

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

MAR-23-1.85 / 2.04

**WALDO TOWNSHIP
MARION COUNTY**

PROJECT DESCRIPTION

REPLACE BRIDGE DECKS OF TWO TWIN STRUCTURES ON US-23 OVER SR-98 AND QU OUA CREEK IN MARION COUNTY NEAR THE TOWN OF WALDO. INCIDENTAL RESURFACING AND GUARDRAIL REPLACEMENTS.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: 3.47 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.13 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA: 4.90 ACRES

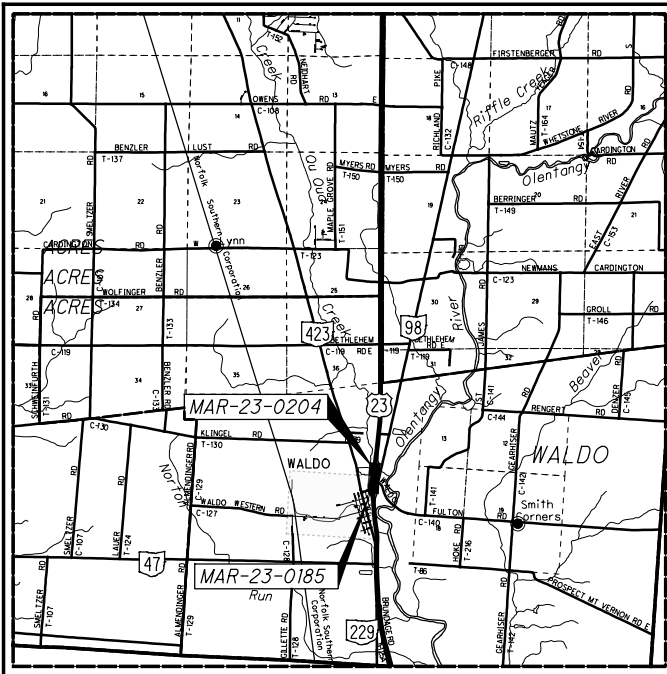
LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2019 SPECIFICATIONS

OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.



LOCATION MAP

LATITUDE: 40°27'50" LONGITUDE: 83°04'32"



PORTION TO BE IMPROVED	-----
INTERSTATE HIGHWAY	=====
FEDERAL ROUTES	-----
STATE ROUTES	-----
COUNTY & TOWNSHIP ROADS	-----
OTHER ROADS	-----

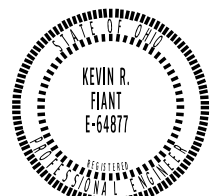
DESIGN DESIGNATION

MAR-23 (1.56-2.39)	
CURRENT ADT (2018)	28,000
DESIGN YEAR ADT (2038)	37,000
DESIGN HOURLY VOLUME (2038)	3,700
DIRECTIONAL DISTRIBUTION	51%
TRUCKS (24 HOUR B&C)	10%
DESIGN SPEED	65
LEGAL SPEED	65
DESIGN FUNCTIONAL CLASSIFICATION:	
	02 PRINCIPAL ARTERIAL (RURAL)
NHS PROJECT	YES

INDEX OF SHEETS:

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STRUCTURES:



SIGNED: *Kevin R. Fiant*
DATE: 7/2/2020

ENGINEERS SEAL:



SIGNED: *Katherine L. Montoya*
DATE: 7/2/2020

DESIGN EXCEPTIONS

DESIGN FEATURE	APPROVAL DATE	SHEET NUMBERS
SHOULDER WIDTH	02/15/18	3 AND 103

STANDARD CONSTRUCTION DRAWINGS

STANDARD CONSTRUCTION DRAWINGS								SUPPLEMENTAL SPECIFICATIONS	
AS-1-15	07/17/15	MGS-1.1	01/19/18	MT-98.20	04/19/19	SICD-1-96	07/18/14	800	07/17/20
AS-2-15	01/19/18	MGS-2.1	01/19/18	MT-98.29	01/17/20	SICD-2-14	07/18/14	808	01/18/19
		MGS-3.1	01/19/18	MT-99.20	04/19/19			821	04/20/12
BP-3.1	01/17/20	MGS-3.2	01/18/13	MT-99.30	01/17/20	TC-41.20	10/18/13	832	10/19/18
BP-5.1	01/18/19	MGS-4.2	07/19/13	MT-100.00	01/15/16	TC-42.20	10/18/13	869	10/17/14
BP-9.1	01/18/19	MGS-5.3	07/15/16	MT-101.60	01/17/20	TC-52.10	10/18/13	873	10/17/08
		MGS-6.1	01/19/18	MT-101.70	01/17/20	TC-52.20	01/19/18	875	01/18/19
DM-4.1	07/20/18			MT-101.75	01/17/20	TC-61.10	01/17/20	878	01/17/20
DM-4.3	01/15/16	MT-95.30	07/19/19	MT-101.80	01/17/20	TC-61.30	07/19/19	896	07/21/17
DM-4.4	01/15/16	MT-95.40	01/17/20	MT-101.90	07/21/17	TC-65.10	01/17/14		
		MT-95.50	07/21/17	MT-104.10	10/16/15	TC-65.11	07/21/17		
PCB-91	01/18/13	MT-95.70	01/17/20	MT-105.10	01/17/20	TC-72.20	07/15/16		
		MT-95.82	07/19/13						
RM-4.2	04/17/20	MT-97.10	04/19/19	SBR-1-13	01/17/14	VFP-1-90	07/20/18		

SPECIAL PROVISIONS

PLANS CERTIFIED BY:

NAME: *Kevin Fiant* DATE: 7-2-2020

DISTRICT 6
OHIO DEPT. OF TRANSPORTATION

APPROVED: *Michael R. Blaylock*
DATE: 7/2/2020 DISTRICT DEPUTY DIRECTOR

APPROVED: _____
DATE: _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

UNDERGROUND UTILITIES
Contact Two Working Days
Before You Dig

OHIO811, 8-1-1, or 1-800-362-2764
(Non-members must be called directly)

PLAN PREPARED BY:

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FEDERAL PROJECT NO.
E170(477)

PID NO.
102332

CONSTRUCTION PROJECT NO.
-

RAILROAD INVOLVEMENT
NONE

MAR-23-1.85 / 2.04

1
112

WORK ZONE SPEED ZONES (WZSZ):

THE FOLLOWING WORK ZONE SPEED ZONE (WZSZ) SPEED LIMIT REVISION HAS 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-35653	MAR-23	NB/SB

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 MILES 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 TO THE RIGHT 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 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 OMTCD PART 6.

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 ZONE CONDITION REDUCING THE 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 PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 808 - DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY
= 2 SIGNS FOR 6 MONTHS = 12 SNMT

ITEM 873 - WORK ZONE PAVEMENT MARKING, CLASS I:

WORK ZONE PAVEMENT MARKINGS SHALL BE PLACED AS SHOWN ON SHEETS 24 -31 AND SHALL CONFORM TO SUPPLEMENTAL SPECIFICATION 873. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION, SIZE, AND TYPE OF WORK ZONE MARKINGS NEEDED MEETING THE REQUIREMENTS OF ITEM 614 BEFORE THE REMOVAL OR RESURFACING OBLITERATES THE EXISTING.

