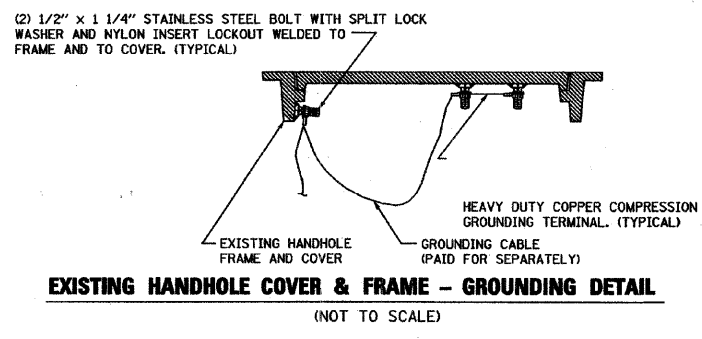
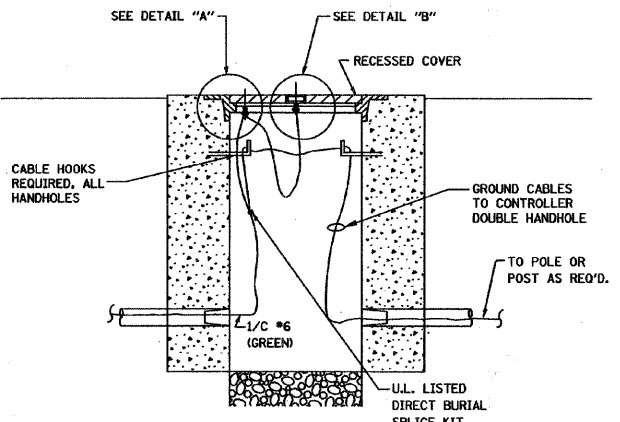
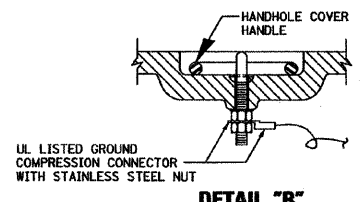
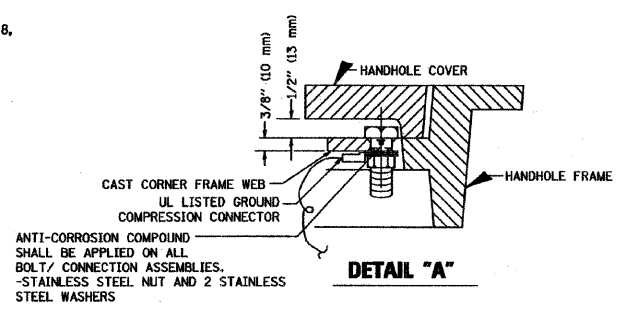
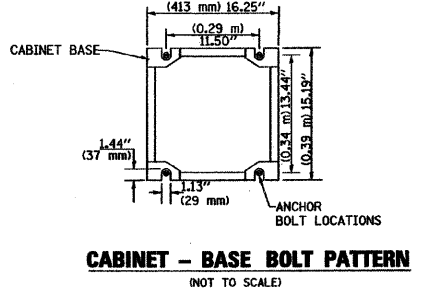
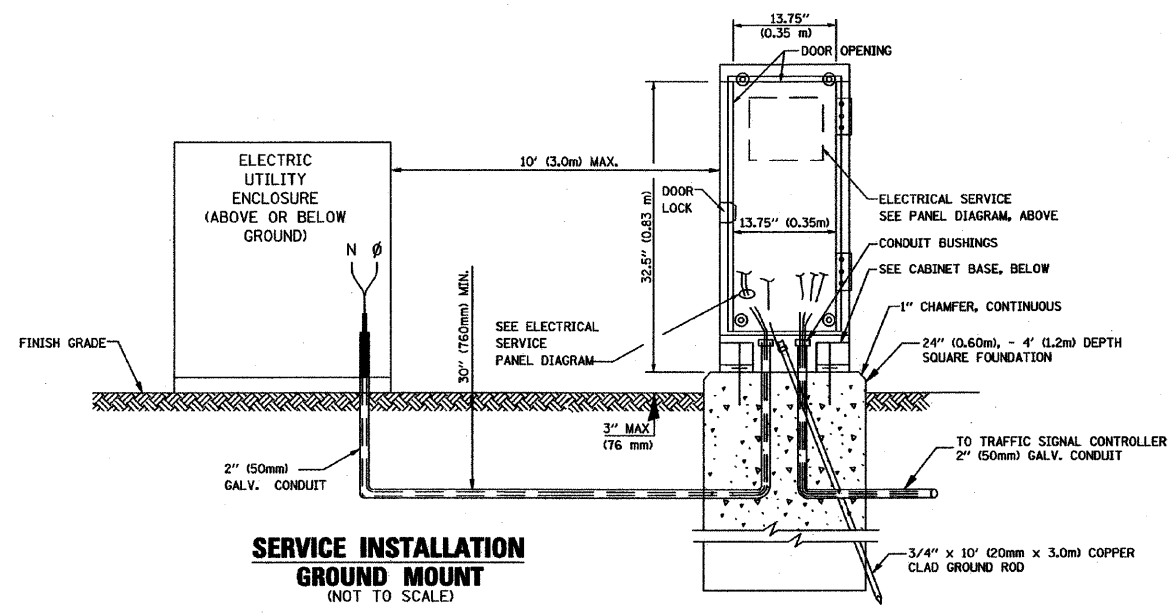


