UTILITIES

THERE ARE NO EXISTING UTILITY FACILITIES SHOWN ON THE PLANS. NOR ARE ANY EXISTING UTILITIES BEING RELOCATED FOR THE PROJECT. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT WILL NOT AFFECT ANY UTILITIES THAT MAY EXIST WITHIN THE WORK AREA. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO IDENTIFY POTENTIAL UTILITY CONFLICTS, BY VISUAL INSPECTION AND BY CONTACTING THE OHIO UTILITIES PROTECTION SERVICE (OHIO 811) FOR FIELD MARKINGS OF THE UNDERGROUND UTILITIES. THE CONTRACTOR SHALL CONTACT AND COORDINATE WITH THE OWNERS TO RESOLVE ALL UTILITY CONFLICTS PRIOR TO CONSTRUCTION OR, WITH THE APPROVAL OF THE PROJECT ENGINEER, THE CONTRACTOR SHALL ADJUST THE PROJECT CONSTRUCTION ACCORDINGLY, SO AS TO AVOID DAMAGE TO THE EXISTING UTILITY FACILITIES.

THE UTILITY CONTACT INFORMATION FOR THE PROJECT CAN BE OBTAINED THROUGH THE ODOT DISTRICT 9 UTILITY COORDINATOR AT 740-774-9075.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

PROFILE AND ALIGNMENT

PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. PLACE THE PROPOSED SURFACE OVERLAY AS SHOWN ON THE TYPICAL SECTIONS.

EXTRA AREAS

QUANTITIES FOR EXTRA AREAS ARE SHOWN ON THE PAVEMENT CALCULATION SHEETS. THESE AREAS INCLUDE THE FOLLOWING:

TURN LANE - FULL WIDTH OR AS DIRECTED BY THE ENGINEER MEDIAN CROSSOVERS - AS DIRECTED BY THE ENGINEER OTHER DESIGNATED AREAS - AS DIRECTED BY THE ENGINEER

PART-WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

RPM (RAISED PAVEMENT MARKER)

IN ADDITION TO CMS 621.03, RPMS SHALL NOT BE INSTALLED ON BRIDGES OR APPROACH SLABS THAT HAVE A CONCRETE SURFACE. INSTALL RPMS IN ASPHALT CONCRETE BEFORE AND AFTER THE SUPERSTRUCTURE. RPMS LOCATED IN EXISTING CONCRETE BRIDGE DECKS OR APPROACH SLABS SHALL BE LEFT IN PLACE.

EXISTING PLANS

EXISTING PLANS ENTITLED BRO-32-0.00 AND BRO-32-5.80 MAY BE INSPECTED IN THE ODOT DISTRICT 9 OFFICE IN CHILLICOTHE, OH.

DISPOSAL OF ASPHALT GRINDINGS

ASPHALT GRINDINGS FROM THIS PROJECT ARE TO BECOME THE PROPERTY OF THE CONTRACTOR TO BE DISPOSED.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN

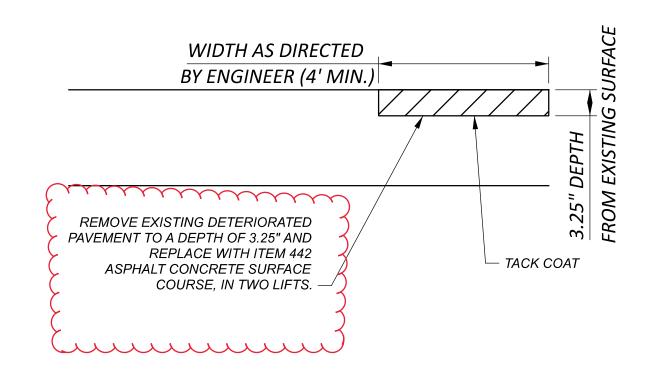
ALL CONSTRUCTION REQUIREMENTS OF 2019 CMS ITEM 251 SHALL APPLY.

