06-16-2023 LETTING ITEM 052

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

VAR. DS LIGHTING REPAIRS 2024-1 VARIOUS 5

D-95-028-23



STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

LOCATION OF SECTION INDICATED THUS: -

May 12, 2023

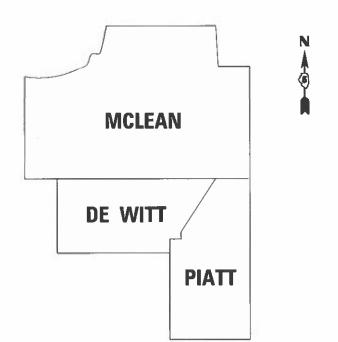
May 12, 2023

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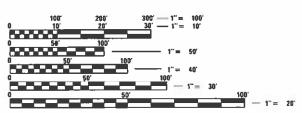
PROPOSED HIGHWAY PLANS

VARIOUS ROUTES SECTION D5 LIGHTING REPAIRS 2024-1 PROJECT WEST FIELD AREA ON-CALL LIGHTING REPAIRS **VARIOUS COUNTIES**

C-95-041-23



FOR INDEX OF SHEETS, SEE SHEET NO. 2 FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 3-4



ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES, IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS 1-800-892-0123

OR 811

TOWNSHIPS: **VARIOUS**

PROJECT ENGINEER: RYAN CARROLL **SQUAD LEADER: CLARE DIETZ DESIGNER: KARY DAWSON** PHONE NUMBER: (217) 465-4181 CONTRACT NO. 70G55

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INDEX OF SHEETS

<u>SHEET</u>	DESCRIPTION
1	COVER SHEET
2	INDEX OF SHEETS & LIST OF HIGHWAY STANDARDS
2	GENERAL NOTES
3 - 4	SUMMARY OF QUANTITIES
5	LUMINAIRE PERFORMANCE TABLE

GENERAL NOTES

G.N.-100A

ELECTRONIC FILES AND/OR ELECTRONIC SURVEY INFORMATION INCLUDING CADD
FILES WILL NOT BE AVAILABLE TO THE CONTRACTOR.

COMMITMENTS

THERE ARE NO COMMITMENTS ASSOCIATED WITH THIS PROJECT.

HIGHWAY STANDARDS

<u>STANDARD</u>	<u>DESCRIPTION</u>
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 M) AWAY
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE
701101-05	OFF-RD OPERATIONS, MULTILANE, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE
701106-02	OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 M) AWAY
701201-05	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701206-05	LANE CLOSURE, 2L, 2W, NIGHT ONLY, FOR SPEEDS ≥ 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-04	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS ≥ 45 MPH
701400-11	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-13	LANE CLOSURE, FREEWAY/EXPRESSWAY
701406-13	LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATIONS ONLY
701411-09	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS ≥ 45 MPH
701421-08	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS ≥ 45 MPH TO 55 MPH
701422-10	LANE CLOSURE, MULTILANE, FOR SPEEDS ≥ 45 MPH TO 55 MPH
701426-09	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS \geq 45 MPH
701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS \leq 40 MPH
701428-01	TRAFFIC CONTROL SETUP AND REMOVAL FREEWAY/EXPRESSWAY
701456-05	PARTIAL EXIT RAMP CLOSURE FREEWAY/EXPRESSWAY
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701502-09	URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701602-10	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701606-10	URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901-08	TRAFFIC CONTROL DEVICES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, HIGHWAY STANDARDS & GENERAL NOTES

F.A. RTE. SECTION COUNTY TOTAL SHEET NO. WAR. D5 LIGHTING REPAIRS 2024-1 VARIOUS 5 2

CONTRACT NO. 70G55

SUMMARY OF QUANTITIES

VARIOUS ROUTES	VARIOUS ROUTES	VARIOUS ROUTES	LOCATION OF WORK:
VARIOUS COUNTIES	VARIOUS COUNTIES	VARIOUS COUNTIES	
100% STATE	100% STATE	100% MCHD	FUNDING BREAKOUT:
100% STATE	100% STATE	100% MCDD	TONDING BILAROUT.
ITS	CONTRACT MAINTENANCE		
0021	0021	0021	CONSTRUCTION TYPE CODE:

			onstruction the cobe.	0021	0021	002
CODE NO.	<u>ITEM</u>	<u>UNIT</u>	TOTAL QUANTITY			
02110005	LUMINAIDE LED BOADWAY OUTDUT DECICNATION E	FACIL	F 00	1.00	4.00	
82110005	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION E	EACH	5.00	1.00	4.00	
82110007	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION G	EACH	10.00	2.00	7.00	1.0
82110008	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	10.00	2.00	7.00	1.0
83003600	LIGHT POLE, ALUMINUM, 45 FT. M.H., 15 FT. DAVIT ARM	EACH	8.00	1.00	6.00	1.0
83012400	LIGHT POLE, ALUMINUM, 45 FT. M.H., TENON MOUNT	EACH	8.00	1.00	6.00	1.0
83060830	LIGHT POLE, GALVANIZED STEEL, 45 FT. M.H., TENON MOUNT	EACH	8.00	1.00	6.00	1.0
X1400365	ELECTRICIAN HELPER	HOUR	700.00	125.00	516.00	59.0
XP000001	JOURNEYMAN ELECTRICIAN	HOUR	800.00	143.00	590.00	67.0
XP000009	PICK-UP TRUCK	HOUR	700.00	125.00	516.00	59.0
XP000012	ARROWBOARD (TRAILER MOUNTED)	HOUR	24.00	4.00	18.00	2.0
XP000013	ATTENUATOR, CRASH (TRUCK MOUNTED)	HOUR	48.00	9.00	35.00	4
XP000015	DIGGER DERRICK	HOUR	40.00	7.00	30.00	3.
XP000029	BUCKET TRUCK/VAN FOR TRAFFIC SIGNALS	HOUR	250.00	45.00	184.00	21.0
XP000030	BUCKET TRUCK FOR HIGHWAY LIGHTING	HOUR	650.00	116.00	479.00	55.(
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USER NAME = Kary.Dawson	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 40.0000 / in	CHECKED -	REVISED -
PLOT DATE = 5/11/2023	DATE -	REVISED -

STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	

		F.A. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
SUMMARY OF QUANT	VAR.	D5 LIGHTING REPAIRS 2	024-1	VARIOUS	5	3	
					CONTRACT	NO. 70	0G55
SHEET 1 OF 2 SHEETS STA	. TO STA.		ILLINOIS	FED. AI	D PROJECT		

SUMMARY OF QUANTITIES

LOCATION OF WORK:	VARIOUS ROUTES	VARIOUS ROUTES	VARIOUS ROUTES
	VARIOUS COUNTIES	VARIOUS COUNTIES	VARIOUS COUNTIES
FUNDING BREAKOUT:	100% MCHD		100% STATE
		CONTRACT MAINTENANCE	ITS
CONSTRUCTION TYPE CODE:	0021	0021	0021

CODE NO	ITEM	LINIT	TOTAL QUANTITY			
CODE NO.	<u>ITEM</u>	<u>UNIT</u>	TOTAL QUANTITY			
VP000031	DOLE TRALLED	HOUR	00.00	14.00	50.00	7.00
XP000031	POLE TRAILER	HOUR	80.00	14.00	59.00	7.00
VP000210	DEPLACE LIGHT POLE PREMANAY DEVICE COURT MCC	FACIL	10.00	2.00	7.00	1.00
XP000310	REPLACE HIGHWAY LIGHT POLE BREAKAWAY DEVICE, COUPLINGS	EACH	10.00	2.00	7.00	1.00
VD000311	DEDUACE LUCINARY LIGHT POLE PREAVANCY DEVICE. TRANSFORMER PAGE	FACIL	10.00	2.00	7.00	1.00
XP000311	REPLACE HIGHWAY LIGHT POLE BREAKAWAY DEVICE, TRANSFORMER BASE	EACH	10.00	2.00	7.00	1.00
		_				
		_				
		_				

MODEL: Default FILE NAME: pw//vildot-pw/bentla

USER NAME = Kary Dawson	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 40.0000 / in	CHECKED -	REVISED -
DIOT DATE FULLDOOD	DATE	DEVICED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

