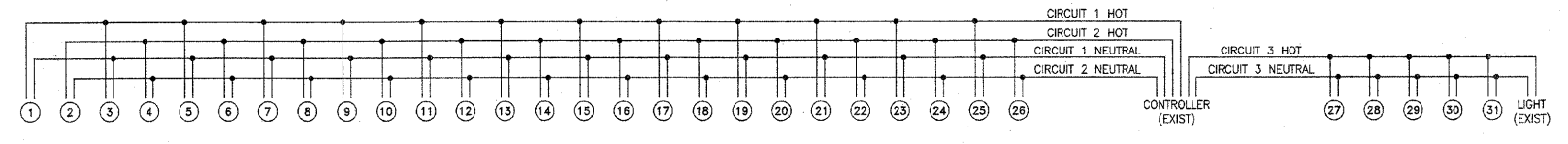


FAU NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
**	**	KANKAKEE	36	19
CONTRACT NO. 87315				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
* BURNS ROAD WEST - FAU 6212				
** 03-00058-01-PP				
 TYSON ENGINEERING, INC. CONSULTING CIVIL ENGINEERS AND SURVEYORS DESIGN FIRM LICENSE #164-001136 367 SOUTH SCHUYLER AVENUE KANKAKEE, ILLINOIS 60901 PHONE (815) 932-7406				
This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of Tyson Engineering Inc. and is not to be used in whole or in part, for any other project without written authorization of Tyson Engineering Inc. Do not scale drawings. Use dimensions only. Contractor shall be responsible for verifying all dimensions. Information herein and herein is confidential.				
REVISIONS				
NO.	DATE	BY	DESCRIPTION	
LIGHTING INSTALLATION DETAILS				
PROPOSED IMPROVEMENTS FOR BURNS ROAD WEST FROM CAREER CENTER ROAD TO BURNING BUSH DRIVE				
SECTION 03-00058-01-PP				
DATE:	3/23/12	JOB NO.	E05055	
SCALE:	HORZ.: 1"=100'	FILE NO.	N/A	
DRAWN BY:	MRG	SHEET	19	
CHECKED BY:	SRM		36	

CIRCUIT DIAGRAM



LUMINAIRE SCHEDULE							
SYMBOL	QTY	LABEL	ARRANGEMENT	DESCRIPTION	LAMP WATTAGE	ARM LENGTH	MOUNTING HEIGHT
●	8	A	SINGLE	HBS-250HPS-MC2	ONE (1) 250W	10'	33'
●	8	C	SINGLE	HBS-150HPS-MC2	ONE (1) 150W	10'	33'
●	1	AA	BACK-BACK	HBS-250HPS-MC2	TWO (2) 250W	10'	33'
●	14	CC	BACK-BACK	HBS-150HPS-MC2	TWO (2) 150W	10'	33'

CONTROLLER: A
 VOLTAGE: 240/120V, 1 PHASE, 3 WIRE
 MAINS: 100A MAIN BREAKER
 CONTACTOR: 100A/2P
 22KAC SERIES RATED
 MOUNTING: GROUND, 59"H X 44"W X 27"D (NOM)
 FEEDER: 1-1/4" C-343

CRK NO.	LOAD DESCRIPTION	C/B	LOAD VA
1	LTS: POLES 26,24,22,20,18	30A/2P	2520
	16,14,12,10,8,6,4,2		2520
2	LTS: POLES 25,23,21,19,17	30A/2P	2515
	15,13,11,9,7,5,3,1		2515
3	LTS: POLES 27-36*	30A/2P	2376
4	-	-	-
5	-	-	-
6	-	-	-
TOTAL KVA PER PHASE			7.4
TOTAL (KVA)			14.8
MAX AMPS			62

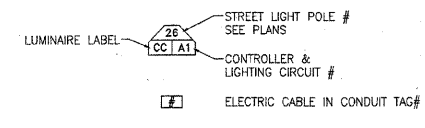
*PROPOSED POLES 27-30
 EXISTING POLES 31-36

- GENERAL NOTES:**
- ALL LIGHTING FIXTURES ARE 240VAC.
 - ALL LAMPS ARE HIGH PRESSURE SODIUM.

ELECTRIC CABLE IN CONDUIT SCHEDULE

TAG	CONDUIT	LTS WIRE	GRD WIRE
[1]	2" PVC	4#2	1#2
[2]	2" PVC	2#4	1#4

SYMBOL LEGEND



ILLINOIS DEPARTMENT OF TRANSPORTATION
 LUMINAIRE PERFORMANCE TABLE

GIVEN CONDITIONS

ROADWAY DATA:	Pavement Width	13.5 FT
	Number Of Lanes	1
	Median Width	11 FT
	IES Surface Classification	R3
	Q-Zero Value	.07
LIGHT POLE DATA:	Mounting Height	33 FT
	Mast Arm Length	10 FT
	Pole Set-Back From Edge Of Pavement	5.5 FT
LUMINAIRE DATA:	Lamp Type	HPS
	Lamp Lumens	16000
	IES Vertical Distribution	M
	IES Control Of Distribution	C
	IES Lateral Distribution	2
	Total Light Loss Factor	0.684
LAYOUT DATA:	Spacing	165 FT
	Configuration	MEDIAN
	Luminaire Overhang Over Edge Of Pavement Lane	2.5 FT

NOTE: Variations from the above specified IES distribution pattern may be requested and acceptance of variations will be subject to review by the Engineer based on how well the performance requirements are met.

PERFORMANCE REQUIREMENTS

NOTE: These performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

ILLUMINATION:	Average Horizontal Illumination, (E _{av})	6 Lux
	Uniformity Ratio, (E _{min} /E _{max})	4
LUMINANCE:	Average Luminance: (L _{av})	0.4 Cd/m ²
	Uniformity Ratios: (L _{min} /L _{max})	4.0
	(L _{min} /L _{med})	8.0
	Maximum Veiling Luminance Ratio: (L _v /L _{av})	0.4

- NOTES:**
- SEE PLAN SHEET 10 FOR LIGHT POLE FOUNDATION STATIONS AND OFFSET INFORMATION.
 - CONDUIT UNDER ROADWAY SHALL BE SCH. 80.