## STATE OF ILLINOIS

# **DEPARTMENT OF TRANSPORTATION**

**INDEX OF SHEETS:** 

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0

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1 COVER SHEET

HIGHWAY STANDARDS AND GENERAL NOTES

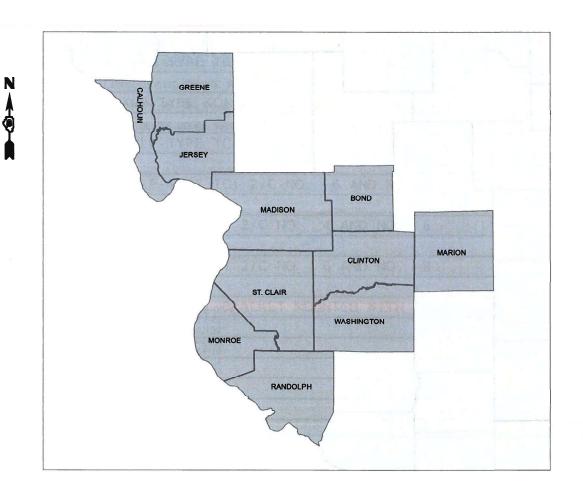
3–10 SUMMARY OF QUANTITIES

11 LUMINAIRE PERFORMANCE TABLES

# PROPOSED HIGHWAY PLANS

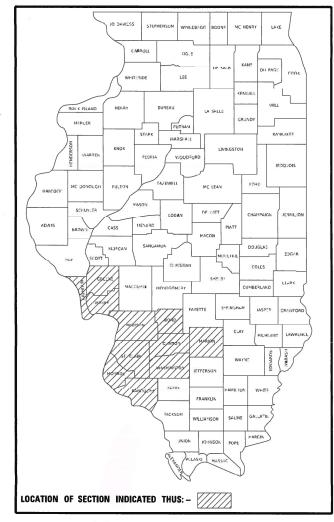
VARIOUS ROUTES
SECTION DIST 8 L TS 2023-1
HIGHWAY LIGHTING, TRAFFIC SIGNAL
REPAIR & MAINTENANCE
VARIOUS COUNTIES

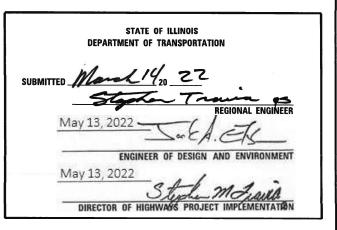
C-98-069-22



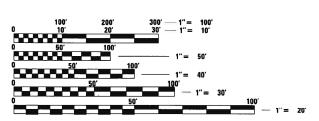
NOTE: WORK CAN BE LOCATED WITHIN ANY OF THE ABOVE NOTED COUNTIES WITHIN DISTRICT 8/REGION 5.

### D-98-039-22





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS
1-800-892-0123
OR 811

PROJECT ENGINEER: CHERYL KEPLAR PROJECT MANAGER: MICHAEL PRESTON

CONTRACT NO. 76P96

HIGHWAY STANDARDS

COMMITMENTS NONE

701456-05 830001-03 701601-09 838001-01 001006 701400-11 701001-02 701401-13 838001-01 701006-05 701406-13 701606-10 873001-02 701101-05 701421-08 701701-10 880001-01 701106-02 701422-10 701901-08 880006-01 701201-05 701446-11 814001-03 886001-01 701206-05 701451-05 821101-02 886006-01 701301-04

- 1. THE LOCATIONS OF THE REPAIR AREAS SHALL BE DETERMINED BY THE ENGINEER/DEPARTMENT.
- 2. NO MATERIAL SHALL BE LEFT ON OR NEAR THE ROADWAY DURING NON-WORKING HOURS.
- 3. ANY NECESSARY TRAFFIC CONTROL WILL BE PROVIDED BY THE CONTRACTOR APPROPRIATE STANDARDS ARE LISTED.
- 4. ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE TO BE GIVEN TO UTILITIES BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. (PHONE 800 892-0123 OR 811) OR FOR NON-MEMBERS, THE UTILITY COMPANY DIRECTLY.
- 5. A FLAGGER SHALL BE REQUIRED AT ALL TIMES WHEN WORKERS OR EQUIPMENT ARE ENCROACHING ON THE LANE OF TRAFFIC.
- 6. 45 AND 55 MPH SIGNS ARE INCLUDED IN ALL INTERSTATE LANE CLOSURES. IF THE LANE CLOSURE DURATION IS LESS THAN 4 HOURS, THE 45 AND 55 MPH SIGNS ARE NOT REQUIRED.
- 7. ANY WORK ORDER MAY BE CANCELED AT THE ENGINEER'S/DEPARTMENT'S DISCRETION.
- 8. NO OVERNIGHT LANE CLOSURES WILL BE ALLOWED.

