

ITEM 614, 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 NUMBER	COUNTY & ROUTE	DIRECTION
WZ-30811	GUE-70-(12.32-17.52)	EB/WB

POTENTIAL WZSZ LOCATIONS SHALL HAVE AN ORIGINAL (PRE-CONSTRUCTION) POSTED SPEED LIMIT OF ≥ 55 MPH, 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, SUPPLEMENTAL SPECIFICATIONS **808, 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 OMUTCD PART 6.

ITEM 614, WORK ZONE SPEED ZONES (WZSZS) (CONT'D.)

WHEN LOOKING UP THE WARRANTED WORK ZONE SPEED LIMITS, ALWAYS USE THE ORIGINAL, PRE-CONSTRUCTION, 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 ZOE 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) 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

A TOTAL OF **6 DSL SIGN ASSEMBLIES** WILL BE REQUIRED FOR THIS PROJECT.

2-MILE MOVING ZONE (RESURFACING)
I.R. 70 EB: 3 DSL X 6 MONTH = 18 SNMT
I.R. 70 WB: 3 DSL X 6 MONTH = 18 SNMT

ITEM 614, DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY
LOCATION 1: 36 SNMT

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 BID FOR ITEM 614, MAINTAINING TRAFFIC.**

ITEM 614, WORK ZONE PAVEMENT MARKINGS

THE CONTRACTOR SHALL PLACE ALL WORK ZONE PAVEMENT MARKINGS IN ACCORDANCE WITH **CMS 614.11** AND STANDARD DRAWING **MT-99.20** UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THE FOLLOWING QUANTITIES ARE BEING CARREID TO THE LOCATION SUB- SUMMARIES FOR PLACEMENT OF TEMPORARY MARKINGS ON THE SURFACE COURSE FOR ENTIRE PROJECT.

ITEM 614, WORK ZONE LANE LINE, CLASS I, 6”, 642 PAINT
(TWO APPLICATIONS INCLUDED FOR CUTBACK JOINT)
LOCATION 1: 20.80 MILE

ITEM 614, WORK ZONE EDGE LINE, CLASS I, 6”, 642 PAINT
(TWO APPLICATIONS INCLUDED FOR OUTSIDE WHITE EDGE LINES)
LOCATION 1: 32.62 MILE (INCLUDES RAMPS)

ITEM 614, WORK ZONE CHANNELIZING LINE, CLASS I, 12”, 642 PAINT
LOCATION 1: 3,755 FEET

ITEM 614, WORK ZONE DOTTED LINE, CLASS I, 6”, 642 PAINT
LOCATION 1: 2,805 FEET

ITEM 614, WORK ZONE STOP LINE, CLASS III, 642 PAINT
LOCATION 1: 155 FEET (RAMPS)

ITEM 614, WORK ZONE MARKING SIGN

THE CONTRACTOR SHALL PLACE ALL WORK ZONE MARKING SIGNS IN ACCORDANCE WITH CMS SECTION 614.04, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

W8-H12A-48 (NO EDGE LINES)
ONE PER MILE FOR PAVEMENT REPAIRS **(SEE SHEET 10)**

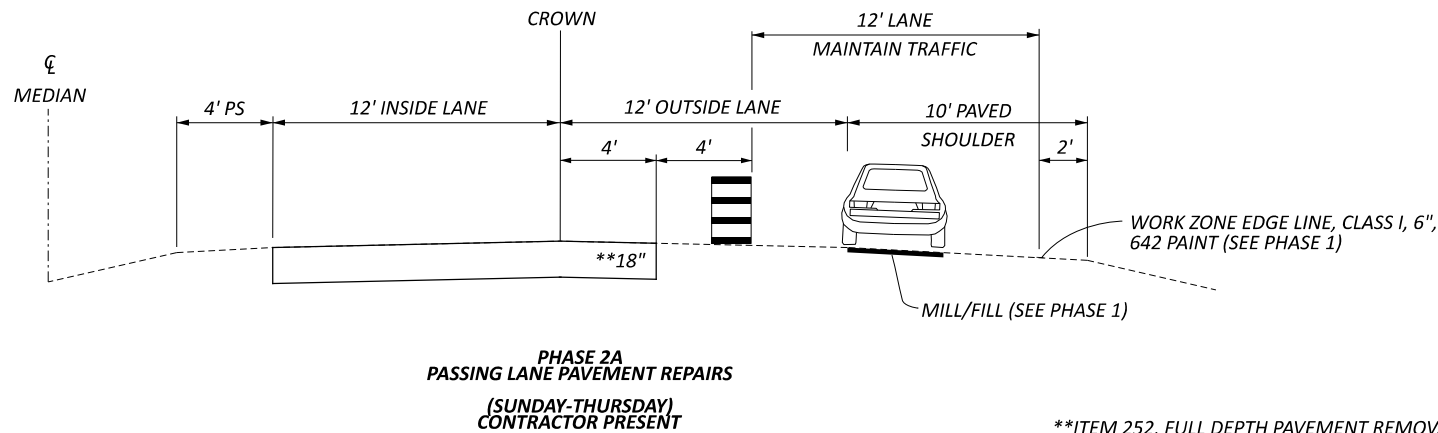
ITEM 614, WORK ZONE MARKING SIGN
LOCATION 1: 10 EACH

