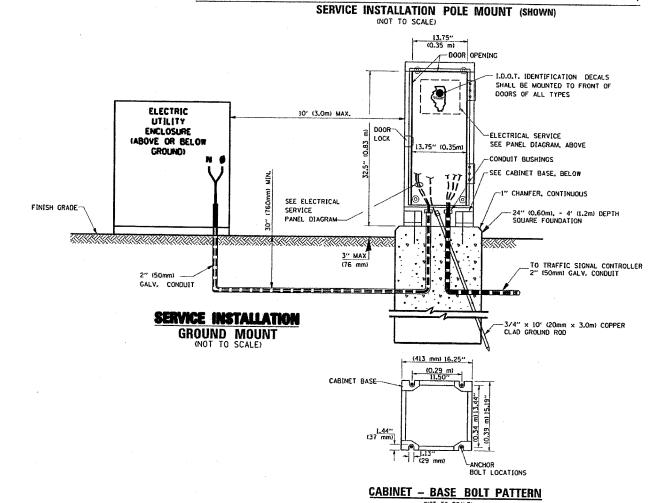


ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)



NOTES:

HANDHOLE COVER

DETAIL "A"

DETAIL "B"

RECESSED COVER

-U.L. LISTED

SPLICE KIT

GROUND CABLES TO CONTROLLER

TO POLE OR

POST AS REO'D.

- SEE DETAIL "B"

CAST CORNER FRAME WEB-

ANTI-CORROSION COMPOUND SHALL BE APPLIED ON ALL

BOLT/ CONNECTION ASSEMBLIES

-STAINLESS STEEL NUT AND 2 STAINLESS STEEL WASHERS

SEE DETAIL "A"

CABLE HOOKS REQUIRED, ALL

HANDHOLES

UL LISTED GROUND -COMPRESSION CONNECTOR

UL LISTED GROUND COMPRESSION CONNECTOR — WITH STAINLESS STEEL NUT

(GREEN)

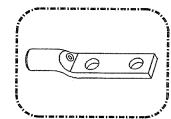
HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

SECTION COUNTY 541 2004-121 TS LAKE 19 5 STA. TO STA. FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

GROUNDING SYSTEM

- 1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE MLP. 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 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.

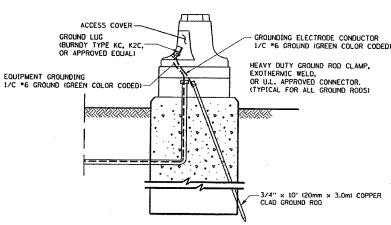


HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YCHA OR APPROVED EQUAL)



120mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EQUAL)

 ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED. * CROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' 12.0m) 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 NAME	DATE	ILLINOIS DEPARTMEN	T OF TRANSPORTATION
		DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS	
		SCALE: VERT. NONE HORIZ.	DRAWN BY: RWP DESIGNED BY: DAD CHECKED BY: DAZ

(2) 1/2" \times 1 1/4" STAINLESS STEEL BOLT WITH SPLIT LOCK WASHER AND NYLON INSERT LOCKOUT WELDED TO \longrightarrow HEAVY DUTY COPPER COMPRESSION GROUNDING TERMINAL, (TYPICAL) - EXISTING HANDHOLE GROUNDING CABLE
(PAID FOR SEPARATELY)

EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL

FRAME AND COVER

...\I013100\132@granada.m32 5/1/2006 2:28:32 PM User=kanthaphixavb

projects@traffic@t013100@132egranada.m32