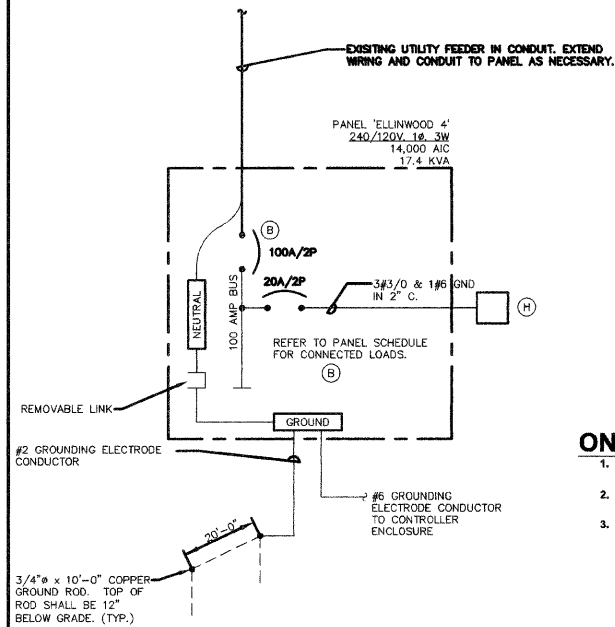


TYPE: BOLT-ON				PANEL NAME: ELLINWOOD 4				CONNECTED 17.4 KVA			
MOUNTING: SURFACE - INTERIOR ONLY				SOLID NEUTRAL GROUND BUS				MAIN: 100A MCB			
FED FROM: UTILITY				VOLTS: 240/120				PHASE: 1			
AIC RATING: 14,000				WIRE: 3				WIRE: 3			
CKT NO.	LOAD DESCRIPTION	WIRE SIZE	LOAD KVA	BREAKER AMP	BREAKER P	BREAKER AMP	LOAD KVA	WIRE SIZE	LOAD DESCRIPTION	CKT NO.	
1	A 2F1, 7F3	"S	2.1	20	2	20	0.3	"S	W1 3 RECEPT.	2	
3		"S	-	-	-	20	0.3	"S	W2 3 RECEPT.	4	
5	B 8F3	"S	1.7	20	2	20	0.3	"S	X1 3 RECEPT.	6	
7		"S	-	-	-	20	0.4	"S	X2 2 RECEPT.	8	
9	C 8F3	"S	1.3	20	2	20	0.8	"S	Y1 4 RECEPT.	10	
11		"S	-	-	-	20	0.6	"S	Y2 3 RECEPT.	12	
13	D 5F3	"S	1.1	20	2	20	0.8	"S	Z1 3 RECEPT.	14	
15		"S	-	-	-	20	1.0	"S	Z2 3 RECEPT.	16	
17	E 2F1, 5F3	"S	1.7	20	2	20	1.0	"S	U1 5 RECEPT.	18	
19		"S	-	-	-	20	0.8	"S	U2 4 RECEPT.	20	
21	F 6F3	"S	1.3	20	2	20	0.8	"S	V1 4 RECEPT.	22	
23		"S	-	-	-	20	0.8	"S	V2 4 RECEPT.	24	
25	LGT. RECEPT. IN CABINET	"O	0.3	20	1	20	0.1	"O	0 SURGE ARRESTOR	26	
27	CABINET HEATER	"O	0.4	20	1	-	-	"O	0	28	
29	LGT. CONTROL	"O	0.1	20	1	20	1	"O	0 SPARE	30	

NOTES: "S" = REFER TO SHEET E3 FOR WIRE SIZE. "O" = REFER TO ONE LINE DIAGRAM ON SHEET E10 FOR WIRE SIZE.

