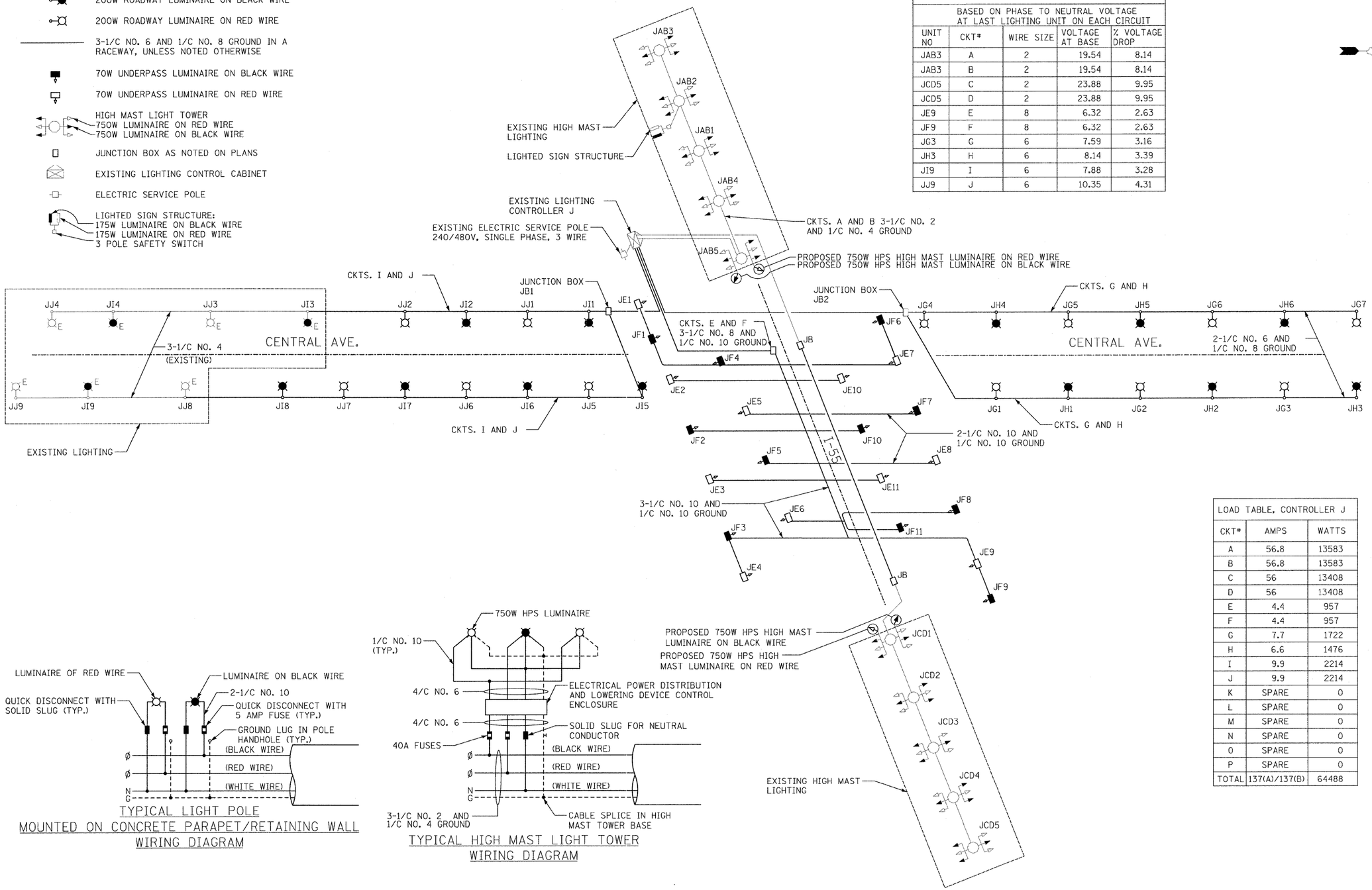
ELECTRICAL SYMBOLS

- 200W ROADWAY LUMINAIRE ON BLACK WIRE
- 200W ROADWAY LUMINAIRE ON RED WIRE
- 3-1/C NO. 6 AND 1/C NO. 8 GROUND IN A RACEWAY, UNLESS NOTED OTHERWISE
- 70W UNDERPASS LUMINAIRE ON BLACK WIRE
- 70W UNDERPASS LUMINAIRE ON RED WIRE
- HIGH MAST LIGHT TOWER
  - 750W LUMINAIRE ON RED WIRE
  - 750W LUMINAIRE ON BLACK WIRE
- JUNCTION BOX AS NOTED ON PLANS
- EXISTING LIGHTING CONTROL CABINET
- ELECTRIC SERVICE POLE
- LIGHTED SIGN STRUCTURE:
  - 175W LUMINAIRE ON BLACK WIRE
  - 175W LUMINAIRE ON RED WIRE
  - 3 POLE SAFETY SWITCH

VOLTAGE DROP TABLE, CONTROLLER J				
BASED ON PHASE TO NEUTRAL VOLTAGE AT LAST LIGHTING UNIT ON EACH CIRCUIT				
UNIT NO	CKT#	WIRE SIZE	VOLTAGE AT BASE	% VOLTAGE DROP
JAB3	A	2	19.54	8.14
JAB3	B	2	19.54	8.14
JCD5	C	2	23.88	9.95
JCD5	D	2	23.88	9.95
JE9	E	8	6.32	2.63
JF9	F	8	6.32	2.63
JG3	G	6	7.59	3.16
JH3	H	6	8.14	3.39
JI9	I	6	7.88	3.28
JJ9	J	6	10.35	4.31



LOAD TABLE, CONTROLLER J		
CKT#	AMPS	WATTS
A	56.8	13583
B	56.8	13583
C	56	13408
D	56	13408
E	4.4	957
F	4.4	957
G	7.7	1722
H	6.6	1476
I	9.9	2214
J	9.9	2214
K	SPARE	0
L	SPARE	0
M	SPARE	0
N	SPARE	0
O	SPARE	0
P	SPARE	0
TOTAL	137(A)/137(B)	64488

TYPICAL LIGHT POLE
MOUNTED ON CONCRETE PARAPET/RETAINING WALL
WIRING DIAGRAM

TYPICAL HIGH MAST LIGHT TOWER
WIRING DIAGRAM

E-11

SINGH
SINGH & ASSOCIATES, INC.
CONSULTING ENGINEERS
300 W. ADAMS ST.
CHICAGO, IL 60606
TEL: (312) 629-0240
FAX: (312) 629-8449

USER NAME = $USER$	DESIGNED - MK	REVISED -	
	DRAWN - AM	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - GR	REVISED -	
PLOT DATE = 3/22/2011	DATE - 3-25-2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CENTRAL AVENUE OVER I-55
WIRING DIAGRAM CONTROLLER J

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	9(H, HB & SB)R-1	COOK	741	219
		CONTRACT NO. 60999		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

J:\55\dgn\D160999-sht-WiringE11.dgn

J:\55\dgn\D160999-sht-WiringE11.dgn 2:09:22 PM 3/22/2011