

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	DIST 8 LTS 2025-1	VARIOUS	8	1
		ILLINOIS	CONTRACT NO. 76T62	

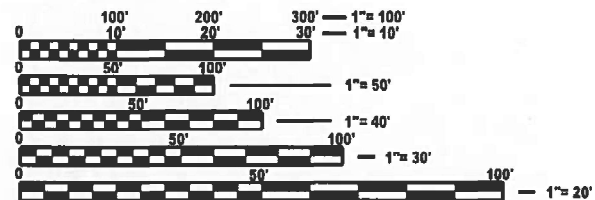
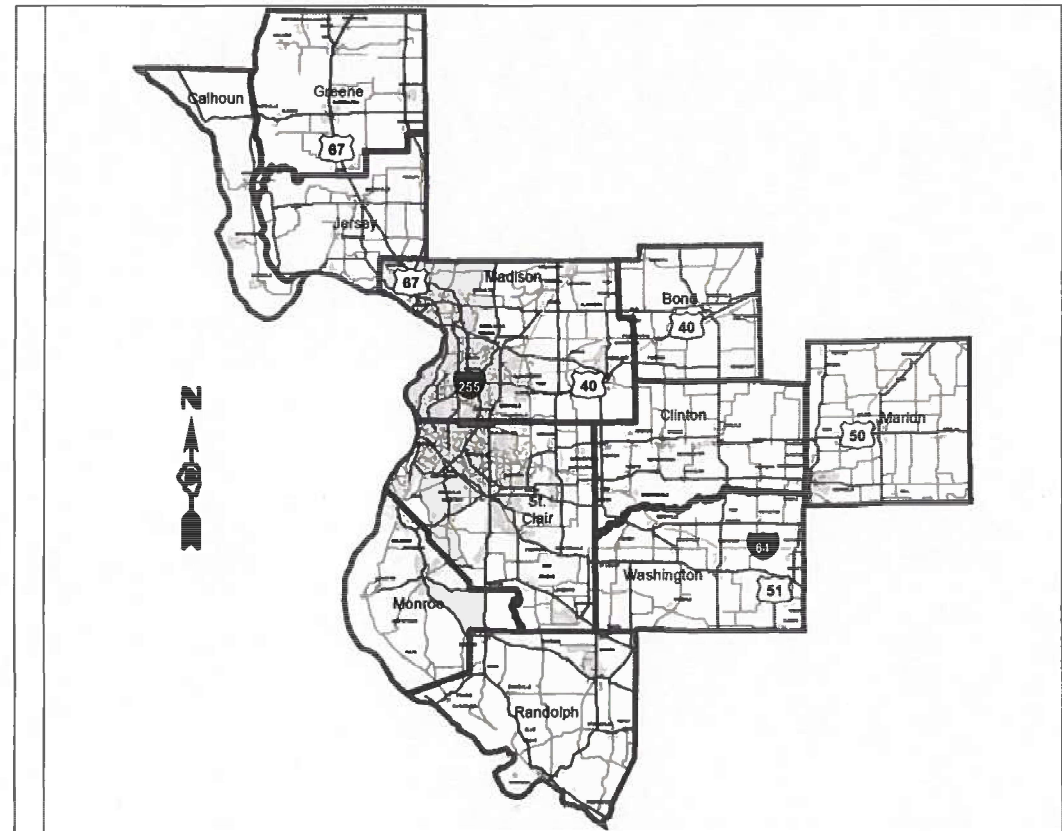
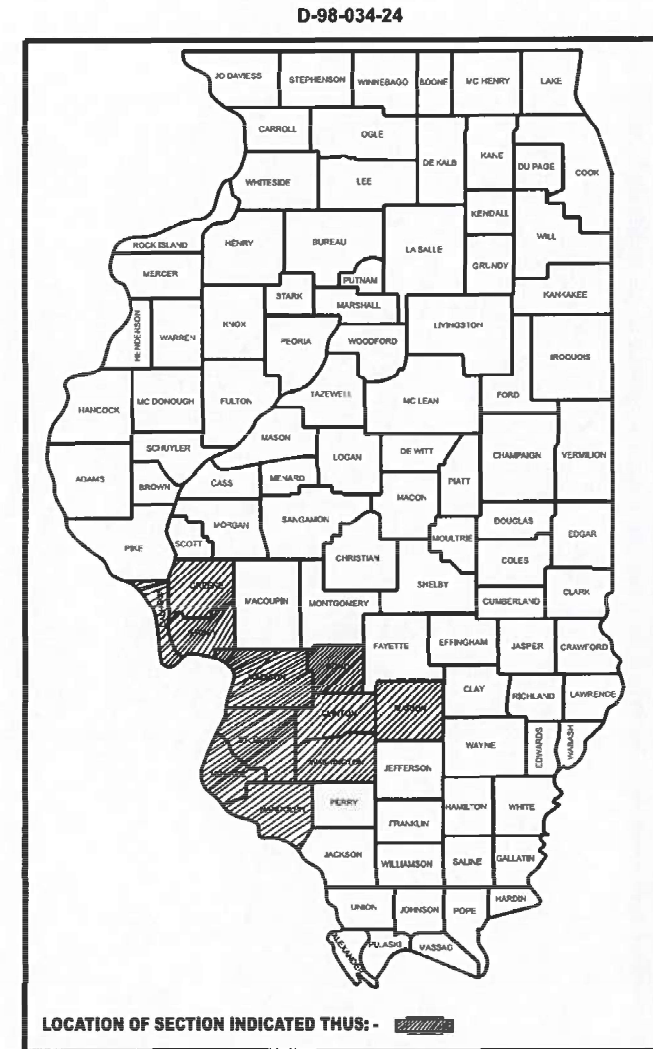
INDEX OF SHEETS

