

SEE PAGES P.02 - P.08

LOCATION MAP

LATITUDE: 40°27'19" LONGITUDE: 81°24'29"



DESIGN EXCEPTIONS

NONE REQUIRED

ADA DESIGN WAIVERS

NONE REQUIRED

UNDERGROUND UTILITIES

Contact Two Working Days  
Before You Dig

  
Before You Dig

OHIO 811, 8-1-1, or 1-800-362-2764  
(Non members must be called directly)

PLAN PREPARED BY:  
ODOT DISTRICT 11  
ENGINEERING

STATE OF OHIO  
DEPARTMENT OF TRANSPORTATION

D11-LG-FY2026

LIGHTING MAINTENANCE CONTRACT

BELMONT, CARROLL, COLUMBIANA, HARRISON, HOLMES,  
JEFFERSON, AND TUSCARAWAS COUNTIES

INDEX OF SHEETS:

TITLE SHEET	P.01
LOCATION MAPS	P.02-P.08
GENERAL NOTES	P.09-P.18
GENERAL SUMMARY	P.19-P.20
LIGHTING INVENTORY	P.21-P.25
GENERAL NOTES (US 250 & SR 151 PARK AND RIDE)	P.26
SUB-SUMMARY (US 250 & SR 151 PARK AND RIDE)	P.27
LIGHTING PLAN (US 250 & SR 151 PARK AND RIDE)	P.28
GENERAL NOTES (JEF US 22/SR 7)	P.29
SUB-SUMMARY (JEF US 22/SR 7)	P.30

STANDARD CONSTRUCTION DRAWINGS								SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
DM-4.3	1/15/16	HL-10.12	7/21/23	MT-95.30	7/19/19	TC-21.21	1/20/23	800-2023	1/17/25
DM-4.4	1/15/16	HL-10.13	1/20/23	MT-95.31	7/19/19	TC-22.10	1/17/25	813	7/21/23
		HL-20.11	7/21/23	MT-97.10	4/19/19	TC-41.20	10/18/13	821	4/20/12
		HL-20.13	1/17/25	MT-98.10	1/17/20	TC-42.20	10/18/13	825	7/19/24
		HL-30.11	7/21/23	MT-98.11	1/17/20	TC-52.10	10/18/13	832	7/19/24
		HL-30.21	4/17/20	MT-98.20	4/19/19	TC-52.20	1/15/21	913	4/16/21
		HL-30.22	1/17/25	MT-98.22	1/17/20	TC-81.11	1/19/24	921	7/19/24
		HL-40.10	7/19/24	MT-98.28	1/17/20	TC-83.10	1/17/20		
		HL-50.11	1/16/15	MT-101.90	7/17/20	TC-83.20	7/19/24		
		HL-60.11	7/21/17	MT-105.10	1/17/20	TC-84.20	1/19/24		
		HL-60.12	7/21/23			TC-84.21	10/18/13		
		HL-60.31	7/19/24						

FEDERAL PROJECT NUMBER

NON-FEDERAL

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

DISTRICT-WIDE HIGHWAY LIGHTING AND MAINTENANCE CONTRACT.

THIS PROJECT INCLUDES UPGRADING ALL REMAINING HIGH-PRESSURE SODIUM (HPS) FIXTURES IN DISTRICT 11 TO LIGHT EMITTING DIODES (LED) FIXTURES.

THIS PROJECT WILL ALSO INSTALL HIGHWAY LIGHTING AT THE US 250/SR 151 PARK & RIDE IN HARRISON COUNTY.

THIS PROJECT WILL ALSO REPLACE 14 MEDIAN-MOUNTED CONVENTIONAL LIGHT POLES ALONG JEF US 22/SR 7.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: 0.3 ACRES

ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0 ACRES

NOTICE OF INTENT EARTH DISTURBED AREA: N/A (NOI NOT REQUIRED)\*  
\*ROUTINE MAINTENANCE PROJECT

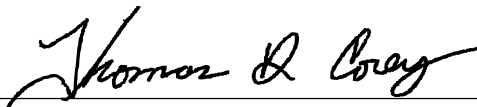
LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

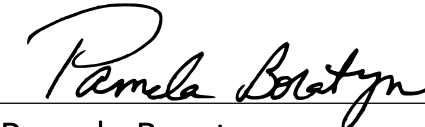
2023 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND CHANGES LISTED IN THE PROPOSAL, SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THESE IMPROVEMENTS WILL NOT REQUIRE THE CLOSING OF THE HIGHWAYS TO TRAFFIC AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH IN THE PLANS AND ESTIMATES.



Thomas D. Corey  
District 11 Deputy Director



Pamela Boratyn  
Director, Department of Transportation

ENGINEER'S SEAL



DESIGN AGENCY



DESIGNER

RDA

REVIEWER

DAH 03/04/25

PROJECT ID

112649

SHEET

P.01

TOTAL

30



RESTORATION, CLEAN UP, AND DISPOSAL

THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO A CONDITION EQUAL TO THAT EXISTING BEFORE THE WORK WAS STARTED PER CMS 104.04.

