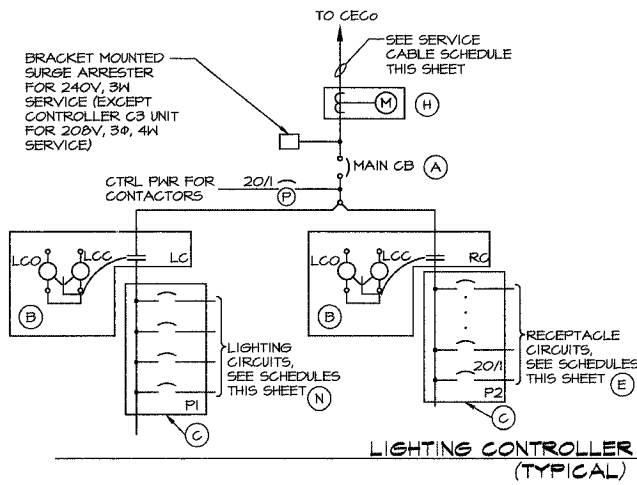


CONTROLLER - C1 - 120/240V, 1Ø, 3W - 150A/2P MAIN CB				
CIRCUIT #	POLE #	USAGE	CKT.BKR	LOAD, W
C1-1	1,3,5,7,9 11,13,15,17 19,21	LIGHTS	70A-2	5500
C1-2	2,4,6,8,10,12 14,16,18	LIGHTS	70A-2	3560
C1-5	1,3,5,7,9,11,13	RECEP	20A-1	1920
C1-6	15,17,19,21	RECEP	20A-1	1920
C1-7	2,4,6,8,10	RECEP	20A-1	1920
C1-8	14,16,18,12	RECEP	20A-1	1920
C1-9		CONTROL	20A-1	---

CONTROLLER - C2 - 120/240V, 1Ø, 3W - 200A/2P MAIN CB				
CIRCUIT #	POLE #	USAGE	CKT.BKR	LOAD, W
C2-1	22,24,26 28,30,32 34,36,38 40	LIGHTS	70A-2	4760
C2-2	23,25,27,29,31 33,35,37,39 41,43	LIGHTS	70A-2	4760
C2-3	42,44,46 48,50,52,54	LIGHTS	70A-2	3400
C2-4	45,47,49,51 53,55,57,59	LIGHTS	70A-2	3640
C2-7	34,36,38,40	RECEP'S	20A-1	1920
C2-8	28,30,32	RECEP'S	20A-1	1920
C2-9	22,24,26	RECEP'S	20A-1	1920
C2-10	37,39,41,43	RECEP'S	20A-1	1920
C2-11	29,31,33,35	RECEP'S	20A-1	1920
C2-12	23,25,27	RECEP'S	20A-1	1920
C2-13	42,44,46	RECEP'S	20A-1	1920
C2-14	48,50,52,54	RECEP'S	20A-1	1920
C2-15	51,53,55,57	RECEP'S	20A-1	1920
C2-16	48,47	RECEP'S	20A-1	1920
C2-17	49,59	RECEP'S	20A-1	1920
C2-18		CONTROL	20A-1	---

