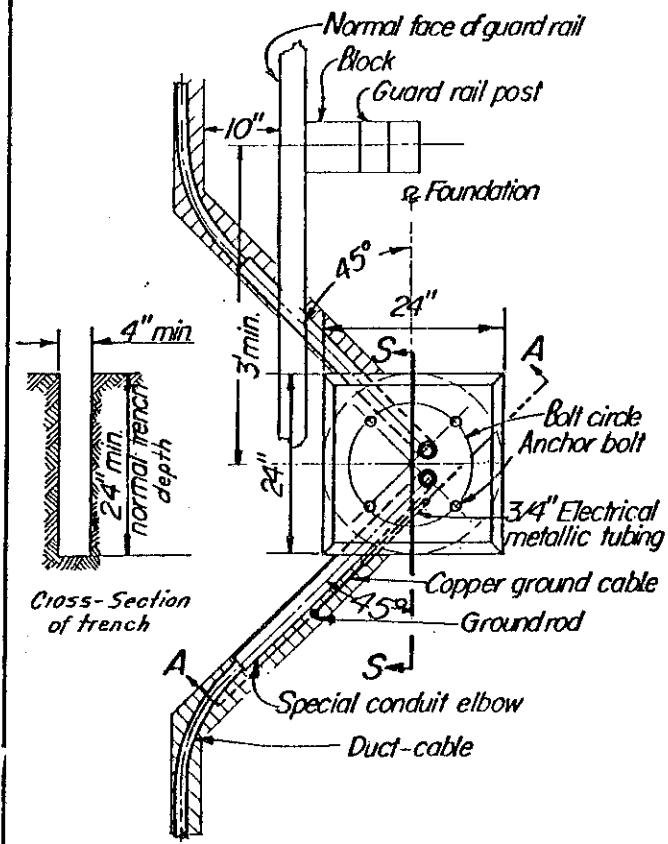
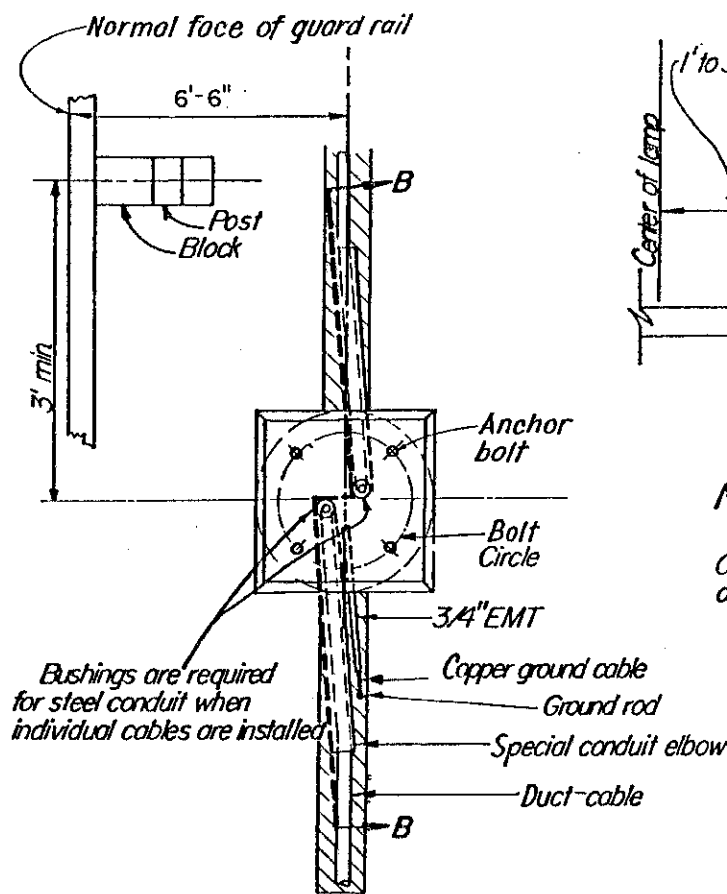


