

WORK ZONE MARKINGS AND SIGNS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS AND SIGNS PER THE REQUIREMENTS OF C&MS 614.04 AND 614.11.

ITEM 614:

WORK ZONE MARKING SIGN	24 EACH
WORK ZONE LANE LINE, CLASS III, 642 PAINT	53.34 MILE
WORK ZONE DOTTED LINE, CLASS 1, 6", 740.06, TYPE 1	5760 FT
WORK ZONE EDGE LINE, CLASS 1, 6" 740.06, TYPE 1	1.09 MILE
WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT	11,319 FT
WORK ZONE STOP LINE, CLASS III, 642 PAINT	339 FT

WORK ZONE MARKING QUANTITIES FOR USE AFTER THE REMOVAL OF EXISTING THERMOPLASTIC PAVEMENT MARKINGS AND AFTER MICROSURFACING LEVELING AND SURFACE COURSES.

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:

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.

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

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.

ENSURE PROVIDED LEOS HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT, IN ACCORDANCE WITH C&MS 614.03.

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. 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 THAT 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 40 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 A LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

DESIGN AGENCY



DESIGNER
JEM

REVIEWER
DMB

PROJECT ID
114767


SHEET TOTAL
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SHEET NUM.										PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
3	4	5	7	8	9	10	12	01/NHS/PV	02/NHS/BR								
										ROADWAY							
44								LS		201	11000	LS			CLEARING AND GRUBBING		
								44		606	61000	44	EACH		IMPACT ATTENUATOR, MISC.:SAND BARREL REMOVED AND REPLACED	3	
										PAVEMENT							
3,500								3,500		251	01001	3,500	SY		PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLAN	3	
			377,269					377,269		421	10010	377,269	SY		MICROSURFACING, SURFACE COURSE		
			377,269					377,269		421	10020	377,269	SY		MICROSURFACING, LEVELING COURSE		
500								500		617	10100	500	CY		COMPACTED AGGREGATE		
										TRAFFIC CONTROL							
			34.32					34.32		618	40600	34.32	MILE		RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)		
							1,242	1,242		621	00100	1,242	EACH		RPM		
							1,242	1,242		621	54000	1,242	EACH		RAISED PAVEMENT MARKER REMOVED		
							303	303		644	00900	303	SF		ISLAND MARKING		
							113	113		644	00500	113	FT		STOP LINE		
							621	621		644	00700	621	FT		TRANSVERSE/DIAGONAL LINE		
							39	39		644	01300	39	EACH		LANE ARROW		
			3,643					3,643		644	30000	3,643	FT		REMOVAL OF PAVEMENT MARKING		
			51.49					51.49		644	30030	51.49	MILE		REMOVAL OF PAVEMENT MARKING		
							134	134		646	10600	134	FT		TRANSVERSE/DIAGONAL LINE		
							3	3		646	20300	3	EACH		LANE ARROW		
							1.38	1.38		807	12010	1.38	MILE		WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 6"		
							0.69	0.69		807	12110	0.69	MILE		WET REFLECTIVE EPOXY PAVEMENT MARKING, LANE LINE, 6"		
							633	633		807	12310	633	FT		WET REFLECTIVE EPOXY PAVEMENT MARKING, CHANNELIZING LINE, 12"		
							34.36	34.36		807	14010	34.36	MILE		WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, EDGE LINE, 6"		