					F.A. RTE	SECTION	١	COUNTY	TOTAL SHEETS	SHEE'
St	JIMIMARY	OF QUA	ANTITIES		VAR.	D5 LIGHTING REPA	IRS 2024-1	VARIOUS	5	4
								CONTRACT	NO. 70)G55
HEET 2	OF 2	SHEETS	STA	TO STA		1111	NOIS SED A	D DROJECT		

	ILLINOIS DEPARTMENT OF TRANSPOR LUMINAIRE PERFORMANCE TAE ED replacement for 250W HPS Horizontal Mou	BLE		и	ILLINOIS DEPARTMENT OF TRANSP LUMINAIRE PERFORMANCE T ED replacement for 400W HPS Horizontal N	TABLE			ILLINOIS DEPARTMENT OF TRANS LUMINAIRE PERFORMANCE LED Replacement for 250W HPS Multi-M	TABLE Jount Luminaire
30 TO	GIVEN CONDITIONS				GIVEN CONDITIONS				(replacement luminaire shall be mounte	ed norizontally)
ROADWAY DATA	Lane Width Number of Lanes (In One Direction Only) Median Width I.E.S. Surface Classification	12 ft 3 0 ft R3		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	GIVEN CONDITIONS Lane Width Number of Lanes (One Direction Only) Median Width I.E.S. Surface Classification	12 ft 3 0 ft R3
LIGHT POLE DATA	Q-Zero Value Mounting Height Luminaire Overhang From	.07 45 ft		LIGHT POLE DATA	Q-Zero Value Mounting Height Luminaire Overhang From	.07 45 ft 0 ft		LIGHT POLE DATA	O-Zero Value Mounting Height	.07 45 ft
LUMINAIRE DATA	Edge of Pavement (White Line) Luminaire Type	0 ft LED			Edge of Pavement (White Line) naire Type	LED			Luminaire Overhang From Edge of Pavement (White Line)	-30 ft
	I.E.S. Vertical Distribution BUG Rating I.E.S. Lateral Distribution Total Light Loss Factor	Medium U = 0 Type II or III 0.684			I.E.S. Vertical Distribution BUG Rating I.E.S. Lateral Distribution Total Light Loss Factor	Medium U = 0 Type II or I 0.684	ī	LUMINAIRE DATA	Luminaire Type I.E.S. Vertical Distribution BUG Rating I.E.S. Lateral Distribution Total Light Loss Factor	LED Medium U = 0 Type III or IV 0.684
LAYOUT DATA	Spacing Configuration	160 ft One Sided		LAYOUT DATA	Spacing Configuration	240 ft One Sided		LAYOUT DATA	Spacing Configuration	145 ft One Sided
	ht loss factor is the product of "Lumen Depreciation" (L and "Equipment factors" (EF) = 0.95.	LLD) = 0.90, "Dirt Depreciation" (LDF)			tht loss factor is the product of "Lumen Depreciation and "Equipment factors" (EF) = 0.95.	on" (LLD) = 0.90, "Dirt Depreciati	on" (LDF)		tht loss factor is the product of "Lumen Depreciati and "Equipment factors" (EF) = 0.95.	
	PERFORMANCE REQUIREMENTS				PERFORMANCE REQUIREMENTS				PERFORMANCE REQUIREMENT	5
	nce requirements shall be the acceptable standards of given conditions listed above.	photometric performance for the			nce requirements shall be the acceptable standard given conditions listed above.	is of photometric performance i	or the		nce requirements shall be the acceptable standar given conditions listed above.	
ILLUMINANCE	Average Illuminance, EAVE Uniformity Ratio, EAVE/EMIN	0.9 fc to 1.4 fc ≤ 3.0:1		ILLUMINANCE	Average Illuminance, E _{AVE} Uniformity Ratio, E _{AVE} /E _{MIN}	0.9 fc to 1.4 ≤ 3.0:1	fc	ILLUMINANCE	Average Illuminance, E _{AVE} Uniformity Ratio, E _{AVE} /E _{MN}	0.9 fc to 1.4 fc ≤ 3.0:1