1. COVER SHEET
2. HIGHWAY STANDARDS, GENERAL NOTES, AND COMMITMENTS
- 3.-6. SUMMARY OF QUANTITIES
7. LUMINAIRE PERFORMANCE TABLE
8. CONCRETE FOUNDATION TYPE A PED PUSH-BUTTON POST

PROPOSED HIGHWAY PLANS

VARIOUS ROUTES
SECTION: DIST 8 LTS 2025-1
HIGHWAY LIGHTING, TRAFFIC SIGNAL
REPAIR & MAINTENANCE
VARIOUS COUNTIES

C-98-096-24



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 EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: CHERYL KEPLAR
PROJECT MANAGER: RICHARD BARBEE

CONTRACT NO. 76T62

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED March 19, 2024
Kirk Brown REGIONAL ENGINEER

May 10, 2024 [Signature]
ENGINEER OF DESIGN AND ENVIRONMENT

May 10, 2024 [Signature]
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

HIGHWAY STANDARDS

701001-02	701400-12	701456-05	821101-02
701006-05	701401-13	701601-09	873001-02
701101-05	701406-13	701606-10	880001-01
701106-02	701421-08	701701-10	880006-01
701201-05	701422-10	701901-09	
701206-05	701446-11	886001-01	
701301-04	701451-05	886006-01	
000001-08	001006		

GENERAL NOTES

1. THE LOCATION 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. A FLAGGER SHALL BE REQUIRED AT ALL TIMES WHEN WORKERS OR EQUIPMENT ARE ENCROACHING ON THE LANE OF TRAFFIC.
5. 45 AND 55 MPH SIGNS ARE INCLUDED IN ALL INTERSTATE LANE CLOSURE TRAFFIC CONTROL AND PROTECTION. IF THE LANE CLOSURE DURATION IS LESS THAN 4 HOURS, THE 45 AND 55 MPH SIGNS ARE NOT REQUIRED.
6. ANY WORK ORDER MAY BE CANCELED AT THE ENGINEER'S / DEPARTMENT'S DISCRETION.
7. NO OVERNIGHT LANE CLOSURES WILL BE ALLOWED.