							17.13	17.13		807	14110	17.13	MILE		WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, LANE LINE, 6"		
							3,643	3,643		807	14310	3,643	FT		WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, CHANNELIZING LINE, 12"		
							3,267	3,267		807	14410	3,267	FT		WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, DOTTED LINE, 6"		
							51.49	51.49		850	10010	51.49	MILE		GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT)		
							3,643	3,643		850	10130	3,643	FT		GROOVING FOR 12" RECESSED PAVEMENT MARKING, (ASPHALT)		
							2.07	2.07		850	20010	2.07	MILE		GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE)		
							633	633		850	20130	633	FT		GROOVING FOR 12" RECESSED PAVEMENT MARKING, (CONCRETE)		
			4,200					4,200		897	01011	4,200	SY		PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A, AS PER PLAN	3	
										STRUCTURE OVER 20 FOOT SPAN (PIK-32-1374 L)							
							21		21	512	10100	21	SY		SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)		
							21		21	512	74000	21	SY		REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES		
							119		119	519	11100	119	SF		PATCHING CONCRETE STRUCTURE		
										STRUCTURE OVER 20 FOOT SPAN (PIK-32-1374 R)							
							46		46	512	10100	46	SY		SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)		
							46		46	512	74000	46	SY		REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES		
							260		260	519	11100	260	SF		PATCHING CONCRETE STRUCTURE		
										STRUCTURE OVER 20 FOOT SPAN (PIK-32-1433 L)							
							21		21	512	10100	21	SY		SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)		
							21		21	512	74000	21	SY		REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES		
							119		119	519	11100	119	SF		PATCHING CONCRETE STRUCTURE		
										STRUCTURE OVER 20 FOOT SPAN (PIK-32-1433 R)							
							47		47	512	10100	47	SY		SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)		
							47		47	512	74000	47	SY		REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES		
							268		268	519	11100	268	SF		PATCHING CONCRETE STRUCTURE		
										MAINTENANCE OF TRAFFIC							
			40					40		614	11110	40	HOUR		LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE		
			24					24		614	12460	24	EACH		WORK ZONE MARKING SIGN		
14								14		614	12484	14	EACH		WORK ZONE INCREASED PENALTIES SIGN		
			53.34					53.34		614	20560	53.34	MILE		WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT		
			1.09					1.09		614	22210	1.09	MILE		WORK ZONE EDGE LINE, CLASS I, 6", 740.06, TYPE I		
			11,319					11,319		614	23690	11,319	FT		WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT		
			5,760					5,760		614	24402	5,760	FT		WORK ZONE DOTTED LINE, CLASS I, 6", 740.06, TYPE I		
			339					339		614	26610	339	FT		WORK ZONE STOP LINE, CLASS III, 642 PAINT		
72								72		808	18700	72	SNMT		DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY		
										INCIDENTALS							
								0.9	0.1	614	11000	LS			MAINTAINING TRAFFIC		
								3		619	16000	3	MNTH		FIELD OFFICE, TYPE A		
								0.9	0.1	624	10000	LS			MOBILIZATION		



