

ITEM 614, MAINTAINING TRAFFIC

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION, LATEST REVISION, THE SPECIFICATIONS AND THE FOLLOWING:

1. ON I.R.-480, A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT, ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, AND ITEM 615 ROADS FOR MAINTAINING TRAFFIC. IT IS PERMISSIBLE TO KEEP ONE LANE OF TRAFFIC OPEN ONLY DURING NON-PEAK HOURS. THE CONTRACTOR IS REQUIRED TO MAINTAIN TWO LANES OF TRAFFIC IN EACH DIRECTION DURING THE FOLLOWING TIMES:

MONDAY - FRIDAY 6:00 AM TO 9:00 AM
MONDAY - FRIDAY 3:00 PM TO 7:00 PM

FOR LANE CLOSURES DURING OFF-PEAK PERIODS, THE CONTRACTOR SHALL INSTALL, REMOVE, AND RESET ALL TRAFFIC CONTROL DEVICES NECESSARY FOR THE WORK ZONE FOR EACH CONSTRUCTION PHASE, AND AS PER ODOT SCD's MT-95.30, MT-95.40 AND MT-101.90. CONFLICTING SIGNS SHALL BE COVERED OR REMOVED. PAYMENT FOR THESE LANE CLOSURES SHALL BE INCIDENTAL TO THE LUMP SUM ITEM 614-MAINTAINING TRAFFIC.

2. ALL EXISTING I.R.-480 LANES, SHALL BE OPEN AND AVAILABLE TO TRAFFIC IN THE ORIGINAL OR PROPOSED FINAL ALIGNMENT BETWEEN OCTOBER 15 AND APRIL 1. SHOULD THE CONTRACTOR FAIL TO MEET THESE REQUIREMENTS, A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$10,000 PER CALENDAR DAY.

THE CONTRACTOR SHALL BE ASSESSED DISINCENTIVES AS DESIGNATED IN THE LANE VALUE CONTRACT TABLE FOR EACH UNIT OF TIME THE PRESCRIBED CRITICAL LANE IS RESTRICTED FROM FULL USE BY THE TRAVELING PUBLIC WITHIN THE RESTRICTED TIME PERIOD. THE LANE VALUE CONTRACT TABLE IS LOCATED IN THE PLAN GENERAL NOTES. THE DISINCENTIVES WILL BE ASSESSED FOR ALL RESTRICTIONS OF THE CRITICAL WORK.

CRITICAL WORK IS SHOWN IN THE LANE VALUE CONTRACT TABLE.

CRITICAL WORK IS DEFINED AS HAVING THE DESIGNATED SECTIONS OPEN TO UNRESTRICTED TRAFFIC AS SHOWN IN THE TABLE, OR THE ENTIRE PROJECT IF NOT OTHERWISE LISTED.

UNRESTRICTED TRAFFIC IS DEFINED AS ALL TRAFFIC LANES BEING AVAILABLE FOR USE WITH SPECIFIED STRIPING AND SAFETY FEATURES IN PLACE.

3. THE CONTRACTOR SHALL ADVISE THE ODOT DISTRICT OFFICE (330-786-2208), SUMMIT COUNTY (330-643-2850) THE CITY OF HUDSON (330-342-1770) AND TWINSBURG TOWNSHIP (330-425-4497) EIGHTEEN (18) DAYS IN ADVANCE OF WHEN THE STOW ROAD DETOUR ROUTE SHOULD BE IN EFFECT. ALL WORK ZONE DEVICES REQUIRED SHALL BE FURNISHED, ERECTED, MAINTAINED, AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. PAYMENT FOR ALL WORK ASSOCIATED WITH THE DETOUR SHALL BE INCLUDED UNDER THE LUMP SUM BID FOR ITEM 614, DETOUR SIGNING.

4. NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS:

NEW YEAR'S (OBSERVED) MEMORIAL DAY
FOURTH OF JULY (OBSERVED) LABOR DAY
GENERAL/REGULAR ELECTION DAY (NOV.) THANKSGIVING
CHRISTMAS (OBSERVED)

ITEM 614, MAINTAINING TRAFFIC (CONTINUED)

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF HOLIDAY	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00 AM WEDNESDAY
TUESDAY (GEN./REG. ELECTION)	5:00 AM TUESDAY THROUGH 12: AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM FRIDAY
THURSDAY (THANKSGIVING ONLY)	6:00 AM WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE VALUE CONTRACT (PN 127).

LANE VALUE CONTRACT TABLE

DESCRIPTION OF CRITICAL LANE/RAMP TO BE MAINTAINED	RESTRICTED TIME PERIOD	TIME UNIT	DISINCENTIVE \$ PER TIME UNIT
2 LANES OF SUM IR 480 FROM MM37 TO MM41	06:00 - 09:00 M-F 15:00 - 19:00 M-F	EACH HOUR	\$10,000

5. LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

6. NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW. AT THE APPROVAL OF THE ENGINEER, PORTABLE CHANGEABLE MESSAGE SIGNS MAY BE USED IN LIEU OF THE STANDARD FLATSHEET SIGN FOR CLOSURE DURATIONS OF LESS THAN 1 WEEK.

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE.

NOTICE OF CLOSURE SIGN TIME TABLE

ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC
ROAD CLOSURES	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
	<= 12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH A

ITEM 614, MAINTAINING TRAFFIC (CONTINUED)

MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TO BE A SPECIFIC OFFICE WITHIN THE DISTRICT RATHER THAN THE GENERAL SWITCHBOARD NUMBER.

6. ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

SEQUENCE OF CONSTRUCTION

ALTHOUGH THE DETAILED MAINTENANCE OF TRAFFIC PLANS AND TYPICAL SECTIONS ILLUSTRATE CONCURRENT EASTBOUND AND WESTBOUND CONSTRUCTION, THE CONTRACTOR HAS THE OPTION TO CONSTRUCT BOTH BOUNDS CONCURRENTLY DURING THE SAME CALENDAR YEAR OR TO COMPLETE EACH BOUND SEPARATELY DURING SEPARATE CALENDAR YEARS. REGARDLESS OF THE SEQUENCE OF CONSTRUCTION NOTE BELOW, THE CONTRACTOR SHALL BE PERMITTED TO PERFORM EASTBOUND AND WESTBOUND WORK AS SEPARATE CONSTRUCTION OPERATIONS. I.R.-480 TRAFFIC SHALL BE MAINTAINED IN EITHER THE ORIGINAL TRAFFIC PATTERN OR THE PERMANENT TRAFFIC PATTERN BETWEEN OCTOBER 15 AND APRIL 1.

NOTE: IT IS ANTICIPATED THAT THE CONTRACTOR WILL PLACE THE FINAL SURFACE COURSE FOR BOTH BOUNDS DURING THE FINAL MOT PHASE OF THE PROJECT. IF PERFORMING EASTBOUND AND WESTBOUND WORK DURING SEPARATE CALENDAR YEARS, THE CONTRACTOR HAS THE OPTION TO APPLY THE FINAL SURFACE COURSE AND THE FINAL STRIPING TO THE CONSTRUCTED BOUND INDEPENDENT OF THE OPPOSING BOUND. THE FOLLOWING WORK ZONE STRIPING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO SUPPORT EITHER OPTION.

ITEM 614, WORK ZONE LANE LINE, CLASS I, 6",
807 PAINT 0.80 MILE
ITEM 614, WORK ZONE EDGE LINE, CLASS I, 6",
807 PAINT 1.60 MILE

ANY ADDITIONAL MILLING OR TEMPORARY ASPHALT WEDGES TO TRANSITION PAVEMENT ELEVATIONS WILL BE PAID FOR UNDER THE LUMP SUM BID PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

PRE-PHASE

1. REMOVE EXISTING OUTSIDE SHOULDER PAVEMENT AND CONSTRUCT PAVEMENT FOR MAINTAINING TRAFFIC ALONG OUTSIDE SHOULDER OF I.R.-480 EASTBOUND AND I.R.-480 WESTBOUND FOR USE IN PHASES 1 AND 2. MAINTAIN ONE EXISTING LANE IN EACH DIRECTION USING SHORT TERM LANE CLOSURES IN ACCORDANCE WITH SCD MT-95.30 AND THE TIMES AS LISTED IN THE ITEM 614, MAINTAINING TRAFFIC NOTE, SHEET 15.