COMMITMENTS

NONE

REV. - MS

MODEL: standards (Sheet)
FILE NAME: c:\pwworking\stdaniel.hopkins@illinois.gov\40837129\08762-Plan-Shts.dgn

USER NAME = daniel.hopkins	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	HIGHWAY STANDARDS, GENERAL NOTES, AND COMMITMENTS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
PLOT SCALE = \$\$SCALE\$	DRAWN -	REVISED -			VAR.	DIST 8 LTS 2025-1	VARIOUS	8	2	
PLOT DATE = 2/21/2024	CHECKED -	REVISED -			CONTRACT NO. 76T62					
	DATE -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.	TO STA.

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				100% STATE	
				TRAFFIC SIGNALS	
				0021	URBAN
80300100	LOCATING UNDERGROUND CABLE	FOOT	1000		1000
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	40		40
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	1000		1000
87000775	ELECTRIC CABLE ASSEMBLY IN CONDUIT, 600V (XLP-TYPE TC) 2/C NO. 4 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	1000		1000
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	60		60
88200510	TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	30		30
88800100	PEDESTRIAN PUSH-BUTTON	EACH	100		100

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				100% STATE	
				TRAFFIC SIGNALS	
				0021	URBAN
XP000001	JOURNEYMAN ELECTRICIAN	HOUR	1000		1000
XP000002	APPRENTICE ELECTRICIAN	HOUR	100		100
XP000009	PICK-UP TRUCK	HOUR	700		700
XP000012	ARROWBOARD (TRAILER MOUNTED)	HOUR	20		20
XP000013	ATTENUATOR, CRASH (TRUCK MOUNTED)	HOUR	500		500
XP000014	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 SIGNALS	EACH	100		100
X8760201	PEDESTRIAN PUSH-BUTTON POST	EACH	50		50
X8860400	DETECTOR LOOP (SPECIAL)	FOOT	5000		5000
XP000015	DIGGER DERRICK	HOUR	100		100
XP000028	LABOR	HOUR	100		100
XP000029	BUCKET TRUCK/VAN FOR TRAFFIC SIGNALS	HOUR	700		700

MODEL: SOQ 1 (Sheet)
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SCALE:			SHEET OF SHEETS	STA.	TO STA.				

				CONSTR. CODE
				100% STATE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	TRAFFIC SIGNALS
				0021 URBAN
XP000030	BUCKET TRUCK FOR HIGHWAY LIGHTING	HOUR	700	700
XP000031	POLE TRAILER	HOUR	100	100
XP000032	FLATBED TRAILER	HOUR	100	100
XP000101	ATQ 5A FUSE 200	EACH	200	200
XP000102	FNQ 5A FUSE	EACH	200	200
XP000104	FNM 10A FUSE	EACH	5	5
XP000105	FRNR 60A FUSE	EACH	5	5
XP000106	BUCHANAN FUSEHOLDER KIT	EACH	50	50
XP000115	150WHPS LAMP	EACH	5	5
XP000116	250WHPS LAMP	EACH	100	100
XP000118	400WHPS LAMP	EACH	350	350
XP000119	150W240/480V BALLAST KIT	EACH	5	5
XP000120	250W240/480V BALLAST KIT	EACH	100	100
XP000122	400W240/480V BALLAST KIT	EACH	150	150