THE CONTRACTOR SHALL CLEAN UP ANY BROKEN GLASSWARE FOUND BY HIS CREWS IN THE WORK AREA BY SWEEPING THE AREA FREE, AND DISPOSING OF THE BROKEN GLASS IN REGULAR RUBBISH DISPOSAL UNITS. ALL BROKEN CONCRETE SHALL BE DISPOSED OF BY THE CONTRACTOR PER CMS 105.17. THE COST OF RESTORATION AND CLEANUP IS INCIDENTAL TO ALL CONTRACT ITEMS.

ALL DEBRIS REMOVED FROM THE ROADSIDE BY THE CONTRACTOR SHALL BE DISPOSED OF PER CMS 105.17.

Removed Note “Item 631 – Disconnect Switch with Enclosure, Type X, As Per Plan”

HAZARDOUS MATERIALS

TRANSFORMERS, BALLASTS, AND CAPACITORS SHALL BE MARKED "NO PCB'S" IN ACCORDANCE WITH THE FEDERAL ENVIRONMENTAL PROTECTION AGENCY REGULATION 40 CFR 761. THE CONTRACTOR SHALL NOT USE ANY MATERIAL FURNISHED UNDER THIS CONTRACT WHICH CONTAINS POLYCHLORINATED BIPHENYLS (PCB'S).

UTILITIES

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE OHIO UTILITIES PROTECTION SERVICE AS NEEDED.

ITEM 625 - LIGHTING, MINIMAL MAINTENANCE, AS PER PLAN

THE CONTRACTOR WILL TROUBLESHOOT LOCATIONS AT THE REQUEST OF THE ENGINEER, AND DETERMINE THE CORRECTIVE ACTION NEEDED. THIS ALSO INCLUDES DISCOVERY OF NEEDED REPAIRS BY THE CONTRACTOR WHEN AT A SPECIFIC LOCATION PERFORMING OTHER PROJECT WORK. A RECOMMENDATION SHALL BE PROVIDED IN WRITING (E-MAIL ACCEPTABLE), OR BY PHONE TO THE ENGINEER WHO WILL APPROVE THE REPAIR/REPLACEMENT ACTION. MINIMAL MAINTENANCE WILL INCLUDE ROUTINE MAINTENANCE NOT SEPARATELY ITEMIZED IN THE PLAN UNDER MAJOR MAINTENANCE, SUCH AS REPLACING PARTS WHICH ARE WORN, DEFECTIVE OR MISSING TO RESTORE THE LIGHTING SYSTEM BACK TO NORMAL OPERATION. EXAMPLES OF MINIMAL MAINTENANCE REPAIRS SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:

1. LIGHTING FIXTURE LAMPS, GASKETS, HINGES AND LATCHES. REPLACEMENT OF THE ENTIRE LUMINAIRE IS UNDER MAJOR MAINTENANCE.
2. POLE OR ARM DAMAGE, DETERIORATION, MISSING HARDWARE OR POLE IDENTIFICATION NUMBERS. ALSO INCLUDED ARE HANDHOLE COVERS, POLE CAPS, ATTACHMENT HARDWARE AND ADJUSTING A POLE TO THE CORRECT PLUMB POSITION. REPLACEMENT OF THE ENTIRE POLE OR ARM IS UNDER MAJOR MAINTENANCE.
3. FRANGIBLE BASE DAMAGE OR MISSING OR DAMAGED DOORS. REPLACEMENT OF THE ENTIRE FRANGIBLE BASE IS UNDER MAJOR MAINTENANCE.
4. FOUNDATIONS WITH VOIDS DUE TO EROSION SHALL BE BACKFILLED WITH ACCEPTABLE MATERIAL, SLOPED AND SEEDED.
5. FUSES THAT ARE BLOWN, DISCONNECT SWITCH ENCLOSURES AND PULL APART CONNECTORS SHALL BE REPLACED WITH THE PROPER TYPE, VOLTAGE AND AMPERE RATING.
6. PHOTOCELLS WILL INCLUDE ADJUSTMENTS OR REPLACEMENTS.
7. GROUNDING AND LIGHTNING PROTECTION REPAIRS, EXCLUDING REPLACING AND INSTALLING A GROUND ROD WHICH IS INCLUDED UNDER MAJOR MAINTENANCE.
8. CONTROL CENTER REPAIRS, INCLUDING REPLACEMENT OF PAD LOCKS AND KEYS. REPLACEMENT OF THE ENTIRE CONTROL CENTER IS UNDER MAJOR MAINTENANCE.

PAYMENT FOR THIS WORK WILL BE MADE AT THE CONTRACT UNIT PRICE BID PER EACH MINIMAL MAINTENANCE REPAIR FOR WHICH WORK HAS BEEN APPROVED AND COMPLETED. THIS INCLUDES FURNISHING ALL LABOR, EQUIPMENT, MATERIAL, AND THE REMOVAL AND DISPOSAL OF MATERIAL FOR MAINTAINING AND REPAIRING THE LIGHTING SYSTEM AS DESCRIBED HEREIN FOR EACH MINIMAL MAINTENANCE REPAIR. IT IS ESTIMATED THAT 500 MINIMAL MAINTENANCE REPAIRS WILL BE NECESSARY DURING THE LIFE OF THIS CONTRACT. THIS QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 611 - 4" CONDUIT, TYPE E, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF TRENCHING, FURNISHING MATERIALS, AND INSTALLING A 4 INCH CONDUIT, TYPE E UNDERDRAIN AT EXISTING OR NEW PULL BOXES AS DIRECTED BY THE ENGINEER. REFERENCE IS MADE TO SCD HL-30.11 FOR DETAILS OF DRAINING PULL BOXES.

