

ALIGNMENT AND PROFILE

THE WORK PROPOSED BY THIS PROJECT CONSISTS OF SLAB REPAIRS AND MICROSURFACING OF THE EXISTING PAVEMENT. THE ALIGNMENT OF THE EXISTING PAVEMENT WILL NOT BE CHANGED AND THE PROFILE OF THE PROPOSED SURFACE WILL BE SIMILAR TO THAT OF THE EXISTING PAVEMENT.

EQUIPMENT CALIBRATION

THE CONTRACTOR SHALL CALIBRATE THE MIXING EQUIPMENT AS PER 421.07. THIS CALIBRATION SHALL BE PERFORMED DURING NORMAL BUSINESS HOURS - MONDAY THROUGH FRIDAY, FROM 7:00 AM TO 5:00 PM.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLAN

THE PAVEMENT REPAIRS SHALL BE IN ACCORDANCE WITH ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR, WITH THE FOLLOWING ADDITIONS:

THE ENGINEER SHALL DESIGNATE THE LOCATIONS AND LIMITS OF THE AREAS TO BE REPAIRED. THE AREAS SHALL BE ROUGHLY RECTANGULAR IN SHAPE AND SAWED OR MILLED TO A NEAT LINE. THE DEPTH OF REMOVAL, AS DIRECTED BY THE ENGINEER, SHALL BE SUFFICIENT TO REMOVE ALL DETERIORATED PAVEMENT. THE REPLACEMENT MATERIAL SHALL BE ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (449), PG70-22M AND IT SHALL BE PLACED IN TWO LIFTS.

THE ESTIMATED PAVEMENT REPAIR AREAS SHALL BE A MINIMUM OF 4 FEET IN WIDTH. THE DEPTH SHALL BE 4 INCHES OR AS DIRECTED BY THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

CLA-70-SLM 0.51 TO 6.56 (EB & WB) = 500 SY
CLA-70-SLM 20.86 TO 25.11 (EB & WB) = 1500 SY

ITEM 251 PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLAN
2000 SY

COOPERATION WITH RAILROAD (NORFOLK SOUTHERN RAILROAD)

THE CONTRACTOR SHALL COORDINATE ALL WORK ON, OVER OR ADJACENT TO THE RAILROAD WITHIN PROJECT LIMITS. THE CONTRACTOR SHALL CONTACT THE FOLLOWING, AT LEAST 30 DAYS IN ADVANCE, IN ORDER TO COORDINATE THE NECESSARY WORK. UNDER NO CIRCUMSTANCES SHALL THERE BE ANY WORK PERFORMED WITHIN THE RAILROAD RIGHT-OF-WAY WITHOUT THE PROPER WRITTEN AUTHORIZATION AND/OR FLAGGING PROTECTION FROM THE RAILROAD. SEE "PAVING AT RAILROAD CROSSINGS" NOTE FOR ADDITIONAL DETAILS.

NORFOLK SOUTHERN RAILROAD
CROSSING LOCATION: CLA-70-6.41

SPEED MEASUREMENT MARKINGS

IR 70 EB SLM 0.84 TO 1.84
IR 70 WB SLM 3.80 TO 4.80

PLACE A SERIES OF SPEED MEASUREMENT MARKINGS ON THE ROADWAY TO ASSIST IN THE ENFORCEMENT OF SPEED REGULATIONS. EACH SPEED MEASUREMENT MARKING SHALL CONSIST OF ONE WHITE TRANSVERSE 24-INCH LINE MEASURED IN THE DIRECTION OF TRAVEL AND 4 FEET IN LENGTH. THE MARKINGS SHALL BE PLACED AT ONE-QUARTER MILE INTERVALS FOR A MINIMUM OF 1 MILE ALONG THE ROADWAY, AT LOCATIONS AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER. SPEED MEASUREMENT MARKINGS SHOULD AVOID BEING LOCATED IN THE VICINITY OF A TAPER, ENTRANCE RAMP OR EXIT RAMP.