				CONSTR. CODE
				100% STATE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	TRAFFIC SIGNALS
				0021 URBAN
XP000123	SD-100 BU STARTER	EACH	5	5
XP000124	SURGE ARRESTOR (EDCO MODEL SHA-XXX3) X=20/240/480 VOLTS	EACH	20	20
XP000125	PHOTO CONTROL, 105V-285V (ALR-MODEL SSTPV-ON)	EACH	20	20
XP000126	#12 XLPE 1/C COPPER WIRE	FEET	500	500
XP000127	#8 XLP-TYPE USE 1/C COPPER WIRE	FEET	500	500
XP000128	#6 XLP-TYPE USE 1/C COPPER WIRE	FEET	10000	10000
XP000129	60A LIGHTING CONTACTOR	EACH	5	5
XP000130	100A LIGHTING CONTACTOR	EACH	5	5
XP000132	50A CIRCUIT BREAKER, 1P	EACH	5	5
XP000135	50A CIRCUIT BREAKER, 2P	EACH	5	5
XP000137	150A CIRCUIT BREAKER, 2P	EACH	5	5
XP000138	200A CIRCUIT BREAKER, 2P	EACH	5	5
XP000139	BREAKAWAY COUPLING, 1"	EACH	5	5
XP000140	1/4" X 1/4" STAINLESS STEEL MESH	SQFT	10	10

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PLOT DATE = 2/21/2024	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES
SOQ 2 OF 4**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	DIST 8 LTS 2025-1	VARIOUS	8	4
CONTRACT NO. 76T62				
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				100% STATE	
				TRAFFIC SIGNALS	
				0021	URBAN
XP000141	ALUMINUM SIGNAL BASE, SQUARE (PELCO)	EACH	100		100
XP000142	ALUMINUM SIGNAL POST, 13', SCH 80 (PELCO)	EACH	5		5
XP000145	MAST ARM BRACKET, 3 SECTION (PELCO AB 11 6)	EACH	5		5
XP000146	MAST ARM BRACKET, 4 SECTION (PELCO AB 11 6)	EACH	5		5
XP000147	MAST ARM BRACKET, 5 SECTION (PELCO AB 11 6)	EACH	5		5
XP000161	LAMP, QUARTZ HALOGEN, 43W @, 10.8V (GE OR EQUIVALENT)	EACH	50		50
XP000164	SIGNAL HEAD, POLYCARBONATE, LED, 1-SECTION, 12", R OR Y (ECONOLITE OR MCCAIN)	EACH	5		5
XP000165	SIGNAL HEAD, POLYCARBONATE, LED, 3-SECTION, 12", (ECONOLITE OR MCCAIN)	EACH	120		120
XP000166	SIGNAL HEAD, POLYCARBONATE, LED, 4-SECTION, 12", (ECONOLITE OR MCCAIN)	EACH	50		50
XP000167	SIGNAL HEAD, POLYCARBONATE, LED, 5-SECTION, 12", (ECONOLITE OR MCCAIN)	EACH	50		50
XP000168	PEDESTRIAN HEAD, POLYCARBONATE, LED, 2-SECTION, 12", (ECONOLITE OR MCCAIN)	EACH	40		40
XP000170	ELECTRIC CABLE, 2/C, #14, TW, SH	FEET	3000		3000
XP000171	ELECTRIC CABLE, 3 PR, #18, TW, SH	FEET	10		10
XP000172	ELECTRIC CABLE, 5 PR, #18, TW, SH	FEET	10		10

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				100% STATE	
				TRAFFIC SIGNALS	
				0021	URBAN
XP000173	ELECTRIC CABLE, 6 PR, #18, TW, SH	FEET	10		10
XP000174	ELECTRIC CABLE, 2/C, #14	FEET	3000		3000
XP000175	ELECTRIC CABLE, 3/C, #14	FEET	3000		3000
XP000176	ELECTRIC CABLE, 5/C, #14	FEET	3000		3000
XP000177	ELECTRIC CABLE, 7/C, #14	FEET	3000		3000
XP000179	GROUND ROD, 8', COPPER CLAD	EACH	5		5
XP000180	SPLICE KIT (3-M SCOTCHCAST #72-N1)	EACH	10		10
XP000181	LOOP SEALANT (BONDO P606)	GALLON	30		30
XP000186	J BOX, NEMA, 4X, SS, 6"X8"X4", W/ ALUMINUM BACKPLATE & LOCK KIT	EACH	5		5
XP000187	HANDHOLE, FRAME & COVER (NEENAH R-6660- JP)	EACH	5		5
XP000188	HANDHOLE, COVER ONLY (NEENAH R-6660-JP)	EACH	20		20
XP000191	SIGN, ILLUMINATED, FIBEROPTIC-TYPE, 24"X30" "NO LEFT/RIGHT TURN" OR "LT TURN YIELD"	EACH	5		5
XP000192	SIGN, ILLUMINATED, FIBEROPTIC-TYPE, 24"X30" SYMBOLIC "NO LEFT/RIGHT TURN"	EACH	5		5
XP000193	MONITOR, NEMA CONFLICT, 12 CHANNEL (EDI SSM-12E)	EACH	5		5