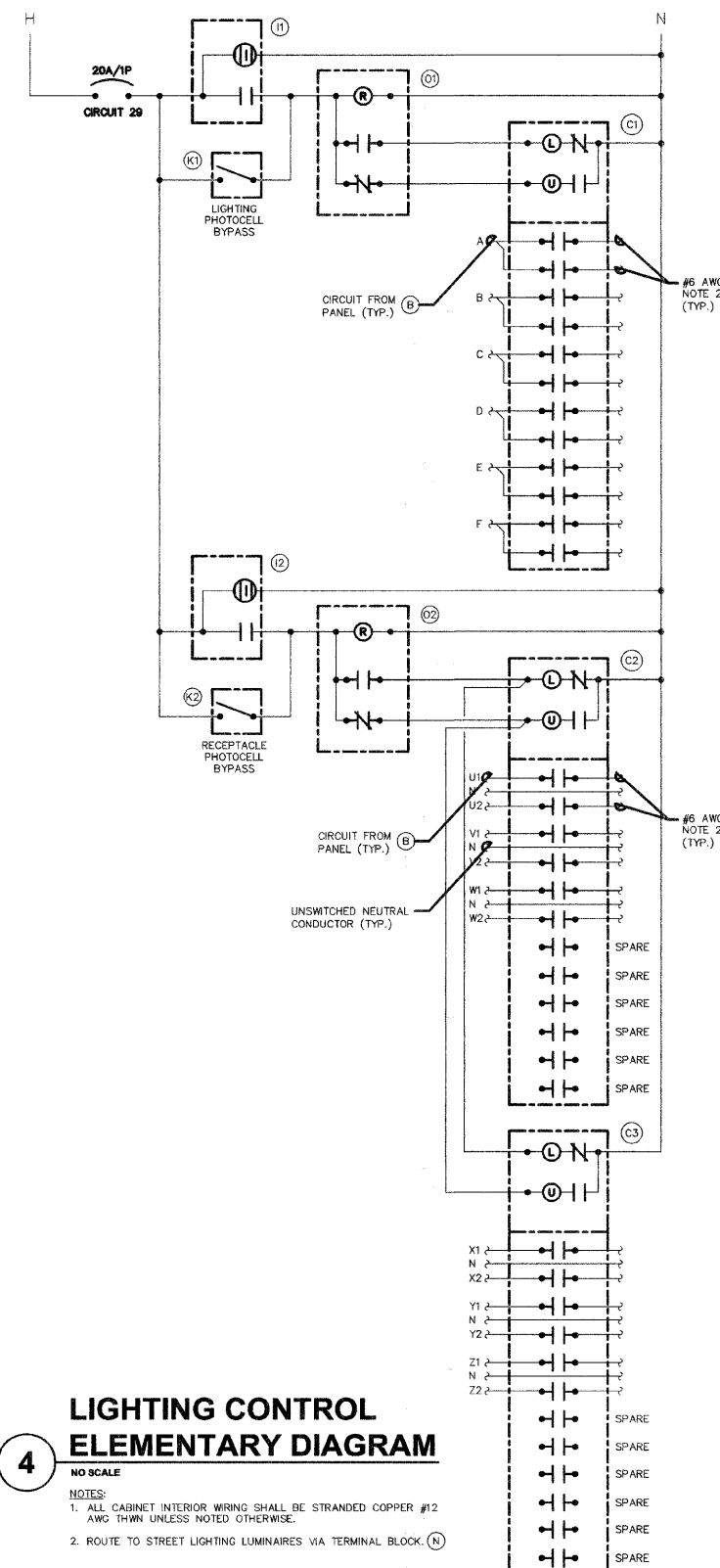


ONE-LINE DIAGRAM NOTES

- AIC RATINGS LISTED FOR EQUIPMENT ARE MINIMUM REQUIREMENTS FOR BUS BRACING AND DEVICE RATING. ALL EQUIPMENT SHALL BE FULLY RATED UNLESS SPECIFICALLY NOTED AS SERIES RATED.
- ALL FUSES FROM 0 AMPERE TO 200 AMPERE SHALL BE DUAL ELEMENT, CLASS RK-5 UNLESS NOTED OTHERWISE.
- INDICATES DIRECT CONNECTION OF GROUND CONDUCTOR TO GROUND BUS.