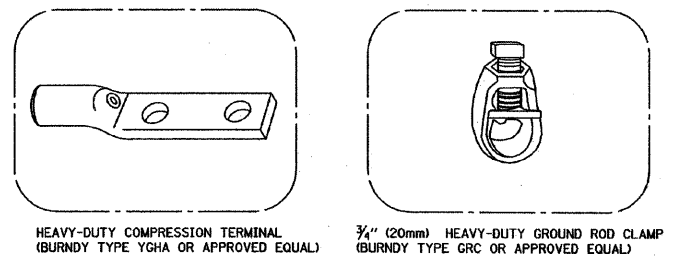
**ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)**  
**SERVICE INSTALLATION POLE MOUNT (SHOWN)**  
 (NOT TO SCALE)



**NOTES:**

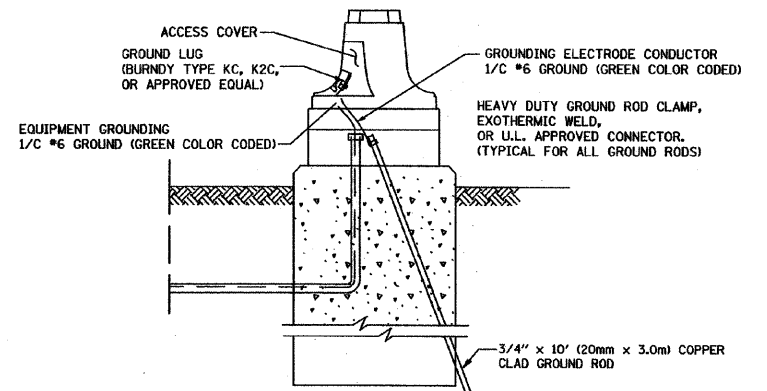
**GROUNDING SYSTEM**

- 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" 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.
- 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.
- ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



**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.



ROBERT E. HAMILTON  
 CONSULTING ENGINEERS P.C.  
 3230 EXECUTIVE DRIVE  
 JULIET, ILLINOIS 60431  
 PHONE: 815-730-3444  
 FAX: 815-730-6703

REVISIONS		
NO.	NAME	DATE
1	PER IDOT	8-13-09
2	PER IDOT	10-29-09

**McBRIDE ENGINEERING, INC.**  
 CIVIL ENGINEERS & SURVEYORS  
 ILLINOIS PROFESSIONAL DESIGN FIRM #184-000803  
 CORPORATION  
 3449 W. 183rd Street Suite 124  
 Hazel Crest, IL 60429-2409  
 708-799-1350  
 ARLINGTON HEIGHTS DIVISION  
 320 S. Belmont Avenue  
 Arlington Heights, IL 60005-2038  
 847-394-4810

VILLAGE OF CRETE  
 EXCHANGE STREET IMPROVEMENTS  
 CRETE, WILL COUNTY, ILLINOIS  
**STANDARD TRAFFIC SIGNAL DESIGN DETAILS**  
 DATE: 7-3-09  
 DRAWN BY: PG/ADM  
 CHECKED BY: LGB

M:\2004\04119.4\dwg\04119.806\_TRAFFIC SIGNAL PLANS.dwg 10/29/2009 11:26:59 AM CDT