LUMINANCE	Average Luminance, Lave Uniformity Ratio, Lave/Lum Uniformity Ratio, Lave/Lum Max. Veiling Luminance Ratio, Lv/Lave	0.6 cd/m² to 0.9 cd/m² ≤ 3.5:1 ≤ 6.0:1 ≤ 0.3:1	79 -6 -79	LUMINANCE	Average Luminance, Lave Uniformity Ratio, Lave/Lann Uniformity Ratio, Laxe/Lann Max. Veiling Luminance Ratio, Lv/Lave	0.6 cd/m² to 0.9 ≤ 3.5:1 ≤ 6.0:1 ≤ 0.3:1	cd/m²	LUMINANCE	Average Luminance, Lave Uniformity Ratio, Lave/Lmm Uniformity Ratio, Lmax/Lmn Max. Veiling Luminance Ratio, Ly/Lave	0.6 cd/m ² to 0.9 cd/m ² ≤ 3.5:1 ≤ 6.0:1 ≤ 0.3:1
		L	ILLINOIS DEPARTMENT OF TRANSPO LUMINAIRE PERFORMANCE TO ED Replacement for 400W HPS Multi-Mou replacement luminaire shall be mounted	ABLE nt Luminaire			LLINOIS DEPARTMENT OF TRAN LUMINAIRE PERFORMANC ED Replacement for 150W HPS Unde	CE TABLE		
			GIVEN CONDITIONS			ROADWAY DATA	Lane Width	12	ft	
,		Roadway Data	Lane Width Number of Lanes (in One Direction Only) Median Width I.E.S. Surface Classification Q-Zero Value	12 ft 4 0 ft R3 .07			Number of Lanes (in One Direction Only) Median Width LE.S. Surface Classification Q-Zero Value	0 R .0	3	
		LIGHT POLE DATA	Mounting Height Luminaire Overhang From Edge of Pavement (White Line)	45 ft -30 ft		LIGHT POLE DATA	Mounting Height Luminaire Overhang From Edge of Pavement (White Line)	16 -20		
		LUMINAIRE DATA	Luminaire Type I.E.S. Vertical Distribution BUG Rating I.E.S. Lateral Distribution Total Light Loss Factor	LED Medium U = 0 Type III or 0.684	IV.	LUMINAIRE DATA	Luminaire Type LE.S. Vertical Distribution BUG Rating LE.S. Lateral Distribution Total Light Loss Factor	LE Med U = Type II 0.6	lium = 0 Il or IV	
		LAYOUT DATA	Spacing Configuration	155 ft One Side		LAYOUT DATA	Spacing Configuration	60 One 5	ft	
			loss factor is the product of "Lumen Depreciation" d "Equipment factors" (EF) = 0.95.	(LLD) = 0.90, "Dirt Deprecia	tion" (LDF)		loss factor is the product of "Lumen Depreci "Equipment factors" (EF) = 0.95.			
			PERFORMANCE REQUIREMENTS				Performance Requirement	NTS		
		luminaire, based on the g	e requirements shall be the acceptable standards iven conditions listed above.				e requirements shall be the acceptable stand ven conditions listed above.	dards of photometric performa	ance for the	
		ILLUMINANCE	Average Illuminance, E _{AVE} Uniformity Ratio, E _{AVE} /E _{MIN}	0.9 fc to 1. ≤ 3.0:1		LUMINANCE	Average Luminance, Lave	0.6 cd/m ² to		
		LUMINANCE	Average Luminance, Lave Uniformity Ratio, Lave/Lann Uniformity Ratio, Laws/Lann Max. Veiling Luminance Ratio, Ly/Lave	$0.6 \text{ cd/m}^2 \text{ to } 0.$ $\leq 3.5:1$ $\leq 6.0:1$ $\leq 0.3:1$			Uniformity Ratio, Lave/Lann Uniformity Ratio, Lawx/Lann Max. Veiling Luminance Ratio, Lv/Lave	≤ 3. ≤ 6. ≤ 0.	0:1	
	USER NAME = Kary, Dawson PLOT SCALE = 40.0000 ' / in.	DESIGNED - DRAWN - CHECKED -	REVISED - REVISED - REVISED -		STATE OF ILLIF DEPARTMENT OF TRAN			MINAIRE PERFORMAI	NCE TABLE	SECTION COUNTY SHEETS NO.
	PLOT DATE = 5/11/2023	DATE -	REVISED -				SCALE: SHEET 1	OF 1 SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT