

CABINET - BASE BOLT PATTERN

ANCHOR BOLT LOCATIONS

NOTES:

GROUNDING SYSTEM

10 STA

SECTION

F.A. . RTE.

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

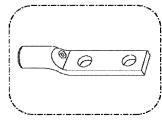
COUNTY

1. THE GROLINDING 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. x 10' 0" (20mm x 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 SUR-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.

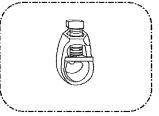
2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND

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.



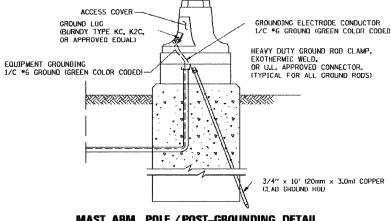
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



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

· 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)

CADD 3	/70 /00
	/30/00
	/15/01
BUREAU OF TRAFFIC 1.	/01/02

DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS

ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE: VERT. NONE DATE 10/18/2002

TSOS

10/18/2002

630.705.0110 voice, 630.839.2566 fax MILLENNIA ENGINEERING

TVN REVISED RAWN TVN REVISED CHECKED RPD REVISED 01/14/09 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

CAST CORNER FRAME WEB:

ANTI-CORROSION COMPOUND:

STEEL WASHERS

REQUIRED, ALL

HANDHOLES

FRAME AND TO COVER. (TYPICAL)

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 \longrightarrow

EXISTING HANDHOLE

EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

FRAME AND COVER

UL LISTED GROUND COMPRESSION CONNECTOR

UL LISTED GROUND COMPRESSION CONNECTOR — WITH STAINLESS STEEL NUT

Z1/C #6

HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

DETAIL "A"

HANDHOLE COVER

HANDLE

DETAIL "B"

RECESSED COVER

-u.i. LISTED

DIRECT BURIAL

TO CONTROLLER

DOUBLE HANDHOLE

TO POLE OR

POST AS REQ'D.

SEE DETAIL "B"

FAI 57/I-57 AT N. PEOTONE/JOLIET RD

GROUNDING CABLE
(PAID FOR SEPARATELY)

HEAVY DUTY COPPER COMPRESSION GROUNDING TERMINAL, (TYPICAL)

DISTRICT ONE STANDARD DETAILS TS-5C

TOTAL SHEET SHEETS NO. COUNTY 34 15 57 99-2H-1-I-2 WILL CONTRACT NO. 60D65 FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT

1/13/2009 P1/2007/1 1.00001

SHEET NO. OF SHEETS STA.