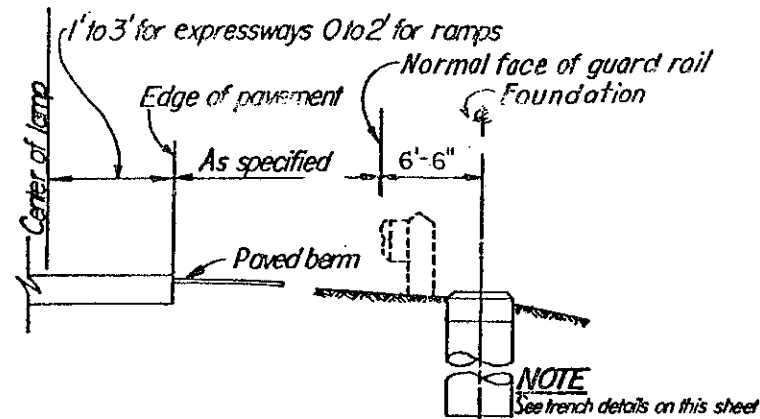
# FOUNDATION AND TRENCH DETAILS



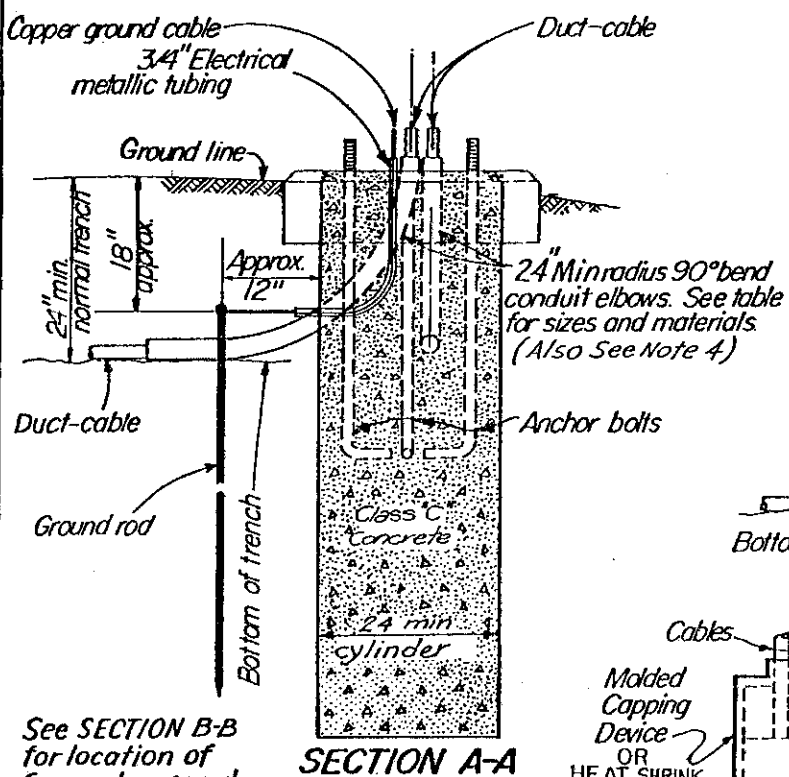
**Cross-Section of trench**



**NORMAL TRENCH ALIGNMENT**

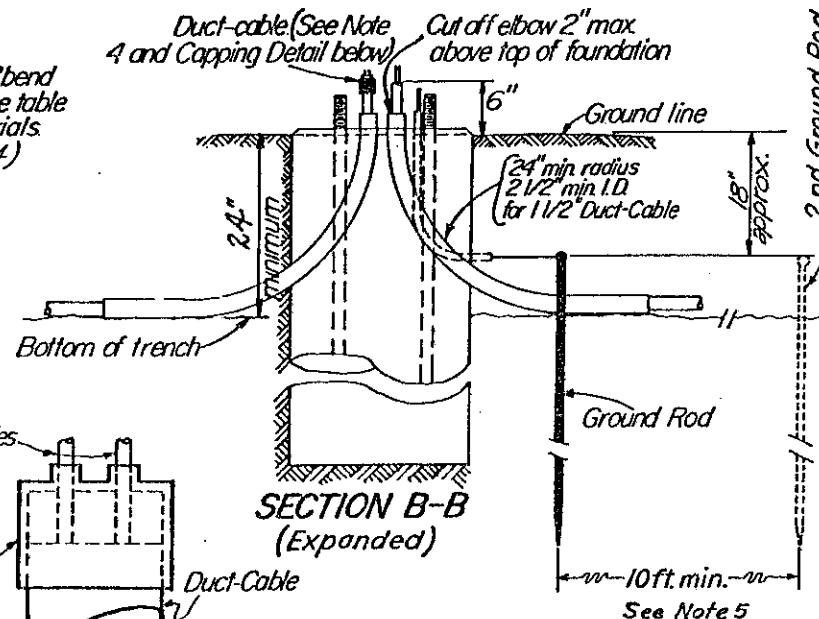


**NORMAL LOCATION OF LIGHT POLE FOUNDATION**  
Opposite hand for poles mounted on left side of pavement.

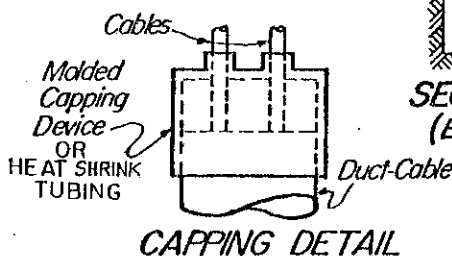


**ALTERNATE TRENCH ALIGNMENT**  
(Use as directed by the Engineer)

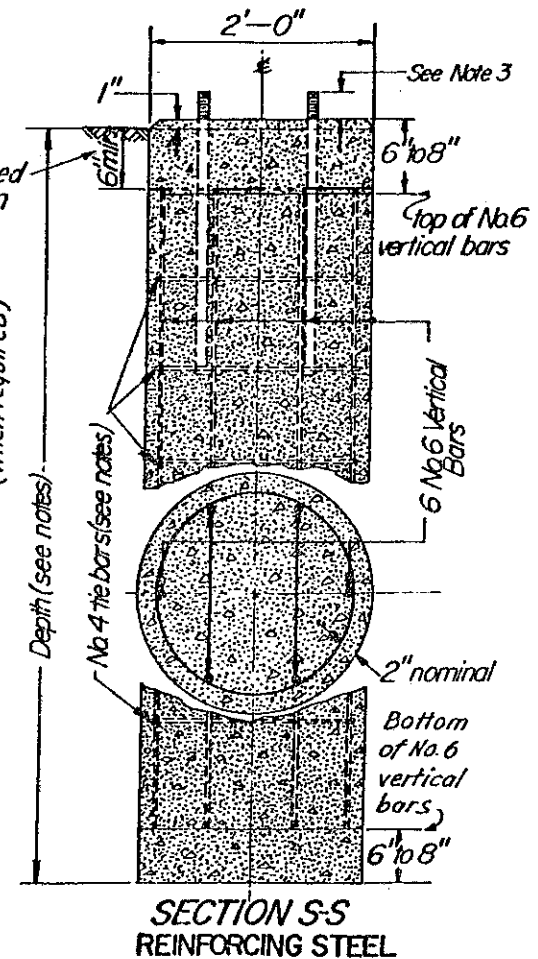
**SECTION A-A**



**SECTION B-B (Expanded)**



**CAPPING DETAIL**



**SECTION S-S REINFORCING STEEL**

## NOTES

**1. FOUNDATION**

Minimum depths to be as follows:  
6 feet for poles having a mounting height less than 40 ft.  
8 feet for poles having a mounting height 40 ft. thru 44 ft.  
9 feet for poles having a mounting height 45 ft. thru 49 ft.  
10 feet for poles having a mounting height of 50 ft. thru 55 ft.

No. 4 Tie bars required as follows:  
4 No. 4 tie bars for 6 ft depth  
5 No. 4 tie bars for 8 and 9 ft. depth  
6 No. 4 tie bars for 10 ft. depth  
Rotate bars to clear conduits.

**2. COPPER GROUND CABLE:**

No. 4 AWG, stranded insulated copper ground cable shall be used. Exothermically weld cable to ground rod, run free end through 3/4" EMT and connect as shown on HL-60.11.  
Use two coats of insulating varnish over exothermic weld and exposed conductor.

**3. ANCHOR BOLT DATA:**

For anchor bolt data see HL-10.13, POLE BASE DETAILS

**4. CONDUIT:**

Where 2" or 3" diameter conduit terminates in a foundation the conduit elbows in the foundation shall be the same size as the conduit. The ends of conduit elbows containing distribution cable shall be closed as described in 625.13