2. REMOVE EXISTING INSIDE SHOULDER PAVEMENT AND CONSTRUCT PAVEMENT FOR MAINTAINING TRAFFIC ALONG INSIDE SHOULDER OF I.R.-480 EASTBOUND AND I.R.-480 WESTBOUND FOR USE IN PHASES 2 AND 3. MAINTAIN ONE EXISTING LANE IN EACH DIRECTION USING SHORT TERM LANE CLOSURES IN ACCORDANCE WITH SCD MT-95.30 AND THE TIMES AS LISTED IN THE ITEM 614, MAINTAINING TRAFFIC NOTE, SHEET 15.

PHASE 1

THE CONTRACTOR SHALL NOT IMPLEMENT PHASE 1 PRIOR TO APRIL 1ST.

SEQUENCE OF CONSTRUCTION (CONTINUED)

1. SHIFT BOTH LANES OF I.R.-480 EASTBOUND AND I.R.-480 WESTBOUND TRAFFIC TO THE OUTSIDE OF EACH BOUND. THE OUTSIDE LANES OF EACH BOUND WILL BE REQUIRED TO USE THE OUTSIDE SHOULDER.

2. DETOUR STOW ROAD TRAFFIC. STOW ROAD TRAFFIC SHALL ONLY BE DETOURED WHEN IR-480 BRIDGE WORK IS BEING PERFORMED. STOW ROAD SHALL BE OPEN TO TRAFFIC BETWEEN OCTOBER 15 AND APRIL 1. PRIOR TO OPENING STOW ROAD TO TRAFFIC, EACH LANE SHALL BE IN A SAFE, PASSABLE CONDITION. THE REOPENING OF STOW ROAD AND ANY TEMPORARY MEASURES TO REOPEN STOW ROAD SHALL BE CONSIDERED INCIDENTAL TO ITEM 614, MAINTAINING TRAFFIC.

3. CONSTRUCT INSIDE PORTIONS OF ROADWAY AND BRIDGE IMPROVEMENTS ALONG I.R.-480 EASTBOUND AND I.R.-480 WESTBOUND.

PHASE 2

1. KEEP THE OUTSIDE LANE OF I.R.-480 EASTBOUND AND I.R.-480 WESTBOUND IN ITS CURRENT PATTERN.

2. SHIFT THE INSIDE LANE OF I.R.-480 EASTBOUND AND I.R.-480 WESTBOUND TRAFFIC TO THE INSIDE OF EACH BOUND. THE INSIDE LANES OF EACH BOUND WILL BE REQUIRED TO USE THE INSIDE SHOULDER.

3. CONSTRUCT MIDDLE PORTIONS OF ROADWAY AND BRIDGE IMPROVEMENTS ALONG I.R.-480 EASTBOUND AND I.R.-480 WESTBOUND.

PHASE 3

THE CONTRACTOR SHALL COMPLETE PHASE 3 BY OCTOBER 15TH.

1. KEEP THE INSIDE LANE OF I.R.-480 EASTBOUND AND I.R.-480 WESTBOUND IN ITS CURRENT PATTERN.

2. SHIFT THE OUTSIDE LANE OF I.R.-480 EASTBOUND AND I.R.-480 WESTBOUND TRAFFIC TO BE ADJACENT TO THE INSIDE LANE OF THEIR RESPECTIVE BOUND.

