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MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR)

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 165 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET P.21. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$4,000 PER DAY FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

ACCESS TO PRIVATE PROPERTY

ACCESS TO DRIVES SHALL BE MAINTAINED VIA EXISTING PAVEMENT, TEMPORARY PAVEMENT, OR ITEM 410. ITEM 410, TRAFFIC COMPACTED SURFACE, TYPE A SHALL BE ITEMIZED SEPARATELY FOR AUTHORIZATION ONLY BY THE ENGINEER. IN THE EVENT THAT A DRIVE CANNOT BE MAINTAINED AND A CLOSURE IS NEEDED THE CONTRACTOR WILL COORDINATE WITH THE PROPERTY OWNER TO MINIMIZE THE IMPACT TO THE OWNER

COMMERCIAL PROPERTY WITH MULTIPLE DRIVES MAY HAVE ONE DRIVE CLOSED WHEN WORKING IN THE AREA OF THE DRIVE. COMMERCIAL PROPERTY WITH ONLY ONE DRIVEWAY OR DRIVEWAYS WITH ONE DIRECTION TRAFFIC USE WILL BE CONSTRUCTED PART WIDTH. THE CONTRACTOR WILL COORDINATE WITH THE PROPERTY OWNER TO MINIMIZE THE IMPACT TO THE OWNER.

MAINTAIN ACCESS TO RESIDENTIAL PROPERTIES AT ALL TIMES. WHEN A RESIDENTIAL DRIVE IS CLOSED FOR CONSTRUCTION, MAINTAIN ALTERNATE ACCESS TO THE PROPERTY. IT MAY BE REQUIRED FOR THE CONTRACTOR TO MAINTAIN ONE PASSABLE LANE WITHIN A CLOSURE IN ORDER FOR RESIDENTS TO ACCESS RESIDENCY WITH A VEHICLE.

UNLESS CALLED OUT IN THE PLANS THE CONTRACTOR WILL COORDINATE ANY CLOSURES WITH PROPERTY OWNERS AND BE RESPONSIBLE FOR ANY AND ALL PROPERTY USE AGREEMENTS FOR ALTERNATIVE ACCESS

SUCCESSFULLY NOTIFY THE OCCUPANTS/OWNERS OF COMMERCIAL OR RESIDENTIAL DRIVES TO BE CLOSED AND COORDINATE THE CLOSURE AT LEAST 48 HOURS BEFORE THE CLOSURE BEGINS (SIMPLY LEAVING A WRITTEN NOTICE OR PHONE MESSAGE IS NOT SUFFICIENT). COORDINATE ALTERNATE ACCESS TO RESIDENTIAL PROPERTIES WITH THE OWNER/OCCUPANT

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR USE AS DIRECTED BY THE ENGINEER AND CARRIED TO THE GENERAL SUMMARY

ITEM 410 - TRAFFIC COMPACTED SURFACE, TYPE A  
100 CUBIC YARDS

PAYMENT FOR ALL LABOR, EQUIPMENT, LAW ENFORCEMENT OFFICERS AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC UNLESS ITEMIZED SEPARATELY

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE OFFICE OF MATERIALS MANAGEMENT WEB PAGE. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 800 FEET AND 650 FEET, RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH C&MS 614.03.

THE PROBABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE LOCATIONS ARE SHOWN ON SHEET(S) P.21 OF THE PLAN. PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE PCMS SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL (IN ACTIVE CELLULAR PHONE AREAS) ALLOW REMOTE SIGN ACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES. ONE REMOTE DATA INPUT DEVICE (LAPTOP COMPUTER PLUS MODEM OR EQUIVALENT) SHALL BE FURNISHED FOR USE BY THE DISTRICT TRAFFIC ENGINEER, OR EQUIVALENT, AND SHALL BE INSURED AGAINST THEFT.) THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF C&MS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN P.21  
SIGN MONTH ASSUMING 4 PCMS SIGN(S) FOR 16 MONTH(S).