LOCATION	DIRECTION	LOG POINT		LENGTH	807				644				807				850				COMMENTS
					WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING				REMOVAL OF PAVEMENT MARKINGS				WET REFLECTIVE EPOXY PAVEMENT MARKING				GROOVING				
		FROM	TO		MILE	EDGE LINE, 6" (YELLOW)	EDGE LINE, 6" (WHITE)	LANE LINE, 6"	CHANNELIZING LINE, 12"	REMOVAL OF PAVEMENT MARKINGS	REMOVAL OF PAVEMENT MARKINGS	EDGE LINE, 6" (YELLOW)	EDGE LINE, 6" (WHITE)	LANE LINE, 6"	CHANNELIZING LINE, 12"	FOR 6" RECESSED MARKING, (ASPHALT)	FOR 12" RECESSED MARKING, (ASPHALT)	FOR 6" RECESSED MARKING (CONCRETE)	FOR 12" RECESSED MARKING (CONCRETE)		
		SLM	SLM		MILE	MILE	MILE	FT	MILE	FT	MILE	MILE	MILE	FT	MILE	FT	MILE	FT			
PIK-32	EB/WB	0.00	2.4700	2.4700	4.94	4.94	4.94		14.82					14.82							
PIK-32-0247	EB/WB	2.4700	2.4900	0.0200						0.04	0.04	0.04				0.12					
PIK-32	EB/WB	2.4900	3.0400	0.5500	1.10	1.10	1.10		3.30					3.30							
PIK-32	EB	2.9650	3.0100					80							80			GOFF ROAD INTERSECTION			
PIK-32	WB	2.9650	3.0100					80							80			GOFF ROAD INTERSECTION			
PIK-32	EB/WB	9.9200	13.2300	3.3100	6.62	6.62	6.62		19.86					19.86							
PIK-32	EB	9.9250	10.1140					646							646			S.R. 124 & TENNYSON RD INTERSECTION			
PIK-32	WB	9.9250	10.1140					883							883			S.R. 124 & TENNYSON RD INTERSECTION			
PIK-32	EB	11.0360	11.0690					54							54			SMOKEY HOLLOW RD INTERSECTION			
PIK-32	WB	11.0360	11.0690					41							41			SMOKEY HOLLOW RD INTERSECTION			
PIK-32-1323	EB/WB	13.2300	13.2500	0.0200						0.04	0.04	0.04				0.12					
PIK-32	EB/WB	13.2500	13.7400	0.4900	1.03	1.03	0.96		3.04					3.04							
PIK-32	EB	13.5750	13.8230					591							591			S.R. 104 INTERSECTION & LEFT TURN LANE TO S.R. 104 NB			
PIK-32	WB	13.5750	13.8230					22							22			S.R. 104 INTERSECTION & LEFT TURN LANE TO S.R. 104 SB			
PIK-32-1374	EB/WB	13.7400	13.8300	0.0900						0.18	0.18	0.18	633			0.54	633	IMPACT BARRELS AT BRIDGE - SEE PLAN NOTE ON SHEET 3			
PIK-32	EB/WB	13.8300	13.9600	0.1300	0.27	0.27	0.27		0.81					0.81							
PIK-32-1396	EB/WB	13.9600	13.9900	0.0300						0.06	0.06	0.06				0.18					
PIK-32	EB/WB	13.9900	14.3300	0.3400	0.68	0.68	0.68		2.04					2.04							
PIK-32-1433	EB/WB	14.3300	14.4800	0.1500						0.31	0.31	0.31				0.93					
PIK-32	EB/WB	14.4800	15.2100	0.7300	1.46	1.46	1.46		4.38					4.38							
PIK-32	WB	14.9560	14.9960					192							192			GROVE RD / VANMETER RD INTERSECTION (NO EB TURN)			
PIK-32	EB/WB	15.2100	15.2300	0.0200	0.04	0.04	0.04		0.12					0.12				US-23 OVERHEAD BRIDGES			
PIK-32	EB	15.1510	15.2520					344							344			US-23 NB TURN LANE			
PIK-32	WB	15.1510	15.2520					333							333			US-23 SB TURN LANE			
PIK-32	EB/WB	15.2300	15.3000	0.0700	0.15	0.15	0.15		0.45					0.45							
PIK-32	EB/WB	15.3000	15.3100	0.0100	0.02	0.02	0.02		0.06					0.06				RAILROAD OVERHEAD BRIDGE			
PIK-32	EB/WB	15.3100	15.7000	0.3900	0.78	0.78	0.78		2.34					2.34							
PIK-32	WB	15.4860	15.4510					178							178			WAKEFIELD MOUND RD INTERSECTION (NO EB TURN)			
PIK-32	EB	15.5480	15.5880					199							199			MOUND CEMETERY RD INTERSECTION (NO WB TURN)			
PIK-32	EB/WB	15.7000	15.7100	0.0100	0.03	0.03	0.03		0.09					0.09				RAILROAD OVERHEAD BRIDGE			
PIK-32	EB/WB	15.7100	15.7400	0.0300	0.06	0.06	0.06		0.18					0.18							
PIK-32-1574	EB/WB	15.7400	15.7700	0.0300						0.06	0.06	0.06				0.18					
THIS SHEET SUB-TOTALS					17.18	17.18				0.69	0.69										
THIS SHEET TOTALS					34.36	17.13	3643		51.49	3643				51.49	3643.00	2.07	633				
CONVERT TO MILE																					
TOTALS CARRIED TO GENERAL SUMMARY					34.36	17.13	3643		51.49	3643				633	51.49	3643	2.07	633			