3. CONSTRUCT OUTSIDE PORTIONS OF ROADWAY AND BRIDGE IMPROVEMENTS ALONG I.R.-480 EASTBOUND AND I.R.-480 WESTBOUND.

FINAL

1. MILL AND RESURFACE STOW ROAD PAVEMENT AND PLACE STOW ROAD FINAL PAVEMENT MARKINGS. OPEN STOW ROAD TO TRAFFIC ONCE ALL IMPROVEMENTS ARE COMPLETE.

2. MILL AND RESURFACE I.R.-480 EASTBOUND LANES AND SHOULDERS FROM STATION 364+90 TO STATION 405+70. MILL AND RESURFACE I.R.-480 WESTBOUND LANES AND SHOULDERS FROM STATION 382+80 TO STATION 423+60. MILL AND RESURFACE THE EXISTING MEDIAN U-TURN AT STA. 388+00. PLACE I.R.-480 EASTBOUND AND I.R.-480 WESTBOUND FINAL SURFACE COURSE. MAINTAIN ONE LANE IN EACH DIRECTION, IN ITS ORIGINAL PATTERN, USING SHORT TERM LANE CLOSURES IN ACCORDANCE WITH SCD MT-95.30 AND THE TIMES AS LISTED IN THE ITEM 614, MAINTAINING TRAFFIC NOTE, SHEET 15.

3. COMPLETE INSTALLATION OF ALL I.R.-480 EASTBOUND AND I.R.-480 WESTBOUND PERMANENT PAVEMENT MARKINGS AND SIGNS.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER 7 M. GAL.



WORK ZONE SPEED ZONES (WZSZS)

THE FOLLOWING WORK ZONE SPEED ZONE (WZSZ) SPEED LIMIT REVISION(S) HAVE BEEN APPROVED FOR USE ON THIS PROJECT WHEN WORK ZONE CONDITIONS AND FACTORS ARE MET AS DESCRIBED BELOW:

WZSZ REVISION NO.	COUNTY-ROUTE-SECTION	DIRECTION
WZ-26214	SUM-480-07.45	EB
WZ-26214	SUM-480-07.45	WB

POTENTIAL WZSZ LOCATIONS SHALL HAVE AN ORIGINAL (PRE-CONSTRUCTION) POSTED SPEED LIMIT OF 55 MPH OR GREATER, A QUALIFYING WORK ZONE CONDITION OF AT LEAST 0.5 MILE IN LENGTH, AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS, AND A WORK ZONE CONDITION IN PLACE THAT REDUCES THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS (I.E., LANE CLOSURE, LANE SHIFT, CROSSOVER, CONTRAFLOW AND/OR SHOULDER CLOSURE). THE LENGTH OF THE WORK ZONE CONDITION IS MEASURED FROM THE BEGINNING OF THE TAPER FOR THE SUBJECT WORK ZONE CONDITION IMPACTING THE TRAVEL LANES AND/OR SHOULDER TO THE END OF THE DOWNSTREAM TAPER, WHERE DRIVERS ARE RETURNED TO TYPICAL ALIGNMENT. AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS IS REQUIRED TO BALANCE THE ADDITIONAL EXPOSURE CREATED BY INSTALLING AND REMOVING WZSZ SIGNING WITH THE TIME NEEDED TO COMPLETE THE WORK.

IF THE WORK ZONE MEETS THESE MINIMUM CRITERIA, IT SHALL BE ANALYZED FURTHER USING TABLE 1 BELOW TO DETERMINE IF AND WHEN IT QUALIFIES FOR A SPEED LIMIT REDUCTION. DEPENDING ON THE ORIGINAL POSTED SPEED LIMIT, THE TYPE OF TEMPORARY TRAFFIC CONTROL USED, AND WHETHER OR NOT WORKERS ARE PRESENT, A WARRANTED WZSZ WILL VARY IN THE APPROVED SPEED LIMIT TO BE POSTED OVER TIME.