ITEM 614, REPLACEMENT DRUM

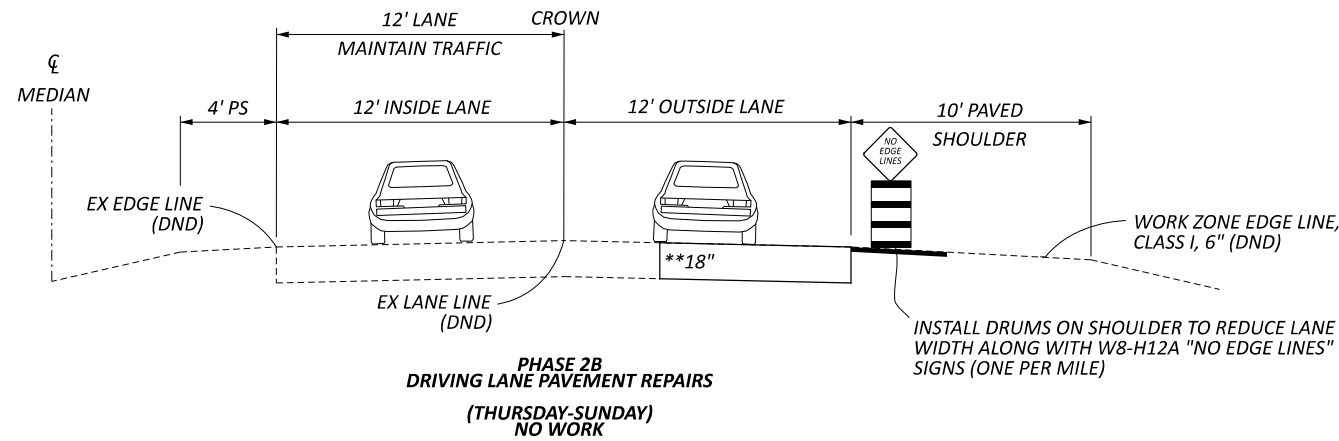
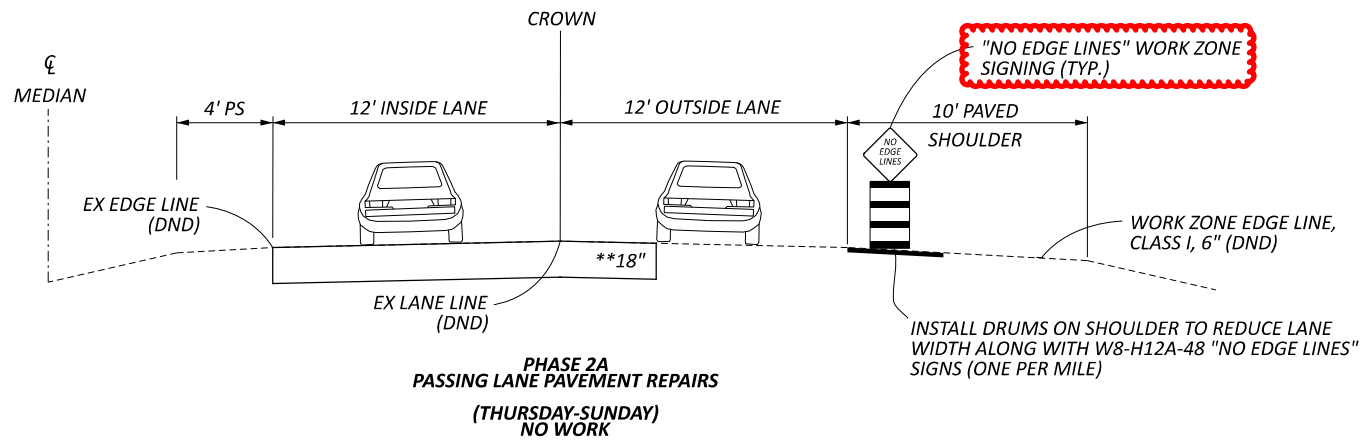
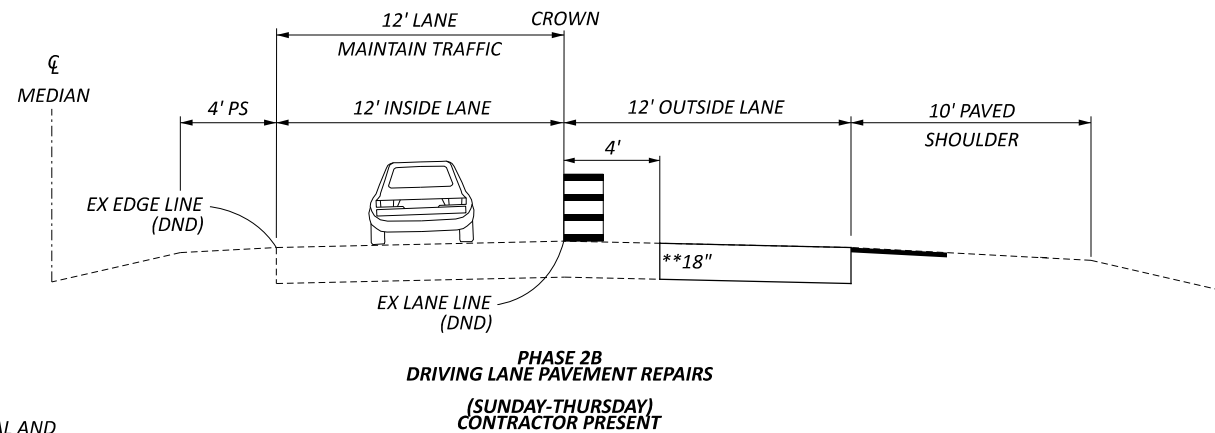
DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS, AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL BE NEW.

