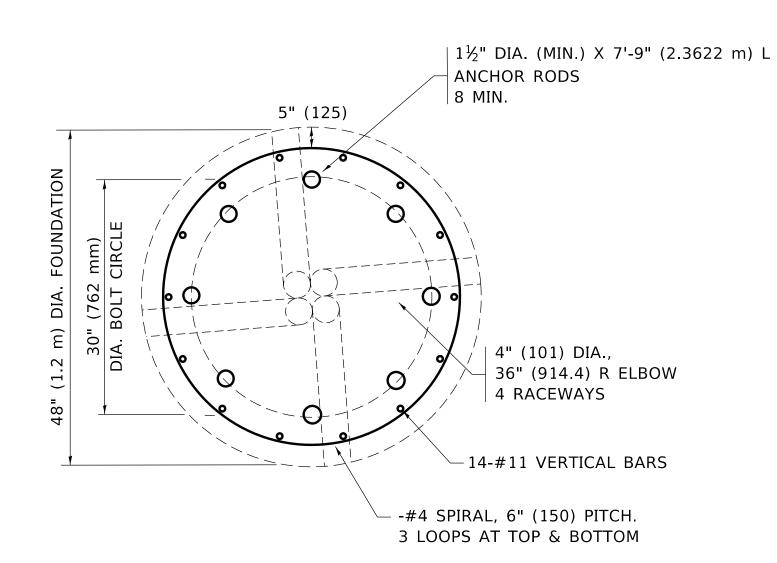
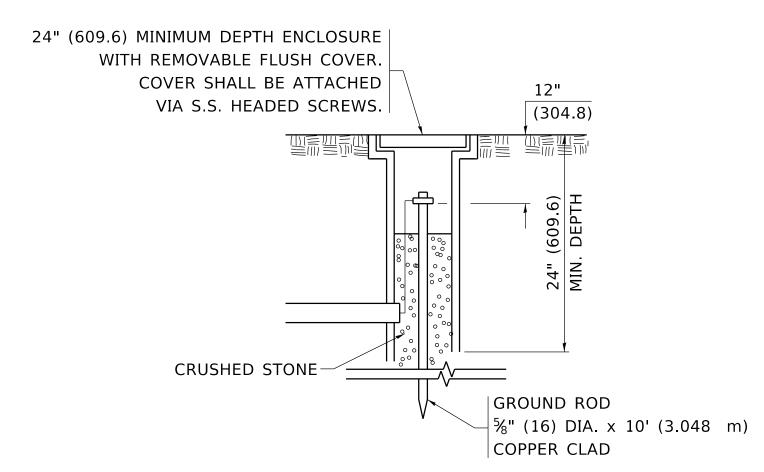
		SHAFT LENGTH (D) TA	ABLE	
SOIL CONSISTENCY		AVERAGE STRENGTH	LIGHT TOWER MOUNTING HEIGHT	
		Qu In tsf (Qu In kPa)	100 FT. (30 m)	110 FT. (34 m)
COHESIVE	SOFT	<0.5 (<50)	22'-6" (6.9 m)	24'-0" (7.2 m)
	MEDIUM	0.5 TO 1 (50 TO 100)	18'-6" (6.9 m)	19'-0" (5.8 m)
	STIFF	1 TO 2 (100 TO 200)	15'-6" (4.7 m)	16'-0" (5.5 m)
	VERY STIFF	2 TO 4 (200 TO 400)	13'-6" (4.1 m)	14'-0" (4.2 m)
	HARD	>4 (>400)	12'-0" (3.6 m)	12'-6" (3.7 m)
GRANULAR		N in BLOWS/FT. (N in BLOWS/0.3m)		
	VERY LOOSE	<5 (<5)	18'-0" (5.4 m)	18'-6" (5.6 m)
	LOOSE	5 TO 10 (5 TO 10)	16'-6" (4.9 m)	17'-0" (5.1 m)
	MEDIUM	10 TO 25 (10 TO 25)	15'-6" (5.2 m)	16'-0" (5.9 m)
	DENSE	25 TO 50 (25 TO 50)	15'-0" (4.5 m)	15'-6" (4.6 m)
	VERY DENSE	>50 (>50)	14'-0" (4.2 m)	14'-6" (4.4 m)