PAYMENT WILL BE AT THE CONTRACT UNIT BID PRICE PER FOOT.

ITEM SPECIAL - EMERGENCY RESPONSE - KNOCKDOWN ROADWAY HAZARD AND/OR LIVE EXPOSED WIRE

THIS ITEM OF WORK SHALL CONSIST OF THE CONTRACTOR RESPONDING TO AN EMERGENCY CALL-OUT, ONLY WHEN NOTIFIED BY THE ENGINEER, WHEN THE EMERGENCY OCCURS DURING NON-REGULAR WORKING HOURS. SOME EXAMPLES OF A HAZARDOUS CONDITION THAT WOULD WARRANT AN EMERGENCY CALL-OUT OF THE CONTRACTOR WOULD BE A KNOCKDOWN THAT REQUIRED THE USE OF HEAVY EQUIPMENT TO REMOVE A POLE, OR AN ACCIDENT THAT WOULD REQUIRE A MAINTENANCE CREW TO REMOVE, AND/OR SECURE ELECTRICAL CIRCUITS.

THE CONTRACTOR SHALL FURNISH THE ENGINEER WITH A SINGLE TELEPHONE NUMBER WHERE THEY CAN BE CONTACTED 24 HOURS A DAY, 7 DAYS A WEEK. IN ADDITION, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN A CELL PHONE FOR THE CONTRACTOR'S CREW FOREMAN. THE CELL PHONE SHALL BE WORN DURING REGULAR AND NON-REGULAR WORKING HOURS, AND THE CONTACT NUMBER SHALL BE LISTED WITH ENGINEER. THE CONTRACTOR'S RESPONSE TIME, FROM THE TIME OF NOTIFICATION UNTIL PERSONNEL ARRIVE AT THE EMERGENCY SITE, SHALL NOT EXCEED TWO (2) HOURS.

SHOULD THE CONTRACTOR FAIL TO MEET THIS REQUIREMENT, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$50 FOR EACH MINUTE OF RESPONSE TIME BEYOND THE REQUIRED 2 HOURS.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE PER CALL OUT.

PERMITTED LANE CLOSURE SCHEDULE (PLCS)

LANE CLOSURE(S) SHALL CONFORM TO THE PLCS. PUBLISHED PLCS INFORMATION CAN BE FOUND ON THE ODOT WEBSITE.

THE MONTHLY PUBLISHED SCHEDULES REQUIRED TO BE USED, FOR EACH PLCS SEGMENT WITHIN THE PROJECT AREA, ARE THOSE THAT COMPRISE THE CONSECUTIVE 12-MONTH PERIOD BEGINNING 15 MONTHS PRIOR TO THE MONTH AND YEAR OF SALE AND ENDING 4 MONTHS PRIOR TO THE MONTH AND YEAR OF SALE. THESE SAME 12 MONTHS APPLY FOR THE LIFE OF THE PROJECT AND SHALL BE APPLIED TO EACH RESPECTIVE MONTH OF CONSTRUCTION (MONTH OF LANE CLOSURES(S) SHALL MATCH MONTH OF PLCS USED). LANE CLOSURE(S) IN PLACE FOR MULTIPLE MONTHS SHALL ALWAYS COMPLY WITH THE CURRENT RESPECTIVE MONTH.

(FOR EXAMPLE: IF THE SALE DATE FOR THE PROJECT WAS MARCH OF 2021, THE MONTHLY PUBLISHED SCHEDULES FOR EACH APPLICABLE PLCS SEGMENT WOULD BE DECEMBER 2019 TO NOVEMBER 2020. IF THIS WAS A THREE-YEAR PROJECT, YEAR THREE WOULD STILL BE USING THE DECEMBER 2019 TO NOVEMBER 2020 MONTHLY SCHEDULES. IF THE PROJECT DESIRED TO CLOSE TWO LANES IN JUNE 2021, REFERENCE WOULD BE MADE TO THE JUNE 2020 SCHEDULE(S) FOR THE RESPECTIVE PLCS SEGMENT(S). IF THE SAME TWO LANES WERE DESIRED TO BE CLOSED AGAIN IN JULY 2021, REFERENCE WOULD BE MADE TO THE JULY 2020 SCHEDULE(S) FOR THE RESPECTIVE PLCS SEGMENT(S).)

MORE RESTRICTIVE CHANGES TO THE ALLOWABLE LANE CLOSURE HOURS ARE AT THE DISCRETION OF THE ENGINEER IN ORDER TO COMPLY WITH THE TRAFFIC MANAGEMENT IN WORK ZONES POLICY (21-008(P)) AND STANDARD PROCEDURE (123-001(SP)).