AGGREGATE WEDGE

WHERE THE CONTRACTOR CAN NOT FULLY MEET THE DROP OFF REQUIREMENTS AS SHOWN IN MOT-101.90, THE CONTRACTOR SHALL INSTALL AN AGGREGATE WEDGE (304 AGGREGATE) PLACED EACH NIGHT AT THE DROP OFF. THE AGGREGATE WEDGE WILL NEED TO BE INSTALLED AT THE TIME OF SUB-BASE CONSTRUCTION (BEFORE CURING) AND LEFT IN PLACE UNTIL THE CONTRACTOR IS READY TO INSTALL THE AGGREGATE BASE AND PAVEMENT. AFTER THE CURE TIME, IT CAN BE LEVELED AND USED IN PLACE.

ITEM 614, WORK ZONE PAVEMENT MARKINGS

THE FOLLOWING QUANTITIES ARE PROVIDED TO INSTALL WORK ZONE PAVEMENT MARKINGS AT PERMANENT LOCATIONS AT THE CONCLUSION OF EACH STAGE WHEN SURFACE COURSE IS INSTALLED. PERMANENT STRIPING QUANTITIES AS QUANTIFIED ON P.116 TO P.120 SHALL BE APPLIED OVER THE TOP OF CLASS III PAVEMENT MARKINGS SPECIFIED HERE.

ITEM 614, WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	2.94 MILE
ITEM 614, WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	1.12 MILE
ITEM 614, WORK ZONE CENTER LINE, CLASS III, 642 PAINT	2.19 MILE
ITEM 614, WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT	4642 FT
ITEM 614, WORK ZONE DOTTED LINE, CLASS III, 6", 642 PAINT	1256 FT
ITEM 614, WORK ZONE STOP LINE, CLASS III, 642 PAINT	396 FT

ITEM 614, WORK ZONE TRAFFIC SIGNAL

THE UNIT PRICE BID FOR ITEM SPECIAL "WORK ZONE TRAFFIC SIGNAL" IS TO BE UTILIZED AT THE INTERSECTION OF US 42 AND INDUSTRIAL PARKWAY TO ACCOUNT FOR ANY MATERIAL DELAYS DUE TO LEAD TIMES INSTAGING THE INSTALLATION OF THE PERMANENT SIGNALS AT THIS LOCATION.