ONE LINE DIAGRAM ELLINWOOD 4

NO SCALE



LIGHTING CONTROL ELEMENTARY DIAGRAM

NO SCALE

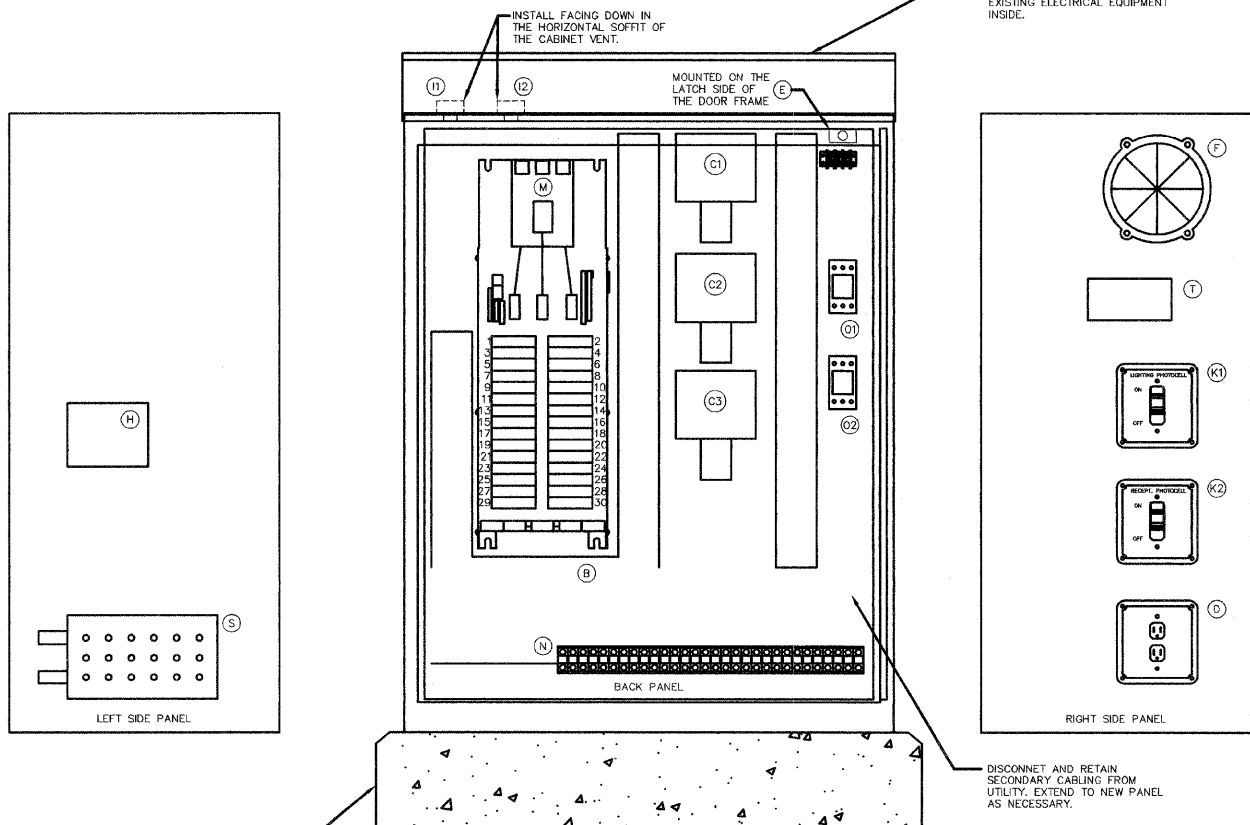
- NOTES:
- ALL CABINET INTERIOR WIRING SHALL BE STRANDED COPPER #12 AWG THWN UNLESS NOTED OTHERWISE.
 - ROUTE TO STREET LIGHTING LUMINAIRES VIA TERMINAL BLOCK.