C&MS ITEM 614, PARAGRAPH 614.02(B), INDICATES THAT TWO DIRECTIONS OF A DIVIDED HIGHWAY ARE CONSIDERED SEPARATE HIGHWAY SECTIONS. THEREFORE, IF THE WORK ON A MULTI-LANE DIVIDED HIGHWAY IS LIMITED TO ONLY ONE DIRECTION, A SPEED LIMIT REDUCTION IN THE DIRECTION OF THE WORK DOES NOT AUTOMATICALLY CONSTITUTE A SPEED LIMIT REDUCTION IN THE OPPOSITE DIRECTION. EACH DIRECTION SHALL BE ANALYZED INDEPENDENTLY FROM EACH OTHER.

ALL WZSZS FLUCTUATE BETWEEN TWO APPROVED REDUCED SPEED LIMITS OR BETWEEN AN APPROVED REDUCED SPEED LIMIT AND THE ORIGINAL POSTED SPEED LIMIT. ONLY ONE OF TWO SIGNING STRATEGIES SHALL BE USED TO IMPLEMENT A WZSZ.

WZSZS USING DSL SIGN ASSEMBLIES SHALL BE IN ACCORDANCE WITH THIS NOTE, APPROVED LIST, SUPPLEMENTAL SPECIFICATIONS (SS) 808 AND 908, AND TRAFFIC SCD MT-104.10.

ONLY ONE WARRANTED SPEED LIMIT APPLIES AT ANY ONE TIME; SPEED LIMIT REDUCTIONS ARE NOT CUMULATIVE. WZSZS SHALL NOT BE USED FOR MOVING/MOBILE ACTIVITIES, AS DEFINED IN OMTUCD PART 6.

WORK ZONE SPEED ZONES (WZSZS) (CONTINUED)

WHEN LOOKING UP THE WARRANTED WORK ZONE SPEED LIMITS, ALWAYS USE THE ORIGINAL, PRECONSTRUCTION, POSTED SPEED LIMIT. DO NOT USE A PRIOR OR CURRENT WORK ZONE SPEED LIMIT AS A LOOK UP VALUE IN THE TABLE. POSITIVE PROTECTION IS GENERALLY REGARDED AS PORTABLE BARRIER OR OTHER RIGID BARRIER IN USE ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WITHOUT POSITIVE PROTECTION IS GENERALLY REGARDED AS USING DRUMS, CONES, SHADOW VEHICLE, ETC., ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WORKERS ARE CONSIDERED AS BEING PRESENT WHEN ON-SITE, WORKING WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WHEN THE WORK ZONE CONDITION REDUCING THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS IS REMOVED, THE SPEED LIMIT DISPLAYED SHALL RETURN TO THE ORIGINAL POSTED SPEED LIMIT.

TABLE 1
 WARRANTED WORK ZONE SPEED LIMITS (MPH)
 FOR WORK ZONES ON HIGH-SPEED (55 MPH
 OR GREATER) MULTI-LANE HIGHWAYS

ORIGINAL POSTED SPEED LIMIT	WITH POSITIVE PROTECTION		WITHOUT POSITIVE PROTECTION	
	WORKERS PRESENT	WORKERS NOT PRESENT	WORKERS PRESENT	WORKERS NOT PRESENT
70	60	65	55	65
65	55	60	50	60
60	55	60	50	60
55	50	55	45	55

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 808, DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY 36 SIGN MNTH (ASSUMING 2 DSL SIGN ASSEMBLIES FOR 18 MONTHS)

EXTRA ADVANCE WARNING SIGNS

AN ADVANCE WARNING SIGN GROUP CONSISTS OF TWO W20-1 (ROAD WORK AHEAD) SIGNS, TWO W20-5 (RIGHT/LEFT LANE CLOSED AHEAD) SIGNS WITH W16-3A DISTANCE PLATES, AND TWO W3-H7 (WATCH FOR STOPPED TRAFFIC) SIGNS AND REQUIRED FLASHING LIGHTS.

PAYMENT FOR PROVIDING, ERECTING, MAINTAINING AND REMOVING EXTRA ADVANCE WARNING SIGN GROUPS SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614, MAINTAINING TRAFFIC.