USER NAME = prestonme	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 3/10/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

SHEET

HIGHWAY STANDARDS AND				D	F.A. RTE.			TOTAL SHEETS	SH N	
GENERAL NOTES			VAR	DIST 8 L TS 2023-1	VARIOUS	11				
GLIGHT ROLLS					CONTRACT	NO. 76	5P9			
2	OF	11	SHEETS	STA.	TO STA.		ILLINOIS FED. A	ID PROJECT		

REV. - MS

				CONSTR. CODE_
				100% STATE
				TRAFFIC SIGNALS
CODE			TOTAL	21
NO.	ITEM	UNIT	QUANTITY	URBAN
80300100	LOCATING UNDERGROUND CABLE	FOOT	200,000	200,000
00300100	EOCATTING GINDERGROUND CADEL	1001	200,000	200,000
82110005	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION E	EACH	5	5
82110007	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION G	EACH	20	20
82110008	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	30	30
82110032	LUMINAIRE, LED, SIGN LIGHTING, OUTPUT DESIGNATION E	EACH	5	5
87000240	ELECTRIC CABLE ASSEMBLY IN CONDUIT, 600V (XLP-TYPE TC) 2/C NO. 2 AND NO. 4	FOOT	500	500
87000405	ELECTRIC CABLE ASSEMBLY IN TRENCH, 600V (XLP-TYPE TC) 2/C NO. 2 AND NO. 4	FOOT	500	500
87000775	ELECTRIC CABLE ASSEMBLY IN CONDUIT, 600V (XLP-TYPE TC) 2/C NO. 2 AND NO. 6	FOOT	500	500
87000885	ELECTRIC CABLE ASSEMBLY IN CONDUIT, 600V (XLP-TYPE TC) 2/C NO. 6 AND NO. 8	FOOT	500	500
87005275	ELECTRIC CABLE ASSEMBLY IN TRENCH, 600V (XLP-TYPE TC) 2/C NO. 4 AND NO. 6	FOOT	500	500
87005385	ELECTRIC CABLE ASSEMBLY IN TRENCH, 600V (XLP-TYPE TC) 2/C NO. 6 AND NO. 8	FOOT	1000	1000
88102825	PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, BRACKET MOUNTED WITH COUNT DOWN TIMER	EACH	50	50
X0327495	JOURNEYMAN ELECTRICIAN	HOUR	3500	3500
X0327496	APPRENTICE ELECTRICIAN	HOUR	350	350

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PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -
PLOT DATE = 3/10/2022	DATE -	REVISED -

					F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
SUMMARY OF QUANTITIES					VAR	DIST 8 L TS 2023-	-1	VARIOUS	11	3	
									CONTRACT	NO. 76	5P96
	SHEET 3	OF 11	SHEETS	STA.	TO STA.		ILLINOIS	FED. A	D PROJECT		

CONSTR.	CODI
100% ST/	ΔTF

				TRAFFIC SIGNALS
CODE			TOTAL	21
NO.	I TEM	UNIT	QUANTITY	URBAN
X0327497	PICK-UP TRUCK	HOUR	700	700
X0327500	ARROWBOARD (TRAILER MOUNTED)	HOUR	20	20
X0327501	ATTENUATOR, CRASH (TRUCK MOUNTED)	HOUR	500	500
70327301	ATTENDATOR, CRASH (INDORTED)	HOOK	300	300
X0327734	TRUCK CRANE	HOUR	500	500
X1400096	LED LAMP MODULE REPLACEMENT	EACH	300	300
X7010218	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	EACH	29	29
X8760200	ACCESSIBLE PEDESTRIAN SIGNAL	EACH	100	100
X8860400	DETECTOR LOOP, SPECIAL	FOOT	5000	5000
VD 0 0 0 0 1 5				
XP000015	DIGGER DERRICK	HOUR	50	50
XP000028	LABOR	HOUR	100	100
XP000029	BUCKET TRUCK-VAN FOR TRAFFIC SIGNALS	HOUR	700	700
7(1 000023	Decker Mock with the Storwices	110011	700	700
XP000030	BUCKET TRUCK FOR HIGHWAY LIGHTING	HOUR	700	700
XP000031	POLE TRAILER	HOUR	20	20
		1		
XP000032	FLATBED TRAILER	HOUR	100	100