THE MINIMUM DIMENSION FOR TRANSVERSE REPAIRS SHALL BE 4', THE MINIMUM FOR LONGITUDINAL REPAIRS SHALL BE 2'. THIS ITEM SHALL COMMENCE PRIOR TO RESURFACING. MATERIAL FOR REPAIR AREAS SHALL BE ITEM 442 SURFACE COURSE, 12.5 MM, TYPE A (448) FOLLOWING APPLICATION OF ITEM 407 TACK COAT. REMOVE EXISTING SURFACE TO A UNIFORM DEPTH OF 3.25", TRIM AS NEEDED WHERE ROUNDED TO PROVIDE VERTICAL FACES ALONG THE PERIMETER OF THE REPAIR AREA. THOUROUGHLY COMPACT ENTIRE AREA.

THE SMOOTHNESS OF ASPHALT REPAIRS CANNOT EXCEED 0.25" FROM THE TESTING EDGE OF A TEN FOOT STRAIGHTEDGE. THE CONTRACTOR IS REQUIRED TO PROVIDE STRAIGHTEDGE THAT IS SATISFACTORY TO THE ENGINEER. CORRECT VARIATIONS INEXCESS OF SURFACE TOLERANCE BY THE RECONSTRUCTING REPAIRS OR SURFACE GRINDING IN A MANNER SATISFACTORY TO THE ENGINEER AT NO ADDITIONAL COST TO THE STATE.

PAYMENT FOR ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED IN THE SQUARE YARD CONTRACT PRICE FOR ITEM 251 PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DESIGNATED BY THE ENGINEER,

ITEM 251, PARTIAL DEPTH REPAIR (442), AS PER PLAN 3000 SY



ITEM 617 - COMPACTED AGGREGATE

THE FOLLOWING ESTIMATED QUANTITY OF ITEM 617 -COMPACTED AGGREGATE HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE TO FILL ANY LOW BERM AREAS AS DESIGNATED BY THE ENGINEER.

150 CY ITEM 617 - COMPACTED AGGREGATE 8.1 STA ITEM 209 - LINEAR GRADING

ITEM 254 - PATCHING PLANED SURFACE

THE FOLLOWING ESTIMATED QUANTITY OF 20% OF THE PLANED SURFACE HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR PATCHING PLANED SURFACE AS DESIGNATED BY THE ENGINEER.

ITEM 254 - PATCHING PLANED SURFACE 2,503 SY

ITEM 253 - PAVEMENT REPAIR, AS PER PLAN

ALL CONSTRUCTION REQUIREMENTS OF 2019 CMS ITEM 253 SHALL APPLY.

THE MINIMUM DIMENSION FOR TRANSVERSE REPAIRS SHALL BE 20', THE MINIMUM FOR LONGITUDINAL REPAIRS SHALL BE 12'. THIS ITEM SHALL COMMENCE PRIOR TO RESURFACING. MATERIAL FOR REPAIR AREAS SHALL BE ITEM 301 ASPHALT CONCRETE BASE, PG64-22, (449) FOLLOWING APPLICATION OF ITEM 407 TACK COAT. REMOVE EXISTING SURFACE TO A UNIFORM DEPTH OF 15.5", TRIM AS NEEDED WHERE ROUNDED TO PROVIDE VERTICAL FACES ALONG THE PERIMETER OF THE REPAIR AREA. THOROUGHLY COMPACT ENTIRE AREA.

THE SMOOTHNESS OF ASPHALT REPAIRS CANNOT EXCEED 0.25" FROM THE TESTING EDGE OF A TEN FOOT STRAIGHTEDGE. THE CONTRACTOR IS REQUIRED TO PROVIDE STRAIGHTEDGE THAT IS SATISFACTORY TO THE ENGINEER. CORRECT VARIATIONS INEXCESS OF SURFACE TOLERANCE BY THE RECONSTRUCTING REPAIRS OR SURFACE GRINDING IN A MANNER SATISFACTORY TO THE ENGINEER AT NO ADDITIONAL COST TO THE STATE.

