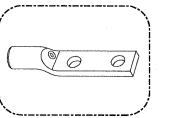
NOTES: FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

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 $3/4^{\prime\prime}$ 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
- 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.



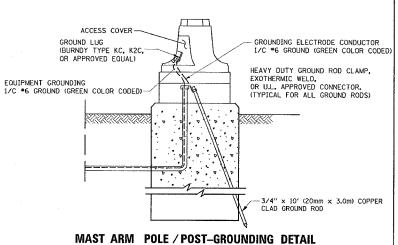
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



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

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 IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



(NOT TO SCALE)

ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE BUREAU OF TRAFFIC STANDARD TRAFFIC SIGNAL DESIGN DETAILS

DATE: 11/7/2007

MOUNTING PLATE TOP & BOTTOM AS PER-NOTES: **MANUFACTURER** -STANDOFF 1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, (H) CABINET. SHEET ALUMINUM -PANELBOARD INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL. FABRICATION PRESSURE 2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED. CONNECTOR, TYP. 60A. MAIN CONTINUOUS PIANO HINGE-DISCONNECT -15A, MAIN DISCONNECT FUSE, KLKR 1/4 A TRAFFIC SIGNAL CONTROLLER CABINET POLE MOUNTED SERVICE -PADLOCK, FURNISHED BY CABINET OUTSIDE
DIMENSIONS L 6" × W 12" × H 14" CONTRACTOR, KEYED TO DISTRICT 1 REQUIREMENTS CIRCUIT BREAKER L (150mm) x W (300mm) x H (355mm) -STAINLESS STEEL NUT AND 2 STAINLESS STEEL WASHERS NEUTRAL GROUND POWER INDICATOR LIGHT
-INTERNALLY MOUNTED FOR—
GROUND MOUNTED SERVICE -COMPRESSION LATCH, TYP. (2 MIN. REQ'D) -1 1/4" (30mm) DIA. COUPLING STRAIN RELIEF COUPLING

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

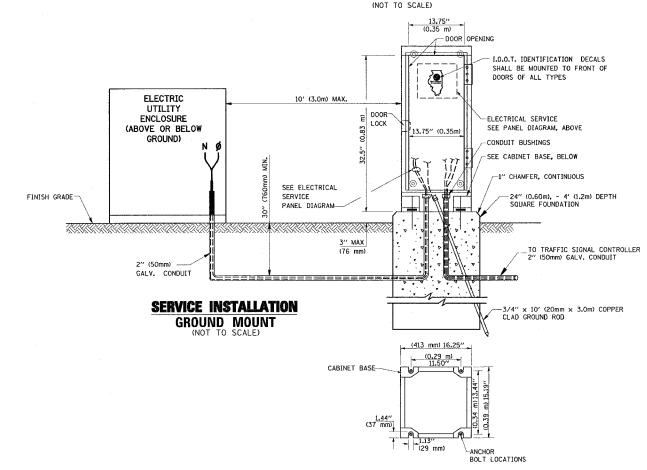
SERVICE INSTALLATION POLE MOUNT (SHOWN)

-2/C (NEUTRAL-WHITE, PHASE-BLACK)

-SECONDARY ELECTRICAL

SERVICE BY UTILITY CO.

-1/C GROUND (GREEN COLOR CODED)



TO GROUND ROD-

1/C #6 (GREEN)

ELECTRICAL SERVICE TO

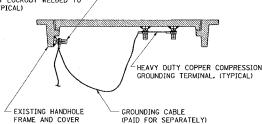
TRAFFIC SIGNAL CONTROLLER

3/4" (20mm) GALV, CONDUIT

(SEE ALL CABLE PLAN, FOR ALL CABLE SIZES)

CABINET - BASE BOLT PATTERN (NOT TO SCALE)

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



HANDHOLE COVER

DETAIL "A"

DETAIL "B"

RECESSED COVER

-U.L. LISTED

DIRECT BURIAL

GROUND CARLES

TO POLE OR

POST AS REO'D.

-- SEE DETAIL "B"

HANDHOLE COVER HANDLE

CAST CORNER FRAME WEB-

ULLISTED GROUND COMPRESSION CONNECTOR

UL LISTED GROUND

SEE DETAIL "A"

CABLE HOOKS

REQUIRED, ALL

COMPRESSION CONNECTOR ---WITH STAINLESS STEEL NUT

€1/C #6

(GREEN)

HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

HANDHOLE FRAME

EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

PLOT FILE PLOT USER

TS05 REVISION DATE: 01/01/02