USER NAME = prestonme	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -
PLOT DATE = 3/10/2022	DATE -	REVISED -

				F.A. RTE	SECT	ΠON		COUNTY	SHEETS	NO.	
SUMMARY OF QUANTITIES			VAR	DIST 8 L 1	TS 2023	-1	VARIOUS	11	4		
									CONTRACT	NO. 76	P96
HEET /	OF 11	SHEETS	CTA	TO STA			TI LINIOTO	55D 41	D DDGJECT		

CONSTR.	CODE
100% STA	ATE

				TRAFFIC SIGNALS
CODE			TOTAL	21
NO.	ITEM	UNIT	QUANTITY	URBAN
XP000101	ATQ 5A FUSE 200	EACH	300	300
XP000102	FNQ 5A FUSE	EACH	300	300
XP000104	FNM 10A FUSE	EACH	10	10
VD000105	EDNID COA FLICE	- FACU	1.0	
XP000105	FRNR 60A FUSE	EACH	10	10
XP000106	BUCHANAN FUSEHOLDER KIT	EACH	50	50
XF 000100	BOCHANAN TOSEHOEDEN NTT	LACIT	30	
XP000115	150W HPS LAMP	EACH	100	100
XP000116	250W HPS LAMP	EACH	100	100
XP000118	400W HPS LAMP	EACH	350	350
XP000119	150W 240-480V BALLAST KIT	EACH	25	25
XP000120	250W 240-480V BALLAST KIT	EACH	50	50
VD000133	ADOW 240 ADOV DALLACT KIT	FACIL	150	150
XP000122	400W 240-480V BALLAST KIT	EACH	150	150
XP000123	SD-100 BU STARTER	EACH	5	5
VI 000152	SD 100 DO STARTER	LACII	J	
XP000124	SURGE ARRESTOR (EDCO MODEL SHA-XXX3) X=20-240-480 VOLT	EACH	5	
			_	
XP000125	PHOTO CONTROL, 105V-285V (ALR-MODEL SSTPV-ON)	EACH	5	5

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PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -
PLOT DATE = 3/10/2022	DATE -	REVISED -

STATE OF ILLINOIS								
DEPARTMENT OF	TRANSPORTATION							

	F.A. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SUMMARY OF QUANTITIES	VAR	DIST 8 L TS 2023-1	VARIOUS	11	5
			CONTRACT	NO. 76	5P96
SHEET 5 OF 11 SHEETS STA. TO STA.		ILLINOIS FED.	AID PROJECT		

				CONSTR. CODE
				100% STATE
				TRAFFIC SIGNALS
CODE			TOTAL	21
NO .	ITEM	UNIT	QUANTITY	URBAN
XP000126	12XLPE 1/C COPPER WIRE	FOOT	4615	4615
XP000127	8 XLP-TYPE 1/C C WIRE	FOOT	500	500
VD000130	C VID TYPE 1/C C WIDE	FOOT	10202	10202
XP000128	6 XLP-TYPE 1/C C WIRE	FOOT	10282	10282
VP000130	60A LIGHTING CONTRACTOR	EACH	30	30
XF000129	OUA LIGHTING CONTRACTOR	ЕАСП	30	
XP000130	100A LIGHTING CONTRACTOR	EACH	10	10
7.1. 000130		27.011	10	
XP000132	50A CIRCUIT BREAKER, 1P	EACH	60	60
XP000135	50A CIRCUIT BREAKER, 2P	EACH	5	5
XP000137	150A CIRCUIT BREAKER, 2P	EACH	30	30
XP000138	200A CIRCUIT BREAKER, 2P	EACH	30	30
XP000139	BREAKAWAY COUPLING, 1"	EACH	30	30
VD000140	1 AU V 1 AU CTAINLECC CTEEL MECH	COLT	1.0	1.0
XP000140	1-4" X 1-4" STAINLESS STEEL MESH	SQFT	10	10
VD000141	ALUMINUM SIGNAL BASE, SQUARE (PELCO)	EACH	80	80
AF 000141	ALOMINOM STONAL BASE, SQUARE (FEECO)	LACH	00	00
XP000142	ALUMINUM SIGNAL POST, 13', SCH 80 (PELCO)	EACH	25	25
3.1 0 3 0 1 1 2				
XP000145	MAST ARM BRACKET, 3 SECTION (PELCO AB 116)	EACH	30	30