When the terminating conduit is steel the conduit elbows in the pole foundation shall also be steel.

At the last light pole on a circuit the vacant conduit elbow in the light pole foundation shall be stubbed out and capped.

**5. GROUND RODS:**

When a second ground rod is required it shall be installed in the cable trench as shown in SECTION B-B.

**6. REINFORCING STEEL:**

Reinforcing steel may be assembled in cages by approved welding of bars.

Subject to approval of the Engineer cages may be assembled in a spiral conformation.

SPECIAL CONDUIT ELBOWS 90° BENDS						
2" 2 1/2" 3" 3 1/2" 4" 4 1/2" 5" 5 1/2" 6" 6 1/2" 7" 7 1/2" 8" 8 1/2" 9" 9 1/2" 10" 10 1/2" 11" 11 1/2" 12" 12 1/2" 13" 13 1/2" 14" 14 1/2" 15" 15 1/2" 16" 16 1/2" 17" 17 1/2" 18" 18 1/2" 19" 19 1/2" 20" 20 1/2" 21" 21 1/2" 22" 22 1/2" 23" 23 1/2" 24" 24 1/2" 25" 25 1/2" 26" 26 1/2" 27" 27 1/2" 28" 28 1/2" 29" 29 1/2" 30" 30 1/2" 31" 31 1/2" 32" 32 1/2" 33" 33 1/2" 34" 34 1/2" 35" 35 1/2" 36" 36 1/2" 37" 37 1/2" 38" 38 1/2" 39" 39 1/2" 40" 40 1/2" 41" 41 1/2" 42" 42 1/2" 43" 43 1/2" 44" 44 1/2" 45" 45 1/2" 46" 46 1/2" 47" 47 1/2" 48" 48 1/2" 49" 49 1/2" 50" 50 1/2" 51" 51 1/2" 52" 52 1/2" 53" 53 1/2" 54" 54 1/2" 55" 55 1/2" 56" 56 1/2" 57" 57 1/2" 58" 58 1/2" 59" 59 1/2" 60"						
R	S	Y	R	S	Y	
24"	11"	35"	24"	8"	32"	
30"	11"	41"	36"	2"	38"	
36"	11"	47"	42"	12"	54"	
42"	12"	54"	48"	12"	60"	

BUREAU OF DESIGN SERVICES  
DIVISION OF HIGHWAYS  
OHIO DEPARTMENT OF TRANSPORTATION

**HIGHWAY LIGHTING**

FOUNDATION AND TRENCH DETAILS

DATE 5-1-87

STANDARD CONSTRUCTION DRAWING HL-20.11

APPROVED: [Signature] Engineer of Design Services