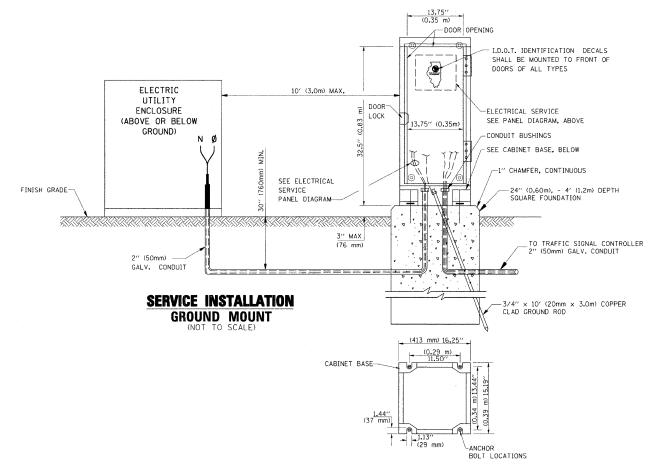


ELECTRICAL SERVICE — PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE) SERVICE INSTALLATION POLE MOUNT (SHOWN)



CABINET - BASE BOLT PATTERN

HANDHOLE COVER

DETAIL "A"

HANDHOLE COVER

HANDLE

DETAIL "B"

- RECESSED COVER

- III. LISTED

GROUND CARLES

TO CONTROLLER

TO POLE OR

POST AS REQ'D.

-SEE DETAIL "B"

CAST CORNER FRAME WEB-

ANTI-CORROSION COMPOUND
SHALL BE APPLIED ON ALL
BOLT/ CONNECTION ASSEMBLIES.

-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 FRAME AND TO COVER. (TYPICAL)

- EXISTING HANDHOLE

FRAME AND COVER

CABLE HOOKS

HANDHOLES

REQUIRED, ALL

UL LISTED GROUND COMPRESSION CONNECTOR

UL LISTED GROUND

COMPRESSION CONNECTOR -WITH STAINLESS STEEL NU

(GREEN)

HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

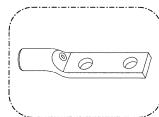
STA. TO STA. FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

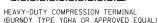
SECTION

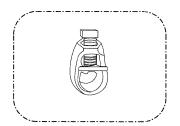
COLINTY

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" DIA. × 10'-0" (20mm × 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 POSLEMS, THE RESIDENT
 ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC,
 ILLINOIS DEPARTMENT 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.
- 4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.





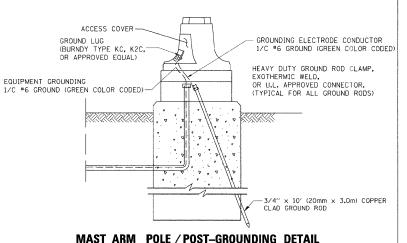


3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EUAL)

NOTES:

BUREAU OF TRAFFIC

• 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.



TE ILLINOIS DEPARTMENT OF TRANSPORTATION

1/30/00
3/15/01
DISTRICT 1
1/01/02
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

SCALE: VERT. NONE DESIGNED BY: DAD CHECKED BY: DAD

NOTES:

EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

GROUNDING CABLE
(PAID FOR SEPARATELY)

HEAVY DUTY COPPER COMPRESSION

GROUNDING TERMINAL, (TYPICAL)