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PLOT SCALE = 100 0000 / in.	CHECKED -	REVISED -
PLOT DATE = 3/10/2022	DATE -	REVISED -

						F.A. RTE	SECT	LION		COUNTY	TOTAL SHEETS	SHEET NO.
SUMMARY OF QUANTITIES					VAR	DIST 8 L	TS 2023	-1	VARIOUS	11	6	
										CONTRACT	NO. 76	5P96
SHEE	T 6	OF 11	SHEETS	STA.	TO STA.			ILLINOIS	FED. A	D PROJECT		

CONSTR. CODE 100% STATE

				TRAFFIC SIGNALS
CODE			TOTAL	21
NO .	ITEM	UNIT	QUANTITY	URBAN
XP000146	MAST ARM BRACKET, 4 SECTION (PELCO AB 116)	EACH	30	30
XP000147	MAST ARM BRACKET, 5 SECTION (PELCO AB 116)	EACH	40	40
XP000161	LAMP, QUARTZ HALOGEN, 43W, 10.8V (GE OR EQUIVALENT)	EACH	80	80
XP000164	SIGNAL HEAD, POLYCARBONATE, LED, 1-SECTION, 12", R OR Y (ECONOLITE OR MCCAIN)	EACH	20	20
VD000165	CICNAL HEAD DOLVCARRONATE LED 2 CECTION 12H /ECONOLITE OR MCCAINI)	E A CI I	120	120
XP000165	SIGNAL HEAD, POLYCARBONATE, LED, 3-SECTION, 12", (ECONOLITE OR MCCAIN)	EACH	120	120
VD000166	SIGNAL HEAD, POLYCARBONATE, LED, 4-SECTION, 12", (ECONOLITE OR MCCAIN)	EACH	20	20
7,000100	SIGNAL HEAD, POLICARBONATE, LED, 4-SECTION, 12 , (ECONOLITE OR MCCAIN)	ЕАСП	20	20
XP000167	SIGNAL HEAD, POLYCARBONATE, LED, 5-SECTION, 12", (ECONOLITE OR MCCAIN)	EACH	30	30
X1 000107	STOWNE THEAD, FOLTEANDOWNTE, ELD, S SECTION, 12 , (LEONOLITE ON MICCAIN)	LACIT		
XP000168	PEDESTRIAN HEAD, POLYCARBONATE, LED, 2-SECTION, 12", (ECONOLITE OR MCCAIN)	EACH	40	40
XP000170	ELECTRIC CABLE, 2-C, #14, TW, SH	FEET	3,000	3,000
XP000171	ELECTRIC CABLE, 3 PR, #18, TW, SH	FEET	10	10
XP000172	ELECTRIC CABLE, 5 PR, #18, TW, SH	FEET	10	10
XP000173	ELECTRIC CABLE, 6 PR, #18, TW, SH	FEET	2,200	2,200
XP000174	ELETRIC CABLE, 2-C, #14	FEET	1,500	1,500
XP000175	ELETRIC CABLE, 3-C, #14	FEET	1,500	1,500

FILE NAME: pw://lidot.pv

USER NAME = prestonme	DESIGNED -	REVISED -
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PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -
PLOT DATE = 3/10/2022	DATE -	REVISED -

											TOTAL SHEETS	SHEET NO.	
SUMMARY OF QUANTITIES					VAR	DIST 8 L TS 2023-1		VARIOUS	11	7			
											CONTRACT	NO. 76	5P96
	SHEET 7	OF 11	SHEETS	STA.	TO STA.				ILLINOIS	FED. A	D PROJECT		