LESS RESTRICTIVE CHANGES TO THE ALLOWABLE LANE CLOSURE HOURS ARE SUBJECT TO THE TRAFFIC MANAGEMENT IN WORK ZONES POLICY (21-008(P)) AND STANDARD PROCEDURE (123-001(SP)) AND SHALL NOT BE IMPLEMENTED UNTIL, AND UNLESS, APPROVED BY THE PROPER ODOT AUTHORITY. [EXISTING MOT EXCEPTIONS THAT HAVE ALREADY BEEN APPROVED IN ACCORDANCE TO THE TRAFFIC MANAGEMENT IN WORK ZONES POLICY AND STANDARD PROCEDURE ARE DETAILED IN THE APPROVED MAINTENANCE OF TRAFFIC (MOT) POLICY EXCEPTION(S) PLAN NOTE.]

ALLOWABLE LANE CLOSURE HOURS FOR FACILITIES NOT COVERED BY THE PLCS, IF ANY, SHALL BE AS SPECIFIED ELSEWHERE IN THE PLANS.

DESIGN AGENCY



DESIGNER

RDA

REVIEWER

DAH 03/04/25

PROJECT ID

112649

SHEET

P.11

TOTAL

30



ITEM 625 - LIGHTING MISC.: H.O.A. SWITCH

THIS ITEM OF WORK SHALL CONSIST OF REMOVING AND DISPOSING OF A DEFECTIVE H-O-A SWITCH, AND FURNISHING AND INSTALLING A NEW SWITCH IN AN EXISTING CONTROL CENTER. THE SWITCH SHALL BE THREE (3) POSITION, "HAND-OFF-AUTOMATIC", WITH THE REQUIRED RATING, AND THE TERMINALS ENCLOSED. THIS ITEM OF WORK SHALL INCLUDE ALL NECESSARY WIRING, TESTING, AND OTHER MISCELLANEOUS ITEMS REQUIRED TO RETURN THE CONTROL CENTER TO NORMAL OPERATION.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT BID PRICE OF EACH.

ITEM 625 - LIGHTING MISC.: LOCATING AND MARKING UNDERGROUND WIRE

THIS ITEM OF WORK SHALL CONSIST OF THE CONTRACTOR LOCATING AND MARKING ALL UNDERGROUND ELECTRICAL WIRE AT THE LOCATION SPECIFIED. THE CONTRACTOR WILL MARK THE LOCATION BY USING RED PAINT ON THE GROUND AND STAKES WITH RED TOPS. ALSO INCLUDED WILL BE ALL EQUIPMENT LABOR, MATERIALS AND INCIDENTALS REQUIRED TO PERFORM THE ABOVE WORK.

THIS ITEM SHALL ALSO BE USED AT THE DIRECTION OF THE ENGINEER WHEN THE LOCATION OF UNDERGROUND UTILITIES IS REQUIRED FOR SPECIAL PROJECTS AND AS SUPPLIED TO THE CONTRACTOR BY DISTRICT TRAFFIC. THE CONTRACTOR SHALL USE THE ONLINE LOCATORLOGIX OUPS TICKET BROWSER FOR RECEIVING AND RESPONDING TO OUPS TICKETS AFTER MARKING. MARKING SHALL BE DONE WITHIN 48 HOURS OF RECEIVING THE TICKET.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE FOR AN HOUR OF TIME.

ITEM 625 - LIGHTING MISC.: DISCONNECT SWITCH, BY TYPE

THIS ITEM OF WORK SHALL CONSIST OF REMOVING AND DISPOSING OF A DEFECTIVE DISCONNECT SWITCH, AND FURNISHING AND INSTALLING A NEW DISCONNECT SWITCH, BY TYPE, IN AN EXISTING CONTROL CENTER, INCLUDING ALL NECESSARY WIRING, TESTING, AND OTHER MISCELLANEOUS ITEMS REQUIRED TO RETURN THE CONTROL CENTER TO NORMAL OPERATION.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT BID PRICE OF EACH.

ITEM 625 - POWER SERVICE, AS PER PLAN (A)

POWER SERVICE WILL CONFORM TO CMS SPECIFICATIONS 725.19 WITH EXCEPTION TO THE REQUIREMENTS FOR THE RETENTION OF PRESERVATIVE. THIS REQUIREMENT WILL BE WAIVED AS LONG AS WOOD POLES MEET AEP STANDARD SPECIFICATIONS AND ARE APPROVED BY THE ENGINEER.

PAYMENT WILL BE AT THE CONTRACT UNIT PRICE PER EACH.

ITEM 625 - DUCT CABLE, BY TYPE, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND INSTALLING DUCT CABLE, AND SHALL ALSO INCLUDE ANY CONNECTOR KITS, SPLICE KITS, AND TESTING REQUIRED TO RETURN THE CIRCUIT TO NORMAL OPERATION. THE CABLE INSULATION SHALL BE TESTED AT ALL NEW INSTALLATIONS WITH A 1000 VOLT MEGGER TO ASSURE THE CABLE AND SPLICES ARE ACCEPTABLE.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT BID PRICE PER FOOT.

ITEM 625 - REPAIRING UNDERGROUND BREAK OF CABLE IN DUCT OR CONDUIT

THIS ITEM OF WORK SHALL CONSIST OF EXCAVATING AND UNCOVERING A BREAK OR SHORT OF CABLE IN CONDUIT, SPLICING THE BREAK OR SHORT WITH WATERPROOF SPLICE KITS, AND BACKFILLING AND RESTORING THE AREA. THE ENGINEER SHALL OBSERVE THE SPLICING AS IT IS DONE TO ENSURE THE REPAIR'S INTEGRITY.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT BID PRICE OF EACH.