PAYMENT FOR THE NEW DRUMS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT DRUM, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUM.

ITEM 614, REPLACEMENT DRUM
LOCATION 1: 25 EACH



**ITEM 252, FULL DEPTH PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT, AS PER PLAN, 18" DEPTH



NOTES:

PHASE 2 LANE CLOSURES SHALL NOT OCCUR IN BOTH EASTBOUND AND WESTBOUND DIRECTIONS CONCURRENTLY
DO NOT DISTURB EXISTING MARKINGS AND RUMBLE STRIPS ON GUE-70-1232 L/R BRIDGES AND NEW PAVEMENT WEST OF BRIDGES WITH THE ABOVE MAINTENANCE OF TRAFFIC



LOCATION 1 TOTALS										PLAN SPLIT	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
2	3	12	13	14	15	16	17	18	20	01/IMS						
															ROADWAY	
					3,555					3,555	202	23000	3,555	SY	PAVEMENT REMOVED	
							261			261	203	10000	261	CY	EXCAVATION	
					3,847		800			4,647	204	10000	4,647	SY	SUBGRADE COMPACTION	
	150									150	204	13000	150	CY	EXCAVATION OF SUBGRADE	
	150									150	204	30020	150	CY	GRANULAR MATERIAL, TYPE C	
	2									2	204	45000	2	hour	PROOF ROLLING	
	450									450	204	50000	450	SY	GEOTEXTILE FABRIC	
20.75										20.75	209	60501	20.75	mile	LINEAR GRADING, AS PER PLAN	2
															EROSION CONTROL	
66,039										66,039	659	00510	66,039	SY	SEEDING AND MULCHING, CLASS 2	
										5,000	832	30000	5,000	EACH	EROSION CONTROL	
															PAVEMENT	
								16		16	251	98000	16	CY	PARTIAL DEPTH REPAIR, MISC.: EXPANSION JOINT	16
									3,028	3,028	252	01001	3,028	FT	FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT, AS PER PLAN, 18" DEPTH	20
					730				14,300	15,030	252	01500	15,030	FT	FULL DEPTH PAVEMENT SAWING	
250										250	253	02000	250	CY	PAVEMENT REPAIR	
		141,616	83,414	8,851	5,122	2,881	1,421	3,691		246,996	254	01000	246,996	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1.75"	
7,081										7,081	254	01600	7,081	SY	PATCHING PLANED SURFACE	
									165	165	255	12000	165	SY	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, TYPE 2, CLASS QC1, 12.5" DEPTH	20
							134			134	301	56000	134	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
					395		89			484	304	20000	484	CY	AGGREGATE BASE	
	LS									LS	400	10000		LS	SPECIAL - PAVER MOUNTED THERMAL PROFILING	3
		11,330	6,674	708	410	231	114	296		19,763	407	20000	19,763	GAL	NON-TRACKING TACK COAT	
			9,399			1,002				10,401	408	10001	10,401	GAL	PRIME COAT, AS PER PLAN	2
							70			70	441	70000	70	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22	
		6,885		431	249			1,230		8,795	442	00100	8,795	CY	ANTI-SEGREGATION EQUIPMENT	
		6,885	4,055	431	249	140		1,230		12,990	442	10331	12,990	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), PWL 2025, AS PER PLAN	4
	LS									LS	SPECIAL	69098400		LS	INTELLIGENT COMPACTION	3