WORK ZONE PAVEMENT MARKINGS ARE NOT TO BE SUBSTITUTED FOR PERMANENT PAVEMENT MARKINGS.

ITEM 614 - WORK ZONE PAVEMENT MARKINGS, CLASS III, 642 PAINT:

TO RETURN TRAFFIC TO PRE-CONSTRUCTION LAYOUT FOLLOWING PHASE 1, THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED AND CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS AND AT TIMES AS DIRECTED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS PER THE REQUIREMENT OF C&MS 614.11:

ITEM 614 - WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT = 2.03 MILE

ITEM 614 - WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT = 1.60 MILE

ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT = 279 FT

ITEM 614 - WORK ZONE DOTTED LINE, CLASS III, 6", 642 PAINT = 554 FT

WORK ZONE PAVEMENT MARKINGS ARE NOT TO BE SUBSTITUTED FOR PERMANENT PAVEMENT MARKINGS.

CONFLICTING PAVEMENT MARKINGS:

PRIOR TO PLACEMENT OF ANY WORK ZONE PAVEMENT MARKINGS, THE CONTRACTOR SHALL COMPLETELY OBLITERATE, AS PER SPEC. 641.10, ALL EXISTING PAVEMENT MARKINGS THAT WOULD CREATE CONFUSION OR CONFLICT WITH THE WORK ZONE PAVEMENT MARKINGS. PAYMENT FOR THIS COMPLETE REMOVAL SHALL BE INCLUDED IN ITEM 614 - MAINTAINING TRAFFIC.

WRECKER AND EMERGENCY VEHICLE ACCESS:

THE CONTRACTOR SHALL MAKE PROVISIONS TO ASSIST IN THE ACCESS OF WRECKERS AND EMERGENCY VEHICLES THROUGHOUT THE WORK ZONE. THIS MAY INCLUDE, BUT NOT LIMITED TO, PROVIDING FLAGGERS OR REMOVING SECTIONS OF BARRIER TO ALLOW EMERGENCY VEHICLES AND WRECKER TO MOVE THROUGH PORTIONS OF THE WORK ZONE TO REACH ACCIDENTS AND/OR BREAKDOWNS. THE INTENT IS TO MINIMIZE EXTENDED DELAYS TO THE TRAVELLING PUBLIC AND TO PROVIDE QUICKER RESPONSE TIMES FOR WRECKERS AND EMERGENCY VEHICLES. ALL AGENTS AND EMPLOYEES OF THE CONTRACTOR SHALL BE MADE AWARE OF THIS PROVISION BEFORE WORK BEGINS.

ALL ACTIVITIES THROUGHOUT THE WORK ZONE SHALL BE COORDINATED BY THE WORKSITE TRAFFIC SUPERVISOR AND THE ENGINEER.

ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A:

PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, SHALL USE THE FLEXIBLE PAVEMENT DESIGN AS GIVEN IN C&MS 615.05. SHEETS 18 -19 SHOW THE PLACEMENT OF THIS PAVEMENT. PAVEMENT USED TO REBUILD SHOULDERS SHALL REMAIN IN PLACE AFTER CONSTRUCTION. PAVEMENT WITHIN THE MEDIAN USED TO CONSTRUCT THE CROSSOVERS SHALL BE REMOVED AND THE TOTAL PAVEMENT WIDTH SHALL BE BROUGHT BACK TO EXISTING EXCEPT FOR THE AREAS SHOWN ON THE PLAN SHEETS.

ITEM 622 - PORTABLE BARRIER, UNANCHORED

ITEM 622 - PORTABLE BARRIER, ANCHORED:

THIS WORK SHALL CONSIST OF FURNISHING, INSTALLING, MAINTAINING, AND SUBSEQUENTLY REMOVING PORTABLE BARRIER AT THE LOCATIONS SHOWN ON SHEETS 25-26 AND 29 - 30 . FOR DETAILS, SEE SCD RM-4.3 AND PCB-91.

PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO PERFORM THE WORK AND SHALL BE PAID FOR AT THE CONTRACT PRICE.

USE OF WEIGHTED CHANNELIZER:

THE WEIGHTED CHANNELIZER MAY BE USED IN ACCORDANCE WITH THIS SECTION. THE WEIGHTED CHANNELIZER SHALL BE PREDOMINANTLY ORANGE IN COLOR AND SHALL BE MADE OF LIGHTWEIGHT, FLEXIBLE, AND DEFORMABLE MATERIAL. THEY SHALL BE AT LEAST 42 INCHES IN HEIGHT WITH A WEIGHTED BASE. THEY MAY HAVE A HANDLE OR LIFTING DEVICE WHICH EXTENDS ABOVE THE 42" MINIMUM HEIGHT.

THE MARKINGS ON THE WEIGHTED CHANNELIZER SHALL BE HORIZONTAL, CIRCUMFERENTIAL, ALTERNATING ORANGE AND WHITE RETROREFLECTIVE STRIPES 6 INCHES WIDE. EACH WEIGHTED CHANNELIZER SHALL HAVE A MINIMUM OF TWO ORANGE AND TWO WHITE STRIPES. ANY NON-RETROREFLECTIVE SPACES BETWEEN THE HORIZONTAL ORANGE AND WHITE STRIPES SHALL NOT EXCEED 2 INCHES WIDE. THE WEIGHTED CHANNELIZER SHALL HAVE A 4-INCH MINIMUM WIDTH, REGARDLESS OF ORIENTATION.

USE OF WEIGHTED CHANNELIZERS ON FREEWAYS AND MULTILANE HIGHWAYS SHALL BE LIMITED TO SHORT-TERM OPERATION FOR EITHER DAY OR NIGHT. UPON COMPLETION OF WORK, THE WEIGHTED CHANNELIZERS SHALL BE REMOVED. THE WEIGHTED CHANNELIZERS MAY AGAIN BE PLACED ON THE HIGHWAY WHEN THE WORK IS TO RESUME ON THE FOLLOWING DAY OR NIGHT. ANY LANE CLOSURE USING CHANNELIZATION DEVICES, EXPECTED TO REMAIN FOR MORE THAN TWELVE HOURS, SHALL REQUIRE THE USE OF DRUMS OR BARRIERS.

WHEN USED AT NIGHT, WEIGHTED CHANNELIZERS SHALL ONLY BE PLACED IN THE TANGENT AREA. THE TANGENT AREA IS DEFINED AS THE AREA AFTER THE TRANSITION TAPER WHERE THE WORK TAKES PLACE. DRUMS SHALL BE USED IN THE TRANSITION TAPERS FOR NIGHT OPERATIONS. MAXIMUM SPACING OF THE WEIGHTED CHANNELIZER SHALL BE 40 FEET AT NIGHT.

STEPS SHOULD BE TAKEN TO ENSURE THAT THE WEIGHTED CHANNELIZERS WILL NOT BE BLOWN OVER OR DISPLACED BY WIND OR MOVING TRAFFIC. BALLASTS SHOULD NOT PRESENT A HAZARD IF THE WEIGHTED CHANNELIZERS ARE INADVERTENTLY STRUCK, NOR SHOULD THEY AFFECT THE VISIBILITY OF THE WEIGHTED CHANNELIZERS. ALL BALLASTS USED SHOULD BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

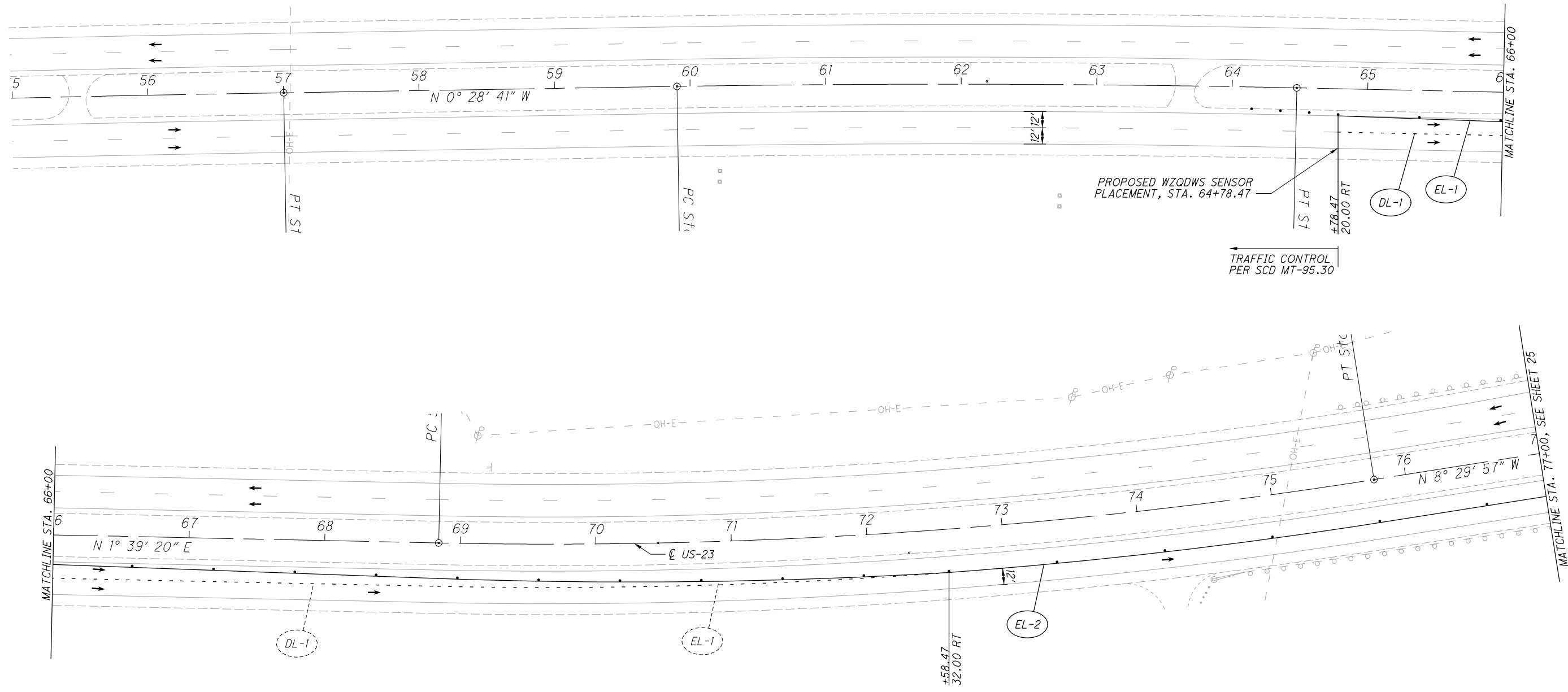
PAYMENT SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

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SHEET	STATION		PHASE	202	411	614	614	614	614	614	615	622	622	873	873	873
	FROM	TO		PAVEMENT REMOVED, ASPHALT SY	STABILIZED CRUSHED AGGREGATE CY	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL) EACH	WORK ZONE RAISED PAVEMENT MARKER EACH	BARRIER REFLECTOR, TYPE 1, ONE WAY EACH	OBJECT MARKER, ONE WAY EACH	OBJECT MARKER, TWO WAY EACH	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A SY	PORTABLE BARRIER, UNANCHORED FT	GLARE SCREEN FT	WORK ZONE EDGE LINE, CLASS I MILE	WORK ZONE CHANNELIZING LINE, CLASS I FT	WORK ZONE DOTTED LINE, CLASS I FT
18	55+00.00	154+00.00		3741	51					5234						
19	55+00.00	154+00.00		2941	54					4363						
24	66+00.00	88+00.00	1										0.45		783	
25	88+00.00	110+00.00	1			2		52	5	45	2500	2500	1.83			
26	110+00.00	132+00.00	1			1	26	7	6		310	310	0.58	470	563	
27	132+00.00	154+00.00	1										0.28		779	
28	55+00.00	77+00.00	2										0.15		784	
29	77+00.00	99+00.00	2			1	21	19		17	820	820	2.15	392	416	
30	99+00.00	121+00.00	2			2		42	12	28	1960	1960	0.62			
31	121+00.00	143+00.00	2										0.15		778	
TOTALS CARRIED TO GENERAL SUMMARY				6682	105	6	47	120	23	90	9597	5590	5590	6.21	862	4103

MAINTENANCE OF TRAFFIC SUBSUMMARY

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MAK

0 20 40 80
HORIZONTAL
SCALE IN FEET

CROSSOVER PHASE 1
STA. 55+00 TO STA. 77+00

REF NO.	STATION		DIRECTION	ITEMS												
	FROM	TO		614	614	614	614	614	622	622	873	873	873			
			WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)	WORK ZONE RAISED PAVEMENT MARKER	BARRIER REFLECTOR, TYPE 1, ONE WAY	OBJECT MARKER, ONE WAY	OBJECT MARKER, TWO WAY	PORTABLE BARRIER, UNANCHORED	GLARE SCREEN	WORK ZONE EDGE LINE, CLASS I	WORK ZONE CHANNELIZING LINE, CLASS I	WORK ZONE DOTTED LINE, CLASS I				
			EACH	EACH	EACH	EACH	EACH	FT	FT	MILE	FT	FT				
EL-1	64+78.47	72+58.47	NB							0.15						
DL-1	64+78.47	72+58.47	NB									783				
EL-2	72+58.47	88+18.47	NB							0.30						
TOTALS CARRIED TO SHEET 15										0.45		783				

LEGEND

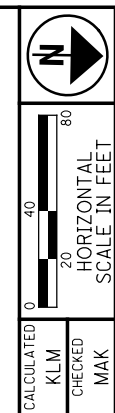
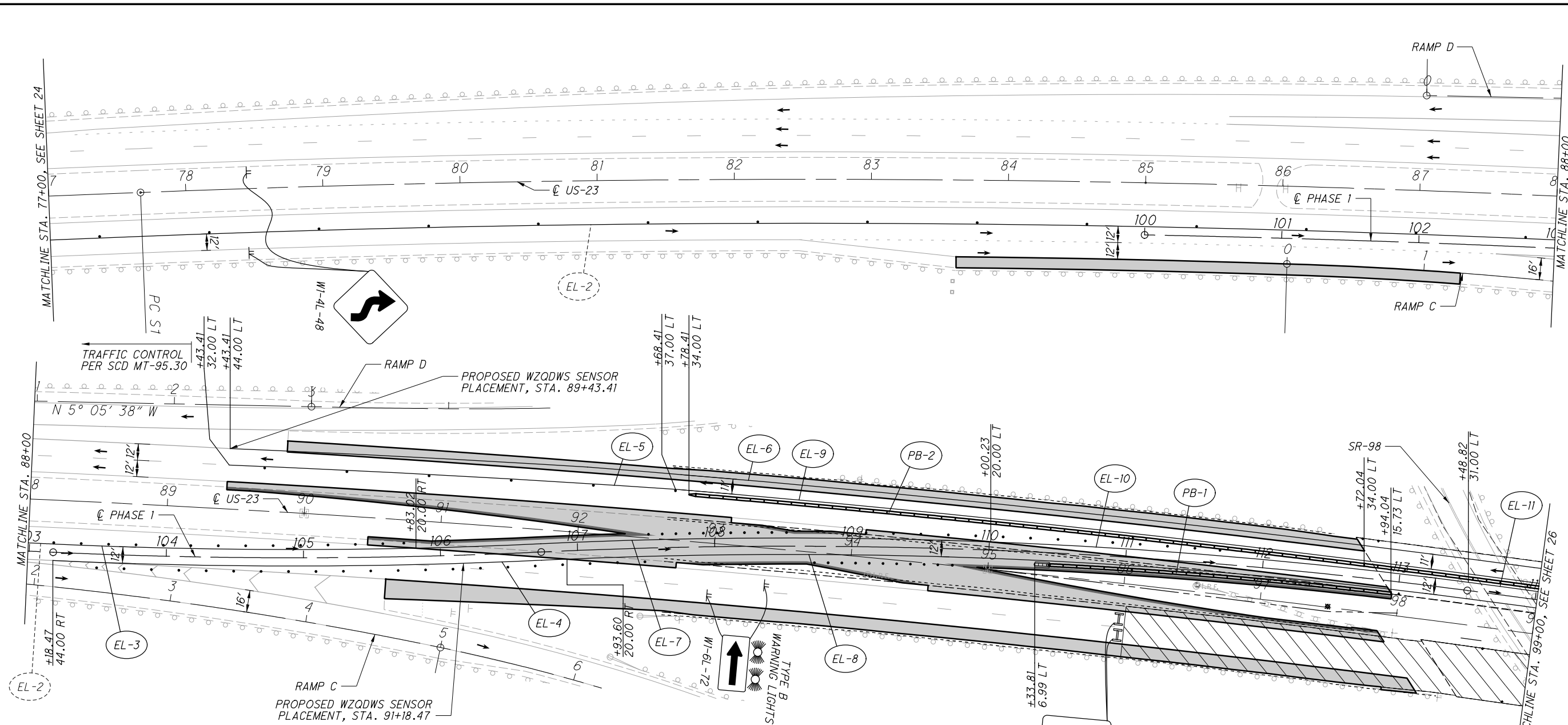
- PAVEMENT FOR MAINTAINING TRAFFIC
- WORK AREA
- CHANNELIZING LINE
- DOTTED LINE
- EDGE LINE
- PORTABLE BARRIER

MATCHLINE STA. 77+00

MATCHLINE STA. 88+00

MATCHLINE STA. 99+00

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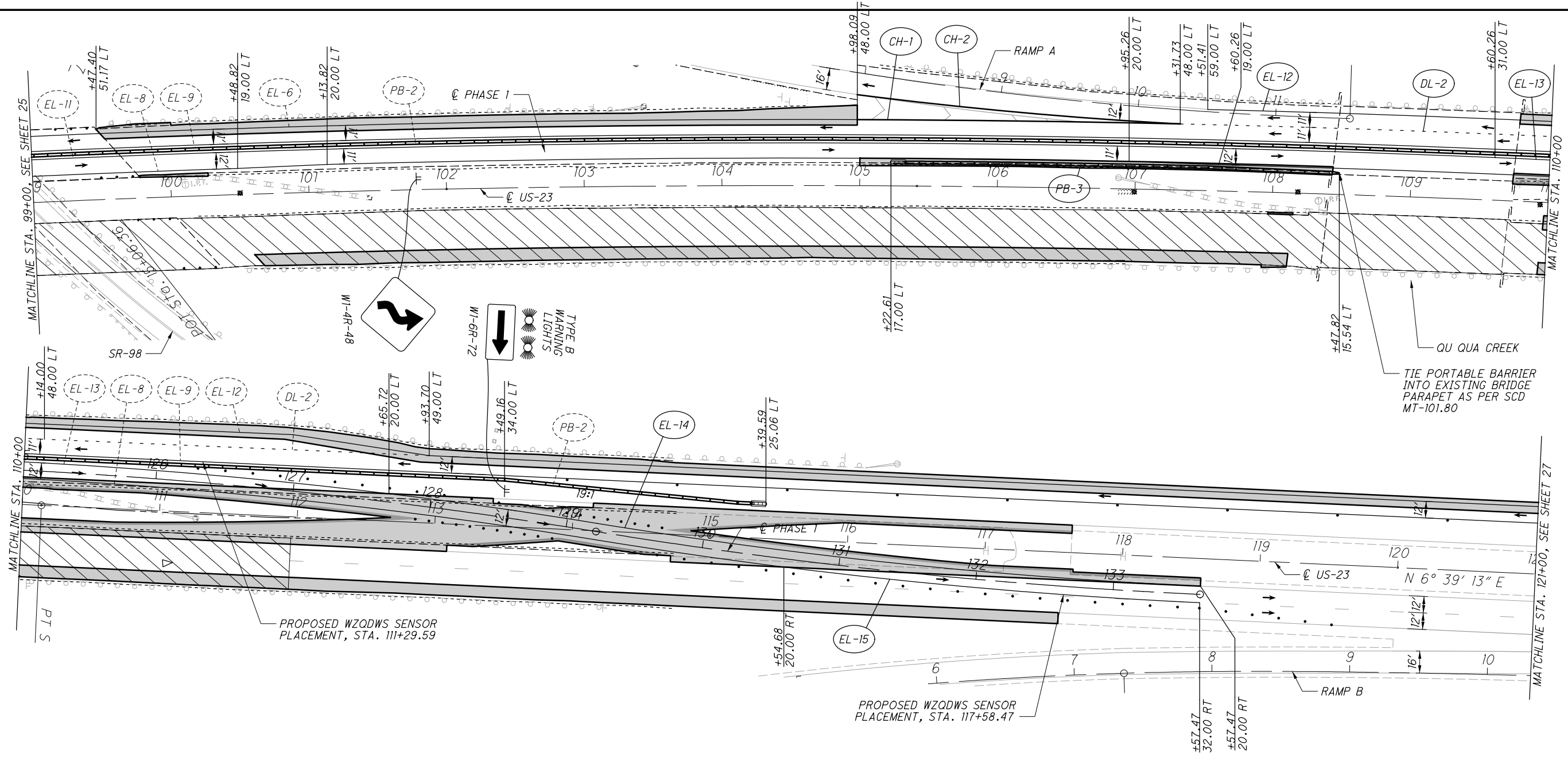
CROSSOVER PHASE 1
STA. 77+00 TO STA. 99+00

