ELECTRIC CABLE IN CONDUIT

600V (XLP-TYPE USE) 3-1C NO. 2 - PHOTOCELL MOUNTED IN CABINET OVERHANG (M) (A) R-1/0 B-1/0N-#2 - PANEL BOARD 1/2" ARBORON MATERIAL --(R)--\$ \$ #12 (H)`-65-|-|-65- ,40++40-, NEUTRAL BUS (K) GROUND BUS P GROUND ROD 5/8" DIA x 10"

100 AMP

120/240V 1PH., 3W

100 AMPERE - 120/240 VOLT WIRING DIAGRAM

NOTES:
THE CABINET SHALL BE FABRICATED FROM 0.125" THICK ALUMINUM
ALLOY SHEET AND SHALL BE REINFORCED WITH ALUMINUM ANGLES.
THE CABINET DOOR SHALL BE NEMA TYPE 3 CONSTRUCTION WITH
NEOPRENE GASKET. THE DOOR SHALL HAVE STAINLESS STEEL HINGES AND THREE POINT LOCKING SYSTEM.

THE CABINET ENCLOSURE SHALL HAVE A #3 POLISH FINISH.

THE CONTRACTOR SHALL REMOVE VEGETATION AND TOPSOIL, LEVEL THE AREA IN FRONT OF THE CONTROL CABINET DOOR AND PLACE LENGTH WISE, PARALLEL TO CONTROL CABINET, A CONCRETE PAD, 48",448"-4" MINIMUM SIZE. THE COST OF LABOR AND MATERIALS SHALL BE INCLUDED IN THE COST OF LIGHTING CONTROLLER SPECIAL.

CONTROL WIRE SHALL BE #12 AWG, 600V, TYPE "SIS" STRANDED COPPER GRAY SWITCH BOARD WIRE. THE ENDS OF ALL CONTROL WIRES SHALL BE IDENTIFIED.

ALL CONTROL CABINET ITEMS SHALL HAVE SUITABLE IDENTIFICATION. OPEN CIRCUIT BREAKERS, CONTACTORS AND OTHER OPEN DEVICES SHALL HAVE PERMANENT SELF STICKING TAGS. DEVICES IN ENCLOSURES SHALL HAVE ENGRAVED 2-COLOR LAMINATED PLASTIC NAMEPLATES ATTACHED TO ENCLOSURES WITH SCREWS. NAMEPLATES SHALL BE ENGRAVED TO CORRESPOND TO DESIGNATIONS ON THE DRAWINGS. INTERNAL CABINET WIRING SHALL BE IDENTIFIED AS INDICATED OR AS DIRECTED BY THE ENGINEER BY MEANS OF SELF-STICKING TAGS APPLIED AT EACH CONNECTED END. IDENTIFICATION SHALL BE MADE BY THE CABINET MANUFACTURE.

ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED. R = RED BL = BLUE W = WHITE

R = RED BL = BLUE W = WHITE B = BLACK Y = YELLOW G = GREEN

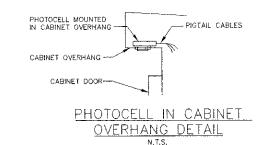
METER AND BASE

THE HEADS OF CONNECTOR SCREWS SHALL BE PAINTED WHITE FOR NEUTRAL BUSS CONNECTION AND GREEN FOR GROUND BUSS CONNECTORS.

PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES WITHIN THE CONTROL CABINET. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED. THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL "ENCLOSED INDUSTRIAL CONTROL PANEL".

PROVIDE A HOLDER AND WATERPROOF POUCH ON THE INNER SIDE OF THE CONTROLLER DOOR. THE HOLDER AND POUCH SHALL BE MOUNTED SO THAT RAIN WATER OR CONDENSED WATER CANNOT ENTER THE POUCH WITH THE CABINET DOOR OPEN, FURNISH THE APPROVED COPY OF THE "CONTROL CABINET WIRING DIAGRAM".

ANCHOR BOLTS AS SPECIFIED BY THE MANUFACTURER.



DEVICE SCHEDULE									
ITEM.	QUANT.	DESCRIPTION							
A	1	METER FITTING							
B	1	CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC BOLT-ON TYPE, 2- POLE- 100 AMPERE, 225 A. FRAME, 240 Vac, NON INTERCHANGEABLE TRIP, INTERRUPTING CAPACITY OF NOT LESS THAN 25,000 RMS SYMMETRICAL AMPERES AT 480 VOLT							
0	2	SPLICE BLOCK							
0		RESERVED							
E	2	CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, 1— POLE— 240 V., BOLT—ON TYPE, 15 A. WITH AN INTERRUPTING RATING OF NOT LESS THAN 14,000 RMS SYMMETRICAL AMPERES AT 277 V.							
F	1	20 A. SPST MICRO SWITCH MOUNTED ON A DOOR,							
(G)	1	60 WATT LIGHT FIXTURE, VAPOR TIGHT, WITH GLOBE AND GUARD AND MOUNTING BOX							
H	Í	GFI RECEPTACLE, 120V, 20A, PREMIUM SPEC. GRADE, NEMA REFERENCE 5-20R IN WEATHER-PROOF BOX WITH FLAP-TYPE COVER							
		RESERVED							
J	1	100 A. CONTACTOR PANEL BOARD INTERIOR, 16 CKT, 1 PH, 3 WIRE, 4-2P/30 AM BOLT-ON BRANCH CIRCUIT BREAKERS, EACH RATED 480 VOLT WITH INTERRUPTING CAPACITY OF NOT LESS THAN 14,000 RMS SYMMETRICAL AMPERES AT 480 VOLT							
K	í	NEUTRAL, COPPER BUSS BAR. PAINTED IN WHITE							
(L)	1	POWER RELAY, 120 VOLT COIL							
M	1	PHOTO ELECTRIC CELL, MOUNTED IN CABINET OVERHANG							
N	1	SURGE ARRESTOR							
0	1	SELECTOR SWITCH, 3 POSITION, ON-OFF-AUTO							
(P)	1	GROUND COPPER BUSS BAR, PAINTED IN GREEN							

Engineering Enterprises, Inc. CONSULTING ENGINEERS 52 Wheeler Rood Sugar Grove, Illinois 60554 630.466.6700 / www.eelweb.com

MCHENRY COUNTY DIVISION OF TRANSPORTATION 16111 NELSON ROAD WOODSTOCK, IL 60098

D3. STONED	1411	INC VIOLED	
DRAWN	 KKP	REVISED	
CHÉCKED	 JRL	REVISED -	
DATE	6/1/12	REVISED -	

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SCALE: N/A

TOTAL SHEE SHEETS NO. SECTION COUNTY VIRGINIA ROAD AT ILLINOIS 31 PARK AND RIDE 09-00370-00-PK MCHENRY 17 LIGHTING CONTROLLER, SPECIAL CONTRACT NO. 63733 C-91-072-10 SHEET NO. 3 OF 5 SHEETS STA. N/A TO STA. N/A ILLINOIS FED. AID PROJECT CMM-9003(484)

COPYRIGHT 2011 ENGINEERING ENTERPRISES, INC