

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 OMTUCD INTENDS THAT THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMTUCD, 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.

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMTUCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) MAY 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).
- FOR OPERATIONS WITHOUT POSITIVE PROTECTION OCCURRING WITHIN 10 FEET OF AN OPEN TRAVELED LANE THAT MEET ALL OF THE FOLLOWING CRITERIA:
 - ON A MULTI-LANE DIVIDED INTERSTATE, OTHER FREEWAY OR EXPRESSWAY; AND
 - AN AUTHORIZED SPEED LIMIT OF 45 MPH OR GREATER THAT IS IN EFFECT AT THE TIME OF THE OPERATION; AND,
 - AADT OF 50,000 (OR AADT OF 30,000 WITH 25% OR HIGHER PERCENT TRUCKS)

"WITHOUT POSITIVE PROTECTION" MEANS USE OF DRUMS, CONES, SHADOW VEHICLE, ETC, WITHOUT PROTECTION FROM PORTABLE BARRIER OR OTHER RIGID BARRIER ALONG THE WORK AREA. THIS PHRASE DOES NOT APPLY TO CASES WHERE POSITIVE PROTECTION IS REQUIRED. MOBILE OPERATIONS ARE REGARDED AS "WITHOUT POSITIVE PROTECTION". FOR WORK ZONES USING A COMBINATION OF BARRIER AND TEMPORARY TRAFFIC CONTROL DEVICES (CONES, DRUMS, ETC), THE DESIGNATION SHALL BE BASED UPON THE TYPE OF DEVICES USED IN THE AREA THAT WORKERS ARE LOCATED.

IF MULTIPLE ACTIVE LOCALIZED QUALIFYING WORK AREAS OCCUR WITHOUT POSITIVE PROTECTION, PER MAINLINE TRAFFIC DIRECTION, PROVIDE A UNIFORMED LEO AND OFFICIAL PATROL CAR IN ADVANCE OF:

- THE FIRST ACTIVE WORK AREA THAT DRIVERS WILL ENCOUNTER; OR
- THE ACTIVE WORK AREA LATERALLY CLOSEST TO THE OPEN TRAVELED LANE; OR
- OTHER LOCATION AS APPROVED BY THE ENGINEER.

THE UNIFORMED LEO AND OFFICIAL PATROL CAR MAY RELOCATE AMONG THE LISTED LOCATIONS AS APPROPRIATE AS THE OPERATIONS PROCEED IN THE LOCALIZED QUALIFYING WORK AREAS.

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, CONTINUED

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 300 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.

NOTIFICATION OF TRAFFIC RESTRICTIONS

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE TO THE RIGHT TO INFORM THE SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

NOTIFICATION OF TRAFFIC RESTRICTIONS, CONTINUED

NOTIFICATION OF TRAFFIC RESTRICTIONS TIME TABLE

ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS AND PIO
RAMP & ROAD CLOSURES	>=2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	>12 HOURS & <2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	<=12 HOURS	4 CALENDAR DAYS PRIOR TO CLOSURE
LANE CLOSURES & RESTRICTIONS	>=2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	<2 WEEKS	5 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES	N/A	14 CALENDAR DAYS PRIOR TO IMPLEMENTATION

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

PROPOSAL NOTE 127 - LANE VALUE CONTRACT TABLE

THE CONTRACTOR SHALL BE ASSESSED DISINCENTIVES AS DESIGNATED IN THE LANE VALUE CONTRACT TABLE FOR EACH UNIT OF TIME THE CRITICAL LANE/RAMP IS RESTRICTED FROM FULL USE BY THE TRAVELLING PUBLIC WITHIN THE RESTRICTED TIME PERIOD. THE LANE VALUE CONTRACT TABLE IS LOCATED BELOW. THE DISINCENTIVES WILL BE ASSESSED FOR ALL RESTRICTIONS OF THE CRITICAL WORK.

CRITICAL WORK IS SHOWN IN THE LANE VALUE CONTRACT TABLE.