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PLOT DATE = 2/21/2024	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES
SOQ 3 OF 4**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	DIST 8 LTS 2025-1	VARIOUS	8	5
CONTRACT NO. 76T62				
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				100% STATE
				TRAFFIC SIGNALS
				0021
				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	20	20
XP000197	DETECTOR, POWER SUPPLY, RACK MOUNT (DETECTOR SYSTEMS OR RENO)	EACH	5	5
XP000198	CABINET, SIGNAL CONTROLLER, ALUM., TYPE IV, W/MONITOR & ALL PLUG-INS, COMPLETE (ECONOLITE)	EACH	5	5
XP000199	FLASHER, NEMA	EACH	20	20
XP000200	LOAD SWTCH, NEMA	EACH	40	40
XP000203	COLD GALVANIZING, SPRAY CAN	EACH	5	5
XP000205	ALUMINUM LIGHT POLE MAST ARM, 15', TRUSS STYLE	EACH	40	40
XP000207	ALUMINUM LIGHT POLE, 45', COMPLETE, RD, W/ TENON TOP, WT BASE, 17" B.C., DK. BRONZE POWDER COAT	EACH	5	5
XP000209	UPPER AND LOWER ARM ASSEMBLY, UNPAINTED ALUMINUM	EACH	120	120
XP000210	FLASHER CONTROLLER CABINET ASSEMBLY, NEMA (PELCO SE-1005 OR EQUIVALENT)	EACH	5	5
XP000300	TRAFFIC SIGNAL RELAMPING	EACH	5	5
XP000301	TRAFFIC SIGNAL LAMP REPLACEMENT	EACH	5	5

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				100% STATE
				TRAFFIC SIGNALS
				0021
				URBAN
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	120	120
XP000308	REPAIR FLASHING BEACON KNOCKDOWN	EACH	40	40
XP000309	REPAIR HIGHWAY LIGHT POLE KNOCKDOWN	EACH	100	100
XP000310	REPLACE HIGHWAY LIGHT POLE BREAKAWAY DEVICE, COUPLINGS	EACH	5	5
XP000311	REPLACE HIGHWAY LIGHT POLE BREAKAWAY DEVICE, TRANSFORMER BASE	EACH	40	40
XP000312	REPLACE TRAFFIC SIGNAL POST BASE ASSEMBLY	EACH	40	40

MODEL: SOQ 4 [Sheet]
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PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -
PLOT DATE = 2/21/2024	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES
SOQ 4 OF 4**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	DIST 8 LTS 2025-1	VARIOUS	8	6
CONTRACT NO. 76T62				
ILLINOIS FED. AID PROJECT				

Illinois Department of Transportation Luminaire Performance Table

Project
 Date: 01/19/21 Contract Number: N/A Section Number: N/A County: Various
 Marked Route Number: Various Municipality: Various

Roadway
 Lane Width: 12 # of Lanes: 2 Median Width: N/A I.E.S. Surface Classification: R3 Q-Zero Value: 0.07

Structure
 Mounting Height: 16 ft Arm Length: 0 ft Set-Back: 20 ft Number of Luminaires (Highmast & Sign Lighting Only): N/A

Luminaire
 Description: Replacement For 150W Underpass I.E.S. Lateral Distribution: Type III or IV I.E.S. Vertical Distribution: Medium
 Total Light Loss Factor (LLF): 0.7 B-U-G Rating: U = 0 Shields: N/A Dimming Protocol: 0-10V

