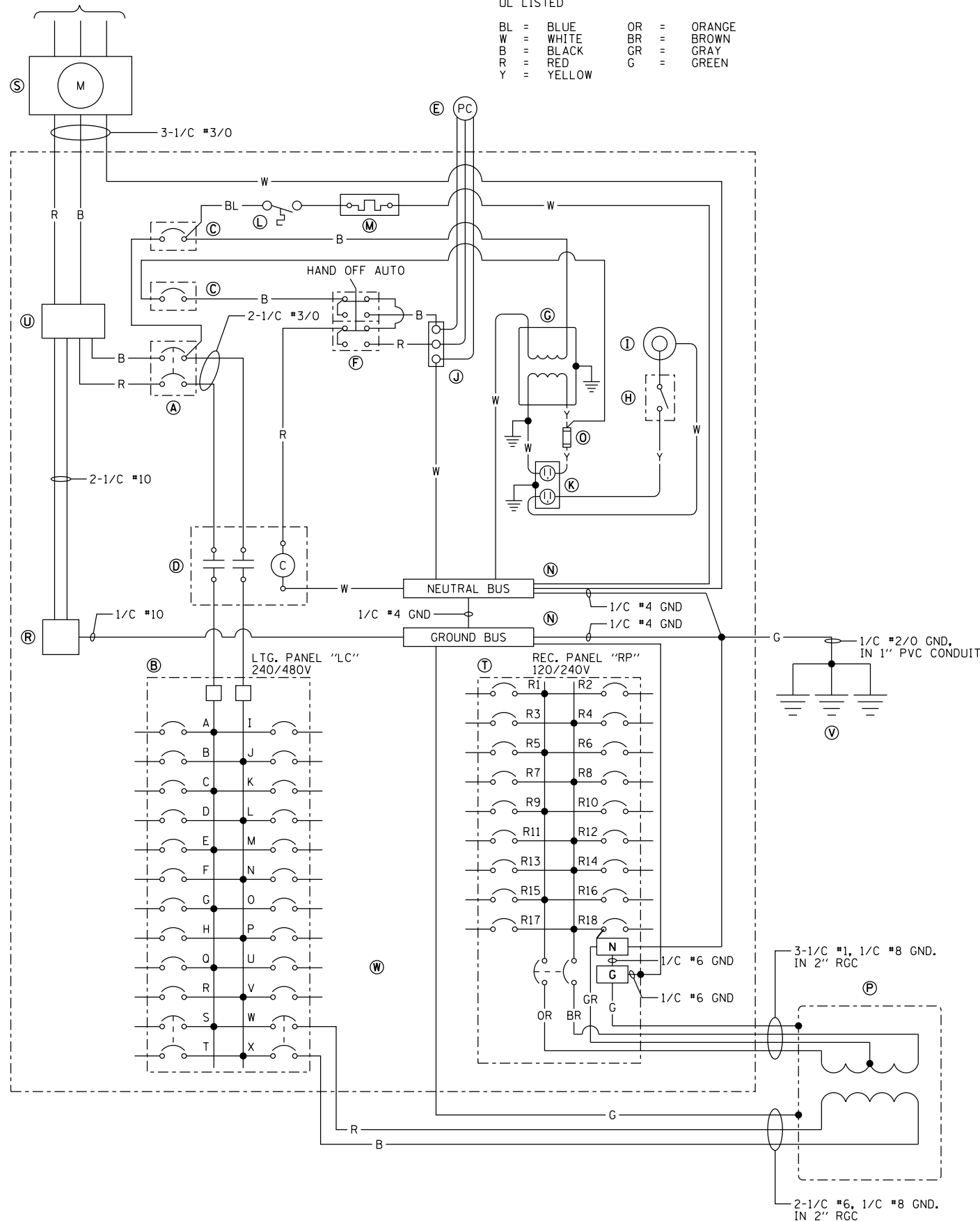


ELECTRICAL SERVICE FROM  
COMED PAD MOUNTED TRANSFORMER  
200A, 240/480V, 1Ø, 3W

POWER WIRING: RHH/RHW  
CONTROL WIRING: #12 MTW  
NEUTRAL BUS COLOR CODED WHITE  
GROUND BUS COLOR CODED GREEN  
UL LISTED

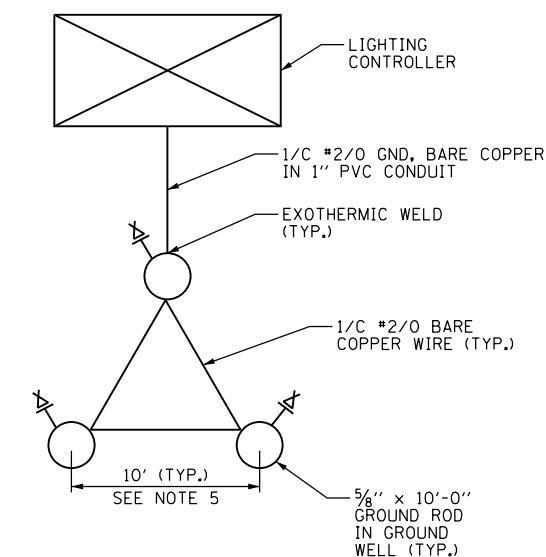
BL = BLUE      OR = ORANGE  
W = WHITE      BR = BROWN  
B = BLACK      GR = GRAY  
R = RED        G = GREEN  
Y = YELLOW



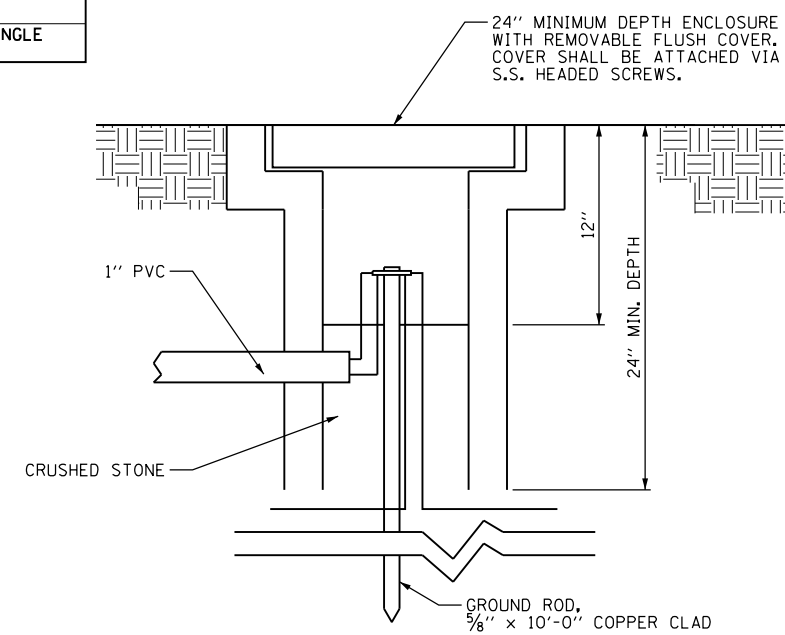
BILL OF MATERIALS		
ITEM	QTY.	DESCRIPTION
(A)	1	MAIN CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, 200 AMP, 480V, 2-POLE, NON-INTERCHANGEABLE TRIP, INTERRUPTING RATING 25,000 AMPERES AT 480 VOLTS
(B)	1	CUTLER HAMMER, POW-R-LINE C PANELBOARD PRL2A, 480/240 VOLT, 1-PHASE, 3-WIRE, 30 BRANCH CIRCUITS, 225 AMPERE MAIN LUGS, WITH (20) 1 POLE-30 AMPERE, 240 VOLT, BOLT-ON BRANCH CIRCUIT BREAKERS, CATALOG NUMBER GHBI030, INTERRUPTING RATING 14,000 AMPERES AT 277 VOLTS (4 SPARE) AND (2) 2 POLE-50 AMPERE, 480 VOLT, BOLT-ON BRANCH CIRCUIT BREAKERS, INTERRUPTING RATING 14,000 AMPERES AT 480 VOLTS (1 SPARE)
(C)	2	CUTLER HAMMER, EHD1015, 1-POLE, 15 AMPERE, 240 VOLT CIRCUIT BREAKER, INTERRUPTING RATING 14,000 AMPERES AT 277 VOLTS
(D)	1	CUTLER HAMMER, A202K4BA, 2-POLE, 200 AMPERE, CONTACTOR 120V COIL
(E)	1	PHOTOCELL (MOUNTED ON THE FRONT OF THE CABINET UNDER THE DRIP EDGE AND TO THE SIDE OF THE ACCESS DOOR)
(F)	1	SQUARE D, 900IKYK111, HAND-OFF-AUTO SELECTOR SWITCH
(G)	1	JEFFERSON, 21-0071-055, 1 KILOVOLT-AMPERE TRANSFORMER
(H)	1	OMRON, A20G07BK, DOOR SWITCH
(I)	1	GENERAL ELECTRIC, H7-120V-15F-3W-DD, 60 WATT ENCLOSED AND GASKETED INCANDESCENT FIXTURE
(J)	1	CINCH, 3 POINT TERMINAL BLOCK
(K)	1	LEVITON, 6599, 15 AMPERE GROUND FAULT CIRCUIT INTERRUPTOR RECEPTACLE, WITH WEATHERPROOF COVER
(L)	1	WHITE-RODGERS, #2E552, 0-50 DEGREE THERMOSTAT
(M)	1	VULCAN #OS1408-250B 250 WATT STAINLESS STEEL HEATER
(N)	2	COPPER GROUND AND NEUTRAL BUS, MINIMUM 1/4"x1"x12"
(O)	1	BUSSMANN, KTK15, FUSE
(P)	1	OLSUN ELECTRIC CORPORATION, #GS15LE-6, 25 KILOVOLT-AMPERE, 1-PHASE, 480-120/240 VOLT TRANSFORMER IN NEMA 3R ENCLOSURE
(R)	1	BRACKET MOUNTED SURGE ARRESTER FOR 480/240 VOLT, 3 WIRE SERVICE
(S)	1	METER SOCKET FOR ELECTRIC UTILITY COMPANY METER
(T)	1	CUTLER HAMMER, POW-R-LINE C PANELBOARD PRL1A, 240/120 VOLT, 1-PHASE, 3-WIRE, 18 BRANCH CIRCUITS, 100 AMPERE, 2-POLE, 240 VOLT MAIN BREAKER, INTERRUPTING RATING 14,000 AMPERES AT 277 VOLTS, WITH (18) 1 POLE-30 AMPERE, 120 VOLT, BOLT-ON GROUND FAULT CIRCUIT INTERRUPTING BRANCH CIRCUIT BREAKERS, CATALOG NUMBER GHBFEP1030, INTERRUPTING RATING 14,000 AMPERES AT 120 VOLTS (2 SPARE)
(U)	1	MARATHON, #1402401, 175A, 2-POLE, 600 VOLT POWER DISTRIBUTION BLOCK
(V)	3	COPPER-CLAD GROUND ROD, 5/8"x10'
(W)	18	POWER DIST SPLICE BLOCKS #2 AWG TO #14 AWG SINGLE POLE. (NOT SHOWN ON BACKPLATE)