ITEM 625 - LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN (A)

THIS ITEM OF WORK CONSISTS OF INSTALLING A LUMINAIRE ON A LIGHT OR COMBINATION POLE AT THE POSITION INDICATED ON THE PLANS. FURNISH NEW MATERIALS AND EQUIPMENT OF FIRST QUALITY, OF CURRENT DESIGN, AND FREE FROM DEFECTS. ENSURE THE LUMINAIRE IS LEVEL AND ALIGNED VERTICALLY AND HORIZONTALLY TO THE ROADWAY AS SPECIFIED. THE LUMINAIRE SUPPLIED SHALL BE COOPER NAVEON NVN-AA-04-E-U-T2A. THE LUMINAIRES SHALL MEET OR EXCEED SUPPLEMENTAL SPECIFICATIONS 813 AND 913.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE FOR EACH CMS ITEM 625, "LUMINAIRE, CONVENTIONAL, SOLID STATE (LED),AS PER PLAN (A) FOR EACH LUMINAIRE WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

THE CONTRACTOR SHALL INQUIRE ABOUT THE STATUS OF THE LUMINAIRE'S WARRANTY WITH THE DISTRICT PRIOR TO REPLACEMENT TO DETERMINE PROPER PAYMENT.

ITEM 625, LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), LED REPLACEMENT EQUIVALENT TO HPS FIXTURE, AS PER PLAN

THE CONTRACTOR SHALL FURNISH AND INSTALL LIGHT EMITTING DIODE (LED) REPLACEMENT FIXTURES EQUIVALENT TO THE EXISTING HIGH PRESSURE SODIUM (HPS) FIXTURES AS SPECIFIED BELOW AND AS PER THE LOCATIONS ON SHEETS 21-24. FURNISH ACCEPTABLE FIXTURES MEETING SS 813 PER ODOT'S OFFICE OF ROADWAY ENGINEERING APPROVED LIST DATED 6/21/24 AND AS SPECIFIED BELOW FOR THE HPS FIXTURES SHOWN ON SHEET 21-24. ALL FIXTURES AT INTERSECTIONS AND INTERCHANGES ALONG FREEWAYS AND EXPRESSWAYS SHALL HAVE I.E.S. TYPE III HORIZONTAL DISTRIBUTION. ALL FIXTURES AT INTERSECTIONS ALONG CONVENTIONAL ROADWAYS SHALL HAVE I.E.S. TYPE II HORIZONTAL DISTRIBUTION. ALL FIXTURES SHALL HAVE A MEDIUM VERITICAL DISTRIBUTION. REMOVAL AND DISPOSAL OF THE EXISTING HPS FIXTURES IS INCLUDED IN THIS ITEM OF WORK. ALSO INCLUDED WILL BE ALL EQUIPMENT, LABOR, MATERIALS, AND INCIDENTALS REQUIRED TO PERFORM THE ABOVE WORK.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT BID PRICE OF EACH.

CONVENTIONAL HPS FIXTURE WATTAGE	100 WATT					
EQUIVALENT LED FIXTURE LUMENS RANGE	4,000-5,000 LUMENS					
LED FIXTURE 1	GE EVOLVE PRODUCT FAMILY					
LED FIXTURE 2	AEL AUTOBAHN PRODUCT FAMILY					
LED FIXTURE 3	SIGNIFY/LUMEC ROADFOCUS LED FAMILY					
LED FIXTURE 4	COOPER NAVION OR VERDEON PRODUCT FAMILIES					
FIXTURE VOLTAGE	480 VOLT		240 VOLT			
DISTRIBUTION TYPE		III		III		
TOTAL QUANTITY		52		3		

CONVENTIONAL HPS FIXTURE WATTAGE	200 WATT					
EQUIVALENT LED FIXTURE LUMENS RANGE	9,500-11,000 LUMENS					
LED FIXTURE 1	GE EVOLVE PRODUCT FAMILY					
LED FIXTURE 2	AEL AUTOBAHN PRODUCT FAMILY					
LED FIXTURE 3	SIGNIFY/LUMEC ROADFOCUS LED FAMILY					
LED FIXTURE 4	COOPER NAVION OR VERDEON PRODUCT FAMILIES					
FIXTURE VOLTAGE	480 VOLT		240 VOLT		120 VOLT	
DISTRIBUTION TYPE	II	III	II	III	II	III
TOTAL QUANTITY	20	817	33	189	20	1

CONVENTIONAL HPS FIXTURE WATTAGE	400 WATT					
EQUIVALENT LED FIXTURE LUMENS RANGE	21,000-24,000 LUMENS					
LED FIXTURE 1	GE EVOLVE PRODUCT FAMILY					
LED FIXTURE 2	AEL AUTOBAHN PRODUCT FAMILY					
LED FIXTURE 3	SIGNIFY/LUMEC ROADFOCUS LED FAMILY					
LED FIXTURE 4	COOPER NAVION OR VERDEON PRODUCT FAMILIES					
FIXTURE VOLTAGE	480 VOLT					
DISTRIBUTION TYPE		III				
TOTAL QUANTITY		306				