Layout
 Spacing (to Nearest 5 ft): 60 ft Configuration (Opposite, Staggered, 1 Sided, or Median): 1 Sided

Performance
 Average Illuminance, E_{ave} (fc): N/A Uniformity Ratio, E_{min}/E_{max} : N/A
 Average Luminance, L_{ave} (cd/m²): 0.6 to 0.9 Uniformity Ratio, L_{min}/L_{max} : less than or equal to 3.5:1
 Veiling Luminance Ratio, L_v/L_{ave} : less than or equal to 6.0:1
 Light Trespass: Distance to ROW (behind pole): N/A Max. Horizontal Illuminance at ROW, E_H : N/A Max. Vertical Illuminance at ROW, E_V : N/A

Notes
 1. Set-Back is from Edge of Pavement (white line) except for sign luminaires when it is vertical and horizontal distance from the sign to the luminaire.
 2. Lighting calculations shall be performed with all luminaires oriented toward and perpendicular to the roadway.
 3. Total Light Loss Factor (LLF) = the product of "Lumen Maintenance" (LLD) = 0.9, "Dirt Depreciation" (LDD) = 0.8, and "Equipment Factors" (EF) = 0.95.
 4. Performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

Replacement luminaire may be tilted as needed.
 Calculations shall be performed in one direction only.
 Compliance with performance criteria shall be held to one significant digit.
 The luminaire performance table defines the luminaire only. It does not necessarily represent the mounting height, arm length, or setback for which the lighting unit is to be installed. Refer to lighting plans for installation.

Printed 03/17/23 BDE 5630 (04/10/19)

Illinois Department of Transportation Luminaire Performance Table

Project
 Date: 01/19/21 Contract Number: N/A Section Number: N/A County: Various
 Marked Route Number: Various Municipality: Various

Roadway
 Lane Width: 12 # of Lanes: 3 Median Width: N/A I.E.S. Surface Classification: R3 Q-Zero Value: 0.07

Structure
 Mounting Height: 45 ft Arm Length: 15 ft Set-Back: 15 ft Number of Luminaires (Highmast & Sign Lighting Only): N/A

Luminaire
 Description: Replacement For 250W Horizontal Mount I.E.S. Lateral Distribution: Type III I.E.S. Vertical Distribution: Medium
 Total Light Loss Factor (LLF): 0.7 B-U-G Rating: U = 0 Shields: N/A Dimming Protocol: 0-10V

Layout
 Spacing (to Nearest 5 ft): 160 ft Configuration (Opposite, Staggered, 1 Sided, or Median): 1 Side

Performance
 Average Illuminance, E_{ave} (fc): 0.9 to 1.4 Uniformity Ratio, E_{min}/E_{max} : less than or equal to 3.0:1
 Average Luminance, L_{ave} (cd/m²): 0.6 to 0.9 Uniformity Ratio, L_{min}/L_{max} : less than or equal to 3.5:1
 Veiling Luminance Ratio, L_v/L_{ave} : less than or equal to 6.0:1
 Light Trespass: Distance to ROW (behind pole): N/A Max. Horizontal Illuminance at ROW, E_H : N/A Max. Vertical Illuminance at ROW, E_V : N/A

Notes
 1. Set-Back is from Edge of Pavement (white line) except for sign luminaires when it is vertical and horizontal distance from the sign to the luminaire.
 2. Lighting calculations shall be performed with all luminaires oriented toward and perpendicular to the roadway.
 3. Total Light Loss Factor (LLF) = the product of "Lumen Maintenance" (LLD) = 0.9, "Dirt Depreciation" (LDD) = 0.8, and "Equipment Factors" (EF) = 0.95.
 4. Performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

Calculations shall be performed in one direction only.
 Compliance with performance criteria shall be held to one significant digit.
 The luminaire performance table defines the luminaire only. It does not necessarily represent the mounting height, arm length, or setback for which the lighting unit is to be installed. Refer to lighting plans for installation.