SECTION-B-B



GROUND WELL DETAIL

- R. TOMSONS 09-02-10 USER NAME = footemj DESIGNED DRAWN - R. TOMSONS 02-27-13 CHECKED REVISED - R. TOMSONS 04-29-16 PLOT SCALE = 50.0000 ' / in. DATE REVISED - R. TOMSONS 07-27-16 PLOT DATE = 4/19/2019

DEPARTMENT OF TRANSPORTATION

HIGH MAST LIGHT TOWER 100 FT TO 110 FT (30 m TO 34 m) FOUNDATION DETAIL TO STA.

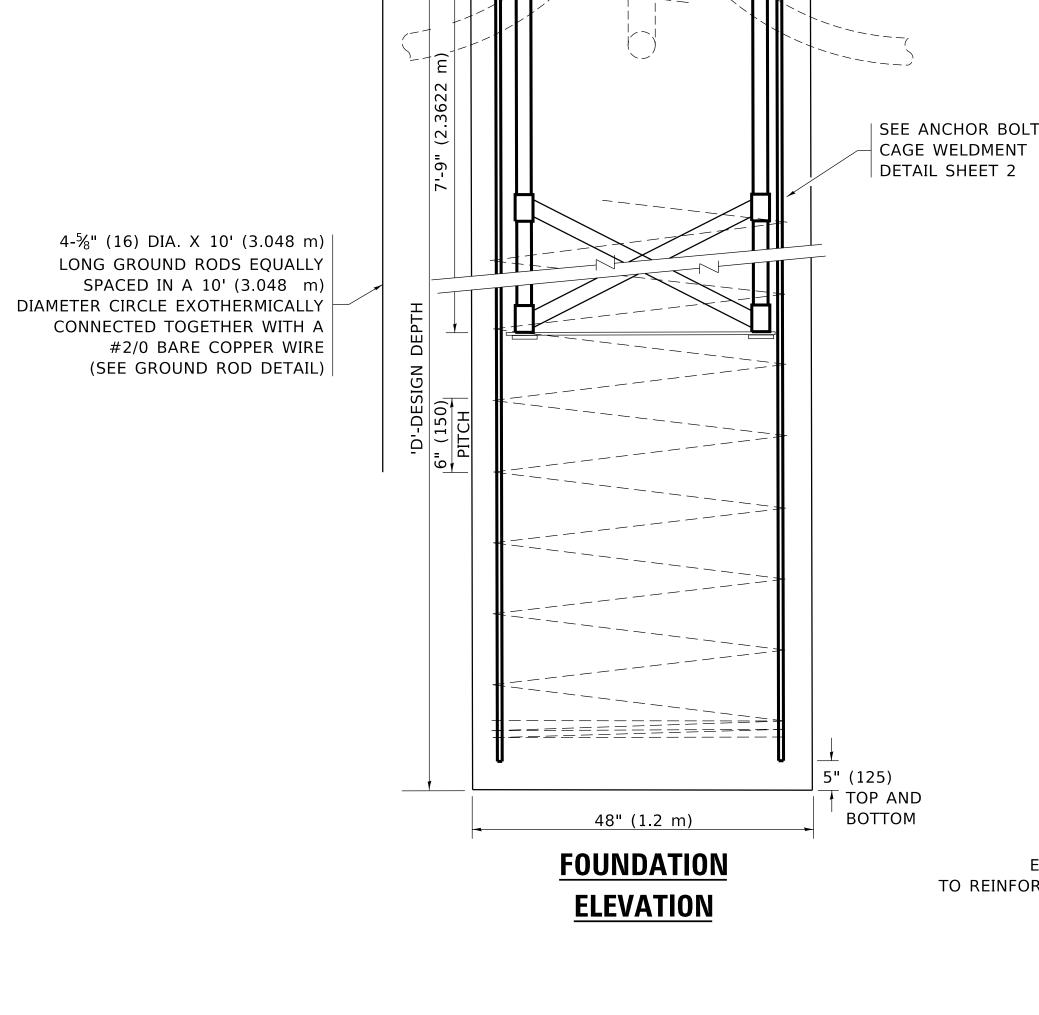
TOTAL SHEET SHEET NO. F.A. RTE. SECTION COUNTY **BE-501** CONTRACT NO. ILLINOIS FED. AID PROJECT

#2/0 BARE COPPER WIRE

GROUND WELL

DESIGN NOTES

- 1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN
- 2. THE ANCHOR RODS SHALL BE VERTICAL NO ADJUSTMENT SHALL BE ALLOWED AFTER THE FOUNDATION IS PLACED.
- THE GAP BETWEEN THE FOUNDATION AND THE BASE PLATE SHALL BE ENCLOSED WITH A STAINLESS STEEL SCREEN FASTENED WITH A STAINLESS STEEL BAND.
- 4. THE TOP OF THE FOUNDATION TO 18" (450) BELOW GRADE SHALL BE FORMED.
- SURFACE WATER WILL NOT BE PERMITTED TO ENTER THE HOLE AND ALL WATER WHICH MAY HAVE INFILTRATED INTO THE HOLE SHALL BE REMOVED BEFORE PLACING CONCRETE.
- 6. THE LIGHT TOWER SHALL NOT BE ERECTED UNTIL AFTER THE CONCRETE HAS BEEN CURED ACCORDING TO ARTICLE 1020.13.
- 7. ANCHOR RODS SHALL BE STRAIGHT AND SHALL BE ACCORDING TO ASTM F1554, GRADE 725 (GRADE 105) AND GALVANIZED ACCORDING TO ARTICLE 1006.9.
- 8. ANCHOR ROD INFORMATION SHALL BE SUBMITTED FOR APPROVAL AND SHALL BE FULLY COORDINATED FOR APPROVAL WITH TOWER MANUFACTURER REQUIREMENTS.
- REINFORCEMENT BARS SHALL BE ACCORDING TO ARTICLE 1006.10
- 10. TWO ANCHOR RODS OPPOSITE EACH OTHER SHALL HAVE THE ANCHOR ROD THREADS PEENED AFTER NUTS ARE INSTALLED.
- 11. A MINIMUM OF THREE FULL THREADS SHALL REMAIN EXPOSED AFTER LIGHT TOWER IN INSTALLED.
- 12. ALL GROUNDING INDICATED IN THE PLANS SHALL BE INCLUDED IN THE COST OF THE LIGHT TOWER FOUNDATION AND SHALL NOT BE PAID FOR SEPARATELY.
- 13. CUT NUTS, OR JAM NUTS, ARE NOT ALLOWED
- 14. ANCHOR ROD QUANTITY, DIAMETER, AND LENGTH SHALL BE DETERMINED BY THE TOWER MANUFACTURER AND APPROVED BY THE ENGINEER. EACH FOUNDATION SHALL HAVE A MINIMUM OF 8 ANCHOR RODS.
- 15. COORDINATE THE ROD CIRCLE DIAMETER OF THE TOWER WITH
- 16. THE FOUNDATION SHALL BE POURED MONOLITHICALLY AND SHALL HAVE NO CONSTRUCTION JOINTS.



BASE PLATE -

SEE NOTE 11 -

MECHANICAL CONNECTION

#2/0 BARE COPPER WIRE _

EXOTHERMIC WELD -

CONNECTION

TO ANCHOR RODS

EXOTHERMIC WELD

REINFORCING STEEL

CONNECTION TO

- 12" (304.8)

RACEWAY PROJECTION

9" (230) MIN.

THREADED

18" (457)

EXOTHERMIC WELDS TO REINFORCEMENT BAR CAGE 5' RADIUS (1.524 m) GROUND ROD (TYP) -

ANCHOR ROD (TYP.)

(TYP. EA. GND ROD) SEE GROUND WELL DETAIL

> MECHANICAL CONNECTION TO ANCHOR ROD (TYPICAL)

- FOUNDATION

REINFORCEMENT BAR CAGE

GROUND ROD DETAIL

STATE OF ILLINOIS

SCALE: NONE SHEET 1 OF 2 SHEETS STA.