CONSTR.	CODE
100% ST	ATE

CODE NO.	ITEM		TOTAL	21
NO.	ITEM			
		UNIT	QUANTITY	URBAN
XP000176 EL	LETRIC CABLE, 5-C, #14	FEET	5,000	5,000
XP000177 EL	LETRIC CABLE, 7-C, #14	FEET	2,000	2,000
XP000179 GR	ROUND ROD, 8', COPPER CLAD	EACH	20	20
XP000180 SP	PLICE KIT (3-M SCOTCHCAST #72-N1)	EACH	10	10
XP000181 LC	DOP SEALANT (BONDO P606)	GAL	10	10
		<u> </u>		
XP000183 BA	ACKPLATE, ABS PLASTIC, 3-SECTION (PELCO)	EACH	10	10
VD000104 D4	ACKELATE ARC BLACTIC A CECTION (RELCO)	FACIL	1.0	1.0
XP000184 BA	ACKPLATE, ABS PLASTIC, 4-SECTION (PELCO)	EACH	10	10
VD000105 DA	ACKPLATE, ABS PLASTIC, 5-SECTION (PELCO)	EACH	10	10
XF000183 BA	ACKPLATE, ABS FLASTIC, 5-SECTION (FEECO)	EACH	10	10
XP000186 L	BOX, NEMA, 4X, SS, 6"X8"X4", W-ALUMINUM BACKPLATE & LOCK KIT	EACH	10	10
X1 000100 J	BOX, NEINA, 4X, 55, 6 X6 X4 , W ALGININGIII BACKI EATE & LOCK KIT	EACH	10	10
XP000187 HA	ANDHOLE, FRAME & COVER (NEENAH R-6660-JP)	EACH	5	5
XP000188 HA	ANHOLE, COVER ONLY (NEENAH R-6660-JP)	EACH	5	5
XP000191 SI	IGN, ILLUMINATED, FIBEROPTIC-TYPE, 24"X30" "NO LEFT-RIGHT TURN" OR "LT TURN YIELD"	EACH	5	5
XP000192 SI	IGN, ILLUMINATED, FIBEROPTIC-TYPE, 24"X30" "NO LEFT-RIGHT TURN" OR "LT TURN YIELD"	EACH	5	5
XP000193 MC	ONITOR, NEMA CONFLICT, 12 CHANNEL (EDI SSM-12E)	EACH	10	10

USER NAME = prestonme	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -
PLOT DATE = 3/10/2022	DATE -	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE:

_	F.A. RTE.	S				
S	VAR	DIST 8				
HEET 8	OF 11	SHEETS	STA	TO STA		

CONSTR.	CODE
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				TRAFFIC SIGNALS
CODE			TOTAL	21
NO.	ITEM	UNIT	QUANTITY	URBAN
XP000194	RELAY, FLASH TRANSFER, (MIDTEX 136-62T3A1)	EACH	5	5
XP000195	DETECTOR, NEMA DIGITAL, 1-CH, SHELF MOUNT (DETECTOR SYSTEMS OR RENO)	EACH	5	5
XP000196	DETECTOR, NEMA DIGITAL, 2-CH, RACK MOUNT (DETECTOR SYSTEMS OR RENO)	EACH	5	5
VP 0 0 0 1 0 7	DETECTOR DOWER CURRLY PACK MOUNT (DETECTOR CYCTEMS OR RENG)	E A CLI		
XP000197	DETECTOR, POWER SUPPLY, RACK MOUNT (DETECTOR SYSTEMS OR RENO)	EACH	5	5
VD000108	CABINET, SIGNAL CONTROLLER, ALUM., TYPE IV, W-MONITOR & ALL PLUG-INS, COMPLETE (ECONOLITE)	EACH	5	5
XP000198	CABINET, SIGNAL CONTROLLER, ALOMI, TIPE IV, W-MONITOR & ALL PLOG-INS, COMPLETE (ECONOLITE)	EACH	)	3
XP000199	FLASHER, NEMA	EACH	5	5
XI 000133	TEXOTIEN, NEWN			
XP000200	LOAD SWITCH, NEMA	EACH	20	20
XP000201	CONTROLLER, SIGNAL, (ECONOLITE ASC-2S-2100)	EACH	1	1
XP000203	COLD GALVANIZING, SPRAY CAN	EACH	5	5
XP000204	ALUMINUM LIGHT POLE, 45', COMPLETE, ROUND W 15' TRUSS STYLE ARM, W- TRANSFORMER BASE, 17" B.C.	EACH	10	10
XP000205	ALUMINUM LIGHT POLE MAST ARM, 15', TRUSS STYLE	EACH	10	10
XP000207	ALUMINUM LIGHT POLE, 45'. COMPLETE, RD,W-TENON TOP, W-T BASE, 17" B.C., DK. BRONZE POWDER COAT	EACH	10	10
XP000209	UPPER AND LOWER ARM ASSEMBLY, UNPAINTED ALUMINUM	EACH	80	80
VD000310	FLACHER CONTROLLER CARINET ACCEMBLY, NEMA / RELCO CE 100E OR FOLLIVALENT)	FACI!	1.0	10
XP000210	FLASHER CONTROLLER CABINET ASSEMBLY, NEMA (PELCO SE-1005 OR EQUIVALENT)	EACH	10	10
XB000300	TRAFFIC SIGNAL RELAMPING	EACH	5	5
VL 000200	TIVALLIC STONAL INLLANIFING	LACH		

