

RGC TO

GROUND

WELL

TYPE "D" FOUNDATION

SERVICE ENTRANCE CABLES AND

CONDUIT AS SHOWN ON PLANS

ALL CIRCUIT BREAKERS ARE 600V

THERMAL-MAGNETIC, SQUARE D TYPE KH, CUTLER HAMMER TYPE FD, OR APPROVED EQUAL

SCHEMATIC DIAGRAM

NOTES:

- ELECTRIC SERVICE SHALL BE SINGLE PHASE THREE WIRE 240/480 VOLT. SERVICE CABLE AND CONDUIT SHALL BE COMPATIBLE WITH THE SERVICE.
- 2. THE ELECTRIC SERVICE EQUIPMENT ASSEMBLY SHALL BE UL LISTED AS SERVICE ENTRANCE EQUIPMENT AND ACCEPTABLE TO COM ED.
- 3. THE ELECTRIC SERVICE DISCONNECT ENCLOSURE SHALL BE AN ALUMINUM CONTROL CABINET, APPROXIMATELY 41"H X 24"W X 16"D, WITH A PIANO-HINGED DOOR, INSULATING BACK PANEL, LEVER HANDLE WITH 3-POINT LATCHING MECHANISM, PADLOCK PROVISION, AND DOOR STOP.
- 4. CIRCUIT BREAKER SHALL BE THERMAL MAGNETIC BOLT-ON TYPE WITH A MINIMUM INTERRUPTING CAPACITY OF 25,000 SYMMETRICAL AMPERES AT 600 VOLTS. THEY SHALL BE LOCKABLE IN THE "OFF" POSITION FOR OSHA LOCK-OUT/TAG-OUT, HANDLES SHALL BE TRIP FREE.
- 5. THE SURGE PROTECTOR SHALL BE SUITABLE FOR SINGLE PHASE 60 HZ
 ELECTRICAL SERVICE OF THE INDICATED VOLTAGE, WITH A SURGE ENERGY
 CAPABILITY OF 2160 JOULES OR BETTER AT 820 MICRO-SECOND PULSE, RATED
 -40 TO 60 DEGREES C., AND SHALL BE UL LISTED PER UL 1449, GENERAL
 ELECTRIC "TRANQUELL" MODEL 91.16ECB001 (240480 V).
- 6. CONNECTORS AND TERMINALS SHALL BE COPPER, INSULATED AND ISOLATED, AND CONFIGURED TO PREVENT SHORTS FROM TIGHTENING TERMINATIONS, ETC. THE OVERALL CONNECTORS AND TERMINALS SHALL BE LOCATED BEHIND A REMOVABLE DEAD-FRONT PANEL.
- 7. THE GROUND BUS BAR SHALL HAVE SPARE TERMINALS AS INDICATED. THE HEADS OF GROUND SCREWS SHALL BE PAINTED GREEN.
- 8. THE WIRING TERMINAL ARRANGEMENT, INCLUDING THE GROUND BAR, SHALL PROVIDE ADEQUATE ROOM FOR PERFORMING FIELD TERMINATIONS.
- 9. A WATERPROOF HOT-RUN LAMINATED LAYOUT AND CIRCUIT DIAGRAM SHALL BE AFFIXED WITH STAINLESS STEEL NUTS TO WELD STUDS ON THE INSIDE OF THE ENCLOSURE DOOR.
- THE CIRCUIT BREAKERS SHALL HAVE A 2-COLOR ENGRAVED PLASTIC NAMEPLATE, ATTACHED WITH SCREWS AND ENGRAVED AS SHOWN.
- 11. TERMINALS AND CONNECTORS SHALL BE RATED FOR 75* C CONDUCTORS.
- 12. A WORK PAD SHALL BE CONSTRUCTED WHERE THE DOOR SIDE OF THE ELECTRIC SERVICE DISCONNECT DOES NOT FACE AND ABUT PAVEMENT. THE SLAB SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 1068.01(b)(1)(f) OF THE STANDARD SPECIFICATIONS.
- 13. THE ELECTRIC SERVICE DISCONNECT SHALL BE LOCATED WITHIN THE IDOT RIGHT-OF-WAY, AND OUTSIDE THE CLEAR ZONE. THE DOOR OF THE ELECTRIC SERVICE DISCONNECT SHALL BE ORIENTED SO THAT A PERSON FACING THE ELECTRIC SERVICE DISCONNECT IS LOOKING TOWARD ONCOMING TRAFFIC (PREFERRED) OR ACROSS THE MAJOR STREET.
- 14. THE ELECTRIC SERVICE DISCONNECT FOUNDATION SHALL BE CONSTRUCTED IN COMPLIANCE WITH SECTION 878 OF THE STANDARD SPECIFICATIONS AND HIGHWAY STANDARD DRAWING 878001-03, AS MODIFIED ON THIS SHEET. CONFIRM ANCHOR BOLT SIZE AND LOCATIONS WITH CABINET SHOP DRAWINGS PRIOR TO CONSTRUCTING FOUNDATION THE GROUND ROD SHALL BE INSTALLED IN AN ACCESS WELL, AND SHALL NOT BE EMBEDDED IN THE FOUNDATION OR THE CONCRETE WORK PAD.
- 15. THE CABINET NAME PLATES SHALL BE STAINLESS STEEL, 1.588 mm (1/16") THICK, 75 mm (3") HIGH, AND OF A LEGNTH SUFFICIENT TO CONTAIN THE LEGEND, IN TWO ROWS OF ENGRAVED, BLACK-ENAMEL-FILLED TEXT 19 mm (34") TALL, WITH A 25 mm (1") MARGIN AT EACH END OF THE NAME PLATE.
- 16. THE NEUTRAL BOND IS TO BE MADE IN THE SERVICE DISCONNECT CABINET, NOT THE LIGHTING CONTROLLER CABINET. REFER TO SPECIAL PROVISIONS.

SERVICE DISCONNECT CABINET

FILE NAME =\2349_Lighting_Details_2.dgn	USER NAME = djk	DESIGNED - EE	REVISED -	OTATE OF HUMOIO	IL ROUTE 53 (BIESTERFIELD ROAD) @ 1–290	F.A.U. SECTION	COUNTY T	TOTAL SHEE
\2347_Lighting_Details_2.agh	PLOT SCALE = 50.0000 '/ IN.	CHECKED - DEM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LIGHTING DETAILS	1339 09-00054-00-CH	COOK 88 4	88 46
······	PLOT DATE = 7/26/2010	DATE - 07-07-10	REVISED -		SHEET NO. 1 OF 1 SHEETS	FED. ROAD DIST. NO. 1 ILLINOIS FED.		

ELEVATION (N. T. S.)

INSTALL GROUND ROD

16mm (5/8") X 3.0M (10') MIN.

FEEDER CABLES IN CONDUIT

TO LIGHTING CONTROLLER AS SHOWN ON PLANS.

INSTALL TWO 100 MM (4") DUCTS

FOR LOAD CONDUCTORS AND

SPARE