REF NO.	STATION		DIRECTION	MARKING TYPE					GLARE SCREEN		WORK ZONE CHANNELIZING LINE, CLASS I			WORK ZONE DOTTED LINE, CLASS I	
	FROM	TO		WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)	WORK ZONE RAISED PAVEMENT MARKER	BARRIER REFLECTOR, TYPE 1, ONE WAY	OBJECT MARKER, ONE WAY	OBJECT MARKER, TWO WAY	PORTABLE BARRIER, UNANCHORED	FT	FT	MILE	FT	FT	
EL-3	88+18.47	90+83.02	NB								0.05				
EL-4	88+18.47	91+93.60	NB								0.07				
EL-7	90+83.02	95+00.23	NB								0.08				
EL-8	91+93.60	115+54.68	NB								0.42				
EL-10	95+00.23	98+48.82	NB								0.07				
PB-1	95+33.81	97+94.04	NB	1		6	5		250	250					
EL-11	98+48.82	109+60.26	NB								0.21				
EL-5	89+43.41	92+68.41	SB								0.06				
EL-6	89+43.41	104+98.09	SB								0.30				
EL-9	92+68.41	122+74.59	SB								0.57				
PB-2	92+78.41	115+39.59	SB	1		46		45	2250	2250					
TOTALS CARRIED TO SHEET 15				2		52	5	45	2500	2500	1.83				

LEGEND

- PAVEMENT FOR MAINTAINING TRAFFIC
- WORK AREA
- CHANNELIZING LINE
- DOTTED LINE
- EDGE LINE
- PORTABLE BARRIER

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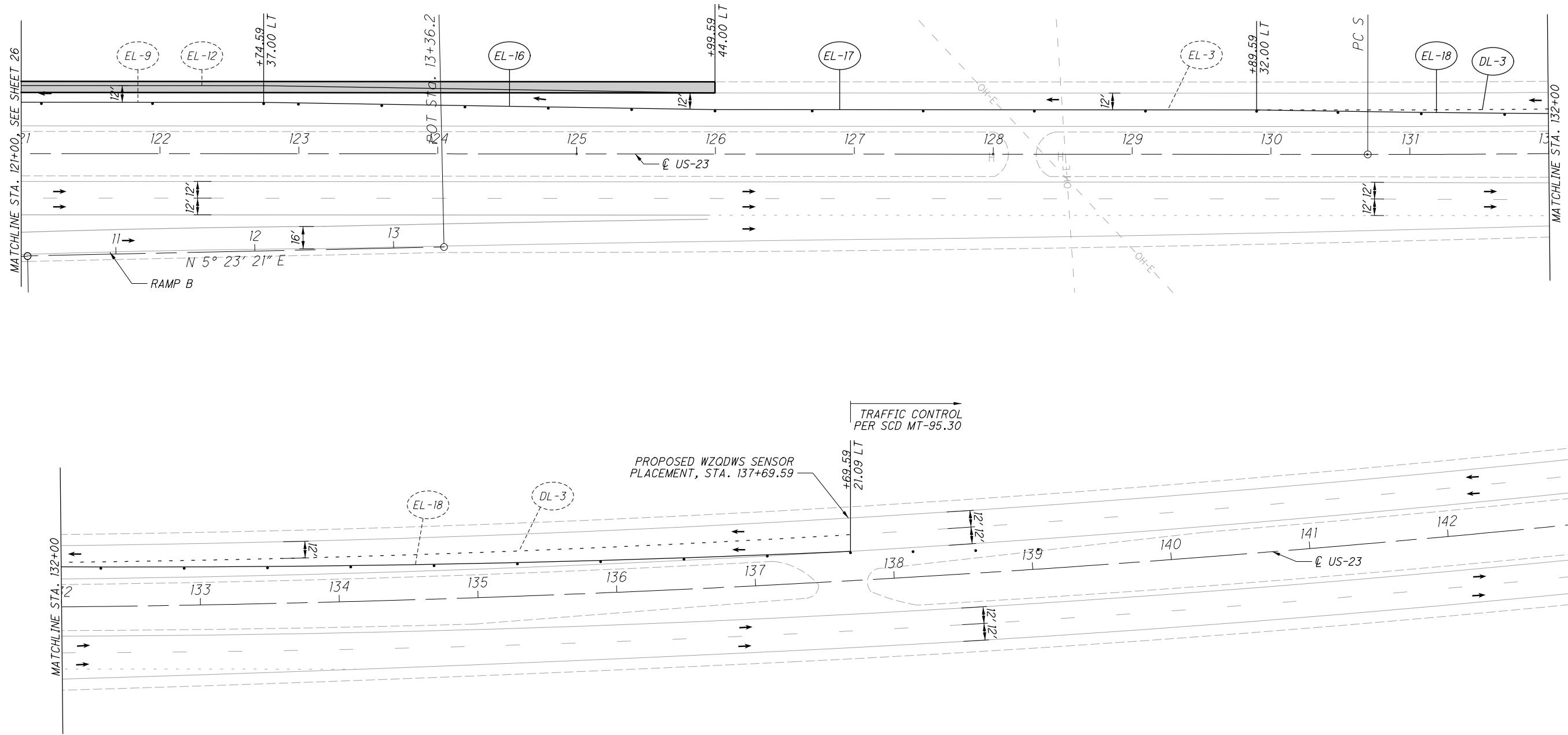
CROSSOVER PHASE 1
STA. 99+00 TO STA. 121+00