PAYMENT FOR ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED IN THE SQUARE YARD CONTRACT PRICE FOR ITEM 253 PAVEMENT REPAIR. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DESIGNATED BY THE ENGINEER,

ITEM 253, PAVEMENT REPAIR, AS PER PLAN

ITEM 252 - PAVEMENT SAWING

REPAIR LOCATED AT BRO 32 SLM 6.18 EB IN THE PASSING LANE.

240 SY

64 LF

AIR SPEED ZONE MARKING

AIR SPEED ZONE MARKINGS SHALL BE WHITE AND 24 INCHES WIDE MEASURED IN THE DIRECTION OF TRAVEL AND 4 FEET IN LENGTH. ON TWO-LANE ROADWAYS WITH PAVED SHOULDERS LESS THAN 4 FEET IN WIDTH, THE AIR SPEED ZONE MARKINGS SHALL BE PLACED WITH 2 FEET ON EACH SIDE OF THE CENTER LINE OR EDGE LINE MARKINGS. WHEN PAVED SHOULDERS OF SUFFICIENT WIDTH ARE AVAILABLE. THE AIR SPEED ZONE MARKINGS SHALL BE PLACED ON THE SHOULDERS.

PLACE THE MARKINGS AT 0.25 MILE INTERVALS FOR OVER A 1 MILE LENGTH OF ROADWAY.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE THE MARKINGS LAID OUT BY A REGISTERED SURVEYOR. A RECORD IS TO BE KEPT AND ONE ORIGINAL SIGNED AND SEALED DOCUMENT 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 SHALL BE ACCORDING TO THE PAVEMENT MARKING MATERIAL USED AND SHALL INCLUDE THE SURVEYING WORK. THE FIVE MARKINGS PLACED IN EACH 1 MILE OF ROADWAY SHALL EQUAL ONE ZONE. ONE ZONE SHALL BE MEASURED AS 1 EACH FOR AIR SPEED ZONE MARKINGS.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER:

ITEM 644 SPEED MEASURMENT MARKING 2 EACH

ESIGN AGENCY



ESIGNER REVIEWER

> ROJECT ID 109841

P.3 14

WORK ZONE INCREASED PENALTIES SIGN (R11-H5A)

R11-H5A-48 SIGNS SHALL BE FURNISHED, ERECTED, AND MAINTAINED IN GOOD CONDITION AND/OR REPLACED AS NECESSARY AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. SIGNS SHALL BE MOUNTED AT THE APPROPRIATE OFFSETS AND ELEVATIONS AS PRESCRIBED BY THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THEY SHALL BE MAINTAINED ON SUPPORTS MEETING CURRENT SAFETY CRITERIA.

THE SIGNS MAY BE ERECTED OR UNCOVERED NO MORE THAN FOUR HOURS BEFORE THE ACTUAL START OF WORK. THE SIGNS SHALL BE REMOVED OR COVERED NO LATER THAN FOUR HOURS FOLLOWING RESTORATION OF ALL LANES TO TRAFFIC WITH NO RESTRICTIONS, OR SOONER AS DIRECTED BY THE ENGINEER. TEMPORARY SIGN COVERING AND UNCOVERING DUE TO TEMPORARY LANE RESTORATIONS SHALL BE GUIDED BY THE FOUR-HOUR LIMITATIONS STATED ABOVE. SUCH LANE RESTORATIONS SHOULD BE EXPECTED TO REMAIN IN EFFECT FOR 30 OR MORE CONSECUTIVE CALENDAR DAYS, SUCH AS **DURING WINTER SHUT-DOWNS.**

THE SIGNS ON THE MAINLINE SHALL BE DUAL MOUNTED UNLESS NOT PHYSICALLY POSSIBLE. THE FIRST SIGN SHALL BE PLACED BETWEEN THE ROAD WORK AHEAD (W20-1) SIGN AND THE NEXT SIGN IN THE SEQUENCE. SIGNS SHALL BE ERECTED ON EACH ENTRANCE RAMP AND EVERY 2 MILES THROUGH THE CONSTRUCTION WORK LIMITS. SIGNS ON THE MAINLINE SHALL BE R11-H5A-48. SIGNS USED ON THE RAMPS SHALL BE R11-H5A-24. R11-H5A-24 SIGNS MAY BE USED IN THE MEDIAN IN LIEU OF R11-H5A-48 SIGNS IF IT IS NOT PHYSICALLY POSSIBLE TO PROVIDE R11-H5A-48 SIGNS IN THE MEDIAN.

THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED, BUT GOOD, CONDITION PROVIDED THE SIGNS MEET CURRENT ODOT SPECIFICATIONS. SIGN FACES SHALL BE RETROREFLECTORIZED WITH TYPE G SHEETING COMPLYING WITH THE REQUIREMENTS *OF C&MS 730.19.*

WORK ZONE INCREASED PENALTIES SIGNS AND SUPPORTS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGN AND NECESSARY SUPPORTS. IF A SIGN AND SUPPORT COMBINATION IS REMOVED AND REERECTED AT ANOTHER LOCATION AS DIRECTED BY THE ENGINEER, IT SHALL BE CONSIDERED ANOTHER UNIT.

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE, IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, ERECTING, MAINTAINING, COVERING DURING SUSPENSION OF WORK, AND REMOVAL OF THE SIGN AND SUPPORT.

ITEM 614, WORK ZONE INCREASED PENALTIES SIGN 28 EACH

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.

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.

THE CONTRACTOR SHALL IMPLEMENT A SYSTEM WHEREBY CHANGEABLE MESSAGES WILL BE IMPLEMENTED WITHIN 4 HOURS FOLLOWING TELEPHONE NOTIFICATION FROM THE PROJECT ENGINEER TO A DESIGNATED PHONE.

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.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN, CONT'D

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 18 SIGN MONTH ASSUMING 6 PCMS SIGN(S) FOR 3 MONTH(S)

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).

ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS, CONT'D

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. 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 70 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.

WORK ZONE MARKINGS AND SIGNS

ITEM 614, WORK ZONE STOP LINE,

CLASS III, 642 PAINT

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.

16 EACH ITEM 614, WORK ZONE MARKING SIGN ITEM 614, WORK ZONE LANE LINE, 26.40 MILE CLASS III, 642 PAINT ITEM 614, WORK ZONE EDGE LINE, CLASS I, 6", 740.06, TYPE I 1.37 MILE ITEM 614, WORK ZONE CHANNELIZING LINE, 6,328 FT CLASS III, 12", 642 PAINT ITEM 614, WORK ZONE DOTTED LINE, CLASS I, 6" 740.06, TYPE I 7,200 FT