TRENCH FOR WIDENING (SPEED LIMIT > 45 MPH)

TRENCH EXCAVATION FOR BASE WIDENING SHALL BE ONLY ON ONE SIDE OF THE PAVEMENT AT A TIME. THE OPEN TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS OR BARRICADES AT ALL TIMES. AS SHOWN ON MT-101.90. PLACEMENT OF PROPOSED BASE MATERIAL SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND THE EXCAVATION OPERATIONS. THE LENGTH OF WIDENING TRENCH WHICH IS OPEN AT ANY ONE TIME SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT TO THE APPROVAL OF THE ENGINEER. THE BASE WIDENING ON THIS PROJECT WILL BE COMPLETED TO A DEPTH OF 3 INCHES BELOW THE EXISTING PAVEMENT BY THE END OF THE WORK DAY. NO TRENCH WILL BE LEFT OPEN OVERNIGHT. IN CASE WORK MUST BE SUSPENDED BECAUSE OF INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH FOR THE UNCOMPLETED BASE WIDENING WILL BE BACKFILLED AT THE DIRECTION OF THE ENGINEER.

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 R11-H5A-48 SIGNS SHALL BE MOUNTED ON 2 NO. 3 POSTS WHEN LOCATED WITHIN CLEAR ZONES.

THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED, BUT GOOD, CONDITION PROVIDED THE SIGNS MEET CURRENT ODOT SPECIFICATIONS.

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 8 EACH WORK ZONE INCREASED PENALTIES SIGNS SHALL BE PLACED AT LOCATIONS SHOWN IN THE PLANS.

FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARDS APPROVED PRODUCTS WEB PAGE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.


THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.




SHEET NUM.										PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
15	16	17	18	19	20	24	46	83	OFFICE CALCS	01/IMS/13	02/IMS/05	03/NFA/05						
									41			41	441	70300	41	CY	PAVEMENT (CONTINUED) ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449)	
							54				54		441	70800	54	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL)	
									1,453		1,453		442	22100	1,453	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449)	
									278		278		442	22300	278	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (449)	
							36				36		609	24510	36	FT	CURB, TYPE 4-C	
							14,199				14,199		618	40100	14,199	FT	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	
							2,846				2,846		SPECIAL	69012060	2,846	SY	PAVEMENT OVERLAY FABRIC COMPOSITE	14
																	TRAFFIC CONTROL	
								68			68		621	00100	68	EACH	RPM	
								68			68		621	54000	68	EACH	RAISED PAVEMENT MARKER REMOVED	
								8			8		626	00102	8	EACH	BARRIER REFLECTOR, TYPE 1, (1-WAY)	
								32			24	8	626	00110	32	EACH	BARRIER REFLECTOR, TYPE 2, (1-WAY)	
								21			21		630	02100	21	FT	GROUND MOUNTED SUPPORT, NO. 2 POST	
								50			50		630	03100	50	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
								38			38		630	06400	38	FT	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, S4X7.7	
								2			2		630	80100	2	SE	SIGN, FLAT SHEET, 730-20	
								2			2		630	84500	2	EACH	GROUND MOUNTED STRUCTURAL BEAM SUPPORT FOUNDATION	
								6			6		630	84900	6	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
								3			3		630	85100	3	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