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER

RMA

REVIEWER

JSL 06/01/25

PROJECT ID

122215

SHEET

33

TOTAL

34

LOCATION 1 TOTALS											PLAN SPLIT	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
6	7	9	11	13	15	16	18	21	31	32	01/IMS						
					3,555						3,555	451	16010	3,555	SY	PAVEMENT (CONT'D)	
																12" REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	
							107				107	516	31011	107	FT	2" DEEP JOINT SEALER, AS PER PLAN (A)	2
							328				328	516	31011	328	FT	2" DEEP JOINT SEALER, AS PER PLAN (B)	15
				2,611		126					2,737	617	10101	2,737	CY	COMPACTED AGGREGATE, AS PER PLAN	2
				20.41							20.41	618	40600	20.41	MILE	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	
								LS			LS	638	98100		LS	WATER WORK, MISC.: INSPECTION PORTALS	21
										610	610	621	00100	610	EACH	TRAFFIC CONTROL	
										610	610	621	54000	610	EACH	RPM	
																RAISED PAVEMENT MARKER REMOVED	
									21.54		21.54	642	00104	21.54	MILE	EDGE LINE, 6", TYPE 1	
									10.22		10.22	642	00204	10.22	MILE	LANE LINE, 6", TYPE 1	
									3,755		3,755	642	00404	3,755	FT	CHANNELIZING LINE, 12", TYPE 1	
									2,805		2,805	642	01510	2,805	EACH	DOTTED LINE, 6", TYPE 1	
									0.68		0.68	646	10010	0.68	MILE	EDGE LINE, 6"	
									0.18		0.18	646	10110	0.18	MILE	LANE LINE, 6"	
									155		155	646	10400	155	FT	STOP LINE	
									4		4	647	50100	4	EACH	PAVEMENT MARKING, MISC.: WRONG WAY ARROW, TYPE B90, CONTRAST	3
																MAINTENANCE OF TRAFFIC	
		24,406									24,406	254	01000	24,406	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1.00"	
		678									678	441	70200	678	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449)	
800											800	614	11110	800	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
			LS								LS	614	12420		LS	DETOUR SIGNING	
	10										10	614	12460	10	EACH	WORK ZONE MARKING SIGN	
	25										25	614	12600	25	EACH	REPLACEMENT DRUM	
28											28	614	18601	28	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	6
	20.80										20.80	614	20110	20.80	MILE	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT	
	32.62										32.62	614	22110	32.62	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT	
	3,755										3,755	614	23210	3,755	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 642 PAINT	
	2,805										2,805	614	24200	2,805	FT	WORK ZONE DOTTED LINE, CLASS I, 4", 642 PAINT	
	155										155	614	26610	155	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
	36										36	808	18700	36	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY	
																INCIDENTALS	
											LS	614	11000		LS	MAINTAINING TRAFFIC	
											12	619	16020	12	MNTH	FIELD OFFICE, TYPE C	
											LS	623	10000		LS	CONSTRUCTION LAYOUT STAKES AND SURVEYING	
											LS	624	10000		LS	MOBILIZATION	

GENERAL SUMMARY



DESIGN AGENCY	
DESIGNER	RMA
REVIEWER	JSL
PROJECT ID	06/01/25
SHEET	122215
TOTAL	34