PAVEMENT MARKINGS SUB-SUMMARY

DESIGN AGENCY

 DESIGNER
JEM
 REVIEWER
DMB
 PROJECT ID
114767
 SHEET TOTAL
 P.8 | 12

LOCATION	DIRECTION	LOG POINT			LENGTH	644								646		807				COMMENTS		
						THERMOPLASTIC PAVEMENT MARKING								EPOXY PAVEMENT MARKING		WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING						
		FROM	STATION	TO		STOP LINE	TRANSVERSE DIAGONAL (WHITE)	TRANSVERSE DIAGONAL (YELLOW)	ISLAND MARKING	LANE ARROW	TRANSVERSE DIAGONAL (WHITE)	LANE ARROW	DOTTED LINE, 6" (WHITE)	DOTTED LINE, 6" (YELLOW)								
		SLM	EQUATION	SLM											LEFT	MAIN LINE	RIGHT	FT	FT		SF	EACH
PIK-32	EB/WB	0.00		2.4700																		
PIK-32-0247	EB/WB	2.4700		2.4900																		
PIK-32	EB/WB	2.4900		3.0400																		
PIK-32	EB	2.9650		3.0100																		
PIK-32	WB	2.9650		3.0100																		
PIK-32	EB/WB	9.9200		13.2300					11	76												
PIK-32	EB	9.9250		10.1140					180		53.27	3										
PIK-32	WB	9.9250		10.1140					144		89.95	6										
PIK-32	EB	11.0360		11.0690								1										
PIK-32	WB	11.0360		11.0690								1										
PIK-32-1323	EB/WB	13.2300		13.2500																		
PIK-32	EB/WB	13.2500		13.7400																		
PIK-32	EB	13.5750		13.8230								38										
PIK-32	WB	13.5750		13.8230								75										
PIK-32-1374	EB/WB	13.7400		13.8300					102	108	159.70	9	134	3								
PIK-32	EB/WB	13.8300		13.9600																		
PIK-32-1396	EB/WB	13.9600		13.9900																		
PIK-32	EB/WB	13.9900		14.3300																		
PIK-32-1433	EB/WB	14.3300		14.4800																		
PIK-32	EB/WB	14.4800		15.2100																		
PIK-32	EB	14.9560		14.9960																		
PIK-32	WB	14.9560		14.9960									2									
PIK-32	EB/WB	15.2100		15.2300																		
PIK-32	EB	15.1510		15.2520									5									
PIK-32	WB	15.1510		15.2520									4									
PIK-32	EB/WB	15.2300		15.3000																		
PIK-32	EB/WB	15.3000		15.3100																		
PIK-32	EB/WB	15.3100		15.7000																		
PIK-32	EB	15.4860		15.4510																		
PIK-32	WB	15.4860		15.4510																		
PIK-32	EB	15.5480		15.5880									2									
PIK-32	WB	15.5480		15.5880									2									
PIK-32	EB/WB	15.7000		15.7100																		
PIK-32	EB/WB	15.7100		15.7400																		
PIK-32-1574	EB/WB	15.7400		15.7700																		
THIS SHEET SUB-TOTALS					0.00	113.00	0.00				302.92	39	134	3			2909	358				
THIS SHEET TOTALS						113.00			437.00	183.50	302.92	39	134	3			3267					
CONVERT TO MILE																						
TOTALS CARRIED TO GENERAL SUMMARY						113			621		303	39	134	3			3267					

PAVEMENT MARKINGS SUB-SUMMARY

DESIGN AGENCY	
DESIGNER	JEM
REVIEWER	DMB
PROJECT ID	114767
SHEET	P.9
TOTAL	12