250 FT

ESIGN AGENCY



ESIGNER KDR REVIEWER DMB ROJECT ID

109841 P.6 14

		SHEET	NUM.			PA	RT.	 - ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET	
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												ROADWAY		
8.1						LS 0.1		201	11000 60200	LS o 1	СТЛ	CLEARING AND GRUBBING		
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240			274,660			274,660		254	01001	274,660		PAVEMENT PLANING, ASPHALT CONCRETE, 1.50"	3	_
			25,697			25,697		254	01000	25,697	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 3.5"		
2,503			•			2,503		254	01600	2,503	SY	PATCHING PLANED SURFACE		
			25 524			25 524		407	20000	25 524	CAL	NONETRACIVING TACIVICAT		
			25,531 12,515			25,531 12,515		407 442	20000 10311	25,531 12,515		NON-TRACKING TACK COAT ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), PWL 2023, AS PER PLAN, PG64-22	٥	
			1,373			1,373		442	10103	1,373		ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (446), PWL 2023, AS PER PLAN, PG64-22	9	
150			_,_,_			150		617	10100	150	CY	COMPACTED AGGREGATE		
			26.54			26.54		618	40600	26.54	MILE	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)		
												TD A FFIC CONTDOL		
				950		950		621	00100	950	EACH	TRAFFIC CONTROL RPM		\dashv
				950		950		621	54000	950	EACH	RAISED PAVEMENT MARKER REMOVED		
			10			10		632	26500	10	EACH	DETECTOR LOOP		
				13		13		644	01300	13	EACH	LANE ARROW		=
			\sim	~~~~		2	~~~	644	40000	2		SPEED MEASUREMENT MARKING	-	\dashv
			> '	72	, , , Y	72	, , , , , ,	644	00500	72	FT	STOP LINE STOP LINE	1	
				423		423		644	00700	423	FT	TRANSVERSE/DIAGONAL LINE 2		
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				0.14		0.14 0.14		807	12010 12110	0.14 0.14		WET REFLECTIVE ÉPOXY PAVEMENT MARKING, EDGE LINE, 6" WET REFLECTIVE EPOXY PAVEMENT MARKING, LANE LINE, 6"		
				0.14		0.14		807	12110	0.14	IVIILL	WET REFERENCE ET OAT TAVEIVIENT WARRING, LANE LINE, O		
				580	~~~	580	~~~	807	12310	580	FT	WET REFLECTIVE EPOXY PAVEMENT MARKING, CHANNELIZING LINE, 12" WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 6"		
			<u> </u>	282		282		807	12410					
				√27.56 13.26	<u> </u>	27.56 13.26		807 807	14010 14110	27.56 13.26		WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, EDGE LINE, 6" WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, LANE LINE, 6"		
				0.08		0.08		807	14200	0.08		WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, CENTER LINE		-
												·		
				3,164		3,164		807	14310	3,164		WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, CHANNELIZING LINE, 12"		
				2,610	\sim	2,610	~~~	807	14410	2,610		WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, DOTTED LINE, 6" WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, DOTTED LINE, 12" ONE OF THE PLANT OF		
				40.82		40.82		850	10010	40.82		GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT)		
			(2,610		2,610		850	10110	2,610		GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT)		
			3	2 960							FT	CDOOVING FOR 12" RECESSED RAVENATINE MARKING (ASPILAT)		
			8	3,860 0.28	\sim	3,860 0.28		850 850	10130 20010	3,860 0.28		GROOVING FOR 12" RECESSED PAVEMENT MARKING, (ASPHALT) GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE)		-
				282		282		850	20110	282		GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE)		
				579.57		579.57		850	20130	579.57	FT	GROOVING FOR 12" RECESSED PAVEMENT MARKING, (CONCRETE)		
			<u> </u>	m	Jul	www	سس	m	·····	uuu	سس	uuuuuuuuu		
												MAINTENANCE OF TRAFFIC		\dashv
		70				70		614	11110	70	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE		
		16				16		614	12460	16		WORK ZONE MARKING SIGN		
		28 18				28 18		614 614	12484 18601	28 18		WORK ZONE INCREASED PENALTIES SIGN PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN		