								8			8		630	86002	8	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
								2			2		630	86102	2	EACH	REMOVAL OF GROUND MOUNTED STRUCTURAL BEAM SUPPORT AND DISPOSAL	
								0.12				0.12	642	00100	0.12	MILE	EDGE LINE, 4", TYPE 1	
								0.06				0.06	642	00300	0.06	MILE	CENTER LINE, TYPE 1	
								0.12		0.12			646	10010	0.12	MILE	EDGE LINE, 6"	
								0.06		0.06			646	10110	0.06	MILE	LANE LINE, 6"	
								2.96			2.96		807	14010	2.96	MILE	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, EDGE LINE, 6"	
								1.48			1.48		807	14110	1.48	MILE	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, LANE LINE, 6"	
								4.44			4.44		850	10010	4.44	MILE	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT)	
																	STRUCTURE OVER 20 FOOT SPAN (SFN 7710445)	90
																	STRUCTURE OVER 20 FOOT SPAN (SFN 7710534)	90
																	MAINTENANCE OF TRAFFIC	
				600						600			614	11110	600	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
						320				320			614	11630	320	FT	INCREASED BARRIER DELINEATION	19
LS						8				8			614	12380	8	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	16
	8									8			614	12420	8	LS	DETOUR SIGNING	
										8			614	12484	8	EACH	WORK ZONE INCREASED PENALTIES SIGN	
										100			614	12800	100	EACH	WORK ZONE RAISED PAVEMENT MARKER	
							3,246			3,246			614	12801	3,246	EACH	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	18
							244			244			614	13310	244	EACH	BARRIER REFLECTOR, TYPE 1, (1-WAY)	19
						50				50			614	13312	50	EACH	BARRIER REFLECTOR, TYPE 2, (1-WAY)	
						100				344			614	13350	344	EACH	OBJECT MARKER, ONE WAY	19
					100,000					100,000			614	18000	100,000	EACH	MAINTAINING TRAFFIC, MISC.:SAFETY REPAIRS	20
										12			614	18600	12	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN	
										36			614	18601	36	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	17
										0.65			614	20056	1.45	MILE	WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT	
										7.23			614	22056	8.83	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT	
										0.12			614	22210	0.12	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 740.06, TYPE I	
										13,042			614	23110	13,042	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 807 PAINT	
										243			614	23410	243	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 740.06, TYPE I	
										1,655			614	28200	1,655	FT	WORK ZONE GORE MARKING, CLASS II, 642 PAINT	
LS										LS			615	10000	LS		ROADS FOR MAINTAINING TRAFFIC	
							8,393			8,393			615	20001	8,393	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	19
7										7			616	10000	7	MGAL	WATER	
										4,920			622	41100	4,920	FT	PORTABLE BARRIER, UNANCHORED	
										1,040			622	41111	1,040	FT	PORTABLE BARRIER, ANCHORED, AS PER PLAN	19
										36			808	18700	36	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY	
																	INCIDENTALS	
										LS			614	11000	LS		MAINTAINING TRAFFIC	
										20			619	16020	20	MNTH	FIELD OFFICE, TYPE C	
										LS			623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
										LS			624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

