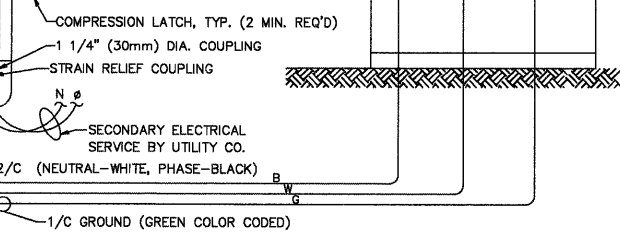


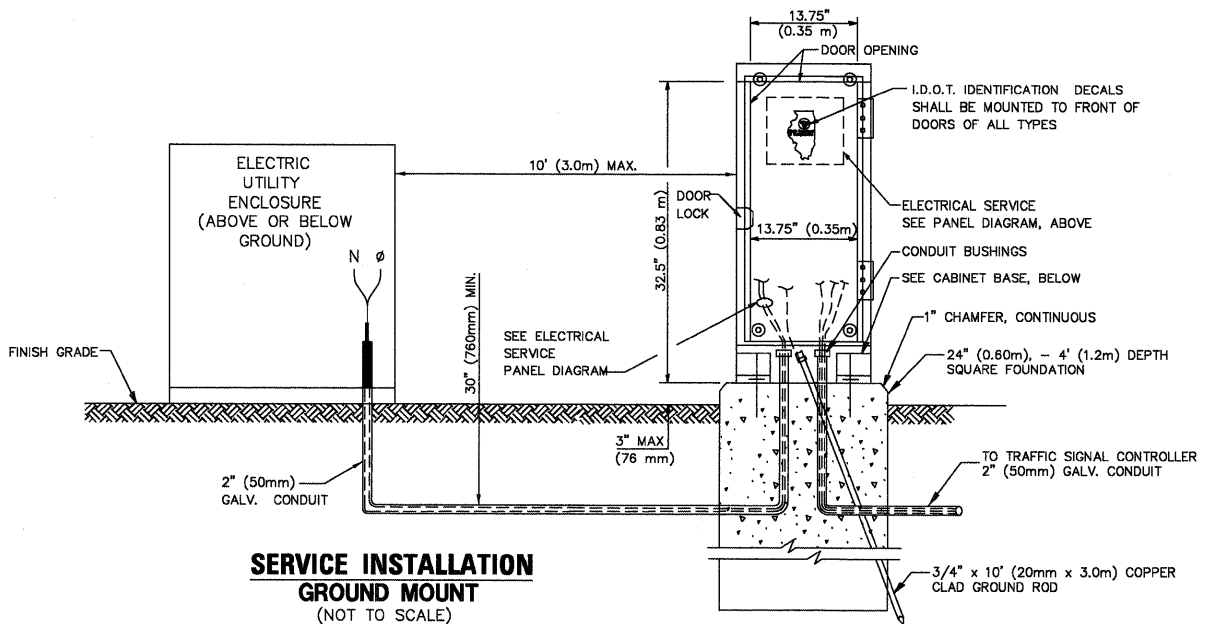
- NOTES:**
- ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
 - ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.

MOUNTING PLATE TOP & BOTTOM AS PER MANUFACTURER
 CABINET, SHEET ALUMINUM FABRICATION
 CONTINUOUS PIANO HINGE
 POLE MOUNTED SERVICE CABINET OUTSIDE DIMENSIONS L 6" x W 12" x H 14" (150mm) x W (300mm) x H (355mm)

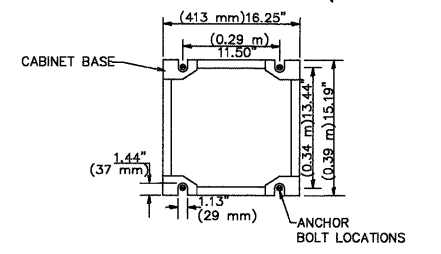
POWER INDICATOR LIGHT - INTERNALLY MOUNTED FOR GROUND MOUNTED SERVICE
 TO GROUND ROD 1/C #6 (GREEN)
 3/4" (20mm) GALV. CONDUIT
 ELECTRICAL SERVICE TO TRAFFIC SIGNAL CONTROLLER (SEE ALL CABLE PLAN, FOR ALL CABLE SIZES)



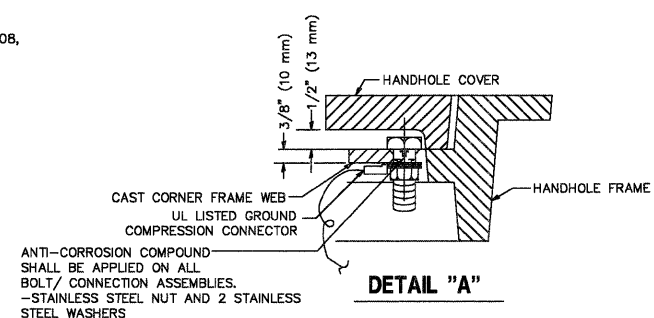
**ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
 SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)**



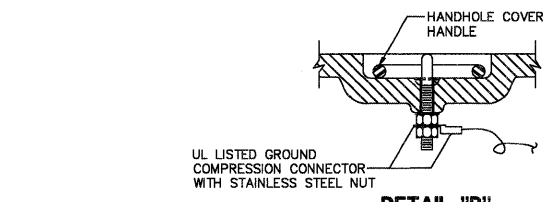
**SERVICE INSTALLATION GROUND MOUNT
 (NOT TO SCALE)**