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USER NAME = prestonme	DESIGNED -	REVISED -						F.A. RTF	SECTION	COUNTY	TOTAL SHEET
	DRAWN -	REVISED -	STATE OF ILLINOIS SUMMARY OF QUANTITIES VAR DIST 8	SUMMARY OF QUANTITIES		DIST 8 L TS 2023-1	VARIOUS	11 9			
PLOT SCALE = 100,0000 / in	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION							CONTRACT	NO. 76P96
PLOT DATE = 3/10/2022	DATE -	REVISED -		SCALE:	SHEET 9	OF 11 SHEETS STA.	TO STA.		ILLINOIS FED. A	ID PROJECT	

CONSTR. CODE 100% STATE

				TRAFFIC SIGNALS
CODE			TOTAL	21
NO.	ITEM	UNIT	QUANTITY	URBAN
XP000301	TRAFFIC SIGNAL LAMP REPLACEMENT	EACH	5	5
XP000302	FLASHING BEACON INSPECTION	EACH	5	5
XP000303	TOWER LIGHTING INSPECTION	EACH	5	5
XP000304	REPLACE SERVICE INSTALLATION, COMPLETE	EACH	5	5
XP000307	REPAIR TRAFFIC SIGNAL KNOCKDOWN	EACH	80	80
VD 0 0 0 0 0 0			1.0	
XP000308	REPAIR TRAFFIC BEACON KNOCKDOWN	EACH	10	10
VD000300	REPAIR TRAFFIC LIGHT POLE KNOCKDOWN	EACH	50	50
XP000309	REPAIR TRAFFIC LIGHT POLE KNOCKDOWN	EACH	50	
XP000310	REPLACE HIGHWAY LIGHT POLE BREAKAWAY DEVICE, COUPLING	EACH	5	5
χι σσσσ1σ	KELENCE HIGHWAY EIGHT FOLL BREAKAWAY BEVICE, COOLEING	LACIT		
XP000311	REPLACE HIGHWAY LIGHT POLE BREAKAWAY DEVICE, TRANSFORMER BASE	EACH	5	
XP000312	REPLACE TRAFFIC SIGNAL POST BASE ASSEMBLY	EACH	5	5

MODEL: Default

USER NAME = prestonme	DESIGNED -	REVISED -
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PLOT DATE = 3/10/2022	DATE -	REVISED -

SUMMARY OF QUANTITIES				F.A. RTE	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.		
				VAR	DIST 8 L TS 2023-1	1	VARIOUS	11	10		
									CONTRACT	NO. 76	5P96
	SHEET 10	OF 11	SHEETS	STA.	TO STA.		ILLINOIS	FED. AI	D PROJECT		

### ILLINOIS DEPARTMENT OF TRANSPORTATION LUMINAIRE PERFORMANCE TABLE LED replacement for 250W HPS Horizontal Mount luminaire

LUMINAIRE PERFORMANCE TABLE LED replacement for 400W HPS Horizontal Mount luminaire

Number of Lanes (in One direction Only)

Lane Width

Median Width

Q-Zero Value

Mounting Height

naire Type

**BUG Rating** 

Spacing

Configuration

I.F.S. Surface Classification

Luminaire Overhang From

I.E.S. Vertical Distribution

I.E.S. Lateral Distribution

Total Light Loss Factor

Edge of Pavement (White Line)