ON MULTILANE HIGHWAYS WITH SHOULDER WIDTHS OF AT LEAST 6 FEET, CENTER THE SPEED MEASUREMENT MARKING ENTIRELY ON THE SHOULDER. IF THE SHOULDER WIDTH IS LESS THAN 6 FEET, CENTER THE MARKING ON THE EDGE LINE SUCH THAT IT EXTENDS 2 FEET ON EITHER SIDE. TO ASSURE VISIBILITY OF THE MARKINGS AND REDUCE PARALLAX ERRORS, FOR EACH DIRECTION UTILIZING AN AIR SPEED CHECK ZONE, A SET OF TWO MARKINGS (LEFT AND RIGHT SIDE) SHALL BE USED AT EACH ONE-QUARTER MILE INTERVAL.

ON TWO-LANE ROADWAYS, ONE MARKING SHOULD BE USED AT EACH ONE-QUARTER MILE INTERVAL AND INSTALLED ACROSS THE CENTER LINE SUCH THAT IT EXTENDS 2 FEET ON EITHER SIDE.

THE MARKINGS SHALL BE LAID OUT BY A REGISTERED SURVEYOR. ON SECTIONS WITH CURVES, THE MARKINGS ON THE INSIDE OF THE CURVE SHALL MEET THE REQUIRED ONE-QUARTER MILE INTERVALS. MARKINGS ON THE OUTSIDE OF THE CURVE SHALL BE DIRECTLY ACROSS FROM THE MARKINGS ON THE INSIDE OF THE CURVE, NOT STAGGERED. A RECORD IS TO BE KEPT AND ONE ORIGINAL SIGNED AND SEALED DOCUMENT IS TO BE SENT TO THE DISTRICT TRAFFIC ENGINEER AND ONE COPY IS TO BE SENT TO THE DISTRICT CONSTRUCTION ENGINEER.

MATERIALS, EQUIPMENT AND APPLICATION SHALL BE ACCORDING TO THE TYPE OF PAVEMENT MARKING MATERIAL USED.

PAYMENT WILL BE FOR EACH 24-INCH-WIDE BY 4 FEET LONG MARKING AND SHALL INCLUDE THE PAVEMENT MARKING MATERIAL USED AND THE SURVEYING WORK. THE FOLLOWING QUANTITIES HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER:

THE FOLLOWING QUANTITY HAS BEEN INCLUDED IN THE PAVEMENT MARKING SUMMARY FOR MARKINGS ON BOTH THE INSIDE AND OUTSIDE SHOULDERS OF IR 70 EB & WB.

ITEM 646 SPEED MEASUREMENT MARKING, 20 EACH

PAVEMENT MARKINGS

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DOCUMENT THE LAYOUT OF THE EXISTING PAVEMENT MARKINGS INCLUDING EXISTING LANE AND SHOULDER WIDTHS IN A LOG AND SUBMIT TO THE DEPARTMENT FOR ACCEPTANCE. THE DEPARTMENT WILL NOT ALLOW THE CONTRACTOR TO PERFORM ANY PAVEMENT WORK FUNCTIONS (MILLING, OVERLAY, ETC.) UNTIL ACCEPTANCE OF THE SUBMITTED EXISTING MARKING LOG.

MARKINGS SHALL BE REPLACED IN KIND EXCEPT WHERE EXISTING MARKINGS DO NOT MEET THE CURRENT STANDARD CONSTRUCTION DRAWINGS. THE CONTRACTOR SHALL COORDINATE AND CORROBORATE THE PROPOSED LAYOUT OF ALL PAVEMENT MARKINGS PER APPLICABLE STANDARD CONSTRUCTION DRAWINGS WITH ODOT.

NO PERMANENT PAVEMENT MARKINGS OR RAISED PAVEMENT MARKERS SHALL BE PLACED UNTIL THE ODOT PROJECT ENGINEER HAS APPROVED THE LOCATION AND/OR LAYOUT OF THE WORK ZONE PAVEMENT MARKINGS.

ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

* DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

* DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC, OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

* FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP).

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION OR AT THE POINT OF ROAD CLOSURE, AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 400 HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

WORK SCHEDULE

NO WORK SHALL BEGIN ON THIS PROJECT BEFORE APRIL 1, 2025.

