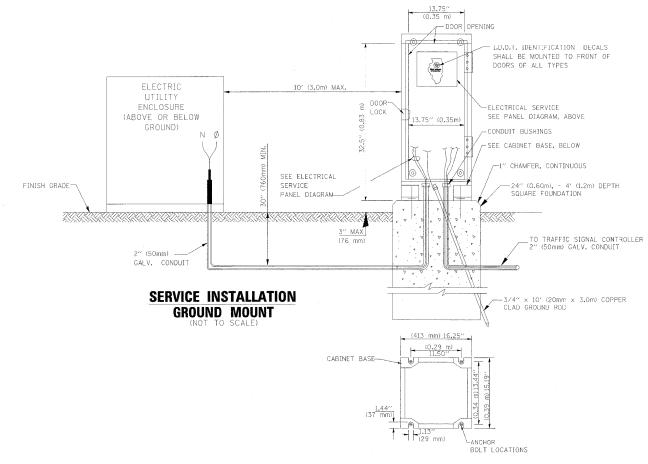


ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE) SERVICE INSTALLATION POLE MOUNT (SHOWN)



DESIGNED - NB/TCM

NB/TCM

01/23/2009

DRAWN

CHECKED

P:\P-08-1600-4\Design\3_Indiana at 142nd\Sht\SHT005.DGN

PLOT SCALE = 60.0001 ' / IN

PLOT DATE = 1/27/2009

CABINET - BASE BOLT PATTERN

REVISED

REVISED

REVISED REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



DIRECT BURIAL

EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL

CAST CORNER FRAME WEB -

ANTI-CORROSION COMPOUND

-STAINLESS STEEL NUT AND 2 STAINLESS

SEE DETAIL "A"

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

HANDHOLES

SHALL BE APPLIED ON ALL

UL LISTED GROUND COMPRESSION CONNECTOR

UL LISTED GROUND

COMPRESSION CONNECTOR -WITH STAINLESS STEEL NUT

(NOT TO SCALE)

SCALE: NTS

HANDHOLE COVER & FRAME - GROUNDING DETAIL

NOTES:

HANDHOLE ERAME

DETAIL "A"

DETAIL "B"

- RECESSED COVER

GROUND CABLES

DOUBLE HANDHOLE

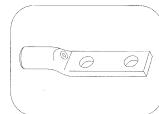
POST AS REQ'D.

- SEE DETAIL "B"

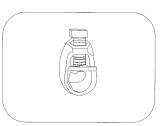
-- HANDHOLE COVER HANDLE

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
 (HADHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE
 3/4" DIA. x 10'-0" (20mm x 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
- 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.
- 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.



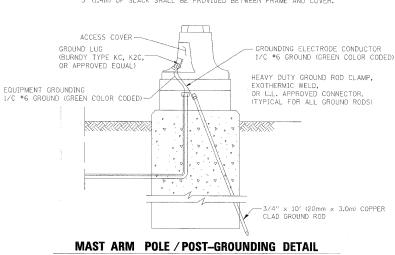




3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED ELAL)

NOTES:

• 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 BETWEEN FRAME AND COVER.



	(NOT TO SCALE)	
REVISIONS DATE	ILLINOIS DEPARTMENT	OF TRANSPORTATION
	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS	
	SCALE, VERT. NONE HORIZ. NONE DATE 09-11-2007	DRAWN BY: BL CHECKED BY: ER/TC

| DATE 09-11-2007 | CHECKED BY: EN / U
| DATE 09-11-2007 | COUNTY | STALL | SHEET | STALL | SH