ILLINOIS DEPARTMENT OF TRANSPORTATION

GIVEN CONDITIONS

12 ft

0 ft

R3

.07

45 ft

0 ft

LFD

Medium

U = 0

Type II or III

0.684

240 ft

One Sided

### ILLINOIS DEPARTMENT OF TRANSPORTATION LUMINAIRE PERFORMANCE TABLE

LED Replacement for 250W HPS Multi-Mount Luminaire (replacement luminaire shall be mounted horizontally)

**GIVEN CONDITIONS** 

Number of Lanes (One Direction Only)

12 ft

0 ft

R3

.07

45 ft

-30 ft

LED

Medium

U - 0

Type III or IV

0.684

145 ft

One Sided

0.9 fc to 1.4 fc

Lane Width

Median Width

Q-Zero Value

Mounting Height

Luminaire Type

BUG Rating

Spacing

Configuration

I.E.S. Surface Classification

Luminaire Overhang From

I.E.S. Vertical Distribution

I.E.S. Lateral Distribution

Average Illuminance, E<sub>AVE</sub>

Max. Veiling Luminance Ratio,  $L_V/L_{\Delta VE}$ 

Total Light Loss Factor

Edge of Pavement (White Line)

GIVEN	CONDITIONS

ROADWAY DATA	Lane Width	12 ft
	Number of Lanes (in One Direction Only)	3
	Median Width	0 ft
	I.E.S. Surface Classification	R3
	Q-Zero Value	.07
LIGHT POLE DATA	Mounting Height	45 ft
	Luminaire Overhang From Edge of Pavement (White Line)	0 ft
LUMINAIRE DATA	Luminaire Type	LED
	I.E.S. Vertical Distribution	Medium
	BUG Rating	U = 0
	I.E.S. Lateral Distribution	Type II or III
	Total Light Loss Factor	0.684

LIGHT POLE DATA

160 ft

LAYOUT DATA One Sided

1. Total light loss factor is the product of "Lumen Depreciation" (LLD) = 0.90, "Dirt Depreciation" (LDF)

= 0.80, and "Equipment factors" (EF) = 0.95.

NOTES:

LAYOUT DATA

ROADWAY DATA

1. Total light loss factor is the product of "Lumen Depreciation" (LLD) = 0.90, "Dirt Depreciation" (LDF) = 0.80, and "Equipment factors" (EF) = 0.95.

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

ILLUMINANCE	Average Illuminance, Eave	0.9 fc to 1.4 fc
	Uniformity Ratio, E <sub>AVE</sub> /E <sub>MIN</sub>	≤3.0:1
LUMINANCE	Average Luminance, Lave	0.6 cd/m <sup>2</sup> to 0.9 cd/m <sup>2</sup>
	Uniformity Ratio, Lave/Lmin	≤3.5:1
	Uniformity Ratio, L <sub>MAX</sub> /L <sub>MIN</sub>	≤ 6.0:1
	Max. Veiling Luminance Ratio, Lv/Lave	≤ 0.3:1

### PERFORMANCE REQUIREMENTS

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

ILLUMINANCE	Average Illuminance, E <sub>AVE</sub>	0.9 fc to 1.4 fc
	Uniformity Ratio, EAVE/EMIN	≤ 3.0:1
LUMINANCE	Average Luminance, L <sub>AVE</sub>	0.6 cd/m <sup>2</sup> to 0.9 cd/m <sup>2</sup>
	Uniformity Ratio, LAVE/LMIN	≤ 3.5:1
	Uniformity Ratio, L <sub>MAX</sub> /L <sub>MIN</sub>	≤ 6.0:1
	Max. Veiling Luminance Ratio, Lv/Lave	≤ 0.3:1

ROADWAY DATA

LIGHT POLE DATA

LUMINAIRE DATA

LAYOUT DATA

ILLUMINANCE

LUMINANCE

Total light loss factor is the product of "Lumen Depreciation" (LLD) = 0.90, "Dirt Depreciation" (LDF) = 0.80, and "Equipment factors" (EF) = 0.95.