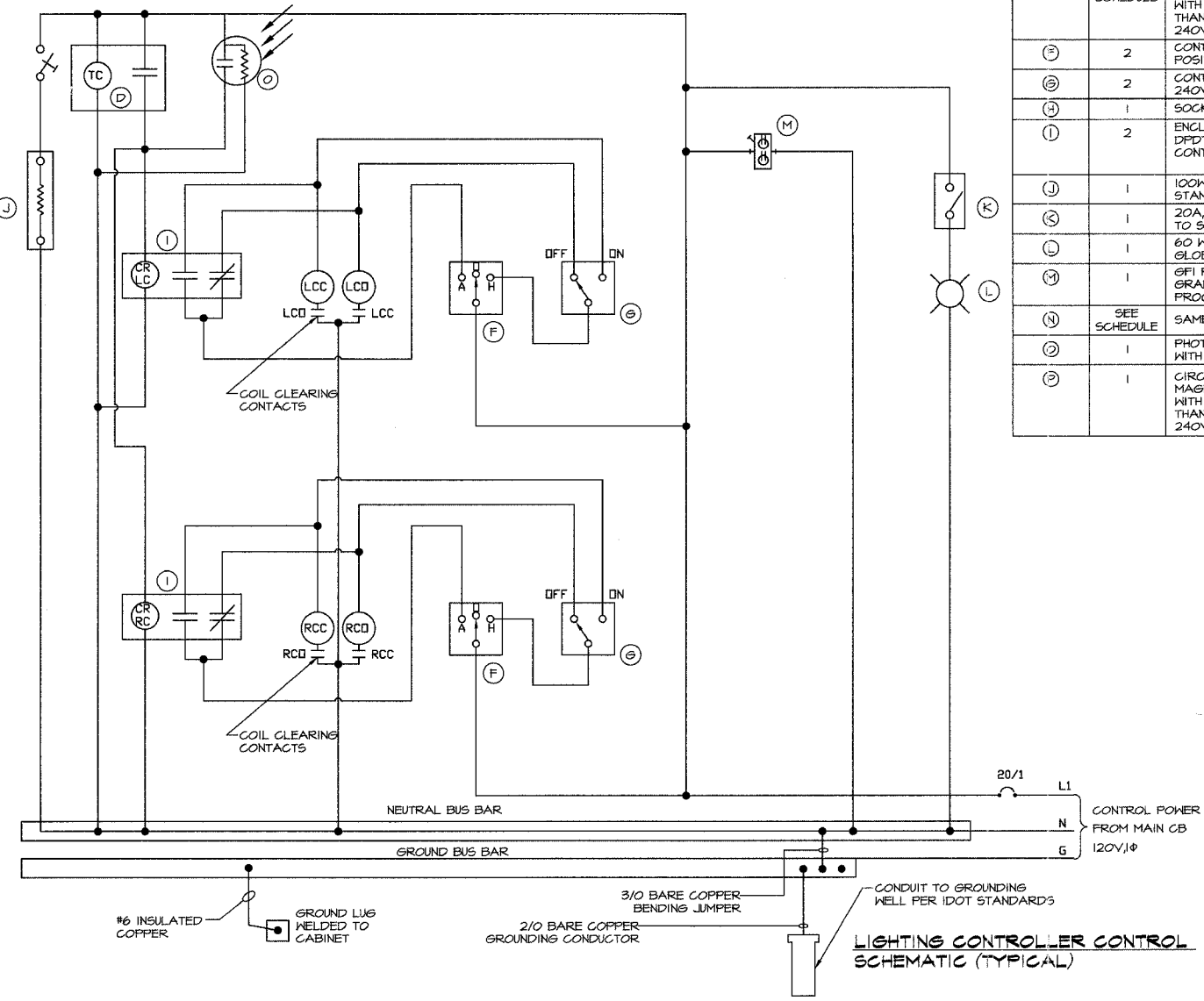
CONTROLLER - C3 - 120/208V, 3Ø, 4W - 200A/3P MAIN CB				
CIRCUIT #	POLE #	USAGE	CKT.BKR	LOAD, W
C3-1	56,58,60,62 64,66,68,70 72,74	LIGHTS	70A-2	3820
C3-2	61,63,65 67,69,71 73,75,77	LIGHTS	70A-2	3660
C3-5	70,72,74	RECEP	20A-1	1920
C3-6	62,64,66,68	RECEP	20A-1	1920
C3-7	56,58,60	RECEP	15A-1	1440
C3-8	73,75,77	RECEP	20A-1	1920
C3-9	67,69,71	RECEP	20A-1	1920
C3-10	61,63,65	RECEP	15A-1	1440
C3-11		CONTROL	20A-1	---

CONTROLLER - C4 - 120/240V, 1Ø, 3W - 200A/2P MAIN CB				
CIRCUIT #	POLE #	USAGE	CKT.BKR	LOAD, W
C4-1	76,78,80,82 84,86,88,90 92,94,96,98 100,102	LIGHTS	70A-2	6120
C4-2	79,81,83 85,87,89,91,93 95,97,99,101	LIGHTS	70A-2	4500
C4-5	78,80,82	RECEP	20A-1	1920
C4-6	84,86,88	RECEP	20A-1	1920
C4-7	88,92,94,96	RECEP	15A-1	1440
C4-8	79,81,83,85	RECEP	20A-1	1920
C4-9	89,90,91,93	RECEP	20A-1	1920
C4-10	95,97,99,101	RECEP	15A-1	1440
C4-11	98,100,102	RECEP	15A-1	1440
C4-12		CONTROL	20A-1	---



EQUIPMENT		
(A)	MAIN CB	SEE SCHEDULE
(C)	P1	LIGHTING PANELBOARD, INTERIOR ONLY, 20 CKT, 200A BUS, 240V, 1Ø. EXCEPT C3 IS TO USE 3Ø PANEL.
(C)	P2	PANELBOARD, INTERIOR ONLY, 20 CKT, 200A BUS, 240V, 1Ø. EXCEPT C3 IS TO USE 3Ø PANEL.
(B)	LC/RC	200A, 2P ELECTRICALLY OPERATED, MECHANICALLY HELD CONTACTOR - 1 LG AND 1 RECEPT'S EXCEPT C3 IS TO USE 3Ø CONTACTOR.