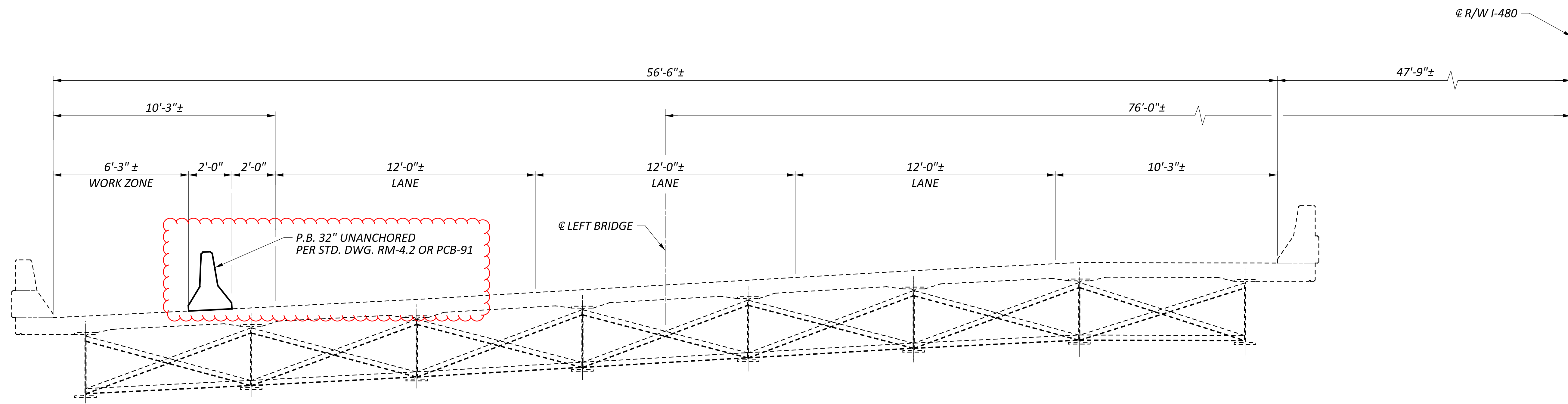
CRITICAL WORK IS DEFINED AS HAVING THE DESIGNATED SECTIONS OPEN TO UNRESTRICTED TRAFFIC AS SHOWN IN THE TABLE, OR THE ENTIRE PROJECT IF NOT OTHERWISE LISTED.

LOCATION	DIRECTION	LANES	ALLOWABLE CLOSURES				TIME UNIT	DISINCENTIVE PER TIME UNIT	
			WEEKDAYS		WEEKENDS				
			1 LANE CLOSED	2 LANES CLOSED	1 LANE CLOSED	2 LANES CLOSED			
I-480: I-77 EXIT RAMP TO I-77 ENTRANCE RAMP	EAST	3	9AM-3PM 7PM-6AM	7:30PM-5AM	8PM FRI-6AM MON	9PM FRI-8AM SAT 8PM SAT-10AM SUN 8PM SUN-5AM MON	9PM FRI-5AM MON (ONE TIME ONLY)*	MINUTE PER LANE	\$485
I-480: I-77 EXIT RAMP TO I-77 ENTRANCE RAMP	WEST	3	10AM-2PM 7PM-6AM	8PM-5AM	8PM FRI-6AM MON	9PM FRI-8AM SAT 8PM SAT-10AM SUN 8PM SUN-5AM MON	9PM FRI-5AM MON (ONE TIME ONLY)*	MINUTE PER LANE	\$485

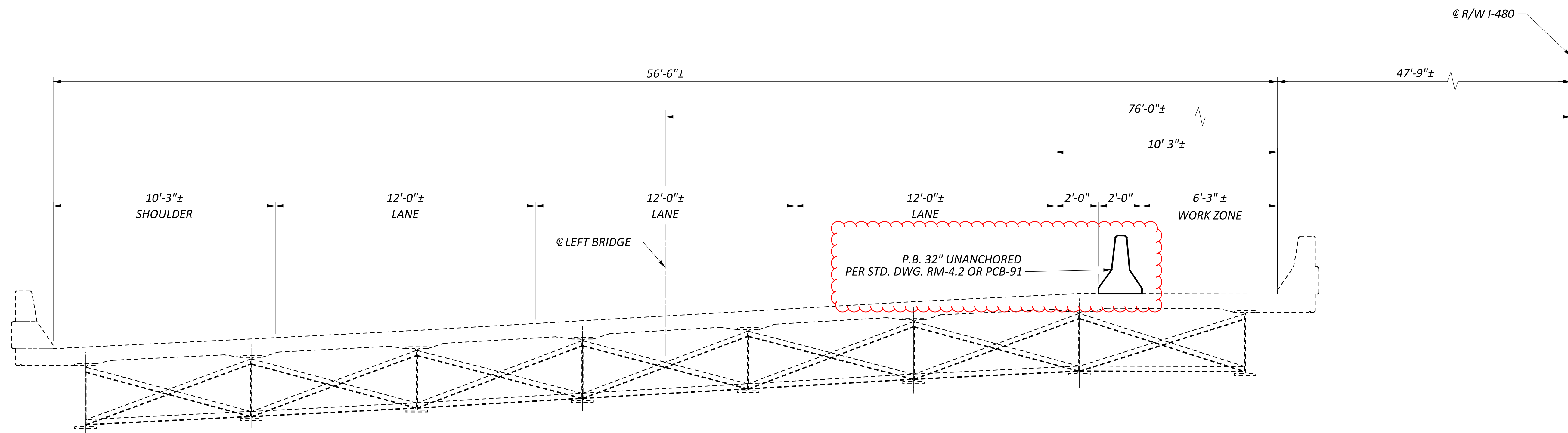
* 9PM FRI - 5AM MON 2 LANE CLOSURES SHALL NOT BE CONCURRENT FOR EASTBOUND AND WESTBOUND.