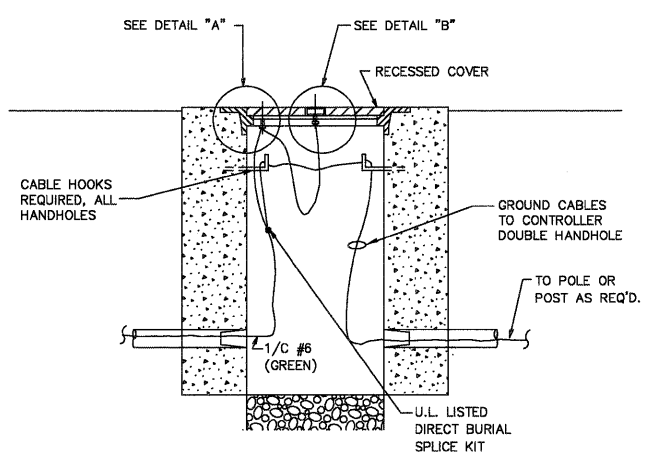
**CABINET - BASE BOLT PATTERN
 (NOT TO SCALE)**



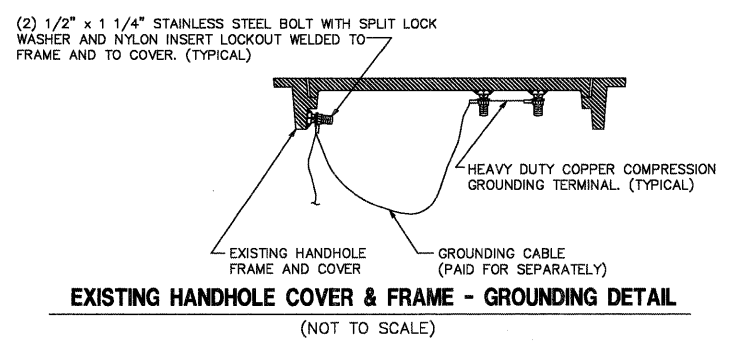
DETAIL "A"



DETAIL "B"



**HANDHOLE COVER & FRAME - GROUNDING DETAIL
 (NOT TO SCALE)**

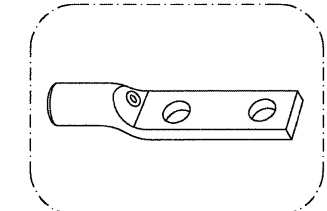


**EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL
 (NOT TO SCALE)**

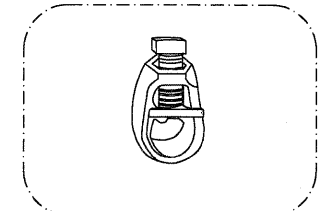
NOTES:

GROUNDING SYSTEM

- 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" 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, LAKE COUNTY DIVISION OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
- 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.
- THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



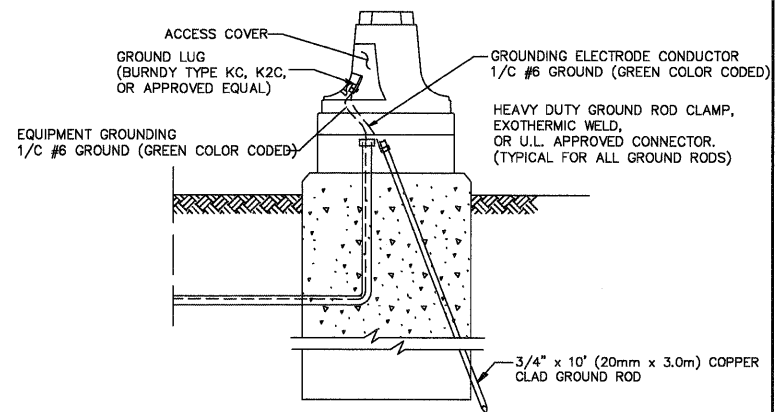
**HEAVY-DUTY COMPRESSION TERMINAL
 (BURNDY TYPE YGHA OR APPROVED EQUAL)**



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

NOTES:

- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPEO 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
 (NOT TO SCALE)**

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**DISTRICT ONE
 STANDARD TRAFFIC SIGNAL
 DESIGN DETAILS**
 SCALE: VERT. NONE
 HORIZ. NONE
 DATE 1-01-02
 DRAWN BY: RWP
 DESIGNED BY: DAD
 CHECKED BY: DAZ
 SHEET 3 OF 4

FILE NAME = 4085.800-TR1.dgn
 USER NAME =
 PLOT SCALE = 1"=20'
 PLOT DATE = 1/29/09

DESIGNED - JRD
 DRAWN - LJD
 CHECKED - KLB
 DATE - 1/29/09

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

**DISTRICT ONE STANDARD TRAFFIC SIGNAL
 DESIGN DETAILS**
 SCALE: NONE SHEET NO. 5 OF 21 SHEETS STA. TO STA.

F.A.J. RITE: 27H SECTION: 2009-005 TS COUNTY: 097(LAKE)K TOTAL SHEETS: 21 SHEET NO.: 5 CONTRACT NO. 60601 ILLINOIS FED. AID PROJECT