CONVENTIONAL HPS FIXTURE WATTAGE	1,000 WATT					
EQUIVALENT LED FIXTURE LUMENS RANGE	55,000-62,000 LUMENS					
LED FIXTURE 1	GE EVOLVE PRODUCT FAMILY					
LED FIXTURE 2	AEL AUTOBAHN PRODUCT FAMILY					
LED FIXTURE 3	SIGNIFY/LUMEC ROADFOCUS LED FAMILY					
LED FIXTURE 4	COOPER NAVION OR VERDEON PRODUCT FAMILIES					
FIXTURE VOLTAGE	480 VOLT					
DISTRIBUTION TYPE		III				
TOTAL QUANTITY		38				





SHEET NUMBER								PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
		P.12	P.13			P.27	P.30	01/SAF/21						
													LIGHTING	
								82	625	98000	82	EACH	LIGHTING, MISC.: ANNUAL OPERATION AND INSPECTION OF TOWER LIGHTING DEVICES	P.15
								1	625	98000	1	EACH	LIGHTING, MISC.: DISCONNECT SWITCH WITH ENCLOSURE, 60 AMP	P.16
								1	625	98000	1	EACH	LIGHTING, MISC.: DISCONNECT SWITCH WITH ENCLOSURE, 100 AMP	P.16
								2	625	98000	2	EACH	LIGHTING, MISC.: DISCONNECT SWITCH, 30 AMP	P.16
								2	625	98000	2	EACH	LIGHTING, MISC.: DISCONNECT SWITCH, 60 AMP	P.16
								2	625	98000	2	EACH	LIGHTING, MISC.: DISCONNECT SWITCH, 100 AMP	P.16
								2	625	98000	2	EACH	LIGHTING, MISC.: H.O.A. SWITCH	P.16
								1	625	98000	1	EACH	LIGHTING, MISC.: LIGHTNING ROD REPAIR	P.14
								3	625	98000	3	EACH	LIGHTING, MISC.: LIGHTNING SURGE ARRESTOR SYSTEM REPAIR	P.14
								3	625	98000	3	EACH	LIGHTING, MISC.: PHOTO-CELL TRANSFORMER, 0.75 kVA	P.15
								2	625	98000	2	EACH	LIGHTING, MISC.: REMOVE AND REERECT STANDING LIGHT POLE ON A NEW BASE	P.12
								10	625	98000	10	EACH	LIGHTING, MISC.: TOWER LIGHTING CONNECTORS	P.15
								1,500	625	98100	1,500	FT	LIGHTING, MISC.: REMOVING CABLE IN EXISTING DUCT OR CONDUIT	P.15
								100	625	98700	100	HOURL	LIGHTING, MISC.: LOCATING AND MARKING UNDERGROUND WIRE	P.16
								200	625	98700	200	HOURL	LIGHTING, MISC.: TROUBLESHOOTING UNDERGROUND AND ABOVE GROUND CIRCUITRY PROBLEM	P.15
													LIGHTING	
													US 250 AND SR 151 PARK AND RIDE	
						8		8	625	00450	8	EACH	CONNECTION, FUSED PULL APART	
						6		6	625	00480	6	EACH	CONNECTION, UNFUSED PERMANENT	
						4		4	625	10490	4	EACH	LIGHT POLE, CONVENTIONAL, DESIGN AT8B32.5	
						4		4	625	14000	4	EACH	LIGHT POLE FOUNDATION, 24" X 6' DEEP	
						380		380	625	29000	380	FT	TRENCH	
						324		324	625	23400	324	FT	NO. 10 AWG POLE AND BRACKET CABLE	
						420		420	625	24320	420	FT	1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES	
						4		4	625	26253	4	EACH	LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN, IES-II-M, LED, 12073-14754 LUMENS	P.26
						1		1	625	30700	1	EACH	PULL BOX, 725.08, 18"	
						5		5	625	32000	5	EACH	GROUND ROD	
						1		1	625	34001	1	EACH	POWER SERVICE, AS PER PLAN (B)	P.26
						380		380	625	36010	380	FT	UNDERGROUND WARNING/MARKING TAPE	
						1		1	625	76000	1	EACH	ARC FLASH CALCULATIONS AND LABEL, (U.S. 250 & S.R. 151 PARK AND RIDE)	
													LIGHTING	
													JEF US 22/SR 7	
						28		28	625	00470	28	EACH	CONNECTION, UNFUSED BOLTED	
						2		2	625	00480	2	EACH	CONNECTION, UNFUSED PERMANENT	
						14		14	625	10491	14	EACH	LIGHT POLE, CONVENTIONAL, AS PER PLAN, DESIGN A6BB45	P.29
						1,428		1,428	625	23400	1,428	FT	NO. 10 AWG POLE AND BRACKET CABLE	
						6,543		6,543	625	24320	6,543	FT	1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES	
						6,543		6,543	625	25910	6,543	FT	CONDUIT CLEANED AND CABLES REMOVED	
						28		28	625	26253	28	EACH	LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN, IES-II-M, LED, 22000-25052 LUMENS	P.29
						14		14	625	32000	14	EACH	GROUND ROD	
						14		14	625	39520	14	EACH	PULL BOX CLEANED	
						LS		LS	SPECIAL	62540000	LS		MAINTAIN EXISTING LIGHTING	P.29
						10		10	625	75400	10	EACH	LIGHT POLE REMOVED	
						20		20	625	75506	20	EACH	LUMINAIRE REMOVED	
						2		2	625	75801	2	EACH	DISCONNECT CIRCUIT, AS PER PLAN	P.29
													MAINTENANCE OF TRAFFIC	
			50					50	614	11110	50	HOURL	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
													INCIDENTALS	
		LS						LS	614	11000	LS		MAINTAINING TRAFFIC	
								LS	624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER

RDA

REVIEWER

DAH 03/04/25

PROJECT ID

112649

SHEET

P.20

TOTAL

30



ITEM 625 - POWER SERVICE, AS PER PLAN (B)

THE POWER SUPPLYING AGENCY FOR THE US 250 AND SR 151 PART OF THIS PROJECT IS:

AEP OHIO POWER COMPANY  
ATTN: CUSTOMER SERVICE CENTER  
1-800-277-2177

POWER SERVICE AT THIS LOCATION SHALL BE AS PER CMS ITEM 625 AND SCD HL-40.10 WITH THE FOLLOWING EXCEPTIONS:

1. THE CONTRACTOR SHALL MEET WITH A REPRESENTATIVE FROM THE POWER SUPPLY AGENCY TO CONFIRM HOW THE PROPOSED POWER SERVICE IS TO BE WIRED, HOOKED UP, AND ITS LOCATION.
2. ALL POWER SERVICES SHALL BE METERED. THE METER SHALL HAVE A LEVER OPERATED BYPASS.

THE CONTRACTOR SHALL CONTACT THE METER SECTION OF THE POWER COMPANY FOR INFORMATION REGARDING THE METER BASE INSTALLATION PRIOR TO ORDERING POLES. THE CONTRACTOR WILL BE RESPONSIBLE FOR REQUESTING AND SCHEDULING ANY INSPECTIONS THE POWER COMPANY MAY REQUIRE FOR THE POWER SERVICE HOOK UP. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT THE POWER COMPANY THREE MONTHS PRIOR FOR THE NEED TO HAVE THE ELECTRICAL SERVICE CONNECTION MADE. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR SPLICE POWER CABLE INTO THE POWER COMPANY'S CIRCUITS. THE NOMINAL VOLTAGE SUPPLIED SHALL BE:

120 / 240 VOLTS 1 ϕ 3W GROUNDED NEUTRAL

THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS AND THE PAYING OF ALL FEES. THE CONTRACTOR SHALL PAY ALL POWER CHARGES UNTIL THE LIGHTING IS ACCEPTED BY THE MAINTAINING AGENCY.

THE ENGINEER SHALL ENSURE THAT EACH POWER SERVICE ELECTRICAL ENERGY ACCOUNT IS IN THE NAME OF AND THAT THE BILLING ADDRESS IS TO THE MAINTAINING AGENCY NOTED IN THE PLANS. THIS SHALL BE DONE NOT ONLY FOR EACH NEW POWER SERVICE ESTABLISHED BY THIS PROJECT BUT ALSO FOR EACH EXISTING POWER SERVICE, SINCE THERE MAY BE A REASSIGNMENT OF THE RESPONSIBILITY FOR AN EXISTING SERVICE AS A RESULT OF THE WORK PERFORMED BY THIS PROJECT.

UPON COMPLETION OF THE ABOVE WORK, CHARGES MADE BY THE POWER COMPANY AS PER CMS 625.15 SHALL BE REIMBURSED TO THE CONTRACTOR BY THE MAINTAINING AGENCY AS PER CMS 625.15.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE FOR EACH CMS ITEM 625, "POWER SERVICE, AS PER PLAN (B)" WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE THIS SHEET FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL

POSITIONING METHOD: OHIO REAL TIME NETWORK (2011), RTK, AND DIFFERENTIAL LEVELING  
MONUMENT TYPE: TYPE A

VERTICAL POSTIONING

ORTHOMETRIC HEIGHT DATUM: NAVD 88  
GEOID: GEOID 18

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD 83 (2011 ADJ, 2010.0)  
ELLIPSOID: GRS 1980  
MAP PROJECTION: TRANSVERSE MERCATOR  
COORDINATE SYSTEM: OHIO COUNTY COORDINATE SYSTEM  
HARRISON LDP

ORIGIN LATIITUDE: N 38° 57' 00"  
ORIGIN LONGTITUDE: E 278° 54' 00"  
FALSE NORTHING (m): 0  
FALSE EASTING (m): 50000

\*THE LOW DISTORTION PROJECTION (LDP) IS A LOCAL COUNTY PROJECTION DEVELOPED BY ODOT. THE DISTORTION BETWEEN GROUND AND GRID IS SO MINIMAL THAT THERE IS NO NEED FOR A SCALE FACTOR TO ADJUST BETWEEN GRID AND GROUND COORDINATES. CONTACT THE DISTRICT SURVEY DEPARTMENT FOR FURTHER INFORMATION OR QUESTIONS.