DEVICE SCHEDULE		
(A)	1	CIRCUIT BREAKER, MOLDED CASE, THERMAL, 2-POLE, 600 VOLT, A.C. 225A, FRAME 175A, NON INTERCHANGEABLE TRIP, BOLT-ON TYPE, INTERRUPTING CAPACITY OF NOT LESS THAN 22,000 RMS SYMMETRICAL AMPERES AT 480V. SEE SCHEDULES THIS SHEET FOR BREAKER RATING.
(B)	2	LIGHTING CONTACTOR (REMOTE CONTROL SWITCH) MECHANICALLY HELD, ASCO 920, MOUNTED ON SUB PANEL 200A, 2P, 600V, WITH 120V COIL.
(C)	2	PANEL BOARD (INTERIOR ONLY) 480/240V SINGLE PHASE WITH 200A, COPPER MAINS AND EIGHT 1P-10A BOLT-ON BRANCH BREAKERS EACH RATED 2TTV, WITH INTERRUPTING CAPACITY OF NOT LESS THAN 14,000 RMS SYMMETRICAL AMPERES AT 2TTV.
(D)	1	TIME CLOCK, 120V, 60HZ, MICROPROCESSOR BASED 2-CHANNEL CONTROLLER WITH ASTRONOMIC FUNCTIONS. RATED FOR -30°C TO +70°C
(E)	SEE SCHEDULE	CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, 1-POLE, 240V, BOLT-ON TYPE, 15/20A WITH AN INTERRUPTING RATING OF NOT LESS THAN 10,000 RMS SYMMETRICAL AMPERES AT 240V.
(F)	2	CONTROL SWITCH, MAINTAINED CONTACT, THREE POSITION, H-O-A, 20A, 240V.
(G)	2	CONTROL SWITCH, TOGGLE TYPE, SPDT, 20A 240V, PREMIUM SPEC. GRADE.
(H)	1	SOCKET FOR ELECTRICAL COMPANY UTILITY METER
(I)	2	ENCLOSED ICE CUBE STYLE CONTROL RELAY, DPDT, PLUG-IN, OCTAL SOCKET, 120VAC, 10A CONTACTS, LED "ON" LIGHT
(J)	1	100W, 120V, CABINET STRIP HEATER STANDOFF MOUNT
(K)	1	20A, SPST, MICRO SWITCH (MOUNT WITH ACTUATOR TO SWITCH WHEN DOOR OPENED)
(L)	1	60 WATT LIGHT FIXTURE, VAPOR TIGHT, WITH GLOBE AND GUARD AND MOUNTING BOX
(M)	1	6PI RECEPTACLE, 120V, PREMIUM SPEC. GRADE, NEMA REFERENCE 5-15R IN WEATHER-PROOF BOX WITH FLAP-TYPE COVER.
(N)	SEE SCHEDULE	SAME AS (E) EXCEPT 2 POLE
(O)	1	PHOTOCELL CONTROL, THISTLOCK STYLE, COMPLETE WITH RECEPTACLE, SPST, 120VAC, FACE TO SOUTH
(P)	1	CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, 1-POLE, 240V, FNL HTD TYPE, 20A WITH AN INTERRUPTING RATING OF NOT LESS THAN 10,000 RMS SYMMETRICAL AMPERES AT 240V.



FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2736	03-00227-00-RS	LAKE	122	75

F.H.W.A. REG. ILLINOIS PROJECT M-8003 (453) CONTRACT NO. 83829

- ### CONTROLLER NOTES
- ALL CONTROL CABINET ITEMS SHALL HAVE SUITABLE IDENTIFICATION. OPEN CIRCUIT BREAKER, 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 MANUFACTURER.
 - ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED.
R = RED BL = BLUE W = WHITE
B = BLACK Y = YELLOW G = GREEN
 - PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES OR CABINETS WITHIN THE CONTROL CABINET
 - ALL 120 VOLT SYSTEMS AND ALL CONTROL WIRING SHALL BE #12AWG STRANDED UNLESS OTHERWISE INDICATED.
 - 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".
 - SEE CABINET AND FOUNDATION DETAIL SHEET FOR SCHEMATIC DIAGRAM AND DEVICE LAYOUT.
 - CONTROL RELAYS CAN BE ELIMINATED IF THE CONTROL TIME CLOCK OUTPUT CONTACTS ARE RATED FOR CONTACTOR IN-RUSH CURRENT.
 - LIGHTING CONTROLLER CABINET TO BE FURNISHED AND INSTALLED IN ACCORDANCE WITH IDOT STANDARD E200, SHEETS 3 & 4.

SERVICE CABLE SCHEDULE	
CONTROLLER	CONDUCTOR/CONDUIT
C1	(2) 2/Ø XHHW (1) #1 GND IN (1) 2" C
C2,C4	(2) 4/Ø XHHW (1) #1 GND IN (1) 2" C
C3	(3) 4/Ø XHHW (1) #1 GND IN (1) 2" C

SHEET KEY				

REVISIONS		
NO.	ITEM	DATE

SCALE:	AS NOTED
DRAWN BY:	KEH/DEH
CHECKED BY:	AMH
DATE:	3-3-06

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LIGHTING DETAILS
SHERIDAN ROAD IMPROVEMENTS
 CITY OF WAUKEGAN JOB NUMBER: 02-28-03-231 LAKE COUNTY, ILLINOIS
 W:\dwg\WK\SHERIDAN-RD\Lighting\LightingFinal\E9 DETAILS.dwg 3/6/2006 11:47:52 AM CST

SHEET NO. **75** of **122**



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EXPIRATION DATE: 11/30/07