

(NOT TO SCALE)

-ANCHOR BOLT LOCATIONS

- DOOR OPENING I.D.O.T. IDENTIFICATION DECALS SHALL BE MOUNTED TO FRONT OF DOORS OF ALL TYPES 10' (3.0m) MAX. UTILITY DOOR: **ENCLOSURE** -ELECTRICAL SERVICE LOCK (ABOVE OR BELOW SEE PANEL DIAGRAM, ABOVE 13,75" (0.35m) GROUND) CONDUIT BUSHINGS -SEE CABINET BASE, BELOW CHAMFER, CONTINUOUS SEE ELECTRICAL FINISH GRADE-SERVICE 24" (0,60m), - 4" (1,2m) DEPTH SQUARE FOUNDATION, TYPE A PAID FOR SEPARATELY PANEL DIAGRAM 3" MAX TO TRAFFIC SIGNAL CONTROLLER 2" (50mm) GALV. CONDUIT (76 mm) 2" (50mm) GALV. CONDUIT **SERVICE INSTALLATION** -3/4" × 10' (20mm × 3.0m) COPPER CLAD GROUND ROD **GROUND MOUNT** (413 mm) 16.25" (0.29 m) 11.50" CABINET BASE-

- 1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508,

COMPRESSION TERMINAL ANTI-CORROSION COMPOUND SHALL BE APPLIED ON ALL BOLT/ CONNECTION ASSEMBLIES. -STAINLESS STEEL BOLT, NUT AND 2 STAINLESS STEEL WASHERS

CAST CORNER FRAME WEB:

UL LISTED GROUND -

- HANDHOLE COVER HANDLE UL LISTED GROUND COMPRESSION TERMINAL WITH STAINLESS STEEL NUT ANTI-CORROSION COMPOUND

DETAIL "B" SHALL BE APPLIED TO THE ASSEMBLY.

HANDHOLE COVER

DETAIL "A"

SEE DETAIL "A" - SEE DETAIL "B" - RECESSED COVER CABLE HOOKS REQUIRED, ALL GROUND CABLES HANDHOLES TO CONTROLLER TO POLE OR POST AS REQ'D. EQUIPMENT GROUNDING 1/C #6 GROUND (GREEN COLOR CODED) -U.L. LISTED DIRECT BURIAL SPLICE KIT

HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

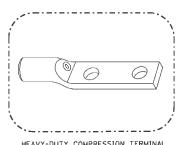
(2) 1/2" x 1 1/4" STAINLESS STEEL BOLT WITH SPLIT LOCK WASHER AND NYLON INSERT LOCKOUT WELDED 10 FRAME AND TO COVER, (TYPICAL) ANTI-CORROSION COMPOUND SHALL BE APPLIED TO EACH ASSEMBLY. HEAVY DUTY COPPER COMPRESSION GROUNDING TERMINAL. (TYPICAL) GROUNDING CABLE (PAID FOR SEPARATELY) — EXISTING HANDHOLE FRAME AND COVER **EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL**

(NOT TO SCALE:

NOTES:

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. \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

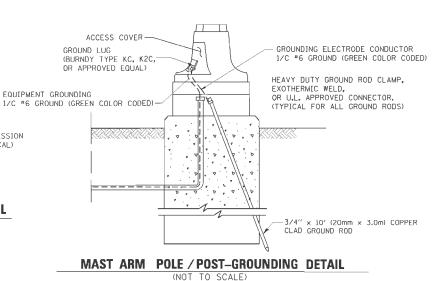




HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)

34" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EQUAL)

- 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.



REVISED DESIGNED -KMM FILE NAME = USER NAME = \$USER\$ <:\Projects\090064\De:</p> 60133IDOT DETAIL_3.dgr DRAWN ΙV REVISED PLOT SCALE = #SCALE# CHECKED JDH REVISED PLOT DATE = 5/7/2012 DATE 5/11/2012 REVISED

CABINET - BASE BOLT PATTERN (NOT TO SCALE)

> STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE - STANDARD TRAFFIC SIGNAL DESIGN DETAILS SCALE: N.T.S. SHEET NO. 3 OF 6 SHEETS STA.

SHEE. SECTION COUNTY 349 (10 & 11 VB) R-3 507 167 KANE AND KENDALL CONTRACT NO. 60133