REF NO.	STATION		DIRECTION	ITEM					QUANTITY				
	FROM	TO		WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)	WORK ZONE RAISED PAVEMENT MARKER	BARRIER REFLECTOR, TYPE 1, ONE WAY	OBJECT MARKER, ONE WAY	OBJECT MARKER, TWO WAY	PORTABLE BARRIER, UNANCHORED	GLARE SCREEN	WORK ZONE EDGE LINE, CLASS I	WORK ZONE CHANNELIZING LINE, CLASS I	WORK ZONE DOTTED LINE, CLASS I
			EACH	EACH	EACH	EACH	EACH	FT	FT	MILE	FT	FT	
PB-3	105+22.61	108+47.82	NB	1		7	6		310	310			
EL-13	109+60.26	112+65.72	NB							0.06			
EL-14	112+65.72	118+57.47	NB							0.11			
EL-15	115+54.68	118+57.47	NB							0.06			
CH-1	104+98.09	107+31.73	SB		13						235		
CH-2	104+98.09	107+31.73	SB		13						235		
DL-2	107+31.73	112+93.70	SB									563	
EL-12	107+51.41	125+99.59	SB							0.35			
TOTALS CARRIED TO SHEET 15				1	26	7	6		310	310	0.58	470	563







LEGEND

- PAVEMENT FOR MAINTAINING TRAFFIC
- WORK AREA
- CHANNELIZING LINE
- DOTTED LINE
- EDGE LINE
- PORTABLE BARRIER

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LEGEND

-  PAVEMENT FOR MAINTAINING TRAFFIC
-  WORK AREA
-  CHANNELIZING LINE
-  DOTTED LINE
-  EDGE LINE
-  PORTABLE BARRIER



0 20 40 80
HORIZONTAL SCALE IN FEET

CALCULATED KLM
CHECKED MAK

CROSSOVER PHASE 1
STA. 121+00 TO STA. 143+00

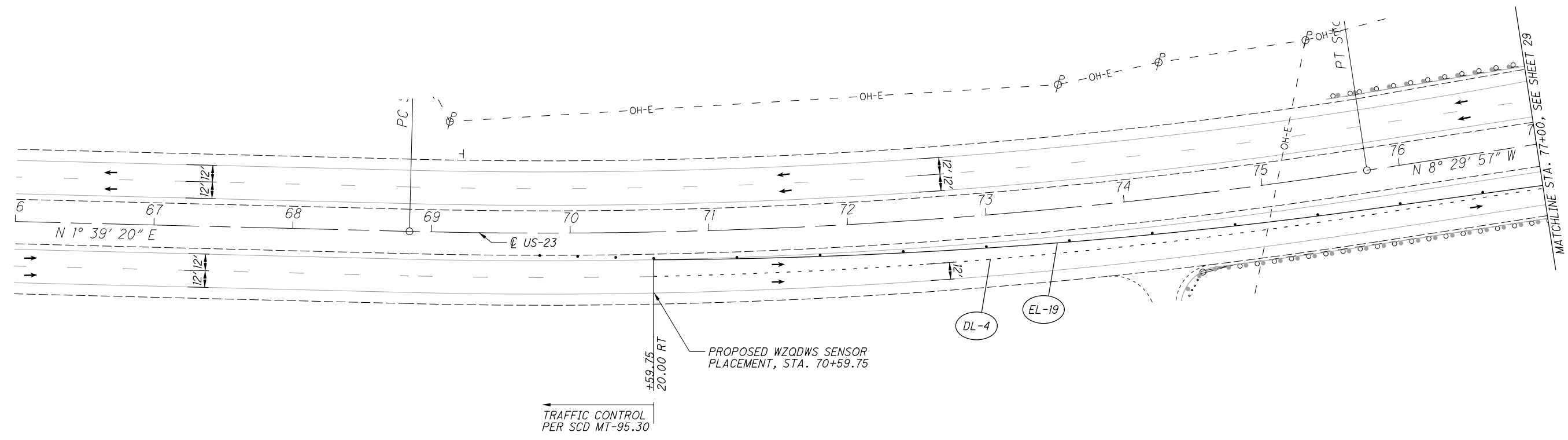
MAR-23-1.85 / 2.04

27
112

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CALCULATED
KLM
CHECKED
MAK

HORIZONTAL SCALE IN FEET



REF NO.	STATION		DIRECTION	614	614	614	614	614	622	622	873	873	873
	FROM	TO		WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)	WORK ZONE RAISED PAVEMENT MARKER	BARRIER REFLECTOR, TYPE 1, ONE WAY	OBJECT MARKER, ONE WAY	OBJECT MARKER, TWO WAY	PORTABLE BARRIER, UNANCHORED	GLARE SCREEN	WORK ZONE EDGE LINE, CLASS I	WORK ZONE CHANNELIZING LINE, CLASS I	WORK ZONE DOTTED LINE, CLASS I
			EACH	EACH	EACH	EACH	EACH	FT	FT	MILE	FT	FT	
EL-19	70+59.75	78+39.75	NB							0.15			
DL-4	70+59.75	78+39.75	NB									784	
TOTALS CARRIED TO SHEET 15										0.15		784	

LEGEND

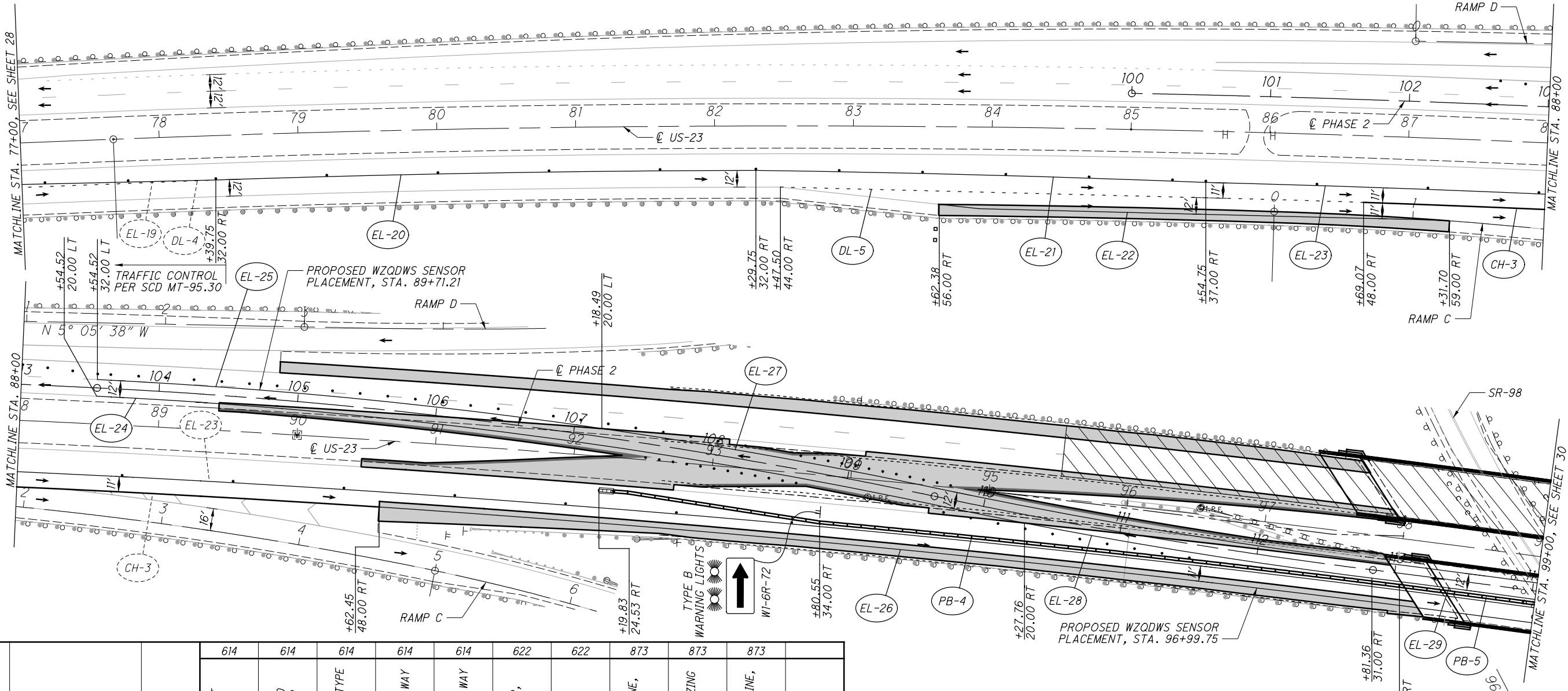
- PAVEMENT FOR MAINTAINING TRAFFIC
- WORK AREA
- CHANNELIZING LINE
- DOTTED LINE
- EDGE LINE
- PORTABLE BARRIER

