COUNTY

TO STA.

LAKE

TOTAL SHEET SHEETS NO.

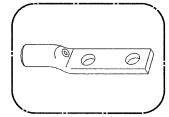
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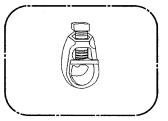
1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE $3/4^{\prime\prime\prime}$ 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 (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.

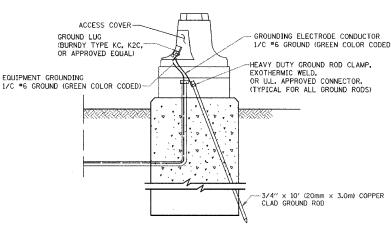


HEAVY-DUTY COMPRESSION TERMINAL
(BURNDY TYPE YGHA OR APPROVED EQUAL)



¾" (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.



MAST ARM POLE / POST-GROUNDING DETAIL (NOT TO SCALE)

REVISIONS	ILLINOIS DEPARTMENT	OF TRANSPORTATION
NAME DATE	LELITOIS DE ANTINETT	or mans official
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	STANDARD TRA	FFIC SIGNAL
	DESIGN D	
	SCALE: VERT. NONE HORIZ. DATE 1-01-02	DRAWN BY: RWP DESIGNED BY: DAD CHECKED BY: DAZ SHEET 3 OF 4

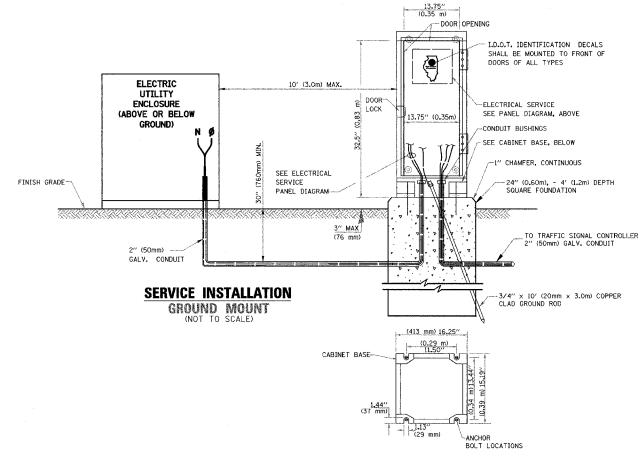
MOUNTING PLATE 0 0 TOP & BOTTOM AS PER-NOTES: MANUFACTURER --STANDOFF 1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, **((H)** CABINET, SHEET ALUMINUM ---PANELBOARD INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL. FABRICATION --PRESSURE 2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED. CONNECTOR, TYP. ~60A, MAIN CONTINUOUS PIANO HINGE-DISCONNECT ---15A, MAIN -FUSE, KLKR 1/4 A TRAFFIC SIGNAL CONTROLLER CABINET -LOCK, HASE POLE MOUNTED SERVICE -PADLOCK, FURNISHED BY CONTRACTOR, KEYED TO CABINET OUTSIDE DIMENSIONS L 6" × W 12" × H 14" 1 CIRCUIT DISTRICT 1 REQUIREMENTS BREAKER NEUTRAL GROUND BUS BUS POWER INDICATOR LIGHT -INTERNALLY MOUNTED FOR -COMPRESSION LATCH, TYP. (2 MIN. REO'D) GROUND MOUNTED SERVICE -1 1/4" (30mm) DIA, COUPLING -STRAIN RELIEF COUPLING TO GROUND ROD--SECONDARY ELECTRICAL 1/C #6 (GREEN) SERVICE BY LITTLETY CO. 3/4" (20mm) GALV. CONDUIT 2/C (NEUTRAL-WHITE, PHASE-BLACK) 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)

--1/C GROUND (GREEN COLOR CODED)



CABINET - BASE BOLT PATTERN (NOT TO SCALE)

(2) $1/2^{\prime\prime} \times 1~1/4^{\prime\prime}$ STAINLESS STEEL BOLT WITH SPLIT LOCK WASHER AND NYLON INSERT LOCKOUT WELDED TO FRAME AND TO COVER. (TYPICAL) HEAVY DUTY COPPER COMPRESSION EXISTING HANDHOLE GROUNDING CABLE
(PAID FOR SEPARATELY) FRAME AND COVER

MANDHOLE COVER

DETAIL "A"

DETAIL "B"

RECESSED COVER

-U.L. LISTED

SPLICE KIT

DIRECT BURIAL

-GROUND CABLES TO CONTROLLER DOUBLE HANDHOLE

TO POLE OR

POST AS REQ'D.

- SEE DETAIL "B"

ANDHOLE COVER

CAST CORNER FRAME WEB

ANTI-CORROSION COMPOUND

SHALL BE APPLIED ON ALL BOLT/ CONNECTION ASSEMBLIES

-STAINLESS STEEL NUT AND 2 STAINLESS

SEE DETAIL "A" -

CABLE HOOKS

REQUIRED, ALL HANDHOLES

UL LISTED GROUND COMPRESSION CONNECTOR

UL LISTED GROUND

COMPRESSION CONNECTOR ---WITH STAINLESS STEEL NUT

(GREEN)

HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

HANDHOLE FRAME

EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

TS05