DESIGN AGENCY



DESIGNER

TMK

REVIEWER

RPH 4-22-24

PROJECT ID

105361

SHEET TOTAL

P.5 21

SHEET NUM.												PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
5	7	8	16	18	19	20	21		01/IMS/05	EXT	TOTAL							
												PAVEMENT						
2,000									2,000	251	2,000	SY	PARTIAL DEPTH PAVEMENT REPAIR (441) AS PER PLAN	5				
			275						275	255	275	SY	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, TYPE 1, CLASS QC MS					
			650						650	255	650	FT	FULL DEPTH PAVEMENT SAWING					
			772,755						772,755	421	772,755	SY	MICROSURFACING, SURFACE COURSE					
			462,739						462,739	421	462,739	SY	MICROSURFACING, LEVELING COURSE					
					82.4				82.4	850	82.4	MILE	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT)					
					7,963				7,963	850	7,963	FT	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT)					
					9,588				9,588	850	9,588	FT	GROOVING FOR 12" RECESSED PAVEMENT MARKING, (ASPHALT)					
												TRAFFIC CONTROL						
								1,973	1,973	621	1,973	EACH	RPM					
								1,973	1,973	621	1,973	EACH	RAISED PAVEMENT MARKER REMOVED					
				41.2					41.2	642	41.2	MILE	REMOVAL OF PAVEMENT MARKING, EDGE LINE, 6", TYPE 1					
				41.2					41.2	642	41.2	MILE	REMOVAL OF PAVEMENT MARKING, LANE LINE, 6", TYPE 1					
				7,693					7,693	643	7,693	FT	REMOVAL OF PAVEMENT MARKING, CHANNELIZING LINE, 12"					
				9,858					9,858	643	9,858	FT	REMOVAL OF PAVEMENT MARKING, DOTTED LINE					
				667					667	643	667	FT	REMOVAL OF PAVEMENT MARKING, TRANSVERSE/DIAGONAL LINE, WHITE					
				20					20	643	20	EACH	REMOVAL OF PAVEMENT MARKING, SPEED MEASUREMENT MARKING					
				0.04					0.04	646	0.04	MILE	EDGE LINE, 6"					
				20					20	646	20	FT	CHANNELIZING LINE, 12"					
				30					30	646	30	FT	STOP LINE					
				667					667	646	667	FT	TRANSVERSE/DIAGONAL LINE					
				20					20	646	20	EACH	SPEED MEASUREMENT MARKING					
					41.2				41.2	807	41.2	MILE	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, EDGE LINE, 6"					
					41.2				41.2	807	41.2	MILE	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, LANE LINE, 6"					
					7,693				7,693	807	7,693	FT	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, CHANNELIZING LINE, 12"					
					7,963				7,963	807	7,963	FT	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, DOTTED LINE, 6"					
					1,895				1,895	807	1,895	FT	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, DOTTED LINE, 12"					
												STRUCTURE REPAIR (CLA-70-0156)						
								14	14	519	14	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B					
												STRUCTURE REPAIR (CLA-70-0173)						
								3	3	519	3	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B					
												STRUCTURE REPAIR (CLA-70-0265)						
								4	4	519	4	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B					
												STRUCTURE REPAIR (CLA-70-0634R)						
								1	1	519	1	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B					
												STRUCTURE REPAIR (CLA-70-1576L)						
								3	3	519	3	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B					
												STRUCTURE REPAIR (CLA-70-1898R)						
								3	3	519	3	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B					
												STRUCTURE REPAIR (CLA-70-2079L)						
								2	2	519	2	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B					
												STRUCTURE REPAIR (CLA-70-2079R)						
								2	2	519	2	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B					
												STRUCTURE REPAIR (CLA-70-2092L)						
								8	8	519	8	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B					
												STRUCTURE REPAIR (CLA-70-2092R)						
								8	8	519	8	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B					

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER
 TMK
 REVIEWER
 RPH 4-22-24
 PROJECT ID
 105361
 SHEET TOTAL
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