CABINET ELEMENTARY DIAGRAM

NO SCALE

BILL OF MATERIALS FOR LIGHTING CONTROLLER "E4"

ITEM #	QUANTITY	DESCRIPTION
B	1	BRANCH CIRCUIT PANEL INTERIOR, 100A COPPER BUS, 240/120 VOLT, MOLDED CASE THERMAL MAGNETIC CIRCUIT BREAKERS, BOLT ON TYPE, AIC RATING OF 14,000 AMPS AT 240 VOLTS, SQUARE D 1630-NQ00, G.E. AQ, SIEMENS P1, OR OUTLER HAMMER FR1.
C1 C2 C3	3	MECHANICAL CONTACTOR, 12 POLE, 30 AMP, 120V COIL, SQUARE D 8803-10X40V02, G.E. CR36M2, OUTLER HAMMER C308C, PROVIDE WITH TWO-WIRE CONTROL FOR PHOTOCELL INTERFACE.
D	1	6F1 RECEPTACLE 120V, 20A, SPECIFICATION, GRADE, NEMA 5-20R IN WEATHER-PROOF BOX WITH FLAP-TYPE COVER, HUBBELL GF5362A WITH WP26 COVER, LEVITON, PASS & SEYMOUR, OR COPPER.
E	1	20A SPDT MICRO SWITCH (MOUNT WITH ACTUATOR TO SWITCH WHEN DOOR OPENED), 120 VOLT, 15 AMP CONTACTS, SQUARE D X0X110, G.E., OUTLER HAMMER, OR SIEMENS.
F	1	60 WATT LIGHT FIXTURE, VAPOR TIGHT WITH GLOBE AND GUARD AND MOUNTING BOX. LAMP PROVIDED WITH FIXTURE.
H	1	SURGE ARRESTOR, BRACKET MOUNTED, 120/240 VOLT SERVICE, SQUARE D S0S1175, G.E., OUTLER HAMMER.
I1 I2	2	PHOTOCELL, 120V, 1500 VA RATED, SINGLE POLE, SINGLE THROW CONTACT, WEATHERPROOF AND CORROSION PROOF ENCLOSURE, U.L. LISTED, TORX 3000, PARAGON, OR INTERMATIC.
J	1	F.C. SHALL REUSE EXISTING CABINET IF POSSIBLE. ENCLOSURE PAD MOUNTED, STAINLESS STEEL, N.E.M.A. 4 CONSTRUCTION WITH KEY LOCKING DOOR, KEY CYLINDER SHALL MATCH EXISTING VLLAGE LIGHTING CONTROLLER LOCKS, HOFFMAN, OR APPROVED EQUAL, 30"W, 48"H, 18"D
K1 K2	2	TOGGLE SWITCH, SPDT, 20 AMP, 240 VOLT, SPECIFICATION GRADE MOUNTED IN SURFACE BOX, HUBBELL HBL1221, LEVITON 1221-2, PASS & SEYMOUR PS20A1, OR COOPER 2221.
M	1	MAIN CIRCUIT BREAKER, MOLDED CASE THERMAL MAGNETIC, SERVICE ENTRANCE DUTY RATED 240 VOLT, 100 AMP, 2 POLE, AIC RATING OF 14,000 AMPS AT 240 VOLTS, INTEGRAL TO BRANCH PANEL.
N	1	COPPER LOAD TERMINAL BLOCK FOR AWG#6 AND AWG#12
O1 O2	2	FORM TYPE C RELAY, ELECTRICALLY HELD, ONE NORMALLY OPEN (N.O.) AND ONE NORMALLY CLOSED (N.C.) CONTACTS, 600V CONTINUOUS DUTY COIL, 30 AMP CONTACT RATING, SQUARE D CLASS 8501, G.E., OR OUTLER HAMMER.
T	1	THERMOSTAT, 40-80 DEGREE RANGE, CHROMALOX WR80, TRANE, MODNE, OR REZNOR.
S	1	HEATER, 120 VOLT, 375 WATT, 40-80 DEGREE THERMOSTAT, CHROMALOX 276-10, TRANE, MODNE, OR REZNOR.



LIGHTING CONTROL CABINET

NO SCALE
U.L. LISTED
IDOT APPROVED

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION E10: ONE LINE DIAGRAM & SCHEDULES

DES PLAINES LIGHTING IMPROVEMENTS AND STREETSCAPE DES PLAINES, ILLINOIS

SCALE: NTS
DATE: 8-14-2009

DRAWN BY: JOP
DESIGNED BY: MCK
CHECKED BY: MCK