MAINTENANCE OF TRAFFIC SUBSUMMARY

STATION TO STATION	614		622	
	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	EACH	PORTABLE BARRIER, UNANCHORED	FT
I-480 WB BRIDGE				
965+97.07 ± LT TO 970+46.72 ± LT	1	442		
966+43.76 ± LT TO 970+93.38 ± LT	1	445		
I-480 EB BRIDGE				
966+93.05 ± RT TO 971+25.43 ± RT	1	412		
967+33.41 ± RT TO 971+62.28 ± RT	1	410		
TOTALS CARRIED TO GENERAL SUMMARY	4	1709		



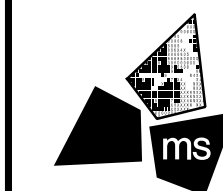
PHASE 1 MAINTENANCE OF TRAFFIC AND CONSTRUCTION
LEFT BRIDGE



PHASE 2 MAINTENANCE OF TRAFFIC AND CONSTRUCTION
LEFT BRIDGE

MAINTENANCE OF TRAFFIC TYPICAL SECTIONS

DESIGN AGENCY



ms consultants, inc.

DESIGNER

WER

REVIEWER

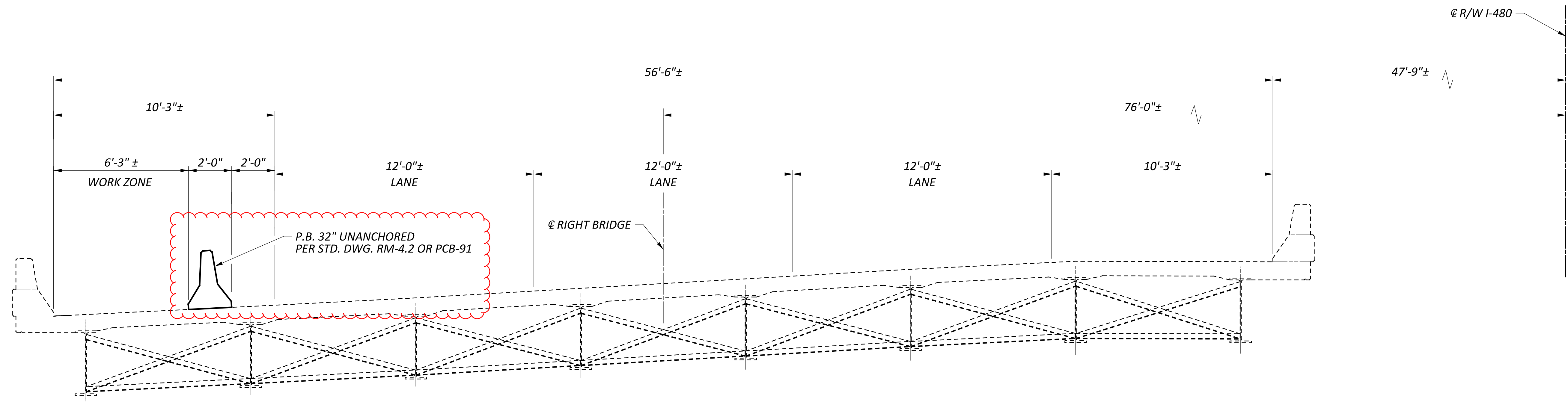
JDH 11-08-23

PROJECT ID

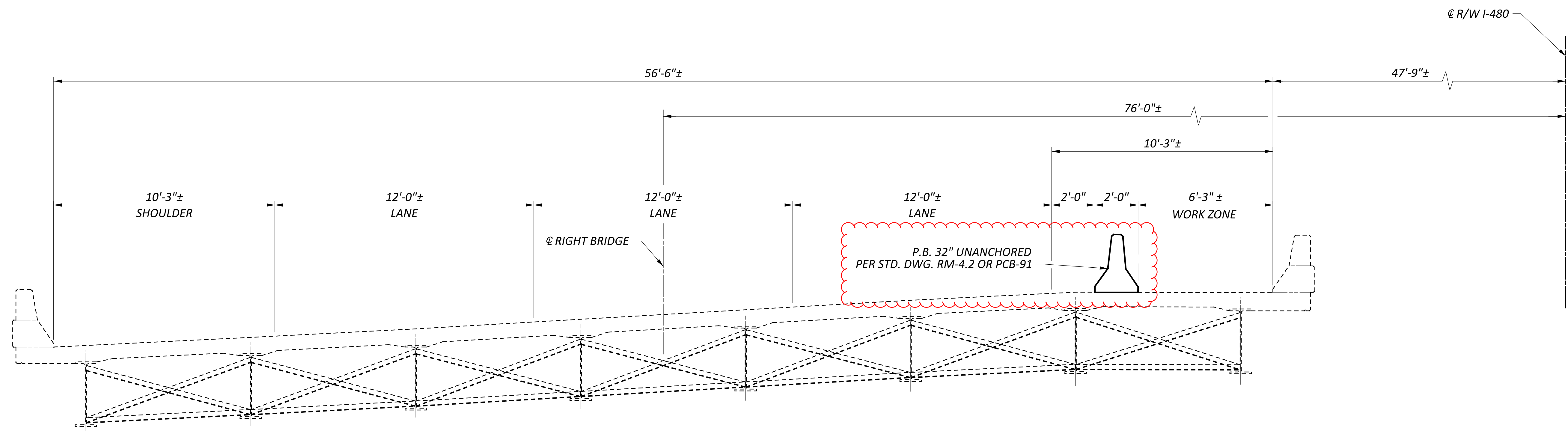
117872

SHEET TOTAL

5 41



PHASE 1 MAINTENANCE OF TRAFFIC AND CONSTRUCTION
 RIGHT BRIDGE



PHASE 2 MAINTENANCE OF TRAFFIC AND CONSTRUCTION
 RIGHT BRIDGE

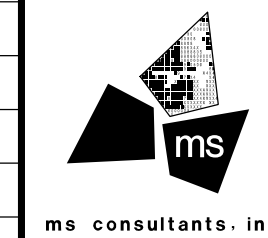
CUY IR 480 17.87 L&R

MODEL: Sheet_SurvFI_PAPER SIZE: 34x42 (in.) DATE: 3/29/2024 TIME: 9:55:55 AM USER: JPenman
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SHEET NUM.											PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
2	3	4	8	10	29						01/BRO/13	EXT	TOTAL				
				50							50	606	15050	50	FT	ROADWAY	
				2							2	606	35002	2	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
				1							1	606	35102	1	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	
1,000											1,000	832	30000	1,000	EACH	EROSION CONTROL	
																TRAFFIC CONTROL	
			12								12	621	00100	12	EACH	RPM	
			52								52	621	54000	52	EACH	RAISED PAVEMENT MARKER REMOVED	
			36								36	626	00102	36	EACH	BARRIER REFLECTOR, TYPE 1, 1 WAY	
			3								3	626	00112	3	EACH	BARRIER REFLECTOR, TYPE 3, 1 WAY	
			200								200	630	97800	200	SF	SIGNING, MISC.: ADDITIONAL SIGNS, GROUND MOUNTED, AS DIRECTED BY ENGINEER	8
			0.21								0.21	646	10010	0.21	MILE	EDGE LINE, 6"	
			0.28								0.28	646	10110	0.28	MILE	LANE LINE, 6"	
																STRUCTURE REPAIR (CUY-00480-17.880L SFN 1813102)	
				LS							LS	202	11201	LS		PORTIONS OF STRUCTURE REMOVED, AS PER PLAN	2
				11,848							11,848	509	10001	11,848	LB	EPOXY COATED STEEL REINFORCEMENT, AS PER PLAN	2