CROSSOVER PHASE 2
STA. 55+00 TO STA. 77+00

MAR-23-1.85 / 2.04

28
112

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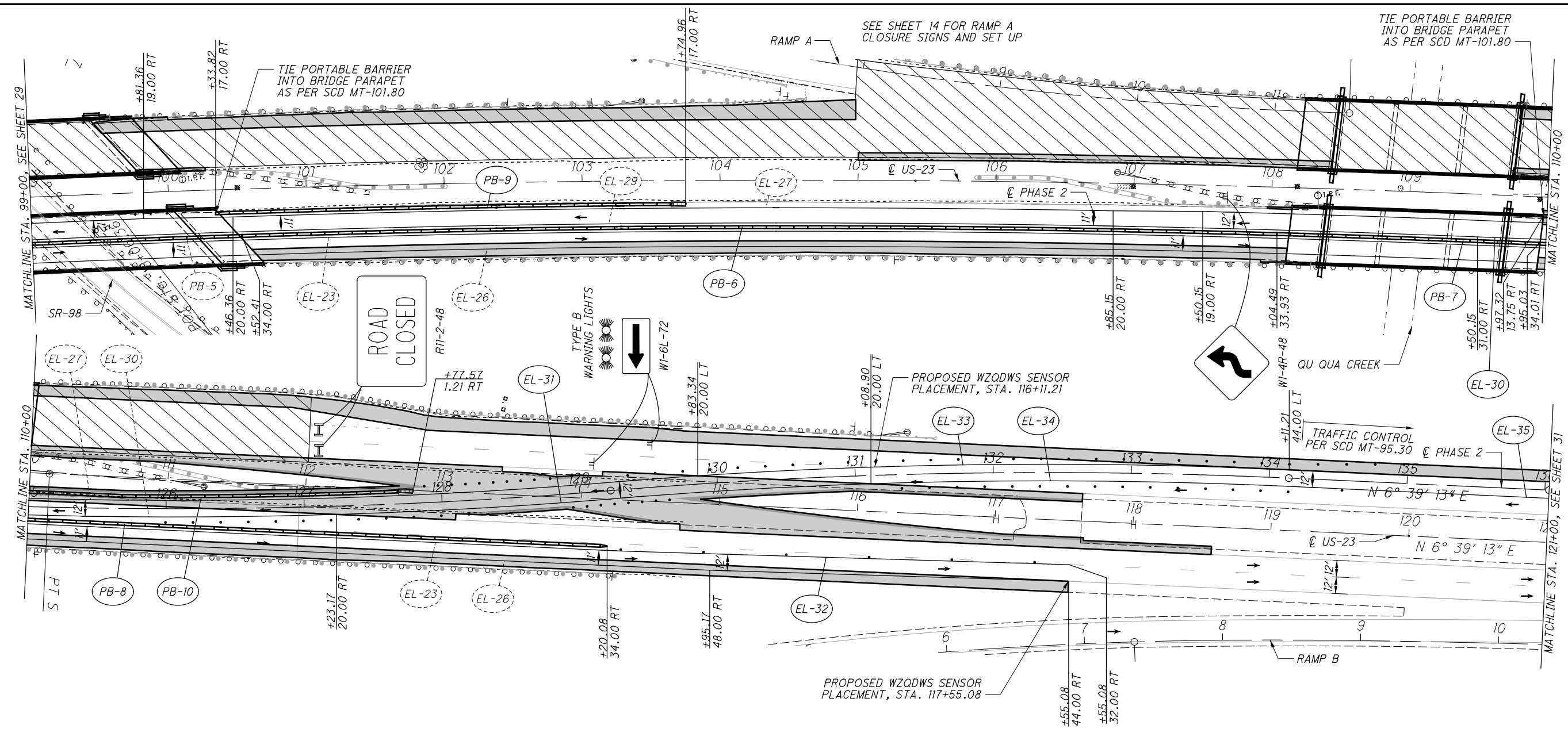


REF NO.	STATION		DIRECTION	614		614		614		614		622		622		873		873		873	
	FROM	TO		WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)	WORK ZONE RAISED PAVEMENT MARKER	BARRIER REFLECTOR, TYPE 1, ONE WAY	OBJECT MARKER, ONE WAY	OBJECT MARKER, TWO WAY	PORTABLE BARRIER, UNANCHORED	GLARE SCREEN	WORK ZONE EDGE LINE, CLASS I	WORK ZONE CHANNELIZING LINE, CLASS I	WORK ZONE DOTTED LINE, CLASS I								
			EACH	EACH	EACH	EACH	EACH	EACH	FT	FT	MILE	FT	FT								
EL-20	78+39.75	82+29.75	NB								0.07										
EL-21	82+29.75	85+54.75	NB								0.06										
DL-5	82+47.50	86+69.07	NB										416								
EL-22	83+62.38	87+31.70	NB								0.07										
EL-23	85+54.75	114+30.08	NB								0.54										
CH-3	86+69.07	90+62.45	NB		21							392									
EL-26	90+62.45	117+55.08	NB								0.51										
PB-4	92+19.83	98+01.71	NB	1		12		11	570	570											
PB-5	98+01.71	100+52.41	NB			6		5	250	250											
EL-24	88+54.52	95+27.76	SB								0.13										
EL-25	88+54.52	92+18.49	SB								0.07										
EL-27	92+18.49	114+83.34	SB								0.43										
EL-28	95+27.76	97+81.36	SB								0.05										
EL-29	97+81.36	109+50.15	SB								0.22										
TOTALS CARRIED TO SHEET 15				1	21	19		17	820	820	2.15	392	416								