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

UNITS ARE IN U.S. SURVEY FEET

ARCH FLASH CALCULATIONS AND LABEL,  
(U.S. 250 & S.R. 151 PARK AND RIDE)

THIS ITEM OF WORK SHALL CONSIST OF PERFORMING ARC FLASH CALCULATIONS AND APPLYING AN EXTERNAL LABEL AS DESCRIBED IN SUPPLEMENTAL SPECIFICATION 825. THIS WORK SHALL BE PERFORMED FOR EACH DISCONNECT SWITCH, SIGNAL, CABINET, AND UPS ENCLOSURE. THE LABEL USED SHALL BE ODOT VERSION A (PREFERRED). THE FOLLOWING INTERSECTION SHALL HAVE THE CALCULATIONS PERFORMED AND LABEL APPLIED:

U.S. 250 & S.R. 151 PARK AND RIDE

PAYMENT FOR ITEM 625 ARC FLASH CALCULATIONS AND LABEL, (U.S. 250 & S.R. 151 PARK AND RIDE) SHALL BE MADE FOR EACH LOCATION AND SHALL BE FULL COMPENSATION FOR ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS REQUIRED TO COMPLETE THE WORK.

PAD LOCKS AND KEYS

PADLOCKS FURNISHED SHALL BE EITHER BRASS OR BRONZE, EQUAL TO MASTER NO. 4BKA OR WILSON BOHANNAN 660A, AND SHALL BE KEYED IN ACCORDANCE WITH C&MS 631.06. PAYMENT SHALL BE INCLUDED IN THE BID FOR THE ITEM(S) BEING LOCKED.

UNDERDRAINS FOR PULL BOXES

REFERENCE TRAFFIC SCD HL-30.11 FOR DETAILS ABOUT DRAINING PULL BOXES. UNDERDRAINS FOR PULL BOXES SHALL BE USED AS DIRECTED BY THE ENGINEER AND SHALL BE PROVIDED WHERE THE LENGTH REQUIRED FOR A SATISFACTORY OUTLET DOES NOT EXCEED 20 FEET. THE FOLLOWING ESTIMATED QUANTITY IS CARRIED TO THE GENERAL SUMMARY FOR THIS PURPOSE:

COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR IS HEREBY ADVISED THAT PROJECT HAS-151-0.00, PID 114467 MAY BE UNDER CONSTRUCTION DURING THE SAME PERIOD THIS PROJECT IS BEING CONSTRUCTED. UPON AWARD OF THIS CONTRACT, THE CONTRACTORS SHALL NOTIFY THE ENGINEER AND THE OTHER CONTRACTORS OF THE EFFECTS OF THIS CONTRACT UPON THE HAS-151-0.00 PROJECT. THE CONTRACT SHALL COOPERATE WITH THE OTHER CONTRACTORS IN ACCORDANCE WITH SEC. 105.08 AND ARRANGE A MUTUALLY ACCEPTABLE WORK SCHEDULE, SUBJECT TO THE APPROVAL OF THE ENGINEER. ANY CONFLICTS BETWEEN CONTRACTORS INVOLVING WORK SCHEDULES, WORK AREAS OR COOPERATION WILL BE RESOLVED BY THE ENGINEER.

ITEM 625 - LUMINAIRE, CONVENTIONAL, SOLID STATE  
(LED) , IES-II-M, LED, 12073-14754 LUMENS, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF ODOT'S CONSTRUCTION AND MATERIAL SPECIFICATIONS, LUMINAIRES ARE CONVENTIONAL LIGHTING UNITS SHALL BE AS FOLLOWS:

LUMINAIRES FOR CONVENTIONAL LIGHTING UNITS WITH AN IES II-M-SC DISTRIBUTION AND 12073 - 14754 LUMEN OUTPUT SHALL BE ONE OF THE FOLLOWING:

1. ATBM-P20-MVOLT-R2-3K
2. SMX-96WIE-LL5-3070-T202
3. NVM-SA2D-730-U-T2
4. OR EQUAL, AS APPROVED BY THE ENGINEER

PAYMENT WILL BE MADE AT THE UNIT BID PRICE FOR EACH CMS ITEM 625, "LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), IES-II-M, LED, 12073 - 14754 LUMENS, AS PER PLAN" FOR EACH LUMINAIRE WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTAL REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

INTERM COMPLETION DATE

THIS PROJECT HAS AN INTERM COMPLETION DATE OF 06/01/2026 FOR ALL ASSOCIATED WORK FOR U.S. 250 & S.R. 151 PARK AND RIDE

Updated Note

Removed Note "Item 625 - Power Service, As Per Plan (C)"

HAS-250/151 PARK AND RIDE PID 112649								
POINT ID	NORTHING	EASTING	ELEVATION	CODE	DESCRIPTION	STATION	OFFSET	ALIGNMENT
C800	525042.052	118930.498	869.82	CMONS	LEVELED	OFF CHAIN	OFF CHAIN	CL_EXRW_SR151
C801	524152.128	119169.043	864.95	CMONS	LEVELED	1+92.75	712.80 RT	CL_EXRW_SR151
C802	524861.484	119723.583	888.29	CMONS	LEVELED	7+56.52	21.68 RT	CL_EXRW_SR151
CL1	524861.797	118965.065	N/A	POT		0+00.00	CL	CL_EXRW_SR151
CL2	524869.361	119444.305	N/A	TS		4+79.30	CL	CL_EXRW_SR151
CL3	524903.481	119842.065	N/A	SC		8+79.30	CL	CL_EXRW_SR151