### PERFORMANCE REQUIREMENTS

NOTE: These performance requirements shall be the acceptable standards of photometric performance for the

	Uniformity Ratio, E <sub>AVE</sub> /E <sub>MIN</sub>	≤ 3.0:1
E	Average Luminance, L <sub>AVE</sub>	0.6 cd/m <sup>2</sup> to 0.9 cd/m <sup>2</sup>
	Uniformity Ratio, LAVE/LMIN	≤ 3.5:1
	Uniformity Ratio, LM4x/LMIN	< 6.0:1

### ILLINOIS DEPARTMENT OF TRANSPORTATION LUMINAIRE PERFORMANCE TABLE

LED Replacement for 400W HPS Multi-Mount Luminaire (replacement luminaire shall be mounted horizontally)

**GIVEN CONDITIONS** 

### LED Replacement for 150W HPS Underpass Luminaire **GIVEN CONDITIONS**

ILLINOIS DEPARTMENT OF TRANSPORTATION

LUMINAIRE PERFORMANCE TABLE

ROADWAY DATA	Lane Width  Number of Lanes (in One Direction Only)  Median Width  I.E.S. Surface Classification	12 ft 4 0 ft R3	ROADWAY DATA	Lane Width Number of Lanes (in One Direction Only) Median Width I.E.S. Surface Classification	12 ft 2 0 ft R3
	Q-Zero Value	.07		Q-Zero Value	.07
LIGHT POLE DATA	Mounting Height	45 ft	LIGHT POLE DATA	Mounting Height	16 ft
	Luminaire Overhang From Edge of Pavement (White Line)	-30 ft		Luminaire Overhang From Edge of Pavement (White Line)	-20 ft
LUMINAIRE DATA	Luminaire Type	LED	LUMINAIRE DATA	Luminaire Type	LED
	I.E.S. Vertical Distribution	Medium		I.E.S. Vertical Distribution	Medium
	BUG Rating	U = 0		BUG Rating	U = 0
	I.E.S. Lateral Distribution	Type III or IV		I.E.S. Lateral Distribution	Type III or IV
	Total Light Loss Factor	0.684		Total Light Loss Factor	0.684
LAYOUT DATA	Spacing	155 ft	LAYOUT DATA	Spacing	60 ft
	Configuration	One Sided		Configuration	One Sided

1. Total light loss factor is the product of "Lumen Depreciation" (LLD) = 0.90, "Dirt Depreciation" (LDF) = 0.80, and "Equipment factors" (EF) = 0.95.

### PERFORMANCE REQUIREMENTS

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

ILLUMINANCE	Average Illuminance, EAVE	0.9 fc to 1.4 fc				
	Uniformity Ratio, E <sub>AVE</sub> /E <sub>MIN</sub>	≤ 3.0:1				
LUMINANCE	Average Luminance, L <sub>AVE</sub>	0.6 cd/m <sup>2</sup> to 0.9 cd/m <sup>2</sup>				
	Uniformity Ratio, Lave/Lmin	≤ 3.5:1				
	Uniformity Ratio, LMAX/LMIN	≤ 6.0:1				
	Max. Veiling Luminance Ratio, L <sub>V</sub> /L <sub>AVE</sub>	≤ 0.3:1				

1. Total light loss factor is the product of "Lumen Depreciation" (LLD) = 0.90, "Dirt Depreciation" (LDF) = 0.80, and "Equipment factors" (EF) = 0.95.

### PERFORMANCE REQUIREMENTS

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

LUMINANCE	Average Luminance, Lave	0.6 cd/m <sup>2</sup> to 0.9 cd/m <sup>2</sup>				
	Uniformity Ratio, LAVE/LMIN	≤ 3.5:1				
	Uniformity Ratio, L <sub>MAX</sub> /L <sub>MIN</sub>	≤ 6.0:1				
	Max. Veiling Luminance Ratio, Lv/LAVE	≤ 0.3:1				

USER NAME = prestonme	DESIGNED -	REVISED -			
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PLOT DATE = 3/10/2022	DATE -	REVISED -			

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DEPARTMENT	0F	TRANSPORTATION

				F.A. RTE	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.				
				VAR	DIST 8 L TS 2023-1		VARIOUS	11	11				
								CONTRACT	NO. 76	5P96			
	SHEET 11	OF	11	SHEETS	STA.	TO STA.			ILLINOIS	FED. A	D PROJECT		