DESIGN AGENCY

COMPASS
 INFRASTRUCTURE GROUP
 DESIGNER
 SSR
 REVIEWER
 MBM 06/14/24
 PROJECT ID
 111186
 SHEET TOTAL
 42 | 131

REF. NO.	SHEET NO.	LOCATION	STATION		SIDE	CODE	SIZE (INCHES)	621	621	626	626	630	630	630	630	630	630	630	642	642	646	646	646	807	807	807	850		
			RPM, ONE-WAY (WHITE)	RAISED PAVEMENT MARKER REMOVED				BARRIER REFLECTOR, TYPE 1 (ONE-WAY)	BARRIER REFLECTOR, TYPE 2 (ONE-WAY)	GROUND MOUNTED SUPPORT, NO. 2 POST	GROUND MOUNTED SUPPORT, NO. 3 POST	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, S4X7.7	SIGN, FLAT SHEET, 730.20	GROUND MOUNTED STRUCTURAL BEAM SUPPORT FOUNDATION	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED STRUCTURAL BEAM SUPPORT AND DISPOSAL	EDGE LINE, 4", TYPE 1 (WHITE)	CENTER LINE, TYPE 1	EDGE LINE, 6" (WHITE)	EDGE LINE, 6" (YELLOW)	LANE LINE, 6"	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, EDGE LINE, 6" (WHITE)	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, EDGE LINE, 6" (YELLOW)	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, LANE LINE, 6"	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT)		
			FROM	TO				EACH	EACH	EACH	EACH	FT	FT	FT	SF	EACH	EACH	EACH	EACH	MILE	MILE	MILE	MILE	MILE	MILE	MILE	MILE		
ELW-1	84	IR-480 EB	364+90	394+02	RT																					0.55	0.55		
ELY-1	84	IR-480 EB	364+90	394+02	RT																					0.55	0.55		
LL-1	84	IR-480 EB	364+90	394+02	RT			24	24																	0.55	0.55		
ELW-2	84	IR-480 WB	382+80	393+43	LT																					0.20	0.20		
ELY-2	84	IR-480 WB	382+80	393+43	LT																					0.20	0.20		
LL-2	84	IR-480 WB	382+80	393+43	LT			9	9																	0.20	0.20		
ELW-3	84	IR-480 EB	394+02	395+73	RT																								
ELY-3	84	IR-480 EB	394+02	395+73	RT																								
LL-3	84	IR-480 EB	394+02	395+73	RT			1	1																				
ELW-4	84	IR-480 EB	395+73	405+70	RT																						0.19		
ELY-4	84	IR-480 EB	395+73	405+70	RT																					0.19	0.19		
LL-4	84	IR-480 EB	395+73	405+70	RT			9	9																	0.19	0.19		
ELW-5	84	IR-480 EB	393+43	395+13	LT																								
ELY-5	84	IR-480 EB	393+43	395+13	LT																								
LL-5	84	IR-480 EB	393+43	395+13	LT			1	1																				
ELW-6	84	IR-480 EB	395+13	423+60	LT																						0.54		
ELY-6	84	IR-480 EB	395+13	423+60	LT																					0.54	0.54		
LL-6	84	IR-480 EB	395+13	423+60	LT			24	24																	0.54	0.54		
BRG-1	85	IR-480 EB	389+02	394+27	RT																								
BRB-1	85	IR-480 EB	394+27	395+75	RT																								
BRG-2	85	IR-480 EB	395+75	399+23	RT																								
BRG-3	85	IR-480 EB	392+55	394+03	RT																								
BRB-2	85	IR-480 EB	394+03	395+52	RT																								
BRB-3	85	IR-480 WB	393+64	395+12	LT																								
BRG-4	85	IR-480 WB	395+12	398+36	LT																								
BRG-5	85	IR-480 WB	389+68	393+41	LT																								
BRB-4	85	IR-480 WB	393+41	394+89	LT																								
BRG-6	85	IR-480 WB	394+89	397+64	LT																								
R-1	85	IR-480 WB	393+82		LT								25.0																
R-2	85	IR-480 EB	393+94		RT									37.8															
R-3	85	IR-480 EB	394+00		RT																								
S-1	85	IR-480 EB	394+00		RT	I-H25b	12 x 12						10.5																
R-4	85	IR-480 EB	394+25		RT																								
R-5	85	IR-480 WB	394+92		LT																								
R-6	85	IR-480 WB	395+16		LT																								
S-2	85	IR-480 WB	395+16		LT	I-H25b	12 x 12						10.5																
R-7	85	IR-480 EB	395+30		RT		24 x 72						25.0																
BRG-7	87	STOW RD.	18+50	21+50	LT																								
BRG-8	87	STOW RD.	18+44	21+31	RT																								
ELW-7	87	STOW RD.	18+50	21+50	LT																								
ELW-8	87	STOW RD.	18+50	21+50	RT																								
CL-1	87	STOW RD.	18+50	21+50	CL																								
TOTALS								68	68	8	32	21.0	50.0	38	2	2	6	3	8	2	0.12	0.06	0.06	0.06	0.06	1.48	1.48	1.48	4.44
TOTALS CARRIED TO GENERAL SUMMARY								68	68	8	32	21	50	38	2	2	6	3	8	2	0.12	0.06	0.12	0.06	0.06	2.96	1.48	1.48	4.44

TRAFFIC CONTROL ESTIMATED QUANTITIES

DESIGN AGENCY

COMPASS
 INFRASTRUCTURE GROUP
 DESIGNER
 KNK
 REVIEWER
 SSR 06/14/24
 PROJECT ID
 111186
 SHEET TOTAL
 83 131