LEGEND

- PAVEMENT FOR MAINTAINING TRAFFIC
- WORK AREA
- CHANNELIZING LINE
- DOTTED LINE
- EDGE LINE
- PORTABLE BARRIER

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CALCULATED
KLM
CHECKED
MAK

0 40 80
20
HORIZONTAL
SCALE IN FEET

N

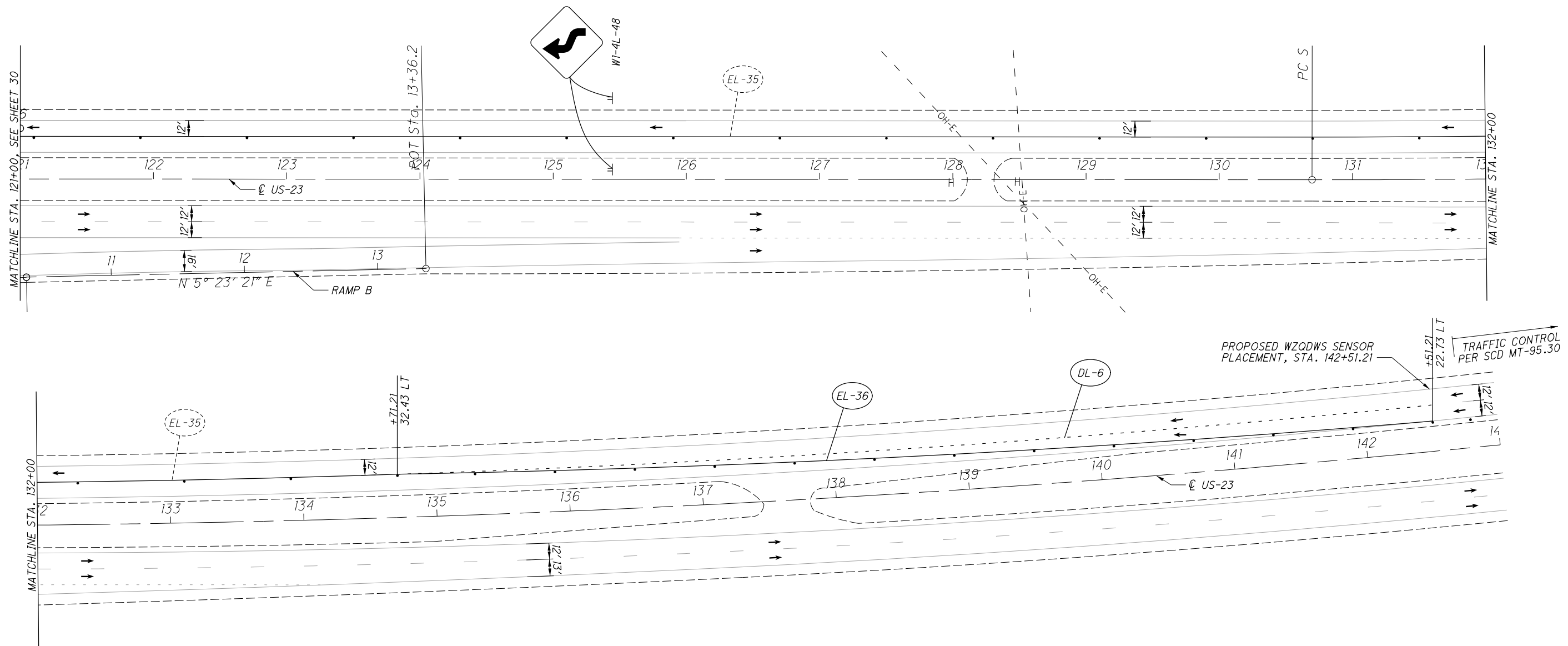
CROSSOVER PHASE 2
STA. 99+00 TO STA. 121+00

REF NO.	STATION		DIRECTION	MARKING TYPE					PORTABLE BARRIER		GLARE SCREEN		WORK ZONE EDGE LINE		WORK ZONE CHANNELIZING LINE		WORK ZONE DOTTED LINE	
	FROM	TO		EACH	EACH	EACH	EACH	EACH	FT	FT	MILE	FT	FT	FT	FT			
PB-6	100+52.41	108+04.49	NB			15		15	750	750								
PB-7	108+04.49	109+95.03	NB			4		4	190	190								
PB-8	109+95.03	114+20.08	NB			8		8	420	420								
EL-32	114+30.08	117+55.08	NB								0.06							
PB-9	100+33.82	103+74.96	SB	1		8	7		330	330								
EL-30	109+50.15	112+23.17	SB								0.05							
PB-10	109+97.32	112+77.55	SB	1		6	5		270	270								
EL-31	112+23.17	116+08.90	SB								0.07							
EL-33	114+83.34	119+11.21	SB								0.08							
EL-34	116+08.90	119+11.21	SB								0.06							
EL-35	119+11.21	134+71.21	SB								0.30							
TOTALS CARRIED TO SHEET 15				2		42	12	28	1960	1960	0.62							

LEGEND

- PAVEMENT FOR MAINTAINING TRAFFIC
- WORK AREA
- CHANNELIZING LINE
- DOTTED LINE
- EDGE LINE
- PORTABLE BARRIER

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





CALCULATED 0
KLM
CHECKED
MAK

0 40 80
HORIZONTAL
SCALE IN FEET

CROSSOVER PHASE 2
STA. 121+00 TO STA. 143+00

LEGEND

-  PAVEMENT FOR MAINTAINING TRAFFIC
-  WORK AREA
-  CHANNELIZING LINE
-  DOTTED LINE
-  EDGE LINE
-  PORTABLE BARRIER

REF NO.	STATION		DIRECTION													
	FROM	TO		614	614	614	614	614	622	622	873	873	873			
			WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)	WORK ZONE RAISED PAVEMENT MARKER	BARRIER REFLECTOR, TYPE 1, ONE WAY	OBJECT MARKER, ONE WAY	OBJECT MARKER, TWO WAY	PORTABLE BARRIER, UNANCHORED	GLARE SCREEN	WORK ZONE EDGE LINE, CLASS I	WORK ZONE CHANNELIZING LINE, CLASS I	WORK ZONE DOTTED LINE, CLASS I				
			EACH	EACH	EACH	EACH	EACH	FT	FT	MILE	FT	FT				
EL-36	134+71.21	142+51.21	SB							0.15						
DL-6	134+71.21	142+51.21	SB									778				
TOTALS CARRIED TO SHEET 15										0.15		778				

