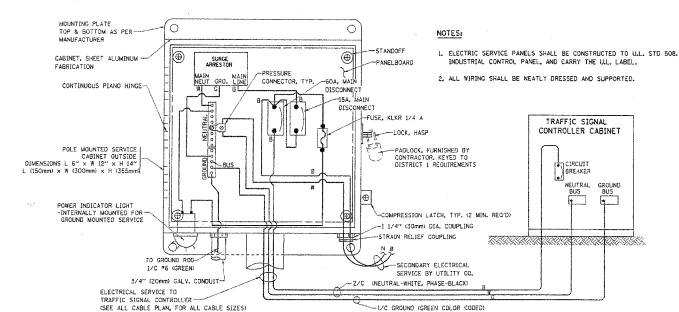
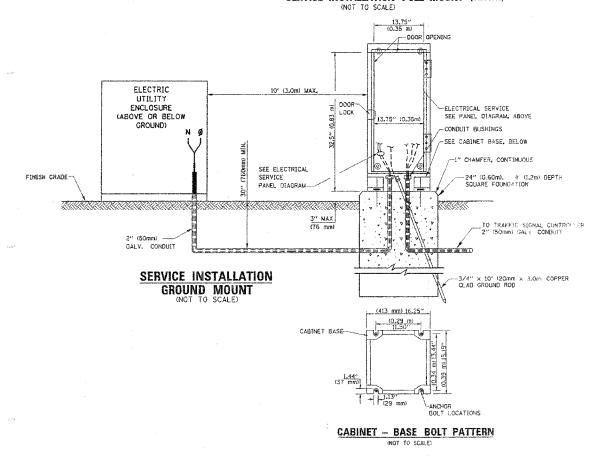
TOTAL SHEE SHEETS NO. SECTION COUNTY RTE. LAKE 336 04-00075-00-BT 42 STA. TO STA.

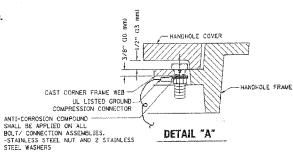
FED. ROAD DIST. NO. 1 | ILLINOIS HIGHWAY PROJECT

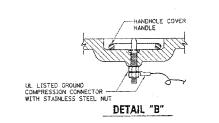
CONTRACT NO. 83890

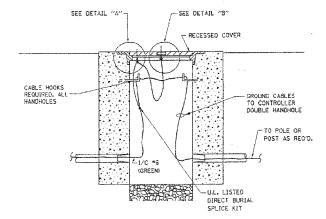


ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE) SERVICE INSTALLATION POLE MOUNT (SHOWN)



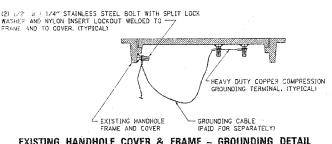






HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

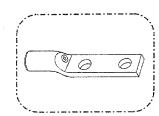


EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL

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 CHANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE $3/4^{\prime\prime}$ CIA, \times 10'-0" (20mm \times 3.0m) LONG, COPPER CLAD, ONE GROUND RCD 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.

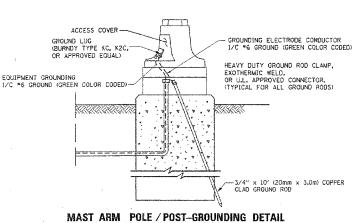




3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EUAL)

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.



REVISIONS

SMITH ENGINEERING CONSULTANTS, INC CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS UNILOSI ROCI DELLA ENORMERIS AND SOUTHER ON SOUTH DELTA CONTROLL OF SOUTH DESIGN FIRM \$ 184-00108

ILLINOIS DEPARTMENT OF TRANSPORTATION

VILLAGE OF MUNDELEIN CMAQ/SEAVEY BIKE PATH

DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS

DRAWN BY CFR CHECKED BY GFR