ITEM 614, SPECIAL - WORK ZONE TRAFFIC SIGNAL 1 EACH



SHEET NUM.												PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	CALCULATED ACS CHECKED JDH	GENERAL SUMMARY
P.12	P.13	P.14	P.14A	P.112	P.121	P.124	P.127	P.237	P.243A			01/STR/04	02/STR/04								
					4							4		632	64000	4	EACH	STRAIN POLE FOUNDATION			
					103							103		632	68300	103	FT	POWER CABLE, 3 CONDUCTOR, NO. 6 AWG			
					134							134		632	69800	134	FT	SERVICE CABLE, 3 CONDUCTOR, NO. 6 AWG			
					1							1		632	70000	1	EACH	POWER SERVICE			
					2							2		632	70400	2	EACH	CONDUIT RISER, 2" DIAMETER			
					2							2		632	86150	2	EACH	STRAIN POLE, TYPE TC-81.11, DESIGN 13			
					2							2		632	87150	2	EACH	COMBINATION STRAIN POLE, TYPE TC-81.11, DESIGN 13			
					1							1		632	90100	1	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION			
					1							1		632	90400	1	EACH	SIGNALIZATION, MISC.: CDMA MODEM, FURNISH ONLY	P.267		
					1							1		633	65511	1	EACH	CABINET, TYPE TS-2, AS PER PLAN	P.265		
					1							1		633	67100	1	EACH	CABINET FOUNDATION			
					1							1		633	67200	1	EACH	CONTROLLER WORK PAD			
					1							1		633	75001	1	EACH	UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN	P.265		
					1							1		633	99000	1	EACH	CONTROLLER ITEM, MISC.: ETHERNET RADIO (UBIQUITY)	P.265		
					1							1		633	99000	1	EACH	CONTROLLER ITEM, MISC.: UNMANAGED ETHERNET SWITCH	P.272		
					30							30		809	64550	30	FT	ETHERNET CABLE, OUTDOOR-RATED			
					4							4		809	69001	4	EACH	ADVANCE RADAR DETECTION, AS PER PLAN	P.267		
					4							4		809	69101	4	EACH	STOP LINE RADAR DETECTION, AS PER PLAN	P.267		
					1							1		809	69123	1	EACH	ATC CONTROLLER, AS PER PLAN	P.265		
																		MISCELLANEOUS STRUCTURE			
								LS				LS		202	11000	LS		STRUCTURE REMOVED			
									LS			LS		202	11201	LS		PORTIONS OF STRUCTURE REMOVED, AS PER PLAN	P.243A		
								LS				LS		503	11100	LS		COFFERDAMS AND EXCAVATION BRACING			
								LS	LS			LS		503	21300	LS		UNCLASSIFIED EXCAVATION (WINGWALL FOOTING)			
								3,534	2,166			3,534	2,166	509	10000	5,700	LB	EPOXY COATED STEEL REINFORCEMENT			
								9.4	8			9.4	8	511	46012	17.4	CY	CLASS QC1 CONCRETE WITH QC/QA, RETAINING/WINGWALL NOT INCLUDING FOOTING			
								26	17			26	17	511	46510	43	CY	CLASS QC1 CONCRETE, FOOTING			
				2.4				1.2				2.4	1.2	511	46610	3.6	CY	CLASS QC1 CONCRETE, HEADWALL			
								40	21			40	21	512	10100	61	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)			
								163				163		512	33000	163	SY	TYPE 2 WATERPROOFING			
								28				28		516	13600	28	SF	1" PREFORMED EXPANSION JOINT FILLER			
								LS	LS			LS		518	21230	LS		POROUS BACKFILL WITH GEOTEXTILE FABRIC			
																		MAINTENANCE OF TRAFFIC			
			100									50	50	410	10001	100	CY	TRAFFIC COMPACTED SURFACE, TYPE A, AS PER PLAN	P.14A		
	100											50	50	614	11110	100	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE			
			1									1		SPECIAL	61411300	1	EACH	WORK ZONE TRAFFIC SIGNAL	P.14A		
						5	10					10	5	614	12384	15	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)			
		LS										LS		614	12420	LS		DETOUR SIGNING			
5												3	2	614	12500	5	EACH	REPLACEMENT SIGN			
50												25	25	614	12600	50	EACH	REPLACEMENT DRUM			
80												61	19	614	13310	80	EACH	BARRIER REFLECTOR, TYPE 1, BIDIRECTIONAL			
80												61	19	614	13360	80	EACH	OBJECT MARKER, TWO WAY			
						0.48						0.48		614	20000	0.48	MILE	WORK ZONE LANE LINE, CLASS I, 4"			
			1.12									1.12		614	20560	1.12	MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	P.14A		
			2.19			1.97	1.38					3	0.35	614	21000	3.35	MILE	WORK ZONE CENTER LINE, CLASS I			
						1.62	0.57					614	21550	2.19	614	21550	2.19	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	P.14A	
			2.94			9.16	3.65					9.44	3.37	614	22000	12.81	MILE	WORK ZONE EDGE LINE, CLASS I, 4"			
												1.16	1.78	614	22360	2.94	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	P.14A		
							971					971		614	23000	971	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8"			
			4,642			2,945	1,697					614	23680	4,642	614	23680	4,642	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT	P.14A	
						952	782					614	24000	1,734	614	24000	1,734	FT	WORK ZONE DOTTED LINE, CLASS I		
			1,256			1,256						614	24612	1,256	614	24612	1,256	FT	WORK ZONE DOTTED LINE, CLASS III, 6", 642 PAINT	P.14A	
						309	114					614	26000	423	614	26000	423	FT	WORK ZONE STOP LINE, CLASS I		
			396									314	82	614	26610	396	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	P.14A		
						8						8		614	30000	8	EACH	WORK ZONE ARROW, CLASS I			
						LS						615	10000	LS	615	10000	LS		ROADS FOR MAINTAINING TRAFFIC		
						11,138.5	1,148.4					10,308.6	1,978.3	615	20000	12,286.9	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A			
						677	3,160					3,007	830	622	41100	3,837	FT	PORTABLE BARRIER, UNANCHORED			

P.109

P.347

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