Printed 03/17/23 BDE 5630 (04/10/19)

Illinois Department of Transportation Luminaire Performance Table

Project
 Date: 01/19/21 Contract Number: N/A Section Number: N/A County: Various
 Marked Route Number: Various Municipality: Various

Roadway
 Lane Width: 12 # of Lanes: 3 Median Width: N/A I.E.S. Surface Classification: R3 Q-Zero Value: 0.07

Structure
 Mounting Height: 45 ft Arm Length: 1 ft Set-Back: 30 ft Number of Luminaires (Highmast & Sign Lighting Only): N/A

Luminaire
 Description: Replacement For 250W Multi Mount I.E.S. Lateral Distribution: Type III I.E.S. Vertical Distribution: Medium
 Total Light Loss Factor (LLF): 0.7 B-U-G Rating: U = 0 Shields: N/A Dimming Protocol: 0-10V

Layout
 Spacing (to Nearest 5 ft): 145 ft Configuration (Opposite, Staggered, 1 Sided, or Median): 1 Sided

Performance
 Average Illuminance, E_{ave} (fc): 0.9 to 1.4 Uniformity Ratio, E_{min}/E_{max} : less than or equal to 3.0:1
 Average Luminance, L_{ave} (cd/m²): 0.6 to 0.9 Uniformity Ratio, L_{min}/L_{max} : less than or equal to 3.5:1
 Veiling Luminance Ratio, L_v/L_{ave} : less than or equal to 6.0:1
 Light Trespass: Distance to ROW (behind pole): N/A Max. Horizontal Illuminance at ROW, E_H : N/A Max. Vertical Illuminance at ROW, E_V : N/A

Notes
 1. Set-Back is from Edge of Pavement (white line) except for sign luminaires when it is vertical and horizontal distance from the sign to the luminaire.
 2. Lighting calculations shall be performed with all luminaires oriented toward and perpendicular to the roadway.
 3. Total Light Loss Factor (LLF) = the product of "Lumen Maintenance" (LLD) = 0.9, "Dirt Depreciation" (LDD) = 0.8, and "Equipment Factors" (EF) = 0.95.
 4. Performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

Replacement luminaire shall be mounted horizontally.
 Calculations shall be performed in one direction only.
 Compliance with performance criteria shall be held to one significant digit.
 The luminaire performance table defines the luminaire only. It does not necessarily represent the mounting height, arm length, or setback for which the lighting unit is to be installed. Refer to lighting plans for installation.

Printed 03/17/23 BDE 5630 (04/10/19)

Illinois Department of Transportation Luminaire Performance Table

Project
 Date: 01/19/21 Contract Number: N/A Section Number: N/A County: Various
 Marked Route Number: Various Municipality: Various

Roadway
 Lane Width: 12 # of Lanes: 4 Median Width: N/A I.E.S. Surface Classification: R3 Q-Zero Value: 0.07

Structure
 Mounting Height: 45 ft Arm Length: 15 ft Set-Back: 15 ft Number of Luminaires (Highmast & Sign Lighting Only): N/A

Luminaire
 Description: Replacement For 400W Horizontal Mount I.E.S. Lateral Distribution: Type III I.E.S. Vertical Distribution: Medium
 Total Light Loss Factor (LLF): 0.7 B-U-G Rating: U = 0 Shields: N/A Dimming Protocol: 0-10V

Layout
 Spacing (to Nearest 5 ft): 240 ft Configuration (Opposite, Staggered, 1 Sided, or Median): 1 Sided

Performance
 Average Illuminance, E_{ave} (fc): 0.9 to 1.4 Uniformity Ratio, E_{min}/E_{max} : less than or equal to 3.0:1
 Average Luminance, L_{ave} (cd/m²): 0.6 to 0.9 Uniformity Ratio, L_{min}/L_{max} : less than or equal to 3.5:1
 Veiling Luminance Ratio, L_v/L_{ave} : less than or equal to 6.0:1
 Light Trespass: Distance to ROW (behind pole): N/A Max. Horizontal Illuminance at ROW, E_H : N/A Max. Vertical Illuminance at ROW, E_V : N/A