				500							500	509	20001	500	LB	CONCRETE REINFORCEMENT, REPLACEMENT OF EXISTING CONCRETE REINFORCEMENT, AS PER PLAN	2
				6,701							6,701	509	30020	6,701	FT	NO. 4 DEFORMED GFRP REINFORCEMENT	
				1,809							1,809	510	10001	1,809	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN	2
				66							66	511	34448	66	CY	CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET)	
				1,563							1,563	512	10100	1,563	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
				15							15	512	10600	15	FT	CONCRETE REPAIR BY EPOXY INJECTION	
				1,251							1,251	512	74000	1,251	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	
				3,370							3,370	513	10201	3,370	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN	2
				72							72	513	20000	72	EACH	WELDED STUD SHEAR CONNECTORS	
				11							11	516	13200	11	SF	½" PREFORMED EXPANSION JOINT FILLER	
				7							7	516	46700	7	EACH	RESET BEARING	
				LS							LS	516	47001	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	2
				1,119							1,119	519	11101	1,119	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	2
				187							187	519	12300	187	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B	
																STRUCTURE REPAIR (CUY-00480-17.880R SFN 1813110)	
					1,463						1,463	512	10100	1,463	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
					7						7	512	10600	7	FT	CONCRETE REPAIR BY EPOXY INJECTION	
					1,172						1,172	512	74000	1,172	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	
					8						8	516	46700	8	EACH	RESET BEARING	
					LS						LS	516	47001	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	2
					1,274						1,274	519	11101	1,274	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	2
					79						79	519	12300	79	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B	
																MAINTENANCE OF TRAFFIC	
		300									300	614	11110	300	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
	1,709										1,709	614	11630	1,709	FT	INCREASED BARRIER DELINEATION	
		4									4	614	12380	4	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	
	36										36	614	13350	36	EACH	OBJECT MARKER, ONE WAY	
		1,709									1,709	622	41100	1,709	FT	PORTABLE BARRIER, UNANCHORED	
																INCIDENTALS	
4											LS	614	11000	LS		MAINTAINING TRAFFIC	
LS											4	619	16011	4	MNTH	FIELD OFFICE, TYPE B, AS PER PLAN	2
											LS	623	10001	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN	2
											LS	624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER
ATM

REVIEWER
JDH 11-08-23

PROJECT ID
117872

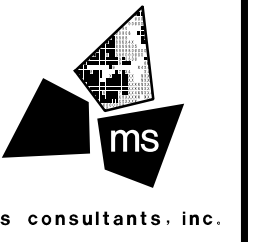
SHEET TOTAL
7 41

CALCULATED BY:	ATM	8/25/2023
CHECKED BY:	WER	8/30/2023

ESTIMATED QUANTITIES - BRIDGE NO. CUY-480-1788L (SFN 1813102)									
ITEM	ITEM EXT.	QUANTITY	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL	SHEET REF.
202	11201	LS	LS	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN					2 / 41
509	10001	11848	LB	EPOXY COATED STEEL REINFORCEMENT, AS PER PLAN			11848		2 / 41
509	20001	500	LB	CONCRETE REINFORCEMENT, REPLACEMENT OF EXISTING CONCRETE REINFORCEMENT, AS PER PLAN			500		2 / 41
509	30020	6701	FT	NO. 4 DEFORMED GFRP REINFORCEMENT			6701		
510	10001	1809	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN			1809		2 / 41
511	34448	66	CY	CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET)			66		
512	10100	1563	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	119	579	865		
512	10600	15	FT	CONCRETE REPAIR BY EPOXY INJECTION	8	7			
512	74000	1251	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	95	464	692		
513	10201	3370	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN				3370	
513	20000	72	EACH	WELDED STUD SHEAR CONNECTORS				72	
516	13200	11	SF	1/2" PREFORMED EXPANSION JOINT FILLER				11	
516	46700	7	EACH	RESET BEARING	7				
516	47001	LS	LS	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN					2 / 41
519	11101	1119	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	242	741	136		2 / 41
519	12300	187	SY	PATCHING CONCRETE BRIDGE DECK *TYPE B			187		
606	15050	50	FT	GUARDRAIL, TYPE MGS				50	
606	35002	2	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1				2	
606	35102	1	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2				1	

* SEE PROPOSAL NOTE 512

ESTIMATED QUANTITIES
 BRIDGE NO. CUY-00480-17.880L
 I-480 OVER S-W AND N-E LANES

SFN	1813102
DESIGN AGENCY	
DESIGNER	CHECKER
ATM	WER
REVIEWER	
JDH	11-08-23
PROJECT ID	
117872	
SUBSET	TOTAL
2	19
SHEET	TOTAL
10	41