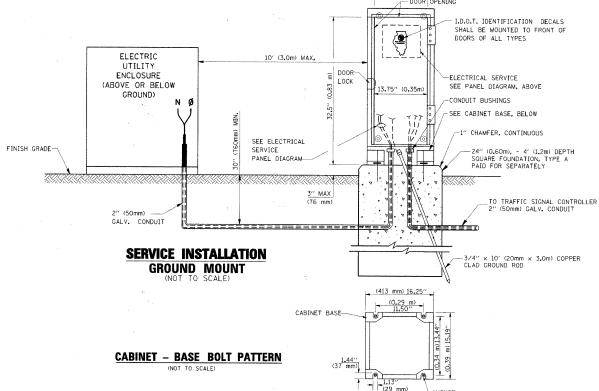


ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE) SERVICE INSTALLATION POLE MOUNT (SHOWN)

CABLE HOOKS REQUIRED, ALL-HANDHOLES -GROUND CABLES TO CONTROLLER DOUBLE HANDHOLE 13.75" (0.35 m) DOOR OPENING TO POLE OR I.D.O.T. IDENTIFICATION DECALS SHALL BE MOUNTED TO FRONT OF DOORS OF ALL TYPES EQUIPMENT GROUNDING 1/C #6 GROUND (GREEN ELECTRIC 10' (3.0m) MAX. COLOR CODED) UTH ITY -U.L. LISTED ENCLOSURE -ELECTRICAL SERVICE LOCK (ABOVE OR BELOW SEE PANEL DIAGRAM, ABOVE GROUND) -CONDUIT BUSHINGS HANDHOLE COVER & FRAME - GROUNDING DETAIL -SEE CABINET BASE, BELOW (NOT TO SCALE)

BOLT LOCATIONS



NOTES:

- HANDHOLF COVER

DETAIL "A"

DETAIL "B"

POST AS REQ'D.

HEAVY DUTY COPPER COMPRESSION GROUNDING TERMINAL, (TYPICAL)

HANDHOLE COVER HANDI F

CAST CORNER FRAME WEB-

COMPRESSION TERMINAL WITH STAINLESS STEEL NU

ANTI-CORROSION COMPOUND SHALL BE APPLIED TO THE ASSEMBLY.

-SEE DETAIL "B"

RECESSED COVER

ANTI-CORROSION COMPOUND -

SEE DETAIL "A" -

(2) 1/2" × 1 1/4" STAINLESS STEEL BOLT WITH SPLIT LOCK WASHER AND NYLON INSERT LOCKOUT WELDED TO FRAME AND TO COVER. (TYPICAL)

ANTI-CORROSION COMPOUND SHALL BE APPLIED TO EACH ASSEMBLY.

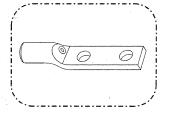
SHALL BE APPLIED ON ALL
BOLT/ CONNECTION ASSEMBLIES.
-STAINLESS STEEL BOLT, NUT AND 2
STAINLESS STEEL WASHERS

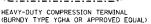
UL LISTED GROUND COMPRESSION TERMINAL

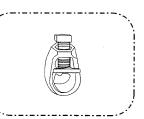
HANDHOLF FRAME

GROUNDING SYSTEM

- 1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE $3/4^{\prime\prime}$ DIA. \times 10'-0" (20mm \times 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
- 2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
- 3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- 4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

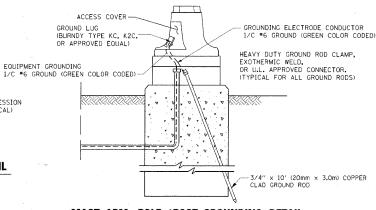






3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP

• ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED. • GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



MAST ARM POLE / POST-GROUNDING DETAIL

TS-05 3 OF 6

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION		
NAME	DATE	ILLINOIS DEI ANTIMEN	II OI INANSFORTATION	
CADD	5/30/00			
CADD	3/15/01	DISTRICT 1		
BUREAU OF TRAFFIC	1-01-02			
BCK	10/28/09	STANDARD	TRAFFIC SIGNAL	
		DESIG	DESIGN DETAILS	
			DESIGN DETAILS	
		SCALE: NONE	554WW 577 56W	
		SCALE: NUNE	DRAWN BY BCK DESIGNED BY DAD	
			CHECKED BY DAD	

EXISTING HANDHOLE FRAME AND COVER (PAID FOR SEPARATELY) EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL (NOT TO SCALE)