

GALV. CONDUIT

**SERVICE INSTALLATION** 

**GROUND MOUNT** 

## SEE DETAIL "A" - SEE DETAIL "B" - RECESSED COVER - DOOR OPENING I.D.O.T. IDENTIFICATION DECALS SHALL BE MOUNTED TO FRONT OF DOORS OF ALL TYPES CABLE HOOKS - GROUND CABLES TO CONTROLLER DOUBLE HANDHOLE FLECTRIC 10' (3.0m) MAX. UTILITY DOOR: **ENCLOSURE** -ELECTRICAL SERVICE LOCK (ABOVE OR BELOW SEE PANEL DIAGRAM, ABOVE 13.75" (O.35m TO POLE OR GROUND) POST AS REQ'D. -CONDUIT BUSHINGS - SEE CABINET BASE, BELOW L1/C \*6 (GREEN) SEE ELECTRICAL FINISH GRADE-SERVICE -24" (0.60m), - 4' (1.2m) DEPTH --- U.L. LISTED SQUARE FOUNDATION DIRECT BURIAL SPLICE KIT HANDHOLE COVER & FRAME - GROUNDING DETAIL TO TRAFFIC SIGNAL CONTROLLER (NOT TO SCALE)

' (50mm) GALV. CONDUIT

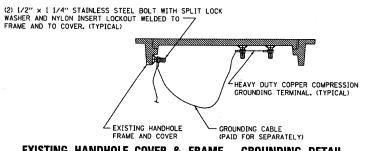
3/4" x 10' (20mm x 3.0m) COPPER CLAD GROUND ROD

(413 mm) 16.25"

- 1.13" (29 mm)

**CABINET - BASE BOLT PATTERN** 

BOLT LOCATIONS



EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

NOTES:

- HANDHOLE COVER

DETAIL "A"

DETAIL "B"

CAST CORNER FRAME WEB-

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

ANTI-CORROSION COMPOUND -

STEEL WASHERS

UL LISTED GROUND COMPRESSION CONNECTOR — WITH STAINLESS STEEL NUT

## GROUNDING SYSTEM

(847) 705-4139.

COUNTY SECTION 320 07-00138-26-TL WILL 19 STA. TO STA. FED. ROAD DIST. NO. \_ ILLINOIS FED. AID PROJECT

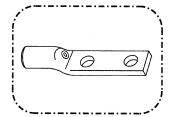
C-91-405-08

CONTRACT NO. 63329 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.  $\times$  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.

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.

ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT

- 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,





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

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

· 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.