Notes
 1. Set-Back is from Edge of Pavement (white line) except for sign luminaires when it is vertical and horizontal distance from the sign to the luminaire.
 2. Lighting calculations shall be performed with all luminaires oriented toward and perpendicular to the roadway.
 3. Total Light Loss Factor (LLF) = the product of "Lumen Maintenance" (LLD) = 0.9, "Dirt Depreciation" (LDD) = 0.8, and "Equipment Factors" (EF) = 0.95.
 4. Performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

Calculations shall be performed in one direction only.
 Compliance with performance criteria shall be held to one significant digit.
 The luminaire performance table defines the luminaire only. It does not necessarily represent the mounting height, arm length, or setback for which the lighting unit is to be installed. Refer to lighting plans for installation.

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Illinois Department of Transportation Luminaire Performance Table

Project
 Date: 01/19/21 Contract Number: N/A Section Number: N/A County: Various
 Marked Route Number: Various Municipality: Various

Roadway
 Lane Width: 12 # of Lanes: 4 Median Width: N/A I.E.S. Surface Classification: R3 Q-Zero Value: 0.07

Structure
 Mounting Height: 45 ft Arm Length: 1 ft Set-Back: 30 ft Number of Luminaires (Highmast & Sign Lighting Only): N/A

Luminaire
 Description: Replacement For 400W Multi-Mount I.E.S. Lateral Distribution: Type III I.E.S. Vertical Distribution: Medium
 Total Light Loss Factor (LLF): 0.7 B-U-G Rating: U = 0 Shields: N/A Dimming Protocol: 0-10V

Layout
 Spacing (to Nearest 5 ft): 155 ft Configuration (Opposite, Staggered, 1 Sided, or Median): 1 Sided

Performance
 Average Illuminance, E_{ave} (fc): 0.9 to 1.4 Uniformity Ratio, E_{min}/E_{max} : less than or equal to 3.0:1
 Average Luminance, L_{ave} (cd/m²): 0.6 to 0.9 Uniformity Ratio, L_{min}/L_{max} : less than or equal to 3.5:1
 Veiling Luminance Ratio, L_v/L_{ave} : less than or equal to 6.0:1
 Light Trespass: Distance to ROW (behind pole): N/A Max. Horizontal Illuminance at ROW, E_H : N/A Max. Vertical Illuminance at ROW, E_V : N/A

Notes
 1. Set-Back is from Edge of Pavement (white line) except for sign luminaires when it is vertical and horizontal distance from the sign to the luminaire.
 2. Lighting calculations shall be performed with all luminaires oriented toward and perpendicular to the roadway.
 3. Total Light Loss Factor (LLF) = the product of "Lumen Maintenance" (LLD) = 0.9, "Dirt Depreciation" (LDD) = 0.8, and "Equipment Factors" (EF) = 0.95.
 4. Performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

Replacement luminaire shall be mounted horizontally.
 Calculations shall be performed in one direction only.
 Compliance with performance criteria shall be held to one significant digit.
 The luminaire performance table defines the luminaire only. It does not necessarily represent the mounting height, arm length, or setback for which the lighting unit is to be installed. Refer to lighting plans for installation.

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MODEL - Lighting (Sheet) FILE NAME: c:\p\work\wtdaniel.hopkins@illinois.gov\0837129\0876162-Plan-Shts.dwg

USER NAME = daniel.hopkins	DESIGNED -	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -
PLOT DATE = 3/7/2024	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

LUMINAIRE PERFORMANCE TABLE			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DIST 8 LTS 2025-1	VARIOUS	8	7
CONTRACT NO. 76T62				
ILLINOIS FED. AID PROJECT				