		26.4				26.4		614	20560	26.4		WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	+ -	
			~~~	~~~~	~~	~~~~	~~~			~~~~		mmmmmm		
		1.37				1.37		614	22210	1.37	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 740.06, TYPE I		
		7,200	~~~~	*****	~~~	7,200		614	23690 24402	7,200		WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT		
	7		ىىىى	······	w			614	24402 <b>~26610~</b>	7,200 ~~250~~		WORK ZONE DOTTED LINE, CLASS I, 6", 740.06, TYPE I WORK ZONE STOP LINE, CLASS II, 642 PAINT	-	
	5					5		616	10000	5		WATER		
											_			
	102					102		808	18700	102	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY		
												STRUCTURE OVER 20 FOOT SPAN (BRO-32-505L SFN:0800074)	-	_
					124		124	516	31001	124	FT	JOINT SEALER, AS PER PLAN	14	
					5		5	519	12300	5	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B		
I				. I		•	•		1	1			1	

1	ı	SHEET	Γ NUM.		1	PA	۱RT.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET
3	5	6	9	10	14	01/NHS/05	02/NHS/47		EXT	TOTAL			NO.
					100		100	516	31001	100	FT	STRUCTURE OVER 20 FOOT SPAN (BRO-32-505R SFN:080082) JOINT SEALER, AS PER PLAN	14
					5		5	519	12300	5		PATCHING CONCRETE BRIDGE DECK - TYPE B	14
												STRUCTURE OVER 20 FOOT SPAN (BRO-32-540L SFN:0800104)	
					104		104	516	31001	104	FT	JOINT SEALER, AS PER PLAN	14
					5		5	519	12300	5	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B	
					130		130	516	31001	130	FT	STRUCTURE OVER 20 FOOT SPAN (BRO-32-540L SFN:0800112)  JOINT SEALER, AS PER PLAN	14
					5		5	519	12300	5		PATCHING CONCRETE BRIDGE DECK - TYPE B	14
						1						INCIDENTALS	
						LS		614	11000	LS		MAINTAINING TRAFFIC	
						LS LS		623 624	10000 10000	LS LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING  MOBILIZATION	
								UZT	10000	LS		WODILIZATION	
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807 644 850 621 WET REFLECTIVE WET REFLECTIVE THERMOPLASTIC **EPOXY EXTRA MARKINGS** GROOVING REMOVED PAVEMENT MARKING PAVEMENT MARKING ' RECESSED MARKING, (CONCRETE) ' RECESSED MARKING, (CONCRETE) MARKER DOTTED LINE, 6" (WHITE) EDGE LINE, 6" (WHITE) LOG POINT CHANNELIZING LINE, LOCATION COMMENTS PAVEMENT ..9 -9 DOTTED LINE, DOTTED LINE, RAISED FROM TO SLM MILE | MILE | MILE | FT | FT FT FT MILE MILE MILE FT FT FT EACH SF FT FT FT MILE FT FT EACH EACH SLM MILE MILE 4.92 4.92 BRO-32, EB&WB EB,WB 2.4600 2.4600 4.92 14.76 **SUB-SUMMARY** 1.02 1.02 1.02 4.5400 5.0500 0.5100 3.06 0.03 0.03 0.06 5.0500 5.0638 0.0138 0.12 0.68 0.68 5.4000 0.3362 0.68 2.04 5.4176 0.0176 0.04 0.04 0.08 0.16 5.4000 5.47 | 5.47 | 5.47 5.4176 8.1500 | 2.7324 | 16.41 ADA-32, WB 23.6700 | 24.8400 | 1.1700 | 1.1700 | 1.1700 | 1.1700 3.51 0.06554 MEDIAN CROSSOVER 24.64 0.07 PAVEMENT MARKING 47.20 278.00 EASTWOOD RD INTERSECTION 1.76 1516.86 397.88 301.17 72.00 10.00 397.88 | 1818.03 KLEIN RD INTERSECTION 7.82 775.97 232.62 775.97 232.62 687.41 161.39 UNION HILL RD INTERSECTION 24.6390 687.41 161.39 RAMP A 5.0230 0.12 0.12 579.57 235.04 0.24 235.04 579.57 WB RAMP B 0.13 0.13 0.08 | 359.77 | 116.74 579.57 3.00 116.74 359.77 579.57 EΒ 0.26 285 281.72 RAMP C EB 0.08 0.07 0.15 | 281.72 | 285.00 RAMP D 5.35 0.17 0.34 WB 0.17 422.67 114.06 281.63 145.02 114.06 422.67 281.63 -(0.00)(4.54)/23.67 ESIGN AGENCY BRO/ADA-32 ESIGNER REVIEWER 950 **TOTALS CARRIED FROM SHEET 11** 950 ROJECT ID 109841 THIS SHEET SUB-TOTALS 13.82 | 13.74 0.07 0.07 
 0.14
 281.63
 579.57

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 579.57
 13.26 0.08 3163.87 748 0.28 281.63 579.57 THIS SHEET TOTALS 27.56 47 0.14 72 P.10 14 40.82 2610 3,860 0.28 282 579.57 2 950 13.26 0.14 72 47 TOTALS CARRIED TO GENERAL SUMMARY 27.56 696 423 950 0.08 3,164 0.14 13 2,610

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