**NOTES:**

- SEE DRAWING E-1 FOR ELECTRICAL SYMBOL LIST AND ABBREVIATIONS. SEE DRAWING E-2 FOR ELECTRICAL GENERAL NOTES.
- SEE DRAWING E-20 FOR CONTROLLER CABINET DETAILS.
- THE CONTROLLER SHALL BE SUITABLE FOR USE AS SERVICE EQUIPMENT PER NEC 230.66 AND U.L. LISTED.
- BOND PANELBOARD ENCLOSURES "LC" AND "RP" TO THE CONTROLLER ENCLOSURE WITH #6 GND.
- IF THERE IS NOT ENOUGH RIGHT OF WAY TO INSTALL THE GROUNDING TRIAD AS SHOWN, REDUCE SPACING TO 6'.
- ALL EQUIPMENT, MATERIALS AND COMPONENTS MUST BE SPECIFICATION GRADE OR BETTER. COMPLETE CABINET CONSTRUCTION SHALL FOLLOW ALL APPLICABLE IDOT SPECIFICATIONS, STANDARDS, AND DETAILS.
- MANUFACTURER MODEL AND PART NUMBERS SHOWN ARE MINIMUM ACCEPTABLE COMPONENTS AND CAN BE SUBSTITUTED WITH EQUAL OR BETTER MATERIALS FROM OTHER MANUFACTURERS WITH THE WRITTEN APPROVAL FROM THE ENGINEER OF RECORD.



GROUND FIELD DETAIL  
N.T.S.



GROUND WELL DETAIL  
N.T.S.

100 S. WACKER DR.  
10TH FLOOR  
CHICAGO, IL 60606  
TEL (312) 935-1000  
FAX (312) 935-4998



FILE NAME = D160F05-SHT-E19.dgn	USER NAME = Frank.Stallone	DESIGNED - MAE	REVISED -
SHT.PLAN	PLOT SCALE = 2.000000' / in.	DRAWN - WM	REVISED -
	PLOT DATE = 3/14/2013	CHECKED - DAD	REVISED -
		DATE - 03/13/13	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

US 45 (LaGRANGE ROAD)  
LIGHTING CONTROLLER WIRING DIAGRAM & GROUNDING DETAILS  
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	103R-3	COOK	932	545
E-19		CONTRACT NO. 60F05		
ILLINOIS FED. AID PROJECT				